PCN	DOCUMENT RELEASE AUTHORIZATION KENNEDY SPACE CENTER, NASA	Page 1 of 14
97963.9		
ESR N/A		Rev/Date
DIR N/A	DRA No. A-DRA01 1784	Signature
EFF N/A	Title Close/Demolish Facilities and Structures, Various Locations Packages 1-5	
EQ.Loc. See Technical Remarks		Ven Code N/A
SDL N/A		Contract NNK12CA53T / NNK10CA19B

DOCUMENTS

I #	PREF	DOCUMENT NUMBER SHEETS	ISSUE	SIZE	SHTS	BIL NO.	SS	MODEL NUMBER	WUC
1	DR	79K39389	NEW	F	98	353.01	JY	K61-2137	JYFAC00000
						353.05	JY	K61-1751	JYFAC6L000
						360.10	JY	K60-1443	JYFFG00000
						360.11	JY	K60-1470	JYFLU00000
						487.01	JY	K61-1989	JYFSR40000
						353.60	EC	K61-4328	ECFACHA000
						353.01	EC	K61-0570	ECFACH0000
						353.60	EC	K61-4328-01	ECFACHB000
						353.60	EC	K61-4328-02	ECFACHC000
						411.51	EC	S72-0884	ECFAIHA000
						411.20	EC	K61-2815	ECFBSHA000
						411.20	EC	K61-2815-01	ECFBSHA100
						401.00	21	K60-0569	21FDWH0000
						355.00	EC	K61-0688	ECFFAAS000
						360.10	EC	K60-0631	ECFFG00000
						040.00	21	S70-1100-01	21FGNNQ000
						040.00	21	S70-0614-03	21FGNE5000
						040.00	21	S70-1100-02	21FGNNR000
						041.00	21	S70-0614-03	21FHEE5000
						041.00	21	S70-1100-02	21FHENR000

TECHNICAL REMARKS

Prepared by Nicola Staton, Jones Edmunds, 269-2950

79K39389 Drawings relate to Hypergol Maintenance Area and Various Facilities, Package 1 (Area A);
79K39390 Drawings relate to LC39A Area, Propellants North Area, SLF Area, and Various Facilities, Package 2 (Areas C, D, & G);
79K39391 Drawings relate to Hangar S and Hangar AF Complexes, Package 3 (Areas B & H);
79K39392 Drawings relate to Environmental Health Facilities Area, Package 4 (Area E);
79K39393 Drawings relate to Modular Office Building, Silver Recovery Building, and Sandblast/Paint Facility, Package 5 (Area F);
79K39394 Specifications cover all five drawing packages;
KSC-TA-12298 Data Manual covers all five packages.

APPROVALS

Technical Contact Ismael Otero, 321.861.3726	Mail Code TA-B3A	Date 6.12.2013	R&QA	Mail Code SA-E5	Date 6/12/13
Technical Wallace R. Schroeder, 321.867.1457	TA-B3A	6/12/2013	Other		
Space and Weight			Joint Release		
Procurement Pkg.			Release Sonia Miller, 321.867.0580	TA-B3A	6/12/13

KSC FORM 21-68V2 NS (REV. 12/10) PREVIOUS EDITIONS ARE OBSOLETE

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
		79K39389 Continued				404.00	EC	K61-0854	ECFHVH0000
						359.75	EC	K62-1945-38	ECFKPLEN38
						360.11	EC	K61-2477	ECFLU00000
						142.00	EC	C72-1501-02	ECFOXBA000
						410.01	EC	K61-0995	ECFSRH0000
						408.00	EC	K61-0867	ECFSSH0000
						495.50	EC	K61-3868	ECFSYH0000
						360.05	EC	K61-4414-0205	ECFUC02050
						402.00	21	U70-1173	21FWFHB000
						402.00	EC	K61-0841	ECFWFH0000
						402.00	EC	K61-0846	ECFWPH0000
						353.60	FT	K61-0571-01	FTFACHL000
						353.01	FT	K61-0571	FTFACH0000
						226.11	FT	K61-3359	FTFAZBA000
						411.20	FT	K61-3407	FTFBSHC000
						068.70	FT	K60-5631	FTFCSNB000
						359.25	FT	K62-4983-0051	FTFCSFA000
						403.00	FT	K61-0299	FTFCSH0000
						355.00	FT	K61-0689	FTFFAAS000
						500.05	FT	K61-2123	FTFHVHPCR0
						404.00	FT	K61-0855	FTFHVH0000
						359.75	FT	K62-1945-39	FTFKPLEN39
						360.11	FT	K61-0276-01	FTFLUH0000
						410.01	FT	K61-0996	FTFSRH0000
						495.50	FT	K61-2496	FTFSYH0000
						360.05	FT	K61-4414-0025	FTFUC00250
						360.05	FT	K61-4414-1519	FTFUC15190
						360.05	FT	K61-4414-0026	FTFUC00260
						360.05	FT	K61-4414-1520	FTFUC15200
						353.06	FT	K60-3143	FTFUP6B000
						402.00	FT	U70-1173-02	FTFWFHD000
						402.00	FT	K61-0842	FTFWPH0000
						411.20	FT	K61-3407	FTFBSHC000
						410.01	FT	K61-3003	FTFSRHA000
						353.05	FT	K61-6570	FTFAC10000
						360.10	FT	K61-6662	FTFFG10000
						560.45	FT	K61-6616	FTFLU50000
						505.11	FT	K62-1619	FTFSR10000
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						353.01	SQ	K62-5207	SQFACHV000
						505.02	SQ	K61-8228	SQFAI00000
						356.00	SQ	K61-3508	SQFHH60000
						500.05	SQ	K62-0478	SQFHV00000
						360.11	SQ	K61-8110	SQFLU00000
						410.01	SQ	K61-0998	SQFSRH0000
						493.00	SQ	K61-7828	SQFSS00000
						402.00	SQ	K61-0843	SQFWPH0000
						353.05	I3	K62-0036	I3FAC00000
						500.05	I3	K62-0470	I3FHV00000
						360.11	I3	K61-8108	I3FLU00000
						505.11	I3	K62-0530	I3FSR00000
						501.10	I3	K61-7811	I3FSS00000
						495.10	I3	K61-3903	I3FWP00000
						505.12	I3	K61-2891	I3FWX00001
						353.10	FR	K62-1811	FRFAC40000
						355.00	FR	K61-5438	FRFFA00000
						360.10	FR	K62-4728	FRFFG20000
						500.05	FR	K62-5439	FRFHVCB000

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
		79K39389 Continued				360.11	FR	K62-5435	FRFLUCB000
						505.11	FR	K61-4671	FRFSREDLCB
						493.00	FR	K62-5437	FRFSSCB000
						495.50	FR	K62-5436	FRFSYWPCB0
						495.10	FR	K62-5438	FRFWPCB000
						353.10	FR	K62-0787	FRFAC10000
						360.10	FR	K62-0788	FRFFG10000
						492.00	FR	K62-0789	FRFHV00000
						502.01	FR	K62-1616	FRFSR00000
2	SW	79K39389	NEW	M	1	**	**	**	**
3	DR	79K39390	NEW	F	72	067.00	FE	K60-7271	FEFPAWS000
						068.90	SF	NT-K-01290-01	SFFDT00001
						355.00	SF	K61-1831	SFFFA00000
						419.00	SF	K61-3187	SFFHVR0000
						067.00	SF	K60-7221	SFFPAWS000
						423.01	SF	K61-1081	SFFSRR0000
						068.90	SG	NT-K-01292-01	SGFDT00001
						355.00	SG	K61-1837	SGFFA00000
						419.00	SG	K61-3188	SGFHVR0000
						067.00	SG	K60-7191	SGFPAWS000
						423.01	SG	K61-1082	SGFSRR0000
						355.00	PR	K61-0623	PRFFAAS000
						067.00	PR	K60-7201	PRFPAWS000
						423.01	PR	K61-1084	PRFSRR0000
						419.00	PR	K60-3082	PRFHVRU000
						423.01	PR	K62-1712	PRFSR00000
						355.00	PS	K61-0297	PSFFAR0000
						067.00	PS	K60-7181	PSFPAWS000
						423.01	PS	K61-1085	PSFSRR0000
						419.00	PS	K60-3083	PSFHVRV000
						423.01	PS	K62-1713	PSFSR00000
						353.10	XR	K61-1804	XRFACJL000
						463.01	XR	K61-3090	XRFSRJ0000
						353.10	DO	K62-0742	DOFAC00000
						360.10	DO	K62-5205	DOFFG10000
						360.11	DO	K62-0743	DOFLU10000
						463.01	DO	K62-1727	DOFSR00000
						353.10	GC	K62-0744	GCFAC00000
						463.01	GC	K61-1518	GCFSRJ0000
						463.01	HF	K61-0815	HFFSRV0000
						353.45	NQ	K61-8324	NQFAC10000
						355.00	NQ	K61-5427	NQFFA00000
						360.10	NQ	K61-5429	NQFFG00000
						492.00	NQ	K62-3402	NQFHV00000
						360.11	NQ	K61-5430	NQFLU00000
						360.02	NQ	K61-5428	NQFSC00000
						360.02	NQ	K62-5306	NQFSCSTX00
						375.01	NQ	K61-5431	NQFSR00000
						068.90	9S	NT-K-01147-01	9SFDT00001
						375.01	9S	K61-6366	9SFSR00000
						375.01	9C	K62-1701	9CFSR00000
						505.07	TR	K62-0183	TRFSR60745
						505.07	TR	K62-0161	TRFSR60716
						353.10	KX	K61-0430	KXFAC9L000
						425.00	KX	K61-1504	KXFSR60000
						357.00	KX	K61-0706	KXFSS9D100
						500.40	KX	K61-0943	KXFWP90000

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
		79K39390 Continued				353.10	L8	K62-4945	L8FACLV000
						065.60	L8	NT-K-28473-01	L8FCS00001
						068.50	L8	NI-K-53473-01	L8FCSBD001
						359.25	K-	K62-4987	K-FCSRA200
						359.25	L8	K62-4983-0123	L8FCSFA000
						068.70	L8	K60-6191	L8FCSNA001
						068.90	L8	NT-K-01473-01	L8FDT00001
						355.00	L8	K62-4946	L8FFA00000
						360.10	L8	K62-4947	L8FFG20000
						500.05	L8	K62-4948	L8FHV00000
						360.11	L8	K62-4949	L8FLU00000
						067.75	L8	NT-K-27473-01	L8FPAIP001
						505.03	L8	K62-4992	L8FPR00000
						066.00	L8	K60-6911	L8FRF00001
						066.00	L8	K60-6891	L8FRF00002
						066.75	L8	NT-K-04473-01	L8FRF00003
						425.00	L8	K62-4936	L8FSR20000
						501.10	L8	K62-4950	L8FSS00000
						495.50	L8	K62-4951	L8FSYWET00
						360.05	L8	K61-4414-3020	L8FUCP0000
						360.05	L8	K61-4414-3021	L8FUCU0000
						500.40	L8	K62-4952	L8FWP00000
						360.11	L6	K62-5275	L6FLU90000
						505.10	L6	K62-2722	L6FSR20000
						353.10	A7	K62-3624	A7FAC10000
						360.10	A7	K62-3625	A7FFG00000
						360.11	A7	K62-3626	A7FLU00000
						505.10	A7	K61-2065	A7FSR90000
						353.00	A7	K61-8320	A7FAC00000
						353.10	A7	K62-5478	A7FACLV000
						492.00	A7	K61-8321	A7FHV00000
						505.10	A7	K62-1604	A7FSR00001
4	SW	79K39390	NEW	M	1	**	**	**	**
5	DR	79K39391	NEW	F	74	560.31	PQ	K61-9860	PQFAC00000
						560.40	PQ	K61-8432	PQFFG00000
						560.45	PQ	K61-8656	PQFLU00000
						561.29	PQ	K60-1175	PQFSRE0000
						560.20	PQ	K61-7408	PQFSY00000
						561.31	PG	K62-0577	PGFTN00000
						561.31	PQ	K62-0577	PQFTN00000
						560.31	QB	K61-4034	QBFAC00000
						560.10	QB	K61-1901	QBFFAEA000
						560.40	QB	K61-2920	QBFFGE0000
						560.11	QB	K61-8009	QBFHV00000
						560.51	QB	K61-6166	QBFPR00000
						561.29	QB	K60-1033	QBFSRE0000
						560.65	QB	K62-4822	QBFSS00000
						560.61	QB	K62-0237	QBFWP00000
						560.31	T8	K61-9862	T8FAC00000
						560.10	T8	K61-7674	T8FFA00000
						560.40	T8	K61-8433	T8FFG00000
						560.11	T8	K61-8010	T8FHV00000
						560.45	T8	K61-8657	T8FLU00000
						561.29	T8	K60-1142	T8FSRE0000
						560.65	T8	K62-4187	T8FSS00000
						560.20	T8	K61-7409	T8FSY00000
						561.29	Q3	K62-5076	Q3FSR30000

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
		79K39391 Continued				560.31	Q3	K61-4005	Q3FAC00000
						560.40	Q3	K61-4004	Q3FFG00000
						537.00	99	FAC-0194	99FHVN1940
						560.45	Q3	K61-8644	Q3FLU00000
						539.00	99	FAC-0281	99FSFN7560
						449.00	Q3	K60-1132	Q3FSRE0000
						560.25	Q3	K60-3341	Q3FSYNW000
						561.20	Q5	K60-1178	Q5FSRE0000
						561.20	Q6	K60-1179	Q6FSRE0000
						560.31	JU	K60-1498	JUFACEA000
						068.70	JU	K60-5531	JUFCSND000
						560.10	JU	K61-2678	JUFFAEA000
						560.40	JU	K61-2235	JUFFGEA000
						560.45	JU	K61-2284	JUFLUEA000
						560.51	JU	K62-0436	JUFPR00000
						452.00	JU	K60-1018	JUFSRB0000
						560.63	JU	K62-0492	JUFTN00001
						560.63	JU	K62-0493	JUFTN00002
						560.63	JU	K62-0494	JUFTN00003
						455.40	JU	K60-3204	JUFWHNB000
						455.40	JU	K60-3352	JUFWINB000
						452.00	JU	K61-2482	JUFWPBW000
						560.31	IJ	K61-0133	IJFACEA000
						560.12	32	K61-0129	32FAITS000
						560.50	IJ	K61-0126	IJFCREA000
						560.10	IJ	K61-2122	IJFFAEA000
						560.40	IJ	K61-2233	IJFFGEA000
						560.11	IJ	K61-8012	IJFHV00000
						560.45	IJ	K61-2282	IJFLUEA000
						560.51	IJ	K61-5052	IJFPR00000
						455.60	IJ	K60-1136	IJFSRB0000
						560.20	IJ	K61-2840	IJFSYEA000
						561.31	IJ	K62-0578	IJFTN00000
						560.63	IJ	K62-0496	IJFTN00001
						561.31	IJ	K62-0579	IJFTN10000
						560.20	IJ	K61-0127	IJFWFEA100
						560.61	IJ	K61-0131	IJFWPTS000
						560.12	JU	K60-3281	JUFAIK3000
						561.29	JU	K61-9425	JUFSR00000
						560.31	IJ	K61-8307	IJFAC20000
						560.40	IJ	K62-3567	IJFFG00000
						560.45	IJ	K62-3568	IJFLU00000
						561.29	IJ	K61-9426	IJFSR10000
						560.61	IJ	K62-3569	IJFWP00000
						560.31	E4	K61-9870	E4FAC00000
						560.12	E4	K60-3280	E4FAIK2000
						560.10	E4	K61-1866	E4FFAEA000
						560.40	E4	K61-2385	E4FFGE0000
						560.11	E4	K61-2389	E4FHVE0000
						560.45	E4	K61-2384	E4FLUE0000
						560.51	E4	K61-1874	E4FPRE0000
						455.03	E4	K60-1140	E4FSRB0000
						560.65	E4	K61-2387	E4FSSE0000
						560.20	E4	K61-6476	E4FSY00000
						560.35	E4	K60-3340	E4FUPNA000
						455.03	E4	K61-2386	E4FWHE0000
						560.61	E4	K61-2388	E4FWPE0000

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
		79K39391 Continued				560.63	JU	K61-5786	JUFTN20000
						561.29	IJ	K61-9427	IJFSR20000
6	SW	79K39391	NEW	M	1	**	**	**	**
7	DR	79K39392	NEW	F	34	353.01	IS	K61-0484	ISFAC90000
						353.05	IS	K61-0484-01	ISFAC9L000
						068.50	YY	NI-K-53607-01	YYFCS00001
						359.25	IS	K62-4983-0030	ISFCSFA000
						068.50	YY	NI-K-53607-02	YYFCS00002
						068.90	YY	NT-K-01607-01	YYFDT00001
						355.00	IS	K61-0650	ISFFAAS000
						360.10	IS	K60-0778	ISFFG00000
						500.05	IS	K61-0916	ISFHV90000
						360.11	IS	K60-1087	ISFLU00000
						067.00	IS	K61-0301	ISFPA00000
						505.11	IS	K61-1537	ISFSR90000
						501.10	IS	K61-1433	ISFSS90000
						500.40	IS	K61-0953	ISFWP90000
						353.05	IF	K61-0485	IFFAC2L000
						355.00	IF	K62-4819	IFFFA00000
						360.10	IF	K60-0762	IFFFG00000
						360.11	IF	K61-8103	IFFLU00000
						480.01	IF	K61-1210	IFFSR20000
						353.05	HR	K62-0022	HRFAC00000
						355.00	HR	K62-0425	HRFFA00000
						500.05	HR	K62-0464	HRFHV00000
						497.01	HR	K61-1980	HRFSR60000
						479.00	HR	K61-7784	HRFSS00000
						500.40	HR	K61-4130	HRFWP90000
						505.11	HR	K61-5412	HRFSR00000
						353.05	HR	K61-6576	HRFAC10000
						360.10	HR	K61-6668	HRFFG10000
						560.45	HR	K61-6622	HRFLU00000
						505.11	HR	K62-1627	HRFSR10000
						505.11	HR	K61-8259	HRFSR20000
8	SW	79K39392	NEW	M	1	**	**	**	**
9	DR	79K39393	NEW	F	20	353.10	ZA	K60-3294	ZAFACNL000
						355.00	ZA	K60-3293	ZAFFANA000
						400.30	ZA	K60-3306	ZAFHVN1000
						400.55	ZA	K62-2711	ZAFSR70000
						400.30	ZA	K62-5328	ZAFWP03400
						353.05	R3	K61-4126	R3FAC90000
						505.11	R3	K61-2413	R3FSR90000
						501.10	R3	K61-7807	R3FSS00000
						500.40	R3	K61-8176	R3FWP00000
						505.12	R3	K61-3865	R3FWX90000
						353.10	K4	K61-3256	K4FAC9L000
						360.10	K4	K61-3675	K4FFG00000
						360.11	K4	K61-3559	K4FLU90000
						222.50	K4	K61-3257	K4FPESP000
						505.10	K4	K61-3254	K4FSR90000
10	SW	79K39393	NEW	M	1	**	**	**	**

DOCUMENT RELEASE AUTHORIZATION CONTINUATION
KENNEDY SPACE CENTER, NASA

DRA No. A-DRA01 -1784

DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
11	SP	79K39394 1-182,226,252, 277,298	NEW	A	186	353.01	JY	K61-2137	JYFAC00000
						353.05	JY	K61-1751	JYFAC6L000
		183-225,227-251, 253-276,278-297, 299-305	NEW	B	119	360.10	JY	K60-1443	JYFFG00000
						360.11	JY	K60-1470	JYFLU00000
						487.01	JY	K61-1989	JYFSR40000
						353.60	EC	K61-4328	ECFACHA000
						353.01	EC	K61-0570	ECFACH0000
						353.60	EC	K61-4328-01	ECFACHB000
						353.60	EC	K61-4328-02	ECFACHC000
						411.51	EC	S72-0884	ECFAIHA000
						411.20	EC	K61-2815	ECFBSHA000
						411.20	EC	K61-2815-01	ECFBSHA100
						401.00	21	K60-0569	21FDWH0000
						355.00	EC	K61-0688	ECFFAAS000
						360.10	EC	K60-0631	ECFFG00000
						040.00	21	S70-1100-01	21FGNNQ000
						040.00	21	S70-0614-03	21FGNE5000
						040.00	21	S70-1100-02	21FGNNR000
						041.00	21	S70-0614-03	21FHEE5000
						041.00	21	S70-1100-02	21FHENR000
						404.00	EC	K61-0854	ECFHVH0000
						359.75	EC	K62-1945-38	ECFKPLEN38
						360.11	EC	K61-2477	ECFLU00000
						142.00	EC	C72-1501-02	ECFOXBA000
						410.01	EC	K61-0995	ECFSRH0000
						408.00	EC	K61-0867	ECFSSH0000
						495.50	EC	K61-3868	ECFSYH0000
						360.05	EC	K61-4414-0205	ECFUC02050
						402.00	21	U70-1173	21FWFHB000
						402.00	EC	K61-0841	ECFWFH0000
						402.00	EC	K61-0846	ECFWPH0000
						353.60	FT	K61-0571-01	FTFACHL000
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						353.60	SQ	K61-0573	SQFACHE000

DOCUMENT RELEASE AUTHORIZATION CONTINUATION
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DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
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						505.02	SQ	K61-8228	SQFAI00000
						356.00	SQ	K61-3508	SQFHH60000
						500.05	SQ	K62-0478	SQFHV00000
						360.11	SQ	K61-8110	SQFLU00000
						410.01	SQ	K61-0998	SQFSRH0000
						493.00	SQ	K61-7828	SQFSS00000
						402.00	SQ	K61-0843	SQFWPH0000
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						500.05	I3	K62-0470	I3FHV00000
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						505.11	I3	K62-0530	I3FSR00000
						501.10	I3	K61-7811	I3FSS00000
						495.10	I3	K61-3903	I3FWP00000
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I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
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						375.01	NQ	K61-5431	NQFSR00000
						068.90	9S	NT-K-01147-01	9SFDT00001
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						560.45	T8	K61-8657	T8FLU00000
						561.29	T8	K60-1142	T8FSRE0000
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						560.20	T8	K61-7409	T8FSY00000
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						560.40	JU	K61-2235	JUFFGEA000
						560.45	JU	K61-2284	JUFLUEA000
						560.51	JU	K62-0436	JUFPR00000
						452.00	JU	K60-1018	JUFSRB0000
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						560.63	JU	K62-0494	JUFTN00003
						455.40	JU	K60-3204	JUFWHNB000
						455.40	JU	K60-3352	JUFWINB000
						452.00	JU	K61-2482	JUFWPBW000
						560.31	IJ	K61-0133	IJFACEA000
						560.12	32	K61-0129	32FAITS000
						560.50	IJ	K61-0126	IJFCREA000
						560.10	IJ	K61-2122	IJFFAEA000
						560.40	IJ	K61-2233	IJFFGEA000
						560.11	IJ	K61-8012	IJFHV00000
						560.45	IJ	K61-2282	IJFLUEA000
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						455.03	E4	K60-1140	E4FSRB0000
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						067.00	IS	K61-0301	ISFPA00000
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						353.05	IF	K61-0485	IFFAC2L000
						355.00	IF	K62-4819	IFFFA00000
						360.10	IF	K60-0762	IFFFG00000
						360.11	IF	K61-8103	IFFLU00000
						480.01	IF	K61-1210	IFFSR20000
						353.05	HR	K62-0022	HRFAC00000
						355.00	HR	K62-0425	HRFFA00000
						500.05	HR	K62-0464	HRFHV00000
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						222.50	K4	K61-3257	K4FPESP000
						505.10	K4	K61-3254	K4FSR90000

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DOCUMENTS

I #	PREF	DOCUMENT NUMBER	ISSUE	SIZE	SHTS	B/L NO.	SS	MODEL NUMBER	WUC
12	SW	79K39394	NEW	M	1	**	**	**	**
13	DM	KSC-TA-12398 Cover, Signature Page, 1-98, 127-130, 133-171,215,241, 266,287,295-2437,2441-2474,2544-2586	NEW	A	2378	**	**	**	**
		99-126,131-132,172-214, 216-240,242-265,267-286, 288-294,2438-2440,2475-2543	NEW	B	210				
14	SW	KSC-TA-12398	INFO	M	1	**	**	**	**

Facility List for A-DRA01-1784

79K39389

Facility #	Facility Name
M7-0862	Hazardous Waste Staging Shelter
M7-0961	Hypergol Module Processing, North
M7-1012	HMF Mix Crib
M7-1061	Hypergol Support Building
M7-1061A	GHe and GN2 Storage
M7-1061B	Antenna Tower
M7-1112	Heating Plant & High Temperature Hot Water Lines
M6-0897	Waste Water Treatment Facility
M7-0459	ISSC Concession Building
M7-0459A	Guard House

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Facility #	Facility Name
J8-1564	Foam Building
J8-1811	Electrical Equipment Building #3 (Oxidizer)
J8-1856	Electrical Equipment Building #4 (Fuel)
J8-1862	Hypergol Oxidizer Facility
J8-1862A	Storage Building
J8-1906	Hypergol Fuel Facility
J8-1906A	Storage Building
K7-0569B	Hazardous Waste Staging Shelter
K7-0569C	Hazardous Waste Staging Building
K7-0570	Petroleum, Oil, and Lubricants (POL) Storage
K7-0619	Sand & Equipment Storage Facility No. 1
J5-1195	Differential Global Positioning Building
J5-1244	SLF Optical Tracker Site B
J5-1441	SLF Optical Tracker Site E
J6-2030	Guard House
TR1-0745	Temporary Building
TR1-0716	Temporary Building (Trailer)
K6-1996E	Sewage Treatment Plant #15
K6-1446	Miscellaneous in K6-1446 Area
K6-2497	Lightning Protection Towers
G5-1061	Equipment Building
G5-1061A	Microwave Tower

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Facility #	Facility Name
66200	Paint Storage Building
66220	Institutional Storage Facility
66221	Institutional Storage Facility
60628	POL Shelter
60630	POL Facility
66237	Hazardous Waste Staging Shelter
66238	Hazardous Waste Staging Shelter
66242	First Wash Building
66249	Thrust Vector Control Deservicing
66259	Equipment Building
66266	Drum Storage
66320	Robot Wash
66241	Deionized Water Tank
66246	Contaminated Water Tank
66256	Waste Water Tank
66267	Tank Farm Area

79K39392

Facility #	Facility Name
L7-1557	Environmental Health Facility
L7-1557C	Storage Building
L7-1557D	Asbestos Testing Lab
L7-1759	Lightning Detection & Ranging Site Tower
L7-1759A	Equipment Shelter
L7-1759B	Equipment Shelter

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Facility #	Facility Name
TR3-0034	Modular Office Building
M6-0847	Silver Recovery Building
K7-2468	Sandblast/Paint Facility

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DRA	NICS-122	M. Guessetto			
DRA	ISC-4210	D. Hearn			
1P	TA-B3C	S. Stilwell			
DRA	ISC-2300	G. Broyles			
DRA	ISC-6200	K. Waller			
DRA	IT-D1	D. Caldwell			
DRA	TA-A5B	E. Ryan			
DRA	ISC-4300	R. Mizyed			
DRA	IMCS-123	V. Parker			
DRA	NICS-133	R. Riherd			
DRA	IMCS-160	E. Ardjewski			
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DRA	ISC-4207	R. Wilson			
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DRA	ISC-2200	J. Hall			
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DRA	TA-B4C	S. Walsh			
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APPLICATION		REVISION HISTORY					
NEXT ASSY	USED ON	PART NO.	ZONE	REV	DESCRIPTION	DATE	APPROVAL

TECHNICAL SPECIFICATIONS FOR DRAWINGS 79K39389, 79K39390, 79K39391, 79K39392, 79K39393

DOCUMENT INFORMATION: (TITLE, NUMBER, REV, DATE)

79K39394 Close/Demolish Facilities and Structures Various Locations, Packages1-5

SENSITIVE BUT UNCLASSIFIED (SBU)

INSTRUCTIONS: This item must be reviewed under the requirements for "Sensitive But Unclassified Information" as described in NPR 1600.1, Chapter 5.

http://nodis-dms.gsfc.nasa.gov

	Yes	No	SBU Reviewer's Signature	Date	Company / Org
Document contains SBU?	☐	☒	William R Schroeder	6/12/13	NASA TA-B3A

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http://exportcontrol.ksc.nasa.gov/

Contractor EC Reviewer's Name and Organization	Contractor EC Reviewer's Signature	Date

NASA ECO Reviewer's Name and Organization	NASA ECO Reviewer's Signature	Date
WALLACE R. SCHROEDER	NASA/TA-B3A William R Schroeder	6/12/13

	EXPORT DETERMINATION (Check one box only)	
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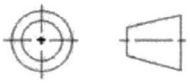
KSC FORM 7-657V2 NS (REV: 09/11) PREVIOUS EDITIONS ARE OBSOLETE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994. TOLERANCES ON:

FRACTIONS DECIMALS ANGLES

THIRD ANGLE PROJECTION



CAD MAINTAINED. CHANGES SHALL BE INCORPORATED ONLY BY THE DESIGN ACTIVITY.

SOFTWARE	ORIGINAL DATE OF DRAWING (YY/MM/DD)	
FILENAME	DRAFTSMAN	CHECKER
MATERIAL	ENGINEER	CHECKER
HEAT TREATMENT	ENGINEER	STRESS
FINAL PROTECTIVE FINISH	ENGINEER	
	SUBMITTED	6.12.2013
	APPROVED	William R Schroeder

JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA

Close/Demolish Facilities and Structures Various Locations, Packages 1-5

PCN: 97963.9

SIZE	CAGE CODE	DWG NO	REV
A		79K39394	
SCALE		UNIT WEIGHT	SHEET 1 OF 305

KSC FORM 21-2C NS (REV. 06/04) PREVIOUS EDITIONS ARE OBSOLETE

Architect/Engineer of Record Certification

Project Title:	CLOSE/DEMO FACILITIES AND STRUCTURES VARIOUS LOCATIONS, PACKS 1-5
Project Control Number:	97963.9
Project Drawing Number:	79K39389, 79K39390, 79K39391, 79K39392, 79K93
Project Specification Number:	79K39394
Project Calculations/Data Manual Number:	KSC-TA-12398

Discipline	Name	ST	License No.	Signature
Architectural				
Civil	Jamie D. Bell	FL	69033	
Environmental	Kim E. Rivera	FL	65681	
Structural				
Mechanical				
Electrical	Michael L. Clark	FL	48898	
Fire Protection				

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SECTION 01 11 00

SUMMARY OF WORK

PART 1 GENERAL

1.1 SUBMITTALS

Not used.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

1.2.1 Project Description

The work includes demolition of various facilities and associated appurtenances in accordance with the contract documents.

1.2.2 Location

The work shall be located throughout the Kennedy Space Center, including the KSC Industrial Area, Shuttle Landing Facility, and Cape Canaveral Air Force Station, as indicated on the drawings.

1.3 CONTRACT DRAWINGS

The following drawings accompany this specification and are a part thereof.

Close/Demolish Facilities & Structures, Hypergol Maintenance Area and Various Facilities, Package 1 (Area A)

Drawing No. 79K39389
Sheets 1 through 98

Close/Demolish Facilities & Structures, LC39A Area, Propellants North Area, SLF Area, and Various Facilities, Package 2 (Areas C, D, and G)

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Close/Demolish Facilities & Structures, Modular Office Building, Silver Recovery Building, and Sandblast/Paint Facility, Package 5 (Area F)

Drawing No. 79K39393
Sheets 1 through 20

1.4 EXISTING WORK

In addition to "FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements":

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

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SECTION 01 33 00

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PART 3 EXECUTION

-- End of Section Table of Contents --

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager and the Designer of Record, if applicable, to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to start of construction (work) issuance of contract notice to proceed or commencing work on site or the start of the next major phase of the construction on a multi-phase contract, includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

Certificates of insurance

Surety bonds

List of proposed Subcontractors

List of proposed products

Construction Progress Schedule

Network Analysis Schedule (NAS)

Submittal register

Schedule of prices

Safety and health plan

Work plan

Quality Control(QC) plan

Environmental protection plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and (MSDS)concerning impedances, hazards and safety precautions.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

Interim "DD Form 1354" with cost breakout for all assets 30 days prior to facility turnover.

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except those SD-01 Pre-Construction Submittals noted above, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.3 SUBMITTALS

Not used.

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Government Approved (G)

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Government approval is required for any deviations from the Solicitation or Accepted Proposal and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled, "Specifications and Drawings for Construction," they are considered to be "shop drawings." Shop drawings not marked with a "G" are to be considered "For Record Only".

1.4.2 Designer of Record Approved/Government Conformance Review (DA/CR)

1.4.2.1 Deviations to the Accepted Design

Designer of Record approval and the Government's concurrence are required for any proposed deviation from the accepted design which still complies with the contract before the Contractor is authorized to proceed with material acquisition or installation. Within the terms of the Contract Clause entitled, "Specifications and Drawings for Construction", they are considered to be "shop drawings." If necessary to facilitate the project schedule, the Contractor and the DOR may discuss a submittal proposing a deviation with the Contracting Officer's Representative prior to officially submitting it to the Government. However, the Government reserves the right to review the submittal before providing an opinion, if deemed necessary. In any case, the Government will not formally agree to or provide a preliminary opinion on any deviation without the DOR's approval or recommended approval. The Government reserves the right to non-concur with any deviation from the design, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on the reviewed and concurred design.

1.4.2.2 Substitutions

Unless prohibited or provided for otherwise elsewhere in the Contract, where the accepted contract proposal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, and the Contractor desires to substitute manufacturer or model after award, submit a requested substitution for Government concurrence. Include substantiation, identifying information and the DOR's approval, as meeting the contract requirements and that it is equal in function, performance, quality and salient features to that in the accepted contract proposal. If the Contract otherwise prohibits substitutions of equal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, the request is considered a "variation" to the contract. Variations are discussed below in paragraphs: "Designer of Record Approved/Government Approved" and "VARIATIONS"

1.4.3 Information Only

Submittals not requiring Government approval will be for information only.

1.5 PREPARATION

1.5.1 Identifying Submittals

When submittals are provided by a Subcontractor, the Prime Contractor is to prepare, review and stamp with Contractor's approval all specified submittals prior to submitting for Government approval.

Identify submittals, except sample installations and sample panels, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:

a. Project title and location.

b. Construction contract number.

c. Date of the drawings and revisions.

d. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other subcontractor associated with the submittal.

e. Section number of the specification section by which submittal is required.

f. Submittal description (SD) number of each component of submittal.

g. When a resubmission, add alphabetic suffix on submittal description, for example, submittal 18 would become 18A, to indicate resubmission.

h. Product identification and location in project.

1.5.2 Format for SD-02 Shop Drawings

Shop drawings are not to be less than 8 1/2 by 11 inches nor more than 30 by 42 inches, except for full size patterns or templates. Prepare drawings to accurate size, with scale indicated, unless other form is required. Drawings are to be suitable for reproduction and be of a quality to produce clear, distinct lines and letters with dark lines on a white background.

Present 8 1/2 by 11 inches sized shop drawings as part of the bound volume for submittals required by section. Present larger drawings in sets.

Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph entitled, "Identifying Submittals," of this section.

Number drawings in a logical sequence. Each drawing is to bear the number of the submittal in a uniform location adjacent to the title block. Place the Government contract number in the margin, immediately below the title block, for each drawing.

Dimension drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawings as indicated on the contract drawings. Identify materials and products for work shown.

Include the nameplate data, size and capacity on drawings. Also include applicable federal, military, industry and technical society publication

references.

1.5.3 Format of SD-03 Product Data and SD-08 Manufacturer's Instructions

Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.

Indicate, by prominent notation, each product which is being submitted; indicate specification section number and paragraph number to which it pertains.

Supplement product data with material prepared for project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project, with information and format as required for submission of SD-07 Certificates.

Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on product data. Also include applicable federal, military, industry and technical society publication references. Should manufacturer's data require supplemental information for clarification, submit as specified for SD-07 Certificates.

Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

Collect required data submittals for each specific material, product, unit of work, or system into a single submittal and marked for choices, options, and portions applicable to the submittal. Mark each copy of the product data identically. Partial submittals will not be accepted for expedition of construction effort.

Submit manufacturer's instructions prior to installation.

1.5.4 Format of SD-04 Samples

Furnish samples in sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately same size as specified:

a. Sample of Equipment or Device: Full size.

b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.

c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.

d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.

e. Sample of Non-Solid Materials: Pint. Examples of non-solid materials are sand and paint.

f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the material or product specified. Sizes and quantities of samples are to represent their respective standard unit.

g. Sample Panel: 4 by 4 feet.

h. Sample Installation: 100 square feet.

Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples are to be in undamaged condition at time of use.

Recording of Sample Installation: Note and preserve the notation of area constituting sample installation but remove notation at final clean up of project.

When color, texture or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

1.5.5 Format of SD-05 Design Data and SD-07 Certificates

Provide design data and certificates on 8 1/2 by 11 inches paper. Provide a bound volume for submittals containing numerous pages.

1.5.6 Format of SD-06 Test Reports and SD-09 Manufacturer's Field Reports

Provide reports on 8 1/2 by 11 inches paper in a complete bound volume.

Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.

1.5.7 Format of SD-01 Preconstruction Submittals and SD-11 Closeout Submittals

When submittal includes a document which is to be used in project or become part of project record, other than as a submittal, do not apply Contractor's approval stamp to document, but to a separate sheet accompanying document.

1.6 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals.

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.7 VARIATIONS

Variations from contract requirements require both Designer of Record (DOR) and Government approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

1.7.1 Considering Variations

Discussion with Contracting Officer prior to submission, after consulting with the DOR, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.7.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025 for submittals which include proposed deviations requested by the Contractor. Set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.7.3 Warranting That Variations Are Compatible

When delivering a variation for approval, Contractor, including its Designer(s) of Record, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.7.4 Review Schedule Is Modified

In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Government of submittals with variations.

1.8 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. No delay damages or time extensions will be allowed for time lost in late submittals.

a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.

b. For submittals requiring review by fire protection engineer, allow review period, beginning when Government receives submittal from QC organization, of 30 working days for return of submittal to the Contractor.

c. Period of review for each resubmittal is the same as for initial submittal.

At the Preconstruction conference, provide, for approval by the Contracting Officer, the following schedule of submittals:

a. A schedule of shop drawings and technical submittals required by the specifications and drawings. Indicate the specification or drawing reference requiring the submittal; the material, item, or process for which the submittal is required; the "SD" number and identifying title of the submittal; the Contractor's anticipated submission date and the approval need date.

b. A separate schedule of other submittals required under the contract but not listed in the specifications or drawings. Schedule will indicate the contract requirement reference; the type or title of the submittal; the Contractor's anticipated submission date and the approved need date (if approval is required).

1.9 DISAPPROVED OR REJECTED SUBMITTALS

If changes are necessary to submittals, the Contractor shall make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.10 APPROVED SUBMITTALS

The Contracting Officer's approval or acceptance of submittals is not to be construed as a complete check, and indicates only that the general method of construction, materials, detailing and other information are satisfactory. design, general method of construction, materials, detailing and other information appear to meet the Solicitation and Accepted Proposal.

Approval or acceptance will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work design, dimensions, all design extensions, such as the design of adequate connections and details, etc., and the satisfactory construction of all work.

After submittals have been approved or accepted by the Contracting Officer,

no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.11 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor to assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.12 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. No payment for materials incorporated in the work will be made if all required Designer of Record or required Government approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

1.13 PROGRESS SCHEDULE

1.13.1 Bar Chart

a. Submit the progress chart, for approval by the Contracting Officer, at the Preconstruction Conference in one reproducible and 4 copies.

b. Prepare the progress chart in the form of a bar chart utilizing form "Construction Progress Chart" or comparable format acceptable to the Contracting Officer.

c. Include no less than the following information on the progress chart:

(1) Break out by major headings for primary work activity.

(2) A line item break out under each major heading sufficient to track the progress of the work.

(3) A line item showing contract finalization task which includes punch list, clean-up and demolition, and final construction drawings.

(4) A materials bar and a separate labor bar for each line item. Both bars will show the scheduled percentage complete for any given date within the contract performance period. Labor bar will also show the number of men (man-load) expected to be working on any given date within the contract performance period.

(5) The estimated cost and percentage weight of total contract cost for each materials and labor bar on the chart.

(6) Separate line items for mobilization and drawing submittal and approval. (These items are to show no associated costs.)

d. Update the progress schedule in one reproduction and 4 copies every 30 calendar days throughout the contract performance period.

1.13.2 Project Network Analysis

Submit the initial progress schedule within 21 calendar days of notice to proceed. Schedule is to be updated and resubmitted monthly beginning 7 calendar days after return of the approved initial schedule. Updating to entail complete revision of the graphic and data displays incorporating changes in scheduled dates and performance periods. Redlined updates will only be acceptable for use as weekly status reviews.

Include the following in the project network analysis:

a. Graphically display with the standard network or arrow diagram capable of illustrating the required data. Drafting to be computer generated on standard 24 by 36 inch (nominal size) drafting sheets or on small 11 by 17 inch minimum sheets with separate overview and detail breakouts. Provide a project network analysis that is legible with a clear, consistent method for continuations and detail referencing. Clearly delineate the critical path on the display. Clearly indicate the contract milestone date on the project network analysis graphic display.

b. Data is to be presented as a separate printout on paper or, where feasible, may be printed on the same sheet as the graphic display. Data is to be organized in a logical coherent display capable of periodic updating.

c. Include within the data verbal activity descriptions with a numerical ordering system cross referenced to the graphic display. Additionally, costs (broken down into separate materials and costs), duration, early start date, early finish date, late start date, late finish date, and float are to be detailed for each activity. A running total of the percent completion based on completed activity costs versus total contract cost is to be indicated. A system for indicating scheduled versus actual activity dates and durations is also to be provided.

d. Sufficient detail to facilitate the Contractor's control of the job and to allow the Contracting Officer to readily follow progress for portions of the work should be shown within the schedule.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

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GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.34	(2001; R 2005) Protection of the Public on or Adjacent to Construction Sites

ASME INTERNATIONAL (ASME)

ASME B30.22	(2010) Articulating Boom Cranes
ASME B30.3	(2009) Tower Cranes
ASME B30.5	(2007) Mobile and Locomotive Cranes

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

NASA NPG 8621.1	(2004a) NASA Mishap Reporting, Investigating and Record Keeping Policy
NASA-STD 8719.12	(2010) Safety Standard for Explosives, Propellants, and Pyrotechnics

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(2010) Standard for Portable Fire Extinguishers
NFPA 241	(2009) Standard for Safeguarding Construction,Alteration, and Demolition Operations
NFPA 51B	(2009; TIA 09-1) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70E	(2012) Standard for Electrical Safety in the Workplace

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011) Safety and Health Requirements Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 20	Standards for Protection Against Radiation
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1910.146	Permit-required Confined Spaces
29 CFR 1915	Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.1400	Cranes & Derricks in Construction
29 CFR 1926.16	Rules of Construction
29 CFR 1926.52	Occupation Noise Exposure
29 CFR 1926.500	Fall Protection
CPL 2.100	(1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146

U.S. NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)

NAVFAC P-307	(2009; Change 1 Mar 2011; Change 2 Aug 2011)Management of Weight Handling Equipment

1.2 DEFINITIONS

a. Competent Person for Fall Protection. A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as their application and use with related equipment, and has the authority to take prompt corrective measures to eliminate the hazards of falling.

b. High Visibility Accident. Any mishap which may generate publicity or high visibility.

c. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.

d. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:

(1) Death, regardless of the time between the injury and death, or the length of the illness;

(2) Days away from work (any time lost after day of injury/illness onset);

(3) Restricted work;

(4) Transfer to another job;

(5) Medical treatment beyond first aid;

(6) Loss of consciousness; or

(7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

e. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the eight elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; or collision, including unplanned contact between the load, crane, or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.) Any mishap meeting the criteria described above shall be documented in both the Contractor Significant Incident Report (CSIR) and using the NAVFAC prescribed Navy Crane Center (NCC) form submitted within five days both as provided by the Contracting Officer.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

Government acceptance, as defined in EM 385-1-1, is required for submittals with a "G, A" designation.

SD-01 Preconstruction Submittals

Safety and Health Plan; G, A

Crane Critical Lift Plan; G, A

Proof of qualification for Crane Operators; G, A

SD-06 Test Reports

Notifications and Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph, "Notifications and Reports."

Accident Reports

Crane Reports

Gas Protection for NASA projects

Regulatory Citations and Violations

SD-07 Certificates

Confined Space Entry Permit

Hot work permit

License Certificates

Certificate of Compliance (Crane)

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.5.1 Personnel Qualifications

1.5.1.1 Site Safety and Health Officer (SSHO)

The SSHO must ensure that the requirements of 29 CFR 1926.16 are met for the project. Provide a Safety oversight team that includes a minimum of one (1) person at each project site to function as the SSHO. The SSHO or an equally-qualified Designated Representative/alternate shall be at the work site at all times to implement and administer the Contractor's safety program and government-accepted Accident Prevention Plan. The SSHO's training, experience, and qualifications shall be as required by EM 385-1-1 paragraph 01.A.17, entitled SITE SAFETY AND HEALTH OFFICER (SSHO), and all associated sub-paragraphs.

A Competent Person shall be provided for all of the hazards identified in the Contractor's Safety and Health Program in accordance with the accepted Safety and Health Plan, and shall be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) to the the Contracting Officer for acceptance in consultation with the Safety Office.

1.5.1.1.1 Contractor Quality Control (QC) Person:

The Contractor Quality Control Person can be the SSHO on this project.

1.5.1.1.2 Additional Site Safety and Health Officer (SSHO) Requirements and Duties

The SSHO shall have completed the "40 Hour Construction Safety Hazard Awareness Training Course for Contractors".

1.5.1.1.3 40 Hour Construction Safety Hazard Awareness Training Course for Contractors

The training requirements for the SSHO must include the successful completion of the course entitled "40 Hour Construction Safety Hazard Awareness Training Course for Contractors". If the SSHO does not have a current certification, they shall obtain the course certification within sixty (60) calendar days from award.

1.5.1.2 Competent Person for Confined Space Entry

Provide a "Competent Person" to supervise the entry into each confined space. That individual must meet the requirements and definition of Competent Person as contained in EM 385-1-1.

1.5.1.3 Crane Operators

Meet the crane operators requirements in USACE EM 385-1-1, Section 16 and Appendix I. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacitates of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or an organization that tests and qualifies crane operators). Provide proof of current qualification.

1.5.2 Personnel Duties

1.5.2.1 Site Safety and Health Officer (SSHO)

The SSHO shall:

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily quality control report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

e. Implement and enforce accepted Safety and Health Plan.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

h. Maintain a list of hazardous chemicals on site and their material safety data sheets.

Failure to perform the above duties will result in dismissal of the superintendent, QC Manager, and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable

replacement.

1.5.3 Meetings

1.5.3.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, or any other assigned safety and health professionals who participated in the development of the Safety and Health Plan.

b. Discuss the details of the submitted Safety and Health Plan.

c. Deficiencies in the submitted Safety and Health Plan will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted Safety and Health Plan.

1.5.3.2 Safety Meetings

Conduct and document daily meetings. Attach minutes showing contract title, signatures of attendees and a list of topics discussed to the Contractors' daily report.

1.6 SAFETY AND HEALTH PLAN

Use a qualified person to prepare the written site-specific Safety and Health Plan. The Safety and Health Plan shall be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The Safety and Health Plan shall be signed by the person and firm (senior person) preparing the Safety and Health Plan, the Contractor, the on-site superintendent, the designated site safety and health officer, the Contractor Quality control Manager, and any designated CSP or CIH.

Submit the Safety and Health Plan to the Contracting Officer 14 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted Safety and Health Plan.

Once work begins, changes to the accepted Safety and Health Plan shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34,) and the environment.

a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be used such as CSPs, CIHs, STSs, CHSTs. Specify the duties of each position.

b. Qualifications of competent and of qualified persons. As a minimum, designate and submit qualifications of competent persons for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.

c. Confined Space Entry Plan. Develop a confined and/or enclosed space entry plan in accordance with USACE EM 385-1-1, applicable OSHA standards 29 CFR 1910, 29 CFR 1915, and 29 CFR 1926, OSHA Directive CPL 2.100, and any other federal, state and local regulatory requirements identified in this contract. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)

1.7 CRANE CRITICAL LIFT PLAN

Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. Submit 15 calendar days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.H. and the following:

For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400.

1.8 FALL PROTECTION AND PREVENTION (FP&P) PROGRAM DOCUMENTATION

The program documentation shall be site specific and address all fall hazards in the work place and during different phases of construction. Address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 6 feet. A qualified person for fall protection shall prepare and sign the program documentation. Include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Revise the Fall Protection and Prevention Program documentation every six months for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. Keep and maintain the accepted Fall Protection and Prevention Program documentation at the job site for the duration of the project. Include the Fall Protection and Prevention Program documentation in the Safety and Health Plan.

The FP&P Plan shall include a Rescue and Evacuation Plan in accordance with USACE EM 385-1-1, Section 21.M. The plan shall include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan in the Fall Protection and Prevention (FP&P) Plan, and as part of the Safety and Health Plan.

1.9 OCCUPANT PROTECTION PLAN

The safety and health aspects of lead-based paint removal, prepared in accordance with Section 02 82 33.13 20 REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD.

1.10 SITE DEMOLITION PLAN

The safety and health aspects prepared in accordance with Section 02 41 00 DEMOLITION AND DECONSTRUCTION and referenced sources.

1.11 EXCAVATION PLAN

The safety and health aspects prepared in accordance with Section 31 00 00 EARTHWORK.

1.12 DISPLAY OF SAFETY INFORMATION

Within one calendar day after commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, shall be deemed as meeting the requirement for a bulletin board. Additional items required to be posted include:

a. Confined space entry permit.

b. Hot work permit.

1.13 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.14 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.15 NOTIFICATIONS and REPORTS

1.15.1 Accident Notification

Notify the Contracting Officer as soon as practical, but no more than 4 hours after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident in accordance with

NASA NPG 8621.1. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.15.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, and property damage accidents resulting in at least $2,000 in damages, to establish the root cause(s) of the accident, and provide the report to the Contracting Officer within 5 calendar days of the accident. The Contracting Officer will provide copies of any required or special forms.

b. Conduct an accident investigation for any weight handling equipment accident (including rigging gear accidents) to establish the root cause(s) of the accident, complete the WHE Accident Report (Crane and Rigging Gear) form and provide the report to the Contracting Officer within 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. The Contracting Officer will provide a blank copy of the accident report form.

1.15.3 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix I and as specified herein with Daily Reports of Inspections.

1.15.4 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926 and USACE EM 385-1-1 Section 16 and Appendix I. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used.

1.16 REGULATORY CITATIONS AND VIOLATIONS

Submit all regulatory citations and/or violations that may occur during this project to the Contracting Officer.

1.17 HOT WORK

Submit and obtain a written permit prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, from the Fire Division. A permit is required from the Explosives Safety Office for work in and around where explosives are processed, stored, or handled. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. Provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current

inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 30 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency phone number 321-867-7911. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED IMMEDIATELY.

1.18 RADIATION SAFETY REQUIREMENTS

License Certificates for radiation materials and equipment shall be submitted to the Contracting Officer and Radiation Safety Office (RSO) for all specialized and licensed material and equipment that could cause fatal harm to construction personnel or to the construction project.

Workers shall be protected from radiation exposure in accordance with 10 CFR 20. Standards for Protection Against Radiation

Loss of radioactive material shall be reported immediately to the Contracting Officer.

Actual exposure of the radiographic film or unshielding the source shall not be initiated until after 5 p.m. on weekdays.

In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, no assumptions shall be made as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, a fully instructed employee shall be positioned inside such building or area to prevent exiting while external radiographic operations are in process. Transportation of Regulated Amounts of Radioactive Material will comply with 49 CFR, Subchapter C, Hazardous Material Regulations. Local Fire authorities and the site Radiation Safety officer (RSO) shall be notified of any Radioactive Material use.

Transmitter Requirements: The base policy concerning the use of transmitters such as radios, cell phones, etc., must be adhered to by all contractor personnel. They must also obey Emissions control (EMCON) restrictions.

1.19 FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government shall not be closed or obstructed without written permission from the Contracting Officer.

1.20 GAS PROTECTION

Contractor shall have one or more employees properly trained and experienced in operation and calibration of gas testing equipment and formally qualified as gas inspectors who shall be on duty during times workers are in confined spaces. Their primary functions shall be to test for gas and operate testing equipment. Unless equipment of constant supervisory type with automatic alarm is employed, gas tests shall be made

at least every 2 hours or more often when character of ground or experience indicates gas may be encountered. A gas test shall be made before workmen are permitted to enter the excavation after an idle period exceeding one-half hour.

Readings shall be permanently recorded daily, indicating the concentration of gas, point of test, and time of test. Submit copies of the gas test readings to the Contracting Officer at the end of each work day.

Special requirements, coordination, and precautions will apply to areas that contain a hazardous atmosphere or, by virtue of their use or physical character, may be oxygen deficient. A check by Government is required prior to entering confined space. Surveillance and monitoring shall be required in these types of work spaces by both Contractor and Government personnel.

1.21 WELDING

Toxic paint may exist on metals. Contractor employees are required to wear the proper PPE during welding activities.

1.22 HIGH NOISE LEVEL PROTECTION

Operations performed by the Contractor that involve the use of equipment with output of high noise levels (jackhammers, air compressors, and explosive-actuated devices) shall be scheduled with the Facility Manager. Use of any such equipment shall be approved in writing by the Contracting Officer prior to commencement of work. Protection against the effects of noise exposure shall be in accordance with 29 CFR 1926.52.

1.23 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.

c. Ensure that temporary erosion controls are adequate.

1.24 CONFINED SPACE ENTRY REQUIREMENTS.

Contractors entering and working in confined spaces while performing general industry work are required to follow the requirements of OSHA 29 CFR 1926 and comply with the requirements in Section 34 of EM 385-1-1, OSHA 29 CFR 1910, and OSHA 29 CFR 1910.146.

PART 2 PRODUCTS

Not used.

2.1 CONFINED SPACE SIGNAGE

Provide permanent signs integral to or securely attached to access covers for new permit-required confined spaces. Signs wording: "DANGER--PERMIT-REQUIRED CONFINED SPACE - DO NOT ENTER -" in bold letters a

minimum of one inch in height and constructed to be clearly legible with all paint removed. The signal word "DANGER" shall be red and readable from 5 feet.

2.2 FALL PROTECTION ANCHORAGE

Leave in place fall protection anchorage, conforming to 29 CFR 1926, installed under the supervision of a qualified person in fall protection, for continued customer use and so identified by signage stating the capacity of the anchorage (strength and number of persons who may be tied-off to it at any one time).

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

Comply with NFPA 241, Federal and State OSHA regulations, and other related submittals and activity fire and safety regulations. The most stringent standard prevails.

3.2 PRE-OUTAGE COORDINATION MEETING

Apply for utility outages at least 14 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, attend a pre-outage coordination meeting with the Contracting Officer to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-1, Section 12, Control of Hazardous Energy.

Contracting Officer will, at the Contractor's request, apply lockout/tagout tags and take other actions that, because of experience and knowledge, are known to be necessary to make the particular equipment safe to work on for government owned and operated systems.

No person, regardless of position or authority, shall operate any switch, valve, or equipment that has an official lockout/tagout tag attached to it, nor shall such tag be removed except as provided in this section. No person shall work on any energized equipment including, but not limited to activities such as erecting, installing, constructing, repairing, adjusting, inspecting, un-jamming, setting up, trouble shooting, testing, cleaning, dismantling, servicing and maintaining machines equipment of processes until an evaluation has been conducted identifying the energy source and the procedures which will be taken to ensure the safety of personnel.

When work is to be performed on electrical circuits, only qualified personnel shall perform work on electrical circuits.

A supervisor who is required to enter an area protected by a lockout/tagout tag will be considered a member of the protected group provided he notifies

the holder of the tag stub each time he enters and departs from the protected area.

Identification markings on building light and power distribution circuits shall not be relied on for established safe work conditions.

Before clearance will be given on any equipment other than electrical (generally referred to as mechanical apparatus), the apparatus, valves, or systems shall be secured in a passive condition with the appropriate vents, pins, and locks.

Pressurized or vacuum systems shall be vented to relieve differential pressure completely.

Vent valves shall be tagged open during the course of the work.

Where dangerous gas or fluid systems are involved, or in areas where the environment may be oxygen deficient, system or areas shall be purged, ventilated, or otherwise made safe before entry.

3.3.1 Tag Placement

Lockout/tagout tags shall be completed in accordance with the regulations printed on the back thereof and attached to any device which, if operated, could cause an unsafe condition to exist.

If more than one group is to work on any circuit or equipment, the employee in charge of each group shall have a separate set of lockout/tagout tags completed and properly attached.

When it is required that certain equipment be tagged, the Government will review the characteristics of the various systems involved that affect the safety of the operations and the work to be done; take the necessary actions, including voltage and pressure checks, grounding, and venting, to make the system and equipment safe to work on; and apply such lockout/tagout tags to those switches, valves, vents, or other mechanical devices needed to preserve the safety provided. This operation is referred to as "Providing Safety Clearance."

3.3.2 Tag Removal

When any individual or group has completed its part of the work and is clear of the circuits or equipment, the supervisor, project leader, or individual for whom the equipment was tagged shall turn in his signed lockout/tagout tag stub to the Contracting Officer. That group's or individual's lockout/tagout tags on equipment may then be removed on authorization by the Contracting Officer.

3.4 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

3.4.1 Training

Institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, provide training for each employee who might be exposed to fall hazards. Provide training by a competent person for fall protection in accordance with 29 CFR 1926.

3.4.2 Fall Protection Equipment and Systems

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Program at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in 29 CFR 1926. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR 1926.500, Subpart M.

3.4.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet 29 CFR 1926. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

3.4.3 Fall Protection for Roofing Work

Implement fall protection controls based on the type of roof being constructed and work being performed. Evaluate the roof area to be accessed for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

   (1) For work within 6 feet of an edge, on low-slope roofs, protect personnel from falling by use of personal fall arrest systems, guardrails, or safety nets. A safety monitoring system is not adequate fall protection and is not authorized.

   (2) For work greater than 6 feet from an edge, erect and install warning lines in accordance with 29 CFR 1926.500.

b. Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

3.4.4 Existing Anchorage

Certified (or re-certified) by a qualified person for fall protection existing anchorages, to be used for attachment of personal fall arrest equipment in accordance with 29 CFR 1926. Existing horizontal lifeline anchorages must be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

3.4.5 Horizontal Lifelines

Design, install, certify and use under the supervision of a qualified person horizontal lifelines for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500).

3.4.6 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with 29 CFR 1926 Subpart M.

3.4.7 Rescue and Evacuation Procedures

When personal fall arrest systems are used, ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Fall Protection and Prevention (FP&P) Plan, and the Safety and Health Plan.

3.5 SCAFFOLDING

Provide employees with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access scaffold platforms greater than 20 feet maximum in height by use of a scaffold stair system. Do not use vertical ladders commonly provided by scaffold system manufacturers for accessing scaffold platforms greater than 20 feet maximum in height. The use of an adequate gate is required. Ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Give special care to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Place work platforms on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and the Safety and Health Plan.

3.6 EQUIPMENT

3.6.1 Material Handling Equipment

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions. Additionally, when material handling equipment is used as a crane it must meet NAVFAC P-307 requirements in Sections 1.7.2, "Contractor Operated Cranes," and 12, "Investigation and Reporting of Crane and Rigging Gear Accidents."

c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.6.2 Weight Handling Equipment

a. Notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.

b. Comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.

c. Comply with ASME B30.5 for mobile cranes, ASME B30.22 for articulating boom cranes, and ASME B30.3 for construction tower cranes.

d. Under no circumstance shall a Contractor make a lift at or above 90 percent of the cranes rated capacity in any configuration.

e. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and follow the requirements of OSHA, and ASME B30.5 or ASME B30.22 as applicable.

f. Do not crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane.

g. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.

h. All employees must keep clear of loads about to be lifted and of suspended loads.

i. Use cribbing when performing lifts on outriggers.

j. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

k. A physical barricade must be positioned to prevent personnel from

entering the counterweight swing (tail swing) area of the crane.

l. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.

m. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

n. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

o. Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. Prior to conducting lifting operations set a maximum wind speed at which a crane can be safely operated based on the equipment being used, the load being lifted, experience of operators and riggers, and hazards on the work site. This maximum wind speed determination shall be included as part of the activity hazard analysis plan for that operation.

3.6.3 Equipment and Mechanized Equipment

a. Proof of qualifications for operator shall be kept on the project site for review.

b. Manufacture specifications or owner's manual for the equipment shall be on-site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA.

3.6.4 Use of Explosives

Explosives shall not be used or brought to the project site without prior written approval from the Contracting Officer. Such approval shall not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

Storage of explosives, when permitted on Government property, shall be only where directed and in approved storage facilities. These facilities shall be kept locked at all times except for inspection, delivery, and withdrawal of explosives.

Explosive work shall be performed in accordance with NASA-STD 8719.12. This document is available at:

http://www.hq.nasa.gov/office/codeq/doctree/871912.htm

3.7 EXCAVATIONS

Soil classification must be performed by a competent person in accordance with 29 CFR 1926.

3.7.1 Utility Locations

All underground utilities in the work area must be positively identified by a third party, independent, private utility locating company in addition to any station locating service and coordinated with the station utility department.

3.7.2 Utility Location Verification

Physically verify underground utility locations, including utility depth, by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system.

3.7.3 Shoring Systems

Trench and shoring systems must be identified in the accepted safety and health plan. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding must have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electrical underground cables.

3.7.4 Utilities Within and Under Concrete, Bituminous Asphalt, and Other Impervious Surfaces

Utilities located within and under concrete slabs are extremely difficult to identify. Whenever contract work involves chipping, saw cutting, or core drilling through concrete, bituminous asphalt or other impervious surfaces, the existing utility location must be coordinated with station utility departments. The third party, independent, private locating company shall locate utility depth by use of Ground Penetrating Radar (GPR), X-ray, bore scope, or ultrasound prior to the start of demolition and construction. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

3.8 ELECTRICAL

3.9.1 Portable Extension Cords

Size portable extension cords in accordance with manufacturer ratings for the tool to be powered and protected from damage. Immediately removed from service all damaged extension cords. Portable extension cords shall meet the requirements of NFPA 70E, and OSHA electrical standards.

3.9 WORK IN CONFINED SPACES

Comply with the requirements in Section 34 of USACE EM 385-1-1, OSHA 29 CFR 1910, OSHA 29 CFR 1910.146, OSHA Directive CPL 2.100 and OSHA 29 CFR 1926. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 34 of USACE EM 385-1-1 for entry procedures.) All hazards pertaining to the space

shall be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

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SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
444 North Capital Street, NW, Suite 249
Washington, DC 20001
Ph: 202-624-5800
Fax: 202-624-5806
E-Mail: info@aashto.org
Internet: http://www.aashto.org

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA)
2700 Prosperity Ave., Suite 250
Fairfax, VA 22031
Tel: 703-849-8888
Fax: 703-207-3561
E-mail: infonet@aiha.org
Internet http://www.aiha.org

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)
1800 East Oakton Street
Des Plaines, IL 60018-2187
Ph: 847-699-2929
Fax: 847-768-3434
E-mail: customerservice@asse.org
Internet: http://www.asse.org

AMERICAN WATER WORKS ASSOCIATION (AWWA)
6666 West Quincy Avenue
Denver, CO 80235
Ph: 800-926-7337

Fax: 303-347-0804
E-mail: smorrison@awwa.org
Internet: http://www.awwa.org

ASME INTERNATIONAL (ASME)
Three Park Avenue, M/S 10E
New York, NY 10016-5990
Ph: 800-854-7179 or 800-843-2763
Fax: 212-591-7674
E-mail: infocentral@asme.org
Internet: http://www.asme.org

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
E-mail: service@astm.org
Internet: http://www.astm.org

COMPRESSED GAS ASSOCIATION (CGA)
4221 Walney Road, 5th Floor
Chantilly, VA 20151
Ph: 703-788-2700
Fax: 703-961-1831
E-mail: cga@cganet.com
Internet: http://www.cganet.com

FLORIDA ADMINISTRATIVE CODE (FAC)
Darby Printing Co.
6215 Purdue Drive
Atlanta, GA 30336
Ph: 1-800-241-5292
Fax: 404-346-3332

FLORIDA STATUTES (FL-STAT)
Law Book Distribution Office
Room LL14, The Capitol
Tallahasee, FL 32399-1400
Ph: 904-488-2323

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)
445 Hoes Lane or 2001 L Street, NW. Suite 700
Piscataway, NJ 08855-1331 or Washington, DC 20036-4910 USA
Ph: 732-981-0060 or 800-701-4333
Fax: 732-562-6380
E-mail: onlinesupport@ieee.org or ieeeusa@ieee.org
Internet: http://www.ieee.org

JOHN F. KENNEDY SPACE CENTER (KSC)
National Aeronautics and Space Administration
KSC Doc Library - D
Kennedy Space Center, FL 32899
Ph: 321-867-3613

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

Superintendent of Documents at
U.S. Government Printing Office

732 North Capitol Street, NW
Washington, DC 20401-0001
Ph: 202-783-3238
Fax: 202-512-1800
E-mail: ContactCenter@gpo.gov
Internet: http://www.nasa.gov or http://www.gpoaccess.gov/help

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
1300 North 17th Street, Suite 1752
Rosslyn, VA 22209
Ph: 703-841-3200
Fax: 703-841-5900
Internet: http://www.nema.org/

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-7471
Ph: 617-770-3000 or 800-344-3555
Fax: 617-770-0700
E-mail: webmaster@nfpa.org
Internet: http://www.nfpa.org

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)
Mail Stop C-34
4676 Columbia Parkway
Cincinnati, OH 45226
Ph: 513-533-8611
Fax: 513-533-8285
E-mail: nioshdocket@cdc.gov
Internet: http://www.cdc.gov/nchs/products.htm

TURFGRASS PRODUCERS INTERNATIONAL (TPI)
2 East Main Street
East Dundee, IL 60118
Ph: 847-649-5555
Fax: 847-649-5678
E-mail: info@turfgrasssod.org
Internet: http://www.turfgrasssod.org

UNDERWRITERS LABORATORIES (UL)
2600 N.W. Lake Road
Camas, WA 98607-8542
Ph: 877-854-3577
Fax: 360-817-6278
E-mail: CEC.us@us.ul.com
Internet: http://www.ul.com/
UL Directories available through IHS at http://www.ihs.com

U.S. ARMY CORPS OF ENGINEERS (USACE)
Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services Branch, TIC
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
E-mail: MTC-INFO@erdc.usace.army.mil
Internet:
http://gsl.erdc.usace.army.mil/SL/MTC/handbook/handbook.htm
Order Other Documents from:

USACE Publications Depot
Attn: CEHEC-IM-PD
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
Fax: 301-394-0084
E-mail: pubs-army@usace.army.mil
Internet: http://www.usace.army.mil/publications
or http://www.hnd.usace.army.mil/techinfo/engpubs.htm

U.S. DEFENSE LOGISTICS AGENCY (DLA)
Andrew T. McNamara Building
8725 John J. Kingman Road
Fort Belvoir, VA 22060-6221
Ph: 1-877-352-2255 or 703-767-5525
Fax: DSN 427-3316
Internet: http://www.dla.mil

U.S. DEPARTMENT OF DEFENSE (DOD)
Order DOD Documents from:
Room 3A750-The Pentagon
1400 Defense Pentagon
Washington, DC 20301-1400
Ph: 703-571-3343
FAX: 215-697-1462
E-mail: pia@hq.afis.asd.mil
Internet: http://www.dod.gov
Obtain Military Specifications, Standards and Related Publications from:
Acquisition Streamlining and Standardization Information System (ASSIST)
Department of Defense Single Stock Point (DODSSP)
Document Automation and Production Service (DAPS)
Building 4/D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Ph: 215-697-6396 - for account/password issues
Internet: http://assist.daps.dla.mil/online/start/; account registration required
Obtain Unified Facilities Criteria (UFC) from:
Whole Building Design Guide (WBDG)
National Institute of Building Sciences (NIBS)
1090 Vermont Avenue NW, Suite 700
Washington, CD 20005
Ph: 202-289-7800
Fax: 202-289-1092
Internet: http://www.wbdg.org/references/docs_refs.php

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)
Order from:
HUD User
P.O. Box 23268
Washington, DC 20026-3268
Ph: 800-245-2691 or 202-708-9981
Fax: 202-708-9981
E-mail: helpdesk@Huduser.org
Internet: http://www.huduser.org

U.S. GENERAL SERVICES ADMINISTRATION (GSA)
General Services Administration
1800 F Street, NW
Washington, DC 20405
Ph: 202-501-0800
Internet: www.GSA.gov
Obtain documents from:
Acquisition Streamlining and Standardization Information System (ASSIST)
Department of Defense Single Stock Point (DODSSP)
Document Automation and Production Service (DAPS)
Building 4/D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Ph: 215-697-6396 - for account/password issues
Internet: http://assist.daps.dla.mil/online/start/; account registration required

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Fax: 301-837-0483
E-mail: contactcenter@gpo.gov
Internet: http://www.archives.gov
Order documents from:
Superintendent of Documents
U.S.Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: http://www.gpoaccess.gov

U.S. NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)
1322 Patterson Ave. SE, Suite 1000
Washington Navy Yard, DC 20374
Ph: 757-322-4200
Fax: 757-322-4416
Internet: http://www.navfac.navy.mil

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

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ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
40 CFR 68	Chemical Accident Prevention Provisions
49 CFR 171 - 178	Hazardous Materials Regulations

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint

thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners,excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.3 GENERAL REQUIREMENTS

Minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. Comply with all applicable environmental Federal, State, and local laws and regulations. Any delays resulting from failure to comply with environmental laws and regulations will be the Contractor's responsibility.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G

The environmental protection plan as indicated in paragraph entitled "Environmental Protection Plan" in this Section.

1.5 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern must be defined within the Environmental Protection Plan as outlined in this section. Address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but are considered necessary, must be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan must be current and maintained onsite by the Contractor.

1.5.1 Compliance

No requirement in this Section will relieve the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor will be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.5.2 Contents

Include in the environmental protection plan, but not limit it to, the

following:

a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.

b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.

d. Description of the Contractor's environmental protection personnel training program.

e. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

f. A spill control plan with the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or local laws and regulations and KSC policy. Include in this plan, as a minimum:

1). The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual will immediately notify the Contracting Officer and NASA Environmental. Include in the plan a list of the required reporting channels and telephone numbers.

2). The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3). Training requirements for Contractor's personnel and methods of accomplishing the training.

4). A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

5). The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

6). The methods and procedures to be used for expeditious contaminant cleanup.

g. A hazardous waste disposal plan identifying methods and locations for hazardous waste and universal waste training, identification, collection management, and disposal.

h. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris and schedules for disposal.

1). Identify any subcontractors responsible for the transportation and disposal of solid waste. Submit licenses or permits for solid waste disposal sites that are not a commercial operating facility.

2). Evidence of the disposal facility's acceptance of the solid waste must be attached to this plan during the construction. Attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. Submit the report for the previous quarter on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted (e.g. the first working day of January, April, July, and October).

3). Indicate in the report the total amount of waste generated and total amount of waste diverted in cubic yards or tons along with the percent that was diverted.

i. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. Detail in the plan the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.

j. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.

k. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. A copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be onsite at any given time must be included in the contaminant prevention plan. Update the plan as new hazardous materials are brought onsite or removed from the site.

1.5.3 Appendix

Attach to the Environmental Protection Plan, as an appendix, copies of all required environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents.

1.6 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations from the drawings, plans and specifications, requested by the Contractor and which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.7 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or

regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 LAND RESOURCES

3.1.1 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved.

3.2 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

3.2.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from demolition activities; shall be controlled at all times. The Contractor shall maintain stockpiles, haul roads, permanent and temporary access roads, spoil areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

3.2.2 Burning

Burning shall be prohibited on the Government premises.

3.3 MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.3.1 Solid Wastes

Place solid wastes (excluding clearing debris) in containers which are emptied on a regular schedule. Handling, storage, and disposal must be conducted to prevent contamination. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with solid waste.

3.3.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.3.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable Federal, State and local regulations and KSC policy. Hazardous materials are defined in 49 CFR 171 - 178. Manage and store hazardous waste in compliance with Federal and State regulations and KSC policy.Take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. For more information refer to the KSC special condition contract clauses.

3.3.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded must be stored in marked corrosion-resistant containers and recycled or disposed of in accordance with 40 CFR 279, State and local laws and regulations, and KSC policy.

3.4 RECYCLING AND WASTE MINIMIZATION

Participate in State, local government, and KSC sponsored recycling programs. The Contractor must participate in the following recycling and waste minimization activities to divert non-hazardous solid waste: cardboard, glass, aluminum, plastic, ceiling tiles, and carpet tiles.

3.5 CONSTRUCTION AND DEMOLITION PROJECTS REPORT

The Contractor shall maintain an inventory of non-hazardous solid waste diversion and disposal of construction and demolition debris. The Contractor shall submit a report (KSC Form 7-648 NS (02/07),to NASA Environmental through the Contracting Officer on a monthly basis and keep a log on site per direction of the Contracting Officer. The following shall be included in the report:

a. Construction and Demolition (C&D) Debris Disposed = _____ in cubic yards or tons, as appropriate.

b. Construction and Demolition (C&D) Debris Recycled = _____ in cubic yards or tons, as appropriate.

c. Total C&D Debris Generated = _____ in cubic yards or tons, as appropriate.

d. Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount) = _____ in cubic yards or tons, as appropriate.

e. Metal Recycled = in tons, as appropriate.

3.6 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.7 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

3.8 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area sodded unless otherwise indicated.

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SECTION 01 57 23

TEMPORARY STORM WATER POLLUTION CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 4439	(2004) Geosynthetics
ASTM D 4491	(1999a; R 2004e1) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(2004; R 2009) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(2004) Determining Apparent Opening Size of a Geotextile
ASTM D 4873	(2002; R 2009) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 SYSTEM DESCRIPTION

The work consists of implementing the storm water pollution prevention measures to prevent sediment from entering streams or water bodies as specified in this Section in conformance with the requirements of Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION.

1.3 EROSION AND SEDIMENT CONTROLS

The controls and measures required of the Contractor are described below.

1.3.1 Stabilization Practices

The stabilization practices to be implemented include sod stabilization. On the daily CQC Report, record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Except as provided in paragraphs UNSUITABLE CONDITIONS and NO ACTIVITY FOR LESS THAN 14 DAYS, initiate stabilization practices as soon as practicable, but no more than 14 days, in any portion of the site where construction activities have temporarily or permanently ceased.

1.3.1.1 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases or is precluded by unsuitable conditions caused by the weather, initiate stabilization practices as soon as practicable after conditions become suitable.

1.3.1.2 No Activity for Less Than 14 Days

When the total time period in which construction activity is temporarily ceased on a portion of the site is 14 days minimum, stabilization practices do not have to be initiated on that portion of the site until 14 days have elapsed after construction activity temporarily ceased.

1.3.1.3 Burnoff

Burnoff of the ground cover is not permitted.

1.3.1.4 Protection of Erodible Soils

Immediately finish the earthwork brought to a final grade, as indicated or specified, and protect the side slopes and back slopes upon completion of rough grading. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils.

1.3.2 Stormwater Drainage

There will be no discharge of excavation ground water to the sanitary sewer, storm drains, or to the river without prior specific authorization of the Environmental Programs Division in writing. Discharge of hazardous substances will not be permitted under any circumstances. Construction site runoff will be prevented from entering any storm drain or the river directly by the use of straw bales or other method suitable to the Environmental Programs Division of the Shipyard. Provide erosion protection of the surrounding soils.

1.3.3 Structural Practices

Implement structural practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Implement structural practices in a timely manner, during the construction process, to minimize erosion and sediment runoff.

1.3.3.1 Silt Fences

Provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Properly install silt fences to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Install silt fences in the locations indicated on the drawings. Obtain approval from the Contracting Officer prior to final removal of silt fence barriers.

1.4 SUBMITTALS

Not used.

1.5 DELIVERY, STORAGE, AND HANDLING

Identify, store and handle filter fabric in accordance with ASTM D 4873.

PART 2 PRODUCTS

2.1 COMPONENTS FOR SILT FENCES

2.1.1 Filter Fabric

Provide geotextile that complies with the requirements of ASTM D 4439, and consists of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and contains stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. Provide synthetic filter fabric that contains ultraviolet ray inhibitors and stabilizers to assure a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	STRENGTH REQUIREMENT
Grab Tensile Elongation (percent)	ASTM D 4632	100 lbs. min. 30 percent max.
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec-1
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

2.1.2 Silt Fence Stakes and Posts

Use either wooden stakes or steel posts for fence construction. Wooden stakes utilized for silt fence construction, shall have a minimum cross section of 2.5 by 2.5 inches when oak is used and 2 by 4 inches when pine is used, and have a minimum length of 3 feet. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum weight of 1.33 pounds/linear foot and a minimum length of 3 feet.

PART 3 EXECUTION

3.1 INSTALLATION OF SILT FENCES

Extend silt fences a minimum of 16 inches above the ground surface without exceeding 34 inches above the ground surface. Provide filter fabric from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, splice together filter fabric at a support post, with a minimum 6 inch overlap, and securely sealed. Excavate trench approximately 4 inches wide and 4 inches deep on the upslope side of the location of the silt fence. The 4 by 4 inch trench shall be backfilled and the soil compacted over the filter fabric. Remove silt fences upon approval by the Contracting Officer.

3.2 FIELD QUALITY CONTROL

Maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. Use the following procedures to maintain the protective measures.

3.2.1 Silt Fence Maintenance

Inspect the silt fences in accordance with paragraph, titled "Inspections," of this section. Any required repairs shall be made promptly. Pay close attention to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, replace the fabric promptly. Remove sediment deposits when deposits reach one-third of the height of the barrier. Remove a silt fence when it is no longer required. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall receive erosion control.

3.3 INSPECTIONS

3.3.1 General

Inspect disturbed areas of the construction site, areas that have not been finally stabilized used for storage of materials exposed to precipitation, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every seven (7) calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Conduct inspections at least once every month where sites have been finally stabilized.

3.3.2 Inspections Details

Inspect disturbed areas and areas used for material storage that are exposed to precipitation for evidence of, or the potential for, pollutants entering the drainage system. Inspect discharge locations or points to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Inspect locations where vehicles exit the site for evidence of offsite sediment tracking.

3.3.3 Inspection Reports

For each inspection conducted, prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection. Furnish the report to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report shall be maintained on the job site.

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SECTION 02 41 00

DEMOLITION AND DECONSTRUCTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO M 145	(1991; R 2008) Standard Specification for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
AASHTO T 180	(2010) Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.6	(2006) Safety Requirements for Demolition Operations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011) Safety and Health Requirements Manual

U.S. DEFENSE LOGISTICS AGENCY (DLA)

DLA 4145.25	(June 2000) Storage and Handling of Liquefied and Gaseous Compressed Gases and Their Full and Empty Cylinders

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M	(2006) MILSTRIP - Military Standard Requisitioning and Issue Procedures
MIL-STD-129	(2007; Rev P; Change 4 2007) Military Marking for Shipment and Storage

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 61	National Emission Standards for Hazardous Air Pollutants
49 CFR 173.301	Shipment of Compressed Gases in Cylinders

and Spherical Pressure Vessels

1.2 PROJECT DESCRIPTION

1.2.1 Demolition/Deconstruction Plan

Prepare a Demolition Plan and submit proposed salvage, demolition, deconstruction, and removal procedures for approval before work is started. Include in the plan procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation and of the sequence of operations. Identify components and materials to be salvaged for reuse or recycling with reference to paragraph Existing Facilities to be Removed. Append tracking forms for all removed materials indicating type, quantities, condition, destination, and end use. Coordinate with Waste Management Plan. Include statements affirming Contractor inspection of the existing roof deck and its suitability to perform as a safe working platform or if inspection reveals a safety hazard to workers, state provisions for securing the safety of the workers throughout the performance of the work. Provide procedures for safe conduct of the work in accordance with EM 385-1-1. Plan shall be approved by Contracting Officer prior to work beginning.

1.2.2 General Requirements

Do not begin demolition or deconstruction until authorization is received from the Contracting Officer. The work of this section is to be performed in a manner that maximizes salvage and recycling of materials. Remove rubbish and debris from the project site; do not allow accumulations inside or outside the building. The work includes demolition, deconstruction, salvage of identified items and materials, and removal of resulting rubbish and debris. Remove rubbish and debris from Government property daily, unless otherwise directed. Store materials that cannot be removed daily in areas specified by the Contracting Officer. In the interest of occupational safety and health, perform the work in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections.

1.3 ITEMS TO REMAIN IN PLACE

Take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government. Repair or replace damaged items as approved by the Contracting Officer. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract. Do not overload structural elements pavements to remain. Provide new supports and reinforcement for existing construction weakened by demolition, deconstruction, or removal work. Repairs, reinforcement, or structural replacement require approval by the Contracting Officer prior to performing such work.

1.3.1 Existing Construction Limits and Protection

Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide temporary shoring and bracing for support of building components to prevent settlement or

other movement. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove dust, dirt, and debris from work areas daily.

1.3.2 Weather Protection

For portions of the building to remain, protect building interior and materials and equipment from the weather at all times. Where removal of existing roofing is necessary to accomplish work, have materials and workmen ready to provide adequate and temporary covering of exposed areas.

1.3.3 Trees

Protect trees within the project site which might be damaged during demolition or deconstruction, and which are indicated to be left in place, by a 6 foot high fence. Erect and secure fence a minimum of 5 feet from the trunk of individual trees or follow the outer perimeter of branches or clumps of trees. Replace any tree designated to remain that is damaged during the work under this contract with like-kind or as approved by the Contracting Officer.

1.3.4 Utility Service

Maintain existing utilities indicated to stay in service and protect against damage during demolition and deconstruction operations. Prior to start of work, utilities serving each area of alteration or removal will be shut off by the Government and disconnected and sealed by the Contractor.

1.3.5 Facilities

Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, must remain standing without additional bracing, shoring, or lateral support until demolished or deconstructed, unless directed otherwise by the Contracting Officer. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract.

1.4 BURNING

The use of burning at the project site for the disposal of refuse and debris will not be permitted.

1.5 AVAILABILITY OF WORK AREAS

Areas in which the work is to be accomplished will be available in accordance with the directions of the Contracting Officer.

1.6 SUBMITTALS

Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Existing Conditions

SD-07 Certificates

Demolition Plan
Notification

1.7 QUALITY ASSURANCE

Submit timely notification of demolition, deconstruction and renovation projects to Federal and local authorities in accordance with 40 CFR 61, Subpart M. Notify the local air pollution control district/agency and the Contracting Officer in writing 10 working days prior to the commencement of work in accordance with 40 CFR 61, Subpart M. Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," conform to the safety requirements contained in ASSE/SAFE A10.6. Comply with the Environmental Protection Agency requirements specified. Use of explosives will not be permitted.

1.7.1 Dust and Debris Control

Prevent the spread of dust and debris to occupied portions of the building and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, flooding or pollution. Vacuum and dust the work area daily. See drawings for dust barrier construction.

1.8 PROTECTION

1.8.1 Traffic Control Signs

Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Anchor barricades in a manner to prevent displacement by wind. Notify the Contracting Officer prior to beginning such work.

1.8.2 Protection of Personnel

Before, during and after the demolition work continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the project site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

1.9 FOREIGN OBJECT DAMAGE (FOD)

Aircraft and aircraft engines are subject to FOD from debris and waste material lying on airfield pavements. Remove all such materials that may appear on operational aircraft pavements due to the Contractor's operations. If necessary, the Contracting Officer may require the Contractor to install a temporary barricade at the Contractor's expense to control the spread of FOD potential debris. The barricade shall include a fence covered with a fabric designed to stop the spread of debris. Anchor the fence and fabric to prevent displacement by winds or jet/prop blasts. Remove barricade when no longer required.

1.10 RELOCATIONS

Perform the removal and reinstallation of relocated items as indicated with workmen skilled in the trades involved. Repair or replace items to be relocated which are damaged by the Contractor with new undamaged items as approved by the Contracting Officer.

1.11 EXISTING CONDITIONS

Before beginning any demolition or deconstruction work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions in the presence of the Contracting Officer showing the condition of structures and other facilities adjacent to areas of alteration or removal. Photographs sized 4 inch will be acceptable as a record of existing conditions. Include in the record the elevation of the top of foundation walls, finish floor elevations, possible conflicting electrical conduits, plumbing lines, alarms systems, the location and extent of existing cracks and other damage and description of surface conditions that exist prior to starting work. It is the Contractor's responsibility to verify and document all required outages which will be required during the course of work, and to note these outages on the record document. Submit survey results.

PART 2 PRODUCTS

2.1 FILL MATERIAL

a. Comply with excavating, backfilling, and compacting procedures for soils used as backfill material to fill basements, voids, depressions or excavations resulting from demolition or deconstruction of structures. Fill material shall be waste products from demolition or deconstruction until all waste appropriate for this purpose is consumed.

b. Fill material shall conform to the definition of satisfactory soil material as defined in AASHTO M 145, Soil Classification Groups A-1, A-2-4, A-2-5 and A-3. In addition, fill material shall be free from roots and other organic matter, trash, debris, frozen materials, and stones larger than 2 inches in any dimension.

c. Proposed fill material must be sampled and tested by an approved soil testing laboratory, as follows:

Soil classification	AASHTO M 145
Moisture-density relations	AASHTO T 180, Method B or D

PART 3 EXECUTION

3.1 EXISTING FACILITIES TO BE REMOVED

Inspect and evaluate existing structures onsite for reuse. Existing construction scheduled to be removed for reuse shall be disassembled. Dismantled and removed materials are to be separated, set aside, and prepared as specified, and stored or delivered to a collection point for reuse, remanufacture, recycling, or other disposal, as specified. Materials shall be designated for reuse onsite whenever possible.

3.1.1 Structures

a. Remove existing structures indicated to be removed to top of foundation walls and as indicated in drawings. Interior walls, other than retaining walls and partitions, shall be removed to top of concrete slab on ground. Break up basement slabs to permit drainage. Remove sidewalks, curbs, gutters and street light bases as indicated.

b. Demolish structures in a systematic manner from the top of the structure to the ground. Demolish concrete and masonry walls in small sections. Remove structural framing members and lower to ground by means of platforms hoists or other suitable methods as approved by the Contracting Officer.

c. Locate demolition and deconstruction equipment throughout the structure and remove materials so as to not impose excessive loads to supporting walls, floors, or framing.

d. Building, or the remaining portions thereof, may be demolished by the mechanical method of demolition.

3.1.2 Utilities and Related Equipment

3.1.2.1 General Requirements

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by the Contracting Officer. Do not interrupt existing utilities serving facilities occupied and used by the Government except when approved in writing and then only after temporary utility services have been approved and provided. Do not begin demolition or deconstruction work until all utility disconnections have been made. Shut off and cap utilities for future use, as indicated.

3.1.3 Chain Link Fencing

Remove chain link fencing, gates and other related salvaged items scheduled for removal and transport to designated areas. Remove gates as whole units. Cut chain link fabric to 25 foot lengths and store in rolls off the ground.

3.1.4 Roofing

Remove portions of existing roof system and associated components down to existing roof deck as indicated in drawings. Remove built-up roofing to effect the connections with new flashing or roofing. Remove gravel surfacing from existing roofing felts for a minimum distance of 24 inches back from the cut. Remove gravel without damaging felts. Salvage asphalt roofing materials. Cut existing felts and insulation along straight lines. Remove roofing system and insulation without damaging the roof deck. Sequence work to minimize building exposure between demolition or deconstruction and new roof materials installation.

3.1.4.1 Temporary Roofing

Install temporary roofing and flashing as necessary to maintain a watertight condition throughout the course of the work. Remove temporary work prior to installation of permanent roof system materials unless approved otherwise by the Contracting Officer. The existing deck is deteriorated, such that ability to support foot traffic and construction

loads is unknown. Make provisions for worker safety during demolition, deconstruction, and installation of new materials as described in paragraphs entitled "Statements" and "Regulatory and Safety Requirements."

3.1.4.2 Reroofing

When removing the existing roofing system from the roof deck, remove only as much roofing as can be recovered by the end of the work day, unless approved otherwise by the Contracting Officer. Do not attempt to open the roof covering system in threatening weather. Reseal all openings prior to suspension of work the same day.

3.1.5 Masonry

Sawcut and remove masonry so as to prevent damage to surfaces to remain, to removed materials being salvaged and to facilitate the installation of new work. Where new masonry adjoins existing, the new work shall abut or tie into the existing construction as indicated. Provide square, straight edges and corners where existing masonry adjoins new work and other locations. Masonry removed in whole blocks shall be salvaged and stored for reuse. Masonry removed in pieces shall be crushed for use as aggregate.

3.1.6 Concrete

Saw concrete along straight lines to a depth as indicated in drawings. Make each cut in walls perpendicular to the face and in alignment with the cut in the opposite face. Break out the remainder of the concrete provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, grind smooth or saw cut entirely through the concrete. Salvage removed concrete.

3.1.7 Structural Steel

Dismantle structural steel at field connections and in a manner that will prevent bending or damage. Recycle structural steel, steel joists, girders, angles, plates, columns and shapes. Do not use flame-cutting torches. Provide temporary shoring and bracing to existing structural components as required and as outlined in Demolition Plan to be approved by Contracting Officer. Transport steel joists and girders as whole units and not dismantled. Transport structural steel shapes to a designated area as directed by the Contracting Officer, stacked according to size, type of member and length, and stored off the ground, protected from the weather.

3.1.8 Miscellaneous Metal

Salvage shop-fabricated items such as access doors and frames, steel gratings, metal ladders, wire mesh partitions, metal railings, metal windows and similar items as whole units. Salvage light-gage and cold-formed metal framing, such as steel studs, steel trusses, metal gutters, roofing and siding, metal toilet partitions, toilet accessories and similar items. Recycle scrap metal as part of demolition and deconstruction operations. Provide separate containers to collect scrap metal and transport to a scrap metal collection or recycling facility, in accordance with the Waste Management Plan.

3.1.9 Carpentry

Recycle lumber, millwork items, and finished boards, and sort by type and

size. Recycle salvaged wood unfit for reuse, except stained, painted, or treated wood. Salvage windows, doors, frames, and cabinets, and similar items as whole units, complete with trim and accessories. Do not remove hardware attached to units, except for door closers. Salvage hardware attached to units for reuse. Brace the open end of door frames to prevent damage.

3.1.10 Carpet Tile

Remove, stack neatly, palletize, and shrink wrap for stable transportation for recycling.

3.1.11 Acoustic Ceiling Tile

Remove all ceiling tile from areas approved by the Contracting Officer, stack neatly, palletize, and shrink wrap for stable transportation for recycling.

3.1.12 Patching

Where removals leave holes and damaged surfaces exposed in the finished work, patch and repair these holes and damaged surfaces to match adjacent finished surfaces, using on-site materials when available. Where new work is to be applied to existing surfaces, perform removals and patching in a manner to produce surfaces suitable for receiving new work. Finished surfaces of patched area shall be flush with the adjacent existing surface and shall match the existing adjacent surface as closely as possible as to texture and finish. Patching shall be as specified and indicated, and shall include:

a. Concrete and Masonry: Completely fill holes and depressions, caused by previous physical damage or left as a result of removals in existing masonry walls to remain, with an approved masonry patching material, applied in accordance with the manufacturer's printed instructions.

b. Where existing partitions have been removed leaving damaged or missing resilient tile flooring, patch to match the existing floor tile.

c. Patch acoustic lay-in ceiling where partitions have been removed. The transition between the different ceiling heights shall be effected by continuing the higher ceiling level over to the first runner on the lower ceiling and closing the vertical opening with a painted sheet metal strip.

d. Replace existing ceiling tiles immediately adjacent to area of work that have been damaged by demolition and new construction. Repair ceiling grid where damaged by demolition and new construction to match existing system.

3.1.13 Mechanical Equipment and Fixtures

3.1.13.1 Preparation for Storage

Remove water, dirt, dust, and foreign matter from units; tanks, piping and fixtures shall be drained; interiors, if previously used to store flammable, explosive, or other dangerous liquids, shall be steam cleaned. Seal openings with caps, plates, or plugs. Secure motors attached by flexible connections to the unit. Change lubricating systems with the proper oil or grease.

3.1.13.2 Piping

Disconnect piping at unions, flanges and valves, and fittings as required to reduce the pipe into straight lengths for practical storage. Store salvaged piping according to size and type. If the piping that remains can become pressurized due to upstream valve failure, end caps, blind flanges, or other types of plugs or fittings with a pressure gage and bleed valve shall be attached to the open end of the pipe to ensure positive leak control. Carefully dismantle piping that previously contained gas, gasoline, oil, or other dangerous fluids, with precautions taken to prevent injury to persons and property. Store piping outdoors until all fumes and residues are removed. Box prefabricated supports, hangers, plates, valves, and specialty items according to size and type. Wrap sprinkler heads individually in plastic bags before boxing. Classify piping not designated for salvage, or not reusable, as scrap metal.

3.1.14 Electrical Equipment and Fixtures

Salvage motors, motor controllers, and operating and control equipment that are attached to the driven equipment. Salvage wiring systems and components. Box loose items and tag for identification. Disconnect primary, secondary, control, communication, and signal circuits at the point of attachment to their distribution system.

3.1.14.1 Fixtures

Remove and salvage electrical fixtures. Salvage unprotected glassware from the fixture and salvage separately. Salvage incandescent, mercury-vapor, and fluorescent lamps and fluorescent ballasts manufactured prior to 1978, boxed and tagged for identification, and protected from breakage.

3.1.14.2 Electrical Devices

Remove and salvage switches, switchgear, transformers, conductors including wire and nonmetallic sheathed and flexible armored cable, regulators, meters, instruments, plates, circuit breakers, panelboards, outlet boxes, and similar items. Box and tag these items for identification according to type and size.

3.1.14.3 Wiring Ducts or Troughs

Remove and salvage wiring ducts or troughs. Dismantle plug-in ducts and wiring troughs into unit lengths. Remove plug-in or disconnecting devices from the busway and store separately.

3.1.14.4 Conduit and Miscellaneous Items

Salvage conduit except where embedded in concrete or masonry. Consider corroded, bent, or damaged conduit as scrap metal. Sort straight and undamaged lengths of conduit according to size and type. Classify supports, knobs, tubes, cleats, and straps as debris to be removed and disposed.

3.2 CONCURRENT EARTH-MOVING OPERATIONS

Do not begin excavation, filling, and other earth-moving operations that are sequential to demolition or deconstruction work in areas occupied by structures to be demolished or deconstructed until all demolition and

deconstruction in the area has been completed and debris removed. Fill holes, open basements and other hazardous openings.

3.3 DISPOSITION OF MATERIAL

3.3.1 Title to Materials

Except for salvaged items specified in related Sections, and for materials or equipment scheduled for salvage, all materials and equipment removed and not reused or salvaged, shall become the property of the Contractor and shall be removed from Government property. Title to materials resulting from demolition and deconstruction, and materials and equipment to be removed, is vested in the Contractor upon approval by the Contracting Officer of the Contractor's demolition, deconstruction, and removal procedures, and authorization by the Contracting Officer to begin demolition and deconstruction. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Showing for sale or selling materials and equipment on site is prohibited.

3.3.2 Reuse of Materials and Equipment

Remove and store materials and equipment as indicated in drawings to be reused or relocated to prevent damage, and reinstall as the work progresses.

3.3.3 Salvaged Materials and Equipment

Remove materials and equipment that are indicated in drawings to be removed by the Contractor and that are to remain the property of the Government, and deliver to a storage site , as directed within 5 miles of the work site.

a. Salvage items and material to the maximum extent possible.

b. Store all materials salvaged for the Contractor as approved by the Contracting Officer and remove from Government property before completion of the contract. On site sales of salvaged material is prohibited.

c. Remove salvaged items to remain the property of the Government in a manner to prevent damage, and packed or crated to protect the items from damage while in storage or during shipment. Items damaged during removal or storage must be repaired or replaced to match existing items. Properly identify the contents of containers.

d. Remove items reserved as property of the using service prior to commencement of work under this contract.

e. Remove and capture all Class I ODS refrigerants in accordance with the Clean Air Act Amendment of 1990, and turn in to the Navy as directed by the Commanding Officer.

3.3.4 Transportation Guidance

Ship all ODS containers in accordance with MIL-STD-129, DLA 4145.25, 49 CFR 173.301, and DOD 4000.25-1-M.

3.3.5 Unsalvageable and Non-Recyclable Material

Dispose of unsalvageable and non-recyclable noncombustible material in the

disposal area as directed by the Contracting Officer. The fill in the disposal area shall remain below elevation and after disposal is completed, the disposal area shall be uniformly graded to drain. Dispose of unsalvageable and non-recyclable combustible material off the site.

3.4 CLEANUP

Remove debris and rubbish from basement and similar excavations. Remove and transport the debris in a manner that prevents spillage on streets or adjacent areas. Apply local regulations regarding hauling and disposal.

3.5 DISPOSAL OF REMOVED MATERIALS

3.5.1 Regulation of Removed Materials

Dispose of debris, rubbish, scrap, and other nonsalvageable materials resulting from removal operations with all applicable federal, state and local regulations as contractually specified in the Waste Management Plan.

3.5.2 Removal from Government Property

Transport waste materials removed from demolished and deconstructed structures, except waste soil, from Government property for legal disposal. Dispose of waste soil as directed.

3.6 REUSE OF SALVAGED ITEMS

Recondition salvaged materials and equipment designated for reuse before installation. Replace items damaged during removal and salvage operations or restore them as necessary to usable condition.

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ASBESTOS ABATEMENT

PART 1 GENERAL

1.1 SUMMARY

This section specifies the asbestos abatement requirements and the Contractor's applicable asbestos procedures, which include demolition or salvage of structures where asbestos is present, removal or encapsulation of materials containing asbestos, construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos, asbestos spill/emergency cleanup, transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed.

Under OSHA, Asbestos Abatement work is categorized into four classes:

Class I Work: Activities involving the removal of Thermal System Insulation (TSI) and surfacing Asbestos Containing Materials (ACM) and Presumed Asbestos Containing Material (PACM).

Class II Work: Activities involving the removal of ACM that is not TSI or surfacing material. This includes wallboard, floor tile and sheeting, roofing, siding, shingles, and construction mastics.

Class III Work: Repair and Maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed.

Class IV Work: Maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste, and debris from Class I,II, and III activities.

Conduct abatement work in accordance with the Class I, II, III, or IV Methods of Compliance as required by 29 CFR 1910,29 CFR 1926, 40 CFR 61-SUBPART M, 49 CFR 171, 49 CFR 172, FAC CHAPTER 62-257, and FL-STAT 469. Submit all required training certifications prior to commencement of work.

1.2 DEFINITIONS

FLAC - Florida Licensed Asbestos Consultant as defined within the FL-STAT 469 ASBESTOS ABATEMENT.

IH - Kennedy Space Center Industrial Hygienist. This person can be either a Government Civil Servant or an authorized Government Contractor. This person is responsible for the oversight, approval of the abatement procedures and the health, safety, and welfare of those who it effects.

1.3 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

COMPRESSED GAS ASSOCIATION (CGA)

CGA G-7.1	(2004) Commodity Specification for Air

FLORIDA ADMINISTRATIVE CODE (FAC)

FAC CHAPTER 62-257	Florida Administrative Code, Asbestos Program

FLORIDA STATUTES (FL-STAT)

FL-STAT 469	Asbestos Abatement

JOHN F. KENNEDY SPACE CENTER (KSC)

KNPR 8500.1	KSC Environmental Requirements
KNPR 1840.19	KSC Industrial Hygiene Programs
KNPR 8715.3	KSC Safety Practices Procedural Requirements

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH 7400	(1994) Standard Test Method for Asbestos and Other Fibers by PCM
NIOSH 94-113	(1994; 4th Ed) NIOSH Manual of Analytical Methods

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 61-SUBPART M	National Emission Standard for Asbestos
40 CFR 763	Asbestos
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control

approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submit Work Schedule; G in accordance with the paragraph entitled, "Worker Protection," of this section.

Asbestos Abatement Notice and Checklist

Notification of Demolition/Renovation; G

SD-02 Shop Drawings

Submit items in accordance with the paragraph entitled, "Implementation Plan," of this section.

Coordination Drawings; G

SD-06 Test Reports

Submit the following:

Initial Exposure Assessments in accordance with 29 CFR 1926

Submit Air Monitoring Reports; G in accordance with paragraph entitled, "Air Monitoring Report," of this section.

Maintain Work Site entry logs; G of all personnel entering and leaving the regulated work area by the on-site competent person indicating the date and time of entry and egress.

Maintain Daily Site Inspection Logs; G by the on-site competent person indicating the date, time and results of the work area daily site inspections.

Maintain Waste Inventory; G of all generated waste drums or containers indicating the location and approximate quantity of material in each container.

SD-07 Certificates

Submit the following certificates:

Asbestos Consultant's License from the State of Florida, Department of Business and Professional Regulation (DBPR)

Asbestos Contractor's License; G or other Contractor license approval from the State of Florida, Department of Business and Professional Regulation (DBPR).

Training Certifications; G, and experience of Contractor's "Competent Person", Supervisor, and workers.

Proficiency Analytical Test Certification

SD-08 Manufacturer's Instructions

Submit Material Safety Data Sheets in accordance with the

paragraph entitled, "Licenses, Permits, and Notices," of this section.

Submit Implementation Plan; G as identified in paragraph entitled, "Implementation Plan," prior to initial site set-ups or start of work.

SD-11 Closeout Submittals

Within 10 days after the completion of work, submit to the Contracting Officer a written summary and copies of the following items:

Waste Disposal Permit and all Disposal Shipping Manifests and Tickets.

Daily site inspection logs, negative pressure logs and other OSHA compliance inspection records.

Air Monitoring Reports conducted during the abatement.

Calibration Records; G for sampling equipment taken before and after each air sample.

Entry logs and Waste Stream Inventory maintained during the abatement task.

1.5 LICENSES, PERMITS, AND NOTICES

Ensure that the FLAC possesses a current license and comply with all Federal, State and Local Regulations. Only those consultants who are certified and licensed by DBPR are permitted to perform Asbestos Surveys or abatement specifications and plans as per Florida Statute 469.

Contractor's possession of a current Asbestos Contractor's License is mandatory, as well as securing all necessary licenses and permits associated with asbestos removal, transportation, and disposal as may be required by Federal, State, and local regulations. Only those Contractors who are certified and licensed by the State of Florida DBPR will be permitted to perform asbestos abatement activities at Kennedy Space Center.

A Waste Disposal Permit and all Disposal Shipping Manifests and Tickets are to be obtained.

Submit the following certificates:

Certification of participation in a Proficiency Analytical Test (PAT) program such as or equivalent to the American Industrial Hygiene Association PAT or Asbestos Analytical Registry (AAR) accreditation certificate and Interlab QA/QC Program participation for the independent air monitoring agency selected by the Contractor before starting work.

Training Certifications and accreditation certificates for the independent air monitoring agency's on-site personnel and a copy of independent air monitoring agency's Quality Control Program.

Certification documents by the Contractor verifying that employees have been provided current respirator fit test, training, and medical

examinations in compliance with 29 CFR 1926.

Material safety data sheets as required for materials to be used on the specified project.

1.5.1 Notification

Submit Florida Department of Environmental Protection (DEP) "Notice of Demolition or Asbestos Renovation" (DEP Form 62-257.900(1)) to DEP District Office. A copy of the notification is to be provided to the Government as part of the Implementation Plan.

1.6 IMPLEMENTATION PLAN

Prepare and submit a detailed, written Implementation Plan created, signed and sealed by a FLAC to the Government for approval, prior to the start of work, that includes the following:

Coordination drawings including site specific drawings of proposed work areas, clean room/change areas, mini-enclosures, shower, equipment room, waste loading/staging areas, work areas, emergency egress, and areas to be modified.

A copy of the applicable DEP Notification of Demolition/Renovation (DEP Form 62-257.900(1)).

Plan of Action, including proposed procedures to be used in complying with the requirements of this specification, 29 CFR 1926,and other applicable regulatory requirements, sequence of asbestos abatement work, the interfaces of trades involved in the performance of work, posting of licenses, permits, etc., methods to be used to assure the safety of building occupants and visitors to the site, disposal plan including location of approved disposal site, a detailed description of the methods employed to control pollution, and a detailed work schedule. Expand upon the method for removal of ACM, method of removal to prohibit visible emissions in the work area, and packaging of removed debris.

Details of the decontamination areas and procedures, locations of staging areas, and posting of warning signs to be used in the work area.

Sketch(s) or drawing(s) of complete contract area(s) showing the shower room, clean room, drum staging area, decontamination and containment work areas, the negative air system, and exits. Indicate designation of the "Competent Person" (CP), and Site Supervisor.

Provide a written Air Monitoring Plan to be prepared under the direction of and signed/stamped by a Certified Industrial Hygienist (C.I.H.)or FLAC specifying the air monitoring criteria and an action plan for implementation by the Competent Person. Identify in the plan the Competent Person to be on site at all times during asbestos abatement operations. The FLAC or his/her representative/competent person is responsible for ensuring applicable regulatory compliance during all phases of the asbestos abatement activities. The competent person has the authority to stop work for unsafe conditions and for not adhering to applicable regulations. Provide a qualified back-up person in the event that the Competent Person is absent from job site.

Provide certification that the Contractor, his staff, and abatement workers (including Supervisors) have attended and successfully completed (an)

asbestos abatement course(s) including refresher courses as set forth in FL-STAT 469 and in accordance with 29 CFR 1926 and 40 CFR 763.

Provide a Respiratory Protection Program in accordance with 29 CFR 1910 including training in the care, use, and maintenance of respirators and fit test certification.

Provide a written description of respiratory equipment (name, type, model number) and protective clothing provided to the abatement workers.

Provide documentation that all personnel assigned to the abatement project have been examined annually by a physician. Submit the physician's written opinion containing the results of the employee's medical examination in compliance with 29 CFR 1926. Establish, maintain, and make readily available for review all Work site entry logs.

Procedures for enforcement of Personal Hygiene Practices.

Prepare and submit a Contingency Plan for emergencies including fire, accident, power failure, heating or cooling, negative air system failure, respirator supplied air system failure, or any other event that may require modification of the work area isolation procedures. Include in the plan specific procedures for decontamination or work area isolation, safe exiting, and the need for medical attention in the event of an emergency.

Submit any additional procedures (fall protection, confined space, etc.) and policies that are in effect to ensure worker safety and environmental, KNPR 8500.1, KNPR 8715.3, and Federal and State) requirements are met.

Submit the Implementation Plan to the Government for review and approval. Commencement of work will not be permitted until the Implementation Plan is given final approval.

1.7 AIR MONITORING REPORTS

Obtain the services of an independent Air Monitoring Agency accredited by the American Industrial Hygiene Association (AIHA), for analysis of airborne asbestos concentration levels. Provide a copy of the monitoring agency's Quality Control Program to the Contracting Officer prior to commencement of the abatement activities. Ensure the individual performing the on-site air monitoring meets the requirements as set forth in FL-STAT 469, 29 CFR 1926, and 40 CFR 763, and performs sample collections in accordance with the approved Air Monitoring Plan.

Perform all Air Monitoring under the direction of the FLAC using an independent Air Monitoring Contractor, in compliance with Florida Statute 469 requirements.

Calibrate pumps before and after each air sample and submit calibration records to the Government.

Submit daily air monitoring reports and keep onsite. Include in the Air Monitoring Report the following information for each sample:

Sample identification, Sample location,

Employee Name,

Description of task being monitored,

Exposure level results in (f/cc),

Monitoring instrument identification number,

Pre-calibration, post calibration, and average flow rate of each sample,

Sample date, start and stop times,

Type of protective devices worn (if any),

Project identification number, Facility number and name,

Sampling and Analytical Methods used,

Contact name and company, and name of individual performing the sampling.

1.7.1 Air Sample Analytical Method

Airborne fiber sampling and analytical procedures are to be analyzed by Phase Contrast Microscopy (PCM) in accordance with 29 CFR 1926 and NIOSH 94-113 7400 method.

1.7.2 Air Sampling Rate, Volumes and Frequency

Conduct daily monitoring utilizing sample rates, volumes and frequency in accordance with 29 CFR 1926 and retain for final submittal at closeout. The minimum number of samples or sample volumes may not be less than those specified below:

Type of Sample	Volume	Minimum No. Samples	Location
Prior to set-up (within 24 hrs)	1200L	2	Regulated Area
Personal, During work	400L	2	Personal B.Z.
Area samples, Adjacent to work area.	1200L	2	Regulated Area
Area samples at Negative Air Unit Exhaust.	1200L	1	In area of outlets

NOTE: The Contractor will perform air sampling outside the regulated work area.

1.8 WORKER PROTECTION

Perform Initial Exposure Assessments and Employee Exposure Monitoring in accordance with 29 CFR 1926, part 1926.1101, with input and approval of the FLAC.

Select and provide respiratory protection to employees and ensure they are utilized in accordance with 29 CFR 1926.

Submit the Work schedule indicating the work days, hours, and the number of workers per shift. Include a bar chart to identify the individual milestones through to the completion of the project (i.e., number of days

to complete work site preparation, number of days to complete ACM removal, number of days to complete final cleaning and lockdown, etc.).

Submit the OSHA compliance inspection records as part of the closeout documents.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 TEMPORARY UTILITIES AND SERVICES

Ensure all electrical equipment to be used inside the work areas is powered from an Underwriters Laboratory (UL) approved Ground Fault Circuit Interrupter (GFCI). Do not exceed the manufacturers limits per GFCI. Make all necessary connections and restore the site connections to their original condition or better, prior to project completion.

Ensure all energized or pressurized systems inside the work area have been locked out, tagged out or otherwise rendered safe.

Provide temporary water from the existing building water source to control the generation of airborne dust, to allow for area, personnel, and equipment decontamination, and to supply decontamination unit needs. Also provide a backflow preventer at the source.

Provide temporary sanitary drainage piping to the decontamination unit sump and to the shower unit at a minimum slope of 2.0 percent, and temporary drainage piping to waste water pump and existing drain in accordance with local standards and as approved by the Contracts Administrator.

3.2 WORK AREA PREPARATION

The Government will re-arrange equipment and storage areas to the extent of providing a direct and unobstructed path to the work area(s). During ACM removal, confine equipment and employees to the designated work area(s).

The Contractor is to establish and maintain a 25-foot access control barrier zone(s) around the designated work area(s). Interference with the functional operation of the building occupants outside these areas is not permitted.

Ensure all building supply and return air ducts from the mechanical system are isolated to eliminate air flow into or out of containment area(s).

3.2.1 Pre-Cleaning

Pre-clean all movable objects identified as contaminated within the work area using a HEPA filtered vacuum and wet cleaning methods as appropriate. Remove these objects after cleaning and store in a protected area.

Pre-clean all surfaces in the work area using HEPA filtered vacuums and/or wet cleaning methods as appropriate. Methods that would raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters, are PROHIBITED. Pay detailed attention to machinery or areas behind grilles and gratings.

Do not remove or otherwise disturb asbestos containing building materials during the pre-cleaning phase.

3.2.2 Work Area(s)

Inform all other Contractors and personnel on the site of the abatement work of the nature of the Contractor's work with ACM and/or PACM, of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of other Contractor employers are not exposed to asbestos in accordance with 29 CFR 1926.

Use industry controls and work practice methods in accordance with 29 CFR 1926. Ensure daily site inspection logs are posted at the jobsite by the on-site competent person.

Use flame resistant, 6 mil polyethylene sheeting when constructing Negative Pressure Enclosures (NPE) or decontamination areas.

3.3 WASTE LOAD-OUT UNIT

Establish a waste load-out unit to provide for interim secure storage. Include an equipment room for storage of asbestos-contaminated items (drums, tools, equipment). Decontaminate all equipment and waste containers prior to being taken out of the work area(s).

All asbestos-containing waste material is to be sealed in leak-tight disposal containers. Thoroughly wet all waste within the disposal containers. Maintain proper labeling protocols for all running and final inventory of filled disposable containers.

3.4 SIGNS AND MARKINGS

Post signs prior to commencing asbestos work as required in 29 CFR 1926. Post signs at the perimeter of the asbestos work areas, along the route of the temporary waste material holding (Drum Staging) area, and at all entrances to asbestos work areas. Ensure signs are conspicuous and legible.

Post telephone numbers and locations of emergency services including, but not limited to, fire, ambulance, doctor, and hospital, at the regulated area.

Post one copy of all permits at the work site perimeter in a accessible location outside the regulated area.

Post one copy of the Abatement Contractors current license at the work site perimeter in a accessible location outside the regulated area.

Post hazard communication notification signs in accordance with KNPR 1840.19 requirements.

3.5 NEGATIVE AIR SYSTEM

Construct Negative Pressure Enclosures (NPE's) as required by 29 CFR 1926.

Duct each of the negative air units through the containment barrier walls to the outside of the work area(s). When the building is occupied, ensure that the ducts exhaust into the outside air; otherwise, they may exhaust into an area of the building beyond the critical barriers. Never exhaust the units into the work area(s).

Provide each unit with temporary back-up electrical power (120 Volt AC) in the event of power failures or outages.

3.5.1 Testing

Design the negative air system to provide a minimum of four (4) air changes per hour and test before any work is begun. After the work area has been prepared, the decontamination unit set up, and the negative air units(s) installed, test the system. Prior to beginning abatement activities, complete Asbestos Abatement Pre-Work Inspection checklist (KSC Form 28-1230NS) to verify the adequacy of the containment system and work area. Once activated, ensure the negative air exhaust unit(s) remain in operation until final clearance air monitoring has been performed and shutdown/removal is approved. Maintain daily negative pressure logs for review by the FLAC and submit as part of the closeout documents.

Install a differential pressure meter or manometer to continuously measure pressure differential between inside and outside the work area for all Class I activities which utilize a NPE. Maintain a minimum pressure differential of 0.02 inch of water column.

3.6 RESPIRATORY PROTECTION

Instruct and train each worker involved in asbestos abatement in proper respirator use and care. Fit all respirators by approved qualitative or quantitative test. Use respiratory protection appropriate for the fiber level encountered in the Work Area and as specified herein, or as required for other situations encountered.

3.6.1 Air Quality for Supplied Air Respiratory Systems

The Contractor is to provide air used for breathing in Type "C" supplied air respiratory systems that meets or exceeds CGA G-7.1, standards for Grade D air.

3.7 REMOVAL OF ASBESTOS

Use industry controls and work practices for all operations in accordance with 29 CFR 1926 Methods of Compliance for Class I, II, III, or IV asbestos work. The FLAC or his/her representative are responsible for these practices.

Ensure all Class I, II, III and IV work is supervised by an on site Competent Person at all times that work is in progress.

Following removal of contaminated items and asbestos material, seal the edges of adjacent surfaces, which were exposed when asbestos was removed, with an asbestos bridging sealant/encapsulant.

3.8 DAILY HOUSEKEEPING

Maintain a clean work area in accordance with 29 CFR 1926. Perform the following housekeeping functions at the end of each shift or prior to leaving the work site unattended:

a. Prepare contaminated waste for disposal by packaging the waste and removing it from the work area.

b. HEPA vacuum the work area.

c. Visually inspect polyethylene in the work area and other high traffic areas.

3.9 CLEANING PROCEDURES

Clean the work area at the end of each day's abatement activities. Designate a separate, secured area within the work area for storage of debris until it can be properly disposed. Secure the work area after termination of the work day to prevent entry. Regularly dispose and replace disposable supplies, such as mop heads, sponges, and rags. Clean all equipment by HEPA vacuuming and wet wiping.

Clean all work areas in which abatement operations have been completed, starting at the ceiling and working down to the floors, by HEPA vacuuming and wet wiping. Prior to removal of worksite access controls and re-occupancy inspection by the Government, and upon satisfactory final clearance air sampling, and removal of polyethylene sheeting, perform a final cleaning (wet wipe) of all surfaces within the work area.

3.10 INSPECTION

Do not commence removal of asbestos materials prior to satisfactory concurrence to proceed on the Asbestos Abatement Pre-Work Inspection (checklist KSC Form 28-1230NS).

3.10.1 Initial Inspection

The Contractor will conduct a walk-through of the work area prior to beginning the abatement work to review existing conditions and ensure safe and practical conditions for the work to be implemented. Any damage to structures, surfaces, and equipment, which could be misconstrued as damage resulting from work, is to be documented by the Contractor and immediately submitted to the Contracting Officer.

Perform background sampling for work areas in accordance with 29 CFR 1926 prior to beginning the abatement work.

3.10.2 Daily Inspection

Maintain a work site entry log of all personnel who enter the regulated work area. Through continuous surveillance and inspections of the worksite, ensure the integrity of containment, proper function of the negative pressure system, and posting of signs and labels. Also ensure, through frequent inspections during each work shift, that negative pressure is maintained, appropriate work practices are followed, appropriate protective clothing and equipment are used, and worker decontamination procedures are being followed.

Ensure that critical barriers and negative pressure enclosures remain effectively sealed and taped. Take immediate action to remedy defects immediately upon discovery. Details of the inspections are to be included in the Contractor's daily inspection log and posted in an accessible location outside the regulated area.

Provide updated copies of the Air Monitoring Reports, Daily Site Inspection Logs and Waste Stream Inventory to the Contracting Officer at the end of each week of the abatement work.

NASA/Kennedy Space Center reserves the right to conduct periodic inspections and air monitoring in the work area(s). If the work area is unsafe as determined by the Government, the Contracting Officer will require the Contractor to stop work until the unsafe conditions are corrected.

3.10.3 Final Inspection

The thoroughness of asbestos removal is to be evaluated by visually inspecting the affected surfaces for residual asbestos material and accumulated dust followed by air sampling. Evidence of residual asbestos or asbestos debris on any adjacent surfaces upon completion of the work is not acceptable.

Upon completion of the work, conduct a thorough visual inspection of the work area by the Abatement Contractor to ensure no residual asbestos material, dust or debris remains. Document final inspections on the Asbestos Abatement Clearance Inspection Checklist (KSC Form 28-1231NS).

If applicable, final aggressive air sampling is to be performed for each NPE work area after completion of a satisfactory visual inspection. The clearance criteria is 0.01 fibers per cubic centimeter (f/cc) of air as determined by PCM. Satisfactory fiber counts from all final samples are to be less than 0.01 f/cc. If any of the final air samples contain greater than 0.01 f/cc, repeat the final cleaning operation and re-test the area until satisfactory clearance levels are obtained.

Collect five (5) PCM final air samples for the first 5,000 square feet of containment plus one (1) additional PCM final air sample for each additional 5,000 square feet or one (1) air sample per room, whichever is greater. The number of final air samples may be reduced for small enclosures of less than approximately 2500 square feet. In no case may fewer than two (2) final samples be collected for any enclosure.

Ensure clearance air sample volumes meet the minimum volumes as indicated for analysis by NIOSH 7400 method.

3.11 ASBESTOS WASTE AND CONTAMINATED MATERIALS

3.11.1 Removal of Asbestos Waste Materials

For purposes of this paragraph, asbestos waste materials are defined as those materials which contain or have been contaminated by asbestos and are not planned to be encapsulated and remain at the job site. They are primarily removed asbestos, disposable clothing and safety equipment, polyethylene sheeting, contaminated amended water, vacuum cleaner contents, and filtration media.

Contain all asbestos waste material in two (2) 6 mil polyethylene disposal bags, or two (2) 6 mil disposal bags and a sealed leak-tight container such as, but not limited to, a steel or fiberboard drum. Pack the asbestos waste material while still wet. Clean the external surface of the waste containers by HEPA vacuuming and wet wiping before moving from the work area. Protect the interior of truck or dumpster with two layers of polyethylene sheeting.

3.11.1.1 Waste Inventory

Label and clearly mark all disposal containers, dumpsters, and trucks, in accordance with 40 CFR 61-SUBPART M, 29 CFR 1910 of OSHA's Hazard Communications Standard, and 49 CFR 171 and 49 CFR 172, Hazardous Substances.

Provide conspicuous, legible labels, affixed to plastic bags and drums indicating the name of the waste generator and the location (facility name and number) where the waste was generated.

For non-regulated asbestos that will be disposed at the KSC/Schwartz Road Landfill, provide a completed landfill disposal verification form (KSC Form 28-1064NS) and send to the Contracting Officer. NOTE: Regulated ACM is not permitted for disposal at KSC/Schwartz Road Landfill. KSC/Schwartz Road Landfill has limited hours of operation.

Provide a Waste Shipment Record (WSR) to the Contracting Officer in accordance with the instructions in 40 CFR 61-SUBPART M.

3.11.2 Work Area Disposal

After final inspection has been completed and the work area is released for occupancy, shut off and remove the Negative Air System units. Unseal all entrances and exits. Dispose of all plastic sheeting, tape, and any other trash and debris, except for critical barriers, in sealable plastic bags, or in drums and moved to the staging area. After final wet wipe of the work area and satisfactory clearance air sampling, dismantle critical barriers and the decontamination unit.

3.11.3 Decontamination Area And Support Area Disposal

Dismantle the decontamination area after the work area is released for re-occupancy. Vacuum all surfaces of the decontamination unit before it is disassembled.

3.12 WASTE TRANSPORTATION AND DISPOSAL

Transport and dispose of asbestos waste in full compliance with 40 CFR 61-SUBPART M, SUBPART A, 49 CFR 171 and 49 CFR 172.

3.13 ASBESTOS ABATEMENT NOTICE AND CHECKLIST

Submit an Asbestos Abatement Pre-Work Inspection form (KSC Form 28-1230NS) and an Asbestos Abatement Clearance Checklist (KSC Form 28-1231NS). Send copies to the Contracting Officer upon satisfactory completion of the work. Notify the Contracting Officer at least three days prior to the planned commencement of work. Coordinate and schedule all Pre-Work and Clearance Site inspections with the Contracting Officer. The completed forms are to be used to establish approval of the containment, work practices and final acceptance/re-occupancy of the work area(s).

3.14 FINAL ACCEPTANCE

The work will not be considered complete until the asbestos materials identified herein have been abated, the areas cleaned, satisfactory

clearance air monitoring completed, all asbestos contaminated waste has been properly disposed of, and all project close out documents have been received and approved by the Contracting Officer.

-- End of Section --

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REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA)

AIHA Z88.6	(2006) Respiratory Protection - Respirator Use-Physical Qualifications for Personnel

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD 6780	(1995; Errata Aug 1996;Rev Ch. 7 - 1997) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing

JOHN F. KENNEDY SPACE CENTER (KSC)

KNPR 1840.19	KSC Industrial Hygiene Programs
KNPR 8500.1	KSC Environmental Requirements
KNPR 8715.3	KSC Safety Practices Procedural Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1926.103	Respiratory Protection
29 CFR 1926.21	Safety Training and Education
29 CFR 1926.33	Access to Employee Exposure and Medical Records
29 CFR 1926.55	Gases, Vapors, Fumes, Dusts, and Mists
29 CFR 1926.59	Hazard Communication
29 CFR 1926.62	Lead
29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste

40 CFR 745	Lead-Based Paint Poisoning Prevention in Certain Residential Structures

UNDERWRITERS LABORATORIES (UL)

UL 586	(2009) Standard for High-Efficiency Particulate, Air Filter Units

1.2 DEFINITIONS

1.2.1 Abatement

"Abatement" means any set of measures designed to permanently eliminate lead-based paint hazards in accordance with standards established by appropriate Federal agencies. Such term includes:

a. The removal of lead-based paint and lead-contaminated dust, the permanent containment or encapsulation of lead-based paint, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead contaminated soil; and

b. All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures.

1.2.2 Action Level

Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8 hour period in a work environment.

1.2.3 Area Sampling

Sampling of lead concentrations within the lead control area and inside the physical boundaries, which is representative of the airborne lead concentrations but is not collected in the breathing zone of personnel.

1.2.4 Competent Person (CP)

As used in this section, refers to a person employed by the Contractor who is trained in the recognition and control of lead hazards in accordance with current federal, State, and local regulations. A Certified Industrial Hygienist (CIH) certified for comprehensive practice by the American Board of Industrial Hygiene is the best choice.

1.2.5 Contaminated Room

Refers to a room for removal of contaminated personal protective equipment (PPE).

1.2.6 Decontamination Shower Facility

That facility that encompasses a clean clothing storage room, and a contaminated clothing storage and disposal rooms, with a shower facility in between.

1.2.7 Deleading

Activities conducted by a person who offers to eliminate lead-based paint or lead-based paint hazards or to plan such activities in commercial

buildings, bridges or other structures.

1.2.8 Eight-Hour Time Weighted Average (TWA)

Airborne concentration of lead to which an employee is exposed, averaged over an 8 hour workday as indicated in 29 CFR 1926.62.

1.2.9 High Efficiency Particulate Air (HEPA) Filter Equipment

HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead-contaminated paint dust. A high efficiency particulate filter means 99.97 percent efficient against 0.3 micron or larger size particles.

1.2.10 Lead

Metallic lead, inorganic lead compounds, and organic lead soaps.

1.2.11 Lead-Based Paint (LBP)

Paint or other surface coating that contains lead.

1.2.12 Lead-Based Paint Activities

Lead-based paint activities include; a lead-based paint inspection and abatement of lead-based paint hazards.

1.2.13 Lead-Based Paint Hazard (LBP Hazard)

Any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-based paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.

1.2.14 Paint with Lead (PWL)

Any paint that contains lead as determined by the testing laboratory using a valid test method. The requirements of this section does not apply if no detectable levels of lead are found using a quantitative method for analyzing paint using laboratory instruments with specified limits of detection (usually 0.01 percent). An X-Ray Fluorescence (XRF) instrument is not considered a valid test method.

1.2.15 Lead Control Area

A system of control methods to prevent the spread of lead dust, paint chips or debris to adjacent areas that may include temporary containment, floor or ground cover protection, physical boundaries, and warning signs to prevent unauthorized entry of personnel. HEPA filtered local exhaust equipment may be used as engineering controls to further reduce personnel exposures or building/outdoor environmental contamination.

1.2.16 Lead Permissible Exposure Limit (PEL)

Fifty micrograms per cubic meter of air as an 8 hour time weighted average as determined by 29 CFR 1926.62. If an employee is exposed for more than eight hours in a workday, the PEL shall be determined by the following formula:

PEL (micrograms/cubic meter of air) = 400/No. hrs worked per day

1.2.17 Personal Sampling

Sampling of airborne lead concentrations within the breathing zone of an employee to determine the 8 hour time weighted average concentration in accordance with 29 CFR 1926.62. Samples shall be representative of the employees' work tasks. Breathing zone shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and centered at the nose or mouth of an employee.

1.2.18 Physical Boundary

Area physically roped or partitioned off around an enclosed lead control area to limit unauthorized entry of personnel. As used in this section, "inside boundary" shall mean the same as "outside lead control area but inside the physical boundary."

1.3 DESCRIPTION

1.3.1 Description of Work

Remove/control lead-based paint/paint with lead as indicated on the drawings. Remove paint in accordance with this Section and recycle, handle, and/or dispose of materials with lead paint in accordance with Federal and State regulations, this Section, and NASA/KSC policy. If a painted surface has not been tested for lead paint, assume lead is present to determine Personnel Protective Equipment (PPE) for workers.

1.3.2 Coordination with Other Work

The contractor shall coordinate with work being performed in adjacent areas. Coordination procedures shall be explained in the Removal/Control Plan and shall describe how the Contractor will prevent lead exposure to other contractors and/or Government personnel performing work unrelated to lead activities.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Respirators; G

SD-06 Test Reports

Sampling results; G

Occupational and Environmental Assessment Data Report; G

SD-07 Certificates

Qualifications of CP; G

Testing Laboratory qualifications; G

Occupant Notification; G

Training Certification of workers and supervisors; G

Third Party Consultant Qualifications; G

Lead-based paint/paint with lead removal/control plan including CP approval (signature, date, and certification number); G

Respiratory Protection Program; G

Hazard Communication Program; G

Clearance Certification; G

SD-11 Closeout Submittals

KSC Waste Management Contractor is responsible for disposal of all Hazardous, Controlled, and Universal Wastes.

Certification of Medical Examinations; G

1.5 QUALITY ASSURANCE

1.5.1 Qualifications

1.5.1.1 Qualifications of CP

Submit name, address, and telephone number of the CP selected to perform responsibilities specified in paragraph entitled "Competent Person (CP) Responsibilities." Provide previous experience of the CP. Submit proper documentation that the CP is trained, licensed, and certified in accordance with Federal, State, and local laws.

1.5.1.2 Training Certification

Submit a certificate for each employee and supervisor, signed and dated by the training provider meeting 40 CFR 745 (Subpart L) requirements, stating that the employee or supervisor has received the required lead training and is certified to perform or supervise deleading or lead removal. Submit proof that the work will be performed by a certified firm.

1.5.1.3 Testing Laboratory

Submit the name, address, and telephone number of the testing laboratory selected to perform the air and wipe sampling, testing, and reporting of airborne concentrations of lead. Use a laboratory accredited under the EPA National Lead Laboratory Accreditation Program (NLLAP) by either the American Association for Laboratory Accreditation (A2LA) or the American Industrial Hygiene Association (AIHA) and that is successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program to perform sample analysis. Laboratories selected to perform blood lead analysis shall be OSHA approved.

1.5.1.4 Third Party Consultant Qualifications

Submit the name, address, and telephone number of the third party consultant selected to perform the wipe sampling for determining

concentrations of lead in dust or soil sampling. Submit proper documentation that the consultant is trained and certified as an inspector technician or inspector/risk assessor by the USEPA authorized State (or local) certification and accreditation program.

1.5.2 Requirements

1.5.2.1 Competent Person (CP) Responsibilities

a. Verify training meets all federal, State, and local requirements.

b. Review and approve lead-based paint/paint with lead removal/control plan for conformance to the applicable standards. Ensure work is performed in strict accordance with specifications at all times.

c. Continuously inspect lead-based paint removal/control work for conformance with the approved plan.

d. Perform air and wipe sampling.

e. Control work to prevent hazardous exposure to human beings and to the environment at all times.

f. Certify the conditions of the work as called for elsewhere in this specification.

1.5.2.2 Lead-Based Paint/Paint with Lead Removal/Control Plan (LBP/PWL R/CP)

Submit a detailed job-specific plan of the work procedures to be used in the removal/control of LBP/PWL. The plan shall include a sketch showing the location, size, and details of lead control areas, location and details of decontamination facilities, viewing ports, and mechanical ventilation system. Include a description of equipment and materials, controls and job responsibilities for each activity from which lead is emitted. Include in the plan, eating, drinking, smoking and sanitary procedures, interface of trades, sequencing of lead related work, collected waste water and paint debris disposal plan, air sampling plan, respirators, personal protective equipment, and a detailed description of the method of containment of the operation to ensure that lead is not released outside the lead control area. Include site preparation, cleanup and clearance procedures. Include occupational and environmental sampling, training, sampling methodology, frequency, duration of sampling, and qualifications of sampling personnel in the air sampling portion of the plan. Include a description of arrangements made among contractors on multi-contractor worksites to inform affected employees and to clarify responsibilities to control exposures.

The Removal/Control Plan shall be developed by a certified planner/project designer.

In occupied buildings, the Removal/Control Plan shall also include an occupant protection program that describes the measures that will be taken during the work to protect the building occupants.

1.5.2.3 Occupational and Environmental Assessment Data Report

If initial monitoring is necessary, submit occupational and environmental sampling results to the Contracting Officer within three working days of collection, signed by the testing laboratory employee performing the analysis, the employee that performed the sampling, and the CP.

In order to reduce the full implementation of 29 CFR 1926.62, the Contractor shall provide documentation. Submit a report that supports the determination to reduce full implementation of the requirements of 29 CFR 1926.62 and supporting the Lead Removal/Control Plan.

a. The initial monitoring shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures per 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead for stated work.

b. Submit worker exposure data gathered during the task based trigger operations of 29 CFR 1926.62 with a complete process description. This includes manual demolition, manual scraping, manual sanding, heat gun, power tool cleaning, rivet busting, cleanup of dry expendable abrasives, abrasive blast enclosure removal, abrasive blasting, welding, cutting and torch burning where lead containing coatings are present.

c. The initial assessment shall determine the requirement for further monitoring and the need to fully implement the control and protective requirements including the lead compliance plan per 29 CFR 1926.62.

1.5.2.4 Medical Examinations

Initial medical surveillance as required by 29 CFR 1926.62 shall be made available to all employees exposed to lead at any time (1 day) above the action level. Full medical surveillance shall be made available to all employees on an annual basis who are or may be exposed to lead in excess of the action level for more than 30 days a year or as required by 29 CFR 1926.62. Adequate records shall show that employees meet the medical surveillance requirements of 29 CFR 1926.33, 29 CFR 1926.62, and 29 CFR 1926.103. Maintain complete and accurate medical records of employees for a period of at least 30 years or for the duration of employment plus 30 years, whichever is longer.

1.5.2.5 Training

Train each employee performing paint removal, disposal, and air sampling operations prior to the time of initial job assignment and annually thereafter, in accordance with 29 CFR 1926.21, 29 CFR 1926.62, and State and local regulations where appropriate.

1.5.2.6 Respiratory Protection Program

a. Provide each employee required to wear a respirator a respirator fit test at the time of initial fitting and at least annually thereafter as required by 29 CFR 1926.62.

b. Establish and implement a respiratory protection program as required by AIHA Z88.6, 29 CFR 1926.103, 29 CFR 1926.62, and 29 CFR 1926.55.

1.5.2.7 Hazard Communication Program

Establish and implement a Hazard Communication Program as required by 29 CFR 1926.59.

1.5.2.8 Waste Management

The Waste Management Plan shall be in accordance with NASA/KSC policy.

a. Spill prevention, containment, and cleanup contingency measures including a health and safety plan to be implemented in accordance with 29 CFR 1926.65.

b. Work plan and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily. Proper containment of the waste includes using acceptable waste containers (e.g., 55-gallon drums) as well as proper marking/labeling of the containers.

1.5.2.9 Environmental, Safety and Health Compliance

In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of Federal, State, local authorities, KNPR 1840.19, KNPR 8715.3, and KNPR 8500.1 regarding removing, handling, storing, transporting, and disposing of lead waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1926.62. Submit matters regarding interpretation of standards to the Contracting Officer for resolution before starting work. Where specification requirements and the referenced documents vary, the most stringent requirement shall apply. The following Federal and State laws, ordinances, criteria, rules and regulations regarding removing, handling, storing, transporting, and disposing of lead-contaminated materials apply:

a. 40 CFR 745 (Subpart L)

b. 29 CFR 1926.62

Licensing and certification in the State of Florida is required.

1.5.3 Pre-Construction Conference

Along with the CP, meet with the Contracting Officer to discuss in detail the waste management plan and the lead-based paint/paint with lead removal/control plan, including work procedures and precautions for the removal plan.

1.6 EQUIPMENT

1.6.1 Respirators

Furnish appropriate respirators approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services, for use in atmospheres containing lead dust. Respirators shall comply with the requirements of 29 CFR 1926.62.

1.6.2 Special Protective Clothing

Furnish personnel who will be exposed to lead-contaminated dust with proper disposable protective whole body clothing, head covering, gloves, and foot coverings as required by 29 CFR 1926.62. Furnish proper disposable plastic or rubber gloves to protect hands. Reduce the level of protection only after obtaining approval from the CP.

1.6.3 Rental Equipment Notification

If rental equipment is to be used during lead-based paint handling and disposal, notify the rental agency in writing concerning the intended use of the equipment.

1.6.4 Vacuum Filters

UL 586 labeled HEPA filters.

1.6.5 Equipment for Government Personnel

Furnish the Contracting Officer with two complete sets of personal protective equipment (PPE) daily, as required herein, for entry into and inspection of the paint removal work within the lead controlled area. Personal protective equipment shall include disposable whole body covering, including appropriate foot, head, and hand protection. PPE shall remain the property of the Contractor. The Government will provide respiratory protection for the Contracting Officer.

1.7 PROJECT/SITE CONDITIONS

1.7.1 Protection of Existing Work to Remain

Perform paint removal work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition or better. Ensure that no paint chips are released to the environment and that there are no emissions from the control area.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 Protection

3.1.1.1 Notification

a. Notify the Contracting Officer 20 days prior to the start of any paint removal work.

b. Occupant Notification

Submit occupant written acknowledgment of the delivery of lead hazard information pamphlet (EPA 747-K-99-001 "Protect Your Family From Lead in Your Home") prior to commencing the renovation work for each affected unit per 40 CFR 745 Subpart E.

3.1.1.2 Boundary Requirements

a. Provide physical boundaries around the lead control area by roping off the area designated in the work plan or providing curtains, portable partitions or other enclosures to ensure that lead will not escape outside the lead control area.

b. Warning Signs - Provide warning signs at approaches to lead control

areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs shall comply with the requirements of 29 CFR 1926.62.

3.1.1.3 Decontamination Facility

Provide clean and contaminated change rooms in accordance with this specification and 29 CFR 1926.62.

3.1.1.4 Eye Wash Station

Where eyes may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes shall be provided within the work area.

3.1.1.5 Mechanical Ventilation System

a. Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.62.

b. To the extent feasible, use local exhaust ventilation connected to HEPA filters or other collection systems, approved by the CP. Local exhaust ventilation systems shall be evaluated and maintained in accordance with 29 CFR 1926.62.

c. Vent local exhaust outside the building only and away from building ventilation intakes.

d. Use locally exhausted, power actuated, paint removal tools.

3.1.1.6 Personnel Protection

Personnel shall wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking or application of cosmetics is not permitted in the lead control area. No one will be permitted in the lead control area unless they have been appropriately trained and provided with protective equipment.

3.2 ERECTION

3.2.1 Lead Control Area Requirements

Full containment - Contain removal operations by the use of critical barriers and HEPA filtered exhaust or a negative pressure enclosure system with decontamination facilities and with HEPA filtered exhaust if required by the CP. For containment areas larger than 1,000 square feet install a minimum of two 18 inch square viewing ports. Locate ports to provide a view of the required work from the exterior of the enclosed contaminated area. Glaze ports with laminated safety glass.

3.3 APPLICATION

3.3.1 Work Procedures

Perform removal of lead-based paint in accordance with approved lead-based paint/paint with lead removal/control plan. Use procedures and equipment required to limit occupational and environmental exposure to lead when lead-based paint is removed in accordance with 29 CFR 1926.62. Dispose of removed paint chips and associated waste in compliance with Environmental

Protection Agency (EPA), State, and local requirements and KSC Policy.

3.3.2 Lead-Based Paint Removal/Control/Deleading

Manual or power sanding of interior and exterior surfaces is not permitted unless tools are equipped with HEPA attachments or wet methods. The dry sanding or grinding of surfaces that contain lead is prohibited. Provide methodology for LBP removal/control in work plan. Remove paint within the areas designated on the drawings in order to completely expose the substrate. Take whatever precautions necessary to minimize damage to the underlying substrate.

Avoid deterioration of the substrate. Provide surface preparations for painting.

Provide methodology for LBP/PWL removal and abatement/control and processes to minimize contamination of work areas outside the control area with lead-contaminated dust or other lead-contaminated debris/waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead. Describe this LBP/PWL removal/control process in the LBP/PWL Removal/Control Plan.

3.3.2.1 Indoor Paint Removal

Perform mechanical or chemical paint removal in lead control areas using enclosures, barriers, or containments. Collect residue debris for disposal in accordance with federal, State, and local requirements.

3.3.2.2 Outdoor Paint Removal

Perform outdoor removal as indicated in federal, State, and local regulations and in the LBP/CPR/CP. The worksite preparation (barriers or containments) shall be job dependent and presented in the LBP/PWL Removal/Control Plan.

3.3.3 Personnel Exiting Procedures

Whenever personnel exit the lead-controlled area, they shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day:

a. Vacuum themselves off.

b. Remove protective clothing in the contaminated change room, and place them in an approved impermeable disposal bag.

c. Shower.

d. Change to clean clothes prior to leaving the physical boundary designated around the lead control area.

3.4 FIELD QUALITY CONTROL

3.4.1 Tests

3.4.1.1 Air and Wipe Sampling

Air sample for lead in accordance with 29 CFR 1926.62 and as specified herein. Air and wipe sampling shall be directed or performed by the CP.

a. The CP shall be on the job site directing the air and non-clearance wipe sampling and inspecting the lead-based paint removal/control work to ensure that the requirements of the contract have been satisfied during the entire lead-based paint removal operation.

b. Collect personal air samples on employees who are expected to have the greatest risk of exposure as determined by the CP. In addition, collect air samples on at least 25 percent of the work crew or a minimum of two employees, whichever is greater, during each work shift.

c. Submit results of air samples, within 72 hours after the air samples are taken.

d. Before any work begins, a third party consultant shall collect and analyze baseline wipe samples in accordance with methods defined in federal, State, and local standards inside and outside of the physical boundary to assess the degree of dust contamination in the facility prior to lead-based paint removal/control.

e. Collect surface wipe samples at a location no greater than 10 feet outside the lead control area at a frequency of once per day while lead removal work is conducted. Surface wipe results shall meet criteria in paragraph "Clearance Certification."

3.4.1.2 Air Sampling During Paint Removal Work

Conduct area air sampling daily, on each shift in which lead-based paint removal operations are performed, in areas immediately adjacent to the lead control area. Sufficient area monitoring shall be conducted to ensure unprotected personnel are not exposed at or above 30 micrograms per cubic meter of air. If 30 micrograms per cubic meter of air is reached or exceeded, stop work, correct the conditions(s) causing the increased levels. Notify the Contracting Officer immediately. Determine if condition(s) require any further change in work methods. Removal work shall resume only after the CP and the Contracting Officer give approval. For outdoor operations, at least one sample on each shift shall be taken on the downwind side of the lead control area.

3.4.1.3 Sampling After Paint Removal/Control

After the visual inspection, collect wipe samples according to the HUD protocol contained in HUD 6780 to determine the lead content of settled dust and dirt in micrograms per square meter foot of surface area.

3.4.1.4 Testing of Removed Paint and Used Abrasive

Test removed paint and used abrasive in accordance with 40 CFR 261 for hazardous waste.

3.5 CLEANING AND DISPOSAL

3.5.1 Cleanup

Maintain surfaces of the lead control area free of accumulations of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the paint removal operation has been completed, clean the area of visible lead paint

contamination by vacuuming with a HEPA filtered vacuum cleaner, wet mopping the area and wet wiping the area as indicated by the CP. Reclean areas showing dust or residual paint chips or debris. After visible dust, chips and debris is removed, wet wipe and HEPA vacuum all surfaces in the work area. If adjacent areas become contaminated at any time during the work, clean, visually inspect, and then wipe sample all contaminated areas. The CP shall then certify in writing that the area has been cleaned of lead contamination before restarting work.

3.5.1.1 Clearance Certification

The CP shall certify in writing that air samples collected outside the lead control area during paint removal operations are less than 30 micrograms per cubic meter of air; the respiratory protection used for the employees was adequate; the work procedures were performed in accordance with 29 CFR 1926.62 and 40 CFR 745; and that there were no visible accumulations of material and dust containing lead left in the work site. Do not remove the lead control area or roped off boundary and warning signs prior to the Contracting Officer's acknowledgement of receipt of the CP certification.

For lead-based paint hazard abatement work, surface wipe sampling shall be conducted and clearance determinations made according to the work practice standards presented in 40 CFR 745.227.

3.5.2 Disposal

a. Collect lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing that may produce airborne concentrations of lead particles. Label the containers in accordance with 29 CFR 1926.62 and 40 CFR 262. Dispose of lead-contaminated waste material in accordance with NASA/KSC policy.

b. Transport all waste materials in accordance with Federal and State regulations.

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SECTION 02 84 16

HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBs AND MERCURY

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.1000	Air Contaminants
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 270	EPA Administered Permit Programs: The Hazardous Waste Permit Program
40 CFR 273	Standards For Universal Waste Management
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

1.2 REQUIREMENTS

Removal and disposal of PCB containing lighting ballasts and associated mercury-containing lamps. Contractor may encounter leaking PCB ballasts.

1.3 DEFINITIONS

1.3.1 Competent Person (CP)

A Competent Person hired by the Contractor is one who is trained in

identifying existing and predictable PCB hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to control PCB hazards. A Certified Industrial Hygienist (CIH), certified by the American Board of Industrial Hygiene, is the recommended choice.

1.3.2 Leak

Leak or leaking means any instance in which a PCB article, PCB container, or PCB equipment has any PCBs on any portion of its external surface.

1.3.3 Lamps

Lamp, also referred to as "universal waste lamp", is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

1.3.4 Polychlorinated Biphenyls (PCBs)

PCBs as used in this specification shall mean the same as PCBs, PCB containing lighting ballast, and PCB container, as defined in 40 CFR 761, Section 3, Definitions.

1.3.5 Spill

Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges when the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases.

1.3.6 Universal Waste

Universal Waste means any of the following hazardous wastes that are managed under the universal waste requirements 40 CFR 273:

(1) Batteries as described in Sec. 273.2 of this chapter;
(2) Pesticides as described in Sec. 273.3 of this chapter;
(3) Thermostats as described in Sec. 273.4 of this chapter; and
(4) Lamps as described in Sec. 273.5 of this chapter.

1.4 QUALITY ASSURANCE

1.4.1 Regulatory Requirements

Perform PCB related work in accordance with 40 CFR 761 and NASA KSC Policy. Perform mercury-containing lamps storage and transport in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and NASA KSC Policy.

1.4.2 Training

Competent Person (CP) shall instruct and certify the training of all persons involved in the removal of PCB containing lighting ballasts and mercury-containing lamps. The instruction shall include: The dangers of PCB and mercury exposure, decontamination, safe work practices, and applicable

OSHA and EPA regulations. The CP shall review and approve the PCB and Mercury-Containing Lamp Removal Work Plans.

1.4.3 Regulation Documents

Maintain at all times one copy each at the office and one copy each in view at the job site of 29 CFR 1910.1000, 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 265, 40 CFR 268, 40 CFR 270, and 40 CFR 273 and of the Contractor removal work plan and disposal plan for PCB and for associated mercury-containing lamps.

1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Qualifications of CP; G

Training Certification; G

PCB and Lamp Removal Work Plan; G

SD-11 Closeout Submittals

Certification of Decontamination

1.6 ENVIRONMENTAL REQUIREMENTS

Use special clothing:

a. Disposable gloves (polyethylene)

b. Eye protection

c. PPE as required by CP

1.7 SCHEDULING

Notify the Contracting Officer 20 days prior to the start of PCB and mercury-containing lamp removal work.

1.8 QUALITY ASSURANCE

1.8.1 Qualifications of CP

Submit the name, address, and telephone number of the Competent Person selected to perform the duties in paragraph entitled "Competent Person (CP)." Provide documented construction project-related experience with implementation of OSHA 29 CFR 1910.1000 which shows ability to assess occupation and environmental exposure to PCB hazards, experience with the use of respirators, personal protective equipment, and other exposure reduction methods to protect employee health. Submit training certification that the CP is trained and certified in accordance with federal, State, and local laws.

1.8.2 PCB and Lamp Removal Work Plan

Submit a job-specific plan within 20 calendar days after award of contract of the work procedures to be used in the removal, packaging, and storage of PCB-containing lighting ballasts and associated mercury-containing lamps.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 WORK PROCEDURE

Furnish labor, materials, services, and equipment necessary for the removal of PCB containing lighting ballasts, associated mercury-containing fluorescent lamps, and high intensity discharge (HID) lamps and other universal wastes in accordance with local, state, or federal regulations. Do not expose PCBs to open flames or other high temperature sources since toxic decomposition by-products may be produced. Do not break mercury containing fluorescent lamps or high intensity discharge lamps.

3.1.1 Work Operations

Ensure that work operations or processes involving PCB or PCB-contaminated materials are conducted in accordance with 40 CFR 761, 40 CFR 262 40 CFR 263, and the applicable requirements of this section, including but not limited to:

a. Obtaining suitable PCB and mercury-containing lamp storage sites.

b. Notifying Contracting Officer prior to commencing the operation.

c. Reporting leaks and spills to the Contracting Officer.

d. Cleaning up spills.

e. Inspecting PCB and PCB-contaminated items and waste containers for leaks and forwarding copies of inspection reports to the Contracting Officer.

f. Maintaining inspection, inventory and spill records.

3.2 PCB SPILL CLEANUP REQUIREMENTS

3.2.1 PCB Spills

Immediately report to the Contracting Officer any PCB spills.

3.2.2 PCB Spill Control Area

Rope off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign. Immediately transfer leaking items to a drip pan or other container.

3.2.3 PCB Spill Cleanup

40 CFR 761, subpart G. Initiate cleanup of spills as soon as possible, but no later than 24 hours of its discovery. Mop up the liquid with rags or

other conventional absorbent. The spent absorbent shall be properly contained and disposed of as solid PCB waste.

3.2.4 Records and Certification

Document the cleanup with records of decontamination in accordance with 40 CFR 761, Section 125, Requirements for PCB Spill Cleanup. Provide test results of cleanup and certification of decontamination.

3.3 REMOVAL

3.3.1 Ballasts

As ballasts are removed from the lighting fixture, inspect label on ballast. Ballasts without a "No PCB" label shall be assumed to contain PCBs and containerized and disposed of as required in Section 02 84 33 under paragraphs STORAGE FOR DISPOSAL and PCB DISPOSAL AND MANAGEMENT.

3.3.2 Lighting Lamps

Remove lighting tubes/lamps from the lighting fixture and carefully place (unbroken) into appropriate containers (original transport boxes or equivalent). In the event of a lighting tube/lamp breaking, sweep and place waste in double plastic taped bags and dispose of as universal waste as specified herein.

3.4 STORAGE AND DISPOSAL

Storage and disposal shall be in accordance with the Federal regulations and NASA KSC Policy.

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SECTION 02 84 33

REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBs)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

JOHN F. KENNEDY SPACE CENTER (KSC)

KNPR 8500.1	KSC Environmental Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.1000	Air Contaminants
29 CFR 1910.145	Accident Prevention Signs and Tags
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 174	Carriage by Rail
49 CFR 175	Carriage by Aircraft
49 CFR 176	Carriage by Vessel
49 CFR 177	Carriage by Public Highway
49 CFR 178	Specifications for Packagings
49 CFR 179	Specifications for Tank Cars

1.2 REQUIREMENTS

The work includes the removal and disposal of material containing PCBs in paint coatings, caulking, and electrical equipment as indicated on the contract drawings. If a painted surface has not been tested for PCBs, assume PCBs are present to determine personnel protective equipment (PPE) for workers. Perform work in accordance with 40 CFR 761 and the

requirements specified herein.

1.3 DEFINITIONS

1.3.1 Leak

Leak or leaking means any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.

1.3.2 PCBs

PCBs as used in this specification shall mean the same as PCBs, PCB Article, PCB Article Container, PCB Container, PCB Equipment, PCB Item, PCB Transformer, PCB-Contaminated Electrical Equipment, as defined in 40 CFR 761, Section 3, Definitions.

1.3.3 Spill

Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges when the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases.

1.4 QUALITY ASSURANCE

1.4.1 Training

Instruct employees on the dangers of PCB exposure, on respirator use, decontamination, and applicable OSHA and EPA regulations.

1.4.2 Competent Person (CP)

A Competent Person hired by the Contractor is one who is trained in identifying existing and predictable PCB hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to control PCB hazards. A Certified Industrial Hygienist (CIH), certified by the American Board of Industrial Hygiene, is the recommended choice.

1.4.3 Regulation Documents

Maintain at all times one copy each at the office and one copy each in view at the job site 29 CFR 1910.1000, 40 CFR 761, and Contractor work practices for removal, storage and disposal of PCBs.

1.4.4 Surveillance Personnel

Surveillance personnel may enter PCB control areas for brief periods of time provided they wear disposable polyethylene gloves and disposal polyethylene foot covers, as a minimum. Additional protective equipment may be required if respiratory hazard is involved or if skin contact with PCB is involved.

1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section

01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Training certification

Qualifications of CP

PCB removal work plan

PCB disposal plan

Notification

Certification of Decontamination for PCB Spill

1.6 EQUIPMENT

1.6.1 Special Clothing

Work clothes shall consist of PPE as required by OSHA regulations, including, but not limited to the following:

a. Disposable coveralls

b. Gloves (Disposable rubber gloves may be worn under these)

c. Disposable foot covers (polyethylene)

d. Chemical safety goggles

e. Half mask cartridge respirator.

1.6.2 Special Clothing for Government Personnel

Provide PPE specified in paragraph entitled "Special Clothing" to the Contracting Officer as required for inspection of the work.

1.6.3 PCB Spill Kit

Assemble a spill kit to include the following items:

	ITEM	MINIMUM QUANTITY
1.	Disposable gloves (polyethylene)	6 prs
2.	Gloves with a high degree of impermeability to PCB	6 prs
3.	Disposable coveralls with permeation resistance to PCB	4 ea
4.	Chemical safety goggles	2 ea
5.	Disposable foot covers (polyethylene)	6 prs
6.	PCB Caution Sign: "PCB Spill--Authorized Personnel Only"	2 ea
7.	Banner guard or equivalent banner material	100 feet
8.	Absorbent material	5 bags
9.	Blue polyethylene waste bags	5 ea
10.	Cloth backed tape	1 roll
11.	Area access logs, blank	10 ea

	ITEM	MINIMUM QUANTITY
12.	Brattice cloth, 6' x 6'	1 piece
13.	Rags	20 ea
14.	Ball point pens	2 ea
15.	Herculite, 4' x 4' and 8' x 8'	1 ea
16.	Blank metal signs and grease pencils	2 ea
17.	Waste containers 55 gallon drum (may be used as container for kit)	1 ea

1.7 QUALITY ASSURANCE

1.7.1 Training Certification

Submit certificates, prior to the start of work but after the main abatement submittals, signed and dated by the CP and by each employee stating that the employee has received training. Certificates shall be organized by individual worker, not grouped by type of certificates.

1.7.2 Qualifications of CP

Submit the name, address, and telephone number of the Competent Person selected to perform the duties in paragraph entitled "Competent Person (CP)." Provide documented construction project-related experience with implementation of OSHA 29 CFR 1910.1000 which shows ability to assess occupation and environmental exposure to PCB hazards, experience with the use of respirators, personal protective equipment, and other exposure reduction methods to protect employee health. Submit proper documentation that the CP is trained and certified in accordance with Federal, State, and local laws.

1.7.3 PCB Removal Work Plan

Submit a detailed job-specific plan of the work procedures to be used in the removal of PCB-containing materials, not to be combined with other hazardous abatement plans.

1.7.4 PCB Disposal Plan

Submit a PCB Disposal Plan within 45 calendar days after award of contract for Contracting Officer's approval. The PCB Disposal Plan shall comply with applicable requirements of Federal, State, and local PCB waste regulations and address:

a. Identification of PCB wastes associated with the work.

b. Estimated quantities of wastes to be generated and disposed of.

e. List of waste handling equipment to be used in performing the work, include cleaning, pump out of oil, and transport equipment to holding area.

f. Spill prevention, containment, and cleanup contingency measures to be implemented.

g. Work plan and schedule for PCB waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.

1.7.5 Notification

Notify the Contracting Officer 20 days prior to the start of PCB removal work.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 PROTECTION

3.1.1 Decontamination Room, Clean Room and Shower Facilities

a. Provide material and labor for construction of a decontamination room, a clean room, and shower facilities. Provide rooms with doors and attach to the exit ways of PCB work areas. Rooms shall be of sufficient size to accommodate the Contractor's operation within. Provide portable toilet and shower facilities. Locate shower facilities between the clean room and decontamination room. Provide separate clothing lockers or containers in each room to prevent contamination of street and work clothes.

b. Remove PCB-contaminated PPE in the decontamination room. Workers shall then proceed to showers. Workers shall shower before lunch and at the end of each day's work. Hot water, towels, soap, and hygienic conditions are the responsibility of the Contractor.

3.1.2 PCB Control Area

Isolate PCB control area by physical boundaries to prevent unauthorized entry of personnel. Food, drink and smoking materials shall not be permitted in areas where PCBs are handled or PCB items are stored.

3.1.3 Personnel Protection

Workers shall wear and use PPE, as recommended by the Industrial Hygienist, upon entering a PCB control area. If PPE is not required per the CP, specify in the PCB removal work plan.

3.1.4 Footwear

Work footwear shall remain inside work area until completion of the job.

3.1.5 Permissible Exposure Limits (PEL)

PEL for PCBs is 3.1 E-08 lb/cubic foot on an 8-hour time weighted average basis.

3.1.6 Special Hazards

a. PCBs shall not be exposed to open flames or other high temperature sources since toxic decomposition by-products may be produced.

b. PCBs shall not be heated to temperatures of 135 degrees F or higher without Contracting Officer's concurrence.

3.1.7 PCB Caution Label

40 CFR 761, Subpart C. Affix labels to PCB waste containers and other PCB-contaminated items. Provide label with sufficient print size to be clearly legible, with bold print on a contrasting background, displaying the following: CAUTION: Contains PCBs (Polychlorinated Biphenyls).

3.1.8 PCB Caution Sign

29 CFR 1910.145. Provide signs at approaches to PCB control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area.

3.2 WORK PROCEDURE

Furnish labor, materials, services, and equipment necessary for the complete removal of PCBs located at the site as indicated or specified in accordance with local, State, or Federal regulations. Package and mark PCB as required by EPA and DOT regulations and dispose of off Government property in accordance with NASA KNPR 8500.1 and KNPR Property Disposal at a permitted site.

3.2.1 No Smoking

Smoking is not permitted within 50 feet of the PCB control area. Provide "No Smoking" signs as directed by the Contracting Officer.

3.2.2 Work Operations

Ensure that work operations or processes involving PCB or PCB-contaminated materials are conducted in accordance with 40 CFR 761 and the applicable requirements of this section, including but not limited to:

a. Obtaining advance approval of PCB storage sites.

b. Notifying Contracting Officer prior to commencing the operation.

c. Reporting leaks and spills to the Contracting Officer.

d. Cleaning up spills.

e. Maintaining an access log of employees working in a PCB control area and providing a copy to the Contracting Officer upon completion of the operation.

f. Inspecting PCB and PCB-contaminated items and waste containers for leaks and forwarding copies of inspection reports to the Contracting Officer.

g. Maintaining a spill kit as specified in paragraph entitled "PCB Spill Kit."

h. Maintaining inspection, inventory and spill records.

3.3 PCB TRANSFORMERS

3.3.1 Draining of Transformer Liquid

Perform work in accordance with 49 CFR 171, 49 CFR 172, 49 CFR 173,

49 CFR 174, 49 CFR 175, 49 CFR 176, 49 CFR 177, 49 CFR 178, and 49 CFR 179, Subchapter C and as specified herein. Drain the transformer, switches, and regulators of free flowing liquid prior to transportation. Place the drained liquids in DOT Spec 17E drums. The drums shall not contain more than 50 gallons of oil. If the equipment cannot be drained, then place it in DOT Spec 17C drums.

3.3.2 Markings

Provide drums and drained PCB-contaminated electrical equipment with caution label markings as specified in paragraph entitled "PCB Caution Label."

3.3.3 Laboratory Analysis

All transformers shall have a laboratory analysis for turn-in.

3.3.4 Disposal

3.3.4.1 Transformers, Less Than 50 ppm or Greater Than 50 ppm

Dispose of transformers in accordance with NASA KNPR 8500.1.

3.4 PCB REMOVAL

Select PCB removal procedure to minimize contamination of work areas with PCB or other PCB-contaminated debris/waste. Handle PCBs such that no skin contact occurs. PCB removal process should be described in the work plan.

3.4.1 Confined Spaces

As feasible, do not carry out PCB handling operations in confined spaces. A confined space shall mean a space having limited means of egress and inadequate cross ventilation.

3.4.2 Control Area

Establish a PCB control area around the PCB item as specified in paragraph entitled "PCB Control Area." Only personnel briefed on the elements in the paragraph entitled "Training" and on the handling precautions shall be allowed into the area.

3.4.3 Exhaust Ventilation

If used, exhaust ventilation for PCB operations shall discharge to the outside and away from personnel.

3.4.4 Temperatures

As feasible, handle PCBs at ambient temperatures and not at elevated temperatures.

3.4.5 Solvent Cleaning

Clean contaminated tools, containers, etc., in accordance with NASA KNPR 8500.1.

3.4.6 Drip Pans

Drip pans are required under portable PCB transformers and rectifiers in use or stored for use. The pans shall have a containment volume of at least one and one-half times the internal volume of PCBs in the item.

3.4.7 Evacuation Procedures

Procedures shall be written for evacuation of injured workers. Aid for a seriously injured worker shall not be delayed for reasons of decontamination.

3.5 PCB SPILL CLEANUP REQUIREMENTS

3.5.1 PCB Spills

Immediately report to the Contracting Officer any PCB spills on the ground or in the water, PCB spills in drip pans, or PCB leaks.

3.5.2 PCB Spill Control Area

Rope off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign. Immediately transfer leaking items to a drip pan or other container.

3.5.3 PCB Spill Cleanup

40 CFR 761, Subpart G. Initiate cleanup of spills as soon as possible, but no later than 48 hours of its discovery. To clean up spills, personnel shall wear the PPE prescribed in paragraph entitled "Special Clothing" of this section. If misting, elevated temperatures or open flames are present, or if the spill is situated in a confined space, notify the Contracting Officer. Mop up the liquid with rags or other conventional absorbent. The spent absorbent shall be properly contained and disposed of as solid PCB waste.

3.5.4 Records and Certification

Document the cleanup with records of decontamination in accordance with 40 CFR 761, Section 125, Requirements for PCB Spill Cleanup. Provide certification of decontamination.

3.5.5 Sampling Requirements

Perform post cleanup sampling as required by 40 CFR 761, Section 130, Sampling Requirements. Do not remove boundaries of the PCB control area until site is determined satisfactorily clean by the Contracting Officer.

3.6 STORAGE FOR DISPOSAL

3.6.1 Storage Containers for PCBs

Store PCBs in Government provided containers.

3.6.2 Waste Containers

Label as directed by the Government.

3.6.3 PCB Articles and PCB-Contaminated Items

Label as directed by the Government.

3.6.4 Approval of Storage Site

Storage sites shall be in accordance with NASA KNPR 8500.1.

3.7 CLEANUP

Maintain surfaces of the PCB control area free of accumulations of PCBs. Restrict the spread of dust and debris; keep waste from being distributed over work area.

Do not remove the PCB control area and warning signs prior to the Contracting Officer's approval. Reclean areas showing residual PCBs.

3.8 PCB DISPOSAL AND MANAGEMENT

Comply with disposal requirements and procedures outlined in the contract documents, 40 CFR 761, and NASA KNPR 8500.1.

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SECTION 26 05 00.00 40

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-- End of Section Table of Contents --

SECTION 26 05 00.00 40

COMMON WORK RESULTS FOR ELECTRICAL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 709	(2001; R 2007) Laminated Thermosetting Materials

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE Stds Dictionary	(2009) IEEE Standards Dictionary: Glossary of Terms & Definitions

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

ANSI Z535.1	(2006) American National Standard for Safety--Color Code
NEMA KS 1	(2001; R 2006) Enclosed and Miscellaneous Distribution Equipment Switches (600 V Maximum)
NEMA RN 1	(2005) Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit
NEMA TC 2	(2003) Standard for Electrical Polyvinyl Chloride (PVC) Conduit
NEMA TC 3	(2004) Standard for Polyvinyl Chloride (PVC) Fittings for Use With Rigid PVC Conduit and Tubing

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2011; TIA 11-1; Errata 2011) National Electrical Code

UNDERWRITERS LABORATORIES (UL)

UL 489	(2009) Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures
UL 6	(2007; reprint Nov 2010) Electrical Rigid Metal Conduit-Steel

1.2 DEFINITIONS

a. Unless otherwise specified or indicated, electrical and electronics terms used in these specifications, and on the drawings, shall be as defined in IEEE Stds Dictionary.

b. The technical sections referred to herein are those specification sections that describe products, installation procedures, and equipment operations and that refer to this section for detailed description of submittal types.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submit Material, Equipment, and Fixture Lists for the following:

Conduits, Raceway sand Fittings

Wire and Cable

Splices and Connectors

Switches

Circuit Breakers

SD-03 Product Data

Conduits, Raceway sand Fittings

Wire and Cable

Splices and Connectors

Switches

Circuit Breakers

SD-06 Test Reports

Insulation Resistance Test

1.4 PREVENTION OF CORROSION

Protect metallic materials against corrosion. Provide equipment enclosures with the standard finish by the manufacturer when used for most indoor installations. Do not use aluminum when in contact with earth or concrete and, where connected to dissimilar metal, protect by approved fittings and treatment. Ferrous metals such as, but not limited to, anchors, bolts, braces, boxes, bodies, clamps, fittings, guards, nuts, pins, rods, shims, thimbles, washers, and miscellaneous spare parts not of corrosion-resistant steel shall be hot-dip galvanized except where other equivalent protective treatment is specifically approved in writing.

1.5 GENERAL REQUIREMENTS

Submit material, equipment, and fixture lists for the following items showing manufacturer's style or catalog numbers, specification and drawing reference numbers, warranty information, and fabrication site.

1.6 MANUFACTURER'S NAMEPLATE

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

1.7 FIELD FABRICATED NAMEPLATES

ASTM D 709. Provide laminated plastic nameplates for each equipment enclosure, relay, switch, and device; as specified in the technical sections or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125 inch thick, black with white center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be one by 2.5 inches. Lettering shall be a minimum of 0.25 inch high normal block style.

PART 2 PRODUCTS

2.1 MATERIALS

Materials and equipment to be provided shall be the standard cataloged products of manufacturers regularly engaged in the manufacture of the products.

2.1.1 Rigid Steel Conduit

Rigid steel conduit shall comply with UL 6 and be galvanized by the hot-dip process. Rigid steel conduit shall be polyvinylchloride (PVC) coated in accordance with NEMA RN 1, where underground and in corrosive areas, or must be painted with bitumastic.

Fittings for rigid steel conduit shall be threaded.

Gaskets shall be solid. Conduit fittings with blank covers shall have gaskets, except in clean, dry areas or at the lowest point of a conduit run where drainage is required.

Covers shall have captive screws and be accessible after the work has been completed.

2.1.2 Rigid Nonmetallic Conduit

Rigid nonmetallic conduit shall comply with NEMA TC 2 and NEMA TC 3 with wall thickness not less than Schedule 40.

2.2 WIRE AND CABLE

Conductors installed in conduit shall be copper 600-volt type THHN and THWN. All conductors AWG No. 8 and larger, shall be stranded. All conductors

smaller than AWG No. 8 shall be solid.

Conductors installed in plenums shall be marked plenum rated.

2.3 SPLICES AND CONNECTORS

Make all splices in AWG No. 8 and smaller with approved insulated electrical type.

Make all splices in AWG No. 6 and larger with Polaris-type connectors. Joints shall be wrapped with an insulating tape that has an insulation and temperature rating equivalent to that of the conductor.

2.4 SWITCHES

2.4.1 Safety Switches

Safety switches shall comply with NEMA KS 1, and be the heavy-duty type with enclosure, voltage, current rating, number of poles, and fusing as indicated. Switch construction shall be such that, when the switch handle in the "ON" position, the cover or door cannot be opened. Cover release device shall be coinproof and be so constructed that an external tool shall be used to open the cover. Make provisions to lock the handle in the "OFF" position, but the switch shall not be capable of being locked in the "ON" position.

Provide switches of the quick-make, quick-break type. Approve terminal lugs for use with copper conductors.

Safety color coding for identification of safety switches shall conform to ANSI Z535.1.

2.5 CIRCUIT BREAKERS

Circuit-breaker interrupting rating shall be not less than those indicated and in no event less than 20,000 amperes root-mean-square (rms) symmetrical at 240 volts, respectively. Multipole circuit breakers shall be the common-trip type with a single handle. Molded case circuit breakers shall be bolt-on type conforming to UL 489.

PART 3 EXECUTION

3.1 CONDUITS, RACEWAYS AND FITTINGS

Conduit runs between outlet and outlet, between fitting and fitting, or between outlet and fitting shall not contain more than the equivalent of three 90-degree bends, including those bends located immediately at the outlet or fitting.

3.1.1 Rigid Steel Conduit

Make field-made bends and offsets with approved hickey or conduit bending machine. Conduit elbows larger than 2-1/2 inches shall be long radius.

3.1.2 Rigid Nonmetallic Conduit

Rigid PVC conduit shall be direct buried.

A green insulated copper grounding conductor shall be in conduit with

conductors and be solidly connected to ground at each end. Grounding wires shall be sized in accordance with NFPA 70.

3.2 WIRING

Feeder and branch circuit conductors shall be color coded as follows:

CONDUCTOR	COLOR AC
Phase A	Black
Phase B	Red
Phase C	Blue
Neutral	White
Equipment Grounds	Green

Conductors up to and including AWG No. 2 shall be manufactured with colored insulating materials. Conductors larger than AWG No. 2 shall have ends identified with color plastic tape in outlet, pull, or junction boxes.

Splice in accordance with the NFPA 70. Provide conductor identification within each enclosure where a tap, splice, or termination is made and at the equipment terminal of each conductor. Terminal and conductor identification shall match as indicated.

Where several feeders pass through a common pullbox, the feeders shall be tagged to clearly indicate the electrical characteristics, circuit number, and panel designation.

3.3 SAFETY SWITCHES

Securely fasten switches to the supporting structure or wall, utilizing a minimum of four 1/4 inch bolts. Do not use sheet metal screws and small machine screws for mounting. Do not mount switches in an inaccessible location or where the passageway to the switch may become obstructed. Mounting height shall be 5 feet above floor level, when possible.

3.4 IDENTIFICATION PLATES AND WARNINGS

Furnish and install identification plates for disconnect switches.

Furnish identification plates for all line voltage enclosed circuit breakers, identifying the equipment served, voltage, phase(s) and power source.

3.5 FIELD TESTING

Submit Test Reports in accordance with referenced standards in this section.

After completion of the installation and splicing, and prior to energizing the conductors, perform wire and cable continuity and insulation tests as herein specified before the conductors are energized.

Contractor shall provide all necessary test equipment, labor, and personnel to perform the tests, as herein specified.

Isolate completely all wire and cable from all extraneous electrical connections at cable terminations and joints. Substation and switchboard feeder breakers, disconnects in combination motor starters, circuit breakers in panel boards, and other disconnecting devices shall be used to isolate the circuits under test.

Perform insulation-resistance test on each field-installed conductor with respect to ground and adjacent conductors. Applied potential shall be 500 volts dc for 300 volt rated cable and 1000 volts dc for 600 volt rated cable.

Perform continuity test to insure correct cable connection (i.e correct phase conductor, grounded conductor, and grounding conductor wiring) end-to end. Any damages to existing or new electrical equipment resulting from contractor mis-wiring will be repaired and re-verified at contractor's expense. All repairs shall be approved by the CO prior to acceptance of the repair.

Final acceptance will depend upon the successful performance of wire and cable under test. Do not energize any conductor until the final test reports are reviewed and approved by the CO.

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SECTION 31 00 00

EARTHWORK

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO M 145	(1991; R 2008) Standard Specification for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
AASHTO T 180	(2010) Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM INTERNATIONAL (ASTM)

ASTM D 2487	(2010) Soils for Engineering Purposes (Unified Soil Classification System)

1.2 DEFINITIONS

1.2.1 Satisfactory Materials

Satisfactory materials shall mean ASTM D 2487, SP, SP-SM, A-2-3, A-2-4, and A-3.

1.2.2 Unsatisfactory Materials

Unsatisfactory soil materials shall mean ASTM D 2487, GW, GP, GM, GP-GM, CW-GM, GC, GP-GC, GM-GC, SW, SW-SM, SC, SW-SC, SP-SC, CL, ML, CL-ML, CH, MH, and AASHTO M 145, Soil Classification Groups A-2-5, A-2-6, A-2-7, A-4, A-5, A-6, and A-7, peat, muck and other highly organic soil, and other highly organic material, buried vegetation, roots, and post consumer materials such as trash, refuse, or other debris and soil materials of any classification that have a moisture content at the time of compaction beyond the range of 1 percentage point below and 3 percentage points above the optimum moisture content of the soil material as determined by moisture-density relations test.

1.2.3 Degree of Compaction

Degree of compaction required is expressed as a percentage of the maximum density obtained by the test procedure in AASHTO T 180, Method B or D.

1.2.4 Topsoil

Material suitable for topsoils is defined as: Natural, friable soil representative of productive, well-drained soils in the area, free of subsoil, stumps, rocks larger than one inch diameter, brush, weeds, toxic substances, and other material detrimental to plant growth. Amend topsoil pH range to obtain a pH of 5.5 to 7.

1.2.5 Unstable Material

Unstable material are too wet to properly support the utility pipe, conduit, or appurtenant structure.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submit 15 days prior to starting work.

SD-03 Product Data

Utilization of Excavated Materials; G

Procedure and location for disposal of unused satisfactory material. Proposed source of borrow material. Notification of encountering rock in the project. Advance notice on the opening of excavation or borrow areas. Advance notice on shoulder construction for rigid pavements.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 GENERAL EXCAVATION

Perform excavation of every type of material encountered within the limits of the project to the lines, grades, and elevations indicated and as specified. Perform the grading in accordance with the typical sections shown and the tolerances specified in paragraph FINISHING. Transport satisfactory excavated materials and place in fill or embankment within the limits of the work. Excavate unsatisfactory materials encountered within the limits of the work below grade and replace with satisfactory materials as directed. Include such excavated material and the satisfactory material ordered as replacement in excavation. Dispose surplus satisfactory excavated material not required for fill or embankment in areas approved for surplus material storage or designated waste areas. Dispose unsatisfactory excavated material in designated waste or spoil areas. During construction, perform excavation and fill in a manner and sequence that will provide proper drainage at all times. Excavate material required for fill or embankment in excess of that produced by excavation within the grading limits from the borrow areas indicated or from other approved areas selected by the Contractor as specified.

3.1.1 Drainage

Provide for the collection and disposal of surface and subsurface water encountered during construction. Completely drain construction site during periods of construction to keep soil materials sufficiently dry.

3.2 SELECTION OF BORROW MATERIAL

Select borrow material to meet the requirements and conditions of the particular fill or embankment for which it is to be used. Obtain borrow material from the borrow areas.

3.3 GROUND SURFACE PREPARATION

3.4 UTILIZATION OF EXCAVATED MATERIALS

The project areas are located within the boundary of various SWMU sites being investigated by the Remediation Group of NASA Environmental. A SWMU designation means that the site has had historical operations which had the potential to impact the environment. Figures showing contaminant concentrations, groundwater sampling results and well locations can be obtained from the Contracting Officer. Contaminant concentrations are available for determination of required PPE and for disposal purposes.

Disturbed soil shall be returned to the general location from which it was removed and not spread to other areas of the site. If soil is to be removed from the site, it shall be collected, containerized, and disposed of according to the Process Waste Questionnaire (PWQ)/Technical Response Package (TRP).

3.5 BACKFILLING AND COMPACTION

Place backfill adjacent to any and all types of structures, and compact to at least 90 percent laboratory maximum density for cohesive materials or 95 percent laboratory maximum density for cohesionless materials, to prevent wedging action or eccentric loading upon or against the structure.

3.6 PLACING TOPSOIL

On areas to receive topsoil, prepare the compacted subgrade soil to a 2 inch depth for bonding of topsoil with subsoil. Spread topsoil evenly to a thickness of 6 inch and grade to the elevations and slopes shown. Do not spread topsoil when frozen or excessively wet or dry. Obtain material required for topsoilfrom offsite areas.

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SECTION 31 23 00.00 20

EXCAVATION AND FILL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO M 145	(1991; R 2008) Standard Specification for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
AASHTO T 2	(1991; R 2010) Standard Method of Test for Sampling of Aggregates (same as ASTM D75)
AASHTO T 87	(1986; R 2008) Standard Method of Test for Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test
AASHTO T 180	(2010) Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM INTERNATIONAL (ASTM)

ASTM C 136	(2006) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D 1140	(2000; R 2006) Amount of Material in Soils Finer than the No. 200 (75-micrometer) Sieve
ASTM D 1556	(2007) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 1557	(2009) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3) (2700 kN-m/m3)
ASTM D 2487	(2010) Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D 3282	(2009) Standard Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D 422	(1963; R 2007) Particle-Size Analysis of

	Soils
ASTM D 4318	(2010) Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D 6938	(2010) Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
ASTM D 698	(2007e1) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/cu. ft. (600 kN-m/cu. m.))

1.2 DEFINITIONS

1.2.1 Degree of Compaction

Degree of compaction is expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D 1557, for general soil types, abbreviated as percent laboratory maximum density.

1.2.2 Hard Materials

Weathered rock, dense consolidated deposits, or conglomerate materials which are not included in the definition of "rock" but which usually require the use of heavy excavation equipment, ripper teeth, or jack hammers for removal.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Shoring and Sheeting Plan

Dewatering work plan

Submit 15 days prior to starting work.

Contractor shall record Existing Conditions before starting work in accordance with the paragraph entitled, "Existing Conditions," of this section.

Records of Underground Utilities shall be submitted before the start of work.

SD-07 Certificates

Certificates for Proposed Soil Materials shall be submitted to the Contracting Officer in accordance with paragraph entitled " Backfill and Fill Materials" of this section.

Certificates of Compliance for Compost shall be submitted

indicating grade and compliance to State and local regulations.

1.4 DELIVERY, STORAGE, AND HANDLING

Perform in a manner to prevent contamination or segregation of materials.

1.5 QUALITY ASSURANCE

1.5.1 Shoring and Sheeting Plan

Submit drawings and calculations, certified by a registered professional engineer, describing the methods for shoring and sheeting of excavations. Drawings shall include material sizes and types, arrangement of members, and the sequence and method of installation and removal. Calculations shall include data and references used.

1.5.2 Dewatering Work Plan

Submit procedures for accomplishing dewatering work.

1.5.3 Utilities

Movement of construction machinery and equipment over pipes and utilities during construction shall be at the Contractor's risk. Excavation made with power-driven equipment is not permitted within 5 feet of known Government-owned utility or subsurface construction. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, excavate by hand. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Contracting Officer. Report damage to utility lines or subsurface construction immediately to the Contracting Officer.

1.6 EXISTING CONDITIONS

Existing conditions shall be recorded, in the presence of the Contracting Officer, and shall include all structure and other facilities adjacent to areas of alteration or removal. Such records shall contain the location of existing utilities, the elevation of the top of foundation walls, the location and extent of cracks and other damage, and a description of surface conditions that exist before the start of work. Copies of the record shall be submitted and the conditions before starting work shall be verified.

Records of Underground Utilities Location of Inspections, Location of Testing, and Location of Utility Approvals shall be submitted to the Contracting Officer before start of work.

PART 2 PRODUCTS

2.1 SOIL MATERIALS

2.1.1 Satisfactory Materials

Satisfactory materials comprise any materials classified by ASTM D 2487 as SP, SM, SP-SM, and ASTM D 3282, Soil Classification Group A-1, A-2-4, and A-3.

2.1.2 Unsatisfactory Materials

Materials which do not comply with the requirements for satisfactory materials are unsatisfactory. Unsatisfactory soil materials shall mean ASTM D 2487, GW, GP, GM, GP-GM, CW-GM, GC, GP-GC, GM-GC, SW, SW-SM, SC, SW-SC, SP-SC, CL, ML, CL-ML, CH, MH, and AASHTO M 145, Soil Classification Groups A-2-5, A-2-6, A-2-7, A-4, A-5, A-6, and A-7, peat, muck, and other highly organic soil, and other highly organic material, buried vegetation, roots, and post-consumer materials such as trash, refuse, or other debris and soil materials of any classification that have a moisture content at the time of compaction beyond the range of 1 percentage point below and 3 percentage points above the optimum moisture content of the soil material as determined by moisture-density relations test. Notify the Contracting Officer when encountering any contaminated materials.

2.1.3 Unstable Material

Unstable material are too wet to properly support the utility pipe, conduit, or appurtenant structure.

2.2 BACKFILL AND FILL MATERIALS

Backfill and fill material shall consist of sandy clay, sand, gravel, soft shale, or other satisfactory soil materials as defined in Subpart 1.3.1 Satisfactory Materials.

Materials for backfill and fill shall be satisfactory soil materials, free of clay clods, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials and other deleterious matter, and shall be satisfactory soil material as follows:

MATERIAL	REQUIREMENT	TEST METHOD	NUMBER OF TESTS
Satisfactory soil materials	Sampling	AASHTO T 2	One for each source of material to determine conformance to definition of satisfactory soil materials; additional tests whenever there is any apparent change
	Preparation of samples	AASHTO T 87	
	Sieve analysis of fine and coarse aggregate	ASTM C 136	
	Mechanical analysis of soils	ASTM D 422	
	Liquid limit of soils	ASTM D 4318	
	Plastic limit and plasticity index of soils	ASTM D 4318	
	Moisture-density relations of soil	AASHTO T 180, Method B or D	

2.3 COHESIONLESS MATERIALS

Cohesionless soil materials include gravels, gravel-sand mixtures, sands, and gravelly-sands. Moisture-density relations of compacted cohesionless soils, when plotted on graphs, will show straight lines or reverse-shaped moisture density curves.

2.4 COHESIVE MATERIALS

Cohesive soil materials include clayey and silty gravels, sand-clay mixtures, gravel-silt mixtures, clayey and silty sands, sand-silt mixtures, clays, silts, and very fine sands. Moisture-density relations of compacted cohesive soils, when plotted on graphs, will show normal moisture-density curves.

2.5 SUBBASE MATERIAL

Subbase material shall be a naturally or artificially graded mixture of natural or crushed gravel, crushed stone, or sand.

2.6 COMPOST

Compost shall be yard trimmings or yard waste compost processed and graded according to state and local regulations.

2.7 COMPACTION EQUIPMENT

Compaction equipment shall consist of sheepsfoot rollers, pneumatic-tired rollers, tamper rollers, vibrating tampers, or other compaction equipment capable of obtaining the required density throughout the entire layer.

PART 3 EXECUTION

3.1 PROTECTION

3.1.1 Shoring and Sheeting

Provide shoring bracing and sheeting where required. In addition to the requirements set forth in this contract, include provisions in the shoring and sheeting plan that will accomplish the following:

a. Prevent undermining of pavements, foundations and slabs.

b. Prevent slippage or movement in banks or slopes adjacent to the excavation.

3.1.2 Drainage and Dewatering

Provide for the collection and disposal of surface and subsurface water encountered during construction.

3.1.2.1 Drainage

So that construction operations progress successfully, completely drain construction site during periods of construction to keep soil materials sufficiently dry. The Contractor shall provide positive surface water runoff away from the construction activity and provide drainage features and equipment as required to maintain dry soils, prevent erosion and undermining of foundations. When unsuitable working platforms for

equipment operation and unsuitable soil support for subsequent construction features develop, remove unsuitable material and provide new soil material as specified herein. It is the responsibility of the Contractor to assess the soil and ground water conditions presented by the plans and specifications and to employ necessary measures to permit construction to proceed. Excavated slopes and backfill surfaces shall be protected to prevent erosion and sloughing. Excavation shall be performed so that the site, the area immediately surrounding the site, and the area affecting operations at the site shall be continually and effectively drained.

3.1.2.2 Dewatering

Groundwater flowing toward or into excavations shall be controlled to prevent sloughing of excavation slopes and walls, boils, uplift and heave in the excavation and to eliminate interference with orderly progress of construction. French drains, sumps, ditches or trenches will not be permitted within 3 feet of the foundation of any structure, except with specific written approval, and after specific contractual provisions for restoration of the foundation area have been made. Control measures shall be taken by the time the excavation reaches the water level in order to maintain the integrity of the in situ material. While the excavation is open, the water level shall be maintained continuously, at least 2 feet below the working level.

Operate dewatering system continuously until construction work below existing water levels is complete.

3.1.3 Underground Utilities

Location of the existing utilities indicated is approximate. The Contractor shall physically verify the location and elevation of the existing utilities indicated prior to starting construction.

3.1.4 Machinery and Equipment

Movement of construction machinery and equipment over pipes during construction shall be at the Contractor's risk. Repair, or remove and provide new pipe for existing or newly installed pipe that has been displaced or damaged.

3.2 SURFACE PREPARATION

3.2.1 Stripping

Strip suitable soil from the site where excavation or grading is indicated and stockpile separately from other excavated material. Material unsuitable for use as topsoil shall be stockpiled. Locate topsoil so that the material can be used readily for the finished grading. Where sufficient existing topsoil conforming to the material requirements is not available on site, provide borrow materials suitable for use as topsoil. Protect topsoil and keep in segregated piles until needed.

3.2.2 Unsuitable Material

Remove vegetation, debris, decayed vegetable matter, sod, mulch, and rubbish underneath paved areas or concrete slabs.

3.3 EXCAVATION

Excavate to contours, elevation, and dimensions indicated. Reuse excavated materials that meet the specified requirements for the material type required at the intended location. Keep excavations free from water. Excavate soil disturbed or weakened by Contractor's operations, soils softened or made unsuitable for subsequent construction due to exposure to weather. Excavations below indicated depths will not be permitted except to remove unsatisfactory material. Unsatisfactory material encountered below the grades shown shall be removed as directed. Refill with backfill and fill material and compact to 95 percent of ASTM D 1557 maximum density. Unless specified otherwise, refill excavations cut below indicated depth with backfill and fill material and compact to 95 percent of ASTM D 1557 maximum density.

3.3.1 Pipe Trenches

Excavate to the dimension indicated. Grade bottom of trenches to provide uniform support for each section of pipe after pipe bedding placement. Tamp if necessary to provide a firm pipe bed. Recesses shall be excavated to accommodate bells and joints so that pipe will be uniformly supported for the entire length. Rock, where encountered, shall be excavated to a depth of at least 12 inches below the bottom of the pipe.

3.3.2 Excavated Materials

Satisfactory excavated material required for fill or backfill shall be placed in the proper section of the permanent work required or shall be separately stockpiled if it cannot be readily placed.

3.4 SUBGRADE PREPARATION

Unsatisfactory material in surfaces to receive fill or in excavated areas shall be removed and replaced with satisfactory materials as directed by the Contracting Officer. The surface shall be scarified to a depth of 6 inches before the fill is started. Sloped surfaces steeper than 1 vertical to 4 horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When subgrades are less than the specified density, the ground surface shall be broken up to a minimum depth of 6 inches, pulverized, and compacted to the specified density. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches and compacted as specified for the adjacent fill. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. Compaction shall be accomplished by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers, or other approved equipment well suited to the soil being compacted. Material shall be moistened or aerated as necessary to provide the moisture content that will readily facilitate obtaining the specified compaction with the equipment used. Minimum subgrade density shall be as specified herein.

3.5 FILLING AND BACKFILLING

Fill and backfill to contours, elevations, and dimensions indicated. Compact each lift before placing overlaying lift.

3.5.1 Common Fill Placement

Place in 6 inch lifts. Compact areas not accessible to rollers or

compactors with mechanical hand tampers. Aerate material excessively moistened by rain to a satisfactory moisture content. Finish to a smooth surface by blading, rolling with a smooth roller, or both.

3.5.2 Backfill and Fill Material Placement

Provide for paved areas and under concrete slabs, except where select material is provided. Place in 6 inch lifts. Do not place over wet or frozen areas. Place backfill material adjacent to structures as the structural elements are completed and accepted. Backfill against concrete only when approved. Place and compact material to avoid loading upon or against the structure.

3.5.3 Backfill and Fill Material Placement Over Pipes and at Walls

Backfilling shall not begin until construction below finish grade has been approved, underground utilities systems have been inspected, tested and approved, forms removed, and the excavation cleaned of trash and debris. Backfill shall be brought to indicated finish grade. Where pipe is coated or wrapped for protection against corrosion, the backfill material up to an elevation 2 feet above sewer lines and 1 foot above other utility lines shall be free from stones larger than 1 inch in any dimension. Heavy equipment for spreading and compacting backfill shall not be operated closer to foundation or retaining walls than a distance equal to the height of backfill above the top of footing; the area remaining shall be compacted in layers not more than 4 inches in compacted thickness with power-driven hand tampers suitable for the material being compacted. Backfill shall be placed carefully around pipes or tanks to avoid damage to coatings, wrappings, or tanks. Backfill shall not be placed against foundation walls prior to 7 days after completion of the walls. As far as practicable, backfill shall be brought up evenly on each side of the wall and sloped to drain away from the wall.

3.5.4 Trench Backfilling

Backfill as rapidly as construction, testing, and acceptance of work permits. Place and compact backfill under structures and paved areas in 6 inch lifts to top of trench and in 6 inch lifts to one foot over pipe outside structures and paved areas.

3.6 BORROW

Where satisfactory materials are not available in sufficient quantity from required excavations, approved borrow materials shall be obtained as specified herein.

3.7 COMPACTION

Determine in-place density of existing subgrade; if required density exists, no compaction of existing subgrade will be required.

3.7.1 Structures, Spread Footings, and Concrete Slabs

Compact top 12 inches of subgrades to 95 percent of ASTM D 1557. Compact fill and backfill material to 95 percent of ASTM D 1557.

3.7.2 Paved Areas

Compact top 12 inches of subgrades to 95 percent of ASTM D 1557. Compact

fill and backfill materials to 95 percent of ASTM D 1557.

3.8 FINISH OPERATIONS

3.8.1 Grading

Finish grades as indicated within one-tenth of one foot. Grade areas to drain water away from structures. Maintain areas free of trash and debris. For existing grades that will remain but which were disturbed by Contractor's operations, grade as directed.

3.9 FIELD QUALITY CONTROL

3.9.1 Sampling

Take the number and size of samples required to perform the following tests.

3.9.2 Testing

Perform one of each of the following tests for each material used. Provide additional tests for each source change.

3.9.2.1 Fill and Backfill Material Testing

Test fill and backfill material in accordance with ASTM C 136 for conformance to ASTM D 2487 gradation limits; ASTM D 1140 for material finer than the No. 200 sieve; ASTM D 4318 for liquid limit and for plastic limit; ASTM D 698 or ASTM D 1557 for moisture density relations, as applicable.

3.9.2.2 Select Material Testing

Test select material in accordance with ASTM C 136 for conformance to ASTM D 2487 gradation limits; ASTM D 1140 for material finer than the No. 200 sieve; ASTM D 698 or ASTM D 1557 for moisture density relations, as applicable.

3.9.2.3 Density Tests

Test density in accordance with ASTM D 1556, or ASTM D 6938. When ASTM D 6938 density tests are used, verify density test results by performing an ASTM D 1556 density test at a location already ASTM D 6938 tested as specified herein. Perform an ASTM D 1556 density test at the start of the job, and for every 10 ASTM D 6938 density tests thereafter. Test each lift at randomly selected locations every 2000 square feet of existing grade in fills for structures and concrete slabs, and every 2500 square feet for other fill areas and every 2000 square feet of subgrade in cut. Include density test results in daily report.

Bedding and backfill in trenches: One test per 50 linear feet in each lift in areas subject to traffic. One test per 100 linear feet in each lift in areas not subject to traffic.

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SECTION 32 31 13

CHAIN LINK FENCES AND GATES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A116	(2011) Standard Specification for Metallic-Coated, Steel Woven Wire Fence Fabric
ASTM A121	(2007) Standard Specification for Metallic-Coated Carbon Steel Barbed Wire
ASTM A153/A153M	(2009) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A702	(1989; R 2006) Standard Specification for Steel Fence Posts and Assemblies, Hot Wrought
ASTM A780/A780M	(2009) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM A90/A90M	(2011) Standard Test Method for Weight of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
ASTM C94/C94M	(2012) Standard Specification for Ready-Mixed Concrete
ASTM F1043	(2011a) Strength and Protective Coatings on Metal Industrial Chain-Link Fence Framework
ASTM F1083	(2010) Standard Specification for Pipe, Steel, Hot-Dipped Zinc Coated (Galvanized) Welded, for Fence Structures
ASTM F567	(2011a) Standard Practice for Installation of Chain Link Fence
ASTM F626	(2008) Standard Specification for Fence Fittings

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS RR-F-191	(Rev K) Fencing, Wire and Post Metal (and Gates, Chain-Link Fence Fabric, and Accessories)
FS RR-F-191/1	(Rev F) Fencing, Wire and Post, Metal (Chain-Link Fence Fabric)
FS RR-F-191/3	(Rev E; Am 1) Fencing, Wire and Post, Metal (Chain-Link Fence Posts, Top Rails and Braces)
FS RR-F-191/4	(Rev F) Fencing, Wire and Post, Metal (Chain-Link Fence Accessories)

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Fence Assembly; G

Location of Gate, Corner, End, and Pull Posts; G

SD-03 Product Data

Fence Assembly; G

Zinc Coating; G

Fabric; G

1.3 ASSEMBLY AND INSTALLATION INSTRUCTIONS

Submit manufacturer's catalog data for complete fence assembly.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver materials to site in an undamaged condition. Store materials off the ground to provide protection against oxidation caused by ground contact.

1.5 QUALITY ASSURANCE

1.5.1 Required Report Data

Submit reports of listing of chain-link fencing and accessories regarding weight in ounces for zinc coating.

PART 2 PRODUCTS

2.1 GENERAL

Provide fencing materials conforming to the requirements of ASTM A116, ASTM A702, ASTM F626, and as specified.

2.2 ZINC COATING

Provide hot-dip galvanized (after fabrication) ferrous-metal components and accessories, except as otherwise specified.

Provide zinc coating of weight not less than 1.94 ounces per square foot, as determined from the average result of two specimens, when tested in accordance with ASTM A90/A90M.

Provide zinc coating conforming to the requirements of the following:

a. Pipe: FS RR-F-191/3 Class 1 Grade A in accordance with ASTM F1083.

b. Hardware and accessories: ASTM A153/A153M, Table 1

c. Surface: ASTM F1043

d. External: Type B-B surface zinc with organic coating, 0.97 ounce per square foot minimum thickness of acrylated polymer.

e. Internal: Surface zinc coating of 0.97 ounce per square foot minimum.

Provide galvanizing repair material that is cold-applied zinc-rich coating conforming to ASTM A780/A780M.

2.3 FABRIC

FS RR-F-191 and detailed specifications as referenced and other requirements as specified.

FS RR-F-191/1; Type I, zinc-coated steel, 9 gage. Mesh size, 2 inches. Provide selvage twisted and barbed at both selvages. Height of fabric, as indicated.

Provide fabric consisting of No. 9-gage wires woven into a 2-inch diamond mesh, with dimensions of fabric and wire conforming to ASTM A116, ASTM A702 and ASTM F626, with 2.0 ounces per square foot zinc galvanizing.

Provide one-piece fabric widths for fence heights up to 12 feet.

2.4 TOP AND BOTTOM SELVAGES

Provide knuckled selvages at top and bottom for fabric with 2 inch mesh and up to 60 inches high, and if over 60 inches high, provide twisted and barbed top selvage and knuckled bottom selvage.

Knuckle top and bottom selvages for 1-3/4-inch and 1-inch mesh fabric.

2.5 POSTS, TOP RAILS, AND BRACES

FS RR-F-191/3 line posts; Class 1, steel pipe, Grade A. End, corner, and pull posts; Class 1, steel pipe, Grade A. Braces; Class 1, steel pipe, Grade A.

2.6 LINE POSTS

Minimum acceptable line posts are as follows:

Up to 6-feet high:

Grade A: 1.900 inch O.D. pipe weighing 2.72 pounds per linear foot.

Grade B: 2.375 inch O.D. pipe weighing 3.12 pounds per linear foot.

Over 6-feet high:

2.0 inch O.D. pipe weighing 3.65 pounds per linear foot.

2.7 END, CORNER, AND PULL POSTS

Provide minimally acceptable end, corner, and pull posts as follows:

Up to 6 feet high:

Grade A: 2.375 inch O.D. pipe weighing 3.65 pounds per linear foot.

Grade B: 2.375 inch O.D. pipe weighing 3.12 pounds per linear foot.

Over 6 feet high:

Grade A: 2.875 inch O.D. pipe weighing 5.79 pounds per linear foot.

Grade B: 2.875 inch O.D. pipe weighing 4.64 pounds per linear foot.

2.8 SLEEVES

Provide sleeves for setting into concrete construction of the same material as post sections, sized 1-inch greater than the diameter or dimension of the post. Weld flat plates to each sleeve base to provide anchorage and prevent intrusion of concrete.

2.9 TOP RAIL

Provide a minimum of 1.660 inches O.D. pipe rails. Grade A weighing 2.27 pounds per linear foot. Provide expansion couplings 6-inches long at each joint in top rails.

2.10 CENTER RAILS BETWEEN LINE POSTS

For fencing over 6-feet high, provide 1.660 inches O.D. pipe center rails, Grade A weighing 2.27 pounds per linear foot.

2.11 POST-BRACE ASSEMBLY

Provide bracing consisting of 1.660 inches O.D. pipe Grade A weighing 2.27 pounds per linear foot and 3/8 inch adjustable truss rods and turnbuckles.

2.12 TENSION WIRE

Provide galvanized wire, No. 7-gage, coiled spring wire, provided at the bottom of the fabric only. Provide zinc coating that weighs not less than 2.0 ounces per square foot.

2.13 STRETCHER BARS

Provide bars that have one-piece lengths equal to the full height of the fabric with a minimum cross section of 3/16 by 3/4 inch, in accordance with

ASTM A116, ASTM A702 and ASTM F626.

2.14 POST TOPS

Provide tops that are steel, wrought iron, or malleable iron designed as a weathertight closure cap. Provide one cap for each post, unless equal protection is provided by a combination post-cap and barbed-wire supporting arm. Provide caps with an opening to permit through passage of the top rail.

2.15 STRETCHER BAR BANDS

Provide bar bands for securing stretcher bars to posts that are steel, wrought iron, or malleable iron spaced not over 15 inches on center. Bands may also be used in conjunction with special fittings for securing rails to posts. Provide bands with projecting edges chamfered or eased.

2.16 MISCELLANEOUS HARDWARE

Provide miscellaneous hot-dip galvanized hardware as required.

2.17 WIRE TIES

Provide 16-gage galvanized steel wire for tying fabric to line posts,spaced 12 inches on center. For tying fabric to rails and braces, space wire ties 24 inches on center. For tying fabric to tension wire, space 0.105-inch hog rings 24 inches on center.

Manufacturer's standard procedure will be accepted if of equal strength and durability.

FS RR-F-191/4. Provide wire ties constructed of the same material as the fencing fabric.

2.18 CONCRETE

Provide concrete conforming to ASTM C94/C94M, and obtaining a minimum 28-day compressive strength of 3,000 psi.

2.19 GROUT

Provide grout of proportions one part portland cement to three parts clean, well-graded sand and a minimum amount of water to produce a workable mix.

2.20 BARBED WIRE

Zinc coated steel barbed wire complying with ASTM A121.

PART 3 EXECUTION

Provide complete installation conforming to ASTM F567.

3.1 GENERAL

Ensure final grading and established elevations are complete prior to commencing fence installation.

3.2 EXCAVATION

Provide excavations for post footings which are drilled holes in virgin or compacted soil, of minimum sizes as indicated.

Space footings for line posts 10 feet on center maximum and at closer intervals when indicated, with bottoms of the holes approximately 3-inches below the bottoms of the posts. Set bottom of each post not less than 36-inches below finished grade when in firm, undisturbed soil. Set posts deeper, as required, in soft and problem soils and for heavy, lateral loads.

Uniformly spread soil from excavations adjacent to the fence line or on areas of Government property, as directed.

When solid rock is encountered near the surface, drill into the rock at least 12 inches for line posts and at least 18 inches for end, pull, corner, and gate posts. Drill holes at least 1 inch greater in diameter than the largest dimension of the placed post.

If solid rock is below the soil overburden, drill to the full depth required except that penetration into rock need not exceed the minimum depths specified above.

3.3 SETTING POSTS

Remove loose and foreign materials from holes and the soil moistened prior to placing concrete.

Provide tops of footings that are trowel finished and sloped or domed to shed water away from posts. Set hold-open devices, sleeves, and other accessories in concrete.

Keep exposed concrete moist for at least 7 calendar days after placement or cured with a membrane curing material, as approved.

Grout all posts set into sleeved holes in concrete with an approved grouting material.

Maintain vertical alignment of posts set in concrete construction until concrete has set.

3.3.1 Earth and Bedrock

Provide concrete bases of dimensions indicated. Compact concrete to eliminate voids, and finish to a dome shape.

3.3.2 Bracing

Brace gate, corner, end, and pull posts to nearest post with a horizontal brace used as a compression member, placed at least 12 inches below top of fence, and a diagonal tension rod.

3.4 CONCRETE STRENGTH

Provide concrete that has attained at least 75 percent of its minimum 28-day compressive strength, but in no case sooner than 7 calendar days after placement, before rails, tension wire, or fabric are installed. Do not stretch fabric and wires or hang gates until the concrete has attained its full design strength.

Take samples and test concrete to determine strength as specified.

3.5 TOP RAILS

Provide top rails that run continuously through post caps or extension arms, bending to radius for curved runs. Provide expansion couplings as recommended by the fencing manufacturer.

3.6 CENTER RAILS

Provide single piece center rails between posts set flush with posts on the fabric side, using special offset fittings where necessary.

3.7 BRACE ASSEMBLY

Provide bracing assemblies at end and gate posts and at both sides of corner and pull posts, with the horizontal brace located at midheight of the fabric.

Install brace assemblies so posts are plumb when the diagonal rod is under proper tension.

Provide two complete brace assemblies at corner and pull posts where required for stiffness and as indicated.

3.8 TENSION WIRE INSTALLATION

Install tension wire by weaving them through the fabric and tying them to each post with not less than 7-gage galvanized wire or by securing the wire to the fabric with 10-gage ties or clips spaced 24 inches on center.

3.9 FABRIC INSTALLATION

Provide fabric in single lengths between stretch bars with bottom barbs placed approximately 1-1/2-inches above the ground line. Pull fabric taut and tied to posts, rails, and tension wire with wire ties and bands.

Install fabric on the security side of fence, unless otherwise directed.

Ensure fabric remains under tension after the pulling force is released.

3.10 STRETCHER BAR INSTALLATION

Thread stretcher bars through or clamped to fabric 4 inches on center and secured to posts with metal bands spaced 15 inches on center.

3.11 GATE INSTALLATION

Install gates plumb, level, and secure, with full opening without interference. Install ground set items in concrete for anchorage as recommended by the fence manufacturer. Adjust hardware for smooth operation and lubricated where necessary.

3.12 TIE WIRES

Provide tie wires that are U-shaped to the pipe diameters to which attached. Twist ends of tie wires not less than two full turns and bent so as not to present a hazard.

3.13 FASTENERS

Install nuts for tension bands and hardware on the side of the fence opposite the fabric side. Peen ends of bolts to prevent removal of nuts.

3.14 ZINC-COATING REPAIR

Clean and repair galvanized surfaces damaged by welding or abrasion, and cut ends of fabric, or other cut sections with specified galvanizing repair material applied in strict conformance with the manufacturer's printed instructions.

3.15 TOLERANCES

Provide posts that are straight and plumb within a vertical tolerance of 1/4 inch after the fabric has been stretched. Provide fencing and gates that are true to line with no more than 1/2 inch deviation from the established centerline between line posts. Repair defects as directed.

3.16 SITE PREPARATION

3.16.1 Clearing and Grading

Clear fence line of trees, brush, and other obstacles to install fencing. Establish a graded, compacted fence line prior to fencing installation.

3.17 FENCE INSTALLATION

Install fence on prepared surfaces to line and grade indicated. Secure fastening and hinge hardware in place to fence framework by peening or welding. Allow for proper operation of components. Coat peened or welded areas with a repair coating matching original coating. Install fence in accordance with fence manufacturer's written installation instructions except as modified herein.

3.17.1 Post Spacing

Provide line posts spaced equidistantly apart, not exceeding 10 feeton center. Provide gate posts spaced as necessary for size of gate openings. Do not exceed 500 feet on straight runs between braced posts. Provide corner or pull posts, with bracing in both directions, for changes in direction of 15 degrees or more, or for abrupt changes in grade. Provide drawings showing location of gate, corner, end, and pull posts.

3.17.2 Top and Bottom Tension Wire

Install top and bottom tension wires before installing chain-link fabric, and pull wires taut. Place top and bottom tension wires within 8 inches of respective fabric line.

3.18 ACCESSORIES INSTALLATION

3.18.1 Post Caps

Design post caps to accommodate top rail. Install post caps as recommended by the manufacturer.

3.18.2 Padlocks

Provide padlocks for gate openings and provide chains that are securely attached to gate or gate posts. Provide padlocks keyed alike, and provide two keys for each padlock.

3.19 GROUNDING

Ground fencing as specified.

Ground all fences crossed by overhead powerlines in excess of 600 volts, and all electrical equipment attached to the fence. Ground fences on each side of all gates, at each corner, at the closest approach to each building located within 50 feet of the fence, and where the fence alignment changes more than 15 degrees. Grounding locations can not exceed 650 feet. Bond each gate panel with a flexible bond strap to its gate post. Ground fences crossed by powerlines of 600 volts or more at or near the point of crossing and at distances not exceeding 150 feet on each side of crossing. Provide ground conductor consisting of No. 6 AWG solid copper wire. Provide copper-clad steel rod grounding electrodes 3/4 inch by 10 foot long. Drive electrodes into the earth so that the top of the electrode is at least 6 inches below the grade. Where driving is impracticable, bury electrodes a minimum of 12 inches deep and radially from the fence, with top of the electrode not less than 2 feet or more than 8 feet from the fence. Clamp ground conductor to the fence and electrodes with bronze grounding clamps to create electrical continuity between fence posts, fence fabric, and ground rods. Total resistance of the fence to ground cannot exceed 25 ohms.

3.20 SECURITY

Install new security fencing, remove existing security fencing, and perform related work to provide continuous security for facility. Schedule and fully coordinate work with Contracting Officer and cognizant Security Officer.

3.21 CLEANUP

Remove waste fencing materials and other debris from the work site.

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SODDING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

TURFGRASS PRODUCERS INTERNATIONAL (TPI)

TPI GSS (1995) Guideline Specifications to Turfgrass Sodding

1.2 DEFINITIONS

1.2.1 Stand of Turf

100 percent ground cover of the established species.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Fertilizer

Include physical characteristics, and recommendations.

SD-07 Certificates

Sod farm certification for sods. Indicate type of sod in accordance with TPI GSS.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Delivery

1.4.1.1 Sod Protection

Protect from drying out and from contamination during delivery, on-site storage, and handling.

1.4.1.2 Fertilizer Delivery

Deliver to the site in original, unopened containers bearing manufacturer's chemical analysis, name, trade name, trademark, and indication of conformance to state and federal laws. Instead of containers, fertilizer may be furnished in bulk with certificate indicating the above information.

1.4.2 Storage

1.4.2.1 Sod Storage

Lightly sprinkle with water, cover with moist burlap, straw, or other approved covering; and protect from exposure to wind and direct sunlight until planted. Provide covering that will allow air to circulate so that internal heat will not develop. Do not store sod longer than 24 hours. Do not store directly on concrete or bituminous surfaces.

1.4.2.2 Topsoil

Prior to stockpiling topsoil, treat growing vegetation with application of appropriate specified non-selective herbicide. Clear and grub existing vegetation three to four weeks prior to stockpiling topsoil.

1.4.2.3 Handling

Do not drop or dump materials from vehicles.

1.5 TIME RESTRICTIONS AND PLANTING CONDITIONS

1.5.1 Restrictions

Do not plant when the ground is frozen, muddy, or when air temperature exceeds 90 degrees Fahrenheit.

1.6 TIME LIMITATIONS

1.6.1 Sod

Place sod a maximum of thirty six hours after initial harvesting, in accordance with TPI GSS as modified herein.

PART 2 PRODUCTS

2.1 SODS

2.1.1 Classification

Argentine Bahia sod shall be well matted with live grass roots. Sod shall be sufficiently thick to hold together during handling operations and to obtain a satisfactory growth of grass. Sod shall be live, fresh, and uninjured at the time of planting and it shall be the Contractor's responsibility to ensure that it contains sufficient moisture at planting to produce growth. Before the sod is harvested, the grass shall be mowed to the average height normally maintained for that variety of grass and shall have all clippings removed. Presence of weeds or other material which might be detrimental to the proposed planting will be cause for rejection of sod.

Rectangular sections used for sodding may vary in length but shall be of equal width and of a size that will permit lifting on boards or that can be otherwise handled without breaking and without loss of native soil attached to the roots.

2.1.2 Purity

Sod species shall be genetically pure, free of weeds, pests, and disease.

2.2 TOPSOIL

2.2.1 On-Site Topsoil

Surface soil stripped and stockpiled on site and modified as necessary to meet the requirements specified for topsoil in paragraph entitled "Composition." When available topsoil shall be existing surface soil stripped and stockpiled on-site.

2.2.2 Off-Site Topsoil

Conform to requirements specified in paragraph entitled "Composition." Additional topsoil shall be furnished by the Contractor.

2.2.3 Composition

Topsoil shall be free of sticks, stones, roots, and other debris and objectionable materials. Other components shall conform to the following limits:

Silt	7 to 17 percent
Clay	4 to 12 percent
Sand	70 to 82 percent
pH	5.5 to 7.0
Soluble Salts	600 ppm maximum

2.3 FERTILIZER

2.3.1 Granular Fertilizer

Synthetic, granular controlled release fertilizer containing the following minimum percentages, by weight, of plant food nutrients:

16 percent available nitrogen
4 percent available phosphorus
8 percent available potassium

2.4 WATER

Source of water shall be approved by Contracting Officer and of suitable quality for irrigation containing no element toxic to plant life.

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 EXTENT OF WORK

Provide fertilizing and sodding of all newly graded finished earth surfaces, unless indicated otherwise, and at all areas inside or outside the limits of construction that are disturbed by the Contractor's operations.

3.1.2 Soil Preparation

Provide 4 inches of off-site topsoil or on-site topsoil to meet indicated finish grade. After areas have been brought to indicated finish grade, incorporate fertilizer into soil a minimum depth of 4 inches by disking, harrowing, tilling or other method approved by the Contracting Officer. Remove debris and stones larger than 3/4 inch in any dimension remaining on the surface after finish grading. Correct irregularities in finish surfaces to eliminate depressions. Protect finished topsoil areas from damage by vehicular or pedestrian traffic.

3.1.2.1 Fertilizer Application Rates

Apply fertilizer at rates as determined by laboratory soil analysis of the soils at the job site. For bidding purposes only apply at rates for the following:

Granular Fertilizer 86.5 pounds per acre, 2.0 pounds per 1000 square feet.

3.2 SODDING

3.2.1 Finished Grade and Topsoil

Prior to the commencement of the sodding operation, the Contractor shall verify that finished grades are as indicated on drawings; the placing of topsoil, smooth grading, and compaction requirements have been completed.

The prepared surface shall be a maximum 1 inch below the adjoining grade of any surfaced area. New surfaces shall be blended to existing areas. The prepared surface shall be completed with a light raking to remove from the surface debris and stones over a minimum 5/8 inch in any dimension.

3.2.2 Placing

Place sod a maximum of 36 hours after initial harvesting, in accordance with TPI GSS as modified herein.

3.2.3 Sodding Slopes and Ditches

For slopes 2:1 and greater, lay sod with long edge perpendicular to the contour. For V-ditches and flat bottomed ditches, lay sod with long edge perpendicular to flow of water. Anchor each piece of sod with wood pegs or wire staples maximum 2 feet on center.

3.2.4 Finishing

After completing sodding, blend edges of sodded area smoothly into surrounding area. Air pockets shall be eliminated and a true and even surface shall be provided. Frayed edges shall be trimmed and holes and missing corners shall be patched with sod.

3.2.5 Rolling

Immediately after sodding, firm entire area except for slopes in excess of 3 to 1 with a roller not exceeding 90 pounds for each foot of roller width.

3.2.6 Watering

Start watering areas sodded as required by daily temperature and wind conditions. Apply water at a rate sufficient to ensure thorough wetting of soil to minimum depth of 6 inches. Run-off, puddling, and wilting shall be prevented. Unless otherwise directed, watering trucks shall not be driven over turf areas.

Watering shall be continuous for at least 60 days. After 60 days of continuous watering, replace any dead sod, till any gaps, and begin the watering process again on any replaced areas.

3.3 PROTECTION OF TURF AREAS

Immediately after turfing, protect area against traffic and other use.

3.4 RESTORATION

Restore to original condition existing turf areas which have been damaged during turf installation operations.

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SECTION 33 11 00

WATER DISTRIBUTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA B300	(2010; Addenda 2011) Hypochlorites
AWWA B301	(2010) Liquid Chlorine
AWWA C104/A21.4	(2008; Errata 2010) Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water
AWWA C105/A21.5	(2010) Polyethylene Encasement for Ductile-Iron Pipe Systems
AWWA C110/A21.10	(2008) Ductile-Iron and Gray-Iron Fittings for Water
AWWA C111/A21.11	(2007) Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
AWWA C115/A21.15	(2005) Flanged Ductile-Iron Pipe With Ductile-Iron or Gray-Iron Threaded Flanges
AWWA C151/A21.51	(2009) Ductile-Iron Pipe, Centrifugally Cast, for Water
AWWA C153/A21.53	(2006) Ductile-Iron Compact Fittings for Water Service
AWWA C203	(2008) Coal-Tar Protective Coatings and Linings for Steel Water Pipelines - Enamel and Tape - Hot-Applied
AWWA C205	(2007) Cement-Mortar Protective Lining and Coating for Steel Water Pipe - 4 In. (100 mm) and Larger - Shop Applied
AWWA C209	(2006) Cold-Applied Tape Coatings for the Exterior of Special Sections, Connections and Fitting for Steel Water Pipelines
AWWA C651	(2005; Errata 2005) Standard for Disinfecting Water Mains
AWWA C900	(2007; Errata 2008) Polyvinyl Chloride

	(PVC) Pressure Pipe, and Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water Distribution

ASME INTERNATIONAL (ASME)

ASME B16.1	(2010) Gray Iron Threaded Fittings; Classes 25, 125 and 250
ASME B18.2.1	(2010) Square and Hex Bolts and Screws (Inch Series)
ASME B18.21.1	(2009) Washers: Helical Spring-Lock, Tooth Lock, and Plain Washers (Inch Series)
ANSI/ASME B18.22.1	(1965; R 2003) Plain Flat Washers
ASME B18.6.1	(1981; R 2008) Wood Screws (Inch Series)
ASME B18.6.3	(2010) Machine Screws, Tapping Screws, and Machine Drive Screws (Inch Series)

ASTM INTERNATIONAL (ASTM)

ASTM A153/A153M	(2009) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A27/A27M	(2010) Standard Specification for Steel Castings, Carbon, for General Application
ASTM A307	(2010) Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength
ASTM A325	(2010) Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength
ASTM A47/A47M	(1999; R 2009) Standard Specification for Ferritic Malleable Iron Castings
ASTM A489	(2012) Standard Specification for Carbon Steel Lifting Eyes
ASTM A536	(1984; R 2009) Standard Specification for Ductile Iron Castings
ASTM A563	(2007a) Standard Specification for Carbon and Alloy Steel Nuts
ASTM B633	(2011) Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
ASTM D 1784	(2011) Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds

ASTM E488/E488M	(2010) Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements
ASTM F1554	(2007a; E 2011) Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength
ASTM F436	(2011) Hardened Steel Washers
ASTM F593	(2002; R 2008; E 2012) Stainless Steel Bolts, Hex Cap Screws, and Studs
ASTM F594	(2009; E 2011) Standard Specification for Stainless Steel Nuts
ASTM F879	(2012) Standard Specification for Stainless Steel Socket Button and Flat Countersunk Head Cap Screws

JOHN F. KENNEDY SPACE CENTER (KSC)

KSC-STD-Z-0013	(1988) Standard for Potable Water Cross-Connection Control Design for Facilities

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 704	(2007) Standard System for the Identification of the Hazards of Materials for Emergency Response

1.2 DESIGN REQUIREMENTS

1.2.1 Water Service Lines

Demolish water service lines where shown on the contract drawings. Demolish water service lines back to the main.

The proposed project will not require a permit for the alteration or installation of utilities to transport potable water. Although no permitting is required, any work done will be according to standards and criteria that would have been required had there been a permit issued by the Department and not jeopardize the health and safety of personnel due to effects of the modification on the KSC PW system (i.e. backflow preventers will be installed as required as in KSC-STD-Z-0013 and standard engineering practice, disinfection and verification prior to use). The organization responsible for the work will ensure that best engineering practices, codes, specifications and standards are followed. Pressure and leak tests as well as disinfection are also required.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

The following drawing types shall be submitted in accordance with paragraph entitled, "Shop Drawings," of this section.

As-Built Drawings; G

SD-03 Product Data

Manufacturer's catalog data shall be submitted for the following items:

Ductile-Iron Pipe; G

Retainer Glands; G

Pipe Connections; G

Rubber Gaskets; G

Plastic Pipe and Fittings; G

Tapped Tees; G

Corporation-Type Stops; G

Water service line piping, fittings, joints, valves, and coupling; G

Submit manufacturer's standard drawings or catalog cuts, except submit both drawings and cuts for push-on and rubber-gasketed bell-and-spigot joints. Include information concerning gaskets with submittal for joints and couplings.

SD-06 Test Reports

Bacteriological Disinfection; G.

Hydrostatic Test; G

Pressure Test; G

Leakage Test; G

Sterilizing; G

1.4 SHOP DRAWINGS

As-Built Drawings shall be submitted by the Contractor for the complete water system prior to start of work.

1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Delivery and Storage

Inspect materials delivered to site for damage. Unload and store with minimum handling. Store materials on site in enclosures or under protective covering. Store plastic piping, jointing materials and rubber gaskets under cover out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes, fittings, valves and hydrants

free of dirt and debris.

1.5.2 Handling

Handle pipe, fittings, valves, hydrants, and other accessories in a manner to ensure delivery to the trench in sound undamaged condition. Take special care to avoid injury to coatings and linings on pipe and fittings; make repairs if coatings or linings are damaged. Do not place any other material or pipe inside a pipe or fitting after the coating has been applied. Carry, do not drag pipe to the trench. Use of pinch bars and tongs for aligning or turning pipe will be permitted only on the bare ends of the pipe. The interior of pipe and accessories shall be thoroughly cleaned of foreign matter before being lowered into the trench and shall be kept clean during laying operations by plugging or other approved method. Before installation, the pipe shall be inspected for defects. Material found to be defective before or after laying shall be replaced with sound material without additional expense to the Government. Store rubber gaskets that are not to be installed immediately, under cover out of direct sunlight.

1.5.2.1 Miscellaneous Plastic Pipe and Fittings

Handle Polyvinyl Chloride (PVC) pipe and fittings in accordance with the manufacturer's recommendations. Store plastic piping and jointing materials that are not to be installed immediately under cover out of direct sunlight.

Storage facilities shall be classified and marked in accordance with NFPA 704.

PART 2 PRODUCTS

2.1 WATER SERVICE LINE MATERIALS

2.1.1 Piping

2.1.1.1 Ductile-Iron Pipe

Ductile-iron pipe shall be in accordance with AWWA C151/A21.51 mechanical push-on joints.

Cement-mortar lining shall be in accordance with AWWA C104/A21.4.

Polyethylene encasement shall be in accordance with AWWA C105/A21.5.

Cast-iron fittings shall be in accordance with AWWA C110/A21.10.

Cast-iron pipe flanges and flanged fittings shall conform to ASME B16.1.

Flanged and threaded ductile-iron pipe shall be in accordance with AWWA C115/A21.15.

Coal-tar protective coating shall be in accordance with AWWA C203.

Cement-mortar lining for pipe 4 inches and larger shall conform to AWWA C205.

Cold-applied tape coating of fittings shall be in accordance with AWWA C209.

Intermediate factory-made joints shall be oversized male and female

threaded. Field joints shall be bell-and-spigot with or without factory-made lead joints or oversize male and female threaded type. Pipelines with threaded joints shall be provided with a packing-ring expansion joint at intervals of not more than 108 feet.

2.1.1.2 Pipe Connections

Bolts, nuts, and washers shall be in accordance with the recommendations of the pipe manufacturer.

2.1.1.3 Rubber Gaskets

Rubber-gasket joints for cast-iron pipe, gaskets, and lubricant shall conform to the applicable requirements of AWWA C111/A21.11. Gaskets shall be in accordance with recommendations of the pipe manufacturer for steel pipe. Joints shall be so designed that, when the pipe is laid and the joint completed, the gasket will be completely enclosed. Rubber gaskets shall be the sole element depended upon for water tightness. Gaskets shall be continuous rings of the necessary size and cross section to fill the recess provided and shall conform to the recommendations of the pipe manufacturer, as applicable.

2.1.1.4 Plastic Pipe and Fittings

Solvent weld pipe shall be extruded of an improved polyvinylchloride (PVC) virgin pipe compound. Compound shall conform to ASTM D 1784, Cell Classification 12454-B, and have a 2,000 psi hydrostatic design stress rating. Pipe and fittings shall conform to AWWA C900, Schedule 40.

Pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, pressure rating in psi, and NSF (National Sanitation Foundation) marking. Manufacturer shall also mark the date of extrusion on the pipe.

Solvent cement or rubber-gasket joints for pipe and fittings shall be in accordance with the manufacturer's instructions.

Fittings shall be PVC Schedule 40.

Fittings shall be injection-molded of an improved PVC compound. Fittings shall conform to ASTM D 1784, Cell Classification 12454-B.

Tees and ells shall be side gated.

Fittings shall bear the company's name and trademark, material designation, size, applicable iron pipe size (ips) schedule, and NSF seal.

Threaded nipples shall be standard weight Schedule 80 with molded threads.

2.1.1.5 Joint Restraint

2.1.1.5.1 Retainer Glands

Retainer glands shall be provided for all buried mechanical joints, fittings, and ductile-iron pipe connections to buried valves. Retainer glands shall be designed for joint retaining through the use of a follower gland and set screw-anchoring devices that impart multiple wedging action against the pipe. The mechanical joint-restraint device shall be UL listed and shall have a working pressure of at least 250 psi with a minimum safety

factor of 2.

a. Gland: Manufactured of ductile iron conforming to ASTM A536. Gland dimensions shall match AWWA C111/A21.11 and AWWA C153/A21.53.

b. Restraining Devices: Manufactured of ductile iron heat treated to a minimum hardness of 370 BHN. Restraining devices shall incorporate a set screw/twist-off nut bolt to ensure the proper actuating of the restraining device. The twist-off nut shall be designed to come off at the torque limit desired to anchor the restraining device in place on the pipe.

c. Joint Deflection: Retainer gland joint deflection shall be limited to manufacturer's recommended maximum deflection angle. Joint deflection shall be applied before the set screws are torqued.

d. Acceptable Manufacturers are EBAA Iron, Inc. - Megalug 1100 Series, or approved equal.

2.1.1.5.2 External Pipe Restraints

Pipe push-on (bell and spigot) joint restraint shall be provided by a restraining harness consisting of a restraint ring, connecting tie-rods, and split-ring assembly installed at all push-on joints. The restraint ring shall consist of wedging components made from 60-42-12 ductile-iron conforming to ASTM A536 and wedges heat treated to minimum 370 BHN. Torque limiting twist-off nuts shall be provided on each wedge to ensure proper applied installation torque. The split ring shall be made from 60-42-12 ductile-iron conforming to ASTM A536. The connecting rods shall be made of steel conforming to AWWA C111/A21.11. Sizes 6- to 12-inch-diameter restraining harnesses shall have 350-psi maximum working pressure rating. All harnesses shall be designed with a 2-to-1 safety factor applied to the maximum working pressure rating.

Acceptable manufacturers are EBAA Iron, Inc. - Series 1700 or approved equal.

2.1.1.5.3 Pipe Connections

Provide fasteners in accordance with the following section unless otherwise noted.

1. General: For all exterior applications and where fastening aluminum, provide Type 304 stainless steel fasteners. Provide hot-dipped galvanized fasteners in all other applications in accordance with ASTM A153/A153M unless noted otherwise on the drawings. Select fasteners for type, grade, and class required.

2. High-Strength Bolts and Nuts: ASTM A325 with heavy hex nuts ASTM A563 and hardened carbon-steel washers ASTM F436.

3. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A307, Grade A, with hex nuts, ASTM A563, and, where indicated, flat washers.

4. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts, nuts, and flat washers; ASTM F593 for bolts and ASTM F594 for nuts, Alloy Group A4.

5. Stainless Steel Socket Button and Flat Countersunk Head Cap

Screws: ASTM F879.

6. Anchor Bolts: ASTM F1554, Grade 36.

7. Eyebolts: ASTM A489.

8. Machine Screws: ASME B18.6.3.

9. Lag Bolts: ASME B18.2.1.

10. Wood Screws: Flat head, ASME B18.6.1.

11. Plain Washers: Round, ANSI/ASME B18.22.1.

12. Lock Washers: Helical, spring type, ASME B18.21.1.

13. Cast-in Place Anchors in Concrete: Anchors capable of sustaining, without failure, a load equal to four times the load imposed, as determined by testing conducted by a qualified independent testing agency according to ASTM E488/E488M.

a. Threaded or wedge type; galvanized ferrous castings, either ASTM A47/A47M malleable iron or ASTM A27/A27M cast steel. Provide bolts, washers, and shims as needed, hot-dip galvanized in accordance with ASTM A153/A153M.

14. Expansion Anchors: Anchor bolt and sleeve assembly with the ability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing conducted by a qualified independent testing agency according to ASTM E488/E488M.

a. Material for Anchors in Interior Locations: Carbon-steel components zinc-plated to comply with ASTM B633, Class Fe/Zn 5.

b. Material for Anchors in Exterior Locations: Alloy Group (A4) stainless-steel bolts complying with ASTM F593 and nuts complying with ASTM F594.

2.1.2 Miscellaneous Items

2.1.2.1 Tapped Tees

Tees shall be installed as necessary.

2.1.2.2 Corporation Stops

Corporation stops shall have waterworks standard thread on the inlet end, with flanged-joint couplings or wiped joints for connections to goosenecks.

2.1.3 Cap Materials

Cut and cap water service pipes as shown on the contract drawings.

2.1.4 Grout

Grout shall be used to fill existing water lines and abandon in place as indicated on contract drawings. Grout compressive strength shall be equal to or greater than 2,000 lbf/in^2.

2.1.5 Disinfection

Chlorinating materials shall conform to the following:

Chlorine, Liquid: AWWA B301.

Hypochlorite, Calcium and Sodium: AWWA B300.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Installation of Caps

Install caps on water service lines as indicated on the contract drawings. Caps shall be installed in accordance with AWWA Standards for appropriate piping material. Cast iron and ductile iron pipe fittings shall be in accordance with AWWA C151/A21.51. PVC pressure piping fittings for water distribution shall be in accordance with AWWA C900.

3.1.2 Cutting of Pipe

Cutting of pipe shall be done without damage to the pipe. Cutting shall be done with an approved mechanical cutter. Wheel cutters shall be used when practical.

3.1.3 Pipe Handling

Pipe and accessories shall be handled in a manner to ensure delivery to the trench in an undamaged condition. Particular care shall be taken not to injure the pipe coating. When the coating or lining of any pipe or fitting is damaged, the repair shall be made by the Contractor at his expense in an approved manner. No other pipe or material shall be placed inside of a pipe or fitting after the coating has been applied. Pipe shall be carried into position. Use of pinch bars and tongs for aligning or turning the pipe shall be permitted only on the bare ends of the pipe. Interior of pipe and accessories shall be cleaned before being lowered into the trench and shall be kept clean during laying operations by an approved method. Before installation, the pipe shall be inspected for defects. Material found to be defective before or after laying shall be replaced with sound material without additional cost to the Government. Rubber Gaskets that are not to be installed immediately shall be stored in a cool dark place out of the direct rays of the sun.

3.1.4 Location

Where the location of the water pipe is not clearly defined by dimensions, the water pipe shall be laid not closer than 10 feet from a sewer horizontally, except where the bottom of the water pipe will be at least 18 inches above the top of the sewer pipe, in which case the water pipe shall be laid not closer than 6 feet from the sewer horizontally. Where waterlines cross under gravity flow sewer lines, the sewer pipe for a distance of at least 10 feet each side of the crossing shall be fully encased in concrete or shall be made of pressure pipe with no joint located within 3 feet, horizontally, of the crossing. Waterlines shall, in all cases, cross above sewage force mains or inverted siphons and shall be not less than 2 feet above the sewer main. Joints in the sewer main closer horizontally than 3 feet, to the crossing shall be encased in concrete.

Waterlines shall not be laid in the same trench with gas lines, fuel lines, or electrical wiring.

3.1.5 Placing, Laying, and Pipe Connections

Pipe and accessories shall be carefully lowered into the trench by suitable equipment. Under no circumstances shall materials be dropped or dumped into the trench. Care shall be taken to avoid abrasion of the pipe coating. Poles used as levers for removing skids across trenches shall be made of wood and have broad flat faces to prevent damage to the pipe or coating. Except where necessary in making connections with other lines or as authorized, pipe shall be laid with the bells facing upstream. Full length of each section of pipe shall rest solidly upon the pipe bed, with recesses excavated to accommodate bells, couplings, and joints. Pipe that has the grade or joint disturbed after laying shall be taken up and relaid. Pipe shall not be laid in water or when trench conditions are unsuitable for the work. When work is not in progress, open ends of pipe, fittings, and valves shall be securely closed so that foreign material will not enter the pipes or fittings. Where any part of the coating or lining is damaged, the repair shall be made by the Contractor in an approved manner, at no additional expense to the Government.

Pipe ends left for future connections shall be valved, plugged, or capped and anchored. Where connections are made between new work and existing mains, the connections shall be made by using special sections and fittings to suit the actual conditions. Where made under pressure, connections shall be installed in accordance with the recommendations of the manufacturer of the pipe being tapped.

3.1.6 Rubber Gaskets

Rubber gaskets shall be handled, lubricated, and installed in accordance with the pipe manufacturer's recommendations. Outside annular space between abutting sections of concrete pipe shall be filled with cement mortar. When recommended by the manufacturer, the inside annular joint space shall be filled with cement mortar after backfilling has been partially accomplished.

3.1.7 Couplings and Joints

Installation of couplings and mechanical joints shall be in accordance with the manufacturer's recommendations. Pipe Connections between different types of pipe and accessories shall be made with transition fittings as recommended by the manufacturer.

3.1.8 Service Lines

Service lines shall include the lines to and connections with, the building service at a point 5 feet outside the building. Where building services are not installed, the Contractor shall terminate the service lines 5 feet from the site of the proposed building at the point designated. Such service lines shall be closed with plugs or caps. Service Stops and Gate Valves shall be provided with extension boxes of the lengths required by the depths of service line stops or valves. Service lines shall be constructed in accordance with the following: service lines 1-1/2 inches and smaller shall be connected to the main by a Corporation-Type Stops and a copper gooseneck, with a service stop below the frostline. Two-inch service lines shall be connected to the main with a rigid connection or a corporation-type stop and copper gooseneck and a gate valve located below

the frostline. Where two or more gooseneck connections to the main are required for an individual service, such connections shall be made with standard quality branch connections in conformance with recognized standard practice. The total clear area of the branches shall be at least equal to the clear area of the service which they are to supply. Service lines larger than 2 inches shall be connected to the main by a rigid connection and shall have a gate valve located below the frostline.

3.1.9 Earthwork

Perform earthwork operations in accordance with Section 31 00 00 EARTHWORK.

3.1.10 Disinfection

Prior to disinfection, obtain Contracting Officer approval of the proposed method for disposal of waste water from disinfection procedures. Disinfect new water piping and existing water piping affected by Contractor's operations in accordance with AWWA C651. Fill piping systems with solution containing minimum of 50 parts per million of available chlorine and allow solution to stand for minimum of 24 hours. Flush solution from the systems with domestic water until maximum residual chlorine content is within the range of 0.2 and 0.5 parts per million, or the residual chlorine content of domestic water supply. Obtain at least two consecutive satisfactory bacteriological samples from new water piping, analyze by a certified laboratory, and submit the results prior to the new water piping being placed into service. Disinfection of systems supplying nonpotable water is not required.

3.2 FIELD QUALITY CONTROL

3.2.1 Field Tests and Inspections

Prior to hydrostatic testing, obtain Contracting Officer approval of the proposed method for disposal of waste water from hydrostatic testing. The Contracting Officer will conduct field inspections and witness field tests specified in this section. The Contractor shall perform field tests, and provide labor, equipment, and incidentals required for testing. The Contractor shall produce evidence, when required, that any item of work has been constructed in accordance with the drawings and specifications. Do not begin testing on any section of a pipeline where concrete thrust blocks have been provided until at least 5 days after placing of the concrete.

3.2.2 Hydrostatic Test

Hydrostatic-pressure test shall be made no sooner than 72 hours after installation of thrust blocks.

3.2.3 Pressure Test

After the pipe is laid, the joints completed, the fire hydrants permanently installed, and the trench partially backfilled leaving the joints exposed for examination, the newly laid piping or any valved section of piping shall be subjected for 1 hour to a hydrostatic-pressure test of 200 psi. Mains supplying water to individual buildings for fire protection shall be subjected for 2 hours to a hydrostatic-pressure test of 200 psi. Each valve shall be opened and closed several times during the test. Exposed pipe, joints, fittings, valves, and hydrants shall be carefully examined during the open-trench test. Joints showing visible leakage shall be replaced or remade as necessary. Leaking rubber gasketed joints shall be

remade using new gaskets when necessary. Pipe, mechanical joints, fittings, valves, or hydrants discovered to be cracked or defective as a consequence of this pressure test shall be removed and replaced with sound material, and the test shall be repeated until the test results are approved.

3.2.4 Leakage Test

Leakage tests shall be conducted after the pressure test has been approved. Duration of each leakage test shall be at least 2 hours. During the test, the main shall be subjected to a pressure of 200 psi. Leakage is defined as the additional quantity of water supplied into the newly laid pipe, or any valved section thereof, necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.

Allowable leakage in gallons per hour per joint at 200 psi average test pressure shall be as follows:

PIPE DIAMETER (INCHES)	ALLOWABLE LEAKAGE (GALLONS PER HOUR)
2	0.0153
3	0.0230
4	0.0306
6	0.0458
8	0.0610
10	0.0765
12	0.0915
14	0.1070
16	0.1225
18	0.1375
20	0.1530
24	0.1830

Should any test of laid pipe disclose a leakage greater than that shown, the defective joints shall be located and repaired until the leakage is within the specified tolerance, at no additional cost to the Government.

3.2.5 Test Timing

Except where concrete-reaction backing necessitates a 72-hour delay, pipelines jointed with rubber gaskets, mechanical, or bolted joints may be subjected to hydrostatic pressure, inspected, and tested for leakage after partial completion of backfill. Concrete pipe shall be filled with water for at least 24 hours before being subjected to the pressure test and subsequent leakage test.

3.2.6 Retesting

Before permanent paving is placed over the pipeline, a measured leakage test of the entire pipeline shall be required. Leakage loss shall be within approved tolerances.

3.2.7 Sterilizing

Water piping, including valves, fittings, and other devices, shall be sterilized and tested according to AWWA C651. After successful sterilization, the piping shall be flushed before placing into service. Water for sterilization will be furnished by the Government, but disposal shall be the responsibility of the Contractor.

3.2.8 PROTECTIVE COATING

Exposed portions of steel joint rings of reinforced-concrete pipe shall be protected from corrosion by a metallic coating, or by a nonmetallic coating when approved.

3.3 CLEANUP

Upon completion of the installation of water lines, and appurtenances, all debris and surplus materials resulting from the work shall be removed.

-- End of Section --

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SECTION 33 30 00

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SECTION 33 30 00

SANITARY SEWERS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C151/A21.51	(2009) Ductile-Iron Pipe, Centrifugally Cast, for Water

ASTM INTERNATIONAL (ASTM)

ASTM C76	(2011) Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM D 3034	(2008) Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings

1.2 SYSTEM DESCRIPTION

1.2.1 Sanitary Sewer Gravity Pipeline

Demolish sanitary sewer gravity pipe line and manholes as indicated on the drawings.

1.2.2 General Requirements

The demolition required herein shall include appurtenant structures and building sewers to points of connection from the building to where the sewer system is to be disconnected and capped. Replace damaged material and redo unacceptable work at no additional cost to the Government. Backfilling shall be accomplished after inspection by the Contracting Officer. Before, during, and after installation, plastic pipe and fittings shall be protected from any environment that would result in damage or deterioration to the material. Keep a copy of the manufacturer's instructions available at the construction site at all times and shall follow these instructions unless directed otherwise by the Contracting Officer. Solvents, solvent compounds, lubricants, elastomeric gaskets, and any similar materials required to install the plastic pipe shall be stored in accordance with the manufacturer's recommendation and shall be discarded if the storage period exceeds the recommended shelf life. Solvents in use shall be discarded when the recommended pot life is exceeded.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation;

submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Existing Conditions

SD-03 Product Data

Caps

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Delivery and Storage

1.4.1.1 Piping

Inspect materials delivered to site for damage; store with minimum of handling. Store materials on site in enclosures or under protective coverings. Store plastic piping and jointing materials and rubber gaskets under cover out of direct sunlight. Do not store materials directly on the ground. Keep inside of pipes and fittings free of dirt and debris.

1.4.1.2 Metal Items

Check upon arrival; identify and segregate as to types, functions, and sizes. Store off the ground in a manner affording easy accessibility and not causing excessive rusting or coating with grease or other objectionable materials.

1.4.2 Handling

Handle pipe, fittings, and other accessories in such manner as to ensure delivery to the trench in sound undamaged condition. Take special care not to damage linings of pipe and fittings; if lining is damaged, make satisfactory repairs. Carry, do not drag, pipe to trench.

1.5 PROJECT/SITE CONDITIONS

Submit drawings of existing conditions, after a thorough inspection of the area in the presence of the Contracting Officer. Details shall include the environmental conditions of the site and adjacent areas. Submit copies of the records for verification before starting work.

PART 2 PRODUCTS

2.1 CAPS

Cut and cap existing sewer line as indicated on contract drawings.

2.2 GROUT AT MANHOLES

Grout shall be used to fill existing sanitary sewer lines and abandon in place as indicated on contract drawings. Grout compressive strength shall be equal to or greater than 2,000 lbf/in^2.

2.3 REPORTS

Compaction and density test shall be in accordance with Section 31 00 00 EARTHWORK.

PART 3 EXECUTION

3.1 INSTALLATION OF CAPS

Install caps for sewer lines as indicated on contract drawings. Caps shall be installed in accordance with AWWA Standards for the appropriate piping material. Cast iron and ductile iron pipe fittings shall be in accordance with AWWA C151/A21.51. Gasketed PVC sewer pipe fittings shall be in accordance with ASTM D 3034. Reinforced concrete pipe (RCP) fittings shall be in accordance with ASTM C76.

3.2 EARTHWORK

Perform earthwork operations in accordance with Section 31 00 00 EARTHWORK.

3.3 MISCELLANEOUS CONSTRUCTION AND INSTALLATION

3.3.1 Disconnecting to Existing Manholes

Pipe connections to existing manholes shall be made so that finish work will conform as nearly as practicable to the applicable requirements specified for new manholes, including all necessary concrete work, cutting, and shaping. The connection shall be centered on the manhole. Holes for the new pipe shall be of sufficient diameter to allow packing cement mortar around the entire periphery of the pipe but no larger than 1.5 times the diameter of the pipe. Cutting the manhole shall be done in a manner that will cause the least damage to the walls.

-- End of Section --

APPENDIX

ASBESTOS SCHEDULE (Packages 1, 2, 3, 4, and 5)

PACKAGE 1 ASBESTOS SCHEDULES

M7-0862 - HAZARDOUS WASTE STAGING SHELTER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (PIPE WRAP)	NO	NO	GOOD	2	SF	CONDUIT	GRAY PUTTY ON CONDUIT	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	255	LF	ROOF	WHITE CAULK AT SEAMS OF METAL ROOF	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	WALL COVERING (BASEBOARD)	NO	NO	GOOD	15	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
100	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	30	SF	CEILING	WHITE OVER CREAM PAINT OVER DRYWALL	AMIS
100	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	12	SF	DUCTS	BLACK DUCT MASTIC	AMIS
100	FLOOR COVERING (TILE)	YES	NO	GOOD	30	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	JONES EDMUNDS
100	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	20	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
100	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	5	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
100 HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	88	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
100 HALL	CEILING MATERIALS (TILE)	NO	YES	FAIR	8	SF	CEILING	2X4 WHITE PINHOLE	JONES EDMUNDS
100 HALL	CEILING MATERIALS (TILE)	NO	YES	FAIR	200	SF	CEILING	2X4 WHITE NATURAL FISSUE TILES	JONES EDMUNDS
100 HALL	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	25	SF	DUCTS	BLACK DUCT MASTIC	AMIS
100 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	10	SF	FLOOR	12" GRAY, WHITE & DARK GRAY SMUDGES	AMIS
100 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	294	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
100 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	12	SF	FLOOR	9" WHITE WITH GRAY AND TAN	JONES EDMUNDS
100 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	2	SF	FLOOR	9" TAN, TAUPE, GRAY, & WHITE SMUDGES	AMIS
100 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	20	SF	FLOOR	12" TAN, TAUPE, GRAY, AND WHITE SMUDGES	AMIS
100 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	42	SF	FLOOR	12" PINKISH CREAM WITH GRAY AND WHITE STREAKS	AMIS
100 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	2	SF	FLOOR	9" OLIVE GREEN WITH WHITE MARBLIZED PATTERN	AMIS
100 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	2	SF	FLOOR	9" LIGHT ORANGE WITH WHITE AND BROWN STEAKS	AMIS
100 HALL	MISCELLANEOUS (BUILDING SEAL)	NO	NO	GOOD	24	LF	WALLS	CREAM BLDG SEAL	AMIS
100 HALL	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	40	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
100 HALL	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	4	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
100B	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	100	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
100B	WALL COVERING (BASEBOARD)	NO	NO	GOOD	44	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	AMIS
100B	CEILING MATERIALS (TILE)	NO	YES	GOOD	10	SF	CEILING	2X2 WHITE PITTED AND PINHOLES	JONES EDMUNDS
100B	CEILING MATERIALS (TILE)	NO	YES	GOOD	12	SF	CEILING	2X2 WHITE NATURAL FISSURE	JONES EDMUNDS
100B	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	12	SF	DUCTS	BLACK DUCT MASTIC	AMIS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100B	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
100B	CEILING MATERIALS (TILE)	NO	YES	GOOD	98	SF	CEILING	2X2 WHITE CHICKEN SCRATH PATTERN	JONES EDMUNDS
101	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	100	SF	CEILING	WHITE/CREAM PAINT OVER DRYWALL	JONES EDMUNDS
101	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	30	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS
101	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	4	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	JONES EDMUNDS
102	WALL COVERING (BASEBOARD)	NO	NO	GOOD	54	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
102	CEILING MATERIALS (TILE)	NO	YES	GOOD	168	SF	CEILING	2X4 WHITE NATURAL FISSUE TILES	AMIS
102	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	30	SF	DUCTS	BLACK DUCT MASTIC	AMIS
102	FLOOR COVERING (TILE)	YES	NO	GOOD	180	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
102	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	75	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
102	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	8	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
103	WALL COVERING (BASEBOARD)	NO	NO	GOOD	38	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
103	CEILING MATERIALS (TILE)	NO	YES	POOR	100	SF	CEILING	2X2 WHITE PITTED AND PINHOLES	AMIS
103	CEILING MATERIALS (TILE)	NO	YES	POOR	24	SF	CEILING	2X2 WHITE PINHOLES	JONES EDMUNDS
103	CEILING MATERIALS (TILE)	NO	YES	POOR	40	SF	CEILING	2X2 WHITE NATURAL FISSURE	JONES EDMUNDS
103	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	12	SF	DUCTS	BLACK DUCT MASTIC	AMIS
103	FLOOR COVERING (TILE)	YES	NO	GOOD	168	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
103	FLOOR COVERING (TILE)	YES	NO	GOOD	4	SF	FLOOR	9" OLIVE GREEN WITH WHITE MARBLIZED PATTERN	AMIS
103	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	30	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
103	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	3	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
103A	WALL COVERING (SPACKLE & DRYWALL)	NO	YES	GOOD	120	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
103A	WALL COVERING (BASEBOARD)	NO	NO	GOOD	35	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
103A	FLOOR COVERING (TILE)	YES*	NO	GOOD	1	SF	FLOOR	ASSUMED 9" CREAM WITH GRAY STREAKS	JONES EDMUNDS
103A	CEILING MATERIALS (TILE)	NO	YES	GOOD	64	SF	CEILING	2X2 WHITE PITTED AND PINHOLES	JONES EDMUNDS
103A	CEILING MATERIALS (TILE)	NO	YES	GOOD	2	SF	CEILING	2X2 WHITE PINHOLES	JONES EDMUNDS
103A	CEILING MATERIALS (TILE)	NO	YES	GOOD	4	SF	CEILING	2X2 WHITE NATURAL FISSURE	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
103A	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	40	SF	DUCTS	BLACK DUCT MASTIC	AMIS
103A	FLOOR COVERING (TILE)	YES	NO	GOOD	96	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
103A	FLOOR COVERING (TILE)	YES	NO	GOOD	2	SF	FLOOR	9" OLIVE GREEN WITH WHITE MARBLIZED PATTERN	AMIS
103A	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	10	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
103A	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	4	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
104	FLOOR COVERING (OTHER)	NO	NO	FAIR	300	SF	FLOOR	CREAM FLOOR COATING	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	36	LF	DOORS	CREAM INTERIOR DOOR CAULK	JONES EDMUNDS
104	MISCELLANEOUS (BUILDING SEAL)	NO	YES	GOOD	180	LF	FLOOR	ORANGE-BROWN BUILDING SEAL AROUND CONCRETE PADS OF STEEL SUPPORT BEAMS	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL	NO	NO	GOOD	4	SF	EQUIPMENT	BLACK CLOTH JACKET ON JACK	JONES EDMUNDS
104	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	60	LF	DUCTS	GRAY OVER WHITE DUCT MASTIC	JONES EDMUNDS
104	MISCELLANEOUS (BUILDING SEAL)	NO	NO	GOOD	20	LF	FLOOR	GRAY BUILDING SEAL AT BAY DOOR	JONES EDMUNDS
104	FLOOR COVERING (SHEET VINYL)	NO	NO	GOOD	1540	SF	FLOOR	BEIGE, TAN & OFF WHITE NATURAL PEBBLE PATTERN	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	3	SF	WALLS	GRAY PUTTY	JONES EDMUNDS
104	CEILING MATERIALS	YES*	YES	GOOD	1,840	SF	CEILING	ASSUMED WHITE DROPDOWN CEILING	JONES EDMUNDS
104	DUCT/HVAC MATERIALS (MASTIC)	YES*	NO	GOOD	3,400	SF	HVAC	ASSUMED BLACK DUCT MASTIC INSIDE HVAC	JONES EDMUNDS
104	FLOOR COVERING (OTHER)	NO	NO	GOOD	300	SF	FLOOR	BLACK FLOOR SEALANT ALONG SEAMS	AMIS
104	FLOOR COVERING (TILE)	NO	NO	GOOD	10	SF	FLOOR	12" GRAY, WHITE & DARK GRAY SMUDGES	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	4	SF	WALLS	WHITE PAINT OVER GRAY PUTTY	AMIS
104	WALL COVERING (BASEBOARD)	YES	NO	GOOD	160	LF	WALLS	4" WHITE VINYL WALL BOARDER WITH YELLOW MASTIC	AMIS
105	MISCELLANEOUS MATERIAL (CAULK)	YES	NO	GOOD	18	LF	DOORS	CREAM INTERIOR DOOR CAULK	JONES EDMUNDS
105	MISCELLANEOUS (PUTTY)	YES	NO	GOOD	1	SF	WALLS	LIGHT GRAY/GRAY PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS
105	MISCELLANEOUS (PUTTY)	YES	NO	GOOD	4	SF	WALLS	DARK GRAY PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS
105	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	60	LF	DUCTS	GRAY DUCT MASTIC	JONES EDMUNDS
105	MISCELLANEOUS MATERIAL (CAULK)	YES	NO	GOOD	18	LF	DOORS	CREAM INTERIOR DOOR CAULK	JONES EDMUNDS
105	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	352	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
105	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	352	SF	CEILING	CREAM PAINT OVER DRYWALL	AMIS
105	FLOOR COVERING (TILE)	NO	NO	GOOD	352	SF	FLOOR	12" LIGHT YELLOW W/GOLD & WHITE SMUDGES	AMIS
105	MISCELLANEOUS (BUILDING SEAL)	NO	NO	GOOD	16	LF	WALLS	CREAM BLDG SEAL	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
105	WALL COVERING (BASEBOARD)	YES	NO	GOOD	76	LF	WALLS	4" WHITE VINYL WALL BOARDER WITH YELLOW MASTIC	AMIS
105	MISCELLANEOUS (PUTTY)	YES	NO	POOR	2	SF	WALLS	WHITE PAINT OVER BLACK PUTTY ON WALL	JONES EDMUNDS
106	MISCELLANEOUS (PUTTY)	YES	NO	GOOD	6	SF	WALLS	DARK GRAY PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS
106	WALL COVERING (SPACKLE & DRYWALL)	NO	YES	GOOD	300	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
106	WALL COVERING (BASEBOARD)	NO	NO	GOOD	50	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
106	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	100	SF	DUCTS	BLACK DUCT MASTIC	AMIS
106	FLOOR COVERING (TILE)	NO	NO	GOOD	100	SF	FLOOR	12" GRAY, WHITE & DARK GRAY SMUDGES	AMIS
106	FLOOR COVERING (TILE)	YES	NO	FAIR	166	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
106	FLOOR COVERING (TILE)	NO	NO	GOOD	4	SF	FLOOR	9" TAN, TAUPE, GRAY, & WHITE SMUDGES	AMIS
106	FLOOR COVERING (TILE)	YES	NO	GOOD	2	SF	FLOOR	9" OLIVE GREEN WITH WHITE MARBLIZED PATTERN	AMIS
107	FLOOR COVERING (OTHER)	NO	NO	GOOD	76	LF	FLOOR	BLACK FLOOR SEALANT ALONG SEAMS	AMIS
108	WALL COVERING (BASEBOARD)	NO	NO	GOOD	80	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
108	CEILING MATERIALS (TILE)	NO	YES	GOOD	350	SF	CEILING	2X2 WHITE PITTED AND PINHOLES	AMIS
108	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	50	SF	DUCTS	BLACK DUCT MASTIC	AMIS
108	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	20	SF	DUCTS	WHITE DUCT MASTIC	AMIS
108	FLOOR COVERING (TILE)	YES	NO	GOOD	350	SF	FLOOR	9" TAN WITH BLACK & WHITE BLOTS	AMIS
109	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	30	LF	PIPES	WHITE MASTIC ON MESH OVER FOAMGLASS ON 12" LINE ABOVE CEILING	JONES EDMUNDS
109	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	6	EA	PIPES	WHITE MASTIC ON MESH OVER FOAMGLASS ON 12" LINE ABOVE CEILING	JONES EDMUNDS
109	WALL COVERING (BASEBOARD)	NO	NO	GOOD	142	SF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
109	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	60	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 6" LINE ABOVE CEILING	JONES EDMUNDS
109	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	208	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
109	CEILING MATERIALS (TILE)	NO	YES	POOR	16	SF	CEILING	2X2 WHITE PINHOLES	JONES EDMUNDS
109	CEILING MATERIALS (TILE)	NO	YES	POOR	20	SF	CEILING	2X2 WHITE PINHOLES WITH LIGHT TEXTURE	JONES EDMUNDS
109	CEILING MATERIALS (TILE)	NO	YES	POOR	208	SF	CEILING	2X2 WHITE NATURAL FISSURE	JONES EDMUNDS
109	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	10	SF	DUCTS	BLACK DUCT MASTIC	AMIS
109	FLOOR COVERING (TILE)	NO	NO	GOOD	80	SF	FLOOR	12" GRAY, WHITE & DARK GRAY SMUDGES	AMIS
109	FLOOR COVERING (TILE)	YES	NO	GOOD	448	SF	FLOOR	12" CREAM WITH LIGHT BROWN SMUDGES	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
109	FLOOR COVERING (TILE)	YES	NO	GOOD	8	SF	FLOOR	12" WHITE WITH BROWN SPECKS AND SHADOWS	AMIS
109	FLOOR COVERING (TILE)	NO	NO	GOOD	8	SF	FLOOR	12" TAN, TAUPE, GRAY, AND WHITE SMUDGES	AMIS
109	FLOOR COVERING (TILE)	NO	NO	GOOD	22	SF	FLOOR	12" CREAM WITH GRAY	JONES EDMUNDS
109	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	4	SF	WALLS	WHITE PAINT OVER GRAY PUTTY	AMIS
110	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	WALLS	RED WALL SEAL	JONES EDMUNDS
110	FLOOR COVERING (OTHER)	NO	NO	FAIR	300	SF	FLOOR	CREAM FLOOR COATING	JONES EDMUNDS
110	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	36	LF	DOORS	CREAM INTERIOR DOOR CAULK	JONES EDMUNDS
110	MISCELLANEOUS (BUILDING SEAL)	NO	YES	GOOD	180	LF	FLOOR	ORANGE-BROWN BUILDING SEAL AROUND CONCRETE PADS OF STEEL SUPPORT BEAMS	JONES EDMUNDS
110	MISCELLANEOUS MATERIAL	NO	NO	GOOD	4	SF	EQUIPMENT	BLACK CLOTH JACKET ON JACK	JONES EDMUNDS
110	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	60	LF	DUCTS	GRAY DUCT MASTIC	JONES EDMUNDS
110	MISCELLANEOUS (BUILDING SEAL)	NO	NO	GOOD	20	LF	FLOOR	GRAY BUILDING SEAL AT BAY DOOR	JONES EDMUNDS
110	FLOOR COVERING (SHEET VINYL)	NO	NO	GOOD	1,540	SF	FLOOR	BEIGE, TAN & OFF WHITE NATURAL PEBBLE PATTERN	JONES EDMUNDS
110	CEILING MATERIALS	YES*	YES	GOOD	1,840	SF	CEILING	ASSUMED WHITE DROPDOWN CEILING	JONES EDMUNDS
110	DUCT/HVAC MATERIALS (MASTIC)	YES*	NO	GOOD	3,400	SF	HVAC	ASSUMED BLACK DUCT MASTIC INSIDE HVAC	JONES EDMUNDS
110	WALL COVERING (BASEBOARD)	YES	NO	GOOD	160	SF	WALLS	4" WHITE VINYL WALL BOARDER WITH YELLOW MASTIC	AMIS
111	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	8	SF	WALLS	BROWN PAPER WITH MASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
111	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	40	LF	PIPES	2" PIPE WITH FOIL OVER FOAMGLASS WITH MINOR AMOUNTS OF BLACK MASTIC	JONES EDMUNDS
111	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
111	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	16	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 6" LINE ABOVE CEILING	JONES EDMUNDS
111	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	120	LF	PIPES	WHITE MASTIC ON MESH OVER FOAMGLASS ON 12" LINE ABOVE CEILING	JONES EDMUNDS
111	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	6	EA	PIPES	WHITE MASTIC ON MESH OVER FOAMGLASS ON 12" LINE ABOVE CEILING	JONES EDMUNDS
111	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	640	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
111	WALL COVERING (BASEBOARD)	NO	NO	GOOD	160	SF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
111	FLOOR COVERING (TILE)	YES*	NO	GOOD	66	SF	FLOOR	ASSUMED 9" GRAY, WHITE & DARK GRAY	JONES EDMUNDS
111	PIPE INSULATION	YES*	YES	GOOD	100	LF	PIPES	ASSUMED 10" to 12" BROWN PAPER LINE WITH CREAM MASTIC	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	FAIR	104	SF	CEILING	2X4 WHITE PITTED AND PINHOLES	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
111	CEILING MATERIALS (TILE)	NO	YES	FAIR	16	SF	CEILING	2X4 WHITE PINHOLE	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	FAIR	16	SF	CEILING	2X4 WHITE LIGHTLY TEXTURED PINHOLE	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	FAIR	640	SF	CEILING	2X4 WHITE NATURAL FISSUE TILES	AMIS
111	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	70	SF	DUCTS	BLACK DUCT MASTIC	AMIS
111	FLOOR COVERING (TILE)	YES	NO	GOOD	621	SF	FLOOR	9" CREAM/BROWN SMUDGES AND ADHESIVE/MASTIC	AMIS
111	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	8	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
112/112A	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	65	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
112/112A	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	615	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
112/112A	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	65	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
112/112A	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	65	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
113	PIPE INSULATION, STRAIGHT (FOAM)	YES	YES	GOOD	5	LF	PIPES	METAL JACKET OVER BLACK MESH WRAP OVER GREEN FOAM OVER BLACK WRAP ON PIPE	JONES EDMUNDS
113	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	3	SF	WALLS	BLACK AND TAN SEALANT AT PIPE PENETRATIONS	JONES EDMUNDS
113	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	2	LF	WALLS	YELLOW SILICONE OVER GRAY CAULK/SEALANT AT WALL PENETRATION	JONES EDMUNDS
113	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	20	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
113	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	20	LF	DOORS	BLACK WEATHER SEAL ON DOORS	JONES EDMUNDS
113	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	200	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
113	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	280	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
113	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	460	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
113	WALL COVERING (BASEBOARD)	NO	NO	GOOD	6	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH CLEAR SILICONE MASTIC	JONES EDMUNDS
113	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	300	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
113	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	300	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
114	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	3	SF	WALLS	BLACK AND TAN SEALANT AT PIPE PENETRATIONS	JONES EDMUNDS
114	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	20	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
114	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
114	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	280	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
114	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	20	LF	DOORS	BLACK WEATHER SEAL ON DOORS	JONES EDMUNDS
114	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	280	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
114	WALL COVERING (BASEBOARD)	NO	NO	GOOD	10	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH CLEAR SILICONE MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
114	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	280	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
114	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	280	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
115	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	6	LF	WALLS	WHITE CAULK ON WALLS	JONES EDMUNDS
115	PIPE INSULATION, STRAIGHT (FOAM)	YES	YES	GOOD	20	LF	PIPES	METAL JACKET OVER BLACK MESH WRAP OVER GREEN FOAM OVER BLACK WRAP ON PIPE	JONES EDMUNDS
115	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	1	SF	WALLS	YELLOW SILICONE OVER GRAY CAULK/SEALANT AT WALL PENETRATION	JONES EDMUNDS
115	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	20	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
115	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	3	SF	WALLS	BLACK AND TAN SEALANT AT PIPE PENETRATIONS	JONES EDMUNDS
115	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	20	LF	DOORS	BLACK WEATHER SEAL ON DOORS	JONES EDMUNDS
115	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	240	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
115	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	280	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
115	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	540	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
115	WALL COVERING (BASEBOARD)	NO	NO	GOOD	5	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH CLEAR SILICONE MASTIC	JONES EDMUNDS
115	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	280	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
115	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	280	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
116	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	2	SF	DUCTS	BROWN DUCT MASTIC	JONES EDMUNDS
116	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	1	SF	WALLS	WHITE CAULK AT WALL PENETRATIONS	JONES EDMUNDS
116	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	150	SF	DUCTS	GRAY DUCT MASTIC	JONES EDMUNDS
116	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	120	LF	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 12" CHILLED WATER STRAIGHTS	JONES EDMUNDS
116	DUCT/HVAC MATERIALS (INSULATION)	NO	NO	GOOD	600	SF	HVAC	BLACK MASTIC ON WOOL FIBER INSIDE AIR HANDLER	JONES EDMUNDS
116	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	280	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
116	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	WALLS	DARK GRAY PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS
116	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	4	EA	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 2-6" CHILLED WATER ELBOWS AND TEES	JONES EDMUNDS
116	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	100	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 2-6" HEATING WATER	JONES EDMUNDS
116	MISCELLANEOUS (BUILDING SEAL)	NO	YES	GOOD	80	LF	FLOOR	BLACK TARRY/FIBROUS SEAL	JONES EDMUNDS
116	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	3	EA	HVAC	ASSUMED BLACK VIBRATION JOINT CLOTHES ON HVAC	JONES EDMUNDS
116	FLOOR COVERING (OTHER)	NO	NO	GOOD	76	LF	FLOOR	BLACK FLOOR SEALANT ALONG SEAMS	AMIS
116A	MISCELLANEOUS (BUILDING SEAL)	NO	NO	GOOD	20	LF	WALLS	CREAM BLDG SEAL	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
117/118/119	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	1000	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
117/118/119	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	6	SF	WALLS	BLACK AND TAN SEALANT AT PIPE PENETRATION	JONES EDMUNDS
117/118/119	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	880	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
117/118/119	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	440	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
117/118/119	WALL COVERING (BASEBOARD)	NO	NO	GOOD	168	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
117/118/119	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	440	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
117/118/119	CEILING MATERIALS (TILE)	NO	YES	GOOD	440	SF	CEILING	2X4 WHITE NATURAL FISSUE TILES	AMIS
117/118/119	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	33	SF	DUCTS	BLACK DUCT MASTIC	AMIS
117/118/119	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	12	SF	DUCTS	WHITE DUCT MASTIC	AMIS
117/118/119	FLOOR COVERING (TILE)	NO	NO	GOOD	880	SF	FLOOR	12" TAN, TAUPE, GRAY, AND WHITE SMUDGES	AMIS
117/118/119	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	44	LF	PIPES	2"-6" BROWN PAPER OVER FOIL OVER FIBERGLASS	AMIS
117/118/119	VALVES, ELBOWS,TEE'S	YES	YES	GOOD	1	EA	PIPES	2"-6" BLACK MASTIC OVER PAPER OVER FOIL/FIBERGLASS	AMIS
120	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	2	SF	WALLS	WHITE FOAM WALL SEAL AT PIPE PENETRATIONS	JONES EDMUNDS
120	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	2	SF	WALLS	WHITE FOAM WALL SEAL AT PIPE PENETRATIONS	JONES EDMUNDS
120	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	70	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
120	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	70	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
120	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	333	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
120	WALL COVERING (BASEBOARD)	NO	NO	POOR	17	LF	WALLS	BROWN MASTIC, 4" BLACK VINYL WALL BOARDER REMOVED	JONES EDMUNDS
120	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	70	SF	CEILING	CREAM PAINT OVER DRYWALL	AMIS
120	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	70	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
120A	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	1	SF	WALLS	RED WALL SEAL AT CONDUIT PENETRATION	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	25	LF	DOORS	WHITE PAINT OVER TAN CAULK	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	3	SF	WALLS	BLACK AND TAN SEALANT AT PIPE PENETRATION	JONES EDMUNDS
120A	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	400	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
120A	WALL COVERING (BASEBOARD)	NO	NO	GOOD	76	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
120A	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	400	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
120A	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	400	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
120C	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	20	LF	DOORS	BLACK WEATHER SEAL ON DOORS	JONES EDMUNDS
120C	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	110	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
120C	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	400	SF	WALLS	SPACKLE AND DRYWALL	JONES EDMUNDS
120C	WALL COVERING (BASEBOARD)	NO	NO	GOOD	11	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	JONES EDMUNDS
120C	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	110	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
120C	FLOOR COVERING (SHEET VINYL)	YES	NO	FAIR	110	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
120D	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	1	SF	WALLS	DARK GRAY PUTTY AT PIPE PENETRATION	JONES EDMUNDS
120D	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	6	SF	WALLS	BROWN PAPER WITH MASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
120D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	270	SF	WALLS	VINYL OVER DRYWALL PARTITIONS	JONES EDMUNDS
120D	CEILING MATERIALS (FIBERGLASS PANELS)	NO	YES	GOOD	120	SF	CEILING	FIBERGLASS CEILING PANELS	JONES EDMUNDS
120D	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	270	SF	WALLS	SPACKLE AND DRYWALL	AMIS
120D	WALL COVERING (BASEBOARD)	NO	NO	GOOD	20	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	AMIS
120D	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	120	SF	CEILING	WHITE PAINT OVER DRYWALL	AMIS
120D	FLOOR COVERING (SHEET VINYL)	YES	NO	GOOD	120	SF	FLOOR	WHITE, CREAM, TAN MOSAIC PATTERN	AMIS
124	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	18	SF	DUCTS	YELLOW DUCT MASTIC	JONES EDMUNDS
124	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	15	SF	DUCTS	GRAY DUCT MASTIC	JONES EDMUNDS
124	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	15	EA	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 12" CHILLED WATER ELBOWS AND TEES	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	3	SF	WALLS	WHITE WALL SEALANT	JONES EDMUNDS
124	MISCELLANEOUS (BUILDING SEAL)	NO	YES	GOOD	20	LF	FLOOR	DARK BROWN/BLACK FIBROUS SEAL	JONES EDMUNDS
124	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	4	EA	PIPES	WHITE PAPER OVER FOIL OVER FBGLS ON TEES AND VALVES ON HEATING WATER (ELBOWS ARE NON-SUSPECT PVC/FBGLS)	JONES EDMUNDS
124	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	140	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 6" -12" HEATING WATER	JONES EDMUNDS
124	MISCELLANEOUS (BUILDING SEAL)	NO	YES	GOOD	65	LF	FLOOR	BLACK TARRY/FIBROUS SEAL	JONES EDMUNDS
124	VALVES, ELBOWS,TEE'S	NO	NO	GOOD	8	EA	PIPES	WHITE MASTIC OVER NEOPRENE ON ELBOWS AND TEES	JONES EDMUNDS
124	PIPE INSULATION, STRAIGHT (NEOPRENE)	NO	NO	GOOD	15	LF	PIPES	WHITE MASTIC OVER NEOPRENE ON 1-4" STRAIGHTS	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	2	SF	WALLS	LIGHT YELLOW WALL SEAL ON HOLE PATCHES	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	WALLS	DARK GRAY PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
124	MISCELLANEOUS MATERIAL (SEALANT)	YES*	NO	GOOD	2	SF	CEILING	ASSUMED BLACK SHINY TAR/SEAL ON CEILING PENETRATIONS	JONES EDMUNDS
200	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	6	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 2" AND 4" LINES TO EQUIPMENT	JONES EDMUNDS
200	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	12" KACKY GREEN AND CREAM SMUDGES WITH TAN SHADOWS	AMIS
200	WALL COVERING (BASEBOARD)	NO	NO	GOOD	7	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	AMIS
200	CEILING MATERIALS (DRYWALL)	NO	YES	GOOD	60	SF	CEILING	CREAM PAINT OVER DRYWALL	AMIS
201	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	115	LF	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
201	VALVES, ELBOWS,TEE'S	NO	NO	GOOD	22	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
201	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	6	SF	WALLS	BROWN WALL SEAL AT PIPE PENETRATIONS	JONES EDMUNDS
201	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	55	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 2" AND 4" LINES TO EQUIPMENT	JONES EDMUNDS
201	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	18	EA	PIPES	CREAM MASTIC OVER PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS
201	FLOOR COVERING (TILE)	NO	NO	GOOD	609	SF	FLOOR	12" KACKY GREEN AND CREAM SMUDGES WITH TAN SHADOWS	AMIS
201	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	240	SF	WALLS	SPACKLE AND DRYWALL	AMIS
201	WALL COVERING (BASEBOARD)	NO	NO	FAIR	200	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	AMIS
201	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	30	SF	DUCTS	BLACK DUCT MASTIC	AMIS
201	FLOOR COVERING (TILE)	YES	NO	GOOD	609	SF	FLOOR	9" BEIGE WITH WHITE SPECKS	AMIS
202	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	4	SF	WALLS	BROWN WALL SEAL AT PIPE PENETRATIONS	JONES EDMUNDS
202	FLOOR COVERING (TILE)	NO	NO	GOOD	8	SF	FLOOR	24" WHITE WITH GRAY STREAKS	JONES EDMUNDS
202	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	55	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 2" AND 4" LINES TO EQUIPMENT	JONES EDMUNDS
202	WALL COVERING (BASEBOARD)	NO	NO	GOOD	160	LF	WALLS	4" BLACK VINYL WALL BOARDER WITH BROWN MASTIC	AMIS
202	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	24	LF	DOORS	GRAY DOOR CAULK	JONES EDMUNDS
202	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	140	LF	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
202	VALVES, ELBOWS,TEE'S	NO	NO	GOOD	18	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
202	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	4	EA	PIPES	CREAM MASTIC OVER PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
202	FLOOR COVERING (TILE)	NO	NO	GOOD	480	SF	FLOOR	12" KACKY GREEN AND CREAM SMUDGES WITH TAN SHADOWS	AMIS
202	WALL COVERING (SPACKLE & DRYWALL	NO	YES	GOOD	174	SF	WALLS	SPACKLE AND DRYWALL	AMIS
202	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	30	SF	DUCTS	BLACK DUCT MASTIC	AMIS
202	FLOOR COVERING (TILE)	YES	NO	GOOD	480	SF	FLOOR	9" BEIGE WITH WHITE SPECKS	AMIS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	5	SF	WALLS	DARK GRAY/GRAY PUTTY AT WALL PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	250	LF	DOORS	WHITE/CREAM/GRAY EXTERIOR CAULK ON DOORS AND CABLE TRAY EQUIPMENT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	600	LF	WALLS	CREAM PAINT OVER GRAY OVER CREAM CONCRETE EXPANSION JOINT SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	YES	FAIR	60	LF	WALLS	WHITE CAULK ON SEAMS, VENTS AND DOORS OF METAL LEAN-TO	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	GOOD	40	LF	WINDOW	WHITE WINDOW GLAZE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	120	LF	WALLS	WHITE EXPANSION JOINT SEAL ON HIGH BAY COLUMNS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	550	LF	CONCRETE	BLACK TARRY BUILDING SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (FOAM PACKING)	NO	YES	FAIR	70	LF	WALLS	BLACK FOAM PACKING ON CORRUGATED METAL WALLS OF SOUTH LEAN-TO	JONES EDMUNDS
EXTERIOR	DUCT/HVAC MATERIALS	NO	NO	FIAR	120	SF	DUCTS	BLACK INSULATION OVER BROWN MASTIC ON AC DUCTS ON SOUTH SIDE OF BUILDING	JONES EDMUNDS
EXTERIOR	DUCT/HVAC MATERIALS	NO	NO	GOOD	4	EA	AC UNIT	BLACK VIBRATION PADS ON AC UNIT ON SOUTH SIDE OF BUILDING	JONES EDMUNDS
EXTERIOR	DUCT/HVAC MATERIALS	NO	YES	FAIR	90	SF	AC UNIT	SILVER FOIL OVER GLUE OVER FIBERGLASS INSIDE AC UNIT ON SOUTH SIDE OF BUILDING	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	NO	FAIR	10	SF	GATE STAND	GREEN TAPE OVER FIBER MESH OVER MASTIC OVER CREAM FOAM	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	2	SF	WALLS	WHITE SEALANT AROUND PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	FAIR	2	SF	WALLS	TAN SEALANT AROUND PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	FLOOR COVERING (OTHER)	NO	NO	FAIR	330	SF	STAIRS	BLACK/GRAY NONSLIP COATING ON STAIRS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	6	SF	WALLS	GRAY CEMENT WALL PATCH AROUND PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (WRAP)	NO	NO	FAIR	20	LF	FIRE LINES	BLACK PIPE WRAP ON FIRE LINE VALVES	JONES EDMUNDS
EXTERIOR	FLOOR COVERING (OTHER)	NO	NO	GOOD	3,000	SF	CONCRETE	LIGHT GRAY SEALANT ON CONCRETE CONTAINMENT AREAS ON NORTH SIDE OF BUILDING	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	PIPE INSULATION, STRAIGHT (NEOPRENE)	NO	NO	GOOD	330	LF	PIPES	METAL JACKET OVER BROWN PAPER OVER NEOPRENE ON 3-6" LINE TO EYE WASH STATIONS	JONES EDMUNDS
EXTERIOR	VALVES, ELBOWS,TEE'S	NO	NO	GOOD	10	EA	PIPES	WHITE MASTIC OVER NEOPRENE ON ELBOWS AND TEES	JONES EDMUNDS
EXTERIOR	PIPE INSULATION, STRAIGHT (NEOPRENE)	NO	NO	GOOD	20	LF	PIPES	WHITE MASTIC OVER NEOPRENE ON 1-4" STRAIGHTS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (WRAP)	NO	NO	POOR	3	LF	HVAC	BLACK PIPE WRAP ON VALVES INSIDE AIR HANDLER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	10	LF	HTHW LINES	GRAY CAULK ON SEAMS AND SUPPORTS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	420	LF	HTHW LINES	METAL JACKET OVER BROWN PAPER OVER FOAMGLASS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION, STRAIGHT (FOAM)	YES	YES	GOOD	80	LF	PIPES	METAL JACKET OVER BLACK MESH WRAP OVER GREEN FOAM OVER BLACK WRAP ON PIPES OUTSIDE ROOMS 113 AND 115	JONES EDMUNDS
MIDDLE ROOF	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	25	SF	DUCTS	WHITE OVER GRAY OVER WHITE MASTIC ON SQUARE DUCTS	JONES EDMUNDS
MIDDLE ROOF	DUCT/HVAC MATERIALS (MASTIC)	YES	NO	GOOD	25	SF	DUCTS	WHITE MASTIC ON CIRCULAR DUCTS	JONES EDMUNDS
MIDDLE ROOF	DUCT/HVAC MATERIALS	NO	NO	GOOD	800	SF	DUCTS	METAL OVER PAPER OVER GLUE OVER NEOPRENE	JONES EDMUNDS
MIDDLE ROOF	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	15	SF	PIPES	WHITE MASTIC OVER MESH OVER FOAMGLASS ON 6-8" HOT H20 LINES	JONES EDMUNDS
MIDDLE ROOF	MISCELLANEOUS MATERIAL (BUILDING SEAL)	YES	NO	GOOD	210	LF	WALLS	TAN PAINT OVER CREAM EXPANSION JOINT SEAL	JONES EDMUNDS
MIDDLE ROOF & EAST/WEST BAY ROOF	ROOF (CORE)	NO	NO	GOOD	6,500	SF	ROOF	PEBBLE OVER BLACK TAR	JONES EDMUNDS
MIDDLE ROOF & EAST/WEST BAY ROOF	ROOF (FLASHING)	YES	NO	GOOD	360	SF	ROOF	SILVER FLASHING OVER BLACK TAR	JONES EDMUNDS
NORTH LOWER ROOF	ROOF (CORE)	YES	NO	GOOD	100	SF	ROOF	BLACK ROLL ASPHALT OVER TAR OVER WHITE COVER ON LOWER ROOF LEADING TO HIGH BAY ROOFS	JONES EDMUNDS
NORTH LOWER ROOF	ROOF (CORE)	NO	NO	FAIR	450	SF	ROOF	WHITE COVER ON LOWER ROOF LEADING TO HIGH BAY ROOFS	JONES EDMUNDS
SOUTH LOWER ROOF	ROOF (FLASHING)	NO	NO	GOOD	200	SF	ROOF	SILVER ROOF FLASHING OVER BLACK TAR	JONES EDMUNDS
SOUTH LOWER ROOF	ROOF (MASTIC)	NO	NO	FAIR	10	SF	ROOF DUCTS	GREEN MASTIC ON ROOF DUCTS	JONES EDMUNDS

M7-0961 - HYPERGOL MODULE PROCESSING, NORTH

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
SOUTH LOWER ROOF	ROOF (CORE)	NO	NO	GOOD	4,000	SF	ROOF	PEBBLE OVER BLACK TAR OVER FIBERBOARD	JONES EDMUNDS
SOUTH LOWER ROOF	ROOF (CORE)	NO	NO	GOOD	1,500	SF	ROOF	WHITE OVER SILVER OVER TAN ROOF COVER ON NORTH PORTION OF SOUTH LOWER ROOF	JONES EDMUNDS
SOUTH LOWER ROOF	ROOF (CORE)	NO	NO	GOOD	100	SF	ROOF	BLACK ROLL ASPHALT AROUND PIPE SUPPORTS	JONES EDMUNDS
SOUTH LOWER ROOF	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	450	LF	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 6" CHILLED WATER STRAIGHTS	JONES EDMUNDS
SOUTH LOWER ROOF	VALVES, ELBOWS,TEE'S	NO	YES	GOOD	15	EA	PIPES	WHITE PAPER OVER FOIL OVER FOAMGLASS ON 6" CHILLED WATER ELBOWS AND TEES	JONES EDMUNDS
SOUTH LOWER ROOF	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	300	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS ON 6" -12" HEATING WATER	JONES EDMUNDS
SOUTH LOWER ROOF	DUCT/HVAC MATERIALS	NO	NO	FAIR	1,000	SF	DUCTS	EXTERIOR HVAC DUCT INSULATION, WHITE MASTIC OVER MESH OVER FOAMGLASS	JONES EDMUNDS

M7-1012 - HMF MIX CRIB

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

M7-1061 - HYPERGOL SUPPORT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	12	LF	WINDOWS	CREAM WINDOW CAULK	JONES EDMUNDS
100	FLOOR COVERING (TILE)	NO	NO	GOOD	42	SF	FLOOR	12" CREAM W/BRN & WHITE STREAKS	AMIS
100	FLOOR COVERING (TILE)	YES	NO	GOOD	20	SF	FLOOR	12" WHITE W/BRN SPECKS AND SMUDGES	AMIS
100	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	440	SF	CEILING	2 X 4 FBGLS PANELS OVER DRYWALL ABOVE DROP-DOWN CEILING	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	144	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	FAIR	112	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	FAIR	24	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	36	SF	CEILING	2 X4 WHITE CHICKEN SCRATCH	JONES EDMUNDS
100	WALL COVERING (BASEBOARD)	NO	NO	POOR	88	LF	WALLS	4" BLACK VINYL WITH BROWN AND BLACK MASTIC	JONES EDMUNDS
100	FLOOR COVERING (TILE)	YES	NO	GOOD	12	SF	FLOOR	9" LIGHT BROWN W/DK BROWN & CREAM SPECKS	AMIS
100	FLOOR COVERING (TILE)	YES	NO	GOOD	336	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (MASTIC)	YES	NO	GOOD	10	SF	DUCTS	BLACK MASTIC OVER FOIL/FIBERGLASS	AMIS
100	MISCELLANEOUS MATERIAL (MASTIC)	YES*	NO	GOOD	5	EA	DUCT/HVAC	ASSUMED VIBRATION JOINT CLOTH	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	44	LF	DOORS	CREAM/WHITE CAULK ON DOOR	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	2	SF	WALLS	WHITE PAINT OVER GRAY CEMENT WALL PATCH	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	10	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
100	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	220	SF	WALLS	PAINTED VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
101	FLOOR COVERING (TILE)	NO	NO	GOOD	80	SF	FLOOR	12" CREAM W/TAN & GRAY/OLIVE SMUDGES	AMIS
101	FLOOR COVERING (TILE)	YES	NO	GOOD	15	SF	FLOOR	12" TAN WITH BROWN STREAKS WITH YELLOW MASTIC	JONES EDMUNDS
101	FLOOR COVERING (TILE)	YES	NO	GOOD	1,166	SF	FLOOR	12" WHITE W/LT GRAY & DARK GRAY STREAKS	AMIS
101	WALL COVERING (BASEBOARD)	NO	NO	FAIR	175	SF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
101	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	1,356	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	12	LF	WINDOWS	GRAY CAULK ON WINDOWS	JONES EDMUNDS
101	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	520	SF	WALLS	VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	60	LF	WINDOWS/DOORS	WHITE CAULK ON WINDOWS AND DOORS	JONES EDMUNDS

M7-1061 - HYPERGOL SUPPORT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
102	CEILING MATERIALS (TILE)	NO	YES	GOOD	100	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
102	CEILING MATERIALS (TILE)	NO	YES	FAIR	86	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
102	CEILING MATERIALS (TILE)	NO	YES	FAIR	24	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
102	PIPE INSULATION	YES	YES	GOOD	20	LF	PIPES	2" OFF-WHT PAPER O/FOIL O/FBGLS	JONES EDMUNDS
102	WALL COVERING (BASEBOARD)	NO	NO	GOOD	64	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	12	LF	WINDOWS	WHITE/CREAM CAULK ON WINDOW	JONES EDMUNDS
~~102~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
~~102~~	~~ELBOWS, VALVES, TEE'S (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
102	FLOOR COVERING (TILE)	YES	NO	GOOD	8	SF	FLOOR	9" LIGHT BROWN W/DK BROWN & CREAM SPECKS	AMIS
102	FLOOR COVERING (TILE)	YES*	NO	GOOD	8	SF	FLOOR	ASSUMED 9" RED-BROWN W/DK BROWN & CREAM SPECKS	JONES EDMUNDS
102	FLOOR COVERING (TILE)	YES	NO	GOOD	220	SF	FLOOR	9" TAUPE W/BRN & BLACK SPECKS	AMIS
102	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	220	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
102	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	220	SF	WALLS	VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	4	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
~~103~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" DIRTY WHITE W/BRN STREAKS~~	~~AMIS~~
~~103~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" OFFWHT W/BLACK SPECKS~~	~~AMIS~~
~~103~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" TAN, TAUPE, GRAY, PINK SMUDGES~~	~~AMIS~~
~~103~~	~~FLOOR COVERING (TILE)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" TAUPE W/BRN, BLACK & WHITE STREAKS~~	~~AMIS~~
~~103~~	~~FLOOR COVERING (TILE)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" WHITE W/BRN SPECKS AND SMUDGES~~	~~AMIS~~
~~103~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE~~	~~AMIS~~
~~103~~	~~WALL COVERING (BASEBOARD)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~WALLS~~	~~BLACK BASE VINYL MOLDING~~	~~AMIS~~
103/105	CEILING MATERIALS (TILE)	NO	YES	GOOD	820	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	720	SF	CEILING	2 X 4 FBGLS PANELS OVER DRYWALL ABOVE DROP-DOWN CEILING	JONES EDMUNDS
103/105	PIPE INSULATION	YES	YES	GOOD	12	LF	PIPES	2" OFF-WHT PAPER O/FOIL O/FBGLS	JONES EDMUNDS
103/105	WALL COVERING (BASEBOARD)	NO	NO	GOOD	112	LF	WALLS	4" GRAY VINYL BASECOVE WITH CREAM GLUE	JONES EDMUNDS

M7-1061 - HYPERGOL SUPPORT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
103/105	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	FAIR	90	SF	FLOOR	BLACK MASTIC UNDER STEEL SUPPORTS FOR RAISED FLOOR	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	CEILING	BLUE PIPE PUTTY ON LINE ABOVE CEILING	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	720	SF	FLOOR	CEMENT FILLER IN RAISED FLOOR PANELS	JONES EDMUNDS
103/105	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	1,120	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
103/105	DUCT/HVAC MATERIALS	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY MASTIC ON DUCT GOING TO ROOM 120A UNDER RAISED FLOOR	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	720	SF	CEILING	PAPER OVER BLACK MASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	36	LF	WINDOWS	WHITE CAULK AROUND INTERIOR WINDOW	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	21	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
103/105	DUCT/HVAC MATERIALS	NO	NO	GOOD	4	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
103/105	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	2	SF	WALLS	WHITE WALL PENETRATION SEAL UNDER RAISED FLOOR	JONES EDMUNDS
104	FLOOR COVERING (TILE)	YES	NO	GOOD	25	SF	FLOOR	12" WHITE W/LT GRAY & DARK GRAY SMUDGES	JONES EDMUNDS
104	CEILING MATERIALS (TILE)	NO	YES	POOR	40	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
104	CEILING MATERIALS (TILE)	NO	YES	FAIR	8	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
104	CEILING MATERIALS (TILE)	NO	YES	GOOD	80	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
104	CEILING MATERIALS (TILE)	NO	YES	FAIR	24	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
104	WALL COVERING (BASEBOARD)	NO	NO	GOOD	64	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
104	PIPE INSULATION	NO	YES	GOOD	22	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
104	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	12	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
104	FLOOR COVERING (TILE)	YES	NO	GOOD	220	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
104	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	640	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4	LF	WALLS	GRAY CAULK VENT	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	6	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
~~105~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" CREAM W/BRN & WHITE STREAKS~~	~~AMIS~~
~~105~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" LIGHT GRAY, DARK GRAY, WHITE SMUDGES~~	~~AMIS~~
~~105~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" TAN, TAUPE, GRAY, PINK SMUDGES~~	~~AMIS~~

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
~~105~~	~~FLOOR COVERING (TILE)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" TAUPE W/BRN, BLACK & WHITE STREAKS~~	~~AMIS~~
~~105~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~2" OFF-WHT CLOTH O/FOIL O/FBGLS~~	~~AMIS~~
~~105~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~ABATED~~	~~0~~	~~EA~~	~~PIPES~~	~~2" OFF-WHT MUDDED ELBOWS~~	~~AMIS~~
~~105~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
~~105~~	~~ELBOWS, VALVES, TEE'S (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
~~105~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES~~	~~AMIS~~
106	CEILING MATERIALS (TILE)	NO	YES	FAIR	90	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
106	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
106	CEILING MATERIALS (TILE)	NO	YES	FAIR	144	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
106	PIPE INSULATION	NO	YES	GOOD	15	LF	PIPES	2" WHITE MASTIC OVER PAPER OVER FOIL/FBGLS HOT H2O SUP/RET	JONES EDMUNDS
106	WALL COVERING (BASEBOARD)	NO	NO	GOOD	72	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
106	PIPE INSULATION	NO	YES	GOOD	30	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
106	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	16	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
106	FLOOR COVERING (TILE)	YES	NO	GOOD	308	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	WALLS	BROWN MASTIC ON PIPE PENETRATION	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	16	LF	WINDOWS	CREAM WINDOW CAULK	JONES EDMUNDS
106	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	264	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	6	SF	DUCT/HVAC	GRAY OVER WHITE DUCT MASTIC	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	6	LF	WALLS	WHITE CAULK AROUND DUCT PENETRATION	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	40	LF	WALLS	WHITE CAULK BETWEEN DRYWALL AND CONCRETE BLOCK	JONES EDMUNDS
106	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	18	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
107	FLOOR COVERING (TILE)	NO	NO	GOOD	6	SF	FLOOR	12" CREAM W/TAN & GRAY/OLIVE SMUDGES	JONES EDMUNDS
107	FLOOR COVERING (TILE)	NO	NO	GOOD	20	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
107	FLOOR COVERING (VINYL)	YES	YES	GOOD	185	SF	FLOOR	12" TAN WITH BROWN STREAKS WITH YELLOW MASTIC	JONES EDMUNDS
107	FLOOR COVERING (TILE)	NO	NO	GOOD	8	SF	FLOOR	12" TAUPE W/SILVER & GOLD STREAKS	AMIS

M7-1061 - HYPERGOL SUPPORT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
107	WALL COVERING (OTHER)	NO	YES	FAIR	220	SF	WALLS	12" WHITE FISSURE TILES WITH BROWN ADHESIVE	JONES EDMUNDS
107	CEILING MATERIALS (TILE)	NO	YES	GOOD	56	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
107	CEILING MATERIALS (TILE)	NO	YES	GOOD	8	SF	CEILING	2 X 4 WHITE CHICKEN SCRATCH TILES	JONES EDMUNDS
107	CEILING MATERIALS (TILE)	NO	YES	FAIR	128	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
107	CEILING MATERIALS (TILE)	NO	YES	FAIR	113	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
107	PIPE INSULATION	NO	YES	GOOD	60	LF	PIPES	2" WHITE PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
107	FLOOR COVERING (TILE)	NO	NO	GOOD	64	SF	FLOOR	24" BEIGE TILES	JONES EDMUNDS
~~107~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~24" OFFWHT W/LACE TAN PATTERN~~	~~AMIS~~
107	FLOOR COVERING (TILE)	NO	NO	GOOD	152	SF	FLOOR	24" WHITE TILES WITH LIGHT GRAY & DARK GRAY STREAKS	JONES EDMUNDS
107	WALL COVERING (BASEBOARD)	NO	NO	FAIR	64	SF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
~~107~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
~~107~~	~~ELBOWS, VALVES, TEE'S (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
107	MISCELLANEOUS MATERIAL	NO	NO	GOOD	4	SF	WALLS	BLACK TAR PAPER OVER BLACK MASTIC ON WALL PATCH	JONES EDMUNDS
107	FLOOR COVERING (OTHER)	NO	NO	GOOD	6	SF	STAIRS	BROWN VINYL STAIR COVER OVER BROWN MASTIC	JONES EDMUNDS
107	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	20	LF	WALLS	CREAM PAINT PAINT OVER WHITE CAULK OVER GRAY SEALANT ON EXTERIOR WALL PATCH	JONES EDMUNDS
107	MISCELLANEOUS MATERIAL (INSULATION)	NO	NO	GOOD	6	SF	CEILING	SILVER FOIL OVER FIBERGLASS WITH YELLOW GLUE	JONES EDMUNDS
107	FLOOR COVERING (VINYL)	YES	NO	GOOD	420	SF	FLOOR	WHITE AND BEIGE CONFETTI STYLE SHEET VINYL WITH YELLOW MASTIC	AMIS
108	CEILING MATERIALS (TILE)	NO	YES	POOR	72	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
108	CEILING MATERIALS (TILE)	NO	YES	GOOD	32	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
108	CEILING MATERIALS (TILE)	NO	YES	GOOD	104	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
108	CEILING MATERIALS (TILE)	NO	YES	FAIR	8	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
108	PIPE INSULATION	NO	YES	GOOD	70	LF	PIPES	2" WHITE MASTIC OVER BROWN PAPER OVER FBGLS	JONES EDMUNDS
108	WALL COVERING (BASEBOARD)	NO	NO	GOOD	70	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
108	PIPE INSULATION	NO	YES	GOOD	70	LF	PIPES	4" OFFWHT CLOTH O/FBGLS	AMIS
108	PIPE INSULATION	NO	YES	GOOD	24	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
108	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	20	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
108	FLOOR COVERING (TILE)	YES	NO	GOOD	36	SF	FLOOR	9" CREAM W/BRN SMUDGES & STREAKS	AMIS
108	FLOOR COVERING (TILE)	NO	NO	GOOD	16	SF	FLOOR	9" DIRTY WHITE W/BRN STREAKS	AMIS
108	FLOOR COVERING (TILE)	YES	NO	GOOD	242	SF	FLOOR	9" TAUPE W/BRN & BLACK SPECKS	AMIS
108	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	YES	GOOD	620	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
108	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
108	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	3	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
110	CEILING MATERIALS (TILE)	NO	YES	GOOD	96	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
110	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2 X 4 WHITE CHICKEN SCRATCH TILES	JONES EDMUNDS
110	CEILING MATERIALS (TILE)	NO	YES	FAIR	48	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
110	CEILING MATERIALS (TILE)	NO	YES	GOOD	8	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)	JONES EDMUNDS
110	WALL COVERING (BASEBOARD)	NO	NO	GOOD	66	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
110	PIPE INSULATION	NO	YES	GOOD	12	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
110	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	12	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
~~110~~	~~FLOOR COVERING (TILE)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~9" LIGHT BROWN W/DK BROWN & CREAM SPECKS~~	~~AMIS~~
110	FLOOR COVERING (TILE)	YES	NO	GOOD	242	SF	FLOOR	9" TAUPE W/BRN & BLACK SPECKS	AMIS
110	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	250	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
110	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
110	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	4	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
110	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	15	SF	CEILING	WHITE MISCELLANEOUS SEALANT ON CEILING BEAMS	JONES EDMUNDS
111	FLOOR COVERING (TILE)	NO	NO	GOOD	4	SF	FLOOR	12" CREAM W/TAN & GRAY/OLIVE SMUDGES	JONES EDMUNDS
111	FLOOR COVERING (TILE)	NO	NO	GOOD	68	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
111	FLOOR COVERING (TILE)	YES	YES	GOOD	275	SF	FLOOR	12" TAN WITH BROWN STREAKS WITH YELLOW MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
111	FLOOR COVERING (TILE)	YES	NO	GOOD	40	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
111	CEILING MATERIALS (OTHER)	NO	YES	GOOD	925	SF	CEILING	2 X 4 FBGLS PANELS OVER DRYWALL ABOVE DROP-DOWN CEILING	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	GOOD	24	SF	CEILING	2 X 4 WHITE CHICKEN SCRATCH TILES	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	GOOD	24	SF	CEILING	2 X 4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	GOOD	816	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
111	CEILING MATERIALS (TILE)	NO	YES	GOOD	925	SF	CEILING	2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)	JONES EDMUNDS
111	PIPE INSULATION	NO	YES	GOOD	50	LF	PIPES	2" OFF WHITE MASTIC OVER FOIL OVER FBGLS	JONES EDMUNDS
111	VALVES, ELBOWS, TEE'S	YES	YES	GOOD	2	EA	PIPES	2" OFF-WHITE MASTIC OVER FOIL OVER FBGLS	JONES EDMUNDS
~~111~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~2" OFF-WHT CLOTH O/FOIL O/FBGLS~~	~~AMIS~~
~~111~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~2" OFF-WHT MUDDED ELBOWS~~	~~AMIS~~
111	PIPE INSULATION	NO	YES	GOOD	140	LF	PIPES	2" WHITE PAPER OVER FOIL OVER FBGLS ON CONDENSATE LINE	JONES EDMUNDS
111	FLOOR COVERING (TILE)	NO	NO	GOOD	28	SF	FLOOR	24" BEIGE TILES	JONES EDMUNDS
111	FLOOR COVERING (TILE)	NO	NO	GOOD	48	SF	FLOOR	24" OFFWHT W/LACE TAN PATTERN	JONES EDMUNDS
111	FLOOR COVERING (TILE)	NO	NO	GOOD	300	SF	FLOOR	24" WHITE TILES WITH LIGHT GRAY & DARK GRAY STREAKS	JONES EDMUNDS
111	WALL COVERING (BASEBOARD)	NO	NO	GOOD	128	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
111	PIPE INSULATION	NO	YES	GOOD	25	LF	PIPES	4" WHITE MASTIC OVER FOAMGLASS ON CHILLED WATER	JONES EDMUNDS
111	PIPE INSULATION	NO	YES	GOOD	30	LF	PIPES	4" WHITE MASTIC OVER NEOPRENE ON CHILLED WATER	JONES EDMUNDS
111	PIPE INSULATION	NO	YES	GOOD	21	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
111	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	4	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
111	PIPE INSULATION	NO	YES	GOOD	170	LF	PIPES	6" WHITE MASTIC OVER FOAMGLASS ON CHILLED WATER	JONES EDMUNDS
111	VALVES, ELBOWS, TEE'S	NO	YES	GOOD	7	EA	PIPES	6" WHITE MASTIC OVER FOAMGLASS ON CHILLED WATER	JONES EDMUNDS
111	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	4	SF	WALLS	BLACK PUTTY ON CONDUIT AND WALL PENETRATIONS	JONES EDMUNDS
111	FLOOR COVERING (OTHER)	NO	NO	GOOD	10	SF	STAIRS	BROWN VINYL STAIR COVER OVER BROWN MASTIC	JONES EDMUNDS
111	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	2	SF	CABLE TRAY	SILVER FOIL OVER TAN MASTIC AND YELLOW GLUE OVER FBGLS INSULATION	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
111	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	32	SF	CEILING	TAN CAULK ON METAL CEILING PANELS AND BEAM JOINTS	JONES EDMUNDS
111	FLOOR COVERING (VINYL)	YES	NO	POOR	925	SF	FLOOR	WHITE AND BEIGE CONFETTI STYLE SHEET VINYL WITH YELLOW MASTIC	AMIS
113/115/117	CEILING MATERIALS (TILE)	NO	YES	GOOD	700	SF	CEILING	12" OFF-WHITE SMOOTH PINHOLE	JONES EDMUNDS
113/115/117	FLOOR COVERING (TILE)	NO	NO	GOOD	22	SF	FLOOR	12" OFFWHT W/TAN, DARK BROWN & WHITE STREAKS	AMIS
113/115/117	FLOOR COVERING (TILE)	YES	NO	GOOD	925	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
113/115/117	CEILING MATERIALS (TILE)	NO	YES	GOOD	70	SF	CEILING	12" WHITE TEXTURED PINHOLE	JONES EDMUNDS
113/115/117	CEILING MATERIALS (TILE)	NO	YES	GOOD	144	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
113/115/117	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2 X 4 WHITE CHICKEN SCRATCH TILES	JONES EDMUNDS
113/115/117	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2X4 WHITE WITH PINHOLES	AMIS
113/115/117	WALL COVERING (BASEBOARD)	NO	NO	GOOD	132	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	AMIS
113/115/117	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	80	LF	WINDOWS	CREAM WINDOW CAULK	JONES EDMUNDS
113/115/117	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	1,188	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
114	FLOOR COVERING (TILE)	NO	NO	GOOD	10	SF	FLOOR	12" CREAM W/BRN & WHITE STREAKS	AMIS
114	CEILING MATERIALS (TILE)	NO	YES	GOOD	966	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
114	WALL COVERING (BASEBOARD)	NO	NO	GOOD	130	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
114	FLOOR COVERING (TILE)	YES	NO	GOOD	956	SF	FLOOR	9" LIGHT BROWN W/DK BROWN & CREAM SPECKS	AMIS
114	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	10	EA	FIRE LINES	ASSUMED GASKETS ON FIRE LINES	JONES EDMUNDS
114	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	4	SF	WALLS	BLACK PUTTY ON WALL PENETRATIONS AND CONDUIT	JONES EDMUNDS
114	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	207	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
114	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	2	SF	CEILING	WHITE MISCELLANEOUS SEALANT ON CEILING BEAMS	JONES EDMUNDS
116	FLOOR COVERING (TILE)	YES	NO	GOOD	525	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
116	CEILING MATERIALS (TILE)	NO	YES	GOOD	460	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
116	WALL COVERING (BASEBOARD)	NO	NO	GOOD	71	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
116	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	16	LF	WINDOWS	CREAM WINDOW CAULK	JONES EDMUNDS
116	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	639	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
116	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	200	SF	WALLS	VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
116	WALL COVERING (PLASTER)	NO	NO	GOOD	80	SF	WALLS	WHITE PLASTER OVER CONCRETE BLOCK WALL	JONES EDMUNDS
118	FLOOR COVERING (TILE)	YES	NO	GOOD	180	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
118	CEILING MATERIALS (TILE)	NO	YES	GOOD	164	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
118	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2X4 WHITE WITH PINHOLES	JONES EDMUNDS
118	WALL COVERING (BASEBOARD)	NO	NO	GOOD	38	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
118	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	50	LF	WINDOWS	CREAM WINDOW CAULK	JONES EDMUNDS
118	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	342	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
118	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	200	SF	WALLS	VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
118	WALL COVERING (DRYWALL PARTITION)	NO	YES	GOOD	200	SF	WALLS	VINYL WITH BASKET WEAVE PATTERN OVER DRYWALL PARTITIONS	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	CEILING	BLACK MASTIC INSIDE ROOF VENT	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	15	SF	AC VENT	BLUE FIBERBOARD INSIDE VENT	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	300	SF	WALLS	BROWN MASTIC DRIPPING FROM CEILING	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (OTHER)	YES	NO	GOOD	40	LF	WALLS	CREAM SEALANT IN CONCRETE BLOCK EXPANSION JOINT ON WALL	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	GOOD	58	LF	FLOOR	TAN FIBROUS BUILDING SEAL	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4	LF	AC VENT	WHITE CAULK INSIDE VENT	JONES EDMUNDS
119	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	2	SF	AC VENT	WHITE MASTIC OVER NEOPRENE PACKING INSIDE VENT	JONES EDMUNDS
120	CEILING MATERIALS (TILE)	NO	YES	GOOD	260	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS
120	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	260	SF	CEILING	2 X 4 FBGLS PANELS OVER DRYWALL ABOVE DROP-DOWN CEILING	JONES EDMUNDS
120	WALL COVERING (BASEBOARD)	NO	NO	GOOD	68	LF	WALLS	4" GRAY VINYL BASECOVE WITH CREAM GLUE	JONES EDMUNDS
120	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	260	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER FIBERGLASS CEILING INSULATION	JONES EDMUNDS
120	FLOOR COVERING (OTHER)	NO	NO	GOOD	225	SF	FLOOR	CARPET OVER BROWN GLUE OVER CONCRETE	JONES EDMUNDS
120	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	680	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
120	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	18	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
120	DUCT/HVAC MATERIALS	YES	YES	GOOD	25	SF	DUCT/HVAC	WHITE EXPANSION JOINT	AMIS
120A	CEILING MATERIALS (TILE)	NO	YES	GOOD	415	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
120A	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	420	SF	CEILING	2 X 4 FBGLS PANELS OVER DRYWALL ABOVE DROP-DOWN CEILING	JONES EDMUNDS
~~120A~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~4" GRAY MUDDED ELBOWS~~	~~AMIS~~
120A	WALL COVERING (BASEBOARD)	NO	NO	GOOD	110	LF	WALLS	4" GRAY VINYL BASECOVE WITH CREAM GLUE	JONES EDMUNDS
~~120A~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4" GREYCLOTH O/FIBERGLASS~~	~~AMIS~~
~~120A~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~8" DARK GRAY & WHITE MUDDED ELBOWS~~	~~AMIS~~
~~120A~~	~~PIPE INSULATION~~	~~YES~~	~~YES~~	~~FAIR~~	~~0~~	~~LF~~	~~PIPES~~	~~8" DK. GRAY & WHITE CLOTH O/FOIL O/FIBERGLASS~~	~~AMIS~~
120A	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	30	SF	FLOOR	BLACK MASTIC UNDER STEEL SUPPORTS FOR RAISED FLOOR	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	330	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER FIBERGLASS CEILING INSULATION	JONES EDMUNDS
120A	FLOOR COVERING (OTHER)	NO	NO	GOOD	90	SF	FLOOR	CARPET OVER BROWN GLUE OVER CONCRETE	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	330	SF	FLOOR	CEMENT FILLER IN RAISED FLOOR PANELS	JONES EDMUNDS
120A	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	100	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	30	LF	WINDOWS/DOORS	WHITE CAULK AROUND INTERIOR WINDOW AND DOOR	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	FAIR	10	SF	PIPES	WHITE MASTIC ON METAL JACKET SEAMS OF 4-6" CHILLED WATER LINE	JONES EDMUNDS
120A	VALVES, ELBOWS, TEE'S	NO	YES	GOOD	8	EA	ELBOWS	WHITE MASTIC OVER FOAMGLASS ON 4" ELBOW ON 6" CHILLED WATER LINE	JONES EDMUNDS
120A	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	6	SF	CEILING	WHITE MISCELLANEOUS SEALANT ON CEILING BEAMS	JONES EDMUNDS
121	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	400	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
121	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	30	LF	WALLS	OFF WHITE SEALANT AROUND TOILETS AND CERAMIC TILES	JONES EDMUNDS
122	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	600	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
122	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	45	LF	WALLS	OFF WHITE SEALANT AROUND TOILETS AND CERAMIC TILES	JONES EDMUNDS
123	PIPE INSULATION	NO	YES	FAIR	24	LF	PIPES	2" OFF-WHT CLOTH O/FOIL O/FBGLS	AMIS
~~123~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~2" OFF-WHT MUDDED ELBOWS~~	AMIS
~~123~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	AMIS
123	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	1	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
123	PIPE INSULATION	YES	YES	FAIR	30	LF	PIPES	BEIGE PAINT OVER WHITE OVER BLACK MASTIC OVER FOIL FBGLS	JONES EDMUNDS
123	FLOOR COVERING (OTHER)	NO	NO	GOOD	11	LF	FLOOR	BLACK FLOOR SEALANT	AMIS
123	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	200	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
124	DUCT/HVAC MATERIALS	YES*	NO	GOOD	5	EA	DUCT/HVAC	ASSUMED VIBRATION JOINT CLOTH	JONES EDMUNDS
124	DUCT/HVAC MATERIALS	NO	NO	GOOD	60	SF	HVAC	BLACK MASTIC INSIDE AIR HANDLER	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (MASTIC)	YES	NO	GOOD	25	LF	WALLS	BLACK MASTIC ON WALL	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	60	LF	FLOOR	BLACK NON FIBROUS BUILDING SEAL	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	1	SF	WALLS	BROWN WALL SEAL AT WALL PENETRATION	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (OTHER)	YES	NO	GOOD	20	LF	WALLS	CREAM SEALANT IN CONCRETE BLOCK EXPANSION JOINT ON WALL	JONES EDMUNDS
124	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	20	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
124	PIPE INSULATION	NO	YES	GOOD	2	SF	WALLS	WHITE CLOTH OVER FBGLS INSULATION ON 4" PIPE PENETRATIONS	JONES EDMUNDS
124	PIPE INSULATION	NO	YES	GOOD	100	LF	PIPES	WHITE MASTIC OVER FOAMGLASS ON 6" HEATING WATER SUPPLY/RETURN	JONES EDMUNDS
124	PIPE INSULATION	NO	YES	GOOD	8	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON ELBOWS ON 6" HEATING WATER SUPPLY/RETURN	JONES EDMUNDS
124	PIPE INSULATION	NO	YES	GOOD	20	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON VALVES, ELBOWS AND TEES ON 12" CHILLED WATER	JONES EDMUNDS
124	PIPE INSULATION	NO	YES	GOOD	6	SF	PIPES	WHITE MASTIC OVER MESH OVER FOAMGLASS ON SQUARE INSULATION BOXES	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	70	SF	FLOOR	BLACK NON FIBROUS BUILDING SEAL	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	2	SF	PIPES	BLACK STICKY PIPE WRAP	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (OTHER)	YES	NO	FAIR	2	SF	WALLS	BLACK/DARK GRAY PUTTY ON PIPE PENETRATIONS	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	5	SF	WALLS	BROWN MASTIC AT PIPE PENETRATIONS	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	24	SF	DOORS	CREAM DOOR CAULK	JONES EDMUNDS
125	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	2	SF	WALLS	TAN PUTTY ON PIPE PENETRATIONS	JONES EDMUNDS
125	PIPE INSULATION	NO	YES	GOOD	20	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON VALVES, ELBOWS AND TEES ON 12" CHILLED WATER	JONES EDMUNDS
125	PIPE INSULATION	NO	YES	GOOD	32	SF	PIPES	WHITE MASTIC OVER MESH OVER FOAMGLASS ON SQUARE INSULATION BOXES	JONES EDMUNDS
125	PIPE INSULATION	NO	YES	GOOD	100	LF	PIPES	WHITE MASTIC OVER PAPER OVER FOAMGLASS ON 12" CHILLED WATER SUPPLY/RETURN	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
125	PIPE INSULATION	NO	YES	GOOD	100	~~LF~~	PIPES	WHITE MASTIC OVER PAPER OVER FOIL OVER FIBERGLASS ON 6" HEATING WATER SUPPLY/RETURN	JONES EDMUNDS
131 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	3	SF	FLOOR	12" CREAM W/BRN & WHITE STREAKS	JONES EDMUNDS
131 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	110	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
131 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	12	SF	FLOOR	12" WHITE W/BRN SPECKS AND SMUDGES	AMIS
131 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	63	SF	FLOOR	12" WHITE WITH LIGHT AND DARK GRAY SMUDGES AND BROWN MASTIC	JONES EDMUNDS
131 HALL	CEILING MATERIALS (TILE)	NO	YES	GOOD	40	SF	CEILING	2 X 2 WHITE NATURAL FISSURE	JONES EDMUNDS
131 HALL	CEILING MATERIALS (TILE)	NO	YES	FAIR	24	SF	CEILING	2 X 2 WHITE PINHOLE TILES	JONES EDMUNDS
131 HALL	CEILING MATERIALS (TILE)	NO	YES	GOOD	1,190	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS
~~131 HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)~~	~~AMIS~~
~~131 HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE AT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)~~	~~AMIS~~
~~131 HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)~~	~~AMIS~~
~~131 HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)~~	~~AMIS~~
~~131 HALL~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~2" OFF WHT CLOTH O/FOIL O/FBGLS~~	~~AMIS~~
~~131 HALL~~	~~VALVES, ELBOWS, TEE'S (MUD)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~2" OFF WHT MUDDED ELBOWS~~	~~AMIS~~
~~131 HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2X4 WHITE~~	~~AMIS~~
131 HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	200	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	AMIS
131 HALL	PIPE INSULATION	NO	YES	GOOD	70	LF	PIPES	4" BROWN PAPER OVER FBGLS NO MASTIC	JONES EDMUNDS
131 HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	40	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	AMIS
~~131 HALL~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
131 HALL	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	14	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
131 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	1,012	SF	FLOOR	9" TAUPE W/BRN & BLACK SPECKS	AMIS
131 HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	6	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
131 HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	25	SF	FLOOR	9" WHITE WITH LIGHT AND DARK GRAY SMUDGES	JONES EDMUNDS
131 HALL	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	510	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
131 HALL	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	17	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
131 HALL	DUCT/HVAC MATERIALS	NO	NO	GOOD	30	SF	DUCT/HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
131 HALL	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	ELECTRICAL BOX	GRAY/BROWN PUTTY INSIDE ELECTRICAL BOX	JONES EDMUNDS
131 HALL	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	1	SF	WALLS	RED CAULK AT WALL PENETRATION	JONES EDMUNDS
131 HALL	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	24	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
131 HALL	DUCT/HVAC MATERIALS	NO	NO	GOOD	10	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
131A HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	44	SF	FLOOR	12" WHITE WITH LIGHT AND DARK GRAY SMUDGES AND BROWN MASTIC	JONES EDMUNDS
131A HALL	CEILING MATERIALS (TILE)	NO	YES	GOOD	475	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS
~~131A HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~FAIR~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE LIGHTLY TEXTURED W/PINHOLES~~	~~AMIS~~
~~131A HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)~~	~~AMIS~~
~~131A HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)~~	~~AMIS~~
131A HALL	PIPE INSULATION	YES	YES	GOOD	200	LF	PIPES	2" WHITE PAPER/FOIL/FBGLS HOT H2O SUP/RET	JONES EDMUNDS
131A HALL	ELBOWS, VALVES, TEE'S (OTHER)	YES	YES	GOOD	24	EA	PIPES	2" WHITE PAPER/FOIL/FBGLS HOT H2O SUP/RET	JONES EDMUNDS
131A HALL	VALVES, ELBOWS, TEE'S (MUD)	YES	YES	GOOD	46	EA	ELBOWS	2" WHITE PAPER/FOIL/FBGLS HOT H2O SUP/RET ELBOWS	JONES EDMUNDS
~~131A HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~FAIR~~	~~0~~	~~SF~~	~~CEILING~~	~~2X4 WHITE~~	~~AMIS~~
131A HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	136	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
131A HALL	PIPE INSULATION	NO	YES	GOOD	200	LF	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
131A HALL	ELBOWS, VALVES, TEE'S (OTHER)	NO	YES	GOOD	24	EA	PIPES	4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET	AMIS
131A HALL	FLOOR COVERING (TILE)	YES	NO	FAIR	430	SF	FLOOR	9" TAUPE W/BRN & BLACK SPECKS	JONES EDMUNDS
131A HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	3	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
131A HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	9" WHITE WITH LIGHT AND DARK GRAY SMUDGES	JONES EDMUNDS
131A HALL	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
131A HALL	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
131A HALL	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	16	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
131B HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	672	SF	FLOOR	12" TAUPE W/BRN, BLACK & WHITE STREAKS	JONES EDMUNDS
131B HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	66	SF	FLOOR	12" WHITE WITH GRAY STREAKS/SMUDGES AND BROWN MASTIC	JONES EDMUNDS
131B HALL	CEILING MATERIALS (TILE)	NO	YES	FAIR	672	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
131B HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	136	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
131B HALL	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	2,040	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
131B HALL	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	13	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
131C HALL	CEILING MATERIALS (TILE)	NO	YES	GOOD	154	SF	CEILING	2 X 2 WHITE RANDOM FISSURE	JONES EDMUNDS
~~131C HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE LIGHTLY TEXTURED W/PINHOLES~~	~~AMIS~~
~~131C HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/LARGE HOLE (FISSURE RUN SHORTWAYS)~~	~~AMIS~~
~~131C HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 WHITE NAT. FISSURE W/PINHOLES (LONGWAYS)~~	~~AMIS~~
131C HALL	PIPE INSULATION	YES	YES	GOOD	4	LF	PIPES	2" WHITE PAPER/FOIL/FBGLS HOT H2O SUP/RET	JONES EDMUNDS
~~131C HALL~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2X4 WHITE~~	~~AMIS~~
131C HALL	WALL COVERING (BASEBOARD)	NO	NO	GOOD	46	LF	WALLS	4" BLACK VINYL WITH BROWN MASTIC	JONES EDMUNDS
~~131C HALL~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
~~131C HALL~~	~~ELBOWS, VALVES, TEE'S (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~4-6" WHITE CLOTH/FOIL/FBGLS HOT H2O SUP/RET~~	~~AMIS~~
131C HALL	FLOOR COVERING (TILE)	YES	NO	GOOD	138	SF	FLOOR	9" TAUPE, TAN, GRAY & WHITE SMUDGES	JONES EDMUNDS
131C HALL	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	9" WHITE WITH LIGHT AND DARK GRAY SMUDGES	JONES EDMUNDS
131C HALL	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
131C HALL	DUCT/HVAC MATERIALS	NO	NO	GOOD	8	SF	DUCT/HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
131C HALL	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	12	LF	WALLS	RED CAULK ON WOOD FRAME WITH SCREEN ABOVE CEILING	JONES EDMUNDS
131C HALL	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	24	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
131C HALL	DUCT/HVAC MATERIALS	NO	NO	GOOD	2	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
~~132~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" CREAM W/TAN & GRAY/OLIVE SMUDGES~~	~~AMIS~~
132	FLOOR COVERING (TILE)	NO	NO	GOOD	334	SF	FLOOR	12" LIGHT BLUE, DARK BLUE AND GRAY SMUDGES	JONES EDMUNDS
132	FLOOR COVERING (TILE)	YES	NO	GOOD	12	SF	FLOOR	12" LIGHT BLUE/GRAY WITH DARK GRAY AND WHITE SMUDGES OVER BLACK MASTIC AROUND EXTERIOR OF ROOM	JONES EDMUNDS
132	FLOOR COVERING (TILE)	NO	NO	GOOD	320	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
132	WALL COVERING (BASEBOARD)	NO	NO	GOOD	78	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
132	MISCELLANEOUS MATERIAL (OTHER)	NO	YES	GOOD	4	SF	CEILING	BLACK BUILDING SEALANT AROUND CEILING I-BEAM	JONES EDMUNDS
132	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	80	SF	FLOOR	BLACK MASTIC UNDER STEEL SUPPORTS FOR RAISED FLOOR	JONES EDMUNDS
132	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	390	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
132	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	12	SF	DUCT/HVAC	GRAY DUCT MASTIC	AMIS
132	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	30	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
132	CEILING MATERIALS (TILE)	NO	YES	GOOD	4	SF	CEILING	WHITE NATURAL FISSURE TILE (CUT TO 2 x 2)	JONES EDMUNDS
132	CEILING MATERIALS (OTHER)	NO	YES	GOOD	320	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
132	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4	SF	WALLS	WHITE WALL PENETRATIONS AROUND CONDUIT	JONES EDMUNDS
133	FLOOR COVERING (TILE)	NO	NO	GOOD	42	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
133	WALL COVERING (BASEBOARD)	NO	NO	GOOD	28	SF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
133	MISCELLANEOUS MATERIAL (OTHER)	NO	YES	GOOD	4	SF	CEILING	BLACK BUILDING SEALANT AROUND CEILING I-BEAM	JONES EDMUNDS
133	CEILING MATERIALS (OTHER)	NO	YES	GOOD	50	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
134	FLOOR COVERING (TILE)	NO	NO	GOOD	10	SF	FLOOR	12" CREAM W/BRN & WHITE STREAKS	JONES EDMUNDS
134	FLOOR COVERING (TILE)	YES	NO	GOOD	68	SF	FLOOR	12" LIGHT BLUE/GRAY WITH DARK GRAY AND WHITE SMUDGES OVER BLACK MASTIC AROUND EXTERIOR OF ROOM	JONES EDMUNDS
134	FLOOR COVERING (TILE)	NO	NO	GOOD	1,080	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
134	CEILING MATERIALS (TILE)	NO	YES	GOOD	1,080	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
134	FLOOR COVERING (TILE)	NO	NO	GOOD	8	SF	FLOOR	24" OFFWHT W/LACE TAN PATTERN	JONES EDMUNDS
134	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	24" WHITE TILES WITH LIGHT GRAY & DARK GRAY STREAKS	JONES EDMUNDS
134	WALL COVERING (BASEBOARD)	NO	NO	GOOD	132	SF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
134	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	10	EA	CONDUIT	BLACK GASKETS ON ELECTRICAL CONDUIT	JONES EDMUNDS
134	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	270	SF	FLOOR	BLACK MASTIC UNDER STEEL SUPPORTS FOR RAISED FLOOR	JONES EDMUNDS
134	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	POOR	26	LF	DOORS	BLACK STRIP AROUND DOORS	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
134	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	1,188	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
134	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	2	SF	DUCT/HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
134	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	GOOD	44	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
134	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	6	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
134	CEILING MATERIALS (OTHER)	NO	YES	GOOD	1,080	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
135	FLOOR COVERING (TILE)	YES	NO	GOOD	68	SF	FLOOR	12" LIGHT BLUE/GRAY WITH DARK GRAY AND WHITE SMUDGES OVER BLACK MASTIC AROUND EXTERIOR OF ROOM	JONES EDMUNDS
135	FLOOR COVERING (TILE)	NO	NO	GOOD	1,080	SF	FLOOR	12" LIGHT GRAY/BLUE TILES WITH DARK GRAY AND WHITE SMUDGES	JONES EDMUNDS
135	CEILING MATERIALS (TILE)	NO	YES	GOOD	1,080	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
135	FLOOR COVERING (TILE)	NO	NO	GOOD	4	SF	FLOOR	24" OFFWHT W/LACE TAN PATTERN	JONES EDMUNDS
135	WALL COVERING (BASEBOARD)	NO	NO	GOOD	132	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
135	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	4	EA	CONDUIT	BLACK GASKETS ON ELECTRICAL CONDUIT	JONES EDMUNDS
135	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	270	SF	FLOOR	BLACK MASTIC UNDER STEEL SUPPORTS FOR RAISED FLOOR	JONES EDMUNDS
135	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	POOR	26	LF	DOORS	BLACK STRIP AROUND DOORS	JONES EDMUNDS
135	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	1,188	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
135	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	GOOD	44	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
135	CEILING MATERIALS (OTHER)	NO	YES	GOOD	1,080	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
136	CEILING MATERIALS (TILE)	NO	YES	GOOD	96	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
136	WALL COVERING (BASEBOARD)	NO	NO	GOOD	40	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
136	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	360	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
136	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	10	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
137	CEILING MATERIALS (TILE)	NO	YES	GOOD	96	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
137	WALL COVERING (BASEBOARD)	NO	NO	GOOD	50	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
137	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	3	SF	WALLS	BLACK SEALANT AROUND DUCT PENETRATION	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
137	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	450	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
137	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	10	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
137	CEILING MATERIALS (OTHER)	NO	YES	GOOD	96	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
138	CEILING MATERIALS (TILE)	NO	YES	GOOD	224	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
138	WALL COVERING (BASEBOARD)	NO	NO	GOOD	58	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
138	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	600	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
138	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	10	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
138	CEILING MATERIALS (OTHER)	NO	YES	GOOD	224	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
139	CEILING MATERIALS (TILE)	NO	YES	GOOD	546	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
139	WALL COVERING (BASEBOARD)	NO	NO	GOOD	94	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
139	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	POOR	24	LF	DOORS	BLACK STRIP AROUND DOORS	JONES EDMUNDS
139	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	920	SF	WALLS	DRYWALL WITH JOINT COMPOUND	AMIS
139	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	GOOD	24	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
139	CEILING MATERIALS (OTHER)	NO	YES	GOOD	584	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
140	CEILING MATERIALS (TILE)	NO	YES	GOOD	490	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
140	WALL COVERING (BASEBOARD)	NO	NO	GOOD	94	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
140	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	POOR	24	LF	DOORS	BLACK STRIP AROUND DOORS	JONES EDMUNDS
140	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	630	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
140	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	GOOD	24	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
140	CEILING MATERIALS (OTHER)	NO	YES	GOOD	490	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
141	CEILING MATERIALS (TILE)	NO	YES	GOOD	140	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
141	WALL COVERING (BASEBOARD)	NO	NO	GOOD	48	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
141	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	486	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
141	CEILING MATERIALS (OTHER)	NO	YES	GOOD	140	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
142	CEILING MATERIALS (TILE)	NO	YES	GOOD	128	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
142	WALL COVERING (BASEBOARD)	NO	NO	GOOD	48	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
142	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	432	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
142	CEILING MATERIALS (OTHER)	NO	YES	GOOD	108	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
143	CEILING MATERIALS (TILE)	NO	YES	GOOD	108	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
143	WALL COVERING (BASEBOARD)	NO	NO	GOOD	42	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
143	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	378	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
143	CEILING MATERIALS (OTHER)	NO	YES	GOOD	108	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
144	CEILING MATERIALS (TILE)	NO	YES	GOOD	108	SF	CEILING	2 X 4 NAT. FISSURES W/MANY SMALL PINHOLES (FISSURES RUN SHORTWAY)	JONES EDMUNDS
144	WALL COVERING (BASEBOARD)	NO	NO	GOOD	38	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH TAN MASTIC	JONES EDMUNDS
144	WALL COVERING (DRYWALL AND JOINT COMPOUND)	NO	NO	GOOD	360	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
144	CEILING MATERIALS (OTHER)	NO	YES	GOOD	108	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	HVAC	BLACK STICKY PIPE PUTTY ON HVAC PIPING	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	1	SF	WALLS	BLACK TAR PAPER AROUND PIPE PENETRATION	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	1	EA	DUCT/HVAC	ASSUMED VIBRATION JOINT CLOTH	JONES EDMUNDS
145	DUCT/HVAC MATERIALS	NO	YES	FAIR	180	SF	HVAC	BLACK/YELLOW INSULATION OVER GLUE INSIDE AIR HANDLERS	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	58	LF	FLOOR	DARK BROWN/BLACK BUILDING SEAL	JONES EDMUNDS
145	DUCT/HVAC MATERIALS	NO	NO	GOOD	2	SF	DUCT/HVAC	GRAY PUTTY ON PENETRATIONS ON DUCT/HVAC	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	25	LF	WALLS	WHITE CAULK ON DUCT PENETRATION	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (MASTIC)	NO	YES	GOOD	15	SF	DUCT/HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
145	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	FAIR	275	SF	CEILING	WHITE PLASTIC OVER FBGLS CEILING INSULATION	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EAST/WEST HALL	MISCELLANEOUS MATERIAL (PIPE WRAP)	NO	NO	GOOD	100	LF	PIPES	2" PIPE BEIGE INSULATION	AMIS
EXTERIOR	PIPE INSULATION	NO	NO	POOR	95	LF	PIPES	4-12" PIPE WITH WHITE MASTIC OVER NEOPRENE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	YES	POOR	210	LF	CONCRETE	BLACK FIBROUS BUILDING SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	POOR	40	SF	AC UNIT	BLACK TAR ON AC UNIT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	5	SF	CONCRETE PAD	BLACK TAR SPILLED ON CONCRETE ENTRANCE TO MECHANICAL ROOM	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	30	LF	CONCRETE	BLACK TARRY BUILDING SEAL ON SOUTH WALL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	POOR	2	EA	BLOWER	BLACK VIBRATION JOINT CLOTH ON BLOWER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	1	EA	JUNCTION BOX	BROWN GASKET ON ELECTRIC BOX	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	1,200	LF	WALLS	CREAM EXPANSION SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	2	SF	WALLS	CREAM/WHITE EXPANSION CAULK AT PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	1,000	LF	WALLS	GRAY & BLUE FOAM PACKING AT TOP OF CORRUGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	1	SF	FIRE LINE	GRAY CAULK AROUND BASE OF FIRE LINE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	8	LF	PIPES	GRAY CAULK ON HEATING WATER METAL JACKET	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	48	LF	WALLS	GRAY EXPANSION CAULK AT BUILDING CORNERS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	WALLS	GRAY PUTTY ON SOUTH WALL AT PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	YES	NO	GOOD	2	SF	WALLS	LIGHT GRAY CEMENT PATCH AT WALL PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	1	SF	WALLS	RED WALL PATCH AT TUBING PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	32	LF	WALLS	WHITE CAULK AROUND VENTS ON WEST WALL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	250	LF	DOORS	WHITE EXTERIOR DOOR CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	YES	NO	FAIR	38	LF	WINDOWS	WHITE WINDOW GLAZE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	70	LF	WINDOWS	WHITE/CREAM WINDOW CAULK	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	120	LF	PIPES	METAL OVER BROWN PAPER OVER NEOPRENE ON 6" WHITE PAINTED IRON PIPE GOING TO ROOF AND FIRE LINE	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	75	LF	PIPES	METAL OVER WHITE MASTIC OVER BROWN PAPER OVER NEOPRENE ON 4" WHITE PAINTED IRON PIPE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	POOR	4	EA	HVAC	BLACK VIBRATION PADS ON OUTSIDE AIR HANDLER	JONES EDMUNDS

M7-1061 - HYPERGOL SUPPORT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	4	EA	HVAC	GREEN VIBRATION PADS ON OUTSIDE AIR HANDLER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	3	LF	HVAC	BLACK STICKY PIPE WRAP ON VALVES TO OUTSIDE AIR HANDLER	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (MASTIC)	NO	NO	FAIR	10	SF	HVAC	CREAM MASTIC ON OUTSIDE PIPES TO AIR HANDLER (LABELED ASBESTOS FREE)	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	6	EA	HVAC	ASSUMED GASKETS ON AIR HANDLER MOTORS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	1	SF	CONDUIT	BLACK MASTIC ON ELECTRICAL CONDUIT	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	1	LF	PIPES	BLACK PIPE WRAP ON CHILLED WATER VALVES	JONES EDMUNDS
ROOF	ROOF (CORE)	NO	NO	GOOD	12,000	SF	ROOF	GRAVEL OVER TAR OVER CONCRETE DECKING	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	4	SF	PIPES	GRAY MASTIC ON METAL JACKET OF CHILLED WATER LINES	JONES EDMUNDS
ROOF	ROOF (FLASHING)	YES	NO	GOOD	15	SF	PITCH PANS	SILVER MASTIC OVER BLACK TAR ON PITCH PANS	JONES EDMUNDS
ROOF	ROOF (FLASHING)	NO	NO	GOOD	144	SF	HATCH COVERS	SILVER MASTIC OVER BLACK TAR PAPER ON HATCH COVERS	JONES EDMUNDS
ROOF	ROOF (FLASHING)	NO	NO	GOOD	135	SF	ROOF	SILVER MASTIC OVER TAR	JONES EDMUNDS
ROOF	DUCT/HVAC MATERIALS	YES	YES	GOOD	25	LF	DUCT/HVAC	WHITE EXPANSION JOINT	AMIS
ROOF	PIPE INSULATION (STRAIGHT)	NO	YES	GOOD	10	LF	PIPES	WHITE MASTIC OVER FOAMGLASS ON 4" CHILLED WATER	JONES EDMUNDS
ROOF	PIPE INSULATION (VALVES, ELBOWS, TEES)	NO	YES	GOOD	6	EA	ELBOWS	WHITE MASTIC OVER FOAMGLASS ON 4" CHILLED WATER	JONES EDMUNDS
ROOF	PIPE INSULATION (VALVES, ELBOWS, TEES)	NO	YES	GOOD	10	EA	ELBOWS	WHITE MASTIC OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
ROOF	PIPE INSULATION (STRAIGHT)	NO	YES	GOOD	160	LF	PIPES	WHITE MASTIC OVER FOAMGLASS ON 6" CHILLED WATER	JONES EDMUNDS
ROOF	ROOF (MASTIC)	NO	NO	GOOD	10	SF	PIPING	WHITE MASTIC ON METAL PIPE STANDS AND 10" PIPING METAL JACKETS	JONES EDMUNDS
ROOF	PIPE INSULATION (STRAIGHT)	NO	YES	GOOD	100	LF	PIPES	WHITE MASTIC OVER FOAMGLASS ON 10" CHILLED WATER	JONES EDMUNDS
ROOF	PIPE INSULATION (VALVES, ELBOWS, TEES)	NO	YES	GOOD	6	EA	ELBOWS	WHITE MASTIC OVER FOAMGLASS ON 10" CHILLED WATER	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL, SEALANT	YES*	NO	GOOD	2	SF	ROOF	ASSUMED ROOF SEALANT AROUND TWO 4-INCH DIAMETER VENT STACKS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL, SEALANT	YES*	NO	GOOD	1	SF	ROOF	ASSUMED ROOF SEALANT AROUND ONE EXHAUST VENT	JONES EDMUNDS

M7-1061A - GHE AND GN2 STORAGE

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100/EXTERIOR	FLOOR COVERING (OTHER)	YES	NO	FAIR	75	LF	FLOOR	BLACK FLOOR SEAL	AMIS
100/EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	27	LF	FLOOR	BROWN FIBROUS BUILDING SEAL	AMIS

M7-1061B - ANTENNA TOWER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	6	SF	TOWER BASE	BROWN CAULK AT BASE OF TOWER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	16	SF	TOWER BASE	BROWN OVER CREAM CEMENTIOUS CONCRETE SEALANT ON ANTENNA FOOTERS	JONES EDMUNDS

M7-1112 - HEATING PLANT & HIGH TEMPERATURE HOT WATER (HTHW) LINES

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
HEATING PLANT	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	1	SF	GUTTERS	WHITE CAULK, NORTH AND SOUTH DOWN SPOUT	AMIS
HEATING PLANT	~~PIPE INSULATION~~	~~YES~~	~~YES~~	~~ABATED~~	~~0~~	~~LF~~	~~PIPES~~	~~MUDDED PIPE INSULATION, UNDER METAL JACKET~~	~~AMIS~~
HEATING PLANT	PIPE INSULATION (STRAIGHT)	NO	YES	GOOD	50	LF	HTHW LINES	METAL JACKET OVER BLUE PLASTIC OF WHITE/CEAM MUDDED PIPE INSULATION	JONES EDMUNDS
HEATING PLANT	PIPE INSULATION (STRAIGHT)	NO	YES	FAIR	10	LF	PIPES	WHITE PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS
HEATING PLANT	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	300	SF	TANK	FOIL OVER YELLOW MASTIC OVER FIBERGLASS ON HEATING TANK	JONES EDMUNDS
HEATING PLANT	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	10	LF	HTHW LINES	WHITE MASTIC OVER NEOPRENE	JONES EDMUNDS
HEATING PLANT	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	65	LF	HTHW LINES	METAL JACKET OVER BROWN MASTIC/PAPER OVER FOAMGLASS	JONES EDMUNDS
LIFT STATION	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	80	LF	CONCRETE	BLACK BUILDING SEAL AROUND BASE OF LIFT STATION	JONES EDMUNDS
LIFT STATION	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	15	EA	PIPES	ASSUMED GASKETS ON LIFT STATION PIPES	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	300	LF	HTHW LINES	METAL JACKET OVER BROWN MASTIC/PAPER OVER FOAMGLASS ON 6" LINE	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	110	LF	HTHW LINES	METAL JACKET OVER BROWN MASTIC/PAPER OVER FOAMGLASS ON 12" LINE	JONES EDMUNDS
G AVENUE	MISCELLANEOUS MATERIAL (MASTIC)	YES	NO	GOOD	100	LF	HTHW LINES	WHITE MASTIC ON METAL JACKET OF PIPES	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	YES	YES	GOOD	15	LF	HTHW LINES	METAL JACKET OVER BLACK MASTIC OVER GRAY FIBROUS INSULATION (LABELED ASBESTOS FREE)	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	YES	NO	FAIR	200	LF	HTHW LINES	BLACK MASTIC OVER MESH ON METAL PIPE CASING GOING UNDERGROUND	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	YES	YES	FAIR	3,600	LF	HTHW LINES	METAL JACKET OVER WHITE/CREAM MUDDED INSULATION	JONES EDMUNDS
G AVENUE	PIPE INSULATION (OTHER)	NO	NO	GOOD	16	LF	HTHW LINES	WHITE MASTIC OVER FOAMGLASS	JONES EDMUNDS
G AVENUE	PIPE INSULATION (STRAIGHT)	NO	YES	GOOD	15	LF	HTHW LINES	METAL OVER BLUE PAPER OVER WHITE MASTIC OVER WHITE MUDDED INSULATION	JONES EDMUNDS
G AVENUE	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	FAIR	8	SF	HTHW LINES	GRAY OVER WHITE MASTIC OVER FOAMGLASS AT PIPE ENDS	JONES EDMUNDS
G AVENUE	PIPE INSULATION (ELBOWS)	NO	NO	GOOD	12	EA	HTHW LINES	METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS	JONES EDMUNDS
G AVENUE	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	20	LF	HTHW LINES	GRAY CAULK AT METAL JACKET SEAMS	JONES EDMUNDS
G AVENUE	PIPE INSULATION (ELBOWS)	YES	YES	FAIR	54	EA	HTHW LINES	METAL JACKET OVER PAPER OVER BLACK MASTIC OVER WHITE MUDDED INSULATION	JONES EDMUNDS
G AVENUE	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	8	EA	HTHW LINES	ASSUMED GASKETS ON HTHW LINE PIPES	JONES EDMUNDS

M6-897 - WASTE WATER TREATMENT FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100 (OFFICE)	CEILING MATERIALS (TILE)	NO	YES	POOR	230	SF	CEILING	2X4 WHITE NATURAL FISSURE WITH PINHOLES	AMIS
100 (OFFICE)	FLOOR COVERING (TILE)	NO	NO	GOOD	230	SF	FLOOR	12" DARK GRAY WITH PINK, BLUE, AND WHITE STREAKS	AMIS
100 (OFFICE)	WALL COVERING (BASEMOLDING)	NO	NO	GOOD	65	LF	WALLS	6" GRAY VINYL BASE BOARD WITH MASTIC	AMIS
100 (OFFICE)	WALL COVERING (DRYWALL)	NO	YES	GOOD	230	SF	WALLS	DRYWALL	AMIS
100 (OFFICE)	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	76	SF	WALLS	JOINT COMPOUND	AMIS
101	WALL COVERING (DRYWALL)	NO	YES	GOOD	230	SF	WALLS	DRYWALL	AMIS
101	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	76	SF	WALLS	JOINT COMPOUND	AMIS
101	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	20	EA	EQUIPMENT	BLACK VIBRATION PADS ON EQUIPMENT	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	16	EA	EQUIPMENT	BLACK GASKETS ON EQUIPMENT	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	1	EA	EQUIPMENT	RED GASKET ON EQUIPMENT	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	6	EA	EQUIPMENT WIRING	YELLOW INSULATION WRAP ON BRACKETS HOLDING EQUPMENT WIRING	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	20	LF	DOORS	WHITE CAULK ON DOORS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (STRAIGHT)	NO	YES	FAIR	3	LF	PIPES	WHITE MASTIC OVER FOIL OVER FIBERGLASS INSULATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	40	LF	WINDOWS	WHITE CAULK ON WINDOWS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	POOR	2	SF	PIPE	GRAY PIPE PUTTY AT BOTTOM OF PVC PIPE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	15	LF	VENTS	TAN CAULK ON INSIDE OF VENT	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	800	SF	ROOF	CREAM SEALANT ON ROOF	JONES EDMUNDS

M7-0459 - ISSC CONCESSION BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
BREAK ROOM	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	120	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
BREAK ROOM	CEILING MATERIALS (TILE)	NO	YES	GOOD	110	SF	CEILING	2' X 2' NATURAL FISSURE TILES	JONES EDMUNDS
BREAK ROOM	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	FAIR	420	SF	WALLS	DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
BREAK ROOM	FLOOR COVERING (TILE)	NO	NO	GOOD	110	SF	FLOOR	12" GRAY TILE WITH BLACK SPECKS AND BROWN GLUE	JONES EDMUNDS
BREAK ROOM	WALL COVERING (BASEMOLDING)	NO	NO	GOOD	45	LF	WALLS	4" GRAY VINYL BASECOVE WITH YELLOW/CREAM GLUE	JONES EDMUNDS
BREAK ROOM	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	4	SF	SINK	GRAY COATING UNDER SINK	JONES EDMUNDS
BREAK ROOM	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	LF	CEILING	WHITE MASTIC OVER FOIL OVER FIBERGLASS DUCT INSULATION	JONES EDMUNDS
ELECTRIC ROOM	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	420	SF	WALLS	DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
ELECTRIC ROOM	FLOOR COVERING (TILE)	NO	NO	GOOD	110	SF	FLOOR	12" GRAY TILE WITH BLACK SPECKS AND BROWN GLUE	JONES EDMUNDS
ELECTRIC ROOM	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	LF	CEILING	WHITE MASTIC OVER FOIL OVER FIBERGLASS DUCT INSULATION	JONES EDMUNDS
ELECTRIC ROOM	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	320	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
ELECTRIC ROOM	CEILING MATERIALS (TILE)	NO	YES	GOOD	110	SF	CEILING	2' X 2' WHITE SMOOTH TILES	JONES EDMUNDS
ELECTRIC ROOM	WALL COVERING (BASEMOLDING)	NO	NO	GOOD	45	LF	WALLS	4" GRAY VINYL BASECOVE WITH YELLOW/CREAM GLUE	JONES EDMUNDS
ELECTRIC ROOM	WALL COVERING (JOINT COMPOUND)	NO	NO	GOOD	2	SF	WALLS	WHITE JOINT COMPOUND IN WALL PATCHES UNDER PANEL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	3,400	SF	WALLS/ CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
JANITOR'S ROOM	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	30	LF	WALLS/CEILING	WHITE PAPER OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
JANITOR'S ROOM	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC ON METAL DUCT	JONES EDMUNDS
JANITOR'S ROOM	DUCT/HVAC MATERIALS, VIBRATION JOINT CLOTH	YES*	NO	GOOD	1	EA	CEILING	ASSUMED VIBRATION JOINT CLOTH	JONES EDMUNDS
KITCHEN/ CONCESSION	CEILING MATERIALS (TILE)	NO	YES	GOOD	200	SF	CEILING	2' X 2' RANDOM HOLE TILES	JONES EDMUNDS
KITCHEN/ CONCESSION	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	4	LF	CEILING	WHITE MASTIC OVER FOIL OVER FIBERGLASS DUCT INSULATION	JONES EDMUNDS
KITCHEN/ CONCESSION	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	720	SF	WALLS	WHITE DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
KITCHEN/ CONCESSION	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	450	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
MEN'S ROOM	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	6	SF	SINKS	GRAY COATING UNDER SINK	JONES EDMUNDS

M7-0459 - ISSC CONCESSION BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
MEN'S ROOM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	200	LF	WALLS	WHITE CAULK AROUND CERMAIC TILES ON WALL AND TOILETS	JONES EDMUNDS
MEN'S ROOM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	40	LF	WALLS/ COUNTERS	GRAY CAULK AROUND SINKS	JONES EDMUNDS
SPACE SHOP	PIPE INSULATION (STRAIGHT)	NO	NO	GOOD	15	LF	CEILING	WHITE PAPER OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
SPACE SHOP	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	2	SF	CEILING	GRAY DUCT MASTIC ON METAL DUCT	JONES EDMUNDS
SPACE SHOP	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	50	LF	CEILING	WHITE MASTIC OVER FOIL OVER FIBERGLASS DUCT INSULATION	JONES EDMUNDS
SPACE SHOP	CEILING MATERIALS (TILE)	NO	YES	GOOD	400	SF	CEILING	2' X 2' NATURAL FISSURE TILES	JONES EDMUNDS
SPACE SHOP	FLOOR COVERING (TILE)	NO	NO	GOOD	400	SF	FLOOR	3' X 3' BLUE TILES WITH WHITE AND BLUE STREAKS	JONES EDMUNDS
SPACE SHOP	WALL COVERING (BASEMOLDING)	NO	NO	GOOD	80	LF	WAKKS	4" BLUE-GRAY VINYL BASECOVE	JONES EDMUNDS
SPACE SHOP	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	800	SF	WALLS	WHITE VENEER COVERED PARTICLE BOARD OVER DRYWALL	JONES EDMUNDS
SPACE SHOP	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	600	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
STORAGE/SINK ROOM	CEILING MATERIALS (TILE)	NO	YES	GOOD	156	SF	CEILING	2' X 2' RANDOM HOLE TILES	JONES EDMUNDS
STORAGE/SINK ROOM	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	600	SF	WALLS	WHITE/OFF-WHITE DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
STORAGE/SINK ROOM	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	2	EA	FIRE LINES	ASSUMED GASKETS ON RED FIRE LINES	JONES EDMUNDS
STORAGE/SINK ROOM	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	LF	CEILING	WHITE MASTIC OVER FOIL OVER FIBERGLASS DUCT INSULATION	JONES EDMUNDS
STORAGE/SINK ROOM	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	360	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
STORAGE/SINK ROOM	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	6	SF	SINKS	GRAY COATING UNDER SINK	JONES EDMUNDS
WOMEN'S ROOM	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	10	SF	SINKS	GRAY COATING UNDER SINK	JONES EDMUNDS
WOMEN'S ROOM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	200	LF	WALLS	WHITE CAULK AROUND CERMAIC TILES ON WALL AND TOILETS	JONES EDMUNDS
WOMEN'S ROOM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	60	LF	WALLS/ COUNTERS	GRAY CAULK AROUND SINKS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	60	LF	WINDOWS	GRAY CAULK ON CONCESSION WINDOWS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	35	LF	WINDOWS/DOORS	TAN CAULK ON SPACE SHOP WINDOWS AND DOOR	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	25	LF	WALLS	WHITE CAULK AT TOP OF WALLS AND AROUND VENTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	6	LF	WALLS	WHITE OVER GREEN CAULK ON FIRE EXTINGUISHER BOX	JONES EDMUNDS

M7-0459 - ISSC CONCESSION BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	GOOD	40	LF	FLOOR	TAN FIBROUS BUILDING SEAL BETWEEN METAL SUPPORTS AND CONCRETE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	CONDUIT	BLUE PUTTY ON CONDUIT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	YES	FAIR	30	LF	DRAINS	BLACK FIBROUS WRAP ON BLUE PVC DRAIN PIPES	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	5	EA	ELECTRICAL BOXES	ASSUMED GASKETS ON ELECTRICAL BOXES	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES*	NO	GOOD	20	EA	ROOF	ASSUMED LIGHT YELLOW SEALANT AROUND AIR TERMINALS ON ROOF AND CANOPY	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES*	NO	GOOD	40	LF	ROOF	ASSUMED WHITE CAULK AROUND EDGE OF CANOPY WHERE CANOPY MEETS BUILDING	JONES EDMUNDS

M7-0459A - Guard House

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	4	LF	WALLS	WHITE CAULK AROUND AC UNIT	JONES EDMUNDS

PACKAGE 2 ASBESTOS SCHEDULES

J8-1564 - FOAM BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	60	LF	FLOOR	BLACK BUILDING SEAL BETWEEN CONCRETE PAD AND WALLS	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	60	LF	WALLS	GRAY PAINT OVER TAN CONCRETE EXPANSION SEAL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	20	LF	DOOR	WHITE PAINT OVER GRAY DOOR CAULK	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	POOR	2	SF	WALLS	GRAY/GREEN TAPE WITH BLACK MASTIC	JONES EDMUNDS
INTERIOR	WALL COVERING (PANEL)	NO	NO	GOOD	6	SF	WALLS	CONCRETE PANEL OVER DOOR	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	POOR	60	LF	WALLS	LIGHT GRAY CONCRETE EXPANSION SEAL ON EXTERIOR WALLS	JONES EDMUNDS
ROOF	ROOF (CORE)	NO	NO	GOOD	180	SF	ROOF	PEBBLE OVER BLACK TAR ON BUILT-UP ROOF	JONES EDMUNDS
ROOF	ROOF (CAULK)	YES	YES	FAIR	6	LF	ROOF	WHITE CAULK ON SILVER FLASHING AROUND ROOF EDGE	JONES EDMUNDS
ROOF	ROOF (FLASHING)	YES*	NO	GOOD	8	SF	ROOF VENT	ASSUMED SILVER FLASHING ON ROOF VENT	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS

J8-1811 - ELECTRICAL EQUIPMENT BUILDING NO. 3

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4	SF	WALLS	RED SEALANT ON CONDUIT PENETRATIONS	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	FAIR	20	SF	HVAC	FOIL OVER BLUE FIBERGLASS OVER GRAY GLUE/MASTIC ON AC UNIT	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	60	LF	WIRES	WHITE INSULATION ON WIRES	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	FAIR	25	LF	DOORS	WHITE WEATHER STRIPPING	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	20	EA	ELECTRICAL BOXES	ASSUMED GASKETS ON ELECTRICAL CONDUIT BOXES	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	2	SF	WALLS	GRAY PUTTY AT ELECTRICAL CONDUIT PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	10	LF	WALLS	WHITE CAULK AT BOTTOM OF CORRUGATED WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	FAIR	20	LF	HVAC	YELLOW-BROWN INSULATION AROUND EXTERIOR OF AC UNIT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (FOAM PACKING)	NO	NO	POOR	80	LF	WALLS	GRAY AND RED FOAM PACKING ALONG TOP OF CORRUGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	4	EA	ELECTRICAL CONDUIT	AMBER PROTECTIVE COATING ON CONDUIT AND ELECTRICAL BOXES	JONES EDMUNDS
ROOF	ROOF (COVER)	NO	NO	GOOD	440	SF	ROOF	WHITE ROOF COVER	JONES EDMUNDS
ROOF	ROOF (CAULK)	NO	NO	GOOD	44	LF	ROOF	GRAY CAULK ALONG ROOF PEAK	JONES EDMUNDS

J8-1856 - ELECTRICAL EQUIPMENT BUILDING NO. 4

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	1	SF	WALLS	GRAY PUTTY AT ELECTRICAL CONDUIT PENETRATION	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	20	SF	HVAC	BLUE FIBERBOARD OVER TAN GLUE/MASTIC ON AC UNIT	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	200	LF	WIRES	WHITE INSULATION ON WIRES	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	FAIR	40	LF	DOORS	WHITE CLOTH WEATHER STRIPPING	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	20	EA	ELECTRICAL BOXES	ASSUMED GASKETS ON ELECTRICAL CONDUIT BOXES	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	2	SF	WALLS	RED SEALANT ON CONDUIT PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (FOAM PACKING)	NO	NO	FAIR	100	LF	WALLS	GRAY AND RED FOAM PACKING ALONG TOP AND BOTTOM OF CORRUGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	20	LF	WALLS	WHITE PAINT OVER GRAY CAULK AROUND BASE OF BUILDING	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	44	LF	ROOF	WHITE OVER GRAY CAULK ON ROOF VENT	JONES EDMUNDS

J8-1862 - HYPERGOL OXIDIZER FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
OXIDIZER FARM	ELECTRICAL (CONDUIT)	NO	NO	GOOD	100	LF	CONDUIT	WHITE CONDUIT COVER	AMIS
OXIDIZER FARM	ELECTRICAL (INSULATION)	NO	NO	POOR	200	LF	WIRES	WHITE INSULATION OVER OFF-WHITE COATING ON 1/4" WIRE	JONES EDMUNDS
~~OXIDIZER FARM~~	~~PIPE INSULATION, STRAIGHT (MUD)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~7" STRAIGHT PIPE INSULATION~~	AMIS
~~OXIDIZER FARM~~	~~PIPE INSULATION, STRAIGHT (WRAP)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPES~~	~~7" STRAIGHT LINE SKIN~~	AMIS
~~OXIDIZER FARM~~	~~VALVES, ELBOWS, TEE'S (WRAP)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~ELBOWS~~	~~OFF-WHITE ELBOW MUD~~	AMIS
OXIDIZER FARM	VALVES, ELBOWS, TEE'S (OTHER)	YES	NO	GOOD	1	SF	VALVES	WHITE VALVE CAULK	AMIS
~~OXIDIZER FARM~~	~~VALVES, ELBOWS, TEE'S (WRAP)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~ELBOWS~~	~~7" GREY ELBOW SKIN, THICK MASTIC LIKE MATERIAL, WHITE UNDER LAYER~~	~~AMIS~~
~~OXIDIZER FARM~~	~~VALVES, ELBOWS, TEE'S (WRAP)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~EA~~	~~ELBOWS~~	~~7" GREY ELBOW SKIN, THIN, TAPE LIKE MATERIAL WITH VISIBILE FIBER STRANDS~~	~~AMIS~~
~~OXIDIZER FARM~~	~~VALVES, ELBOWS, TEE'S (WRAP)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~EA~~	~~ELBOWS~~	~~WOVEN ELBOW WRAP~~	~~AMIS~~
OXIDIZER FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	YES	NO	GOOD	150	LF	CONCRETE	PINK/BEIGE CONCRETE EXPANSION SEAL OVER GRAY BACKER ROD	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	150	LF	CONCRETE	WHITE CONCRETE EXPANTION SEAL	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	15	LF	CONCRETE	GRAY CONCRETE EXPANSION SEAL	JONES EDMUNDS
OXIDIZER FARM	VALVE, ELBOWS, TEE'S (FOAM)	NO	YES	POOR	45	EA	PIPES	GRAY PAINT OVER WHITE MASTIC OVER MESH OVER BROWN FOAM ON N_2O_4 PIPE	JONES EDMUNDS
OXIDIZER FARM	PIPE INSULATION, STRAIGHT (FOAM)	NO	YES	POOR	1,800	LF	PIPES	GRAY PAINT OVER METAL OVER FOAM ON 8" O.D. N_2O_4 PIPES	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	FAIR	10	LF	CONCRETE	OFF-WHITE SEAL OVER BROWN FIBROUS CONCRETE EXPANSION SEAL	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (PIPE WRAP)	NO	NO	GOOD	2	LF	PIPES	BLACK PIPE WRAP ON VALUVE OF H_20 LINES	JONES EDMUNDS
OXIDIZER FARM	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	FAIR	1,800	LF	PIPES	METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS ON 6" O.D. CHILLED WATER STRAIGHTS	JONES EDMUNDS
OXIDIZER FARM	FLOOR COVERING (OTHER)	NO	NO	FAIR	1,700	SF	CONCRETE	GRAY OVER YELLOW-BROWN EPOXY OVER WHITE MESH	JONES EDMUNDS
OXIDIZER FARM	VALVE, ELBOWS, TEE'S (FOAMGLASS)	NO	YES	POOR	40	EA	PIPES	METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS ON 6" O.D. CHILLED WATER ELBOWS & TEES	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (WRAP)	NO	NO	POOR	35	LF	WIRES/PIPES	SILVER WRAP ON WIRES AND PIPES	JONES EDMUNDS
OXIDIZER FARM	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	10	LF	PIPES	SILVER PAINT OVER METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS ON 12" O.D. PIPE	JONES EDMUNDS
OXIDIZER FARM	VALVE, ELBOWS, TEE'S (FOAMGLASS)	NO	YES	GOOD	2	EA	PIPES	SILVER PAINT OVER METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS ON 12" O.D. PIPE	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	FAIR	15	EA	ELECTRICAL CONDUIT	BLACK GASKETS WITH YELLOW GLUE	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	20	LF	CAMERA TOWER	GRAY CAULK AT BASE OF CAMERA TOWER	JONES EDMUNDS

J8-1862 - HYPERGOL OXIDIZER FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
OXIDIZER FARM	PIPE INSULATION, STRAIGHT (NEOPRENE)	NO	NO	POOR	5	LF	PIPES	WHITE MASTIC OVER NEOPRENE OVER METAL PIPE	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	POOR	2	SF	ELECTRICAL CONDUIT	BLACK PUTTY ON BLUE, RED, AND WHITE, ELECTRICAL CONDUIT	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL	NO	NO	GOOD	2	EA	ELECTRICAL CONDUIT	AMBER PROTECTIVE COATING ON CONDUIT AND ELECTRICAL BOXES	JONES EDMUNDS
OXIDIZER FARM	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	15	EA	WATER LINE	ASSUMED GASKETS ON RED FIRE LINE NORTH OF OXIDIZER FACILITY	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4,000	SF	ROOF	CREAM SEALANT ON ROOF	JONES EDMUNDS

J8-1862A - STORAGE BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR/ EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	280	LF	WALLS	CREAM CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	POOR	8	LF	CONCRETE PAD	BROWN FIBROUS BUILDING SEAL	JONES EDMUNDS
EXTERIOR	WALL COVERING (OTHER)	NO	NO	GOOD	150	SF	WALLS	GRAY COVER OVER METAL CORNERS	JONES EDMUNDS
EXTERIOR	WALL COVERING (STUCCO)	NO	NO	GOOD	600	SF	WALLS	GRAY EXTERIOR STUCCO UNDER ROCK COVER	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	POOR	50	LF	DOORS	GRAY/SILVER WEATHER STRIPPING	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS

J8-1906 - HYPERGOL FUEL FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
FUEL FARM	ELECTRICAL MATERIALS (CONDUIT COVER)	NO	NO	POOR	200	LF	WIRES	WHITE ROPE LIKE CONDUIT COVER	JONES EDMUNDS
~~FUEL FARM~~	~~TANK/BOILER/CHILLER INSULATION (FOAMGLASS)~~	~~YES~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~TANK~~	~~GRAY MASTIC OVER FOAM~~	AMIS
~~FUEL FARM~~	~~VALVES, ELBOW, TEE'S (FOAMGLASS)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPES~~	~~WHITE MASTIC O/BLACK NEOPRENE~~	AMIS
FUEL FARM	MISCELLANEOUS MATERIAL (WRAP)	NO	NO	POOR	100	LF	WIRES	SILVER WRAP ON WIRES	JONES EDMUNDS
FUEL FARM	VALVE, ELBOWS, TEE'S (FOAM)	YES	YES	POOR	30	EA	PIPES	GRAY PAINT OVER WHITE MASTIC OVER BROWN FOAM ON MMH LINE	JONES EDMUNDS
FUEL FARM	FLOOR COVERING (OTHER)	NO	NO	FAIR	1,700	SF	CONCRETE	GRAY COVER ON CONCRETE	JONES EDMUNDS
FUEL FARM	PIPE INSULATION, STRAIGHT (FOAM)	NO	YES	FAIR	1,700	LF	PIPES	GRAY PAINT OVER METAL JACKET OVER WHITE MASTIC OVER YELLOW FOAM ON MMH 8" O.D. LINE	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	YES	NO	GOOD	180	LF	CONCRETE	PINK/BEIGE CONCRETE EXPANSION SEAL OVER GRAY BACKER ROD	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	45	LF	CONCRETE	WHITE CONCRETE EXPANSION SEAL	JONES EDMUNDS
FUEL FARM	VALVE, ELBOWS, TEE'S (FOAMGLASS)	YES	NO	GOOD	40	EA	PIPES	WHITE MASTIC OVER FOAMGLASS ON 6" O.D. WATER LINE	JONES EDMUNDS
FUEL FARM	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	1,600	LF	PIPES	GRAY PAINT OVER METAL JACKET OVER WHITE MASTIC OVER FOAMGLASS ON 6" O.D. WATER LINES	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	10	LF	CONCRETE	DARK BROWN FIBROUS CONCRETE EXPANSION SEAL	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	50	LF	CONCRETE	GRAY OVER YELLOW CONCRETE EXPANSION SEAL	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	20	LF	CONCRETE PAD	GRAY CAULK AROUND BASE OF PHOTO STATION	JONES EDMUNDS
FUEL FARM	PIPE INSULATION, STRAIGHT (FOAM)	NO	YES	GOOD	1,400	LF	PIPES	YELLOW INSULATION UNDER PVC CASING ON MMH LINE	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIALS (OTHER)	NO	NO	FAIR	1	SF	FLOOR	BLACK EPOXY ON CONCRETE AROUND PIPE PENETRATION	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	1	SF	WALLS	TAN CAULK AROUND PIPE PENETRATIONS AT EYE WASH STATION	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	12	LF	PIPES	GRAY CAULK/PUTTY ON MMH LINES	JONES EDMUNDS
FUEL FARM	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	YES	GOOD	10	LF	PIPES	12" WATER LINE, METAL OVER WHITE MASTIC OVER FOAMGLASS OVER METAL PIPE	JONES EDMUNDS
FUEL FARM	VALVE, ELBOWS, TEE'S (FOAMGLASS)	NO	YES	GOOD	4	EA	PIPES	12" WATER LINE, METAL OVER WHITE MASTIC OVER FOAMGLASS OVER METAL PIPE	JONES EDMUNDS
FUEL FARM	VALVE, ELBOWS, TEE'S (FOAMGLASS)	NO	YES	GOOD	3	EA	PIPES	WHITE MASTIC OVER MESH OVER FOAM GLASS ON 6" O.D. WATER LINE	JONES EDMUNDS

J8-1906 - HYPERGOL FUEL FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
FUEL FARM	MISCELLANEOUS MATERIALS (MASTIC)	NO	NO	FAIR	1	SF	PIPES	WHITE MASTIC OVER BROWN FOAM ON 6" WATER LINE	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	POOR	2	EA	ELECTRICAL CONDUIT	BLACK GASKET ON CONDUIT	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL	NO	NO	GOOD	1	EA	ELECTRICAL CONDUIT	AMBER PROTECTIVE COATING ON CONDUIT AND ELECTRICAL BOXES	JONES EDMUNDS
FUEL FARM	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	FAIR	12	EA	PIPES	ASSUMED GASKETS ON GRAY/RED STEAM LINES	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	4000	SF	ROOF	CREAM SEALANT ON ROOF	JONES EDMUNDS

J8-1906A - STORAGE BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	50	LF	DOORS	GRAY/SILVER WEATHER STRIPPING	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	FAIR	8	LF	CONCRETE PAD	BROWN FIBROUS BUILDING SEAL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	150	LF	WALLS	CREAM CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	150	LF	WALLS	GRAY CAULK	JONES EDMUNDS
EXTERIOR	WALL COVERING (OTHER)	NO	NO	GOOD	150	SF	WALLS	GRAY COVER OVER METAL CORNERS	JONES EDMUNDS
EXTERIOR	WALL COVERING (STUCCO)	NO	NO	GOOD	650	SF	WALLS	GRAY EXTERIOR STUCCO UNDER ROCK COVER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	20	LF	WALLS	OFF-WHITE/GRAY CAULK AROUND AC UNIT	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS

K7-0569B - HAZARDOUS WASTE STAGING SHELTER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	10	LF	FLOOR	BROWN FIBROUS BUILDING SEAL	JONES EDMUNDS
EXTERIOR	PIPE INSULATION (STRAIGHT)	NO	NO	POOR	5	LF	PIPES	WHITE MASTIC OVER BROWN PAPER OVER BLACK FOAM ON EYE WASH	JONES EDMUNDS
EXTERIOR	ROOF (CORE)	NO	NO	GOOD	300	SF	ROOF	ROLLED ASPHALT ON ROOF	JONES EDMUNDS

K7-0569C- HAZARDOUS WASTE STAGING BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	YES	GOOD	100	LF	WALLS	GRAY FOAM PACKING AT TOP AND BOTTOM OF CORRUGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	FAIR	6	SF	WALLS/ROOF	MASTIC UNDER LIGHTNING PROTECTION BRACKETS	JONES EDMUNDS
DOORS	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	30	LF	DOORS	BLACK WEATHER STRIPPING ON ROLL-UP DOORS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	FAIR	10	SF	ROOF	GRAY SEALANT AROUND AIR TERMINALS AND COUNTERPOISE	JONES EDMUNDS

K7-0570 - POL

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	GOOD	70	LF	WINDOWS/DOORS	GRAY CAULK AROUND WINDOWS AND DOOR EXTERIOR	AMIS
INTERIOR/ EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	1	SF	WALLS	GRAY PUTTY	AMIS
INTERIOR/ EXTERIOR	FLOOR COVER (OTHER)	NO	NO	GOOD	200	SF	CONCRETE PAD	YELLOW NON-SLIP FLOOR COVER	JONES EDMUNDS
INTERIOR/ EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	POOR	10	LF	WALLS	GRAY CAULK AROUND VENTS	JONES EDMUNDS
INTERIOR/ EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	POOR	10	LF	WALL/VENTS	GRAY/WHITE CAULK AROUND VENTS ON WEST WALL	JONES EDMUNDS
INTERIOR/ EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	500	LF	WALLS	GRAY AND BLUE FOAM PACKING AT TOP AND BOTTOM OF CORRUGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	1	SF	WALLS	BLACK MASTIC ON SHED CORNER	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	5	LF	WALLS	WHITE CAULK ON WALL PATCH	JONES EDMUNDS
EXTERIOR	FLOOR COVER (OTHER)	NO	NO	POOR	30	SF	CONCRETE PAD	GRAY COATING ON CONCRETE	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	800	SF	ROOF	OFF-WHITE SEALANT ON ROOF	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	GOOD	120	LF	ROOF	GRAY CAULKING AROUND ROOF SEAM	JONES EDMUNDS

K7-0619 - SAND AND EQUIPMENT STORAGE FACILITY NO. 1

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	2	SF	CONCRETE PAD	RED MASTIC SPILLED ON CONCRETE	JONES EDMUNDS
EXTERIOR	FLOOR COVER (OTHER)	NO	NO	GOOD	75	SF	CONCRETE APRON	GRAY COATING ON CONCRETE APRON	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	NO	NO	POOR	30	SF	ROOF	GRAY/BROWN PAPER COVERING FRONT WOOD BEAM SUPPORT FOR ROOF	JONES EDMUNDS

J5-1195 - DIFFERENTIAL GLOBAL POSITIONING BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	WALL COVERING (BASEBOARD)	NO	NO	GOOD	50	LF	WALLS	4" BROWN VINYL BASE MOLDING WITH YELLOW GLUE	JONES EDMUNDS
INTERIOR	FLOOR COVERING (TILE)	NO	NO	GOOD	150	SF	FLOOR	12" CREAM WITH BROWN STREAKS AND YELLOW GLUE	JONES EDMUNDS
INTERIOR	DUCT/HVAC MATERIALS	NO	YES	GOOD	40	SF	HVAC	BLUE FIBERGLASS INSULATION OVER YELLOW GLUE INSIDE AC UNITS	JONES EDMUNDS
INTERIOR	WALL COVERING (CEMENT BOARD)	NO	NO	GOOD	600	SF	WALLS	CEMENT BOARD BEHIND FIBERGLASS WALL PANELS	JONES EDMUNDS
EXTERIOR	WALL COVERING (MORTAR)	NO	NO	GOOD	500	SF	WALLS	MORTAR BEHIND PEBBLE EXTERIOR SURFACE	JONES EDMUNDS
INTERIOR	DUCT/HVAC MATERIALS	NO	NO	GOOD	1	SF	HVAC	TAN MASTIC BEHIND AC VENT	JONES EDMUNDS
ROOF	ROOF (COVER)	NO	NO	GOOD	150	SF	ROOF	WHITE COVER ON ROOF	JONES EDMUNDS

J5-1244 - SLF OPTICAL TRACKER SITE B

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CONCRETE SEAL)	NO	NO	GOOD	75	LF	CONCRETE PAD	BLACK CONCRETE EXPANSION SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	FAIR	15	EA	ELECTRICAL EQUIPMENT	ASSUMED BLACK GASKETS	JONES EDMUNDS

J5-1441 - SLF OPTICAL TRACKER SITE E

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	15	LF	TRANSFORMER	WHITE CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	ELECTRICAL PANEL	DARK GRAY ELECTRICAL PUTTY	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	ELECTRICAL PANEL	LIGHT GRAY ELECTRICAL PUTTY	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	6	EA	ELECTRICAL EQUIPMENT	ASSUMED BLACK GASKETS	JONES EDMUNDS

J6-2030 - GUARD HOUSE

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	NO	GOOD	75	SF	WALLS	RED MASTIC BETWEEN METAL WALLS AND FOAM INSULATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	3	EA	ELECTRICAL CONDUIT	BLACK GASKETS	JONES EDMUNDS

TR1-0745: TEMPORARY BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
102 (HALL)	WALL COVERING (DRYWALL PARTITIONS)	NO	NO	GOOD	1,000	SF	WALLS	DRYWALL PARTITIONS	JONES EDMUNDS
102 (HALL)	FLOOR COVERING (LINOLEUM)	NO	NO	FAIR	25	SF	FLOOR	TAN SPECKLED LINOLEUM	JONES EDMUNDS
103 (WOMEN'S)	FLOOR COVERING (LINOLEUM)	NO	NO	FAIR	35	SF	FLOOR	TAN SPECKLED LINOLEUM	JONES EDMUNDS
103 (WOMEN'S)	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	POOR	2	LF	SINK	WHITE CAULK AROUND SINK	JONES EDMUNDS
104 (MEN'S)	FLOOR COVERING (LINOLEUM)	NO	NO	FAIR	60	SF	FLOOR	TAN SPECKLED LINOLEUM	JONES EDMUNDS
104 (MEN'S)	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	POOR	1	LF	SINK	WHITE CAULK AROUND SINK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	POOR	2	LF	WALLS	GRAY SEALANT ON LIGHT FIXTURE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	FAIR	20	LF	DOOR	WHITE DOOR CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	FAIR	4	LF	WINDOW	BLACK MASTIC ABOVE WINDOW RIGHT OF ROOM 100 DOOR	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	FAIR	16	LF	WINDOW	OFF-WHITE WINDOW CAULK ON WINDOW RIGHT OF ROOM 100 DOOR	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	10	LF	WALLS	GRAY DUCT CAULK AROUND AC UNIT	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	GOOD	600	SF	ROOF	GREEN / BLACK / WHITE / GRAY-WHITE SEALANT	JONES EDMUNDS

TR1-0716: TEMPORARY BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
101/102/103	FLOOR COVERING	NO	NO	FAIR	720	SF	INTERIOR	BLACK CARPET WITH YELLOW GLUE	JONES EDMUNDS
INTERIOR	WALL COVERING (DRYWALL PARTITIONS)	NO	NO	FAIR	350	SF	WALLS	DRYWALL PARTITIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	FAIR	60	LF	EXTERIOR/DOOR	WHITE SEALANT ON EXTERIOR DOOR	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	NO	NO	POOR	600	SF	EXTERIOR	BROWN PAPER BACKING OVER GLUE OVER WHITE INSULATION UNDER TRAILER	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	GOOD	600	SF	ROOF	SILVER FLASHING ON ROOF	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	15	SF	ROOF	ASSUMED SEALANT / MASTIC ON EXHAUST VENTS	JONES EDMUNDS

K6-1446L - ELECTRICAL MAINTENANCE FACILITY SHED

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	35	SF	WINDOWS	WHITE CAULK	JONES EDMUNDS
ROOF	ROOF (CORE)	NO	NO	GOOD	100	SF	ROOF	BLACK ROLLED ASPHALT OVER TAR	JONES EDMUNDS
ROOF	ROOF (MASTIC)	NO	NO	GOOD	8	SF	ROOF	BLACK MASTIC AROUND ROOF VENT	JONES EDMUNDS

K6-1446 UNLABELED SHEDS OUTSIDE ELECTRICAL MAINTENANCE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
WEST SHED	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	GOOD	30	LF	VENTS	WHITE CAULK AROUND INTERIOR/EXTERIOR CEILING AND WALL VENTS	JONES EDMUNDS
WEST SHED	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	4	LF	VENTS	BLACK/DARK GRAY PUTTY ON EAST VENT	JONES EDMUNDS
WEST SHED	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	10	LF	DOOR	WHITE CAULK	JONES EDMUNDS
WEST SHED	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	YES	FAIR	130	LF	WALLS	WHITE OVER GRAY SEAL ON VENTS AND AT BASE OF CORRUGATED WALLS	JONES EDMUNDS
WEST SHED	MISCELLANEOUS MATERIAL (FOAM PACKING)	NO	YES	POOR	25	LF	WALLS	WHITE FOAM PACKING AT TOP OF NORTH CORRUGATED WALL	JONES EDMUNDS
WEST SHED	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	12	LF	DOOR	TAN GLUE ALONG TOP OF DOOR FRAME	JONES EDMUNDS
EAST SHED	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	YES	FAIR	30	LF	WINDOWS	WHITE CAULK ON EXTERIOR	JONES EDMUNDS
EAST SHED	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	WALLS	BLACK PUTTY AT CONDUIT PENETRATION	JONES EDMUNDS

K6-1996E - SEWAGE TREATMENT PLANT NO. 15

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	POOR	45	LF	CONCRETE	BLACK FIBROUS SEAL ON LIFT STATION PADS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	NO	NO	POOR	300	SF	TANK	GRAY OVER GREEN OVER BLACK COATING ON TANK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC, TAR)	NO	NO	GOOD	175	SF	CONCRETE	BLACK MASTIC/TAR LINING THE BOTTOM OF THE CONCRETE PADS TO THE LIFT STATION	JONES EDMUNDS
EXTERIOR	PIPE INSULATION	NO	YES	POOR	10	SF	PIPES	BROWN AND GRAY FIBROUS PACKING AT PIPE JOINTS	JONES EDMUNDS
LIFT STATION	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	20	EA	PIPES	ASSUMED GASKETS ON LIFT STATION PIPES	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	10	EA	PIPES	ASSUMED GASKETS ON PIPES TO TANK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	4	EA	ELECTRICAL CONDUIT	ASSUMED GASKETS ON ELECTRICAL CONDUIT	JONES EDMUNDS

K6-2497 - LIGHTNING PROTECTION TOWERS

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

G5-1061: EQUIPMENT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	FLOOR COVERING	NO	NO	FAIR	80	SF	FLOOR	12" X 12" WHITE TILE WITH GRAY SMUDGES	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (CAULKING)	NO	NO	FAIR	10	LF	WALLS	WHITE CAULKING AT DUCT PENETRATIONS	JONES EDMUNDS
100	WALL COVERING (BASEBOARD)	NO	NO	FAIR	35	LF	WALLS	4" BLACK BASEBOARD WITH YELLOW GLUE	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	FAIR	17	LF	DOOR	BROWN DOOR SEALANT	JONES EDMUNDS
EXTERIOR	MISCELLANOUS MATERIAL (OTHER)	NO	YES	FAIR	600	SF	EXTERIOR SIDING AND ROOF	EXTERIOR FIBROUS SIDING AND ROOF	JONES EDMUNDS

G5-1061A: MICROWAVE TOWER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

PACKAGE 3 ASBESTOS SCHEDULES

66200 - PAINT STORAGE BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	FLOOR COVERING (OTHER)	NO	NO	GOOD	86	SF	FLOOR	BLACK FLOOR SEAL	AMIS
100	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	GOOD	20	LF	DOOR	CREAM CAULK	AMIS
100	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES	NO	GOOD	28	LF	WINDOWS	BEIGE CAULK	AMIS
100	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	1	SF	WALLS	GRAY PUTTY	AMIS
100	MISCELLANEOUS MATERIAL (BUILDING SEAL)	YES	NO	GOOD	72	LF	WALLS	LIGHT TAN BUILDING SEAL	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	WALLS	WHITE PUTTY	AMIS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES*	NO	POOR	30	LF	WINDOWS	ASSUMED WHITE WINDOW GLAZE	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	YES*	NO	POOR	5	SF	ROOF	ASSUMED SEALANT ON AIR TERMINALS	JONES EDMUNDS

66220 - INSTITUTIONAL STORAGE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
(100) 1028	WALL COVERING (BASEBOARD)	NO	NO	GOOD	80	LF	WALLS	4" BLACK BASECOVE WITH TAN MASTIC	JONES EDMUNDS
(100) 1028	WALL COVERING (PLASTER)	NO	NO	FAIR	500	SF	WALLS	CREAM PAINT OVER WHITE PLASTER OVER BROWN COAT	JONES EDMUNDS
(100) 1028	FLOOR COVERING (TILE)	NO	NO	FAIR	300	SF	FLOOR	12" CREAM WITH GRAY STREAKS WITH TAN MASTIC	JONES EDMUNDS
(100) 1028	WALL COVERING (DRYWALL)	NO	YES	FAIR	500	SF	WALLS	CREAM PAINT PAINT OVER DRYWALL	JONES EDMUNDS
(100) 1028	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	100	SF	WALLS	SPACKLE	JONES EDMUNDS
(101) 1035/1037	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	24	LF	WINDOWS/DOORS	WHITE DOOR CAULK	JONES EDMUNDS
(101) 1035/1037	WALL COVERING (BASEBOARD)	NO	NO	GOOD	60	SF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
(101) 1035/1037	FLOOR COVERING (TILE)	YES	NO	FAIR	400	SF	FLOOR	9" LIGHT GRAY WITH WHITE STREAKS	AMIS
(101) 1035/1037	FLOOR COVERING (TILE)	YES	NO	FAIR	100	SF	FLOOR	9" DARK GRAY WITH WHITE AND DARK SMUDGES	AMIS
(102) 1029/1031	WALL COVERING (BASEBOARD)	NO	NO	FAIR	80	LF	WALLS	4" BLACK BASECOVE WITH TAN MASTIC	JONES EDMUNDS
(102) 1029/1031	WALL COVERING (PLASTER)	NO	NO	GOOD	750	SF	WALLS	LIGHT BLUE AND WHITE OVER PLASTER	JONES EDMUNDS
(102) 1029/1031	CEILING MATERIALS (TILE)	NO	YES	GOOD	624	SF	CEILING	2 X 4 WHITE WITH SPECKS	AMIS
(102) 1029/1031	FLOOR COVERING (TILE)	YES	NO	ABATED	0	SF	FLOOR	9" LIGHT GRAY WITH WHITE STREAKS	AMIS
(102) 1029/1031	FLOOR COVERING (TILE)	YES	NO	FAIR	15	SF	FLOOR	9" BLACK WITH WHITE STREAKS	AMIS
(102) 1029/1031	FLOOR COVERING (TILE)	YES	NO	GOOD	600	SF	FLOOR	9" DARK GRAY WITH WHITE AND DARK SMUDGES WITH 12" LIGHT GRAY WITH GRAY SMUDGES	AMIS
(102) 1029/1031	FLOOR COVERING (TILE)	NO	NO	GOOD	4	SF	FLOOR	9" GREEN	AMIS
(103) 1026	WALL COVERING (BASEBOARD)	NO	NO	GOOD	50	LF	WALLS	4" BLACK BASECOVE WITH TAN MASTIC	JONES EDMUNDS
(103) 1026	FLOOR COVERING (TILE)	YES	NO	FAIR	130	SF	FLOOR	12" WHITE WITH GRAY SMUDGES WITH TAN & BLACK MASTIC	JONES EDMUNDS
~~(103) 1026~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" CREAM WITH TAN SMUDGES~~	~~AMIS~~
(103) 1026	WALL COVERING (DRYWALL)	NO	YES	GOOD	650	SF	WALLS	WHITE DRYWALL	AMIS
(103) 1026	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	75	SF	WALLS	SPACKLE	AMIS
(103A) 1021	WALL COVERING (DRYWALL)	NO	YES	GOOD	224	SF	WALLS	WHITE DRYWALL	AMIS
(103A) 1021	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	20	SF	WALLS	SPACKLE	AMIS
(103B) 1027	WALL COVERING (BASEBOARD)	NO	NO	FAIR	60	LF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
(103B) 1027	WALL COVERING (PLASTER)	NO	NO	GOOD	500	SF	WALLS	WHITE PLASTER TOP COAT OVER BROWN BOTTOM COAT	JONES EDMUNDS
(103B) 1027	FLOOR COVERING (TILE)	YES	NO	FAIR	330	SF	FLOOR	9" DARK GRAY WITH BLACK AND WHITE SPECKS	AMIS
(103B) 1027	WALL COVERING (DRYWALL)	NO	YES	FAIR	300	SF	WALLS	WHITE DRYWALL	AMIS
(103B) 1027	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	FAIR	30	SF	WALLS	SPACKLE	AMIS

66220 - INSTITUTIONAL STORAGE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
(104) 1009	FLOOR COVERING (TILE)	YES	NO	POOR	800	SF	FLOOR	9" LIGHT GRAY WITH WHITE STREAKS WITH 12" OFF-WHITE WITH GRAY STREAKS	AMIS
(104) 1009/1013	WALL COVERING (BASEBOARD)	NO	NO	GOOD	200	LF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
(104) 1009/1013	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	ELECTRIC BOX	BLACK/GRAY ELECTRICAL PUTTY	JONES EDMUNDS
(104) 1009/1013	MISCELLANEOUS MATERIAL	NO	NO	GOOD	40	LF	WALLS	CREAM PAINT OVER WHITE EXPANSION JOINT CAULK	JONES EDMUNDS
(104) 1009/1013	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	2	SF	WALLS	WHITE WALL PENETRATION SEAL	JONES EDMUNDS
(104) 1009/1013	FLOOR COVERING (OTHER)	NO	NO	GOOD	120	SF	FLOOR	BLACK NON-SLIP COVER	JONES EDMUNDS
(104) 1009/1013	MISCELLANEOUS MATERIAL	NO	NO	GOOD	80	LF	WALLS	WHITE OVER GRAY HARD PACKING BETWEEN CORRUGATED CEILING AND WALL	JONES EDMUNDS
(104) 1009/1013	MISCELLANEOUS MATERIAL	NO	NO	FAIR	2	SF	WALLS	WHITE WALL PENETRATION SEAL AROUND ELECTRICAL CONDUIT	JONES EDMUNDS
(104) 1009/1013	DUCT/HVAC	YES*	NO	GOOD	1	EA	HVAC	ASSUMED GRAY VIBRATION JOINT CLOTH	JONES EDMUNDS
(105) 1005	WALL COVERING (BASEBOARD)	NO	NO	GOOD	110	SF	WALLS	4" BROWN BASECOVE WITH TAN & BLACK MASTIC	JONES EDMUNDS
(105) 1005	FLOOR COVERING (TILE)	NO	NO	GOOD	110	SF	FLOOR	12" GRAY/BEIGE TILE WITH WHITE STREAKS AND TAN MASTIC	JONES EDMUNDS
(105) 1005	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	15	LF	ROLL UP DOOR	BLACK MASTIC UNDER ROLL UP DOOR	JONES EDMUNDS
(105) 1005	MISCELLANEOUS MATERIAL	YES	NO	GOOD	1	SF	WALLS	WHITE PAINT OVER BLACK/TAN WALL PENETRATION SEAL	JONES EDMUNDS
(106) 1002/1004	WALL COVERING (BASEBOARD)	NO	NO	GOOD	80	LF	WALLS	4" BLACK BASECOVE WITH TAN MASTIC	JONES EDMUNDS
(107) 1000/1003	FLOOR COVERING (TILE)	YES	NO	GOOD	448	SF	FLOOR	12" BEIGE WITH GRAY AND WHITE STREAKS WITH BLACK & TAN MASTIC	JONES EDMUNDS
(107) 1000/1003	WALL COVERING (BASEBOARD)	NO	NO	GOOD	80	LF	WALLS	4" BLACK BASECOVE WITH TAN MASTIC	JONES EDMUNDS
(107) 1000/1003	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	70	LF	WINDOWS/DOORS	WHITE WINDOW AND DOOR CAULK	JONES EDMUNDS
~~(107) 1000/1003~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" ORANGE WITH WHITE ST~~	~~AMIS~~
(108) 1011	MISCELLANEOUS MATERIAL	NO	NO	GOOD	160	LF	WALLS	CREAM PAINT OVER WHITE EXPANSION JOINT CAULK	JONES EDMUNDS
(108) 1011	CEILING MATERIALS (TILE)	NO	YES	GOOD	200	SF	CEILING	2 X 4 WHITE WITH SPECKS	AMIS
(108) 1011	FLOOR COVERING (TILE)	YES	NO	GOOD	800	SF	FLOOR	9" DARK GRAY WITH BLACK AND WHITE SPECKS	AMIS
(108) 1011	WALL COVERING (DRYWALL)	NO	YES	FAIR	200	SF	WALLS	WHITE DRYWALL	AMIS
(108) 1011	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	20	SF	WALLS	SPACKLE	AMIS
(110) 1015A	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	POOR	2	SF	WALLS	RED WALL PUTTY	JONES EDMUNDS
(110) 1015A	CEILING MATERIALS (TILE)	NO	YES	GOOD	180	SF	CEILING	1 X 1 WHITE FISSURES AND PINHOLES	AMIS
(110) 1015A	FLOOR COVERING (TILE)	YES	NO	FAIR	180	SF	FLOOR	9" DARK GRAY WITH BLACK AND WHITE SPECKS	AMIS
(110) 1015A	WALL COVERING (DRYWALL)	NO	YES	GOOD	280	SF	WALLS	WHITE AND LIGHT GRAY DRYWALL	AMIS

66220 - INSTITUTIONAL STORAGE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
(110) 1015A	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	28	SF	WALLS	SPACKLE	AMIS
(110A) 1015	WALL COVERING (BASEBOARD)	NO	NO	FAIR	50	LF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
(110A) 1015	CEILING MATERIALS (TILE)	NO	YES	GOOD	180	SF	CEILING	1 X 1 WHITE FISSURES AND PINHOLES	AMIS
(110A) 1015	FLOOR COVERING (TILE)	YES	NO	FAIR	180	SF	FLOOR	9" DARK GRAY WITH BLACK AND WHITE SPECKS	AMIS
(110A) 1015	WALL COVERING (DRYWALL)	NO	YES	GOOD	390	SF	WALLS/CEILING	LIGHT GRAY DRYWALL	AMIS
(110A) 1015	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	YES	GOOD	28	SF	WALLS	SPACKLE	AMIS
1008	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	FAIR	2	SF	WALLS	WHITE WALL PENETRATION SEAL	JONES EDMUNDS
10082	DUCT/HVAC (CAULK)	NO	NO	GOOD	4	LF	DUCTS	SILVER DUCT CAULK	JONES EDMUNDS
101A	FLOOR COVERING (TILE)	NO	NO	FAIR	55	SF	FLOOR	12" GRAY/BEIGE TILE WITH WHITE STREAKS AND TAN MASTIC	JONES EDMUNDS
101A	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	10	LF	DOORS	WHITE CAULK ON DOOR	JONES EDMUNDS
101A	FLOOR COVERING (TILE)	NO	NO	FAIR	55	SF	FLOOR	12" CREAM WITH GRAY STREAKS	AMIS
~~101A~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" ORANGE WITH WHITE STREAKS~~	~~AMIS~~
101A	WALL COVERING (SPACKLE, JOINT COMPOUND)	NO	NO	FAIR	75	SF	WALLS	SPACKLE	AMIS
1030	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	FAIR	100	LF	FLOOR	BLACK FIBROUS BUILDING SEAL	JONES EDMUNDS
1030	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	60	LF	WINDOWS	WHITE WINDOW CAULK	JONES EDMUNDS
1034	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	FAIR	50	LF	FLOOR	BLACK FIBROUS BUILDING SEAL	JONES EDMUNDS
1034	~~DUCT/HVAC (MASTIC)~~	NO	NO	GOOD	10	SF	DUCTS	GRAY DUCT MASTIC	JONES EDMUNDS
1034	DUCT/HVAC (CAULK)	NO	NO	GOOD	45	LF	DUCTS	SILVER DUCT CAULK	JONES EDMUNDS
1034	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	2	SF	WALLS	WHITE WALL PENETRATION SEAL	~~JONES EDMUNDS~~
~~104~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" CREAM WITH TAN SMUDGES~~	~~AMIS~~
~~104~~	~~WALL COVERING (BASEBOARD)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~WALLS~~	~~3" WALLBOARD WITH MASTIC~~	~~AMIS~~
106	FLOOR COVERING (TILE)	NO	NO	GOOD	160	SF	FLOOR	12" ORANGE WITH WHITE STREAKS	AMIS
~~106~~	~~WALL COVERING (BASEBOARD)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~WALLS~~	~~3" WALLBOARD WITH MASTIC~~	~~AMIS~~
~~107~~	~~WALL COVERING (BASEBOARD)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~WALLS~~	~~3" WALLBOARD WITH MASTIC~~	~~AMIS~~
108	WALL COVERING (BASEBOARD)	NO	NO	POOR	100	LF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
~~109~~	~~FLOOR COVERING (OTHER)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~RUBBER BROWN SPOT FLOORING~~	~~AMIS~~
110	WALL COVERING (BASEBOARD)	NO	NO	FAIR	50	LF	WALLS	4" BLACK BASECOVE WITH BROWN MASTIC	JONES EDMUNDS
EXTERIOR	DUCT/HVAC (MASTIC)	NO	NO	POOR	40	SF	DUCTS	WHITE MASTIC OVER FIBERGLASS ON METAL DUCT	~~JONES EDMUNDS~~
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	60	LF	WINDOW	WHITE EXTERIOR WINDOW CAULK	~~JONES EDMUNDS~~
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	POOR	55	LF	DOORS/WALLS	WHITE EXTERIOR CAULK AROUND DOORS AND WALL PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	700	LF	WALLS	WHITE EXPANSION JOINT SEAL	JONES EDMUNDS

66220 - INSTITUTIONAL STORAGE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	DUCT/HVAC (MASTIC)	NO	NO	FAIR	10	SF	AC UNIT	WHITE PAINT OVER GRAY MASTIC ON EAST AC UNIT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	30	LF	WINDOWS	WHITE/GRAY EXTERIOR WINDOW CAULK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	FAIR	2	SF	WALLS	DARK GRAY WALL PUTTY	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	11	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
EXTERIOR (WEST WALL)	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	40	LF	CONCRETE	GRAY HARD EXTERIOR BUILDING SEAL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	POOR	20	SF	ROOF	DARK GRAY OVER DARK BROWN SEALANT ON AIR TERMINALS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	FAIR	10	SF	ROOF	ASSUMED LIGHT GRAY CAULK AROUND GABLE END	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	POOR	2	SF	ROOF	LIGHT GRAY BOOT AROUND PVC VENTS	JONES EDMUNDS
ROOF	ROOF MATERIAL (ROOF CORE)	NO	NO	FAIR	400	SF	ROOF	OFF-WHITE FLAT ROOF ON WEST SIDE	JONES EDMUNDS

66221 - INSTITUTIONAL STORAGE FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	FAIR	20	LF	ROLL UP DOOR	BLACK SEAL ON ROLL UP DOOR	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	POOR	20	SF	FLOOR	BLACK NON SLIP FLOOR COVER	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	DOORS	ASSUMED FIRE DOORS	JONES EDMUNDS
EXTERIOR	DUCT/HVAC (MASTIC)	NO	NO	GOOD	10	SF	DUCTS	CREAM PAINT OVER GRAY DUCT MASTIC	JONES EDMUNDS
EXTERIOR	DUCT/HVAC (MASTIC)	NO	NO	GOOD	20	SF	DUCTS	WHITE MASTIC OVER FBGLS OVER METAL	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	FAIR	15	SF	ROOF	GRAY SEALANT AROUND SCREWS ON ROOF	JONES EDMUNDS

60628 - POL SHELTER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (FOAM SEALANT)	NO	NO	FAIR	5	LF	WALLS	RED FOAM SEAL UNDER AC UNIT	JONES EDMUNDS

60630 - POL FACILITY HANGAR AF

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

66237 - HAZARDOUS WASTE STAGING SHELTER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

66238 - HAZARDOUS WASTE STAGING SHELTER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

66242 - FIRST WASH BUILDING (SRB)

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
~~100~~	~~PIPE INSULATION, STRAIGHT~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPING~~	~~4" FOIL OVER FOAMGLASS HOT SURFACTANT LINE~~	~~AMIS~~
100	FLOOR COVERING (OTHER)	NO	NO	GOOD	260	LF	FLOOR	BLACK FLOOR SEAL	AMIS
~~100~~	~~MISCELLANEOUS MATERIAL (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~DAMPNER~~	~~BROWN FIBROUS DAMPNER~~	~~AMIS~~
100	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	16	LF	WALLS	CREAM PAINT OVER WHITE CAULK OVER GRAY FIBROUS BACKER ROD	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	10	EA	EQUIPMENT	RED GASKETS ON EQUIPMENT	JONES EDMUNDS
~~100~~	~~FLOOR COVERING (OTHER)~~	~~NO~~	~~NO~~	~~FAIR~~	~~0~~	~~LF~~	~~FLOOR~~	~~WHITE & BLACK FLOOR TAPE~~	~~AMIS~~
~~101~~	~~MISCELLANEOUS MATERIAL (PUTTY)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~WALLS~~	~~BLACK PUTTY~~	~~AMIS~~
~~102~~	~~PIPE INSULATION, STRAIGHT~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPING~~	~~4" FOIL OVER FOAMGLASS HOT SURFACTANT LINE~~	~~AMIS~~
101 (NORTH WASH)	FLOOR COVERING (OTHER)	NO	NO	POOR	300	LF	FLOOR	BLACK FLOOR SEAL	JONES EDMUNDS
101 (NORTH WASH)	FLOOR COVERING (OTHER)	NO	NO	POOR	2,275	SF	FLOOR	GRAY FLOOR COVER	JONES EDMUNDS
101 (NORTH WASH)	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	LF	CONDUIT	RED PUTTY AT CONDUIT PENETRATION	JONES EDMUNDS
101 (NORTH WASH)	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	120	LF	WINDOWS/DOORS	WHITE WINDOW AND DOOR CAULK	JONES EDMUNDS
102 (PUMP ROOM)	PIPE INSULATION	NO	YES	POOR	170	LF	PIPING	2-6" WHITE PAPER OVER FIBERGLASS POTABLE H20	JONES EDMUNDS
~~102 (PUMP ROOM)~~	~~PIPE INSULATION, STRAIGHT~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~PIPING~~	~~4" FOIL OVER FOAMGLASS HOT SURFACTANT LINE~~	~~AMIS~~
102 (PUMP ROOM)	MISCELLANEOUS MATERIAL (OTHER)	YES*	NO	GOOD	1000	SF	HVAC	ASSUME EPOXY OR MASTIC OR CAULKING INSIDE EXHAUST VENTS	JONES EDMUNDS
102 (PUMP ROOM)	FLOOR COVERING (OTHER)	NO	NO	FAIR	150	LF	FLOOR	BLACK FLOOR SEAL	JONES EDMUNDS
102 (PUMP ROOM)	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	POOR	30	LF	DOORS	BLACK WEATHER SEAL ON ROLL UP DOORS	JONES EDMUNDS
~~102 (PUMP ROOM)~~	~~VALVES, ELBOWS, TEES (MUD)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~EA~~	~~PIPING~~	~~MUDDED T'S ON PG01~~	~~AMIS~~
102 (PUMP ROOM)	INSULATION (TANK)	NO	YES	GOOD	140	SF	TANK	WHITE FIBROUS TANK INSULATION	AMIS
102 (PUMP ROOM)	VALVES, ELBOWS, TEES (FOAMGLASS)	NO	NO	GOOD	14	EA	PIPING	WHITE MASTIC ON FOAMGLASS ELBOW, POTABLE H20	AMIS
102 (PUMP ROOM)	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	25	LF	WALLS	WHITE/CREAM CAULK AROUND VENTS	JONES EDMUNDS
102 (SOUTH WASH)	FLOOR COVERING (OTHER)	NO	NO	GOOD	260	LF	FLOOR	BLACK FLOOR SEAL	JONES EDMUNDS

66242 - FIRST WASH BUILDING (SRB)

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
~~103 (SOUTH WASH)~~	~~MISCELLANEOUS MATERIAL (OTHER)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~DAMPNER~~	~~BROWN FIBROUS DAMPNER~~	~~AMIS~~
103 (SOUTH WASH)	FLOOR COVERING (OTHER)	NO	NO	POOR	2,275	SF	FLOOR	GRAY FLOOR COVER	JONES EDMUNDS
~~103 (SOUTH WASH)~~	~~FLOOR COVERING (OTHER)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~LF~~	~~FLOOR~~	~~WHITE & BLACK FLOOR TAPE~~	~~AMIS~~
103 (SOUTH WASH)	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	60	LF	DOORS	WHITE DOOR CAULK	JONES EDMUNDS
103 (SOUTH WASH)	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	16	LF	WINDOWS	WHITE WINDOW CAULK	AMIS
~~EXT. SLIDING DOORS~~	~~MISCELLANEOUS MATERIAL (OTHER)~~	~~NO~~	~~YES~~	~~FAIR~~	~~0~~	~~SF~~	~~DOORS~~	~~BLACK FILLER INSIDE DOOR SEAL~~	~~AMIS~~
~~EXT. SLIDING DOORS~~	~~MISCELLANEOUS MATERIAL (OTHER)~~	~~NO~~	~~YES~~	~~FAIR~~	~~0~~	~~SF~~	~~DOORS~~	~~BROWN DOOR SEAL COVER~~	~~AMIS~~
~~EXT. SLIDING DOORS~~	~~INSULATION~~	~~NO~~	~~YES~~	~~FAIR~~	~~0~~	~~SF~~	~~DOORS~~	~~TAN FILLER (INSULATION) INSIDE DOOR SEAL~~	~~AMIS~~
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	350	LF	EXTERIOR WALLS	BLACK BUILDING SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	850	LF	WALLS	WHITE CAULK IN CONCRETE EXPANSION JOINTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	200	LF	DOORS	WHITE CAULK ON EXTERIOR OF ROLL UP DOORS	JONES EDMUNDS
EXTERIOR EAST WALL	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	15	LF	WALLS	WHITE/CREAM CAULK AROUND VENTS	JONES EDMUNDS
EXTERIOR WEST WALL	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	10	LF	WALLS	GRAY SEALANT ON VENT	JONES EDMUNDS
EXTERIOR WEST WALL	MISCELLANEOUS MATERIAL (SEALANT, CAULK)	NO	NO	GOOD	55	LF	WALLS	WHITE/CREAM CAULK AROUND VENTS	JONES EDMUNDS
ROOF	ROOFING MATERIALS (CORES)	NO	NO	GOOD	6,215	SF	ROOF	BITUMINOUS ROOFING PAPER AND TAR	JONES EDMUNDS
ROOF	ROOFING MATERIALS (FLASHING)	NO	NO	GOOD	75	SF	ROOF	SILVER PLASTIC ROOFING CEMENT ON FLASHING AT VENTS	JONES EDMUNDS

66249 - THRUST VECTOR CONTROL (TVC) DESERVICING BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	FLOOR COVERING (OTHER)	NO	NO	FAIR	1,800	SF	FLOORS	BROWN AND GRAY NON-SKID FLOORING (PAINT/PATCHES)	JONES EDMUNDS
100	FLOOR COVERING (OTHER)	NO	NO	GOOD	120	LF	FLOORS	BROWN FIBROUS FLOOR SEAL	AMIS
100	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	20	EA	PIPES	ASSUMED GASKETS ON RED FIRE LINE	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	WALLS	LIGHT GRAY PUTTY	AMIS
100	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	120	LF	DOOR	WHITE CAULK	AMIS
100	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	WALLS	WHITE SEALANT AROUND ELECTRICAL CONDUIT	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	WALLS	YELLOW PUTTY AROUND CONDUIT	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	WALLS	BLACK/DARK GRAY PUTTY	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	POOR	2	SF	PIPES	BROWN PIPE SEALANT	JONES EDMUNDS
101	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	WALLS	LIGHT GRAY PUTTY	AMIS
101	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	6	SF	HVAC	OATMEAL DUCT CAULK	AMIS
101	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	25	LF	DOOR	WHITE CAULK	AMIS
101	MISCELLANEOUS MATERIAL (Other)	NO	NO	POOR	10	LF	WALLS	WHITE EXPANSION JOINT SEALANT	JONES EDMUNDS
101	FLOOR COVERING (OTHER)	NO	NO	GOOD	32	LF	FLOORS	WHITE FLOOR SEAL	AMIS
101	CEILING MATERIALS (INSULATION)	NO	YES	FAIR	500	SF	WALLS	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (PIPE WRAP)	NO	NO	GOOD	2	SF	PIPES	BLACK STICKY PIPE WRAP	JONES EDMUNDS
102	VIBRATION JOINT CLOTH	YES*	NO	GOOD	1	EA	HVAC	ASSUMED BLACK VIBRATION JOINT CLOTH ON AC	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	2	SF	HVAC	DARK GRAY ELECTRICAL PUTTY	AMIS
102	DUCT/HVAC (MASTIC)	NO	NO	GOOD	4	SF	HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	10	SF	HVAC	GREENISH GRAY MASTIC OVER ORANGE NON-SUSPECT FIBER BOARD	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	65	LF	DOOR	WHITE CAULK	AMIS
102	DUCT/HVAC (MASTIC)	NO	NO	GOOD	4	SF	HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
102	MISCELLANEOUS MATERIAL (CAULK)	YES	NO	GOOD	15	LF	WALLS	WHITE/YELLOW CAULK	JONES EDMUNDS
103	WALL COVERING (BASEBOARD)	NO	NO	GOOD	35	LF	WALLS	4" BROWN VINYL BASE MOLDING AND YELLOW MASTIC	AMIS
103	WALL COVERING (DRYWALL, JOINT COMPOUND)	NO	YES	GOOD	700	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
103	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	110	LF	DOOR	WHITE CAULK	AMIS
103	FLOOR COVERING (VINYL)	NO	NO	GOOD	250	SF	FLOORS	WHITE WITH BROWN DESIGN FLOOR SHEETING	AMIS
104	WALL COVERING (BASEBOARD)	NO	NO	GOOD	45	LF	WALLS	4" BROWN VINYL BASE MOLDING AND YELLOW MASTIC	AMIS
104	FLOOR COVERING (OTHER)	YES	NO	GOOD	37	LF	FLOORS	BROWN FIBROUS FLOOR SEAL	AMIS

66249 - THRUST VECTOR CONTROL (TVC) DESERVICING BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
104	WALL COVERING (DRYWALL, JOINT COMPOUND)	NO	YES	GOOD	480	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
104	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	10	SF	HVAC	GRAY DUCT CAULK	AMIS
104	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	120	LF	DOOR	WHITE CAULK	AMIS
104	FLOOR COVERING (VINYL)	NO	NO	GOOD	150	SF	FLOORS	WHITE WITH BROWN DESIGN FLOOR SHEETING	JONES EDMUNDS
105	WALL COVERING (BASEBOARD)	NO	NO	GOOD	20	LF	WALLS	4" BROWN VINYL BASE MOLDING AND YELLOW MASTIC	AMIS
105	FLOOR COVERING (OTHER)	YES	NO	GOOD	35	LF	FLOORS	BROWN FIBROUS FLOOR SEAL	JONES EDMUNDS
105	WALL COVERING (DRYWALL, JOINT COMPOUND)	NO	YES	GOOD	480	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
105	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	GOOD	2	SF	WALLS	RED CAULK AT WALL PENETRATION	JONES EDMUNDS
105	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	100	LF	DOOR	WHITE CAULK	AMIS
~~105~~	~~FLOOR COVERING (VINYL)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOORS~~	~~WHITE WITH BROWN DESIGN FLOOR SHEETING~~	~~AMIS~~
106/106A	WALL COVERING (BASEBOARD)	NO	NO	GOOD	21	SF	WALLS	4" BROWN VINYL BASE MOLDING AND YELLOW MASTIC	AMIS
106/106A	WALL COVERING (DRYWALL, JOINT COMPOUND)	NO	YES	GOOD	600	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
106/106A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	4	SF	HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
106/106A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	40	SF	HVAC	GREENISH GRAY MASTIC	JONES EDMUNDS
106/106A	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	80	LF	DOOR	WHITE CAULK	AMIS
~~106/106A~~	~~FLOOR COVERING (VINYL)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOORS~~	~~WHITE WITH BROWN DESIGN FLOOR SHEETING~~	~~AMIS~~
107	WALL COVERING (BASEBOARD)	NO	NO	GOOD	15	LF	WALLS	4" BROWN VINYL BASE MOLDING AND MASTIC	AMIS
107	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	WALLS	BLACK WALL PUTTY PENETRATION SEAL	JONES EDMUNDS
107	WALL COVERING (DRYWALL, JOINT COMPOUND)	NO	YES	GOOD	500	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
107	DUCT/HVAC (MASTIC)	NO	NO	GOOD	4	SF	HVAC	GRAY DUCT MASTIC	JONES EDMUNDS
107	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	40	LF	DOOR	WHITE CAULK	AMIS
107	DUCT/HVAC (MASTIC)	NO	NO	GOOD	2	SF	HVAC	WHITE DUCT MASTIC	JONES EDMUNDS
~~107~~	~~FLOOR COVERING (VINYL)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOORS~~	~~WHITE WITH BROWN DESIGN FLOOR SHEETING~~	~~AMIS~~
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	POOR	15	LF	WALLS	BLACK CAULK AT BASE OF EXTERIOR CORRUGATED METAL WALL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	1	SF	SE WALL	BLACK PUTTY AT WALL PENETRATION FOR PIPE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	2	SF	NORTH WALL	BLACK WALL PUTTY PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	26	SF	WALLS	CREAM/TAN CAULK AT METAL WALL/CONCRETE BLOCK JUNCTION AND AT VENTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES*	NO	GOOD	4	SF	WALLS	ASSUMED ELECTRICAL PUTTY ON JUNCTION BOX	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	12	EA	PIPES	ASSUMED GASKETS ON RED WATER LINES	JONES EDMUNDS

66249 - THRUST VECTOR CONTROL (TVC) DESERVICING BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (FOAM PACKING)	NO	NO	GOOD	50	SF	WALLS	GRAY/BLUE FOAM PACKING UNDER CORREGATED METAL WALLS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	1	SF	SE WALL	GRAY PUTTY AT WALL PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	SE WALL	LIGHT GRAY PUTTY AT WALL PENETRATION FOR WIRE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	POOR	2	SF	PIPES	WHITE PUTTY AT PIPE PENETRATIONS	JONES EDMUNDS
EXTERIOR	INSULATION	NO	NO	GOOD	10	SF	WALLS	TAN FOAM PACKING BEHIND WALL PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	10	SF	WEST WALL	WHITE CAULK ON EXTERIOR CORNER WALL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	GOOD	10	LF	PIPES	WHITE MASTIC OVER FIBERGLASS ON EYE WASH STATION	JONES EDMUNDS
EXTERIOR	INSULATION	NO	NO	GOOD	3,500	SF	WALLS	WHITE PAPER OVER FIBERGLASS INSULATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	1	SF	WEST WALL	WHITE PUTTY AT PIPE PENETRATION NEAR EYE WASH	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	FAIR	1	SF	WALLS	WHITE SEALANT AT PIPE PENETRATION	JONES EDMUNDS
EXTERIOR AC	MISCELLANEOUS MATERIAL (GLUE)	NO	NO	POOR	200	SF	HVAC	SILVER TAPE OVER YELLOW GLUE	JONES EDMUNDS
ROOF	ROOF MATERIAL (ROOF CORE)	NO	NO	GOOD	10	SF	ROOF	BEIGE COATING WITH CLOTH	AMIS
ROOF	ROOF MATERIAL (ROOF CORE)	NO	NO	GOOD	3	SF	ROOF	BLACK ROOF CEMENT	AMIS
ROOF	ROOF MATERIAL (ROOF CORE)	NO	NO	GOOD	150	SF	HVAC	GRAY ELASTIC COATING	AMIS
ROOF	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	225	LF	DOOR	WHITE CAULK	AMIS
ROOF	ROOF MATERIAL (ROOF CORE)	NO	NO	GOOD	2000	SF	ROOF	WHITE ROOF COATING	AMIS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	10	SF	ROOF	ASSUMED WHITE SEALANT AROUND HIGH BAY AIR VENTS AND WHERE EAST ROOF MEETS HIGH BAY	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	POOR	30	SF	ROOF	BROWNISH YELLOW CAULK ON AIR TERMINALS AND COUNTERPOISE	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	50	SF	ROOF	ASSUMED SILVER SEALANT AROUND SCREWS AND VENTS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	NO	NO	FAIR	20	LF	ROOF	SILVER SEALANT OVER WHITE CAULK ON EXHAUST VENTS	JONES EDMUNDS

66259 - EQUIPMENT BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	NO	GOOD	2,500	SF	WALLS	BROWN PAPER OVER YELLOW STYROFOAM INSULATION	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	15	LF	FLOOR	GRAY BUILDING SEAL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	FAIR	2	SF	WALLS/FLOOR	BLACK WALL PENETRATION SEAL	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (GASKET)	YES*	NO	GOOD	2	EA	ELECTRICAL PANEL	ASSUMED GASKETS ON ELECTRICAL PANEL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	FAIR	90	LF	WALLS	WHITE CAULK ON EXTERIOR WALLS, DOOR, ROOF, AND METAL PANEL SEAMS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	10	LF	WALLS	GRAY CONCRETE JOINT SEAL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKET)	NO	NO	GOOD	1	EA	TANK	BLACK GASKET ON WHITE PROCESS WATER TANK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKET)	NO	NO	GOOD	2	EA	PIPES	RED GASKET ON EXTERIOR PIPES	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT)	YES*	NO	FAIR	20	LF	LOWER ROOF	ASSUMED GRAY SEALANT ON LOWER ROOF ABOVE EQUIPMENT SHED	JONES EDMUNDS

66266 - DRUM STORAGE BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	FLOOR COVERING	NO	NO	GOOD	450	SF	FLOOR	GRAY FLOOR MATERIAL (POLYUREA)	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (MASTIC)	NO	NO	POOR	4	SF	WALLS	CREAM MASTIC UNDER LIGHTNING PROTECTION SYSTEM	JONES EDMUNDS

66320 - ROBOT WASH FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	WALL COVERING (BASEBOARD)	NO	NO	GOOD	90	LF	WALLS	4" BLACK VINYL BASEBOARD WITH YELLOW GLUE	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	270	SF	CEILING	2' x 4' RANDOM HOLE TILES	JONES EDMUNDS
100	DUCT/HVAC (MASTIC)	NO	YES	GOOD	40	SF	DUCT	BLACK FIBERBOARD OVER YELLOW FIBERGLASS ON INSIDE OF METAL DUCT	JONES EDMUNDS
100	MISCELLANEOUS MATERIALS (PUTTY)	NO	NO	GOOD	1	SF	WALLS	CREAM PIPE PUTTY	JONES EDMUNDS
100	FLOOR COVERING (TILE)	YES	NO	POOR	12	SF	FLOOR	12" X 12" LIGHT GREEN WITH TAN SMUDGES AND BLACK MASTIC	JONES EDMUNDS
100	CEILING MATERIALS (OTHER)	NO	YES	GOOD	300	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
100	FLOOR COVERING (TILE)	YES	NO	GOOD	392	SF	FLOOR	12" X 12" CREAM W/TAN & BEIGE SMUDGES AND BLACK MASTIC	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	30	SF	CEILING	2' X 4' WHITE NATURAL FISSURES, PINHOLES	AMIS
100	WALL COVERING (BASEBOARD)	NO	NO	GOOD	4	LF	WALLS	4" TAUPE VINYL BASEBOARD/MASTIC	AMIS
100	MISCELLANEOUS MATERIALS (OTHER)	YES*	NO	GOOD	1	EA	CONDUIT	ASSUMED GASKET ON ELECTRICAL CONDUIT	JONES EDMUNDS
100	DUCT/HVAC (MASTIC)	NO	NO	GOOD	30	SF	DUCT	BLACK DUCT MASTIC	AMIS
100	WALL COVERING (DRYWALL)	NO	YES	GOOD	840	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
100	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	36	LF	WINDOW	WHITE BUILDING SEAL	AMIS
101	WALL COVERING (DRYWALL)	NO	YES	GOOD	580	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
101	WALL COVERING (BASEBOARD)	NO	NO	GOOD	60	LF	WALLS	4" BLACK VINYL BASEBOARD WITH YELLOW GLUE	JONES EDMUNDS
101	CEILING MATERIALS (TILE)	NO	YES	GOOD	160	SF	CEILING	2' x 4' RANDOM HOLE TILES	JONES EDMUNDS
101	DUCT/HVAC (MASTIC)	NO	YES	GOOD	250	SF	DUCT	BLACK FIBERBOARD OVER YELLOW FIBERGLASS ON INSIDE OF METAL DUCT	JONES EDMUNDS
101	FLOOR COVERING (TILE)	YES	NO	POOR	4	SF	FLOOR	12" X 12" LIGHT GREEN WITH TAN SMUDGES AND BLACK MASTIC	JONES EDMUNDS
101	CEILING MATERIALS (OTHER)	NO	YES	GOOD	300	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
101	FLOOR COVERING (TILE)	YES	NO	GOOD	185	SF	FLOOR	12" X 12" CREAM W/TAN & BEIGE SMUDGES AND BLACK MASTIC	JONES EDMUNDS
~~101~~	~~FLOOR COVERING (TILE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" X 12" LIGHT GRAY, DARK GRAY & WHITE~~	~~AMIS~~
101	CEILING MATERIALS (TILE)	NO	YES	GOOD	16	SF	CEILING	2' X 4' WHITE NATURAL FISSURES, PINHOLES	AMIS
101	DUCT/HVAC (MASTIC)	NO	NO	GOOD	35	SF	DUCT	BLACK DUCT MASTIC	AMIS
101	MISCELLANEOUS MATERIALS (OTHER)	YES*	NO	GOOD	4	EA	DOOR	ASSUMED FIRE DOORS	JONES EDMUNDS
101	MISCELLANEOUS MATERIALS (OTHER)	YES*	NO	GOOD	8	SF	DOOR	ASSUMED PUTTY INSIDE WINDOWS OF DOORS	JONES EDMUNDS
101	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	78	LF	WINDOW	WHITE BUILDING SEAL	AMIS
102	WALL COVERING (BASEBOARD)	NO	NO	GOOD	54	LF	WALLS	4" BLACK VINYL BASEBOARD WITH YELLOW GLUE	JONES EDMUNDS

66320 - ROBOT WASH FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
102	CEILING MATERIALS (TILE)	NO	YES	GOOD	120	SF	CEILING	2' x 4' RANDOM HOLE TILES	JONES EDMUNDS
102	FLOOR COVERING (TILE)	YES	NO	GOOD	180	SF	FLOOR	12" X 12" CREAM W/TAN & BEIGE SMUDGES AND BLACK MASTIC	JONES EDMUNDS
~~102~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~12" X 12" WHITE TEXTURED~~	~~AMIS~~
102	MISCELLANEOUS MATERIALS (Other)	YES*	NO	GOOD	2	EA	CONDUIT	ASSUMED GASKETS ON FIRE SYSTEM ELECTRICAL CONDUIT	JONES EDMUNDS
102	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	DUCT	BLACK DUCT MASTIC	JONES EDMUNDS
102	WALL COVERING (DRYWALL)	NO	YES	GOOD	540	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
102	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	30	LF	WALLS	WHITE BUILDING SEAL	AMIS
102	CEILING MATERIALS (OTHER)	NO	YES	GOOD	50	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
103	CEILING MATERIALS (TILE)	NO	YES	GOOD	22	SF	CEILING	2' x 4' RANDOM HOLE TILES	JONES EDMUNDS
103	CEILING MATERIALS (OTHER)	NO	YES	GOOD	30	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
103	FLOOR COVERING (TILE)	YES	NO	GOOD	30	SF	FLOOR	12" X 12" CREAM W/TAN & BEIGE SMUDGES AND BLACK MASTIC	JONES EDMUNDS
~~103~~	~~CEILING MATERIALS (TILE)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~12" X 12" WHITE TEXTURED~~	~~AMIS~~
103	CEILING MATERIALS (TILE)	NO	YES	GOOD	8	SF	CEILING	2' X 4' WHITE NATURAL FISSURES, PINHOLES	JONES EDMUNDS
103	WALL COVERING (BASEBOARD)	NO	NO	GOOD	20	LF	WALLS	4" BLACK VINYL BASEBOARD WITH YELLOW GLUE	JONES EDMUNDS
103	WALL COVERING (DRYWALL)	NO	YES	GOOD	240	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
103	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	16	LF	WALLS	WHITE BUILDING SEAL	AMIS
104	DUCT/HVAC (MASTIC)	NO	NO	GOOD	25	SF	DUCT	CREAM MASTIC OVER SILVER FOIL OVER FIBERGLASS OVER METAL DUCT	JONES EDMUNDS
104	WALL COVERING (DRYWALL)	NO	YES	GOOD	768	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
104	MISCELLANEOUS MATERIALS (CAULK, SEALANT)	NO	NO	GOOD	4	SF	WALLS	RED WALL PENETRATION SEAL	JONES EDMUNDS
104	MISCELLANEOUS MATERIALS (CAULK, SEALANT)	NO	NO	GOOD	4	SF	WALLS	BLACK WALL PENETRATION SEAL	JONES EDMUNDS
104	MISCELLANEOUS MATERIALS (Other)	YES*	NO	GOOD	30	EA	CONDUIT	ASSUMED GASKETS ON PUMP EQUIPMENT AND ELECTRICAL CONDUIT	JONES EDMUNDS
104	FLOOR COVERING (OTHER)	NO	NO	GOOD	64	LF	FLOOR	BLACK FIBROUS FLOOR SEAL	AMIS
104	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	16	LF	FLOOR	LIGHT GRAY BUILDING SEAL	JONES EDMUNDS
104	MISCELLANEOUS MATERIALS (OTHER)	YES*	NO	GOOD	4	SF	DOOR	ASSUMED PUTTY INSIDE WINDOWS OF DOORS	JONES EDMUNDS
104	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	20	LF	WALLS	WHITE BUILDING SEAL	JONES EDMUNDS
104	CEILING MATERIALS (OTHER)	NO	YES	GOOD	750	SF	CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
105 (WASH BAY)	FLOOR COVERING (OTHER)	NO	NO	GOOD	150	LF	FLOOR	BLACK FIBROUS FLOOR SEAL	AMIS
105 (WASH BAY)	MISCELLANEOUS MATERIALS (CAULK, SEALANT)	NO	NO	GOOD	10	SF	WALLS	BLACK CAULK	AMIS
105 (WASH BAY)	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	NO	GOOD	20	LF	WALLS	WHITE BUILDING SEAL	AMIS

66320 - ROBOT WASH FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
105 (WASH BAY)	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	FAIR	280	LF	FLOOR	GRAY, NON-FIBROUS BUILDING SEAL	JONES EDMUNDS
105 (WASH BAY)	MISCELLANEOUS MATERIAL (PUTTY)	NO	NO	GOOD	4	SF	ELECTRICAL CONDUIT	TAN PUTTY ON ELECTRICAL CONDUIT	JONES EDMUNDS
105 (WASH BAY)	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	40	LF	FLOOR	GRAY BUILDING SEAL OVER OLDER GRAY SEAL	JONES EDMUNDS
105 (WASH BAY)	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	10	EA	ROBOT WASH	ASSUMED GASKETS ON ROBOT WASH	JONES EDMUNDS
105 (WASH BAY)	MISCELLANEOUS MATERIAL (GASKETS)	YES*	NO	GOOD	1	EA	ROBOT WASH	ASSUMED MOTOR OR PLATE UNDER TURN TABLE	JONES EDMUNDS
105 (WASH BAY)	MISCELLANEOUS MATERIAL (VIBRATION JOINT)	YES*	NO	GOOD	5	EA	METAL DUCTS	ASSUMED VIBRATION JOINTS ON METAL HVAC DUCTS	JONES EDMUNDS
EXTERIOR	DUCT/HVAC (MASTIC)	YES*	NO	FAIR	100	LF	METAL DUCTS	ASSUMED DARK GRAY MASTIC ON EXTERIOR HVAC DUCTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	25	LF	DOOR AND WALL PENETRATIONS	GRAY CAULK ON EXTERIOR DOOR AND WALL PENETRATIONS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	75	LF	DOOR	CREAM PAINT OVER WHITE CAULK ON DOOR AND WALL PANEL SEAMS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	FAIR	160	LF	ROOF	OFF-WHITE SEALANT OVER DARK GRAY FOAM ON ROOF SEAMS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (SEALANT)	YES*	NO	GOOD	60	SF	ROOF	ASSUMED SILVER SEALANT ON SCREWS ON SOUTH AND WEST LOWER ROOFS	JONES EDMUNDS

66241 - DEIONIZED WATER TANK

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	POOR	1	SF	BASE OF PIPE	GRAY PAINT OVER GRAY SEALANT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	1	EA	WATER LINE	RED GASKET ON WATER LINE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	GOOD	1	EA	ENTRY HATCH	BLACK GASKET ON ENTRY HATCH	JONES EDMUNDS

66246 - CONTAMINATED WATER TANK

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	FAIR	200	LF	EXTERIOR SEAMS	WHITE SEALANT ON TANK SEAM	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (TANK LINER)	NO	NO	FAIR	2,600	SF	INTERIOR	BLACK TANK LINER ON INSIDE OF TANK	JONES EDMUNDS

66256 - WASTE WATER TANK (BLUE TANK)

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	100	LF	TANK SEAMS	GRAY CAULK ON STEEL SEAMS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	FAIR	600	LF	TANK SEAMS	BLACK CAULK ON STEEL SEAMS AND BOLTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	YES	FAIR	100	LF	TANK BASE	BLACK FIBROUS SEAL AT TANK BASE	JONES EDMUNDS

66267 - TANK FARM

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	450	SF	FLOOR	GRAY POLYUREA SEALANT ON TANK FARM AND TRENCH	JONES EDMUNDS

PACKAGE 4 ASBESTOS SCHEDULES

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1000/7A (HALL)	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	50	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH YELLOW AND BROWN MASTIC	AMIS
1000/7A (HALL)	DUCT/HVAC (MASTIC)	NO	NO	GOOD	1,000	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1000/7A (HALL)	CEILING MATERIAL (TILES)	NO	YES	GOOD	721	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1000/7A (HALL)	CEILING MATERIAL (TILES)	NO	YES	GOOD	24	SF	CEILING	2 X 4 PINHOLE	JONES EDMUNDS
1000/7A (HALL)	DUCT/HVAC (MASTIC)	YES	NO	GOOD	50	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1000/7A (HALL)	DUCT/HVAC (MASTIC)	NO	NO	GOOD	54	SF	CEILING	WHITE HVAC MASTIC	AMIS
1000/7A (HALL)	FLOOR COVERING (TILE)	YES	NO	GOOD	721	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1000/7A (HALL)	PIPE INSULATION	NO	YES	GOOD	103	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	AMIS
1000/7A (HALL)	PIPE INSULATION	NO	NO	GOOD	6	SF	CEILING	BLACK PIPE WRAP	AMIS
1000/7A (HALL)	MISCELLANEOUS MATERIAL	NO	NO	GOOD	65	LF	FLOOR	GREEN BONDING AGENT ON EXTERIOR CONCRETE WALL UNDER RAISED FLOOR	JONES EDMUNDS
1001/1	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	240	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1001A/1	VALVES, ELBOWS, TEES (MASTIC)	YES	NO	GOOD	3	EA	CEILING	BLACK MASTIC ON ELBOWS OF 2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1001A/1	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	240	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1001A/1	PIPE INSULATION	NO	YES	GOOD	8	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1001 B-E/1	CEILING MATERIAL (TILES)	NO	YES	GOOD	600	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1001 B-E/1	CEILING MATERIAL (TILES)	NO	YES	GOOD	8	SF	CEILING	2 X 4 WHITE MED & SMALL PINHOLES	AMIS
1001 B-E/1	DUCT/HVAC (MASTIC)	YES	NO	GOOD	100	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1001 B-E/1	DUCT/HVAC (MASTIC)	NO	NO	GOOD	100	SF	CEILING	WHITE HVAC MASTIC	AMIS
1001 B-E/1	FLOOR COVERING (TILE)	YES	NO	GOOD	562	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1001 B-E/1	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	12" WHITE W/GRAY STREAKS	AMIS
1001 B-E/1	FLOOR COVERING (TILE)	NO	NO	GOOD	10	SF	FLOOR	12" OFFWHT W/DARK BROWN STREAKS	AMIS
1001 B-E/1	FLOOR COVERING (TILE)	NO	NO	GOOD	4	SF	FLOOR	2 X 2 WHITE W/PEACH DRIZZLES	AMIS
~~1001 B-E/1~~	~~MISCELLANEOUS MATERIAL (OTHER)~~	~~YES~~	~~NO~~	~~GOOD~~	0	~~SF~~		~~MISCELLANEOUS MATERIAL~~	~~AMIS~~
1001 B-E/1	PIPE INSULATION	NO	YES	GOOD	56	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1001 B-E/1	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	10	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	AMIS
1001 B-E/1	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	100	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH CLEAR AND BROWN MASTIC	AMIS
1002 (HALL)	FLOOR COVERING (TILE)	YES	NO	GOOD	180	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002 (HALL)	CEILING MATERIAL (TILES)	NO	YES	GOOD	180	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1002 (HALL)	DUCT/HVAC (MASTIC)	YES	NO	GOOD	70	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002 (HALL)	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	WHITE HVAC MASTIC	AMIS
1002 (HALL)	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	280	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002 (HALL)	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	2	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1002 (HALL)	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	22	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	JONES EDMUNDS
1002 (HALL)	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	5	EA	CEILING	4-6" WHITE CLOTH O/MUD ELBOW	
1002 (HALL)	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	16	LF	CEILING	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1002 (HALL)	VALVES, ELBOWS, TEES (MUD)	YES	YES	GOOD	7	EA	CEILING	2" WHITE CLOTH OVER MUD	JONES EDMUNDS
1002A/2	CEILING MATERIAL (TILES)	NO	YES	GOOD	91	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002A/2	DUCT/HVAC (MASTIC)	YES	NO	GOOD	8	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002A/2	FLOOR COVERING (TILE)	YES	NO	GOOD	91	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002A/2	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	7	LF	WALLS	4" BLACK VINYL BASE MOLDING	AMIS
1002A/2	DUCT/HVAC (MASTIC)	NO	NO	GOOD	4	SF	CEILING	YELLOW DUCT MASTIC	JONES EDMUNDS
1002B/4	DUCT/HVAC (MASTIC)	YES	NO	GOOD	30	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002B/4	FLOOR COVERING (TILE)	YES	NO	GOOD	144	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002B/4	DUCT/HVAC (MASTIC)	NO	NO	GOOD	8	SF	CEILING	YELLOW DUCT MASTIC	JONES EDMUNDS
1002B/4	PIPE INSULATION, STRAIGHT	NO	YES	GOOD	3	LF	CEILING	4-6" WHITE CLOTH OVER FIBERGLASS PIPING	JONES EDMUNDS
1002B/4	VALVES, ELBOWS, AND TEES	NO	YES	GOOD	2	EA	CEILING	4-6" WHITE CLOTH OVER FIBERGLASS PIPING	JONES EDMUNDS
1002B/4	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	10	LF	CEILING	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1002B/4	VALVES, ELBOWS, AND TEES	YES	YES	GOOD	4	EA	CEILING	2" WHITE CLOTH OVER MUD	JONES EDMUNDS
1002B/4	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002C	PIPE INSULATION	NO	YES	GOOD	24	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	JONES EDMUNDS
1002C	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	1	EA	CEILING	4-6" WHITE CLOTH O/MUD ELBOW	JONES EDMUNDS
1002C	DUCT/HVAC (MASTIC)	YES	NO	GOOD	10	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002C	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	WHITE HVAC MASTIC	AMIS
1002C	FLOOR COVERING (TILE)	YES	NO	GOOD	132	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002C	CEILING MATERIAL (TILES)	NO	YES	GOOD	132	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002C	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	230	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002C	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	120	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1002D	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1002D	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1002D	DUCT/HVAC (MASTIC)	YES	NO	GOOD	10	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002D	DUCT/HVAC (MASTIC)	NO	NO	GOOD	6	SF	CEILING	WHITE HVAC MASTIC	JONES EDMUNDS
1002D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	340	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1002E	FLOOR COVERING (TILE)	YES	NO	GOOD	270	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002E	CEILING MATERIAL (TILES)	NO	YES	GOOD	270	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002E	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	100	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002E	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	580	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1002E	DUCT/HVAC (MASTIC)	YES	NO	GOOD	15	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002E	DUCT/HVAC (MASTIC)	NO	NO	GOOD	10	SF	CEILING	WHITE HVAC MASTIC	AMIS
1002E	PIPE INSULATION	NO	YES	GOOD	36	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	JONES EDMUNDS
1002E	DUCT/HVAC MATERIALS (INSULATION)	NO	YES	GOOD	40	SF	CEILING	FIBERGLASS INSULATION INSIDE ABANDONED HVAC DUCT	JONES EDMUNDS
1002F	FLOOR COVERING (TILE)	YES	NO	GOOD	140	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002F	CEILING MATERIAL (TILES)	NO	YES	GOOD	140	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002F	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	140	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002F	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	340	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1002F	DUCT/HVAC (MASTIC)	YES	NO	GOOD	15	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002F	PIPE INSULATION	NO	YES	GOOD	12	LF	CEILING	2" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1002F	MISCELLANEOUS MATERIAL (MASTIC)	YES	NO	GOOD	2	EA	CEILING	BLACK MASTIC ON ELBOWS OF 2-4" PIPE	JONES EDMUNDS
1002G	FLOOR COVERING (TILE)	YES	NO	GOOD	88	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002G	CEILING MATERIAL (TILES)	NO	YES	GOOD	88	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002G	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	170	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002G	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	100	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1002G	DUCT/HVAC (MASTIC)	NO	NO	GOOD	10	SF	CEILING	WHITE HVAC MASTIC	AMIS
1002G	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	8	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1002H	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002H	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1002H	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	120	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002H	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	140	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1002H	DUCT/HVAC (MASTIC)	YES	NO	GOOD	15	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002H	PIPE INSULATION	NO	YES	GOOD	20	LF	CEILING	4-6" WHITE CLOTH OVER FIBERGLASS PIPING	JONES EDMUNDS
1002H	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	7	EA	CEILING	4-6" WHITE CLOTH O/MUD ELBOW	
1002J/6	DUCT/HVAC (MASTIC)	YES	NO	GOOD	40	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1002J/6	FLOOR COVERING (TILE)	YES	NO	GOOD	144	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1002J/6	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	WHITE HVAC MASTIC	JONES EDMUNDS
1002J/6	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1002J/6	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	YELLOW DUCT MASTIC	JONES EDMUNDS
1002J/6	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	2	LF	CEILING	4-6" WHITE CLOTH OVER FIBERGLASS PIPING	JONES EDMUNDS
1002J/6	VALVES, ELBOWS, AND TEES (MUD)	YES	YES	GOOD	5	EA	CEILING	2" WHITE CLOTH OVER MUDDED ELBOWS AND TEES	JONES EDMUNDS
1002J/6	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	15	LF	CEILING	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1002K/8	CEILING MATERIAL (TILES)	NO	YES	GOOD	96	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
~~1002K/8~~	~~DUCT/HVAC (MASTIC)~~	YES	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	OFF-WHITE/CREAM HVAC MASTIC	~~AMIS~~
1002K/8	FLOOR COVERING (TILE)	YES	NO	GOOD	96	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
~~1002K/8~~	~~MISCELLANEOUS MATERIAL (PUTTY)~~	~~YES~~	~~NO~~	~~ABATED~~	~~0~~	~~SF~~	~~WALL~~	~~GRAY/WHITE PUTTY~~	~~AMIS~~
1002K/8	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	22	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH YELLOW & BROWN MASTIC	JONES EDMUNDS
1003/3 (MEN'S)	WALL COVERING (PLASTER)	NO	NO	GOOD	800	SF	WALLS/CEILING	PLASTER WALLS AND CEILING	JONES EDMUNDS
1003/3 (MEN'S)	FLOOR COVERING (TILE)	NO	NO	GOOD	440	SF	FLOOR/WALLS	CERAMIC TILE & MORTAR	AMIS
1003/3 (MEN'S)	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	5	LF	WALLS	WHITE CAULK AROUND SINKS AND TOILETS	JONES EDMUNDS
1003/3 (MEN'S)	PIPE INSULATION	NO	YES	GOOD	20	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1003/3 (MEN'S)	VALVES, ELBOWS, TEES (MASTIC)	YES	NO	GOOD	2	EA	CEILING	BLACK MASTIC ON ELBOWS OF 2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1003/3 (MEN'S)	PIPE INSULATION	NO	YES	GOOD	25	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	JONES EDMUNDS
1003/3 (MEN'S)	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	6	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	JONES EDMUNDS
1003/3 (MEN'S)	DUCT/HVAC (MASTIC)	YES	NO	GOOD	7	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
5 (JANITOR'S CLOSET)	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	2	SF	PIPE	WHITE PIPE CAULK	AMIS
5 (JANITOR'S CLOSET)	PIPE INSULATION	NO	YES	GOOD	24	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1007/7 (WOMEN'S)	CEILING MATERIAL (TILES)	NO	NO	GOOD	70	SF	CEILING	2 x 2 SMOOTH TILES	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1007/7 (WOMEN'S)	FLOOR COVERING (TILE)	NO	NO	GOOD	440	SF	FLOOR/WALLS	CERAMIC TILE & MORTAR	AMIS
1007/7 (WOMEN'S)	WALL COVERING (PLASTER)	NO	NO	GOOD	75	SF	WALLS	PLASTER WALLS	JONES EDMUNDS
1007/7 (WOMEN'S)	WALL COVERING (DRYWALL)	NO	NO	GOOD	50	SF	WALLS	DRYWALL & JOINT COMPOUND	JONES EDMUNDS
1009/7 (WOMEN'S)	CEILING MATERIAL (TILES)	NO	YES	GOOD	50	SF	CEILING	2 x 2 DRYWALL TILES	JONES EDMUNDS
1009/7 (WOMEN'S)	WALL COVERING (PLASTER)	NO	NO	GOOD	75	SF	WALLS/CEILING	PLASTER WALLS AND CEILING ABOVE DROP CEILING	JONES EDMUNDS
1009/7 (WOMEN'S)	WALL COVERING (DRYWALL)	NO	NO	GOOD	50	SF	WALLS	DRYWALL & JOINT COMPOUND	JONES EDMUNDS
~~RESTROOMS~~	~~PIPE INSULATION~~	~~YES~~	~~NO~~	~~ABATED~~	~~0~~	~~SF~~	~~CEILING~~	~~BLACK MASTIC ON PAPER/FOIL/F.G~~	~~AMIS~~
1011/7B	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	20	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1011/7B	CEILING MATERIAL (TILES)	NO	YES	GOOD	30	SF	CEILING	2 X 4 WHITE MED & SMALL PINHOLES	JONES EDMUNDS
1011/7B	FLOOR COVERING (TILE)	YES	NO	GOOD	10	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1012/7B	DUCT/HVAC (MASTIC)	YES	NO	GOOD	20	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1012/7B	DUCT/HVAC (MASTIC)	NO	NO	GOOD	40	SF	CEILING	WHITE HVAC MASTIC	AMIS
1012/7B	FLOOR COVERING (TILE)	YES	NO	GOOD	10	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1012/7B	FLOOR COVERING (TILE)	YES	NO	GOOD	6	SF	FLOOR	12" DARK TAN WITH DARK BEIGE AND CREAM STREAKS	AMIS
1012/7B	PIPE INSULATION	NO	YES	GOOD	24	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1012/7B	PIPE INSULATION	NO	YES	GOOD	10	LF	WALL/CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS	JONES EDMUNDS
1012/7B	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	6	SF	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	AMIS
1012/7B	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	4	LF	FLOOR	BLACK NON FIBROUS SEAL AROUND FLOOR OPENING FOR ELECTRICAL CONDUITS	JONES EDMUNDS
COMM CLOSET/7C	FLOOR COVERING (TILE)	YES	NO	GOOD	5	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
~~7D~~	~~CEILING MATERIAL (TILES)~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~2 X 4 NATURAL FISSURE W/PINHOLES~~	~~AMIS~~
~~7D~~	~~DUCT/HVAC (MASTIC)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~OFF-WHITE/CREAM HVAC MASTIC~~	~~AMIS~~
~~7D~~	~~FLOOR COVERING (TILE)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~FLOOR~~	~~12" TAN W/LT BROWN & CREAM SMEARS~~	~~AMIS~~
~~7D~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~4-6" WHITE CLOTH O/FBGLS PIPING~~	~~AMIS~~
~~7D~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS~~	~~AMIS~~
~~7D~~	~~FLOOR COVERING (BASECOVE)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~WALLS~~	~~4" BLACK VINYL BASE MOLDING~~	~~AMIS~~

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
14	PIPE INSULATION	NO	YES	GOOD	16	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	AMIS
14 A/B	PIPE INSULATION	NO	YES	GOOD	16	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	AMIS
1014B	DUCT/HVAC (MASTIC)	YES	NO	GOOD	15	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1014B	DUCT/HVAC (MASTIC)	NO	NO	GOOD	30	SF	CEILING	WHITE HVAC MASTIC	AMIS
1014B	FLOOR COVERING (TILE)	YES	NO	GOOD	156	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1014B	CEILING MATERIAL (TILES)	NO	YES	GOOD	156	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1014B	PIPE INSULATION	NO	YES	GOOD	26	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1014C	DUCT/HVAC (MASTIC)	YES	NO	GOOD	5	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1014C	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	WHITE HVAC MASTIC	AMIS
1014C	CEILING MATERIAL (TILES)	NO	YES	GOOD	150	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1014C	FLOOR COVERING (TILE)	YES	NO	GOOD	150	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1014C	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	250	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1014C	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	140	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1014C	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	15	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1014C	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	36	LF	WINDOWS	GRAY WINDOW GLAZE/CAULKING	JONES EDMUNDS
1014D	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1014D	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1014D	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	36	LF	WINDOWS	GRAY WINDOW GLAZE/CAULKING	JONES EDMUNDS
1014D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	220	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1014D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	100	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1014D	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	12	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1014D	DUCT/HVAC (MASTIC)	YES	NO	GOOD	8	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1014E	FLOOR COVERING (TILE)	YES	NO	GOOD	250	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1014E	CEILING MATERIAL (TILES)	NO	YES	GOOD	250	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1014E	DUCT/HVAC (MASTIC)	YES	NO	GOOD	40	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1014E	DUCT/HVAC (MASTIC)	NO	NO	GOOD	55	SF	CEILING	WHITE HVAC MASTIC	AMIS
1014E	DUCT/HVAC (MASTIC)	NO	NO	GOOD	16	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1014E	PIPE INSULATION	NO	YES	GOOD	13	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
1014E	VALVES, ELBOWS, AND TEES	NO	NO	GOOD	8	SF	CEILING	CREAM MASTIC ON ELBOW OF 10" BROWN PAPER PIPE	JONES EDMUNDS
1014F	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1014F	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1014F	DUCT/HVAC (MASTIC)	YES	NO	GOOD	15	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1014F	DUCT/HVAC (MASTIC)	NO	NO	GOOD	5	SF	CEILING	WHITE HVAC MASTIC	AMIS
1014F	DUCT/HVAC (MASTIC)	NO	NO	GOOD	40	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1014F	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	200	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1014F	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	120	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1015/7C	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	POOR	6	LF	FLOOR	BLACK NON FIBROUS SEAL AROUND FLOOR OPENING FOR ELECTRICAL CONDUITS	JONES EDMUNDS
1015/7C	MISCELLANEOUS MATERIAL	NO	NO	GOOD	8	LF	FLOOR	GREEN BONDING AGENT ON EXTERIOR CONCRETE WALL UNDER RAISED FLOOR	JONES EDMUNDS
1017/9	VALVES, ELBOWS, TEES (MASTIC)	YES	NO	GOOD	6	EA	CEILING	BLACK MASTIC ON ELBOWS OF 2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1017/9	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	12	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	JONES EDMUNDS
1017/9	CEILING MATERIAL (TILES)	NO	YES	GOOD	484	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1017/9	DUCT/HVAC (MASTIC)	YES	NO	GOOD	20	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1017/9	DUCT/HVAC (MASTIC)	NO	NO	GOOD	25	SF	CEILING	WHITE HVAC MASTIC	AMIS
1017/9	FLOOR COVERING (TILE)	YES	NO	GOOD	484	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1017/9	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	26	LF	FLOOR	BLACK FLOOR BLDG SEALANT	AMIS
1017/9	PIPE INSULATION	NO	YES	GOOD	44	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1017/9	PIPE INSULATION	NO	YES	GOOD	22	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS	JONES EDMUNDS
1017/9	PIPE INSULATION	NO	YES	GOOD	29	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	AMIS
~~1017/9~~	~~PIPE INSULATION~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~PIPE~~	~~BLACK PIPE WRAP~~	AMIS
1017/9	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	24	LF	WALLS	4" BLACK VINYL BASE MOLDING	AMIS
1018/16	CEILING MATERIAL (TILES)	NO	YES	GOOD	880	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1018/16	DUCT/HVAC (MASTIC)	YES	NO	GOOD	50	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018/16	DUCT/HVAC (MASTIC)	NO	NO	GOOD	50	SF	CEILING	WHITE HVAC MASTIC	AMIS
1018/16	FLOOR COVERING (TILE)	YES	NO	GOOD	880	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
~~1018/16~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~4-6" WHITE CLOTH O/FBGLS PIPING~~	~~AMIS~~

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1018/16	PIPE INSULATION	NO	YES	GOOD	30	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MATIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
~~1018/16~~	~~VALVES, ELBOWS, TEES (MUD)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~EA~~	~~CEILING~~	~~4-6" WHITE CLOTH O/MUD VALVES & JOINTS~~	~~AMIS~~
1018/16	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	65	LF	CEILING	4-6" WHITE MASTIC OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
1018/16	VALVES, ELBOWS, TEES (FOAMGLASS)	NO	NO	GOOD	6	EA	CEILING	4-6" WHITE MASTIC OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
1018/16	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	220	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1018/16	DUCT/HVAC (MASTIC)	YES	NO	GOOD	50	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018/16	DUCT/HVAC (MASTIC)	NO	NO	GOOD	175	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1018A	CEILING MATERIAL (TILES)	NO	YES	GOOD	240	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1018A	FLOOR COVERING (TILE)	YES	NO	GOOD	240	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1018A	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	130	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1018A	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	140	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1018A	DUCT/HVAC (MASTIC)	YES	NO	GOOD	10	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	20	SF	CEILING	WHITE HVAC MASTIC	AMIS
1018A	PIPE INSULATION	NO	YES	GOOD	13	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
1018A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	120	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1018A	VALVES, ELBOWS, AND TEES	NO	NO	GOOD	10	SF	CEILING	CREAM MASTIC ON JOINTS OF 10" BROWN PAPER PIPE	JONES EDMUNDS
1018B/1018C/16A	CEILING MATERIAL (TILES)	NO	YES	GOOD	240	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1018B/1018C/16A	CEILING MATERIAL (TILES)	NO	YES	GOOD	8	SF	CEILING	2 X 4 PINHOLE	JONES EDMUNDS
1018B/1018C/16A	DUCT/HVAC (MASTIC)	YES	NO	GOOD	10	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018B/1018C/16A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	5	SF	CEILING	WHITE HVAC MASTIC	AMIS
1018B/1018C/16A	FLOOR COVERING (TILE)	YES	NO	GOOD	240	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1018B/1018C/16A	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~4-6" WHITE CLOTH O/FBGLS PIPING~~	~~AMIS~~
1018B/1018C/16A	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	66	LF	CEILING	4-6" WHITE MASTIC OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
1018B/1018C/16A	VALVES, ELBOWS, TEES (FOAMGLASS)	NO	NO	GOOD	4	EA	CEILING	4-6" WHITE MASTIC OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
~~1018B/1018C/16A~~	~~VALVES, ELBOWS, TEES (MUD)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~EA~~	~~CEILING~~	~~4-6" WHITE CLOTH O/MUD VALVES & JOINTS~~	~~AMIS~~
1018B/1018C/16A	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	20	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1018B/1018C/16A	DUCT/HVAC MATERIALS (INSULATION)	NO	YES	FAIR	65	SF	CEILING	BLACK MASTIC OVER FIBERGLASS INSULATION INSIDE ABANDONED DUCT ABOVE CEILING	JONES EDMUNDS
1018E/1018D/16C	DUCT/HVAC (MASTIC)	YES	NO	GOOD	4	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018E/1018D/16C	FLOOR COVERING (TILE)	YES	NO	GOOD	14	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1018E/1018D/16C	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	NO	GOOD	2	LF	FLOOR	BLACK FLOOR BLDG SEALANT	AMIS
1018E/1018D/16C	PIPE INSULATION	NO	YES	GOOD	6	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1018E/1018D/16C	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	1	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	AMIS
1018F/16B	CEILING MATERIAL (TILES)	NO	YES	GOOD	240	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1018F/16B	DUCT/HVAC (MASTIC)	NO	NO	GOOD	12	SF	CEILING	WHITE HVAC MASTIC	AMIS
1018F/16B	FLOOR COVERING (TILE)	YES	NO	GOOD	226	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
~~1018F/16B~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~4-6" WHITE CLOTH O/FBGLS PIPING~~	~~AMIS~~
~~1018F/16B~~	~~VALVES, ELBOWS, TEES (MUD)~~	~~YES~~	~~NO~~	~~GOOD~~	~~0~~	~~EA~~	~~CEILING~~	~~4-6" WHITE CLOTH O/MUD VALVES & JOINTS~~	~~AMIS~~
1018F/16B	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	64	LF	CEILING	4-6" WHITE MASTIC OVER FOIL OVER FOAMGLASS	JONES EDMUNDS
1018F/16B	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GODD	5	LF	CEILING	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1018F/16B	VALVES, ELBOWS, AND TEES (MUD)	YES	YES	GODD	4	EA	CEILING	2" WHITE CLOTH OVER MUD	JONES EDMUNDS
1018F/16B	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	22	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1018G/16D	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1018G/16D	DUCT/HVAC (MASTIC)	YES	NO	GOOD	10	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1018G/16D	DUCT/HVAC (MASTIC)	NO	NO	GOOD	6	SF	CEILING	WHITE HVAC MASTIC	AMIS
1018G/16D	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1018G/16D	PIPE INSULATION	NO	YES	GOOD	12	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MATIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
1018G/16D	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	OFF-WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1019A	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	230	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1019A	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	230	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1019A	MISCELLANEOUS MATERIAL (VIBRATION JOINT CLOTH)	YES*	NO	GOOD	1	EA	DUCT/HVAC	ASSUMED BLACK VIBRATION JOINT CLOTH ON DUCT	JONES EDMUNDS
1019A	CEILING MATERIAL (TILES)	NO	YES	GOOD	160	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1019A	FLOOR COVERING (TILE)	YES	NO	GOOD	160	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1019A	PIPE INSULATION	NO	YES	GOOD	22	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1019A	PIPE INSULATION	NO	YES	GOOD	11	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1019A	PIPE INSULATION	NO	YES	GOOD	22	LF	CEILING	10-12" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
1019A	DUCT/HVAC (MASTIC)	NO	NO	GOOD	44	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
~~1019A~~	~~DUCT/HVAC (MASTIC)~~	YES	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~OFF-WHITE/CREAM HVAC MASTIC~~	~~AMIS~~
~~1019A~~	~~DUCT/HVAC (MASTIC)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~WHITE HVAC MASTIC~~	~~AMIS~~
1019A	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	26	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS
1019B	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1019B	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	GOOD	24	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER FIBERGLASS CEILING INSULATION	JONES EDMUNDS
1019B	FLOOR COVERING (TILE)	YES	NO	GOOD	120	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1019B	DUCT/HVAC (MASTIC)	YES	NO	GOOD	5	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1019B	DUCT/HVAC (MASTIC)	NO	NO	GOOD	15	SF	CEILING	WHITE HVAC MASTIC	AMIS
1019B	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	3	LF	PIPES	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1019B	VALVES, ELBOWS, TEES (FIBERGLASS)	NO	YES	GOOD	1	EA	PIPES	2" WHITE CLOTH OVER FIBERGLASS	JONES EDMUNDS
1019B	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	120	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1019B	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	120	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1019C/1019D	CEILING MATERIAL (TILES)	NO	YES	GOOD	225	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1019C/1019D	FLOOR COVERING (TILE)	YES	NO	GOOD	225	SF	FLOOR	CARPET OVER 12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1019C/1019D	DUCT/HVAC (MASTIC)	YES	NO	GOOD	40	SF	CEILING	OFF-WHITE/CREAM HVAC MASTIC	JONES EDMUNDS
1019C/1019D	DUCT/HVAC (MASTIC)	NO	NO	GOOD	20	SF	CEILING	WHITE HVAC MASTIC	AMIS
1019C/1019D	DUCT/HVAC (MASTIC)	NO	NO	GOOD	44	SF	CEILING	WHITE HVAC MASTIC OVER FIBERGLASS DUCT	JONES EDMUNDS
1019C/1019D	PIPE INSULATION	NO	YES	GOOD	60	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1019C/1019D	VALVES, ELBOWS, AND TEES	NO	NO	GOOD	6	SF	CEILING	CREAM MASTIC ON JOINTS OF 10" BROWN PAPER PIPE	JONES EDMUNDS
1019C/1019D	PIPE INSULATION	NO	YES	GOOD	42	LF	CEILING	2"-4" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1019C/1019D	MISCELLANEOUS MATERIAL (MASTIC)	YES	NO	GOOD	6	EA	CEILING	BLACK MASTIC ON ELBOWS OF 2-4" PIPE	JONES EDMUNDS
1019C/1019D	PIPE INSULATION	NO	YES	GOOD	48	LF	CEILING	10-12" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS WITH CREAM MASTIC	JONES EDMUNDS
~~1019C/1019D~~	~~PIPE INSULATION~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~BLACK PIPE WRAP~~	~~AMIS~~
1019C/1019D	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	5	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	AMIS
1019C/1019D	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	36	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH BROWN MASTIC	AMIS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1019C/1019D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	460	SF	WALLS	TAN BASKET WEAVE DRYWALL PARTITIONS	JONES EDMUNDS
1019C/1019D	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	110	SF	WALLS	TAN BURLAP DRYWALL PARTITIONS	JONES EDMUNDS
1019C/1019D	VALVES, ELBOWS, TEES (MUD)	YES	NO	GOOD	5	EA	CEILING	4-6" WHITE CLOTH O/MUD VALVES & JOINTS	AMIS
1025A/13 A,B	CEILING MATERIAL (TILES)	NO	YES	GOOD	260	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1025A/13 A,B	DUCT/HVAC (MASTIC)	NO	NO	GOOD	120	SF	CEILING	WHITE/CREAM MASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
1025A/13 A,B	FLOOR COVERING (TILE)	NO	NO	GOOD	206	SF	FLOOR	12" WHITE WITH VARIOUS SHADES OF GRAY STREAKS	AMIS
1025A/13 A,B	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	13	LF	CEILING	10" BROWN PAPER OVER FOIL OVER BLACK MASTIC OVER FBGLS	JONES EDMUNDS
1025A/13 A,B	VALVES, ELBOWS, AND TEES (FIBERGLASS)	NO	YES	GOOD	1	EA	CEILING	WHITE MASTIC OVER BROWN PAPER OVER FBGLS ON ELBOW OF 2-4" PIPE	AMIS
1025A/13 A,B	PIPE INSULATION, STRAIGHT (FIBERGLASS)	NO	YES	GOOD	12	LF	CEILING	WHITE MASTIC OVER BROWN PAPER OVER FBGLS ON 2-4" PIPE	AMIS
1025A/13 A,B	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	3	LF	WINDOWS	BROWN WINDOW CAULK	JONES EDMUNDS
1025A/13 A,B	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	20	LF	WINDOWS	WHITE WINDOW CAULK	JONES EDMUNDS
1025A/13 A,B	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	30	LF	WALLS	4" BLACK VINYL BASE MOLDING	AMIS
1025A/13 A,B	WALL COVERING (DRYWALL)	NO	NO	GOOD	660	SF	WALLS	DRYWALL	AMIS
1025A/13 A,B	WALL COVERING (SPACKLE)	NO	NO	GOOD	200	SF	WALLS	SPACKLE	AMIS
1025/1025C/13	CEILING MATERIAL (TILES)	NO	YES	GOOD	288	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
~~1025/1025C/13~~	~~DUCT/HVAC (MASTIC)~~	~~NO~~	~~NO~~	~~GOOD~~	~~0~~	~~SF~~	~~CEILING~~	~~WHITE HVAC MASTIC~~	~~AMIS~~
1025/1025C/13	DUCT/HVAC (MASTIC)	NO	NO	GOOD	160	SF	CEILING	WHITE/CREAM MASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
1025/1025C/13	FLOOR COVERING (TILE)	NO	NO	GOOD	288	SF	FLOOR	12" WHITE WITH VARIOUS SHADES OF GRAY STREAKS	AMIS
~~1025/1025C/13~~	~~PIPE INSULATION~~	~~NO~~	~~YES~~	~~GOOD~~	~~0~~	~~LF~~	~~CEILING~~	~~4-6" WHITE CLOTH O/FBGLS PIPING~~	~~AMIS~~
1025/1025C/13	PIPE INSULATION	NO	YES	GOOD	12	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	AMIS
1025/1025C/13	VALVES, ELBOWS, TEES (FIBERGLASS)	NO	YES	GOOD	6	EA	CEILING	4" WHITE MASTIC OVER BROWN PAPER OVER FBGLS	AMIS
1025/1025C/13	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	64	LF	WALLS	4" BLACK VINYL BASE MOLDING WITH YELLOW AND BROWN MASTIC	AMIS
1025/1025C/13	WALL COVERING (DRYWALL)	NO	NO	GOOD	640	SF	WALLS	DRYWALL	AMIS
1025/1025C/13	WALL COVERING (SPACKLE)	NO	NO	GOOD	200	SF	WALLS	SPACKLE	AMIS
1025/1025C/13	MISCELLANEOUS MATERIAL (VIBRATION JOINT CLOTH)	YES*	NO	GOOD	1	EA	DUCT/HVAC	ASSUMED BLACK VIBRATION JOINT CLOTH ON DUCT	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
~~1025B/13C (CLOSET)~~	~~PIPE INSULATION, STRAIGHT (FIBERGLASS)~~	~~YES~~	~~NO~~	~~ABATED~~	~~0~~	~~LF~~	~~WALLS/CEILING~~	~~2-4" CW SUPPLY/ RETURN LINES; WHITE CLOTH OVER YELLOW FIBERGLASS~~	~~AMIS~~
1025B/13C (CLOSET)	CEILING MATERIAL (TILES)	NO	YES	GOOD	24	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1025B/13C (CLOSET)	FLOOR COVERING (TILE)	NO	NO	GOOD	24	SF	FLOOR	12" WHITE WITH VARIOUS SHADES OF GRAY STREAKS	JONES EDMUNDS
1025B/13C (CLOSET)	PIPE INSULATION	NO	YES	GOOD	4	LF	CEILING	2"-6" H20 BROWN PAPER OVER FOIL OVER FBGLS	JONES EDMUNDS
1025B/13C (CLOSET)	PIPE INSULATION, STRAIGHT (FIBERGLASS)	YES	YES	GOOD	10	LF	WALLS/CEILING	2"-3" HOT H20 WHITE MASTIC OVER BROWN PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS
1025B/13C (CLOSET)	VALVES, ELBOWS, TEES (FIBERGLASS)	YES	YES	GOOD	3	EA	WALLS/CEILING	2"-3" HOT H20 WHITE MASTIC OVER BROWN PAPER OVER FOIL OVER FIBERGLASS	JONES EDMUNDS
1025B/13C (CLOSET)	VALVES, ELBOWS, TEES (FIBERGLASS)	NO	YES	GOOD	1	EA	CEILING	4" WHITE MASTIC OVER BROWN PAPER OVER FBGLS	AMIS
1040/15	CEILING MATERIAL (TILES)	NO	YES	GOOD	96	SF	CEILING	2 X 4 NATURAL FISSURE W/PINHOLES	AMIS
1040/15	MISCELLANEOUS MATERIAL (PUTTY)	YES	NO	GOOD	3	SF	FLOOR	BLACK ELECTRICAL PUTTY	AMIS
1040/15	FLOOR COVERING (TILE)	YES	NO	GOOD	96	SF	FLOOR	12" TAN W/LT BROWN & CREAM SMEARS	AMIS
1040/15	FLOOR COVERING (TILE)	YES	NO	GOOD	4	SF	FLOOR	12" WHITE WITH GRAY SMUDGES	AMIS
1040/15	PIPE INSULATION	NO	YES	GOOD	8	LF	CEILING	4-6" WHITE CLOTH O/FBGLS PIPING	AMIS
1040/15	FLOOR COVERING (BASECOVE)	NO	NO	GOOD	19	LF	WALLS	4" PEACH VINYL WALL BASEBOARD WITH BROWN MASTIC	AMIS
1040/15	ELECTRICAL (WRAP)	YES*	NO	GOOD	1	LF	ELECTRICAL CONDUIT	ASSUMED BLACK ELECTRICAL PIPE WRAP	JONES EDMUNDS
1040/15	MISCELLANEOUS MATERIAL	NO	NO	GOOD	20	LF	FLOOR	GREEN BONDING AGENT ON EXTERIOR CONCRETE WALL UNDER RAISED FLOOR	JONES EDMUNDS
1064 (MECH ROOM)	MISCELLANEOUS MATERIALS (BUILDING SEAL)	NO	YES	FAIR	30	LF	FLOOR	TAN BUILDING SEAL	JONES EDMUNDS
1064 (MECH ROOM)	MISCELLANEOUS MATERIALS (VIBRATION PADS)	NO	NO	GOOD	4	EA	HVAC	BLACK VIBRATION PADS ON HVAC	JONES EDMUNDS
1064 (MECH ROOM)	MISCELLANEOUS MATERIALS (BUILDING SEAL)	YES*	NO	GOOD	2	EA	HVAC	ASSUMED BLACK VIBRATION JOINT CLOTH	JONES EDMUNDS
1064 (MECH ROOM)	DUCT/HVAC (MASTIC)	YES*	NO	GOOD	350	SF	HVAC	ASSUMED MASTICS INSIDE AIR HANDLER	JONES EDMUNDS
1100	CEILING MATERIAL (TILES)	NO	YES	GOOD	2,500	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1100	CEILING MATERIAL (TILES)	NO	YES	GOOD	158	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1100	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	2,775	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1100	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	75	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1100	WALL COVERING (BASECOVE)	NO	NO	GOOD	190	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH WHITE/CREAM MASTIC	JONES EDMUNDS
1100	DUCT/HVAC (MASTIC)	NO	NO	GOOD	5	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1102	CEILING MATERIAL (TILES)	NO	YES	GOOD	104	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1102	CEILING MATERIAL (TILES)	NO	YES	GOOD	4	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1102	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	180	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1102	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	18	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS
1102	WALL COVERING (BASECOVE)	NO	NO	GOOD	21	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH WHITE/CREAM MASTIC	JONES EDMUNDS
1104	CEILING MATERIAL (TILES)	NO	YES	GOOD	110	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1104	CEILING MATERIAL (TILES)	NO	YES	GOOD	10	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1104	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	70	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1104	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	18	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS
1104	WALL COVERING (BASECOVE)	NO	NO	GOOD	10	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH WHITE/CREAM MASTIC	JONES EDMUNDS
1110	CEILING MATERIAL (TILES)	NO	YES	GOOD	11	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1110	CEILING MATERIAL (TILES)	NO	YES	GOOD	120	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1110	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	80	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1110	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	18	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS
1110	WALL COVERING (BASECOVE)	NO	NO	GOOD	11	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH WHITE/CREAM MASTIC	JONES EDMUNDS
1112	CEILING MATERIAL (TILES)	NO	YES	GOOD	87	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1112	CEILING MATERIAL (TILES)	NO	YES	GOOD	9	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1112	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	180	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1112	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	18	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS
1112	WALL COVERING (BASECOVE)	NO	NO	GOOD	21	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH WHITE/CREAM MASTIC	JONES EDMUNDS
1116D	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	420	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1116D	CEILING MATERIAL (TILES)	NO	YES	GOOD	56	SF	CEILING	2 X 2 RANDOM FISSURE TILES	JONES EDMUNDS
1116D	CEILING MATERIAL (TILES)	NO	YES	GOOD	160	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
1116D	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	22	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1116D	WALL COVERING (BASECOVE)	NO	NO	GOOD	44	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH YELLOW & BROWN MASTIC	JONES EDMUNDS
1117	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	240	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
1117	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	22	LF	WINDOW	WHITE INTERIOR WINDOW CAULK	JONES EDMUNDS
1117	WALL COVERING (BASECOVE)	NO	NO	GOOD	24	LF	WALLS	4" GRAY VINYL BASE MOLDING WITH YELLOW & BROWN MASTIC	JONES EDMUNDS
1117	CEILING MATERIAL (TILES)	NO	YES	GOOD	141	SF	CEILING	2 X 2 NATURAL FISSURE W/PINHOLES	JONES EDMUNDS
ANNEX ROOF (NORTH)	ROOF (CORE)	NO	NO	GOOD	2,500	SF	ROOF	PEBBLE OVER TAR ON ANNEX ROOF	JONES EDMUNDS
ANNEX ROOF (NORTH)	ROOF (FLASHING)	YES	NO	GOOD	4	SF	ROOF	FLASHING WITH SILVER PAINT	AMIS
INTERIOR	MISCELLANEOUS MATERIAL	NO	NO	GOOD	340	LF	FLOOR	GREEN BONDING AGENT ON EXTERIOR CONCRETE WALL UNDER RAISED FLOOR	JONES EDMUNDS
EXTERIOR	PIPE INSULATION, STRAIGHT (FIBERGLASS)	YES	YES	GOOD	30	LF	WALLS	2" WHITE MASTIC OVER CLOTH OVER FIBERGLASS	JONES EDMUNDS
EXTERIOR	PIPE INSULATION, STRAIGHT (FOAMGLASS)	NO	NO	GOOD	40	LF	WALLS	8" METAL JACKET OVER WHITE PLASTIC OVER FOAMGLASS ON CHILLED WATER SUPPLY/RETURN	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (INSULATION)	NO	NO	GOOD	100	SF	DI TANK	BLUE OVER WHITE MASTIC OVER MESH OVER NEOPRENE ON DI H20 TANK	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (EXPANSION SEAL)	NO	NO	POOR	210	LF	CONCRETE	BLACK EXPANSION SEAL ALONG FRONT SIDEWALK	JONES EDMUNDS
EXTERIOR	DUCT/HVAC (MASTIC)	YES*	NO	GOOD	200	SF	HVAC	ASSUMED MASTICS INSIDE AIR HANDLER ON NW CORNER OF BUILDING	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	50	LF	WINDOWS	WHITE WINDOW CAULK ON WINDOW EXTERIORS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	50	LF	WINDOWS	GRAY/WHITE GLAZE ON NORTH WINDOW EXTERIORS	JONES EDMUNDS
EXTERIOR	WALL COVERING (STUCCO)	NO	NO	GOOD	880	SF	WALLS	STUCCO ON KNEE WALL OF ANNEX	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	250	LF	WALLS/ANNEX DOORS	STICKY CREAM CAULK IN KNEE WALL EXPANSION JOINT AND DOORS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	NO	NO	GOOD	210	LF	WINDOWS	EXTERIOR CREAM OVER GRAY HARD CAULK UNDER WHITE/CREAM SILICONE ON ANNEX	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	1	SF	PIPE	WHITE SEALANT INSIDE PIPE	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	1	SF	WALLS	GRAY SEALANT AT PIPE PENETRATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK)	YES	NO	GOOD	100	LF	DOORS	WHITE OVER GRAY OVER TAN CAULK ON EXTERIOR DOORS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	NO	NO	GOOD	4	SF	WALLS	WHITE SEALANT AROUND PIPE PENETRATIONS	JONES EDMUNDS

L7-1557 - ENVIRONMENTAL HEALTH BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (SEALANT)	YES	NO	GOOD	950	LF	WALLS	WHITE/CREAM OVER TAN EXPANSION JOINT SEALANT	JONES EDMUNDS
SOUTH ROOF	ROOF (CORE)	NO	NO	GOOD	6,000	SF	ROOF	PEBBLE OVER TAR ON SOUTH ROOF	JONES EDMUNDS
SOUTH ROOF	ROOF (FLASHING)	YES	NO	GOOD	380	SF	ROOF	FLASHING WITH SILVER PAINT, WITH WHITE COVER OVER PORTIONS	AMIS
SOUTH ROOF	ROOF (FLASHING)	NO	NO	GOOD	330	SF	ROOF	WHITE MASTIC OVER ROLLED ASPHALT ON ROOF	JONES EDMUNDS
SOUTH ROOF	ROOF (CAULK)	NO	NO	GOOD	140	LF	ROOF	WHITE MASTIC OVER CREAM AND GRAY CAULK OVER BLACK TAR ON CONCRETE WALL OF ROOF	JONES EDMUNDS
SOUTH ROOF	ROOF (CAULK)	NO	NO	FAIR	20	LF	ROOF	WHITE CAULK ON ROOF FLASHING	JONES EDMUNDS

L7-1557C - STORAGE BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	FAIR	155	LF	WALLS	WHITE CAULK AROUND VENTS AND AT WALL CORNERS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (OTHER)	NO	NO	FAIR	120	LF	WALLS	BLACK FOAM PACKING AT TOP AND BOTTOM OF WALLS	JONES EDMUNDS
INTERIOR	MISCELLANEOUS MATERIAL (BUILDING SEAL)	NO	YES	FAIR	60	LF	FLOOR	BLACK FIBROUS SEAL AROUND CONCRETE PADS INSIDE BUILDING	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (INSULATION)	YES	NO	FAIR	30	SF	ROOF	DARK GRAY FOAM UNDER METAL RIDGE OF ROOF	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	10	SF	ROOF	WHITE CAULK ON METAL RIDGE OF ROOF	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES	NO	FAIR	800	SF	ROOF	SILVER SEALANT ON METAL ROOF	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES*	NO	GOOD	20	LF	ROOF	ASSUMED CAULK COVERED WITH SILVER PAINT ON AIR VENT	JONES EDMUNDS

L7-1557D - ASBESTOS TESTING LAB

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	35	SF	CEILING	2X4 NATURAL FISSURE WITH PINHOLES	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	715	SF	CEILING	2X4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
100	CEILING MATERIALS (TILE)	NO	YES	GOOD	715	SF	CEILING	2X4 WHITE LARGE AND SMALL PINHOLES	JONES EDMUNDS
100	FLOOR COVERING (TILE)	NO	NO	FAIR	750	SF	FLOOR	12" WHITE WITH GRAY AND LIGHT BLUE SPECKS	JONES EDMUNDS
100	WALL COVERING (BASEBOARD)	NO	NO	GOOD	80	LF	WALLS	4" GRAY VINYL FLOOR BASEBOARD	AMIS
100	WALL COVERING (DRYWALL)	NO	YES	FAIR	800	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
100	MISCELLANESOUS MATERIALS (INSULATION)	NO	YES	GOOD	1,800	SF	WALLS/CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
104	CEILING MATERIALS (TILE)	NO	YES	GOOD	510	SF	CEILING	2X4 NATURAL FISSURE WITH PINHOLES	AMIS
104	CEILING MATERIALS (TILE)	NO	YES	GOOD	28	SF	CEILING	2X4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
104	FLOOR COVERING (TILE)	NO	NO	GOOD	506	SF	FLOOR	12" WHITE WITH GRAY AND LIGHT BLUE SPECKS	JONES EDMUNDS
104	WALL COVERING (BASEBOARD)	NO	NO	GOOD	84	LF	WALLS	4" GRAY VINYL FLOOR BASEBOARD WITH LIGHT GRAY MASTIC	AMIS
104	WALL COVERING (DRYWALL)	NO	YES	GOOD	840	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
104	WALL COVERING (DRYWALL PARTITIONS)	NO	YES	GOOD	100	SF	WALLS	LIGHT BLUE/GRAY PAINTED DRYWALL PARTITIONS	JONES EDMUNDS
104	MISCELLANESOUS MATERIALS	NO	NO	GOOD	4	SF	SINKS	BLACK SINK COATING	JONES EDMUNDS
104	MISCELLANESOUS MATERIALS (INSULATION)	NO	YES	GOOD	1,250	SF	WALLS/CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
103/106	CEILING MATERIALS (TILE)	NO	YES	GOOD	10	SF	CEILING	2X4 WHITE LIGHTLY TEXTURED WITH PINHOLES	JONES EDMUNDS
103/106	CEILING MATERIALS (TILE)	NO	YES	GOOD	90	SF	CEILING	2X4 WHITE LARGE AND SMALL PINHOLES	JONES EDMUNDS
103/106	FLOOR COVERING (TILE)	NO	NO	GOOD	100	SF	FLOOR	12" WHITE WITH GRAY AND LIGHT BLUE SPECKS	JONES EDMUNDS
103/106	WALL COVERING (BASEBOARD)	NO	NO	GOOD	37	LF	WALLS	4" GRAY VINYL FLOOR BASEBOARD WITH LIGHT GRAY MASTIC	AMIS
103/106	WALL COVERING (DRYWALL)	NO	YES	GOOD	400	SF	WALLS	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
103/106	MISCELLANESOUS MATERIALS (INSULATION)	NO	YES	GOOD	240	SF	WALLS/CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
107/108	FLOOR COVERING (TILE)	NO	NO	GOOD	35	SF	FLOOR	12" WHITE WITH GRAY AND LIGHT BLUE SPECKS	JONES EDMUNDS
107/108	WALL COVERING (BASEBOARD)	NO	NO	GOOD	22	LF	WALLS	4" GRAY VINYL FLOOR BASEBOARD WITH LIGHT GRAY MASTIC	AMIS
107/108	WALL COVERING (DRYWALL)	NO	YES	GOOD	210	SF	WALLS/CEILING	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
107/108	MISCELLANESOUS MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	WALLS/CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS
109	FLOOR COVERING (TILE)	NO	NO	GOOD	35	SF	FLOOR	12" WHITE WITH GRAY AND LIGHT BLUE SPECKS	JONES EDMUNDS
109	WALL COVERING (BASEBOARD)	NO	NO	GOOD	22	LF	WALLS	4" GRAY VINYL FLOOR BASEBOARD WITH LIGHT GRAY MASTIC	AMIS
109	WALL COVERING (DRYWALL)	NO	YES	GOOD	210	SF	WALLS/CEILING	DRYWALL WITH JOINT COMPOUND	JONES EDMUNDS
109	MISCELLANESOUS MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	WALLS/CEILING	WHITE PLASTIC OVER FIBERGLASS INSULATION	JONES EDMUNDS

L7-1557D - ASBESTOS TESTING LAB

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
EXTERIOR	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	5	LF	DUCTS	GRAY AND WHITE MASTIC ON HVAC	JONES EDMUNDS
EXTERIOR	DUCT/HVAC MATERIALS	NO	NO	GOOD	500	SF	HVAC	BLACK NEOPRENE INSULATION AND GLUE INSIDE HVAC	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	800	SF	ROOF	WHITE/GRAY/BLACK SEALANT ON ROOF AND SCREWS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (PUTTY)	YES*	NO	GOOD	1	SF	ROOF	ASSUMED GREEN PUTTY ON PVC VENT	JONES EDMUNDS

L7-1759 - LIGHTNING DETECTION AND RANGING SITE TOWER

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
NO SUSPECT MATERIALS									

L7-1759A/B - LIGHTNING DETECTION AND RANGING SITE TOWER EQUIPMENT SHELTERS

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR L7-1759A	FLOOR COVERING (VINYL)	NO	NO	POOR	120	SF	FLOOR	WHITE AND LIGHT GRAY SHEET VINYL	JONES EDMUNDS
INTERIOR L7-1759B	FLOOR COVERING (VINYL)	NO	NO	POOR	160	SF	FLOOR	TAN SHEET VINYL	JONES EDMUNDS
EXTERIOR ROOF L7-1759A/B	ROOF COVERING	NO	NO	POOR	280	SF	ROOF	WHITE MASTIC OVER BLACK OVER WHITE CLOTH ROOF COVER ON METAL PANELS	JONES EDMUNDS
EXTERIOR L7-1759B	MISCELLANEOUS MATERIAL (CAULK)	NO	YES	FAIR	110	LF	WALLS	WHITE CAULK ON EXTERIOR OF STRUCTURE	JONES EDMUNDS

PACKAGE 5 ASBESTOS SCHEDULES

TR3-0034 - MODULAR OFFICE

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1000	CEILING MATERIALS (TILE)	NO	YES	GOOD	5,650	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1000	CEILING MATERIALS (TILE)	NO	YES	GOOD	350	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1000	WALL COVERING (BASECOVE)	NO	NO	GOOD	450	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1000	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	6,000	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1000	FLOOR COVERING (CARPET)	NO	NO	GOOD	6,000	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1000	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	400	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1000	MISCELLANEOUS MATERIALS (INSULATION)	NO	NO	GOOD	1,500	SF	CEILING	SILVER FOIL OVER BROWN PAPER INSULATION OVER SILVER FOIL	JONES EDMUNDS
1000	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	175	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS
1000	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	4,000	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1001/1051A	CEILING MATERIALS (TILE)	NO	YES	GOOD	328	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1001/1051A	CEILING MATERIALS (TILE)	NO	YES	GOOD	32	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1001/1051A	WALL COVERING (BASECOVE)	NO	NO	GOOD	68	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1001/1051A	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	268	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1001/1051A	FLOOR COVERING (CARPET)	NO	NO	GOOD	360	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1001/1051A	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1001/1051A	MISCELLANEOUS MATERIALS (INSULATION)	NO	NO	GOOD	40	SF	CEILING	SILVER FOIL OVER BROWN PAPER INSULATION OVER SILVER FOIL	JONES EDMUNDS
1001/1051A	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	5	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS
1001/1051A	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	760	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1002	CEILING MATERIALS (TILE)	NO	YES	GOOD	240	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1002	WALL COVERING (BASECOVE)	NO	NO	GOOD	65	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1002	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	240	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1002	FLOOR COVERING (CARPET)	NO	NO	GOOD	240	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1002	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1002	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS
1002	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	640	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1004	CEILING MATERIALS (TILE)	NO	YES	GOOD	118	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1004	CEILING MATERIALS (TILE)	NO	YES	GOOD	2	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1004	WALL COVERING (BASECOVE)	NO	NO	GOOD	45	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1004	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1004	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1004	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1004	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1006	CEILING MATERIALS (TILE)	NO	YES	GOOD	120	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1006	WALL COVERING (BASECOVE)	NO	NO	GOOD	45	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1006	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1006	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1006	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1006	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1008	CEILING MATERIALS (TILE)	NO	YES	GOOD	120	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1008	WALL COVERING (BASECOVE)	NO	NO	GOOD	40	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1008	MISCELLANEOUS MATERIALS (INSULATION)	NO	NO	GOOD	120	SF	CEILING	SILVER FOIL OVER BROWN PAPER INSULATION OVER SILVER FOIL	JONES EDMUNDS
1008	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1008	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	2	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1008	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	400	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1012	CEILING MATERIALS (TILE)	NO	YES	GOOD	138	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1012	CEILING MATERIALS (TILE)	NO	YES	GOOD	10	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1012	WALL COVERING (BASECOVE)	NO	NO	GOOD	48	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1012	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	144	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1012	FLOOR COVERING (CARPET)	NO	NO	GOOD	144	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC	JONES EDMUNDS
1012	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	5	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1012	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1012	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	480	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1016	CEILING MATERIALS (TILE)	NO	YES	GOOD	120	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1016	WALL COVERING (BASECOVE)	NO	NO	GOOD	48	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1016	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1016	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1016	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1016	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	440	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1018	CEILING MATERIALS (TILE)	NO	YES	GOOD	120	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1018	WALL COVERING (BASECOVE)	NO	NO	GOOD	48	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1018	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	120	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1018	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1018	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1018	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	440	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1044	CEILING MATERIALS (TILE)	NO	YES	GOOD	8	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1044	CEILING MATERIALS (TILE)	NO	YES	GOOD	8	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1044	WALL COVERING (BASECOVE)	NO	NO	GOOD	26	LF	WALLS	4" GRAY BASECOVE WITH TAN MASTIC	JONES EDMUNDS
1044	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	260	SF	WALLS	BEIGE PAINTED DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
1044	FLOOR COVERING (VINYL)	NO	NO	GOOD	40	SF	FLOOR	CREAM/YELLOW SHEET VINYL WITH TAN GLUE/MASTIC	JONES EDMUNDS
1044	MISCELLANEOUS MATERIALS (PUTTY)	NO	NO	GOOD	2	SF	FLOOR	GRAY PUTTY ON CONDUIT	JONES EDMUNDS
1046	CEILING MATERIALS (TILE)	NO	YES	GOOD	32	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1046	WALL COVERING (BASECOVE)	NO	NO	GOOD	26	LF	WALLS	4" GRAY BASECOVE WITH TAN MASTIC	JONES EDMUNDS
1046	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	260	SF	WALLS	BEIGE PAINTED DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
1046	FLOOR COVERING (VINYL)	NO	NO	GOOD	40	SF	FLOOR	CREAM/YELLOW SHEET VINYL WITH TAN GLUE/MASTIC	JONES EDMUNDS
1048	FLOOR COVERING (TILE)	NO	NO	GOOD	60	SF	FLOOR	12" BEIGE WITH WHITE AND BROWN STREAKS	JONES EDMUNDS
1048	CEILING MATERIALS (TILE)	NO	YES	GOOD	60	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1048	WALL COVERING (BASECOVE)	NO	NO	GOOD	22	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1048	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	300	SF	WALLS	BEIGE PAINTED DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
1050	FLOOR COVERING (TILE)	NO	NO	GOOD	120	SF	FLOOR	12" CREAM WITH BROWN SMUDGES WITH BROWN MASTIC	JONES EDMUNDS
1050	CEILING MATERIALS (TILE)	NO	YES	GOOD	80	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1050	CEILING MATERIALS (TILE)	NO	YES	GOOD	40	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1050	WALL COVERING (BASECOVE)	NO	NO	GOOD	45	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1050	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	120	SF	WALLS	CREAM AND TAN PAINTED DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
1050	MISCELLANEOUS MATERIALS (CAULK)	NO	NO	GOOD	25	LF	WALLS	WHITE CAULK ON SINKS AND TOILETS	JONES EDMUNDS
1051	CEILING MATERIALS (TILE)	NO	YES	GOOD	240	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1051	WALL COVERING (BASECOVE)	NO	NO	GOOD	64	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1051	FLOOR COVERING (CARPET)	NO	NO	GOOD	240	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1051	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1051	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	240	SF	CEILING	PAPER OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1051	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	5	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS
1051	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	640	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
1052	FLOOR COVERING (TILE)	NO	NO	GOOD	120	SF	FLOOR	12" CREAM WITH BROWN SMUDGES WITH BROWN MASTIC	JONES EDMUNDS
1052	CEILING MATERIALS (TILE)	NO	YES	GOOD	126	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1052	CEILING MATERIALS (TILE)	NO	YES	GOOD	24	SF	CEILING	2' x 4' WHITE PINHOLES	JONES EDMUNDS
1052	WALL COVERING (BASECOVE)	NO	NO	GOOD	45	LF	WALLS	4" BROWN BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1052	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	120	SF	WALLS	CREAM AND TAN PAINTED DRYWALL WITH WHITE JOINT COMPOUND	JONES EDMUNDS
1052	MISCELLANEOUS MATERIALS (CAULK)	NO	NO	GOOD	25	LF	WALLS	WHITE CAULK ON SINKS AND TOILETS	JONES EDMUNDS
1022/1024	CEILING MATERIALS (TILE)	NO	YES	GOOD	264	SF	CEILING	2' x 4' WHITE NATURAL FISSURE TILES	JONES EDMUNDS
1022/1024	WALL COVERING (BASECOVE)	NO	NO	GOOD	68	LF	WALLS	4" DARK GRAY BASECOVE WITH WHITE MASTIC	JONES EDMUNDS
1022/1024	CEILING MATERIALS (INSULATION)	NO	YES	GOOD	268	SF	CEILING	BROWN PAPER OVER BLACK MASTIC OVER YELLOW FIBERGLASS INSULATION	JONES EDMUNDS
1022/1024	FLOOR COVERING (CARPET)	NO	NO	GOOD	120	SF	FLOOR	BLUE CARPET OVER YELLOW AND GREEN MASTIC/GLUE	JONES EDMUNDS
1022/1024	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	10	SF	CEILING	GRAY DUCT MASTIC	JONES EDMUNDS
1022/1024	DUCT/HVAC MATERIALS (MASTIC)	NO	NO	GOOD	5	SF	CEILING	WHITE DUCT MASTIC	JONES EDMUNDS

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ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
1022/1024	WALL COVERING (WALL PARTITIONS)	NO	YES	GOOD	880	SF	WALLS	WHITE GRAY AND MAROON VINYL OVER DRYWALL	JONES EDMUNDS
INTERIOR	WALL COVERING (DRYWALL)	NO	NO	GOOD	5,600	SF	WALLS	DRYWALL WITH LIGHT GREEN FIBROUS PAPER BEHIND BUILDING INSULATION	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (INSULATION)	NO	NO	GOOD	2,400	SF	CEILING	SILVER FOIL OVER BROWN PAPER INSULATION OVER SILVER FOIL	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (FLASHING)	NO	NO	GOOD	35	LF	AC UNIT	BLACK OVER SILVER FLASHING ON AC UNIT	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (CAULK)	NO	NO	GOOD	350	LF	WINDOWS	CREAM/GRAY CAULK AROUND WINDOWS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (CAULK)	NO	NO	GOOD	240	LF	WALLS	LIGHT BLUE PAINT OVER LIGHT GRAY CAULK ON CRAWL SPACE OPENINGS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (SEALANT)	NO	NO	GOOD	120	LF	WALLS	LIGHT BLUE PAINT OVER WHITE EXPANSION JOINT SEALANT BETWEEN WALL PANELS	JONES EDMUNDS
EXTERIOR	WALL COVERING (STUCCO)	NO	NO	GOOD	4,800	SF	WALLS	LIGHT BLUE PAINT OVER CREAM STUCCO WITH WHITE CLOTH BACKING	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (SEALANT)	NO	NO	GOOD	20	LF	CONCRETE	LIGHT GRAY EXPANSION SEAL IN CONCRETE WALKWAY	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (CAULK)	NO	NO	GOOD	40	LF	WALLS	WHITE CAULK AROUND ELECTRICAL BOXES TO AC UNITS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIALS (INSULATION)	NO	YES	GOOD	5,600	SF	WALLS	WHITE FIBROUS VAPOR BARRIER ON EXTERIOR WALL	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIALS (ROOFING)	YES*	NO	GOOD	8,700	SF	ROOF	ASSUMED ROOFING MATERIAL	JONES EDMUNDS

M6-847 - SILVER RECOVERY BUILDING

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
INTERIOR	WALL COVERING (DRYWALL & JOINT COMPOUND)	NO	YES	GOOD	1,000	SF	WALLS/CEILING	WHITE PAINT OVER DRYWALL AND JOINT COMPOUND	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	POOR	20	LF	WALLS	WHITE CAULK AROUND VENTS	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (GASKETS)	NO	NO	FAIR	1	EA	EYE WASH	BLACK GASKET ON EYE WASH	JONES EDMUNDS
EXTERIOR	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	NO	NO	GOOD	50	LF	ROOF/WALL	WHITE CAULK AROUND ROOF PERIMETER AND SEAMS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL (CAULK, SEALANT)	YES*	NO	GOOD	60	LF	ROOF	ASSUMED CAULK COVERED W/ SILVER PAINT	JONES EDMUNDS

K7-2468 - SANDBLAST/PAINT FACILITY

ROOM NUMBER	MATERIAL TYPE	ASBESTOS	FRIABLE	CONDITION	QUANTITY	UNIT	LOCATION	COMMENTS	REPORT BY
100	MISCELLANEOUS MATERIAL	NO	NO	GOOD	2	SF	BUILDING SUPPORTS	TAN MASTIC SPILLED ON SUPPORTS	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL	NO	YES	POOR	1	SF	WIRES	CLOTH WEBBING ON GROUNDING WIRES	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL (INSULATION)	NO	YES	POOR	2	SF	BUILDING SUPPORTS	DARK BROWN/GRAY INSULATION ON NORTHEAST CORNER SUPPORT	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL	NO	NO	POOR	5	SF	BUILDING SUPPORTS	BLACK AND WHITE FABRIC STRAPPING	JONES EDMUNDS
100	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	2	EA	ELECTRICAL JUNCTIONS	ASSUMED GASKETS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	192	SF	ROOF	ASSUMED TRANSLUCENT ROOF PANELS	JONES EDMUNDS
ROOF	MISCELLANEOUS MATERIAL	YES*	NO	GOOD	20	SF	ROOF	ASSUMED CAULK/MASTIC ON ROOF VENT AND AIR TERMINALS	JONES EDMUNDS