

Supplemental Information for:

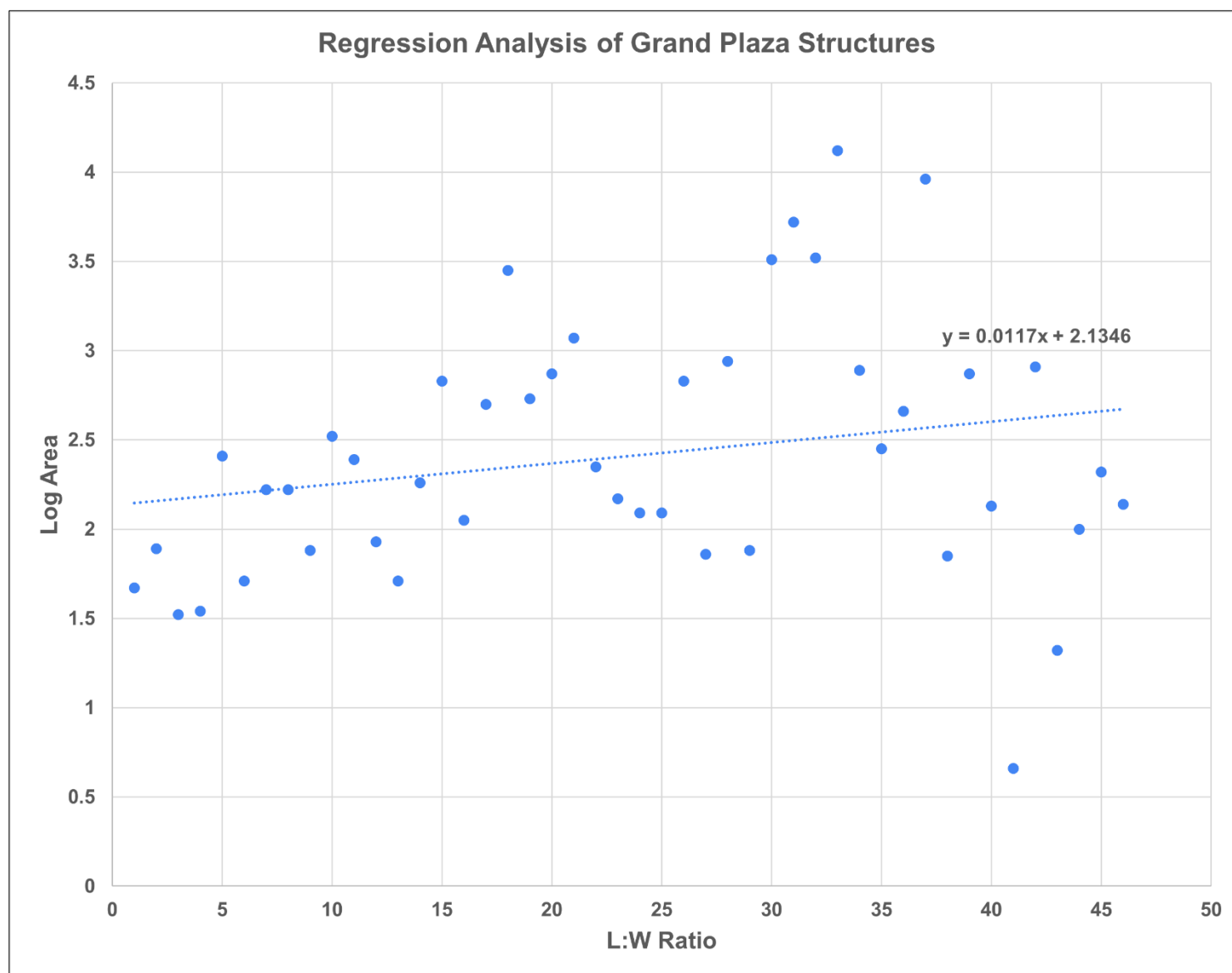
*Reimagining the Development of Downtown Cahokia Using Remote Sensing Visualizations from the Western Edge of the Grand Plaza*

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**Table S1.** Results from our linear regression analysis of L:W ratios and area (m<sup>2</sup>) for structures we identified in the Grand Plaza. Highlighted structures are circular in shape and not easily attributable to Cahokia’s known chronological phases. Gray cells denote the lowest residual for each structure analyzed and grow darker in shade with each consecutive temporal phase.

Site	Building Number (FID)	Phase Association	Structure Type	Length	Width	L:W Ratio	Perimeter (m)	Area (m <sup>2</sup> )	Log Area	TLW/EM	Lohmann	Stirling	Moorehead
Cahokia Grand Plaza	0	TLW/EM	Rectilinear	3.076	1.761	1.74673481	9.137	5.338	1.67	0.704924588	0.831529926	1.176008802	1.829497331
Cahokia Grand Plaza	1	TLW/EM	Rectilinear	3.065	2.254	1.359804791	9.849	6.615	1.89	0.292310825	0.653589219	0.936314064	1.321814862
Cahokia Grand Plaza	2	Lohmann	Rectilinear	3.209	1.527	2.101506221	8.651	4.585	1.52	1.031529797	0.942966274	1.344066667	2.243269876
Cahokia Grand Plaza	3	TLW/EM	Rectilinear	2.201	2.192	1.004105839	8.167	4.645	1.54	0.465243887	1.042253695	1.268208987	1.407352692
Cahokia Grand Plaza	4	TLW/EM	Rectilinear	4.452	2.576	1.72826087	12.688	11.117	2.41	-0.044271739	0.093538043	0.435068478	1.075761957
Cahokia Grand Plaza	5	TLW/EM	Rectilinear	3.176	2.024	1.56916996	8.894	5.506	1.71	0.576532806	0.810831225	1.126970751	1.657477866
Cahokia Grand Plaza	6	Lohmann	Rectilinear	4.438	2.177	2.038585209	12.149	9.168	2.22	0.300207717	0.249805788	0.640863987	1.496488103
Cahokia Grand Plaza	7	TLW/EM?	Circular	n/a	n/a	n/a	11.227	9.236	2.22	-0.105255367	0.338343026	0.599405428	0.890899909
Cahokia Grand Plaza	8	TLW/EM	Rectilinear	3.512	2.095	1.676372315	9.887	6.548	1.88	0.459898138	0.629178329	0.962427351	1.567182816
Cahokia Grand Plaza	9	Lohmann	Rectilinear	5.028	2.746	1.831026948	13.572	12.4	2.52	-0.103114785	-0.027632629	0.330299272	1.042168536
Cahokia Grand Plaza	10	Lohmann	Rectilinear	4.294	2.875	1.493565217	12.274	10.916	2.39	-0.141103235	0.139049461	0.44312247	0.921265739
Cahokia Grand Plaza	11	TLW/EM	Rectilinear	3.314	2.304	1.438368056	9.884	6.863	1.93	0.291419618	0.605049392	0.900312934	1.340226649
Cahokia Grand Plaza	12	TLW/EM?	Circular	n/a	n/a	n/a	8.509	5.502	1.71	0.355152843	0.859171928	1.104334672	1.326831014
Cahokia Grand Plaza	13	TLW/EM	Rectilinear	4.281	2.441	1.753789431	12.106	9.551	2.26	0.118436379	0.240763089	0.586367882	1.244742442
Cahokia Grand Plaza	14	Stirling	Rectilinear	5.306	3.736	1.420235546	15.867	16.951	2.83	-0.617606745	-0.292979604	-0.000610011	0.426745128
Cahokia Grand Plaza	15	TLW/EM	Rectilinear	3.452	2.316	1.490500864	10.91	7.764	2.05	0.19737133	0.479382556	0.782966494	1.258987392
Cahokia Grand Plaza	16	Lohmann	Rectilinear	5.317	2.876	1.848748261	15.292	14.826	2.7	-0.274293115	-0.209558936	0.151201287	0.875344332
Cahokia Grand Plaza	17	Moorehead	Rectilinear	7.149	4.479	1.596115204	22.003	31.509	3.45	-1.150053851	-0.932097723	-0.611657736	-0.062488346
Cahokia Grand Plaza	18	Stirling	Rectilinear	5.322	3.173	1.677277025	15.097	15.368	2.73	-0.389651497	-0.220920013	0.112473401	0.717855468
Cahokia Grand Plaza	19	Stirling	Rectilinear	5.778	3.225	1.791627907	16.768	17.69	2.87	-0.472727628	-0.373349953	-0.02170614	0.662875349

Cahokia Grand Plaza	20	Moorehead	Rectilinear	5.543	3.965	1.397982346	18.134	21.558	3.07	-0.868684388	-0.530560681	-0.241742699	0.170199874
Cahokia Grand Plaza	21	Lohmann	Rectilinear	3.671	3.056	1.201243455	12.323	10.524	2.35	-0.246621008	0.210824836	0.468243292	0.743924509
Cahokia Grand Plaza	22	TLW/EM	Rectilinear	3.709	2.346	1.580988917	12.182	8.769	2.17	0.122416283	0.349546505	0.667572336	1.20626526
Cahokia Grand Plaza	23	TLW/EM	Rectilinear	3.338	2.424	1.377062706	11.516	8.075	2.09	0.100901815	0.451713284	0.737192492	1.134646122
Cahokia Grand Plaza	24	TLW/EM	Rectilinear	3.154	2.566	1.229150429	11.439	8.085	2.09	0.027271083	0.467791348	0.729663757	1.024673344
Cahokia Grand Plaza	25	Stirling	Rectilinear	5.204	3.255	1.598771121	16.912	16.925	2.83	-0.528731736	-0.312386421	0.00847745	0.559486329
Cahokia Grand Plaza	26	Lohmann	Rectilinear	3.974	1.62	2.45308642	11.19	6.436	1.86	0.86654642	0.564749506	1.021962099	2.164669753
Cahokia Grand Plaza	27	Moorehead	Rectilinear	4.582	4.116	1.113216715	17.393	18.843	2.94	-0.880440719	-0.369606657	-0.126237269	0.088476628
Cahokia Grand Plaza	28	TLW/EM	Rectilinear	3.371	2.049	1.645192777	9.982	6.566	1.88	0.444376964	0.632567545	0.960840312	1.54400083
Cahokia Grand Plaza	29	Moorehead	Rectilinear	6.26	5.485	1.141294439	21.968	33.485	3.51	-1.436463628	-0.942658706	-0.694808113	-0.460647584
Cahokia Grand Plaza	30	Moorehead	Rectilinear	6.746	6.354	1.061693421	24.247	41.346	3.72	-1.686089015	-1.144006075	-0.908859805	-0.729830941
Cahokia Grand Plaza	31	Moorehead	Rectilinear	6.39	5.443	1.173984935	21.755	33.8	3.52	-1.430190299	-0.956212162	-0.703144167	-0.446342201
Cahokia Grand Plaza	32	Moorehead	L Structure	12.562	3.902	3.21937468	37.569	61.532	4.12	-1.011995284	-1.778546028	-1.199033829	0.474405074
Cahokia Grand Plaza	33	Moorehead?	Circular	n/a	n/a	n/a	15.115	17.946	2.89	-0.878649622	-0.309079723	-0.081166625	0.066473174
Cahokia Grand Plaza	34	Lohmann	Rectilinear	3.849	3.021	1.27408143	13.726	11.607	2.45	-0.310362264	0.102907349	0.371950745	0.698079543
Cahokia Grand Plaza	35	Lohmann?	Circular	4.631	3.844	1.204734651	13.814	14.352	2.66	-0.554883091	-0.099554657	0.158420994	0.436520213
Cahokia Grand Plaza	36	Moorehead	L Structure	8.089	5.482	1.475556366	31.286	52.266	3.96	-1.720068041	-1.428992977	-1.127794181	-0.662123842
Cahokia Grand Plaza	37	TLW/EM?	Circular	n/a	n/a	n/a	8.957	6.368	1.85	0.1532	0.7327	0.958	1.0943
Cahokia Grand Plaza	38	Stirling	Rectilinear	5.377	3.297	1.630876554	17.346	17.719	2.87	-0.552749651	-0.355876281	-0.029888383	0.543356718
Cahokia Grand Plaza	39	TLW/EM	Rectilinear	3.263	2.569	1.270144025	11.672	8.393	2.13	0.007677696	0.423335344	0.691750331	1.015152083
Cahokia Grand Plaza	40	TLW/EM	Rectilinear	1.944	1.005	1.934328358	5.839	1.943	0.66	1.808308657	1.821138507	2.195557313	2.978973134
Cahokia Grand Plaza	41	Moorehead	L Structure	4.254	3.602	1.18101055	20.217	18.267	2.91	-0.816692948	-0.346975847	-0.092786563	0.168881344
Cahokia Grand Plaza	42	Lohmann	Rectilinear	2.848	1.298	2.194144838	8.373	3.725	1.32	1.2776453	1.132896456	1.548781972	2.512146687
Cahokia Grand Plaza	43	TLW/EM?	Circular	n/a	n/a	n/a	9.822	7.368	2	0.025228084	0.57788993	0.810252369	0.977200523
Cahokia Grand Plaza	44	TLW/EM	Rectilinear	4.234	2.443	1.733115023	12.592	10.187	2.32	0.048144658	0.183010397	0.525315555	1.169371019
Cahokia Grand Plaza	45	TLW/EM	Rectilinear	3.776	2.317	1.629693569	11.498	8.46	2.14	0.176661459	0.374252309	0.700051403	1.272477169



**Figure S1.** Best fit regression line produced from our linear regression analysis of structures we identified in the Grand Plaza.