

# Morgan, Ryan & Associates, inc.

July 2, 1979

DEPARTMENT OF  
LAND CONSERVATION  
AND DEVELOPMENT

Department of Land Conservation and Development  
1175 Court St. NE  
Salem, OR 97310

JUL 2 - 1979

SALEM

RE: Hines Comprehensive Plan

Gentlemen:

As the Planning Consultants for the City of Hines, we are pleased to transmit to the Department of Land Conservation and Development Commission seven (7) copies of the Adopted Hines Comprehensive Plan and Implementation Ordinances (Zoning and Subdivision-Partitioning-Standards Ordinances).

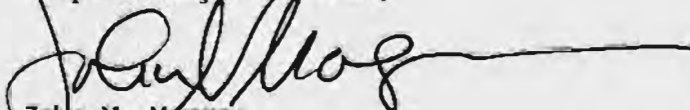
The Comprehensive Plan and Ordinances were adopted by the Hines City Council on June 26, 1979.

Also on June 26, 1979, the Harney County Court adopted the Urban Growth Boundary & Program and the Joint Management Agreement for that area outside of the City Limits of Hines, but within the designated Urban Growth Boundary.

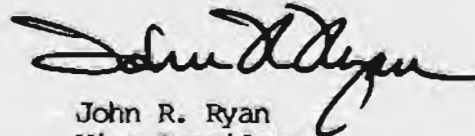
This Comprehensive Plan document and accompanying Ordinances represents over a year of continuous effort on the part of the Hines Planning Commission, the designated Committee for Citizen Involvement. It is a sincere effort, based upon what the participants in the planning process believe to be the best information available. It is a reflection of needs and desires, as perceived by the citizens of Hines, Oregon.

Should any questions arise regarding this document, please contact this office at your earliest convenience.

Respectfully submitted,



John N. Morgan  
President



John R. Ryan  
Vice President  
Project Manager

Urban and Regional Planning • Design • Governmental Processes

CITY OF HINES, OREGON

COMPREHENSIVE PLAN

MORGAN, RYAN & ASSOCIATES

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#### **ACKNOWLEDGEMENTS**

Those persons who contributed to the formulation of this plan deserve the community's thanks and gratitude for participating in the development of the City of Hines Comprehensive Plan. The Goals and Policies in this Plan will help guide the growth of the City of Hines in the years to come.

ACKNOWLEDGEMENTS

Hines City Council

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Mrs. Joanne Hofman  
Mr. Donald H. Holder  
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Special Thanks to the Following:

Charles "Corky" Palmer  
Candace Palmer

# Section I

CITY OF HINES, OREGON  
COMPREHENSIVE PLAN - DRAFT

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URBAN GROWTH BOUNDARY & PROGRAM

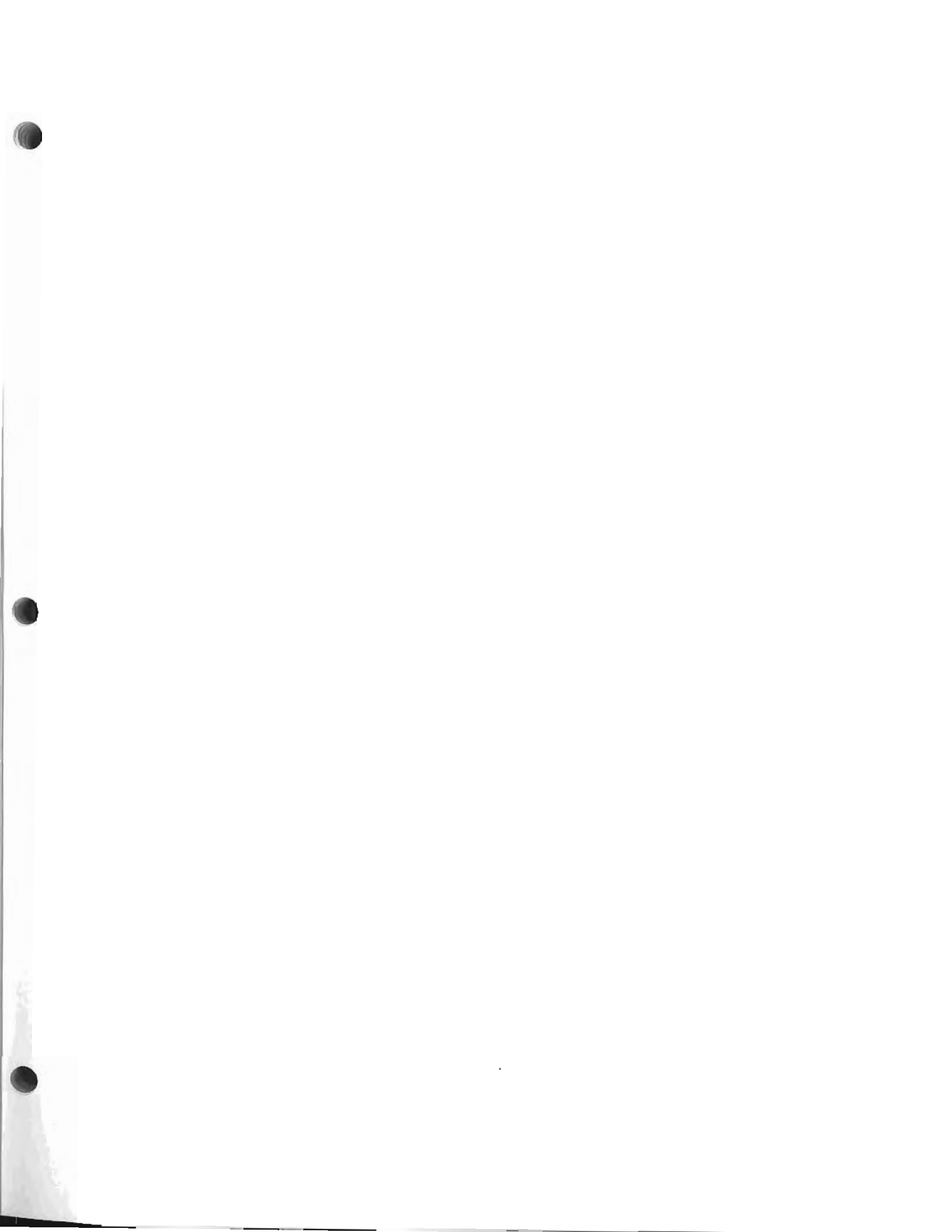
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## HISTORICAL PERSPECTIVE

The earliest recorded settler in or near what is now Hines was George A. Smyth, in 1873. Mr. Smyth, four sons, and immediate family moved from the Willamette Valley to the "Warm Spring," located just south of Hines. A son-in-law, John J. Miller settled about one mile northwest at "Miller" Spring.

In September of 1873, the first white child was born in the county to parents not associated with the military; Margaret Louise Smyth. In later years (1896), she married Mr. J. Donnegan.

Later settlers included William and Monse Currey, with ranch headquarters located at a small spring in what is now the northwest section of Hines. The brothers moved a small store and saloon to the Hines location in 1878 after a brief business venture in nearby "Axhandle" (present City of Burns), where high water from Spring runoff endangered some of their stocks and supplies. The building was used a few times as a barricade for nearby settlers when rumors of Indian attacks were circulated after the Piate uprising of 1878.

The Warm Spring (presently the site of the E. Hines Lumber Co. log pond) was the site of many "buckaroo" camps for fall and spring cattle round-ups while also accommodating year-round cattle grazing.

Land included in the present City of Hines was mostly sage brush or pasture until 1924, when the Fred Herrick Lumber Company, anticipating harvest of 890,000,000 board-feet of Ponderosa Pine from the Bear Valley District of the Malheur National Forest, started the Malheur Railroad Company's track to Burns. The "contract" stipulated the lumber mill be located within five miles of Burns, so the site of the Warm Spring, two and one-half miles south, was selected because of the ice free log pond.

Beset by market slumps and various obstacles, Herrick encountered many delays in completing the fifty miles of railroad north to the timber supply. In 1928, the Edward Hines Lumber Company of Chicago, Illinois, took over the Herrick interests; both railroad and uncompleted mill. The railroad from Crane to Burns passed to the Union Pacific Railroad and the Malheur Railroad Company's name was changed to Oregon Northwestern and extended north to Seneca in southern Grant County. The mill was completed and two large turbines were installed, with a 6,000 kilowatt capacity providing a surplus of 3,000 kilowatts. That "surplus" was later sold to West Coast Power Company.

As a result of the Hines' Company interests, a real estate development firm from New Orleans purchased a large tract of land, developed power lines and water supply with a deep well and tower for gravity flow. Lands were purchased from I.S. Greer, R.E. Reed, the Hotchkiss family and several other ranch and homesite owners by Stafford-Derbes & Roy Company and developed into the beginnings of a new city. Edward Hines and his wife designed and planned the new city around an oval, dedicated to park and recreation. Wanting the city to be different from most mill towns, Mrs. Hines stipulated every house be constructed with slight differences. "Greater Burns" was under way.

## Present "City of Hines"

The City of Hines was incorporated on December 8, 1930. The Hines post office was opened in March 1931 with Mr. Eugene J. Brown serving as first postmaster. In 1931, the Hines Elementary School (still in service) was completed. Mr. R.H. Anderson was the first principal and served in that capacity until 1953. A grocery and furniture store, a dance- and pool-hall were completed on the southwest side of Circle Drive, and the Ponderosa Hotel was begun but never finished on the southeast side.

The development company involved in construction of many of the homes and structures in the new city was caught in the Depression and sold its interest to a savings and loan company. Another savings and loan company was also involved, but both encountered financial difficulties. In 1934, the "City Corporation" was chartered as a subsidiary affiliate of the Edward Hines Lumber Company. The "City Corporation" sold houses to employees of the mill on time, with little or no down payment, or rented the homes to employees (rent was based on fifty cents for each day the employee worked, none if there was no work available). House payments were deducted from payroll checks. Shrubbery and trees were given free of charge to residents. The "Corporation" was finally dissolved in 1950.

Recreation equipment and a swimming pool were installed at the Warm Spring in 1935 and paid for through a "raffle." These remained in service until 1969.

Many of the early residents were former employees of the Hines company from the east; some from Minnesota, others from Mississippi. During those early years of the Great Depression and subsequent recovery years, there was little public welfare or assistance; friends and the "company" took care of the needy and helped families through various crises of the times.

Today, the City of Hines still depends on the "mill" for economic stability. The largest major employer in the Burns/Hines area was, is and will continue to be the Edward Hines Lumber Company.\*

### \* References:

Lewis A. McArthur: "Oregon Geographic Names"  
George Francis Brimlow: "Harney County, Ore. and its Rangeland"  
Personal Contacts: Charles Walker, Lynn Brinkley, Cal Mosley, William Jennings, Sr., Esther Thompson Jones, Mel Mortenson, O.D. Hotchkiss, Sally Wilke Kahn  
City of Hines and Edward Hines Lumber Company  
C.B. McConnell "Burns Paiute Indian History Related," Burns-Times Herald, 8/14/58.  
Nel Bosch - Harney County Chamber of Commerce .IOL80

# Highlights and Short Paragraphs on Harney County Oregon

## Millions of Dollars of New Capital

Five millions of dollars — all new capital — is pouring into the Greater Burns District of Harney County, Oregon. More millions are to come. Permanent employment for thousands of additional people is being provided for. New wealth is opening up the immense timber resources of the Malheur forests in southeastern Oregon. They are breaking the fast barriers that have for so many years prevented the growth in this rich territory.

Brilliant opportunities are now open to investors, business and professional people, farmers, poultry men, live stock and dairy men.

## Payroll of Over \$1,250,000 a Year

A new modern city is being built now within a mile and a half of Burns, and adjoining the \$2,000,000 lumbering plant of the Hines' interests of Chicago — largest retailers of lumber in America. The Hines' operations in mill and timber, it is estimated, will provide a payroll of over \$1,250,000 a year. Other payroll industries will follow, and back of them stands 11,000,000,000 feet of fine pine timber — sufficient to provide continuous cutting for a century.

Of equal importance, industry and the thousands of new people it is bringing with it, is opening up the rich Harney Valley to development; 500,000 acres of land in the county are available for cultivation; more than 130,000 acres are under irrigation; more than 240,000 acres can be irrigated either by ditch or from shallow wells tapping the immense supplies of water that lie beneath the great valley's floor.



Billions of feet of Standing Gold! That have attracted millions of dollars of new capital—and should attract you

## Magnificent Crops Ideal Climate

Prices are low. Climate is ideal, with sunshine practically all the year round. For 14 years the Agricultural Experiment Station of Oregon State College has raised magnificent crops on sub-average land with water. For wheat the record yield is 96.8 bushels per acre; the average, 45. Potatoes average 100 bushels to the acre, with a record of 342 bushels. Alfalfa averages from 5 to better than 9 tons in two cuttings per acre. Oats average 40 bushels, with a record of 136 bushels. Barley 50 bushels, record 104.

The valley produces hardy vegetables, such as cauliflower, cabbage, carrots, potatoes. One of the biggest crops of the future will be sugar beets.

In the mountain foot hills surrounding Burns and the Steins Mountain country are successfully grown sweet corn, squash, melons, cucumbers, lettuce and similar products.

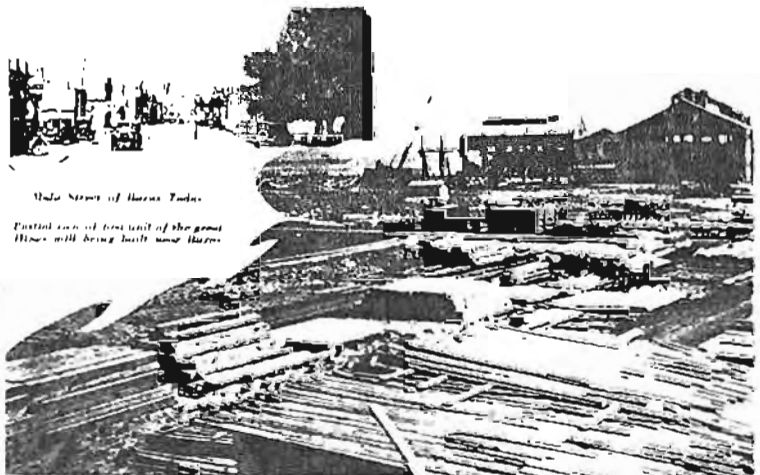
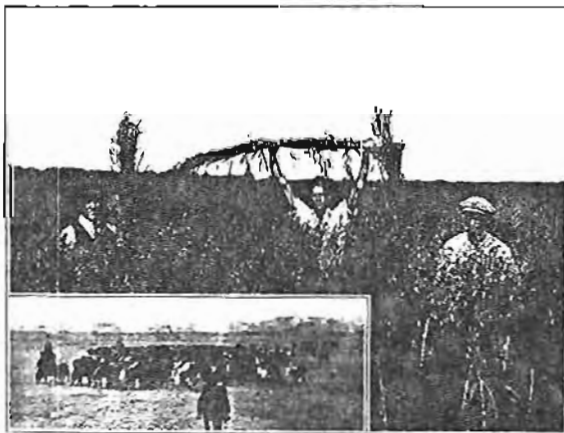
## Largest Livestock District in Oregon

Harney County is the largest live-stock district of Oregon. Between 125,000 and 175,000 head of sheep and cattle are on the open range 8 months of the year. Dairying is coming rapidly to the fore, and will be one of the most important lines of endeavor. There are approximately 3000 head of dairy cattle in the county at the present time.

Farmers are particularly urged to investigate the possibilities of 40 and 80-acre family unit farms. People who are interested in business are especially invited to learn of the tremendous strides which have been taken in the last year.

Big things are happening, and this wealthy territory so long isolated now is springing forward at an astounding rate. Share in its opportunities!

There are more than a quarter of a million acres of fine level land in Harney County that will grow crops like this, once it is under irrigation. Millions of acres are open for livestock grazing.



Main Street of Burns Today  
Partial view of first unit of the good houses which will be built near Burns

For prompt authentic  
information write to

**BURNS CHAMBER OF COMMERCE**  
BURNS, Harney County, OREGON

The latest "Authentic" information from Harney County

CIRCA 1929 II



## INTRODUCTION

In 1973, the 57th Legislative Assembly adopted Senate Bill 100 (ORS 197), known as the 1973 Land Use Act, which among other things, created the Land Conservation and Development Commission (LCDC). LCDC was charged with the responsibility to develop statewide planning goals and guidelines to guide local comprehensive planning. Extensive work sessions and public hearings resulted in the adoption of 14 Statewide Goals and Guidelines to be used by state agencies, and implementing comprehensive plans. (Additional Goals were adopted at a later date, but do not apply to Hines)

Two significant components of the state legislation are first, the authority of cities to establish urban growth boundaries, and second, assurances of citizen involvement throughout the planning process from development through the implementing stages.

Partly in response to the state mandate, the City of Hines embarked on a planning program to develop a Comprehensive Plan. In early 1978, the planning firm of Rodney R. Stubbs & Associates was retained to assist the City in this planning program and to develop a document that fulfills the intent and purpose of the 14 Goals and Guidelines established by LCDC. In October, 1978, the planning division of Stubbs & Associates was purchased by Morgan, Ryan & Associates, Inc.

### Committee for Citizen Involvement

The Hines Planning Commission was designated as the Committee for Citizen Involvement (CCI) and given the responsibility of insuring citizen participation by means of a Citizen's Involvement Program (CIP) through the use of the local media, community surveys, information materials and public work sessions and hearings.

The Comprehensive Plan should be considered an official statement of the City of Hines. The document sets forth goals, objectives and policies to guide the future physical development of the community. The following subchapters depict existing conditions, summarize conclusions, and, where applicable, sets forth certain development criteria.

## PHYSICAL CHARACTERISTICS

## A. Location

Hines is located in Southeast Oregon in the northcentral portion of Harney County. It is approximately 130 miles east of Bend, 200 miles south of Pendleton, and 130 miles west of Ontario, Oregon. Hines is bordered by the city of Burns on the north. The Silvies River is located to the east of the city. The Malheur National Wildlife Refuge lies about 20 miles to the south. One major highway, US 20/395, passes through Hines giving good vehicle connections, both north/south and east/west.

## B. Climate

Climatic data have been collected at Burns for about 78 years between 1891 and 1921 and from 1938 to date. Records were collected at the Harney Branch Experiment Station (now the Dorland Ray farm) from 1913 to 1953. Data is available for shorter periods for Camp Harney and Malheur National Wildlife Refuge south of Malheur Lake. On the basis of these records, annual precipitation averages about 20 percent less near Malheur Lake. Thus, the annual total for the valley probably averages less than 10 inches. At Burns, the minimum annual recorded precipitation was 5.32 inches in 1949, and the maximum was 18.12 in 1906.

Prevailing winds are from the west and average in velocity from 1 to 5 miles per hour, but higher gusts have been recorded in the area.

Table 1 indicates the monthly temperature at Burns, and Figures 1 and 2 indicate normal and extreme monthly precipitation, average maximum and minimum monthly temperature and annual precipitation at Burns, respectively.

## C. Topography

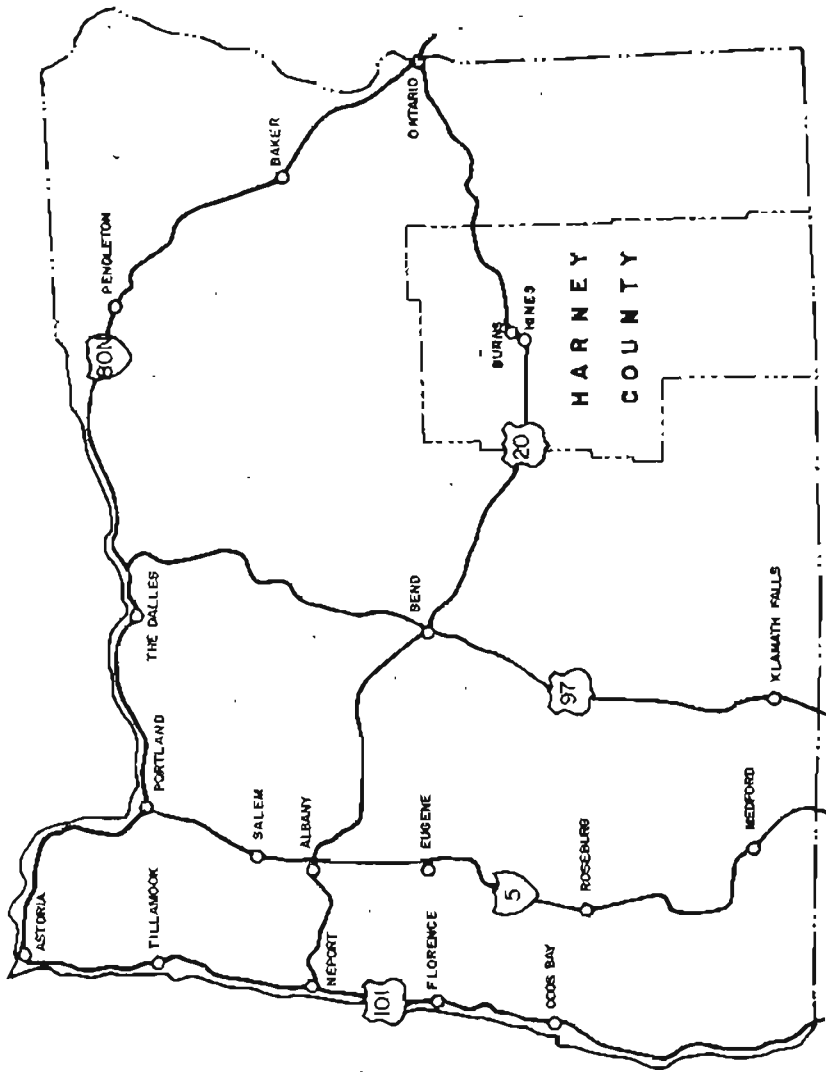
Hines is situated at the far northern end of the Great Basin, a major topographic and geologic feature encompassing southeast Oregon, southern Idaho and much of Nevada and Utah. This area is the remnant of an ancient sea and now forms one of the four major deserts of the United States. The Blue Mountains, which mark the boundary of the Great Basin, start a short distance north of the Hines/Burns area and extend to the Umatilla plain near the Columbia River.

Most of the City of Hines lies in a relatively flat area located between steep hillsides to the west and the Silvies River Flood Plain to the east. Very little of the existing city is developed in these areas of natural hazard at the present time. However, they form development constraints that will shape the future growth of the City of Hines.

## D. Geology

The land surface in the Hines area is predominantly characterized by volcanic lava flows, associated airborne materials, and sedimentary deposits mixed with volcanics. The larger valleys of the county, including the Silvies River Flood Plain, all have thick unconsolidated alluvial and lake bed deposits.

MAP 1



HARNEY COUNTY, OREGON

Table 1 --Monthly temperatures at Burns

[National Weather Service records]

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Average maximum	34.6	40.9	47.5	58.6	66.7	73.6	85.7	83.5	76.3	63.3	47.5	38.1	59.7
Average minimum	14.5	20.1	24.8	31.5	38.5	43.7	51.1	48.9	40.9	32.5	24.3	18.9	32.5
Mean	24.8	29.7	37.4	46.0	53.4	59.8	69.5	67.2	58.8	48.4	36.1	29.1	46.7
Highest	58	64	74	86	93	95	101	103	100	86	70	61	103
Lowest	-26	-18	-3	14	19	28	34	31	24	13	-17	-8	-26

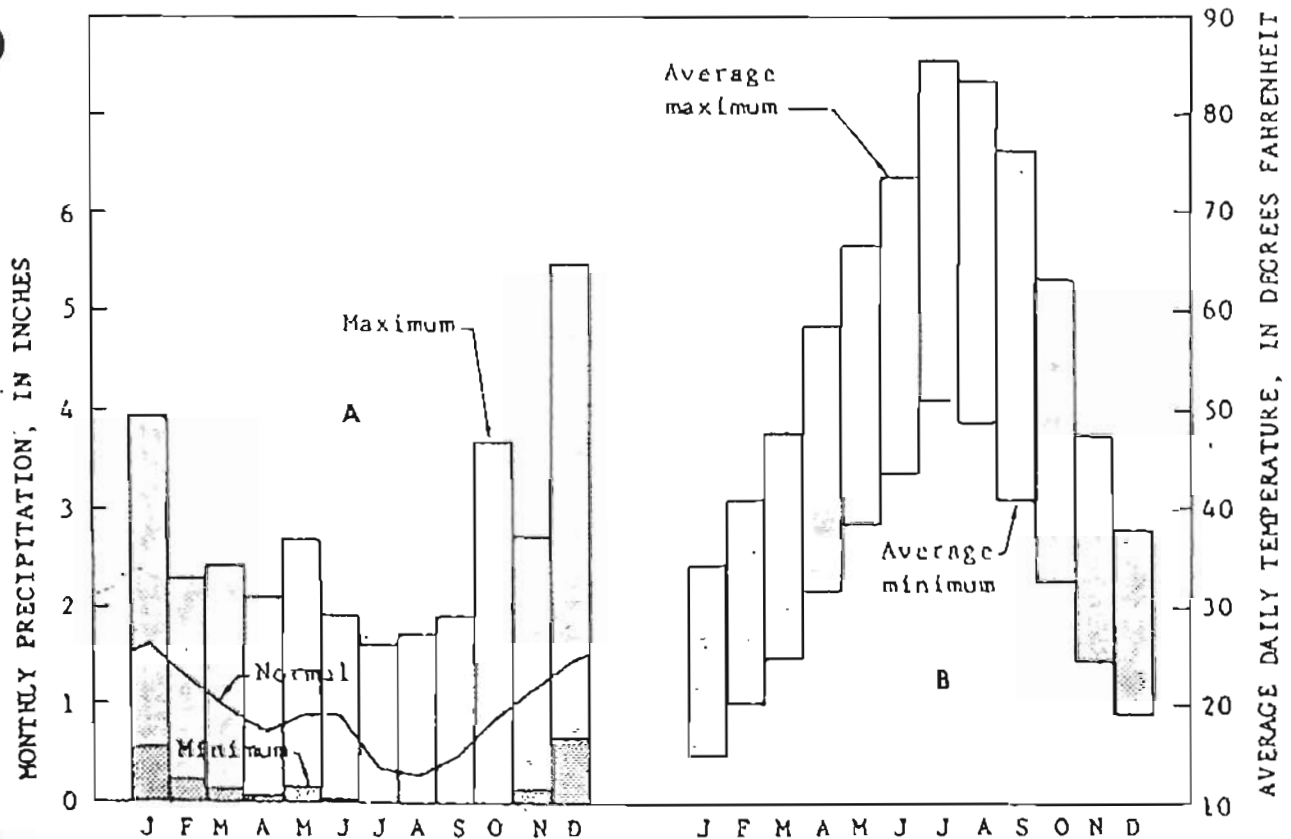


Figure 1 --(A) Normal and extreme monthly precipitation and (B) average maximum and minimum monthly temperature at Burns.

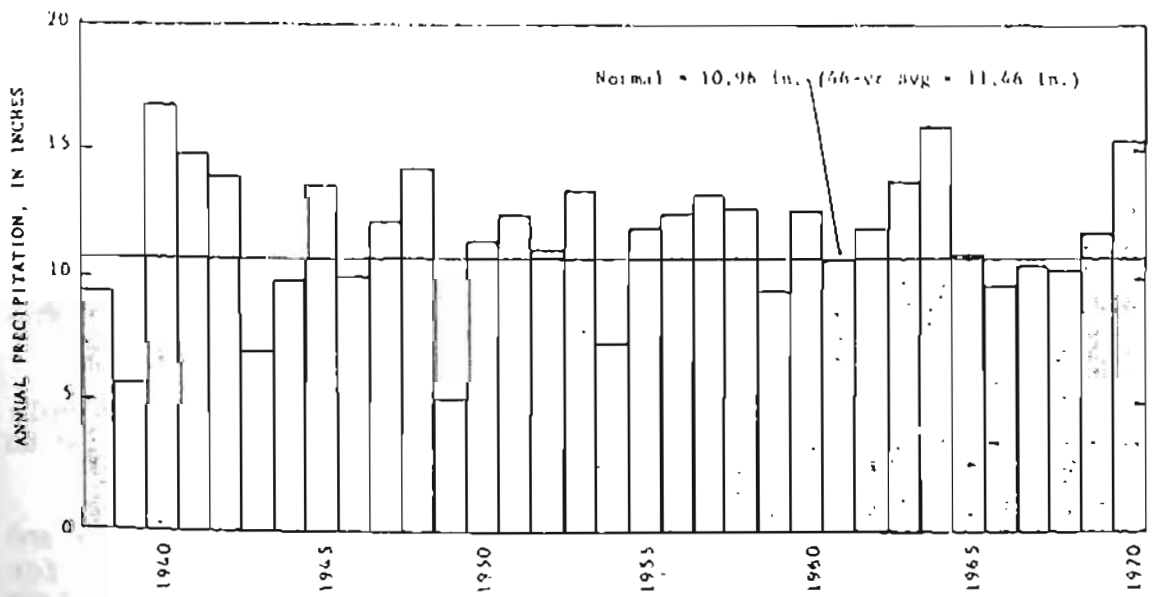


Figure 2 --Annual precipitation at Burns, 1938-70.

#### E. Silvies River

The Silvies River at its headwaters is a rapidly flowing stream, becoming a gently falling stream over 100 river miles above its entry into Malheur Lake. It is heavily drawn upon for irrigation of upper valley lands and receives substantial return flows before entering the flat lakebed area surrounding Malheur Lake and the cities of Burns and Hines. It is in these reaches that the stream gradient becomes extremely low and the dissolved oxygen frequently falls below desirable levels. The stream flow is heavily enriched with plant nutrients, and algal growth reaches nuisance levels. The City of Hines does not discharge municipal wastes into the stream, thereby preventing a more serious degradation of water quality. The extremely low assimilation capacity of the Silvies River suggests that the only effective method for maintaining desirable water quality is prevention of discharge of significant quantities of degrading flows.

#### F. Soils

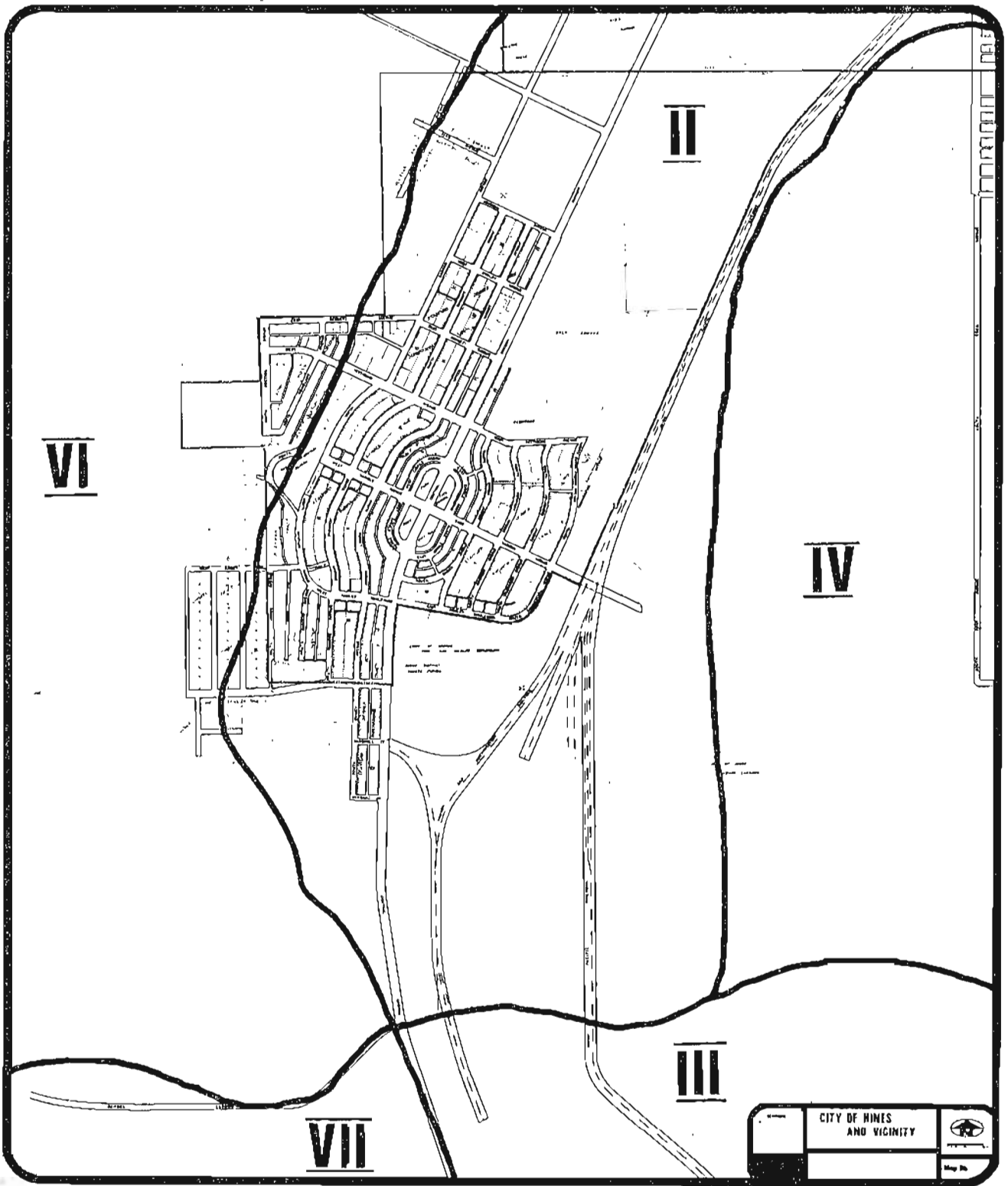
Goal #3 of the Statewide Goals and Guidelines requires that certain soils, considered the "prime" agricultural soils, be preserved and maintained for agricultural use. These are defined as the Class I - VI Soils as classified by the Soil Conservation Service of the U.S. Department of Agriculture. The entirety of Harney County is in a unique situation in that detail soils mapping has not been performed, therefore, detailed soil capability classification designations do not exist. The S.C.S. has undertaken a program to develop mapping to the scale that is enjoyed by the vast majority of the state, however, this program will take approximately five years to complete. The information developed by the S.C.S. should be included in the next update of the Hines Comprehensive Plan. In the interim, the jurisdictions of Harney County must work with what information exists and take actions that work to implement the spirit of Goal #3.

Generalized mapping of the Burns/Hines area has been completed by the S.C.S. indicating that Hines straddles the line between Class II and Class VI designations. Map 2 shows the location of the various generalized soil types in the Hines area.

The Silvies River Flood Plain area lying to the east and southeast of the City of Hines and including several tributaries feeding into the river in this area, form an area of Class II soils. These were created by alluvial and sedimentary actions of the river. Many of these soils are wet where they occur along the stream course where the river spreads out on the level basin floor during periods of high runoff. Some of these soils are very poorly drained in swales of lower lying areas which are inundated during the wet seasons. The vegetation in this area is primarily rushes and other adapted wetland flora.

Soils in the Class II designation have few limitations or hazards. Simple conservation practices are needed when they are cultivated. They are suited to cultivated crops, pasture, range, woodland or wildlife.

The majority of the City of Hines and all of the land to the west and northwest is generally designated as Class VI soils. These are areas which for the most part are underlain by Miocene (19,000,000 years ago) to recent age lava



# SOIL CLASSIFICATION

flows and interbedded tuffaceous sediments. The soils in these areas are typically light colored, basic in reaction, and very stony and shallow. The surface layers are generally silt loam and grade rather abruptly to strongly contrasting, well structured, often clay subsoil. A thin discontinuous hardpan is often present immediately above the bedrock. Course fragments in the soils and at the surface are nearly always angular and relatively unweathered. The native vegetation includes bluebunch wheatgrass, Sandburg Bluegrass, big sagebrush, and rabbitbrush.

Soils in Class VI have severe limitations or hazards that make them generally unsuitable for cultivation. They are suited largely for pasture, range, woodland or wildlife. The same types of limitations also exist for urban uses. The shallow soil depths and hardpan cause severe septic limitations and render underground utility installations occasionally impractical due to the high costs that may accompany construction.

#### GOAL

To preserve and maintain agricultural land, where viable.

#### GUIDELINES

1. Encourage preservation of agriculture as a major component of the economy in Harney County.
2. Support policies favorable to the agricultural industry so as to maintain a viable support services economy in the City of Hines.
3. Encourage and preserve agricultural lands appropriate for that use outside the City of Hines.
4. Encourage use of land not suitable for agricultural development for meeting the County's non-farming housing needs.

#### POLICIES

1. Discourage non-agricultural development on land suitable for viable, economically feasible agricultural uses.
2. Encourage non-agricultural development on land inside the Urban Growth Boundary that can readily be served with urban services adjacent to or in close proximity to existing services.
3. Adopt implementing ordinances to encourage efficient use of land unsuitable for agricultural use but suitable for urban development.



## G. Air Quality

Overall, according to the Oregon Department of Environmental Quality, the air quality in the Hines area is considered very good. DEQ indicates that slash burning, agricultural tillage and "upset" conditions (those temporary equipment malfunctions that may increase certain pollutants for a short periods of time) at the Hines Lumber Mill may result in short-term localized impacts on air quality.

The prevailing wind from the west precludes a significant amount of air pollution reaching potential residential areas to the west, especially from the Hines Lumber Company. It should be noted that the Lumber Mill is the largest contributor to the "Total Particulates", however, the DEQ points out that the air quality, generally, is still very good in Harney County.

Table 2 lists the pollutants as cited by the Oregon Department of Environmental Quality. Ambient air quality and noise data are not available at this time.

Table 2

## HARNEY COUNTY AIR POLLUTANT EMISSIONS

By S.I.C.\* Coding - 1978

(\*Standard Industrial Classification Manual - 1972)

Estimated Annual Emission Rates  
Tons Per Year

S.I.C. Class	Total Particulates	Sulfur Oxides	Nitrogen Oxides	Carbon Monoxides	Total Organics
<u>Agriculture</u>	715.00				
<u>Lumber &amp; Wood Products</u>	3,136.01		565.00	113.00	143.10
<u>Petroleum Refin- ing &amp; Related Industries</u>	2.75				
<u>Stone, Clay, Glass &amp; Concrete</u>	.83				
<u>Nonclassifiable</u>					
- Surface Coating					18.87
- Dry Cleaning					9.77
- Slash Burning	683.53		151.90	4,860.67	911.38
- Forest Fires	23.44		5.21	166.72	31.26
- Motor Vehicles (Light Duty)	48.32	12.67	417.56	6,883.69	777.74
- Motor Vehicles (Heavy Duty)	15.55	16.70	177.30	497.22	72.72
- Gas Marketing					63.53
- Off-Highway Fuel Use	9.05	6.71	79.85	1,166.97	58.91
- Residential Space Heating	2.11	34.01	15.18	4.22	.84
- Comm. & Indust. Space Heating	7.98	68.41	20.82	1.39	1.39
- Industrial Fuel Combustion	.20	2.68	.66	.05	.01
- Railroads	.63	1.45	9.40	3.30	2.71
<u>Total Annual Emission Rates</u>	4,645.40	142.63	1,442.88	13,697.28	2,092.20

## NATURAL HAZARDS AND LIMITATIONS

There are several parts of the Hines area that have conditions that are hazardous or that restrict their suitability for building sites. There are two basic reasons for identifying and addressing these areas: human safety and public cost. In hazardous areas development without careful design and engineering can bring definite threats to personal health and safety. This can be through violent actions such as flooding or slippage, or through subtle actions such as sewage infiltration into water supplies.

High public costs may be incurred as a result of a natural disaster that affects developed areas. Equally as threatening to the local economy may be the cost of providing services to areas that have natural conditions that make extension of public utilities, especially those that require underground pipe, expensive.

Four basic types of hazards occur in the area. They are described below:

## A. Floodplain

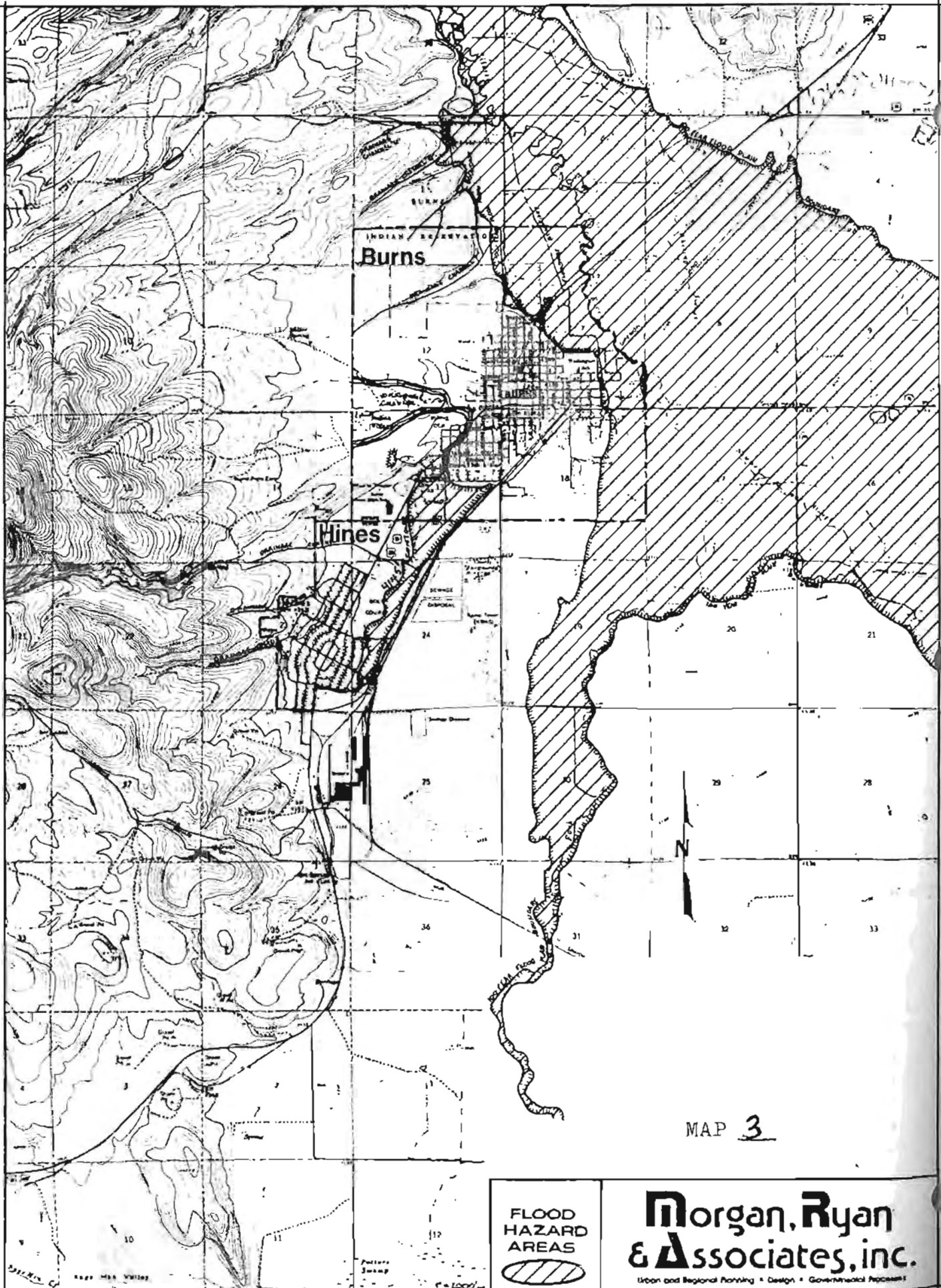
The most prevalent hazard is found in the Silvies River Flood Plain. Map 3 indicates the areas that are subject to occasional flooding. Frequency and major extent are not known at this time. In these areas, construction should be avoided, or if allowed, subject to special standards designed to protect the structure. The Flood Plain should be reserved, for the most part, for open space and agricultural uses.

Other areas that are subject to occasional damage from flooding are those adjacent to the drainage channels. These channels come from the west and impose constraints where potential runoff is heavy and where drainage makes the location of sewers and waste disposal sites a constraint on development. They also serve as reservoirs for storage of flood runoff. Of particular interest is the "sump" area located between Burns and Hines. Unrestricted development in this area will reduce its ability to store water as well as create a hazard to life and property.

Flooding problems along the drainage channels, and most especially, in the Silvies River Flood Plain, are greatest when runoff of the Silvies River coincides with heavy drainage from the hills to the west of the city. The City of Hines is most impacted by Drainage Channels "B" and "C", as indicated on Map 3. Some of the restraints caused by flooding can be modified by improvements to drainage channels, as was reported in a study conducted by the State Water Resources Board in 1968. The ability to reduce flood peaks on the Silvies River is dependant upon upstream flood control storage, something likely only to occur with the assistance of the Flood Control Program administered by the U.S. Army Corps of Engineers.

## B. Steep Slopes

The slope areas to the west of Hines (Map 5) are limited in their development potential because of the topography, by the relatively low strength

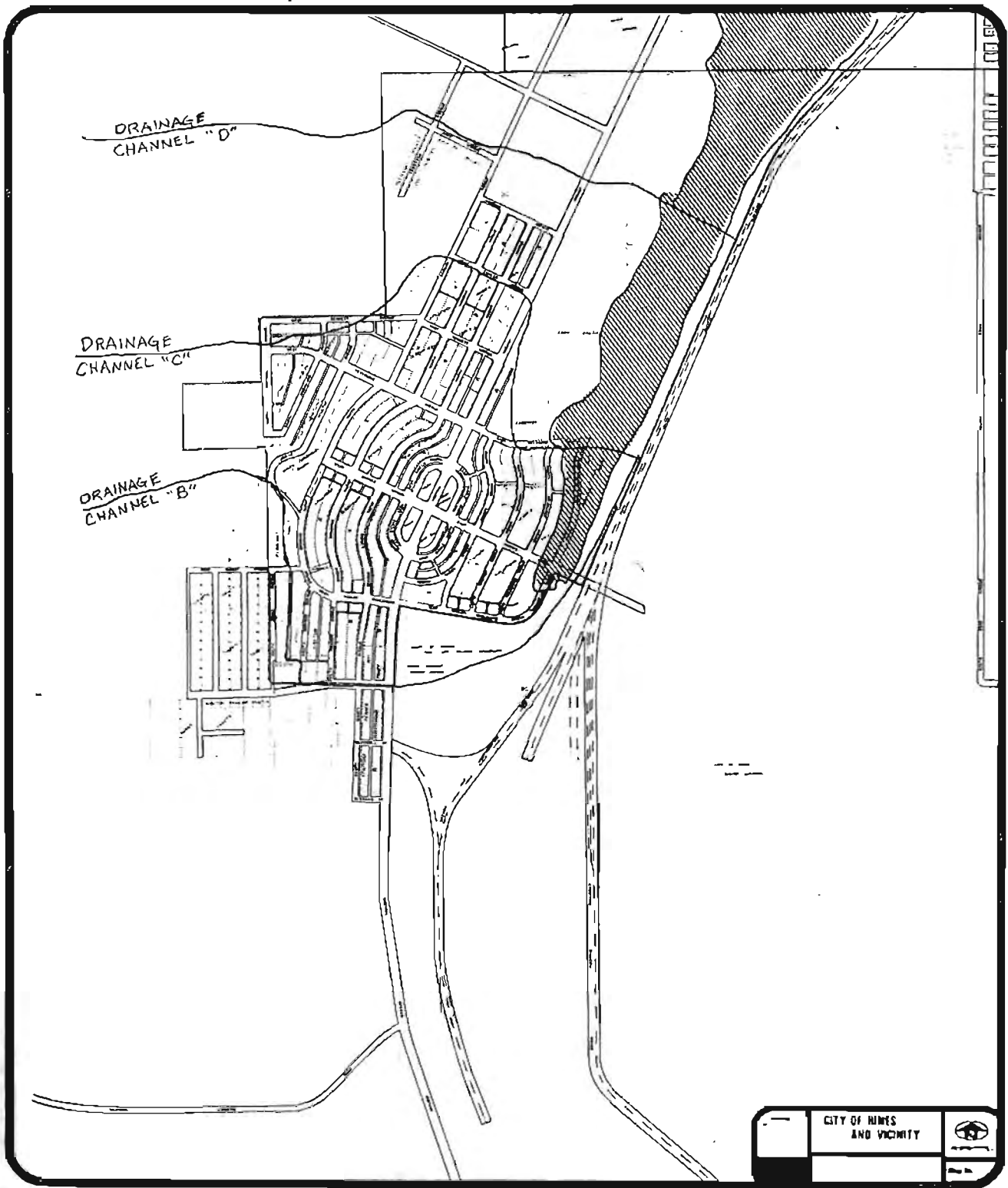


MAP 3



FLOOD  
HAZARD  
AREAS

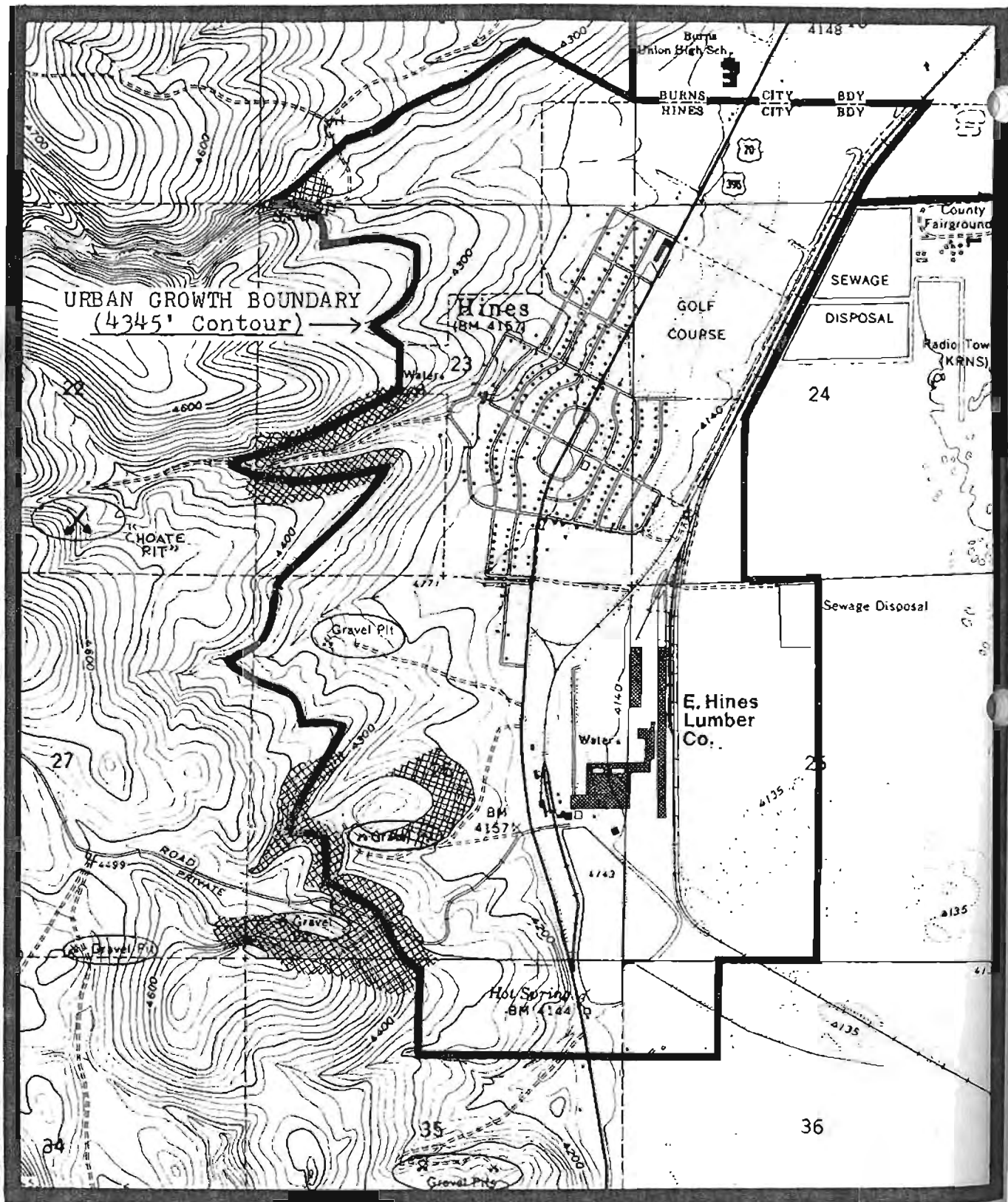


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# FLOOD HAZARD AREAS

-  FLOOD HAZARD AREAS
-  DRAINAGE CHANNELS



AGGREGATE RESOURCES  
&  
STEEP SLOPES

(X) Gravel Pits

(Cross-hatched) Steep Slopes  
(In Excess of 30%)

of the soils, and by the frequent volcanic rock outcroppings. If any development is to be allowed in these areas, careful engineering should be required by the City before building permits are issued. Also, extensive disruption of the slopes by cut, fill, and added weight of structures may cause serious slippage and erosion problems. These areas, if used at all, should be treated very carefully. Greatly reduced residential density may be necessary.

#### C. Near Surface Bedrock

Near surface bedrock areas have severe restrictions on any type of sewage disposal system. Underground installation of utilities is difficult and expensive. These areas, also, should have a lower development priority. Development in these hazardous areas is expensive to the builder and risky for the buyer and the community in terms of maintenance and replacement costs. When alternatives exist to provide land for projected community growth, they should be utilized. The individual and public will have less cost, health, and economic risks if the hazard areas are left in low utilization states.

#### D. Earthquake Hazard

The history of earthquakes in Oregon is reliable only back to the mid-1800's, as there is an insufficient length of record to allow a determination of either the largest magnitude earthquake that could be expected or the frequency of lesser shocks. Earlier reports extend from 1833 but these reports are dependent on the size and distribution of population in Oregon.

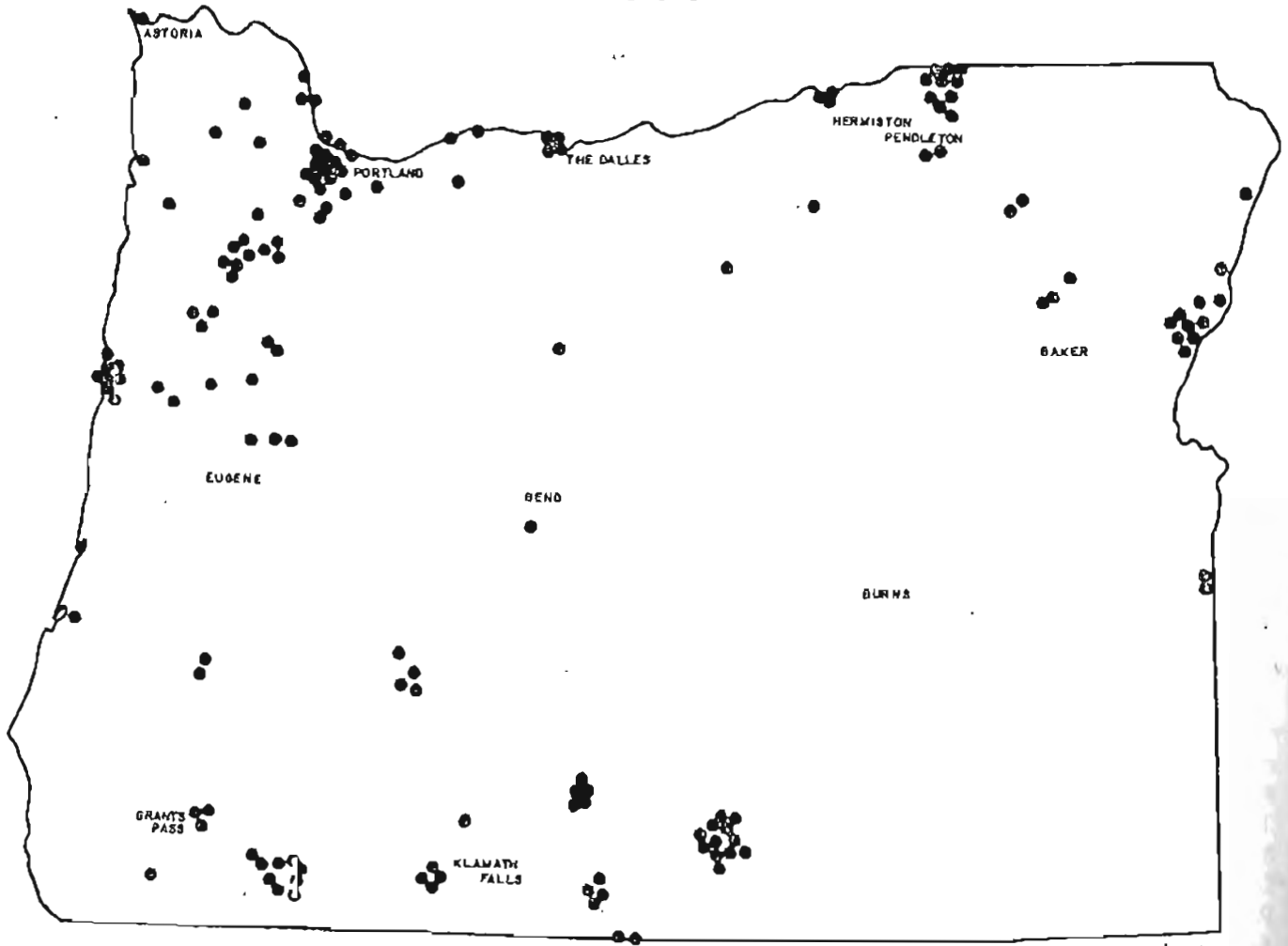
From 1833 to 1962, most earthquakes were located by reports from observers near the epicenter. Some of the larger earthquakes which occurred from the late 1920's to 1962, were recorded on seismographs located at the University of Washington, University of California and Oregon State University. However, because of the distance involved, instrument limitations and other uncertainties, these instrumentally located epicenters are probably as inaccurate as those located by reports from observers.

In 1962, the U.S. Coast and Geodetic Survey established a world wide standard seismograph station at Corvallis, Oregon. Also, in 1962, a recording station was established 38 miles east of Baker, Oregon. Later stations included Klamath Falls and Portland. A fifth station was established at Pine Mountain in 1969 as cooperative project of the University of Oregon and the National Aeronautics and Space Administration (NASA). Since 1963, most earthquakes in Oregon have been located with seismograph stations located in Oregon and the Pacific Northwest. Map 6 shows the location of Earthquake Epicenters in Oregon from 1841 to 1970.

Earthquakes present a much smaller hazard than the three mentioned previously; in the Hines vicinity few if any earthquakes have been reported by the U.S. Coast and Geodetic Survey.

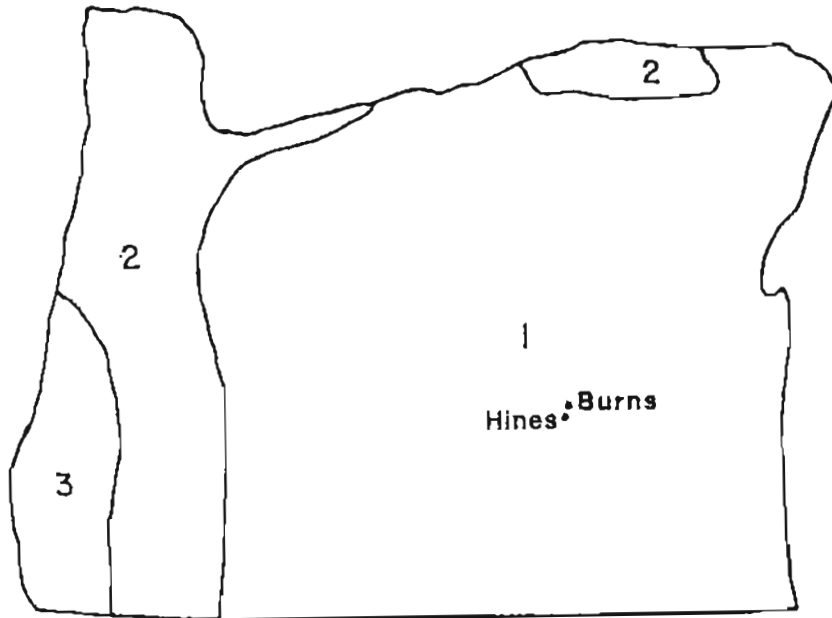
Based upon past occurrences, land formations, and present state of knowledge, a generalized map showing the Seismic Risk Zones (Map 7) has been drawn up as part of the Hazard Study (1978) prepared by the Disaster Preparedness Planning Section of the Executive Department, State of Oregon. Hines is classified as being Zone 1, which indicates that a major earthquake may produce minor damage.

# Earthquake Epicenters In Oregon 1841 - 1970





## Seismic Risk Zones For Oregon



<u>ZONE</u>	<u>INTENSITY (MM)</u>	<u>DEGREE OF DAMAGE</u>
0	INTENSITY I-VI	NO DAMAGE
1	INTENSITY VI-VIII	MINOR DAMAGE
2	INTENSITY VIII-IX	MODERATE DAMAGE
3	INTENSITY IX-X	MAJOR DAMAGE

SOURCE: EARTHQUAKE HAZARD STUDY-DRAFT  
EMERGENCY SERVICES DIVISION  
STATE OF OREGON, 1978

POLICIES

1. The City of Hines shall recognize the development limitations imposed by the carrying capacities of natural resources; i.e. surface and groundwater capabilities, soils, geology, etc.
2. Natural resource physical limitations shall be one of the primary evaluation factors for development approval. The carrying capacity thereof shall not be exceeded.
3. To maintain development costs at a minimum and to encourage the most efficient use of resources by guiding development to lower hazard or physical limitation areas.
4. Discourage development in floodplains, natural drainageways, on steep slopes, and other hazardous areas.
5. Preserve the holding capacity of the sump area by discouraging development in the area below the 4145' contour line.
6. It shall be the developer/builder's burden of proof for determining the degree of hazard or physical resource carrying capacity.
7. Development within the identified floodway shall be permitted to the extent the hazard is correctable without adversely affecting other properties.
8. Hines shall continue participation in the Federal Flood Insurance Program as administered by the U.S. Department of Housing and Urban Development, Flood Insurance Administration (in accordance with the Flood Hazard Boundary Map).

## NATURAL RESOURCES

Fish Resources

The fish resources in the Burns/Hines area are located mainly in the Silvies River system, which is part of the Malheur Lake Basin. Rainbow trout comprise the bulk of existing trout population while bluegill, pumpkinseed, bullhead catfish, white crappie, and yellow perch are the warm water game fish most plentiful in the Silvies River.

Anadromous fish (fish that travel from salt to fresh water) are not present, as this basin is naturally isolated from the ocean.

The most serious limiting factor for game fish populations is inadequate stream flow during the summer months. Several lakes and reservoirs in the Malheur Lake Basin are either too alkaline or suffer greatly from excessive drawdowns (mostly from irrigation) to sustain adequate fish production. Other principal limitations of game fish are high water temperatures and competition (for food and other life supporting elements) from rough fish species.

Wildlife Resources

The Silvies River which passes through the Burns/Hines area must be considered as part of a larger system - the Malheur Lake Basin. As such, the wildlife that occurs throughout the Basin encompasses significantly more than the urban area immediately surrounding Burns and Hines.

Although water supplies for game fish are critical within this part of the state, the Malheur Lake Basin provides an essential portion of Oregon's wildlife based recreational activity. These activities include hunting for deer, pheasant, quail, chukar partridge, pronghorn antelope, and sage grouse. In addition to these major hunting activities, there is a limited amount of elk hunting in the Silvies River area.

While efforts have been made to increase the availability of water storage facilities, the full potential for increased population and distribution in the Malheur Lake Basin is limited by the amount of water. Most upland game species are limited to an environment within a mile or so of a permanent water source, and big game are rarely found more than a few miles from water. Furbearers such as muskrat, beaver and mink depend directly on permanent water bodies for food, shelter and escape cover.

Bird and Waterfowl Resources

Within the Silvies River system, which does include the Burns/Hines urban area as well as the entry point to Malheur Lake, there are several species of bird and waterfowl. Listed here are some of the observable species:

Northern bald eagle  
Goshawk

American osprey  
Western merlin

Burrowing owl	Horned grebe
White pelican	Great egret
White-faced ibis	Greater sandhill crane
Grankly's gull	Forster's tern
Caspian tern	Lesser scaup
Redhead	Bufflehead
Snowy Plover	Long-billed curlew
Black-necked stilt	

The rare and endangered bird, mammal and plant species as identified by the Nature Conservancy as part of the Oregon Natural Heritage Program (Harney County - Data Summary, 1978) include:

Birds:

Margined sculpin  
 Malheur sculpin  
 Long-billed curlew  
 Sandhill crane  
 Snowy Plover  
 Squainson's hawk  
 Ferruginous hawk  
 Burrowing owl

Mammals:

Merriam's shrew  
 Pygmy rabbit  
 Washington ground squirrel

Plants:

*Lomatium hendersonii*  
*Mimulus jungermannioides*  
*Ranunculus reconditus*  
*Talinum spinescens*

(Common plant names were not listed by the Nature Conservancy)

The Silvies River flood plain is mostly privately owned and is used extensively for growing hay, consisting mainly of native grasses. Mowing the hay in mid-summer inevitably destroys some of the bird fledglings; however, marsh and waterfowl production has been high. A more significant threat would be a change to intensive agricultural methods, such as dredging, diking, pumping ground water for irrigation, and shifting to alfalfa and other crops that provide no nesting habitat for the waterfowl and other birds. Clearing the sagebrush on dry uplands, and irrigating with alkaline groundwater, allows good harvests only for a limited time; then salt accumulation in the soil results in decreasing production. The threat is that the soil will become unfit for any desirable vegetation. Loss of very productive bird habitat through the loss of the grassy wetland is the immediate threat.

Discussion

The Malheur-Harney Lake Basin, with the Malheur National Wildlife Refuge (located approximately 20 miles south of Hines) at its heart, is one of the most important bird nesting and migratory bird stopover points in the United States. It is the main resting and feeding area for birds migrating to and from the interior valley wetlands of California. In 1976, this area produced more ducks

than all 14 other waterfowl refuges in the Pacific Northwest combined. In addition to sheer numbers using the Basin, the diversity of birds is also exceptionally high with nearly 300 species having been observed there.

The Silvies River flood plain represents a substantial portion of the overall habitat used by waterfowl and marshbirds during the spring and summer as described above. Loss of this habitat would substantially decrease waterfowl numbers using this Basin during spring migration; overall, the diversity and productivity of this area as a bird habitat would be severely diminished.

There are several ways to identify, notify and protect those significant natural areas as discussed by the Nature Conservancy. Specific reference is made to the Harney County - Data Summary, Oregon Natural Heritage Program. The Nature Conservancy, as regards the tools for protection of these natural areas on the part of property owners, state, federal and local agencies, suggest some of the following methods:

Landowner notification	Agreement with Landowner
Registration	Conservation easement
Fee Acquisition	Designation
Dedication	Land Use Control

This Comprehensive Plan does not endorse any one method of protection, but merely mentions the various alternatives for reference.

## SCENIC &amp; HISTORIC RESOURCES

Historically, Hines was constructed as a company town to serve the residential needs of the newly constructed Edward Hines Lumber Company during the early years of the Great Depression (1929). The layout of the original plat of the City is unique and historically significant in itself in that it was a town built to serve one industry; the industry that today is the single largest employer in the Burns/Hines urban area and all of Harney County.

The Harney County Historical Society in cooperation with the Harney County Planning Commission, has compiled an inventory of historical sites and structures entitled, Harney County, An Historical Inventory. That inventory provides an excellent basis from which to explore further sites and areas. However, the current Inventory makes no mention of the Hines area as of today (March, 1979). It does, however, recommend an inventory of "Additional Potential Historic Sites" (Appendix A). That list does recognize potential sites within Hines including the following:

1. The Hines Lumber Company
2. The townsite of Hines

Since the two are tied closely with the same period, a further supplementary inventory should be undertaken to add to the present publication including not only a general history of the Hines Lumber Company and townsite, but also an examination of specific homes and structures in the Hines community.

The current Inventory was conducted in accordance with several site evaluation criteria in addition to field inspection and personal interviews. The evaluation criteria used by "Region 6 of the U.S. Forest Service" were used in conducting the study and resulting Inventory. They were:

- "1. Factors appropriate for all cultural resources:
  - (a) Is it unique? (Is it the only one left, only one ever made, only one known?)
  - (b) Is it representative: (Is it one of a group of similar resources in the area? Does it represent a past way of life?)
  - (c) Is it over 50 years old?
  - (d) Is it associated with a known person or event?
  - (e) Does it have integrity? (Has the setting been altered?)
2. Factors appropriate especially for historical resources:
  - (a) Does it relate to an historical theme? (The Fur Trade, The Oregon Trail, etc.)
  - (b) Is it associated with a particular event or person? (The first ranger station, a battle, a well-known cattleman, etc.)
  - (c) Is it usable or adaptable for use?
  - (d) Does it have distinctive features (engineering or architectural, etc.)? (Emphasis Added)

Perhaps the most significant criteria here is 1.(c); "Is it over 50 years old?" Both the City of Hines and the Hines Lumber Company are just now attaining the

50 year-old status. Consequently, any additional inventories or studies conducted subsequent to the original publication date (1978) in the Hines area should be included in any Comprehensive Plan update.

GOAL

To identify and preserve those sites and structures that represent the historical, social, cultural, economic, and industrial heritage and progress of the City of Hines.

POLICIES

1. Upon identification of historic and scenic sites, a comprehensive approach to the protection of the City's historic and scenic resources coordinating efforts on the Federal, State, County and Local level should be encouraged.
2. The Harney County, An Historical Inventory, 1978, shall serve as the data base from which further inventories and recommendations shall occur.
3. Completion of the historic sites inventory, based upon information gathered in the Harney County, An Historical Inventory (Appendix A) is encouraged.
4. Public education concerning the scenic and historic sites within Hines and Harney County is desirable and is encouraged.
5. Financial and technical support should be pursued in order to establish a program for preservation of Hines' cultural and historic resources through public and private agencies, firms, community groups and individuals.

## MINERAL AND AGGREGATE RESOURCES

In general, there is limited activity related to mining of mineral deposits in the Burns/Hines area. Those deposits are limited to non-metallic substances. There is a known deposit of scoria or cinders west of Burns and a pumice deposit southwest of Hines. The site that most directly affects the City of Hines is the "Choate" pit to the west of the existing City Limits. Truck traffic from that "pit" uses Hanley Avenue to get to the Central Oregon Highway (U.S. 20/395) to the east, thereby channeling non-residential traffic through a residential area of Hines. Map 5 indicates the general location of those deposits.

Pumice, pumicite and cinders are all types of volcanic rocks derived from material that was once molten. They differ from common dense stony lavas in that they are primarily glasses - the natural end product of lavas that have cooled.

Pumice and pumicite range in color from white to various tones of gray and tan. Cinders are almost always dark red to black. They are also commonly more stony than glassy.

Pumice and pumicite are used as abrasives for cleaning and fine polishing.

Cinders and pumice are both used as aggregate in the manufacture of light-weight precast concrete blocks and bulk pours in applications where insulation, fire-proofing, and weight savings are important factors.

GOAL

To identify and, where appropriate, develop mineral and aggregate resources.

POLICIES

1. The location, quality and quantity of aggregate resources shall be identified and plans shall be formulated for the conservation and/or development of such resources as appropriate to meet future needs.
2. Development of mineral and/or aggregate resources shall provide plans for the rehabilitation of mined areas.



## Water Resources

### Summary

In general, the surface water quality in Harney County is less than excellent. The Oregon Department of Environmental Quality specifically cites "low flows and coliform bacteria" as limiting parameters for the Silvies River in the Statewide Water Quality Management Plan of 1976. This means that these parameters are not within established water quality standards or desired limits. In addition, "temperatures appear to be undesirably high during the summer months for salmonoids."

Specifically addressing the Silvies River, the DEQ goes on to state that, "there are no industrial or municipal discharges into the Silvies River. Therefore, the major impact on the (Silvies) river's water quality is probably from the agricultural activities along it, such as flood irrigation. Overland runoff generally increases the level of turbidity and coliform bacteria in the waterway."

"Short term turbidity increases may be caused by bank stabilization projects, bridge construction and repair, dredging or other instream work." (Source: Oregon Department of Environmental Quality, Water Quality Management Plan, 1976)

### Existing Conditions

The semi-arid region of Harney County is dependent upon the availability and quality of water. This important resource is used for agriculture, industry, municipal, and recreation purposes.

Precipitation, largely in the form of snow during the winter months, is small in the lower elevations and moderate in the areas of higher altitudes, i.e., Steens Mountain area.

There is a good potential for additional ground water storage in the basin; the effective porosity factor is moderate, and the water levels are deep in many places. Aquifers are practically untested and unused but have great potential in some sub-basins, such as Bear Valley on the upper Silvies River.

Surface water in Harney County is part of the "Closed Lake Basin." In theory, it would be possible for Basin waters to flow through the South Fork of the Malheur River to the ocean, but this has not occurred in recent times. Inflow to the system is from precipitation; outflow, or discharge is by evapotranspiration (use of water by plants and evaporated from the soil).

### Lakes

There are about 45 lakes and reservoirs in the Malheur Lake drainage basin, which encompasses much of Harney County. The areas are quite variable depending upon the amount of rainfall occurring each year. Malheur Lake, south

of Hines, has an area of about 64,000 maximum surface acres when it is near its maximum elevations, and Harney Lake has an area of 33,000 maximum surface acres; both of these lakes have been known to be dry in years of severe drought.

Water flows out of Malheur Lake only when its elevation exceeds 4,093 feet (approximately) and its outflows are discharged into Harney Lake. (For specific information, the reader should consult the U.S. Department of Housing and Urban Development Federal Insurance Administration Flood Hazard Boundary Map for Harney County, April 18, 1978, Panel 410083 0035A). The frequency with which high flows to Malheur Lake have occurred has been such that it has waters that are not highly saline. Harney Lake, however, has no consistent outflow, losing water only by evaporation (except in rare instances), with the result that its waters are highly saline; there is no fish life in this lake.

### Present Water Requirements

#### Irrigation

Irrigated agriculture in Harney County has its beginning late in the nineteenth century, and by 1902 about 74,000 acres were under irrigation; by 1919 the irrigated acreage had increased to about 119,400, reaching 126,000 acres in 1929. The irrigated area in 1964 amounted to about 140,000 acres. The present distribution of these acreages is about 60 percent in the Silvies River basin, 30 percent in the Donner and Blitzen basin, and 10 percent in the Silver Creek basin. Currently, there are about 145,000 acres under irrigation in Harney County; 110,000 acres under natural or "wild-flooding" and 35,000 acres irrigated through more sophisticated methods, i.e., sprinkler systems.

Most of the irrigation is accomplished by wild flooding in the early spring when the water is available. Because of the limited supply, it is estimated that the depletion is about 40 percent of that which could occur and is estimated to be 0.6 acre-feet per acre; thus the depletion due to irrigation was estimated to have been about 84,000 acre-feet in 1964.

#### Municipal, Domestic and Industrial

Next to irrigation, the largest user of water is the Edward Hines Lumber Company, being the largest industrial user also. No accurate measure of industrial use is available, but the lumber mill south of Hines has three large-capacity wells, two of which pump nearly continuously to supply water for plant operation and to sprinkle the large log deck always present. Outflow from the mill operation is used to irrigate an adjacent hayfield and meadow.

#### Groundwater

Ground water is used widely for domestic supplies at many ranches throughout the area. A number of suburban homes a short distance from Hines have individual wells for domestic supply. Much of the stock water used in the

area also comes from wells, particularly in the areas east and south of the "island" between the two Silvies River branches. Even near the river, some stock water may be supplied by wells, especially during the summer and autumn.

Groundwater occurs beneath the land surface in an aquifer (a permeable formation of consolidated or unconsolidated rock material). In places it may be confined under hydrostatic pressure by less permeable overlying strata (in which event the pressure will cause the water to rise in a well or even flow at the surface), or it may be unconfined (water level in the well the same as in the aquifer).

In this "closed" hydrologic system of the Harney Valley, 1) the deeper confined aquifers remain filled at a volume that is essentially constant, 2) the shallower unconfined aquifers, over a term of years, remain filled to an average water-table stage which is locally related to the stage of the Silvies River, and 3) over the same term of years, recharge must equal discharge. For such a system, water moves through the shallow, unconfined zone to recharge deeper, confined aquifers in recharge areas. In discharge areas, the confined aquifers lose water upward through the unconfined aquifers.

The ultimate source of ground water in the area is precipitation on the surface of the catchment area. Recharge to the ground water body results from infiltration of precipitation on the land surface and from percolation from streams.

As in most areas of Oregon, water levels in wells in the Harney Valley fluctuate seasonally, being highest in early spring and lowest in the late summer and autumn. During wet seasons, water levels rise largely in response to additions of water to storage, and water levels decline owing to the movement and withdrawal of water by natural discharge and pumping during summer.

Three deep wells furnish Hines with municipal water. Hines has an elevated storage tower to maintain water pressure.

Thermal artesian water at temperatures of 70 to 80 degrees Fahrenheit underlies an area of several square miles near Hines.

According to a 1973 report (Ground Water Levels, 1968-1972) by the State Engineer, "some decline of artesian pressure near Hines is expected."

In general, from the information available, it appears that the Harney Valley, which includes Burns and Hines, can sustain additional ground water developments without serious problems of overdraft.

Municipal use and use in light industry was estimated to be about 250 gallons per capita per day (gpcd).

## SCHOOL FACILITIES IN BURNS, HINES AND HARNEY COUNTY

The City of Hines has one school facility located within the City Limits: Hines Elementary School. "Hines Elementary School District No. 30" has a total of 287 students (May, 1979), including their kindergarden program. The District has 18 certified teachers. The school is located in the western portin of the City of Hines at the end of Barnes Avenue.

There are 13 classrooms in the existing building with other facilities available for library use, music activities and physical education programs.

The average student/teacher ratio and the grade distribution follows:

Kindergarden	-	38 students
1st Grade	-	48 students
2nd Grade	-	39 students
3rd Grade	-	44 students
4th Grade	-	45 students
5th Grade	-	35 students
6th Grade	-	38 students
Number of teachers	-	18
Number of students	-	287
Average student/teacher ratio	-	15.94:1

The Hines Elementary District pays tuition to the Burns Elementry District in order to have the 7th and 8th grade Hines students attend Lincoln Junior High School in Burns.

The Hines Elementary School District offers programs in special education, music, library and physical education. The Hines Elementary School District plans no new facilities in the immediate future, however, an 11 acre site was purchased several years ago for future expansion or relocation. That site is located next to the Public Golf Course.

Due to the overall size of the County and the vast distances involved, the education systems in Harney County are related, either by attendance or by financing programs. What follows is a description of the education facilities and programs in the remainder of the County.

Public education in Harney County is provided by 15 different school districts, including the Hines Elementary School District. Some administrative and support services are provided by the Harney County Education Service District (E.S.D.). A description of each of the school districts and facilities follows (NOTE: With few exceptions, student attendance figures are for the 1977-78 school year):

## ELEMENTARY SCHOOLS

Grades K - 8

Burns No. 1  
 Burns, Oregon  
 837 students  
 5 person Board of Directors

The Burns Elementary School District has three elementary schools and one junior high school. The student loads and grade distribution are as follows:

## Filmore Elementary School

Kindergarten - 1 classroom  
 Grade 1 - 1 classroom  
 Grade 2 - 1 classroom  
 Grade 3 - 1 classroom  
 Classroom total - 4  
 Number of teachers - 4  
 Number of students - 104  
 Average student/teacher ratio - 26:1

## Washington Elementary School

Kindergarten - 1 classroom  
 Grade 1 - 1 classroom  
 Grade 2 - 1 classroom  
 Grade 3 - 1 classroom  
 Classroom total - 4  
 Number of teachers - 4  
 Number of students - 117  
 Ave. student/teacher ratio - 29.25:1

## Slater Elementary School

Grade 1 - 2 classrooms  
 Grade 2 - 2 classrooms  
 Grade 3 - 2 classrooms  
 Grade 4 - 3 classrooms  
 Grade 5 - 3 classrooms  
 Grade 6 - 3 classrooms  
 Total Classrooms - 15  
 Number of teachers - 15  
 Number of students - 339  
 Ave. student/teacher ratio - 22.6:1

## Lincoln Junior High School

Grade 7 & 8  
 Number of teachers - 13  
 Number of students - 227  
 Ave. student/teacher ratio - 21.3:1

## District Enrollment

Kindergarten - 94	Grade 5 - 80
Grade 1 - 89	Grade 6 - 74
Grade 2 - 72	Grade 7 - 130
Grade 3 - 82	Grade 8 - 147
Grade 4 - 69	Total <u>837</u>

The Hines Elementary District No. 30 has a tuition and service agreement with the Burns District to provide Grades 7 & 8 for Hines Elementary District

District students at Lincoln Junior High School. Approximately 30 percent of the junior high students come from the Hines District.

Various special programs are provided within the school district. Remedial reading, learning disability, music, library, and counseling are some of the services that are available to all four schools.

The Junior High School facility does not have significant recreational areas, especially for field sports, and depends upon the grounds at nearby Slater Elementary School when this type of space is used. The Junior High, Washington and Filmore schools also use the Slater cafeteria facility.

The District had 23 to 25 new students in the 1977-78 school year. Due to predicted school population stabilization, the District does not anticipate any significant capital improvements in the near future.

The Burns Elementary District has its own administrative and support staff.

Crane No. 4

28 miles southeast of Burns

65 students

5 person Board of Directors

The Crane District has its own administrator. Grades 1 - 6 attend Crane Elementary School. Grades 7 & 8 are placed in the Crane Union High School. This District feeds into the Crane Union High School District.

The grade school has three classrooms with five and one-half teachers. The school had 23 students in 1969 and 65 in the last school year (1976-77), indicating an average annual increase of 7%. The District is anticipating a continued growth pattern of approximate 25% increase over the next 5 - 10 years. The Crane Elementary School has a 14:1 student/teacher ratio.

The elementary facilities are designed to accommodate 45 students so there is some overcrowding at this time. Also, recreational facilities, which are shared with Crane Union High School, are very limited in space. The district has not planned for any expansion of the facilities, but it is anticipated that some capital improvements must be made soon.

Pinecreek No. 5

35 miles northeast of Burns

8 students

5 person Board of Directors

Grades 1 - 8 are provided at the Pinecreek School. Administration and supervision of the school is provided by the E.S.D. in coordination with the local Board of Directors. These students attend Crane Union High School.

Diamond No. 7

60 miles southeast of Burns  
17 students  
5 person Board of Directors

The Diamond District has two teachers. Administration and supervision are provided by the E.S.D. in coordination with the local Board of Directors. This district feeds into the Crane Union High School District.

Suntex No. 10

30 miles west of Burns  
9 students  
5 person Board of Directors

The Suntex District has one teacher. Supervision and administration are provided by the E.S.D. in coordination with the local Board of Directors. These students attend Burns Union High School.

Drewsey No. 13

48 miles northeast of Burns  
13 students  
5 person Board of Directors

The Drewsey District has two teachers. Supervision and administration are provided by the E.S.D. in coordination with the local Board of Directors. These students attend Crane Union High School.

French Glen No. 16

60 miles south of Burns  
6 students  
5 person Board of Directors

The French Glen School District has one teacher. Administration and supervision are provided by the E.S.D. in coordination with the local Board of Directors. The French Glen District feeds into the Crane Union High School District.

Lawen No. 18

18 miles southeast of Burns  
13 students  
5 person Board of Directors

The Lawen District has two teachers. Administration and supervision are provided by the E.S.D. in coordination with the local Board of Directors. The school feeds into the Crane Union High School District.

Double "0" No. 28

28 miles southwest of Burns

5 students

5 person Board of Directors

The Double "0" District has one teacher. Administration and supervision are provided by the E.S.D. in coordination with the local Board of Directors. The Burns Union High School District receives these students.

Andrews No. 29

120 miles southwest of Burns

12 students

5 person Board of Directors

The Andrews District has two elementary schools that are 41 miles apart. There is one teacher with supervision and administration provided by the E.S.D. in coordination with the local Board of Directors. The Andrews District feeds into the Crane Union High School District.

Sod House No. 32

28 miles southwest of Burns

12 students

5 person Board of Directors

The Sod House District has one full-time and one part-time teacher. Supervision and administration are provided by the E.S.D. in coordination with the local Board of Directors. The District feeds into Crane Union High School.

Fields No. 33

132 miles south of Burns

9 students

5 person Board of Directors

The Fields District has one teacher. Administration and supervision are provided by the E.S.D. in coordination with the local Board of Directors. The District feeds into the Crane Union High School District.



## HIGH SCHOOLS

Burns Union High School No. 2

Burns

500 students

5 person Board of Directors

This is a four year high school with its own administrative and support staff. The positions on the Burns High School Board come from the various zones of the attendance area of the County. The district operates Burns Union High School which has some 40 rooms and 37 certified teachers. Two counselors are also on the staff.

The Burns Union High School offers remedial programs and is very strong in vocational education programs, such as business, mechanics, metal and wood shops. Art and home economics are also strong programs at Burns High School. The school owns its own observatory which is operated by the high school astronomy club.

An accelerated learner program is now offered that concentrates on college preparatory classes. Currently, approximately 30 percent of the Burns High School graduates go on to college.

The Burns High School has had a stable student population over the past few years. For five years, student numbers have varied little (no more than plus or minus 20 from the 500 figure). The District does not anticipate any significant increase from the area, based on current student loads in the elementary schools and junior highs. There may be some in-migration that will affect the student population, but that has not been projected or dealt with by the District. At this time few new facilities or capital improvements are planned.

Crane Union High School No. 1

28 miles southeast of Burns

85 students

5 person Board of Directors

This is a boarding high school with dormitories to house students throughout the week. Crane is the only public boarding high school in the country, with the distance from home to school making this necessary. Crane Union High School shares the same administrator with Crane Elementary District No. 4. The board members represent the rural areas of the county attendance area. Grades 7 and 8 from the Crane Elementary District attend the High School.

The High School has 12 classrooms with 11 teachers. The school had 51 students in 1969 and 85 during the 1976-77 school year,

indicating an average annual increase of 4.4%. The District is anticipating a continued growth pattern of an approximate 25% increase over the next 5 - 10 years. The Crane Union High School District has an 8:1 student/teacher ratio.

The high school facilities are designed to accommodate 150 students, so there is room for the projected expansion. However, recreational space, which is shared with the Elementary School, is limited. The District has not planned for any capital construction in the near future.

Existing school facilities in the rural area of the county fare adequately in terms of existing student load and program demands. The School Districts have been able to maintain adequate programs and services for the students, generally through the services of the Educational Service District. The E.S.D. provides consulting services in reading, counseling, speech and hearing, curriculum and other areas. These are reassessed each year in order to keep them current to the needs of the students. The biggest problem facing the provision of programs and services is the isolation of the rural areas.

Enrollment projections to anticipate growth over the next few years have not been made by the Education Service or rural districts. This is due for the most part to the extreme fluctuations that can happen in a rural school without any prior notice or prediction. For instance, the movement of one hired man with three children from one ranch to another in the county can totally change the complexion of two school districts. This has caused some problems.

The Education Service District and the rural districts have not undertaken any facility planning and programming to anticipate the demands on the districts over the next few years. The general policy has been to accommodate growth and change as it occurs.

The twelve rural districts have a budgeting process that is only used in four of Oregon's 36 counties. Each year the E.S.D. prepares a draft budget for each district. The district's Board and Budget committee reviews the draft and revises and adopts it. Funds to support the district budget comes from two major sources. The E.S.D. and the local district raises the monies necessary. The E.S.D. funds are "equalizing" money that is spread among the rural districts to assure an equal share based on student loads and demands. The E.S.D. money is raised through a county wide levy.

One of the largest demands on the rural school district is meeting federal and state mandated program requirements. Financial restraints and the rural character of the district contribute to the problem.

The greatest problem of the rural school districts are the distances throughout Harney County. Population in the county is considered moderately stable with the largest turnover of students being in Burns and Hines without any significant rapid growth. The rural districts suffer from a large turnover of teachers, attributed to distance and isolation.

RECOMMENDATIONS

1. Facility and program planning be done on a long-range rather than a year-to-year basis to better anticipate population growth throughout the County.
2. Rural school districts seek additional funds, when appropriate, to insure conformance with federal and state mandated educational programs.
3. A wide range of educational opportunities be provided, when possible, to assure quality education throughout the rural and urban school districts.
4. Adequate land be secured, where appropriate, for the expansion or development of educational facilities.

## PARKS, RECREATION AND OPEN SPACE

An integral part of the character of any city is the areas set aside for recreation and aesthetic enjoyment. Hines is blessed in this regard because of its location in the immense vastness and beauty of the open space provided by Harney County. Access to spectacular areas of natural beauty is relatively easy for the citizen of Hines, with only short distances to the Blue Mountains, Malheur National Wildlife Refuge, and Steens Mountain. Even much closer to the city are the hills to its west and the flood plain area of the Silvies River to the east.

Hines has a considerable amount of centrally located park space that was set aside in the original plan of the city. The area west of the highway has many trees, some picnic benches and tables, playground equipment, and tennis courts. The eastern portion is the site of the fire department and city hall, however, most of the area is vacant. The continued development of the four quadrants of this central park space, utilizing more trees, recreation equipment, park benches, etc., would provide an even stronger focal point for Hines that could be readily enjoyed by all the city residents as well as enjoyed and appreciated by those traveling through the city.

Hines residents also have easy automobile access to the several park facilities and to the commercial recreational facilities located in Burns. The nine-hole golf course, located in the flood plain area, provides an important developed recreational facility for the citizens of these two cities.

Table 3 lists those recreational facilities that are available not only in the Burns/Hines area, but throughout Harney County.

GOAL

To develop and maintain a variety of park and recreation facilities to serve the recreational needs of the City of Hines and the urban area.

POLICIES

1. When the community determines there is a need for such facilities, areas be acquired for neighborhood parks.
2. Neighborhood parks should be within walking distance from residential areas they are intended to serve, and that the sites not be separated from the service area by major barriers to pedestrian traffic.
3. Park and recreation facilities be developed to meet the needs of all age groups within the community and the urban area.
4. Encourage the further development of a bicycle/pedestrian path from Burns to Hines in addition to the existing path along U.S. 20/395.
5. Attention should be given to possible park sites to the west of the

existing City limits but within the Urban Growth Boundary.

Table 3INVENTORY OF RECREATIONAL DEVELOPMENTS

Burns, Hines, Harney County

Name	Water	Toilets	Picnic Sites	Overnight Sites	Activities	Remarks
Anderson Pk. (Burns)					SW	Pool, Tennis
Camper Corral	X	X	X	X	F-G-H-V	Electricity Private Pool
Page Spring	X	X	X	X	F-G-H-V	
Fish Lake	X	X	X	X	B-G-F-L- V-SW	No motors allowed
Jackman Pk.	X	X	X	X	G-V	
Blitzen Crossing		X	X	X	F-G-V	
Krumbo		X	X		B-G-F-L	No motors allowed
Malheur Environmental Field Station	X	X		X	G-H	Electricity Dormitory
Yellowjacket Reservoir	X	X	X	X	B-F	
Sands	X	X		X	SW	Pool
Valley Golf Course (Hines)	X	X				Golf Course
Hines Ball Park		X				Bleachers
Hines City Pk.	X	X	X			Playground, Tennis Court
Washington Pk. (Burns)	X	X				Playground facilities
Davidson Pk. (Burns)	X	X	X			
Village Trailer Park	X	X	X			Electricity
Sage Hen	X	X	X			State safe rest area
Delintment Lake	X	X	X	X	B-F-L-SW	Forest Service Campground

Table 3INVENTORY OF RECREATIONAL DEVELOPMENTS

Burns, Hines, Harney County

Name	Water	Toilets	Picnic Sites	Overnight Sites	Activities	Remarks
Joaquin Miller	X	X	X	X		Forest Serv Campground
Veteran's Memorial Field (Burns)						Ballfield
Filmore Park (Burns)						
Buchanan Spring	X	X	X		G-H-V	
Buchanan Thunder Egg Beds					G	Rockhoundi
Altnow Pond					B-F-L-SW	Warm Water Fishing
Chickahominy Reservoir	X	X	X	X	F-WS	

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Activities:    B - Boating    G - Geology    L - Lake    SW - Swimming  
                   F - Fishing    H - History    V - Scenic    WS - Water Skiing

## PUBLIC FACILITIES AND SERVICES

GOAL

To provide adequate public facilities and services to meet current and potential community growth.

General Discussion

## Police Services

The City of Hines Police Department is located in the Hines City Hall. It has three officers and one patrol vehicle. The department is actively involved in traffic control, crime prevention and investigation. Also, an extensive school liaison program has been undertaken with policemen giving programs on various aspects of safety and law to school children of all ages. At this time the police car is on patrol 16 hours out of the day.

The police department is aware that Hines has a faster growth rate than Burns or the rest of Harney County. Commercial expansion in its northern portion near the High School and continued residential growth put much greater demands on the department. New commercial facilities sometimes bring demands on the police force that greatly cut into the existing efficiency and time availabilities in residential areas. There is the possibility that new commercial facilities bring increased amounts of theft and vandalism, and would suggest that commercial establishments have burglar alarm systems which would require around the clock police monitoring.

Crime statistics in Burns indicated a 191 percent increase in reported crimes in 1977 over 1976. As of April 1, 1978, there was a 54 percent increase over 1977. This is indicative of the growing crime problem that often accompanies community growth.

With the potential addition of a 24 patrol, requiring the expansion of the department from three to five persons, police protection would be adequate to anticipate the population and commercial growth expected over the next five years. With 24 hour protection, even the potential of a doubling of the criminal activity cases would not overtax the capabilities and efficiency of the police department. Such an expansion of the police department's staff would not require significant new capital investments, since new officers would make up a third shift in a 24 hour period and therefore one police vehicle should be adequate. At the same time, the existing police headquarters in City Hall would be able to handle the increased load.

POLICY

The existing level of police services appears to be adequate, but with projected increases in population and intensified development, an increased level of service should be anticipated within the next few years.



Fire Department

The Hines Fire Department consists of 20 volunteer firemen, of which there are the Fire Chief, Assistant Fire Chief, a Captain and two Lieutenants. There are never less than 18 men in the department and at least 80 percent of the time are at full strength with 20 volunteers.

The City of Hines has an insurance rating of "Class 6."

The Hines fire dispatching is done through the Burns police office in Burns.

The equipment consists of:

A. One 1963 fire truck. It has a 1,000 gallon water tank and it is equipped with a 1,000 gallon per minute pump and a 250 gpm booster pump. It carries all fire hoses and equipment that is required.

B. One 1974 fire truck. It is equipped with a 750 gallon water tank. It has a 750 gpm pump and a 250 gpm booster pump. It carries all fire equipment and hose that is required.

The fire station is a two story wood frame building. It contains two bays for fire trucks, storage facilities and has one of the city wells (water) and a pump room. The availability of water at the pressure needed for service seems to be adequate in all but the most extreme cases.

There are occasions when there is a deficiency in manpower due to the nature of the volunteer fire department system. This occurs because most of the firemen are mill workers. Should a fire occur during mill working hours, the department is short-handed until the workers arrive.

Unless there is a large unexpected increase in the population of Hines, the existing facilities and equipment, with proper maintenance, care, and periodic replacement should be adequate for many years.

There is a need to increase that available manpower over the next few years to keep up with expanding population. As Burns and Hines continue to grow, perhaps they could consolidate, or form a fire district, taking in the unprotected area surrounding both cities. They would then be able to support and maintain a partially paid department, perhaps to the extent of lowering the insurance rating.

The oldest fire truck is now 16 years old. A sum of money should be put in a reserve fund every year to go toward the purchase of a new fire truck in the future.

POLICIES

1. The Hines Volunteer Fire Department should plan for an increase in available manpower over the next few years.
2. The City of Hines and the City of Burns should consider the consolidation of fire protection services through the formation of a fire protection district.

## Medical and Health Facilities

All medical and health facilities for the Harney County area are located in the County Seat of Burns. Below is a summary of the services provided by those facilities.

### A. Harney County Hospital

The Harney County hospital is a 49 bed, short-term, general hospital which provides medical, surgical, and obstetrical care. It is a well equipped facility with recently expanded laboratory capabilities. The medical staff consists of six resident physicians and an employee staff of 80. Two important features of the hospital are the Intensive Care and Coronary units. Emergency air service (charter airplane and Air Force helicopter) is available to the hospital which also contains a small pharmacy operating on a part-time basis.

### B. Health Care Professionals

The Burns/Hines/Harney County area is served by the following health care professionals:

- 1) Six physicians
- 2) Four dentists
- 3) One optometrist
- 4) Two psychiatric social workers
- 5) One (part-time) psychiatric consultant
- 6) Two (part-time) chiropractors

### C. Harney County Counseling and Guidance Service

Counseling and guidance services are available to residents of Harney County on an "ability to pay" basis.

### D. Alcohol Treatment

Alanon, Alateen, and Alcoholics Anonymous groups are located in the Burns/Hines area. Service is available to any person seeking help, 24 hours a day. An alcohol treatment unit is available at the Harney County hospital.

### E. Senior Citizens Center

There is a newly constructed center for seniors located in Burns. The center provides entertainment, trips, mini-clinics, health, legal advisory counseling, and various other services.

## F. Nursing Home

The Burns Nursing Home has a 49 bed facility; 34 beds for nursing patients and 15 beds for care for the aged.

### POLICY

The quantity and quality of medical and health facilities appear to be adequate to meet existing needs within the community; however, those facilities currently inventoried should be re-evaluated at the next Comprehensive Plan Update.

## Library

The Harney County Library, built in 1969 and located in Burns, distributes books throughout the County. In 1978, it recorded a circulation of 32,210, a 2 percent decline from 1971. The number of books has increased, however, from 18,000 in 1971 to 22,000 in 1978, or an increase of 18 percent. Material is available from the Oregon State Library in Salem on a loan basis. The Harney County Library sponsors the annual Shakespearian Festival and also provides a Children's Story hour for pre-school age children. In addition, the library has the capability for art or craft display, space permitting; availability of twenty art reproductions for check out; and historical data on Harney County.

## Museum

The Harney County Museum is located next to the County Library and has a good display of pioneer materials, artifacts, etc.

## Solid Waste Disposal

The largest amounts of solid waste are generated in the urban areas. Eighty-five percent of Harney County's solid waste is generated in Burns/Hines area.

### 1. Location

The Burns/Hines solid waste disposal site is located about 1 mile west of Burns. It is owned and operated by a private individual who also has a franchise on waste collection in the Burns/Hines urban area.

### 2. Operations and Collection

The site is kept open to all who wish to dump there from

dawn to dark for a small fee. The waste disposal site is closed on Thursdays. There are collections made by the franchise but not all individuals in the area use it.

### 3. General

This site is geologically suitable. Soils are tuffaceous, silty sediments of low, hydraulic conductivity and are unsaturated. Ample cover material, mostly from pit excavations, is available. Sufficient ground (160 acres) is available at the site for further excavation as necessary. With the amount of land at this site, it should last in excess of 25 years. With the anticipated facilities for recycling and recovery, the life of the waste disposal site, or the potential use time for the facility could be lengthened beyond the estimated 25 years. The pit is served by all-weather paved access road. Drainage water is diverted away from the pit by berms constructed when the pit was excavated. A "blow fence," designed to prevent flying debris from nearby properties has been constructed on a significant portion of the site. The pit is being covered about three times a week during the summer and once to twice a week during the winter months.

### 4. Units Served and Waste Received

This site receives the waste of the entire Burns/Hines urban area, or about 30.75 cubic yards of compacted waste daily. It serves over 125 commercial and public units and 1500+ residential units and urban units.

### POLICY

The solid waste disposal facility west of Burns appears to be adequate to meet the needs of the urban area over the next several years, but should be reviewed at subsequent Comprehensive Plan Updates for negative impacts on urban growth.

## TRANSPORTATION

Streets

The City of Hines' street pattern is somewhat different than other communities throughout the county, or for that matter, the State of Oregon. Hines' street pattern is one of curvilinear streets combined with rectangular blocks. Map 8 illustrates the unique layout of the streets in Hines.

The main thoroughfares of the central business district are U.S. 20/395, West Circle Drive and East Circle Drive. However, the majority of the through traffic is on U.S. 20/395 which bisects the town and more or less parallels West and East Circle Drive.

Most of the streets in the City of Hines are paved, as shown on Map 8. The right-of-way for these streets occupy about 145 acres or approximately 35% of the total developed area in Hines. Most of the streets in Hines have a 60 foot right-of-way, with paved surfaces to a width of between 18 and 20 feet, with a few paved to a width of 40 feet. Most of the streets in Hines are without curbs and gutters.

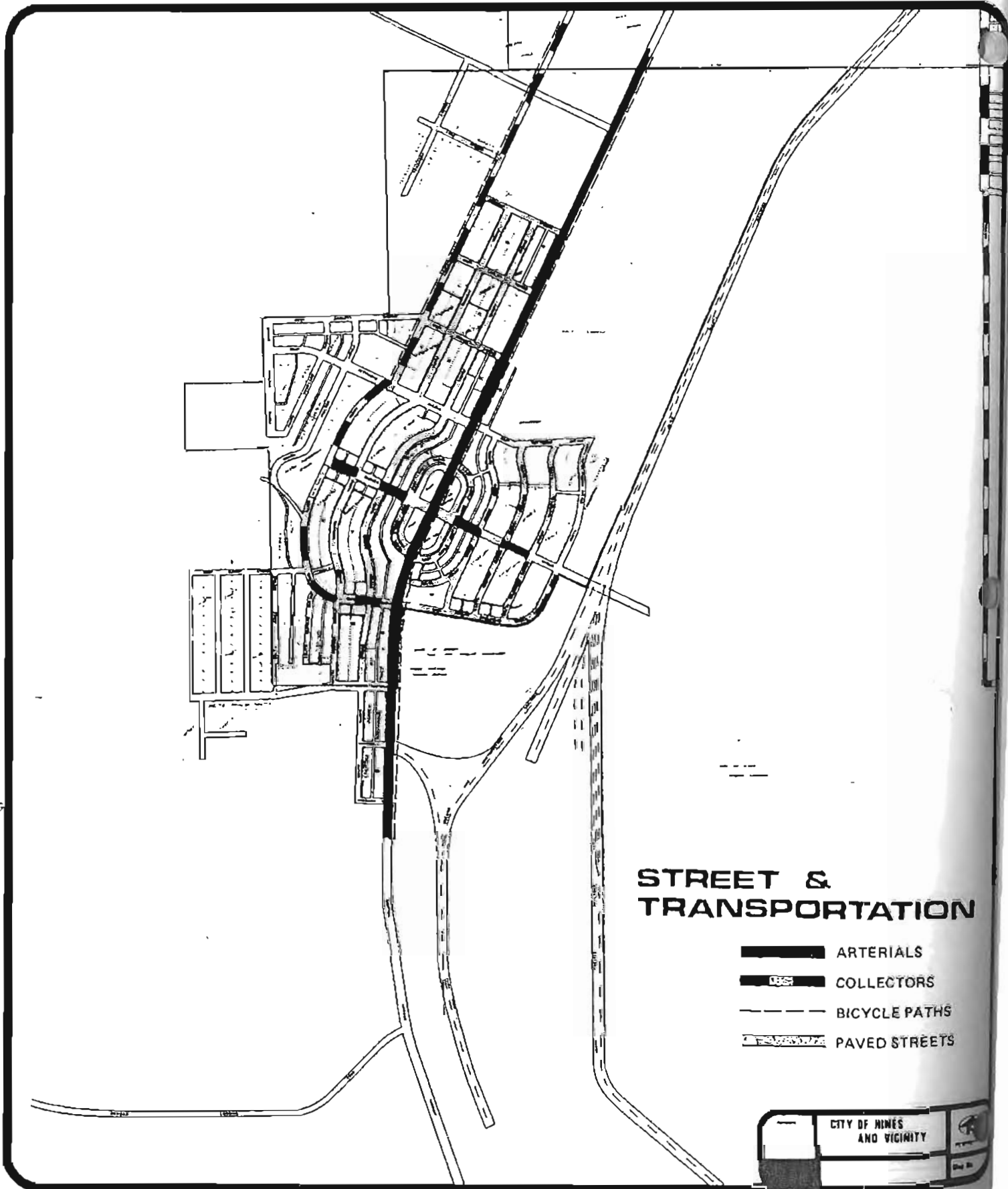
The cost of street paving in Hines is paid for out of the City receipts from the state allocated gasoline tax. As a result of the unique development and different street standards, this source has provided enough revenue so that most of the streets in Hines have been paved as it has developed. The traffic counts for the Burns/Hines area are listed below. Although a majority of the traffic counts are for the Burns area, the total traffic pattern of Burns has a direct or indirect affect on traffic patterns in Hines.

Table 4  
1977 Traffic Volumes  
Average Daily Trips


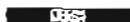

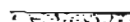
<u>Highway</u>	<u>Location</u>	<u>Vehicles</u>
U.S. 20/395	South City Limits of Hines	4,500
	Hines/Burns City Limits	7,400
	50 ft. SW of W. Monroe St.	9,200
	50 ft. W of Court on Monroe	10,800
	50 ft. W of Highway 78 on Monroe	10,100
	50 ft. N of US 20/395 Intersection	8,600
	Northeast City Limits of Burns	2,550
Oregon 78	50 ft. E of US 20/395 Intersection	3,800
	East City Limits of Burns	1,150

Recent Major Improvements

Burns/Hines



### STREET & TRANSPORTATION

-  ARTERIALS
-  COLLECTORS
-  BICYCLE PATHS
-  PAVED STREETS

West Monroe Street is now a four lane thoroughfare from its intersection with Broadway to Hines Boulevard continuing as Oregon Boulevard to the south city limits of Burns and continuing into Hines. This 1.34 mile section of highway recently was improved in a major project costing in excess of \$750,000, and included relocating the existing bike path from the east side of the highway to the west side.

### Airports

#### Burns

A. The Burns Municipal Airport consists of two hard surface (asphalt) cross runways of 150 by 5,100 feet. It is located six miles east of Burns at an elevation of 4,141 feet.

B. "Davis." Elevation 4,141 feet. Private 2,600 by 60 feet dirt strip located two miles east of Burns.

#### Hines

The "Choate" private airstrip is located immediately west of the Hines City Limits and is approximately 1/2 mile long and has a "cinder" surface.

### Railroad

Burns is served by a spur of the Union Pacific Railroad from its main line in Ontario, 130 miles to the east. This line provides tri-weekly freight service only; there is no passenger service to the Burns/Hines area. The Oregon Northwest Railroad has a line from Burns to Seneca, 50 miles to the north which hauls logs, lumber and freight.

### Bus Service

#### 1. Municipal

At this time there is no municipally operated bus line in the Harney County area.

#### 2. Commercial

There is one private bus company serving the Burns/Hines area; Trailways. There is no Greyhound bus service in Harney County.

Trailways offers passenger and express service west to and from Bend and east through Harney County and Malheur Counties to Nyssa, Ontario and Vale on U.S. 20. There are no plans for expansion of Trailways service in the foreseeable future. This is the only form of passenger carrier service in Harney County.

### 3. Senior Citizens Center Bus

There is a bus on an "on-call" basis to serve the needs of the senior citizen segment of the local population in Burns and Hines who do not drive a private automobile.

#### Taxi Service

Limited taxi service (currently provided by one cab) is available throughout Harney County.

#### Motor Carriers

System 99 Freight Lines provides daily service from the west and south and Garrett Freight Lines provides daily service from the east and north.

In addition, the United Parcel Service (UPS) provides service to Harney County.

#### Bikepaths

The first bikepath (asphalt) in the State of Oregon was constructed in the 1960's parallel to U.S. 20/395 from central Hines to Burns (near the "Les Schwab" store) for a distance of about 2 miles. It is the only designated bikepath in Harney County.

As part of the 1978, 1.34 mile improvement of U.S. 20/395 from near the Hines city limits to N. Diamond Avenue in Burns (to a four lane facility with storm sewers and curbs), an eight-foot concrete bikepath was constructed along the west side of the thoroughfare. The existing asphalt bikepath along the east side of U.S. 20/395 ends near the beginning of the improvement necessitating crossing of U.S. 20/395 to the newer concrete bikepath on the west side.

It is anticipated that as the portion of U.S. 20/395 is improved in Hines, the existing asphalt bikepath will be relocated from the east side to the west side to tie in with the recently completed section in Burns.

Bikepaths on a county-wide basis are somewhat impractical for Harney County due to the sparse population and vast distances between any significant concentrations of people, other than the Burns/Hines urban area.

#### GOAL

To provide and encourage a safe, convenient and economic transportation system to serve the needs of the citizens of Hines, the residents of the urban area, and Harney County.



POLICIES

1. Maintain and upgrade the overall transportation system within the city to meet present and future needs.
2. To provide, at a minimum, paved streets within the community.
3. Design of new roads, streets and thoroughfares should preserve and enhance natural and scenic resources.
4. Commercial bus service to areas outside of Harney County should be retained.
5. At a minimum, rail freight service to Harney County should be retained.
6. A bikepath should be completed from central Hines to central Burns.
7. An "Airport Master Plan" should be developed to assure the Burns/Hines urban area af adequate air service in the future.

## EXISTING WATER SYSTEM

A. System Description

The present water system serving the City of Hines is shown on Map 9. The system is supplied by three wells. Well No. 1 is located next to the water tower on the hill west of Hines. Well No. 2 lies in the old City Hall building in the center of town at Barnes Avenue and the Central Oregon Highway. Well No. 3 is located on Lot 12, Block 1 of the unplatted "Choate Tract" just west of the present Hines City Limits. Table 5 below outlines present capacity, depth, elevation, etc., of the three wells:

TABLE 5  
Well Information  
City of Hines Water System

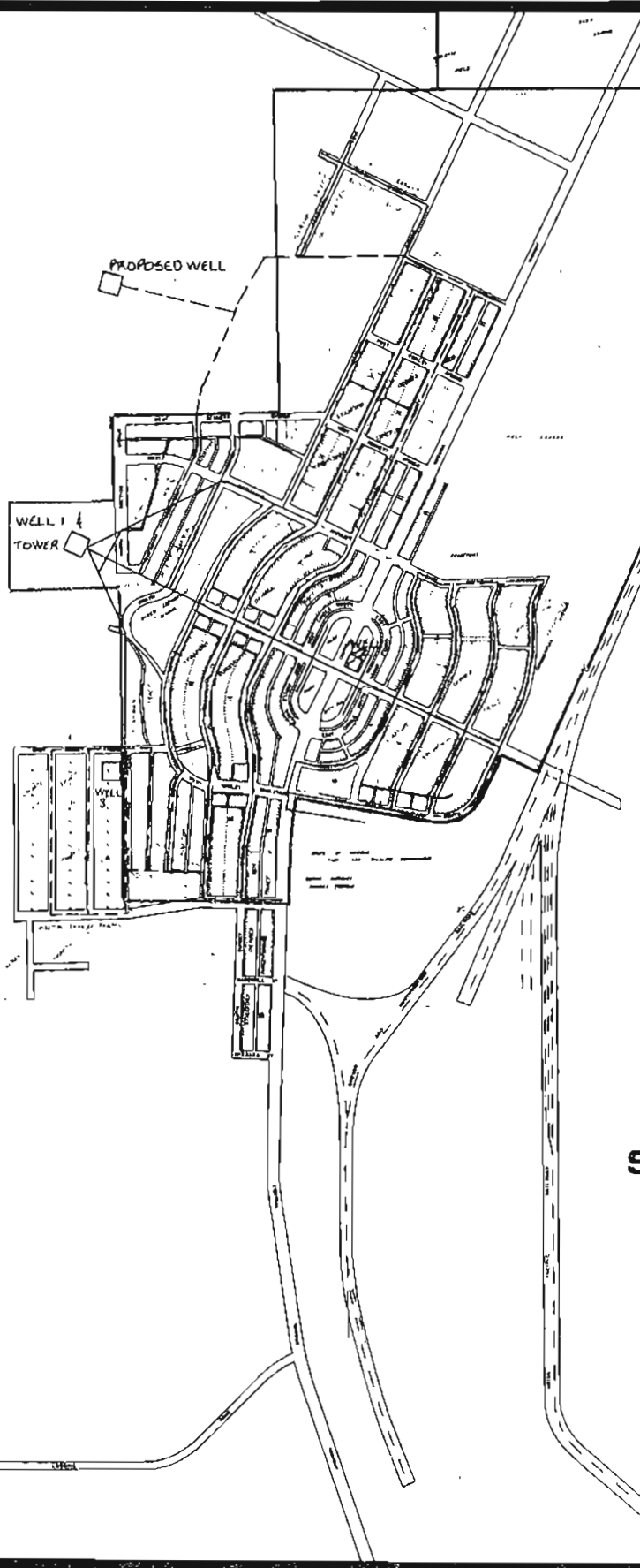
<u>Well No.</u>	<u>Rated Capacity gal./min.</u>	<u>Casing Size</u>	<u>Pump Type</u>	<u>HP</u>	<u>Depth</u>	<u>Ground Elevation</u>
1	800	12"	Vertical Turbine	100	340'	4,315'
2	800	6"	Vertical Turbine	100	170'	4,160'
3	1,000	14"	Vertical Turbine	200	345'	4,240'

Water from Well No. 1 is pumped directly to a 250,000 gallon elevated steel storage tank. The tank and well lie on an eight acre tract of land owned by the City. This tank provides the only storage in the Hines system. Overflow elevation of the tank is approximately at the 4,445 foot elevation, therefore, making the reservoir capable of serving all areas below the 4,435 foot elevation (approximately). This elevation is the approximate upper limit of the water system without additional pumping, storage or pressure systems.

The backbone of the distribution system is the 8-inch main running from the Tank and Well No. 1, east along Barnes Avenue to the east limits of Hines. Well No. 2 connects to this line. The remaining system mainly consists of 6-inch lines branching off of this main, then reducing in size to 4 and 2 inch lines. No extensive grid or looping has yet been developed with the distribution system. An 8-inch main runs between Well No. 1 and Well No. 3, then continues north through "John Woods Addition" and then to "Pleasant Valley Addition." A connection to the Burns Water System at the City Limits in North Saginaw Avenue has been completed.

B. Service Area

The City's current water service area is shown on Map 10. This assumes all areas within 250 feet of existing mains can obtain adequate water service. In addition, the City presently provides water service to immediate areas outside the City. This is mainly in the areas south and southwest of the



# SEWER & WATER

- SEWER
- - - WATER

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present City Limits and include: Skelton, Revak, and Choate Tracts; Sands Mobile Home Park, scattered houses and the gas station south of W. Byrd Avenue.

### C. Service Levels

As controlled by the elevation of the water tower, the upper limit of the existing service is approximately at the 4,345 foot contour. This line is also shown on Map 11. The lowest elevation in Hines is about 4,140 feet, being that area near the railroad tracks on the east boundary of the City. Table 6 below summarizes the existing service tract and includes future levels for the area west of the City.

TABLE 6  
Hines Water Service Levels

<u>No.</u>	<u>Tank Overflow Elevation</u>	<u>Service Level Limits (elev.)</u>	<u>Static Pressure (lbs/sq.in.)</u>
1	4,445	4,435 - 4,140	43 - 132
2 /a	4,675	4,575 - 4,435	43 - 100

a/ Future upper level outside present system level.

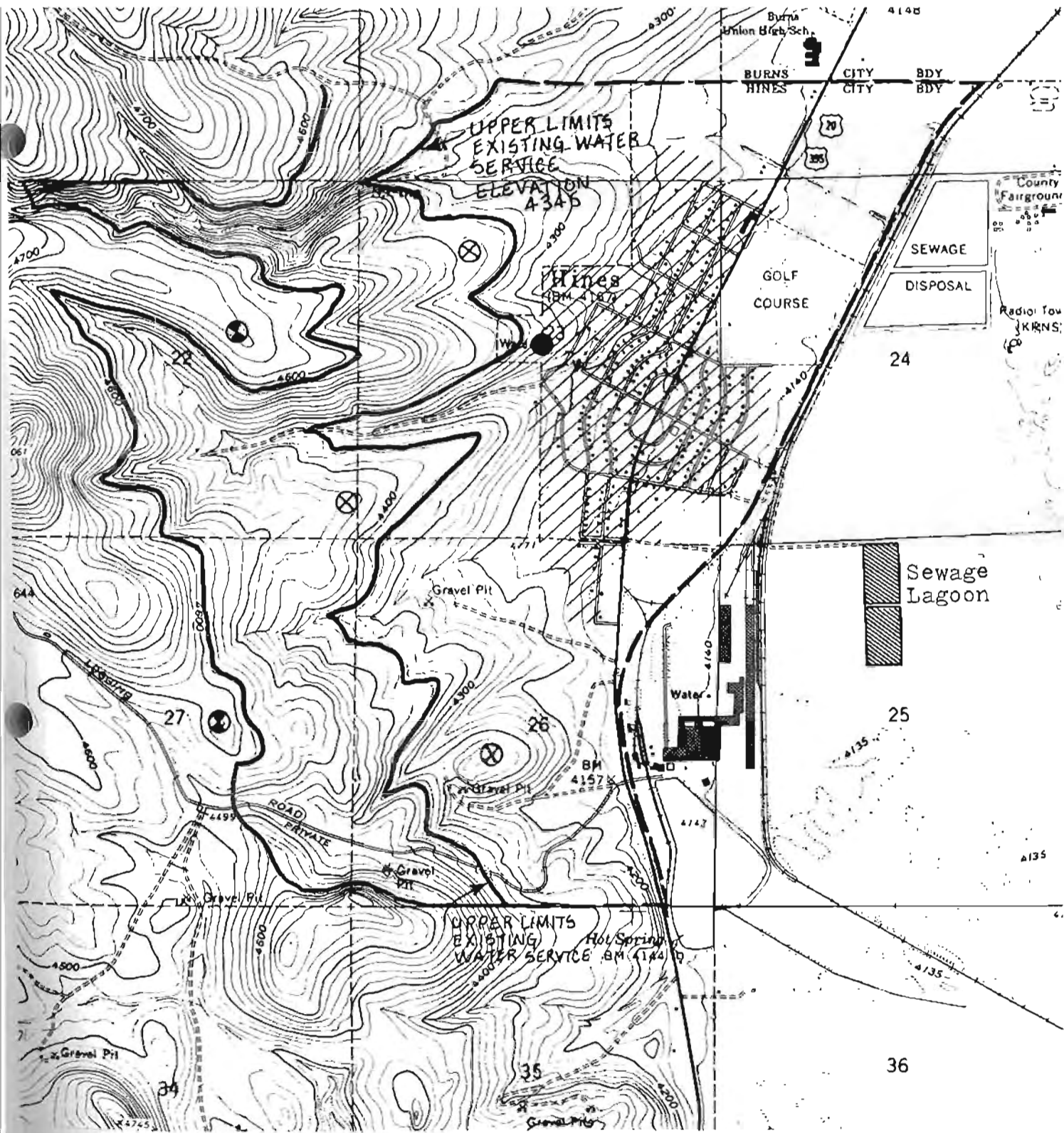
As can be seen from the data above, existing Service Level No. 1 suffers from high pressures at its lower elevation. Normal criteria calls for a maximum static pressure in a system at approximately 100 psi (pounds per square inch). Pressure reducing valves are installed where pressures may exceed this limit. For Hines, this would mean the installation of the pressure reducing station at the 4125 foot level.

### D. Existing Water Usage

To date, the City of Hines provides water service to 540, unmetered accounts, as shown below:

TABLE 7  
Water Accounts

<u>Type</u>	<u>Number</u>
Residential Inside City	503
Outside City	16
Total Residential	519
Commercial Inside City	18
Outside City	3
Total Commercial	21
<b>TOTAL ACCOUNTS</b>	<b>540</b>



- EXISTING TANK SITE
- ⊗ PROPOSED TANK SITE LEVEL 1
- ⊗ PROPOSED TANK SITE LEVEL 2
- /// PRESENT SERVICE AREA

MAP 10

EXISTING WATER SERVICE AREA

Presently there are no industrial users in Hines. Commercial users, such as restaurants, service stations, and motels use significant amounts of water. Other commercial establishments such as barber shops, offices, etc., have a relatively low water demand.

Determining water usage for the City is difficult as: 1) users are unmetered, and 2) there are no master meters at the wells. In order to determine an approximate system demand, water usage from comparable communities without meters is used to determine present demands on the Hines system. For the purposes of this report, it is assumed that average per capita water usage is 250 gpd during the summer and 150 gpd during the winter. Similar communities that have individual meters normally use approximately 100 gpd per person. Based on this, estimated water demands are shown below:

TABLE 8  
Present Water System Demands

A. <u>Equivalent Population</u>		
1. Residential - 519 accounts @ 3.17 gal/acct.		1,609
2. Commercial - 21 accounts @ 5.00 gal/acct.		105
<b>Total Equivalent Population</b>		<b><u>1,714</u></b>
B. <u>Per Capita Demands</u>		
1. Average Daily per Capita Demand (Summer)	250	gpcd
2. Maximum Daily Per Capita Demand	450	gpcd
3. Peak Instantaneous per Capita Demand		0.5 gpm/person
C. <u>Total Demands</u>		
1. Average Daily Demand = 300 gpm	=	428,500 gpd
2. Maximum Daily Demand = 535 gpm	=	771,300 gpd
3. Peak Instantaneous Demand = 860 gpm		

## WATER SYSTEM PLANNING CRITERIA

A. Sources of Supply

The existing wells are believed to be capable of supplying water at a rate of about 2600 gpm (3.74 mgd). Maximum daily demand at present (1978) is estimated at 771,300 gpd. To be considered adequate, the system should be able to provided the maximum daily demands while providing fire flows. This may be done a number of ways. For example, the system could be designed to meet those needs entirely from its sources of supply, or partly from supply and partly from storage.

B. Storage

Distribution system storage requirements are determined primarily by required fire flows plus some additional capacity for meeting peak hourly demands and allowance for emergency conditions. The existing elevated water tank overflow elevation (4,445 feet) is designed to provide service pressures between 43 psi and 130 psi. Ideally, a second reservoir at elevation 4,400 feet should be provided on the opposite side of the system, which would help to minimize fluctuations in pressure during periods of high demand. Unfortunately, no such reservoir site exists either north or east of town. The only location at this elevation line is approximately 3/4 of a mile west of the Edward Hines Lumber Company plant off of Forest Road No. 19. This site, however, is fairly well isolated from the rest of Hines.

C. Distribution System

Distribution grid pipe lines are designed to deliver at velocities in the range of 4 to 6 feet per second. Velocities in this range generally produce the most economical balance between pumping power costs and pipe line costs. At a velocity of 5 feet per second, capacities of various pipe sizes are shown below:

<u>Pipe Diameter (inches)</u>	<u>Capacity (gpm)</u>
2	50
4	200
6	450
8	800
10	1,250

D. Pumping Stations

Pumping stations are used to either boost flows and pressures in areas where pressures are low, or to transfer water from one service level to the next higher level. Capacities of pump stations are determined by the maximum daily demand in the area the station serves. Dual pumps are considered the minimum necessary for reliable service along with provisions for a standby power supply, such as portable generators.

#### E. Valve, Hydrant, Pressure Reducing Areas

This report is not intended to discuss distribution system details to any great extent. Such things as hydrant spacing, valve arrangements, stub outs for future main extensions, "blow-offs" at low points, and air/vacuum valves at high points of the distribution system should, however, be considered during the preparation of construction plans and specifications.

#### F. Easements, Land, Water Rights, and Permits

The water distribution network typically mirrors the road or street network of a city for obvious reasons. Future or proposed pipeline improvements should follow existing rights-of-way whenever possible. In areas where no public roads exist, easements need to be acquired. Easements for pipelines should be a minimum of 10 feet in width and preferably 15 feet for lines larger than 10 inches in diameter. Temporary easements should be acquired in addition to permanent easements, wherever possible, covering the anticipated construction period. This practice will avoid many conflicts between the contractor and property owners and will likely decrease bid prices for the work. Easements should provide the City rights of access to the pipeline at all times and at any time, in case of emergency. Permanent structures should be prohibited over the easement area.

Land and property acquisition will also be needed for such improvements as wells, reservoirs, and pump stations. Access rights-of-way and easements should also be provided to these areas.

Water rights for the withdrawal of ground water also have to be acquired from the Oregon Department of Water Resources. Permits for highway, railroad and river crossings are generally required.



## EXISTING SEWER SYSTEM

A. Present Sewer Service Area

The City of Hines presently serves the entire City limits with sewer service plus limited acreage outside the City.

The City reports 509 sewer accounts as shown in the table below.

TABLE 9  
1978 Sewer Accounts

<u>Domestic</u>		
	Inside City	474
	Outside City	14
<u>Commercial</u>		
	Inside City	18
	Outside City	3
	TOTAL SEWER ACCOUNTS	509

Presently there are no industrial waste contributors. The present sewer service area is shown on Map 9.

B. Sewage Collection System

The majority of the collection pipe was installed in 1955. This piping is concrete sewer pipe with rubber gasket-type joints. Table 10 below shows the size and footage of the sewer mains.

TABLE 10  
Pipe Installation  
Hines Sewer Collection System  
Total Footage of Pipe

<u>Pipe Size</u>	<u>Total (in Feet)</u>
6"	8,000
8"	22,000
10"	6,500
12"	66,000
15"	3,000
18"	<u>8,000</u>
TOTAL SEWER MAIN	54,000 Ft.

(4-6 inch service line estimated)

The length of service piping is estimated as follows:

509 service connections x 60 feet typical side sewer reach = 30,540 feet.

C. Pumping Stations

One pump station also serves the Hines area. This station is located on the sewage lagoon site and pumps all sewage from the City into the lagoons.

TABLE 11  
Existing Pump Station

Type of Station	Dry Well
Area Served	Entire City
Number of Pumps	Two
Horsepower of Pumps	10hp
Normal Pumping Capacity	570 gpm (820,000 gpd)
Maximum Pumping Capacity	1200 gpm
Overflow	No
Mechanical Backup	Yes
Backup Power	Yes
Size of Force Main	8"

In the design of this pump station, room was left for a third pump, which could be installed when needed.

This new station was installed in 1977 as part of the City of Hines Sewage Treatment Plant Improvements.

#### D. Sewage Treatment and Disposal

Sewage treatment is provided by two stabilization lagoons, in series, followed by chlorination. Raw sewage is pumped from the sewage lift station through an 8-inch force main to a flow metering station. Here, the sewage flows are measured, then flow by gravity into Lagoon No. 1. Lagoon No. 1 overflows into Lagoon No. 2. The treated sewage then enters a chlorine contact tank where chlorine is added to the water for disinfection. The chlorine tank provides the required 60 minutes detention at a flow of 324,000 gpd. The chlorinated effluent, after being measured again, flows out onto an area west of the lagoons where it seeps into the ground for final disposal.

The stabilization lagoons total surface area is 21.6 acres. Lagoon No. 1 at the original pumping station was constructed in 1955. In 1969, the Edward Hines Lumber Company constructed Lagoon No. 2. A pump station and 6-inch force main were installed. During the summer of 1977, the existing Hines pump station was upgraded and the chlorinator facilities were constructed by 75 percent grant monies from the Environmental Protection Agency. These upgraded facilities are designed for a population of 2,700 persons. Table 12 provides information about the various components of this system.

TABLE 12  
 1978 Flows and Waste Loadings  
 Hines Sewage Treatment Plant Facilities

1. Current Population	
a. City of Hines	1,573
b. E. Hines Lumber Co. 1,100 Employees = Population of	220
c. Outside Users	47
1978 Population Equivalent	1,840
2. Flows	
Average Daily Flows /a	287,000 gpd
Peak Flow /b	718,000 gpd
Per Capita Daily Flow /c	156 gpd
3. BOD's Loading	
Per Capita Daily Loading	0.17 lbs/day
Total Daily Loading	313.00 lbs/day
Average Concentration	130.00 mg/l
4. Suspended Solids Loading	
Per Capita Daily Loading	0.20 lbs/day
Total Daily Loading	368.00 lbs/day
Average Concentration	155.00 mg/l

- a/ Based on influent flows measured at the plant from 12/77 to 6/78.  
 b/ Based on an estimated ratio of peak flow to average daily flow of 2.5.  
 c/ Equal to average daily flow divided by the population equivalent.

## SEWER SYSTEM PLANNING CRITERIA

A. Service Areas

Map // shows the present sewer service area. Also shown is the approximate limits of existing gravity service. Areas inside this line could be served by extensions of existing sewer mains and laterals. Areas outside this line would have to be served by either: 1) installation of major trunk lines to these areas, or 2) area pump stations with pumping to existing mains.

B. Sewage Collection System

## 1. General

Systems for sanitary sewage collection receive and conduct the various sewage wastes from a given area to the point of treatment. A gravity collection system conveying sewage flows to the treatment plant for ultimate disposal is the most desirable.

Sanitary sewer systems generally consist of a network of interceptor, trunk and main sewers. These sewers receive the sewage flows from smaller lateral sewers and conduct the flows to the treatment site. Trunk and main sewers are generally 10 inches in diameter or larger.

Waste flows are highly variable. It is vital that a sewer system be designed to maintain a sufficient velocity to keep solids in suspension. In order to achieve this, sewers are constructed with proper slope to assure adequate velocities. Manholes for access points are installed in the sewers at frequent intervals to provide for removal of obstructions or blockages when and if they occur.

## 2. Standards for Sanitary Sewers

The Oregon State Department of Environmental Quality (DEQ) has published policies covering the preparation of plans for sanitary sewer systems. The principal DEQ standards are:

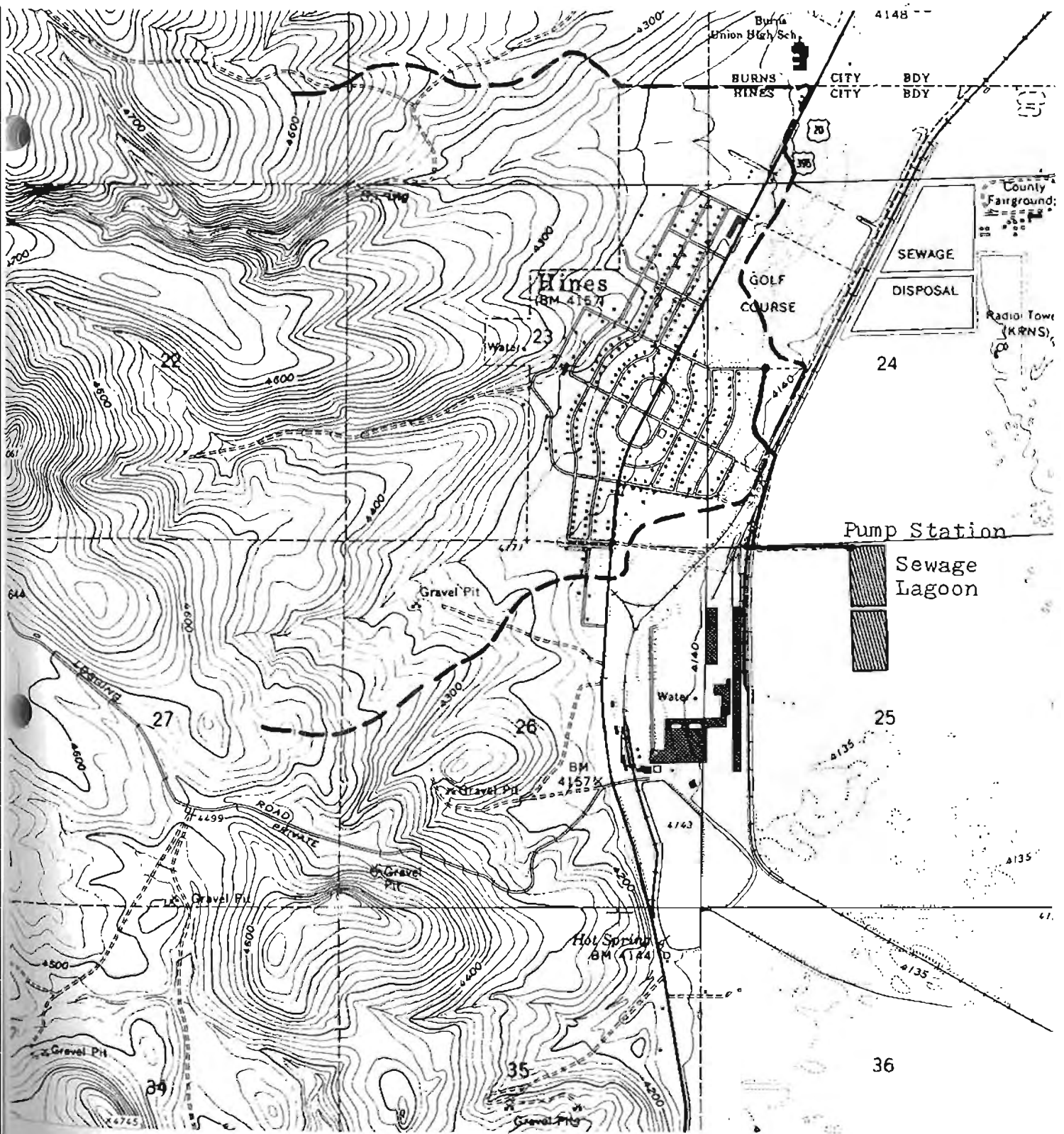
a. All sewers, excepting dwelling connections, shall be at least 8 inches in diameter. Short runs of 6-inch pipe will be allowed in the upper sections of any line less than 250 feet in length.

b. The minimum grade allowable is such that the velocity of the sewage flow is not less than two feet per second.

c. Manholes must be installed at each change in grade or alignment, or at intervals not to exceed 500 feet.

d. Sewers designed to carry both storm runoff and domestic sewage will not be approved for new construction.

e. Sanitary sewers and domestic water lines should not be laid in a common trench.



MAP 11

APPROXIMATE LIMITS OF  
GRAVITY SERVICES TO  
EXISTING MAINS - SEWER

EXISTING  
SEWER SERVICE AREA

f. All sewer joints should be watertight so as to exclude as much storm and groundwater infiltration as possible.

### 3. Sewer Capacity

Sanitary sewer systems, particularly sewer mains, are commonly designed to provide capacity for the peak estimated flows from a completely developed area. Sizing of sewer mains to serve the ultimate development of an area is quite logical, since installed sewers have a fixed capacity which cannot be expanded without complete replacement or installation of new parallel sewers. Both of these methods are costly. Economic considerations usually dictate that the initial design provide capacity for the estimated ultimate sewage flows. However, in this period of high interest rates, careful analysis of the cost of ultimate facilities versus smaller initial lines with further parallel relief lines must be made. It may be more economical in some cases to install facilities in parallel stages when great oversizing is required to provide for ultimate area needs.

In order to insure that sanitary sewers remain capable of handling the sanitary wastes in their respective areas, they must be constructed in such a manner as to prevent excessive infiltration of groundwater. Regardless of the material used in construction, some storm water enters the system through the tops of manholes, through illegal drainage connections and because of substandard construction of service lines from the lateral sewer to the house connection. By the time the area is completely developed and the maximum waste load is placed on the system, the sewers will probably have been in use for many years. Because of the natural deterioration of the sewer pipe and joints, the design allowance for groundwater infiltration must be the anticipated for a sewer line 50 to 75 years old. The leakage allowance at the time of construction must be much less than the design allowance.

Sewage flow, in most cases, can be directly related to domestic water use. From a review of domestic water use throughout the Pacific Northwest, design criteria have been developed for residential areas in terms of per capita flow per day. Peak flows from small areas may be as high as 350 gallons per day (gpd) per person. As the contributing area increases, the peak flows per person tend to decrease. The Oregon DEQ in their sewer system design standards recommends laterals and mains be designed for 350 gallons per capita per day based on the total estimated future population. Sewer trunks and interceptors should have capacity to at least 250 gpd. This basic design criteria is summarized below.

TABLE 13  
Sewer Design Criteria

<u>Pipe Diameter</u> <u>(inches)</u>	<u>Domestic Flow</u> <u>Contribution</u> <u>(gpcd) /a</u>	<u>Equivalent</u> <u>Drainage</u> <u>Area /b</u>
Mains & Laterals	350	250 Acres or less
6" & 8"	250	Greater than 250 acres

a/ Includes allowance for normal infiltration.

b/ Based on density of 5.5 persons per acre.

Experience has shown that normal design criteria for residential development result in sewers with adequate capacity for most industrial and commercial establishments. There will, however, be special cases in which larger quantities of liquid waste are discharged to the sewer system. These must be considered individually as they occur. Examples are canneries and similar food processing industries.

#### 4. Sewer Location

Since it is necessary that sewers flow downhill, it is not always possible to locate them in public rights-of-way or even in undeveloped sections of private property. Whenever possible, sewers are located in the shoulders of roadways where they can be constructed with a minimum of damage to pavement and a minimum disruption to traffic. When there are curbs, water lines, or other obstructions along the shoulder, the sewer must be located elsewhere, usually in the roadway.

In hillside development, houses are frequently located much lower than the roadway. Service to these houses from the roadway would require a sewer too deep to be economically feasible. Normally, the most satisfactory solution is to construct a sewer along the back property line of low lying residences. This sewer is often required in addition to a sewer along the roadway which serves residences on the higher side of the road.

When it is not practical to provide gravity sewer to a building, the City could consider alternatives as follows:

- a. Allow the building to continue using a septic tank.
- b. Require that the owner install and maintain an automatic sewage pump that lifts the sewage from the building up to the sewer.
- c. Install individual pumping units to each building and include the cost as a part of the entire system.

d. A modification of Alternatives A and B above would call for a pump to lift septic tank effluent up to the sewer. By pumping only the liquid wastes from the septic tank, a less expensive pump can be utilized.

## 5. Pump Stations

In some cases, it may be necessary to use pump stations at low points in the collection system. In general, two types of pump stations are used. They are:

a. A factory-built type which is an all steel or fiberglass unit shipped to the jobsite as a completely prefabricated unit. This wet-pit and dry-pit type is preferred for most installations of any substantial size.

b. For small capacity requirements and limited budgets, a wet-pit type installation is popular. This type contains a submersible pump with automatic controls, level versions and the components necessary for basic operations.

A third type, similar to the existing pump station at the sewage lagoon, is custom built stations. This unit usually involves considerably high capital expense due to design and construction requirements.

## C. Sewage Treatment and Disposal

### 1. Sewage

A community's sewage contains a variety of wastes that vary in amount and composition from hour-to-hour throughout the day. The concentration of domestic sewage is generally about the same in each community, if infiltration rates are normal. Industrial waste, such as that discharged from canneries, packing houses, plywood mills, and large creameries, and increases the strength of sewage. For example, some wastes discharged from canneries are significantly more concentrated, gallon for gallon, than domestic sewage. The concentration of sewage can be measured by many tests. The principal tests are suspended solids and the bio-chemical oxygen demand (BOD). Normal domestic contribution of BOD and suspended solids are 0.17 and 0.20 pounds per capita per day rely.

### 2. Treatment Processes

Sewage treatment can be divided into three distinct processes, termed primary, secondary and tertiary treatment. Primary treatment involves the removal of suspended and settled solids by screening, grinding, sedimentation, or flotation. Primary treatment processes will normally remove 50 to 60 percent of the suspended solids contained in sewage and will reduce the BOD approximately 30 percent. This process generally consists of quiescent settling of the sewage



for a period of approximately two hours. Solids removed in the clarifiers (settling basins) are transferred to digestion tanks where complete bacterial decomposition takes place. The highly putrescible solids are converted into a relatively stable humus-like material in 30 - 90 days. After these materials are digested, they are withdrawn from the tank and discharged onto sand beds, mechanically dewatered, spread on land as liquid fertilizer, or stored in lagoons.

Primary treatment alone is no longer acceptable to the DEQ and will in all cases be followed by a minimum of secondary treatment.

Secondary treatment, using conventional biological processes, removes up to 95 percent of suspended solids and 75 to 95 percent of the pollutional (BOD) load. The principal methods employed in modern sewage treatment to provide secondary treatment are:

- a. Activated sludge process.
- b. Modified activated sludge processes.
- c. Trickling filters.
- d. Waste stabilization lagoons (nonaerated and aerated.)

The City of Hines employs waste stabilization lagoons as its treatment system. This method is discussed below.

### 3. Waste stabilization Lagoons

The waste stabilization lagoon is essentially a body of water three to five feet deep into which untreated sewage is introduced. The waste is detained for a period of time sufficient to permit stabilization of the sewage solids by a complex natural process involving sunlight, air, water currents, algae, and bacterial action. The surface area of such a pond is necessarily large, about six acres per 1,000 population equivalent served.

Oxygen supplied to the lagoon by direct contact with the air, and by the normal life process of algae in the presence of sunlight and in adequate food supply, maintains a high dissolved oxygen content in the pond, thereby minimizing the possibility of odors. Many waste stabilization lagoons have been designed in such a manner that no effluent is discharged from the lagoon. In fact, the original sewage lagoon for Hines was designed as a non-overflow lagoon. In these cases, the sewage inflow is entirely balanced by evaporation from the surface of the pond and by percolation into the soil. Where ponds are designed to overflow, as in the case of the present Hines lagoon system, the effluent has been normally observed to be as satisfactory as that obtained from conventional secondary sewage treatment plants.

Operation of waste stabilization lagoon indicates little difficulty with odor problems. Normally, these ponds have the appearance of a clean body of water having no connotations of sewage.

Advantages of the waste stabilization lagoon method of treatment include low operating and maintenance costs, simplicity of operation, and low initial cost. The major disadvantage is that total land requirements are the largest of any type of treatment. Despite the large land requirements, the waste stabilization ponds are often an economical and satisfactory method of treatment when land is available.

#### 4. Tertiary Treatment.

For areas requiring an extremely high degree of treatment, usually for environmental considerations, a third stage of treatment is used. Tertiary treatment can be expected to remove BOD and suspended solids in the 98 to 99 percent range from secondary effluents. In addition, phosphates, nitrogen compounds, and other dissolved inorganics can be removed.

Among the processes employed in tertiary treatment are: sand filtration, granular carbon absorption, chemical coagulation and sedimentation, ammonia stripping, electro-dialysis, ion exchange and reverse osmosis. The methods most often used are sand filtration, chemical coagulation, and carbon absorption.

Tertiary treatment is not widely used. The processes require sophisticated operational skill and involve considerable capital expense. Applications are mainly limited to discharges entering waterways having low assimilative BOD capacity and/or threatened by nutrient enrichment. Since Hines presently discharges its sewage effluent to a seepage area next to the lagoons, and therefore, not to a lake or a stream, it is not expected that tertiary treatment would be required for many years in the future, if ever.

#### 5. Individual Disposal Systems

In areas where sanitary sewers are not available, sewage disposal is most often accomplished by septic tank and underground drainfield installations. Performance of the system is dependent on soil permeability and depth of groundwater.

Permeable soils, not subject to high groundwater levels or flooding, generally are acceptable for this means of sewage disposal. For widely separated residences septic tanks are usually less expensive to construct than sewers and central treatment plants. Almost all of the homes in rural and suburban Harnett County presently employ septic tank systems.

Properly designed tanks have sufficient capacity for anticipated amounts of household wastewater and solids. Tanks must be large enough to retain solids, thereby preventing passage of solids into drain lines. Sufficient lengths of drainfield line must be installed to permit effluent percolation into the soil without waterlogging the area. It is imperative that the liquid be capable of filtering into the subsoil, evaporating, or being absorbed by plant

growth.

In an effective system, air and soil bacteria destroy most of the dissolved solids. Percolation proceeds at a sufficient rate so that no wastewater overflows onto the surface of the ground. Tanks normally need their solids content pumped out at intervals of about two years.

Impervious soils seldom support a drainfield satisfactorily. Percolation is drastically impeded by low seepage velocities. Drain trenches often become waterlogged, causing surface breakout of tank effluent. In addition to being esthetically offensive, the overflow may contain microorganisms causing typhoid, dysentery, hepatitis, and other diseases. Enlargement of the system is generally only a stopgap.

#### 6. Sewage Treatment Requirements

Oregon Revised Statute 449.077 declares it ". . .to be the public policy of the state to conserve the waters of the state and to protect, maintain, and improve the quality thereof. . ."

ORS 449.081 and 449.086 specifically empower the Department of Environmental Quality to set and enforce standards of water quality. These standards of stream quality, in effect, determine the degree of treatment required for wastes discharged to waters within the state.

In 1976 the DEQ proposed, and later adopted, the Water Quality Management Plan - Malheur Lake Basin which:

- a. Establishes water quality standards in the Malheur Lake Basin "necessary to serve all recognized beneficial uses to the greatest possible extent".
- b. Protects "existing water quality where such quality is higher than the established standards".
- c. Guide "logical and orderly planning and implementation of such waste treatment capabilities and waste controls as may be necessary to accommodate planned future growth and development without sacrificing water quality".
- d. Identifies "water quality deficiencies and standards noncompliance and to propose and implement the necessary corrective action to the problems".

The major tool for the enforcement of these DEQ standards lies in the Waste Discharge Permit Requirement. Under provisions of ORS 468.740, no waste shall be discharged into water of the state without a permit Discharge Elimination System (NPDES), a national waste discharge permit program. This is in compliance with provisions of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) and regulations of the Environmental Protection Agency (EPA).

The City of Hines currently operates its treatment facilities through this waste discharge permit system. (NPDES # 1811). Due to the nature of Hines' facilities and that sewage effluent is currently disposed of on land, there are no permit limits on conditions for Hines.

## POPULATION AND PROJECTIONS

## Burns/Hines Urban Area

## A. General

The major causes for growth in Harney County have been developments in the cattle and lumber industry. Support services necessary to maintain these industries have, for the most part, been located within the cities of Burns and Hines. Because these basic economic resources employ people, the urban areas have grown to meet the demands in housing, consumer goods, and services. Due to public agency policies that are designed to maintain a sustained yield of timber, grasslands and wildlife from public land, the county's dependence upon the harvest of natural resources from these public lands stabilizes the county's growth. Unless there is a drastic change in public policy, existing industries dependent upon natural resources will continue to have a base from which to operate and will increase their production at a limited rate. It can be assumed, therefore, that population growth within the cities of Burns and Hines will continue at a relatively steady pace following historical trends.

Harney County has had a steadily decreasing growth rate over the thirty years between 1940 and 1970, averaging approximately 1 percent growth per year, but reducing at approximately 50 percent per decade. At this time (1978) a supplemental census is not available for the entire county area so the eight year period between 1970 and 1978 is not known. However, the incorporated area of Burns and Hines showed a 10.4 percent growth rate during this period and it therefore can be expected that the entire county had a comparable rise, representing approximately 1 percent per year for the eight year period. From the table it can be seen that the growth of the two city area has traditionally been greater than that of the county, except for the 1960 to 1970 period in which the incorporated area actually experienced a decline. This can be attributed to rural residential housing occurring at a greatly increased rate outside of the existing city limits of the two communities. Also, mobile home courts and subdivision development has taken place near the city limits and in areas that will eventually become parts of the city.

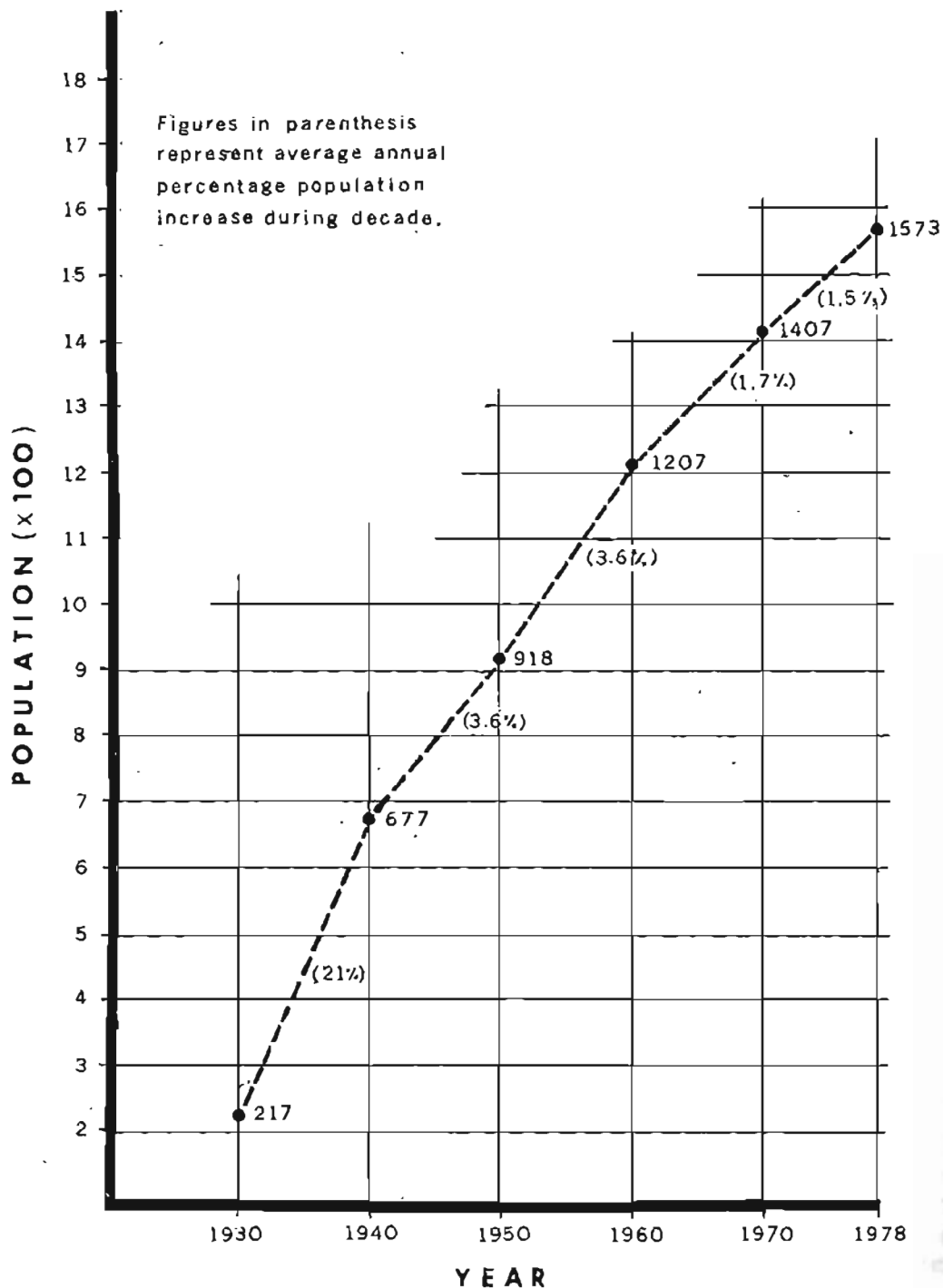
Graphs 1 and 2 illustrate the actual population growth patterns for Hines and Burns over the last 48 and 88 years, respectively. It can be seen that for the period between 1940 and 1978 there is a stabilization of growth averaging around 1.2 percent per annum for the urban area, including both cities.

Portland State University projected Burns' and Hines' populations from 1970 to 1977 with an average annual increase of 1.7 percent for Burns and 2.6 percent for Hines, representing an urban area increase of 1.95 percent. These projections have proven to be too high. Graph 3 shows the annual projections and the actual 1978 census results for Hines. The actual average annual increase for this period has been 1.1 percent for the urban area. This is consistent with the previous 48 year trend.

Three separate elements can go into a change of population and must be considered in estimates and projections. These include the birth and death rates, population increases due to annexations, and in- and out- migration. Also it must be realized that, while based on these factors, major changes may

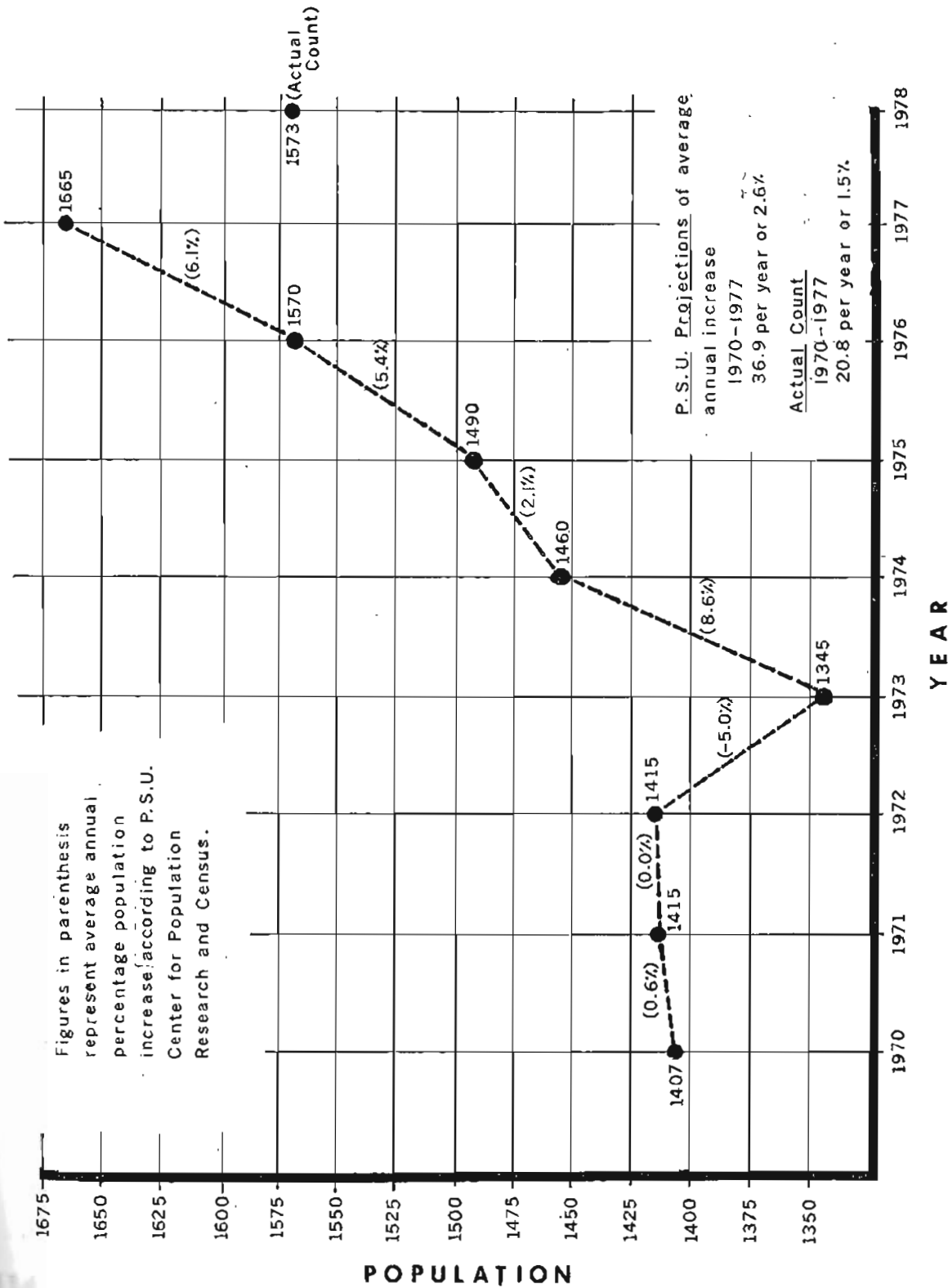
Graph 1.

# CITY OF HINES



## POPULATION TRENDS

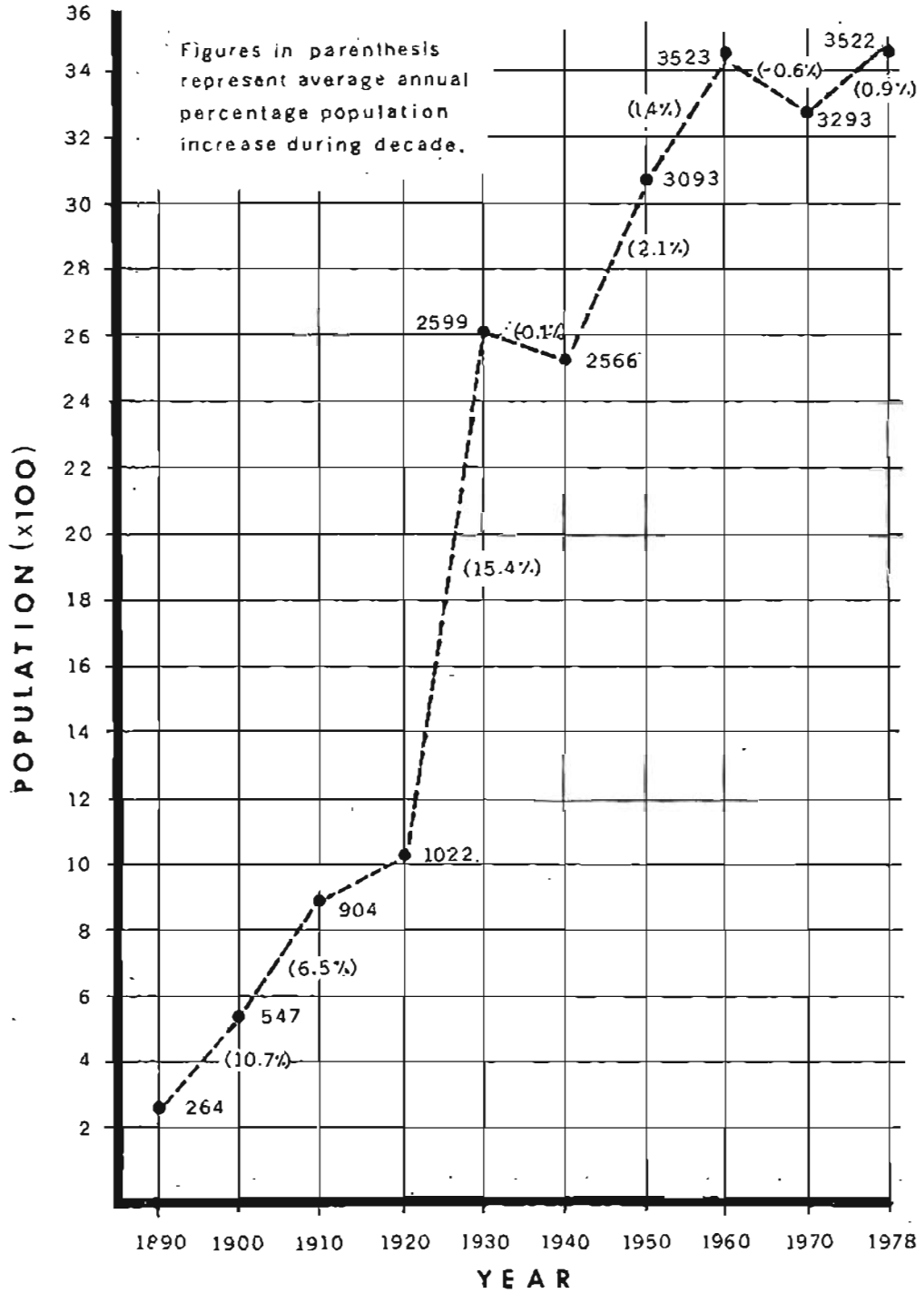
# CITY OF HINES



## P.S.U. POPULATION PROJECTIONS

Graph 3

# CITY OF BURNS



## POPULATION TRENDS



occur that could drastically alter the population of the urban areas of Harney County in a relatively short period of time. If events such as this occur, the following projections are not valid and must be re-evaluated in light of these circumstances. Therefore, the following assumptions are made as part of these population projections:

1. The form of government and the political, economic and social organization and institution of the United States will remain substantially unchanged.
2. No all out war, internal revolution, devastation, epidemic, or other disaster will occur which will affect the area.
3. No new major employer will locate within the urban area nor will one relocate out of the area.

The economic section of this plan will be making economic forecasts indicating the employment levels to be anticipated for the various industry classifications over the course of the life of this plan. Those projections show that approximate 1.6 percent annual increase in employment opportunities in the communities. It can be anticipated that this would represent an approximate population growth somewhere between .5 percent and 1.5 percent, depending upon the proportion of the local labor force that moves into the new employment opportunities, the reduction of the local unemployment rate because of the new opportunities, and the utilization of local female labor force in any new employment opportunities.

It is also assumed that the City of Hines will continue to receive a greater proportion of the urban area population. This is based on historical trends and on the availability of easily servicable vacant land. The area north of the City of Hines that does have ready access to sewer and water lines is within, for the most part, the Hines city limits rather than the Burns city limits. Therefore, it can be assumed that the Hines population increases will range between 1 to 2 percent per annum while the Burns increases will range from .5 to 1.5 percent per annum, giving an average urban area increase of .67 percent to 1.67 percent.

The following population projections for Burns, Hines, and the entire urban area are derived from the above assumptions and conclusions.

City of Burns - Population Projections

Annual Rate	1978	1985	1990	1995	2000	
Low (0.5%)	3776 3522	3522	3647	3739	3834	3930
Medium (1.0%)	3522	3522	3776	3969	4171	4384
High (1.5%)	254 pop	3522	3909	4211	4536	4887

City of Hines - Population Projections

Annual Rate	1978	1985	1990	1995	2000
Low (0.5%)	1573	1686	1772	1863	1958
Medium (1.0%)	1573	1746	1882	2026	2183
High (1.5%)	1573	1843	2076	2292	2530

Handwritten notes for Hines table:  
 1843  
 1573  
 173 pop +  
 + 173  
 427 pop  
 4071 = 142 du  
 3000

Urban Area - Population Projections  
(Based on above figures)

Annual Rate	1978	1985	1990	1995	2000
Low (0.67%)	5095	5333	5571	5697	5888
Medium (1.2%)	5095	5522	5851	6197	6567
High (1.67%)	5095	5752	6287	6828	7417

#### B. Population Characteristics

Table 14 and 15 show the age and sex of the population for the City of Hines and the City of Burns. The Burns data is more conclusive because it includes census results from the 1970 census while information such as this was not obtained for residents within Hines. The reason for this being that census data is "broken down" into categories for analysis for those cities over 2,500 population. In 1970, and for that matter in 1979, Hines had a population of less than 2,500. Therefore, the analysis of this information is based in general terms upon the experiences of the City of Burns, assuming that Hines would follow suit. Table 15 shows 1970 census population for Burns in different age and sex, 1978 information, and the percentages of change in each of those groups.

Those statistics show an interesting trend for the cities. It can be observed that there are significant decreases in the population under 20 and in the population between 40 and 55. At the same time, there are significant increases in the 20 to 40 bracket and the 55 and up bracket. The median age of both Hines and Burns at the 1970 census was between 25 and 29 years of age. Today, for both communities it is between 30 and 34 years of age. This is assumed to reflect a greatly declining birth rate over the last 19 years, following national trends, and a significant out-migration of middle aged individuals. At the same time, young adults are increasing in the community, possibly reflecting employment opportunities and higher birth rates in the "baby boom" era. The large increase in post retirement age population may be indicative of earlier population increases for both communities that were significant 20 to 30 years ago and with those individuals which moved into the community at that time now reaching retirement.

Whatever the reasons for these trends, it indicates a large young adult population and a significant senior citizen population. This young adult population will provide the major labor force for the next 10 to 20 years, however, unless there is a significant change in the birth rate, in-migration will have to occur in order to support the local labor needs during that same time period as the young adults approach retirement age. The statistics also indicate that there may be a significant need for special services for senior citizens that did not exist eight years ago.

The above statistics indicate a consistent but relatively slow growth rate for the Burns/Hines urban area. The communities will continue to receive less than a proportional share of the state's population growth, which is projected at 3 to 3.5 percent until the year 2000. State projections anticipate that the vast majority of that growth will occur in the Portland Metropolitan area and throughout the Willamette Valley. At this time there are no new major employers for Harney County, or most of southeastern Oregon, that appear to be interested in utilizing this area for significant manufacturing facilities and therefore

TABLE 14

## HINES

AGE AND SEX OF POPULATION  
(1978)

<u>Age Groups</u>			
<u>Age</u>	<u>Male</u>	<u>Fem.</u>	<u>Total</u>
Unknown	9	8	17
0-4	67	57	124
5-9	80	77	157
10-14	72	69	141
15-19	72	65	137
20-24	48	40	88
25-29	50	71	121
30-34	70	68	138
35-39	62	53	115
40-44	52	37	89
45-49	47	42	89
50-54	45	46	91
55-59	37	34	71
60-64	32	27	59
65-69	26	34	60
70-74	17	19	36
75-79	10	12	22
80-84	3	7	10
85-89	3	4	7
90-94	0	0	0
95+	0	1	1
Total	802	771	1573

Table 15

## Burns - Age and Sex of Population

Age	Male			Female			Total		
	1970	1978	% Change	1970	1978	% Change	1970	1978	% Change
Unknown	---	24	---	---	16	---	---	40	---
0-4	141	145	+ 2.8%	135	123	- 8.9%	276	268	- 2.9%
5-9	151	127	-15.9%	145	133	- 8.3%	296	260	-12.2%
10-14	193	144	+ 0.7%	154	123	-20.1%	297	267	-10.1%
15-29	161	144	-10.6%	157	164	+ 4.5%	318	308	- 3.4%
20-24	112	149	+33.0%	118	148	+25.4%	230	297	+29.1%
25-29	122	173	+41.8%	105	135	+28.6%	227	308	+35.7%
30-34	87	116	+33.3%	91	115	+26.4%	178	231	+29.8%
35-39	92	108	+17.4%	71	102	+43.7%	163	210	+28.8%
40-44	93	99	+ 6.5%	92	80	-13.0%	185	179	- 3.2%
45-49	102	89	-10.8%	99	79	-20.2%	201	168	-16.4%
50-54	96	96	---	103	86	-16.5%	199	182	-8.5%
55-59	97	84	-13.4%	80	98	+22.5%	177	182	+20.3%
60-64	79	94	+19.0%	84	93	+10.7%	163	187	+14.7%
65-69	79	73	- 7.6%	71	70	+ 1.4%	150	143	+ 4.7%
70-74	41	55	+34.1%	42	67	+59.5%	83	122	+47.0%
75+	61	75	+23.0%	89	95	+ 6.7%	150	170	+13.3%
Total	1657	1795	+ 8.3%	1636	1727	+ 5.6%	3293	3522	+ 7.0%

employment opportunities. Increases in existing manufacturing and agricultural uses, coupled with a corresponding increases in support businesses and services should yield population increases well within the limits outlined in the above projections.

There may be a future shortage of labor in the area, due to the apparent decline in birth rates, unless in-migration is achieved at a level that maintains a consistent or a growing population in the 18 to 65 labor force age range. This will probably not result in a net increase in population or in population growth rates, rather than on birth rates to supply those population figures. This presents a challenge to the communities in attracting new young families to the area by providing the amenities, and assuring the employment opportunities that will be necessary if the communities are to enjoy continued growth.

## ECONOMY &amp; EMPLOYMENT

Historically, Hines has been a "company town" that was constructed specifically to house mill workers when the Edward Hines Lumber Co. Mill was built in the late 1920's and early 1930's. While the City of Hines was built for one specific purpose, the adjacent town of Burns was, by the early 30's, established. It had served for many years as a business and service center for agricultural activities and with the construction of the Hines Lumber Co. mill, a business and retail center for the forest products and agriculture industries for Harney County. Since its construction, Hines has served more as a residential community than a commercial, industrial or governmental center. Major retailing and business activities are located in the Burns area. The Hines commercial area serves mainly as a convenience center for the local residents and for "through" traffic on the Central Oregon Highway (US 20/395).

Overall, Harney County's economy has been based on a strong agricultural, lumber and forest products industry. Agriculture includes livestock production, range management and crop cultivation. The "economic" beginnings of Harney County date back to the cattle ranches of the late 1800's. Later, attempts were made at "dry land" farming, but the climate proved that dry land farming and small farm operations were not profitable and resulted in the further stimulation and development of the livestock industry which is now, and will continue to be, a major factor in the economy of the county. Livestock feed production, on both base and range areas, dominates the land use pattern and will continue to do so.

One major climatic factor may have some influence over the future of the livestock industry: the potential for a drought situation, as experienced in the mid-1970's. Numbers of cattle were reduced significantly, as much as 30 percent below normal (Fall 1977). Since this area is dependent upon the cattle industry for about 80 percent of its agricultural income, the reduced figure illustrates a major negative impact on the county's agricultural related employment and economic return.

According to an "Area Manpower Review" for the Fall of 1977:

"(D)espite a significant upturn in the number of national housing starts, wood products employment in Harney County is below that of July 1976. Most of the contract loggers have been laid off for extended periods of time since the first of the year. Large log inventories at the (Hines) lumber mill are cited as the major reasons for these layoffs.

Jobs in the trade and services sector have been stable over the months and years, an indication of an unchanging level of economic activity. A depressed cattle industry and a stable wood products industry have given these sectors little reason to expand. Drought conditions are responsible for a slowdown in tourist activities with the threat of range fires and lack of water limiting recreational use.

High fire danger did account for some increased jobs as additional personnel was hired to fight fires. Special federal programs have also helped to expand public sector employment as local and state governments hire people through the use of CETA and other federal

funds.

In this rather isolated, sparsely populated county of southeastern Oregon, the population is very dependent upon the wood products, government and agricultural industries. With all of these industries being seasonal in nature, the county experiences high rates of unemployment during certain times of the year. With this in mind, we find that the labor pool is made up of a number of people who are seasonally unemployed. Most are of an unskilled or semi-skilled nature and often they do not seek other work outside their primary occupation."\*

\* Source: State of Oregon, Employment Division, Department of Human Resources, "Area Manpower Review - Burns (Harney County) Labor Area, Fall 1977."

Table 16 shows the work force and employment trends in the various industries in Harney County for the 1970 through (November) 1978 period. That table is graphically summarized in Chart 1. As can be seen from the data available, Harney County's economy is stable with the lumber and wood products industry being the single largest consistent employer followed by government, trade and service, and miscellaneous related employment.

There was a slow but steady increase in the total civilian labor force for the 1970 - 1977 period with a slight decline in 1978. Agriculture related employment showed the greatest gain during 1978 (through November) increasing by 8.5 percent and an overall gain for the nine year period of +1.5 percent in employment. As can be seen from Chart 1, as the agricultural employment declines, the unemployment figures rise.

Major commercial and industrial activities are centralized in the Burns/Hines urban area. The Edward Hines Lumber Mill is the largest single employer in the urban area. Much of the economy in the Burns/Hines area is dependent upon the continued stability of that mill. The service related industries; trade, finance, real estate, etc., provide support and needed goods not only for the mill-related worker but to the large agriculture community as well.

#### OUTLOOK

The Burns/Hines urban area and most of Harney County can expect little change in the economic outlook over the next few years. Based on historical trends, the overall civilian labor force in all of Harney Co. can be expected to increase by about 2 to 2.45 percent a year. Normal seasonal patterns will occur including differing employment levels in agriculture, trade, construction, and government. Livestock production, timber harvesting, and wood products are the present major industries of Harney County. There appears to be various opportunities to develop certain types of recreational and tourist facilities within the county. Due to the lack of all modes of transportation, the distance to large markets, and available labor supply, it has been difficult to attract new industries to Harney County. Future socio-economic growth will depend on the expansion of the agricultural and timber industries and the further development of the recreation and tourist industry, which now ranks third among the major economic segments of the community.

TABLE 16  
HARNEY COUNTY NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT (Annual Average)

	1970 (A)	1971 (A)	1972	1973	1974	1975	1976	1977	1978
Total Wage & Salary	2150	2280	2320	2390	2460	2440	2550	2600	2556
Manufacturing									
Total	700	800	780	850	850	850	910	890	852
Durable Goods	700	790	780	840	840	840	900	880	842 (C)
Lumber & Wood	700	790	780	840	840	840	900	880	842
Other Durable Goods	0	—	0	0	0	0	0	0	0
Non-Durable Goods	0	10	0	10	10	10	10	10	10
Food Products	0	*	0	0	0	0	0	0	0
Other Non-durable Goods	0	*	0	10	10	10	10	10	10
Non-manufacturing									
Total	1450	1480	1540	1540	1610	1590	1640	1710	1705
Contract Construction	50	50	40	60	80	50	50	80	53
Transp., Comm., Util.	100	80	80	90	80	80	80	80	89
Trade	390	390	410	430	430	430	450	480	479
Finance, Insurance, & Real Estate	60	60	60	70	80	80	70	70	73
Service & Misc.	230	230	240	200	210	200	210	220	224
Government	620	670	710	690	730	750	780	780	787
Agriculture Related Employment (B)	870	940	1010	980	850	870	840	910	987

(A) This non-agricultural wage and salary employment series is based on the 1972 SIC code structure and supersedes previous tables based on the 1967 SIC codes. Therefore, the 1970 and 1971 figures are not strictly comparable, but according to the Employment Department, State of Oregon, the change in SIC coding had little effect on Harney County.

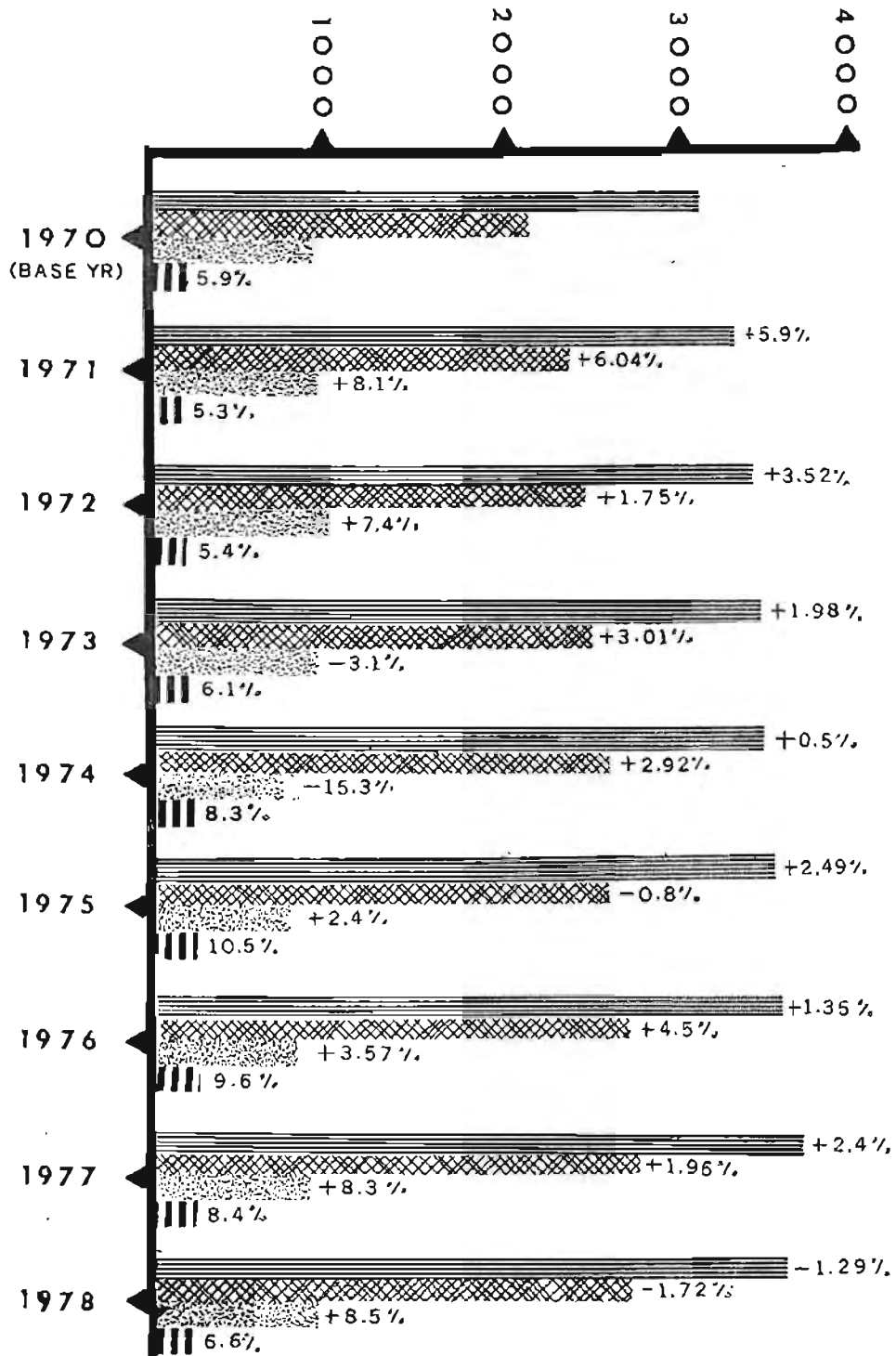
(B) Does not include unemployment.

(C) Includes labor disputes - 890 subtracted from wood products average (during summer 1978).





\* Not separated.



Chart 1



**LEGEND:**

-  TOTAL WORK FORCE
-  NON-AGRICULTURAL JOBS
-  AGRICULTURAL JOBS
-  UNEMPLOYMENT

**EMPLOYMENT**

TABLE 17  
 (Annual Average) HARNEY COUNTY RESIDENT LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT

	1970	1971	1972	1973	1974	1975	1976	1977	1978(B)
Civilian Labor Force	3210.0	3400.0	3520.0	3590.0	3610.0	3700.0	3750.0	3840.0	3791.0
Unemployment	190.0	180.0	190.0	220.0	300.0	390.0	360.0	320.0	248.0
Percent of Labor Force	5.9	5.3	5.4	6.1	8.3	10.5	9.6	8.4	6.6
TOTAL EMPLOYMENT	3020.0	3220.0	3330.0	3370.0	3310.0	3310.0	3390.0	3510.0	3543.0

(A) Includes employed and unemployed individuals 16 years and older by place of residence. Data is adjusted for multiple job-holding and commuting. Includes non-agriculture wage and salary, self-employed, unpaid family workers, domestics, agriculture and labor disputants.

(B) Through November 1978. Due to revised estimating procedures between December 1977 and January 1978, data for 1978 and that of previous years are not strictly comparable. Shown here only as an indicator for employment trends.

One indicator of the dependence of Harney County on the major industry of the timber and wood products can be illustrated in the amount of "National Forest Receipts Dollars Returned to County". The table below summarizes the dollar and percentage amounts for the 1973 through 1977 period.

Table 18  
National Forest Receipts Dollars Returned to County

Year	Amount	Percentage Change From Previous Year
1973	\$ 722,736.24	---
1974	913,831.21	+26.4 %
1975	535,284.69	-41.4 %
1976	948,837.62	+77.3 %
1977	1,505,700.72	+58.7 %

The significant reductions in dollar receipts for the period between 1974 and 1975 can be directly attributable to the severe drought experienced in eastern Oregon. This one illustration demonstrates that the overall economy, and more particularly the timber and wood products and other agriculture activities, namely livestock production, is largely dependent upon an adequate water supply. There is basically no other major industries within Harney County that could absorb a significant amount of short term or long term unemployed.

#### LABOR FORCE

The available adult male labor force in the Burns/Hines area is closely aligned with the local demand. The adult female labor supply greatly exceeds the demand, as indicated in Table 19, as does the supply of youth for part time work during the school year and full time work in the summer. This indicates there is an opportunity to utilize the female labor force for future industrial development.

The agricultural labor force is limited and is somewhat restricted by seasonal trends. The seasonal agricultural labor force is becoming more and more limiting, thus, automation is stimulated. There continues to be a need for qualified ranch and farm management personnel as increased absentee ownership is dependent upon this technical and professional labor force. It appears that there will be an increased demand for professional ranch management in the years to come. The agricultural sector is presently improving the quality of its vocational labor force through education, incentive opportunities, tenure, and future economic growth. This attitude by ranch ownership will have a material affect on stimulating this labor force in the future.

One element of a potential expansion in the overall county economy lies in the exploration, development and extraction of mineral, geo-thermal, oil and gas resources. Several leases have been secured for large portions of Harney County for the possible location and development of these natural resources. With the ever increasing demands for alternative sources of energy, the geo-thermal, gas, and oil potential in Harney County may prove a boost to the employment segment and provide added revenues to the county. The filing of several hundred "leases" in early 1979 may signal the beginnings of resource development in

TABLE 19  
HARNEY COUNTY  
Work Force and Employment by Sex and Minority Status  
(April 1977)

Sex and Minority Status	Work Force	Employed	Unemployed	Percent Distribution			Unemployment Rate
				Work Force	Employed	Unemployed	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Both Sexes</b>							
1. TOTAL	3,660	3,140	520	100.0	100.0	100.0	14.2
2. White	3,585	3,095	490	98.0	98.6	94.2	13.7
3. Black	20	11	9	0.5	0.4	1.7	45.0
4. Other Races	55	34	21	1.5	1.1	4.0	38.2
5. Spanish American	142	142	0	3.9	4.5	0	0
6. Minority Group*	217	187	30	5.9	6.0	5.8	13.8
<b>Female</b>							
7. TOTAL	1,319	1,120	199	100.0	100.0	100.0	15.1
8. Percent of Both Sexes	36.0	35.7	38.3	xxx	xxx	xxx	xxx
9. White	1,296	1,097	199	98.3	97.9	100.0	15.4
10. Black	6	6	0	0.5	0.5	0	0
11. Other Races	17	17	0	1.3	1.5	0	0
12. Spanish American	52	52	0	3.9	4.6	0	0
13. Minority Group*	75	75	0	5.7	6.7	0	0

Notes: \*Sum of Spanish American and all races except white. Some duplication possible since Spanish American may include nonwhite races in addition to white.

Harney County, which may encourage further diversification of economy which, at this time, is overly dependent upon a small number of major industry employers.

Due to the inter-dependence of Burns and Hines area on the same major economic activities, the overall economic goals and policies are very similar.

GOAL

To maintain, stabilize, and strengthen existing important sectors of the overall economy; including, but not limited to, forestry, agriculture, government, and recreation.

POLICIES

1. Coordinate decisions concerning economic base resources in the county and to maintain an economic-environmental balance in all resource management and allocation decisions.
2. Major economic development plans should be based on the best information available and to take into account areas suitable for economic development, effects on existing economy, available resources, labor market factors, transportation, energy availability, and community livability.
3. Encourage a diversity of labor and capital intensive economic development.
4. Encourage location of major economic developments where public facilities and urban services can be readily provided.
5. Provide adequate protection for all existing and potential economic development areas, including areas for expansion.
6. Develop a cultural and financial climate that will encourage diversified residential, commercial, and industrial growth and development.

## ENERGY

As the United States enters a future of restricted energy resources, a city comprehensive plan should examine the topic of energy. Hines is located on a major through highway, U.S. 20/395. The tourist and business oriented traffic is dependent on the availability of petroleum. Future petroleum price increases could affect Hines' retail and service market oriented toward the auto and in some ways, any industrial expansion relating to transportation needs.

### Available Energy

C.P. National of California supplies electrical power to the Burns/Hines urban area. The company retails power from the Bonneville Power Administration from the west and Idaho Power from the east and north. The three directional feeder system to the area makes prolonged power interruption highly unlikely.

The Harney Electric Cooperative serves a majority of Harney County as well as the area to the south, east and west of the Burns/Hines urban area.

Natural gas service is not available in the Burns/Hines urban area or throughout Harney County.

### Potential Energy

#### 1. Geothermal

Oregon, along with the other western states, is within the zone of volcanic activity which surrounds the Pacific Ocean. Volcanic activity in Oregon should not be considered extinct; but dormant. The High Lava Plains, the Basin-Range and the Owyhee Upland, where Harney County is situated, contains (along with the Cascade Range) almost 80 percent of the thermal springs known in Oregon. Map 12 illustrates those areas that have potential for significant exploration and possible development.

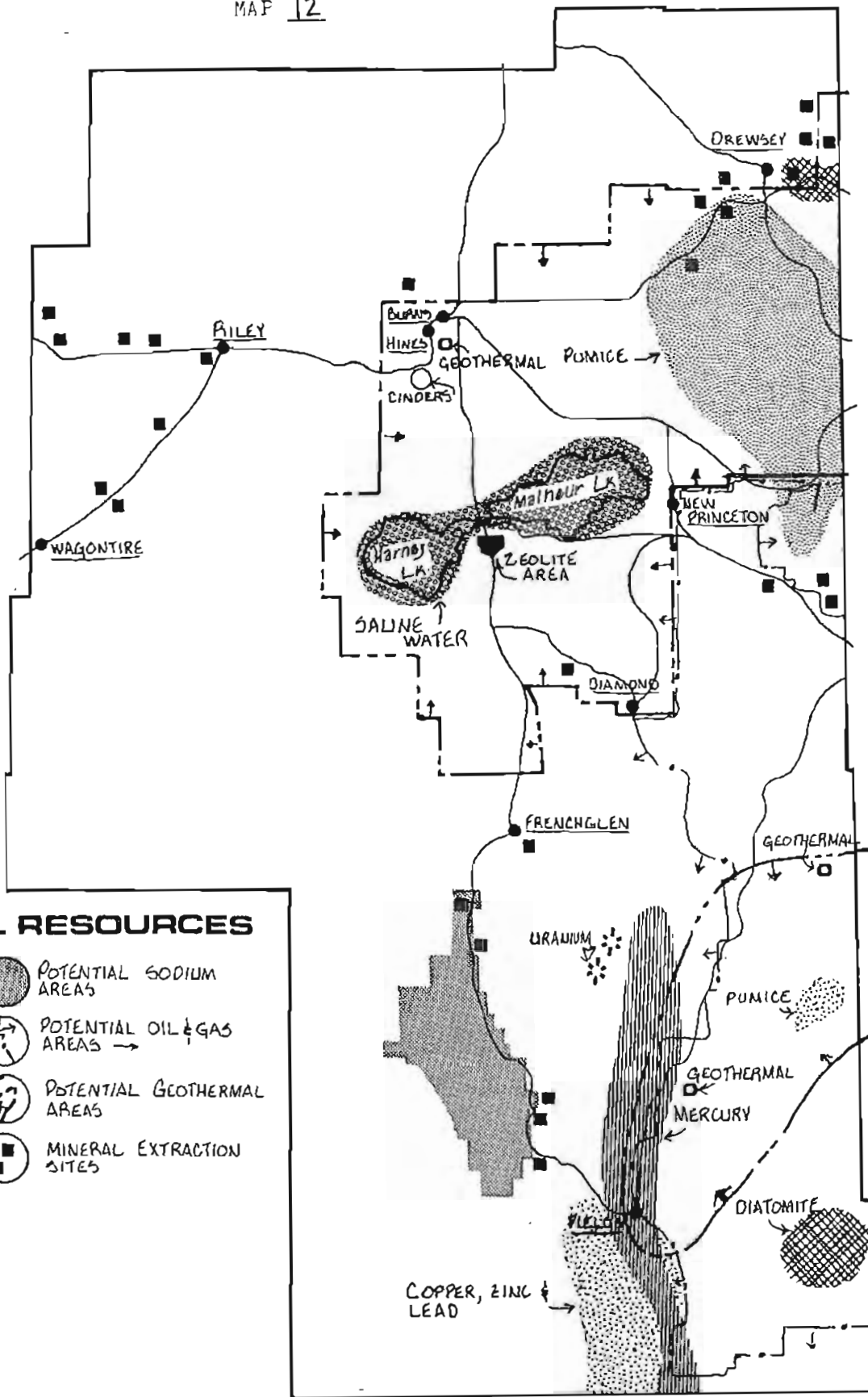
#### 2. Solar Energy

Solar energy is the world's most abundant permanent source of energy. The amount of solar energy intercepted by the planet earth is 170 trillion kilowatts, an amount 5,000 times greater than the sum of all other inputs (terrestrial nuclear, geothermal, and gravitational energies and lunar gravitational energy).





Harney County, located in southeastern Oregon, enjoys over 300 days of sunshine per year. There may be possibilities in the future to utilize some of the vast areas of Harney County for collection systems.

#### 3. Hydroelectric

Due to the lack of large volume flowing rivers, the Harney County area generally has no potential water power sites with capacities large enough to significantly affect the overall inventory of existing or potential



**MINERAL RESOURCES**

- 
 POTENTIAL SODIUM AREAS
- 
 POTENTIAL OIL & GAS AREAS →
- 
 POTENTIAL GEOTHERMAL AREAS
- 
 MINERAL EXTRACTION SITES

COPPER, ZINC & LEAD

URANIUM

DIATOMITE

GEOTHERMAL MERCURY

PUMICE

FRENCHGLEN

DIAMOND

SALINE WATER

ZEOLITE AREA

Malheur Lk

Warm Springs Lk

CINDERS

GEOTHERMAL

HINES

RILEY

WAGON TIRE

NEW PRINCETON

DREWSEY

hydroelectric sites. In the past, when transmission from outside power sources was not feasible, some small water power sites were developed, and sites were studied...on Kiger Creek and Donner and Blitzen River in the southeastern part (of the "Closed Lake" basin). These streams have sufficient fall and discharge in certain reaches to make small water power developments possible, but modern technology favors larger developments and has made the smaller sites economically unattractive.

#### 4. Oil and Gas Resources

There have been several leases secured for large areas of Harney County for the potential exploration and development of oil and gas resources. Major development of these resources may have a significant impact on the economy of the County while providing necessary energy sources to meet a segment of energy needs in the future.

#### 5. Conservation

The comprehensive plan can promote energy conservation through various techniques. Some techniques include encouragement of efficient land use patterns, encouraging effective housing rehabilitation and construction controls, and formulating energy efficient transportation policies, such as those concerning bikepaths, carpools and pedestrian travel. Unfortunately, Harney County does not have the large urban centers that characterize some other counties in Oregon. The alternate modes of transportation concept perhaps does not fulfill the needs of Hines, due to the vast distances involved and the lack of a concentrated urban population, except in the Burns/Hines urban area.

In this particular instance, the greatest potential for the consumer to conserve energy is through measures such as the use of energy-efficient appliances, better management of home energy uses, home improvement programs and the recycling of domestic waste products. The consumer can also, through home insulation, greatly reduce home heating and cooling bills.

#### GOAL

To promote the conservation, development of alternative sources, and the efficient use of energy.

#### POLICIES

1. Future commercial, industrial, and residential development within and adjacent to the City of Hines should progress in the most efficient and logical manner possible.
2. The majority of residential development should occur in urban areas where it is less expensive and less energy is consumed in providing public facilities and services.
3. Housing should be located near commercial and industrial employment



centers in order to reduce the amount of energy consumed in transportation between home and job.

4. Commercial services should be located within or adjacent to residential areas to limit the energy consumed between residential and commercial areas.

5. Development should progress in an orderly manner. It is more energy efficient to develop vacant lands within or contiguous to the existing Hines urban area rather than to allow continued "leap-frog" development patterns.

6. Residential, commercial and industrial development should be energy efficient in design, siting and construction.

7. The expansion of present energy sources must be examined with consideration for the impact such development would have in regard to natural resources, changes in land use patterns, and the economy of Burns, Hines and the entire area.

8. In an effort to conserve energy, the development of recycling facilities and the use of recycled materials should be encouraged where applicable.

## LAND USE

A. Residential

Hines is predominantly a residential community with little commercial or industrial activity within the City Limits. Highway 20/395 bisects the original platted townsite of Hines into its western and eastern parts. Along this highway lies a small commercial center, vacant public land, a developed park and municipal buildings. Commercial strips are developing north and south of the central "hub." The unique character of the town layout has influenced the residential growth so that it occurs at the periphery of an elliptical system of streets and blocks. Historically, this has occurred in an orderly fashion and the original hub of the town is somewhat developed with new growth occurring on the vacant land at the periphery. There is a considerable amount of land available for residential growth within the City Limits.

The east Hines neighborhood includes the residential area east of the Highway 20/395. This area contains the "sump," the golf course, and a well developed residential neighborhood bordered by the railroad tracks and agricultural land. There are very few vacant lots remaining here.

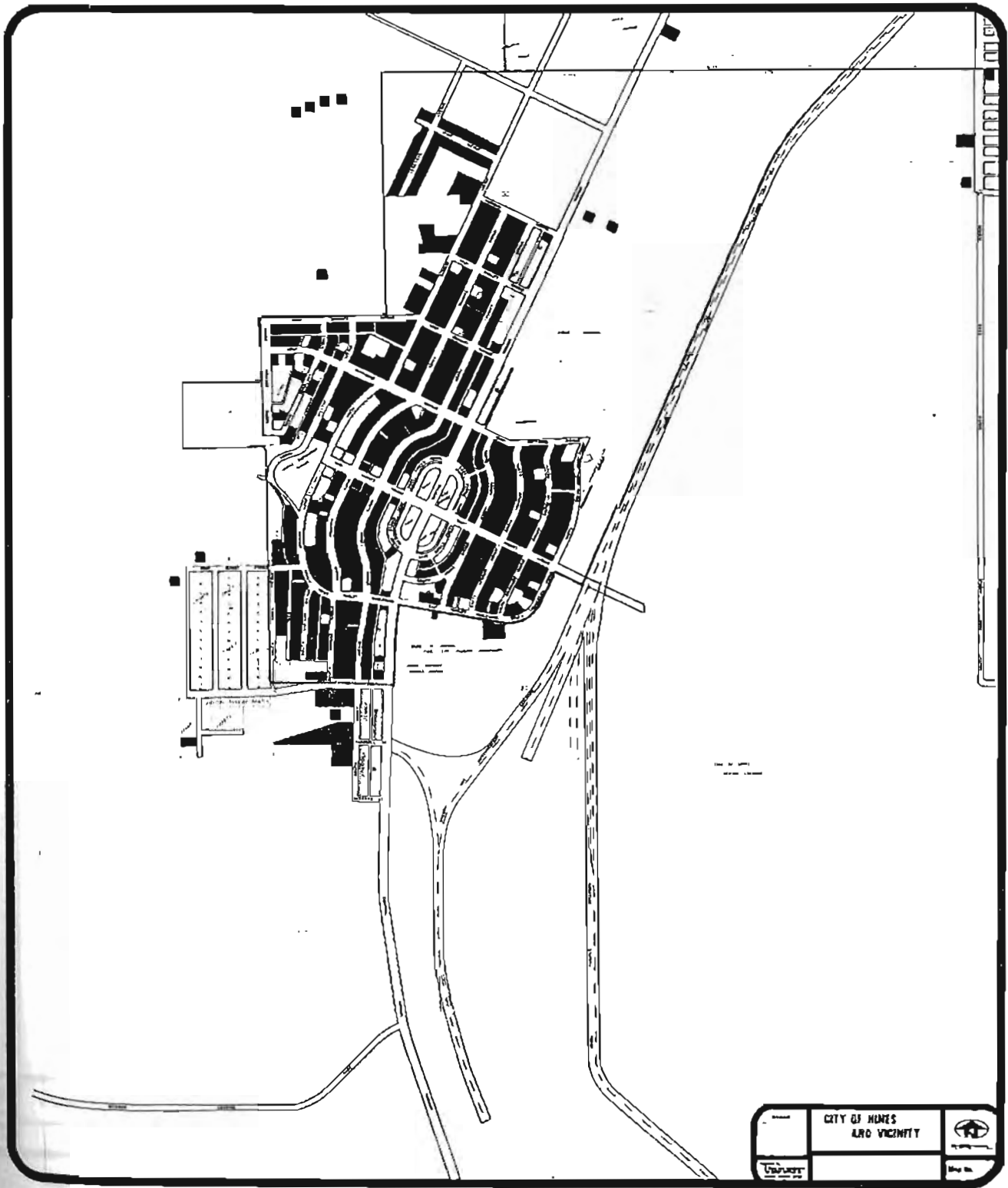
The west Hines neighborhood includes the western portion of Hines from the central hub and from the northern to southern City Limits. Around the hub is a limited amount of commercial development, a post office, public park, and tennis courts. As the highway proceeds north, there is random commercial development. The central part of this neighborhood contains the Hines Grade School and park areas. The principal area where residential expansion is occurring and may be expected to continue to occur in the future within the City is in the far northern reaches of the City extending northerly to the Burns City Limits.

There is a significant area of subdivided land south of the City Limits and west of the highway. This area is not served with sewer or water, nor does it have paved streets. The lots in this area are only approximately 50 percent occupied.

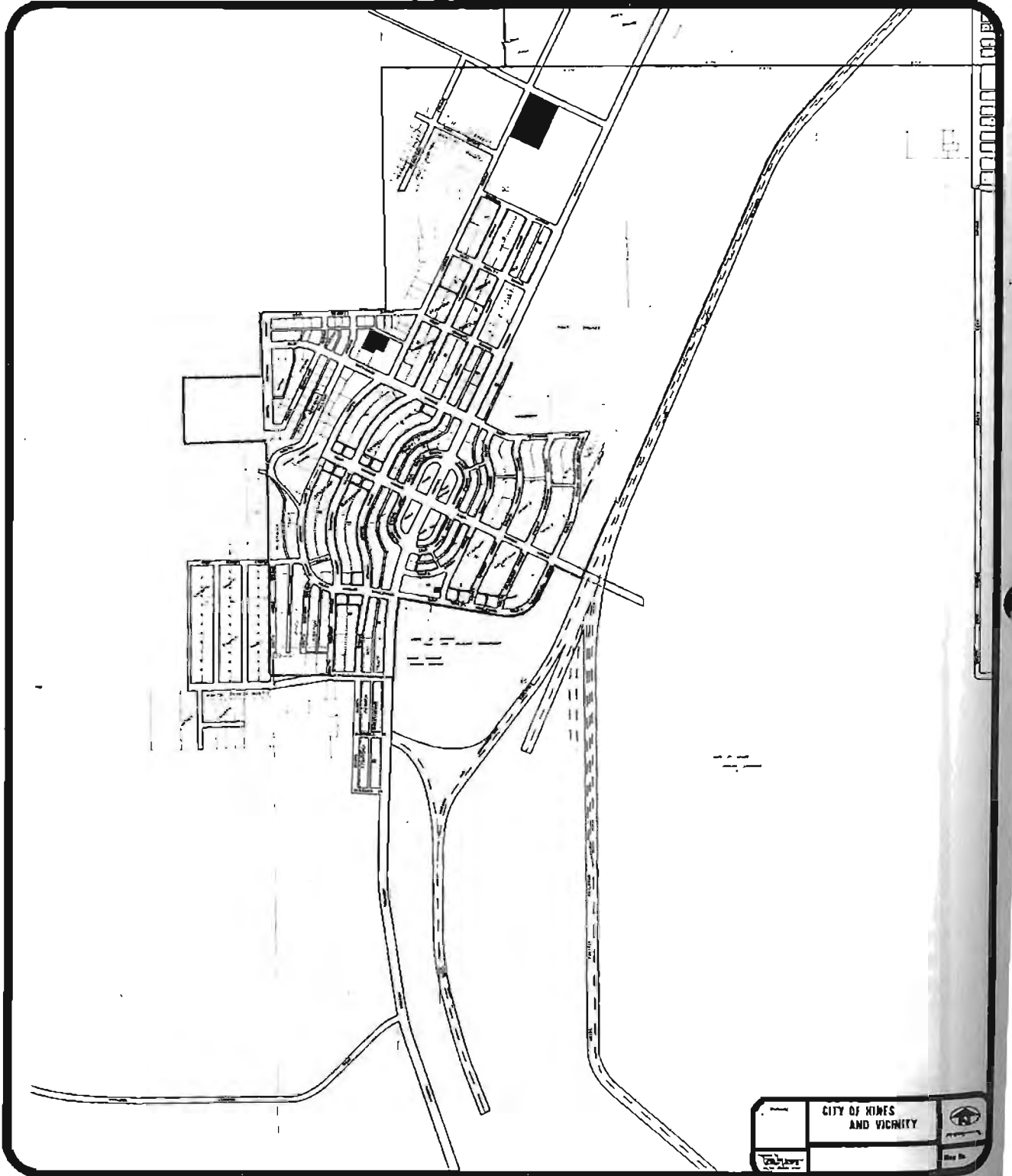
B. Commercial

The City of Hines only has limited commercial facilities relying heavily on the well established facilities in Burns to meet the day-to-day shopping needs of the Hines residents. Two percent of the Hines developed area, encompassing approximately 8 acres, are used for commercial activity. Included in this area are two separate sub areas. First is the hub of the community which contains a few restaurants, a store, a credit union, and a post office.

The second sub area includes the commercial activity strip along Highway 20/395, both north and south of the central "hub." In these areas are other stores, service stations and motels. Much of the potential area along the highway strip is unused or underutilized. This provides opportunities for commercial growth in the future as demand increases with population growth. There should be little need for rezoning property outside of these areas to allow for commercial development.

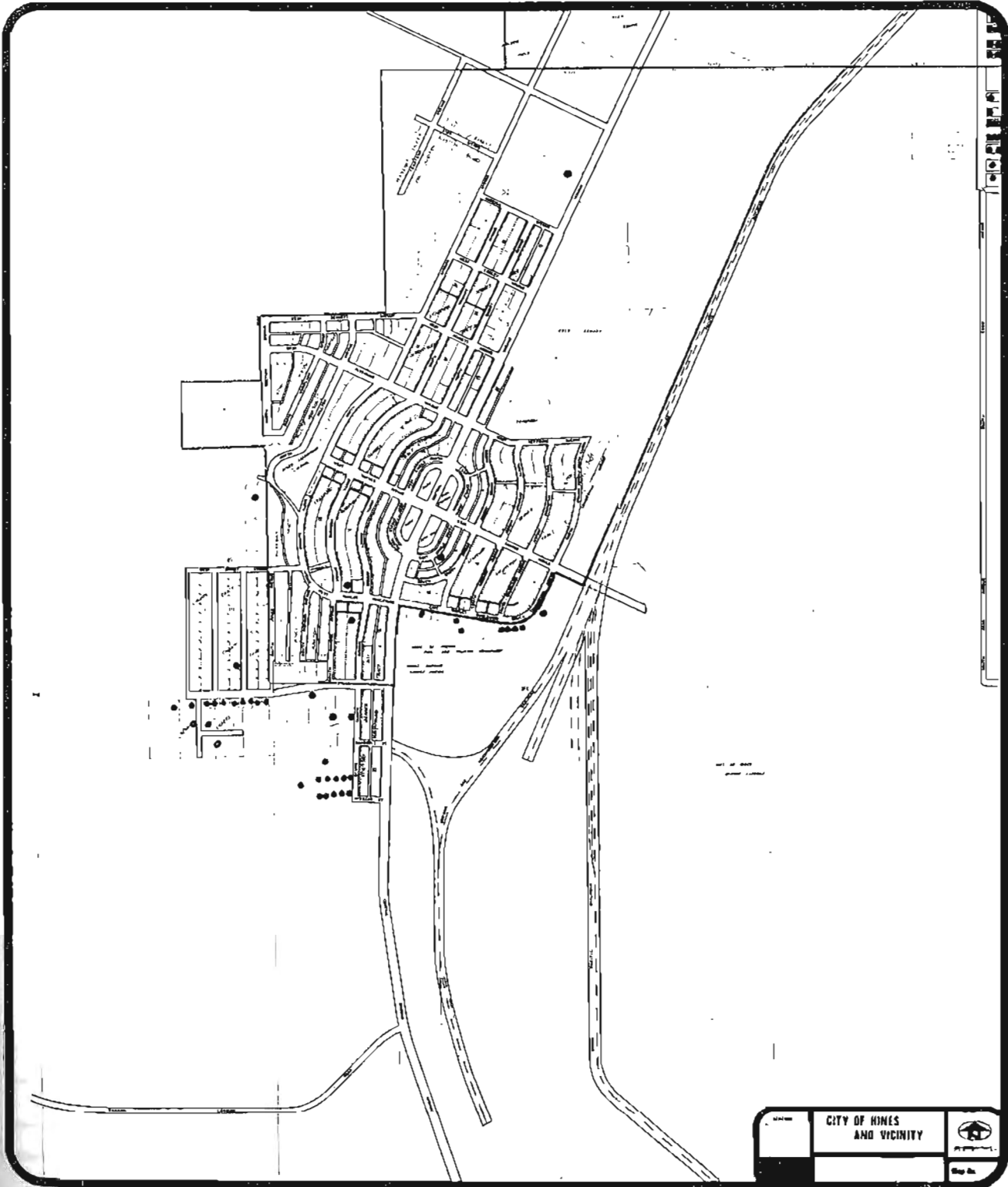


**EXISTING LAND USE**  
**Single Family Residential**




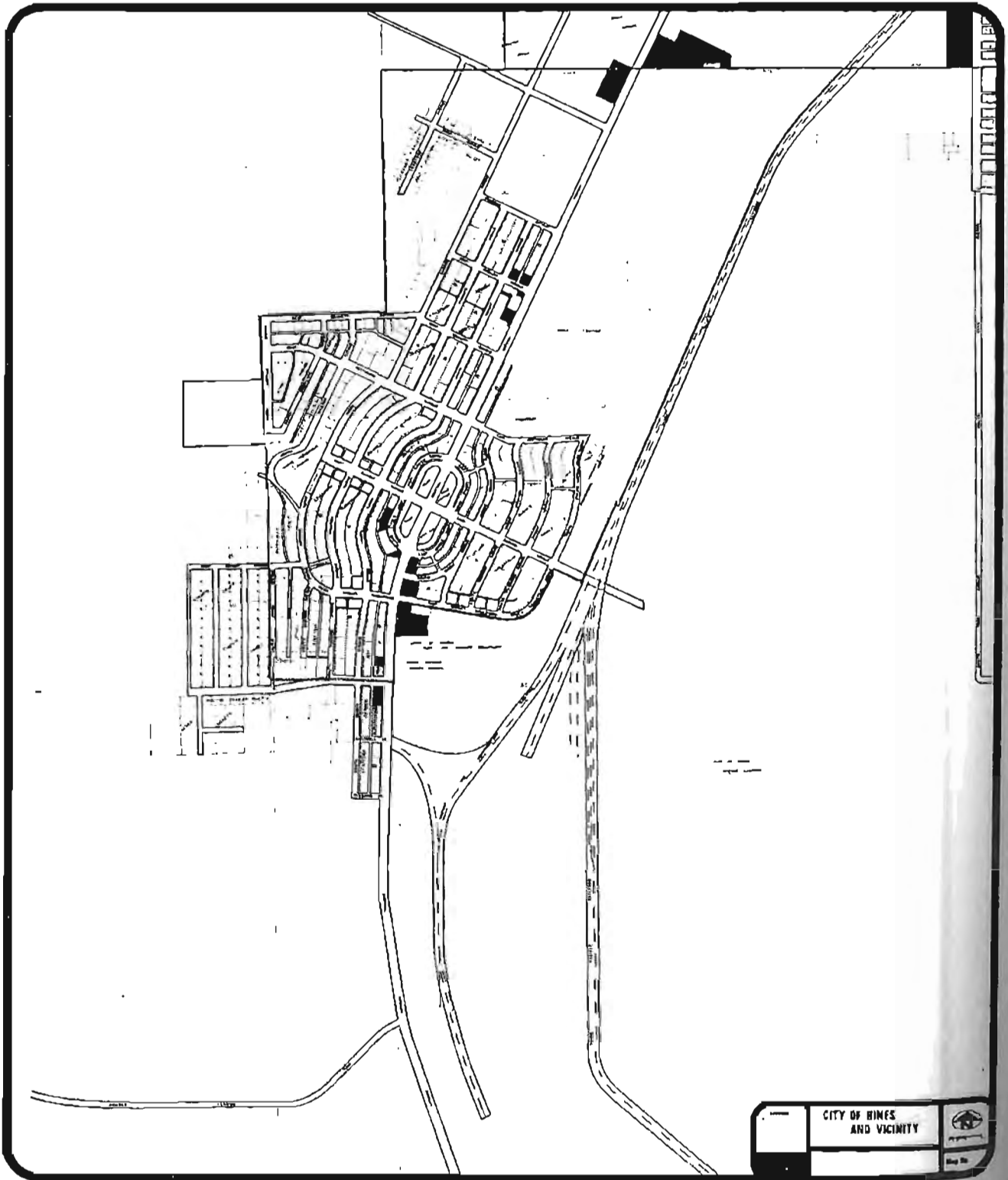
EXISTING LAND USE

■ — Multi Family



EXISTING LAND USE  
Mobile Homes

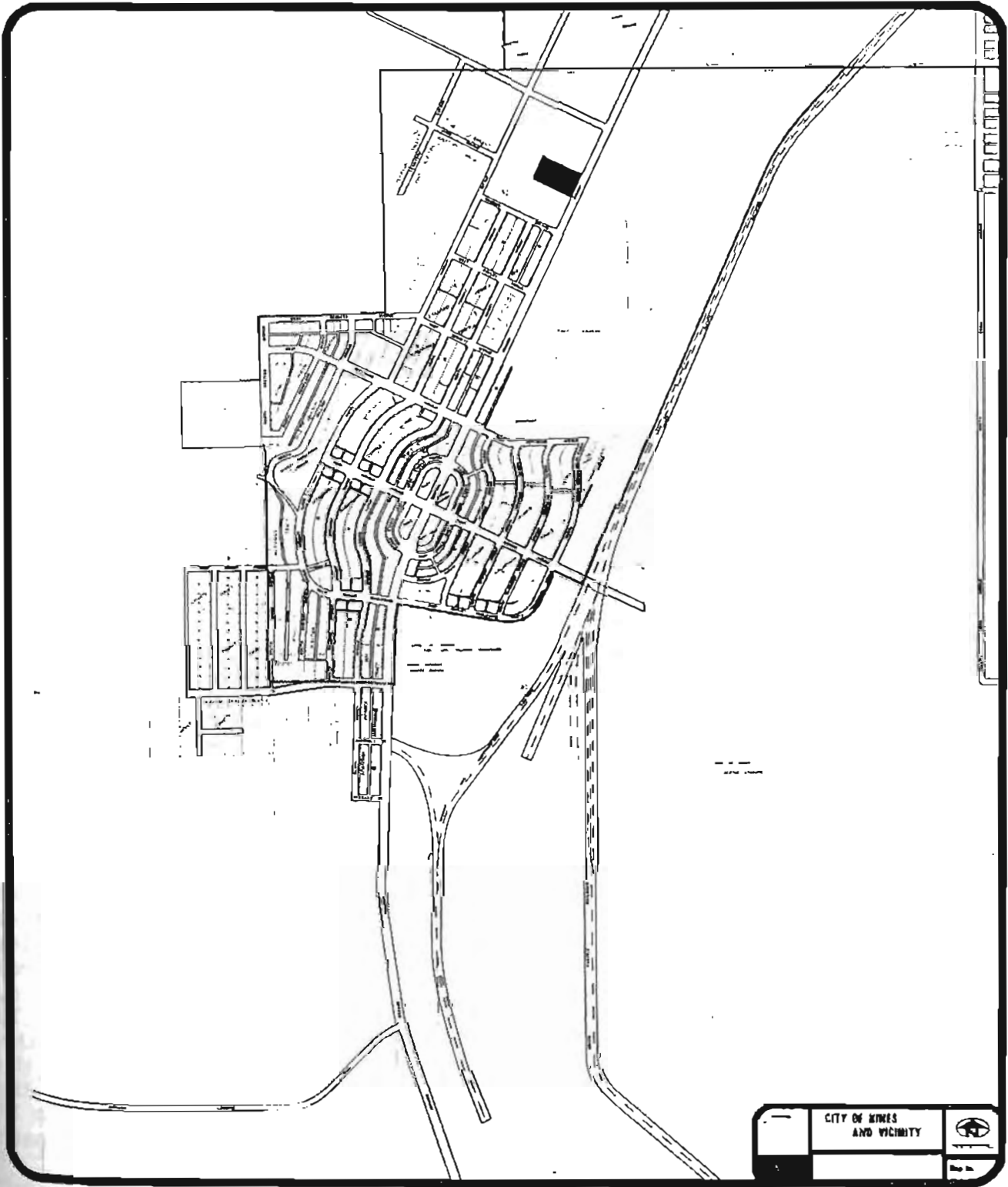
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SCALE		Sheet No.



EXISTING LAND USE

Commercial - ■

MAP 17



EXISTING LAND USE  
Industrial (Within City)-■

### C. Industrial

The major industrial activity for all of Harney County is the lumber mill immediately outside and southeast of Hines. There are no areas within the City of Hines itself which are devoted to large scale manufacturing or other major industrial activities. There is a considerable amount of land in the City of Burns devoted to industrial use including a significant portion of vacant land. Therefore, there may be little need to allow future industrial development in Hines as there is a large amount of land in the area already available. However, there may be some sites along the highway, especially near the lumber mill, that may be appropriate for industrial use and that if developed and annexed may provide an economic boost for the City and region as a whole. As well, this could provide a "buffer" area between the heavy industrial use and the nearby residential area.

### D. Determinants of Land Use

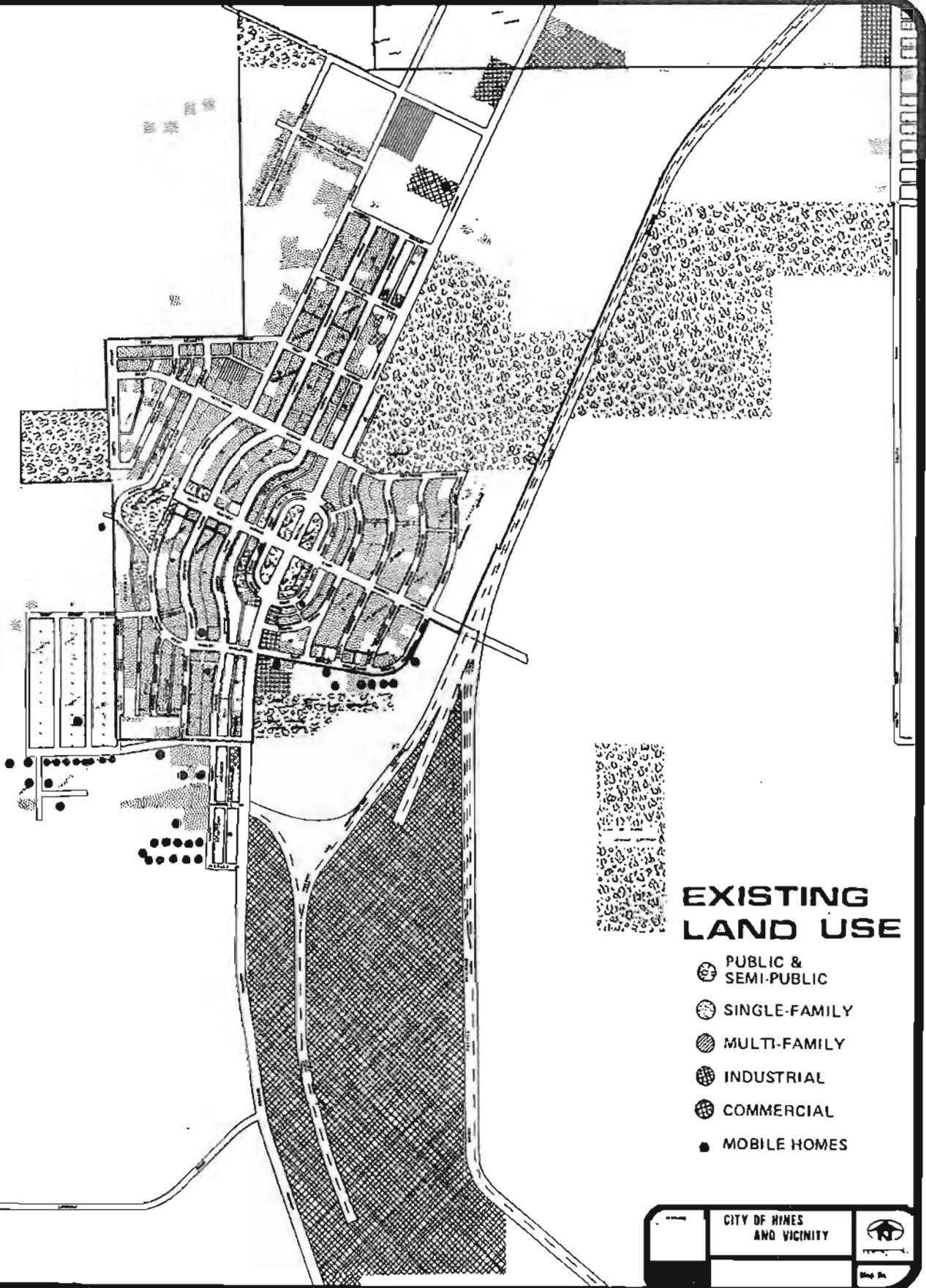
The City of Hines has developed in a pattern that was molded by manmade and natural conditions of the land. To the east, several factors present development constraints. These include the sump drainage area at the far northern part of the Hines City Limits, the golf course immediately south of the sump, the Silvies River Flood Plain which abuts immediately adjacent to the existing subdivided area, and the Hines Lumber Company to the southeast. To the south, the Hines Lumber Company offers considerable constraint for the area east of the highway. The area west of the highway has fewer constraints than many of the other portions of land around the City as evidenced by the significant partitioning activity that has occurred in the area. To the west is an area characterized by occasional steep slopes and rocky lands. Although residential growth can occur in these areas, it will be more expensive for the City to provide facilities and services such as streets and sewers into this area. To the north, residential growth is generally unconstrained for the City of Hines, except for the Burns City Limits.

### D. Growth Potential

In order to accommodate the anticipated future growth of the City of Hines, areas must be designated as acceptable for the growth to occur. These should be areas that balance all of the factors that present constraints or opportunities for residential and commercial development. These include: natural hazards and limitations that bring potential safety or economic burdens upon the persons residing within these areas, or upon the community as a whole, the existing land uses, such as the lumber mill, that are not generally compatible with immediately surrounding residential land use; and on the preservation of better agricultural soils in order to help preserve the agricultural based economy of Harney County. This includes the area east of the City of Hines, which is currently in agricultural use, is classified as Class II soils according to the Soil Conservation Service, and that for the most part falls within the Silvies River Flood Plain.

Using these constraints, it is obvious that the majority of residential and commercial growth for the City of Hines should continue in a linear fashion along the highway axis. The majority of this growth should come to the

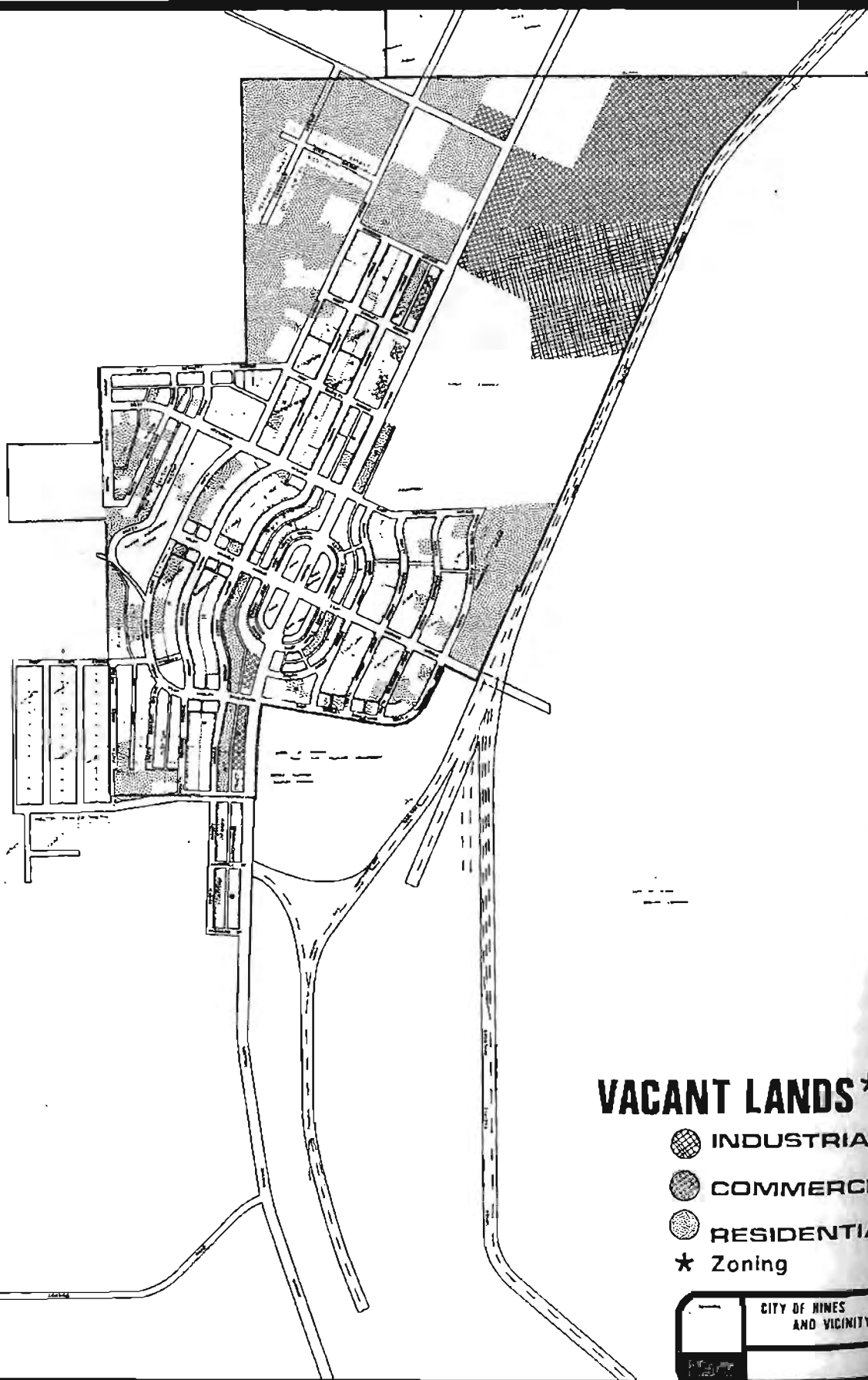




### EXISTING LAND USE

- ⊗ PUBLIC & SEMI-PUBLIC
- ⊠ SINGLE-FAMILY
- ▨ MULTI-FAMILY
- ⊠ INDUSTRIAL
- ⊠ COMMERCIAL
- MOBILE HOMES

CITY OF HINES AND VICINITY		
		Map No.



### VACANT LANDS\*

-  INDUSTRIAL
-  COMMERCIAL
-  RESIDENTIAL
-  Zoning

CITY OF HINES AND VICINITY	

northwest of the highway as this is the area where fewer and smaller extensions of public facilities would be necessary, where there is a majority of the land available, and where development can occur away from the potential influence or conflict of the lumber mill.

## HOUSING

Housing is, of course, one of the most critical elements of the urban community. The provision of safe, decent, and sanitary housing in types and price ranges adequate for all segments of the community in an adequate supply for existing and future populations is a primary goal of the State of Oregon and of the City of Hines. The housing needs of Hines can best be met by an analysis of existing housing and to relate that to future population projections. City ordinances and policies that encourage the provision of safe and sanitary housing at all price ranges and in adequate quantities are essential for the continued social health of the community of Hines.

There are three major components to this housing element of the Hines Comprehensive Plan. They are:

1. An analysis of existing quantities and types of housing;
2. An analysis of the existing conditions of housing; and,
3. Projections of housing needs during the life of this plan based on population projections.

Analysis of Housing Stock

Table    below is the result of a certified census of population and housing within the Hines city limits taken in June 1978. The material in Table 20 below indicates the existing composition within the entire Hines area.

Table 20

## Housing Data for the Hines Incorporated Area

TYPE OF UNIT	HOUSING			
	Occupied Units	Vacant Units	Total Units	Occupancy Rate
Single Family Units	473	19	492	.9614
Multiple Family Units	50	3	53	.9434
Mobile Homes*	6	---	---	----
Group Quarters	---	---	---	----
TOTAL ALL UNITS	529	22	551	.9601

\* Unoccupied mobile homes are not counted as housing units.

Owner-Occupied Housing Units - 445	Population - 1391
Renter-Occupied Housing Units - 84	Population - 182

Size of Household  
(Number of households by number of persons per household.)

1 - 85	2 - 157
3 - 94	4 - 120
5 - 35	6 - 28

Table 20 (cont.)

7 -	8	8 -	1
9+ -	0		

Source: June 1978 Census; City of Hines; Center for Population Research and Census, Portland State University.

Table 21 breaks some of the information from Table 20 into neighborhood groupings.

Table 21

Housing Composition Percentages  
By Neighborhood

City of Hines

Neigh- borhood	Single Family	Multiple Family	Mobile Home	Total
West	86.5%	12.5%	1.0%	100.0%
East	98.5%	1.5%	0.0%	100.0%
Total	89.5%	9.8%	0.7%	100.0%

The information contained within Table 1 takes on greater significance when compared with information categories from the 1970 Census of Population. This gives an indication of trends that have occurred within Hines over the last eight years. In 1970 there were 403 dwelling units, with 529 in 1978. This represents a 3.9% average annual increase. The person per dwelling unit figure has dropped from 3.49 in 1970 to 2.97 in 1978.

It is easy to observe that there is an overall trend in the City of Hines toward a high degree of home ownership and a relatively low vacancy rate. There is also a very low percentage of the housing stock in mobile homes.

This information takes on a different perspective when compared to the City of Burns and looking at the housing situation in the whole urban area. Table 22 shows this comparison.

Table 22

Urban Area Housing Characteristics

City	Single Family	Multiple Family	Mobile Homes	Total
Burns	70.5%	17.2%	12.3%	100.0%
Hines	89.5%	9.8%	0.7%	100.0%
Total Urban	75.6%	15.2%	9.2%	100.0%

From this information it can be concluded that the majority of development of owner occupied housing is in the Hines area. There has been minimal development of renter housing or mobile homes in the City, with Burns absorbing the majority of these housing types. In order to balance out the housing distribution, assuring fair densities of all types of housing, Hines should be prepared to meet the public need by allowing apartments and mobile homes in appropriate amounts at appropriate locations.

The figures above indicate that there is an overall lowering of population density within the Hines urban area as the area expands. If this trend continues, it will mean that a much greater amount of land will be necessary than if higher people per dwelling unit figures were maintained, or than if greater dwelling unit per acre densities were realized.

Table 1 indicates a moderate vacancy rate for both single-family and multiple-family units. This single-family vacancy rate is approximately 4 percent and the multiple-family rate is approximately 5.5 percent. An occupancy rate of 5 percent is considered the minimum at which a community can efficiently operate. Seven to 10 percent is a normal, healthy housing situation.

The percentage of multiple family units does not on the surface seem to correspond with the low vacancy rate for multiple family units. The market demand, and therefore public need, is probably not being met. The census was taken at a time when traditionally a large amount of population migration is taking place as the normal school year was just completed. It is the conclusion of this report that even though the vacancy rates are low for rental housing, the percentage of housing in rental use is very low, indicating that there is a demand and need for housing of a rental nature.

There is a limited amount of subsidized housing in the Hines area. One housing project, with 40 units, contains almost all of the subsidized housing for Burns and Hines. There is a waiting list for this project with a very low turnover rate. Several additional units of subsidized housing have been authorized by HUD, but no developers have yet to accept this opportunity. It is in the city's best interest to encourage subsidized housing, in appropriate locations, to meet the needs of the citizens. Utilization of new, subsidized housing may help to alleviate some of the problems with delapidated units in the community.

#### Housing Conditions

The second factor in this analysis of housing for the City of Hines relates to the condition of the existing housing stock. Condition means the ability of housing to be classified as safe, decent and sanitary. Sound housing is the keystone of the health of the community. Delapidated housing erodes this health through reduction of property values, visual eyesores, increased fire hazard,

and the psychological effects on the dwellers of such housing. The general thrust of Hines' housing goal is to maximize the availability of sound housing structures for the benefit of the residents and the whole community.

During May of 1978 a windshield survey was taken of all structures in the City of Hines. One purpose of this survey was to determine types and conditions of residential structures. This survey, in terms of housing conditions, cannot be considered an accurate reflection of a structure's conformance or non-conformance to any building code. Rather it is a general indication of structural condition. This survey is not intended to be an evaluation of any individual piece of property, rather it is an indication of general trends and conditions for larger areas of the city.

Three separate structural categories were used. These were: Sound Structure, Rehabilitation Feasible, and Rehabilitation Questionable. Several elements of the structure were observed to establish its place within the above three criteria. Most particularly these included the condition of the chimney, roof, siding, windows, porch, steps and the foundation. Severe deterioration in several of these elements for a particular dwelling would place it in "Rehabilitation Questionable". Deterioration in one or possibly two of these elements places this structure in "Rehabilitation Feasible". Overall good condition of the structural elements placed the structure in "Sound Structure". The generalized results of that study are shown in Table 23 below.

Table 23

Housing Condition Percentages  
By Neighborhood

City of Hines

Neighborhood	Sound Structure*	Rehabilitation Feasible*	Rehabilitation Questionable*
West	67.8%	24.4%	3.8%
East	48.5%	44.8%	6.7%
Total	63.0%	32.5%	4.5%

\* See text for explanation. This survey does not include mobile homes. It combines single-family and multiple-family dwelling units.

One basic assumption of the housing survey is that the mobile homes are generally in sound condition. This is backed by the fact that the vast majority of the mobile homes within the community have been located here since 1970. During this decade, codes and standards for the construction of mobile homes have been improved to a point where they can be considered generally as sound as a typical site-built structure. The assumption of this report is that little if any of this relatively young housing has become deteriorated in this period. Therefore, the above table deals only with single and multiple family dwelling units.

It can be seen that Hines has an excessive percentage of housing that cannot be considered currently sound structures. A majority of these are found in the eastern half of the community. The majority of housing in Hines was constructed during the "boom" years of 1940 to 1960. This survey indicated that much of the housing that has fallen into poor condition was built during that period and has not been maintained in the interim. The percentage of "rehabilitation questionable" housing is normal and compares with the "norm" for the State (4-6%). This housing must generally be considered as housing to be replaced in terms of meeting the future market demands. Rehabilitation of the structures is generally unfeasible because of cost. Rehabilitation may greatly exceed the value of the structure itself.

The "rehabilitation feasible" housing percentage are relatively high. These housing units can be successfully rehabilitated without undue expense by the owner. Therefore, they should be considered as part of the continuing housing stock.

The "sound structure" housing units are found in both part of the community. The west portion has the higher proportion of "sound structure" housing stock due to the younger age of the housing in this area.

The above analysis of housing stock indicates that there are no serious problems for the community. Generally, Hines has a relatively good housing stock as compared to the balance of the State. However, upgrading of this housing stock is desirable, and can happen through rehabilitation of structures where possible and through demolition of structures where not. Demolished structures should be replaced with housing that is compatible with the neighborhood and provides for the needs of the people desiring to live in the particular area. The governing agencies of Hines should take steps to encourage or see that this type of housing upgrading takes place. This can occur through relaxation of codes governing mobile home location, encouragement of local financial institution to provide low interest loans, and by pursuing federal money for rehabilitation program, for example, through the Community Development Block Grant program of the United States Department of Housing and Urban Development.

### Housing Projections

Projections of future demands for housing are necessary as part of a community's overall urbanization program in terms of the community understanding the demand and being able to accommodate its impacts.

Another portion of this Comprehensive Plan document deals with population projections for the City of Hines. Based upon those projections and certain assumptions, housing projections to accommodate growth have been made. The Urbanization section of this plan combines these figures with those of Burns to provide information for the entire urban area.

The assumptions that go into these projections are as follows:

1. Maintain an 8% average vacancy rate.
2. The ratio of housing types will remain constant.
3. People per dwelling unit densities will remain constant.

Table 24 below contains the housing projections for the City of Hines.



Table 24

Housing Projections to Accommodate Growth  
(Assuming constant variables)

City of Hines

Year	Popu- lation	Total Units	Single Family	Multiple Family	Mobile Homes
1978	1573	551	492	53	6
1985					
Low	1686	612	547	59	7
Medium	1746	634	566	61	7
High	1843	669	597	64	7
1990					
Low	1772	644	575	62	7
Medium	1882	684	611	66	8
High	2076	754	673	72	8
1995					
Low	1863	677	605	65	7
Medium	2026	736	657	71	8
High	2292	832	743	80	9
2000					
Low	1958	711	635	68	8
Medium	2183	793	708	76	9
High	2530	919	821	88	10

GOAL

To assure the provision of safe, decent, and sanitary housing in types and price ranges adequate for all segments of the community in an adequate supply for the existing and future population of the City.

POLICIES

1. Appropriate ordinances and programs will be developed and adopted that work to implement the Housing Goal and Policies. These ordinances and programs will be reevaluated and updated on a periodic basis to determine their continuing value in implementing the Community's goals.
2. Hines shall recognize that a greater share of the non-single family housing of the Burns/Hines urban area should be located within Hines to help assure an

equitable distribution of all housing types.

3. Multi-family units shall be encouraged when there is a demonstrated public need for this type of housing. Multi-family units should be located in areas where it is determined that impacts on public facilities and services, especially streets and schools, will be minimized.

4. Mobile homes will be allowed in conventional housing areas when they conform to standards to be set by the Planning Commission concerning width, skirting, foundations, utilities, etc., that are designed to minimize health and compatability problems.

5. Mobile home parks will be encouraged when there is a demonstrated public need.

6. Rehabilitation of housing shall be a high priority of the City. Efforts shall be made to provide financing and/or financial incentives to those who undertake rehabilitation projects. The City shall encourage local lending institutions to provide low interest loans for this purpose and shall investigate federal and state programs that may provide the necessary aid.

7. The City shall anticipate future housing demand by planning for capital improvements necessary to meet the projected growth well in advance.

APPENDICES

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CITY OF HINES  
QUESTIONNAIRE

RESULTS

1. Compared with other communities with which you are familiar, how do you rate Hines as a place in which to live?

Excellent	24%
Good	48%
Fair	15%
Poor	---

2. We want to know what you like about Hines compared with other communities with which you are familiar, and what you think needs improving. The following are factors often considered in determining whether or not a city is a desirable place in which to live. Please rate each of these as you think they apply to Hines. (Place an "X" or a check mark in the column provided.)

General

3. Cleanliness of Air

Excellent	27%	Above Average	41.6%	Average	18.75%
Below Average	6.25%	Poor	5.2%	No Opinion	1%

4. Friendliness of Neighbors

Excellent	17%	Above Average	33.3%	Average	43.7%
Below Average	2%	Poor	2%	No Opinion	1%

5. Schools

Excellent	13%	Above Average	31%	Average	34%
Below Average	4%	Poor	1%	No Opinion	17%

6. Disposal of Rubbish

Excellent	5%	Above Average	13%	Average	34%
Below Average	18%	Poor	25%	No Opinion	4%

7. Junk Car Removal

Excellent	4%	Above Average	16%	Average	38%
Below Average	13%	Poor	21%	No Opinion	1%

8. Street Lights

Excellent	10%	Above Average	17%	Average	39%
Below Average	23%	Poor	9%	No Opinion	2%

9.	Facilities for Entertainment				
	Excellent	5%	Above Average	1%	Average
	Below Average	20%	Poor	48%	No Opinion
					18%
					8%
10.	Shopping Facilities				
	Excellent	3%	Above Average	1%	Average
	Below Average	27%	Poor	46%	No Opinion
					21%
					2%
11.	Freedom from Natural Disasters				
	Excellent	33%	Above Average	30%	Average
	Below Average	3%	Poor	1%	No Opinion
					19%
					14%
12.	Library Facilities				
	Excellent	8%	Above Average	9%	Average
	Below Average	8%	Poor	40%	No Opinion
					18%
					17%
13.	Community Pride				
	Excellent	19%	Above Average	28%	Average
	Below Average	14%	Poor	1%	No Opinion
					32%
					6%
14.	Restaurants				
	Excellent	3%	Above Average	7%	Average
	Below Average	25%	Poor	27%	No Opinion
					34%
					5%
15.	Medical Services				
	Excellent	5%	Above Average	6%	Average
	Below Average	21%	Poor	38%	No Opinion
					22%
					9%
16.	Job Opportunities				
	Excellent	4%	Above Average	15%	Average
	Below Average	22%	Poor	20%	No Opinion
					32%
					6%
17.	Provision for Special Needs of the Elderly				
	Excellent	5%	Above Average	9%	Average
	Below Average	13%	Poor	26%	No Opinion
					31%
					16%



18. Provision for Special Needs  
of Children and Youth

Excellent	4%	Above Average	4%	Average	22%
Below Average	23%	Poor	33%	No Opinion	14%

19. Dog Control

Excellent	6%	Above Average	10%	Average	22%
Below Average	13%	Poor	47%	No Opinion	2%

City Services

20. Quality of Water

Excellent	60%	Above Average	24%	Average	13%
Below Average	2%	Poor	---	No Opinion	1%

21. Parks & Open Spaces

Excellent	24%	Above Average	42%	Average	30%
Below Average	2%	Poor	---	No Opinion	2%

22. Police Protection

Excellent	13%	Above Average	25%	Average	41%
Below Average	16%	Poor	3%	No Opinion	2%

23. Sewer System

Excellent	11%	Above Average	27%	Average	50%
Below Average	6%	Poor	3%	No Opinion	3%

24. Street Maintenance

Excellent	4%	Above Average	15%	Average	31%
Below Average	23%	Poor	27%	No Opinion	---

25. Freedom of Traffic  
Movement

Excellent	8%	Above Average	25%	Average	50%
Below Average	7%	Poor	6%	No Opinion	3%

26. Parking for Shopping

Excellent	11%	Above Average	22%	Average	51%
Below Average	9%	Poor	2%	No Opinion	5%

27. Recreation Facilities

Excellent	4%	Above Average	8%	Average	43%
Below Average	19%	Poor	19%	No Opinion	7%

28. Responsiveness of City Government

Excellent	6%	Above Average	9%	Average	41%
Below Average	10%	Poor	9%	No Opinion	25%

29. Adequate Restrictions for Property Development

Excellent	4%	Above Average	13%	Average	41%
Below Average	12%	Poor	8%	No Opinion	22%

30. Fairness of Taxes to Meet City's Revenue Needs

Excellent	22%	Above Average	31%	Average	38%
Below Average	3%	Poor	1%	No Opinion	5%

31. Fire Protection

Excellent	44%	Above Average	35%	Average	20%
Below Average	---	Poor	---	No Opinion	1%

32. Water Supply

Excellent	16%	Above Average	30%	Average	35%
Below Average	8%	Poor	8%	No Opinion	3%

33. Speed and Traffic Control

Excellent	36%	Above Average	35%	Average	12%
Below Average	8%	Poor	5%	No Opinion	2%

34. Hines' population is beginning to increase, and, most likely, will continue to do so over the next few years. In your opinion, what type of growth should be encouraged, and what type discouraged?

A. Heavy Industries

Encouraged	37%
Discouraged	55%
No Opinion	8%

B. Light Industries

Encouraged	89%
Discouraged	9%
No Opinion	2%

C. A residential community for people working elsewhere

Encouraged	56%
Discouraged	37%
No Opinion	7%

D. A community in which retired people from other areas are encouraged to move to Hines

Encouraged	50%
Discouraged	46%
No Opinion	4%

E. A community for people who work in Hines

Encouraged	83%
Discouraged	13%
No Opinion	4%

35. How badly does the City of Hines need new non-industrial employment opportunities (services, retail trade, etc.)?

A great deal	45%
Quite a bit	28%
Some	17%
None	8%
No Opinion	2%

36. Please describe your living quarters:

Owner	92%
Renter	8%

House	77%
Apartment	3%
Duplex	3%
Mobile H.	1%
Other	16%

37. How much choice of housing is there for new residents?

A lot	2%
Moderate	38%
Little	40%
None	18%
No Opinion	2%

38. What kind of housing is most needed in Hines? (check all that apply)

Homes to buy under \$30,000	29%
Homes to buy from \$30,000 - \$40,000	29%
Homes to buy over \$40,000	8%
Apartments	54%
Townhouses	4%

Homes to rent	65%
Duplexes	24%
Mobile Homes	23%
Do not know	6%

39. Mobile Homes and modular homes are becoming a viable alternative to conventional housing types. How should Hines react to this trend?

- A. Actively encourage mobile home parks 18%
- B. Allow mobile home parks, but only with high standards regarding parking, landscaping, sanitation and the like 75%
- C. Discourage mobile homes and mobile home parks 20%
- D. No opinion 5%

40. What is your opinion regarding housing for low-income families?

- A. City should strongly encourage this kind of housing, including expenditure of city funds if necessary to match federal grants. 6%
- B. City should encourage low-income housing, but not to the point of spending city money. 51%
- C. City should be neutral on this issue. 19%
- D. City should try to prevent construction of low-income housing in Hines 23%
- E. No opinion 2%

41. If you moved to your present residence in the last 5 years, why did you choose Hines?

42. How many years have you lived in Hines?

Less than 1 year	10%
1 to 2 years	20%
3 to 5 years	17%
6 to 10 years	17%
over 10 years	36%

43. How many people in your household fall into each of the following age groups? (289 - 96 = 3.01)

Under 10	17%
10 - 17	16%
18 - 22	6%
23 - 35	17%
36 - 50	21%
51 - 64	13%
65 and over	10%

44. If financial resources were available, which of the following park or recreational facilities, in your opinion, should receive highest priority?

A. City park

First choice 27%

Second choice 10%

B. Develop a large park in another area

First choice 2%

Second choice 5%

C. More neighborhood parks

First choice 8%

Second choice 6%

D. Develop park areas adjacent to schools

First choice 6%

Second choice 9%

E. Build a recreation center

First choice 39%

Second choice 8%

F. Swimming pool

First choice 21%

Second choice 8%

G. No opinion

First choice 10%

Second choice 8%

45. Are there sites or buildings in Hines which should be identified and recognized for their historical significance?

Yes 15%

Would you support city expenditures to preserve sites or buildings of historical significance?

Yes 29%

No 57%

Monetary level

Minimal 13%

Moderate 17%

Substantial 2%

46. Based upon your contacts with Hines' city officers and employees, what is your opinion of their attitude toward the public?
- |  |     |
|--|-----|
| A. Exceptionally cheerful and cooperative                              | 24% |
| B. More friendly and helpful than most other governmental people       | 29% |
| C. About average   | 17% |
| D. Needs considerable improvement                                      | 12% |
| E. I haven't had enough contact with city employees to form an opinion | 20% |
47. Should there be city regulations for the preservation of natural features, such as trees, shrubs, streams and land surfaces?
- |            |     |
|------------|-----|
| Yes        | 26% |
| No         | 50% |
| No opinion | 24% |
48. Do you feel that Hines should consider collecting a development fee at the time land is subdivided to help cover the increasing cost of providing services which may result from such subdividing?
- |     |     |
|-----|-----|
| Yes | 70% |
| No  | 22% |
- Which services
- |            |     |
|------------|-----|
| Water      | 57% |
| Sewer      | 57% |
| Streets    | 58% |
| School     | 28% |
| Other      | 9%  |
| No Opinion | 8%  |
49. Do you feel that shopping and residential needs in the community are adequately being met?
- |     |     |
|-----|-----|
| Yes | 29% |
| No  | 60% |
- How can they be improved?
50. What has Hines done in the past five years about which you are proud?
51. What would you like to see accomplished in Hines during the next five to ten years?
52. In your opinion, what are the most serious problems in Hines?

53. What is the primary occupation of the principal wage-earner at this time?

Lumber industry	37%
Construction	2%
Other blue collar	1%
Agriculture	5%
Unemployed	0%
Professional/Managerial	15%
Education	9%
Clerical/retail trade	2%
Government	13%
Retired	17%

54. If there is a second wage-earner in the household what is his/her present occupation?

Lumber industry	2%
Construction	1%
Other blue collar	1%
Agriculture	—
Unemployed	2%
Professional/Managerial	6%
Education	5%
Clerical/retail trade	12%
Government	6%
Retired	6%
No second wage-earner	6%

55. In which area does the principal wage-earner work?

Hines	47%
Burns	22%
Harney County	27%
Other	4%

56. If there is a second wage-earner in the household, where does he/she work?

Hines	30%
Burns	57%
Harney County	11%
Other	2%

57. Please make any comments which, in your opinion, would help to make Hines a better place to live, or any other comments you want to make in regards to the subjects mentioned in this questionnaire.

## **Section II**



## URBAN GROWTH BOUNDARY AND PROGRAM

The problems and opportunities for urban growth in the Burns/Hines urban area have been studied and analyzed by a joint Urbanization Committee consisting of members of the Burns, Hines, and Harney County Planning Commissions. This plan element is the result of that committee's work. It provides an analysis of current growth trends and needs for the urban area, sets goals and policies for managing that growth, and sets an Urban Growth Boundary and Phased Growth Program defining the urban area. This particular Comprehensive Plan element will be used in all three jurisdictions' Comprehensive Plans and will guide the three governing bodies as they make their day-to-day land use decisions that pertain to growth. It is intended and anticipated that a continuing process of communication between the jurisdictions in utilization and updating of this Comprehensive Plan element will occur. The cooperation shown in developing this element must continue as this growth management program is implemented over the next several years.

The growth and development of the Burns/Hines urban area has been a continuous process as was indicated in the Population element of this planning document. Burns and Hines have had a relatively slow but steady growth rate over the last several decades. Harney County has had a rapidly increasing rate of residential development in the area surrounding the Burns/Hines urban area. This increasing residential rate has caused greater demands for commercial services and also on any public facilities and services that the communities are called upon to provide.

Urban growth is essential if a community's economic lifeblood is to continue. However, an uncontrolled growth pattern may cause extreme hardship on the community if typical patterns are followed. For example, there are some areas of the Burns/Hines urban area that have been heavily partitioned or subdivided while remaining outside of either city limits. These areas show a haphazard lot layout, a lack of adequate roads, absence of any public sanitation facilities, and a general sprawling of the land use pattern. The people residing in these areas, even though the areas may be technically urban in density, cannot appreciate or utilize many of the services that a community should be able to provide. By the same token, and even more importantly in an overall sense, these types of areas are very expensive for communities that must provide some facilities and services to them. Even though many of the property owners in these areas do not pay any city taxes, they make heavy use of city public services such as streets and parks.

Another significant problem with this type of land use pattern is that the property is effectively removed from growth potential. In other words, the land, with its haphazard lot pattern and lack of adequate street layout, cannot be efficiently divided into full service urban sized lots unless many of the parcels can be combined into a single unit. This forces the community to look beyond these areas or in alternative areas that may not be suitable for urban development. This may be very expensive for the community in that the forced "leap-frogging" of urban development with the attendant extension of sewer and water lines and streets can be very expensive. In many cases, the community ends up subsidizing the existence of lands that are committed to urban sprawl. The basic economy of a city requires that its growth be carefully managed and planned. In this way the effects on the tax base can be minimized and benefits to the overall community's economic, environmental, and social structure can be maximized.

The purpose of this Urban Growth Program is to provide for an orderly and efficient transition from rural to urban land uses. The program assumes that Burns and Hines are the logical providers of urban services and therefore should have control over the urban form. This program provides a guide for urban expansion and serves to channel, not restrict, growth in ways which provide the least economic burden and the most economic benefit to the communities.

In this plan element, "Urban area" means all land inside the Urban Growth Boundary. "Urban Growth Area" includes the lands between existing and future city limits and the Urban Growth Boundary.

The Urban Growth Program consists of two basic parts. First, an Urban Growth Boundary with distinct development priority subareas which defines the physical limits to urban expansion; and second, a series of Urban Growth Policies that all three jurisdictions will use to guide land use decisions. A major element of the determination of land need is a projection of land consumption over the next 21 years.

#### Land Consumption

The Population Projection sections of the Burns and Hines plans project population growth to the year 2000. Based on the demographic information from that section, which was based on the 1978 Burns and Hines census, the following Housing projections were made.

Table 1

Year	Urban Area Housing Projections <i>Incl incorporations</i>				
	Population & Change from 1978	Total Dwelling Units & Change from 1978	Single-family Units & Change from 1978	Multiple-family Units & Change from 1978	Mobile Home & Change from 1978
1978	5095	2024	1530	307	187
1985	5522 +427	2233 +209	1693 +163	336 +29	204 +26
1990	5851 +756	2365 +341	1796 +266	355 +48	213 +26
1995	6197 +1102	2502 +478	1902 +372	357 +68	225 +38
2000	6567 +1472	2649 +625	2016 +486	395 +88	237 +50

See Assumptions on next page.

Assumptions

1. Maintain an 8 percent vacancy rate.
2. The ratio of housing types will remain constant.
3. People per dwelling unit densities will remain constant. *2.97 (p. 68)*
4. The medium growth population projections will be the most accurate.

Based on the Housing projections, the following land consumption projections were made.

Table 2

Urban Area Residential Land Consumption Projections, in Acres  
(Projection 1)

Year	Total Land Consumed Since 1978 (Includes Public Facility Land)	Land Consumed for Single-family Use Since 1978	Land Consumed For Multiple family Use Since 1978	Land Consumed for Mobile Home Use Since 1978
1985	50.1	<i>36.2 + 163 units</i>	1.9	2.0
1990	81.8	<i>59.1</i>	3.2	3.1
1995	114.6	<i>82.7</i>	4.5	4.5
2000	149.8	<i>108.0</i>	5.9	5.9

Assumptions

1. Single-family development will continue at approximately 4.5 dwelling units per acre.
2. Multi-family development will continue at approximately 15 dwelling units per acre.
3. Mobile home development will continue at approximately 8.5 dwelling units per net acre.
4. Public facilities (streets, parks, schools, etc.) will consume 25 percent of the developed residential land.
5. Vacant platted lots will be consumed as part of the total bank of vacant land according to assumptions 1, 2, and 3 (see Table 4).

The above projection does not take into account the utilization of existing vacant lots and smaller vacant areas within the urbanized area as a process

different than developing new areas. It must be anticipated that existing vacant areas within the urban area will be developed over the course of the next 21 years therefore lowering the demand for new areas. Table 3 below gives the approximate amount of vacant land within the city limits. Using this information, Table 4 was developed which anticipates the consumption of vacant land before new land is made available.

Table 3

## Urban Area Vacant Residential Land Within City Limits, in Acres

City	Approximate Vacant Unplatted Land Outside Developed Area	Approximate Vacant Platted Land Outside Developed Area	Approximate Total Vacant Land Outside Developed Area	Approximate Vacant Lots Within Developed Area
Hines	77	0	77	45 lots
Burns				
South	111	0	111	213 lots
North	<u>430</u>	<u>50</u>	<u>480</u>	<u>110 lots</u>
Total	541	50	591	323 lots
Total Area	618	50	668	368 lots

*What is developed land?*

Using the figures from Table 3 and assuming that this land will be consumed before new areas are opened for development, this alternative set of land consumption projections were developed.

Table 4

Urban Area Residential Land Consumption Projections  
(Projection 2)

Year	Vacant Lots Consumed For Single-family and Mobile Home Use Since 1978**	Total New Land Consumed Since 1978 (includes public facility land)*	New Land Consumed for Single- Family Use Since 1978*	New Land Consumed for Multiple- Family Use Since 1978*	New Land Consumed for Mobile Home Use Since 1978*
1985	180	2.4	0.0	1.9	0.0
1990	188	35.3	23.1	3.2	0.0
1995	0	105.4	46.7	4.5	4.9
2000	0	184.5	72.0	5.8	6.3

Assumptions

All assumptions are the same as Table 2 except assumption No. 5. Assumption No. 5 is that vacant lots will be consumed by single-family and mobile homes before new areas are used.

- \* in acres
- \*\* by number of lots

Projection No. 1 and Projection No. 2 represent the two extremes of consumption as probably portions of the vacant land and new land will be developed at the same time. Therefore, the probable consumption will fall between these two projections.

It must be recognized that these projections are for residential and public use only. Commercial and industrial uses will also grow with the residential use. Usually these uses occupy approximately 15 percent of an urban area. Therefore, actual land consumption may be as much as 15 percent greater than the residential consumption alone. Assuming this to be the case, these projections were developed.

Table 5

Urban Area Land Consumption Projections, in Acres

Year	Total Land Consumed Since 1978 (using Residential Projection No. 1)	Total Land Consumed Since 1978 (using Residential Projection No. 2)
1985	57.6	2.8
1990	94.1	40.6
1995	131.8	121.2
2000	172.3	212.2

Urban Growth Boundary and Rural Residential Area

Several different factors, based upon L.C.D.C. Goal 14 - Urbanization, were

utilized to define the land that will be considered available for urban purposes in accordance with the policies of this Urban Growth Program and therefore included within the Urban Growth Boundary. These included:

1. All of the existing urbanized or near urbanized area;
2. The projected land area needs to the year 2000;
3. The availability of urban services;
4. The physical characteristics of the land and its natural resources and hazards most especially its Soil Conservation Service classifications.

The Urban Growth Boundary for the two communities includes a large amount of land. It is recognized that the land area shown within the boundary is probably greater than the minimum needed by the year 2000. However, this much land was included recognizing the advantages of property being within the boundary and anticipating the cooperation between the County and the two communities in administering that land. The logic of inclusion of this land will be explained below.

Within the Urban Growth Boundary are two categories of land area. These represent development priority areas which serve to phase growth, channeling it into areas with services adequate to accommodate it. The Urban Growth Boundary is also partially surrounded by a Rural Residential Zone area. This is an area of mutual concern because of its semi-urban nature, and its impacts on the urban area.

The Priority One Development Area includes lands currently urbanized with urban facilities and services and lands currently vacant that can receive sewer and water services without major expansions or alterations to existing main sewer and water facilities. The acreages in these areas are given in Table 6 below. Area One should accommodate projected growth until the year 2000. It is important to note that Burns currently has city limits that greatly exceed the size of the existing urban area. All of its Priority One area is contained within the existing city limits. Some parts of the Priority One area in Burns are within the Silvies River flood plain, however, as these areas are currently in the city limits and are heavily partitioned, it was felt appropriate to include them and to anticipate that their development will be managed by the Flood Plain Development Provisions of the Burns Zoning Ordinance.

(Legal descriptions of development priority areas, when finalized, to be inserted here.)

Table 6

Approximate Acreage of  
Development Priority Areas

	Priority One			Priority Two	Total
	Burns	Hines	Total	Both Cities	
Developed	795	595	1390	90	1480
Undeveloped	1080	455	1535	501	2036
Total	1875	1050	2925	591	3516

The **Priority Two Development Area** includes lands for which either sewer or water or both are not available at this time and can only be made available after substantial improvements and expansions to the relevant main facilities. This area is intended to remain in very low density residential use until urban services can be provided. Heavy parcelization and development of this land will effectively remove it from the prospect of ever being efficiently urbanized with the minimum cost to the taxpayers of the communities or the county.

In the southeast corner of Burns an area of agricultural land within the current city limits has been included as a Priority Two Development parcel. It is being included inside the Urban Growth Boundary by virtue of its existing status as being inside the Burns city limits. However, its large size and current viable agricultural operation have given it a lower development priority. Adjacent to this area is a subdivision outside of the city limits. It has Priority Two designation because of the diseconomy to the city of annexing it and providing services at this time.

The Priority Two Development Area contains approximately 591 acres as is shown in Table 6 above. This should accommodate projected growth needs well into the next century. It is important to note that this area will not be available to accommodate urban growth until significant improvements or expansions are made to the water and sewer facilities of the communities. Therefore, the communities must anticipate these projects if adequate land is to be provided to accommodate growth at this point in the future.

(Legal description of development priority areas, when finalized, to be inserted here.)

The **Rural Residential Area** includes the lands to the north, west, and south of Burns and Hines that are zoned Rural Residential by Harney County. In these areas the minimum lot size is five acres or the minimum allowed for a septic permit, whichever is the larger. It is not anticipated that these areas will need to be considered urbanizable within the 20th century. The property has been included in this joint document however, recognizing its "semi-urban" nature and anticipating significant impacts from this area on the lands and facilities within the Burns and Hines city limits. It is the intention of this Plan that this area will be given special consideration by the County and that the County will consult with the communities and determine the impact on a community's facilities and services before any residential development takes place in these areas. The County will also anticipate that someday these areas will be urbanized and therefore will allow only land use patterns, lot sizes and street layouts that can be converted to an urban land form with relative ease. This is more fully laid out in the Policies section below and in the Urban Growth Management Agreement between the three jurisdictions.

#### Findings Relative to Establishment of the Hines Urban Growth Boundary

In accordance with the considerations and necessary findings of LCDC Goal #14, "Urbanization:"

1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC Goals.

That through the various elements of this Comprehensive Plan, this consideration has been addressed; in the Urban Growth Program discussion, the Housing element, the Land Use element, and the Sewer and Water elements.

2. Need for housing, employment opportunities, and livability.

That the area west of the City of Hines will provide the necessary amount of land to accommodate projected housing demand (Housing element), while at the same time utilizing less productive agricultural land - mainly Class VI Soils (Soils element). The area included within the Urban Growth Boundary on the eastern side of the Edward Hines Lumber Company mill site is currently owned by that company and anticipates using it (Existing Land Use element) for expansion to provide additional employment opportunities (Economy & Employment element).

3. Orderly and economic provision for public facilities and services.

That the capability of the existing facilities have been extensively inventoried and that the Urban Growth Boundary is consistent with the current service levels and the orderly future expansion of these services (Existing Water System, Water System Planning Criteria, Existing Sewer System, Sewer System Planning Criteria elements) necessary to support urban growth (i.e., sewer and water) with as little negative impact on the community as possible.

4. Maximum efficiency of land uses within and on the fringe of the existing urban area.

That through the Priority Development Areas 1 & 2 (Urban Growth Program element), orderly development of land and extension of urban services can occur on a phased basis negating the effects of "leap-frog" type development.

5. Environmental, energy, economic and social consequences.

That establishment of the Urban Growth Boundary at its present location will have minimal environmental effects on potential residences (Physical Characteristics element) due to the prevailing winds mitigating the effects of air pollution from the Edward Hines Lumber Company while minimizing the amount of energy (Energy element) expended for travel to and from employment locations (i.e., the Edward Hines Lumber Company), retail services (Existing Land Use element) in Hines and the adjacent City of Burns, and educational facilities (School Facilities element).

6. Retention of agricultural land as defined, with Class I being the highest priority for retention and Class VI being the lowest priority.

That the establishment of the Urban Growth Boundary will maintain Class II through IV soils to the east of Hines for agricultural purposes and utilize those soils in the Class VI and VII designation mainly for expansion of the urban area (Physical Characteristics element). Those areas adjacent to the Edward Hines Lumber Company mill site to the east and so owned will be converted to industrial uses (Existing Land Use element) as the overall economic factors warrant, thereby increasing employment opportunities and stimulating the local economy (Economy and Employment elements).



7. Compatibility of the proposed urban uses with nearby agricultural activities.

That potential residential uses to the west near the existing urban area would be adjacent to low intensity uses, both agricultural (grazing) and residential (minimum five acre lot size in the Rural Residential Zone [Harney County Zoning Ordinance]). The area for inclusion within the Urban Growth Boundary is largely Class VI and VII Soils (Soils element) and is generally of lower agricultural productivity than the Class II and IV Soils to the east of the City of Hines. However, at times, even those lands east of the City of Hines and in the Silvie River Flood Plain require irrigation from ground water sources (Water Resources element) to maintain a substantial level of agricultural productivity. Those lands to the west of Hines, due to topography, soil classification (Physical Characteristics element), and availability - existing and potential - of urban services (Water and Sewer elements) are more appropriate for urban type uses than those to the east of the City of Hines.

URBAN GROWTH POLICIES

1. The existing city limits for the Cities of Burns and Hines should remain relatively unchanged until a major portion of the respective city's existing useable land has been developed for urban purposes. As well, expansions of the city limits should be in the direction of existing rural residential activity around the communities.
2. Extension of Burns' or Hines' urban services should be granted only after careful and thorough evaluation of the facts surrounding the extension. A major emphasis should be given to analyzing the costs and benefits to the community.
3. The Urban Growth Boundary area is divided into two development priority areas. These areas will be developed in accordance with the following criteria:
  - a. Priority One Development Area shall be the land allowed for immediate urbanization when the policies on urban growth are conformed with. No land divisions should occur in this area without annexation and the full provision of urban facilities and services.
  - b. Priority Two Development Area shall be developed only after adequate sewer and water services can be made available to support urban growth and only after the Priority One Development Area is significantly urbanized. Partitionings and subdivisions within this area may be granted by the County, but only after conformance with the Development Coordination Policy below and conformance with the Urban Growth Management Agreement.
4. The Rural Residential Area shall not be developed to urban densities. Land divisions and subdivisions may be granted by the County in this area only after conformance with the Development Coordination Policy below and conformance with the Urban Growth Management Agreement.
5. The communities are the logical providers of urban services in the defined Urban Growth Boundary area. Therefore, development inside of the Urban Growth Area shall occur only after close coordination with the two communities and the County.
6. Harney County may grant requests for development in the Priority One and Two and Rural Residential areas only after allowing both communities the opportunity to comment on the proposed development and to give input as to its effects on any or all urban facilities and services. The County shall grant such a request only after it is determined that there will not be any undue impact on the provision of these services by either community. The County shall also only grant approval if it is shown that the land use pattern, including lot location, size, and street locations and improvements anticipates future urbanization and will not detract from the ability to convert the land efficiently to urban use. The County shall inform the applicant and shall cause to be included on the plat of any partition or subdivision notice to the eventual consumer that the property is located inside the Burns/Hines Urban Growth Boundary and that it and surrounding properties are subject to future urbanization.
7. Lands will only be annexed when contiguous to existing city limits and when there is immediate access to urban facilities or when the land is

servicable within a reasonable length of time.

8. Urban facilities and services, including sewer and water, will not be extended to a property unless the property is annexed. Exceptions may be made to this policy only when annexation is impossible or economically unfeasible for the City and when there is a threat to public health by not allowing the extension of facilities.

9. The city boundary between Burns and Hines as both communities grow will be determined on a case by case basis as property is developed. The property will be annexed to the community which can most efficiently provide public facilities and services.

10. All government units that have jurisdiction or influence over the growth of the two communities should review and concur with this Urban Growth Planning program. This most especially should include the various school districts.

11. Development of land, whether inside or outside of city limits, shall occur only after consideration of the following development criteria which are based upon local needs:

a. The financial capability of a particular city to provide the necessary facilities and services at levels suitable for urban use.

b. The amount of time required to provide these services to the property.

c. The technical requirements of the provision of services.

d. The need to provide sufficient amount of land to provide an adequate housing market.

e. The willingness of the development sector to assume the burden of funding the cost of providing major facilities and services at the appropriate levels to serve particular developments and to anticipate developments beyond.

12. All three jurisdictions shall adopt by ordinance a joint Urban Growth Management Program which more closely defines the procedures for implementation of these policies.

13. The Urban Growth Boundary, Policies, and Program shall be reviewed in the early 1980's when data from the 1980 census becomes available. It shall then be reviewed regularly every five years. It also may be reviewed at any time upon the request of any of the jurisdictions. It should be anticipated that these policies and boundary are based on current trends and projections that are based on assumptions which anticipate little change in the character or growth patterns of the communities. However, the introduction of many factors could significantly alter those assumptions and should call for the immediate re-evaluation and updating of this Growth Program.

URBAN GROWTH AREA JOINT MANAGEMENT AGREEMENT

The parties to this Joint Management Agreement shall be the Cities of Burns and Hines, Oregon, and Harney County, Oregon.

The terms of this Joint Management Agreement shall be applicable to the Cities of Burns' and Hines' urban growth area. For the purposes of this Agreement, the Urban Growth Area shall be defined as that area of land extending from the Cities of Burns' and Hines' corporate limits to the City of Burns' and Hines' urban growth boundary as referenced and mapped in the City of Burns Comprehensive Plan, the City of Hines Comprehensive Plan, and the Harney County Comprehensive Plan, and hereby incorporated into and made a part of this document. The development priority areas shall also be as referenced and mapped in the City of Burns Comprehensive Plan, the City of Hines Comprehensive Plan, and the Harney County Comprehensive Plan.

This Joint Management Agreement is entered into pursuant to ORS Chapters 190 and 197 and the Oregon Statewide Planning Goals for the purpose of facilitating the orderly transition from rural to urban land uses within the Cities of Burns' and Hines' urban growth area.

Words and phrases used in this Joint Management Agreement shall be construed in accordance with ORS Chapters 92, 215, and 227 and applicable Oregon Statewide Planning Goals unless otherwise specified. In the event two or more definitions are provided for a single word or phrase, the most restrictive definition shall be utilized in construing this Agreement.

I. Introductory Information

A. This Joint Management Agreement is the culmination of a series of actions intended, in part, to facilitate the orderly and efficient transition from urbanizable to urban land uses within the urban growth area. Such actions include the preparation of city comprehensive plans, the cooperative establishment of an urban growth area and policies by a joint Burns/Hines/Harney County Urbanization Committee, coordination with effected governmental units, and county review of the city comprehensive plans.

B. The City of Burns City Council, the City of Hines City Council, and the Harney County Court have adopted by ordinance comprehensive plans which include an urban growth boundary and planning goals and policies.

II. Urban Growth Management Provisions

A. Harney County shall retain responsibility for land use decisions and actions affecting the urban growth area and the Rural Residential area, such responsibility to be relinquished over any land within this area upon its annexation to one of the cities.

B. The existing city limits for the Cities of Burns and Hines should remain relatively unchanged until a major portion of the respective city's existing useable land has been developed for urban purposes. As well, expansions of the city limits should be in the direction of existing rural residential activity around the

communities.

C. The Urban Growth Boundary area is divided into two development priority areas. These areas will be developed in accordance with the following criteria:

1. Priority One Development Area shall be the land allowed for immediate urbanization when the policies on urban growth are conformed with. No land divisions should occur in this area without annexation and the full provision of urban facilities and services.

2. Priority Two Development Area shall be developed only after adequate sewer and water services can be made available to support urban growth and only after the Priority One Development Area is significantly urbanized. Partitionings and subdivisions within this area may be granted by the County, but only after conformance with the Development Coordination Policy within the Comprehensive Plans and conformance with this Urban Growth Management Agreement.

D. The Rural Residential Area shall not be developed to urban densities.

E. The communities are the logical providers of urban services in the urban growth area. Therefore, development inside of the Urban Growth Area should occur only after close coordination with the two communities and the County. Procedures for this coordination shall be found below.

F. Harney County may grant requests for development in the Priority Two and the Rural Residential areas only after allowing both communities the opportunity to comment on the proposed development and to give input as to its effects on any or all urban facilities and services. The County shall grant such a request only after it is determined that there will not be any undue impact on the provision of these services by either community. The County shall also only grant approval if the county determines that the land use pattern, including lot location, size, and street locations and improvements anticipates future urbanization and will not detract from the ability to convert the land efficiently to urban use. The County shall inform the applicant, and shall cause to be included on the plat of any partition or subdivision, notice to the eventual consumer that the property is located inside the Burns/Hines Urban Growth Boundary and that it and surrounding properties are subject to future urbanization.

G. Lands will only be annexed when contiguous to existing city limits and when there is immediate access to urban facilities or when the land is servicable within a reasonable length of time.

H. Urban facilities and services, including sewer and water, will not be extended to a property unless the property is annexed. Exceptions may be made to this policy only when annexation is impossible or economically unfeasible for the city and when there is a threat to public health by not allowing the extension of facilities.

I. The city boundary between Burns and Hines as both communities grow will be determined on a case by case basis as property is developed. The property will be annexed to the community which can most efficiently provide public facilities and services.

J. The Urban Growth Boundary, Policies, and Program shall be reviewed in the early 1980's when data from the 1980 census becomes available. It shall then be reviewed regularly every five years. It also may be reviewed at any time upon the request of any of the jurisdictions. It should be anticipated that these policies and boundary are based on current trends and projections that are based on assumptions which anticipate little change in the character or growth patterns of the communities. However, the introduction of many factors could significantly alter those assumptions and should call for the immediate re-evaluation and updating of this Growth Program.

K. A jurisdiction shall initiate a review of this program, map or agreement by resolution of the governing body setting out the reasons for the review. The regular five year review shall be initiated by the County Court. A joint Urbanization Committee, made up of members of the three Planning Commissions shall conduct the review and make recommendations for changes. All three full Planning Commissions shall then review the committee's report. After a public hearing, with due notice, the Commissions will make recommendations to the governing bodies. The three governing bodies shall consider the recommendations and, after public hearings with due notice, shall jointly adopt a revised program, map and/or agreement.

### III. Referred Application - Coordination

A. The Harney County staff shall refer each partition or subdivision request affecting the Cities of Burns' and/or Hines' urban growth area to the affected city for its review and comment within 14 days of the date the request was filed with the Harney County staff. Any additional information submitted by the applicant shall be submitted to the Cities promptly.

B. The cities shall review the request and submit their recommendations to the County within 30 days of their receipt from the County staff. The City Planning Commissions shall review all referrals from Harney County for subdivision or land partitioning in the urban growth area. If a commission determines that there is no conflict with the Comprehensive Plan, especially policy "6" of the Urbanization section, then a "no conflict" correspondence shall be made to Harney County. If a commission feels a conflict exists, then the commission will review the referred development proposal and submit a recommendation to Harney County.

C. Should no recommendations be made by a City within established response times and there has been no request for extension, the City shall be presumed to have no negative comment regarding the application.

D. After the County makes a decision on the application, the Cities shall be informed within five (5) days of the action taken by the

County.

IV. Severability

The provisions of this Joint Management Agreement are severable. If an article, sentence, clause, or phrase shall be adjudged by a court of competent jurisdiction to be invalid, the decision shall not affect the validity of the remaining portions of this Agreement.

IN WITNESS WHEREOF, this Urban Area Joint Management Agreement is signed and executed this \_\_\_\_\_ day of \_\_\_\_\_, 1979.

HARNEY COUNTY COURT

CITY OF HINES

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Recorder

CITY OF BURNS

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Recorder

IMPLEMENTATION, AMENDMENTS & REVISIONS

This plan is a collection of thoughts, ideas, concerns observations and recommendations. Upon its adoption, it can be a solid foundation for Hines to make the community a better place in which to reside and work. The active use of this Plan as a guideline for community activity and projects will probably be the only way that Hines' goals can be realized.

This section of the Plan deals with the ways it is to be used. There are three separate areas: implementation, revision, and process. Implementation involves specific policies or recommendations which are intended to see that Statewide Goals and Guidelines are followed. There are two separate parts to this. The first is an active effort on Hine's part to undertake or support policies and recommendations that will help the city to reach the goals. These policies and recommendations must conform to the appropriate goals. The various recommendations within this Plan reflect this method of implementation.

The second is to react to or participate in the actions or projects of others, using the goals and policies as the basis of evaluation and action. This will commonly involve commenting on various land use decisions before the City Planning Commission and may also include, for example, deciding on street improvement proposals or developing a program to encourage new industries to locate in or near Hines.

During the implementation, conflicts possibly could arise between various goals, policies, and recommendations. Also, there may be a need for interpretation or for evaluation of compliance with various criteria. The responsibility for these three functions would be shared between a Citizen Involvement Program and the decision-making bodies in the community and urban area.

POLICIES FOR IMPLEMENTATION

1. The City of Hines, working under the Citizen Involvement Program, should actively pursue the goals of this Plan and adhere to its policies in doing so.
2. The goals and policies of this Plan should be the foundation for reacting to and commenting on the actions and proposals of others.
3. Conflict resolution, interpretation, and criteria evaluation should be a responsibility shared by all segments of the community with opportunities for citizen involvement at all levels.

REVISION

This Plan should be a dynamic document. It is based on existing conditions and future projections. In the event that existing conditions change or that predicted courses are not fully followed, the assumptions and conclusions found in this Plan may become inaccurate. In this event, they must be re-evaluated and modified as necessary. Correspondingly, the policies and recommendation may need adjustment. These types of revisions may occur at any time; however, they should be approached cautiously. If this Plan is to be a stable foundation for decision-making, it must be changed only when it is determined that the broad



community interest will be better served by the revision. The Plan should not be changed solely for individual gain.

Revisions of the Hines Comprehensive Plan are just as critical and important as the original development and adoption process.

The time span for this Plan is not set; however, it should be assumed to have an approximate five year life span. At the end of that time, it should be totally revised. This major revision process should include a complete re-evaluation of the existing conditions and trends with a resetting of goals and policies. An evaluation of the effectiveness of the Hines Plan would be valuable in that process.

Proposed changes of the Urban Growth Boundary, Plan Map changes of residential to industrial, or any similar change is considered to have significant impact. Therefore, the Plan and implementing measures are to be reviewed at least once every two years by the Hines Planning Commission. The review should begin with an examination of data on development trends, population growth and effectiveness of policy statements to guide daily and long-term decision making. The process must also include an evaluation of the social, economic, environmental and energy implications of alternative solutions and strategies for development. Above all, this process should involve a broad cross-section of the local community in a program of continuing citizen involvement. If done with a narrow focus, the Hines Comprehensive Plan would no longer be a statement of the community's desires and concerns for future growth and development.

Minor changes to the Hines Comprehensive Plan which do not have a significant effect beyond the immediate area are not to be made more frequently than once a year. Proposals for minor changes to the Plan are to be reviewed sparingly during the year. This cautious process is important for maintaining the public's long-term confidence in the Plan and credibility of daily decision-making. Changes to the Plan are to be based on special studies or other updated resource data and used as a factual basis to support the change. The public need and justification for a change must be addressed and documented.

#### POLICIES FOR REVISION

1. This Plan may be revised when conditions change from what they were at its adoption to the extent that the assumptions and conclusions become inaccurate. The broad community interest must be served by the change and not for just any private interest. Major Plan revisions to the Hines Comprehensive Plan that would result in a widespread and significant impact beyond the immediate area are not to be made more frequently than every two years.
2. No more than five years after the adoption of this Plan, a major revision process should be undertaken to update it in its entirety.
3. Any major revision should be based on examination of development trends, population growth and effectiveness of policy statements since the previous adoption or revision date.
4. Any revisions of the Urban Growth Boundary shall be coordinated with the City of Burns and Harney County in accordance with the procedures set forth in "II. (K)" of the Urban Growth Area Joint Management Agreement

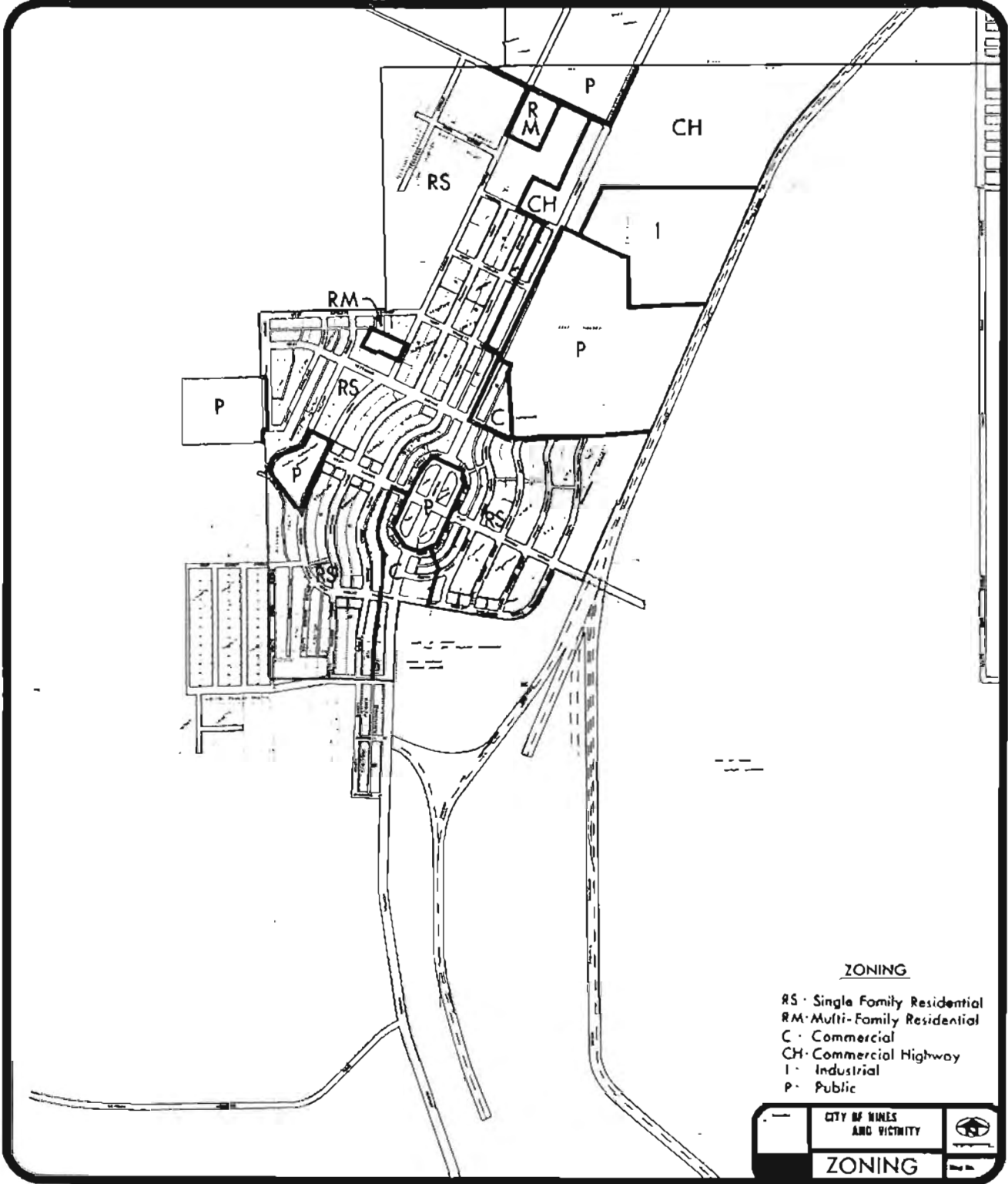
PROCESS

Citizens are often called upon to participate in government decision-making processes. This may involve such things as a minor variance request, a school attendance boundary change, or a citywide social service program. A community response is intended to be a comprehensive overview of community concerns and ideas. It should reflect what is determined to be best for the City as a whole.

POLICIES FOR PROCEDURE

1. Major revisions and minor changes to the Hines Comprehensive Plan and implementing ordinances must be adopted by the City Council following the forwarding of a recommendation by the Planning Commission based upon citizen involvement and coordination with other governmental units and agencies.
2. Property owners within 250 feet of an area subject to change are to be notified by first class mail of proposed changes as is specified by the zoning ordinance under the notification procedures.
3. The conduct of the public hearings shall be in accordance with those procedures outlined in the Hines Zoning Ordinance under Article II.

# **Section III**



ZONING

- RS - Single Family Residential
- RM - Multi-Family Residential
- C - Commercial
- CH - Commercial Highway
- I - Industrial
- P - Public

CITY OF NINES  
AND VICINITY



ZONING

SECTION III

IMPLEMENTATION ORDINANCES

ZONING ORDINANCE

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AN ORDINANCE ESTABLISHING ZONING REGULATIONS, PRESCRIBING THE USES TO WHICH PROPERTY IN THE ZONES MAY BE PUT, PROVIDING PENALTIES FOR VIOLATION THEREOF, AND REPEALING CONFLICTING ORDINANCES.

The City of Hines, Oregon, ordains as follows:

ARTICLE 1. INTRODUCTORY PROVISIONS

SECTION 1.010 Short Title

This ordinance shall be known as the Hines Zoning Ordinance and may be so cited and pleaded.

SECTION 1.020 Intent and Purpose of the Hines Zoning Ordinance

1. To establish this zoning ordinance as an instrument with which to implement the City's Comprehensive Plan by regulating the use of and development standards for all property within the incorporated limits of the City of Hines, consistent with the goals and policies of such Comprehensive Plan.
2. To provide a guide for the physical development of the city.
3. To promote orderly growth of the city.
4. To promote and to protect the public health, safety and general welfare of the community;
5. To regulate the location, construction, reconstruction, alteration and use of buildings, structures and land;
6. To protect all areas of the City from harmful encroachment by incompatible uses;
7. To prevent the overcrowding of land with buildings.
8. To avoid undue congestion of population.
9. To encourage the conservation of energy and natural resources.

SECTION 1.030 Enforcement

The City Recorder shall have the power and duty to enforce the provisions of this ordinance. An appeal from a ruling of the City Recorder shall be made to the Planning Commission.

SECTION 1.040 Permit Required

Prior to the erection, movement, reconstruction, extension or alteration of a structure, a permit for such erection, movement, reconstruction, extension, enlargement or alteration shall be obtained from the City Building Inspector. The applicant shall pay a fee as established by the City Council at the time the application is filed.



SECTION 1.050 Violations of Regulations Unlawful

It shall be unlawful for any person to violate any provision of this ordinance, to permit or maintain any such violation, to refuse to obey any provision hereof, or to fail or refuse to comply with any such provision except as variation may be allowed under this ordinance. Proof of such unlawful act or failure to act shall be deemed prima facie evidence that such act is that of the owner. Prosecution or lack thereof either of the owner or of the occupant shall not be deemed to relieve the other.

SECTION 1.060 Abatement and Penalty

A. A person violating a provision of this ordinance shall, upon conviction, be punished by a fine of not more than one thousand (\$1,000) dollars. A violation of this ordinance shall be considered a separate offense for each day the violation continues.

B. In case a building or other structure is, or is proposed to be located, constructed, maintained, repaired, altered, or used, or land is, or is proposed to be, used in violation of this ordinance, the City may, as an alternative to other remedies that are legally available for enforcing this ordinance, institute injunction, mandamus, abatement, or other appropriate proceedings to prevent, enjoin temporarily or permanently, abate, or removed the unlawful location, construction, maintenance, repair, alteration, or use.

SECTION 1.070 Fees

The following fees shall be paid to the City Recorder at the time of filing an application for a land use decision. These fees are to help cover the cost of processing such application. If an application is withdrawn by the applicant prior to any public meetings at which time the application is discussed, or prior to the City submitting to a newspaper information for publication of a legal notice of a public hearing, the fee shall be refunded. After the City's submittal of after any public meeting at which the application is discussed, the fee, or any part of, shall not be refunded.

<u>Application</u>	<u>Fee</u>
Adjustment	\$10.00
Variance	15.00
Conditional Use	15.00
Specific Conditional Use	25.00
Zone Charge	50.00

SECTION 1.080 Compliance

A lot may be used and a structure or part of structure constructed, reconstructed, altered, occupied, or used only as this ordinance permits. Failure to comply with all of the terms and conditions attached to any conditional use, variance or site plan shall constitute a violation of this ordinance.

SECTION 1.090 Maintenance of Minimum Requirements

A. No lot area, yard, or off-street parking area existing on or after the effective date of this ordinance shall be reduced below the minimum requirements of this ordinance, except as provided in ARTICLE VI or ARTICLE VII. (Adjustment & Variance)

B. An accessory use or structure shall comply with requirements for a principal use, except as this ordinance specifically allows to the contrary.

SECTION 1.100 Authorization of Similar Uses

The Planning Commission may rule that a use not specifically permitted in a zone be permitted in a zone if it is similar to the permitted uses in the zone, if its effect on adjacent properties is substantially the same as the permitted uses, and if it is not specifically designated as a permitted use in another zone.

SECTION 1.110 Interpretation

If the conditions imposed by a provision of this ordinance are less restrictive than comparable conditions imposed by another provision of this ordinance or of any other ordinance of the City, the provision which is more restrictive shall govern.

SECTION 1.120 Severability

The provisions of this ordinance are severable. If any section, sentence, clause, or phrase of this ordinance is judged by a court to be invalid, the decision shall not affect the remaining portions of this ordinance.

SECTION 1.130 Definitions

General Definitions: For the purpose of this ordinance, words used in the present tense include the future, the singular number includes the plural, the word "shall" is mandatory and not directory, the word "building" includes structure.

1. **ACCESSORY USE OR ACCESSORY STRUCTURE.** A use or structure incidental and subordinate to the main use of the property and located on the same lot or parcel as the main use or structure.
2. **ALLEY.** A dedicated public way which affords only a secondary means of vehicular access to a property.
3. **ALTERATION, STRUCTURAL.** Any change or repair which would affect or materially change a supporting member of a building such as a bearing wall

foundation, column, beam or girder, or any structural change in the roof or exterior walls.

4. **APARTMENT.** An apartment shall mean a multi-family dwelling unit or units as defined in this ordinance.

5. **AUTOMOBILE, BOAT, TRUCK, OR TRAILER SALES LOT.** A lot used for display, sale or rental of new or used automobiles, trucks, boats or trailers where no repair work is done except minor incidental maintenance and repairs of automobiles, trucks, boats or trailers to be displayed, sold or rented on the premises.

6. **AUTOMOBILE SERVICE STATION, FILLING STATION OR GAS STATION.** A retail place of business engaged primarily in the sale of motor fuels, but also in supplying goods and services generally required in the operation and maintenance of automotive vehicles and fulfilling of motorist needs. These may include sale of petroleum products; sale and servicing of tires, batteries, automotive accessories and replacement items; washing and lubrication services; the performance of minor automotive maintenance and repair; and the supplying of other incidental customer services and products.

7. **AUTOMOBILE WRECKING OR JUNK YARD.** A premises used for the storage or sale of used automobile parts or for the storage, dismantling or abandonment of junk, obsolete automobiles, trailers, trucks, machinery or parts thereof. Three or more dismantled, obsolete, inoperable motor vehicles or any inoperable machinery or parts thereof on one lot shall constitute a wrecking yard.

8. **BASEMENT OR CELLAR.** That portion of a building between floor and ceiling which is partly below and partly above the average grade, but so located that the vertical distance from the average grade to the floor below is equal to or greater than the vertical distance from the average grade to ceiling. If such portion of a building is not a basement, then it shall be considered a story.

9. **BOARDING, LODGING OR ROOMING HOUSE.** A dwelling or part thereof, other than a motel, or hotel, or multiple family dwelling, where lodging with or without meals is provided, for compensation, for three (3) or more persons other than members of the family occupying such house.

10. **BUILDING.** A structure built for the support, shelter enclosure of persons, animals, chattels, or property of any kind. Trailers, as defined by this ordinance, shall not be considered as buildings.

11. **CARPORT.** A stationary structure not enclosed and consisting of a roof with its supports or storage cabinets substituting for supports and used for sheltering motor vehicles and open on at least two of the four sides.

12. **CITY.** The incorporated City of Hines, Oregon.

13. **COMMISSION.** Planning Commission of Hines, Oregon.

14. **COUNCIL.** The official, elected governing body of the City of Hines, Oregon.

15. **DAY CARE CENTER, NURSERY OR KINDERGARTEN.** An institution, establishment or

place not part of the public school system, in which are commonly received at one time 4 or more children, if in a residence, or any number of children if in other than a residence, not related by parentage to the provider of the day care service, 14 years of age or under, for a period or periods not exceeding twelve hours per day for the purpose of being given board, care or training, apart from their parents or guardians for compensation or reward.

16. **DWELLING UNIT.** One or more rooms which are intended or designed to be occupied by one family with facilities for living, sleeping, cooking and eating. Trailer, as defined in this ordinance, shall not be considered as a dwelling unit.

17. **DWELLING, MULTIPLE FAMILY.** A building containing three or more dwelling units.

18. **DWELLING, SINGLE-FAMILY.** A detached building designed exclusively for occupancy by one family.

19. **DWELLING, TWO FAMILY (DUPLEX).** A building designed exclusively for occupancy by two families living independently of each other.

20. **FAMILY.** An individual or two or more persons related by blood or marriage, or a group of not more than five persons not related by blood or marriage, living together in a dwelling unit.

21. **FENCE.** An unroofed barrier or an unroofed, enclosing structure such as masonry, ornamental iron, woven wire (chain link), wood pickets, or solid wood or any other material used as an unroofed barrier to light, sight, air or passage.

22. **GARAGE, PRIVATE.** A detached accessory building or portion of a main building for the parking or temporary storage of automobiles.

23. **GARAGE, PUBLIC.** A building, other than a private garage, used for the care, repair, or equipping of motor vehicles, or where vehicles are parked or stored for compensation, hire or sale.

24. **GRADE, GROUND LEVEL.** The average elevation of the finished ground elevation at the centers of all walls of a building, except that if a wall is parallel to and within five feet of a public sidewalk, alley, or other public way, the grade shall be the elevation of the sidewalk, alley or public way.

25. **HEIGHT OF A BUILDING.** The vertical distance from the grade to:

- a) The highest point of the coping of a flat roof.
- b) The deck line of a mansard roof.
- c) The center height between the highest and lowest points of a gable, hip or shed roof.

26. **HOME OCCUPATION.**

- A. An occupation carried on solely by the resident of a dwelling house as a secondary use, in connection with which:
  1. No assistants are employed.
  2. Limited commodities can be sold (retail or wholesale)

including services,

3. No sounds are heard beyond the premises,
4. No display, advertisement, or signboard may be permitted where the home or occupation is located.

B. Home occupations may include:

1. Dressmaking
2. Lawyer
3. Notary Public
4. Public Accountant
5. Artist
6. Teacher
7. Musician
8. Practitioners of any art, craft or profession of a nature to be conveniently, unobstrusively and inoffensively pursued in a family dwelling.

C. No structural alterations are made to accommodate such occupations.

D. The residential character of the building remains unchanged.

E. Not more than one-half (1/2) of the floor area of 1 story is devoted to such use.

F. All activity connected with the use is contained within the building (no outdoor display or storage)

27. **HOTEL.** Any building containing guest rooms intended or designed to be used; or which are used, rented or hired out to be occupied; or which are occupied for sleeping purposes by guests.

28. **JUNK YARD.** (See Automobile Wrecking Yard)

29. **KENNEL.** Any premises where four (4) or more dogs, cats or other small animals or any combination thereof are kept commercially or permitted to remain for board, propagation, training, racing or sale, except veterinary clinics and animal hospitals.

30. **LANDSCAPING** Includes trees, grass, bushes, shrubs, flowers and garden areas; also the arrangement of fountains, decks, street furniture and paving materials. Landscaping does not include the placing or installation of artificial plants, shrubs, bushes or flowers.

31. **LOT.** A parcel or tract of land that is part of a recorded subdivision described by "lot-and-block" occupied or capable of being occupied by a building or group of buildings, including accessory structures, together with such yards or open spaces as are required by this ordinance and having a frontage upon a street. If a building or group of buildings occupy more than one lot, the combined lots shall be considered one lot, if all applicable property development standards are not maintained for each individual lot but are maintained for the combined lots.

32. **LOT AREA.** The total computed land area, measured on a horizontal plane, contained within the lot lines of a lot exclusive of streets or alley rights-of-way, but shall include the area of all easements on the lot.

33. **LOT, CORNER.** A lot abutting on two or more streets other than an alley, at their intersection, or upon two (2) parts of the same street where such streets or parts of the same street form an interior angle of less than 135 degrees within the lot lines.

34. **LOT, DEPTH.** The horizontal distance from the mid-point of the front lot line to the midpoint of the rear lot line of a lot or parcel.

35. **LOT, INTERIOR.** A lot or parcel other than a corner lot or parcel.

36. **LOT LINE.** The property lines bounding a lot or parcel.

37. **LOT LINE, FRONT.** In the case of an interior lot or parcel, the lot line separating the lot or parcel from the street other than an alley, and in the case of a corner lot or parcel, the shortest line along a street other than an alley.

38. **LOT LINE, REAR.** A property line which is opposite and most distant from the front lot line. In the case of an irregular, triangular, or other shaped lot or parcel, a line 10 feet in length within the lot or parcel parallel to and at a maximum distance from the front lot line. In the above instance, and if the front lot line is curved and a determination of the parallel relationship to the front lot line is being made, a straight line connecting the two end points of the front lot line shall be used. In the case of a corner lot or parcel, either interior lot line may be the rear lot line, regardless of the placement of the front door.

39. **LOT LINE, SIDE.** Any lot line not a front or rear lot line.

40. **LOT OF RECORD.** A lot which is part of a subdivision, record of survey, or a lot or parcel described by metes and bounds which has been recorded in the office of the County Recorder.

41. **LOT WIDTH.** The horizontal distance between the side lot lines, measured at right angles to the lot depth at a point midway between the front and rear lot lines as defined in this ordinance.

42. **MOBILE HOME.** "Mobile Home" means a vehicle or structure, transportable in one or more sections, which is eight body feet or more in width, and is thirty-two body feet or more in length, and which is built on a permanent chassis to which running gear is or has been attached, and which is designed to be used as a dwelling with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle (trailer, camper, motor home).

43. **MODULAR HOME.** A building or structural unit which has been in whole or substantial part manufactured at an off-site location to be wholly or partially assembled on-site, but does not include a Mobile Home or Recreational Vehicle as herein defined.

44. **MOBILE HOME PARK.** A place where two or more mobile homes are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership the primary purpose of which is to rent space or keep space for rent to any person for a charge or fee paid or to be paid for the rental or use of

facilities or to offer space free in connection with securing the trade or patronage of such person.

45. **MOTEL** A business which provides a building or group of buildings used for transient residential purposes containing guest rooms consisting of sleeping and bathroom facilities with automobile storage provided therewith, which building or group of buildings is designed, intended or used primarily for the accomodation of transient automobile travelers and visitors; including business groups designated as tourist courts, motor courts, motor hotels, inns and similar designations.

46. **NONCONFORMING LOT OR PARCEL.** A lot or parcel which does not meet the dimensional requirements of the district in which it is located.

47. **NONCONFORMING STRUCTURE OR USE.** A lawful existing structure or use at the time this ordinance or any amendment thereto becomes effective, which does not conform to the requirements of the zone in which it is located.

48. **NOTIFICATION AREA (ZONE CHANGE, CONDITIONAL USE, AND VARIANCE).** As applied to petitions, applications, or proceedings for a reclassification of property or change of zone, or applications for conditional use and variance, the notification area shall be deemed to include the area bounded by lines 250 feet from and parallel to the boundaries of the area to be reclassified, changed, varied, or adjusted including the width of all streets and alleys in such notification area; however, in the event that all of the property within a single ownership is not included in the area to be changed, the boundary of the notification area shall be measured from the property line and not from the boundary line of the area to be changed as such property was shown on the maps of the county assessor for the year (365 days) preceding the date of filing for the petition. The notification area shall also include the premises to be reclassified or changed from one zone to another. Contiguous property under the same ownership but having a separate tax lot number shall not be considered as part of the subject property.

49. **NURSING HOME.** Any home, place or institution which operates and maintains facilities providing convalescent or nursing care, or both, for a period exceeding 24 hours for two or more ill or infirm patients not related to the nursing home administrator, or owner, by blood or marriage. Convalescent care may include, but need not be limited to, the procedures commonly employed in nursing and caring for the sick. A nursing home includes rest homes and convalescent homes, but does not include a boarding home for the aged, a retirement home, hotel, hospital, or a chiropractic facility licensed under ORS.

50. **OWNER.** The owner of record of real property as shown on the latest tax rolls or deed records of the county, including a person who is purchasing a parcel of property under written contract. This definition does not include "earnest" or "option" monies applied to a subject property.

51. **PARCEL** A tract of land that is not part of a recorded subdivision and described by "metes and bounds" that is occupied or capable of being occupied by a building or a group of buildings, including accessory structures, together with such yards or open spaces as are required by this ordinance and having a frontage upon a road or street. If a building or group of buildings occupy more than one parcel, the combined parcels shall be considered one parcel, if all

applicable property development standards are not maintained for each individual parcel but are maintained for the combined parcels.

52. **PERSON.** Every natural person, firm, partnership, association, social or fraternal organization, corporation, trust, estate, receiver, syndicate, branch of government, or any group or combination acting as a unit.

53. **RECREATION VEHICLE.** A vacation trailer or other vehicular or portable unit which is either self-propelled or towed or is carried by a motor vehicle and which is intended for human occupancy and is designed for vacation or recreational but not long term residential purposes.

54. **RESTAURANT, CAFE.** A business establishment where prepared food is served to the public for consumption within the building, on the premises, or to "take out" to some other location.

55. **SIGN.** A medium, including its structure and component parts, which is used or intended to be used to attract attention to the subject matter for identification or advertising purposes.

56. **SIGN AREA.** The area of a sign within and including the perimeter or border which may enclose the outer limits of any writing, emblem, figure, character or other representation. The area of a portion of a sign having no such perimeter or border shall be the area enclosed within a quadrangle or triangle of the smallest size sufficient to cover the sign exclusive of essential structural supports. If the sign has a curved surface, the area shall be measured on the curvature. Each display surface of a sign is a part of the sign area.

57. **STORY.** That portion of a building included between the surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor directly above a basement, cellar, or unused underfloor space is more than 6 feet above grade, as herein defined, for more than 50 percent of the total perimeter or is more than 12 feet above grade, as defined herein, at any point, such basement, cellar, or unused underfloor space shall be considered a story.

58. **STREET.** A public thoroughfare or right-of-way 20 feet or greater in width dedicated, deeded or otherwise available for use as such (other than an alley), or a private thoroughfare commonly owned within a subdivision, which affords the principal means of access to abutting property including avenue, place, way, drive, boulevard, highway, road and any other similar designations.

59. **STRUCTURE.** Anything constructed or built, any edifice or building of any kind or any piece of work artificially built up or composed of parts joined together in some definite manner which requires location above or below grade or is attached to something having a location above or below grade including swimming and wading pools and covered patios. This definition does not include outdoor areas such as paved areas, walks, tennis courts, and similar recreation areas.

60. **TRAILER (TRAVEL OR VACATION).** (See Recreational Vehicle).

61. **TRAILER PARK.** A parcel or lot which is operated on a fee or other basis as



a place for the parking or siting of two or more occupied recreational vehicles.

62. **USE.** The purpose for which land or a structure is designed, arranged, or intended, or for which it is occupied or maintained.

63. **VISION CLEARANCE AREA.** A triangular area on a lot or parcel at the intersection of two streets, a street and a railroad, or a street and an alley; two sides of which are lot lines measured from the corner intersection of the lot lines to a distance specified in these regulations. The third side of the triangle is a line across the corner of the lot or parcel adjoining the ends of the other two sides. Where the lot lines at intersections have rounded corners, the lot lines will be extended in a straight line to a point of intersection. The vision clearance area shall contain no plantings, walls, structures or temporary or permanent obstructions exceeding 30 inches in height measured from the grade of the street center line.

64. **YARD, FRONT.** A yard extending across the full width of a lot or parcel, the depth of which is the minimum horizontal distance between the front lot line and a line parallel thereto at the nearest point of the foundation of the main building. Any yard meeting this definition and abutting on a street other than alley shall be considered a front yard.

65. **YARD, REAR.** A yard extending between side lot lines and measured horizontally at right angles to the rear lot line from the rear lot line to the nearest point of the foundation of the main building.

66. **YARD, SIDE.** A yard between the main building and the side lot line, extending from the front yard, or front lot line if no front yard is required, to the rear yard; the width of the required side yard shall be measured horizontally from the nearest point of the side lot line toward the nearest part of the foundation of the main building.

#### SECTION 1.140 Classification of Zones

For the purpose of this ordinance, the following zones are hereby established:

<u>Zone</u>	<u>Designation</u>
Residential - Single Family	RS
Residential - Multi-Family	RM
Commercial	C
Commercial - Highway	CH
Industrial	I
Public	P

#### SECTION 1.150 Location of Zones

The boundaries for the zones listed in this ordinance are indicated on the Hines Zoning Map which is hereby adopted by reference. The boundaries shall be modified in accordance with zoning map amendments which shall be adopted by reference.

SECTION 1.160 Authorization to Initiate Amendments

An amendment to the text of this ordinance or to the Zoning Map may be initiated by the City Council, the City Planning Commission, or by an application of a property owner. The request by a property owner for an amendment shall be accomplished by filing an application with the City Recorder.

SECTION 1.170 Public Hearings on Amendments

The Planning Commission shall conduct a public hearing on the proposed amendment at its earliest practicable meeting after the amendment is proposed and shall within forty (40) days after the hearing, recommend to the City Council approval, disapproval, or modified approval of the proposed amendment. After receiving the recommendation of the Planning Commission, the City Council shall hold a public hearing on the proposed amendment.

SECTION 1.180 Record of Amendments

The City Recorder shall maintain records of amendments to the text and Zoning Map of the ordinance.

SECTION 1.190 Zoning Map

A Zoning Map or Zoning Map Amendment adopted by ARTICLE II of this ordinance or by an amendment thereto shall be prepared by authority of the Planning Commission or be a modification by the City Council of a map or map amendment so prepared. The map or map amendment shall be dated with the effective date of the ordinance that adopts the map or map amendment. A certified print of the adopted map or map amendment shall be maintained in the office of the City Recorder as long as this ordinance remains in effect.

SECTION 1.200 Zone Boundaries

Unless otherwise specified, zone boundaries are section lines; subdivision lines; lot lines; center lines of street or railroad rights-of-way; or such lines extended.

SECTION 1.210 Zoning of Newly Annexed Areas

Any area or premises within the City or hereafter annexed to the City, not otherwise classified either by the City or any County Court shall be automatically classified as an RS district until such time as a zoning plan for any such area has been adopted by the City Council.

## ARTICLE II PUBLIC HEARINGS

SECTION 2.010 Holding Public Hearings

Any hearing before the Planning Commission or City Council required by any of the provisions of this ordinance shall be a public hearing held in accordance with the provisions of this ARTICLE.

The Planning Commission as to its hearings and the City Council as to its hearings shall adopt rules governing the conduct of public hearings held pursuant to this ARTICLE. Such rules shall accord reasonable opportunity for all interested persons to be heard.

SECTION 2.020 Appearance of Interested Persons, Remonstrances

Any person or persons desiring to be heard for or against the subject of the hearings may file with the City Council or the Planning Commission, whichever holds the hearing, a statement in writing, or may appear and respond personally at the hearing, either in person or by a representative. Written responses or objections to a proposed land use decision or other subject of a hearing may be filed by owners of property in the affected area. Persons who sign a petition for a land use decision may sign the remonstrances but such action shall not deprive the Planning Commission or the City Council to proceed with the hearing.

SECTION 2.030 Notice of Public Hearing

Upon fixing the time of the public hearing before the City Council or Planning Commission, the City Recorder shall cause notice thereof to be given by mail, posting and publication as may be required by the provisions of this ARTICLE. Such notice shall set forth the time and place of hearing, a summary of the nature and substance of the action to be considered at the hearing, and a brief description of the property involved.

SECTION 2.040 Mailing Notices

Notice of public hearings to be held by the Planning Commission or City Council shall be by first class mail, postage prepaid, to each property owner within the notification area at least ten (10) days prior to the date of the hearing. Failure to receive such notice by mail will not affect the validity of the proceedings.

SECTION 2.050 Posting Notices

Notices of public hearings to be held by the Planning Commission or City Council for any land use change including appeals shall be given by posting at least one (1) copy of such notice on the property involved and at least four (4) copies of such notice within the affected area in prominent and conspicuous places. Such notices shall be posted at least ten (10) days prior to the date of the hearing. The notices which are to be posted shall be headed "Notice of Public Hearing

Affecting This Area" which heading shall be in letters of at least one inch height.

SECTION 2.060 Publishing Notices

Notices of public hearings to be held by either the Planning Commission or City Council on land use decisions shall be given by publishing such notice in a local newspaper of general circulation in the area not less than once in any newspaper within the prior week within which the public hearing is to be held.

SECTION 2.070 Conduct of Hearings on Land Use Decision

Conduct of all hearings held by the Planning Commission or City Council on land use decisions shall be governed by provisions hereinafter set forth in this ARTICLE.

Every person entitled to notice of hearing shall be entitled to be heard in accordance with the rules as herein established.

SECTION 2.080 General Conduct of Hearing

- A. Each person appearing before the Planning Commission or City Council shall give his/her name and address in an audible tone of voice for the record.
- B. No person shall speak more than once without obtaining permission from the Planning Commission or City Council.
- C. No person shall be disorderly, abusive or disruptive of the orderly conduct of the hearing.
- D. The Planning Commission or City Council may set reasonable time limits for all presentations, and may exclude or limit cumulative, repetitious or immaterial matter.

SECTION 2.090 Order of Procedure

The order of proceedings in the hearings shall be as follows:

- A. Commence the Hearing. Announce the nature and purpose of the hearing and summarize the rules for the conduct of the hearing.
- B. Staff Report. Presentation by staff summarizing the nature of the proposal, explaining graphic or pictorial displays which are part of the record and a summary of the staff report, if any.
- C. Proponent's Case Appearance of the proponent and those persons in favor of the proposal.

1) The applicant-proponent shall appear, in his own behalf, or by a representative.

2) Persons in favor of the proponent's proposal shall be heard next.

D. Questioning of Proponents Allow opponents, upon recognition by the Chairperson, to submit questions directly to the proponents. Proponents shall be given a reasonable time to respond solely to the questions.

E. Opponent's Case. Persons opposed to the proposal shall be heard next as follows:

1) Special organizations formed for the purpose of opposition to the proposal.

2) Persons who received or who were entitled to receive notice of the hearing.

3) Other interested persons.

F. Petitions and Letters. Call for petitions and letters which have been filed with the City Recorder.

G. Questioning of Opponents. Allow proponents, upon recognition by the Planning Commission Chairperson, to submit questions to opponents who have testified. Opponents shall be given a reasonable time to respond solely to the questions.

H. Rebuttal Testimony. Allow the proponents to offer rebuttal testimony.

I. Close of Hearing and Deliberation. The Planning Commission shall conclude the hearing and deliberate the proposal.

J. Decision. The Planning Commission, shall, within thirty (30) days of the hearing, take action denying or approving the application. The Planning Commission shall incorporate findings. The findings can incorporate those proposed by the proponent, opponent or the staff. A copy of the decision shall be filed with the City Council and a copy of the decision shall be sent by first class mail to the applicant and to all persons who made an appearance at the hearing.

#### SECTION 2.100 Review By Council

A. The decision of the Planning Commission shall be final unless:

1) A notice of review from an aggrieved party is received by the City Recorder within ten (10) days of the mailing of the decision on the proposed action;

2) The Council, on its own motion, orders review within fifteen (15) days of said decision. Aggrieved party includes persons mailed notice of the hearing or any five or more individuals joined together to request review.

B. Every notice of review shall contain:

- 1) A reference to the application sought to be reviewed;
- 2) If not the applicant, a statement of the interest of the petitioner to determine his status as an aggrieved party;
- 3) Wherein the action of the Planning Commission was in error;
- 4) The date of the decision of the Planning Commission; and
- 5) If additional evidence is proposed, the nature of the evidence set forth in particular.

C. In the event of review by Council, either by appeal or Planning Commission initiation, a notice of public hearing shall be given to all persons notified of the hearing before the Planning Commission, and all persons who made an appearance before the Planning Commission.

D. The City Council may by resolution, amend, rescind or affirm the action of the Planning Commission or may remand the matter back to the Planning Commission for additional information.

SECTION 2.110 Resubmission of Application

If any application or petition is denied, the application or petition shall not be submitted again until at least six months after the date of the final action denying same.

## ARTICLE III EXCEPTIONS

SECTION 3.010 Nonconforming Uses

A. Nonconforming Use of Land. The lawful use of land existing on the effective date of this ordinance, although such use does not conform to the regulations specified for the zone on which such land is situated, may be continued, provided that no such use shall be enlarged or increased, or be extended to occupy a greater area than that occupied by such use at the time of the passage of this ordinance and if any such use ceases, as hereinafter provided, subsequent use of such land shall be in conformity with the regulations specified in this ordinance for the zone in which such land is situated.

B. Nonconforming Use of a Building. The lawful use of a building on the effective date of this ordinance may be continued although such building or the use thereof does not conform to the regulations specified for the zone in which such building is located.

C. Nonconforming Lots of Record. Those lots which:

1) Are of record;

2) Were created in conformance with all laws and regulations pertaining to such division of land, may be used for any use allowed in the zone in which they are located, provided that yard dimensions and all other requirements not involving lot area or width shall conform to the zone regulations.

D. Cessation of Nonconforming Use of Building and Land. If the actual operation of a nonconforming use of building ceases for a continuous period of one year, such building and the land on which it is located shall then be subject to all the regulations, except required setbacks and off-street parking specified by this ordinance for the zone in which such land and building is situated. In case the nonconforming use of land where no building is involved ceases for a period of 30 days, then such land shall be subject to all the regulations specified for the zone in which the land was located. Nonconforming land includes land used for the grazing or keeping of livestock.

E. Repair to Nonconforming Structures. A nonconforming structure may be repaired and maintained, so long as any such repair or maintenance does not in any way increase its nonconformity and it remains otherwise lawful.

F. Destruction of Nonconforming Structures.

1) In case any lawful nonconforming building is damaged or destroyed by fire, explosion, an act of God, or an act of a public enemy or by any other cause, to the extent that the total destruction exceeds eight (80) percent of the cost of replacement of the building, using new material, the land and building shall be subject to all the regulations specified by this ordinance for the

zone in which such land and building are located.

2) When it is permissible to rebuild or repair a nonconforming use building which is partially destroyed, the rebuilding thereof shall commence within one year if the new building is to be used for the same use as was made of the old building.

3) A maximum of six (6) months shall be allowed for completion of the exterior of any reconstruction.

G. Enlargement or Extension to Nonconforming Buildings. A nonconforming building may be enlarged, extended or structurally altered provided such enlargement, extension or structural alteration itself conforms in all respects to the regulations specified by this ordinance for the zone in which such building is located, but otherwise it shall be unlawful to enlarge, extend or structurally alter any nonconforming building.

H. Extension of Nonconforming Use Throughout a Building. A nonconforming use of a portion of a building may be extended throughout the entire building provided that such extension be approved by the Planning Commission after proceedings are had as in this ordinance provided for variances.

I. Change of Nonconforming Use. The nonconforming use of a building may be changed to a use of the same or more restrictive nature when such change of use is approved by the Planning Commission after proceedings are had as in this ordinance provided for variances.

#### SECTION 3.020 General Exceptions to Lot Size Requirements

If a property ownership, whether it be a lot or more than one contiguous lot held in a single ownership at the time of passage of this ordinance, has an area or dimension which does not meet the lot size requirements of the zone in which the property is located, the holdings may be occupied by a use permitted in the zone subject to the other requirements of the zone, provided that, if there is an area deficiency, residential use shall be limited to a single-family dwelling or the number of dwelling units consistent with the density requirements of the zone. The record of ownership as recorded in the office of the county clerk at the time of passage of this ordinance shall be the basis for application of this "exception" unless the owner submits proof that a different ownership existed at the time the provisions of this ordinance became applicable to the land concerned.

#### SECTION 3.030 General Exceptions to Yard Requirements

The following exceptions to yard requirements are authorized for a lot in any zone:

1) If there are buildings on both abutting lots which are within 100 feet of the intervening lot, and the buildings have front yards of less than the required depth for the zone, the depth of the front yard for the intervening lot need not exceed the average



depth of the front yards of the abutting lots.

2) If there is a building on one abutting lot which is within 100 feet of the lot, and this building has a front yard of less than the required depth for the zone, the front yard for the lot need not exceed a depth halfway between the depth of the yard of the abutting lot and the required front yard depth.

SECTION 3.040 General Exception to Building Height Limitations

Vertical projections such as chimneys, spires, domes, elevator shaft housing, towers, aerials, flagpoles, and similar objects not used for human occupancy are not subject to the building height limitations of this ordinance.

SECTION 3.050 Projections from Buildings

Architectural features such as cornices, eaves, canopies, sunshades, gutters, chimneys, and flues shall not project into a required yard more than three (3) feet.

ARTICLE IV ACCESS

SECTION 4.010 Access to Lots

All lots shall have direct access to a public or private street. Private streets shall be described by written easements, when appropriate.

SECTION 4.020 Lot Frontage

All lots shall have street frontage as follows:

- A. Lots fronting on a public or approved private street, except as noted below - 60 feet.
- B. Lots fronting on a cul-de-sac or other approved turn around space - 20 feet.

SECTION 4.030 Driveway Widths - Residential

All residential uses shall have driveway (curb-cut) widths as follows:

- A. For a one-family dwelling there shall be a driveway of at least 12 feet and no more than 24 feet.
- B. A driveway serving two or three dwelling units shall be at least 20 feet and no more than 30 feet in width.
- C. A driveway serving four or more dwelling units shall be at least 24 feet and no more than 30 feet in width.

SECTION 4.040 Driveway Widths - Commercial, Industrial and Public

All industrial, commercial, and public uses shall have driveway widths as follows:

- A. One-way driveways shall be at least 12 and no more than 15 feet in width. Such driveways shall be plainly designated with directional signs or markings.
- B. Two-way driveways shall be at least 22 and no more than 30 feet in width.
- C. Three-lane two-way driveways shall be at least 30 and no more than 34 feet in width. Such lanes shall be clearly striped and have directional signs.

SECTION 4.050 Driveway Locations

All uses shall have driveway intersections with streets only in accordance

with the following provisions:

A. Driveways Serving One, Two, or Three Dwelling Units. Driveways serving one, two, or three dwelling units shall be no closer to a street intersection than 50 feet.

B. Driveways Serving Four or More Dwelling Units or any Commercial, Industrial or Public Use.

1) Driveway locations shall conform to one or more of the following location standards:

a) No driveway shall be located closer than 125 feet from a downstream intersection.

b) No driveway shall be located closer than 50 feet from an upstream intersection.

c) In the event that a lot is on a corner and the lot width does not allow conformance with the above standards, the driveway shall be located as far as practically possible from the intersection.

d) If a lot can have a driveway conforming to subsection a) or b) above for one street frontage but not the other, subsection c) above shall not apply and only the driveway(s) allowed in accordance with subsections a) or b) shall be allowed.

e) If a lot is located across from the intersecting street of a "T" intersection, no driveway shall be located within 50 feet of the intersection, unless it is directly across from the intersecting street.

f) On a lot or group of lots under single ownership, no driveway shall be within 50 feet of another.

#### SECTION 4.060 Driveway Variances

The Planning Commission may, after proceedings held in accordance with ARTICLE VIII (Variance Procedures), vary the standards of SECTION 4.050 above if it is found that the public safety and convenience will better be served by locations not allowed by right.

## ARTICLE V SIGNS

SECTION 5.010 Signs

A sign is permitted only as an accessory to the use on the property on which the sign is located. Only the following signs are permitted out-of-doors in view of the general public.

1. On property used as a public, charitable, or religious institution, an identification sign facing each abutting street not exceeding six square feet in area and a bulletin board not over ten square feet in area.
2. On property used for another purpose, signs shall pertain to the business or other pursuit conducted on the premises on which the sign is located and the total area of signs shall not exceed in square feet the number of feet frontage of the the lot along the street which the signs are facing or 150 square feet whichever is less. No single sign shall exceed an area of 50 square feet per side or 100 square feet in total sign area. If more than one commercial use shares the frontage, the allowed area of signs shall be divided between the uses.

SECTION 5.020 Temporary Signs

Notwithstanding Section 5.010, the following signs are permitted.

1. Temporary real estate sales signs not exceeding six square feet in area.
2. No sign erected near the intersection of streets shall obstruct the vision clearance area; be located where, by reason of its position, shape or color, it may interfere with, obstruct the view of or be confused with a traffic sign, signal or other device; or make use of a word such as "stop," "danger" or "yield" or any other representation that could interfere with, mislead or confuse traffic.
3. No sign attached to a building shall project above the ridge line or other upper edge of the roof of the building on the property. If not attached to the building, a sign shall not exceed 20 feet in height measured from the elevation of the grade or from the grade of the street upon which the sign faces, whichever permits the greatest height.
4. A sign which is no longer accessory to the use of the property on which it is located shall be removed. A sign which is damaged shall be repaired or removed within ten days of the damage. A sign shall be maintained in good condition and appearance and parts of the sign and its supports that are painted shall be repainted not less than once every two years.

SECTION 5.030 Movement and Glare of Signs and Displays

No sign or window display visible from a street or adjacent property shall have a visible moving part; be equipped with moving, flashing or intermittent illumination or be placed or illuminated in a manner disturbing, annoying or in

another manner tending to create a nuisance to the occupants of another building or premises.

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## ARTICLE VI ADJUSTMENTS

SECTION 6.000 General

Due to the inherent nature and limitations of an ordinance, it is not possible to encompass all the different situations arising from the various properties treated by this ordinance. Therefore, the Planning Commission may grant limited adjustments to the terms of the ordinances when adjustments are within the limitations and conditions contained in this Article. These provisions shall be used sparingly within the purpose and intent of the ordinance and the limitations shall not be exceeded under any circumstances.

SECTION 6.020 Conditions for Granting an Adjustment

The Planning Commission must find that each of the following conditions apply to the particular situation prior to granting an adjustment:

- A. Practical difficulties or unnecessary hardship: That strict application of the ordinance would result in practical difficulties or unnecessary hardship;
- B. Extraordinary circumstances: That there are exceptional or extraordinary circumstances or conditions applying to the land, building or use referred to in the application, which circumstances or conditions do not apply generally to other land, buildings or uses in the same zone;
- C. Not detrimental: That granting the application will not be detrimental to the public welfare or injurious to property or improvements in the neighborhood containing the property of the applicant;
- D. Health or safety not adversely affected: That granting the application under the circumstances of the particular case, will not adversely affect the health or safety of persons working or residing in the neighborhood containing the property of the applicant;
- E. Necessary for the enjoyment of property rights: That the granting of the application is necessary for the preservation and enjoyment of the substantial property rights of the applicant, and;
- F. Maintains intent of ordinance and comprehensive plan: That such adjustment is within the intent and purpose of the ordinance and will not adversely affect the community objectives of the comprehensive plan.

SECTION 6.030 Limitations for Adjustments

The Planning Commission may grant only the minimum adjustment necessary to relieve the hardship or practical difficulty and shall certify on the order authorizing the adjustment that such adjustment is the minimum. The following items are subject to adjustment:

- A. Lot area: Maximum possible adjustment of one percent of the minimum lot

area required but not more than 500 square feet.

B. Percentage of lot coverage: A maximum adjustment of two (2) percent more than permitted but not more than 250 square feet.

C. Front yard and any yard adjacent to a street: A maximum adjustment of ten percent of the required front yard depth but in no instance shall this permit a yard depth of less than ten feet adjacent to a street.

D. Side yards: A maximum adjustment of one foot but in no instance shall this permit a side yard depth of less than four feet for a 20-foot building in height, or less than five feet for a 21- to 35-foot building in height and then, in either case, only when the existing main building was constructed under earlier ordinances, with side yard or less than now required.

E. Rear yard depth: A maximum adjustment of either four feet for the main building, or ten feet if a yard area equal to that being covered is provided at some other place on the lot other than a required yard area, but in no instance shall this permit a rear yard depth of less than five feet for a 20-foot building in height, six feet for a 30-foot building in height, or seven feet for a 35-foot building in height.

F. Lot width: A maximum of 10 percent of the required minimum width of 75 feet at the front building line.

G. Lot frontage: A maximum of 10 percent of the required minimum lot frontage.

H. Fences: Construction of fences with greater height or density than permitted.

I. Reduction or separation of subdivided lots.

J. Subjects not included for adjustments: The number of dwelling units permitted, parking requirements, height, vision clearance area and the use of property are not subject for adjustment by the Planning Commission.

#### SECTION 6.040 Information to be Submitted

The Planning Commission may require the applicant to submit such information in writing on a form provided by the Planning Commission as is necessary to weigh the merits of the application.

#### SECTION 6.050 Conditions May be Attached

The Planning Commission may attach any condition to the adjustment if such conditions relate directly and specifically to the matter being adjusted.

#### SECTION 6.060 Order Granting the Adjustment

The Planning Commission shall issue an order when granting an adjustment of the ordinance. The order shall contain the name and mailing address of the owner of

the property, the address of the property upon which the adjustment is granted, the legal description and the dimensions of the property, the findings of each of the conditions enumerated in Section 6.020, and the specific adjustment granted together with any conditions which may have to be placed on such adjustment. The order shall be filed:

- A. With the owner of the property;
- B. With the Building Inspector for filing with the building permit;
- C. With the City Council for their review and acknowledgement; and,
- D. In the Secretary's permanent files.

#### SECTION 6.070 Notice of Granting

A notice of granting an adjustment shall contain the address of the property and the specific adjustments granted with such conditions as may have been applied to the adjustment, the effective date of the adjustment and when, where and how and by whom an appeal to the order may be filed. One such notice shall be posted upon the property subject to the adjustment and one such notice shall be served by mail on each abutting property.

#### SECTION 6.080 Adjustment Right Must be Exercised to be Effective

Adjustments granted under this ordinance shall be effective only when the exercise of the right granted thereunder shall be commenced within six months from the effective date of the adjustment, unless an extension be allowed by the Planning Commission. In such case right be not exercised, or extension obtained, the adjustment shall be void. Any valid adjustment granted pursuant to this ordinance is transferrable to subsequent owners or contract purchasers of the property subject to adjustment unless otherwise provided at the time of granting such adjustment.

#### SECTION 6.090 Appeals

Any interested party may file a written appeal to the City Council of an order by the Planning Commission any time prior to the effective date of such order. An appeal shall set forth wherein the Planning Commission failed to adhere to the provisions of the ordinance. An appeal stays all action and suspends the order until the appeal is resolved.

#### SECTION 6.100 Resubmission of Adjustment Application

Any application which has been denied wholly or in part by the Planning Commission or City Council shall not be resubmitted for a period of six months from such denial, unless consent for resubmission be given by two-thirds of the members of the Planning Commission.

#### SECTION 6.110 Revocation of Permit

Any adjustment granted under this ordinance may be revoked by the Planning



Commission if it develops or is ascertained that the application contains any false statement. In such case, it shall be unlawful for any person to exercise any right of adjustment granted under this ordinance pursuant to such application.

## ARTICLE VII VARIANCES

SECTION 7.000 General

Subject to the restrictions and provisions contained in this ordinance, the Planning Commission shall have the power to vary or modify the strict application of any of the regulations or provisions of this ordinance in any such case where strict application would result in practical difficulties or unnecessary hardships with reference to requirements governing: lot area, lot width, percentage of lot coverage, and number of dwelling units or structures permitted on a lot, height of structures, location, yards, signs, parking, and vision clearance.

The power herein provided to the Planning Commission to grant variances from the strict application of the provisions of this ordinance shall be used sparingly, within the limits granted the Planning Commission with the spirit and intent of this ordinance, and applied reasonably to maintain and not abolish the distinctive classifications created by this ordinance.

SECTION 7.010 Conditions for Granting Variance

The Planning Commission may permit and authorize a variance when it appears from the matters presented at the public hearing:

- A. That there are unnecessary, unreasonable hardships or practical difficulties which can be relieved only by modifying the literal requirements of the ordinance;
- B. That there are exceptional or extraordinary circumstances or conditions applying to the land, buildings or use referred to in the application, which circumstances or conditions do not apply generally to land, buildings or uses in the same district; however, nonconforming land, uses or structures shall not constitute such circumstances or conditions in themselves;
- C. That granting the application will not be materially detrimental to the public welfare or be injurious to property or improvements in the neighborhood of the premises;
- D. That such variance is necessary for the preservation and enjoyment of the substantial property rights of the petitioner;
- E. That the granting of the application will not, under the circumstances of the particular case, adversely affect the health or safety of persons working or residing in the neighborhood of the property or the applicant; and,
- F. That granting of the application will be in general harmony with the intent and purpose of the ordinance and will not adversely affect any officially adopted comprehensive plan.

SECTION 7.020 Limiting Variances

The Planning Commission may impose such limitations, conditions and safeguards as may be deemed appropriate so that the spirit of this ordinance will be observed, public safety and welfare secured, and substantial justice be done. The Planning Commission may limit the time or duration of a variance. A violation of any such condition or limitation shall constitute a violation of this ordinance.

SECTION 7.030 Application

The application for a variance shall be made on a form provided by the Planning Commission for such purpose. The application shall be complete as to all matters requested thereon.

SECTION 7.040 Public Hearing

Notice of public hearing shall be given and held as prescribed in ARTICLE 2.

SECTION 7.050 Decision of the Planning Commission

The Planning Commission shall render its decision on an application for a variance after the conclusions of a hearing pursuant to ARTICLE 2.090(J).

SECTION 7.060 Variance Right Must be Exercised to be Effective

Variances granted under this ordinance shall be effective only when the exercise of the right granted thereunder shall be commenced within six (6) months from the effective date of that variance, unless a longer period be specified or thereafter allowed by the Planning Commission after a public hearing upon an application filed with the Planning Commission prior to the expiration date of the variance. In case such right be not exercised, or no extension be obtained, the variance shall be void. A written request for an extension of time filed with the Planning Commission shall toll the running of the six-month period until the Planning Commission has rendered a decision on the request.

SECTION 7.070 Cessation of Variance

Discontinuance of the exercise of any right heretofore or hereafter authorized by any variance for a continuous period of six (6) months shall be deemed an abandonment of such variance, and the property affected thereby shall be subject to all the provisions and regulations of this ordinance applicable to the zone in which the property is located at the time of such abandonment.

SECTION 7.080 Transfer of Variance

Any valid variance granted pursuant to this ordinance is transferrable unless

otherwise provided at the time of the granting of such variance.

SECTION 7.090 Resubmission of Variance Application

No application which has been denied wholly or in part by the Planning Commission or by the City Council shall be resubmitted for a period of six months from such denial, unless consent for resubmission be given by the Planning Commission upon showing of good cause therefor.

SECTION 7.100 Revocation of Permit

A. Any variance granted under this ordinance may be revoked by the Planning Commission if it develops or is ascertained that the application therefor contains any false, inaccurate or incomplete statements as to material facts. In such case it shall be unlawful for any person to exercise any right granted by the Planning Commission or the City Council pursuant to such application. No revocation shall be effective until ten (10) days following the date on which notice thereof was either personally delivered or deposited with the U.S. Postal Service, postage fully prepaid, for delivery by certified mail. Notice of revocation shall state the grounds thereof, the date upon which the revocation becomes effective and the right of appeal provided in Subsection B of this Section.

B. Any person whose variance has been revoked pursuant to this section may appeal such action to the City Council by filing written notice of appeal with the City Recorder on any regular city business day prior to the effective date of the revocation. The scope of such appeal shall be limited to the questions of whether the statements upon which the revocation is based were, in fact, false, inaccurate or incomplete statements as to material facts. The filing of an appeal shall stay the effective date of the revocation until final disposition of the appeal by the City Council.

C. Revocation of a variance shall not ban, nor shall it in any way be held to prejudice the right of the applicant to file a new application stating the correct and complete facts.

## ARTICLE VIII . CONDITIONAL USES

SECTION 8.000 General

A conditional use is an activity which is basically similar to other uses permitted in the zone but due to some of the characteristics of the conditional use, which are not entirely compatible with the zone, such use could not otherwise be permitted in the zone. A public hearing and review of the proposed conditional use by the Planning Commission and the imposition of certain conditions, if necessary, will insure that the specified proposed use will be in consonance with the purpose and intent of the zone, and that the considerations specified in Section 8.060 are satisfied.

SECTION 8.010 Application

The application for establishment, expansion or alteration of a conditional use shall be made on a form provided by the Planning Commission for such purpose. The application shall be complete as to all matters requested thereon, and may be filed only by one or more of the following persons:

- A. The property owner.
- B. A purchaser thereof under a duly executed written contract when he states that he is the contract purchaser on the application and the seller consents in writing to such application;
- C. A lessee in possession of the property and the owner consents in writing to such application; or
- D. The agent for any of the foregoing when duly authorized in writing and the agent states on the application that he is the duly authorized agent.

SECTION 8.020 Power to Hear and Decide

The Planning Commission shall have the power to hear and decide all applications for the establishment, expansion or alteration of conditional uses identified as such under any provision of the Hines Zoning Ordinance. The Planning Commission shall have the power to determine whether the proposed use may be established and may impose conditions thereon, all within the specifications and restrictions as to substance and procedure set forth in this chapter.

SECTION 8.030 Hearings

The Planning Commission shall hold a public hearing on each proposed conditional use as provided in ARTICLE 2 of this Code.

SECTION 8.040 Conditional Uses and Concurrent Variances

Variances may be processed concurrently and in conjunction with a conditional use application and when so processed will not require an additional public

hearing or additional filing fee.

SECTION 8.050 Conditions

The Planning Commission may prescribe conditions as to any matters provided below. No conditions shall be imposed unless the Planning Commission determines that the conditions are necessary for the public health, safety and welfare.

SECTION 8.060 Findings of the Planning Commission

Before granting a conditional use, the Planning Commission shall determine:

- A. That such conditional use, as prescribed by the applicant, will be in harmony with the purpose and intent of the zone and, with any condition imposed, satisfies the considerations mentioned in Section 8.000.
- B. That the granting of a conditional use permit will be consistent with the goals and policies expressed in the Hines Comprehensive Plan.
- C. That all conditions imposed are authorized by Section 8.050.

SECTION 8.070 Variance Procedure Applicable to Conditional Uses

Sections 7.050 through 7.100 of this ordinance relating to variances, shall apply, where applicable, to the granting of conditional uses.

## ARTICLE IX SPECIFIC CONDITIONAL USES

SECTION 9.010 Mobile Home Conditional Use Standards

In addition to the standards of the zone in which the conditional use is located and the other standards of this ordinance, a mobile home on an individual lot approved as a conditional use shall meet the following standards.

1. The mobile home shall be a "double-wide" containing at least 800 square feet of space as determined by measurement of the exterior dimensions of the unit exclusive of any trailer hitch device or any extension of the unit permitted by subsection 2 of this section.

2. No extensions or outbuildings shall be attached to the mobile home. However, a carport, a covered or uncovered patio or a storage unit for the incidental yard and household items may be erected adjacent to the exterior walls of the mobile home.

3. The mobile home is provided with a "water closet," lavatory and bathtub or shower which are connected to running water and drain system and which are located in a room or rooms which afford privacy to the occupant.

4. The mobile home is provided with a kitchen area or room containing a sink with hot and cold running water which is connected to a drain system.

5. The mobile unit shall have the Oregon "Insigne of Compliance" as provided for by state law. However, upon submission of evidence indicating substantial compliance with the standards required for an "Insigne of Compliance," the building official may waive the "Insigne of Compliance" requirement for units manufactured prior to September, 1969.

6. The owner of the mobile home shall be the owner of the lot on which the mobile home is located.

7. The wheels of the mobile home shall be removed and the unit placed on and securely anchored to a foundation having permanence and strength equal to that provided by a cement or concrete block foundation. Further, unless the foundation is continuous, the unit shall have a continuous "skirting" of non-decaying, non-corroding, material extending at least six inches into the ground or to an impervious surface. The skirting or continuous foundation shall have provisions for ventilation and access to the space under the unit, but such openings shall be secure against the entrance of animals.

8. The owner of the property agrees, in writing, to remove the foundation and additions to the mobile home and to permanently disconnect sewer, water, and other utilities if the mobile home is removed from its foundation. The agreement authorizes the City to perform for the cost of the work in the event the owner fails to accomplish the work within thirty (30) days from the date on which the mobile home is moved from its foundation. This condition shall not apply in the event the mobile home is replaced on the original foundation, or on the original foundation as modified, by another approved mobile home within thirty (30) days of the original unit's removal.

SECTION 9.020 Mobile Home Park Conditional Use Standards

In addition to the standards of the zone in which the conditional use is located and the other standards of this ordinance, a mobile home park approved as a conditional use shall meet the following standards.

1. Evidence shall be provided that the park will be eligible for a certificate of sanitation as required by state law.
2. No mobile home shall occupy more than forty (40) percent of the space provided for it.
3. The total number of parking spaces in the park, exclusive of parking provided for the exclusive use of the manager or employees of the parks, shall be equal to not less than 2.0 parking spaces per mobile home space. Parking spaces shall be paved with asphalt, concrete, or similar dustless material.
4. A mobile home situated in the park shall be, within 48 hours of its arrival in the park, securely anchored to footings or other devices intended to minimize the probability that the mobile home shall be overturned or displaced by wind.
5. A mobile home permitted in the park shall contain not less than 225 square feet as determined by measurement of the exterior of the unit exclusive of any trailer hitch device. It shall contain its own "water closet," lavatory and shower or tub which are connected to running water and a drain system and which are located in a room or rooms which afford privacy to the occupant. It shall also contain a kitchen room or space containing a sink which is supplied with hot and cold running water and which is connected to a drain system.
6. A mobile home permitted in a park shall have the Oregon "Insigne of Compliance" as provided for by state law. However, upon submission of evidence indicating substantial compliance with the standards required for an "Insigne of Compliance," the building official may waive the "Insigne of Compliance" requirement for units manufactured prior to September, 1969.
7. A mobile home permitted in a park, if not resting on a continuous foundation, shall be provided with a continuous "skirting" of non-decaying, non-corroding material extending at least six inches to the ground or to an impervious surface. The skirting or continuous foundation shall have provisions for ventilation and access to the space under the unit, but such openings shall be secure against the entrance of animals.
8. There shall be no outdoor storage of furniture, tools, equipment, building materials or supplies belonging to the occupants or management of the park.
9. That portion of the parcel of land which is used for park purposes shall be surrounded, except at entry and exit places, by a sight-obscuring fence or hedge not less than six (6) feet in height. Such fence or hedge shall be maintained in a neat appearance.
10. If the park provides spaces for fifty (50) or more mobile home units, each vehicular way in the park shall be named and marked with signs which are similar in appearance to those used to identify public streets in the City. A map of



the named vehicular ways shall be provided to the Fire Department of the City.

11. If space provided for a mobile home or permanent structure in the park is located more than 500 feet from a public fire hydrant, the park shall be provided with private hydrants so that no space or structure within the park shall be no more than 500 feet from a hydrant. Each hydrant shall be located on a vehicular way within the park and shall conform in design and capacity to the public hydrants in the City.

#### SECTION 9.030 Trailer Park Conditional Use Standards

In addition to the standards of the zone in which the conditional use is located and the other standards of this ordinance, a trailer park approved as a conditional use shall meet the following standards.

1. Evidence shall be provided that the park will be eligible for a mobile home park certificate of sanitation as required by state law.
2. The total number of parking spaces in the park, exclusive of parking provided for the exclusive use of the manager or employees of the park, shall be equal to 1.5 spaces per mobile home or recreation vehicle space. Parking spaces shall be covered with crushed gravel or paved with asphalt, concrete or similar dustless material.
3. The park shall be maintained in a neat appearance at all times. Except for vehicles, there shall be no outside storage of materials or equipment belonging to the park or to any guest of the park.
4. Except for the access roadway into the park, the park shall be screened on all sides by a sight-obscuring fence not less than six (6) feet tall.

#### SECTION 9.040 Variance Procedure Applicable to Specific Conditional Uses

Sections 7.050 through 7.100 of this ordinance relating to variances, shall apply where applicable to the granting of specific conditional uses.

## ARTICLE X ZONE CHANGES

SECTION 10.000 Zone Changes, Generally

A zone change is a reclassification of any specific area of the City from one zone district classification to another, or the imposition of such classification upon property previously unclassified. Such change may be made only in one of the following ways:

1. By order of the Planning Commission incorporated in a decision rendered pursuant to Article 2.
2. By resolution of the City Council initiating a zone change pursuant to Article 2.
3. By ordinance of the City Council pursuant to Article 2.

SECTION 10.010 Initiation of Zone Change Proceedings by the City Council

1. A zone change may be initiated by the City Council only when the change proposed is for some governmental, educational, religious or philanthropic purpose.
2. Proceedings to reclassify premises as to zone, initiated by the City Council shall be by resolution, and the resolution shall be referred to the Planning Commission. The Secretary shall thereupon fix a date for hearing by the Planning Commission and give notice of such hearing as provided in Article 2.
3. After the hearing, the Planning Commission shall make a recommendation to the City Council.

SECTION 10.020 Initiation of Zone Change by the Planning Commission

1. A zone change may be initiated by resolution by the Planning Commission only when the proposed change is in the public interest and would be of general benefit.
2. When the proceedings are initiated by the Planning Commission, the Secretary shall fix a date for hearing before the Planning Commission and give notice of such hearing as provided in Article 2.
3. After the hearing the Planning Commission may refer its recommendation to the City Council.

SECTION 10.030 Initiation of Zone Change by Petition

1. Any person entitled to apply for a conditional use permit as provided in Article 8 may file a zone change petition. The petition shall be in three

parts, as follows:

#### PART 1 - Property Data

- A. The present zone classification;
- B. The proposed zone classification;
- C. The street address or, if none has been assigned, the location of the property;
- D. The legal description of the property;
- E. The names and residence addresses of all persons having a vested interest in title to the property and the extent and nature of their interest; and
- F. The signatures of persons listed under (E) whose respective interests in the aggregate amount to fee title of over 50 percent of the area petitioned for reclassification.

#### PART 2 - Plot Plan

- A. A clear and legible plot plan of the affected area showing public streets and rights-of-way and ownership lines drawn to scale and of a size sufficient to permit clear identification of the matters specified as B and C of Part 2;
- B. Show the area petitioned for reclassification and the owners thereof;
- C. Show the location and names of owners of all other property within the affected area.

#### PART 3 - Documentation

A. Certified List. The petition shall set forth the names of the owners of all property within the notification area, their mailing addresses, and the descriptions of their property as the same appears on the most recent assessment and tax roll for Harney County, as the case may be, or as the same may appear in the deed records of said county, if said records be later.

B. Affidavit. Attached to the petition shall be the affidavit of the person or persons preparing the plat and lists of names and addresses of owners therein, showing that person or persons are qualified and competent to prepare such plat and to examine the public records pertaining to ownership of real property, and certifying that the list of names of the owners and descriptions of the property in such lists are accurate and correct and that no name of any owner of property in the notification area is omitted from the list. The certificate of an abstract or title company incorporated under the laws of Oregon shall be deemed in compliance with this provision. A petition must be filed within sixty (60) days after the making of such affidavit or certificate.

After the complete zone change petition has been filed with the City Recorder, that person shall check the petition within ten (10) calendar days and determine if the petition is complete under the provisions of this ordinance. If the petition be sufficient that person shall then direct the Secretary to fix a time of the hearing on such petition before the Planning Commission and cause notice of hearing to be given as provided in Article 2. The Planning Commission shall thereafter conduct a public hearing and render a decision as provided in this Article and Article 2. If the petition is not sufficient, the City Recorder

shall return the petition to the petitioner with such explanation of the deficiency in the petition as may be required.

SECTION 10.040 Signatures, How Counted

When any provisions of this ordinance require signatures of the owners of property of a state percentage of property within any area, the following rules shall apply:

1. Tenants in common. When but one tenant in common, or several but less than all, signs a petition or waiver it shall be counted only for such interest or portion of the common property as the person or persons signing may own.

2. Tenants by the entirety; joint tenancy. Where property is owned by a husband and wife as tenants by the entirety and but one of them signs, he or she shall be deemed the owner of one-half of the property and shall be counted accordingly. Where property is owned by two or more persons under an estate having the attributes of a joint tenancy or right of survivorship each tenant shall be deemed the owner of so much of the property as he would receive if the joint property were divided equally between such tenants.

3. Purchasers under contract. Any person purchasing the property under a contract of sale may sign a petition, waiver or other instrument required by this ordinance as owner, provided that he states he is purchasing the property under contract.

4. Government property. Notwithstanding the fact that the consent of the federal, state, county or local government, or the agents thereof, is not necessary to any zone change petition or other petition required by this ordinance, any such governmental unit or agency may, however, remonstrate and object to any proposed change, and such objection, remonstrance, or other instrument shall be signed by the administrative head of such governmental unit having the authority over the property.

5. Corporation. Where property is owned by a private corporation, any petition, waiver, or other instrument concerning such property under this ordinance shall be signed by an authorized officer of the corporation.

6. Prima facie proof of ownership. When any person signs as the owner of property or as an officer of a public or private corporation owning the property, or as an attorney-in-fact or agent of any such owner, or when any person states that he is buying the property under contract, the Planning Commission and City Council may accept such statements to be true, unless the contrary be proved, and except where otherwise in this ordinance more definite and complete proof is required, but the Planning Commission or City Council may demand proof that the signer is such owner, officer, attorney-in-fact or agent.

SECTION 10.040 Zone Change Declaration; Scope

1. After consideration of all matters brought before the Planning Commission at the hearing, the Planning Commission may impose conditions as to any of the following matters which the Planning Commission deems necessary to effectuate the intent and purpose of that particular zone, should a zone change be granted, including:

- A. Uses permitted;
- B. Size, height and location of buildings and accessory structures;
- C. Landscaping;
- D. Protection and preservation of existing trees, vegetation, water resources, wildlife habitat and other significant natural resources;
- E. Size, location, screening, drainage, and surfacing of driveways, parking areas, and street access;
- F. Size, height and location of free-standing signs and illuminated wall signs;
- G. Size, height, location and materials for the construction of fences;
- H. Location and intensity of outdoor lighting.

2. Such conditions shall be stated with at least the same specificity and narrowness as would be required of a regulatory ordinance enacted in the exercise of the City's police power; shall be reasonably related to the public health, safety and welfare; and shall be designed to reasonably effectuate their intended purpose.

3. The Planning Commission shall not impose any permanent condition which would have the effect of limiting use of the subject property to one particular owner, tenant or business. Such permanent conditions may limit the subject property as to use, but shall not be so restrictive that they may not reasonably be complied with by other occupants who might devote the property to the same or a substantially similar use.

4. The Planning Commission's decision shall not be expressly or by implication incorporate or authorize any variance from the requirements of the zoning district to which the subject property is to be reclassified, or from any other applicable requirements of the Hines Zoning Ordinance, unless an application therefor was made and heard as provided in Article 2 and Article 7 of this Code. Such decision shall not expressly or by implication incorporate or authorize any variance from the requirements of any other provision of this code.

## ARTICLE XI USE ZONES

**SINGLE FAMILY RESIDENTIAL (RS)****SECTION 11.000 Intent and Purpose of the Residential - Single Family (RS) Zone**

1. To protect and preserve areas which will be developed with single family detached dwellings and characterized by a high ratio of home ownership.
2. To stabilize and protect the essential characteristics of residential environments.
3. To promote and encourage a suitable environment for activities associated with family life.

**SECTION 11.010 Uses Permitted Outright in a Residential - Single Family (RS) Zone**

In an RS zone, the following uses and their accessory uses are permitted outright.

1. Single family dwelling, excluding mobile homes.
2. Two family dwellings (duplexes) on a corner lot of 10,000 square feet or more.
3. Church
4. Gardens, orchards and crop cultivation, provided no stable or barn, cattle or other livestock or poultry is maintained in connection therewith, and that all other applicable ordinances are complied with.
5. Customary residential accessory buildings for private use, such as a pergola, greenhouse, hot house, summer house, patio, enclosed or covered patio, wood shed, quarters for domestic animals maintained as pets of the residents.
6. The taking of boarders or leasing of rooms by a resident family, providing the total number of boarders and roomers does not exceed two in any single family dwelling, nor more than four in any legally established two family dwelling.

**SECTION 11.020 Conditional Uses Permitted in Residential Single Family (RS) Zone**

In an RS zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of Article 8.

1. Mobile home on individual lots (in accordance with the provisions of ARTICLE 9 (Specific Conditional Uses).
2. Two-family dwelling unit on an interior lot of 10,000 square feet.
3. Community buildings.

4. Schools.
5. Public Utility Structure or Facility for the purpose of distribution of its services and not designed for human habitation, i.e. an electrical substation, pump station, etc.
6. Home occupation.
7. Boarding House.
8. Day Care Center.

SECTION 11.030 Dimensional Standards, RS Zone

In an RS zone, the following dimensional standards shall apply.

1. The front yard shall be a minimum of twenty (20) feet. No parking shall be allowed within the required front yard excluding driveways.
2. Each side yard shall be a minimum of ten (10) feet, except that on corner lots the side yard adjacent to the street shall be a minimum of fifteen (15) feet.
3. The rear yard shall be a minimum of ten (10) feet.
4. The minimum lot area shall be 7,500 square feet.
5. The minimum lot width at the front building line shall be seventy-five (75) feet.
6. The minimum lot depth shall be one hundred (100) feet.
7. No building shall exceed a height of thirty-five (35) feet.
8. Structures shall not occupy more than forty (40) percent of the lot area.
9. Parking: refer to ARTICLE 12.

MULTI-FAMILY RESIDENTIAL (RM)SECTION 11.100 Intent and Purpose of the Residential - Multi-Family (RM) Zone

1. To establish sites for higher density residential developments where full urban services, public facilities and convenient transportation routes are readily available.
2. To recognize that these areas are characterized, primarily, as areas of the City which provide rental housing accommodations.

SECTION 11.110 Uses Permitted Outright in a Residential - Multi-Family (RM) Zone

In an RM zone, the following uses and their accessory uses are permitted outright.

1. Any use permitted outright in a Residential - Single Family (RS) zone.
2. Duplexes on corner or interior lots of 10,000 square feet.
3. Multiple family dwellings.
4. Boarding Houses.
5. Day Care Nursery/Kindergarten

SECTION 11.120 Conditional Uses Permitted in a Residential - Multi-Family (RM) Zone

In an RM zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of ARTICLE 8.

1. Mobile homes on individual lots (in accordance with the provisions of the Specific Conditional Use procedures).
2. Schools.
3. Home occupation.
4. Public Utility Structure or Facility.
5. Mobile Home Park.

SECTION 11.130 Dimensional Standards, RM Zone

In an RM zone, the following dimensional standards shall apply.

1. The front yard shall be a minimum of twenty (20) feet. No parking shall be allowed within the required front yard area, except for a single family or a two family (duplex) dwelling.
2. The side yard shall be a minimum of ten (10) feet, except that on corner lots the side yard adjacent to a street shall be a minimum of fifteen (15) feet. No parking shall be allowed in a required side yard adjacent to a street.
3. The rear yard shall be a minimum of ten (10) feet.
4. Minimum lot areas:
  - a) Single-family dwelling 7,500 sq. ft.
  - b) Duplex 10,000 sq. ft.



c) Multi-Family dwelling units 10,000 sq. ft.

For each bedroom within a multi-family dwelling unit, boarding house, or nursing home structure, the minimum lot area shall be increased 500 square feet for every bedroom over 4.

5. The minimum lot width at the front building line shall be seventy-five (75) feet.

6. The minimum lot depth shall be one hundred (100) feet.

7. No building shall exceed thirty-five (35) feet in height.

8. No main building or group of buildings shall occupy more than forty (40) percent of the total lot area.

9. Parking: Refer to ARTICLE 12.

COMMERCIAL (C)

SECTION 11.200 Intent and Purpose of the Commercial (C) Zone

1. To serve the City of Hines as a center of commerce and government.
2. It is further intended to contain an interrelationship of retail and service commercial enterprises, together with office, financial and governmental services and proximity to residential developments designed and situated so as to encourage a close relationship of one use to another.
3. To provide adequate protection between differing uses and to provide means to help assure compatibility between neighboring uses.

SECTION 11.210 Uses Permitted Outright in a Commercial (C) Zone

In a C zone the following uses and their accessory uses shall be permitted outright.

1. Any use permitted outright in a Residential Single Family (RS) zone.
2. Any use permitted outright in a Residential - Multi-Family (RM) zone.
3. Automobile, truck and boat rental and sales.
4. Automobile, truck or vehicle service station.
5. Business or trade school.
6. Retail trade establishment such as food store, drug store, hardware store, furniture store, clothing store, department store, restaurants (excluding drive-in or "fast-food" restaurants) and similar retail stores.
7. Business, governmental or professional office and financial institutions.
8. Service commercial and commercial amusement establishments such as hotel, taverns, club, lodge, fraternal organization and theater, excluding drive-in theaters.
9. Personal business services such as barber shop, tailoring shop and printing shop.
10. Parking lots, when developed in accordance with the standards and provisions of ARTICLE 12.
11. Laundry and dry cleaning shop.
12. Second-hand goods store.

SECTION 11.220 Conditional Uses Permitted, C Zone

In a C zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of Article 9.

1. Mobile Home Parks.

SECTION 11.230 Limitations on Use

All business, service, repair, processing, storage of merchandise displays shall be conducted wholly within an enclosed building except for the following:

1. Off-street parking (and loading) when developed in accordance with standards and provisions of ARTICLE 12.
2. "Drive-in" windows.
3. Nursery (plants, shrubs, and/or trees).
4. Displays of new or used automobiles, trailers, trucks, boats, tires or other mobile equipment.

SECTION 11.240 Dimensional Standards, C Zone

In a C zone, the following dimensional standards shall apply.

1. Yards for all lots in the C zone which includes the area bounded by the western half block between East Circle Drive (North and South) and Ogden Avenue (North and South) and bounded by East Pettibone Avenue on the north and South Ogden Avenue on the south; and the eastern half block between West Circle Drive (North and South) and Quincy Avenue (North and South) and bounded by West Pettibone Avenue and on the south by West Hanley Boulevard.
  - A. No yards adjacent to a street shall be required except when the front lot line abuts a residential zone in which case the yard shall be ten (10) feet.
  - B. No side yard shall be required except when the side lot line abuts a residential zone in which case the yard shall be ten (10) feet.
  - C. No rear yard shall be required except when the rear lot line abuts a residential zone and there is no alley intervening, in which case the yard shall be twenty (20) feet.
  - D. Where yards are required, one foot shall be added to each yard for each foot by which the height of a building exceeds forty-five (45) feet.
2. Provisions for all required yards.
  - A. Only parking areas, landscaping areas or allowed display or storage areas are allowed in required yards.
  - B. If a front yard is required, the first five feet from the lot line shall not be used for parking or outdoor display or storage, and shall be used for landscaping.
  - C. If a side yard is required, the first five feet from the lot line shall be landscaped, or if desired, a parking area or allowed display or storage area may be adjacent to the side lot line providing a screening device is provided that is at least four feet in height.
  - D. If a rear yard is required, the first five feet from

the lot line shall be landscaped, or if desired, a parking area or allowed outdoor display or storage area may be adjacent to the rear lot line providing a screening device is provided that is at least four feet in height.

E. Where a side or rear yard abuts an alley, it need not be landscaped in accordance with the above provisions.

3. Height. No building or structure in a "C" zone shall exceed seventy-five (75) feet in height.

4. Landscaping. All lot area not occupied by structures, parking, or open storage lots authorized as a conditional use shall be landscaped as required by the City Council.

5. Lot coverage. Structures may not occupy more than sixty (60) percent of the lot or parcel.

COMMERCIAL - HIGHWAY (CH)SECTION 11.300 Intent and Purpose of the Commercial - Highway (CH) Zone

1. To provide for a wide range of business activity and for those businesses which are appropriate to major thoroughfare or highway locations adjacent to existing built-up areas of the City.
2. It is recognized that highway commercial districts occupy sites on or along arterial streets or highways and are visible to a great number of people living within and using the City. For this reason, it is intended that businesses located therein exercise restraint in the execution of all of their physical facilities which are viewable from adjacent streets and property so that these highway commercial areas enhance the appearance of the community and not detract from it.
3. It is further intended that large paved parking (and loading) areas be extensively landscaped with earthen mounds, trees, shrubs, ground cover and other living materials that will visually "soften" the impact of the hard paved surfaces.

SECTION 11.310 Uses Permitted Outright in the Commercial - Highway (CH) Zone  
 In a CH zone, the following uses and their accessory uses are permitted outright.

1. Any use permitted outright in a "C" zone.
2. Auction house.
3. Automobile repair garage.
4. Bowling alley.
5. Retail building materials, lumber supply and major hardware store.
6. Drive-in, or "fast-food" restaurants.
7. Motels.
8. Mobile Home Parks.
9. Mobile home, trailer and recreational vehicle sales and service.
10. Monument sales.

SECTION 11.320 Conditional Uses Permitted, CH Zone

In a CH zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of ARTICLE 8.

1. Farming and logging materials, implements or machinery sales and service.
2. Outdoor storage of merchandise.
3. Kennel
4. Animal hospital with enclosed boarding areas for convalescent use.
5. Drive-in theater.

**SECTION 11.330** Limitations on Use

All business, service, repair, processing, storage of merchandise displays shall be conducted wholly within an enclosed building except for the following:

1. Off street parking (or loading) when developed in accordance with the standards and provisions of ARTICLE 12.
2. "Drive-in" windows.
3. Nursery (plants, trees, and/or shrubs).
4. Displays of new or used automobiles, trailers, mobile homes, trucks, recreational vehicles, boats, tires or other mobile equipment.

**SECTION 11.340** Dimensional Standards, CH Zone

In a CH zone, the following dimensional standards shall apply.

1. Yards for all lots in the CH zone:
  - A. A yard of twenty (20) feet shall be required adjacent to all streets.
  - B. A side yard of ten (10) feet shall be required.
  - C. A rear yard of twenty (20) feet shall be required.
  - D. Where yards are required, one foot shall be added to each yard for each foot by which the height of a building exceeds forty-five (45) feet.
2. Provisions for all required yards.
  - A. Only parking areas, landscaping areas or allowed display or storage areas are allowed in required yards.
  - B. If a front yard is required, the first five feet from the lot line shall not be used for parking or outdoor display or storage, and shall be used for landscaping.
  - C. If a side yard is required, the first five feet from the lot line shall be landscaped, or if desired, a parking area or allowed outdoor display or storage area may be adjacent to the side lot line providing a screening device is provided that is at least four feet in height.
  - D. If a rear yard is required, the first five feet shall be landscaped, or if desired, a parking area or allowed outdoor display or storage area may be adjacent to the rear lot line providing a screening device is provided that is at least four feet in height.
  - E. Where a side or rear yard abuts an alley, it need not be landscaped in accordance with the above provisions.
3. Height. No building in a "CH" zone shall exceed forty-five

(45) feet in height.

4. Landscaping. All lot area not occupied by structures, parking, or open storage lots authorized as a conditional use shall be landscaped as required by the City Council.

## INDUSTRIAL (I)

SECTION 11.400 Intent and Purpose of the Industrial (I) Zone

1. To provide sites for a wide range of industrial and related uses which may need various types of access and which because of the nature of their operation, may or may not be a compatible close neighbor to residential developments.
2. To permit normal manufacturing and industrial activity subject only to those regulations necessary to control congestion and pollution of all types of which would have an adverse effect on the livability or conduct or uses in other sectors of the City.

SECTION 11.410 Uses Permitted Outright in an Industrial (I) Zone

In an I zone the following uses and their accessory uses are permitted outright:

1. Any use permitted in a Commercial Highway (CH) zone, but excluding a dwelling unit, including mobile homes.
2. Cabinet, carpenter or wood working shop.
3. Compounding, packaging or storage of cosmetics, drugs, perfumes, pharmaceuticals, soap or toiletries.
4. Dwelling for caretaker or night watchman on the property.
5. Freight depot.
6. Ice or cold storage plant.
7. Laboratory for research or testing.
8. Laundry, dry cleaning or dyeing establishment.
9. Lumber yard, building supply outlet.
10. Machinery or equipment sales, service or storage.
11. Manufacture, repair or storage of articles from the following previously prepared materials: bone, cellophane, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastic, precious or semi-precious stone or metal, shell, textiles, wax, wire or yarn.
12. Manufacture, repair or storage of ceramic products, musical instruments, novelties, rubber or metal stamps, toys, optical goods, scientific or precious instruments, medical or dental supplies or equipment, small electronic supplies or equipment, business machines, watches or timing devices, luggage, photographic equipment or small pleasure boats.
13. Motor vehicle body shop, tire shop or similar repair shop.
14. Plumbing, heating, electrical or paint contractor's sales, repairs or storage.
15. Processing, packaging or storage of food or beverages.
16. Railroad tracks and related facilities.
17. Utility lines, station or substation.
18. Veterinary clinic or hospital.
19. Welding, sheet metal or machine shop.
20. Wholesale distribution or outlet, including warehousing and storage.

SECTION 11.420 Conditional Uses Permitted in the Industrial (I) Zone



In the "I" zone the following uses and their accessory uses are permitted when authorized in accordance with the provisions and procedures of Article 8.

1. Trailer Park (When developed in accordance with the provisions of Article 9 - Specific Conditional Uses).

#### SECTION 11.430 Limitations on Use

In an I zone the following conditions and limitations shall apply:

1. A use is prohibited which creates a nuisance because of noise, smoke, odor, dust or gas or which has been declared a nuisance by statute, by action of the municipal court or by a court of competent jurisdiction.
2. Wastes and other materials shall be stored and grounds shall be maintained in a manner that will not attract or aid the propagation of insects or rodents or otherwise create a health hazard.
3. Where outside storage is used, such use shall have a solid enclosure at least six (6) feet in height.
4. Points of access from a public street to properties in an I zone shall be so located as to minimize traffic congestion and avoid directing traffic onto residential streets.
5. Building entrances or other openings adjacent to or across the street from a residential zone shall be prohibited if they cause glare, excessive noise or otherwise adversely affect land uses in the residential zone.

#### SECTION 11.440 Dimensional Standards, I Zone

In an I zone the following dimensional standards shall apply:

1. Setback requirements:
  - A. A front yard shall be a minimum of 20 feet measured from the foundation abutting a residential zone.
  - B. The side yard shall be a minimum of 10 feet measured from the foundation where abutting a residential zone.
  - C. The rear yard shall be a minimum of 25 feet measured from the foundation where abutting a residential zone.
2. The minimum lot area shall be 10,000 square feet.
3. In an I zone within 100 feet of a residential zone, no building shall exceed a height of 45 feet.

## PUBLIC (P)

SECTION 11.500 Intent and Purpose of the Public (P) Zone

The P district is included herein because unique relationships often exist between the uses of such public lands and those non-public properties that abutt and surround them. Should a governmental entity cease using such land for a public use or purpose, then they shall automatically be eligible for reclassification into another district, in compliance with the City's Comprehensive Plan and subject to the usual change of zone procedures.

SECTION 11.510 Uses Permitted Outright in a Public (P) Zone

In a P zone the following uses and their accessory uses are permitted outright:

1. Assembly hall.
2. Athletic field.
3. Auditorium.
4. Ball park
5. Broadcasting station (tower).
6. Cemeteries.
7. City buildings.
8. Community center.
9. Fire station.
10. Golf course.
11. Hospitals.
12. Parking.
13. Parks.
14. Post Office.
15. Public Garages.
16. Schools, Public and Private.
17. Swimming Pools.
18. Tennis courts.
19. Utilities, public.
20. Water tanks & towers.

SECTION 11.520 Conditional Uses Permitted in the Public (P) Zone

In the P zone the following are permitted when authorized in accordance with the provisions and procedures of Article 8.

1. Dwelling for caretaker or watchman or housing for staff.

SECTION 11.530 Abandoning Use: Transfer of Ownership

Whenever the existing use of a P district, or part of any such district, is abandoned or the property transferred to private ownership for different use, such abandoned or transferred area shall be deemed in the RS district, and only such building, structure or premises, may then be erected, structurally altered, enlarged or such use made, as is permissible in the RS district.

SECTION 11.540 Changing Use

Any area shown on the official zoning map as a park, playground, cemetery, ball park, school, or other public or semi-public area, shall not be used for any other purpose than that for which such area is used at the effective date of this ordinance, and whenever the use of such an area or district is discontinued or proposed to be changed, it shall automatically become an RS district until a zoning plan for such property has been adopted by the City Council. The Planning Commission shall recommend to the City Council appropriate rezoning for any such area.

SECTION 11.550 Dimensional Standards in a Public (P) Zone

1. Height. No building or structure in the P zone shall exceed six stories or 70 feet, provided buildings or structures shall set back from every street and lot line one foot for each foot of height of the building in excess of 35 feet in addition to all other yard and setback requirements herein specified.
2. Front Yard. There shall be a front yard on every lot in the P zone, which front yard shall have a minimum depth of 20 feet. No parking shall be permitted within the front yard area.
3. Side Yards. Where the side of a lot in the P zone abutts upon the side of a lot in a residential district, there shall be a minimum side yard of five feet. There shall be added to the minimum requirements aforesaid, one foot for each multiple of 15 feet or portion thereof, that the length of that side of the building measures over 30 feet; provided further, any side yard adjacent to a street shall be a minimum of 20 feet and no parking shall be permitted within ten (10) feet of the street property line.
4. Rear Yard. In the P zone there shall be a rear yard which shall have a minimum depth of 20 feet, which depth shall be increased by four feet for each additional story above the first.
5. Lot area. The minimum requirements in a P zone for dwellings shall be the same lot area prescribed for dwellings in the RM zone. No main building, including dwellings, shall occupy more than 30 percent of the lot area.

## ARTICLE XII PARKING REQUIREMENTS

SECTION 12.000 General Provisions Regarding Off-Street Parking  
Off-street parking, when provided shall meet the following requirements:

1. Areas used for standing and maneuvering vehicles shall have durable and dustless surfaces maintained adequately for all weather use and so drained as to avoid flow of water across sidewalks or onto adjacent properties.
2. Artificial lighting which may be provided shall be so deflected as not to shine or create glare in any residential zone, any adjacent dwelling, or onto a public right-of-way.
3. Access aisles shall be of sufficient width for all vehicular turning and maneuvering including adequate turn-around area to prevent vehicles from "backing" into the street right-of-way.
4. All parking areas shall be served by a driveway, driveways, or an alley, when providing the only vehicle access from a public right-of-way.
5. Parking spaces along the outer boundaries of a parking area shall be contained by a curb or bumper so placed to prevent a motor vehicle from extending over an adjacent property, street, landscaping and to protect any screening.
6. Automobile parking areas shall be used solely for temporary parking of passenger vehicles.

SECTION 12.010 Parking Requirements

Except as provided in SECTION 12.020 below, at the time of construction, reconstruction, or enlargement of a structure, or at the time a use is changed in any way, off-street parking areas shall be provided as follows unless greater requirements are otherwise established. Where square feet of the structure or use are specified as the basis for requirement, the area measured shall be the gross floor area. When the requirements are based on the number of employees, the number counted shall be those working on the premises during the largest shift at peak season. Fractional space requirements shall be counted as a whole space.

## RESIDENTIAL

- A. One and two family dwellings.
  - Two spaces per dwelling unit.
- B. Multiple family dwellings.
  - Studio 1.00 space/unit
  - 1 Bedroom 1.00 space/unit
  - 2 Bedroom 1.50 space/unit

- 3 Bedroom 2.00 space/unit
- 4 Bedroom 2.50 space/unit

- C. Rooming or Boarding house.  
 - Spaces equal to 80 percent of the number of guest accommodations (beds) plus one additional space for the manager.

#### COMMERCIAL RESIDENTIAL

- A. Hotel  
 - One space per two guest rooms plus one space per two employees.
- B. Motel  
 - One space per guest room or suite plus one additional space for the owner or manager.

#### INSTITUTIONAL

- A. Welfare or correctional institution.  
 - One space per six beds for patients or inmates.
- B. Convalescent hospital, nursing home, sanitarium, rest home, homes for the aged  
 - One space per four beds for patients or residents.
- C. Hospital  
 - One and one-half space per bed.
- D. Church  
 - One space per four seats or eight of bench length in the main auditorium, or one space per 35 square feet of floor area of main auditorium not containing fixed seats, whichever is greater.
- E. Library  
 - One space per 400 square feet of floor area plus one space per two employees.
- F. Pre-school Nursery/Kindergarten  
 - Two spaces per teacher.
- G. Elementary or Junior High School  
 - One space per classroom plus one space per administrative employee.
- H. High School, college, commercial school for adults  
 - One space per classroom plus one space per administrative employee plus one space for each six students.
- I. Other auditorium, meeting rooms

- One space per six seats or eight feet of bench length, or one space for each 35 square feet of floor area assembly room not containing fixed seats, whichever is greater.

#### COMMERCIAL AMUSEMENT

- A. Stadium
  - One space per four seats or eight feet of bench length.
- B. Bowling alley
  - Three spaces per alley plus one space per employee.
- C. Dance hall, skating rink
  - One space per 100 square feet of area plus one space per two employees.

#### COMMERCIAL

- A. Retail store except as provided in subsection (B) of this subsection
  - One space per 200 square feet of floor area designated for retail sales.
- B. Service or repair shop, retail store handling exclusively bulky merchandise such as automobiles and furniture.
  - One space per 600 square feet of floor area.
- C. Bank, office (except medical and dental)
  - One space per 300 square feet of floor area.
- D. Medical and dental clinic
  - One space per 300 square feet of floor area plus one space per two employees.
- E. Eating or drinking establishment
  - One space per 100 square feet of floor area.
- F. Mortuaries
  - One space per four seats or eight feet of bench length in chapels.

#### INDUSTRIAL

- A. Storage warehouse, manufacturing establishment, rail or trucking freight terminal
  - 0 - 49,000 square feet of floor area ... one space per 5,000 square feet or one space per employee, whichever is greater,
  - 50,000 - 99,000 square feet of floor area ... one space per

10,000 square feet or one space per employee, whichever is greater,  
- 100,000 square feet and over of floor area ... one space per  
15,000 square feet or one space per employee, whichever is greater.

B. Wholesale establishment  
- One space per employee plus one space per 700 square feet of  
patron serving area.

SECTION 12.020 Exception to General Parking Requirements

No parking is required for reconstruction, addition to, or new construction in  
the area bounded by that mentioned in Article 11, Section 11.240 (1.).





SUBDIVISION - PARTITIONING - STANDARDS

ORDINANCE

\*\*\*\*\*

Morgan, Ryan & Associates, Inc.

280 Court St. NE  
Salem, OR 97301

\*\*\*\*\*

M.A. Palmer & Sons  
245 N Alder St.  
Burns, OR 97720

Charles F. "Corky" Palmer

\*\*\*\*\*

SUBDIVISION/PARTITIONING/STANDARDS ORDINANCE

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(Note: SECTION VI - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION is located in a separate volume on file in the City Recorder's Office, Hines City Hall, Hines, OR

## SECTION I

### Purpose

The purpose of this ordinance is to provide procedures to regulate subdivision and partitioning of land; to carry out the Comprehensive Plan of the City of Hine and the State of Oregon Land Conservation and Development Commission's Statewide Goals and Guidelines; to prevent excessive congestion and the overcrowding of land; to insure the proper arrangement of streets, ways and thoroughfares and their relationship to the topography of the site and to existing or planned streets, ways or thoroughfares; to provide for public utilities; to provide for adequate open space for light and air, and recreation; to make adequate provision for education facilities, transportation, water supply, sewage, drainage; and to secure protection from flood, slides, pollution, and other dangers; and to otherwise provide for the needs of the people of the City of Hines and promote the public health, safety, and welfare.

## SECTION II

### Definitions

1. **Alley** A very minor publicly dedicated right-of-way less than 20 feet in width uses primarily for service access to the back or side of properties abutting along or on other streets.
2. **Arterial Street** Major street, major thoroughfare, or major highway. A roadway of considerable continuity which is primarily a traffic artery for intercommunication among large areas.
3. **Building Line** A line on a plat from a lot line indicating beyond which buildings or structures may be erected.
4. **Collector Street** Secondary street, secondary thoroughfare, or secondary highway. A street supplementary to the major highway system and primarily a means of intercommunications between this system and smaller areas (or among smaller areas).
5. **Comprehensive Plan** The Comprehensive Plan formulated by the City Planning Commission and adopted by the City Council for the guidance of growth and the improvement of the City and which indicates the general locations recommended for the various functional classes of public works, places and structures (streets, parks, school sites, transportation facilities, public buildings, etc.).
6. **Curbline** The improvement or line dividing the roadway improvement from the balance of the right-of-way area.
7. **Dead-end Street or Cul-de-sac** A minor street with only one outlet.
8. **Lot** A parcel or tract of land that is part of a recorded subdivision described by "lot-and-block" occupied or capable of being occupied by a building or a group of buildings, including accessory structures, together with such yards or open spaces as are required by the Zoning Ordinance and having frontage upon a street.

9. **Major Partition** A partition of three or less parcels of land that is subject to approval by a City or County under a regulation or ordinance adopted pursuant to ORS 92.046 and that does include the creation of a road or street.

10. **Map** A final diagram, drawing or other writing concerning a major or minor partition, or subdivision.

11. **Metes and Bounds** The method used to describe a tract or tracts of land intended for dwelling or other purposes as the sole means of recording such property in the County Recorder's office.

12. **Minor Partition** A partition of three or less parcels of land that is subject to approval by a City or County under a regulation or ordinance adopted pursuant to ORS 92.046 and that does not include the creation of a road or street.

13. **Minor Street** Local street or cul-de-sac. A street primarily for access to abutting properties.

14. **Parcel** A unit of land that is created by a partitioning of land and is recorded by legal description other than a "lot-and-block" number of a recorded subdivision, i.e. a "metes-and-bounds" description.

15. **Partition** Either an act of partitioning land or an area or tract of land partitioned as defined in this section.

16. **Partition Land** To divide an area or tract of land into two or three parcels within one year (365 days) when such areas or tracts of land exist as a unit under single ownership at the beginning of such year. "Partition land" does not include divisions of land resulting from lein foreclosure; division of land resulting from the creation of cemetery lots and divisions of land made pursuant to a court order, including but not limited to court orders in proceedings involving testate and intestate succession; or any adjustment of an lot line by the relocation of a common boundary where an additional parcel is not created and where the existing parcel reduced in size by the adjustment is not reduced below the minimum lot size established by any applicable zoning ordinance.

17. **Plat** Includes a final map, diagram, drawing, replat or writing containing all the descriptions, locations, specifications, dedications, easement, provisions and information concerning a subdivision.

18. **Proposed Official Map** The map developed and adopted by the City of Hines on which the planned locations, particularly of streets, are indicated with detail and exactness so as to furnish the basis for property acquisition or building restrictions.

19. **Road** See "Street."

20. **Roadway** The portion or portions of a street or way available for vehicular traffic, or in other words, the portion or portions between curbs, where curbs are provided, the "travel bed."

21. **Street** A public thoroughfare or right-of-way 20 feet or greater in width dedicated, deeded or otherwise available for use as such (other than an alley), or a private thoroughfare commonly owned within a subdivision, which affords the

principal means of access to abutting property including avenue, place, way, drive, boulevard, highway, road and any similar designations.

22. **Street Width - Improved** The shortest distance between the curb faces or edge of improvements.

23. **Street Width - Right-of-way** The shortest distance between the property or easement lines which delineate the right-of-way of a street.

24. **Subdivision** Either an act of subdividing land into four or more parcels or lots or an area or tract of land subdivided as defined in this section.

25. **Subdivide Land** To divide an area or tract of land into four or more lots within one year (365 days) when such area or tract of land exists as a unit under a single ownership at the beginning of such year.

SECTION III  
Minor Partitions

1. Scope: A minor partition is to divide an area or tract of land into two or three parcels within one year (365 days) when such area or tract of land exists as a unit of land under single ownership at the beginning of such a year and when such partitioning does not create a public or private road or street. No area or tract as described above shall be partitioned into more than three lots during the year immediately following a period of single ownership as one area or tract. Minor partitionings are subject to the review and approval by the City of Hines Planning Commission.

2. Tentative Plan Map: All applications to the City Planning Commission shall be accompanied by an original or copy and 5 (five) copies of the tentative plan map or a reproducible original, if requested by the Planning Commission.

3. Information Required on Tentative Plan: The tentative plan for minor partitions shall be drawn at a scale of 1" = 200' or larger and shall include:

A. The date, scale, northpoint, legend, topography, features such as bluffs, creeks, drainage channels, watercourses, and other bodies of water, existing physical features such as highway and railroad rights-of-way, and areas subject to flooding or mass earth movement.

B. Legal description of the tract boundaries.

C. Name of the owner, subdivider, and engineer, surveyor, or planner.

D. Reference points of existing surveys identified, related to the plat by distances and bearings, and referenced to a field book or map as follows:

1) Boundary of property, distance and bearings of adjoining properties or monuments, or other evidence found on the ground and used to determine the boundaries of the minor partition.

2) The tract designation or other description according to the real estate records of Harney County.

3) The boundary lines (accurate in scale) of the tract to be partitioned.

4) The names of adjacent subdivisions or the names of the recorded owners of adjoining parcels of unpartitioned land.

E. The exact location and width of street rights-of-way and easements intercepting or abutting the boundary of the tract.

F. Easements denoted by fine dotted lines, clearly identified and, if already of record, their recorded reference. If an easement is not definitely located of record, its length and bearing, and sufficient ties to locate the easement with respect to the partitioning shall be

shown. If the easement is being dedicated by this application, it shall be so noted.

G. The square footage of each lot, or the acreage to the nearest tenth of an acre.

H. Identification of land parcels to be dedicated for any purpose, public or private, so as to be distinguishable from lots intended for sale.

I. Proposed deed restrictions, if any.

J. Approximate acreage of land within the partition area under single ownership or, if more than one ownership is involved, the acreage of the landowners directly involved in the partitioning.

K. The location of all sewer, water, and storm drain tiles as they relate to the subject property.

L. A vicinity map showing zoning, all public streets and their names and other distinguishing features within 800 feet of the property so as to accurately identify its location. This map shall be at a scale of 1" = 800' or larger on a separate sheet.

M. Such additional information as the City Engineer or the Planning Commission may deem necessary.

4. Application: A letter of application for a minor partitioning shall accompany the tentative plan map. This letter shall be filed no less than thirty (30) days prior to consideration by the Planning Commission and shall include the following:

A. A statement signed and acknowledged by all parties having a record title interest in the land, consenting to the preparation of the plan and the application.

B. The names of the individuals and/or firms responsible for preparation of the plan.

C. Complete addresses for all those mentioned in A. and B. above.

D. A description of any variances being requested and the complete reasons to justify their granting.

E. Any other appropriate information.

5. Fire Hazard Restrictions: The City Planning Commission may require that necessary restrictions regarding fire prevention or control be placed on record at the time of filing or be contained in each and every deed of conveyance of the lots within the partition.

6. Conditions of Plan Approval: If it appears to the City Planning Commission that for the protection of public health, safety and welfare, the economic stability of the City, or the proper utilization of land resources it is

necessary or prudent to deny approval of a tentative plan for a minor partition and after preparation of special findings, such denial shall be made.

7. Decision Upon Tentative Plan: After reviewing the tentative plan, the City Planning Commission shall:

1. Reject the plan, providing the applicant with a summary of their reasons for taking such action;
2. Give approval subject to specified conditions, providing the applicant with a list thereof and providing that the applicant returns with a revised application reflecting those conditions; or
3. Accept and approve the partition.

8. Termination of Approval: Approval of a plan for a minor partition by the City Planning Commission shall expire and be null and void three (3) months from the date of approval, unless a final plan is recorded with the County Recorder within said time.

9. Appeal to the City Council: A person may appeal a decision of the City Planning Commission to the City Council. Written notice of the appeal must be filed with the City Recorder within ten (10) days after the decision is made. A notice of appeal shall state the nature of the decision and the grounds for appeal. The City Council may hold a public hearing and shall make a decision in accordance with Subsections 6. and 7. above.

#### SECTION IV Subdivisions

1. Scope:

A. A major partitioning is to divide an area or tract of land into two or three parcels within one year (365 days) when such area or tract of lands exists as a unit of land under single ownership at the beginning of such a year and when such partitioning creates a public or private road or street. No area or tract as described above shall be partitioned into more than three lots during the year immediately following a period of single ownership as one area or tract.

B. A subdivision is a land division creating four (4) or more lots from an area or tract when such area or tract of land exists as a unit of land under single ownership within the previous year.

C. A major partition or a subdivision is subject to the review and approval of the City of Hines Planning Commission.

2. Tentative Plan: All applications to the Planning Commission for tentative approval of a proposed subdivision or major partition of land shall be accompanied by an original or a copy and 5 (five) copies of the tentative plan or a reproducible original, if requested by the Planning Commission.



3. Information Required on the Plan: The tentative plan of a subdivision or major partition shall be drawn at a scale of 1" = 100' or larger. The tentative plan shall show:

- A. The proposed name of the subdivision or major partition.
- B. North point, scale and date of application.
- C. Names and addresses of the subdivider and of the engineer, surveyor, planner, or landscape architect.
- D. The tract designation or other description according to the real estate records of Harney County.
- E. The boundary lines (accurate in scale) of the tract to be subdivided.
- F. Contour lines showing at least two foot contours for 0 - 10% slopes, 5 foot contours for 11 - 30% slopes, and for over 30% - contours as appropriate.
- G. The names of adjacent subdivisions or the names of the recorded owners of adjoining parcels of unsubdivided land.
- H. The location, width and names of all existing or platted streets or other public ways within or adjacent to the tract, existing permanent buildings, railroad rights-of-way and other important features such as section lines, political subdivisions or corporation lines and school district boundaries.
- I. Existing sewers, water mains, culverts, drainage ditches or underground utilities and improvements within the tract and immediately adjacent thereto together with pipe sizes, grades and locations indicated.
- J. All parcels of land intended to be dedicated for public use or reserved in the deeds for the use of all property owners in the proposed subdivision, together with the purpose of conditions or limitations of such reservation, if any.
- K. The location, names, width and approximate grades of all streets proposed or existing in the subdivision, and the approximate widths and locations of proposed easements for drainage, sewerage, and utilities.
- L. Approximate location of all areas subject to inundation or storm water overflow and the location, width, and direction of flow of all watercourses.
- M. Proposed lots, approximate lot dimensions, approximate square footage, and the number of lots. Where lots are to be used for purposes other than residential, it shall be indicated upon such lots.
- N. Parks, playgrounds, recreation area, parkways and other open spaces proposed for public use.

- O. Locations of any proposed tree plantings or other plantings.
  - P. Appropriate information clearly stating the map is a tentative plan.
  - Q. Proposed source of water supply, estimated volume to be available together with data regarding the location, type, and size of all storage facilities, distribution lines, fire hydrants, and gate valves.
  - R. Data as deemed necessary by the Planning Commission on the sanitary sewer system concerning the following: the location, size, type, approximate grade, and capacity of all trunk, main or lateral lines, and pumping stations.
  - S. Information on the source of other public utilities.
  - T. Proposed deed restrictions, if any.
  - U. The location of any environmental hazard; areas unsuitable for the buildings proposed; or land subject to mass earth movement, excessive erosion, or other similar natural occurrences.
  - V. A vicinity sketch at a scale of 1" = 800' or larger showing zoning, all existing and adjacent subdivisions, streets, and railroad rights-of-way, and track lines of acreage parcels. It shall show how streets and alleys in the proposed subdivision or major partition may connect with existing and proposed streets and alleys in neighboring subdivisions or undeveloped property, to produce the most advantageous development of the entire neighborhood area.
4. Plan Review: The tentative plan and vicinity sketch shall be reviewed by the Planning Commission. A public hearing shall be held for a subdivision application in accordance with the provisions and process for a zone change. A public hearing may be held for a major partitioning at the discretion of the Planning Commission. The Planning Commission may consult such other agencies or persons as appears appropriate; the Planning Commission shall submit the tentative plan for review by the City Engineer, Fire Chief, Surveyor, and such others as appears appropriate. Comments must be returned to the Planning Commission within fifteen (15) days. No action may be taken by the Planning Commission until they receive these comments, unless the comments are not returned within fifteen (15) days.
5. Fire Hazard Restrictions: The City Planning Commission may require that necessary restrictions regarding fire prevention or control be placed on record at the time of filing or be contained in each and every deed of conveyance of the lots within the partition.
6. Conditions of Plan Approval: If it appears to the City Planning Commission that for the protection of public health, safety, and welfare, the economic stability of the City, or the proper utilization of land resources it is necessary or prudent to deny approval of a tentative plan for a major partition or subdivision, and after preparation of specific findings, such denial shall be made.
7. Decision Upon Tentative Plan: After reviewing the tentative plan, the

Planning Commission shall:

1. Reject the plan, providing the applicant with a summary of their reasons for taking such action;
  2. Give approval subject to specified conditions, providing the applicant with a list thereof; or
  3. Accept and approve the partition or subdivision.
8. Termination of Approval: Approval of a plan for a major partition or subdivision by the City Planning Commission shall expire and be null and void three (3) months from the date of approval, unless a final plat is recorded within said time. The Planning Commission may grant two (2) three-month extensions of this deadline if a finding can be made that conditions concerning the land division and surrounding area have not changed since the approval to a degree that alters the basis of fact upon which the approval was made.
9. Major Partition/Subdivision Appeal to the City Council: A person entitled to receive legal notification (within 250') may appeal a decision of the City Planning Commission to the City Council for a major partitioning or subdivision. Written notice of the appeal must be filed with the City Recorder within ten (10) days after the decision is made. The notice of appeal shall state the nature of the decision and the grounds for appeal. The City Council may hold a hearing and shall make a decision in accordance with Subsections 6. and 7. above.
10. Subdivision, City Council Review: Approval of a tentative subdivision plan by the Planning Commission shall be a tentative approval and shall not constitute acceptance of a plat. Further, the City Council may veto approval of the tentative plat by a two-thirds (2/3) vote of the entire City Council by not later than the third regular meeting of the City Council following the Planning Commission meeting at which the approval was given. If the City Council does not veto the approval within three meetings, the Planning Commission's action shall be final.

SECTION V  
Final Plats

1. Submission of Final Plat:

Within three (3) months from the date of any approval issued by the Planning Commission giving approval to a tentative plan for a major partition or subdivision, the subdivider shall submit to the City Recorder a final plat conforming to the tentative plan as approved by the Planning Commission. If a subdivider wishes to proceed with a subdivision or major partition after the expiration of said three (3) month period or any extensions, he must resubmit a tentative plan to the Planning Commission and make revisions the Planning Commission considers advisable.

2. Final Plat: A final plat shall be submitted to the City Recorder; shall be an accurate plat for official record prepared by a registered engineer or licensed land surveyor; shall conform to the provisions of this ordinance and the applicable laws of the State of Oregon; and shall have attached thereon an affidavit from the surveyor that he had correctly marked with property monuments the land as represented, that he marked proper monument indicating the initial point of survey, that the survey was accurately made, and giving the dimensions and kind of the initial survey point monument, and its location.

3. Plat Review: The final plat shall be reviewed by the City Recorder. The City Recorder shall consult the Planning Commission and may consult such other agencies or persons as appears appropriate, including but not limited to the County Health Officer and the City Engineer.

4. Plat Specifications: The Final Plat submitted to the City Recorder shall be in black India ink on good quality white, cold pressed, double mounted drawing paper 18" x 24" with muslin extending three inches at the left end for binding purposes, or, as an option, on mylar, as required by ORS 92.080. Five prints from the tracing shall also be submitted. No part of the drawing shall be nearer to the edge of the sheet than one inch. The final plat, if prepared on paper, shall be accompanied also by an exact duplicate of the final plat, either drawn in black India ink or photographically reproduced on good quality tracing medium suitable for making prints.

5. Information Required on Final Plat: In addition to that otherwise specified by law, the following information shall be shown on the final plat:

A. The date, scale, northpoint, legend, controlling topography such as bluffs, creeks and other bodies of water, and existing physical features such as highways and railroads.

B. Legal description of the tract boundaries.

C. Name of the owner, subdivider, and engineer or surveyor.

D. Reference points of existing surveys identified, related to the plat by distances and bearings, and referenced to a field book or map as follows:

1) Stakes, monuments, or other evidence found in the ground and used to determine the boundaries of the subdivision.

- 2) Adjoining corners of adjoining subdivisions.
- 3) City boundary lines when crossing or adjacent to the subdivision.
- 4) Other monuments found or established in making the survey of the subdivision or required to be installed by provisions of this ordinance.

E. The exact location and width of streets and easements intersecting the boundary of the tract.

F. Tract, block, and lot boundary lines and street right-of-way and center lines, with dimensions, bearings or deflection angles, radii and arc dimensions, points of curvature and tangency, and tangent bearings. Normal high water lines for any creek, river, or other body of water. Tract boundaries and street bearings shall be shown to the nearest 30 seconds with basis of bearings, shown or noted. Distance shall be shown to the nearest 0.01 feet. No ditto (" " ") marks shall be used.

G. The width of the portion of streets being dedicated and the width of existing rights-of-way. For street on curvature, curve data shall be based on the street center line. In addition to the center line arc dimension, the radius and central angle shall be indicated.

H. Easements denoted by fine dotted lines, clearly identified and, if already of record, their recorded reference. If an easement is not definitely located of record, its length and bearing, and sufficient ties to locate the easement with respect to the partition or subdivision shall be shown. If the easement is being dedicated by the map, it shall be properly referenced in the owner's certificates of dedication.

I. Lot numbers beginning with the number "1" and numbered consecutively in each block.

J. The square footage of each lot.

K. Block numbers beginning with the number "1" and continuing consecutively without omission or duplication throughout the subdivision. The numbers shall be solid, of sufficient size and thickness to stand out and so placed as not to obliterate any figure. Block number in addition to a subdivision of the same name shall be a continuation of the numbering in the original subdivision.

L. Identification of land parcels to be dedicated for any purpose, public or private, so as to be distinguishable from lots intended for sale.

M. The following certificates which may be combined where appropriate:

- 1) A certificate signed and acknowledged by all parties having any record title interest in the land, consenting to

the preparation and recording of the plat.

2) A certificate signed and acknowledged as above indicating to the public all common improvements, including but not limited to streets, roads, parks, sewage disposal and water supply systems, the donation of which was made a condition of approval of the tentative plan for the subdivision or the major partition.

3) A certificate signed and acknowledged as above, dedicating to the public all streets and roads without any reservation or restriction.

4) A certificate conforming to ORS 92.060 and 92.070 with the seal of and signed by the engineer or surveyor responsible for the survey and final map.

N. Other certificates now or hereafter required by law.

O. Identification of any deed restrictions imposed by the developer, required by the Planning Commission, or existing property at time of plat approval.

P. The Planning Commission may require identification of all lands permanently reserved for open space; lands subject to flooding, mass earth movement, or other environmental hazards and lands known to the developer to be unsuited for building purposes.

6. Supplementary Information with Final Plat: The following data shall accompany the final plat:

A. A preliminary title report issued by a title insurance company in the name of the owner of the land, showing all parties whose consent is necessary and their interest in the premises.

B. Sheets and drawings showing the following:

1) Traverse data including the coordinates of the boundary of the subdivision and ties to section corners and showing the error of closure, if any.

2) The computation of all distances, angles, and courses shown on the final map.

3) Ties to existing monuments, proposed monuments, adjacent subdivision, street corners, and state highway stationing, as may be required by the City Engineer.

C. A copy of any dedication requiring separate documents.

D. A plan showing the following:

1) Widths of the proposed dedication throughout the length of the proposal.

2) Centerline alignment showing P.C. and P.T. stationing on

all curves, necessary curve data and bearings of tangents.

3) Ground line and grade line profile on the centerline and curblines of the proposed street or road.

4) Vertical curve data showing P.I. elevations and stations, length of vertical curve and tangent grades.

5) Proposed drainage structures, showing both size and type of structure.

6) Section lines, fractional section lines to corner from which dedication description is prepared.

7) Vicinity map in the upper left hand corner of the first plan sheet showing roughly the relationship of the proposed roads or streets to cities, state highways, county roads, or other well defined topographical features.

8) The stamp and signature of the Registered Professional Engineer or qualified land surveyor preparing the plans.

7. Conditions of Plat Approval:

A. If it appears that the final plat is in substantial conformity to the approved tentative site plan map, to any conditions that were part of the approval of the tentative site plan map, to the provisions of Section IV, 2 - 6 above, and is accurate, complete, and in conformance with all provisions of the Hines City Ordinances, the City Recorder and City of Hines Planning Commission shall approve the final plat.

B. If the City Recorder or Planning Commission finds that the final plat does not conform to the approved tentative site plan map, any conditions of the approval, or the provisions of Section IV, 2 - 6 above, the plat shall not be accepted and the subdivider shall be informed of the inaccuracies or deficiencies so that the plat can be revised.

8. Filing Plat With State: Either before or after recording the final plat, the subdivider shall file a report with the Real Estate Division, Department of Commerce, State of Oregon, and shall comply with all provisions of the Oregon Statutes relating to the sale of subdivided land in Oregon prior to the sale of any lot.

9. Approving Signatures: When the final plat is approved by the City Recorder and City Planning Commission the plat will be forthwith sent to other agencies affected for their approval. Approval of the final plat will be evidenced by the signatures of the Planning Commission chairperson, the City Recorder, the County Tax Collector, the Mayor, the County Judge and County Commissioners and other public official required by law, which signatures shall be placed upon the final plat of record.

10. Termination of Approval: Approval of the final plat by the Planning Commission chairperson shall expire and be null and void thirty (30) days from the date the final plat was approved by the Planning Commission chairperson unless said final plat is submitted to the County for recording within said time. Provided, however, that the Commission may extend said time for a period

not to exceed thirty (30) days more upon written application of the subdivider or his successor made during the time set forth in the first sentence of the subsection.

11. Filing of Final Plat: After obtaining all required approvals and signatures, the subdivider shall file the plat and the exact copy thereof in the County Clerk's office. Upon the filing of the plat, the subdivider shall furnish one print of the final plat to the following: County Assessor, County Surveyor, City Recorder, and the Planning Commission.

12. Public Improvements: Approval of the final plat by the City shall not be deemed to constitute or effect an acceptance by the City of any street, sewer, water, or other public improvement construction or design: Engineering approval of and for public improvement construction, design, or engineering shall be processed in accordance with Section VI of this ordinance.





SUBDIVISION - PARTITIONING - STANDARDS

ORDINANCE

SECTION VI

Standard Specifications for Public Works Construction

\*\*\*\*\*

Morgan, Ryan & Associates, Inc.

280 Court St. NE  
Salem, OR 97301

\*\*\*\*\*

M.A. Palmer & Sons  
245 N Alder St.  
Burns, OR 97720

Charles F. "Corky" Palmer

\*\*\*\*\*

SUBDIVISION/PARTITIONING/STANDARDS ORDINANCE

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## SECTION VI

## STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

6.000 GENERAL AND SPECIFIC These Standard Specifications for Public Works Construction in the City of Hines are intended to:

- a. Set forth uniform material and workmanship standards under which all public works facilities shall be constructed within the City.
- b. Supplement and complete the requirements of Subdivision Ordinance No. \_\_\_ and other prevailing ordinances as they relate to the physical construction of public works facilities within the City.
- c. Streamline the administration and construction of public works facilities within the City.

6.010 CONFORMITY TO THE COMPREHENSIVE PLAN AND OFFICIAL MAP The subdivision shall conform to and be in harmony with the City's Comprehensive Plan and proposed official map. Major thoroughfares, parks and recreation areas shall be placed in the generalized locations designated by the Comprehensive Plan.

6.015 SCOPE

- a. These Standard Specifications for Public Works Construction in the City of Hines shall cover all public street drainage, water, sewer and appurtenant facilities within the Corporate Limits of Hines, whether construction by the City, or constructed privately and turned over to the City for maintenance and operation.
- b. These Standard Specifications relate only to Public Works Construction in the City, and should not be confused with building codes, zoning ordinances and other regulations for which procedures and standards have been established. Planning, zoning and related matters should first be satisfied prior to referral of a project to the Public Works Department for review of proposed facilities.
- c. These Standard Specifications may be amended or updated from time to time upon recommendation by the Public Works Department and appropriate action so to do by the City Council.

6.020 DEFINITIONS The following definitions shall apply throughout these Standards:

- a. City- the City of Hines, Oregon
- b. Council- the Common Council of the City of Hines, Oregon
- c. Commission- the Planning Commission of the City of Hines, Oregon
- d. Representative- a City representative appointed by the Council as follows:
  - Public Works Superintendent

e. Developer- An individual or firm who undertakes construction of a public works facility within the corporate limits of the City.

f. Public Works Facility- any facility constructed upon public right-of-way or public easement which is immediately or eventually to be taken over by the City for maintenance and operation. These facilities include, but are not limited to, streets, sidewalks, curbs, parking lots, driveways, drainage facilities, water system works, and sanitary sewer systems.

g. Standards- shall mean these Standard Specifications for Public Works Construction as adopted for use in the City of Hines, Oregon.

#### 6.025 AVAILABILITY AND USE OF STANDARDS

a. Copies of these Standards or any subsection thereof are available at City Hall upon reasonable notice and payment as established by the Hines City Council and administered through the City Recorder's Office.

b. An Engineer may, at his sole discretion, utilize the Standards by direct reference thereto in the contract documents he prepares for construction of street, drainage, water, and sewer facilities within the City. If such election is made by the Engineer, his contract documents shall contain the following statements:

"Materials and workmanship shall be in strict accordance with the Standard Specifications for Public Works Construction of the City of Hines. No changes from the approved project plans and specifications shall be made without prior written approval from the City."

c. The Standards are in outline form only, and shall not operate to relieve an Engineer from his professional responsibilities during project design and construction. Any additional project requirements shall be set forth in the documents an Engineer prepares for the work. The City provides these Standards only as a convenience to facilitate development within Hines.

6.030 FORM OF STANDARD SPECIFICATIONS The Standard Specifications are in abbreviated or short form, and the omission of certain words and phrases not essential to the meaning and interpretation of the specifications is intentional. Omitted words and phrases are to be supplied through inference by the reader.

The accepted abbreviations for various societies, associations and organizations are also used for the sake of brevity. Some of these are presented below:

AASHO	American Association of State Highway Officials
ACI	American Concrete Institute
ASA	American Standards Association
ASTM	American Society for Testing and Materials

AWPA	American Wood Preservers Association
AWWA	American Water Works Association
CS	Commercial Standards - U.S. Department of Commerce
Federal	Federal Specifications - Superintendent of Documents, Washington, D.C.
NCSA	National Crushed Stone Association
OSHC	Oregon State Highway Commission
APWA	American Public Works Association
FAA	Federal Aviation Agency

Unless otherwise specifically noted in these Specifications, references to various standard specifications shall mean the latest revisions of same.

#### 6.035 CONTROL OF PUBLIC WORKS PROJECTS

a. All public works facilities, or facilities to become public shall be designed and inspected under the direction of a Professional Engineer registered in the State of Oregon. At the completion of construction this Engineer shall submit a completion certificate to the City stating that all work has been completed in accordance with the approved project plans and specifications.

b. All surveys for public works facilities shall be performed under the direction of a Professional Land Surveyor registered in the State of Oregon. All elevations shall be referenced to U.S.C.G.S. datum where possible.

c. Materials and Workmanship shall meet or exceed the adopted Standards and at all times they shall be subject to the approval of the Department of Public Works or their duly authorized representatives.

d. Approved by the City of plans and specifications for water and sewerage facilities is contingent upon approvals for same being attained from the State Health Division and the Department of Environmental Quality.

e. Upon completion of projects to become public works, a Developer or his Engineer shall submit one complete set of reproducible "As-Built" drawings to the City. Such "As-Built" drawings shall show any deviation from the original construction drawings and shall include sufficient information to accurately locate water and sewer service extensions, reports on water and sewer line leakage tests, etc.

f. Prior to acceptance of public works projects by the City for operation and maintenance, a one-year guarantee on all materials and workmanship incorporated therein shall be provided the City in one of the acceptable forms described hereinafter.

#### 6.040 PROCEDURES FOR CONSTRUCTING PUBLIC WORKS

##### a. Public Works Serving a Single Lot, Residence or Business

(1) Anyone wishing to construct or install a sewer and/or water service line (hookup) as defined as a Public

Works Facility herein, to serve a single lot, residence, or business shall apply for a Type A Construction Permit from the Public Works Department. A sample Type A permit form is appended to this section. Type A permits are part of the building sewer and/or water hookup permit and fee process.

(2) No additional fee above the regular sewer and/or water hookup fee is required for a Type A permit.

(3) A tentative schedule for inspection of construction work will be established at the time the permit is issued. In every case, inspection is required before any concrete is poured or any pipe is covered. The permit holder shall notify the City when he is ready for inspection and shall obtain approval from the Public Works Department before proceeding with construction.

(4) When engineering and/or surveying services are provided by the City, construction plans, cut sheets and related data will be furnished the permit holder within a reasonable time after date of permit issuance.

(5) By his signature on a Type A Permit, the permit holder agrees as follows:

(a) To construct the improvement in accordance with the City Standards.

(b) To guarantee all materials and workmanship incorporated into the work for a period of one year following final inspection and acceptance of the improvement by the City.

(c) To indemnify and hold harmless the City, its officers, representatives and employees from liability of every nature and kind as may result from the operations or negligent acts of the permit holder in performing the work described therein.

(6) Upon completion of all work, the permit holder shall notify the Public Works Department who shall promptly make a final inspection of the project. If the work meets requirements, the improvement will be accepted by the City and a date then established for the one year guarantee period.

b. Public Works Serving More Than One Lot, Residence or Business (Partitions, Subdivisions, etc.)

(1) Anyone wishing to construct a public works facility as hereinbefore defined to serve more than one lot, residence or business shall apply for a Type B Construction Permit from the Public Works Department. A sample B form is appended to this Section.

(2) Requirements for issuance of a Type B Permit



include:

- (a) Prior satisfaction of planning, zoning, and building code requirements.
  - (b) Submission and approval of detailed construction plans and specifications as prepared by a registered Professional Engineer. These shall be submitted in triplicate. If acceptable, one set of plans and specifications shall be marked "Approved", and will be returned to the applicant. If not acceptable, any deficiencies shall be noted when these documents are returned to the applicant; the applicant shall then make the necessary corrections and resubmit the documents for approval.
  - (c) Submission of a copy of a construction performance bond or other written guarantee acceptable to the City in the full amount of the estimated construction cost. This bond shall guarantee acceptance of the improvements by the City, and it shall ensure the satisfactory repair or replacement of any public facility damaged during construction.
  - (d) Submission of a copy of a certificate indicating that the applicant or each of his contractors is covered by Public Liability and Property Damage Insurance in amounts of no less than \$100,000/\$200,000 liability and \$50,000 property damage.
  - (e) Submission of letters from applicable State agencies approving the plans and specifications.
  - (f) Payment of a permit fee to defray the City's costs of inspection and administration. The permit fee shall be based on a rate of \$10.00 per lot for each of the lots served by any and all public works facilities contemplated and described in the permit.
- (3) Periodic inspection of construction by Public Work Department representatives is required. No concrete shall be poured or pipe back-filled without said inspections being made. A tentative schedule for inspection will be established when the permit is issued. The permit holder will give the City a minimum of 24 hours advance notice before inspections fall due. It is the permit holders responsibility to obtain City inspections and approvals before installing the work.
- (4) The City will provide the permit holder with a

letter formally accepting the improvements for City ownership, operation and maintenance subject to the usual exception as to the one year guarantee on materials and workmanship, when the following conditions are met:

- (a) Construction is complete.
- (b) The City or its duly authorized representative has inspected the finished work and found it acceptable.
- (c) The permit holder's Engineer submits a certificate of completion and reproducible "As-Built" plans to the City as required under Item 6 of these Special Conditions. Copies of water and sewer line leakage tests shall also be furnished the City.
- (d) The permit holder furnishes the City with a copy of a non-lien affidavit certifying that all bills in connection with the work have been paid in full.
- (e) Satisfactory provisions have been made in the form of recorded plats or easements to ensure the City's access to the public works facility for purposes of operation and maintenance.

6.045 COMPLIANCE WITH LAWS AND REGULATIONS The required provisions of all applicable laws, regulations and codes shall be deemed inserted in all public works construction documents and they shall have equal force and effect as though written out fully therein.

6.050 WORK ON CITY RIGHT-OF-WAYS Work on City right-of-ways requires the following:

- a. Compliance with City approved construction documents.
- b. Furnishing the City with a copy of the construction performance bond or other written guarantee acceptable to the City to ensure satisfactory restoration or replacement of any damaged public facility existing on City right-of-way.
- c. Erection and maintenance of suitable warning signs, barricades, danger lights and flagmen as necessary for the convenience and safety of the travelling public.
- d. The minimum possible interruption to pedestrian and vehicular traffic flow.

6.055 PROTECTION OF EXISTING FACILITIES

- a. The approximate locations of underground City water, sewer, and drainage facilities are available at City Hall. The approximate locations of underground power, telephone and cable facilities are

available from the serving utility companies. The locations of existing facilities shall be shown on the construction drawings for public works projects.

b. The exact locations of underground facilities shall be verified in advance of public works construction, in cooperation with the public or private utilities involved.

c. All existing underground and surface facilities shall be protected from damage during construction of public works projects.

d. Any existing facilities not specifically designated for alteration or removal which are damaged during construction, shall be restored or replaced to an "in kind" or better condition at the expense of the constructor.

e. Suitable notice shall be given to all public and private utility companies in advance of construction for the purpose of protecting or relocating existing facilities.

#### 6.060 CITY ORDINANCES AFFECTING PUBLIC WORKS CONSTRUCTION

a. New subdivisions and land partitions within the City of Hines shall comply with the requirements of Subdivision Ordinance No. \_\_\_\_, as adopted by the Council on 6/26/79.

b. Improvements to existing City streets shall comply with applicable ordinances in force and thereto appertaining at the time said improvements are made.

c. The physical requirements for all public works construction within the City shall comply with these Standards.

d. Sections 6.100, 6.200, and 6.300 of the Public Works Standards each are prefaced with standards to be used in the design of public works facilities in the City. Variances to these design standards will be considered by City upon adequate showing that a special case exists.

6.065 IMPROVEMENT AGREEMENT Where a Developer desires to defer construction of a portion of the public works improvements to be constructed under Type B Permit, and where such deferral is determined to have no adverse affect on the City's interests, the Developer shall enter into an Improvement Agreement with the City of the form attached hereto. Said Improvement Agreement shall set forth completion dates for the items for work to be deferred, and it shall constitute assurance that all improvements will be made in a timely manner.

#### 6.070 ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

Alternates for Improvements and Guarantees of Financial Security.

A. Completion of improvements. Before the final subdivision plat or major partition map is signed by the Mayor, all applicants shall be required to complete, in accordance with the City Council's decision and to the satisfaction of the City Engineer, all the street, sanitary and other improvements, as required in these regulations, specified in

the final subdivision plat, and as approved by the City Council and to dedicate same to the City, free and clear of all liens and encumbrances on the property and public improvements thus dedicated.

B. The City Council at its discretion may waive the requirement that the applicant complete and dedicate all public improvements prior to the signing of the subdivision plat, and that, as an alternative, the applicant shall provide assurance of financial security at the time of application for final subdivision approval in an amount estimated by the applicant and determined by the City Engineer as sufficient to secure to the City the satisfactory construction, installation, and dedication of the incompleated portion of required improvements. The guarantee of financial security shall also secure all lot improvements on the individual lots of the subdivision as required in these regulations, and may take the form of any of the following:

(1) Escrow Account: The subdivider or land partitioner shall deposit cash, or collateral readily convertible to cash at face value, either with the governing body or in escrow with a bank. The use of collateral other than cash, and the section of the bank with which funds are to be deposited are subject to the approval of the City Council. Where an escrow account is to be employed, the Subdivider shall file with the City Council his agreement with the bank guaranteeing the following:

(a) that the funds in the escrow account are to be held in trust until released by the governing body and may not be used or pledged by the subdivider as security for any obligation during that period;

(b) that in the event that the subdivider fails to complete the required improvements, the bank shall immediately make the funds in escrow available to the City for the completion of these improvements.

(2) Property Escrow: The subdivider may offer as a guarantee land or personal property, including corporate stocks or bonds. A qualified real estate appraiser shall establish the value of any real property so used and in so doing, shall take into account the possibility of a decline in the value of said property during the guarantee period. The City Council reserves the right to reject the use as collateral of any property when the value of the property is unstable, when the property may be difficult to sell or when other factors exist which will inhibit the City Council from exchanging the property for an amount of money sufficient to complete the required improvements. When property is offered as an improvement guarantee, the subdivider shall:

(a) execute an agreement with the escrow agent when it is not the City, instructing the agent to

release the property to the City in case of default. The agreement shall be placed on file with the City Recorder.

(b) file with the City Council an affidavit affirming that the property to be used as a guarantee is free and clear of any encumbrances or liens at the time it is to be put in escrow.

(c) execute and file with the City Council an agreement stating that the property to be placed in escrow as an improvement guarantee will not be used for any other purpose, or pledged as a security in any other matter, until it is released by the governing body.

(3) Special Improvement District: The City Council may enter into an agreement with the subdivider, and the owners of the property proposed for subdivision or partition, if other than the person subdividing or partitioning the land, that the installation of required improvements will be financed through a special improvement district created pursuant to Oregon law. This agreement must provide that no lots within the subdivision or major partition will be sold, rented, or leased, and no contract for the sale of lots executed, before improvements through the creation of a special improvements district constitutes a waiver by the subdivider or partitioner, or the owners of the property, of the right to protest or petition against the creation of the district.

(4) Letter of Credit: Subject to the approval of the City Council the subdivider or land partitioner shall provide a letter of credit from a bank or other reputable institution or individual. This letter shall be deposited with the governing body and shall certify the following:

(a) that the creditor guarantees funds in amount equal to the cost, as estimated by the subdivider or land partitioner and approved by the City Council, of completing all required improvements.

(b) that if the subdivider or land partitioner fails to complete the specified improvements within the required period, the creditor will pay to the City immediately, and without further action, such funds as are necessary to finance the completion of those improvements, up to the limit of credit stated in the letter.

(c) that this letter of credit may not be withdrawn, or reduced in amount, until released by the City Council.

(5) Surety performance bond: The bond shall be executed

by a surety company authorized to do business in the State of Oregon and acceptable as a surety to the City Council and countersigned by an Oregon agent. The bond shall be payable to the City and shall be in effect until the completed improvements are accepted by the City Council.

C. Cost of Improvements: All required improvements shall be made by the applicant, at his expense, without reimbursement by the City, except in the case of a creation of a local improvement district, as provided for herein above.

D. Failure to Complete Improvements: For subdivisions or major partitions for which guarantees of performance have not been made, if the improvements are not completed within the period specified by the City Council in the resolution approving the plat, the approval shall be deemed to have expired. In those cases where a guarantee of financial security has been made and required improvements have not been installed within the stated period of time, the City may declare the subdivider or major land partitioner to be in default and require that all the improvements be installed regardless of the extent of the building development at the time that default is declared.

E. Acceptance of dedication offers: Acceptance of formal offers of dedication of streets, public areas, easements, and parks shall be by ordinance of the City Council.

TYPE A CONSTRUCTION PERMIT APPLICATION

Application is made to:

_____ Street	_____ Construct	_____ Alter
_____ Storm Drain	_____ Curb	_____ Sanitary Sewer
_____ Sidewalk	_____ Driveway	_____ Water Main
	_____ Parking Lot	_____ Other

DESCRIPTION OF THE WORK \_\_\_\_\_  
\_\_\_\_\_

LOCATION OF WORK:

_____ Private Property	Address _____
_____ Lot	Block _____ Addition _____
Owner(s) Name _____	Address _____

EASEMENTS REQUIRED?

_____ Rights-of-Way	Street _____	Obtained? _____
From _____	To _____	
Engineer _____	Address _____	Phone _____
Contractor _____	Address _____	Phone _____

PROPOSED WORK SCHEDULE :

Begin _____	Complete _____
Remarks _____	

\_\_\_\_\_ Plans cleared by local, public and private utilities  
 \_\_\_\_\_ Three sets of plans attached

Permit Hookup Fee plus Materials Paid By: \_\_\_\_\_  
("Schedule of fees" available at City Recorder Office)

CONDITIONS OF THIS PERMIT

1. Applicant agrees to comply with the above description of work, attached plans, and the regulations of Standard Specifications for Public Works Construction of the City of Hines.
2. Applicant agrees to guarantee all materials and workmanship covered by this permit for a period of one year following acceptance of the improvements by the City.
3. Applicant agrees to identify and hold harmless the City, its officials, representatives and employees from any and all liability resulting from the applicant's negligent act or performance of work under this permit.

Applicant \_\_\_\_\_  
 Application received \_\_\_\_\_ By \_\_\_\_\_  
 (date)

Plans checked by:	Approved _____	Not Approved _____	Date _____
Department of Public Works			
Permit issued _____	19 _____	By _____	

ACTUAL CONSTRUCTION:

Date Started _____	Date Completed _____	Date Accepted _____
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TYPE B CONSTRUCTION PERMIT APPLICATION

Application is made to: \_\_\_\_\_ Construct \_\_\_\_\_ Alter \_\_\_\_\_  
\_\_\_\_\_ Street \_\_\_\_\_ Curb \_\_\_\_\_ Sanitary Sewer \_\_\_\_\_  
\_\_\_\_\_ Storm Drain \_\_\_\_\_ Driveway \_\_\_\_\_ Water Main \_\_\_\_\_  
\_\_\_\_\_ Sidewalk \_\_\_\_\_ Parking Lot \_\_\_\_\_ Other \_\_\_\_\_

DESCRIPTION OF THE WORK \_\_\_\_\_

Location of Work:

\_\_\_\_\_ Private Property Address \_\_\_\_\_  
\_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Addition \_\_\_\_\_  
Owner(s) Name \_\_\_\_\_ Address \_\_\_\_\_ Phone \_\_\_\_\_

Easement Required? \_\_\_\_\_ Obtained \_\_\_\_\_

\_\_\_\_\_ Right-of-way Street \_\_\_\_\_  
\_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

Engineer \_\_\_\_\_ Address \_\_\_\_\_ Phone \_\_\_\_\_  
Contractor \_\_\_\_\_ Address \_\_\_\_\_ Phone \_\_\_\_\_

State of Oregon approval for water & sanitary sewer projects. Date \_\_\_\_\_  
Public Liability coverage \$ \_\_\_\_\_; Certificate of Insurance  
attached: \_\_\_\_\_

Proposed work schedule:

Begin \_\_\_\_\_ Complete \_\_\_\_\_  
Remarks \_\_\_\_\_

\_\_\_\_\_ Plans cleared by local, public and private utilities.  
\_\_\_\_\_ Three sets of plans attached.

Number of Lots Served by Above Facilities - - - - -  
Permit Fee Basis - - - - - \$ \_\_\_\_\_  
Total Permit Fee - - - - - \$ \_\_\_\_\_  
Paid by - - - - -  
Cost Estimate of Proposed Work - - - - - \$ \_\_\_\_\_

\_\_\_\_\_ Attach 100% performance and maintenance bond.

NOTICE: After issuance of a permit, the contractor shall give the City and all local utility companies at least 24 hours notice before commencing work.

I agree to comply with the above description, plans and specifications herewith submitted, and also with the regulations of the City of Hines and the State of Oregon covering such work.

APPLICANT

Application received \_\_\_\_\_ by \_\_\_\_\_  
(Date)

PLANS CHECKED BY: Approved \_\_\_\_\_ Not Approved \_\_\_\_\_ Date \_\_\_\_\_  
Department of Public Works  
Permit issued \_\_\_\_\_ 19 \_\_\_\_\_ by \_\_\_\_\_

ACTUAL CONSTRUCTION:

Date started \_\_\_\_\_ Date completed \_\_\_\_\_ Date accepted \_\_\_\_\_



IMPROVEMENT AGREEMENT (SAMPLE)

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_  
19\_\_\_\_\_, by and between the City of Hines, a municipal corporation, hereinafter  
called the "City" and \_\_\_\_\_,  
hereinafter called the "Developer";

WITNESSETH:

WHEREAS, The Developer has submitted to the City Planning Commission for  
approval a plat for \_\_\_\_\_ subdivision; and

WHEREAS, The Developer has not met all the specifications and standards set  
forth for the approval of plats in the "Subdivision Ordinance of the City of Hines;  
and

WHEREAS, The City Planning Commission has granted approval to the final plat  
of the above mentioned subdivision with the understanding that the Developer agrees  
to the following:

THE Developer agrees that he shall complete, or cause to be completed on or  
before the dates hereinafter specified, and in accordance with the procedures, and  
specifications set forth in the Subdivision Ordinance and Public Works Construction  
Standards of the City of Hines, the following improvements, to-wit:

- (a) Clearing and grading of all proposed streets.

To be completed on or before \_\_\_\_\_.

- (b) Storm drainage facilities both within and outside of right-of-way limits.

To be completed on or before \_\_\_\_\_.

- (c) Water supply lines, service extensions, and appurtenances.

To be completed on or before \_\_\_\_\_.

- (d) Sanitary Sewer lin, service extensions, and appurtenances.

To be completed on or before \_\_\_\_\_.

- (e) Concrete curbs.

To be completed on or before \_\_\_\_\_.

(f) Street base rock and levelling rock.

To be completed on or before \_\_\_\_\_.

(g) Asphaltic concrete paving of streets.

To be completed on or before \_\_\_\_\_.

(h) Concrete sidewalks.

To be completed on or before \_\_\_\_\_.

IT IS AGREED, that said Developer is making these improvements to the specifications and standards on file at City Hall with the result that the City will accept said improvements as part of the City's public works facilities after said Developer completes the improvements and procedures to the satisfaction of the Department of Public Works.

IN WITNESS WHEREOF, the City of Hines has caused this agreement to be signed by its Mayor and Director of Public Works, and the Developer has caused this agreement to be signed and sealed the same as the date and year first above written.

CITY OF HINES, OREGON

By: \_\_\_\_\_

Director of Public Works

By: \_\_\_\_\_

Mayor

DEVELOPER

By: \_\_\_\_\_

By: \_\_\_\_\_

6.100 SUBDIVISION DESIGN

a. Blocks. No block shall be longer than 1,400 feet between street lines. In blocks over 800 feet in length there shall be a cross walkway of not less than 12 feet in width near the middle of the block.

b. Lots.

1. Every lot shall abut on a street or on an officially approved way.

2. Wherever possible, all side lot lines shall be at right angles to street lines or radial to curved street lines, unless variation from these requirements is deemed necessary by the City Planning Commission.

3. Through lots, lots with double frontage, should be avoided except where they are essential to provide separation of residential development from an arterial street or adjacent non-residential activities or to overcome specific disadvantages of topography and orientation. No right of access may be required along the lines of lots abutting such a traffic artery or other incompatible use.

4. Lot sizes shall conform to the Zoning Ordinance requirements of the area. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use contemplated. The depth of lots shall not exceed two and one-half times the average width, unless variation from these requirements is deemed necessary by the City Planning Commission. Where the slope of the ground exceeds 10 percent in any direction or for more than 60 percent of the buildable area of a lot, the Commission may require the area of a lot to be increased according to the following table:

11% to 15% slope - minimum area of lot + 20%

16% to 20% slope - minimum area of lot + 50%

21% to 25% slope - minimum area of lot + 100%

26% to 30% slope - minimum area of lot + 200%

over 30% slope - minimum area to be established by the Planning Commission.

5. Corner lots shall be 5 feet more in width than other lots and also shall have sufficient extra width to meet the additional side yard requirements of the zoning district in which they are located.

6. Lot and block grading shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:

(a) Cut slope shall not exceed one and one-half feet horizontally to one foot vertically or shallower depending on soil characteristics.

(b) Fill slope shall not exceed one and one-half feet horizontally to one foot vertically.

(c) The character of soil for fill and the characteristics of lots made usable by fill shall be suitable for the purpose intended.

(d) When cutting and filling is contemplated by the subdivider, he shall submit plans showing existing and finished grades for the approval of the Planning Commission. In reviewing these plans, the Planning Commission shall consider the need for drainage and effect of filling on adjacent property. Grading shall be finished in such a manner and prior to installation of sanitary sewer and water systems as not to create steep banks or unsightly areas adjacent to properties, not create any drainage problems by altering the course of a waterway or storm runoff.

7. Frontage Each lot shall abut upon a street other than an alley for at least 60 feet, except for lots fronting on the bulb of a cul-de-sac or the outside of a street curve of at least 45 degrees, then the minimum frontage shall be 20 feet.

8. Building lines. Building lines shall be shown on all lots planned for residential use and on all commercial or industrial lots immediately adjoining the residential area. Such building lines shall not be less than those required by the Zoning Ordinance.

9. Duplication of names. The name of a proposed subdivision shall not duplicate the name of any other subdivision within the County. The street names shall not duplicate the names of any other street or way within the City or Postal Service area.

6.200 RELATION TO ADJOINING STREET SYSTEM. A subdivision shall provide for the continuation of the principal streets existing in the adjoining subdivisions or of their property projections when adjoining property is not subdivided, and such streets shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the City Planning Commission, topographic conditions make such continuation for conformity impractical, exception may be made. In cases where the City Planning Commission itself adopts a plan or plat of a neighborhood or area of which the subdivision is a part, the subdivision shall conform to such adopted neighborhood or area

plan.

Where the plat submitted covers only a part of the subdivider's tract, a drawing of the prospective future street system of the entire tract shall be furnished and the street system of the part submitted shall be considered in light of conformity to the street system of the entire tract.

Where a tract is subdivided into lots of one acre or more, the Commission may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street requirements and other requirements contained in these regulations.

6.210 ACCESS. There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed in the City under conditions approved by the City Planning Commission. The subdividing of land shall be such as to provide each lot, by means of a public street or way, with satisfactory access to an existing public highway or or to a thoroughfare as shown in the major street plan, the Comprehensive Plan or an official map.

6.215 MINIMUM STREET WIDTHS. General

a. The widths of major streets shall conform to the widths designated on the proposed official plan.

b. The minimum width for streets right-of-way shall be 50 feet, except in cases where the topography or other physical conditions make a street of this width impractical, the City Planning Commission may modify this ~~miror~~ street width regulation. These widths shall be measured from lot line to lot line.

6.220 ROADWAYS.

a. Arterial. Right-of-way for Arterials shall be 80 feet and roadways for major streets (arterials) shall not be improved less than 44 feet with parking or 36 feet with parking on one side only and shall conform to the adopted roadways and cross sections for such thoroughfares, as shown in Appendix . All streets shall be fully improved with curbs, storm drains, and paving when required by the Commission to the standards and specifications herein listed.

The persons subdividing land shall furnish the City with a bond, or other security satisfactory to the City Planning Commission that the person subdividing will fully improve all streets in the subdivision before it is occupied by anyone in any new construction. The bond or security shall be satisfactory to the City Planning Commission in penalty amount equal to the City Engineer's estimate of total construction cost.

b. COLLECTORS. Right of way for Collectors shall be 60 feet and roadways for major street shall not be improved less than 40 feet with parking, 36 feet with parking on one side only, and shall conform to the adopted roadways and cross sections for such thoroughfares, as indicated herein and on the proposed official map. All streets shall be fully improved with curbs, storm drains, and paving, where required

by the Planning Commission to the standards and specifications herein listed.

c. Local Streets. Roadway for minor streets shall not be improved less than 36 feet with parking, 30 feet with parking on one side only except in cases where topography or other physical conditions have brought about a right-of-way less than 50 feet in width, a smaller improved width may be approved.

6.225 STREET GRADES

a. Street grades shall conform to the following:

	<u>Maximum</u>	<u>Minimum</u>
Preferred Grade	8.0%	0.40%
*Limiting Grades (Paved Surfaces)	18.0%	0.30%
**Limiting Grades (Gravel Surfaces)	15.0%	0.40%

\*Maximum grade allowed only on short runs and not at intersections; minimum grade may require use of monolithic curb and gutter.

\*\*Temporary construction only for individual lots or minor partitions pending full street improvement.

b. Intersecting street grades shall be connected with acceptable vertical curves in consideration of traffic movement, sight distance at summits, and drainage at sags.

c. All streets shall have at least a 0.3 percent grade.

d. All streets shall be fully improved with curbs, sidewalks, storm drains, and paving, when required by the Planning Commission, to the standards and specifications listed herein. The person subdividing land shall furnish the City a bond or other security satisfactory to the City Planning Commission in accordance with provisions outlined in 6.000.

6.230 DEAD-END STREETS. Cul-de-sac streets shall not exceed 800 feet in length and shall terminate in a turn-around with a minimum radius of 45 feet and a minimum paving radius of 35 feet. Cul-de-sac streets of 200 feet or less may be 50 feet in right-of-way width.

6.235 STREET CURVES.

a. The minimum centerline radius of curvature shall be 300 feet for arterial streets (over 80 feet in width), 200 feet for collector streets (61 to 80 feet in width), and 100 feet for minor streets (60 feet or less in width).

b. Arterial street intersections shall have a curb radius of not less than 25 feet; all other street intersections shall have a curb radius of not less than 20 feet.

c. Intersection angles. Street intersection shall be as near right angles as possible except where topography requires a lesser angle, but in no case shall the acute angle be less than 80 degrees.

d. Alignment. Staggered street alignment shall, whenever practical, leave a minimum of 200 feet distance between the centerline of the streets, but in no case be less than 125 feet.

e. Continuation of streets. Subdivision streets which constitute the continuation of streets in contiguous territory shall be aligned so that their centerlines coincide. Where straight line continuations are not possible, such centerlines shall be continued as curves. These streets or the continuation of streets in contiguous territory may be required by the Planning Commission where such continuation is necessary to maintain the function of the street or desirable existing pattern of development of streets and blocks in the surrounding area.

6.240 STREETS ADJACENT TO RAILROADS. When the area to be subdivided adjoins or contains a railroad, a street shall be provided on each side and parallel to such railroad, within or adjacent to the subdivision. In the case of a railroad, there shall be a land strip of not less than 25 feet between the railroad right-of-way and residential property. The intersections of such parallel streets, where they intersect with streets that cross a railroad, shall be determined with due consideration at cross streets of a minimum distance required for approach grades to a future grade separation and right-of-way widths of the cross street.

6.245 ALLEYS. The minimum width of an alley in a residential block, when platted, shall be 20 feet. Alleys should be provided in commercial and industrial districts and shall be not less than 20 feet in width. The corners of all alley intersections with other alleys or streets shall have a radius of not less than 10 feet.

6.250 HALF STREETS. No half streets shall be included in a subdivision plan except where necessary on the boundary of the subdivision tract where the extension of an existing dedicated street must be provided for and the boundary line of the tract is the center line of the necessary street.

6.255 EASEMENTS. Where alleys are not provided, easements of not less than 10 feet in width may be required on each side of the rear lot line or side lot line, for necessary utility lines including poles, wires, conduits, storm and sanitary sewers, gas, water lines. Public Utility Easements of not less than 5 feet in width may be required along front lot lines where necessary for the extension of public utility lines.

6.260 UNDERGROUND UTILITIES Insofar as practical, underground utility installations shall conform to the typical locations shown on the Standard Details. An overall utility plan shall be prepared for new subdivisions and major land partitions showing all proposed utility locations.

#### STREET CROSS SECTIONS

- a. Symmetrical street cross sections per Standard Detail No. are preferred, with opposite curbs at approximately the same grade.
- b. Tilted and warped street cross sections are only allowed under

the special cases of sidehill lies and to match existing facilities.

c. The maximum difference in opposing curb grade elevations for tilted or warped sections shall be 1-foot for tilted and warped sections.

d. The finished pavement grade from the center point of cul-de-sac turn-arounds to the gutter line shall be at least 2.5% negative.

#### CURBS

a. Curb tops shall be set below adjacent ground levels to receive surface drainage from the lots where possible.

b. Three-inch diameter weep holes shall be provided through curbs with inverts 1" above gutter line, at the following locations:

(1) Opposite existing or anticipated roof drain downspouts (minimum of 2 per lot).

(2) At 16-foot on centers along low areas where curb top is above adjacent ground.

(3) At 16-foot on centers adjacent to bank areas to receive ground water.

c. Curb shape to conform to Standard Details.

d. Monolithic curb and gutter sections may be required where curb grades are below the 0.40% minimum recommended.

e. Machine extruded curbs require two inches of 3/4" minus crushed rock base; formed and poured curbs may be set on crushed rock base or compact subgrade.

f. Maximum tolerance for finished curbs shall be 1/2" on alignments, and 1/4" on grade at any point providing a drainage pocket does not occur.

g. Standard curb exposure is 6" above gutter grade; variations in exposure will be allowed only if necessary to match existing facilities.

h. Provide drop curbs for driveways and ambulatory ramps with original curb pour when locations can be determined in advance.

#### 6.265 SIDEWALKS

a. Conform to dimensions on Standard Details.

b. Maintain 1/4" per foot cross slope for drainage to curbs.



- c. Confer with Commission as to sidewalk locations.
- d. Sidewalks adjacent to curbs are allowed on minor streets, cul-de-sacs, and in some commercial areas subject to Planning Commission approval.

#### 6.270 DRIVEWAYS

- a. Deferred until lots are built upon.
- b. Maximum driveway ramp slope not to exceed 15%.

#### 6.275 STORM SEWERS

- a. Design Basis

(1) In general, the storm sewer system should be designed for the estimated ultimate storm water runoffs based on future upstream land use as designated in the City of Hines Comprehensive Plan.

(2) In addition, the design should include and show the effect of the proposed development in the existing downstream storm sewer system.

(3) The developer, or his Engineer, shall submit with the street and drainage construction plans one set of storm sewer design calculations showing, as a minimum, the following:

- (a) Design period.
- (b) Drainage areas.
- (c) Upstream land uses and runoff coefficients.
- (d) Rainfall intensities and durations.
- (e) Inlet times.
- (f) Design flows and capacities of the existing and proposed storm sewer system.

- b. Design Standards

(1) Storm sewers and appurtenances to be provided for new subdivisions and land partitions; open ditches allowed only upon special considerations, or in locations with existing drainage ditches.

(2) Low corners at street intersection shall be drained through storm sewer systems if possible; no sheet drainage allowed except as provided under Item \_\_\_ below.

(3) Concrete valley gutters of approved design may be used to continue surface drainage across intersections if approved by the City.

(4) Storm sewers under all street improvements shall have a minimum of 1-foot cover to finished grade.

(5) Storm sewers shall be designed for at least 2 fps self cleansing flow velocities when full; outlet protection shall be provided where storm sewers daylight with scouring velocities.

(6) The Rational Method, or other recognized engineering procedure shall be used for all storm drainage design.

(7) Recommended design for storm sewer systems are as follows:

(a) Minimum of 5-year storm protection (20% chance of occurrence each year) for lateral and minor storm sewers; Minimum of 10-year storm protection (10% chance of occurrence each year) for trunk and main storm sewers.

(b) Rainfall intensities shall be at least equivalent to those shown on the Rainfall Intensity-Duration Frequency Curves hereinafter.

(c) Inlet times shall range from 5 minutes for intensely developed areas through 10 minutes for unimproved or low density areas.

(d) Runoff coefficients shall coincide with, or be equivalent to, the following:

<u>Description of Area</u>	<u>Runoff Coefficients</u>		
	<u>Flat</u>	<u>Rolling 2% - 10%</u>	<u>Hilly Over 10%</u>
Pavement & Roofs	0.90	0.90	0.90
Earth Shoulders	0.50	0.50	*
Drives & Walks	0.75	0.80	0.85
Gravel Pavement	0.50	0.55	0.60
City Business Areas	0.80	0.85	0.85
Apartment Dwelling Areas	0.50	0.60	0.70
Suburban, Normal Residential	0.45	0.50	0.55
Dense Residential Section	0.60	0.65	0.70
Lawns, Sandy Soil	0.10	0.15	0.20
Lawns, Heavy Soil	0.17	0.22	0.35
Grass Shoulder	0.25	0.25	0.25
Side Slopes, Earth	0.60	0.60	0.60
Side Slopes, Turf	0.30	0.30	0.30
Median Areas, Turf	0.25	0.30	0.30
Cultivated Land, Clay and Loam	0.50	0.55	0.60

Cultivated Land, Clay and Loam	0.50	0.55	0.60
Cultivated Land, Sand & Gravel	0.25	0.30	0.35
Industrial Areas, Light	0.50	*	0.80
Industrial Areas, Heavy	0.60	*	0.90
Parks and Cemeteries	0.10	*	0.25
Playgrounds	0.20	*	0.30
Woodland and Forests	0.10	0.15	0.20
Meadows and Pasture Land	0.25	0.30	0.35
Unimproved Areas	0.10	0.20	0.30

(e) Tailwater levels in receiving channels and possible overloading of existing storm sewers shall be considered in the hydraulic design of new storm sewers.

(f) Storm sewers shall be designed for flows up to full flow, without surcharging manholes and catchbasins.

(g) Both on-site and contributing to off-site drainage shall be considered in designing new storm sewers.

(h) Storm sewer design shall be subject to approval of the City - pipe roughness coefficient  $n=0.015$  for concrete pipe and  $n=0.024$  for corrugated metal pipe.

(8) Minimum diameter for public storm sewers in 8 inches.

(9) Maximum run for surface drainage between catch basins or drainage inlets shall be 500-feet.

(10) Manholes shall be provided on storm sewers at regular intervals to facilitated cleaning.

(11) Catch basin and drainage inlet rims shall be set 1" below finished grade and the pavement apron depressed thereto for positive drainage.

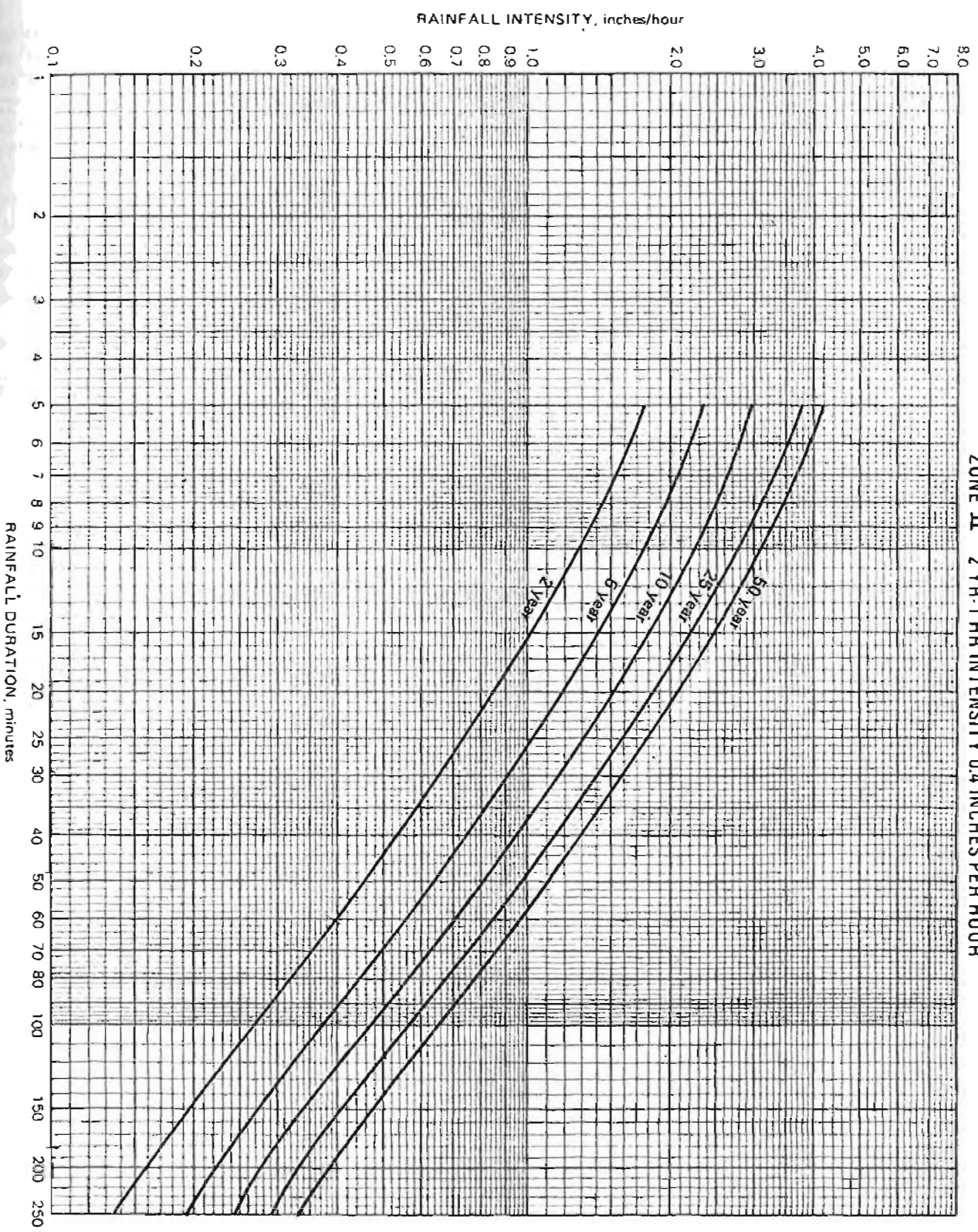
(12) Dry wells are allowed under special cases as follows:

(a) No public storm sewer is available.

(b) The amount of drainage is determined to be minor.

(c) Construction of dry well is approved by the City, and dry well is not constructed under any improvement.

**INTENSITY - DURATION CURVE**  
**ZONE II 2 YR. 1 HR INTENSITY 0.4 INCHES PER HOUR**



6.280 SIGNING

- a. All newly platted streets to be signed with name approved by Planning Commission.
- b. Signs to conform to City Standards and general details herewith.

6.285 MATERIALS

a. Clearing All unclassified material of natural and/or man-made origin occurring within right-of-ways, the removal of which is necessary to accommodate permanent construction.

b. Grubbing All natural and/or man-made matter including stumps, roots, buried vegetation and debris which occur within a 6-inch depth below subgrade.

c. Earthwork; Street Excavation, Embankment & Subgrade

1. Street excavation shall all be classified as common excavation, except where the documents for a project specifically contain a rock excavation bid item.

2. Where provided for, rock excavation shall include only solid bedrock and ledge rock or substantial concrete foundation which cannot be removed by ordinary mechanical means, but which requires drilling and blasting.

3. Over excavation and backfill, when directed by the Engineer, shall be performed to firm up soft or spongy foundations occurring below subgrade level. Backfill material shall be either:

(a) Select native materials resulting from site excavations and approved by Engineer, or

(b) Imported base rock as hereinafter defined, when authorized by the Engineer.

4. Subgrade and embankment material shall be:

(a) Approved native clays, silts, sands, gravels, cinders, and mixes of the same.

(b) Free from sod, roots, vegetative matter, debris, boulders and rock fragments over 6 inches in diameter.

(c) Capable of being compacted and graded into a dense, smooth, stable mass as required under Workmanship.

5. Topsoil backfill for curbs and planting strip areas shall be approved native fine grained soil mixes free of deleterious matter.

d. Trench Excavation, Backfill & Bedding for Storm Sewers

1. Trench excavation shall be unclassified, except where the project documents specifically contain a trench rock excavation bid item.

2. Where provided for, trench rock excavation shall include solid bedrock, ledge rock, and boulders over 3/4 cubic yards in volume which cannot be removed by a 3/4 cubic yard backhoe, but which requires drilling and blasting.

3. Pipe embedment material shall be 3/4" minus crushed rock, pea gravel, turkey grit, or approved native excavated material.

4. Pipe zone material shall be 1 1/2 " or 3/4" minus crushed rock or approved native excavated material.

5. Backfill above pipe zone shall be:

(a) Class I - 1 1/2" crushed rock for use under all street pavements, curbs, sidewalks, and driveways.

(b) Class III & IV select native materials from site excavations which are free of vegetative matter, debris, and rock fragments over 6 inches in diameter, for use in landscaped and unimproved areas.

6. Conform to Standard Detail for Pipe Trench.

e. Storm Sewer Pipe

1. Unless project documents require otherwise, all public storm sewer pipe 24 inches and less in diameter shall be either:

(a) Concrete pipe conforming to ASTM C14 X for extra-strength, non-reinforced concrete pipe or;

(b) Galvanized corrugated steel pipe conforming to ASSHO M-36 or M0-136. Gage of pipe to be sufficient to support loads imposed on it;

2. Storm sewer pipe over 24 inches in diameter shall conform to the ASTM C-76 specifications for Class III reinforced concrete pipe, or ASSHO M-36 specifications for corrugated steel pipe, unless project documents require otherwise.

3. Storm sewer pipes with less than one foot of cover below finished grade shall be of reinforced concrete design, or shall be capped with 2000 psi concrete as the City directs.

4. Pipe fittings including tees, bends and plugs shall be the same material as the mainline pipe.

5. Joint cove

(1) Applies to exterior top half circle of all pipe joints.

(2) Use either 2000 psi grout worked into and around joint, or

(3) Cover each joint with 12" wide strips of asphalt coated fiberglass roofing mesh.

f. Manholes, Catch Basins and Appurtenance

1. Precast or monolithic cast-in-place concrete units allowed:

2. Precast sections shall conform to ASTM C-478 specifications; cast-in-place units shall be equivalent as to concrete and reinforcement design and workmanship unless modified below.

3. All concrete shall be Class 'A' per Section 504 of OSHC specifications with minimum 28-days compressive strengths as follows:

(a) Catch basins and manhole bases - 3000 psi

(b) Manhole risers, cones and flat tops - 4000 psi

4. Flat tops for manholes 48" in diameter shall be 6" thick; for manholes over 48" in diameter 8" thick.

5. Portland cement per ASTM C-150.

6. Concrete aggregate per ASTM C-33 - 1 1/2" maximum size.

7. Reinforcement design for manholes to conform to Items 9 through 13 of ASTM C-478, with either;

(a) Wire fabric - ASTM A-185

(b) Deformed bars - ASTM A-15

8. Mortar - one part Portland cement, one to two parts plaster sand, with water as necessary for consistency.

9. Manhole castings

(a) Conform to ASTM A-48 specifications for grey cast iron Class 30.

(b) Frame - Salem Iron Works #A2975, or approved equal.

(c) Standard cover - Salem Iron Works #A2974 with two 3/4" diameter holes, or approved equal.

(d) Slotted cover - Salem Iron Works #A4175 heavy duty, or approved equal.

(e) Conform to Standard Details for dimensions.

10. Catch Basin Castings;

(a) Conform to ASTM A-48 specifications for grey cast iron, Class 30.

(b) Conform to Standard Details for Type B grate.

(c) Frame - Salem Iron Works #A2495, or approved equal.

(d) Grate - Salem Iron Works #A4628, heavy duty, or approved equal.

11. Rock riprap where required by project plans:

(a) Conform to Section 714 of OSHC specifications for loose riprap.

(b) Size and grading class as noted on plans.

(c) Angular in shape; rounded stone not allowed.

12. Special structures - as detailed on plans and required by specifications for each project.

g. Concrete Curbs

1. Conform to Section 609 of OSHC specifications as to aggregate, concrete, joint filler and steel.

2. All concrete to be Class "A", 3000 psi at 28 days, 1 1/2" maximum aggregate size per ASTM C-33.

3. Conform to Standard Details for curb shapes, as follows:

(a) Type C for standard curb.

(b) Type A for monolithic curb and gutter.

4. Expansion joints - 1/2" premolded filler per subsections 705.01 and 609.35 of ASHC specifications, at



intervals not to exceed 48' and at all abutting concrete.

5. Contraction joints - 1/8" weakened plane type per subsection 609.37 of OSHC specifications, at intervals not to exceed 16-feet.

6. Aggregate base for machine extruded curbs to be 1 1/2" minus or 3/4" minus crushed rock as hereinafter specified.

7. Curb weep hole pipe to be 3" diameter PVC or ABS solid wall ES.

8. Drop curbs to be of same material; shape conforms to Standard Detail.

h. Sidewalks and Driveways

1. Conform to Section 608 of OSHC specifications as to aggregate, concrete, joint filler and steel.

2. All Concrete to be Class "A", minimum of 2500 psi at 28 days, 1 1/2" maximum aggregate size per ASTM C-33.

3. Conform to Standard Details for sidewalk and driveway dimensions and details.

4. Expansion joints - 1/2" premolded filler per subsection 705.01 and 608.35 of OSHC specifications, at intervals not to exceed 1-foot.

6. Aggregate base where required for sidewalks and driveways to be 3/4" minus crushed rock as hereinafter specified.

7. Sidewalk joints to line up with curb joints.

i. Base Rock and Surfacing Rock

(a) Base rock to be 1 1/2" minus crushed rock or crushed gravel conforming to Section 703 of OSHC specifications; minimum lift required is 6".

2. Levelling rock to be 3/4" minus crushed rock or crushed gravel conforming to Section 703 of OSHC specifications; minimum lift required is 1 1/2".

3. City may require gradation, plasticity, sand equivalent and abrasion test data to be provided on questionable rock source materials.

j. Soil Sterilant

1. Required only adjacent to existing curbs where streets are to be improved:

2. Use sodium chlorate, or approved non-selective herbicide.

k. Asphaltic Concrete Pavement

1. Basic street paving shall be a Class "B" asphaltic concrete mix conforming to Section 403 of OSHC specifications.

2. Class "C" and finer concrete mixes may be used for patching and th in overlays when such conform to the above specifications.

3. Asphalt cement shall be AR-4000 grade.

4. Tack coat shall be RS-1 conforming to ASTM D-977 for Emulsified Asphalt.

5. Joint seal shall be RS-1 or RS-2 conforming to ASTM D-977.

l. Surface Restorations

1. Conform to Standard Details for the following types of surface replacements.

(a) Class A pavement replacement - arterials and major streets.

(b) Class B pavement replacement - minor streets, cul-de-sacs, etc.

(c) Class D gravel street, driveway and shoulder replacement.

(d) Class E topsoil replacement for unimproved areas.

2. Trench backfill, base rock, surfacing rock, asphaltic concrete pavement, joint seal, etc. shall conform to the material requirements hereinbefore specified.

3. Restoration of surfaces not described herein or shown on the Standard Details shall be such as to replace the disturbed surface to equal or better original condition.

6.290 WORKMANSHIP

a. Clearing

1. Clear improvement area of all surface vegetation, stumps, roots, down timber, brush, weeds, grasses, and deleterious matter necessary to accommodate permanent construction.

2. Clearing limits normally limited to 1' behind curbs or 1' on each side of sidewalks unless otherwise noted on

project plans.

3. Protect from damage all trees, shrubs, landscaped areas and lawns not designated.
4. Protect existing street surface facilities, adjacent properties, and survey monuments from damage; confine operations to clearing limits shown on Plans.
5. Tree branches which extend over curbs and which are less than 8-feet above curb level shall be sawn off next to the boles, and the cuts treated with an approved tree sealant.
6. Dispose of clearing waste off project limits at site provided by Contractor.
7. Clean up street right-of-ways and adjacent work areas of all litter and debris resulting from Contractor's clearing operations.

b. Grubbing

1. Grub areas under streets, curbs, sidewalks and driveways to remove all stumps, roots, buried vegetative matter and debris to a depth of 6-inches below subgrade.
2. Dispose of grubbing waste off site as for clearing waste.

c. Earthwork; Street Excavation, Embankment and Subgrade

1. Excavate to subgrade lines and grades required by Plans.
2. Excavate to subgrade for connecting street and driveway approaches as directed.
3. Advise utility companies in advance of excavation for field location, marking, and for relocation of underground utilities as necessary.
4. Protect existing facilities from damage during excavations; any damaged facility not designated for removal or alteration to be repaired or set by Engineer, survey monuments, and private properties.
5. Along existing streets only, City will participate in the relocations of water and sewer lines if essential to new construction.
6. Where excavations are required alongside edges of existing pavements to be matched, any raveled or deteriorated pavement edges shall be cut clean and straight.
7. Overexcavate to remove soft or otherwise unsuitable

foundation material, when directed by Engineer; backfill with imported base rock or approved native backfill and compact at 95% of maximum density as directed.

8. Unauthorized overexcavations to be backfilled as above at Contractor's expense.

9. On street embankment areas, all sod, vegetative matter, and debris to be stripped away from under subgrade.

10. Rock excavation; if required, shall conform to the Manual of Accident Prevention in Construction published by AGC, in regard to Section 5, Explosives. Prior to commencing use of explosives, the Contractor shall submit a certificate of insurance showing coverage of blasting operations and blasting product liability to the limits required by Section I hereof. Coverage for this extra hazard shall be maintained during all blasting operations.

11. Approved excavated materials to be used directly in street embankment and site fill grading areas where provided for on Plans. Unsuitable material including broken pavement, rubble, large rocks and debris to be disposed of by Contractor off site.

12. Topsoil to be selectively excavated and a sufficient amount windrowed or stockpiled for curb backfill and dressing back planting strip area.

13. Shape and grade all cut and fill slopes to be smooth, uniform, and compact in conformance to lines and grades required by Plans.

14. Rough grade subgrade prior to utility crossings to 0.20-foot vertical and 0.50-foot horizontal tolerance to design cross section and grades.

15. After utility crossings and curb installation, fine grade subgrade to within 0.10-foot vertically of design grade at any point.

16. Proof roll subgrade to achieve the compaction hereinafter specified on a 6-inch depth.

17. All embankment material to be placed in lifts not exceeding 6-inches depth.

18. Place no embankment when material is frozen or too wet to achieve compaction.

19. Condition fill material for optimum moisture content before placing in embankment.

20. Sprinkle subgrade as necessary to achieve compaction, and for dust control.

21. All subgrade and embankment lifts to be compacted to 95% of maximum density per AASHTO T-180 test method.

22. Engineer to approve subgrade prior to rocking of streets.

23. Place topsoil backfill behind curbs and dress back disturbed planting strip area; smooth and uniform to property lines; compact till firm as evidenced by insignificant deflection under wheel or track loads.

24. Dispose of all waste materials and debris caused by Contractors' operations off site.

d. Trench Excavation, Backfill and Bedding for Storm Sewers

1. Engineer to set grade stakes for storm sewers at intervals not to exceed 50' plus structure stakes, and furnish both Contractor and City with copy of cut sheets.

2. Excavate pipe trenches to lines and grades required by Plans and as staked in field.

3. Excavate below pipe to allow for placement of 4-inch lift of bedding material under pipe.

4. Sheet, shore and brace trench walls as required for safety; dewater trenches as necessary for construction.

5. Provide barricades, warning signs and flagmen for safety of travelling public during work on streets.

6. Confine operations to right-of-ways provided; no work to be done on private property without express written permission of property owner.

7. Locations of underground utilities shown on Plans are normally based on available utility maps and no guarantee is made as to completeness and accuracy.

8. Contractor shall coordinate with public and private utility companies for locations and relocations of underground utilities as required to accommodate new construction.

9. Protect underground utilities and surface facilities not designated for removal or alteration from damage; restore any damaged facility to equal or better original condition.

10. Blasting, if required for trench rock excavation, to be performed carefully and in compliance with applicable safety codes and regulations.

11. Place pipe zone material around and over pipe carefully to prevent pipe damage; no free fall of material

directly on pipe allowed; bring pipe zone material up uniformly on each side to prevent pipe displacement.

12. Place classified backfill above pipe zone in lifts not to exceed 12" in compacted thickness and consolidate as follows:

(a) Class I rock backfill to be used under all streets, curbs, sidewalks and driveways and shall be compacted to 95% of maximum density per AASHTO T-180.

(b) Class III approved native backfill to be used under planting strips and landscaped areas, lawns, etc. as required by Plans, and shall be compacted to 90% or maximum density per AASHTO T-180.

(c) Class IV approved native backfill to be used in open and unimproved areas; shallow trenches may be filled to surface, wheel compacted until visually firm, and then refill, compacted and struck off smooth.

(d) Contractor shall maintain trench surfaces for a period of one year following final inspection of the work: any settled trenches, or damage to surface improvements resulting from settled trenches, shall be restored to acceptable condition within this period by the Contractor.

13. Approved materials from trench excavations to be used directly for Class III and IV backfill; excess and waste materials to be removed from site by contractor unless Plans provide on-site fill grading area for same.

14. Where trenching is performed along streets that have been excavated to subgrade, trench Contractor shall restore street subgrade to original condition.

15. Trenching through existing pavements requires clean, straight cutting of pavement with approved mechanical cutter.

16. Work on public road and on railroad right-of-ways shall be done under permit from the agency having jurisdiction, and in accordance with the terms of the permit.

17. Trenches across roads and existing driveways shall not be left open at the close of any working day without permission.

e. Storm Sewer Pipe

1. Handle pipe carefully to avoid damage; pipe shall not be dropped off truck or into trenches; broken pipe to be rejected by Engineer and removed from site by Contractor.

2. Maintain minimum of 1-foot of cover on all pipe

before crossing with equipment.

3. Engineer to provide line and grade stakes at 50-foot intervals, or as judged necessary.

4. Contractor to utilize sufficient string lines, targets, batterboards and survey instruments as necessary for accurate installation.

5. Tolerance for laying pipe is a maximum of 1/2" on line and 1/4" on grade.

6. Install pipe in accordance with methods set forth in:

(a) Concrete Pipe Handbook by American Concrete Pipe Association.

(b) Handbook of Steel Drainage & Highway Construction Products by the American Iron and Steel Institute. (For corrugated steel pipe.)

7. Lay pipe in upstream direction.

8. Lay pipe in accordance with manufacturers requirements and recommendations.

9. Mortar exterior top half circle of pipe joint and work mortar into joint; alternately cover top half circle of each pipe joint with 12" wide strip for specified roofing mesh.

10. Lay pipe on prepared embedment, bring pipe zone material up uniformly around and over pipe, and consolidate backfill as specified hereinbefore.

11. Set pipe into manholes, catchbasins and drainage structures, and grout in connection with 2000 psi concrete in approved workmanlike manner.

12. Install prefabricated pipe fittings where Plans require in workmanlike manner as for mainline pipe.

13. Any field connections to existing storm sewers such as cut-in tees are subject to approval of the City.

14. Where existing field tile, trench drains, etc. are intercepted by new trunk storm sewers, they shall be plumbed into the trunk in approved manner.

15. Where pipe is on curved alignment, sweep in on long radius not to exceed pipe joint gap tolerance.

16. Pipe laid directly over existing water and sewer mains shall be cradled in 2000 psi concrete cushion to

adequately spread imposed loads and prevent crushing of under pipe.

17. Relocation of existing storm sewers subject to approval of City.

18. Clean all dirt and debris from inside of pipe as work progresses.

f. Manholes; Catch Basins and Appurtenant Structures

1. Conform to requirements of Standard Details.

2. Comply with Section 63-3 of APWA Standard Specifications, unless modified herein.

3. Structures to be built on public right-of-ways shall conform to requirements of agency having jurisdiction.

4. Manhole and catch basin concrete shall be free from factures, honey-combs, surface roughness and clipped edges; damaged precast sections to be rejected.

5. Comply with Section 504 of OSHC Specifications as to workmanship for poured in place concrete.

6. Dewater excavations for structures.

7. Place manhole base on compact granular material as required by Standard Details.

8. Place and compact backfill in 12" lifts around structures; backfill class and compaction same as for adjacent pipe.

9. Mortar all joints in precast sections to affect water seal.

10. Grout manhole inverts smooth and uniform to channel water flow per Standard Details and as directed.

11. Pipe connections to be let into precast or monolithic concrete walls smoothly; any broken out concrete to be grouted back solid for minimum of 6" around entire connection.

12. Catch basins each to have two 4" diameter weepholes with rock surround at subgrade level per Standard Details.

13. Frames and extension rings not to be grouted in until rims can be set accurately to finished grade.

14. Manhole rims to be set flush with finished pavement grade; catch basin rims to be set 1" below grade and the pavement apron feathered thereto per Standard Details.



15. Special and appurtenant structures to be detailed on project plans, and constructed accordingly.

16. All workmanship for public facilities subject to approval of the City.

g. Concrete Curbs

1. Provide all labor, equipment and materials to construct concrete curbing as indicated on project plans or otherwise directed.

2. Engineer to set top of curb cut stakes at intervals not to exceed 50-feet, and at critical radii and grade points, on offset line requested by Contractor.

3. Do minor filling and grading as required for curb foundation.

4. Formed and poured curbs can be set on compacted subgrade or base rock; machine layed curbs require minimum 2" lift of compacted base rock.

5. Conform to dimensions shown on Standard Details for type of curb specified.

6. Construct drop curbs for driveways and bike paths where plans require and as field directed; conform to Standard Details.

7. Install curb weepholes where plans require, in conformance with Standard Details.

8. Block out curbs as required where plans call for side inlet catch basins.

9. Standard City curb is type C, with 6" exposure per Details; extruded or other types of curbs are special cases requiring City approval.

10. Construction tolerance for curbs is 1/2" on line and 1/4" on grade.

11. Construct curbs in accordance with Section 609 of OSHC Specifications, smooth and uniform.

12. Construct 1/2" curb expansion joints at intervals not to exceed 48 feet at radius points, and at all abutting concrete construction.

13. Construct 1/8" minimum weakened plane contraction joints at intervals not to exceed 16-feet per OSHC Specifications.

14. Work subject to approval of City who reserves right

to reject improperly located or constructed curbs.

15. Contractor to notify City for form or grade checks prior to pouring curbs.

16. Place topsoil backfill as required and dress back planting strip.

h. Sidewalks and Driveways

1. Conform to plans and Standard details as to locations and dimensions.

2. Conform to Section 608 of OSHC Specifications as to workmanship.

3. Expansion joints per subsection 608.35.

4. Contraction joints per subsection 608.36.

5. Sidewalk to be marked in 4'x4' squares by grooving.

6. Edges shall be tooled to 1/4" radius.

7. Cross broom or burlap finish in workmanlike manner; finish to match existing adjacent facilities.

8. Curb walks and driveways per subsection 608.34 of OSHC Specifications.

9. Sidewalks to be sloped up 1/4" per foot from top of curb to drain over same.

10. Sidewalks and driveways to be laid on prepared subgrade compacted to 95% of maximum density per AASHTO T-180, or on compacted 3/4" minus rock fill.

11. Rock base shall be placed and compacted to refill curb excavation where sidewalks are to be constructed adjacent to curbs.

12. Sidewalks shall be constructed to within 1/2" on line and 1/4" on grade tolerance for smooth, uniform alignment and grade.

13. Driveways, and sidewalks across driveways, shall have a concrete thickness of 6 inches.

14. Install 3" diameter foot drain pipe under sidewalks where required to meet curb weepholes.

15. Restore topsoil and dress back disturbed surfaces within planting strip in approved manner.

16. Sidewalks not to be constructed within 1' of adjacent property lines.

i. Base Rock and Surfacing Rock

1. Rocking not to be performed prior to Engineer approving subgrade.
2. Furnish and lay base rock and surfacing rock to lines and grades required by Plans.
3. Compact base rock and surfacing rock to 95% of maximum density per AASHO T-180 test, methods C or D.
4. Base rock to be placed in one lift, minimum of 6 inches in compacted thickness.
5. Surfacing rock to be placed in one lift, minimum of 1 1/2" in compacted thickness.
6. Soft or spongy subgrade shall be removed, and the excavation backfilled with approved subgrade materials or base rock compacted to 95% of maximum density as directed by the Engineer.
7. Place all rock in accordance with section 304 of OSHC Specifications.
8. Sprinkle with water as necessary for compensation and dust control.
9. Protect structures from damage when placing and spreading rock.
10. Engineer to set centerline blue tops for finished surfacing rock at intervals not to exceed 50-feet.
11. Finish rock courses accurately to lines and grades required by plans, and by cross sections shown on Standard Details.
12. Rocking to be approved by Engineer prior to paving.

j. Soil Sterilant

1. Required only where streets are to be improved adjacent to existing curbs, and where a bid item is provided for soil sterilant in the project documents.
2. Following rocking of streets, apply soil sterilant at manufacturer's recommended rates adjacent to curbs and not less than one foot out from curb.
3. Sterilant to be placed to 12" behind curbs, only where sidewalks are to be constructed adjacent thereto.
4. Protect adjacent vegetation from damage when applying sterilant.

k. Asphaltic Concrete Pavement

1. Pave only after engineer approves rock surface, during dry weather, and when temperature is at least 40 degrees F and rising.
2. Machine lay and compact asphalt concrete paving in conformance with OSHC Specifications, Sections 401.01 through 401.49.
3. City's right to require copy of asphaltic concrete mix design on suspect material.
4. City's right to undertake core, density and extraction tests on pavement laid, and to reject pavement not conforming to specifications.
5. Cut edges of existing pavement clean and straight and apply tack coat, where new pavement will join.
6. Apply tack coat to manhole frames, valve boxes, curbs, and joints, with other pavements.
7. Adjust all rims of manholes, catch basins, valve boxes, etc. to conform to finished pavement grade; no such structures shall be paved over.
8. Gutter pavement to conform to required exposures for standard curb and drop curb.
9. Feather pavement apron down 1" to meet catch basin rims.
10. Blend pavement in at intersections and structures as directed.
11. Finished pavement thickness to be 2 1/2" of compacted asphaltic concrete; compact mix to at least 92% of theoretical relative maximum of density per OSHC standard procedures.
12. Tolerance on finished pavement grade and cross section is a maximum of 1/2" in any 16-foot run, providing no drainage pockets occur.
13. Pavement surface to be smooth, uniform, well-sealed.
14. Protect new pavement against traffic until it is set.
15. Maintain barricades, warning signs and flagmen for safety during construction.
16. All Paving subject to approval of City.

1. Surface Restorations

1. Conform to Standard Details for classifications of surface restorations required.
2. Underground contractor within new street improvement area required to restore subgrade to original condition unless project documents specify otherwise.
3. Restore any damaged or disturbed surface to equal original conditions or better.
4. Includes replacement of pavements, curbs, walks, gravelled surfaces, lawns, landscaped areas, etc.
5. Comply with permit requirements by governing authority for surface restorations on public right-of-ways.
6. Comply with conditions of easements when work is performed on private properties.
7. Complete surface replacements as soon as practical after trenches have been backfilled and thoroughly compacted.
8. Bring all utility appurtenances such as valve boxes, manhole rims, etc. within resurfacing areas to match finished grade.
9. Provide traffic control, barricades, flagmen, etc. for safety during work on public right-of-ways.
10. Any resurfaced areas which settle shall be promptly restored by Contractor during the one year guarantee period for which he shall maintain the work.
11. Blend finished surfaces in neatly to match adjacent surfaces.
12. Workmanship for gravel and pavement surface replacements to conform to applicable specifications hereinbefore for rock and paving.
13. Replace disturbed lawns, landscaped areas, etc. to satisfaction of owner.
14. All surface restoration work subject to approval of the City.

6.300 SANITARY SEWERS DESIGN STANDARDS

a. All sanitary sewers shall be designed for gravity flow of sewage only.

b. All sanitary sewers shall conform to the State of Oregon, Department of Environmental Quality Regulations.

c. Where possible sanitary sewers shall be designed to flow by gravity to an existing sewer without sewage lift stations.

d. Design Period In general, sewer systems should be designed for the estimated ultimate tributary population. Similarly, consideration should be given to the maximum anticipated capacity of institutions, industrial parks, commercial development, etc.

e. Design Factors In determining the required capacities of sanitary sewers the following factors should be considered:

1. Maximum hourly sewage flow.
2. Additional maximum sewage or waste flow from industrial plants.
3. Ground water infiltration.
4. Topography of area.
5. Location of sewage treatment plant.
6. Depth of excavation.
7. Pumping requirements.

f. Design Capita Flow

1. Per Capita Flow  
New sewer systems shall be designed on the basis of an average daily per capita flow of sewage of not less than 100 gallons per day. This figure is assumed to cover dry weather flow, but an additional allowance should be made where conditions are unfavorable. Generally, the sewers should be designed to carry, when running full, not less than the following daily per capita contributions of sewage, exclusive of sewage or other waste flow from industrial plants.

- (a) Laterals and Sub-main Sewers  
400 gallons.
- (b) Main, Trunk and Outfall Sewers  
250 gallons.
- (c) Interceptors

Normally no interceptor shall be designed for less than 350 percent of the estimated average dry weather flow.

g. Details of Design and Construction

1. Minimum Size

No sewer main shall be less than 8-inches in diameter except as noted in the DEQ regulations.

h. Depth In general sewers shall be sufficiently deep so as to receive sewage from basements and to prevent freezing. No sewer should be less than 2.5 feet deep.

i. Slope

Feet	<u>Sewer Size</u>	Minimum Slope in Feet Per 100
	6-inch	0.60
	8-inch	0.40
	10-inch	0.28
	12-inch	0.22
	14-inch	0.17
	15-inch	0.15
	16-inch	0.14
	18-inch	0.12
	21-inch	0.10
	24-inch	0.08
	27-inch	0.067
	30-inch	0.058
	36-inch	0.046

j. Alignments All sewers shall be laid straight.

k. Increasing Size When a smaller sewer joins a larger one, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for securing these results is to place the 0.8 depth point of both sewers at the same elevation.

l. High Velocity Protection Where velocities greater than 15-feet per second are attained, special provisions shall be made to protect against displacement by erosion & shock.

m. Manholes

1. Location

Manholes shall be installed at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 500-feet. Cleanouts may be used only at the end of laterals no greater than 250-feet in length.

2. A drop pipe should be provided for a sewer entering a manhole at an elevation of 24-inches or more above the

manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24-inches, the invert should be filleted to prevent solids deposition.

3.       Diameter  
The minimum diameter of manholes shall be 48-inches; larger diameters are preferable.
4.       Flow Channel  
The flow channel through manholes should be made to conform in shape and slope to that of the sewers.
5.       Watertightness  
Watertight manhole covers are to be used wherever the manhole tops may be flooded by street runoff or high water. All manholes shall be watertight.
6.       Step  
All manholes shall be equipped with permanent steps as later specified.

n.       Protection of Water Supplies

1.       Water Supply Interconnections  
There shall be no physical connection between a public or private potable water supply system and a sewer, or appurtant thereto which would permit the passage of any sewage or polluted water into the potable supply.
2.       Horizontal Separation  
Sewers shall be laid at least 10-feet, horizontally, from any existing or proposed water main.
3.       Vertical Separation  
Whenever it is necessary for sewer and water lines to cross each other, the sanitary sewer shall either be located 18-inches or more below the water pipe, or be constructed of one 18-foot section of ductile iron water pipe centered at the point of crossing.

o.       Location of Service Laterals

1.       Service laterals shall be extended to the edge of the property to be served and shall be sufficiently deep to provide gravity service.
2.       Ends of all unused service laterals to be marked by a 2x4 as shown in Standard Details.

6.310 MATERIALS

a.       Trench Backfill



1. Trench Backfill Zones Trench backfill is segregated into the following zones:

See Pipe Trench Detail on Plans.

- (a) Pipe Embedment
- (b) Backfill in Pipe Zone
- (c) Classified backfill above Pipe Zone

2. Pipe Embedment Material Pea gravel, reject 3/4-inch minus crushed rock, turkey grit; or native excavated material approved by Engineer prior to use.

3. Backfill Material in Pipe Zone Same as embedment material.

4. Classified Backfill Material above Pipe Zone

(a) Classes of Backfill

(1) Class I Granular Backfill: Imported crushed rock; crusher screenings, clean bank-run gravel, pea rock or sand meeting the following minimum requirements:

(aa) One hundred percent (100%) passing 6-inch sieve (U.S.) and 5-15 percent passing No. 200 mesh (U.S.).

(bb) To be free of deleterious matter.

(cc) Use under all paved roadways or paved driveways.

(2) Class II Granular Backfill

(aa) Native excavated material free of vegetable matter & debris.

(bb) Individual particles less than one-third trench width in greater dimension.

(cc) Class III used in gravel road shoulders, lawns, gardens, gravel drives, etc.

(dd) Class IV used in unimproved areas or as directed by Engineer.

b. Sewer Pipe (Including service laterals)

1. Asbestos-Cement Gravity Sewer Pipe

- (a) Conform to ASTM Specifications C-427, Type II.
- (b) Classes of pipe to be adequate to support earth loads plus any imposed loads.
- (c) Couplings--"Ring-Tite" of "Fluid-Tite" manufactured by Johns-Manville or Certain-Teed, or equal.

2. Concrete Gravity Sewer Pipe

- (a) Conform to ASTM C-14 extra strength or ATM C-76, bell and spigot with rubber gasket type joints.
- (b) Joints to conform to ASTM C-443.
- (c) All pipe to have cured one week prior to delivery at job site.

3. Cast Iron Sewer Pipe

- (a) Class 150, conformation to AWWA C-106 or "No-Hob", conforming to Cast Iron Soil Pipe Institutes Standard 301-68T.
- (b) Joints - mechanical, "push-on" of Caulder Coupling.

4. Poly-Vinyl-Chloride (PVC) Gravity Sewer Pipe

- (a) Conform to ASTM D-3034 SDR 35 bell and spigot with rubber gasket type joints.
- (b) Joints to conform to ASTM D-3212.
- (c) Couplings--"Ring-Tite" or Fluid-Tite", manufactured by Johns-Manville or Certain Teed or equivalent.

5. Fittings

- (a) Fittings mean wyes, tees, or other special connections as shown.
- (b) Fittings: of same material, type, class, and grade as sewer pipeline in which installed.
- (c) Conform to same specifications as sewer pipe.

c. Manholes1. Risers and Tops

(a) Precast-reinforced concrete conforming to ASTM C-478, with following limitations:

- (1) Risers to be 48-inch diameter.
- (2) Tops to be eccentric cone except where insufficient headroom necessitates the use of flat tops.
- (3) Manhole steps provided - where precast riser sections are holed through for insertion of steps, upon installation of steps, thoroughly fill and compact hole with nonshrink grout inside and out, so as to provide a nonleaking connection.

2. Concrete Base

(a) Cast-in-place, monolithic concrete conforming to following specifications:

- (1) Concrete
  - (aa) Cement content minimum 6 sacks per cubic yard and minimum 28-day compressive strength of 3,000 psi.
  - (bb) Aggregate - Conform to ASTM C-33, maximum size 1 1/2 inch.
  - (cc) Portland Cement - Conform to ASTM C-150, Type II.
  - (dd) Water - Fresh, clean, free of deleterious matter.
  - (ee) Proportioning, mixing, and placing concrete - Conform to ASTM C-94.
  - (ff) Maximum Water - Cement Ratio, six (6) gallons per sack, slump not to exceed 4-inches.
  - (gg) Admixtures, - Conform to ASTM C-260 or C-494, do not

use calcium chloride or any admixture not approved by Engineer.

(b) Precast manhole bases meeting the above requirements and meeting all dimensional requirements may be used.

3. Mortar for Joints of Manholes

(a) Proportions: 1 part Portland Cement (Type II) and 2 parts clean, well-graded, concrete sand of which 100 percent (100%) passes a No. 8 (U.S.) mesh sieve.

(b) Use not more than 10 percent (10%) by weight cement hydrate lime of consistency to be readily applied.

(c) Use no mortar mixed longer than 30 minutes.

4. Precast Ring Extensions

(a) Use standard precast concrete rings or bricks and mortar.

5. Manhole Frames and Covers

(a) As shown on plan details or as approved by Engineer.

(b) Iron castings conform to ASTM A-48 (Grade 30).

(c) Castings be planed and ground to insure flat and true surfaces at contact between cover and frame.

(d) Covers to be true and rest within frame at all points.

6. Manhole Steps

(a) Hot rolled-bar steel, ASTM A-107, Grade 5, or ASTM A-15 intermediate grade.

(b) Hot galvanized after fabrication conforming ASTM A-123.

d. Cleanouts

1. Pipe, fittings and joints same as specifications for pipe.

2. Castings

- (a) As shown on standard detail.
- (b) Conform to ASTM A-48 (Grade 30).

## 6.320 WORKMANSHIP

### a. Excavation and backfill

#### 1. General

- (a) Confine operations to right-of-way provided; avoid encroachment on or damage to private property or existing utilities unless prior arrangements have been made.
- (b) All streets, structures, and utilities to be left in condition equal to or better than original.
- (c) Where damage occurs and cannot be repaired or replaced, Contractor shall purchase and install new material which is satisfactory to Owner.

#### 2. Excavation

- (a) Locate Existing Utilities.
  - (1) Before digging, notify appropriate utility companies, locate all existing buried utilities if necessary to avoid damage during trench excavation.
- (b) Opening Trenches.
  - (1) Excavate to depth required for alignment and grade.
  - (2) Line and grade to be provided with stakes at not more than 50-foot intervals.
  - (3) Excavate to allow minimum of 4-inches of bedding beneath pipe.
- (c) Shoring and Bracing.
  - (1) Provide shoring and bracing where needed to protect work, property, utilities, pavements, etc., and to provide safe working conditions.
  - (2) Shall be of Contractor's design.
  - (3) Comply with local and state

safety codes.

(4) Failure of shoring, sheeting, and bracing, resulting in damages shall be Contractor's responsibility.

(d) Disposal of Excavated Materials.

(1) Remove and dispose of excess material.

(2) Remove excavated materials unsuitable for backfill.

(3) Store material suitable for backfill in neat pile adjacent to excavation where space allows.

(4) Interfere with traffic and land use as little as possible.

(5) Where trench is adjacent to road shoulder, place excavated materials on side of ditch away from road.

3. Pipe Embedment

(a) Embedment material to extend across full width of trench and 4-inches below bottom of pipe barrel, as shown on the detailed plans.

(b) Where in Engineer's opinion, unsuitable native embedment materials exist, imported embedment material to be hauled to site.

(c) Pipe to be laid directly on embedment materials.

(1) Place embedment material in trench, compacting and shaping to provide continuous support for pipe between couplings.

(2) Dig coupling holes to permit assembly.

(3) After pipe is in place, place embedment materials to 1/6 pipe height and thoroughly compact by spading, tamping and walking material into place.

4. Trench Backfill in Pipe Zone

(a) Backfill in Pipe Zone.

(1) Place selected material to

limits shown on the detailed plans.

(2) Backfill simultaneously on both sides of pipe.

(3) Take care that compaction is sufficient to prevent lateral movement of pipe.

5. Trench Backfill Above Pipe Zone

(a) Class I or Class II Granular Backfill

(1) Under paved roadways, paved drives, sidewalks and curbs.

(2) Place imported material in trench; do not let material fall directly on pipe.

(3) Compact by ramming or by mechanical compaction in 6-inch lifts or other approved method to a degree which prevents subsequent settlement.

(b) Class III - Native Backfill

(1) Use under gravel drives, improved yards, road shoulders, etc.

(2) Place native excavated material in ditch; do not let materials fall directly on pipe.

(3) Compact by ramming, vibration or a combination thereof to obtain a relative dry density greater than 85% of in-place density of surrounding undisturbed soil.

(c) Class IV Native Backfill

(1) Use in unimproved areas.

(2) Place native material in trench; do not let material fall directly into trench.

(3) Compact by wheel travel of heavy equipment until settlement ceases.

(4) Refill trench with remaining material and compact as above.

(5) Grade to a neat appearing surface.

(d) Maintenance of trench Surface

(1) Restore ground surface to original condition and elevation.

(2) Maintain such surfaces for 1-year following acceptance of work.

(3) In unimproved land, where landowner permits, backfill may be mounded over trench to accommodate subsequent settlement and later graded flat.

b. Pipe Work

1. Handling Pipe and Accessories

(a) Handle with care to avoid damage.

(b) Do not drop or bump.

(c) Unload at site opposite or near place where pipe is to be laid.

2. Line and Grade

(a) Engineer to set grade stakes on offset line at maximum spacing of 50-feet.

(b) Engineer to furnish Contractor with elevations and cuts from offset stakes.

(c) Tolerable variance from established line and grade is 1/2 inch for line and 1/4 inch for grade providing a level or reversed slope does not occur.

3. Laying Sewer Pipe

(a) Lay no pipe before Engineer examines and passes it for use.

(b) Remove rejected pipe from site promptly.

(c) Place embedment material prior to laying pipe.

(d) Lower all pipe and fittings into trench in a manner to prevent damage to pipe.

(e) Shape and grade trench to established line and grade.

(f) Form bell holes properly in trench bottom



so that pipe bears solidly upon entire length of barrel.

(g) Lay pipe to uniform line and grade, bell ends upgrade.

(h) Clean interior of pipe of foreign material before laying next pipe.

(i) Do not lay pipe in water or on frozen trench bottom or when weather or trench conditions in Engineer's opinion are unfavorable.

(j) Pipe floated out of place shall be removed and relaid as Engineer directs.

(k) Plug all pipe openings when work is suspended.

(l) Place pipe coupling not more than 2-feet out from base of any manhole.

4. Jointing

(a) Comply with pipe and joint manufacturer's recommendations.

5. Sewer Service Laterals

(a) Protect pipe and fittings during backfilling operations.

(b) Engineer to establish depths and locations for service extension.

(c) Lay pipe with minimum grade of 1/4 inch per foot unless otherwise ordered by Engineer.

(d) Plug upper end service extension with watertight plug.

(e) Plug to be removable without breaking pipe.

(f) Mark end of service extension with 2x4 inch wood pole set as detailed.

6. Leakage Testing

(a) All pipe and manholes to be leak tested.

(b) Contractor to use approved low-pressure air test. Air loss not to exceed .0030 cubic feet per minute per square foot of internal pipe surface. Test in accordance with standard test

bound herein.

(c) Temporarily plug pipes as required for air test.

(d) Manholes to have no visible leakage under high groundwater conditions.

(e) Signal statement of test compliance to be filed with City and DEQ by a registered Engineer.

c. Manholes

1. Concrete bases

(a) Conform to dimension shown on plans for the specific type of manhole.

(b) Minimum of 6-inches in thickness.

(c) Minimum projection of 6-inches outside of outside diameter of riser.

(d) Use walls of excavation covered with suitable water-proof membrane as form for base.

(e) Keep excavation dewatered at all times while working on manhole bases.

(f) Keep fresh concrete from contact with groundwater.

(g) Forming with plywood or other forming material will be required if contractor cannot demonstrate ability to construct consistently watertight manhole bases by normal means.

(h) Allow not more than 6-foot free fall in placement of concrete. Use elephant trunk or approved baffles.

(i) Adequately vibrate, spade, rod, walk, etc. wet concrete to obtain a dense and compact base.

(j) Allow concrete to cure minimum of 24-hours in moist condition prior to backfilling.

(k) Channels

(1) Conform accurately to sewer grade.

(2) Bring to well-rounded, smooth junctions.

(3) Carry sides of channels vertically to crown elevation of pipe and round lip.

(4) Finish concrete shelf between channels smoothly and with sufficient slope to drain.

(5) Lay pipe through manhole where grades permit, break out top of pipe, mortar and finish smoothly.

2. Risers and Tops

(a) Set first riser section in fresh base concrete and work concrete to obtain a watertight seal between riser and base.

(b) Riser not to bear directly on any pipe.

(c) Wet thoroughly all joints or connections between precast elements, fill with mortar, and finish inside and out to insure watertightness.

(d) Place precast sections vertically so ladder rungs are aligned.

(e) Complete manhole; rigid, true to dimension, and watertight.

3. Extension Rings

(a) Use precast extension rings on all manholes in streets, roads, where surface grade may change or as Engineer directs.

(b) Construct in accordance with Standard Manhole Details as to height determined by Engineer.

(c) Not to exceed 12-inches in height.

4. Manhole Frames and Covers

(a) Set in bed or mortar.

(b) Top of cover to conform accurately with surrounding grade unless otherwise directed by Engineer.

(c) Covers in roadways to be set and adjusted just prior to paving of street.



K & C FACTORS FOR SANITARY SEWER AIR TESTING

LENGTH (FT)	4-INCH		6-INCH		8-INCH		10-INCH	
	C	K	C	K	C	K	C	K
1	0.0015	0.18	0.0023	0.40	0.0031	0.70	0.0039	1.10
2	0.0030	0.35	0.0047	0.79	0.0062	1.41	0.0078	2.20
3	0.0046	0.53	0.0070	1.19	0.0093	2.11	0.0116	3.30
4	0.0061	0.70	0.0093	1.58	0.0124	2.82	0.0155	4.40
5	0.0076	0.88	0.0116	1.98	0.0155	3.52	0.0194	5.50
6	0.0092	1.06	0.0140	2.38	0.0186	4.22	0.0233	6.60
7	0.0107	1.23	0.0163	2.77	0.0217	4.93	0.0272	7.70
8	0.0122	1.41	0.0186	3.17	0.0249	5.63	0.0311	8.80
9	0.0138	1.58	0.0210	3.56	0.0280	6.34	0.0349	9.90
10	0.0153	1.76	0.0233	3.96	0.0311	7.04	0.0388	11.00
20	0.0306	3.52	0.0466	7.92	0.0621	14.08	0.0776	22.00
30	0.0458	5.28	0.0699	11.88	0.0932	21.12	0.1165	33.00
40	0.0611	7.04	0.0932	15.84	0.1242	28.16	0.1553	44.00
50	0.0764	8.80	0.1165	19.80	0.1553	35.20	0.1941	55.00
60	0.0917	10.56	0.1398	23.76	0.1864	42.24	0.2329	66.00
70	0.1070	12.32	0.1630	27.72	0.2174	49.28	0.2717	77.00
80	0.1222	14.08	0.1863	31.68	0.2485	56.32	0.3106	88.00
90	0.1375	15.80	0.2096	35.64	0.2795	63.36	0.3494	99.00
100	0.1528	17.60	0.2329	39.60	0.3106	70.40	0.3882	110.00
200	0.3056	35.20	0.4658	79.20	0.6212	140.80	0.7764	220.00
300	0.4584	52.80	0.6988	118.80	0.9318	211.20	1.1646	330.00
400	0.6112	70.40	0.9317	158.40	1.2424	281.60	1.5528	440.00
500	0.7640	88.00	1.1646	198.00	1.5530	352.00	1.9410	550.00
600	0.9168	105.60	1.3975	237.60	1.8636	422.40	2.3292	660.00
700	1.0696	123.20	1.6304	277.20	2.1742	492.80	2.7174	770.00
800	1.2224	140.80	1.8634	316.80	2.4848	563.20	3.1056	880.00
900	1.3752	158.40	2.0963	356.40	2.7954	633.60	3.4938	990.00
1000	1.5280	176.00	2.3292	396.00	3.1060	704.00	3.8820	1100.00

EXAMPLE # 1

To Air Test a system consisting of 435 feet of 8-inch and 100 feet of 4-inch:

		K	C
8-inch:	(400 feet)	281.60	1.2424
	(30 feet)	21.12	0.0932
	(5 feet)	3.52	0.0155
	435 feet	306.24	1.3511
4-inch:	100 feet	17.60	0.1528
	TOTAL	323.84	1.5039

$$\text{time allowed} = \frac{K \text{ Total}}{C \text{ Total}} = \frac{323.84}{1.5039}$$

$$= 215.33 \text{ seconds} \quad \leftarrow \text{ answer}$$



6.400 WATER SYSTEM INSTALLATIONS - DESIGN STANDARDSa. Base system design upon following usages:

1. 5 gpm per residential house.
2. 1 gpm per person.
3. 1,000 gpm per fire hydrant.

b. Minimum Sizing

1. 6-inch pipe for unsupported runs not exceeding 800 feet.
2. 4-inch pipe for cul-de-sacs or where no future extension is possible-length not to exceed 400 feet.
3. 2-inch pipe for cul-de-sacs or where no extension is possible-length not to exceed 200 feet.

c. Minimum Pressure

1. Not less than 30 psi at any curb stop during maximum flow conditions including open hydrants.

d. Looped System

1. Lines must be looped where City so specified.
2. Hydrants or blow-offs 2-inch in diameter to be provided at all dead ends.

e. Valves

1. Same size as pipeline.
2. Maximum distance of two blocks between valves, but not to exceed 1,200 feet.
3. Three-way interconnection to be valved two ways.
4. Four-way interconnection to be valved three ways.
5. Typical location opposite extended property lines.

f. Fire Hydrants

1. Space as determined by Fire Chief.

g. Minimum Cover

1. Distribution pipes - - 36 inches.

2. Service connections - - 30 inches.

h. Service Connections

1. All services to have corporation stop, shut-off valve and box per Standard Details herein.

2. Minimum Service Line Size.

- (a) 1-inch diameter for one house.

3. Meter location if required by City - adjacent to property line of property served.

i. Plans submitted to City for Review to include:

1. Pipe locations and sizes.

2. Profile of ground surface and pipelines.

3. Location of all other existing or planned installations including roads, sidewalks, lots sewer, overhead and underground telephone and electricity.

4. Location and size of all service connections, valves, hydrants, and blow-off and any special installations.

j. Specifications Submitted to City for Review to include:

1. Description of all materials to be used in water system.

2. Description of work to be done and workmanship required.

k. Locations of Installations

1. Distribution Pipe.

- (a) Locate per typical utility location detail, Standard Detail II-5.

2. Valves.

- (a) Locate on property lines extended.

3. Meter and Meter Box, if required by the City.

- (a) Locate on or adjacent to property line.

4. Fire Hydrants -- as determined by Fire Chief.

6.410 MATERIALS

a. Trench Backfill



1. Trench Backfill Zones Trench backfill is segregated into the following zones. See Pipe Trench Details on Plans.

- (a) Pipe Embedment.
- (b) Backfill in Pipe Zone.
- (c) Classified backfill above Pipe Zone.

2. Pipe Embedment Material

- (a) Pea gravel, reject 3/4-inch minus crushed rock, turkey grit, or native excavated material approved by the Engineer before use.

3. Backfill Material in Pipe Zone

- (a) Same as embedment material.

4. Classified Backfill Material above Pipe Zone

- (a) Classes of Backfill

- (1) Class I Granular Backfill: Imported crushed rock, crusher screenings, clean bank-run gravel, pea rock or sand meeting the following minimum requirements:

- (aa) One hundred percent (100%) passing 6-inch sieve (U.S.) and 5-15 percent passing No. 200 mesh (U.S.).

- (bb) To be free of deleterious matter.

- (cc) Use under all paved roadways or paved driveways.

- (2) Class II Granular Backfill

- (aa) Native excavated materials meeting requirements for Class I material above.

- (bb) To be approved by Engineer before use.

- (cc) Use under paved roadways or paved driveways.

- (3) Class III and IV Native Backfill

(aa) Native excavated material free of vegetable matter and debris.

(bb) Individual particles less than one-third trench width in greater dimension.

(cc) Class III used in gravel road shoulders, lawns gardens, gravel drives, etc.

(dd) Class IV used in unimproved areas or as directed by Engineer.

b. Distribution Pipe and Fitting

1. Ductile iron water pipe conforming to AWWA C-150 or AWWA C-151, 4-inch and smaller to be Class 52; 6-inch through 24-inch to be minimum Class 50.
2. Joint - mechanical or push-on.
3. Fittings - cast iron conforming to AWWA C-110 and C-111, Class 150 gray iron fittings, mechanical or flange joint.

c. Couplings

1. Where required to be "Dresser", "Smith-Blair" or approved equal.
2. Size and type necessary for proper connection.

d. Gate Valves—larger than 2-inch

1. Brass-fitted cast iron conforming to AWWA C-500, Class 150 equal to Mueller non-rising stem.
2. Open counter clockwise by a 2-inch square operating nut.
3. Valve Boxes in streets, driveways, sidewalks, etc. - properly protected steel, cast iron or concrete with cast iron lines with formed top to receive insert type cover labeled "W" manufactured by Rich or Brooks Products Co. or equal.
4. Valve Boxes in unimproved areas - section of PVC pipe with slip-on cap as detailed.

e. Gate Valves - 2-inch

1. Inside screen, non-rising stem, solid wedge, screw-in bonnet conforming to AWWA C-500.
2. Main line valves located in road right-of-ways to have 2-inch square operating nut, open counter clockwise.

f. Service Connections

1. Copper Tube Services.
  - (a) Corporation stops - shall conform to AWWA C-800 and to be Hayes Model 5204 or 4200 or approved equal.

(b) Service saddles where required - 2-inch wide stainless steel band with ductile iron body conforming to ASTM A-536 as manufactured by Romae Industries or approved equal.

(c) Direct top - for services 1-inch and smaller; use non-threaded self-sealing corporation stops equivalent to "Hayes-Seal" as manufactured by Hayes, or approved equal.

(d) Service Pipe - 1-inch and smaller to be copper Type K conforming to ASTM B-88. Service lines over 1-inch to be galvanized steel conforming to ASTM A-120. All pipe to have pressure rating no less than 150 psi and to conform to AWWA and Oregon State Plumbing Codes.

(e) Shut-off Valves - Solid bronze conforming to AWWA standards as manufactured by Hayes or approved equal.

(f) Shut-off boxes when no meter is required - section of 2-inch PVC water pipe with slip-on cap, as detailed.

(g) Meter boxes when meter is required - use precast concrete meter boxes with cast iron lids.

(h) Water meters where required - disc type Trident 8 or approved equal.

g. Blowoff

1. Pipe - Schedule 40, galvanized iron and fittings.
2. Valve - 150 psi rated, bronze, screwed ends, rising stem type gate valve with hand wheel.
3. Valve box - as specified in paragraph g above.
4. Anchor rods - number and size to be specified by Engineer.
5. Use brass coupling between main and valve.

h. Fire Hydrants

1. Hydrant - Pacific State Model per City of Hines Standards and as required by the City Fire Chief.

6.420 WORKMANSHIP

a. Excavation and Backfill

1. General

(a) Confine operations to right-of-way provided; avoid encroachment on or damage to private property or existing utilities unless prior arrangements have been made.

(b) All streets, structures, and utilities to be left in condition equal to or better than original.

(c) Where damage occurs and cannot be repaired or replaced, Contractor shall purchase and install new material which is satisfactory to owner.

(d) Installation and workmanship to conform to AWWA C-603.

2. Excavation

(a) Locate existing utilities.

(1) Before digging, notify appropriate utility companies, locate all existing buried utilities if necessary to avoid damage during trench excavation.

(b) Opening Trenches.

(1) Excavate to depth required for alignment and grade.

(2) Excavate to allow minimum of 2-inches of bedding beneath pipe.

(c) Shoring and Bracing.

(1) Provide shoring and bracing where needed to protect work, property, utilities, pavements, etc., and to provide safe working conditions.

(2) Shall be of Contractors design.

(3) Comply with local and state safety codes.

(4) Failure of shoring, sheeting, and bracing, resulting in damage shall be Contractor's responsibility.

(d) Disposal of excavated materials.

(1) Remove and dispose of excess material.

(2) Remove excavated materials

unsuitable for backfill.

(3) Store material suitable for backfill in neat pile adjacent to excavation where space allows.

(4) Interfere with traffic and land use as little as possible.

(5) Where trench is adjacent to road shoulder, place excavated materials on side of ditch away from road.

### 3. Pipe Embedment

(a) Embedment material to extend across full width of trench and 2-inches below bottom of pipe barrel, as shown on the detail plans.

(b) Where in engineer's opinion, unsuitable native embedment materials exist, imported embedment material to be hauled to site.

(c) Pipe to be laid directly on embedment materials.

(1) Place embedment material in trench, compacting and shaping to provide continuous support for pipe between couplings.

(2) Dig coupling holes to permit assembly.

(3) After pipe is in place, place embedment materials to  $1/6$  pipe height and thoroughly compact by spading, tamping and walking material into place.

### 4. Trench Backfill in Pipe Zone

(a) Backfill in Pipe Zone

(1) Place selected material to limits shown on the detailed plans.

(2) Backfill simultaneously on both sides of pipe.

(3) Take care that compaction is sufficient to prevent lateral movement of pipe.

### 5. Trench Backfill Above Pipe Zone

## (a) Class I or Class II Granular Backfill

(1) Under paved roadways, paved drives, sidewalks and curbs.

(2) Place imported material in trench; do not let material fall directly onto pipe.

(3) Compact by ramming or by mechanical compaction in 6-inch lifts or other approved method to a degree which prevents subsequent settlement.

## (b) Class III - Native Backfill

(1) Use under gravel drives, improved yards, road shoulders, etc.

(2) Place native excavated material in ditch; do not let materials fall directly on pipe.

(3) Compact by ramming, vibration or a combination there-of to obtain a relative dry density greater than 85% of in-place dry density of surrounding undisturbed soil.

## (c) Class IV Native Backfill

(1) Use in unimproved areas.

(2) Place native material in trench; do not let material fall directly into trench.

(3) Compact by wheel travel of heavy equipment until settlement ceases.

(4) Refill trench with remaining material and compact as above.

(5) Grade to a neat appearing surface.

b. Pipe Work

1. All materials must be handled in the manufacturer-approved manner.

2. Install all pipe, valves, hydrants and appurtenances in accordance with AWWA C-603 and standard details herein.

3. Reaction blocking to be installed in accordance with .

AWWA C-603 and the standard details.

4. Joint Deflection - not to exceed manufacturer's recommendations.

5. Hydrostatic tests at 150 psi to be made on all pipe after backfilling and after service connections are made. Pressure must not drop over 75 psi in 1 hour. Test is to be made in conformance with AWWA C-603, Section 19. Leakage allowance as bound herein. Conformance with specified leakage allowances is mandatory for acceptance of system by the City. Signed statement of test compliance to be filed with City by a registered Engineer.

6. All pipe to be flushed and disinfected in conformance with AWWA C-601.

7. Clean up all public properties, rights-of-way or easements, and any private properties equal to original conditions.

c. Hydrants

1. After pipeline is tested, flushed and disinfected, Contractor to notify Fire Chief.

2. All hydrants to be thoroughly painted after installation.

3. All hydrants to be set plumb and with ground flange set at ground level.

4. All hydrants to be properly blocked, bolted or otherwise restrained against blow off.



STANDARD WATER PIPE LEAKAGE ALLOWANCE  $L = \frac{ND \cdot P}{5500}$

ND = PRESSURE FACTORS - WATER = 5500

Joints	2" D	4" D	6" D	8" D	10" D	12" D	14" D	16" D	18" D
1	.00036	.00073	.00109	.00145	.00182	.00218	.00255	.00291	.00327
2	.00073	.00145	.00218	.00291	.00364	.00436	.00509	.00582	.00655
3	.00109	.00218	.00327	.00436	.00545	.00655	.00764	.00873	.00982
4	.00145	.00291	.00436	.00582	.00727	.00873	.01018	.01164	.01309
5	.00182	.00364	.00545	.00727	.00909	.01091	.01273	.01455	.01636
6	.00218	.00436	.00655	.00873	.01091	.01309	.01527	.01745	.01964
7	.00255	.00509	.00764	.01018	.01273	.01527	.01782	.02036	.02291
8	.00291	.00582	.00873	.01164	.01455	.01745	.02036	.02327	.02618
9	.00327	.00655	.00982	.01309	.01636	.01964	.02291	.02618	.02945
10	.00364	.00727	.01091	.01455	.01818	.02182	.02545	.02909	.03273
20	.00727	.01455	.02182	.02909	.03636	.04364	.05091	.05818	.06545
30	.01091	.02182	.03273	.04364	.05455	.06545	.07636	.08727	.09818
40	.01455	.02909	.04364	.05818	.07273	.08727	.10182	.11636	.13091
50	.01818	.03636	.05455	.07273	.09091	.10909	.12727	.14545	.16364
60	.02182	.04364	.06545	.08727	.10909	.13091	.15273	.17455	.19636
70	.02545	.05091	.07636	.10182	.12727	.15273	.17818	.20364	.22909
80	.02909	.05818	.08727	.11636	.14545	.17455	.20364	.23273	.26182
90	.03273	.06545	.09818	.13091	.16364	.19636	.22909	.26182	.29455
100	.03636	.07273	.10909	.14545	.18182	.21818	.25454	.29091	.32727
200	.07273	.14545	.21818	.29091	.36364	.43636	.50909	.58182	.65455
300	.10909	.21818	.32727	.43636	.54545	.65455	.76364	.87273	.98182
400	.14545	.29091	.43636	.58182	.72727	.87273	1.01818	1.16364	1.30909
500	.18182	.36364	.54545	.72727	.90909	1.09091	1.27273	1.45455	1.63636
600	.21818	.43636	.65455	.87273	1.09091	1.30909	1.52727	1.74545	1.96364
700	.25454	.50909	.76364	1.01818	1.27273	1.52727	1.78182	2.03636	2.29091
800	.29091	.58182	.87273	1.16364	1.45455	1.74545	2.03636	2.32727	2.61818
900	.32727	.65454	.98182	1.30909	1.63636	1.96364	2.29091	2.61818	2.94545

Example: 123 joints 12" pipe, starting pressure 150 psi,  
after 1 hour P = 139 psi, Avg P =  $\frac{150+138}{2} = 144$  psi

P.F. for 100 joints = .21818

20 joints = .04364

3 joints = .00655

Total  $\frac{123}{3}$  joints = .26837 X 12 psi =

3.22 gallons allowable loss in one hour

L = Allowable leakage in one hour  
D = Diameter, inches  
N = Number of joints  
P = Average test pressure

DOCUMENTS  
LOCAL  
Hines  
(1980)



## Department of Land Conservation and Development

1175 COURT STREET N.E., SALEM, OREGON 97310 PHONE (503) 378-4926

March 12, 1980

The Honorable H. Lee Wallace  
Mayor, City of Hines  
P.O. Box 336  
Hines, OR 97738

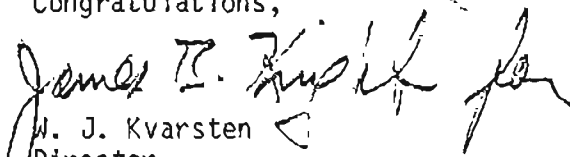
Dear Mayor Wallace:

It gives me a great deal of pleasure to confirm that the Land Conservation and Development Commission, on February 1, 1980 officially acknowledged the comprehensive plan and implementing ordinances of the City of Hines as being in compliance with the Statewide Planning Goals.

The acknowledgment signifies an historic step for the City's land use planning program. By effectively planning ahead for the wise use of your valuable land, you have set an excellent example for others to follow.

I would like to commend the city officials, staff and citizens of your community for their hard work and foresight in the field of land use planning.

Congratulations,

  
W. J. Kvarsten  
Director

Enclosure

cc: Morgan, Ryan and Associates, Consultant  
Brent Lake  
Carol Smith, Coordinator  
Judge Dale White, Harney County

WJK:DB:jk  
75Z/3Z

BEFORE THE  
LAND CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF THE  
CITY OF HINES

)  
)

COMPLIANCE ACKNOWLEDGMENT  
ORDER

On September 28, 1978, the City of Hines, pursuant to ORS CH 197.251 (1) (1977 Replacement Part), requested that its Comprehensive Plan and implementing measures, consisting of the Comprehensive Plan, adopted June, 1979; the Zoning Ordinance, adopted June 1979; and the Subdivision Ordinance, adopted June, 1979; be acknowledged by the Land Conservation and Development Commission in compliance with the Statewide Planning Goals.

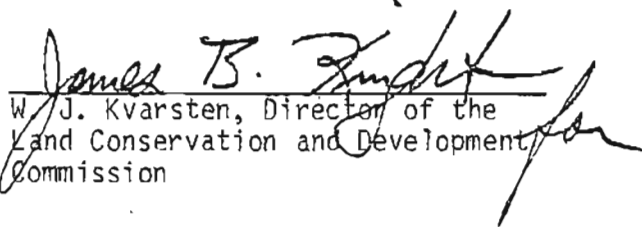
The Commission reviewed the attached written report of the staff of the Department of Land Conservation and Development on March 6, 1980, regarding the compliance of the aforementioned plan and measures with the Statewide Planning Goals. Section IV of the report and Section V of the Response to Continuance Report constitutes the findings of the Commission.

Based on its review, the Commission finds that the City's Comprehensive Plan and implementing measures comply with the Statewide Planning Goals adopted by this Commission pursuant to ORS CH 197.225 and 197.345.

Now therefore be it ordered that:

The Land Conservation and Development Commission acknowledges that the aforementioned Comprehensive Plan and implementing measures of the City of Hines are in compliance with the Statewide Planning Goals.

Dated this 13th day of March, 1980.

  
James B. Kvarsten, Director of the  
Land Conservation and Development  
Commission

BEFORE THE LAND CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF THE CITY OF HINES            )  
COMPREHENSIVE PLAN AND IMPLEMENTING        )  
MEASURES    )

CONTINUANCE  
ORDER

This matter came before the Commission on a request from the City of Hines on July 11, 1979, for acknowledgment of compliance pursuant to ORS 197.251 and the Commission Acknowledgment Rule, OAR 660-03-000 to 660-03-035. The Commission, having fully considered the City's comprehensive plan and implementing measures, comments and objections of interested persons and the report of the Department of Land Conservation and Development, now enters its:

Findings of Fact

1. The City of Hines comprehensive plan and implementing measures comply with Statewide Planning Goals 1-4, 6-9, and 11-13 for the reasons set forth in Section IV of the Department's report (dated November 22, 1979), which is attached hereto and incorporated herein.
2. The City's comprehensive plan and implementing measures do not yet comply with Statewide Planning Goals, 5, 10, and 14 for reasons set forth in Sections IV and V of the Department's report.
3. A continuance would likely enable the City to obtain an acknowledgment of compliance more expeditiously than would a denial of acknowledgment because the nature of the revision needed is minor and will not require extensive Department analysis and notice actions which are initiated when a jurisdiction resubmits its plan and implementing measures following a denial.

4. A denial of acknowledgment may seriously disrupt the City's local planning effort because a denial would likely lead to undue public loss of confidence in the use and legal effect of the City's plan and implementing measures.
5. The Department of Land Conservation and Development and the City have agreed that the additional work towards compliance with Statewide Planning Goals 5, 10, and 14 can be completed in 45 days.
6. The City of Hines had consented to a continuance of its acknowledgment request (see Appendix).

#### Conclusion

1. The comprehensive plan and implementing measures of the City of Hines require additional planning work in order to be considered by the Commission to be in compliance with the Statewide Planning Goals.
2. Additional time is necessary for the City to complete additional planning work necessary to bring its comprehensive plan and implementing measures in compliance with all Statewide Planning Goals.
3. The additional planning work on the comprehensive plan and implementing measures can reasonably be completed in 45 days.



SEP 27 1979

*Department of Economic Development*

SALEM

921 S.W. WASHINGTON STREET, PORTLAND, OREGON 97205 PHONE (503) 229-5535

September 27, 1979

Mr. Wes Kvarsten  
Land Conservation & Development Commission  
1175 Court St., N.E.  
Salem, Oregon 97310

Dear Mr. Kvarsten:

The Department of Economic Development has reviewed the city of Hines Comprehensive plan, with particular emphasis on economic development considerations. We have the following comments and recommendations related to plan acknowledgement.

- a. The economy of Hines is almost totally dependent on one industry - lumber - and one company - Hines Lumber Company. Their economic analysis indicates that while the trade and services sector is stable, both the lumber and agriculture sectors are declining. The need to diversify is evident; logical alternatives are to expand secondary wood processing, tourism and recreation and agriculture.
- b. The analysis of the local economy, constraints and stated economic goals appear adequate.
- c. The need to increase their water storage capacity has been recognized. Some type of an ongoing capital improvement program should be instituted.
- d. Although Hines depends primarily on Burns for most of its commercial and retail activity, adequate commercial land for modest growth has been provided in the Urban Growth Boundary.
- e. Although there is little provision for industrial land in Hines (one small parcel), there appears to be adequate available industrial land in Burns and as part of the Hines Lumber Company complex.

The City of Hines Comprehensive Plan is one of the most complete and adequate plans reviewed to date, and the city should be commended.

We recommend acknowledgement of the plan, and very strongly urge the city to start immediately to develop and carry out a capital improvement program.

Sincerely,

A handwritten signature in dark ink, appearing to read "Roger Eiss". The signature is written in a cursive style with a large initial "R".

Roger Eiss  
Deputy Director

# OREGON BUSINESS PLANNING COUNCIL

1178 CHEMEKETA, N.E.

SALEM, OREGON 97301

PHONE (503) 370-8112

STAFF:  
KATHERINE KEENE  
Planning Director

October 9, 1979

DAVID S. HILL  
Natural Resources  
Director

DEPARTMENT OF  
LAND CONSERVATION  
AND DEVELOPMENT

Mr. Wes Kvarsten, Director  
Department of Land Conservation  
and Development  
1175 Court Street  
Salem, Oregon 97301

10/10/79  
11:25  
SALEM

Attention: Dale Blanton

Dear Mr. Kvarsten:

The Oregon Business Planning Council has reviewed the Comprehensive Plan and implementing ordinances submitted by the City of Hines in support of its request for acknowledgement of compliance.

1. The Plan does not adequately inventory mineral and aggregate resources. Map 5 shows two gravel pits; one in Priority Development Area 1 and one in Priority Development Area 2. Other than the map information, the Plan does not discuss the quality and quantity of the identified resources. The Plan designates the resource areas for future residential development without discussing conflicting uses or the need to preserve the resources. Until such an analysis is conducted the Plan does not meet the requirements of Goal 5.

2. The Plan contains housing projections by type, but the next step of projecting needed land for each housing type is not clear because the land needs are developed in another section which combines the needs of Hines and Burns. Thus, the land needed to accommodate Hines' projected housing is masked.

3. Our third concern is with the buildable land inventory. The Plan does not clearly state how many acres of buildable land (suitable, available and necessary) exist within the city limits nor in the urban growth area. Thus, it is not clear how much growth can be absorbed within the city limits, and consequently, how much land will be needed outside the city limits.

4. The Plan establishes that "the market demand, and therefore public need, is probably not met" for multi-family housing (p. 69). The Plan also says, "It is the conclusion of this report ... that there is a demand and need for housing of a rental nature" (p. 69). Even though the Plan has established a general need for multi-family housing and Housing Policy 3



encourages multi-family housing, the Plan Map does not designate any vacant lands for multi-family housing; the Zone Map does not zone any vacant lands for multi-family uses. The areas zoned RM are already used for multi-family uses according to Map 14, Existing Land Use. This seems to conflict with Goal 10 compliance.

5. The Plan Map and Zone Map do not seem to be in agreement in all cases. The golf course is designated as Public and Semi-Public, but the northeast portion is zoned Industrial. The eastern portion of the block surrounded by Hanley Boulevard East on the south, Highway 20/395 on the west and Ogden Avenue South on the north is designated Residential, but part of the eastern 1/2 is zoned Commercial. These are the only examples noted during our review and may be due to technical errors. These inconsistencies should, however, be rectified prior to compliance.

Based on the above comments it is necessary that the Oregon Business Planning Council object to the acknowledgment of compliance request submitted by the City of Hines.

Sincerely,



Jim Jacks  
Associate Planning Director

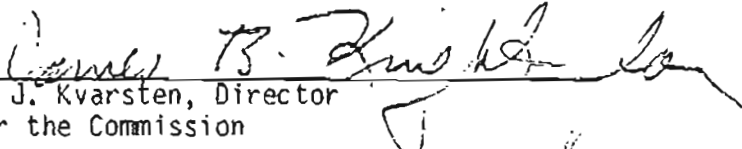
JJ:paw

cc: H. Lee Wallace, Mayor  
Morgan, Ryan & Associates  
Carol Smith, Coordinator  
Brent Lake, Field Representative

THEREFORE, IT IS HEREBY ORDERED THAT:

In accordance with ORS 197.251 and the Commission's Acknowledgment Procedure Rule, OAR 660-03-000 to 660-03-035, the acknowledgment request of the City of Hines is continued, and the city is granted 45 days in which to complete the additional planning work set forth in this order.

DATED THIS 12TH DAY OF MARCH, 1980.

  
W. J. Kvarsten, Director  
for the Commission

WJK:DB:cp  
1379A/82  
2/29/80

LAND CONSERVATION AND DEVELOPMENT COMMISSION  
ACKNOWLEDGMENT OF COMPLIANCE

RESPONSE TO CONTINUANCE ORDER OFFERED JANUARY 30, 1980

City of Hines

DATE RECEIVED: January 29, 1980      DATE OF COMMISSION ACTION: March 6, 1980

I. REQUEST: Acknowledgment of Compliance with the Statewide Planning Goals  
for the comprehensive plan and implementing measures.

II. SUMMARY OF RECOMMENDATIONS:

A. Staff:

Recommends acknowledgment.

B. Local Coordination Body:

Recommends acknowledgment.

FIELD REPRESENTATIVE: Brent Lake  
Phone: 389-2253

COORDINATOR: Carol Smith  
Phone: 573-6655

LEAD REVIEWER: Dale Blanton  
Phone: 378-4920

Date of Report: February 20, 1980

III. BACKGROUND INFORMATION:

The City of Hines' original acknowledgment request was reviewed by the Commission on January 30, 1980. At that time, the Commission offered to continue the City's request for 45 days to allow Hines to complete work on Statewide Planning Goals 5, 10 and 14.

IV. ADDITIONAL MATERIALS

The following additional materials were submitted by the City to comply with the Statewide Planning Goals:

Amendments to comprehensive plan adopted January 14, 1980.

## V. FINDINGS:

## A. Previously Approved Goals

The Commission's Continuance Order found that the City of Hines acknowledgment request complied with Statewide Planning Goals 1-4, 6-9 and 11-13. The adopted amendments do not conflict with the previous Commission action and the plan remains in compliance with these Goals.

It should be noted that the continuance order required an implementing measure to cover flood hazards (Goal 7). This error in the continuance order was caused when the City submitted its flood plain regulations subsequent to the preparation of the original staff report. The City has submitted an implementing measure which meets Goal 7 requirements.

## B. Required Plan and Implementing Measure Revisions

1. Open Spaces, Scenic and Historic Areas, and Natural Resources:  
(Goal 5)

## Requirements:

- 1) Develop policies for the resolution of land use conflicts arising between aggregate operations and residential use.
- 2) Develop implementing measures to carry out policies in 1 above.

## Response:

The City has conducted an evaluation of the aggregate sites in question and determined that "The quality of these resources, however, is not significant when compared to other aggregate resources located in other parts of Harney County and therefore are not considered as a primary aggregate resource" (p. 14).

Conclusion: The City of Hines complies with Goal 5.

The City has resolved the potential land use conflicts by making a determination that the resources are not of sufficient value to warrant protection. The use of the resource land for residential purposes does not have a substantial impact because other more valuable sites exist in the area to provide for aggregate needs. These sites are located outside the UGB.

10. Housing: (Goal 10)

Requirements:

- 1) Project residential land use needs in acres for the City of Hines;
- 2) Inventory Vacant/Buildable land by zone designation; and
- 3) If necessary, provide adequate acreages to meet identified multifamily housing needs.

Response:

The City has revised housing data to include projections of housing needs by type which relate to population projections (Housing data pp. 67-74). These projections are converted to acreage needs by the Urbanization element (p. 3, Attachment "A").

Table 2 (Attachment "B") contains a buildable land inventory for all of the Planning Area by plan and zone designation. A comparison of buildable lands data with residential acreage needs data indicate that sufficient buildable lands exist within Priority Development Area I to accommodate needs. This comparison is reflected in Attachment "C" which contains the following table:

<u>Meeting Land Needs For The Year 2000</u>	
<u>Land Needed For Residential Use</u>	<u>Land Potentially Available in Priority I Area</u>
132.00 acres	150.93 acres

The final issue is the ability to provide for multifamily needs through commercial zoning. The City's analysis states:

"It is anticipated by both Burns and Hines that a majority of the commercial activity including major and minor retail sales service and office types of uses will continue to be centered in the Burns community. It should therefore become readily apparent that there could be a significant amount of commercially designated property available for use as multifamily or mobile home use to the year 2000 as mobile homes and multifamily housing units are allowed as "permitted uses" in the commercial zones. Hines anticipates only about 15% of the Urban Area becoming developed as commercial uses to the year 2000. Fifteen percent of the 38.5 undeveloped commercial acres represents only about 8 acres, leaving about 30 acres for use as either multifamily and mobile home development.

Multifamily and mobile home land use consumption is projected for a total of 10 acres to the year 2000. This margin provides the City of Hines the opportunity to encourage sites which will have the least impact on urban services in accordance with the adopted Urban Growth Policies." (p. 7)

Conclusion: The City of Hines complies with Goal 10.

The City has completed all tasks outlined in the "In order to comply" statements.

3. Urbanization: (Goal 14)

Requirements:

- 1) Develop findings relative to factors 1 and 2 which compare land use needs to acreage within the UGB;
- 2) Develop findings relative to factor 3 which addressed the ability to efficiently service Priority Development Area Two; and if necessary
- 3) Amend the Urban Growth Boundary to include only those lands which are demonstrably needed and serviceable based upon items 1 and 2 above.

Response

The City has revised the Urbanization element to contain findings on land consumption within the UGB. The City's analysis of the boundary concludes:

"The Priority One Development Area includes lands currently urbanized with urban facilities and services and lands currently vacant that can receive sewer and water services without major expansions or alterations to existing main sewer and water facilities. The acreages in these areas are given in Attachment B. Area One should accommodate projected growth until the year 2000." (p. 5)

The City has amended its UGB to exclude all of Development Area II except for an industrial area owned by the Hines Lumber Co. A third category of land called "Urban Reserve" has been created for areas outside Development Area II. This area is outside the UGB and serves as an area of mutual interest between the City and Harney County.

Conclusion: The City of Hines complies with Goal 14.

The City has adopted new findings and revised the UGB to include only those lands needed for urban use during the planning period. Some industrial land remains in Priority Development Area Two based upon ownership by an existing industry. However, this area is protected from premature conversion to urban use by policies.

LAND CONSERVATION AND DEVELOPMENT COMMISSION

ACKNOWLEDGMENT OF COMPLIANCE

City of Hines

I. REQUEST: Acknowledgment of Compliance with the Statewide Planning Goals for the comprehensive plan and implementing measures.

II. SUMMARY OF RECOMMENDATIONS:

A. Staff:

Recommends the granting of a 120-day continuance in order to resolve problems with Goals 5, 7, 10 and 14.

B. Local Coordination Body:

Recommends acknowledgment (see attached).

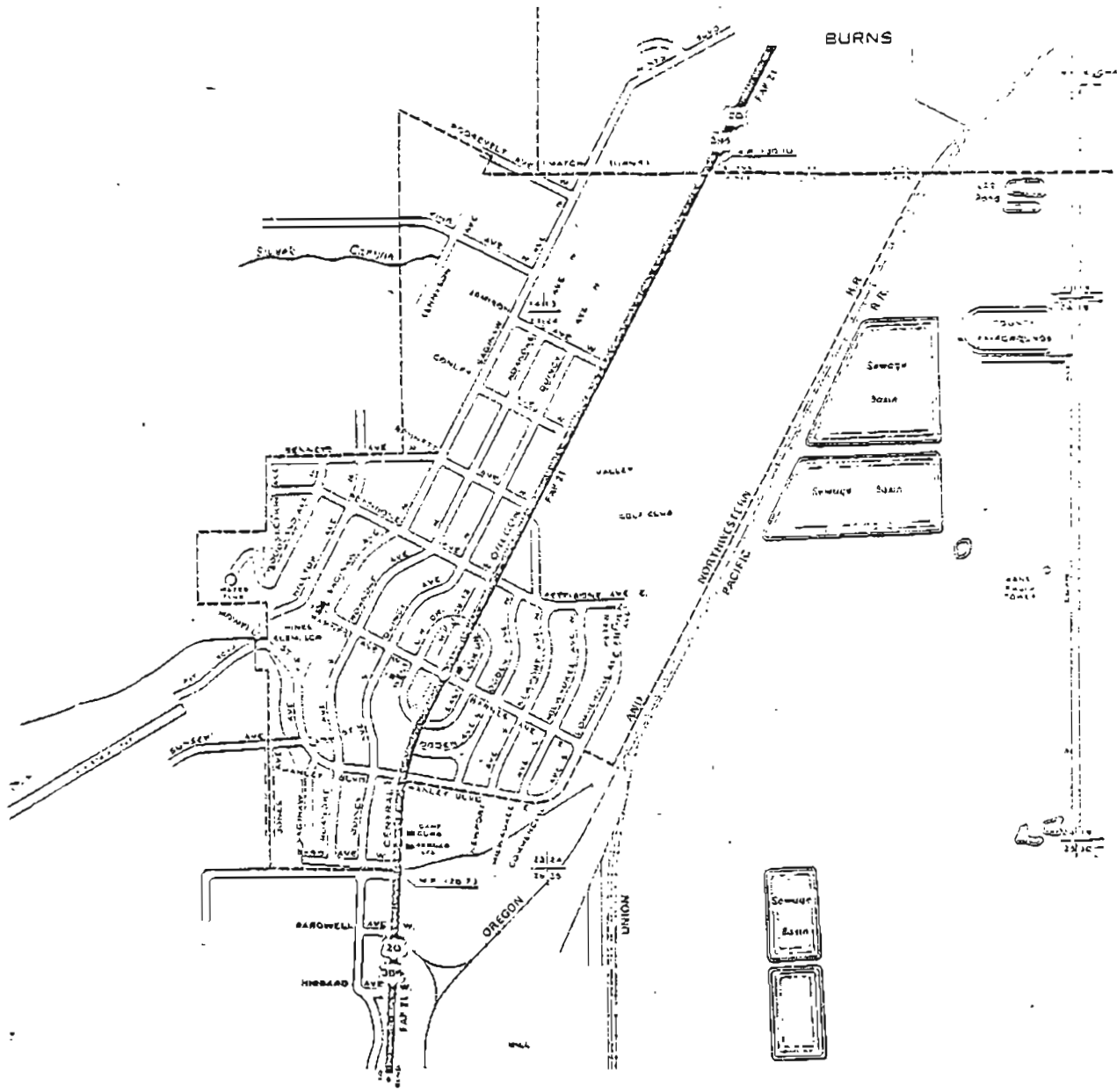
FIELD REPRESENTATIVE: Brent Lake  
Phone: 389-2253

COORDINATOR: Carol Smith  
Phone: 573-6655

LEAD REVIEWER: Dale Blanton  
Phone: 378-4920

Date of Report: November 22, 1979





T 22 S R 30 E W.M.

# HINES

HARNEY COUNTY, OREGON

PREPARED BY THE  
 DEPARTMENT OF HIGHWAYS  
 U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL ROAD ADMINISTRATION  
 Population 1,345  
 Area 1.72 sq. mi.  
 Date 1974

**LEGEND**

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>— FEDERAL AID INTERSTATE SYSTEM</li> <li>— FEDERAL AID PRIMARY SYSTEM</li> <li>— FEDERAL AID SECONDARY SYSTEM STATE</li> <li>— FEDERAL AID SECONDARY SYSTEM COUNTY</li> <li>— OTHER FEDERAL AID SECONDARY LOCAL</li> <li>— TERMINATION OF A SYSTEM</li> <li>— DIVIDED HIGHWAY</li> <li>— UNIMPROVED HIGHWAY NO OF LANES</li> <li>— STREET PAVED FOR TRAFFIC</li> <li>— STREET DESIGNATED BUT NOT OPEN</li> </ul> | <ul style="list-style-type: none"> <li>— INTERSTATE NUMBERED ROUTE</li> <li>— U.S. NUMBERED ROUTE</li> <li>— STATE NUMBERED ROUTE</li> </ul> | <ul style="list-style-type: none"> <li>● POST OFFICE</li> <li>● SCHOOL</li> <li>● CITY CENTER</li> <li>● FIRE STATION</li> <li>● CITY LIMITS</li> <li>● PUBLIC BLDG</li> <li>● CITY HALL</li> <li>● COURT HOUSE</li> <li>● ARMORY</li> <li>● LIBRARY</li> </ul> |
|---|--|---|

Revised December 1974

III. BACKGROUND INFORMATION:

A. GEOGRAPHY:

Hines is located in Southeast Oregon in the north central portion of Harney County. It is approximately 130 miles east of Bend, 200 miles south of Pendleton, and 130 miles east of Ontario, Oregon. Hines is bordered by the City of Burns on the north. The Silvies River is located to the east of the City. The Hines Lumber Company planned and developed the City in 1928 and their lumber mill still constitutes the major part of Hines' economic base.

B. GOVERNING BODY:

Mayor and six-member city council.

C. POPULATION:

1978 - 1,575  
1977 - 1,665  
1974 - 1,460  
1970 - 1,407  
1950 - 1,207  
1950 - 918  
1940 - 677

D. PLAN AND IMPLEMENTING MEASURES:

Comprehensive Plan: June 1979  
Zoning Ordinance: June 1979  
Subdivision Ordinance: June 1979  
Management Agreement: July 1979

E. COMPLIANCE STATUS:

Planning Extension until January 6, 1978, and Compliance Date until July 1, 1980; Planning Assistance Grant of \$23,300 approved May 6, 1977. The city received a second planning assistance grant of \$8,427 in 1978-79.

IV. FINDINGS:

A. General Overview

Hines has developed an extensive background report which addresses all applicable Statewide Planning Goals. The Plan and Implementing Measures are generally consistent with the Goals. However, in several specific instances the acknowledgment request does not meet Goal requirements. These deficiencies can be summarized as follows:

Goal 5

No conflict resolution mechanism exists to resolve land use conflicts between aggregate resources and residential development proposed for the same area.

Goal 7

No implementing measures have been submitted to carry out plan policies on Hazards Development.

Goal 10

A buildable lands inventory, including residential land needs projections, has not been completed. Without this inventory, an assessment of the adequacy of implementing measure can not be done.

Goal 14

Findings for th UGB do not adequately address factors 1-3 of Goal 14 for land use needs and service provisions. In addition, the land needs projections and buildable lands inventory in Goal 10 may affect the need for land relative to factors 1 and 2 of the Goal.

B. Goal Compliance

1. Citizen Involvement: (Goal 1)

The City of Hines has an approved citizen involvement program (April 1976), with the Planning Commission performing the function of Committee for Citizen Involvement. The Introduction to the Hines Comprehensive plan states that community surveys, local media, information materials, public work sessions and public hearings were used in preparation of the Plan.

Section II of the appendix to the Plan contains amendment procedures and policies (pp. 16-18). These policies state:

1. "The City of Hines, working under the Citizen Involvement Program, should actively pursue the goals of this Plan and adhere to its policies in doing so" (Policy 1, p. 16, Appendix II).

2. "Conflict resolution, interpretation, and criteria evaluation should be a responsibility shared by all segments of the community with opportunities for citizen involvement at all levels" (Policy 3, p. 16, Appendix II).

Conclusion: The City of Hines complies with Goal 1.

2. Land Use Planning: (Goal 2)

The Comprehensive Plan for Hines contains inventories and background data pertinent to the City. The plan states:

"The Comprehensive Plan should be considered as an official statement of the City of Hines. The document sets forth goals, objectives and policies to guide the future physical development of the community. The following subchapters depict existing conditions, summarize conclusions, and where applicable, set forth certain development criteria" (Introduction p. 1).

Hines has adopted zoning and subdivision ordinances to implement the plan, as well as a management agreement with Harney County pertaining to the urbanizable area. These elements are all contained within a single plan document.

Section II of the appendix contains a discussion of "Implementation, Amendments and Revisions" (pp. 16-18).

Policies state:

"This Plan may be revised when conditions change from what they were at its adoption to the extent that the assumptions and conclusions become inaccurate. The broad community interest must be served by the change and not for just any private interest. Major Plan revisions to the Hines Comprehensive Plan that could result in a widespread and significant impact beyond the immediate area are not to be made more frequently than every two years.

No more than five years after the adoption of this Plan, a major revision process should be undertaken to update it in its entirety.

Any major revision should be based on examination of development trends, population growth and effectiveness of policy statements since the previous adoption or revision date.

Any revisions of the Urban Growth Boundary shall be coordinated with the City of Burns and Harney County in accordance with the procedures set forth in 'II. (K)' of the Urban Growth Area Joint Management Agreement" (p. 17).

Conclusion: The City of Hines complies with Goal 2.

3. Agricultural Lands: (Goal 3)

Not Applicable.

NOTE: Even though this element is inapplicable inside the UGB, the City has adopted an agricultural lands element (p. 4).

4. Forest Lands (Goal 4)

Not Applicable

5. Open Spaces, Scenic and Historic Areas, and Natural Resources:  
(Goal 5)

The City has inventoried applicable Goal 5 resources which include Open Space, Mineral and Aggregate, Energy, Fish and Wildlife, Historic, Scenic and Cultural and Water Resources.

Fish resources are plentiful in the Silvies River which is limited by inadequate stream flow during summer months (p. 9). Wildlife are prevalent in the Malheur Lake Basin which "encompasses significantly more than the urban area surrounding Burns and Hines" (p. 9). In addition, numerous birds and waterfowl are present in the area. A National Wildlife refuge is located 20 miles south of Hines.

The plan states, "This Comprehensive Plan does not endorse any one method of protection, but merely mentions the various alternatives for reference" (p. 11). The mentioned alternatives include: landowner notification, agreement with landowner, registration, fee acquisition, dedication, conservation easement, designation and land use control.

Historic sites are discussed on pages 12 and 13 of the Hines Plan. The Harney County Historical Society has published an inventory of historical structures titled Harney County, An Historical Inventory, which identifies the Hines Lumber Company and the Townsite of Hines as potential historic sites.

The Plan outlines criteria for historic site determination and contains policies for ongoing inventory work (pp. 12-13). The State Historic Preservation Office inventory for Harney County does not identify any historic sites in Hines.

Mineral and Aggregate resources are identified on page 14 and mapped (Map No. 5). Two gravel sites exist within the Hines UGB. Policies indicate that "...plans shall be formulated for the conservation and/or development of such resources as appropriate to meet future needs"; and "Development of mineral and/or aggregate resources shall provide plans for the rehabilitation of mined areas" (p. 14).

Identified aggregate sites are designated as such on the land use plan map. However, these areas are also designated as residential areas. Current zoning (County Rural Residential) does not allow aggregate operations. According to Carol Smith, Coordinator, one site is operating as a preexisting nonconforming use (conversation 11/20/70).

Plan policies do not resolve conflicts between residential uses and aggregate operations, but do call for the formulation of "conservation and/or development plans". The conflict resolution issue has been raised by the Oregon Business Planning Council, which has objected to acknowledgment of the Hines Plan.

Water resources inventory data are contained on pages 15-17 of the plan. The plan indicates that, "There is a good potential for additional ground water storage in the basin...Aquifers are practically untested and unused, but have great potential in some sub-basins" (p. 15).

Other water resources are discussed in the plan, but are not located inside the Hines growth boundary.

Open space is discussed as a part of the Park and Recreation element (pp. 26-27). The plan states:

"An integral part of the character of any city is the areas set aside for recreation and aesthetic enjoyment. Hines is blessed in this regard because of its location in the immense vastness and beauty of the open space provided by Harney County. Access to spectacular areas of natural beauty is relatively easy for the citizen of Hines, with only short distances to the Blue Mountains, Malheur National Wildlife Refuge, and Steens Mountain. Even much closer to the city are the hills to its west and the flood plain area of the Silvies River to the east. Hines has a considerable amount of centrally located park space that was set aside in the original plan of the city" (p. 26).

The Hines Plan contains information on energy resources (op. 61-63), including geothermal, solar hydroelectric, petroleum and conservation. Policy 7, on page 63 calls for examination of the expansion of present energy sources to determine "the impact such development would have in regard to natural resources, changes in land use patterns and the economy of Burns, Hines and the entire area."

Conclusion: The City of Hines does not comply with Goal 5.

The City has completed a resource inventory of the planning area for all applicable Goal 5 resources.

Policies have been developed for update work on Historic Sites and Mineral and Aggregate resources. Wildlife resources are located outside the urban growth area and are under Harney County jurisdiction. Groundwater resources are not currently under development pressure. Open space is currently under public ownership or is outside the UGB.

No conflict resolution mechanism has been developed to resolve land use conflicts between aggregate operations and residential use planned for the same area. Existing zoning does not allow the aggregate operations outright. However, the county does have a zone which, if applied to this area, allows aggregate operations conditionally.

In order to comply, the City must:

1. Develop policies for the resolution of land use conflicts arising between aggregate operations and residential use.
2. Develop implementing measures to carry out policies in 1 above.

6. Air, Water and Land Resources Quality

The Hines Comprehensive Plan contains factual base information on Air, Water and Land Resources Quality.

Air quality in Hines is "considered very good" according to the Department of Environmental Quality (DEQ) information in the Plan. The plan indicates the "Ambient air quality and noise data are not available at this time" (p. 5).

Land Quality information is included in Agricultural Land and Natural Hazards elements of the plan. Soils and hazard data are mapped.

Water Quality information relative to the Silvies River (outside planning area) and ground water resources is contained on pages 15-17.

Plan Policies related to this Goal state:

1. "The City of Hines shall recognize the development limitations imposed by the carrying capacities of natural resources; i.e. surface and groundwater capabilities, soils, geology, etc" (policy 1, p. 8).
2. Natural resource physical limitations shall be one of the primary evaluation factors for development approval. The carrying capacity thereof shall not be exceeded" (policy 2, p. 8).

The Plan recognizes the applicability of state and federal water quality standards as they relate to the sewerage system. According to the Plan: "ORS 440.081 and 440.086 specifically empower the Department of Environmental Quality to set and enforce standards of water quality" (p. 51).

Standards for approval in the Industrial Zone prohibit a use which "creates a nuisance because of noise, smoke, odor, dust or gas or which has been declared a nuisance by statute, by action of the municipal court or by a court of competent jurisdiction.

Conclusion: The City of Hines complies with Goal 6.

Factual data is adequate for goal compliance at this time. However the lack of available ambient air or noise data, which is recognized by the Plan, should lead to incorporation of data and development of appropriate policies when information becomes available.

Plan policies and statements relative to the DEQ water quality standards are adequate to insure that the carrying capacity of the air, water and land resources will not be exceeded.

Suggestion for Plan and Implementing Measure Improvement

The City should adopt a Plan Policy which requires ambient air and noise quality data to be incorporated in the plan at plan update.

7. Areas Subject to Natural Disasters and Hazards: (Goal 7)

The City has evaluated the planning area and identifies flood plain, steep slope, bedrock and earthquake hazards (pp. 6-7).

The two significant hazards are flood plains and steep slopes. Surface bedrock presents development limitations due to the cost of providing services. However, the area is not a threat to life or property. Hines is located in seismic risk Zone 1, which "indicates that a major earthquake may produce minor damage" (p. 7).



Flood areas inside the UGR are limited to an area called "the sumo," which acts as a retention basin for flood waters. The City participates in the Federal Flood Insurance Program and has a policy for continued participation in the program (p. 2).

Policies state:

1. "Discourage development in flood plains, natural drainageways, on steep slopes and other hazardous areas" (Policy 4, p. 8).
2. "Preserve the holding capacity of the sumo area by discouraging development in the area below the 4,145' contour line" (Policy 5, p. 8).
3. "It shall be the developer/builder's burden of proof for determining the degree of hazard or physical resource carrying capacity" (Policy 6, p. 8).

No implementing measures have been submitted for hazard development.

Conclusion: The City of Hines does not comply with Goal 7.

Policies address all hazards which could result in loss of life or property damage.

No implementing measures have been submitted.

In order to comply, the City must develop implementing measures to carry out hazards policies.

8. Recreational Needs: (Goal 8)

Existing recreation facilities are inventoried in the plan (pp. 27A-27B). Future park needs are discussed in the citizen involvement questionnaire (Appendix).

The Plan states:

"Hines has a considerable amount of centrally located park space that was set aside in the original plan of the city. The area west of the highway has many trees, some picnic benches and tables, playground equipment, and tennis courts. The eastern portion is the site of the fire department and city hall, however, most of the area is vacant. The continued development of the four quadrants of this central park space,

utilizing more trees, recreation equipment, park benches, etc., would provide an even stronger focal point for Hines that could be readily enjoyed by all the city residents as well as enjoyed and appreciated by those traveling through the city" (p. 26).

Policies provide for:

1. Provision of needed facilities;
2. Guidelines for Park location;
3. Development of Pedestrian/Bike path (pp. 26-27).

Conclusion: The City of Hines complies with Goal 8.

9. Economy of the State: (Goal 9)

Hines has evaluated the local economy, including employment trends, labor force, commercial/industrial activities and projected economic trends.

Historically, Hines was developed as a "company town" in conjunction with the Edward Hines Lumber Mill. The mill is the largest employer in the Burns/Hines area and is an essential element in the local economy. Other than the timber industry, agriculture plays an important role in the local economy (p. 57).

One potential area of economic diversification is in exploration, development and extraction of mineral, geothermal, oil and gas resources (p. 59).

Policies state:

1. Coordinate decisions concerning economic base resources in the county and to maintain an economic-environmental balance in all resource management and allocations decisions.
2. Major economic development plans should be based on the best information available and to take into account areas suitable for economic development, effects on existing economy, available resources, labor market factors, transportation, energy availability, and community livability.
3. Encourage a diversity of labor and capital intensive economic development.

4. Encourage location of major economic developments where public facilities and urban services can be readily provided.
5. Provide adequate protection for all existing and potential economic development areas, including areas for expansion.
6. Develop a cultural and financial climate that will encourage diversified residential, commercial, and industrial growth and development" (p. 60).

Hines is located adjacent to the City of Burns. As such, the two communities are tied closely to one another economically. The Hines Plan indicates a reliance on Burns for most future commercial and industrial development (pp. 64-65). The City has provided some opportunities, however, for small-scale industrial and highway-oriented commercial development as well as room for expansion of the Hines Lumber Mill (see also Goal 14).

Vacant Commercial and Industrial land within the city limits is shown on Map 14.

Conclusion: The City of Hines complies with Goal 9.

Hines has completed an economic survey of potentials and constraints for growth. The interrelationship between the Hines and Burns economy is reflected in the Plan.

10. Housing: (Goal 10)

Buildable Lands Inventory

Buildable lands are defined in Goal 10 as, "...lands in urban and urbanizable areas that are suitable, available and necessary for residential use" (emphasis added).

A. Lands Suitable and Available for Residential Use

The City has evaluated the suitability of land for residential purposes. Hazards data is mapped on Maps 3-7. Vacant residential lands within the city limits are shown on Map 14.

There is no analysis of vacant and buildable residential land for the entire urban growth area. Portions of the vacant residential land shown on Map 14 are located in flood areas indicated on Map 4.

B. Lands Necessary for Residential Use

Housing needs are analyzed in the Housing and Urban Growth Elements of the Plan.

In the year 2000, between 711 and 910 units will be needed to house a population of 1,958 to 2,530. Year 2000 needs can be summarized as follows:

Year 2000 Needs by Type<sup>1</sup>

	Single-Family	Multi-Family	Mobile Home
LOW	635	68	8
HIGH	821	88	10

<sup>1</sup> Table 24 (p. 72)

Land use needs are included in Appendix Section II, but are for the combined Burns/Hines urban area. Data does not relate directly to the identified needs for Hines shown on Table 24. In addition, the needs data is not compared to acreages provided within the Hines UGR.

Sufficiency of Land to Meet Identified Needs

Land use needs (Table 24) are not translated into acreage needs for Hines. Vacant buildable lands are not indicated by zone designation. Zoned multifamily areas are currently developed according to the existing land use map. Therefore, no vacant/buildable lands are zoned for multifamily use.

Housing Policies

1. Ordinances and programs will be developed and adopted to implement the Housing Goal and Policies.
2. A greater share of nonsingle family housing for the Burns/Hines area should be located in Hines.
3. Multifamily units shall be encouraged when "there is a demonstrated need."
4. Mobile homes will be allowed in conventional housing areas when they conform to Planning Commission Standards related to width, skirting foundations, etc., designed to minimize health and compatability problems.
5. Mobile home parks will be encouraged when there is a demonstrated need.

6. Rehabilitation shall be a high priority.
7. Capital improvements shall be used to meet growth demands in advance.

Implementing Measures:

The Zoning Ordinance allows single family dwellings and duplexes (on corner lots of 10,000 sq. ft.) outright in the single family zone. Multifamily dwellings are allowed outright in the multifamily residential zone. Mobile Homes are subject to conditional use standards in the single family and multifamily residential zone.

Standards for a conditional use permit include:

- A. That such conditional use, as prescribed by the applicant, will be in harmony with the purpose and intent of the zone and, with any condition imposed, satisfies the considerations mentioned in Section 8.000.
- B. That the granting of a conditional use permit will be consistent with the goals and policies expressed in the Hines Comprehensive Plan.
- C. That all conditions imposed are authorized by Section 8.050.

Oregon Business Planning Council has objected to acknowledgment based on Goal 10. (See Attached)

Conclusion: The City of Hines does not comply with Goal 10.

The City has not completed an adequate buildable lands inventory because:

1. Land use acreage needs have not been completed for the City of Hines.
2. Vacant/Buildable lands are not inventoried by zone designation.

Information contained in the Hines plan is not adequate to determine that identified needs are being adequately met.

Conditional use standards for mobile Homes are sufficiently clear and objective to be consistent with the Commission Housing Policy (i.e. St. Helens Case).

Oregon Business Planning Council has raised Goal 10 concerns which are similar to those discussed above. (See Attached)

In order to comply, the City must:

1. Project residential land use needs in acres for the City of Hines.
2. Inventory Vacant/Buildable land by zone designation; and
3. If necessary, provide adequate acreages to meet identified multifamily housing needs.

11. Public Facilities and Services: (Goal 11)

The City of Hines has developed a Public Facilities and Services Element which includes Police, Fire, Medical and Health, Library, Museum, Solid Waste, Water Sewerage, Storm Drainage and Schools.

Schools

Only one school exists in the City of Hines. Other educational facilities within the county are provided by 15 different school districts. Data on existing enrollments and programs is provided for each school in the County. Future needs for the planning period are not projected. However, the plan recommends that, "Facility and program planning be done on a long-range rather than a year-to-year basis to better anticipate population growth throughout the County," and that "Adequate land be secured, where appropriate, for the expansion or development of educational facilities" (p. 25).

Water

The Hines water system is discussed on pages 37-41 and mapped on Map 9. Map 10 indicates the present water service area. Existing capacity of the system is estimated to be 3.74 million gallons-per-day. Demand is estimated at 771,300 gallons-per-day.

The Plan outlines criteria for water system planning which includes sources of supply, storage, distribution system, pumping stations, valve, hydrant, pressure reducing areas, easements, land, water rights and permits (pp. 41-42).

Sewerage System

The Plan outlines the present service area, existing collection system and the treatment system. The plan indicates that the treatment facility is designed to serve a population of 2,700 persons. Current loading is equivalent to a population of 1,840.

Sewerage system planning criteria contained in the plan includes service areas, the collection system, capacity, sewer location, and treatment.

### Police and Fire

Police service, according to the Plan, is adequate at this time. Future needs will be primarily employee needs, rather than capital investments. "...an increased level of service should be anticipated within the next few years" (p. 28).

Fire service is provided by a volunteer force of 20. Dispatching is coordinated through the Burns police office. "Unless there is a large unexpected increase in the population of Hines, the existing facilities and equipment, with proper maintenance, care, and periodic replacement should be adequate for many years" (p. 29).

### Other Facilities and Services

A solid waste disposal site is provided through a franchised operation located one mile west of Burns. The site is expected to be adequate for 25 years (p. 32).

Storm Drainage is discussed briefly in the hazards element (p. 6) and major drainageways are mapped on the Flood Hazards Map (Map 4). These are subject to occasional flooding during heavy runoff periods (p. 6).

### Policies

Plan Policies state:

1. "The solid waste disposal facility west of Burns appears to be adequate to meet the needs of the urban area over the next several years, but should be reviewed at subsequent Comprehensive Plan updates for negative impacts on urban growth" (p. 32).
2. "The quantity and quality of medical and health facilities appear to be adequate to meet existing needs within the community; however, those facilities currently inventoried should be reevaluated at the next Comprehensive Plan Update" (p. 31).
3. "The City of Hines and the City of Burns should consider the consolidation of fire protection services through the formation of a fire protection district" (Policy 2, p. 24).

In addition, the following policies are contained in the Urbanization Element (Appendix II):

1. "Extension of Burns' or Hines' urban services should be granted only after careful and thorough evaluation of the facts surrounding the extension. A major emphasis should be given to analyzing the costs and benefits to the community" (Policy 2, p. 10).
2. The communities are the logical providers of urban services in the defined Urban Growth Boundary area. Therefore, development inside of the Urban Growth Area shall occur only after close coordination with the two communities and the County" (Policy 5, p. 10).
3. Development of land, whether inside or outside of city limits, shall occur only after consideration of the following development criteria which are based upon local needs;
  - a. The financial capability of a particular city to provide the necessary facilities and services at levels suitable for urban use.
  - b. The amount of time required to provide these services to the property.
  - c. The technical requirements of the provision of services.
  - d. The need to provide sufficient amount of land to provide an adequate housing market.
  - e. The willingness of the development sector to assume the burden of funding the cost of providing major facilities and services at the appropriate levels to serve particular developments and to anticipate developments beyond" (Policy 11, p. 11).

Conclusion: The City of Hines complies with Goal 11.

Factual base information for the Hines Plan is thorough and well-documented. This data addresses all key facilities in Hines, including Sewerage, Water, Schools, Police, Fire and Storm Drainage. Policies are adequate to achieve the Goal.

12. Transportation: (Goal 12)

The Hines Plan contains data on streets, airports, railroads, bus service, taxi service, motor carriers and bikepaths. The data reflects a reliance on the existing street network, as



alternatives are currently not available. One bike path does connect Burns and Hines. Senior citizens can utilize a bus on an "on call" basis. The City has developed a functional classification for city streets (Map 8).

Policies generally support upgrading the existing network, including retention of the existing rail service, development of an airport master plan (Burns Airport) and the retention of bus service.

Conclusion: The City of Hines complies with Goal 12.

Hines has provided a general overview of transportation in the City and adopted policies which will promote a basic level of service.

13. Energy Conservation: (Goal 13)

Hines had developed an energy element with a goal: "To promote the conservation, development of alternative sources and efficient use of energy" (p. 62). Potential energy sources for the area include geothermal, solar, oil, gas and conservation (pp. 61-62).

Policies promote efficient land use patterns, orderly development, expansion of present sources and conservation (p. 63).

Conclusion: The City of Hines complies with Goal 13.

14. Urbanization: (Goal 14)

The Urban Growth Boundaries for Burns and Hines were prepared through a joint urbanization committee consisting of members of Burns, Hines and Harney County Planning Commissions.

The plan states:

"Urban growth is essential if a community's economic lifeblood is to continue. However, an uncontrolled growth pattern may cause extreme hardship on the community if typical patterns are followed. For example, there are some areas of the Burns/Hines urban area that have been heavily partitioned or subdivided while remaining outside of either city limits. These areas show a haphazard lot layout, a lack of adequate roads, absence of any public sanitation facilities, and a general sprawling of the land use pattern...Another significant problem with this

type of land use pattern is that the property is effectively removed from growth potential. In other words, the land, with its haphazard lot patterns and lack of adequate street layout, cannot be efficiently divided into full service urban sized lots unless many of the parcels can be combined into a single unit. This forces the community to look beyond these areas or in alternative areas that may not be suitable for urban development. This may be very expensive for the community in that the forced "leap-frogging" of urban development with the attendant extension of sewer and water lines and streets can be very expensive. In many cases, the community ends up subsidizing the existence of lands that are committed to urban sprawl" (Appendix II, p. 1).

#### Urban Growth Boundary

The Hines Urban Growth Boundary is divided into two areas: Development Priority Area 1 (including city limits) and Development Priority Area 2.

According to the Plan:

"The Priority One Development Area includes lands currently urbanized with urban facilities and services and lands currently vacant that can receive sewer and water services without major expansions or alterations to existing main sewer and water facilities" (p. 6, Appendix II).

"The Priority Two Development Area includes lands for which either sewer or water or both are not available at this time and can only be made available after substantial improvements and expansions to the relevant main facilities" (p. 7, Appendix II).

The Plan contains the following evaluation of the boundary as it relates to land use needs:

"The Urban Growth Boundary for the two communities includes a large amount of land. It is recognized that the land area shown within the boundary is probably greater than the minimum needed by the year 2000. However, this much land was included recognizing the advantages of property being within the boundary and anticipating the cooperation between the County and the two communities in administering that land...

"The Priority Two Development Area contains approximately 591 acres as is shown in Table 6 above. This should accommodate projected growth needs well into the next century. It is important to note that this area will not be available to accommodate urban growth until significant improvements or expansions are made to the water and sewer facilities of the communities. Therefore, the communities must anticipate these projects if adequate land is to be provided to accommodate growth at this point in the future" (Excerpts from pages 6 and 7 of Appendix II).

Table 6 indicates the following:

	<u>Priority 1</u>	<u>Priority 2 (Includes Burns)</u>
Developed	595 acres	90
Undeveloped	<u>455 acres</u>	<u>501</u>
TOTAL	1,050 acres	591

The City has adopted findings for the Urban Growth Boundary which relate to the seven factors in Goal 14 (pp. 7-9, Appendix II). These findings are general in nature and do not tie factual information directly to a conclusion. For example, land use needs (factors 1 and 2) are not quantified and compared to the size of the boundary.

Factor 3 is discussed, but data in the facilities element indicate that some portions of the boundary may not be economically serviceable.

Transition from Urbanizable Land to Urban Uses

The City has developed 13 urban growth policies (Appendix II, pp. 10-11). These policies include:

1. "The existing city limits for the Cities of Burns and Hines should remain relatively unchanged until a major portion of the respective city's existing usable land has been developed for urban purposes. As well, expansions of the city limits should be in the direction of existing rural residential activity around the communities" (Policy 1, p. 10).

2. "Extension of Burns' or Hines' urban services should be granted only after careful and thorough evaluation of the facts surrounding the extension. A major emphasis should be given to analyzing the costs and benefits to the community" (policy 2, p. 10).
3. "The Urban Growth Boundary area is divided into two development priority areas. These areas will be developed in accordance with the following criteria:
  - a. Priority One Development Area shall be the land allowed for immediate urbanization when the policies on urban growth are conformed with. No land divisions should occur in this area without annexation and the full provision of urban facilities and services.
  - b. Priority two Development Area shall be developed only after adequate sewer and water services can be made available to support urban growth and only after the Priority One Development Area is significantly urbanized. Partitionings and subdivisions within this area may be granted by the county, but only after conformance with the Development Coordination Policy below and conformance with the Urban Growth Management Agreement" (Policy 3, p. 10).

(See also services policies under Goal 11.)

The Oregon Business Planning Council has objected to acknowledgment of the Hines Plan based on Goal 14. (See Attached)

Conclusion: The City of Hines does not comply with Goal 14.

Information indicates that sufficient land exists within the Growth Boundary to accommodate needs into the next century. In addition, Development Priority Two contains land which can't be efficiently serviced without major capital improvements.

Findings are adequate for Goal 14, Factors 4-7. However, Factors 1-3 are not adequately addressed. Findings must indicate how much land is needed to satisfy Factor 1 and 2 and relate this information to actual acreage within the UGB.

Factor 3 should be evaluated against statements in the plan which indicate that Priority Development Area Two is not economically serviceable.

Oregon Business Planning Council concerns (see objection letter) are similar to those identified above.

In order to comply, the City must:

- 1. Develop findings relative to factors 1 and 2 which compare land use needs to acreage within the UGR;
- 2. Develop findings relative to factor 3 which address the ability to efficiently service Priority Development Area Two;

and, if necessary

- 3. Amend the Urban Growth Boundary to include only those lands which are demonstrably needed and serviceable based upon items 1 and 2 above.

C. Comments Received

The following have submitted statements on the acknowledgment request:

Department of Transportation	Comments
Department of Economic Development	Comments
Oregon Business Planning Council	Objection

D. Overall Conclusion

Hines has prepared a Plan and Implementing measures which generally address all Goals. However, the documents do not adequately address identified problems with Goals 5, 7, 10 and 14. These items are not difficult to correct and should not take more than 120 days.

V. RECOMMENDATION:

A. Staff:

Recommends the granting of a 120-day continuance in order to resolve problems with Goals 5, 7, 10 and 14.

In order to comply, the City must:

Goal 5

- 1. Develop policies for the resolution of land use conflicts arising between aggregate operations and residential use.
- 2. Develop implementing measures to carry out policies in 1 above.

Goal 7

1. In order to comply, the City must develop implementing measures to carry out hazards policies.

Goal 10

1. Project residential land use needs in acres for the City of Hines.
2. Inventory Vacant/Buildable land by zone designation; and
3. If necessary, provide adequate acreages to meet identified multifamily housing needs.

Goal 14

1. Develop findings relative to factors 1 and 2 which compare land use needs to acreage within the UGB;
2. Develop findings relative to factor 3 which address the ability to efficiently service Priority Development Area Two; and, if necessary
3. Amend the Urban Growth Boundary to include only those lands which are demonstrably needed and serviceable based upon items 1 and 2 above.

B. Local Coordination Body:

Recommends acknowledgment (see attached).

APPENDIX A

5. Open Spaces, Scenic and Historic Areas, and Natural Resources: (Goal 5)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 26-27 (Open Space), 14 (Mineral and Aggregate), 61-63 (Energy), 9-11 (Fish and Wildlife), 12-13 (Historic Sites, Scenic and Cultural Resources) 15-17 (Water Resources)

Plan Policies: 13 (Scenic and Historic), 14 (Mineral and Aggregate), 62-63 (Energy)

Implementing Measures: Zoning and Subdivision Ordinances

6. Air, Water and Land Resources Quality

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 5, (Air Quality) 3, 6-7, 14 (Land Quality), 15 (Water Resource Quality), 42-52 (Sewerage System)

Plan Policies: p. 8

Implementing Measures: Zoning Ordinance Section 11.430 (Industrial Zone Limitations)

7. Areas Subject to Natural Disasters and Hazards: (Goal 7)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 6-7, Maps 3-5.

Plan Policies: p. 8

Implementing Measures: None submitted

8. Recreational Needs: (Goal 8)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 26-27B

Plan Policies: pp. 26-27

Implementing Measures: Zoning Ordinance Section 11.500 (Public Zone)

9. Economy of the State: (Goal 9)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 57-60

Plan Policies: p. 60

Implementing Measures: Zoning Ordinance Sections 11.200 (Commercial Zone), 11.300 (Commercial-Highway Zone), 11.400 (Industrial Zone); Subdivision Ordinance

10. Housing: (Goal 10)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 67-72, Urban Growth Boundary and Program

Plan Policies: pp. 72-73

Implementing Measures: Zoning Ordinance Sections 11.000-11.030 (Single Family Zone), 11.100-11.130 (Multifamily Residential); Subdivision Ordinance

11. Public Facilities and Services: (Goal 11)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 28-31 (Public Facilities and Services), 37-41 (Water System), 42-48 (Sewerage System), 18-25 (Schools), Map 4 (Drainage)

Plan Policies: pp. 28 (Police), 29 (Fire), 31 (Health), 32 (Solid Waste)

Implementing Measures: Appendix Section VI (Standard Specifications for Public Works Construction)

12. Transportation: (Goal 12)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 33-35

Plan Policies: p. 36

Implementing Measures: Appendix VI (Standard Specifications for Public Works Construction), Subdivision Ordinance

13. Energy Conservation: (Goal 13)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 61-62)

Plan Policies: pp. 62-63

Implementing Measures: Zoning and Subdivision Ordinances



14. Urbanization: (Goal 14)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Comprehensive Plan pp. 52-66 (Land Use), 57-72 (Housing), Appendix Section II (Urban Growth Boundary and Program), and 37-52 (Sewerage and Water System)

Plan Policies: Appendix II, pp. 10-11

Implementing Measures: Urban Growth Area Joint Management Agreement and City/County Implementing Measures

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COUNTY OF HARNEY  
Harney County Planning Commission

PLANNING OFFICE 450 N. BUENA VISTA P.O. Box 1147 Burns, Oregon 97720 573-6655

November 5, 1979

Mr. Wes Kvarsten  
1175 Court Street N.E.  
Salem, Oregon 97310

Dear Mr. Kvarsten,

At a public hearing on May 31, 1979 the Harney County Court approved and adopted the City of Hines Comprehensive Plan and Urban Growth Boundry Agreement. I would recommend that the Land Conservation and Development Commission acknowledge the City of Hines Comprehensive Plan.

Sincerely,



Carol J. Smith  
Coordinator, Harney County Planning  
Department

cc. Brent Lake



To: Dale  
Department of Transportation

TRANSPORTATION BUILDING, SALEM, OREGON 97310

October 10, 1979

IN REPLY REFER TO  
FILE NO.: PLA 16-9

H. Lee Wallace, Mayor  
City of Hines  
City Hall  
Hines, OR 97738

Dear Mayor Wallace:

Putting together a comprehensive plan and appropriate ordinances is an extremely complex task. The main elements must fit together to form a realistic plan to guide your area's growth. The portion of the plan that we reviewed related to the Department of Transportation programs. Generally your plan addresses our concerns well. We appreciate the manner in which your community helped with many of the issues directly affecting the Department of Transportation.

We do request however, that the city at plan update pay particular attention to insuring adequate protection for important historic structures should they be noted or located in the future.

We would like to be involved in future updates of the plan and ordinances. It will be helpful if you direct information on future plan revisions to George Strawn, our Transportation Planning Representative and Cindy Murphy, our Parks Planning Representative. We would also appreciate your sending George notice of zone changes and subdivision approvals along state highways and ask that you send similar notices to Cindy when they affect state parks facilities. Addresses and phone numbers of our representatives are enclosed.

We thank you for this opportunity to comment and look forward to working with you in the future.

A copy of this letter is being forwarded to the Department of Land Conservation and Development to let them know that we support those elements of your plan that relate to our jurisdiction.

Sincerely,

Robert E. Royer, Ass't Director  
Policy and Program Development

Enclosure

cc: W. J. Kvarsten/Dale Martin

John Ryan, Brent Lake, George Strawn, Cindy Murphy