Chart 21021 (Plan) (A) NM 13/03

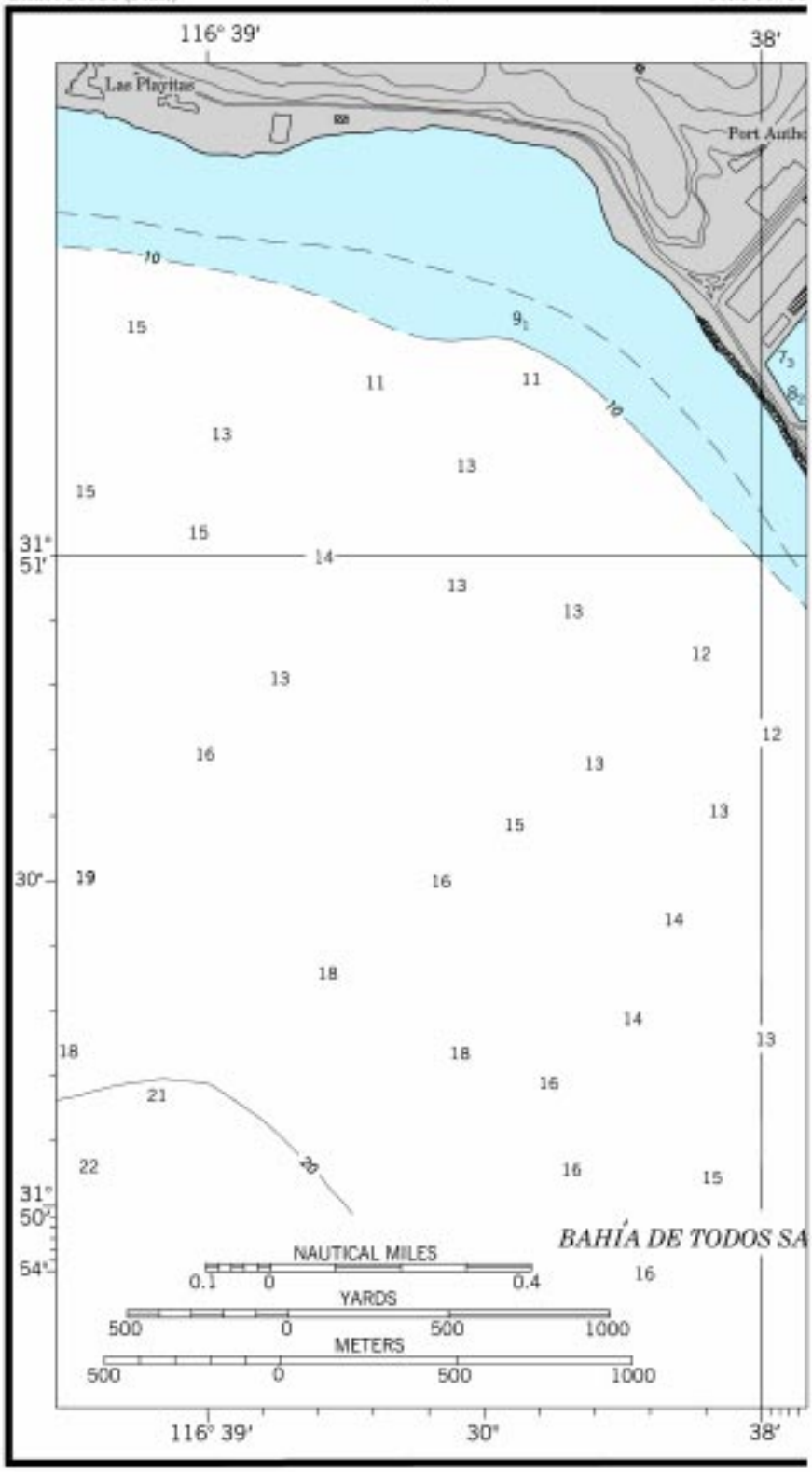
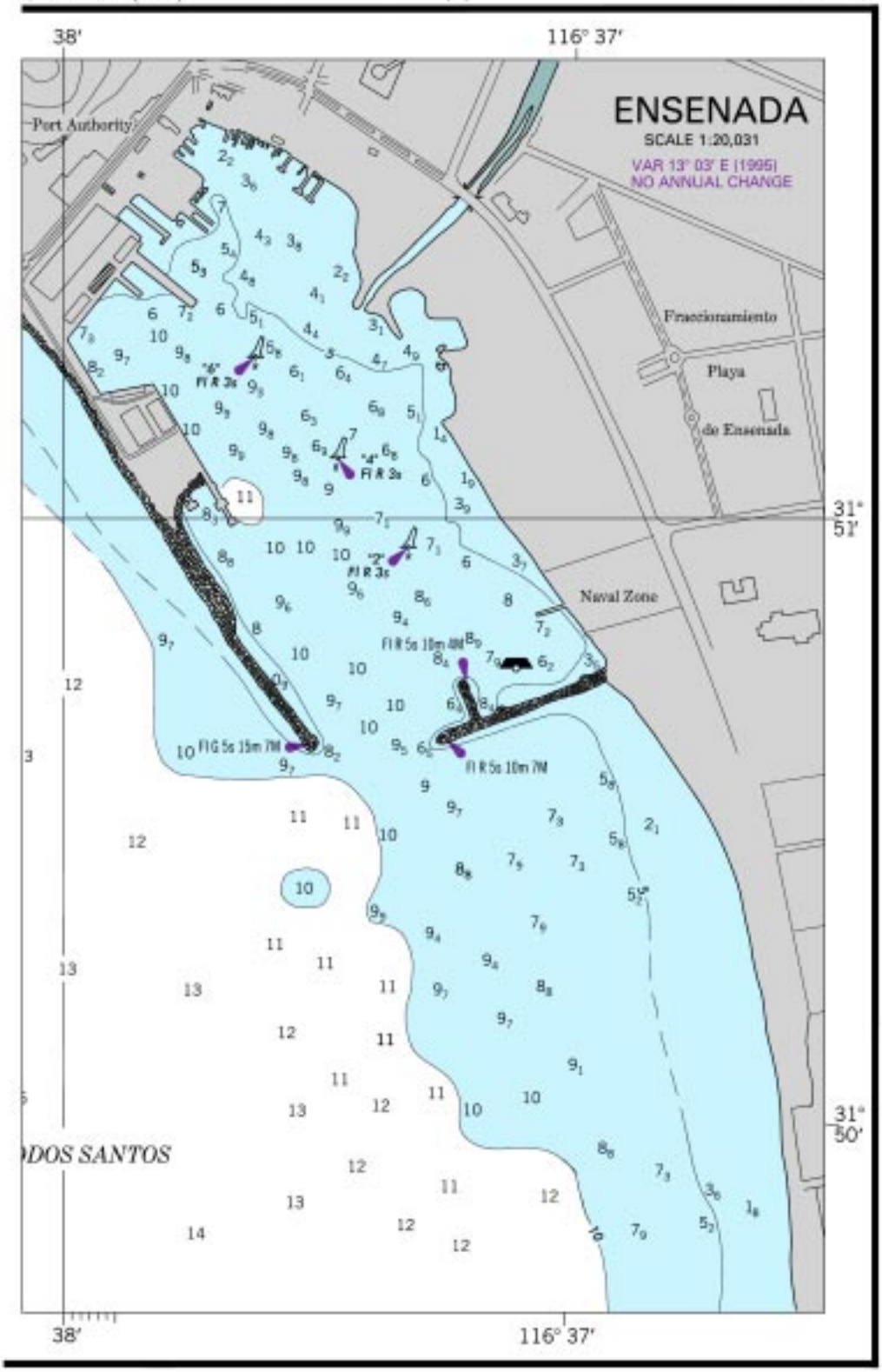


Chart 21021 (Plan) (B) NM 13/03



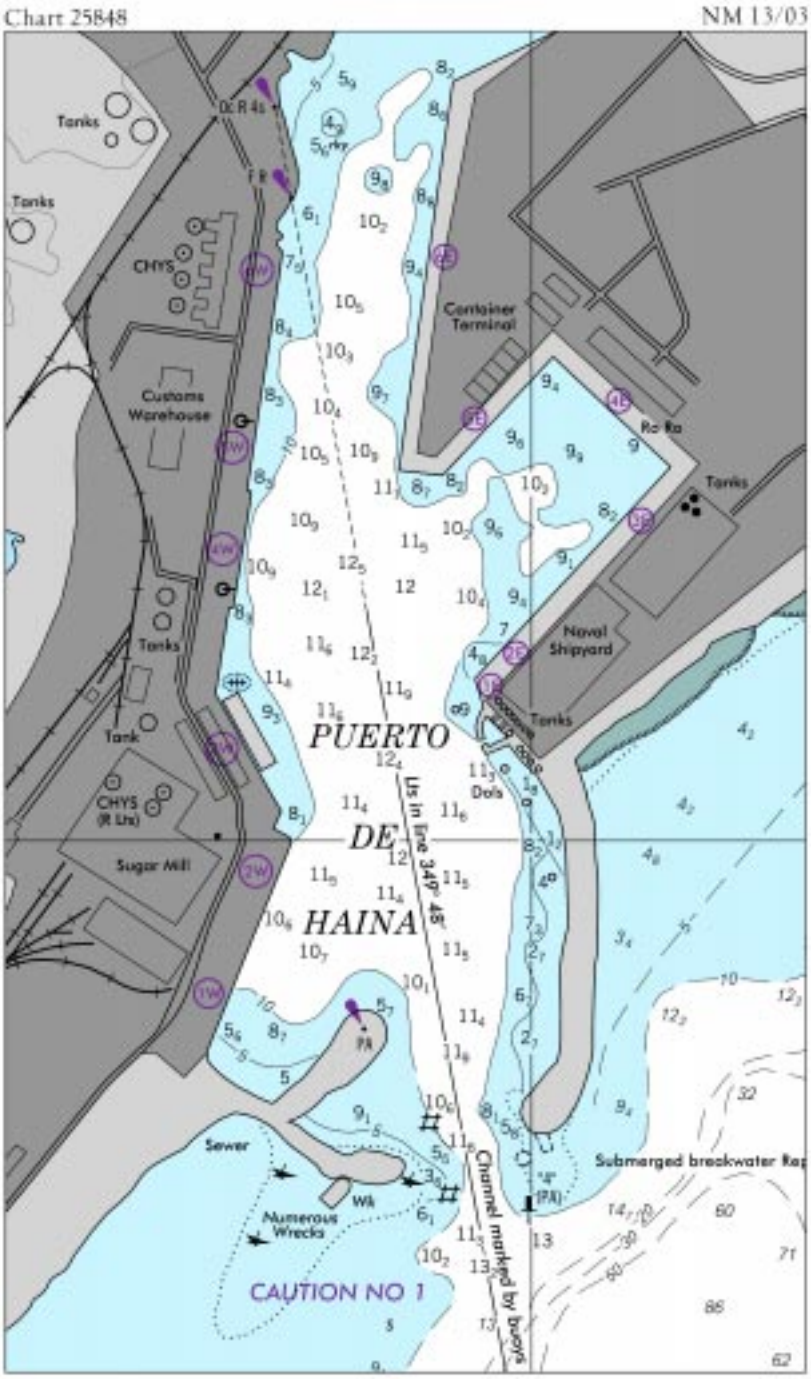


Chart 25848
NM 13/03
Tanks
Tanks
CHYS
Customs Warehouse
Tanks
Tank
CHYS (R Lts)
Sugar Mill
Container Terminal
Ro Ro
Tanks
Naval Shipyard
Tanks
PUERTO
DE
HAINA
Lts in line 349° 48'
Dols
Sewer
Wk
Numerous Wrecks
CAUTION NO 1
Channel marked by buoys
Submerged breakwater Rep

Chart 11475 NM 13/03

FORT PIERCE HARBOR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| FORT PIERCE INLET | | | | | | | |
| ENTRANCE RANGE | 26.5 | 24.5 | 22.6 | 9-02 | 250-400 | 2.4 | 28 |
| INNER RANGE | 19.4 | 24.4 | 22.6 | 9-02 | 250-385 | 1.2 | 28 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11524 NM 13/03

CHARLESTON HARBOR, COOPER RIVER AND SHIPYARD RIVER
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS- REPORT OF NOV 2000 AND SURVEYS TO NOV 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| FORT SUMTER RANGE | 44.9 | 47.5 | 47.4 | 45.6 | 5-02 | 1000 | 9.0 | 47 |
| MOUNT PLEASANT RANGE | 45.7 | 46.6 | 46.9 | 47.7 | 11-02 | 1000-600 | 1.6 | 45 |
| REBELLION REACH | 47.2 | 47.8 | 47.2 | 47.8 | 11-02 | 600 | 1.4 | 45 |
| SHUTES-FOLLY REACH | 46.2 | 47.3 | 47.6 | 47.6 | 10-02 | 600-800 | 1.3 | 45 |
| HORSE REACH | 47.5 | 48.3 | 48.2 | 44.6 | 5,11-02 | 800 | 0.5 | 45 |
| CUSTOMHOUSE REACH | 34.9 | 48.3 | 48.6 | 46.2 | 5,11-02 | 1385 | 0.2 | 45 |
| SOUTH CHANNEL | 24.4 | 24.8 | 24.5 | A24.3 | 10-96 | 600-1000 | 3.1 | 45 |
| HOG ISLAND REACH | 46.7 | 47.3 | 43.2 | 39.2 | 11-02 | 600-1300 | 1.5 | 45 |
| DRUM ISLAND REACH | 44.6 | 47.6 | 48.2 | 44.1 | 1-03 | 600-1300 | 0.7 | 45 |
| TOWN CREEK LOWER REACH | 34.6 | 38.9 | 39.0 | 35.9 | 11-02 | 400-450 | 1.1 | 45 |
| TURNING BASIN | 36.5 | 34.3 | 34.2 | 33.4 | 5-02 | 250 | 0.25 | 35 |
| TOWN CREEK UPPER REACH | 35.2 | 40.2 | 40.9 | 40.5 | 11-01;5-02 | 250 | 1.0 | 16 |
| MYERS BEND | 42.0 | 47.2 | 47.8 | 48.1 | 11-01;1-03 | 600-900 | 0.4 | 45 |
| DANIEL ISLAND REACH | 47.0 | 47.3 | 45.9 | 39.5 | 1-03 | 880-980 | 1.2 | 45 |
| DANIEL ISLAND BEND | 48.0 | 48.4 | 48.8 | 48.0 | 1-03 | 700-780 | 0.4 | 45 |
| CLOUTER CREEK REACH | 40.3 | 42.6 | 42.8 | 40.5 | 1-03 | 600 | 0.9 | 45 |
| NAVY YARD REACH | 39.8 | 42.3 | 40.9 | 36.0 | 1-03 | 600-700 | 1.1 | 45 |
| NORTH CHARLESTON REACH | 36.0 | 42.4 | 42.6 | 43.1 | 1-03 | 500-600 | 1.0 | 45 |
| FILBIN CREEK REACH | 39.8 | 41.3 | 43.2 | 43.5 | 10-02;1-03 | 500 | 0.6 | 45 |
| PORT TERMINAL REACH | 36.7 | 42.6 | 41.8 | 41.4 | 10-02 | 600 | 0.7 | 45 |
| ORDNANCE REACH | 37.8 | 35.8 | 36.3 | 36.9 | 10-02 | 600 | 0.3 | 45 |
| ORDNANCE REACH TURNING BASIN | 44.6 | 43.9 | 43.1 | 43.0 | 10-02 | 800 | 0.26 | 45 |
| WANDO RIVER | | | | | | | | |
| LOWER REACH | 44.3 | 45.6 | 46.2 | 38.4 | 5-02;1-03 | 1500-400 | 1.3 | 45 |
| UPPER REACH | B41.5 | B43.0 | B47.2 | B44.7 | 1-03 | 400-850 | 0.74 | 45 |
| TURNING BASIN | 40.6 | 38.1 | 43.3 | 43.3 | 1-03 | 550 | 0.3 | 45 |
| SHIPYARD CREEK | | | | | | | | |
| MAIN CHANNEL | 26.2 | 27.4 | 29.0 | 27.2 | 8,10-00 | 1200-300 | 1.0 | 30 |
| LOWER TURNING BASIN | 37.9 | 38.9 | 40.0 | 40.8 | 8,10-00 | 700 | 0.2 | 38 |
| UPPER TURNING BASIN | 22.0 | 23.4 | 23.7 | 24.7 | 8,10-00 | 600 | 0.15 | 30 |
| COOPER RIVER | | | | | | | | |
| RANGE A | 38.7 | 37.4 | 38.3 | 38.9 | 7,8-98;12-99 | 400-1350 | 1.02 | 35 |
| RANGE B | 20.5 | 25.2 | 36.4 | 37.0 | 12-99 | VARIES | 0.74 | 35 |
| RANGE C | 20.6 | 26.1 | 38.3 | 36.1 | 7,8-98;12-99;1-00 | VARIES | 0.76 | 35 |
| RANGE D | 30.2 | 37.4 | 37.8 | 37.1 | 2-00 | VARIES | 0.58 | 35 |
| RANGE E | 32.1 | 34.8 | 38.2 | 36.3 | 1-95 | VARIES | 0.38 | 35 |
| RANGE F | 25.0 | 36.6 | 35.2 | 33.9 | 1-95 | VARIES | 0.29 | 35 |

A. ALONG CHANNEL EDGE.
B. FROM BOUY 8 TO END OF REACH SHOALING OCCURS WITH MIN DEPTH OF 31 FT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12222 NM 13/03

NORFOLK HARBOR AND APPROACHES
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| THIMBLE SHOAL CHANNEL (A) | | | | | | | | |
| NORTH ELEMENT (B) | 47.6 | 46.5 | 45.6 | 44.1 | 6,7,9-00 | 350 | 13.0 | 55 |
| SOUTH ELEMENT (C) | 49.7 | 50.0 | 49.7 | 50.3 | 6,7,9-00 | 650 | 13.0 | 55 |
| NORTH AUXILIARY CHANNEL (D) | | | | | | 450 | | 32 |
| SOUTH AUXILIARY CHANNEL (D) | | | | | | 450 | | 32 |
| NORFOLK HARBOR | | | | | | | | |
| ENTRANCE REACH | 50.3 | 51.5 | 52.9 | 52.0 | 4-99 | 1000 | 1.4 | 50 |
| NORFOLK HARBOR REACH | 51.3 | 50.8 | 45.6 | 45.4 | 9,10-02 | 1250-800 | 3.8 | 55 |
| CRANEY ISLAND REACH | 48.8 | 51.5 | 50.8 | 46.1 | 9,10-02 | 800 | 2.1 | 55 |
| LAMBERTS BEND | 38.9 | 45.8 | 40.0 | 37.5 | 3-02 | 750 | 0.3 | 45 |
| PORT NORFOLK REACH | 38.0 | 40.0 | 40.3 | 38.6 | 3-02 | 750 | 2.0 | 45 |
| NEWPORT NEWS CHANNEL | 48.7 | 50.1 | 50.6 | 50.3 | 5,6-02 | 800 | 4.2 | 55 |
| CAPE HENRY CHANNEL | 47.9 | 48.8 | 49.0 | 48.5 | 2,3,6-00 | 1000 | 1.4 | 50 |
| YORK SPIT CHANNEL | 38.5 | 49.5 | 50.1 | 45.9 | 11,12-99;2,3-00 | 1000(E) | 18.4 | 50 |

A. THIS CHANNEL IS RESTRICTED TO EXCLUDE VESSELS AND TOWS DRAWING LESS THAN 25 FEET.
B. PORTION OF PROJECT MAINTAINED TO 45 FEET
C. PORTION OF PROJECT MAINTAINED TO 50 FEET
D. PROJECT MAINTENANCE DISCONTINUED
E. CHANNEL WIDTH MAINTAINED TO 800 FEET
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12245 NM 13/03

NORFOLK HARBOR AND NEWPORT NEWS CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| NORFOLK HARBOR ENTRANCE REACH | 50.3 | 51.5 | 52.9 | 52.0 | 4-99 | 1000 | 1.4 | 50 |
| NORFOLK HARBOR REACH | 51.3 | 50.8 | 45.6 | 45.4 | 9,10-02 | 1250-800 | 3.8 | 55 |
| CRANEY ISLAND REACH | 48.8 | 51.5 | 50.8 | 46.1 | 9,10-02 | 800 | 2.1 | 55 |
| NEWPORT NEWS CHANNEL | 48.7 | 50.1 | 50.6 | 50.3 | 5,6-02 | 800 | 4.2 | 55 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12253 NM 13/03

ELIZABETH RIVER CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| CRANEY ISLAND REACH | 48.8 | 51.5 | 50.8 | 46.1 | 9,10-02 | 800 | 2.1 | 55 |
| LAMBERTS BEND | 38.9 | 45.8 | 40.0 | 37.5 | 3-02 | 750 | 0.3 | 45 |
| PORT NORFOLK REACH | 38.0 | 40.0 | 40.3 | 38.6 | 3-02 | 750 | 2.0 | 45 |
| TOWN POINT REACH | 39.3 | 39.1 | 40.2 | 38.8 | 3-02 | 750 | 0.6 | 45 |
| SOUTHERN BRANCH: | | | | | | | | |
| LOWER REACH | 36.8 | 40.3 | 40.5 | 38.4 | 3-02 | 450-800 | 1.7 | 45 |
| MIDDLE REACH | 38.9 | 40.8 | 40.5 | 38.0 | 3-02 | 375 | 0.9 | 45 |
| UPPER REACH | 33.1 | 34.8 | 35.4 | 31.1 | 3-02 | 250-500 | 2.7 | 35 |
| TURNING BASIN | 34.7 | 35.7 | 35.0 | 33.4 | 3-02 | 600 | 0.1 | 35 |
| THENCE TO A POINT 100 YARDS SOUTH OF LIGHT "30" | 27.1 | 29.8 | 30.5 | 28.8 | 3-02 | 250 | 1.1 | 35 |
| TURNING BASIN AT MAINS CREEK | 28.4 | 30.4 | 29.0 | 28.3 | 3-02 | 800 | 0.2 | 35 |
| THENCE TO A POINT 100 YARDS NORTH OF N & P B L RR BRIDGE | 25.5 | 29.8 | 29.2 | 26.7 | 3-02 | 250 | 0.2 | 35 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12327 NM 13/03

ARTHUR KILL, KILL VAN KULL, NEWARK BAY,
PASSAIC AND HACKENSACK RIVERS CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS-
REPORT OF DEC 2002 AND SURVEYS TO JUL 2002

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

| NAME OF CHANNEL | DEPTH MLLW (FEET) | WIDTH (FEET) | DATE OF SURVEY |
|---|---|---|---|
| ARTHUR KILL (OUTERBRIDGE REACH TO N. OF SHOOTERS I. REACH) | A22.1 | 800-500 | 9-01; 3-02 |
| KILL VAN KULL (CONSTABLE HOOK REACH TO BERGEN PT. WEST REACH) | 36.3 | 2000-800 | 10-01; 4-02 |
| S. OF SHOOTERS I. REACH | B5.0 | 400 | 8-90 |
| NEWARK BAY (NEWARK BAY S. REACH TO DROYERS PT. REACH) | C18.7 | 1750-300 | 12-01 |
| PASSAIC RIVER (KEARNY PT. REACH TO ARLINGTON REACH) | D0.4 | 300-200 | 7-02 |
| HACKENSACK RIVER (DROYERS PT. REACH TO TURNING BASIN) | 14.9 | 300-800 | 12-01 |

A. A DEPTH OF 34.1 FEET WAS AVAILABLE IN THE MIDDLE HALF.
B. OBSTUCTIONS INTERSPERSED IN THE TWO RIGHT QUARTERS. THERE IS A MINIMUM DEPTH OF 5.9 FEET OVER WRECKAGE.
C. A DEPTH OF 21.9 FEET WAS AVAILABLE IN THE MIDDLE HALF, EXCEPT FOR SHOALING TO 8.4 FT AT 40° 42' 11.4" N 74° 06' 56.1" W.
D. A DEPTH OF 4.6 FEET WAS AVAILABLE IN THE MIDDLE HALF.

NOTE 1. SEE LARGE SCALE CHARTS FOR MORE DETAIL OF REACHES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 12327 NM 13/03

NEW YORK HARBOR - LOWER BAY - CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2003
AND SURVEYS TO DEC 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| AMBROSE CHANNEL | 40.3 | 44.7 | 44.9 | 28.4 | 9-95 | 2000 | 9.2 | 45 |
| SANDY HOOK CHANNEL (EAST) | 38.9 | 40.7 | 37.9 | 31.8 | 6,7-02 | A800-2200 | 3.5 | A35 |
| SANDY HOOK CHANNEL | 24.9 | 38.6 | 37.3 | 32.9 | 6,7-02 | 800 | 2.4 | 35 |
| CHAPEL HILL: | | | | | | | | |
| SOUTH CHANNEL | 28.5 | 29.5 | 30.1 | 27.7 | 10-02 | 1000 | 2.7 | 30 |
| NORTH CHANNEL | 28.7 | 29.1 | 29.0 | 27.9 | 10-02 | 1000 | 1.8 | 30 |
| TERMINAL CHANNEL | 44.2 | 45.7 | 46.0 | 44.0 | 2-97 | 400 | 0.8 | 35 |
| KEYPORT HARBOR CHANNEL | 5.0 | 6.7 | 6.5 | 5.8 | 5-02 | 100-200 | 0.9 | 8 |
| RARITAN BAY EAST REACH | 33.3 | 37.2 | 35.5 | 33.1 | 4-01 | 600 | 4.0 | 35 |
| RARITAN BAY WEST REACH | 33.4 | 39.1 | 39.2 | 33.9 | 4,9-01 | 600 | 2.4 | 35 |
| SEGUINE POINT BEND | 28.5 | 35.1 | 38.4 | 29.7 | 9-01 | 600-800 | 1.2 | 35 |
| RED BANK REACH | 34.0 | 40.3 | 40.5 | 34.2 | 9-01 | 600 | 1.2 | 35 |
| WARD POINT BEND (EAST) | 31.5 | 38.7 | 36.9 | 27.6 | 9,12-01 | 600-800 | 1.1 | 35 |
| WARD POINT BEND (WEST) | 35.0 | 35.0 | 35.0 | 33.8 | 9,12-01 | 600-800 | 0.8 | 35 |
| RARITAN RIVER CUT OFF | 16.7 | 19.3 | 19.3 | 11.6 | 3-99 | 600-1100 | 1.0 | 20 |
| WARD POINT SECONDARY CHANNEL | 21.3 | 21.0 | 20.9 | 20.6 | 12-02 | 400 | 0.9 | 30 |
| GREAT BEDS REACH | 24.6 | 25.7 | 25.3 | 25.2 | 6-01 | 300 | 0.6 | 25 |
| SOUTH AMBOY REACH | 24.4 | 23.1 | 22.8 | 23.6 | 6-01 | 300 | 1.2 | 25 |

A. THE NAVAL FACILITIES ENGINEERING COMMAND MAINTAINS A 45 FOOT PROJECT FOR A WIDTH OF 600 FEET IN SANDY HOOK (EAST) TO THE TURNING BASIN.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12331 NM 13/03

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2003 AND SURVEYS TO DEC 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| RARITAN BAY WEST REACH | 33.4 | 39.1 | 39.2 | 33.9 | 4,9-01 | 600 | 2.4 | 35 |
| SEGUINE POINT BEND | 28.5 | 35.1 | 38.4 | 29.7 | 9-01 | 600-800 | 1.2 | 35 |
| RED BANK REACH | 34.0 | 40.3 | 40.5 | 34.2 | 9-01 | 600 | 1.2 | 35 |
| WARD POINT BEND (EAST) | 31.5 | 38.7 | 36.9 | 27.6 | 9,12-01 | 600-800 | 1.1 | 35 |
| WARD POINT BEND (WEST) | 35.0 | 35.0 | 35.0 | 33.8 | 9,12-01 | 600-800 | 0.8 | 35 |
| OUTERBRIDGE REACH | 34.4 | 34.7 | 35.9 | 35.9 | 9-01; 3-02 | 600-800 | 0.8 | 35 |
| PORT SOCONY REACH | 31.9 | 35.0 | 35.6 | 33.4 | 3-02 | 600-800 | 0.8 | 35 |
| PORT READING REACH | 22.1 | 35.0 | 35.2 | 27.7 | 3-02 | 500 | 1.8 | 35 |
| FRESH KILLS REACH | 29.0 | 35.2 | 36.5 | 33.9 | 3-02 | 500 | 1.8 | 35 |
| RARITAN RIVER CUTOFF | 16.7 | 19.3 | 19.3 | 11.6 | 3-99 | 600-1100 | 1.0 | 20 |
| WARD POINT SECONDARY CHANNEL | 21.3 | 21.0 | 20.9 | 20.6 | 12-02 | 400 | 0.9 | 30 |
| GREAT BEDS REACH | 24.6 | 25.7 | 25.3 | 25.2 | 6-01 | 300 | 0.6 | 25 |
| SOUTH AMBOY REACH | 24.4 | 23.1 | 22.8 | 23.6 | 6-01 | 300 | 1.2 | 25 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12332 NM 13/03

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2003 AND SURVEYS TO DEC 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| WARD POINT BEND (EAST) | 31.5 | 38.7 | 36.9 | 27.6 | 9,12-01 | 600-800 | 1.1 | 35 |
| WARD POINT BEND (WEST) | 35.0 | 35.0 | 35.0 | 33.8 | 9,12-01 | 600-800 | 1.3 | 35 |
| OUTERBRIDGE REACH | 34.4 | 34.7 | 35.9 | 35.9 | 9-01; 3-02 | 600 | 1.6 | 35 |
| RARITAN RIVER CUTOFF | 16.7 | 19.3 | 19.3 | 11.6 | 3-99 | 600-1100 | 1.0 | 20 |
| WARD POINT SECONDARY CHANNEL | 21.3 | 21.0 | 20.9 | 20.6 | 12-02 | 400 | 0.9 | 30 |
| GREAT BEDS REACH | 24.6 | 25.7 | 25.3 | 25.2 | 6-01 | 300 | 0.6 | 25 |
| SOUTH AMBOY REACH | 24.4 | 23.1 | 22.8 | 23.6 | 6-01 | 300 | 1.2 | 25 |
| SANDY POINT REACH | 22.2 | 22.0 | 18.6 | 23.8 | 6-01 | 300 | 0.9 | 25 |
| KEASBEY REACH | 16.3 | 19.8 | 23.2 | 20.7 | 6-01 | 300 | 0.9 | 25 |
| RED ROOT REACH | 13.5 | 16.7 | 17.6 | 14.6 | 6-01 | 300 | 1.5 | 25 |
| CRAB ISLAND REACH | A15.0 | A14.5 | A14.5 | 12.5 | 9-88 | 200 | 1.2 | 15 |
| NORTHWEST REACH | 6.0 | 7.5 | 7.5 | 12.2 | 7-62 | 200 | 1.2 | 15 |
| TITANIUM REACH | 4.1 | 4.0 | 1.9 | 1.6 | 6-01 | 300 | 0.6 | 25 |
| SOUTH CHANNEL | C2.0 | D4.2 | B4.2 | B2.1 | 7-62;3,4-90 | 150 | 0.7 | 15-10 |

A. SHOALS LOCATED APPROXIMATELY 40°29'01.0"N, 74°21'16.0"W TO 400 YARDS SOUTH; A DEPTH OF 13 FEET FOR A WIDTH OF 200 FEET WAS AVAILABLE TO THE WEST OF THE PROJECT CHANNEL.
B. POSSIBLE 6 FT OBSTRUCTION LOCATED IN 40°29'34.4"N, 74°19'03.0"W.
C. POSSIBLE 6 FT OBSTRUCTION LOCATED IN 40°29'35.4"N, 74°19'04.5"W.
D. POSSIBLE 4 FT OBSTRUCTION LOCATED IN 40°29'37.4"N, 74°19'04.0"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12337 NM 13/03

NEWARK BAY, PASSAIC AND HACKENSACK RIVERS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF DEC 2002 AND SURVEYS TO JUL 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| NEWARK BAY MIDDLE REACH | 35.0 | 39.4 | 36.0 | 31.4 | 12-01 | 1750-500 | 1.4 | 40 |
| NEWARK BAY NORTH REACH | 33.3 | 33.7 | 21.9 | A18.7 | 12-01 | 900-500 | 1.1 | 35 |
| TURNING BASIN | 23.8 | 24.9 | 21.9 | A18.7 | 12-01 | 900 | 0.26 | 35 |
| PASSAIC RIVER: | | | | | | | | |
| KEARNY PT REACH | 15.7 | 18.2 | 17.2 | 13.4 | 7-02 | 300 | 1.1 | 30 |
| POINT NO POINT REACH | 2.1 | 7.2 | 14.6 | 9.0 | 7-02 | 300 | 1.1 | 30 |
| HARRISON REACH | B2.9 | 4.6 | 5.5 | 1.2 | 7-02 | 300 | 1.9 | 20 |
| NEWARK REACH | 0.7 | 9.5 | 11.0 | C0.7 | 7-02 | 300 | 1.3 | 20 |
| KEARNY REACH | 3.4 | 8.3 | 7.9 | D0.4 | 7-02 | 300 | 0.9 | 20 |
| ARLINGTON REACH | 2.7 | 10.9 | 9.7 | E3.1 | 7-02 | 200 | 0.9 | 16 |
| BELLEVILLE REACH | 0.1 | 0.4 | 8.0 | 9.9 | 6-92 H | 150 | 1.4 | 10 |
| NUTLEY REACH | 2.6 | 9.2 | 7.4 | 3.5 | 11-89 H | 150 | 1.7 | 10 |
| RUTHERFORD REACH | 1.7 | 5.1 | 3.8 | 3.7 | 11-89 H | 150 | 2.2 | 10 |
| WALLINGTON REACH | F2.2 | 1.5 | 1.9 | G1.1 | 11-89 H | 150 | 0.9 | 10 |
| HACKENSACK RIVER: | | | | | | | | |
| DROYERS POINT REACH | 25.4 | 28.7 | 25.5 | 18.9 | 12-01 | 300-400 | 1.5 | 30 |
| MARION REACH | 28.7 | 29.3 | 25.9 | 22.1 | 12-01 | 300 | 1.8 | 30 |
| TURNING BASIN | 14.9 | 23.5 | 28.4 | 23.4 | 12-01 | 300-800 | 0.2 | 25 |
| PORT NEWARK CHANNEL: | | | | | | | | |
| BRANCH CHANNEL | 33.0 | 35.7 | 33.5 | 33.2 | 1,2-01 | 1050-400 | 0.4 | 40 |
| INSHORE CHANNEL | 36.3 | 34.6 | 30.1 | 28.7 | 1,2-01 | 400 | 1.1 | 35 |
| PIERHEAD CHANNEL | 33.8 | 35.6 | 35.0 | 33.4 | 1,2-01 | 300 | 0.7 | 40 |

A. EXCEPT FOR A SHOAL TO 7.7 FT AT 40° 42' 11.4" N 74° 06' 56.1" W ALONG THE RIGHT OUTSIDE QUARTER OF THE REACH.
B. EXCEPT FOR SHOALS, BARE AT M.L.L.W., FROM 40° 44' 26" N 74° 08' 18" W TO 40° 44' 23" N 74° 08' 26" W
C. EXCEPT FOR SHOALS, BARE AT M.L.L.W., FROM 40° 44' 03" N 74° 09' 24" W TO 40° 44' 04" N 74° 09' 31" W AND 40° 44' 07" N 74° 09' 36" W TO 40° 44' 09" N 74° 09' 39" W
D. EXCEPT FOR A SHOAL TO BARE FROM 40° 45' 06.0" N 74° 09' 52.0" W TO 40° 45' 12.0" N 74° 09' 51.0 W AND 40° 45' 38" N 74° 09' 43" W TO 40° 45' 31" N 74° 09' 47" W
E. EXCEPT FOR A SHOAL TO BARE FROM 40° 45' 56" N 74° 09' 27" W TO 40° 45' 59" N 74° 09' 25"W
F. A SHOAL BARE AT M.L.L.W. EXTENDS ACROSS THE LEFT OUTSIDE QUARTER ABOUT 370 YARDS DOWNSTREAM OF THE EIGHTH STREET BRIDGE.
G. A SHOAL BARE AT M.L.L.W. EXTENDS ACROSS THE RIGHT OUTSIDE QUARTER ABOUT 300 YARDS NORTH OF THE MAIN ST. BRIDGE AND SHOALING TO 0.3 FEET 175 FEET WEST OF THE SECOND ST. BRIDGE.
H. THE CORPS OF ENGINEERS HAS CONFIRMED THAT THIS REACH IS NOT ACTIVELY MAINTAINED.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12371 NM 13/03

NEW HAVEN HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JULY 2001 AND SURVEYS TO OCT 2000

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| ENTRANCE CHANNEL | 35.9 | 35.6 | 35.7 | 35.0 | 10-00 | 500 | 1.1 | 35 |
| LIGHTHOUSE POINT REACH | 32.8 | 34.4 | 34.1 | 31.4 | 10-00 | 400-500 | 2.9 | 35 |
| NEW HAVEN REACH | 29.3 | 30.7 | 29.6 | 29.7 | 10-00 | 800-500 | 1.0 | 35 |
| EAST HAVEN REACH | 13.2 | 16.6 | 15.0 | 17.0 | 1,6-83 | 500-100 | 0.1 | 22 |
| QUINNIPIAC RIVER | | | | | | | | |
| FERRY ST. BRIDGE REACH | A14.7 | 16.0 | 16.4 | 13.8 | 12-93 | 200 | 0.6 | B 18 |
| GRAND AVE. BRIDGE REACH | 11.5 | 12.7 | 12.8 | 11.8 | 12-93 | C 200 | 0.5 | 22-16 |
| MILL RIVER | | | | | | | | |
| ENTRANCE CHANNEL | 8.1 | D 6.5 | E 9.9 | 7.1 | 10-00 | 200 | 0.3 | 12 |
| EAST FORK | F 6.2 | F 6.1 | G 6.1 | H 7.9 | 10-00 | 100 | 0.2 | 12 |
| WEST FORK | 2.6 | 5.3 | 4.9 | 4.9 | 10-00 | 125 | 0.3 | 12 |

A. EXCEPT SHOALING TO 12.7 FEET ON NORTH LIMITS OF CHANNEL.
B. THE MAINTAINED DEPTH IS 16 FEET.
C. THE PROJECT WIDTH IS 200-400 FEET AND THE MAINTAINED WIDTH IS 200 FEET.
D. EXCEPT SHOALING TO 5.5 FEET WITHIN 25 FEET OF CHAPEL ST. BRIDGE FENDER.
E. EXCEPT SHOALING TO 9.2 FEET WITHIN 10 FEET OF CHAPEL ST. BRIDGE FENDER.
F. EXCEPT SHOALING TO 2.2 FEET IN LAST 430 FEET OF REACH.
G. EXCEPT SHOALING TO 0.6 FEET IN LAST 430 FEET OF REACH.
H. EXCEPT SHOALING TO 0.5 FEET IN LAST 430 FEET OF REACH.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12378 (Left Panel) NM 13/03

CONNECTICUT RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2002 AND SURVEYS TO JAN 2003

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| MOUSE ISLAND BAR CHANNEL | 16.2 | 13.9 | 12.4 | 1-03 | 150 | 0.7 | 15 |
| PORTLAND BAR CHANNEL | 11.9 | 11.7 | 13.0 | 1-03 | 150 | 0.3 | 15 |
| CROMWELL BAR CHANNEL | 14.2 | 13.5 | 12.5 | 1-03 | 150 | 0.6 | 15 |
| GILDERSLEEVE ISLAND SHOAL CHANNEL | 14.0 | 13.9 | 15.1 | 1-03 | 150 | 0.9 | 15 |
| PISTOL POINT BAR CHANNEL | 8.1 | 9.1 | 8.1 | 9-02,1-03 | 150 | 0.9 | 15 |
| BROWNSTONE BAR CHANNEL | 15.0 | 13.7 | 13.1 | 9-89 | 150 | 0.9 | 15 |
| DIVIDEND BAR CHANNEL | 7.7 | 7.8 | 8.1 | 7-98 | 150 | 0.6 | 15 |
| GLASTONBURY-TWO PIERS BAR CHANNEL | 11.6 | 12.1 | 12.6 | 4-86 | 150 | 1.2 | 15 |
| GLASTONBURY UPPER BAR CHANNEL | 12.3 | 12.2 | 12.0 | 4-86 | 150 | 0.9 | 15 |
| PRESS BARN BAR CHANNEL | 14.1 | 13.2 | 12.6 | 9-89 | 150 | 0.1 | 15 |
| NAUBUC BAR CHANNEL | 15.0 | 15.0 | 13.6 | 11-82 | 150 | 0.5 | 15 |
| CYS HOLLOW BAR CHANNEL | 15.0 | 15.0 | 13.9 | 9-89 | 150 | 0.5 | 15 |
| WETHERSFIELD SHOAL CHANNEL | 11.8 | 12.2 | 12.8 | 9-89 | 150 | 0.4 | 15 |
| CLAY BANKS BAR CHANNEL | 12.3 | 12.9 | 12.9 | 1,2,3-91 | 150 | 1.6 | 15 |
| HARTFORD BAR CHANNEL | 9.7 | 10.2 | 13.5 | 10-89 | 150 | 0.4 | 15 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12401 NM 13/03

NEW YORK HARBOR-LOWER BAY-CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF DEC 2002 AND SURVEYS TO OCT 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| AMBROSE CHANNEL | 40.3 | 44.7 | 44.9 | 28.4 | 9-95 | 2000 | 9.2 | 45 |
| SANDY HOOK CHANNEL (EAST) | 38.9 | 40.7 | 37.9 | 31.8 | 6,7-02 | A800-2200 | 3.5 | A35 |
| SANDY HOOK CHANNEL | 24.9 | 38.6 | 37.3 | 32.9 | 6,7-02 | 800 | 2.4 | 35 |
| CHAPEL HILL: | | | | | | | | |
| SOUTH CHANNEL | 28.5 | 29.5 | 30.1 | 27.7 | 10-02 | 1000 | 2.7 | 30 |
| TERMINAL CHANNEL | 44.2 | 45.7 | 46.0 | 44.0 | 2-97 | 400 | 0.8 | 35 |
| RARITAN BAY EAST REACH | 33.3 | 37.2 | 35.5 | 33.1 | 4-01 | 600 | 4.0 | 35 |
| RARITAN BAY WEST REACH | 33.4 | 39.1 | 39.2 | 33.9 | 4,9-01 | 600 | 2.4 | 35 |

A. THE NAVAL FACILITIES ENGINEERING COMMAND MAINTAINS A 45 FOOT PROJECT FOR A WIDTH OF 600 FEET IN SANDY HOOK (EAST) TO THE TURNING BASIN.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12402 NM 13/03

NEW YORK HARBOR-LOWER BAY-CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF DEC 2002 AND SURVEYS TO OCT 2002

| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) | | | | | | PROJECT DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|
| NAME OF CHANNEL | LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
| AMBROSE CHANNEL | 40.3 | 44.7 | 44.9 | 28.4 | 9-95 | 2000 | 9.2 | 45 |
| CHAPEL HILL: | | | | | | | | |
| SOUTH CHANNEL | 28.5 | 29.5 | 30.1 | 27.7 | 10-02 | 1000 | 2.7 | 30 |
| NORTH CHANNEL | 28.7 | 29.1 | 29.0 | 27.9 | 10-02 | 1000 | 1.8 | 30 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION