

# **COMPREHENSIVE LAND USE PLAN**

**FOR**

**BROOKINGS  
COUNTY**

**PREPARED BY  
THE BROOKINGS COUNTY PLANNING COMMISSION**

**WITH ASSISTANCE FROM  
THE FIRST DISTRICT ASSOCIATION OF LOCAL GOVERNMENTS**

**BROOKINGS COUNTY, SOUTH DAKOTA**

**COMPREHENSIVE LAND USE PLAN**

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**Effective Date: ..... March 10, 2016**

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**THIS BROOKINGS COUNTY COMPREHENSIVE LAND USE PLAN WAS PREPARED WITH ASSISTANCE FROM  
THE FIRST DISTRICT ASSOCIATION OF LOCAL GOVERNMENTS**

**TODD KAYS, EXECUTIVE DIRECTOR  
LUKE MULLER, PLANNER**

## FORWARD

This document is the Brookings County Comprehensive Land Use Plan adopted pursuant to SDCL 11-2, and is the official policy guide for future land use decisions for Brookings County. The written policies, goals and objectives, and recommendations along with the Future Land Use Map(s) and other maps provide guidance for decisions affecting the use and development of land within the unincorporated areas of Brookings County. It is also recognized that this document should be reviewed annually and revised to reflect the changing aspiration of the citizens of Brookings County.

A public hearing of the Brookings County Planning Commission was held and this plan was recommended for approval by the Brookings County Planning Commission on January 26, 2016. A public hearing of the Brookings County Board of County Commissioners was held on February 9, 2016. The Brookings County Commission adopted this plan on February 9, 2016. The effective date of this document is March 10, 2016.

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Chairperson  
Planning Commission

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Chairperson  
Brookings County Commission

Attest:

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## **INTRODUCTION**

Change is a constant that will affect individuals throughout their life. Individuals need to make plans which will accommodate the changes they will encounter in the future. A plan can provide valuable insight into the possible solutions to the problems which typically accompany change. Planning for change is not limited to individuals. It also applies to communities and counties. Although the Brookings County Planning Commission and Board of County Commissioners have excelled in the historical application of land use management controls to the unincorporated areas of Brookings County, future development has the potential of applying new and varied pressures on local decision makers. Those pressures may be in the form of residents demanding new or additional services of township or county governments and/or the potential conflicts that occur in the siting of various uses – concentrated animal feeding operations, wellfields, wastewater treatment facilities, landfills, aggregate mining, and non-farm residences to name a few. The continued development of the county should not occur haphazardly or without insight to a plan addressing future growth patterns. For without a well-prescribed plan for future expansion, municipal, township and county leaders will be left unguided to make decisions which could impact the county's ability to progressively develop.

The Brookings County 2016 Comprehensive Land Use Plan (hereafter referred to as the Plan) is intended to replace the existing land use plan, and is meant to be a dynamic document which can evolve and respond to changing conditions. The Plan strives to integrate and balance the various plans and policies so as to promote the most beneficial physical development and community/county welfare possible for the next fifteen (15) to twenty (20) years.

The first characteristic of the Plan is that it is long-term in nature. The intent of this plan is to assist in the shaping of Brookings County's anticipated development by providing the means necessary to attain a prescribed future. Second, this plan is comprehensive in that it will be directed toward all of the unincorporated areas of the county, and serve as a guide to the physical development of those areas. Also, the Plan is the official policy document that provides a consistent statement of the County's plans and policies for future development and will further guide the decisions made by the Brookings County Board of County Commissioners, Planning Commission, Board of Adjustment, and various other governmental officials. The Plan offers a guide that will assist in answering potential questions regarding future land use and zoning and subdivision regulations. These policies form a common thread throughout the plan, stressing the critical importance of compact and contiguous growth of municipalities and established growth areas. Additionally, the Plan emphasizes the importance of long-term agricultural use by seeking to minimize interference with farming activities and discourage premature development, which may lead to costly and inefficient public expenditures.

This comprehensive land use plan depicts a pattern of land uses reflective of Brookings County's historical endeavor to achieve a balance of land that provides for the needs of the county. While the Plan is not a prescription for specific development uses and forms, the County will continue to control the location and density of general categories of land use through its continued adherence to the policies and land use maps contained herein, unless there are demonstrable and overriding reasons for not doing so.

Furthermore the Plan promotes managed growth that is cost-effective and logical. Brookings County, working with the incorporated municipalities, strives to prevent leapfrog development or urban sprawl, as well as minimize conflict between incompatible uses that may locate next to each other. In addition, the Plan establishes a circular process of implementation, review, and amendment for itself.

Finally, the Plan is designed to meet the statutory requirements of the State of South Dakota. The ability of Brookings County to plan and regulate land use within its borders is granted through South Dakota Codified Law Chapters 11-2 and 11-3. Also, this Plan is intended to meet planning requirements for its implementation tools, chief among those being the county's zoning ordinance.

## **PLANNING HISTORY**

Counties and municipalities are allowed by South Dakota Codified Law to prepare and adopt comprehensive plans, zoning and subdivision regulations. Brookings County began land use planning efforts in the early 1970's. The Brookings County Comprehensive Water and Sewer Plan was updated in 1973 and was used as the basis for the county's comprehensive plan. Zoning and subdivision ordinances were adopted in May of 1976. Since the inception of zoning, the county has amended the ordinance as needed with comprehensive updates in 1988, 1997, and 2007. Many of the communities within Brookings County have adopted comprehensive plans and zoning/subdivision regulations. Of the nine municipalities in Brookings County, only Bruce and Sinai have not established formal land use regulations. Brookings and Bushnell are currently reviewing land use policies, and the Cities of Volga and Aurora have completed comprehensive updates to their land use plans and zoning ordinances in the last three years.

Since 1980, the county has shared zoning authority with the City of Brookings. This extraterritorial zoning jurisdiction area encompasses land within three miles of the City of Brookings.

The latest update of the Comprehensive Land Use Plan for Brookings County was completed in 2000. That update re-iterated many core tenants of the original Water and Sewer Plans of the 1970's and established policies for areas of future development as were identified in the new draft.

In 2013, Brookings County made the decision to update its existing comprehensive land use plan. Brookings County Development Office Staff with assistance from South Dakota State University – Rural Sociology Department (students) initially conducted background research and created a survey which was then mailed to some residents and Township Supervisors of Brookings County and was available to be completed online. From the fall of 2013 until the spring of 2014, staff, with assistance from the students and First District Association of Local Governments, conducted community meetings in Volga, Brookings, Elkton, and White. Following those meetings county staff, with assistance from the Brookings County Planning Commission, utilized aerial photography and site visits to complete a land cover map of the entire county. Detailed information of Brookings County's demographics, economic structure, physical geography, transportation, and other areas of study were completed and reviewed. In the fall of 2014 the County Commission requested the First District Association of Local Governments to provide assistance to the County Planning Commission in the creation of policies and completion of the Comprehensive Land Use Plan.

Over a twelve-month period, the First District Association of Local Governments worked with the Planning Commission, County Staff and other leaders in gathering the remaining information, and utilized public meetings to develop policies needed for the completion of this document. Thus, after many hours of meetings and the compilation and analysis of data, the Planning Commission has completed this comprehensive land use plan.

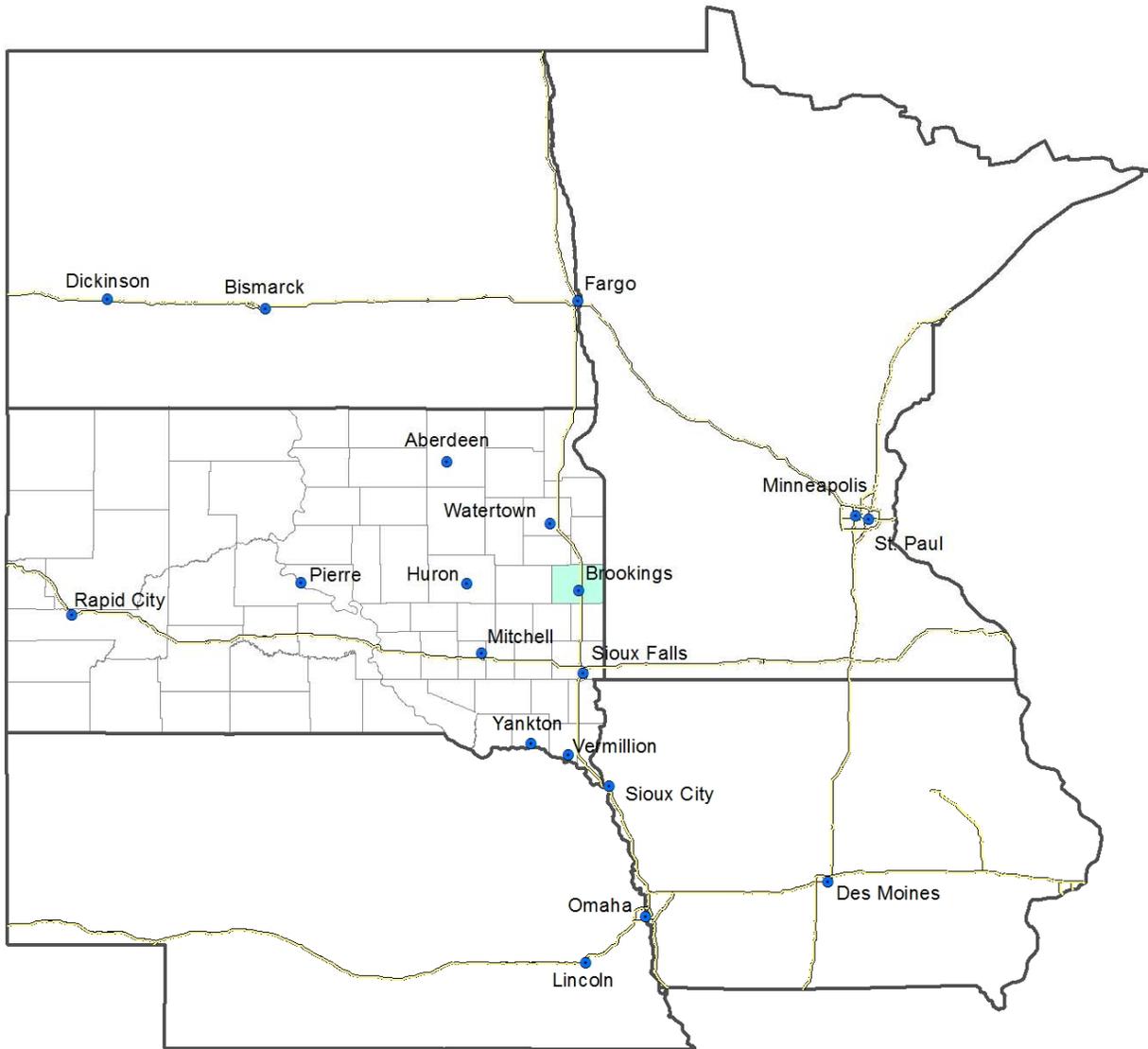
## **BACKGROUND**

### **REGIONAL LOCATION**

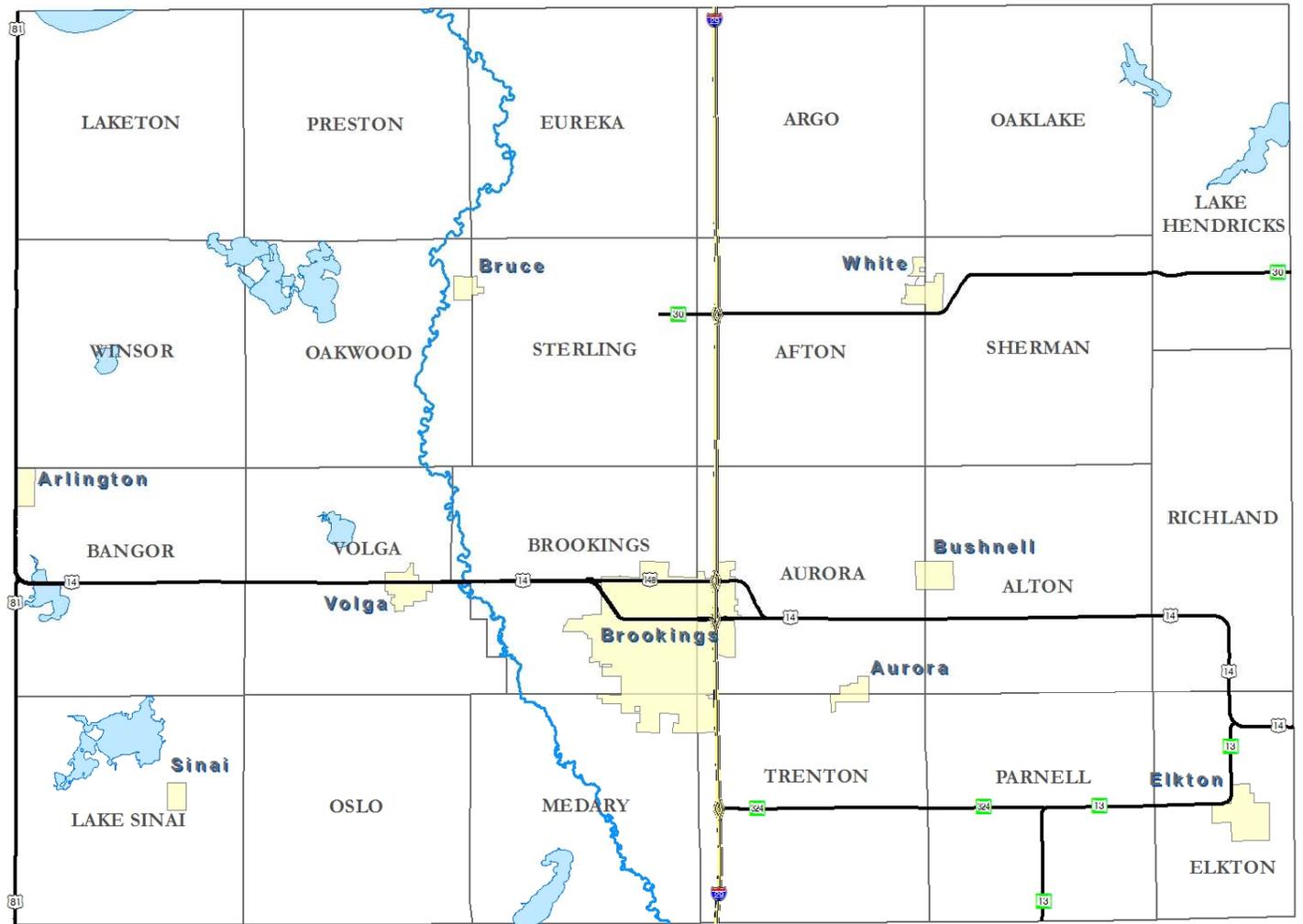
Brookings County lies in the eastern portion of the State of South Dakota at the crossroads of Interstate 29 and Highway 14. Major cities within the region include Fargo, Sioux City, Minneapolis, and Sioux Falls.

The county is comprised of twenty-three townships and nine communities: Aurora, Brookings, Bruce, Bushnell, Elkton, Sinai, Volga, White, and Arlington, which is partially in both Kingsbury and Brookings Counties. The centrally located City of Brookings is the county seat.

**MAP 1  
REGIONAL LOCATION MAP**



**MAP 2  
INCORPORATED MUNICIPALITIES AND TOWNSHIPS MAP**



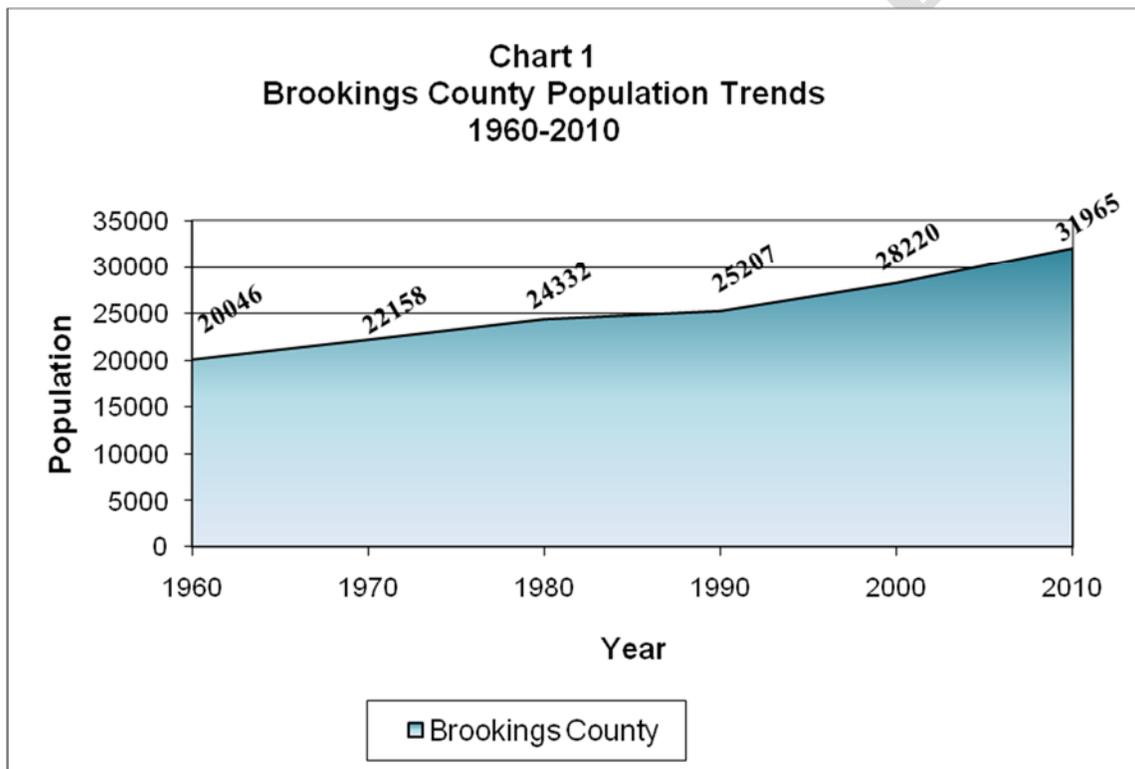
**Legend**

 Municipalities

## POPULATION

The study of a county's population is an essential component in the development of a comprehensive land use plan. By understanding the makeup of its population, a county is then better prepared to plan for the future needs of its citizenry. This section examines the population of Brookings County with respect to its current rural versus urban composition, various push-pull factors which have and will continue to influence population in the county, and a population push projection for the purposes of planning.

The population of the county is 31,965 (2010 Census). Chart 1 displays information on the population trends for Brookings County from 1960 to 2010. Brookings County has increased in population by nearly sixty (59.5) percent since 1960 (11,919 persons). Population has steadily increased during that time period with an average of 1.1% annually; however since 1990 population has increased at a steeper annual rate of 2.7%.



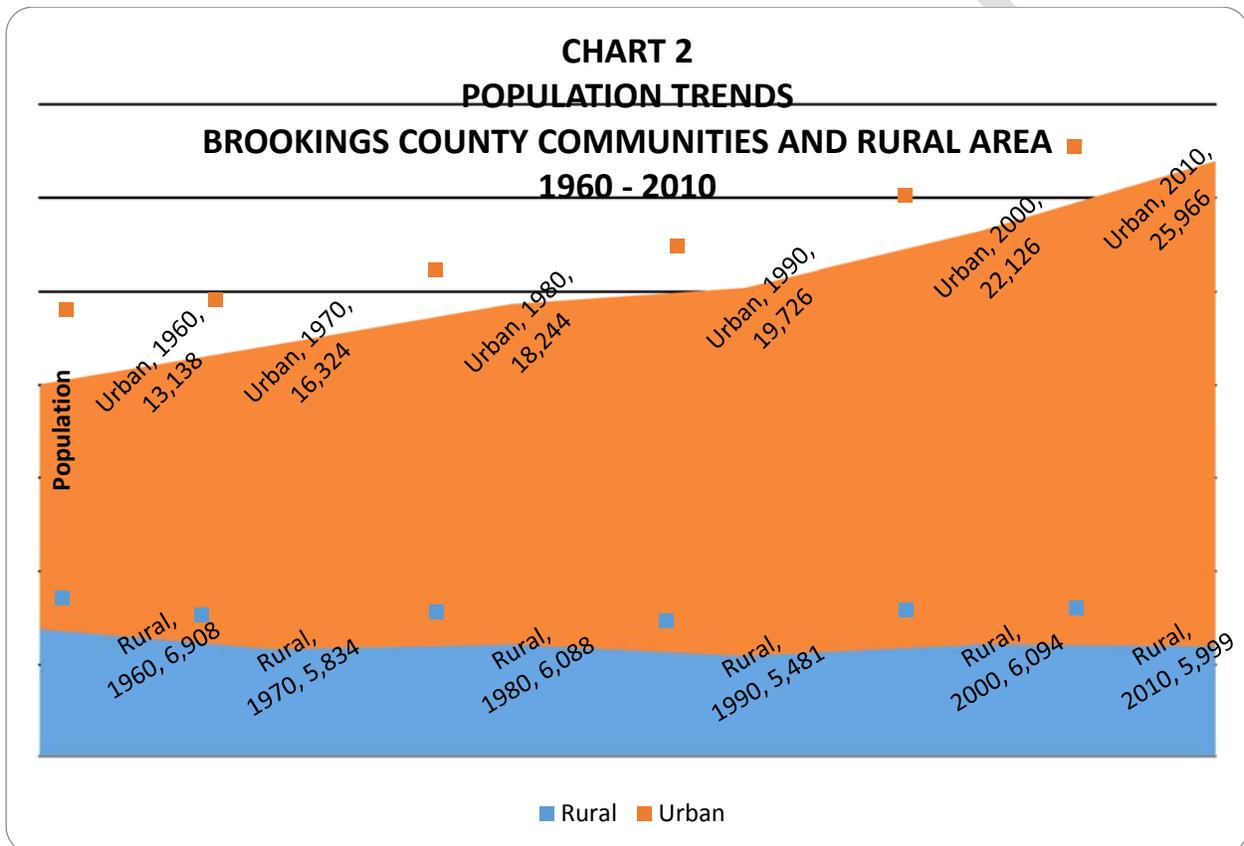
Sources for Chart 1 – US Bureau of Census of the Population 1960, 1970, 1980, 1990, 2000, and 2010.

Table 1 and Chart 2 detail Brookings County population trends by dividing the county into communities and the rural area as subsets. The population of the rural areas within Brookings County have declined since 1960 (-13.2%, 909 persons). In rural areas throughout the region, population has typically decreased due to the exodus of young adults upon graduation from high school. This trend is partially evident in rural Brookings County by simply identifying the decrease of population over the last fifty years of 13.2% (909 individuals). A closer look at Table 1 indicates that the decrease in population appears to be a function of a generational cycle in rural population which appears to be leveling out. Based upon this data, barring any major policy shifts or other factors, it would be reasonable to expect the population in the rural areas to increase slightly, but start to level out over the next two decades.

**TABLE 1  
BROOKINGS COUNTY  
POPULATION HISTORY 1960-2010**

CENSUS YEAR	RURAL		COMMUNITIES		TOTAL COUNTY
	Population	% of Total	Population	% of Total	
1960	6,908	34.46%	13,138	65.54%	20,046
1970	5,834	26.33%	16,324	73.67%	22,158
1980	6,088	25.02%	18,244	74.98%	24,332
1990	5,481	21.74%	19,726	78.26%	25,207
2000	6,094	21.59%	22,126	78.41%	28,220
2010	5,999	18.77%	25,966	81.23%	31,965

\* The communities' population for 1960-2010 included Aurora, Brookings Bruce, Bushnell, Elkton, Sinai, Volga, and White.



Sources for Table 1 and Chart 2 – US Bureau of Census of the Population 1960, 1970, 1980, 1990, 2000, and 2010.

The “communities” subset is defined to include Aurora, Brookings, Bruce, Bushnell, Elkton, Sinai, Volga, and White. Arlington was not included in the population statistics since only a small portion of Arlington is located in Brookings County and the 2010 census listed only (eight) 8 people residing on the Brookings County side of the Arlington. Between 1960 and 2010 the population of the communities in Brookings County has nearly doubled, increasing by 97.6%. The growth, largely attributable to the growth of the City of Brookings, is responsible for shifting the urban versus rural ratio to 81.2% urban in 2010. As indicated in Table 2 between 2000 and 2010, the municipalities of Aurora, Brookings, Elkton, and Volga all posted increases in population.

Though not expressed in this table, Volga and Brookings continued an annual growth of a nearly 2% annual population increase from the 1990 Census. Although Aurora’s population only indicates a slight increase between 2000 and 2010 and indicates an actual decrease since 1990 the population of 532 in 2010 is considered low by residents of the area. The census bureau estimates the population of Aurora at 621 individuals which indicates an acknowledgment of the low 2010 number or the Census assumes Aurora is the fastest growing community in all of South Dakota with a 3.3% annual increase since 2010. The communities of Bruce, Bushnell, Sinai, and White all posted losses in population. While the losses by these communities accounted for a significant decrease in the respective populations, it is anticipated that the various factors identified below will likely influence the population of those communities to remain steady or even increase.

**TABLE 2  
BROOKINGS COUNTY POPULATION ANALYSIS  
BROOKINGS COUNTY COMMUNITIES, AND RURAL AREA PROPORTIONS**

	Population 2000	Proportion of Brookings County 2000	Population 2010	Proportion of Brookings County 2010	Change in Proportion 2000-2010
<b>Aurora</b>	500	1.8%	532	1.7%	-0.1%
<b>Brookings</b>	18,504	65.6%	22,056	69.0%	3.4%
<b>Bruce</b>	272	1.0%	204	0.6%	-0.3%
<b>Bushnell</b>	75	0.3%	65	0.2%	-0.1%
<b>Elkton</b>	677	2.4%	736	2.3%	-0.1%
<b>Sinai</b>	133	0.5%	120	0.4%	-0.1%
<b>Volga</b>	1,435	5.1%	1,768	5.5%	0.4%
<b>White</b>	530	1.9%	485	1.5%	-0.4%
<b>Rural</b>	6,094	21.6%	5,999	18.8%	-2.8%
<b>Total</b>	28,220		31,965		

Sources: US Bureau of the Census, Census of Population 2000, 2010.

As was previously described, Brookings County embarked upon an ambitious survey of residents of the county to determine perceptions regarding a multitude of issues. The results of the survey, along with a review of natural and cultural (man-made) resources found within Brookings County, identified numerous factors attracting residents to Brookings County.

Individuals consider numerous factors when determining where to establish residence. While identifying a complete matrix of why an individual might choose to stay or move to Brookings County is impractical and unnecessary for the purposes of this plan, it is relevant to note existing resources which will continue to keep and attract residents in Brookings County.

*Physical Resources:*

- Brookings County is located within the “Prairie Pothole Region.” Amongst various wetlands which speckle the landscape, particularly in the less developed drainage area west of the Big Sioux River, numerous lakes remain in the county including, but not limited to, Oakwood/Tetonkaha, Goldsmith, Sinai, Oak, Hendricks, Campbell, and Poinsett.
- Gravel deposits of varying quality follow the routes of ancient and current rivers in Brookings County.

- Much soil in the county consists of alluvial loam, as much as five feet thick in some areas, which developed over thousands of years of prairie grass covering the region prior to the founding of Brookings County in 1871.
- The climate of Brookings County typically yields over twenty inches of moisture annually which is ample for the production of most cereal, leguminous, and feed crops. The temperature range within the county is ideal for the raising of livestock. The steady winds found in Brookings County due to its location on the Coteau des Prairie provide opportunity for wind generated electrical power.
- Ample water supply from two major aquifers, primarily the Big Sioux Aquifer, may be utilized for municipal and rural providers of public water sources.

#### *Utility Resources:*

- Brookings Municipal Utilities provides electric service to the city of Brookings and operates the distribution system with a large and small commercial rate pricing structure provided for businesses depending on their peak demand. Sioux Valley Energy provides electric service to much of rural Brookings County. Other electrical providers include H-D Electric, Excel Energy, and Ottertail Power. Swiftel Communications provides video, voice, data, wireless networks, cable service and VOIP to Brookings with fiber-to-the-premise throughout the city. Other providers of voice, digital cable TV and high-speed Internet service include Interstate Telecommunications Cooperative (ITC) and Centurylink.
- Brookings Municipal Utilities provides up to 7.5 million gallons of treated water each day to the cities of Brookings and Aurora. The four water towers located in the city of Brookings, along with two water treatment plants, have a combined storage of 6.15 million gallons. The Brookings Wastewater Treatment Plant, located three miles south of the city of Brookings, is a 6 million gallon per day, extended aeration, activated sludge treatment plant with a collection system made up of 84 miles of pipe and four lift stations. Rural water is provided by either Brookings-Deuel Rural Water Service, Inc. out of Toronto, SD, Kingbrook Rural Water Service, Inc. out of Arlington, SD, or Big Sioux Community Water System based near Egan, SD. Kingbrook is currently working on completing substantial improvements to both water capacity and ability to transport water from generation sites which may allow increased supply to residents and agricultural industries in rural Brookings County.
- Natural gas is supplied to the Brookings County community by Northwestern Energy. Northwestern's system includes approximately 7,700 miles of transmission and distribution pipelines and storage facilities serving 168 communities in Montana, South Dakota, and central Nebraska.

#### *Transportation Resources*

- Brookings County benefits from prime location on the I-29 corridor that connects US Highways 14 and 81 to I-90.
- Brookings Municipal Airport is full-service airport for private aircraft. And just 55 miles south, the Sioux Falls Regional Airport offers nonstop service to ten cities through six airlines, flights to over 200 domestic cities, and is an International Port of Entry. In addition, UPS and Federal Express provide air cargo service from Sioux Falls Regional Airport.

- A highly developed railway and trucking web serves the distribution needs of the region's industries. Rail service is provided on the Rapid City, Pierre and Eastern Railroad operated by Genesee and Wyoming Inc. which connects to all major centers across North America – bridging Canada, the United States, and Mexico with each other and with the rest of the world by shipping to ports on both the Atlantic and Pacific Oceans. In addition, 10 Brookings County motor carriers offer over-the-road transportation services. US Highway 14 offers a direct route to Minneapolis, and as previously noted the proximity to both Interstate 29 and Interstate 90 offer the ability to ship via truck from coast to coast east and west and from Canada to Kansas City and further south via Interstate 29 and US Highway 81.

#### *Institutional and Economic Resources*

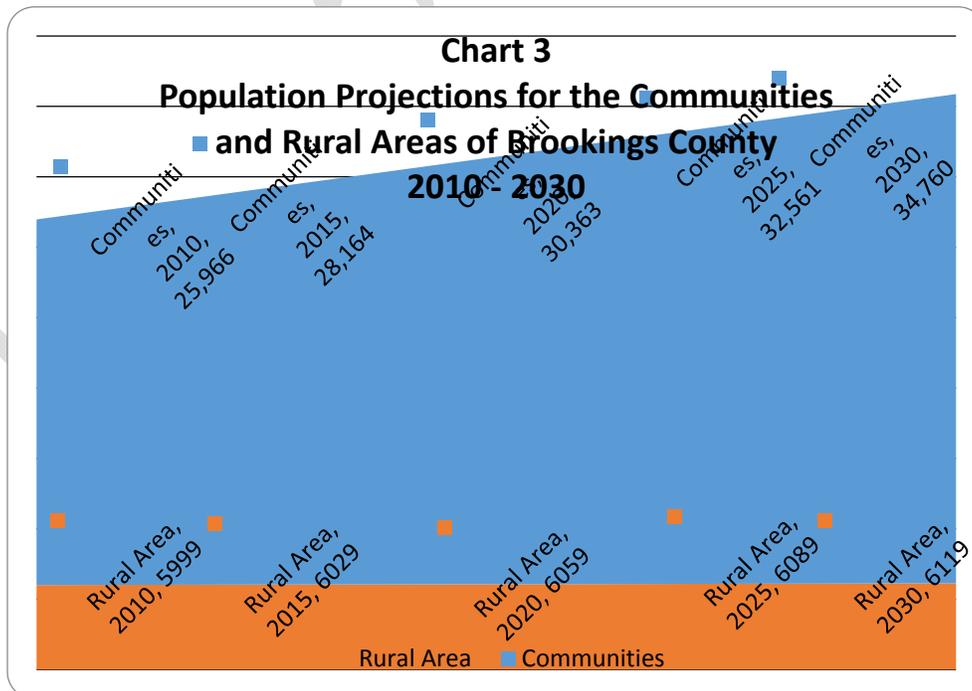
- South Dakota State University (SDSU) is the state's largest land grant university. Centrally located in the city of Brookings, SDSU offers degrees through six colleges and the Graduate School. Its primary strengths include agriculture, engineering, human health and nutrition, renewable energy, pharmaceutical science, geospatial information sciences, environmental sciences, and many other fields. At \$70 million in annual expenditures, SDSU has the most active research program in the state. There are nearly 2,000 SDSU graduates that enter the workforce each year. The university also has four active Governors Research Centers and fosters entrepreneurial growth with assistance to technology based businesses originating from studies at the university. Enrollment has increased steadily over the past several decades and is anticipated to continue to be steady at 12,600 to 13,000 students.
- Large manufacturing and technology businesses have become established in the City of Brookings. Daktronics, founded by SDSU professors, is a global company established and based in the City of Brookings. Other large manufacturing businesses within Brookings include 3M, Larson Manufacturing, and Twin City Fan, which have manufacturing facilities in Brookings County as well as other locations in the Midwest (South Dakota, Minnesota, Iowa, Wisconsin, Illinois, etc.)
- Numerous processing facilities for raw agricultural products are located within and near Brookings County. Bel Brands processes over 500,000 lbs of milk daily. South Dakota Soybean Processors located at the edge of the City of Volga processes up to 80,000 bushels of soybeans daily into soybean oil, soybean meal, and numerous other products. Valero Renewables, located on the northern edge of Aurora, processes up to 120,000 bushels of corn each day into ethanol, distillers grains and other by-products. In neighboring Hamlin County, the Lake Norden Cheese Company processes three million pounds of milk daily into cheese.
- The proximity to other communities in the region has given Brookings County residents more opportunities to access the labor markets in surrounding counties as well as drawing outside labor in. Over 15% of regional, out-of-county residents travel between 33 and 160 miles to work in Brookings County; two percent travel more than 160 miles.

Projections

All of the communities, rural areas, and lakes have the potential to contribute to the county’s future population base. Table 3 and Chart 3 exhibit population projections for Brookings County. The population projections were based on regression analysis utilizing U.S. Census Data and local land use plans for each jurisdiction. It should be noted that the 2015 population is projected based upon local projections instead of most recent census projections. As previously mentioned, the census attributes a 3.3% annual population increase to Aurora, where a more modest 1% annual increase is applied. The census also attributes an approximate 1% annual increase to Brookings and Volga, despite recent history indicating population increases closer to 2%. It should be noted the population projections set forth here are dependent upon the actions taken by the local citizens and government.

**TABLE 3  
BROOKINGS COUNTY POPULATION PROJECTIONS  
MUNICIPALITIES AND RURAL AREA 2010 – 2030**

	2010	2015	2020	2025	2030
<b>Aurora</b>	532	585	638	692	745
<b>Brookings</b>	22056	23986	25916	27846	29776
<b>Bruce</b>	204	207	209	212	214
<b>Bushnell</b>	65	66	67	67	68
<b>Elkton</b>	736	764	791	819	846
<b>Sinai</b>	120	122	123	125	126
<b>Volga</b>	1768	1945	2122	2298	2475
<b>White</b>	485	491	497	503	509
<b>Rural</b>	<b>5999</b>	<b>6029</b>	<b>6059</b>	<b>6089</b>	<b>6119</b>
<b>Total</b>	<b>31,965</b>	<b>34,193</b>	<b>36,422</b>	<b>38,650</b>	<b>40,879</b>



## **EXISTING LAND USE**

Where and how a county will develop is influenced by the usage of the county's existing land resources. In order for a future plan to properly develop, an understanding of the existing types of land use within the county is necessary. The Brookings County Planning Commission and Staff utilized aerial imagery, existing tax records and some site visits to complete a detailed land cover map. Existing Land Cover Maps (by specific type) are included in Appendix E for each township in Brookings County. The existing land cover map by specific type was then reviewed and the fourteen specific land cover types were classified into the following general land use categories: Municipalities, Agricultural, Commercial/Industrial, Public/Quasi-Public, and Unclassified/ Inundated. Finally, for the purposes of this report, those land uses are analyzed in the context of the following four existing land use areas.

The first existing land use area includes incorporated municipalities. Within Brookings County there are nine (9) incorporated communities. They include White, Volga, Sinai, Elkton, Bushnell, Bruce, Brookings, Aurora, and a portion of Arlington. For the purpose of the Plan, individual land uses and available infrastructure within these communities will not be reviewed.

The second existing land use area includes the developed lakes which have been identified as appropriate locations for the "Lake Park" zoning designation. Lake Campbell, Lake Poinsett, and Lake Hendricks have considerable residential development. Brookings County has also assigned a "Lake Park" zoning designation to portions of shoreline near Oakwood Lake, Oak Lake, and Lake Goldsmith. Lake Park development is primarily residential with instances of commercial and public/quasi-public uses.

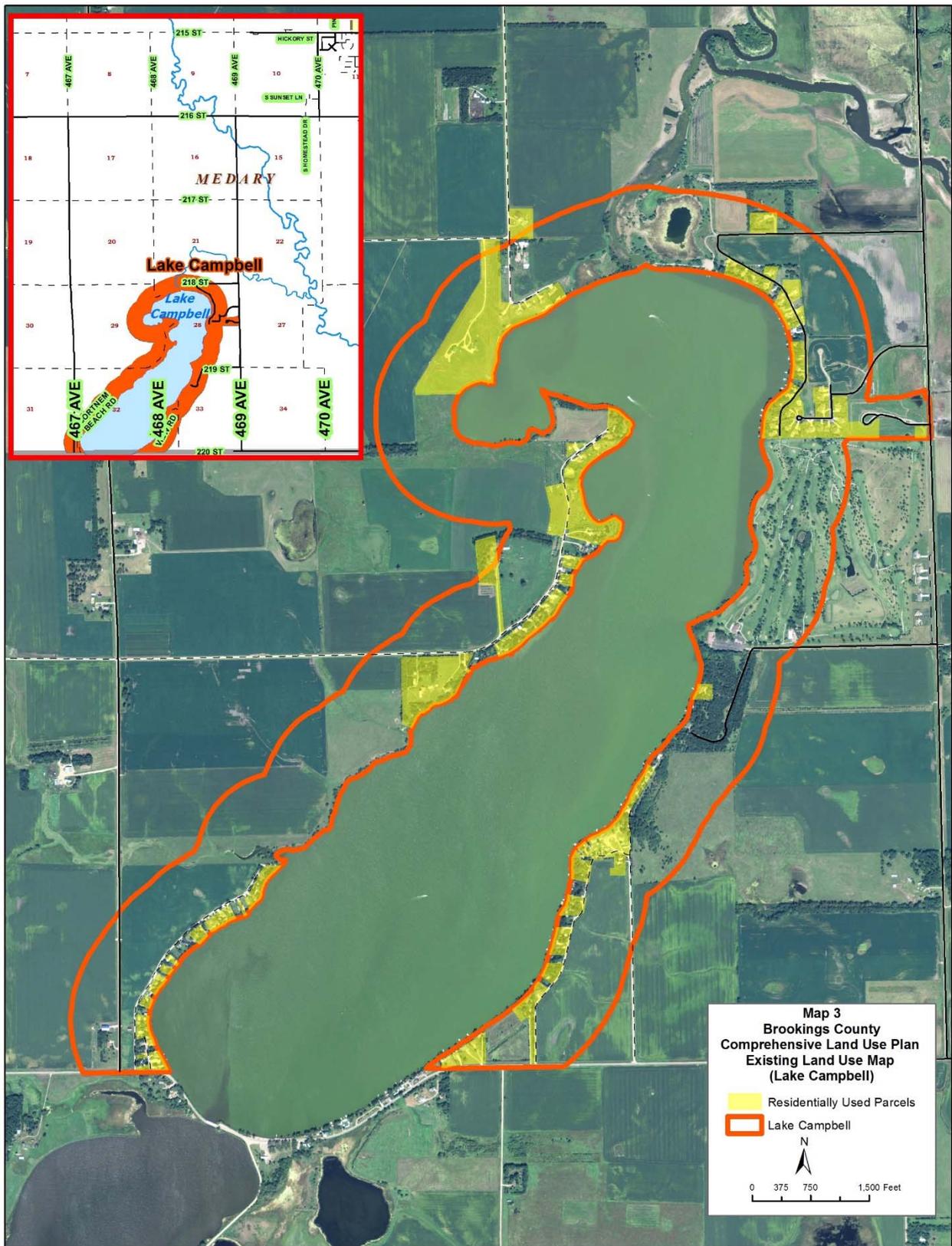
The third existing land use area includes the agreed upon Joint Jurisdiction Area for the City of Brookings and Brookings County. The Joint Jurisdiction Area includes several residential developments, multiple aggregate mining sites, and some scattered commercial uses.

The fourth existing land use area includes the remaining unincorporated areas of the county. By area, this is the largest existing land use area within the county. Agricultural activities are the primary uses in this area. Within this category there are individual residences, public/quasi-public uses, conservation/recreation areas, commercial and industrial uses, and aggregate mining. Existing Land Use Maps for each township are located in Appendix E.

## **DEVELOPED LAKES EXISTING LAND USE**

### **Lake Campbell**

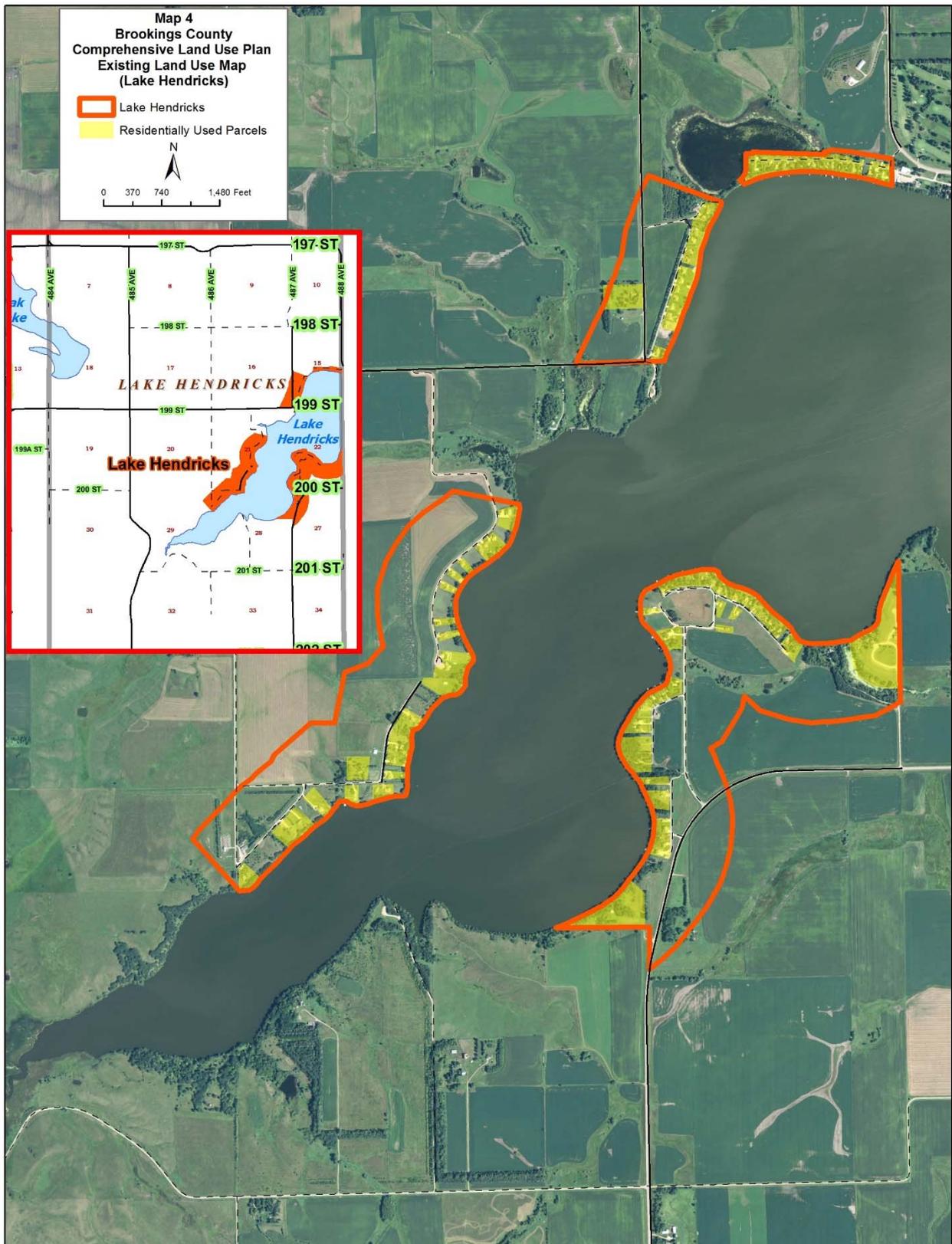
Lake Campbell consists of approximately 809 acres and is located south of the City of Brookings, sharing a border with Moody County. Considerable residential development is situated on this lake, with all residences utilizing septic tanks for provision of sanitary sewer services. Within the Lake Campbell Lake Park Zoned Area, the specific land use survey identified 147 parcels with residential structures. Those parcels include approximately 130 acres, accounting for approximately 18% of the Lake Park Zoned area. In addition to the parcels with residences currently used, approximately 70 additional undeveloped parcels may be used for residential purposes in the future. The other land uses near Lake Campbell are primarily agricultural, with the exception of a golf course on the east side of the lake. (See Map 3).



## Lake Hendricks

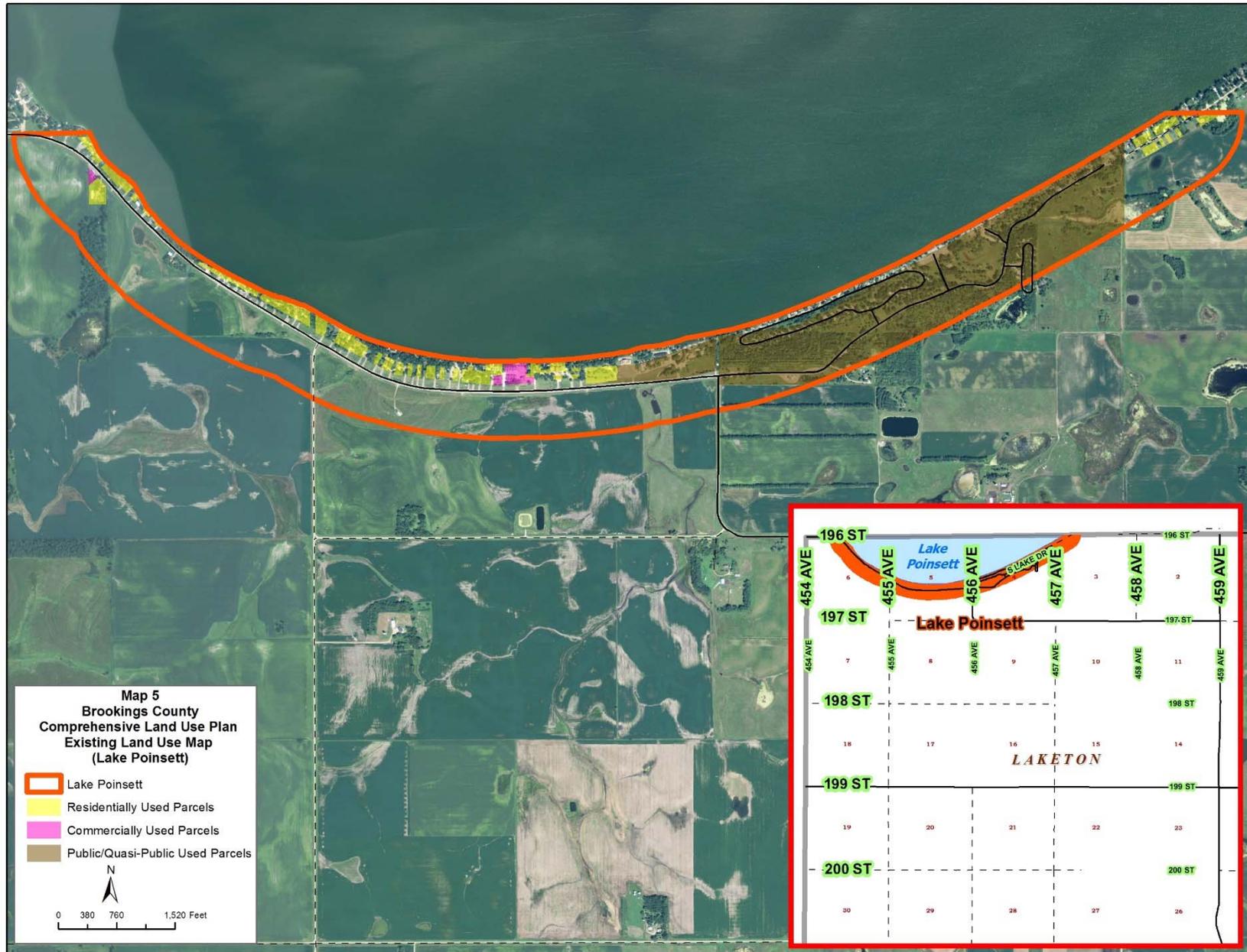
Lake Hendricks is a large lake located in the northeast corner of Brookings County. Split by the South Dakota/Minnesota border, approximately 867 acres of the lake are located in Brookings County; with more located on the Minnesota side of the border. Considerable residential development is situated on this lake, with some residences in the northeast corner of the lake connected to the Hendricks, Minnesota Municipal sanitary sewer system and the rest served by septic tanks. Within the Lake Hendricks Lake Park Zoned Area, the specific land use survey identified 115 parcels with residential structures. Those parcels include nearly 97 acres, accounting for approximately 24% of the Lake Park Zoned area. In addition to the parcels with residences currently used, approximately 65 additional undeveloped parcels may be used for residential purposes in the future. The other land uses near Lake Hendricks are primarily agricultural, with a few building sites used for storage of personal and agricultural equipment. (See Map 4).

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## Lake Poinsett

Lake Poinsett was, until recent decades, the largest natural lake in South Dakota. A small portion of the southern end of the lake is located in northwest Brookings County. Approximately 646 acres of the lake are located in Brookings County with the majority of the lake located within Hamlin County. The shoreline of this lake is almost completely developed as are some lots across South Lake Drive from the lake as well. A sanitary sewer district has been formed for Lake Poinsett, and while some portions of the lake are not presently served, all of the lots on Lake Poinsett within Brookings County are adjacent to the sanitary sewer line. Within the Lake Poinsett Lake Park Zoned Area, the specific land use survey identified 90 parcels with residential structures. Those parcels include nearly 23 acres, accounting for approximately 6% of the Lake Park Zoned area. Less than ten additional subdivided, but undeveloped parcels may be used for residential purposes in the future. This area includes a church and religious camp as well as a state park with a campground. These two public/quasi-public uses cover approximately 89 of the acres Zoned Lake Park around Lake Poinsett, accounting for slightly more than 22% of the area. The commercial uses within this area consist of restaurants and commercial cabins which, combined utilize less than 3 acres of land and account for less than 1% of this Lake Park area. Agricultural land uses surround the other uses with only a few single family residences on the south side of South Lake Drive. (See Map 5).



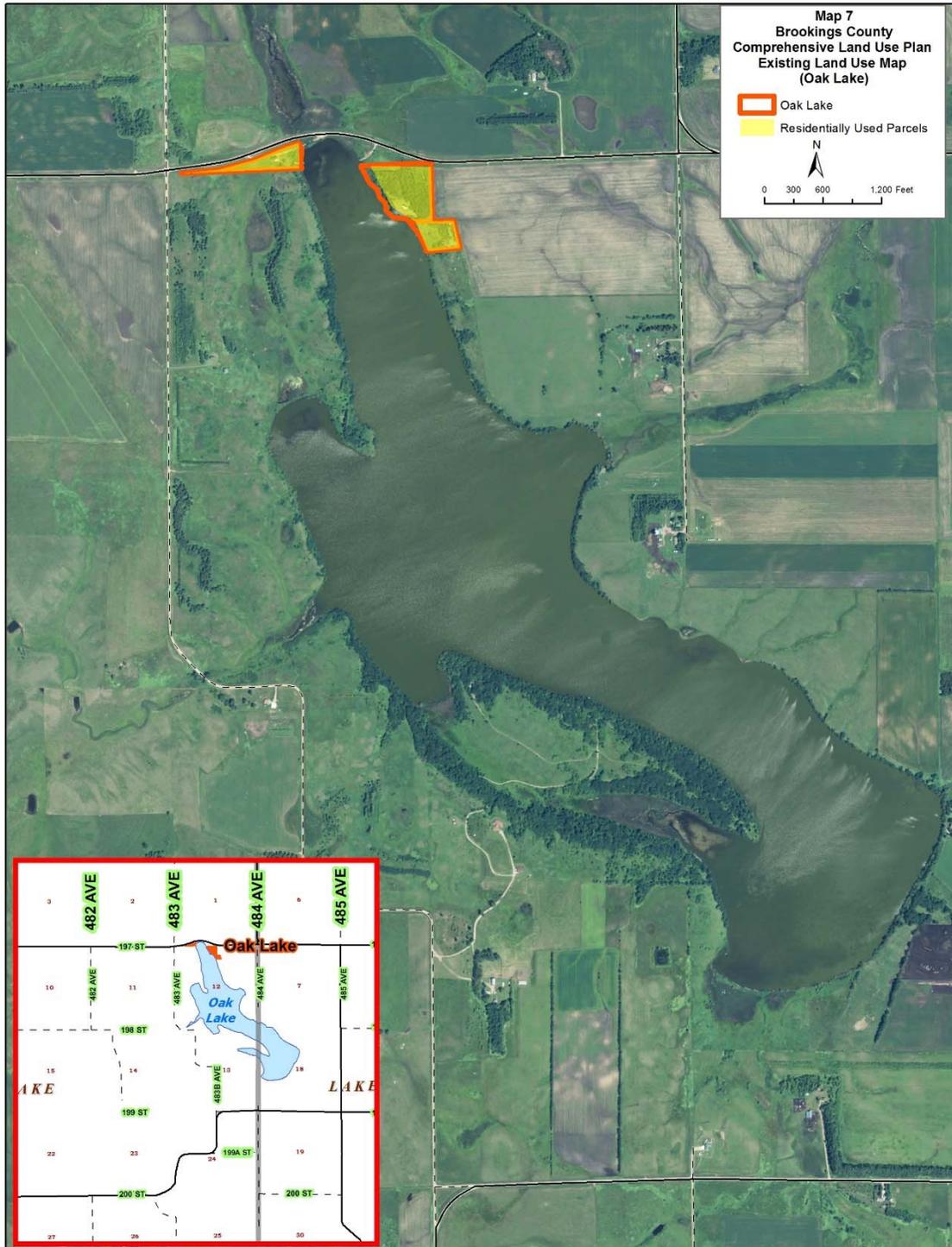
## Oakwood Lakes

The Oakwood Lakes Lake Park Zoned Area actually borders only Lake Tetonkaha and Johnson Lake which is part of a cluster of lakes in northwestern Brookings County. Lake Tetonkaha and Johnson Lake are approximately 1,055 acres in area when the area is combined. The southern edge of Lake Tetonkaha and a small area of lots on the northern tip of Johnson Lake are zoned Lake Park. Within these two areas, the specific land use survey identified 60 parcels with residential structures. Those parcels include nearly 22 acres, accounting for approximately 11% of the Lake Park Zoned area. All of these residences utilize septic tanks for the provision of sanitary sewer services. The other land uses near Lake Hendricks are primarily agricultural, with a few building sites used for storage of personal and agricultural equipment. (See Map 6).



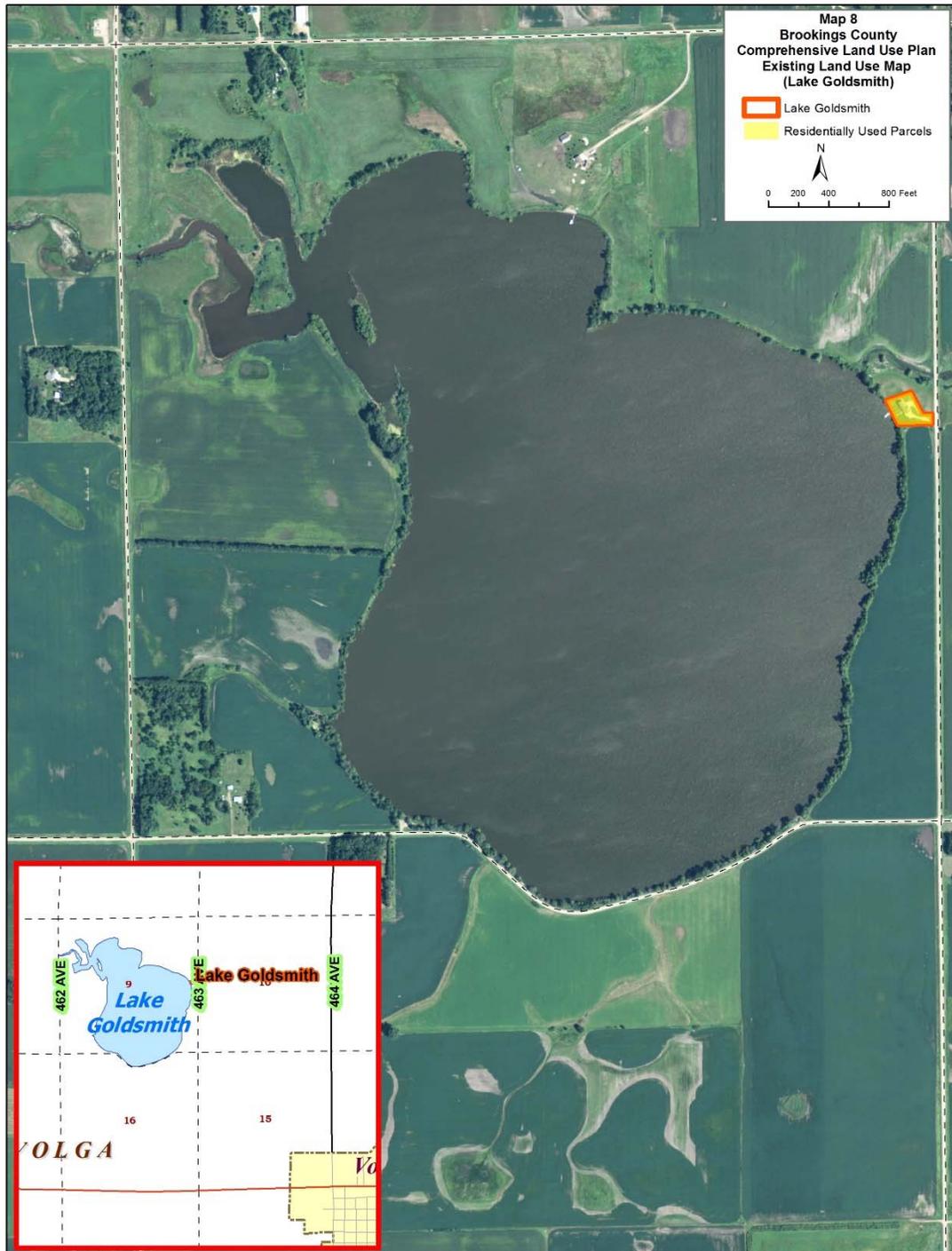
## Oak Lake

The Oak Lake Lake Park Zoned Area consists of a small area adjacent to Oak Lake in northeastern Brookings County. This area includes only three parcels, all of which are occupied by residential structures and contains a combined eleven acres. (See Map 7).



## Lake Goldsmith

The Lake Goldsmith Lake Park Zoned Area consists of a single, one acre lot, which is residentially used adjacent to Lake Goldsmith. Lake Goldsmith is a small water body approximately one mile northwest of the City of Volga in central Brookings County. The remainder of the area immediately surrounding Lake Goldsmith is zoned Natural Resources. (See Map 8).



## **City of Brookings Joint Jurisdiction Area**

Brookings County and the City of Brookings have exercised joint zoning authority over a prescribed area surrounding the City of Brookings since 1980. The joint jurisdiction area extends two to three miles to the west and north of the Brookings City Limit and one and a half to two and a half miles to the east and south of the city limit. Due to inaccuracies, and the incompleteness of some data in the detailed land use survey previously performed, First District Staff utilized data provided by the Brookings County Department of Equalization and reviewed aerial photography to determine general land use in the joint jurisdiction area. Chart 4 displays the percentage of total area as so determined to be classified as agricultural, residential, public/quasi-public, surface mining, and commercial/industrial. More detailed identification and statistics regarding land uses in the joint jurisdictional area can be found in Map 9, and Table 4.

### *Agricultural*

Agricultural land use is the dominant use of land in the joint jurisdictional area. Research farms operated by South Dakota State University, residences on lots with greater than thirty-five acres, cropland, pastureland and open space compose nearly eighty-nine percent (88.7%) of the total area. In some cases farm size and scope of farming operations nearer to the City of Brookings are smaller; however the land is still primarily used for agricultural purposes.

### *Residential*

Residential development as defined in this study accounts for slightly more than five percent (5.4%) of the total joint jurisdictional area. Included within this category are all parcels with residential structures (including manufactured homes) which include less than thirty-five acres. Multiple scattered residences, including some small subdivisions, were established in this area before Brookings County initially adopted zoning. Other subdivisions, particularly south of the City of Brookings, have developed in accordance with Joint Jurisdiction standards. Still other residences on less than thirty-five acres have been created since Brookings County Zoning Ordinance allows for the creation of lots containing less than thirty-five acres at sites which have been occupied by a residence for ten years in the past or at an established farm building site.

### *Public/Quasi-Public*

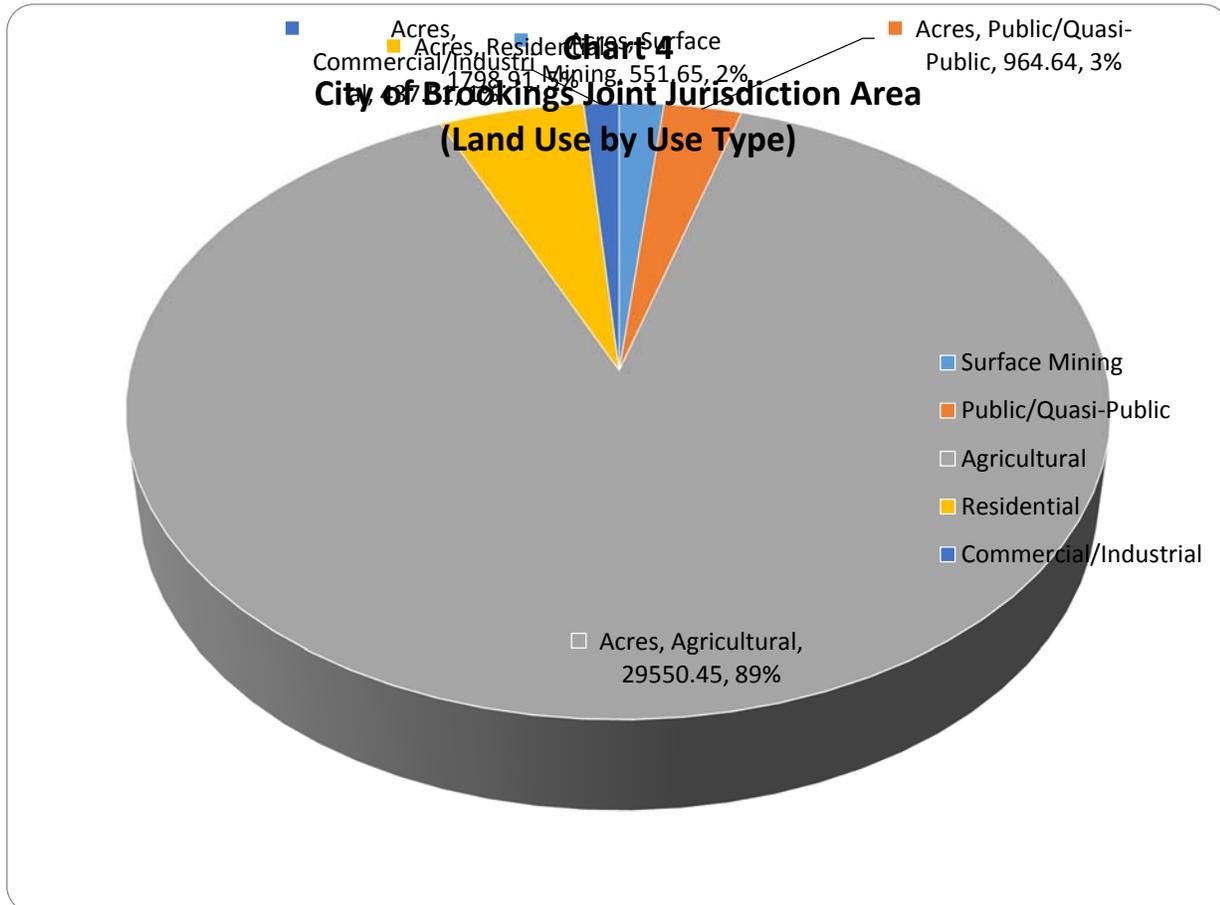
Numerous public or quasi-public uses, such as landfills, substations, water treatment and pumping facilities, and communications facilities utilize nearly three percent (2.9%) of the joint jurisdiction area. Most of the area dedicated to public use is owned and operated by the City of Brookings for the provision of services to its residents.

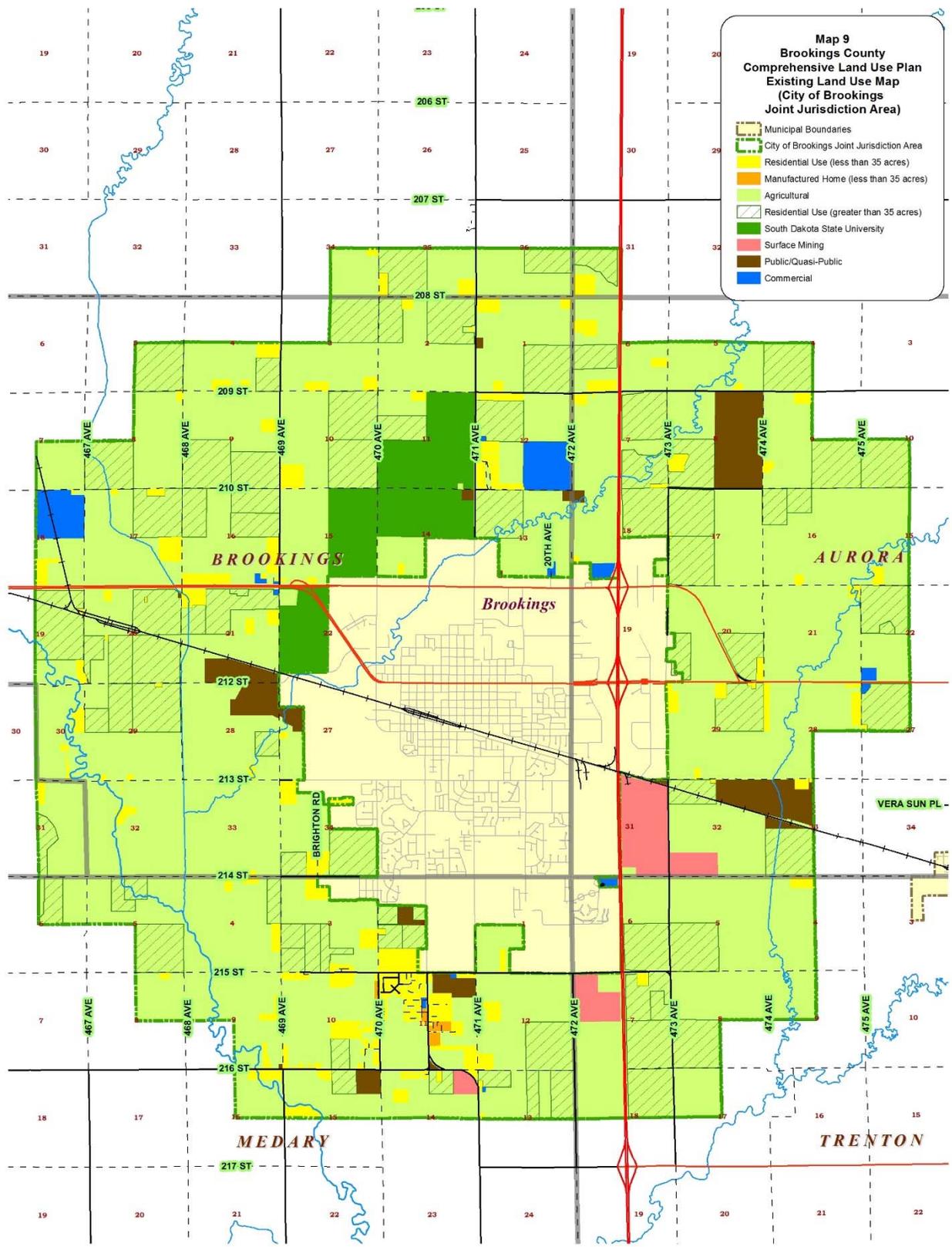
### *Surface Mining*

Mining, primarily the mining of gravel, is a land use that occupies 1.7% of the joint jurisdictional area. Several gravel pits are permitted and operating on the southeast edge of the City of Brookings.

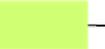
*Commercial/Industrial*

Commercial and Industrial land uses occupy slightly over one percent (1.3%) of the total area in the Brookings Joint Jurisdictional Area. With only a few commercial uses on the fringe of the City of Brookings, primarily south of city limits; most of the land uses in this category include bulk loading and storage facilities.





**TABLE 4  
JOINT JURISDICTIONAL LAND USE TABLE**

Existing Land Use (Specific Type)	Symbol	Number of Parcels	Area (in acres)	Percent of Joint Area	Existing Land Use (General Type)	General Description
Residential Use (less than 35 acres)		461	1,764.28	5.30%	Residential	Single family residences located on parcels with an area of less than 35 acres.
Manufactured Home (less than 35 acres)		10	34.63	0.10%	Residential	Residences and Manufactured Home Parks with manufactured homes located on parcels with an area of less than 35 acres.
Agricultural		297	19,742.93	59.28%	Agricultural	Cropland, pastureland, and open space.
Residential Use (greater than 35 acres)		85	8,463.40	25.41%	Agricultural	Single family residences located on parcels with an area of greater than 35 acres. The lot area fits the current intent of the zoning ordinance and therefore residences are presumed to be agriculturally affiliated.
South Dakota State University		7	1,344.12	4.04%	Agricultural	Property owned by South Dakota State University. Includes multiple agricultural research farms.
Surface Mining		9	551.65	1.66%	Surface Mining	Mining of materials, primarily sand and gravel.
Commercial		23	437.51	1.31%	Commercial/Industrial	Combination of various commercial and industrial uses.
Public/Quasi-Public		29	964.64	2.90%	Public/ Quasi-Public	Utility services owned and operated by utility providers and the City of Brookings such as: landfills, substations, water treatment, and pumping areas, etc.
<b>TOTALS</b>		921	33,303.15			

## **UNINCORPORATED RURAL AREA LAND USE**

### Agricultural Land Use

Agriculture is the major land use in the approximately eight hundred five (805) square miles of Brookings County. This basic land use has been altered very little through urbanization or the development of communities. Based upon the land cover map, described earlier in this section, 96.8% of the unincorporated area of Brookings County is dedicated to agricultural land uses (pasture land, open space, shelterbelts, undeveloped area, agricultural building sites, and other agricultural land). Common agricultural practices are known to cause conflicts with non-agricultural land uses. Current crop production methods include the use of loud machinery, herbicides, pesticides, fertilizers, and treated seeds. Current animal production requires daily feeding, checking for health problems, milking, processing of animals, manure application, and manure management. These methods of production are expected all day, every day of the year. Further, these agricultural uses, regardless of scale, are preferred over non-agricultural residences in the rural area. Population increases in the rural areas have been fueled by an increase in non-farm residential development pressures and those pressures are expected to grow in the future. Banking regulations, niche crop farms, and hobby farms are stoking pressures which already exist to establish small residences in rural portions of the county. This increase leads to increased potential for land use conflict between expectations by non-farm residents and the reality of living in areas where crop production and animal agriculture are favored. Any growth in the unincorporated rural land use area of the non-farm population will continue to make it more difficult for farmers to improve efficiency and effectiveness of their agricultural operations.

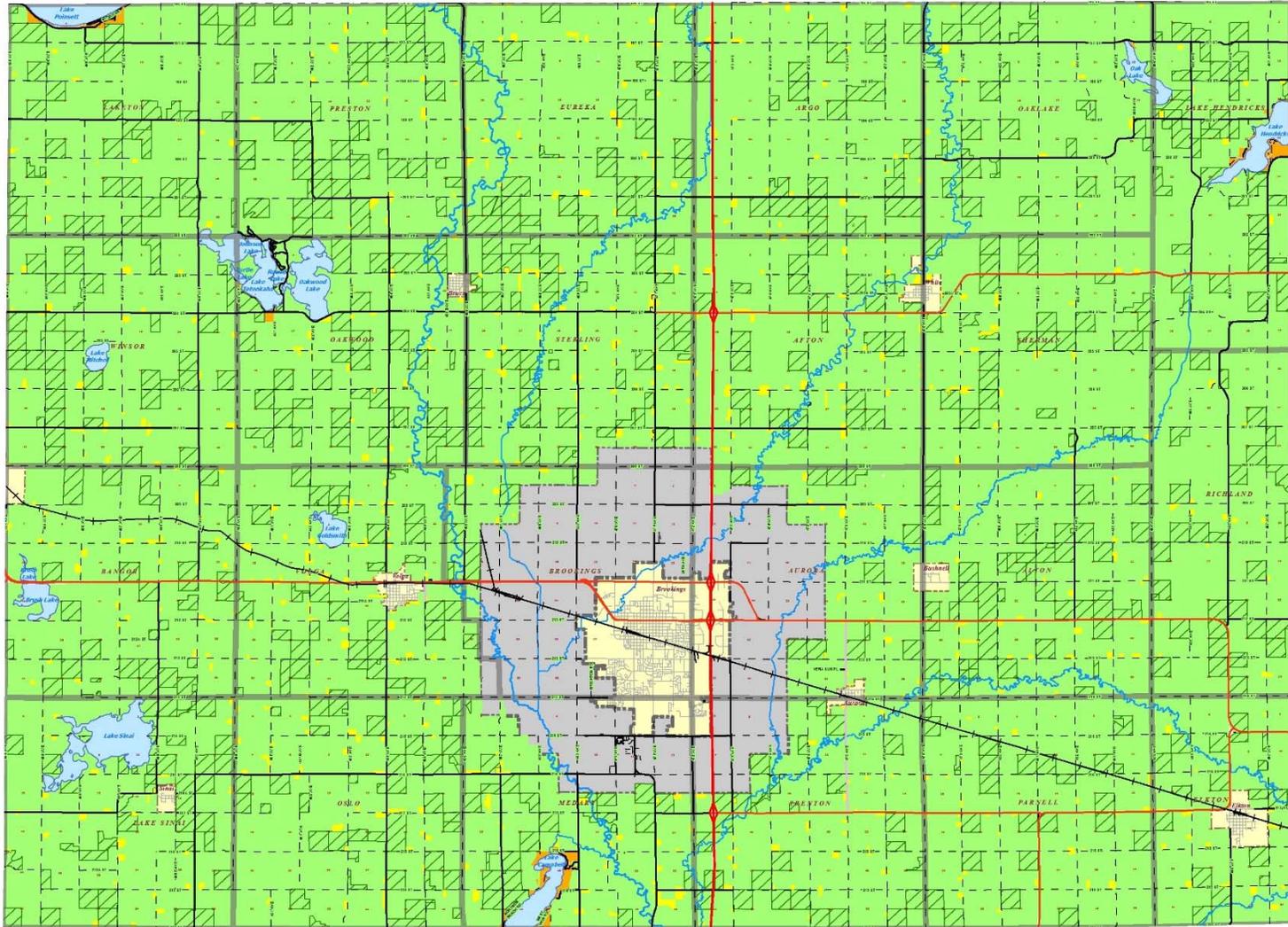
### Residential Land Use

Within Brookings County, most residential construction occurs within municipal service areas. As previously described, increasing pressures have led to the utilization of exemptions to the minimum lot requirement in the Brookings County Zoning Ordinance. Map 10 identifies where proliferation of residences on parcels with less than thirty-five acres is most prevalent. It should be pointed out that some residences on lots of less than 35-acres adjacent to parcels under the same ownership which, held in common, may total greater than 35 acres which would satisfy zoning requirements, but are displayed on the map as containing less than 35 acres. It also should be noted that this map does not display agricultural versus non-agricultural residences.

Outside of the Lake Park zoned areas and City of Brookings Joint Jurisdictional area in the rural portion of the county 809 (54%) of the 1,493 parcels with residences located upon them consist of less than 35 acres. As previously stated, many of these lots are adjacent to additional land held under common ownership or used as a base for farming operations, but still represents a high percentage of all residences in the rural areas. Further, this information does not indicate which lots were initially developed prior to the inception of zoning in Brookings County, or which lots have been legally (or illegally) subdivided since 1974. Table 5 identifies the number of parcels with residences with greater than or less than 35 acres in each township (excluding Joint Jurisdiction and Lake Park areas.) Interestingly, the two townships with the highest percentage of residences on parcels with 35-acres in the rural areas were Laketon and Lake Hendricks Townships which both have Lake Park zoning within them (Lake Park zoned areas were not included in Table 5.) As would be expected, the townships with the highest percentages of residences on lots of less than 35-acres are located near the City of Brookings.

**TABLE 5  
RESIDENCES ON GREATER THAN/LESS THAN 35-ACRES  
BY TOWNSHIP**

Township	Residences on Greater than 35-acre Parcels		Residences on Less than 35-acre Parcels		Total Residential Parcels
	Number	Percentage	Number	Percentage	
Afton	25	30.12%	58	69.88%	83
Alton	43	57.33%	32	42.67%	75
Argo	23	41.82%	32	58.18%	55
Aurora	11	25.58%	32	74.42%	43
Bangor	30	48.39%	32	51.61%	62
Brookings	6	40.00%	9	60.00%	15
Elkton	18	48.65%	19	51.35%	37
Eureka	26	37.68%	43	62.32%	69
Lake Hendricks	38	77.55%	11	22.45%	49
Lake Sinai	41	56.94%	31	43.06%	72
Laketon	33	67.35%	16	32.65%	49
Medary	23	28.75%	57	71.25%	80
Oak Lake	25	58.14%	18	41.86%	43
Oakwood	35	49.30%	36	50.70%	71
Oslo	41	48.81%	43	51.19%	84
Parnell	26	45.61%	31	54.39%	57
Preston	41	62.12%	25	37.88%	66
Richland	31	64.58%	17	35.42%	48
Sherman	27	44.26%	34	55.74%	61
Sterling	41	32.54%	85	67.46%	126
Trenton	28	41.79%	39	58.21%	67
Volga	36	32.43%	75	67.57%	111
Winsor	36	53.73%	31	46.27%	67
<b>Totals</b>	<b>684</b>	<b>45.91%</b>	<b>806</b>	<b>54.09%</b>	<b>1,490</b>



**Map 10**  
**Brookings County Comprehensive Land Use Plan**  
**Residences with Greater than/Less than 35-Acre Parcels**

Municipal Boundaries
  City of Brookings Joint Jurisdiction Area
  Lake Park Development Areas
  Residential Use (less than 35 acres) (809)
  Residential Use (greater than 35 acres) (684)

Brookings County has developed policies to minimize land use conflicts with certain types of residential land uses, and to manage residential development by restricting the density of development. The following policies are designed to provide for the health and safety of the residents of rural areas as well as minimize conflicts between agricultural and residential land uses.

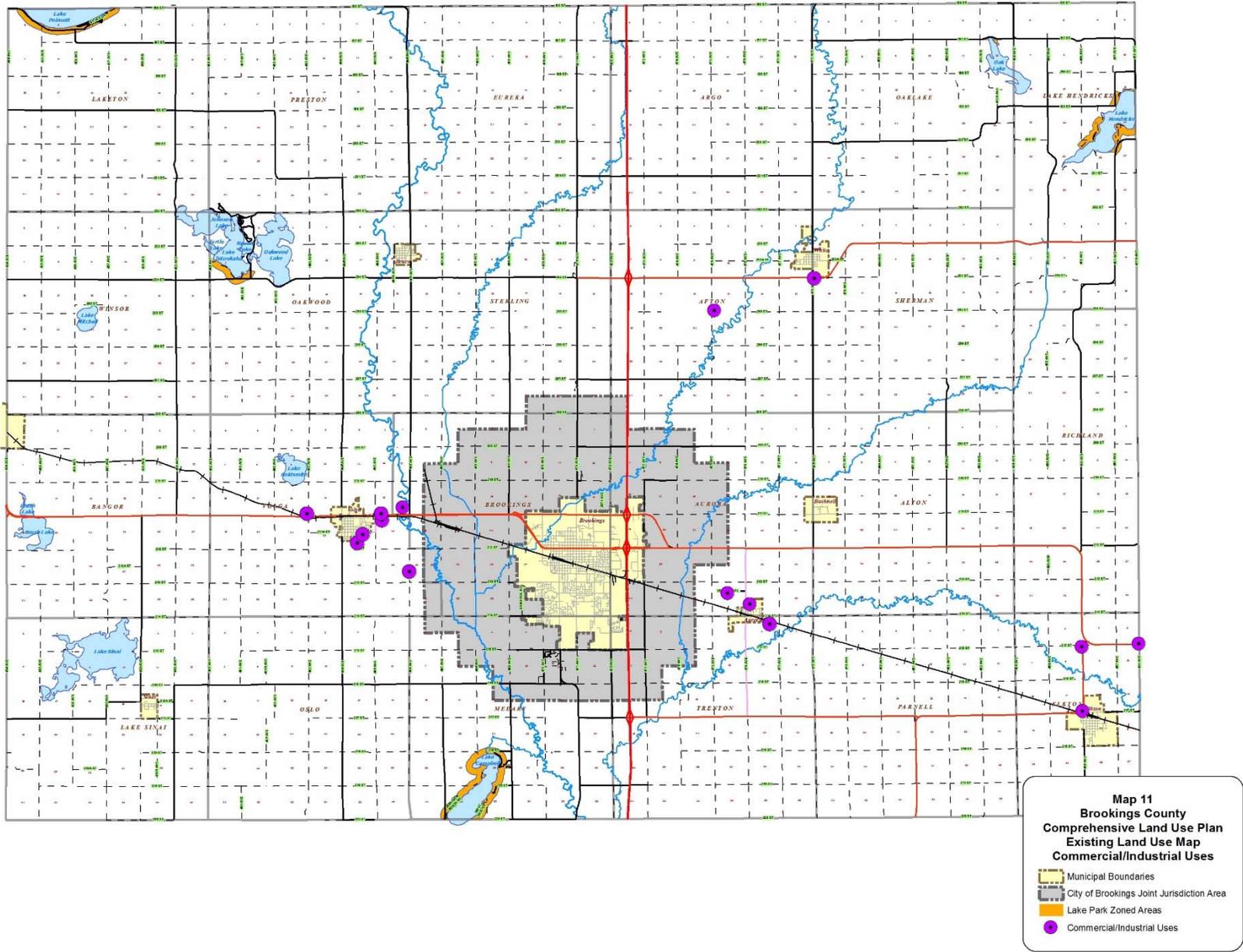
Policies:

- All residences are required to be accurately addressed for the most efficient provision of emergency services to the residents of Brookings County.
- A building permit for a newly constructed residence may be issued only after the applicant(s) waive all common law rights to object to normal and necessary agricultural management activities legally conducted on adjacent lands which may conflict with the proposed residential land use in the form of a "Right-to-Farm Covenant."
- A building permit for a newly constructed residence may only be issued within one-quarter (1/4) mile of an existing Concentrated Animal Feeding Operation after the applicant(s) waive all common law rights to the granting of residential setback variances for the expansion of said Concentrated Animal Feeding Operation.

**Commercial/Industrial Land Use**

There is very little commercial/industrial activity at the county level of a specific business district nature. The most concentrated areas of commercial/industrial development are located on the fringes of the communities in Brookings County. Earlier maps indicated commercial uses located within the City of Brookings Joint Jurisdiction Area and Lake Park Zoned Areas. The primary businesses located in the remaining rural portions of the county are operated as accessory uses to residences (home based businesses,) which are not identified on the map below of commercial and industrial sites. Other commercial/industrial businesses consist primarily of agriculturally related industrial/processing uses on the fringes of Volga and Aurora. Map 11 denotes the locations of commercial/industrial sites in the remaining rural areas of the county where not associated with a residence or other primary agricultural use.

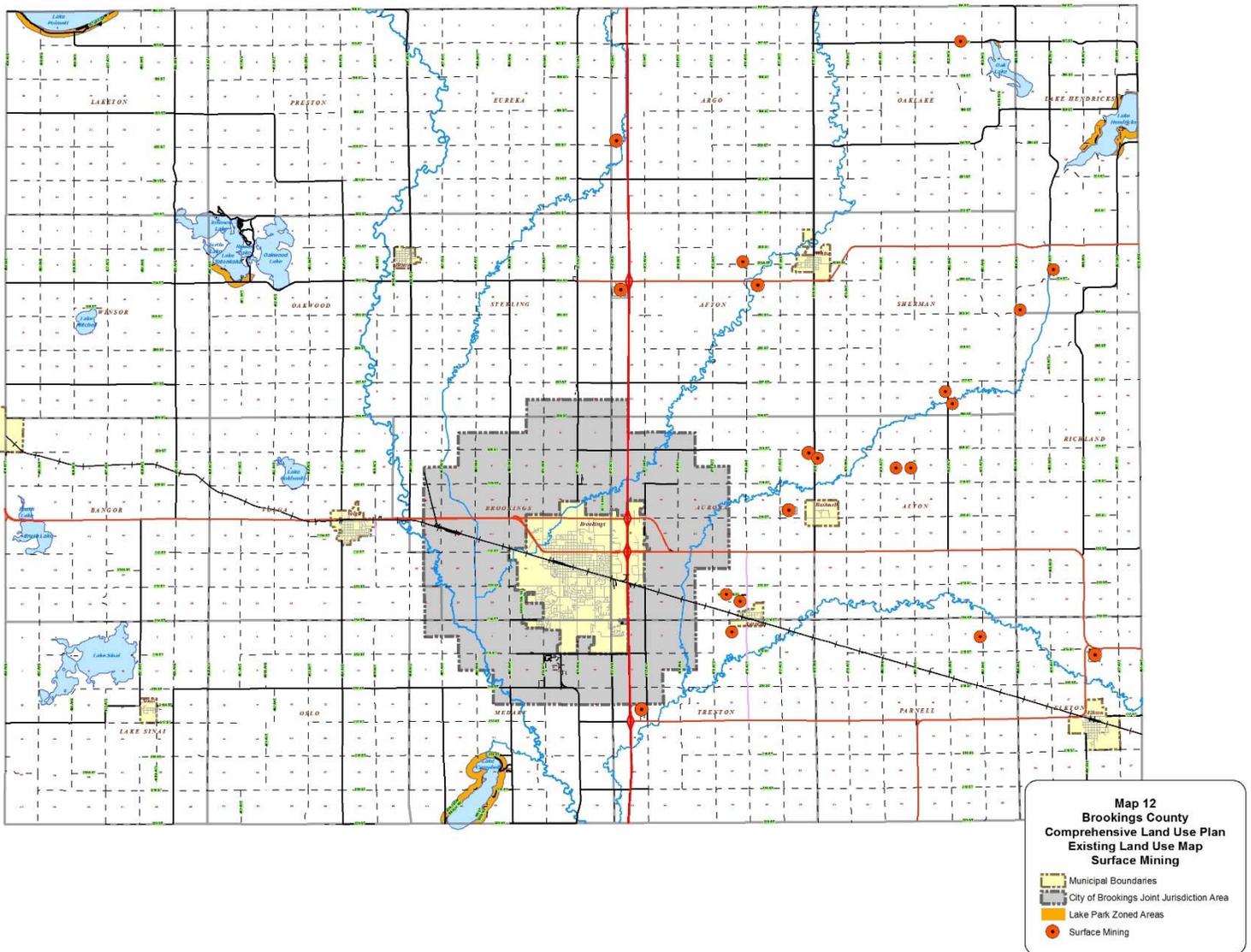
Although the rural area may experience pressure to provide locations for both commercial and industrial development, it is the intent of Brookings County to encourage commercial and industrial development to occur within municipalities and adjacent to developed lakes, thereby preserving agricultural lands for agriculture production. The exception would be to consider commercial and industrial ventures that directly support agricultural production.



## Construction Aggregate Land Use

Several geomorphologic processes have created numerous deposits of sand and gravel throughout Brookings County. Approximately 20 gravel pits remain active for commercial or private use, while several more pits have been abandoned or reclaimed throughout the county. These extraction sites have the potential to impact adjacent land uses. The many negative impacts associated with aggregate mining include dust, noise, trucking of material, road damage, environmental concerns, and appearance.

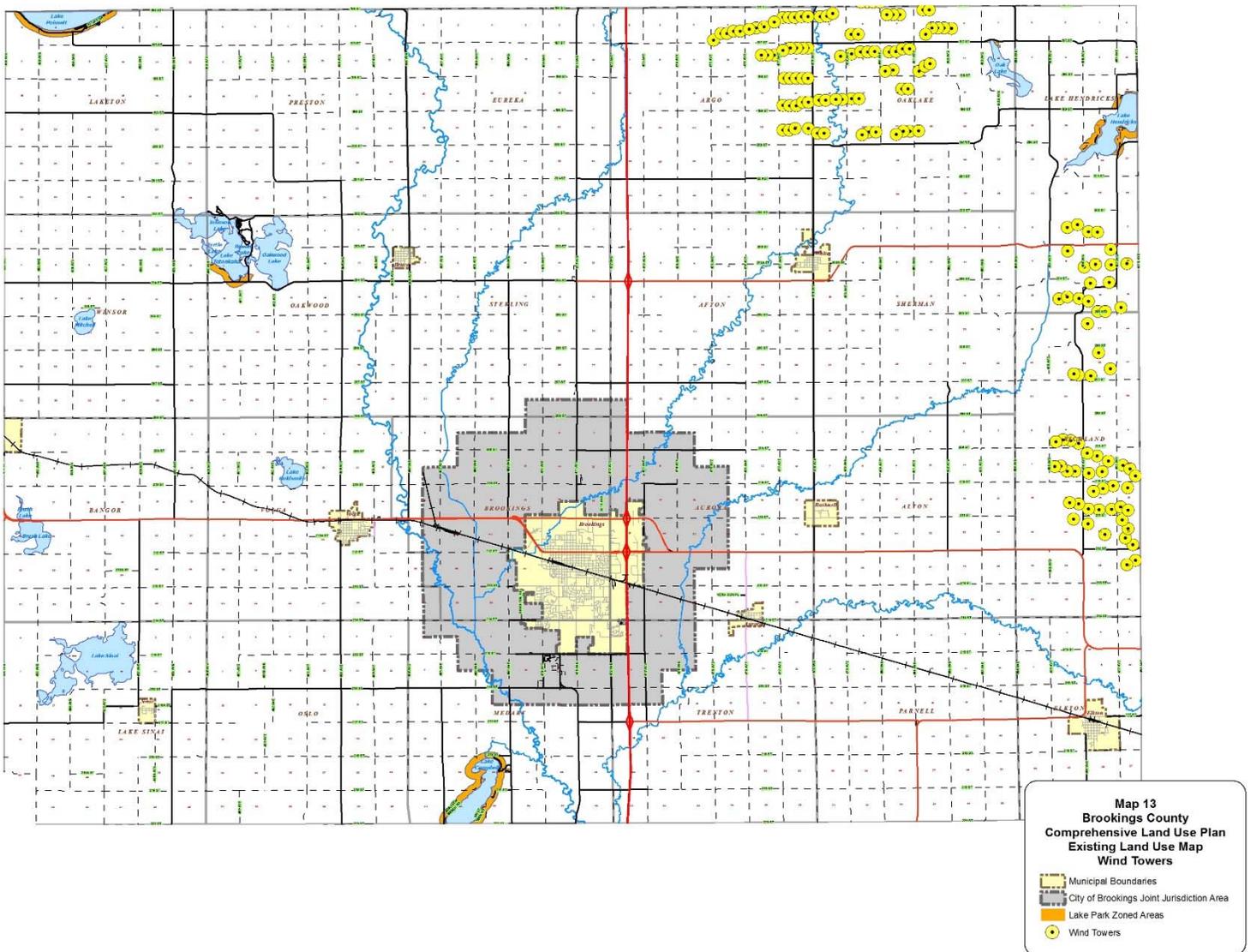
Map 12 displays existing mining sites, identified in the 2014 Land Cover Survey.



## Wind Energy Generation

The climate of Brookings County and its location upon the Coteau des Prairie places the county at a strategic advantage for the generation of wind energy. Three different wind farms have a total of 143 electricity generating towers located in the northern and eastern portions of Brookings County. It is reasonable to expect future applications for wind farms. Brookings County supports renewable energy generation, such as wind energy development. It should be noted that wind farms only need to be permitted after consideration of certain factors such as noise of the towers, cast-off of debris from blades, power transmission, and the effects on roads leading to and from tower locations during and after construction.

Map 13 displays the location of current wind towers in Brookings County.



## **TRANSPORTATION**

A well-conceived transportation system is one of the most important features of a comprehensive land use plan. The transportation plan attempts to program road and street use to prevent congested and unsafe street design. Through long-term planning of designated street types, new developments can be coordinated and potential problems minimized.

### **ANCILLARY STUDIES**

In August of 2013 HRGreen completed the Brookings County Master Transportation Plan (BCMTP). The BCMTP was comprehensive, identifying current conditions, crash data, and projected future traffic needs for the entire county. The BCMTP identified certain roadway system asset management guidelines and policy considerations such as recommended pavement and design considerations for roadways and future multi-use trails in the county. The Planning Commission recognizes the BCMTP as a source of reference for the future guidelines and considerations for future transportation needs associated with development; therefore the Brookings County Master Transportation Plan (2013) is intended to be adopted by reference and declared to be a part of this Comprehensive Land Use Plan.

### **COUNTY TRANSPORTATION SYSTEM**

Brookings County's transportation system is generally laid in a one-mile rectilinear grid system with a majority of the roads having sixty-six (66) foot right-of-ways. The public right-of-ways for County, State and Federal Highways with a bituminous or concrete surface generally exceed one hundred (100) feet in right-of-way. The township highway system represents the largest road system within the county.

### **STREET CLASSIFICATION**

Roads within the county support diverse volumes of traffic. The county has classified the road system. These classifications are specifically related to the function that the road is expected to perform. Developmental expectations are dependent upon the varying amounts and types of traffic.

The following generally recognized hierarchy of road classifications is used to assist in the development of intermediate and long range transportation needs.

Arterials – Arterial streets serve as primary circulation routes. These roads generally carry the majority of traffic volume within the county. Their basic function is to facilitate movement of medium and long distance, high-speed traffic between regions and communities with a minimum of impediments. Since arterials serve for traffic movement between regions and subareas, all direct access to abutting property should be restricted. Further, parallel service roads should be added, where appropriate, to maintain traffic carrying capabilities of the thoroughfare. Interstate 29, United States Highways 81 and 14, South Dakota Highways 30, 13, and 324 are considered arterials.

Collectors - form an intermediate category between arterial and local roads. Collectors serve as a link between arterial and local roads by "collecting" traffic from local roads and transferring it to arterial roads. Collectors may further be classified into major and minor collector categories. Presently, the Brookings County paved Highway System serves as collectors.

Local Streets - primarily provide access to abutting properties. They are not designed to carry large amounts of through traffic and are primarily characterized by short trip length and low traffic flow. County gravel and township gravel highway systems act as local streets.

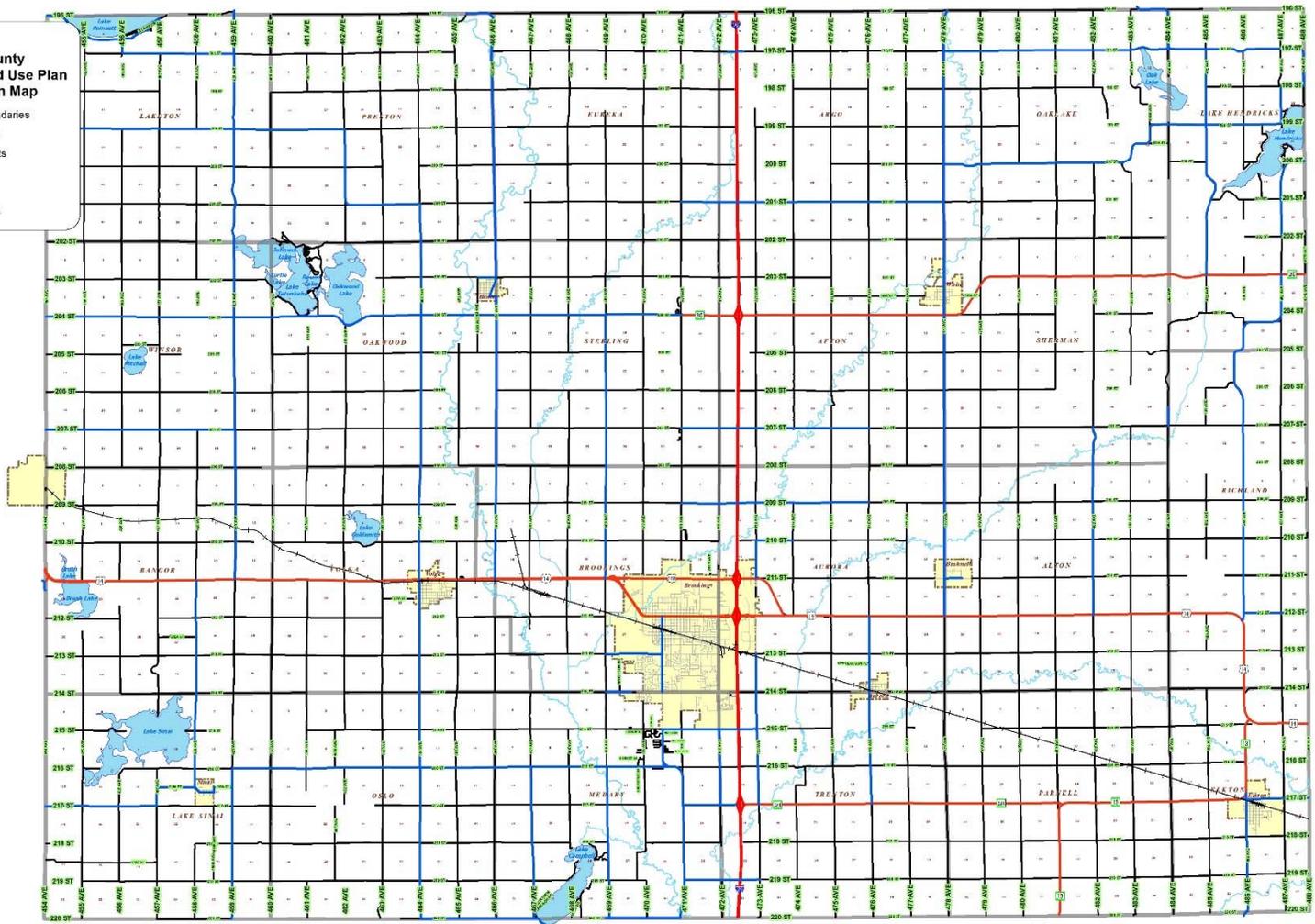
### **MAJOR STREET PLAN**

The Major Street Plan shown on Map 14 classifies roads as arterial, collector, or local. The plan is designed to effectively move traffic through the county and between major attraction points.

1/8/16 DRAFT

**Map 14**  
**Brookings County**  
**Comprehensive Land Use Plan**  
**Major Street Plan Map**

-  Municipal Boundaries
-  Arterial Streets
-  Collector Streets
-  Local Streets
-  Railroads
-  Rivers/Streams



## **Transportation Goal**

**To provide a safe and effective transportation system that promotes the efficient movement of people, goods, and services within and through the county.**

### **Policies**

- Plan and provide an integrated street and highway system that is designed, developed, and maintained consistently with the County's existing and anticipated future land use patterns and activities.
- Limit access (driveway/curbcut) and utilize frontage roads on arterial and major/minor collector streets.
- Secure and preserve sufficient rights-of-way for future arterial and major collector traffic routes.
- Require developers to have sufficient parking to meet existing and future demands.
- Classify major streets and highways according to function and establish design standards for various street classifications.
- Coordinate plans with communities in the development of a network of arterial and collector roads that promote efficient traffic movement and support growth in projected development areas.
- Identify maintenance responsibilities as part of the platting of new subdivision roads.
- Require new development to finance road improvements needed to support increased traffic.
- Discourage strip-type development along major thoroughfares to maintain the carrying capacity of highways and to avoid conflict with other land uses.
- Regarding problems with the lack of frontage roads adjacent to certain segments of existing arterial and collector roads, the County may need to study the development of frontage roads on said arterial roads – i.e. Highway 77 south to the “S” curve.
- Require compliance with the Brookings County Master Transportation Plan (August 2013), and amendments or revisions thereto when supported by the County Highway Superintendent.

## **PHYSICAL ENVIRONMENT**

### **STREAMS, LAKES AND WETLANDS**

Water drainage in Brookings County is concentrated in the Coteau des Prairies. The Big Sioux River provides the primary drainage outlet through the center of the county. East of the Big Sioux River, drainage is more clearly defined with small creeks and tributaries to the Big Sioux River with some potholes scattered throughout the eastern portion of the county. The drainage pattern west of the Big Sioux River in Brookings County is less clearly defined. This immature drainage pattern is apparent in the number of potholes and closed basin prairie lakes. Some above ground, natural drainage exists, but much of the water from the west side of the County reaches the Big Sioux River via subsurface drainage.

The Big Sioux River, along with Six-mile Creek, Medary Creek, Deer Creek, and North Deer Creek form the major surface drainage features in Brookings County. The Big Sioux bisects the county, flowing south from Brookings County. Medary, Deer, North Deer, and Six-mile creeks with their tributaries drain the eastern portion of the county, while westerly Big Sioux Tributaries drain the western half of the county.

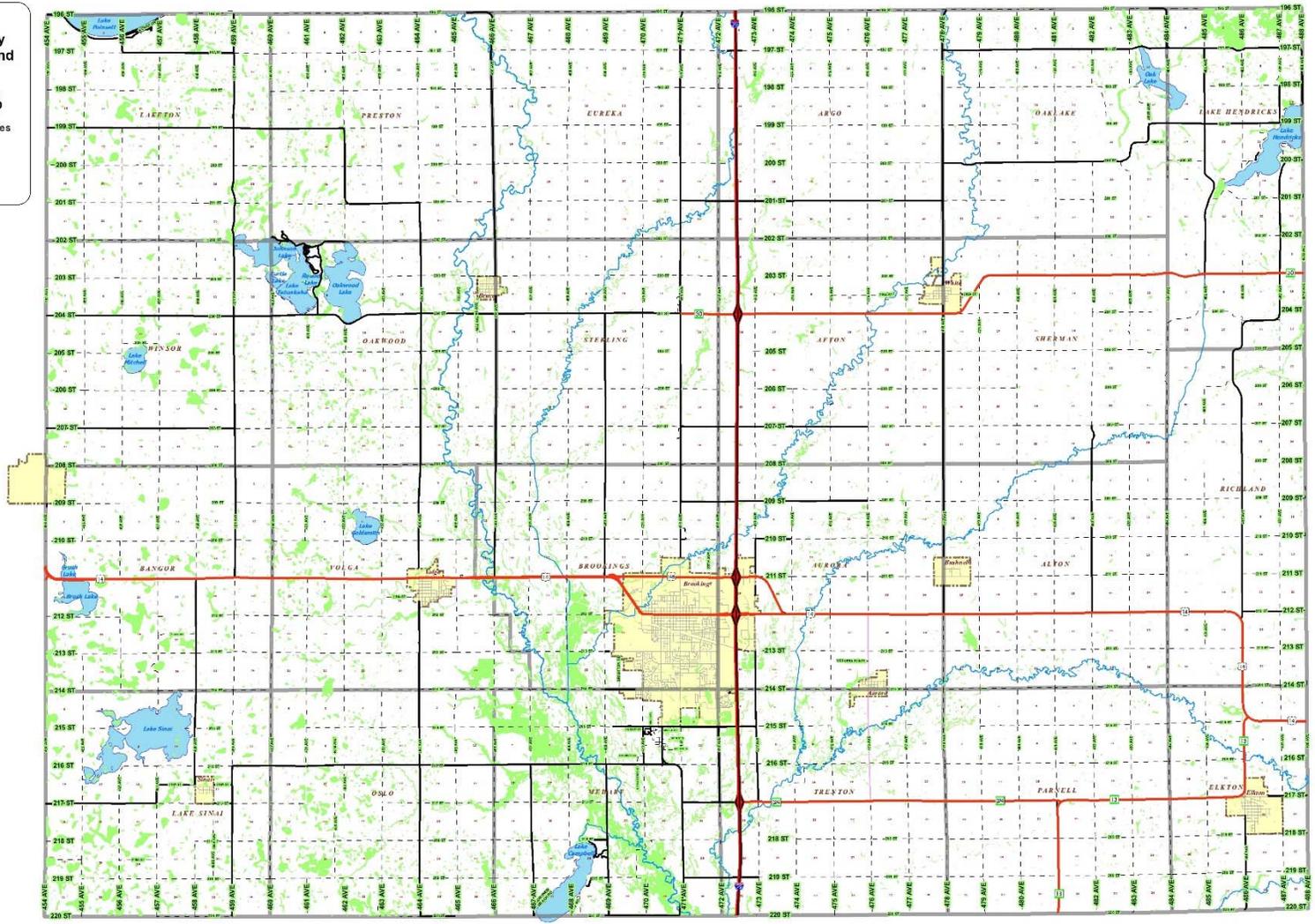
As previously described, wetlands are prevalent throughout the entire county, with the highest concentration in western Brookings County. Wetlands perform a variety of functions, serving as natural water purifiers by filtering out pollutants, thereby enhancing surface and groundwater quality, increasing wildlife and fish habitat and providing recreational opportunities. Wetlands also reduce siltation and control flooding by slowing runoff during rapid snow melt and heavy rainfall, releasing water gradually so erosion and downstream flooding are minimized.

There are eight prairie lakes located in Brookings County. They include Lake Poinsett, Lake Sinai, Oakwood Lake, Johnson Lake, Lake Goldsmith, Lake Campbell, Lake Hendricks, and Lake Tetonkaha. Presently there are clustered residential developments on Lakes Poinsett, Tetonkaha, Oak, Campbell and Hendricks. Numerous lakes and sloughs have encompassed greater land area and have become deeper due to a predominantly wet climatic cycle in the past two decades.

Wetlands, lakes, and streams are shown on Map 15.

**Map 15**  
**Brookings County**  
**Comprehensive Land**  
**Use Plan**  
**Wetlands, Lakes,**  
**and Streams Map**

-  Municipal Boundaries
-  Lakes
-  Wetlands
-  Rivers/Streams



## **SOILS**

There are a number of soil associations, or types of soil patterns, in Brookings County. A soil association is landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil, and it is named for the major soils.

The Natural Resources Conservation Service has completed an update of the Brookings County Soil Survey. Soil boundaries were provided in digital format for entry into a Geographic Information System (GIS) along with attribute information associated with the various soil types. GIS affords the opportunity to analyze these attributes as part of the site development evaluation process.

A map showing soil associations is useful to people who want a general idea of soils in the county. The soil attributes provide information on agricultural productivity, erosion factors, and limitations for the use of wastewater absorption fields, lagoons, buildings, roads, and other engineering applications. The County should consider soil associations, and their limitations when, making decisions on future development projects.

## **FLOOD PLAINS**

Floodplains are lowlands adjacent to the channels of rivers, streams, and other watercourses where inundation periodically occurs due to extreme natural events.

The flood plain has two (2) constituents – a floodway and a flood fringe. Together they comprise the flood hazard area generally referred to as the 100-year flood plain identified by the Federal Emergency Management Agency (FEMA), where the chance of experiencing a flood of such magnitude is one (1) percent every year.

Brookings County presently maintains eligibility in the National Flood Insurance program. Brookings County adopted the most recent National Flood Insurance rate map, which has identified special flood areas (100-year flood plains) within the rural (and urban) areas of the county. Brookings County has adopted and enforces a Flood Damage Prevention Ordinance. A Flood Damage Prevention Ordinance establishes restrictions on construction in the flood plain and floodway. Since Brookings County has adopted the Flood Damage Prevention Ordinance, residents are able to purchase special insurance at subsidized rates. Further, the ordinance requires residential structures be flood-proofed. This is done by requiring the lowest floor of residential structures to be constructed to a standard of one (1) foot above the base flood elevation. Residential structures are prohibited from being constructed in flood ways while encroachments; including fill and new construction, are prohibited unless engineering certification demonstrates that the activity will not result in an increase in flood levels.

Map 16 identifies the specific flood hazard areas identified by FEMA.

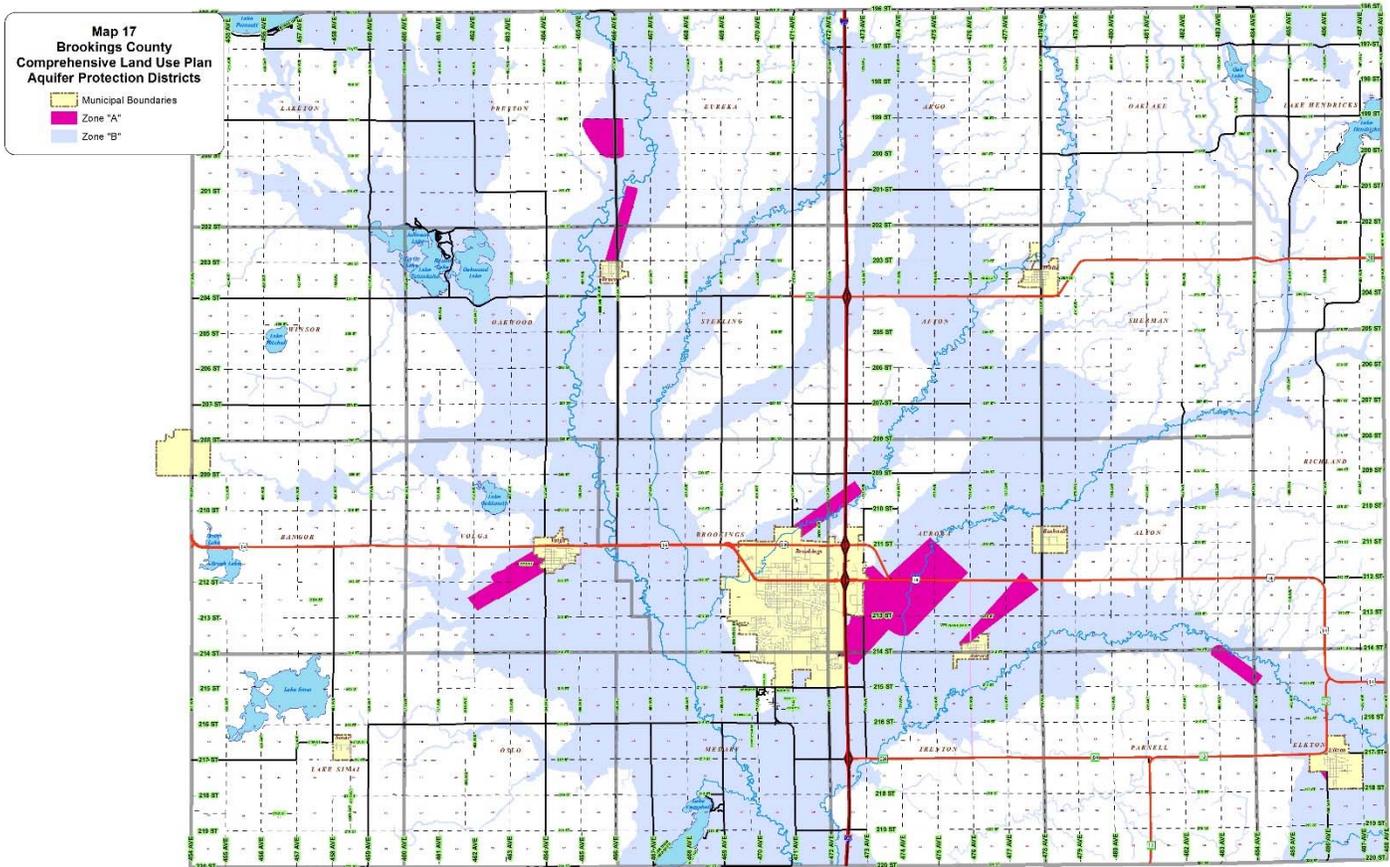


## AQUIFER AND WATER SOURCE PROTECTION

The County's water resources consist of surface water found in streams and lakes, and groundwater occurring in the Big Sioux Glacial Aquifer. Two rural water systems (Kingbrook and Brookings-Deuel) and the City of Brookings provide water to all rural and municipal users, excluding those with private wells. Nearly one hundred percent of the public water supply is taken from the Big Sioux Aquifer.

The water resources are at risk of contamination by a variety of sources – inadequate wastewater treatment and disposal, attributed to both on-site and municipal sources, mismanagement of waste from livestock facilities, overuse of fertilizers and pesticides, solid waste disposal sites, and sites for the storage and manufacture of regulated substances. The county enforces measures to protect these vulnerable areas through the water-source protection overlay district provisions of the zoning ordinance. The overlay district prohibits uses which pose a high risk of contamination to surface and groundwater resources, and regulates other potential damaging uses so that adverse environmental impacts are minimized.

Map 17 identifies the location of shallow aquifer and wellhead protection areas in the unincorporated areas of Brookings County.



## **LAND USE PLANNING POLICIES**

The purpose of the Plan is to outline what is to be produced or accomplished in the county relative to the physical environment. The Plan shall consist of land use planning policies and a future land use map. The land use planning policies contain numerous goals and policies. These policies and maps should all be used collectively as they set a comprehensive framework for a review and evaluation process upon which plans, developments, and programs can be formulated and instituted.

The primary objective of this study is to identify where and how this growth can best take place. This required the documentation of existing land uses, and the identification of opportunities and constraints, that will affect future land development.

The development of land use planning policies was required to establish the basis on which future development would take place. By integrating the county's vision and growth objectives with the available resources, a preferred direction and pattern for future development was determined, and thus, became the basis for the recommendations and future land use planning policies and maps as presented in this report.

Generally, a comprehensive land use plan utilizes written policies to paint a picture of how a county should look in 15 to 20 years. An initial step in the development of a comprehensive plan is that of establishing land use planning policies. The following are the major goals, objectives and policies, which have an application to the development of the comprehensive plan for Brookings County.

### **DEFINITIONS**

This section contains the development "vision" for Brookings County. It is expressed through goals and policies. A definition for each term is presented below.

**Goal -** A general statement that reflects ideals, ambitions or hopes.

**Policy -** A statement concerning a specific, measurable target or purpose or an action or position that will be taken to achieve the goal.

The Goals and Policies spell out various roles and responsibilities for Brookings County. To better understand the county's role for each Goal and Policy, a number of the key terms are defined below.

**Create:** Bring about the desired goal, usually with staff, Planning Commission, Board of County Commissioners and Board of Adjustment involvement in all levels from planning to implementation.

**Continue -** Follow past and present procedures to maintain desired goal, usually from staff, Planning Commission, Board of County Commissioners and Board of Adjustment involvement in all levels from planning to implementation.

**Encourage -** Foster the desired goal through county policies.

**Enhance -** Improve current goal to a desired state through the use of policies and staff, Planning Commission, Board of County Commissioners and Board of Adjustment involvement at all levels of planning.

- Identify -** Catalog and confirm resource or desired item(s) through the use of staff, Planning Commission, Board of County Commissioners and Board of Adjustment actions.
- Maintain -** Keep in good condition the desired state of affairs through the use of county policies, staff and Planning Commission.
- Recognize -** Acknowledge the identified state of affairs and take actions or implement policies to preserve or change them.
- Prevent -** Stop described event through the use of appropriate county policies, staff, Planning Commission, Board of County Commissioners and Board of Adjustment action.
- Promote -** Advance the desired state through the use of community policies and staff, Planning Commission, Board of County Commissioners and Board of Adjustment activity at all levels of planning.
- Protect -** Guard against a deterioration of the desired state through the use of community policies, staff, Planning Commission, Board of County Commissioners and Board of Adjustment.
- Provide:** Take the lead role in supplying the needed financial and staff support to achieve the desired goal.
- Strengthen:** Improve and reinforce the desired goal through the use of community policies, staff, Planning Commission, Board of County Commissioners and Board of Adjustment and financial assistance, if needed.
- Support:** Supply the needed staff support, policies, etc. at all levels to achieve the desired goal.

The goals and policies spell out various roles and responsibilities for Brookings County. The following statements will direct the implementation of the Comprehensive Land Use Plan. They are being presented under the following nine (9) headings:

- Fundamental Goals
- Environmental Policies
- General Residential Development
- General Commercial and Industrial Development
- Rural Development Areas
- Urban Development Areas
- Transitional Development Areas
- Areas of Development Limitations
- Management and Coordination

Within the four (4) delineated areas of future development (Rural Development Areas, Urban Development Areas, Transitional Development Areas, Area of Development Limitation) special considerations for certain land uses, or types of land uses, have been identified for the specified development areas and can be found in the appendix. The future development areas are identified in Map 18 on page 60.

## **FUNDAMENTAL GOALS**

- To provide for orderly, efficient land development within the unincorporated areas of Brookings County.
- To manage growth within the framework of the Plan and other municipal comprehensive plans.
- To maintain a distinction between rural areas and municipalities.
- To provide a transportation system that promotes the safe and efficient movement of people, goods, and services.
- To achieve the maximum efficiency in the provision of public services and facilities.
- To preserve and enhance environmental, historical, and cultural resources.
- To promote compatible development in the rural area.
- To support and encourage the growth of the county's economic base and promote the expansion of job opportunities.
- To maintain a viable agricultural economy and preserve the rural quality of life.
- To protect and enhance property values and tax base of Brookings County.
- Promote only responsible residential, commercial and industrial development based upon sound siting criteria.

## **ENVIRONMENTAL POLICIES**

It is the goal of Brookings County to avoid development in areas that:

1. Are environmentally fragile or unique;
2. Present health and safety hazards, as defined in County, State, and Federal statutes, to county residents.

Policy 1. Soil characteristics, depth to aquifer, topography and other construction limitations should be carefully considered in project site planning.

### **Policy 1 - Supporting Policies**

- County officials shall be provided assurances of environmental protection measures, prior to the approval of any required permit or legal document, in areas having obvious or documented development limitations.
- The County discourages the development of stream corridors, the aquifer, natural floodplains and drainage ways and other significant natural areas that are unsuitable for construction.
- County Officials shall strive to protect surface water and groundwater, especially in those areas that are designated wellhead and shallow aquifer protection areas.

- Soil erosion and downstream sedimentation shall be minimized through appropriate design.
- Prior to development in unsewered areas, soils shall be tested and analyzed for absorption capability and no building permits allowed unless tests determine site meets established sanitary standards.
- Those areas identified as floodplain, groundwater aquifer, natural resource shall be managed in such a way as to prevent premature development of other land uses.
- Natural drainage courses should be protected in their capacities to carry runoff water.

Policy 2. Development shall be limited within areas that are known to experience regular and/or severe flooding.

**Policy 2 - Supporting Policies**

- Citizens seeking county permission for development within a known flood hazard area shall provide documentation that their project will not present a risk to public health and safety.
- Proposed developments in flood hazard areas shall comply with the National Flood Insurance Program and associated regulatory agencies.

Policy 3. Drainage, air quality, noise, and other environmental factors will be considered for impacts on neighboring property.

**Policy 3 - Supporting Policies**

- The preservation of agricultural production practices should be a priority consideration in land use decisions.
- In situations where permission is needed, and the situation warrants an evaluation, the county will rely upon both technical sources and public input in making decisions.

**RESIDENTIAL DEVELOPMENT IN GENERAL**

In order to maintain an agriculturally based community where conflicts with agricultural practices are reduced, and in order to maintain the quality of the lakes within the county so they are viable, it is the goal of Brookings County to encourage the expansion of residential development primarily in existing incorporated communities, sanitary sewer districts, and in certain instances within joint jurisdiction areas, and in those rural areas in which the residential development is supportive of agricultural operations.

Policies

- Encourage new residential construction to locate on previously platted lots and other parcels which already qualify as building sites.

- Non-farm residential development should take place at locations that minimize public infrastructure costs, potential agricultural/residential conflicts, and promote safety.
- Restrict the density of residential uses and encourage higher development densities to the municipalities, agreed upon joint jurisdiction areas, and sanitary sewer districts.
- Preserve and protect the agricultural productivity of rural land by restricting the development of non-farm residential sites.
- Scattered non-farm residential developments shall be discouraged.
- Discourage non-farm residential development which access township/county gravel roads.
- Discourage land splits which erode the integrity of agricultural use areas.
- Require a right-to-farm covenant prior to construction of residences.
- Require a concentrated animal feeding operation setback waiver for construction of residences within an established distance of an existing concentrated animal feeding operation.
- Pedestrian and traffic safety, infrastructure capacities, environmental impacts, and adjacent land uses should be considered in evaluating residential development proposals.
- Public services and facilities shall be provided at a level sufficient to meet the needs of a low-density agricultural population only.
- Within the framework of zoning, when small lot developments are proposed, every effort should be made to cluster residential uses and limit driveway approaches onto arterial and collector roads.
- Identify policies for certain types of residential land uses permitted in the unincorporated areas of Brookings County which protect agricultural land uses.
- Discourage the rezoning of property to Lake Park (Residential) District unless the following general design criteria are met:
  - Connection to an approved sanitary sewer treatment facility
  - Connection to an approved public water supply
  - The development and maintenance of interior streets should be the responsibility of the developer or homeowners association.
  - Direct access for the development (not individual lots) to a federal/state highway or paved county road unless otherwise agreed upon by the applicable road authority.
  - Controlled access onto major highways
  - Adequate buffering from neighboring uses
  - A piecemeal approach to the development of lake property is not encouraged. A comprehensive design and site review shall be required.
  - Brookings County encourages the development of public and/or private parks/access areas adjacent to lakes after a comprehensive site review.

Exception to large lot residential development

Prior to the adoption of a 35-acre minimum lot requirement in 1976 for agriculturally zoned property in Brookings County, some lots had been created by virtue of platting, sales, exclusion, etc. and, therefore, retained the ability to construct residences upon them provided they have not decreased in size. In most cases the smaller lots are situated near lakes or municipalities, or are limited to Government Lots, or lots originally created for public uses such as schools, cemeteries, churches, etc. In acknowledgment of these existing lots of record, and with the purpose to enable next generation farmers to establish a site at a farmstead, Brookings County allowed for lots where a residence has been occupied for ten years, and at the site of established farm building site to decrease its lot size below 35 acres. As an unintended consequence, this policy has led to a gradual, decades-long, erosion of minimum lot sizes in portions of Brookings County. Although many lots still meet the minimum lot requirement of 35 acres, the current policy does little to discourage the haphazard development of non-farm dwellings.

The Brookings County Planning Commission recommends some or all of the following, or similar policies and strategies, be considered to allow for the decrease to minimum lot area for residential uses but still support the goal of discouraging land uses which conflict with agricultural uses. It is expected that current exceptions, large-lot residential policies, may be supplemented or replaced by some or all of the following policies.

- Policy #1  
Establish a maximum residential development density based upon the United States Public Land Survey (USPLS).
  - Strategy #1.A.  
Establish a maximum number of residences to be allowed in a section, quarter section or quarter-quarter section based upon the USPLS.
  - Strategy #1.B.  
Only allow exception to the maximum residential density if certain prescribed conditions or exceptions are met.
  - Strategy #1.C.  
In instances where exceptions to the minimum 35-acre lot minimum have been approved, the ability to transfer the right to develop a residence from one area to another (based upon prescribed USPLS quadrant) may be exercised provided certain conditions are met.
- Policy #2  
Existing policy is to allow lots which have been used as a residence for the immediately preceding ten years to be decreased. It is expected this policy will be phased out over the lifetime of this land use plan. Until that transition, the following strategies will be employed to support this policy.
  - Strategy #2.A.  
Brookings County Equalization records will be utilized to determine whether a residence has been occupied on the specific site for the immediately preceding ten years prior to granting of exception.
  - Strategy #2.B.

A minimum lot size for any such proposed lot will be established and said lot will be platted in accordance with the Brookings County Subdivision Ordinance.

- Policy #3
  - Existing policy is to allow an established farm building site to be subdivided into a lot intended to be used for residential purposes consisting of less than thirty-five (35) acres. It is expected this policy will be heavily restricted, or phased out, over the lifetime of this land use plan.
  - Strategy #3.A.  
In an effort to distinguish between abandoned farms and established farm building sites, Brookings County will establish a prescribed timeframe in which a farm building site is required to have been established, and the associated residence occupied in order to qualify as an established farm building site.
  - Strategy #3.B.  
Brookings County Equalization records will be utilized to determine whether a farm building site was established and occupied within a prescribed timeframe.
  - Strategy #3.C.  
A minimum lot size for any such proposed lot will be established and said lot will be platted in accordance with the Brookings County Subdivision Ordinance.
- Policy #4
  - Support residential developments of lots and densities within the identified area of Joint Jurisdiction with the City of Brookings not supported in other unincorporated portions of the county
  - Strategy #4.A.  
The City of Brookings and Brookings County will continue to review subdivision and development proposals for residential developments in the Joint Jurisdiction area to determine compliance with the Joint Jurisdiction Ordinance.
  - Strategy #4.B.  
Specific design standards should be adopted for residential subdivisions in the joint jurisdiction area. If specific design standards are not adopted for such subdivisions, it is recommended that residential subdivisions in the Joint Jurisdiction area comply with the design criteria for the City of Brookings.
  - Strategy #4.C.  
In certain areas identified in conjunction with the City of Brookings, but not adjacent to City (of Brookings) Limits, the opportunity should be provided for subdivision which does not meet all design standards, or other minimum requirements, provided the owners of the property agree to establish an association for the maintenance of public areas and roads in addition to serving and enforcing other functions.

- Strategy #4.D.  
All residential development of lots and densities within the identified area of Joint Jurisdiction with the City of Brookings, not supported in other unincorporated portions of the county, be subject to the developer or property owners agreeing to voluntarily annex the property into the City of Brookings upon becoming contiguous to City Limits and paying a pro-rata share for connection to utility services if necessary.
- Policy #5  
Establish an Overlay District which would allow and increase residential density surrounding communities without a formal Joint Jurisdiction (Zoning) Ordinance with Brookings County
  - Strategy #5.A.  
Consider development within one mile of small towns in areas, identified by each specific town and surrounding townships, as suitable for small lot (less than thirty-five acres) development.
  - Strategy #5.B.  
Allow for transfer of development right within any parcel under contiguous ownership unless separated by a street or roadway.
  - Strategy #5.C.  
Specific areas will be identified with careful consideration to the ability of the road to handle potential traffic and access for the use, and the potential impact on certain agricultural uses. These areas are identified as Areas of Development Transition on the Future Land Use Map.
  - Strategy #5.D.  
CAFO setback requirements shall apply to all existing residences and lots created prior to the establishment of zoning in Brookings County. Within the prescribed area, CAFO setback requirements shall not apply to residences constructed on lots of less than thirty-five (35) acres which were created after the establishment of this overlay district.
  - Strategy #5.E.  
The formal establishment of any overlay district will be subject to public notice, and consent of the specific community, and applicable road maintenance authority.

## **COMMERCIAL AND INDUSTRIAL DEVELOPMENT IN GENERAL**

It is the goal of Brookings County to encourage the continuation of agricultural production, while promoting cost effective, value added agricultural processing efforts.

### **Policies**

- Promotion or encouragement should be given to agricultural production and processing activities that benefit the agriculture industry.
- County regulations should protect the property rights and promote the economic opportunities of farm operators.

- Commercial and industrial development should take advantage of existing utility networks and transportation systems.
- The locations, capacities and relationships of public infrastructure systems should be reviewed as part of development proposals requiring county permission.
- Brookings County encourages the redevelopment and reuse of existing business locations.
- Commercial and industrial development, such as value added Agricultural industries, should be compatible with adjacent land uses.
- Commercial and Industrial development projects should take place in designated industrial parks or already developed highway locations.
- Commercial and Industrial development projects which potentially pose a threat to the environment shall be precluded from siting in Areas of Development Limitation.
- Commercial and industrial developments which can be accommodated in municipalities shall be discouraged in the unincorporated areas of the county.
- Municipal commercial districts should be protected and should not be diluted by a scattered pattern of commercial uses developed at random throughout the unincorporated areas of the county.
- Developers should be encouraged to reserve "buffer" areas between different land uses to minimize the potential for conflict.
- Discourage commercial and industrial development in the rural area unless the uses are directly supportive of agricultural operations.
- Discourage strip development along transportation arteries, particularly those which serve as gateways to the municipalities.
- Prior to construction, each commercial/industrial development project should be subject to a specific site design, review, and approval process. The arrangement of the on-site buildings should provide for efficient and viable long-term usage. Further, appropriately locating and designing the development's service areas should discourage disruption to on-site circulation or adjacent land use. Vehicular access to highway commercial and industrial areas should be sufficiently set back from intersecting streets with appropriate sight distance maintained at all entry points. Also, to enhance vehicular traffic flow, strict controls affecting the number and location of access points to commercial/ industrial areas should be established.
- Identify policies for certain types of commercial and industrial land uses permitted in the unincorporated areas of Brookings County which protect agricultural land uses and are compatible with other goals and policies of this plan.
- Discourage the rezoning of property to allow for Commercial/Industrial uses unless the following general commercial/industrial criteria are met:

- Adjacent to county and state highways
- Rail access for industrial uses
- Controlled access onto major highways
- Adequate buffering from neighboring uses
- Hard surfaced driveways and parking areas
- Uses which may be accommodated within municipal city limits are encouraged to be located in city limits.
- Proposed development adjacent to municipal boundaries is encouraged to be annexed by the municipality prior to development

## **RURAL DEVELOPMENT AREAS**

This category represents the bulk of agricultural land (cropland, rangeland, and pasture) and sites that are not expected to experience any anticipated change during the planning period. This land use category should be regulated to prevent the encroachment by urban uses until such time development meets the established land use planning policies. There may be an occasional residence, or an agricultural-oriented commercial/industrial venture constructed, but the primary use or focus should remain agricultural. Major land intensive projects such as a landfill, sewer lagoon, aggregate mining operation, or concentrated animal feeding operation may dramatically alter the area and or adjacent areas. However, these particular uses would require a comprehensive site plan review, the satisfaction of specific criteria, including environmental assessment procedures if applicable, and may require public input.

Areas identified for development stability or agricultural uses shall be managed in such a way as to promote these uses and prevent premature intensification of other land uses. Land in this area shall be regulated so as to limit non-farm residential and urban density development through the use of minimum lot sizes, residential density requirements, setbacks, and other regulations.

It should be noted that if agricultural lands are not protected through land use controls their optimum utilization will diminish in disproportion to the amount of area reverting to urban use. Thus, much of the remaining economic potential of the land, in terms of agricultural production, is lost.

### Agricultural Preservation Policies

- The premature development of agricultural land should be discouraged.
- Discourage development patterns that require public improvements financed in part by the farming community but which are not necessary to support agriculture.
- Best management land practices must be employed to protect valuable agricultural land, soils, water supplies, as well as other amenities.
- Preserve agricultural lands and protect the rural area from uses which interfere with, and are not compatible, with general farming practices. This may include the use of Right-to-Farm Covenants, and minimum setbacks for residences from established Concentrated Animal Feeding Operations, or exemptions to setbacks from Concentrated Animal Feeding Operations for certain development exceeding a residential development of one residence per thirty-five acres
- Recognize and improve upon regulations which have a negative impact on farming operations.

- Promote development patterns which will avoid producing inflated agricultural land values.
- When considering future land use decisions, the preservation of agricultural land should be of significance.
- Identify policies for the permitting of non-agricultural land uses which protect agricultural land uses.
- Areas identified for rural density development, or agricultural uses, shall be managed in such a way as to promote agriculturally related uses and prevent premature intensification of other land uses. Land in the Rural Development Area shall be regulated so as to limit non-farm residential and urban density development through the use of minimum lot sizes and other regulations.
- Maintain a residential density of not more than one building site per 35 acres.

#### Miscellaneous Policies

- Limit rural developments to densities that do not exceed current service levels.
- Discourage the random and haphazard siting of commercial and industrial uses within the rural area where such uses do not support the agricultural industry.
- Protect construction aggregate resources by restricting adjacent land uses to those that are compatible with extraction operations. Require operators to meet developmental and operational standards (such as road haul agreements).
- Regulate concentrated animal feeding, processing, and related operations to protect environmental quality and minimize conflicts with existing and future development areas.
- In order to protect the aquifer, lakes and wetlands, and to ensure proper installation and maintenance of on-site wastewater disposal systems, the County should require installers of the on-site wastewater disposal systems to be licensed.
- Only future development (residential, commercial, industrial, etc.) which cannot be accommodated in a municipality, agreed upon joint jurisdiction area, or in a Lake Park District or sanitary sewer district, should be encouraged in the unincorporated areas of the county that have appropriate infrastructure – roads, water, sewer.
- Brookings County encourages the identification and retention of historic and cultural resources – i.e. historic farms, cemeteries, etc.
- Certain land use location and design criteria for land uses in the Rural Development areas have been established and are located in Appendix A.
- Certain policies for specific uses in the Rural Development Areas have been established and are located in Appendix B.

## **URBAN DEVELOPMENT AREAS**

These areas have qualities that encourage development in the near future. These areas are located within and immediately adjacent to municipalities with adequate infrastructure in place. There is often access to transportation routes and the property is served, or could be economically served, with public services – i.e. water, sanitary sewer, and streets.

#### Policies

- Concentrate future non-farm growth, in or contiguous to, municipalities where public infrastructure can be economically provided. Maximize the utilization and efficiency of existing public facilities.
- Discourage premature development in municipal/developed lake fringe areas. Premature development is defined as development that could limit future land use options, and opportunities, to locate and finance public infrastructure facilities.
- Seek input of municipal officials in the review of development proposals which could potentially impact future municipal expansion and public infrastructure projects.
- Encourage annexation of potential development sites within municipal fringe areas before development plans are approved.
- Recognize municipal growth plans when considering future development proposals.
- Preserve the identity of existing communities by discouraging sprawl and leapfrog development.
- Only the subdivision of land adjacent to areas of development advantage, which would enhance future municipal or established developed lake development, is encouraged.
- Identify policies for certain types of land uses permitted in the unincorporated areas of Brookings County which promote the orderly growth of municipalities and protect agricultural land uses.

#### **AREAS OF DEVELOPMENT TRANSITION**

These areas are located near incorporated municipalities including the Joint Jurisdiction Area with the City of Brookings, and/or developed lakes. They have been experiencing requests for residential or commercial/industrial development. The current land use is generally agriculture or open space. These areas could be potential conflict zones in terms of availability of public infrastructure, incompatible uses, and municipal/county interests.

## Policies

- Uses and activities, when compatible, shall be concentrated and clustered into functionality related areas or centers.
- Urban development will not be permitted in areas without available infrastructure – i.e. paved roads, public water, and sewer services, and such development shall include connection to said municipal/sanitary sewer district/road district infrastructure.
- In areas of development transition, leapfrog development on land which cannot be economically provided with public services and facilities is discouraged.
- Cooperation and coordination in land use planning should be promoted between municipal areas, sanitary sewer districts, and the County in the development of land and utilities in the extraterritorial jurisdictional area outside of a community's corporate limits.
- In areas of development transition, annexation of the land adjacent to the municipal corporate limits and sanitary sewer districts is encouraged prior to development.
- In areas of development transition, only the subdivision of land adjacent to the city limits and existing developed lake areas, which would enhance future city and lake development, is encouraged.
- Require county-approved developments within the areas of development transition to require utilities compatible with municipal or sanitary sewer district requirements.
- Promote optimum land use relationships and minimize land use conflicts.
- Protect agricultural land uses from encroachment of potentially incompatible commercial, industrial, or residential development through the use of setbacks, screening, easements, covenants, etc.
- Identify policies for certain types of land uses permitted in the unincorporated areas of Brookings County which promote the orderly growth of municipalities and protect agricultural land uses. Policies for land uses not specifically listed are to be considered generally as described within other policy areas of this plan.
- Promote cooperative efforts with the municipalities in dealing with development issues in municipal/developed lake fringe areas.
- Encourage new residential construction to locate on previously platted lots and other parcels which already qualify as building sites.
- Limit rural densities adjacent to communities and sanitary sewer districts so that current service levels are not exceeded, thereby avoiding the creation of new special purpose districts (i.e. sanitary, water, and road districts).
- Contain urban expansion to areas which are adjacent to incorporated communities and sanitary sewer districts.

- Future community growth should occur in areas contiguous to existing development to allow economical expansion of municipal facilities and services.
- Rural land will be converted to urban development in accordance with the Comprehensive Plans, and in such a way, as to promote economic and orderly extension of the urban services.
- Rural land on the fringe of municipalities is encouraged to be converted to urban development in accordance with the Future Land Use Plan of the specific municipality, and in such a way, as to promote economic and orderly extension of the urban services.
- Recognize the need for contracts or agreements providing for the future annexation as a condition of transitioning land use from agricultural to characteristically residential, commercial, or industrial land uses.
- Collaborate with the City of Brookings to identify areas within the City of Brookings/Brookings County Joint Jurisdiction Area for the development of lots at densities which are not allowed in other unincorporated portions of the county for commercial, industrial, and residential purposes.
- Regarding the development of property adjacent to lakes located within the county, the County realizes that these lands are also areas of development transition and will require extensive review prior to the approval of new developments and/or the expansion of existing developments. Policies or issues to consider in the development of lake property include:
  - In areas of development transition adjacent to lakes, the subdivision and development of land should not be permitted without approved water and sanitary sewer services.
  - The development and maintenance of interior streets should be the responsibility of the developer or homeowner's association.
  - In review of residential, commercial, and industrial development proposals, Brookings County shall consider the impact upon county and township roads servicing the proposed lake developments.
  - A piecemeal approach to the development of lake property is not encouraged. A comprehensive design and site review shall be required.
  - Brookings County encourages the development of public and/or private parks/access areas adjacent to lakes after a comprehensive site review.
- Certain land use location and design criteria for land uses in the Areas of Development Transition have been established and are located in Appendix C.
- Certain policies for specific uses in the Areas of Development Transition have been established and are located in Appendix D.

## AREAS OF DEVELOPMENT LIMITATION

One of the main factors in implementing the first land use regulations was for the purpose of limiting residential development adjacent to lakes in Brookings County, unless sanitary sewer districts were established. Now, regular flooding, depth to the aquifer, steep slopes, fragile soils, proximity to certain facilities (gravel pits, lagoons, landfills, concentrated animal feeding operations, etc.) are all considered limiting factors. Limited access to transportation routes and public facilities further limit the area's potential for development.

### Development Constraints in the Unincorporated Areas of the County

The following types of development constraints have been identified and will be accommodated in the future land use plan.

**Floodplain** – This development constraint category has been designated from flood plain studies on land experiencing flooding, standing water, or extremely high water table conditions. The land areas vary in the intensity of problem water conditions, but special consideration should be given to preventing development to occur unless coordinated precautionary measures are instituted.

**Shallow aquifer** - This development constraint category has been designated from groundwater shallow aquifer studies. Special consideration should be given to preventing types of development which have the potential to pollute the aquifer (concentration of residences, chemical storage, concentrated animal feeding operations, certain commercial and industrial uses, etc.) unless coordinated precautionary measures are instituted.

**Soils** - This development constraint category has been designated from Natural Resource Conservation Service soil studies. These studies provide information on the suitability of the general soil associations to support certain types of land use activities, such as septic tank absorption fields, sewage lagoons, shallow excavations, dwellings with basements, sanitary landfill, roads and streets. The Zoning Officer, Planning Commission, and/or Board of Adjustment will utilize the information from these studies in making decisions relating to the development of specific sites. Special consideration should be given to preventing development to occur in areas where soil types are not conducive to associated development requests.

**Natural Resources** - This development constraint category has been designated from Natural Resource Conservation Service and Corps of Engineer's wetland inventory studies. The land areas vary from bodies of water to game propagation areas. Special consideration should be given to preventing development to occur unless coordinated precautionary measures are instituted within and near certain rivers, streams, lakes, abandoned quarries, certain wetlands, natural prairies, and historical sites.

**Pipelines** - This development constraint category has been designated based upon the proximity to oil and gas transmission lines located in Brookings County. Special consideration should be given to preventing and/or limiting some forms of development to occur unless coordinated precautionary measures are instituted.

## Policies

- Development of this area shall be compatible with features of the natural environment and accommodated without destroying environmental features and natural amenities. At a minimum, the following areas shall be considered Areas of Development Limitation:
  - Shallow Aquifer - Zone A and B
  - Soils that cannot support certain land use activities –these are defined within the NRCS Brookings County Soil Survey
  - Identified Flood Plains
  - Identified Wetlands
- The following physical features should be preserved in a natural state and properly maintained: Low-wet areas, lakes and streams, drainage ways, wildlife areas, and tree-cover.
- Zoning and subdivision regulations shall require protection of drainage ways, wetlands, water courses, water bodies, soils, and aquifers; and shall require easements for such and make them integral parts of land development site plans.

## Environmental Areas

It is the goal of Brookings County to avoid development in areas that:

1. Are environmentally fragile or unique;
2. Present health and safety hazards, as defined in County, State or Federal statutes, to county residents.
3. Are already preserved based upon ownership by state or federal entities.

Policy 1. Soil characteristics, depth to aquifer, topography and other construction limitations should be carefully considered in project site planning.

### **Policy 1 - Supporting Policies**

- County officials shall be provided assurances of environmental protection measures, prior to the approval of any required permit or legal document, in areas having obvious or documented development limitations, such as shallow aquifer, wellhead protection areas, floodplains, or wetlands.
- The development of stream corridors, the aquifer, natural floodplains and drainage ways, and other significant natural areas that are unsuitable for construction, shall be precluded.
- County Officials shall strive to protect surface water and groundwater, especially in those areas that are designated wellhead and shallow aquifer protection areas.
- Soil erosion and downstream sedimentation shall be minimized through appropriate design.
- Prior to development in unsewered areas, soils shall be tested and analyzed for absorption capability and no building permits allowed unless tests determine site meets established sanitary standards.

- Those areas identified as floodplain, groundwater aquifer, or natural resource shall be managed in such a way as to prevent premature development of other land uses.
- Natural drainage courses should be protected in their capacities to carry runoff water.
- Brookings County will consider the most specific, recent information regarding floodplains, shallow aquifer, and well head protection areas in determining whether to expand or decrease the area(s) to be regulated, in accordance with the applicable zoning district.
- Land use restrictions surrounding lakes will be based upon original delineations of meandered lakes, unless otherwise provided for by Brookings County.
- Brookings County discourages any action which would remove the zoning designation of “Natural Resources District” from any property already so designated.
- No property shall be rezoned to “Natural Resource District” from another zoning designation until the affected land owner is properly notified.
- Natural Resource and Aquifer Protection areas should be identified and regulated with appropriate restrictions to support the policies contained herein.

Policy 2. Development shall be limited within areas that are known to experience regular and/or severe flooding.

**Policy 2 - Supporting Policies**

- Citizens seeking county permission for development within a known flood hazard area shall provide documentation that their project will not present a risk to public health and safety.
- Proposed developments in flood hazard areas shall comply with the National Flood Insurance Program and associated regulatory agencies.
- Flood hazard areas have been identified by the Federal Emergency Management Agency and the National Flood Insurance Program, and should be appropriately regulated in support of the policies contained herein by the creation of an appropriate zoning district.

Policy 3. Drainage, air quality, noise, and other environmental factors will be considered for their impacts on neighboring property.

**Policy 3 - Supporting Policies**

- The preservation of agricultural production practices should be a priority consideration in land use decisions.
- In situations where permission is needed and the situation warrants an evaluation, the county will rely upon both technical sources and public input in making decisions.

Policy 4. Overall risk of damage to pipelines will be considered for their impacts on transmission pipelines.

#### **Policy 4 - Supporting Policies**

- Appropriate areas surrounding pipelines will be reviewed for possible impacts to the regular transmission of materials through an established pipeline.
- Operators of pipelines will be notified and comment will be sought from appropriate entities prior to construction and/or commencement of certain land uses within a specified distance of pipelines.
- Any areas identified as posing a significant risk to the safety and welfare of the residents of Brookings County should be appropriately regulated in support of the policies contained herein by the creation of an appropriate pipeline protection zoning district(s).

#### **MANAGEMENT AND COORDINATION**

It is the goal of Brookings County to efficiently and effectively manage and coordinate land use plans and implementation tools.

- Coordination should take place between local, state, and regional entities on development issues.
- Recommend meeting with the City of Brookings to review the present Joint Jurisdiction Plan and Joint Jurisdiction Zoning Ordinance, with specific reference to residential and commercial development policies, in the Joint Jurisdictional Planning Area.
- Employ an area-wide approach in planning utility and drainage systems.
- Citizen participation should be a major component of the development process.
- Ample opportunity will be provided for direct public comment in every appropriate situation.
- Planning and other development documents will be written using plain language with an absence of jargon or specialized terminology.
- Flexibility within the planning and zoning process will be retained so as to readily cope with changing social and economic conditions.
- All extensive land development proposals should be guided by a plan for site development. Such plans would determine the optimum intensity of the use for land and identify corresponding densities of land occupancy, so that proper precautions could be taken to assure adequate utilities and environmental concerns.

## **FUTURE LAND USE**

### **DEVELOPED LAKES FUTURE LAND USE**

To accommodate growth, the land use plan will address both the Joint Jurisdictional Area and established, or appropriately zoned areas, of developed lakes. Those areas along with certain identified corridors near state and federal counties are identified as “Areas of Development Transition” on Map 18, the Future Land Use Map. Lakes expected to increase in residential development include Lake Campbell, Lake Hendricks, Lake Tetonkaha, and Lake Poinsett. These lakes already have a concentration of residential/commercial uses.

It is likely that the established developed areas of Lake Campbell, Lake Hendricks, Lake Tetonkaha, and Lake Poinsett will experience continued development in varying degrees. While non-lake front growth potential exists for all of the above lakes; significant lake front area is appropriately zoned, and subdivided in some cases, adjacent to Lake Tetonkaha, Lake Hendricks, and Lake Campbell. Despite the small portions of Oak Lake and Lake Goldsmith being zoned for Lake Park (residential) development, it has been, and continues to be contradictory to the goals of this and past Brookings County Land Use Plans dating back to 1972 to allow expansion of moderate to high density residential development without the establishment of public/quasi-public sanitary sewer collection systems operated and paid for exclusively by the residents utilizing it. For that reason any action which would remove the zoning designation of “Natural Resources District” from any property already so designated is discouraged. The four lakes listed above were developed prior to the establishment of zoning in Brookings County and are encouraged to establish a sanitary sewer district rather than to use individual septic tanks. However, infill and future residential development may be allowed to continue while utilizing the present forms of sanitary services.

In selecting potential sites for future development, goals and objectives relating to general land use, residential land use, transportation and public utilities were considered. Locational factors used in determining these sites considered issues of compatible adjacent land uses, existing infrastructure, such as transportation (location of paved roads, traffic access and safety), public utilities (availability of water and sanitary sewer, topography and drainage), and cost efficiency.

#### **Future Commercial/Industrial**

Locational factors to consider when planning for commercial and industrial land use development include compatible adjacent land uses, existing infrastructure, topography/drainage, traffic (congestion, access, parking, safety), and in addition - type of commercial/industrial activity (whether or not the proposed activity is agriculturally versus non-agriculturally related). In addition to areas planned for future commercial/industrial growth by individual communities, but outside of City Limits, areas near the Interstate 29 exits at SD HWY 30 and SD HWY 324 have been identified as potential commercial/industrial development sites. Also included is the area adjacent to SD HWY 13 north from Elkton, then East along US HWY 14 between the Minnesota border and the SD HWY 13/US HWY 14 intersection. Areas served by rail and other utilities may be suitable for certain industrial uses, however detailed site review should be considered prior to development of those areas.

### Future Open Space

Open space is a desired amenity of the urban environment. Circumstances and conditions under which open space areas should be set aside relate largely to a county's commitment for improving the visual appearance of the area. At a minimum, natural resources, aquifers, wetlands, flood plains and floodway, and land areas with twenty (20) percent grade or greater, should be protected from extensive urban development, if possible. In addition, there are other areas within and around the areas that have a scenic value that enhance the quality of life. These areas should be identified and protected whenever possible. Further, roadway and utility improvements, as well as buildings and signage, should be controlled so that they are sensitive to adjacent scenic areas. With appropriate planning and coordination of adjacent development projects, a system of interconnected belts of permanent open space can be created to provide a haven for wildlife, enhance community views and vista or simply provide a pleasant contrast to the urban scene.

### Future Agricultural

Land areas not expected to be developed within the fifteen (15)-year planning period have been designated as agricultural in the future land use plan. No attempt has been made to project which, if any, of these areas should be permanently maintained for agricultural purposes. The implementation of this plan through zoning and subdivision regulations will help minimize the disturbance of agricultural land and promote a smooth transition to other uses.

### Future Residential

The main goal when developing areas for future residential use is to create an area that provides a strong, cohesive environment, and does not intrude upon intensive agricultural, industrial or commercial uses. Within the City of Brookings Joint Jurisdiction Area additional residential development will occur. Such development should be consistent with the long range development plans of the City of Brookings while consisting of development that is compatible with current regulations and enforcement procedures available within the joint jurisdiction area. To maintain the lowest public expenditures necessary for developing future residential areas, it is prudent to incorporate relevant street, park, and general utility development plans.



## **IMPLEMENTATION**

The comprehensive land use plan for Brookings County has been designed to provide guidance for future growth for approximately fifteen (15) years. With any plan of this nature, it needs to be reviewed periodically to ensure conditions and circumstances affecting development are occurring as originally anticipated. The Brookings County Planning Commission recommends that this document is reviewed on an annual basis for minor changes and that a comprehensive update to this plan occur in twenty (20) years, or as deemed necessary, by the Brookings County Planning Commission.

It should be noted that the completion of a comprehensive land use plan is only the first step in the implementation of a planning program. The plan itself is merely a guide for achieving an orderly and attractive county. The County will need to take a number of steps in order for the plan to be successful. The first step is the identification and prioritization of public improvements required to support and serve future development areas. Second, the adoption or modification of applicable implementation tools, such as regulatory ordinances to ensure that the objectives embodied in the plan are adhered to as future parcels and tracts of land are developed. These tools, which are discussed in the following section, may include zoning and subdivision ordinances, building codes, etc. Finally, the Brookings County Planning Commission and Board of Adjustment should continue to review all matters affecting physical development and remain active in promoting the plan with other planning agencies in the area.

## **ZONING ORDINANCE**

The basic function of the zoning ordinance is to carry out the goals, objectives, and policies of the comprehensive land use plan. The zoning ordinance, which reflects these long-range goals, is the primary regulatory tool utilized by the county for various land use activities in the rural unincorporated area.

Since the inception of zoning, the county has amended the ordinance as needed. It is recommended that to insure the policies embodied within this plan are implemented, the zoning ordinance should be reviewed and appropriate changes incorporated.

### Zoning Techniques

#### *Density Zoning*

Since 1974, Brookings County has enforced a 35-acre minimum lot size and maximum of one residence per quarter-quarter section in the Agriculture District. This requirement of large lot zoning was put into effect for a number of reasons which include the following:

- Pollution of groundwater/aquifers from septic tanks;
  - Brookings County has instituted an aquifer protection ordinance. There are many shallow aquifers dispersed throughout the county. Concentrated, small lot developments have the potential to pollute the aquifer directly or from run-off situations.
  - Communities have invested millions of dollars in sewage treatment facilities. These facilities generally have excess capacity which could be utilized, not only in the community of Brookings, but also in the smaller communities in the county.

- Demand for increased services – road improvements, snow removal – beyond what farmers and township officials need or want to pay for;
  - Rural subdivisions, or strip developments, often demand improvements or increased services over and above what is normally required by the farming community. These requirements often come in the form of improved road surfacing or maintenance and snow removal requirements.
- Conflict between non-farm residential development and farming operations;
  - Farming operations continue to change over time. Farming today needs to be classified as heavy industry. Heavy industry and residential uses are generally not compatible. It used to be that a livestock operation would be comprised of 100 head of stock cows. Today many feedlots must include a thousand head of cattle to be economically viable. Crop farming is not generally compatible with residential development. Potential conflicts here include herbicide drift, blowing dirt, and noise. Obviously, the spreading of animal waste as fertilizer and odors from livestock operations has been, and will continue to be, a major issue.
- Problems relating to strip development along county and state highways; and
  - Small lot developments along county and state highways pose a different type of problem. A strip development along these highways, with multiple driveways, reduces the function of the highway and also causes traffic issues. School bus stops along these strip developments not only cause potential for accidents, but also reduce the flow of traffic.
- Removal of farmland from agricultural use.
  - The end result of small lot development in the established rural agricultural area is the removal of prime farmland from its “highest and best” use.

Large lot zoning has been both effective and controversial in Brookings County. It has aided in reducing potential conflict between Ag and non-ag uses. It has also reduced the need of an increased level of services and has preserved farmland for agricultural uses. Obviously, at this time, there is a demand for small lot development in rural areas. However, this demand for rural-type living should be encouraged to develop in, and adjacent, to communities which have the ability to provide the necessary services.

### **JOINT JURISDICTIONAL (EXTRATERRITORIAL ZONING)**

The County recognizes the rights of and obligations of municipalities to plan for their individual development. South Dakota Codified Law enable municipalities to adopt zoning regulations for areas within their corporate limits and, with county approval; they may exercise zoning powers in areas up to three miles outside of their municipal boundaries. For municipalities to exercise these extraterritorial zoning powers, the county and city must adopt identical zoning ordinances. Presently, only the City of Brookings share extraterritorial zoning jurisdiction with the County.

If communities do not want to go through the formalized relations of joint jurisdictional zoning, another approach is to have effective communication between the governing bodies.

Coordination between Brookings County and the incorporated municipalities will be essential if the goals, objectives, policies, and recommendations within this plan are to be realized. Without a coordinated approach, urban/rural sprawl, and scattered development, could simply push the problem beyond the extraterritorial jurisdiction. A high priority should, therefore, be placed on resolving any policy conflicts which might exist between the County and the incorporated communities.

## **SUBDIVISION ORDINANCE**

The Subdivision Ordinance constitutes another tool that the county may utilize in carrying out the objectives of the comprehensive land use plan.

Subdivision regulations are enforceable by communities in the county that have adopted comprehensive land use plans and a major street plan, which is filed with the County Register of Deeds. The reason for this joint authority is that if development is to occur within these prescribed areas, it should conform to development standards as required within the community. This is because these areas are those most susceptible to annexation; therefore, they will become a part of the same municipal structure which determined the physical standards under which they are constructed. When a community exercises platting control over rural property, the statutes require plats to be submitted to the County Planning Commission for review and recommendation. Communities with extraterritorial platting authority in Brookings County include – Aurora, Brookings, Elkton, and White.

Because municipal subdivision regulations may require unrealistic or unreasonable development requirements when applied to the rural areas of the county, the county should work with those communities who are or will be involved in platting outside municipal borders to ensure that subdivision regulations take into consideration the rural character of the property.

It is recommended that to insure the policies embodied within this plan are implemented, the subdivision ordinance should be reviewed and appropriate changes incorporated.

## **BUILDING CODE**

A building code establishes minimum construction standards for new structures as well as for remodeling and repair work performed on existing buildings. These standards are intended to safeguard life, health, property, and the public welfare by regulating and controlling design, construction, quality of materials, and occupancy of structures.

It is intended to ensure that construction meets minimum structural and life requirements; therefore, Brookings County has adopted the latest version of the International Building Code (IBC). Further, Brookings County shall review adopted codes and inspect structures to determine compliance with the adopted Building Code.

## **PERMITTING**

### Permitted Uses:

Permitted uses are listed in all zoning districts. Permitted uses are those uses which are allowed “by-right,” and inherently consistent with the intent of the specified zoning district provided specified lot area, required yards, and construction standards are met.

### Policies:

- The administrative official shall be authorized to issue building and use permits for all structures used for “permitted uses” in a specified district.
- The administrative official may refer any building permit to the Board of Adjustment.

### Conditional Uses:

Conditional uses are authorized and defined by South Dakota Codified Law (SDCL). South Dakota Codified Law states that counties may determine a permitting process for conditional uses. In Brookings County, conditional uses are listed in all zoning districts. These uses, due to the characteristics of the specified use or zoning district, require case-by-case consideration. Conditional uses are uses which are authorized within a zoning district, provided specified conditions are met, and may only be denied if specific criteria for denying the permit can be identified. General minimum considerations shall be made for each conditional use. Additional conditions may be considered for any given application provided they are applicable to the request at hand.

### Policies:

- Conditional use permits are recommended to be considered by the Brookings County Board of Adjustment.
- The administrative official may authorize uses and the construction of buildings only in accordance with the conditional use permit as approved.
- Although some may not apply to all applications, the approving board shall, at a minimum, consider whether or not the applicant has made satisfactory provision and arrangements for the following:
  - Entrance and exit to property and proposed structures thereon, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe.
  - Off-street parking and loading areas where required, with particular attention to the items above and the economic, noise, glare or other effects of the conditional use on adjoining properties and properties generally in the district.
  - Utilities, refuse, and service areas, with reference to locations, availability, and compatibility.
  - Screening and buffering with reference to type, dimensions and character.
  - Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect, and compatibility and harmony with properties in the district.
  - Required yards and other open space.
  - General compatibility with adjacent properties and other property in the district.
- The approving board may prescribe conditions unique to each individual request, provided they are applicable to the specific request.

*General compatibility with adjacent properties and other property in the district*

All uses listed as conditional uses are compatible with other property in a specified zoning district. If such uses are not compatible, they should be prohibited within the specified district. Conditional uses may only be denied in accordance with definable criteria, in order that an applicant may know under which circumstances a permit may be granted in this location. In Brookings County, general compatibility refers to the manner of operation of a use. The approving board may consider compatibility when prescribing conditions for approval of a permit, but those conditions should be uniformly required of similar uses under similar circumstances throughout the county.

Variances:

Variances allow an applicant to break the rules prescribed by the Zoning Ordinance of Brookings County. Variances may only be granted if an applicant demonstrates that by reason of exceptional topographic conditions, or other extraordinary and exceptional situation or condition the strict application of a specified regulation would result in peculiar and exceptional undue hardship onto the property owner which is not the result of the applicant's own actions. Variances from the ordinance, as required by South Dakota Codified Law, may only be considered by the Board of Adjustment. It is the responsibility of the applicant to demonstrate the undue hardship described above.

Policies:

- The Board of Adjustment shall only grant variances to applicants demonstrating all of the following:
  - Special conditions and circumstances exist which are peculiar to the land, structure or building involved, and which are not applicable to other land, structures, or buildings in the same district;
  - The literal interpretation of the provisions of this ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this ordinance;
  - The special conditions and circumstances do not result from the actions of the applicant;
  - Financial disadvantage of the property owner shall not constitute conclusive proof of unnecessary hardship within the purposes of zoning.
  - Granting the variance request would not confer on the applicant any special privilege that is denied by this ordinance to other lands, structures, or buildings in the same district.
  - No nonconforming use of neighboring lands, structures, or buildings in the same district, and no permitted or nonconforming use of lands, structures, or buildings in other districts, shall be considered grounds for the issuance of a variance.
- The Board of Adjustment shall not grant a variance to allow a use not permissible under the terms of the zoning ordinance.

## **GIS (GEOGRAPHIC INFORMATION SYSTEMS)**

GIS is a computer technology used to capture, manage, store, manipulate, analyze, and display spatial information.

GIS technology provides a valuable tool to assist in implementing the comprehensive land use plan. Much of the spatial data information gathered for this plan has been entered into a GIS, including existing land use, flood plains, aquifers, water resources, and transportation systems.

GIS involves spatial operations such as the linking of data from different sets, which is stored in a digital form. An infinite variety of analyses could be conducted on the data. Examples may include:

- What is at a certain location?
- Where do certain conditions exist?
- What has changed over time?
- What spatial patterns exist with the data?
- What if..?

Modeling can be performed to determine the impact of the location of a new concentrated animal feeding operation may have on the aquifer. The possibilities are only constrained by the limits of the database. It is recommended that GIS technology continues to be utilized in the implementation of the Comprehensive Land Use Plan, as well as to support other county departments.

# BROOKINGS COUNTY

# COMPREHENSIVE LAND USE PLAN

## APPENDIX

### LIST OF APPENDICES

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**APPENDIX A  
LAND USE LOCATION AND DESIGN CRITERIA  
BY GENERAL LAND USE TYPE IN THE RURAL DEVELOPMENT AREAS**

The following general policies have been established by the Brookings County Planning Commission and should be considered for all specified land uses in a given use category.

**GENERAL POLICIES FOR RESIDENTIAL USES**

- Discourage non-farm residential development; and
- Discourage land splits which erode the integrity of agricultural use areas.
- Require Right-to-Farm Covenant and minimum setback from established concentrated animal feeding operations.
- Require compliance with South Dakota Department of Natural Resource requirements for sanitary sewer provision.

**GENERAL COMMERCIAL/INDUSTRIAL POLICIES**

- Environmental impacts of certain uses shall be considered when situated in designated aquifer protection areas, or floodplains, to consider effects of runoff and application or disposal of waste.
- Federal and State requirements or permits shall be obtained and adhered to.
- Consideration should be made regarding the capability of roads serving the site to handle traffic generated by the proposed use. Brookings County may require written assurances for maintenance of such roads, which may include identification of financial obligations in reference thereto.
- Uses which may be accommodated within municipal city limits are encouraged to be located in city limits.
- Light generated from the site of a commercial use should not cause a nuisance, or unreasonable distraction, to adjacent property or right-of-way.
- Proposed development adjacent to municipal boundaries is encouraged to be annexed by the municipality prior to development.
- Retail sales in the Area of Development Stability are discouraged, unless raw or processed products grown or raised on site are to be sold.

**GENERAL INTENSIVE RURAL USE POLICIES**

- Environmental impacts of certain uses shall be considered when situated in designated aquifer protection areas, or floodplains, to consider effects of runoff and application or disposal of waste.
- Adequate separation from residences, churches, institutional uses, municipalities and parks, should be identified.
- Discourage the construction of Class A and B concentrated animal feeding operations in the floodplain, or over shallow aquifers.
- Operators should comply with requirements for land application of animal wastes and for odor minimization.
- Construction and land application to prevent runoff of animal wastes is required.
- Federal and State requirements, or permits, shall be obtained and adhered to.
- Consideration should be made regarding the capability of roads serving the site to handle traffic generated by the proposed use. Brookings County may require written assurances for maintenance of such roads, which may include identification of financial obligations in reference thereto.

**APPENDIX B  
LAND USE LOCATION AND DESIGN CRITERIA  
BY SPECIFIC LAND USE IN THE RURAL DEVELOPMENT AREAS**

In the Rural Development Areas, owing to certain special characteristics attendant to their operation, the following uses have been identified to require case-by-case review and specific location and design criteria in order to minimize land use conflicts with permitted uses in the Rural Development Areas. If allowed in other areas identified in this plan, these uses may require consideration of additional policies not generally applicable in the Rural Development Areas. Specific Land use policies have been established for specific land uses under three different general categories in the Rural Development Areas:

1. General Residential Policies
2. General Commercial/Industrial Policies
3. General Intensive Rural Use Policies

**POLICIES FOR SPECIFIC RESIDENTIAL USES IN RURAL DEVELOPMENT AREAS**

The following specific location and design policies have been established by the Brookings County Planning Commission and should be considered when siting specified projects in the rural area of the county.

**Group homes**

Group Homes are not defined in the current zoning ordinance, but are considered a supervised living or counseling arrangement in a family home context providing for the twenty-four (24) hour care of children or adults.

**Policies:**

- Brookings County does not discriminate against developmentally disabled or any individuals with disabilities. Further Brookings County will comply with all provisions of the fair housing act when issuing permits for group homes.
- Applicants for group home shall demonstrate that all applicable state and federal requirements have been met regarding the facility, and the health and safety of its tenants.
- Group homes are required to be in single family residential unit.
- Applicants for group homes shall demonstrate that adequate provisions for the health, safety, and general welfare of its tenants and staff have been made.
- Group homes are subject to review of the Brookings County Sheriff and emergency services personnel to ensure the safety of residents and neighboring landowners.
- Group homes are subject to additional requirements imposed by the Board of Adjustment.

## **Accessory agricultural housing**

Brookings County recognizes the need for relatives of farm operators and employees to live on the farm site. In order to allow for residents, deriving their primary source of income from a farm, to live where they work, more than one residence/dwelling unit may be allowed on a minimum 35 acre parcel in two instances:

1. A manufactured home to be used as an additional dwelling for an employee or relative of the farm operator.
2. An additional single family structure or a multiple family structure is proposed to house employees and/or relatives of the farm operator at the site of a Concentrated Animal Feeding Operation, which has received a conditional use permit by Brookings County.

### **Policies:**

- “Relatives” should be limited to parents, grandparents, children, or brothers and sisters of the farm operator.
- Employees living in an accessory agricultural housing structure shall derive their primary source of income from the farm operation based at the location of the residence.
- Brookings County may utilize tax records, pay stubs, or any other information necessary to determine the primary source of income for residents of accessory agricultural housing.
- Application for Accessory Agricultural Housing will be separate from applications for Concentrated Animal Feeding Operations if at the same location as the Accessory Agricultural Housing.
- Brookings County shall establish a minimum required lot area for Accessory Agricultural Housing
- Access to public dedicated streets and roads shall be provided utilizing a shared primary access with the primary residence or primary use on site.
- Accessory Agricultural Housing utilizing a multiple family structure may only be allowed over a shallow aquifer if the residential structure utilizes an approved central sanitary sewer collection system, which may consist of holding tanks, trunk lines, lift stations, and treatment facilities.
- Septic tanks and associated drain fields for containment of human waste must conform to regulations established by the South Dakota Department of Environment and Natural Resources.
- Accessory Agricultural Housing utilizing a multiple family structure is recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- Accessory Agricultural Housing utilizing a multiple family structure not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road may be expected to maintain financial responsibility for road improvements, and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.

## Religious farming communities

A religious farming community refers to a corporation formed primarily for religious purposes, as indicated by tax status, whose principal income is derived from agriculture and/or a farm which may or may not be held in collective ownership, in which multiple families reside on-site and use or conduct activities upon the property which are participated in, shared, or used in common by the members of the group residing thereon. It is important to note that Brookings County does not discourage religious farming communities. At the same time, the county has adopted regulations for high density development not associated with agricultural activities.

### Policies:

- Application for Religious farming communities will be separate from applications for Concentrated Animal Feeding Operations at the same location as the Religious farming community.
- Applications for Religious farming communities will be separate from applications for home extended businesses at the same location as the Religious farming community.
- Brookings County shall establish a minimum required lot area for Religious farming communities.
- Access to public dedicated streets and roads shall be limited. Direct access to dwelling units shall be provided through an internal access system.
- Religious farming communities may only be allowed over a shallow aquifer if the proposed Religious farming community utilizes an approved central sanitary sewer collection system, which may consist of holding tanks, trunk lines, lift stations, and treatment facilities.
- Septic tanks and associated drain fields for containment of human or animal wastes must conform to regulations established by the South Dakota Department of Environment and Natural Resources.
- Religious farming communities are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- Religious farming communities not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road may be expected to maintain financial responsibility for road improvements, and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Approval for Religious farming communities may only be granted after detailed site plan approval by the Board of Adjustment. The administrative official may only issue building permits and allow uses in accordance with the approved site plan. Upon approval of the site plan, the Board of Adjustment may indicate what, if any, uses may be additionally allowed and under what conditions without the Board's reconsideration. Similarly, upon approval of the site plan the Board of Adjustment may indicate if the location or size of any structures may be changed between the Board's approval and the approval of the administrative official.

## **GENERAL POLICIES FOR SPECIFIC COMMERCIAL/INDUSTRIAL USES IN RURAL DEVELOPMENT AREAS**

The following specific location and design criteria have been established by the Brookings County Planning Commission and should be considered when siting commercial, industrial, and public/quasi-public projects in the rural area of the county.

### **Retail sales in rural areas.**

Retail sales in the rural areas of Brookings County may conflict with agricultural uses. Retail sales generate traffic volumes and types which are incompatible with agricultural operations. However, Brookings County supports value-added agricultural ventures in the rural area which provide wide variety site-produced agricultural products for sale. Since uses such as botanical gardens, commercial greenhouses, tree farms, and other direct producer-to-consumer agricultural ventures still generate traffic volumes and types atypical of rural traffic patterns; accommodations must be made for parking, loading, and access. Depending upon the scope of the business, various accommodations may be necessary to provide for the health and safety of potential patrons.

#### **Policies:**

- With the exceptions of fireworks sales (described later) and the sale of site-produced agricultural products, any retail sales in the rural areas of Brookings County are discouraged.
- Tree farms, botanical gardens, commercial greenhouses, and other sales of site-produced agricultural products may be required to provide screening or buffering to limit potential land use conflicts.
- Tree farms, botanical gardens, commercial greenhouses, and other sales of site-produced agricultural products are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- On-site parking and loading will vary upon the size of the operation and may require site specific consideration.
- Entrance and exit to and from the site will be achieved in a forward gear.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

### **Home extended business**

A home extended business consists of a business, profession, occupation, or trade conducted for profit and located entirely within the accessory building for a dwelling, which use is accessory, incidental, and secondary to the use of the dwelling for residential purposes and does not change the essential residential character or appearance of such dwelling.

#### **Policies:**

- Brookings County encourages businesses operated by the owner or tenant of a property.

- Brookings County may permit businesses operated by the owner or tenant of a property which may be of a similar character to other uses allowed in the agricultural district including, but not limited to, gravel hauling, asphalt contracting, commercial hauling, general contracting/construction.
- Brookings County shall establish a maximum number of non-family employees allowed to work for the business.
- Buildings for the operation of the business should be of similar construction to agricultural or residential structures.
- Businesses operated by the owner or tenant shall not disrupt normal agricultural operations.
- Appropriate screening or additional setbacks for business activities may be required to protect agricultural uses from commercial activities.
- On-premise sign area shall be limited.
- Off-premise signs shall be prohibited with the exception of SDDOT commercial, directional signs.
- Outdoor storage of materials, vehicles, or inventory shall be limited.
- Permits for extended home occupations will only be permitted upon assurance by the entity in charge of maintenance of the roads that the traffic generated by the proposed use can be accommodated by the roads serving the business.
- No equipment or process shall be used in extended home occupation which creates unreasonable noise, vibration, glare, fumes, odors, or electrical interference detectable to the normal senses off the lot.
  - In the case of noise: noise shall not exceed that expected of agricultural uses within the district.
  - In the case of electrical interference: no equipment or process shall be used which creates visual or audible interference in any radio or television receivers off the premises, or causes fluctuations in line voltage off the premises.
  - Brookings County may assign appropriate conditions to mitigate noise, vibration, glare, fumes, odors, or electrical interference.

#### **Commercial stables and livestock sale barns**

Commercial stables include any building used for the shelter and feeding of domestic animals, especially horses and cattle, where such domestic animals are ridden, raised, trained, boarded, harbored, or kept for remuneration. Livestock sale barns are a place where the normal activity is to sell or exchange livestock. Livestock are normally in these barns for the day of the sale or auction.

#### **Policies:**

- Commercial stables and sale barns are required to follow all regulations for similarly sized CAFO's
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- Livestock sale barns and commercial stables are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.

- Livestock sale barns and commercial stables not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road, may be required to maintain financial responsibility for road improvements and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.

### **Fireworks sales and storage**

Fireworks sales and storage locations include any site which may be permitted in accordance with South Dakota Codified Law for the storage or retail sale of fireworks

#### **Policies:**

- Firework sales and storage operations are required to meet all applicable state and federal regulations regarding the sale and storage of fireworks.
- Applicants for sale of fireworks shall obtain a State Permit from the South Dakota State Fire Marshall's Office prior to the sale of fireworks.
- Brookings County shall review and require precautions be taken for the safety of patrons, employees, and adjacent land uses.
- Permits for the sale of fireworks shall be limited to a single season applied for and expire, or be suspended, until the next permitted season for a new operator or at a previously unpermitted location.
  - Following the expiration of an initial permit for the sale of fireworks, Brookings County may authorize the sale of fireworks for more than one sales season with a single permit.
- Fireworks sales are required to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- On-site parking and loading will vary based upon the size of the operation and may require site specific consideration.
- Storage of fireworks may be required to be screened from adjacent landowners and/or rights-of-way.

### **Bed and Breakfast**

Bed and Breakfasts are businesses located in a private single-family residence where limited meals and temporary accommodations are provided to the public for a charge, and may also be classified as a "lodging house."

#### **Policies:**

- Applications for Bed and Breakfast's (B & B's) may be required to include a detailed plan for the operation of the business.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- B & B's should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- B & B's shall include the preparation of meals on site.
- B & B's may be incidental to an owner occupied principal dwelling.
- Brookings County may establish a maximum length of stay for patrons.
- B & B's shall meet all applicable regulations of the South Dakota Department of Health.
- B & B operators shall provide proof of liability insurance.

- Minimum floor area for each paying guest will be reviewed.

### **Game lodges**

Game lodges may include a single building or group of two (2) or more detached, or semi-detached, or attached buildings occupied, or used as a temporary abiding place, of sportsmen, hunters and fishermen, who are lodged with or without meals, and in which there are sleeping quarters. This definition includes two types of game lodges: those occupied by paying guests, those occupied by non-paying friends or relatives of the property owner.

#### **Policies:**

- Applications for Game Lodges may be required to include a detailed plan for the operation of the business.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- Game Lodge operators shall demonstrate proof of liability insurance.
- Game Lodges should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- Game Lodges may include the preparation of meals on site.
- Game Lodges may be affiliated with private shooting preserves.
- Game Lodges will be operated and constructed in accordance with South Dakota Codified Law and all applicable rules governing Game Lodges or similar operations.
- Minimum floor area for each paying guest will be reviewed.
- Construction and siding materials will be reviewed on a case-by-case basis.
- Brookings County may request and review information regarding property expected to be used for hunting, not including public hunting areas.
- Brookings County may establish a maximum length of stay for any patron.

### **Aviation Facilities:**

Aviation facilities include airports, airstrips, helipads, other similar uses, and any use accessory thereto.

#### **Policies:**

- Applications for aviation facilities may be required to include a detailed plan for the operation of the business, and a detailed site plan including, but not limited to, details of the airstrip/helipad, parking of automobiles and aircraft, location and amount of fuel and other chemical storage, identification of overhead electrical lines and utility easements in relation to runways, approach zones, and helipads.
- Aviation Facilities are required to meet all applicable state and federal requirements for the specified facility.
- Applicants for Aviation facilities may be required to notify utility providers to review potential disruption of service for electricity transmission and production, telecommunications, and other services.
- When considering Aviation facilities the county will consider affects of noise and land use limitations on neighboring lands.
- When considering Aviation facilities the county will review the proposed location in reference to existing airports, airstrips, and helipads.
- Aviation facilities should be situated with access to roads capable of handling potential, private, commercial, or industrial traffic associated with the facility.

- Aviation facilities should be sited in areas where neighboring uses will not affect the transmission of air-traffic, or other necessary signals required for the safe conduct of an Aviation facility.
- Aviation facilities may be for private or commercial use, but applicants shall identify the primary purpose of the facility.
- Applications for aviation facilities are subject to review by the Brookings County Emergency Management director.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

#### **Religious Institutions and associated uses.**

Religious institutions include any building or use operated for non-profit purposes by an established religious organization holding either tax exempt status under Section 501(c)(3) of the Internal Revenue Code or under the state property tax law, where such building is primarily intended to be used as a place of worship. The term includes, but is not necessarily limited to: church, temple, synagogue, and mosque. Religious institutions may operate numerous commercial, residential or other quasi-public uses or functions including, but not limited to, parsonages, cemeteries, banquet/reception facilities, limited commercial sales, etc.

#### **Policies:**

- Applications for religious institutions may be required to include a detailed plan for the operation of the business including the listing of any associated commercial, residential, or other quasi-public uses to be performed at the site, maximum capacity/expected attendance, and other information which may be necessary to consider the request.
- When considering religious institutions and associated uses, the county will consider the compatibility to surrounding agricultural uses.
- Religious institutions and associated uses may be required to provide screening or buffering to limit potential land use conflicts.
- Religious institutions and associated uses should be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- Cemeteries should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- Cemeteries shall be appropriately registered with the State of South Dakota and should file easements/agreements for future access and maintenance of the cemetery.

#### **Recreational uses**

These uses include, but are not limited to, private clubs, golf courses, (including: driving ranges and clubhouses), track or racing sports (including, but not limited to, motorcycle / all terrain vehicle, and remote controlled devices) and shooting sports (including target ranges, paintball and private shooting preserves).

Policies:

- Applications for Recreational uses may be required to include detailed site and operation plans to describe the nature of the business, hours of operation, potential traffic generated, and other information which may be requested.
- On-site parking and loading will vary based upon the size of the operation and may require site specific consideration.
- Retail sales of products relating to the specific recreational use and clubhouses may only be considered ancillary, and therefore accessory to the primary recreational use. If the primary recreational use is abandoned, the retail sales and/or clubhouse shall be closed as well.
- Recreational uses may be required to provide screening or buffering to limit potential land use conflicts and safety hazards.
- Recreational uses may be required to prepare a plan for health emergencies possibly related to the use.
- Recreational uses will be responsible for ensuring the health and safety of their patrons
- Recreational uses are required to meet all applicable regulations of the South Dakota Department of Health and all other applicable regulatory agencies.
- Any use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.
- Recreational uses should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

**Contractor Shops and Yards**

Contractor shops and yards include structures and land areas where the outdoor storage of equipment and supplies used for various types of off-site construction are stored. Examples of equipment and supplies include, but are not limited to, the following – road construction, building construction, gravel operations, and general contracting services.

Policies:

- Applications for contractor shops and yards may be required to include detailed site and operation plans to describe the nature of the business, number and type of equipment, hours of operation, potential traffic generated, means of securing the site, and other information which may be requested.
- Contractor shops and yards may be required to provide buffering and screening to limit potential land use conflicts.
- Junk shall not be stored at contractor shops and yards
- On-site parking and loading will vary upon the size of the operation and require site specific consideration
- Contractor shops and yards are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.

- Contractor shops and yards not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road, may be expected to be financially responsible for road improvements, and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.

**Sanitary landfills and domestic sanitary sewer facilities.**

Sanitary sewer treatment facilities for multiple municipalities are located outside of the corporate limits of the specific municipalities. In addition the solid waste landfill for the City of Brookings is also located in the rural portion of the County.

**Policies:**

- Proximity to neighboring uses and natural resources shall be considered prior to approval of sanitary landfills and domestic sanitary sewer facilities.
- Sanitary landfills and domestic sanitary sewer facilities shall be operated in accordance with state and federal requirements.
- Drainage patterns unique to Brookings County require a case-by-case consideration of stormwater/pollution control measures
- Permits for sanitary landfills and domestic sanitary sewer facilities will only be authorized upon assurance that the condition of designated haul roads will not deteriorate due to traffic generated by the use.
- Applicants for sanitary landfills and domestic sanitary sewer facilities are expected to take financial responsibility for road improvements, and maintenance necessitated by traffic from the use's activities. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Sanitary landfills and domestic sanitary sewer facilities are expected to generate noise and odor uncharacteristic of agricultural uses. Measures may be taken to minimize potential conflicts with neighboring properties. Any conditions including, but not limited to, buffering, screening, limiting the hours of operation, and limiting the types of activities allowed may be utilized to meet this policy.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.
- Applicants shall prepare a plan for reclamation of any sanitary landfill.
- Applicants shall be responsible for controlling debris from exiting any landfill.

## **Veterinary offices and animal hospitals**

Veterinary offices and animal hospitals include facilities which provide on-site medical treatment of animals.

### **Policies:**

- Animal hospitals are required to follow regulations for similarly sized CAFO's (including manure management) or kennels.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- Veterinary offices and animal hospitals shall provide a plan for managing and disposing of dead animals.
- Veterinary offices and animal hospitals are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- Veterinary offices and animal hospitals not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road, may be expected to be financially responsible for road improvements and maintenance, necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.

## **Commercial public entertainment enterprises not normally accommodated in commercial areas (Entertainment enterprises)**

Some outdoor events such as music concerts, rodeos, tractor pulls, and animal or vehicle races; other events have been permitted in Brookings County in the past. Such events often generate light, noise and traffic atypical of the proposed venue. In addition, depending upon the size and scope of the event, varying amounts of space may be necessary for parking, vendors, sanitary sewer provision, health care facilities, and other services generally associated with large gatherings of people.

### **Policies:**

- Applicant shall provide a detailed site and operation plan including, but not limited to, a detailed description of what activities will occur on the entire property, manner of cleaning up during and after the event, location of restroom facilities, etc.
- Applicant shall provide documentation of satisfaction of requirements from applicable fire, ambulance, and law enforcement departments.
- Applicant shall provide proof of liability insurance for the event.
- Entertainment enterprises may be required to provide buffering to limit potential land use conflicts.
- The duration or hours of operation of Entertainment enterprises should be considered to avoid potential conflicts with surrounding agricultural uses.
- Entertainment enterprises will be responsible for ensuring the health and safety of their patrons.
- Entertainment enterprises should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- Each event shall require a separate permit. In the event of recurring events, after one event the County may allow more than one occurrence of an event with the same permit.

## **Junk or Salvage yards**

Junk or salvage yards include areas of land with or without buildings, whether for private or commercial purposes, or both, used for, or occupied by, a deposit, collection, or the storage outside of a completely enclosed building, or used and/or discarded materials such as waste paper, rags, or scrap metal, used building materials, home furnishings, machinery, vehicles, or parts thereof, with or without the dismantling, processing, salvage, sale, or other use or disposition of the same.

### **Policies:**

- Applications for Junk or salvage yards may be required to include detailed site and operation plans to describe the nature of the business, total area to be used for storage, hours of operation and crushing (if applicable), potential traffic generated, means of securing the site, and other information which may be requested.
- Applications for Junk or salvage yards shall include a plan detailing when and how the site will be returned to its pre-development state.
- Junk or salvage yards are required to control weeds.
- Junk or salvage yards should be screened on all sides.
- Minimum separation distances should be established from right-of-way, residences, and Lake Park zones.
- A minimum lot area should be established to allow room for piles, screening, parking, loading, ingress/egress, and buffering.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- No unlicensed vehicles may be stored on site until all fluids are drained from the specific vehicle.
- Junk and salvage yards are recommended to be situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road.
- Junk and salvage yards not situated with access to a county road, paved road, or Board of Adjustment approved privately maintained road may be expected to be financially responsible for road improvements, and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Any use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

**Signs:**

Signs are a critical, accessory function of commercial and industrial land uses. Signs provide the public with a means of distinguishing the name and type of business located in rural areas.

**Policies:**

- Brookings County measures sign area on one side of a specified sign.
- Brookings County shall establish regulations regarding sign illumination, including digital message centers.
- Brookings County shall establish maximum on-premise sign area.
- Brookings County shall establish maximum area for any off-premise sign.
- Brookings County shall establish the minimum spacing between off-premise signs.
- Brookings County does not practice “strip zoning” for the sole purpose of permitting off-premise signs.

1/8/16 DRAFT

## **GENERAL CRITERIA FOR OTHER SPECIFIC USES IN THE RURAL DEVELOPMENT AREAS**

The following specific location and design policies have been established by the Brookings County Planning Commission and should be considered when siting specified agricultural and other projects in the rural area of the county.

### **Concentrated Animal Feeding Operations**

Concentrated Animal Feeding Operations (CAFOs) include a lot, yard, corral, building or other area where animals have been, are, or will be stabled or confined for a total of forty-five (45) days or more during any twelve (12)-month period, and where crops, vegetation, forage growth, or post harvest residues are not sustained over any portion of the lot or facility.

Policies:

- Brookings County supports the creation and expansion of concentrated animal feeding operations in rural areas.
- Brookings County uses an animal unit equivalency ratio to determine the head count of a specific animal species for the purpose of defining the specific class of CAFO by animal unit.
  - The standards for determining an animal unit to animal head count equivalency are derived from the Environmental Protection Agency and the State of South Dakota General Permit.
  - The animal species equivalents are based upon a species' manure production.
- Operations of less than 500 animal units which are not situated over a shallow aquifer or wellhead protection area should be allowed by-right provided minimum management practices are employed.
- All operations of greater than 50 animal units situated over a shallow aquifer or well head protection area require case-by-case consideration.
- All operations of 500 animal units or greater require case-by-case consideration.
- Due to the specific nature of each operation, a CAFO seeking to expand beyond its permitted number of animal units is required to obtain a new Concentrated Animal Feeding Operation Permit.
- Any previously unpermitted operation expanding to the next "class" (based upon size) of CAFO is required to obtain a new Concentrated Animal Feeding Operation permit.
- Brookings County does not certify any engineering associated with the manure and nutrient management plans prepared by a CAFO applicant.
- All CAFO's are required to comply with applicable state and federal regulations.
- The regulatory agency for compliance with state and federal environmental regulations is the South Dakota Department of Environment and Natural Resources.
- A General Permit is not required at the time of approval for a CAFO by Brookings County; however no CAFO which is required to have one is permitted to be stocked until it has received a General Permit from the South Dakota Department of Environment and Natural Resources.
- All manure spreading within Brookings County requires appropriate separation from property lines, rights-of-way, specific water features, and various different land uses.
- CAFOs of greater than 1,000 animal units should meet minimum requirements of the South Dakota DENR General Permit.

- CAFOs of 500 to 999 animal units should meet minimum standards established by the Natural Resource Conservation Service for CAFO construction, manure and nutrient management.
- CAFOs of greater than 2,000 animal units are encouraged to be situated with access to paved roads or gravel roads maintained by Brookings County.
- New CAFOs of greater than 1,000 animal units are prohibited in the aquifer protection areas.
- CAFOs should be situated with access to roads capable of handling potential traffic volumes associated with the use without increasing the cost of maintaining those roads.
- Drainage patterns unique to Brookings County require a case-by-case consideration of stormwater/pollution control measures.
- CAFO operators may be expected to be financially responsible for road improvements, and maintenance necessitated by traffic from the operation. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- CAFO's are expected to generate odor, surface run-off, and to block snow. Appropriate setbacks from residences, municipalities, and other high density uses, as well as rights-of-way, water features and water sources will be assigned.
- Brookings County may consider adopting future regulations based upon scientific bases not considered at the time of adoption of initial regulations.
- If measures can be taken to measurably decrease the odor footprint of the CAFO, setbacks from certain land uses may be decreased.
- Spreading of manure is expected to generate odor and surface run-off. Appropriate setbacks from residences, high density uses, water and drainage features, and water sources will be established and required.
- Residential setback requirements from existing CAFO operations' facilities may be decreased, provided the specific operation has a history of compliance with local, state, and federal requirements; and that the proposed expansion improves stormwater, nutrient, and manure management capabilities of the existing operation; or if written consent is obtained from the specific affected landowner(s).
- Brookings County may require installation of monitoring or test wells at the expense of the applicant to ensure a specific site does not become a significant source of pollution.
- Protect existing CAFOs from encroachment of non-agricultural or residential uses by requiring any new construction within one-quarter mile of an existing CAFO to waive the right to protest any future expansion of the specified CAFO at the existing location.
- Brookings County may establish criteria to increase or decrease required setbacks from residential structures.

## **Fur farms and kennels**

When pets from one or more owners are raised, trained or boarded in a single location for the purposes of generating revenue, Brookings County considers the site a kennel. Fur Farms consist of a farm on which certain animals, such as minks, are raised for their pelts.

### **Policies:**

- Any property where one or more owners raise, train or board dogs, cats or other household pets in a single location for the purposes of generating revenue, is considered a kennel and shall be regulated accordingly.
- Fur farms are responsible for providing scientific determination of animal unit equivalents for the specific species.
- Fur farms are required to follow all regulations for similarly sized CAFOs with particular emphasis on managing manure and dead animals.
- Fur farms are required to identify security measures to be taken which may include lighting, secure entry, fences, surveillance, etc.
- Fur farms and kennels are required to obtain and maintain appropriate USDA certification if necessary.
- Brookings County will review and consider the number of animals proposed to be bred, harbored, housed, boarded, etc. in reference to the minimum separation distance required between fur farms or kennels and certain neighboring uses.
- On-site parking and loading for fur farms and kennels will vary upon the size of the operation and require site specific consideration.
- Brookings County will consider whether a fur farm or kennel is situated with access to a road capable of handling traffic projected to be generated by the fur farm or kennel with, or without, improvements or an agreement relating to maintenance of the specified road.

## **Sand, gravel and other mineral exploration and extraction, and other related uses.**

Sand, gravel and other mineral exploration and extraction refers to the removal of a mineral, typically gravel or other similar materials, from its natural occurrence on affected land. The term includes, but is not limited to, underground and surface mining. Uses commonly associated with mineral extraction and exploration include batch plants (permanent or temporary) and rock crushers.

### **Policies:**

- Applicants for mineral exploration and extraction or other related uses shall submit a detailed site and operation plan which may include the methods by which materials will be removed, how long, whether rock crushing will take place on site, hours of operation of the site, location of piles, equipment, berms or trees for screening (if any), area to be excavated, phasing of excavation, location(s) of ingress/egress, and a schedule/plan for reclamation.
- Brookings County may limit the amount of area allowed to be mined at any given time on a property without being reclaimed.
- Mineral exploration and extraction shall be conducted in accordance with state and federal requirements.
- Land which is mined will be required to be reclaimed to a condition similar to its original state upon cessation of mining activities unless otherwise approved.

- Applicants may be required to post a bond, or some other form of financial assurance, to ensure that plans for reclamation of the area to be mined can be carried out in accordance with the plan approved at the time of permitting.
- Drainage patterns unique to Brookings County require a case-by-case consideration of stormwater/pollution control measures
- Permits for mining and related activities will only be permitted upon assurance that the condition of designated haul roads will not deteriorate due to traffic generated by the use.
- Applicants for mining or related activities are expected to take financial responsibility for road improvements and maintenance necessitated by traffic from the mining or related activities. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Gravel pits are expected to generate noise uncharacteristic of agricultural uses. Measures may be taken to minimize potential conflicts with neighboring properties. Any conditions including, but not limited to, buffering, screening, limiting the hours of operation, and limiting the types of activities allowed may be utilized to meet this policy.
- Applicants may be required to provide a plan for managing dust originating from the site or upon designated haul roads.
- To ensure against loss of property, ensure public safety, and ensure appropriate slopes upon reclamation, appropriate extraction setbacks will be imposed.
- Operators of mineral exploration and extraction sites are expected to maintain a site without noxious weeds, junk, or rubble.

#### **Telecommunications facilities**

Telecommunications facilities refer to any cables, wires, lines, wave guides, antennas, and any other equipment or facilities associated with the transmission or reception of communications which a Person seeks to locate, or has installed, upon or near a Tower or Antenna Support Structure.

#### **Policies**

- Appropriate setbacks will be determined to protect residential areas and other land uses from potential adverse impact of Towers and Telecommunications Facilities.
- Appropriate measures will be taken to minimize adverse visual impact of Towers and Telecommunications Facilities through careful design, siting, landscaping, and innovative camouflaging techniques.
- Brookings County encourages the shared use/collocation of Towers and Antenna Support Structures as a primary option rather than construction of additional single-use Towers.
- Brookings County promotes and encourages utilization of technological designs that will either eliminate or reduce the need for erection of new Tower structures to support antenna and Telecommunications Facilities.
- Brookings County requires appropriate construction methods, setbacks, and planning for the maintenance, repair, and decommissioning of towers to avoid potential damage to property caused by Towers and Telecommunications Facilities by ensuring such structures are soundly and carefully designed, constructed, modified, maintained, and removed, when no longer used or are determined to be structurally unsound.

- All such towers are required to meet the regulations for such towers imposed by all state and federal entities, including, but not limited to, the Federal Communications Commission, the Federal Aviation Administration, United States Fish and Wildlife Service, and South Dakota Department of Transportation.

### **Wind Energy Systems**

A commonly owned and/or managed integrated system that converts wind movement into electricity. All of the following are encompassed in this definition of system: tower or multiple towers, generator(s), blades, power collection systems, electric interconnection systems, and accessory uses such as operation and maintenance structures.

#### **Policies**

- Appropriate setbacks will be determined to protect adjacent properties, roadways and residences from potential noise, destruction, or other potential adverse impacts of towers.
- Applicants shall provide documentation of approval from all applicable state and federal entities.
- Maximum noise levels shall be established for wind energy systems.
- Applicants shall implement a plan that minimizes erosion, compaction and site disturbance.
- Applicants shall implement a plan that accounts for the protection of livestock and the replacement of fences which are destroyed in the course of construction.
- Applicants for wind energy systems are expected to take financial responsibility for road improvements and maintenance necessitated by traffic and site disturbance associated with the construction or operation of the wind energy system. Any conditions including, but not limited to, bonds, insurance, haul road agreements, maintenance agreements, private roads, and dust control measures may be utilized to meet this policy.
- Wind towers shall be lighted in accordance with Federal Aviation Administration requirements.
- Wind energy systems shall not cause electromagnetic interference contrary to Federal Communications Commission regulations or other law.
- Appropriate minimum spacing shall be established for wind turbines.
- Regulations shall be adopted regarding the placement of collector and feeder lines.
- Applicants shall provide plans for the decommissioning of the wind energy system which will include plans for site restoration and abandoned turbines.
- Minimum ground clearance shall be established for blade height.
- Maximum noise levels to be heard at the property line of the site with a wind tower.
- Wind Energy Systems shall meet all applicable state and federal regulations regarding wind energy systems, energy generation, and energy transmission.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading, shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

**APPENDIX C**  
**LAND USE LOCATION AND DESIGN CRITERIA**  
**BY GENERAL LAND USE TYPE IN THE AREAS OF DEVELOPMENT TRANSITION**

The following general policies have been established by the Brookings County Planning Commission and should be considered for all specified land uses in a given use category.

**GENERAL POLICIES FOR RESIDENTIAL USES**

- Protect agricultural land uses from encroachment of non-farm residential development; and
- Discourage land splits which erode the integrity of agricultural use areas.
- Require Right-to-Farm Covenant and minimum setbacks from existing concentrated animal feeding operations.
- Discourage strip or linear development proposals along a road or highway.
- Prevent unreasonable expansion of township provided road maintenance by requiring private other manner of construction and maintenance of roads serving rural residential developments.
- Require compliance with South Dakota Department of Natural Resource requirements for sanitary sewer provision.

**GENERAL COMMERCIAL/INDUSTRIAL POLICIES**

- Protect agricultural land uses from encroachment of commercial/industrial development
- Environmental impacts of certain uses shall be considered when situated in designated aquifer protection areas or floodplains to consider effects of runoff and application or disposal of waste.
- Federal and State requirements or permits shall be obtained and adhered to.
- Consideration should be made regarding the capability of roads serving the site to handle traffic generated by the proposed use. Brookings County may require written assurances for maintenance of such roads which may include identification of financial obligations in reference thereto.
- Uses which may be accommodated within municipal city limits are encouraged to be located in city limits.
- Light generated from the site of a commercial use should not cause a nuisance, or unreasonable distraction to adjacent property or right-of-way.
- Proposed development adjacent to municipal boundaries is encouraged to be annexed by the municipality prior to development.
- Certain retail sales may be allowed within appropriately zoned areas.

## **GENERAL INTENSIVE RURAL USE POLICIES**

- Environmental impacts of certain uses shall be considered when situated in designated aquifer protection areas or floodplains to consider effects of runoff and application or disposal of waste.
- Adequate separation from residences, churches, institutional uses, municipalities and parks should be identified.
- Discourage the construction of Class A and B concentrated animal feeding operations in the floodplain, or over shallow aquifers.
- Operators should comply with requirements for land application of animal wastes and for odor minimization.
- Construction and land application to prevent runoff of animal wastes is required.
- Federal and State requirements or permits shall be obtained and adhered to.
- Consideration should be made regarding the capability of roads serving the site to handle traffic generated by the proposed use. Brookings County may require written assurances for maintenance of such roads which may include identification of financial obligations in reference thereto.

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**APPENDIX D  
LAND USE LOCATION AND DESIGN CRITERIA  
BY SPECIFIC LAND USE IN THE AREAS OF DEVELOPMENT TRANSITION**

In the Area of Development Transition, owing to certain special characteristics attendant to their operation, the following uses have been identified to require case-by-case review and specific location and design criteria in order to minimize land use conflicts with permitted uses in the Area of Development Transition. If allowed in other areas identified in this plan, these uses may require consideration of additional policies not generally applicable in the Area of Development Transition. Specific Land use policies have been established for specific land uses under three different general categories in the Area of Development Transition:

1. General Residential Policies
2. General Commercial/Industrial Policies
3. General Intensive Rural Use Policies

**POLICIES FOR SPECIFIC RESIDENTIAL USES IN AREAS OF DEVELOPMENT TRANSITION**

The following specific location and design policies have been established by the Brookings County Planning Commission and should be considered when siting specified projects in the rural area of the county.

Location and design policies in the Areas of Development Transition include those design policies established for the Rural Development Area for the following uses:

- Group homes**
- Accessory agricultural housing**
- Religious farming communities**

**GENERAL POLICIES FOR SPECIFIC COMMERCIAL/INDUSTRIAL USES IN AREAS OF DEVELOPMENT TRANSITION**

The following specific location and design criteria have been established by the Brookings County Planning Commission and should be considered when siting commercial, industrial, and public/quasi-public projects in the rural area of the county.

Location and design policies in the Areas of Development Transition include those design policies established for the Rural Development Area for the following uses:

- Home extended business**
- Commercial stables and livestock sale barns**
- Fireworks sales and storage**
- Bed and Breakfast**
- Game lodges**
- Aviation Facilities**
- Religious Institutions and associated uses.**
- Recreational uses**
- Contractor Shops and Yards**
- Sanitary landfills and domestic sanitary sewer facilities.**
- Veterinary offices and animal hospitals**

- **Commercial public entertainment enterprises not normally accommodated in commercial areas (Entertainment enterprises)**
- **Junk or Salvage yards**
- **Signs**

**Other Retail sales in the Area of Development Transition.**

Any primarily retail oriented business is encouraged to be located within municipalities. Retail sales in the rural areas of Brookings County may conflict with agricultural uses; however certain retail sales may be compatible in areas near municipal boundaries.

**Policies:**

- The sale of site-produced agricultural products is encouraged in appropriately zoned areas.
- The retail sale, storage, service and wholesale distribution of products not consisting of site-produced agricultural products may include food, implements, seed, fertilizer, pesticide, herbicide, petroleum products, recreational, and convenience items
- Applications for commercial sale, storage, service or warehousing businesses may be required to include a detailed plan for the operation of the business, and a detailed site plan including, but not limited to, details regarding customer and employee parking areas, lighting, landscaping, utility provision, and display of merchandise for sale or being stored.
- Commercial sale, storage, service or warehousing businesses must be situated with access to a paved road, or Board of Adjustment approved privately maintained road.
- On-site parking and loading will vary upon the size of the operation and may require site specific consideration.
- Applicants shall demonstrate that stormwater run-off, upon final construction and grading shall not exceed pre-construction stormwater run-off volumes and/or negatively affect adjacent landowners.

**Truck terminals and freight warehouses**

Truck terminals and freight warehouses include structures and land areas where freight is transferred, unloaded, or stored before ultimately being shipped to be processed or sold.

**Policies:**

- Truck terminals and freight warehouses may be required to include detailed site and operation plans to describe the nature of the business or materials to be stored, number and type of equipment, hours of operation, potential traffic generated, means of securing the site, and other information which may be requested.
- Truck terminals and freight warehouses may be required to provide buffering and screening to limit potential land use conflicts.
- Junk and personal items shall not be stored at truck terminals and freight warehouses
- On-site parking and loading will vary upon the size of the operation and require site specific consideration
- Truck terminals and freight warehouses shall be situated with access to a paved road or Board of Adjustment approved privately maintained road.
- Any use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.

**Highway and street maintenance shops**

Policies:

- Highway and street maintenance shops may be required to provide buffering and screening to limit potential land use conflicts.
- Junk and personal items shall not be stored at highway and street maintenance shops.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- Highway and street maintenance shops shall be situated with access to a paved road or Board of Adjustment approved privately maintained road.
- Any use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.

**Welding, machine shops, and other manufacturing**

Policies:

- Manufacturing, welding, and machine shops may be required to include detailed site and operation plans to describe the nature of the business or materials to be repaired, serviced or manufactured, number and type of equipment utilized for shipping of materials and finished product, hours of operation, potential traffic generated, means of securing the site, plans for storage of items for sale or waiting to be shipped or returned to customers, and other information which may be requested.
- Manufacturing, welding, and machine shops may be required to provide buffering and screening to limit potential land use conflicts.
- Junk and personal items shall not be stored at manufacturing, welding, and machine shops.
- On-site parking and loading will vary upon the size of the operation and require site specific consideration.
- Manufacturing, welding, and machine shops shall be situated with access to a paved road or Board of Adjustment approved privately maintained road.
- Any use or storage of any petroleum based products shall comply with Brookings County Aquifer Protection regulations and all other applicable regulatory agencies.

**GENERAL CRITERIA FOR OTHER SPECIFIC USES IN AREAS OF DEVELOPMENT TRANSITION**

The following specific location and design policies have been established by the Brookings County Planning Commission and should be considered when siting specified agricultural and other projects in the rural area of the county.

Location and design policies in the Areas of Development Transition include those design policies established for the Rural Development Area for the following uses:

- Class D or E Concentrated Animal Feeding Operations**
- Fur farms and kennels**
- Sand, gravel and other mineral exploration and extraction, and other related uses.**
- Telecommunications facilities**
- Wind Energy Systems**

**APPENDIX E  
LAND COVER/LAND USE MAPS  
BY TOWNSHIP**

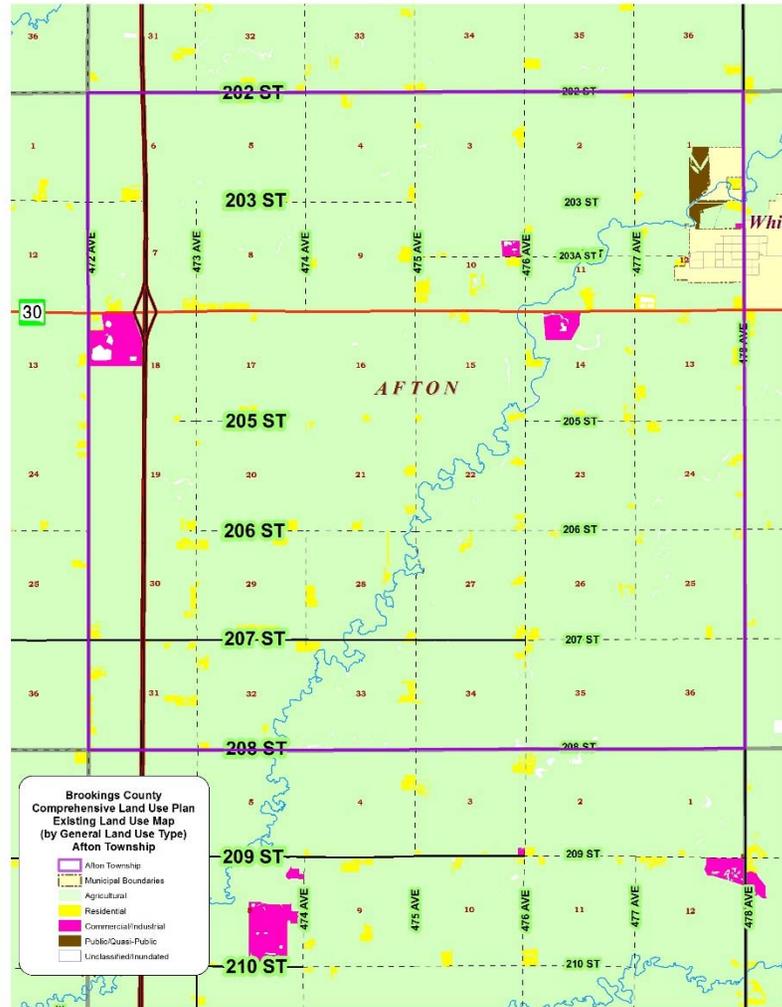
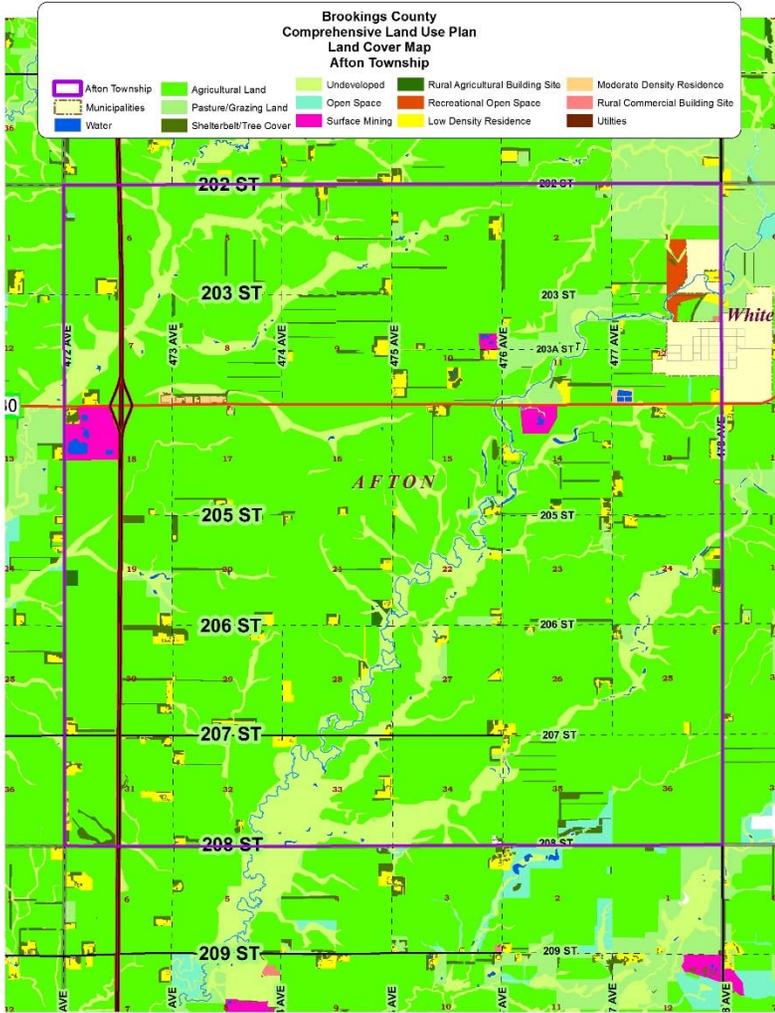
<b><u>Existing Land Use (Specific Type)**</u></b>	<b><u>Area (in acres)</u></b>	<b><u>Percent of Classified Area*</u></b>	<b><u>Existing Land Use (General Type)***</u></b>
<b>Agricultural Land</b>	323,318.67	66.78%	Agricultural
<b>Pasture/Grazing</b>	44,227.29	9.13%	Agricultural
<b>Shelterbelt/Tree Cover</b>	14,347.95	2.96%	Agricultural
<b>Undeveloped</b>	78,849.13	16.29%	Agricultural
<b>Open Space</b>	7,506.22	1.55%	Agricultural
<b>Surface Mining</b>	960.31	0.20%	Commercial/Industrial
<b>Rural Agricultural Building Site</b>	756.21	0.16%	Agricultural
<b>Recreational Open Space</b>	375.27	0.08%	Public/Quasi-Public
<b>Low Density Residence</b>	11,526.53	2.38%	Residential
<b>Moderate Density Residence</b>	1,300.31	0.27%	Residential
<b>Rural Commercial Building Site</b>	817.14	0.17%	Commercial/Industrial
<b>Utilities</b>	195.13	0.04%	Public/Quasi-Public
<b>Unclassified/Inundated</b>			Unclassified/Inundated
<b>Municipalities</b>			Municipalities

\*Percent of classified area does not include unclassified/inundated areas, nor municipalities.

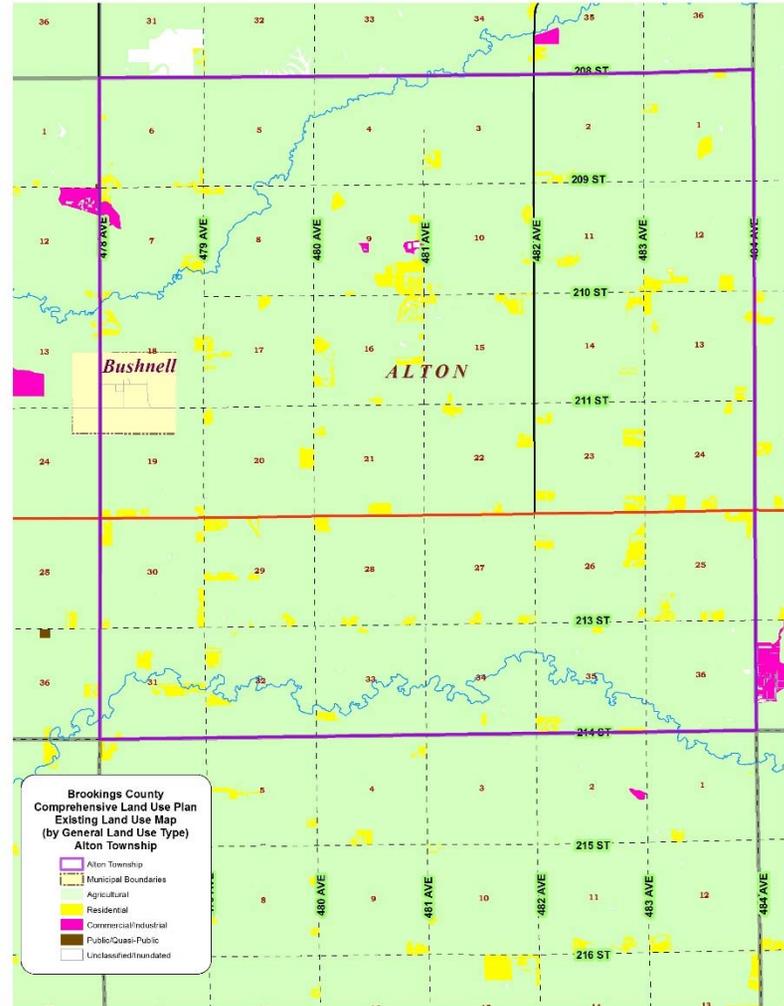
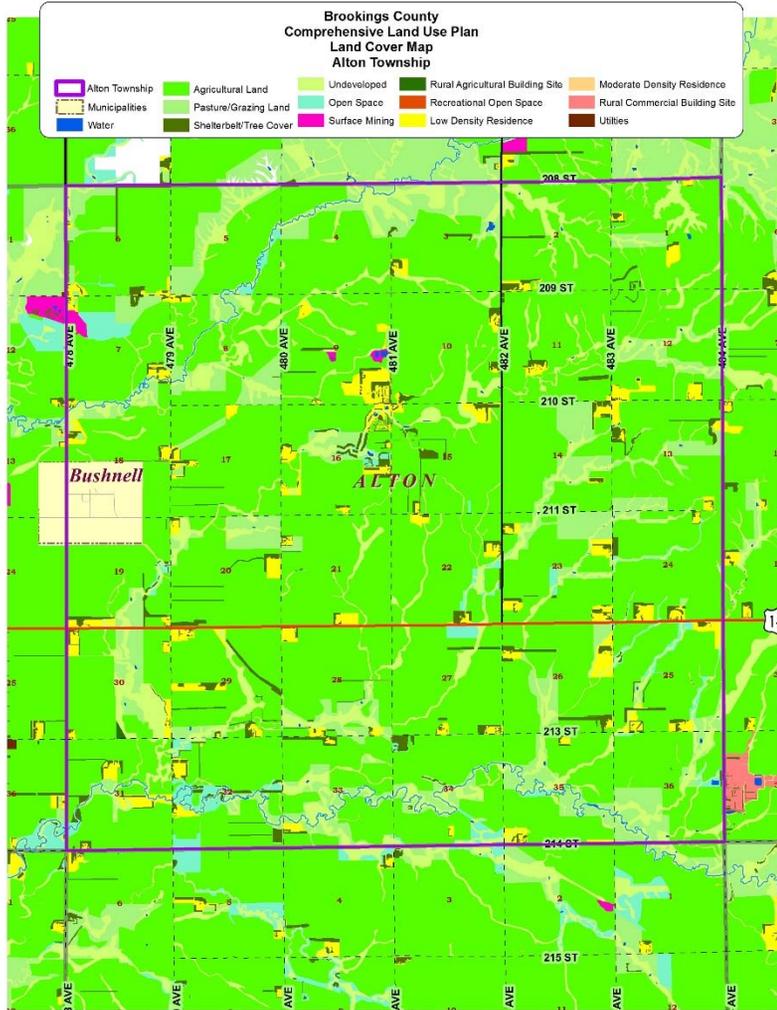
\*\*Land cover as identified and classified by Brookings County Staff as of March 4, 2015.

\*\*\*General land use classification based upon land cover maps.

# AFTON TOWNSHIP



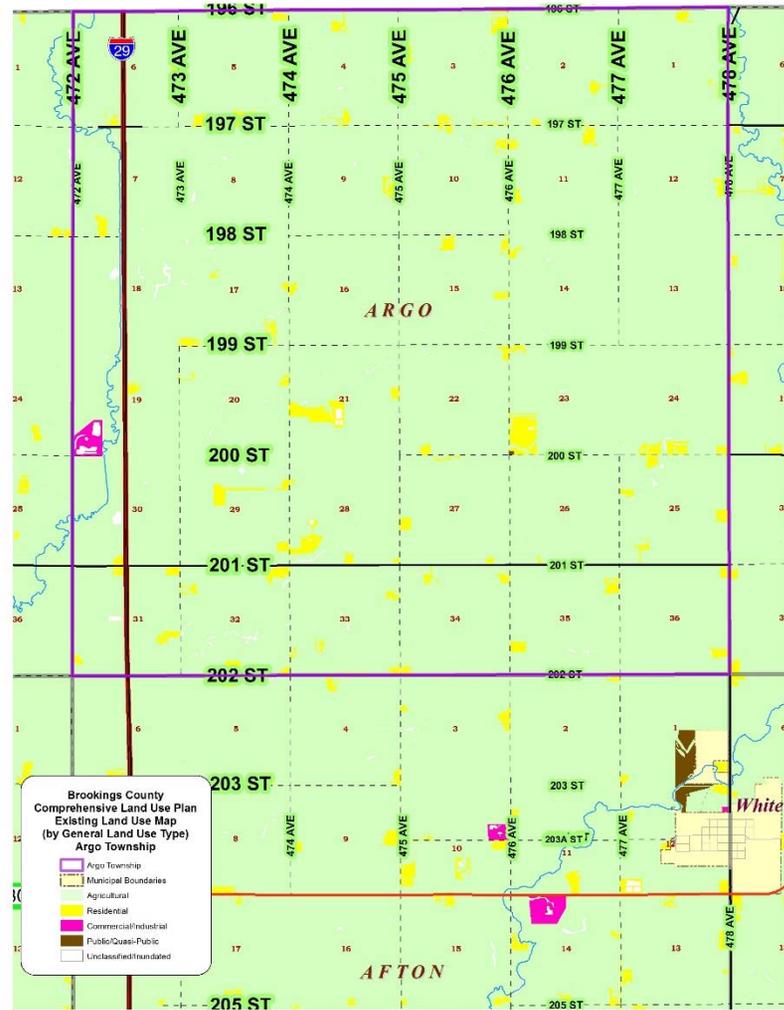
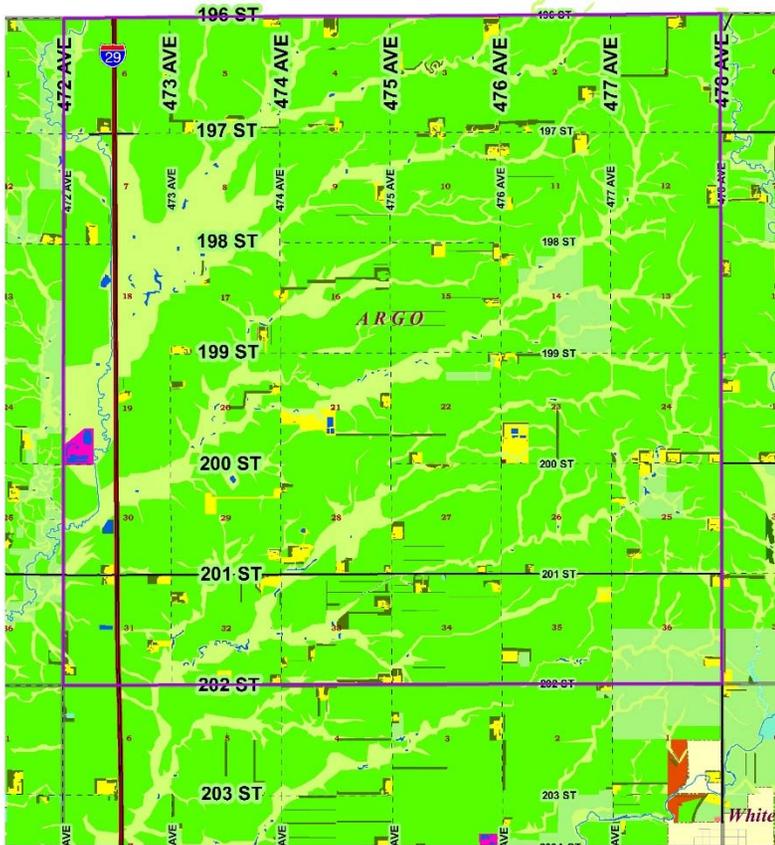
# ALTON TOWNSHIP



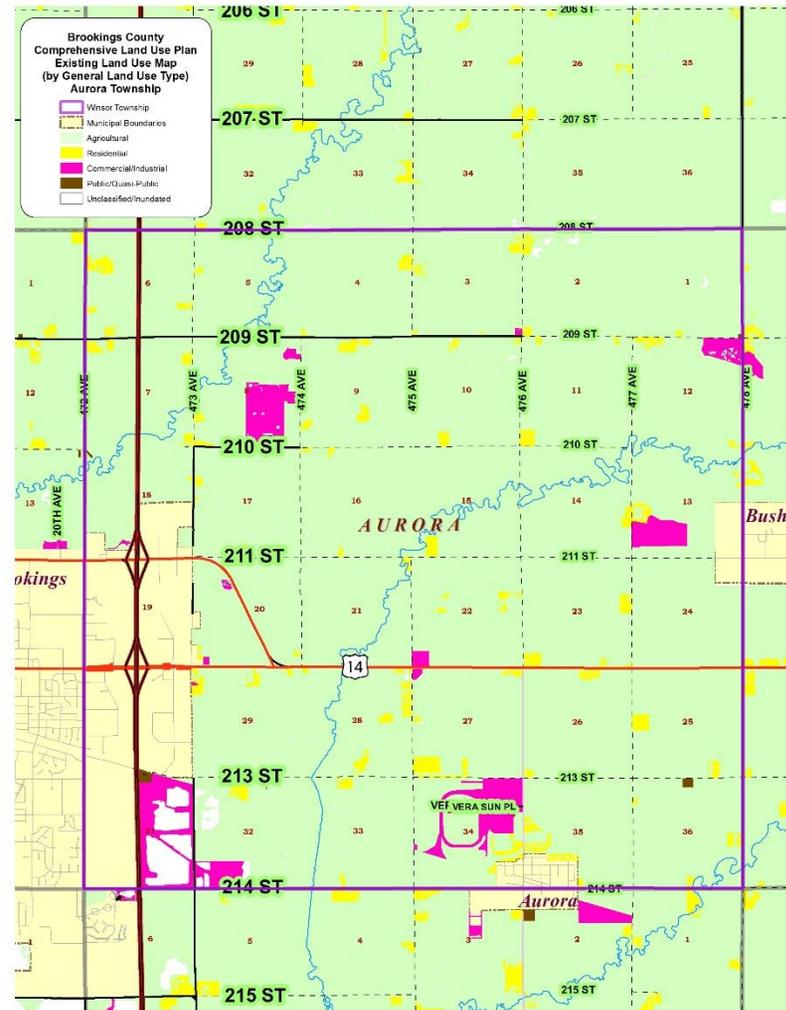
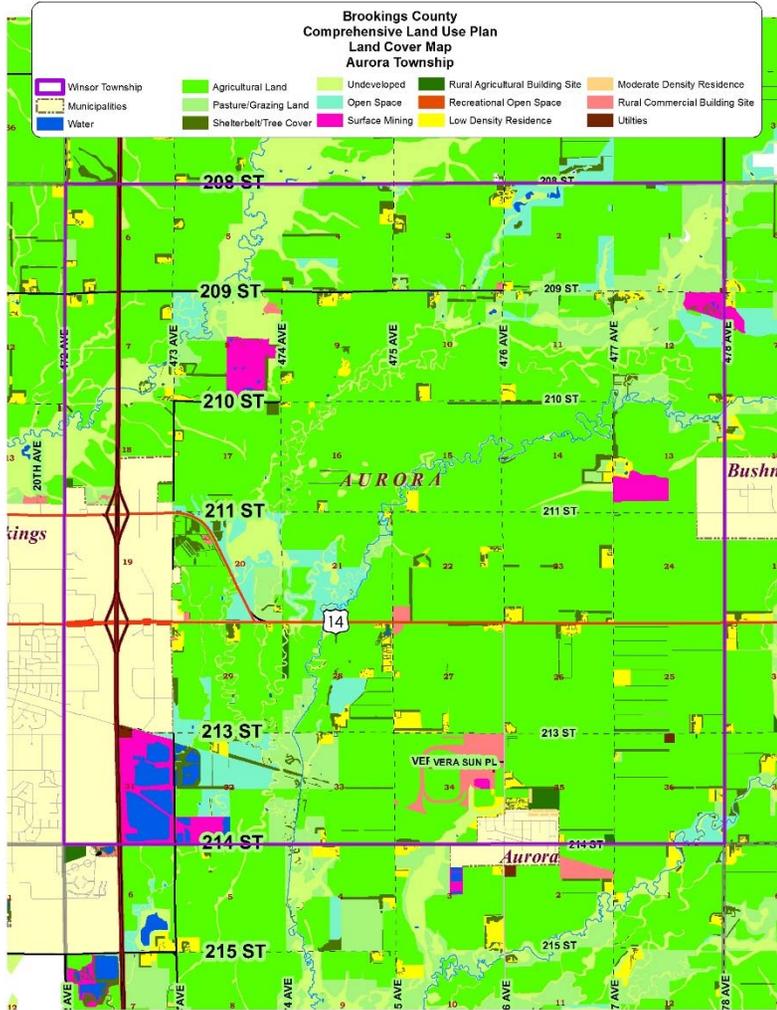
# ARGO TOWNSHIP

**Brookings County  
Comprehensive Land Use Plan  
Land Cover Map  
Argo Township**

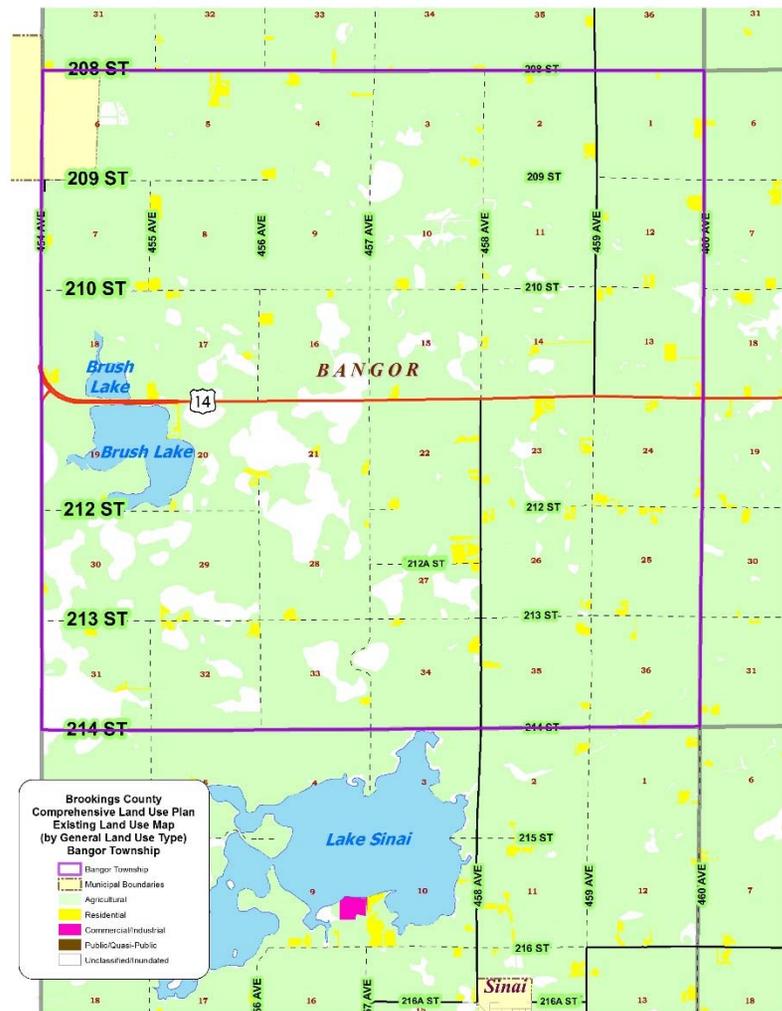
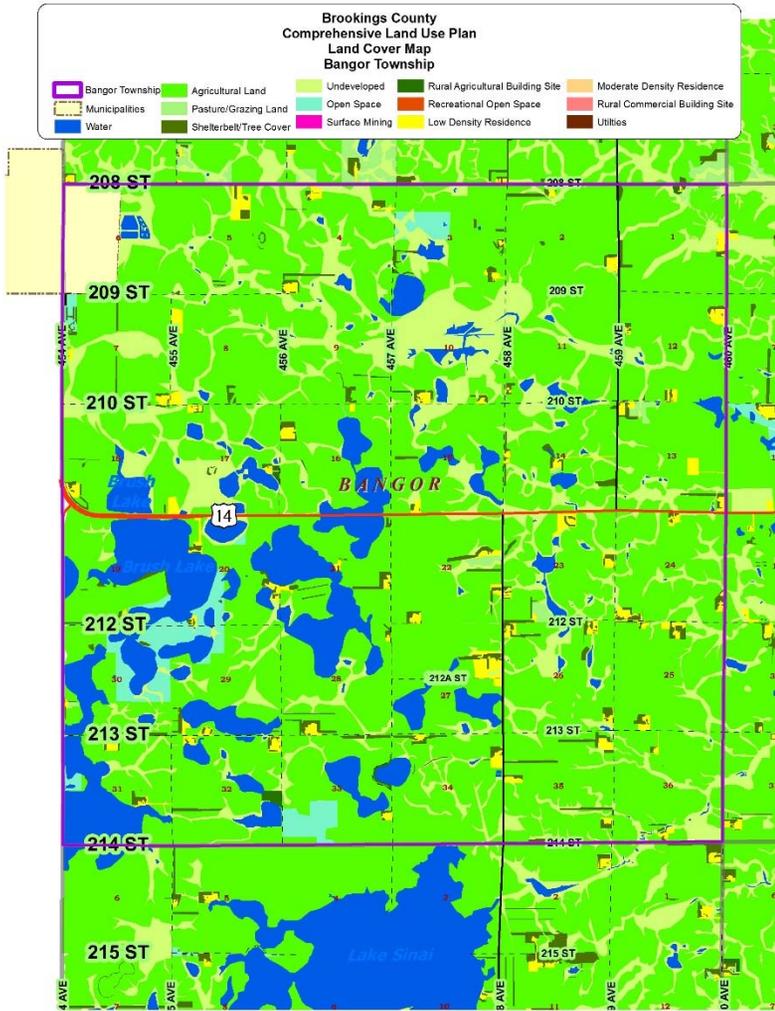
Argo Township	Agricultural Land	Undeveloped	Rural Agricultural Building Site	Moderate Density Residence
Municipalities	Pasture/Grazing Land	Open Space	Recreational Open Space	Rural Commercial Building Site
Water	Shelterbelt/Tree Cover	Surface Mining	Low Density Residence	Utilities



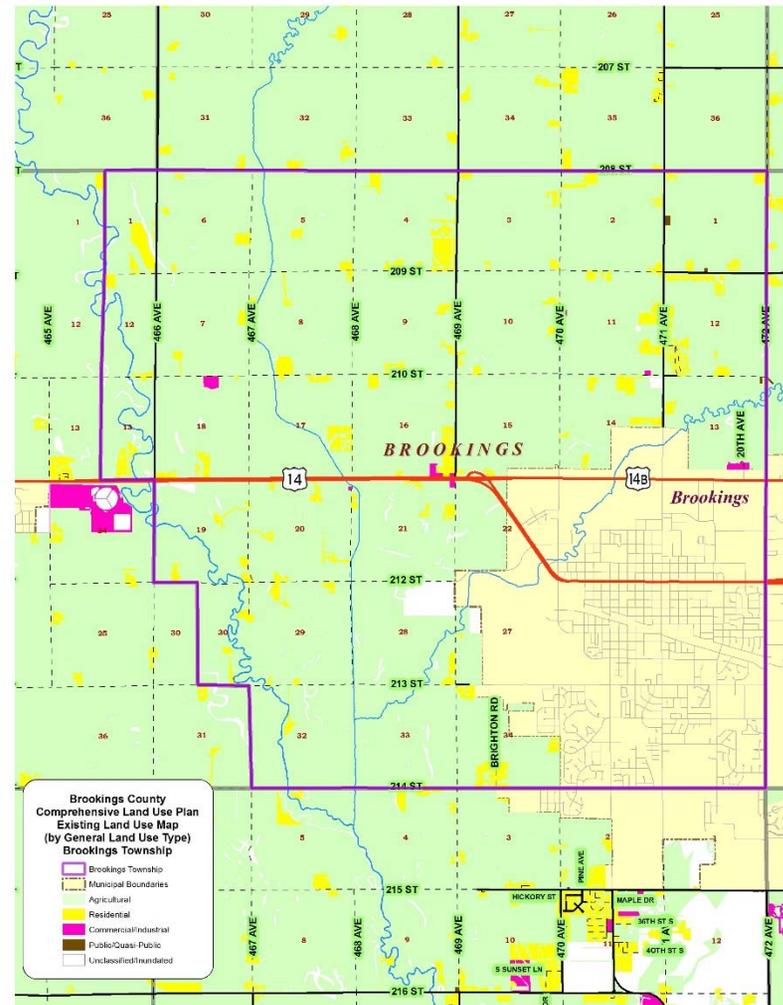
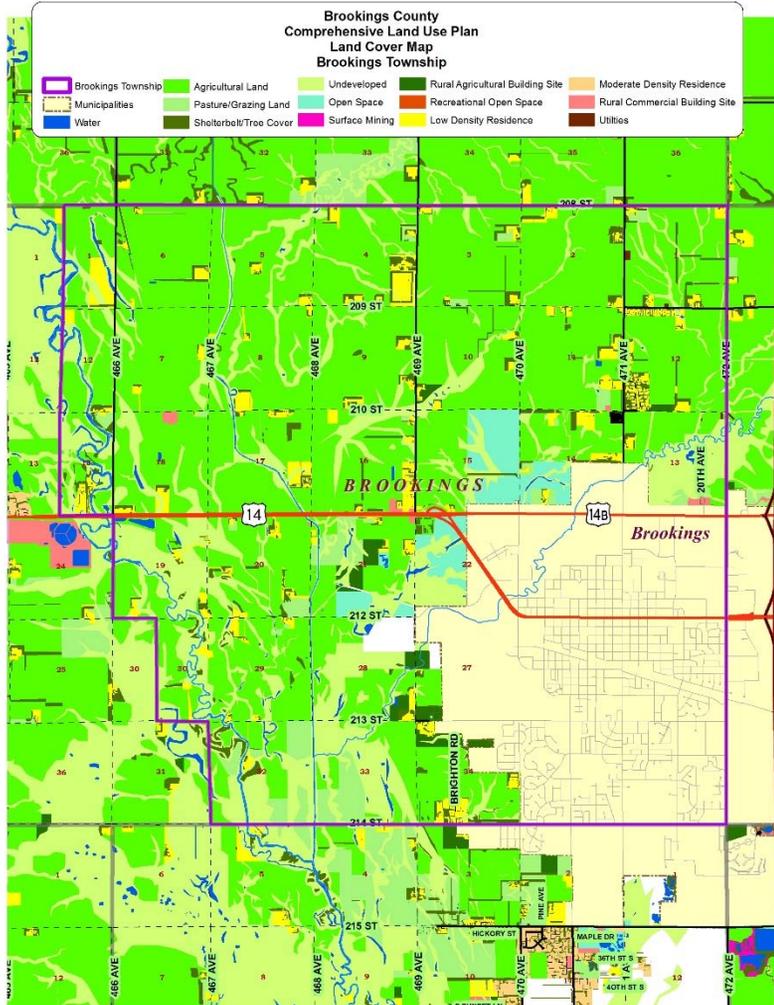
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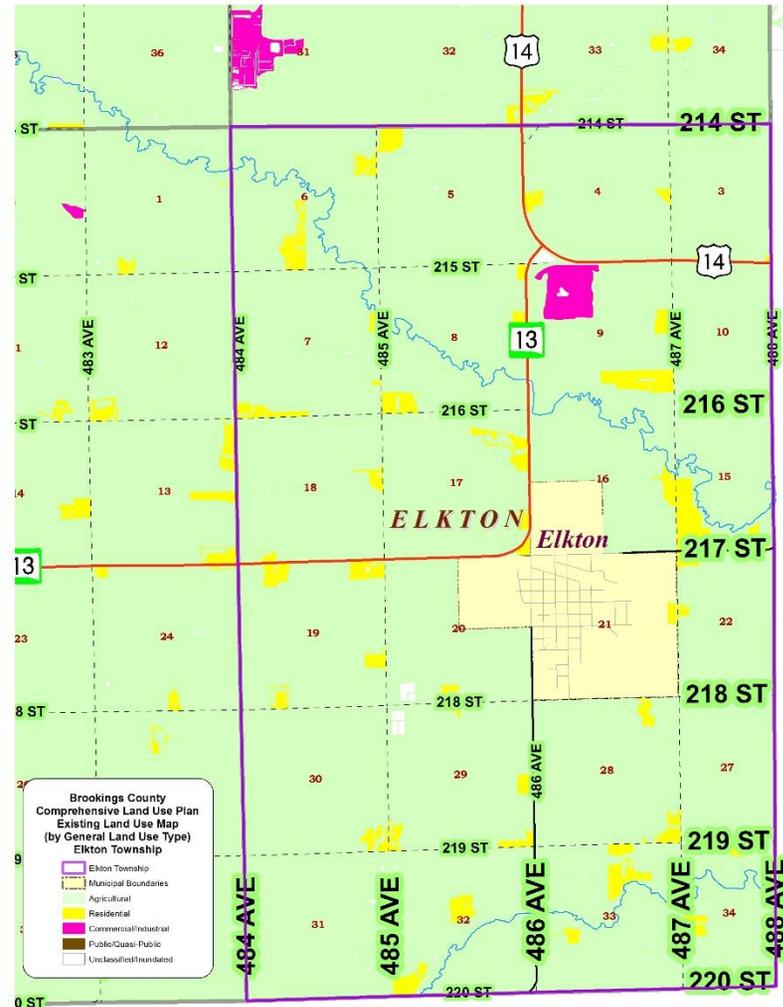
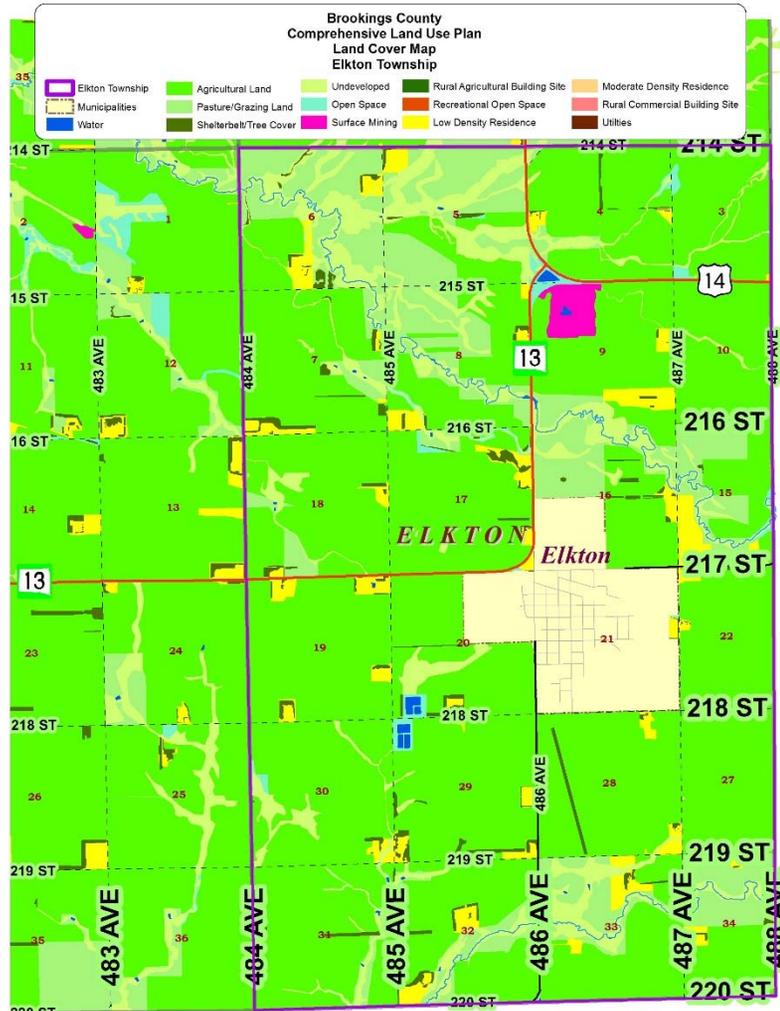
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# BROOKINGS TOWNSHIP



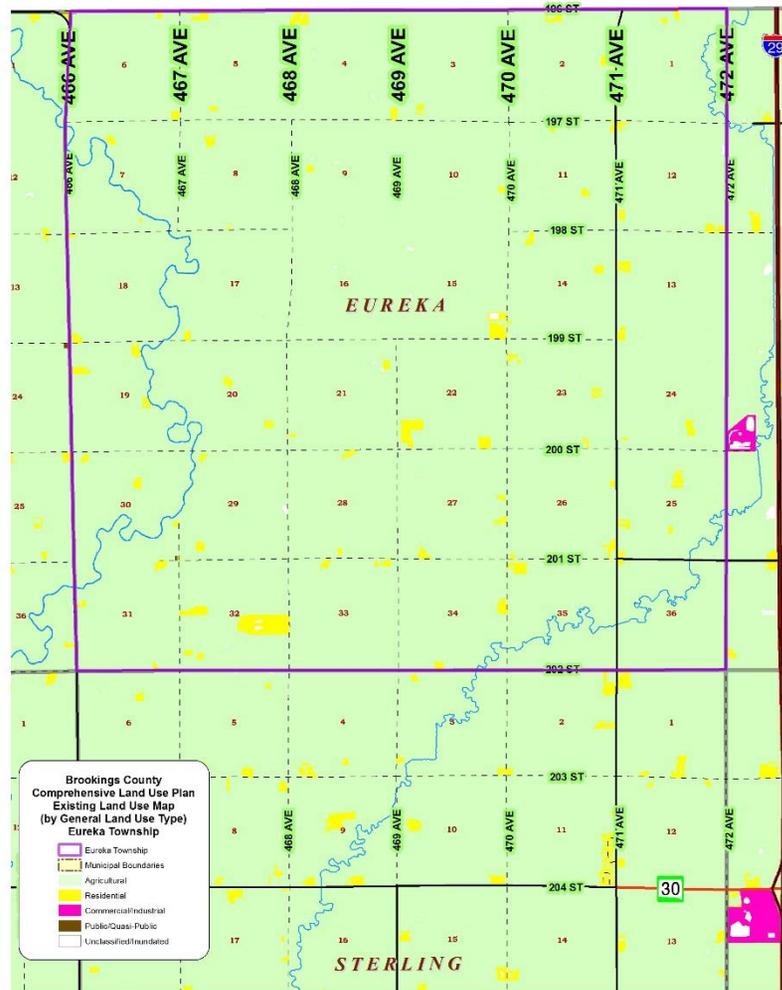
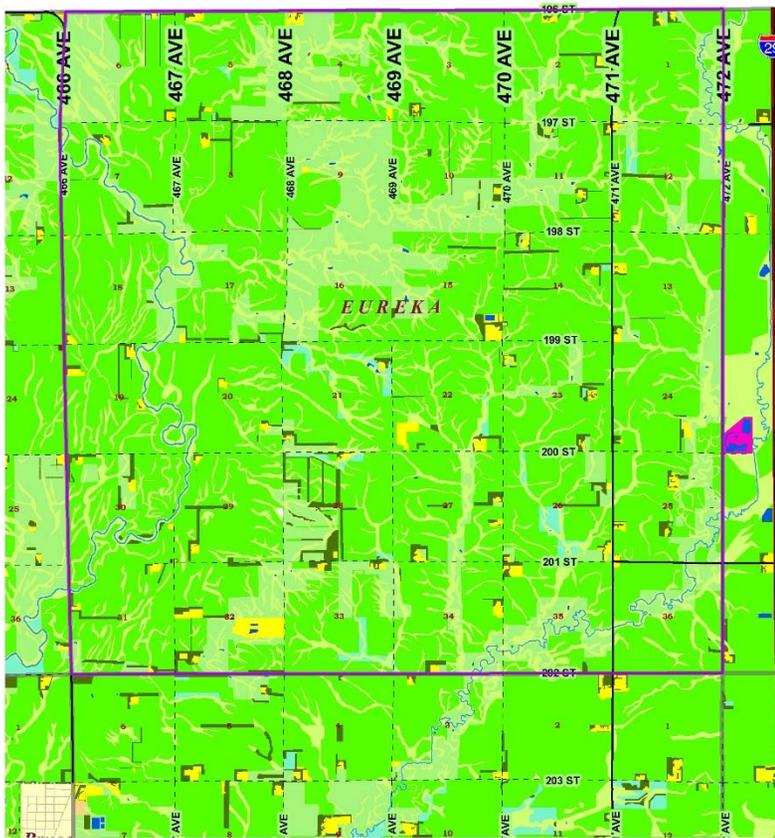
# ELKTON TOWNSHIP



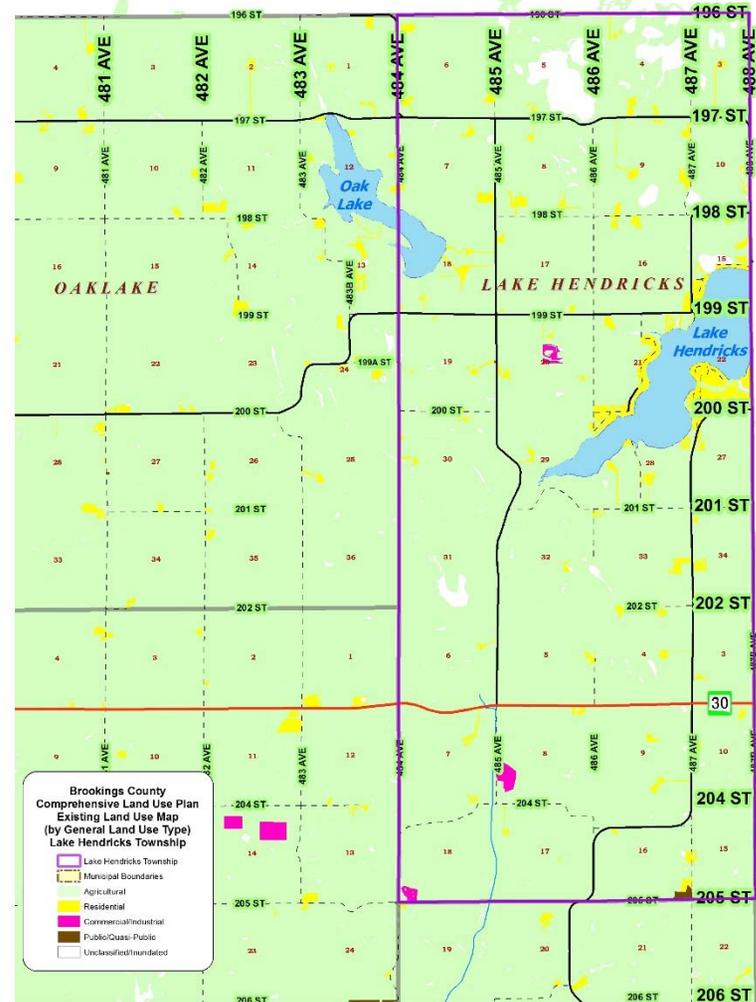
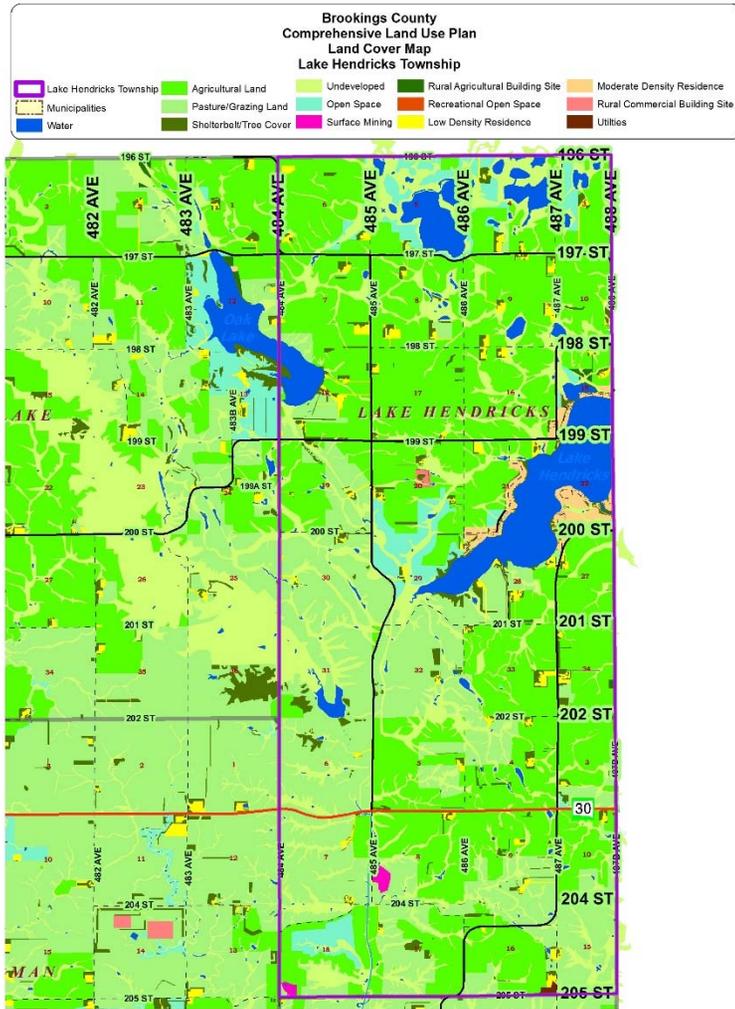
# EUREKA TOWNSHIP

**Brookings County  
Comprehensive Land Use Plan  
Land Cover Map  
Eureka Township**

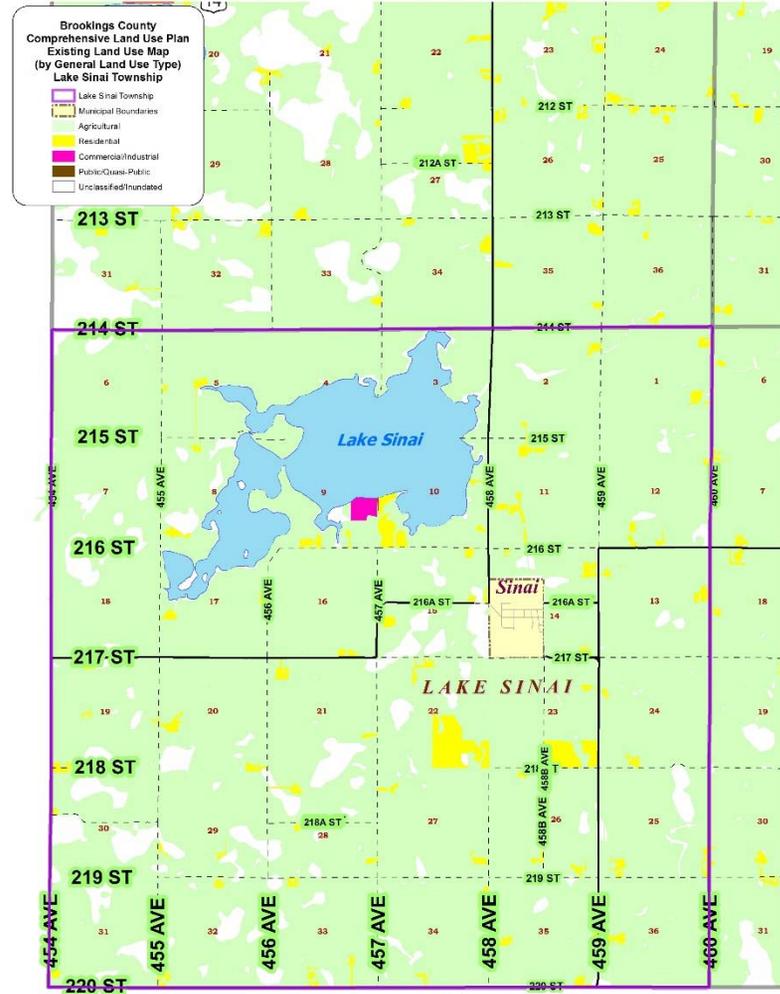
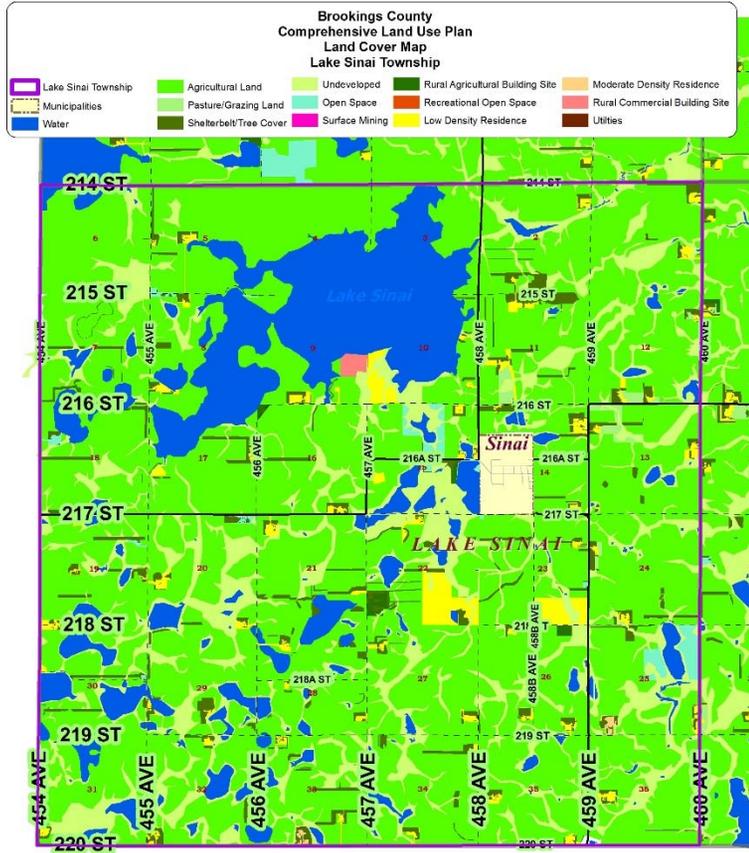
Eureka Township	Agricultural Land	Undeveloped	Rural Agricultural Building Site	Moderate Density Residence
Municipalities	Pasture/Grazing Land	Open Space	Recreational Open Space	Rural Commercial Building Site
Water	Shelterbelt/Tree Cover	Surface Mining	Low Density Residence	Utilities



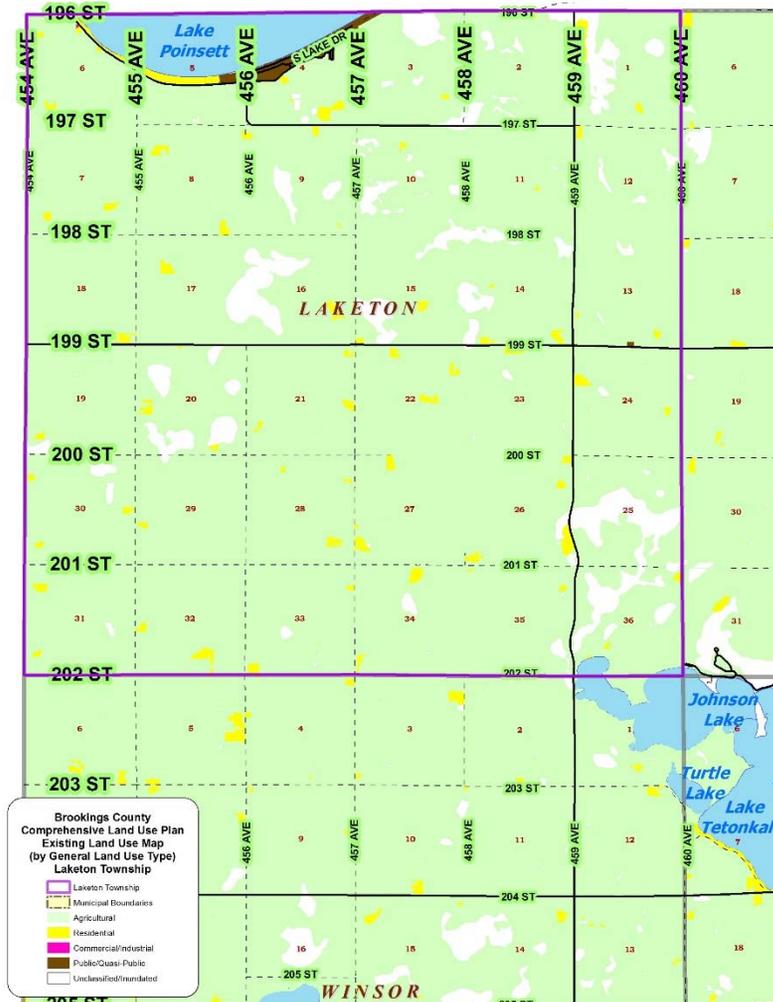
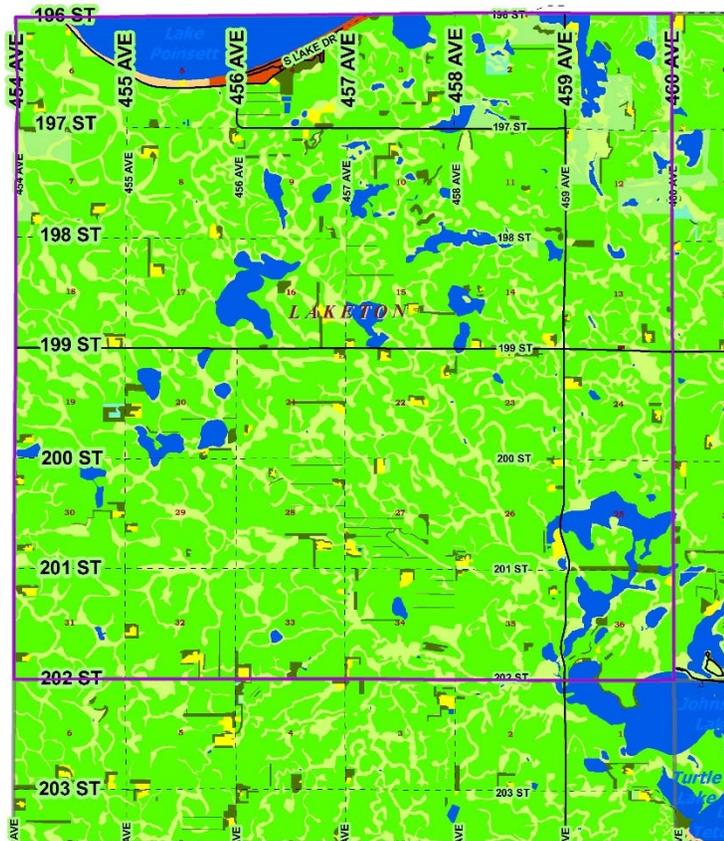
# LAKE HENDRICKS TOWNSHIP



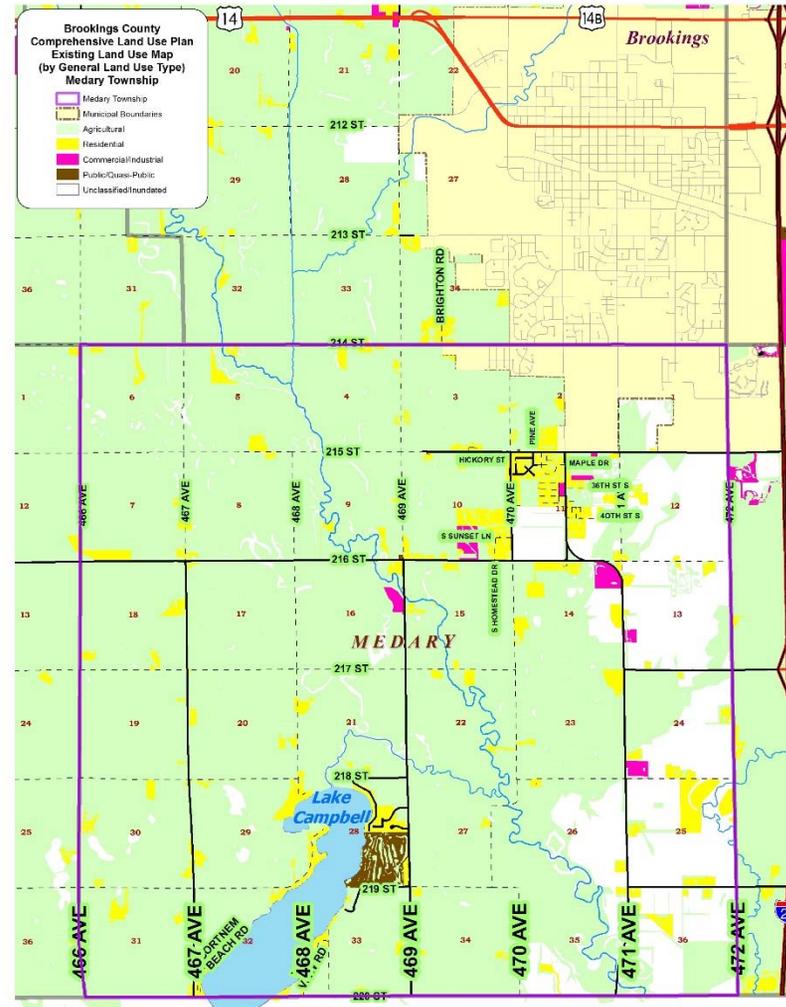
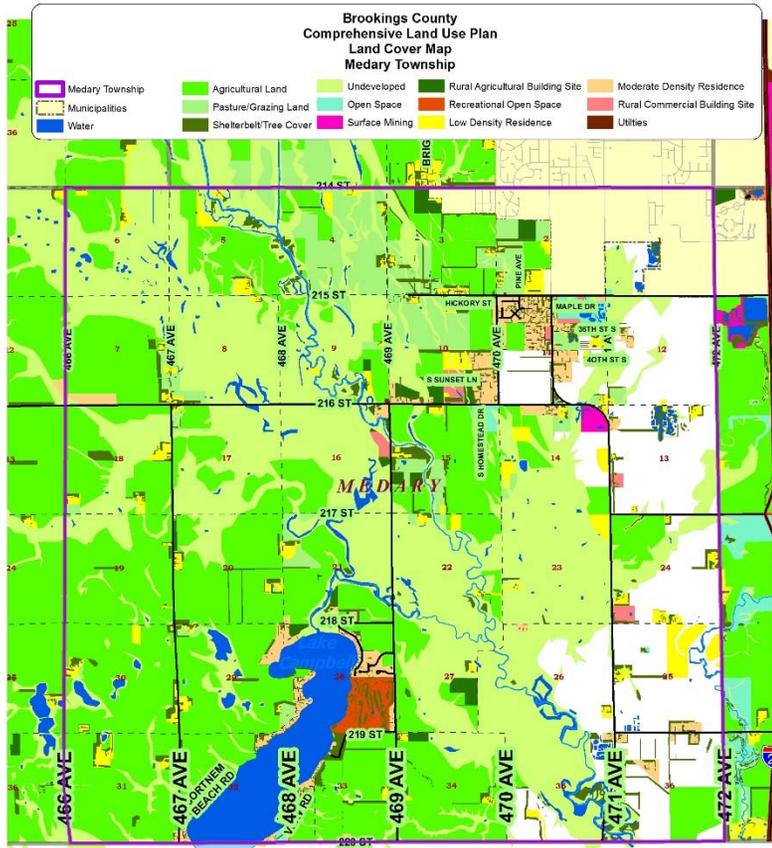
# LAKE SINAI TOWNSHIP



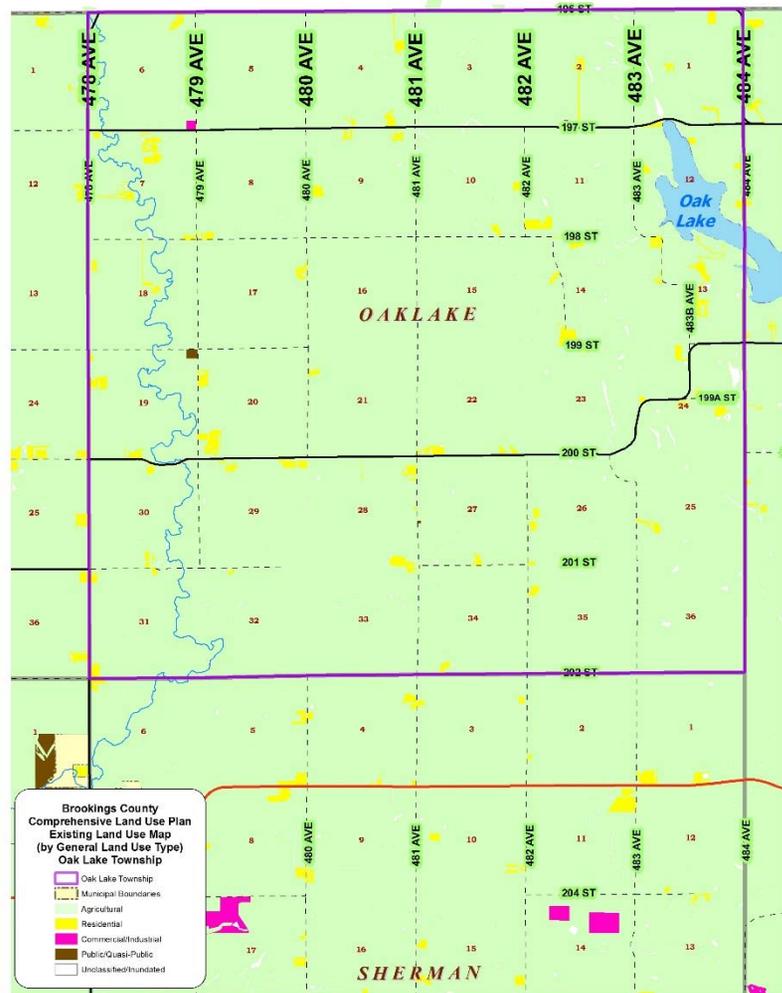
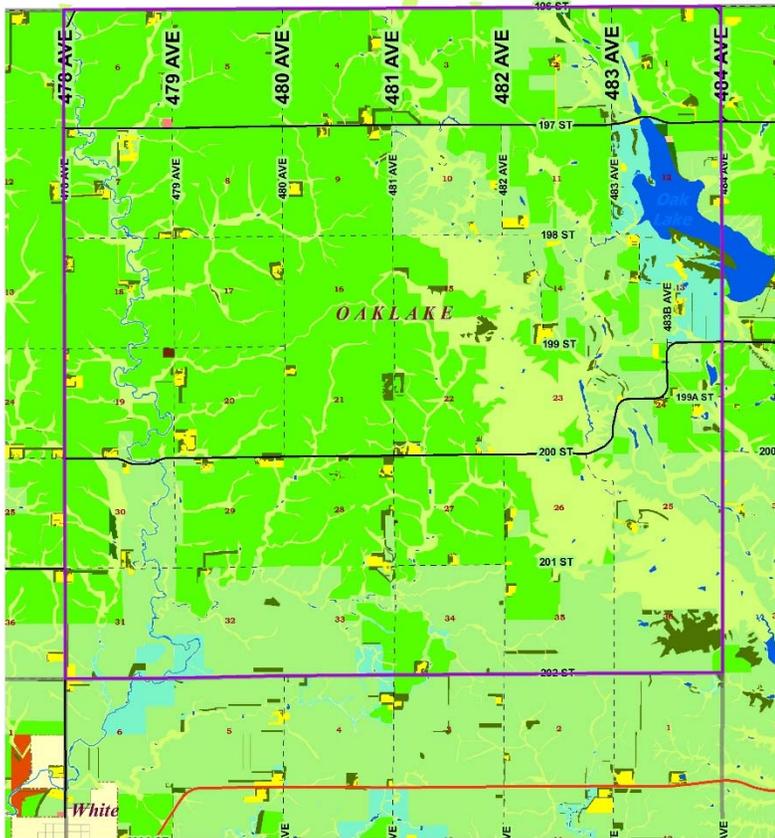
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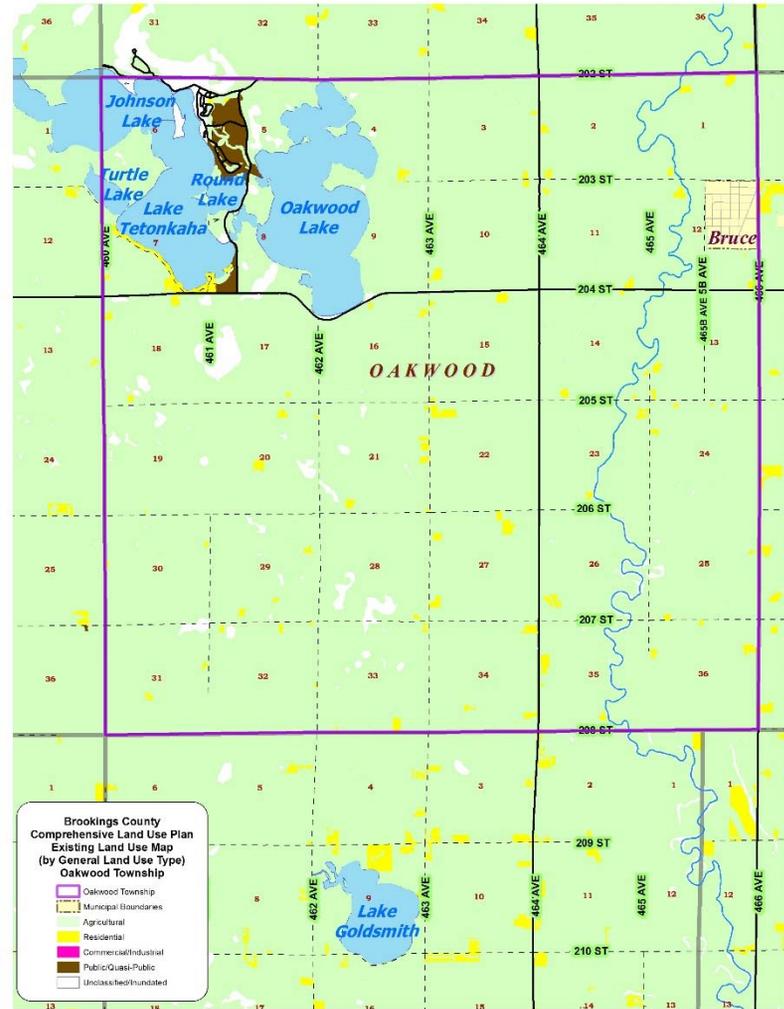
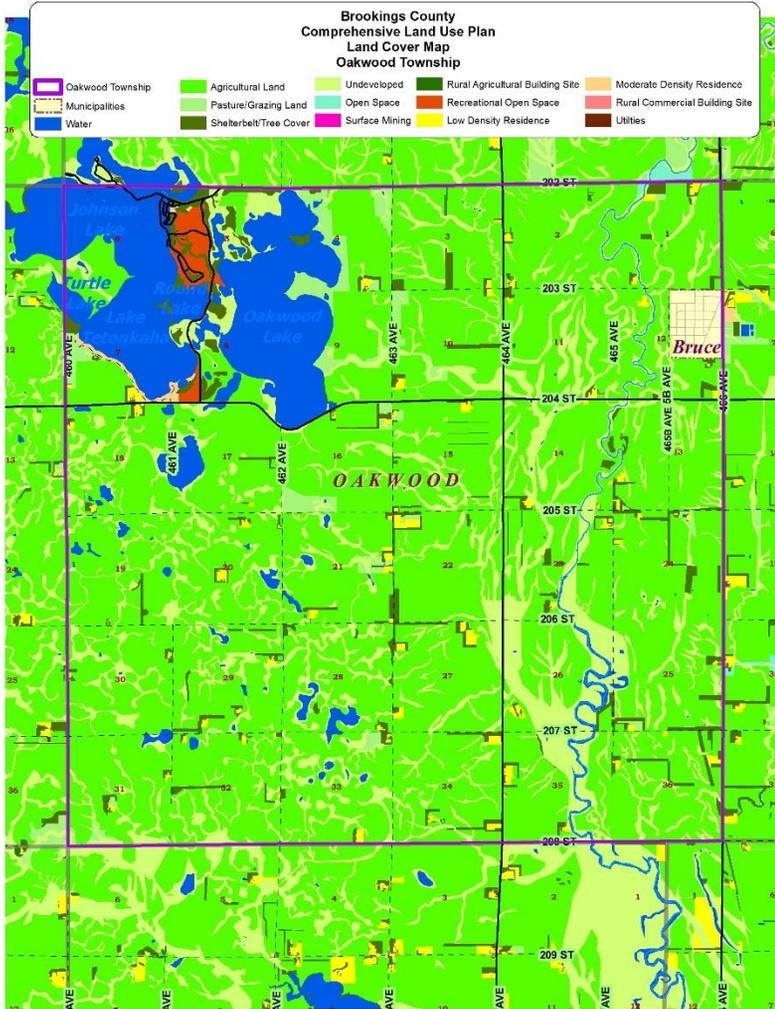
# MEDARY TOWNSHIP



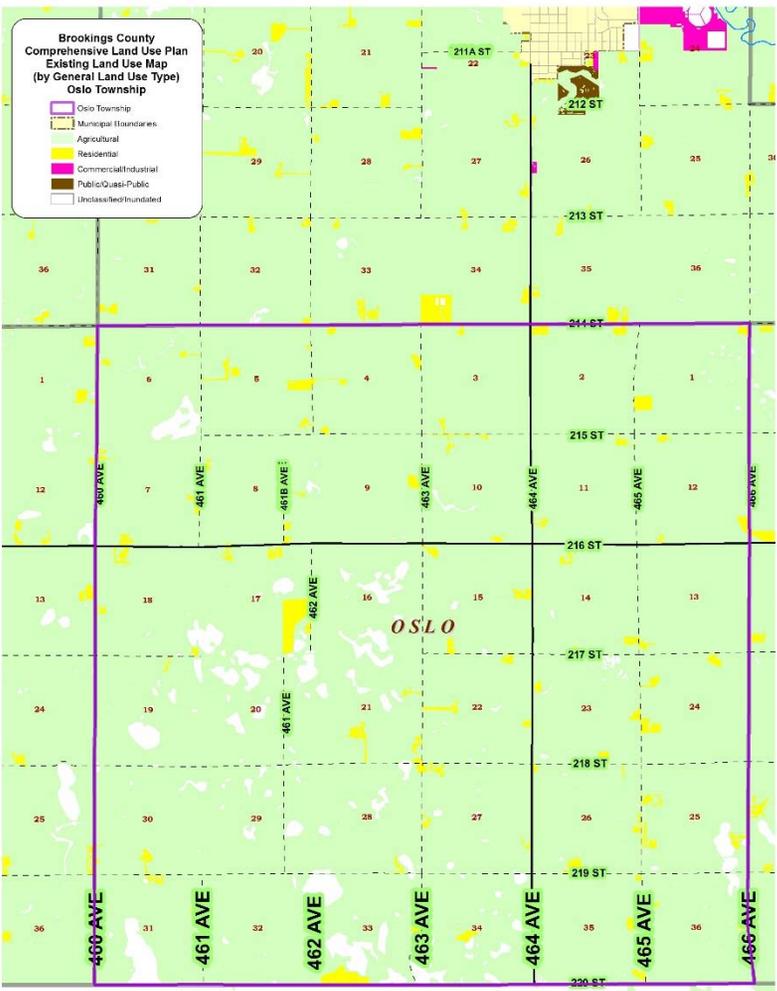
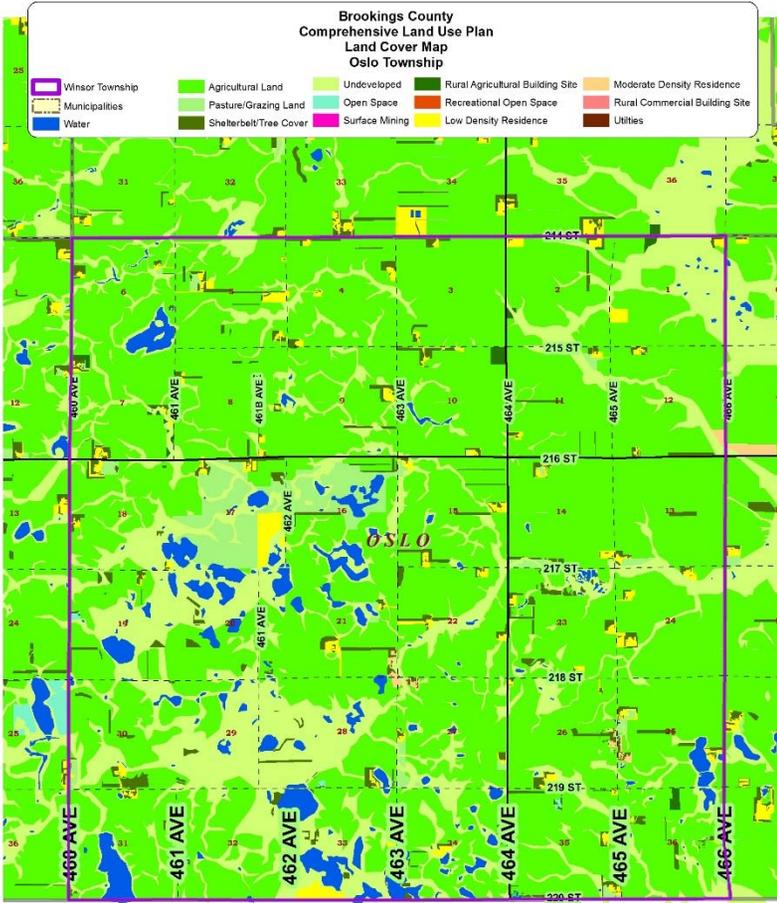
# OAK LAKE TOWNSHIP



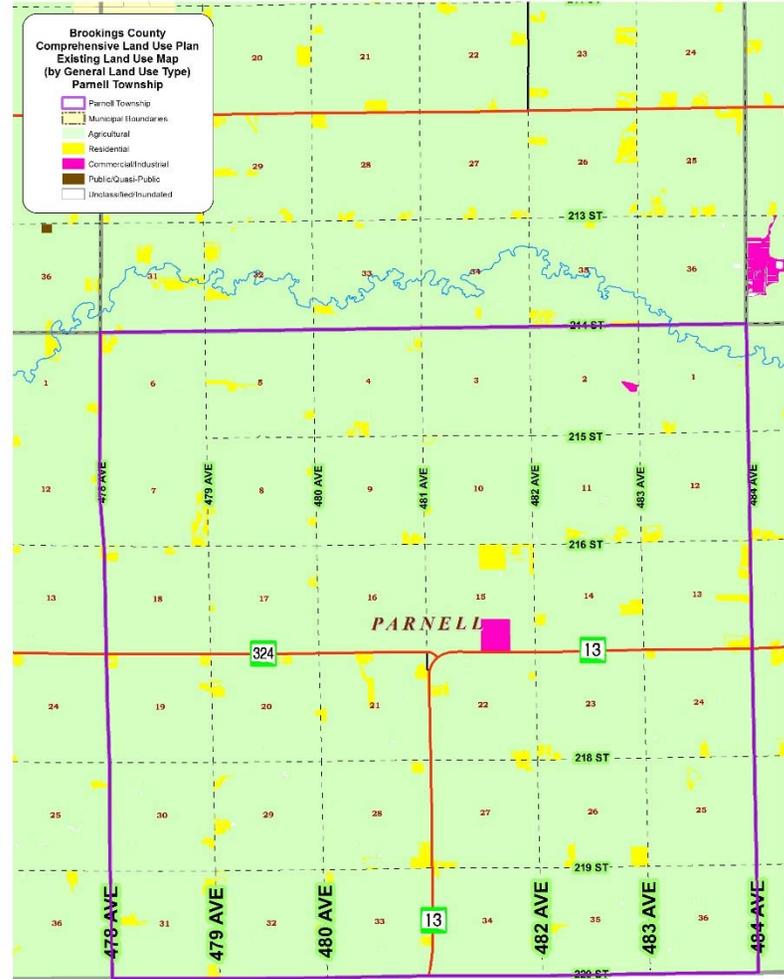
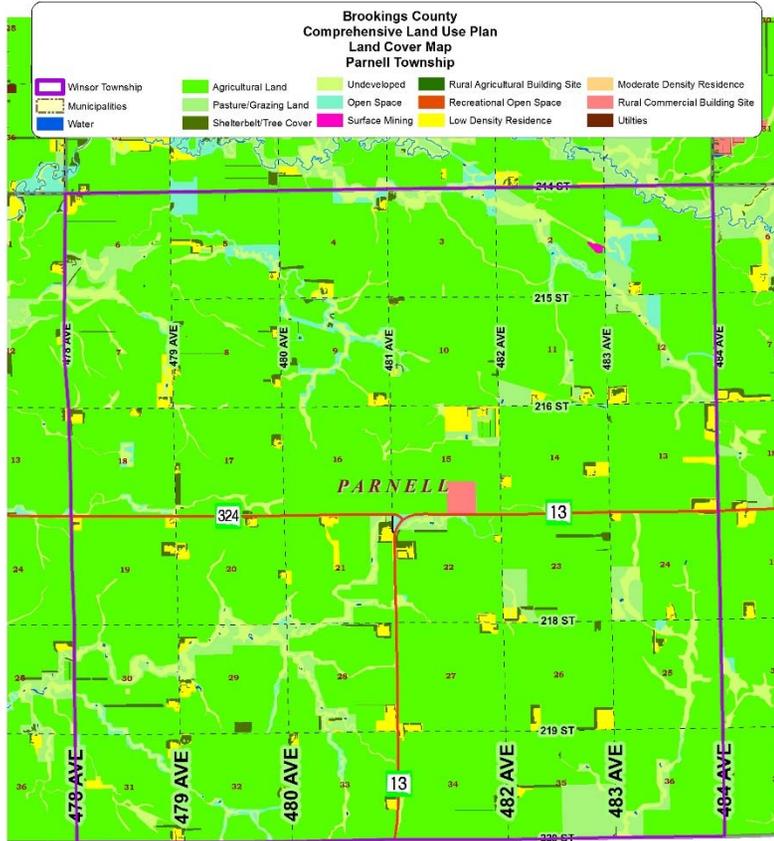
# OAKWOOD TOWNSHIP



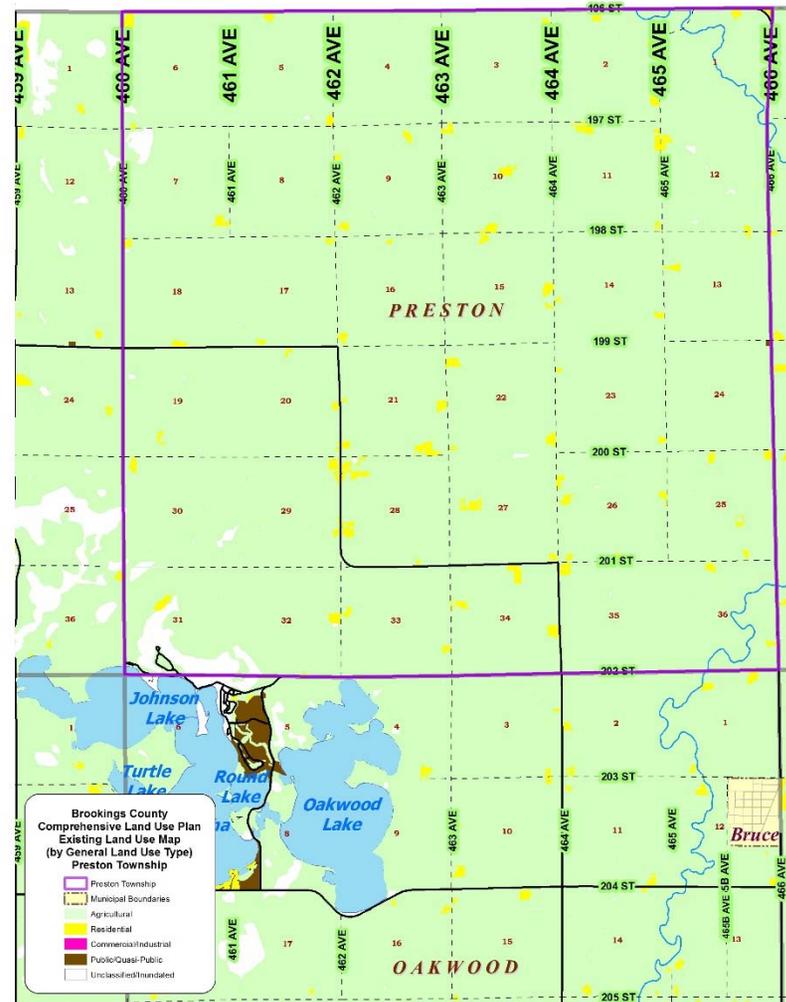
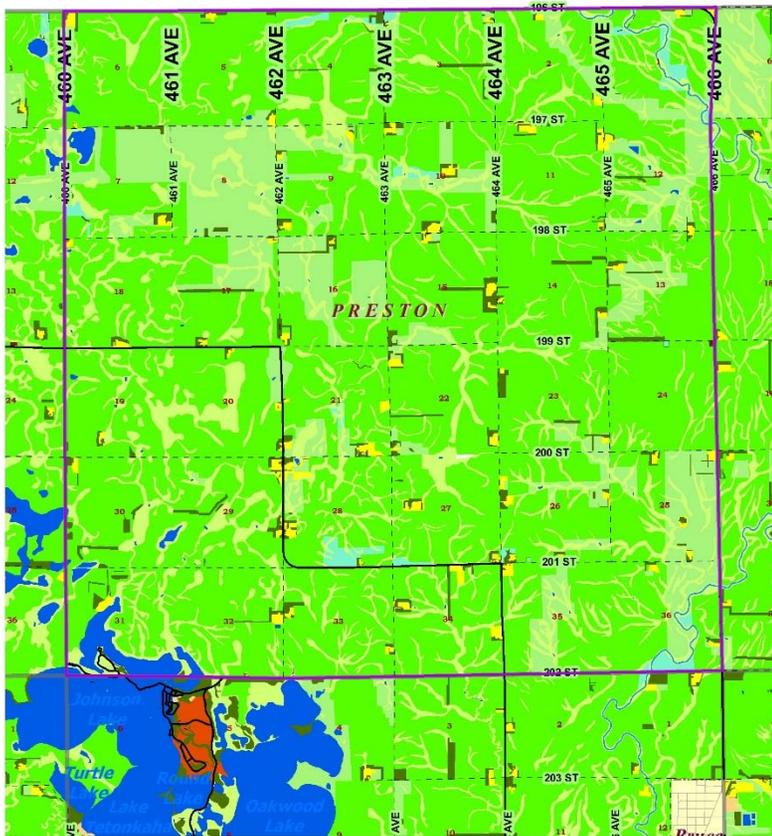
# OSLO TOWNSHIP



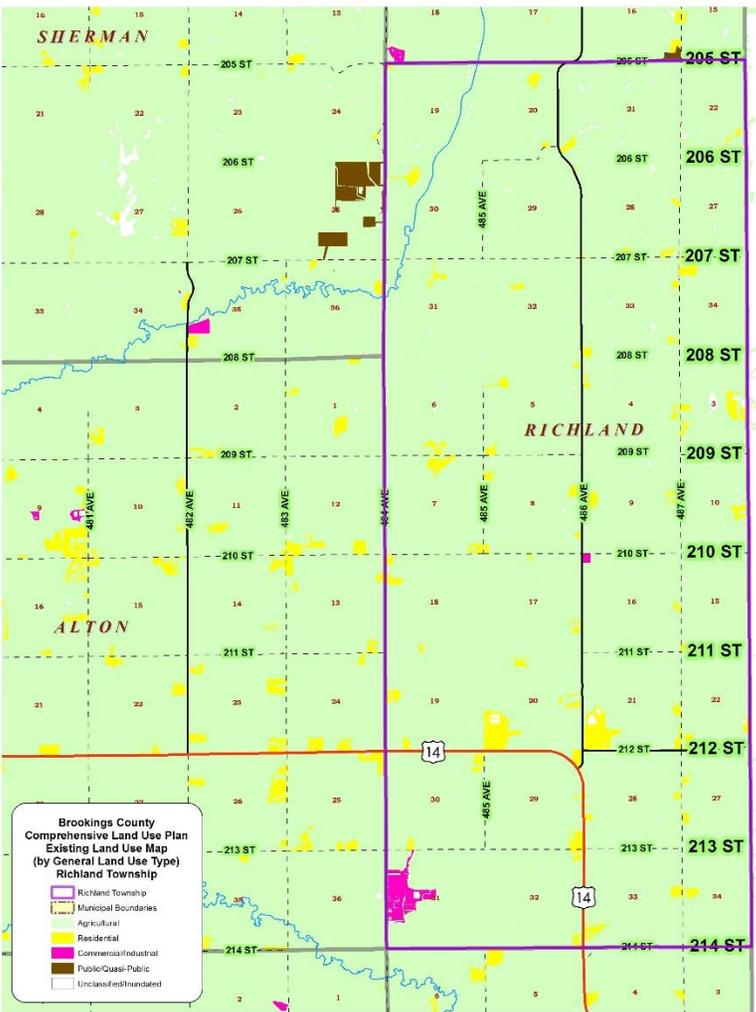
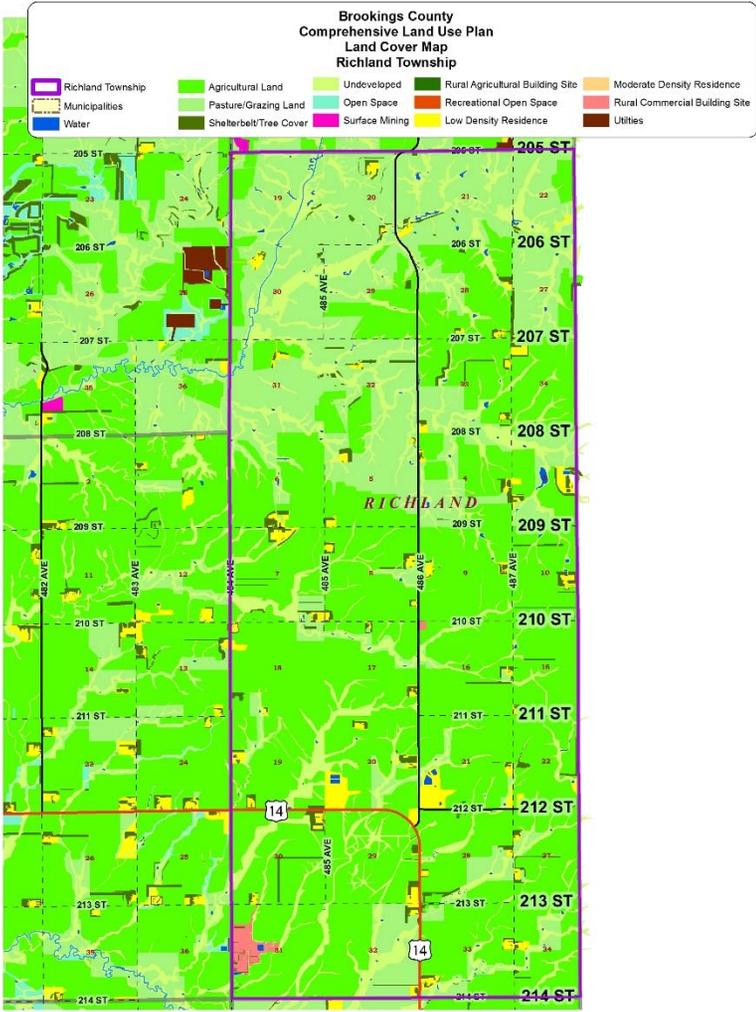
# PARNELL TOWNSHIP



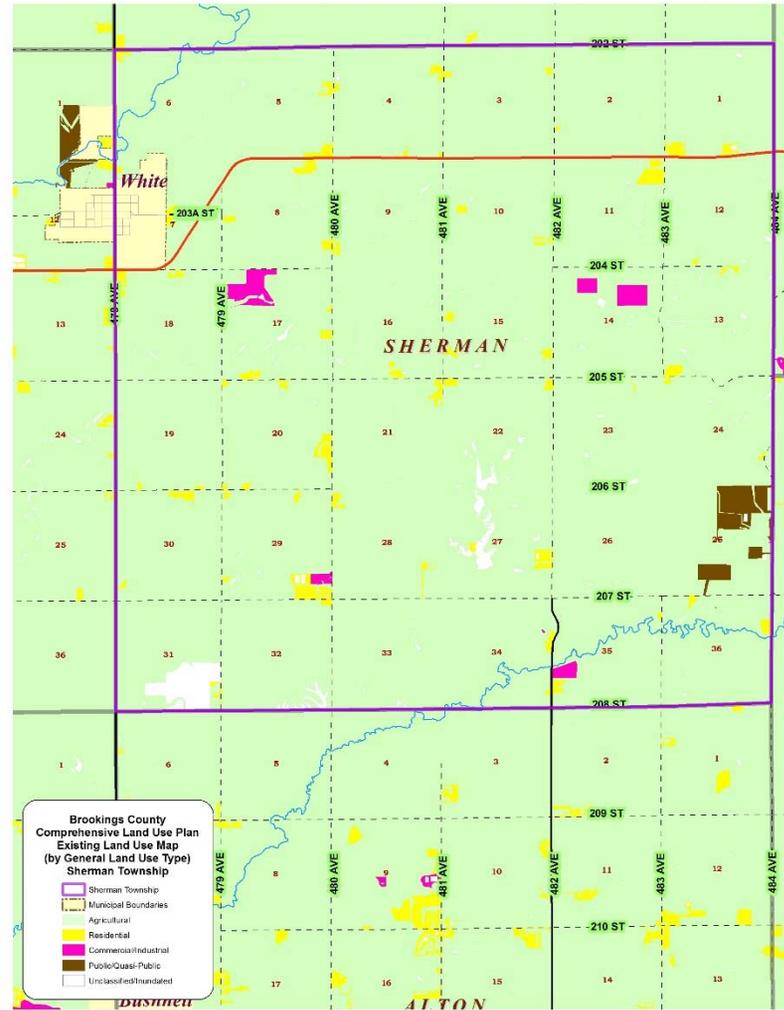
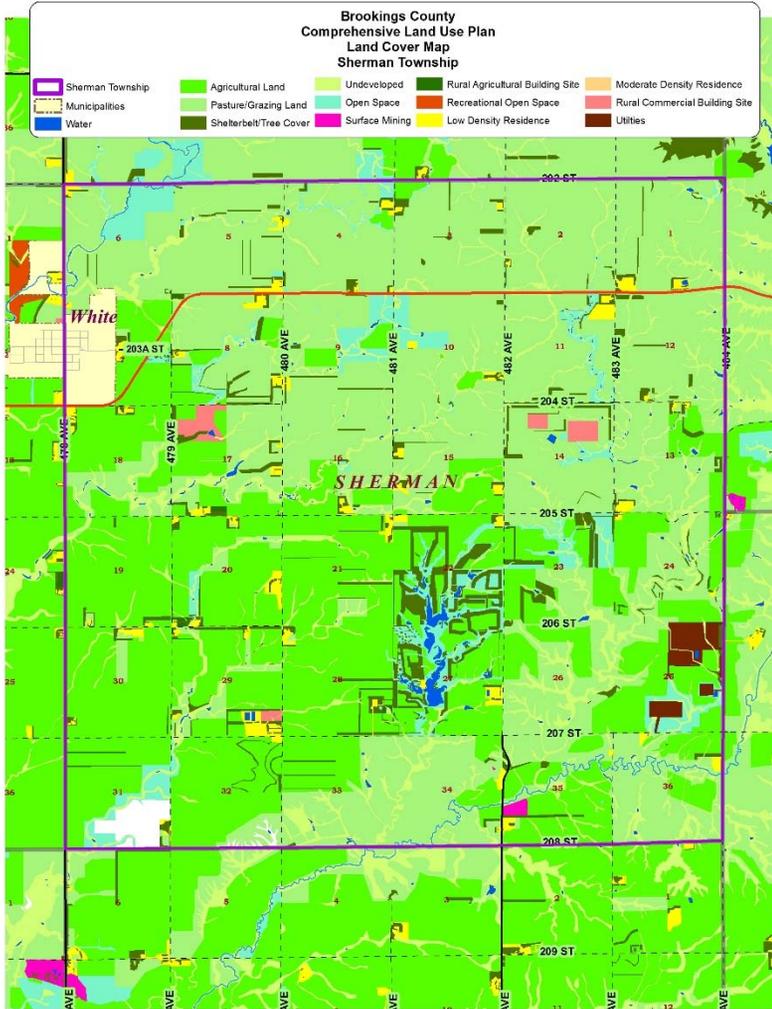
# PRESTON TOWNSHIP



# RICHLAND TOWNSHIP

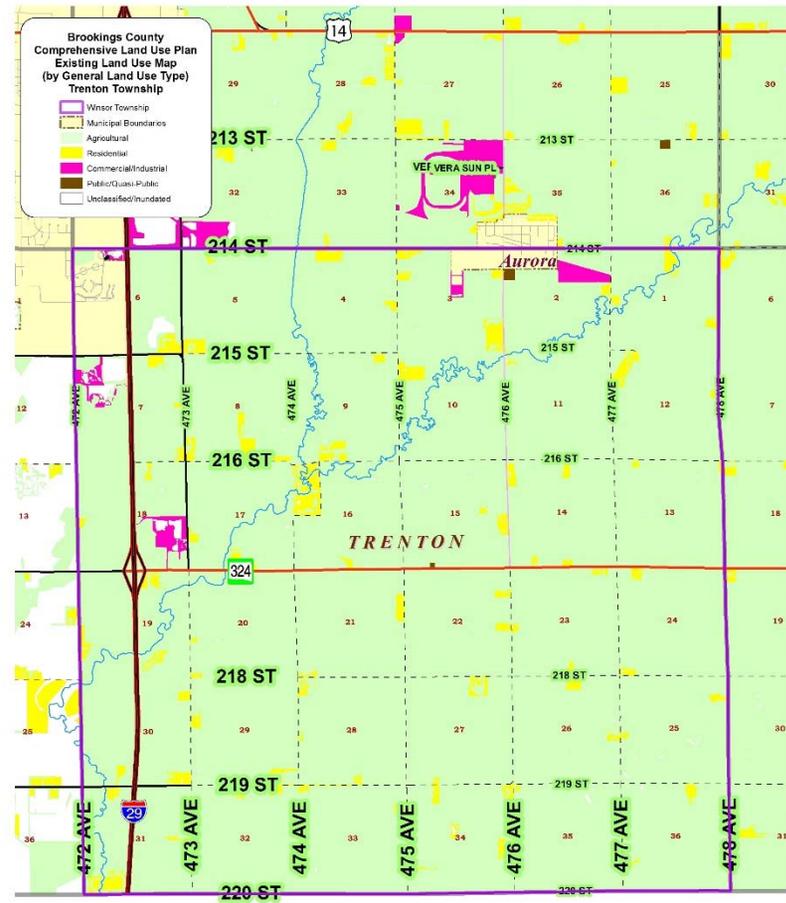
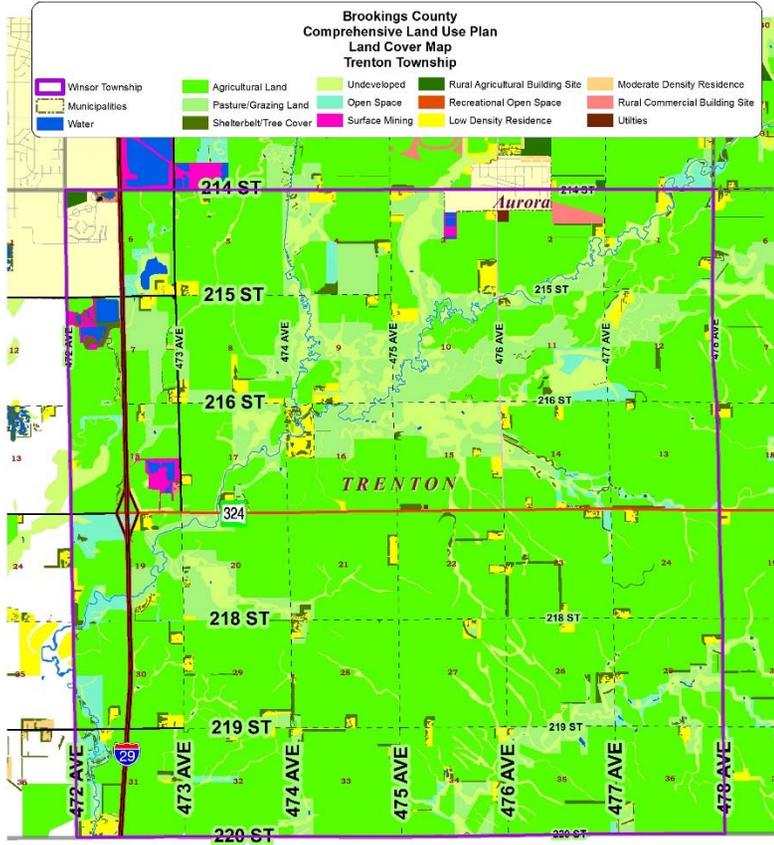


# SHERMAN TOWNSHIP

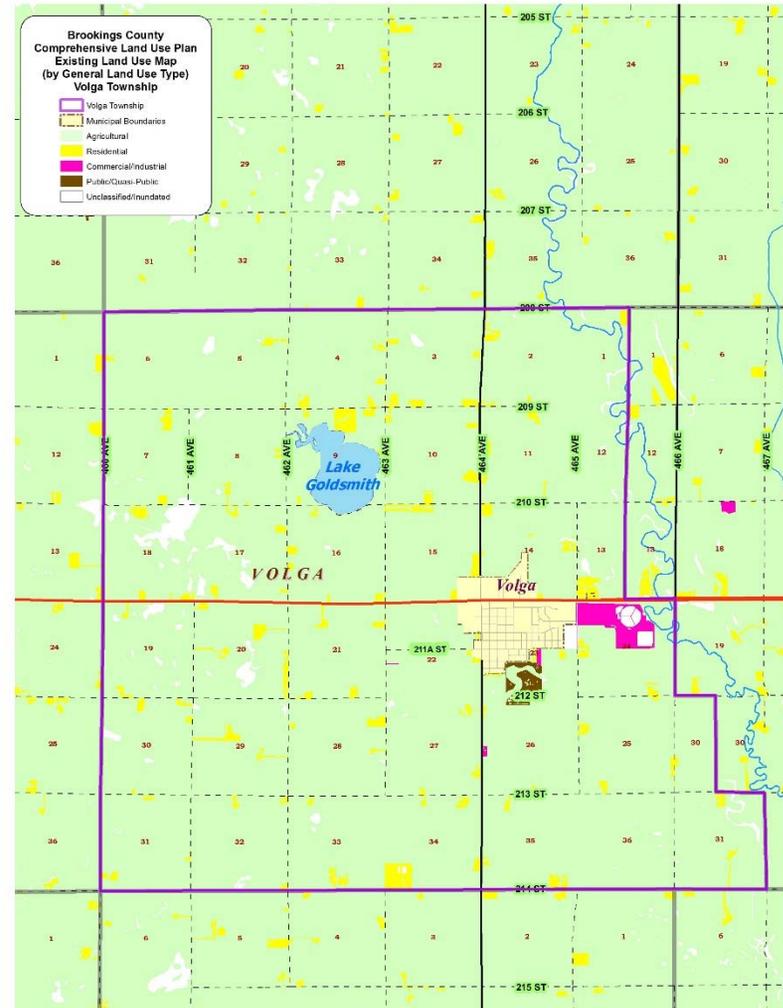
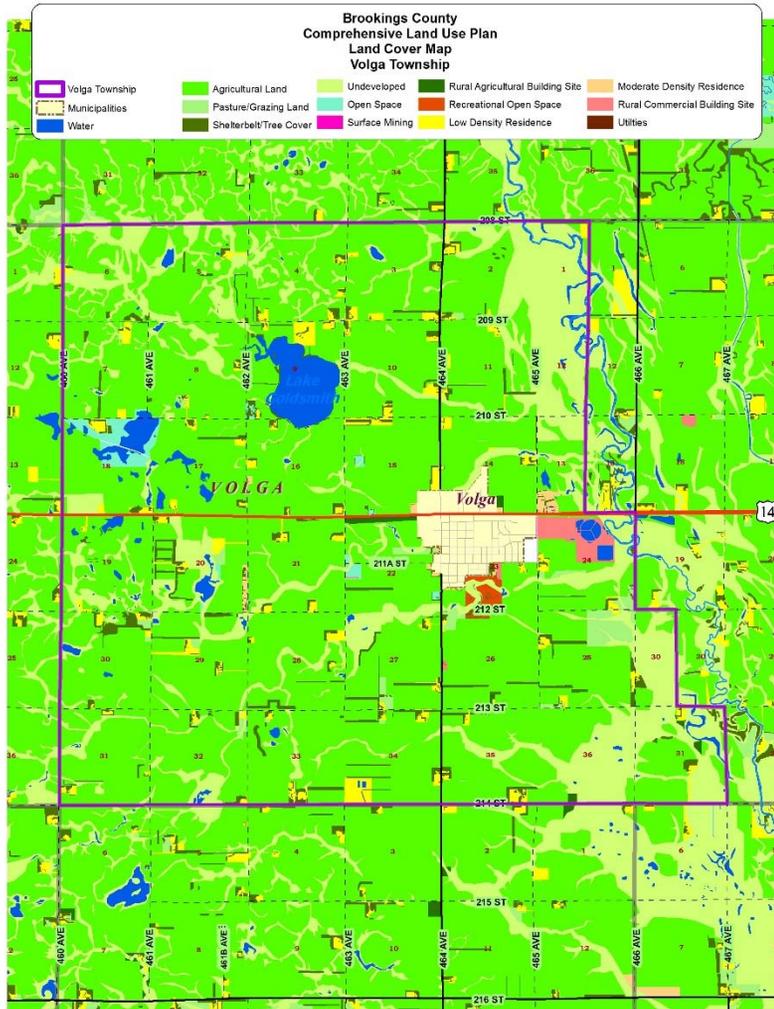




# TRENTON TOWNSHIP



# VOLGA TOWNSHIP



# WINSOR TOWNSHIP

