

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."

WINGHAVEN

BOARDWALK COMMONS AT WINGHAVEN

PHASE 3-VILLAGE I

AS-BUILT PLANS

WINGHAVEN RESIDENTIAL L.L.C.

The existing sewer lengths, sizes, flowlines, depths of structures and sewers and locations with respect to existing or proposed casements 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 casements 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.

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VOLZ



10849 INDIAN HEAD IND'L BLVD.
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Roger G. Allen
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Engineers
Land Planners
Land Surveyors

VOLZ

AS-BUILT PLANS
BOARDWALK COMMONS AT WINGHAVEN

AS-BUILT PLANS
Design By: G.A.S.
Drawn By: K.L.A.
Checked By: T.J.M.
6000-35

AS-BUILT

VOLZ ENGINEERING & SURVEYING, INC.
 10849 INDIAN HEAD INDUSTRIAL BLVD.
 ST. LOUIS, MO 63132 (314)426-6212
 B6500IAB BOARDWALK COMMONS VILLAGE

4-12-**
 9:40:35
 Page 1

STRUCTURES		FLOWLINE			UPPER STRUCTURE		HYDRAULIC			FRICTION	VELOCITY			TURN		AREA		QUANTITY		***	CAPACITIES																							
UPPER	LOWER	LENGTH	SIZE	UPPER	LOWER	GRADE	ELEVATION	FREEBOARD	UPPER	LOWER	GRADE	LOSS	FPS	HEAD	GAIN	ANGLE	LOSS	AREA	PI		INCR	TOTAL	PIPE	INLET	GUTTER	P.V.	BYPASS																	
LINE 1 8 STRUCTURES																																												
2GI/SI I-16	2GI/SI I-15	45.2	15	528.81	526.73	.046	534.91	4.85	530.06	527.98*	.0002	.01	.75	.01	.00	0	.00	.28	3.30	.92	.92	.50'	13.86	7.40	7.33	6.40																		
2GI/SI I-15	2GI/SI I-14	77.0	15	526.53	524.48	.027	530.99	3.01	525.76	525.73*	.0004	.03	1.10	.02	.02	0	.00	.13	3.30	.43	1.35	.50'	10.54	7.40	7.33	5.93																		
2GI/SI I-14	2GI/SI I-13	87.1	15	524.28	521.17	.036	529.51	3.78	522.51	522.42*	.0010	.09	1.67	.04	.04	90	.01	.21	3.30	.69	2.05	.50'	12.21	7.40	7.33	7.41																		
2GI/SI I-13	2GI/SI I-12	93.9	15	520.97	518.83	.023	525.72	3.30	520.24	520.08*	.0018	.16	2.21	.08	.06	70	.03	.20	3.30	.66	2.71	.50'	9.75	7.40	7.33	6.92																		
2GI/SI I-12	2GI/SI I-11	41.5	15	518.63	518.39	.006	523.01	2.93	519.76	519.65	.0027	.11	2.74	.12	.07	60	.04	.20	3.30	.66	3.37	.50'	4.91	7.40	7.33	4.88																		
2GI/SI I-11	2GI/SI I-10	98.5	15	518.19	517.21	.010	522.79	3.14	519.23	518.46*	.0078	.77	4.65	.34	.36	55	.06	.71	3.30	2.34	5.71	.50'	6.44	7.40	7.33	5.94																		
																				INCOMING LINE	2	90	.01			1.25																		
																				INCOMING LINE	3	15	.00			1.42																		
LINE 2 2 STRUCTURES																																												
2GI/SI I-17	2GI/SI I-10	70.4	15	517.77	517.21	.008	522.24	3.22	519.02	.00	.0004	.03	1.02	.02	.00	0	.00	.38	3.30	1.25	1.25	.50'	5.76	7.40	7.33	2.26																		
LINE 3 2 STRUCTURES																																												
2GI/SI I-18	2GI/SI I-10	18.9	15	517.17	517.21	.002	520.77	2.35	518.42	.00	.0005	.01	1.16	.02	.00	0	.00	.43	3.30	1.42	1.42	.50'	2.97	7.40	7.33	2.34																		
LINE 4 5 STRUCTURES																																												
2GI/SI I-21	MH I-20A	35.1	15	525.58	525.04	.015	532.08	5.25	526.83	526.29*	.0003	.01	.86	.01	.00	0	.00	.32	3.30	1.06	1.06	.50'	8.01	7.40	7.33	4.49																		
MH	I-20A	77.5	15	524.84	522.67	.028	531.38	5.09	523.94	523.92*	.0003	.02	.86	.01	.00	80	.01			1.06			10.81			5.60																		
2GI/SI I-20	2GI/SI I-19	131.4	15	521.97	520.00	.015	529.32	5.40	521.43	521.25*	.0014	.18	1.94	.06	.07	0	.00	.25	3.30	.82	2.38	.50'	7.91	7.40	7.33	5.64																		
																				INCOMING LINE	5	105	.00			.50																		
2GI/SI I-19	AI EXIST	13.8	15	515.82	514.10	.125	524.87	3.62	.04	.00	.0032	.04	2.98	.14	.13	10	.01	.39	3.30	1.29	3.66	.50'	22.81	7.40	7.33	13.64																		
LINE 5 2 STRUCTURES																																												
2GI/SI I-23	2GI/SI I-20	83.5	15	523.77	522.87	.011	528.52	3.50	525.02	524.12*	.0001	.00	.40	.00	.00	0	.00	.15	3.30	.50	.50	.50'	6.71	7.40	7.33	3.23																		
LINE 6 3 STRUCTURES																																												
CI	I-8 MH	14.8	15	525.38	525.21	.011	531.33	4.70	526.63	526.46*	.0009	.01	1.56	.04	.00	0	.00	.46	3.30	1.52	1.92	2.0%	6.92	1.93	4.23	4.76																		
																				INCOMING QUANTITY	0	.00			.40																			
MH	I-26 MH	32.3	15	525.01	524.80	.007	531.15	4.69	.03	.00	.0009	.03	1.56	.04	.00	80	.02			1.92			5.21			4.23																		
LINE 7 2 STRUCTURES																																												
2GI/SI I-22	MH I-20A	47.4	15	529.20	525.04	.088	533.65	3.20	530.45	526.29*	.0004	.02	1.08	.02	.00	0	.00	.40	3.30	1.32	1.32	.50'	19.14	7.40	7.33	8.95																		

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

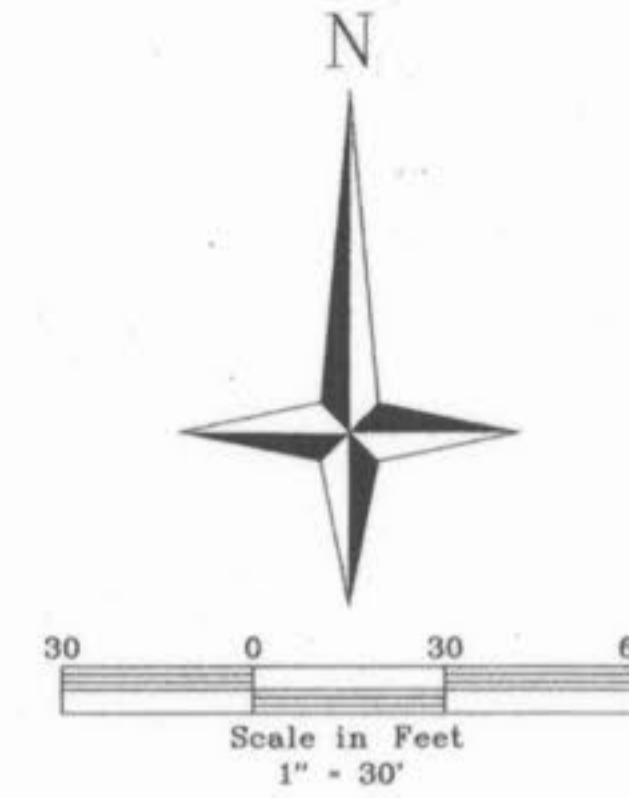
* lower hydraulic elevation when flowing less than full
 C curve loss in pipe
 R radius of curve
 HW entrance control elevation
 pv partial flow velocity

WIND HILL VILLAGE

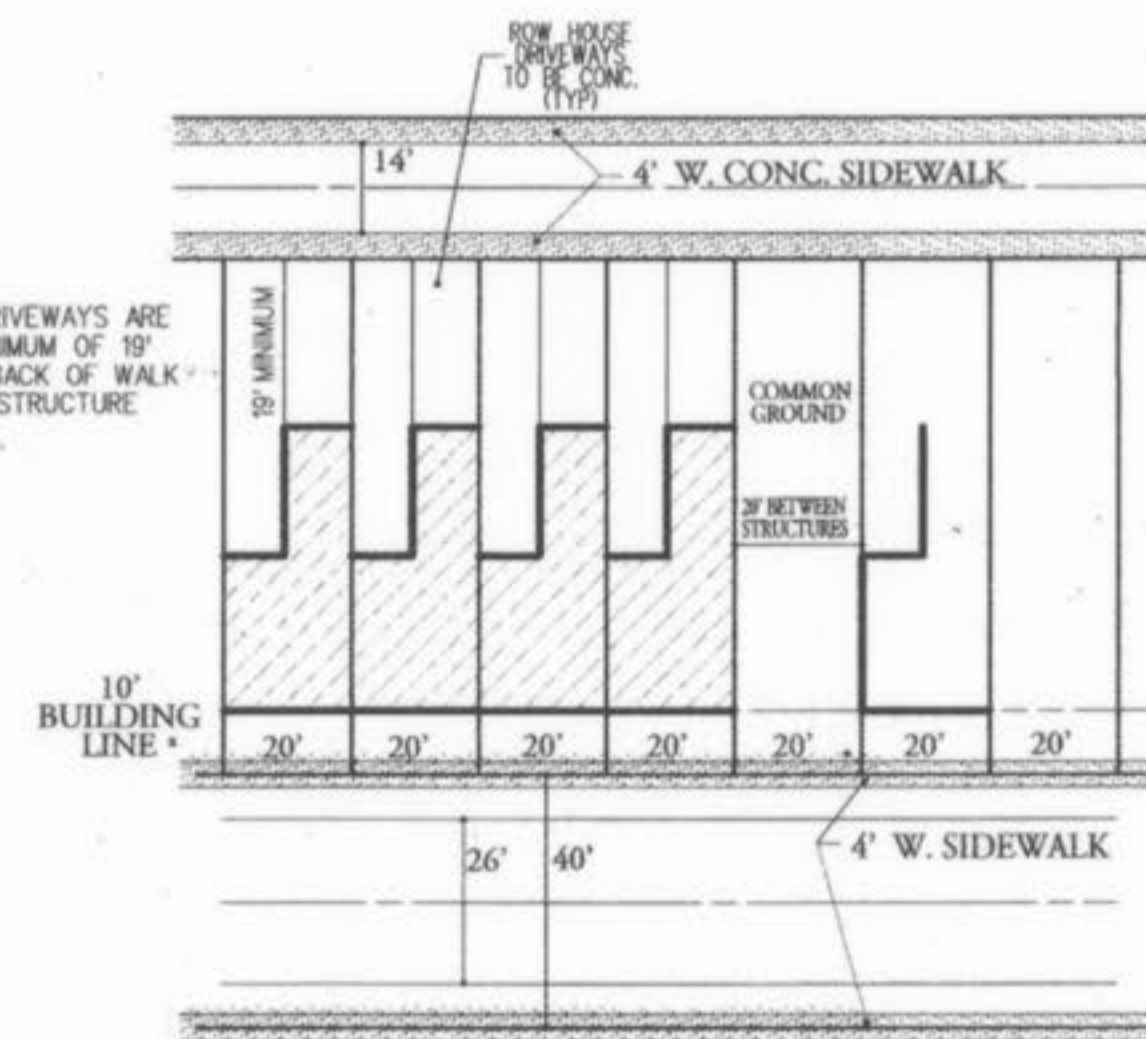
SUMMERSTONE VILLAGE

Red Hawk Parkway

PLAT BOOK 39
PAGE 1, 2, 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.



TYPICAL LOT

*RESIDENTIAL LOTS FRONTING ROLLING THUNDER DRIVE HAVE 15' FRONT BUILDING LINE.

* UNITS REQUIRE PIERING ALONG FRONT WALL TO BELOW 1:1 INFLUENCE OF SANITARY SEWER

⊗ UNITS REQUIRE PIERING WALL NEXT TO SANITARY SEWER TO BELOW 1:1 INFLUENCE OF SANITARY SEWER

	△	LENGTH	RADIUS	TANGENT
CURVE 1	221° 28' 21"	108.30'	28'	74.01'
CURVE 2	39° 39' 34"	20.77'	30'	10.82'
CURVE 3	9° 56' 42"	49.64'	286'	24.88'
CURVE 4	4° 10' 17"	35.20'	483.50'	17.61'
CURVE 5	83° 39' 50"	42.35'	29'	25.96'
CURVE 6	79° 09' 49"	53.89'	39'	32.24'
CURVE 7	13° 22' 40"	101.22'	433.50'	50.84'
CURVE 8	4° 48' 05"	43.58'	520'	21.80'

CONSTRUCT WYE ONLY. CAP WYE AND BACKFILL WITH CONC. PLUGS.

MASONRY BLOCK WALL (SEE DETAIL SHEET 18)

CONCRETE STEPS (SEE DETAIL SHEET 17)

TOTAL VILLAGE ACREAGE	7.215
TOTAL NUMBER OF BUILDINGS (INCLUDES RETAIL-RESTAURANT)	4
TOTAL NUMBER OF RESIDENTIAL UNITS	58
TOTAL SQUARE FOOTAGE OF RETAIL	27,211

Roger G. Allen
Mo. P.L.S. No. 2185

FINAL SEWER MEASUREMENTS

WINGHAVEN RESIDENTIAL L.L.C.
11 MCBRIDE & SON
CORPORATE CENTER DRIVE
ST. LOUIS, MISSOURI 63005
PHONE (630) 537-2000



AS-BUILT PLANS

BOARDWALK COMMONS AT WINGHAVEN

SITE PLAN

Design By: G.A.S.
Drawn By: K.L.A.
Checked By: T.J.M.

6500-35

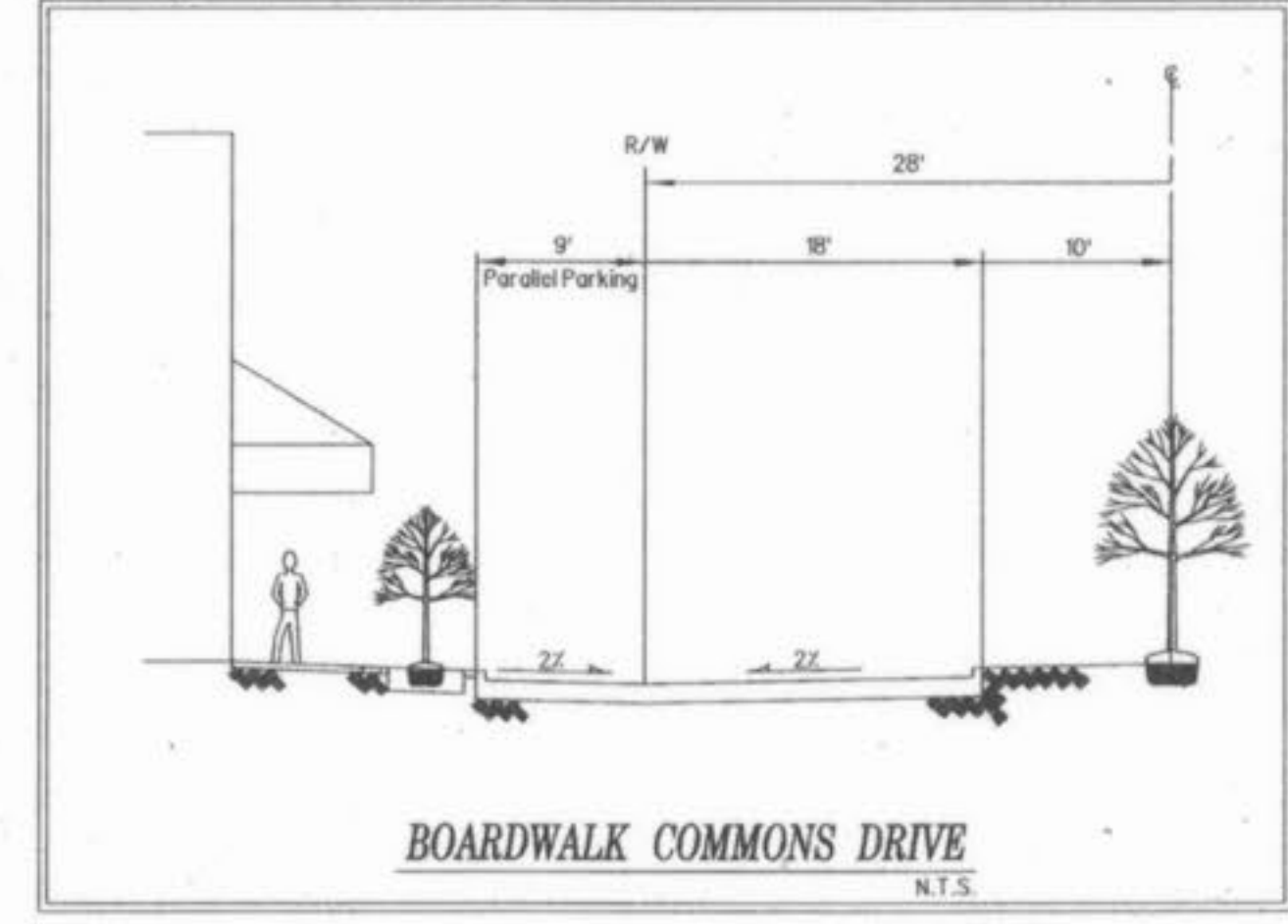
	Δ	LENGTH	RADIUS	TANGENT
CURVE 8	4° 48' 05"	43.58'	520'	21.80'
CURVE 9	14° 03' 55"	77.33'	315'	38.86'
CURVE 10	28° 48' 07"	417.80'	831.12'	213.41'

CONSTRUCT WYE ONLY.
CAP WYE AND BACKFILL
WITH CONC. PLUG

MASONRY
BLOCK WALL
(SEE DETAIL
SHEET 181)
CONCRETE
STEPS
(SEE DETAIL
SHEET 171)

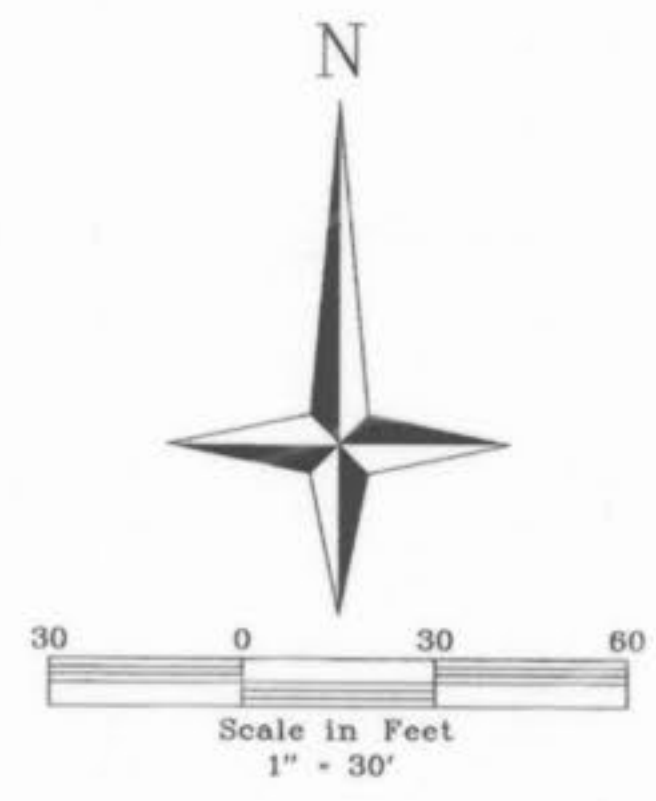
LANDSCAPING WITHIN THE ISLAND
WILL NOT ENCRUSH INTO THE
SIGHT TRIANGLE.

Centerline @ Centerline
Station 0+00 @ 49+64.79



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- * UNITS REQUIRE PIERING ALONG FRONT WALL TO BELOW 1:1 INFLUENCE OF SANITARY SEWER
- ⊗ UNITS REQUIRE PIERING WALL NEXT TO SANITARY SEWER TO BELOW 1:1 INFLUENCE OF SANITARY SEWER



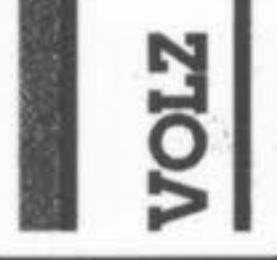
FUTURE DEVELOPMENT

FINAL SEWER MEASUREMENTS

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 Mo. P.L.S. No. 2185



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AS-BUILT PLANS
AT WINGHAVEN

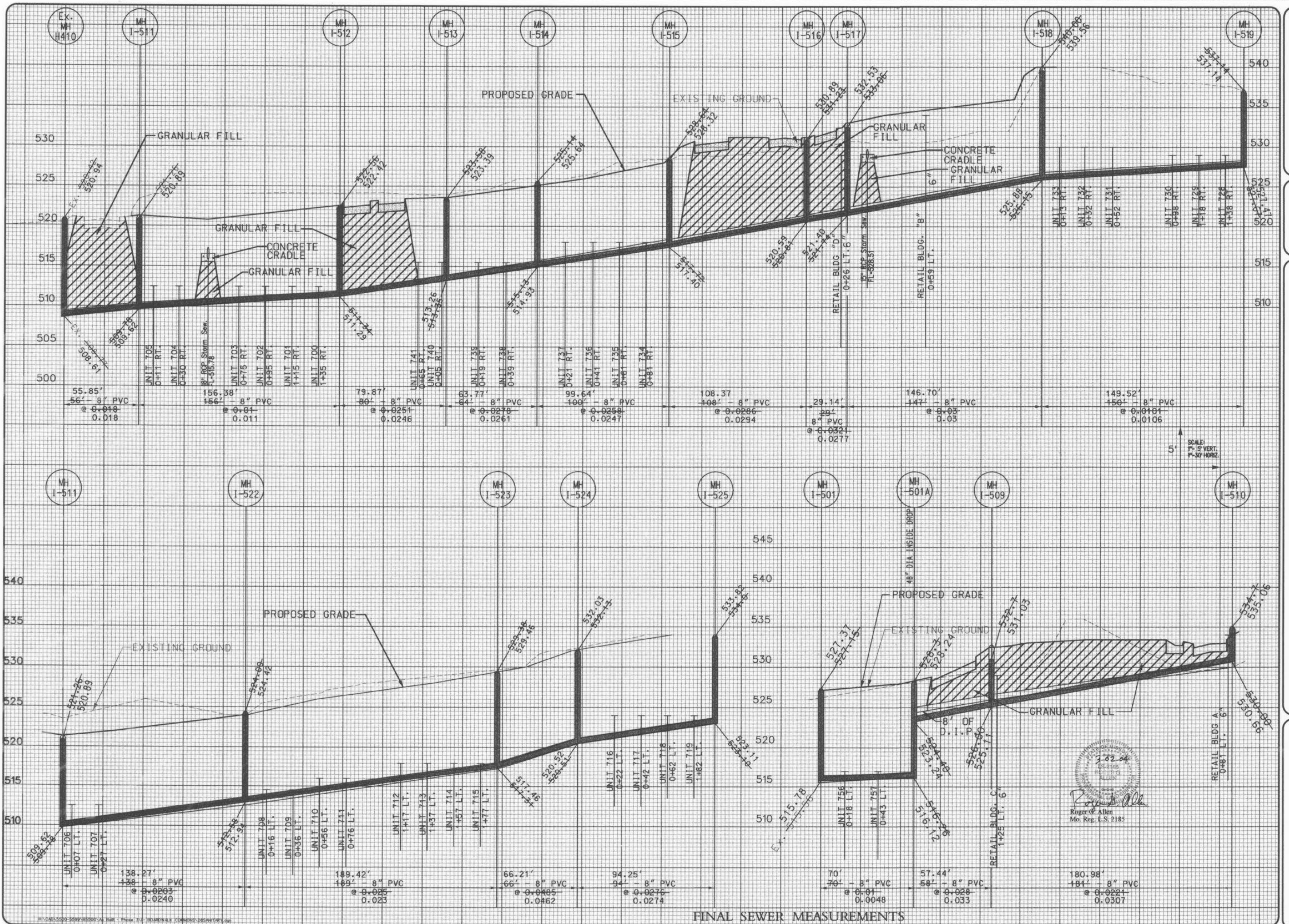
BOARDWALK COMMONS

SITE PLAN

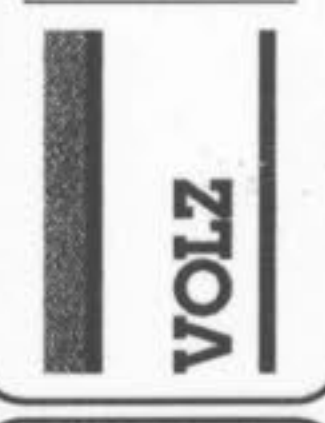
Design By: G.A.S.
 Drawn By: K.L.A.
 Checked By: T.J.M.
 8500-35

4-29-02

Boardwalk Commons Ph 3 v11 I App 4/29/02
 ARK



WINGHAVEN
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AS-BUILT PLANS

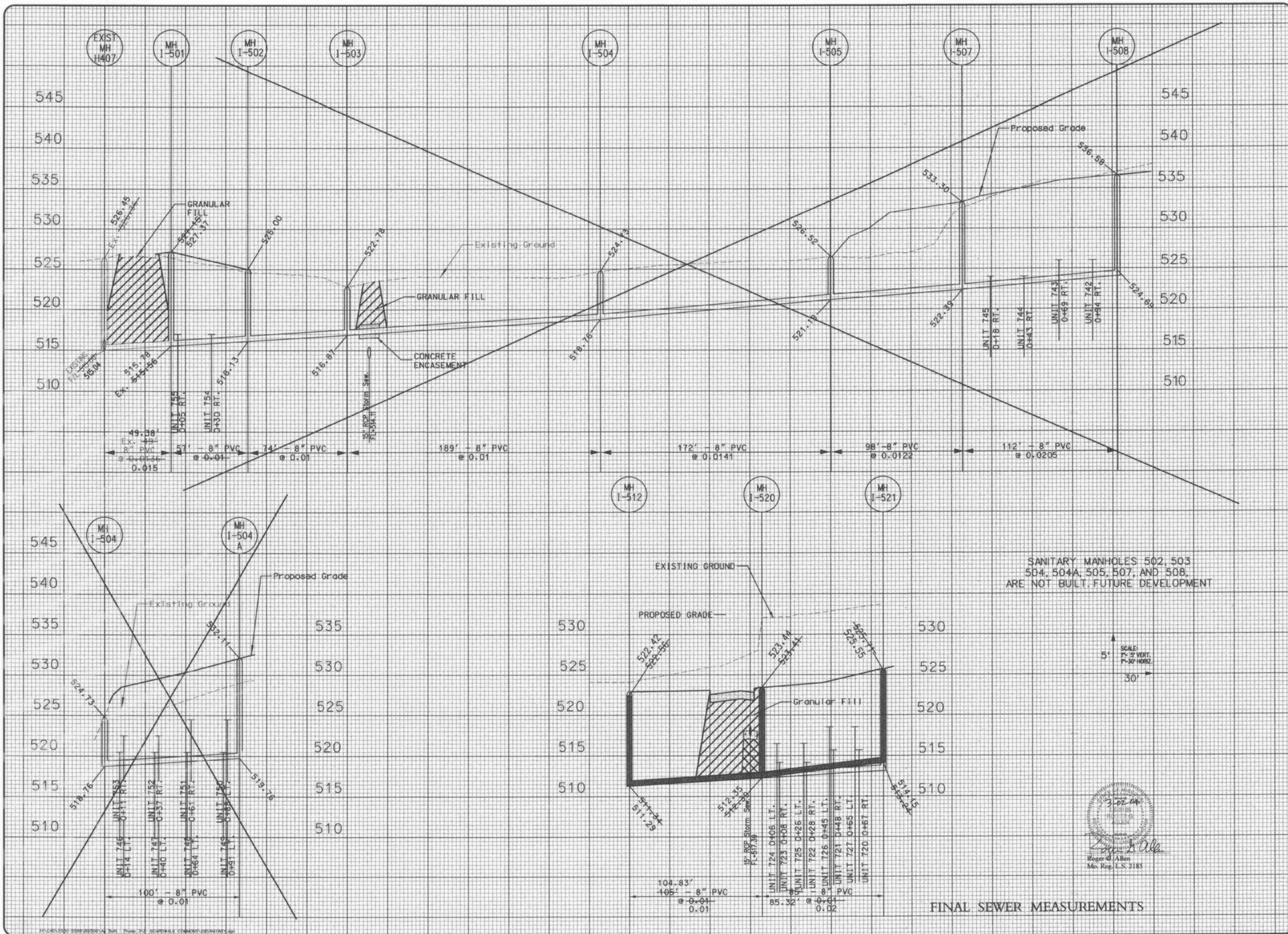
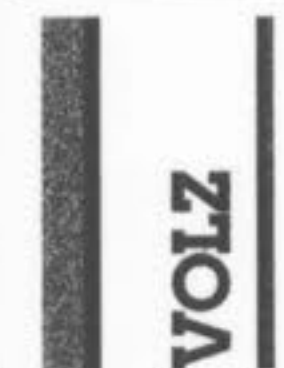
BOARDWALK COMMONS AT WINGHAVEN

SANITARY SEWER PROFILE

Design By: G.A.S.
Drawn By: K.L.A.
Checked By: T.J.M.
Base Map No. P. 8500-35
1-29-02



FINAL SEWER MEASUREMENTS



SANITARY MANHOLES 502, 503, 504, 504A, 505, 507, AND 508, ARE NOT BUILT. FUTURE DEVELOPMENT

SCALE:
1" = 5' VERT.
1" = 30' HORIZ.

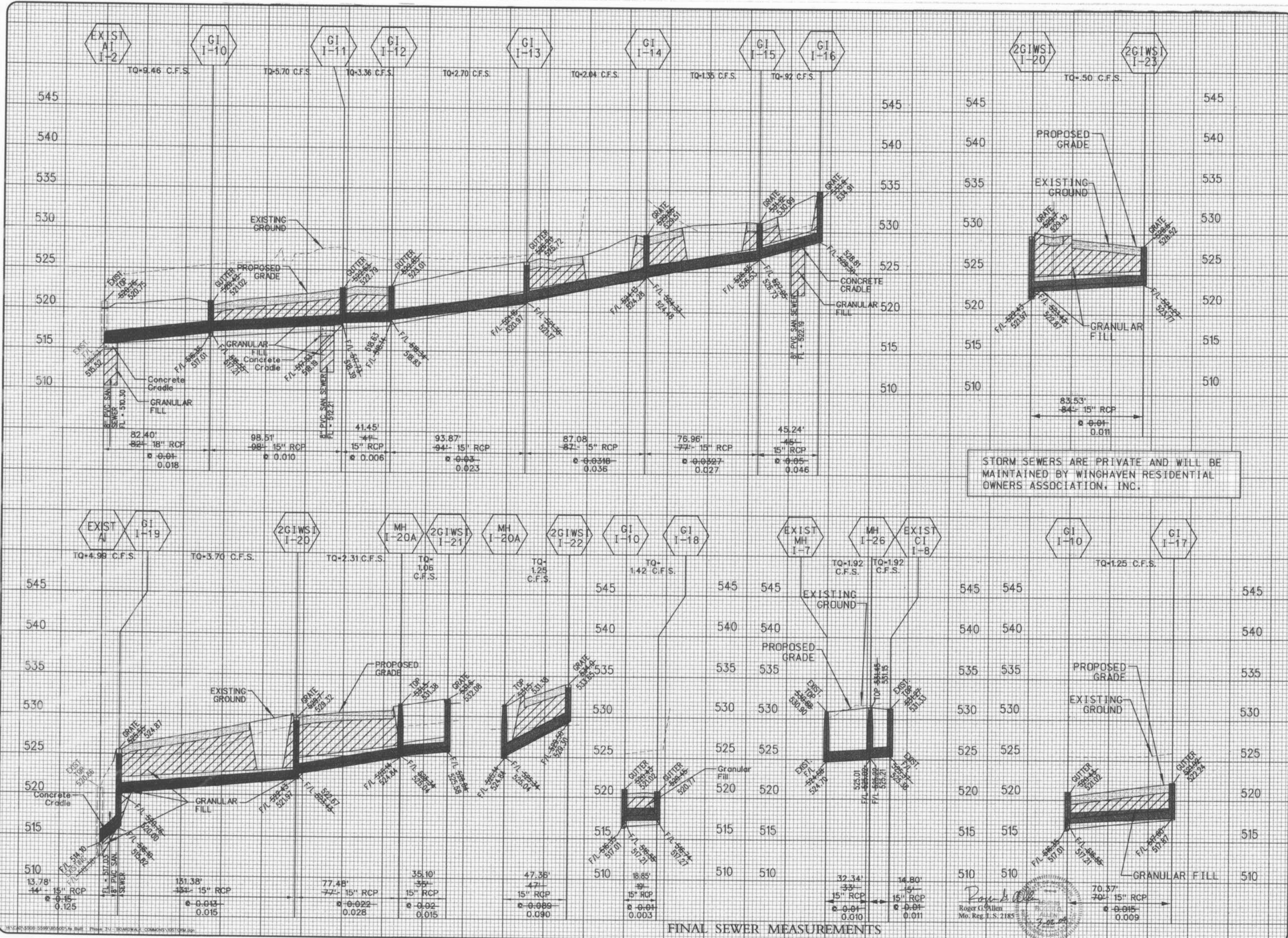
3.02.04
REGISTERED PROFESSIONAL ENGINEER
ROGER D. ALLEN
No. Reg. L.S. 2185

FINAL SEWER MEASUREMENTS

AS-BUILT PLANS
BOARDWALK COMMONS
AT WINGHAVEN

STORM SEWER PROFILES

Design By: G.A.S.
Drawn By: K.L.A.
Checked By: T.A.M.
Base Map No. 8500-35



Boardwalk Commons PWS 0112 App 4/29/01
ABC