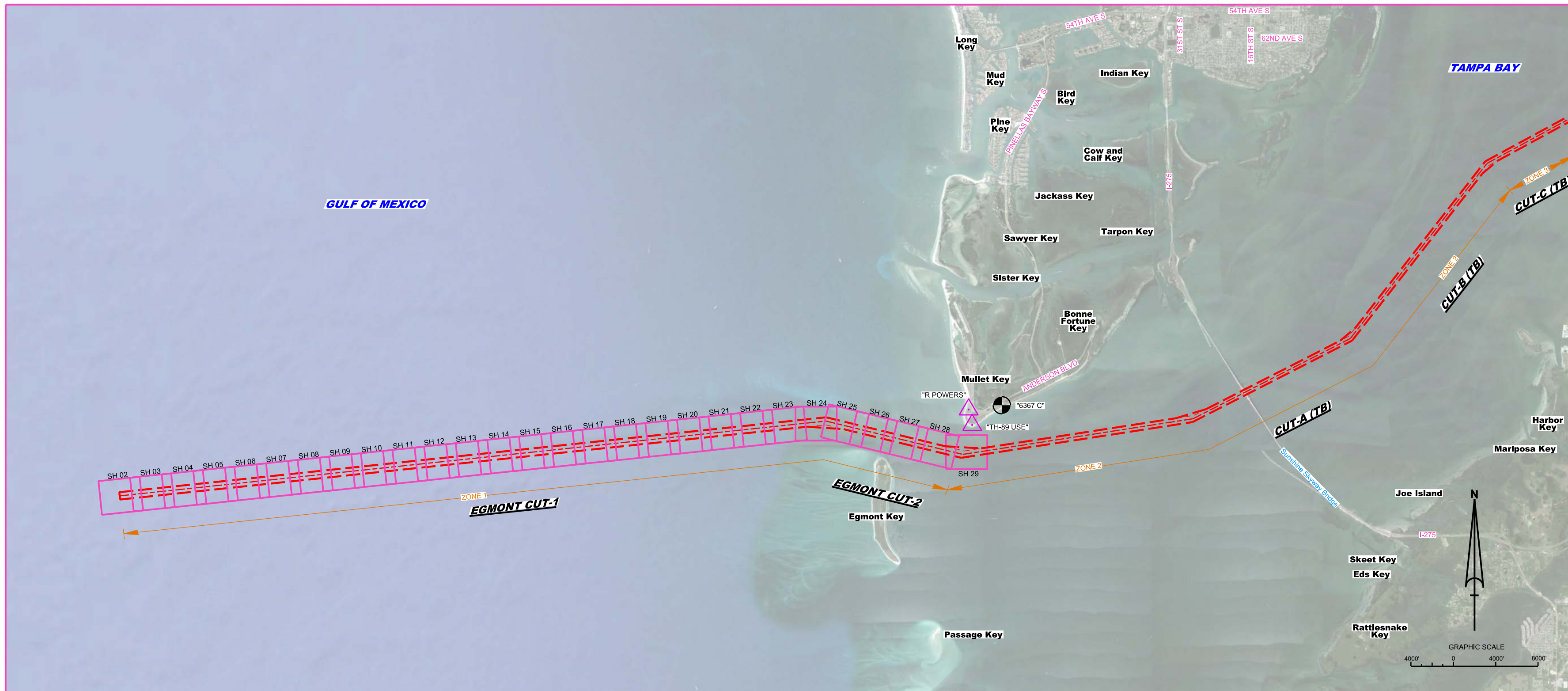


TAMPA HARBOR HILLSBOROUGH COUNTY, FLORIDA EGMONT KEY CUTS 1 & 2 (ZONE 1) POST-HURRICANE HERMINE EXAMINATION SURVEY FY16 45-FOOT PROJECT

SURVEY NOTES

1. REFER TO SURVEY NO. 16-169.
 2. DEPTHS DEPICTED BY THIS SURVEY ARE IN FEET AND TENTHS AND ARE REFERENCED TO MLLW, TIDAL EPOCH 1983-2001, AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). A MODIFIED VERSION OF NOAA'S VDATUM MODEL WAS USED TO CALIBRATE TO THE PUBLISHED MLLW HEIGHTS OF THE BENCH MARKS BELOW:
NOAA TIDAL STATION 872-6367 FOR ALL CUTS (PID: AG7401)
 3. TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL. FILE NAME IS: "SPC-FL-WEST-2010-12-07.KTD".
 4. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
 5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
 6. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
 7. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATIONS:
REFERENCE BASE LOCATED AT "TH-89 USE" (PID: AG0988)
REFERENCE BASE LOCATED AT "R POWERS" (PID: BBDR33)
TIDESTAFF SET FROM "872 6367 C" (PID: AG7401)
 8. VERTICAL MEASUREMENTS WERE MADE USING A R2SONIC 2024 MULTI-BEAM SENSOR OPERATING AT 240 KHZ, A ROSS 835B DUAL-FREQUENCY 28/200 KHZ SMARTSOUNDER SINGLE-BEAM TRANSDUCER AND AN EDGE-TECH 6205 COMBINED SIDESCAN AND MULTI-BEAM TRANSDUCER. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.
- | VESSEL | DATE OF SURVEY | CUT |
|-----------------|--------------------|-------------------|
| SB-44 | 16-17 NOV 2016 | EGMONT CUTS 1 & 2 |
| SV JACKSONVILLE | 02-03, 06 FEB 2017 | EGMONT CUTS 1 & 2 |
| SB-44 | 07, 13 FEB 2017 | EGMONT CUT-1 |
9. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
 10. 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. THIS CHART IS SOLELY FOR THE DISTRIBUTION OF AVAILABLE DEPTHS AT THE TIME OF THE SURVEY.
 11. 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, 30 NOV 13.

| LEGEND | |
|--------|--------------------|
| ▲ | MONUMENT |
| ⚓ | LIGHTED BEACON |
| ■ | GREEN DAYBEACON |
| ▲ | RED DAYBEACON |
| ⚓ | RED LIGHTED BUOY |
| ⚓ | GREEN LIGHTED BUOY |
| ⚓ | CAN BUOY |
| ⚓ | NUN BUOY |
| ⚓ | TIDE STAFF |
| 8 | PROJECT DEPTH |



US Army Corps of Engineers
Jacksonville District

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JACKSONVILLE, FLORIDA

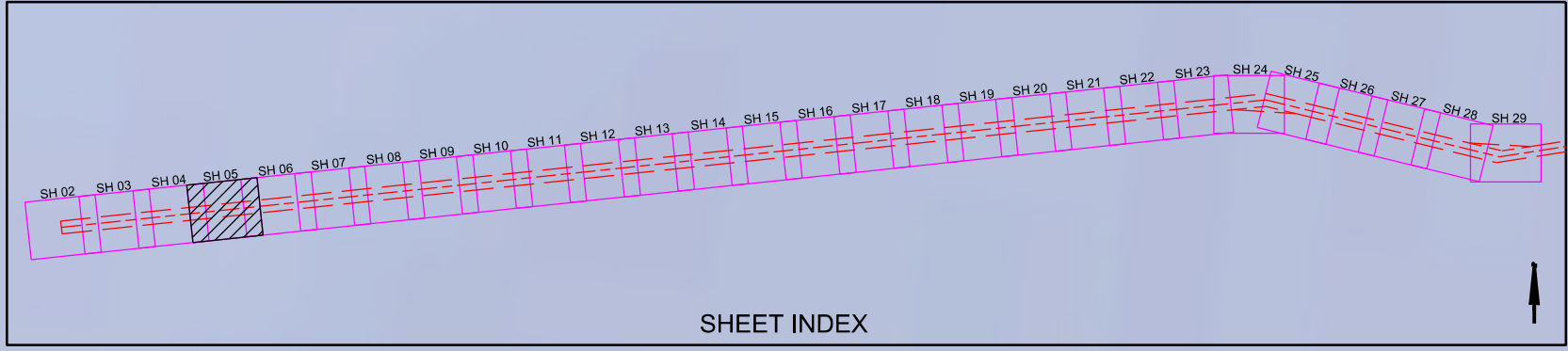
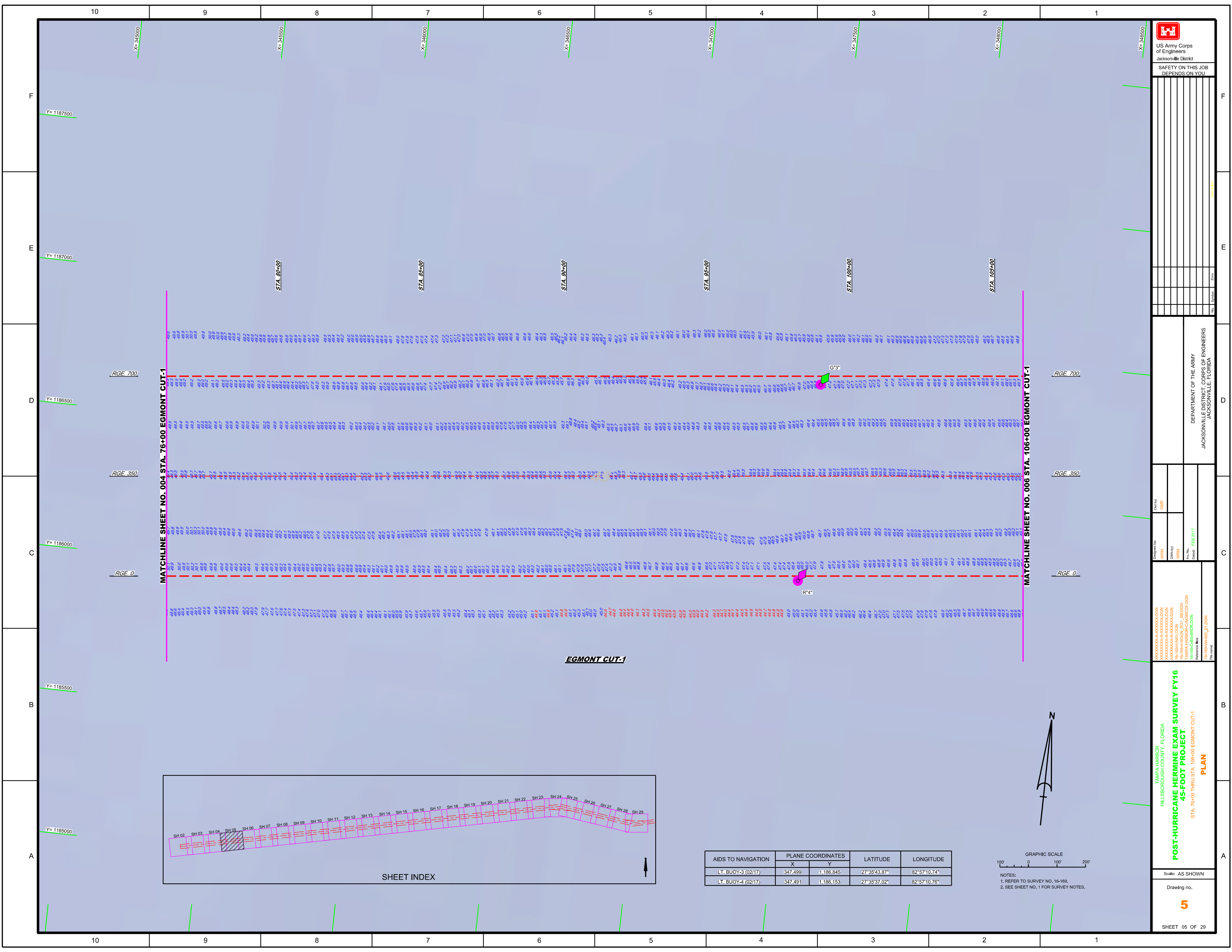
DESIGNED BY: WRM
CHECKED BY: GMR
DATE: FEB 2017

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA
POST-HURRICANE HERMINE EXAM SURVEY FY16
45-FOOT PROJECT
INDEX, LOCATION AND VICINITY MAP

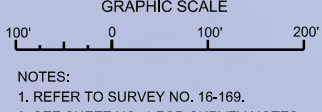
Scale: AS SHOWN

Drawing no. **1**


SHEET 01 OF 29



| AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|--------------------|-------------------|-----------|--------------|--------------|
| | X | Y | | |
| LT. BUOY-3 (02/17) | 347.499 | 1,186.845 | 27°35'43.87" | 82°57'10.74" |
| LT. BUOY-4 (02/17) | 347.491 | 1,186.153 | 27°35'37.02" | 82°57'10.76" |

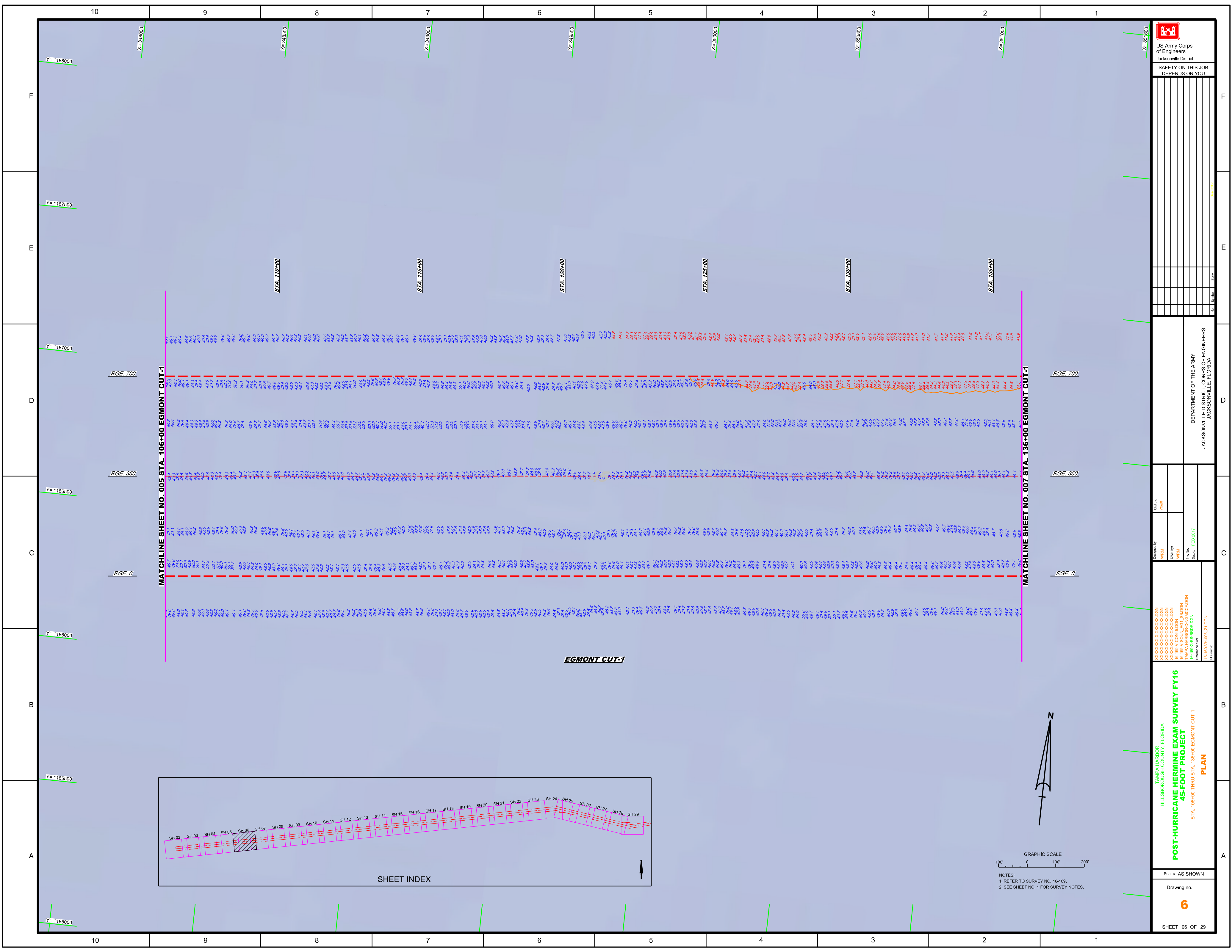


NOTES:
 1. REFER TO SURVEY NO. 16-169.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.


 US Army Corps of Engineers
 Jacksonville District
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 DEPENDS ON YOU

DESIGNED BY: WRM
 CHECKED BY: GHR
 DRAWN BY: WRM
 DATE: FEB 2017
 PROJECT: TAMPABARBOR-HURRICANE EXAM SURVEY FY16 45-FOOT PROJECT
 SHEET: STA. 76+00 THRU STA. 106+00 EGMONT CUT-1

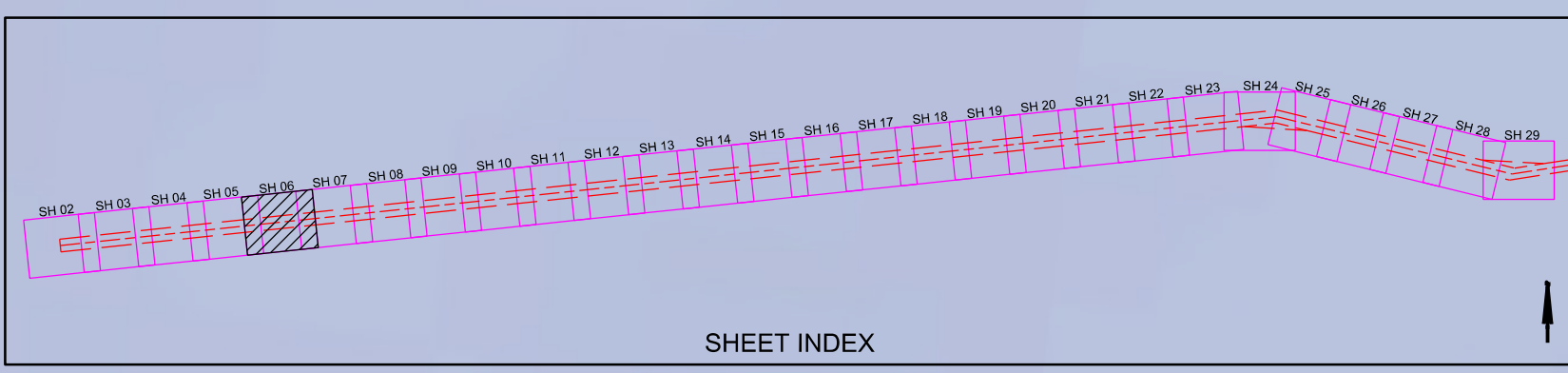
TAMPABARBOR
 HILLSBOROUGH COUNTY, FLORIDA
**POST-HURRICANE HERMINE EXAM SURVEY FY16
 45-FOOT PROJECT**
 STA. 76+00 THRU STA. 106+00 EGMONT CUT-1
PLAN



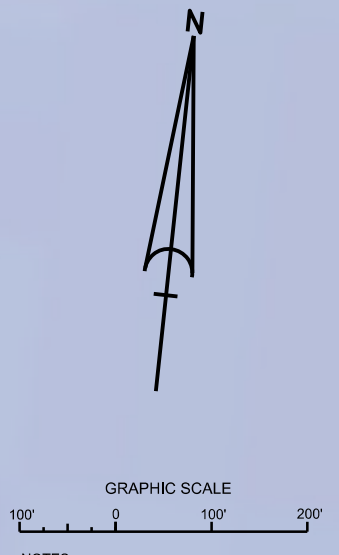
MATCHLINE SHEET NO. 005 STA. 106+00 EGMONT CUT-1

MATCHLINE SHEET NO. 007 STA. 136+00 EGMONT CUT-1

EGMONT CUT-1

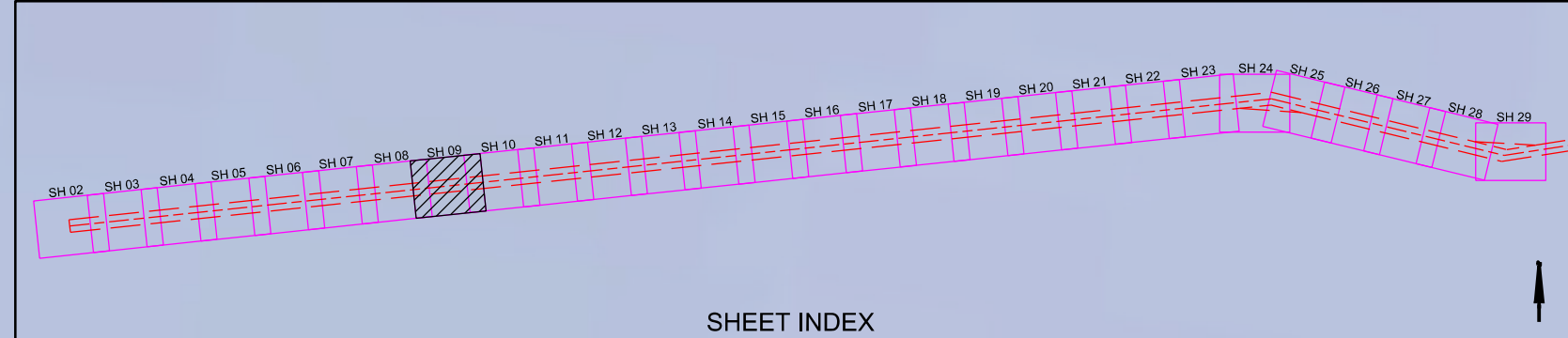
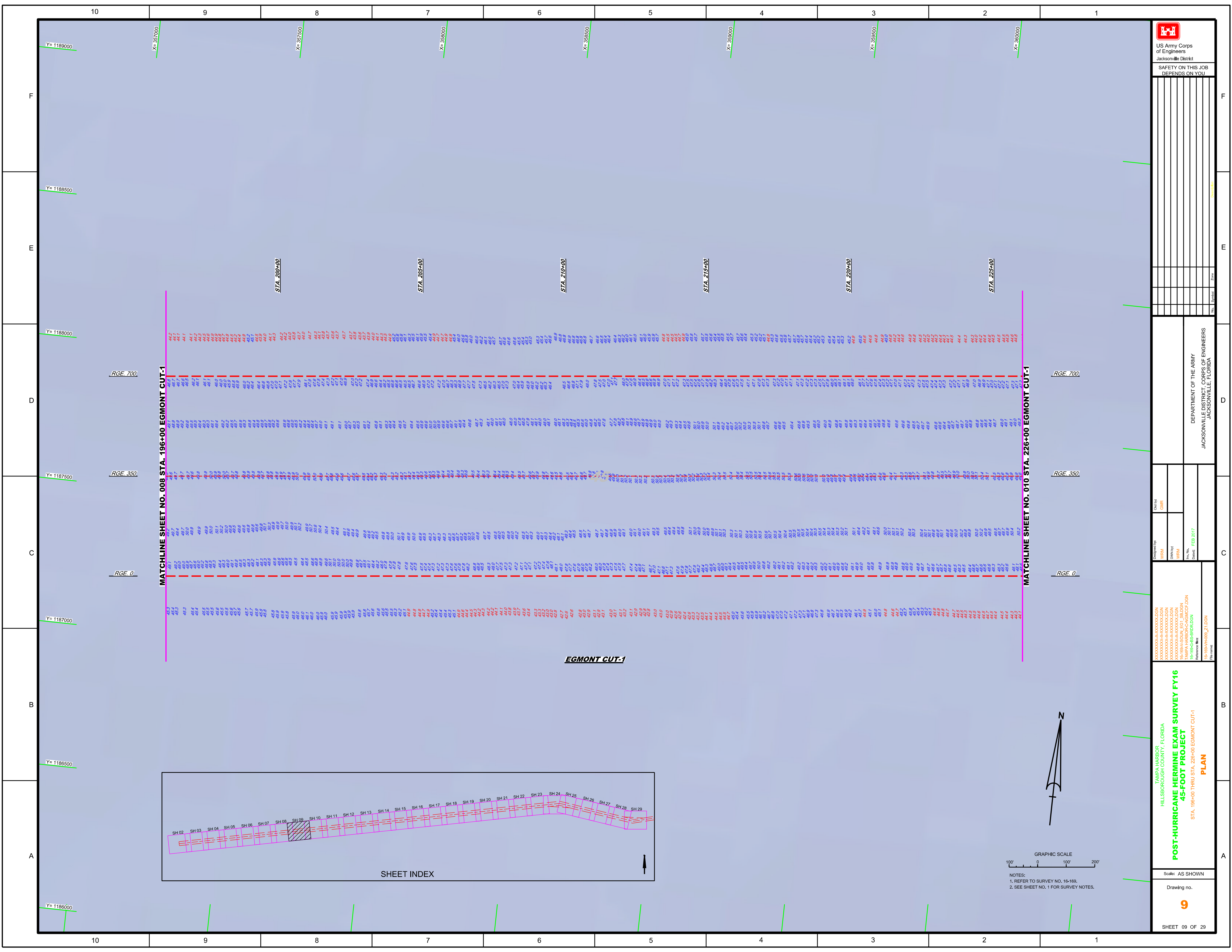


SHEET INDEX




NOTES:
1. REFER TO SURVEY NO. 16-169.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

| | |
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| US Army Corps of Engineers Jacksonville District SAFETY ON THIS JOB DEPENDS ON YOU | |
| DESIGNED BY: WRM CHECKED BY: GHR DRAWN BY: WRM DATE: FEB 2017 | DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA |
| POST-HURRICANE HERMINE EXAM SURVEY FY16 45-FOOT PROJECT STA. 106+00 THRU STA. 136+00 EGMONT CUT-1 PLAN | |
| Scale: AS SHOWN Drawing no. 6 SHEET 06 OF 29 | |



SHEET INDEX

EGMONT CUT-1



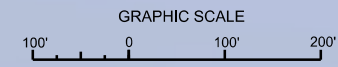
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DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 JACKSONVILLE, FLORIDA

Call by: GHR
 Designed by: WRM
 Drawn by: WRM
 File Name: 16-169-H002_Z.LDN
 Date: FEB 2017

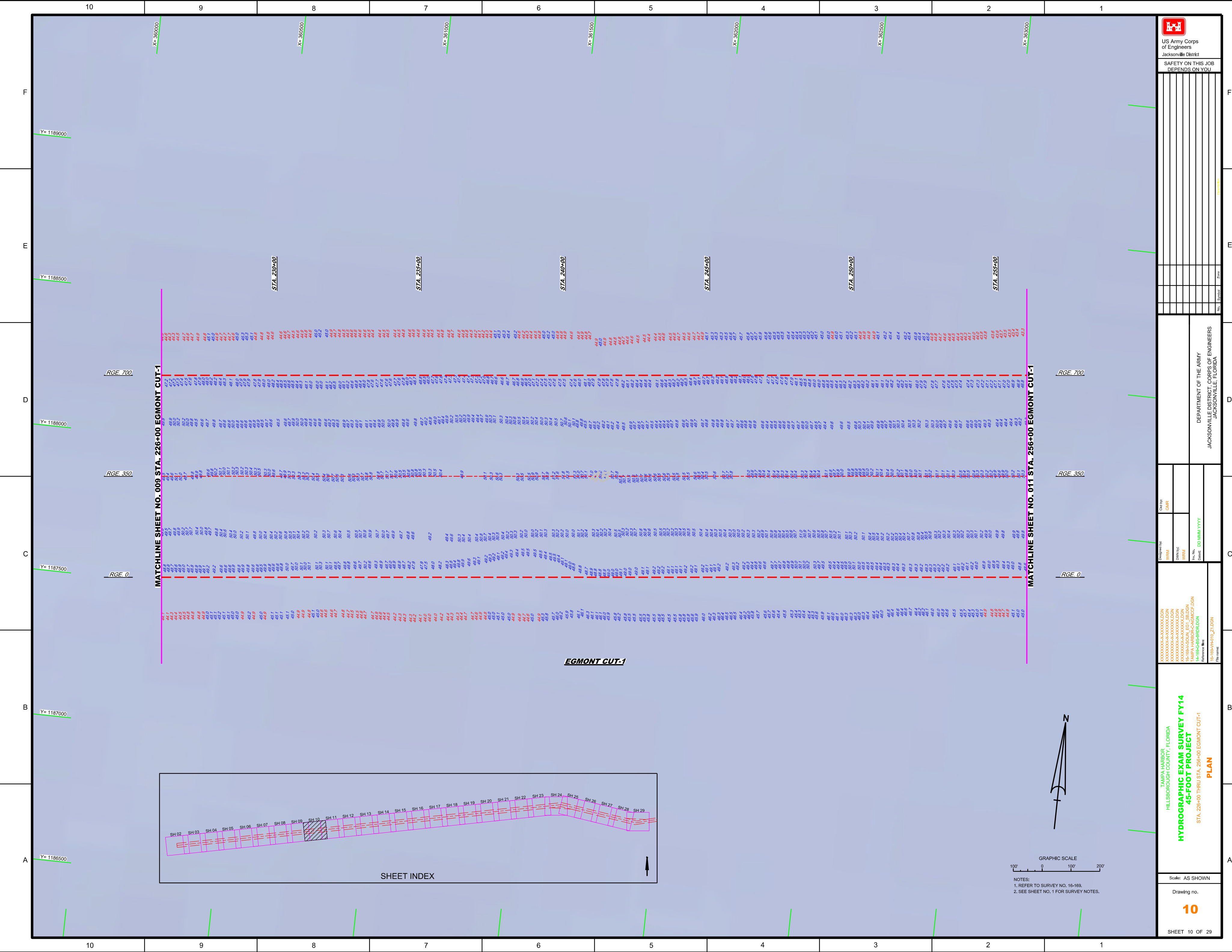
TAMP A HARBOR
 HILLSBOROUGH COUNTY, FLORIDA
POST-HURRICANE HERMINE EXAM SURVEY FY16
45-FOOT PROJECT
 STA. 196+00 THRU STA. 226+00 EGMONT CUT-1
PLAN

Scale: AS SHOWN
 Drawing no. **9**
 SHEET 09 OF 29

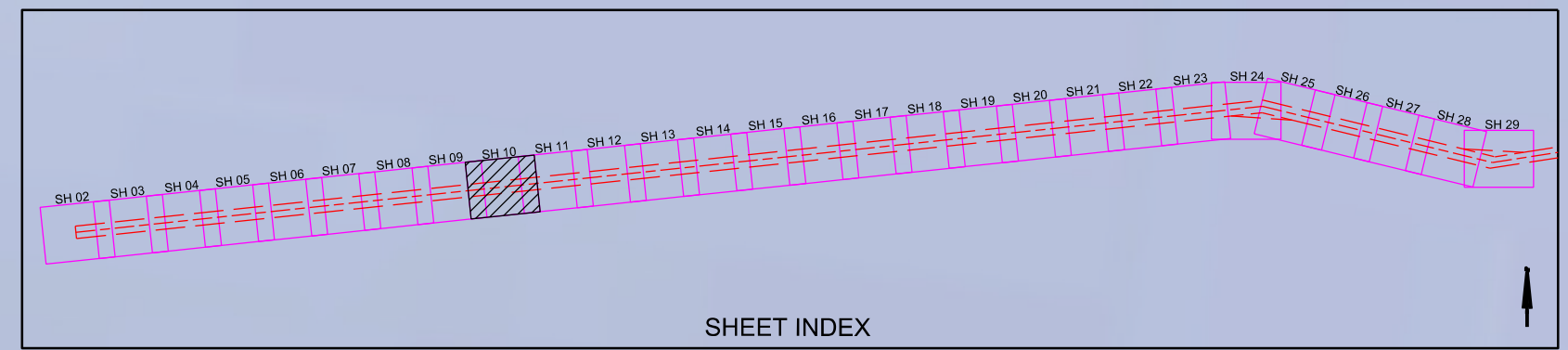


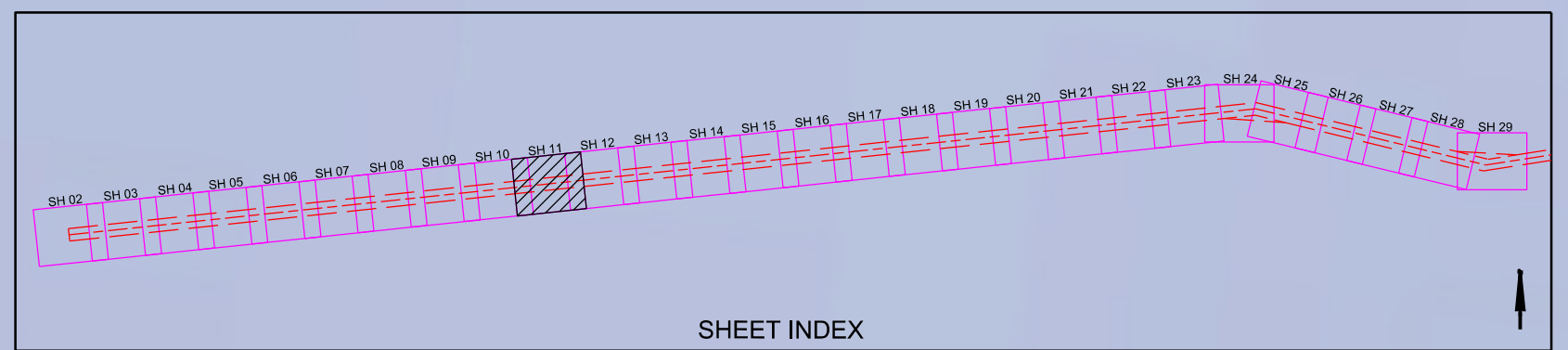
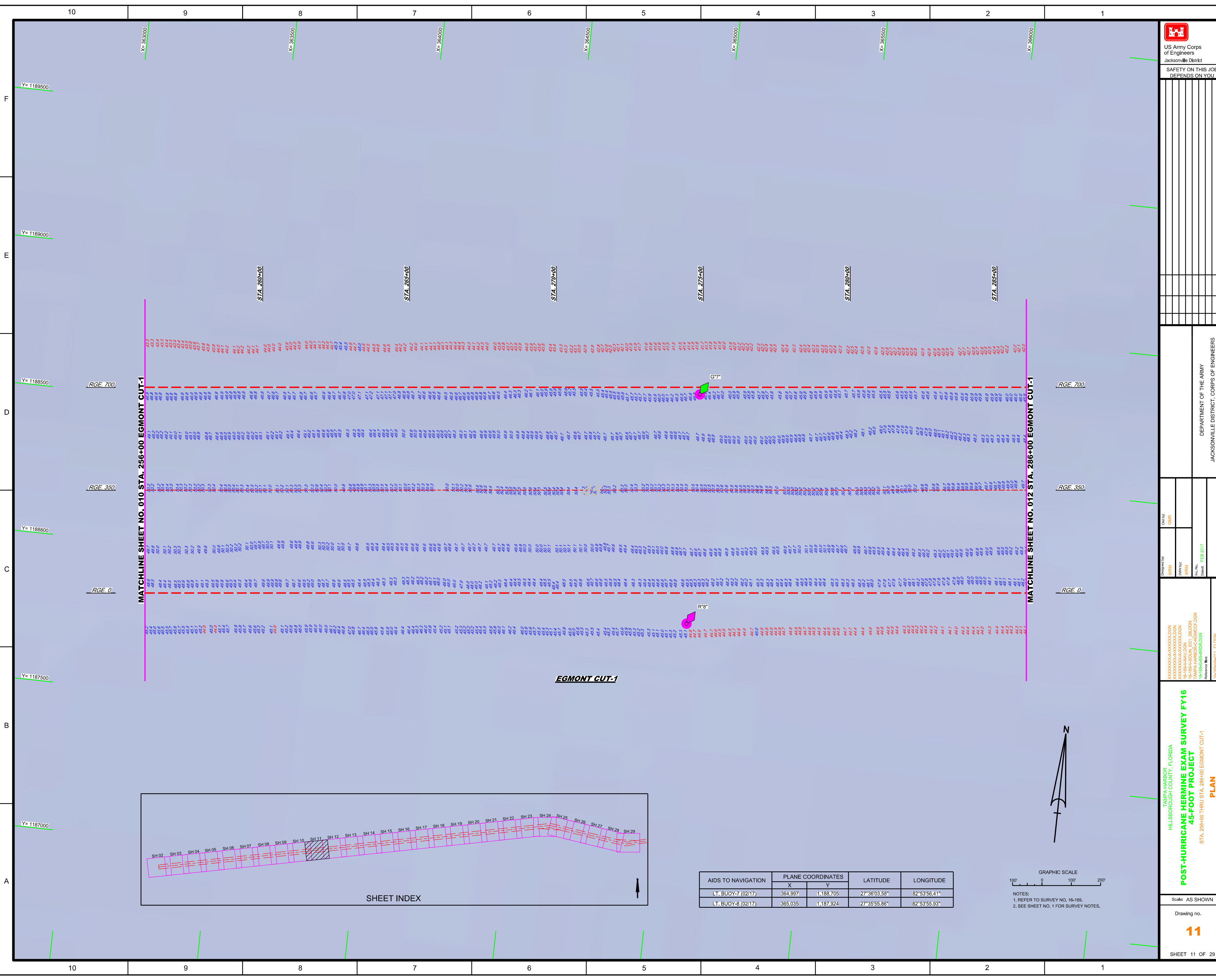
NOTES:
 1. REFER TO SURVEY NO. 16-169.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.





GRAPHIC SCALE
Scale: 1" = 100'
NOTES:
1. REFER TO SURVEY NO. 16-169.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.





| AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|--------------------|-------------------|-----------|--------------|--------------|
| | X | Y | | |
| LT. BUOY-7 (02/17) | 364,997 | 1,188,705 | 27°36'03.58" | 82°53'56.41" |
| LT. BUOY-8 (02/17) | 365,035 | 1,187,924 | 27°35'55.86" | 82°53'55.93" |

GRAPHIC SCALE
 100' 0 100' 200'
 NOTES:
 1. REFER TO SURVEY NO. 16-169.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
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 DEPENDS ON YOU

XXXXXXXXXXXXXXXXXXXX
 16-169-HAV.DGN
 16-169-EGMONT CUT-1
 16-169-EGMONT CUT-1

Drawn by: GHR
 Designated by: GHR
 Date: FEB 2017

TAMPA HARBOR
 HILLSBOROUGH COUNTY, FLORIDA
**POST-HURRICANE HERMINE EXAM SURVEY FY16
 45-FOOT PROJECT**
 STA. 256+00 THRU STA. 286+00 EGMONT CUT-1

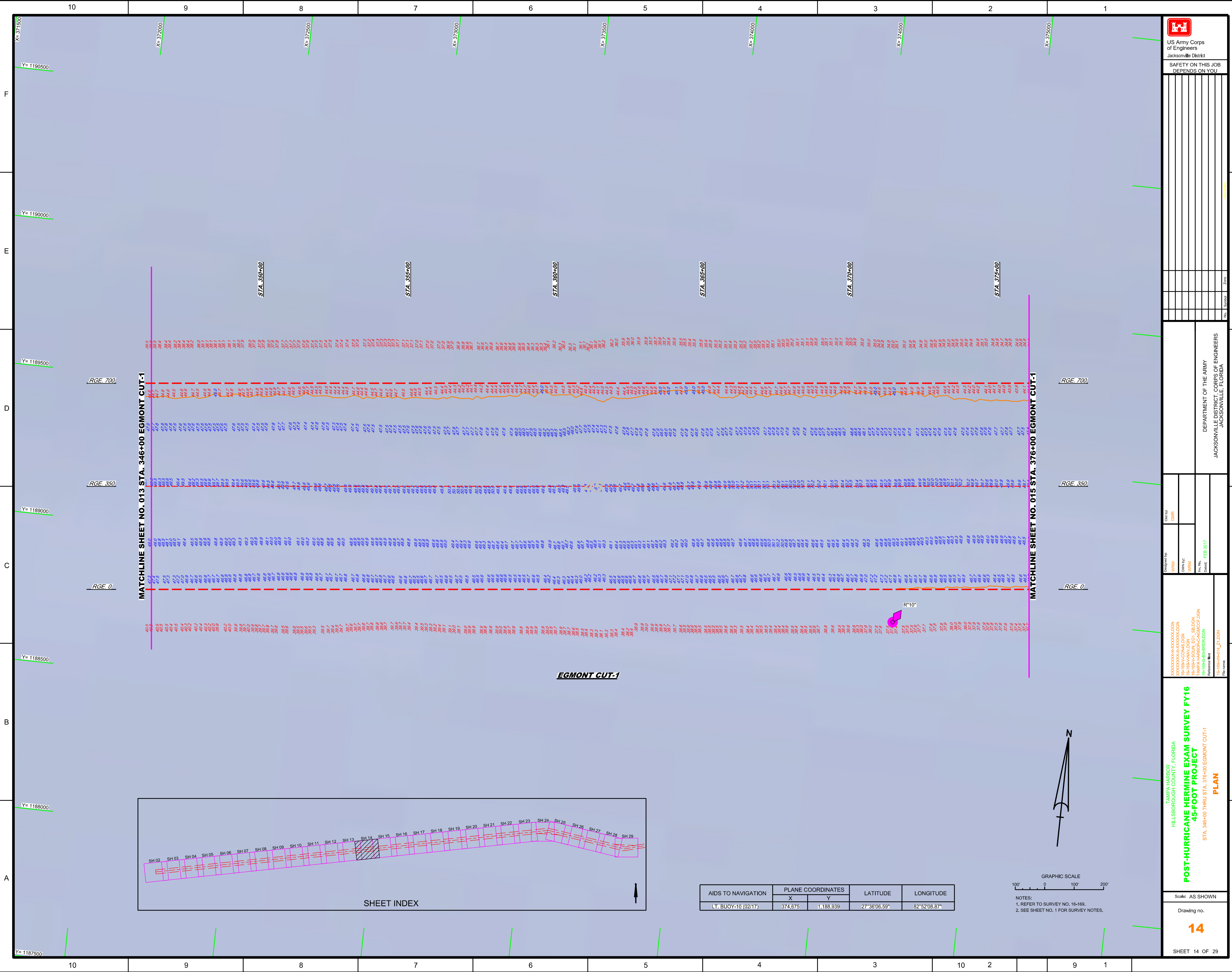
DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, FLORIDA

Scale: AS SHOWN

Drawing no.
11

SHEET 11 OF 29

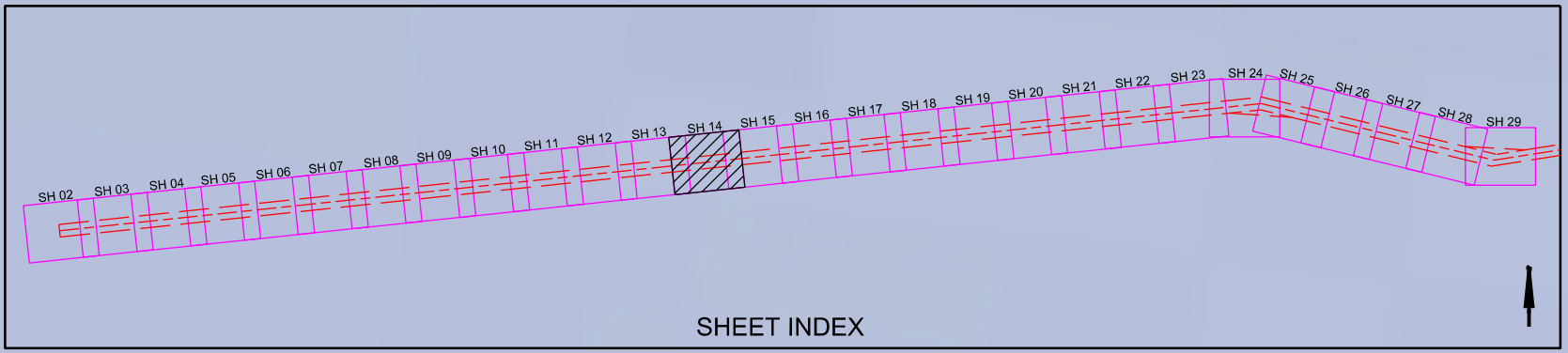
PLAN



MATCHLINE SHEET NO. 013 STA. 346+00 EGMONT CUT-1

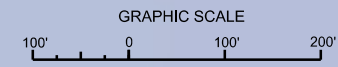
MATCHLINE SHEET NO. 015 STA. 376+00 EGMONT CUT-1

EGMONT CUT-1



SHEET INDEX

| AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---------------------|-------------------|-----------|--------------|--------------|
| | X | Y | | |
| LT. BUOY-10 (02/17) | 374,875 | 1,188,939 | 27°36'08.59" | 82°52'08.87" |



NOTES:
 1. REFER TO SURVEY NO. 16-169.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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XXXXXXXXXXXXXXXXXXXX
 16-169A-CO-045.DGN
 16-169A-HAV.DGN
 16-169A-EGMONT CUT-1.DGN
 16-169A-EGMONT CUT-1.DGN
 16-169A-HR1-LZ.DGN

Drawn by: **WRM**
 Check by: **GHR**
 Design Date: **FEB 2017**

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

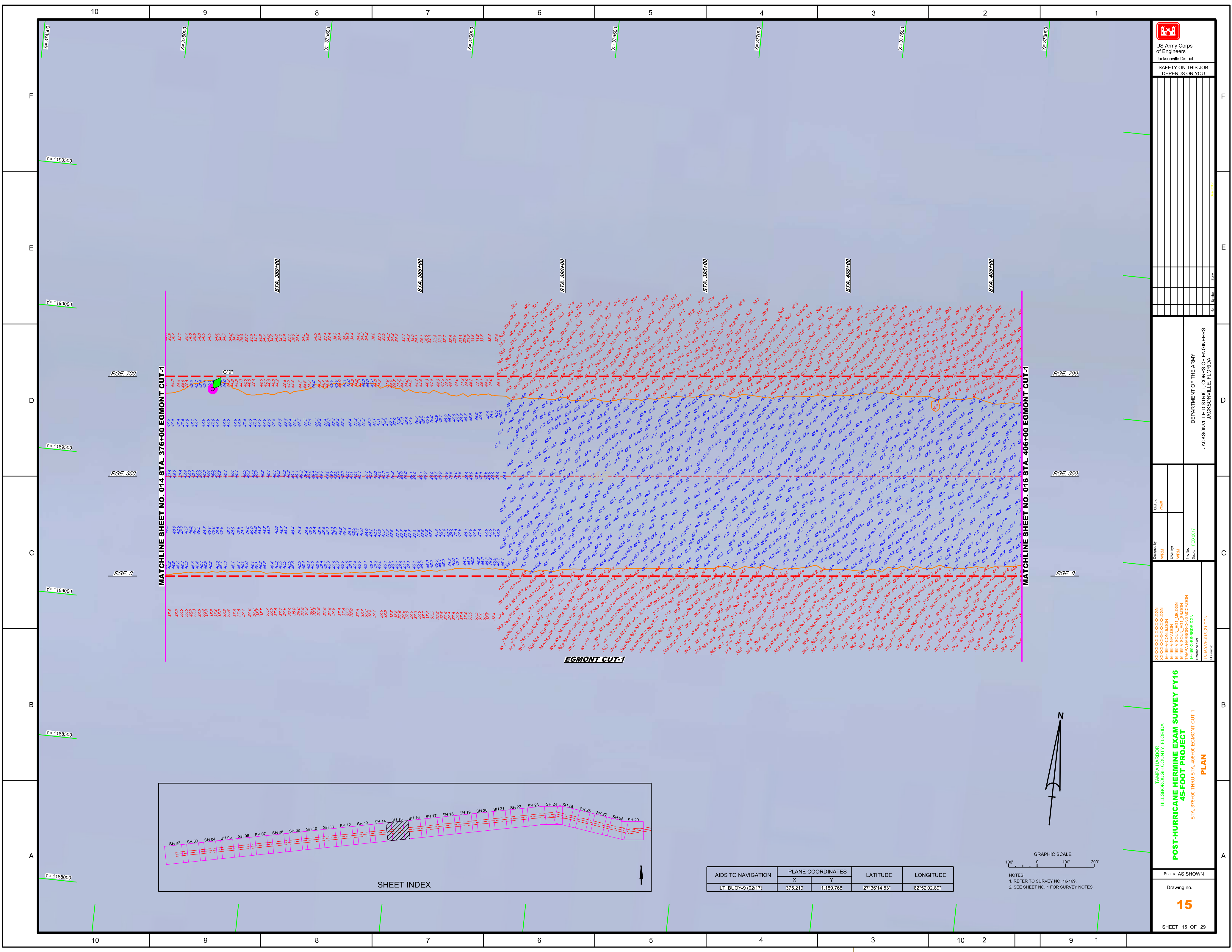
TAMPA HARBOR
 HILLSBOROUGH COUNTY, FLORIDA
**POST-HURRICANE HERMINE EXAM SURVEY FY16
 45-FOOT PROJECT**
 STA. 346+00 THRU STA. 376+00 EGMONT CUT-1
PLAN

Scale: AS SHOWN

Drawing no.

14

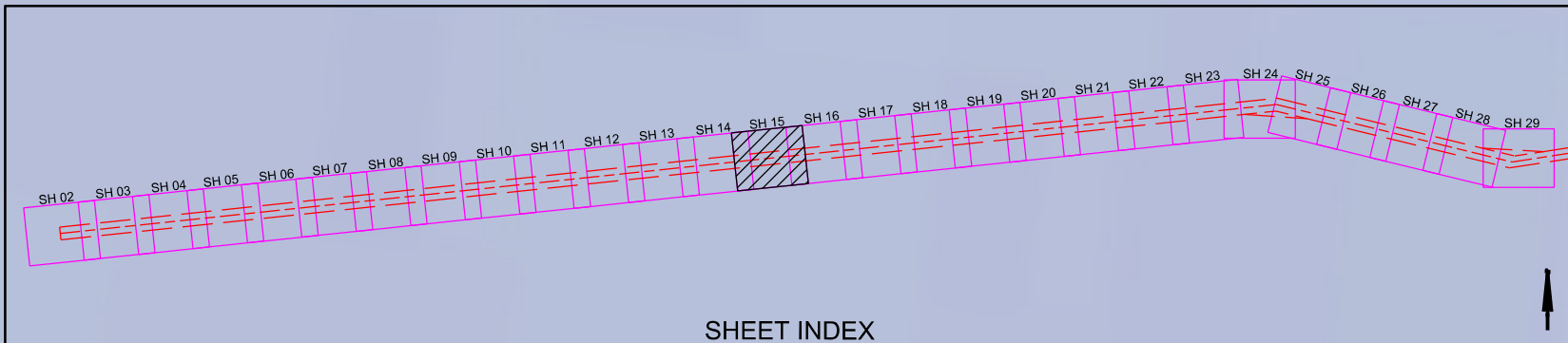
SHEET 14 OF 29



MATCHLINE SHEET NO. 014 STA. 376+00 EGMONT CUT-1

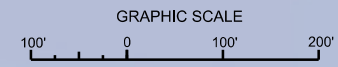
MATCHLINE SHEET NO. 016 STA. 406+00 EGMONT CUT-1

EGMONT CUT-1



SHEET INDEX

| AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|--------------------|-------------------|-----------|--------------|--------------|
| | X | Y | | |
| Lt. BUOY-9 (0217) | 375,219 | 1,189,768 | 27°36'14.83" | 82°52'02.89" |



NOTES:
 1. REFER TO SURVEY NO. 16-169.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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

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|--------------|-------------|----------|
| Designed by: | Checked by: | Date: |
| WRM | GHR | FEB 2017 |
| WRM | WRM | |
| WRM | WRM | |
| WRM | WRM | |

POST-HURRICANE HERMINE EXAM SURVEY FY16
45-FOOT PROJECT
 STA. 376+00 THRU STA. 406+00 EGMONT CUT-1
PLAN

Scale: AS SHOWN

Drawing no. **15**

SHEET 15 OF 29