

SHILOH ROAD CORRIDOR STUDY

**PREPARED FOR:
YELLOWSTONE COUNTY BOARD OF PLANNING**

SHILOH ROAD
CORRIDOR STUDY

BILLINGS
&
YELLOWSTONE COUNTY
MONTANA

PREPARED BY:
YELLOWSTONE COUNTY PLANNING DEPARTMENT
510 NORTH BROADWAY
BILLINGS, MONTANA

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SHILOH ROAD CORRIDOR STUDY

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Yellowstone County Board of Planning

Dan Hickey
Doug Clark
Terry Keating
Chuck Hensley
Bob Lenhardt
Rex Hafer
Patricia Jaffray
Shirley McDermott
Craig Feldman
James Ruff
Ralph Brewington

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Elwood English

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Richard L. Larsen, Mayor
Billie Krenzler
Jeff Regnier
Kevin Justis
Mark Kennedy
Dan Farmer
Norm Kolpin
Owen Neiter
Ralph Stone
Richard E. Clark
Charles F. Tooley

Yellowstone County Planning Department

Bill Arnold, Director
Gail Kenson, Long Range Planner
Jim Halberg, Long Range Planner
Kerwin Jensen, Zoning Coordinator
Dan Miles, Long Range Planner
Scott Walker, Transportation Planner
Rae Maclean, Planning Clerk

Fischer & Associates

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SHILOH ROAD

CORRIDOR STUDY

INTRODUCTION

SHILOH ROAD CORRIDOR STUDY

INTRODUCTION

The Shiloh Road Corridor, as identified in this Study, can best be described as an area in transition. The predominantly rural, agricultural character of the area is slowly beginning to change with increased pressures from urban development. Given those development trends, along with projections for future growth, a long-term, comprehensive perspective of the area is essential for effectively managing such growth.

The Corridor itself stretches from the Yellowstone River to Highway 3 and is one-mile wide, with Shiloh Road forming the axis of the Corridor. The Corridor boundary is illustrated in Exhibit 1.

The 1990 Yellowstone County Comprehensive Plan recognized the need to develop and maintain specific corridor plans. The Comprehensive Plan therefore provides the direction and foundation for the Shiloh Road Corridor Study. Many of the goals and policies from the Comprehensive Plan are carried forward into this Study, however, in a more site-specific manner. Additionally, this Study goes further with respect to translating those goals and policies into regulatory actions as well as providing further policy guidance.

The intent of the Study then is to provide the policies and regulatory tools necessary to ensure that growth in the Corridor is managed effectively. A unique opportunity exists to ensure orderly, cost-effective, and functional growth within the Corridor. In other words, thoughtful planning at this stage can serve to avoid future problems and the costs associated with retroactively attempting to solve those problems.

It has also been recognized through this study process that a cooperative effort will be required to effectively implement the recommendations contained in the Corridor Study. The City of Billings and Yellowstone County certainly have mutual interests in effective growth management, therefore, both governing bodies must join together to establish a positive program for implementation. This is the only logical approach to ensure that the overall community's goals and values are observed. The entire community benefits as a result.

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CORRIDOR STUDY

OBJECTIVES

OBJECTIVES

Several principle objectives are incorporated into this Study in order to provide a focused approach. In addition, these objectives provide a valuable reference for use in evaluating the Study in the future. The Study is intended to promote a logical arrangement of land use, circulation and services. That logical arrangement should help to encourage and contribute to the economic, social and physical well-being of the Corridor. It is further intended to guide the development and change within the Corridor in order to meet existing and anticipated needs.

The Study has also been prepared in order to pursue the goals of the 1990 Yellowstone County Comprehensive Plan. By providing a comprehensive perspective of the Corridor, the City, County, and residents/land owners can all work together towards the common objectives established within this Study. Those principle planning objectives are as follows:

1. To provide a comprehensive, long-term perspective of the Corridor.
2. To identify opportunities, both existing and anticipated, for future development within the Corridor.
3. To identify potential constraints to future development within the Corridor.
4. To accurately assess existing and anticipated needs.
5. To provide a comprehensive inventory of the social, economic, and physical characteristics of the Corridor.
6. To develop specific goals and policies for future growth and development within the Corridor.

7. To provide a growth management guide.
8. To provide recommendations for regulatory measures necessary to ensure orderly, compatible, and cost-effective growth within the Corridor.
9. To analyze the interrelationships of existing and anticipated land uses within and adjacent to the Corridor.
10. To solicit community input as to the desired future direction and character of development within the Corridor.
11. To provide local elected officials with better, more complete information and direction on which to base future decisions affecting development within the Corridor.
12. To foster coordination and cooperation between the City of Billings, Yellowstone County, and the residents/land owners within the Corridor.
13. To develop practical and realistic implementation strategies that are consistent with the economic capabilities of both the City and County.

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CORRIDOR STUDY

METHODOLOGY

METHODOLOGY

In order to meet the preceding objectives in a logical and creative manner, and to accurately assess the needs within the Corridor, a sound planning methodology was utilized in the preparation of this Study. This methodology provides a meaningful, organized way of thinking about the future. The basic methodology included the following components:

1. Inventory
2. Analysis
3. Needs Assessment
4. Conclusions & Recommendations

Once the Corridor was identified, it was further divided into study areas in order to provide a more manageable method of study. The study areas are illustrated in Exhibit 1. The formulation of recommendations therefore involved the analysis of individual study areas as well as the entire Corridor.

INVENTORY

The planning process began with a comprehensive inventory of existing land use, facilities, site conditions, utilities, traffic and transportation characteristics, and the interrelationship of the Corridor with the surrounding community.

This process consisted of an approach utilizing information obtained from a bibliography of secondary source materials, and a detailed physical inventory conducted within each study area. The bibliography of secondary source materials is included as an appendix to this study.

Each of the secondary source materials was reviewed for relevance to the study. Secondary sources consisted of a broad variety of existing reports, planning studies, maps, engineering studies, and extensive aerial photography. The 1990 Yellowstone County Comprehensive Plan and 1990 Transportation Plan were referenced substantially.

The review process was supplemented with interviews with both City and County staff as well as with the authors of the various studies and reports. This process was designed to verify data, but in addition, was used to identify specific regulations or policies administered by City and County departments. These regulations and policies were then analyzed in terms of potential effects on future growth and development within the Corridor.

The major landholders in the Corridor were also interviewed. This process again served to verify information, but was also extremely valuable in soliciting input towards the formulation of recommendations. As stated previously, citizen input was recognized as being essential to the overall planning process.

The inventory involved collecting data for each land area within the Corridor. The data was then summarized by study area and subsequently for the entire Corridor. Field surveys were conducted to verify data, determine land uses, and identify any unique physical characteristics. Data collection included the following:

1. Physical Landforms
2. Vegetation
3. Soils
4. Hydrology
5. Geology
6. Environmentally-Sensitive Areas

7. Historic & Cultural Resources
8. Irrigation Facilities
9. Community Resources
 - Schools
 - Parks & Recreation
10. Private Utilities
11. Public Infrastructure
 - Streets
 - Water Systems
 - Sanitary Sewer Systems
 - Storm Drainage
12. Public Services
 - Police Protection
 - Fire Protection
 - Solid Waste Collection & Disposal
 - Medical Emergency Services
 - Transit Services
13. Zoning
14. Land Use
15. Ownership

ANALYSIS

Based upon the information collected in the inventory process, an analysis was conducted to identify problem areas, needs, opportunities, and constraints. The process of analysis necessarily included the meaningful consideration of input by the various individuals and groups that were interviewed.

Information was first analyzed in terms of existing conditions. Subsequently, the information was analyzed within the perspective of anticipated growth and change. This process is essential to provide meaningful recommendations for the future.

CONCLUSIONS & RECOMMENDATIONS

The results of the analysis process were then synthesized into a series of conclusions and recommendations. These were grouped into major categories such as public facilities, transportation, land use, etc., for the purpose of providing the reader/user with distinguishable areas of interest.

The recommendations contained within this study are not only derived from careful investigation and analysis, but from sound planning principles. Perhaps most importantly, the recommendations are based upon a reflection of the goals and policies contained within the Comprehensive Plan, and upon meaningful citizen input.

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CORRIDOR STUDY

STUDY AREAS

STUDY AREAS

OVERVIEW

The Corridor was divided into five separate study areas for the principal purpose of providing a more manageable method of study. The study areas are illustrated in Exhibit 1. Several primary issues presented themselves during the course of study. The two major issues however, are the lack of adequate right-of-way for future expansion of the principal arterial system, and the availability of municipal water and sewer service. Other issues which will need to be addressed with future development of the area include the provision of services such as police protection, storm drainage, solid waste collection and disposal, and transit services, along with the funding required to provide such services. In addition, when residential development occurs in the future at such densities as seen within the City limits, the adequacy of classroom space in the school system will become an issue.

In terms of adequate right-of-way, where land has previously been subdivided subject to local review and standards, the right-of-way has been dedicated. Throughout the Corridor however, are lands that have been divided through the use of exemptions from the Montana Subdivision & Platting Act (MSPA). Since there was no ability by local government to require right-of-way dedication on these certificates of survey, adequate right-of-way has not been provided. Additionally, there are numerous parcels of land within the Corridor that remain unsubdivided, either through platting or surveys, and therefore right-of-way has not been provided.

With the amendment of the MSPA in the 1993 Legislature, this should not continue to present itself as a problem. Further divisions of land will now be subject to local government review, with an ability to require standard right-of-way for future streets.

Shiloh Road, as an example, represents the principal north-south arterial within the Corridor, and in actuality, the western fringes of the urban area. The 1990 Transportation Plan recognized the need for future expansion of this roadway from a rural two-lane road to an urban four-lane divided roadway. As the area develops, it will be extremely important to control access to Shiloh as well as the other principal arterials, and to maintain the required arterial setbacks. This will greatly assist in maintaining an adequate level of service and functional integrity for the street network. In addition, the arterial setbacks will help to reduce the impacts of the transportation network on adjoining lands.

Considerable right-of-way acquisition will be required to accomplish this project. If the right-of-way were to be expanded on the west side of the existing road, the Shiloh Drain would present a physical constraint. Therefore, additional right-of-way will need to be dedicated on the east side of Shiloh Road, unless through the implementation of the West End Stormwater Master Plan, land west of Shiloh Road can be acquired for greenway. It does not seem cost-effective to physically relocate or pipe this drainage facility.

In terms of municipal water and sewer service, those areas within the Corridor, and in the City limits of Billings, do not all have services available. Public facilities planning should be updated in order to assess the feasibility and costs associated with system expansions. Storm drainage within this area also represents a key development issue. The draft "West End Stormwater Master Plan" should be finalized and adopted. The greenways recommended in the draft master plan would provide a cost-effective method of handling stormwater runoff in the area, and could additionally provide for trail systems.

With increased pressure for development in this area, the need now exists to expand the urban planning area in order to look at future services and the associated costs of providing such services. The expansion of the urban planning area will allow for a comprehensive analysis of service provisions and associated costs.

This type of comprehensive planning is necessary in order to look at not only water and sewer, but the other services previously mentioned such as storm drains, transit, police, and solid waste collection and disposal.

Until such time as the planning area is expanded and public facilities planning updated, there is sufficient justification to maintain the corporate limits of Billings as they currently exist. The current urban planning area boundary is illustrated in Exhibit 2.

Maintaining the current City limits will, in addition, provide incentives for in-fill development in those areas where services are already available. In terms of public costs, in-fill development will certainly have a positive effect. The public water and sewer systems that have been built need to be maximized in terms of use, thereby reducing overall public cost. In addition, if such services were to be extended beyond the current City limits, a disproportionate expenditure of public funds to extend such services would result.

In conjunction with maintaining the City limits, the land use west of Shiloh Road should be managed in a manner so as to allow the continuance of productive agricultural uses. If residential development is demanded, it should be at low densities. A maximum density of one dwelling unit per one acre would be recommended, as this density coincides with both the Agricultural-Suburban zoning classification and the minimum state requirements for individual well and septic systems. Even with low density residential development west of Shiloh Road, careful consideration needs to be given to potential groundwater problems associated with wells and septic systems. Any subdivision proposals should be evaluated on a technical basis, and environmental assessments required. Subdivision design should also consider the potential for future lot splits when and if municipal water and sewer service become available.

STUDY AREA 1

Study Area 1 consists of approximately 4.5 square miles, and is situated at the southernmost extent of the Corridor. This area includes the proposed location of the new Shiloh Road Interchange. The southern boundary of the study area is approximately the Yellowstone River, and the northern boundary located at Hesper Road. The eastern and western boundaries of the study area lie approximately one-half mile either side of Shiloh Road.

The topography in this area is gently-sloping from the north towards the Yellowstone River, and is interspersed with rolling hills. Most of the vegetation in the area is agricultural in nature, with areas of various native grasses, and stands of cottonwood trees along the Canyon Creek drainage. Canyon Creek is a predominant feature within the area, and enters the study area at the ZooMontana site. From that point, the creek winds southeasterly into the Yellowstone River. Other prominent features of the area are the Billings Benchwater Association (BBWA) canal, Canyon Creek ditch, U.S. Interstate #90, Montana RailLink right-of-way, and the South Frontage Road.

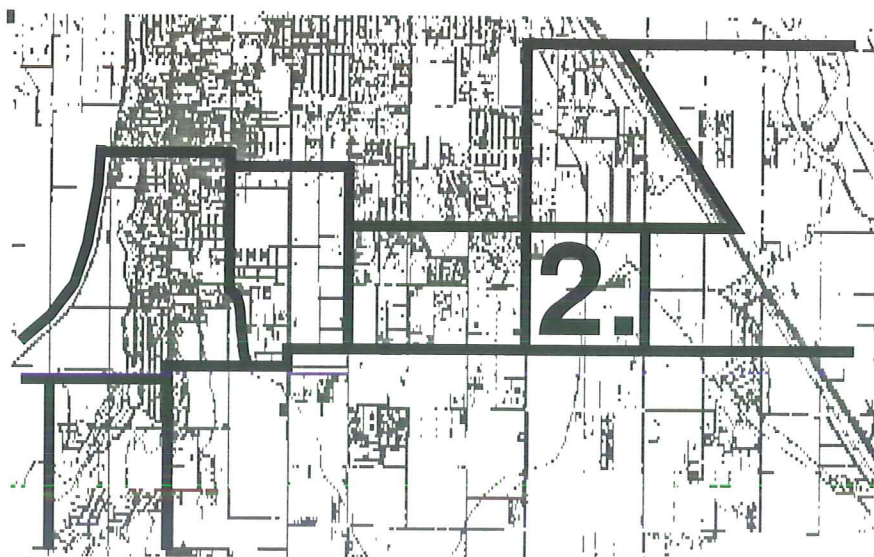
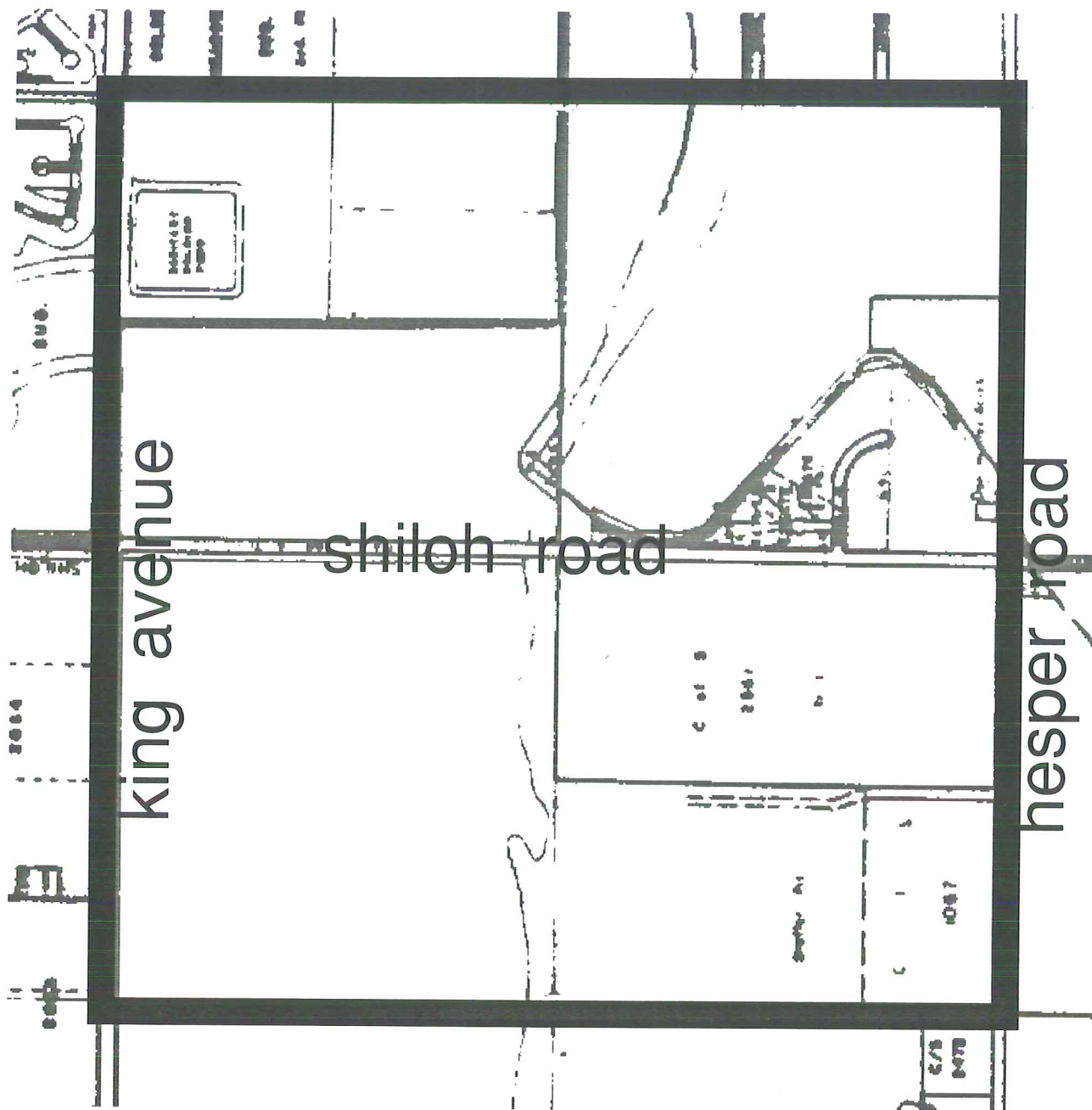
The Shiloh Road Interchange, as proposed by the Montana Department of Transportation (MDT), will be built approximately one-half mile east of the existing Shiloh Overpass. The construction of this new interchange will increase local and regional traffic within the Corridor. Currently, traffic circulation and access is provided primarily by Shiloh Road, Hesper Road, Wise Lane, Goodman Road, Story Road, and the South Frontage Road.

The current zoning of land within this study area is dominated by the Agricultural-Open Space (A-1) district (10 Acre Minimum), with some interspersed areas of residential, commercial, and controlled industrial. Current zoning classifications are illustrated in Exhibit 3. Due to the anticipated development pressures and zoning requests associated with the construction of the interchange, this area should be managed carefully with respect to zoning regulations.

The range of land use within the area is diverse, and includes the following:

- * Yellowstone Industrial Park
- * KGHl Radio Station and Tower
- * Grocery Store
- * Concrete Products
- * Neibauer Acreage Tracts (Residential)
- * Esther Rose Subdivision (Residential)
- * ZooMontana

Aside from the above-noted land uses, the area remains for the most part in productive agricultural use. Existing land use is shown in Exhibit 4. This area, due to its relation to the new interstate interchange, will undoubtedly experience the earliest pressures for development and change. The development of the ZooMontana site (currently underway), the future construction of the new State Women's Correctional Facility in Area of Influence - 2, and the visibility and access from the interstate corridor, will all influence the future development of Study Area 1. Public utilities availability will also greatly influence the development of this area.



**Study
Area
2**

STUDY AREA 2

This study area is located immediately north of Study Area 1, and encompasses a little more than one square mile in area. Hesper Road forms the southern boundary and King Avenue West forms the northern boundary. Here again, the eastern and western boundaries are one-half mile on either side of Shiloh Road.

The overall gentle slope of the land in this area is from the north towards the Yellowstone River. However, extensive gravel extraction has created numerous large depressions, mainly in the southwest and north-central portions of the study area. The remaining land not currently being utilized for gravel extraction is again agricultural, with some areas of native grasses.

Among the prominent physical features in the area are the BBWA canal, Hougans Slough, and the Shiloh Drain. There are also scattered, smaller drainage and irrigation ditches within the area. Primary access and circulation in this study area are provided by Shiloh Road, King Avenue West, and Hesper Road.

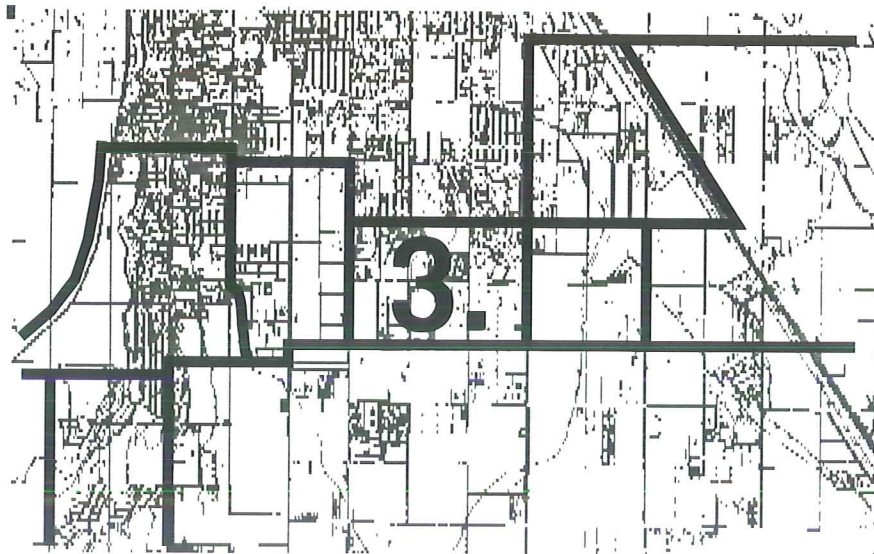
The current zoning of land within this study area is quite diverse. The largest portion of the area is zoned Agricultural-Open Space (A-1), with the remainder being zoned for both residential (including a substantial tract for mobile homes), and some controlled industrial. In addition, there is a large planned unit development, with land designated for single-family, multi-family, and some commercial uses. The existing zoning classifications are illustrated in Exhibit 3.

The current range of land uses in the area includes the following:

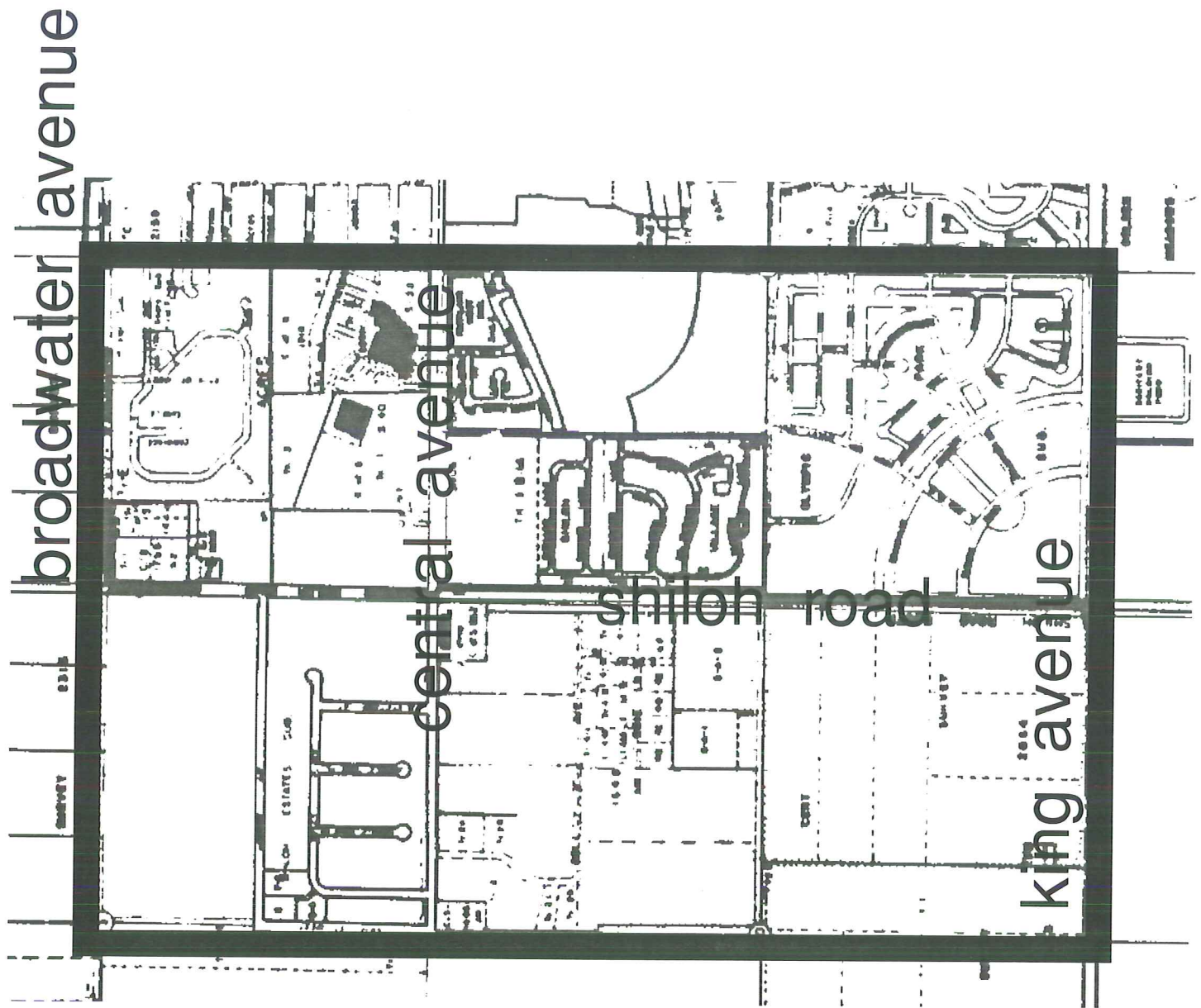
- * Yellowstone County Gravel Pit
- * Yellowstone County Abandoned Vehicle Yard
- * Gravel Extraction Site and Concrete Batch Plant
- * Temple Estates Subdivision (Residential)
- * Dan Walter Acres (Residential)

Here again, as in Study Area 1, the predominant land use remains productive agricultural use. The range of existing land uses is illustrated in Exhibit 4.

The gravel extraction activities in this area, along with the associated reclamation efforts, will greatly influence future land use options in this area. These extraction areas present good opportunities for recreational water resource amenities, or depending upon costs associated with reclamation, could be filled and developed. Another major consideration for future development within this area is the right-of-way required for the expansion of Shiloh Road. Associated with the future expansion of Shiloh Road is the issue of the Shiloh Drain and the physical constraint that it represents. Public utilities availability will influence development potential in this area as well.



Study Area 3



STUDY AREA 3

Study Area 3 consists of approximately 1.5 square miles, and is located in the center of the Corridor Study Area. King Avenue West forms the southern boundary of the study area, while Broadwater Avenue forms the boundary to the north. Once again, the eastern and western boundaries of the study area lie one-half mile on either side of Shiloh Road.

The general topography of this area is well-drained and gently sloping in a southeasterly direction. The land therefore lends itself to being suitable for agriculture or development. The most notable feature within the area is the Shiloh Drain, which runs the length of the study area parallel to Shiloh Road.

Principal access within this area is provided by Shiloh Road, King Avenue West, Central Avenue, Broadwater Avenue, and Monad Road. This arterial street network provides access to the downtown area, regional shopping areas, local neighborhoods, and the interstate system. Interstate access is provided via the King Avenue West interchange.

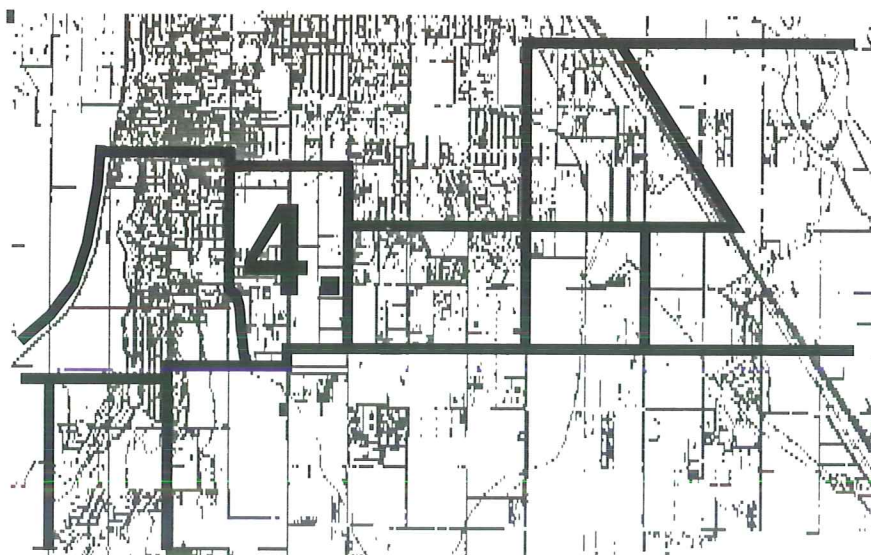
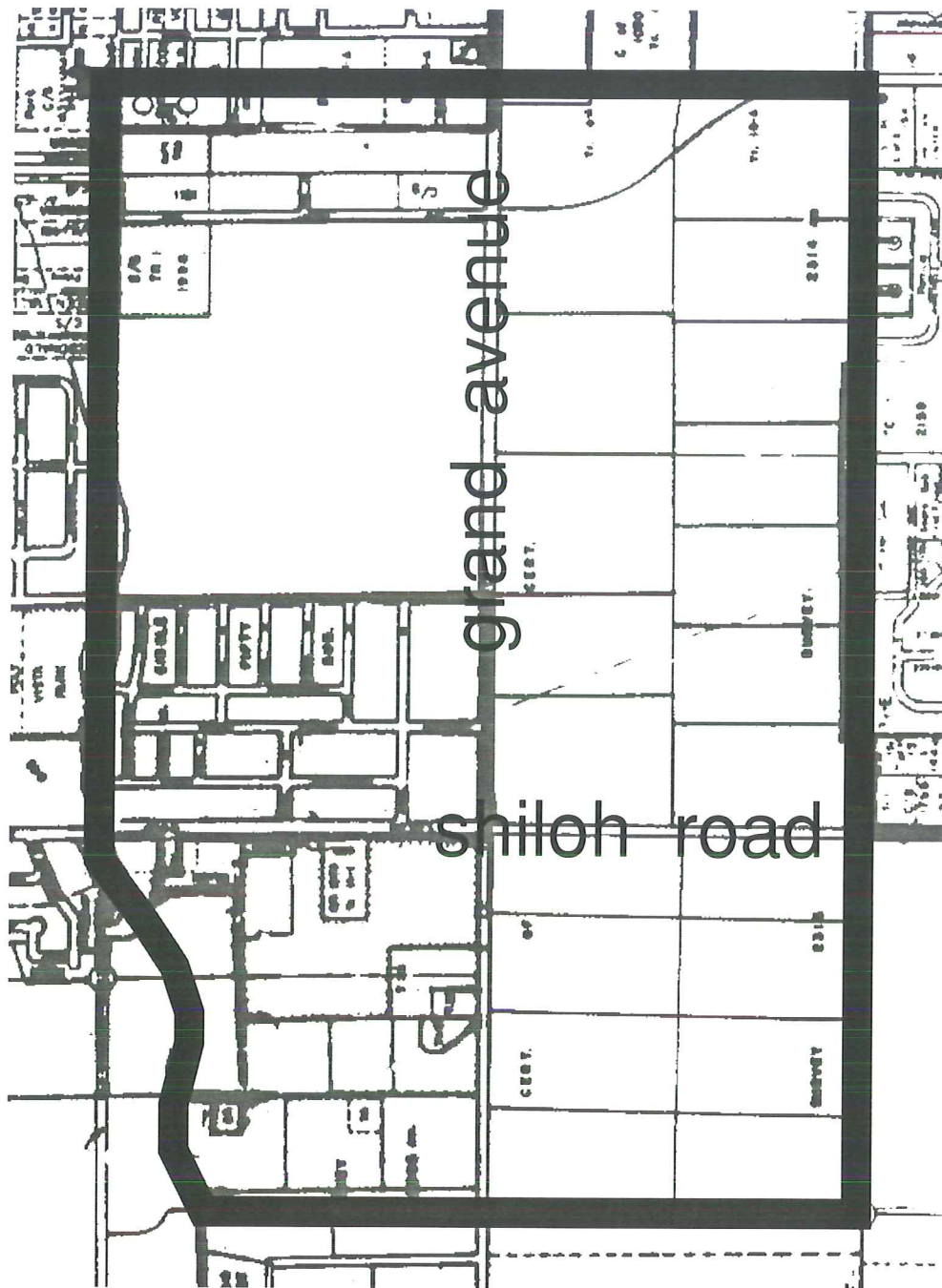
Current zoning within this study area is again dominated by the Agricultural-Open Space (A-1) district, with the remainder of land zoned for residential, commercial, and public uses. There are several large planned unit developments within this area, including Olympic Park, Parkland West, and Shiloh Village Subdivisions. These PUD's contain land designated for single-family, multi-family, mobile homes, residential professional, and commercial uses. Existing zoning can be seen in Exhibit 3.

Land use within this study area is diverse, including agriculture, single-family residential (including mobile home park), multi-family residential, institutional, and commercial. The significant non-residential uses within the area include the following:

- * Billings Vocational Technical Institute
- * Career Institute
- * Veterinary Clinic
- * Convenience Store
- * Photographic Studio
- * Churches

Existing land use patterns are illustrated in Exhibit 4.

The existing diversity of uses, along with the Shiloh Road right-of-way considerations and Shiloh Drain constraints, present the principal issues for future development of this area. This area contains considerable land within the City limits that is currently vacant, but with City services available. Therefore, this is an area which should be strongly encouraged for in-fill development. The planned unit developments within the area should allow for a logical mix of land uses, while maintaining existing neighborhood characters, and future compatibility of uses. Here again, the availability of public utilities will be a great influence on development potential in this area.



**Study
Area
4**

STUDY AREA 4

Study Area 4 encompasses approximately one square mile, and is located towards the northern end of the Corridor. The study area boundaries are Broadwater Avenue on the south, Colton Boulevard on the north, and one-half mile east and west of Shiloh Road.

The general topography of this area is also gently sloping, and drains to the southeast. The land in this study area is well-suited for development or for agricultural production. Amongst the prominent features are the Big Ditch and the Arnold Drain, which both traverse the study area.

Primary access and circulation are provided by Shiloh Road, Grand Avenue, and Broadwater Avenue. Broadwater Avenue does not extend west of Shiloh Road at the present time. Both Grand and Broadwater Avenues provide access to regional shopping, and further east, to the downtown district. Colton Boulevard is designated and functions as a collector street, thereby providing access to and from the neighborhoods to the arterial street network. Colton is currently not constructed between 38th Street West and Shiloh Road.

The current zoning within this area presents a mixture of various residential and agricultural zoning classifications, however, the largest portion of land in the area is zoned Agricultural-Open Space (A-1). In addition, there are some nodes of commercial zoning in the area, at the northeast corner of Grand and Shiloh. Existing zoning classifications are illustrated in Exhibit 3.

Land use in this study area is quite varied. Currently there are large lot residential developments (15,000 square feet or greater), commercial, institutional, and agricultural uses. There is land within the area which has been subdivided for residential purposes, but is currently undeveloped. Most of the land in the area is productively farmed. Among the non-residential land uses in the area are the following:

- * Nursery
- * Sod Farm
- * Churches
- * Veterinary Clinic

It should be noted that a large tract of agriculturally-zoned land was recently leased for the purposes of constructing a new 18-hole public golf course. The land use patterns in this study area are shown in Exhibit 4.

Primary considerations for development in this study area are right-of-way acquisition, and the availability of municipal water and sewer services. Much of this study area is currently within the County's jurisdiction, therefore no municipal services are available at this time.

STUDY AREA 5

Study Area 5 is located at the northernmost extent of the Corridor, and consists of approximately 4 square miles of land. The boundaries of the study area are formed by Colton Boulevard on the south, Beartooth Avenue on the east, 46th Street West on the west, and State Highway #3 to the north.

With the exception of the rimrocks, this area slopes generally in a southeasterly direction. The land in the area is generally well-drained, and suitable for either residential development, or for agricultural purposes. There are small areas interspersed below the rims which are natural drainage areas, and are not suitable for development of any type.

Notable features within the area include the Cove Ditch, Hi-Line Ditch, and the Big Ditch, all of which traverse the study area. These ditches provide for irrigation and drainage of the study area.

Primary access and circulation to the area are provided by Shiloh Road, Rimrock Road, Colton Boulevard, Zimmerman Trail, and State Highway #3. The connection from State Highway #3 via Zimmerman Trail to Shiloh Road, provides an important farm to market function. Here again, the principal arterials provide access to regional shopping, the downtown district, while Colton Boulevard functions as a collector.

The predominant zoning classification within this study area is Residential 9600, with the remainder of land zoned for agriculture, and public uses. The current zoning classifications are shown in Exhibit 3.

Land use within this area is varied, with low-density residential uses, institutional uses, agricultural uses, and public park lands. The non-residential uses within the area include the following:

- * Convalescent Home
- * Elementary School
- * Public Parks

The current range of land use is illustrated in Exhibit 4.

The major consideration for future development in this area is the expansion of municipal services to the residential developments. This is a highly desirable residential area, with some in-fill potentials, given adequate service capacities. Other considerations for the area are right-of-way acquisition, and potential school capacity problems when the area is fully developed.

NOTE: Additional, more detailed information on the study areas within the Shiloh Road Corridor is available in the Yellowstone County Planning Department offices.

SHILOH ROAD

CORRIDOR STUDY

CONCLUSIONS & RECOMMENDATIONS

PUBLIC FACILITIES

The results of the study effort indicate that development constraints exist with regard to public facilities. In other words, development potential (at urban densities) will be limited in the near term to those areas currently served, or capable of being served, by municipal water and sanitary sewer systems. Currently, the western one-half of the Corridor lies outside of the City, therefore municipal services are not available to that area. In addition, public facilities planning and urban planning efforts have not been extended west of Shiloh Road, with the exception of the area north of Grand Avenue.

Therefore, not only do the physical facilities end at Shiloh Road, but planning efforts as well. This points to the critical need of updating and expanding local planning efforts to more specifically plan for future facilities west of Shiloh Road. These efforts should include a benefit/cost analysis with regard to funding future improvements. The second critical need is to promote and encourage growth within the areas already served or capable of being served by existing systems. This goal of promoting "in-fill" development is strongly emphasized in the 1990 Yellowstone County Comprehensive Plan.

The principal intent is to maximize the use of existing systems prior to expanding service to contiguous or outlying areas. This again points to the need for updated public facilities planning to more specifically identify available capacities within these "in-fill" areas. Further study should identify current and future land use demands and density potentials. This also represents good fiscal policy in that the public investment in the existing systems has not yet yielded its maximum return. Therefore, to extend services beyond the City limits at this time would raise an issue of the disproportionate expenditure of public funds. This identifies the need to carefully manage any growth west of Shiloh Road in the near-term.

As mentioned in the Comprehensive Plan, to supply treated water to dispersed rural residents throughout the County is prohibitively expensive. Outside of the areas served by the City, existing sources are threatened by drought conditions, increased demand, and uncertainties in estimations and forecasts of ground water supply and quality. New development in these outlying areas should be discouraged because of these very problems. However, it cannot be completely eliminated. Density of development however, can be managed through local zoning regulations - ie., lot size minimums.

Underground sewage treatment systems similarly have the potential for serious problems. The potential for groundwater contamination increases proportionately with the concentration of individual sewage systems. Monitoring of existing sewage systems in this area should be increased to better forecast problems. Clustered development in rural areas can provide alternatives to individual sewage systems, but these systems can also create problems when improperly managed. Adequate safeguards must be put in place for continued management and maintenance. Such systems can certainly function well and provide a solution to sprawled development and individual systems that result in ground saturation. The Yellowstone Country Club's sewage system is an example of a good working system for clustered development.

This finding lends support to the policy statements within the Comprehensive Plan which refer to capitalizing on existing public water and sewer systems, encouraging "in-fill" development in those areas already provided with public systems, reducing impacts of development on open rural areas, and discouraging extensions of municipal services to outlying areas to avoid the disproportionate expenditure of public funds. Further, this finding supports the overall goal within the Land Use/Growth Management Element of the Plan which states..."Curb urban sprawl and discourage leapfrog development."

Stormwater management is another development issue within the Corridor. The draft "Westend Stormwater Master Plan" should be finalized and adopted so that it is in place prior to significant development pressures arising. A greenway system should be identified so that necessary right-of-way or easements can be obtained as part of any future subdivision approvals. The park dedication requirements for subdivisions should also provide a useful tool in establishing a greenway system. Such a system could provide for multiple uses such as linear drainage and bicycle/pedestrian trail systems.

Therefore, based upon the study findings, and in consideration of the goals and policies within the Comprehensive Plan, the following recommendations are provided:

1. Encourage new development within the Corridor in those areas already served with public water and sanitary sewer systems. ie., "in-fill" development
2. To facilitate #1 above, develop an inventory of vacant lands within the Corridor already served or capable of being served with public facilities.
3. In anticipation of future development pressures within the Corridor, expand the Urban Planning Area so as to better plan and manage the ultimate extension of public facilities.
4. In anticipation of future development pressures within the Corridor, initiate an update of the 1984 Black & Veatch Public Facilities Plan for the in-fill area. Based on that update, assess the need for expansion west of Shiloh Road.
5. Discourage new development in those areas within the Corridor not currently capable of being served by public water and sanitary sewer systems.

6. Maintain low densities outside of the City limits where public facilities are not available.
7. Encourage clustered developments within the areas outside of the service areas.
8. Explore alternative technologies for rural sewage systems.
9. Increase monitoring of individual sewage systems.

PARKS & OPEN SPACE

There is significant opportunity for development of a parks/open space system within the Corridor study area. The natural and man-made drainageways in the area have been identified in the study process as constraints to development. However, these same drainageways present a great opportunity for developing a unique and functional amenity. As recognized in the draft "West End Stormwater Master Plan", a greenbelt system can efficiently and cost-effectively provide for stormwater runoff in the area. If properly planned for, the greenbelt system could also provide for active and/or passive recreational opportunities. Bicycle/pedestrian paths could be integrated into such a greenbelt system. In addition, these greenbelt corridors would provide for the preservation of wetland areas as well as wildlife habitat. See Exhibit 5.

There is a recognized need, as identified in the Comprehensive Plan, to coordinate such efforts with other departments, agencies, and special interest groups. This could include the City Engineer, County Surveyor, City Parks Department, County Park Board, and the Yellowstone River Parks Association, Fish Wildlife & Parks, Department of State Lands, and the BLM. Most importantly will be the active involvement and cooperation of the landholders and ditch companies in the area.

This conclusion is further supported by the Comprehensive Plan. There are several policy statements within the Land Use/Growth Management Element of the Plan which recommend creating a multi-purpose network of recreational trails and open spaces along irrigation canals and drainageways. In addition, it is recommended to preserve areas of open space within areas of urban development, and to promote access by non-motorized traffic.

The Comprehensive Plan also suggests a "pilot trail" program to assist in implementation. Such a system is seen as being quite feasible within the Shiloh Road Corridor. Given the largely undeveloped character of the Corridor, an open space plan could still be integrated into the future development of the area. This system could then "set the standard" for other areas, and could additionally be used to work out the liability and maintenance issues which are of vital importance to its success.

Another constraint to development within the Corridor identified in this study is the existence of gravel extraction operations. Here again, an opportunity exists, given appropriate planning and reclamation efforts, to provide unique and functional park and recreational amenities. The reclamation and conversion of gravel pit sites into water resources (small lakes) and parks has been quite successful in other areas. These could either be developed as public facilities, joint public-private ventures, or strictly privately-owned and incorporated into a planned development.

Finally, one of the most significant opportunities for parks and open space within the Corridor is the Yellowstone River and its environs. Given recent efforts by the Yellowstone River Parks Association (YRPA), and considering one of the principal goals within the Environment Element of the Comprehensive Plan is the preservation of the river corridor, steps need to be taken to ensure that this valuable resource is not degraded. The active and passive recreational opportunities and benefits afforded by the Yellowstone River cannot be overstated. Here again, the wetland areas and wildlife habitat areas along the River should be preserved, as also recommended in the Comprehensive Plan.

A parks trail system could potentially be developed that starts with the drainageways in the area, connects to the River, and then along the River to East Bridge, and into the Heights along the old railway corridor. This system would be unique to Montana, and could also have potential for economic benefits. Tourists visiting ZooMontana or passing through to Yellowstone Park might be inclined to stay over a day to enjoy the river park system. Once such a system is developed and becomes recognized, other opportunities such as mountain bike rentals, raft rentals, etc.. could present themselves, here again adding a stimulus to the local economy.

A coordinated effort is here again needed to preserve this invaluable resource. Any coordinated effort should involve the previously-mentioned groups in order to maximize the potential for success. The fact that local floodplain regulations have been adopted for the Yellowstone River makes the task of preservation somewhat easier. Development within the floodway of the river is already prohibited, and is severely restricted within the flood fringe areas. Parkland acquisitions and conservation easements would provide effective means of preserving the river corridor for public benefit. Public park dedication requirements within the local subdivision regulations should be utilized to acquire identified lands for the greenbelt system. Additionally, the cash-in-lieu payment requirement, where land is not desirable or needed, could be used to purchase land parcels or linkages for the system.

Of critical importance to the implementation and future success of providing greenways and river parks is the provision for long-term maintenance. This issue deserves detailed study so that appropriate funding can be provided for such maintenance. The use of park maintenance districts is encouraged with the approval of future subdivisions. A county-wide park district with mill levy authority would also substantially assist with this need.

Therefore, given the findings of this study, and in consideration of the goals, policies, and strategies in the Comprehensive Plan, the following recommendations are provided:

1. Develop an open space master plan for the Corridor area which identifies the open space system components, and proposes strategies for implementation.
2. For any proposed subdivision within the Corridor, require that the parkland dedication be met with land adjacent to the river or the drainageways (natural or man-made), where identified as components in the open space master plan, and where openly discussed with both landowners and ditch companies. The potential for a large regional park should also be considered.
3. Pursue the acquisition of lands within the Yellowstone River corridor for a river park system through land donations, conservation easements, park cash-in-lieu payment requirements, or joint public-private ventures.
4. Include this portion of the Yellowstone River corridor in any river park master planning efforts.
5. Encourage reclamation and re-use plans for gravel pit operations that provide for the reclamation and conversion of the gravel pit sites to water resource areas and parks.
6. Pursue the legislative authority to locally condition and monitor reclamation plans.
7. Identify and implement funding tools for long-term maintenance of trail systems.

TRANSPORTATION

The construction of the new Shiloh Road interchange on U.S. Interstate 90 will require specific consideration of impacts and need in regard to the street network within the Corridor. The access provided to Shiloh Road by the new interchange will immediately increase traffic volumes in terms of both regional and local traffic. That increase will not become significant, however, until such time as development activity accelerates. The 1990 Transportation Plan projects an increase in average daily traffic (ADT) at King Avenue West from approximately 5500 ADT in 1990 to 15000 ADT in the year 2010.

Based upon those projected traffic volume increases, the Plan identifies the need to expand Shiloh Road from a two-lane rural roadway to an urban four-lane divided roadway from I-90 to Rimrock Road. New traffic signals and turn lanes are also planned for the major intersections at King, Central, Broadwater, and Grand Avenues. The estimated costs for the expansion and associated improvements were projected in the Plan at \$9.5 million.

The results of this study indicate that there is considerable right-of-way along Shiloh Road that will need to be acquired in order to allow for the expanded roadway. One of the principal reasons for the lack of adequate right-of-way is that the Shiloh Road Corridor is characterized by numerous parcels that have been divided under exemptions from the Montana Subdivision & Platting Act (MSPA). These exemptions have not allowed local government any statutory authority, under MSPA, to require dedication of right-of-way for public street systems.

Therefore, there has been no provision for adequate right-of-way adjacent to those parcels along Shiloh Road. This lack of adequate right-of-way is also evident along the other principal arterials within the Corridor. In addition, also due to local government's lack of statutory authority under MSPA, there has been no review for adequate or proper access locations or access controls.

As future land divisions occur along the principal arterials within the Corridor, a method is needed for acquiring the adequate right-of-way to ultimately expand these public roads. In addition, as the principal arterials are expanded to urban roadways in the future, there is a need to control access in order to maintain the functional integrity of these arterials. Given the importance of preserving the functional integrity of Shiloh Road and others, as principal arterials, and the identified need for acquiring adequate right-of-way for the planned expansion of the roadways, the amendment of the MSPA by the 1993 Legislature should assist in addressing these critical needs.

Secondary impacts identified in the study relate to the affect of arterial street systems on adjacent land uses. Increased traffic on "urban roadways" can create adverse impacts on adjacent land uses such as noise, dust, fumes, and safety.

A principal policy statement within the Land Use/Growth Management Element of the Comprehensive Plan states..."Land uses adjacent to arterial streets should be planned to minimize the harmful effects of traffic on people residing on or utilizing adjacent lands." It is further recommended in the Comprehensive Plan that, through both zoning and subdivision processes, adequate lot sizes should be planned adjacent to arterials to ensure adequate setbacks and improved access control.

In addition, the use of street tree plantings, reverse frontage lots, no-access strips, earth berms, and other methods are recommended to minimize traffic impacts on adjacent uses. Strict adherence to local subdivision regulations in regard to traffic control measures is also recommended. Therefore, it will be of critical importance to require compliance with local standards as development proceeds in the Corridor.

City transit service should be provided to this area with the ultimate development of the Corridor. Funding for this service expansion should be identified and provided. Reduced vehicle trips and the associated energy conservation should be maintained as critical objectives. The long range transportation plan and transit development plan need to consider this important service.

Based upon the findings of this study, and in consideration of the recommendations within the Comprehensive Plan, the following recommendations are provided:

1. Support legislative reform to the Montana Subdivision and Platting Act (MSPA) to enable local government to review and set standards for right-of-way, easements, and access for all divisions of land.
2. Discourage variance requests, through the local subdivision review process, from the standard right-of-way dedications along the principal arterials within the Corridor.
3. Require the use of no-access strips between physical access locations. Update current site development regulations to require no-access as condition of development.
4. Require the provision of planting screens along the principal arterials, as outlined in the local subdivision regulations, to lessen future impacts of traffic on adjacent land uses.

5. To further assist in controlling access to the principal arterial system, develop and adopt site development standards for the Yellowstone County Zoning Regulations.
6. Develop funding strategies for the future expansion of Shiloh Road, as well as other arterials within the Corridor. Strategies to consider include:
 - a. transportation district;
 - b. local-option gas tax;
 - c. special improvement districts; and
 - d. development impact fees.
7. Discourage requests for arterial setback variances from the local zoning standards.
8. Develop policies for future median openings on the expanded Shiloh Road as related to traffic movement and safety.
9. Develop a long-range plan for transit service, to include funding.

LAND USE & GROWTH MANAGEMENT

As stated previously, the Shiloh Road Corridor can best be described as an urban transition area. Although much of the Corridor remains in agricultural use and rural in character, scattered commercial and residential uses have begun to develop. Further documentation of the transitional character is provided by the fact that roughly one-half of the Corridor is within the city limits, and the other one-half within the county's jurisdiction. Related to that fact is the availability of public water and sewer facilities. Those facilities are not currently available to the entire Corridor. That in turn dictates to a large degree the type and intensity of land use that is appropriate and feasible.

The fact that the area is still largely undeveloped supports the need for this Study. Steps need to be taken to ensure that the Corridor develops in an orderly, compatible, and cost-effective manner. In other words, a great opportunity exists to effectively plan for a viable and attractive "gateway" into the west end of the Billings urban area.

With continuing growth towards the west, and with the additional access to U.S. Interstate 90 at Shiloh Road, guidance must be provided to manage the development that will most certainly occur. That guidance must necessarily be based not only upon sound planning principles, but upon community input. The future direction and character of growth needs to be established now.

As stated previously, growth management is one of the primary objectives of this Study. The Yellowstone County Comprehensive Plan contains several recommendations for conducting corridor studies in order to more effectively manage growth in newly emerging areas.

The study process was designed to not only identify needs within the area, but also to identify the opportunities that exist. The following recommendations for growth management are therefore based upon analysis of both needs and opportunities, and are further supported by goals, policies, and strategies contained within the Yellowstone County Comprehensive Plan.

1. Discourage the development of Shiloh Road as a "commercial strip".
2. Discourage "spot zoning" requests.
3. Encourage the use of planned development to maximize flexibility in land use and site design.
4. Update planned development regulations to provide better flexibility and design standards in order to encourage the use of planned development.
5. Allow for appropriately located nodes of commercial development to serve adjacent neighborhoods.
6. Provide for open space to maintain scenic vistas and to protect the environmentally-sensitive areas within the Corridor.
7. Encourage "in-fill" development in those areas currently served or capable of being served by public facilities.
8. Develop and maintain a current inventory of vacant lands within the Corridor which can be served by public facilities.

9. Discourage annexations by the City or by petition until the urban planning area has been expanded, and public facilities plans updated.
10. Develop and adopt performance zoning standards for the immediate interchange site to allow for flexibility in land use and design, while ensuring quality, compatible development with a sensitivity towards views, aesthetics, and the environment.
11. Expand the urban planning area to incorporate the western extent of the Corridor so as to better assess the feasibility of future provisions of municipal facilities and services.
12. Maintain low density residential development and zoning west of Shiloh Road where municipal facilities are not currently available. If such facilities become available, allow density to increase through rezoning to allow for higher density "urban" development.
13. Require reverse frontage lots and no-access easements along the principal arterials within the Corridor to better maintain the functional integrity of the transportation network.
14. Require the use of greenbelts along the principal arterials within the Corridor to reduce the impacts of transportation on adjoining lands.
15. Strongly discourage the granting of variances for arterial setbacks, right-of-way standards, no-access easements, reverse frontage lots, and greenbelts along the principal arterials within the Corridor.
16. Preserve the Yellowstone River corridor for public use.

17. Encourage the design of low density residential development west of Shiloh Road such that properties may be resubdivided if public facilities become available, while maintaining adequate access, setbacks, etc..

18. Discourage the encroachment of incompatible and unrelated land uses into established areas.

19. Develop and adopt site development/design guidelines for commercial development within the Corridor in order to enhance access, landscaping, lighting, signage, and architectural compatibility.

20. Develop incentives for "in-fill" development.

21. Discourage urban sprawl and "leap-frog" development.

22. Encourage multi-jurisdictional coordination and cooperation.

23. Develop and adopt a unified city/county development code in order to increase administrative efficiency, eliminate duplication of services, better provide cost-effective provision of service, and to provide greater continuity from long-range planning to site development. The unified development code should include regulations for zoning, subdivision, site development, signs, and floodplains.

24. Consistently maintain adherence to the policies within this study to ensure effective and successful implementation.

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SHILOH ROAD

CORRIDOR STUDY

**SECONDARY SOURCE
BIBLIOGRAPHY**

SHILOH ROAD CORRIDOR STUDY

SECONDARY SOURCE

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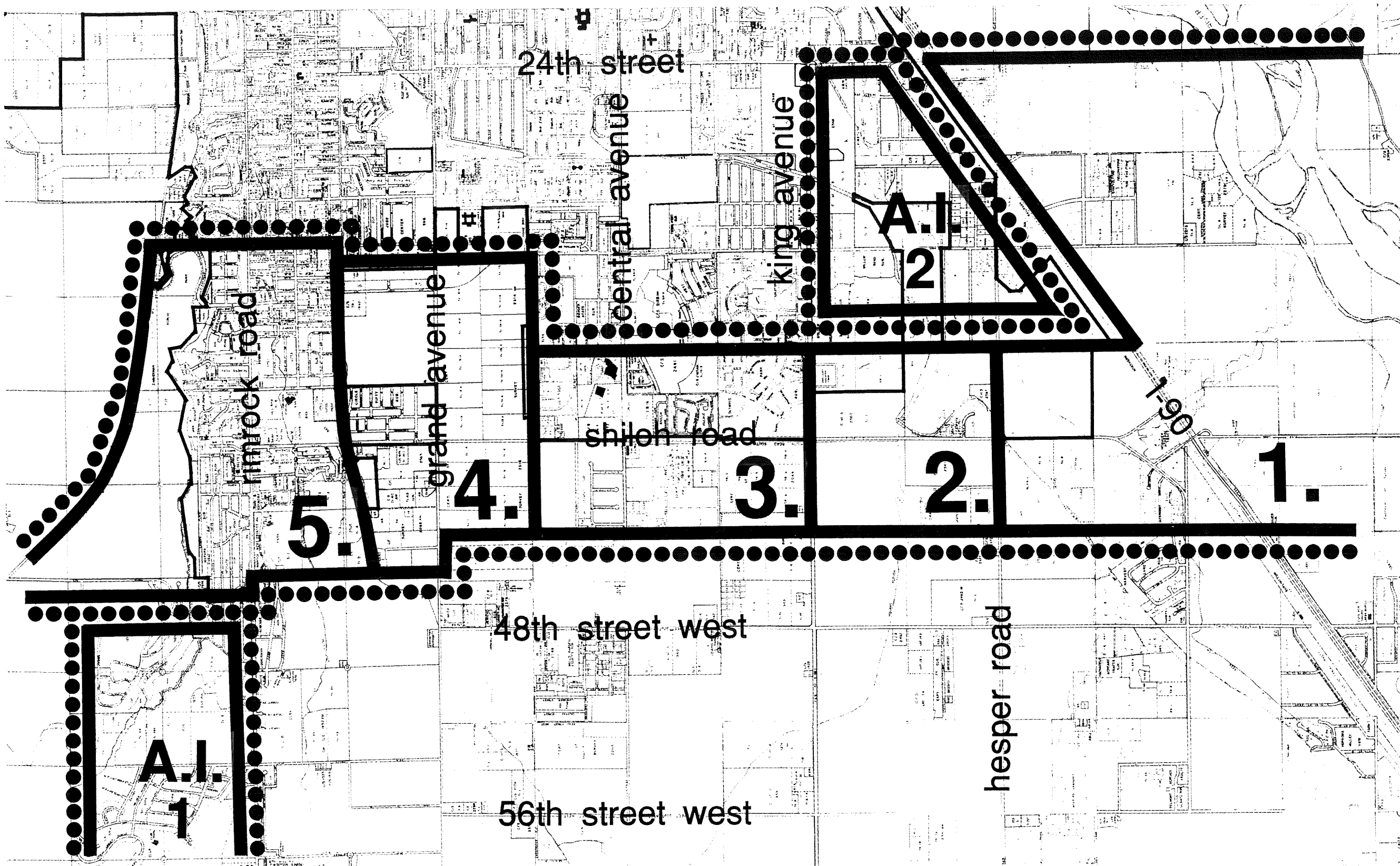
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SHILOH ROAD

CORRIDOR STUDY

EXHIBITS



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A.I. Area of Influence

1. Study Area

● Area Boundary

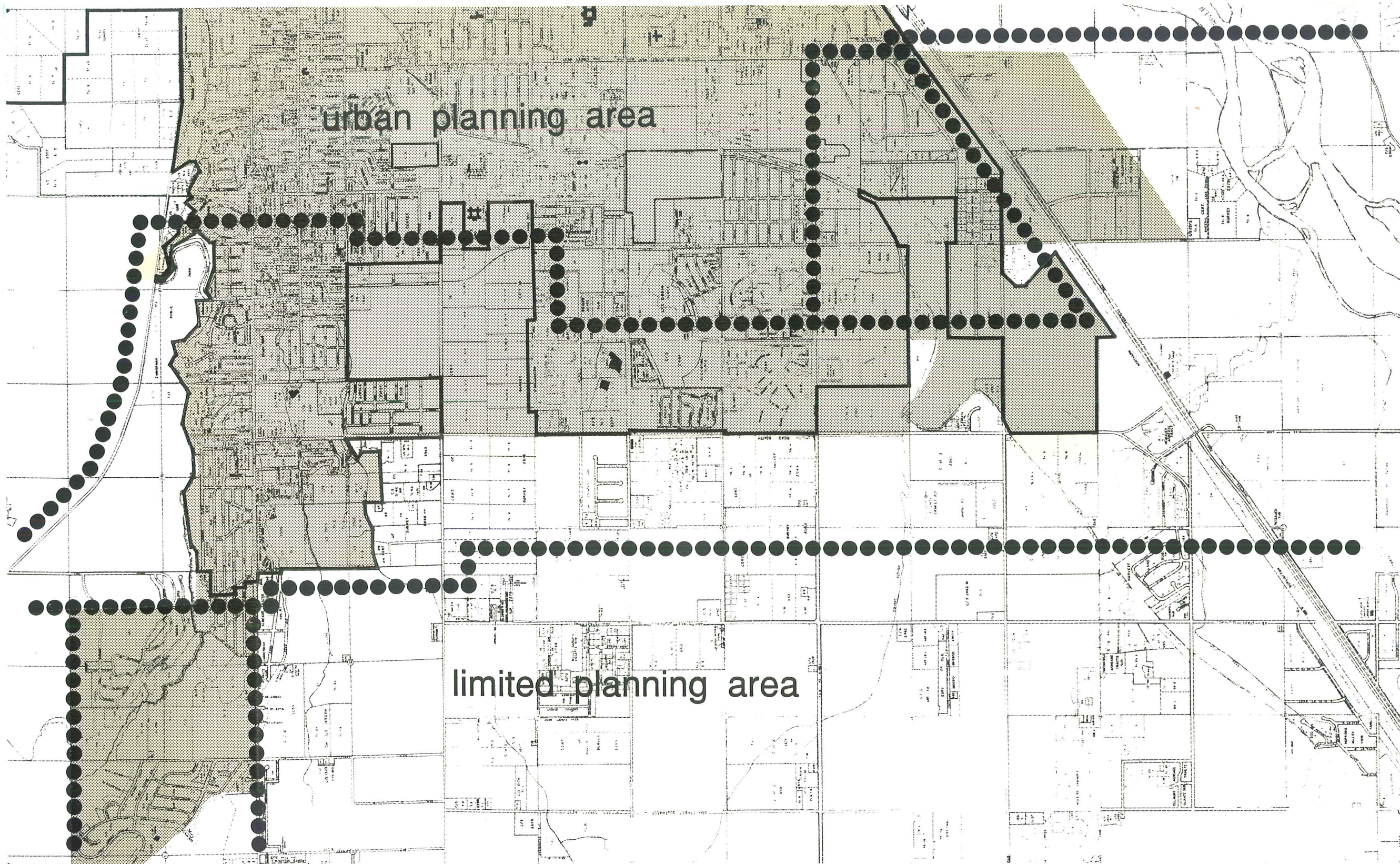
■ Sub-area Boundary

| City/County Boundary

Corridor
Study
Area
Map

SHILOH ROAD CORRIDOR STUDY

Prepared for Yellowstone County Board of Planning
August 1992

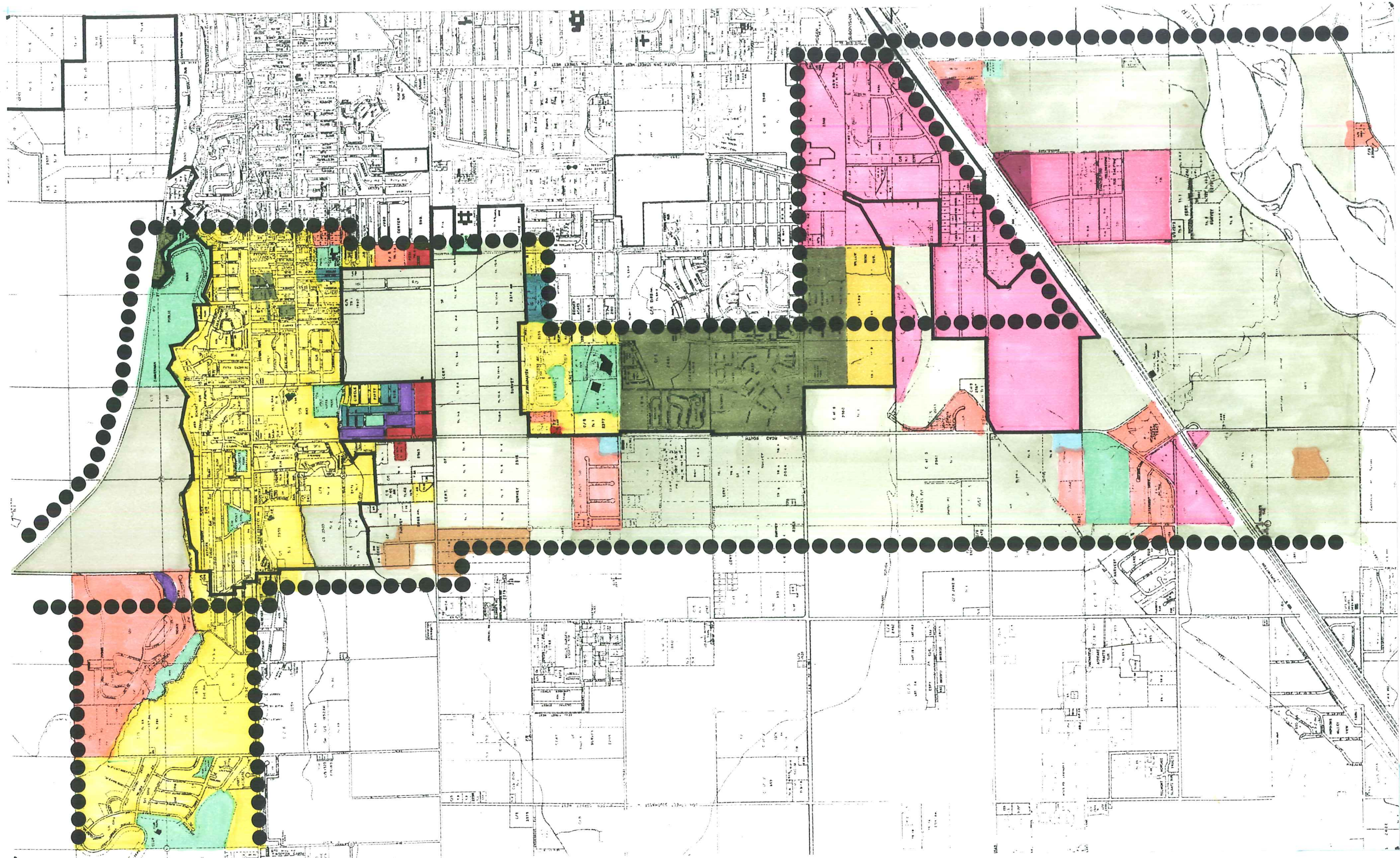


SHILOH ROAD CORRIDOR STUDY

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Urban
Planning
Area
Boundary



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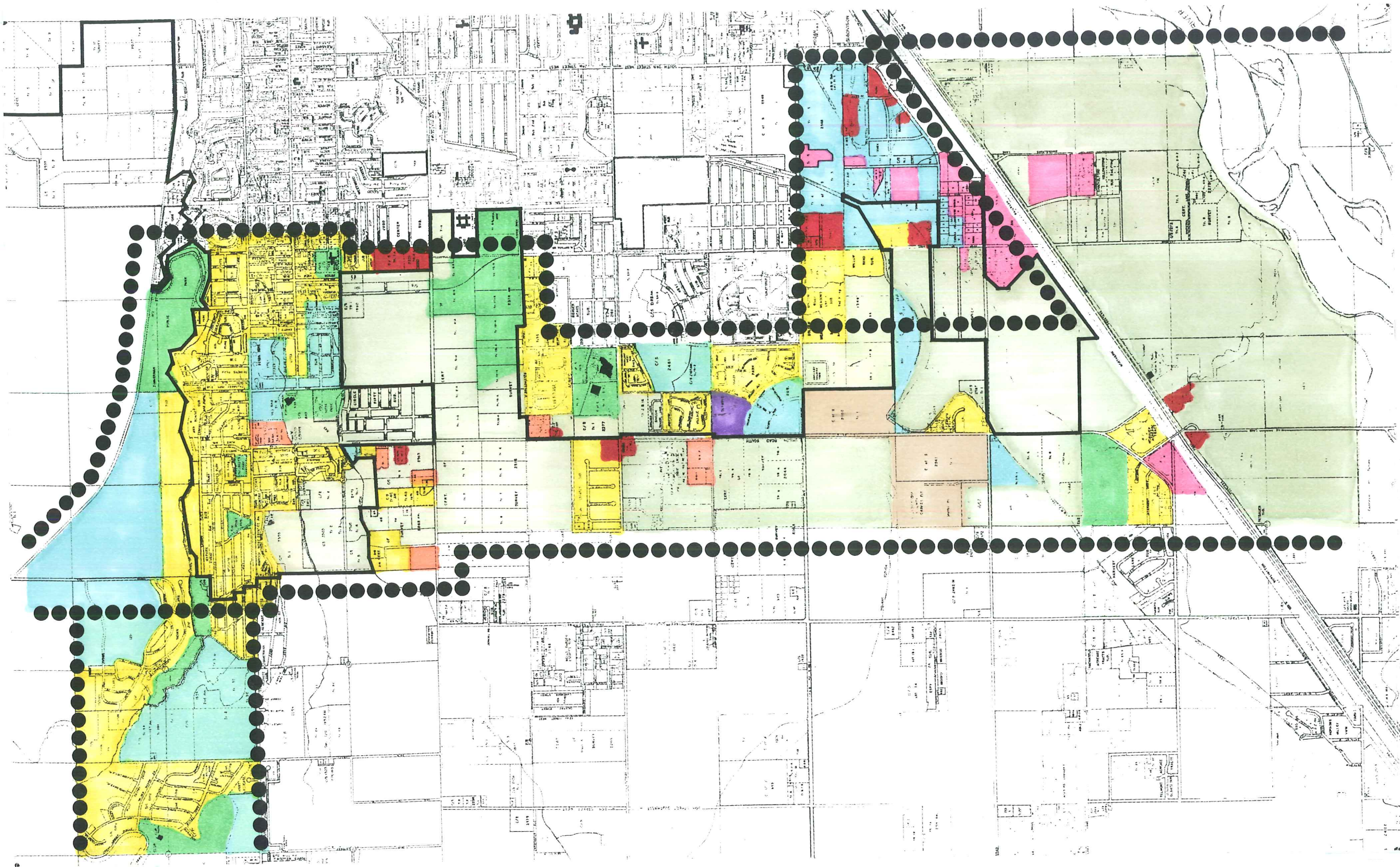
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- Single-family Residential (R-6000)
- Planned Unit Development
- Residential - Multi-family
- Residential - Mobile Home
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- Community Commercial
- Neighborhood Commercial
- Controlled Industrial



SHILOH ROAD CORRIDOR STUDY

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Existing Zoning



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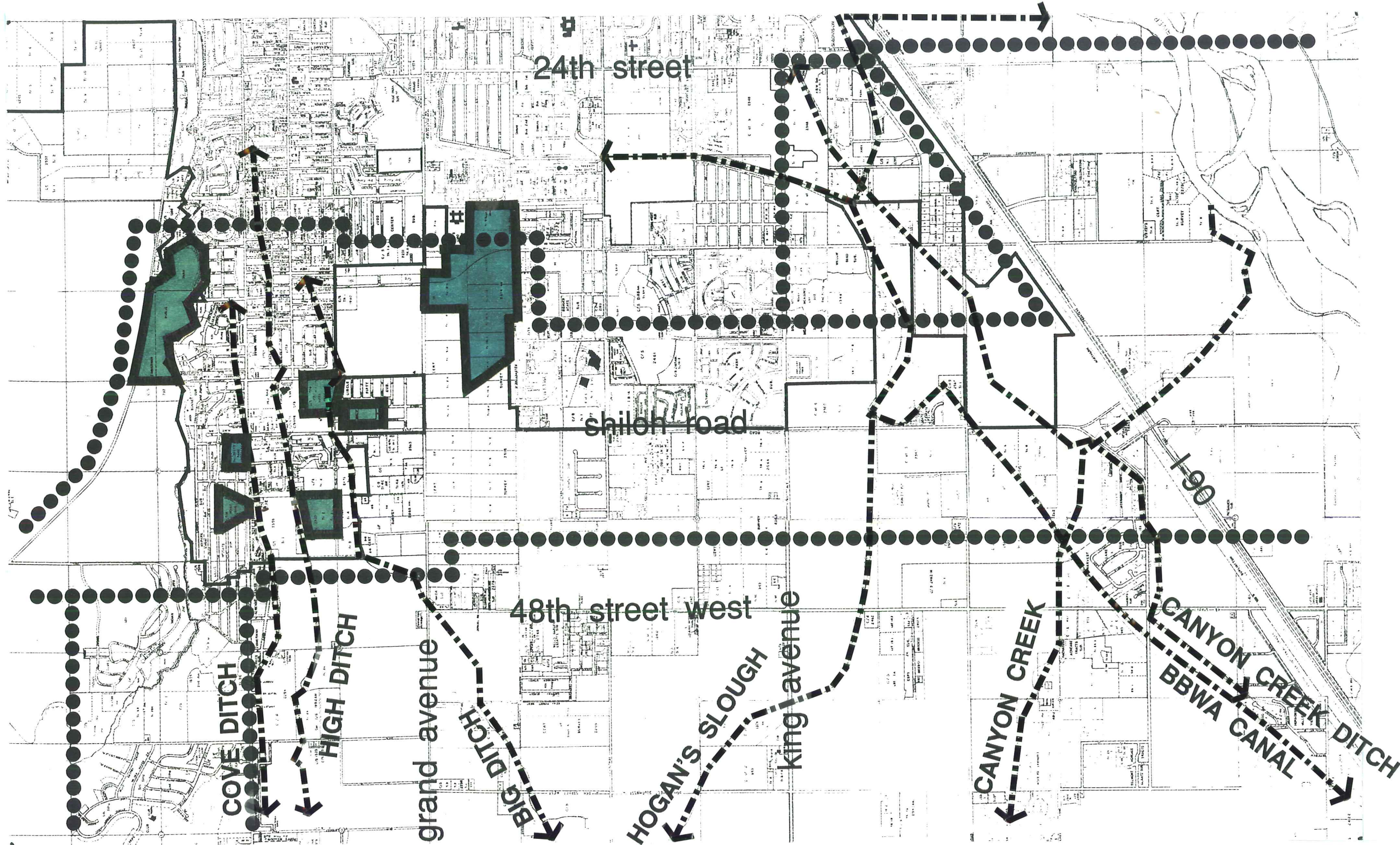
- Single-family
- Multi-family
- Agricultural
- Public
- Commercial
- Industrial
- Vacant
- Institutional
- Gravel Extraction



Existing
Land
Use

SHILOH ROAD CORRIDOR STUDY

Prepared for Yellowstone County Board of Planning



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SHILOH ROAD CORRIDOR STUDY

Prepared for Yellowstone County Board of Planning



Parks &
Green-
ways