

## Town of Plymouth Data Sheet

<b>Station:</b>	Point 198	<b>FORGES FIELD</b>		<b>NGS PID#</b>		<b>ID#</b>																																													
<b>Town:</b>	Plymouth		<b>Quad:</b> Plym																																																
<b>NAD83</b>	<b>Northerly</b>	<b>Easterly</b>	<b>NAD 27</b>	<b>Northerly</b>	<b>Easterly</b>																																														
<b>(Survey Ft)</b>	2809626.037	883854.464	<b>(Survey Ft)</b>	348956.815	827552.925																																														
<b>(meters)</b>	856375.729	269399.380	<b>(meters)</b>	106362.250	252238.636																																														
						<b>Order</b>																																													
<b>Elevation</b>	<b>Vert. Datum f/m</b>	<b>Order</b>	<b>Stamping:</b>																																																
<b>NAVD88</b>	25.239/7.693		<b>Sketch</b>																																																
<b>NAVD29</b>	26.066/7.945		<b>Recov. Date:</b>	Set. 19, 2011																																															
<b>Marked by:</b>	IR																																																		
<b>Description:</b>																																																			
<b>Reference Marks:</b>																																																			
<b>Azimuth Data:</b>																																																			
<b>Geodetic:</b>	<p>FILE: 50372620.11o 000323977  2005 NOTE: The IGS precise and IGS rapid orbits were not available  2005 at processing time. The IGS ultra-rapid orbit was/will be used to  2005 process the data.  2005</p> <p style="text-align: center;">NGS OPUS SOLUTION REPORT  =====</p> <p>All computed coordinate accuracies are listed as peak-to-peak values.  For additional information: <a href="http://www.ngs.noaa.gov/OPUS/about.html#accuracy">http://www.ngs.noaa.gov/OPUS/about.html#accuracy</a></p> <p>USER: rfirth@townhall.plymouth.ma.us                      DATE: September 20, 2011  RINEX FILE: 5037262n.11o    TIME: 11:33:39 UTC  SOFTWARE: page5 1108.09 master10.pl 060711                      START: 2011/09/19 13:46:00  EPHEMERIS: igu16541.eph [ultra-rapid]                              STOP: 2011/09/19 18:06:00  NAV FILE: brdc2620.11n    OBS USED: 9857 / 10070 : 98%  ANT NAME: TRM33429.00+GP NONE                                      # FIXED AMB: 31 / 33 : 94%  ARP HEIGHT: 1.557528    OVERALL RMS: 0.010(m)</p> <p>REF FRAME: NAD_83 (CORS96) (EPOCH:2002.0000)                      ITRF00 (EPOCH:2011.7169)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">X:</td> <td style="width: 25%;">1572960.859(m)</td> <td style="width: 15%;">0.030(m)</td> <td style="width: 15%;">1572960.074(m)</td> <td style="width: 15%;">0.030(m)</td> </tr> <tr> <td>Y:</td> <td>-4482368.403(m)</td> <td>0.054(m)</td> <td>-4482366.965(m)</td> <td>0.054(m)</td> </tr> <tr> <td>Z:</td> <td>4241847.595(m)</td> <td>0.053(m)</td> <td>4241847.532(m)</td> <td>0.053(m)</td> </tr> <tr> <td>LAT:</td> <td>41 57 16.83457</td> <td>0.012(m)</td> <td>41 57 16.86808</td> <td>0.012(m)</td> </tr> <tr> <td>E LON:</td> <td>289 20 13.50579</td> <td>0.041(m)</td> <td>289 20 13.49430</td> <td>0.041(m)</td> </tr> <tr> <td>W LON:</td> <td>70 39 46.49421</td> <td>0.041(m)</td> <td>70 39 46.50570</td> <td>0.041(m)</td> </tr> <tr> <td>EL HGT:</td> <td>-20.556(m)</td> <td>0.071(m)</td> <td>-21.801(m)</td> <td>0.071(m)</td> </tr> </table> <p><b>ORTHO HGT: 7.693(m) 0.121(m) [NAVD88 (Computed using GEOID09)]</b></p> <p style="text-align: center;">UTM COORDINATES                      STATE PLANE COORDINATES</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;"></td> <td style="width: 30%; text-align: center;">UTM (Zone 19)</td> <td style="width: 30%; text-align: center;">SPC (2001 MA M)</td> </tr> <tr> <td>Northing (Y) [meters]</td> <td style="text-align: center;">4646081.271</td> <td style="text-align: center;">856375.729</td> </tr> <tr> <td>Easting (X) [meters]</td> <td style="text-align: center;">362181.555</td> <td style="text-align: center;">269399.379</td> </tr> </table>							X:	1572960.859(m)	0.030(m)	1572960.074(m)	0.030(m)	Y:	-4482368.403(m)	0.054(m)	-4482366.965(m)	0.054(m)	Z:	4241847.595(m)	0.053(m)	4241847.532(m)	0.053(m)	LAT:	41 57 16.83457	0.012(m)	41 57 16.86808	0.012(m)	E LON:	289 20 13.50579	0.041(m)	289 20 13.49430	0.041(m)	W LON:	70 39 46.49421	0.041(m)	70 39 46.50570	0.041(m)	EL HGT:	-20.556(m)	0.071(m)	-21.801(m)	0.071(m)		UTM (Zone 19)	SPC (2001 MA M)	Northing (Y) [meters]	4646081.271	856375.729	Easting (X) [meters]	362181.555	269399.379
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To convert meters to US survey feet  
Multiply by 3.2808333333

Convergence [degrees]	-1.11190404	0.56229396
Point Scale	0.99983372	0.99997372
Combined Factor	0.99983695	0.99997694
US NATIONAL GRID DESIGNATOR: 19TCG6218146081(NAD 83)		
BASE STATIONS USED		
PID	DESIGNATION	LATITUDE LONGITUDE DISTANCE(m)
DE6262	URIL U OF RI COOP CORS ARP	N412920.158 W0713139.778 88622.9
DI0876	ACU5 ACUSHNET 5 CORS ARP	N414436.796 W0705313.027 29933.7
AF9520	WES2 WESTFORD CORS ARP	N423647.975 W0712935.968 100218.3
NEAREST NGS PUBLISHED CONTROL POINT		
LW4580	PLYMOUTH HBR S CHAN RNG R LT	N415721.351 W0703943.763 153.1
This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.		
<b>Grid Azimuth:</b>		



To convert meters to US survey feet  
Multiply by 3.280833333