

# ***Mississippi River Critical Corridor Area Plan***



Rosemount's Critical Area (looking northwesterly)

## ***Appendix B of the 2030 COMPREHENSIVE LAND USE PLAN***



## Introduction

---

This Mississippi River Critical Area Plan has been prepared to preserve and manage the environmental, scenic and economic values afforded the City of Rosemount by the Mississippi River. The city's policy is to incorporate these values into the Comprehensive Plan. The Critical Area within the City of Rosemount is located east of Highway 52 and north of Highway 55.

## Background and Purpose

---

### **Critical Area Act – Tier I**

The Critical Areas Act passed by the 1973 Minnesota Legislature provided a process for planning and managing an area of recreational and statewide public interest. A 72-mile stretch of the Mississippi River and adjoining lands, which includes part of Rosemount, was designated a Critical Area by the Governor of Minnesota in 1976. This Critical Area was established to preserve and enhance the natural environment by providing guidelines for development along the River. Under provisions of this Act, the designation was made permanent by the Metropolitan Council in 1979. Local governments and state and regional agencies are required to implement their plans and regulations consistent with standards for the river corridor in Executive Order 79-19. The Critical Area requirements are referred to as Tier I standards. Rosemount adopted a Critical Area Plan and Ordinances to meet the Tier I requirements of the Mississippi River Critical Area in 1980.

### **Mississippi National River and Recreation Area (MNRRA) – Tier II**

In 1988, the Mississippi National River and Recreation Area (MNRRA) was created and became part of the National Park System (Public Law 100-696). MNRRA was established to:

1. Protect, preserve, and enhance the significant environmental, natural, scenic, historical, cultural and scientific values of the Mississippi River corridor through the Twin Cities metropolitan area;
2. Enhance the public outdoor recreation opportunities in the area;
3. Encourage coordination of federal, state, and local programs;
4. Provide a management framework to assist the state and local governments in the development and implementation of integrated resource management programs; and
5. Ensure orderly public and private development in the area.

A Comprehensive Management Plan (CMP) for MNRRA was adopted by the National Park Service in 1995. The guidelines for MNRRA are referred to as Tier II standards. Tier II standards require greater protection of natural resources than Tier I standards and encourage cooperation with other communities.

Funds were provided by the National Park Service (NPS) to assist Rosemount in the revision of the City's Critical Area Plan and to consider the adoption of Tier II standards and policies outlined in the CMP during their 1998 Comprehensive Plan Update. The Minnesota Department of Natural Resources (DNR) and Metropolitan Council are responsible for coordinating and approving local Critical Area plans and ordinances. The NPS reviews Plans for conformance with MNRRA.

This Mississippi River Corridor Plan has been prepared to ensure that responsible development occurs in the MNRRA area and to recognize the Mississippi River as an integral part of the City. Working with adjacent communities and other organizations, Rosemount hopes to protect the scenic and natural resources and enhance the recreational opportunities within the Mississippi River Corridor. The City also supports the continued use of the River Corridor for industrial uses.

This Plan meets State and Regional Tier I requirements and in many cases the City has voluntarily adopted Tier II policies which provide even greater protection of the MNRRA Corridor. This Mississippi River Corridor Plan replaces the City's previous Critical Area Plan. This Plan is also part of the City's 1998 Comprehensive Plan and the Corridor is delineated on the City's Official Zoning Map.

### **Coordination and Citizen Participation**

Rosemount worked cooperatively with the City of Inver Grove Heights, Nininger Township, City of Hastings, and Ravenna Township to identify common issues and priorities for the Mississippi River Corridor. Dakota County, DNR, Met Council, and others also provided resources and assistance.

## **Existing Land Use**

---

Approximately 3,000 acres, of which 920 acres are water surface, are within Rosemount's designated Mississippi River Corridor. This represents approximately 13% of the City's 22,615 acres. The predominant uses in the Mississippi River Corridor are wooded open space and river dependent industry. Thirteen year-round homes are scattered throughout the Critical Area. There are limited farming activities. Figure 3.8-A illustrates the dominant land uses in the Mississippi River Corridor.

Land use and development within the Corridor is directed by a number of regulatory controls, including the City's zoning, shoreland, critical area and floodplain ordinances. Figure 3.8-B identifies these controls. The following sections describe the predominant land uses of the Rosemount Critical Area (also see Figure 3.8-A).

### **Industrial**

The largest single type of landowner in the Rosemount Critical Area is industry. Figure 3.8-C identifies and Figure 3.8-G describes the major industries located in the Critical Area. This industrial area represents a continuation of similar land uses in southern Inver Grove Heights and is an essential element in the economy of Rosemount and the region.

Industrial activity is not extensive throughout the industrially-owned land along the riverfront; rather, it is focused primarily at three barge terminals and associated loading/unloading, storage and distribution systems. Flint Hills Resources and CF Industries control approximately 75% of the riverfront land. Flint Hills receives and ships petroleum products from one barge slip and C.F. Industries transports liquid and dry fertilizers at two separate barge slips for on-site storage.

Map Key	Owner	Land Use	Size (Acres)	Market Value <sup>1</sup>	River Use	Rail Access
A	Dixie Petro Chemical	Gas Supplier	26.5	\$2,289,900	No	Yes (Active)
B	Walbon Partnership	Trucking Terminal	5.9	\$946,300	No	No (Potential)
C	Technical Erectors	Vacant Platted Industrial Lots	13.3	\$287,900	No	No (Potential)
D	Pine Bend Land Co.	Wood Byproduct Recycling	5.7	\$792,000	No	No
E	Spectro Alloys Corporation	Aluminum Recycling	15.5	\$1,057,100	No	Yes (Inactive)
F	Endres Properties	Food Byproduct Reprocessing	50.7	\$2,201,100	No	No (Potential)
G	CF Industries Inc.	Liquid and Dry Fertilizer Warehouse	381.2	\$4,481,000	Yes 2 barge	Yes (Active)
H	Flint Hills Resources	Oil Refinery	539.1		Yes 1 barge	Yes (Inactive)

<sup>1</sup> From Dakota County Tax Records Payable 2010

**Figure 3.8-G - Major Industries**

### **Agricultural**

The agricultural land uses within the Critical Area are located south of Pine Bend Trail and east of the industrial area. There are limited farming activities with one feedlot and one commercial paintball operation. Two major landowners currently include Pine Bend Development (190.2 acres) and Birger (175.8 acres) south of Spring Lake Park.

### **Residential**

The five residences located within the industrial area are owned by industry and occupied by industry personnel for security purposes. The remaining eight homes are located in the agricultural zoning district and are either remaining farmsteads or rural residential lots.



Flint Hills Resource's Barge Terminal (looking westerly)

### **Recreational/Public Open Space**

Spring Lake Park occupies the eastern portion of the riverfront within the boundaries of Rosemount. The park will eventually contain 1,500 acres; 270 acres are in Rosemount and the balance is in Nininger Township. Spring Lake Park serves as the only area where public adjoins the Mississippi River within the City of Rosemount. This area includes two primary uses, including an archery range and youth lodge. Although a trail system is developed within the youth lodge site, no public trail system or scenic overlook exists within this part of Spring Lake Park.

Dakota County is responsible for the planning and maintenance of the park lands and facilities. A public boat landing approximately two miles east of the Rosemount property is operated by the DNR.

### **Islands**

The islands that exist within the City of Rosemount and the Corridor are owned by a combination of private parties and state/federal agencies. Since they are completely within the floodway boundary and subject to geographic change, they are not specifically addressed in this plan regarding land use.

# Natural Resources and Water Management

---

## **Topography**

The northern tip of the corridor lies at the edge of eastern St. Croix Moraine. The maximum relief, or the elevation change from the Flint Hills secondary treatment ponds to the edge of the river, is approximately 250 feet (See Figure 3.8-D). The highest elevation is approximately 940 feet and is located near the intersection of Highways 52 and 55. The remainder of the corridor is part of the Mississippi River Outwash plain, with the highest elevations averaging about 900 feet along Highway 55. The lowest point is the river, which has a normal pool elevation of 687 feet.

Two well-pronounced bluff lines are within the Critical Area, with slopes often exceeding the 12 percent and 18 percent standards identified as sensitive areas in the Metropolitan Council's *Information Handbook for the Twin Cities Metropolitan Area Mississippi River Corridor Critical Area*. The upper bluff line follows Pine Bend Trail while the lower bluff is near the river. The lower and upper bluffs join together in the northern portion of the Corridor to create an impressive topographical feature.

## **Natural Drainages**

Storm water run-off in the Mississippi River Corridor follows the natural drainage pattern to the river. Since the current industrial users maintain a significant amount of their sites in a natural state, there are no major drainage and/or erosion problems. In addition, City guidelines for bluff setbacks, vegetation preservation, landscaping and stormwater management work to minimize the negative impacts of development on natural drainageways and steep slopes.

## **Soils**

The Dakota County Soils Survey has identified two general soil associations within the Mississippi River Corridor of the City of Rosemount.

1. **Nearly Level Soils on the Floodplains**. This general area is on the floodplains of the Mississippi River. Much of it is frequently flooded and it is generally too wet to be cultivated. The area consists of mixed Alluvial land and some Sawmill soils. Colo soils, Riverwash, and Peat Muck are also present. These soils are found on the river islands and near the shore along the eastern portion of the Critical Area.
2. **Dark-Colored Rolling to Nearly Level Soils on Outwash**. The major soils in this association include a mix of the Dakota, Estherville and Waukegan series. These soils are generally well-drained and more susceptible to drought, making them less suitable for agricultural use. These soils compose the remainder of the Critical Area.

A high percentage of the Corridor has soils that are classified as severe, severe-very severe, or very severe for on-site sewage disposal systems. More detailed soil studies should be done on a site-specific basis for building construction and septic systems. On September 19, 1997, the City adopted a new ordinance (Chapter 6, Design, Installation and Maintenance of On-Site Individual Sewage Treatment Systems) that requires inspections and maintenance permits every two years.

## **Habitat Areas and Animals**

The Minnesota Department of Natural Resources (DNR) has conducted a Minnesota County Biological Survey (MCBS) to identify significant natural communities, plants and animals in Dakota County. These features are part of the Minnesota Natural Heritage Information System.

### **Natural Communities**

Natural communities are areas containing groups of plants and animals that have not been significantly altered by humans. They are examples of what the area looked like in the mid-1800's. Figure 3.8-E identifies the location and type of natural communities in Rosemount. The following descriptions were provided by the DNR.

**Floodplain Forest – silver maple subtype** – lowland forests on alluvium along the Mississippi River, flooded for weeks at a time during seasonal high water; canopy dominated by silver maple, which contributes >50% cover; common canopy associates include green ash, cottonwood, and peach-leaved willow; subcanopy and shrub layer poorly developed; woody climbers such as Canada moonseed and wild grape common, especially in light gaps; common ground-layer species include wood nettle, tall coneflower, and honewort.

**Dry Prairie – sand-gravel subtype** – dry prairies on outwash (with gravel fraction >10%); common graminoids include little bluestem, big bluestem, side-oats grama, hairy grama, plains muhly, and Schweinitz's nut-sedge; common forbs include bird-foot violet, western spiderwort, stiff sunflower, green milkweed, bluets, and pasque-flower.

**Oak Forest – mesic subtype** – dry-mesic to mesic forests on loess, colluvium, or glacial till, often on north- to east-facing slopes; canopy most often dominated by one or more oak species, usually including red oak, other dominant or important canopy species are bur oak, northern pin oak, white oak, and basswood; common subcanopy and shrub-layer species include ironwood, sugar maple, paper birch, bitternut hickory, gray dogwood, and American Hazelnut; ground layer dominated by summer-blooming species such as pointed-leaved tick-trefoil, wild geranium, and sweet cicely.

**Oak Forest – dry subtype** – dry forests on outwash; canopy dominated by one or more oak species, including northern pin oak, white oak, and bur oak; common canopy associates include red oak and black bitternut hickory, downy arrowhood, chokecherry, gray dogwood, and American hazelnut; ground layer dominated by summer blooming species such as shining bedstraw, white snakeroot, and Pennsylvania sedge.

**Other  
Woodlands**

There are also significant areas of woodlands that have been disturbed or are not original, but are still important assets to the City of Rosemount. These areas are also identified on Figure 3.8-E. The eastern orientation of slopes in the corridor create cooler, moister conditions due to the loss of afternoon sun. Shade and moisture tolerant plants, such as ferns and mosses, are found in the understory.

**Plants  
and Animals**

The Mississippi River Corridor is home to a variety of animal and plant species. The following animal and plant species are particularly important because they are state listed:

<b><u>Element</u></b>	<b><u>State Status</u></b>
Bald Eagle	Special Concern
James' Polanisia	Endangered
Creeping Juniper	Special Concern
Loggerhead Shrike	Threatened

**Rivers, Lakes and Wetlands**

**Mississippi  
River**

The Mississippi River serves two separate and distinct water surface uses: transportation and recreation. Commercial navigation co-exists with fishing, boating and hunting. A 9-foot navigation channel is maintained for the river's barge traffic. Improvement in water quality has also resulted in an increase in the recreational use of the river.

**Spring Lake**

The lock and dam system created pools in the river. Spring Lake, a part of Pool 2, is five miles upstream from Lock and Dam No. 2 in Hastings. Being very shallow and well enclosed by islands, Spring Lake can only be utilized by recreational boaters. In fact, the shallowness and the presence of submerged tree stumps limits recreational boating to canoeing and limited fishing.

**Wetlands**

The National Wetlands Inventory (NWI) identifies all wetlands in the Critical Area (See Figure 3.8-E). With the exception of a few pocket wetlands, all of the wetlands in the Critical Area are located within the Mississippi River floodplain.

**Transportation and Utilities**

---

**Transportation**

There are several major transportation facilities serving the Rosemount Critical Area. These facilities include roadways, railway lines and spurs, the river, and pipelines and conveyors (See Figure 3.8-A).

**Roadways** Three public roadways are located in the Critical Area: State Trunk Highway 55, Pine Bend Trail, and Fahey Avenue. Highway 55 is heavily utilized by commercial and passenger traffic and serves as a major route between the Twin Cities and Hastings. Pine Bend Trail and Fahey Avenue serve local needs.

Within the City of Rosemount, Highway 55 is also part of The Great River Road - a national scenic and recreational highway that is being designated from the headwaters of the Mississippi River at Lake Itasca to the Gulf of Mexico.

**Railways** United Pacific (UP) Railroad operates a long spur extending south from Inver Grove Heights to various industrial users, all of which are operated on an irregular schedule.

**River** Barge traffic is very important for Rosemount's river-based industries. Commercial navigation is limited to the main, nine-foot channel and ancillary routes to the three existing barge terminals. Flint Hills Resources operates one barge terminal. CF Industries operates two barge terminals. Barge fleeting - the docking of several barges, is not authorized within Rosemount. Small-scale fleeting within the terminals themselves is allowed.

**Pipelines and Conveyors** Pipelines and conveyors are utilized by industry to transport barge shipments from barge terminals to storage and manufacturing facilities. These facilities are privately owned and operated. A pipe has recently been installed by Flint Hills Resources within the corridor to pump leaded gasoline from a leak site along the river.

**Utilities**  
**Wastewater Treatment**

The Metropolitan Council Environmental Services has an inoperable Wastewater Treatment Plant with a 42" discharge located near the southernmost barge terminal.

**Utility Crossings**

There are no existing utility crossings across the river within the City of Rosemount.

## **Critical Area Land Use Plan**

---

The proposed land use plan reaffirms the existing pattern of development. The Mississippi River Critical Area is divided into four land use districts according to State Executive Order 79-19. The districts are:

1. Rural Open Space
2. Urban Diversified
3. Urban Developed
4. Urban Open Space

The Corridor in Rosemount contains the *Rural Open Space* and *Urban Diversified* Districts (See Figure 3.8-B) with approximately one-third of the Corridor on the east end within the first rural category. These districts establish the following guidelines to manage the Corridor consistent with its natural characteristics and existing development (Executive Order 79-19; March 12, 1979):

The City of Rosemount will evaluate new land use proposals and/or expansion proposals for existing land uses based upon the corresponding district designation. The City will also be attentive to the area that transitions from urban to rural (east of Endres and CF Industries as shown in Exhibit 3.8-C). Current zoning for this transition area is Agriculture, which gives more support to its rural and open space character. Policies addressing these two districts are further identified in Section 3.8.9.

### **Rural Open Space District**

The lands and waters within this district shall be used and developed to preserve their open, scenic, and natural characteristics and ecological and economic functions. Presently undeveloped islands shall be maintained in their existing natural state. The transportation function of the river shall be maintained and preserved. The City allows public, recreational, or institutional uses within this District.

### **Urban Diversified**

The lands and waters in this district shall be used and developed to maintain the present diversity of commercial, industrial, residential, and public uses of the lands, including the existing transportation use of the river; to protect historical sites and areas, natural scenic and environmental resources; and to expand public access to and enjoyment of the river. New commercial, industrial, residential, and other uses may be permitted if they are compatible with these goals.

The following sections describe each land use in more detail.

**Residential** Thirteen single family homes have been identified within both districts. Five are owned by Flint Hills Resources and leased to personnel. These homes are viewed as non-permanent structures in terms of a 20-25 year time period. Four other homes on the east end are part of an approved rural subdivision. Additional residential development will be severely limited due to zoning restrictions and industrial conflicts.

**Industrial** The large area designated industrial serves two distinct purposes. It primarily allows areas for expansion of existing uses, and it provides limited areas for new industry to properly locate within the Corridor.

New development and expansion of existing industrial properties, including warehouses, storage bins, pipelines, conveyors, and associated activities will be allowed subject to the Critical Area Ordinance. All uses must be architecturally and visually compatible with the Corridor as defined in the ordinance (e.g., height, setback, scale). A minimum setback of 100 feet is identified from a bluff face and shoreline. Barge expansion beyond the three existing terminals is not anticipated or supported within the Corridor.

**Agricultural** Agriculture and other related uses will continue to operate within the Corridor. These uses shall be low-impact uses requiring minimal alteration and improvement of the existing landscape.

### **Recreational/Public**

**Open Space** The Mississippi River is a tremendous resource that is underutilized for its recreational, scenic and environmental values. In addition to the county's planned improvements at Spring Lake Park Reserve, the city supports additional trails connecting various points of interest. A scenic overlook and improved access to the river for the public is also important.

A proposed trail system is shown on Figure 3.8-F, which will improve the use and enjoyment of the River Corridor. The Plan provides linkages with Rosemount residents, adjoining communities and the region by proposing County and City trails along Highway 52 and 55 and the Mississippi River and 140<sup>th</sup> Street East. Rosemount has identified the following trail connections:

- (1) From Highway 3 to Spring Lake Park, generally following the Interpretive Trail Corridor shown on Figure 3.8.4; and
- (2) From Inver Grove Heights to Spring Lake Park.

The City will also begin to evaluate a scenic overlook/interpretive center at some underdetermined location along Pine Bend Trail by initiating discussions with landowners, Dakota County, DNR and NPS (See Figure 3.8-G).

Another prominent recreational use within these districts is splat ball. Two private courses exist on leased property that is sloped and wooded. Active play time is limited to non-winter months and evening/weekend hours. The city regulates these operations by an annual interim use permit. Any other potential outdoor recreational uses would be reviewed and permitted under the same public process (including public hearings).

Open spaces that are designated as permanent by some public or private action are encouraged by the city. Although no active plan or program is in place at the city for acquisition, opportunities will be evaluated in the

future. Cooperation with existing property owners is key to achieve more common open spaces in the Corridor. Critical Area open space guidelines are addressed in the city's park plan(s).

**Nonconforming  
Uses**

The Corridor has a number of nonconforming uses that are subject to the City's standard provisions in the zoning ordinance. Those uses that fit this category include the homes within the industrial zoning district, some small vacant industrial lots, and a few industries that don't meet site design standards (i.e., percentage in greenspace).

## **Critical Area Land Use Policies**

---

The following policies shall guide land use decisions within the Mississippi River Corridor of Rosemount:

1. Provide for the continued economic use and development of the Mississippi River Corridor where appropriate within the Urban Diversified District in a manner that will not prematurely require urban services, and will be consistent with resource protection and open space policies of this plan;
2. Enforce the Mississippi River Critical Area Ordinance development regulations to ensure environmental and visual compatibility for all development, site plans, and/or expansions within the Mississippi River Corridor and minimize interference with views to and from the River, including such things as building heights and materials, erosion control standards, bluff line, shoreland and floodplain setbacks, buffering, preservation of natural vegetation, and maximum developable slopes;
3. Work with owners to minimize the negative impact of existing uses and structures on the Critical Area;
4. Consider incentives to encourage polluting industries that no longer rely on the river for transportation or other needs to relocate out of the riverfront area;
5. Convert inconsistent riverfront land uses that are causing adverse effects on the river corridor to consistent uses if the owners move away;
6. Require land dedication to be located in the Mississippi River Corridor when a park dedication is required of development within the Mississippi River Corridor. If a developer provides cash in lieu of land, it should be used by the City to purchase open space or other public services that enhance the use or enjoyment of the Mississippi River Corridor;
7. Cooperate with the City of Inver Grove Heights, City of Hastings, Nininger Township, Ravenna Township, and State Historic Preservation Office to identify, preserve, enhance and promote significant historical and cultural sites within the Mississippi River Corridor;

8. Increase opportunities for Rosemount residents and others to use the Mississippi River Corridor as a recreational, cultural and historic resource;
9. Cooperate with adjacent communities, Dakota County, MnDOT and other jurisdictions to develop a park and trail system better connecting Rosemount to adjoining communities and other points of interest;
10. Promote the use and enjoyment of Spring Lake Park for active and passive recreational uses;
11. Work with property owners to pursue the development of an interpretive center/scenic overlook near the old ski hill and a bike trail along Pine Bend Trail as close to the river as practical;
12. Work with industry and Minnesota Pollution Control Agency (MPCA) to ensure conformance with state and federal laws;
13. Coordinate with other agencies to deter or minimize the impact of potential mining or extraction uses and ensure consistency with the Critical Area plan and ordinances;
14. Encourage economic investment that preserves and rehabilitates historic structures; and
15. Encourage local land use control and local, regional, and state economic development activities that promote sustainable development.

## Critical Area Natural Resources and Water Management Plan

---

The preservation and enhancement of the natural environment is an important element of this Plan. The basic mechanism for protection of the environment in the Rosemount Critical Area is the Mississippi River Corridor Critical Area Ordinance which, in turn, relies primarily upon site plan requirements for environmental and aesthetic protection. Specifically, any development in the Critical Area will be required to submit site plans which delineate measures taken to insure environmental protection during and after construction. As such, site plans must indicate, at a minimum:

- slopes and setbacks from bluffs
- types and location of vegetation
- identification of wetlands
- identification of normal high water mark and 100-year flood elevation
- setbacks from water bodies
- soil types
- grading, landscaping, drainage and stormwater retention plans
- measures to control erosion and sedimentation

- ❑ proposed and future buildings, septic system, conveyors, pipelines, parking and access locations
- ❑ description of the development’s impact on existing views to and from the river
- ❑ opportunities for open space and public viewing of the Corridor

The City will also work with property owners and other jurisdictions to improve the habitat areas and natural communities identified in Figure 3.8-E.

In support of site plan review standards that may either be currently in place (Critical Area Ordinance) or be amended/added in the future, the following policies apply to site development in the Corridor:

1. Promote clustering of land uses;
2. Provide uninterrupted vegetated shoreline where practical;
3. Protect natural resources with preservation areas;
4. Encourage shoreline preservation and restoration;
5. Protect views from designated overlooks and develop new overlooks;
6. Establish a preferential order for increasing river crossing capacity;
7. Protect and restore wetlands;
8. Apply setback and height restrictions and encourage careful site design to maintain the ability to view the river from existing open space and developed areas;
9. Screen development to minimize its visibility from the river or opposite shore;
10. Maintain public access to the river. Increase access in new development and redevelopment projects;
11. Rehabilitate and adaptively reuse historic structures;
12. Encourage placing utilities underground; and
13. Encourage adoption of sustainable building practices.

## Critical Area Natural Resources and Water Management Policies

---

The following policies shall guide natural resource and water management practices within the Mississippi River Corridor of Rosemount:

1. Preserve scenic and environmentally sensitive areas of the Mississippi River Corridor, including: floodplains, wetlands, bluffs, steep slopes, natural drainage ways, significant vegetation and wildlife habitat;
2. Support the preservation and management of rare, unique, endangered and threatened plants and animals and prohibit any action that would reduce or degrade the habitat supporting such species;
3. Enforce the adopted minimum development standards as part of the Mississippi River Corridor District to minimize site disturbance and regulate the maximum amount of impervious surface allowed on each lot, setback from bluffline, placement of roads and parking areas, alteration of natural slopes, buffering and screening, and enforcement procedures;
4. Protect the visual quality and erosion impacts of new development by prohibiting clear-cutting of existing trees within the Shoreland District and minimize the removal of all vegetative cover within the Corridor; restoration shall use native vegetation;
5. Existing and future development shall preserve existing vegetation; additional buffering and screening shall be provided as part of the required landscaping plan for all development within the Mississippi River Corridor; and clustering of structures shall be encouraged;
6. Encourage property owners within the Mississippi River Corridor to replace diseased trees with new plantings and to introduce appropriate native vegetation on steep slopes to control erosion, all in cooperation with other agencies that address reforestation;
7. Minimize the impact on wildlife, vegetation, beaches and riverbanks of barge terminals, pipes, conveyors, and other physical barriers and improvements that connect barges to upland buildings;
8. Prohibit development on slopes greater than 18 percent, and allow development on slopes 12-18 percent only if there are not reasonable alternatives; development of slopes 12-18 percent shall be controlled and managed to minimize any adverse impact on the environment;
9. Enforce the Water Resources Management Ordinance and Shoreland Management Ordinance to ensure that the river, wetlands, ponding areas, and natural drainage courses are managed, protected and restored;
10. Encourage existing and future development to minimize direct runoff and improve runoff quality;
11. Prohibit the construction of on-site sewer systems in areas having severe or very severe soil limitations for such systems except where alternative systems can be designed and maintained;

12. Protect and improve native vegetation along beaches, riverbanks, and natural drainage areas to improve water quality and prevent erosion;
13. Work to ensure that developments within the Mississippi River Corridor assess and minimize adverse effects and maximize beneficial effects on the environment;
14. Work with MPCA and others to monitor, prevent, and mitigate environmental and water quality impacts on the Mississippi River from site activities, including on-site septic;
15. Pursue joint ventures with industrial property owners to provide educational and recreational opportunities along the river;
16. Support Dakota County in efforts to protect natural resources, such as wildlife, plants, water quality and floodplain areas of Spring Lake Park;
17. Support Flint Hills Resources' efforts toward groundwater corrective measures as identified in the 1998/99 Koch Refinery Groundwater Risk Evaluation/Corrective Measures Study;
18. Evaluate potential noise and visual impacts before making decisions to expand or locate barge operations;
19. Reduce the use of chemicals for fertilizer and pest control in agricultural and residential areas and on public lands, which would support sustainable land treatment activities and integrated pest management practices; and
20. Encourage ongoing efforts to clean up corridor lands that are adversely affecting or could adversely affect the river environment, such as landfill sites that are leaking, sites that could present a hazard to public safety, or sites that could delay recreational or other desired uses of the corridor.

## Critical Area Transportation and Utility Plan

---

As with the proposed land use elements, the proposed transportation and utility systems do not significantly differ from existing conditions. The City currently has no major infrastructure improvements planned for the Mississippi River Corridor area. Trails are discussed in the recreation element of the Land Use section.

### **Roadways**

No short-term changes from the existing conditions are planned. A realignment of County Road 42 with State Highway 55 is identified in a draft County Highway 42 Corridor Study. If implemented, Highway 55 may be turned back to the City or County with a possible north/south realignment in the Critical Corridor as a frontage road directly east of Highway 52 (See Figure 3.8-F). Private roadways are permitted within the industrial area for service and emergency access, and materials transport. These will be constructed on an as-needed basis, subject to City Ordinances (Note: roadways, pipelines, conveyors and utilities area

generally permitted to traverse slopes in excess of 12% if no feasible alternatives exist.) All changes made to public roadways may be permitted after review and approval is made by appropriate agencies based on the policies stated in Sections 3.8.7 and 3.8.9.

### **Railways**

No major changes are anticipated. Expansion of these facilities may be permitted after review and approval is made by appropriate agencies based on the policies stated in Sections 3.8.7 and 3.8.9.

### **Water Transportation**

No changes in commercial or recreational boating are anticipated.

### **Utilities**

No major changes are anticipated. Any new utility lines should be placed underground or utilize existing utility corridors.

## **Critical Area Transportation and Utility Policies**

---

The City supports the following policies in relation to transportation and utilities:

1. Route new utility crossings along existing utility corridors;
2. Place new and existing utilities underground whenever possible;
3. Locate future utility transmission lines within existing right-of-way;
4. Continue to support the utilization of the river for commercial and recreational needs;
5. Work with the U.S. Army Corps of Engineers, DNR and other agencies to accommodate barge traffic and minimize conflict between commercial and recreational uses; and
6. Site, design, and construct future roadways, railways, utilities and other improvements that are consistent with the City's Critical Area plan and ordinances, provide safe pedestrian crossings, enable reasonable use of land between the river and the transportation facility, and do not stimulate incompatible development.

## **Cultural and Historic Resources**

---

Although the historic village of Rosemount was established outside the river corridor, the Mississippi River corridor includes areas of historic and cultural importance to Native Americans and European settlers. MNRRA identifies cultural resources as including historic sites and structures, archaeological and ethnographic resources and cultural landscapes of local, state, national or Native American significance. The most well known site in Dakota County's corridor is the Kaposia Village, which once included 100 members of the Dakota Tribe and twenty lodges formed in 1838. In addition to sites identified at the State Historic Preservation Office (SHPO), other cultural resources may not yet be identified or evaluated.

Most protection of cultural and historic resources depends on local ordinances. Although Rosemount does not have a protection program in place, it will further investigate the need to participate in programs (i.e., Certified Local Government Program through SHPO) to carry out the following policies:

1. Protect the integrity of cultural resources, including, but not limited to, historic sites and structures, archaeological resources, and cultural landscapes;
2. Where possible, continue historic uses or adaptively reuse historic properties and encourage appropriate investment in preservation and rehabilitation;
3. For projects that have site plan review, require identification of cultural resources and a plan to protect and/or mitigate impacts to those resources in consultation with appropriate agencies or organizations; for projects that require an EAW, consider SHPO comments;
4. Consult with the Dakota County Historical Society and SHPO, including the Native American advisory group, on the value and methods of protecting cultural resources that are identified in the river corridor; and
5. Work with the National Park Service to document and interpret the importance of cultural resources within the river corridor.

## Implementation Program

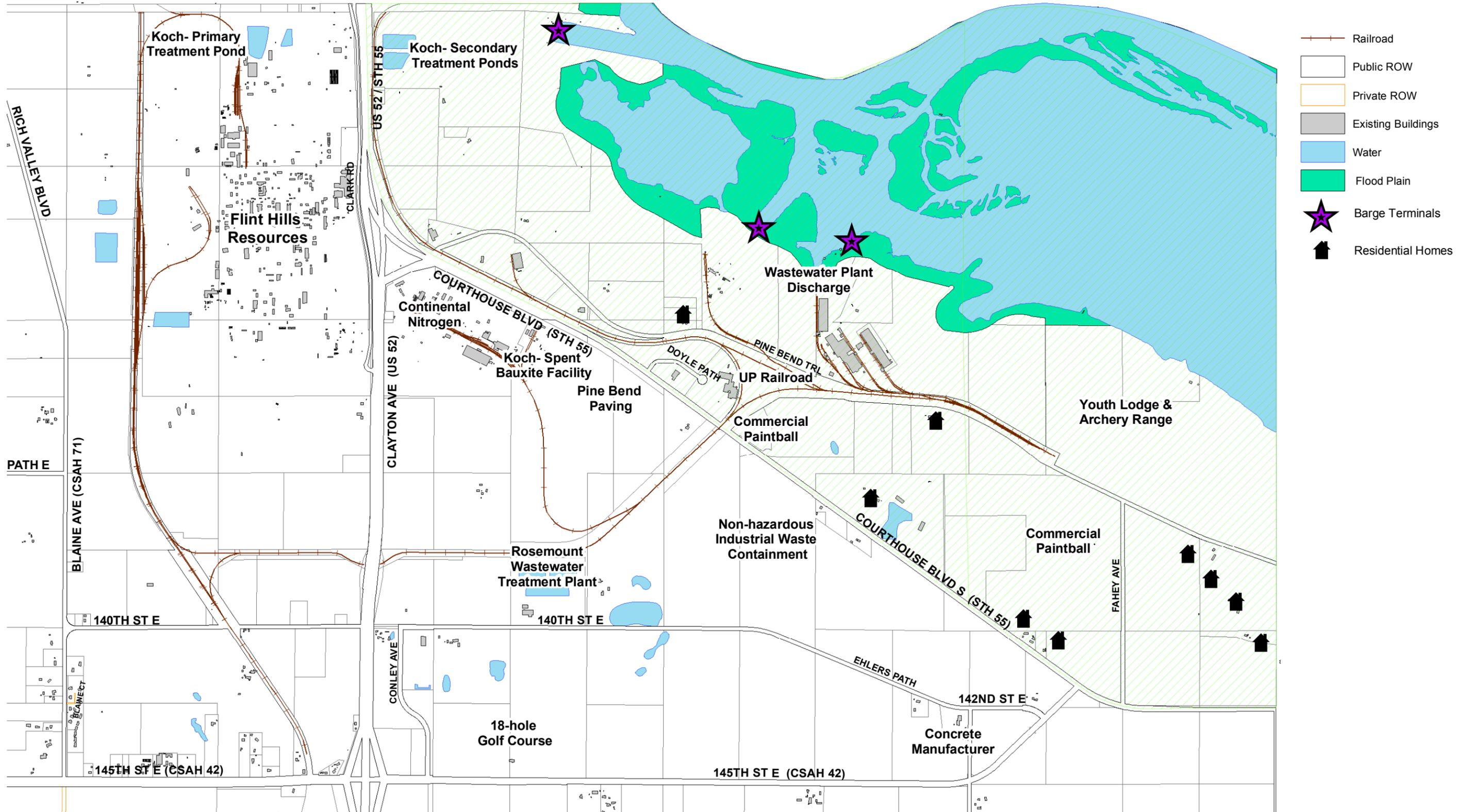
---

The Implementation Program includes this Plan, the Mississippi River Corridor Critical Area Ordinance, and a Capital Improvements Plan. Implementation will require cooperation among the many agencies having jurisdiction within the Mississippi River Corridor as well as City residents living within the area. In order to implement the Plan, the City of Rosemount will take the following actions:

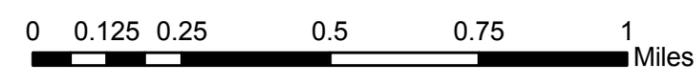
1. Adopt the Mississippi River Corridor Plan as an element of the Comprehensive Plan;
2. Amend the Critical Area Ordinance to reflect the new Mississippi River Corridor standards;
3. Distribute the Mississippi River Corridor Plan to other agencies and industries working in Rosemount;
4. Cooperate with MnDOT, Dakota County, Inver Grove Heights, and Nininger Township in the development of the identified trail connections, in the mitigation of impacts during road construction or realignment, and the consideration of pedestrian access to the river and to trails;
5. Develop materials to educate and promote the economic importance, history, natural resources and recreation opportunities in the Mississippi River Corridor;

6. Forward all development plans requiring discretionary action (i.e. variances, conditional use permits) to the DNR, prior to taking action on each application;
7. Incorporate local capital improvements within the Mississippi River Corridor into the City's overall Capital Improvement Program. The Capital Improvement Program will be updated every two years in accordance with the Metropolitan Land Planning Act. After the Capital Improvement Plan is completed, it will be forwarded to the appropriate agencies with jurisdiction over the Mississippi River Corridor. Capital improvement projects shall be consistent with Critical Area standards and guidelines and the policies for river protection and enhancement that are adopted in this plan;
8. Work with the DNR, NPS and Flint Hills Resources on strategies to protect woodlands as identified on Figure 3.8-F and to provide for scenic or public access; and
9. Work with the Dakota County Historical Society and State Historic Preservation Office to preserve and protect historic and/or cultural resources and landscapes (e.g., Kaposia Village site) in consultation with affiliated Native American and other groups.

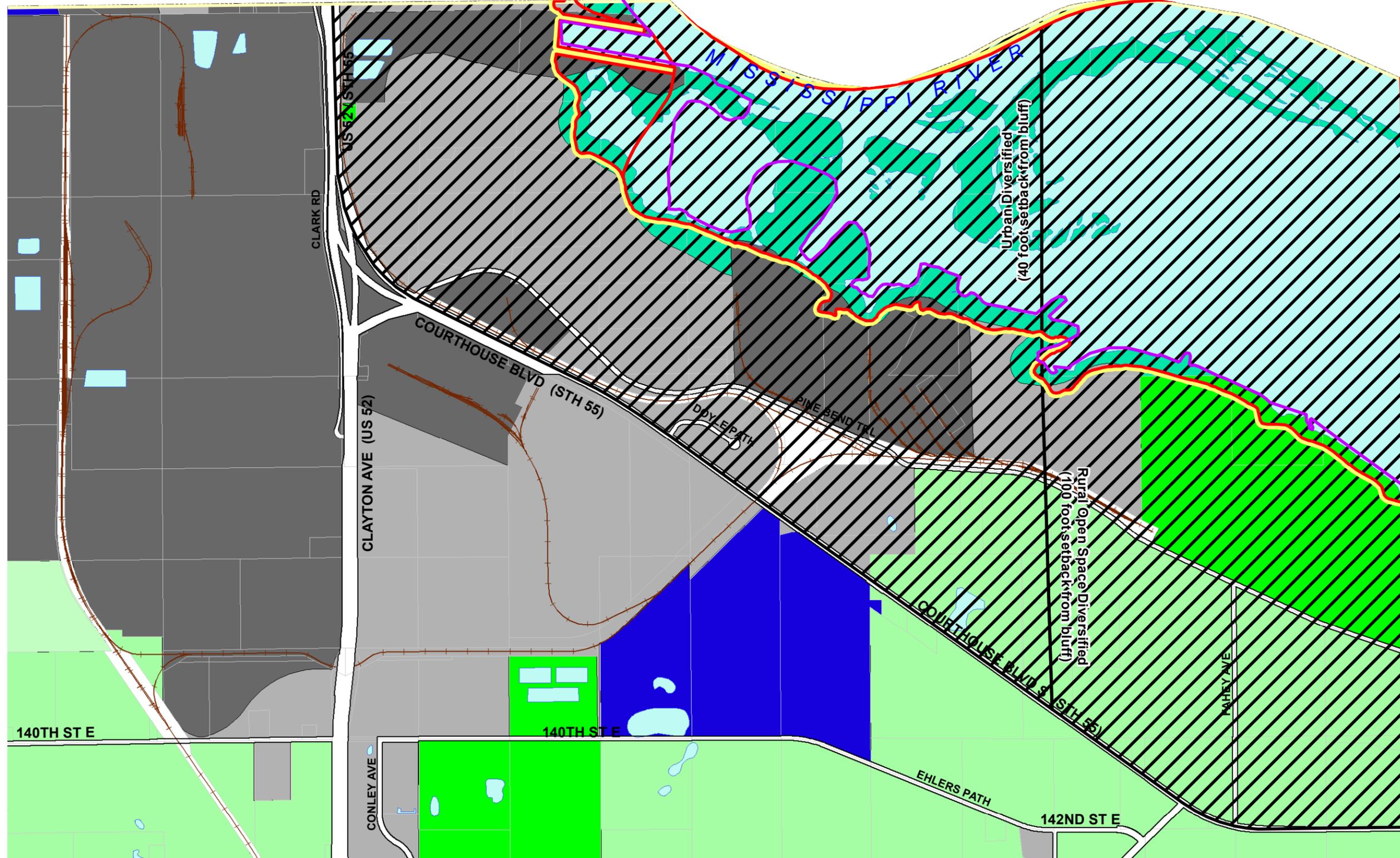
# Figure 3.8-A Dominant Land Uses



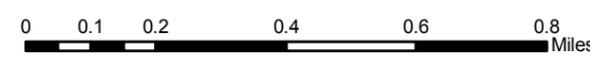
- Railroad
- Public ROW
- Private ROW
- Existing Buildings
- Water
- Flood Plain
- Barge Terminals
- Residential Homes



March 2009

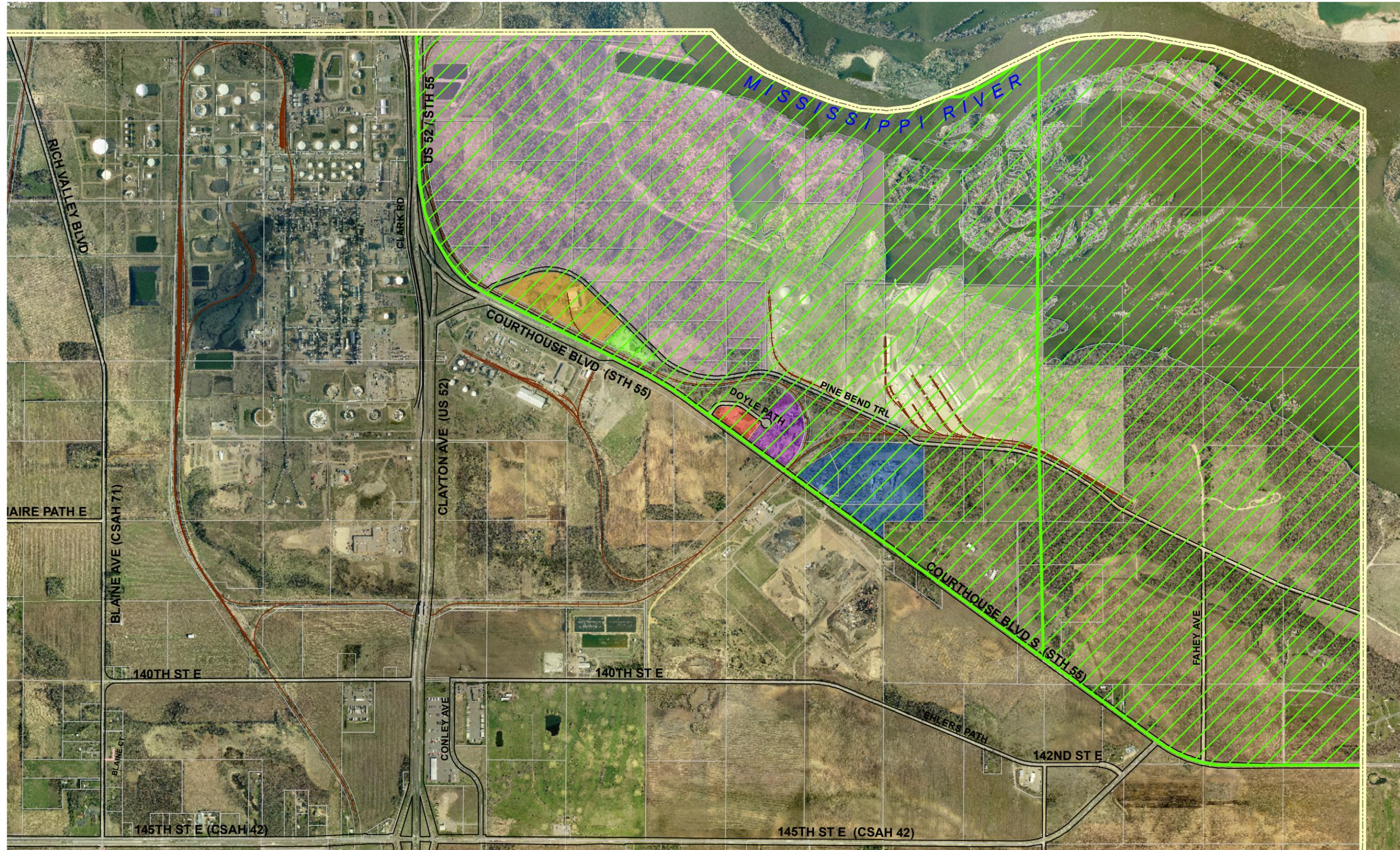


- Legend**
- City Boundary
  - Parcels
  - Regulated Bluff - 18% slope or greater
  - MNRRA Corridor
  - OHWL - 686 feet
  - 100 year Floodplain
  - Shoreland District
  - Public Right-of-Way
  - Private Right-of-Way
  - Railroad
- Zoning**
- Industrial:**
- BP - Business Park
  - IP - Industrial Park
  - GI - General Industrial
  - HI - Heavy Industrial
- Other:**
- AGP - Agricultural Preserve
  - AG - Agricultural
  - PI - Public/Institutional
  - FP - Flood Plain
  - WM - Waste Management
  - W - Water
  - ROW - Right-of-Way



March 2009

This map to be used for discussion purposes only. This map does not substitute the Flood Insurance Rate Map for this area. Accuracy of Ordinary High Water Level (OHWL = 686.7) based on 2 foot contour data provided by Dakota County. Actual slopes must be determined on a site by site basis. Parcel information provided by Dakota County.



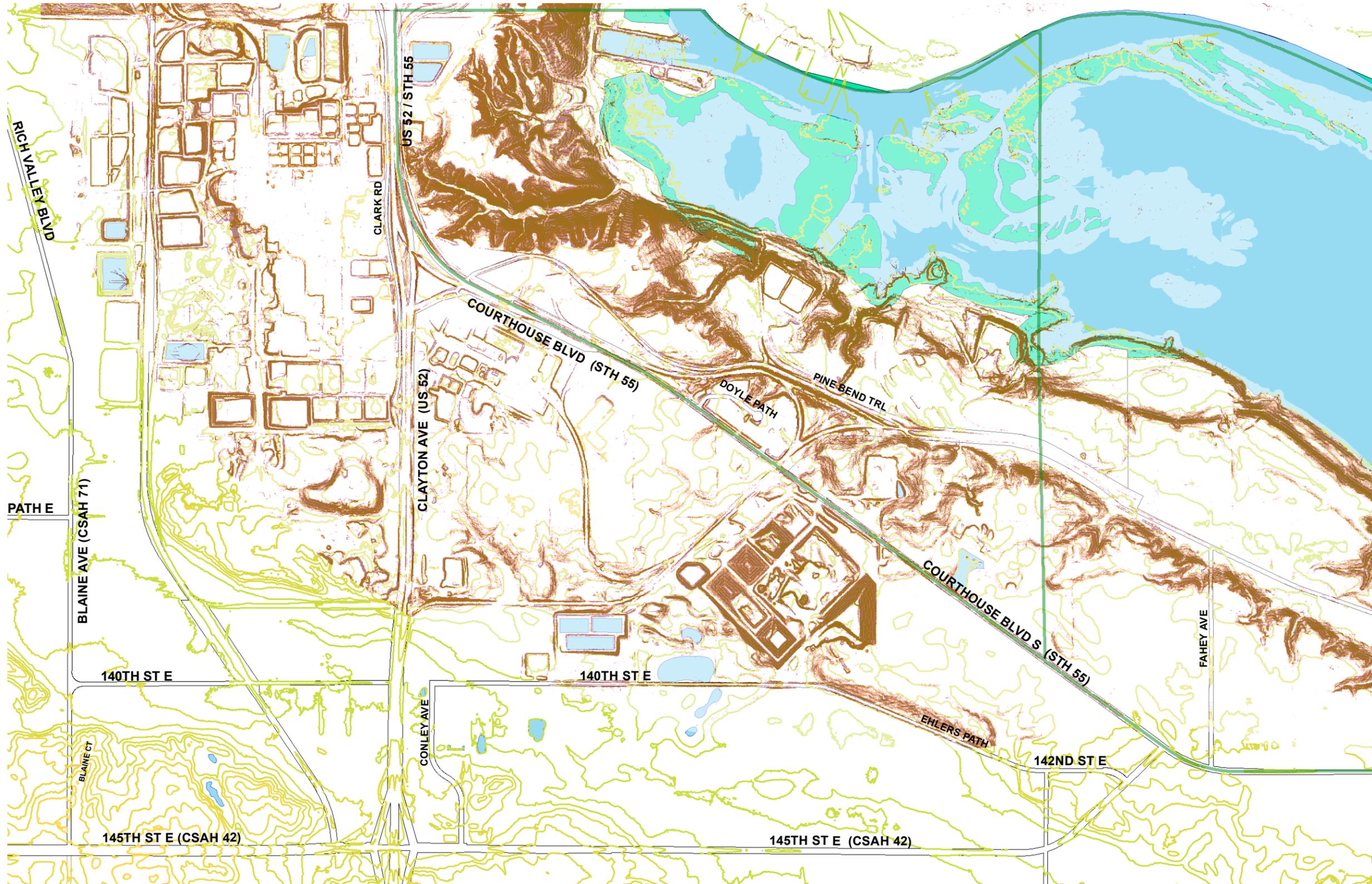
- Legend**
- City Boundary
  - MNRRA Corridor
  - Public Right-of-Way
  - Private Right-of-Way
  - Railroad
  - Parcels
  - Endres Properties
  - Spectro Alloys Coporation
  - Dahn Construction
  - Walbon Partnership
  - Dixie Petro Chemical
  - Flint Hills Resources
  - CF Industries

0 0.125 0.25 0.5 0.75 1 Miles

Aerial photography provided by Pictometry (2008). Parcel information provided by Dakota County.

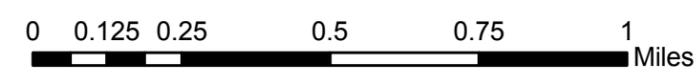
March 2009

# Figure 3.8-D Topography and Slopes



- Mississippi River Critical Area
- Parcels
- Slope from 12% to 18%
- Slope greater than 18%
- Water
- Flood Plain

- Contours**
- 690 - 760
  - 761 - 860
  - 861 - 912
  - 913 - 952
  - 953 - 1030



March 2009

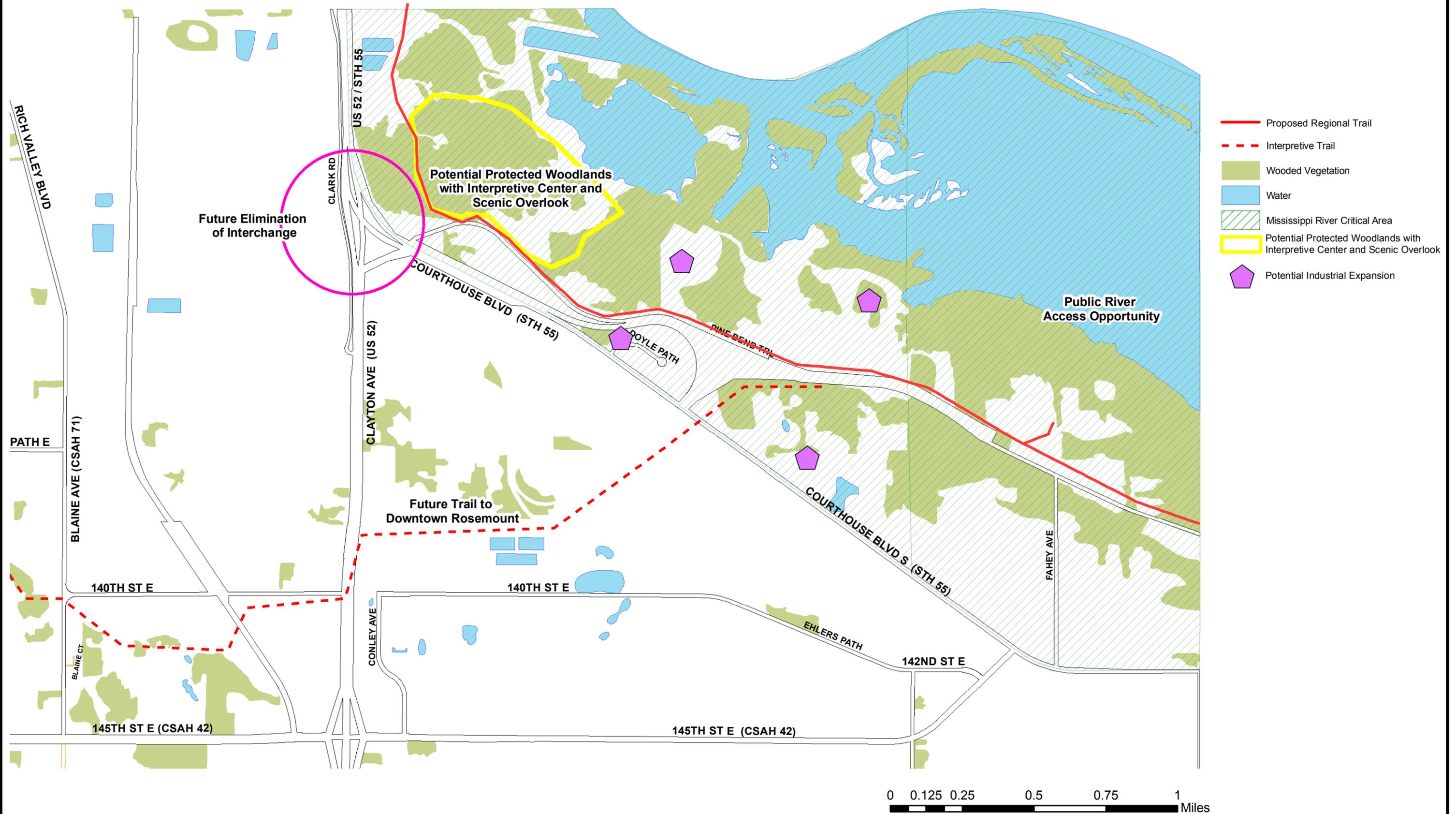
FILE: //snap2/share1/GIS/City/Maps/Departmental Maps/CommunityDevelopment/Jason/2008 Topo and Slope.mxd

# Figure 3.8-E Natural Resources



March 2009

# Figure 3.8-F Mississippi River Corridor Plan



March 2009