

1 National Geodetic Survey, Retrieval Date = July 25, 2007  
 JV6293 \*\*\*\*\*

JV6293 DESIGNATION - CROSSROADS P0610

JV6293 PID - JV6293  
 JV6293 STATE/COUNTY- MD/HARFORD  
 JV6293 USGS QUAD - JARRETTSVILLE (1974)

JV6293  
 JV6293 \*CURRENT SURVEY CONTROL

JV6293\* NAD 83(1991)- 39 32 36.42254(N) 076 28 23.94802(W) ADJUSTED  
 JV6293\* NAVD 88 - 177.665 (meters) 582.89 (feet) ADJUSTED

JV6293 X - 1,152,006.336 (meters) COMP  
 JV6293 Y - -4,788,626.919 (meters) COMP  
 JV6293 Z - 4,039,117.157 (meters) COMP  
 JV6293 LAPLACE CORR- -2.65 (seconds) DEFLEC99  
 JV6293 ELLIP HEIGHT- 145.101 (meters) (09/18/02) GPS OBS  
 JV6293 GEOID HEIGHT- -32.56 (meters) GEOID03  
 JV6293 DYNAMIC HT - 177.573 (meters) 582.59 (feet) COMP  
 JV6293 MODELED GRAV- 980,104.1 (mgal) NAVD 88

JV6293 HORZ ORDER - FIRST  
 JV6293 VERT ORDER - FIRST CLASS II  
 JV6293 ELLP ORDER - FOURTH CLASS II

JV6293.The horizontal coordinates were established by GPS observations  
 JV6293.and adjusted by the National Geodetic Survey in January 1992.  
 JV6293  
 JV6293.The orthometric height was determined by differential leveling  
 JV6293.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.  
 JV6293  
 JV6293.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 JV6293  
 JV6293.The Laplace correction was computed from DEFLEC99 derived deflections.  
 JV6293  
 JV6293.The ellipsoidal height was determined by GPS observations  
 JV6293.and is referenced to NAD 83.  
 JV6293  
 JV6293.The geoid height was determined by GEOID03.  
 JV6293  
 JV6293.The dynamic height is computed by dividing the NAVD 88  
 JV6293.geopotential number by the normal gravity value computed on the  
 JV6293.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 JV6293.degrees latitude (g = 980.6199 gals.).

JV6293  
 JV6293.The modeled gravity was interpolated from observed gravity values.

JV6293  
 JV6293;  

	North	East	Units	Scale	Factor	Converg.
JV6293;SPC MD	- 208,469.712	445,273.972	MT	1.00001768	+0 19 50.0	
JV6293;SPC MD	- 683,954.38	1,460,869.69	sFT	1.00001768	+0 19 50.0	
JV6293;UTM 18	- 4,378,123.129	373,401.731	MT	0.99979733	-0 56 17.3	

JV6293!  
 JV6293!SPC MD - Elev Factor x Scale Factor = Combined Factor  
 JV6293!UTM 18 - 0.99997724 x 1.00001768 = 0.99999492  
 JV6293!UTM 18 - 0.99997724 x 0.99979733 = 0.99977457

JV6293

JV6293 SUPERSEDED SURVEY CONTROL  
JV6293  
JV6293 ELLIP H (01/27/92) 145.097 (m) GP( ) 4 1  
JV6293 NAD 83(1986)- 39 32 36.41586(N) 076 28 23.95540(W) AD( ) 1  
JV6293 NGVD 29 (06/18/91) 177.90 (m) 583.7 (f) LEVELING 3  
JV6293

JV6293.Superseded values are not recommended for survey control.  
JV6293.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
JV6293.[See file dsdata.txt](#) to determine how the superseded data were derived.

JV6293  
JV6293\_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ7340278123(NAD 83)  
JV6293\_MARKER: DD = SURVEY DISK  
JV6293\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
JV6293\_SP\_SET: CONCRETE POST  
JV6293\_STAMPING: 61 CROSSROADS 1989  
JV6293\_MARK LOGO: MD-025  
JV6293\_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET  
JV6293\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
JV6293+STABILITY: SURFACE MOTION  
JV6293\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
JV6293+SATELLITE: SATELLITE OBSERVATIONS - July 21, 2005

JV6293  
JV6293 HISTORY - Date Condition Report By  
JV6293 HISTORY - 1989 MONUMENTED RDA  
JV6293 HISTORY - 19931209 GOOD GEOMET  
JV6293 HISTORY - 19990608 GOOD GEOMET  
JV6293 HISTORY - 20010103 GOOD MDSHA  
JV6293 HISTORY - 20010217 GOOD USPSQD  
JV6293 HISTORY - 20030321 GOOD DMW  
JV6293 HISTORY - 20050721 GOOD DEWDV

JV6293  
JV6293 STATION DESCRIPTION  
JV6293  
JV6293'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989  
JV6293'THE STATION IS LOCATED IN WESTERN HARFORD COUNTY, MARYLAND ABOUT 7  
JV6293'MILES WEST OF THE VILLAGE OF BEL AIR. TO REACH THE STATION FROM THE  
JV6293'INTERSECTION OF FEDERAL HIGHWAY 1 AND STATE HIGHWAY 152 PROCEED  
JV6293'NORTHWEST ALONG HIGHWAY 152 5.75 MILES TO THE INTERSECTION OF STATE  
JV6293'HIGHWAY 152 AND STATE HIGHWAY 165 AND THE STATION ON THE LEFT IN THE  
JV6293'SOUTHEAST CORNER OF THE INTERSECTION IN FRONT OF A COMMERCIAL BANK.  
JV6293'THE STATION IS A STANDARD HARFORD COUNTY STATION DISC SET IN CONCRETE  
JV6293'ABOUT 1 INCH BELOW GROUND STAMPED 61 CROSSROADS 1989. THE STATION IS  
JV6293'5.9 FEET NORTHWEST OF POWER POLE, 123.2 FEET SOUTHEAST OF THE  
JV6293'CENTERLINE OF HIGHWAY 165, 123.5 FEET SOUTHWEST OF THE CENTERLINE OF  
JV6293'HIGHWAY 152.

JV6293  
JV6293 STATION RECOVERY (1993)

JV6293  
JV6293'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1993  
JV6293'RECOVERED IN GOOD CONDITION.

JV6293  
JV6293 STATION RECOVERY (1999)

JV6293  
JV6293'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1999 (BB)  
JV6293'RECOVERED AS DESCRIBED.

JV6293  
JV6293 STATION RECOVERY (2001)

JV6293  
JV6293'RECOVERY NOTE BY MARYLAND DOT HIGHWAY ADMINISTRATION 2001 (SFK)  
JV6293'RECOVERED AS DESCRIBED.  
JV6293  
JV6293 STATION RECOVERY (2001)  
JV6293  
JV6293'RECOVERY NOTE BY US POWER SQUADRON 2001 (RG)  
JV6293'RECOVERED IN GOOD CONDITION.  
JV6293  
JV6293 STATION RECOVERY (2003)  
JV6293  
JV6293'RECOVERY NOTE BY DAFT MCCUNE WALKER INCORPORATED 2003 (JMB)  
JV6293'RECOVERED IN GOOD CONDITION.  
JV6293  
JV6293 STATION RECOVERY (2005)  
JV6293  
JV6293'RECOVERY NOTE BY DEWBERRY DAVIS 2005 (WM)  
JV6293'RECOVERED IN GOOD CONDITION.

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

LATITUDE	039 32 36.41596	NORTH(sf)	683953.710
LONGITUDE	076 28 23.95615	EAST(sf)	1460869.058
GRID AZ.	309 14 40.8	ELEV. LEVEL OBS.	583.66 ft

1 National Geodetic Survey, Retrieval Date = July 25, 2007  
 JV6327 \*\*\*\*\*

JV6327 DESIGNATION - CROSSROADS AZ MK P0611

JV6327 PID - JV6327  
 JV6327 STATE/COUNTY- MD/HARFORD  
 JV6327 USGS QUAD - JARRETTSVILLE (1974)

JV6327  
 JV6327 \*CURRENT SURVEY CONTROL

JV6327\* NAD 83(1991)- 39 33 11.70715(N) 076 29 19.09926(W) ADJUSTED  
 JV6327\* NAVD 88 - 174.121 (meters) 571.26 (feet) ADJUSTED

JV6327 X - 1,150,563.386 (meters) COMP  
 JV6327 Y - -4,788,258.410 (meters) COMP  
 JV6327 Z - 4,039,954.030 (meters) COMP  
 JV6327 LAPLACE CORR- -2.64 (seconds) DEFLEC99  
 JV6327 ELLIP HEIGHT- 141.583 (meters) (09/18/02) GPS OBS  
 JV6327 GEOID HEIGHT- -32.53 (meters) GEOID03  
 JV6327 DYNAMIC HT - 174.030 (meters) 570.96 (feet) COMP  
 JV6327 MODELED GRAV- 980,103.7 (mgal) NAVD 88

JV6327 HORZ ORDER - FIRST  
 JV6327 VERT ORDER - FIRST CLASS II  
 JV6327 ELLP ORDER - FOURTH CLASS II

JV6327.The horizontal coordinates were established by GPS observations  
 JV6327.and adjusted by the National Geodetic Survey in January 1992.

JV6327  
 JV6327.The orthometric height was determined by differential leveling  
 JV6327.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6327  
 JV6327.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 JV6327

JV6327.The Laplace correction was computed from DEFLEC99 derived deflections.  
 JV6327

JV6327.The ellipsoidal height was determined by GPS observations  
 JV6327.and is referenced to NAD 83.

JV6327  
 JV6327.The geoid height was determined by GEOID03.  
 JV6327

JV6327.The dynamic height is computed by dividing the NAVD 88  
 JV6327.geopotential number by the normal gravity value computed on the  
 JV6327.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 JV6327.degrees latitude (g = 980.6199 gals.).

JV6327  
 JV6327.The modeled gravity was interpolated from observed gravity values.  
 JV6327

JV6327;		North	East	Units	Scale	Factor	Converg.
JV6327;SPC MD	-	209,550.424	443,950.988	MT	1.00001969	+0	19 15.4
JV6327;SPC MD	-	687,500.02	1,456,529.20	sFT	1.00001969	+0	19 15.4
JV6327;UTM 18	-	4,379,232.630	372,103.287	MT	0.99980139	-0	56 53.1

JV6327!  
 JV6327!SPC MD - Elev Factor x Scale Factor = Combined Factor  
 JV6327!UTM 18 - 0.99997779 x 1.00001969 = 0.99999748  
 JV6327!UTM 18 - 0.99997779 x 0.99980139 = 0.99977918  
 JV6327

JV6327 SUPERSEDED SURVEY CONTROL  
 JV6327  
 JV6327 ELLIP H (01/27/92) 141.573 (m) GP( ) 4 1  
 JV6327 NAD 83(1986)- 39 33 11.70045(N) 076 29 19.10660(W) AD( ) 1  
 JV6327 NGVD 29 (06/18/91) 174.36 (m) 572.0 (f) LEVELING 3  
 JV6327

JV6327.Superseded values are not recommended for survey control.  
 JV6327.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 JV6327.[See file dsdata.txt](#) to determine how the superseded data were derived.  
 JV6327

JV6327\_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ7210379233(NAD 83)  
 JV6327\_MARKER: DZ = AZIMUTH MARK DISK  
 JV6327\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 JV6327\_SP\_SET: CONCRETE POST  
 JV6327\_STAMPING: 61 CROSSROADS 1989  
 JV6327\_MARK LOGO: MD-025  
 JV6327\_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET  
 JV6327\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 JV6327+STABILITY: SURFACE MOTION  
 JV6327\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 JV6327+SATELLITE: SATELLITE OBSERVATIONS - March 21, 2003

JV6327  
 JV6327 HISTORY - Date Condition Report By  
 JV6327 HISTORY - 1989 MONUMENTED RDA  
 JV6327 HISTORY - 19991226 GOOD USPSQD  
 JV6327 HISTORY - 20030321 GOOD DMW

JV6327  
 JV6327 STATION DESCRIPTION  
 JV6327  
 JV6327'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989  
 JV6327'THE STATION IS LOCATED IN WESTERN HARFORD COUNTY, MARYLAND ABOUT 7  
 JV6327'MILES WEST OF THE VILLAGE OF BEL AIR. TO REACH THE STATION FROM THE  
 JV6327'INTERSECTION OF FEDERAL HIGHWAY 1 AND STATE HIGHWAY 152 PROCEED  
 JV6327'NORTHWEST ALONG HIGHWAY 152 5.75 MILES TO THE INTERSECTION OF STATE  
 JV6327'HIGHWAY 152 AND STATE HIGHWAY 165 AND THE STATION ON THE LEFT IN THE  
 JV6327'SOUTHEAST CORNER OF THE INTERSECTION IN FRONT OF A COMMERCIAL BANK.  
 JV6327'TO REACH THE AZIMUTH MARK FROM THE STATION PROCEED NORTHWEST ALONG  
 JV6327'HIGHWAY 152 1.0 MILES TO THE MARK ON THE LEFT. THE MARK IS A  
 JV6327'STANDARD HARFORD COUNTY AZIMUTH DISC SET IN CONCRETE ABOUT 1 INCH  
 JV6327'BELOW GROUND STAMPED 61 CROSSROADS 1989. THE MARK IS 107.1 FEET  
 JV6327'SOUTHEAST OF C AND P OF MARYLAND TELEPHONE POLE NUMBER 23, 85.2 FEET  
 JV6327'SOUTHWEST OF THE CENTERLINE OF HIGHWAY 152, 88.6 FEET NORTHWEST OF C  
 JV6327'AND P OF MARYLAND TELEPHONE POLE NUMBER 22.

JV6327  
 JV6327 STATION RECOVERY (1999)  
 JV6327

JV6327'RECOVERY NOTE BY US POWER SQUADRON 1999  
 JV6327'RECOVERED IN GOOD CONDITION.

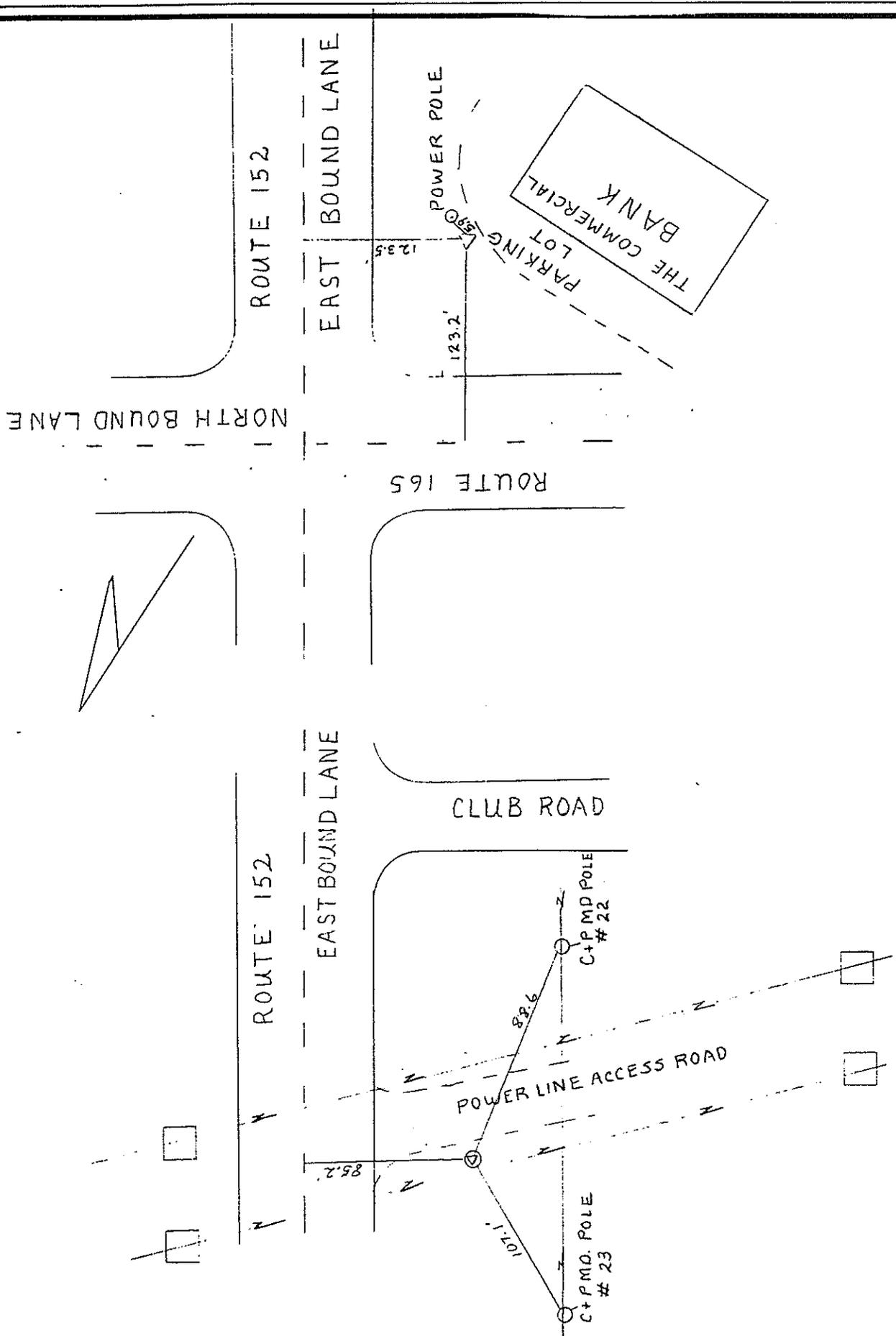
JV6327  
 JV6327 STATION RECOVERY (2003)  
 JV6327

JV6327'RECOVERY NOTE BY DAFT MCCUNE WALKER INCORPORATED 2003 (JMB)  
 JV6327'RECOVERED IN GOOD CONDITION.

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

LATITUDE	039 33 11.70040	NORTH(sf)	687499.331
LONGITUDE	076 29 19.10682	EAST(sf)	1456528.611
GRID AZ.	129 14 40.8	ELEV. LEVEL OBS.	572.04 ft

61 CROSSROADS 1989



RINKER-DETWILER & ASSOCIATES, P.C.

Engineering • Surveying • Land Planning  
Global Positioning System • Mapping

