

# Department of Port Control

Ordinance No.: 143-2019

Division of Planning & Engineering

## Executive Summary

The Department of Port Control is requesting to amend the title and Sections 1, 2, and 4 of Ordinance No. 700-16, passed August 10, 2016, as amended; and to supplement the ordinance by adding new Sections 3a and 3b, relating to the public improvement of rehabilitating the storm and sanitary sewer systems in and around the IX Center and discharge centers and constructing infrastructure improvements needed for the rehabilitation and to authorize a design build contract to make the improvement and real estate and easement acquisition.

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### **Background/Purpose:**

The current sanitary drainage system of the Cleveland Hopkins International Airport ("CLE") IX Center, along with several adjacent buildings on the Airport's South Campus, traverses under active runways to the NASA Glenn Research Center ("NASA"). NASA has requested that this flow be redirected outside of their property due to their facility basements being flooded with sanitary/storm effluent during major rain events. Storm water infiltration has also occurred due to the age of the line. The sanitary line has likely existed since the World War II era and is beyond its useful life. Redirecting the line has become a priority of the Department and Mayor's Office. In addition, the Ohio Environmental Protection Agency ("OEPA") has tested a nearby Airport detention basin and determined that a main source of harmful biofilm (bacterial) growth in the basin is due to contaminated storm lines coming from the IX Center. Tests of these lines have revealed that the sanitary and storm lines are cross-connected on IX Center property, which has resulted in contaminated storm effluent reaching the detention basin. OEPA has requested the Airport address the biofilm issue with a suitable plan to be completed by the spring of 2021. Otherwise, the Airport faces a potential Notice of Violation ("NOV") from the OEPA.

The I-X Center was constructed in 1942 has over 2 million square feet under roof. Of that area, close to half is offices and exhibition area that is a vital economic engine for the area. The Department is concerned that the cross-connections between sanitary and storm within the IX Center lease hold will continue to affect NASA's facilities, the aforementioned detention basin, and will require attention per Ohio Environmental Protection Agency (EPA) regulations prior to the spring of 2021. The re-direction of sanitary is only possible after storm and sanitary utilities have been separated and brought to current standards.



**Scope of Work:**

The scope of this work will allow the Department to seek a Consultant(s) to supplement the staff to provide I-X Center-related sanitary and storm analysis plus design and construction management services for the Airport. The selected Consultant(s) shall provide the complete study, design, and construction management services to determine the separation of storm and sanitary systems throughout the entire IX Center lease hold area. The sanitary portion will include the design of a new sanitary gravity pipeline from a Northeast Ohio Regional Sewer District (NEORSD) interceptor east of the Airport, designed for the purposes of receiving the I-X Center effluent plus Airport South Campus Development areas. The storm pipe network shall be analyzed and designed to determine the best solution to provide additional capacity, alleviating existing flooding conditions during high-frequency rainfall events and the design of a new outfall for the I-X Center either through the Airport's Central Detention Basin or South to Abram Creek. The proposed study and design solutions will adhere to the sanitary and storm program documents guiding the future infrastructure improvements throughout DPC. The design of a water quality post-construction Best Management Practice (BMP) retrofit of the Central Detention Basin or upstream of the storm outfall connection to Abram Creek for the purpose of receiving I-X Center runoff will also be a critical component of the project.. Storm and sanitary calculations shall be performed utilizing Storm Water Management Modeling (SWMM), and follow DPC CAD/BIM standards and design requirements.

**Justification/Urgency:**

The life expectancy of the current storm/sanitary lines into and out of the I-X Center was surpassed several years ago and requires immediate attention. Both the NASA and I-X Center facilities have experienced significant infrastructure damage over this period. In addition, the OEPA has given the Department until the spring of 2021 to address the biofilm growth issue in the Airport's detention basin. Future major rain events will continue to cause damage to these facilities and Airport partner facilities. Therefore, imperative is for DPC to promptly initiate the legislative and Request for Qualifications processes that will engage a contractor to prepare the project design/build plans and specifications.

**Anticipated Cost and funding source:** N/A**Schedule or Term of Contract:**

Requested is for the design-build professional services contract to begin upon date of execution and, unless extended by the City or unless sooner canceled or terminated pursuant to the provisions thereof, shall terminate upon the Department Director's acceptance of completion of all required services.

**Current Vendors/Contracts:** N/A**CSB Participation:**

All prospective consultants or teams of consultants are expected to meet the required OEO participation goals of the City of Cleveland.