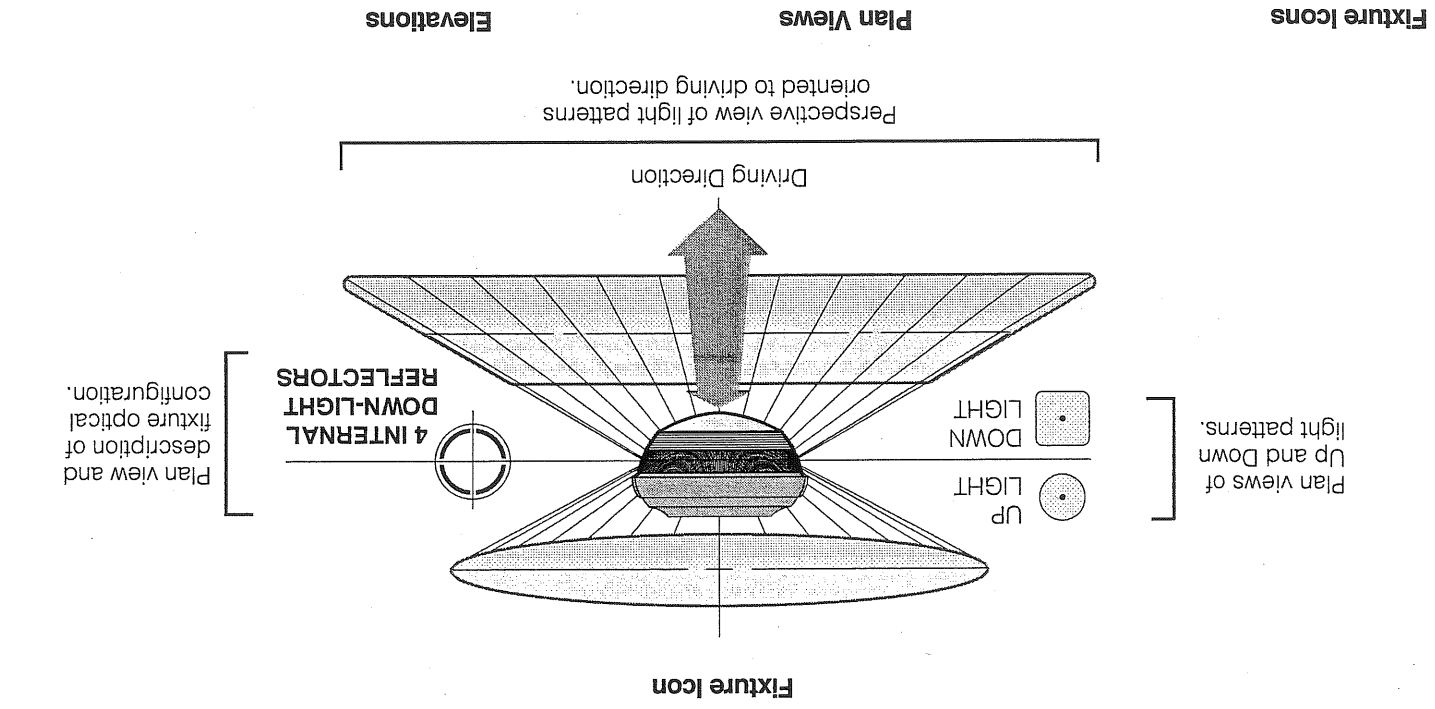


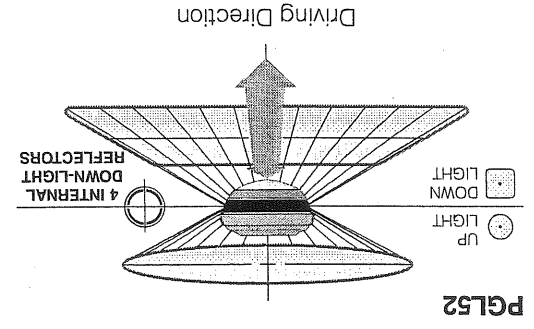
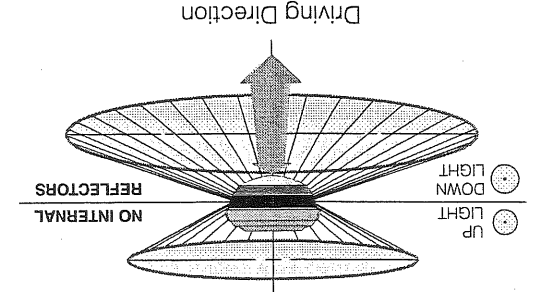
34A-B-1

82-200 Marginal
way

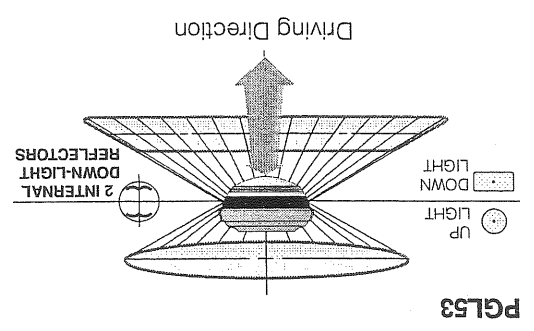
Subdivision
City of Portland



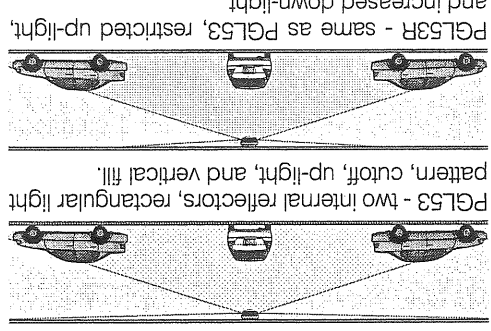
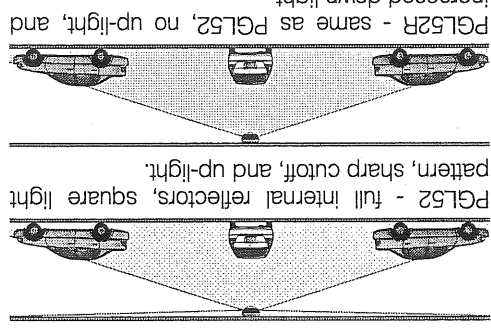
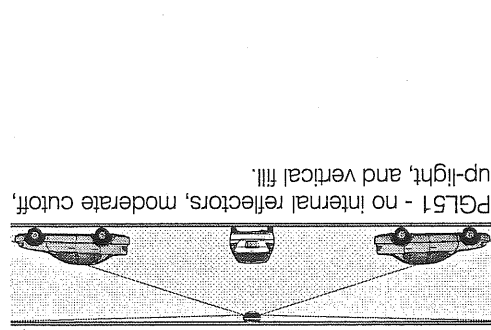
PGL51



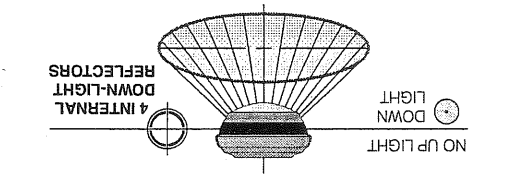
PGL52



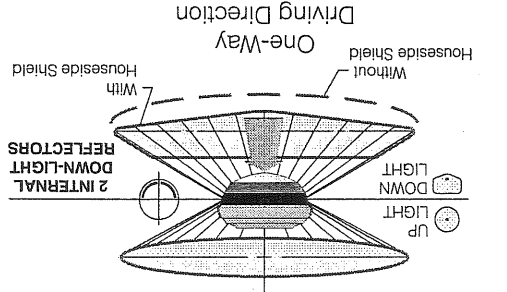
PGL53



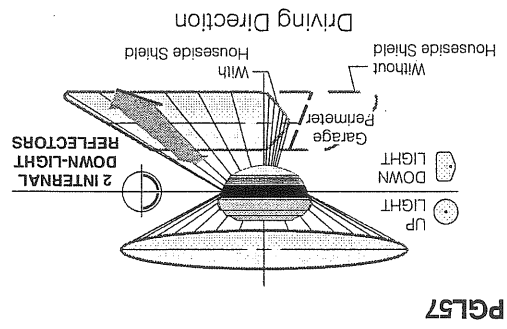
PGL53R - same as PGL53, restricted up-light, and increased down-light.



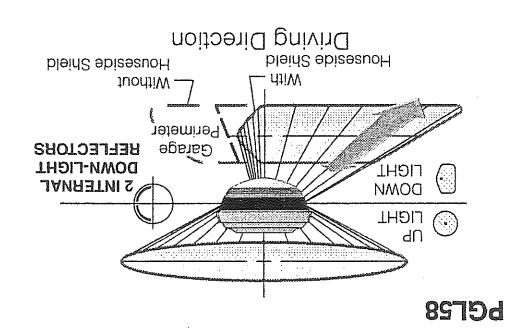
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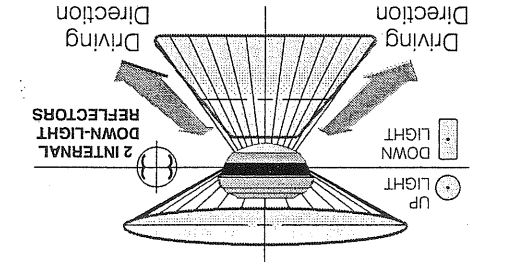
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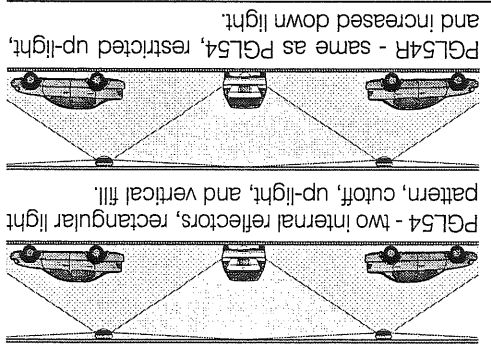
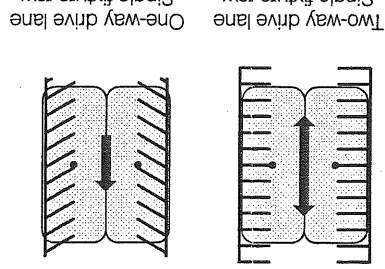
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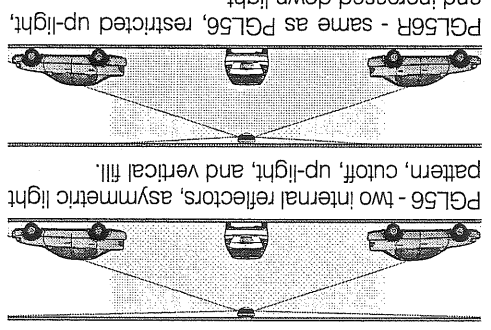
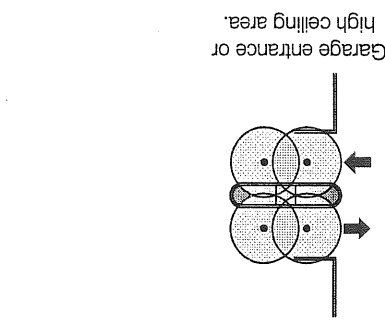
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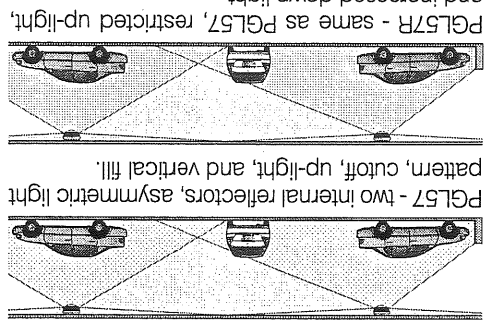
PGL54



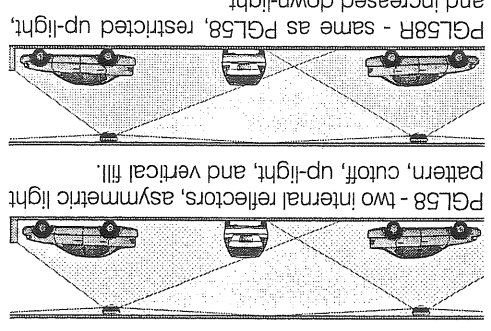
PGL54R - same as PGL54, restricted up-light, and increased down light.



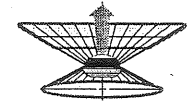
PGL56R - same as PGL56, restricted up-light, and increased down-light.



PGL57R - same as PGL57, restricted up-light, and increased down-light.



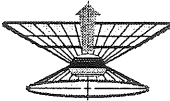
PGL58R - same as PGL58, restricted up-light, and increased down-light.



PGL52 / PGL62 - Single Row System

Standard Lexan® SLX Refractor

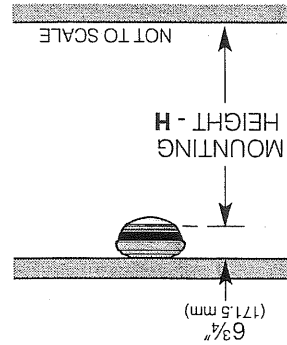
Maintained Illumination for a System of Fixtures



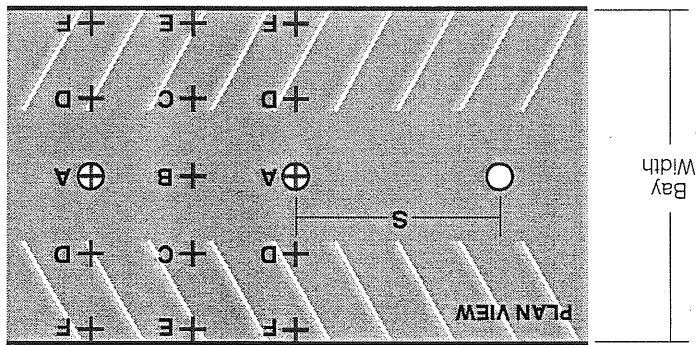
PGL52 / PGL62 - Double Row System

Standard Lexan® SLX Refractor

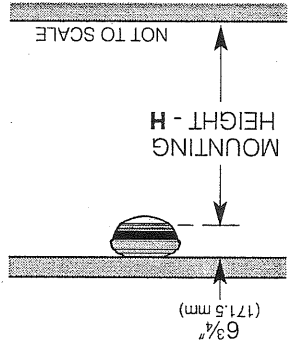
Maintained Illumination for a System of Fixtures



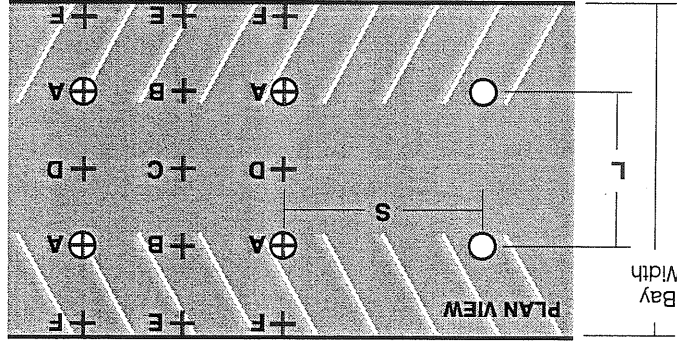
NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



For Optional Acrylic Refractor, Multiply by 1.065



NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



For Optional Acrylic Refractor, Multiply by 1.065

Bay Width	Bay Height	Fixture Spacing	Footcandles on Deck						Uniformity Avg./Min.	Max./Min.	
			S	A	B	C	D	E			F
60'	55'	8'	15.1	9.6	7.3	6.3	1.8	1.5	3.97	10.07	
		9'	13.2	5.4	5.7	3.9	1.2	1	4.35	13.2	
	60'	8'	15.1	9.6	6.5	5.1	1.2	1	5.31	15.1	
		9'	10.9	5.9	5.7	3.5	2	1.4	2.99	7.79	
55'	8'	20'	12.9	8.7	6.8	6.7	2.7	2.2	5.94	2.7	
		30'	13.2	5.4	5.7	3.9	1.2	1	4.35	13.2	
	60'	8'	14.2	5.7	6.2	4.1	1.3	1	4.63	14.2	
		9'	13.8	9.3	7.3	7.2	2.9	2.4	6.38	2.66	5.75
60'	55'	8'	14.1	5.7	6.1	4.1	1	0.8	4.51	17.63	
		9'	11.6	6.3	6.2	3.8	2.1	1.5	4.49	2.99	7.73
	60'	8'	16.1	10.3	6.9	5.4	1.3	1.1	5.66	5.15	14.64
		9'	13.8	9.3	6.5	6.7	1.9	1.7	5.82	3.42	8.12
60'	60'	8'	13.8	6.5	6.7	1.9	1.7	5.82	3.42	8.12	
		9'	11.6	6.3	6.2	3.8	2.1	1.5	4.49	2.99	7.73
	55'	8'	18.2	12.5	11.4	7.6	2.4	2.2	7.71	3.5	8.27
		9'	18.2	6.2	6.1	3.7	1.5	1.1	4.25	3.86	10.55
55'	8'	20'	18.2	6.2	6.1	3.7	1.5	1.1	4.25	3.86	10.55
		30'	11.6	6.2	6.1	3.7	1.5	1.1	4.25	3.86	10.55
	60'	8'	15.8	7.1	6.3	5	1.4	1	5.21	5.21	15.8
		9'	15.6	11.4	10	7.3	2.4	2.2	7.03	3.2	7.09
60'	55'	8'	11.2	2.4	1.3	1.7	0.6	0.6	4.2	18.67	
		9'	9.9	5.2	2.6	2.4	1.1	1	3.07	3.07	9.9
	60'	8'	11.9	5.5	1.9	1.9	0.7	0.7	2.33	12.86	
		9'	9.9	5.2	2.6	2.4	1.1	1	3.07	3.07	9.9
60'	8'	20'	11.9	5.5	1.9	1.9	0.7	0.7	2.99	4.27	17
		30'	11.2	2.3	1.3	1.7	0.5	0.5	4.94	4.94	22.4
	60'	8'	9.9	5.2	2.6	2.4	1.1	1	3.07	3.07	9.9
		9'	9.9	5.2	2.6	2.4	1.1	1	3.07	3.07	9.9

85 Watt IF
6,000 initial lumens
Kim Test No. KL00971
Light Loss Factor: 0.80

150 Watt HPS
ED-17 clear
medium base
16,000 initial lumens
Kim Test No. KL00925
Light Loss Factor: 0.81

175 Watt MH
ED-17 clear
medium base
15,000 initial lumens
Kim Test No. KL00918
Light Loss Factor: 0.72

150 Watt PMH
ED-17 clear
medium base
14,000 initial lumens
Kim Test No. KL00980
Light Loss Factor: 0.72

85 Watt IF
PGL62 only
6,000 initial lumens
Kim Test No. KL00971
Light Loss Factor: 0.80

150 Watt HPS
ED-17 clear
medium base
16,000 initial lumens
Kim Test No. KL00925
Light Loss Factor: 0.81

175 Watt MH
ED-17 clear
medium base
15,000 initial lumens
Kim Test No. KL00918
Light Loss Factor: 0.72

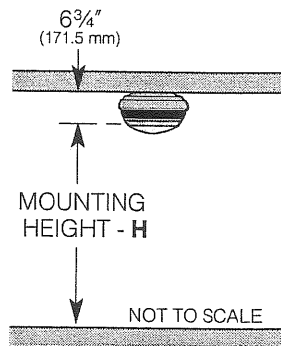
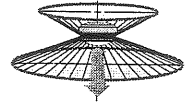
150 Watt PMH
ED-17 clear
medium base
14,000 initial lumens
Kim Test No. KL00980
Light Loss Factor: 0.72

Bay Width	Bay Height	Fixture Spacing	Footcandles on Deck						Uniformity Avg./Min.	Max./Min.	
			S	A	B	C	D	E			F
60'	55'	8'	16.7	11.4	14.7	12.6	14.7	12.6	13.95	1.22	1.47
		9'	14.2	6.6	11.5	7.7	11.5	7.7	10.05	1.52	2.15
	60'	8'	16.1	10.8	13	10.1	12.9	10.1	12.36	1.22	1.59
		9'	13.8	6.2	10.2	5.9	10.2	5.9	8.91	1.51	2.34
60'	55'	8'	12.2	7.8	11.5	7.1	11.5	7.1	9.43	1.35	1.72
		9'	16.3	12.3	14.7	14.5	14.6	14.5	14.71	1.2	1.33
	60'	8'	17.3	11.5	13.9	10.9	13.9	10.9	13.29	1.22	1.59
		9'	13.1	8.4	12.3	7.6	12.3	7.6	10.11	1.33	1.72
60'	60'	8'	14.8	6.6	11	6.3	10.9	6.3	9.53	1.51	2.35
		9'	15.4	11.2	12.9	13.4	12.9	13.4	13.54	1.21	1.38
	55'	8'	17.2	8.9	12.7	10.1	12.7	10.1	12.35	1.39	1.93
		9'	18.9	14.9	23.6	16.2	23.6	16.2	18.23	1.22	1.58
55'	8'	20'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		30'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
60'	55'	8'	12.9	6.5	4.7	4.6	4.6	4.5	7.06	1.57	2.87
		9'	11.8	3	2.6	3.5	2.6	3.5	5.47	2.1	4.54
	60'	8'	14.3	9.1	13.3	9	13.3	9	11.29	1.25	1.59
		9'	14.9	9.9	15.2	9.8	15.2	9.8	12.25	1.25	1.55
60'	8'	20'	19.7	14.2	18.3	12.8	18.2	12.8	15.91	1.24	1.54
		30'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
	55'	8'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
60'	55'	8'	12.7	8.9	12.7	10.1	12.7	10.1	12.35	1.39	1.93
		9'	18.9	14.9	23.6	16.2	23.6	16.2	18.23	1.22	1.58
	60'	8'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		9'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
60'	60'	8'	14.3	9.1	13.3	9	13.3	9	11.29	1.25	1.59
		9'	14.9	9.9	15.2	9.8	15.2	9.8	12.25	1.25	1.55
	55'	8'	12.9	6.5	4.7	4.6	4.6	4.5	7.06	1.57	2.87
		9'	11.8	3	2.6	3.5	2.6	3.5	5.47	2.1	4.54
55'	8'	20'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		30'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
55'	8'	20'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		30'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
60'	55'	8'	12.7	8.9	12.7	10.1	12.7	10.1	12.35	1.39	1.93
		9'	18.9	14.9	23.6	16.2	23.6	16.2	18.23	1.22	1.58
	60'	8'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		9'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
60'	60'	8'	14.8	6.6	11	6.3	10.9	6.3	9.53	1.51	2.35
		9'	15.4	11.2	12.9	13.4	12.9	13.4	13.54	1.21	1.38
	55'	8'	17.2	8.9	12.7	10.1	12.7	10.1	12.35	1.39	1.93
		9'	18.9	14.9	23.6	16.2	23.6	16.2	18.23	1.22	1.58
60'	55'	8'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		9'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
60'	60'	8'	14.3	9.1	13.3	9	13.3	9	11.29	1.25	1.59
		9'	14.9	9.9	15.2	9.8	15.2	9.8	12.25	1.25	1.55
	55'	8'	12.9	6.5	4.7	4.6	4.6	4.5	7.06	1.57	2.87
		9'	11.8	3	2.6	3.5	2.6	3.5	5.47	2.1	4.54
60'	55'	8'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		9'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.6	16.44	1.19	1.45
60'	60'	8'	14.3	9.1	13.3	9	13.3	9	11.29	1.25	1.59
		9'	14.9	9.9	15.2	9.8	15.2	9.8	12.25	1.25	1.55
	55'	8'	12.9	6.5	4.7	4.6	4.6	4.5	7.06	1.57	2.87
		9'	11.8	3	2.6	3.5	2.6	3.5	5.47	2.1	4.54
60'	55'	8'	20.4	15	22.8	15.2	22.8	15.2	18.09	1.21	1.52
		9'	12.6	7.6	11.6	7.1	11.6	7.1	9.53	1.34	1.77
	60'	8'	16.8	8.3	11.1	8.3	11.1	8.3	11.13	1.34	2.02
		9'	17.9	13.8	20	14.6	19.9	14.			

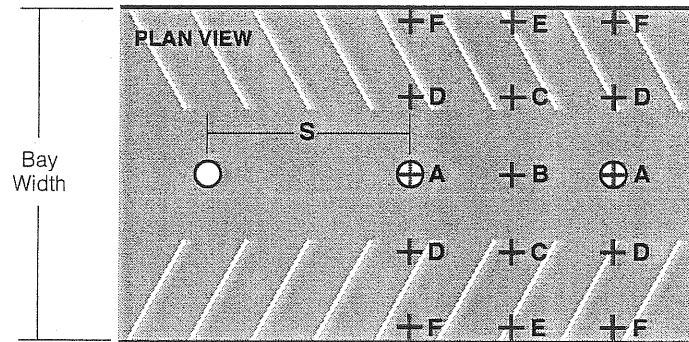
PGL51 / PGL61 - Single Row System

Standard Lexan® SLX Refractor

Maintained
Illumination for a
System of Fixtures



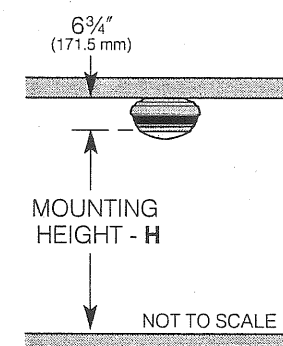
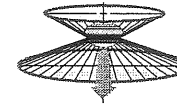
NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



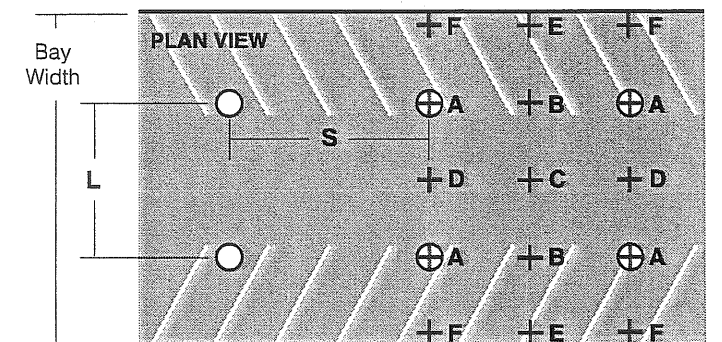
PGL51 / PGL61 - Double Row System

Standard Lexan® SLX Refractor

Maintained
Illumination for a
System of Fixtures

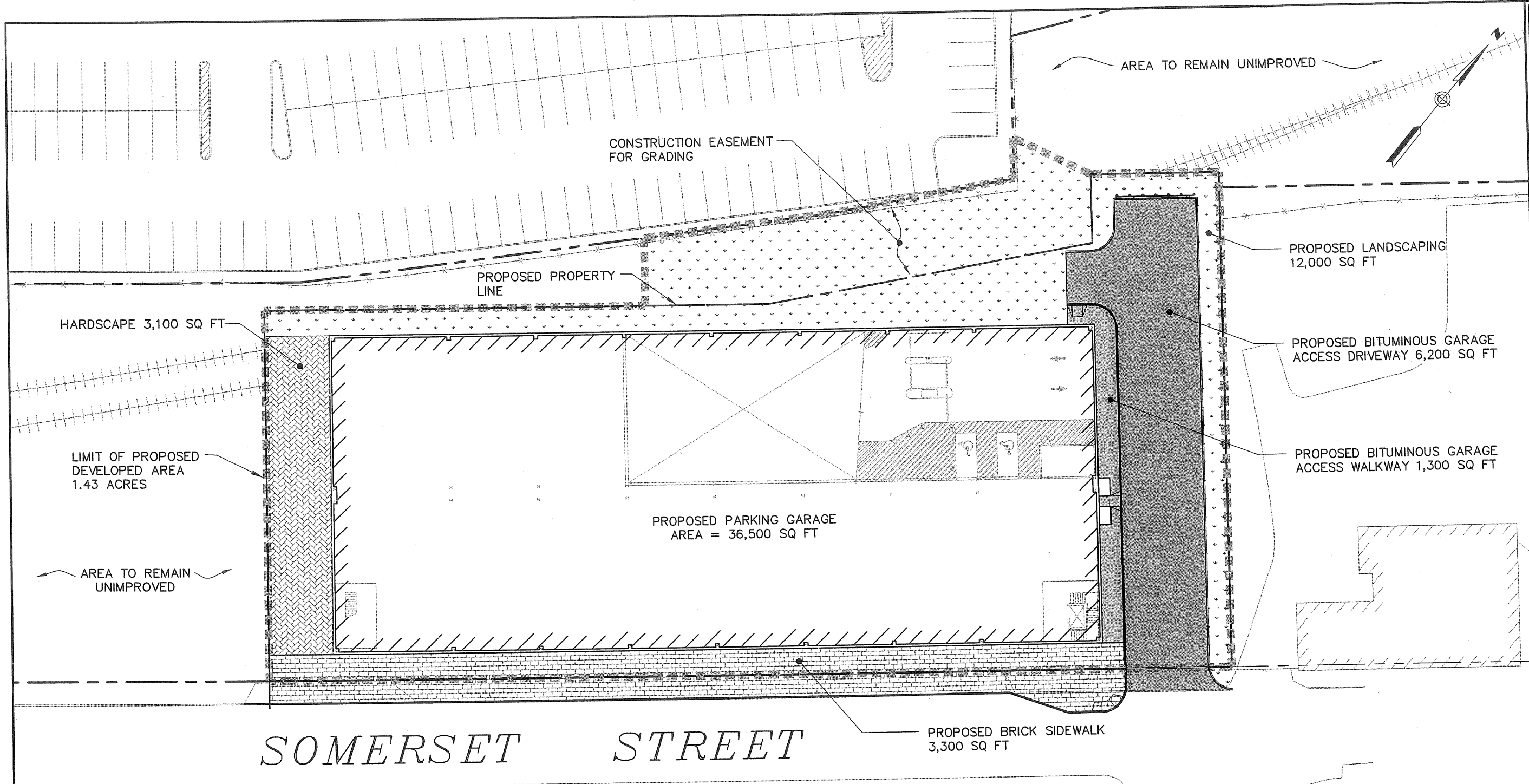


NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



	Bay Width	Fixture Mounting Height H	Fixture Spacing S	Maintained Horizontal Footcandles on Deck						Maintained Avg. fc	Uniformity Avg./Min.	Max./Min.	
				A	B	C	D	E	F				
150 Watt PMH ED-17 clear medium base 14,000 initial lumens Kim Test No. KL00978 Light Loss Factor: 0.72	55'	8'	20'	13.5	11	6.2	5.9	2.5	2.5	5.93	2.37	5.4	
			30'	10.6	6.3	3.8	3.8	1.6	1.8	4.05	2.53	6.63	
		9'	20'	11.9	10.2	6	5.9	3.5	3.5	6.04	1.73	3.4	
			30'	9.1	5.3	3.9	3.8	2.3	2.4	4.05	1.76	3.96	
		60'	8'	20'	13.5	10.9	5.3	5.6	1.7	1.7	5.41	3.18	7.94
				30'	10.6	6.3	3.8	3.8	1.2	1.4	3.89	3.24	8.83
	9'	20'	11.8	10.2	5.6	5.4	2.5	2.5	5.44	2.18	4.72		
		30'	9.1	5.2	3.8	3.7	1.7	1.8	3.76	2.21	5.35		
	175 Watt MH ED-17 clear medium base 15,000 initial lumens Kim Test No. KL00916 Light Loss Factor: 0.72	55'	8'	20'	14.5	11.8	6.6	6.3	2.7	2.7	6.36	2.36	5.37
				30'	11.4	6.8	4.1	4.1	1.7	2	4.37	2.57	6.71
			9'	20'	12.7	11	6.5	6.3	3.8	3.7	6.47	1.75	3.43
				30'	9.8	5.7	4.2	4	2.5	2.6	4.34	1.74	3.92
60'			8'	20'	14.4	11.7	5.6	6	1.9	1.8	5.78	3.21	8
				30'	11.3	6.8	4	4	1.3	1.5	4.15	3.19	8.69
9'		20'	12.6	10.9	6	5.8	2.7	2.7	5.83	2.16	4.67		
		30'	9.7	5.6	4.1	4	1.9	2	4.07	2.14	5.11		
150 Watt HPS ED-17 clear medium base 16,000 initial lumens Kim Test No. KL00919 Light Loss Factor: 0.81		55'	8'	20'	16.6	14.4	9	7.8	3.3	3.3	7.77	2.35	5.03
				30'	12.2	9	5.4	5.6	2.2	2.3	5.35	2.43	5.55
			9'	20'	15	13.5	8.5	7.9	4.2	4.3	7.85	1.87	3.57
				30'	10.4	7.6	6	5.3	2.8	2.9	5.25	1.88	3.71
	60'		8'	20'	16.6	14.3	8	7.2	2.4	2.4	7.11	2.96	6.92
				30'	12.2	8.9	5.3	5.5	1.7	1.8	5.1	3	7.18
	9'	20'	14.9	13.4	8	7.3	3.2	3.2	7.17	2.24	4.66		
		30'	10.4	7.6	5.9	5.1	2.2	2.3	4.95	2.25	4.73		
	85 Watt IF PGL61 only 6,000 initial lumens Kim Test No. KL00974 Light Loss Factor: 0.80	55'	8'	20'	11.8	5.6	2.5	2.6	1.1	1.1	3.41	3.1	10.73
				30'	10.8	2.8	1.4	2	0.8	0.8	2.67	3.34	13.5
			9'	20'	9.9	5.4	2.6	2.7	1.3	1.3	3.27	2.52	7.62
				30'	8.8	2.8	1.6	2	0.9	0.9	2.47	2.74	9.78
60'			8'	20'	11.8	5.6	2.1	2.2	0.9	0.9	3.17	3.52	13.11
				30'	10.8	2.8	1.4	2	0.7	0.7	2.63	3.76	15.43
9'		20'	9.8	5.3	2.3	2.3	1.1	1.1	3.02	2.75	8.91		
		30'	8.7	2.8	1.5	2	0.8	0.8	2.4	3	10.88		

	Bay Width	Fixture Mounting Height H	Fixture Spacing L	S	Maintained Horizontal Footcandles on Deck						Maintained Avg. fc	Uniformity Avg./Min.	Max./Min.	
					A	B	C	D	E	F				
150 Watt PMH ED-17 clear medium base 14,000 initial lumens Kim Test No. KL00978 Light Loss Factor: 0.72	55'	8'	27.5'	20'	16.1	13.6	12.4	11.9	12.3	11.9	13.33	1.12	1.35	
				30'	12.5	7.9	7.6	7.7	7.6	7.7	8.99	1.18	1.64	
		9'	27.5'	20'	15.4	13.8	12.2	11.8	12.1	11.8	13.09	1.11	1.31	
				30'	11.6	7.6	7.9	7.6	7.8	7.5	8.69	1.16	1.55	
		60'	8'	30'	20'	15.2	12.7	10.5	11.2	10.5	11.2	12.33	1.17	1.45
					30'	11.8	7.4	7.2	7.4	7.2	7.4	8.53	1.18	1.64
	9'	30'	20'	14.3	12.7	11.2	10.8	11.2	10.8	12.07	1.12	1.32		
			30'	10.9	6.9	6.9	6.9	6.9	6.9	7.97	1.16	1.58		
	175 Watt MH ED-17 clear medium base 15,000 initial lumens Kim Test No. KL00916 Light Loss Factor: 0.72	55'	8'	27.5'	20'	17.2	14.5	13.3	12.8	13.2	12.7	14.26	1.12	1.35
					30'	13.3	8.5	8.2	8.2	8.2	8.2	9.61	1.17	1.63
			9'	27.5'	20'	15.5	14	12.5	12.1	12.5	12	13.31	1.11	1.29
					30'	12.4	8.1	8.4	8.1	8.4	8.1	9.31	1.15	1.53
60'			8'	30'	20'	16.3	13.6	11.3	12	11.3	12	13.22	1.17	1.44
					30'	12.7	7.9	7.7	8	7.7	8	9.18	1.19	1.65
9'		30'	20'	15.3	13.6	12	11.6	12	11.6	12.93	1.11	1.32		
			30'	11.7	7.4	7.4	7.4	7.4	7.4	8.53	1.15	1.58		
150 Watt HPS ED-17 clear medium base 16,000 initial lumens Kim Test No. 00919 Light Loss Factor: 0.81		55'	8'	27.5'	20'	20	17.8	18.1	15.7	18.1	15.6	17.58	1.13	1.28
					30'	14.5	11.2	10.9	11.1	10.8	11.1	11.97	1.11	1.34
			9'	27.5'	20'	19.4	17.8	17	16	17	16	17.35	1.08	1.21
					30'	13.4	10.4	12	10.5	12	10.5	11.56	1.11	1.29
	60'		8'	30'	20'	19	16.7	15.9	14.4	15.9	14.4	16.23	1.13	1.32
					30'	13.9	10.5	9.5	10.5	9.5	10.5	11.21	1.18	1.46
	9'	30'	20'	18.6	16.7	16.1	14.6	16.1	14.5	16.23	1.12	1.28		
			30'	12.6	9.8	10.7	9.8	10.7	9.8	10.73	1.09	1.29		
	85 Watt IF PGL61 only 6,000 initial lumens Kim Test No. KL00974 Light Loss Factor: 0.80	55'	8'	27.5'	20'	13	6.8	5	5.2	5	5.2	7.45	1.49	2.6
					30'	11.6	3.6	2.8	4	2.8	4	5.73	2.05	4.14
			9'	27.5'	20'	11.3	6.8	5.4	5.4	5.3	5.4	7.15	1.35	2.13
					30'	9.7	3.7	3.2	4	3.1	4	5.31	1.71	3.13
60'			8'	30'	20'	12.7	6.5	4.2	4.4	4.2	4.4	6.85	1.63	3.02
					30'	11.4	3.4	2.5	3.4	2.5	3.4	5.35	2.14	4.56
9'		30'	20'	10.9	6.4	4.6	4.7	4.6	4.6	6.53	1.42	2.37		
			30'	9.5	3.5	2.8	3.5	2.8	3.5	4.96	1.77	3.39		



PROPOSED SURFACE TYPES WITHIN DEVELOPED AREA

IMPERVIOUS AREA

		NEW IMPERVIOUS AREA
PROPOSED GARAGE	36,500 SQ FT	0 SQ FT
PROPOSED BIT. DRIVEWAY	6,200 SQ FT	0 SQ FT
PROPOSED BRICK SIDEWALK	3,300 SQ FT	0 SQ FT
PROPOSED BIT. SIDEWALK	1,300 SQ FT	0 SQ FT
PROPOSED HARDSCAPE	3,100 SQ FT	0 SQ FT
	50,400 SQ FT (1.15 AC)	0 SQ FT

PERVIOUS AREA

PROPOSED LANDSCAPING	12,000 SQ FT
	12,000 SQ FT (0.28 AC)



CHECK GRAPHIC SCALE BEFORE USING

PROPOSED CONDITIONS

DESIGNED BY:	DAS
CHECKED BY:	DAS / BSS
DRAWN BY:	DAS

203905 - Stormwater - Analysis.dwg

CITY OF PORTLAND
PORTLAND, ME

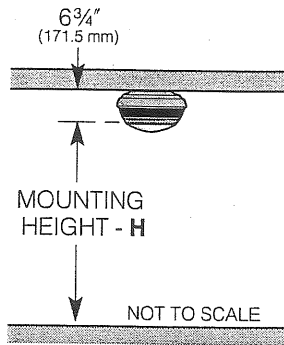
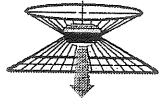
BAYSIDE GARAGE
STORMWATER LAW DETERMINATION

JOB NO: 203905
DATE: SEPT 2006
SCALE: 1"=40'

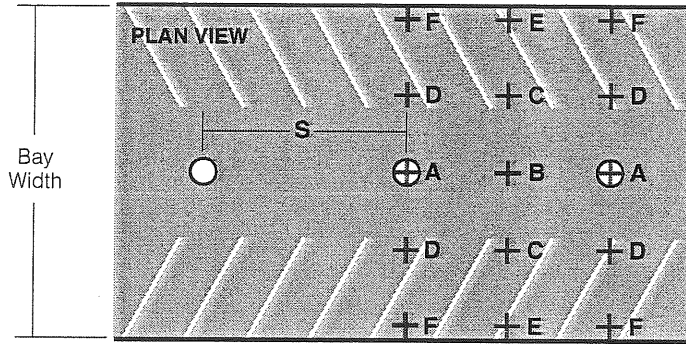
FIGURE 2

PGL53 / PGL63 - Single Row System

Standard Lexan® SLX Refractor



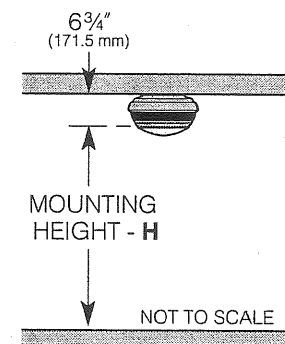
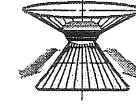
NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



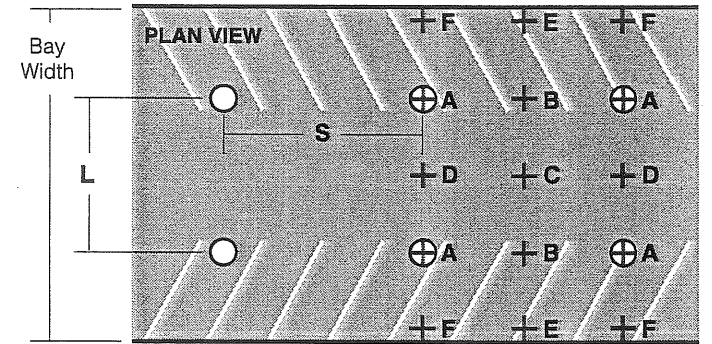
Maintained
Illumination for a
System of Fixtures

PGL54 / PGL64 - Double Row System

Standard Lexan® SLX Refractor



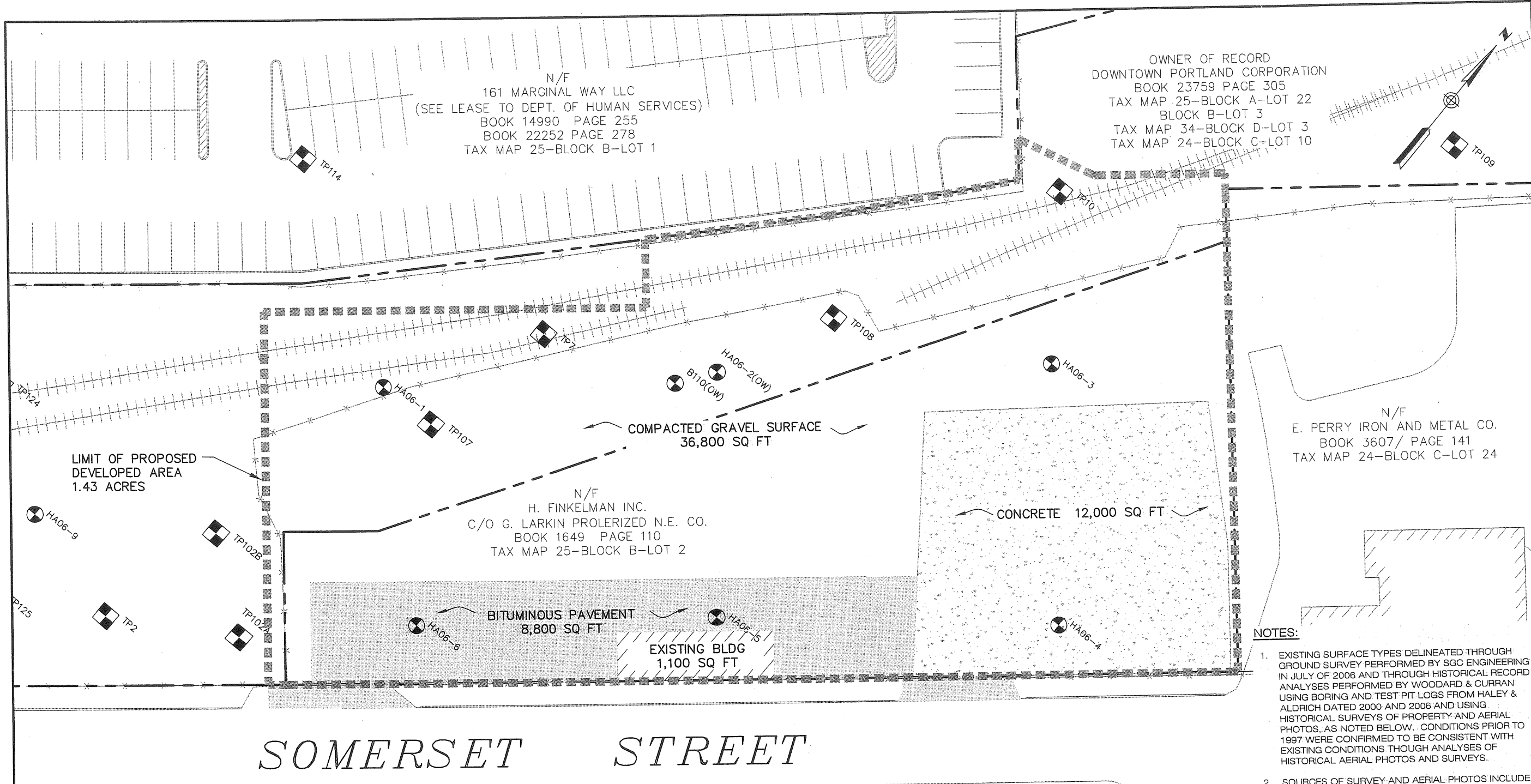
NOTE: All values are maintained illumination which include 40% ceiling reflection, contribution from adjoining bays, and estimated lamp and luminaire depreciation between maintenance cycles. Surface reflections from structural beams were not considered (flat ceiling presumed). Normal lamp output tolerances, jobsite electrical variations, maintenance schedules and surface reflection characteristics can affect accuracy.



Maintained
Illumination for a
System of Fixtures

Fixture Type	Bay Width	Fixture Mounting Height H	Fixture Spacing S	Maintained Horizontal Footcandles on Deck						Maintained Avg. fc	Uniformity Avg./Min.	Max./Min.	
				A	B	C	D	E	F				
150 Watt PMH ED-17 clear medium base 14,000 initial lumens Kim Test No. KL00982 Light Loss Factor: 0.72	55'	8'	20'	9.6	9.3	8	7	2.7	2.8	5.94	2.2	3.56	
			30'	9	2.6	3.7	5.8	1.6	2.2	4.21	2.63	5.63	
		9'	20'	8.2	8.5	7.7	6.9	3.8	4	6.1	1.61	2.24	
			30'	7.3	3.3	4.4	5.4	2.4	3	4.34	1.81	3.04	
	60'	8'	20'	9.5	9.2	6.8	6.3	1.9	1.9	5.23	2.75	5	
			30'	9	2.6	3.6	5.7	1.2	1.6	3.96	3.3	7.5	
		9'	20'	8.2	8.4	7.1	6.3	2.7	2.8	5.39	2	3.11	
			30'	7.3	3.2	4.3	5.4	1.8	2.2	4.03	2.24	4.06	
	175 Watt MH ED-17 clear medium base 15,000 initial lumens Kim Test No. KL00922 Light Loss Factor: 0.72	55'	8'	20'	10.3	10	8.5	7.5	2.9	3	6.36	2.19	3.55
				30'	9.7	2.8	3.9	6.2	1.7	2.3	4.49	2.64	5.71
			9'	20'	8.8	9.1	8.3	7.4	4.1	4.3	6.55	1.6	2.22
				30'	7.9	3.5	4.7	5.8	2.5	3.2	4.65	1.86	3.16
60'		8'	20'	10.2	9.9	7.3	6.8	2	2	5.61	2.81	5.1	
			30'	9.6	2.8	3.9	6.1	1.3	1.7	4.24	3.26	7.38	
		9'	20'	8.8	9.1	7.6	6.8	2.9	3	5.79	2	3.14	
			30'	7.8	3.5	4.6	5.7	1.9	2.4	4.3	2.26	4.11	
150 Watt HPS ED-17 clear medium base 16,000 initial lumens Kim Test No. KL00927 Light Loss Factor: 0.81		55'	8'	20'	10.8	11.3	11	9.1	3.5	3.6	7.51	2.15	3.23
				30'	9.8	3.5	4.6	7.6	2.2	2.7	5.19	2.36	4.45
			9'	20'	9.4	10.7	11.4	9.1	4.5	4.8	7.79	1.77	2.59
				30'	8	4	5.8	7.2	2.9	3.5	5.35	1.84	2.76
	60'	8'	20'	10.7	11.3	9.4	8.3	2.6	2.6	6.69	2.57	4.35	
			30'	9.7	3.4	4.5	7.5	1.7	2	4.88	2.87	5.71	
		9'	20'	9.3	10.7	10	8.2	3.4	3.5	6.86	2.02	3.15	
			30'	8	3.9	5.7	7.1	2.3	2.7	5.01	2.18	3.48	
	85 Watt IF PGL63 only 6,000 initial lumens Kim Test No. KL00969 Light Loss Factor: 0.80	55'	8'	20'	9.1	4.4	2.2	2.3	1.1	1.1	2.85	2.59	8.27
				30'	8.6	1.7	1.2	1.9	0.8	0.8	2.25	2.81	10.75
			9'	20'	7.6	4.4	2.4	2.4	1.3	1.3	2.79	2.15	5.85
				30'	6.9	1.8	1.3	1.9	0.9	0.9	2.08	2.31	7.67
60'		8'	20'	9.1	4.4	1.9	2	0.9	0.9	2.65	2.94	10.11	
			30'	8.6	1.7	1.2	1.8	0.6	0.7	2.17	3.62	14.33	
		9'	20'	7.5	4.3	2.1	2.1	1.1	1	2.54	2.54	7.5	
			30'	6.9	1.8	1.3	1.8	0.7	0.7	1.97	2.81	9.86	

Fixture Type	Bay Width	Fixture Mounting Height H	Fixture Spacing L	S	Maintained Horizontal Footcandles on Deck						Maintained Avg. fc	Uniformity Avg./Min.	Max./Min.	
					A	B	C	D	E	F				
150 Watt PMH ED-17 clear medium base 14,000 initial lumens Kim Test No. KL00982 Light Loss Factor: 0.72	55'	8"	27.5'	20'	16.2	14.8	12.1	9.2	12	9.2	12.38	1.35	1.76	
				30'	10.5	10.7	8.6	4.9	8.5	4.9	7.89	1.61	2.18	
		9'	27.5'	20'	15	12.8	12.5	11.2	12.5	11.2	12.69	1.13	1.34	
				30'	9.5	10.2	9.9	6.2	9.8	6.2	8.35	1.35	1.66	
	60'	8'	30'	20'	15.8	14.5	9.3	7.2	9.2	7.2	10.87	1.51	2.19	
				30'	10.3	10.5	6.9	3.7	6.9	3.7	7.01	1.89	2.84	
		9'	30'	20'	14.5	12.3	10.7	9.2	10.7	9.2	11.33	1.23	1.58	
				30'	9.3	9.9	8.1	4.9	8.1	4.9	7.38	1.51	2.02	
	175 Watt MH ED-17 clear medium base 15,000 initial lumens Kim Test No. KL00922 Light Loss Factor: 0.72	55'	8'	27.5'	20'	17.4	15.9	12.9	9.9	12.9	9.8	13.27	1.35	1.78
					30'	11.2	11.5	9.2	5.3	9.1	5.3	8.47	1.6	2.17
			9'	27.5'	20'	16	13.7	13.4	12	13.4	12	13.57	1.13	1.33
					30'	10.2	11	10.6	6.7	10.5	6.7	8.97	1.34	1.64
60'		8'	30'	20'	17	15.5	9.9	7.7	9.9	7.7	11.66	1.51	2.21	
				30'	11.1	11.2	7.4	4	7.4	4	7.53	1.88	2.8	
		9'	30'	20'	15.5	13.2	11.5	9.8	11.5	9.8	12.11	1.24	1.58	
				30'	10	10.6	8.7	5.3	8.7	5.3	7.94	1.5	2	
150 Watt HPS ED-17 clear medium base 16,000 initial lumens Kim Test No. KL00927 Light Loss Factor: 0.81		55'	8'	27.5'	20'	19.6	21.6	16.1	11.1	16	11.1	15.75	1.42	1.95
					30'	11.8	14.3	10.7	6.4	10.7	6.4	9.75	1.52	2.23
			9'	27.5'	20'	18.7	18.2	17.7	13.7	17.6	13.7	16.42	1.2	1.37
					30'	10.7	13.5	13.1	7.5	13.1	7.5	10.27	1.37	1.8
	60'	8'	30'	20'	19.1	21.1	12.1	8.9	12.1	8.9	13.89	1.56	2.37	
				30'	11.6	14	8.5	5.1	8.5	5	8.67	1.73	2.8	
		9'	30'	20'	18	17.5	14.3	11.3	14.3	11.3	14.51	1.28	1.59	
				30'	10.4	13.1	10.5	6.2	10.5	6.2	9.1	1.47	2.11	
	85 Watt IF PGL64 only 6,000 initial lumens Kim Test No. KL00969 Light Loss Factor: 0.80	55'	8'	27.5'	20'	10	6.2	3.7	3.4	3.7	3.4	5.59	1.64	2.94
					30'	9.3	3.3	2.5	2.7	2.5	2.7	4.5	1.8	3.72
			9'	27.5'	20'	8.7	6	4	3.9	4	3.9	5.48	1.41	2.23
					30'	7.7	3.4	2.7	3	2.7	3	4.25	1.57	2.85
60'		8'	30'	20'	10.4	6	3.2	3.2	3.2	3.2	5.49	1.72	3.25	
				30'	9.2	3.2	2.2	2.3	2.2	2.3	4.24	1.93	4.18	
		9'	30'	20'	8.9	5.8	3.6	3.5	3.6	3.5	5.27	1.51	2.54	
				30'	7.6	3.2	2.4	2.5	2.4	2.5	3.93	1.64	3.17	



WOODARD & CURRAN
Engineering · Science · Operations
PORTLAND, ME
1-800-426-4262

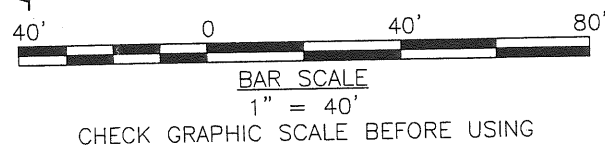
EXISTING CONDITIONS

DESIGNED BY: DAS
CHECKED BY: DAS/BSS
203905-Stormwater-Analysis.dwg
DRAWN BY: DAS

CITY OF PORTLAND
PORTLAND, ME

BAYSIDE GARAGE
STORMWATER LAW DETERMINATION

- NOTES:**
- EXISTING SURFACE TYPES DELINEATED THROUGH GROUND SURVEY PERFORMED BY SGC ENGINEERING IN JULY OF 2006 AND THROUGH HISTORICAL RECORD ANALYSES PERFORMED BY WOODARD & CURRAN USING BORING AND TEST PIT LOGS FROM HALEY & ALDRICH DATED 2000 AND 2006 AND USING HISTORICAL SURVEYS OF PROPERTY AND AERIAL PHOTOS, AS NOTED BELOW. CONDITIONS PRIOR TO 1997 WERE CONFIRMED TO BE CONSISTENT WITH EXISTING CONDITIONS THROUGH ANALYSES OF HISTORICAL AERIAL PHOTOS AND SURVEYS.
 - SOURCES OF SURVEY AND AERIAL PHOTOS INCLUDE:
 - DRAFT ALTA/ACSM LAND TITLE SURVEY - BAYSIDE, SGC ENGINEERING, JULY 2006.
 - SITE PLAN FOR THE DEPARTMENT OF HUMAN SERVICES/MARGINAL WAY LLC, SEBAGO TECHNICS, JUNE 2003.
 - TOPOGRAPHIC SURVEY - BAYSIDE RAILROAD, SEBAGO TECHNICS, FEBRUARY 2003.
 - BAYSIDE SURVEY, OEST ASSOCIATES, MAY 2002.
 - AERIAL PHOTOGRAPH, CITY WIDE AERIAL COVERAGE, BRADSTREET CONSULTANTS, 2000.
 - PLAN OF PROPERTIES - MARGINAL WAY - SOMERSET STREET, OEST ASSOCIATES, JULY 1998.
 - AERIAL PHOTOGRAPH, OWEN AND WHITE INC., NOVEMBER 1969.



SURFACE CONDITION, TEST PIT AND BORING DATA
HALEY & ALDRICH PHASE II ESA, NOV. 2000
TP107 0-0.8 FT - RAILYARD FILL
TP108 0-0.8 FT - RAILYARD FILL
*RAILYARD FILL IS DEFINED AS >50% CINDERS AND COAL FRAGMENTS IN BLACK STAINED MATRIX OF MEDIUM TO FINE SAND WITH SILT

HALEY & ALDRICH PHASE II ESA, NOVEMBER 2000
B110(OW) 0-0.4 FT - LOOSE, BLACK SILTY SAND WITH GRAVEL

BAYSIDE GARAGE GEOTECHNICAL INVESTIGATION, HALEY & ALDRICH, AUG. 2006

HA06-1	SAND/GRAVEL FILL AT SURFACE	HA06-4	0-1.0 FT - CONCRETE
HA06-2	SAND/GRAVEL FILL AT SURFACE	HA06-5	0-0.3 FT - ASPHALT
HA06-3	SAND/GRAVEL FILL AT SURFACE	HA06-6	0-0.4 FT - ASPHALT

EXISTING SURFACE TYPES WITHIN PROPOSED DEVELOPED AREA (PRE 1997)*
*See Notes

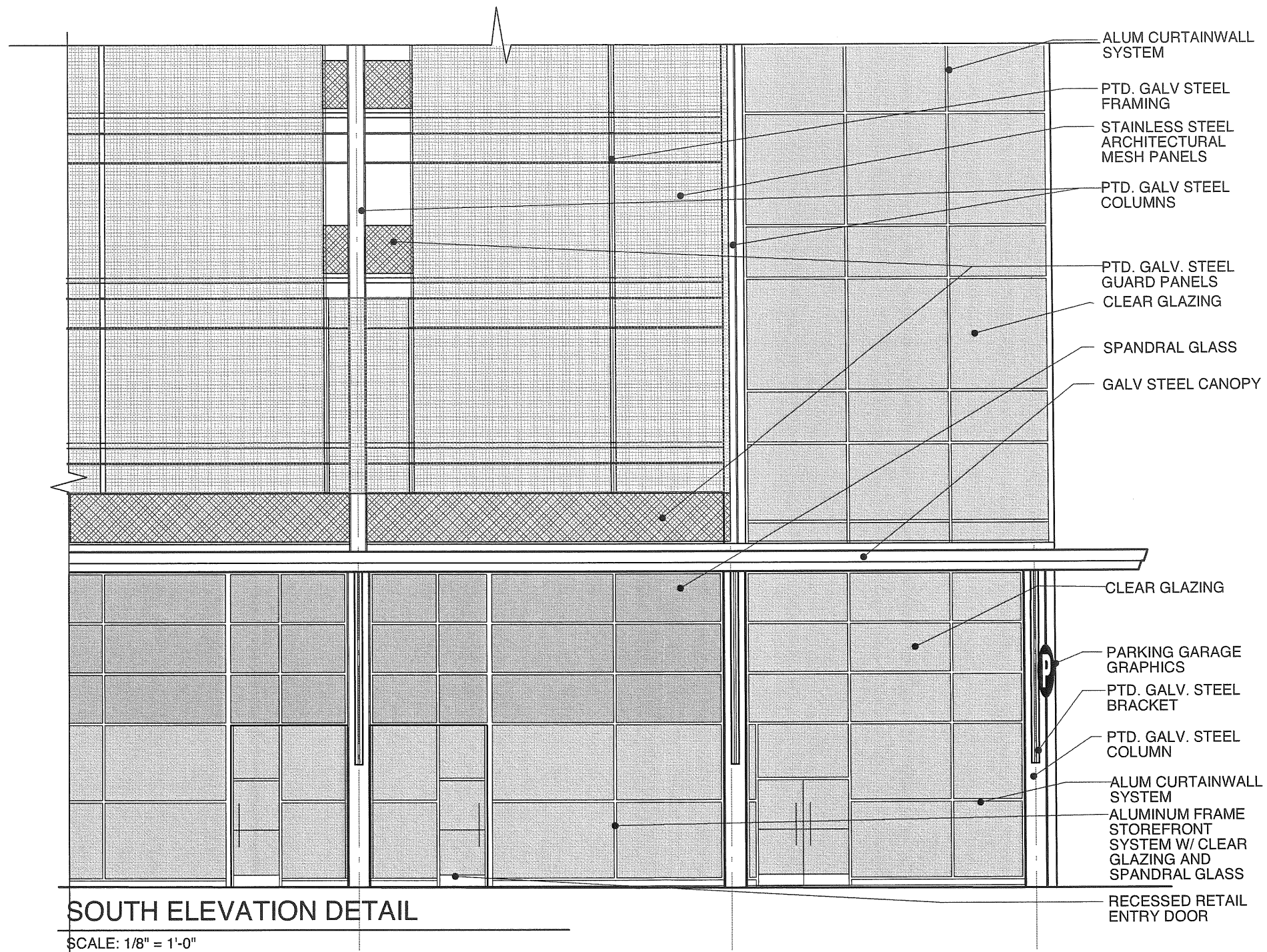
IMPERVIOUS AREA

COMPACTED GRAVEL SURFACE	40,500 SQ FT
CONCRETE	12,000 SQ FT
BITUMINOUS PAVEMENT	8,800 SQ FT
EXISTING BLDG	1,100 SQ FT
TOTAL	62,400 SQ FT (1.43 AC)

PERVIOUS AREA

TOTAL	0 SQ FT (0 AC)
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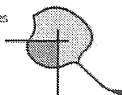
JOB NO: 203905
DATE: SEPT 2006
SCALE: 1"=40'
FIGURE 1



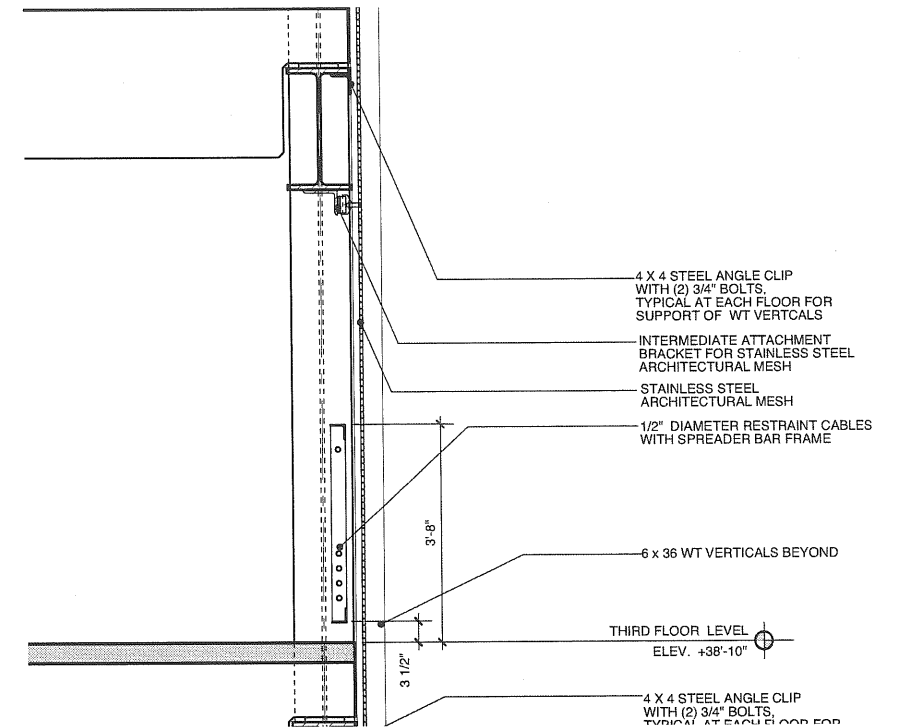
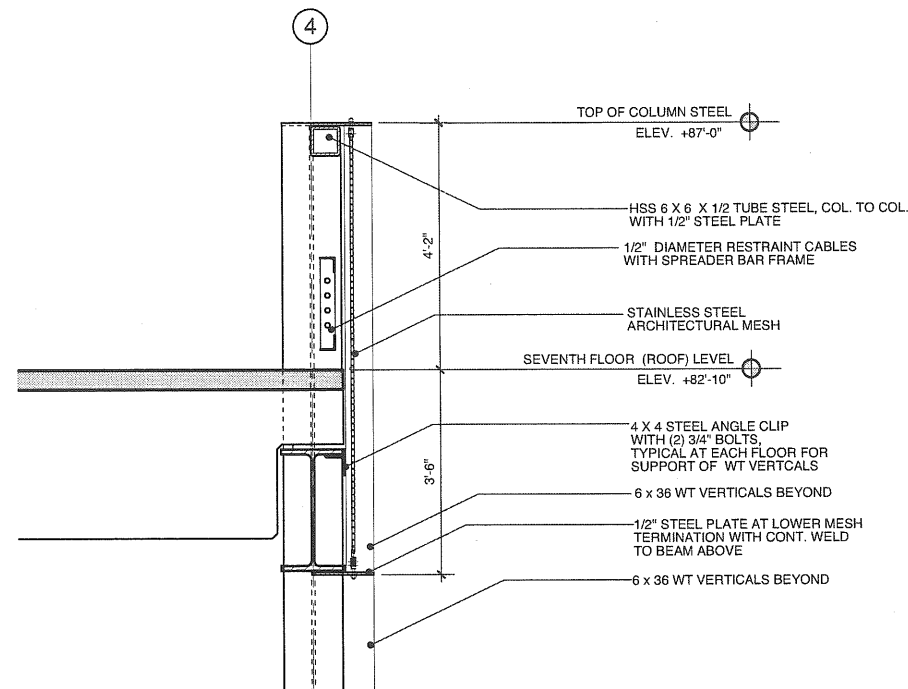
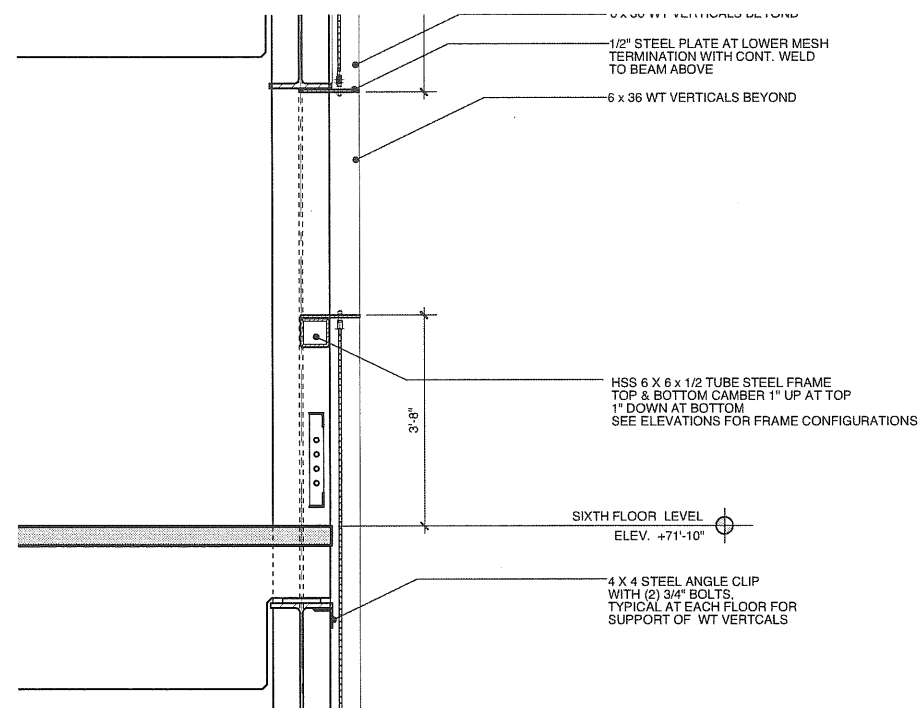
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Richardson & Associates
Landscape Architects
11 Middle Street
Saco, Maine 04072
207-286-9291



SIMON DESIGN ENGINEERING LLC
42 Washington Street, Suite 500 781.237.2226 tel
Wellesley, Massachusetts 02481 781.237.2272 fax
www.sde-us.com info@sde-us.com



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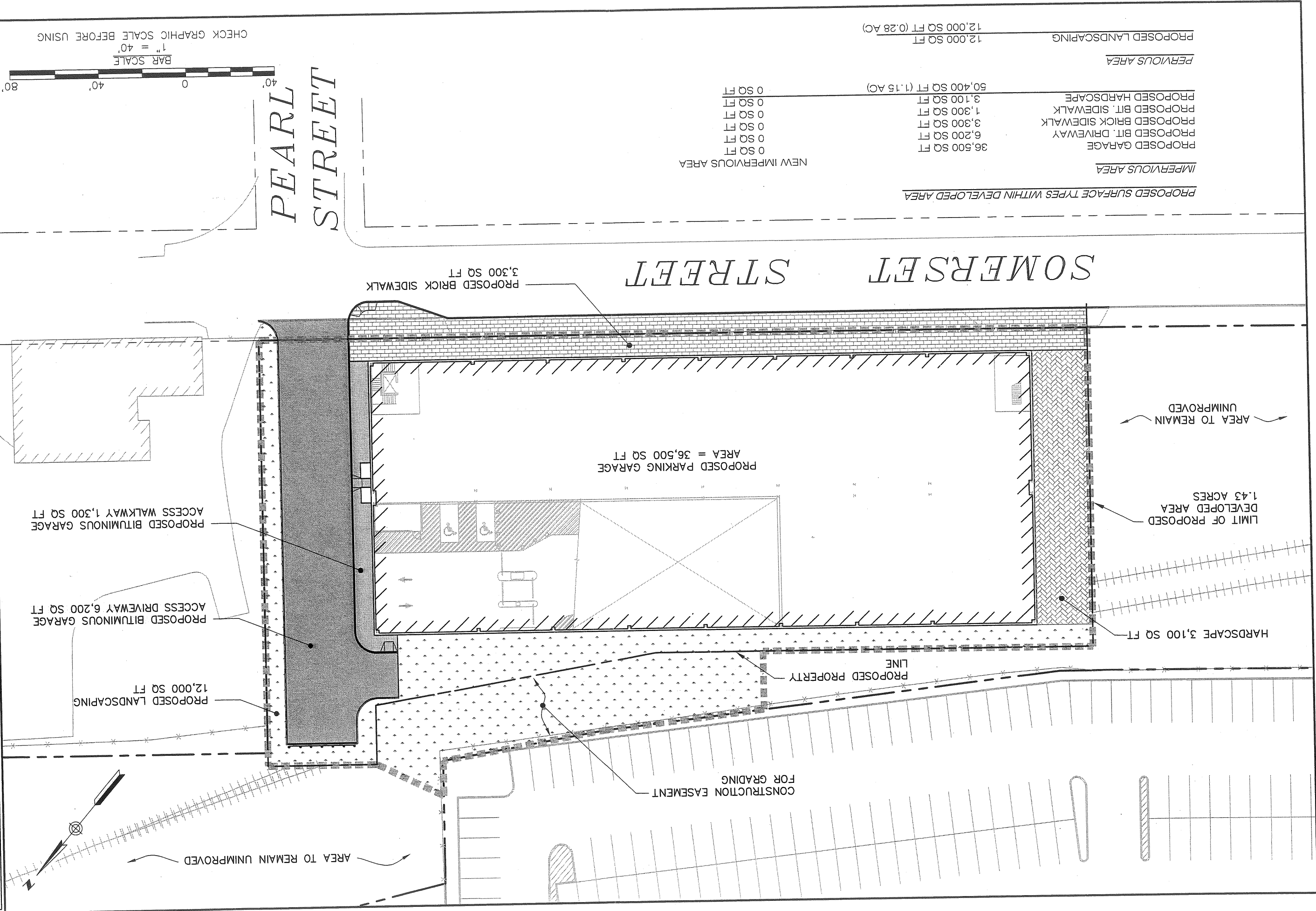


FIGURE 2
 DATE: SEPT 2006
 SCALE: 1"=40'
 JOB NO.: 2033905

CITY OF PORTLAND
 PORTLAND, ME
 BAYSIDE GARAGE
 STORMWATER LAW DETERMINATION

DESIGNED BY: DAS
 DRAWN BY: DAS
 CHECKED BY: DAS/BSS
 2033905-Stormwater-Analysis.dwg

WOODARD & CURRAN
 Engineering · Science · Operations
 PORTLAND, ME
 1-800-426-4262



IMPERVIOUS AREA	PROPOSED SURFACE TYPES WITHIN DEVELOPED AREA	NEW IMPERVIOUS AREA
PROPOSED GARAGE	36,500 SQ FT	0 SQ FT
PROPOSED BIT. DRIVEWAY	6,200 SQ FT	0 SQ FT
PROPOSED BRICK SIDEWALK	3,300 SQ FT	0 SQ FT
PROPOSED BIT. SIDEWALK	1,300 SQ FT	0 SQ FT
PROPOSED HARDSCAPE	3,100 SQ FT	0 SQ FT
		50,400 SQ FT (1.15 AC)
PROPOSED LANDSCAPING	12,000 SQ FT	
		12,000 SQ FT (0.28 AC)

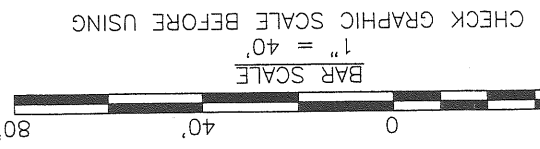
CHECK GRAPHIC SCALE BEFORE USING
 BAR SCALE
 1" = 40'
 0 40 80

FIGURE 1
 JOB NO.: 203905
 DATE: SEPT 2006
 SCALE: 1"=40'

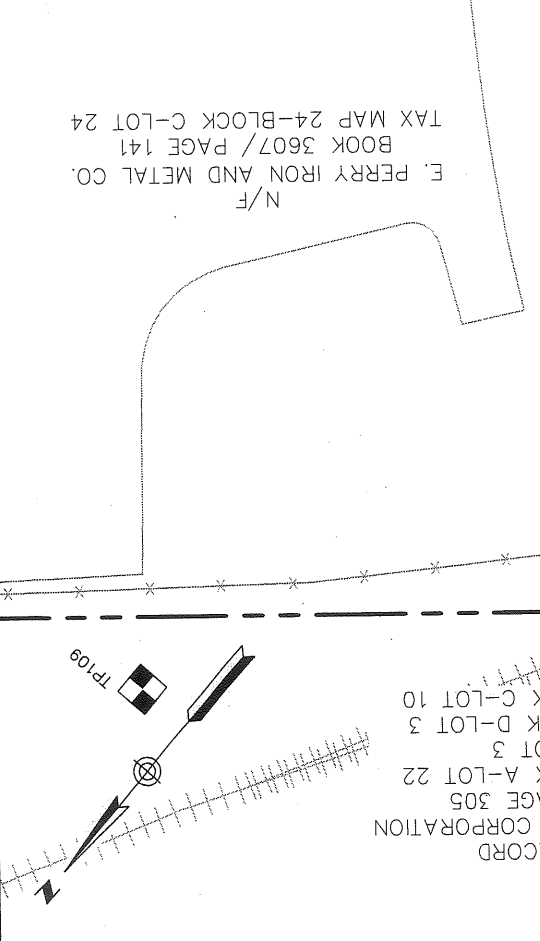
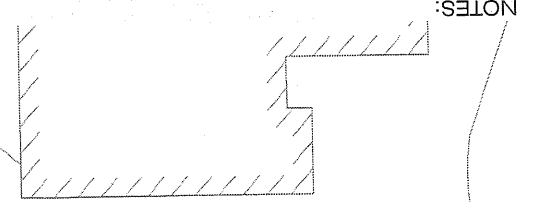
CITY OF PORTLAND
 PORTLAND, ME
 BAYSIDE GARAGE
 STORMWATER LAW DETERMINATION

EXISTING CONDITIONS
 DESIGNED BY: DAS
 DRAWN BY: DAS
 CHECKED BY: DAS/BSS
 203905-Stormwater-Andy/sjs.dwg

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2. SOURCES OF SURVEY AND AERIAL PHOTOS INCLUDE:
- 2.1. DRAFT ALTA/CASM LAND TITLE SURVEY - BAYSIDE, SGC ENGINEERING, JULY 2006.
 - 2.2. SITE PLAN FOR THE DEPARTMENT OF HUMAN SERVICES/MARGINAL WAY LLC, SEBAGO SERVICES, JUNE 2003.
 - 2.2. TOPOGRAPHIC SURVEY - BAYSIDE RAILROAD, SEBAGO TECHINCS, FEBRUARY 2003.
 - 2.3. BAYSIDE SURVEY, OEST ASSOCIATES, MAY 2002.
 - 2.4. AERIAL PHOTOGRAPH, CITY WIDE AERIAL COVERAGE, BRADSTREET CONSULTANTS, 2000.
 - 2.5. PLAN OF PROPERTIES - MARGINAL WAY - SOMERSET STREET, OEST ASSOCIATES, JULY 1998.
 - 2.6. AERIAL PHOTOGRAPH, OWEN AND WHITE INC., NOVEMBER 1969.
1. EXISTING SURFACE TYPES DELINEATED THROUGH GROUND SURVEY PERFORMED BY SGC ENGINEERING IN JULY OF 2006 AND THROUGH HISTORICAL RECORD ANALYSES PERFORMED BY WOODARD & CURRAN USING BORING AND TEST PIT LOGS FROM HALEY & ALDRICH DATED 2000 AND 2006 AND USING HISTORICAL SURVEYS OF PROPERTY AND AERIAL PHOTOS, AS NOTED BELOW. CONDITIONS PRIOR TO 1997 WERE CONFIRMED TO BE CONSISTENT WITH EXISTING CONDITIONS THROUGH ANALYSES OF HISTORICAL AERIAL PHOTOS AND SURVEYS.



IMPERVIOUS AREA	
COMPACTED GRAVEL SURFACE	40,500 SQ FT
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BITUMINOUS PAVEMENT	8,800 SQ FT
EXISTING BLDG	1,100 SQ FT
TOTAL	62,400 SQ FT (1.43 AC)

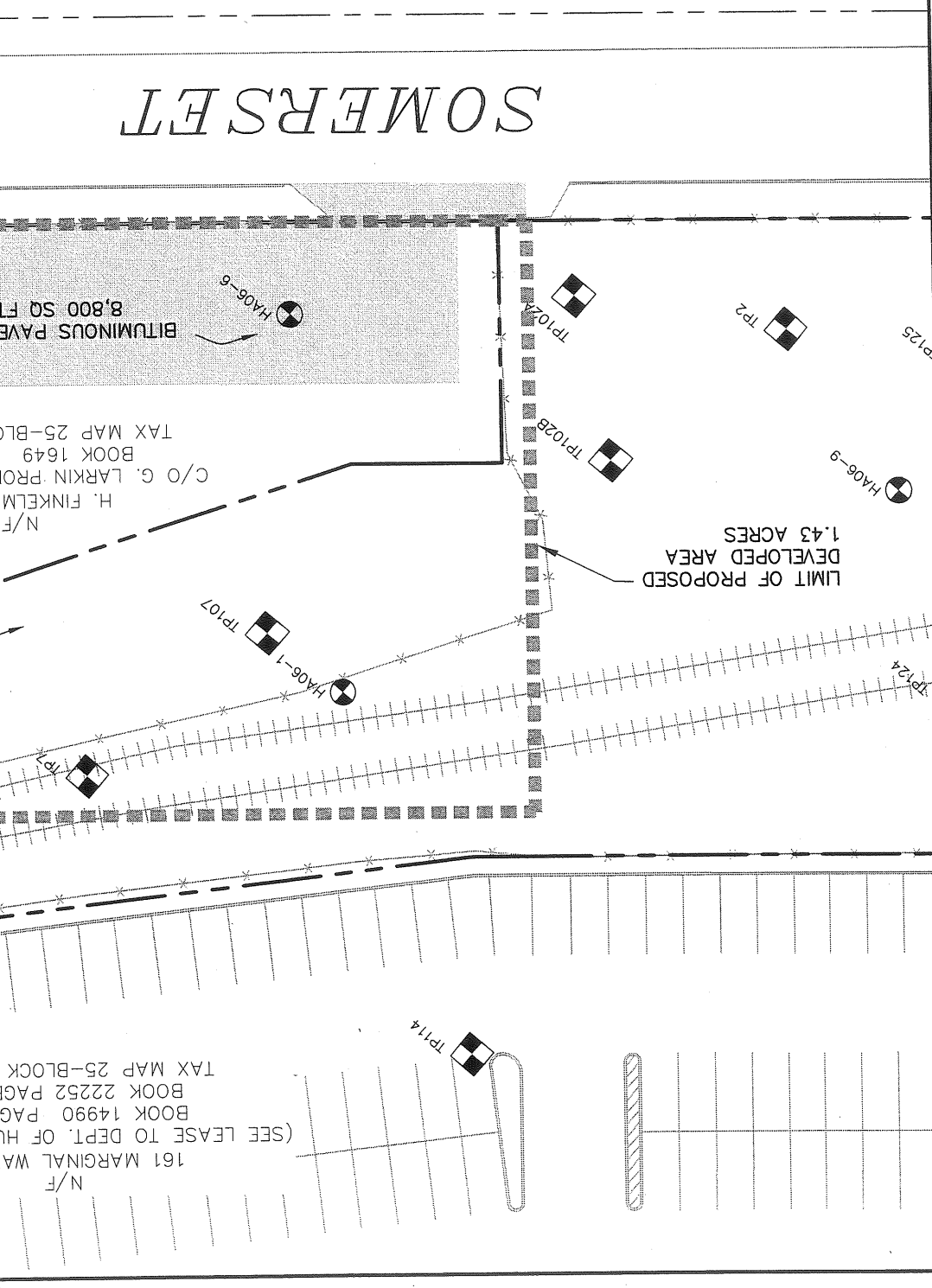
PERVIOUS AREA	
TOTAL 0 SQ FT (0 AC)	

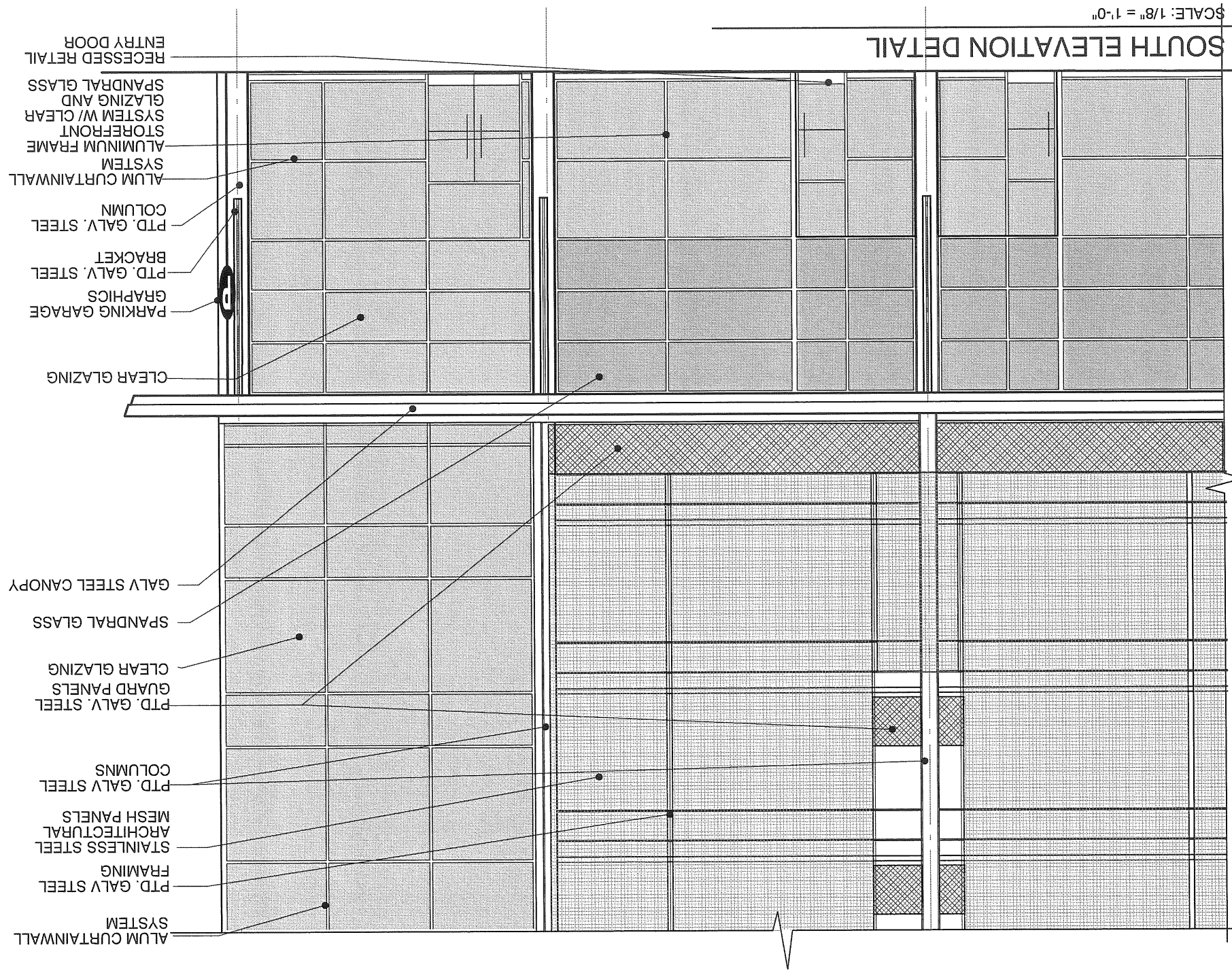
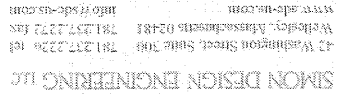
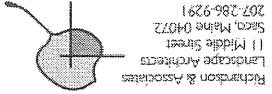
* See Notes
 EXISTING SURFACE TYPES WITHIN PROPOSED DEVELOPED AREA (PRE 1997)*

BAYSIDE GARAGE GEOTECHNICAL INVESTIGATION, HALEY & ALDRICH, AUG. 2006	
HA06-4	0-1.0 FT - CONCRETE
HA06-5	0-0.3 FT - ASPHALT
HA06-6	0-0.4 FT - ASPHALT
HA06-1 SAND/GRAVEL FILL AT SURFACE	
HA06-2 SAND/GRAVEL FILL AT SURFACE	
HA06-3 SAND/GRAVEL FILL AT SURFACE	

HALEY & ALDRICH PHASE II ESA, NOVEMBER 2000	
B110(OW) 0-0.4 FT - LOOSE, BLACK SILTY SAND WITH GRAVEL	
TP107 0-0.8 FT - RAILYARD FILL	
TP108 0-0.8 FT - RAILYARD FILL	
TP109 0-0.8 FT - RAILYARD FILL	

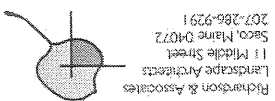
SURFACE CONDITION, TEST PIT AND BORING DATA	
HALEY & ALDRICH PHASE II ESA, NOV. 2000	
RAILYARD FILL IS DEFINED AS >50% CINDERS AND COAL FRAGMENTS IN BLACK STAINED MATRIX OF MEDIUM TO FINE SAND WITH SILT	





SCALE: 1/8" = 1'-0"

Bayside: Parking Garage and Site Planning Technical Services



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