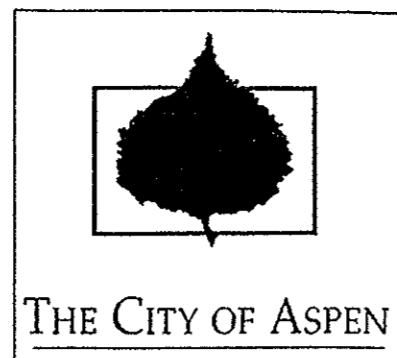


# CITY OF ASPEN - GPS CONTROL MONUMENTATION 2009

City of Aspen, County of Pitkin, State of Colorado



**NOTES:**

- 1) SURVEY DATE: OCTOBER 2009.
- 2) THE PURPOSE OF THIS MAP IS TO IDENTIFY THE GPS CONTROL MONUMENT LOCATIONS.
- 3) ALL COORDINATES ARE BASED ON THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE - NAD83 (1992)
- 4) MODIFIED COORDINATES VALUES WERE COMPUTED WITH A COMBINED SCALE FACTOR = 0.99956182.
- 5) ORTHOMETRIC HEIGHTS WERE DERIVED BY GPS MEASUREMENTS USING GEOID 03 HOLDING THE NAVD 88 DATUM ON MONUMENT Q-159 AS SHOWN HEREON.
- 6) ALL NEW MONUMENTS ARE SET IN MONUMENT BOXES SET FLUSH WITH GROUND / STREET.



- TO REMOVE LID OF THE MONUMENT BOXES WITH CENTER NUT:
- 1) SLIGHTLY LOOSEN NUT.
  - 2) SPIN ENTIRE LID TO LINE UP "SURVEY" ON LID WITH "SURVEY" ON MONUMENT BOX.
  - 3) LIFT OPEN.

**NGS STATION S-159**

STATION IS LOCATED ABOUT 3 KM (1.9 MI) NORTHWEST OF ASPEN, 3 KM (1.9 MI) EAST-SOUTHEAST OF THE ASPEN-PITKIN COUNTY AIRPORT, IN T10S, R65W, ALONG AN OLD RAILROAD GRADE NOW USED FOR A BICYCLE PATH, IN A SMALL GRASSY CLEARING JUST NORTH OF THE BRIDGE OVER THE ROARING FORK RIVER. OWNERSHIP--PITKIN COUNTY. TO REACH FROM THE JUNCTION OF STATE HWY 82 AND THE ASPEN-PITKIN COUNTY AIRPORT ENTRANCE, ABOUT 5.5 KM (3.4 MI) NORTHWEST OF ASPEN, GO SOUTHEAST ON HWY 82 FOR 2.0 MI (3.2 KM) TO THE EAST END OF THE BRIDGE OVER MAROON CREEK. CONTINUE AHEAD FOR 0.85 (1.37 KM) TO A ROAD LEFT AT EAST END OF A GOLF COURSE (0.1 MI BEFORE REACHING BRIDGE OVER CASTLE CREEK). TURN LEFT, NORTHWEST, ON CEMETARY LANE FOR 1.1 MI (1.8 KM) TO THE SMALL BRIDGE OVER THE ROARING FORK RIVER. CONTINUE AHEAD FOR ABOUT 125 FT (38.1 M) TO A TURNOUT AND STATION ON THE RIGHT ON THE NORTH SIDE OF A PAVED PATH. STATION MARK IS SET IN THE TOP OF A 15-CM CONCRETE POST PROJECTING 10 CM ABOVE GROUND. IT IS 19.9 M (65.3 FT) EAST OF, AND SLIGHTLY LOWER THAN THE ROAD CENTER, 7.9 M (25.9 FT) EAST OF A SPLIT-RAIL FENCE, 9.3 M (30.5 FT) EAST-SOUTHEAST OF A GUYED UTILITY POLE, 19.8 M (65.0 FT) NORTH-NORTHEAST OF THE TRAIL CENTER AT FENCE GAP, 1.6 M (5.2 FT) SOUTH-SOUTHWEST OF THE EAST ONE OF TWO GUY WIRES AND 0.4 M (1.3 FT) WEST OF A FIBERGLASS WITNESS POST. DESCRIBED BY G.R. HEID RECOVERY NOTE BY NATIONAL GEODETIC SURVEY.

**NGS STATION Q-159**

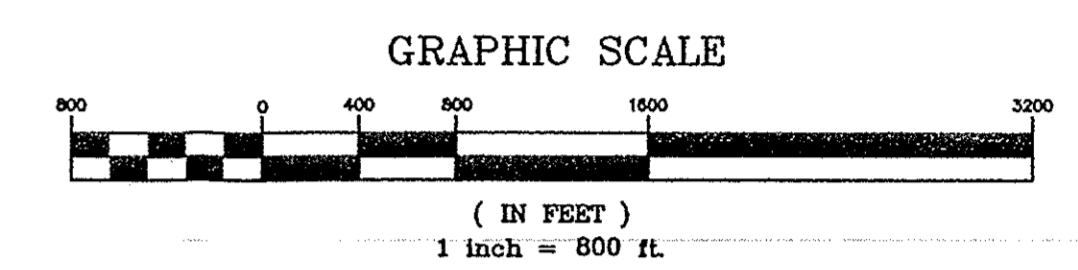
AT ASPEN, PITKIN COUNTY, AT THE SOUTHWEST CORNER OF THE COUNTY COURTHOUSE LAWN, 59 FEET NORTH OF THE CENTERLINE OF MAIN STREET, 43 FEET EAST OF THE CENTERLINE OF GALENA STREET, 65.8 FEET WEST OF THE CENTER OF THE MAIN ENTRANCE TO THE BUILDING, 33.7 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE BUILDING, 12.5 FEET SOUTHWEST OF THE GRANITE BASE OF A SOLDIERS MONUMENT, AND 3 FEET NORTHEAST OF THE SOUTHWEST CORNER OF AN ORNAMENTAL IRON FENCE. A STANDARD DISK, STAMPED Q 159 1934 AND SET IN THE TOP OF A CONCRETE POST. DESCRIBED BY COAST AND GEODETIC SURVEY 1934

I, THOMAS S. MARCIN, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, HEREBY CERTIFY THAT THIS GPS CONTROL MAP WAS DONE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT IT WAS PERFORMED USING THE STANDARD CARE AND PRACTICE USED IN THE AREA AT THE TIME OF THE SURVEY. THE NOTES HEREON ARE A PART OF THIS CERTIFICATION.



THOMAS S. MARCIN  
COLORADO PROFESSIONAL  
LAND SURVEYOR

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.



Point Id	Location	Modified Northing	Modified Easting	NAVD 88 Elev.	Latitude	Longitude	Ellipsoidal height	Northing (State Plane)	Easting (State Plane)	Orthometric Height (Geoid 03)	Geoid Separation	Convergence	Projection Scale Factor	Elevation Scale Factor	Combined Scale Factor
GPS-1	CENTERLINE OF S. WEST END ST. & E. DURANT AVE.	1496095.0939	2628603.4714	7945.54	39 11 10.660219 N	106 48 51.902972 W	7901.1397	1495439.5350	2627451.6700	7945.6622	-44.5224	-0 49 44.362	0.99993701	0.99962245	0.99955948
GPS-2	CENTERLINE OF S. GALENA ST. & E. DURANT AVE.	1496470.2996	2627274.4073	7932.92	39 11 14.176547 N	106 49 08.843410 W	7888.4323	1495814.5763	2626123.1882	7933.0076	-44.5756	-0 49 55.046	0.99993704	0.99962305	0.99956011
GPS-3	CENTERLINE OF S. GARMISCH ST. & E. DURANT AVE.	1496848.6625	2625934.4874	7917.36	39 11 17.721818 N	106 49 25.922707 W	7872.7879	1496192.7734	2624783.8554	7917.4174	-44.6294	-0 50 05.818	0.99993706	0.99962380	0.99956089
GPS-4	CENTERLINE OF S. WEST END ST. & E. HOPKINS AVE.	1496940.9754	2628842.3131	7925.42	39 11 19.050801 N	106 48 49.026365 W	7881.0243	1496285.0458	2627690.4070	7925.5324	-44.5080	-0 49 42.548	0.99993707	0.99962341	0.99956050
GPS-5	CENTERLINE OF S. GALENA ST. & E. HOPKINS AVE.	1497316.2233	2627513.2316	7915.94	39 11 22.567657 N	106 49 05.967549 W	7871.4458	1496680.1292	2626361.9079	7916.0064	-44.5605	-0 49 53.232	0.99993710	0.99962386	0.99956099
GPS-6	CENTERLINE OF S. GARMISCH ST. & E. HOPKINS AVE.	1497694.5308	2626173.3453	7893.61	39 11 26.112501 N	106 49 23.046934 W	7849.0363	1497038.2710	2625022.6087	7893.6517	-44.6153	-0 50 04.004	0.99993713	0.99962493	0.99956208
GPS-7	CENTERLINE OF N. SIXTH ST. & W. HOPKINS AVE.	1498262.3721	2624162.0138	7935.12	39 11 31.432001 N	106 49 48.686040 W	7890.4699	1497605.8635	2623012.1585	7935.1723	-44.7022	-0 50 10.174	0.99993717	0.99962295	0.99956151
GPS-8	CENTERLINE OF N. GARMISCH ST. & W. FRANCIS ST.	1498853.9448	2626500.7626	7887.99	39 11 37.613400 N	106 49 19.104610 W	7843.3974	1498197.1770	2625349.8825	7887.9900	-44.5926	-0 50 01.518	0.99993722	0.99962520	0.99956244
GPS-9(R)	CENTERLINE OF N. SIXTH ST. & W. FRANCIS ST.	1499421.8193	2624489.4393	7906.09	39 11 42.933466 N	106 49 44.744697 W	7861.5619	1498764.8026	2623339.4405	7906.2557	-44.6937	-0 50 17.689	0.99993726	0.99962434	0.99956162
GPS-10(N)	N-SIDE OF CEMETARY ENT. @ CEMETARY LANE	1501416.7456	2622537.5656	7871.92	39 12 02.358347 N	106 50 09.897585 W	7827.1213	1500758.8548	2621388.4221	7871.9165	-44.7950	-0 50 33.552	0.99993742	0.99962598	0.99956342
GPS-11(N)	IN BUS LANE @ CEMETARY LN. & SILVER KING DR.	1502643.7696	2621645.3844	7849.59	39 12 14.350198 N	106 50 21.454957 W	7804.7452	1501985.3382	2620496.6318	7849.5933	-44.8479	-0 50 40.841	0.99993752	0.99962705	0.99956459
GPS-12(N)	CENTERLINE OF FORGE RD. & MOLLY CT.	1505736.1035	2617527.9292	7906.18	39 12 44.296089 N	106 51 14.320370 W	7761.1436	1505004.4517	2616099.0712	7818.8257	-45.0405	-0 51 14.183	0.99993779	0.99962913	0.99956684
GPS-13(N)	TIEHACK RD. APPROX 55 FT SW. OF PED. BRIDGE & 4 FT. E OF GAURDRAIL	1505664.2037	2617245.8960	7818.83	39 12 43.544236 N	106 51 17.888206 W	7773.7756	1505004.4517	2616099.0712	7818.8257	-45.0500	-0 51 16.433	0.99993778	0.99962853	0.99956633
GPS-14(N)	W-SIDE OF SERVICE ENT. TO REC. CTR. & MAROON CREEK RD.	1498051.9745	2617324.5721	8042.23	39 11 28.355432 N	106 51 15.447982 W	7997.2801	1497395.5580	2616177.7128	8042.2341	-44.9538	-0 51 14.894	0.99993714	0.99961785	0.99955502
GPS-15(N)	NE CORNER OF STEEPLCHASE DR. & EMERGENCY SERVICE RD.	1497536.8242	2618476.4968	8021.91	39 11 23.435705 N	106 51 00.727187 W	7977.0090	1496880.6335	2617329.1327	8021.9101	-44.9010	-0 51 05.610	0.99993711	0.99961882	0.99955595
GPS-16(N)	THUNDERBOWL LN. IN GREEN AREA AT THE NW CORNER OF BRIDGE OVER SKIRUN	1494040.8286	2618609.2357	8148.63	39 10 48.624186 N	106 51 23.768651 W	8103.7149	1493398.1698	2615462.8999	8148.6289	-44.9118	-0 51 20.142	0.99993686	0.99961277	0.99955620
GPS-17(N)	E-SIDE OF HWY 82, APPROX 60.3 FT NW OF BUSSTOP AT MCKIMMING RD.	1494447.0727	2630444.5298	8013.41	39 10 52.777341 N	106 51 14.372859 W	8116.2114	1494791.7977	2629291.9216	8013.4083	-44.9472	-0 49 18.144	0.99993690	0.99961810	0.99955592
GPS-18(N)	CENTERLINE OF HAY 82 & ROARING FORK DR.	1494403.8374	2631854.0010	8036.49	39 10 54.414901 N	106 49 10.332987 W	7992.1439	1493749.0195	2620003.7753	7992.1439	-44.9492	-0 50 20.389	0.99993726	0.99962433	0.99956243
GPS-19(N)	CENTERLINE OF N. SEVENTH ST. & W. FRANCIS ST.	1495165.6393	2624153.6211	7906.41	39 11 43.821628 N	106 49 49.025770 W	7861.6811	1498859.5811	2623003.7684	7908.3897	-44.7084	-0 49 52.181	0.99993713	0.99962405	0.99956120
GPS-20	CENTERLINE OF S. SEVENTH ST. & W. HOPKINS AVE.	1498357.1903	2623826.2795	7937.57	39 11 32.320116 N	106 49 52.965867 W	7892.9305	1497700.6401	2622678.5713	7937.6469	-44.7163	-0 50 22.874	0.99993717	0.99962284	0.99956004
Q-159	NGS STATION "Q-159"	1497655.8665	2627649.4303	7911.98	39 11 25.942507 N	106 49 04.301101 W	7867.4731	1496999.6237	2626498.0468	7912.0271	-44.5539	-0 49 52.181	0.99993713	0.99962405	0.99956120
S-159	NGS STATION "S-159"	1505286.4231	2621667.2819	7720.88	39 12 40.459940 N	106 50 21.671650 W	7676.0706	1504628.8367	2620518.5197	7720.8688	-44.8981	-0 50 40.978	0.99993775	0.99963319	0.99957037

(R)=RESET OLD MONUMENT  
(N)=SET NEW MONUMENT

REV: 7-13-10, CITY COMMENTS  
REV: 5-7-10, CITY COMMENTS

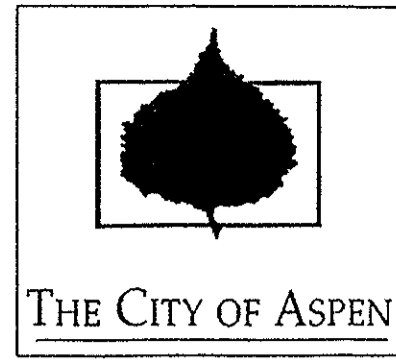
MARCIN ENGINEERING LLC

P.O. Box 1062  
AVON, CO 81620  
(970) 748-0274  
(970) 748-9021 FAX



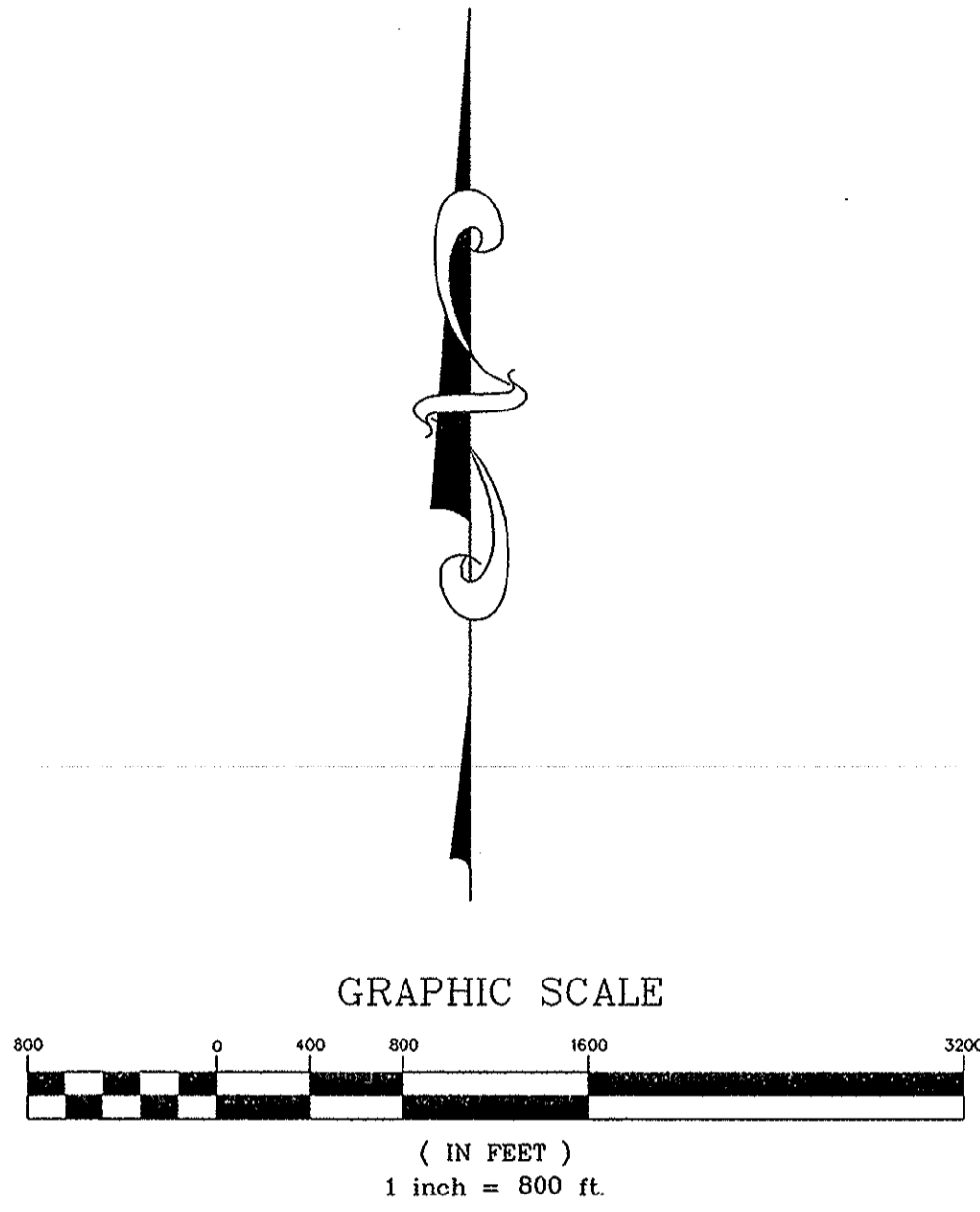
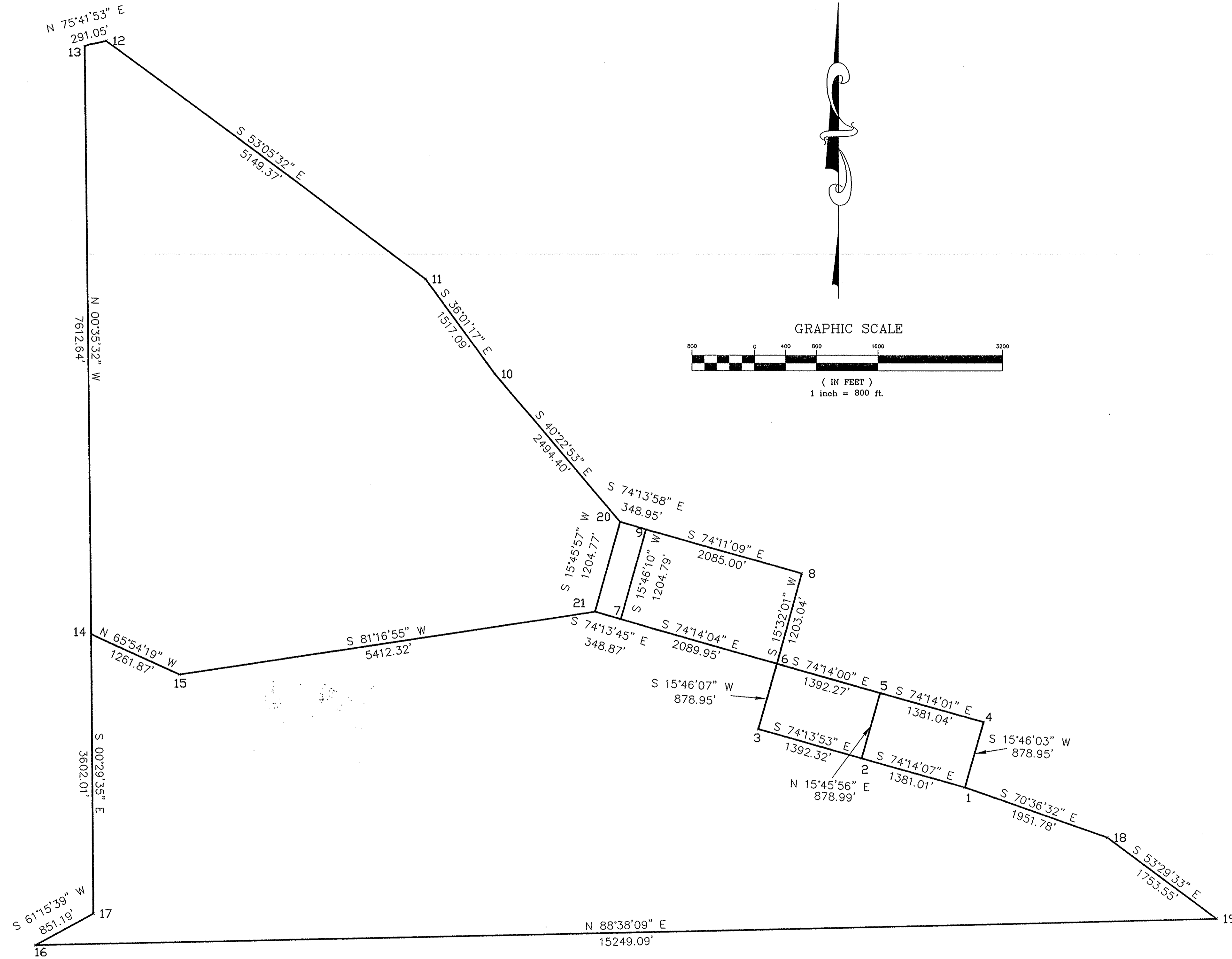
CITY OF ASPEN  
GPS CONTROL MONUMENTATION  
County of Pitkin, State of Colorado

DRAWN BY: JSP	DATE: 12/2/2009
CHECKED BY: RPK	DRAWING NO.: 09040_FINAL
JOB NO.: 09040	SHEET 1 OF 2



# CITY OF ASPEN - GPS CONTROL MONUMENTATION 2009

City of Aspen, County of Pitkin, State of Colorado



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REV: 5-7-10, CITY COMMENTS	
<b>MARCIN ENGINEERING LLC</b>	
P.O. Box 1062 AVON, CO 81620 (970) 748-0274 (970) 748-9021 FAX	
<b>CITY OF ASPEN</b> GPS CONTROL MONUMENTATION County of Pitkin, State of Colorado	
DRAWN BY: JSP	DATE: 12/2/2009
CHECKED BY: RPK	DRAWING NO.: 09040_FINAL
JOB NO.: 09040	SHEET 2 OF 2