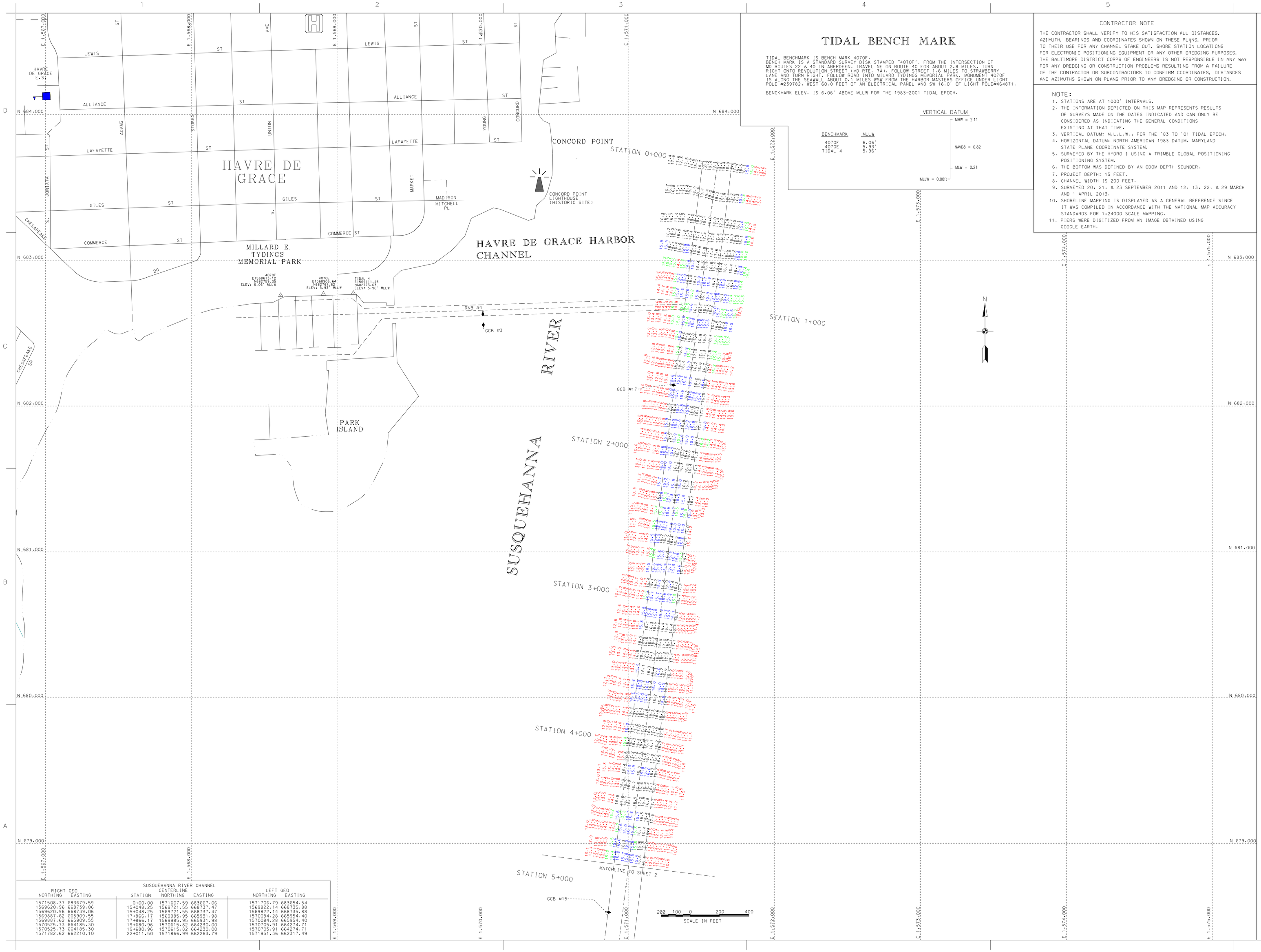

RIGHT GEO NORTHING	RIGHT GEO EASTING	SUSQUEHANNA RIVER CENTERLINE STATION	CENTERLINE NORTHING	CENTERLINE EASTING	LEFT GEO NORTHING	LEFT GEO EASTING
1571508.37	683679.59	0+00.00	1571607.59	683667.06	1571706.79	683654.54
1569620.96	668739.06	15+048.25	1569721.55	668737.47	1569822.14	668735.88
1569620.96	668739.06	15+048.25	1569721.55	668737.47	1569822.14	668735.88
1569887.62	665909.55	17+866.17	1569985.95	665931.98	1570084.28	665954.40
1569887.62	665909.55	17+866.17	1569985.95	665931.98	1570084.28	665954.40
1570525.73	664185.30	19+680.96	1570615.82	664230.00	1570705.91	664274.71
1570525.73	664185.30	19+680.96	1570615.82	664230.00	1570705.91	664274.71
1571782.62	662210.10	22+011.50	1571866.99	662263.79	1571951.36	662317.49

TIDAL BENCH MARK

TIDAL BENCHMARK IS BENCH MARK 4070F.
BENCH MARK IS A STANDARD SURVEY DISK STAMPED "4070F". FROM THE INTERSECTION OF MD ROUTES 22 & 40 IN ABERDEEN. TRAVEL NE ON ROUTE 40 FOR ABOUT 2.8 MILES. TURN RIGHT ONTO REVOLUTION STREET (MD RTE. 7A). FOLLOW STREET 1.6 MILES TO STRAWBERRY LANE AND TURN RIGHT. FOLLOW ROAD INTO MILARD TYDINGS MEMORIAL PARK. MONUMENT 4070F IS ALONG THE SEAWALL ABOUT 0.1 MILES WSW FROM THE HARBOR MASTERS OFFICE UNDER LIGHT POLE #239782. WEST 60.0 FEET OF AN ELECTRICAL PANEL AND SW 16.0' OF LIGHT POLE#464871.

BENCKMARK ELEV. IS 6.06' ABOVE MLLW FOR THE 1983-2001 TIDAL EPOCH.

BENCHMARK	MLLW
4070F	6.06'
4070E	5.93'
TIDAL 4	5.96'

VERTICAL DATUM

MHHW = 2.11
NAVD8 = 0.82
MLW = 0.21
MLLW = 0.00ft

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3. VERTICAL DATUM: M.L.L.W.. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM. MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING POSITIONING SYSTEM.
6. THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER.
7. PROJECT DEPTH: 15 FEET.
8. CHANNEL WIDTH IS 200 FEET.
9. SURVEYED 20. 21. & 23 SEPTEMBER 2011 AND 12. 13. 22. & 29 MARCH AND 1 APRIL 2013.
10. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.
11. PIERS WERE DIGITIZED FROM AN IMAGE OBTAINED USING GOOGLE EARTH.

US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

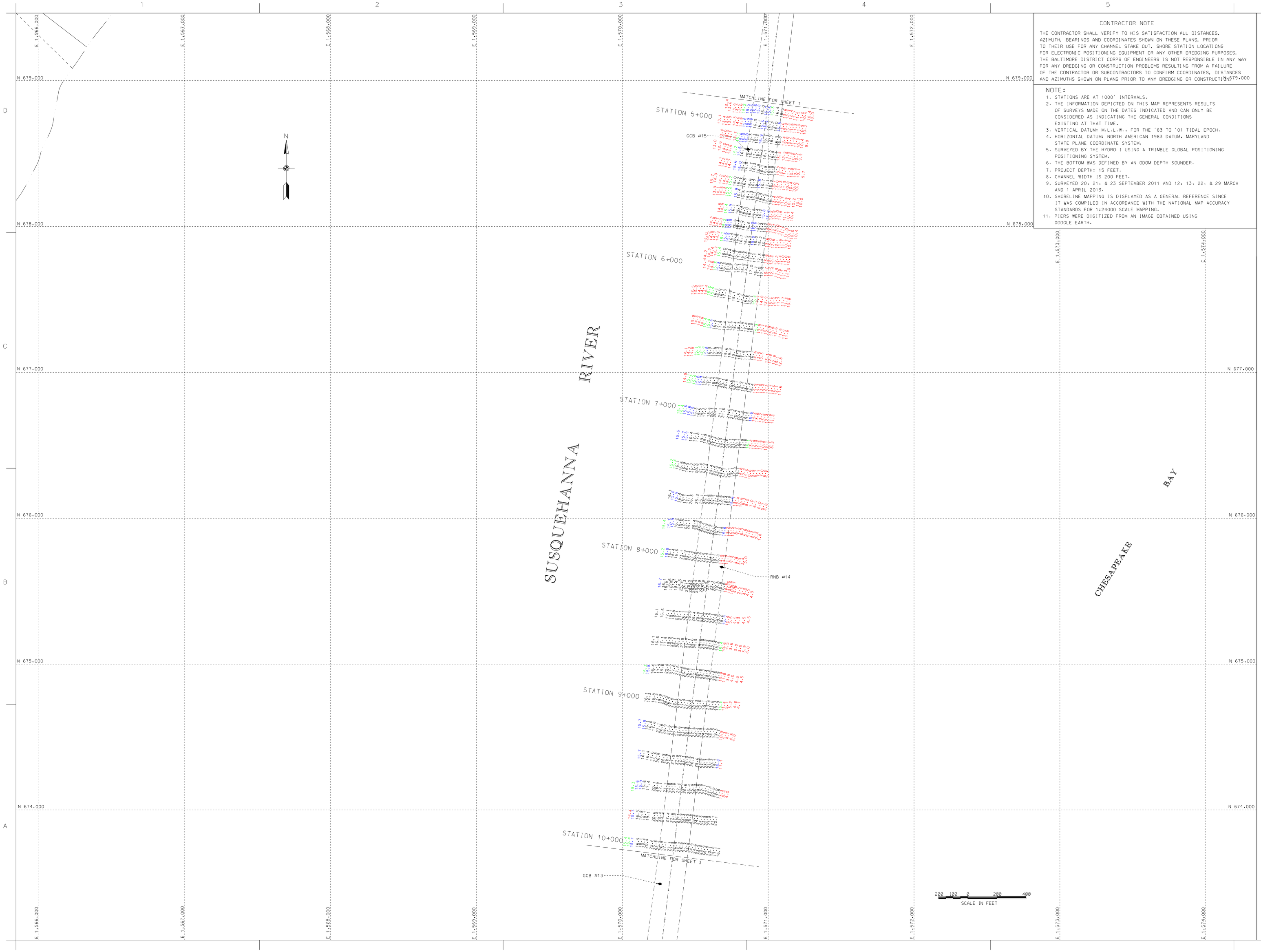
U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: JB Kim
Date by: 2012
Drawn by: SMC
Date by: 2012
Reviewed by: SMC
Submitted by: Chief, Nav. Branch
File name: HARFORD_CNDSSRMPS20
Plot date:
Plot scale:
Rev. SMC '13
Rev. Dwgs by Tech 2012-2013
Drawing scale:
Rev.

HARFORD COUNTY
MARYLAND

CONDITION SURVEY
SUSQUEHANNA RIVER
STATION 0+000 TO 14+800

Sheet reference number:
V-101
Sheet 1 of 6



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US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

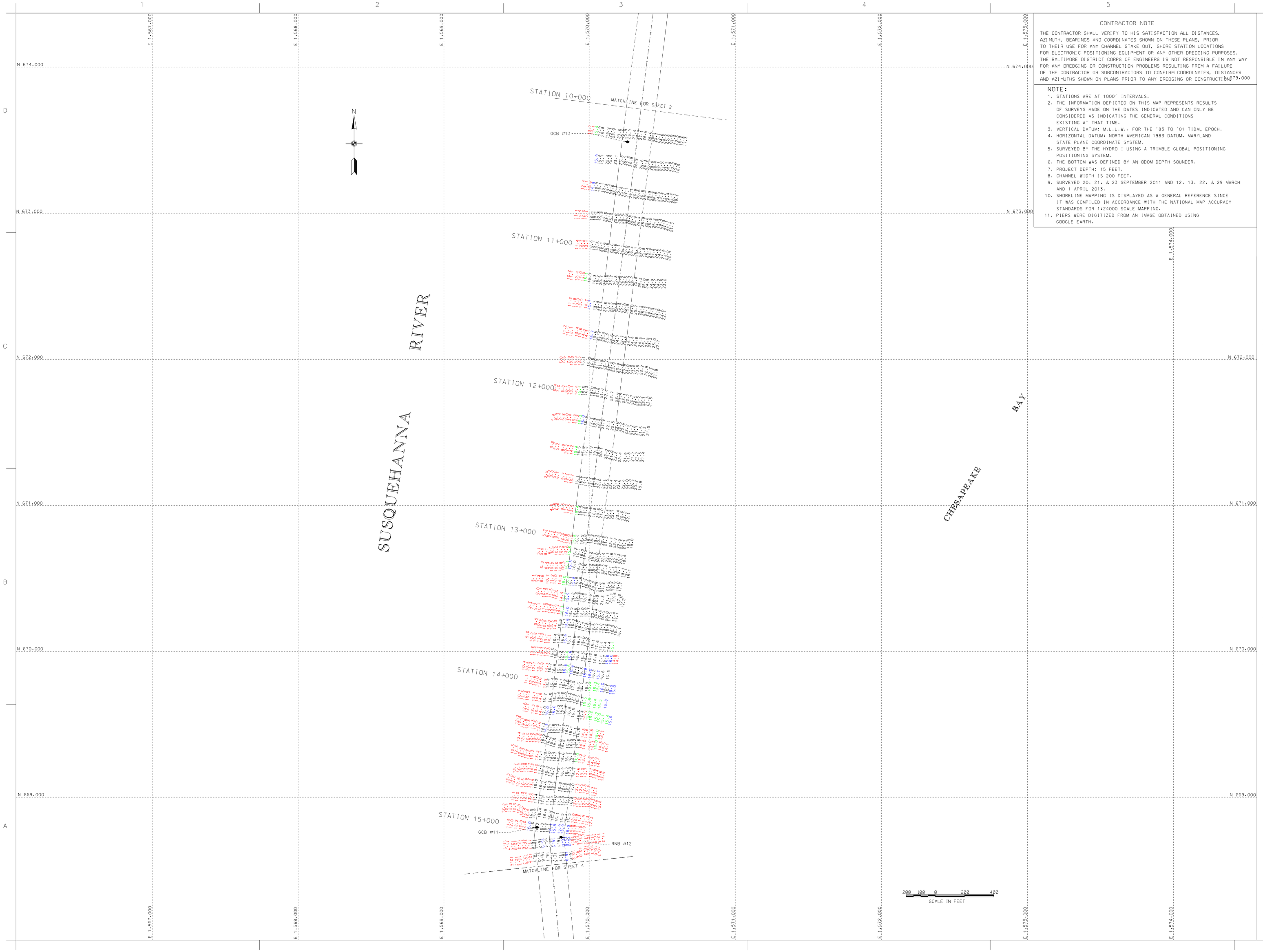
U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: JMC
Date: JUNE '13
Drawn by: JMC
Checked by: DMS
Reviewed by: DMS
Submitted by:
Date/ Time in CAD: 10-2013
Drawing name:
File name: H:\DGN\CAD\MAINTENANCE
Plot scale:
Plot date:
Date Rev. Branch
Rev.

HARFORD COUNTY
MARYLAND

CONDITION SURVEY
SUSQUEHANNA RIVER
STATION 4+900 TO 10+000

Sheet reference number:
V-102
Sheet 2 of 6



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US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

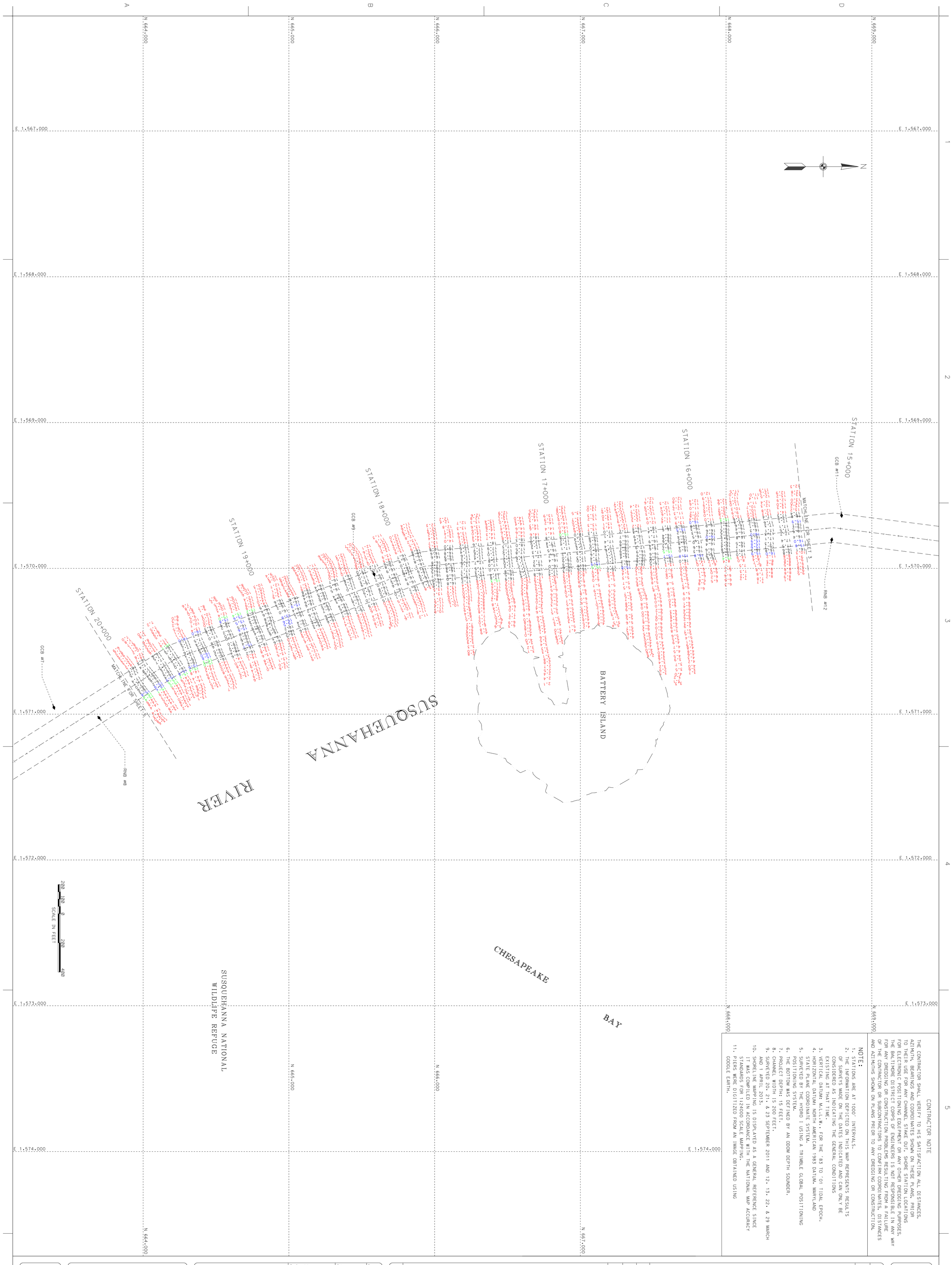
Designed by:
Date by: JUL 13
Chk by: SMC
Reviewed by: SMC
Submitted by:
Chief, Nav. Branch

Date: MAR 13
Scale: 1" = 100'-10'-0M
Drawing: V-103
Design file name: HAR_CMP200A-MAP03
Plot date:
Plot scale:
File name:

HARFORD COUNTY
MARYLAND

CONDITION SURVEY
SUSQUEHANNA RIVER
STATION 10+100 TO 15+200

Sheet reference number:
V-103
Sheet 3 of 6



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Sheet reference number: V-104
Sheet 4 of 6

HARFORD COUNTY
MARYLAND

CONDITION SURVEY
SESQUEHANNA RIVER
STATION 15+300 TO 20+000

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by:		Date: JUNE '13
Dwn by: JAH	Ckd by: SMG	Design file no. FILE: 20 MAP: 13-015
Reviewed by: SMG		Drawing code:
Submitted by: Chief, Nav. Branch		File name: SH01_06C004JUN2013 Plot date: Plot scale:

Rev.

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

US Army Corps of Engineers
Baltimore District

CONTRACTOR NOTE

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6. THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER.
7. PROJECT DEPTH: 15 FEET.
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11. PIERS WERE DIGITIZED FROM AN IMAGE OBTAINED USING GOOGLE EARTH.

US Army Corps of Engineers
Baltimore District

Date	Description	Appr.

Date	Description	Appr.

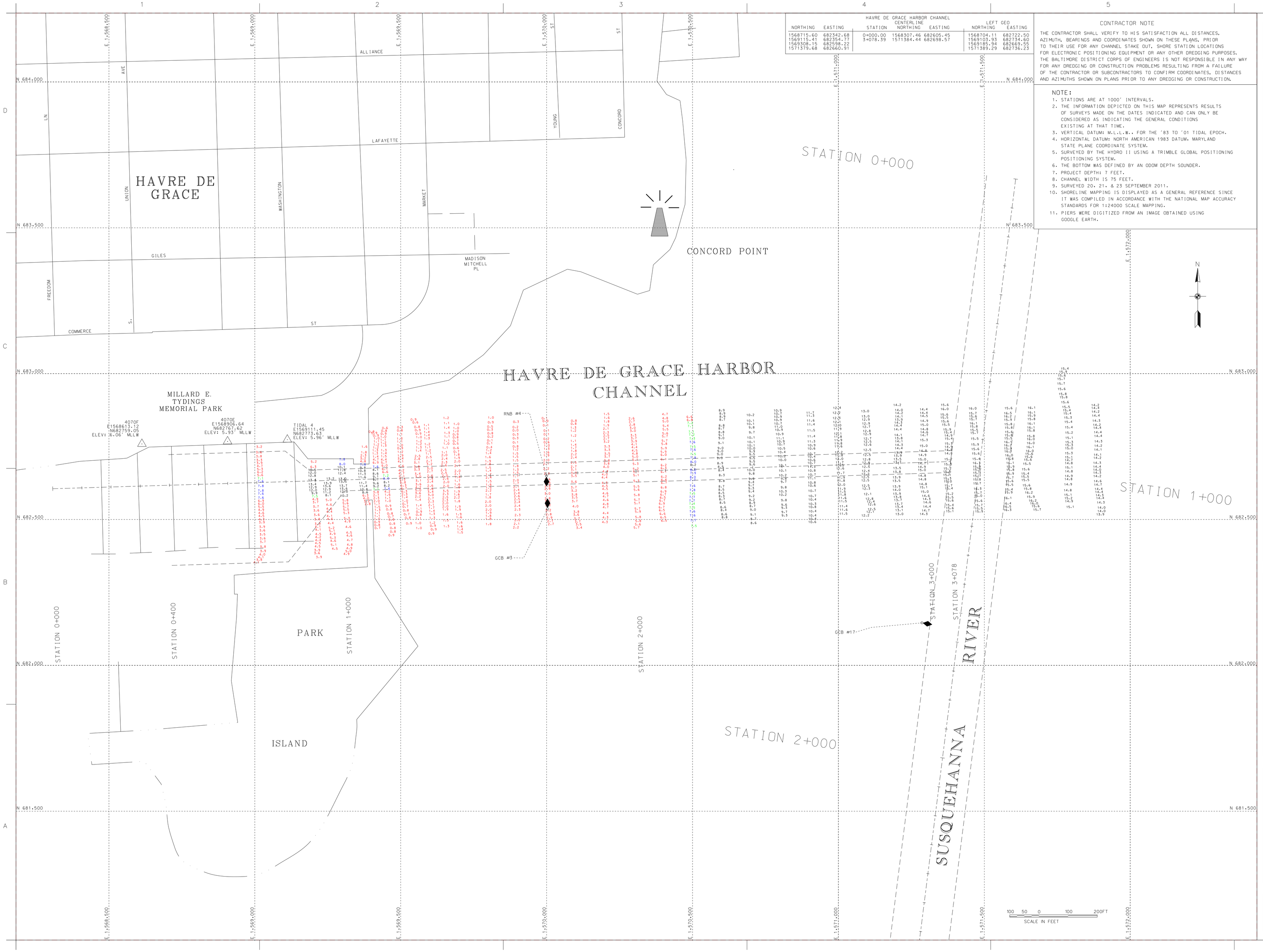
U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: Date for: Jul 2012
Drawn by: Date for: DMC
Reviewed by: SMC
Submitted by: Chief, Nav. Branch
Date: June 13
Drawn to Ver.: 8.1.0 Build 13.0.16
Checked by: JLMP
File name: HYDC_CD2011AUG03
Proj. date:
Proj. scale:
Rev.

HARFORD COUNTY
MARYLAND

CONDITION SURVEY
SUSQUEHANNA RIVER
STATION 20+100 TO 22+000

Sheet reference number:
V-105
Sheet 5 of 6



HAVRE DE GRACE HARBOR CHANNEL CENTERLINE

NORTHING	EASTING	STATION	NORTHING	EASTING	NORTHING	EASTING
1568715.60	682342.68	0+000.00	1568307.46	682605.45	1568704.11	682722.50
1569115.41	682354.77	3+078.39	1571384.44	682698.57	1569103.93	682734.60
1569308.15	682598.22				1569185.94	682669.55
1571379.68	682660.91				1571389.29	682736.23

LEFT GEO

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6. THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER.
7. PROJECT DEPTH: 7 FEET.
8. CHANNEL WIDTH IS 75 FEET.
9. SURVEYED 20. 21. & 23 SEPTEMBER 2011.
10. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.
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US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: JLM
Date: JUNE 2012 13
Rev.
Tech. Insp: JLM
Chief Hyd: CMBC
Design File No.: 13-207 Sub 13-207
Reviewed by: SMC
Drawing Number:
Supervisor by:
File name:HDG_CGCOA-AA003
Plot date:
Plot scale:
Const. Ops. Branch

HARFORD COUNTY
MARYLAND
CONDITION SURVEY
SESQUEHANNA RIVER
HAVRE DE GRACE HARBOR
STATION 0+000 TO 3+078

Sheet reference number:
V-106
Sheet 6 of 6