



# CITY OF THE COLONY GPS CONTROL SHEET

ESTABLISHED BY: BRITAIN & CRAWFORD, LLC.  
LAND SURVEYING & TOPOGRAPHIC MAPPING PH. 817-926-0211

MONUMENT NAME: MONUMENT No. 12	DATE ESTABLISHED: FEBRUARY, 2009	COUNTY: DENTON	STATE: TEXAS	MAPSCO PAGE NO. 654-D
-----------------------------------	-------------------------------------	-------------------	-----------------	--------------------------

NAD-83 (CORS 96) GEODETIC POSITION  LATITUDE N 033° 03' 31.28136" LONGITUDE W 096° 51' 48.81518"	NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS)  NORTHING (Y) 2155551.151 EASTING (X) 752803.624
---	---

ELLIPSOIDAL ELEVATION (METERS) 139.780  ELLIPSOIDAL HEIGHT (METERS) -26.473	NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET)  NORTHING (Y) 7072004.06790 EASTING (X) 2469823.22307
---	--

AZIMUTH MARK: MONUMENT #13 AT INTERSECTION OF WINDHAVEN PARKWAY AND ARBOR HILLS WAY LYING S72°20'01"E 3523.47' FROM MONUMENT #12	NAVD-88 ELEV: 545.448' (U.S. SURVEY FEET)
--	--

DESCRIPTION: 3 1/4" ALUMINUM DISK SET IN CONCRETE IN THE MEDIAN OF WINDHAVEN PARKWAY, 6.8' NORTH OF THE SOUTH MEDIAN CURB AND 96.7' WEST OF THE WEST MEDIAN NOSE AT THE INTERSECTION OF PLANO PARKWAY.

LEGEND:  
⊙ = MONUMENT

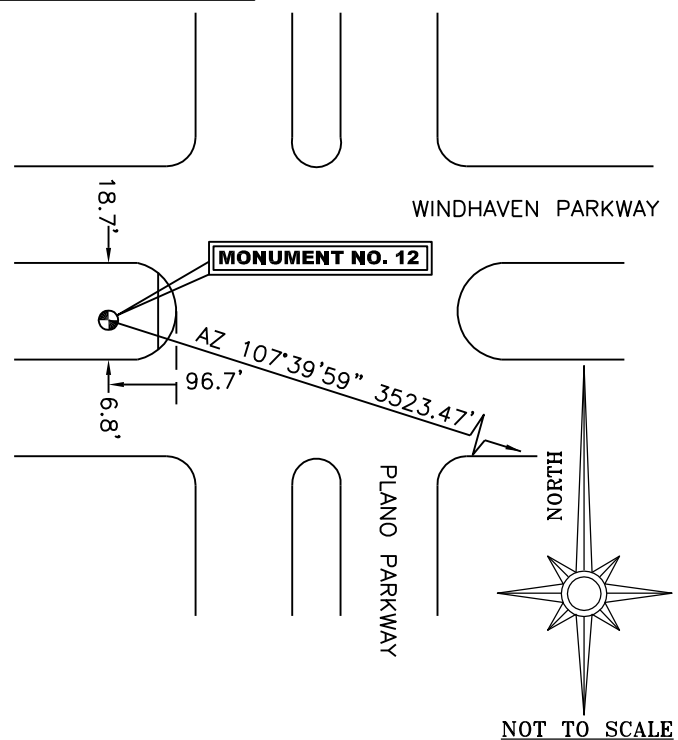


PHOTO TAKEN FROM THE WEST LOOKING EAST TOWARD PLANO PARKWAY



FILE: CO120342.090 000513745

NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.  
 For additional information: [www.ngs.noaa.gov/OPUS/Using\\_OPUS.html#accuracy](http://www.ngs.noaa.gov/OPUS/Using_OPUS.html#accuracy)

RINEX FILE: co12034q.09o DATE: February 06, 2009  
 TIME: 15:05:17 UTC

SOFTWARE: page5 0810.20 master30.pl 081023 START: 2009/02/03 16:25:00  
 EPHEMERIS: igr15172.eph [rapid] STOP: 2009/02/03 20:26:30  
 NAV FILE: brdc0340.09n OBS USED: 10400 / 11209 :93%  
 ANT NAME: THA800961+REC NONE # FIXED AMB: 55 / 59 :93%  
 ARP HEIGHT: 1.24663 OVERALL RMS: 0.013(m)

REF FRAME: NAD\_83(CORS96)(EPOCH:2002.0000) ITRF00 (EPOCH:2009.0925)

X:	-639478.770(m)	0.020(m)	-639479.476(m)	0.020(m)
Y:	-5312696.126(m)	0.042(m)	-5312694.703(m)	0.042(m)
Z:	3459491.924(m)	0.031(m)	3459491.754(m)	0.031(m)

LAT:	33 3 31.28136	0.024(m)	33 3 31.30026	0.024(m)
E LON:	263 8 11.18482	0.021(m)	263 8 11.15125	0.021(m)
W LON:	96 51 48.81518	0.021(m)	96 51 48.84875	0.021(m)
EL HGT:	139.780(m)	0.051(m)	138.574(m)	0.051(m)
ORTHO HGT:	166.253(m)	0.082(m)	[NAVD88 (Computed using GEOID03)]	

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 14)	SPC (4202 TXNC)
Northing (Y) [meters]	3659822.439	2155551.151
Easting (X) [meters]	699463.969	752803.624
Convergence [degrees]	1.16580841	0.89250536
Point Scale	1.00009057	0.99987263
Combined Factor	1.00006863	0.99985069

US NATIONAL GRID DESIGNATOR: 14SPB9946459822(NAD 83)

		BASE STATIONS USED		
PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DF8986	TXDE DENTON CORS ARP	N331237.612	W0970945.970	32601.2
DF4385	ZFW1 FORT WORTH WAAS 1 CORS ARP	N324950.320	W0970359.262	31617.7
DF8982	TXCO COLLIN CORS ARP	N330954.927	W0963740.571	24967.2

		NEAREST NGS PUBLISHED CONTROL POINT		
PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DN0269	Y 262	N330339.	W0965126.	637.6

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.