SAND CREEK LANDFILL PIPE SIZING CALCULATIONS
APRIL 1990

HEADER SECTION	WELL NO.	WELL DEPTH (FT)	PERF LENGTH (FT)	WELL PROD. (CFM)	VACUUM @ WELL (IN.W.C.)	LINE FLOW (CFM)	LINE SIZE (IN)	D.P/100' LINE (IN.W.C.)	DELTA P WELL AND FITTINGS (IN.W.C.)	LINE LENGTH (FT)	DELTA P LINE (IN.W.C.)	TOTAL DELTA P (IN.W.C)	VELOCITY (FPM)
LFG-100E													
	EW-75	30	18	13.5	5.00	13.5	6	0.00	0.1	125	0.002	5.70	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-71	30	18	13.5	5.70	27.0	6	0.01	0.1	120	0.007	6.42	146.12
						13.5	4	0.01	0.6	40	0.005	0.60	158.32
	EW-74	30	18	13.5	6.42	40.5	6	0.01	0.1	220	0.029	7.15	219.18
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
SUBHDR 10													
	EW-70	30	18	13.5	7.15	13.5	6	0.00	0.1	190	0.003	7.85	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-72	30	18	13.5	7.85	27.0	6	0.01	0.1	140	0.009	8.56	146.12
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-73	30	18	13.5	8.56	40.5	6	0.01	0.1	20	0.003	9.27	219.18
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
LFG-100E						81.0	6	0.05	0.1	225	0.112	0.21	438.36
	EW-69	50	35	26.3	9.48	107.3	6	0.09	0.1	210	0.179	10.36	580.42
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-68	50	35	26.3	10.36	133.5	6	0.13	0.1	25	0.032	11.10	722.49
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 9													
	EW-64	30	18	13.5	11.10	13.5	6	0.00	0.1	220	0.004	11.81	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-66	35	20	15.0	11.81	28.5	6	0.01	0.1	200	0.014	12.52	154.24
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-67	40	25	18.8	12.52	47.3	6	0.02	0.1	160	0.029	13.26	255.71
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
LFG-100E						180.8	6	0.29	0.1	235	0.540	0.64	978.20
	EW-63	50	35	26.3	13.90	207.0	6	0.30	0.1	265	0.788	15.39	1120.26
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 8													
	EW-65	30	18	13.5	15.39	13.5	6	0.00	0.1	220	0.004	16.10	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-57	30	18	13.5	16.10	27.0	6	0.01	0.1	150	0.009	16.91	146.12
						13.5	4	0.01	0.6	50	0.006	0.61	158.32
	EW-59	35	20	15.0	16.81	42.0	6	0.01	0.1	200	0.029	17.54	227.30
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-60	40	25	18.8	17.54	60.8	6	0.03	0.1	200	0.058	18.30	328.77
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-61	45	30	22.5	18.30	83.3	6	0.05	0.1	190	0.100	19.11	450.54
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-62	50	35	26.3	19.11	109.5	6	0.09	0.1	40	0.035	19.85	592.60
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
LFG-100E						316.5	8	0.18	0.1	210	0.372	0.47	1010.48
	EW-56	50	35	26.3	20.32	342.8	8	0.21	0.1	240	0.495	21.52	1094.29
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 7													
	EW-58	30	18	13.5	21.52	13.5	6	0.00	0.1	240	0.004	22.23	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-49	30	18	13.5	22.23	27.0	6	0.01	0.1	95	0.006	22.95	146.12
						13.5	4	0.01	0.6	110	0.013	0.61	158.32
	EW-50	30	18	13.5	22.95	40.5	6	0.01	0.1	15	0.002	23.67	219.18
						13.5	4	0.01	0.6	220	0.025	0.63	158.32
	EW-51	35	20	15.0	23.67	55.5	6	0.02	0.1	200	0.049	24.42	300.36
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-52	40	25	18.8	24.42	74.3	6	0.04	0.1	200	0.085	25.21	401.83
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-53	45	30	22.5	25.21	96.8	6	0.07	0.1	200	0.140	26.06	523.60
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-54	50	35	26.3	26.06	123.0	6	0.11	0.1	60	0.066	26.83	665.66
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
LFG-100E						465.8	8	0.37	0.1	40	0.148	0.25	1486.99
	EW-55	50	35	26.3	27.08	492.0	8	0.41	0.1	275	1.126	28.91	1570.80
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-48	50	35	26.3	28.91	518.3	8	0.45	0.1	285	1.288	30.90	1654.60
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 6													
	EW-40	30	18	13.5	30.90	13.5	6	0.00	0.1	200	0.003	31.61	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-42	35	20	15.0	31.61	28.5	6	0.01	0.1	200	0.014	32.32	154.24
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-43	40	25	18.8	32.32	47.3	6	0.02	0.1	200	0.036	33.06	255.71
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-44	45	30	22.5	33.06	69.8	6	0.04	0.1	200	0.075	33.84	377.48
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-45	50	35	26.3	33.84	96.0	6	0.07	0.1	200	0.138	34.69	519.54
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-46	50	35	26.3	34.69	122.3	6	0.11	0.1	160	0.175	35.57	661.60
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-47	50	35	26.3	35.57	148.5	6	0.16	0.1	40	0.063	36.34	803.66
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
LFG-100E						666.8	12	0.10	0.1	200	0.205	0.31	974.16
	EW-39	50	35	26.3	36.64	693.0	12	0.11	0.1	300	0.331	37.68	1012.52
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 5													
	EW-41	30	18	13.5	37.68	13.5	6	0.00	0.1	215	0.004	38.39	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-30	30	18	13.5	38.39	27.0	6	0.01	0.1	165	0.010	39.10	146.12
						13.5	4	0.01	0.6	40	0.005	0.60	158.32
	EW-32	35	20	15.0	39.10	42.0	6	0.01	0.1	100	0.014	39.82	227.30
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-31	30	18	13.5	39.82	55.5	6	0.02	0.1	100	0.024	40.57	300.36
						13.5	4	0.01	0.6	250	0.029	0.63	158.32
	EW-33	35	20	15.0	40.57	70.5	6	0.04	0.1	200	0.077	41.35	381.54
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-34	40	25	18.8	41.35	89.3	6	0.06	0.1	200	0.120	42.17	483.01
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-35	45	30	22.5	42.17	111.8	6	0.09	0.1	200	0.184	43.06	604.78
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-36	50	35	26.3	43.06	138.0	6	0.14	0.1	200	0.275	44.04	746.84
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-37	50	35	26.3	44.04	164.3	6	0.19	0.1	160	0.306	45.05	888.90
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-38	50	35	26.3	45.05	190.5	6	0.25	0.1	20	0.051	45.81	1030.96
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
LFG-100E						883.5	12	0.18	0.1	270	0.473	0.57	1290.85
	EW-29	50	35	26.3	46.38	909.8	12	0.19	0.1	215	0.398	47.49	1329.20
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 4													
	EW-20	30	18	13.5	47.49	13.5	6	0.00	0.1	200	0.003	48.19	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-21	30	18	13.5	48.19	27.0	6	0.01	0.1	200	0.012	48.91	146.12
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-22	30	18	13.5	48.91	40.5	6	0.01	0.1	200	0.027	49.64	219.18
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-23	30	18	13.5	49.64	54.0	6	0.02	0.1	85	0.020	50.36	292.24
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-24	30	18	13.5	50.36	67.5	6	0.04	0.1	115	0.041	51.12	365.30
						13.5	4	0.01	0.6	210	0.024	0.62	158.32
	EW-25	40	25	18.8	51.12	86.3	6	0.06	0.1	200	0.113	51.94	466.77
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-26	50	35	26.3	51.94	112.5	6	0.09	0.1	200	0.187	52.83	608.84
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
	EW-27	50	35	26.3	52.83	138.8	6	0.14	0.1	110	0.153	53.69	750.90
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
LFG-100E						1048.5	12	0.24	0.1	80	0.194	0.29	1531.93
SUBHDR 2													
	EW-5	30	18	13.5	53.98	13.5	6	0.00	0.1	200	0.003	54.69	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-6	30	18	13.5	54.69	27.0	6	0.01	0.1	30	0.002	55.39	146.12
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-7	30	18	13.5	55.39	40.5	6	0.01	0.1	170	0.023	56.14	219.18
						13.5	4	0.01	0.6	200	0.023	0.62	158.32
	EW-8	35	20	15.0	56.14	55.5	6	0.02	0.1	200	0.049	56.89	300.36
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-9	40	25	18.8	56.89	74.3	6	0.04	0.1	200	0.085	57.68	401.83
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
SUBHDR 1													
	EW-1	30	18	13.5	57.68	13.5	6	0.00	0.1	200	0.003	58.38	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-2	30	18	13.5	58.38	27.0	6	0.01	0.1	115	0.007	59.09	146.12
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-3	35	20	15.0	59.09	42.0	6	0.01	0.1	200	0.029	59.82	227.30
						15.0	4	0.01	0.6	30	0.004	0.60	175.91
	EW-4	35	20	15.0	59.82	57.0	6	0.03	0.1	200	0.051	60.58	308.48
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
JCN SUBHDR 1 & 2						131.3	6	0.13	0.1	30	0.038	0.14	710.31
LFG-100W	EW-10	45	30	22.5	60.72	153.8	6	0.17	0.1	165	0.279	61.70	832.08
						22.5	4	0.03	0.6	15	0.005	0.50	263.87
	EW-11	45	30	22.5	61.70	176.3	6	0.22	0.1	240	0.526	62.93	953.84
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-18	50	35	26.3	62.93	202.5	6	0.29	0.1	35	0.100	63.73	1095.91
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
SUBHDR 3													
	EW-13	30	18	13.5	63.73	13.5	6	0.00	0.1	210	0.003	64.44	73.06
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-12	30	18	13.5	64.44	27.0	6	0.01	0.1	20	0.001	65.16	146.12
						13.5	4	0.01	0.6	180	0.021	0.62	158.32
	EW-14	30	18	13.5	65.16	40.5	6	0.01	0.1	180	0.024	65.89	219.18
						13.5	4	0.01	0.6	15	0.002	0.60	158.32
	EW-15	35	20	15.0	65.89	55.5	6	0.02	0.1	200	0.049	66.64	300.36
						15.0	4	0.01	0.6	15	0.002	0.60	175.91
	EW-16	40	25	18.8	66.64	74.3	6	0.04	0.1	200	0.085	67.43	401.83
						18.8	4	0.02	0.6	15	0.003	0.60	219.89
	EW-17	45	30	22.5	67.43	96.8	6	0.07	0.1	140	0.098	68.23	523.60
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
LFG-100W						299.3	8	0.16	0.1	225	0.358	0.46	955.41
	EW-19	45	30	22.5	68.69	321.8	8	0.18	0.1	200	0.365	69.76	1027.24
						22.5	4	0.03	0.6	15	0.005	0.60	263.87
	EW-28	50	35	26.3	69.76	348.0	8	0.21	0.1	20	0.042	70.51	1111.05
						26.3	4	0.04	0.6	15	0.006	0.61	307.84
JCN LFG-100E & LFG-100W TO BLOWER BLDG (LFG-200)						1396.5	12	0.42	0.1	650	2.716	73.32	2040.38

REV	DESCRIPTION	DATE	BY

BF1
BROWNING-FERRIS INDUSTRIES
GAS SYSTEMS
757 N. ELDRIDGE - P.O.BOX 3151 - HOUSTON, TEXAS 77253 - (713) 870-8100

TITLE: PIPING AND BLOWER SIZING CALCULATIONS
PROJECT NAME AND LOCATION: GAS EXTRACTION SYSTEM
SAND CREEK LANDFILL
DENVER, COLORADO

SCALE: N.T.S.
DATE: AUG. 1991
ENGINEER: D.A.W.
DRAWN BY: A.D.W.
APPROVED BY:
PROJECT NUMBER:

DRAWING NUMBER: SHEET 2