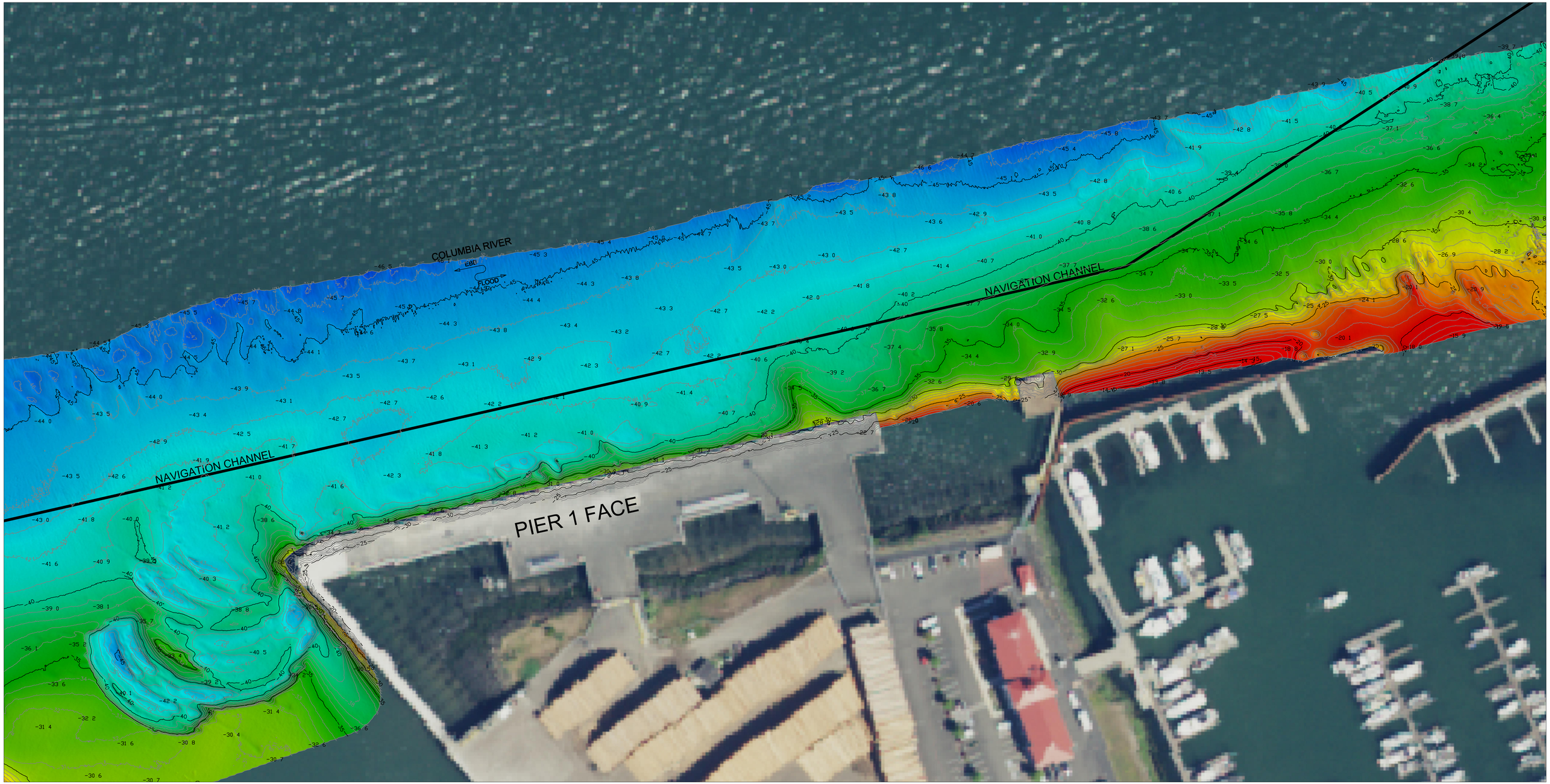
# Port of Astoria

## Central Waterfront 2020 Post-Dredge Bathymetric Survey

Data Collected: March 3, 2021

Drawing Date: March 22, 2021




NOTES:

1. HORIZONTAL DATUM: NAD 83 (2011) STATE PLANE COORDINATES, OREGON NORTH ZONE.
2. UNITS: U.S SURVEY FEET
3. VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW). MLLW DETERMINED FROM USACE TIDE BOARD LOCATED ON THE ASTORIA BRIDGE PIER AND USACE MONUMENT 1402-19 (ELEV.= 15.87 FT.)
4. CONTOUR INTERVAL: 1 FOOT. CONTOURS WERE DEVELOPED FROM A GRIDDED 1 FT X 1FT DATASET USING AN INVERSED WEIGHTED AVERAGE OF ALL SOUNDINGS.
5. ALL HORIZONTAL POSITIONING AND VESSEL ATTITUDE WAS PROVIDED IN REAL TIME USING AN APPLANIX POS-MV RTK GPS AIDED INERTIAL SENSOR RECEIVING RTK CORRECTIONS FROM A TRIMBLE R8 RTK BASE STATION.
6. SOUNDINGS WERE COLLECTED USING A R2SONIC 2022 MULTIBEAM SONAR SYSTEM AND DATA PROCESSING WAS COMPLETED USING HYPACK HYSWEEP SOFTWARE.
7. THIS BATHYMETRIC SURVEY IS REPRESENTATIVE OF THE GENERAL CONDITION OF THE RIVERBED AT THE TIME OF THE SURVEY. THE CONDITION OF THE BOTTOM MAY CHANGE AT ANY TIME AFTER THE DATE OF THIS SURVEY.
8. ALL BATHYMETRIC DATA WAS COLLECTED IN ACCORDANCE WITH THE U.S ARMY CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM-1110-02-1003 (NOVEMBER 2013).

THIS HYDROGRAPHIC SURVEY WAS COMPLETED BY AN AMERICAN CONGRESS ON SURVEYING AND MAPPING CERTIFIED HYDROGRAPHER.

JAMES W. GLAESER DATE
AMERICAN CONGRESS ON SURVEYING AND MAPPING
CERTIFIED HYDROGRAPHER #222

PORT OF ASTORIA

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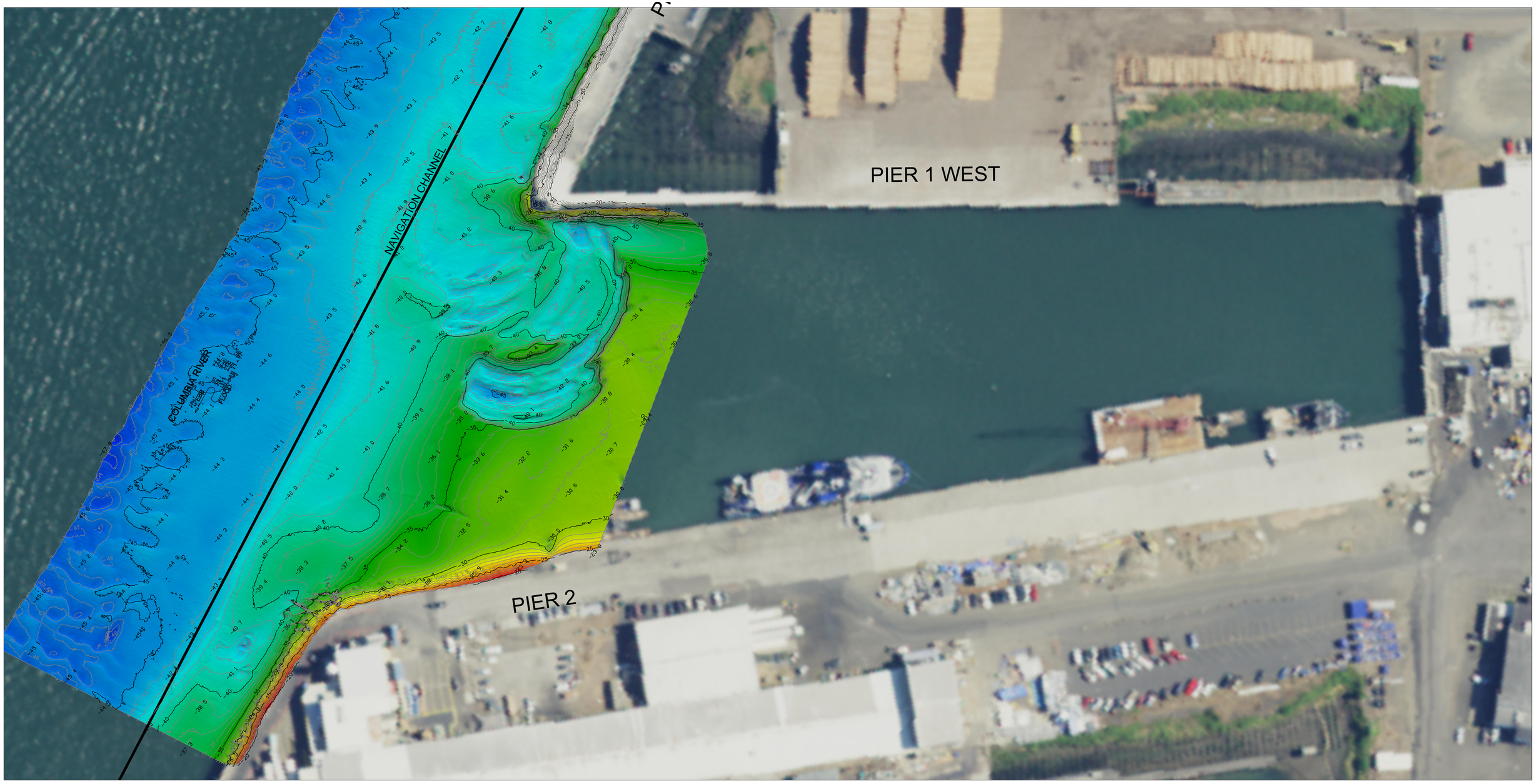


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