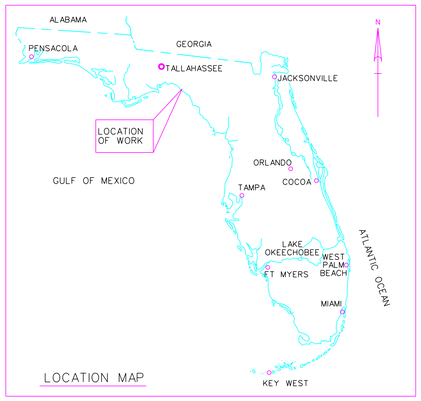
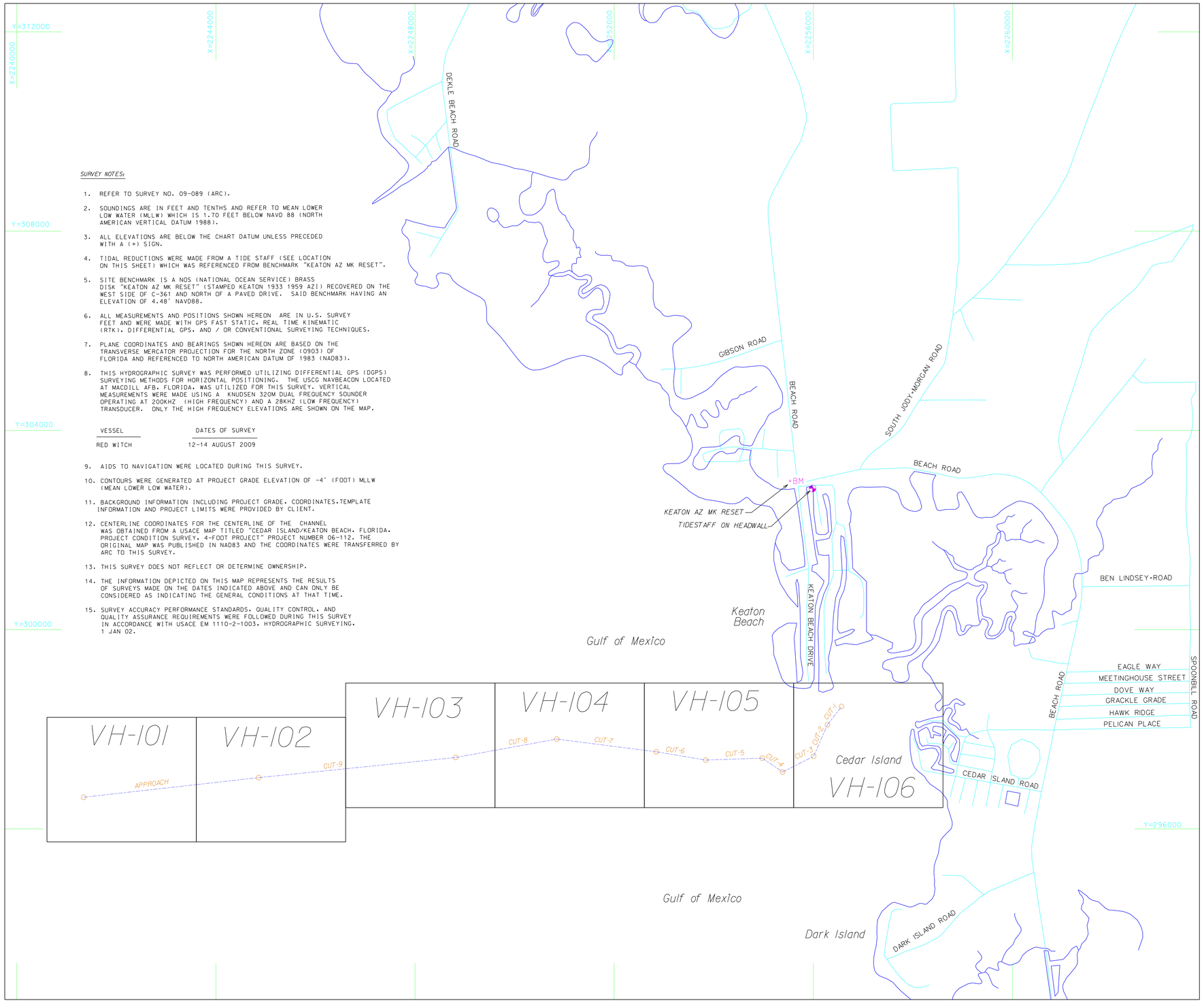
CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA
PROJECT CONDITION SURVEY





SURVEY NOTES:

1. REFER TO SURVEY NO. 09-089 (ARC).
2. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) WHICH IS 1.70 FEET BELOW NAVD 88 (NORTH AMERICAN VERTICAL DATUM 1988).
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED WITH A (+) SIGN.
4. TIDAL REDUCTIONS WERE MADE FROM A TIDE STAFF (SEE LOCATION ON THIS SHEET) WHICH WAS REFERENCED FROM BENCHMARK "KEATON AZ MK RESET".
5. SITE BENCHMARK IS A NOS (NATIONAL OCEAN SERVICE) BRASS DISK "KEATON AZ MK RESET" (STAMPED KEATON 1933 1959 AZI) RECOVERED ON THE WEST SIDE OF C-361 AND NORTH OF A PAVED DRIVE. SAID BENCHMARK HAVING AN ELEVATION OF 4.48' NAVD88.
6. ALL MEASUREMENTS AND POSITIONS SHOWN HEREON ARE IN U.S. SURVEY FEET AND WERE MADE WITH GPS FAST STATIC, REAL TIME KINEMATIC (RTK), DIFFERENTIAL GPS, AND / OR CONVENTIONAL SURVEYING TECHNIQUES.
7. PLANE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE NORTH ZONE (0903) OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
8. THIS HYDROGRAPHIC SURVEY WAS PERFORMED UTILIZING DIFFERENTIAL GPS (DGPS) SURVEYING METHODS FOR HORIZONTAL POSITIONING. THE USCG NAVBEACON LOCATED AT MACDILL AFB, FLORIDA, WAS UTILIZED FOR THIS SURVEY. VERTICAL MEASUREMENTS WERE MADE USING A KNUDSEN 320M DUAL FREQUENCY SOUNDER OPERATING AT 200KHZ (HIGH FREQUENCY) AND A 28KHZ (LOW FREQUENCY) TRANSDUCER. ONLY THE HIGH FREQUENCY ELEVATIONS ARE SHOWN ON THE MAP.

VESSEL	DATES OF SURVEY
RED WITCH	12-14 AUGUST 2009

9. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
10. CONTOURS WERE GENERATED AT PROJECT GRADE ELEVATION OF -4' (FOOT) MLLW (MEAN LOWER LOW WATER).
11. BACKGROUND INFORMATION INCLUDING PROJECT GRADE, COORDINATES, TEMPLATE INFORMATION AND PROJECT LIMITS WERE PROVIDED BY CLIENT.
12. CENTERLINE COORDINATES FOR THE CENTERLINE OF THE CHANNEL WAS OBTAINED FROM A USACE MAP TITLED "CEDAR ISLAND/KEATON BEACH, FLORIDA, PROJECT CONDITION SURVEY, 4-FOOT PROJECT" PROJECT NUMBER 06-112. THE ORIGINAL MAP WAS PUBLISHED IN NAD83 AND THE COORDINATES WERE TRANSFERRED BY ARC TO THIS SURVEY.
13. THIS SURVEY DOES NOT REFLECT OR DETERMINE OWNERSHIP.
14. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED ABOVE AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME.
15. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 1 JAN 02.

BENCHMARK	NAVD 88 ELEV.(FT)
KEATON AZ MK RESET	4.48

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NAVD 88
1.70 feet
M.L.L.W.

Relationship between NAVD 88 and 1983-2001 NOAA Mean Lower Low Water Tidal Datum

GRAPHIC SCALE

800' 0 800' 1600'

SCALE: 1"=800'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N		A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE
JACKSONVILLE, FLORIDA 32210
PHONE: 1-904/384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Dwn by: DET
Ckd by: JFS
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HYDROCORD.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPENAVD.DGN
2009-089-V-PRENDTICK.DGN
2009-089-V-PRENDTIDE.DGN
2009-089-V-SCELEV.DGN
2009-089-V-SCELEV.DGN
FLORIDA_C_PLOC.DGN
2009-089-C-BS.DGN
Reference files:

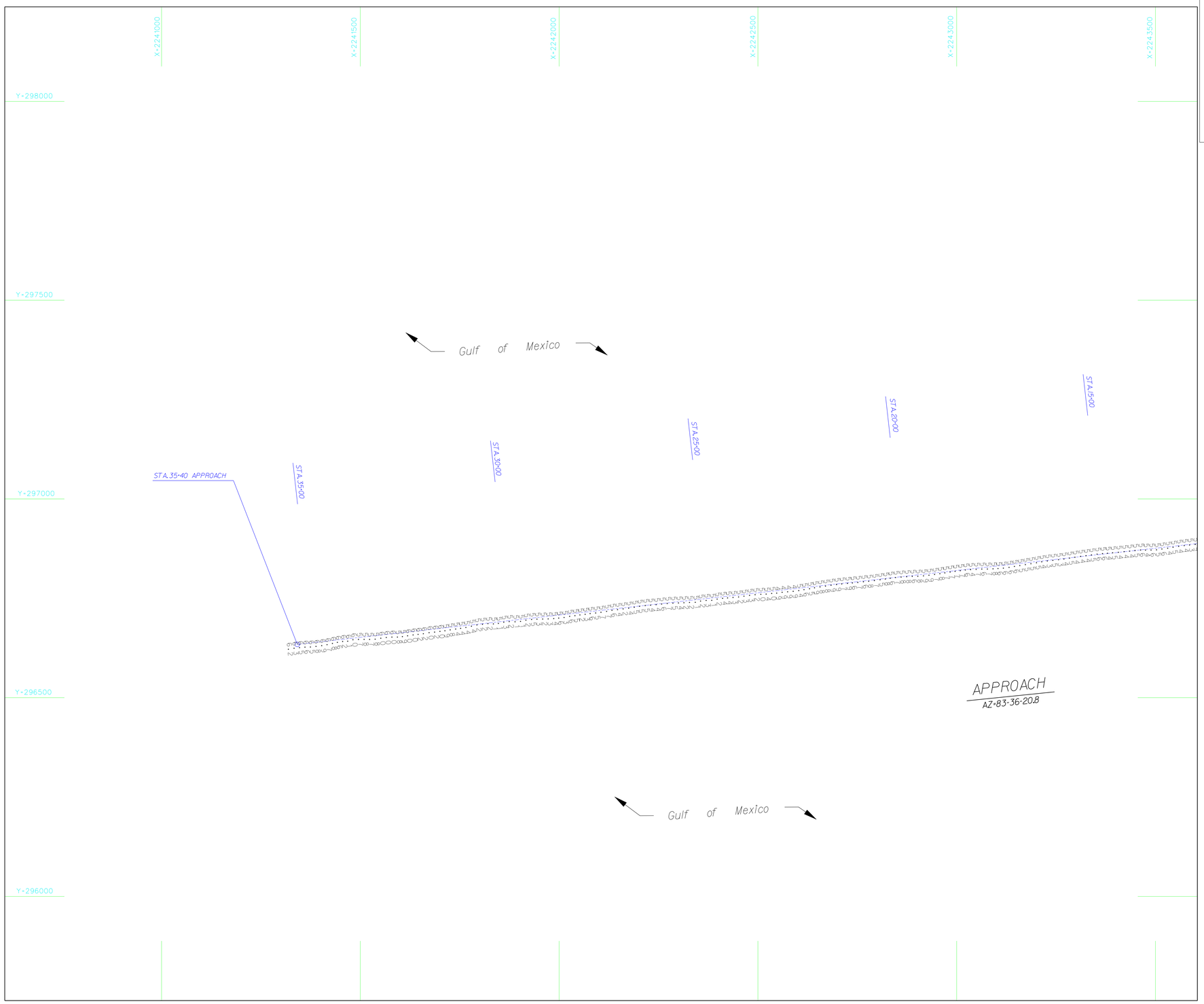
2009-089-G001.DGN
File name:

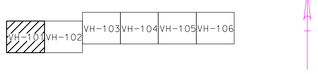
CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA
PROJECT CONDITION SURVEY
4-FOOT PROJECT
GULF OF MEXICO TO CUT-1
COVER

Scale: AS SHOWN

Drawing no.
GI-001

...\dgn\2009-089-GI001.dgn 8/26/2009 1:10:37 PM





SHEET LAYOUT

N

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND	
	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N		A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Ckd by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPNAVAD.DGN
2009-089-V-HPGRIDTICK.DGN
2009-089-V-PRELEV.DGN
2009-089-V-SCELEV.DGN
2009-089-V-GPCONTOUR.DGN
2009-089-G-BS.DGN
Reference files:
2008-089-VH101.DGN
File name:

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

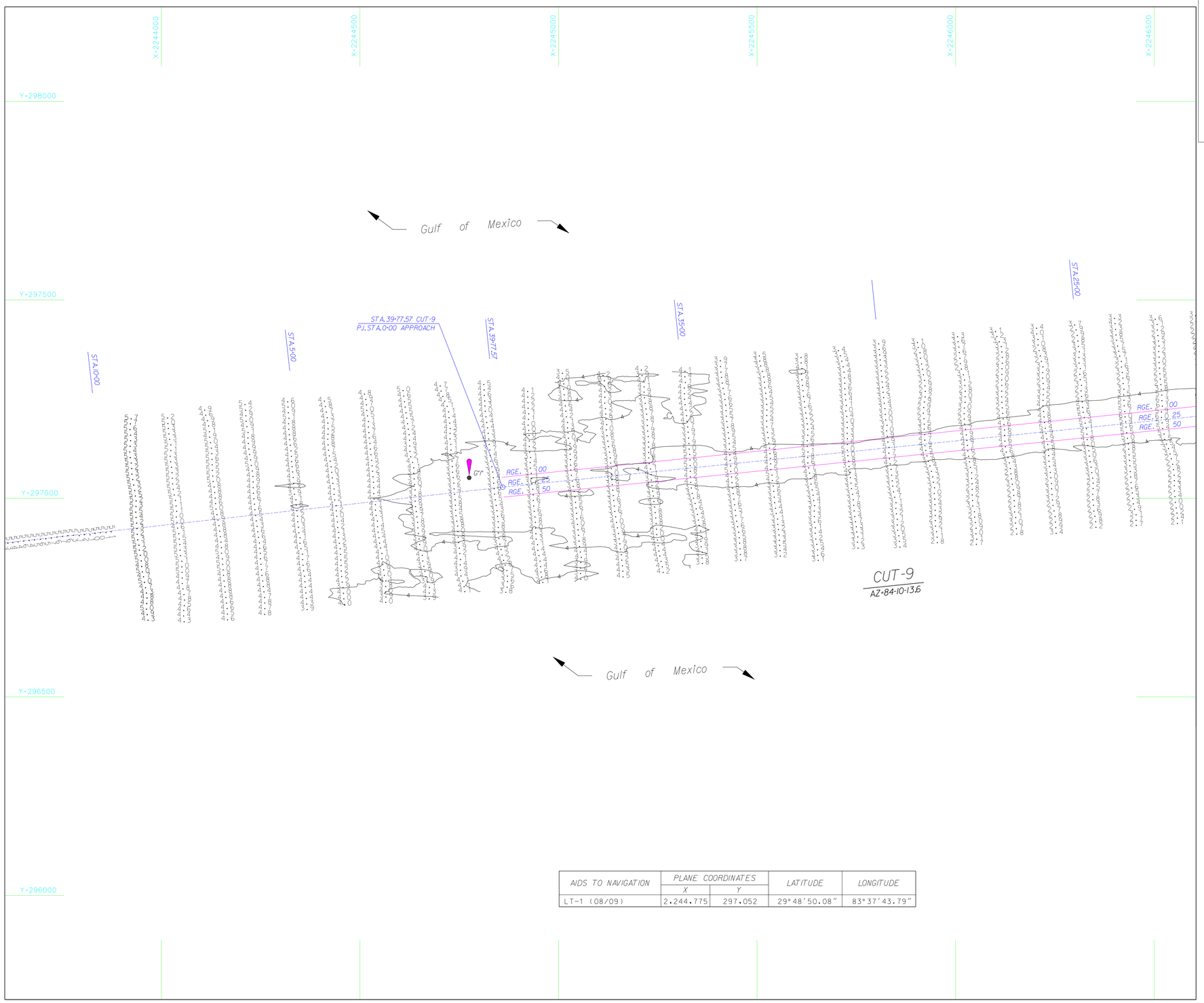
PROJECT CONDITION SURVEY
4-FOOT PROJECT

GULF OF MEXICO TO CUT-1
PLAN

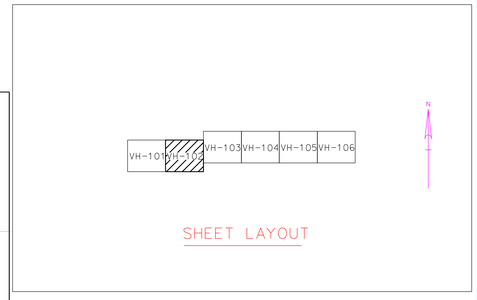
Scale: AS SHOWN

Drawing no.

VH-101



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-1 (08/09)	2,244,775	297,052	29°48'50.08"	83°37'43.79"



SHEET LAYOUT

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
N	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N		A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Ckd by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPNAVAID.DGN
2009-089-V-HPGROTICK.DGN
2009-089-V-PRELEV.DGN
2009-089-V-SCELEV.DGN
2009-089-V-GPCONTOUR.DGN
2009-089-G-BS.DGN
Reference files:
2008-089-VH102.DGN
File name:

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

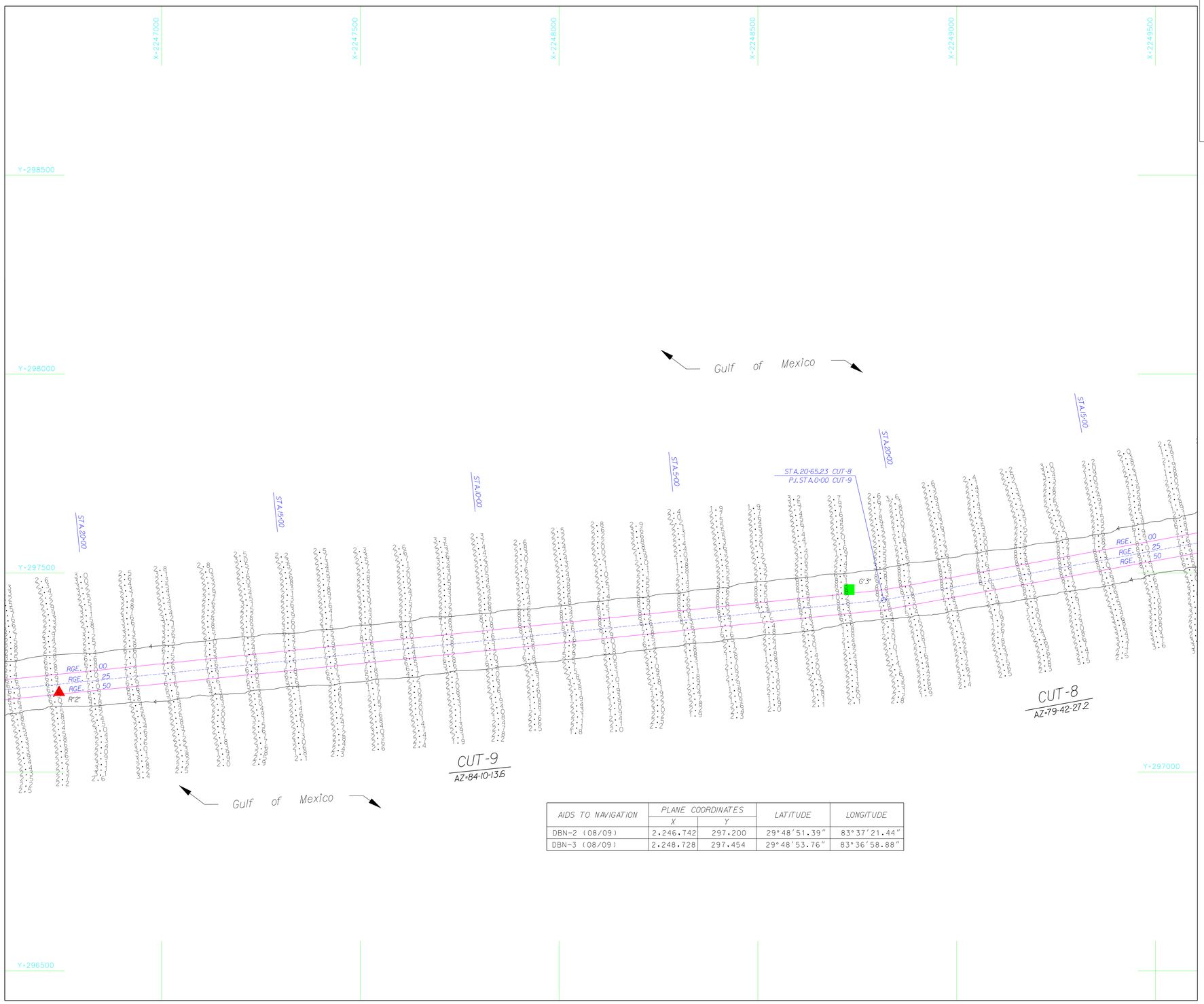
PROJECT CONDITION SURVEY
4-FOOT PROJECT

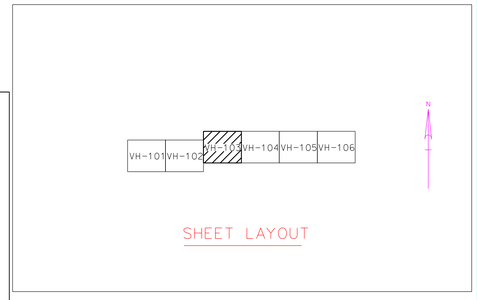
GULF OF MEXICO TO CUT-1
PLAN

Scale: AS SHOWN

Drawing no.

VH-102





SHEET LAYOUT

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-2 (08/09)	2.246.742	297.200	29°48'51.39"	83°37'21.44"
DBN-3 (08/09)	2.248.728	297.454	29°48'53.76"	83°36'58.88"

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
N	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N	A	A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Ckd by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPNAVAD.DGN
2009-089-V-HPGROTOK.DGN
2009-089-V-PRELEV.DGN
2009-089-V-SCELEV.DGN
2009-089-V-GPCONTOUR.DGN
2009-089-G-BS.DGN
Reference files:
2008-089-VH103.DGN
File name:

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

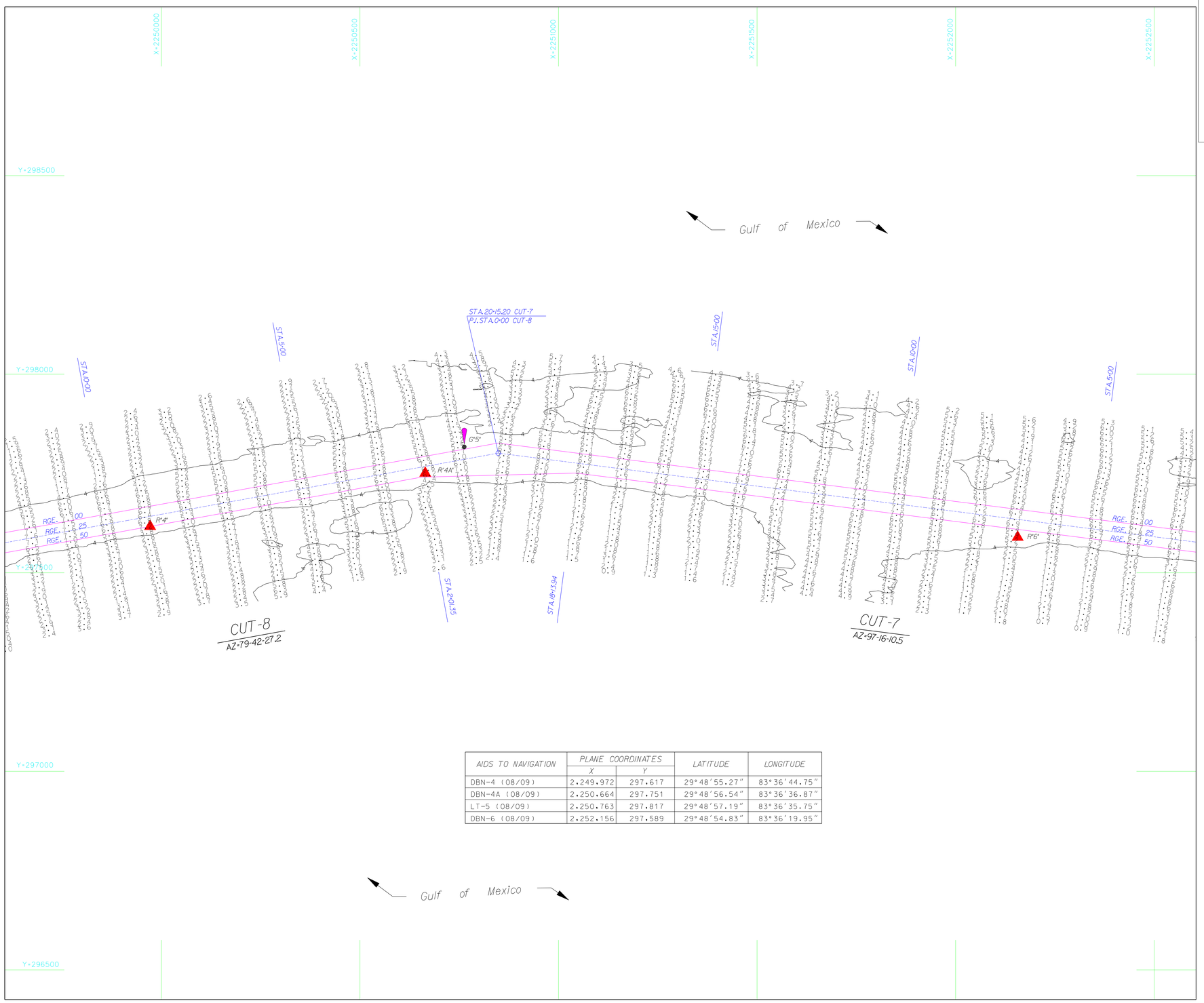
PROJECT CONDITION SURVEY
4-FOOT PROJECT

GULF OF MEXICO TO CUT-1
PLAN

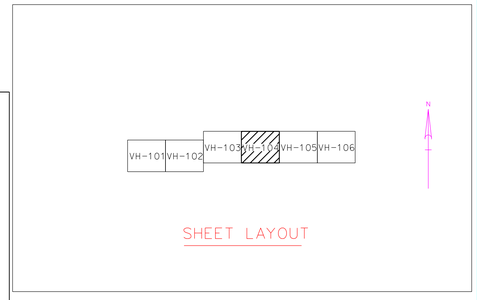
Scale: AS SHOWN

Drawing no.

VH-103



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-4 (08/09)	2,249,972	297,617	29°48'55.27"	83°36'44.75"
DBN-4A (08/09)	2,250,664	297,751	29°48'56.54"	83°36'36.87"
LT-5 (08/09)	2,250,763	297,817	29°48'57.19"	83°36'35.75"
DBN-6 (08/09)	2,252,156	297,589	29°48'54.83"	83°36'19.95"



SHEET LAYOUT

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N	A	A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE
JACKSONVILLE, FLORIDA 32210
PHONE: 904-384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Ckd by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPNAVAID.DGN
2009-089-V-HPGROTICK.DGN
2009-089-V-PRELEV.DGN
2009-089-V-SCELEV.DGN
2009-089-V-GPCONTOUR.DGN
2009-089-G-BS.DGN
Reference files:
2008-089-VH104.DGN
File name:

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

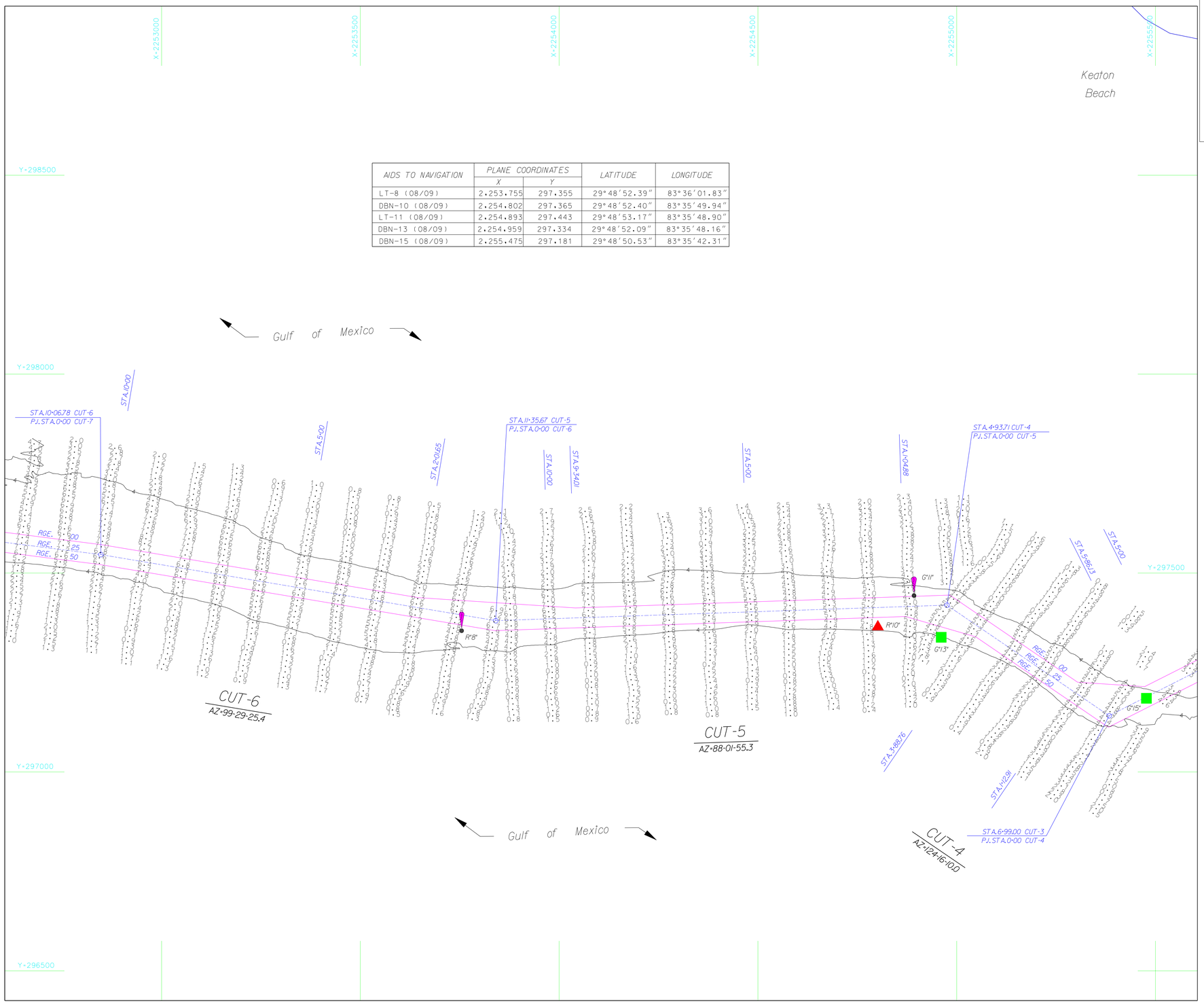
PROJECT CONDITION SURVEY
4-FOOT PROJECT

GULF OF MEXICO TO CUT-1
PLAN

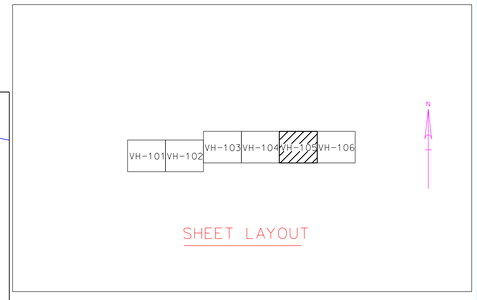
Scale: AS SHOWN

Drawing no.

VH-104



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-8 (08/09)	2,253,755	297,355	29°48'52.39"	83°36'01.83"
DBN-10 (08/09)	2,254,802	297,365	29°48'52.40"	83°35'49.94"
LT-11 (08/09)	2,254,893	297,443	29°48'53.17"	83°35'48.90"
DBN-13 (08/09)	2,254,959	297,334	29°48'52.09"	83°35'48.16"
DBN-15 (08/09)	2,255,475	297,181	29°48'50.53"	83°35'42.31"



SHEET LAYOUT

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET GI001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N		A-N	ABCD

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE,
JACKSONVILLE, FLORIDA 32210
PHONE: 904/384-8377
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Ckd by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Dated: 17 JULY 2009
D.O.FILE NO.
Dated: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPNAVAID.DGN
2009-089-V-HPGROTICK.DGN
2009-089-V-PRELEV.DGN
2009-089-V-SCELEV.DGN
2009-089-V-GPCONTOUR.DGN
2009-089-G-BS.DGN
Reference files:
2008-089-VH105.DGN
File name:

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

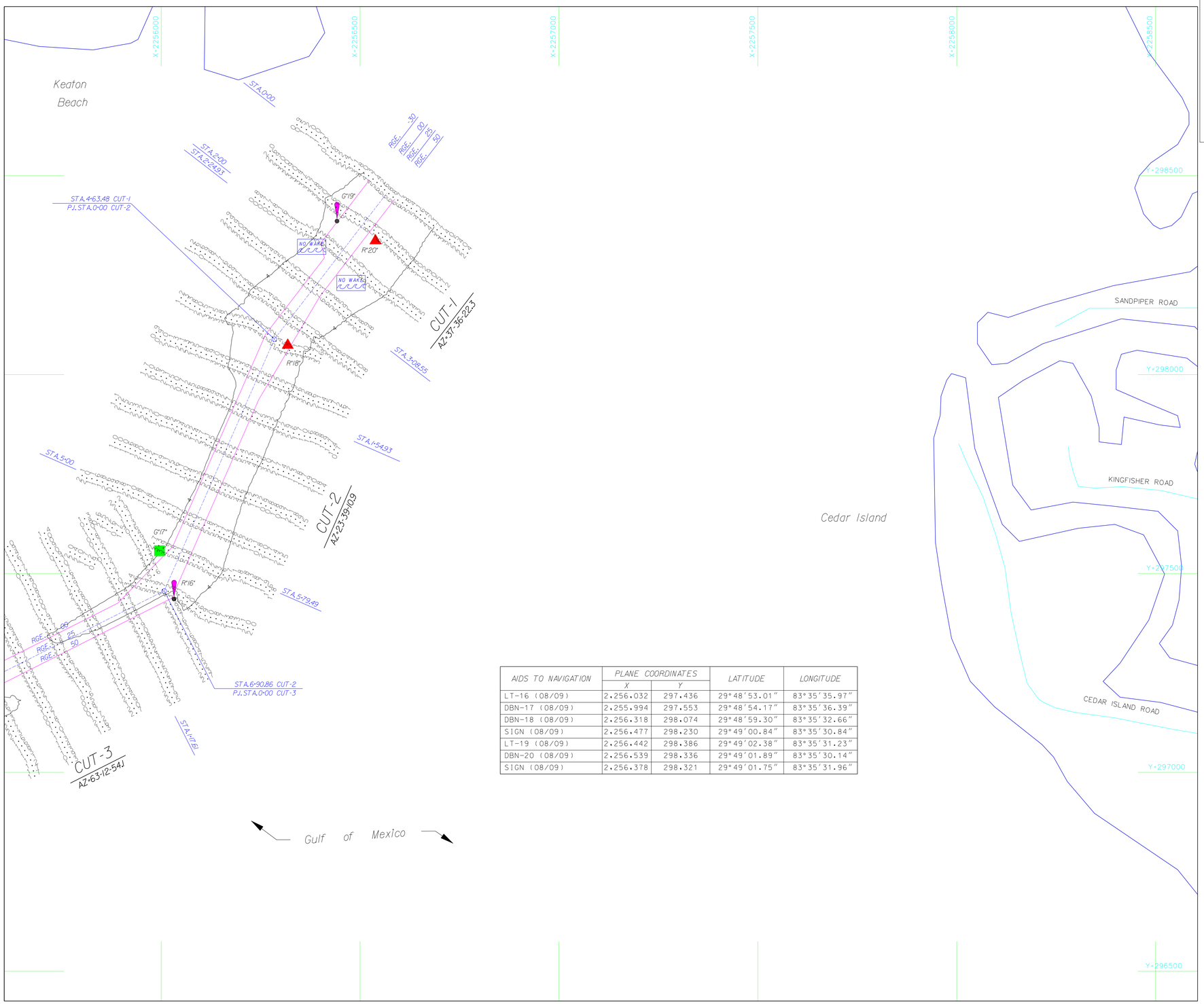
PROJECT CONDITION SURVEY
4-FOOT PROJECT

GULF OF MEXICO TO CUT-1
PLAN

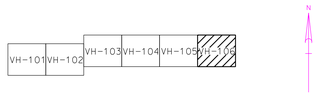
Scale: AS SHOWN

Drawing no.

VH-105



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-16 (08/09)	2,256.032	297.436	29°48'53.01"	83°35'35.97"
DBN-17 (08/09)	2,255.994	297.553	29°48'54.17"	83°35'36.39"
DBN-18 (08/09)	2,256.318	298.074	29°48'59.30"	83°35'32.66"
SIGN (08/09)	2,256.477	298.230	29°49'00.84"	83°35'30.84"
LT-19 (08/09)	2,256.442	298.386	29°49'02.38"	83°35'31.23"
DBN-20 (08/09)	2,256.539	298.336	29°49'01.89"	83°35'30.14"
SIGN (08/09)	2,256.378	298.321	29°49'01.75"	83°35'31.96"



SHEET LAYOUT

N

ABBREVIATIONS

RGE. = RANGE
STA. = STATION

LEGEND

	CHANNEL CENTERLINE
5	CONTOUR W/ ANNOTATION
BM	BENCHMARK
	LIGHTED BEACON
	GREEN DAYBEACON
	RED DAYBEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
C	CAN BUOY
N	NUN BUOY
NO WAKE	NO WAKE SIGN
	TIDE STAFF

NOTES:

1. REFER TO SURVEY 2009-089 (ARC)
2. SEE SHEET G1001 THIS SET FOR ALL NOTES.

GRAPHIC SCALE

100' 0 100' 200'

SCALE: 1"=100'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
N	A	A-N	ABCD

ARC SURVEYING & MAPPING, INC.
CERTIFICATE OF AUTHORIZATION NO. LB 6575
JACKSONVILLE, FLORIDA 32210
PHONE 8(904)384-4311
LICENSED BUSINESS NO. 615

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: XXX
Cad by: JFS
DWN by: DET
Inv. No. W912EP-05-D-0003
Date: 17 JULY 2009
D.O.FILE NO.
Date: AUGUST 2009

2009-089-V-HPBACKGROUND.DGN
2009-089-V-HPCHANNEL.DGN
2009-089-V-HPCONTOUR.DGN
2009-089-V-HPCRDTICK.DGN
2009-089-V-HPRELEV.DGN
2009-089-V-HPSTATION.DGN
2009-089-V-CPCONTOUR.DGN

Reference files:
2009-089-G-BS.DGN

File name:
2008-089-VH106.DGN

CEDAR ISLAND/KEATON BEACH
TAYLOR COUNTY, FLORIDA

PROJECT CONDITION SURVEY
4-FOOT PROJECT

GULF OF MEXICO TO CUT-1
PLAN

Scale: AS SHOWN

Drawing no.

VH-106

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