



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-26  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_11 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.4 FT** **Location:** Outside  
**Flooding Type:** Surge  
**Mark Address:** 3276 Harness Creek. (middle white house down the gravel driveway)  
**Description of Mark:** 26" above ground

**Type of Line:** Mud line

**Description of Physical Structure:** wood house

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/26/2003

**Surveyors:** Cumberledge, Booth **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9375 **Easting:** 1,451,724

**Longitude:** -76.5153 **Northing:** 460,464

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 220 FT

**Comments:**

Middle white house down the driveway off of Harness Creek Drive, just before entering Wimbledon Farms Subdivision. Looks like asbestos exterior siding



DSCN0030.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-27  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_12 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.7 FT** **Location:** on wood fence  
**Flooding Type:** Surge  
**Mark Address:** 400 Ferry Point Road  
**Description of Mark:** 36" above ground

**Type of Line:** Mud line

**Description of Physical Structure:** wood fence

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/26/2003

**Surveyors:** Cumberledge, Booth **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9459 **Easting:** 1,446,016

**Longitude:** -76.5320 **Northing:** 464,076

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 30 FT

**Comments:**

Red flag tied on little tree in front of mark for easy spotting.  
 House is on the end of Ferry Point Road



DSCN0032.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-28  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_13 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.2 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** Liberty Yacht Club on South River (downstream of Route 2 bridge)  
**Description of Mark:** 26.5" above asphalt pavement

**Type of Line:** Mud line

**Description of Physical Structure:** metal building

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/26/2003

**Surveyors:** Cumberledge, Booth **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9531 **Easting:** 1,440,310

**Longitude:** -76.5523 **Northing:** 467,689

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 160 FT

**Comments:**

Marina office / shop is the big blue and white building



DSCN0034.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-29  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_14 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.4 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** Oak Grove Marina (upstream of Route 2 bridge)  
**Description of Mark:** 16" above ground

**Type of Line:** Mud line

**Description of Physical Structure:** metal cooler

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/26/2003

**Surveyors:** Cumberledge, Booth **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9551 **Easting:** 1,440,310

**Longitude:** -76.5540 **Northing:** 467,689

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 30 FT

**Comments:**

Staff gave a picture of the Marina taken after the storm on 9/18/03.



DSCN0036.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-30  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_15 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.1 FT** **Location:** on tree  
**Flooding Type:** Surge  
**Mark Address:** 1512 Londontown Ct.  
**Description of Mark:** 21" from bottom of tree

**Type of Line:** Mud line

**Description of Physical Structure:** tree

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** DB CC **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/31/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9392 **Easting:** 1,443,190

**Longitude:** -76.5426 **Northing:** 460,419

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 200 FT

**Comments:**

Gazebo and tree is in the back yard between house #1510 and 1512. House #1512 is for sale. House #1510 is approx. 200' from the edge of the water.



DSCN0038.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-31  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_16 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **6.5 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** Selby Bay Yacht Basin off of Selby Drive  
**Description of Mark:** 46" above ground

**Type of Line:** Mud line

**Description of Physical Structure:** wood shed

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** DB CC **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.9082 **Easting:** 1,451,783

**Longitude:** -76.5139 **Northing:** 449,538

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 140 FT

**Comments:**

Shed is in the back yard, right off the entrance



DSCN0039.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-32  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_17 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** South River **Quality of Mark:** Good  
**Flood Elevation:** **5 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** 3689 1st Ave. (on repetitive loss list)  
**Description of Mark:** 30.5 " from concrete floor

**Type of Line:** Mud line  
**Description of Physical Structure:** wood house  
**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS  
**Flagging Date:** 9/28/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.  
**Survey Date:** 10/31/2003 **Survey Type:** N/A  
**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83  
**Latitude:** 38.9086 **Easting:** 1,451,783  
**Longitude:** -76.5143 **Northing:** 449,538

**Approx. First Floor Elevation (Based on Measurement from Mark):** 2.5 FT

**Approx. Distance to Shoreline:** 190 FT

**Comments:**

Owner was not home - left business card. Mud line may have been affected by weather or cleanup action, resulting in lower than average elevation.



DSCN0043.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-33  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_18 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Rhode River **Quality of Mark:** Good  
**Flood Elevation:** **6.9 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** 107 Elliott Court  
**Description of Mark:** 7.5" above wood deck floor

**Type of Line:** Mud line

**Description of Physical Structure:** wood house

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

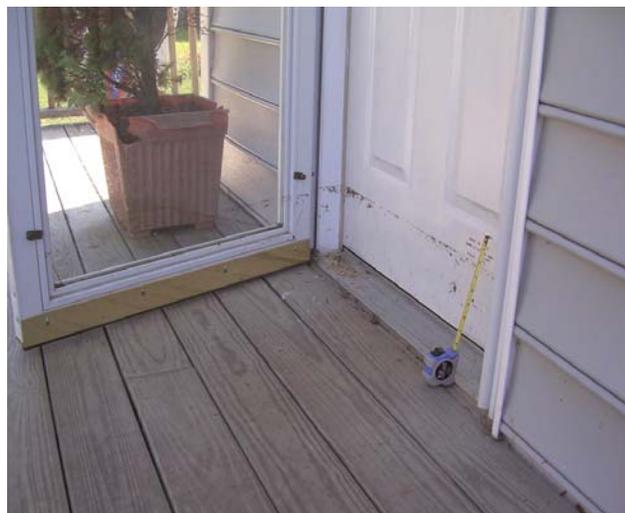
**Latitude:** 38.8738 **Easting:** 1,454,689

**Longitude:** -76.5077 **Northing:** 438,627

**Approx. First Floor Elevation (Based on Measurement from Mark):** 6.3 FT

**Approx. Distance to Shoreline:** 400 FT

**Comments:**



DSCN0044.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-34  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_19 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** West River **Quality of Mark:** Good  
**Flood Elevation:** **7.03 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** Pirates Cove Restaurant , 4817 Riverside Drive  
**Description of Mark:** 35.2 above ground

**Type of Line:** Mud line

**Description of Physical Structure:** stucco building

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.8434 **Easting:** 1,446,204

**Longitude:** -76.5389 **Northing:** 427,656

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 260 FT

**Comments:**

HWM in side dining room is about 4' above floor.



DSCN0045.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-35  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_20 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Chesapeake Bay **Quality of Mark:** Good  
**Flood Elevation:** **5.9 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** 5190 Lake Ave (on the repetitive loss list)  
**Description of Mark:** 18" above ground

**Type of Line:** Mud line

**Description of Physical Structure:** concrete house

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/31/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.8325 **Easting:** 1,454,768

**Longitude:** -76.5029 **Northing:** 424,060

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 1000 FT

**Comments:**

Masonry rambler, gray color, at the corner of Lake Ave and Spruce Ave.



DSCN0047.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-36  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_21 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Rockhold Creek **Quality of Mark:** Fair  
**Flood Elevation:** **6.7 FT** **Location:** outside  
**Flooding Type:** Surge  
**Mark Address:** 611 Deale Road (downstream of Deale Road Bridge)  
**Description of Mark:** 3" down from the edge of back brick patio

**Type of Line:** Personal account

**Description of Physical Structure:** brick patio

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/7/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.7821 **Easting:** 1,440,615

**Longitude:** -76.5586 **Northing:** 405,776

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 10 FT

**Comments:**

2 story brick, wood, and siding house just downstream of Deale Bridge. According to witness, HWM is approximately 7' above normal water elevation.



DSCN0049.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project

**COMM. NO.** 240008

**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-37

**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_22 **Mark Type:** Coastal

**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003

**Flooding Source:** Rockhold Creek **Quality of Mark:** Good

**Flood Elevation:** **5.4 FT** **Location:** on grass

**Flooding Type:** Surge

**Mark Address:** 5977 Rockhold Creek Drive (upstream of Deale Road Bridge)

**Description of Mark:** 2' from edge of ramp

**Type of Line:** Debris line

**Description of Physical Structure:** N/A

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/31/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.7832 **Easting:** 1,440,615

**Longitude:** -76.5592 **Northing:** 405,776

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 50 FT

**Comments:**

House is the 2nd house, NW of bridge



DSCN0050.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-38  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT6\_23 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Chesapeake Bay **Quality of Mark:** Good  
**Flood Elevation:** **3.9 FT** **Location:** on grass  
**Flooding Type:** Surge  
**Mark Address:** 6603 Eleanore Ave (within Owings Cliffs / Fairhaven Subdivision)  
**Description of Mark:** 2' east of buoy (toward water)

**Type of Line:** Debris line

**Description of Physical Structure:** N/A

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Mai **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** SW FP **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/31/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 38.7462 **Easting:** 1,440,687

**Longitude:** -76.5576 **Northing:** 391,209

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 40 FT

**Comments:**

Beach is widened after storm. Debris line may have been affected by weather or cleanup action, resulting in lower than average elevation.



DSCN0052.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-39  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_11 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Chesapeake Bay **Quality of Mark:** Poor  
**Flood Elevation:** **6.81 FT** **Location:** Debris line  
**Flooding Type:** Surge  
**Mark Address:** 1000 Kembo Road  
**Description of Mark:** debris line on Kembo Road

**Type of Line:** Debris line

**Description of Physical Structure:** N/A

**Closest City:** Curtis Bay **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Pavlis, Ireton **Company/Agency:** URS

**Survey Date:** 9/30/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1914 **Easting:** 1,445,547

**Longitude:** -76.5349 **Northing:** 555,127

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 230 FT

**Comments:**



Balt11-28.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-40  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_12 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Stony Creek **Quality of Mark:** Fair  
**Flood Elevation:** **7.16 FT** **Location:** Embankment  
**Flooding Type:** Surge  
**Mark Address:** 1210 Beach Promenade, Baltimore, MD 21226  
**Description of Mark:** backyard on embankment, right side of steps if facing water

**Type of Line:** Debris line/personal account

**Description of Physical Structure:** N/A

**Closest City:** Orchard Beach **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Pavlis, Ireton **Company/Agency:** URS

**Survey Date:** 9/29/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1705 **Easting:** 1,448,420

**Longitude:** -76.5227 **Northing:** 547,858

**Approx. First Floor Elevation (Based on Measurement from Mark):** 7.16 FT

**Approx. Distance to Shoreline:** 10 FT

**Comments:**



Balt12-32.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-41  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_13 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Rock Creek **Quality of Mark:** Poor  
**Flood Elevation:** **6.88 FT** **Location:** Personal account  
**Flooding Type:** Surge  
**Mark Address:** 7812 June Drive  
**Description of Mark:** 1 foot off tree between tree and water

**Type of Line:**

**Description of Physical Structure:** N/A

**Closest City:** Pasadena **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Pavlis, Ireton **Company/Agency:** URS

**Survey Date:** 9/29/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1414 **Easting:** 1,451,314

**Longitude:** -76.5197 **Northing:** 536,946

**Approx. First Floor Elevation (Based on Measurement from Mark):** 6.88 FT

**Approx. Distance to Shoreline:** 160 FT

**Comments:**



Balt13-34.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-42  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_14 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Chesapeake Bay **Quality of Mark:** Good  
**Flood Elevation:** **6.42 FT** **Location:** Inside wall transferred outside  
**Flooding Type:** Surge  
**Mark Address:** Fort Smallwood Park at intersection of East Drive and Bay Front Drive  
**Description of Mark:** Outside storage building, transferred from inside

**Type of Line:** Mud line

**Description of Physical Structure:** N/A

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Pavlis, Ireton **Company/Agency:** URS

**Survey Date:** 9/30/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1654 **Easting:** 1,462,617

**Longitude:** -76.4779 **Northing:** 544,294

**Approx. First Floor Elevation (Based on Measurement from Mark):** 4.67 FT

**Approx. Distance to Shoreline:** 100 FT

**Comments:**



Balt14-37B.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-43  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_15 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Chesapeake Bay **Quality of Mark:** Good  
**Flood Elevation:** **6.71 FT** **Location:** Inside wall transferred outside  
**Flooding Type:** Surge  
**Mark Address:** 7804 Harbor Road  
**Description of Mark:** Back of house right side of basement door frame

**Type of Line:** Mud line

**Description of Physical Structure:** wood house on concrete foundation

**Closest City:** Bay Side Beach **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Blackwell, Chrimer **Company/Agency:** URS

**Survey Date:** 10/4/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1372 **Easting:** 1,471,190

**Longitude:** -76.4417 **Northing:** 533,418

**Approx. First Floor Elevation (Based on Measurement from Mark):** 6.29 FT

**Approx. Distance to Shoreline:** 380 FT

**Comments:**



Balt15-40.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project

**COMM. NO.** 240008

**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-44

**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_16 **Mark Type:** Coastal

**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003

**Flooding Source:** Sillery Bay **Quality of Mark:** Poor

**Flood Elevation:** **7.85 FT** **Location:** Outside building wall

**Flooding Type:** Surge

**Mark Address:** See below

**Description of Mark:** To the left of the main door to the house, adjacent to frame

**Type of Line:** Mud line/personal account

**Description of Physical Structure:** brick house

**Closest City:** Gibson **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Blackwell, Chrimer **Company/Agency:** URS

**Survey Date:** 10/4/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.0955 **Easting:** 1,471,279

**Longitude:** -76.4448 **Northing:** 518,850

**Approx. First Floor Elevation (Based on Measurement from Mark):** 5.68 FT

**Approx. Distance to Shoreline:** 50 FT

**Comments:**



Balt16-42.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-45  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_17 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Magothy River **Quality of Mark:** Poor  
**Flood Elevation:** **5.76 FT** **Location:** Debris line on Eagle Hill Road  
**Flooding Type:** Surge  
**Mark Address:** 381 Eagle Hill Road  
**Description of Mark:** Debris line, with nail and flag for visual

**Type of Line:** Debris line

**Description of Physical Structure:** N/A

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Blackwell, Chrismer **Company/Agency:** URS

**Survey Date:** 10/4/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.0810 **Easting:** 1,457,108

**Longitude:** -76.4917 **Northing:** 515,125

**Approx. First Floor Elevation (Based on Measurement from Mark):** N/A

**Approx. Distance to Shoreline:** 90 FT

**Comments:**



Balt17-45.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-46  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_18 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Magothy River **Quality of Mark:** Poor  
**Flood Elevation:** **6.89 FT** **Location:** Debris line on Beach Road  
**Flooding Type:** Surge  
**Mark Address:** 14 Beach Road  
**Description of Mark:** Adjacent to stairs that led to dock, right side facing bay

**Type of Line:** Debris line/personal account  
**Description of Physical Structure:** N/A  
**Closest City:** Severna Park **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS  
**Flagging Date:** 9/27/2003

**Surveyors:** Pavlis, Ireton **Company/Agency:** URS  
**Survey Date:** 9/28/2003 **Survey Type:** N/A  
**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83  
**Latitude:** 39.0758 **Easting:** 1,448,611  
**Longitude:** -76.5214 **Northing:** 511,437

**Approx. First Floor Elevation (Based on Measurement from Mark):** 6.56 FT  
**Approx. Distance to Shoreline:** 10 FT

**Comments:**



Balt18-49.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-47  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT8\_19 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Magothy River **Quality of Mark:** Good  
**Flood Elevation:** **6.47 FT** **Location:** Inside wall transferred  
**Flooding Type:** Surge  
**Mark Address:** 998 Forest Drive  
**Description of Mark:** Adjacent to window

**Type of Line:** Mud line

**Description of Physical Structure:** wood house

**Closest City:** Severna Park **County:** Anne Arundel **State:** Maryland

**Flaggers:** Fike **Company/Agency:** URS

**Flagging Date:** 9/27/2003

**Surveyors:** Blackwell, Chrimer **Company/Agency:** URS

**Survey Date:** 10/4/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.0595 **Easting:** 1,468,529

**Longitude:** -76.4592 **Northing:** 504,265

**Approx. First Floor Elevation (Based on Measurement from Mark):** 5.8 FT

**Approx. Distance to Shoreline:** 70 FT

**Comments:**



Balt19-50.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-48  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT9\_10 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Patapsco River **Quality of Mark:** Fair  
**Flood Elevation:** **7.5 FT** **Location:** black fence post  
**Flooding Type:** Surge  
**Mark Address:** corner of Shenandoah Ave and Gibbons Ave (Wastewater Pumping Station)  
**Description of Mark:** 26.25" from blacktop pad on front left black metal fencepost.

**Type of Line:** Mud/debris line

**Description of Physical Structure:** metal fence post

**Closest City:** **County:** Anne Arundel **State:** Maryland

**Flaggers:** Ryan Carroll **Company/Agency:** Dewberry

**Flagging Date:** 10/7/2003

**Surveyors:** Thigpen, Walker **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/15/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.2211 **Easting:** 1,417,160

**Longitude:** -76.6394 **Northing:** 565,923

**Approx. First Floor Elevation (Based on Measurement from Mark):** 5.3 FT

**Approx. Distance to Shoreline:** 1000 FT

**Comments:**

Public Works Phone# 410-222-8400.



DSCN0090.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*



**PROJECT** FEMA-1492-DR-MD High Water Mark Survey Project  
**COMM. NO.** 240008  
**TYPE** High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** A-49  
**CONTENTS** Individual Historical High Water Mark Survey Report

**Historical Mark:** UNIT9\_11 **Mark Type:** Coastal  
**Flood Event:** Hurricane Isabel **Date of Flood:** 09/19/2003  
**Flooding Source:** Patapsco River **Quality of Mark:** Fair  
**Flood Elevation:** **7.5 FT** **Location:** outside wall  
**Flooding Type:** Surge  
**Mark Address:** 3 Arundel Place  
**Description of Mark:** 26.25" above top of porch deck

**Type of Line:** Debris line

**Description of Physical Structure:** wood deck post

**Closest City:** Glen Burnie **County:** Anne Arundel **State:** Maryland

**Flaggers:** Ryan Carroll **Company/Agency:** Dewberry

**Flagging Date:** 10/7/2003

**Surveyors:** Thigpen, Walker **Company/Agency:** Greenhome & O'Mara, Inc.

**Survey Date:** 10/15/2003 **Survey Type:** N/A

**Projection:** Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

**Latitude:** 39.1550 **Easting:** 1,428,607

**Longitude:** -76.5979 **Northing:** 540,477

**Approx. First Floor Elevation (Based on Measurement from Mark):** 5.3 FT

**Approx. Distance to Shoreline:** 320 FT

**Comments:**

residence sustained extensive flood damage. Family was not home at time of flagging.



DSCN0091.jpg

*Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.*