

1 National Geodetic Survey, Retrieval Date = August 1, 2007
 JV6268 *****

P1130

JV6268 DESIGNATION - NORRIS
 JV6268 PID - JV6268
 JV6268 STATE/COUNTY- MD/HARFORD
 JV6268 USGS QUAD - NORRISVILLE (1984)
 JV6268
 JV6268 *CURRENT SURVEY CONTROL
 JV6268
 JV6268* NAD 83(1991)- 39 42 00.41396(N) 076 31 57.75529(W) ADJUSTED
 JV6268* NAVD 88 - 218.040 (meters) 715.35 (feet) ADJUSTED
 JV6268
 JV6268 X - 1,144,465.859 (meters) COMP
 JV6268 Y - -4,779,061.089 (meters) COMP
 JV6268 Z - 4,052,541.440 (meters) COMP
 JV6268 LAPLACE CORR- -2.55 (seconds) DEFLEC99
 JV6268 ELLIP HEIGHT- 185.605 (meters) (08/30/02) GPS OBS
 JV6268 GEOID HEIGHT- -32.44 (meters) GEOID03
 JV6268 DYNAMIC HT - 217.932 (meters) 715.00 (feet) COMP
 JV6268 MODELED GRAV- 980,121.4 (mgal) NAVD 88
 JV6268
 JV6268 HORZ ORDER - FIRST
 JV6268 VERT ORDER - FIRST CLASS II
 JV6268 ELLP ORDER - FOURTH CLASS II
 JV6268

JV6268.The horizontal coordinates were established by GPS observations
 JV6268.and adjusted by the National Geodetic Survey in January 1992.
 JV6268
 JV6268.The orthometric height was determined by differential leveling
 JV6268.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.
 JV6268
 JV6268.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 JV6268
 JV6268.The Laplace correction was computed from DEFLEC99 derived deflections.
 JV6268
 JV6268.The ellipsoidal height was determined by GPS observations
 JV6268.and is referenced to NAD 83.
 JV6268
 JV6268.The geoid height was determined by GEOID03.
 JV6268
 JV6268.The dynamic height is computed by dividing the NAVD 88
 JV6268.geopotential number by the normal gravity value computed on the
 JV6268.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JV6268.degrees latitude (g = 980.6199 gals.).
 JV6268
 JV6268.The modeled gravity was interpolated from observed gravity values.
 JV6268

		North	East	Units	Scale	Factor	Converg.
JV6268;							
JV6268;SPC MD	-	225,836.321	440,079.685	MT	1.00005334	+0 17 35.8	
JV6268;SPC MD	-	740,931.33	1,443,828.10	sFT	1.00005334	+0 17 35.8	
JV6268;SPC PA S	-	41,445.415	704,403.757	MT	1.00004465	+0 47 23.2	
JV6268;SPC PA S	-	135,975.50	2,311,031.33	sFT	1.00004465	+0 47 23.2	
JV6268;UTM 18	-	4,395,596.626	368,594.909	MT	0.99981259	-0 58 45.1	
JV6268							
JV6268!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
JV6268!SPC MD	-	0.99997088	x	1.00005334	=	1.00002422	

JV6268!SPC PA S - 0.99997088 x 1.00004465 = 1.00001553
JV6268!UTM 18 - 0.99997088 x 0.99981259 = 0.99978348

JV6268

JV6268: Primary Azimuth Mark Grid Az
JV6268:SPC MD - NORRIS AZ MK 163 55 47.0
JV6268:SPC PA S - NORRIS AZ MK 163 25 59.6
JV6268:UTM 18 - NORRIS AZ MK 165 12 07.9

JV6268

PID	Reference Object	Distance	Geod. Az
JV6305	NORRIS AZ MK	401.625 METERS	1641322.8

JV6268

JV6268

SUPERSEDED SURVEY CONTROL

JV6268

JV6268	ELLIP H (03/31/00)	185.517 (m)	GP()	3 1
JV6268	ELLIP H (01/27/92)	185.603 (m)	GP()	4 1
JV6268	NAD 83(1986)- 39 42 00.40661(N)	076 31 57.76005(W)	AD()	1
JV6268	NAVD 88 (03/31/00)	218.04 (m)	715.4 (f) LEVELING	3
JV6268	NGVD 29 (06/18/91)	218.28 (m)	716.1 (f) LEVELING	3

JV6268

JV6268.Superseded values are not recommended for survey control.

JV6268.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

JV6268.[See file dsdata.txt](#) to determine how the superseded data were derived.

JV6268

JV6268_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ6859595597(NAD 83)

JV6268_MARKER: DD = SURVEY DISK

JV6268_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

JV6268_SP_SET: CONCRETE POST

JV6268_STAMPING: 113 NORRIS 1989

JV6268_MARK LOGO: MD-025

JV6268_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET

JV6268_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

JV6268+STABILITY: SURFACE MOTION

JV6268_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JV6268+SATELLITE: SATELLITE OBSERVATIONS - July 20, 2005

JV6268

HISTORY	Date	Condition	Report By
JV6268	1989	MONUMENTED	RDA
JV6268	19970615	GOOD	MD-005
JV6268	19990505	GOOD	GEOMET
JV6268	20050720	GOOD	DEWDAV

JV6268

JV6268

STATION DESCRIPTION

JV6268

JV6268'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989

JV6268'THE STATION IS LOCATED IN NORTHWESTERN HARFORD COUNTY, MARYLAND IN

JV6268'THE VILLAGE OF NORRISVILLE IN FRONT OF NORRISVILLE ELEMENTARY

JV6268'ELEMENTARY SCHOOL THE STATION IS AT THE INTERSECTION OF STATE HIGHWAY

JV6268'23 AND STATE HIGHWAY 136 IN THE NORTHWEST CORNER OF THE INTERSECTION

JV6268'OF HIGHWAY 23 IN THE ENTRANCE OF NORRISVILLE ELEMENTARY SCHOOL. THE

JV6268'STATION IS A STANDARD HARFORD COUNTY STATION DISC SET IN CONCRETE

JV6268'ABOUT 1 INCH BELOW GROUND STAMPED 113 NORRIS 1989. THE STATION IS

JV6268'61.5 FEET NORTH OF THE CENTERLINE OF THE SOUTH ENTRANCE OF THE

JV6268'ELEMENTARY SCHOOL, 23.8 FEET WEST OF THE CENTERLINE OF HIGHWAY 23,

JV6268'6.2 FEET SOUTH OF G AND E POWER POLE NUMBER 397897.

JV6268
JV6268 STATION RECOVERY (1997)
JV6268
JV6268 'RECOVERY NOTE BY BALTIMORE COUNTY MARYLAND 1997 (WEH)
JV6268 'RECOVERED BY THE BALTIMORE COUNTY SURVEY DIVISION 1997 (WEH) RECOVERED
JV6268 'AS DESCRIBED.
JV6268
JV6268 STATION RECOVERY (1999)
JV6268
JV6268 'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1999 (AB)
JV6268 'RECOVERED AS DESCRIBED.
JV6268
JV6268 STATION RECOVERY (2005)
JV6268
JV6268 'RECOVERY NOTE BY DEWBERRY DAVIS 2005 (WM)
JV6268 'RECOVERED IN GOOD CONDITION.

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

LATITUDE	039 42 00.40800	NORTH(sf)	740930.724
LONGITUDE	076 31 57.75885	EAST(sf)	1443827.825
GRID AZ.	163 55 47.5	ELEV. LEVEL OBS.	716.15 ft.

1 National Geodetic Survey, Retrieval Date = August 1, 2007

JV6305 *****

P1131

JV6305 DESIGNATION - NORRIS AZ MK
JV6305 PID - JV6305
JV6305 STATE/COUNTY- MD/HARFORD
JV6305 USGS QUAD - NORRISVILLE (1984)

JV6305 *CURRENT SURVEY CONTROL

JV6305*	NAD 83(1991)-	39 41 47.88222(N)	076 31 53.17192(W)	ADJUSTED
JV6305*	NAVD 88	- 214.474 (meters)	703.65 (feet)	ADJUSTED
JV6305	X	- 1,144,628.915 (meters)		COMP
JV6305	Y	- 4,779,273.074 (meters)		COMP
JV6305	Z	- 4,052,241.774 (meters)		COMP
JV6305	LAPLACE CORR-	-2.60 (seconds)		DEFLEC99
JV6305	ELLIP HEIGHT-	182.034 (meters)	(09/18/02)	GPS OBS
JV6305	GEOID HEIGHT-	-32.44 (meters)		GEOID03
JV6305	DYNAMIC HT	- 214.367 (meters)	703.30 (feet)	COMP
JV6305	MODELED GRAV-	980,121.2 (mgal)		NAVD 88

JV6305 HORZ ORDER - FIRST
JV6305 VERT ORDER - FIRST CLASS II
JV6305 ELLP ORDER - FOURTH CLASS II

JV6305.The horizontal coordinates were established by GPS observations
JV6305.and adjusted by the National Geodetic Survey in January 1992.

JV6305.The orthometric height was determined by differential leveling
JV6305.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6305.The X, Y, and Z were computed from the position and the ellipsoidal ht.
JV6305

JV6305.The Laplace correction was computed from DEFLEC99 derived deflections.
JV6305

JV6305.The ellipsoidal height was determined by GPS observations
JV6305.and is referenced to NAD 83.

JV6305.The geoid height was determined by GEOID03.
JV6305

JV6305.The dynamic height is computed by dividing the NAVD 88
JV6305.geopotential number by the normal gravity value computed on the
JV6305.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
JV6305.degrees latitude (g = 980.6199 gals.).

JV6305.The modeled gravity was interpolated from observed gravity values.
JV6305

JV6305;		North	East	Units	Scale Factor	Converg.
JV6305;SPC MD	-	225,450.369	440,190.867	MT	1.00005246	+0 17 38.7
JV6305;SPC MD	-	739,665.09	1,444,192.87	sFT	1.00005246	+0 17 38.7
JV6305;SPC PA S	-	41,060.445	704,518.278	MT	1.00004544	+0 47 26.1
JV6305;SPC PA S	-	134,712.48	2,311,407.05	sFT	1.00004544	+0 47 26.1
JV6305;UTM 18	-	4,395,208.394	368,697.468	MT	0.99981226	-0 58 41.9

JV6305!
JV6305!SPC MD - Elev Factor x Scale Factor = Combined Factor
0.99997144 x 1.00005246 = 1.00002390

JV6305!SPC PA S - 0.99997144 x 1.00004544 = 1.00001688
JV6305!UTM 18 - 0.99997144 x 0.99981226 = 0.99978371

JV6305

JV6305: Primary Azimuth Mark Grid Az
JV6305:SPC MD - NORRIS 343 55 47.0
JV6305:SPC PA S - NORRIS 343 25 59.6
JV6305:UTM 18 - NORRIS 345 12 07.6

JV6305

PID	Reference Object	Distance	Geod. Az
JV6268	NORRIS	401.625 METERS	3441325.7

JV6305

JV6305 SUPERSEDED SURVEY CONTROL

JV6305

JV6305 ELLIP H (01/27/92) 182.032 (m) GP() 4 1
JV6305 NAD 83(1986)- 39 41 47.87487(N) 076 31 53.17667(W) AD() 1
JV6305 NGVD 29 (06/18/91) 214.71 (m) 704.4 (f) LEVELING 3

JV6305

JV6305.Superseded values are not recommended for survey control.
JV6305.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JV6305.[See file dsdata.txt](#) to determine how the superseded data were derived.

JV6305

JV6305_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ6869795208(NAD 83)

JV6305_MARKER: DZ = AZIMUTH MARK DISK

JV6305_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

JV6305_SP_SET: CONCRETE POST

JV6305_STAMPING: 113 NORRIS 1989

JV6305_MARK LOGO: MD-025

JV6305_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET

JV6305_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

JV6305+STABILITY: SURFACE MOTION

JV6305_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JV6305+SATELLITE: SATELLITE OBSERVATIONS - 1989

JV6305

HISTORY	Date	Condition	Report By
HISTORY	1989	MONUMENTED	RDA

JV6305

JV6305 STATION DESCRIPTION

JV6305

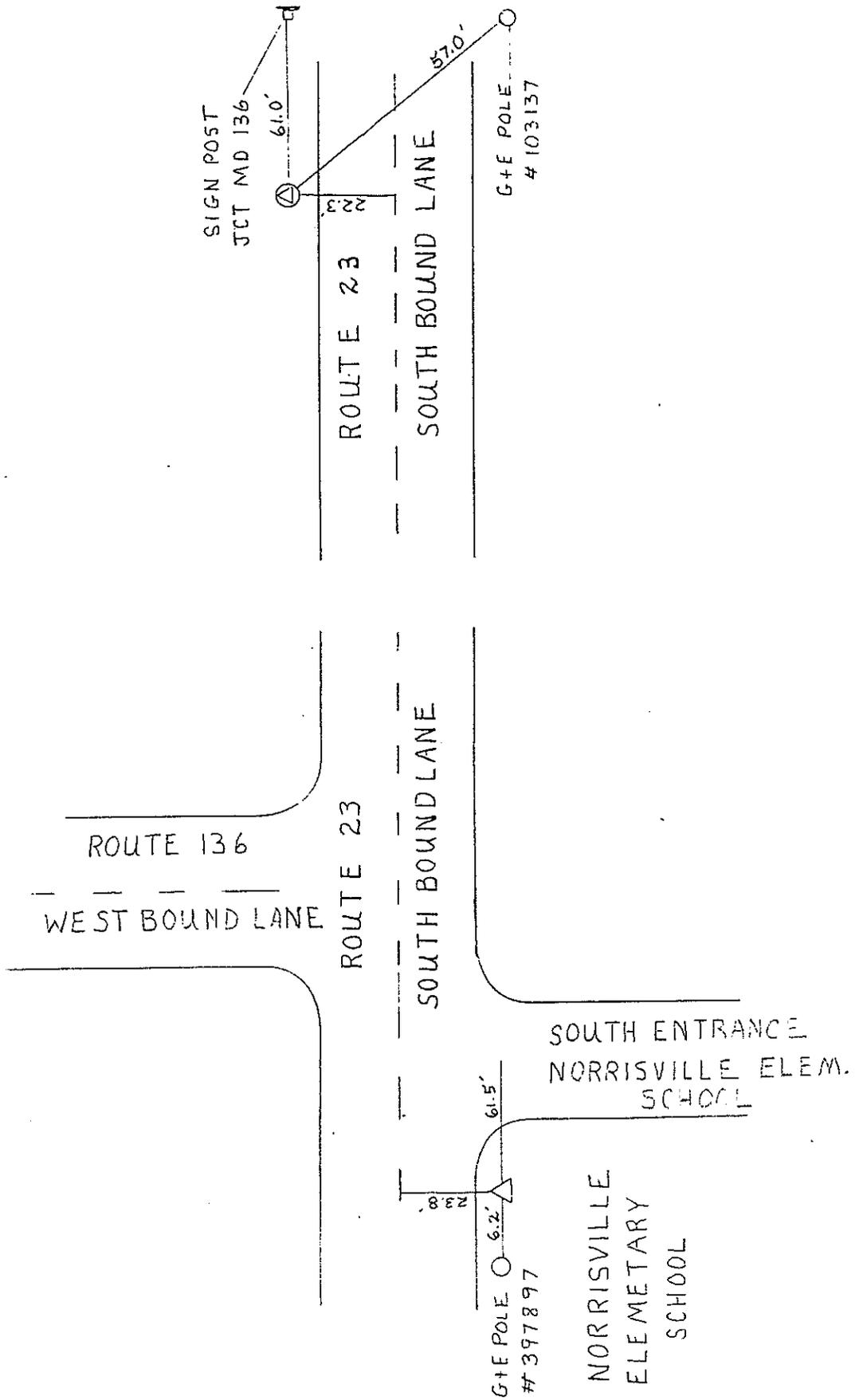
JV6305'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989

JV6305'THE STATION IS LOCATED IN NORTHWESTERN HARFORD COUNTY, MARYLAND IN
JV6305'THE VILLAGE OF NORRISVILLE IN FRONT OF NORRISVILLE ELEMENTARY
JV6305'ELEMENTARY SCHOOL THE STATION IS AT THE INTERSECTION OF STATE HIGHWAY
JV6305'23 AND STATE HIGHWAY 136 IN THE NORTHWEST CORNER OF THE INTERSECTION
JV6305'OF HIGHWAY 23 IN THE ENTRANCE OF NORRISVILLE ELEMENTARY SCHOOL. TO
JV6305'REACH THE AZIMUTH MARK FROM THE STATION PROCEED SOUTH ALONG HIGHWAY
JV6305'23 0.25 MILES TO THE MARK ON THE LEFT. THE MARK IS A STANDARD
JV6305'HARFORD COUNTY AZIMUTH DISC SET IN CONCRETE ABOUT 1 INCH BELOW GROUND
JV6305'STAMPED 113 NORRIS 1989. THE MARK IS 61.0 FEET NORTH OF THE SIGN
JV6305'POST JCT MD 136, 22.3 FEET EAST OF THE CENTERLINE OF HIGHWAY 23, 57.0
JV6305'FEET NORTHEAST OF G AND E POWER POLE NUMBER 103137.

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

LATITUDE	039 41 47.87619	NORTH(sf)	739664.475
LONGITUDE	076 31 53.17550	EAST(sf)	1444192.594
GRID AZ.	343 55 47.5	ELEV. LEVEL OBS.	704.44 ft.

113 NORRIS. 1989



RINKER-DETWILER & ASSOCIATES, P.C.

Engineering • Surveying • Land Planning
Global Positioning System • Mapping