South Sioux City, NEBRASKA

Quality of Life...
A Cardinal Rule

1,769 ACRES

South Sioux City

comprehensive needs assessment

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General Site Information

- The site area is +/- 1,780 acres.
- The site boundaries are as follows:
  - Northern Boundary: Interstate 129
  - Eastern Boundary: C Avenue
  - Southern Boundary: Dakota City
  - Western Boundary: E Avenue and the Old Crystal Lake
- Currently there are approximately 362 acres that have been or are being developed. Industries that are located within the site are Beef Products Inc. *(BPI)*, CHS, Omega Industries, Richardson Milling, Tyson Foods, and Big Ox Energy.
- Of the remaining 1,408 acres, 1264 acres are undeveloped with the remainder dedicated for transportation Right Of Way.
- The undeveloped land parcels are owned by separate entities. The City of South Sioux City currently contains options on select properties.
- A site location map is included in the appendix of this report.

Site Topography and Floodplain Information

- The site is generally flat. The developed areas mostly drain to Old Crystal Lake via the City of South Sioux City's storm sewer system.
- A review of the current Federal Emergency Management Agency *(FEMA)* floodplain maps has been performed on the site. None of the site is within a Special Flood Hazard Area.

Wetlands Information

Construction activities that affect wetlands should be given special consideration. Wetlands have the potential to be classified as Waters of the State or Waters of the United States. Wetlands that are determined to be Waters of the United States *(jurisdictional)* are subject to review by the Army Corps of Engineers. Major impacts to existing wetlands that are jurisdictional must be permitted and will typically have a review period with the Corps of Engineers *(six-to-nine months)*. The permit requires specific mitigations of the wetland disturbance that can potentially affect site development.

- A search was performed of the National Wetlands Inventory (NWI).
- There are no wetlands shown for the site.

The NWI map does not always accurately depict the existing condition of wetlands. Olsson Associates recommends that wetland delineations be performed on land parcels to more accurately evaluate the condition of any

wetlands that may exist. Once the delineation is complete, the impacts to the property and the potential development of the parcels can be more fully known.

Soils Information

Information for this section is forthcoming.

Environmental

Information for this section is forthcoming.

Utility Infrastructure Information

The subject property underwent a review of existing utility infrastructure, showing where existing public and private utilities are located. All maps depicting findings are included within this report.

The following forms of utility infrastructure have been assessed, and the findings are as follows:

Sanitary Sewer

- The wastewater collection system is operated by the City of South Sioux City.
- The wastewater is treated by the City of Sioux City, Iowa at the Sioux City Regional Wastewater Treatment Facility.
- All sites can be currently served with existing sanitary sewer mains.
- Average daily usage of the City's wastewater system is 1.5 - 1.8 MGD.
- Capacity information regarding the existing wastewater system is forthcoming.
- Discharging industrial development effluent may require pre-treating the wastewater to remove certain industrial by-products before discharging to the public sanitary sewer system.

Public Water

- The public water system is owned and operated by the City of South Sioux City.
- The City operates 2 water treatment plants and buys supplemental water from the City of Sioux City, Iowa.
- The City's water system has a capacity of 6.5 MGD.
- The City has four 250,000 gallon water towers.
- All sites are served off of 12-inch or 16-inch mains.

- All sites can be currently served with the existing water infrastructure.
- Industrial development on this site should be designed considering maximum allowable pressure and flow.

Stormwater

- The area to generally flat and mostly drain to the roadway ditches.
- The existing storm sewer system carries water to the Missouri River and the Crystal Lake Bed on the northwest side of the Roth Industrial Park.
- Proposed industrial users should design their developments such that the existing drainage patterns would not be adversely affected.
- Large industrial developments should be prepared to provide on-site stormwater detention to minimize the impacts of increased impervious area and increased stormwater runoff.

Electrical Service

- The City of South Sioux City and NPPD own the electrical distribution system.
- NPPD supplies service to the City of South Sioux City and existing industries in the Roth Industrial Park.
- There are 2 substations within the Roth Industrial Park.
- A preliminary layout should be prepared and reviewed with NPPD to determine the specific requirements and capabilities to provide electrical service to the project site.

Gas Service

- MidAmerican Energy operates the local natural gas supply system.
- Northern Natural Gas currently has 3 high pressure gas mains that run through the site.
- Gas service could be readily extended to potential industrial users on the site.
- A preliminary layout should be prepared and reviewed with MidAmerican Energy or Northern Natural Gas officials to determine the specific requirements and capacities to provide gas service to the project site.

Telecommunications

Long Lines

- Fiber currently runs to the various sites.
- Can provide cable TV, internet, and phone service through its fiber

optic network.

Century Link

• Currently provides telephone and internet service to the Roth Industrial Park.

CableOne

- Can provide cable TV, internet and phone service.

Transportation Infrastructure Information

Roadway Infrastructure

- US Highway 75 and US Highway 77 run through the Roth Industrial Park on the western side.
- Interstate 129 is located on the northern edge of the Roth Industrial Park and can be accessed from US 77/75 of Dakota Avenue.
- Interstate 29 is located 3.1 miles east of Roth Industrial Park.

Railroad Infrastructure

- Burlington Northern Santa Fe Railway has the existing mainline track that runs north/south through the Roth Industrial Park.
- Union Pacific owns an industrial track through the Roth Industrial Park and shares a trackage agreement with BNSF so that they can get to their rail yard in Sioux City, Iowa.

Zoning & Land Use

- The Roth Industrial Park is within the zoning control of the City of South Sioux City and the City of Dakota City.
- Site land uses are controlled by the following governing documents:
  - City of South Sioux City Comprehensive Plan 2009
  - City of South Sioux City current Zoning Ordinance
  - Dakota City current Zoning Ordinance
- The following existing land uses are found in the Roth Industrial Park:
  - Heavy Industrial
  - Medium Industrial
  - Heavy Commercial
  - Light Commercial
  - Agricultural

General Overview

The Roth site is strategically located at the convergence of three primary routes owned and operated by the two largest Class I railroads — Burlington Northern Santa Fe *(BNSF)* and Union Pacific Railroad *(UPRR)*. As more specifically depicted in the attached rail map:

- The north/south mainline crossing Highway 20 *(I-129)* is UPRR's Dakota City Industrial Lead. This route is an industrial rail-serve route terminating at the south end of the Tyson plant at Pine Street. This relatively low-traffic route operates at 10 mph and is classified on the UPRR network as a "Controlled Access" route.
- The east/west mainline crossing Highway 77 was formerly owned by Nebraska Northeastern Railroad *(NENE)* and recently acquired by BNSF. This route is an industrial rail-serve route terminating in approximately 114 miles west at O'Neill, Nebraska. According to the Federal Railroad Administration *(FRA)*, this is a low-volume route operating at 10 mph.
- The north/south mainline adjacent to Dakota City is BNSF's Sioux City Subdivision. This major route continues south to Fremont, Nebraska and diverges to major BNSF coal routes and other primary networks spanning coast to coast throughout the United States. According to FRA records, this primary route carries moderate rail traffic *(11 trains per day)* with speeds of up to 50 mph.

Strengths and Opportunities

The Roth site presents several unique characteristics appealing to rail-serve industrial development. The following summarizes some of the most notable features:

- Location, location, location! As previously mentioned, the Roth site is positioned at the convergence of three primary Class I routes with moderate volume of rail traffic. This carries several advantages not often found with most other rail-serve sites:
  - Moderate railcar volume allows for additional rail traffic and congestion does not and overwhelmingly hinder additional arrival/departure traffic.
  - Accessibility and service is readily achievable from numerous states/regions, which is ideal for arrivals and departures from several different locations.
  - Competing Class I railroads often times encourages more competitive pricing, which is favorable to rail-serve owners/operators.
  - Close proximity to mainline and industrial lead tracks provides flexibility and convenience to servicing Class I operations due to the limited haul distance. This is favorable for both the servicing railroad and site owner/operator with regards to delivery costs, operations, and scheduling.

- Close proximity to Dakota City, South Sioux City, Sioux City South, Sergeant Bluff, developments, and businesses provide valuable resources such as utilities, infrastructure, workforce, and potential sources of funding often necessary for industrial site development and sustainability.
- According to FIRM/FEMA records, the Roth site is situated in an open area outside of regions categorized as being a floodway or floodplain, which is favorable for railcar service, storage, and handling of materials.
- The surrounding roadway network provides convenient access to the site for staff and rail-serve users for loading/unloading operations and distribution. Specifically, access to Highway 75 is ideal for freight transportation.

Constraints and Challenges

The Roth site offers many advantages, but unfortunately also carries the following challenges, which may hinder rail-serve development:

- The adjacent roads are favorable for site access; however, rail/roadway crossings may be required to provide rail-serve capabilities. Road crossings are highly discouraged by servicing railroads due to numerous concerns, primarily safety and liability, along with associated costs required for warning devices, signalization, and maintenance. Agreements and permits are required with state, county, and other local authorities for the development and maintenance of any at-grade road crossing.
- Existing track geometry, existing roads, property boundaries, infrastructure, and other features will likely prohibit bi-directional rail accessibility. In other words, rail access will likely only be achievable from a single direction. Ideally, rail service providers prefer *(and sometimes require)* bi-directional access to a rail-serve facility.
- The land-use availability for proposed rail infrastructure may limit the length of track required to accommodate a unit train *(110+ railcars)*. While this is not an insurmountable obstacle, as many rail-serve users don't require delivery of unit trains, rail service providers prefer track length and storage adequate for unit train delivery. This requirement is typically dependent on Class I industrial track requirements and user needs.

Feasible Development

Several alternatives are available for providing rail-serve capabilities to the Roth site. Rail service is essentially contingent upon existing track geometry and other prohibitive factors. The attached rail map depicts two areas available for providing feasible rail service. Area 1 is located west of Highway 75 with rail access achievable from the east/west BNSF mainline along the north side of the property. Area 2, located east of Highway 75, provides a few options for rail accessibility with rail access achieved from the northern east/west BNSF mainline and/or from the north/south BNSF Sioux City Subdivision.

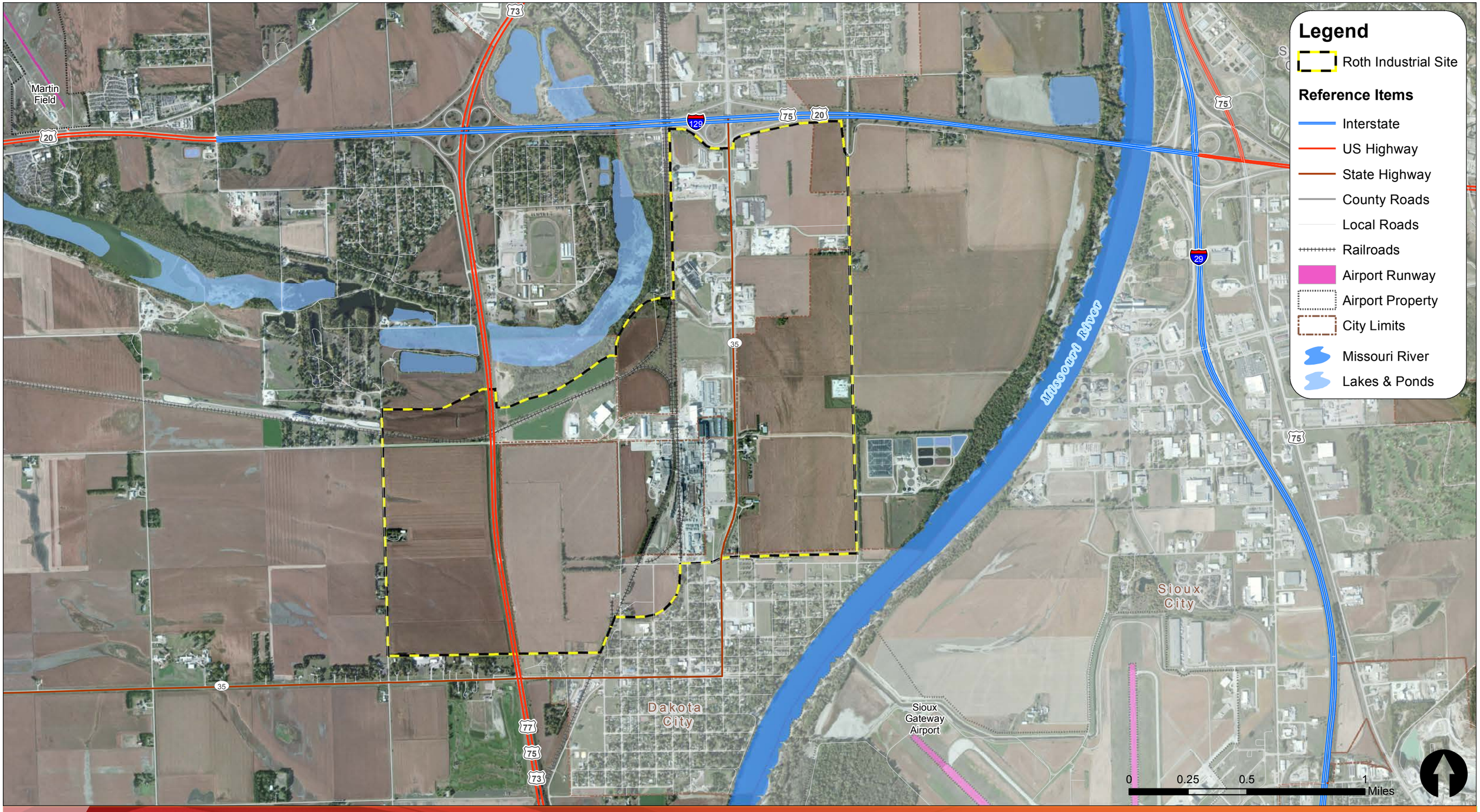
Area 1 is ideal for a north/south industrial lead track with single directional access from the BNSF mainline. Additional branch tracks and paralleling tracks can be constructed for loading/unloading, transload, or railcar storage. The number of tracks, storage length, and layout will be entirely dependent on user needs, BNSF requirements, and operations. Additionally, while it may not be necessary, it is recommended that trackage accommodate both arrival and departure cars for ease of serviceability and operations.

Area 2 is relatively larger in size and can likely accommodate a loop track layout with bi-direction access, which is ideal for serviceability and operations. The loop track layout allows a unit or manifest train to maintain connectivity during loading/unloading operations and the bi-directional access allows the servicing railroad to arrive or depart from the north or south. Several other layouts, including those previously recommended for Area 1, are available and can be catered to the needs of the owner/operator.

Both options will require at-grade road crossings or road closures, which may be prohibitive. Track layouts must meet BNSF industrial track standards and requirements and requires coordination, review, and approval by the BNSF during early stages of engineering design.

Summary

The Roth site has excellent rail-serve potential. While the subject property does have limitations, its proximity to existing adjacent trackage allows for evaluation of several track layouts and alternatives. Additionally, industrial track development is often contingent upon user needs and requirements. Careful planning and coordination is critical for successfully constructing and operating a rail-serve facility. Several considerations must be made during the early stages of planning and development including, but not limited to, track and site layout, safety, operations, maintenance, storage and handling of materials, security, land-use, access, and versatility.



SITE MAP

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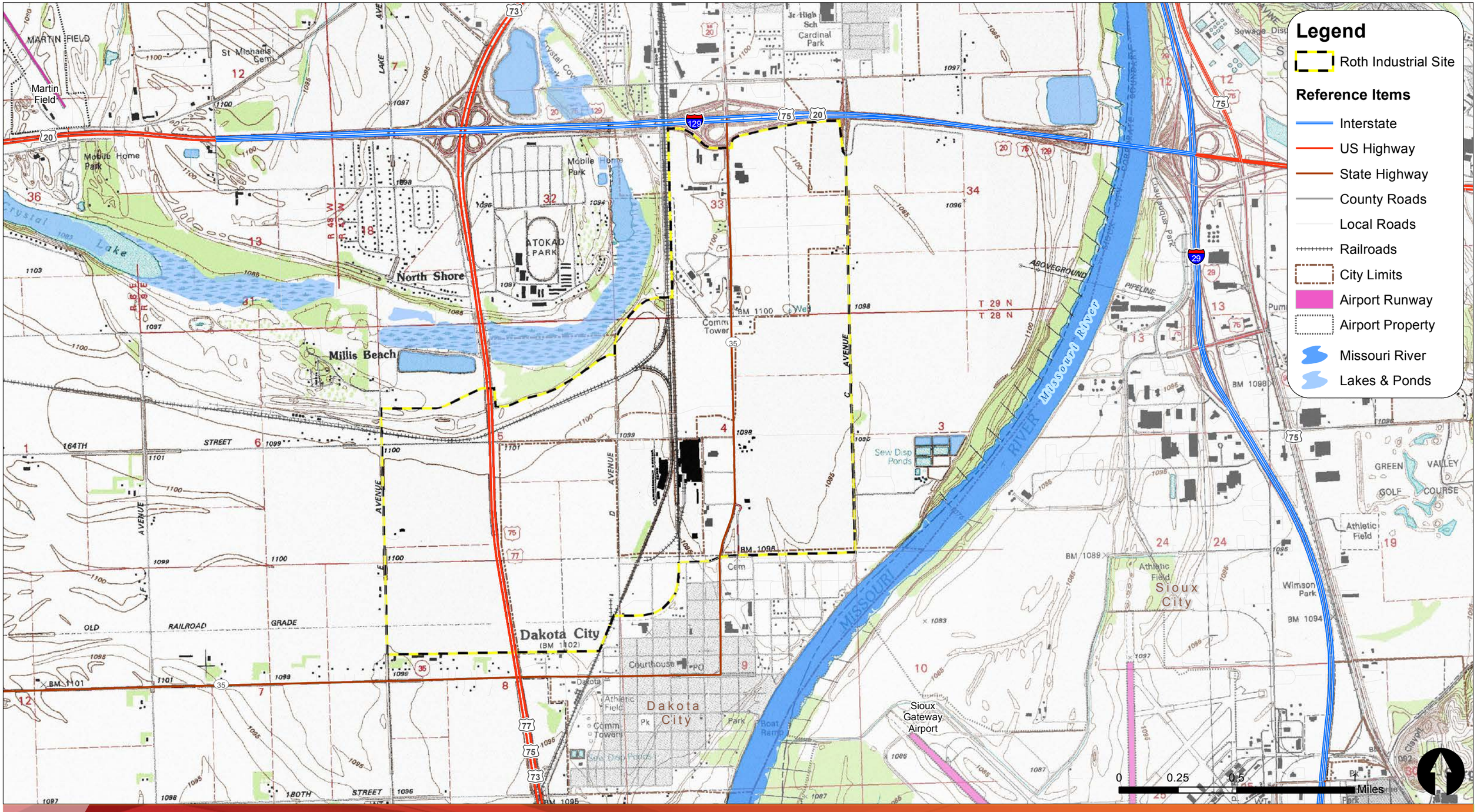

TOPOGRAPHIC MAP

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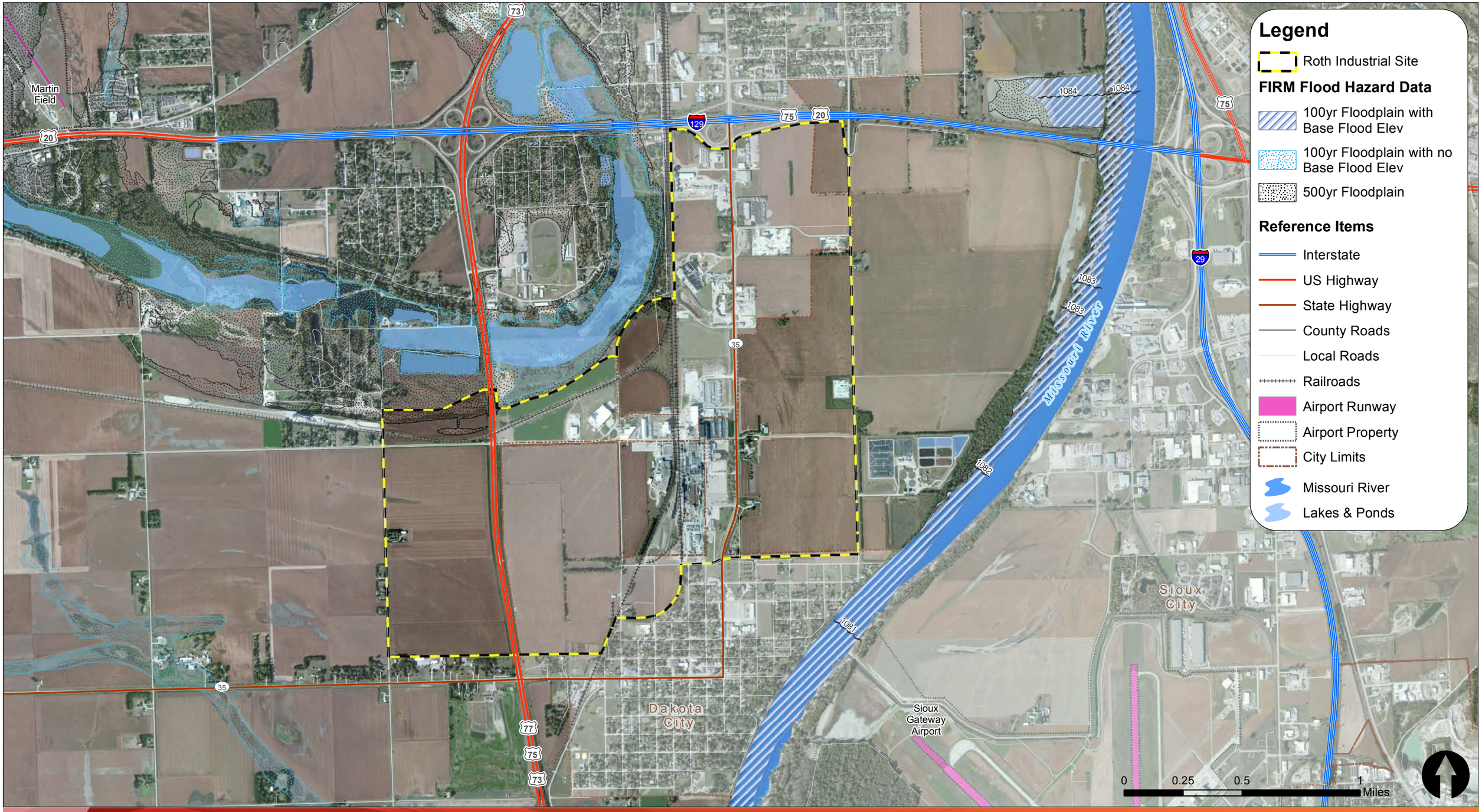

Legend

- Roth Industrial Site

FIRM Flood Hazard Data

- 100yr Floodplain with Base Flood Elev
- 100yr Floodplain with no Base Flood Elev
- 500yr Floodplain

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
- City Limits
- Missouri River
- Lakes & Ponds

FLOODPLAIN MAP

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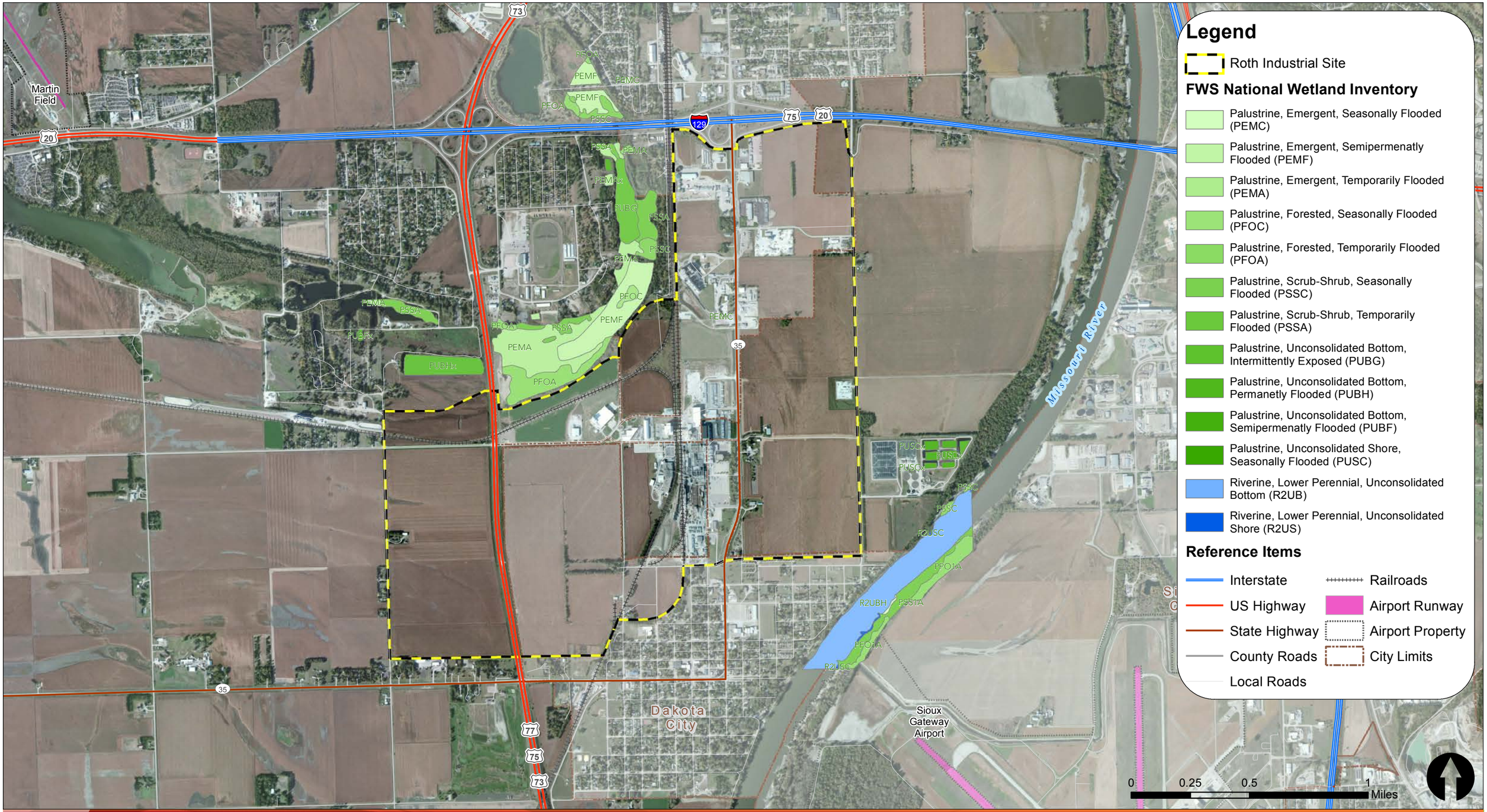

NATIONAL WETLANDS INVENTORY (NWI) MAP

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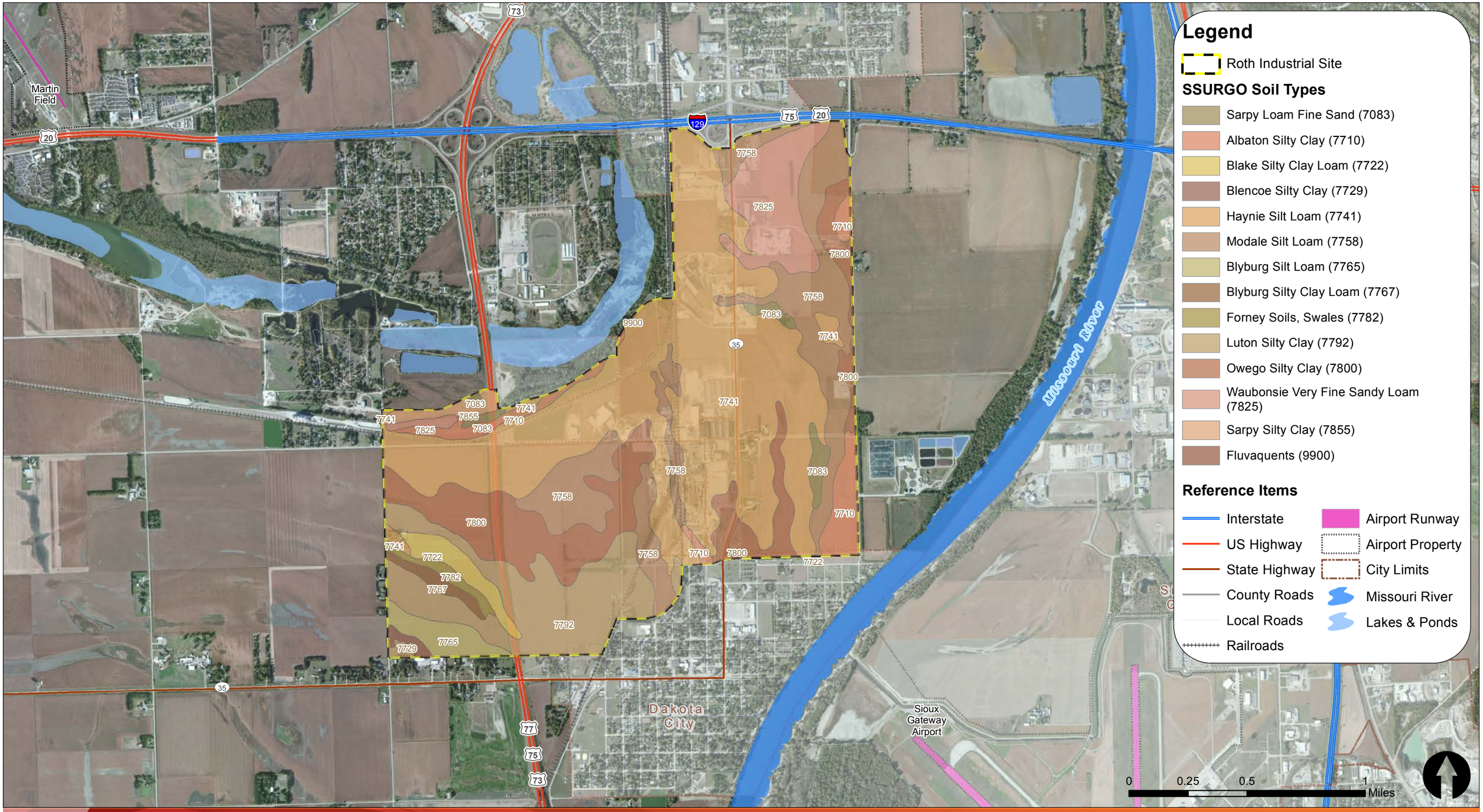

Legend

- Roth Industrial Site

SSURGO Soil Types

- Sarpy Loam Fine Sand (7083)
- Albaton Silty Clay (7710)
- Blake Silty Clay Loam (7722)
- Blencoe Silty Clay (7729)
- Haynie Silt Loam (7741)
- Modale Silt Loam (7758)
- Blyburg Silt Loam (7765)
- Blyburg Silty Clay Loam (7767)
- Forney Soils, Swales (7782)
- Luton Silty Clay (7792)
- Owego Silty Clay (7800)
- Waubonsie Very Fine Sandy Loam (7825)
- Sarpy Silty Clay (7855)
- Fluvaquents (9900)

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
- City Limits
- Missouri River
- Lakes & Ponds

SOIL MAP

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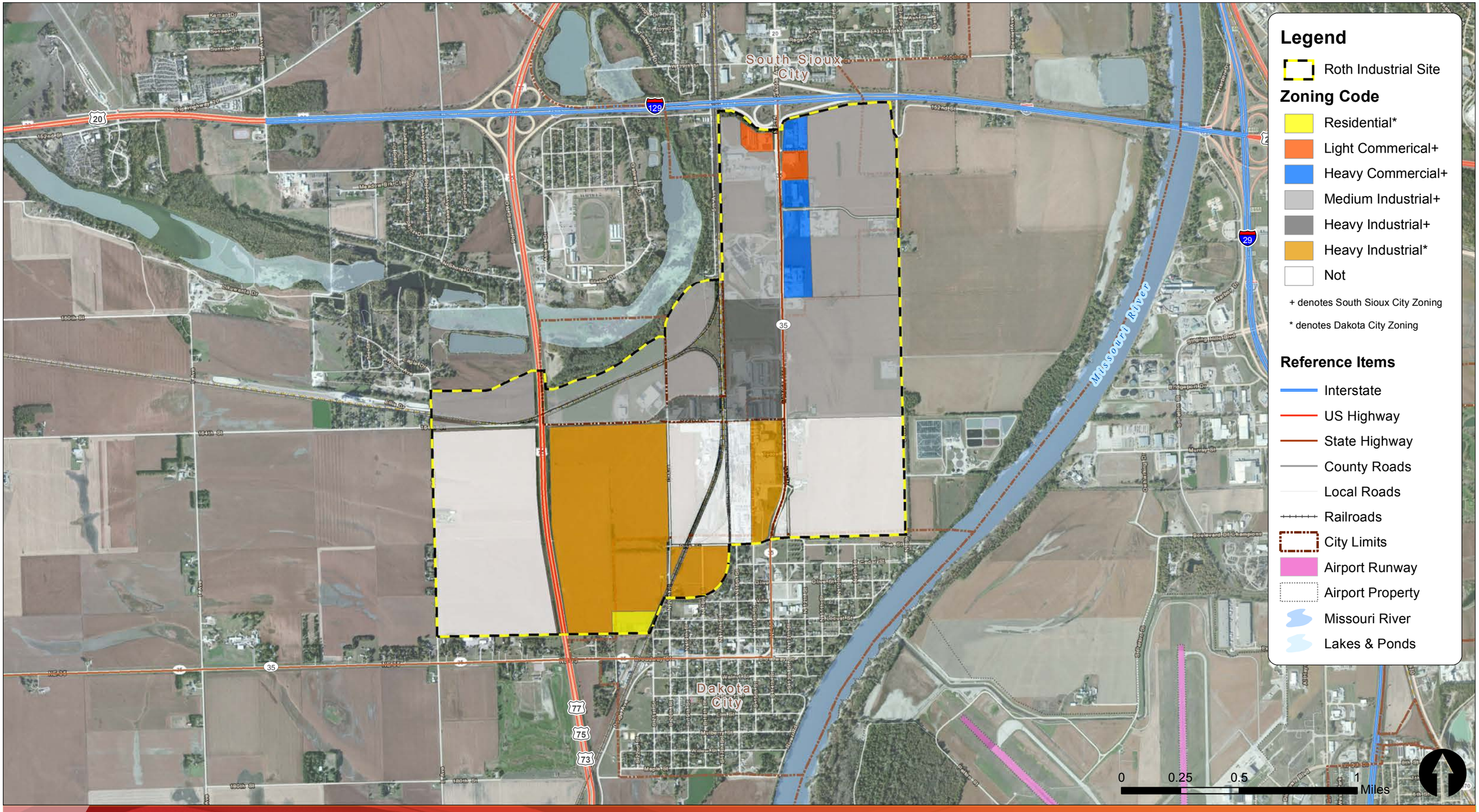

ZONING MAP

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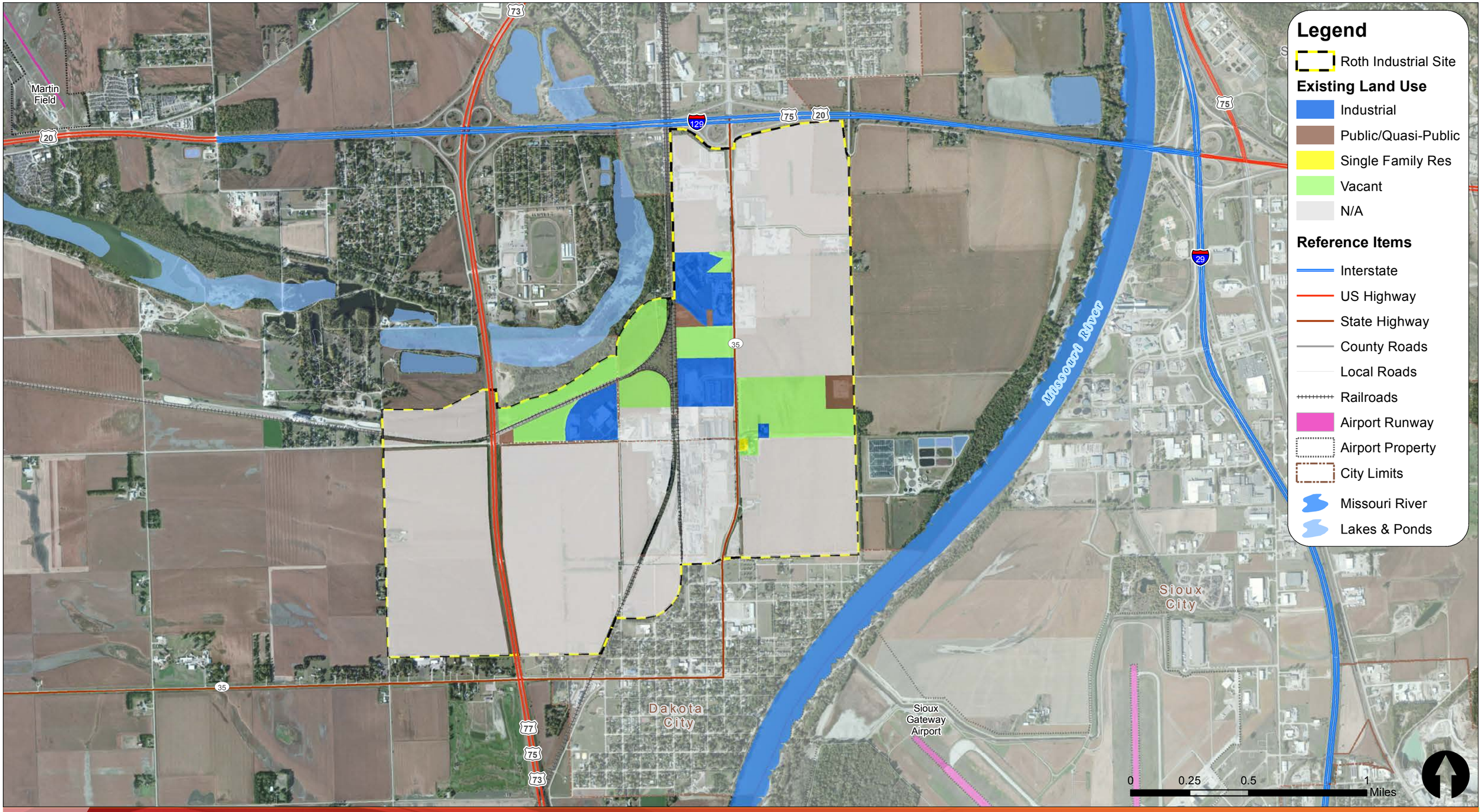

Legend

- Roth Industrial Site

Existing Land Use

- Industrial
- Public/Quasi-Public
- Single Family Res
- Vacant
- N/A

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
- City Limits
- Missouri River
- Lakes & Ponds

EXISTING LAND USE MAP

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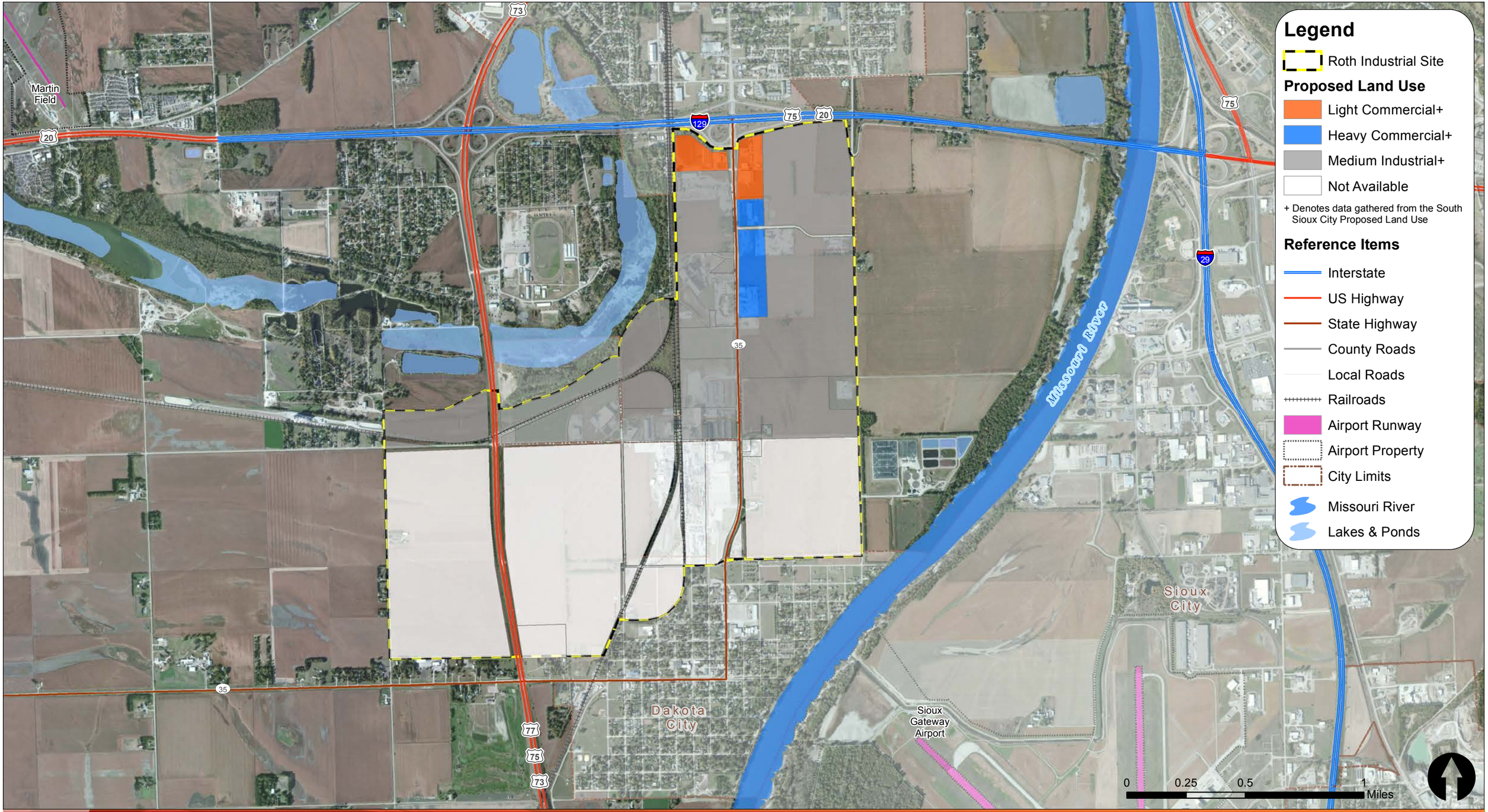

Legend

- Roth Industrial Site

Proposed Land Use

- Light Commercial+
- Heavy Commercial+
- Medium Industrial+
- Not Available

+ Denotes data gathered from the South Sioux City Proposed Land Use

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
- City Limits
- Missouri River
- Lakes & Ponds

FUTURE LAND USE MAP

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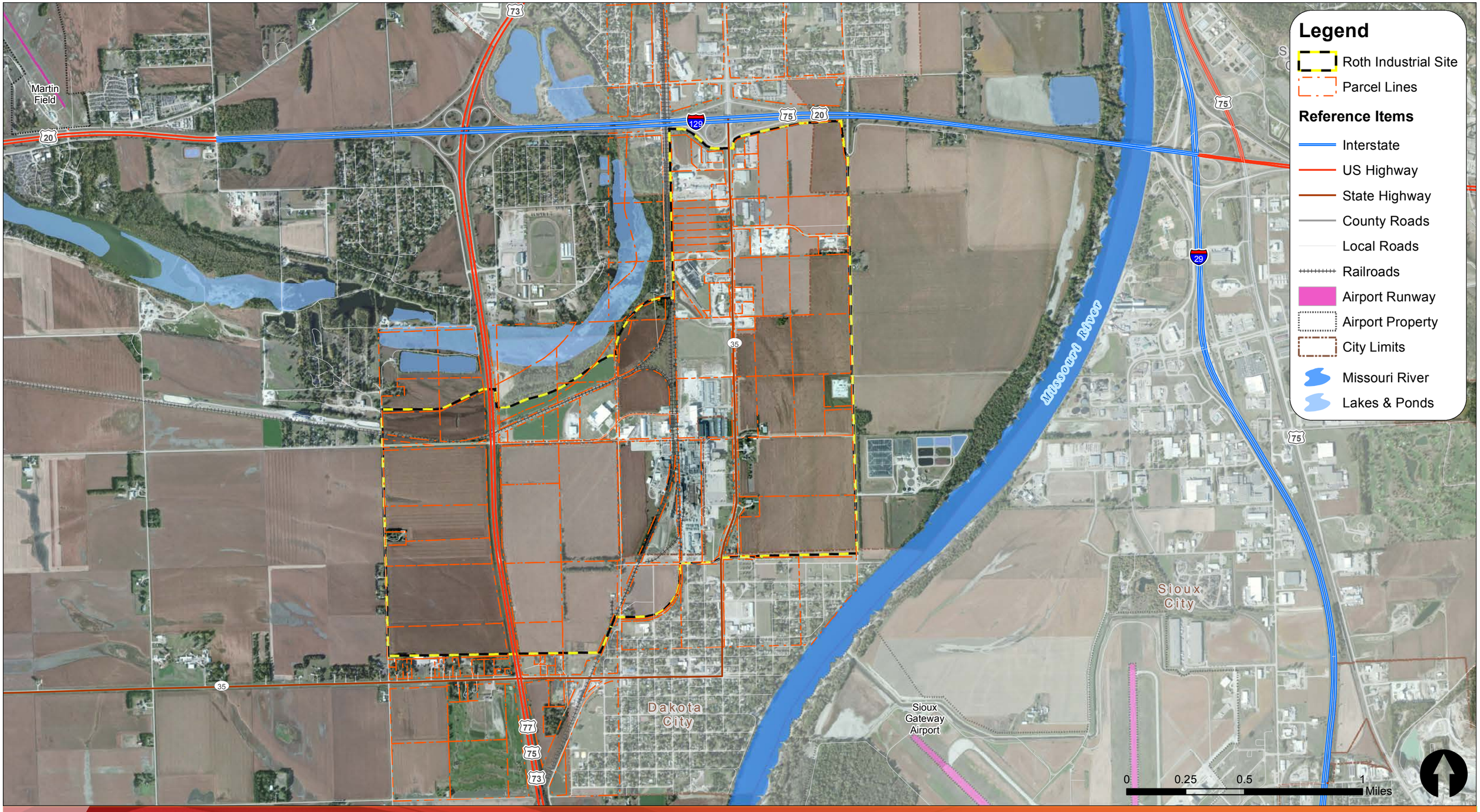

PROPERTY PARCEL MAP

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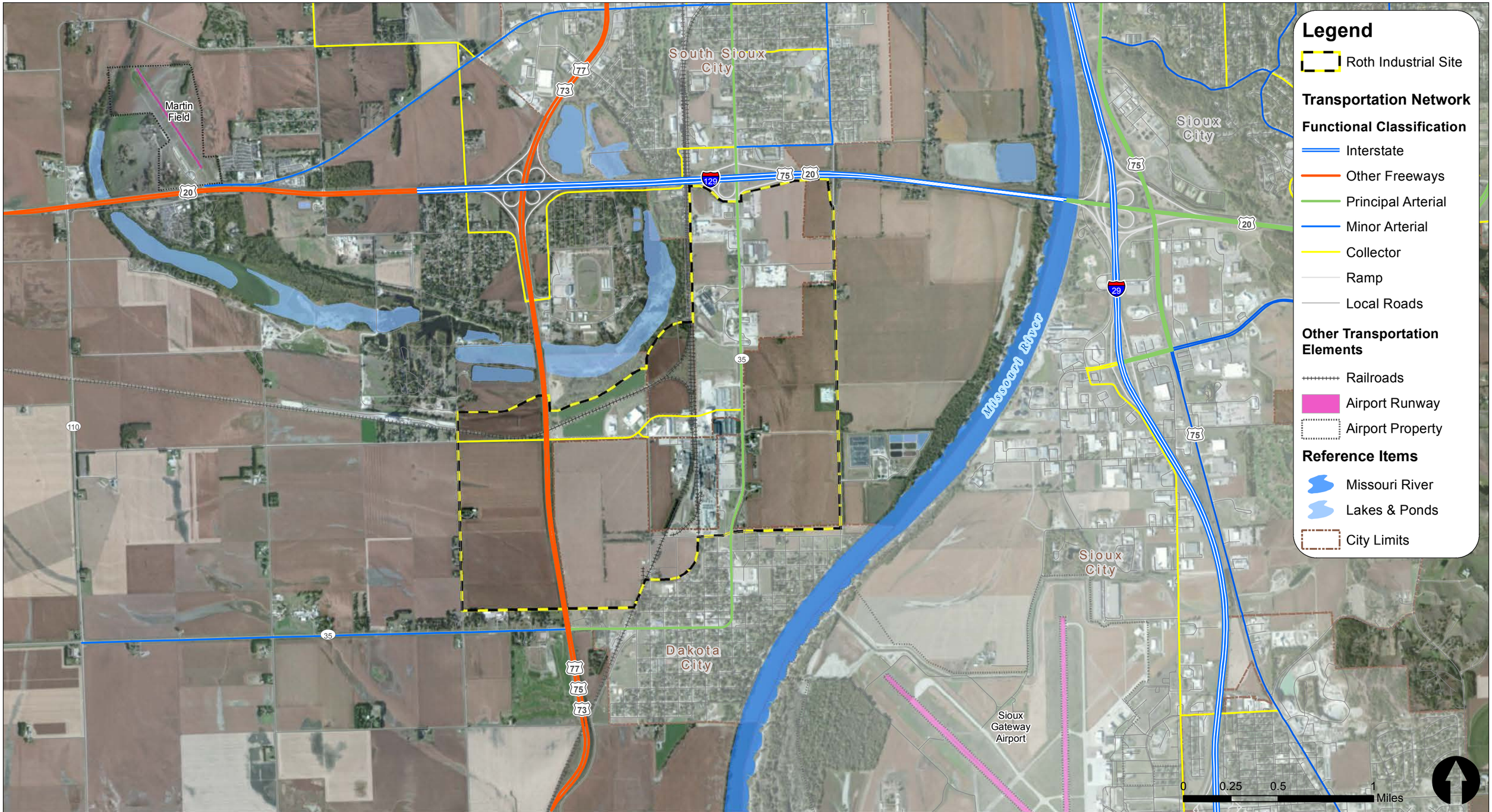

LOCAL TRANSPORTATION NETWORK MAP

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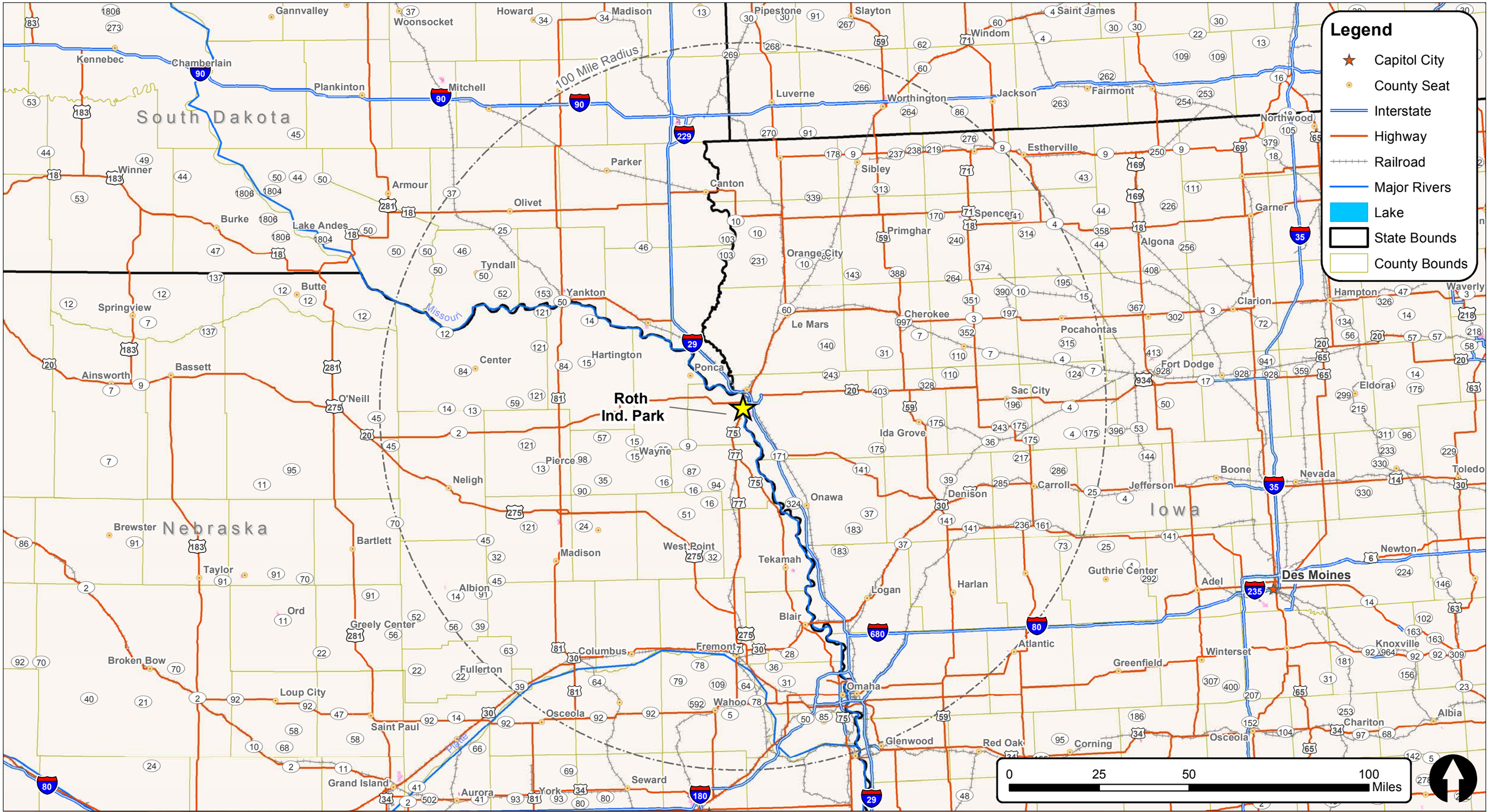

REGIONAL TRANSPORTATION NETWORK MAP

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Legend

- National Capital
- State Capital
- Major Citiy
- Interstate
- US States
- U.S. Boundary
- North America
- Major Rivers
- Major Lakes
- Oceans

US Travel Distance from Site (Approx.)

Travel Time

- Less Than 1 Day
- 1+Day
- 2+Day

Note: Travel times used in this graphic were approximated using the assumption of 11 hours of drive time and posted speed limt for each road segement.

Roth
Ind Park

Seattle
Portland
Sacramento
Oakland
San Jose
Fresno
Las Vegas
Anaheim
Santa Ana
Riverside
San Diego
Phoenix
Mesa
Tucson
Albuquerque
El Paso
Aurora
Denver
Colorado Springs
Wichita
Omaha
Minneapolis
St. Paul
Kansas City
St. Louis
Oklahoma City
Tulsa
Arlington
Dallas
Fort Worth
Austin
San Antonio
Houston
Corpus Christi
New Orleans
Memphis
Chicago
Milwaukee
Detroit
Toledo
Cleveland
Columbus
Indianapolis
Cincinnati
Louisville
Lexington
Nashville
Atlanta
Jacksonville
Tampa
Miami
Charlotte
Raleigh
Virginia Beach
Washington
Baltimore
Philadelphia
New York
Newark
Buffalo
Boston

Pacific Ocean
Atlantic Ocean
Gulf of Mexico

0 625,000 1,250,000 2,500,000 Feet
0 255 510 1,020 Miles

1 inch equals 239.43 miles

TRAVEL DISTANCE MAP

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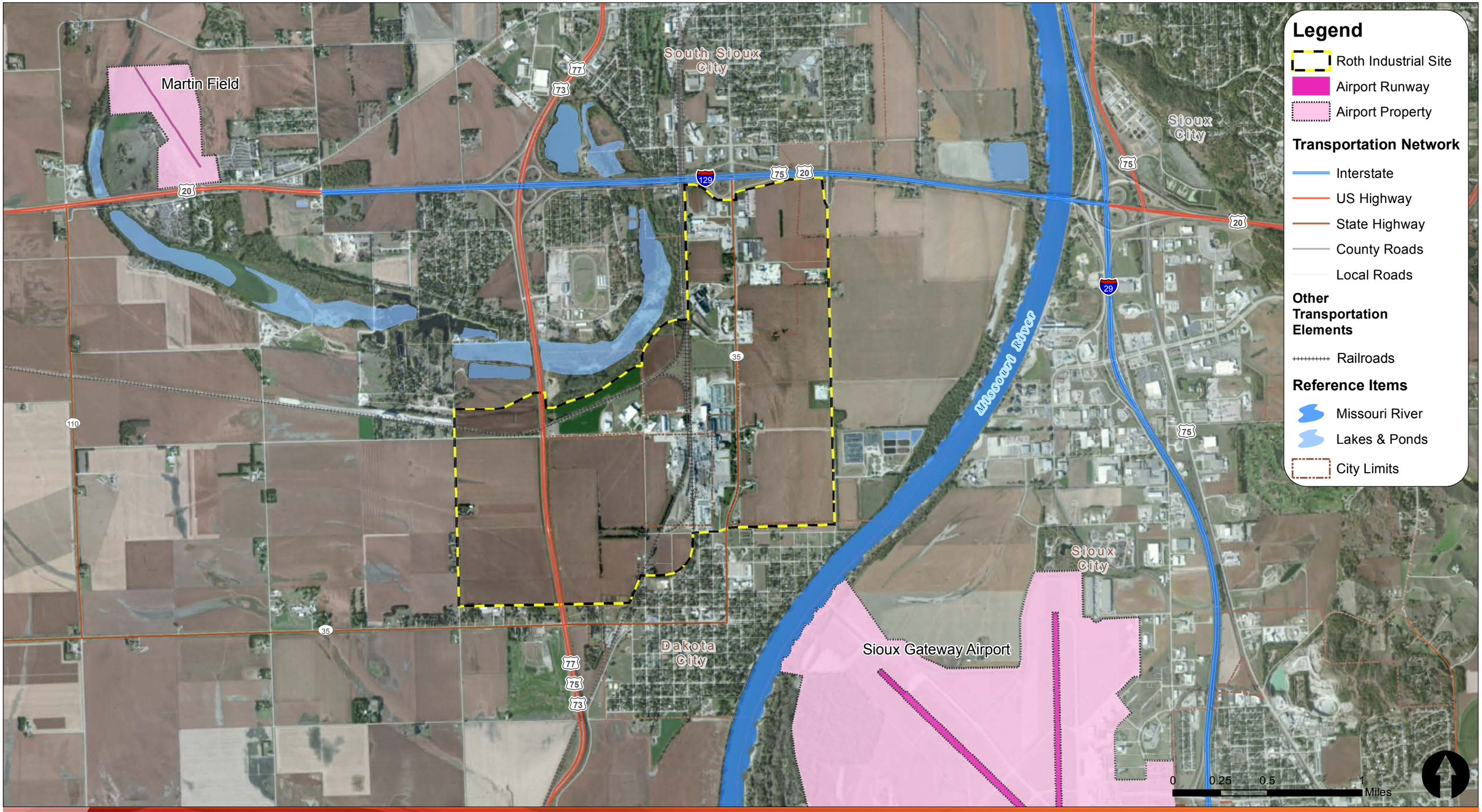

AIRPORT LOCATIONS MAP

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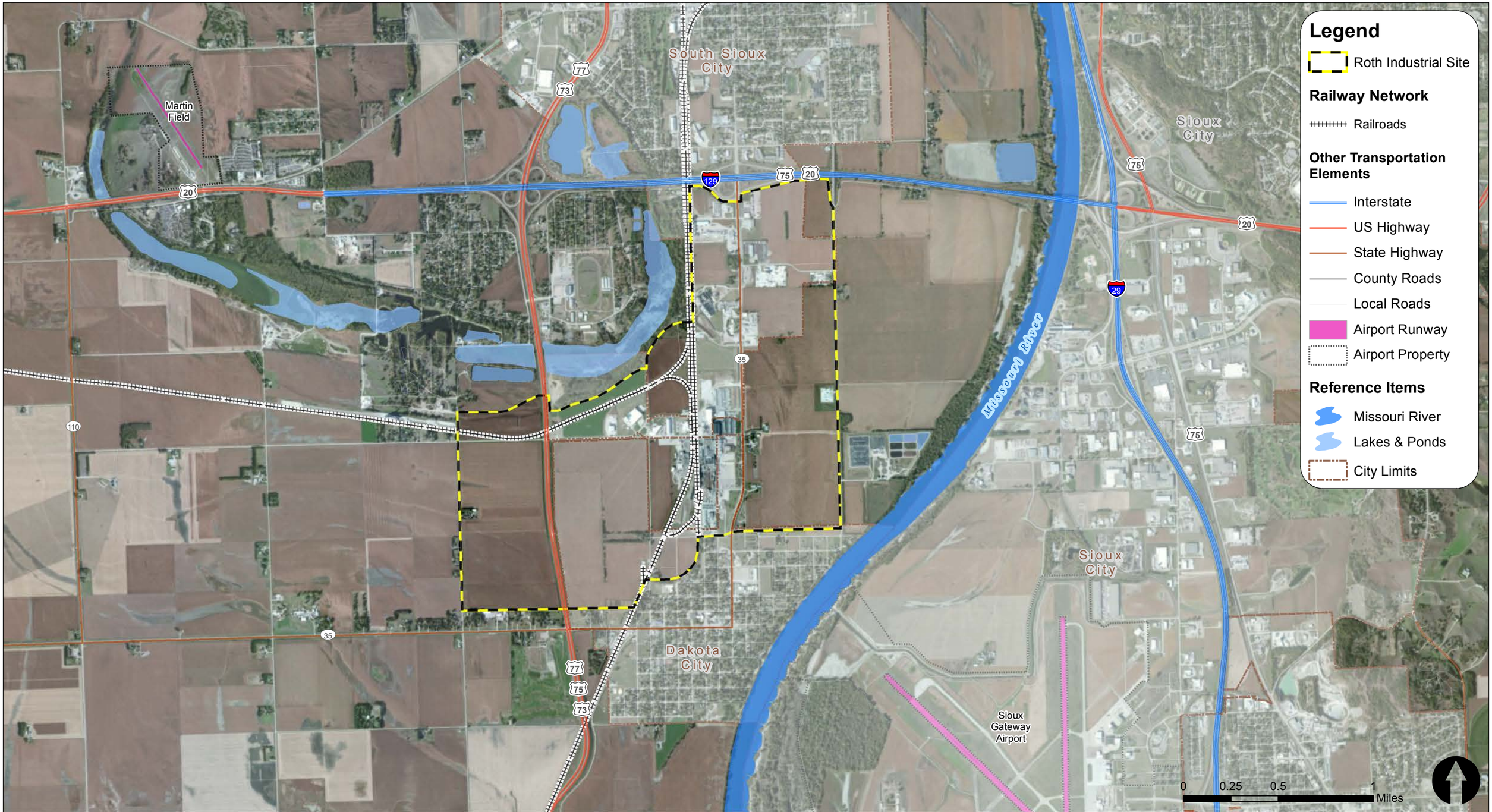

RAIL MAP

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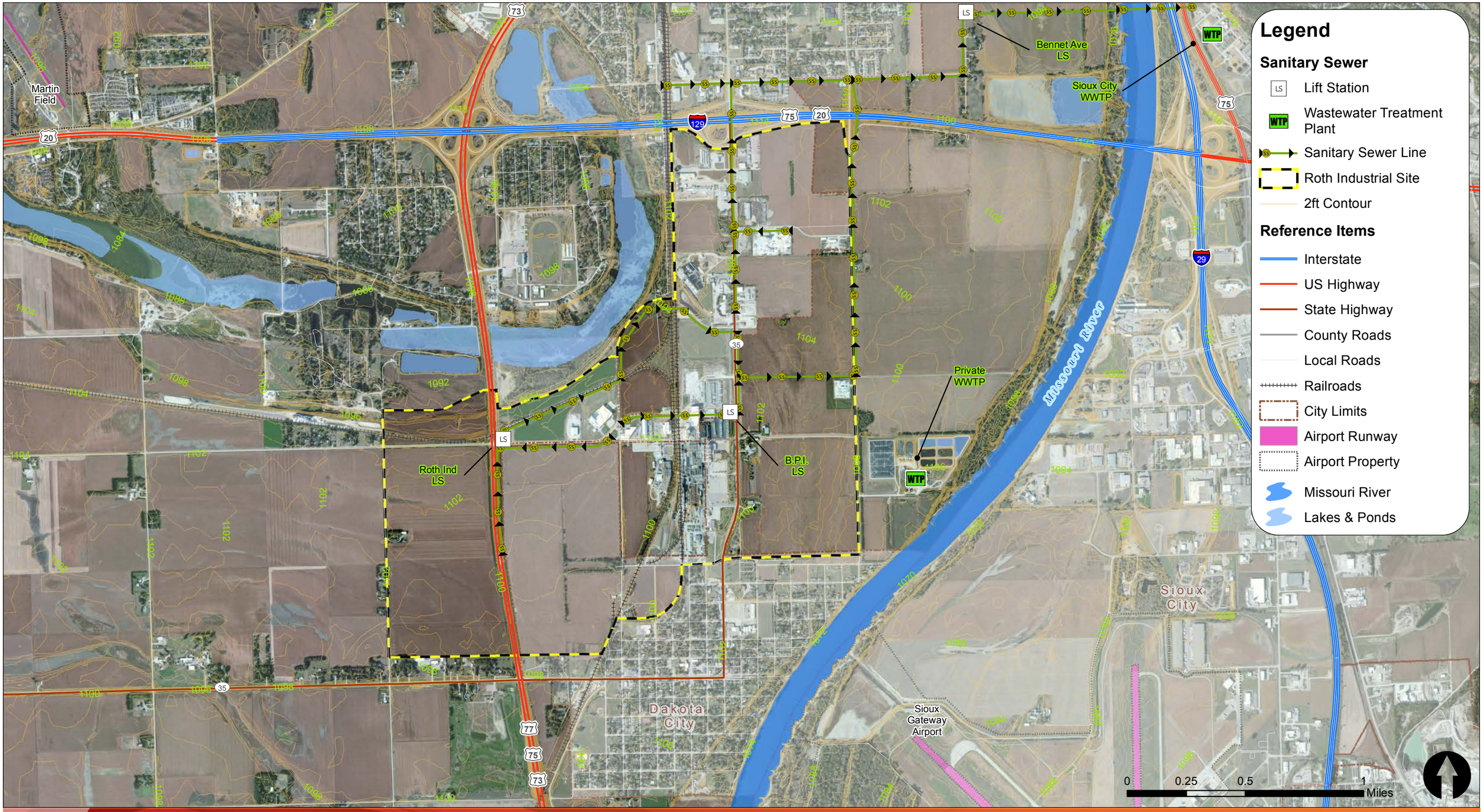

SEWER/STORMWATER INFRASTRUCTURE MAP

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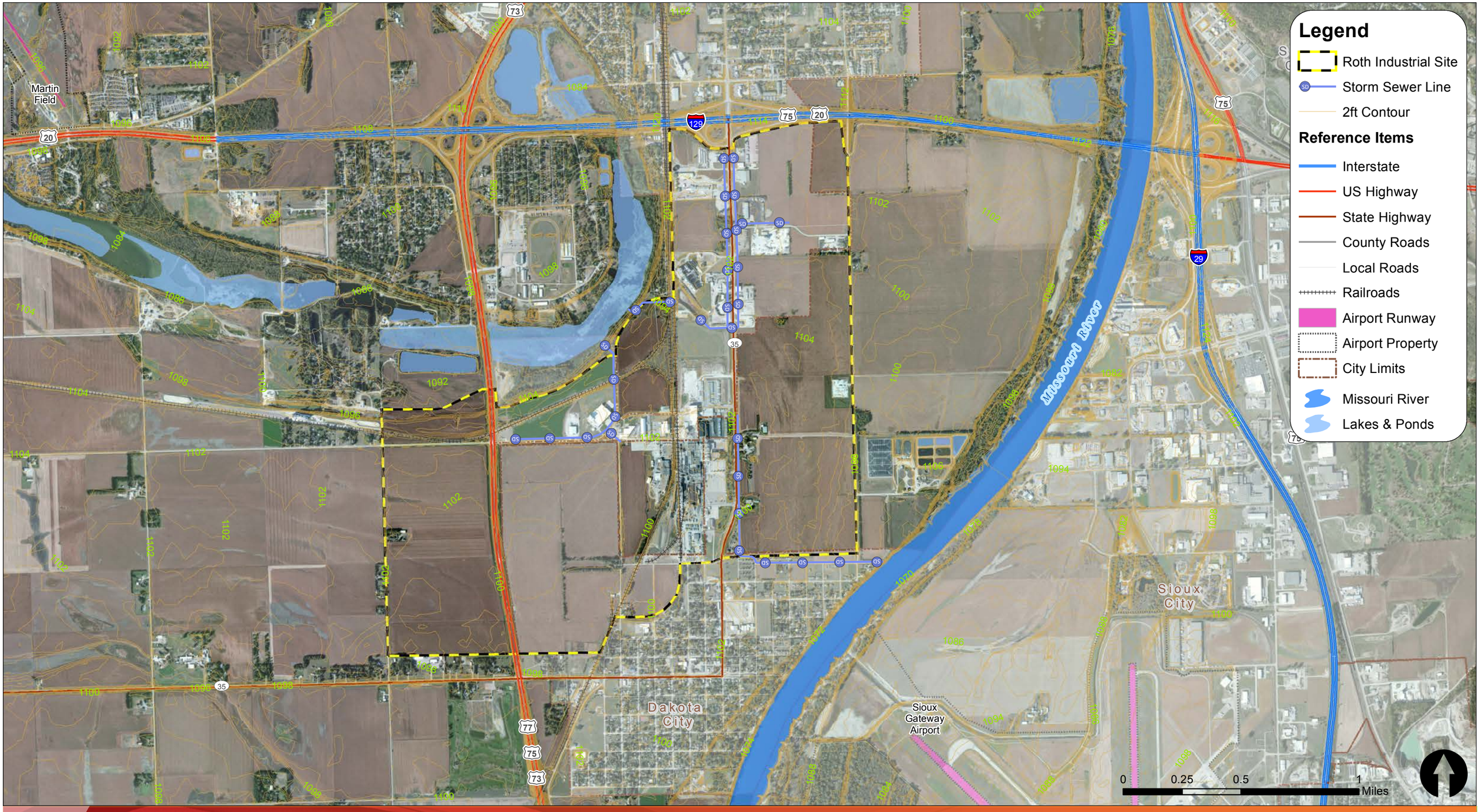

STORM DRAINAGE MAP

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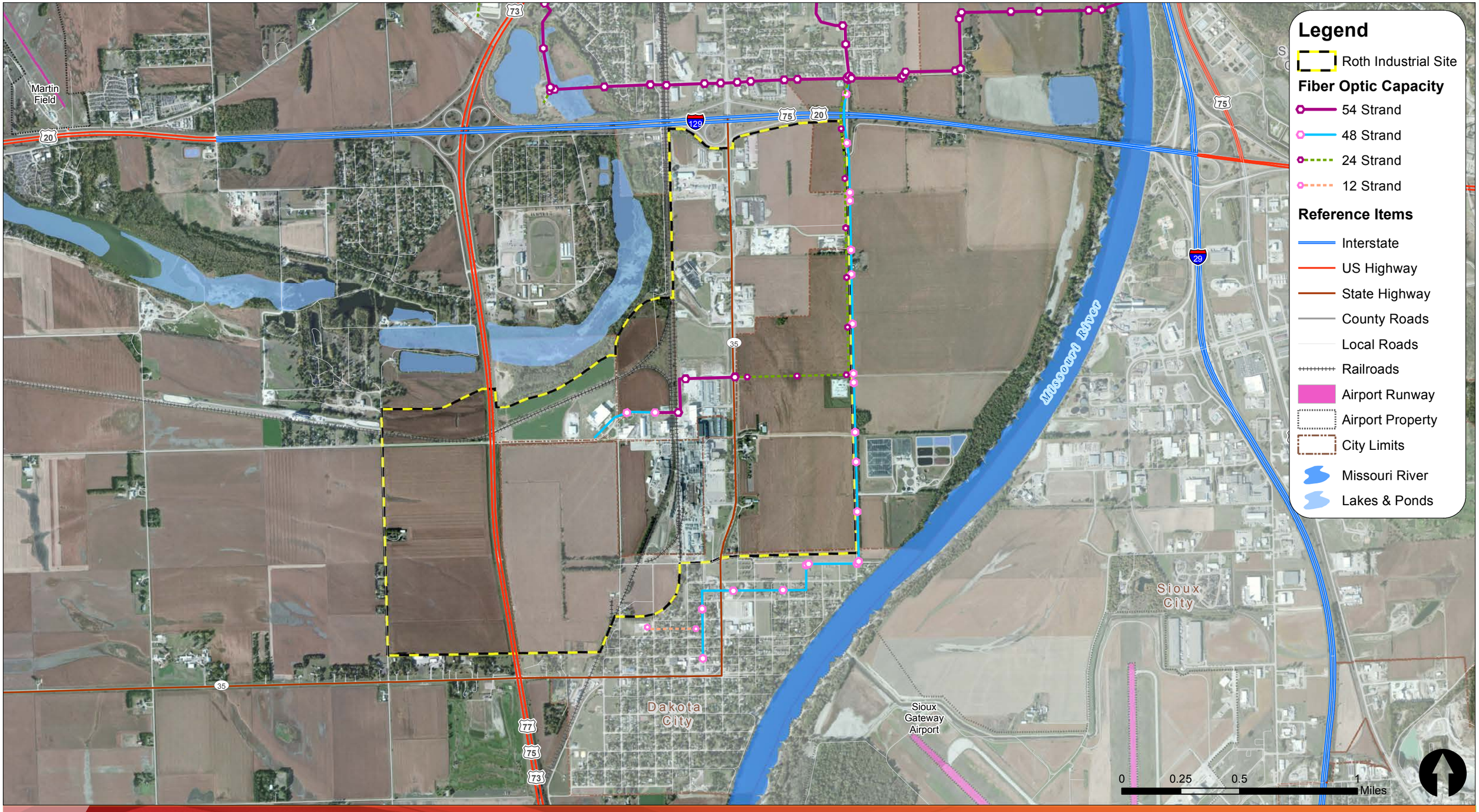

TELECOMMUNICATIONS SERVICE AREA MAP

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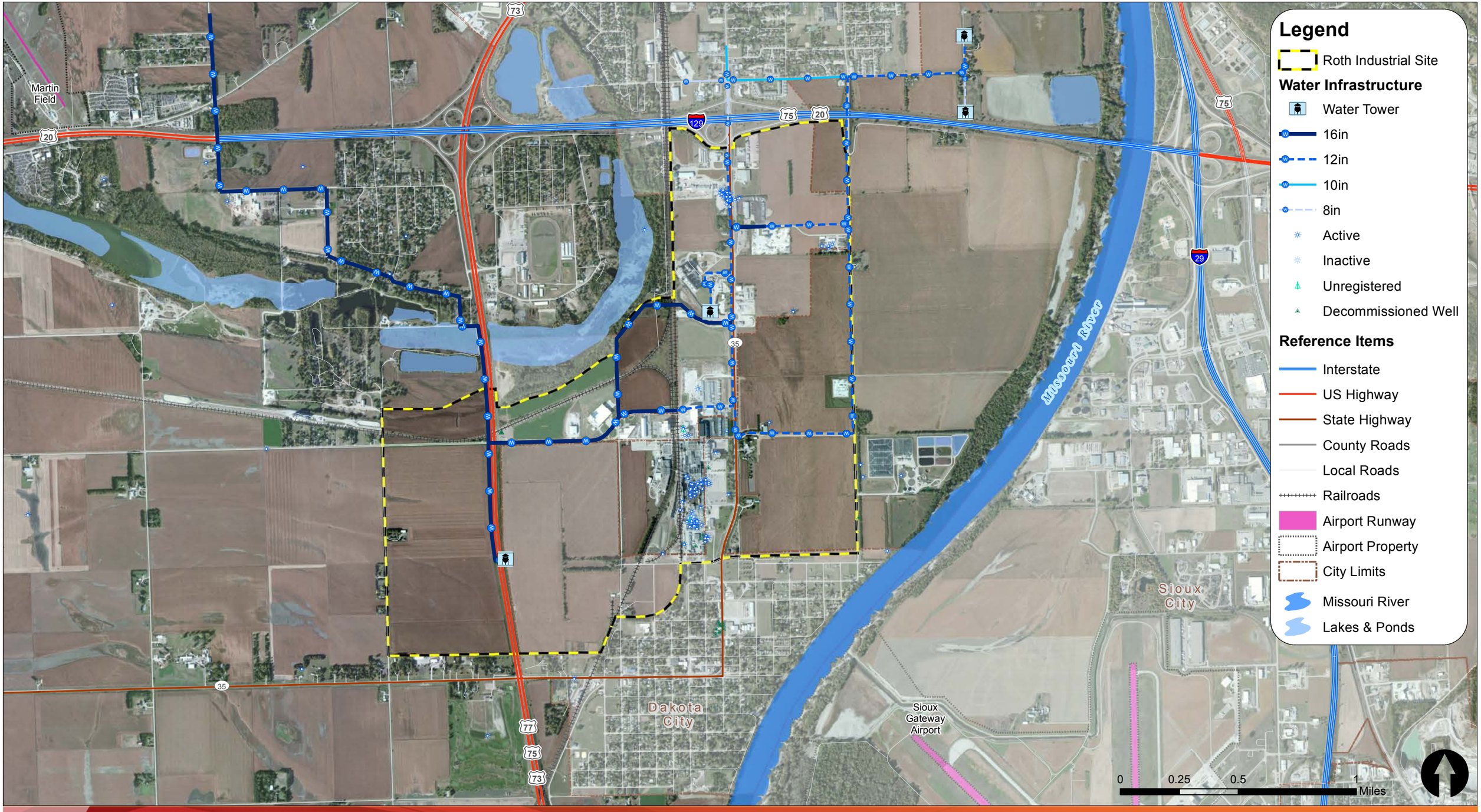

Legend

- Roth Industrial Site

Water Infrastructure

- Water Tower
- 16in
- 12in
- 10in
- 8in
- Active
- Inactive
- Unregistered
- Decommissioned Well

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
- City Limits
- Missouri River
- Lakes & Ponds

WATER MAP

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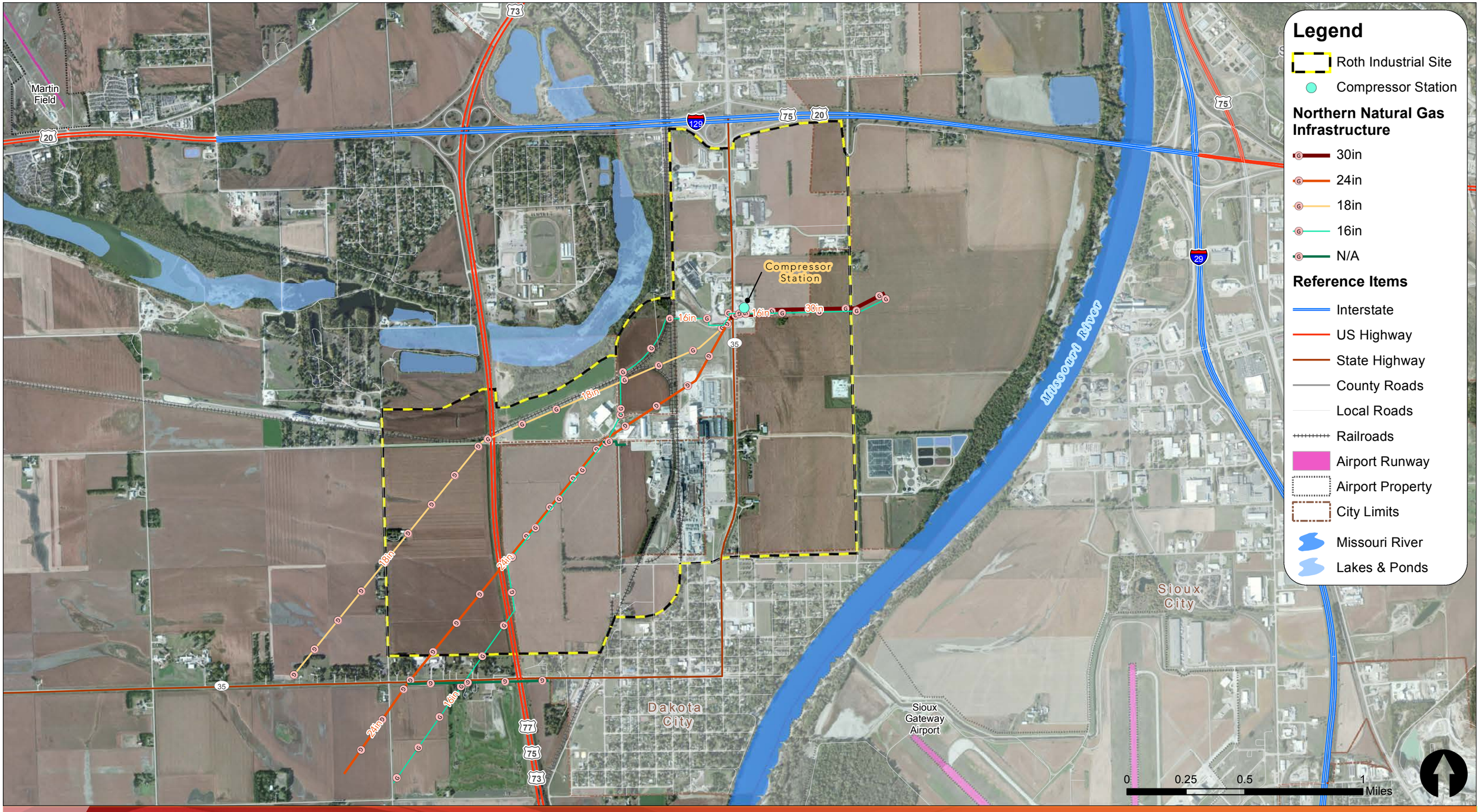

Legend

- Roth Industrial Site
- Compressor Station

Northern Natural Gas Infrastructure

- 30in
- 24in
- 18in
- 16in
- N/A

Reference Items

- Interstate
- US Highway
- State Highway
- County Roads
- Local Roads
- Railroads
- Airport Runway
- Airport Property
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GAS MAP

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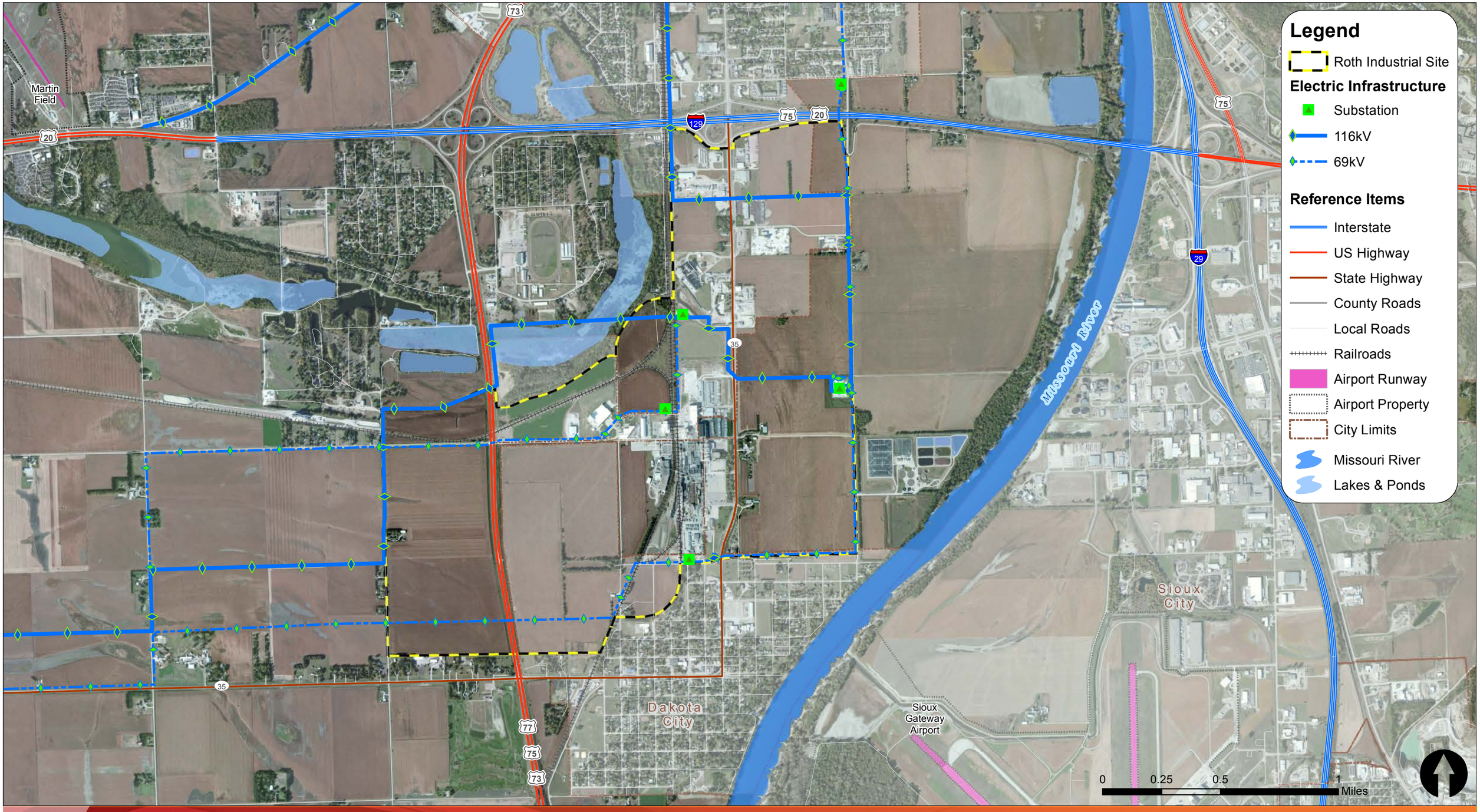

ELECTRICAL MAP

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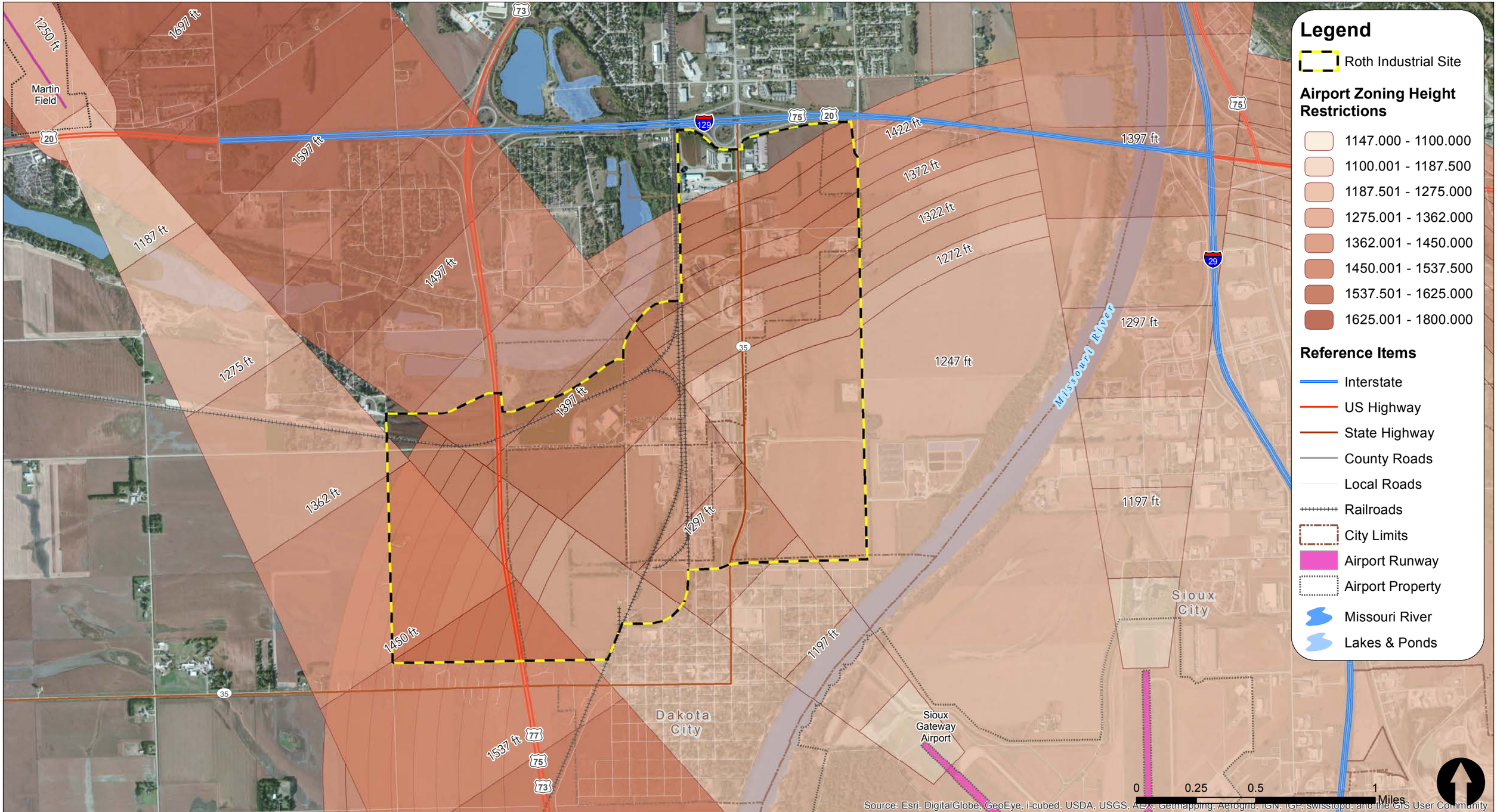

AIRSPACE MAP

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