Y12 TEN-YEAR SITE PLAN LIMITED UPDATE FY 2011-FY 2020











Y-12 National Security Complex Ten-Year Site Plan

EXECUTE LIMITED UPDATE FY 2011–2020

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prepared by
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108

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OVERVIEW

This Ten-Year Site Plan (TYSP) Limited Update presents the FY 2011–2020 facility and infrastructure requirements to maintain progress in achieving the overall transformation vision for the Y-12 National Security Complex (Y-12). The FY 2011–2020 requirements expressed herein are within the Future Years Nuclear Security Program (FYNSP) targets for Y-12. The long-range vision is consistent with the Supplemental Programmatic Environmental Impact Statement (SPEIS) Record of Decision (ROD) issued December 2008. Issuance of the 2010 Nuclear Posture Review will certainly impact detailed decision making. Achieving transformation at Y-12 will no doubt be a challenge from a budget and schedule perspective.



Fig. 1. Y-12's future high-security area.

The preferred alternative from the 2008 ROD further established the following site-specific goals for Y-12:

- 90% reduction in the high-security area (Fig. 1),
- 60% reduction in the nuclear operations footprint,
- 50% reduction in the total building footprint (an approximate 3.1 million gross ft² reduction), and
- 20–30% reduction in the Defense Programs staff.

For more than 10 years, Y-12 has been transforming in support of site goals to consolidate operations and modernize its facilities and infrastructure. These actions are consistent with and supportive of NNSA enterprise transformation planning. Through modernization projects, deferred maintenance (DM) reduction, enhanced security measures, technology enhancements, infrastructure reduction, and innovative ways of doing business, Y-12 is becoming a more responsive and cost-effective enterprise, as evidenced by the following significant infrastructure accomplishments.

- The Highly Enriched Uranium Materials Facility (HEUMF), Y-12's first major enriched uranium (EU) modernization project, is complete and began operation in January 2010. See Fig. 2.
- The Uranium Processing Facility (UPF), which will consolidate all EU operations into a second designed-denial facility near HEUMF, continues in preliminary design. When the facility is operational and the Protected Area Reduction Project (PARP) is also completed, the high-security area can be reduced by 90%, enabling an annual operating cost reduction of approximately \$200 million per year. UPF is scheduled to be fully operational in FY 2022. Building 9212 will continue to be operational until full production is achieved in UPF.



Fig. 2. The Highly Enriched Uranium Materials Facility.

- Two major infrastructure projects will be completed in FY 2010. The Potable Water System Upgrades project team is constructing a new potable water supply system and upgrading select elements of the distribution system. The Steam Plant Life Extension project team is constructing a new gas-fired, packaged boiler steam plant to replace the aging coal-fired plant.
- Supported by funding from the Facilities and Infrastructure Recapitalization Program (FIRP) through FY 2013, Y-12 is continuing its integrated program to reduce excess facilities, having already achieved a reduction of approximately 1.3 million ft². With more than \$250 million from the American Recovery and Revitalization Act (ARRA), work began in 2009 to deactivate and demolish (D&D) process-contaminated legacy facilities. Work is under way in Buildings 9204-4 and 9201-5, and the Biology Complex.
- In FY 2009, Y-12 developed a new Master Plan to further define and fully integrate the projects, activities, and resources required to achieve the transformation vision. The plan also included a communications module to enhance both internal and external communication and scenario planning.

- The Nuclear Facility Risk Reduction Project received CD-1 approval in FY 2010, which will provide prioritized, practical utility modifications to the 9212 and 9204-2E facilities.
- A proposed third-party financed project to construct a new Complex Command Center has received CD-0 and CD-1 approvals. The new facility will replace the aging fire station, plant shift superintendent's office, and emergency operations center. The selected developer has completed 60% design, and the project proposal is under review at Headquarters.



Fig. 3. The proposed Complex Command Center.

 Y-12 continues to make excellent progress implementing the Graded Security Protection (GSP) policy. Consolidation and enhanced protection of EU material has been completed. Through close coordination with NNSA, Y-12 is pursuing a costeffective, risk-based GSP implementation plan.

1. ASSUMPTIONS

Y-12's planning documents (Strategic Plan, TYSP, and the Y-12 Master Plan) are based on assumptions concerning needed capabilities, capacity and work scope, and infrastructure. This TYSP Limited Update is consistent with the SPEIS ROD position that Y-12 will remain NNSA's center of excellence for uranium manufacturing and research and development (R&D). It is further assumed NNSA will implement the ROD within its funding targets and FYNSP constraints.

1.1. Programmatic Capabilities

The following NNSA and non-NNSA programs are active at the Y-12 site and are supported by Y-12 employees, facilities, and infrastructure. Using current guidance, these programs are expected to continue at Y-12 for the next 10 years.

- The Life Extension Programs (LEPs) direct the performance of maintenance and retrofit activities on weapon systems in the enduring stockpile. LEP activities are directed toward the production of refurbished, replaced, and/or redesigned weapon components.
- 2. The Stockpile Systems Program develops the detection and evaluation of potential problems in the nuclear weapons stockpile that could affect safety, use control, and reliability.
- 3. The Retired Weapons Program is responsible for the dismantlement and disposition of weapon system components returned from the nuclear stockpile.
- 4. The Nuclear Materials Management, Storage, and Disposition Program ensures safe, secure, and compliant storage of the nation's strategic reserve of highly enriched uranium (HEU) and lithium, as well as all other nuclear materials at Y-12. Y-12 is designated as DOE's national repository for HEU and supports strategic materials supply and demand analyses.
- 5. The Material Recycle and Recovery Program is responsible for the recycle and recovery of EU from various forms of material

- generated from the production, dismantlement, or quality evaluation of weapon parts; the chemical conversion of various forms of lithium to lithium chloride; and storage of in-process materials until they can be further processed for long-term reuse, storage, or disposition.
- 6. The Nuclear Security and Nuclear Nonproliferation programs focus on Y-12's core competencies related to nuclear expertise and technologies to address emerging needs.
- 7. The Naval Reactors (NR) Program is responsible for supplying HEU to NR fuel fabricators.
- The HEU Disposition and Uranium Supply Program is responsible for disposition of the domestic surplus HEU and for supplying uranium and other nuclear materials to NNSAapproved customers.
- 9. The Safeguards and Security Program uses current security planning and technology to support the Office of Homeland Security and other international security organizations.
- DOE-Office of Environmental Management (EM) is conducting D&D of current or former NNSA, DOE-Office of Science (SC), and DOE-Office of Nuclear Energy (NE) facilities and environmental remediation actions.

1.2. Capacity and Work Scope

The following assumptions concern Y-12's workload during the next decade.

- LEP production will continue the W76 and any follow-on programs directed.
- The production of joint test assembly units will decrease in FY 2010 and then be sustained at the newly established level.
- Quality evaluation (surveillance) rates will increase over the next 4 years and then remain at that higher level.
- Dismantlement will sustain the high-throughput levels established in FY 2008, as funding allows.

- NR work will be steady at current rates.
- Work associated with National Security Programs, Complementary Work, and NNSA's nonproliferation mission will increase.
- Facility D&D through ARRA and the Integrated Facility Disposition Project (IFDP) will continue.

1.3. Planning

The following are planning, project, and facility and infrastructure assumptions.

- Land requirements will generally remain stable. While some disposition of land may occur to support third-party financing projects or possible joint ventures, Y-12 will continue to require security and emergency response buffers that preclude release of any real estate for public use.
- The UPF project, the Security Improvements Project, and PARP will be funded. PARP is required to achieve the total cost savings associated with consolidating EU operations and reducing Y-12's high-security area by 90%.
- Recapitalization of mission-critical facilities and utility infrastructure systems will be the primary driver in the prioritization of FIRP projects through FY 2013. The Nuclear Facility Risk Reduction project is an example of a key Readiness in Technical Base and Facilities (RTBF) utility systems recapitalization.
- When the Y-12 Master Plan vision is achieved, the total operating space required to perform the NNSA and non-NNSA missions and functions will be approximately 50% less than today's.
- IFDP will provide for D&D of more than 3.8 million ft² of NNSA and DOE NE, SC, and EM excess facilities.
- Transition to a smaller, more responsive Y-12 will require most mission-critical facilities be operated and maintained for 10 years or longer.

- Y-12's Accelerated Security Transformation proposes the removal of nearly 70 acres from the Protected Area and will achieve compliance with the GSP policy within a 2-year timeframe. DOE and NNSA will benefit from cost avoidances for ongoing operations, facility demolitions, and new facility construction.
- Upgrades or replacements of Safeguards and Security systems and equipment must be considered until UPF is operational.

2. CURRENT STATE OF THE SITE

See Overview (page 1) and Sect. 1.1 (page 3) for additional information of projects and programs active on the Y-12 site.

2.1. Accomplishments since FY 2009 TYSP

- 1. As a precursor to IFDP, more than \$250 million from ARRA funding jumpstarted projects, including five facility demolitions, legacy material removal, and storm system remediation,
- 2. More than \$50 million in savings and efficiencies were achieved against an aggressive goal of \$40 million—B&W Y-12's highest annual savings.
- 3. The highest dismantlement throughput level in more than 25 years was achieved, which exceeded the planned disposition of dismantled components by 140%.
- 4. All W76-1 LEP deliverables were completed ahead of schedule, exceeding NNSA expectations, and supported commitments to the U.S. Department of Defense.
- 5. Y-12 led the way in meeting NNSA's multi-site goal to consolidate and remove excess special nuclear materials (SNM) by shipping more than 7.5 MTU, or more than 93% of the overall goal.
- 6. Aggressive site transformation continued by completing the HEUMF project, finalizing the 30% design for UPF, completing the 60% design for the Complex Command Center, and completing a new Y-12 Master Plan.

- 7. Y-12 successfully completed \$300 million in project scope on more than 100 line-item, small capital, and expense projects, with improved safety performance.
- 8. The development of the ES-3100, a significantly advanced Type B fissile material shipping container, was completed. The ES-3100 is now used routinely at Y-12, much of the DOE complex, and commercial sites.
- 9. Y-12 helped with the President's number one priority—making the world safer from terrorist threats by more than doubling work on this national security issue. Y-12 is fabricating new HEU Equivalent Radiological Signature Training Devices, a tool that can revolutionize SNM detection.

3. CHANGES FROM PRIOR YEAR TYSP

The lack of a funded program, such as Transformation Disposition, to disposition excess facilities produced the most significant change from the prior year's TYSP.

4. REAL PROPERTY ASSET MANAGEMENT

B&W Y-12 recognizes the importance of strategically and tactically integrating its long-range planning for real property asset management with the SPEIS preferred alternative. Integrated planning is fundamental to achieving NNSA's transformation goals for Y-12. A number of projects are under way and moving Y-12 closer to the goals.

4.1 Site Footprint Management/Excess Facilities Disposition

Since becoming the Y-12 managing and operating contractor in FY 2000, B&W Y-12 has implemented an aggressive footprint management and excess facilities disposition program. The following results stem from these activities.

• Through FY 2009, B&W Y-12 demolished NNSA facilities totaling 1,198,382 ft², with 1,035,076 ft² defined as "banked square footage," which offsets new construction.

- An additional 140,000 ft² of space is currently available for demolition, with an estimated 4,000,000 ft² that has been identified as future excess space.
- ARRA is funding the cleanout and deactivation of Building 9201-5 and a significant portion of Building 9204-4.
- There are currently more than 250 facilities at Y-12 that are projected to be excess to mission needs over the next several years. These buildings account for almost \$200 million in DM backlog and cost more than \$60 million each year in operating and maintenance costs.
- The proposed Accelerated Security Transformation will remove nearly 70 acres from the Protected Area; DOE and NNSA will benefit from significant cost avoidances associated with D&D activities planned within the Protected Area.

Demolitions within the constraints of the approved FYNSP and out-year funding targets are provided in Tables E-1 and E-4. However, the magnitude of the required demolitions is not captured within those constraints. It is vitally important an additional funding mechanism be identified for future demolition of excess facilities. Y-12 is depending on EM's IFDP for these demolitions.

4.2 Future Space Needs

Future space needs are a function of population projections, workload, productivity, and other parameters—none of which, in totality, are definitive.

- Administrative Space. With the construction of the Jack Case and New Hope centers, B&W Y-12 was able to demolish several aged and deteriorated office buildings. The remaining challenges will be to address space needs inside the high-security area, where several older office buildings remain in use. These buildings are targeted for refurbishment in upcoming years to ensure their viability for future needs.
- Laboratory and R&D Space. The Technology Development organization and the plant laboratory are currently housed in 60-year-old facilities. In addition, an increase in Complementary

Work and other national security initiatives would increase the need for additional R&D laboratory and training space. Technology Development and the plant laboratory are included in the Consolidated Manufacturing Complex (CMC)—Canned Subassembly Support. Options will be explored to replace these facilities using private-sector funding.

- Industrial, Production, and Processing Space. Assuming the completion of UPF and CMC, B&W Y-12 does not anticipate the need for additional space for this category. This assumption can change based on NNSA decisions regarding workload or mission.
- Service/Support Space. The most significant requirements in service and support are for maintenance operations and shipping and receiving facilities. A consolidated location in close proximity to the process complex would provide a more efficient operation. Additionally, shipping and receiving is now housed in off-site leased space. A new on-site facility would provide modernized processes and increase efficiencies.
- Warehouse. HEUMF addresses Y-12's HEU material storage needs. Y-12 does, however, need a modern non-SNM material storage complex.

4.2.1. New Construction Footprint

Between FYs 2011–2020 new construction at Y-12 will total 399,000 ft². The Complex Command Center will be 49,000 ft² of leased space which is included in the total. UPF and the Complex Command Center will be the most significant new constructions. These two facilities will relocate remaining mission-critical processes into new, modernized facilities, which will then allow the demolition of the Manhattan-era facilities used today.

4.2.2. Leased Space

Leased facilities are a key element of space configuration at Y-12. Third-party financing was utilized to construct the Jack Case and New Hope centers. Also, the shipping and receiving warehouse is housed in an off-site leased facility, as are records storage and the UPF project design team. The Complex Command Center is a

current project seeking third-party financing; it will provide nearly 49,000 ft² of new emergency management space.

4.2.3. Footprint Tracking

Table E provides the footprint tracking data and charts covering data from FYs 2002–2020. As requested in the TYSP Guidance, only the footprint reductions and additions that are within the FYNSP funding are included.

4.3. DM Reduction/Facility Condition

The FY 2011–2020 TYSP Guidance related to NNSA corporate facilities and infrastructure encompasses the following Complexwide DM and facility condition goal.

• By 2013, improve mission-dependent, not-critical facilities and infrastructure to an FCI level of 7%.

FYNSP funding for FIRP and RTBF continues to be a primary driver behind DM reduction. At the end of FY 2009, Y-12 had reduced DM by more than \$247 million from the original FY 2003 baseline. The results of the reduction are evident site-wide: the facilities' physical conditions are improving and the site looks significantly better due to facility demolition, which further reduces DM. The projected DM reduction during FY 2011–2015 is \$73 million based on current FYNSP levels.

With respect to FCI, Y-12 fully anticipates meeting the complex-wide goals. For FY 2010, the mission-critical FCI is projected to be 3.1%, and the mission-dependent, not-critical FCI is to be 6.9%. With FIRP now extended through FY 2013, Y-12 expects the NNSA mission-critical FCI to be 3.0% with a DM value of approximately \$90 million, and the mission-dependent, not-critical FCI is projected to be 5.9% with a DM value of approximately \$171 million in FY 2013.

Although the Y-12 site's overall condition has significantly improved due to FIRP and line-item DM reduction, out-year projections reveal a downturn in the trend without continued funding sources for recapitalization and demolition projects.

4.3.1. FIRP FY 2003 Legacy DM Baseline and Projected DM Reduction from Baseline

Table F-1 reflects the DM reduction associated with the FY 2003 baseline as reported in the August 2003 Final FY 2004–2013 Ten-Year Comprehensive Site Plan. Per NNSA-HQ guidance, no growth in DM or escalation of DM costs is associated with the FYs 2003–2013 baseline values.

4.3.2. Total DM and Projected DM Reduction

Table F-2 reflects fully burdened values for project planning and execution. DM growth and escalation are included in Attachment F-2. Data for annual required maintenance has incorporated the Y-12 assessment of maintenance as a percentage of replacement plant value. The annual planned maintenance data reflects Y-12's assessment of work scope that should be included as maintenance costs and also ensures consistency of maintenance reporting with other NNSA sites.

4.4. Facilities Information Management System (FIMS)

Data reported within this TYSP is in harmony with the annual reporting requirements and data entry into DOE's FIMS. Y-12 is committed to data quality within FIMS and strives to ensure information is consistent with the Y-12 Master Plan and the SPEIS preferred alternative. B&W Y-12 achieved green ratings in previous validation efforts and will continue to maintain accurate data and provide consistent linkage between FIMS, TYSP, and the Y-12 Master Plan.

4.5. Security

The projects in Attachments A-6a and A-6b of the TYSP Guidance will allow NNSA to integrate its corporate requirements for security infrastructure.

B&W Y-12 has aggressively reduced its security area footprint, and the construction of HEUMF and UPF will ultimately shrink the current Protected Area by 90%. Consolidations of Limited Areas and vault-type rooms will continue to be evaluated for beneficial and cost-effective implementation.

5.0. SITE PROJECT PRIORITIZATION AND COST PROFILE

Project prioritization is an integral part of B&W Y-12's baseline planning process. B&W Y-12's prioritization process is programmanagement centered, and communication/integration rests with the program managers for Directed Stockpile Work, RTBF, Campaigns, Security, and Complementary Work. Final project priority is ultimately established collaboratively between B&W Y-12 and NNSA program managers and senior management. The Y-12 Master Plan assures a common infrastructure vision for priority decisions.

B&W Y-12 has augmented the prioritization process with a procedure that defines the site-level approach to risk management to ensure associated risks are identified and controlled. This *risk determination and acceptance* process has direct applicability to many legacy facility and infrastructure issues described in this TYSP.

6.0. ENERGY MANAGEMENT PLAN

B&W Y-12's detailed energy management program and milestones for achieving site-specific energy efficiency goals are outlined in FY 2009 Y-12 National Security Complex Executable Plan Update and Annual Report on Energy Management for the National Nuclear Security Administration (Y/IA-436), Rev. 1.

Attachment A-1 Facilities and Infrastructure Cost Projection Spreadsheet Line Item Projects for Y-12 Site

(\$000s) Priority (1) Project Nam Project Deferred Mission Mission Deferred GSF Added Total (8) FY 2011 FY 2012 FY 2014 FY 2015 FY 2016 (16) FY 2017 FY 2018 FY 2019 FY 2020 Maintenance Dependency Dependency Maintenance or Eliminated Years 2010 **FYNSP FYNSP** 2013 **FYNSP FYNSP** (17) (18) (19) (20) (2) Type Comment FYNSP (3) Identifier(s) (3a) (4) Reduction (6) (7) Funding Current (11) (12) (14) (15) Program (4a) (9) (10) (13) (5) A. Readiness in Technical Base and Facilities (RTBF) Line Items HEU Materials 01-D-124 OPC 67,498 60,877 6.62 Facility PE&D ш 465,929 465,929 RTBF 110,000 Total (TPC) 526,806 Uranium 06-D-141 See note below. Red Processing and 9212, 9215, 9998, acility 19,296 TRE TRD TBD TBD TBD TBD TBD TBD TBD OPC 55.734 24.179 2 PE&D 351,149 139,205 94,000 115,016 2,928 TBD TBD TBD LI 882,47 102,47 189,987 320,000 MC DSW 350,000 Total (TPC) 1,332,829 194,939 113,29 139,195 189,987 270,012 320,000 10-D-501 3,396 647 1,247 Nuclear 10,00 1,275 Facilities Risk PE&D 8,500 12,500 -4,000 Reduction LI 57,296 39,387 17,909 3 Project (NFRR) 3,396 1,247 RTBF 8,138 Total (TPC) 75,796 13,212 647 36,06 19,184 2,045 B. Facilities and Infrastructure Recapitalization Program (FIRP) Line Items Steam Plant 06-D-603 5,393 4,375 1,018 05-D160.2 Life Extension PE&D 11,668 11.668 43,818 LI 43,818 RTRF 21.250 19,200 Total (TPC) MD 60.879 59.861 1.018 Potable Water 08-D-602 OPC 5,625 4.725 900 System 06-D160.4 PE&D 6,767 6,767 2 Upgrades LI 48,906 48,906 MD RTBF 25,000 3,888 Total (TPC) 60,398 C. Safeguards & Security (S&S) Line Items 10-D-701 Security OPC 12,242 5,910 686 3,061 772 1,696 117 05-D-170.2 Improvement PE&D 10,421 10,421 Project 49.000 LI 49,000 71,663 Total (TPC) 49,686 D. Other Defense Programs Line Items (for example, Campaigns/Directed Stockpile Work (DSW)) OPC PE&D LI Total (TPC) SubTotal Costs for All NNSA Weapons Activities Account Line Items 2.135.892 861.731 184,733 142,903 142.237 210,867 272.174 321,247 E. Nuclear Nonproliferation (NN) Line Items PE&D Total (TPC) Total Costs for All NNSA Site Line Items 861,731 184,733 142,903 142,237 321,247 F. Non-NNSA Line Items Program A PE&D LI Total (TPC) Total Costs for Program A G. Non-NNSA Line Items Program B OPC PE&D LI Total (TPC) Total Costs for Program B

2135892

Site Costs

861731

184733

142903

142237

210867

321247

*Note: The current FYNSP funding profile is under evaluation to determine funding needs to support programmatic milestones for UPF.

							· · · · · · · · · · · · · · · · · · ·	frastructure Line Item Pi (\$0)	ojects for Y-1 100s)	12 NSC Site										
	Project Name (2)	Project Number (3)	Identifier(s) (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	FY 2010 (14)	FY 2011 (15)	FY 2012 (16)	FY 2013 (17)	FY 2014 (18)	FY 2015 (19)	FY 2016 (20)	FY 2017 (21)	FY 2018 (17)	FY 2019 (18)	FY 2020 (19)
A. Readine		Base and Fac	ilities (RTBF) Line	Items	1	ı	60000	OPC	60,000	1		ı		3,000	7,000	8,000	20,000	15,000	7,000	1
	Consolidated Manufacturing						00000	PE&D	57,000					7,000	18,000	32,000				
1	Complex -	11-P-001	NA	MC	DSW			LI Total	183,000								80,000	85,000	18,000	
	Lithium							(TPC)	300,000	_	_	_	_	10,000	25,000	40,000	100,000	100,000	25,000	
							75000	OPC	8,400			3,000	1,100	1,100	1,200	2,000	,	,		
2	Maintenance	11-P-002	NA	NMD	RTBF			PE&D LI	12,000 44,400				9,000	3,000 20,000	20.000	4,400				
	Facility	11-P-002	NA	NIVID	KIBF			Total	44,400				-	20,000	20,000	4,400				
								(TPC)	64,800	-	-	3,000	10,100	24,100	21,200	6,400	-	-	-	-
	Materials						50000	OPC PE&D	3,200 4,000							2,000	200 4,000	200	300	500
3	Receiving and	11-P-003	NA	NMD	RTBF			LI	12,300								4,000	6,000	6,300	
	Storage Facility							Total												
								(TPC)	19,500	-	-	- 0.000	- 0.000	4.000	4 000	2,000	4,200	6,200	6,600	500
1				1				OPC PE&D	7,000 16,000			3,000 2,000	2,000 10,000	1,000 4,000	1,000	 				
4	Utility System	11-P-004	NA	MD	RTBF			LI	55,000					40,000	15,000					
4	Upgrades	11-P-004	INA	IMID	KIBF			Total												
								(TPC)	78,000	_	_	5,000	12,000	45,000	16,000	_	_	_	_	
	Consolidated						184000	OPC	94,000				,				2,000	6,000	18,000	18,000
5	Manufacturing	TBD	NA	мс	DSW			PE&D	191,000 549,000									30,000	80,000	80,000
5	Complex-CSA	IBD	NA	MC	DSW			Total	549,000											
	Support							(TPC)	834,000	-	-	-	-	-	-	-	2,000	36,000	98,000	98,000
B. Facilities	s and Infrastruct	ure Recapital	lization Program (I	FIRP) Line Items	1	ı		000				ı					1			
								OPC PE&D												
NA	NA	NA	NA	NA	NA	NA	NA	LI												
								Total (TPC)	0	0	0		0	0	0			0	0	,
C. Safeguar	ds & Security (S	&S) Line Iten	ns			l	<u> </u>	(IFC)	U	U	U	U	U	U	U	U	l 0	U	U	
o. ourogua.		Line Kon					C	OPC	51,990			7,000	4,150	2,240	2,440	2,570	2,680	2,810	2,950	9,550
	Protected Area				DOW/DTD5			PE&D	58,930					16,710	20,620	21,600	00.400	00.110	70.000	40.400
1	Reduction Project	11-P-005	NA	MD	DSW/RTBF			LI Total	271,880								98,460	80,410	76,820	16,190
	.,							(TPC)	382,800	0.00	0.00	7,000.00	4,150.00	18,950.00	23,060.00	24,170.00	101,140.00	83,220.00	79,770.00	25,740.00
D. Other De	fense Programs	Line Items (f	or example, Camp	aigns/Directed S	tockpile Work (DS	(W))	1	ODC	1			1					1			
								OPC PE&D												
NA	NA	NA	NA	NA	NA	NA	NA	LI												
								Total (TPC)	0	0	0		0	0	0			0	0	,
E. Nuclear I	Nonproliferation	(NN) Line Ite	ms				<u> </u>	(11 0)	0	U	U	U	0	0	U	0	0	U	0	
	· ·							OPC												
NA	NA	NA	NA	NA	NA	NA	NA	PE&D LI												
NA	NA.	NA	NA	NA NA	NA	NA NA	NA.	Total												
								(TPC)	0	0	0	0	0	0	0	0	0	0	0	(
						Costs fo	or All NNSA Sit	Total	1,679,100	_	_	15,000	26,250	98,050	85,260	72,570	207,340	225,420	209,370	124,240
F. Non-NNS	A Line Items Pro	ogram A							.,,											,
								OPC PE&D												
	NA		NA		NA	N/	A	LI												
				1				Total (TPC)			^			^	^			^	_	
								Total	0	0	0	0	0	0	0	0	0	0	0	
G Non Mai	SA Line Items Pr	ogram B					Costs fo	r Program A	0	0	0	0	0	0	0	0	0	0	0	(
G. NOT-NNS	A LINE ITEMS Pr	ogram B						OPC	1			I				I				I
								PE&D												
	NA		NA	· '	NA	N/	4	LI Total												
								(TPC)	0	0	0	0	0	0	0	0	0	0	0	(
								Total												
							Costs fo	r Program B Total	0	0	0	0	0	0	0	0	0	0	0	· ·
								Site Costs	1679100	0	0	15000	26250	98050	85260	72570	207340	225420	209370	124240
Cost project	ions are escalated	eptual and car	rry 40% contingency	<u> </u>																
Assumes LE	ED certification																			

Attachment A-3
NNSA Facilities and Infrastructure Cost Projection Spreadsheet
DTDF(0

										cilities for Y-12 Sit									
									(\$000	Os)									
Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2011 FYNSP (10)	FY 2012 FYNSP (11)	FY 2013 FYNSP (12)	FY 2014 FYNSP (13)	FY 2015 FYNSP (14)	FY 2016 (15)	FY 2017 (16)	FY 2018 (17)	FY 2019 (18)	FY 2020 (19)
1	East End Parking	Not Assigned	MD	RTBF	-		GPP	4,000	2000	2000									
2	West End Parking	Not Assigned	MD	RTBF	-		GPP	2,000			2,000								
3	9201-5N/W HVAC	Not Assigned	MC	RTBF	-		GPE	1,400		600	800								
4	9113/9119/9103 HVA0	Not Assigned	MD	RTBF	-		GPE					2,000.00							
ETC.																			
TOTAL RTBF/Operations (Facilities & Infra under this category	structure reported							7,400	_	2,600	2,800	2,000.00	-	-	-	-	-	-	-

Attachment A-4 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Facilities and Infrastructure Recapitalization Program (FIRP) for Y-12 National Security Complex Site

							2 National Security Co	mplex Site										
FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	Legacy Deferred Maintenance Reduction (FY03 & FY04 Baseline)	Non-Legacy Deferred Maintenance Reduction	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2010 Current (10)	FY 2011 FYNSP (11)	FY 2012 FYNSP (12)	FY 2013 FYNSP (13)	FY 2014 FYNSP (14)	FY 2015 FYNSP (15)
							(5)	(5a)										
1	NWC RAMP Project Support	65	Y12-R-08-01	Multiple	MC/MDNC	RTBF	1,968	0	0	Exp	2,720	2,718	2	0	0	0		
2	Nitrogen Plant Replacement	65		Y12-DM-08-109	MDNC	RTBF	2,500	C	0	GPP	4,348	4,048	300	0	0	0		
3	Roof Leak Repairs	65	Y12-R-08-03	N/A	MC/MDNC	RTBF	0	0	0	Exp	1,100	650	450	0	0	0		
4	9204-2E Hot Air Deficiencies	65	Y12-R-08-04	Y12-DM-09-42	MC	RTBF	1,329	0	0	GPP	4,800	500	4,300	0	0	0		
5	CoE/SBI Support to YSO	N/A	Y12-R-09-05		N/A	N/A	0	0	0	Exp	631	331	300	0	0	0		
6	Planning & Design for FY10 Recap	N/A	Y12-P-09-01	N/A	N/A	N/A	0	0	0	Exp	1,107	1,021	86		0	0		
			Year Totals				5,797	0	0		14,706	9,268		0	0	0		
	FY10 RAMP Support	65		Y12-DM-10-54	MC/MDNC	RTBF	3,326	0	0	Exp	3,027	0	3,027	0	0	0		
	Energy Conservation & Utility Upgrades			Y12-DM-10-76	MC/MDNC	RTBF	150	0	0	Exp	1,500	0	1,500	0	0	0		
3	Planning & Design for FY11 Recap	N/A	Y12-P-10-01	N/A	N/A	N/A	0	0	0	Exp	1,018	0	1,018	0	0	0		
	Linux and the above the		10 Totals		la un co	In Table	3,476	0	0		5,545	0	5,545	-	0	0		
1	Utility Optimization & DM Reduction	65			NMD	RTBF	1,500	0	0	Exp	6,000	0	0	6,000	0	0		
	FY11 RAMP Support	65		Y12-DM-11-58	MC/MDNC	RTBF RTBF	625	0	0	Exp	2,500	0	0	2,500	0	0		
3	FY11 Mechanical DM Redux.	65 N/A	Y12-R-11-03		MC/MDNC N/A	N/A	750	0	0	Exp/GPP	3,000	0	0	3,000	0	0		
4	Program Support & Planning		Y12-P-11-01	N/A	N/A	N/A	2,875	0	0	Exp	1,069 12,569	0	0	1,069 12,569	0	0		
4	FY12 RAMP Support	65		Y12-DM-12-58	MC/MDNC	RTBF	625	U	0	- Fran	2,500	0	0	12,569	2,500	0		
2	Utility Optimization & DM Reduction	65	Y12-R-12-01 Y12-R-12-02		MC/MDNC	RTBF	1,250	0	0	Exp Exp	5,000	0	0	0	5,000	0		
		65		Y12-DM-12-102,		1		U	0	Exp	-,	U	U	U	-,	U		
2	FY12 Wood Pole Deficiencies	65	Y12-R-12-03	103 &104	MDNC	RTBF	375	0	0	Exp	1,500	0	0	0	1,600	0		
3	FY12 HVAC DM Reduction	65	Y12-R-12-04	TBD	MC/MDNC	RTBF	875	0	0	Exp/GPP	3,500	0	0	0	3,500	0		
4	FY12 Electrical DM Reduction	65	Y12-R-12-05	TBD	MC/MDNC	RTBF	750	0	0	Exp	3,000	0	0	0	3,000	0		
5	Program Support & Planning	N/A	Y12-P-12-01	N/A	N/A	N/A	0	0	0	Exp	1,569	0	0	0	1,569	0		
		FY1	12 Totals				3,875	0	0		17,069	0	0	0	17,169	0		
1	FY13 RAMP Support	65	Y12-R-13-01	Y12-DM-13-58	MC/MDNC	RTBF	800	0	0	Exp	3,200	0	0	0	0	3,200		
2	FY13 Wood Pole Deficiencies	65	Y12-R-13-02	Y12-DM-13-102, 103 &104	MDNC	RTBF	700	0	0	Exp	2,800	0	0	0	0	2,800		
3	FY13 HVAC DM Reduction	65	Y12-R-13-03		MC/MDNC	RTBF	1,200	0	0	Exp/GPP	4,800	0	0	0	0	4,800		
4	FY13 Electrical DM Reduction	65	Y12-R-13-04		MC/MDNC	RTBF	1,200	0	0	Exp	4,800	0	0	0	0	4,800		
5	Program Support & Planning	N/A	Y12-P-13-01	N/A	N/A	N/A	0	0	0	Exp	969	0	0	0	0	969		
		FY1	13 Totals				3,900	0	0		16,569	0	0	0	0	16,569		
										TOTAL								
										(FIRP)	66,458	9,268	10,983	12,569	17,169	16,569	-	-

Attachment A-5 Other Facilities and Infrastructure Cost Projection Spreadsheet For Y-12 Site (\$000s) Priority Project Name Project Mission Mission Deferred GSF Added or Funding Total (8) Prior FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 Eliminated (6) 2013 Maintenance Type Years' 2010 2011 2012 FYNSP **FYNSP** (16) (17) (18) (19) (20) Number (3) Dependency Dependency (1) (2) Reduction (5) Funding **FYNSP** FYNSP **FYNSP** (14) (15) Program (7) Current (4) (9) (10) (11) (12) (13) (4a) NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program A) 3 4 5 ETC. TOTAL Program A (facilities & infrastructure reported under this category NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program B) 2 3 4 5 ETC. TOTAL Program B (facilities & infrastructure reported under this category Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program C) 2 3 4 5 ETC. TOTAL Program C (facilities & infrastructure reported under this category Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program D) 2 3 4 5 ETC. TOTAL Program D (facilities & infrastructure reported under this category

Attachment A-6(a) - FY 2010 -- FY 2012 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Currently Funded Security Infrastructure Projects for Y-12 NSC (\$000s)

								d Funding So		
Priority (1)	Project Name (2)	Site Specific Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Estimated Total Project Cost (8)	Line Item A-1,2	RTBF A-3	FIRP A-4	Other A-5	GSP Related? Y or N
	List FY 10 Projects									
	Oven Consolidation	P88Y3023	MC	DP	\$15,900				DSW	Y
	Category I Load-Out to HEUMF	70100041	MC	DP	\$16,900				DSW	Y
	Bear Creek Road Bypass	P88Y3082	NMD	RTBF	\$9,800		X			Y
	Transportation Vehicles (fabrication)	TBD	NMD	DSW	\$3,100				DSW	Y
	Transportation Vehicles (design)	TBD	NMD	DNS	\$1,000				FS2011	Y
	Area 5 Fort Engagement (Tower 2)	P88Y3111	NMD	DNS	\$2,000				FS2011	Y
	Security System Support	P88Y3073	NMD	DNS	\$725		+		FS2011	N
	Security Communications Equipment	P88Y3075	NMD	DNS/HSS	\$85				RH0607	Y
	C3I SAS Equipment	P88Y3098	NMD	DNS/HSS	\$290				FS2008/ RH0607	Y
	BearCat Neutralization (Phase II)	P88Y3093	NMD	DNS/HSS	\$350				FS2008/ RH0607	Y
	C3I System Deployment	P88Y3070	NMD	DNS/HSS	\$700				FS2008/ RH0607	Υ
	MotoMesh Deployment (Phase II)	P88Y3086	NMD	DNS/HSS	\$2,200				FS2008/ RH0607	
	ALPR System (Fixed)	NA	NMD	DNS	\$400				FS2011	Y
1	Area 5 Fort Engagement (Tower 3)	P88Y3084	NMD	DNS	\$5,100				FS2011	Y
2	Airborne Deterrent (Phase II)	P88Y3086	NMD	DNS	\$800				FS2011	Υ
3	Hostile Intent Barrier Relocation	P88Y3089	NMD	DNS	\$2,500				FS2011	Y
4	Area 5 Fort Engagement (Tower	P88Y3053	NMD	DNS	\$3,100				FS2011	Y
5	* Portal 14 Upgrades	P88Y3116	NMD	DNS	\$800				FS2011	Υ
6	* Portal 8 Upgrades	P88Y3112	NMD	DNS	\$6,000				FS2011	Υ
7	* Entry Equipment	P88Y3117	NMD	DNS	\$1,100				FS2011	Y
8	* Exterior Protected Positions	P88Y3115	NMD	DNS	\$3,000				FS2011	Y
9 10	* VTR Upgrades * Corridor Access Control	P88Y3118	NMD	DNS DNS	\$700				FS2011	Y
10		P88Y3114	NMD		\$1,000				FS2011 FS2008/	Y
11	Sniper Suppression Capability	TBD 11	NMD	DNS/HSS	\$1,400				RH0607	Υ
12	* Vehicle Protection	P88Y3120	NMD	DNS	\$500				FS2011	Y
13	* Remote Overwatch	TBD 13	NMD	DNS	\$1,000				FS2011	Y
14	* Bear Creek Road Closure C3I System Applications	P88Y3113	NMD	DNS	\$2,000				FS2011 FS2008/	Y
15	Deployment	TBD 15	NMD	DNS/HSS	\$1,000				RH0607	Y
16	C3I Integration Center	TBD 16	NMD	DNS/HSS	\$300		1		FS2008/ RH0607	Y
17	* Elevated Engagement Training Facility	TBD 17	NMD	DNS	\$200				FS2011	Y

FY10.

List FY11 Projects								
Based on FYNSP, no security infrastructure projects are funded in FY 2011.								
List FY12 Projects	T	T	T	T	1	1	ı	ı

Attachment A-6(b) - FY10, FY11, and FY12 Unfunded NNSA Facilities and Infrastructure Cost Projection Spreadsheet Security Infrastructure Projects for Y-12 NSC (\$000s)

- · · ·	B 1 1/1 //	5	(\$000\$)		1			
Priority	Prioritization	Project Name	Site Specific	Mission	Mission	Total	Proposed for	GSP
(1)	Score	(2)	Project Number	Dependency	Dependency	(8)	either FY10,	Related?
	(2a)		(3)	(4)	Program		FY11, or FY12	Y or N
					(4a)		funding	
1		* Portal 11 Upgrades	TBD 1	NMD	EM	\$4,700	FY10	Y
2		* Deinventory Building 9720-38	TBD 2	NMD	DP	\$200	FY10	N
3		* "H" Road Building Demolition	TBD 3	NMD	FIRP	\$8,100	FY10	N
4		* Utility Re-Route	TBD 4	NMD	CSS	\$3,000	FY10	N
5		* "H" Road Vehicle Barrier	TBD 5	NMD	EM	\$7,000	FY10	N
6		* "H" Road Detection and Assessment	TBD 6	NMD	EM	\$7,200	FY10	N
7		* Secondary Pathways and Assessment	TBD 7	NMD	EM	\$2,600	FY10	N
8		* Classified Matter Protection Upgrades	TBD 8	NMD	DP	\$3,000	FY10	N
9		* Classified Matter Consolidation and Disposal	TBD 9	NMD	DP	\$1,000	FY10	N
		Security Systems Life-Cycle Replacement/						
10		Modernization	TBD 10	NMD	DNS	\$1,416	FY10	N
11		** Building 9720-26 Upgrades	TBD 11	NMD	DNS	\$300	FY11	Υ
12		** Building 9710-2 Upgrades	TBD 12	NMD	DNS	\$1,000	FY11	Υ
13		** Armored Vehicle Upgrades	TBD 13	NMD	DNS	\$1,500	FY11	Υ
14		*** Portal 8 Throughput Capacity Increase	TBD 14	NMD	TBD	\$4,000	FY11	N
15		*** Portal 14 Throughput Capacity Increase	TBD 15	NMD	TBD	\$3,000	FY11	N
		Security Systems Life-Cycle Replacement/						
16		Modernization	TBD 16	NMD	DNS	\$1,078	FY11	N
		Security Systems Life-Cycle Replacement/						
17		Modernization	TBD 17	NMD	DNS	\$1,608	FY12	N
		Security Systems Life-Cycle Replacement/						
18		Modernization	TBD 18	NMD	DNS	\$2,100	FY13	N
		Security Systems Life-Cycle Replacement/					•	
19		Modernization	TBD 19	NMD	DNS	\$700	FY14	N
		Security Systems Life-Cycle Replacement/					•	
20		Modernization	TBD 20	NMD	DNS	\$2,000	FY15	N
		Security Systems Life-Cycle Replacement/						
21		Modernization	TBD 21	NMD	DNS	\$2,000	FY16	N

^(*) Anticipate project will be funded in FY10 by programs other than DNS.

^(**) Anticipate project will be funded through gained efficiencies and cost savings/avoidances from funded FY10 DNS projects.

^(***) Additional throughput capacity needed at Protected Area portals due to parking lot relocation to support UPF construction.

Attachment E-1 Facilities Disposition Plan (Within FYNSP/Outyear Planning Targets)

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Deferred Maintenance Identifier (3a)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Legacy Deferred Maintenance Reduction (FY03 & FY04 Baseline) (7)	Non-Legacy Deferred Maintenance Reduction (8)	Gross Square Footage (gsf) (9)	Excess Year (10)	Estimated Disposition Year (11)	TEC to Disposition (\$000s) (12)	Yearly S&M Costs (\$000s) (13)	Contaminated (Yes or No) (14)	Notes (15)
FIRP	9766-00	Office Building	9766	RTBF	88	1	\$1,496	\$447	36,846	2008	2010	\$4,000	\$4	Yes	Required for UPF Constr.
									36,846			\$4,000			
FIRP	9720-38	Storage	9720-38	DSW		1	\$63	\$20	7,658	2011	2011	\$4,000	\$24	No	Required for PA reduction.
FIRP	9616-10	Bulk Acid Unloading Station	9616-10	RTBF		1	\$3	\$2	438	2009	2011	\$500	\$1	No	Required for PA reduction.
FIRP	9983-AT	Building	9983-AT	RTBF	52	1	\$4	\$3	288	2009	2011	\$250	\$0	No	Required for PA reduction.
FIRP	9983-FG	Office Space - Trailer	9983-FG	RTBF	52	1	\$0	\$71	1,307	2009	2011	\$250	\$11	No	Required for PA reduction.
FIRP	9720-19	Rubber Shop	9720-19	DSW	76	2	\$84	\$63	6,048	2010	2011	\$2,000	\$19	Yes	
FIRP	9720-19A	Rubber Shop	9720-19A	DSW	76	2	\$28	\$28	1,515	2010	2011	\$500	\$5	Yes	
FIRP	9720-19B	Rubber Shop	9720-19B	DSW	76	2	\$0	\$3	2,450	2010	2011	\$1,000	\$8	Yes	
UPF LI	9949-56	Guard Tower	9949-56	RTBF		3	\$15	\$6	49	2010	2011	\$50	\$1	No	Required for UPF Constr.
UPF LI	9949-36	Guard Tower	9949-36	RTBF		3	\$0	\$15	36	2010	2011	\$50	\$1	No	Required for UPF Constr.
UPF LI	9949-44	Guard House	9949-44	RTBF		3	\$0	\$1	40	2010	2011	\$6	\$1	No	Required for UPF Constr.
UPF LI	9949-43	Guard House	9949-43	RTBF		3	\$0	\$11	55	2010	2011	\$8	\$1	No	Required for UPF Constr.
UPF LI	9720-37	Storage	9720-37	RTBF		3	\$16	\$0	230	2010	2011	\$35	\$1	No	Required for UPF Constr.
UPF LI	9124	Storage	9124	RTBF		3	\$0	\$4	400	2010	2011	\$60	\$1	No	Required for UPF Constr.
UPF LI	9107	Administrative	9107	RTBF		3	\$0	\$2,377	11,632	2010	2011	\$1,700	\$45	No	Required for UPF Constr.
									32,146			\$10,409			
FIRP		Pumphouse	9404-04	RTBF	76	1	\$635	\$422	5,525	2008	2012	\$1,500	\$0	No	9404-04 - Historic
FIRP		Plant & Instr. Air Comps.	9404-02	RTBF	76	1	\$59	\$38	4,585	2009	2012	\$1,200	\$11	No	
FIRP		Cooling Tower	9409-04	RTBF	60	1	\$5	\$4,854	5,600	2009	2012	\$900	\$0	No	
FIRP		Cooling Tower	9409-30	RTBF	60	1	\$0	\$0	600	2008	2012	\$200	\$0	No	
FIRP		Water Treatment	9416-18	RTBF	76	1	\$3	\$5	50	2009	2012	\$100	\$1	No	
FIRP	9416-21	Water Treatment	9416-21	RTBF	76	1	\$26	\$29	44	2009	2012	\$100	\$1	No	
							A		16,404			\$4,000			2 : 16 1125 0
FIRP	9709-00	Training & Warehouse	9709	RTBF	88	1	\$1,221	\$514	53,757	2008	2013	\$4,500	\$18	No	Required for UPF Constr.
									53,757			\$4,500			

Attachment E-2 New Construction Footprint Added

Funding Source (1)	Project Number (2)	Facility Name (3)	Mission Dependency Program (4)	Funding Type (LI, GPP, IGPP) (5)	Project Area (GSF) (6)	Year of Beneficial Occupancy (7)	Notes (8)
RTBF	06-D-141	Uranium Processing Facility	DSW	LI	350,000	2018	
Total					350,000		

Attachment E-3 FY 2010 Leased Space Y-12 National Security Complex Site

#	FIMS # (2)	Property Name (3)	Mission Dependency	Dependency	# Occupants (6)	Square	Rental Rate per	Annual Cost (9)	Lease Type	Lease Term -	Exp. Month / Year	Options
			Program (4)	(5)		Feet (7)	Rentable s.f. (8)		(10)	yrs. (11)	(12)	(13)
1	1099 COMMERCE PARK	UPF Design	RTBF	NMC	329	50,078	\$20.12	\$1,119,000.00	Full	5	30-Sep-10	Υ
2	113C UNION VALLEY RD	Sample Prep Facility	RTBF	NMC	31	28,253	\$27.04	\$1,338,897.00	Full	10	24-Oct-10	Υ
3	115 UNION VALLEY ROAD	Materials Shipping/Receiving	RTBF	NMC	33	28,800	\$10.04	\$289,263.00	Full	1	20-Feb-10	N
4	200 SUMMIT PLACE	Records Storage Facility	RTBF	NMC	7	24,585	\$26.72	\$726,965.00	Full	10	31-Oct-17	Υ
5	301 BCR	Jack Case Office Building	RTBF	MDNC	970	411,837	\$34.61	\$15,023,292.00	Full	5	04-May-12	Υ
6	602 SCA	New Hope Center	RTBF	MDNC	371	137,758	\$34.61	\$5,018,887.00	Full	5	04-May-12	Y

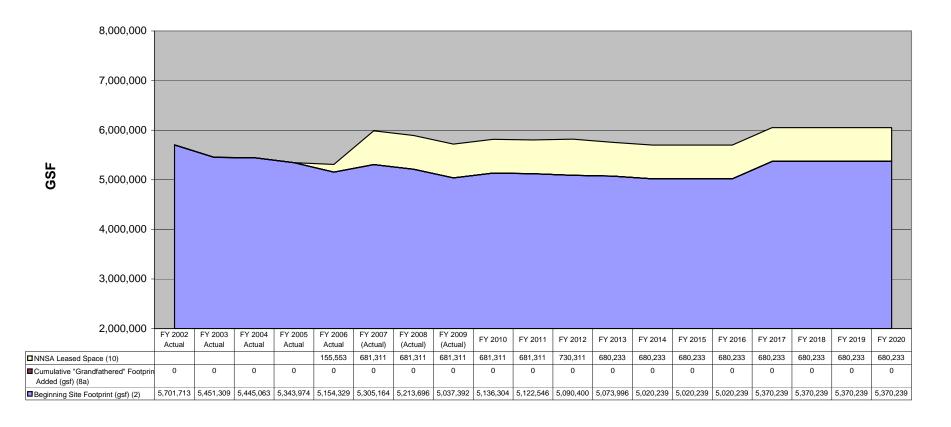
681,311

Attachment E-4(a) FOOTPRINT TRACKING SUMMARY SPREADSHEET Y-12 National Security Complex Site Footprint Tracking Summary - NNSA

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction/	Site Footprint Reduction by FY (gsf) (5)	Footprint "Banked" (gsf) (6)	Waiver/ Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative "Grandfathered" Footprint Added (gsf) (8a)	NNSA Site Total Footprint (gsf) (9)	NNSA Leased Space (10)	Weapons Activities Account (gsf) (11)
FY 2002 Actual	5,701,713	-250,404	0	5,451,309	-250,404		0	0	5,451,309		N/A
FY 2003 Actual	5,451,309	-117,838	0	5,445,063	-368,242	111,592	0	0	5,445,063		NA
FY 2004 Actual	5,445,063	-108,065	6,976	5,343,974	-469,331		0	0	5,343,974		N/A
FY 2005 Actual	5,343,974	-207,830	18,185	5,154,329	-658,976		0	0	5,154,329		N/A
FY 2006 Actual	5,154,329	-111,786	42,858	5,305,164	-727,904	219,763	0	0	5,460,717	155,553	111,786
FY 2007 (Actual)	5,305,164	-103,684	12,216	5,213,696	-819,372		0	0	5,895,007	681,311	103,684
FY 2008 (Actual)	5,213,696	-135,469	0	5,037,392	-954,841	-40,835	0	0	5,718,703	681,311	135,469
FY 2009 (Actual)	5,037,392	-11,759	110,671	5,136,304	-855,929		0	0	5,817,615	681,311	11,759
FY 2010	5,136,304	-36,846	23,088	5,122,546	-869,687		0	0	5,803,857	681,311	36,846
FY 2011	5,122,546	-32,146	0	5,090,400	-901,833		0	0	5,771,711	681,311	32,146
FY 2012	5,090,400	-16,404	0	5,073,996	-918,237		0	0	5,804,307	730,311	16,404
FY 2013	5,073,996	-53,757	0	5,020,239	-971,994		0	0	5,700,472	680,233	53,757
FY 2014	5,020,239		0	5,020,239	-971,994		0	0	5,700,472	680,233	0
FY 2015	5,020,239		0	5,020,239	-971,994		0	0	5,700,472	680,233	0
FY 2016	5,020,239		350,000	5,370,239	-621,994		0	0	6,050,472	680,233	0
FY 2017	5,370,239		0	5,370,239	-621,994		0	0	6,050,472	680,233	0
FY 2018	5,370,239		0	5,370,239	-621,994		0	0	6,050,472	680,233	0
FY 2019	5,370,239		0	5,370,239	-621,994		0	0	6,050,472	680,233	0
FY 2020	5,370,239		0	5,370,239	-621,994		0	0	6,050,472	680,233	0

Note 1: Values have been revised from previous submittals to match FY2008 Banking Memo and EOFY FIMS snapshots

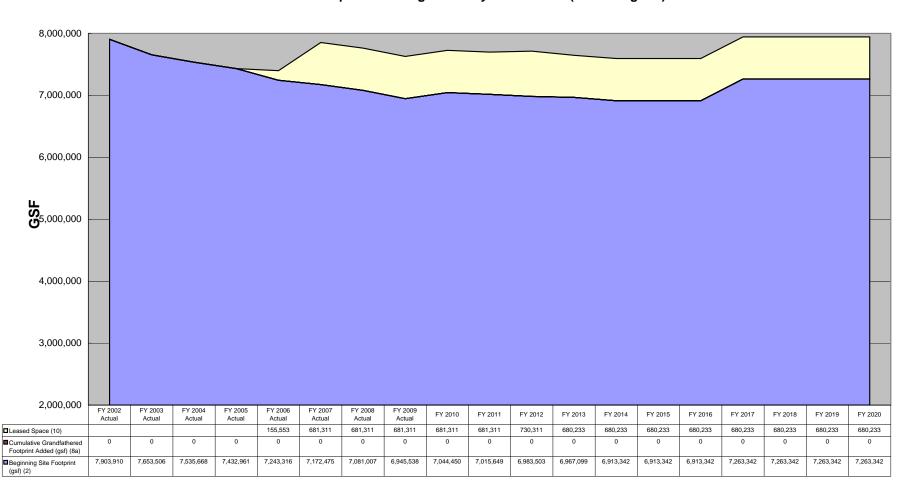
ATTACHMENT E-4(a) Y-12 National Security Complex Site Space Tracking Summary - NNSA



Attachment E-4 (b) FOOTPRINT SUMMARY SPREADSHEET

			Y-12 National Securit	y Complex Footprint	Fracking Summa	ry - SITE WIDE (Mul	ti-Program)			
Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction Footprint Added (gsf) (4)	Site Footprint Reduction by FY (5)	Footprint "Banked" (gsf) (6)	Waiver/ Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative Grandfathered Footprint Added (gsf) (8a)	Site Total Footprint (Multi-Program) (gsf) (9)	Leased Space (10)
FY 2002 Actual	7,903,910	-250,404	0	7,653,506	-250,404		0	0	7,653,506	
FY 2003 Actual	7,653,506	-117,838	0	7,535,668	-368,242	111,592	0	0	7,535,668	
FY 2004 Actual	7,535,668	-109,683	6,976	7,432,961	-470,949		0	0	7,432,961	
FY 2005 Actual	7,432,961	-207,830	18,185	7,243,316	-660,594		0	0	7,243,316	
FY 2006 Actual	7,243,316	-113,699	42,858	7,172,475	-731,435		0	0	7,172,475	155,553
FY 2007 Actual	7,172,475	-103,684	12,216	7,081,007	-822,903		0	0	7,081,007	681,311
FY 2008 Actual	7,081,007	-135,469	0	6,945,538	-958,372	-40,835	0	0	6,945,538	681,311
FY 2009 Actual	6,945,538	-11,759	110,671	7,044,450	-859,460		0	0	7,044,450	681,311
FY 2010	7,044,450	-51,889	23,088	7,015,649	-888,261		0	0	7,015,649	681,311
FY 2011	7,015,649	-32,146	0	6,983,503	-920,407		0	0	6,983,503	681,311
FY 2012	6,983,503	-16,404	0	6,967,099	-936,811		0	0	6,967,099	730,311
FY 2013	6,967,099	-53,757	0	6,913,342	-990,568		0	0	6,913,342	680,233
FY 2014	6,913,342		0	6,913,342	-990,568		0	0	6,913,342	680,233
FY 2015	6,913,342		0	6,913,342	-990,568		0	0	6,913,342	680,233
FY 2016	6,913,342		350,000	7,263,342	-640,568		0	0	7,263,342	680,233
FY 2017	7,263,342		0	7,263,342	-640,568		0	0	7,263,342	680,233
FY 2018	7,263,342		0	7,263,342	-640,568	_	0	0	7,263,342	680,233
FY 2019	7,263,342		0	7,263,342	-640,568	_	0	0	7,263,342	680,233
FY 2020	7,263,342		0	7,263,342	-640,568	·	0	0	7,263,342	680,233

ATTACHMENT E-4(b)
Y-12 National Security Complex
Site Wide Footprint Tracking Summary - SITE WIDE (Multi-Program)



Attachment F-1 FIRP Legacy (FY03 and FY04) Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline NNSA (\$000s)

Category of Maintenance	Legacy (FY03 & FY04)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
FIRP LEGACY DEFERRED MAINTENANCE (DM) BASELINE (FY03 & FY04) (Excludes Programmatic Real Property or Equipment)	568,300	408,084	352,238	313,640	282,944	251,906	227,421	215,027	205,424	194,328	184,428	178,428	172,428	166,428	160,428	154,428	148,428	142,428
2. LEGACY DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL		160,216	55,846	38,598	30,696	31,038	24,485	12,394	9,603	11,096	9,900	6,000	6,000	6,000	6,000	6,000	6,000	6,000
A. Reduction in Legacy DM Baseline (total due to FIRP ONLY) for all F&I		21,770	46,270	23,247	23,306	19,330	6,927	6,217	3,603	5,096	3,900							
Reduction in Legacy DM for Mission- Critical F&I (due to FIRP ONLY)				7,043	4,157		2,842	-										
ii. Reduction in Legacy DM for Mission Dependent, Not Critical F&I (due to FIRP ONLY)				10,735	16,558	16,605	4,085	3,689	3,603	5,096	3,900							
iii. Reduction in Legacy DM for Not Mission <u>Dependent F&I</u> (due to FIRP ONLY)				5,469	2,591	2,724	-	2,528	-		-							

Attachment F-2 NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction (\$000s)

Category of Maintenance	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
1. ANNUAL REQUIRED MAINTENANCE for F&I	31,493	111,408	70,088	72,046	79,556	138,325	99,870	78,067	79,863	81,699	83,578	85,501	87,467	89,479	91,537	93,642	95,796	97,999
2. ANNUAL PLANNED MAINTENANCE <u>TOTAL</u>	30.780	48.202	60,865	52.449	35.835	45.321	44.062	45.316	45.316	45.316	45.316	45.316	45.316	45.316	45.316	45.316	45.316	45,316
a. Direct	18,605	19,935	21,542	22,976	35,835	21.368	21,514	21,363	21,363	21,363	21,363	21,363	21,363	21,363	21,363	21.363	21,363	21,363
b. Indirect	12.175	28.267	39.323	29.473	33,033	23,953	22,548	23.953	23,953	23,953	23.953	23,953	23,953	23,953	23,953	23.953	23,953	23,953
3. DEFERRED MAINTENANCE (DM) TOTAL	,		33,333	,			==,0 :0											
3. DEFERRED MAINTERMANCE (DM) ICIAL ([Excludes Programmatic Real Property or Equipment) = Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	568,300	450,579	418,803	427,745	437,103	414,457	405,069	403,814	403,095	399,867	397,764	399,515	401,304	403,133	405,002	406,912	408,864	410,859
i. Backlog Inflation Rate (%)					2.3%	2.3%	2.3%	2.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
ii. DM Inflation								9,317	8,884	8,868	8,797	8,751	8,789	8,829	8,869	8,910	8,952	8,995
iii. DM NEW	/	10,000	18,006	13,059	31,653	6,735	10,000	8,000	6,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
A. DM, Mission-Critical F&I ONLY	/_			121,528	135,047	131,427	129,635	89,068	90,010	90,444	90,843	91,218	91,613	92,027	92,462	92,917	93,393	93,890
B. DM, Mission-Dependent, Not Critical F&I ONLY	/			182,041	220,882	215,344	204,790	186,416	182,034	175,905	170,955	169,892	168,840	167,797	166,764	165,742	164,730	163,728
C. DM, Not Mission-Dependent F&I ONLY				124,177	81,174	67,686	70,643	128,329	131,050	133,517	135,966	138,404	140,851	143,308	145,776	148,253	150,741	153,240
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL				31,845	44,149	42,746	19,004	18,572	15,603	17,096	15,900	12,000	12,000	12,000	12,000	12,000	12,000	12,000
i. Reduction Total attributed to FIRP ONLY				23,247	23,306	19,330	6,927	6,217	3,603	5,096	3,900							
A. Reduction in DM for Mission-Critical F&I	/_			12,830	6,591	3,907	9,376	49,225	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
Reduction attributed to FIRP ONLY				7,043	4,157	-	2,842	-	-	-	-							
B. Reduction in DM for Mission-Dependent, Not Critical F&I				10,735	27,225	34,115	8,524	22,703	8,103	9,596	8,400	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Reduction attributed to FIRP ONLY				10,735	16,558	16,605	4,085	3,689	3,603	5,096	3,900							
C. Reduction in DM for Not Mission-Dependent F&I				8,280	10,333	4,724	1,104	(53,357)	1,000	1,000	1,000	1,000	1,000	1.000	1,000	1.000	1.000	1,000
Reduction attributed to FIRP ONLY				5,469	2,591	2,724	-	2,528	-	-								
5. REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&I)																		
= Inflation of PY RPV + Increase or Decrease due to other causes	4,606,871	4,706,336	4,914,176	5,259,332	5,978,742	6,644,749	7,552,200	8,040,124	8,198,381	8,373,128	8,542,846	8,730,789	8,922,866	10,319,169	10,546,191	10,778,207	11,015,328	11,257,665
A. RPV for Mission-Critical F&I ONLY				2,218,162	2,702,351	2,746,691	3,335,200	2,870,591	2,933,744	2,998,287	3,064,249	3,131,662	3,200,559	4,470,971	4,569,333	4,669,858	4,772,595	4,877,592
B. RPV for Mission-Dependent, Not Critical F&I C. RPV for Not Mission-Dependent F&I				1,815,567	2,369,288 907,103	2,547,376 1,368,618	2,787,822 1,460,852	2,700,706	2,760,122	2,820,844	2,882,903	2,946,327 2,688,150	3,011,146 2,747,289	3,077,391 2,807,729	3,145,094 2,869,499	3,214,286 2,932,628	3,285,000 2,997,146	3,357,270
D. RPV Increase from prior year attributed to inflation				85.386	478.599	137.511	152.829	173,701	176,883	180,364	184,209	187,943	192,077	196.303	227,022	232,016	237,121	242,337
RPV Increase / decrease attributed to causes other than inflation (provide separate supporting narrative behind F-2 exhibit)				259,770	240,811	528,496	754,622	314,224	(18,626)	(5,618)	(14,490)	,510	,	1,200,000	-			,501
					= 1.1			=14.004	=									
Facility Condition Index (FCI) FCI TOTAL	FY 2003 (Baseline) 12.3%	FY 2004 (Actual) 9.6%	FY 2005 (Actual) 8.5%	FY 2006 (Actual) 8.1%	FY 2007 (Actual) 7.3%	FY 2008 (Actual) 6.2%	FY 2009 (Actual) 5.4%	FY 2010 5.0%	FY 2011 4.9%	FY 2012 4.8%	FY 2013 4.7%	FY 2014 4.6%	FY 2015 4.5%	FY 2016 3.9%	FY 2017 3.8%	FY 2018 3.8%	FY 2019 3.7%	FY 2020 3.6%
FCI Mission Critica FCI Mission Dependent, Not Critical				5.5% 10.0%	5.0% 9.3%	4.8% 8.5%	3.9% 7.3%	3.1% 6.9%	3.1% 6.6%	3.0% 6.2%	3.0% 5.9%	2.9% 5.8%	2.9% 5.6%	2.1% 5.5%	2.0% 5.3%	2.0% 5.2%	2.0% 5.0%	1.9%
FCI Not Mission Dependent Asset Condition Index (ACI)	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	9.6% FY 2006 (Actual)	8.9% FY 2007 (Actual)	4.9% FY 2008 (Actual)	4.8% FY 2009 (Actual)	5.1% FY 2010	5.2% FY 2011	5.2% FY 2012	5.2% FY 2013	5.1% FY 2014	5.1% FY 2015	5.1% FY 2016	5.1% FY 2017	5.1% FY 2018	5.0% FY 2019	5.0% FY 2020
ACI TOTAL ACI Mission Critica	0.88	0.90	0.91	0.92 0.95	0.93 0.95	0.94 0.95	0.95 0.96	0.95 0.97	0.95 0.97	0.95 0.97	0.95 0.97	0.95 0.97	0.96 0.97	0.96 0.98	0.96 0.98	0.96 0.98	0.96 0.98	0.96
ACI Mission Dependent, Not Critical ACI Not Mission Dependent				0.90 0.90	0.91 0.91	0.92 0.95	0.93 0.95	0.93 0.95	0.93 0.95	0.94 0.95	0.94 0.95	0.94 0.95	0.94 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	