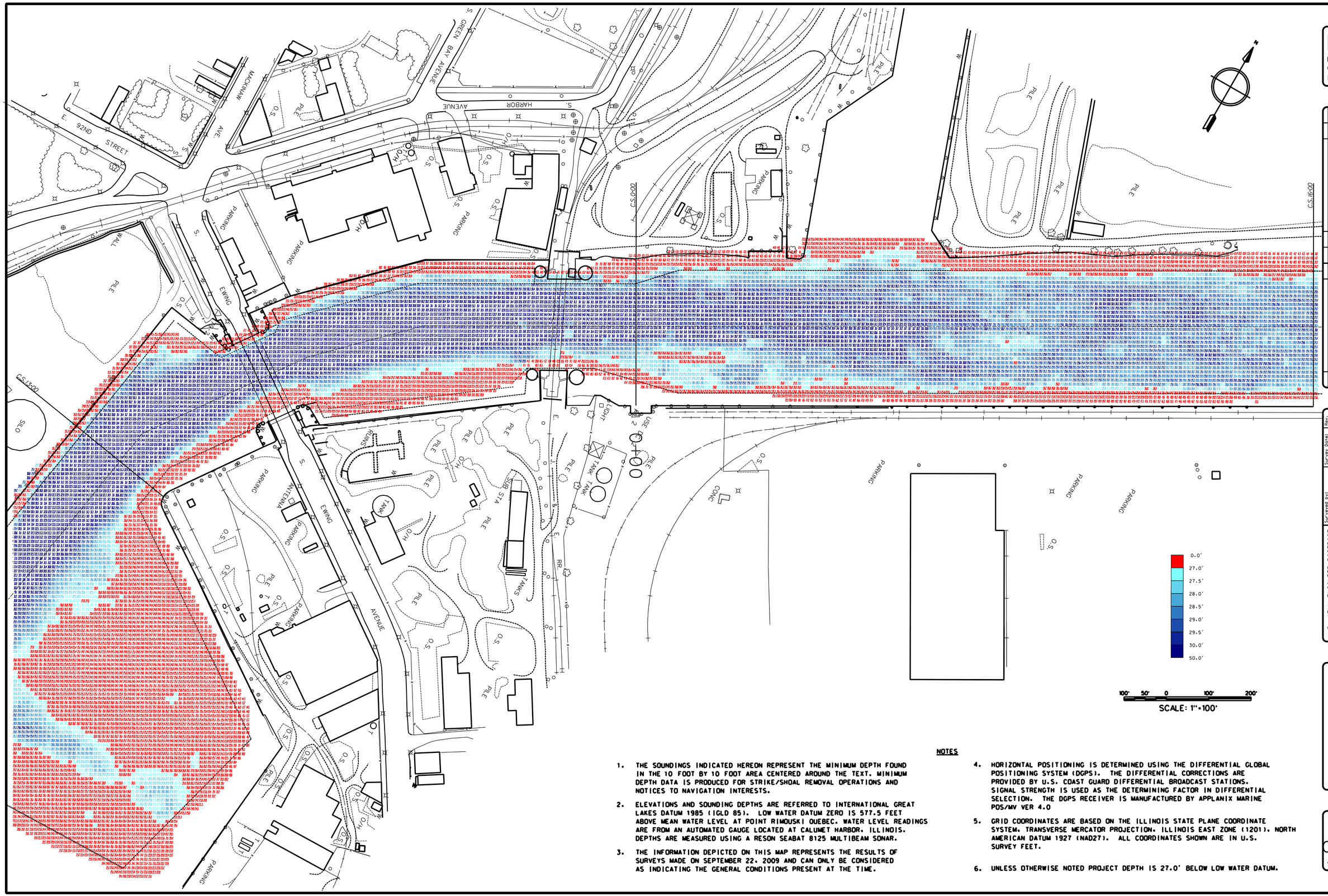

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

2. ELEVATIONS AND SOUNDING DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD 85). LOW WATER DATUM ZERO IS 577.5 FEET ABOVE MEAN WATER LEVEL AT POINT RIMOUSKI QUEBEC. WATER LEVEL READINGS ARE FROM AN AUTOMATED GAUGE LOCATED AT CALUMET HARBOR, ILLINOIS. DEPTHS ARE MEASURED USING A RESON SEABAT 8125 MULTIBEAM SONAR.

3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON SEPTEMBER 22, 2009 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.

4. HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY U.S. COAST GUARD DIFFERENTIAL BROADCAST STATIONS. SIGNAL STRENGTH IS USED AS THE DETERMINING FACTOR IN DIFFERENTIAL SELECTION. THE DGPS RECEIVER IS MANUFACTURED BY APPLANIX MARINE POS/MV VER 4.0

5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.

Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Mrozek
Dwn by: A.S.
Chkd by:
Reviewed by:
Chief, Hydro. Mgmt.
Approved by:
Chief, Sub Section
Approved by:
Chief, Engineering
Approved by:
District Engineer

Survey Date: Sept. 22, 2009
Rev.
Design File name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 02
C.S. 13+00 TO C.S. 16+00
CONDITION SURVEY

Sheet reference number:
CLR-02
Sheet 02 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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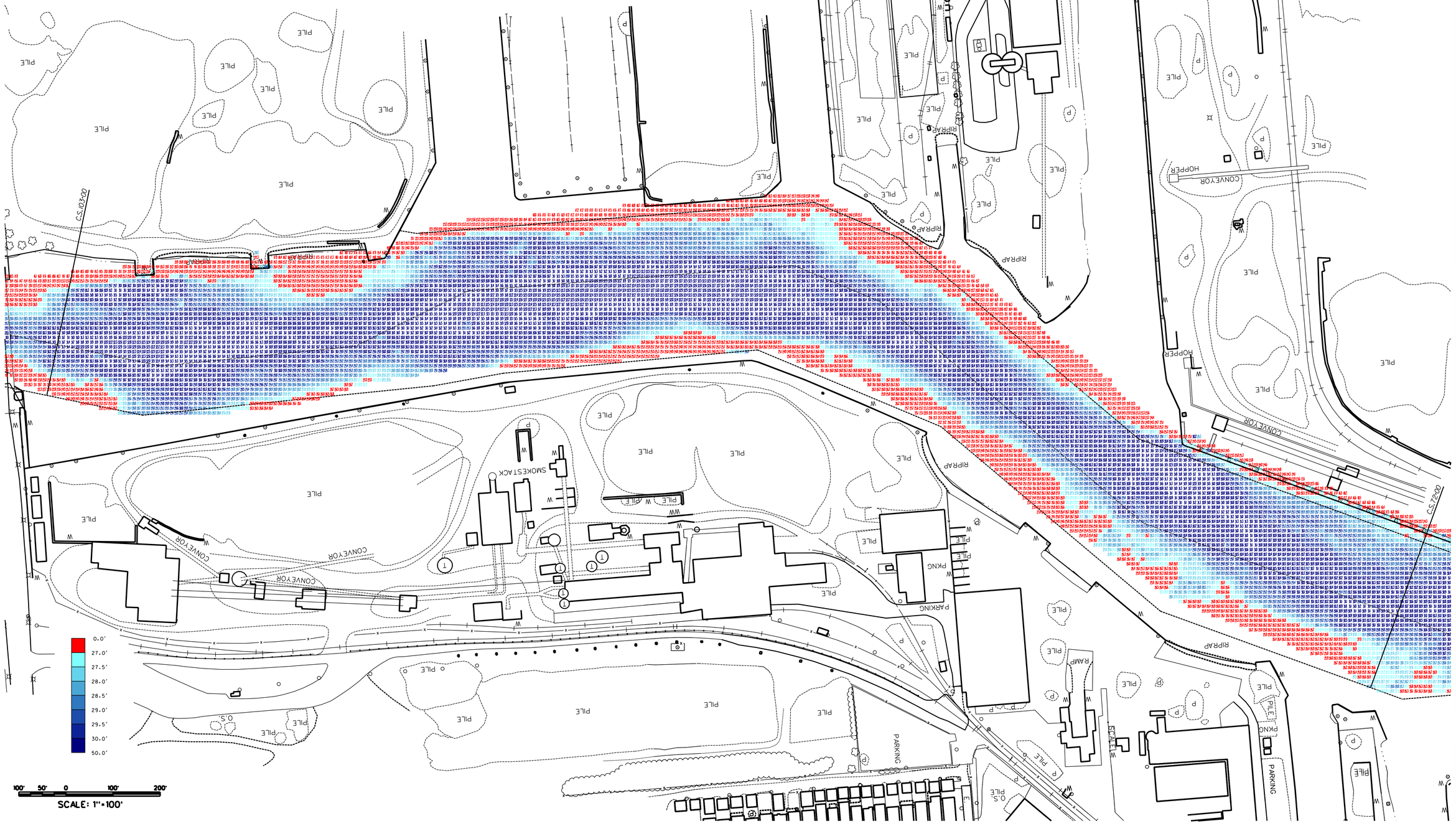
3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON SEPTEMBER 22, 2009 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.

4. HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY U.S. COAST GUARD DIFFERENTIAL BROADCAST STATIONS. SIGNAL STRENGTH IS USED AS THE DETERMINING FACTOR IN DIFFERENTIAL SELECTION. THE DGPS RECEIVER IS MANUFACTURED BY APPLANIX MARINE POS/MV VER 4.0

5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Wedek
Dwn by: Ckd by:
Reviewed by:
Approved by:
Approval Recommended:
Chief, Eng. Tech. Div.
Chief, Sur. Section
District Engineer

Survey Dates: Sept. 22, 2009
Design File name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 05
C.S. 72+00 TO C.S. 103+00
CONDITION SURVEY

Sheet reference number:
CLR-05
Sheet 05 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON SEPTEMBER 22, 2009 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.

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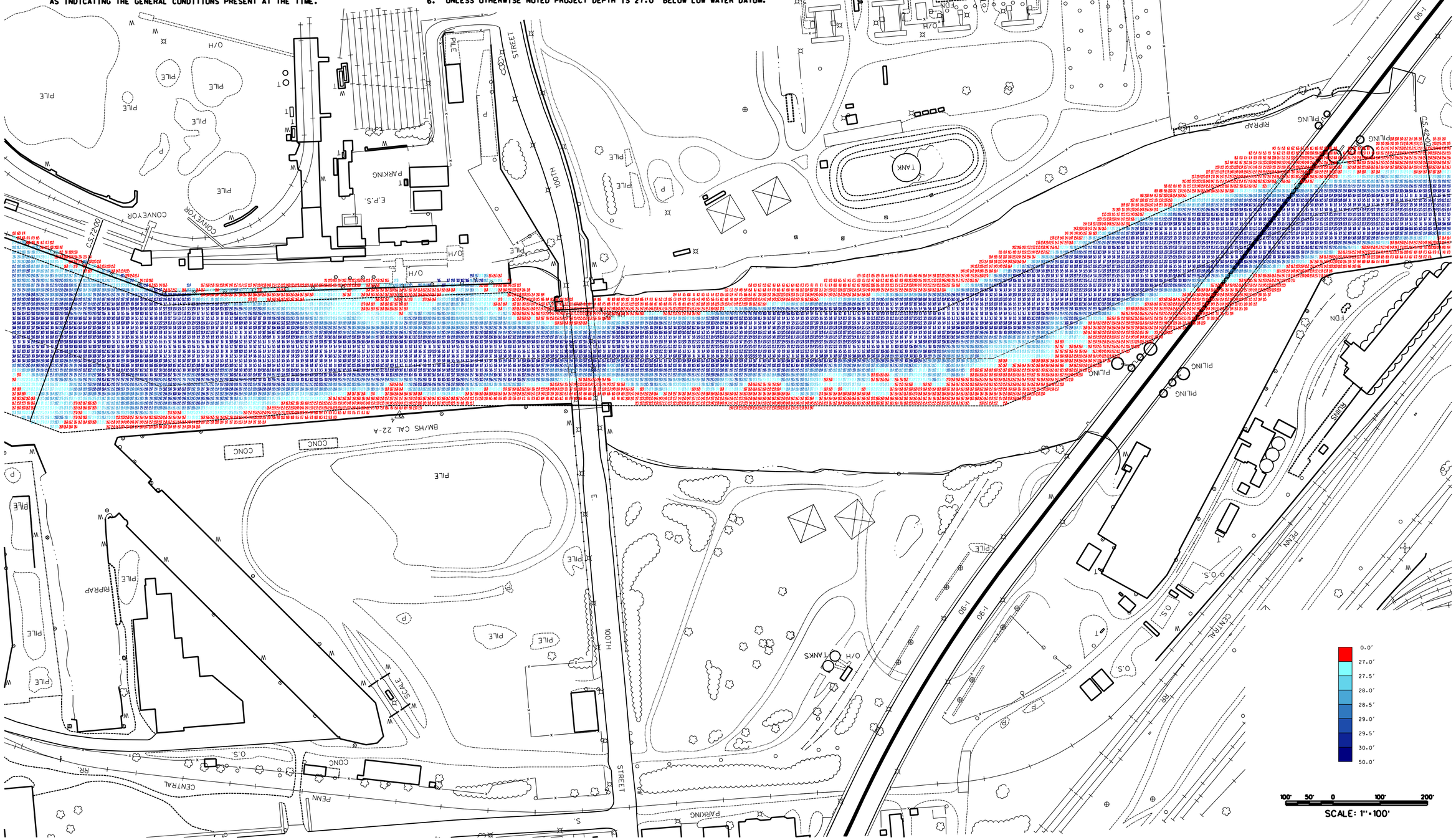
5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

Symbol	Description	Date	Appr.

Surveyed by: J. Mrozek		Survey Date: Sept. 22, 2009	Rev:
Dwn by: J. Ha	Ckd by:	Design file name:	
Reviewed by:		Drawing code:	
Chief, Hydr. Section		File name:	
Approved by:	Scoutled by:	Plot date:	
District Engineer	Chief, GIS Section	Plot scale: 1"=100'	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Approval Recommended:
Area Eng. Geo Office

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 04
C.S. 42+00 TO C.S. 72+00
CONDITION SURVEY

Sheet reference number:
CLR-04
Sheet 04 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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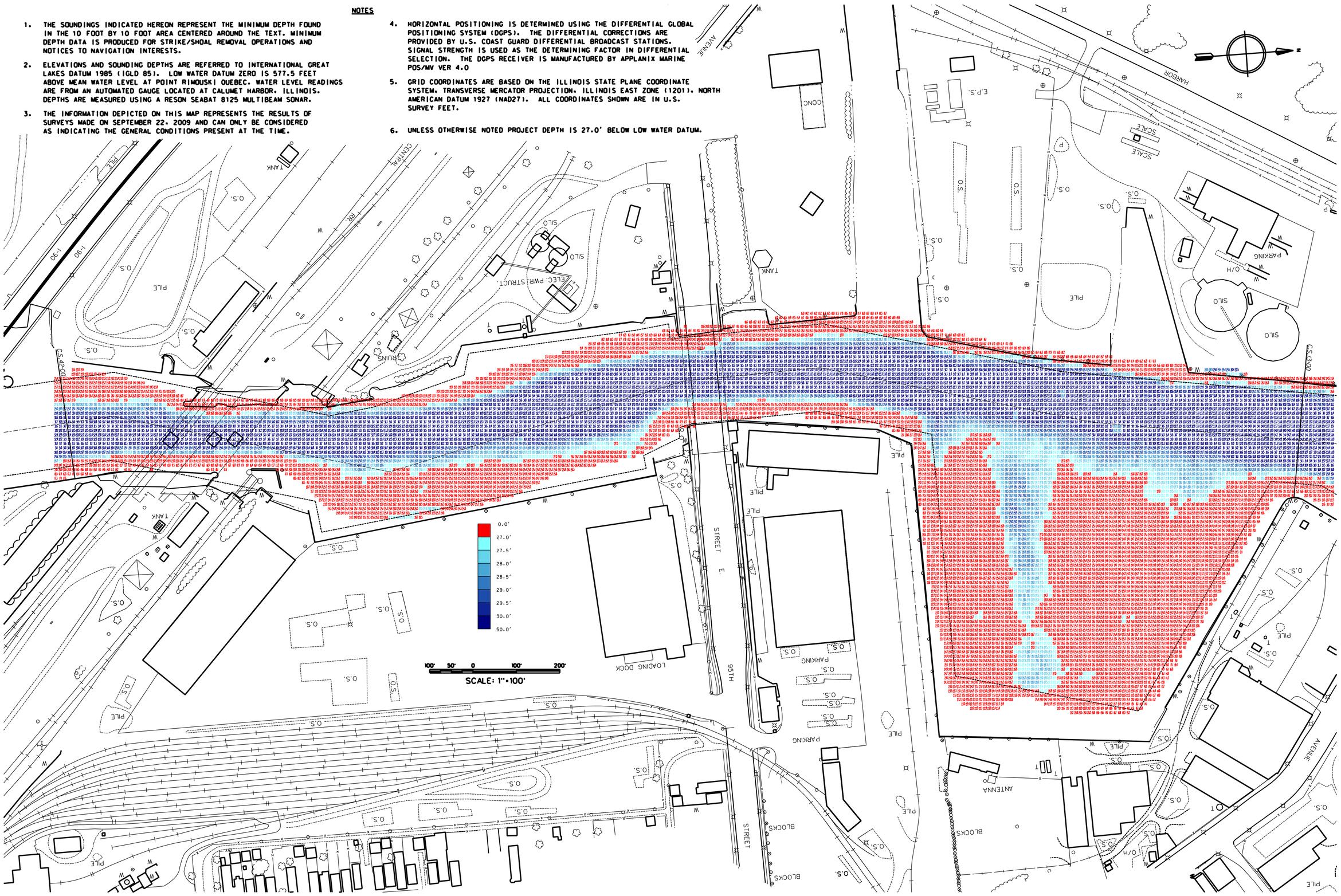
5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

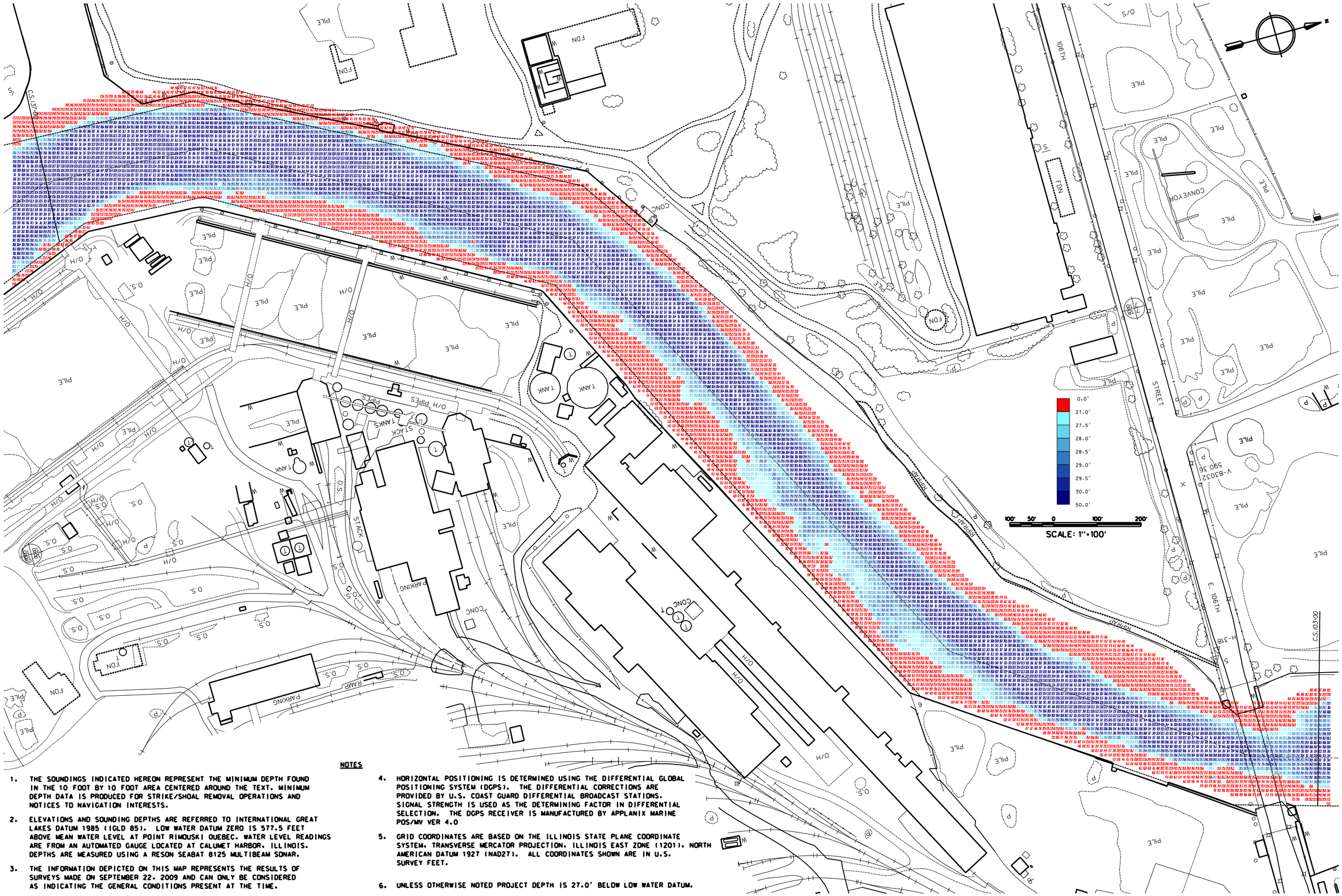
Surveyed by: J. Mrozek		Survey Date: Sept. 22, 2009	Rev.
Dwn by: J. M.	Ckd by:	Design File name:	
Reviewed by:		Drawing code:	
Approval Recommended: Chief, Hydro. Survey Section	Chief, Eng. Geo Office	File name:	
		Plot date:	
Approved by: District Engineer	Submitted by: Chief, Hydro. Survey Section	Plot scale: 1"=100'	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 03
C.S. 13+00 TO C.S. 42+00
CONDITION SURVEY

Sheet reference number:
CLR-03
Sheet 03 of



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Survey Date: Sept. 22, 2009
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

Surveyed by: J. Mrozek
Dwn by: J.S.M.
Ckd by:
Reviewed by:
Chief, Fac. Mgmt.
Submitted by:
Chief, SMR Section
Approval Recommended:
Area Eng. Soo Office
Approved by:
District Engineer:

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 06
C.S. 103+00 to C.S. 137+00
CONDITION SURVEY

Sheet reference number:
CLR-06
Sheet 06 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON SEPTEMBER 22, 2009 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.

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5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.

NOTES

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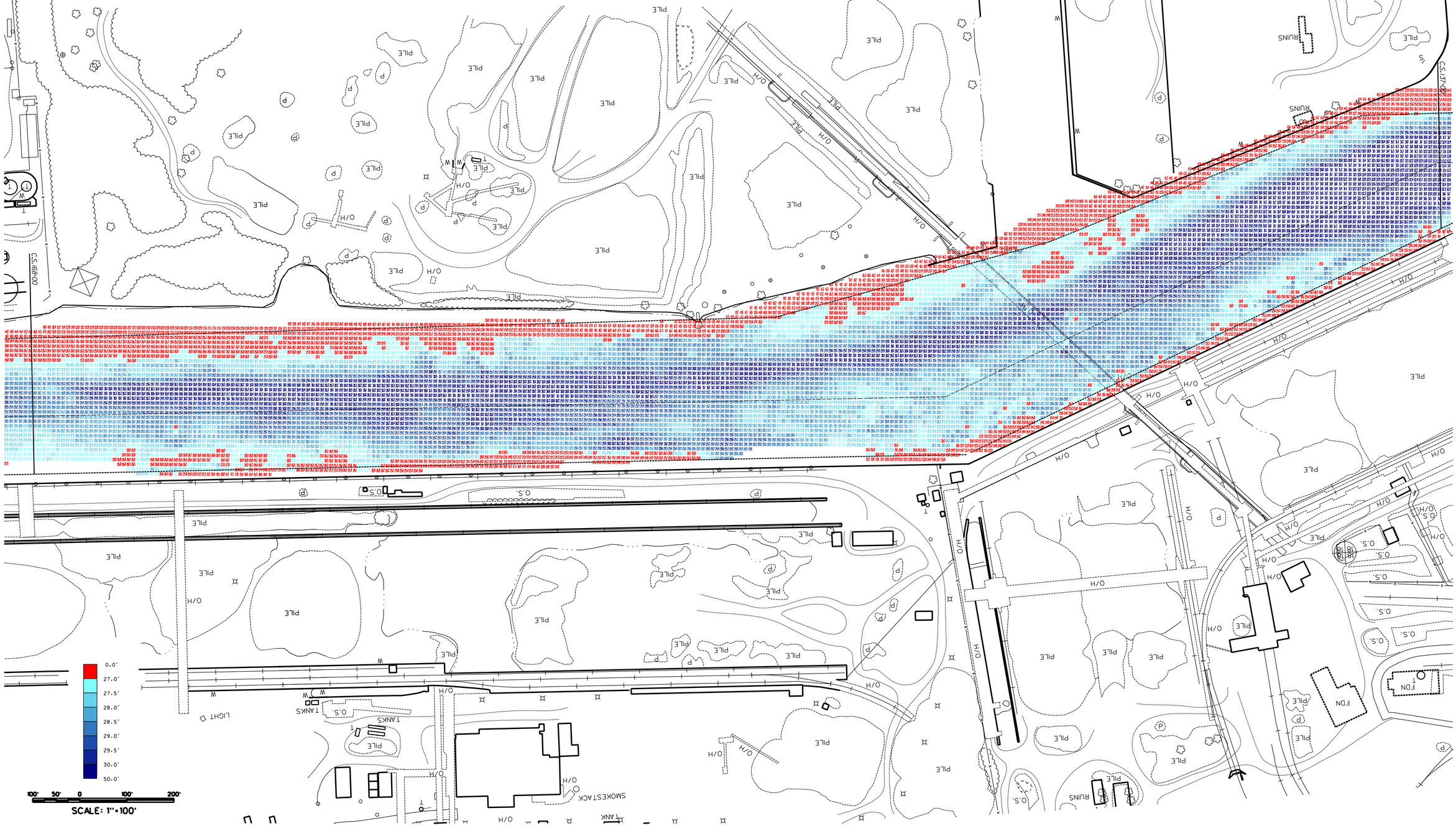
6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

Surveyed by: J. Mrozek
Dwn by: J. Mrozek
Ckd by:
Reviewed by:
Chief, Fac. Mgmt.
Submitted by:
Chief, SNR Section
Survey Date: Sept. 22, 2009
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Approval Recommended:
Area Eng. Soo Office
Approved by:
District Engineer:

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 07
C.S. 137+00 to C.S. 168+00
CONDITION SURVEY

Sheet reference number:
CLR-07
Sheet 07 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
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3. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON SEPTEMBER 24, 2009 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.
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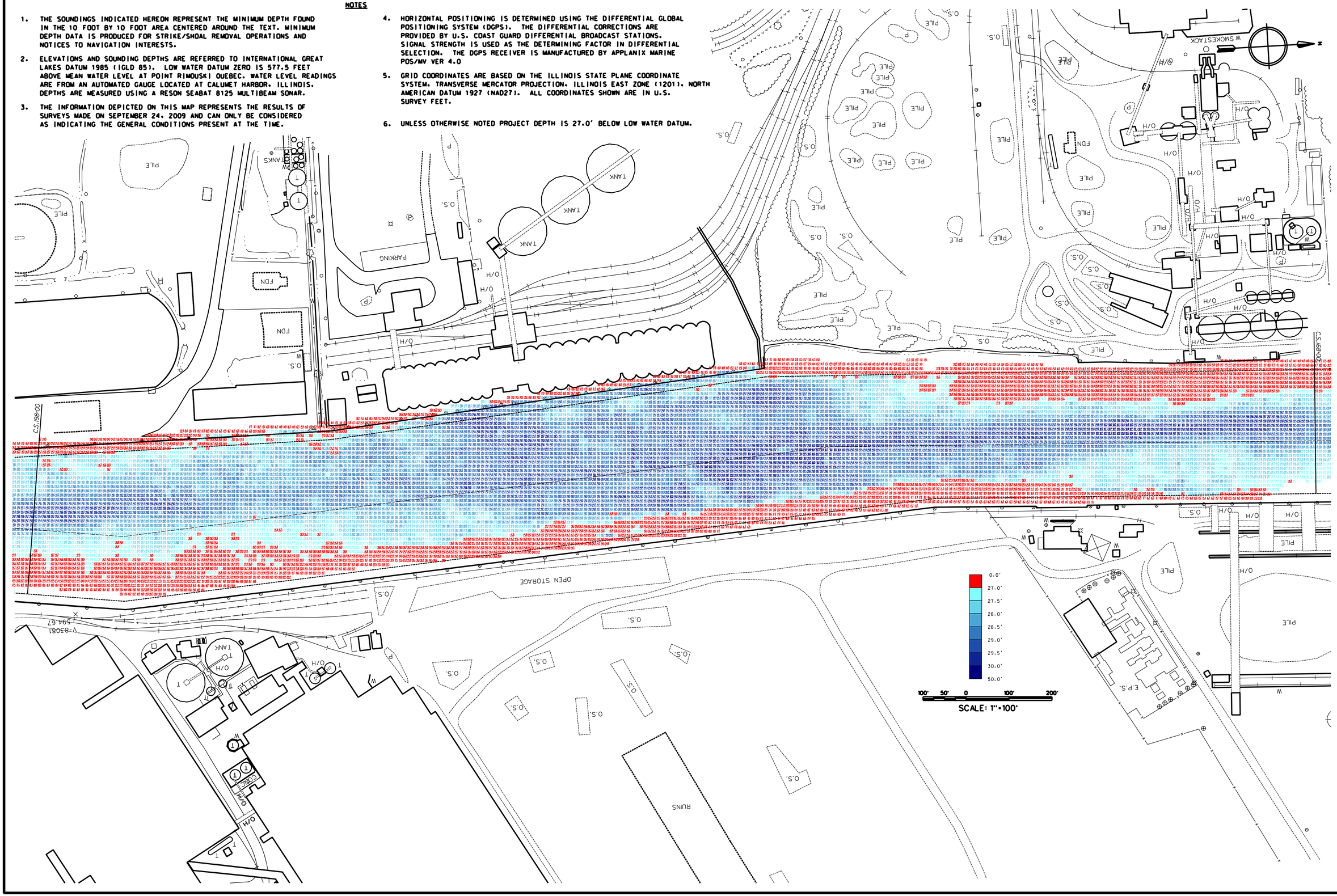

US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

Rev.	Survey Date: Sept. 24, 2009
	Design file name:
	Drawing code:
	File name:
	Plot date:
	Plot scale: 1"=100'

Surveyed by: J. Mrozek
Dwn by: J.S.M.
Ckd by:
Reviewed by:
Chief, Mgmt.
Submitted by:
Chief, SMR Section

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Approval Recommended:
Area Eng. Soo Office
Approved by:
District Engineer:

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 08
C.S. 168+00 TO C.S. 198+00
CONDITION SURVEY

Sheet reference number:
CLR-08
Sheet 08 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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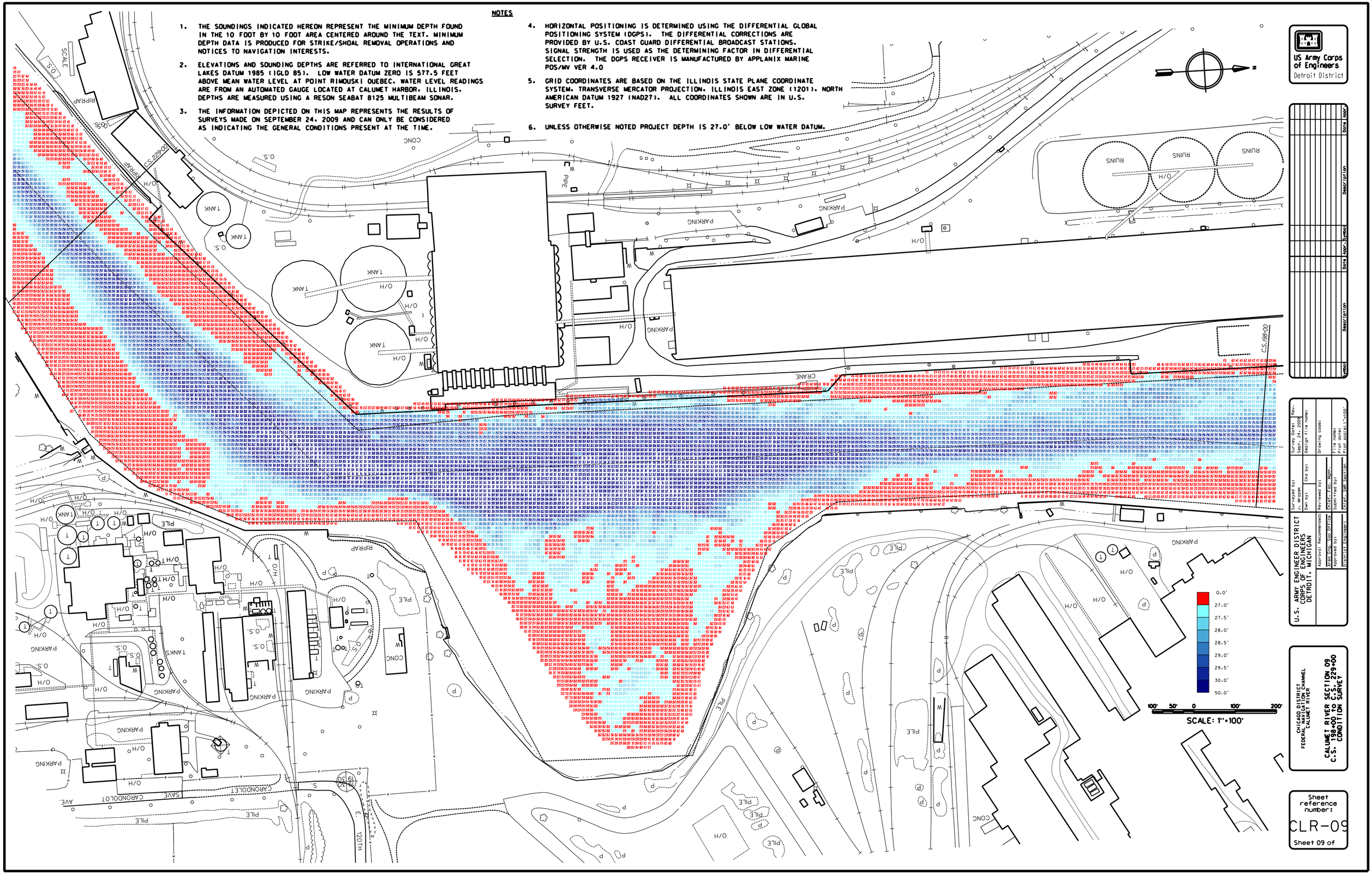
5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.

6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Mrozek
Survey Date: Sept. 24, 2009
Rev.
Dwn by:
Chkd by:
Design file name:
Drawing code:
Reviewed by:
Chief, Doc. Mgmt.
File name:
Plot date:
Plot scale: 1"=100'
Approved by:
Chief, Sur. Section
Approval Recommended:
Area Eng. - Geo Office
Scale: 1"=100'
District Engineer

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 09
C.S. 198+00 TO C.S. 229+00
CONDITION SURVEY

Sheet reference number:
CLR-09
Sheet 09 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

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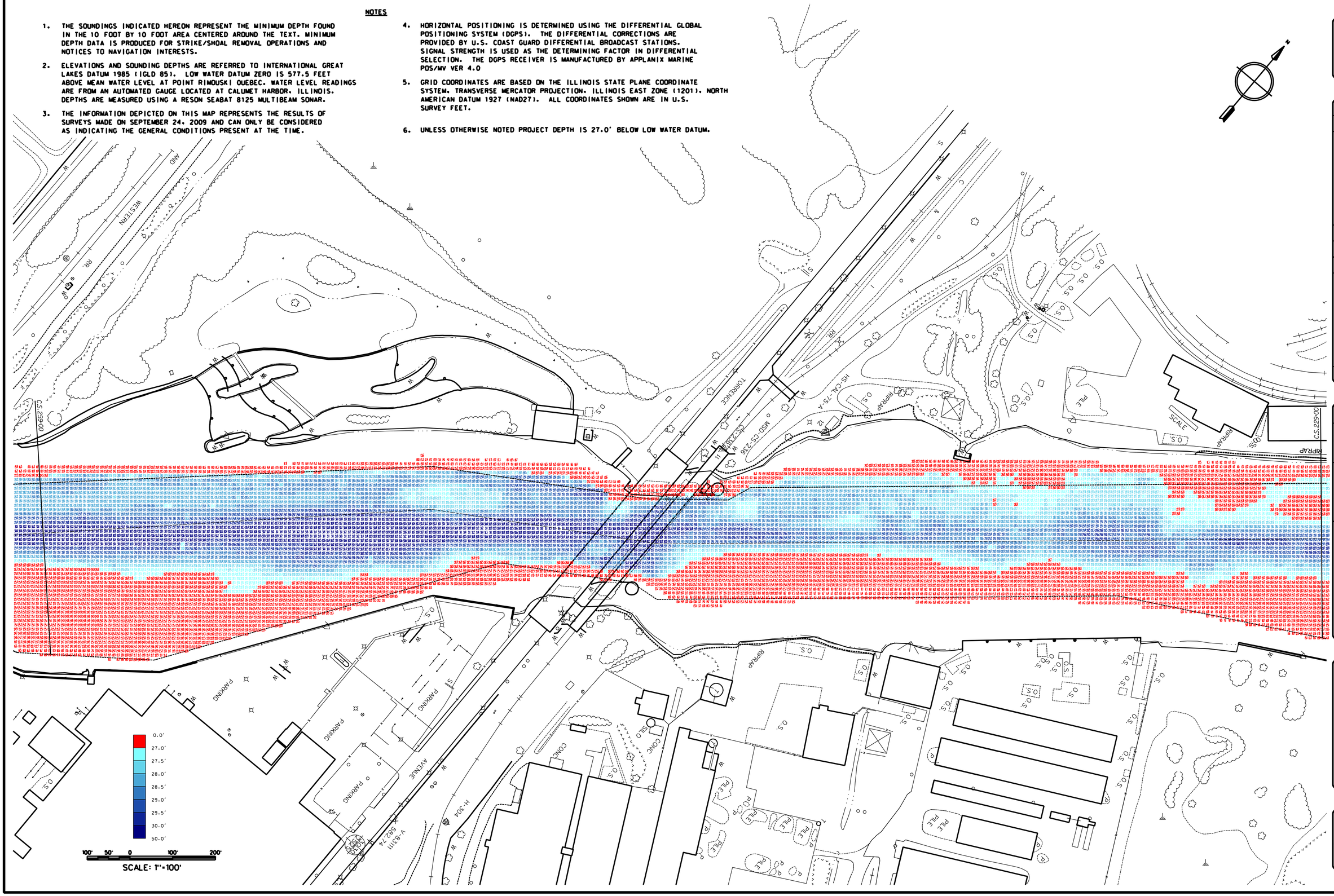

US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Weckel
Dwn by:
Chkd by:
Reviewed by:
Chief, Fdn. Mgmt.
Chief, Sur. Section
Submitted by:

Approval Recommended:
Area Eng. Sec. Office
Approved by:
District Engineer

Survey Date: Sept. 24, 2009
Rev.
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 10
C.S. 229+00 TO C.S. 259+00
CONDITION SURVEY

Sheet reference number:
CLR-10
Sheet 10 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
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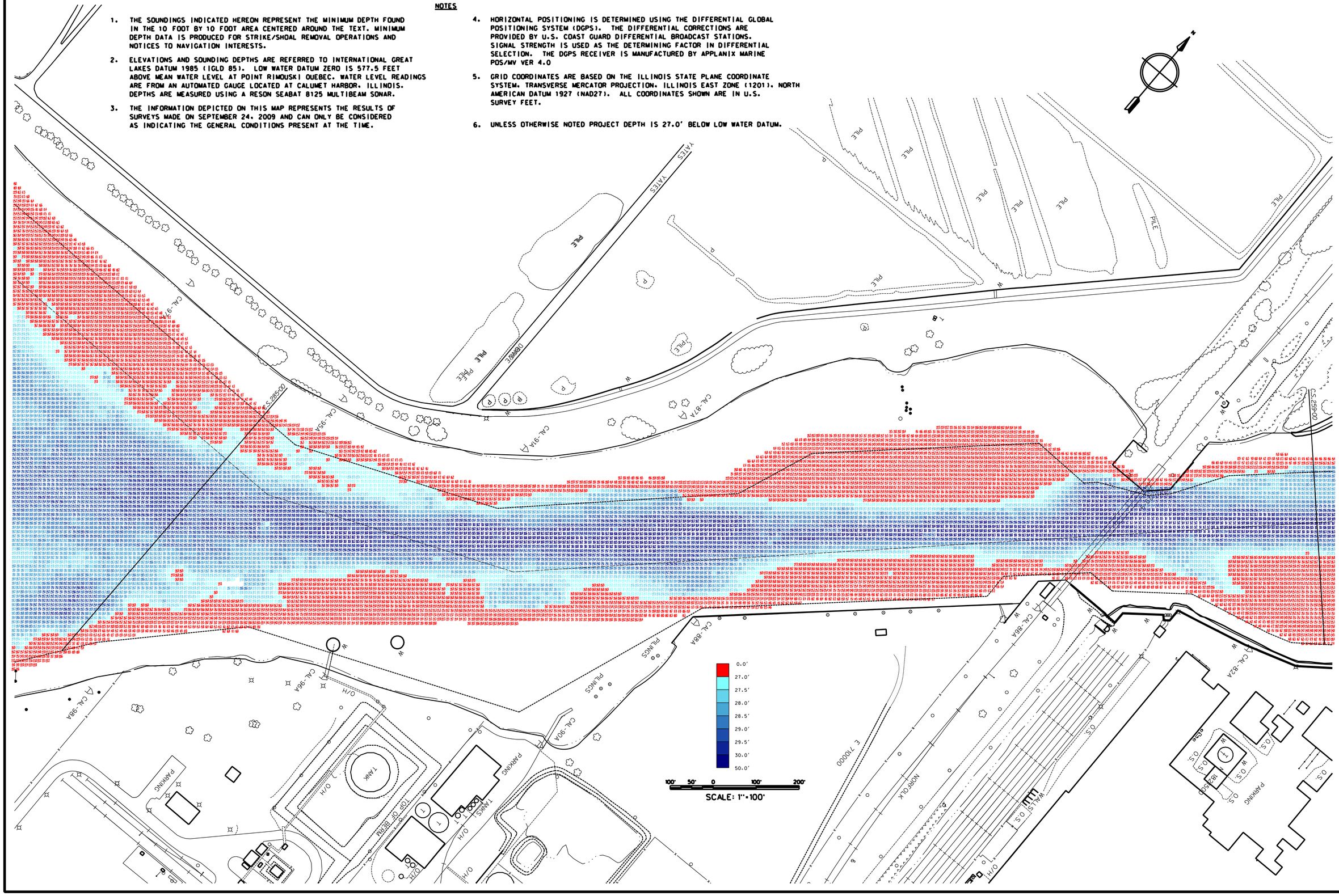
4. HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY U.S. COAST GUARD DIFFERENTIAL BROADCAST STATIONS. SIGNAL STRENGTH IS USED AS THE DETERMINING FACTOR IN DIFFERENTIAL SELECTION. THE DGPS RECEIVER IS MANUFACTURED BY APPLANIX MARINE POS/MV VER 4.0
5. GRID COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, ILLINOIS EAST ZONE (1201), NORTH AMERICAN DATUM 1927 (NAD27). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.
6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.



US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Kocek
Dwn by: J. Kocek
Ckd by: J. Kocek
Reviewed by: J. Kocek
Submitted by: Mgmt.
Chief, SNR Section
Survey Date: Sept. 24, 2009
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'
Rev.

Approval Recommended:
Area Eng. Sec. Office
Approved by:
Chief, Engineering Division

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 11
C.S. 259+00 to C.S. 285+00
CONDITION SURVEY

Sheet reference number:
CLR-11
Sheet 11 of

NOTES

1. THE SOUNDINGS INDICATED HEREON REPRESENT THE MINIMUM DEPTH FOUND IN THE 10 FOOT BY 10 FOOT AREA CENTERED AROUND THE TEXT. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
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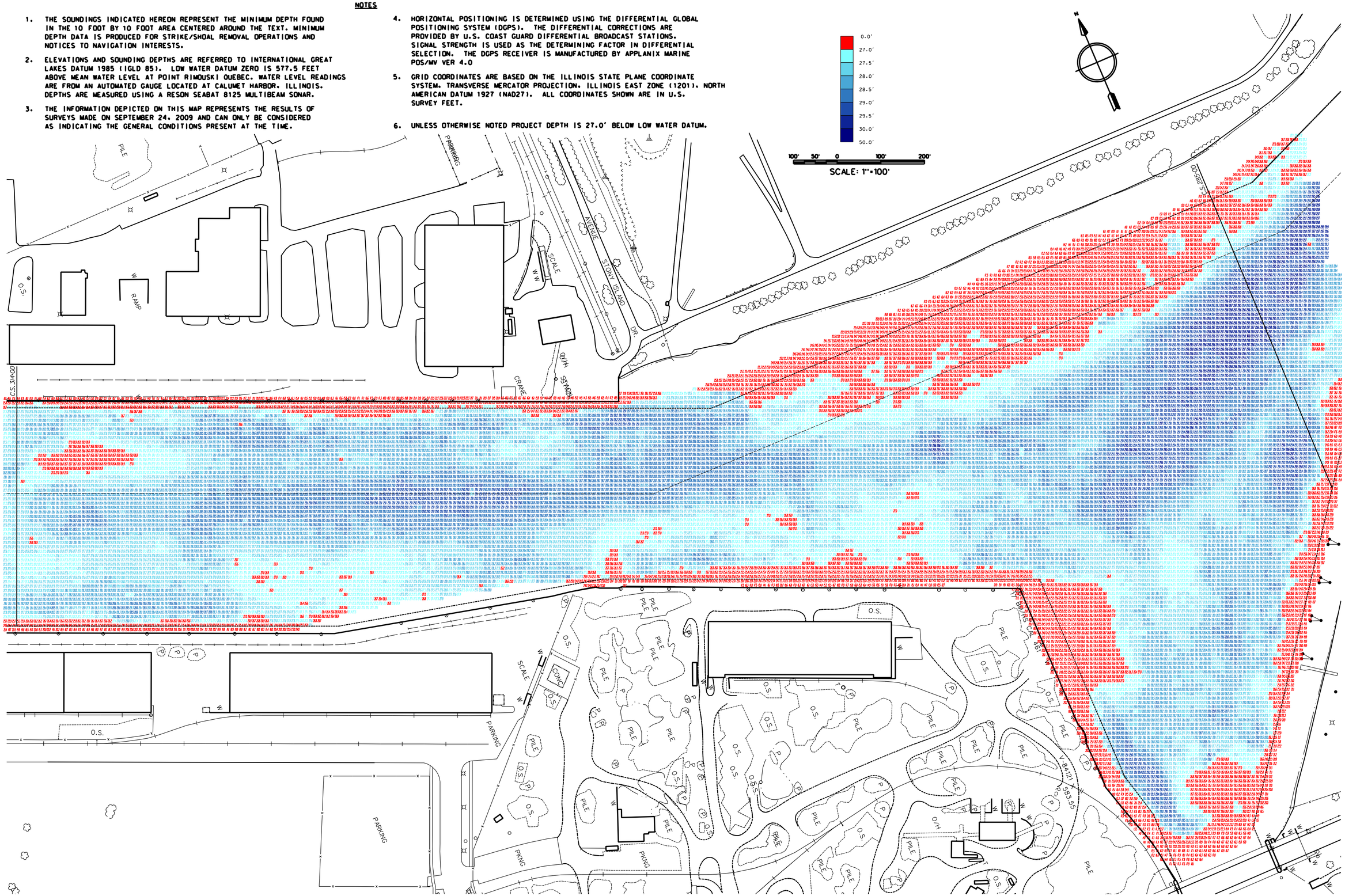


US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

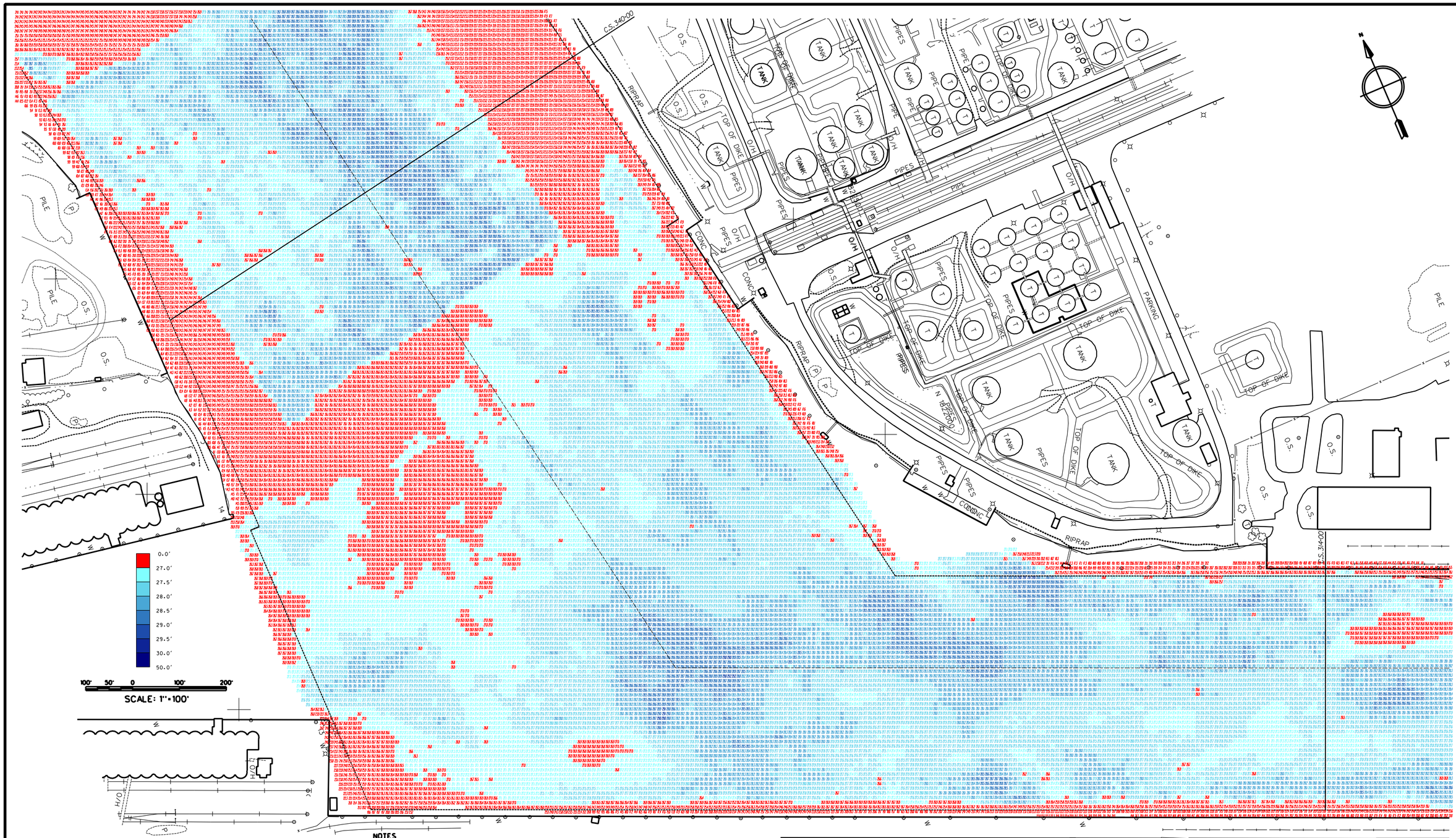
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. McCook
Dwn by: Jwn
Ckd by: Ckd
Reviewed by: Rev
Scaled by: Scld
Chief, Geo. Mgmt.
Chief, SAR Section
Area Eng. Geo Office
Approved by: Approved
Approval Recommended
District Engineer
Survey Date: Sept. 24, 2009
Design File name:
Drawing coord:
File name:
Plot date:
Plot scale: 1"=100'

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 12
C.S. 285+00 to C.S. 314+00
CONDITION SURVEY

Sheet reference number:
CLR-12
Sheet 12 of



NOTES

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6. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 27.0' BELOW LOW WATER DATUM.

US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.
Symbol	Description	Date	Appr.

Surveyed by: J. Mrozek
Drn by: J. Mrozek
Chkd by:
Reviewed by:
Chief, Hydro. Mgmt.
Scott Fried by:
Chief, Surv. Section
Survey Date: Sept. 24, 2009
Rev.
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

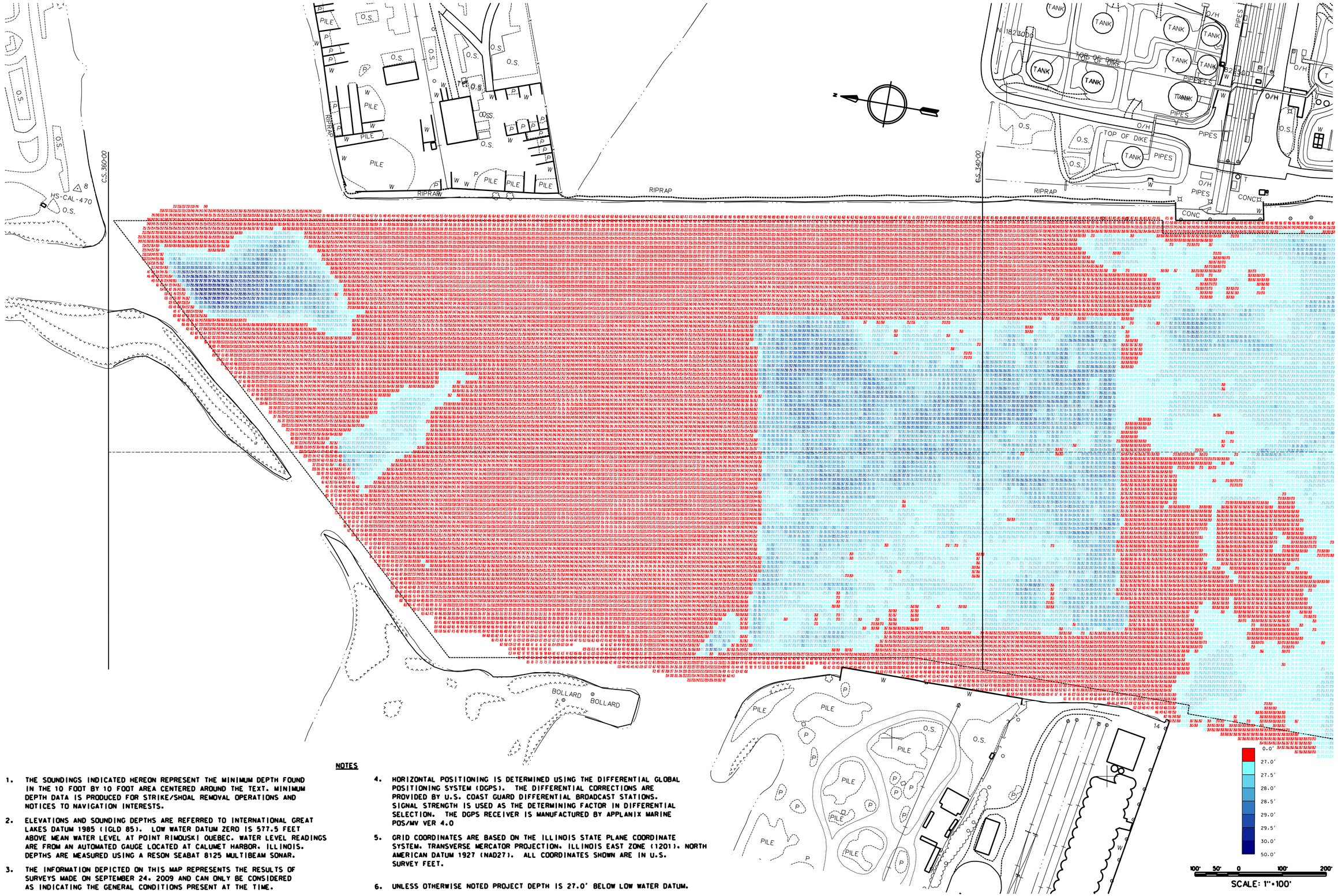
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Approval Recommended:
Area Eng. Sec Office
Approved by:
District Engineer

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 13
C.S. 314+00 TO C.S. 340+00
CONDITION SURVEY

Sheet reference number:
CLR-13
Sheet 13 of 14



US Army Corps of Engineers
Detroit District

Date	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: J. Wrobek
Dwn by: J.S.M.
Ckd by:
Reviewed by:
Chief, Fac. Mgmt.
Submitted by:
Chief, Sub Section
Approved by:
Chief, Engineering Division
Approved by:
Chief, Engineering Division
Survey Dates: Sept. 24, 2009
Design file name:
Drawing code:
File name:
Plot date:
Plot scale: 1"=100'

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
CALUMET RIVER

CALUMET RIVER SECTION 14
C.S. 340+00 to C.S. 360+00
CONDITION SURVEY

Sheet reference number:
CLR-14
Sheet 14 of 14

NOTES

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