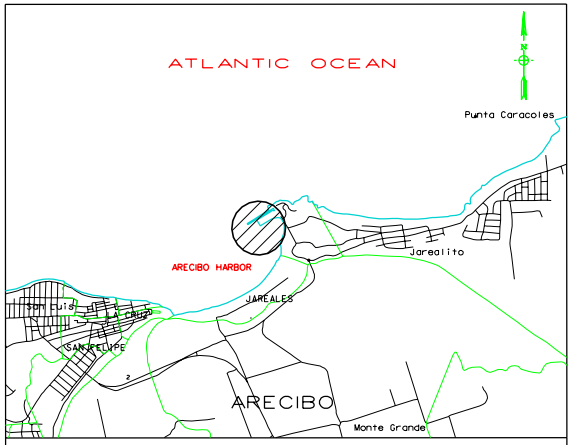


LOCATION PLAN

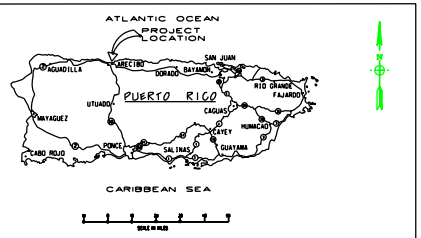
NOT TO SCALE

HORIZONTAL & VERTICAL CONTROL

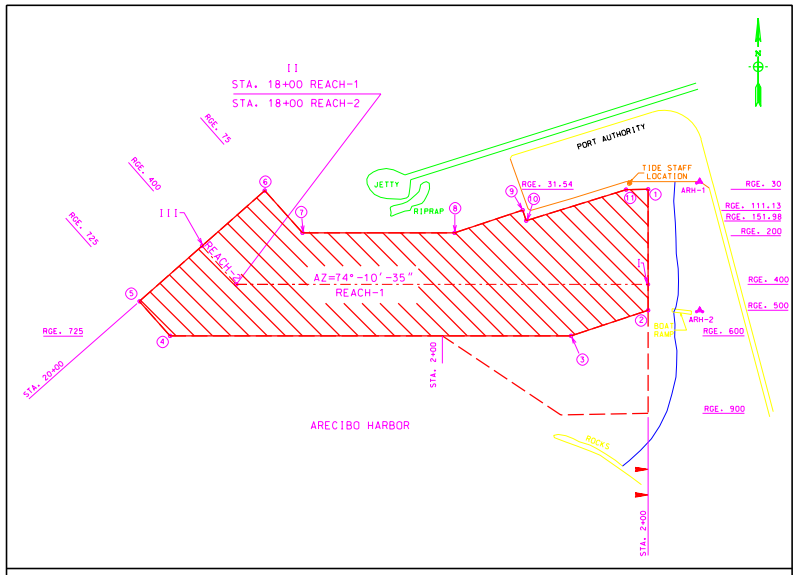
CONTROL MONUMENT	PLANE COORDINATES (NAD-83/86 FEET)		NGVD-29 ELEVATION
	X	Y	
ARH-1	-	-	6.95
ARH-2	-	-	5.97
U.S. COAST GUARD DGPS BEACON	67°04'01.0554"E	18°27'46.7022"N	——

CENTERLINE CONTROL POINT	PLANE COORDINATES (NAD83/86 FT)		STATION	RANGE	REACH
	X	Y			
I	563,533.03	890,994.52	2+00	400	1
II	561,993.64	890,558.23	18+00	400	1
			18+00	400	2
III	561,825.31	890,666.22	20+00	400	2

CHANNEL CONTROL POINT	PLANE COORDINATES (NAD-83/86 FT)		STATION	RANGE	REACH
	X	Y			
1	563,432.14	891,350.50	2+00	30	1
2	563,560.30	890,898.31	2+00	500	1
3	563,298.93	890,720.29	5+00	600	1
4	561,800.93	890,295.73	18+20.47	725	2
5	561,649.83	890,392.66	20+00	725	2
6	562,000.78	890,939.77	20+00	75	2
7	562,186.36	890,820.73	15+43	200	1
8	562,754.81	890,981.84	9+52.18	200	1
9	562,985.24	891,139.52	6+87.49	111.13	1
10	563,009.44	891,103.92	6+73.91	151.98	1
11	563,349.80	891,325.57	2+86	31.54	1



LOCATION MAP



SURVEY LIMITS

NOT TO SCALE

RELATIONSHIP BETWEEN NGVD 1929 AND MEAN LOW WATER

INDEX	
COVER SHEET	1
SOUNDINGS VIEW	2
PLAN VIEW	3

LEGEND

- AIDS TO NAVIGATION
- TIDE STAFF
- MONUMENT

CHANNEL SURVEY NOTES:

1. REFER TO SURVEY NO. 03-069 (RLA).

2. PLANE COORDINATES ARE BASED ON THE LAMBERT CONIC PROJECTION FOR PUERTO RICO AND THE U.S. VIRGIN ISLANDS. NORTH ZONE (NAD-83/86).

3. ALL AZIMUTHS ARE GRID: RECKONED CLOCKWISE FROM SOUTH.

4. STATIONING REFERS TO CENTERLINE OF CHANNEL EXCEPT FOR WIDENER STATIONING.

5. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO MEAN LOW WATER (MLW) WHICH IS 0.55 FEET BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929 [NGVD-29].

6. ALL ELEVATIONS ARE BELOW THE REFERENCE PLANE UNLESS PRECEDED BY PLUS (+) SIGN.

7. THE SURVEY DATA DEPICTED ON THIS MAP WAS OBTAINED DURING THE PERIOD OF APRIL 2003.
   REFER TO RAW FIELD DATA:
   DEPTH SOUNDER [FATHOMETER] GRAPH PAPER ROLL . DATED APRIL 17. 2003 AND APRIL 21. 2003.

8. EQUIPMENT & HYDRO SURVEY INFORMATION:
   POSITIONING: DGPS ASHTECH RELIANCE
   SOUNDER: ECHOTRAC DF 3200 MK II. HIGH FREQUENCY
   ODOM'S ECHOSCAN MULTIBEAM
   KVH GYRO COMPASS
   TSS HEAVE COMPENSATOR
   REFERENCE STATIN: U.S. COAST GUARD NAV BEACON - ISABELA. PUERTO RICO
   DGPS CALIBRATION STATION: ARH-1
   LOCATION OF TIDE STAFF: TS#1 ARH-1 AREA
   BENCH MARK: ARH-1
   VESSEL: RLDA RUDA

9. STANDARD FIELD CALIBRATIONS FOR ALL EQUIPMENT WAS PERFORMED. RESULTING ACCURACY WAS WITHIN MANUFACTURER'S SPECIFICATIONS.

10. THE INFORMATION DEPICTED IN THESE DRAWINGS REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATED GENERAL CONDITIONS EXISTING AT THAT TIME.

11. NAD-83/86 COORDINATES SHOWN IN CONTROL BOX ARE CORPSCON CONVERTED FROM NAD-27 COORDINATES.

SURVEYOR'S CERTIFICATE

THE UNDERSIGNED. REGISTERED SURVEYOR LICENCE NO. 7537 AUTHORIZED TO EXERCISE HIS PROFESSION IN PUERTO RICO DOES HEREBY CERTIFY THAT THE ABOVE DISTANCES AND THE PLAT HEREON DRAWN IS A TRUE REPRESENTATION OF THE EXISTING CONDITION AT THE TIME OF THE SURVEY.

RENAN LOPEZ DE AZUA

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

R.LOPEZ DE AZUA & ASSOCIATES
SAN JUAN, PUERTO RICO

Rev. No.
Dsing:
Scale: AS SHOWN
Plot date: MAY 28, 2003
Plot scale: 1:100

Designed by
Dwn BY: JOSM
Chk BY: GPS

Dated: MAY 2003
D.O.F.FILE NO. 106-38.389

File name: EDWSOCUCON
Reference files: EDWSOPRCON

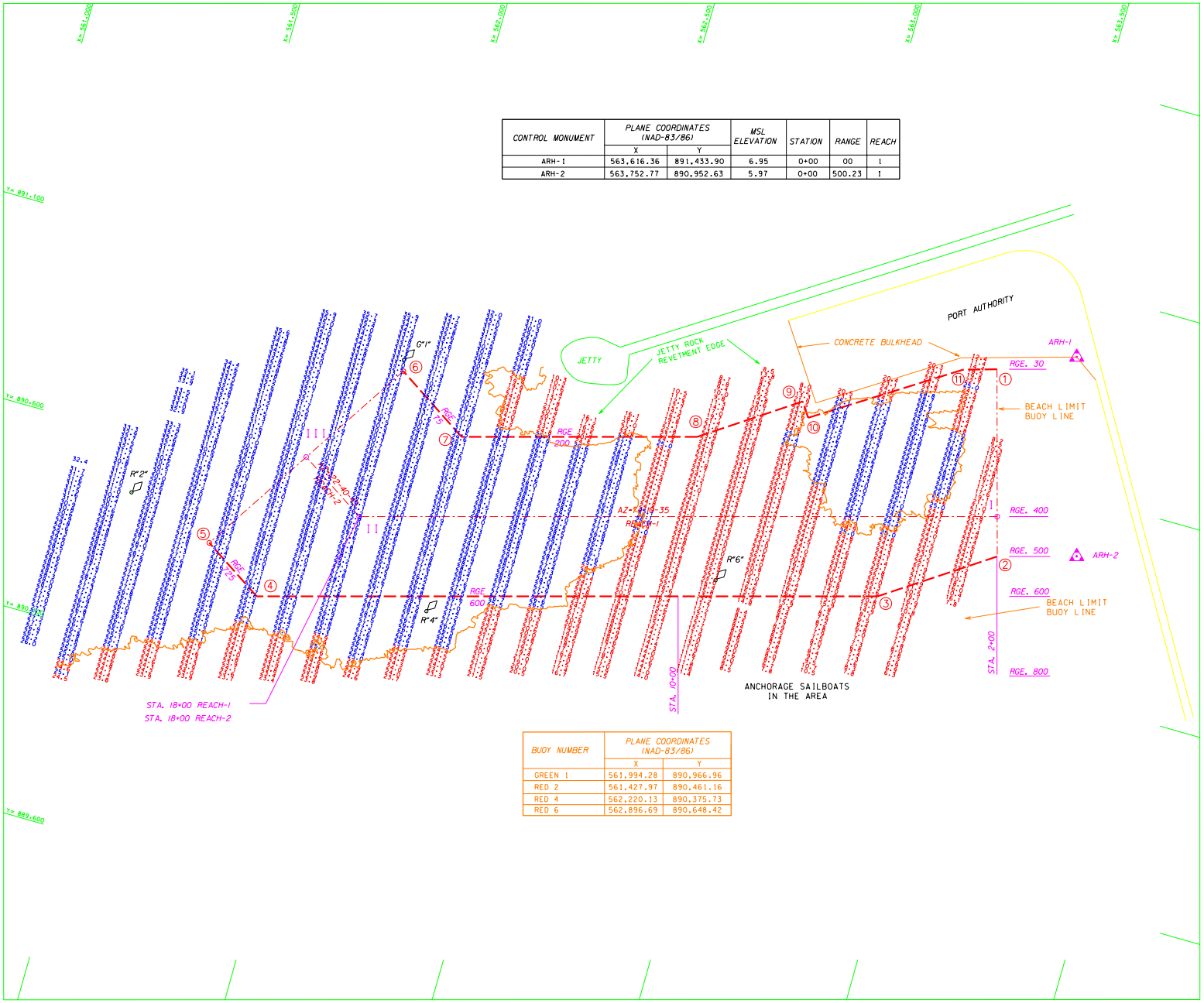
ARECIBO, PUERTO RICO
ARECIBO HARBOR
25-FOOT PROJECT
PROJECT CONDITION SURVEY
COVER SHEET

DRAWING NO.
1/2

SHEET 1 OF 3

CONTROL MONUMENT	PLANE COORDINATES (NAD-83/86)		MSL ELEVATION	STATION	RANGE	REACH
	X	Y				
ARH-1	563,616.36	891,433.90	6.95	0+00	00	1
ARH-2	563,752.77	890,952.63	5.97	0+00	500.23	1

LEGEND	
	MONUMENT
	RED BUOY
	GREEN BUOY



BUOY NUMBER	PLANE COORDINATES (NAD-83/86)	
	X	Y
GREEN 1	561,994.28	890,966.96
RED 2	561,427.97	890,461.16
RED 4	562,220.13	890,375.73
RED 6	562,896.69	890,648.42

N

SCALE: 1" = 100'

100' 0 100'

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

R.LOPEZ DE AZUA & ASSOCIATES
SAN JUAN, PUERTO RICO

Rev. No.
Dated
Scale: AS SHOWN
Plot date: MAY 28, 2003
Plot Scale: 1:100

Designed by
Dwn by: JCDM
Ckd by: MPR

Dated: MAY 2003

D.O.F.FILE NO. 106-38.389

File name: E06BS4D2.DGN
Reference files:
E06BS4D1.DGN
E06GPL.MLDGN
E06BAT.DGN
E06ANLE.DGN
E06SCON1.DGN
E06SCON2.DGN
E06BCRSC.DGN

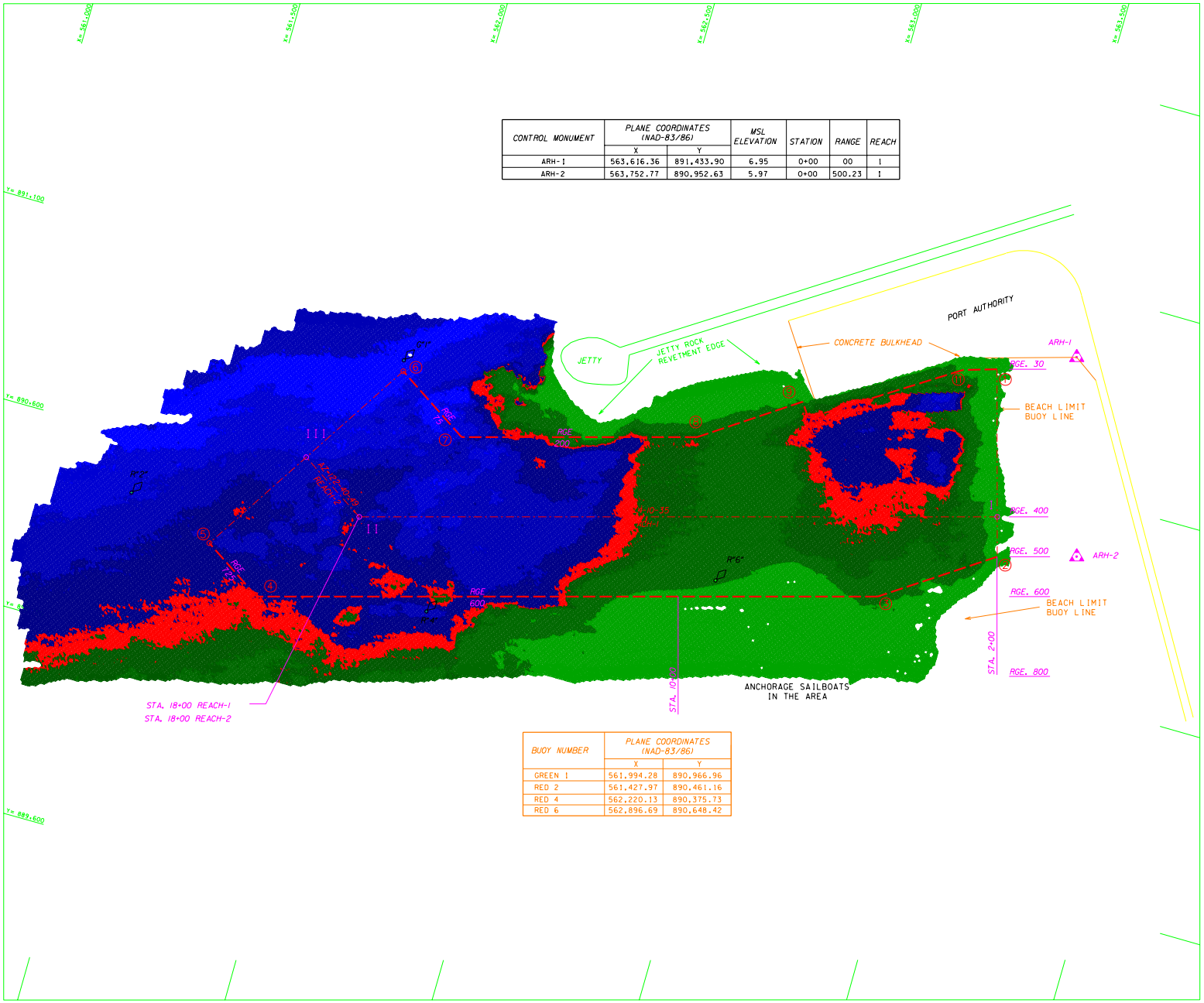
ARECIBO, PUERTO RICO
ARECIBO HARBOR
25-FOOT PROJECT
PROJECT CONDITION SURVEY
SOUNDING VIEW

DRAWING NO.
2/2

SHEET 2 OF 3

CONTROL MONUMENT	PLANE COORDINATES (NAD-83/86)		MSL ELEVATION	STATION	RANGE	REACH
	X	Y				
ARH-1	563,616.36	891,433.90	6.95	0+00	00	1
ARH-2	563,752.77	890,952.63	5.97	0+00	500.23	1

LEGEND	
	MONUMENT
	RED BUOY
	GREEN BUOY



BUOY NUMBER	PLANE COORDINATES (NAD-83/86)	
	X	Y
GREEN 1	561,994.28	890,966.96
RED 2	561,427.97	890,461.16
RED 4	562,220.13	890,375.73
RED 6	562,896.69	890,648.42

COLOR CODED CHANNEL ELEVATIONS

-5.0'
-20.0'
-24.0'
-25.0'
-26.0'
-28.0'
-30.0'
-32.0'
-34.0'

N

SCALE: 1" = 100'
100' 0 100'

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

R.LOPEZ DE AZUA & ASSOCIATES
SAN JUAN, PUERTO RICO

Rev. No.
Dated:
Scale: AS SHOWN
Plot date: MAY 28, 2003
Plot scale: 1:100

Designed by:
Dwn by: JOSM
Ckd by: JOSM
APR

Dated: MAY 2003
D.O.F.FILE NO. 106-38.389

File name: D03353.DGN
Reference files:
D03001.DGN
E06GPL.JALCON
E06BAS.DGN
E06BAC.DGN
E06PSNOC.DGN

ARECIBO, PUERTO RICO
ARECIBO HARBOR
25-FOOT PROJECT
PROJECT CONDITION SURVEY
PLAN VIEW

DRAWING NO.

SHEET 3 OF 3