



**Mike DeWine**, Governor  
**Jon Husted**, Lt. Governor  
**Laurie A. Stevenson**, Director

November 9, 2022

Ann Aubry, P.E., Interim Utilities Direction  
City of Columbus  
910 Dublin Road  
Columbus, OH 43215

Re: City of Columbus  
Intermodal Sanitary Subtrunk Extension, Phase 1  
Loan Number: CS390274-0379  
Finding of No Significant Impact

Dear Ms. Aubry:

On October 5, 2022, Ohio EPA issued a draft Finding of No Significant Impact (FNSI) for the City of Columbus – Intermodal Sanitary Subtrunk Extension, Phase 1 project for public review and comment. The thirty-day period for comments has passed and no comments have been received. Therefore, the conclusions contained in that preliminary FNSI become the basis for this final FNSI for the above referenced project.

This final Finding of No Significant Impact may be revised or rescinded at a future date based upon either changes to the proposed project, the presentation of information which significantly alters earlier conclusions, or failure of the applicant to perform the environmental mitigation prescribed in the draft Environmental Assessment.

Sincerely,

Kathleen Courtright, Assistant Chief  
Division of Environmental and Financial Assistance



Mike DeWine, Governor  
Jon Husted, Lt. Governor  
Laurie A. Stevenson, Director

**October 5, 2022**

**Preliminary Finding of No Significant Impact  
To All Interested Citizens, Organizations, and Government Agencies**

**City of Columbus – Franklin County  
Intermodal Sanitary Subtrunk Extension, Phase 1  
Loan Number: CS390274-0379**

The attached Environmental Assessment (EA) is for a sanitary sewer extension project in Columbus which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the attached EA.

Any comments on our preliminary determination should be sent to the email address of the contact named at the end of the EA. We will not act on this project for 30 calendar days from the date of this notice. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Columbus can then proceed with its application for the WPCLF loan.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

## ENVIRONMENTAL ASSESSMENT

### **Project Identification**

Name: Intermodal Sanitary Subtrunk Extension, Phase 1

Applicant: City of Columbus  
910 Dublin Road  
Columbus, OH 43215

Loan Number: CS390274-0379

### **Project Summary**

The City of Columbus in Franklin County has requested \$35,000,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) to construct the Intermodal Sanitary Subtrunk Extension (ISSE) in order to extend sanitary sewer service further into the Northern Pickaway Joint Economic Development District (JEDD).

The purpose of the ISSE project is to extend the Lockbourne Intermodal Subtrunk Sewer (LIS) to additional Intermodal and Rickenbacker service areas of southeast Columbus. The ISSE will serve proposed development along Rickenbacker Parkway which includes warehouses and other commercial developments in the JEDD located south of Rickenbacker International Airport.

Construction for this project will utilize microtunneling at a depth that should have minimal surface impacts. Due to the industrial nature of the area, no residents will be impacted by the project construction.

### **History and Existing Conditions**

In 2018, the 60-inch Lockbourne Intermodal Subtrunk was constructed along Ashville Pike and Circleville Lockbourne Road to service the area south of the airport.

In another project, Columbus plans to construct a gravity sewer to maintain and expand sanitary service to the Rickenbacker International Airport. Existing sewers located within the area flow north, discharging into the Big Walnut Outfall Augmentation Sewer for treatment at the Southerly Wastewater Treatment Plant. These force mains will be replaced with larger gravity sewer equipped to handle a greater capacity of sanitary waste to prepare for anticipated development within the area.

The proposed Intermodal Subtrunk Extension project area spans across both Franklin and Pickaway counties. It is bordered by the Norfolk Southern Intermodal Facility on the west, the Rickenbacker International Airport on the northwest, Hayes Road on the north, Walnut Creek on the east, and Duvall Road on the south. Other utilities are present within the project vicinity.

Maps of the project area are provided in the exhibits below.

### **Population and Flow Projections**

Currently airport and agriculture land dominate the project area. Future development of this area is projected to be warehousing and distribution. Industrial development is anticipated in this area and Columbus has been expanding its sewer system to meet future service needs. The ISSE will serve a tributary area of approximately 3,711 acres and will be designed for a total ultimate peak design tributary flow of 17.60 million gallons per day (MGD).

### **Alternatives**

The location of the proposed sewer is within or along the Rickenbacker Parkway right-of-way. Factors considered during the preliminary design of the proposed alignment alternatives include utility and right-of-way constraints, environmental permitting, and economic evaluation and lifecycle costs of materials utilized for each alternative.

Two alignment alternatives were developed for Phase 1 of the ISSE to minimize additional project costs and schedule delays associated with construction and easement acquisition, while avoiding impacts to Rickenbacker Parkway which is a major road for intermodal transport.

- 1) Alternative 1 considers the use of microtunnel fiber reinforced pipe. Since this pipe material cannot withstand point loadings associated with a curved microtunnel, all horizontal runs between shafts must be straight. This pipe also exhibits lower axial compressive strength; therefore, the distance between shafts must be limited to around 1,500 linear feet, with a recommended maximum of 1,800 linear feet. Using these criteria, Alternative 1 requires eight shaft sites along the horizontal alignment with an average drive distance of approximately 1,000 feet and a maximum drive distance of 1,700 feet. Manhole 1 and Shaft 1 on this alignment will be located on Norfolk Southern Railway Property.
- 2) Alternative 2 considers the use of microtunnel reinforced concrete pipe (RCP) with a corrosion-inhibiting liner. The RCP can withstand greater point loadings and axial pressures and can be driven longer distances with curves as tight as 1,050 feet in radius. The corrosion inhibiting liner provides corrosion protection for the concrete pipe. Alternative 2 will eliminate three shafts due to longer allowable drive lengths. The average shaft spacing/drive length for Alternative 2 has been proposed at just over 2,000 linear feet with a maximum drive length of 2,130 linear feet. Alternative 2 adds a curved alignment between Manhole 1 and Shaft 1 which eliminates the need for a shaft on Norfolk Southern Railway Property at that location.

Additionally, the type of appropriate construction was also evaluated: open-cut excavation or trenchless excavation (horizontal auger boring, horizontal directional drilling, microtunneling, pilot-tube method, or direct pipe). It was ultimately determined that trenchless excavation would create a lower probability of impacting aquatic habitats and cultural resources.

### **Selected Alternative**

The ISSE is an extension of the existing 60-inch Lockbourne Intermodal sewer that currently passes through the Village of Lockbourne and terminates at the Norfolk Southern Intermodal facility on State Route 762. The sewer extension project will be approximately 12,750 linear feet in total and will be completed in two phases (Phase 1 and Phase 2). Phase 1 of the ISSE is a large-diameter tunneled sewer that will start at the end of the 60-inch LIS west of the intersection of Thoroughbred Drive and Rickenbacker Parkway. The sewer will extend approximately 8,258 linear feet east along Rickenbacker Parkway and end just west of the intersection with Airbase Road.

After considering the constructability and cost effectiveness of each design, Columbus elected to move forward with the selected materials and alignment detailed in Phase 1, Alternative 2 (54-inch microtunnel). The recommended pipe material for the microtunnel is reinforced concrete pipe (RCP) with precast grout ports. The RCP will allow the use of longer drives and curves on this alignment which will result in less shafts than would be needed for Alternative 1 construction.

The finished diameter for the subtrunk will be 54-inches. It will be constructed of RCP with a wet-cast, integral high-density polypropylene-studded liner that is jacked into place behind a microtunnel boring machine (MTBM) as it mines through the soil and overburden. Hydrogeological and geophysical studies were performed to select the best technology for tunnel construction and to ensure the MTBM is designed to operate in a manner that reduces impacts to nearby customers and wells. The tunnel will be constructed at an approximate depth of 30 feet below ground. With the MTBM mining, intermediate shafts will be constructed to provide jacking and service locations during construction and ultimately future connection points as the service area develops.

The microtunnel installation of the 54-inch diameter ISSE Phase 1 will require dewatering shaft/manhole excavations. This will be carried out using sumping within the excavation to manage trench groundwater, where it is anticipated that dewatering volumes will be relatively small.

## **Implementation**

### *Project Costs*

Columbus plans to borrow \$35,000,000 from the WPCLF. During the 20-year loan period Columbus will save approximately \$5,306,803 by using WPCLF dollars at the standard rate of 2.26%, compared to the market rate of 3.51%. Interest rates are set monthly and may change for the requested month of loan award.

### *Project Schedule*

The anticipated loan award will occur in December 2022. Construction is expected to begin immediately and is expected to be completed by February 2024.

## **Public Participation**

Columbus will hold a public meeting in order to address any construction logistics or questions the public may have. A public notice was posted on the City of Columbus' Public Utilities webpage detailing the proposed construction project. Contact information was provided for any public questions or concerns.

Ohio EPA will make a copy of this document available to the public on its web page: <https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements> and will provide it upon request to interested parties. Information supporting this Environmental Assessment (EA) is available from the project contact named below.

## **Environmental Impacts**

Construction of this project could affect environmental features, but the effects will be reduced or mitigated to acceptable levels as explained below.

### Air Quality

Franklin County is in attainment for all regulated criteria air pollutants applicable to this project. The

contractor will prevent unnecessary dust from construction activities from entering the atmosphere. Dust on unsurfaced streets or parking areas and any remaining dust on surfaced streets shall be controlled with water as needed. Because of this approach, there will be no significant adverse short-term or long-term impacts on local air quality.

#### Archaeological and Historical Resources

Coordination was completed with the State Historic Preservation Office (SHPO) prior to nomination of this project. SHPO stated that trenchless construction techniques will create a low probability of affecting significant archaeological sites. Many previous archaeological surveys have been reported prior to utility work within the project area. Further archaeological work will be completed in areas not previously surveyed prior to implementation of the project.

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify SHPO of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will not resume until a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

No historic properties are present within the construction area. The planned area of construction has been previously developed and all excavation work will take place within previously disturbed roads and rights-of-way alongside other installed utilities. As no new excavations will occur, no impacts are expected to archaeological or historical resources.

#### Terrestrial Habitat and Endangered Species

Nine federally listed species occur in Franklin County: the endangered Indiana bat, the endangered running buffalo clover, the endangered Scioto madtom, the endangered clubshell mussel, the endangered northern riffleshell mussel, the endangered rayed bean mussel, the endangered snuffbox mussel, the threatened northern long-eared bat, and the threatened rabbitsfoot mussel.

Coordination was completed with the Ohio Department of Natural Resources (ODNR) prior to nomination of this project. ODNR recommended minimizing disruption to any aquatic habitat and tree clearing should occur within the recommended seasonal timeframe.

The area of disturbance during construction is limited to existing roads and previously disturbed rights-of-way. No habitat suited to the species listed above is in the project area, and trenchless construction will avoid impacts to any aquatic areas. Based on this information, the project will have no significant adverse short-term or long-term effect on terrestrial habitat or endangered species.

#### Farmland Protection and Land Use

The predominant current land use in the greater project area is agricultural. The proposed future land use in this same area is about 50% industrial, 40% public use (Rickenbacker Port Authority land), and 10% existing rural-residential and agricultural. The purpose of this project and related projects is to accommodate expected commercial growth in the JEDD and surrounding areas that are or have been agricultural and will be converted to other uses resulting in a permanent loss of agricultural production. The concentration of anticipated development in the JEDD boundary is preferable to more dispersed development and more widespread loss of agricultural land that can make farming less convenient.

#### Floodplains

According to project planning and design, no construction is scheduled to occur within designated flood

hazard zones.

#### Ground Water Resources

Ground water resources could be adversely affected by deep trenching as it is likely that dewatering will be required along much of the alignment. Based on the documented well depths and sparse concentration of wells in the vicinity of the proposed alignment, it is concluded that dewatering for either open cut excavation or shaft construction would adversely impact relatively few wells. Pump lowering would likely be practical at most locations. Depending on the duration of dewatering at various locations, it is anticipated that temporary tanks or replacement wells would be practical remediation options where pumps cannot be lowered. If new, deeper wells are needed, they will be replaced prior to construction.

#### Safety, Noise, Traffic, and Aesthetics

Existing traffic patterns will be impacted. A traffic plan has been developed by the contractor prior to commencing construction which includes all proper warning signs and lane closures. The contractor will minimize both the extent and duration of the disruption of traffic and disturbance to the neighborhood during construction. Due to the industrial nature of the area, no residents will be impacted by the project construction. Local aesthetics will be unchanged after construction is complete. For these reasons, the project will not adversely affect noise, traffic, public safety, or aesthetics.

#### Surface Water Resources

Although a stream was identified within the project area, the planned trenchless method of construction will mitigate any impacts to the stream.

The contractor will minimize soil from eroding or otherwise entering onto all paved areas and into natural watercourses and ditches. Designated Wild and Scenic Rivers will be unaffected by this project as there are none located within the project's vicinity.

#### Wetlands

Although the National Wetland Inventory identified a wetland area on the former golf course property alongside Rickenbacker Parkway, a 401/404 permit was obtained by the property owner, the Columbus Regional Airport Authority, prior to construction for the purpose of another project and mitigation work will be completed prior to the beginning of this project's construction.

#### Energy Use

The completed ISSE will utilize a gravity sewer system where feasible, therefore minimizing additional regional energy usage.

#### Local Economy

Projected residential sewer bills with the implementation of this and other wastewater projects are expected to be approximately \$867/year, which is approximately 1.6% of median household income (MHI) of Columbus, or \$53,745. This annual bill is higher than the statewide average of \$749. By using WPCLF financing for this project, Columbus has minimized the economic impact on customers.

#### Conclusion

Based upon Ohio EPA's review of the planning information and the materials presented in this Environmental Assessment, we have concluded that there will be no significant indirect or direct short-term or long-term adverse environmental impacts from the proposed project as it relates to the environmental features discussed previously. This is because these features do not exist in the project

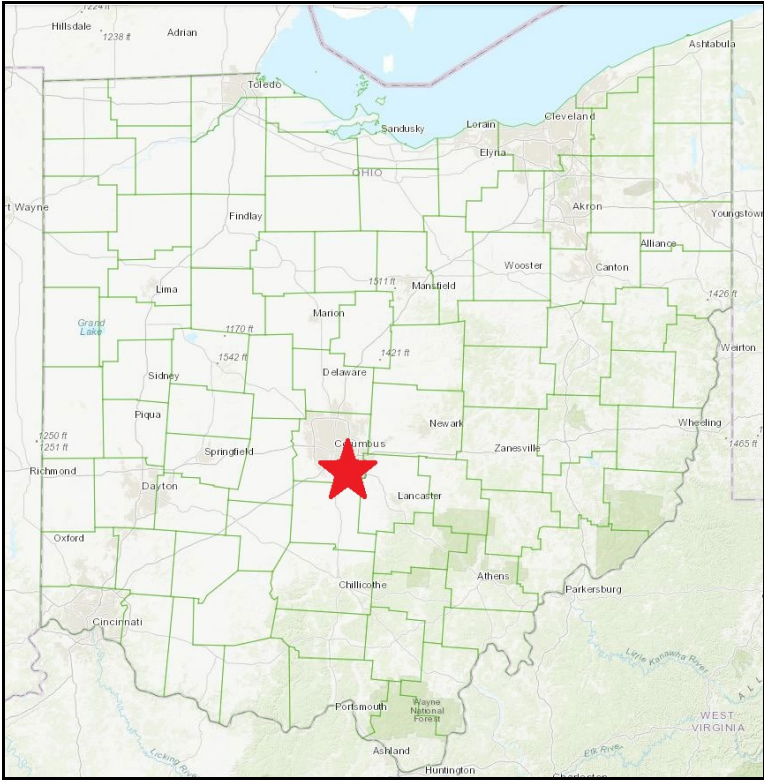
area, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated.

**Contact information**

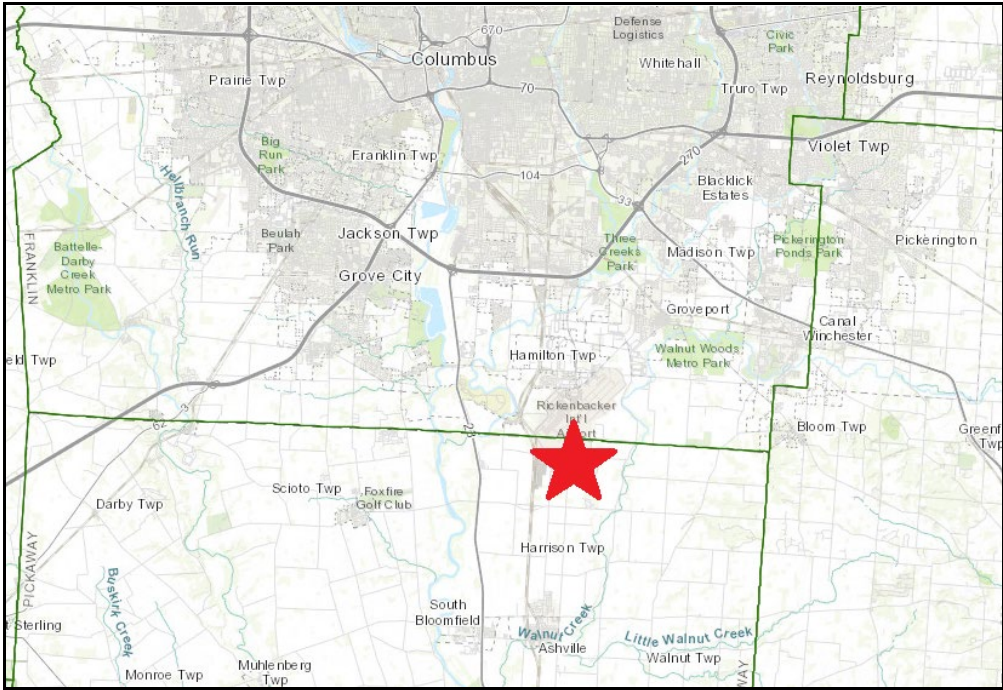
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**Exhibit 1: Project location map**



**Exhibit 2: Project location map**



**Exhibit 3: Project location map**

