







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From: John Isaacson [SMTP:isaacson@lanl.gov]
To: PETER.SANFORD@saic.com; KIRK.W.OWENS@saic.com
Cc: sradz@lanl.gov
Subject: Revised July TA-21 waste volumes
Sent: 8/16/2005 2:08 PM

Importance: Normal

Peter, here are the revised waste volume estimates for TA-21.

Jl
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 TA_21_BLDG_QUAN_EST_JULY_20.xls TA_21_BLDG_QUAN_EST_JULY_20.xls

TA-21
BUILDING QUANTITY ESTIMATE
MARCH 2005

BUILDINGS AND CODING		SUMMARY WASTE QUANTITIES			SOLID WASTE TYPES									
					7H20EX42	7H20EX23	7H20EX24	7H20EX25	7H20EX26	7H20EX41	7H20EX47	7H20EX48		
P3 CODE	ACTIVITY ID DESCRIPTIONS	TOTAL SOLID WASTE VOLUME (CY)	EFFECTIVE WASTE DISPOSAL VOLUME	TOTAL LIQUID WASTE VOLUME (GAL)	LOW LEVEL RAD/BULK (CY)	TRU RAD (WIPP) (CY)	MIXED LOW LEVEL (%)	SOLID INDUSTRIAL (%)	SANITARY (%)	SOLID TSCA HAZ W/ ASBESTOS (%)	SOLID HAZ W/ORGANICS/ BULK (%)	SOLID HAZ W/METALS/ BULK (%)	RECYCLED/ ON SITE (%)	Total Check
PD	TA-21 DP WEST FACILITY BLDG 2 & LS GROUP 1	3901.75	5852.63	445.18	74.60%	0.001%	0.01%	2.25%	1.00%	0.41%	0.01%		21.73%	100.00%
PJ	TA-21 DP WEST FACILITY BLDG 312 GROUP 3	460.42	690.64	101.04	63.43%	0.001%		1.54%	1.00%	0.48%			33.54%	100.00%
PV	TA-21 DP WEST FACILITY BLDG 210 GROUP 1	1951.22	2926.83	250.12	18.26%			10.18%	1.00%	0.70%			69.86%	100.00%
PE	TA-21 DP WEST FACILITY BLDG 149 GROUP 2	326.39	489.59	87.64	65.20%	0.001%	0.01%	3.13%	1.00%	1.23%	0.01%		29.41%	100.00%
PF	TA-21 DP WEST FACILITY BLDG 315 GROUP 3	2449.04	3673.55	299.90	78.91%	0.005%		1.23%	1.00%	1.17%			17.69%	100.00%
PG	TA-21 DP WEST FACILITY BLDG 5 & LS GROUP 1	3388.09	5082.14	393.81	83.39%	0.001%	0.01%	2.73%	1.00%	0.49%	0.01%		12.37%	100.00%
PH	TA-21 DP WEST FACILITY BLDG 150 GROUP 2	3992.56	5988.85	454.26	70.98%	0.001%	0.01%	1.23%	1.00%	0.04%	0.01%	0.01%	26.72%	100.00%
PK	TA-21 DP WEST FACILITY BLDG 313 GROUP 3	1839.21	2758.82	238.92	71.68%	0.001%		1.55%	1.00%	0.54%			25.22%	100.00%
PL	TA-21 DP WEST FACILITY BLDG 314 GROUP 3	1882.38	2823.57	243.24	67.02%	0.001%		5.62%	1.00%	0.49%			25.88%	100.00%
PM	TA-21 DP WEST FACILITY BLDG 257 GROUP 4	1029.74	1544.61	157.97	79.76%	0.05%	1.00%		1.00%	0.07%			18.12%	100.00%
PN	TA-21 DP WEST FACILITY BLDG 286 GROUP 4	226.85	340.27	77.68	5.53%			4.68%	1.00%	1.74%			87.05%	100.00%
PB	TA-21 DP WEST INFRASTRUCTURE BLDG 342 GROUP 5	119.83	179.74	11.98	1.00%			64.86%	1.00%				33.14%	100.00%
PR	TA-21 DP WEST UTILITY MODIFICATION GROUP 5				99.00%				1.00%					100.00%
PS	TA-21 DP WEST INFRASTRUCTURE GAS LINE RELOCATION GROUP 5				99.00%				1.00%					100.00%
PT	TA-21 DP WEST INFRASTRUCTURE BLDG 230 GROUP 5	388.12	582.19	38.81	6.20%			85.00%	1.00%		0.01%	0.01%	7.78%	100.00%
PU	TA-21 DP WEST INFRASTRUCTURE BLDG 258 GROUP 5	119.83	179.74	11.98	1.00%			64.86%	1.00%				33.14%	100.00%
	TA-21 DP WEST PAD DISPOSITION GROUP 5	1912.56	2868.83	191.26	5.00%			52.00%					43.00%	100.00%
PW	TA-21 DP EAST FACILITY TSFF BLDG 209 GROUP 6	4911.41	7367.11	1037.28	58.11%		0.25%	5.42%	1.00%	0.13%	0.01%	1.00%	34.09%	100.00%
PX	TA-21 DP EAST FACILITY TSTA BLDG 155 GROUP 6	3613.29	5419.93	777.66	60.37%		0.25%	4.16%	1.00%	0.08%	0.01%	1.00%	33.13%	100.00%
PY	TA-21 DP EAST FACILITY BLDG 152 GROUP 6	4235.66	6353.49	902.13	76.26%	0.001%	0.25%	3.92%	1.00%	0.06%	0.01%	2.00%	16.50%	100.00%
BUILDINGS AND CODING		SUMMARY WASTE QUANTITIES			SOLID WASTE TYPES									
					7H20EX42	7H20EX23	7H20EX24	7H20EX25	7H20EX26	7H20EX41	7H20EX47			
P3 CODE	ACTIVITY ID DESCRIPTIONS	TOTAL SOLID WASTE VOLUME (CY)	EFFECTIVE WASTE DISPOSAL VOLUME	TOTAL LIQUID WASTE VOLUME (GAL)	LOW LEVEL RAD/BULK (CY)	TRU RAD (WIPP) (CY)	MIXED LOW LEVEL (CY)	SOLID INDUSTRIAL (CY)	SANITARY (CY)	SOLID TSCA HAZ W/ ASBESTOS (CY)	SOLID HAZ W/ORGANICS/ BULK (CY)	SOLID HAZ W/METALS/ BULK (CY)	RECYCLED/ ON SITE (CY)	Total Check
PD	TA-21 DP WEST FACILITY BLDG 2 & LS GROUP 1	3901.75	5852.63	390.18	4,365.86	0.06	0.59	131.59	58.53	23.76	0.59	-	1,271.66	100.00%
PJ	TA-21 DP WEST FACILITY BLDG 312 GROUP 3	460.42	690.64	46.04	438.08	0.01	-	10.66	6.91	3.34	-	-	231.64	100.00%
PV	TA-21 DP WEST FACILITY BLDG 210 GROUP 1	1951.22	2926.83	195.12	534.48	-	-	297.87	29.27	20.39	-	-	2,044.83	100.00%
PE	TA-21 DP WEST FACILITY BLDG 149 GROUP 2	326.39	489.59	32.64	319.22	0.00	0.05	15.34	4.90	6.05	0.05	-	143.98	100.00%
PF	TA-21 DP WEST FACILITY BLDG 315 GROUP 3	2449.04	3673.55	244.90	2,898.63	0.18	-	45.18	36.74	42.91	-	-	649.91	100.00%
PG	TA-21 DP WEST FACILITY BLDG 5 & LS GROUP 1	3388.09	5082.14	338.81	4,238.20	0.05	0.51	138.58	50.82	24.95	0.51	-	628.52	100.00%
PH	TA-21 DP WEST FACILITY BLDG 150 GROUP 2	3992.56	5988.85	399.26	4,250.72	0.06	0.60	73.86	59.89	2.25	0.60	0.60	1,600.27	100.00%
PK	TA-21 DP WEST FACILITY BLDG 313 GROUP 3	1839.21	2758.82	183.92	1,977.46	0.03	-	42.84	27.59	15.00	-	-	695.90	100.00%
PL	TA-21 DP WEST FACILITY BLDG 314 GROUP 3	1882.38	2823.57	188.24	1,892.22	0.03	-	158.57	28.24	13.76	-	-	730.75	100.00%
PM	TA-21 DP WEST FACILITY BLDG 257 GROUP 4	1029.74	1544.61	3464.25	1,232.05	0.77	15.45	-	15.45	1.01	-	-	279.89	100.00%
PN	TA-21 DP WEST FACILITY BLDG 286 GROUP 4	226.85	340.27	22.68	18.80	-	-	15.93	3.40	5.92	-	-	296.22	100.00%
PB	TA-21 DP WEST INFRASTRUCTURE BLDG 342 GROUP 5	119.83	179.74	11.98	1.80	-	-	116.58	1.80	-	-	-	59.57	100.00%
PR	TA-21 DP WEST UTILITY MODIFICATION GROUP 5				-	-	-	-	-	-	-	-	-	
PS	TA-21 DP WEST INFRASTRUCTURE GAS LINE RELOCATION GROUP 5				-	-	-	-	-	-	-	-	-	
PT	TA-21 DP WEST INFRASTRUCTURE BLDG 230 GROUP 5	388.12	582.19	38.81	36.09	-	-	494.86	5.82	-	0.06	0.06	45.30	100.00%
PU	TA-21 DP WEST INFRASTRUCTURE BLDG 258 GROUP 5	119.83	179.74	11.98	1.80	-	-	116.58	1.80	-	-	-	59.57	100.00%
	TA-21 DP WEST PAD DISPOSITION GROUP 5	1912.56	2868.83	191.26	143.44	-	-	1,491.79	-	-	-	-	1,233.60	100.00%
PW	TA-21 DP EAST FACILITY TSFF BLDG 209 GROUP 6	4911.41	7367.11	982.28	4,280.70	-	18.42	399.48	73.67	9.28	0.74	73.67	2,511.16	100.00%
PX	TA-21 DP EAST FACILITY TSTA BLDG 155 GROUP 6	3613.29	5419.93	722.66	3,272.22	-	13.55	225.63	54.20	4.15	0.54	54.20	1,795.44	100.00%
PY	TA-21 DP EAST FACILITY BLDG 152 GROUP 6	4235.66	6353.49	847.13	4,845.03	0.06	15.88	249.22	63.53	3.52	0.64	127.07	1,048.53	100.00%

TA-21
BUILDING QUANTITY ESTIMATE
MARCH 2005

BUILDINGS AND CODING		LIQUID WASTE TYPES						
		7H20EX09	7H20EX10	7H20EX11				7H20EX12
P3 CODE	ACTIVITY ID DESCRIPTIONS	INDUSTRIAL LIQUID (%)	LIQUID HAZ W/ORGANICS (%)	LIQUID HAZ W/METALS (%)	LIQUID MIXED WASTE (%)	LIQUID TSCA HAZ W/ ASBESTOS (%)	PCB LIQUID (%)	LIQUID LLRW/DRUM (%)
PD	TA-21 DP WEST FACILITY BLDG 2 & LS GROUP 1		0.01%		0.01%	10.00%	2.00%	87.98%
PJ	TA-21 DP WEST FACILITY BLDG 312 GROUP 3					55.00%	2.00%	43.00%
PV	TA-21 DP WEST FACILITY BLDG 210 GROUP 1					19.00%	2.00%	79.00%
PE	TA-21 DP WEST FACILITY BLDG 149 GROUP 2		0.01%		0.01%	55.00%	2.00%	42.98%
PF	TA-21 DP WEST FACILITY BLDG 315 GROUP 3					40.00%	2.00%	58.00%
PG	TA-21 DP WEST FACILITY BLDG 5 & LS GROUP 1		0.01%		0.01%	9.00%	2.00%	88.98%
PH	TA-21 DP WEST FACILITY BLDG 150 GROUP 2		0.01%	0.01%	0.01%	11.00%	2.00%	86.97%
PK	TA-21 DP WEST FACILITY BLDG 313 GROUP 3					40.00%	2.00%	58.00%
PL	TA-21 DP WEST FACILITY BLDG 314 GROUP 3					37.00%	2.00%	61.00%
PM	TA-21 DP WEST FACILITY BLDG 257 GROUP 4				1.00%	28.00%	2.00%	69.00%
PN	TA-21 DP WEST FACILITY BLDG 286 GROUP 4					48.00%	2.00%	50.00%
PB	TA-21 DP WEST INFRASTRUCTURE BLDG 342 GROUP 5							100.00%
PR	TA-21 DP WEST UTILITY MODIFICATION GROUP 5							100.00%
PS	TA-21 DP WEST INFRASTRUCTURE GAS LINE RELOCATION GROUP 5							100.00%
PT	TA-21 DP WEST INFRASTRUCTURE BLDG 230 GROUP 5		0.01%	0.01%				99.98%
PU	TA-21 DP WEST INFRASTRUCTURE BLDG 258 GROUP 5							100.00%
	TA-21 DP WEST PAD DISPOSITION GROUP 5							100.00%
PW	TA-21 DP EAST FACILITY TSFF BLDG 209 GROUP 6		10.00%		0.25%	10.00%	2.00%	77.75%
PX	TA-21 DP EAST FACILITY TSTA BLDG 155 GROUP 6		10.00%		0.25%	10.00%	3.00%	76.75%
PY	TA-21 DP EAST FACILITY BLDG 152 GROUP 6		10.00%		0.25%	10.00%	3.00%	76.75%
BUILDINGS AND CODING		LIQUID WASTE TYPES						
		7H20EX09	7H20EX10	7H20EX11				7H20EX12
P3 CODE	ACTIVITY ID DESCRIPTIONS	INDUSTRIAL LIQUID (GAL)	LIQUID HAZ W/ORGANICS (GAL)	LIQUID HAZ W/METALS (GAL)	LIQUID MIXED WASTE (GAL)	LIQUID TSCA HAZ W/ ASBESTOS (GAL)	PCB LIQUID (GAL)	LIQUID LLRW/DRUM (GAL)
PD	TA-21 DP WEST FACILITY BLDG 2 & LS GROUP 1	-	0.04	-	0.04	44.52	8.90	391.66
PJ	TA-21 DP WEST FACILITY BLDG 312 GROUP 3	-	-	-	-	55.57	2.02	43.45
PV	TA-21 DP WEST FACILITY BLDG 210 GROUP 1	-	-	-	-	47.52	5.00	197.60
PE	TA-21 DP WEST FACILITY BLDG 149 GROUP 2	-	0.01	-	0.01	48.20	1.75	37.67
PF	TA-21 DP WEST FACILITY BLDG 315 GROUP 3	-	-	-	-	119.96	6.00	173.94
PG	TA-21 DP WEST FACILITY BLDG 5 & LS GROUP 1	-	0.04	-	0.04	35.44	7.88	350.41
PH	TA-21 DP WEST FACILITY BLDG 150 GROUP 2	-	0.05	0.05	0.05	49.97	9.09	395.07
PK	TA-21 DP WEST FACILITY BLDG 313 GROUP 3	-	-	-	-	95.57	4.78	138.57
PL	TA-21 DP WEST FACILITY BLDG 314 GROUP 3	-	-	-	-	90.00	4.86	148.38
PM	TA-21 DP WEST FACILITY BLDG 257 GROUP 4	-	-	-	1.58	44.23	3.16	109.00
PN	TA-21 DP WEST FACILITY BLDG 286 GROUP 4	-	-	-	-	37.29	1.55	38.84
PB	TA-21 DP WEST INFRASTRUCTURE BLDG 342 GROUP 5	-	-	-	-	-	-	11.98
PR	TA-21 DP WEST UTILITY MODIFICATION GROUP 5	-	-	-	-	-	-	-
PS	TA-21 DP WEST INFRASTRUCTURE GAS LINE RELOCATION GROUP 5	-	-	-	-	-	-	-
PT	TA-21 DP WEST INFRASTRUCTURE BLDG 230 GROUP 5	-	0.00	0.00	-	-	-	38.80
PU	TA-21 DP WEST INFRASTRUCTURE BLDG 258 GROUP 5	-	-	-	-	-	-	11.98
	TA-21 DP WEST PAD DISPOSITION GROUP 5	-	-	-	-	-	-	191.26
PW	TA-21 DP EAST FACILITY TSFF BLDG 209 GROUP 6	-	103.73	-	2.59	103.73	20.75	806.49
PX	TA-21 DP EAST FACILITY TSTA BLDG 155 GROUP 6	-	77.77	-	1.94	77.77	23.33	596.85
PY	TA-21 DP EAST FACILITY BLDG 152 GROUP 6	-	90.21	-	2.26	90.21	27.06	692.39

General Assumptions

genl	Assume 50% increase in volume for packaging efficiency
ASB	ACM Roofs= 2, 5, 30, 42, 149, 254, 312, 313, 314, 315, 328
TRU	TRU waste volumes are estimated based upon the expected volume of waste to be produced based upon experience.
LIQ	Assume liquids generated are all LLRW unless otherwise specified.
LIQ	Assume any building with asbestos abatement will generate an additional 55 gallons of liq waste, all of which will be disposed as liq asbestos waste.
ASB	ASB: asb portion of floors = 1/8" of 40% of floors = 1/96*FP*.4 all structures
ASB	ASB: asb portion of floors = 1/8" of 40% of floors = 1/96*FP*.4 all structures
ASB	ASB: asb on walls = 1/4" on 30% of walls = 1/48*SA*.3 all structures
PCB	Ballasts/fluorescent light bulbs are expected but volume is expected to represent an insignificant percentage.
Adj Soils	Adjacent Soil contamination is assumed to be 5' out from the structure and 2' deep, unless otherwise specified.

Based upon Bldgs 3&4 South, unless otherwise specified:

Steel = 1/6 (total roof +walls)	36% of steel is recycleable, 64% is LLW
Concrete = 5/6 (roof+walls)	52% of concrete is LLW, 43% is reusable as backfill, 5% is IND
Concrete Floors	52% of concrete is LLW, 43% is reusable as backfill, 5% is IND

Building-Specific Assumptions

TA-21 DP WEST FACILITY BLDG 2 & LS GROUP 1

Bldg 2 group includes main floor, mezz, 21-80, and 21-458

Roof is ACM

HAZ: Assume, based upon historical Process and Decon in 1978-1981, that in BLDGs 2, 5, 149, and 150, tunnels and trenches waste (approx .01%) will be Solid Haz w/organics

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

TA-21 DP WEST FACILITY BLDG 312 GROUP 3

Assume that corridor is 98% clean. Corridor comprises 828 SF/1949 SF Net = 42% of building is assumed not contaminated.

Roof is ACM

TA-21 DP WEST FACILITY BLDG 210 GROUP 1

Assumed no adjacent soil contamination as building is considered clean

assume all concrete and metal are recycled

TA-21 DP WEST FACILITY BLDG 149 GROUP 2

Roof is ACM

HAZ: Assume, based upon historical Process and Decon in 1978-1981, that in BLDGs 2, 5, 149, and 150, tunnels and trenches waste (approx .01%) will be Solid Haz w/organics

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

TA-21 DP WEST FACILITY BLDG 315 GROUP 3

Roof is ACM

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

See assumption for 312 - 98% of 26% of building assumed clean.

Process Pu line under floor - assume higher LLW and possibly TRU

TA-21 DP WEST FACILITY BLDG 5 & LS GROUP 1

Bldg 5 group includes main floor, mezz, basement, and 21-89

Roof is ACM

HAZ: Assume, based upon historical Process and Decon in 1978-1981, that in BLDGs 2, 5, 149, and 150, tunnels and trenches waste (approx .01%) will be Solid Haz w/organics

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

Assume 2% of floor slab is contaminated. All walls and roofing concrete and steel will be recycled.

TA-21 DP WEST FACILITY BLDG 150 GROUP 2

HAZ: Assume, based upon historical Process and Decon in 1978-1981, that in BLDGs 2, 5, 149, and 150, tunnels and trenches waste (approx .01%) will be Solid Haz w/organics

HAZ: Assume also that at 150, .01% of waste volume will be haz metals.

Bldg 150 group includes main floor, mezz, basement, and 21-144

Assume basement walls and floors are clean (IND) (98%) (only one pipe observed at ceiling level). Limited rad con areas with potential for contamination.

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

TA-21 DP WEST FACILITY BLDG 313 GROUP 3

See assumption for 312 - 98% of 26% of building assumed clean.

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

Roof is ACM

TA-21 DP WEST FACILITY BLDG 314 GROUP 3

See assumption for 312 - 98% of 26% of building assumed clean.

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

Roof is ACM

TA-21 DP WEST FACILITY BLDG 257 GROUP 4

21-257 Assume 7.5 gal liq/CY of Equip

Bldg 257 includes two floors

TA-21 DP WEST FACILITY BLDG 286 GROUP 4

Assume concrete floors can be cleaned and only 2% of material from floors will be LLW

Assume remaining metal and concrete will be recycled

Assume no contamination of soil below slab.

TA-21 DP WEST INFRASTRUCTURE BLDG 342 GROUP 5

Assumed no adjacent soil contamination as building is considered clean

TA-21 DP WEST UTILITY MODIFICATION GROUP 5

No specific assumptions

TA-21 DP WEST INFRASTRUCTURE GAS LINE RELOCATION GROUP 5

No specific assumptions

TA-21 DP WEST INFRASTRUCTURE BLDG 230 GROUP 5

Assumed no adjacent soil contamination as building is considered clean

TA-21 DP WEST INFRASTRUCTURE BLDG 258 GROUP 5

Assumed no adjacent soil contamination as building is considered clean

TA-21 DP WEST PAD DISPOSITION GROUP 5

No specific assumptions

TA-21 DP EAST FACILITY TSFF BLDG 209 GROUP 6

IND: assumed 10% of walls, floor and roof at DP East

Bldg 209 includes two floors

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

Clean rooms at South end of 209 area = 5361 SF/20525 SF Nt, therefore 26% of the building is recycled material, 74% is divided by standard percentages

TA-21 DP EAST FACILITY TSTA BLDG 155 GROUP 6

Bldg 155 includes two floors

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

Assume that 1/2 of the equipment is not contaminated as equipment volumes include diesel tanks and electrical switchgear.

Assume that offices at the south end of the main floor of the building, as well as all rooms except 5501, 5501A, 5501B, and 5508 are clean.

Approx 4251 SF out of 15924 NET SF = 27% considered contaminated and divided by standard percentages, remaining 73% is clean.

TA-21 DP EAST FACILITY BLDG 152 GROUP 6

Assume adjacent Soil Contamination is 17% of the underlying soil based upon actual percentages from Bldg 3&4 South.

IND: assumed 10% of walls, floor and roof at DP East

TA21
BUILDING QUANTITY ESTIMATE
MARCH 2005
Total CY

Property ID	Unit	Description	floor CY	roof CY	wall CY	Duct CY	Pipe (CY)	Adj Soils (CY)	Equip (CY)	Total (CY)	Interior Surface area (approx) (walls+ceilings) (SF)	Interior Surface area (approx) (walls w/o ceilings) (SF)	For Demo	Demo 1/6 metal	Demo 5/6 concrete	Demo LLW
21-0001	210001	Office/Vault	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
21-0002	210002	wet lab N + S	445.71	356.57	1007.41	566.00	252.00	197.88	80.00	2905.57	77375	62934	1364	227	1137	2064
21-0002	210002	wet lab N + S mezz	8.43	0.00	179.75	0.00	0.00	0.00	0.00	188.19	6123	5440	180	30	150	101
21-0003	210003	Asphalt adj to former structure	0.00	0.00	0.00	0.00	0.00	747.00	0.00	747.00	0	0	0	0	0	747
21-0004	210004	Asphalt adj to former structure	0.00	0.00	0.00	0.00	0.00	747.00	0.00	747.00	0	0	0	0	0	747
21-0005	210005	laboratory N + S	416.88	333.51	595.76	566.00	252.00	231.37	0.00	2395.51	50837	37330	929	155	774	1768
21-0005	210005	lab N + S - arch mezz attic	263.73	0.00	290.02	0.00	0.00	0.00	0.00	553.75	33893	23212	290	48	242	294
21-0005	210005	laboratory N + S - basement	49.60	0.00	116.15	0.00	0.00	168.64	80.00	414.39	4697	2688	116	19	97	337
21-0014	210014	Z - Instrument	77.48	77.48	26.17	0.00	0.00	340.00	0.50	521.64	5258	2120	104	17	86	437
21-0018	210018	Corridor	38.27	38.27	0.00	0.00	0.00	0.00	0.00	76.54	1550	0	38	6	32	41
21-0021	210021	Demolished 2/7/05	106.72	106.72	30.62	0.00	0.00	434.00	0.00	678.05	6802	2480	137	23	114	564
21-0030	210030	Paint Shop	32.84	32.84	16.00	0.00	0.00	168.00	0.00	249.68	2626	1296	49	8	41	211
21-0031	210031	Electronics/Cable Fab	130.57	130.57	34.86	0.00	0.00	539.00	20.00	855.00	8112	2824	165	28	138	716
21-0042	210042	Pump House	1.60	1.60	3.16	0.00	0.00	24.00	0.00	30.37	321	256	5	1	4	27
21-0046	210046	Warehouse	48.94	48.94	21.53	0.00	0.00	234.00	0.00	353.41	3726	1744	70	12	59	298
21-0057	210057	Fuel Tank	15.41	0.00	17.28	0.00	0.00	105.00	386.50	524.19	2024	1400	17	3	14	509
21-0069	210069	PRV	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0074	210074	acid pit	0.62	0.62	0.00	0.00	0.00	0.00	0.00	1.23	25	0	1	0	1	1
21-0075	210075	Steam Pit	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0076	210076	storm drain	0.62	0.62	0.00	0.00	0.00	0.00	0.00	1.23	25	0	1	0	1	1
21-0077	210077	Steam Pit	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0080	210080	PRV	1.98	1.98	4.44	0.00	0.00	27.00	0.00	35.40	440	360	6	1	5	31
21-0081	210081	PRV	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0082	210082	PRV	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0087	210087	PRV	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58	265	240	3	0	2	2
21-0088	210088	PRV - no above grnd structure	0.62	0.62	2.96	0.00	0.00	0.00	0.00	4.20	265	240	4	1	3	2
21-0089	210089	PRV	0.99	0.99	3.46	0.00	0.00	19.00	0.00	24.43	320	280	4	1	4	22
21-0110	210110	Acid Tank	11.11	0.00	2.11	0.00	0.00	36.14	75.00	124.37	1134	684	2	0	2	118
21-0111	210111	Acid Tank	11.11	0.00	2.11	0.00	0.00	31.34	75.00	119.57	1134	684	2	0	2	113
21-0112	210112	Acid Tank	11.11	0.00	2.11	0.00	0.00	29.82	75.00	118.04	1134	684	2	0	2	112
21-0113	210113	Acid Tank	11.11	0.00	2.11	0.00	0.00	30.59	75.00	118.81	1134	684	2	0	2	113
21-0116	210116	Hot Tool Room, includes basement	110.37	110.37	123.46	51.00	6.43	1315.00	0.00	1716.63	14470	10000	234	39	195	1556
21-0144	210144	Utility/passageway	4.44	4.44	0.00	0.00	0.00	0.00	0.00	8.89	180	0	4	1	4	5
21-0148	210148	Electrical Substation	1.78	1.78	3.75	0.00	0.00	0.00	22.00	29.31	376	304	6	1	5	26
21-0149	210149	Corridor	92.89	92.89	41.09	22.00	32.00	35.53	10.00	326.39	5426	1664	134	22	112	220
21-0150	210150	Basement	159.51	0.00	134.02	0.00	0.00	0.00	0.00	293.53	12004	5544	134	22	112	6
21-0150	210150	mezz	22.42	0.00	341.14	0.00	0.00	0.00	8.00	371.56	21990	20174	341	57	284	204
21-0150	210150	Molecular Chemistry	260.78	173.85	235.33	2478.00	40.00	116.62	14.00	3318.58	15153	8112	409	68	341	2662
21-0152	210152	Laboratory Bldg	339.38	359.75	962.37	595.00	112.00	217.94	1649.22	4235.66	65713	51968	1322	220	1102	3465
21-0155	210155	1st floor	364.81	364.81	723.46	208.00	215.00	228.48	1126.74	3231.31	49355	34580	1088	181	907	1993
21-0155	210155	ext mezz	51.09	0.00	0.00	0.00	101.00	0.00	229.89	381.98	2069	0	0	0	0	357
21-0160	-	canopy	6.49	6.49	0.00	0.00	0.00	49.28	0.00	62.26	263	0	6	1	5	56
21-0166	-	Support/Eq bldg	21.16	21.16	0.00	0.00	0.00	113.40	44.00	199.72	857	0	21	4	18	180
21-0167	-	Support/Eq bldg	21.57	21.57	0.00	0.00	0.00	115.05	50.00	208.19	874	0	22	4	18	188
21-0193	210193	Electrical Substation	1.78	1.78	3.75	0.00	0.00	0.00	2.00	9.31	376	304	6	1	5	6
21-0209	210209	1st fl	590.37	590.37	930.56	325.00	16.09	359.04	740.00	3551.43	101910	78000	1521	253	1267	2019
21-0209	-	Basement	357.83	0.00	194.07	0.00	0.00	718.08	90.00	1359.98	19732	5240	194	32	162	1099
21-0210	210210	Pu Research	621.04	310.52	642.67	63.00	48.00	0.00	266.00	1951.22	63552	50976	953	159	794	389
21-0212	210212	Calcium Bldg	11.09	11.09	16.79	0.00	0.00	434.00	0.00	472.96	1129	680	28	5	23	455
21-0213	-	support/Supply Warehouse	42.54	42.54	43.40	0.00	0.00	204.56	0.00	333.03	5238	3515	86	14	72	273
21-0220	-	cooling tower - abandoned	7.11	7.11	0.00	0.00	0.00	0.00	0.00	14.21	288	0	7	1	6	8
21-0223	210223	acid sump with structure above	1.19	0.00	1.38	0.00	0.00	21.00	37.00	60.57	272	224	1	0	1	59
21-0227	-	Support /Sewage treatment	11.18	11.18	0.00	0.00	0.00	76.85	2.00	101.20	453	0	11	2	9	91

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Total CY

Property ID	Unit	Description	floor CY	roof CY	wall CY	Duct CY	Pipe (CY)	Adj Soils (CY)	Equip (CY)	Total (CY)		Interior Surface area (approx) (walls+ceilings) (SF)	Interior Surface area (approx) (walls w/o ceilings) (SF)	For Demo	Demo 1/6 metal	Demo 5/6 concrete	Demo LLW
21-0228	210228	Replacement Whouse	152.12	152.12	43.40	0.00	0.00	629.00	0.00	976.64		9676	3515	196	33	163	814
21-0229	-	Support /Sewage control bldg	5.31	5.31	0.00	0.00	0.00	43.76	14.00	68.38		215	0	5	1	4	63
21-0230	-	sludge drying bed	31.07	0.00	0.00	0.00	0.00	157.99	0.00	189.06		1258	0	0	0	0	174
21-0254	210254	Guard House	7.19	7.19	7.11	0.00	0.00	56.00	0.00	77.48		867	576	14	2	12	67
21-0257	210257	Rad Liquid Waste Treatment Plant	150.70	100.47	190.67	84.00	19.00	0.00	461.90	1006.74		18876	14807	291	49	243	800
21-0257	210257	underground piping	0.00	0.00	0.00	0.00	23.00	0.00	0.00	23.00		0	0	0	0	0	23
21-0258	210258	West Water Tower	39.51	39.51	14.81	0.00	0.00	0.00	26.00	119.83	calc'd:	3185	800	54	9	45	76
21-0259	210259	PRV	0.62	0.62	2.96	0.00	0.00	0.00	4.00	8.20		265	240	4	1	3	6
21-0260	210260	Steam Pit	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58		265	240	3	0	2	2
21-0261	210261	Steam Pit	0.62	0.00	2.96	0.00	0.00	0.00	0.00	3.58		265	240	3	0	2	2
21-0286	210286	Warehouse / Rad	68.19	90.91	53.25	4.50	0.00	0.00	10.00	226.85		8793	5111	144	24	120	19
21-0303	210303	Electrical Substation	1.78	0.00	3.75	0.00	0.00	0.00	0.00	5.53		376	304	4	1	3	3
21-0307	210307	Electrical Substation	1.78	1.78	3.75	0.00	0.00	0.00	2.00	9.31		376	304	6	1	5	6
21-0308	210308	Electrical Substation	1.78	1.78	3.75	0.00	0.00	0.00	0.00	7.31		376	304	6	1	5	4
21-0309	210309	Electrical Substation	1.78	1.78	3.75	0.00	0.00	0.00	2.00	9.31		376	304	6	1	5	6
21-0310	210310	Telephone Pedestal	0.12	0.12	0.69	0.00	0.00	0.00	0.00	0.94		230	225	1	0	1	1
21-0311	210311	Telephone Pedestal	0.12	0.12	0.69	0.00	0.00	0.00	0.00	0.94		230	225	1	0	1	1
21-0312	210312	Corridor	51.16	51.16	58.00	149.59	72.26	78.26	0.00	460.42		5756	3684	109	18	91	299
21-0313	210313	Corridor	105.28	105.28	136.35	137.67	66.46	157.98	0.00	709.03		16420	12156	242	40	201	355
21-0314	210314	Corridor	119.58	119.58	154.33	144.18	69.62	207.91	0.00	815.21		14671	9828	274	46	228	414
21-0315	210315	Corridor	117.85	117.85	97.33	146.52	70.75	178.10	4.00	732.41		13029	8256	215	36	179	430
21-0316	210316	Telephone Pedestal	0.12	0.12	0.69	0.00	0.00	0.00	0.00	0.94		230	225	1	0	1	1
21-0320	210320	Telephone Pedestal	0.12	0.12	0.69	0.00	0.00	0.00	0.00	0.94		230	225	1	0	1	1
21-0323	-	-	0.17	0.17	0.00	0.00	0.00	9.83	0.00	10.18		7	0	0	0	0	10
21-0323	-	-	0.24	0.24	0.00	0.00	0.00	10.57	2.00	13.04		10	0	0	0	0	13
21-0328	210328	Materials Receiving	7.90	7.90	24.89	0.00	0.00	56.37	4.00	101.06		1328	1008	33	5	27	82
21-0334	210334	Utility Shed	1.43	1.43	2.63	0.00	0.00	21.53	0.00	27.03		271	213	4	1	3	24
21-0335	210335	Containment Vessel	19.75	19.75	0.69	0.00	0.00	30.09	5.00	75.29		1250	450	20	3	17	56
21-0338	210338	Electrical Substation	1.78	1.78	3.75	0.00	0.00	70.00	0.00	77.31		376	304	6	1	5	74
21-0342	210342	East Water Tower	39.51	39.51	14.81	0.00	0.00	0.00	26.00	119.83	calc'd:	3185	800	54	9	45	76
21-0345	-	-	2.37	2.37	0.00	0.00	0.00	27.74	0.00	32.48		96	0	2	0	2	30
21-0346	-	2-3000 gal SS hold tanks	17.81	17.81	0.56	0.00	0.00	100.57	30.00	166.74		1081	360	18	3	15	150
21-0353	210353	Change Room Trailer	7.28	7.28	11.26	0.00	0.00	57.00	0.00	82.83		1207	912	19	3	15	71
21-0355	210355	Office Trailer / Rad	12.35	12.35	11.85	0.00	0.00	87.00	2.00	125.54		1460	960	24	4	20	108
21-0357	210357	Steam Plant	140.30	140.30	30.91	0.00	0.00	544.00	575.00	1430.51		8186	2504	171	29	143	1284
21-0359	210359	Office Trailer	12.86	12.86	11.06	0.00	0.00	84.00	0.00	120.79		1417	896	24	4	20	104
21-0361	210361	Trans Office Trlr	41.23	41.23	11.26	0.00	0.00	194.81	12.00	300.54		2582	912	52	9	44	257
21-0365	210365	Trans Office Trlr	42.84	42.84	11.26	0.00	0.00	200.50	16.00	313.44		2647	912	54	9	45	268
21-0370	-	mech eq bldg	13.45	13.45	11.26	0.00	0.00	80.72	34.00	152.88		1457	912	25	4	21	135
21-0387	-	-	1.61	1.61	3.56	0.00	0.00	22.71	0.00	29.49		353	288	5	1	4	26
21-0388	-	-	0.68	0.68	0.00	0.00	0.00	14.81	0.00	16.17		28	0	1	0	1	16
21-0402	210402	Storage Bldg - no floor	0.00	31.31	0.00	0.00	0.00	155.57	0.00	186.88		1268	0	31	5	26	172
21-0418	-	-	6.52	6.52	0.00	0.00	0.00	55.74	0.00	68.77		264	0	7	1	5	63
21-0421	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30		160	0	4	1	3	43
21-0422	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30		160	0	4	1	3	43
21-0423	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30		160	0	4	1	3	43
21-0424	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30		160	0	4	1	3	43
21-0427	210427	Shed	0.89	0.89	2.37	0.00	0.00	19.00	0.00	23.15		228	192	3	1	3	21
21-0428	210428	Shed	5.70	5.70	6.12	0.00	0.00	48.00	0.00	65.53		727	496	12	2	10	57
21-0443	210443	Office Trailer	12.84	12.84	11.26	0.00	0.00	0.00	0.00	36.94		1432	912	24	4	20	20
21-0450	210450	Van	0.77	6.12	7.70	0.00	0.00	54.00	0.00	68.59		872	624	14	2	12	62
21-0451	210451	Storage Shed	1.56	1.56	3.26	0.00	0.00	25.00	0.00	31.37		327	264	5	1	4	28
21-0454	210454	Van	0.77	6.12	8.20	0.00	0.00	59.00	0.00	74.09		912	664	14	2	12	67

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 Total CY

Property ID	Unit	Description	floor CY	roof CY	wall CY	Duct CY	Pipe (CY)	Adj Soils (CY)	Equip (CY)	Total (CY)	Interior Surface area (approx) (walls+ceilings) (SF)	Interior Surface area (approx) (walls w/o ceilings) (SF)	For Demo	Demo 1/6 metal	Demo 5/6 concrete	Demo LLW
21-0455	210455	Van	0.77	6.12	9.48	0.00	0.00	67.00	0.00	83.37	1016	768	16	3	13	76
21-0456	210456	Van	0.77	6.12	8.00	0.00	0.00	56.00	0.00	70.89	896	648	14	2	12	64
21-0458	210458	Metal Storage Shed	1.98	1.98	3.56	0.00	0.00	27.00	0.00	34.51	368	288	6	1	5	31
21-0461	210461	Office Trailer	7.90	7.90	8.49	0.00	0.00	71.00	0.00	95.30	1008	688	16	3	14	84
21-0462	210462	Transportainer	7.90	7.90	7.11	0.00	0.00	65.00	0.00	87.91	1088	768	15	3	13	77
21-0466	-	-	0.67	0.67	0.00	0.00	0.00	14.68	0.00	16.02	27	0	1	0	1	15
21-0470	-	Transportainer	3.95	3.95	7.11	0.00	0.00	38.40	0.00	53.42	928	768	11	2	9	46
21-0471	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30	160	0	4	1	3	43
21-0472	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30	160	0	4	1	3	43
21-0485	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30	160	0	4	1	3	43
21-0487	-	-	3.95	3.95	0.00	0.00	0.00	38.40	0.00	46.30	160	0	4	1	3	43
21-0490	-	-	9.09	9.09	0.00	0.00	0.00	73.07	0.00	91.24	368	0	9	2	8	83
21-0550	210550	Storage Shed	4.72	4.72	5.43	0.00	0.00	42.00	0.00	56.86	631	440	10	2	8	50
21-0553	210553	Telephone Pedestal	0.12	0.12	0.69	0.00	0.00	0.00	0.00	0.94	230	225	1	0	1	1
21-1001	-	-	377.28	377.28	0.00	0.00	0.00	1325.09	86.00	2165.66	15280	0	377	63	314	1811
21-1002	-	-	353.83	353.83	0.00	0.00	0.00	40.77	608.00	1356.44	14330	0	354	59	295	1024
21-1004	-	-	4.74	4.74	0.00	0.00	0.00	40.77	0.00	50.25	192	0	5	1	4	46
21-1005	-	-	4.74	4.74	0.00	0.00	0.00	40.77	0.00	50.25	192	0	5	1	4	46
21-1006	-	-	4.74	4.74	0.00	0.00	0.00	40.77	0.00	50.25	192	0	5	1	4	46
21-1007	-	-	4.74	4.74	0.00	0.00	0.00	40.77	0.00	50.25	192	0	5	1	4	46
21-1008	-	-	4.74	4.74	0.00	0.00	0.00	40.77	0.00	50.25	192	0	5	1	4	46
21-1009	-	-	4.74	4.74	0.00	0.00	0.00	55.56	0.00	65.03	192	0	5	1	4	61
21-1010	-	-	7.21	7.21	0.00	0.00	0.00	25.48	0.00	39.89	292	0	7	1	6	33
63-0039	630039	Van	0.77	6.12	0.00	0.00	0.00	0.00	0.00	6.89	248	0	6	1	5	4
DP West Elec, Teleph, & Fire		Utility Lines	0.00	0.00	0.00	0.00	7.00	950.00	0.00	957.00	0	0	0	0	0	957
DPWest Industrial		Industrial Waste Line	0.00	0.00	0.00	0.00	6.00	95.00	0.00	101.00	0	0	0	0	0	101
DPWest Sanitary		Sanitary Sewer lines	0.00	0.00	0.00	0.00	67.00	1073.00	0.00	1140.00	0	0	0	0	0	1140
DPWest Steam and Cond		Steam Lines	0.00	0.00	0.00	0.00	60.00	964.00	0.00	1024.00	0	0	0	0	0	1024
DPWest Water Supply		Water Lines	0.00	0.00	0.00	0.00	166.00	2660.00	0.00	2826.00	0	0	0	0	0	2826
LAC		-	2.02	2.02	0.00	0.00	0.00	25.48	0.00	29.52	82	0	2	0	2	28
RW Lines		Rad Waste lines at TA21	0.00	0.00	0.00	0.00	8.77	562.00	0.00	570.77	0	0	0	0	0	571
21-0003	210003	Remainder of Structure	99.33	66.22	132.01	25.26	6.00	54.35	0.00	383.18	8029	5347	198	33	165	244
21-0004	210004	Remainder of Structure	91.85	61.23	91.82	23.36	6.00	45.90	0.00	320.17	6199	3719	153	26	128	206
21-313 w/3 and adj asphalt		Assume Bldg 3 remainder rolls up into Bldg 313	204.62	171.51	268.36	162.93	72.46	959.34	0.00	1839.21	24448.50	17502.50	439.87	73.31	366.56	1346.72
21-314 w/4 and adj asphalt		Assume Bldg 4 remainder rolls up into Bldg 314	211.43	180.81	246.15	167.54	75.62	1000.81	0.00	1882.38	20869.75	13546.75	427	71	356	1367
Former Building slabs		21-21, 46, and 228 Total:	307.78	307.78	0.00	0.00	0.00	1297.00	0.00	1912.56			308	51	256	1623
Bldg 230 group		21-227, 229, 230, 387	49.17	18.09	3.56	0.00	0.00	301.31	16.00	388.12	2279.22	288.00	22	4	18	355

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Property ID	Unit	Description	Demo Recycle	Demo IND	1/2 slab
21-0001	210001	Office/Vault	0	0	0
21-0002	210002	wet lab N + S	762	79	223
21-0002	210002	wet lab N + S mezz	79	8	0
21-0003	210003	Asphalt adj to former structure	0	0	0
21-0004	210004	Asphalt adj to former structure	0	0	0
21-0005	210005	laboratory N + S	568	60	208
21-0005	210005	lab N + S - arch mezz attic	235	25	132
21-0005	210005	laboratory N + S - basement	70	7	25
21-0014	210014	Z - Instrument	77	8	39
21-0018	210018	Corridor	32	4	19
21-0021	210021	Demolished 2/7/05	103	11	53
21-0030	210030	Paint Shop	35	4	16
21-0031	210031	Electronics/Cable Fab	125	13	65
21-0042	210042	Pump House	3	0	1
21-0046	210046	Warehouse	51	5	24
21-0057	210057	Fuel Tank	14	1	8
21-0069	210069	PRV	2	0	0
21-0074	210074	acid pit	1	0	0
21-0075	210075	Steam Pit	2	0	0
21-0076	210076	storm drain	1	0	0
21-0077	210077	Steam Pit	2	0	0
21-0080	210080	PRV	4	0	1
21-0081	210081	PRV	2	0	0
21-0082	210082	PRV	2	0	0
21-0087	210087	PRV	2	0	0
21-0088	210088	PRV - no above grnd structure	2	0	0
21-0089	210089	PRV	2	0	0
21-0110	210110	Acid Tank	6	1	6
21-0111	210111	Acid Tank	6	1	6
21-0112	210112	Acid Tank	6	1	6
21-0113	210113	Acid Tank	6	1	6
21-0116	210116	Hot Tool Room, includes basement	145	15	55
21-0144	210144	Utility/passageway	4	0	2
21-0148	210148	Electrical Substation	3	0	1
21-0149	210149	Corridor	96	10	46
21-0150	210150	Basement	288	0	80
21-0150	210150	mezz	152	15	11
21-0150	210150	Molecular Chemistry	623	33	130
21-0152	210152	Laboratory Bldg	699	72	170
21-0155	210155	1st floor	1175	64	182
21-0155	210155	ext mezz	22	3	26
21-0160	-	canopy	6	1	3
21-0166	-	Support/Eq bldg	18	2	11
21-0167	-	Support/Eq bldg	18	2	11
21-0193	210193	Electrical Substation	3	0	1
21-0209	210209	1st fl	1439	93	295
21-0209	-	Basement	235	26	179
21-0210	210210	Pu Research	1363	199	311
21-0212	210212	Calcium Bldg	16	2	6
21-0213	-	support/Supply Warehouse	54	6	21
21-0220	-	cooling tower - abandoned	6	1	4
21-0223	210223	acid sump with structure above	1	0	1
21-0227	-	Support /Sewage treatment	9	1	6

TA21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Total CY

Property ID	Unit	Description	Demo Recycle	Demo IND	1/2 slab
21-0228	210228	Replacement Whouse	147	16	76
21-0229	-	Support /Sewage control bldg	5	0	3
21-0230	-	sludge drying bed	13	2	16
21-0254	210254	Guard House	9	1	4
21-0257	210257	Rad Liquid Waste Treatment Plant	187	20	75
21-0257	210257	underground piping	0	0	0
21-0258	210258	West Water Tower	40	4	20
21-0259	210259	PRV	2	0	0
21-0260	210260	Steam Pit	2	0	0
21-0261	210261	Steam Pit	2	0	0
21-0286	210286	Warehouse / Rad	197	11	34
21-0303	210303	Electrical Substation	2	0	1
21-0307	210307	Electrical Substation	3	0	1
21-0308	210308	Electrical Substation	3	0	1
21-0309	210309	Electrical Substation	3	0	1
21-0310	210310	Telephone Pedestal	0	0	0
21-0311	210311	Telephone Pedestal	0	0	0
21-0312	210312	Corridor	154	7	26
21-0313	210313	Corridor	338	15	53
21-0314	210314	Corridor	384	17	60
21-0315	210315	Corridor	288	15	59
21-0316	210316	Telephone Pedestal	0	0	0
21-0320	210320	Telephone Pedestal	0	0	0
21-0323	-	-	0	0	0
21-0323	-	-	0	0	0
21-0328	210328	Materials Receiving	17	2	4
21-0334	210334	Utility Shed	2	0	1
21-0335	210335	Containment Vessel	17	2	10
21-0338	210338	Electrical Substation	3	0	1
21-0342	210342	East Water Tower	40	4	20
21-0345	-	-	2	0	1
21-0346	-	2-3000 gal SS hold tanks	15	2	9
21-0353	210353	Change Room Trailer	11	1	4
21-0355	210355	Office Trailer / Rad	15	2	6
21-0357	210357	Steam Plant	132	14	70
21-0359	210359	Office Trailer	16	2	6
21-0361	210361	Trans Office Trlr	40	4	21
21-0365	210365	Trans Office Trlr	41	4	21
21-0370	-	mech eq bldg	16	2	7
21-0387	-	-	3	0	1
21-0388	-	-	1	0	0
21-0402	210402	Storage Bldg - no floor	13	1	0
21-0418	-	-	6	1	3
21-0421	-	-	3	0	2
21-0422	-	-	3	0	2
21-0423	-	-	3	0	2
21-0424	-	-	3	0	2
21-0427	210427	Shed	2	0	0
21-0428	210428	Shed	7	1	3
21-0443	210443	Office Trailer	16	2	6
21-0450	210450	Van	6	1	0
21-0451	210451	Storage Shed	3	0	1
21-0454	210454	Van	6	1	0

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 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Total CY

Property ID	Unit	Description	Demo Recycle	Demo IND	1/2 slab
21-0455	210455	Van	7	1	0
21-0456	210456	Van	6	1	0
21-0458	210458	Metal Storage Shed	3	0	1
21-0461	210461	Office Trailer	10	1	4
21-0462	210462	Transportainer	10	1	4
21-0466	-	-	1	0	0
21-0470	-	Transportainer	6	1	2
21-0471	-	-	3	0	2
21-0472	-	-	3	0	2
21-0485	-	-	3	0	2
21-0487	-	-	3	0	2
21-0490	-	-	8	1	5
21-0550	210550	Storage Shed	6	1	2
21-0553	210553	Telephone Pedestal	0	0	0
21-1001	-	-	320	35	189
21-1002	-	-	300	32	177
21-1004	-	-	4	0	2
21-1005	-	-	4	0	2
21-1006	-	-	4	0	2
21-1007	-	-	4	0	2
21-1008	-	-	4	0	2
21-1009	-	-	4	0	2
21-1010	-	-	6	1	4
63-0039	630039	Van	3	0	0
DP West Elec, Teleph, & Fire		Utility Lines	0	0	0
DPWest Industrial		Industrial Waste Line	0	0	0
DPWest Sanitary		Sanitary Sewer lines	0	0	0
DPWest Steam and Cond		Steam Lines	0	0	0
DPWest Water Supply		Water Lines	0	0	0
LAC		-	2	0	1
RW Lines		Rad Waste lines at TA21	0	0	0
21-0003	210003	Remainder of Structure	126	13	50
21-0004	210004	Remainder of Structure	104	11	46
21-313 w/3 and adj asphalt		Assume Bldg 3 remainder rolls up into Bldg 313	463.93	28.56	102
21-314 w/4 and adj asphalt		Assume Bldg 4 remainder rolls up into Bldg 314	487	28	106
Former Building slabs		21-21, 46, and 228 Total:	261	28	154
Bldg 230 group		21-227, 229, 230, 387	30	3	25

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Floors

Property ID	Unit	Description	Floor/Found Thickness (in)	Extra Concrete (in)	Footprint (SF)	Volume Floor Materials (CY)	Floor/Found Material	Source Floor Data
21-0001	210001	Office/Vault			0			
21-0002	210002	wet lab N + S	6	4	14441	446	concrete	Scaled from GIS, Fndtn thickness from documents
21-0002	210002	wet lab N + S mezz	4		683	8	decking	
21-0003	210003	Asphalt adj to former structure						N/A
21-0004	210004	Asphalt adj to former structure						N/A
21-0005	210005	laboratory N + S	6	4	13507	417	concrete	Scaled from GIS, Fndtn thickness from documents
21-0005	210005	lab N + S - arch mezz attic	8		10681	264		As-built AB286
21-0005	210005	laboratory N + S - basement	8		2009	50	concrete	As-built AB286
21-0014	210014	Z - Instrument	8		3138	77		Area scaled from as-built, fndtn thick assumed
21-0018	210018	Corridor	8		1550	38		TSDs 98-99 baseline, foundation thickness assumed
21-0021	210021	Demolished 2/7/05	8		4322	107		TSDs 98-99 baseline, foundation thickness assumed
21-0030	210030	Paint Shop	8		1330	33		TSDs 98-99 baseline, foundation thickness assumed
21-0031	210031	Electronics/Cable Fab	8		5288	131		TSDs 98-99 baseline, foundation thickness assumed
21-0042	210042	Pump House	8		65	2		TSDs 98-99 baseline= GIS, foundation thickness assumed
21-0046	210046	Warehouse	8		1982	49		TSDs 98-99 baseline, foundation thickness assumed
21-0057	210057	Fuel Tank	8		624	15		footprint scaled from GIS drawing, thickness assumed
21-0069	210069	PRV	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0074	210074	acid pit	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0075	210075	Steam Pit	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0076	210076	storm drain	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0077	210077	Steam Pit	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0080	210080	PRV	8		80	2		scaled from GIS, foundation thickness assumed
21-0081	210081	PRV	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0082	210082	PRV	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0087	210087	PRV	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0088	210088	PRV - no above grnd structure	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0089	210089	PRV	8		40	1		TSDs 98-99 baseline, foundation thickness assumed
21-0110	210110	Acid Tank	8		450	11		TSDs 98-99 baseline, foundation thickness assumed
21-0111	210111	Acid Tank	8		450	11		TSDs 98-99 baseline, foundation thickness assumed
21-0112	210112	Acid Tank	8		450	11		TSDs 98-99 baseline, foundation thickness assumed
21-0113	210113	Acid Tank	8		450	11		TSDs 98-99 baseline, foundation thickness assumed
21-0116	210116	Hot Tool Room, includes basement	8		4470	110		area scaled from GIS, found thickness assumed doubled to include basement
21-0144	210144	Utility/passageway	8		180	4		TSDs 98-99 baseline, foundation thickness assumed
21-0148	210148	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0149	210149	Corridor	8		3762	93		NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0150	210150	Basement	8		6460	160		foundation thickness assumed, footprint- set 80053 drawing
21-0150	210150	mezz	4		1816	22		mezz floor thick assumed footprint from dwg AB283
21-0150	210150	Molecular Chemistry	8	4	7041	261		scaled from GIS, foundation thickness assumed
21-0152	210152	Laboratory Bldg	8		13745	339		MOADS DB TIFF AB628, foundation thickness assumed
21-0155	210155	1st floor	8		14775	365		scaled from GIS dwg, foundation thickness assumed
21-0155	210155	ext mezz	8		2069	51		TSDs 98-99 baseline, foundation thickness assumed
21-0160	-	canopy	8		263	6		From EV, foundation thickness assumed
21-0166	-	Support/Eq bldg	8		857	21		From EV, foundation thickness assumed
21-0167	-	Support/Eq bldg	8		874	22		From EV, foundation thickness assumed
21-0193	210193	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0209	210209	1st fl	8		23910	590	concrete	scaled from GIS dwg, foundation thickness assumed
21-0209	-	Basement	8		14492	358		FP scaled from as-built, foundation thickness assumed
21-0210	210210	Pu Research	8	8	12576	621		scaled from GIS dwg, foundation thickness assumed, extra inches represents 2nd floor

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 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Floors

Property ID	Unit	Description	Floor/Found Thickness (in)	Extra Concrete (in)	Footprint (SF)	Volume Floor Materials (CY)	Floor/Found Material	Source Floor Data
21-0212	210212	Calcium Bldg	8		449	11		scaled from GIS dwg, foundation thickness assumed
21-0213	-	support/Supply Warehouse	8		1723	43		From EV, foundation thickness assumed
21-0220	-	cooling tower - abandoned	8		288	7		From EV, foundation thickness assumed
21-0223	210223	acid sump with structure above	8		48	1		scaled from GIS dwg, foundation thickness assumed
21-0227	-	Support /Sewage treatment	8		453	11		From EV, foundation thickness assumed
21-0228	210228	Replacement Whouse	8		6161	152		TSDs 98-99 baseline, foundation thickness assumed
21-0229	-	Support /Sewage control bldg	8		215	5		From EV, foundation thickness assumed
21-0230	-	sludge drying bed	8		1258	31		From EV, foundation thickness assumed
21-0254	210254	Guard House	8		291	7		TSDs 98-99 baseline, foundation thickness assumed
21-0257	210257	Rad Liquid Waste Treatment Plant	8	4	4069	151		scaled from GIS dwg, foundation thickness assumed
21-0257	210257	underground piping				0		N/A
21-0258	210258	West Water Tower	8		1600	40		TSDs 98-99 baseline, fnd thk assumed, GIS Area=773
21-0259	210259	PRV	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0260	210260	Steam Pit	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0261	210261	Steam Pit	8		25	1		TSDs 98-99 baseline, foundation thickness assumed
21-0286	210286	Warehouse / Rad	6		3682	68		TSDs 98-99 baseline
21-0303	210303	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0307	210307	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0308	210308	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0309	210309	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0310	210310	Telephone Pedestal	8		5	0		TSDs 98-99 baseline, foundation thickness assumed
21-0311	210311	Telephone Pedestal	8		5	0		TSDs 98-99 baseline, foundation thickness assumed
21-0312	210312	Corridor	8		2072	51		FP-NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0313	210313	Corridor	8		4264	105		FP-NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0314	210314	Corridor	8		4843	120		FP-NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0315	210315	Corridor	8		4773	118		FP-NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0316	210316	Telephone Pedestal	8		5	0		TSDs 98-99 baseline, foundation thickness assumed
21-0320	210320	Telephone Pedestal	8		5	0		TSDs 98-99 baseline, foundation thickness assumed
21-0323	-	-	8		7	0		From EV, foundation thickness assumed
21-0323	-	-	8		10	0		From EV, foundation thickness assumed
21-0328	210328	Materials Receiving	8		320	8		TSDs 98-99 baseline, foundation thickness assumed
21-0334	210334	Utility Shed	8		58	1		TSDs 98-99 baseline, foundation thickness assumed
21-0335	210335	Containment Vessel	8		800	20		TSDs 98-99 baseline, fnd thk assumed, GIS Area=101
21-0338	210338	Electrical Substation	8		72	2		TSDs 98-99 baseline, foundation thickness assumed
21-0342	210342	East Water Tower	8		1600	40		TSDs 98-99 baseline, foundation thickness assumed
21-0345	-	-	8		96	2		From EV, foundation thickness assumed
21-0346	-	2-3000 gal SS hold tanks	8		721	18		From EV, foundation thickness assumed
21-0353	210353	Change Room Trailer	8		295	7		TSDs 98-99 baseline, foundation thickness assumed
21-0355	210355	Office Trailer / Rad	8		500	12		FP-NNSA Excess Facilities Disposition Plan, foundation thickness assumed
21-0357	210357	Steam Plant	8		5682	140		TSDs 98-99 baseline, foundation thickness assumed
21-0359	210359	Office Trailer	8		521	13		scaled from GIS, foundation thickness assumed
21-0361	210361	Trans Office Trlr	8		1670	41		TSDs 98-99 baseline, foundation thickness assumed
21-0365	210365	Trans Office Trlr	8		1735	43		TSDs 98-99 baseline, foundation thickness assumed
21-0370	-	mech eq bldg	8		545	13		From EV, foundation thickness assumed
21-0387	-	-	8		65	2		From EV, foundation thickness assumed
21-0388	-	-	8		28	1		From EV, foundation thickness assumed
21-0402	210402	Storage Bldg - no floor	0		1268	0		no floor
21-0418	-	-	8		264	7		From EV, foundation thickness assumed

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 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Floors

Property ID	Unit	Description	Floor/Found Thickness (in)	Extra Concrete (in)	Footprint (SF)	Volume Floor Materials (CY)	Floor/Found Material	Source Floor Data
21-0421	-	-	8		160	4		From EV, foundation thickness assumed
21-0422	-	-	8		160	4		From EV, foundation thickness assumed
21-0423	-	-	8		160	4		From EV, foundation thickness assumed
21-0424	-	-	8		160	4		From EV, foundation thickness assumed
21-0427	210427	Shed	8		36	1		TSDs 98-99 baseline, foundation thickness assumed
21-0428	210428	Shed	8		231	6		TSDs 98-99 baseline, foundation thickness assumed
21-0443	210443	Office Trailer	8		520	13		TSDs 98-99 baseline, foundation thickness assumed
21-0450	210450	Van	1		248	1		TSDs 98-99 baseline
21-0451	210451	Storage Shed	8		63	2		TSDs 98-99 baseline, foundation thickness assumed
21-0454	210454	Van	1		248	1		assumed = 21-450
21-0455	210455	Van	1		248	1		assumed = 21-450
21-0456	210456	Van	1		248	1		assumed = 21-450
21-0458	210458	Metal Storage Shed	8		80	2		scaled from GIS, foundation thickness assumed
21-0461	210461	Office Trailer	8		320	8		TSDs 98-99 baseline, foundation thickness assumed
21-0462	210462	Transportainer	8		320	8		TSDs 98-99 baseline, foundation thickness assumed
21-0466	-	-	8		27	1		From EV, foundation thickness assumed
21-0470	-	Transportainer	8		160	4		From EV, foundation thickness assumed
21-0471	-	-	8		160	4		From EV, foundation thickness assumed
21-0472	-	-	8		160	4		From EV, foundation thickness assumed
21-0485	-	-	8		160	4		From EV, foundation thickness assumed
21-0487	-	-	8		160	4		From EV, foundation thickness assumed
21-0490	-	-	8		368	9		From EV, foundation thickness assumed
21-0550	210550	Storage Shed	8		191	5		TSDs 98-99 baseline, foundation thickness assumed
21-0553	210553	Telephone Pedestal	8		5	0		TSDs 98-99 baseline, foundation thickness assumed
21-1001	-	-	8		15280	377		From EV, foundation thickness assumed
21-1002	-	-	8		14330	354		From EV, foundation thickness assumed
21-1004	-	-	8		192	5		From EV, foundation thickness assumed
21-1005	-	-	8		192	5		From EV, foundation thickness assumed
21-1006	-	-	8		192	5		From EV, foundation thickness assumed
21-1007	-	-	8		192	5		From EV, foundation thickness assumed
21-1008	-	-	8		192	5		From EV, foundation thickness assumed
21-1009	-	-	8		192	5		From EV, foundation thickness assumed
21-1010	-	-	8		292	7		From EV, foundation thickness assumed
63-0039	630039	Van	1		248	1		assumed = 21-450
DP West Elec, Teleph, & Fire		Utility Lines						N/A
DPWest Industrial		Industrial Waste Line						N/A
DPWest Sanitary		Sanitary Sewer lines						N/A
DPWest Steam and Cond		Steam Lines						N/A
DPWest Water Supply		Water Lines						N/A
LAC		-	8		82	2		From EV, foundation thickness assumed
RW Lines		Rad Waste lines at TA21						N/A
21-0003	210003	Remainder of Structure	8	4	2682	99		Scaled from GIS, Fndtn thickness from documents
21-0004	210004	Remainder of Structure	8	4	2480	92		Scaled from GIS, Fndtn thickness from documents
Former Building slabs		21-21, 46, and 228 Total:			12465			
Bldg 230 group		21-227, 229, 230, 387			732.85			

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 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Walls

Property ID	Unit	Description	Floor Height (FT)	Perimeter (LF)	Ext Wall Thickness (in)	Total ext Waste Vol (CY)	Wall Surface Area (SF)	Exterior material	Source Ext Data
21-0001	210001	Office/Vault		0	0	0	0	wood frame, cinder block	TSDs 98-99 baseline
21-0002	210002	wet lab N + S	17	1098	8	461	18666	SS	matl-TSDs 98-99 baseline, assumed wall thickness, LF fr MOADS DB set3151064.tif
21-0002	210002	wet lab N + S mezz	8	600	12	178	4800	SS	matl-TSDs 98-99 baseline, assumed wall thickness, LF fr MOADS DB TIFF
21-0003	210003	Asphalt adj to former structure						N/A	N/A
21-0004	210004	Asphalt adj to former structure						N/A	N/A
21-0005	210005	laboratory N + S	17	642.7	8	270	10926	SS	TSDs 98-99 baseline, ACAD Dwg AB286
21-0005	210005	lab N + S - arch mezz attic	14	722	8	250	10108	SS	TSDs 98-99 baseline, As-builts
21-0005	210005	laboratory N + S - basement	12	224	14	116	2688	concrete block	wall material assumed, measurements from As-built, basement floor height assumed
21-0014	210014	Z - Instrument	8	265	4	26	2120	wood frame, concrete block	TSDs 98-99 baseline, assumed thickness, height
21-0018	210018	Corridor		0	0	0	0	steel frame, concrete block	TSDs 98-99 baseline
21-0021	210021	Demolished 2/7/05	8	310	4	31	2480	concrete	TSDs 98-99 baseline, assumed thickness, height
21-0030	210030	Paint Shop	8	162	4	16	1296	stucco, wood frame	TSDs 98-99 baseline, assumed thickness, height
21-0031	210031	Electronics/Cable Fab	8	353	4	35	2824	wood frame	TSDs 98-99 baseline, assumed thickness, height
21-0042	210042	Pump House	8	32	4	3	256	wood	TSDs 98-99 baseline, assumed thickness, height
21-0046	210046	Warehouse	8	218	4	22	1744	steel frame, concrete, steel siding	TSDs 98-99 baseline, assumed thickness, height
21-0057	210057	Fuel Tank	10	140	4	17	1400	steel	TSDs 98-99 baseline, assumed thickness, height
21-0069	210069	PRV	10	24	4	3	240	concrete	hist doc used max depth and diameter
21-0074	210074	acid pit		0	0	0	0		
21-0075	210075	Steam Pit	10	24	4	3	240	metal	hist doc used max depth and diameter
21-0076	210076	storm drain		0	0	0	0		
21-0077	210077	Steam Pit	10	24	4	3	240	concrete	hist doc used max depth and diameter
21-0080	210080	PRV	10	36	4	4	360	metal	TSDs 98-99 baseline, thckns from 1824[1]& assumed ht,hist doc used max depth and diameter
21-0081	210081	PRV	10	24	4	3	240	metal	hist doc used max depth and diameter
21-0082	210082	PRV	10	24	4	3	240	metal	hist doc used max depth and diameter, thckns from 1824[1]
21-0087	210087	PRV	10	24	4	3	240	metal	hist doc used max depth and diameter
21-0088	210088	PRV - no above grnd structure	10	24	4	3	240	metal	hist doc used max depth and diameter
21-0089	210089	PRV	10	28	4	3	280	metal	TSDs 98-99 baseline, thckns from 1824[1] & ht,hist doc used max depth and diameter
21-0110	210110	Acid Tank	18	38	1	2	684	steel	Based upon historical doc
21-0111	210111	Acid Tank	18	38	1	2	684	steel	Based upon historical doc
21-0112	210112	Acid Tank	18	38	1	2	684	steel	Based upon historical doc
21-0113	210113	Acid Tank	18	38	1	2	684	steel	Based upon historical doc
21-0116	210116	Hot Tool Room, includes basement	20	500	4	123	10000	metal siding	TSDs 98-99 baseline scaled from GIS drawing doubled to include basement
21-0144	210144	Utility/passageway		0	0	0	0	steel	TSDs 98-99 baseline
21-0148	210148	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc
21-0149	210149	Corridor	8	208	8	41	1664	Cement block, concrete frame	matl from TSDs 98-99 baseline, assumed height, thickness
21-0150	210150	Basement	8	389	12	115	3112	concrete	from dwg set80053.tif, height assumed
21-0150	210150	mezz	14	403	8	139	5642	Conc blk, conc frame	TSDs 98-99 baseline, dwg ab283, ht from arch sched 17335
21-0150	210150	Molecular Chemistry	12	408	12	181	4896		TSDs 98-99 baseline, ACAD Drawing AB283
21-0152	210152	Laboratory Bldg	14	660	6	171	9240	wood or metal stud	MOADS DB TIFF AB628, 1671
21-0155	210155	1st floor	20	673	8	332	13460	wood or metal stud	MOADS TIFF AB109 floor height assumed by elev dwg set180351
21-0155	210155	ext mezz	0	273	8	0	0	wood or metal stud, incl in 1st floor	MOADS TIFF AB109 floor height assumed by elev dwg set180351
21-0160	-	canopy	8	0	0	0	0		est from photo in hist doc
21-0166	-	Support/Eq bldg							
21-0167	-	Support/Eq bldg							
21-0193	210193	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0209	210209	1st fl	15	900	8	333	13500	wood or metal stud	Perimeter from GIS, 'MOADS TIFF AB246 floor height assumed based on dwg 17777
21-0209	-	Basement	8	655	12	194	5240		assumed height
21-0210	210210	Pu Research	16	918	8	363	14688	steel "column to pier"	TSDs 98-99 baseline, assumed thickness, 16' height represents 2 floors
21-0212	210212	Calcium Bldg	8	85	8	17	680	concrete block	TSDs 98-99 baseline, assumed thickness, assumed height
21-0213	-	support/Supply Warehouse	19	185	4	43	3515		assumed similar to 286

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BUILDING QUANTITY ESTIMATE
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Walls

Property ID	Unit	Description	Floor Height (FT)	Perimeter (LF)	Ext Wall Thickness (in)	Total ext Waste Vol (CY)	Wall Surface Area (SF)	Exterior material	Source Ext Data
21-0220	-	cooling tower - abandoned							
21-0223	210223	acid sump with structure above	8	28	2	1	224	wood	scaled from GIS Dwg, assumed height, photo in hist doc
21-0227	-	Support /Sewage treatment							
21-0228	210228	Replacement Whouse	19	185	4	43	3515		perim from 8645[1]
21-0229	-	Support /Sewage control bldg							
21-0230	-	sludge drying bed							
21-0254	210254	Guard House	8	72	4	7	576		assumed thickness, ht
21-0257	210257	Rad Liquid Waste Treatment Plant	13	267	8	86	3471	concrete block	Scaled from MOADS drawings dated 1983
21-0257	210257	underground piping							N/A
21-0258	210258	West Water Tower	8	100	6	15	800	steel	TSDs 98-99 baseline, assumed thickness, assumed height
21-0259	210259	PRV	10	24	4	3	240	metal	hist doc used max depth and diameter
21-0260	210260	Steam Pit	10	24	4	3	240	concrete	hist doc used max depth and diameter
21-0261	210261	Steam Pit	10	24	4	3	240	concrete	hist doc used max depth and diameter
21-0286	210286	Warehouse / Rad	19	185	4	43	3515	steel frame, metal panels	scaled from GIS dwg TSDs 98-99 baseline, height from Larkin Garcia
21-0303	210303	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0307	210307	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0308	210308	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0309	210309	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0310	210310	Telephone Pedestal	9	25	1	1	225	metal	hist doc used max depth and diameter
21-0311	210311	Telephone Pedestal	9	25	1	1	225	metal	hist doc used max depth and diameter
21-0312	210312	Corridor	12	129	8	38	1548	steel	TSDs 98-99 baseline, assume 8" ext wall thickness, height
21-0313	210313	Corridor	12	175	8	52	2100	steel	TSDs 98-99 baseline, assume height
21-0314	210314	Corridor	12	369	8	109	4428	steel	TSDs 98-99 baseline, assume height
21-0315	210315	Corridor	12	188	6	42	2256	steel	TSDs 98-99 baseline, assume height
21-0316	210316	Telephone Pedestal	9	25	1	1	225	metal	hist doc used max depth and diameter
21-0320	210320	Telephone Pedestal	9	25	1	1	225	metal	hist doc used max depth and diameter
21-0323	-	-							
21-0323	-	-							
21-0328	210328	Materials Receiving	12	84	8	25	1008	concrete pumice block	TSDs 98-99 baseline, assume bldg ht=12', wall th=8 from 7473[1]
21-0334	210334	Utility Shed	6.67	32	4	3	213	steel frame & siding	FP and thickness from hist doc, assumed ht
21-0335	210335	Containment Vessel	9	50	0.5	1	450	steel holding tank	from hist doc
21-0338	210338	Electrical Substation	8	38	4	4	304	steel	est from photo in hist doc, assumed same as 21-148
21-0342	210342	East Water Tower	8	100	6	15	800	steel	TSDs 98-99 baseline, assumed same as 21-258
21-0345	-	-							
21-0346	-	2-3000 gal SS hold tanks	9	40	0.5	1	360	Stainless Steel	from hist doc
21-0353	210353	Change Room Trailer	12	76	4	11	912	steel frame and siding, wood	TSDs 98-99 baseline, assumed thickness & ht
21-0355	210355	Office Trailer / Rad	8	120	4	12	960	steel frame & siding	TSDs 98-99 baseline, assumed thickness & ht
21-0357	210357	Steam Plant	8	313	4	31	2504	steel frame & siding	TSDs 98-99 baseline, assumed thickness & ht
21-0359	210359	Office Trailer	8	112	4	11	896	steel frame corr steel, wood frame (?)	TSDs 98-99 baseline, assumed thickness & ht
21-0361	210361	Trans Office Trlr	12	76	4	11	912	steel frame and siding, wood	perimeter assumed same as 353
21-0365	210365	Trans Office Trlr	12	76	4	11	912	steel frame and siding, wood	perimeter assumed same as 353
21-0370	-	mech eq bldg	12	76	4	11	912	stuccoed conc masonry	TSDs 98-99 bsln, assumed thk & ht, assumed same style/size as 353
21-0387	-	-	8	36	4	4	288	SS	same as 21-458 per hist doc
21-0388	-	-							
21-0402	210402	Storage Bldg - no floor	8	0	0	0	0		est from photo in hist doc
21-0418	-	-							
21-0421	-	-							
21-0422	-	-							
21-0423	-	-							
21-0424	-	-							

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Walls

Property ID	Unit	Description	Floor Height (FT)	Perimeter (LF)	Ext Wall Thickness (in)	Total ext Waste Vol (CY)	Wall Surface Area (SF)	Exterior material	Source Ext Data
21-0427	210427	Shed	8	24	4	2	192	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0428	210428	Shed	8	62	4	6	496	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0443	210443	Office Trailer	12	76	4	11	912	steel frame and siding, wood	TSDs 98-99 baseline, assumed thickness & ht, assumed same as 353
21-0450	210450	Van	8	78	4	8	624	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0451	210451	Storage Shed	8	33	4	3	264	wood	TSDs 98-99 baseline, assumed thickness & ht
21-0454	210454	Van	8	83	4	8	664	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0455	210455	Van	8	96	4	9	768	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0456	210456	Van	8	81	4	8	648	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0458	210458	Metal Storage Shed	8	36	4	4	288	SS	TSDs 98-99 baseline, assumed thickness & ht
21-0461	210461	Office Trailer	8	86	4	8	688	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0462	210462	Transportainer	8	96	3	7	768		est from hist doc, assumed thickness
21-0466	-	-							
21-0470	-	Transportainer	8	96	3	7	768		est from hist doc, assumed thickness
21-0471	-	-							
21-0472	-	-							
21-0485	-	-							
21-0487	-	-							
21-0490	-	-							
21-0550	210550	Storage Shed	8	55	4	5	440	steel	TSDs 98-99 baseline, assumed thickness & ht
21-0553	210553	Telephone Pedestal	9	25	1	1	225	metal	hist doc used max depth and diameter
21-1001	-	-							
21-1002	-	-							
21-1004	-	-							
21-1005	-	-							
21-1006	-	-							
21-1007	-	-							
21-1008	-	-							
21-1009	-	-							
21-1010	-	-							
63-0039	630039	Van		0	0	0	0	steel	TSDs 98-99 baseline
DP West Elec, Teleph, & Fire		Utility Lines		0	0	0	0		
DPWest Industrial		Industrial Waste Line		0	0	0	0		
DPWest Sanitary		Sanitary Sewer lines		0	0	0	0		
DPWest Steam and Cond		Steam Lines		0	0	0	0		
DPWest Water Supply		Water Lines		0	0	0	0		
LAC		-							
RW Lines		Rad Waste lines at TA21		0	0	0	0		
21-0003	210003	Remainder of Structure	17	314.5	8	132	5347		scaled from GIS
21-0004	210004	Remainder of Structure	17	218.75	8	92	3719		scaled from GIS

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BUILDING QUANTITY ESTIMATE
MARCH 2005
Walls

Property ID	Unit	Description	Int Wall (LF)	Int Wall Thickness (in)	Total Int Walls (CY)	Int Wall Material	Total Walls (CY)	Source Int Wall Data
21-0001	210001	Office/Vault	0	0	0	wood frame, cinder block	0	TSDs 98-99 baseline
21-0002	210002	wet lab N + S	1302	8	547	gypsum lathe and plaster inside Contam	1007	TSDs 98-99 baseline, wall lf est from MOADS TIFF, height from LA-9513-MS
21-0002	210002	wet lab N + S mezz	40	2	2	plaster	180	MOADS TIFF dwg, thickness assumed, height from LA-9513-MS
21-0003	210003	Asphalt adj to former structure					0	
21-0004	210004	Asphalt adj to former structure					0	
21-0005	210005	laboratory N + S	776.6	8	326	gypsum lathe and plaster inside Contam	596	TSDs 98-99 baseline, ACAD Dwg AB286
21-0005	210005	lab N + S - arch mezz attic	468	2	40	gypsum lathe and plaster inside Contam	290	TSDs 98-99 baseline, As-builts
21-0005	210005	laboratory N + S - basement	0	14	0	gypsum lathe and plaster inside Contam	116	TSDs 98-99 baseline, As-builts, height from LA-9513-MS
21-0014	210014	Z - Instrument	0	0	0	wood frame, concrete block	26	TSDs 98-99 baseline
21-0018	210018	Corridor	0	0	0	steel frame, concrete block	0	TSDs 98-99 baseline
21-0021	210021	Demolished 2/7/05	0	0	0	concrete	31	TSDs 98-99 baseline
21-0030	210030	Paint Shop	0	0	0	stucco, wood frame	16	TSDs 98-99 baseline
21-0031	210031	Electronics/Cable Fab	0	0	0	wood frame	35	TSDs 98-99 baseline
21-0042	210042	Pump House	0	0	0	wood	3	TSDs 98-99 baseline
21-0046	210046	Warehouse	0	0	0	steel frame, concrete, steel siding	22	TSDs 98-99 baseline
21-0057	210057	Fuel Tank	0	0	0	steel	17	TSDs 98-99 baseline
21-0069	210069	PRV	0	0	0	concrete	3	TSDs 98-99 baseline
21-0074	210074	acid pit	0	0	0		0	
21-0075	210075	Steam Pit	0	0	0		3	
21-0076	210076	storm drain	0	0	0		0	
21-0077	210077	Steam Pit	0	0	0	concrete	3	TSDs 98-99 baseline
21-0080	210080	PRV	0	0	0	metal	4	TSDs 98-99 baseline
21-0081	210081	PRV	0	0	0	metal	3	TSDs 98-99 baseline
21-0082	210082	PRV	0	0	0	metal	3	TSDs 98-99 baseline
21-0087	210087	PRV	0	0	0	metal	3	TSDs 98-99 baseline
21-0088	210088	PRV - no above grnd structure	0	0	0	metal	3	TSDs 98-99 baseline
21-0089	210089	PRV	0	0	0	metal	3	TSDs 98-99 baseline
21-0110	210110	Acid Tank	0	0	0	steel	2	TSDs 98-99 baseline
21-0111	210111	Acid Tank	0	0	0	steel	2	TSDs 98-99 baseline
21-0112	210112	Acid Tank	0	0	0	steel	2	TSDs 98-99 baseline
21-0113	210113	Acid Tank	0	0	0	steel	2	TSDs 98-99 baseline
21-0116	210116	Hot Tool Room, includes basement	0	0	0	Steel frame w/drywall inside, metal siding out, no int	123	TSDs 98-99 baseline
21-0144	210144	Utility/passageway	0	0	0	plaster	0	TSDs 98-99 baseline
21-0148	210148	Electrical Substation	0	0	0		4	
21-0149	210149	Corridor	0	0	0	Cement block, concrete frame	41	TSDs 98-99 baseline
21-0150	210150	Basement	152	5	19	wood/metal stud	134	wall is low height assume 4'
21-0150	210150	mezz	519	9	202	Concrete block, concrete frame	341	TSDs 98-99 baseline
21-0150	210150	Molecular Chemistry	134	varies	54		235	TSDs 98-99 baseline, ACAD Drawing AB283, ht assumed
21-0152	210152	Laboratory Bldg	1526	12	791	wood/metal stud	962	MOADS DB TIFF AB628 Note - wall thickness varies lf=sf total walls
21-0155	210155	1st floor	528	12	391	wood/metal stud	723	MOADS DB TIFF AB109 Note - wall thickness varies lf=sf total walls
21-0155	210155	ext mezz	0	0	0		0	MOADS DB TIFF AB109 Note - wall thickness varies lf=sf total walls
21-0160	-	canopy					0	
21-0166	-	Support/Eq bldg					0	
21-0167	-	Support/Eq bldg					0	
21-0193	210193	Electrical Substation	0	0	0		4	
21-0209	210209	1st fl	2150	6	597	wall thickness from tiff	931	MOADS DB TIFF AB246 Note
21-0209	-	Basement	0	6	0		194	
21-0210	210210	Pu Research	1134	5	280	drywall	643	TSDs 98-99 baseline
21-0212	210212	Calcium Bldg	0	0	0	concrete block	17	TSDs 98-99 baseline
21-0213	-	support/Supply Warehouse					43	

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BUILDING QUANTITY ESTIMATE
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Walls

Property ID	Unit	Description	Int Wall (LF)	Int Wall Thickness (in)	Total Int Walls (CY)	Int Wall Material	Total Walls (CY)	Source Int Wall Data
21-0220	-	cooling tower - abandoned					0	
21-0223	210223	acid sump with structure above					1	
21-0227	-	Support /Sewage treatment					0	
21-0228	210228	Replacement Whouse	0	0	0	plastic batt insulation	43	TSDs 98-99 baseline
21-0229	-	Support /Sewage control bldg					0	
21-0230	-	sludge drying bed					0	
21-0254	210254	Guard House	0	0	0		7	
21-0257	210257	Rad Liquid Waste Treatment Plant	436	6	105	concrete block	191	TSDs 98-99 baseline
21-0257	210257	underground piping				N/A	0	
21-0258	210258	West Water Tower	0	0	0	steel	15	TSDs 98-99 baseline
21-0259	210259	PRV	0	0	0	metal	3	TSDs 98-99 baseline
21-0260	210260	Steam Pit	0	0	0	concrete	3	TSDs 98-99 baseline
21-0261	210261	Steam Pit	0	0	0	concrete	3	TSDs 98-99 baseline
21-0286	210286	Warehouse / Rad	42	4	10	plastic batt insulation	53	TSDs 98-99 baseline
21-0303	210303	Electrical Substation	0	0	0		4	
21-0307	210307	Electrical Substation	0	0	0		4	
21-0308	210308	Electrical Substation	0	0	0		4	
21-0309	210309	Electrical Substation	0	0	0		4	
21-0310	210310	Telephone Pedestal	0	0	0		1	
21-0311	210311	Telephone Pedestal	0	0	0		1	
21-0312	210312	Corridor	89	6	20	plaster, concrete block	58	as built drawing ab-495-001-d-0[1]
21-0313	210313	Corridor	419	varies	85	plaster	136	TSDs 98-99 baseline, http://arania.lanl.gov jpeg
21-0314	210314	Corridor	225	8	45	plaster	154	TSDs 98-99 baseline, http://arania.lanl.gov jpeg
21-0315	210315	Corridor	250	6	56	plaster	97	TSDs 98-99 baseline
21-0316	210316	Telephone Pedestal	0	0	0		1	
21-0320	210320	Telephone Pedestal	0	0	0		1	
21-0323	-	-					0	
21-0323	-	-					0	
21-0328	210328	Materials Receiving	0	0	0	concrete pumice block	25	TSDs 98-99 baseline
21-0334	210334	Utility Shed	0	0	0	steel frame & siding	3	TSDs 98-99 baseline
21-0335	210335	Containment Vessel	0	0	0	steel holding tank	1	TSDs 98-99 baseline
21-0338	210338	Electrical Substation	0	0	0		4	
21-0342	210342	East Water Tower	0	0	0	steel	15	TSDs 98-99 baseline
21-0345	-	-					0	
21-0346	-	2-3000 gal SS hold tanks					1	
21-0353	210353	Change Room Trailer	0	0	0	steel frame and siding, wood	11	TSDs 98-99 baseline
21-0355	210355	Office Trailer / Rad	0	0	0	drywall	12	TSDs 98-99 baseline
21-0357	210357	Steam Plant	0	0	0	steel frame & siding	31	TSDs 98-99 baseline
21-0359	210359	Office Trailer	0	0	0	steel frame corr steel, wood frame (?)	11	TSDs 98-99 baseline
21-0361	210361	Trans Office Trlr	0	0	0		11	
21-0365	210365	Trans Office Trlr	0	0	0		11	
21-0370	-	mech eq bldg					11	
21-0387	-	-	0	0	0	SS	4	same as 21-458 per hist doc
21-0388	-	-					0	
21-0402	210402	Storage Bldg - no floor	0	0	0	metal	0	TSDs 98-99 baseline
21-0418	-	-					0	
21-0421	-	-					0	
21-0422	-	-					0	
21-0423	-	-					0	
21-0424	-	-					0	

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Walls

Property ID	Unit	Description	Int Wall (LF)	Int Wall Thickness (in)	Total Int Walls (CY)	Int Wall Material	Total Walls (CY)	Source Int Wall Data
21-0427	210427	Shed	0	0	0	steel	2	TSDs 98-99 baseline
21-0428	210428	Shed	0	0	0	steel	6	TSDs 98-99 baseline
21-0443	210443	Office Trailer	0	0	0	steel	11	TSDs 98-99 baseline
21-0450	210450	Van	0	0	0	steel	8	TSDs 98-99 baseline
21-0451	210451	Storage Shed	0	0	0	wood	3	TSDs 98-99 baseline
21-0454	210454	Van	0	0	0	steel	8	TSDs 98-99 baseline
21-0455	210455	Van	0	0	0	steel	9	TSDs 98-99 baseline
21-0456	210456	Van	0	0	0	steel	8	TSDs 98-99 baseline
21-0458	210458	Metal Storage Shed	0	0	0	SS	4	TSDs 98-99 baseline
21-0461	210461	Office Trailer	0	0	0	steel	8	TSDs 98-99 baseline
21-0462	210462	Transportainer	0	0	0		7	
21-0466	-	-					0	
21-0470	-	Transportainer					7	
21-0471	-	-					0	
21-0472	-	-					0	
21-0485	-	-					0	
21-0487	-	-					0	
21-0490	-	-					0	
21-0550	210550	Storage Shed	0	0	0	steel	5	TSDs 98-99 baseline
21-0553	210553	Telephone Pedestal	0	0	0		1	
21-1001	-	-					0	
21-1002	-	-					0	
21-1004	-	-					0	
21-1005	-	-					0	
21-1006	-	-					0	
21-1007	-	-					0	
21-1008	-	-					0	
21-1009	-	-					0	
21-1010	-	-					0	
63-0039	630039	Van	0	0	0	steel	0	TSDs 98-99 baseline
DP West Elec, Teleph, & Fire		Utility Lines	0	0	0		0	
DPWest Industrial		Industrial Waste Line	0	0	0		0	
DPWest Sanitary		Sanitary Sewer lines	0	0	0		0	
DPWest Steam and Cond		Steam Lines	0	0	0		0	
DPWest Water Supply		Water Lines	0	0	0		0	
LAC		-					0	
RW Lines		Rad Waste lines at TA21	0	0	0		0	
21-0003	210003	Remainder of Structure	0	0	0		132	
21-0004	210004	Remainder of Structure	0	0	0		92	

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Roofing

Property ID	Unit	Description	Roof Surf Area (SF)	Roof Thickness (in)	Total Roof Waste Volume (CY)	Roof Material	Source Roof Data	Roof Assumptions
21-0001	210001	Office/Vault	0	8	0			assumed 8 inch thick X FP
21-0002	210002	wet lab N + S	14441	8	357	ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP, see floors
21-0002	210002	wet lab N + S mezz	0	0	0			roof included in main bldg
21-0003	210003	Asphalt adj to former structure	0	0	0			N/A
21-0004	210004	Asphalt adj to former structure	0	0	0			N/A
21-0005	210005	laboratory N + S	13507	8	334	ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP, see floors
21-0005	210005	lab N + S - arch mezz attic	0	0	0	ACM	TSDs 98-99 baseline	roof included in main bldg
21-0005	210005	laboratory N + S - basement	0	0	0			roof included in main bldg
21-0014	210014	Z - Instrument	3138	8	77	steel frame	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0018	210018	Corridor	1550	8	38	metal	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0021	210021	Demolished 2/7/05	4322	8	107	concrete, ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0030	210030	Paint Shop	1330	8	33	wood frame, ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0031	210031	Electronics/Cable Fab	5288	8	131	concrete deck panel	TSDs 98-99 baseline	Roof surface area from ESH-5 asb db asmd 8" thck
21-0042	210042	Pump House	65	8	2	wood, ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0046	210046	Warehouse	1982	8	49	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0057	210057	Fuel Tank	0	0	0			No roof - just a tank per hist doc photo
21-0069	210069	PRV	0	0	0			No roof - just a manhole per hist doc photo
21-0074	210074	acid pit	25	8	1			assumed 8 inch thick X FP
21-0075	210075	Steam Pit	0	0	0			No roof - just a manhole per hist doc photo
21-0076	210076	storm drain	25	8	1			assumed 8 inch thick X FP
21-0077	210077	Steam Pit	0	0	0			No roof - just a manhole per hist doc photo
21-0080	210080	PRV	80	8	2	metal	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0081	210081	PRV	0	0	0			No roof - just a manhole per hist doc photo
21-0082	210082	PRV	0	0	0			No roof - just a manhole per hist doc photo
21-0087	210087	PRV	0	0	0			No roof - just a manhole per hist doc photo
21-0088	210088	PRV - no above grnd structure	25	8	1	metal	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0089	210089	PRV	40	8	1	metal	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0110	210110	Acid Tank	0	0	0			No roof - just a manhole per hist doc photo
21-0111	210111	Acid Tank	0	0	0			No roof - just a manhole per hist doc photo
21-0112	210112	Acid Tank	0	0	0			No roof - just a manhole per hist doc photo
21-0113	210113	Acid Tank	0	0	0			No roof - just a manhole per hist doc photo
21-0116	210116	Hot Tool Room, includes baseme	4470	8	110	metal with wood framing	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0144	210144	Utility/passageway	180	8	4			assumed 8 inch thick X FP
21-0148	210148	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0149	210149	Corridor	3762	8	93	ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0150	210150	Basement	0	0	0			included in bldg total
21-0150	210150	mezz	0	0	0			included in bldg total
21-0150	210150	Molecular Chemistry	7041	8	174			assumed 8 inch thick X FP
21-0152	210152	Laboratory Bldg	13745	8	360			assumed 8 inch thick X FP+6% for slope
21-0155	210155	1st floor	14775	8	365			assumed 8 inch thick X FP
21-0155	210155	ext mezz	0	8	0			included in bldg total
21-0160	-	canopy	263	8	6			assume thickness and slope of ~10 deg - 6% added to FP.
21-0166	-	Support/Eq bldg	857	8	21			assumed 8 inch thick X FP
21-0167	-	Support/Eq bldg	874	8	22			assumed 8 inch thick X FP
21-0193	210193	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0209	210209	1st fl	23910	8	590			Roof surface area from ESH-5 asb db asmd 8" thck
21-0209	-	Basement	0	0	0			N/A
21-0210	210210	Pu Research	12576	8	311			assumed 8 inch thick X FP

TA-21
BUILDING QUANTITY ESTIMATE
MARCH 2005
Roofing

Property ID	Unit	Description	Roof Surf Area (SF)	Roof Thickness (in)	Total Roof Waste Volume (CY)	Roof Material	Source Roof Data	Roof Assumptions
21-0212	210212	Calcium Bldg	449	8	11	steel framed	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0213	-	support/Supply Warehouse	1723	8	43			assumed 8 inch thick X FP
21-0220	-	cooling tower - abandoned	288	8	7			assumed 8 inch thick X FP
21-0223	210223	acid sump with structure above	0	0	0			No roof - just a manhole per hist doc photo
21-0227	-	Support /Sewage treatment	453	8	11			assumed 8 inch thick X FP
21-0228	210228	Replacement Whouse	6161	8	152	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0229	-	Support /Sewage control bldg	215	8	5			assumed 8 inch thick X FP
21-0230	-	sludge drying bed	0	0	0			No roof - just a flat sludge drying bed per hist doc photo
21-0254	210254	Guard House	291	8	7	steel frame, ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0257	210257	Rad Liquid Waste Treatment Plan	4069	8	100			Roof surface area from ESH-5 asb db assmd 8" thck
21-0257	210257	underground piping	0	0	0			N/A
21-0258	210258	West Water Tower	1600	8	40			assumed 8 inch thick X FP
21-0259	210259	PRV	25	8	1	metal	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0260	210260	Steam Pit	0	0	0			No roof - just a manhole per hist doc photo
21-0261	210261	Steam Pit	0	0	0			No roof - just a manhole per hist doc photo
21-0286	210286	Warehouse / Rad	3682	8	91	steel frame, concrete ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0303	210303	Electrical Substation	0	0	0			No roof - just a manhole per hist doc photo
21-0307	210307	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0308	210308	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0309	210309	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0310	210310	Telephone Pedestal	5	8	0			assumed 8 inch thick X FP
21-0311	210311	Telephone Pedestal	5	8	0			assumed 8 inch thick X FP
21-0312	210312	Corridor	2072	8	51	SS with built-up roof ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0313	210313	Corridor	4264	8	105	steel and built-up assume ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0314	210314	Corridor	4843	8	120	ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0315	210315	Corridor	4773	8	118	steel and built-up assume ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0316	210316	Telephone Pedestal	5	8	0			assumed 8 inch thick X FP
21-0320	210320	Telephone Pedestal	5	8	0			assumed 8 inch thick X FP
21-0323	-	-	7	8	0			assumed 8 inch thick X FP
21-0323	-	-	10	8	0			assumed 8 inch thick X FP
21-0328	210328	Materials Receiving	320	8	8	ACM	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0334	210334	Utility Shed	58	8	1	steel frame & siding	TSDs 98-99 baseline	assume thickness and slope of ~10 deg - 6% added to FP.
21-0335	210335	Containment Vessel	800	8	20			assumed 8 inch thick X FP
21-0338	210338	Electrical Substation	72	8	2			assumed 8 inch thick X FP
21-0342	210342	East Water Tower	1600	8	40			assumed 8 inch thick X FP
21-0345	-	-	96	8	2			assumed 8 inch thick X FP
21-0346	-	2-3000 gal SS hold tanks	721	8	18			assumed 8 inch thick X FP
21-0353	210353	Change Room Trailer	295	8	7	steel, wood frame	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0355	210355	Office Trailer / Rad	500	8	12	steel with wood frame	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0357	210357	Steam Plant	5682	8	140	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0359	210359	Office Trailer	521	8	13	wood frame	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0361	210361	Trans Office Trlr	1670	8	41			Roof surface area from ESH-5 asb db assmd 8" thck
21-0365	210365	Trans Office Trlr	1735	8	43			assumed 8 inch thick X (FP+8%) to account for slope
21-0370	-	mech eq bldg	545	8	13			assumed 8 inch thick X FP
21-0387	-	-	65	8	2			assumed 8 inch thick X FP
21-0388	-	-	28	8	1			assumed 8 inch thick X FP
21-0402	210402	Storage Bldg - no floor	1268	8	31			assumed 8 inch thick X FP
21-0418	-	-	264	8	7			assumed 8 inch thick X FP

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 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Roofing

Property ID	Unit	Description	Roof Surf Area (SF)	Roof Thickness (in)	Total Roof Waste Volume (CY)	Roof Material	Source Roof Data	Roof Assumptions
21-0421	-	-	160	8	4			assumed 8 inch thick X FP
21-0422	-	-	160	8	4			assumed 8 inch thick X FP
21-0423	-	-	160	8	4			assumed 8 inch thick X FP
21-0424	-	-	160	8	4			assumed 8 inch thick X FP
21-0427	210427	Shed	36	8	1		TSDs 98-99 baseline	assumed 8 inch thick X (FP+8%) to account for slope
21-0428	210428	Shed	231	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0443	210443	Office Trailer	520	8	13	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0450	210450	Van	248	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0451	210451	Storage Shed	63	8	2	wood	TSDs 98-99 baseline	assumed 8 inch thick X (FP+20%) to account for slope
21-0454	210454	Van	248	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0455	210455	Van	248	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0456	210456	Van	248	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0458	210458	Metal Storage Shed	80	8	2	SS	TSDs 98-99 baseline	assumed 8 inch thick X (FP+3%) to account for slope
21-0461	210461	Office Trailer	320	8	8	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
21-0462	210462	Transportainer	320	8	8			assumed 8 inch thick X FP
21-0466	-	-	27	8	1			assumed 8 inch thick X FP
21-0470	-	Transportainer	160	8	4			assumed 8 inch thick X FP
21-0471	-	-	160	8	4			assumed 8 inch thick X FP
21-0472	-	-	160	8	4			assumed 8 inch thick X FP
21-0485	-	-	160	8	4			assumed 8 inch thick X FP
21-0487	-	-	160	8	4			assumed 8 inch thick X FP
21-0490	-	-	368	8	9			assumed 8 inch thick X FP
21-0550	210550	Storage Shed	191	8	5	steel	TSDs 98-99 baseline	assumed 8 inch thick X (FP+5.5%) to account for slope
21-0553	210553	Telephone Pedestal	5	8	0			assumed 8 inch thick X FP
21-1001	-	-	15280	8	377			assumed 8 inch thick X FP
21-1002	-	-	14330	8	354			assumed 8 inch thick X FP
21-1004	-	-	192	8	5			assumed 8 inch thick X FP
21-1005	-	-	192	8	5			assumed 8 inch thick X FP
21-1006	-	-	192	8	5			assumed 8 inch thick X FP
21-1007	-	-	192	8	5			assumed 8 inch thick X FP
21-1008	-	-	192	8	5			assumed 8 inch thick X FP
21-1009	-	-	192	8	5			assumed 8 inch thick X FP
21-1010	-	-	292	8	7			assumed 8 inch thick X FP
63-0039	630039	Van	248	8	6	steel	TSDs 98-99 baseline	assumed 8 inch thick X FP
DP West Elec, Teleph, & Fire		Utility Lines	0	0	0			N/A
DPWest Industrial		Industrial Waste Line	0	0	0			N/A
DPWest Sanitary		Sanitary Sewer lines	0	0	0			N/A
DPWest Steam and Cond		Steam Lines	0	0	0			N/A
DPWest Water Supply		Water Lines	0	0	0			N/A
LAC		-	82	8	2		EV FP	assumed 8 inch thick X FP
RW Lines		Rad Waste lines at TA21			0			N/A
21-0003	210003	Remainder of Structure	2682	8	66			assumed 8 inch thick X FP
21-0004	210004	Remainder of Structure	2480	8	61			assumed 8 inch thick X FP

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BUILDING QUANTITY ESTIMATE
MARCH 2005
Adj_Soils

Property ID	Unit	Description	Adj Contam Soils (CY)	Assumed Extent	Source Adj Soils Data
21-0001	210001	Office/Vault		gone	
21-0002	210002	wet lab N + S	198	5'out and 2' down, exp FP scaled from GIS	17% of the GIS total based upon actual data at 3 and 4 S
21-0002	210002	wet lab N + S mezz	0	not ground level	
21-0003	210003	Asphalt adj to former structure	747	low val = 498	used high est from 2004 RRES
21-0004	210004	Asphalt adj to former structure	747	low val = 498	used high est from 2004 RRES
21-0005	210005	laboratory N + S	231	5'out and 2' down minus basement footprint = 1361	17% of the total based upon actual data at 3 and 4 S
21-0005	210005	lab N + S - arch mezz attic	0	not ground level	
21-0005	210005	laboratory N + S - basement	169	5'out and 2' down, assumed 12' basement height	17% of the GIS total based upon actual data at 3 and 4 S
21-0014	210014	Z - Instrument	340	5'out and 2' down	scaled from as built drawing
21-0018	210018	Corridor	0		
21-0021	210021	Demolished 2/7/05	434	gone	
21-0030	210030	Paint Shop	168	5' out and 2' down	scaled from as built drawing
21-0031	210031	Electronics/Cable Fab	539	5' out and 2' down	scaled from as built drawing
21-0042	210042	Pump House	24	5' out and 2' down	scaled from GIS
21-0046	210046	Warehouse	234	5' out and 2' down	scaled from as built drawing
21-0057	210057	Fuel Tank	105	5' out and 2' down	scaled from GIS
21-0069	210069	PRV	0		
21-0074	210074	acid pit	0		
21-0075	210075	Steam Pit	0		
21-0076	210076	storm drain	0		
21-0077	210077	Steam Pit	0		
21-0080	210080	PRV	27		
21-0081	210081	PRV	0		
21-0082	210082	PRV	0		
21-0087	210087	PRV	0		
21-0088	210088	PRV - no above grnd structure	0		
21-0089	210089	PRV	19		From EV
21-0110	210110	Acid Tank	36		From EV
21-0111	210111	Acid Tank	31		From EV
21-0112	210112	Acid Tank	30		From EV
21-0113	210113	Acid Tank	31		From EV
21-0116	210116	Hot Tool Room, includes basement	1315	5' out and 10' down to include basement	scaled from GIS dwg
21-0144	210144	Utility/passageway	0		
21-0148	210148	Electrical Substation	0		
21-0149	210149	Corridor	35.53	209 total	From EV, 17% of the total based upon actual data at 3 and 4 S
21-0150	210150	Basement	0		included in bldg numbers
21-0150	210150	mezz	0		included in bldg numbers
21-0150	210150	Molecular Chemistry	116.62	5' out and 2' down, scaled from GIS dwg = 686	17% of the GIS total based upon actual data at 3 and 4 S
21-0152	210152	Laboratory Bldg	217.94	5' out and 2' down, scaled from GIS dwg = 1282	17% of the GIS total based upon actual data at 3 and 4 S
21-0155	210155	1st floor	228.48	5' out and 2' down = 1344	17% of the GIS total based upon actual data at 3 and 4 S
21-0155	210155	ext mezz	0		
21-0160	-	canopy	49		From EV
21-0166	-	Support/Eq bldg	113		From EV
21-0167	-	Support/Eq bldg	115		From EV
21-0193	210193	Electrical Substation	0		
21-0209	210209	1st fl	359.04	5' out and 2' down, scaled from GIS dwg = 2112	17% of the GIS total based upon actual data at 3 and 4 S
21-0209	-	Basement	718.08	8' deep and 5' out = 4224, assume 17% per 3/4 S	Entire basement is considered to have adjacent soils
21-0210	210210	Pu Research	0	5'out and 2' down = 1245, from GIS, scaled	Assumed no adj soil is contam as bldg is clean

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Adj_Soils

Property ID	Unit	Description	Adj Contam Soils (CY)	Assumed Extent	Source Adj Soils Data
21-0212	210212	Calcium Bldg	434	5'out and 2' down	scaled from as-built dwg
21-0213	-	support/Supply Warehouse	205		From EV
21-0220	-	cooling tower - abandoned	0	From EV=52	Assumed no adj soil is contam as bldg is clean
21-0223	210223	acid sump with structure above	21		scaled from GIS dwg
21-0227	-	Support /Sewage treatment	77		From EV
21-0228	210228	Replacement Whouse	629	5'out and 2' down	footprint scaled from As-Built Drawing AB912
21-0229	-	Support /Sewage control bldg	44		From EV
21-0230	-	sludge drying bed	158		From EV
21-0254	210254	Guard House	56	5'out and 2' down	scaled from as-built dwg
21-0257	210257	Rad Liquid Waste Treatment Plant	0		Soils under 257 are included in MDA T
21-0257	210257	underground piping			
21-0258	210258	West Water Tower	0	5'out and 2' down, scaled from as-built dwg = 100	Assumed no adj soil is contam as bldg is clean
21-0259	210259	PRV	0		
21-0260	210260	Steam Pit	0		
21-0261	210261	Steam Pit	0		
21-0286	210286	Warehouse / Rad	0	5'out and 2' down, scaled from GIS = 378	Assume no contamination of soil below slab.
21-0303	210303	Electrical Substation	0		
21-0307	210307	Electrical Substation	0		
21-0308	210308	Electrical Substation	0		
21-0309	210309	Electrical Substation	0		
21-0310	210310	Telephone Pedestal	0		
21-0311	210311	Telephone Pedestal	0		
21-0312	210312	Corridor	78	5'out and 2' down, scaled from GIS=133	Assume 2% contam below corridor portion approx 42% of bldg
21-0313	210313	Corridor	158	5'out and 2' down, scaled from GIS=212	Assume 2% contam below corridor portion approx 26% of bldg
21-0314	210314	Corridor	208	5'out and 2' down, scaled from GIS=279	Assume 2% contam below corridor portion approx 26% of bldg
21-0315	210315	Corridor	178	5'out and 2' down, scaled from GIS=239	Assume 2% contam below corridor portion approx 26% of bldg
21-0316	210316	Telephone Pedestal	0		
21-0320	210320	Telephone Pedestal	0		
21-0323	-	-	10		From EV
21-0323	-	-	11		From EV
21-0328	210328	Materials Receiving	56		From EV
21-0334	210334	Utility Shed	22		From EV
21-0335	210335	Containment Vessel	30		From EV
21-0338	210338	Electrical Substation	70	5'out and 2' down	scaled from as-built dwg
21-0342	210342	East Water Tower	0	From EV = 103	Assumed no adj soil is contam as bldg is clean
21-0345	-	-	28		From EV
21-0346	-	2-3000 gal SS hold tanks	101		From EV
21-0353	210353	Change Room Trailer	57	5'out and 2' down	scaled from as-built dwg
21-0355	210355	Office Trailer / Rad	87		From EV
21-0357	210357	Steam Plant	544	5'out and 2' down	scaled from GIS dwg
21-0359	210359	Office Trailer	84	5'out and 2' down	scaled from as-built dwg
21-0361	210361	Trans Office Trlr	195		From EV
21-0365	210365	Trans Office Trlr	200		From EV
21-0370	-	mech eq bldg	81		From EV
21-0387	-	-	23		From EV
21-0388	-	-	15		From EV
21-0402	210402	Storage Bldg - no floor	156		From EV
21-0418	-	-	56		From EV

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Piping

Property ID	Unit	Description	Piping (LF)	Pipe Diameter (in)	Total Pipe Vol (CY)	Source Pipe Data
21-0001	210001	Office/Vault			0	Demolished 7/17/04
21-0002	210002	wet lab N + S	4685	4	252	assumed based upon Bldg 5 estimate. See Bldg 5 assumptions
21-0002	210002	wet lab N + S mezz			0	included in N + S
21-0003	210003	Asphalt adj to former structure				N/A
21-0004	210004	Asphalt adj to former structure				N/A
21-0005	210005	laboratory N + S	4685	4	252	Scaled from drawing set3151073, assumed four 4" pipes & four 1.5" in each trench
21-0005	210005	lab N + S - arch mezz attic			0	included in N + S
21-0005	210005	laboratory N + S - basement			0	included in N + S
21-0014	210014	Z - Instrument			0	
21-0018	210018	Corridor			0	
21-0021	210021	Demolished 2/7/05			0	Demolished 2/7/05
21-0030	210030	Paint Shop			0	
21-0031	210031	Electronics/Cable Fab			0	
21-0042	210042	Pump House			0	
21-0046	210046	Warehouse			0	
21-0057	210057	Fuel Tank			0	
21-0069	210069	PRV			0	
21-0074	210074	acid pit			0	
21-0075	210075	Steam Pit			0	
21-0076	210076	storm drain			0	
21-0077	210077	Steam Pit			0	
21-0080	210080	PRV			0	
21-0081	210081	PRV			0	
21-0082	210082	PRV			0	
21-0087	210087	PRV			0	
21-0088	210088	PRV - no above grnd structure			0	
21-0089	210089	PRV			0	
21-0110	210110	Acid Tank			0	
21-0111	210111	Acid Tank			0	
21-0112	210112	Acid Tank			0	
21-0113	210113	Acid Tank			0	
21-0116	210116	Hot Tool Room, includes baseme	771	varies	6	Estimate based upon 4 lengths each of small and medium pipe and one large each spanning bldg.
21-0144	210144	Utility/passageway			0	
21-0148	210148	Electrical Substation			0	
21-0149	210149	Corridor	1495	varies	32	
21-0150	210150	Basement			0	
21-0150	210150	mezz			0	
21-0150	210150	Molecular Chemistry	3087	4	40	as-built drawing, 4"dia, estimate 60' contam drain, includes Basement and Mezz
21-0152	210152	Laboratory Bldg	9050	4	112	as-built drawing, 4"dia average C49846-014-d-0
21-0155	210155	1st floor	11100	4	215	visual obs + as-built drawing, diameter of 4" used
21-0155	210155	ext mezz	5200	4	101	visual obs + as-built drawing, diameter of 4" used
21-0160	-	canopy				
21-0166	-	Support/Eq bldg				
21-0167	-	Support/Eq bldg				
21-0193	210193	Electrical Substation			0	
21-0209	210209	1st fl	35405.8	1.5	16	Data collected from mechanical piping as-builts LA-GH 612 and 613
21-0209	-	Basement				included in 1st fl numbers
21-0210	210210	Pu Research	2568	varies	48	Estimated as 4 pipes of small and medium size - and two of large size using width/length/height of building., doubled for second floor
21-0212	210212	Calcium Bldg			0	

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Piping

Property ID	Unit	Description	Piping (LF)	Pipe Diameter (in)	Total Pipe Vol (CY)	Source Pipe Data
21-0213	-	support/Supply Warehouse				
21-0220	-	cooling tower - abandoned				
21-0223	210223	acid sump with structure above				
21-0227	-	Support /Sewage treatment				
21-0228	210228	Replacement Whouse			0	
21-0229	-	Support /Sewage control bldg				
21-0230	-	sludge drying bed				
21-0254	210254	Guard House			0	
21-0257	210257	Rad Liquid Waste Treatment Plar	1463	4	19	scaled from best avail tiff file
21-0257	210257	underground piping	1772	4	23	Scaled from 21-257 underground piping site plan, assume 4" diameter
21-0258	210258	West Water Tower			0	
21-0259	210259	PRV			0	
21-0260	210260	Steam Pit			0	
21-0261	210261	Steam Pit			0	
21-0286	210286	Warehouse / Rad	0		0	no piping
21-0303	210303	Electrical Substation			0	
21-0307	210307	Electrical Substation			0	
21-0308	210308	Electrical Substation			0	
21-0309	210309	Electrical Substation			0	
21-0310	210310	Telephone Pedestal			0	
21-0311	210311	Telephone Pedestal			0	
21-0312	210312	Corridor	2208		72	See estimate Bldg 312-313-314-315
21-0313	210313	Corridor	2031		66	See estimate Bldg 312-313-314-315
21-0314	210314	Corridor	2128		70	See estimate Bldg 312-313-314-315
21-0315	210315	Corridor	2162		71	See estimate Bldg 312-313-314-315
21-0316	210316	Telephone Pedestal			0	
21-0320	210320	Telephone Pedestal			0	
21-0323	-	-				
21-0323	-	-				
21-0328	210328	Materials Receiving			0	
21-0334	210334	Utility Shed			0	
21-0335	210335	Containment Vessel			0	
21-0338	210338	Electrical Substation			0	
21-0342	210342	East Water Tower			0	
21-0345	-	-				
21-0346	-	2-3000 gal SS hold tanks				
21-0353	210353	Change Room Trailer			0	
21-0355	210355	Office Trailer / Rad			0	
21-0357	210357	Steam Plant			0	
21-0359	210359	Office Trailer			0	
21-0361	210361	Trans Office Trlr			0	
21-0365	210365	Trans Office Trlr			0	
21-0370	-	mech eq bldg				
21-0387	-	-				
21-0388	-	-				
21-0402	210402	Storage Bldg - no floor			0	
21-0418	-	-				
21-0421	-	-				
21-0422	-	-				
21-0423	-	-				

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Piping

Property ID	Unit	Description	Piping (LF)	Pipe Diameter (in)	Total Pipe Vol (CY)	Source Pipe Data
21-0424	-	-				
21-0427	210427	Shed			0	
21-0428	210428	Shed			0	
21-0443	210443	Office Trailer			0	
21-0450	210450	Van			0	
21-0451	210451	Storage Shed			0	
21-0454	210454	Van			0	
21-0455	210455	Van			0	
21-0456	210456	Van			0	
21-0458	210458	Metal Storage Shed			0	
21-0461	210461	Office Trailer			0	
21-0462	210462	Transportainer			0	
21-0466	-	-				
21-0470	-	Transportainer				
21-0471	-	-				
21-0472	-	-				
21-0485	-	-				
21-0487	-	-				
21-0490	-	-				
21-0550	210550	Storage Shed			0	
21-0553	210553	Telephone Pedestal			0	
21-1001	-	-				
21-1002	-	-				
21-1004	-	-				
21-1005	-	-				
21-1006	-	-				
21-1007	-	-				
21-1008	-	-				
21-1009	-	-				
21-1010	-	-				
63-0039	630039	Van			0	
DP West Elec, Teleph, & Fire		Utility Lines	8159	2	7	Only includes electrical
DPWest Industrial		Industrial Waste Line	817	6	6	
DPWest Sanitary		Sanitary Sewer lines	9221	6	67	
DPWest Steam and Cond		Steam Lines	8284	6	60	
DPWest Water Supply		Water Lines	22864	6	166	
LAC		-				
RW Lines		Rad Waste lines at TA21	4826	1.5	8.77	Scaled from 1998 As Builts
21-0003	210003	Remainder of Structure	900	varies	6.00	estimated in proportion to bldg 2 and 5 estimates, biased by footprint SF
21-0004	210004	Remainder of Structure	832	varies	6.00	estimated in proportion to bldg 2 and 5 estimates, biased by footprint SF

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Ducts

Property ID	Unit	Description	Duct (LF)	Duct vol/SF	Duct Total Vol (CY)	Source Duct Data
21-0001	210001	Office/Vault	0	0	0	
21-0002	210002	wet lab N + S	3673		566	top of inside walls with penetrations, scaled from drawing see 21-2 Ducts.xls, duct size and area varies
21-0002	210002	wet lab N + S mezz	0	0	0	included in N&S
21-0003	210003	Asphalt adj to former structure				N/A
21-0004	210004	Asphalt adj to former structure				N/A
21-0005	210005	laboratory N + S	3673		566	assumed same as 21-2, see 21-2 assumptions
21-0005	210005	lab N + S - arch mezz attic	0	0	0	included in N&S
21-0005	210005	laboratory N + S - basement	0	0	0	included in N&S
21-0014	210014	Z - Instrument	0	0	0	
21-0018	210018	Corridor	0	0	0	communication and electrical conduit on roof, some
21-0021	210021	Demolished 2/7/05	0	0	0	
21-0030	210030	Paint Shop	0	0	0	
21-0031	210031	Electronics/Cable Fab	0	0	0	
21-0042	210042	Pump House	0	0	0	
21-0046	210046	Warehouse	0	0	0	
21-0057	210057	Fuel Tank	0	0	0	
21-0069	210069	PRV	0	0	0	
21-0074	210074	acid pit	0	0	0	
21-0075	210075	Steam Pit	0	0	0	
21-0076	210076	storm drain	0	0	0	
21-0077	210077	Steam Pit	0	0	0	
21-0080	210080	PRV	0	0	0	
21-0081	210081	PRV	0	0	0	
21-0082	210082	PRV	0	0	0	
21-0087	210087	PRV	0	0	0	
21-0088	210088	PRV - no above grnd structure	0	0	0	
21-0089	210089	PRV	0	0	0	
21-0110	210110	Acid Tank	0	0	0	
21-0111	210111	Acid Tank	0	0	0	
21-0112	210112	Acid Tank	0	0	0	
21-0113	210113	Acid Tank	0	0	0	
21-0116	210116	Hot Tool Room, includes baseme	1372	varies	51	Estimate based upon 2 sections each of small supply, large supply, and square return each spanning bldg.
21-0144	210144	Utility/passageway	0	0	0	
21-0148	210148	Electrical Substation	0	0	0	
21-0149	210149	Corridor	440	varies	22	HEPA - 2 Condenser, bag house, 36" diam 50' stack. Stack included in numbers
21-0150	210150	Basement				
21-0150	210150	mezz				
21-0150	210150	Molecular Chemistry	1003	varies	2478	Scaled from glove box drawing, includes 57 hoods/boxes/connections + 36" diam 50' stack
21-0152	210152	Laboratory Bldg	2677	6	595	
21-0155	210155	1st floor	5619	1	208	Scaled off drawings and est. based on photos. Size varies so total LF is used but volume uses actual size
21-0155	210155	ext mezz	0	0	0	included in 1st floor quantities
21-0160	-	canopy				
21-0166	-	Support/Eq bldg				
21-0167	-	Support/Eq bldg				
21-0193	210193	Electrical Substation	0	0	0	
21-0209	210209	1st fl	2796	varies	325	see estimate in pipes and ducts.xls Scaled from drawing.
21-0209	-	Basement				
21-0210	210210	Pu Research	1260	varies	63	see estimate in pipes and ducts.xls Scaled from drawing. Added 50% for the second floor
21-0212	210212	Calcium Bldg	0	0	0	

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Ducts

Property ID	Unit	Description	Duct (LF)	Duct vol/SF	Duct Total Vol (CY)	Source Duct Data
21-0213	-	support/Supply Warehouse				
21-0220	-	cooling tower - abandoned				
21-0223	210223	acid sump with structure above				
21-0227	-	Support /Sewage treatment				
21-0228	210228	Replacement Whouse	0	0	0	
21-0229	-	Support /Sewage control bldg				
21-0230	-	sludge drying bed				
21-0254	210254	Guard House	0	0	0	
21-0257	210257	Rad Liquid Waste Treatment Plar	870	varies	84	There are 30 vessels in 21-257. Assume ventilation for 30 vessels spans floor to ceiling. For supply and return, assume 2 of each type spanning building length, 80" along longest span
21-0257	210257	underground piping				
21-0258	210258	West Water Tower	0	0	0	
21-0259	210259	PRV	0	0	0	
21-0260	210260	Steam Pit	0	0	0	
21-0261	210261	Steam Pit	0	0	0	
21-0286	210286	Warehouse / Rad	63	2	5	Visual obs - exterior ductwork ~ 3 LF 60 LF interior
21-0303	210303	Electrical Substation	0	0	0	
21-0307	210307	Electrical Substation	0	0	0	
21-0308	210308	Electrical Substation	0	0	0	
21-0309	210309	Electrical Substation	0	0	0	
21-0310	210310	Telephone Pedestal	0	0	0	
21-0311	210311	Telephone Pedestal	0	0	0	
21-0312	210312	Corridor	312	varies	150	on North wing roof, bag house and HEPA, 20' 36" diameter
21-0313	210313	Corridor	301	varies	138	HVAC dist in attic with ACM ins.
21-0314	210314	Corridor	309	varies	144	HVAC dist in attic with ACM ins., small HVAC room
21-0315	210315	Corridor	314	varies	147	see calcs for piping and ducts
21-0316	210316	Telephone Pedestal	0	0	0	
21-0320	210320	Telephone Pedestal	0	0	0	
21-0323	-	-				
21-0323	-	-				
21-0328	210328	Materials Receiving	0	0	0	
21-0334	210334	Utility Shed	0	0	0	
21-0335	210335	Containment Vessel	0	0	0	
21-0338	210338	Electrical Substation	0	0	0	
21-0342	210342	East Water Tower	0	0	0	
21-0345	-	-				
21-0346	-	2-3000 gal SS hold tanks				
21-0353	210353	Change Room Trailer	0	0	0	
21-0355	210355	Office Trailer / Rad	0	0	0	
21-0357	210357	Steam Plant	0	0	0	
21-0359	210359	Office Trailer	0	0	0	
21-0361	210361	Trans Office Trlr	0	0	0	
21-0365	210365	Trans Office Trlr	0	0	0	
21-0370	-	mech eq bldg				
21-0387	-	-				
21-0388	-	-				
21-0402	210402	Storage Bldg - no floor	0	0	0	
21-0418	-	-				
21-0421	-	-				

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Ducts

Property ID	Unit	Description	Duct (LF)	Duct vol/SF	Duct Total Vol (CY)	Source Duct Data
21-0422	-	-				
21-0423	-	-				
21-0424	-	-				
21-0427	210427	Shed	0	0	0	
21-0428	210428	Shed	0	0	0	
21-0443	210443	Office Trailer	0	0	0	
21-0450	210450	Van	0	0	0	
21-0451	210451	Storage Shed	0	0	0	
21-0454	210454	Van	0	0	0	
21-0455	210455	Van	0	0	0	
21-0456	210456	Van	0	0	0	
21-0458	210458	Metal Storage Shed	0	0	0	
21-0461	210461	Office Trailer	0	0	0	
21-0462	210462	Transportainer	0	0	0	
21-0466	-	-				
21-0470	-	Transportainer				
21-0471	-	-				
21-0472	-	-				
21-0485	-	-				
21-0487	-	-				
21-0490	-	-				
21-0550	210550	Storage Shed	0	0	0	
21-0553	210553	Telephone Pedestal	0	0	0	
21-1001	-	-				
21-1002	-	-				
21-1004	-	-				
21-1005	-	-				
21-1006	-	-				
21-1007	-	-				
21-1008	-	-				
21-1009	-	-				
21-1010	-	-				
63-0039	630039	Van	0	0	0	
DP West Elec, Teleph, & Fire		Utility Lines	0	0	0	
DPWest Industrial		Industrial Waste Line	0	0	0	
DPWest Sanitary		Sanitary Sewer lines	0	0	0	
DPWest Steam and Cond		Steam Lines	0	0	0	
DPWest Water Supply		Water Lines	0	0	0	
LAC		-				
RW Lines		Rad Waste lines at TA21	0	0	0	
21-0003	210003	Remainder of Structure	628	varies	25	
21-0004	210004	Remainder of Structure	631	varies	23	

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Equip_Items

Property ID	Unit	Description	# of Eq Items	Volume/Item (CY)	Total vol (CY)	Source Equip	Comments
21-0001	210001	Office/Vault	0	2	0		N/A
21-0002	210002	wet lab N + S	40	2	80		Assume 4 electrical rooms - each with 10 units.
21-0002	210002	wet lab N + S mezz	0	0	0		N/A
21-0003	210003	Asphalt adj to former structure	0	2	0		N/A
21-0004	210004	Asphalt adj to former structure	0	2	0		N/A
21-0005	210005	laboratory N + S	0	2	0		Equipment observed - compactors/mixers expected to be used in D&D and not counted - 8 CY
21-0005	210005	lab N + S - arch mezz attic	0	0	0		
21-0005	210005	laboratory N + S - basement	40	2	80		Assume 4 electrical rooms - each with 10 units.
21-0014	210014	Z - Instrument	2	0.25	0.5		From MOADS Eq list, only listed eq is 2 fire extinguishers, assume .25 CY
21-0018	210018	Corridor		2	0		
21-0021	210021	Demolished 2/7/05	0	0	0		N/A
21-0030	210030	Paint Shop		2	0		
21-0031	210031	Electronics/Cable Fab	10	2	20		From MOADS Eq list, various items listed - average size assumed 2 CY
21-0042	210042	Pump House		2	0		
21-0046	210046	Warehouse	0	2	0		N/A
21-0057	210057	Fuel Tank	1	386.5	386.5	online tanks DB	50000 gal AGT - diesel, UG pipes, diesel tank (no size) From MOADS Eq list, various items listed and 3 oil tanks, assume 10 CY additional for misc eq. assume 12' diameter by 60' length.
21-0069	210069	PRV	0	2	0		N/A
21-0074	210074	acid pit	0	2	0		N/A
21-0075	210075	Steam Pit	0	2	0		N/A
21-0076	210076	storm drain	0	2	0		N/A
21-0077	210077	Steam Pit	0	2	0		N/A
21-0080	210080	PRV	0	2	0		N/A
21-0081	210081	PRV	0	2	0		N/A
21-0082	210082	PRV	0	2	0		N/A
21-0087	210087	PRV	0	2	0		N/A
21-0088	210088	PRV - no above grnd structure	0	2	0		N/A
21-0089	210089	PRV	0	2	0		N/A
21-0110	210110	Acid Tank	1	75	75	Max from 2004 RRES, 13200 gal RLW, online tanks DB	Waste volume is tank steel & bldg rubble. No soil or tuff. High void volume waste, need inv/vol study - include with 257, 111, 112, 113. min is 50, vol uses bldg footprint and 1/3 bldg height. Low bound assumed tanks are cut up.
21-0111	210111	Acid Tank	1	75	75	Max from 2004 RRES, 13200 gal RLW, online tanks DB	Waste volume is tank steel & bldg rubble. No soil or tuff. High void volume waste, need inv/vol study - include with 257, 111, 112, 113. min is 50, vol uses bldg footprint and 1/3 bldg height. Low bound assumed tanks are cut up.
21-0112	210112	Acid Tank	1	75	75	Max from 2004 RRES, 12800 gal RAD, online tanks DB	Waste volume is tank steel & bldg rubble. No soil or tuff. High void volume waste, need inv/vol study - include with 257, 111, 112, 113. min is 50, vol uses bldg footprint and 1/3 bldg height. Low bound assumed tanks are cut up.
21-0113	210113	Acid Tank	1	75	75	Max from 2004 RRES, 12800 gal RAD, online tanks DB	Waste volume is tank steel & bldg rubble. No soil or tuff. High void volume waste, need inv/vol study - include with 257, 111, 112, 113. min is 50, vol uses bldg footprint and 1/3 bldg height. Low bound assumed tanks are cut up.
21-0116	210116	Hot Tool Room, includes basement		2	0		
21-0144	210144	Utility/passageway	0	2	0		
21-0148	210148	Electrical Substation	11	2	22		From MOADS Eq list, 11 various items listed - average size assumed 2 CY
21-0149	210149	Corridor	5	2	10		Visual obs. S.Shaefer - 5 hoods
21-0150	210150	Basement	0	2	0		
21-0150	210150	mezz	4	2	8		HEPA - 2 Condenser, bag house - assume 4 "items"
21-0150	210150	Molecular Chemistry	7	2	14		Visual obs. S.Shaefer - 7 hoods
21-0152	210152	Laboratory Bldg	1	1649	1649	volume/item = all	From MOADS Eq list, 36 various items listed - average size assumed 2 CY, also 5 tanks assume 10 CY each, assume an additional 1/2 of building footprint is 6' high equipment 5 are fume hoods, by observation.

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Equip_Items

Property ID	Unit	Description	# of Eq Items	Volume/Item (CY)	Total vol (CY)	Source Equip	Comments
21-0155	210155	1st floor	1	1127	1127	online tanks DB, MOADS db, volume/item = all	2000 gal AGT - diesel, 3008 gal AGT diesel filled with concrete, also From MOADS Eq list, 3 various items listed - average size assumed 2 CY, assume additional 1/3 of building area is equipment 6' high - 1 glove box and one hood observed. assume 2000 gal = 9.3 CY and 3008 gal = 15 CY
21-0155	210155	ext mezz	1	230	230	volume/item = all	Assume 1/3 of building area is equipment 6' high
21-0160	-	canopy	0	2	0		N/A
21-0166	-	Support/Eq bldg	22	2	44		From MOADS Eq list, 22 various items listed - average size assumed 2 CY
21-0167	-	Support/Eq bldg	25	2	50		From MOADS Eq list, 25 various items listed - average size assumed 2 CY
21-0193	210193	Electrical Substation	1	2	2		From MOADS Eq list, 1 oil transformer listed - assumed 2 CY
21-0209	210209	1st fl	1	740	740	volume/item = all	60 equipment items est from drawing, From MOADS Eq list, 232 various items listed - average size assumed 2 CY, 11 various tanks, assumed 10 CY each, 23 hoods/boxes observed.
21-0209	-	Basement	45	2	90	volume/item = all	assume 10 equipment items, electrical, assume additional 10 CY equipment Additional 60 CY of transformers
21-0210	210210	Pu Research	1	266	266	volume/item = all	From MOADS Eq list, 102 various items listed - average size assumed 2 CY, 6 various tanks, assumed 10 CY each. Assume 1 hood in building.
21-0212	210212	Calcium Bldg		2	0		
21-0213	-	support/Supply Warehouse	0	2	0		N/A
21-0220	-	cooling tower - abandoned	0	2	0		N/A
21-0223	210223	acid sump with structure above	1	37	37	online tanks DB, volume/ item = all	1@5000 gal RLLW and 2@ 1000 gal RLLW , UG piping, 1000 gal tanks may be bigger. est 5000 gal = 8'x13.33', 1000 gal = 5.33' x 6', MOADS db lists 2 pumps - assume 1 CY each
21-0227	-	Support /Sewage treatment	2	1	2		MOADS db lists 2 pumps - assume 1 CY each
21-0228	210228	Replacement Whouse		2	0		
21-0229	-	Support /Sewage control bldg	7	2	14		From MOADS Eq list, 7 various items listed - average size assumed 2 CY
21-0230	-	sludge drying bed	0	2	0		N/A
21-0254	210254	Guard House	0	2	0		N/A
21-0257	210257	Rad Liquid Waste Treatment Plant	1	461.9	461.9	online tanks DB, volume/ item = all items	RLLW Tanks - 2 @412 gal, 1@1740 gal, outside = 2@28200 gal RLLW damaged piping, 1@25gal ferric sulfate, 1@ unknown caustic, 1@5gal water, 1@25 gal HL RAD, 1@30 gal RAD, 1@unknown w/unk contents1@400 gal perlite, 1@25 gal lime, 1@3960 LLRAD, 1@123 gal chemical, 1@100 NaOH, 1@4200 gal HLRAD, 1@18000 gal effluent, 1@225 gal waste, 1@1740 gal HL RAD, 1@125 gal HLRAD, 2 pressure vessels no more info, 1@1300 gal LLRAD, 1@225 gal waste subfloor, 1@5900 LLRAD, 1@2 and 1@3 gal water, 2@1294 gal HLRAD, 1@325 NaOH, 1@100 polymer.. assume 412= 400 gal ~ 2 CY, assume 1740 gal = 10 CY, assume 28200 gal = 150 CY, 25 and 30 gal = .25 CY, assume 3960 = 4200 gal = 19.5 CY, assume 123= 100=125 gal = .75 gal, assume 18000 gal = 100 CY, assume 225 gal = 1.2 CY, assume 1300 gal = 1294= 7.5 CY, assume 5900 gal = 30 CY, , assume 325 gal = 1.5 CY, assume 4 unknowns + 2 very sm containers total 10 CY. From MOADS Eq list, 40 various items listed - average size assumed 2 CY. Two hoods assumed.
21-0257	210257	underground piping	0	2	0		N/A
21-0258	210258	West Water Tower	1	26	26	volume/item = all tanks	From MOADS Eq list, 3 various items listed - average size assumed 2 CY, 2 various tanks, assumed 10 CY each
21-0259	210259	PRV	2	2	4		From MOADS Eq list, 2 various items listed - average size assumed 2 CY.
21-0260	210260	Steam Pit	0	2	0		N/A
21-0261	210261	Steam Pit	0	2	0		N/A
21-0286	210286	Warehouse / Rad	1	10	10	online tanks DB	1@unknown gal unknown content, assume 10 CY
21-0303	210303	Electrical Substation	0	2	0		N/A
21-0307	210307	Electrical Substation	1	2	2		From MOADS Eq list, 1 oil type transformer listed - assumed 2 CY.
21-0308	210308	Electrical Substation	0	2	0		N/A
21-0309	210309	Electrical Substation	1	2	2		From MOADS Eq list, 1 oil type transformer listed - assumed 2 CY.
21-0310	210310	Telephone Pedestal	0	2	0		N/A
21-0311	210311	Telephone Pedestal	0	2	0		N/A
21-0312	210312	Corridor		2	0		
21-0313	210313	Corridor		2	0		

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Equip_Items

Property ID	Unit	Description	# of Eq Items	Volume/Item (CY)	Total vol (CY)	Source Equip	Comments
21-0314	210314	Corridor		2	0		
21-0315	210315	Corridor	2	2	4		Visual obs. S.Shaefer
21-0316	210316	Telephone Pedestal	0	2	0		N/A
21-0320	210320	Telephone Pedestal	0	2	0		N/A
21-0323	-	-	0	2	0		N/A
21-0323	-	-	1	2	2		From MOADS Eq list, 1 item listed - average size assumed 2 CY.
21-0328	210328	Materials Receiving	2	2	4		From MOADS Eq list, 2 various items listed - average size assumed 2 CY.
21-0334	210334	Utility Shed	0	2	0		N/A
21-0335	210335	Containment Vessel	1	5	5	online tanks DB	1@unknown gal unknown content, assume 5 CY
21-0338	210338	Electrical Substation	0	2	0		N/A
21-0342	210342	East Water Tower	1	26	26	volume/item = all items	From MOADS Eq list, 3 various items listed - average size assumed 2 CY, 2 various tanks, assumed 10 CY each
21-0345	-	-	0	2	0		N/A
21-0346	-	2-3000 gal SS hold tanks	2	15	30		assume 3000 gal tank = 15 CY
21-0353	210353	Change Room Trailer		2	0		
21-0355	210355	Office Trailer / Rad	1	2	2		From MOADS Eq list, 1 item listed - average size assumed 2 CY.
21-0357	210357	Steam Plant	1	575	575	online tanks DB, volume/item = all tanks	600 gal AGT - diesel, 3@250 gal calcium inj, 1@25gal ferric sulfate, From MOADS Eq list, 269 various items listed - average size assumed 2 CY, 8 various tanks, assumed 10 CY each (3 already accounted for) . assume 600 gal = 3 CY, 250 gal = 1.25 CY, 25 gal = .25 CY
21-0359	210359	Office Trailer	0	2	0		N/A
21-0361	210361	Trans Office Trlr	6	2	12		From MOADS Eq list, 6 items listed - average size assumed 2 CY.
21-0365	210365	Trans Office Trlr	8	2	16		From MOADS Eq list, 8 items listed - average size assumed 2 CY.
21-0370	-	mech eq bldg	17	2	34		From MOADS Eq list, 17 items listed - average size assumed 2 CY.
21-0387	-	-	0	2	0		N/A
21-0388	-	-	0	2	0		N/A
21-0402	210402	Storage Bldg - no floor	0	2	0		N/A
21-0418	-	-	0	2	0		N/A
21-0421	-	-	0	2	0		N/A
21-0422	-	-	0	2	0		N/A
21-0423	-	-	0	2	0		N/A
21-0424	-	-	0	2	0		N/A
21-0427	210427	Shed	0	2	0		N/A
21-0428	210428	Shed	0	2	0		N/A
21-0443	210443	Office Trailer	0	2	0		N/A
21-0450	210450	Van	0	2	0		N/A
21-0451	210451	Storage Shed	0	2	0		N/A
21-0454	210454	Van	0	2	0		N/A
21-0455	210455	Van	0	2	0		N/A
21-0456	210456	Van	0	2	0		N/A
21-0458	210458	Metal Storage Shed	0	2	0		N/A
21-0461	210461	Office Trailer	0	2	0		N/A
21-0462	210462	Transportainer	0	2	0		N/A
21-0466	-	-	0	2	0		N/A
21-0470	-	Transportainer	0	2	0		N/A
21-0471	-	-	0	2	0		N/A
21-0472	-	-	0	2	0		N/A
21-0485	-	-	0	2	0		N/A
21-0487	-	-	0	2	0		N/A
21-0490	-	-	0	2	0		N/A
21-0550	210550	Storage Shed	0	2	0		N/A

TA-21
 BUILDING QUANTITY ESTIMATE
 MARCH 2005
 Equip_Items

Property ID	Unit	Description	# of Eq Items	Volume/Item (CY)	Total vol (CY)	Source Equip	Comments
21-0553	210553	Telephone Pedestal	0	2	0		N/A
21-1001	-	-	43	2	86		From MOADS Eq list, 43 items listed - average size assumed 2 CY.
21-1002	-	-	304	2	608		From MOADS Eq list, 304 items listed - average size assumed 2 CY. Assume all lifts will be removed, not as waste
21-1004	-	-	0	2	0		N/A
21-1005	-	-	0	2	0		N/A
21-1006	-	-	0	2	0		N/A
21-1007	-	-	0	2	0		N/A
21-1008	-	-	0	2	0		N/A
21-1009	-	-	0	2	0		N/A
21-1010	-	-	0	2	0		N/A
63-0039	630039	Van	0	2	0		N/A
DP West Elec, Teleph, & Fire		Utility Lines	0	2	0		N/A
DPWest Industrial		Industrial Waste Line	0	2	0		N/A
DPWest Sanitary		Sanitary Sewer lines	0	2	0		N/A
DPWest Steam and Cond		Steam Lines	0	2	0		N/A
DPWest Water Supply		Water Lines	0	2	0		N/A
LAC		-	0	2	0		N/A
RW Lines		Rad Waste lines at TA21	0	2	0		N/A
21-0003	210003	Remainder of Structure	0		0		assume all equipment removed
21-0004	210004	Remainder of Structure	0		0		assume all equipment removed

NOTE: Tank sizes at http://www.highlandtank.com/LIT/HT_Aboveground_Tanks.pdf