

BAYHILL VILLAGE
WINGHAVEN™ 

A TRACT OF LAND BEING PART OF
 U.S. SURVEY 1641 TOWNSHIP
 46 NORTH - RANGE 2 EAST
 ST. CHARLES COUNTY, MISSOURI

IMPROVEMENT PLANS
PHASE ONE
(INCLUDING LOTS 46,47,48,121,122)
FINAL SEWER MEASUREMENTS



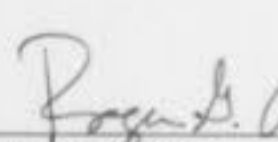

The existing sewer lengths, sizes, flowlines, depths of structures and sewers and locations with respect to existing or proposed easements have been measured. The results of those measurements are shown on this set of Final Measurement Plans. Since the wye locations have been plotted from information provided by the sewer contractor or other sources, I disclaim any responsibility for that specific information.

All public sewers are located within designated existing or proposed easements except as shown in this drawing.

The results of those measurements are shown on this drawing by lining out the planned number and indicating the measured number adjacent to the planned number. All other numbers shown have not been measured or verified.

The location of the sewers were determined by locating the manholes and traversing in a straight line between them.

No hydraulic computations have been done on the measured lines to verify or confirm the capacity, freeboard or design requirements of the sewers.


 Roger G. Allen
 Mo. Reg. L.S. 2185


WINGHAVEN
 RESIDENTIAL L.L.C.
 *1 MCBRIDE & SON
 CENTER DRIVE
 ST. LOUIS, MISSOURI 63005
 PHONE (636) 337-2000

10649 Indian Head Industrial Blvd.
 St. Louis, Missouri 63122-1766
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Engineers
 Land Planners
 Land Surveyors
VOLZ

BAYHILL VILLAGE
WINGHAVEN™ 

Base Map No.	Design By: E.D.K.	Drawn By: R.S.B.	Checked By: T.J.M.
7246			

AS-BUILT

OLZ ENGINEERING & SURVEYING, INC.
0849 INDIAN HEAD INDUSTRIAL BLVD.
T. LOUIS, MO 63132 (314)426-6212
7246ASS WINGHAVEN - VILLAGE "O"

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LINE	STRUCTURES			LENGTH	SIZE	FLOWLINE			UPPER STRUCTURE		HYDRAULIC			FRICTION LOSS	VELOCITY			TURN			QUANTITY			CAPACITIES									
	UPPER	LOWER				UPPER	LOWER	GRADE	ELEVATION	FREEBOARD	UPPER	LOWER	GRADE		UPPER	LOWER	GRADE	FPS	HEAD	GAIN	ANGLE	LOSS	AREA	PI	INCR	TOTAL	***	PIPE	INLET	GUTTER	P.V.	BYPASS	
INE 1	10 STRUCTURES																																
I	6A	CI	6	94.0	12	573.89	572.96	.010	577.41	2.22	575.19	575.01	.0019	.18	1.98	.06	.00	0	.00	.59	2.64	1.56	1.56	4 SIDES	6"	3.54	13.42			4.29			
I	6	CI	5	35.0	15	572.76	572.65	.003	579.29	4.28	574.99	574.94	.0013	.04	1.87	.05	.02	10	.01	.28	2.64	.74	2.30	1.0%		3.62	2.29	2.97	3.07				
I	5	AI	4	207.3	18	572.45	570.07	.011	579.60	4.66	574.50	572.82	.0081	1.68	5.35	.44	.11	10	.01	.12	2.64	.32	9.45	1.0%		11.26	2.29	2.97	7.01				
															INCOMING LINE			2	85	.33			6.84										
I	4	AI	3	228.2	18	569.87	567.17	.012	577.69	4.87	572.56	570.41	.0095	2.16	5.78	.52	.14	20	.11	.29	2.64	.77	10.22	4 SIDES	6"	11.43	13.42			7.36			
I	3	MH	2	121.5	24	566.97	565.91	.009	574.44	4.03	569.71	568.73	.0081	.99	6.49	.65	.33	35	.21	.65	2.64	1.72	20.38	3 SIDES	6"	21.13	10.35			7.77			
H	2	MH	1	400.5	24	565.71	560.44	.013	572.03	3.30	567.88	562.91	.0124	4.97	INCOMING LINE			5	40	.16			8.45										
															INCOMING LINE			4	80	.16			25.21			25.95					9.35		
H	1	CI	EX	26.0	24	560.71	558.35	.091	565.39	2.48	560.94	560.35*	.0227	.59	INCOMING LINE			4	80	.66			4.83			68.16					11.71		
															INCOMING LINE			10	0	.00			8.84										
I	EX	CI	EX	45.0	24	558.35	555.88	.055	563.73	3.38	559.28	557.99	.0287	1.29	12.20	2.31	.92	0	.00	1.62	2.64	4.28	38.33	LOW		53.00	4.00	2.00	18.39		.28		
I	EX	FE	EX	41.0	24	555.88	554.48	.034	563.73	5.74	557.72	556.48*	.0304	1.24	12.55	2.44	.26	0	.00	.41	2.64	1.08	39.42	LOW		41.80	4.00	2.00	15.10				
																																15.13pv	
INE 2	5 STRUCTURES																																
I	10	CI	9	96.3	12	581.30	579.79	.016	584.95	2.65	582.30	580.79*	.0002	.02	.64	.01	.00	0	.00	.19	2.64	.50	.50	3 SIDES	6"	4.46	10.35			2.78			
I	9	CI	8	36.1	15	579.59	579.49	.003	584.64	3.85	580.76	580.74*	.0005	.02	1.23	.02	.03	0	.00	.38	2.64	1.00	1.50	1.0%		3.40	2.29	2.97	2.76				
I	8	CI	7	334.9	15	579.29	576.06	.010	585.28	4.54	578.47	577.82	.0019	.65	2.32	.08	.10	90	.02	.51	2.64	1.35	2.85	1.0%		6.34	2.29	2.97	5.10				
I	7	CI	5	188.1	15	575.86	573.85	.011	581.37	3.55	577.21	575.10*	.0112	2.11	5.57	.48	.56	0	.00	.50	2.64	1.32	6.84-	1.0%		6.68	2.29	2.97	5.57				
															INCOMING LINE			3	90	.05			2.67										
INE 3	3 STRUCTURES																																
I	12	CI	11	99.7	12	577.68	576.67	.010	581.36	2.68	578.68	577.95	.0014	.14	1.71	.05	.00	0	.00	.51	2.64	1.35	1.35	3 SIDES	6"	3.59	10.35			4.22			
I	11	CI	7	35.4	15	576.42	576.06	.010	581.82	3.88	577.88	577.82	.0017	.06	2.17	.07	.07	0	.00	.50	2.64	1.32	2.67	1.0%		6.51	2.29	2.97	5.01				
INE 4	4 STRUCTURES																																
I	15	CI	14	106.1	12	570.01	569.12	.008	574.73	3.72	571.01	570.12*	.0006	.06	1.08	.02	.00	0	.00	.32	2.64	.84	.84	3 SIDES	6"	3.26	10.35			3.42			
I	14	CI	13	35.7	15	568.92	568.36	.016	573.91	3.79	569.68	569.61*	.0019	.07	2.32	.08	.10	0	.00	.76	2.64	2.01	2.85	LOW		8.09	4.00	2.00	6.86				
I	13	MH	2	100.2	15	568.16	565.91	.022	573.82	4.21	569.29	568.73	.0056	.56	3.94	.24	.25	30	.03	.75	2.64	1.98	4.83	LOW		9.68	4.00	2.00	7.82				
INE 5	3 STRUCTURES																																
I	17	AI	16	116.2	12	572.40	571.05	.012	577.03	3.63	573.40	572.05*	.0082	.95	4.10	.26	.00	0	.00	1.22	2.64	3.22	3.22	LOW		3.84	4.00	2.00	5.55				
I	16	AI	3	177.6	18	569.17	567.52	.009	576.12	4.07	571.55	570.41	.0065	1.15	4.78	.35	.20	80	.17	.32	2.64	.84	8.45	3 SIDES	6"	10.12	10.35			6.33			
															INCOMING LINE			6	15	.04			4.38										
INE 6	4 STRUCTURES																																
I	20	AI	19	176.2	12	573.66	572.04	.009	576.63	1.97	574.66	574.03	.0022	.40	2.15	.07	.00	0	.00	.64	2.64	1.69	1.69	3 SIDES	6"	3.42	10.35			4.30			
I	19	AI	18	106.9	12	571.84	571.00	.008	576.86	2.83	573.65	572.66	.0093	.99	4.37	.30	.35	50	.04	.66	2.64	1.74	3.43-	3 SIDES	6"	3.16	10.35			4.37			
I	18	AI	16	109.1	15	570.80	569.37	.013	577.50	4.84	572.55	572.05	.0046	.50	3.57	.20	.00	30	.11	.36	2.64	.95	4.38	3 SIDES	6"	7.40	10.35			6.26			

*** AIs # of sides open & depth of sill
CIs street grade at inlet
GIs depth over grate

* lower hydraulic elevation when flowing less than full
C curve loss in pipe
R radius of curve
HW entrance control elevation
pv partial flow velocity

LINE	STRUCTURES			LENGTH	SIZE	FLOWLINE			UPPER STRUCTURE		HYDRAULIC			FRICTION LOSS	VELOCITY			TURN		QUANTITY			CAPACITIES								
	UPPER	LOWER				UPPER	LOWER	GRADE	ELEVATION	FREEBOARD	UPPER	LOWER	GRADE		FPS	HEAD	GAIN	ANGLE	LOSS	AREA	PI	INCR	TOTAL	***	PIPE	INLET	GUTTER	P.V.	BYPASS		
LINE 7 11 STRUCTURES																															
I	30	AI	29	100.2	12	576.56	575.35	.012	580.37	2.81	577.56	576.35*	.0039	.39	2.82	.12	.00	0	.00	.84	2.64	2.22	2.22	3	SIDES	6"	3.92	10.35	5.13		
I	29	MH	28A	73.3	12	575.15	574.12	.014	578.81	2.46	575.62	575.12*	.0068	.50	3.73	.22	.16	95	.09	.27	2.64	.71	2.93	3	SIDES	6"	4.22	10.35	5.85		
IH	28A	CI	28	93.6	15	573.92	572.75	.013	581.26	6.14	574.49	574.30	.0021	.19	2.39	.09	.00	10	.02				2.93							5.66	
I	28	MH	27	44.6	15	572.55	572.43	.003	578.86	4.56	573.96	573.68*	.0064	.28	4.19	.27	.30	40	.04	.84	2.64	2.22	5.15-		LOW		3.35	4.00	2.00	4.10	
IH	27	AI	26	96.3	15	572.23	571.37	.009	579.27	5.59	573.23	572.62*	.0064	.61	4.19	.27	.00	30	.10				5.15							5.60	
I	26	MH	25	89.2	18	571.17	570.11	.012	577.71	5.09	572.51	572.15	.0040	.36	3.76	.22	.01	0	.00	.57	2.64	1.50	6.65	3	SIDES	6"	11.45	10.35	6.35		
IH	25	CI	24	24.0	18	569.91	569.69	.009	578.56	6.41	572.03	571.93	.0040	.10	3.76	.22	.00	60	.12				6.65							6.04	
I	24	CI	23	36.5	24	569.49	568.94	.015	578.18	6.25	571.20	570.94*	.0070	.26	6.04	.57	.44	60	.12	.72	2.64	1.90	18.98		LOW		27.78	4.00	2.00	9.49	
I	23	AI	22	111.0	24	568.94	563.34	.050	578.17	7.23	566.27	565.34*	.0084	.93	INCOMING LINE			8	65	.17		10.43									
I	22	AI	21	55.0	24	563.14	561.04	.038	572.34	7.00	563.90	563.40	.0091	.50	6.61	.68	.21	0	.00	.67	2.64	1.77	20.75		LOW		50.81	4.00	2.00	15.31	
															6.87	.73	.11	45	.32	.32	2.64	.84	21.60	3	SIDES	6"	44.20	10.35		13.96	
LINE 8 6 STRUCTURES																															
I	35	CI	34	170.0	12	579.71	577.53	.013	582.91	2.20	580.71	578.53*	.0029	.50	2.45	.09	.00	0	.00	.73	2.64	1.93	1.93	2	SIDES	6"	4.03	6.70		5.11	
I	34	CI	33	129.0	18	575.63	574.52	.009	583.34	4.81	576.89	576.02*	.0067	.87	4.87	.37	.12	90	.07	.27	2.64	.71	8.61		1.5%		9.74	2.11	3.66	6.35	
I	33	MH	32	100.0	21	574.32	572.97	.014	581.46	5.44	575.15	574.72*	.0043	.43	INCOMING LINE			17	5	.01		5.97									
IH	32	MH	31	70.6	21	572.77	572.18	.008	581.23	6.51	574.24	573.93*	.0043	.31	4.34	.29	.00	5	.01	.20	2.64	.53	10.43		1.5%		18.41	2.11	3.66	8.00	
IH	31	CI	24	114.2	21	571.98	571.12	.008	579.79	5.86	573.36	572.87*	.0043	.49	4.34	.29	.00	25	.09				10.43				14.49				6.44
															4.34	.29	.00	30	.10				10.43				13.75				6.44
LINE 9 2 STRUCTURES																															
I	36	CI	33	35.8	15	577.06	574.52	.071	581.51	3.20	578.31	576.02	.0004	.01	1.05	.02	.00	0	.00	.49	2.64	1.29	1.29		1.5%		17.21	2.11	3.66	8.24	
LINE 10 4 STRUCTURES																															
I	39	CI	38	150.1	15	566.38	564.25	.014	570.44	2.81	567.63	565.50*	.0071	1.06	4.43	.30	.00	0	.00	2.06	2.64	5.44	5.44	3	SIDES	6"	7.70	10.35		6.76	
I	38	CI	37	35.2	18	564.05	563.27	.022	570.26	4.76	564.96	564.77*	.0055	.19	4.42	.30	.12	0	.00	.90	2.64	2.38	7.81		LOW		15.64	4.00	2.00	8.92	
I	37	MH	1	35.8	18	563.07	560.64	.068	570.26	5.49	563.16	562.91	.0071	.25	5.00	.39	.16	0	.00	.39	2.64	1.03	8.84		LOW		27.37	4.00	2.00	13.92	
LINE 11 4 STRUCTURES																															
I	43	MH	42	57.1	12	558.43	558.00	.008	562.33	2.90	559.43	559.00*	.0070	.40	3.80	.22	.00	0	.00	1.13	2.64	2.98	2.98		LOW		3.09	4.00	2.00	4.61	
IH	42	AI	41	122.6	15	557.80	546.74	.090	562.97	3.97	552.51	549.93	.0210	2.58	7.64	.91	.73	50	.11				9.37				19.40				15.66
I	41	FE	40	66.8	18	546.54	545.49	.016	552.52	2.59	549.89	549.00	.0133	.89	INCOMING LINE			12	60	.24		6.39									
															6.86	.73	.04	0	.00	1.04	2.64	2.75	12.12	3	SIDES	6"	13.17	10.35		8.51	
LINE 12 3 STRUCTURES																															
I	45	CI	44	35.1	15	564.11	563.05	.030	568.88	3.52	565.36	564.30*	.0006	.02	1.27	.03	.00	0	.00	.59	2.64	1.56	1.56		1.0%		11.23	2.29	2.97	6.42	
I	44	MH	42	352.1	15	562.85	558.00	.014	568.85	4.55	562.69	559.25*	.0098	3.44	5.21	.42	.47	90	.02	.55	2.64	1.45	6.39		1.0%		7.58	2.29	2.97	6.97	
															INCOMING LINE			13	90	.08		3.38									
LINE 13 2 STRUCTURES																															
I	46	CI	44	138.9	15	564.12	563.05	.008	567.84	2.47	565.37	564.30*	.0027	.38	2.75	.12	.00	0	.00	1.28	2.64	3.38	3.38	2	SIDES	6"	5.67	6.70		4.89	

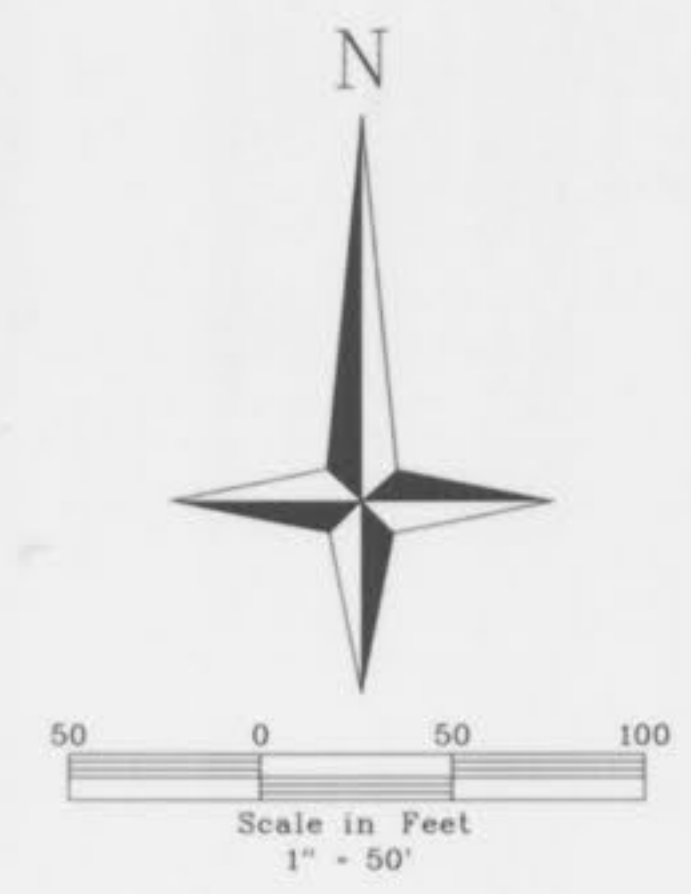
*** AIs # of sides open & depth of sill
 CIs street grade at inlet
 GIs depth over grate

* lower hydraulic elevation when flowing less than full
 C curve loss in pipe
 R radius of curve
 HW entrance control elevation
 pv partial flow velocity

STRUCTURES	UPPER		LOWER		FLOWLINE			UPPER STRUCTURE		HYDRAULIC			FRICTION LOSS	VELOCITY			TURN		QUANTITY		CAPACITIES																				
	UPPER	LOWER	LENGTH	SIZE	UPPER	LOWER	GRADE	ELEVATION	FREEBOARD	UPPER	LOWER	GRADE		FPS	HEAD	GAIN	ANGLE	LOSS	AREA	PI	INCR	TOTAL	***	PIPE	INLET	GUTTER	P.V. BYPASS														
LINE 14 14 STRUCTURES																																									
I	62	CI	61	96.5	12	584.38	584.42	.000	589.72	4.12	585.60	585.42*	.0018	-.18	1.95	.06	.00	0	.00	.58	2.64	1.53	1.53-	2 SIDES	6"	.73	6.70	1.95													
I	61	CI	60	118.8	15	584.22	582.91	.011	590.30	4.88	584.39	584.16*	.0019	-.23	2.30	.08	.07	10	.01	.49	2.64	1.29	2.82	1.0%	6"	6.78	2.29	2.97	5.27												
I	60	MH	59	41.7	15	582.71	582.29	.010	590.01	5.85	583.80	583.54*	.0062	-.26	4.15	.27	.30	30	.03	.86	2.64	2.27	5.10	LOW	6"	6.48	4.00	2.00	5.83												
H	59	AI	58	128.1	15	582.09	580.76	.010	589.79	6.25	582.81	582.01*	.0062	-.80	4.15	.27	.00	65	.16			5.10				6.58				5.83											
I	58	AI	57	134.6	18	580.56	579.52	.008	586.83	4.82	581.52	581.02*	.0037	-.50	3.63	.20	.00	85	.18	.50	2.64	1.32	6.42	3 SIDES	6"	9.23	10.35		5.72												
I	57	AI	56	68.9	18	579.32	577.78	.022	584.24	3.22	579.85	579.48	.0053	-.37	4.35	.29	.16	50	.10	.48	2.64	1.27	7.68	2 SIDES	6"	15.71	6.70		5.72												
I	56	MH	55	76.3	21	577.58	576.83	.010	584.17	4.69	579.29	578.99	.0039	-.30	4.12	.26	.05	45	.14	.84	2.64	2.22	9.90	3 SIDES	6"	15.71	10.35		5.72												
H	55	CI	54	38.5	21	576.63	576.37	.007	585.13	6.14	578.82	578.67	.0039	-.15	4.12	.26	.00	80	.17			9.90				13.01				6.04											
I	54	CI	53	35.5	21	576.17	575.97	.006	584.64	5.97	578.30	578.10	.0056	-.20	4.94	.38	.21	65	.15	.75	2.64	1.98	11.88	LOW	6"	11.90	4.00	2.00	5.81												
I	53	MH	52	22.0	21	575.77	575.68	.004	584.86	6.76	577.63	577.43*	.0092	-.20	6.31	.62	.43	10	.04	1.25	2.64	3.30	15.18-	LOW	6"	10.15	4.00	2.00	6.31												
H	52	AI	51	97.5	24	575.48	574.68	.008	583.79	6.36	577.12	576.68*	.0045	-.44	4.83	.36	.00	40	.27			15.18				20.49				7.07											
I	51	AI	50	128.0	24	574.48	572.77	.013	583.31	6.63	575.38	574.77*	.0048	-.61	4.99	.39	.05	85	.25	.19	2.64	.50	15.68	2 SIDES	6"	26.15	6.70		8.61												
I	50	MH	EX	26.0	36	572.57	569.63	.113	577.46	2.69	572.66	572.63*	.0010	-.03	2.93	.13	.00	90	.28	.38	2.64	1.00	20.72	4 SIDES	6"	224.29	13.42		19.82												
															INCOMING LINE	15	60	.09			4.04																				
LINE 15 6 STRUCTURES																																									
I	67	CI	66	35.2	15	581.59	580.62	.028	586.51	3.67	582.84	581.87*	.0003	-.01	.93	.01	.00	0	.00	.43	2.64	1.14	1.14	1.0%	6"	10.73	2.29	2.97	5.72												
I	66	AI	65	101.3	15	580.42	579.63	.008	586.55	4.68	581.01	580.88*	.0013	-.13	1.87	.05	.06	0	.00	.44	2.64	1.16	2.30	1.0%	6"	5.70	2.29	2.97	4.44												
I	65	AI	64	172.8	15	579.43	577.83	.009	585.18	4.30	579.42	579.08*	.0020	-.34	2.34	.09	.06	85	.04	.22	2.64	.58	2.88	3 SIDES	6"	6.22	10.35		4.92												
I	64	AI	63	122.1	15	577.53	574.06	.028	583.13	4.05	575.82	575.45	.0030	-.37	2.90	.13	.08	0	.00	.26	2.64	.69	3.56	3 SIDES	6"	10.89	10.35		7.90												
I	63	AI	50	134.2	15	573.86	573.31	.004	579.72	4.27	575.29	574.77	.0039	-.52	3.29	.17	.07	80	.09	.18	2.64	.48	4.04	3 SIDES	6"	4.14	10.35		3.80												
LINE 16 3 STRUCTURES																																									
I	69	CI	68	97.8	12	586.64	585.48	.012	590.64	3.00	587.64	586.48*	.0006	-.06	1.11	.02	.00	0	.00	.33	2.64	.87	.87	3 SIDES	6"	3.88	10.35		4.0												
I	68	MH	EX	37.5	12	585.28	584.93	.009	590.73	4.25	.08	.00	.0020	-.08	2.05	.07	.07	90	.01	.28	2.64	.74	1.61	1.0%	6"	3.44	2.29	2.97	4.25												
LINE 17 4 STRUCTURES																																									
I	72	MH	71	121.2	12	579.21	578.08	.009	586.31	4.56	581.75	581.49	.0021	-.26	2.08	.07	.00	0	.00	.62	2.64	1.64	1.64	3 SIDES	6"	3.44	10.35		4.27												
H	71	CI	70	40.8	12	577.98	580.36	-.058	586.67	5.18	581.45	581.36*	.0021	-.09	2.08	.07	.00	90	.05			1.64				8.60				8.42											
I	70	CI	34	188.5	15	577.59	575.83	.009	585.79	4.43	580.14	578.53	.0085	1.61	4.86	.37	.40	10	.01	.50	2.64	1.32	5.97	1.0%	6"	6.24	2.29	2.97	5.69												
															INCOMING LINE	18	85	.06			3.01																				
LINE 18 3 STRUCTURES																																									
I	74	CI	73	101.8	12	579.35	578.27	.011	583.43	1.70	581.73	581.51	.0021	-.21	2.08	.07	.00	0	.00	.62	2.64	1.64	1.64	2 SIDES	6"	3.67	6.70		4.60												
I	73	CI	70	35.4	15	578.07	577.81	.007	585.93	4.42	581.44	581.36	.0022	-.08	2.45	.09	.08	0	.00	.52	2.64	1.37	3.01	1.0%	6"	5.54	2.29	2.97	4.52												

*** AIs # of sides open & depth of sill
 CIs street grade at inlet
 GIs depth over grate

* lower hydraulic elevation when flowing less than full
 C curve loss in pipe
 R radius of curve
 HW entrance control elevation
 pv partial flow velocity



THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, OR NONEXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

FEMA F.I.R.M. MAPS
29183C0220E, 29183C0240E, 2918C0430E
DATED AUGUST 2, 1996

FINAL SEWER MEASUREMENTS

3-05-04
US-2185
ROGER G. ALLEN
Roger G. Allen
ROGER G. ALLEN
MO P.L.S. # 2185

PROPERTY N/F OF
McWING GOLF, L.L.C.
2460/0478

BAYHILL VILLAGE
WINGHAVEN

SITE PLAN
AS BUILT

Drawn By: DNL
Checked By: DNL

7246

03-04-04

SEE SHEET 2

NOTE TO BE INSTALLED WITH
BAYHILL VILLAGE PHASE ONE
HOME LATERAL CONNECTIONS
TO THESE LINES ARE NOT TO BE
MADE UNTIL FUTURE PLATS ARE
APPROVED.



PROPERTY N/F OF
MCWING GOLF, LLC
DB. 2012 PG. 1706

PROPERTY N/F OF
McWING GOLF, L.L.C.
2012x1706



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PROPERTY N/F OF
McWING GOLF, L.L.C.
2460/0478



Scale in Feet
1" = 50'

3-05-04
LS-2185
ROGER G. ALLEN
Roger G. Allen
ROGER G. ALLEN
MO P.L.S. # 2185

PROPERTY N/F OF
NOVUS PROPERTY HOLDINGS, L.L.C.
1953/436

FINAL SEWER MEASUREMENTS

FEMA F.I.R.M. MAPS
29183C0220E, 29183C0240E, 2918C0430E
DATED AUGUST 2, 1996

SEE SHEET 1

SEE SHEET 3

WINGHAVEN
RESIDENTIAL L.L.C.
11168000 & SON
CENTER DRIVE
ST. LOUIS, MISSOURI 63005
PHONE (636) 537-2000



BAYHILL VILLAGE
WINGHAVEN

SITE PLAN
AS-BUILTS

Base Map No. P. 7948
Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.



THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, OR NONEXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

FEMA F.I.R.M. MAPS
 29183C0220E, 29183C0240E, 29183C0430E
 DATED AUGUST 2, 1996

3-05-04
 LS-1185
 ROGER G. ALLEN
 MO P.L.S. # 2185



Scale in Feet
 1" = 50'

FINAL SEWER MEASUREMENTS
 SEE SHEET 4

WINGHAVEN
 RESIDENTIAL L.L.C.
 11 ACBRIDGE & SON
 CENTER DRIVE
 ST. LOUIS, MISSOURI 63005
 PHONE (636) 337-2000



BAYHILL VILLAGE
WINGHAVEN

SITE PLAN
 AS-BUILTS
 Design By: E.D.K.
 Drawn By: R.S.B.
 Checked By: T.J.M.
 Base Map No. P-7246
 03-04-04

SEE SHEET 3

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, OR NONEXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

WINGHAVEN
RESIDENTIAL L.L.C.
11 MCBRIDE & SON
CENTER DRIVE
ST. LOUIS, MISSOURI 63005
PHONE (636) 537-2000

VOLZ



BAYHILL VILLAGE

WINGHAVEN

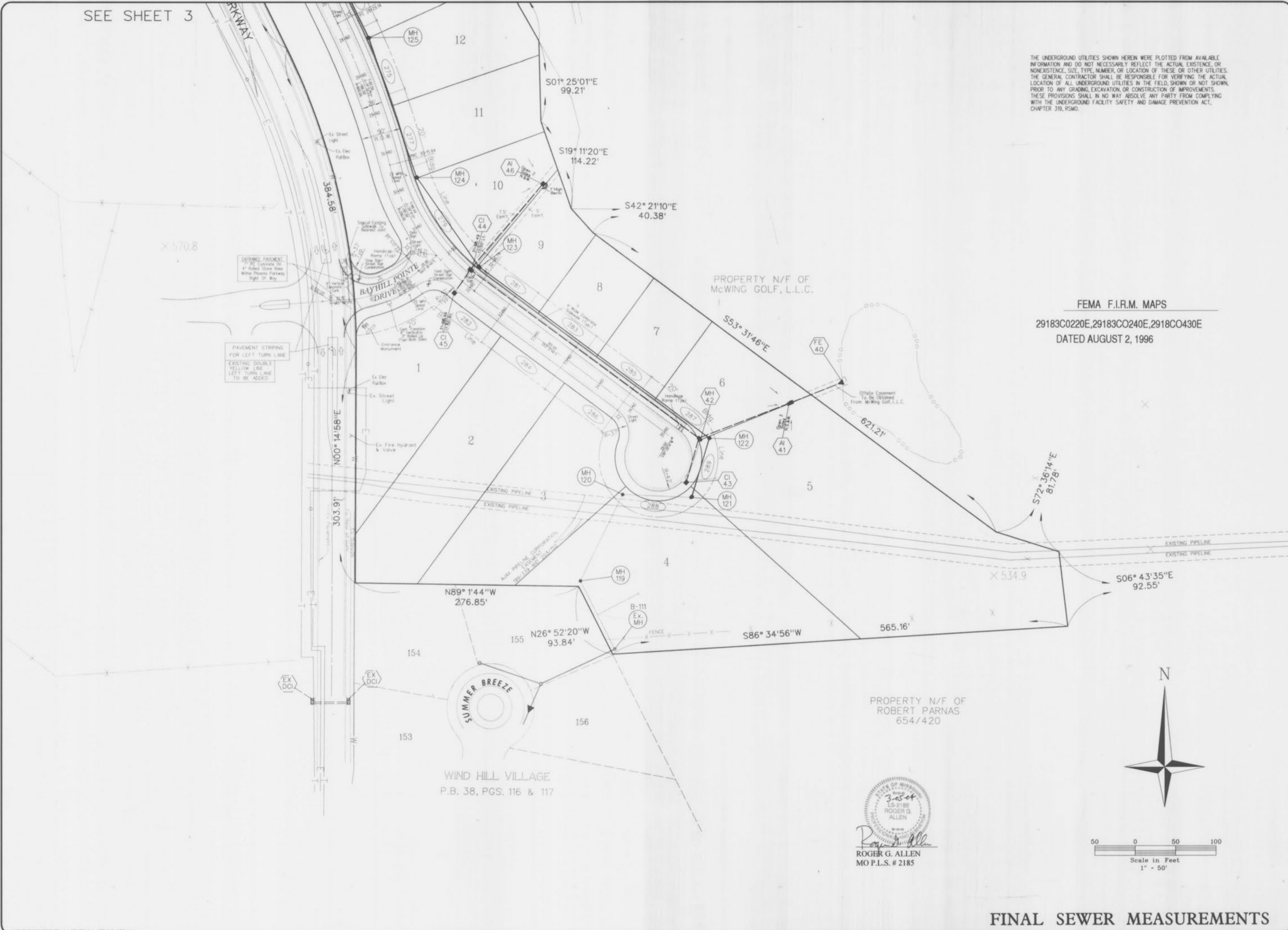
SITE PLAN
AS-BUILTS

Design By: E.D.K.
Drawn By: B.S.B.
Checked By: T.J.M.

Base Map No. P * 7246

03/14/04

4



FEMA F.I.R.M. MAPS
29183C0220E, 29183C0240E, 29183C0430E
DATED AUGUST 2, 1996

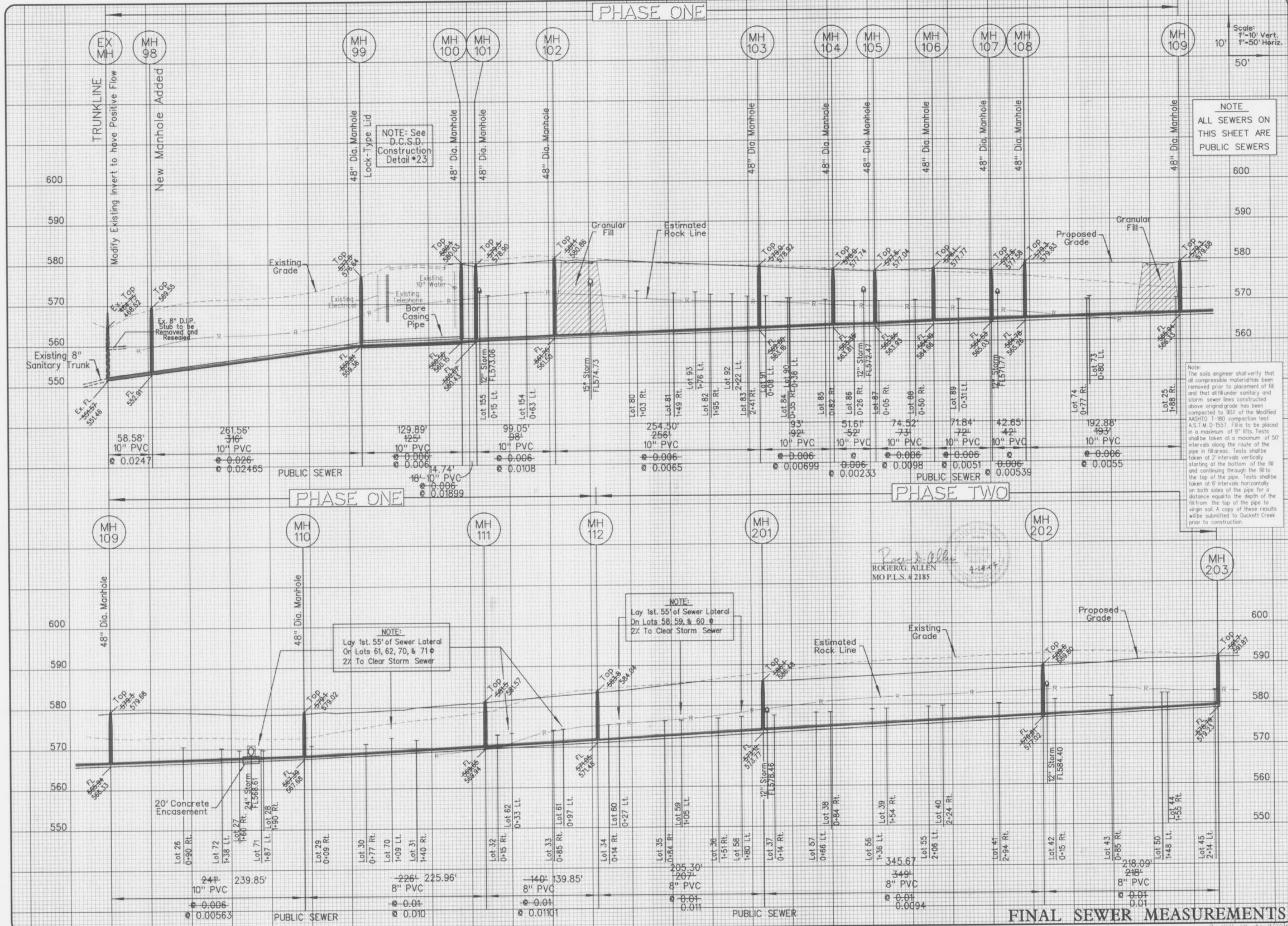
PROPERTY N/F OF
ROBERT PARNAS
654/420

3-05-04
LS-2188
ROGER G. ALLEN

Roger G. Allen
ROGER G. ALLEN
MO P.L.S. # 2185



FINAL SEWER MEASUREMENTS



NOTE
ALL SEWERS ON
THIS SHEET ARE
PUBLIC SEWERS

Note
The soils engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of the Modified AASHTO T-180 compaction test A.S.T.M. D-1557. Fill is to be placed in a maximum of 9" lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to Duckett Creek prior to construction.

NOTE: See
D.C.S.D.
Construction
Detail #23

NOTE:
Lay 1st. 55' of Sewer Lateral
On Lots 61, 62, 70, & 71 @
2% To Clear Storm Sewer

NOTE:
Lay 1st. 55' of Sewer Lateral
On Lots 58, 59, & 60 @
2% To Clear Storm Sewer

ROGER G. ALLEN
MO P.L.S. # 2185

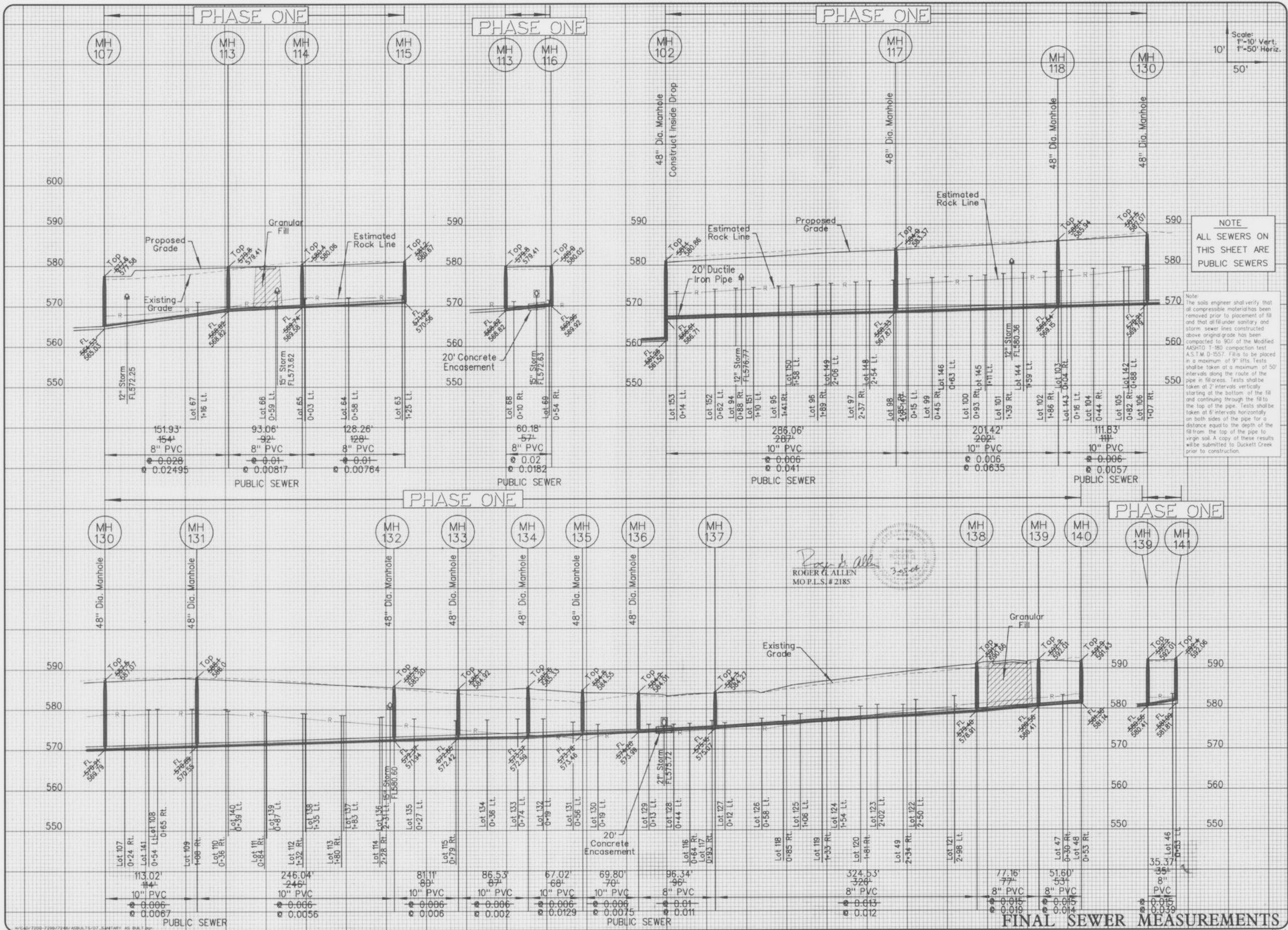
FINAL SEWER MEASUREMENTS

WINGHAVEN
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CENTER DRIVE
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PHONE (636) 537-2000



BAYHILL VILLAGE
WINGHAVEN

SANITARY SEWER PROFILES
AS-BUILTS
Design By: E.D.K.
Drawn By: B.S.B.
Checked By: T.J.M.
7/24/04
14-27-04
5

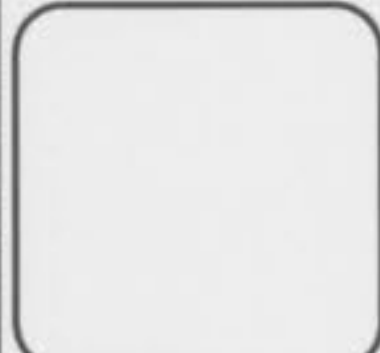


NOTE
ALL SEWERS ON THIS SHEET ARE PUBLIC SEWERS

Note:
The soils engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of the Modified AASHTO T-99 compaction test. A.S.T.M. D-1557. Fill to be placed in a maximum of 9" lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 5' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to Duckett Creek prior to construction.

Roger Allen
ROGER ALLEN
MO P.L.S. # 2185

WINGHAVEN
RESIDENTIAL L.L.C.
*1 MCBRIDE & SON
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PHONE (636) 537-2000

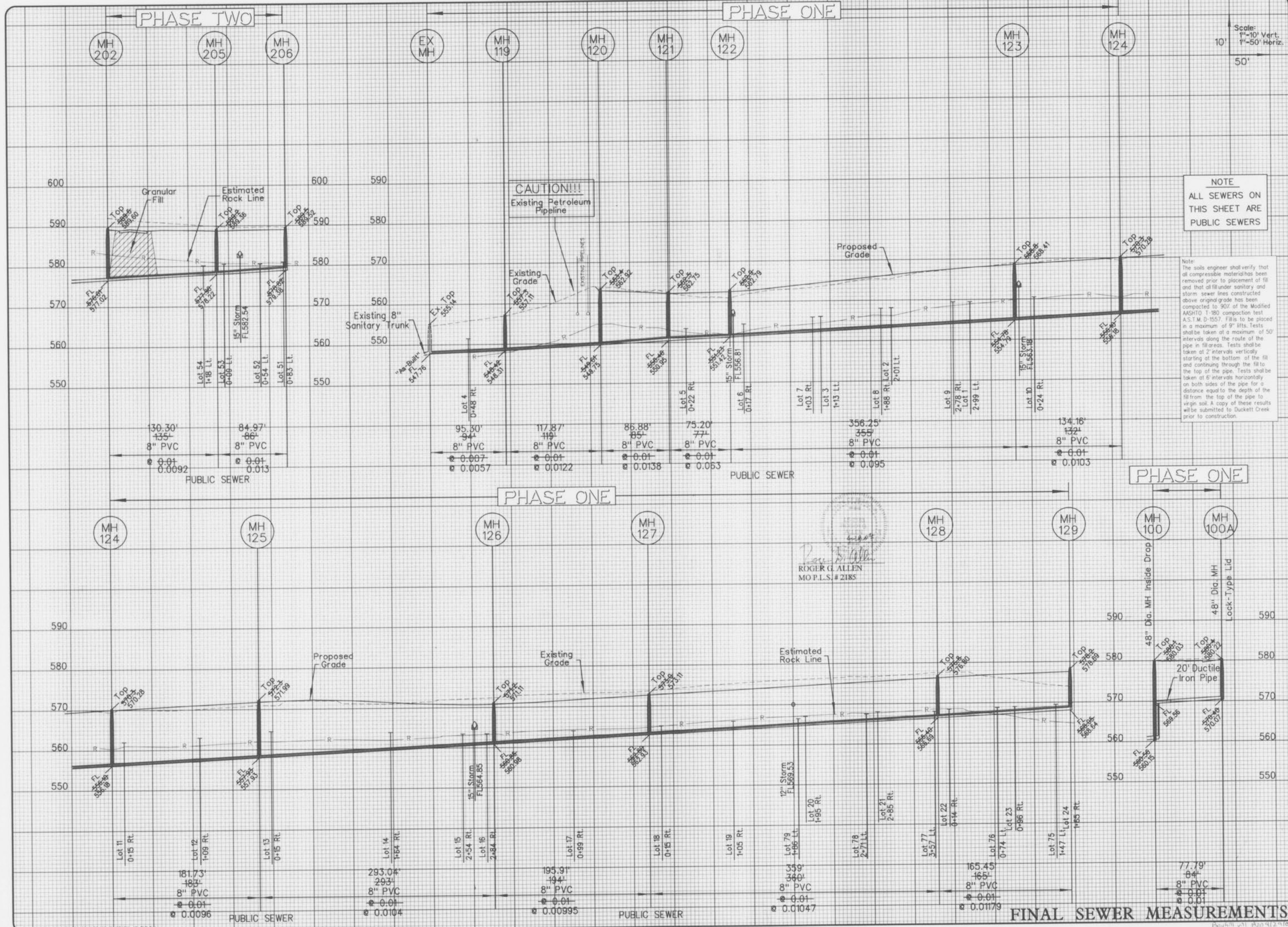


BAYHILL VILLAGE
WINGHAVEN

SANITARY SEWER PROFILES
AS-BUILTS
Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.
7246
11/10/10
6

FINAL SEWER MEASUREMENTS

Redhill 1111 App 11/24/10 A.S.C.



Scale:
1"=10' Vert.
1"=50' Horiz.
50'

NOTE
ALL SEWERS ON
THIS SHEET ARE
PUBLIC SEWERS

Note:
The soils engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of the Modified AASHTO T-99 compaction test A.S.T.M. D-1557. Fills to be placed in a maximum of 9' lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to Duckett Creek prior to construction.

ROGER G. ALLEN
MO P.L.S. # 2185

FINAL SEWER MEASUREMENTS

WINGHAVEN
RESIDENTIAL L.L.C.
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PHONE (636) 637-2000

VOLZ

BAYHILL VILLAGE



WINGHAVEN

SANITARY SEWER PROFILES
AS-BUILTS

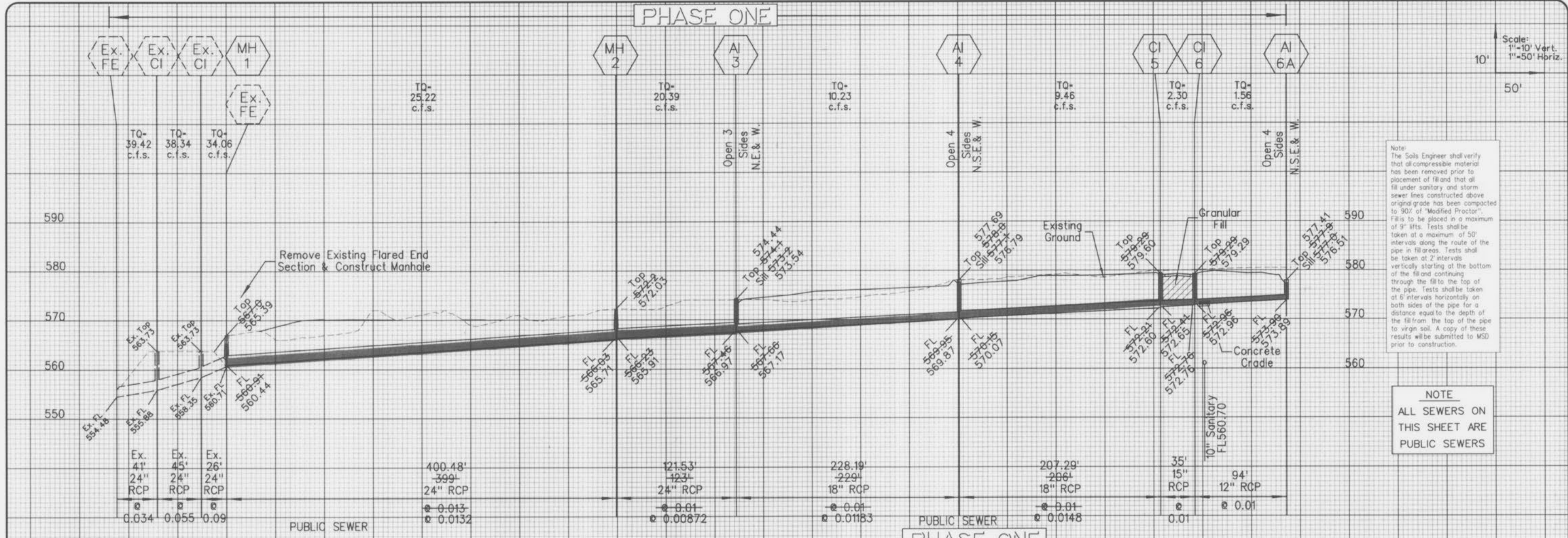
Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.
7246

PHASE ONE

Scale:
1"=10' Vert.
1"=50' HORIZ.

Note:
The Soils Engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of "Modified Proctor". Fill is to be placed in a maximum of 9" lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to MSD prior to construction.

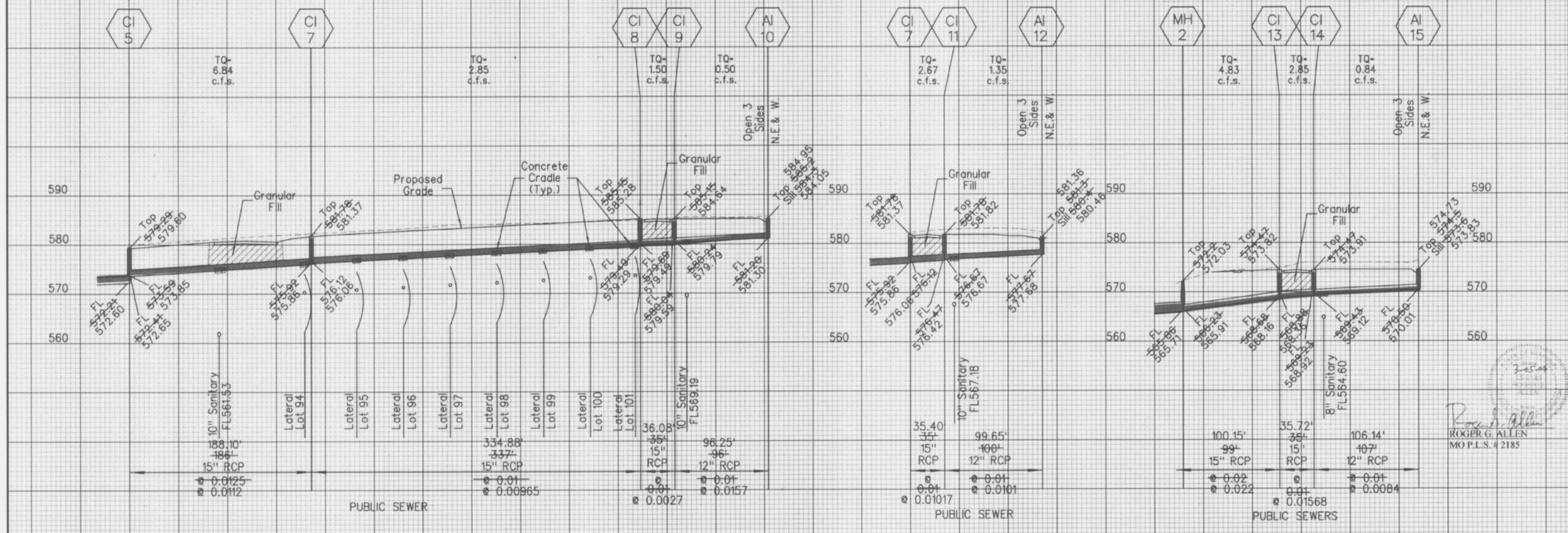
NOTE
ALL SEWERS ON THIS SHEET ARE PUBLIC SEWERS



PHASE ONE

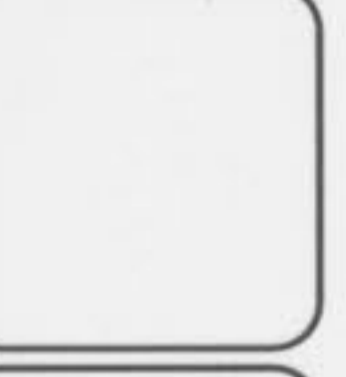
PHASE ONE

PHASE ONE



ROGER G. ALLEN
MO P.L.S. # 2185

WINGHAVEN
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ST. LOUIS, MISSOURI 63005
PHONE (636) 537-2000

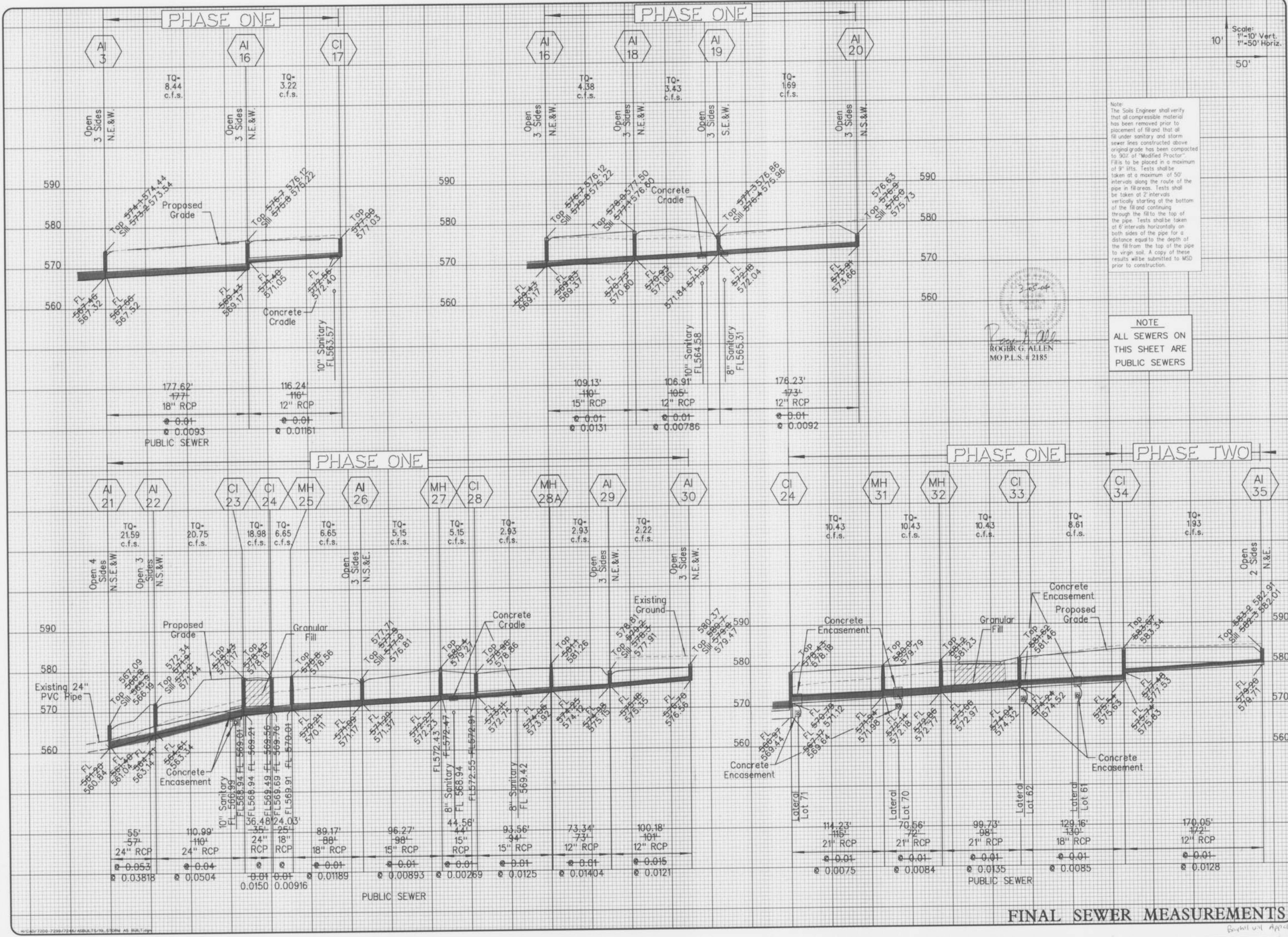


BAYHILL VILLAGE
WINGHAVEN

STORM SEWER PROFILES
AS-BUILTS
Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.
7246
03-04-14

FINAL SEWER MEASUREMENTS

By: [Signature] Date: 4/29/04 ABC



Scale:
1"=10' Vert.
1"=50' Horiz.

Note:
The Soils Engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of "Modified Proctor". Fills to be placed in a maximum of 9' lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to MSD prior to construction.

ROGER G. ALLEN
MO P.L.S. # 2185

NOTE
ALL SEWERS ON THIS SHEET ARE PUBLIC SEWERS

WINGHAVEN
RESIDENTIAL L.L.C.
11 MORRIS & SON
CENTER DRIVE
ST. LOUIS, MISSOURI 63005
PHONE (636) 537-2000

VOLZ

7246



BAYHILL VILLAGE
WINGHAVEN

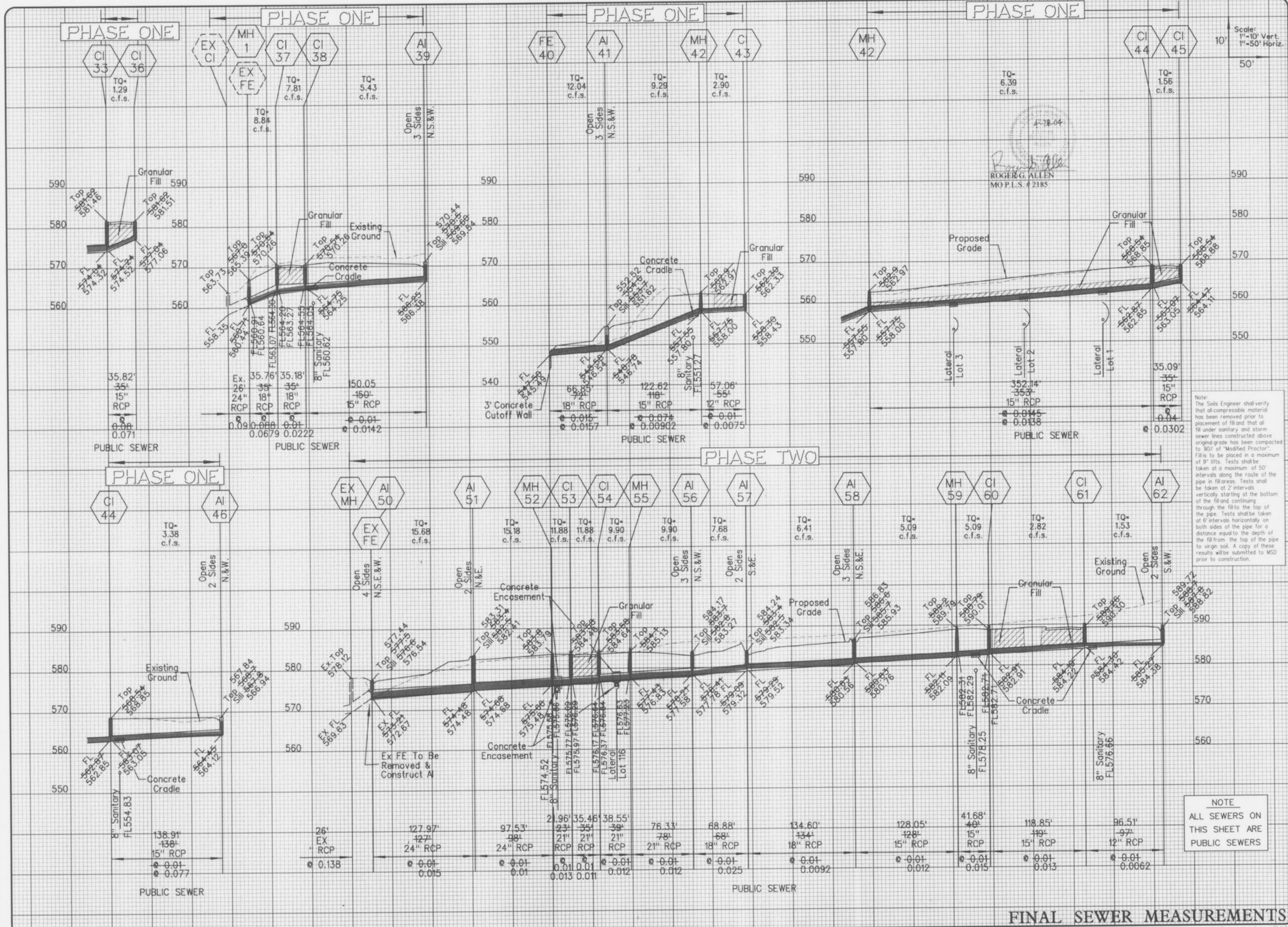
STORM SEWER PROFILES
AS-BUILTS

Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.

03-10-10

FINAL SEWER MEASUREMENTS

Basin 101 Approval 10/10/10



4-28-04
 Roger G. Allen
 M.O.P.L.S. # 2185

Note:
 The Soils Engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of "Modified Proctor". Fills to be placed in a maximum of 9" lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to MSD prior to construction.

NOTE
 ALL SEWERS ON THIS SHEET ARE PUBLIC SEWERS

WINGHAVEN
 RESIDENTIAL L.L.C.
 11 WINGHAVEN
 CENTER DRIVE
 ST. LOUIS, MISSOURI 63005
 PHONE (636) 837-2000

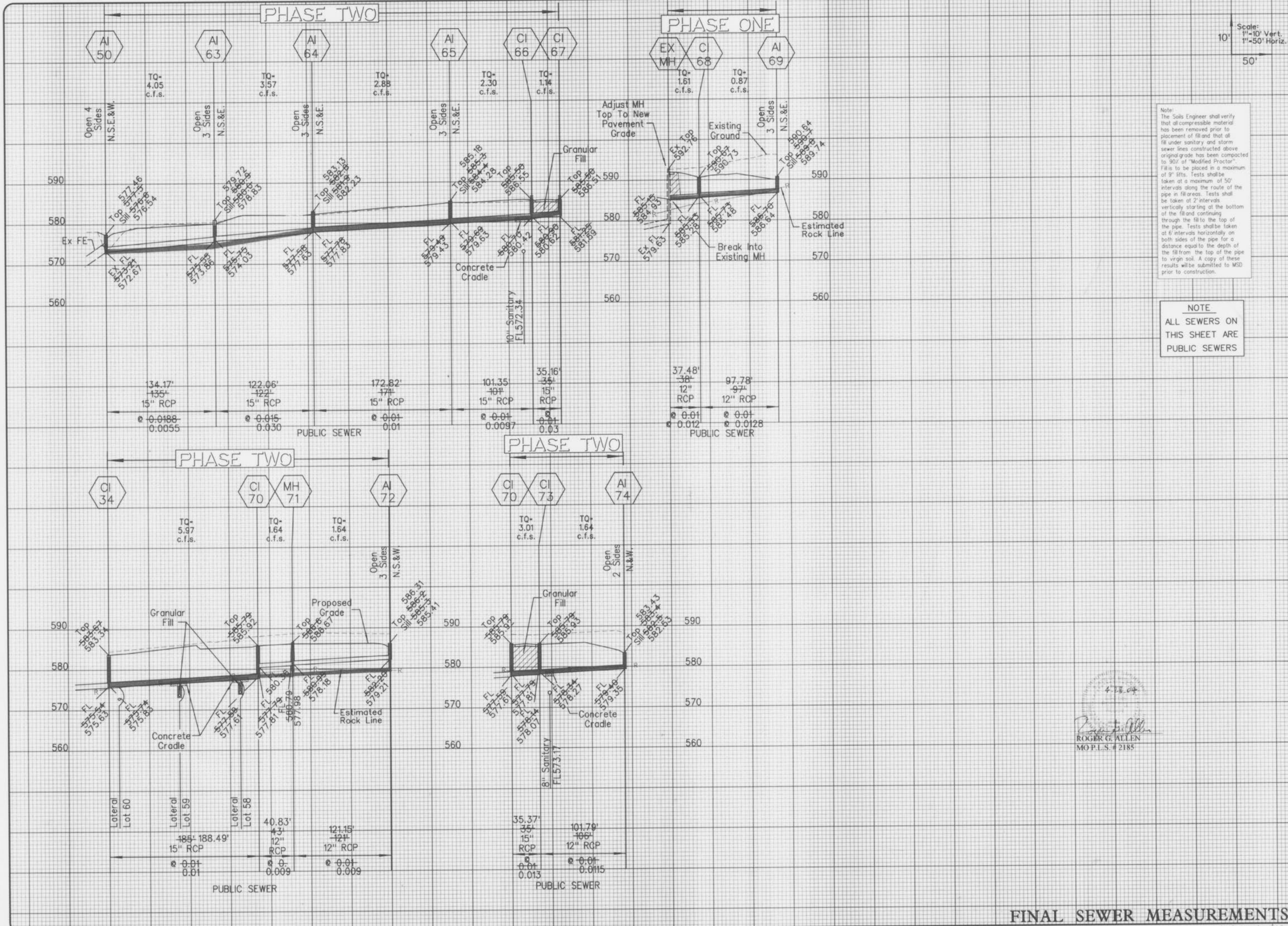


BAYHILL VILLAGE
WINGHAVEN

STORM SEWER PROFILES
 AS-BUILTS
 Design By: E.O.K.
 Drawn By: R.S.B.
 Checked By: T.J.M.
 7246
 10

FINAL SEWER MEASUREMENTS

Bayhill Vill App 9/25/04 AOC



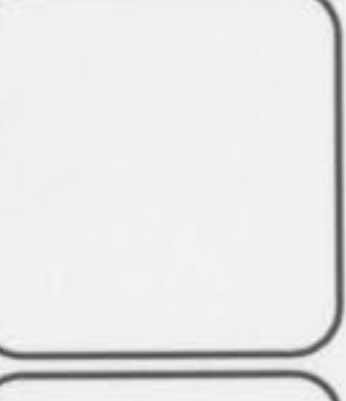
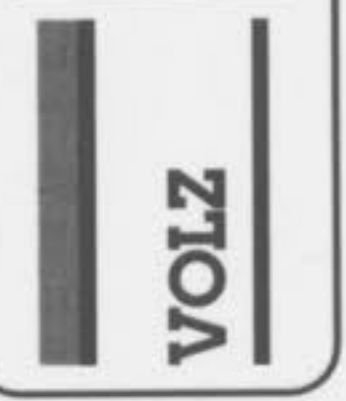
Scale:
1"=10' Vert.
1"=50' Horiz.

Note:
The Soils Engineer shall verify that all compressible material has been removed prior to placement of fill and that all fill under sanitary and storm sewer lines constructed above original grade has been compacted to 90% of "Modified Proctor" Fill to be placed in a maximum of 9" lifts. Tests shall be taken at a maximum of 50' intervals along the route of the pipe in fill areas. Tests shall be taken at 2' intervals vertically starting at the bottom of the fill and continuing through the fill to the top of the pipe. Tests shall be taken at 6' intervals horizontally on both sides of the pipe for a distance equal to the depth of the fill from the top of the pipe to virgin soil. A copy of these results will be submitted to MSD prior to construction.

NOTE
ALL SEWERS ON THIS SHEET ARE PUBLIC SEWERS

4.28.04
ROGER G. ALLEN
MO.P.L.S. # 2185

WINGHAVEN
RESIDENTIAL L.L.C.
11 MICROR & SON
ST. LOUIS, MISSOURI 63105
PHONE (636) 337-2000



BAYHILL VILLAGE
WINGHAVEN

STORM SEWER PROFILES
AS-BUILTS
Design By: E.D.K.
Drawn By: R.S.B.
Checked By: T.J.M.
7246

FINAL SEWER MEASUREMENTS

11