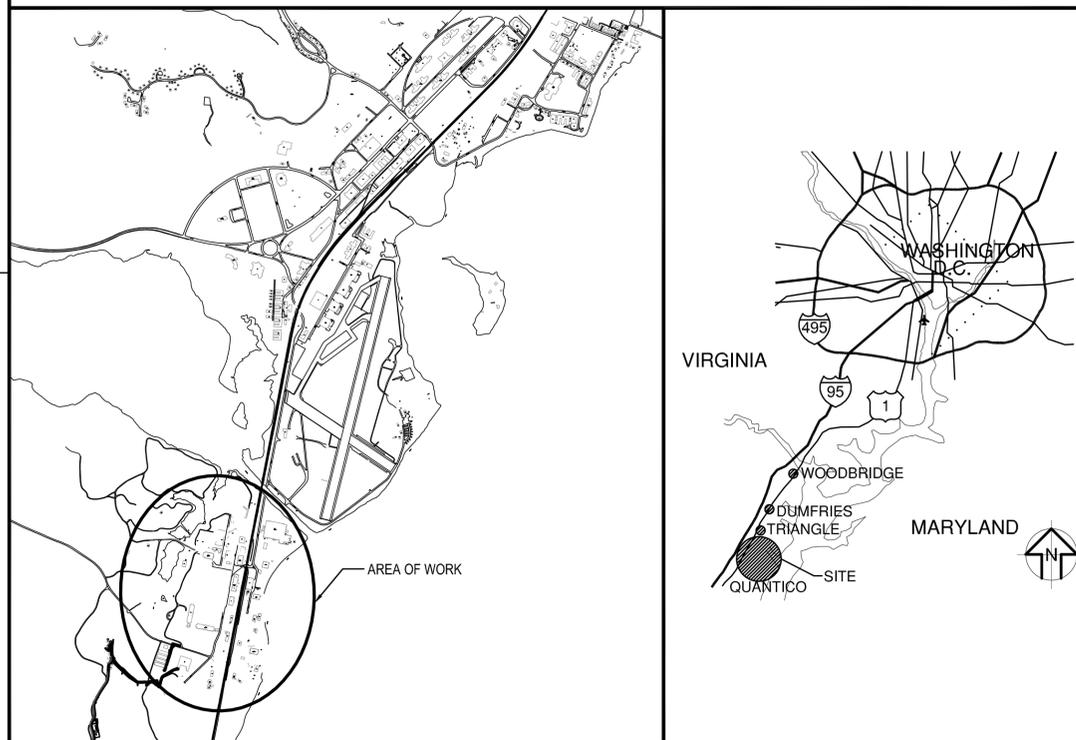


P714 REPAIR OCS ELECTRIC SYSTEM SUBSTATION, CONDUITS, AND CABLES

MARINE CORPS BASE QUANTICO QUANTICO, VIRGINIA

CONSTRUCTION CONTRACT NO.
PROJECT NO. QU1536M
PWB NO. 2013228

LOCATION MAP



NOTICES

GUIDELINES FOR EXCAVATION PROJECTS AND UNEXPECTED DISCOVERIES AT MCBQ

FOR EXCAVATIONS PERMITTED WHERE THERE ARE NO KNOWN ARCHAEOLOGICAL SITES OR CEMETERIES, CAUTION MUST STILL BE USED BY CONTRACTORS. SOME AREAS SUCH AS MAINSIDE, ARE URBAN TERRAIN AND HAVE BEEN SIGNIFICANTLY MODIFIED OR DISTURBED. HOWEVER, THERE MAY BE UNDISTURBED SOIL ZONES ENCOUNTERED ADJACENT TO OR UNDER PREVIOUS DISTURBANCES/FILL.

IN SOME CASES NEPA PERSONNEL MAY PERIODICALLY EXAMINE EXCAVATIONS DURING THE CONSTRUCTION PERIOD TO EXAMINE SOIL STRATIGRAPHY FOR GENERAL INFORMATION AND POSSIBLE RESOURCE ISSUES IN AREAS OF INTEREST.

THE CONTRACTOR SHOULD CONTACT BASE ARCHAEOLOGIST/NEPA SECTION IMMEDIATELY IF ARTIFACTS (METAL TOOLS, ARROWHEADS, ETC.) APPEARING TO PRE-DATE THE 20TH CENTURY OR UNUSUAL SOIL ZONES ARE ENCOUNTERED.

IN THE EVENT THERE ARE ANY UNEXPECTED DISCOVERIES OF POTENTIAL HUMAN REMAINS (E.G. BONES, BONE FRAGMENTS), WORK MUST BE HALTED OR DIVERTED TO OTHER AREAS UNTIL APPROPRIATE MEASURES ARE TAKEN. CONTRACT PROJECT MANAGERS MUST BE INFORMED THAT ANY HUMAN REMAINS ENCOUNTERED ARE **PROTECTED BY STATE AND FEDERAL LAW**. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:

- HALT WORK AT THE LOCATION LEAVING REMAINS IN PLACE AND ANY ASSOCIATED FEATURES AND OBJECTS
- NOTIFY BASE ARCHAEOLOGIST/NEPA SECTION (SEE BELOW)
- REDESIGN PROJECT TO AVOID REMAINS, IF POSSIBLE
- BASE ARCHAEOLOGIST/NEPA SECTION WILL CONTACT STATE HISTORIC PRESERVATION OFFICE (SHPO), AND IF REMAINS ARE NATIVE AMERICAN WILL CONTACTS TRIBE(S)
- REMOVAL OF REMAINS REQUIRES A PERMIT FROM THE SHPO, INCLUDING THE PARTICIPATION OF A SKELETAL BIOLOGIST OR PHYSICAL ANTHROPOLOGIST, AND PLANS TO MAKE APPROPRIATE NOTIFICATIONS TO POSSIBLE DESCENDENTS/RELATIVES AND OTHER MEASURES IN ACCORDANCE WITH STATE LAW AND ADVISORY COUNCIL ON HISTORIC PRESERVATION GUIDELINES

CONTACT INFORMATION:

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PCBs

SAMPLING SHALL BE CONDUCTED FOR EACH OIL FILLED DEVICE REMOVED. SUBMIT REPORTS TO CONTRACTING OFFICER. IF OIL IS NON-PCB, DRAIN AND DISPOSE PROPERLY. IF THE MATERIALS SAMPLED ARE DETERMINED TO BE PCBs OR PCB CONTAMINATED, THEN THE CONTRACTOR SHALL ADHERE TO THE SPECIFICATION AND THE REQUIREMENTS OF SPECIFICATION SECTION 028433 FOR REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBs). PROVIDE UNIT COST FOR THE DISPOSAL OF PCB CONTAMINATED OIL.

OSPREY NESTS

SOME OF THE EXISTING POWER POLES CONTAIN OSPREY NESTS. ANY WORK ON A POWER POLE WHICH HAS AN OSPREY NEST SHALL OCCUR BETWEEN 1 OCTOBER AND 1 APRIL. IF THE POLE OR NEST IS DAMAGED DURING CONSTRUCTION THE FOLLOWING GUIDANCE PER THE VIRGINIA DEPARTMENT OF GAME AND INLAND FISHERIES SHALL BE FOLLOWED:

1. THE REPLACEMENT PLATFORM SHOULD BE AS TALL AS OR TALLER THAN THE ORIGINAL NEST SUPPORT, BUT NOT LESS THAN 15 FEET ABOVE THE GROUND OR NORMAL WATER ELEVATION.
2. THE REPLACEMENT PLATFORM SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE ORIGINAL NEST SITE; PREFERABLY WITHIN 150 FEET OF THE ORIGINAL NEST SITE, AND NO MORE THAN 300 FEET DISTANT.
3. THE REPLACEMENT PLATFORM SHOULD BE IN AN EXPOSED LOCATION (I.E., NOT UNDER OR WITHIN THE CANOPY OF A TREE OR OTHER SHELTER).
4. THE PLATFORM SUPPORT SHOULD BE STRONG ENOUGH TO SUPPORT A 200-POUND NEST.
5. NEST PLATFORMS SHOULD BE CIRCULAR OR OVAL, OR OF ANY CONVEX POLYGONAL SHAPE WITH MORE THAN THREE SIDES, WITH A MINIMUM WIDTH OF 3 FEET IN ANY HORIZONTAL DIMENSION. SEE DETAIL 2/E-501.
6. IF FEASIBLE, OLD NESTS SHOULD BE RELOCATED INTACT ONTO THE NEW PLATFORM. WHEN THIS IS NOT FEASIBLE, STICKS FROM THE OLD NEST SHOULD BE ROUGHLY ARRANGED ON THE PLATFORM IN THE SHAPE OF A NEST.
7. THE ORIGINAL NEST SUPPORT OR SUBSTRATE SHOULD BE MODIFIED TO DISCOURAGE OSPREYS FROM REBUILDING A NEST AT THE SITE.

ASBESTOS & LEAD-BASED PAINT

NOTE: A PRE-ALTERATION ASSESSMENT HAS BEEN CONDUCTED FOR ASBESTOS CONTAINING MATERIALS (ACM'S) AND LEAD-BASED PAINT (LBP). AREAS FOUND TO CONTAIN THESE MATERIALS HAVE BEEN INDICATED ON THE CONTRACT DOCUMENTS. HOWEVER, IF SUSPECT ACM'S OR LBP'S ARE ENCOUNTERED IN AREAS NOT INDICATED TO CONTAIN THESE MATERIALS, DEMOLITION ACTIVITIES SHALL CEASE AND BULK ASBESTOS AND/OR LEAD PAINT CHIP SAMPLING SHALL BE CONDUCTED. IF THE MATERIALS SAMPLED ARE DETERMINED NECESSARY FOR REMOVAL THEN THE CONTRACTOR SHALL ADHERE TO THE SPECIFICATION AND THE REQUIREMENTS OF SPECIFICATION SECTIONS 02 82 16.00 20 FOR ASBESTOS REMOVAL, AND 02 83 13.00 20 FOR LEAD IN CONSTRUCTION. SEE SHEET XX FOR ADDITIONAL REQUIREMENTS.



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ACTIVITY

SATISFACTORY TO DATE

DES KU DRW EP CH#SS/CPC

BRANCH MANAGER

CHIEF ENGINEER

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - WASHINGTON

MARINE CORPS BASE QUANTICO, VIRGINIA

QUANTICO, VA

P714 REPAIR OCS ELECTRIC SYSTEM

SUBSTATION, CONDUITS, AND CABLES

COVER SHEET

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND

RESIDENT OFFICER IN CHARGE OF CONSTRUCTION

MARINE CORPS BASE QUANTICO

SCALE: AS NOTED

EPROJECT NO.: QU1536M

CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 3189910

SHEET 1 OF 105

G-001

DRAWING REVISIONS: 10 MARCH 2008

FILE NAME: G-001 COVER SHEET.DWG
OUR REF: XXXXX
PROJECT: XXXXXXXX
PLOT DATE: 1/14/2016 8:31:17 AM

BUILDING OUTAGE SCHEDULE

BUILDING	MINIMUM NUMBER OF DAYS NOTICE	AVAILABLE DAYS FOR OUTAGE	AVAILABLE HOURS	NOTES
1-2	21	M-F	NORMAL BUSINESS HOURS	8 HOUR MAX OUTAGE
3	21	M-F	NORMAL BUSINESS HOURS	8 HOUR MAX OUTAGE
69	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
72	21	M-F	NORMAL BUSINESS HOURS	8 HOUR MAX OUTAGE
2112	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2113	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2118	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
2121	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2122	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2124	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2125	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2140	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2168	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2177	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2179	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2187	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
2189N	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
3065	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
3083	21	DATES POWER CAN BE TURNED OFF WITHOUT TEMP GENERATOR, JUNE 16 & 26, JULY 3, 24 & 31 AND AUGUST 7 & 14. ALL OTHER DATES PROVIDE TEMP GENERATOR.		
3083A	21	DATES POWER CAN BE TURNED OFF WITHOUT TEMP GENERATOR, JUNE 16 & 26, JULY 3, 24 & 31 AND AUGUST 7 & 14. ALL OTHER DATES PROVIDE TEMP GENERATOR.		
3185	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3185B	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3186	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3202	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3209	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3218	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3230	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3232	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3233	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3239	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3240	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3256A	21	M-F	NORMAL BUSINESS HOURS	COORDINATE WITH OCS, THERE ARE 5 DAYS PER YEAR WHERE POWER CAN NOT BE LOST.
3256B	21	SUN-SAT	AVAILABLE ANYTIME	NO OUTAGE RESTRICTIONS
3260	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3262	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3264	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
3266	21	SAT-SUN	8PM FRIDAY - 4AM MONDAY	8 HOUR MAX OUTAGE
5001	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
5002	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
5003	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
5005	21	PROVIDE TEMPORARY GENERATOR FOR ALL OUTAGES.		
RECEIVER BLDG.	21	COORDINATE WITH MCAF. FACILITY HAS GENERATOR, MEASURE FUEL LEVEL PRIOR TO OUTAGE AND PROVIDE FUEL TO PRE OUTAGE LEVEL AFTER OUTAGE IS COMPLETE.		
TRANSMITTER BLDG.	21	COORDINATE WITH MCAF. FACILITY HAS GENERATOR, MEASURE FUEL LEVEL PRIOR TO OUTAGE AND PROVIDE FUEL TO PRE OUTAGE LEVEL AFTER OUTAGE IS COMPLETE.		
DASR SITE	21	COORDINATE WITH MCAF. FACILITY HAS GENERATOR, MEASURE FUEL LEVEL PRIOR TO OUTAGE AND PROVIDE FUEL TO PRE OUTAGE LEVEL AFTER OUTAGE IS COMPLETE.		

PROJECT SEQUENCING REQUIREMENTS

- PROJECT WILL BE BUILT WHILE THE BUILDINGS AND BASE REMAINS IN SERVICE AND OCCUPIED.
- PROVIDE GENERATORS WHICH COMPLY WITH VIRGINIA VISIBLE EMISSIONS DURING OPERATION.
- PROVIDE TRAILER MOUNTED GENERATORS, PARKED GENERALLY WHERE INDICATED. VERIFY FINAL LOCATION WITH CONTRACTING OFFICER BEFORE INSTALLING. PROVIDE GENERATORS WITH RESIDENTIAL GRADE SILENCERS, AND DIRECT EXHAUST AND RADIATOR DISCHARGE AWAY FROM BUILDINGS, OUTSIDE AIR INTAKES AND DOORS TO THE BUILDING. SEE DRAWING E-406 FOR TEMPORARY GENERATOR SCHEDULE.

FREQUENCY, HZ	MAXIMUM SOUND LEVEL, DECIBELS
63 AND BELOW	78
125	68
250	60
500	53
1000	48
2000	44
4000	42
8000	41
- PROVIDE FUEL, MAINTENANCE AND OPERATORS FOR BUILDINGS INDICATED WHILE NORMAL POWER IS OUT OF SERVICE. PROVIDE TEMPORARY CABLES AND CABLE PROTECTION AND CONNECT. MAXIMUM OUTAGE WHILE CONNECTING GENERATOR SHALL NOT EXCEED TWO HOURS.
- ADDITIONAL GENERATORS MAY BE PROVIDED TO REDUCE THE TOTAL CONSTRUCTION TIME. SUBMIT PROPOSED SEQUENCING PLAN AND OBTAIN APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- EQUIP FUEL OIL TANKS WITH A MEANS TO CONTAIN SPILLS AND LEAKS DURING FUEL OIL TRANSFER AND GENERATOR OPERATIONS.
- SUBMIT A MONTHLY REPORT OF FUEL OIL USED TO OPERATE THE GENERATORS, FOR DELIVERY TO PWB QUANTICO ENVIRONMENTAL.
- OBTAIN A PERMIT TO CONSTRUCT AND OPERATE ANY FUEL BURING EQUIPMENT RATED AT A CAPACITY GREATER THAN 5 MILLION BTU PER HOUR DESIGN HEAT INPUT.
- MAXIMUM OUTAGE FOR GENERATOR TAP BOX CONNECTION SHALL BE 2 HOURS.

GENERAL NOTES

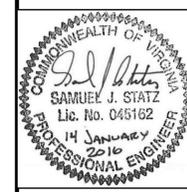
- ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST.", OR "(E)".
- VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION SEQUENCING PLAN CONT

- SCHEDULE TRANSFER OF ALL BUILDINGS ON 5KV SYSTEM TO 15KV SYSTEM. OCS SUBSTATION AND ASSOCIATED 5 KV FEEDER SERVING RADAR HILL SHALL REMAIN ACTIVE UNTIL ONGOING PROJECT "P-1406 ATC TRANSMITTER/RECIEVER RELOCATION" IS COMPLETED.
- OVER SCHEDULED WEEKEND OUTAGES, TRANSFER ALL BUILDINGS ON 5KV SYSTEM TO 15KV SYSTEM.
- PROVIDE FEEDER FROM OCS SWITCH STATION TO MANHOLE OCS-27. OVER ONE SCHEDULED WEEKEND OUTAGE;
 - CLOSE PMOS-1 SWITCH TO OCS SWITCH STATION AND OPEN OCS SWITCH STATION MAIN.
 - DISCONNECT THE MAIN FEED TO OCS SUBSTATION AND REMOVE IT TO MANHOLE OCS-27. PROVIDE T-BODY SEPARABLE SPLICE CONNECTORS AND CONNECT TO FEEDER TO OCS SWITCH STATION MAIN.
 - PROVIDE FEEDER FROM OCS SWITCH STATION TO MANHOLE Y-1. PROVIDE T-BODY SEPARABLE SPLICE CONNECTORS AND CONNECT TO YECKEL HALL FEEDER.
 - CLOSE MAIN SWITCH FOR OCS SWITCH STATION AND OPEN SWITCH TO PMOS-1.
- ALL ELECTRICAL OUTAGES SHALL OCCUR FROM 8PM FRIDAY THRU 4AM SUNDAY, UNLESS OTHERWISE NOTED. COORDINATE UTILITY SHUTDOWN SCHEDULE FOR INDIVIDUAL BUILDINGS WITH THE CONTRACTING OFFICER.
- DEMOLISH OCS SUBSTATION, ALL OVERHEAD LINES, AND ASSOCIATED POLES. NOT BEING RETAINED TO SUPPORT TELECOMMUNICATIONS.

CONSTRUCTION SEQUENCING PLAN

- COORDINATE ALL ELECTRICAL OUTAGES 21 CALENDAR DAYS PRIOR TO OUTAGE. RECEIVE WRITTEN PERMISSION PRIOR TO ANY OUTAGE. PROJECT SHALL BE BUILT WHILE THE BUILDING AND BASE REMAIN IN SERVICE AND OCCUPIED, AND MUST REMAIN IN SERVICE, EXCEPT FOR SCHEDULED OUTAGES. PROVIDE TEMPORARY GENERATORS AS REQUIRED. SEE BUILDING OUTAGE SCHEDULE FOR ADDITIONAL INFORMATION.
- ALL CABLES IN A MANHOLE SHALL BE DE-ENERGIZED PRIOR TO ENTERING THE MANHOLE. COORDINATE SWITCHING WITH HIGH VOLTAGE SHOP.
- PROVIDE ALL TEMPORARY GENERATOR CONNECTIONS AS INDICATED.
- PROVIDE ALL MEDIUM VOLTAGE EQUIPMENT, DUCTBANKS, MANHOLES AND CABLES. TEST ALL CABLES.
- PROVIDE ALL LOW VOLTAGE DUCTBANKS.
- PROVIDE 15KV CABLE FROM MAIN OF OCS SWITCH STATION INTERRUPTER SWITCH TO EXISTING MANHOLE OCS-27. PROVIDE T-BODY SEPARABLE SPLICE CONNECTORS ON FEEDER.
- ENSURE PMOS-1 HAS POWER FROM MCAF FEEDER. OPEN BREAKER IN OCS SUBSTATION SERVING PMOS-1 AND OPEN SWITCH IN PMOS-1 FEEDING OCS SUBSTATION.
- DISCONNECT AND REMOVE FEEDER PMOS-1 FROM OCS SUBSTATION TO MANHOLE OCS-27. TAG, PROTECT AND PROVIDE T-BODY SEPARABLE SPLICE CONNECTORS ON PMOS-1 FEEDER. RETAIN IN MANHOLE FOR REUSE.
- PROVIDE 15KV FEEDER FROM BREAKER IN OCS SUBSTATION TO MANHOLE OCS-27. PROVIDE T-BODY SEPARABLE SPLICE CONNECTORS AND CONNECT TO FEEDER TO OCS SWITCH STATION.
- ENSURE ALL PRIMARY SWITCHES ON TRANSFORMERS ARE OPEN AND ENERGIZE 15KV EQUIPMENT AND CABLES BY CLOSING BREAKER IN OCS SUBSTATION AND CLOSING SWITCH IN OCS SWITCH STATION.
- PROVIDE FEEDER FROM OCS SWITCH STATION AND CONNECT TO PMOS-1 FEEDER.
- RELOCATE LARSONS SWITCH TO SERVE RADAR HILL AND CONNECT TO EXISTING FEEDER 15LV FEEDER SERVING RADAR HILL. ENSURE SWITCH FROM OCS SWITCH FEEDER IS OPEN AND LOCKED OUT AND PROVIDE TEMPORARY 5KV CABLE FROM LARSONS SWITCH TO OVERHEAD 5KV SYSTEM ON POLE P-1. ENERGIZE SWITCH ON 5KV SYSTEM.
- OPTION-1: REPLACE TID 126.



APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
SATISFACTORY TO DATE
DES: KU DRW: EP CHK:SS/CPG
BRANCH MANAGER
CHIEF ENGINEER
XXXXXX

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - WASHINGTON
 RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
 MARINE CORPS BASE QUANTICO, VIRGINIA
 QUANTICO, VA
**P714 REPAIR OCS ELECTRIC SYSTEM
 SUBSTATION, CONDUITS, AND CABLES**
 BUILDING OUTAGE SCHEDULE/SEQUENCING

SCALE: AS NOTED
EPROJECT NO.: QUT536M
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 3189915
SHEET 6 OF 105
G-006

FILE NAME: G-004 BUILDING OUTAGE SCHEDULE - SEQUENCING.DWG
 OUR REF: XXXXXX
 PROJECT: XXXXXX
 PLOT DATE: 1/13/2016 11:34:53 PM