

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan			4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	
9. COST ESTIMATES				
Item	UM	Quantities	Unit Cost	Total Cost
Site Preparation				\$40,639,210
Paving and Site Improvements				\$31,479,309
AT/FP				\$7,816,964
Electrical Utilities				\$32,206,661
Mechanical Utilities				\$21,979,100
Environmental Mitigations				\$16,310,000
Demolition				\$297,152
Special Costs				\$7,840,288
Guam Gross Receipts Tax	ea	4.16%	\$145,893,528	\$6,270,301
Post Construction Award Services (PCAS)	ea	1.00%	\$151,962,699	\$1,569,987
Contingency				\$7,928,434
Contingency	ea	5.00%	\$153,482,326	\$7,928,434
Other Costs				\$10,322,821
SIOH	ea	6.20%	\$161,156,442	\$10,322,821
Total Request				\$176,819,939

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

Guidance Cost Analysis

Code – Category	U/M	Guidance Cost	Guidance Size	Project Scope	Size Factor	Area Factor	Unit Cost	Cost
842-10 Water Distribution Line, Potable	M	312.00	1	8,185	1	2.32	723.84	983.69
850 Roads and Streets	M2	56.20	1	34,012	1	2.32	130.38	276.74
852 Sidewalks and Other Pavements	M2	69.37	1	10,879	1	2.32	160.95	85.43

ANALYSIS STATEMENT

The estimate was prepared under guidance of MCON/MCNR Project Cost Development and Review Guidelines dated 7 October 2013. Wherever possible, historical unit costs from recent projects on Guam were used. Water distribution unit costs have been based on FY12 MCON P-2048 Finegayan Water Utilities project. Storm drainage and road and street unit costs have been based on bid analysis of the Route 8-10-16 Tri-Intersection Improvements project. Unit costs of electrical power transmission, distribution, and major substation equipment were obtained directly from US vendors. Reference has also been made to the costs provided by the Guam Power Authority (GPA) in the Line load analysis (power flow runs) performed in March 2013, R.S. Means Electrical Cost Data, the Andersen Air Force Base (AAFB) North Ramp Parking P/C-01 cost estimate dated 22 July 2008, the Port of Long Beach Shore to Ship Power cost estimate dated 22 August 2011. For consistency, reference has also been made to unit costs from the Municipal Solid Waste Landfill Closure 1391 and the Government of Japan FY 2010 J-017 Finegayan U&SI cost estimate Guam shipping costs based on U.S. carriers. Where historical unit costs or other guidance were not available, unit costs were derived from reference to FY13 Tri-Service Supporting Facility Unit Cost Database and the 2013 PAX Newsletter 3.2.2 dated 2 May 2013, and adjusted using an area cost factor of 2.32. Unit costs have been normalized to October 2013, and escalated to the midpoint of construction of October 2018 using NAVFAC Building Cost Index revised 10 October 2013 to comply with UFC 3-701-01. Gross Receipts Tax has been included as a line item under Special Costs, and is not included in the unit rates.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Site Preparation

Clearing and Grubbing: The U&SI Phase II area covers approximately 635,000 square meters (64 hectares) of land requiring clearing and grubbing including removal of vegetation, stripping limestone rock, and removal and stockpiling of reusable topsoil. This site work preparation will occur prior to mass grading the site. Prior to any clearing, grubbing, or other land disturbance, the appropriate temporary erosion control measures shall be installed in accordance to Guam regulations, further described in the erosion control section of this document.

Grading and Earthwork: The U&SI Phase II includes major earth moving (mass grading) and limited fine grading along the roadway corridors and drainage systems. The grading activity will include the excavation of five permanent drainage detention ponds, and drainage conveyance swales along constructed roadways, as shown on the provided figure (see attached subbasin and secondary drainage routing). The cut and fill quantities associated with this mass grading effort assume a rough building pad for future vertical construction, which anticipates import of structural fill. The cut and fill quantities also assume a 0.6-meter deep typical road pavement section including compacted base and pavement surfacing. Existing surface grades (based on LIDAR topography) at tie in points along the Phase II boundary and along existing communication lines and wellheads are preserved to ensure the plan is implementable.

The cut and fill quantities are based on the assumption that native material excavated on site is suitable for reuse on site as fill material. If soil testing and/or geotechnical recommendations indicate otherwise, additional costs and changes in grading may be decreased. Likewise, with the completion of a topographic survey, the cut and fill quantities may vary.

Green Waste Facility: Green waste processing and construction recycling would be accomplished by the contractor on site during the construction of U&SI Phase II contract. The green waste (constructed in U&SI Phase I) site will be located in the northeast corner of the Main Cantonment by the construction gate. The processed green waste would be utilized as needed or stockpiled for future beneficial use on site as mulch and or a top soil additive to reduce quantity of soil importation.

Erosion Control: The U&SI Phase II will include all construction activity Best Management Practices (BMPs) required to stabilize disturbed ground and stockpiled material to prevent erosion and transportation of material from the site causing adverse downstream impacts. Extra care shall be taken for earth moving activities during the rainy season.

To protect the waters of Guam and the health and welfare of the public, the Guam Environmental Protection Agency (GEPA) established a set of regulations under the authority of Guam's Water

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <p>Pollution Control Act. The Act serves to regulate grading, clearing, grubbing, and stockpiling activities and sets minimum standards for erosion and sedimentation control.</p> <p>During design and construction, this project will adhere to the requirements set forth in the GEPA regulations which include but are not limited to completing the initial permit application process, as applicable, submitting a sediment and erosion control plan, and submitting final as-built surveys and soils and conformity documentation at a minimum. Attention during design and construction will be given to the Section (§)10106 Special Requirements, which contains guidance regarding sinkholes and safety precautions for earth-moving activities that involve sinkholes. Special attention should also be given to work within the existing wellhead protection zones and karst areas with potential Northern Guam Lens Aquifer influence.</p> <p>Paving and Site Improvements</p> <p><i>Roads and Streets:</i> As currently proposed, the following four roadway types would be used in U&SI Phase II within the main cantonment and on-base roadways:</p> <ul style="list-style-type: none"> • Arterial • Perimeter Patrol • Collector Undivided • Local Non-Residential <p>Proposed roadway cross sections, which include required stormwater drainage, and low-impact development (LID) features and requirements, are shown in the attached sketches. Dimensions shown in these figures are the “ideal” dimensions for each facility. Constructed roadway dimensions may vary based on the available right-of-way and drainage requirements.</p> <p><i>Sidewalks:</i> The standard sidewalk width will be 3 meters wide and will typically be installed on both sides of the street throughout the main cantonment. As seen on the graphics, because of available land and drainage requirements, sidewalks may be reduced to 2 meters wide where little pedestrian traffic is anticipated and be located on only one side of the street. See attached roadway sketches for sidewalk details.</p> <p><i>Curbs and Gutters:</i> Most roads anticipated as part of the U&SI Phase II will utilize a rural road section without curb and gutter. The collector undivided and arterial road at the main gate will have sidewalks.</p> <p><i>Traffic Signs:</i> There will be approximately 61 road signs through the U&SI Phase II area.</p> <p><i>Perimeter Fence:</i> The perimeter fence for the main cantonment will be installed along Route 3A northwest from construction fence to cliff line. A 4.6-meter-wide gravel perimeter road will be</p>			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <p>constructed on the inside of the fence line and a 6-meter clear zone will be provided on the outside of the fence line. Conduit for closed circuit television will be provided.</p> <p><i>Storm Drainage:</i> The U&SI Phase II anticipates sheet flow of stormwater from each parcel/building pad into vegetated roadside drainage swales, which then conveys the stormwater via swale, concrete pipe culverts, and rip-rap protected and/or concrete lined swales to detention ponds for control of the stormwater runoff leaving the site.</p> <p>The detention ponds and stormwater conveyance systems are sized to handle the appropriate design storm runoff generated within specific drainage basins and sub-basins delineated based on the proposed CDP and the notional site grading plan. The ponds are primarily located along the perimeter of the main cantonment, downstream of where the flows are generated, prior to discharge offsite. Control structures will be located at each pond to regulate the rate of stormwater discharge from the site, which is not to exceed pre-development rates. The discharge flow will be restricted via an orifice control plate and will include high level overflow within the structure and an emergency spillway from the pond for critical flows.</p> <p>Stormwater quality will be provided within the vegetated swales and bio-retention features located along the roadways as part of U&SI Phase II. The use of lined ponds is also anticipated for detention basins located within wellhead protection zones. Since these ponds will lack the ability to infiltrate stormwater, additional measures will be required as part of the outfall control to ensure the ponds fully recover to maintain capacity for subsequent storm events and to ensure the pond bottoms do not become a maintenance issue. The application of low impact drainage (LID) best management practices (BMPs) to mitigate pollutant loading associated with each land use, will occur with vertical construction in subsequent phases.</p> <p>In order to protect natural water resources and comply with environmental regulations, the storm drainage system shall adhere to the following documents, at a minimum:</p> <ul style="list-style-type: none"> • <i>Guam Transportation Stormwater Drainage Manual</i>, August 2010. • Horsley Witten Group, Inc. 2006. <i>CNMI and Guam Stormwater Management Manual. Volumes I & II</i>. Final. October. • <i>Department of the Navy Low Impact Development Policy for Stormwater Management Memorandum</i> (2007). • <i>U.S. Naval Forces Marianas Stormwater Pollution Prevention Plan (SWPPP) Volume 6: Best Management Practices (BMPs) Manual</i> (2009). • <i>DoD Sustainable Design and Development Implementation Direction Memorandum</i> (2010a). • Unified Facilities Criteria (UFC): <i>3-210-10 LID</i> (DoD 2010b). • GEPA. 1997a. <i>Guam Administrative Rules (GAR), Title 22, Division II, Chapter 9: Underground Injection Control Regulations</i>. 			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <ul style="list-style-type: none"> • GEPA. 1997b. <i>Guam Administrative Rules (GAR), Title 22, Division II, Section 7130: Wellhead Protection for Public Water Supply Wells.</i> • GEPA. 1997c. <i>Guam Administrative Rules (GAR), Title 22, Division II, Chapter 1-: Guam Soil Erosion and Sediment Control Regulations.</i> • GEPA. 1997d. <i>Guam Administrative Rules (GAR), Title 22, Division IX, Chapter 45: Soil Erosion and Sedimentation Control.</i> <p><i>Landscaping and Site Improvements:</i> Landscaping will consist of seeding, mulching, sodding of swales, sodding of unlined pond side slopes, grassed medians, and parkway soft shoulders; preventing erosion and enhancing the overall drainage of the main cantonment area. Trees will be planted along roadways as appropriate. Aluminum handrails, bollards, and other will be installed at drainage features and existing wells for safety and protection.</p> <p>AT/FP</p> <p><i>Main Gate:</i> Facilities at the Main Gate consist of a covered Sentry Plaza with a 545-square meter canopy, a 19-square meter Sentry House (Overwatch Tower), and a 257-square meter Main Gate building with a 30-space parking lot.</p> <p><i>Commercial/Tactical Vehicle Gate:</i> Facilities at the Commercial/Tactical Vehicle Gate consist of a 20,500 meter commercial gate house at plaza, a 20-square meter Sentry House (Overwatch Tower), and a Vehicle Weigh Station Plaza with a 150-square meter canopy and a 3 square meter Vehicle Weigh Station House.</p> <p>Electrical Utilities</p> <p><i>Electrical Distribution, Primary:</i> Phase II will provide empty conduit systems within Phase II main cantonment areas. Looped main circuit cabling will be installed allowing the vertical facilities to connect to the electrical distribution system as the vertical facilities are constructed. A conduit stub out from the new substation is provided to facilitate future connections, at lower cost, when the existing 4.16 kV NCTS load will be transferred to the new main substation. Empty conduit stub outs from new substation will also be installed to provide future connections to 13.8 KV critical loads at NCTS and allow for future connections to South Finegayan family housing. These empty conduits will facilitate future tie in to the main substation at minimal cost since the stub outs will already be installed. This will also prevent having to trench the U&SI roads when the vertical facilities are constructed.</p> <p><i>Telecommunications Conduit & Cabling:</i> U&SI Phase II will provide an empty conduit system (no cables) for Phase II area for both the DoD and commercial systems. The cabling for the DoD intra-base IT/COMM system will be installed in Phase II in order to minimize splicing of the cables, with loop and stowing within manholes provided by U&SI Phase I and II for connecting to future</p>			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <p>vertical facilities. Any DoD cabling which terminates outside of the main cantonment will not be installed by this project, but rather by other projects which are connecting to off base locations. These off base projects will utilize the conduits installed in U&SI Phases I and II for this purpose. All ductbanks will be concrete encased for protection of the IT/COMM system. Approximately 15-meter long stub outs, consisting of two 10-cm diameter empty conduits, will extend from the closest manhole towards the various anticipated sites for vertical construction for future service connections.</p> <p>Six cable huts, approximately 16 square meters each, containing copper and fiber cross connect equipment will be fed with cables from the closest manhole of the main distribution ductbank. The cables would be spliced/patched to the terminal blocks of the cross connect and then leave the cable hut to feed nearby buildings. These six cable huts will be located throughout the main cantonment to facilitate IT/COMM distribution.</p> <p>Mechanical Utilities:</p> <p><i>Water Distribution:</i> This project will construct new distribution mains along planned roadways. To provide water connectivity to the existing Navy water system, a transmission main approximately 2,930 meters long will be installed from the water main near the commercial/tactical vehicle gate along the on-base security road just inside the security fence south along Route 3 and connect to the transmission main near the existing 757,082-liter NCTS Finegayan ground tank. A booster pump station or additional pumps in the existing NCTS structures will be needed to pump water north to supply the new 5.7-million liter ground tank during interim conditions and also to provide an emergency backup for the water supply should the source/transmission system from AAFB be taken off line for maintenance or other reasons. This connection to the transmission main will allow excess water from the current water wells at NCTS and the new wells at AAFB to be used for other DoD requirements. The existing distribution system in the NCTS Finegayan area is designated to service only the existing NCTS facilities. All of the existing NCTS water distribution system remains.</p> <p><i>Sanitary Sewer:</i> The U&SI Phase IIA sanitary sewer system will provide service to facilities at the main gate. The system will consist of 91 meters of sanitary sewer mains near the main gate of the main cantonment area (see attached sewer collection sketch – Phase IIA area), along with two manholes, one pump station, and 370 meters of force main. The U&SI Phase IIA sanitary sewer system will connect into the U&SI Phase I sanitary sewer system in the main cantonment area.</p> <p>The U&SI Phase IIB sewer system would consist of 2,630 meters of sanitary sewer mains along the west side of the main cantonment area (see attached sewer collection sketch – Phase IIB area), along with 35 manholes, one pump station and 670 meters of force main. This U&SI Phase IIB sanitary sewer system will connect into the U&SI Phase I sanitary sewer system and</p>			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)		2. Date 7Feb2014	REPORT CONTROL SYMBOL		
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment				
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820			
<p>(...continued)</p> <p>provide the backbone for the sanitary sewer requirements for future construction projects in the main cantonment area</p> <p>The Phase IIC area, is a drainage basin and does not require sanitary sewer lines.</p> <p>Environmental Mitigation:</p> <p><i>Cultural Mitigations:</i> There are three known cultural resource sites in U&SI Phase II footprint; and Section 106 consultation has determined all three are eligible for listing in the National Register of Historic Places since the three sites will be adversely impacted. These Section 106 consultations with the Guam State Historic Preservation Office (SHPO) resulted in the requirement for archaeological monitoring during mass grubbing and grading for the project. This is because data recovery does not always get 100% of a site and Guam SHPO has already indicated that they want monitoring in other Joint Guam Program Office project areas, even those areas subject to prior development. The Programmatic Agreement requires data recovery as mitigation for adversely affected cultural resources that are archaeological in nature. All three sites will require data recovery. Although actual data recovery cost depends on type, size, location and condition of individual sites, recent historic cost data allows for an estimate for data recovery of \$100K for each one.</p> <p><i>ESS Mitigations:</i> TBD</p> <p><i>Natural Resources Mitigations:</i> TBD</p>						
11. REQUIREMENT:						
Facilities Planning Data Table						
Cat Code	Requirements	UM	Adequate	Substandard	Inadequate	Deficiency/Surplus
812-1 Electrical Power Transmission and Distribution Lines	3,108	LM	0	0	0	3,108
832-10 Sanitary Sewer Line	3,761	LM	0	0	0	3,761
842-10 Water Distribution Line, Potable	8,185	LM	0	0	0	8,185

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)			2. Date 7Feb2014	REPORT CONTROL SYMBOL	
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan			4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment			
5. Program Element MCON	6. Category Code		7. Project Number J-017	8. Project Cost (\$000) \$176,820		
(...continued)						
Cat Code	Requirements	UM	Adequate	Substandard	Inadequate	Deficiency/Surplus
850 Roads and Streets	34,012	SM	0	0	0	34,012
852 Sidewalks and Other Pavements	10,879	SM	0	0	0	10,879
<p>SCOPE: U&SI Phase II is the second of two U&SI projects to construct the site improvements, roads, utility infrastructure (water, wastewater, electrical, and IT/COMM) necessary to allow construction of the facilities required for the Marine Corps relocation from Okinawa to Guam. U&SI Phase II is divided into three parts:</p> <ul style="list-style-type: none"> • Phase IIA includes construction of the main gate, main gate visitors center, commercial/tactical vehicle gate, and one transformer in the main electrical substation along with the respective infrastructure. • Phase IIB includes construction of the roads, streets, walks, and the respective infrastructure in the northwest portion of the main cantonment area. • Phase IIC includes the installation of a retention pond at the southwest corner of the main cantonment area. <p>Phase II is planned as a design/bid/build project.</p> <p>PROJECT: U&SI Phase II is a follow on to U&SI Phase I and these two U&SI projects will allow for the facilities construction to take place in order for the Marine Corps to be relocated from Okinawa to Guam.</p> <p>REQUIREMENT: In October 2005, as part of the Defense Policy Review Initiative (DPRI), the United States and Japan signed the <i>Alliance Transformation and Realignment Agreement (ATARA)</i>, which outlined an evolving security relationship between the two close allies. A follow-on document, the <i>United States-Japan Roadmap for Realignment Implementation</i> of May 2006 ("the Roadmap"), provided details on the implementation of the new agreement and established the parameters for the relocation of elements of the III Marine Expeditionary Force (MEF) from Okinawa, Japan to Guam. In April 2012, the U.S.–Japan Security Consultative Committee (SCC) issued a joint statement announcing its agreement to adjust the plan outlined in the 2006 Realignment Roadmap to reflect a new force posture in the Pacific, referred to as the Distributed Laydown. The adjustments included a reduced number of Marines (from approximately 8,600 to approximately 5,000) and dependents (from approximately 9,000 to approximately 1,300) to be relocated to Guam.</p>						

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <p>CURRENT SITUATION: There are no facilities on Guam that can be used to house the 5,000 Marines and their 1,300 dependents that must relocate from Okinawa to Guam. This U&SI project will construct the necessary infrastructure systems (site improvements, roads, utilities systems, storm drainage, and IT/COMM) to allow construction of the necessary the main cantonment facilities of the Marine Corps.</p> <p>IMPACT IF NOT PROVIDED: If this U&SI project is not provided, the main cantonment area for the Marine Corps cannot be constructed and the agreements made between the United States and Japan will not be reached.</p> <p>ADDITIONAL: Economic Alternatives Considered</p> <p>A. <i>Status Quo:</i> With status quo, the Marines would have remained on Okinawa and the United States would not be able to keep its agreement with the Government of Japan under the signed 2005 <i>Alliance Transformation and Realignment Agreement (ATARA)</i> and the signed 2006 <i>United States-Japan Roadmap for Realignment Implementation</i>.</p> <p>B. <i>Renovation and Modernization:</i> There are no facilities on Guam that can be renovated or modernized to accommodate the 5,000 Marines and their 1,300 dependents.</p> <p>C. <i>New Construction:</i> This U&SI project must be undertaken to allow the necessary facilities to be constructed to house the 5,000 Marines and their 1,300 dependents that are relocating from Okinawa to Guam.</p> <p>D. <i>Other Alternatives:</i> There are no other alternatives on Guam that will house the 5,000 Marines and their dependents that will meet the agreement requirements signed by the United States with Japan.</p> <p>E. <i>Analysis Results:</i> Construction of this U&SI project is the only viable alternative that will allow for the future construction of the Marine Corps main cantonment area.</p>			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
(...continued)			
A. Estimated Design Data:			
1. Status:			
(a) Date Design Started: October 2016			
(b) Parametric Cost Estimate Used to Develop Costs			
(c) Percent Complete: N/A			
(d) Date 35 Percent Complete: April 2017			
(e) Date Design Complete: January 2018			
(f) Type of Design Contract: Design/Bid/Build			
2. Basis:			
(a) Standard or Definitive Design: Definitive, this is a U&SI project			
(b) Date Design was Most Recently Used: \$9.8 M			
3. Total Cost (c) = (a) + (b) or (d) + (e)			
(a) Production of Plans and Specifications: N/A			
(b) All other Design Costs: N/A			
(c) Total: N/A			
(d) Contract: N/A			
(e) In-house: N/A			
4. Contract Award: June 2017			
5. Construction Start: October 2017			
6. Construction Complete: January 2021			
B. Equipment associated with this project which will be provided from other appropriations: N/A			
Fiscal Year			
Equipment	Procuring	Appropriated	Cost
Nomenclature	Appropriation	Or Requested	(\$000)
Furnishings/Equipment	O&M	xxxx	0000

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL																								
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment																									
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820																								
(...continued)																											
Active Network Hardware for Local Area Network and Voice over IP Phone Systems (Passive cable plant installation priced and included as part of construction)		O&M	xxxx 0000																								
12. SUPPLEMENTAL DATA:																											
Site Approval:																											
<input type="checkbox"/> Yes, obtained date: <input checked="" type="checkbox"/> No, expected approval date: Approval date, 15 March 2015, will occur when Record of Decision (ROD) is signed approving Finegayan as the site for the Marine Corps main cantonment.																											
Issues (If yes, please provide discussion under issue):																											
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 10%;">Yes</th> <th style="text-align: left; width: 10%;">No</th> <th style="width: 80%;"></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>DDESB, AICUZ, Airfield, EMR, or wetlands.</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Endangered species/sensitive habitat</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Air quality Dust and erosion control will be in accordance with the Guam Soil Erosion and Sediment Control regulations</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Cultural/archaeological resources</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Clearing of trees</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Known contamination at selected site/hazardous materials</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Operational problems</td> </tr> </tbody> </table>				Yes	No		<input type="checkbox"/>	<input checked="" type="checkbox"/>	DDESB, AICUZ, Airfield, EMR, or wetlands.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Endangered species/sensitive habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Air quality Dust and erosion control will be in accordance with the Guam Soil Erosion and Sediment Control regulations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cultural/archaeological resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Clearing of trees	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Known contamination at selected site/hazardous materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operational problems
Yes	No																										
<input type="checkbox"/>	<input checked="" type="checkbox"/>	DDESB, AICUZ, Airfield, EMR, or wetlands.																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Endangered species/sensitive habitat																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Air quality Dust and erosion control will be in accordance with the Guam Soil Erosion and Sediment Control regulations																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cultural/archaeological resources																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Clearing of trees																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Known contamination at selected site/hazardous materials																									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Operational problems																									

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
(...continued)			
<input type="checkbox"/> () <input checked="" type="checkbox"/> (X)		Traffic Patterns Impact: New on-base roads will be constructed and existing on-base roads will be altered.	
<input type="checkbox"/> () <input checked="" type="checkbox"/> (X)		Existing Utilities Upgrade: There are no existing utilities systems for the main cantonment area, and new utilities systems will have to be constructed.	
<input type="checkbox"/> () <input checked="" type="checkbox"/> (X)		Other: Project will include a stormwater management / erosion control system	
<p>Planning: (If no, please provide an explanation):</p> <p>Yes No</p> <p><input checked="" type="checkbox"/> (X) <input type="checkbox"/> () Consistent with Master Plan or Base/Regional Dev.</p> <p>Host Nation Approval: NA Guam is a territory of the United States</p> <p>National Capital Region Approval: NA</p> <p>NEPA Documentation: Supplemental Environmental Impact Statement is scheduled to be completed March 2015</p> <p>Yes No</p> <p><input checked="" type="checkbox"/> (X) <input type="checkbox"/> ()</p> <p>Level of NEPA:</p> <p>Yes No</p> <p><input type="checkbox"/> () <input checked="" type="checkbox"/> (X) Categorical Exclusion.</p> <p><input type="checkbox"/> () <input checked="" type="checkbox"/> (X) Environmental Assessment (EA)</p> <p><input checked="" type="checkbox"/> (X) <input type="checkbox"/> () Environmental Impact Statement (EIS)</p> <p>Mitigation Issues:</p> <p>Yes No</p> <p><input type="checkbox"/> () <input checked="" type="checkbox"/> (X) Wetlands replacement/enhancement</p> <p><input type="checkbox"/> () <input checked="" type="checkbox"/> (X) Hazardous</p>			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
(...continued)			
<input type="checkbox"/> <input checked="" type="checkbox"/> Contaminated soil/water Project will include stormwater management / erosion control system			
Environmental Cleanup: <input type="checkbox"/> Required Start Date: Completion Date: <input checked="" type="checkbox"/> Not Required			
Project Issues Yes N o			
<input type="checkbox"/> <input checked="" type="checkbox"/> Systems safety			
<input checked="" type="checkbox"/> <input type="checkbox"/> Soils – foundation and seismic conditions see attached			
<input type="checkbox"/> <input checked="" type="checkbox"/> Construction/operational permits, DZSP permits required			
<input type="checkbox"/> <input checked="" type="checkbox"/> Local air quality/wastewater permits			
<input type="checkbox"/> <input checked="" type="checkbox"/> Complies with Final Governing Standard (Environmental Standards for Spain, Italy and Greece) NA			
<input type="checkbox"/> <input checked="" type="checkbox"/> Land Acquisition (i.e., location, quantity)			
<input type="checkbox"/> <input checked="" type="checkbox"/> Technical Operating Manuals			
<input type="checkbox"/> <input checked="" type="checkbox"/> Feasibility/Constructability in FY			
<input type="checkbox"/> <input checked="" type="checkbox"/> Historical Preservation			
<input type="checkbox"/> <input checked="" type="checkbox"/> Equipment delivery/outfitting time table			
<input type="checkbox"/> <input checked="" type="checkbox"/> Does the facility have an overhead crane requirement?			
<input type="checkbox"/> <input checked="" type="checkbox"/> Navy Crane Center contacted to assist with development of crane estimate (lifting capacity < 10-tons)?			
<input type="checkbox"/> <input checked="" type="checkbox"/> Navy Crane Center contacted to coordinate procurement and timelines (lifting capacity >=10-tons)?			
<input checked="" type="checkbox"/> <input type="checkbox"/> Physical Security			
<input type="checkbox"/> <input type="checkbox"/> Shielding			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
(...continued)			
<input type="checkbox"/> SCIF <input checked="" type="checkbox"/> Fencing and security gates occur around perimeter of the site <input type="checkbox"/> IDS <input type="checkbox"/> Other Type:			
Budget Estimate Summary Sheet: See attachment.			
Built-In Equipment: N/A			
A. Estimated Design Data:			
1. Estimated Design Data:			
<input type="checkbox"/> Date Design Start (PCE Authorized)			
<input type="checkbox"/> Date 35% Design or Parametric Cost Estimate Completed			
<input type="checkbox"/> Date Design Completed			
<input type="checkbox"/> Percent Completed as of			
<input type="checkbox"/> Percent Completed as of			
<input type="checkbox"/> Type of Design Contract			
<input type="checkbox"/> Parametric Estimate used to develop cost			
<input type="checkbox"/> Energy Study/Life-Cycle Analysis Performed			
2. Basis:			
<input type="checkbox"/> A) Standard of Definitive Design			
<input type="checkbox"/> B) Where design was previously used			
3. Total Cost (C) = (A) + (B) or (D) + (E)			
<input type="checkbox"/> A) Production of Plans and Specifications			
<input type="checkbox"/> B) All other Design Costs			
<input type="checkbox"/> C) Total			
<input type="checkbox"/> D) Contract			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)		2. Date 7Feb2014	REPORT CONTROL SYMBOL		
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment				
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820			
(...continued)						
(E) In-House						
4. Construction Award:						
5. Construction Start:						
6. Construction Complete:						
B. Equipment associated with this project which will be provided from other appropriations: N/A						
Major Equipment	Funding Source	Funding Year	Installation Start-End Mo/Yr	Shakedown Start/End Mo/Yr	IOC Date Mo/Yr	Cost (000)
Electronic Security Equipment (ESS)						
Furniture/Furnishings						
NMCI Support						
Telecommunications Equipment						
Building Equipment (OFCL)						
Activity POC: Mr. Morris Ishida, NAVFAC-PAC, AM22, Phone No.: 808-472-1503						
JOINT USE CERTIFICATION:						
Attachments:						
(X)	1.	Budget Estimate Summary Sheet				
()	2.	Economic Analysis				
(X)	3.	Site Plan				

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
<p>(...continued)</p> <p>() 4. Facility Planning Documents/P-80 Calculations</p> <p>() 5. Collateral Equipment List</p> <p>() 6. AT/FP Facility Assessment</p> <p>() 7. MILCON Checklist</p> <p>() 8. LEED Checklist</p> <p>() 9. Site Approval</p> <p>(X) 10. Other: Sketches</p>			

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	
Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED				
Item	UM	Quantities	Unit Cost	Total Cost
SITE PREPARATION				\$40,639,210
PAVING AND SITE IMPROVEMENTS				\$31,479,309
AT/FP				\$7,816,964
ELECTRICAL UTILITIES				\$32,206,661
MECHANICAL UTILITIES				\$21,979,100
ENVIRONMENTAL MITIGATIONS				\$16,310,000
DEMOLITION				\$297,152
SPECIAL COSTS				\$7,840,288
Guam Gross Receipts Tax	ea	4.16%	\$150,728,396	\$6,270,301
Post Construction Award Services (PCAS)	ea	1.00%	\$156,998,697	\$1,569,987
CONTINGENCY				\$7,928,434
Contingency	ea	5.00%	\$158,568,684	\$7,928,434
OTHER COSTS				\$10,322,821
Design Build	ea	0.00%	\$166,497,118	\$0
SIOH	ea	6.20%	\$166,497,118	\$10,322,821
TOTAL REQUEST				\$176,819,939

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
SITE PREPARATION				\$40,639,210
Clearing and Grubbing	ha	64	\$90,913.02	\$5,818,433
Clear and Grub Site				
Clear and grub site (non-rock)	ha	64	\$44,448.59	\$2,844,710
Clear and grub site (rock)	ha	8	\$88,773.38	\$710,187
Premium for clearance at heavily forested areas	ha	34	\$59,429.88	\$2,020,616
Select removal of specimen trees	ea	218	\$1,114.31	\$242,920
Grading and Earthwork	ha	64	\$536,107.31	\$34,310,868
Pre-construction				
Utility company / NCTS coordination	Item	2	\$393,597.00	\$787,194
Layout Survey (during construction)	ha	64	\$5,177.59	\$331,366
Ground Location and topographic survey	ha	64	\$32,191.19	\$2,060,236
Construction Services				
Mobilization	ea	2	\$1,114,310.00	\$2,228,620
Demobilization	ea	2	\$1,114,310.00	\$2,228,620
Maintenance of Traffic (MOT)	Item	2	\$92,859.00	\$185,718
Record drawings and certification	ha	64	\$647.20	\$41,421
Grading and Earthwork				
Mass grading - excavation and stockpile	m3	419,893	\$20.43	\$8,578,414
Premium for excavation in rock and grind for reuse	m3	125,967	\$61.91	\$7,798,617
Mass grading - backfill and light compaction	m3	219,971	\$23.52	\$5,173,718
Stockpile of excess material or move from stockpile	m3	199,922	\$9.95	\$1,989,225
Swale excavation	m3	9,863	\$66.86	\$659,440
Clear and grade at perimeter fence for clear zone - 6m	m2	17,471	\$28.48	\$497,574
Fine grading: excludes building zones	ha	28	\$62,525.18	\$1,750,705
Green Waste Facility	t	5,740	\$19.81	\$113,710
C&D Waste recycling				
Green waste handling facility	ea			<i>included in Phase 1</i>
Green waste composting and mulching	t	5,740	\$19.81	\$113,710
Demolition sorting and recycling	m3			<i>included in Phase 1</i>
Erosion Control	ha	64	\$8,625.39	\$552,025
Erosion control plan Implementation	ha	64	\$6,190.61	\$396,199

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
PAVING AND SITE IMPROVEMENTS				\$31,479,309
Roads & Streets	m2	34,012	\$276.75	\$9,412,708
Roads				
Asphalt concrete, 40mm thick; aggregate base, 110mm thick; sub base, 250mm thick; including over excavation and compaction	m2			<i>included in Phase 1</i>
Asphalt concrete, 50mm thick; aggregate base, 100mm thick; sub base, 325mm thick; including over excavation and compaction	m2	24,836	\$142.39	\$3,536,398
Asphalt concrete, 50mm thick; aggregate base, 100mm thick; sub base, 375mm thick; including over excavation and compaction	m2	9,176	\$142.39	\$1,306,571
Angled Parking at Main Street (10 spaces)	m2			<i>included in Phase 1</i>
Parking at Main Gate (5 Spaces)	m2	1,858	\$142.39	\$264,561
Parking at Commercial / Tactical Gate (5 spaces)	m2	1,750	\$142.39	\$249,183
Perimeter road at fence line, graded base course only - 20'-0"	m2	17,471	\$9.47	\$165,450
Traffic stripes and markings	m	18,194	\$5.26	\$95,701
Street lights, LED, including conduit and wire	ea	201	\$18,571.83	\$3,732,938
Environmental compliance allowance	Item	1	\$61,906.00	\$61,906
Sidewalks	m2	10,879	\$85.43	\$929,392
Sidewalks / Multi-purpose Pathways				
PCC Pavement, 100 mm thick	m2	10,879	\$74.29	\$808,200
Aggregate Base, 100 mm thick	m2	10,879	\$11.14	\$121,192
Curbs & Gutter	m	805	\$148.57	\$119,599
Vertical curbs	m	805	\$148.57	\$119,599
Traffic Signs	Lot	51	\$15,658.61	\$798,589
Road signs	ea	60	\$4,023.90	\$241,434
Traffic signals at Highway 3 and 3A	ea	1	\$557,155.00	\$557,155
Perimeter Fence	m	2,866	\$625.79	\$1,793,515
Perimeter security fence, 2400mm high, 3 strands barbed wire				

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
Northwest from construction fence to cliff line	m	2,866	\$416.50	\$1,193,689
From construction fence along 3A to 3	m			<i>included in Phase 1</i>
Tactical / commercial gate enclosure	m			<i>included in Phase 1</i>
Along 3 to main gate	m			<i>included in Phase 1</i>
Main gate enclosure	m			<i>included in Phase 1</i>
Main gate Along 3 to Construction Fence	m			<i>included in Phase 1</i>
From construction fence along 3 to existing NCTS gate	m			<i>included in Phase 1</i>
From existing NCTS gate along south boundary to cliff line	m			<i>included in Phase 1</i>
Temporary construction fence, 1800mm high, 3 strands of barbed wire				
South boundary of main cantonment	m			<i>included in Phase 1</i>
West boundary of main cantonment	m			<i>included in Phase 1</i>
Temporary security gate and gate house for construction access	ea	1	\$86,669.00	\$86,669
Conduit for future CCTV and lighting at fence	m	2,866	\$179.05	\$513,157
Storm Drainage	ha	64	\$68,166.80	\$4,362,675
Drainage elements				
Dry detention pond (measured with grading)	m3		\$0.00	<i>measured with grading</i>
Offsite drainage bypass swales (grass lined)	m	1,554	\$111.43	\$173,163
Dry conveyance swales (concrete lined)	m	884	\$257.53	\$227,656
Storm water concrete pipe culverts (Class III)				
600mm dia	m	77	\$940.97	\$72,455
750mm dia	m	98	\$1,361.93	\$133,469
900mm dia	m	10	\$1,702.40	\$17,024
1050mm dia	m	37	\$2,104.81	\$77,878
1200mm dia	m	10	\$2,476.20	\$24,762
Storm water concrete box culverts (Class III)				
900mm x 1200mm	m	259	\$2,228.62	\$577,213
900mm x 1500mm	m	46	\$2,476.24	\$113,907
900mm x 1800mm	m	10	\$2,723.90	\$27,239
Check dams / weirs	ea	5	\$5,262.00	\$26,310
Storm inlets and control structures	ea	13	\$12,381.23	\$160,956
Headwall structure with wingwall and pad	m3	80	\$6,685.85	\$534,868
Concrete flume and sidewalk chase	ea	65	\$3,962.00	\$257,530
Outfall pipe (from each pond)	m	1,036	\$1,300.03	\$1,346,832

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
Underdrain	m	100	\$173.34	\$17,334
Rip Rap	m3	574	\$260.01	\$149,246
Bio-retention swales	m	549	\$773.83	\$424,833
Pond lining	m2			<i>included in Phase 1</i>
Landscaping & Site Improvements	m2	845,835	\$16.63	\$14,062,831
Landscaping				
Seeding and mulching	m2	346,006	\$3.41	\$1,179,881
Watering for seed establishment	m2	346,006	\$0.62	\$214,524
Sodding swales	m2	32,968	\$10.52	\$346,824
Sodding pond side slopes	m2	96,699	\$10.52	\$1,017,273
Landscaped median / parkway	m2	1,215	\$22.29	\$27,082
Grassed median/parkway/soft shoulder (no curbs)	m2	22,941	\$22.29	\$511,355
Street trees	ea	550	\$17,024.18	\$9,363,299
Site development at Main Gate	m2	30,000	\$6.20	\$186,000
Site development at Commercial / Tactical Gate	m2	140,000	\$4.33	\$606,200
Site Improvements				
Aluminum hand rails	m	393	\$1,238.12	\$486,581
Bollards and other site appurtenances	Item	2	\$61,906.00	\$123,812
AT/FP				\$7,816,964
Main Gate	ea	1	\$5,241,876.00	\$5,241,876
Main gate building	m2	257	\$8,752.28	\$2,249,336
Main gate house	m2	19	\$24,963.05	\$474,298
Main gate canopy	m2	545	\$4,052.68	\$2,208,711
Gates, barriers and associated systems at Main Gate	Item	1	\$309,531.00	\$309,531
Commercial / Tactical Gate	ea	1	\$2,575,088.00	\$2,575,088
Commercial gate sentry house (Overwatch)	m2	20	\$5,606.85	\$112,137
Commercial gate house at plaza	m2	20	\$24,963.05	\$499,261
Weigh station house	m2	23	\$5,606.83	\$128,957
Weigh station canopy and equipment	m2	150	\$5,628.23	\$844,235
Gates, barriers and associated systems at Commercial / Tactical Gate	Lane	8	\$123,812.25	\$990,498

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
ELECTRICAL UTILITIES				\$32,206,661
Electrical Substation	ea	1	\$2,197,667.00	\$2,197,667
Substation				
34.5 kV Switchgear	ea			<i>included in Phase 1</i>
13.8 kV Switchgear	ea			<i>included in Phase 1</i>
Capacitor Bank	ea			<i>included in Phase 1</i>
Substation building	m2			<i>included in Phase 1</i>
Substation transformer slab, fencing and grounding	Item			<i>included in Phase 1</i>
34.5 kV station service	ea			<i>included in Phase 1</i>
15 MVA transformer	ea	1	\$2,197,667.00	\$2,197,667
Industrial power panel-100A	ea			<i>included in Phase 1</i>
Industrial power feeder-2"C(PVC40)-3#2/0 + 1#4 gnd	m			<i>included in Phase 1</i>
Manhole	ea			<i>included in Phase 1</i>
Empty 13.8 kV switchgear section	ea			<i>included in Phase 1</i>
SCADA	ea			<i>included in Phase 1</i>
Electrical Distribution, Primary	m	3,108	\$843.36	\$2,621,173
Distribution				
(2) 4" PVC Sch. 40 conduit	m	3,108	\$179.05	\$556,488
(2) 6" PVC Sch. 40 conduit	m			<i>included in Phase 1</i>
8'x8'x8' manhole	ea	33	\$44,572.39	\$1,470,889
13.8KV Underground, 3#1/0 Awg 15kV EPR 133%	m			<i>included in Phase 1</i>
1#1/0 SDBC	m			<i>included in Phase 1</i>
MV Splice	ea			<i>included in Phase 1</i>
MV Terminations	ea			<i>included in Phase 1</i>
Trench and Haul	m3	1,641	\$95.34	\$156,453
Concrete	m3	995	\$439.54	\$437,343
Thermal testing	ea			<i>included in Phase 1</i>
3#927.2 kcmil Overhead Line Conductors	m			<i>included in Phase 1</i>
Power Pole installation, supports and terminations	ea			<i>included in Phase 1</i>
34.5kV Connection for Substation Activation				
(2) 6" PVC Sch. 40 conduit	m			<i>included in Phase 1</i>
8'x8'x8' manhole	ea			<i>included in Phase 1</i>
13.8KV Underground, 3#1/0 Awg 15kV EPR 133%	m			<i>included in Phase 1</i>
1#1/0 SDBC	m			<i>included in Phase 1</i>
MV Splice	ea			<i>included in Phase 1</i>
MV Terminations	ea			<i>included in Phase 1</i>

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
Trench and Haul	m3			<i>included in Phase 1</i>
Concrete	m3			<i>included in Phase 1</i>
Thermal testing	ea			<i>included in Phase 1</i>
3#927.2 kcmil Overhead Line Conductors	m			<i>included in Phase 1</i>
Terminations at site distribution power pole	ea			<i>included in Phase 1</i>
Telecommunications Conduit & Cabling	m	11,144	\$2,457.63	\$27,387,821
Main distribution conduit				
12-4"C PVC40	m			<i>included in Phase 1</i>
8-4"C PVC40	m	8,922	\$716.19	\$6,389,847
6-4"C PVC40	m	1,273	\$537.15	\$683,792
4-4"C PVC40	m	370	\$358.10	\$132,497
Trench and haul	m3	11,271	\$96.58	\$1,088,553
Backfill	m3	3,706	\$334.29	\$1,238,879
Manholes, 8'x8'x8'	ea	69	\$11,143.10	\$768,874
Concrete	m3	3,138	\$439.54	\$1,379,277
Cable huts				
Cable hut, 3.5m x 3.5m	ea	6	\$43,334.33	\$260,006
Cross connects cabinet - fiber	ea	6	\$15,476.50	\$92,859
Cross connect cabinets - copper	ea	6	\$49,524.83	\$297,149
Conduit in services laterals below street				
2-4"C PVC40	m	579	\$179.05	\$103,670
Trench and haul	m3	426	\$96.58	\$41,143
Backfill	m3	120	\$334.28	\$40,114
Concrete	m3	63	\$439.54	\$27,691
Conductors				
1-288 SM Fiber	m	8,182	\$40.86	\$334,317
4-288 SM Fiber	m	6,380	\$142.39	\$908,448
3-288 SM Fiber	m	4,825	\$110.19	\$531,667
1-72 SM Fiber	m	6,210	\$15.48	\$96,130
1-36 SM Fiber	m	6,210	\$11.45	\$71,104
1-600pr Telecomm cable	m	18,967	\$160.96	\$3,052,929
2400pr Telecomm cable	m	11,205	\$619.06	\$6,936,568
6-3" 3-cell fabric inner duct	m	3,255	\$198.10	\$644,816
4-3" 3-cell fabric inner duct	m	14,312	\$132.48	\$1,896,054
Terminations at cable huts	ea	6	\$61,906.17	\$371,437
MECHANICAL UTILITIES				\$21,979,100

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (Continuation)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
Water Distribution	m	8,185	\$2,169.42	\$17,756,735
Water Treatment and Pump station Building	ea	2	\$3,073,638.00	\$6,147,276
600mm (24-inch) fusible PVC C-905 pipe	m	2,985	\$1,361.93	\$4,065,361
450mm (18-inch) fusible PVC C-905 pipe	m	990	\$1,219.56	\$1,207,364
300mm (12-inch) pipe	m	3,685	\$947.17	\$3,490,322
200mm (8-inch) PVC pipe for laterals	m	525	\$406.11	\$213,208
200mm (8-inch) PVC pipe for well realignment	m			<i>included in Phase 1</i>
Trench and Haul	m3	18,795	\$96.58	\$1,815,221
300mm (12-inch) gate valve w/ box	ea	26	\$4,023.92	\$104,622
200mm (8-inch) gate valve w/ box	ea	35	\$2,723.86	\$95,335
100 mm (4-inch) clean-out and riser with manhole at Dead Ends on Main	ea	3	\$13,619.33	\$40,858
Lateral clean-out and riser with box at End	ea	35	\$4,054.86	\$141,920
Test, flush and chlorinate	m	8,185	\$13.62	\$111,479
Connection to existing	ea	6	\$10,833.67	\$65,002
Fire hydrant assembly	ea	38	\$6,809.66	\$258,767
Water tanks	ea		\$0.00	\$0
5.7ML Ground water storage tank/site improvements	ea			<i>included in Phase 1</i>
Sanitary Sewer	m	3,761	\$1,122.67	\$4,222,365
Wastewater Collection (On-Base)				
200mm (8-inch) pipe	m	2,391	\$216.68	\$518,082
250mm (10-inch) pipe	m	330	\$297.15	\$98,060
300mm (12-inch) pipe	m			<i>included in Phase 1</i>
375mm (15-inch) pipe	m			<i>included in Phase 1</i>
Sewer manhole	ea	37	\$14,857.46	\$549,726
Pump station	ea	1	\$2,011,949.00	\$2,011,949
Pump station (packaged)	ea	1	\$742,873.00	\$742,873
200mm (8-inch) pressure pipe	m	670	\$303.35	\$203,245
100mm (4-inch) pressure pipe	m	370	\$185.72	\$68,716
Discharge manhole	ea			<i>included in Phase 1</i>
Demolish and remove existing sewer lines	m			<i>included in Phase 1</i>
Demolish and remove manhole	ea			<i>included in Phase 1</i>
Connection to existing manhole	ea	6	\$4,952.33	\$29,714
ENVIRONMENTAL MITIGATIONS				\$16,310,000
Cultural Mitigations	Item	3	\$283,333.33	\$850,000

1. Component NAVY	FY 2018 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)		2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunications Site (NBGTS), Finyegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II USMC Main Cantonment		
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820	

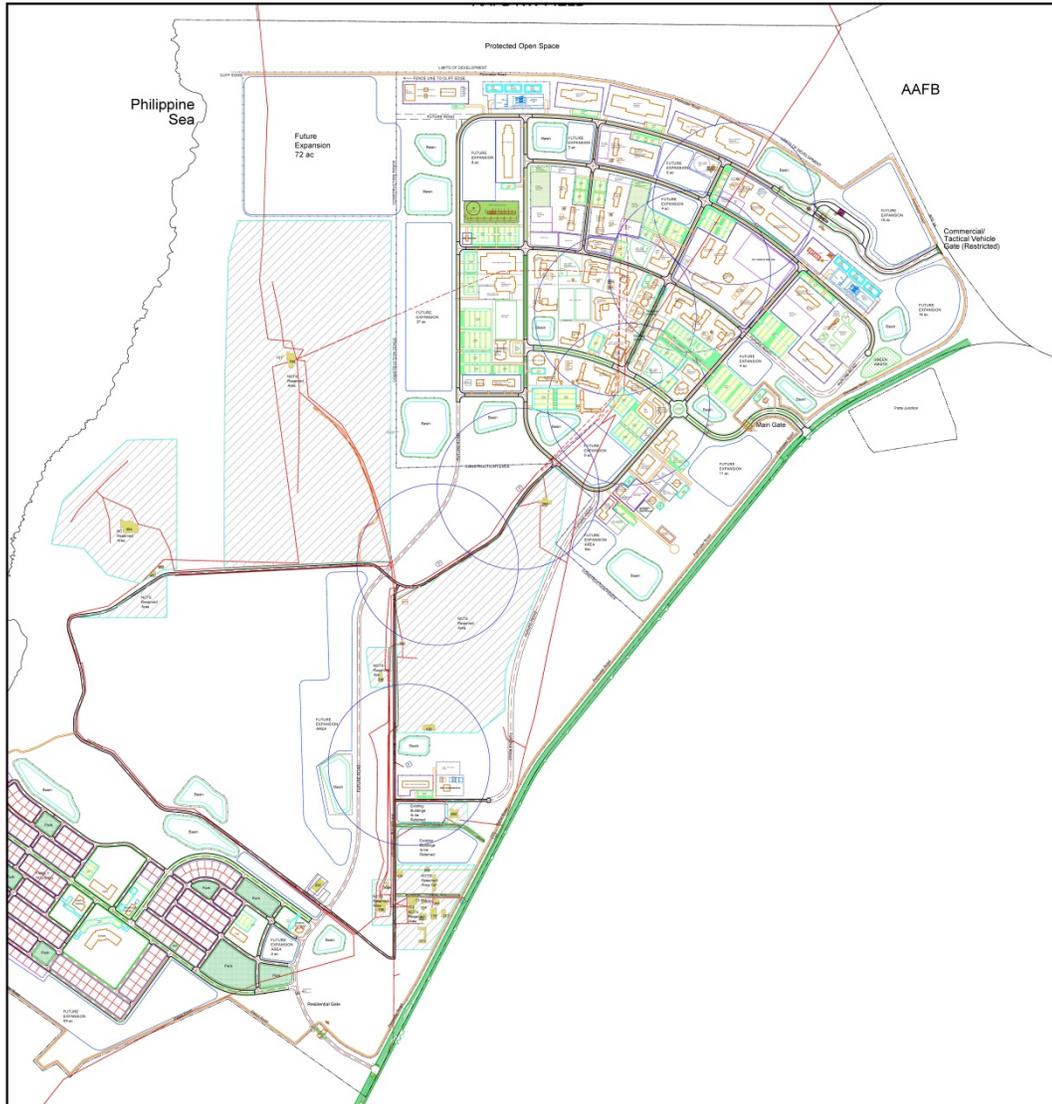
Budget Estimate Summary Sheet (2018 Funding) - PHASE II COMBINED

Item	UM	Quantities	Unit Cost	Total Cost
Data recovery and monitoring	Item	1	\$850,000.00	\$850,000
Environmental Mitigations	ha	89	\$0.00	\$0
MEC Clearance (Full Site Area In Phase 1)				
Low Probability Areas: No pre-clearance	ha			<i>included in Phase 1</i>
Medium Probability Areas	ha			<i>included in Phase 1</i>
Natural Resources Mitigations	Item	89	\$173,707.87	\$15,460,000
Natural Resources Mitigations (allowance)	Item	1	\$15,460,000.00	\$15,460,000
DEMOLITION				
Demolition	Lot	3	\$99,050.67	\$297,152
Remove existing buildings / structures	m3			<i>included in Phase 1</i>
Remove roads and pads	m2			<i>included in Phase 1</i>
Protect in place existing IT comm line	m			<i>included in Phase 1</i>
Remove existing utilities	m	1,600	\$185.72	\$297,152
Hazardous waste abatement	m3			<i>included in Phase 1</i>

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820
(...continued)			

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

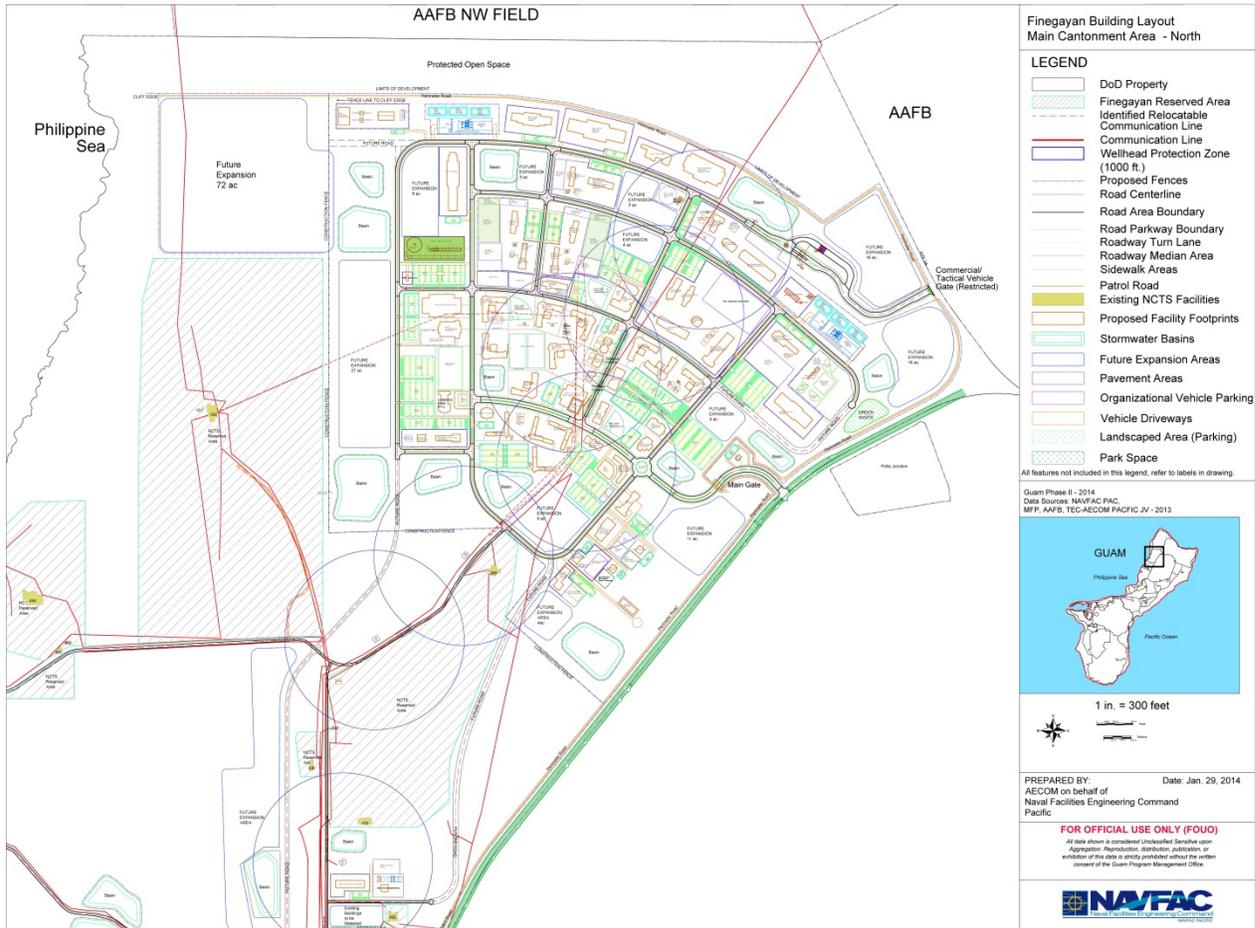


Finegayan Building Layout Main Cantonment Area PREPARED BY: AEDCOM on behalf of Naval Facilities Engineering Command PACIFIC FOR OFFICIAL USE ONLY <small>This map and data contained herein is for Official Use Only. All data shown is unclassified. Unclassified does not mean that the information is not controlled. Distribution, reproduction, or modification of this data is strictly prohibited without written consent of the Guam Program Management Office.</small>		LEGEND <table border="0"> <tr> <td> DoD Property</td> <td> Sidewalk Areas</td> </tr> <tr> <td> Finegayan Reserved Area</td> <td> Patrol Road</td> </tr> <tr> <td> Identified Relocatable Communication Line</td> <td> Existing NCTS Facilities</td> </tr> <tr> <td> Communication Line</td> <td> Proposed Facility Footprints</td> </tr> <tr> <td> Wellhead Protection Zone (1000 ft.)</td> <td> Stormwater Basins</td> </tr> <tr> <td> Proposed Fences</td> <td> Future Expansion Areas</td> </tr> <tr> <td> Road Centerline</td> <td> Pavement Areas</td> </tr> <tr> <td> Road Area Boundary</td> <td> Organizational Vehicle Parking</td> </tr> <tr> <td> Road Parkway Boundary</td> <td> Vehicle Driveways</td> </tr> <tr> <td> Roadway Turn Lane</td> <td> Landscaped Area (Parking)</td> </tr> <tr> <td> Roadway Median Area</td> <td> Park Space</td> </tr> </table>		DoD Property	Sidewalk Areas	Finegayan Reserved Area	Patrol Road	Identified Relocatable Communication Line	Existing NCTS Facilities	Communication Line	Proposed Facility Footprints	Wellhead Protection Zone (1000 ft.)	Stormwater Basins	Proposed Fences	Future Expansion Areas	Road Centerline	Pavement Areas	Road Area Boundary	Organizational Vehicle Parking	Road Parkway Boundary	Vehicle Driveways	Roadway Turn Lane	Landscaped Area (Parking)	Roadway Median Area	Park Space	 GUAM <small>US Marine Corps Base Guam Concept Development Plan Study Phase II - 100% CDP - January 2014 Data Sources: NAVFAC PAC, MFP, AAFB, TEC-AEDCOM PACIFIC JV - 2013</small>
DoD Property	Sidewalk Areas																									
Finegayan Reserved Area	Patrol Road																									
Identified Relocatable Communication Line	Existing NCTS Facilities																									
Communication Line	Proposed Facility Footprints																									
Wellhead Protection Zone (1000 ft.)	Stormwater Basins																									
Proposed Fences	Future Expansion Areas																									
Road Centerline	Pavement Areas																									
Road Area Boundary	Organizational Vehicle Parking																									
Road Parkway Boundary	Vehicle Driveways																									
Roadway Turn Lane	Landscaped Area (Parking)																									
Roadway Median Area	Park Space																									

Finegayan Site Map

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

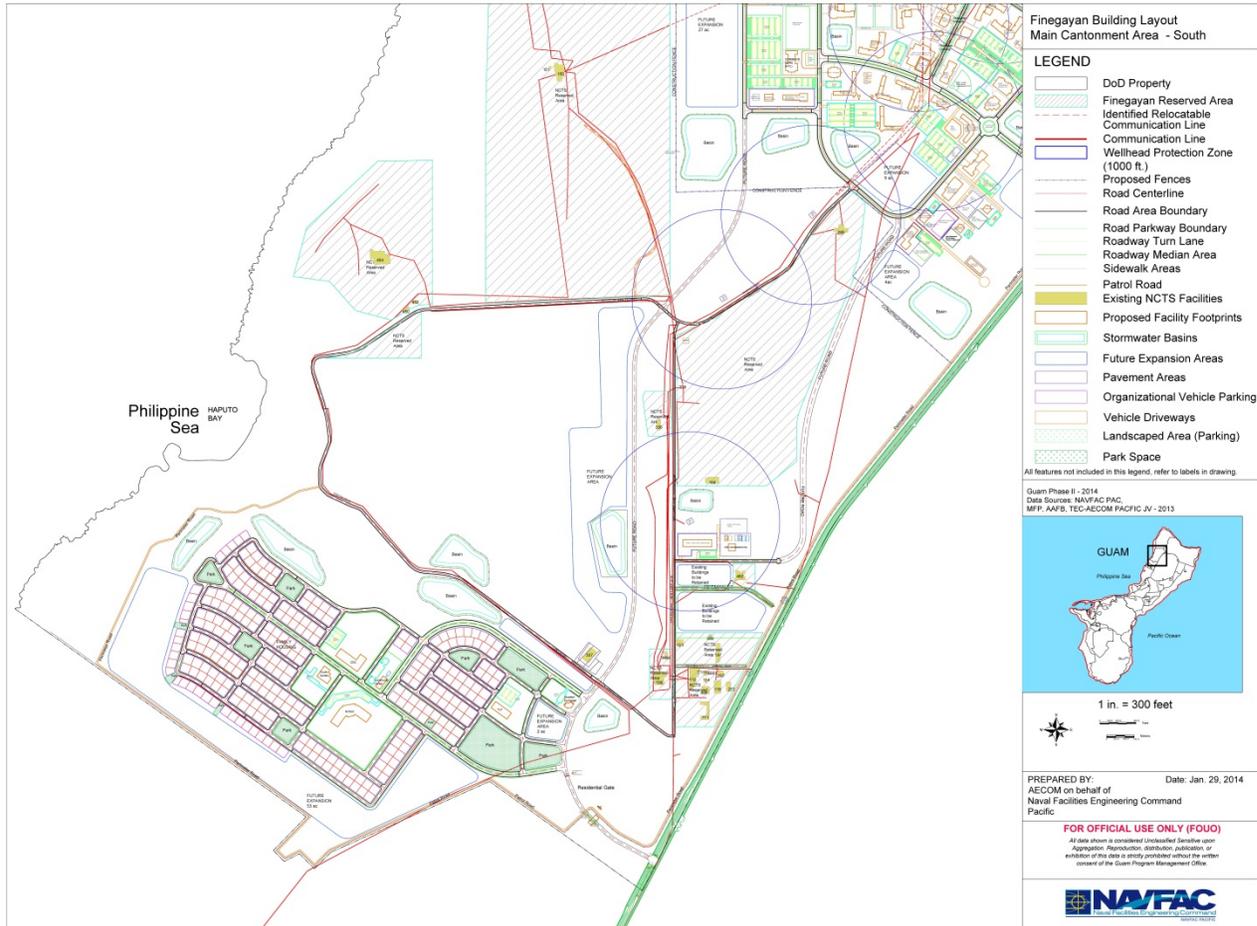
(...continued)



Finegayan Site Map (North)

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

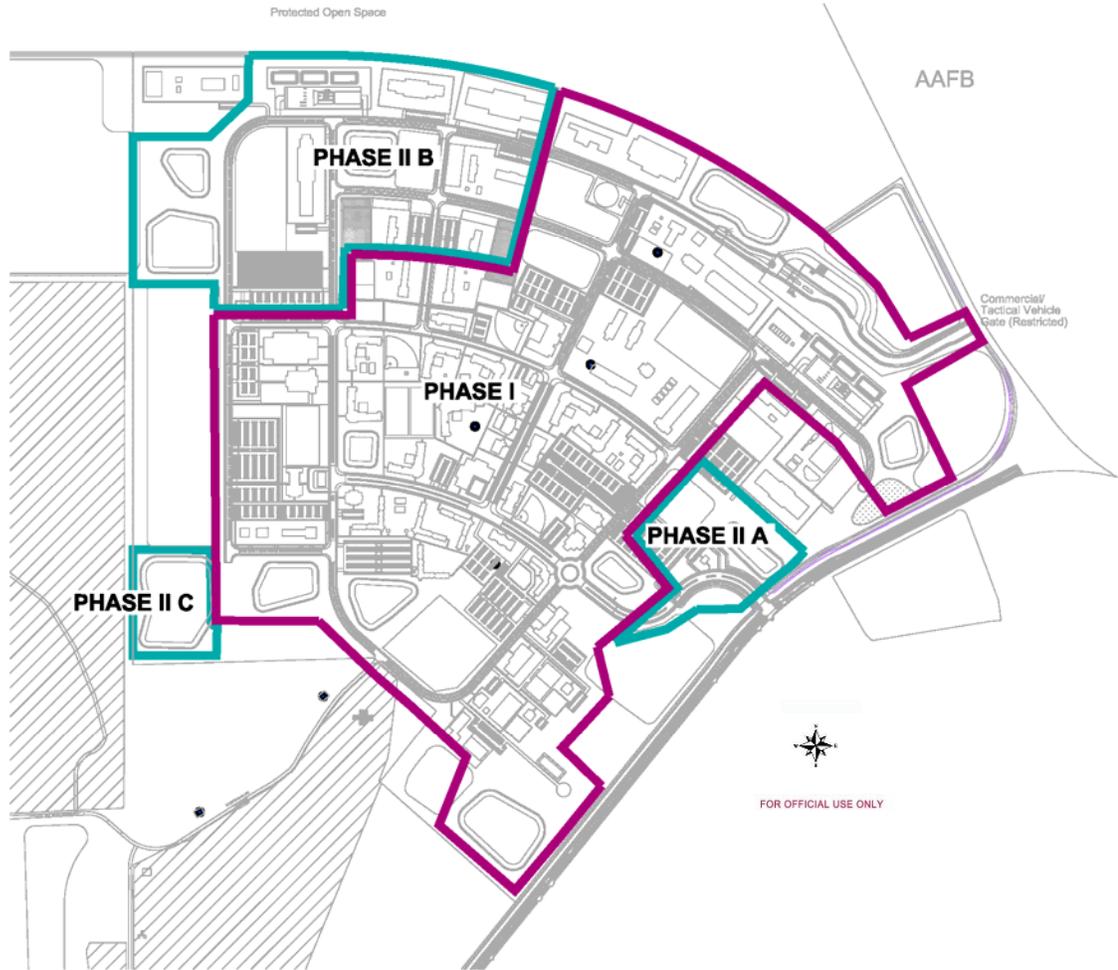
(...continued)



Finegayan Site Map (South)

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

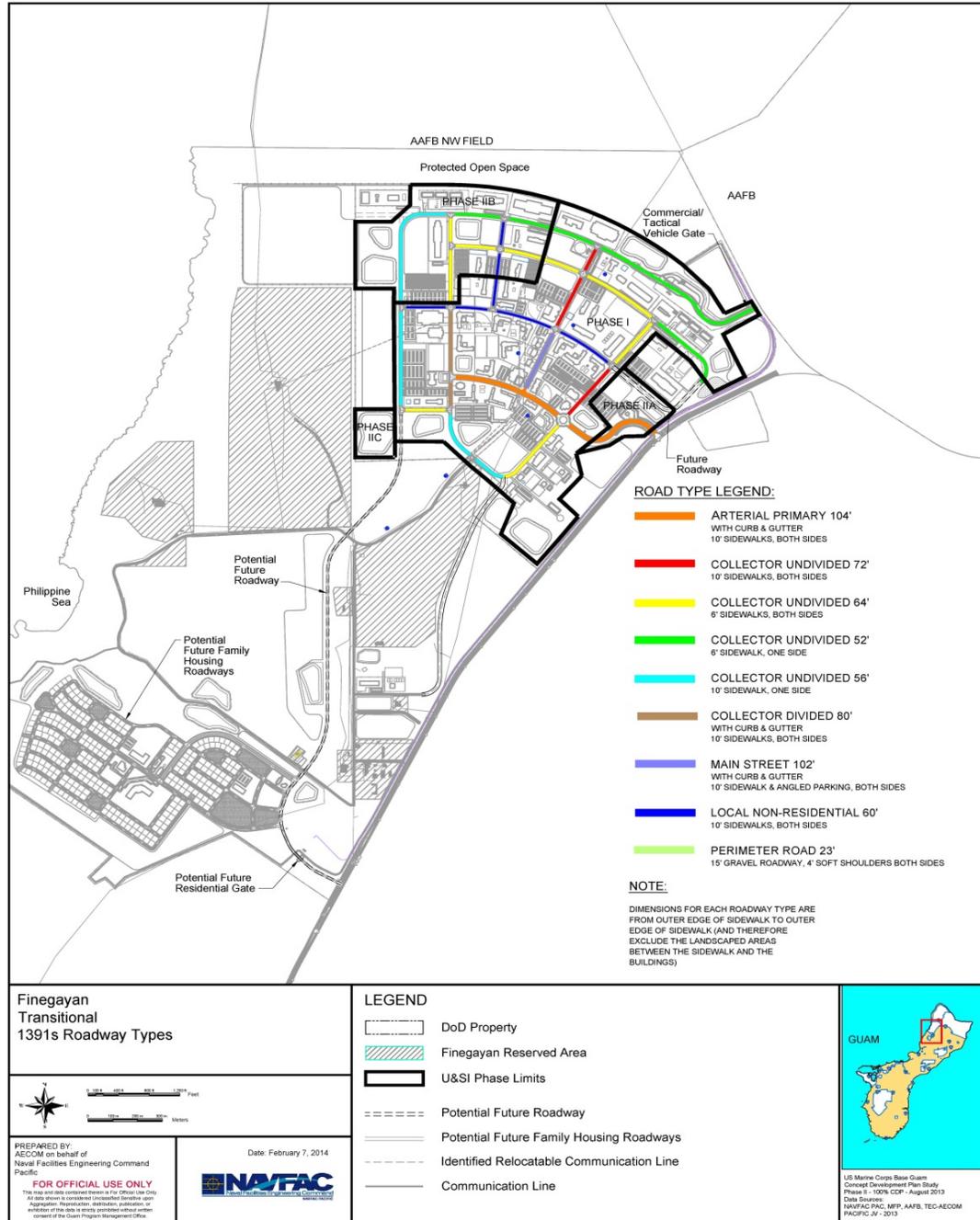
(...continued)



Phasing Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)



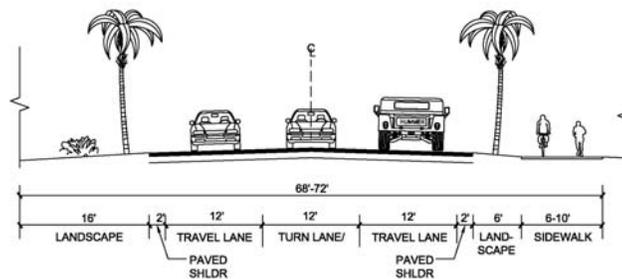
Road Hierarchy Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

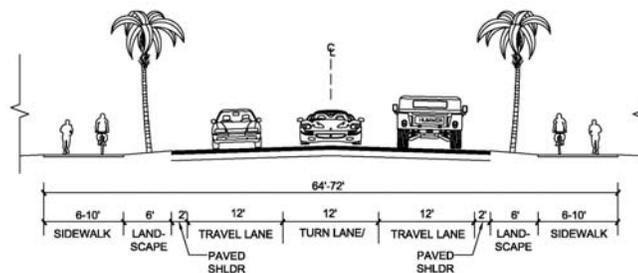
COLLECTOR - UNDIVIDED

(SIDE WALK ON ONE SIDE)



COLLECTOR - UNDIVIDED

(SIDE WALK ON BOTH SIDES)

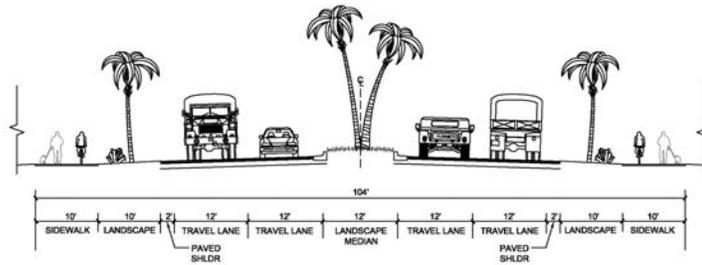


Roadway Schematics Phase II

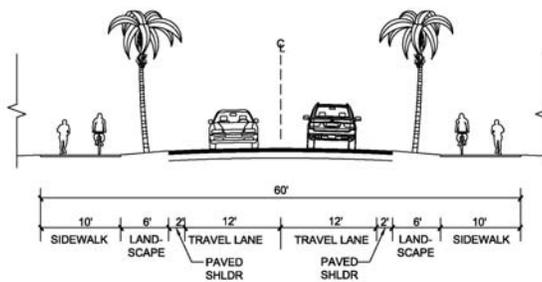
1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

ARTERIAL - PRIMARY



LOCAL NON-RESIDENTIAL

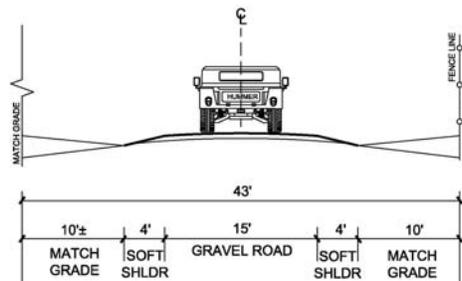


Roadway Schematics Phase II

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

(...continued)

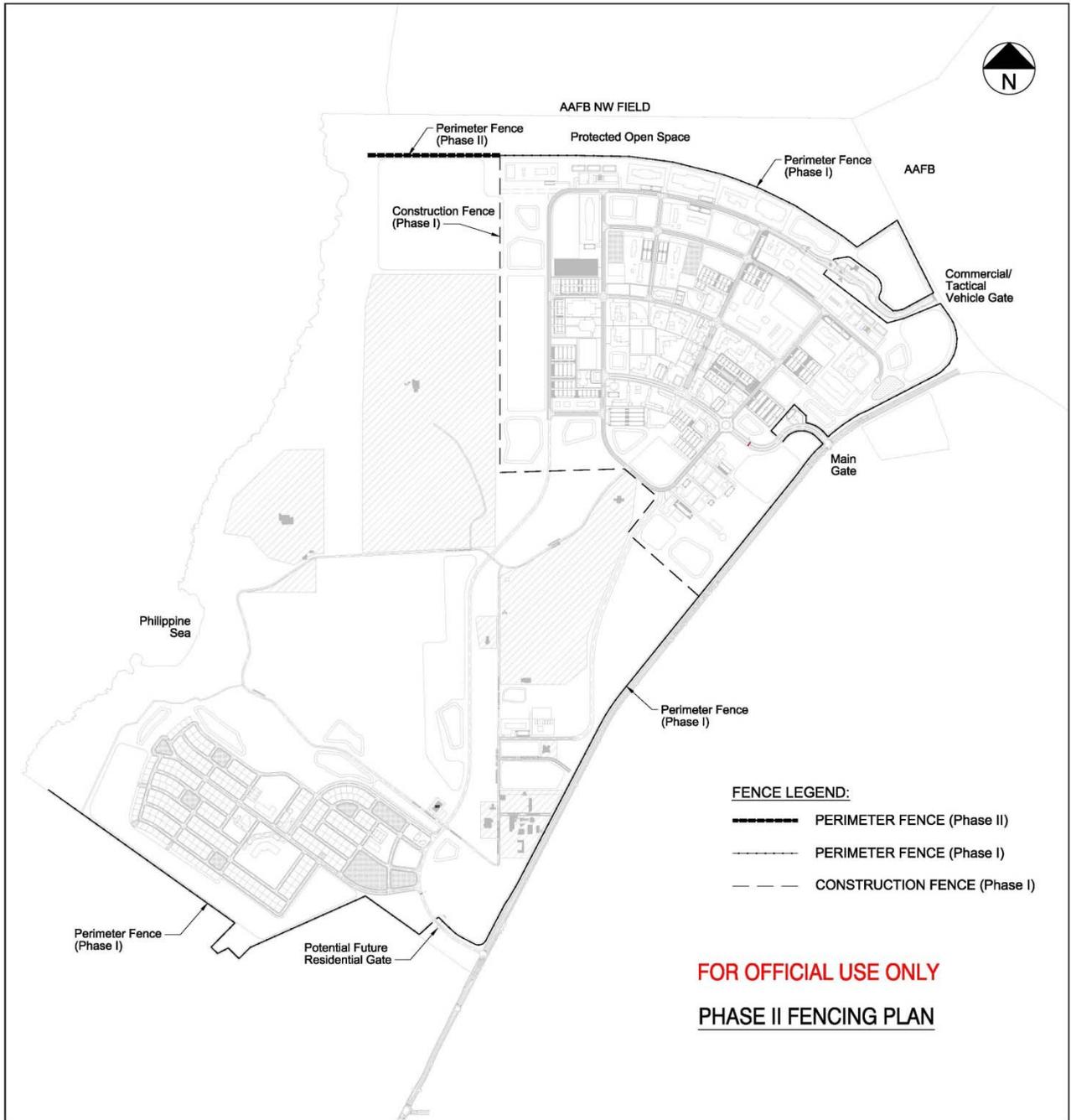
PERIMETER ROAD



Roadway Schematics Phase II

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

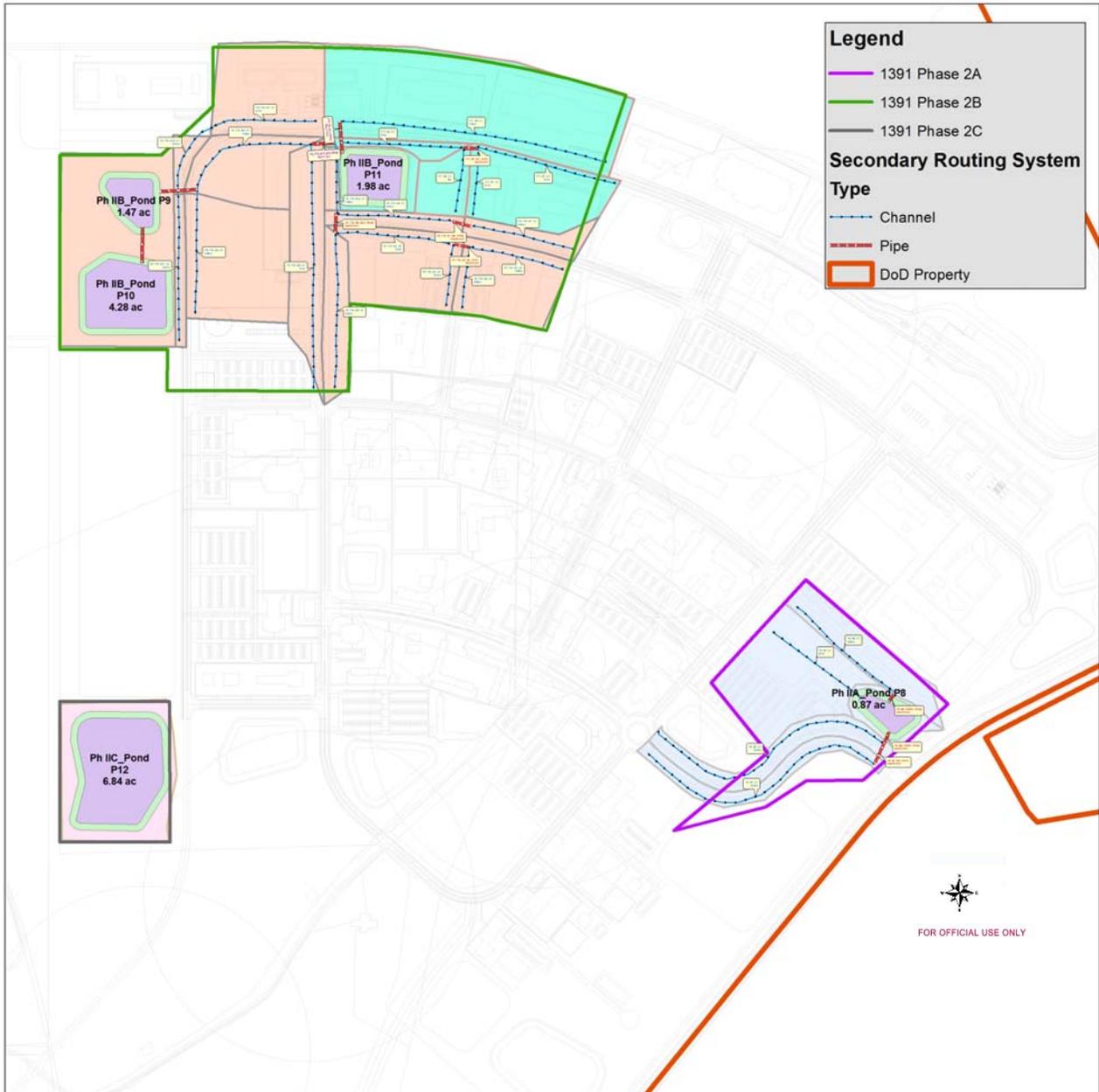
(...continued)



Fence Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

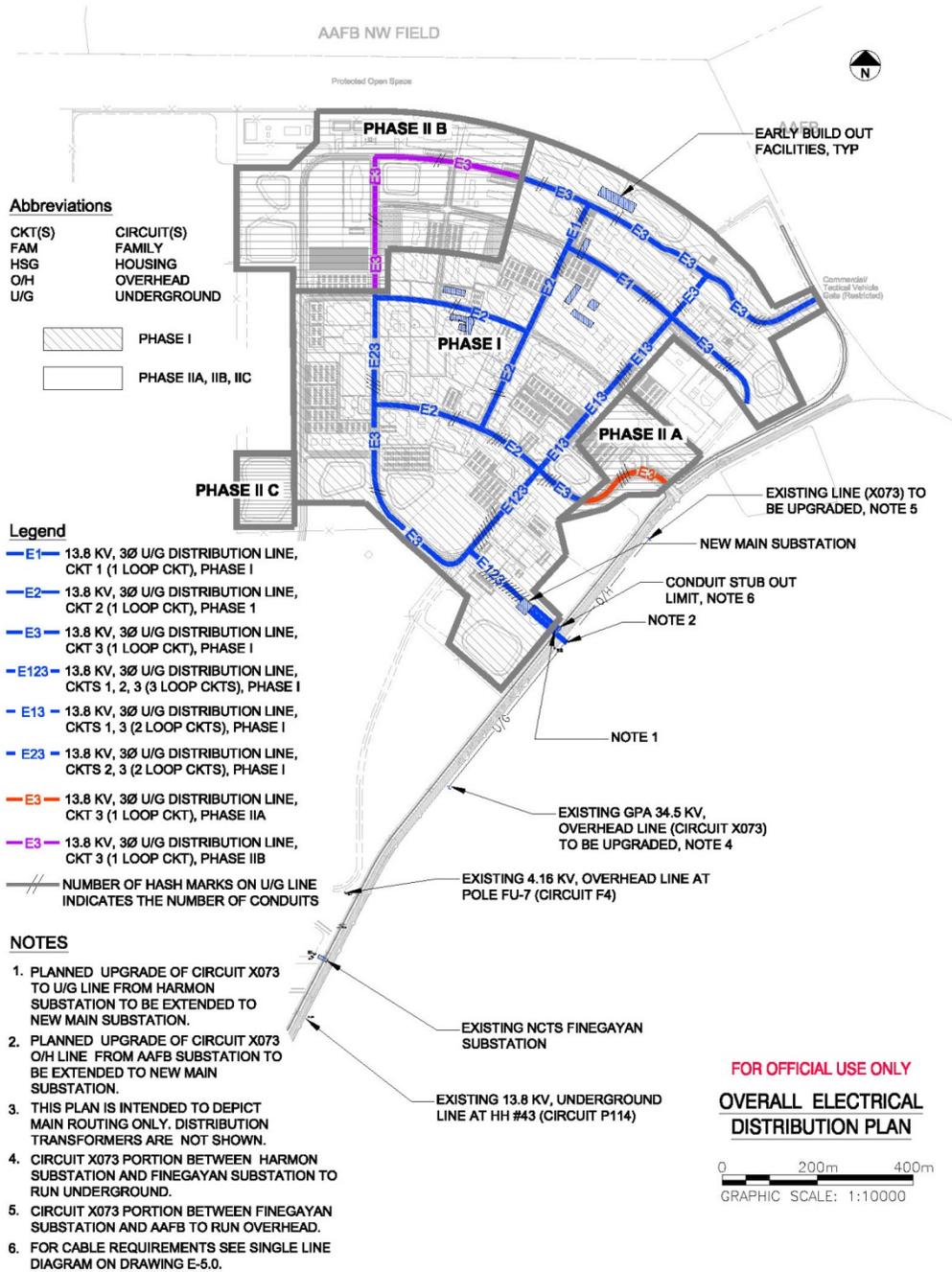
(...continued)



Subbasin and Secondary Drainage Routing

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$176,820

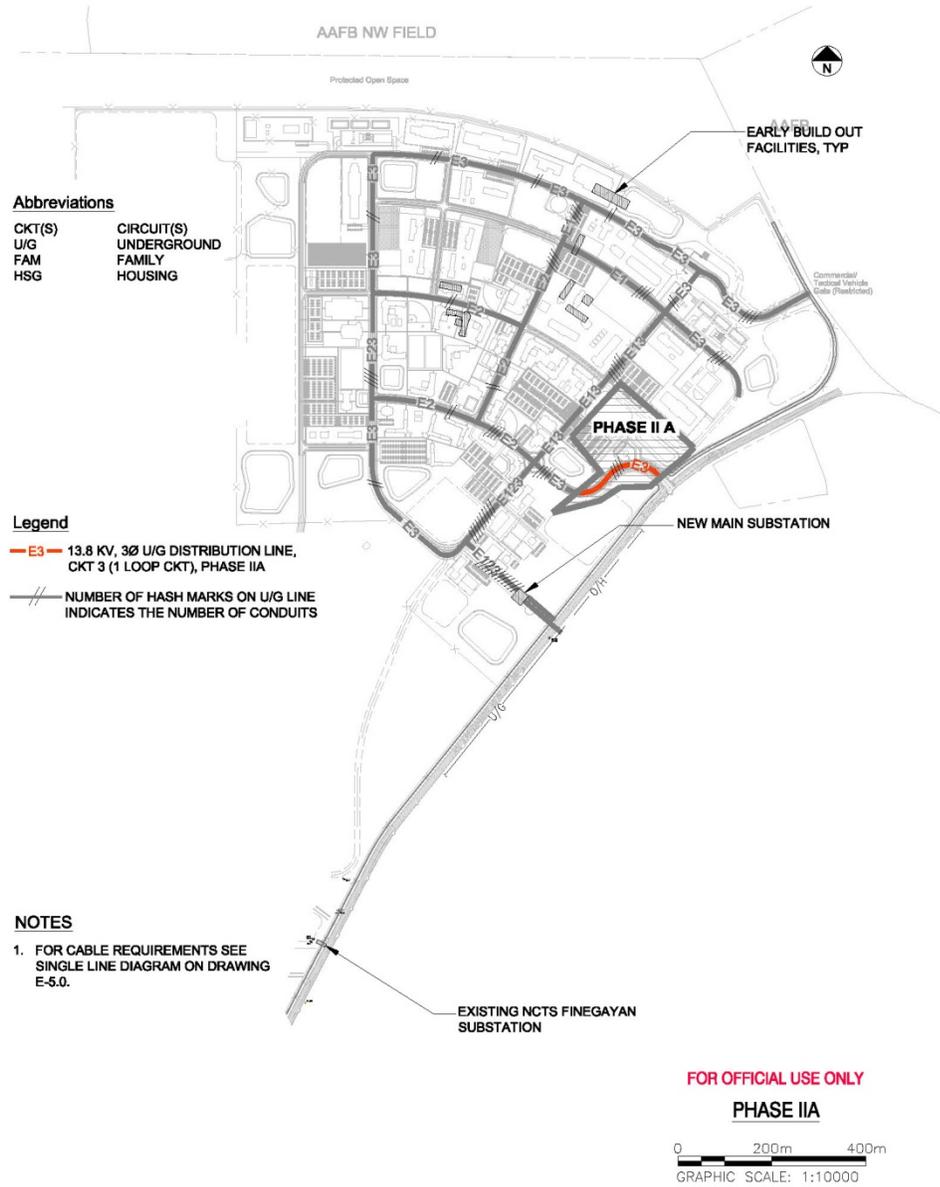
(...continued)



Electrical Distribution Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

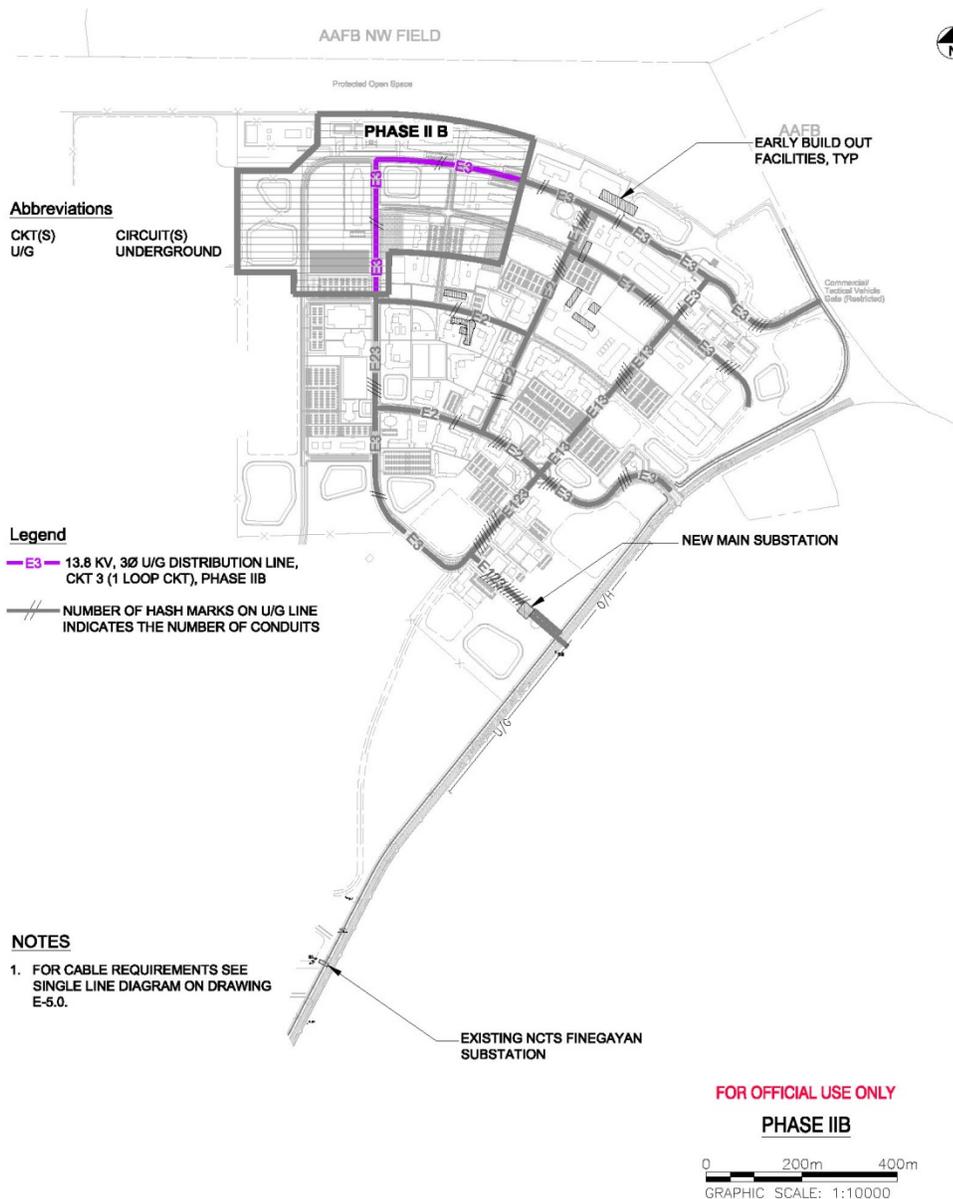
(...continued)



Electrical Distribution Plan Phase IIA

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (Continuation)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

(...continued)



Electrical Distribution Plan Phase IIB

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

(...continued)

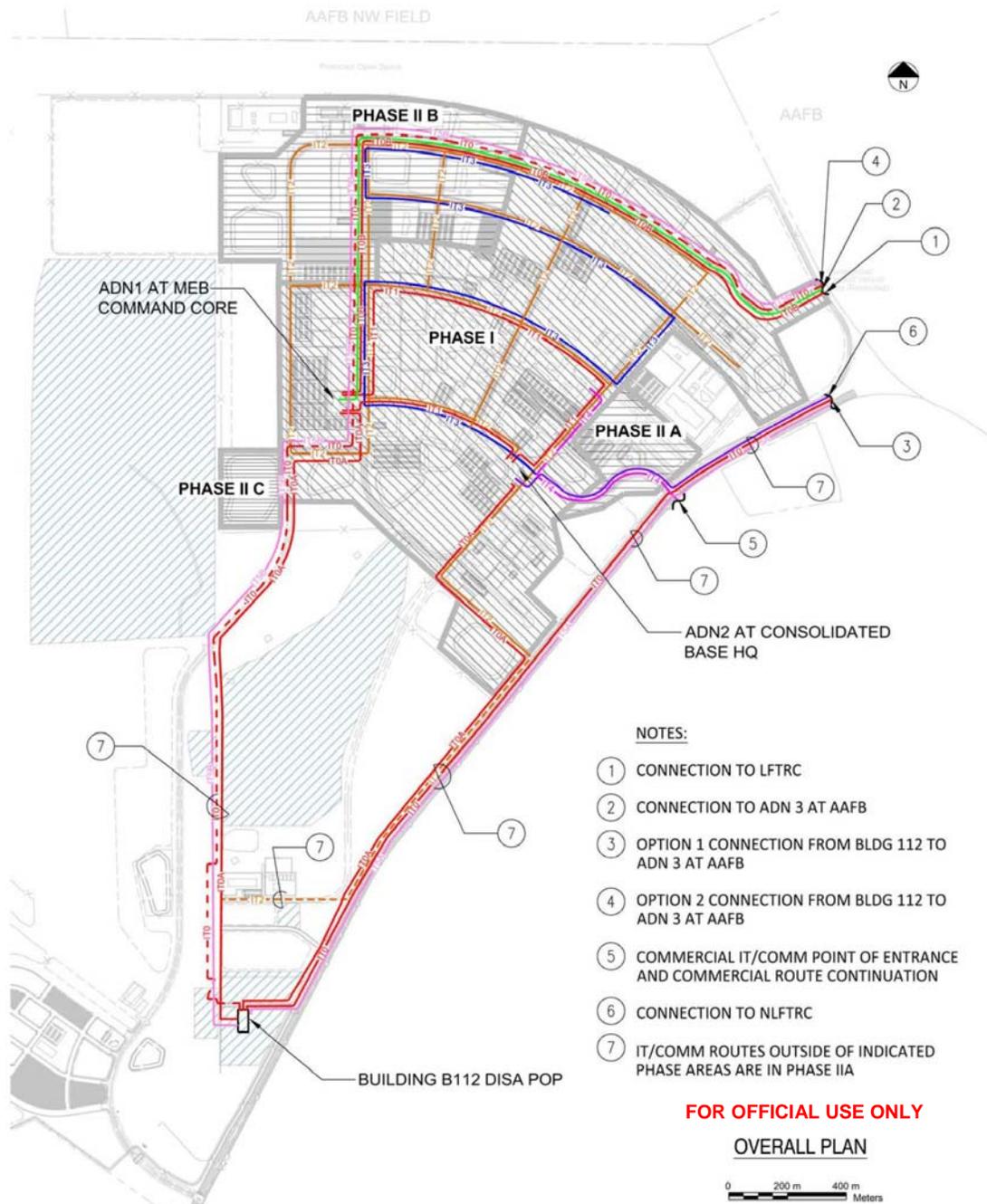
-  USMC IT/COMM CORE BACKBONE
 -  USMC IT/COMM DISTRIBUTION
 -  COMMERCIAL IT/COMM DISTRIBUTION
 -  COMMERCIAL IT/COMM FROM UTILITY
 -  USMC IT/COMM ROUTE FOR CONNECTING ADN3 TO BUILDING 112 - OPTION 1
 -  USMC IT/COMM ROUTE TO LFTRC AND HAND GRENADE RANGE
 -  USMC IT/COMM ROUTE TO NLFTRC
 -  IT/COMM ROUTE FOR CONNECTING ADN3 TO BUILDING 112 - OPTION 2
 -  USMC IT/COMM DISTRIBUTION - CONDUIT ONLY
 -  USMC IT/COMM ROUTE FOR CONNECTING ADN1 AND ADN2 TO BUILDING 112
 -  USMC IT/COMM ROUTE FOR CONNECTING ADN1 TO ADN3
 -  USMC IT/COMM ROUTE FOR NTCS EAST FROM B112
 -  USMC IT/COMM ROUTE FOR NTCS WEST FROM B112
-  PHASE I AREA
 PHASE IIA, IIB, IIC AREA

IT/COMM LEGEND

Telecommunications Schematic Legend

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

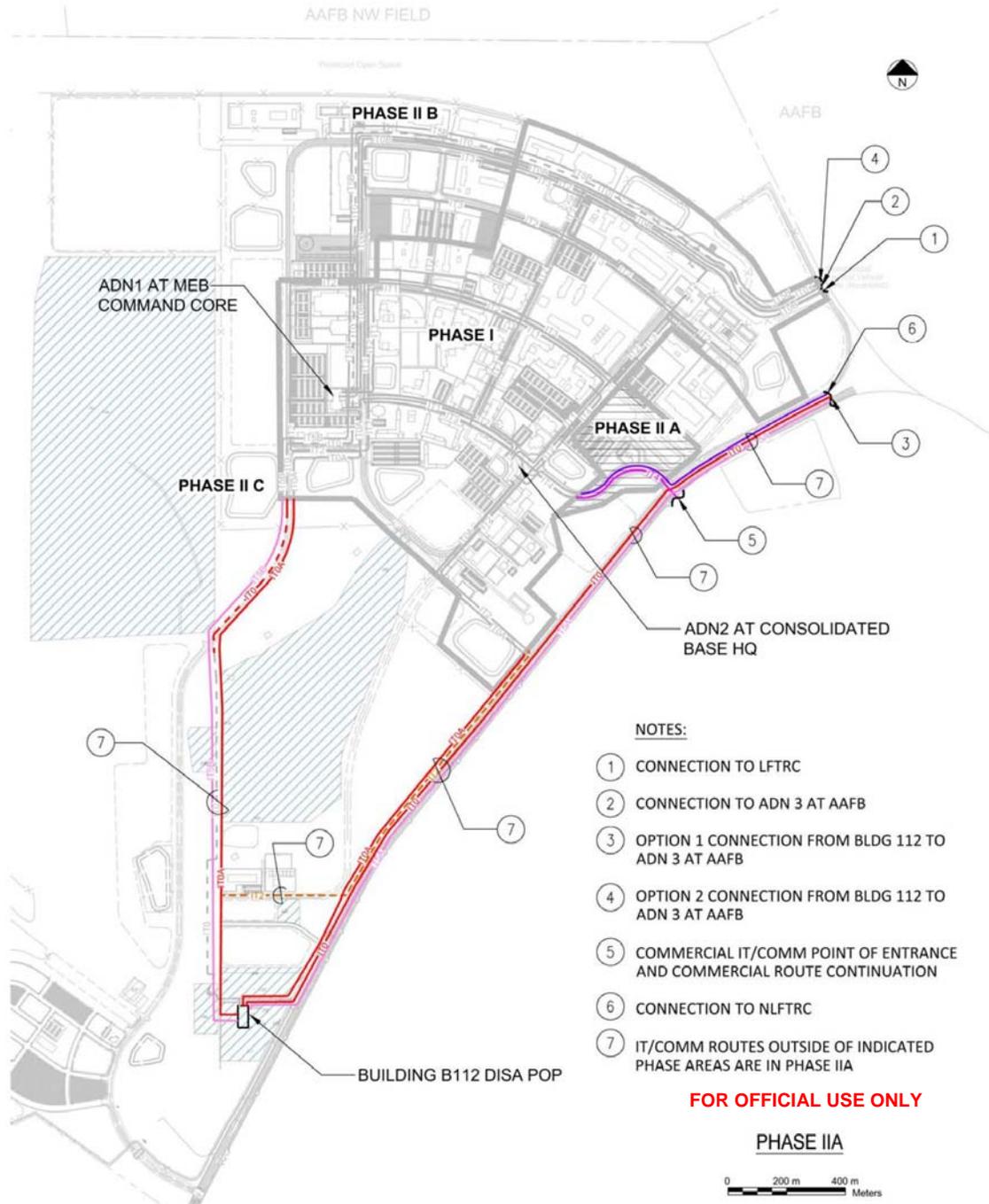
(...continued)



Telecommunications Schematic

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

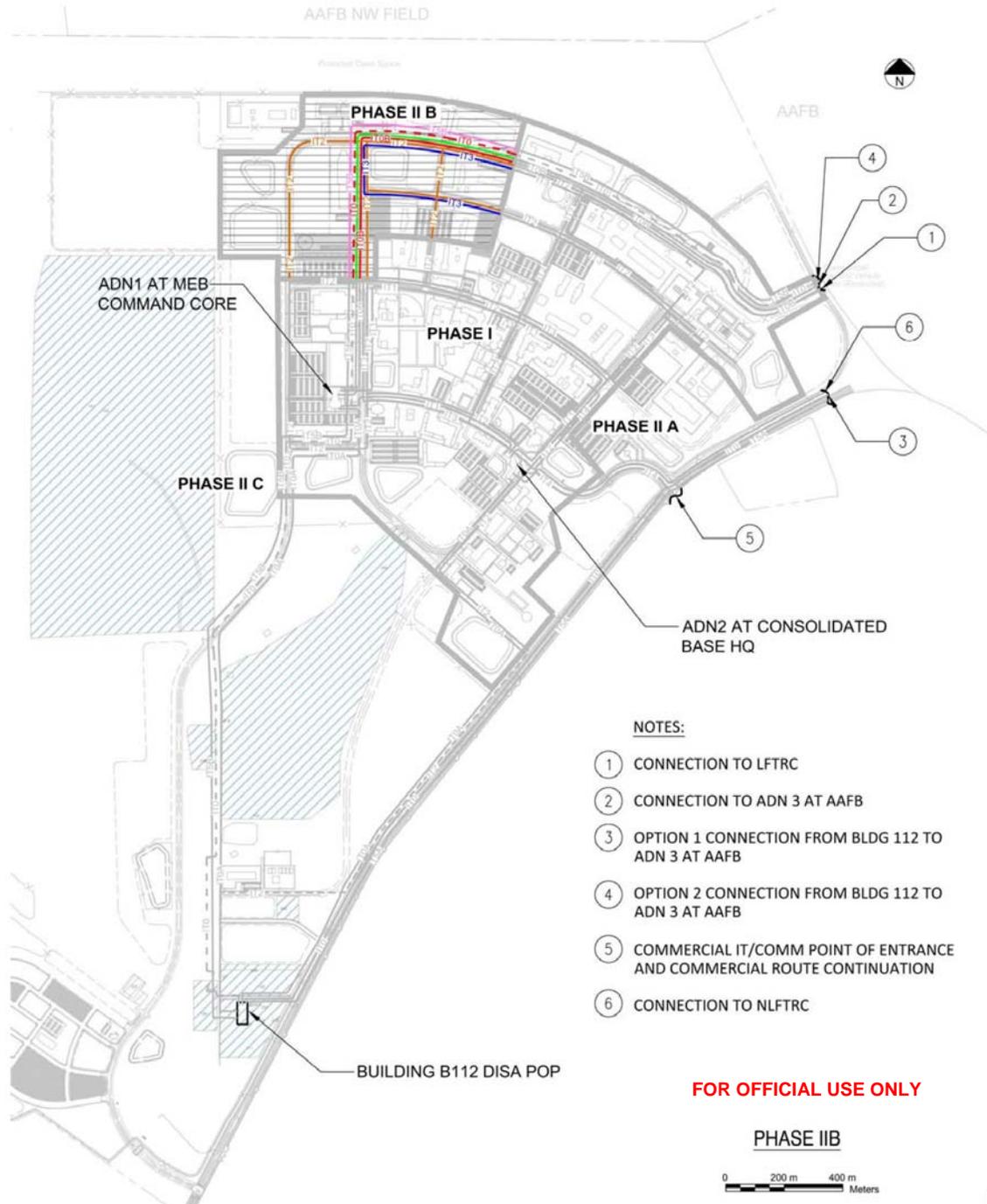
(...continued)



Telecommunications Schematic Phase IIA

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

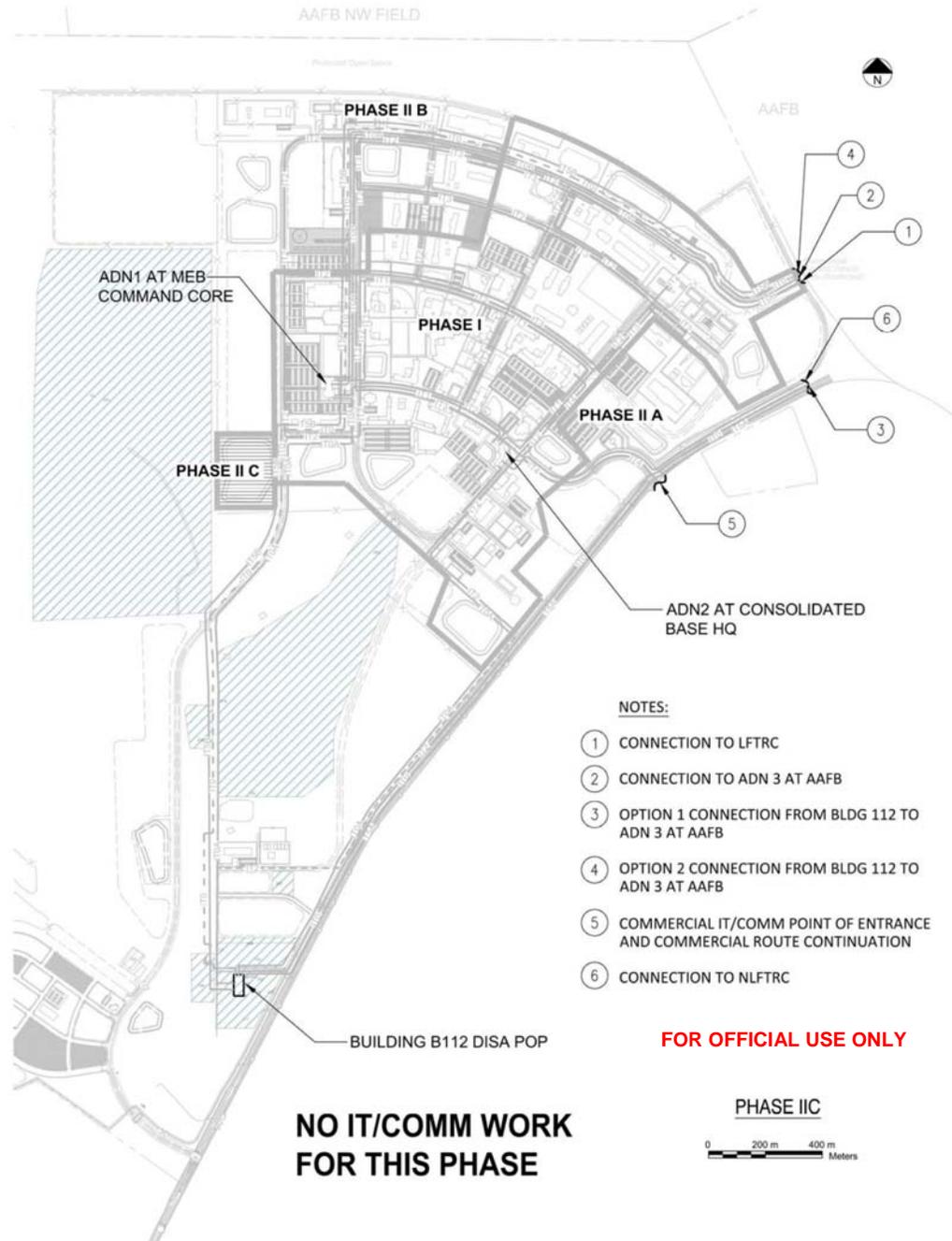
(...continued)



IT/Communications Schematic Phase IIB

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

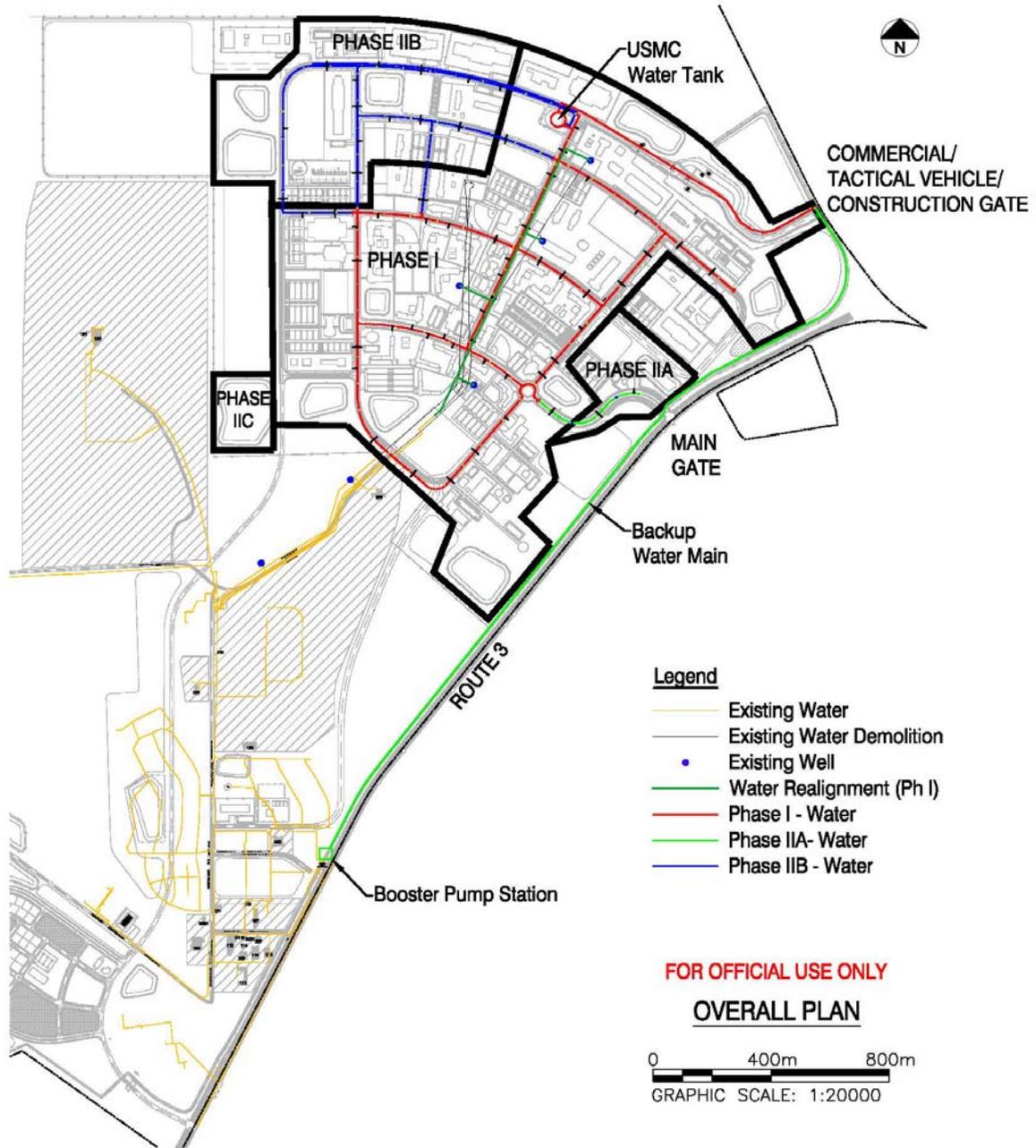
(...continued)



IT/Communications Schematic Phase IIC

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

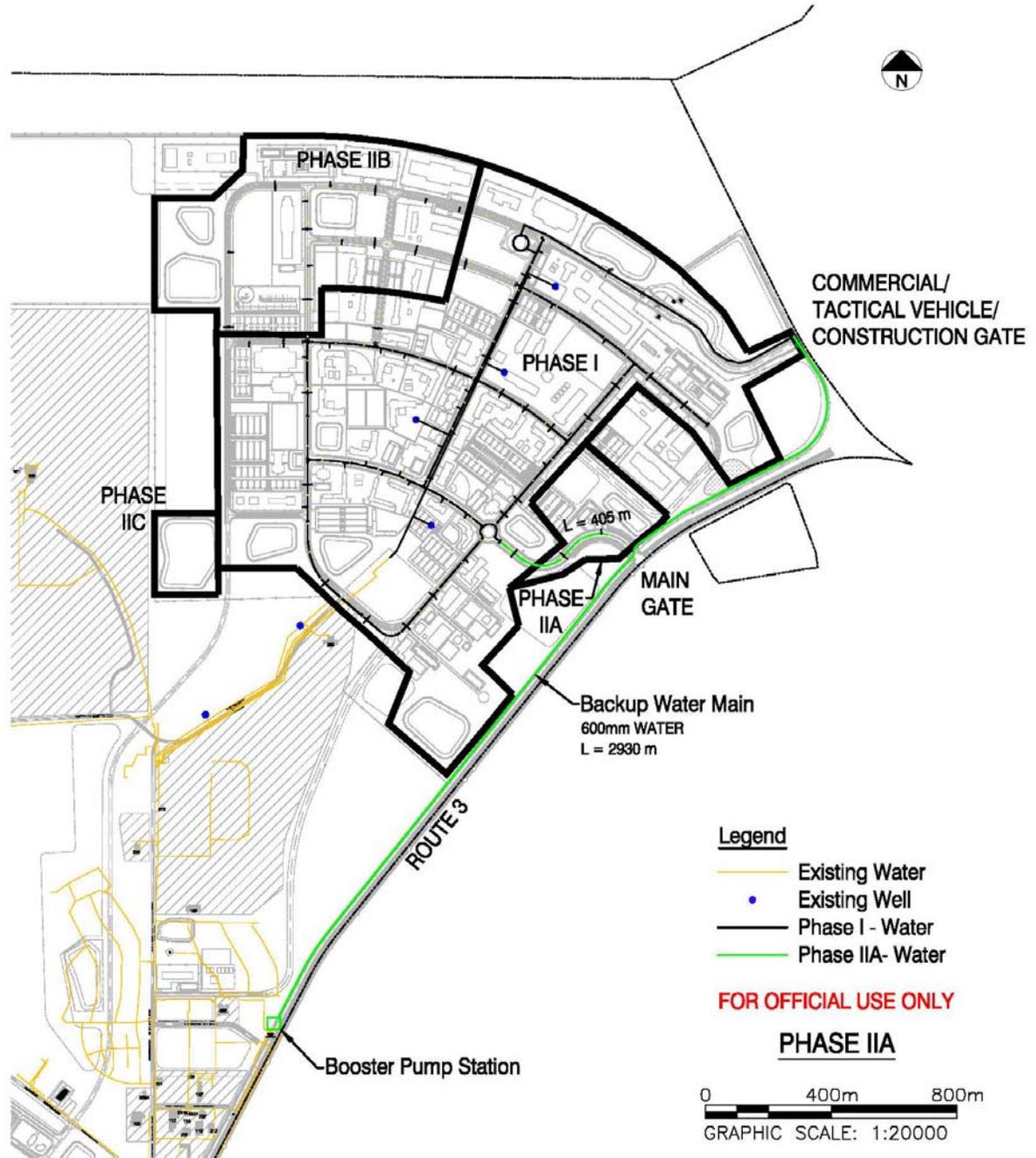
(...continued)



Water Distribution Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

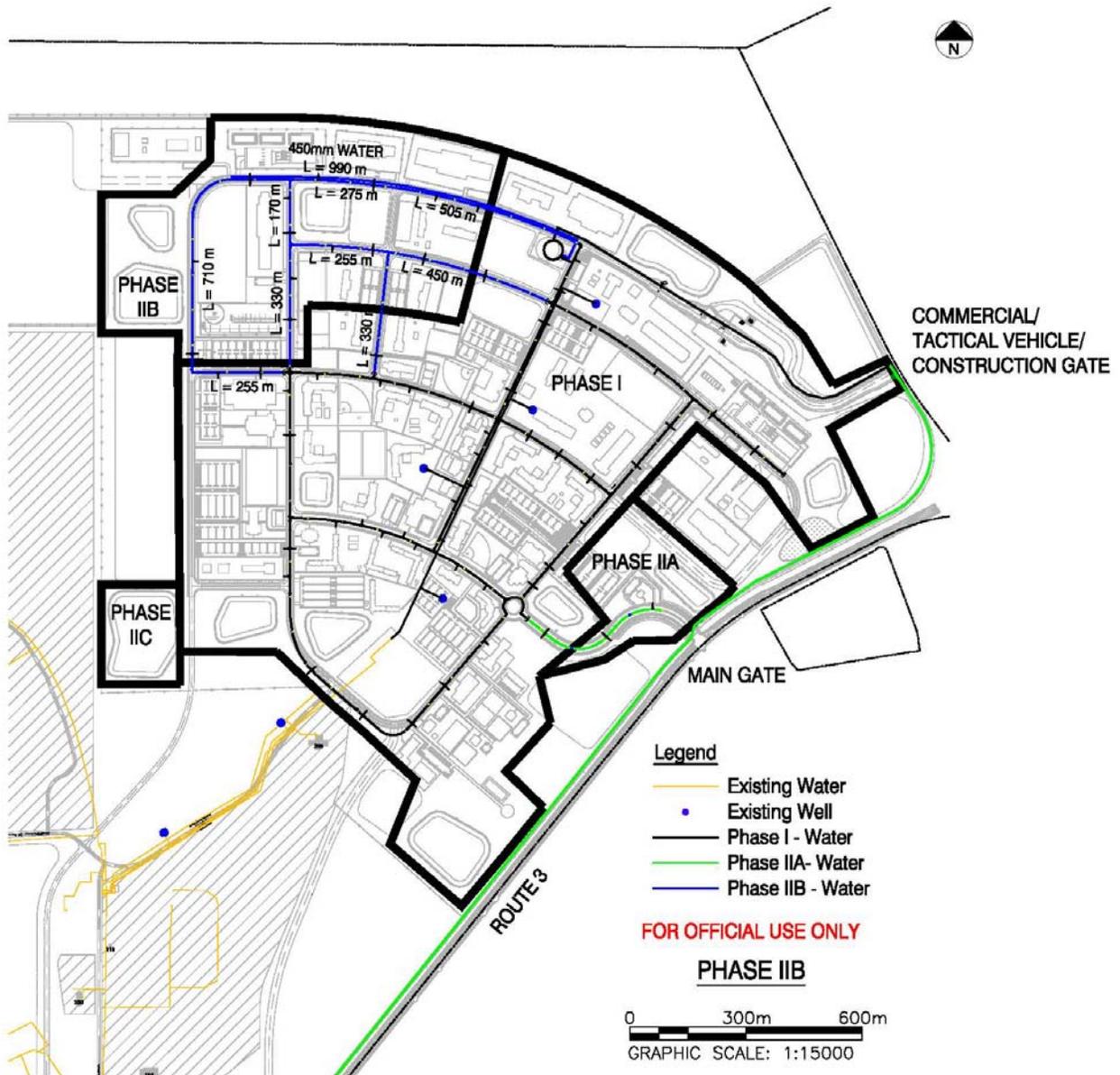
(...continued)



Water Distribution Plan Phase IIA

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (Continuation)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

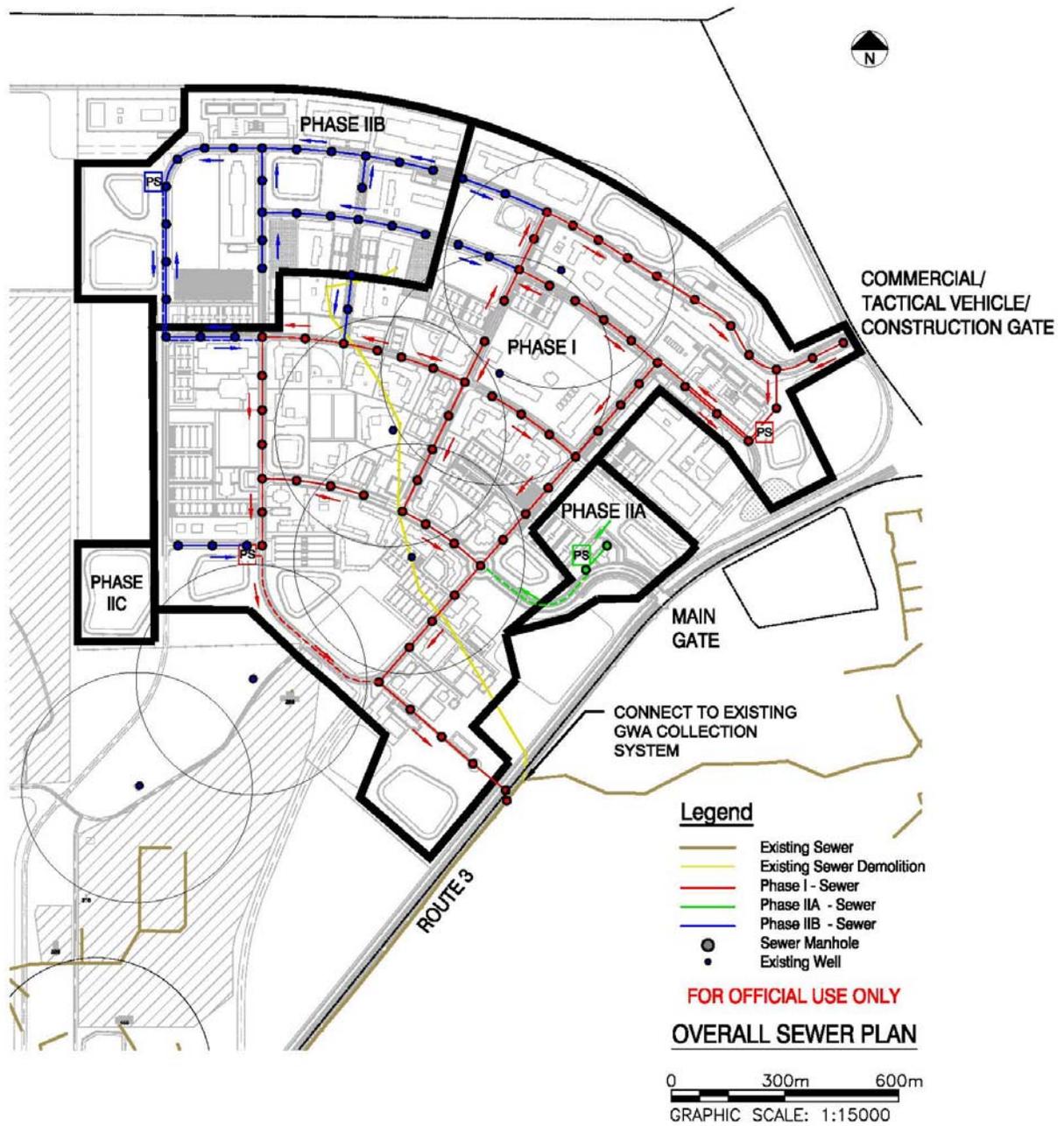
(...continued)



Water Distribution Plan Phase IIB

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

(...continued)



Sanitary Sewer Plan

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

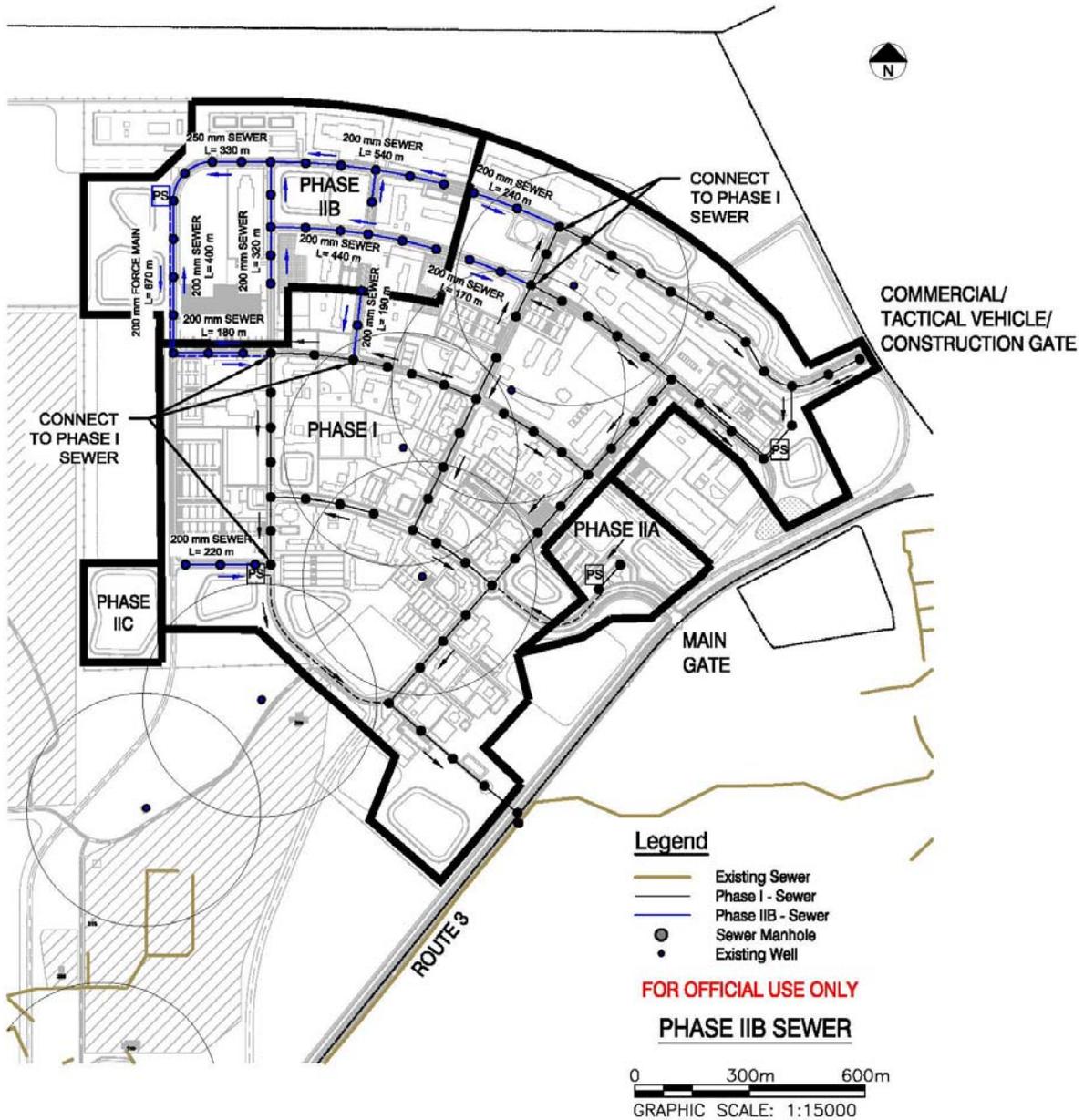
(...continued)



Sanitary Sewer Plan Phase IIA

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA (<i>Continuation</i>)	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost (\$000) \$178,819

(...continued)



Sanitary Sewer Plan Phase IIB