

**Table 3
Soil Sample and Solidification Mix Design Parameters
Basis of Design Report for In Situ Solidification
Hempstead Former MGP Site**

Testing Phase	Sample Location	Sample Depth (feet, bgs)	Composite Sample Identification	Moisture Content (%)	Dry Unit Weight (pcf)	% Passing No. 4 Sieve	% Passing No. 200 Sieve	Total PAH (µg/kg)	Total BTEX (µg/kg)	Mix Design Identification	Mix Designs										Superplasticizer (Rheobuild) ^A Milliliters				
											Soil		GGBFS		Cement		Water	Bentonite		Organoclay					
											Grams	% Dry Weight Basis	Grams	% Dry Weight Basis	Grams	% Dry Weight Basis		Grams	% Dry Weight Basis	Grams		% Dry Weight Basis			
TIER 1																									
	ISS-01	25-75	5524+5524A	15.2	114.8	96.0	3.7	417,670	2,113	5524+5524A-1	4000	100	300	7.5	100	2.5	160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5524+5524A-2	4000	100	600	15	200	5	184	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5524+5524A-3	4000	100	900	22.5	300	7.5	348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5524+5524A-4	4000	100	1200	30	400	10	504	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	ISS-02	10-35	5521+5521A	5.7	114.7	91.7	3.3	480,910	1,459	5521+5521A-1	4000	100	300	7.5	100	2.5	360	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5521+5521A-2	4000	100	600	15	200	5	500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5521+5521A-3	4000	100	900	22.5	300	7.5	504	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5521+5521A-4	4000	100	1200	30	400	10	641	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	ISS-03	10-50	5522+5523	9.8	117.4	88.1	2.9	648,450	2,316	5522+5523-1	3600	100	270	7.5	90	2.5	200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5522+5523-2	3600	100	540	15	180	5	338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5522+5523-3	3600	100	810	22.5	270	7.5	482	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5522+5523-4	3600	100	1080	30	360	10	615	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	ISS-04	20-40	5525+5525A	10.4	114	93.5	4.0	660,540	23,025	5525+5525A-1	3800	100	285	7.5	95	2.5	210	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5525+5525A-2	3800	100	570	15	190	5	304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5525+5525A-3	3800	100	855	22.5	285	7.5	460	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
										5525+5525A-4	3800	100	1140	30	380	10	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TIER 2																									
	ISS-02	10-35	5521+5521A	5.7	114.7	91.7	3.3	480,910	1,459	5521+5521A-1	2600	100	195	7.5	65	2.5	234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5521+5521A-5	2500	100	93.8	3.75	31.3	1.25	222	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5521+5521A-6	2600	100	146.3	5.625	48.8	1.875	229	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5521+5521A-7	2600	100	195	7.5	65	2.5	234	26	1	N/A	N/A	N/A	N/A	N/A	N/A
										5521+5521A-8	2600	100	195	7.5	65	2.5	234	N/A	N/A	26	1	N/A	N/A	N/A	N/A
	ISS-04	20-40	5525+5525A	10.4	114	93.5	4.0	660,540	23,025	5525+5525A-1	2500	100	187.5	7.5	62.5	2.5	138	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525+5525A-5	2750	100	103.1	3.75	34.4	1.25	165	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525+5525A-6	2750	100	154.7	5.625	51.6	1.875	158	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525+5525A-7	2750	100	206.3	7.5	68.8	2.5	252	55	2	N/A	N/A	N/A	N/A	N/A	N/A
										5525+5525A-8	2750	100	206.3	7.5	68.8	2.5	252	N/A	N/A	55	2	N/A	N/A	N/A	N/A
TIER 3																									
	ISS-02	10-35	5521+5521A	5.7	114.7	91.7	3.3	480,910	1,459	5521+5521A-9	5000	100	337.5	6.75	112.5	2.25	405	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5521+5521A-14	5000	100	337.5	6.75	112.5	2.25	405	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22.5
	ISS-04	20-40	5525+5525A	10.4	114	93.5	4.0	660,540	23,025	5525 A,B,C-9	12635.4	100	852.9	6.75	284.3	2.25	564	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525 A,B,C-10	6317.7	100	426.4	6.75	142.1	2.25	455	63.2	1	N/A	N/A	N/A	N/A	N/A	N/A
										5525 A,B,C-11	6317.7	100	426.4	6.75	142.1	2.25	545 ^B	126.4	2	N/A	N/A	N/A	N/A	N/A	N/A
										5525 A,B,C-12	6317.7	100	426.4	6.75	142.1	2.25	407	N/A	N/A	63.2	1	N/A	N/A	N/A	N/A
										5525 A,B,C-13	6317.7	100	426.4	6.75	142.1	2.25	407	N/A	N/A	126.4	2	N/A	N/A	N/A	N/A
										5525 A,B,C-14	6317.7	100	426.4	6.75	142.1	2.25	282	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28.4
TIER 4																									
	ISS-04	20-40	5525+5525A	10.4	114	93.5	4.0	660,540	23,025	5525-15-1	3750.4	100	229.1	6.75	76.4	2.25	153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525-16-1	3600.1	100	219.9	6.75	73.3	2.25	293	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525-17-1	3600.1	100	219.9	6.75	73.3	2.25	440	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525-18-1	3600.1	100	219.9	6.75	73.3	2.25	586	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
										5525-19-1	3750.4	100	229.1	6.75	76.4	2.25	187	N/A	N/A	67.9	2	N/A	N/A	N/A	N/A
										5525-20-1	3600.1	100	219.9	6.75	73.3	2.25	358	N/A	N/A	65.2	2	N/A	N/A	N/A	N/A
										5525-21-1	3600.1	100	219.9	6.75	73.3	2.25	538	N/A	N/A	65.2	2	N/A	N/A	N/A	N/A
										5525-22-1	3600.1	100	219.9	6.75	73.3	2.25	717	N/A	N/A	65.2	2	N/A	N/A	N/A	N/A

Notes:
A: Rheobuild's dose is equal to 5ml per 100 grams of GGBFS-cement
B: possible typo, maybe 455
N/A = not analyzed