

1 National Geodetic Survey, Retrieval Date = July 24, 2007
 JV6288 *****

JV6288 DESIGNATION - COOL BRANCH P0430

JV6288 PID - JV6288
 JV6288 STATE/COUNTY- MD/HARFORD
 JV6288 USGS QUAD - BEL AIR (1986)

JV6288 *CURRENT SURVEY CONTROL

JV6288* NAD 83(1991)- 39 34 59.17429(N) 076 15 30.49998(W) ADJUSTED
 JV6288* NAVD 88 - 98.798 (meters) 324.14 (feet) ADJUSTED

JV6288 X - 1,169,273.901 (meters) COMP
 JV6288 Y - -4,781,490.325 (meters) COMP
 JV6288 Z - 4,042,460.831 (meters) COMP
 JV6288 LAPLACE CORR- -2.82 (seconds) DEFLEC99
 JV6288 ELLIP HEIGHT- 65.962 (meters) (09/18/02) GPS OBS
 JV6288 GEOID HEIGHT- -32.82 (meters) GEOID03
 JV6288 DYNAMIC HT - 98.749 (meters) 323.98 (feet) COMP
 JV6288 MODELED GRAV- 980,129.0 (mgal) NAVD 88

JV6288 HORZ ORDER - FIRST
 JV6288 VERT ORDER - FIRST CLASS II
 JV6288 ELLP ORDER - FOURTH CLASS II

JV6288.The horizontal coordinates were established by GPS observations
 JV6288.and adjusted by the National Geodetic Survey in January 1992.

JV6288.The orthometric height was determined by differential leveling
 JV6288.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6288.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 JV6288

JV6288.The Laplace correction was computed from DEFLEC99 derived deflections.
 JV6288

JV6288.The ellipsoidal height was determined by GPS observations
 JV6288.and is referenced to NAD 83.

JV6288.The geoid height was determined by GEOID03.
 JV6288

JV6288.The dynamic height is computed by dividing the NAVD 88
 JV6288.geopotential number by the normal gravity value computed on the
 JV6288.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JV6288.degrees latitude (g = 980.6199 gals.).

JV6288.The modeled gravity was interpolated from observed gravity values.
 JV6288

	North	East	Units	Scale	Factor	Converg.
JV6288; SPC MD	- 213,000.500	463,706.273	MT	1.00002600	+0 27 55.5	
JV6288; SPC MD	- 698,819.14	1,521,343.00	sFT	1.00002600	+0 27 55.5	
JV6288; UTM 18	- 4,382,243.864	391,925.116	MT	0.99974380	-0 48 07.1	

JV6288!
 JV6288! SPC MD - Elev Factor x Scale Factor = Combined Factor
 JV6288! UTM 18 - 0.99998965 x 1.00002600 = 1.00001565
 JV6288! UTM 18 - 0.99998965 x 0.99974380 = 0.99973345

JV6288

JV6288: Primary Azimuth Mark Grid Az
 JV6288:SPC MD - COOL BRANCH AZ MK 176 32 34.7
 JV6288:UTM 18 - COOL BRANCH AZ MK 177 48 37.3

PID	Reference Object	Distance	Geod. Az dddmmss.s
JV6323	COOL BRANCH AZ MK	APPROX. 0.7 KM	1770030.2

JV6288
 JV6288 SUPERSEDED SURVEY CONTROL
 JV6288
 JV6288 ELLIP H (01/27/92) 65.953 (m) GP() 4 1
 JV6288 NAD 83(1986)- 39 34 59.16714(N) 076 15 30.50657(W) AD() 1
 JV6288 NGVD 29 (06/18/91) 99.04 (m) 324.9 (f) LEVELING 3
 JV6288

JV6288.Superseded values are not recommended for survey control.
 JV6288.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JV6288.[See file dsdata.txt](#) to determine how the superseded data were derived.
 JV6288

JV6288_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ9192582244(NAD 83)
 JV6288_MARKER: DD = SURVEY DISK
 JV6288_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 JV6288_SP_SET: CONCRETE POST
 JV6288_STAMPING: 43 COOL BRANCH 1989
 JV6288_MARK LOGO: MD-025

JV6288_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
 JV6288_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 JV6288+STABILITY: SURFACE MOTION
 JV6288_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 JV6288+SATELLITE: SATELLITE OBSERVATIONS - 1989

HISTORY	Date	Condition	Report By
JV6288 HISTORY	- 1989	MONUMENTED	RDA

JV6288 STATION DESCRIPTION
 JV6288

JV6288'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989
 JV6288'THE STATION IS LOCATED IN EASTERN HARFORD COUNTY, MARYLAND ABOUT 1.5
 JV6288'MILES NORTH OF THE VILLAGE OF CHURCHVILLE. TO REACH THE STATION FROM
 JV6288'THE INTERSECTION OF STATE HIGHWAY 22 AND STATE HIGHWAY 136 PROCEED
 JV6288'NORTH ALONG HIGHWAY 136 1.75 MILES TO THE STATION ON THE RIGHT. THE
 JV6288'STATION IS A STANDARD HARFORD COUNTY STATION DISC SET IN CONCRETE
 JV6288'ABOUT 1 INCH BELOW GROUND STAMPED 43 COOL BRANCH 1989. THE STATION
 JV6288'IS 30.5 FEET SOUTHEAST OF THE CENTERLINE OF HIGHWAY 136, 52.9 FEET
 JV6288'SOUTHWEST OF C AND P OF MARYLAND TELEPHONE POLE NUMBER 51, 9.1 FEET
 JV6288'NORTHWEST OF WHITE BOARD FENCE.

**RINKER-DETWILER INFORMATION FROM HARFORD COUNTY SURVEY CONTROL BOOK
 NAD 83/86 COORDINATES - NGVD29 ELEVATIONS**

LATITUDE	039 34 59.16719	NORTH(sf)	698818.418
LONGITUDE	076 15 30.50592	EAST(sf)	1521342.538
GRID AZ.	176 32 35.3	ELEV. LEVEL OBS.	324.93 ft

1 National Geodetic Survey, Retrieval Date = July 24, 2007

JV6323 *****

JV6323 DESIGNATION - COOL BRANCH AZ MK

P0431

JV6323 PID - JV6323

JV6323 STATE/COUNTY- MD/HARFORD

JV6323 USGS QUAD - BEL AIR (1986)

JV6323

JV6323 *CURRENT SURVEY CONTROL

JV6323

JV6323* NAD 83(1991)- 39 34 34.99830(N) 076 15 28.86731(W) ADJUSTED

JV6323* NAVD 88 - 90.576 (meters) 297.16 (feet) ADJUSTED

JV6323

JV6323 X - 1,169,423.095 (meters) COMP

JV6323 Y - -4,781,936.380 (meters) COMP

JV6323 Z - 4,041,880.917 (meters) COMP

JV6323 LAPLACE CORR- -2.80 (seconds) DEFLEC99

JV6323 ELLIP HEIGHT- 57.735 (meters) (09/18/02) GPS OBS

JV6323 GEOID HEIGHT- -32.83 (meters) GEOID03

JV6323 DYNAMIC HT - 90.531 (meters) 297.02 (feet) COMP

JV6323 MODELED GRAV- 980,128.3 (mgal) NAVD 88

JV6323

JV6323 HORZ ORDER - FIRST

JV6323 VERT ORDER - FIRST CLASS II

JV6323 ELLP ORDER - FOURTH CLASS II

JV6323

JV6323.The horizontal coordinates were established by GPS observations

JV6323.and adjusted by the National Geodetic Survey in January 1992.

JV6323

JV6323.The orthometric height was determined by differential leveling

JV6323.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6323

JV6323.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JV6323

JV6323.The Laplace correction was computed from DEFLEC99 derived deflections.

JV6323

JV6323.The ellipsoidal height was determined by GPS observations

JV6323.and is referenced to NAD 83.

JV6323

JV6323.The geoid height was determined by GEOID03.

JV6323

JV6323.The dynamic height is computed by dividing the NAVD 88

JV6323.geopotential number by the normal gravity value computed on the

JV6323.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JV6323.degrees latitude (g = 980.6199 gals.).

JV6323

JV6323.The modeled gravity was interpolated from observed gravity values.

JV6323

JV6323; North East Units Scale Factor Converg.

JV6323;SPC MD - 212,255.218 463,751.295 MT 1.00002455 +0 27 56.5

JV6323;SPC MD - 696,373.99 1,521,490.71 sFT 1.00002455 +0 27 56.5

JV6323;UTM 18 - 4,381,497.978 391,953.635 MT 0.99974373 -0 48 05.6

JV6323

JV6323! - Elev Factor x Scale Factor = Combined Factor

JV6323!SPC MD - 0.99999094 x 1.00002455 = 1.00001549

JV6323!UTM 18 - 0.99999094 x 0.99974373 = 0.99973467

JV6323

JV6323: Primary Azimuth Mark Grid Az
 JV6323:SPC MD - COOL BRANCH 356 32 34.7
 JV6323:UTM 18 - COOL BRANCH 357 48 36.8

JV6323

JV6323	PID	Reference Object	Distance	Geod. Az
JV6323				dddmmss.s
JV6323	JV6288	COOL BRANCH	APPROX. 0.7 KM	3570031.2

JV6323

JV6323 SUPERSEDED SURVEY CONTROL

JV6323

JV6323 ELLIP H (01/27/92) 57.725 (m) GP() 4 1
 JV6323 NAD 83(1986)- 39 34 34.99116(N) 076 15 28.87389(W) AD() 1
 JV6323 NGVD 29 (06/18/91) 90.82 (m) 298.0 (f) LEVELING 3

JV6323

JV6323.Superseded values are not recommended for survey control.
 JV6323.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JV6323.[See file dsdata.txt](#) to determine how the superseded data were derived.

JV6323

JV6323_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ9195481498(NAD 83)

JV6323_MARKER: DZ = AZIMUTH MARK DISK

JV6323_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

JV6323_SP_SET: CONCRETE POST

JV6323_STAMPING: 43 COOL BRANCH 1989

JV6323_MARK LOGO: MD-025

JV6323_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET

JV6323_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

JV6323+STABILITY: SURFACE MOTION

JV6323_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JV6323+SATELLITE: SATELLITE OBSERVATIONS - January 05, 1990

JV6323

JV6323 HISTORY - Date Condition Report By

JV6323 HISTORY - 1989 MONUMENTED RDA

JV6323 HISTORY - 19900105 GOOD

JV6323

JV6323 STATION DESCRIPTION

JV6323

JV6323'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989

JV6323'THE STATION IS LOCATED IN EASTERN HARFORD COUNTY, MARYLAND ABOUT 1.5

JV6323'MILES NORTH OF THE VILLAGE OF CHURCHVILLE. TO REACH THE STATION FROM

JV6323'THE INTERSECTION OF STATE HIGHWAY 22 AND STATE HIGHWAY 136 PROCEED

JV6323'NORTH ALONG HIGHWAY 136 1.75 MILES TO THE STATION ON THE RIGHT. TO

JV6323'REACH THE AZIMUTH MARK FROM THE STATION PROCEED SOUTH ALONG HIGHWAY

JV6323'136 0.45 MILES TO THE MARK ON THE RIGHT. THE MARK IS A STANDARD

JV6323'HARFORD COUNTY AZIMUTH DISC SET IN CONCRETE ABOUT 1 INCH BELOW GROUND

JV6323'STAMPED 43 COOL BRANCH 1989. THE MARK IS 31.4 FEET NORTHEAST OF THE

JV6323'SOUTHWEST CORNER OF A SPLIT RAIL FENCE, 19.3 FEET SOUTHWEST OF C AND

JV6323'P OF MARYLAND TELEPHONE POLE NUMBER 36, 34.5 NORTHWEST OF THE

JV6323'CENTERLINE OF HIGHWAY 136.

JV6323

JV6323

STATION RECOVERY (1990)

JV6323

JV6323 'RECOVERED 1990

JV6323 'RECOVERED IN GOOD CONDITION.

**RINKER-DETWILER INFORMATION FROM HARFORD COUNTY SURVEY CONTROL BOOK
NAD 83/86 COORDINATES - NGVD29 ELEVATIONS**

LATITUDE 039 34 34.99111

NORTH(sf) 696373.262

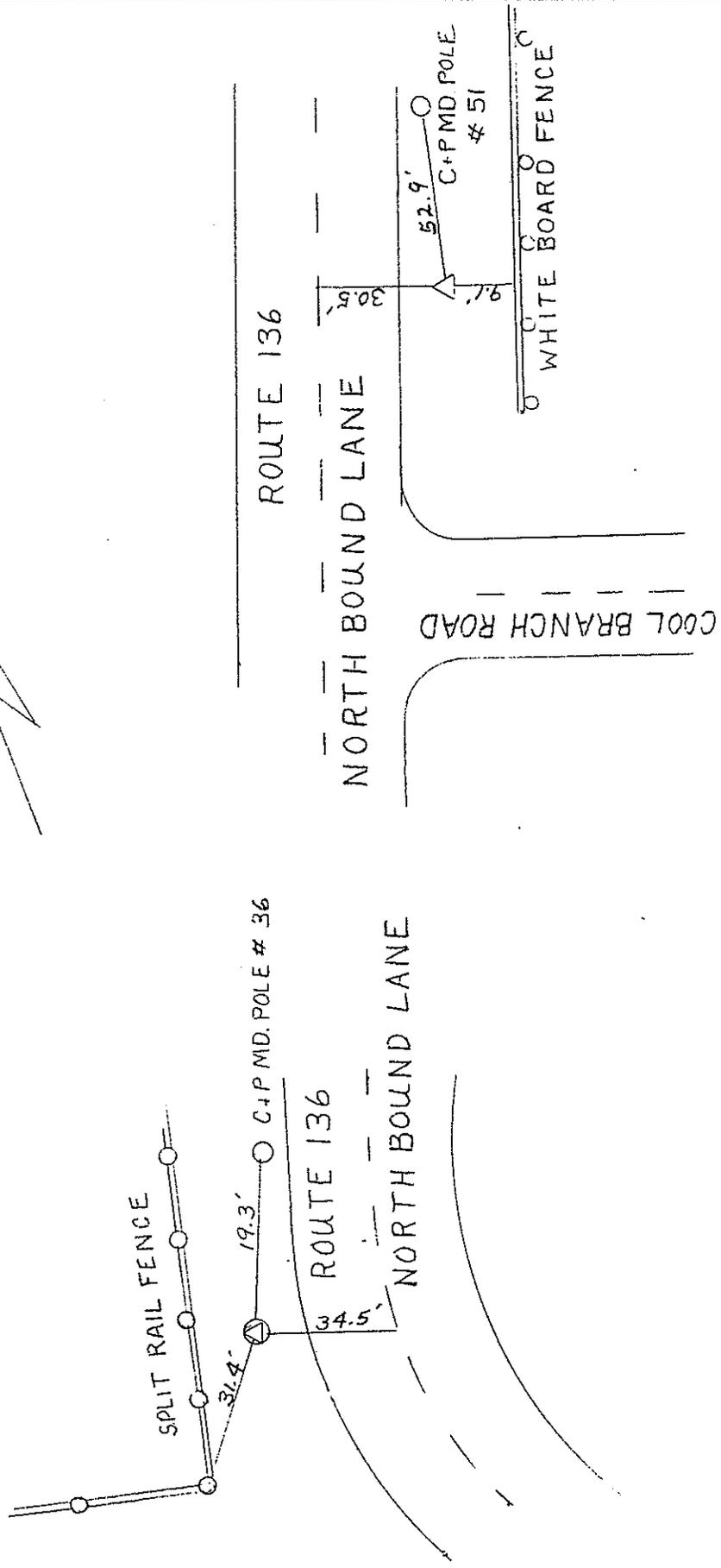
LONGITUDE 076 15 28.87333

EAST(sf) 1521490.242

GRID AZ. 356 32 35.3

ELEV. LEVEL OBS. 297.95 ft

43 COOL BRANCH 1989



RINKER-DETWILER & ASSOCIATES, P.C.

Engineering • Surveying • Land Planning
Global Positioning System • Mapping