1. Component	FY 2015 NAVY RDT&E CONSTRUCTION PROGRAM	2. Date
NAVY		04 MAR 2014

3. Installation(SA) and Location/UIC: N47609	4. Project Title
NAWS CHINA LAKE CHINA LAKE, CALIFORNIA	SSBN Replacement Launch Test Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0603595N	39012	P3237	36,470

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
SSBN REPLACEMENT LAUNCH TEST COMPLEX (16,404SF)	m2	1,524		14,510
LAUNCH TEST STAND ENCLOSURE CC39012 (1,615SF)	m2	150	34,104.73	(5,120)
OPERATIONAL SUPPORT BUILDING CC31210 (6,092SF)	m2	566	4,731.62	(2,680)
EARTH BASED ARRESTMENT STRUCTURE CC39012 (8,697SF)	m2	808	6,904.62	(5,580)
SPECIAL COSTS	LS			(920)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(210)
SUPPORTING FACILITIES				18,580
SPECIAL CONSTRUCTION FEATURES	LS			(2,520)
SITE PREPARATIONS	LS			(1,360)
SPECIAL FOUNDATION FEATURES	LS			(5,490)
PAVING AND SITE IMPROVEMENTS	LS			(2,880)
ELECTRICAL UTILITIES	LS			(3,690)
MECHANICAL UTILITIES	LS			(2,640)
SUBTOTAL				33,090
CONTINGENCY (5%)				1,650
TOTAL CONTRACT COST				34,740
SIOH (5.7%)				1,980
SUBTOTAL				36,720
TOTAL REQUEST ROUNDED				36,720
TOTAL REQUEST				36,470
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(49,718)

10. Description of Proposed Construction:

The Launch Test Stand Enclosure (LTSE) will be a high-rise, metal framed, tower-like structure, consisting of metal panel walls, a detachable roof structure, and special foundations. The LTSE will provide a controlled environment for the Launch Test Stand (LTS).

The Operational Support Building (OSB) will provide a controlled environment for the launch control area, Low Fidelity Test Vehicle (LFTV) maintenance, Instrumentation Shop, Communication area and restroom facilities.

The Earth Based Arrestment (EBA) structure will consist of subsurface retaining walls

forming a pit that is approximately 145 feet long, 60 feet wide and 43 feet deep. It will be filled with arresting media to cushion the test vehicle as it lands after test launch.

Special costs include post construction award services. Environmental mitigation includes Desert Tortoise fence and bio-monitoring during construction.

Operations and Maintenance Support Information (OMSI) is included in this project.

Special construction features include fire protection storage tanks, fire pump system and pump house, davit crane, rigging storage building, EBA shield and cover, and Launch Test Vehicle (LTV) stand.

Site Preparation includes clearing and grubbing, excavation and grading, and removal of existing pavement.

Special foundation features include concrete piles, each approximately 80 feet long, which support the launch test stand in the enclosure. The foundation must be capable of supporting the dead and live loads of a 65-ton Trident II (D5) test vehicle during the test launches. The earth-based arresting enclosure (box) will have concrete walls and a soil-cement floor capable of supporting the impact of the test vehicle as it lands in the arresting box after test launch.

Pavement and site improvements include vehicle and crane path, vehicle parking area for approximately 18 vehicles, sidewalk, compacted roads, trash enclosures, satellite hazardous waste accumulation area, LTSE Removable Roof ground support, EBA cover ground support, stormwater drainage, bioswales, and miscellaneous equipment pads.

Electrical utilities include extending the existing overhead power electrical distribution system, transformer, exterior lighting, telephone, fiber optic systems, and Control and Data Acquisition System (CDAS) test equipment infrastructure.

Mechanical utilities include Heating, Ventilation, and Air Conditioning (HVAC) systems for OSB and LTSE, domestic water lines, fire water lines, fire hydrants, underground backflow preventer and meter and water pump house, sanitary sewer lines, sanitary sewer leach field, dosing tank, septic tank, washdown system, washdown system piping, and mechanical yard to house HVAC equipment.

11. Requirement: **Adequate:** **Substandard:**

PROJECT:

Project constructs a new Launch Test Complex (LTC) which will be government owned and contractor operated to support dry launch testing and evaluation of full-scale launch technologies. The project construction will be authorized by 10 U.S.C. Section 2353,

8. Project Cost ($000)

funded from Research, Development, Test, and Evaluation (RDT&E) appropriations, and will have no general utility and utilized solely to meet RDT&E contractual requirements. The facility is being procured by the Government and provided for contractor use in fulfillment of their planned contract obligations.

(New Mission)

REQUIREMENT:

This project enables full-scale testing of a new Trident missile launcher system to demonstrate hardware qualifications, collect launch event information, and to demonstrate performance of the launcher system. This project provides adequate test facilities to conduct qualification testing of full-scale launcher hardware. The project will provide performance and safety data to mitigate the risk of a tactical failure in the fleet.

This project requires construction starting in fiscal year 2015, with equipment outfitting in 2016 and launch testing in 2017.

CURRENT SITUATION:

Currently, there is no capability that exists to support the LTC requirements. The previous full-scale LTV launching and handling facility of this type was the Hunters Point Surface Launch Test Complex (HPSLTC) located at the Hunters Point Naval Shipyard (HPNSY). HPNSY was closed in 1991 by the Base Realignment and Closure (BRAC) Commission.

IMPACT IF NOT PROVIDED:

Failure to provide LTC will result in a delay to the qualification and performance testing of the launch system, which, in turn, would cause a delay in delivery of qualified launcher equipment for the SSBN Replacement.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:	
(A) Date design or Parametric Cost Estimate started	01/2012
(B) Date 35% Design or Parametric Cost Estimate complete	05/2012
(C) Date design completed	02/2014
(D) Percent completed as of September 2013	35%
(E) Percent completed as of January 2014	65%
(F) Type of design contract	Design Bid Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes
2. Basis:	
(A) Standard or Definitive Design	No
(B) Where design was previously used	N/A
3. Total cost (C) = (A) + (B) = (D) + (E):	
(A) Production of plans and specifications	$1,600
(B) All other design costs	$500
(C) Total	$2,100

1. Component	FY 2015 NAVY RDT&E CONSTRUCTION PROGRAM	2. Date
NAVY		04 MAR 2014

3. Installation(SA) and Location/UIC: N47609	4. Project Title
NAWS CHINA LAKE CHINA LAKE, CALIFORNIA	SSBN Replacement Launch Test Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0603595N	39012	P3237	36,470

(D) Contract $2,050
(E) In-house $50
4. Contract award: 11/2014
5. Construction start: 12/2014
6. Construction complete: 03/2016

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost($000)
Arrestment Media	RDT&E	2015	3,043
Control and Data Acquisition System	RDT&E	2015	4,700
Crawler Crane	RDT&E	2015	6,000
Cross Flow Simulator	RDT&E	2015	1,500
Earth-Based Arrestment Groomer	RDT&E	2015	400
Furniture Furnishings & Equipment	RDT&E	2015	25
Gantry Crane (10 Ton)	RDT&E	2015	125
Gas Generators	RDT&E	2016	15,040
Launcher Test Stand & Support Equipment	RDT&E	2015	8,500
Low Fidelity Test Vehicle & Support Equipment	RDT&E	2015	10,000
Magazine	RDT&E	2015	225
Manlift, Davit and Three Jib Cranes	RDT&E	2015	160

JOINT USE CERTIFICATION:

The Regional Commander certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This construction will have sole use for the RDT&E contract requirements supporting the SSBN Replacement Launcher qualification.

Activity POC: Project Development Lead Phone No: 760 939 4631