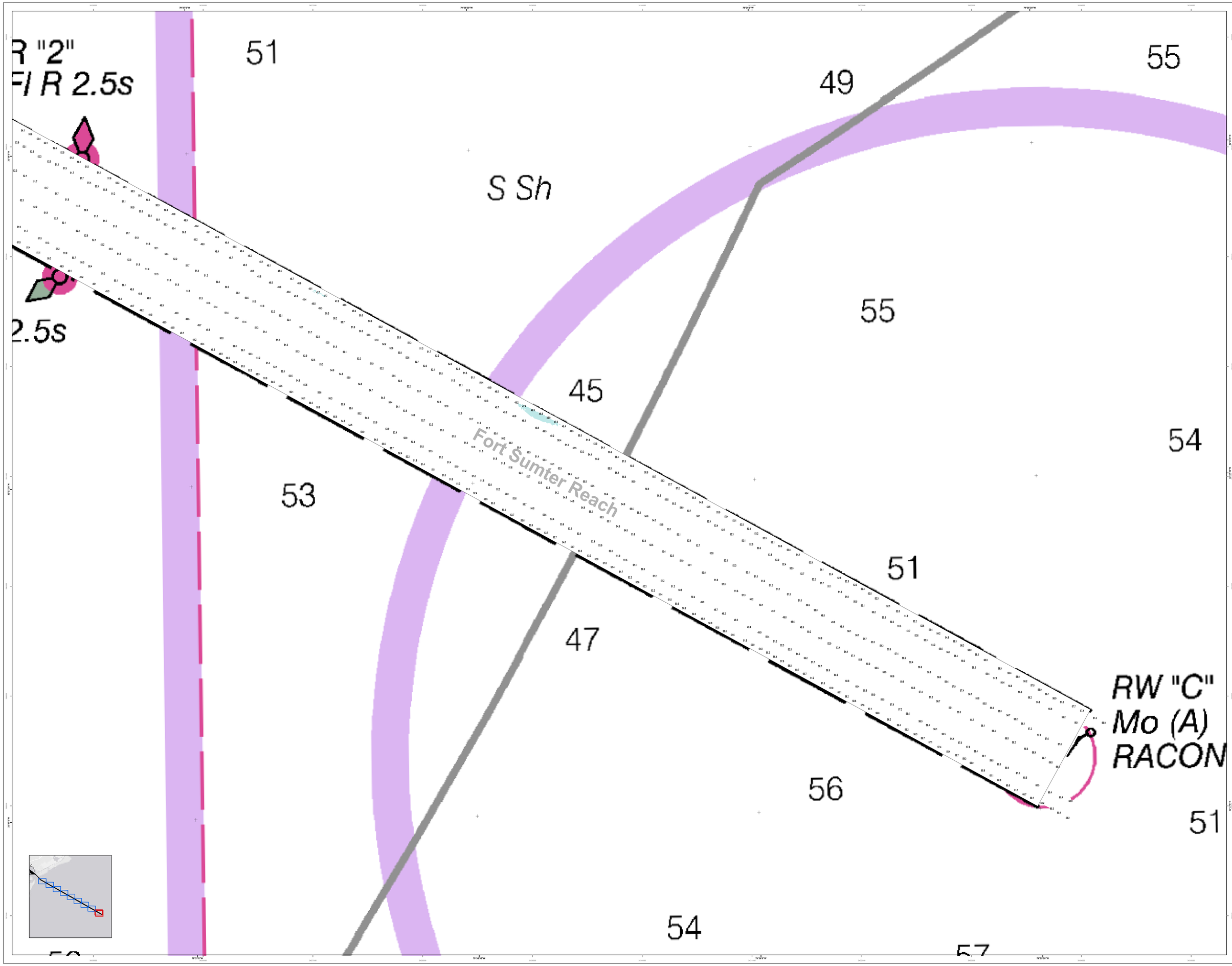


U.S. Army Corps of Engineers
Charleston District

Production Notes:
1. Hydrographic data collected in this product is for planning purposes only. Data is not to be used for navigation.
2. Survey conducted by the U.S. Army Corps of Engineers.
3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
4. Coordinates are based on USACE Alaska Service 1501 and 1503.

N

0 125 250 500 750 1,000 Feet

Depth in Feet
- 0 to 30.5
- 30.1 to 40.5
- 40.1 to 45.5
- 45.1 to 47.5
- Greater than 47.5

USCG Beacon
- Green
- Red
- White

Federal Navigation Channel
- Left TOC Line
- Right TOC Line
- True Centerline

Legend

Bluestreak Sounding
- Sounding
- Sounding may cover several points at various depths per each quarter area.

Obstructions Point
- Wreck
- Wreck-Submerged

USCG Buoy
- Lighted
- Unlighted
- Green
- Red
- White
- Yellow
- USCG Light
- Coast Guard Racon

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, consequential, special or exemplary damages, including, but not limited to, loss of anticipated profits or benefits arising out of use of this data.
These data sets have been developed from the best available sources, and are believed to be accurate and reliable. Some data details are accurate and reliable, errors and variable conditions, inherent in the source materials and methods, may be reflected in the data sources.
This product is not intended to be used for navigation.
Mariners are encouraged to use all prudent safety measures.

Designed By: eHydro Software v3.82	Survey Date: 08 Sep 2015	Production Date: 17 Sep 2015
Reviewed By: NWS	Acoustic Sounding Equipment: 210 kHz	Project Reference Number: CHA-SC-PDC-14010
Reference Scale: 1 inch = 250 feet	Survey Type: Single-Beam Condition Survey	
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl		

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

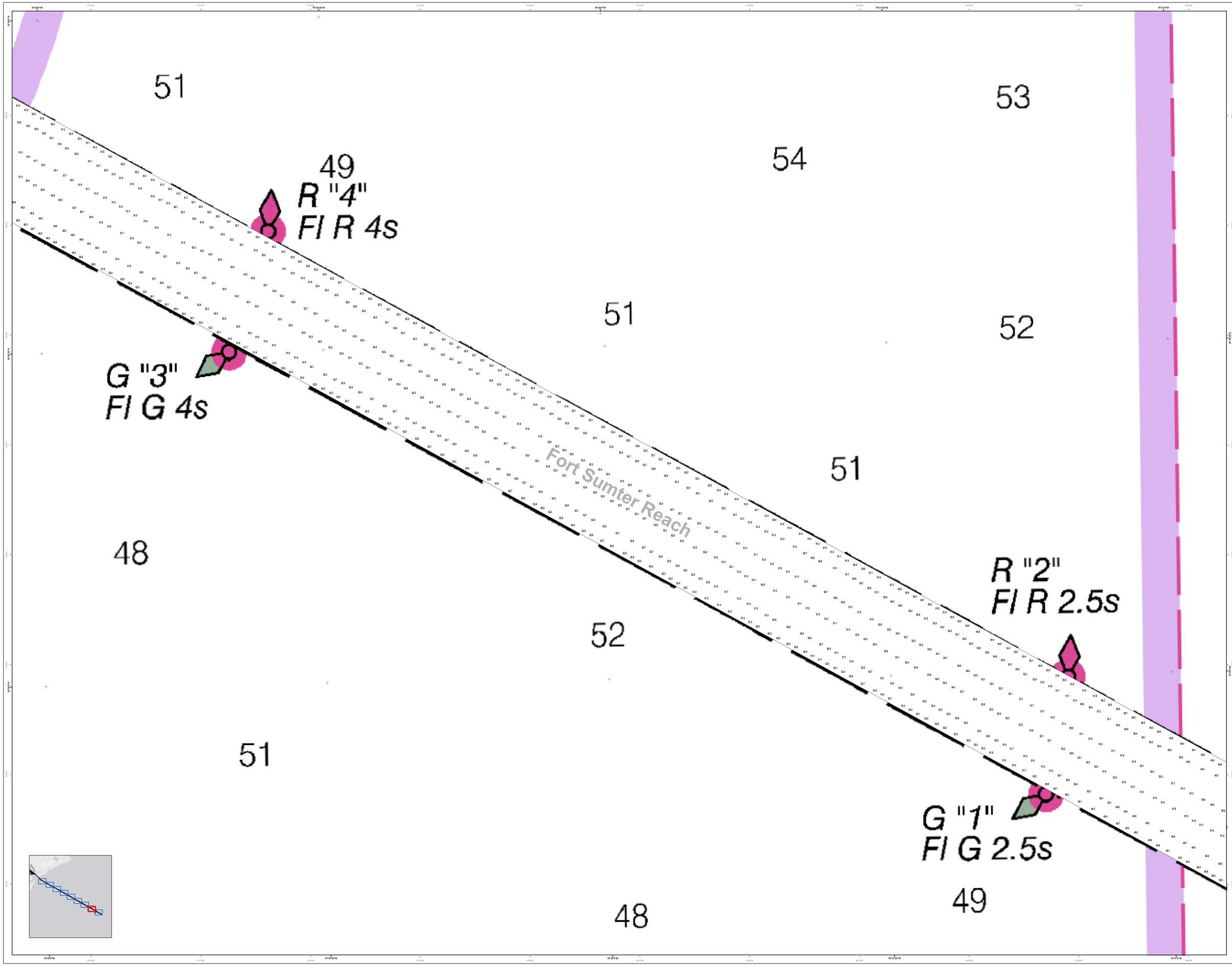
SPATIAL DATA BRANCH
69A1AGOOD AVE
CHARLESTON, SC 29403

CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicative of the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002

SHEET 1 OF 9



U.S. Army Corps of Engineers
Charleston District

Legend
Bouldered Sounding
Sounding
Sounding may occur several times in the survey area, but only one is displayed per each quarter area
Channel Boundary
Channel Direction
Wreck-Submerged
USCG Buoys
Green
Red
White
Yellow
Feature Navigation Channel
Left TOC Line
Right TOC Line
True Centerline
USCG Light
Coast Guard Beacon
Depth in Feet
0 to 35.0
35.1 to 40.0
40.1 to 45.0
45.1 to 47.0
Greater than 47.0

Production Notes:
1. The data depicted on this product is for plotting purposes only. It should not be used for navigation.
2. Area surveys conducted by the U.S. Army Corps of Engineers.
3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
4. Datum: Horizontal - NAD 83, Vertical - MLLW.
Map services 11521 and 11523.

N

0 125 250 500 750 1,000 Feet

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this product.
These data sets have been developed from the best available source data. No warranty is made as to the accuracy, reliability, or completeness of these data. Users are cautioned to verify critical details and report any discrepancies to the District Office.
This product is not intended to be used for navigation.
Mariners are encouraged to use all prudent safety measures.

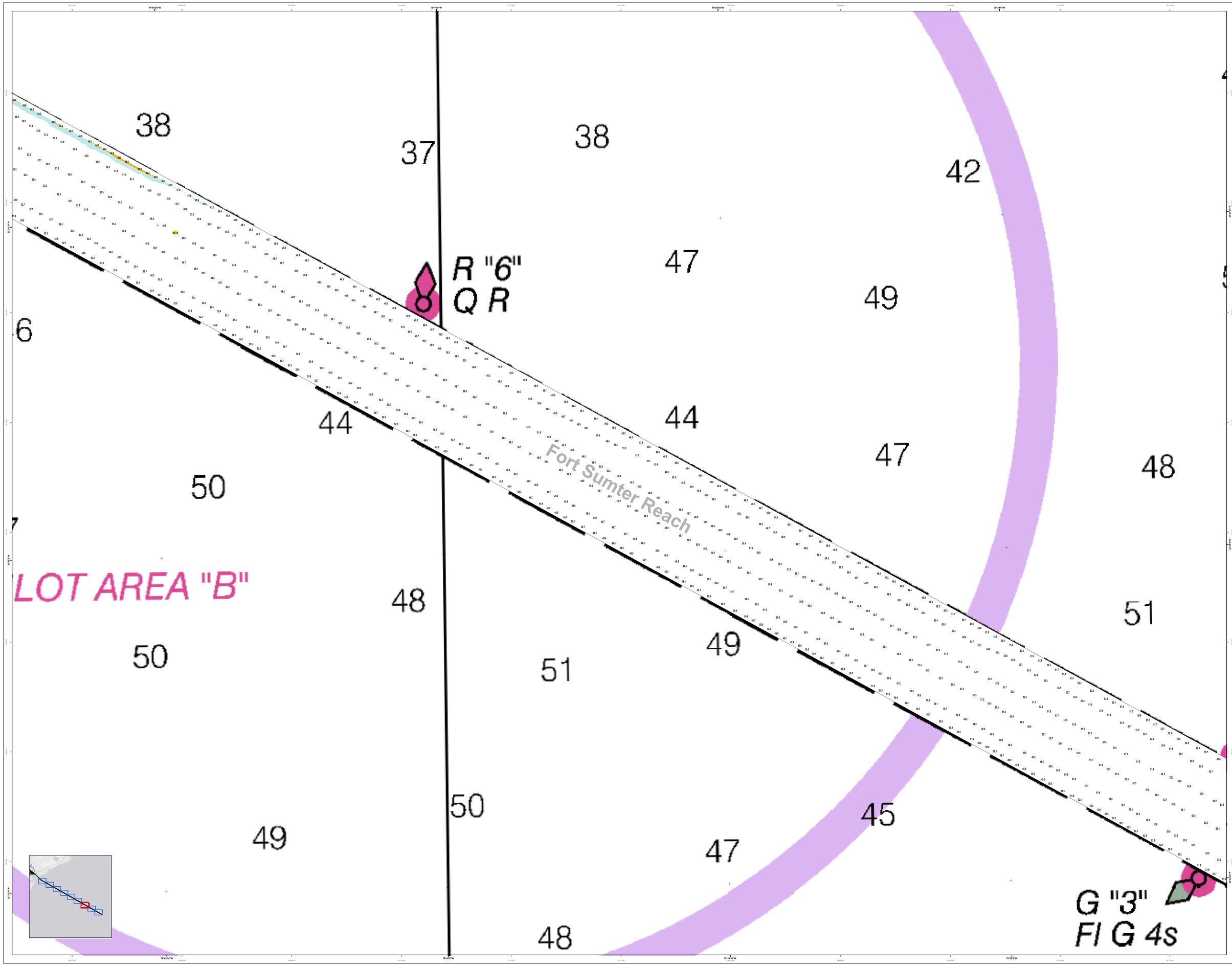
Designed By: eHydro Software v3.82	Survey Date: 08 Sep 2015	Production Date: 17 Sep 2015
Reviewed By: NONE	Absolute Scale: 1:3,000	Project Reference Number: CESAC-PD-PROJ-00110
Reference Scale: 1 inch = 250 feet	Survey Type: Single-Beam Condition Survey	
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl		

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as accurate for general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 2 OF 9



U.S. Army Corps of Engineers

Charleston District

Production Notes:

1. Data shown is compiled to this product for plotting purposes only.
2. Depths are in feet and based on surveys conducted by the U.S. Corps of Engineers and others.
3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
4. Aids to Navigation are USCG Waterway Aids to Navigation 11521 and 11523.

N

0 125 250 500 750 1,000 Feet

Depth in Feet

- 0 to 30.5
- 30.5 to 40.5
- 40.5 to 45.5
- 45.5 to 47.5
- Greater than 47.5

USCG Beacon

- Green
- Red
- White

Federal Navigation Channel

- Left TOC Line
- Right TOC Line
- True Centerline

USCG Buoy

- Green
- Red
- White
- Yellow

- USCG Light
- Coast Guard Beacon

Legend

Bessent Sounding

- Sounding

Sounding may not exceed the depth contour displayed per each quarter area

Obstruction Point

- Obstruction
- Wreck Submerged

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, special, incidental, or consequential damages arising out of the use of this data, including but not limited to, loss of anticipated profits or benefits arising out of the use of this data.

These data sets have been developed from the best available sources at the time of compilation and are believed to be accurate. Mariners should exercise caution when using these data sets, as errors and variable conditions may exist. Soundings are reduced to Mean Lower Low Water (MLLW) and are subject to tide and other water level variations. **Charts are not intended to be used for navigation. Mariners are encouraged to use all prudent safety measures.**

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHARLESTON, SOUTH CAROLINA	Designed By: eHydro Software v3.82	Survey Date: 08 Sep 2015
	Reviewed By: NOAA	Absolute Scale: 1:3,000
SPATIAL DATA BRANCH 69A HAGOOD AVE CHARLESTON, SC 29403 CESAC-GIS@USACE.ARMY.MIL	Reference Scale: 1 inch = 250 feet	Survey Type: Single-Beam Condition Survey
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl	

Production Date:
17 Sep 2015

Contract Reference Number:
CESAC-PCA-10110

Charleston Entrance Channel Survey

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as a snapshot of general conditions existing at that time.

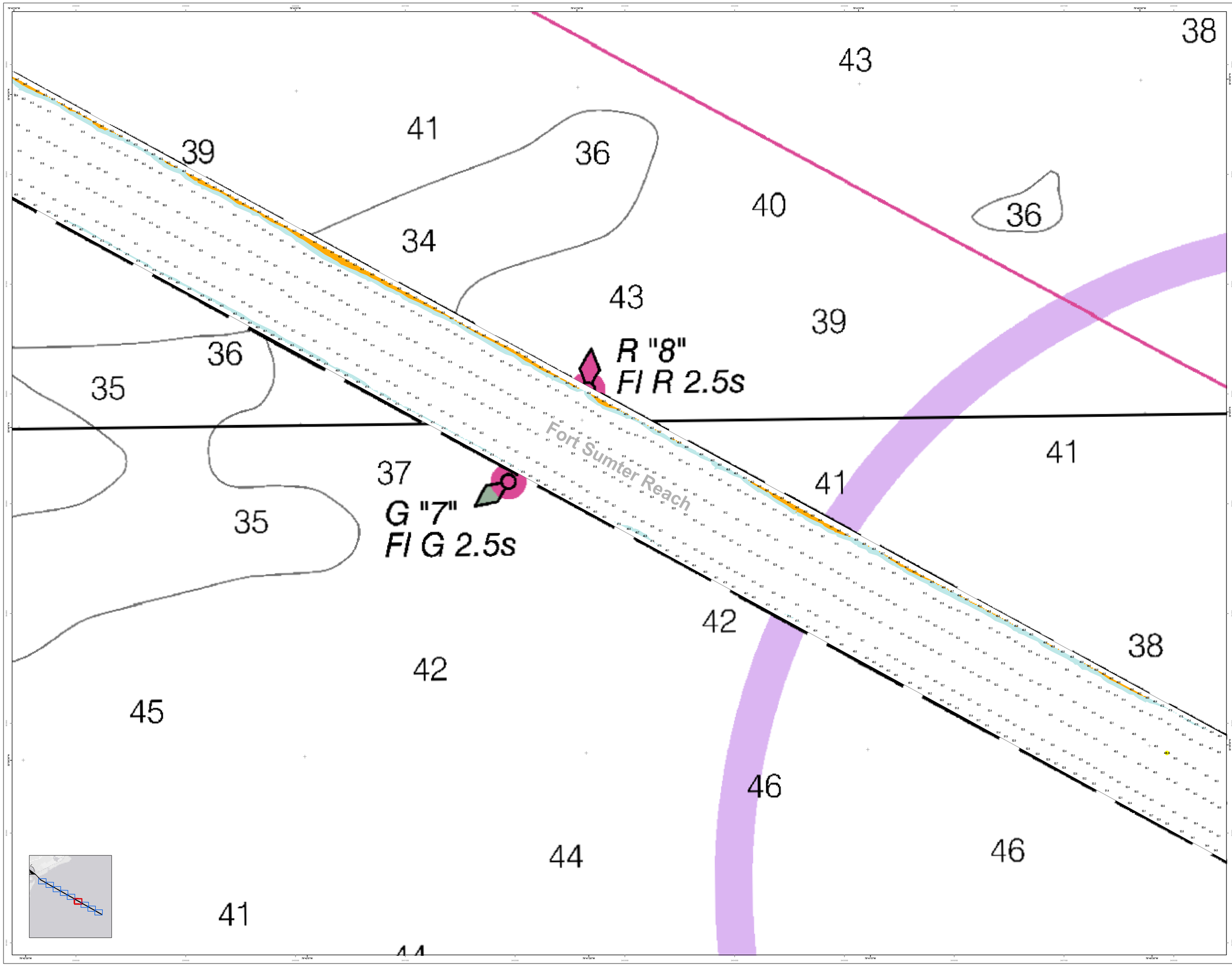
Concluded on: **08 Sep 2015**

Charleston, South Carolina

SHEET REFERENCE NUMBER

C002

SHEET 3 OF 9



U.S. Army Corps of Engineers
Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising out of or in any way connected with the use of the data contained herein, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this data.
These data sets have been developed from the best available source data and are subject to revision without notice. While these datasets are accurate and reliable, errors and variable conditions in the source data may exist. Mariners should use all available information in the data sources in addition to these datasets.
These data are not intended to be used for navigation.
Mariners are encouraged to use all prudent safety measures.

Production Notes:
1. Charts should be printed on this product for plotting purposes only.
2. Field data collected by the USACE and contracted survey firms were conducted by the Charleston District Survey Section.
3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
4. All Coordinates are referenced to NAD 83, State Plane, US Survey Feet, Lambert Conformal Conic, Zone 3900 (FIPS 3900).
5. Aids to Navigation are based on the Coast Guard Notice to Mariners and Map service 11521 and 11523.

N

0 125 250 500 750 1,000 Feet

Depth in Feet
- 0 to 3.5
- 3.5 to 6.5
- 6.5 to 8.5
- 8.5 to 12.5
- Greater than 12.5

USCG Beacon
- Green
- Red
- White

Federal Navigation Channel
- Left TOE Line
- Right TOE Line
- True Centerline

USCG Buoy
- Green
- Red
- White
- Yellow

- USCG Light
- Coast Guard Racon

Legend

Bottom Sounding
- Sounding
- Sounding may cover several survey points, only shown per each quarter area

Obstruction Point
- Wreck
- Wreck-Submerged

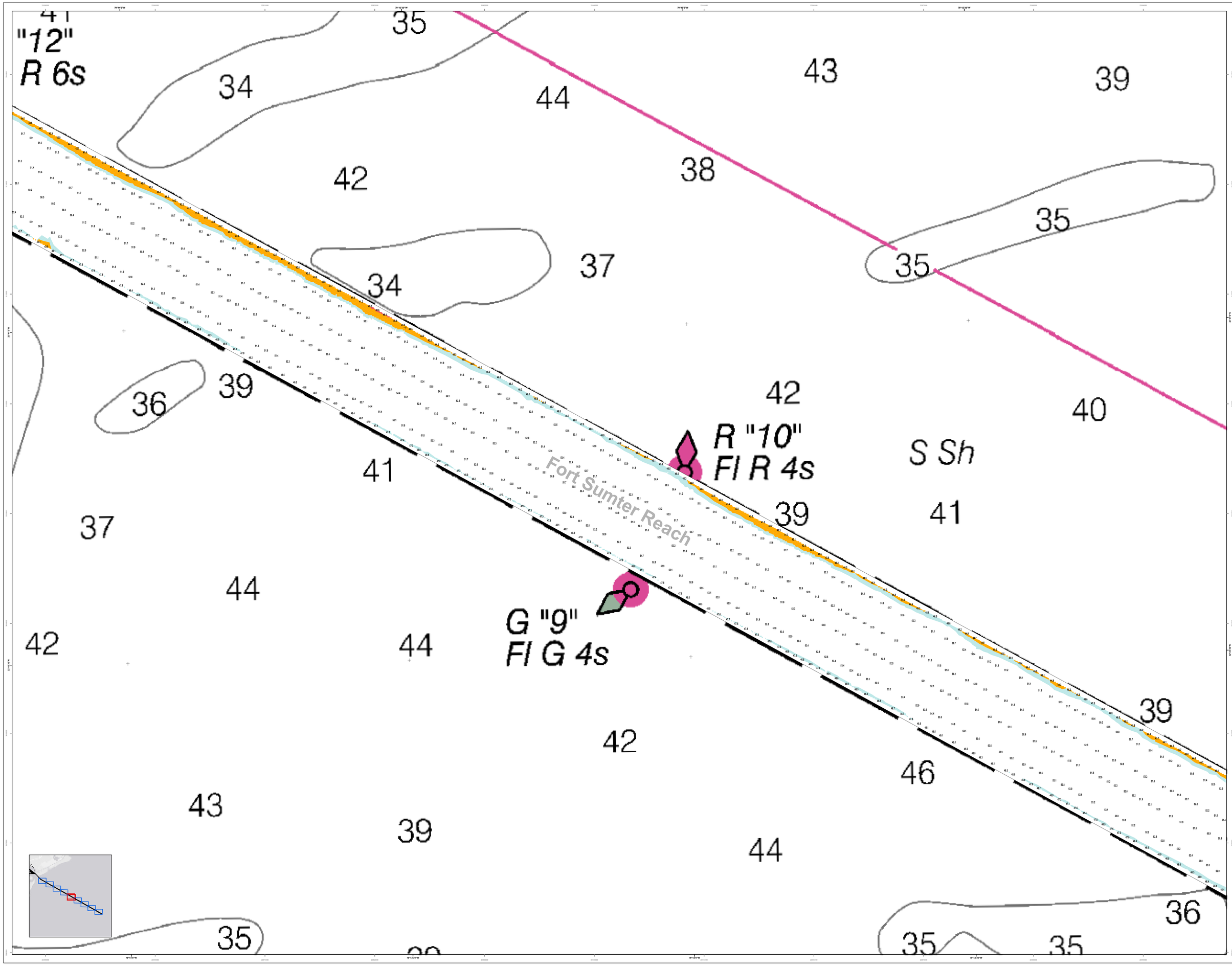
Designed By: eHydro Software v3.82	Production Date: 17 Sep 2015
Reviewed By: Nicole Nichols	Absolute Scale: 1:12,000
Reference Scale: 1 inch = 250 feet	Project Reference Number: CESAC-PM-A-10110
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl	Survey Type: Single-Beam Condition Survey
Survey Date: 08 Sep 2015	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as providing the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 4 OF 9



U.S. Army Corps of Engineers
Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages arising, but not limited to, loss of anticipated profits or benefits arising out of the use of this data.
These data sets have been developed from the best available source data and are believed to be accurate and reliable. However, datasets are accurate and reliable, errors and variable conditions, including but not limited to, weather, may exist in the source data and attributes in the data sources.
This data set is not to be used for navigation.
Mariners are encouraged to use all prudent safety measures.

Production Notes:
1. Depth contours displayed on this product are for plotting purposes only. Depth contours are based on data from surveys conducted by the Charleston District, Corps of Engineers.
2. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
3. Aids to Navigation are based on Aids to Navigation 11321 and 11323.

N

0 125 250 500 750 1,000 Feet

Depth in feet
- 0 to 35.5
- 35.5 to 40.5
- 40.5 to 45.5
- 45.5 to 47.5
- Greater than 47.5

USCG Beacon
- Green
- Red
- White

Federal Navigation Channel
- Right TOC Line
- Left TOC Line

Legend
Bathymetric Sounding
- Sounding
- Sounding may cover several locations and depths vary per each sounder area

Observation Point
- Wreck-Submerged

USCG Buoy
- Green
- Red
- White
- Yellow
- USCG Light
- Coast Guard Racon

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

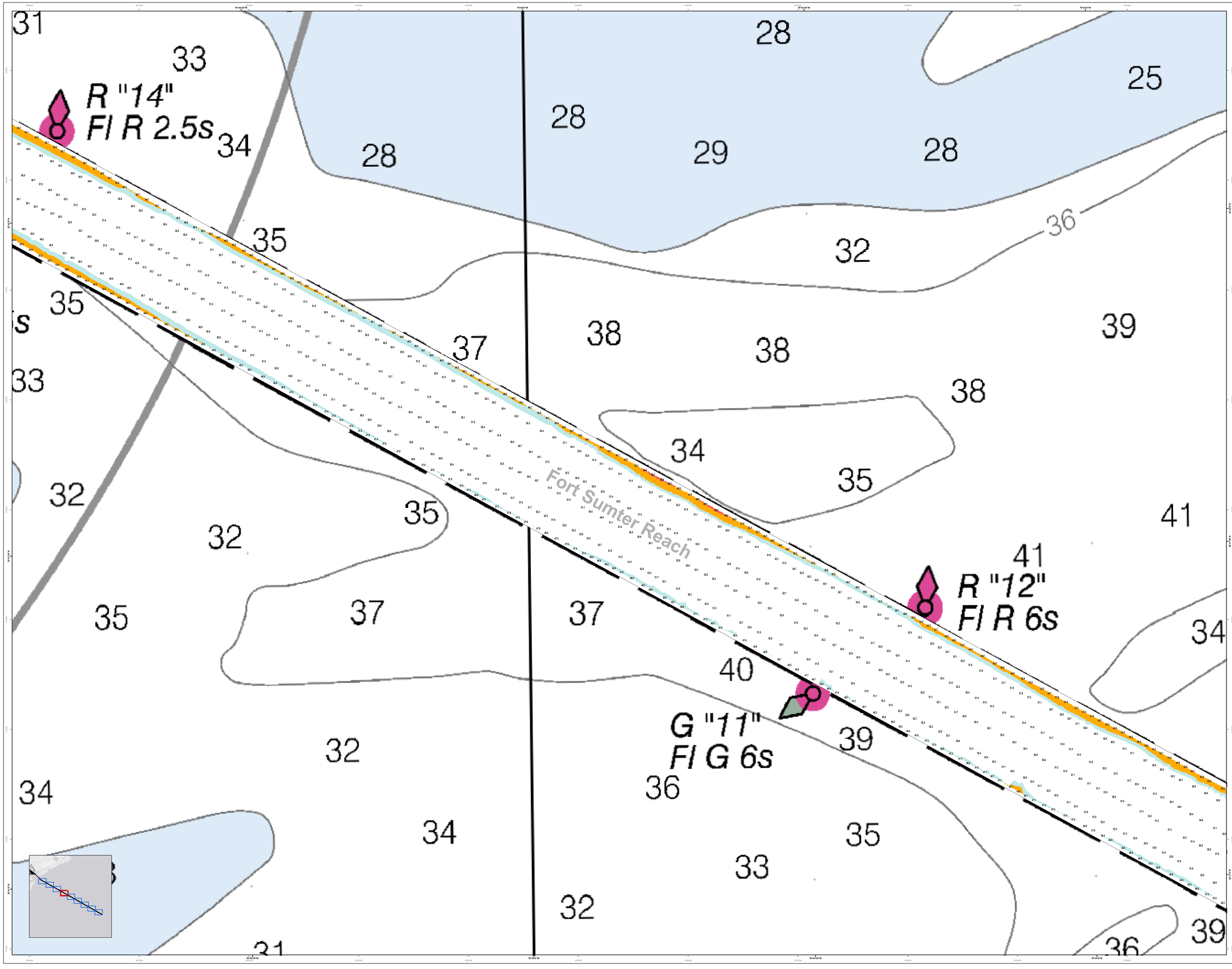
SPATIAL DATA BRANCH
69A1 MAGNOLIA AVE
CHARLESTON, SC 29403

CESAC-GIS@USACE.ARMY.MIL

Designed By: eHydro Software v3.82
Reviewed By: Jack Wells
Survey Date: 08 Sep 2015
Production Date: 17 Sep 2015
Reference Scale: 1 inch = 250 feet
Project Area Number: CHS-CP-PA-14-01
Survey Type: Single-Beam Condition Survey
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicative of the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 5 OF 9



U.S. Army Corps of Engineers
Charleston District

Legend
Breakout Sounding
Sounding
Sounding may occur around the perimeter of the area but not in the center of the area per each quarter area
Depth Contour
Depth Contour
Shoreline
Shoreline (Submerged)

USCG Buoys
Green
Red
White
Red
White
Yellow
USCG Light
Coast Guard Racon

Feature Navigation Channel
Left TOC Line
Right TOC Line
True Centerline

Depth Feet
0 to 3.0
3.1 to 6.0
6.1 to 9.0
9.1 to 12.0
Greater than 12.0

N

0 125 250 500 750 1,000 Feet

Production Notes:
1. This chart is not to be used for navigation. It is produced for planning purposes only.
2. Depths are in feet and are referenced to the Mean Lower Low Water (MLLW) datum.
3. Soundings are in feet and tenths.
4. Coordinates are in feet and tenths.

Data was collected using Hydrographic Survey Standards and Specifications, Hydrographic Surveys, Section 1 and 2, Version 2.0, dated 2013 and Hydrographic Surveys, Section 3, Version 2.0, dated 2013.

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages, including, but not limited to, loss of anticipated profits or benefits arising out of the use of this map.
These data sets have been developed from the best available sources. We make no warranties, guarantees or representations as to the accuracy, completeness, or suitability of the data, or fitness for any particular purpose. Some features depicted may not be to their true scale, location, or orientation, and may not be depicted on the map. Some features may not be shown due to the scale of the map. Other limitations may exist in the data sources.
This chart is not intended to be used for navigation.
Mariners are encouraged to use all prudent safety measures.

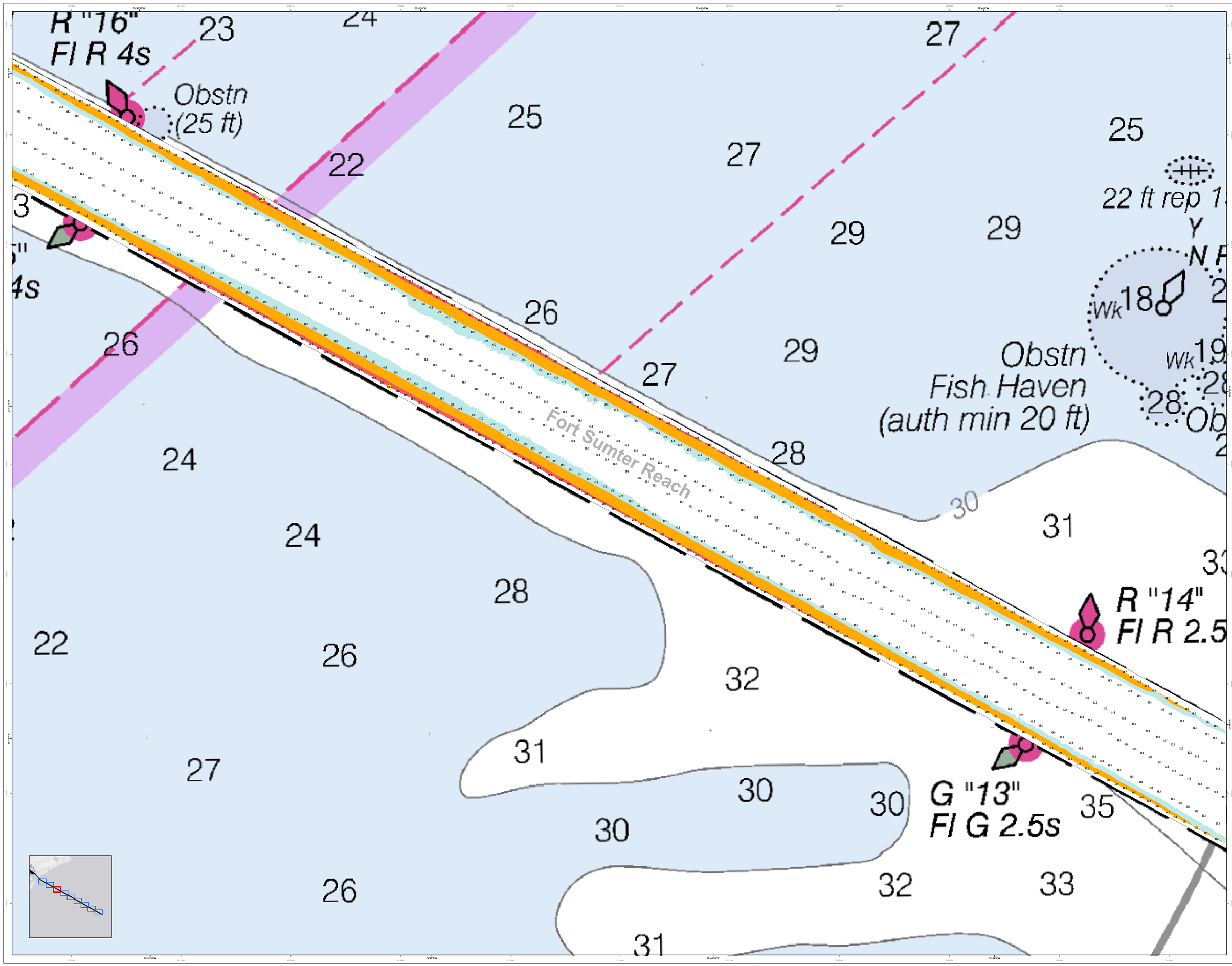
Designed By: eHydro Software v3.82	Survey Date: 08 Sep 2015	Production Date: 17 Sep 2015
Reviewed By: NOAA	Absolute Scale: 1:2,000	Project Reference Number: CESAC-FS-2015-0010
	Reference Scale: 1 inch = 250 feet	Survey Type: Single-Beam Condition Survey
	Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA
NOAA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as an indication of the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 6 OF 9



U.S. Army Corps of Engineers
Charleston District

Production Notes:
1. Coordinates are referenced to the Charleston Datum and are provided for plotting purposes only.
2. Hydrographic Survey data collected from surveys conducted by the U.S. Corps of Engineers, Charleston District.
3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW).
4. Aids to Navigation are referenced to Aids to Navigation Service 5 (ATON) and 11523.

N

0 125 250 500 750 1,000 Feet

Depth Test
- 0 to 3.5
- 3.1 to 4.5
- 4.1 to 6.5
- 6.1 to 12.5
- Greater than 12.5

USCG Beacon
- Green
- Red
- White

Fairway/Navigation Channel
- Right TOC Line
- Left TOC Line
- True Centerline

USCG Buoy
- Green
- Red
- White
- Yellow

Lighting
- Flashing
- Occulting may cover several adjacent buoys, flashing per each quarter area
- Quick Flashing

Obstruction Point
- Wreck
- Obstruction

USCG Light
- Right TOC Line

Coast Guard Buoys
- Wreck-Submerged

Legend
Structured Sounding
- Sounding
- Sounding may cover several adjacent buoys, flashing per each quarter area

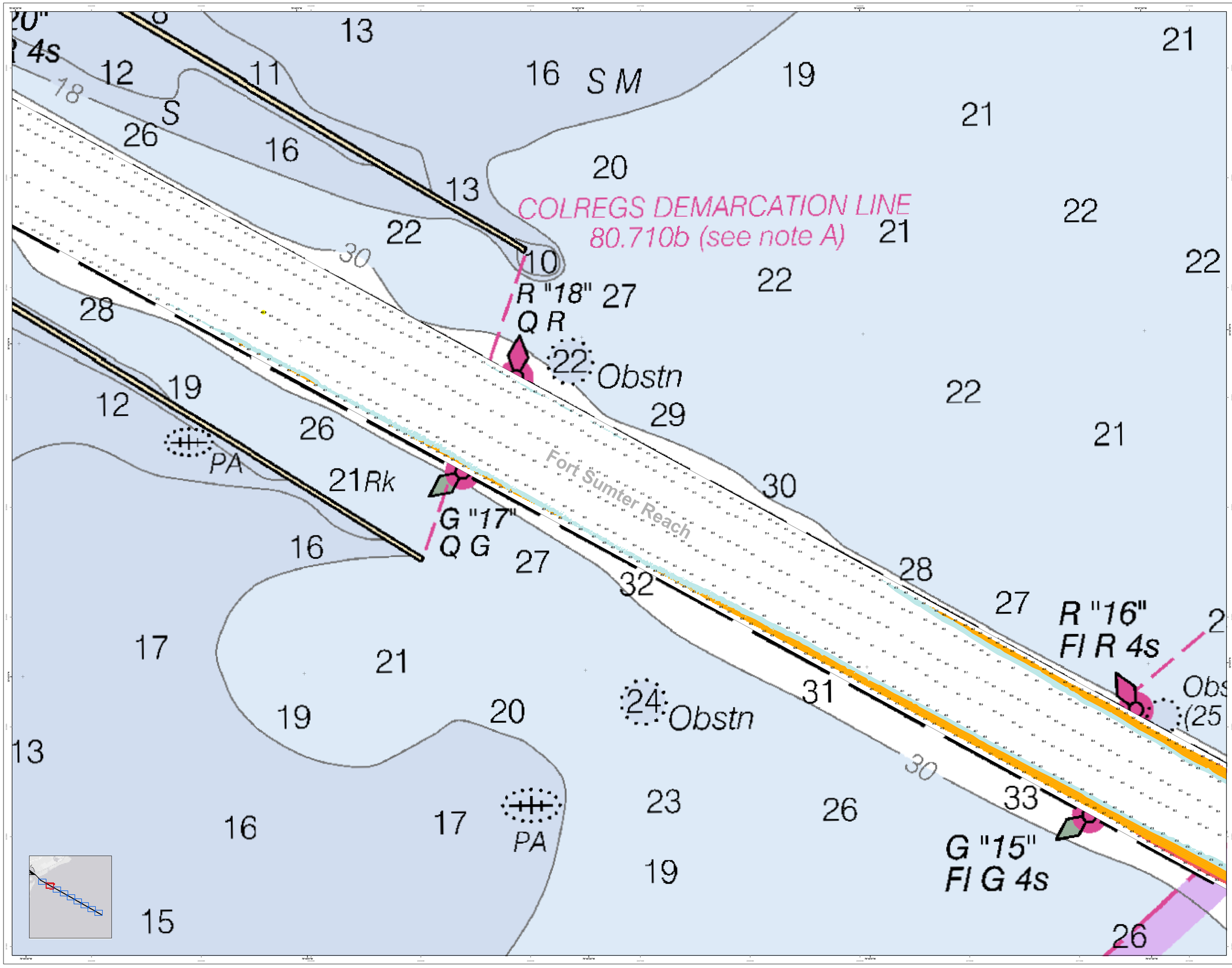
Designed By: eHydro Software v3.82
Reviewed By: Approved By: 1/12/2015
Survey Date: 08 Sep 2015
Production Date: 17 Sep 2015
Project Reference Number: CESAC-PM-PL-2015
Survey Type: Single-Beam Condition Survey
Reference Scale: 1 inch = 250 feet
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A1HGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as accurate for the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 7 OF 9



U.S. Army Corps of Engineers
Charleston District

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, incidental, special, exemplary, or consequential damages including, but not limited to, loss of anticipated profits or benefits arising out of the use of this map.
These data sets have been developed from the best available sources and are subject to constant change. We make no claim that these datasets are accurate and reliable, errors and variable conditions exist in the original data, even if we have corrected the data to the best of our ability. **Mariners are encouraged to use all prudent safety measures.**

Production Notes:
1. Contours and soundings shown on this chart are for plotting purposes only. Contours are based on the most recent survey conducted by the Charleston District, Corps of Engineers.
2. Soundings are in feet and tenths.
3. Soundings are referenced to Mean Lower Low Water (MLLW).
4. Aids to Navigation are based on USCG Aids to Navigation Report (ATON) and USCG Weekly Notice to Mariners.

N

0 125 250 500 750 1,000 Feet

Depth in Feet
- 0 to 3.0
- 3.1 to 6.0
- 6.1 to 9.0
- 9.1 to 12.0
- Greater than 12.0

USCG Beacon
- Green
- Red
- White

Federal Navigation Channel
- Left TOC Line
- Right TOC Line
- Trial Centerline

USCG Buoy
- Green
- Red
- White
- Yellow

- USCG Light
- Coast Guard Racon

Legend
Measured Sounding
- Sounding
- *Sounding may cover several measurements, depending on plot mode's quarter area*

Reference Points
- Obstruction
- Wreck-Submerged

Designed By: eHydro Software v3.82	Reviewed By: Kevin Ward	Survey Date: 08 Sep 2015	Production Date: 17 Sep 2015
	Absolute Scale: 1:3,000	Project Reference Number: CESAC-PA-2015-0010	
Reference Scale: 1 inch = 250 feet		Survey Type: Single-Beam Condition Survey	
Projection: NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl			

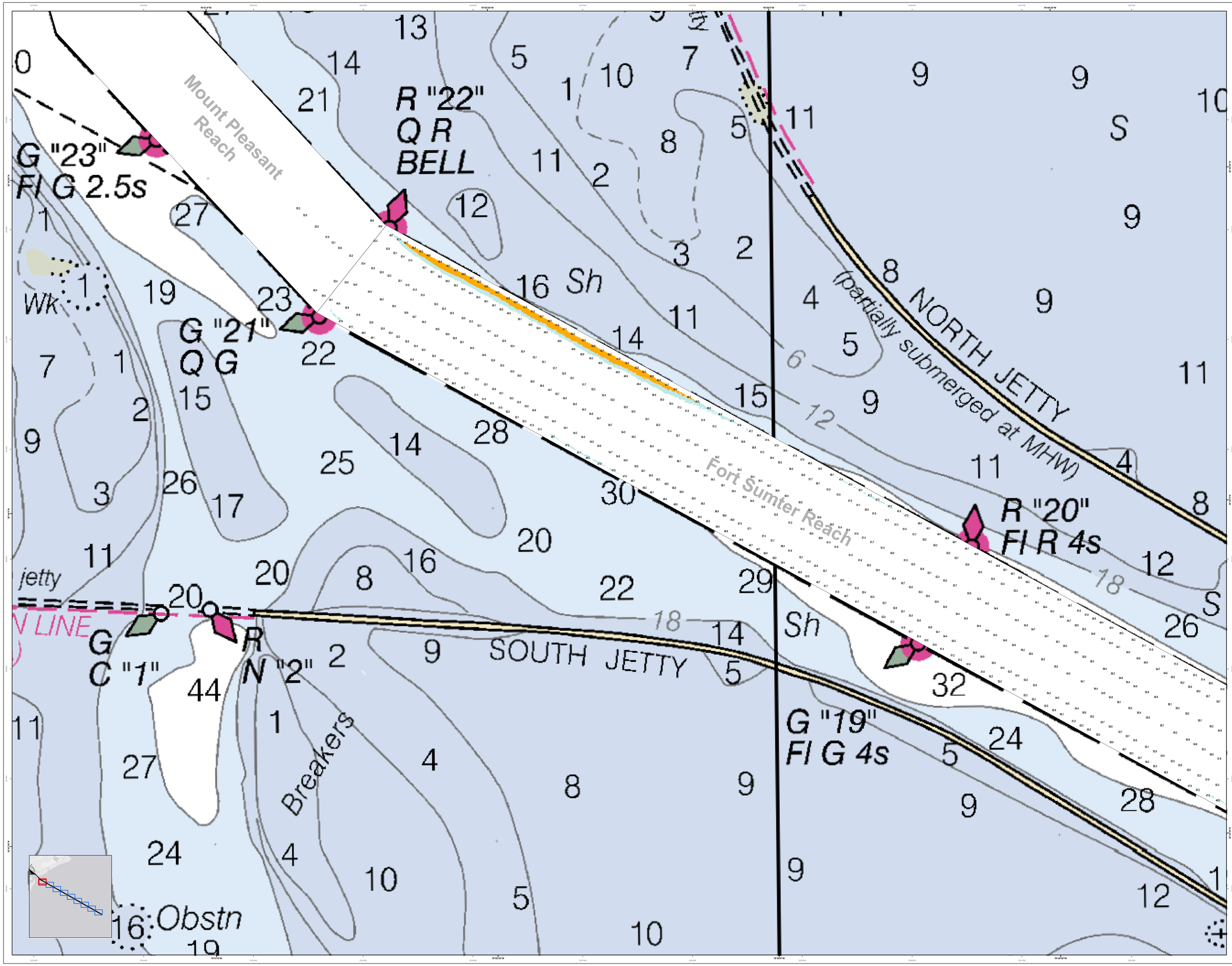
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A IAGOOD AVE
CHARLESTON, SC 29403

CESAC-GIS@USACE.ARMY.MIL

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as accurate during general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002
SHEET 8 OF 9



U.S. Army Corps of Engineers
Charleston District

Production Notes:

1. Data shown on this map is provided for planning purposes only. It should not be used for navigation. 2. Data gaps exist in the survey conducted by the U.S. Army Corps of Engineers. 3. Soundings are in feet and tenths referenced to Mean Lower Low Water (MLLW). Datum: North American Vertical Datum 1988 (NAVD 88). Map service: 11221 and 11523.

N

0 125 250 500 750 1,000 Feet

Depth Feet
0 to 5.5
5.1 to 8.5
8.1 to 14.5
14.1 to 21.5
Greater than 21.5

USCG Beacon
Green
Red
White

Federal Navigation Channel
Left TOC Line
Right TOC Line
True Centerline

USCG Buoy
Green
Red
White
Yellow
USCG Light
Coast Guard Racon

Legend

Breakers Sounding
Breakers
Sounding may cover an area of breakers, depending on sea conditions.

Obstruction Point
Obstn
Wreck
Wreck-Submerged

In no event shall the U.S. Army Corps of Engineers, Charleston District Office, Spatial Data Branch be liable for direct, indirect, special, incidental, or consequential damages arising from using, but not limited to, loss of anticipated profits or benefits arising out of the use of this map.

These data sets have been developed from the best available sources and are subject to continuous maintenance. We assume the data details are accurate and reliable, errors and variable conditions are inherent in all data sets. Users should exercise independent judgment and verification of the data received.

This map is not intended to be used for navigation.

Mariners are encouraged to use all prudent safety measures.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CHARLESTON, SOUTH CAROLINA

SPATIAL DATA BRANCH
69A HAGOOD AVE
CHARLESTON, SC 29403
CESAC-GIS@USACE.ARMY.MIL

Designed By: eHydro Software v3.82
Reviewed By: Alexander Scale
Approved By: C.E.Pinck

Reference Scale:
1 inch = 250 feet

Projection:
NAD 1983 StatePlane South Carolina FIPS 3900 Feet Intl

Survey Date:
08 Sep 2015

Survey Type:
Single-Beam Condition Survey

Production Date:
17 Sep 2015

Project Reference Number:
CESAC-GIS-PA-2015

Charleston Entrance Channel Survey
The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as providing the general conditions existing at that time.
Concluded on: **08 Sep 2015**
Charleston, South Carolina

SHEET REFERENCE NUMBER
C002

SHEET 9 OF 9