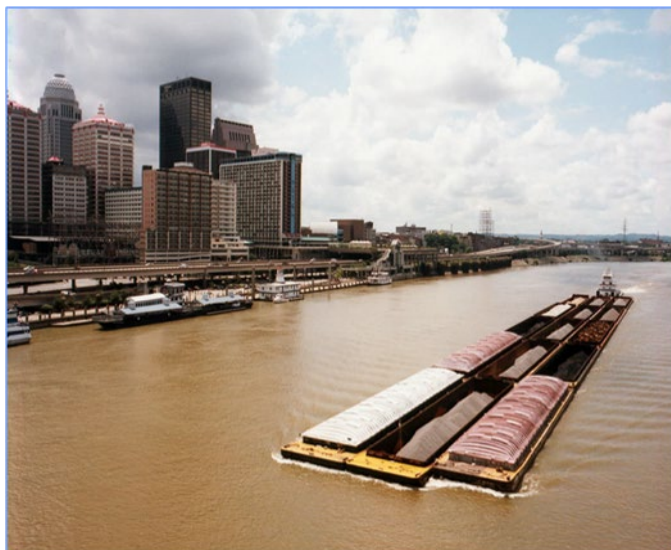
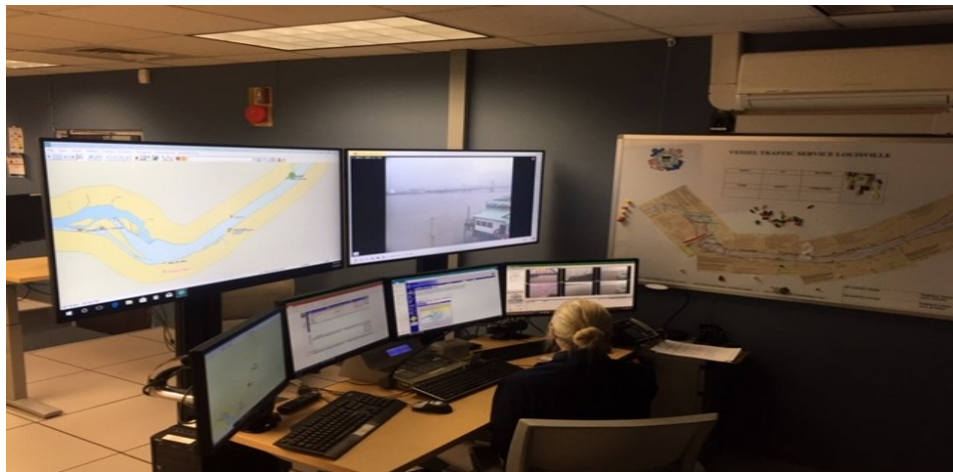




# VTs Louisville User Manual





**U. S. COAST GUARD  
VESSEL TRAFFIC SERVICE LOUISVILLE**

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## Vessel Traffic Service (VTS) Louisville (502-779-5420)



### ... Just the Facts ...

1. **VTS Louisville Area:** McAlpine Locks (MM 606.8) to Twelve Mile Island (MM 593); the VTS monitors VHF CH-13

2. **When the VTS is activated:** It is activated when the McAlpine (upper) gauge is at approximately **13.0 feet**.

3. **Applicable to which vessels:** Generally, all vessels must comply with directives issued by the VTS. Vessels that are subject to Vessel Bridge-to-Bridge Radiotelephone Act and vessels that are required to participate in the **Vessel Movement Reporting System (VMRS Users)** are all considered VTS Users.

**You are a VMRS User** if you operate in the VTS Area and your vessel is:

- (a) A towing vessel of 8 meters (approx 26 feet) or more in length;
- (b) A passenger vessel certificated to carry 50 or more passengers for hire, when engaged in trade; or
- (c) Any other power-driven vessel of 40 meters (approx 131 feet) or more in length.

4. **When & where to report:** If you are a *VMRS User*, you must file a **Sailing Plan** at least 15 minutes before navigating in the VTS area. VTS Louisville will accept Sailing Plan reports at the lower & upper ends of the VTS Area (McAlpine Locks and Twelve-Mile Island), as well as 15 minutes before entering the VTS Area. You must also file **Position Reports** at specific locations within the VTS area as described below (includes initial Sailing Plan):

### **Position Reporting**

#### **Upbound Vessels**

McAlpine L/D (MM 606.8) (*Sailing Plan*)  
L&I Railroad Bridge (MM 604.4)  
Towhead Island (MM 602.5)  
Six Mile Island (MM 598)  
Twelve Mile Island (MM 593) (*Final Report*)

#### **Downbound Vessels**

Twelve Mile Island (MM 593) (*Sailing Plan*)  
Six Mile Island (MM 598)  
Louisville Waterworks (MM 600.5)  
Towhead Island (MM 602.5)  
L&I Railroad Bridge (MM 604.4)  
McAlpine L/D (MM 606.8) (*Final Report*)

For vessels initiating their voyage from *within* the VTS Area, they should file their *Sailing Plan* before getting underway, and then file *Position Reports* at the same locations listed above for either Upbound or Downbound vessels as applicable. They should also report when they reach their destination or mooring.

5. **What & how to report:** The initial report or *Sailing Plan* should include at minimum the following information:

- (a) Vessel name and type;
- (b) Present position;
- (c) Destination;
- (d) Intended route/planned stops;
- (e) Time and point of entry; and
- (f) Barges types (hopper, red flag/tank, crane, etc.) including any *Dangerous cargoes*

**Example Sailing Plan:** "Louisville Traffic, this is M/V John Doe currently downbound at Twelve-Mile Island with 15 hoppers (loads of coal); I'll be stopping at Six Mile for fuel, then proceeding downbound through McAlpine"

For Position reports, you need only give the name of the vessel and the name of the checkpoint.

**Example Position Report:** "Louisville Traffic, this is M/V John Doe; finished fueling and passing Six Mile Island downbound".

All Sailing Plan and Position Reports should be communicated via **VHF/FM CH-13** unless directed to another frequency by the VTS.

6. **How to report Certain Dangerous Cargoes:** For towing vessels pushing barges that are loaded (or were previously loaded) with **Certain Dangerous Cargoes (CDC)**, or for any other vessel that does not want to



“advertise” their cargoes, please consider using telephone or cellular (in lieu of VHF/FM) to report your Sailing Plan. VTS Louisville can be reached at **502-779-5420**. The VTS encourages you to report your initial Sailing Plan via telephone to accommodate your privacy wishes and to avoid broadcasting any CDC cargoes that are in tow; however, Position Reports must be made via VHF/FM radio for safety purposes, so that other traffic will know your route and position.

**Example Sailing Plan (via radio & telephone):**

**First via radio:** “Louisville Traffic, this is M/V John Doe currently downbound at Twelve-Mile Island, checking into the system; I’ll get back to you in a moment.” **Then via telephone:** “Louisville Traffic, this is the John Doe with the rest of my Sailing Plan. “I’m pushing 3 loads of ammonium nitrate and 1 empty Chlorine barge, in addition to 5 loads of coal; I’ll be stopping at Six Mile for fuel, then proceeding downbound through McAlpine”

- 7. What are Certain Dangerous Cargoes?** Certain Dangerous Cargoes (CDC) are defined in 33 CFR 160.202. The list(s) are too extensive to publish in this guide; however, the most common CDC cargoes that are likely to ever be transported on the Western Rivers are outlined below. *Disclaimer:* this is not a complete listing of CDC cargoes, but we are not aware of any other CDC cargoes that have been shipped through the Western Rivers in the past five years, and it is improbable that any would be shipped in bulk other than those on this list:

CDC Bulk Cargoes		
CHRIS	Proper Shipping Name	Type
AAD	Acetaldehyde	Liquefied Gas
ACY	Acetone cyanohydrin	Liquid
ALA	Allyl alcohol	Liquid
AMA	Ammonia, anhydrous	Liquefied Gas
AMN	Ammonium nitrate	Powder/Granular (Hopper)
AN2	Ammonium nitrate based fertilizers	Powder/Granular (Hopper)
BDI	Butadiene	Liquefied Gas
BTN	Butylene	Liquefied Gas
BUT	Butane	Liquefied Gas
CLX	Chlorine	Liquefied Gas
CSA	Chlorosulfonic acid	Liquid
CTA	Crotonaldehyde	Liquid
DMA	Dimethylamine	Liquefied Gas
EAM	Ethylamine	Liquefied Gas
ECH	Ethylene chlorohydrin	Liquid
ECL	Ethyl chloride	Liquefied Gas

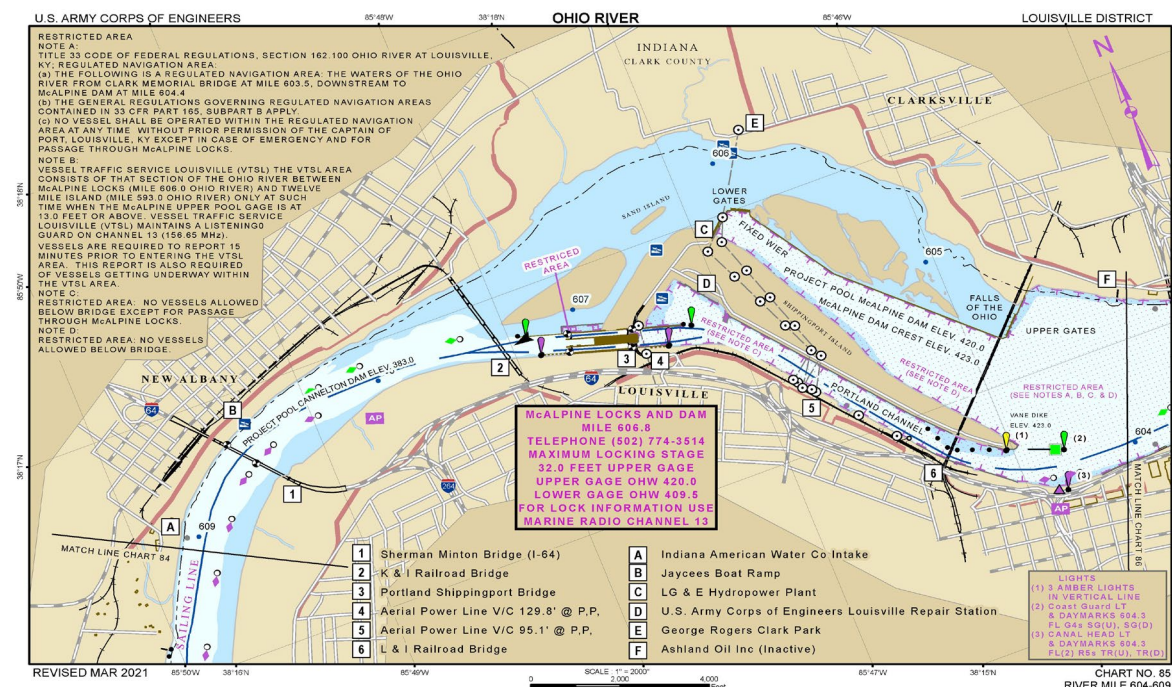
CDC Bulk Cargoes		
CHRIS	Proper Shipping Name	Type
EDB	Ethylene dibromide	Liquid
EOX	Ethylene oxide	Liquefied Gas
ETH	Ethane	Liquefied Gas
ETL	Ethylene	Liquefied Gas
LNG	Methane (LNG)	Liquefied Gas
MAP	Methyl acetylene-propadiene mixture	Liquefied Gas
MET	Methacrylonitrile	Liquid
MTB	Methyl bromide	Liquefied Gas
MTC	Methyl chloride	Liquefied Gas
OLM	Oleum (fuming sulfuric acid)	Liquid
PO2	Propylene Oxide/Ethylene Oxide Mixtures	Liquefied Gas
POX	Propylene Oxide	Liquid
PPL	Propylene	Liquefied Gas
PRP	Propane	Liquefied Gas
SFD	Sulfur dioxide	Liquefied Gas
VCM	Vinyl chloride	Liquefied Gas

- 8. What type of service does the VTS provide?** VTS Louisville provides most of the services defined by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) as an *Information Service*, as a *Navigation Service* and as a *Traffic Organization Service*. These services include, but are not limited to the following functions: communicating the approximate position, intentions and destination of vessels operating within the VTS area; information on meteorological and hydrological conditions and status of aids to navigation (ATON); information on the presence of traffic congestion in the waterway and waterway restrictions; and, information to assist in the on-board navigational decision-making process provided at the request of a vessel, or when deemed necessary by the VTS. The VTS also monitors and provides advance planning and prioritization of vessel movements, including the allocation of space, established routes, and/or other measures that may be considered necessary and appropriate by the VTS, including the establishment of vessel queues. Some of these services are possible because of mandatory position reporting.
- 9. One-Way Traffic?** One of the most important functions that VTS Louisville performs is to actively manage traffic in the critical area between Towhead Island (MM 602.5) and the Louisville & Indiana (L&I) Railroad Drawbridge at the entrance to the Portland Canal (MM 604.4). Due to strong out-drafts along the Kentucky bank and the limited space available at the canal entrance, the VTS manages the system to ensure only one-way traffic is allowed between Towhead Island and L&I Bridge, and with few exceptions, that only a single tow is allowed to transit the area at a time. The VTS also ensures that the L&I Bridge is in the “Up” (Open) position before granting clearance for downbound traffic to proceed below Towhead Island.
- 10. Where are the Queues?** Any *downbound* vessel queue will be managed by the VTS. The VTS will inform mariners of their order in any queue. If you are a downbound tow and the VTS notifies you that you are next in



queue, generally your tow should hold at Louisville Waterworks (MM 600.5); if your tow is not next in the downbound queue, you should consider holding at or above Six Mile Island. For any *upbound* queues, your order will generally be established by order of lockage, and you will be allowed to hold in the Portland Canal unless directed otherwise by the McAlpine Lockmaster or the VTS.

Useful Numbers		
Name	Phone	VHF-FM
Clark County, IN Sheriff	812-283-4471	
Clarksville, IN Fire Dept	812-282-7619	
Clarksville, IN Police Dept	812-288-7151	
Floyd County, IN Sheriff	812-948-5400	
Harrods Creek, KY Fire Dept	502-228-1351	
Jeffersonville, IN Fire Dept	812-285-6445	
Jeffersonville, IN Police Dept.	812-283-6633	
L&I Railroad Drawbridge	502-583-4272	CH-13
Louisville Metro Fire/Police Dispatch	911 or 502-574-7111	
McAlpine Lockmaster	502-774-3514	CH-13
McAlpine Lower Automated Gauge	502-396-5587	
McAlpine Upper Automated Gauge @ 2nd Street Bridge	502-396-5569	
National Response Center	800-424-8802	
New Albany, IN Police Dept	812 948-5300	
USCG Navigation Center	703-313-5900	
<b>USCG Sector Ohio Valley</b> (Louisville, KY)	502-779-5424 or 800-253-7465	CH-16
Utica, IN Fire Dept	812-288-7044	
<b>VTS Louisville</b>	502-779-5420	CH-13





**U. S. COAST GUARD  
VESSEL TRAFFIC SERVICE LOUISVILLE**

**INTRODUCTION**

During high river stages at Louisville, Kentucky, downbound tows on the Ohio River face a combination of navigational challenges. Due to unusually strong and variable current patterns, a down bound tow passing under the former Louisville and Jeffersonville Railroad (Big-Four) Bridge is committed until it reaches the Louisville-Portland Canal. If a tow has to stop or back down because the Louisville and Indiana Railroad Bridge cannot be opened, the pilot will have control difficulties. Consequently, the tow could be carried by strong outdraft currents toward the middle of the river and the McAlpine Dam. As such, it is unsafe for more than one tow at a given time to be in the reach of the channel between Towhead Island and the entrance to the Louisville and Portland Canal.

In 1971 and 1972 a series of casualties occurred on the Ohio River in the Louisville area. The most serious was in February of 1972 when a barge carrying chlorine gas became lodged in the McAlpine Dam threatening the Louisville metropolitan area. As a result of these casualties, in 1973 the Vessel Management System Louisville (VSML) was created.

Effective 13 October 13, 1994, changes to Title 33 of the United States Code of Federal Regulations (CFR) Part 161 shifted the participation requirement from a “voluntary” system to a “mandatory” system. Vessel Traffic Service Louisville (VTSL) is a mandatory Vessel Traffic Service (VTS) designed to enable vessel operators to better cope with the hazards associated with navigation during high water conditions in the Louisville area. The VTS is placed into operation when the water level at the upper gauge of McAlpine Dam approaching 13 feet and rising. The VTS remains in operation until the level falls below 13 feet.

The VTS provides the mariner with information related to the safe navigation of the waterway. Mariners are cautioned that information provided by the Vessel Traffic Center (VTC) can be no more accurate than the reports received from the VTS Users. The VTC may not have first hand knowledge of all hazardous conditions that may exist in the VTSL area. As such, unreported hazards may confront the mariner at any time. Such hazards should be reported to the VTC as soon as possible so the VTC may pass that information on to other mariners.

This information, coupled with the mariner’s compliance with VTS directions and measures, and the provisions set forth in 33 CFR 161, serve to enhance the safe routing of vessels through the hazardous waterway in the VTSL area during periods of high water. However, the owner, operator, charterer, master or person directing the movement of a vessel remains at all times responsible for the manner in which the vessel is operated and maneuvered, and for the safe navigation of the vessel under all circumstances. Compliance with these rules or with a direction of the VTS is at all times contingent upon the requirement for safe navigation.

The VTC processes information received from vessels operating in the VTSL area. The VTC also communicates directly with the Louisville and Indiana Railroad Bridge Office via telephone and passes bridge status information to vessels within the VTSL area. The goal of the VTS is to improve vessel safety by implementation of the following procedures:

- (1) The VTC will coordinate the raising of the Louisville and Indiana Railroad Bridge with the needs of river traffic;



- (2) The VTC will notify participating vessels of the location of other vessels and information about any known hazards within the VTSL area;
- (3) Through advanced planning, vessel advisories and vessel movement directives, the VTC will direct vessels in order to avoid congestion in the critical area between Towhead Island and the Louisville and Indiana Railroad Bridge;
- (4) The VTC will permit only one tow at a time to transit between Towhead Island and the entrance to the Louisville and Portland Canal.

VTS Louisville operates on a VHF-FM communications network and provides coverage from Twelve Mile Island (Mile 593.0) to McAlpine Lock and Dam (Mile 606.8) on the Ohio River. The VTS maintains a listening guard on Channel 13. The Sector Ohio Valley Communications Center also maintains a listening guard on Channel 16 except when working radio traffic on another frequency. The primary frequency for communicating with the VTC is Channel 13 (156.65 MHz). In the event of communications failure on Channel 13, initial contact with the VTC can be made on Channel 16. The voice call sign for VTS Louisville is “Coast Guard Louisville Traffic.”

Vessels required to participate in the VTS are listed in this manual. The Ports and Waterways Safety Act, as amended, prescribes civil and criminal penalties for violation of the VTS regulations. Any person who willfully and knowingly violates any regulation issued hereunder commits a Class C Felony.

This manual is intended to provide the mariner with a description of the services offered and rules in force for VTS Louisville. It incorporates regulations which are published in Title 33 Code of Federal Regulations (CFR). This manual is not intended to conflict with or modify the Regulations in any respect.

This manual hereby cancels and supersedes previous editions of the Vessel Traffic Service User’s Manual. ***This manual is effective October 20, 2021.*** Earlier versions should be discarded.

We encourage all interested parties to visit the Vessel Traffic Center, and we encourage suggestions for improvements to this manual or to VTS operating procedures. Send suggestions and comments to:

Commander  
Coast Guard Sector Ohio Valley  
600 Martin Luther King Jr. Place  
Room 409-D  
Louisville, KY 40202-2242



## SECTION I. GENERAL PROCEDURES

### 1. Purpose and Applicability

- a. The purpose of this User's Manual is to provide procedures to be followed by vessels operating in the Vessel Traffic Service Louisville (VTSL) area and to enhance safe passage by reducing the potential for ramblings, groundings and collisions and to minimize risk of environmental harm resulting from those events.
- b. The following procedures in this section apply to Vessel Traffic Service (VTS) Users (required participants):
  - (1) Every vessel subject to the Vessel Bridge-to-Bridge Radiotelephone Act, which is:
    - a. Every power-driven vessel of 20 meters ( approximately 65 feet) or more in length while navigating;
    - b. Every vessel of 100 gross tons and upward carrying one or more passengers for hire while navigating;
    - c. Every towing vessel of 8 meters ( approximately 26. feet) or over in length while navigating; and
    - d. Every dredge or floating plant engaged in or near a channel or fairway in operation likely to restrict or affect navigation of other vessels except for an unmanned or intermittently manned floating pant under the control of a dredge;
  - (2) Vessels required to participate in a Vessel Movement Reporting System (VMRS);
  - (3) Vessels equipped with a required Coast Guard type-approved Automatic Identification System (AIS).

Participation may also apply to any vessel underway or at anchor within the Louisville VTS area to the extent the VTS considers it necessary

2. Vessel Operation. VTS Users shall ensure that all VTS directions or measures and the procedures contained in the regulations set forth in Appendix C are adhered to. Compliance with these rules or with a direction of the VTS is at all times contingent upon the requirement for safe navigation. If a VTS User is unable to safely comply with a direction issued by VTS, the VTS User may deviate only to the extent necessary to avoid endangering persons, property or the environment. This deviation shall be reported to the VTS as soon as possible.

3. Intention to Deviate From These Rules. Requests to deviate from these rules for an extended period of time or if anticipated before the start of a transit, must be submitted in writing to the District Commander. Upon receipt of the written request, the District Commander may authorize a deviation if the proposed deviation provides a level of safety equivalent to or beyond that provided by these procedures or is a maneuver considered necessary for safe navigation under the circumstances.



Correspondence requesting a deviation of these regulations should be addressed to:

Commander (dpw)  
Eighth Coast Guard District  
500 Poydras Street  
New Orleans, LA 70130-3396

The VTC may, upon request, authorize a deviation from these rules for a voyage or part of a voyage through the VTSL area. The deviation request must be made well in advance to allow the requesting vessel and the VTC sufficient time to assess the safety of the proposed maneuver. The requesting vessel and the VTC must exchange relevant information on vessel handling characteristics, traffic density and environmental conditions and, must otherwise cooperate to promote a safe transit.

4. Requirement to Carry the Rules. Each VTS User must carry on board and maintain for ready reference a copy of the regulations. Carrying a copy of this User's Manual meets the requirement to carry the rules.

5. Emergencies

a. Emergency Mooring Buoys. The U. S. Army Corps of Engineers has established four pairs of emergency mooring buoys within the VTSL area. Each buoy is 10 feet in diameter with retro-reflective sides. The two buoys which comprise each pair are 585 feet apart and are located approximately at:

(1) Indiana Bank – Mile 582.3 (near 18 Mile Island);

(2) Six Mile Island – Mile 597.5;

(3) Six Mile Island – Mile 598.2; and

(4) Kentucky Bank – Mile 599.8 (Cox's Park).

Note: All buoys, except those at Six Mile Island – Mile 598.2, are removed between May 1 and September 30. Due to the close proximity of the municipal water intakes, mooring of tank vessels laden with petroleum products or hazardous materials is not authorized on the Kentucky Bank - Mile 599.8 (Cox's Park).

b. The Regulations. A vessel will not use the emergency mooring buoys that have been established by the U. S. Army Corps of Engineers, unless specifically authorized. The VTS, upon request, may authorize the use of the emergency mooring buoys by down bound towing vessels that are awaiting VTS approval to proceed.



## SECTION II. VESSEL TRAFFIC SERVICE LOUISVILLE AREA DESCRIPTION

The VTSL area consists of that section of the Ohio River between the McAlpine Lock (Mile 606.8) and Twelve Mile Island (Mile 593.0) only at such time when the McAlpine upper pool gauge is approximately 13.0 feet or above. Within this area lie the following bridges, islands and landmarks:

<b><u>Point of Reference</u></b>	<b><u>Mile</u></b>	<b><u>Bank</u></b>
*Twelve Mile Island	593.0	
East End Bridge/Lewis and Clark	595.0	
Harrods Creek/Captain's Quarters Boat Dock/Marina	595.9	LDB
*Six Mile Island	598.0	
Wootons Dock Light	598.7	RDB
Cox's Park Public Boat Ramp	599.7	LDB
*+Louisville Water Company Intake	600.6	LDB
Old JeffBoat Shipyard	601.5	RDB
*Towhead Island	602.5	
Louisville & Jeffersonville Railroad Bridge (Big Four Railroad Bridge)	602.9	
John F. Kennedy Memorial Highway Bridge and Lincoln Memorial Bridge (dual bridges) (Interstate 65 Bridges)	603.1	
Clark Memorial Bridge (Second Street Bridge)	603.5	
*Louisville and Indiana (L&I) Railroad Bridge (Conrail Bridge)	604.4	
*McAlpine Lock and Dam	606.8	
RDB – Right Descending Bank LDB – Left Descending Bank		
*VTS Check Points		
*+Louisville Water Intake check point for down bound vessels only		



## SECTION III. COMMUNICATIONS PROCEDURES AND MISCELLANEOUS REPORTS

The procedures in this section apply to VTS Users:

1. **Designated Frequency for VTSL Area.** The primary frequency for communicating with the VTC is 156.65 MHz (Channel 13). The VTC also monitors Channel 16 (156.8 MHz). If communications on Channel 13 fail, VTSL communications shall be on Channel 16. All references to “channel” refer to VHF-FM marine radio channels.

Note: As stated in 47 CFR 80.148 (b), a VHF watch on Channel 16 (156.800 MHz) is not required on vessels subject to the Vessel Bridge-to-Bridge Radiotelephone Act and participating in a Vessel Traffic Service (VTS) system when the watch is maintained on both the vessel bridge-to-bridge frequency and a designated VTS frequency.

2. **Voice Call Sign.** The voice call sign for VTSL is “COAST GUARD LOUISVILLE TRAFFIC,” after communications have been established, the abbreviated call sign “LOUISVILLE TRAFFIC” may be used.

3. **Radio Listening Watch**

a. When not exchanging communications, a VTS User shall maintain a listening watch on the VTS frequency, VHF-FM Channel 13 (156.65 MHz), and shall respond promptly when hailed by the VTC.

b. All communication and reports required by these procedures shall be made from the navigational bridge of the vessel, or in case of a dredge, from its main control station.

4. **Radiotelephone Equipment.** A vessel’s radiotelephone equipment shall be maintained in effective operating condition. A VTS User that cannot meet the radiotelephone requirements of these rules may not enter or get underway in the VTS Area without permission from the VTC. If the required radiotelephone ceases to operate, the VTS User shall ensure that it is restored to operating condition as soon as possible. The failure of a vessel’s radiotelephone equipment while the vessel is underway, shall not in itself constitute a violation of these rules nor shall it obligate the vessel to moor or anchor, however required reports shall be made by other means if possible.

5. **English Language.** All communications and reports shall be made in the English language.

6. **Time.** In all communications and reports, time shall be specified by using the Louisville local time, either Eastern Standard Time (EST) or Eastern Daylight Savings Time (EDT) depending on which is in effect, and by using the 24 hour clock system (i.e., 1:00 pm is 1300).

7. **Report of Impairment to the Operation of a Vessel.** A VTS User shall report to the VTC any conditions of the vessel related to a vessel’s ability to safely navigate or maneuver such as, but not limited to:

a. The absence or malfunction of vessel operating equipment such as propulsion machinery, steering gear, radar system, gyrocompass, depth sounding device,



Automatic Radar Plotting Aid (ARPA), radiotelephone, automated dependent surveillance equipment, navigational lighting, sound signaling devices or similar equipment;

- b. Any condition on board the vessel likely to impair navigation, such as lack of current nautical charts and publications, personnel shortage, or similar conditions; or
- c. Vessel characteristics that affect or restrict maneuverability, such as cargo arrangement, trim, loaded condition, underkeel clearance, speed or similar characteristics.

**8. Miscellaneous Reports.** A VTS User shall notify the VTC of any of the following:

- a. A marine casualty (as defined in 46 CFR 4.03-1);
- b. Involvement in the ramming of a fixed or floating object;
- c. A pollution incident (as defined in 33 CFR 151.15);
- d. A defect or discrepancy in an aid to navigation;
- e. A hazardous condition (as defined in 33 CFR 160.202);
- f. Improper operation of vessel equipment (as defined in 33 CFR 164.53);
- g. Adverse weather or reduced visibility.



## SECTION IV. VESSEL MOVEMENT REPORTING SYSTEM (VRMS)

VMRS Users are those vessels that are required to monitor, report and respond to VTS directions in the VTSL area. VTS Users are those vessels that are required to monitor and respond to directions from the VTC.

The procedures in this section apply to VMRS Users:

- (2) Every power-driven vessel of 40 meters (approximately 131 feet) or more in length.
- (3) Every towing vessel of 8 meters (approximately 26 feet) or more in length.
- (4) Every vessel certificated to carry 50 or more passengers for hire, when engaged in trade.

VMRS Users must meet all requirement established for VTS Users; and

1. **Reports.** Except as otherwise provided, all reports and communications shall be made promptly by radiotelephone to the VTC on Channel 13 (156.65 MHz).

2. **Sailing Plan.** Vessels (i.e., up bound, local transit\* or down bound) are required to report 15 minutes prior to entering the VTS area (i.e., when a vessel is getting underway from berth, anchor or mooring within the VTSL area or entering the VTS area from outside). The report shall contain the following information:

- a. Name of vessel;
- b. Horsepower;
- c. Location of the vessel;
- d. Estimated time of entering or beginning to navigate in the VTS Area;
- e. Destination;
- f. Any planned maneuvers within the VTSL area before proceeding to final destination (i.e., fleeting or tow work, overnight stopping, bunkering or taking on stores/supplies);
- g. Tow configuration to include number of barges (loaded and unloaded) and types of cargos. The barge name and specific cargo\*\* (last cargo for empties) is to be provided for any dangerous cargo or any regulated cargo barges (commonly referred to as red flag) as defined by Subchapter D and Subchapter O of 46 CFR 30-40 and 151; and
- h. Any impairment to the operational capability of the vessel including those described in Paragraph 7 of Section III.

(\*A local transit vessel is a vessel whose transit originates and terminates within the VTSL area.)



(\*\*The USCG Chemical Hazards Response Information System (CHRIS) code designation is the preferred method of identifying cargo required to be reported by name.)

3. **Position Reporting Points.** Vessels are required to report its name and location to the VTC at the following Reporting Points:

a. Up bound vessel

(1) The initial report for entering the VTSL area is the McAlpine Lock (Mile 606.8)+.

(2) Louisville and Indiana Railroad Bridge (Mile 604.4);

(3) Towhead Island (Mile 602.5);

(4) Six Mile Island (Mile 598.0);

a. The final report for an up bound vessel departing the VTSL area is Twelve Mile Island (Mile 593.0)++.

b. Down bound vessel

(1) The initial report for entering the VTSL area is Twelve Mile Island (Mile 593.0)+.

(2) Six Mile Island (Mile 598.0);

(3) Louisville Water Company Municipal Intake (Mile 600.6);

(4) Towhead Island (Mile 602.5);

(5) Louisville and Indiana Railroad Bridge (Mile 604.4);

(6) The final report for a down bound vessel departing the VTSL area is the McAlpine Lock (Mile 606.8)++.

c. It is requested that vessel movements, such as, but not limited to turning, making up, changing or reassembling tows, be reported to the VTC at least 15 Minutes prior to commencing, at commencement and immediately upon completion of operation.

d. When directed by the VTC.

+VTS Users entering the VTS area from within the VTSL area (i.e., when a vessel is getting underway from berth, anchor or mooring) will use that location as their beginning point and report at the next check point they arrive as per the above designated locations.

++VTS Users terminating their voyage within the VTSL area (i.e., berths, anchors, or moors for an extended period of time to totally reconfigure or pick up a new tow) will use that location as their final report for their transit of the VTSL area.



4. **Sailing Plan Deviation Report.** A vessel must report:
- a. Any intention to deviate from a VTS direction;
  - b. Any significant deviation from previously reported information.



## APPENDIX A      SAMPLE MESSAGES

**I.      GENERAL**    VTSL communications shall be on VHS FM Channel 13 (156.65 MHz). This is the Bridge-to-Bridge radiotelephone frequency and shall be used for navigational safety purposes. For VTSL purposes the following points are emphasized:

- a. Use the name of the vessel or the station being called first, then the calling vessel or station's name (do not use call signs).
- b. In the interest of courtesy to other mariners please listen for other radio traffic in progress before transmitting so that traffic is not interrupted.

## **II.      SAILING PLAN**

**SAMPLE 1.** A down bound vessel with tow is calling 15 minutes from approaching Twelve Mile Island (Mile 593.0) bound for Cairo IL. The tow has 6 empty open hopper barges, 2 loads of petroleum products and 2 loads of Propylene Oxide (a CDC cargo).

Call- Up:            "COAST GUARD LOUISVILLE TRAFFIC – THIS IS – MOTOR VESSEL JOHN DOE – OVER."

VTC:                "JOHN DOE – THIS IS COAST GUARD LOUISVILLE TRAFFIC – OVER."

Message:           "LOUISVILLE TRAFFIC – THIS IS- MOTOR VESSEL JOHN DOE AT MILE 588 ABOVE TWELVE MILE ISLAND WITH 6 EMPTY HOPPERS AND 4 LOADED RED-FLAGS. MY DESTINATION IS CAIRO IL. – OVER."

VTC:                "JOHN DOE – THIS IS LOUISVILLE TRAFFIC – ROGER –ARE ANY OF YOUR BARGES CDC – OVER.

VSL:                "LOUISVILLE TRAFFIC – ROGER – I'LL FINISH CHECK-IN IN A FEW MINUTES - OVER"

VTC:                "JOHN DOE – THIS IS LOUISVILLE TRAFFIC – ROGER – (VTC PASSES ANY ADVISORY INFORMATION); STANDING-BY"

\*NOTE: If the tow contains CDC cargos (or other cargos that the mariner wishes to keep private), the vessel may request to switch to another channel, or to finish check-in via cell-phone to avoid excessive transmission on CH-13 or to avoid "advertising" the cargos in tow.

**SAMPLE 2.** An up bound vessel is calling 15 minutes prior to departing McAlpine Lock and entering the Louisville Portland Canal with 10 loads coal and 5 loads of steel bound for Cincinnati, OH.

Call- Up:            "COAST GUARD LOUISVILLE TRAFFIC – THIS IS – MOTOR VESSEL JOHN DOE – OVER."



VTC: "JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – OVER."

Message: "LOUISVILLE TRAFFIC – THIS IS- MOTOR VESSEL JOHN DOE AT MCALPINE LOCK WITH 15 LOADED BARGES; 10 COAL AND 5 STEEL. UP BOUND FOR CINCINNATI, OH. NO RED FLAGS– OVER."

VTC: "JOHN DOE – THIS IS LOUISVILLE TRAFFIC – ROGER – (VTC PASSES ANY ADVISORY INFORMATION) CALL AGAIN WHEN CLEARING MCALPINE LOCK – OUT."

### III. **POSITION REPORTS**

**SAMPLE 1.** An up bound tow clearing McAlpine Lock at 1600 EST.

Call-Up: "COAST GUARD LOUISVILLE TRAFFIC – THIS IS – MOTOR VESSEL JOHN DOE – OVER."

VTC: "JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – OVER."

Report: "LOUISVILLE TRAFFIC – THIS IS MOTOR VESSEL JOHN DOE - CLEAR OF MCALPINE LOCK - OVER"

VTC: "JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – ROGER - (VTC PASSES ANY ADVISORY INFORMATION)– OVER."

Message: "JOHN DOE – THIS IS – LOUISVILLE TRAFFIC - THE L&I BRIDGE IS IN THE FULL UP AND OPEN POSITION – YOU ARE CLEAR TO PROCEED - CALL AGAIN WHEN YOU ARE CLEAR OF THE L&I BRIDGE– OVER."

Reply: "LOUISVILLE TRAFFIC – THIS IS – JOHN DOE – ROGER – OUT."

**SAMPLE 2.** A down bound tow passes Six Mile Island.

Call-Up & Message "COAST GUARD LOUISVILLE TRAFFIC – THIS IS – MOTOR VESSEL JOHN DOE – OVER."

VTC: "JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – OVER."

Report: "LOUISVILLE TRAFFIC – THIS IS MOTOR VESSEL JOHN DOE –I AM AT SIX MILE ISLAND - OVER"

VTC: "JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – ROGER (VTC PASSES ANY ADVISORY INFORMATION) - OUT."



#### IV. **FINAL REPORT.**

**SAMPLE 1.** A vessel completing its voyage within the VTSL area.

Call-Up & Message “COAST GUARD LOUISVILLE TRAFFIC – THIS IS – MOTOR VESSEL JOHN DOE – OVER.”

VTC: “JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – OVER.

Report: “LOUISVILLE TRAFFIC – THIS IS MOTOR VESSEL JOHN DOE – I HAVE REACHED MY DESTINATION AT JEFFBOAT INDIANA SIDE - ESTIMATED TIME OF DEPARTURE IS 2000 EST WITH NEW TOW- OVER

VTC: “JOHN DOE – THIS IS – COAST GUARD LOUISVILLE TRAFFIC – ROGER - OUT.



## APPENDIX B            DEFINITIONS AS USED IN THIS MANUAL

**Bulk** – Material in any quantity that is shipped, stored, or handled without the benefit of package, label, mark or count and carried in integral or fixed independent tanks.

**Captain of the Port** – The Coast Guard officer designated by the Commandant to command a Captain of the Port Zone.

**Certain Dangerous Cargo (CDC)** – CDCs are defined in 33 CFR 160.202, which includes toxic and/or flammable cargoes commonly transported on the Western Rivers, including Chlorine, Anhydrous Ammonia, Propylene Oxide, Butadiene, Butane, Propane, other LFG/LNG, Ammonium Nitrate and Ammonium Nitrate based fertilizers. Specifically, 33 CFR 160.202 defines CDC as any of the following:

- (1) Division 1.1 or 1.2 explosives as defined in 49 CFR 173.50.
- (2) Division 1.5D blasting agents for which a permit is required under 49 CFR 176.415 or, for which a permit is required as a condition of a Research and Special Programs Administration exemption.
- (3) Division 2.3 “poisonous gas”, as listed in 49 CFR 172.101 that is also a “material poisonous by inhalation” as defined in 49 CFR 171.8, and that is in a quantity in excess of 1 metric ton per vessel.
- (4) Division 5.1 oxidizing materials for which a permit is required under 49 CFR 176.415 or for which a permit is required as a condition of a Research and Special Programs Administration exemption.
- (5) A liquid material that has a primary or subsidiary classification of Division 6.1 “poisonous material” as listed in 49 CFR 172.101 that is also a “material poisonous by inhalation,” as defined in 49 CFR 171.8 and that is in a bulk packaging, or that is in a quantity in excess of 20 metric tons per vessel when not in a bulk packaging.
- (6) Class 7, “highway route controlled quantity” radioactive material or “fissile material, controlled shipment,” as defined in 49 CFR 173.403.
- (7) All bulk liquefied gas cargo carried under 46 CFR 151.50-31 or listed in 46 CFR 154.7 that is flammable and/or toxic and that is not carried as certain dangerous cargo residue (CDC residue).
- (8) The following bulk liquids except when carried as CDC residue:
  - (i) Acetone cyanohydrin;
  - (ii) Allyl alcohol;
  - (iii) Chlorosulfonic acid;
  - (iv) Crotonaldehyde;
  - (v) Ethylene chlorohydrin;
  - (vi) Ethylene dibromide;
  - (vii) Methacrylonitrile;
  - (viii) Oleum (fuming sulfuric acid); and
  - (ix) Propylene oxide, alone or mixed with ethylene oxide.



(9) The following bulk solids:

(i) Ammonium nitrate listed as a Division 5.1 (oxidizing) material in 49 CFR 172.101 except when carried as CDC residue; and

(ii) Ammonium nitrate based fertilizer listed as a Division 5.1 (oxidizing) material in 49 CFR 172.101 except when carried as CDC residue.

**Certain Dangerous Cargo residue (CDC residue)** includes any of the following:

(1) Ammonium nitrate in bulk or ammonium nitrate based fertilizer in bulk remaining after all saleable cargo is discharged, not exceeding 1,000 pounds in total and not individually accumulated in quantities exceeding two cubic feet.

(2) For bulk liquids and liquefied gases, the cargo that remains onboard in a cargo system after discharge that is not accessible through normal transfer procedures, with the exception of the following bulk liquefied gas cargoes carried under 46 CFR 151.50-31 or listed in 46 CFR 154.7:

- (i) Ammonia, anhydrous;
- (ii) Chlorine;
- (iii) Ethane;
- (iv) Ethylene oxide;
- (v) Methane (LNG);
- (vi) Methyl bromide;
- (vii) Sulfur dioxide; and
- (viii) Vinyl chloride

**Commandant** – The Commandant of the United States Coast Guard.

**Director, Vessel Traffic Services** – The Coast Guard officer or civilian designated by the Commandant to direct the Vessel Traffic Service (VTS) as described in 33 CFR 161.

**Deviation** – Any departure from any rule in this manual.

**District Commander** – The Coast Guard officer designated by the Commandant to command a Coast Guard District.

**Hazardous Condition** – Any condition that may adversely affect the safety of any vessel, bridge, structure or shore area or the environmental quality of any port, harbor, or navigable waterway. This includes a vessel's ability to safely navigate or maneuver, and includes, but is not limited to:

- a. The absence or malfunction of vessel operating equipment, such as propulsion machinery, steering gear, radar system, gyrocompass, depth sounding device, automatic radar plotting aid (ARPA), radiotelephone, automated dependent surveillance equipment, navigational lighting, sound signaling devices or similar equipment.
- b. Any condition on board the vessel likely to impair navigation, such as lack of current nautical charts and publications, personnel shortage, or similar condition.
- c. Vessel characteristics that affect or restrict maneuverability, such as cargo arrangement, trim, loaded condition, underkeel clearance, speed, or similar characteristics.



**Length** – Overall length of a vessel (including its tow)

**Length of Tow** – When towing with a hawser, the length in feet from the stern of the towing vessel to the stern of the last vessel in tow. When pushing ahead or towing alongside, length of tow means the tandem length in feet of the vessels in tow excluding the length of the towing vessel

**Tank Vessel** – A vessel that is constructed or adapted to carry, or that carries, oil or hazardous materials in bulk as cargo or cargo residue.

**Towing Vessel** – Any commercial vessel engaged in towing another vessel astern, alongside, or by pushing ahead.

**Vessel** – Every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.

**Vessel Movement Reporting System (VMRS)** – A system used to manage and track vessel movements within a VTS area. This is accomplished by a vessel providing information under established procedures as set forth in this part, or as directed by the VTS.

**Vessel Traffic Center (VTC)** – The shore-based facility that operates the Vessel Traffic Service.

**VTS Special Area** – A waterway within a VTS area in which special operating requirements apply.

**Vessel Movement Reporting System (VMRS) User** – A vessel, or an owner, operator, charterer, master, or person directing the movement of a vessel, that is required to participate in a VMRS within a VTS area. VMRS participation is required for:

- a. Every power-driven vessel of 40 meters (approximately 131 feet) or more in length.
- b. Every towing vessel of 8 meters (approximately 26 feet) or more in length.
- c. Every vessel certificated to carry 50 or more passengers for hire, when engaged in trade.

**Vessel Traffic Service (VTS)** – A service implemented under 33 CFR 161 by the United States Coast Guard designed to improve the safety and efficiency of vessel traffic and to interact with marine traffic and respond to traffic situations developing in the VTS area.

**Vessel Traffic Service Area** – The geographical area encompassing a specific VTS area of service as described in 33 CFR 161. This area of service may be subdivided into sectors for the purpose of allocating responsibility to individual Vessel Traffic Centers or to identify different operating requirements. VTS Louisville area of service is described in Section II of this manual.

**VTS User** – A vessel, or an owner, operator, charterer, master, or person directing the movement of a vessel, that is:

- (4) Every vessel subject to the Vessel Bridge-to-Bridge Radiotelephone Act, which is:



- e. Every power-driven vessel of 20 meters ( approximately 65 feet) or more in length while navigating;
- f. Every vessel of 100 gross tons and upward carrying one or more passengers for hire while navigating;
- g. Every towing vessel of 8 meters ( approximately 26. feet) or over in length while navigating; and
- h. Every dredge or floating plant engaged in or near a channel or fairway in operation likely to restrict or affect navigation of other vessels except for an unmanned or intermittently manned floating pant under the control of a dredge;

(5) Vessels required to participate in a Vessel Movement Reporting System (VMRS);

(6) Vessels equipped with a required Coast Guard type-approved Automatic Identification System (AIS).

**VTS User's Manual** – The manual established and distributed by the VTS to provide the mariner with a description of the services offered and rules in force for that VTS. Additionally, the manual may include chartlets showing the area and sector boundaries, general navigational information about the area, and procedures, radio frequencies, reporting provisions and other information which may assist the mariner while in the VTS area.



## APPENDIX C VESSEL TRAFFIC MANAGEMENT

### ***PART 161—VESSEL TRAFFIC MANAGEMENT***

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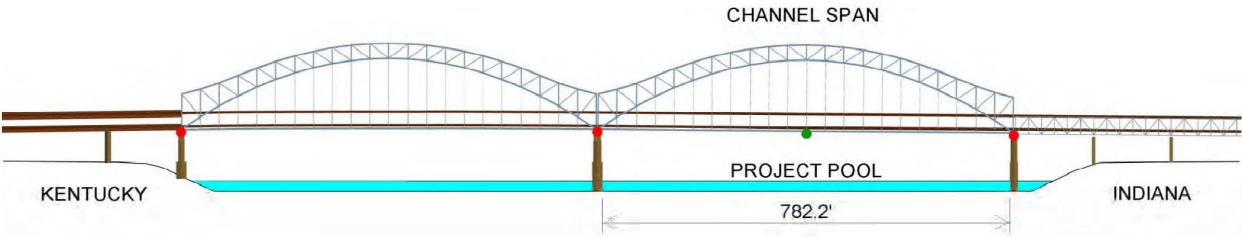
[§26.09 List of exemptions.](#)

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Sherman Minton Hwy (I-64) Bridge

RIVER MILE 608.6



DOWNSTREAM VIEW

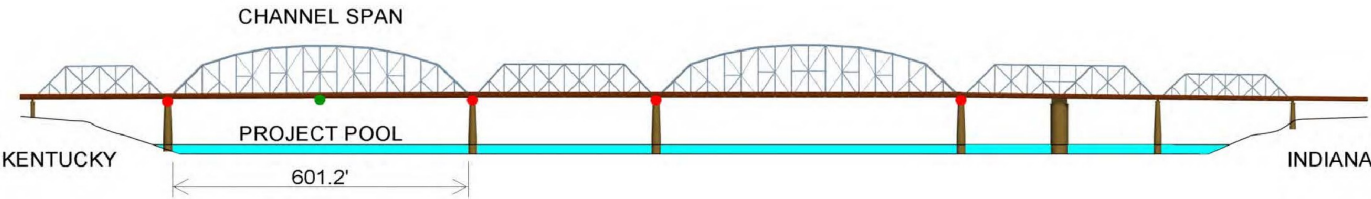
PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	383.00
NGVD 29	382.18
NAVD 88	381.71

CHANNEL SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER
ELEVATION OF LOW STEEL	483.3	479.8	476.7	482.5	479.0	475.9	482.0	478.5	475.4
VERT. CLEARANCE AT PROJECT POOL STAGE	100.3	96.8	93.7	100.3	96.8	93.7	100.3	96.8	93.7

NOTE: ALL UNITS ARE IN FEET

Kentucky & Indiana RR Bridge

RIVER MILE 607.4



DOWNSTREAM VIEW

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	383.00
NGVD 29	382.18
NAVD 88	381.70

CHANNEL SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER
ELEVATION OF LOW STEEL	481.3	481.9	483.1	480.5	481.1	482.3	480.0	480.6	481.8
VERT. CLEARANCE AT PROJECT POOL STAGE	98.3	98.9	100.1	98.3	98.9	100.1	98.3	98.9	100.1

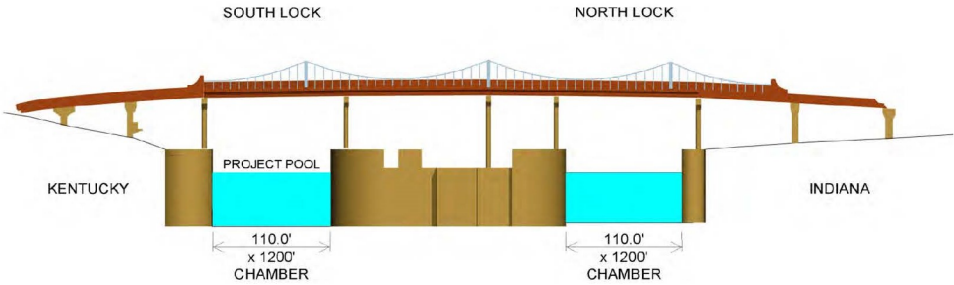
NOTE: ALL UNITS ARE IN FEET



PORTLAND SHIPPINGPORT BRIDGE

McAlpine Locks

RIVER MILE 606.8



DOWNSTREAM VIEW

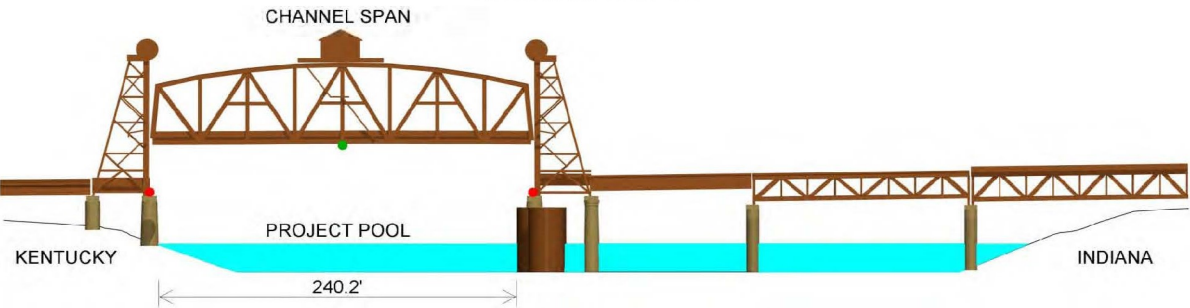
PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.18
NAVD 88	418.70

SOUTH LOCK									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	493.5	494.3	495.1	492.7	493.5	494.3	492.2	493.0	493.8
VERT. CLEARANCE AT PROJECT POOL STAGE	73.5	74.3	75.1	73.5	74.3	75.1	73.5	74.3	75.1
NORTH LOCK									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	495.0	494.3	493.3	494.2	493.5	492.5	493.7	493.0	492.0
VERT. CLEARANCE AT PROJECT POOL STAGE	75.0	74.3	73.3	75.0	74.3	73.3	75.0	74.3	73.3

NOTE: ALL UNITS ARE IN FEET

Louisville & Indiana RR Bridge

RIVER MILE 604.4



DOWNSTREAM VIEW

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.17
NAVD 88	418.69

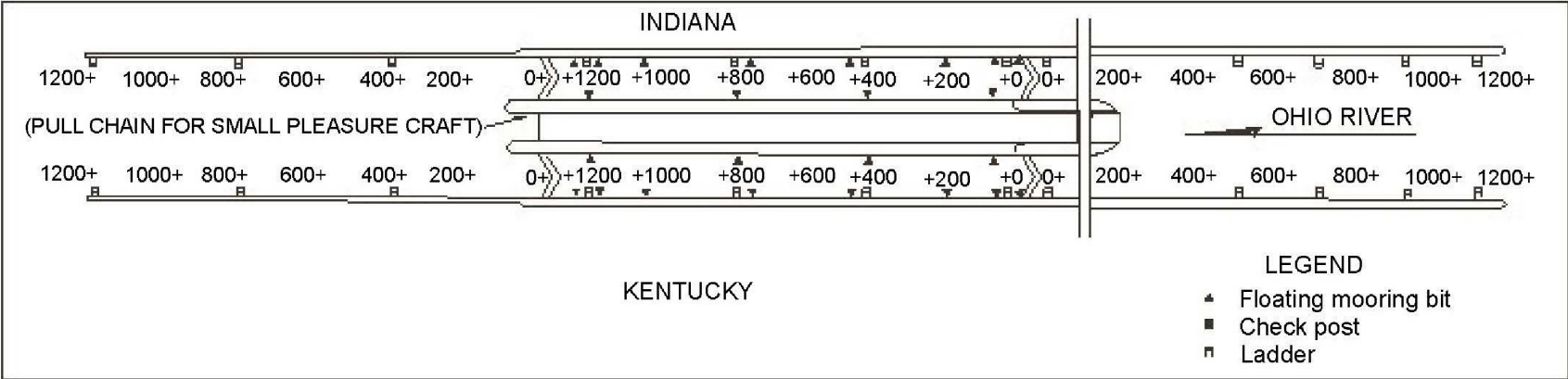
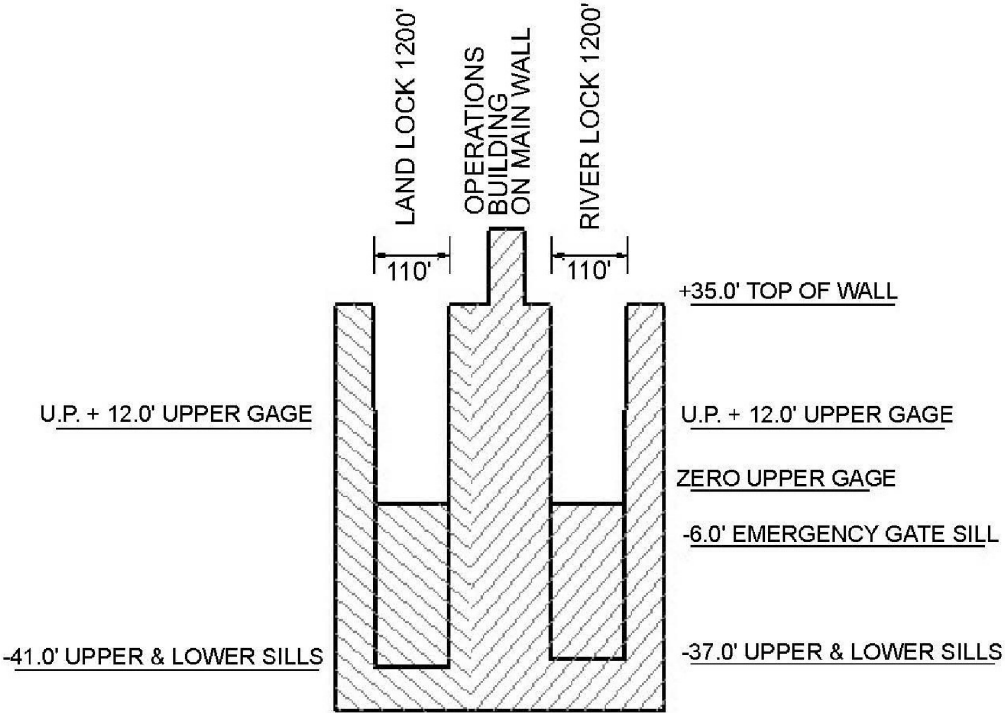
CHANNEL SPAN-RIASED									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER
ELEVATION OF LOW STEEL	490.9	491.4	491.4	490.1	490.6	490.6	489.6	490.1	490.1
VERT. CLEARANCE AT PROJECT POOL STAGE	70.9	71.4	71.4	70.9	71.4	71.4	70.9	71.4	71.4
CHANNEL SPAN-LOWERED									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER
ELEVATION OF LOW STEEL	458.9	459.2	458.9	458.1	458.4	458.1	457.6	457.9	457.6
VERT. CLEARANCE AT PROJECT POOL STAGE	38.9	39.2	38.9	38.9	39.2	38.9	38.9	39.2	38.9

NOTE: ALL UNITS ARE IN FEET



McAlpine Locks			
UPPER GAGE:			
ZERO ELEV.	=	408.0	
PROJECT POOL.	=	12.0'	
LOWER GAGE:			
ZERO ELEV.	=	374.0	
PROJECT POOL.	=	9.0'	

North Champer (1200 Ft)	
- Upper Emg Bulkhead Sill	402.0
- Upper Gate Sill	371.0
- Lower Gate Sill	371.0
- Lower Bulkhead Sill	371.0
South Chamber (1200 Ft)	
- Upper Emg Bulkhead Sill	402.0
- Upper Gate Sill	367.0
- Lower Gate Sill	367.0
- Lower Bulkhead Sill	367.0





RESTRICTED AREA

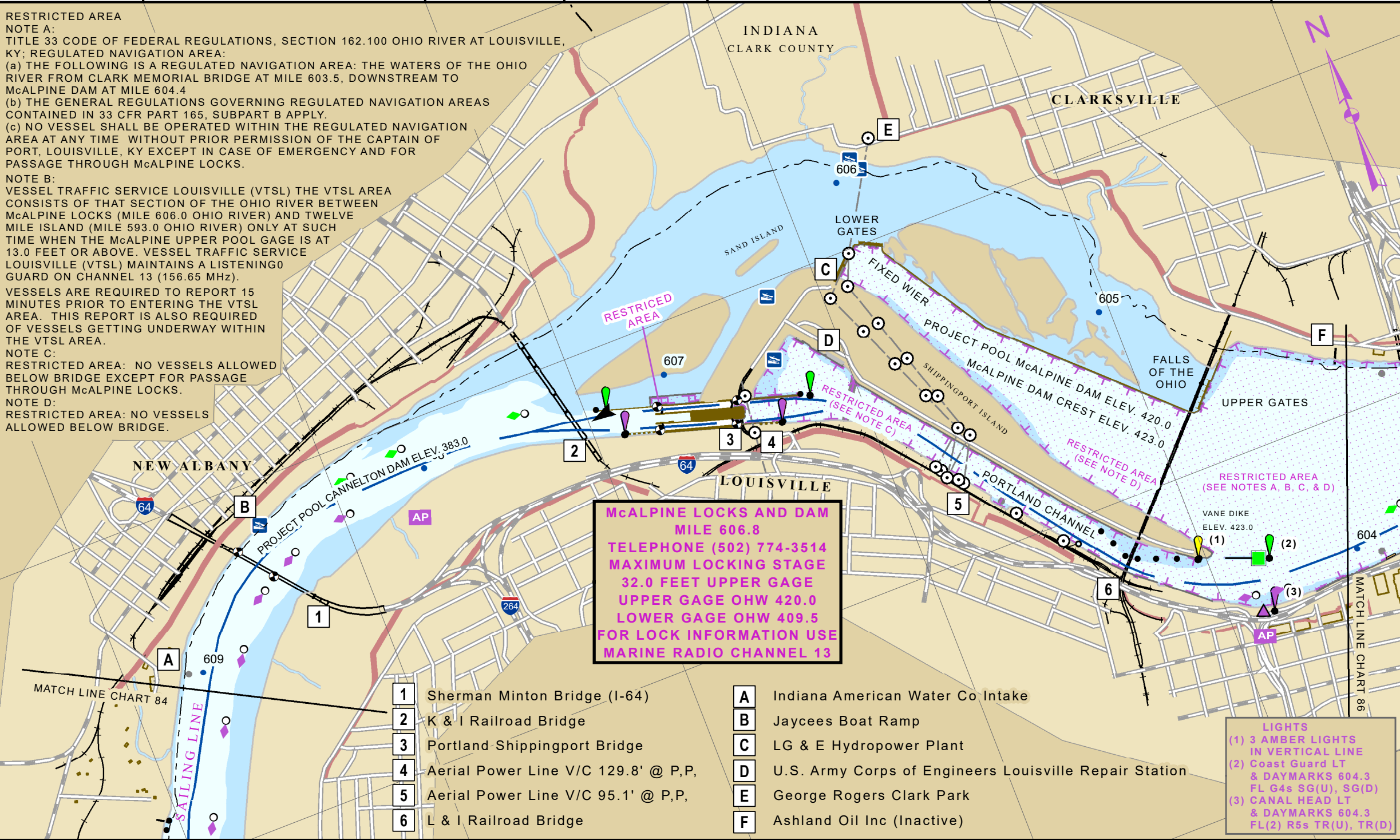
NOTE A:  
TITLE 33 CODE OF FEDERAL REGULATIONS, SECTION 162.100 OHIO RIVER AT LOUISVILLE, KY; REGULATED NAVIGATION AREA:  
(a) THE FOLLOWING IS A REGULATED NAVIGATION AREA: THE WATERS OF THE OHIO RIVER FROM CLARK MEMORIAL BRIDGE AT MILE 603.5, DOWNSTREAM TO McALPINE DAM AT MILE 604.4  
(b) THE GENERAL REGULATIONS GOVERNING REGULATED NAVIGATION AREAS CONTAINED IN 33 CFR PART 165, SUBPART B APPLY.  
(c) NO VESSEL SHALL BE OPERATED WITHIN THE REGULATED NAVIGATION AREA AT ANY TIME WITHOUT PRIOR PERMISSION OF THE CAPTAIN OF PORT, LOUISVILLE, KY EXCEPT IN CASE OF EMERGENCY AND FOR PASSAGE THROUGH McALPINE LOCKS.

NOTE B:  
VESSEL TRAFFIC SERVICE LOUISVILLE (VTSL) THE VTSL AREA CONSISTS OF THAT SECTION OF THE OHIO RIVER BETWEEN McALPINE LOCKS (MILE 606.0 OHIO RIVER) AND TWELVE MILE ISLAND (MILE 593.0 OHIO RIVER) ONLY AT SUCH TIME WHEN THE McALPINE UPPER POOL GAGE IS AT 13.0 FEET OR ABOVE. VESSEL TRAFFIC SERVICE LOUISVILLE (VTSL) MAINTAINS A LISTENING GUARD ON CHANNEL 13 (156.65 MHz).

VESSELS ARE REQUIRED TO REPORT 15 MINUTES PRIOR TO ENTERING THE VTSL AREA. THIS REPORT IS ALSO REQUIRED OF VESSELS GETTING UNDERWAY WITHIN THE VTSL AREA.

NOTE C:  
RESTRICTED AREA: NO VESSELS ALLOWED BELOW BRIDGE EXCEPT FOR PASSAGE THROUGH McALPINE LOCKS.

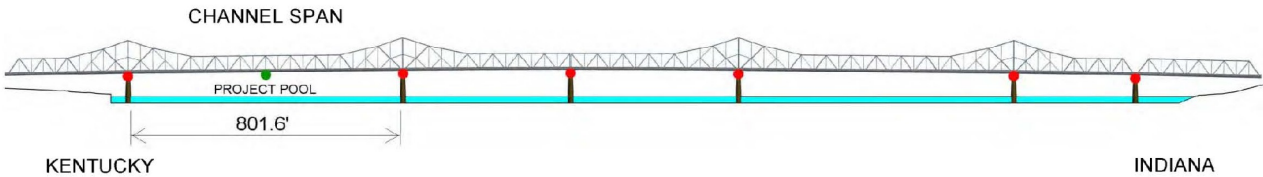
NOTE D:  
RESTRICTED AREA: NO VESSELS ALLOWED BELOW BRIDGE.





Clark Memorial (US 31E) Bridge

RIVER MILE 603.5



DOWNSTREAM VIEW

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.16
NAVD 88	418.67

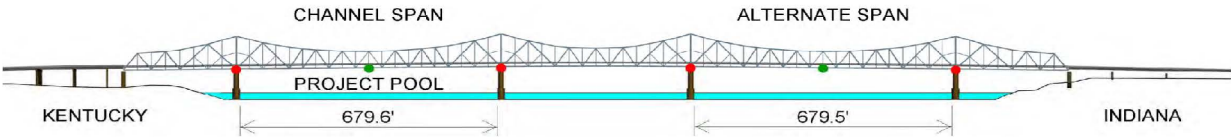
CHANNEL SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER	KY PIER	CENTER	IN PIER
ELEVATION OF LOW STEEL	490.6	494.7	498.6	489.8	493.9	497.8	489.3	493.4	497.3
VERT. CLEARANCE AT PROJECT POOL STAGE	70.6	74.7	78.6	70.6	74.7	78.6	70.6	74.7	78.6

NOTE: ALL UNITS ARE IN FEET

John F. Kennedy Memorial Highway Bridge

(South Bound I-65)

RIVER MILE 603.1



DOWNSTREAM VIEW

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.15
NAVD 88	418.66

CHANNEL SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	492.1	495.4	498.7	491.3	494.6	497.9	490.8	494.1	497.4
VERT. CLEARANCE AT PROJECT POOL STAGE	72.1	75.4	78.7	72.1	75.4	78.7	72.1	75.4	78.7
ALTERNATE SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	498.9	495.3	492.1	498.1	494.5	491.3	497.6	494.0	490.8
VERT. CLEARANCE AT PROJECT POOL STAGE	78.9	75.3	72.1	78.9	75.3	72.1	78.9	75.3	72.1

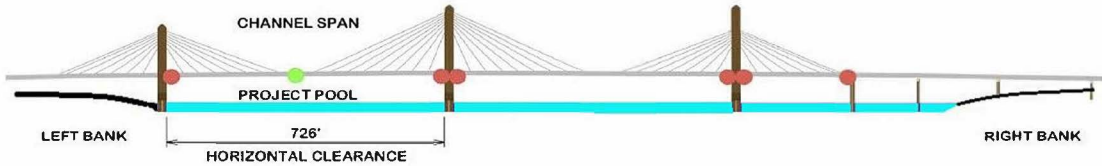
NOTE: ALL UNITS ARE IN FEET



**John F. Kennedy Memorial Highway Bridge**

**(North Bound I-65)**

**RIVER MILE 603.1**



**VIEW LOOKING DOWNSTREAM**

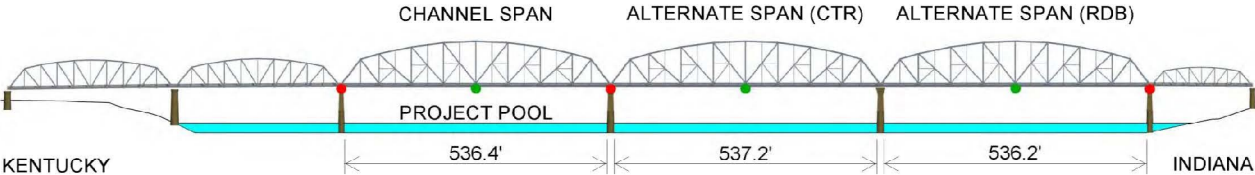
PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.16
NAVD 88	418.67

CHANNEL SPAN (Suspension)									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	495.2	497.8	500.9	494.4	497.0	500.1	493.9	496.5	499.6
VERT. CLEARANCE AT PROJECT POOL STAGE	75.2	77.8	80.9	75.2	77.8	80.9	75.2	77.8	80.9

Horizontal Clearances were measured between piers above the water. The clearance below the water may be less than what is shown above.  
The water depth as shown is only a graphic representation for visual purposes. No field work has been performed to determine the depth of water.

**Big Four RR Bridge**

**RIVER MILE 602.9**



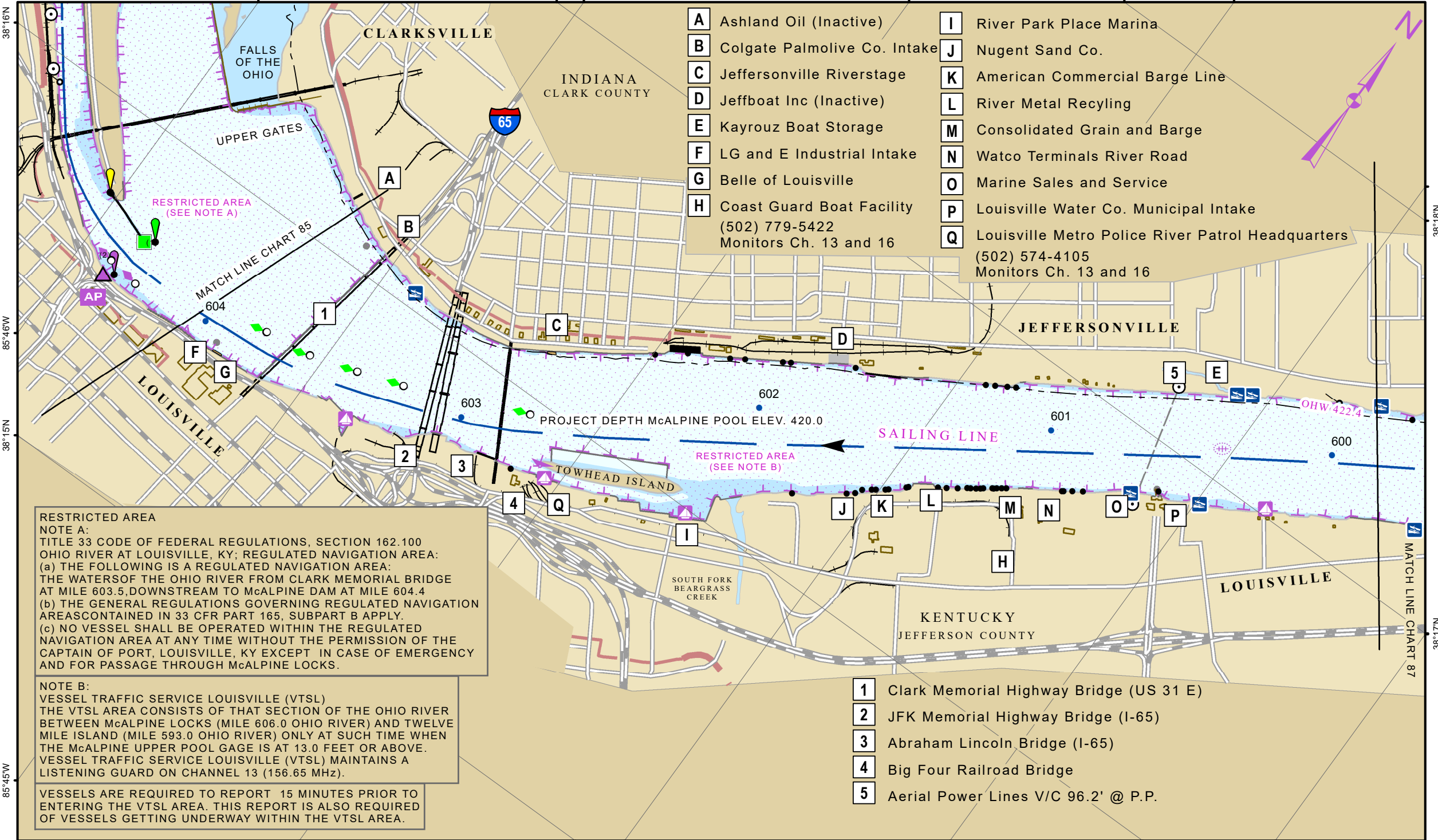
**DOWNSTREAM VIEW**

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.15
NAVD 88	418.66

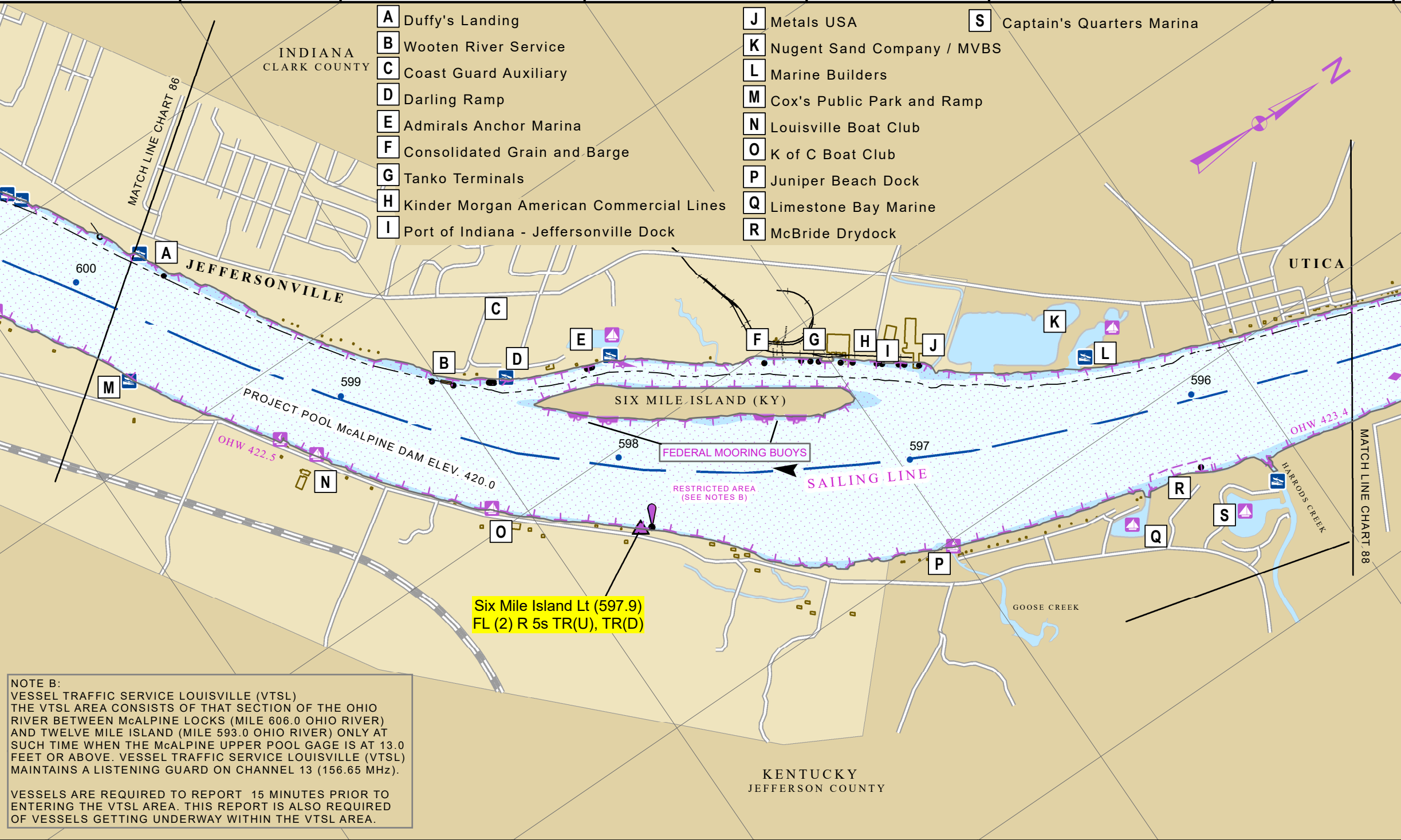
NOTE: ALL UNITS ARE IN FEET

CHANNEL SPAN									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	497.1	497.1	497.2	496.3	496.3	496.4	495.8	495.8	495.9
VERT. CLEARANCE AT PROJECT POOL STAGE	77.1	77.1	77.2	77.1	77.1	77.2	77.1	77.1	77.2
ALTERNATE SPAN (CTR)									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	497.2	497.3	497.3	496.4	496.5	496.5	495.9	496.0	496.0
VERT. CLEARANCE AT PROJECT POOL STAGE	77.2	77.3	77.3	77.2	77.3	77.3	77.2	77.3	77.3
ALTERNATE SPAN (RDB)									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	497.3	497.5	497.6	496.5	496.7	496.8	496.0	496.2	496.3
VERT. CLEARANCE AT PROJECT POOL STAGE	77.3	77.5	77.6	77.3	77.5	77.6	77.3	77.5	77.6





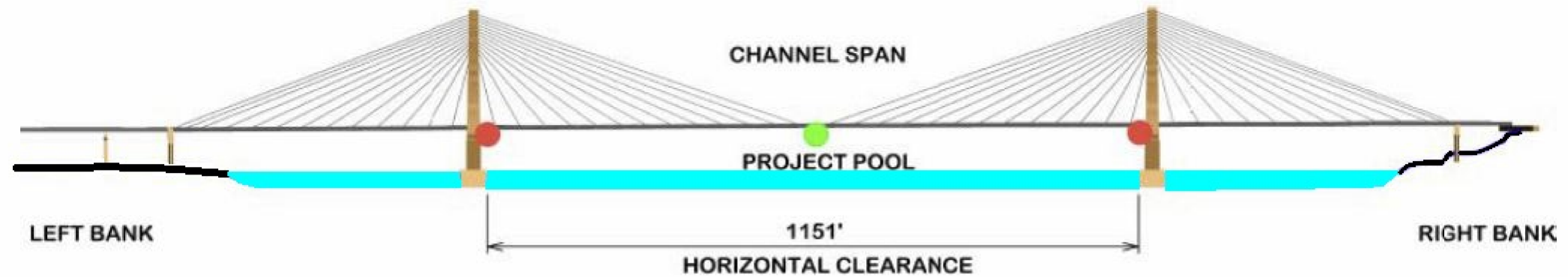






## Lewis and Clark Bridge

RIVER MILE 595.1



VIEW LOOKING DOWNSTREAM

PROJECT POOL STAGE	
DATUM	ELEV.
OHIO RIVER DATUM	420.00
NGVD 29	419.14
NAVD 88	418.63

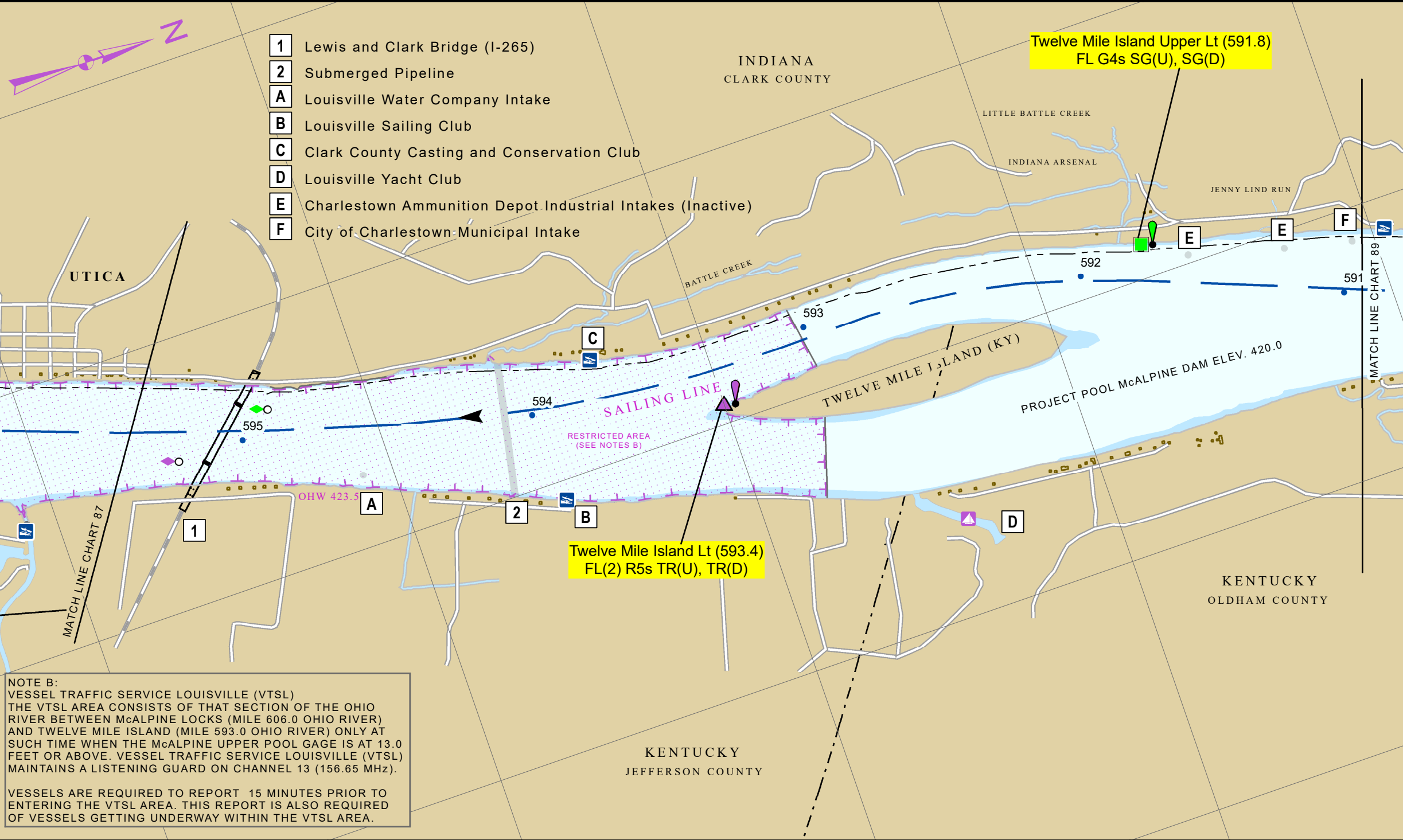
CHANNEL SPAN (Suspension)									
VERTICAL DATUM	OHIO RIVER DATUM (ORD)			NGVD 29			NAVD 88		
LOCATION	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER	LEFT PIER	CENTER	RIGHT PIER
ELEVATION OF LOW STEEL	497.1	500.6	503.0	496.2	499.8	502.1	495.7	499.2	501.6
VERT. CLEARANCE AT PROJECT POOL STAGE	77.1	80.6	83.0	77.1	80.6	83.0	77.1	80.6	83.0

NOTE: ALL UNITS ARE IN FEET

Horizontal Clearances were measured between piers above the water. The clearance below the water may be less than what is shown above.

The water depth as shown is only a graphic representation for visual purposes. No field work has been performed to determine the depth of water.





- 1 Lewis and Clark Bridge (I-265)
- 2 Submerged Pipeline
- A Louisville Water Company Intake
- B Louisville Sailing Club
- C Clark County Casting and Conservation Club
- D Louisville Yacht Club
- E Charlestown Ammunition Depot Industrial Intakes (Inactive)
- F City of Charlestown Municipal Intake

Twelve Mile Island Upper Lt (591.8)  
FL G4s SG(U), SG(D)

Twelve Mile Island Lt (593.4)  
FL(2) R5s TR(U), TR(D)

NOTE B:  
VESSEL TRAFFIC SERVICE LOUISVILLE (VTSL)  
THE VTSL AREA CONSISTS OF THAT SECTION OF THE OHIO RIVER BETWEEN McALPINE LOCKS (MILE 606.0 OHIO RIVER) AND TWELVE MILE ISLAND (MILE 593.0 OHIO RIVER) ONLY AT SUCH TIME WHEN THE McALPINE UPPER POOL GAGE IS AT 13.0 FEET OR ABOVE. VESSEL TRAFFIC SERVICE LOUISVILLE (VTSL) MAINTAINS A LISTENING GUARD ON CHANNEL 13 (156.65 MHz).

VESSELS ARE REQUIRED TO REPORT 15 MINUTES PRIOR TO ENTERING THE VTSL AREA. THIS REPORT IS ALSO REQUIRED OF VESSELS GETTING UNDERWAY WITHIN THE VTSL AREA.