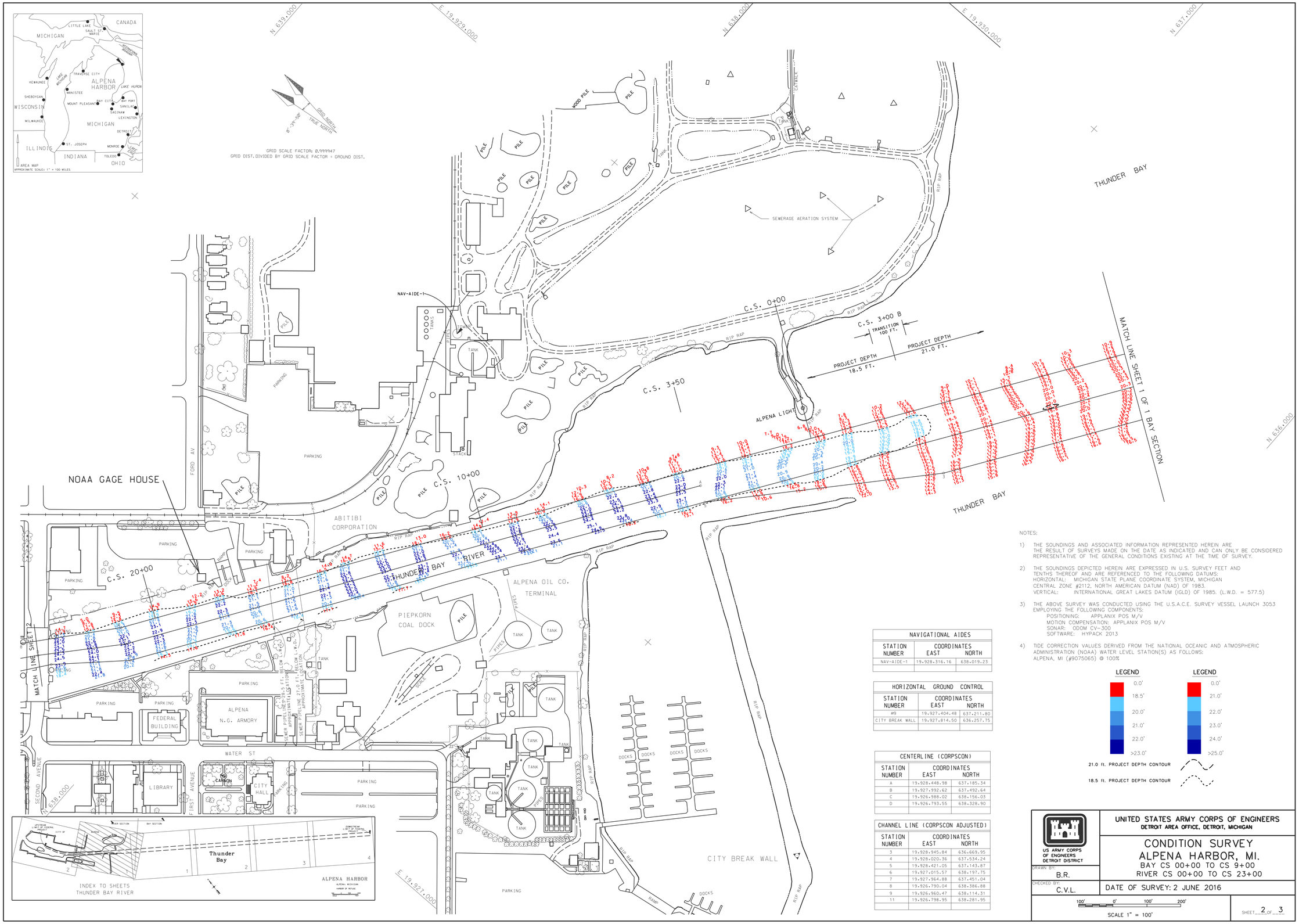

NOTES:

1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS:
HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983
VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985. (L.W.D. = 577.5)

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS:
POSITIONING: APPLANIX POS M/V
MOTION COMPENSATION: APPLANIX POS M/V
SONAR: ODOM CV-300
SOFTWARE: HYPACK 2013

4) TIDE CORRECTION VALUES DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATION(S) AS FOLLOWS:
ALPENA, MI (#9075065) @ 100%

NAVIGATIONAL AIDES

STATION NUMBER	COORDINATES EAST	COORDINATES NORTH
NAV-AIDE-1	19,928,316.16	638,019.23

HORIZONTAL GROUND CONTROL

STATION NUMBER	COORDINATES EAST	COORDINATES NORTH
#9	19,927,404.48	637,211.80
CITY BREAK WALL	19,927,814.50	636,257.75

CENTERLINE (CORPSCON)

STATION NUMBER	COORDINATES EAST	COORDINATES NORTH
A	19,928,448.98	637,185.34
B	19,927,992.62	637,492.64
C	19,926,988.02	638,156.03
D	19,926,793.55	638,328.90

CHANNEL LINE (CORPSCON ADJUSTED)

STATION NUMBER	COORDINATES EAST	COORDINATES NORTH
3	19,928,945.84	636,669.95
4	19,928,020.36	637,534.24
5	19,928,421.05	637,143.87
6	19,927,015.57	638,197.75
7	19,927,964.88	637,451.04
8	19,926,790.04	638,386.88
9	19,926,960.47	638,114.31
11	19,926,798.95	638,281.95

LEGEND

0.0'	
18.5'	
20.0'	
21.0'	
22.0'	
>23.0'	

LEGEND

0.0'	
21.0'	
22.0'	
23.0'	
24.0'	
>25.0'	

21.0 ft. PROJECT DEPTH CONTOUR

18.5 ft. PROJECT DEPTH CONTOUR

US ARMY CORPS OF ENGINEERS DETROIT DISTRICT

UNITED STATES ARMY CORPS OF ENGINEERS
DETROIT AREA OFFICE, DETROIT, MICHIGAN

CONDITION SURVEY
ALPENA HARBOR, MI.

BAY CS 00+00 TO CS 9+00
RIVER CS 00+00 TO CS 23+00

DRAWN BY: B.R.

CHECKED BY: C.V.L.

DATE OF SURVEY: 2 JUNE 2016

100' 0' 100' 200'
SCALE 1" = 100'

SHEET 2 OF 3