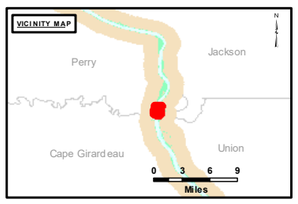
37°35'N

89°31'W

76

37°35'N





LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface

Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

Feet
0 250 500 750 1,000

NOTES:
Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

Distribution Liability - The data represents the results of data collection/processing to the standards of US Army Corps of Engineers Hydrographic Surveying Engineers under the conditions. As such, it is only valid for the intended use, content, time and accuracy as specified by the Corps. The Corps makes no warranty, expressed or implied, nor assumes any liability for any particular purpose of the data beyond those originally intended by the Corps. The Corps is under no liability whatsoever to any person by reason of any use made thereof. Any person using this data for purposes other than those originally agreed to by the Corps does so at his own risk and agrees to indemnify the Corps from any and all claims or liability arising from such use. The Corps does not warrant that the data is free from errors and omissions and is under no obligation to advise any person of any error or omission which may be discovered. The Corps is under no obligation to furnish any updated data to others without also transferring this Disclaimer.

DISCLAIMER
Access Constraints - The United States Government has in fee ownership or controlling interest in the land and waterways depicted on this survey. By acceptance of this survey, you acknowledge your understanding that the US Government makes no warranties, expressed or implied, concerning the accessibility, condition, or availability of any land or waterways depicted on this survey. The US Government assumes no liability for any person's inability to access any land or waterway depicted on this survey. The US Government is under no liability whatsoever to any person by reason of any use made thereof. Any person using this survey for purposes other than those originally agreed to by the US Government does so at his own risk and agrees to indemnify the US Government from any and all claims or liability arising from such use. The US Government does not warrant that the survey is free from errors and omissions and is under no obligation to advise any person of any error or omission which may be discovered. The US Government is under no obligation to furnish any updated survey to others without also transferring this Disclaimer.

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

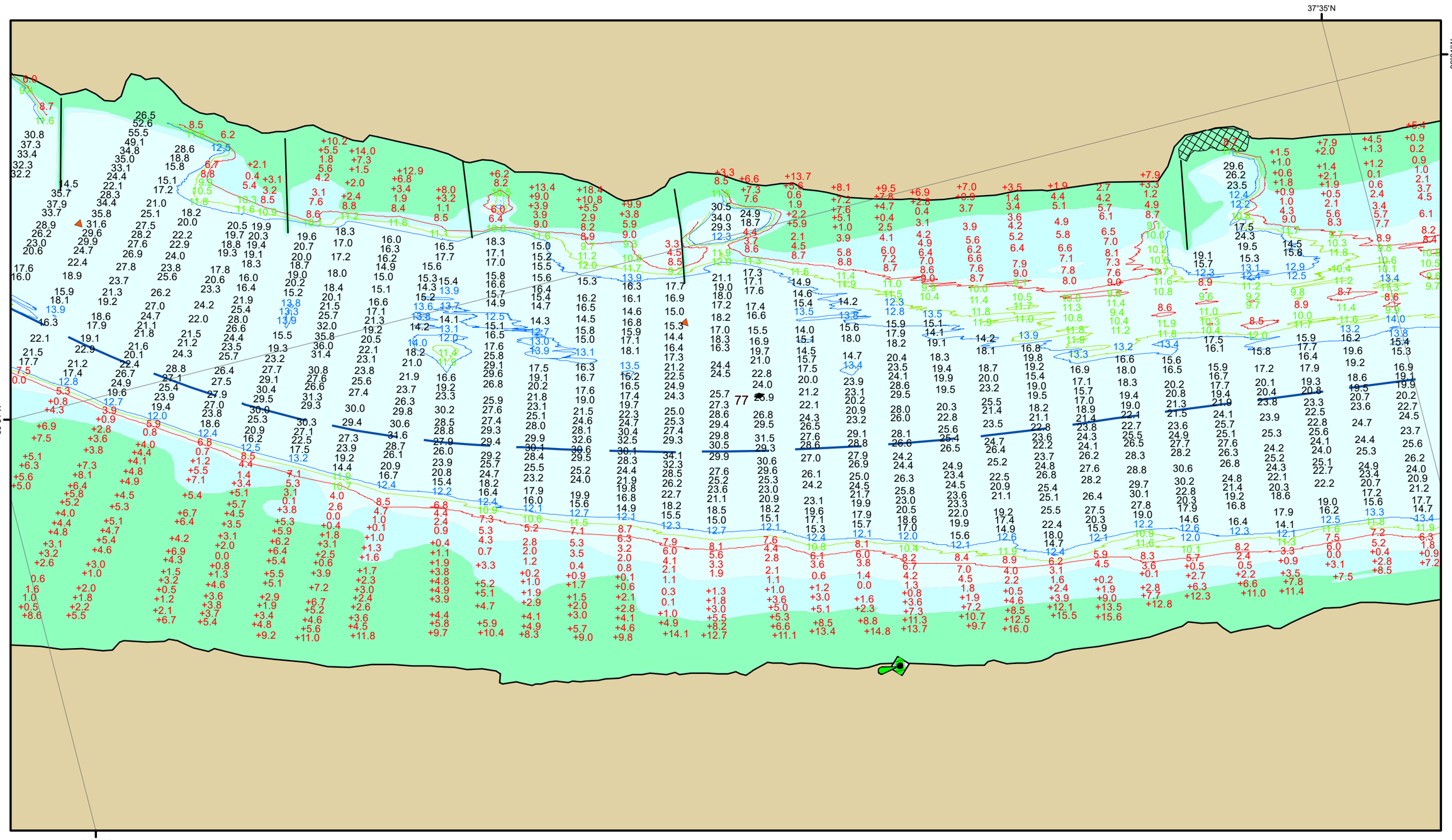
Surveyed By: _____
Plotted By: _____
Checked By: _____

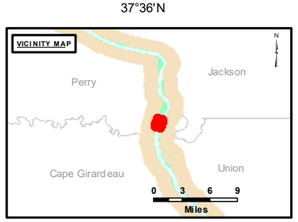
Submitted: _____
Recommended: _____
Approved: _____

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 12 of 29







LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface
- Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

Feet: 0 250 500 750 1,000

NOTES:
Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

DISCLAIMER
Access Constraints - The United States Government has free distribution/convenience use aspect of US Army Corps of understanding that the US Government makes no warranties, As such, it is only valid for the intended use, content, time and express or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the under no liability whatsoever to any person by reason of any use of this product. The US Government shall be indemnified by the recipient/by agrees not to represent these data to anyone as other than data as received from the US Government. Reproduction these data to others without also transferring this Disclaimer.

Distribution Liability - The data represents the results of engineering/survey/geospatial investigations. Corps of Engineers makes no warranties, guarantees or representations as to the accuracy, completeness, timeliness and reliability or suitability for any particular purpose of the data. The recipient agrees to indemnify the US Government from any of any of the application of the data for other than its intended purpose.

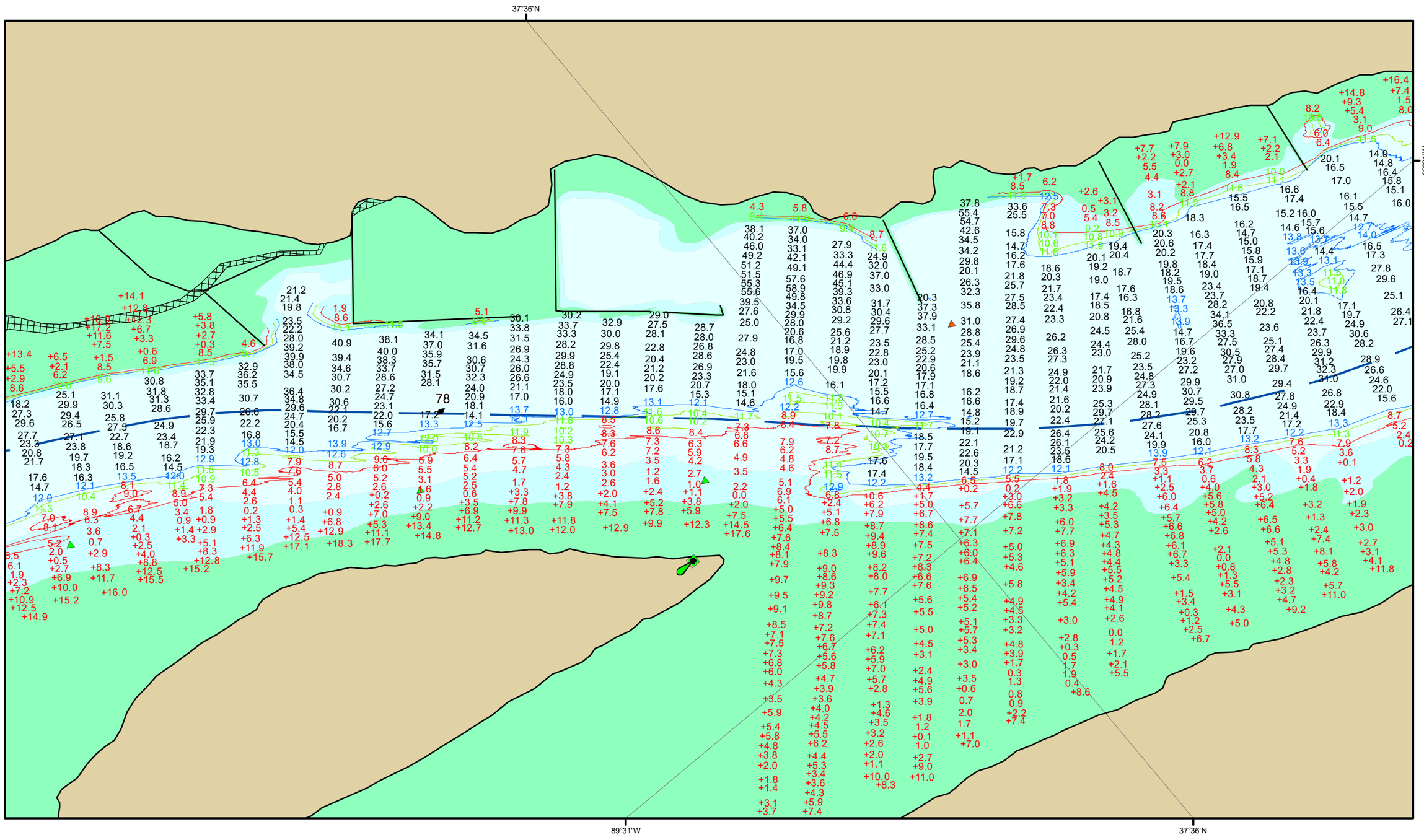
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

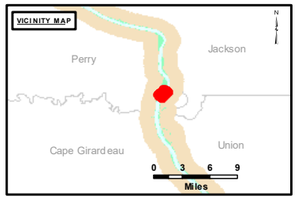
Submitted By: _____
Reviewed By: _____
Approved By: _____
Checked By: _____

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 13 of 29







LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface
- Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

Feet: 0 250 500 750 1,000

NOTES:
Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

Distribution Liability - The data represents the results of data direct/compilation by the agencies of US Army Corps of Engineers under the conditions and circumstances described. As such, it is only valid for the intended use, content, time and accuracy as specified by the agencies. The US Government makes no warranties, expressed or implied, as to the accuracy, completeness, reliability, suitability or usability for any particular purpose of the information and data contained on this map and accompanying documents and assumes no responsibility for any decisions made by others on the basis of this information. The US Government reserves the right to revise the information depicted on this map at any time without obligation to notify any person of such revisions. The US Government shall not be liable for any damages incurred as the result of any of the application of the data/for other than its intended purpose.

DISCLAIMER
Access Constraints - The United States Government has free distribution/commercial use agreements with many agencies across the world. By accessing and using this data, you are understanding that the US Government makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, suitability or usability for any particular purpose of the information and data contained on this map and accompanying documents and assumes no responsibility for any decisions made by others on the basis of this information. The US Government reserves the right to revise the information depicted on this map at any time without obligation to notify any person of such revisions. You are not to sell, rent, lease, sublicense, lend, or otherwise transfer or distribute or make these data available to others without also transferring this Disclaimer.

U.S. ARMY CORPS OF ENGINEERS
St. Louis District

Surveyed By: ____
Submitted: ____
Polled By: ____
Recommended: ____
Checked By: ____
Approved: ____

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 14 of 29

37°37'N

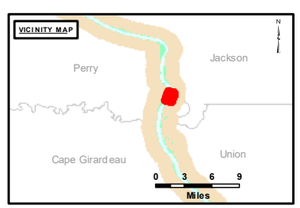
89°30'W

89°30'W

37°37'N

79

78





LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface
- Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

Feet
0 250 500 750 1,000

NOTES:
Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

DISCLAIMER
Access Constraints - The United States Government has in fee simple title to all property depicted on this map. You must comply with all regulations governing access to and use of Government property. You must understand that the US Government makes no warranties, expressed or implied, concerning the existence of access, the conditions of access, the nature of access, or the availability of access for any particular purpose. Donation of property does not relieve the donee from responsibility for compliance with regulations, laws or conditions affecting access. The US Government is not responsible for maintenance or improvement of access routes, and does not warrant the safety of access routes. Access may be withdrawn or restricted at any time by the US Government or by agencies controlling access routes. The US Government is not responsible for and will not defend claims by third parties for loss of life, personal injury, or property damage associated with the use of access routes. Donation of property does not relieve the donee from responsibility for compliance with regulations, laws or conditions affecting access. The US Government is not responsible for maintenance or improvement of access routes, and does not warrant the safety of access routes. Access may be withdrawn or restricted at any time by the US Government or by agencies controlling access routes. The US Government is not responsible for and will not defend claims by third parties for loss of life, personal injury, or property damage associated with the use of access routes.

Distribution Liability - The data represents the results of data collection conducted by or approved by US Army Corps of Engineers personnel using procedures appropriate for the conditions. As such, it is only valid for the intended use, content, time and accuracy stated in the project documentation. Any use of the data for purposes other than its intended purpose, or beyond the accuracy limitations, is the responsibility of the user. The user is responsible for the application of the data and for using appropriate methods to analyze its suitability for planned uses. The user is responsible for the application of the data for other than its intended purpose and for any consequences of that use.

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

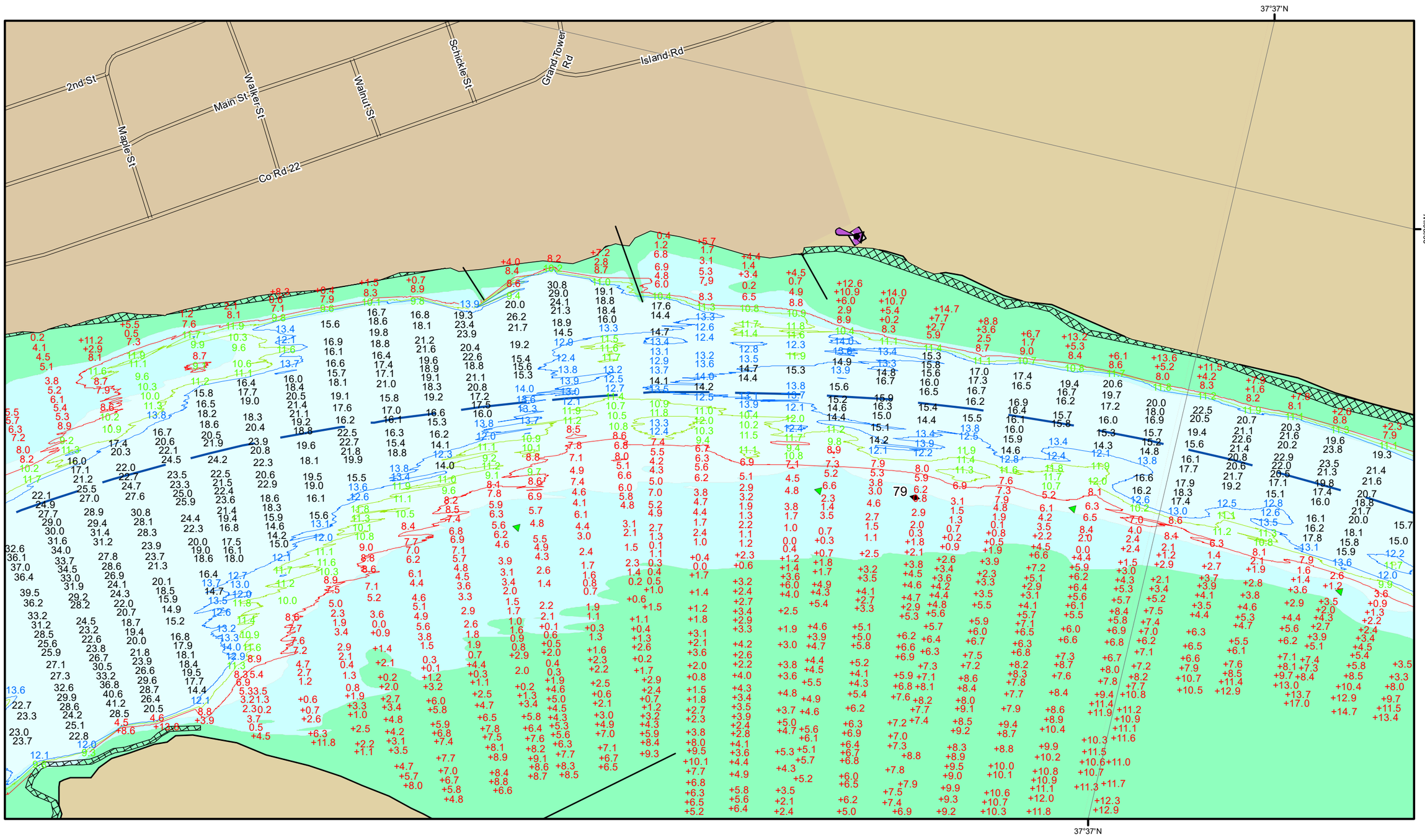
Surveyed By: ____
Polled By: ____
Checked By: ____

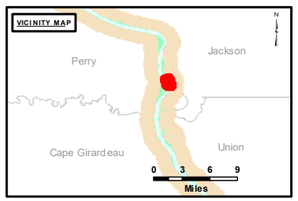
Submitted: ____
Recommended: ____
Approved: ____

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 15 of 29







LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface

Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy

Feet: 0, 250, 500, 750, 1,000

- Training Structure
- Revetment

NOTES:

Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

DISCLAIMER
Distribution Liability: The data represents the results of data direction/processing by a agent of US Army Corps of Engineers and is provided to the recipient "as is" and "as available" conditions. As such, it is only valid for the intended use, content, time and accuracy as specified by the originator. The recipient assumes all responsibility and liability for any particular purpose other than its intended purpose and for any decisions made or actions taken by the recipient or others on the basis of any of the application of the data/for other than its intended purpose.

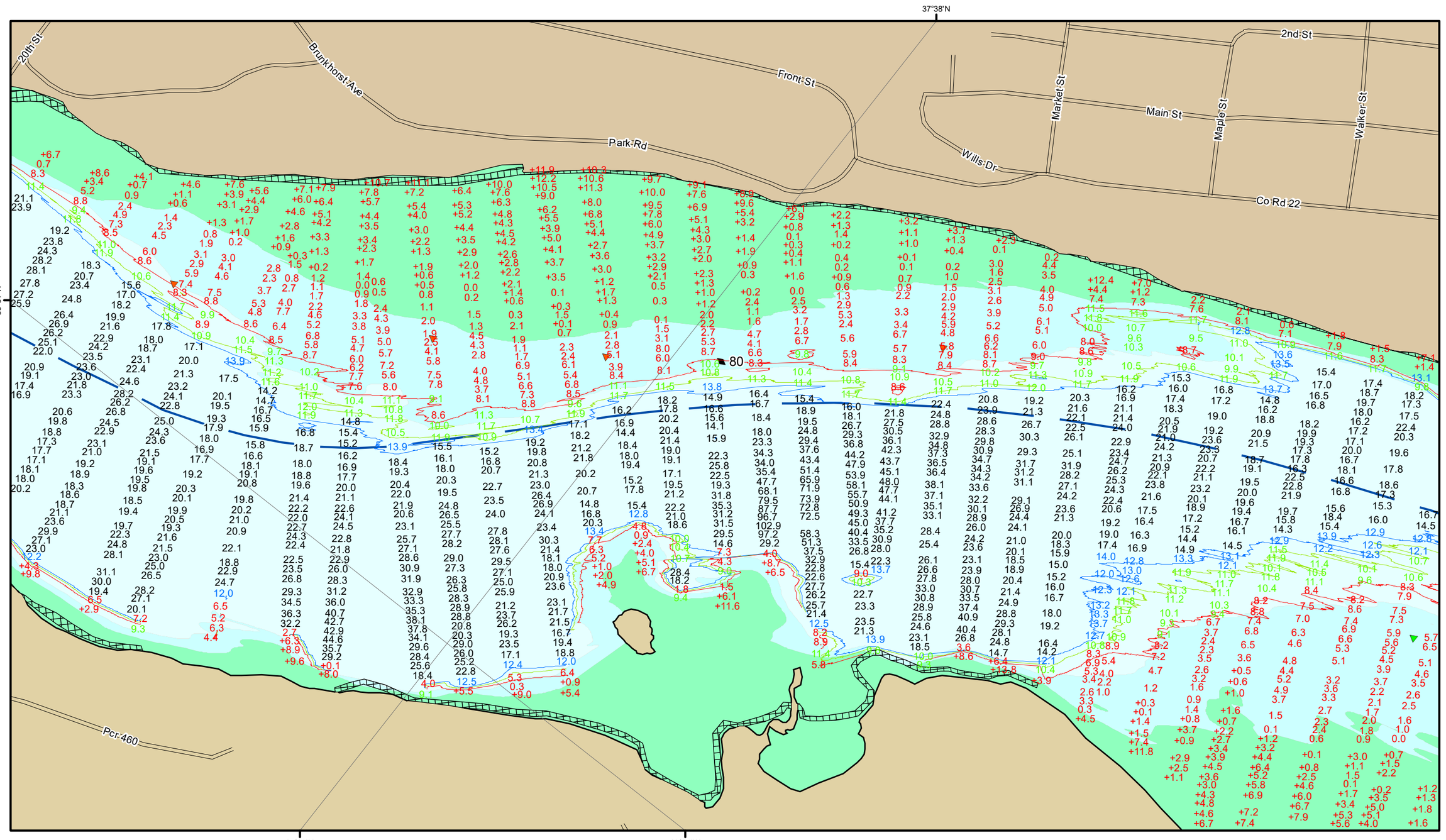
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

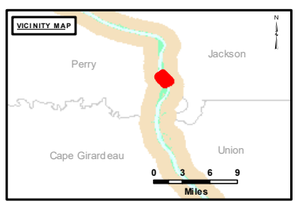
	Surveyed By:	Plotted By:	Checked By:
Submitted:			
Recommended:			
Approved:			

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 16 of 29







LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface
- Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

Feet: 0, 250, 500, 750, 1,000

NOTES:

Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

Distribution Liability - The data represents the results of data collection/processing to the extent of US Army Corps of Engineers specifications and was accurate at the time of the survey. As such, it is only valid for the intended use, content, time and conditions specified in the survey report. The US Government makes no warranties, expressed or implied, concerning the accuracy, reliability, or suitability of this data for any purpose other than its intended purpose. The US Government shall not be liable for any damages, including consequential damages, resulting from the use of any of the application of the data for other than its intended purpose.

DISCLAIMER
Access Constraints - The United States Government has in its possession certain data that is subject to restrictions. By accessing this data, you agree to the following conditions: understanding that the US Government makes no warranties, expressed or implied, concerning the accuracy, reliability, or suitability of this data for any particular purpose of the #website, #entity or #application. Under no circumstances shall the US Government be liable for any damages, including consequential damages, resulting from the use of any of the #website, #entity or #application for other than its intended purpose. Any use of the #website, #entity or #application for other than its intended purpose is expressly agrees not to represent these data to any one as other than government data. Any user who modifies these data shall remove all references to the US Government and its #website, #entity or #application from these data to others without also transferring this Disclaimer.

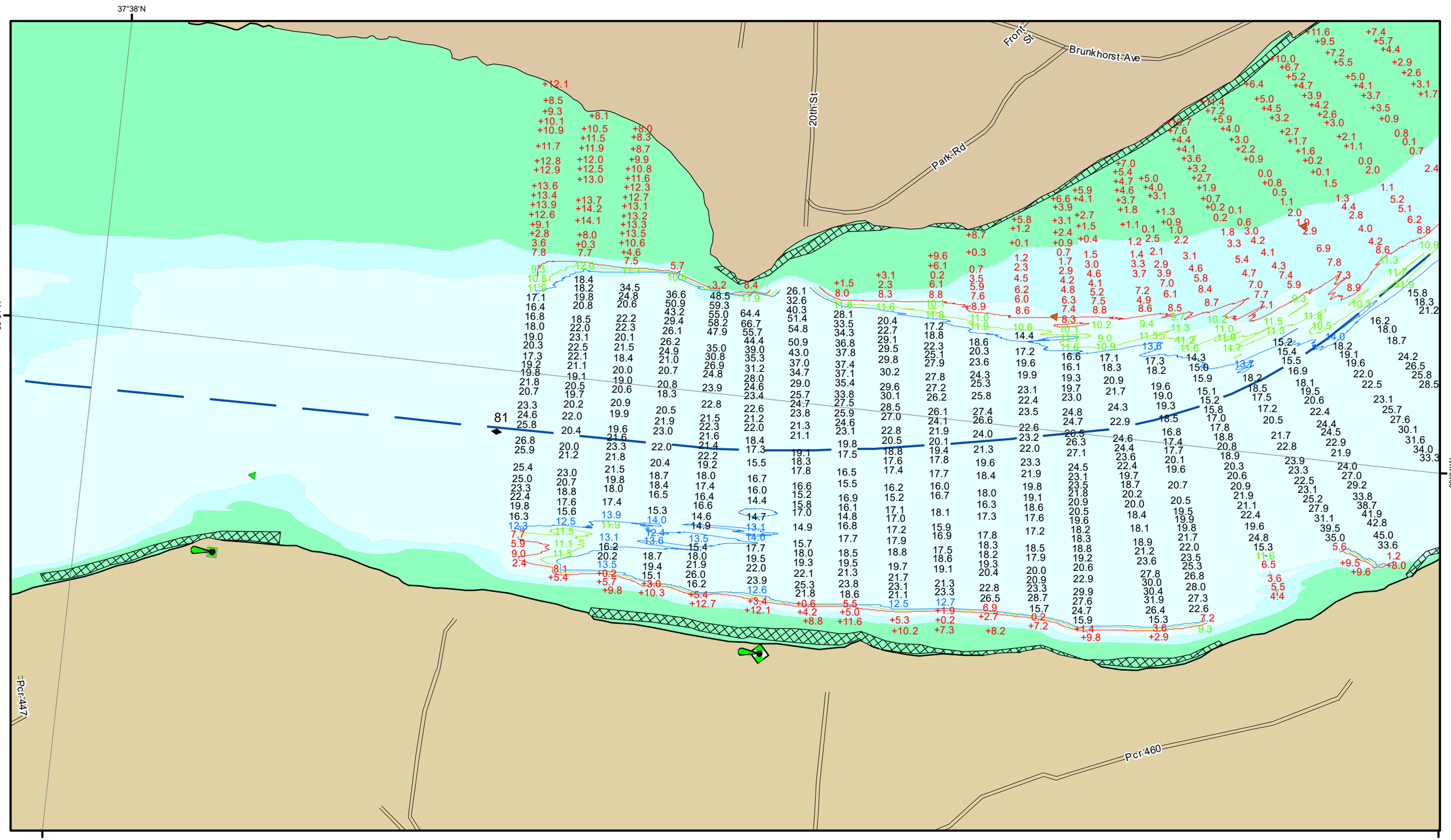
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

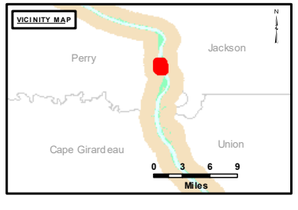
	Surveyed By:	Plotted By:	Checked By:
Submitted:			
Recommended:			
Approved:			

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 17 of 29







LAYERS

- River Mile
- Sailing Line
- 9' below LWRP2014 Surface
- 12' below LWRP2014 Surface
- 14' below LWRP2014 Surface
- Depths shown are below LWRP2014 Surface

Aids to Navigation

- Green
- Red
- Junction
- Green Buoy
- Red Buoy
- Training Structure
- Revetment

N E S W

Feet 0 250 500 750 1,000

NOTES:
Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Missouri East Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below the 2014 Low Water Reference Plane.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

US Army Corps of Engineers
District: CEMVS

Distribution Liability: The data represents the results of data collection/processing by a specific US Army Corps of Engineers District under specific survey conditions. As such, it is only valid for the intended use, content, time and accuracy for which it was collected and processed. The US Government is not responsible for any of the application of the data for other than its intended purpose.

DISCLAIMER:
Access Constraints: The United States Government has in its understanding that the US Government makes no warranties, expressed or implied, concerning the accuracy, reliability, or suitability for any particular purpose of the information and data contained in this product, nor makes any warranty under no liability whatsoever to any person by reason of any use made thereof. The US Government hereby disclaims any responsibility to expand this product to any person whether or not they are engaged in government projects. Please direct any questions about these data to any one as other than the US Government. Please read the Distribution Liability before using these data to others without also transferring this Disclaimer.

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

Submitted: Reviewed By: _____
Recommended: Plotted By: _____
Approved: Checked By: _____

Survey Information

GRAND_TOWER_UPPER_MISSISSIPPI
UM_SL_GTC_20181212_OT_1
12 December 2018

Reach Number 18 of 29