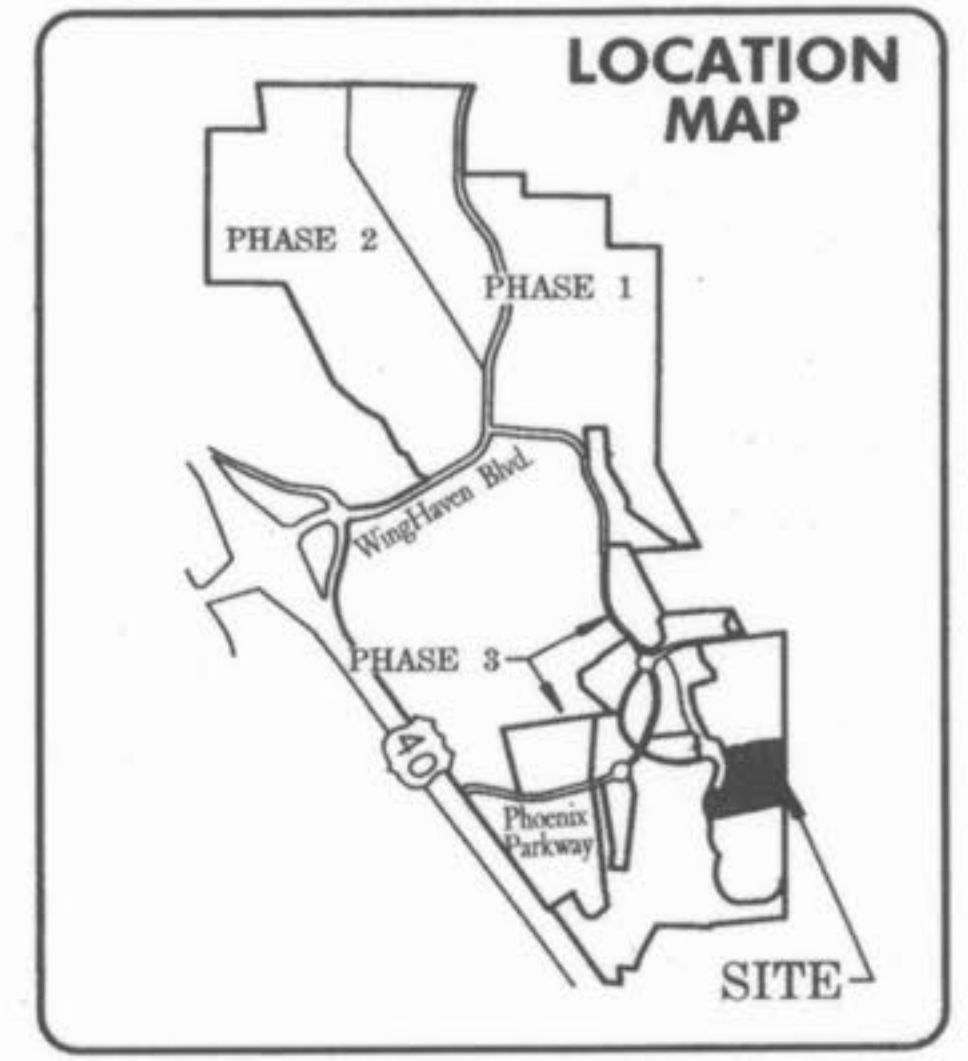


WINGHAVEN
PHASE 3
STONEY MOUNTAIN VILLAGE
VILLAGE "N"
AS-BUILT PLANS
WINGHAVEN RESIDENTIAL L.L.C.
McBRIDE & SON HOMES INC.



B.M. LOOP NOTES

U.S.G.S. DATUM BENCHMARK
 (Provided by the Missouri Department of Transportation)

ELEVATION 616.50 at Dardenne Prairie, T. 46N., R. 2E., near approximate corner sections 1, 2, 11 & 12, 31' N. and 20' W. of Crossroads, the intersection of State Highway "N" with Post Road and Hanley Road, 49' S. of S.E. Corner of Catholic Church, 2.0' N. of sidewalk, and in concrete post, standard tablet stamped "TT 60 C 1936 616."

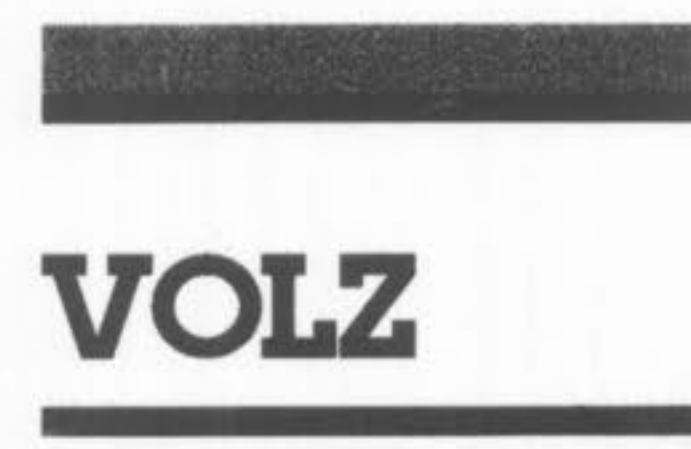
The existing sewer lengths, sizes, flowlines, depths of structures and sewers and locations with respect to existing or proposed easements have been measured. The results of those measurements are shown on this set of Final Measurement Plans. Since the wye locations have been plotted from information 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
 Roger G. Allen
 Mo. Reg. L.S. 2185

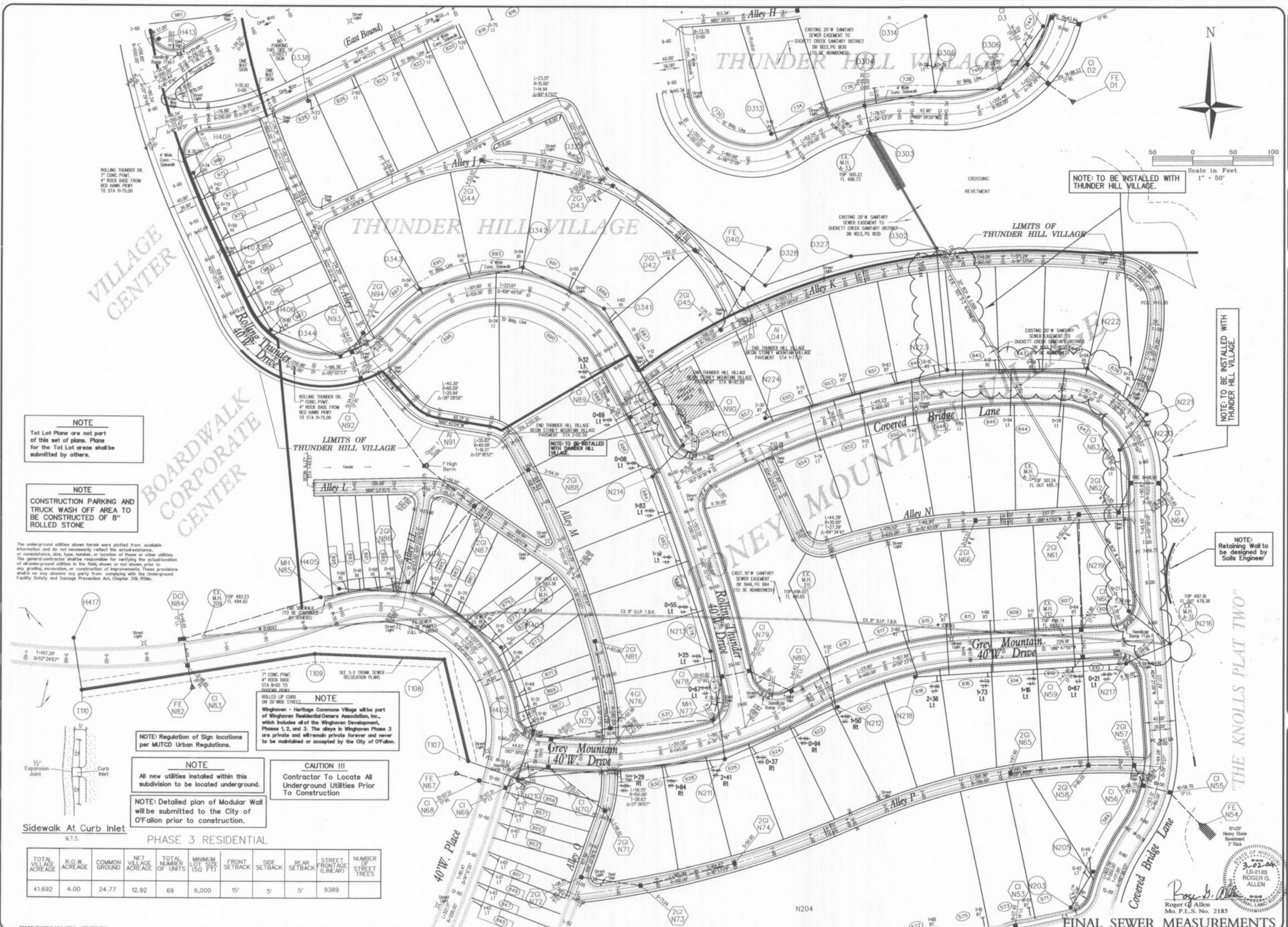
STRUCTURES UPPER	LOWER	LENGTH	SIZE	FLOWLINE		UPPER STRUCTURE		HYDRAULIC		FRICTION LOSS	VELOCITY		TURN		ANNA PI	QUANTITY		CAPACITY		***	PIPE INLET	GUTTER	BYPASS						
				UPPER	LOWER	GRADE	ELEVATION	PREBOARD	UPPER		LOWER	GRADE	FTS	HEAD GAIN		ANGLE	LOSS	INCH	TOTAL					INCH	TOTAL				
LINE 7 7 STRUCTURES																													
CI	N80	CI	N79	58.0	15	498.38	497.97	.007	503.53	3.90	499.63	499.22*	.0006	.03	1.27	.03	.00	0	.00	.58	2.64	1.56	1.56	1.09	5.43	2.29	2.97	3.81	
CI	N79	CI	N78	35.0	15	497.97	497.27	.020	504.23	5.01	499.59	499.52*	.0019	.07	2.30	.08	.09	0	.00	.48	2.64	1.27	2.82	3.08	9.14	1.57	5.18	6.56	
CI	N78	MH	N77	54.0	15	497.27	496.63	.012	503.68	5.16	499.05	497.88*	.0032	.17	3.97	.14	.10	40	.04	.31	2.64	.82	3.64	3.04	7.03	1.57	5.18	6.56	
MH	N77	AOI	N76	129.0	15	496.63	496.08	.004	501.92	4.04	497.74	497.33*	.0032	.41	3.97	.14	.00	70	.08						4.22				5.76
AOI	N76	CI	N75	75.0	18	496.08	493.56	.034	501.31	3.98	495.48	495.06*	.0056	.42	4.45	.31	.30	75	.09	.87	2.64	2.30	7.87	.50*	19.25	8.40	7.00	10.71	
CI	N75	CI	N70	35.0	18	493.56	492.44	.032	500.00	4.94	494.21	493.96	.0089	.24	4.93	.38	.13	5	.01	.32	2.64	.84	8.73	1.09	18.79	2.29	2.97	10.43	
LINE 8 2 STRUCTURES																													
ZOI	N81	AOI	N76	110.0	12	497.90	496.08	.015	502.34	3.64	498.70	497.33	.0029	.32	2.45	.09	.00	0	.00	.73	2.64	1.93	1.93	1.00*	4.32	17.10	2.97	6.31	
LINE 9 5 STRUCTURES																													
CI	N89	CI	N89	35.0	15	509.21	506.82	.091	513.96	3.50	510.46	507.27*	.0003	.01	.93	.01	.00	0	.00	.43	2.64	1.14	1.14	1.09	19.50	2.29	2.97	4.23	
CI	N89	ZOI	N88	143.0	15	506.02	502.06	.028	513.83	6.56	503.46	503.31*	.0011	.15	1.72	.09	.05	0	.00	.37	2.64	.98	2.11	1.09	10.75	2.29	2.97	6.43	
ZOI	N88	ZOI	N87	80.0	15	502.06	494.73	.092	507.51	4.20	497.55	497.25	.0038	.30	3.23	.16	.18	0	.00	.70	2.64	1.85	3.96	.50*	19.55	5.40	2.00	11.53	
ZOI	N87	ZOI	N86	126.0	21	494.73	494.11	.005	501.05	3.80	497.01	496.44	.0045	.56	4.40	.30	.20	5	.00	.81	2.64	2.14	10.59	.50*	11.12	5.40	2.00	6.30	
ZOI	N86	MH	N85	109.0	21	494.11	492.83	.012	500.86	4.22	498.19	495.52	.0061	.66	5.14	.41	.20	15	.05	.67	2.64	1.77	12.34	.50*	17.17	8.40	2.00	7.84	
MH	N85	DCI	N84	180.0	21	492.83	491.65	.007	500.31	4.79	495.34	494.25	.0061	1.09	5.14	.41	.00	40	.18						12.83				6.16
DCI	N84	CI	N83	35.0	16	491.65	491.21	.013	499.59	5.34	494.24	494.21*	.0008	.03	2.62	.11	.00	5	.01	1.60	3.85	6.16	18.52	LOW	74.78	10.00	2.00	8.35	
CI	N83	PK	N82	30.0	42	491.21	489.86	.045	499.39	5.18		.01	.00	.0004	.01	2.05	.07	.00	85	.07	.47	2.64	1.24	19.76	LOW	213.43	4.00	2.00	13.82
LINE 10 5 STRUCTURES																													
ZOI	N94	CI	N93	28.0	15	515.13	514.60	.019	519.49	3.11	516.38	515.85*	.0008	.02	1.51	.04	.00	0	.00	.70	2.64	1.85	1.85	.50*	8.89	5.40	2.00	6.33	
CI	N93	CI	N92	35.0	15	514.60	513.74	.025	520.39	4.54	515.05	514.99*	.0010	.06	2.26	.08	.07	0	.00	.35	2.64	.92	2.77	1.23	10.13	1.50	5.34	7.05	
CI	N92	AI	N91	136.0	15	513.74	496.28	.128	520.32	5.33	498.19	497.82	.0027	.37	2.75	.12	.07	50	.04	.23	2.64	.61	3.38	3.23	21.15	1.50	5.34	13.45	
AI	N91	ZOI	N87	78.0	15	496.28	494.73	.020	501.98	4.06	497.63	497.25	.0048	.38	3.66	.21	.16	20	.03	.42	2.64	1.11	4.49	4 STDS 6*	9.11	13.42		4.41	

*** A/s # of sides open & depth of sill
 C/s street grade at inlet
 O/s 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

AS-BUILT

STRUCTURES UPPER	LOWER	LENGTH	SIZE	FLOWLINE		UPPER STRUCTURE		HYDRAULIC		FRICTION LOSS	VELOCITY		TURN		ANNA PI	QUANTITY		CAPACITY		***	PIPE INLET	GUTTER	BYPASS						
				UPPER	LOWER	GRADE	ELEVATION	PREBOARD	UPPER		LOWER	GRADE	FTS	HEAD GAIN		ANGLE	LOSS	INCH	TOTAL					INCH	TOTAL				
LINE 1 3 STRUCTURES																													
CI	N30	CI	N29	101.0	15	496.87	494.60	.022	501.95	3.83	498.12	495.85*	.0002	.02	.77	.01	.00	0	.00	.36	2.64	.95	.95	1.08	9.68	2.29	2.97	4.44	
CI	N29	ZOI	R26	147.0	15	494.60	490.86	.025	504.43	8.58		.30	.00	.0020	.30	2.37	.09	.11	0	.00	.74	2.64	1.95	2.90	1.08	10.30	2.29	2.97	7.17
LINE 2 3 STRUCTURES																													
CI	N53	CI	N52	100.0	15	497.20	494.82	.024	501.87	3.42	496.45	496.07*	.0002	.02	.82	.01	.00	0	.00	.38	2.64	1.00	1.00	1.14	9.97	2.25	3.12	5.11	
CI	N52	ZOI	R48	149.0	15	494.82	490.91	.026	500.72	4.65		.36	.00	.0034	.36	2.60	.11	.14	0	.00	.83	2.64	2.19	3.19	1.08	10.44	2.29	2.97	7.40
LINE 3 11 STRUCTURES																													
CI	N64	CI	N63	35.0	15	496.98	496.39	.017	500.73	2.50	498.23	497.64*	.0005	.02	1.12	.02	.00	0	.00	.52	2.64	1.37	1.37	LOW	8.39	4.00	2.00	6.05	
CI	N63	ZOI	N62	39.0	15	496.39	495.70	.018	500.62	2.98	497.02	496.95*	.0018	.07	2.24	.08	.09	0	.00	.52	2.64	1.37	2.75	LOW	8.59	4.00	2.00	6.23	
ZOI	N62	ZOI	N61	50.0	15	495.70	495.12	.012	500.79	3.84	496.56	496.40	.0032	.16	2.99	.14	.11	70	.05	.35	2.64	.92	3.67	1.00*	6.96	17.10	2.97	6.82	
ZOI	N61	CI	N60	143.0	18	495.12	493.49	.011	500.79	4.39	496.04	495.15	.0062	.89	4.69	.34	.28	65	.08	.66	2.64	1.74	8.29	1.00*	11.21	17.10	2.97	6.85	
CI	N60	CI	N59	34.0	18	493.49	493.06	.013	501.53	6.38	494.82	494.56*	.0072	.25	5.05	.40	.10	90	.24	.24	2.64	.63	8.92	1.18	11.81	2.25	3.12	7.13	
CI	N59	ZOI	N58	134.0	18	493.06	490.97	.016	501.53	8.97	493.59	492.49	.0082	1.10	5.39	.45	.11	0	.00	.23	2.64	.61	9.53	1.28	13.12	2.22	3.26	8.18	
ZOI	N58	ZOI	N57	56.0	21	490.97	489.88	.019	499.83	7.33	492.27	491.85	.0076	.42	5.73	.51	.22	0	.00	.59	2.64	1.56	13.78	.50*	22.11	5.40	2.00	9.40	
ZOI	N57	CI	N56	27.0	21	489.88	489.38	.019	499.18	7.33	491.38	491.13*	.0085	.23	6.08	.57	.33	90	.36	.32	2.64	.84	14.63	.50*	21.68	5.40	2.00	9.73	
CI	N56	CI	N55	34.0	24	489.38	488.02	.040	499.50	8.37	490.19	490.02*	.0051	.17	5.12	.41	.00	65	.34	.55	2.64	1.45	16.08	LOW	45.25	4.00	2.00	13.18	
CI	N55	PK	N54	58.0	24	488.02	483.62	.074	499.29	9.27		.31	.00	.0054	.31	5.29	.43	.05	50	.21	.30	2.64	.53	16.61	LOW	62.31	4.00	2.00	16.71
LINE 4 2 STRUCTURES																													
ZOI	N65	ZOI	N58	99.0	12	496.68	490.97	.058	500.78	3.10	497.68	492.49	.0057	.57	3.43	.18	.00	0	.00	1.02	2.64	2.69	2.69	.50*	8.56	5.40	2.00	4.66	
LINE 5 2 STRUCTURES																													
ZOI	N66	ZOI	N61	129.0	12	498.23	495.12	.024	502.18	2.95	499.23	496.40	.0065	.84	3.66	.21	.00	0	.00	1.09	2.64	2.88	2.88	1.00*	5.53	17.10	2.97	7.10	
LINE 6 8 STRUCTURES																													
ZOI	N74	ZOI	N73	120.0	12	496.27	495.18	.009	500.77	3.50	497.27	496.18*	.0063	.75	3.60	.20	.00	0	.00	1.07	2.64	2.82	2.82	1.00*	3.40	17.10	2.97	4.61	
ZOI	N73	ZOI	N72	74.0	15	495.18	493.82	.018	499.87	3.69	495.73	495.36	.0051	.37	3.74	.22	.13	0	.00	.67	2.64	1.77	4.59	.50*	8.78	5.40	2.00	7.16	
ZOI	N72	ZOI	N71	89.0	18	493.82	493.41	.009	499.83	4.47	495.24	494.91*	.0037	.33	3.63	.20	.07	20	.05	.69	2.64	1.82	6.42	.50*	7.13	5.40	2.00	9.73	
ZOI	N71	CI	N70	91.0	18	493.41	492.44	.011	499.95	5.04	494.49	493.96	.0058	.52	4.51	.32	.20	100	.16	.59	2.64	1.56	7.97						



NOTE
 Tot Lot Plans are not part of this set of plans. Plans for the Tot Lot areas shall be submitted by others.

NOTE
 CONSTRUCTION PARKING AND TRUCK WASH OFF AREA TO BE CONSTRUCTED OF 8" ROLLED STONE

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.

NOTE
 Winghaven - Heritage Commons Village will be part of Winghaven Residential Owners Association, Inc., which includes all of the Winghaven Development, Phases 1, 2, and 3. The alleys in Winghaven Phase 3 are private and will remain private forever and never to be maintained or accepted by the City of O'Fallon.

NOTE: Regulation of Sign locations per MUTCD Urban Regulations.

NOTE
 All new utilities installed within this subdivision to be located underground.

CAUTION !!!
 Contractor To Locate All Underground Utilities Prior To Construction

NOTE: Detailed plan of Modular Wall will be submitted to the City of O'Fallon prior to construction.

Sidewalk At Curb Inlet
 N.T.S.

PHASE 3 RESIDENTIAL

TOTAL VILLAGE ACREAGE	R.O.W. ACREAGE	COMMON GROUND	NET VILLAGE ACREAGE	TOTAL NUMBER OF UNITS	MINIMUM LOT SIZE (SQ FT)	FRONT SETBACK	SIDE SETBACK	REAR SETBACK	STREET FRONTAGE (LINEAR)	NUMBER OF STREET TREES
41.692	4.00	24.77	12.92	69	6,000	15'	5'	5'	9389	

NOTE: TO BE INSTALLED WITH THUNDER HILL VILLAGE.

NOTE: Retaining Wall to be designed by Soils Engineer

THE KNOLLS PLAT TWO

Roger J. Allen
 Roger J. Allen
 Mo. P.L.S. No. 2185
 3-22-04
 LS-2185
 ROGER J. ALLEN

WINGHAVEN
 RESIDENTIAL L.L.C.
 41 WOODBINE & SON
 CORPORATE CENTER DRIVE
 ST. LOUIS, MISSOURI 63005
 PHONE (314) 937-2000

VOLZ

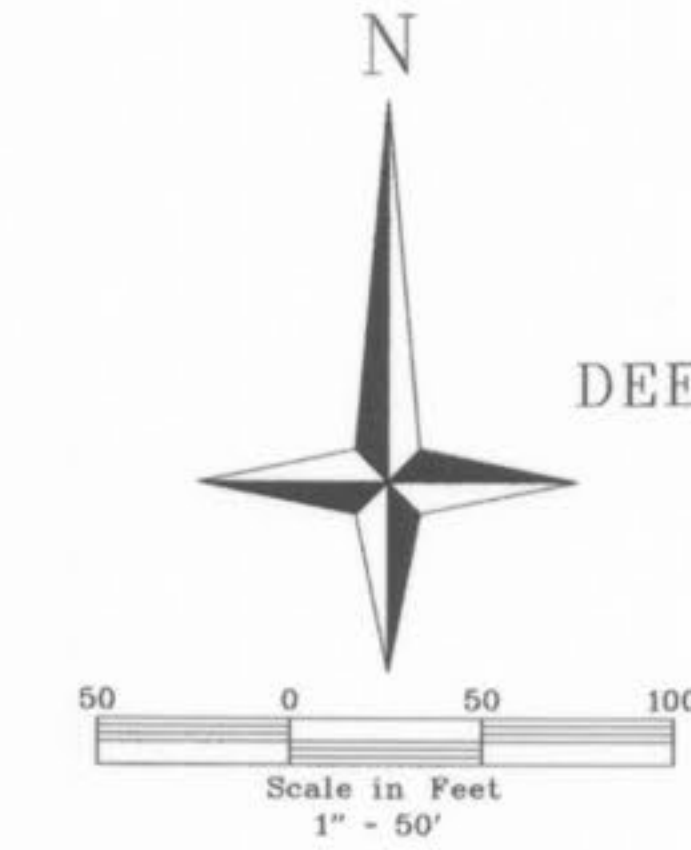
WINGHAVEN
 STONEY MOUNTAIN VILLAGE AS-BUILT PLANS

SITE PLAN

Design By: G.A.S.
 Drawn By: M.W.M.
 Checked By: E.A.K.

B-6000

03



DEED RESTRICTED WETLANDS

DEED RESTRICTED WETLANDS

STATE OF MISSOURI
 3-02-04
 REGISTERED PROFESSIONAL LAND SURVEYOR
 R. ALLEN
 Roger O. Allen
 Mo. P.L.S. No. 2185

"THE KNOLLS PLAT TWO"

"THE KNOLLS PLAT TWO"

FINAL SEWER MEASUREMENTS

WINGHAVEN
 RESIDENTIAL L.L.C.
 *MCGIBBIE & SON
 CORPORATE CENTER DRIVE
 BLOOMINGTON, MISSOURI
 PHONE (314) 537-2000

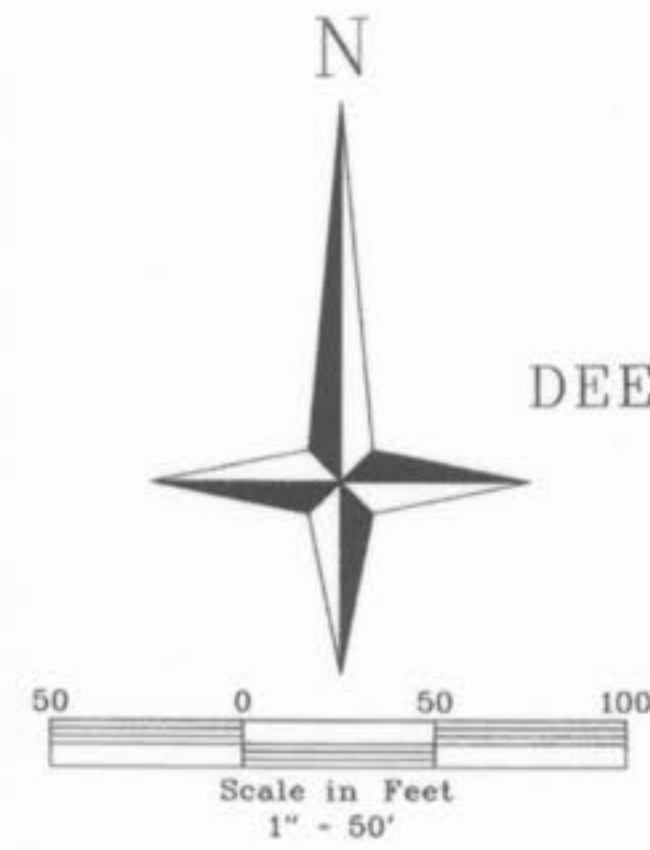


WINGHAVEN

STONEY MOUNTAIN VILLAGE AS-BUILT PLANS

SITE PLAN
 Design By: G.A.S.
 Drawn By: M.W.M.
 Checked By: E.A.K.
 B-6600

08-28-04
 04



DEED RESTRICTED WETLANDS

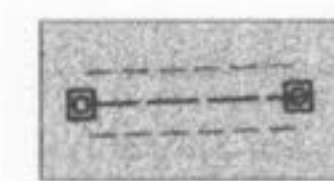
DEED RESTRICTED WETLANDS

NOTE

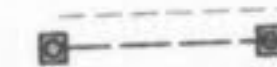
All new utilities installed within this subdivision to be located underground.

NOTE

Winghaven - Stoney Mountain Village will be part of Winghaven Residential Owners Association, Inc., which includes all of the Winghaven Development, Phases 1, 2, and 3. The alleys in Winghaven Phase 3 are private and will remain private forever and never to be maintained or accepted by the City of O'Fallon.



Storm Sewers Within The Private Alleys Will Be Maintained By Winghaven Residential Owners Association, Inc. The alleys in Winghaven Phase 3 are private and will remain private forever and never to be maintained or accepted by the City of O'Fallon.



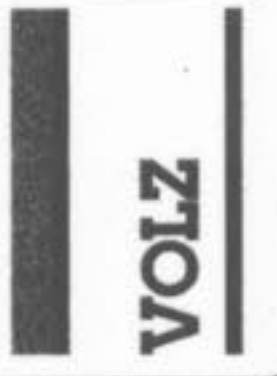
Storm Sewers Within Common Ground And Public Right Of Way To Be Accepted And Maintained By The City of O'Fallon.

Professional Engineer Seal for Roger G. Allen, State of Missouri, License No. 2185. Signature of Roger G. Allen, Mo. P.L.S. No. 2185.

FINAL SEWER MEASUREMENTS

Stoney Mt. Vill App 4/23/04 ABK

WINGHAVEN RESIDENTIAL L.L.C.
11 MCBRIDE & SON CORPORATE CENTER DRIVE ST. LOUIS, MISSOURI 63005 PHONE (314) 537-2000

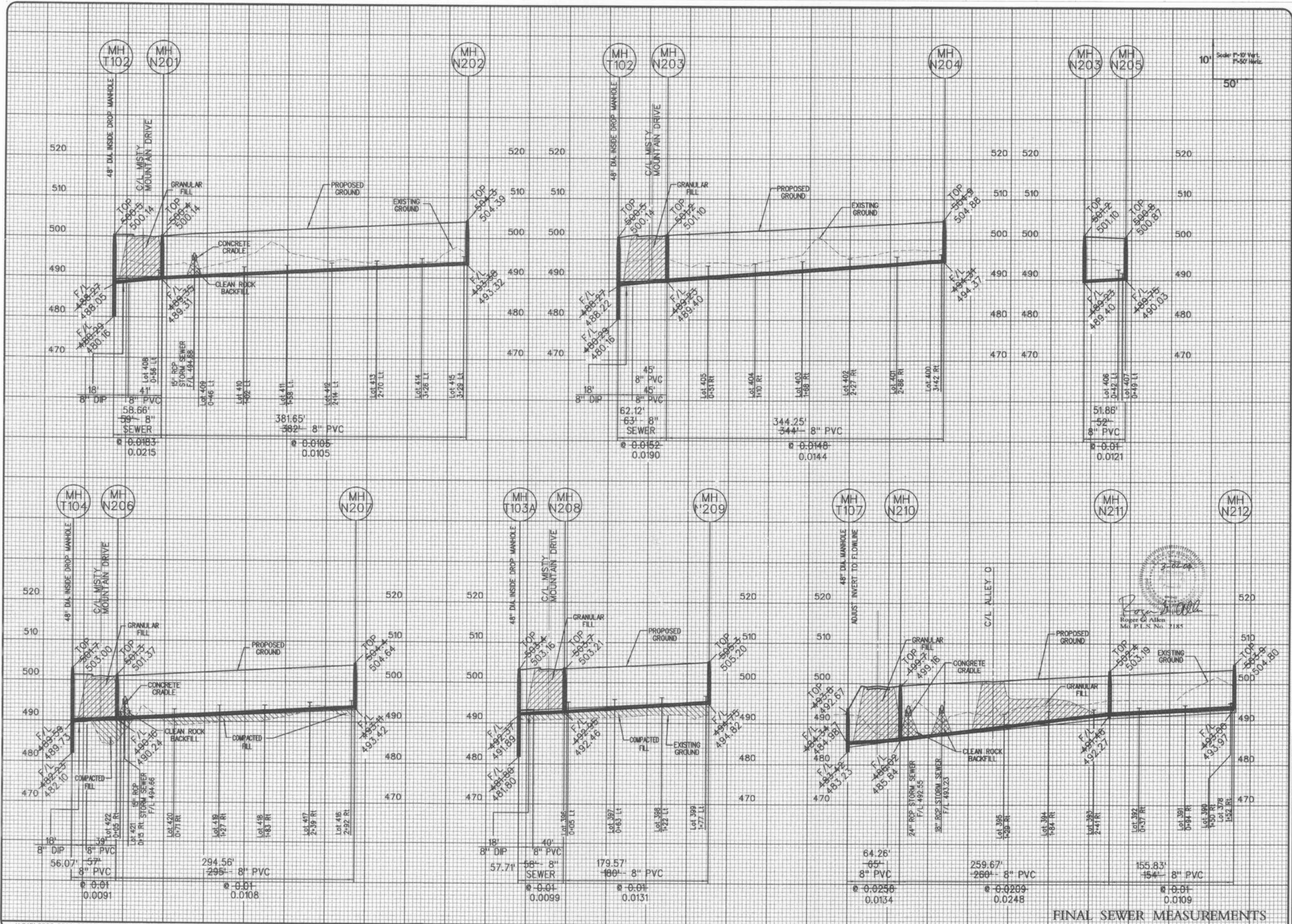


WINGHAVEN
STONEY MOUNTAIN VILLAGE AS-BUILT PLANS

STORM SEWER MAINTENANCE
Design By: G.A.S.
Drawn By: M.W.M.
Checked By: E.A.K.
P-6000
05-03-07
4A



H:\CAD\5500-5599\B5500\PHASE3\VILLAGE\SHEETS\ASBLT04A.DWG



10' Scale: H=10' Vert. V=50' Horiz.

WINGHAVEN
RESIDENTIAL L.L.C.
*1 MCBROE & SON
CORPORATE CENTER DRIVE
ST. LOUIS, MISSOURI 63005
PHONE (314) 537-2000



WINGHAVEN™
STONEY MOUNTAIN VILLAGE

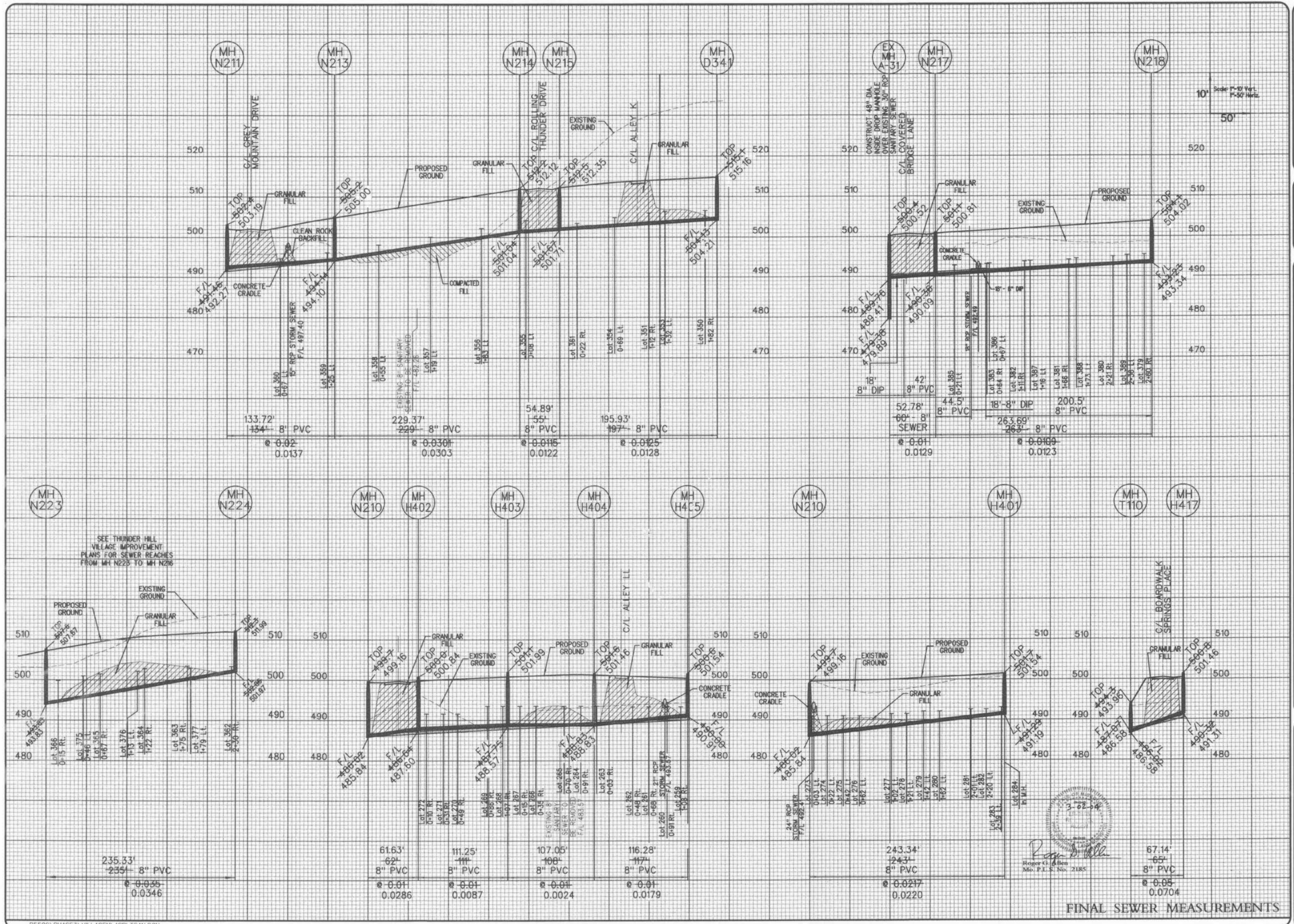
Professional Engineer Seal
Roper G. Allen
Mc. P.L.S. No. 2185

SANITARY SEWER PROFILES
Design By: G.A.S.
Drawn By: M.W.M.
Checked By: E.A.K.
P-6000

FINAL SEWER MEASUREMENTS

H:\CAD\5500-5599\B5500\PHASE 3\VILLAGE\ASBL\TS\AN.DGN

Stoney Mt. Village App 4/29/04 ABC



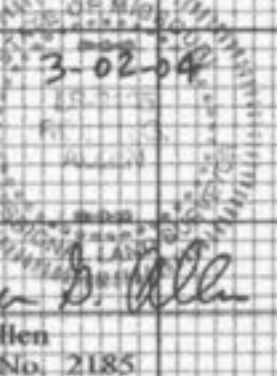
10' Scale
 50' Horiz

WINGHAVEN
 RESIDENTIAL L.L.C.
 *MCRBCE & SON
 CORPORATE CENTER DRIVE
 ST. LOUIS, MISSOURI 63005
 PHONE (314) 537-2000

VOLZ

WINGHAVEN™
 STONEY MOUNTAIN VILLAGE

SANITARY SEWER PROFILES
 Design By: G.A.S.
 Drawn By: M.W.M.
 Checked By: E.A.K.
 B-6500
 08-23-01
 14



FINAL SEWER MEASUREMENTS

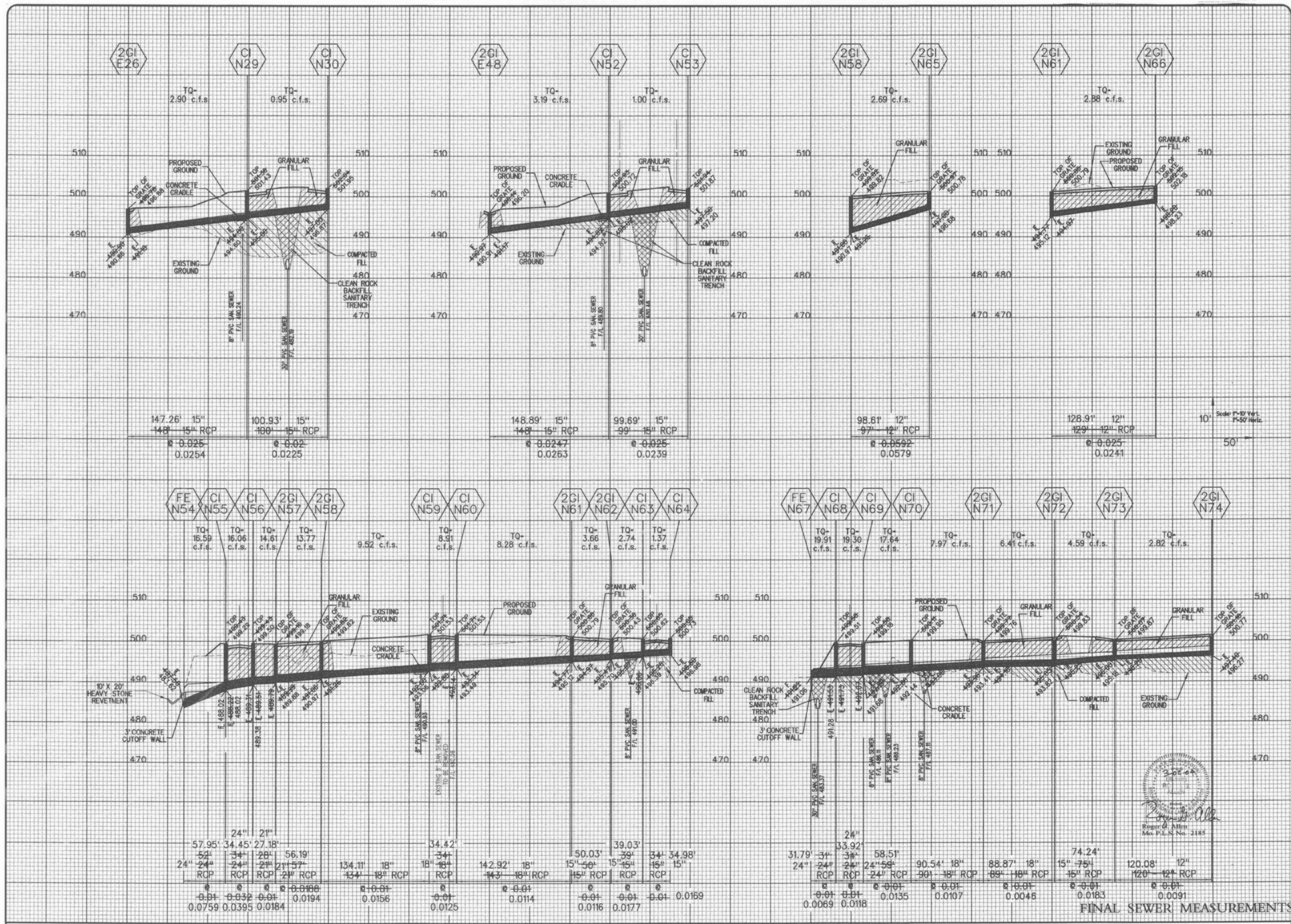
B5500\PHASE 3\VILLAGEN\ASBL.TSAN.DGN

Stoney Mt. Village App'd 2/20/01 ABC



WINGHAVEN™
STONEY MOUNTAIN VILLAGE AS-BUILT PLANS

STORM SEWER PROFILES
Design By: C.A.S.
Drawn By: M.W.M.
Checked By: E.A.K.
B-8000



FINAL SEWER MEASUREMENTS

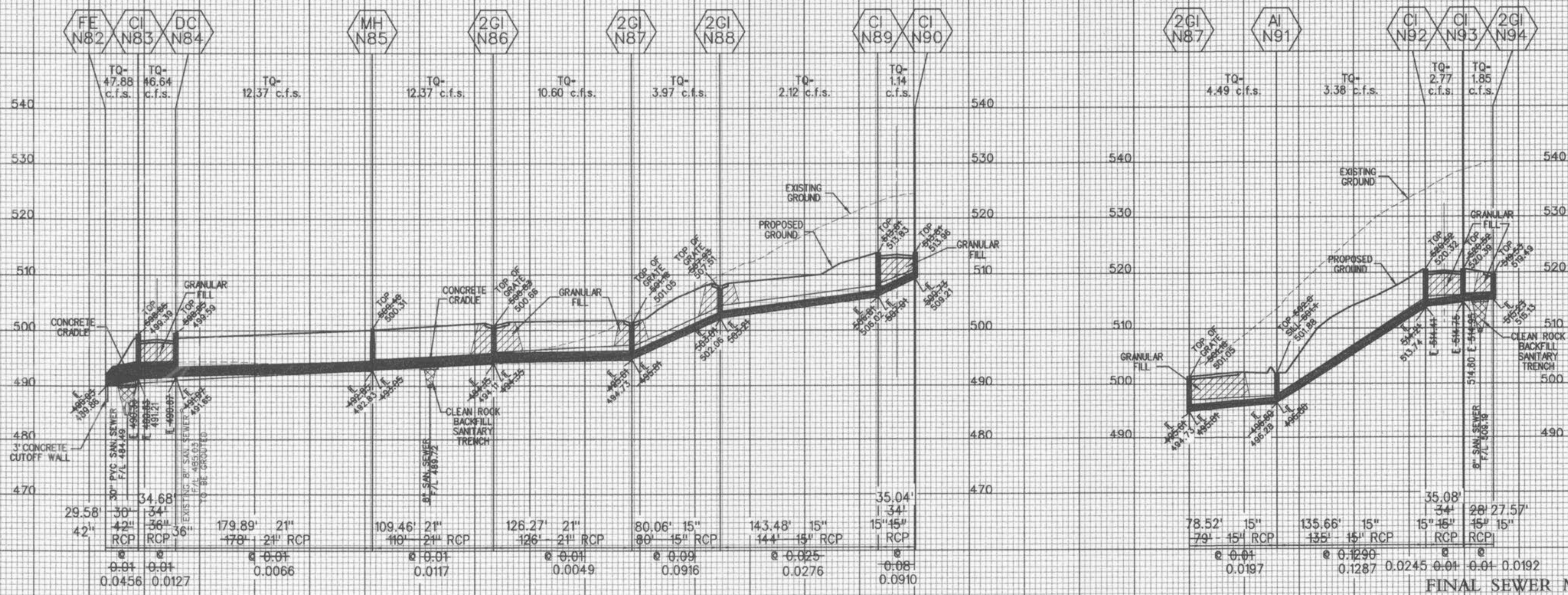
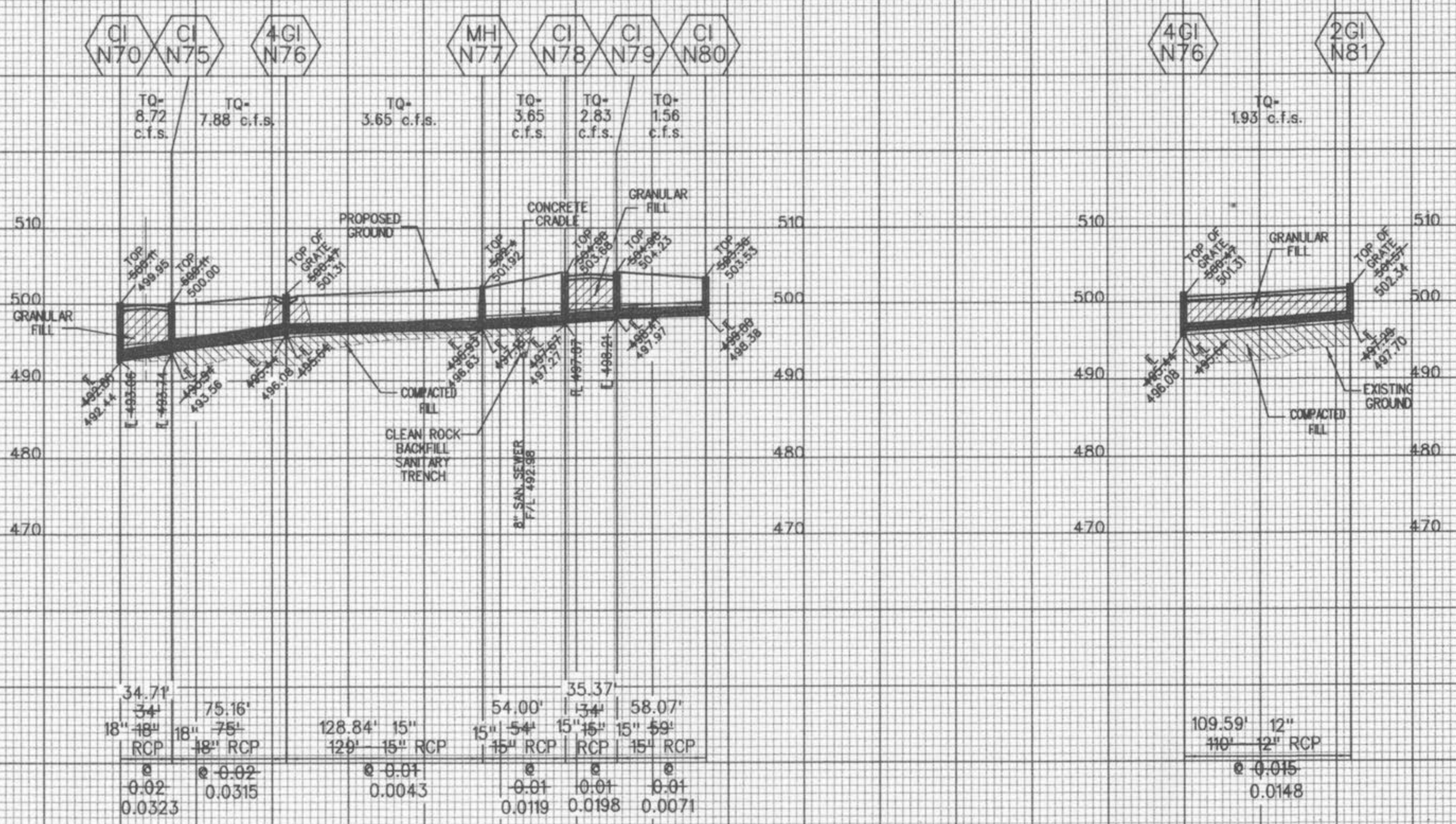
H:\CAD\5500-5599\B5500\PHASE 3\VILLAGEN\ASBLTSTM.DGN



WINGHAVEN™
STONEY MOUNTAIN VILLAGE AS-BUILT PLANS

STORM SEWER PROFILES
Design By: G.A.S.
Drawn By: M.W.K.
Checked By: E.A.K.
B-6500

Scale: V=10' Vert.
H=50' Horiz.
10'
50'



3-02-04
Roger G. Allen
Mo. P.L.S. No. 2185

FINAL SEWER MEASUREMENTS