

An aerial photograph of a boat moving down a river, leaving a white wake. The boat is positioned vertically in the center of the frame. A large, semi-transparent blue rectangle is overlaid on the right side of the image, containing text. The background shows the river's surface and a line of trees with autumn foliage on the right bank.

# NEMO PORT

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## Port Authority Application

Northeast Missouri Regional Port Authority  
of Clark County, Missouri

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## Project Description

Following the completion in January 2023 of the port strategic plan and market study performed for Northeast Missouri Regional Planning Commission by Decision Innovation Solutions; Bujanda & Allen; and MECO Engineering, the Clark County Commission, armed with the information provided by the study, started the process for the formation of the Northeast Missouri Regional Port Authority of Clark County. In conjunction with the City of Alexandria, the county commission approved the resolution for the creation of the port authority, which will include the entirety of Clark County, Missouri, the northeast corner of the state and the northern most county in Missouri on the Mississippi River. The Clark County Commission appointed a preliminary board of directors to fashion by-laws for the proposed entity in preparation for an application to the state for port authority formation.

With the assistance of Northeast Missouri Regional Planning Commission, this official application has been fashioned to request the official approval from the Missouri State Highway Commission sanctioning the formation of the port authority, as governed by Chapter 68 RSMo of the state statutes.

# Chapter 68 RSMo Requirements

## (1) Population of cities/counties submitting the application:

The proposed Northeast Missouri Regional Port Authority of Clark County Missouri, to be called NEMO Port, will consist of the entirety of Clark County, Missouri.

Clark County, Missouri population per the U.S. Census as of April 1, 2020 was 6,634.

## (2) The desirability and economic feasibility of having more than a single port authority within the same geographic area:

The NEMO Port is proposed near Alexandria, Missouri, in Clark County, the northern most county along the Mississippi River in the state. The 2023 port strategic plan and market study performed for Northeast Missouri Regional Planning Commission by Decision Innovation Solutions; Bujanda & Allen; and MECO Engineering presented a comprehensive analysis of the marine highways, port authorities, river terminals, and docks to better understand the competitive environment in which the Clark County Port can be expected to operate.



Bujanda and Allen identified almost 250 public and private river ports in the study area. The Clark County Port would have to be competitive in terms of transportation infrastructure available for all modes, marine highways, and terminal infrastructure vis-à-vis competing alternatives in the study area, which the report proved it would be.

The strategic plan and market study highlighted the 15 public port authorities classified by the 2022 MoDOT Freight Plan as either active or developing which account for just 4% of goods by weight moved on the state's transportation system. The volume of freight is expected to grow by 20% by 2045 to 1.1 billion tons and inland waterways, with the expansion of local and regional port sites offering the perfect opportunity to move more of this volume off the state's overcrowded highways and rail lines.

The new 2023 Missouri State Freight and Rail Plan breaks this down even further for Missouri's Northeast District, which while predominantly rural, still moved 43 million tons of goods worth \$15 billion in 2018. By 2045, these figures are expected to rise to 45 million tons of goods worth \$21 billion and on to its maritime highways. The district's road conditions are negatively impacted by the fact 83% of that freight tonnage is carried by trucks (in 2018). The report projects this trend to remain largely in place through 2045 but notes the share of value of goods carried by water is expected to increase notably from 5% to 9%. The proposed multimodal port site in Clark County would help move more of the region's freight off the roadways and take advantage of rail and water transportation instead.

### **(3) The technical and economic capability of participating cities and/or counties, as well as private interests, to plan and carry out port development within the proposed district:**

The Clark County Commission and the City Council of Alexandria, Missouri have both pledged their support for the formation of the NEMO Port, the concept for which was born several years ago in a private/public partnership effort to establish river access for fertilizer delivery to the region.

The organization's strategic plan and market study highlights the potential for additional private partnerships and investment while also demonstrating the technical ability of the organization, which through its partnership with Northeast Missouri Regional Planning Commission (NEMO RPC) was able to secure a \$250,000 grant through the Missouri Agricultural and Small Business Development Authority (MASBDA) to complete the study. The project identified more than a dozen potential private partners interested in the creation of a port facility in this region.

NEMO RPC has extensive technical experience working as a planning partner with MoDOT on regional transportation issues, including multimodal projects and also has experience working with the U.S. Department of Transportation Maritime Administration (MARAD), specifically with the Port Infrastructure Development Program (PIDP) grant system. The RPC has worked with its counterpart just across the border in Iowa, where the Southeast Iowa Regional Planning Commission acts as the administrative arm of the regional port authority, to model a plan that could allow NEMO RPC to potentially offer a similar service to the NEMO Port Authority.

#### **(4) The amount of actual and potential river traffic that would make use of any facilities developed by a port authority:**

The strategic plan and market study performed on behalf of the proposed port authority notes the Clark County Port Project is expected to increase efficiencies by increasing the use of barges in supply chains serving the study's 200-mile radius area, particularly in light of the American Patriot Holdings LLC (APH) plans to create self-propelled container vessels to operate on the Mississippi River opening up the market for containerized cargo exports and imports which until now have largely been limited to the ocean ports.

The market study generated responses from 13 businesses and industries that expressed interest in utilizing an inland Mississippi River port in Clark County and defined approximately 550,000 metric tons of domestic volume and another 400,000-650,000 metric tons of international volume. More than half of the respondents also rated the ability to ship or receive containerized cargo as attractive or very attractive.

The Clark County Port Project will enable the movement of commodities between the study area and the U.S. Gulf Coast (USGC).

- **Outbound**—barge services could provide a viable transportation option for agricultural commodities moving to the Port of New Orleans (NOLA) for onward shipment by scheduled international liner services with cargo loaded in “backhaul” containers that otherwise would be repositioned empty.
- **Inbound**—barge services could provide a viable alternative for containers delivered to USGC terminals by international ocean-going vessels, and subsequently loaded by cranes onto barges or river vessels, primarily at New Orleans, and then moved via the M-35 and M-55 waterways primarily, but also via M-55, M-29, and M-70.

The Project will also provide access to the Gulf Intracoastal Waterway (M-10). M-10 stretches from Brownsville, TX to Jacksonville, FL, including other ports in Texas, Louisiana,

Mississippi, Alabama, and Florida. This marine highway also connects to M-49 in Morgan City, LA, M-65 in Mobile, AL, and M-55 in New Orleans, LA.

The market study projected 2026 imports of 338,000 metric tons in the study area and 617,00 metric tons of exports, with those numbers projected to grow 526,000 metric tons of imports and 897,00 metric tons of exports by 2046.

*Projected study area import volume and growth percent (2023 Port Strategic Plan and Market Study).*

Total Study Area Volume	Units	2022	2023	2024	2025	2026	2031	2036	2041	2046	2051
<b>Imports</b>	<b>1,000 MT</b>	<b>303.2</b>	<b>311.7</b>	<b>320.5</b>	<b>329.4</b>	<b>338.3</b>	<b>383.6</b>	<b>429.5</b>	<b>476.0</b>	<b>522.6</b>	<b>569.5</b>
Containerized	1,000 MT	116.5	119.2	122.0	124.7	127.5	141.7	156.2	171.0	185.8	200.8
Non-Containerized	1,000 MT	186.7	192.5	198.5	204.7	210.8	241.9	273.3	305.0	336.8	368.7

*Projected study area export volume and growth percent (2023 Port Strategic Plan and Market Study).*

Total Study Area Volume	Units	2022	2023	2024	2025	2026	2031	2036	2041	2046	2051
<b>Exports</b>	<b>1,000 MT</b>	<b>561.5</b>	<b>575.4</b>	<b>589.3</b>	<b>603.3</b>	<b>617.2</b>	<b>687.0</b>	<b>757.0</b>	<b>827.2</b>	<b>897.4</b>	<b>967.8</b>
Containerized	1,000 MT	184.6	190.2	195.8	201.3	206.9	234.9	262.9	291.0	319.2	347.4
Non-Containerized	1,000 MT	376.9	385.2	393.6	401.9	410.3	452.1	494.1	536.2	578.3	620.4

Source: DIS, IMPLAN, U.S. Census

According to the 2023 Missouri Freight and Rail Plan, in 2018, more than 985 million tons of freight valued at \$1.1 trillion was shipped on the Show-Me State's transportation system with projections to increase to more than 1.1 billion tons of freight, valued at \$1.8 trillion annually by 2045, an increase of 19% by tonnage and 57% by value.

The vast majority of this freight travels by rail and road, with only 4% of the volume, and just 2% of the value being shipped on waterways. While river transportation has proven to be at minimum competitive and more often a more financially viable option than either rail or road, not to mention more environmentally friendly and exponentially safer, limited regional access to get cargo on and off the river is preventing the transition of higher volumes of cargo to this preferred method of transportation. The state freight and rail plan projects water-based freight transportation to see "significant" growth between 2018 and 2045, an estimated 35% increase in volume.

## **(5) The potential economic impact on the immediate area from which the application originates:**

The strategic plan and market study included a cost/benefit analysis as well as an economic impact study, measuring increase in economic activity in the form of a new port business in Clark County, broken down into two categories:

1. economic activity generated from capital expenditures for the construction of a new port facility, and
2. the operation of the new facility once constructed.

The initial direct investment of \$37.8 million in capital for the construction of the facility results in an estimated total impact of \$67.9 million in output, \$32.7 million in value added, and \$22.1 million in labor income. An estimated total of 366 jobs would be supported.

An estimated total tax revenue of \$6.8 million is expected to be generated from this project. Of this amount, \$2.5 million is estimated to be generated at the state and local level, and \$4.3 million is estimated to be generated at the federal level.

The operations of a Clark County port facility which would include container, breakbulk, agribulk, and drybulk services would result in annual direct economic impact of \$13.2 million in output (sales), \$3.7 million in value added, and 25 jobs resulting in an estimated total economic impact of \$27.0 million in output, \$11.3 million in value added, and 113 jobs. In this scenario, a total of \$2.7 million in taxes is paid annually, of which \$1.3 million are state and local taxes and \$1.4 million are federal taxes.

## **(6) The potential impact on the economic development of the entire state and how the proposed port authority development activities relate to any state plans:**

The 2023 Missouri Freight and Rail Plan states “Every business and resident in Missouri depends on efficient and safe freight transportation. Freight demand is closely tied to the economy and a well-performing and connected freight.”

A key strategy identified in the plan is Expanding the Ag Coast of America, the region that covers a 15-mile stretch of the Mississippi River and features some of the highest levels of capacity. Expansion of the “Ag Coast of America” will support increased shipments of agriculture products - including grain, fertilizer and processed food products on the Mississippi and Missouri rivers providing additional opportunities for agribusinesses to leverage Missouri’s inland waterways network. This strategy will not only lead to increased jobs and business opportunities, but it will also benefit other industries by lowering freight costs across the state and providing additional capacity and access to marine shipping modes. The creation of a Clark County port seems to line up exactly with this strategy, extending the Ag Coast to the state’s northern border.

Since moving freight by water is the more environmentally friendly and least expensive transportation mode, marine highway projects, such as the Clark County Port Project, generate societal benefits that cannot be recouped by private investors. Aggregate economic benefits and direct impacts include freight transportation costs savings, freight emission cost savings, safety cost savings, state of good repair cost savings, and job creation which all positively impact the state’s economic development efforts.

The 2018 Economic Impact Study for Public Ports commissioned by MoDOT issued several key findings:

- Missouri public ports witnessed an increase of 78 percent in cargo volume from 2011 to 2016, approaching nearly 4 million tons of freight valued at over \$12 billion.
- Nearly 290,000 jobs annually statewide and \$15.7 billion in labor income and over \$100.6 billion in annual economic activity, as measured by Gross State Product, or output can be attributed to the state's public ports.
- That represents more than one third of Missouri's economy (34%) with one out of every ten jobs in the state supported by the state's public ports system and more than \$2.4 billion in state and local tax revenue annually attributed to this economic activity generated by the port facilities.

The Benefit/Cost Analysis portion of the strategic plan demonstrates there are significant long-term economic benefits associated with the project, primarily associated with potential savings in the number of fatalities and injuries, non-carbon emissions, and freight transportation cost savings that will impact economic development statewide.

The project can demonstrate net savings in landside freight infrastructure maintenance that could potentially result from ton-miles saved due to freight diversion from the incumbent routes (truck + rail) to the proposed alternative via Clark County Port (truck + barge). Over the course of the 30-year forecast period, over 600,000 FEUs and 10 million MT will be removed from the highways and railways and transported by barge. This reduction will directly reduce the impact that trucks have on the condition of the roadway pavement, and railroads will also enjoy a lower generalized maintenance cost.

While no one likes to reduce the impacts of traffic crashes and fatalities solely to economics, the report's BCA demonstrates significant net savings in traffic crash costs by moving more traffic off the roads on to the safer maritime highways, helping push Missouri closer to its demonstrated goal of eliminating traffic fatalities as defined in the Show-Me Zero state strategic safety plan.

The BCA also highlights significant net savings in carbon (CO<sub>2</sub>) and non-carbon emission damage costs resulting from ton-miles saved due to freight diversion from the incumbent routes (truck + rail) to the COB service (truck + barge) alternative. Non-carbon emissions including hydrocarbons and volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), and particulate matter (PM) were factored into the analysis. The direct economic impact was measured as well as the social cost of carbon (SCC) and clearly demonstrated noteworthy positive impacts on the region and the state.

# General Information

## (1) Port Authority Boundaries:

The proposed Northeast Missouri Regional Port Authority of Clark County Missouri, to be called NEMO Port, will consist of the entirety of Clark County, Missouri.

Clark County is bounded on the north by the State of Iowa; northeast by the Des Moines River that divides it from Iowa; east by the Mississippi River, separating it from the State of Illinois; south by Lewis County, and west by Knox/Scotland Counties. According to the ASC 2021 5-Year, Clark County, Missouri covers 504.6 square miles.

## (2) Service Area:

Clark County is part of the six-county service area represented by the Northeast Missouri regional Planning Commission, along with Adair, Knox, Lewis, Schuyler and Scotland counties. According to the U.S. Census ASC 2020 5-Year Estimates, the service area of the RPC is home to a total population of 55,570, down from 56,045 population reported in the ASC 2020 5-Year Estimates.

## (3) Project Scope:

The completed strategic plan and market study for the facility (see full copy attached) includes a conceptual plan and a total project cost estimate determined for the development of the recommended site northeast of the City of Alexandria, Missouri. The site is identified as the area between Keokuk, Iowa and Alexandria, Missouri in Sections 3/4 of Township 64 North, Range 5 West and Sections 33/34 of Township 65 North, Range 5 West. This site has access to the Mississippi River on the east and US Highway 61/136 on the west, with paralleling railway of Burlington Northern and Santa Fe Railway (BNSF) to this Highway route. This area is fairly flat, ranging in ground elevations from 488 to 507.

There are approximately 298 *acres* targeted for the overall footprint of this project, which depicts an elevated terminal with a lower area already graded for future containment loading via rail. This initial phase has incorporated a basin area for borrow material for the elevated site. The estimated volume in the basin area is expected to meet the compensatory storage that will be required for the hydraulic modeling to obtain a zero increase to the Base Flood Elevation (BFE with the elevated area at an elevation of 499).

The proposed Alexandria site offers river, rail and roadway access. The location has immediate highway access to MO 136 and is in close proximity to US 61/27 and the Avenue of the Saints. The property offers the available space for the creation of a rail spur to take advantage of the nearby BNSF corridor connecting Alexandria, Missouri and Quincy, Illinois with Galesburg and Chicago, Illinois to the north and St. Louis, Missouri to the south, running parallel to the Mississippi River.

Clark County has excellent rail connectivity to/from major freight markets and entry/exit gateways: about 300 miles from Chicago, the largest rail hub in the U.S., 1,900 miles from the West Coast, the largest intermodal port gateway, and 900 miles from the Gulf of Mexico, the largest agricultural gateway in the U.S. The main rail corridors serving the movement of freight in Northeast Missouri include the afore mentioned north-south NSF line, as well as the east-west BNSF corridor that connects Alexandria, Missouri with Kansas City, Missouri and on to the west coast. There is also connectivity via BNSF with the NS and CSTX corridors that offer connectivity for the BNSF Mississippi River corridor to the eastern and southern U.S. regions.

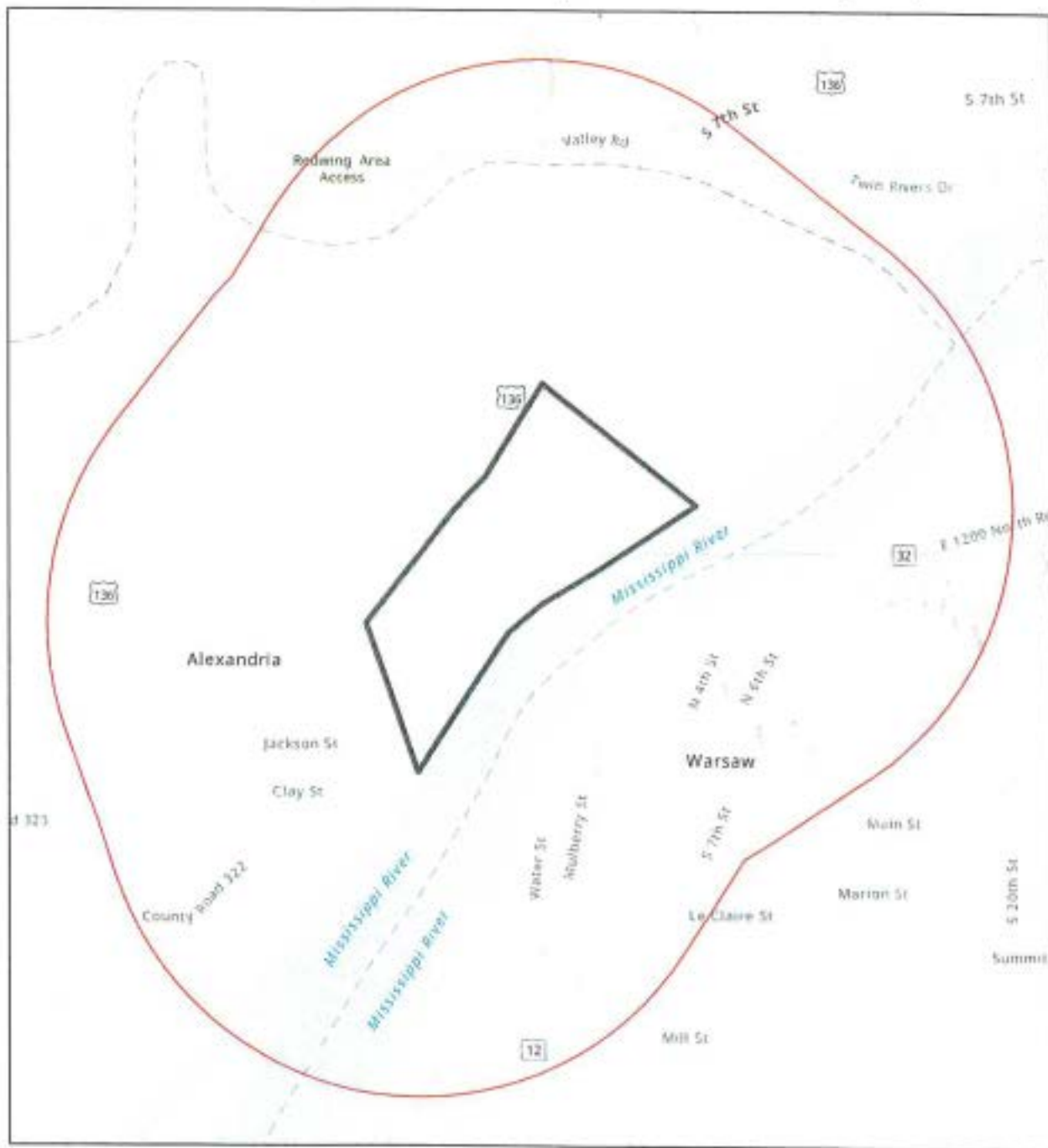
The region also offers excellent connectivity to/from major markets and cargo entry/exit points in all directions via highway as it is about 300 miles from Chicago, 800 miles from the Canadian border, 1,000 miles from the East Coast, 1,900 miles from the West Coast, and 900 miles from the Gulf of Mexico. The main roads serving the movement of freight in Northeast Missouri include: **North-South:** U.S. Route 61 (US 61), Route 15, and US 63 (connecting the northern Stateline with I-70 and US 54 in the central part of the state); **East-West:** US 136, Route 6, US 36, and US 24 (connecting the eastern Stateline adjacent to the Mississippi River with US 65, I-35, and the western Stateline in north and central Missouri).

From Alexandria, MO, US 61 and US 136 provide rapid access to any of the routes mentioned above in less than 15 minutes, allowing travel in both the north-south and east-west directions.

To connect these multimodal assets with the Mississippi River, the proposed river port at Alexandria scope of work would include land acquisition and earthwork and site preparation to elevate the site to 1 foot above the base flood elevation. A 6,000 foot on-site rail spur is proposed as well as road access to US 61. The proposed scope of work includes sheetwall and cock creation as a dock barge/crane for container loading and unloading. Additional development would include storage facilities for agribulk, drybulk and liquid bulk cargo.

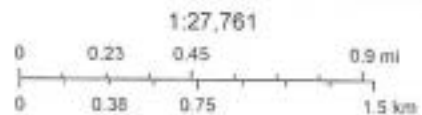


### Potential Option #1A North (Recommended Option)

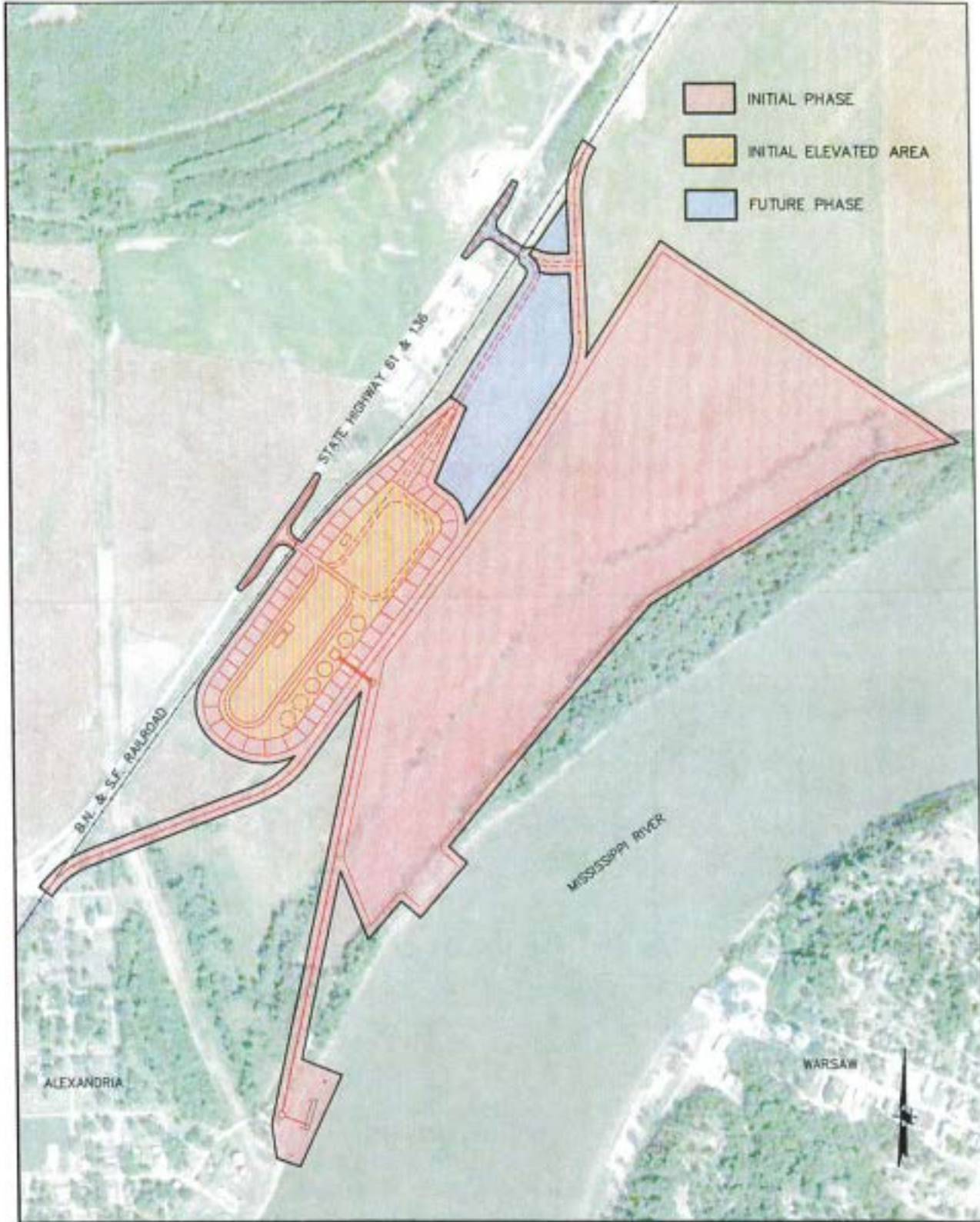


October 18, 2022

- Buffered Project Boundary
- Project Boundary



Esri, NASA, NOAA, USGS, FEMA, Missouri Dept. of Conservation, Missouri DNR, Esri, HERE, Garmin, SwisSlog, GeoTechnology, Inc., METRAGIS, USGS, EPA, NPS, US Census Bureau, USDA



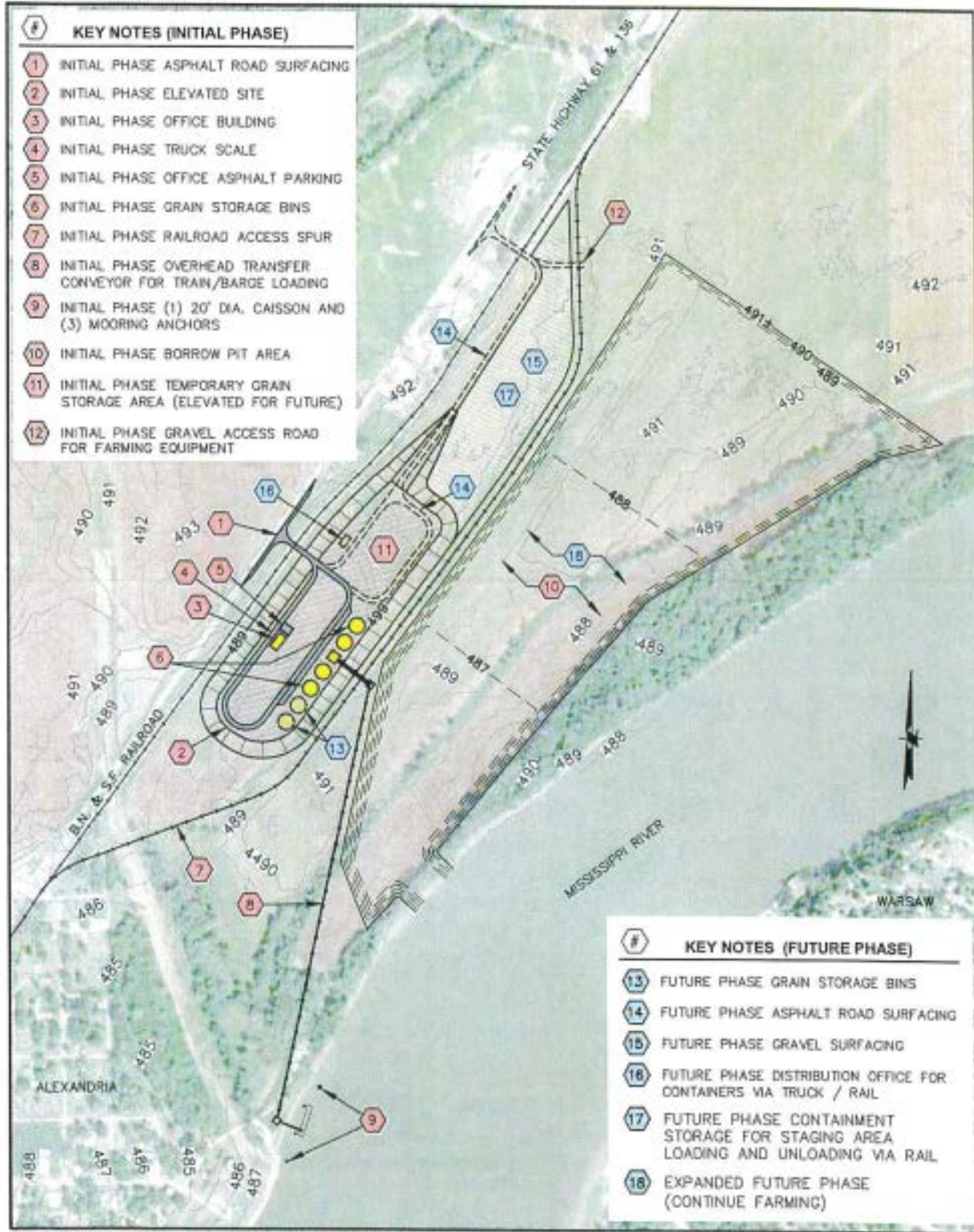
OFFICE LOCATIONS  
 HARRISBURG, MD  
 JEFFERSON CITY, MO  
 BRANSON, MO  
 PITTSFIELD, IL

CLARK COUNTY  
 PORT AUTHORITY

DESIGNED	DRAWN	CHECKED	APPROVED	RELEASED
	S. HAYES			

OPTION 1A NORTH  
 (NORTH OF ALEXANDRIA)  
 OVERALL CONCEPTUAL PLAN

SCALE	FILE NO.	PROJECT NO.	SHEET NO.
1"=800'	102868 OPT-1A-N	102-868	



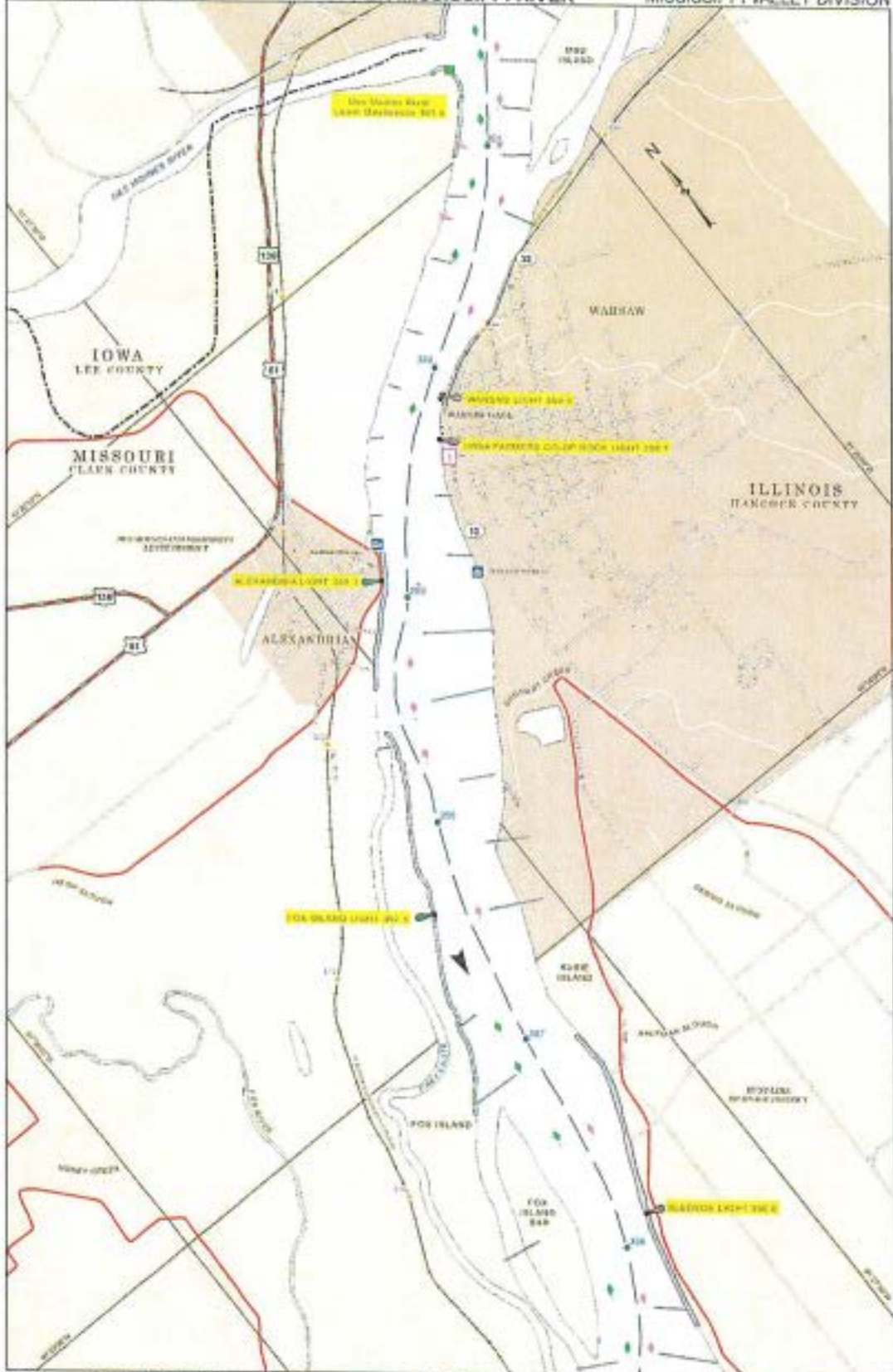
OFFICE LOCATIONS  
HANNBAL, MO  
JEFFERSON CITY, MO  
BRANSON, MO  
PITTSFIELD, IL

CLARK COUNTY  
PORT AUTHORITY

OPTION 1A NORTH  
(NORTH OF ALEXANDRIA)  
CONCEPTUAL SITE PLAN

DESIGNED	DRAWN	CHECKED	APPROVED	RELEASED	SCALE	FILE NO.	PROJECT NO.	SHEET NO.
	R. HAYES				1"=800'	102268 OPT-1A1	102-668	

U.S. ARMY CORPS ENGINEERS UPPER MISSISSIPPI RIVER MISSISSIPPI VALLEY DIVISION



3011 BODY POSITIONS ON CHARTS ARE APPROXIMATE. SEE NOTES IN COLUMN. CHART NO. 98 RIVER MILE 364 TO 391