

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 29
2. MODIFICATION NO.: 0005	3. EFFECTIVE DATE SEP 05, 2003	4. REQUISITION/PURCHASE REQ. NO. W81W3G-2035-7181	PROJECT NO. (If applicable)
6. ISSUED BY Department of the Army Baltimore District, Corps of Engineers Contracting Division P.O. Box 1715 Baltimore MD 21203-1715	CODE CA31	7. ADMINISTERED BY: Contracting Division, Contracts Branch CENAB-CT-C 10 S. Howard ST. Room 7000 Baltimore, MD 21203-1715	CODE E1P0100
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(x)	9A. AMENDMENT OF SOLICITATION NO. DACA31-03-R-0038
		X	9B. DATED (SEE ITEM 11) AUG 04, 2003
			10A. MODIFICATION OF CONTRACT/ ORDER NO.
			10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers **is not extended.**

DATE OF RECEIPT OF PROPOSALS 4:00 PM, LOCAL TIME, SEP 15, 2003

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER No. ITEM 10A
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR43.103(b)
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: changes clause FAR 52.243.1
D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

**UNACCOMPANIED ENLISTED PERSONNEL HOUSING (UEPH 2)
FORT DETRICK, MARYLAND**

SEE THE FOLLOWING PAGES

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

AMENDMENTS:

- 1) Amendment 0001: Delete in their entirety drawings issued by Amendment 0001. Drawings issued by Amendment 0001 are superceded by detailed Company Operations drawings in this Amendment 0005.
- 2) Amendment 0003, Item 17: Insert “except when under economizer control.” to the end of paragraph 3.3.6.2c.
- 3) Amendment 0003, Item 17: Delete the following sentence from paragraph 3.3.6.3b: “The fans shall start and stop at the setpoints as shown.”
- 4) Amendment 0003, Item 17: Delete “space temperature” in the last sentence of paragraph 3.3.6.7 and replace with “zone temperature.”
- 5) Amendment 0003, Item 17: Immediately after paragraph 3.3.6.8, add the following:

“3.3.6.9. Economizer Control

The DDC system shall accept the signal of an outside air temperature-sensing element and transmitter. The DDC system shall perform switchover between outside air economizer control mode and minimum outside air mode when the outside air temperature drops below 12.7 °C. When the DDC system places the control system in the minimum outside air mode, the outside air damper shall be open to the minimum outdoor air setting.

3.3.6.10. Mixed-Air Temperature Control

When the DDC system places the system in the economizer mode, it shall modulate the dampers from the signal of a temperature-sensing element and transmitter in the mixed air stream to maintain the setpoint.”

- 6) Amendment 0003, Item 19: Immediately after paragraph 3.3.13.8, add the following:

“3.3.14 Packaged Rooftop Kitchen Ventilation Unit Control

3.3.14.1. Fan Start/Stop Control: fan shall be controlled by on-off switch located as shown on the electrical drawings. Switch shall be wired to hood integral controls.

3.3.14.2. Damper Control: when the supply fan is turned on, the outside air damper shall open fully.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

3.3.14.3. Heating Valve Control: The 2 position hot water coil valve is controlled from a 2 position outside air temperature sensor located in the outside air intake ductwork. When the temperature drops below the setpoint of 18.4 °C (adjustable), the hot water coil shall be full open to flow through the coil.

3.3.14.4. Face and Bypass Control: The air temperature at the discharge of the heating coil is controlled by modulating the coil face and bypass dampers to maintain the coil discharge air temperature. If the supply temperature falls .5 °C (adjustable) below the heating setpoint temperature of 15.5 °C (adjustable), the control package for the unit shall modulate the face and bypass dampers to increase air flow through the coil and proportionally decrease air flow through the bypass to maintain the setpoint. Upon a rise in supply temperature above the setpoint the reverse shall take place.

3.3.14.5. Filter: If pressure differential across filter exceeds 124 pa (adjustable) above initial clean filter pressure drop, an alarm shall be sent to the building DDC control system.

3.3.14.6. Exhaust Fan: The unit upblast exhaust fan shall be energized whenever the supply fan is energized.

3.3.15 Variable Air Volume Control Sequence with Return Fan (COF AHU-1)

3.3.15.1 Occupied, Unoccupied and Ventilation Delay Modes

Operation Ventilation delay mode timing shall start prior to the occupied mode timing. During ventilation delay mode, the dampers shall remain in their normal positions as shown, except when under economizer control. At the time shown, the DDC controller shall place the system in the occupied mode. At the expiration of the ventilation delay mode timing period, the DDC controller shall place the minimum outside air damper under minimum outside air flow control and shall place the economizer outside air, return air and relief air damper's under economizer and mixed air temperature control. At the time shown, the DDC controller shall place the control system in the unoccupied mode of operation and dampers shall return to their normal positions as shown.

3.3.15.2 Fan Control

Occupied and ventilation delay modes – Supply fan and return fan shall operate continuously.

Unoccupied mode – The supply fan and the return fan shall cycle according to the night setback schedule. The fans shall start and stop at the setpoints as shown.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

3.3.15.3 Supply Duct Pressurization Control

When the supply fan starts, the DDC controller shall modulate the VFDU from the signal of a static pressure sensing element and transmitter to maintain the setpoint as shown. A high limit static pressure switch in the fan discharge shall stop the supply fan and the return fan and initiate a high static alarm when the static pressure exceeds the setpoint.

3.3.15.4 Return Fan Volume Control

When the return fan starts, the DDC controller shall modulate the return fan VFDU from the signals of an air flow measurement station and transmitter in the return air ductwork, in combination with an air flow measurement station and transmitter in the supply air ductwork, to maintain a constant difference between supply air and return air flow rates as shown.

3.3.15.5 Filters

A differential pressure switch across each filter shall initiate a filter alarm when the pressure drop across the filter reaches the setpoint as shown.

3.3.15.6 Freeze Protection

A freeze-stat, located as shown, shall stop the supply and return fans, cause the outside air, return air and relief air dampers to return to their normal position, and shall initiate a low temperature alarm if the temperature drops below the freeze-stat's setpoint as shown. The DDC controller shall monitor the freeze-stat through auxiliary contacts and shall indicate an alarm condition when the freeze-stat trips.

3.3.15.7 Cooling Coil Control

Occupied and Ventilation Delay Modes – The stages of cooling shall be modulated by the DDC controller from the signal of a temperature sensing element and transmitter located in the coil discharge air to maintain the setpoint as shown.

Unoccupied Mode – The cooling coil control valve shall remain closed.

3.3.15.8 Heating Coil Control

All Modes – The DDC controller shall modulate the heating coil valve based on input from an averaging temperature sensor located downstream of the heating coil to maintain coil discharge air setpoint as shown.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

3.3.15.9 Minimum Outside Air Flow Control

Occupied Mode – The minimum outside air damper shall be modulated to maintain the minimum outside air flow at setpoint, as sensed by an air flow measurement station located in the minimum outside air duct.

Unoccupied and Ventilation Delay Modes – The minimum outside air damper shall remain closed.

3.3.15.10 Economizer and Mixed Air Temperature Control

The DDC controller shall accept the signal of an outside air temperature-sensing element and transmitter. When the outside air temperature is below setpoint (11.7 deg C), the DDC controller shall place the AHU in the economizer mode by modulating the economizer outside air, relief air and the return air dampers to maintain the mixed air temperature at setpoint. As the economizer outside air and relief air dampers open, the return air damper closes. When the system is not in economizer mode, the economizer outside air and relief air dampers shall remain closed and the return air damper shall remain open.

3.3.15.11 Pressure Independent Terminal VAV box with Velocity Controller

All Modes – The control damper of the VAV box shall modulate in response to the signal from a flow-sensing element at the discharge or inlet of the VAV box to a microprocessor based VAV box velocity controller. The velocity controller shall control the box damper from the minimum flow position to the full flow position from the signal of a space temperature-sensing element located as shown. When the space temperature decreases, the damper shall gradually close to the minimum flow position to maintain the cooling setpoint as shown. When the space temperature calls for heating after the minimum flow position is reached, control shall then pass through a temperature dead band as shown. When the space temperature has dropped through the dead band, the duct heater coil shall be gradually controlled to maintain the heating setpoint as shown.

3.3.15.12 Emergency Fan Shutdown

All Modes – Smoke detectors in the supply air and return air ductwork shall stop the supply fan and the return fan and initiate a smoke alarm if smoke is detected at either location. Restarting the supply fan and the return fan shall require manual reset at the smoke detector.

Activation of a duct smoke detector in the supply air or return air ductwork, or activation of a manual emergency fan shutdown switch shall cause the associated fan to shutdown in accordance with NFPA 90A. Activation of these devices shall operate a pilot light on

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

the HVAC control panel. The panel shall require manual resetting after the detector and the manual switch are reset.

3.3.16. Unit Ventilator Control (UV-1 and UV-2)

A manual fan switch, located adjacent to the thermostat, shall allow occupant operation of the fan. Fan switch positions provided shall be Off, Low, Medium, and High.

With the fan in one of the three "energized" positions and the unit selected for heating, a wall-mounted thermostat shall modulate the three-way valve on the hot water coil to maintain the setpoint.

The cooling mode will control the cooling coil and the remote air-cooled condensing unit while the heating mode will control the heating coil. When the remote air-cooled condensing unit energized the heating coil will be bypassed.

With the fan "de-energized" the three-way hot water valve shall close to the coil.

While the fan is "de-energized" if the space temperature drops below the freeze protection setpoint of 13 °C (adjustable), the unit fan will be automatically compelled to "energize" in the high speed position without occupant intervention to maintain the freeze protection setpoint. The fan shall automatically "de-energize" if the space temperature rises above the freeze protection setpoint.

3.3.16.1. Direct Expansion Cooling Coil

- a. Occupied Mode - The stages of cooling shall be controlled according to the space temperature.
- b. Unoccupied Mode – Cooling shall be off.

3.3.17 Single Zone Hydronic Heating and Direct Expansion Cooling Coil (COF AC-1)

3.3.17.1 Occupied, Unoccupied and Ventilation Delay Modes

Ventilation delay mode timing shall start prior to the occupied mode timing. The DDC system shall prevent the outside air damper from opening. At the time shown, the DDC system shall place the system in the occupied mode. At the expiration of the ventilation delay mode timing period, the DDC system shall allow the outside air damper to open. At the time shown, the DDC system shall place the control system in the unoccupied mode of operation.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

3.3.17.2 Outside Air

Occupied Mode – The outside air and return air dampers shall be under control.

Unoccupied Mode – The dampers shall return to their normal position.

Ventilation Delay Mode – The dampers shall return to their normal position.

3.3.17.3 Supply Fan

Occupied and Ventilation Delay Modes – Supply fan shall start and shall operate continuously.

Unoccupied Mode – The supply fan shall cycle according to the night setback schedule. The fan shall start and stop at the setpoints shown.

3.3.17.4 Filter

A differential pressure switch across the filter shall initiate a filter alarm when the pressure drop across the filter reaches the setpoint.

3.3.17.5 Freeze Protection

All Modes – A freezestat located as shown shall stop the supply fan, cause the outside air and return air dampers to return to their normal position and shall initiate a low temperature alarm if the temperature drops below the freezestat's setpoint. Return to the normal mode of operation shall require manual reset at the freezestat. The DDC system shall monitor the freezestat through auxiliary contacts and shall indicate an alarm condition when the freezestat trips.

3.3.17.6 Cooling and Heating Coils

Occupied and Ventilation Delay Modes – the stages of cooling and modulation of hot water coil control valve shall be controlled according to the space temperature.

Unoccupied Mode – Cooling shall be off. Heating coil control valve shall modulate to maintain night setback temperature setpoint.

3.3.17.7 Outside Air Electric Pre-heat Coil

Occupied Mode – Electric pre-heat coil shall modulate to maintain coil discharge temperature setpoint.

b. Unoccupied and Ventilation Delay Modes – Electric pre-heat coil is de-energized.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

7) Amendment 0003, Item 28: Immediately after paragraph 3.4.17, add the following:

“3.4.18 Variable Air Volume Control System – With Return Fan

Steps for installation shall be as follows:

Step 1 – System Inspection: The HVAC system shall be observed in its shutdown condition. It shall be verified that power is available where required, and that the outside air and relief air dampers are closed, the return air damper is open, and that the supply fan and return and cooling are off.

Step 2 – Calibration Accuracy Check with HVAC System Shutdown: Readings shall be taken with a digital thermometer at each temperature sensing element location. Each temperature shall be read at the DDC controller, and the thermometer and DDC controller display readings logged. The calibration accuracy of the sensing element-to-DDC controller readout for outside air, return air, mixed air and pre-heat coil and cooling coil discharge temperatures shall be checked. The minimum outside air flow, supply air flow, and return air flow shall be read, using a digital indicating velometer, and the velometer and DDC controller display readings logged. The flows should read zero.

Step 3 – Actuator Range Adjustments: A signal shall be applied to the actuators through an operator-entered value at the DDC controller. The proper operation of the actuators and positioners for all dampers and valves shall be visually verified. The signal shall be varied from live zero to full range, and actuator travel shall be verified from zero stroke to full stroke within the signal range. It shall be verified that all sequenced and parallel operated actuators move from zeros stroke to full stroke in the proper direction, and move the connected device in the proper direction from one extreme position to the other.

Step 4 – Control System Commissioning

(1) With the fans ready to start, the control system shall be placed in the ventilation delay mode and in the occupied mode and it shall be verified that supply fan and return fan start. It shall be verified that the outside air and relief air dampers are closed, the return air damper is open, and the stages of cooling and VFDUs are under control, by simulating a change in the fan discharge temperature. The system shall be placed out of the ventilation delay mode, and it shall be verified that the economizer outside air and relief air dampers remain closed, the return air damper remains open, and the minimum outside air damper comes under control.

(2) The two-point calibration accuracy check of sensing element-to-DDC controller readout for the minimum outside airflow measurement station shall be performed. Force all VAV box dampers to the full open position, turn all exhaust fans off, manually adjust the supply duct static pressure to achieve the design duct static pressure, manually adjust the output to the return fan to establish the design differential flow difference between the supply and return duct flows, and manually adjust the minimum outside air flow to achieve a flow which is approximately 25% less than the desired air flow. Under these

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

conditions, the minimum outside airflow control loop shall be tuned. Confirm stable operation of the minimum outside airflow control loop in response to a process disturbance.

(3) With supply fan running, a high static pressure input signal shall be simulated at the device by a pressure input to the sensing device. HVAC system shutdown shall be observed, and it shall be verified that the high static alarm is initiated. The HVAC system shall be restarted by manual reset, and it shall be verified that the high static alarm returns to normal.

(4) The two-point accuracy check of sensing element-to-DDC controller readout for the static pressure in the supply duct shall be performed.

(5) Each VAV terminal unit controller's minimum flow and maximum flow setpoints shall be set at the same setting. This will prevent the VAV box damper from modulating under space temperature control and will achieve a constant supply duct system pressure drop. The return fan VFU shall be placed under control, and the starter switch shall be turned to the "Auto" position so that the fan starts. The two-point calibration accuracy check of sensing element-to-DDC controller readout for the airflow measurement stations shall be performed. The supply fan VFU shall be operated manually to change the supply fan flow, and the control system shall be set to control at the airflows indicated at 4-ma input and at 20-ma input. The supply fan flow shall be changed to verify that the return flow setpoint tracks the supply fan flow with the proper flow differential.

(6) The economizer mode shall be simulated by a change in the outside air temperature and the return air temperature through operator entered valves and it shall be verified that the system goes into the economizer mode. The mixed air temperature shall be artificially changed through operator entered values to slightly open the economizer outside air damper and the second point of the two-point calibration accuracy check of sensing element-to-DDC controller readout for outside air, return air and mixed air temperature shall be performed. The temperature setpoint shall be set as shown.

(7) The two-point calibration accuracy check of sensing element-to-DDC controller readout for the fan discharge temperature shall be performed. The setpoint for the fan discharge temperature shall be set as shown. A change shall be simulated in the discharge air temperature through an operator-entered value and it shall be verified that the stage of cooling are modulated.

(8) The two-point calibration accuracy check of sensing element-to-DDC controller readout for the pre-heat coil shall be performed. The setpoint for the pre-heat coil discharge temperature shall be set as shown. A change shall be simulated in the discharge air temperature through an operator-entered value and it shall be verified that the pre-heat coil valve is modulated.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

(9) The control system shall be placed in the unoccupied mode and it shall be verified that the HVAC system shuts down and the control system assumes the specified shutdown conditions. The space temperature shall be artificially changed to below the night setback temperature setpoint, and it shall be verified that the HVAC system starts; the space temperature shall be artificially change to above the night setback temperature setpoint and it shall be verified that the HVAC system stops. The night setback temperature setpoint shall be set at the setpoint.

(10) With the HVAC system running, a filter differential pressure switch input signal shall be simulated at the device. It shall be verified that the filter alarm is initiated. The differential pressure switch shall be set at the setpoint as shown. This shall be performed for each filter.

(11) With the HVAC system running, a freezestat trip input signal shall be simulated at the device. HVAC system shutdown shall be verified. It shall be verified that a low temperature alarm is initiated. The freezestat shall be set at the setpoint as shown. The HVAC system shall be restarted by manual restart and it shall be verified that the alarm returns to normal.

(12) With the HVAC system running, a smoke detector trip input signal shall be simulated at each device. Control device actions and interlock functions as described in the Sequence of Operation shall be verified. Simulation shall be performed without false-alarming any Life Safety systems. It shall be verified that the HVAC system shuts down and the smoke detector alarm is initiated. The detectors shall be reset. The HVAC system shall be restarted by manual reset, and the alarm return-to-normal shall be verified.

(13) For each VAV terminal unit, velocity setpoints shall be set for minimum and maximum flow and temperature setpoints for the heating/cooling dead band. The actions of the controller, the operation of the damper, and the operation of heating shall be verified. It shall be verified that space temperature is maintained.

3.4.19. Unit Ventilator Commissioning (UV-1 and UV-2)

a. Fan shall be energized and the thermostat set to heating. The space thermostat temperature setting shall be turned up so that it makes contact and fully opens the three-way valve to the heating coil. With the space thermostat temperature setting turned down the three-way valve shall close to the heating coil. When set to cooling and the space thermostat setting turned down so that it makes contact and energizes the remote air cooled condensing unit and opens the refrigerant expansion valve to the cooling coil. With the space thermostat temperature setting turned up, refrigerant expansion valve shall close and the air-cooled condensing unit shall de-energize.

b. The fan shall be set to the 'off' position, the three-way shall close to the coil and the remote air cooled condensing unit shall de-energize.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- c. The fan shall be set to various fan speeds (high, medium, low) and the fan speed shall change.
- d. The fan shall be set to the 'off' position and the system shall be set to heating, the space thermostat temperature setting for freeze protection shall start the fan.
- e. The results of testing each type of unit shall be logged.

3.4.20 Single Zone with Hydronic Heating Direct Expansion Cooling (COF AC-1)

Steps for installation shall be as follows:

- a. Step 1 – System Inspection: The HVAC system shall be verified in its shutdown condition. The system shall be checked to see that power and main air are available where required, the outside air damper is closed, all stages of cooling are off and that the return air damper is open.
- b. Step 2 – Calibration Accuracy Check with HVAC System Shutdown: Readings shall be taken with a digital thermometer at each temperature sensing element location. Each temperature shall be read at the DDC controller, and the thermometer and DDC system display reading logged. The calibration accuracy of the sensing element-to-DDC system readout for outside air, return air and space temperatures shall be checked.
- c. Step 3 - Actuator Range Adjustments: A signal shall be applied to the actuator, through an operator entered value to the DDC system. The proper operation of the actuators and positioners for all dampers and valves shall be visually verified. The signal shall be varied from live zero of 4 ma to 20 ma, and it shall be verified that the actuators travel from zero stroke to full stroke within the signal range. It shall be verified that all sequenced and parallel operated actuators move from zero stroke to full stroke in the proper direction and move the connected device in the proper direction from one extreme position to the other. Example: NC actuators are closed at 4 ma and are open at 20 ma. The signal levels that move the controlled device to its extreme positions shall be logged. The operating points of the sequence shall be set for each stage of cooling and the proper operation of each stage shall be verified.
- d. Step 4 - Control System Commissioning:
 - (1) With the fan ready to start, the control system shall be placed in the ventilation delay mode and in the occupied mode, and it shall be verified that supply fan starts. It shall be verified that the outside air and relief air dampers are closed, the return air damper is open, and the heating coil and stages of cooling are under control, by simulating a change in the space temperature.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- (2) The control system shall be placed in the minimum outside air mode. It shall be verified that the outside air damper opens to minimum position and the electric preheat coil in under control.
 - (3) The control system shall be placed in the unoccupied mode, and it shall be verified that the HVAC system shuts down, and the control system assumes the specified shutdown conditions. The space temperature shall be artificially changed to below the night setback temperature setpoint, and it shall be verified that the HVAC system starts; the space temperature shall be artificially changed to above the night setback temperature setpoint, and it shall be verified that the HVAC system stops. The night setback temperature setpoint shall be set at the setpoint as shown.
 - (4) With the HVAC system running, a filter differential pressure switch input signal shall be simulated at the device. It shall be verified that the filter alarm is initiated. The differential pressure switch shall be set at the setpoint as shown.
 - (5) With the HVAC system running, a freezestat trip input signal shall be simulated at the device. HVAC system shutdown shall be verified. It shall be verified that a low-temperature alarm is initiated. The freezestat shall be set at the setpoint. The HVAC system shall be restarted by manual restart and it shall be verified that the alarm returns to normal.
 - (6) With the HVAC system running, a smoke detector trip input signal shall be simulated at each detector, and control device actions and interlock functions as described in the Sequence of Operation shall be verified. Simulation shall be performed without false-alarmed any Life Safety systems. It shall be verified that the HVAC system shuts down and that the smoke detector alarm is initiated. The detectors shall be reset. The HVAC system shall be restarted by manual reset, and it shall be verified that the alarm returns to normal.”
- 8) Amendment 0003, Item 34: Delete in their entirety Sheets A-13, A-14, A-72, and A-76 reissued by Amendment 0003 and substitute the attached, revised like numbered sheets, dated, Sep 02, 2003.
- 9) Amendment 0003, Item 34: The following changes occur on sheets reissued by Amendment 0003:
 - a) Sheet A-20: Add note “For description of B1, see Sheet A-72.”
 - b) Sheet A-24: Add note “For dimensions of TRP, see Sheet A-72.”
 - c) Sheet A-24, Detail 2/A24, Detail C (in Circle): Change “25mm” to “37.7mm,” and change “50mm” to “75mm.”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

SOLICITATION:

- 10) Price Schedule: Delete price schedule in its entirety as originally issued and substitute the attached revised price schedule, dated Sep 02, 2003.
- 11) Section 00100, Page 8 of 70, Clause 52.216-1: Immediately after this clause insert the following:

“FAR 52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interest, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirements. Evaluation of options will not obligate the Government to exercise the option(s).

(End of clause)”

SPECIFICATIONS:

- 12) Division 1: Add the attached new Section 01070 CUTTING, PATCHING AND REPAIRING.
- 13) Section 01330, Submittal Register: Delete submittal register in its entirety as originally issued and substitute the attached revised register, dated Sep 02, 2003.
- 14) Section 02315: Revise all references to “Dining Facility” to read “Dining Facility and Company Operations Facility.”
- 15) Page 02531-4, Paragraph 1.4: Add the submittal below to SD-06:

“Work Plan; G AR

Work plan detailing the Contractor's method of maintaining flow in existing sewers during construction.”

- 16) Page 02531-6, Paragraph 1.6: Immediately after this paragraph insert the following:

"1.7 MAINTAINING FLOW IN SEWERS

The Contractor shall provide all materials, equipment and incidentals required to maintain flow in existing sewers at all times. A work plan detailing the Contractors method of maintaining flow during construction shall be submitted for Government approval before starting any work."

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- 17) Division 2: Add the attached new Section 02870, SITE FURNISHINGS.
- 18) Page 06100-11, Paragraph. 3.1.3: Add to end of second sentence; “unless noted otherwise.”
- 19) Page 08210-3, Paragraph 2.2.2.1: Revise to read as follows:

“2.2.2.1 Natural Finished Wood Veneer Doors

Veneer doors to receive natural finish shall be Premium Grade with book matched birch veneer in accordance with NWWDA I.S. 1-A. Vertical stile strips shall be selected to provide edges of the same species and/or color as the face veneer. Door finish shall be in accordance with paragraph FINISHING.”

- 20) Page 08210-3, Paragraph 2.3:
- a) Title: Delete “AND LOUVER” from title.
 - b) In first sentence delete “and louver.”
- 21) Page 08210-3, Paragraph 2.3.1: Revise to read as follows:

“2.3.1 Natural Finish Doors

Doors to receive natural finish shall be Premium Grade in accordance with AWI Qual Stds. Finish shall be in accordance with paragraph FINISHING.”

- 22) Page 08510-2, Paragraph 1.2.1: Add the following to the beginning of the paragraph: “Window glazing and frames shall work together as a system to withstand overpressures and other structural loads. Design window frames, mullions, and hardware to resist a static load of 7 kilopascals applied to the surface of the glazing. Frame and mullion deformations shall not exceed 1/160 of the unsupported member lengths. Glazing shall have a minimum frame bite of 9.5 mm for structurally glazed window systems and 25 mm for window systems which are not structurally glazed. Design frame connections to surrounding walls and support elements to resist a combined ultimate loading consisting of a tension force of 35-kN/m and a shear force of 13-kN/m. Alternatively, provide frames that afford an equivalent level of performance.”
- 23) Page 08510-5, Paragraph 2.2.1: Add the following sentence at the end of the paragraph: “Balance mechanisms shall be Caldwell Manufacturing Ultra-Lift balances or approved equal. A minimum of two balances shall be provided per sash.”
- 24) Page 08810-4, Paragraph 2.4.1: In the first line, change “6 mm minimum” to “4 mm minimum”.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- 25) Page 08520-5, Paragraph 2.4.2: Add the following sentence to the end of the paragraph: “Hinges shall be concealed stainless steel hinges conforming to AAMA 904-01, four or six bar type per manufacturers recommendations.”.
- 26) Page 8700-11, Paragraph 3.4: Revise per attached revised Hardware Sets, dated Sep 02, 2003.
- 27) Page 09250-7, Paragraph 3.1.2: Change the first sentence to read, “ Control joints for...in interior walls or wall furrings.”
- 28) Section 09680: Delete this section in its entirety as originally issued and substitute the attached revised like-numbered section, dated Sep 02, 2003.
- 29) Page 10550-2, Paragraph 2.1:
- a) Add a sentence to the beginning of the paragraph reading, “Mailbox type A shall be used for barracks module A and located at the existing Soldier Community Building.”
 - b) Change the third sentence to read, “The size of each individual compartment shall match the size of the existing mailboxes at the Soldier Community Building.”
 - c) Add the following sentences to the end of the paragraph, “A total of 48 mailboxes are required. Contractor shall coordinate locations with the Contracting Officer.
- 30) Page 10550-2, Paragraph 2.2:
- a) Add a sentence to the beginning of the paragraph that reading, “Mailbox type B shall be used at barracks module R1.”
 - b) Add the following sentence to the end of the paragraph: “Six mailboxes that each have 16 individual mailboxes, two parcel lockers, and an outgoing mail receptacle are required. Contractor shall coordinate locations and mounting style with the Contracting Officer.”
- 31) Page 13930A-4, Paragraph 1.6:
- a) SD-03 Product Data, Final Acceptance Test Procedures: Change “G AR” to “G ED.”
 - b) SD-03 Product Data, Fire Protection Specialist Qualifications: Delete “G AR.”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- c) SD-03 Product Data, Sprinkler System Installer Qualifications: Delete “G AR.”
- d) SD-06 Test Reports, Final Acceptance Test Report: Change “G AR” to “G ED.”
- e) SD-07 Certificates, Fire Protection Specialist: Delete “G AR.”

32) Page 13965, Paragraph 1.2:

- a) SD-03 Product Data, Similar Services: Delete “G AR.”
- b) SD-03 Product Data, Final Acceptance Tests: Change “G AR” to “G ED.”
- c) SD-07 Certificates, Installation Technician: Delete “G AR.”
- d) SD-07 Certificates, Installation Drawings: Delete “G AR.”

33) Page 15700 A-12, Paragraph 2.7.2:

- a) Revise 3rd sentence to read “Compressor shall be capable of continuous operation down to the lowest step of unloading as indicated.”
- b) Delete the 4th sentence in its entirety.
- c) Delete the following from the 5th sentence “If standard with the manufacturer, two or more compressors may be used in lieu of a single compressor with unloading capabilities, in which case the compressor will operate in sequence, and” so sentence reads “Each compressor shall have an independent refrigeration circuit through the condenser and evaporator.”

34) Page 15895-20, Paragraph 2.9.2.1: Insert the following at the end of the paragraph: “VAV AHU refrigerant coils shall be two separate and complete circuits that are intertwined. Each circuit shall be equipped with a thermal expansion valve and refrigerant distributor, allowing for capacity modulation of a single circuit to accommodate low load conditions with full expansion valve stability.

35) Page 15895-21, Paragraph 2.9.2.3: Add the following to the end of the paragraph: “For electric resistance heating coils under 20 kW in size, 3 stages of heating shall be provided.”

36) Page 15895-21, Paragraph 2.10.1: Insert “mixing box,” in the second sentence immediately following “access sections,”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

37) Page 15895A-25, Paragraph 2.11.1.6: Immediately after this paragraph insert the following:

“2.11.2 Variable Air Volume (VAV) Terminal Units

VAV terminal units shall be the type, size and capacity shown and shall be mounted in the ceiling and shall be suitable for single duct system applications. Actuators and controls shall be as specified in paragraph CONTROLS. Unit enclosures shall be constructed of galvanized steel not lighter than 0.85 mm (22 gauge) or aluminum sheet not lighter than 1.3 mm (18 gauge). Single or multiple discharge outlets shall be provided as required. Units with flow limiters are not acceptable. Unit air volume shall be factory preset and readily field adjustable without special tools. Reheat coils shall be provided as indicated. A flow chart shall be attached to each unit. Acoustic performance of the terminal units shall be based upon units tested according to ARI 880. Sound power level shall be as indicated. Discharge sound power shall be shown for minimum and 375 Pa (1-1/2 inch water gauge) inlet static pressure.

2.11.2.1 Variable Volume, Single Duct

Variable volume, single duct, terminal units shall be provided with a calibrated air volume-sensing device, air valve or damper, actuator, and accessory relays. Units shall control air volume to within plus or minus 5 percent of each air set point volume as determined by the thermostat with variations in inlet pressures from 200 to 1500 Pa (3/4 to 6 inch water gauge). Internal resistance of units shall not exceed 100 Pa (0.4-inch water gauge) at maximum flow range. External differential pressure taps separate from the control pressure taps shall be provided for airflow measurement with a 0 to 250 Pa (0 to 1-inch water gauge) range. Unit volume controller shall be normally closed upon loss of pneumatic pressure.

2.11.2.2 Reheat Units

a. Hot Water Coils: Hot water coils shall be fin-and-tube type constructed of seamless copper tubes and copper or aluminum fins mechanically bonded or soldered to the tubes. Headers shall be constructed of cast iron, welded steel or copper. Casing and tube support sheets shall be 1.6 mm (16 gauge), galvanized steel, and formed to provide structural strength. Tubes shall be correctly circuited for proper water velocity without excessive pressure drop and they shall be drainable where required or indicated. At the factory, each coil shall be tested at not less than 1700 kPa (250 psi) air pressure and shall be suitable for 1400 kPa (200 psi) working pressure. Drainable coils shall be installed in the air handling units with a pitch of not less than 10 mm per m (1/8 inch per foot) of tube length toward the drain end. Coils shall conform to the provisions of ARI 410.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

2.11.3 Unit Ventilators

Unit ventilators shall include an enclosure, galvanized casing, coil assemblies, valve and piping package, drain pan, air filters, fan assembly, fan drive, motor, motor controller, dampers, and damper operators. Sound power level shall be NC 35. Sound power level data or values for these units shall be obtained according to test procedures based on ARI 350. Sound power values apply to units provided with factory fabricated cabinet enclosures and standard grilles, when handling standard flow for which the unit air capacity is rated. Each unit shall be secured to the building structure. Capacity of the unit ventilators shall be as indicated. Unit ventilators shall be of the year-round type with automatic controls arranged to properly heat and cool the room. Automatic valves and controls shall be provided as specified in Section 15951. Sequence of control shall be any one of the standard ANSI cycles.

2.11.3.1 Enclosures

Enclosures shall be fabricated of not lighter than 1.6-mm (16 gauge) 16 gauge galvanized steel, reinforced and braced, or all welded framework with panels to provide equivalent strength. The casing shall be acoustically and thermally insulated internally with not less than 13-mm thick dual density fibrous glass insulation. The exposed side shall be high density, erosion-proof material suitable for use in air streams with velocities up to 246 m/s 4500 fpm. The insulation shall be fastened with waterproof, fire-resistant adhesive. Access panel shall be designed for easy removal by one person. Discharge grilles shall have adjustable grilles or grilles with adjustable vanes and shall properly distribute air throughout the conditioned space. Return grilles shall be removable where front panel does not provide access to interior components. Plastic discharge or return grilles are not acceptable. Removable panels or access doors shall be provided for all piping and control compartments. Fan switch shall be accessible an access panel. Gaskets shall be provided for effective air seal, as required.

Fans

Fans shall be of the galvanized steel or aluminum, multiblade, centrifugal type, dynamically and statically balanced. Fan housings shall be provided with resilient mounted, self-aligning permanently lubricated ball bearings. Fans shall be direct-connected.

Coils

Coils shall be circuited for a maximum water velocity of 8 fps without excessive pressure drop and shall otherwise be as specified for hot water coils in paragraph TERMINAL UNITS.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

Drain Pans

Drain and drip pans shall be sized and located to collect all condensed water dripping from any item within the unit enclosure. Drain pans shall be constructed of not lighter than 1.2 mm (18 gauge) 18 gauge steel, galvanized after fabrication, and thermally insulated to prevent condensation. Insulation shall be coated with a fire-resistant waterproofing material. In lieu of the above, drain pans may be constructed of die-formed 1.0 mm (20 gauge) 20 gauge steel, formed from a single sheet and galvanized after fabrication and insulated and coated as for the 1.3 mm (18 gauge) 18 gauge steel material, or of die-formed 1.3 mm (18 gauge) 18 gauge type 304 stainless steel insulated as specified above. Drain pans shall be pitched to drain. Drain connection shall be provided. Connection shall be minimum 20 mm 3/4 inch NDT or 18 mm 5/8 inch OD.

2.11.3.5 Filters

Fiberglass disposable type, 25 mm 1 inch thick, conforming to CID A-A-1419, installed upstream of coil.

2.11.3.6 Motors

Motors shall be of the permanent split-capacitor type with built-in thermal overload protection and automatic reset. Motor shall be mounted on a resilient mounting, isolated from the casing and shall be suitable for operation on electric service available. A manually operated motor switch shall provide for 2 or 3 speeds and off and shall be mounted on an identified plate adjacent to the room thermostat. In lieu of speed control, a solid state variable speed controller having minimum speed reduction of 50 percent may be provided.”

38) Page 15895-23, Paragraph 2.10.1: Immediately after this paragraph insert the following:

“2.10.2. Packaged Rooftop Kitchen Ventilation Unit

2.10.2.1. Packaged units shall include but not be limited to cabinet, supply fan section, exhaust an section, hot water coil face and bypass section, filter/access section, and intake rainhood with motorized backdraft damper. Unit supply fans shall be belt drive double width-double inlet forward curve or backward incline fans wheels. Unit exhaust fans shall be upblast type especially fabricated for commercial kitchen service. Entire unit shall be curb mounted with vibration isolators. Supply and exhaust fan motors shall be matched to fan loads.

2.10.2.2. Exhaust Fan: The unit exhaust fan shall be upblast type and shall be energized whenever the supply fan is energized.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

2.10.2.3. Face and Bypass Section: The coil full face and bypass section shall be provided to modulate airflow through the heating coil to the supply air discharge and to provide freeze protection in the winter season. The bypass shall have a balancing plate to offset the pressure drop of the hot water coil.”

39) Page 15895-33, Paragraph 3.5: Insert “air terminal units, unit ventilators,” in the seventh sentence immediately following “Inside of room fan-coil units,”

DRAWINGS:

40) Sheets T-04, C-1, C-2, C-3, C-16, E&S-1, E&S-2, E&S-4, A-13, A-14, A-23, A-55, A-56, A-58, A-72, A-76, S-01, S-08, S-09, S-10, S-11, S-12, S-13, S-14, S-15, S-19, S-20, S-21, S-22, S-23, S-24, S-25, S-26, S-27, S-28, S-30, S-31, SU-1, SU-2, FA-06, FA-07, FA-8, M-05, M-06, M-25, M-26, M-27, M-29, MC-11, MC-12 and MC-13:
Delete these sheets in their entirety and substitute the attached, revised like numbered sheets, dated, Sep 02, 2003.

41) Sheet T-01, Materials: Add the following note to hatches: “Unless otherwise noted herein”

42) Sheet T-02, Index:

- a) Add “ARCHITECTURE” title block after Plate 41.
- b) Change title of Plate 113 to read “Utility Requirement Plan.”

43) Sheet T-03, Index:

- a) Change title of Plate 176 to read “DUCTWORK LAYOUT.”
- b) Change plumbing heading to read “ENLISTED BARRACKS – MODULE A.”
- c) Change title of Plate 136 to read “ELECTRICAL LEGEND.”
- d) Insert the following after Plate 198:

“Plate number: 198a
Title: MECHANICAL SCHEDULES
FILE NAME: 189M27A
SHEET NUMBER: M-27a”

44) Sheet C-16: Delete "Profile: 200W & 150F (West to East)" and substitute new profile on attached Sketch SK-C5, dated Sep 02, 2003.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

- 45) Sheet B-1, Settlement Plate Notes: Revise the first note to read “There are a total of 4 settlement plates. Settlement plate locations at the Dining Facility are shown on this plan and locations at the Company Operations Facility are shown on the Company Operations Facility civil plans.”
- 46) Sheet B-3: Revise all references to “Dining Facility” to read “Dining Facility and Company Operations Facility.”
- 47) Sheet SU-2, Legend: Revise as shown on attached Sketch SK-C4, dated Sep 02, 2003.
- 48) Sheet A-38: Delete “WALL RATING LEGEND” in its entirety.
- 49) Sheet A-12: Add General Note #7 reading, “SEE STRUCTURAL DRAWINGS FOR THE LOCATIONS OF THE CMU CONTROL JOINTS. THE CMU CONTROL JOINTS MAY NOT OCCUR AT THE LOCATIONS OF THE BRICK EXPANSION JOINTS.”
- 50) Sheet A-15: Elevation D: Revise note that reads “PREFABRICATED TRANSLUCENT CANOPY” to read “PRE-ENGINEERED TRANSLUCENT CANOPY.”
- 51) Sheets A-17, A-18 and A-19: Add the following General Note to the sheets:
“2. ALL WOOD BLOCKING IN THE CONSTRUCTION OF THE ROOF OR ROOF ACCESSORIES SHALL BE PRESSURE-TREATED.”
- 52) Sheet A-17, Detail 10, Section: Ladder and Scuttle: To the right of the notes, add the height of the ladder. The dimension should read “5313+.”
- 53) Sheet A-21: Revise this sheet in accordance with the attached Sketches SK-A-4 and SK-A-5 dated Sep 02, 2003.
- 54) Sheet S-01, Foundation Note 3: Revise references to “Dining Facility” to read “Dining Facility and Company Operations Facility.”
- 55) Sheet S-01:
- a) TYPICAL DEPRESSED SLAB: Rename as DEPRESSED SLAB; change “19mm” to “13 or 50mm”; change NOTE to read “SEE FOUNDATION PLAN, ARCHITECTURAL FLOOR PLAN AND ARCHITECTURAL FINISH PLAN.”
 - b) STRUCTURAL STEEL NOTE #5: Change “(2) 19mm DIA. A307 ANCHOR BOLTS” to “(4)...”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

c) CONCRETE NOTE 5 & 6: Change "CLASS B TENSION LAP SPLICE" to "38 BAR DIA. FOR #19 BARS AND SMALLER AND 47 BAR DIA. FOR > #19 BAR."

d) EQUIPMENT PAD DETAIL: Add note "SEE MECH. DRWGS FOR EXACT LOCATIONS, FOR EXTERIOR PADS SEE CIVIL AND MECH."

e) SLAB CONTROL JOINTS: Change "(S.C.J.)" to "(C.J.)"; change "100" to "t"; label depth of sawcut as "t/4."

f) CONCRETE NOTES: Add "10. ALL CONCRETE NOT EXPOSED TO VIEW SHALL RECEIVE CLASS D FINISH. ALL EXPOSED CONCRETE SHALL RECEIVE CLASS A OR B FINISH. REFER TO ARCHITECTURAL FINISH SCHEDULE."

56) Sheet S-11, LINTEL TYPE L-1: Delete "MINIMAL EXPANSION ANCHOR."

57) Sheet S-12, SECTION A/S-9/S-12: Add note "OTHER BEAM BEARINGS ARE SIMILAR."

58) Sheet S-13, SECTION B/S-13/S-13: Indicate 1st stirrup outside of column on both sides to be "150mm"

59) Sheet S-15, GENERIC BEAM ELEVATION: Indicate 1st stirrup, both sides, to be "150mm" from face of support.

60) Sheet S-18, SECTION 1/S-13/S-18: Change "SEE BEAM SCHEDULE SHEET 5" to "SEE BEAM SCHEDULE SHEET S-15."

61) Sheet S-19, TYPICAL SLAB REINFORCEMENT PLAN: Add note "AT OPENINGS PUT STEEL MISPLACED BY OPENING, EQUALLY AROUND PERIMETER OF OPENING."

62) Sheet S-20, TYPICAL COLUMN B1,G1,B12,G12: Delete Amendment 1 triangle.

63) Sheet S-21, ROOF FRAMING PLAN: Change dormer reference from "S-22" to "S-24."

64) Sheet S-22, DETAIL C/S-22/S-22: Change "(2) M20 ANCHOR BOLTS" to "(4) M20 ANCHOR BOLTS."

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

65) Sheet S-24:

- a) SECTION C\S-24\S-24: Change “(2) M20 BOLTS” to “(4) M20 BOLTS.”
- b) SECTION A/S-24/S-24: Change “(4) 20M EXPANSION ANCHORS” to “(4) M20 ANCHOR BOLTS.”
- c) DORMER FRAMING PLAN: Change horizontal section reference “A/S-24/S-24” to “ B/S-24/S-24.”

66) Sheet S-25:

- a) FRONT ELEVATION OF ARCH: Delete Amendment 1 triangle.
- b) SECTION A/S-25/S-25: Delete Amendment 1 triangle.

67) Sheet S-26:

- a) FOUNDATION PLAN: Change section reference “A/S6/S26” to “A/S26/S26.”
- b) FOUNDATION PLAN: Move the left reference C/S26/S26 up so that it only crosses beam 3 one time.

68) Sheet S-27:

- a) ELEVATION BM3: At first bay indicate stirrups to extend “1500mm” from face of support; at left side of first interior column indicate stirrups to extend “1500mm” from face of column; between these two indicate stirrups” #13@450：“ note that the above is “TYPICAL FOR ALL BAYS OF ALL BEAMS.”
- b) ELEVATION BM3: At 3rd bay indicate the distance between the two top bars as “L/3”; on either side of L/3 indicate a “950mm” lap; at the 8100mm bay dimension add “(L)”; add note “TYPICAL AT ALL BAYS FOR ALL BEAMS”
- c) ELEVATION BM4: Add “SEE SECTION A/S26/S26.”

69) Sheet S-28:

- a) SECOND & THIRD FLOOR FRAMING PLAN: Add the following note; “NOTE: SEE SHEET S-30 FOR TYPICAL SHEARWALL PANEL TO FOUNDATION CONNECTION.”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

b) NOTES: Add the following: “13. EXTERIOR WALL SHEATHING SHALL BE 13mm THICK PLYWOOD.”

c) Delete SECTION C/S-28/S-28 and replace with section on attached Sketch SK-K1.

d) SECTION A/S28/S28: Change reference “1/S-28” to “1/S-28/S-28.”

e) Change “DETAIL 1” to “DETAIL 1/S-28/S-28.”

70) Sheet S-30:

a) SECTION A/S-28/S-30: Add the following note; “NOTE: TYPICAL CONNECTION EACH END OF SHEARWLL PANELS.”

b) SECTION B/S-28/S-30: Add the following note: “NOTE: TYPICAL CONNECTION EACH END OF SHEARWALL PANELS.”

c) CANOPY PLAN, NOTE 2: Revise “TOP CHORD LINE LOAD...” to read “TOP CHORD LIVE LOAD.”

71) Sheet M-13, Notes: Add the following note:

“7. Aquastats shall be mounted as shown on control drawings.”

72) Sheet M-14, Notes: Add the following note:

“6. Aquastats shall be mounted as shown on control drawings.”

73) Sheets M-17 and M-18: Delete “Open Ended Duct” and replace with “SG-1”

74) Sheet P-03, Note 5: Delete reference to TM-5-805-6 and substitute “Section 07900A.”

75) Sheet P-10: Change the Ice Maker filter to Water filter in note 1 on the Icemaker Water Connection detail.

76) Sheet P-10: Change the Ice Maker filter to Water filter in note 2 on the Soda Machine C02 Connection detail.

77) Sheet P-10: Add a leader indicating the fire protection schematic continuation on the Domestic Water Service Line Schematic detail.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

78) Sheet P-11: Revise leaders to indicate an invert of 103.7 at the 1500mm (5') line for all waste lines exiting the bldg.

79) Sheet P-15: Remove the reference to the vault in the label for the domestic water line.

80) Sheet P-15: Revise this sheet in accordance with the attached Sketch SK-MP-8, dated Sep 02, 2003.

81) Sheet P-17: Rotate the North arrow on this plan 180°.

82) Sheet P-17, Note 5: Remove the reference to TM-5-805-6 and replace with "Section 07900A."

83) Sheet P-18: Rotate the North arrow on this plan 180°.

84) Sheet P-18, Note 4: Remove the reference to TM-5-805-6 and replace it with "Section 07900A."

85) Sheet P-19: Rotate the North arrow on this plan 180°.

86) Sheet P-20: Rotate the North arrow on this plan 180°.

87) Sheet P-23: Change the size of the cold water inlet on the domestic water heater (DWH-1) detail to 80mm.

88) Sheet ES-1:

a) Revise ACC-1 Homerun to read "MDP-16".

b) Revise Note 17 to read "Existing manhole 32A: Contractor shall run all communication cable and fiber optics from this manhole to the new facilities. See sheet ES-2 for fiber optic run thru the existing ductbank system back to building 1422. Contractor shall install all copper and fiber cables to all facilities and manholes as called in the drawings. Fort Detrick's Directorate of Information Management (DIOM) will have their contractor (Knight's Communication) terminate and splice all outside plant cables. Knight's Communication shall provide all materials to include all splice cases, building protectors, and fiber termination boxes to complete splicing of all copper and fiber involved. The contractor shall coordinate all communications site work with the DOIM."

c) Revise Note 18 to read "4 way 103mm PVC concrete encased ductbank with 4-27mm inner-ducts in one of the 103mm ducts and one duct with 200 pair #24

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

AWG telephone cable, one duct for cable television and one spare duct. Provide pull cords in all ducts. See telephone ductbank detail on sheet ES-5.”

d) Revise Note 19 to read “4 way 103mm PVC concrete encased ductbank with 4-27mm inner-ducts in one of the 103mm ducts (For fiber optics, 12 strand single-mode fiber) and one duct with 500 pair #24 AWG telephone cable, one duct for cable television and one spare duct. Provide pull cords in all ducts. See telephone ductbank detail on sheet ES-5.”

e) Revise Note 21 to read “4 way 103mm PVC concrete encased ductbank with 4-27mm inner-ducts in one of the 103mm ducts and one duct with 400 pair #24 AWG telephone cable, one duct for cable television and one spare duct. Provide pull cords in all ducts. See telephone ductbank detail on sheet ES-5.”

89) Sheet ES-2:

a) Revise this sheet in accordance with the attached Sketch SK-EE-10, dated Sep 02, 2003.

b) Revise Note 2 to read “Contractor shall run 48 strand single-mode fiber optic cable from building 1422 thru the existing ductbank system to the existing manhole 32. The contractor shall then pull 12 strand single-mode fiber optic cable from existing manhole 32 to existing manhole 32A. See sheet ES-1 for the run of the fiber optics from existing manhole 32A. The contractor shall pull the 36 strand fiber from the existing manhole 32 to the existing manhole 35. 12 strand of the 36 strand shall be used for the new Company Operations Facility. The remaining 24 strand shall remain in manhole 35 for future use.”

c) Revise Note 3 to read “Contractor shall install all copper and fiber cables to all facilities and manholes as called in the drawings. Fort Detrick’s Directorate of Information Management (DIOM) will have their contractor (Knight’s Communication) terminate and splice all outside plant cables. Knight’s Communication shall provide all materials to include all splice cases, building protectors, and fiber termination boxes to complete splicing of all copper and fiber involved. The contractor shall coordinate all communications site work with the DOIM.”

90) Sheet E-1: Revise this sheet in accordance with the attached Sketch SK-EE-1, dated Sep 02, 2003.

91) Sheet E-2: Revise this sheet in accordance with the attached Sketch SK-EE-2 and SK-EE-3, dated Sep 02, 2003.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

92) Sheet E-3:

a) Revise this sheet in accordance with the attached Sketch SK-EE-4 and SK-EE-5, dated Sep 02, 2003.

b) Delete symbol labeled "MTS" in Electrical Room D104.

93) Sheet E-6:

a) Revise this sheet in accordance with the attached Sketch SK-EE-6, dated Sep 02, 2003.

b) Revise Note 3 to read "For the electrical circuits and the corresponding kitchen equipment see panel schedule on Sheet E-9 and kitchen equipment schedule on Sheet E-8."

94) Sheet E-7:

a) Delete symbol labeled "MTS" in Electrical Room D104.

b) Revise this sheet in accordance with the attached Sketch SK-EE-7, dated Sep 02, 2003.

95) Sheet E-8:

a) Delete "Switchboard Schedule" from the drawing.

b) Delete "Switchboard" detail located below the panel schedule MP3 from the drawing.

c) Wiring Panel Schedule MP1: Revise "600 AMP MAINS" to read "800 AMP MAINS."

d) Wiring Panel Schedule MP1: Wiring panel schedule MP1: Revise "600A MCB" to read "800A MCB".

e) Wiring Panel Schedule MP1: Wiring panel schedule Switchboard: Revise MP1 circuit breaker "600" to read "800".

f) Revise this sheet in accordance with the attached Sketch SK-EE-8 and SK-EE-9, dated Sep 02, 2003.

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

96) Sheet E-23:

a) Delete details labeled “Typical dual communications outlet, not to scale” and “Type W wall mount voice outlet, not to scale”.

b) Revise Note 4 to read “4. Terminate all telephone station cables on backboard with 100 pair, 110 type block systems. Terminate voice on the left and data on the right.”

c) Add Note 5 to read “5. Contractor shall install all copper and fiber cables to all facilities and manholes as called in the drawings. Fort Detrick’s Directorate of Information Management (DIOM) will have their contractor (Knight’s Communication) terminate and splice all outside plant cables. Knight’s Communication shall provide all materials to include all splice cases, building protectors, and fiber termination boxes to complete splicing of all copper and fiber involved. The contractor shall coordinate all communications site work with the DOIM.”

d) Add Note 6 to read “6. Contractor shall install a nylon pull cord in all entrance conduits and in all conduits between communication closets and station cables.”

97) Sheet E-30: Revise feeder feeding panel P1 from the MDP to read “4#4/0-1#4G-63mmC.”

98) Sheet E-31: Revise this sheet in accordance with the attached Sketch SK-EE-10, dated 9/2/03.

99) Sheet E-34:

a) Delete details labeled “Typical dual communications outlet, not to scale” and “Type W wall mount voice outlet, not to scale”.

b) Revise Note 4 to read “Terminate all telephone station cables on backboard with 100 pair, 110 type block systems. Terminate voice on the left and data on the right.”

c) Add Note 5 to read “5. Contractor shall install all copper and fiber cables to all facilities and manholes as called in the drawings. Fort Detrick’s Directorate of Information Management (DIOM) will have their contractor (Knight’s Communication) terminate and splice all outside plant cables. Knight’s Communication shall provide all materials to include all splice cases, building protectors, and fiber termination boxes to complete splicing of all copper and fiber involved. The contractor shall coordinate all communications site work with the DOIM.”

AMENDMENT NO.0005 TO ADVERTISED RFP DACA31-03-R-0038
EFFECTIVE SEP 05, 2003

d) Add Note 6 to read "6. Contractor shall install a nylon pull cord in all entrance conduits and in all conduits between communication closets and station cables."

100) Sheets OC-1, OC-2, OC-3, OC-4, OC-5, OC-6, OS-1, OS-2, OS-3, OS-4, OS-5, OS-6, OA-2, OA-3, OA-4, OA-5, OA-6, OA-7, OA-8, OA-9, OA-10, OA-11, OA-11.1, OA-11.2, M-27A, OM-1, OM-02, OM-03, OM-04, OM-5, OM-6, OM-7, OMC-1, OMC-2, OMC-2A, OMC-3, FA-9, FA-10, FS-09, FS-10, OP-1, OP-2, OES-1, OES-2, OES-3, OE-1, OE-2, OE-3, OE-4, OE-5, OE-6, OE-7: Add these new sheets, dated Sep 02, 2003, to the drawings.

ATTACHMENTS:

- 1) Revised Price Schedule, dated Sep 02, 2003
- 2) New Sections 01070 CUTTING, PATCHING AND REPAIRING and 02870, SITE FURNISHINGS
- 3) Revised Submittal Register, dated Sep 02, 2003
- 4) Revised Hardware Schedule, dated Sep 02, 2003
- 5) Revised Section 09680, dated Sep 02, 2003
- 6) Revised Sheets T-04, C-1, C-2, C-3, C-16, E&S-1, E&S-2, E&S-4, A-13, A-14, A-23, A-55, A-56, A-58, A-72, A-76, S-01, S-08, S-09, S-10, S-11, S-12, S-13, S-14, S-15, S-19, S-20, S-21, S-22, S-23, S-24, S-25, S-26, S-27, S-28, S-30, S-31, SU-1, SU-2, FA-06, FA-07, FA-8, M-05, M-06, M-25, M-26, M-27, M-29, MC-11, MC-12 and MC-13, dated Sep 02, 2003
- 7) New Sheets OC-1, OC-2, OC-3, OC-4, OC-5, OC-6, OS-1, OS-2, OS-3, OS-4, OS-5, OS-6, OA-2, OA-3, OA-4, OA-5, OA-6, OA-7, OA-8, OA-9, OA-10, OA-11, OA-11.1, OA-11.2, M-27A, OM-1, OM-02, OM-03, OM-04, OM-5, OM-6, OM-7, OMC-1, OMC-2, OMC-2A, OMC-3, FA-9, FA-10, FS-09, FS-10, OP-1, OP-2, OES-1, OES-2, OES-3, OE-1, OE-2, OE-3, OE-4, OE-5, OE-6, OE-7, dated Sep 02, 2003
- 8) Sketches SK-C4, SK-C5, SK-A-4, SK-A-5, SK-MP-8 and SK-EE-1 through SK-EE-11 inclusively, dated Sep 02, 2003
- 9) Sketch SK-K1

PART I - THE PRICE SCHEDULE
SECTION 00010 - SUPPLIES OR SERVICES AND PRICES

ATTACHMENT TO ACCOMPANY AMENDMENT 0005 TO RFP DACA31-03-R-0038
REVISED SEP 02, 2003

PRICE SCHEDULE

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	PRICE	AMOUNT
	<u>Base Bid Items</u>				
0001	All costs in connection with Unaccompanied Enlisted Personnel Housing (UEPH) 2, including utilities, to points 5 feet outside the building lines (of all buildings), complete as shown on drawings and specified, but exclusive of work covered under Base Bid Items 0003 through 0012 and Optional Bid Item 0013 below.	JOB	---	LS	\$_____
0002	All costs in connection with Unaccompanied Enlisted Personnel Housing (UEPH) 2 beyond points 5 feet outside the building lines (of all buildings), including utilities and sitework, complete as shown on drawings and specified, but exclusive of work covered under Base Bid Items 0003 through 0012 and Optional Bid Item 0014 below.	JOB	---	LS	\$_____
0003	Mass Rock Excavation (payment Item 02300-1 as specified in Section 02300)	1135	CM	\$_____	\$_____
0004	Dental Concrete (payment Item 02300-2 as specified in Section 02300)	300	CM	\$_____	\$_____
0005	Overexcavation and Replacement of Soils in Pond Area(payment Item 02300-3 as specified in Section 02300)	800	CM	\$_____	\$_____
0006	Rock Excavation for Utilities (payment Item 02316-1 as specified in Section 02316)	50	CM	\$_____	\$_____
0007	Drilled Pier Construction (payment Item 02466-1 as specified in Section 02466)	915	LM	\$_____	\$_____

DACA31-03-R-0038

PART I - THE PRICE SCHEDULE
SECTION 00010 - SUPPLIES OR SERVICES AND PRICES

PRICE SCHEDULE

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	PRICE	AMOUNT
0008	Earth Excavation - Piers (payment Item 02466-2 as specified in Section 02466)	585	LM	\$_____	\$_____
0009	Rock Excavation - Piers (payment Item 02466-3 as specified in Section 02466)	330	LM	\$_____	\$_____
0010	Rock Evaluation Coring (payment Item 02466-4 as specified in Section 02466)	685	LM	\$_____	\$_____
0011	Overexcavation, Disposal and Replacement with DGA (payment Item 02722-1 as specified in Section 02722)	5000	SM	\$_____	\$_____
0012	Stabilization Geotextile (payment Item 02722-2 as specified in Section 02722)	5000	SM	\$_____	\$_____
TOTAL ESTIMATED BASE BID AMOUNT					\$_____

Optional Bid Items

0013	All costs in connection with the Company Operations Facility (COF), including utilities, to points 5 feet outside the building lines, complete as shown on drawings and specified.	JOB	---	LS	\$_____
0014	All costs in connection with the Company Operations Facility (COF) beyond points 5 feet outside the building lines, including utilities and sitework, complete as shown on drawings and specified.	JOB	---	LS	\$_____
TOTAL ESTIMATED BASE AND OPTIONAL BID AMOUNT					\$_____

PART I - THE PRICE SCHEDULE
SECTION 00010 - SUPPLIES OR SERVICES AND PRICES

NOTES TO OFFERORS

Unit Prices

VARIATION IN ESTIMATED QUANTITIES. If the quantity of a unit-price item in this contract is an estimated quantity and the actual quantity of the unit-price item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified. (FAR 52.211-18 APR 1984)

Optional Items

Offerors must quote on all items including Optional Items. Failure to quote on all items may be cause for rejection of the proposal.

Optional Items may be exercised at any time within 180 calendar days after contract award. The Contracting Officer may exercise the Optional Items by written notice to the Contractor, postmarked within the period specified above. The Government may exercise any, all or none of the listed Optional Items in any order.

No additional time for contract completion will be allowed when an Optional Item is exercised.

SECTION 01070

CUTTING, PATCHING AND REPAIRING

PART 1 GENERAL

1.1 Description

This section pertains to the provision of all cutting, removing, replacing, patching, repairing, restoration, refinishing and similar type work as necessary to existing work scheduled to remain and to new work required to be cut or uncovered. All existing facilities damaged as a result of the construction activities shall be restored to a condition equivalent to that prior to the start of work, except where otherwise shown or specified.

1.2 Work Execution

Extent of work includes uncovering work to provide for installation of ill-timed work, removal and replacement of defective work or work that does not conform to the contract documents, installation of new work to be installed in existing construction, and as necessary to make several parts fit.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Procedures; G AR.

The accomplishment of cutting, patching, and repairing of the work.

PART 2 PRODUCTS

2.1 MATERIALS

Materials for replacement, repairing, patching, restoration, and similar type work shall conform to applicable sections of the specifications for new materials or work. Where existing materials and/or installations are not covered by the specifications, such materials shall match existing. All excess materials resulting from cutting and removal work shall be removed from the job site.

PART 3 EXECUTION

3.1 INSPECTION AND PREPARATION

3.1.1 Inspection of Conditions of Work

Inspect all existing conditions of work, for possible movement or damage during cutting or uncovering procedures. After uncovering work, inspect conditions affecting installation of new products. Do not proceed with any further cutting, patching or repairing work if defects are observed; or if any unsafe condition exists.

3.1.2 Preparation of the Work Site

Prior to cutting or uncovering work, provide all shoring, bracing and supports as required to maintain the structural integrity of the project. Prior to restoration work, properly prepare existing surfaces to receive new materials such as to provide a proper bond or joining.

3.2 CUTTING AND DRILLING

Contractor shall do all cutting and drilling of existing walls, partitions, ceilings, floors, etc., as necessary for installation of the new work as shown, including cutting of holes and other openings for new plumbing, mechanical and electrical work. Cutting shall be performed by hand or small power tools; holes and slots cut neat and to size required, with minimum disturbance of adjacent work; cut holes in concrete slabs for pipes and conduit with core drills of proper sizes. Openings shall be covered temporarily when not in use and patched as soon as work is installed.

3.3 PATCHING AND REPAIRS

3.3.1 Performance of Work

Existing work shall be cut, altered, removed, temporarily removed and replaced, or relocated as required for the performance of the work indicated on the drawings. Work remaining in place that is damaged or defaced by reason of alteration or demolition shall be restored to a condition equivalent to that prior to the start of work. Contractor shall be responsible for coordinating all patching and repairing involving the various trades, whether or not specifically mentioned under the respective sections.

3.3.2 Alterations

Where alterations or removals exposes damaged or unfinished surfaces or materials, such surfaces or materials shall be refinished or replaced as necessary to make continuous areas uniform. Where new work by any trade occurs in an existing finished area the entire wall or ceiling surface in which such work occurs shall be refinished. Where such new work occurs in an existing unfinished area, the work shall be done to render the new work inconspicuous.

3.3.3 Utility Removal

Where utilities are removed, relocated, or abandoned, they shall be capped, valved or plugged to make a complete and working installation as required. Resulting holes and damaged surfaces shall be properly patched to match adjacent undisturbed surfaces or prepared to receive new finish as applicable.

3.3.4 Restoration of Existing Surfaces

All surfaces affected by patching and repairing work shall be restored to

match existing adjacent surfaces. Repainting of affected areas or surfaces shall match color and shade of existing painted surfaces.

3.4 PROCEDURES

3.4.1 Procedures

The procedures proposed for the accomplishment of cutting, patching, and repairing work shall be submitted when such work affects:

- a. Work of Government employees or Contractors working under separate contract.
- b. The structural value of or structural integrity of any element of the project.
- c. Integrity of effectiveness of weather-exposed or moisture-resistant elements or systems.
- d. Efficiency and operational life, maintenance or safety of operational elements.
- e. Visual qualities of sight-exposed elements.

3.4.2 Submittals

- a. Identification of the project.
- b. Description of affected work.
- c. The necessity for cutting, patching or alteration.
- d. The affect on work of the Government or any separate Contractor.
- e. The affect on the structural or weather proof integrity of the project.
- f. Description of proposed work:
 1. Scope of cutting, patching, alteration and repairing.
 2. Trades who will execute the work.
 3. Products proposed to be used.
 4. Schedule of work.
- g. Alternatives to cutting, patching and repairing.

3.5 MEASUREMENT AND PAYMENT

No separate measurement and payment will be made for the work performed in this Section 01070, CUTTING, PATCHING & REPAIRING specified herein, and all costs in connection therewith shall be considered a subsidiary obligation of the Contractor, and shall be included in the overall cost of the work.

-- End of Section --

SECTION 02870

SITE FURNISHINGS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 303 (2000) Code of Standard Practice for Steel Buildings and Bridges

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.3 (1995) Operations -- Safety Requirements for Power Actuated Fastening Systems

ANSI B18.2.1 (1996; A 1999) Square and Hex Bolts and Screws Inch Series

ASME INTERNATIONAL (ASME)

ASME B18.2.2 (1987; R 1999) Square and Hex Nuts

ASME B18.6.2 (1998) Slotted Head Cap Screws, Square Head Set Screws, and Slotted Headless Set Screws: Inch Series (B18.6.2)

ASME B18.6.3 (1999) Machine Screws and Machine Screw Nuts

ASME B18.21.2M (1999) Lock Washers (Metric Series)

ASME B18.22M (1981; R 2000) Metric Plain Washers

ASTM INTERNATIONAL (ASTM)

ASTM A 36/A 36M (2001) Carbon Structural Steel

ASTM A 47/A 47M (1999) Ferritic Malleable Iron Castings

ASTM A 48/A 48M (2000) Gray Iron Castings

ASTM A 53/A 53M (2002) Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

ASTM A 123/A 123M (2002) Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 153/A 153M (2001a) Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A 185	(2001) Steel Welded Wire Reinforcement, Plain, for Concrete
ASTM A 307	(2002) Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
ASTM A 500	(2001a) Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A 501	(2001) Hot-Formed Welded and Seamless Carbon Steel Structural Tubing
ASTM A 615/A 615M	(2001b) Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM A 653/A 653M	(2002a) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A 780	(2001) Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM B 26/B 26M	(2002) Aluminum-Alloy Sand Castings
ASTM B 62	(2002) Composition Bronze or Ounce Metal Castings
ASTM B 108	(2001a) Aluminum-Alloy Permanent Mold Castings
ASTM B 209M	(2002e1) Aluminum and Aluminum-Alloy Sheet and Plate (Metric)
ASTM B 221M	(2002) Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
ASTM C 94/C 94M	(2000e2) Ready-Mixed Concrete
ASTM C 150	(2002a) Portland Cement
ASTM D 648	(2001) Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position
ASTM D 1187	(1997; R 2002e1) Asphalt-Base Emulsions for Use as Protective Coatings for Metal
ASTM D 2990	(2001) Tensile, Compressive, and Flexural Creep and Creep Rupture of Plastics
ASTM D 3451	(2001) Testing Coating Powders and Powder Coatings
ASTM E 488	(1996) Strength of Anchors in Concrete and Masonry Elements

ASTM F 1487 (2001e1) Playground Equipment for Public Use

AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)

AWPA C1 (2000) All Timber Products - Preservative Treatment by Pressure Processes

AWPA C9 (2000) Plywood - Preservative Treatment by Pressure Processes

AWPA M2 (2001) Standard for Inspection of Treated Wood Products

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M (2002) Structural Welding Code - Steel

NATIONAL HARDWOOD LUMBER ASSOCIATION (NHLA)

NHLA Rules (1998) Rules for the Measurement & Inspection of Hardwood & Cypress

REDWOOD INSPECTION SERVICE (RIS)

RIS Grade Use (1998) Redwood Lumber Grades and Uses

SOUTHERN CYPRESS MANUFACTURERS ASSOCIATION (SCMA)

SCMA Spec (1986; Supple No. 1 Aug 1993) Standard Specifications for Grades of Southern Cypress

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB 1003 (1994) Grading Rules

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS A-A-1925 (Rev. A) Shield, Expansion (Nail Anchors)

FS TT-P-664 (Rev. D) Primer Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-Compliant

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)

WCLIB 17 (2000) Standard Grading Rules

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)

WWPA Grading Rules (1998) Western Lumber Grading Rules

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the

Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Benches and Chairs; G ED
Tables; G ED
Bicycle Racks; G ED
Assembly Instruction Drawings

Drawings showing scaled details of proposed site furnishings, elevations for each type of site furnishing; dimensions, details, and methods of mounting or anchoring; shape and thickness of materials; and details of construction.

SD-03 Product Data

Benches
Tables
Bicycle Racks
Waste Receptacles
Ash Urn

Manufacturer's descriptive data and catalog cuts.
Manufacturer's printed data indicating usage of environmentally safe wood treatment.

SD-04 Samples

Finish; G ED

Two sets of color data for each furnishing displaying manufacturer's color selections and finishes, and identifying those colors and finishes proposed for use.

SD-06 Test Reports

Recycled Materials

A report of site furnishing parts consisting of recycled materials. Product specification data, providing test information for deflection and creep in accordance with ASTM D 648 and ASTM D 2990 for site furnishings which use plastic lumber as a component, shall be submitted. The data shall provide a comparison of deflection and creep measurements to other comparable materials.

Testing

A report of post-installation test results.

SD-07 Certificates

Primer certificate
Powder coatings certificate

Manufacturer's certificate of compliance.

1.3 QUALIFICATION OF WELDERS

Qualify welders in accordance with AWS D1.1/D1.1M using procedures, materials, and equipment of the type required for the work.

1.4 DELIVERY, INSPECTION, STORAGE AND PROTECTION

Materials shall be delivered, handled, and stored in accordance with the manufacturer's recommendations. Site furnishings shall be inspected upon arrival at the job site for conformity to specifications and quality in accordance with paragraph MATERIALS. Protect from corrosion, staining, and other types of damage. Store items in designated area free from contact with soil and weather. Remove and replace damaged items with new items.

1.5 GENERAL REQUIREMENTS

1.5.1 Fabrication Drawings

Submit fabrication drawings showing layout(s), connections to structural system, and anchoring details as specified in AISC 303.

1.5.2 Installation Drawings

Submit templates, erection and installation drawings indicating thickness, type, grade, class of metal, and dimensions. Show construction details, reinforcement, anchorage, and installation.

1.5.3 Assembly Instruction Drawings

Submit assembly instruction drawings showing layout(s), connections, bolting and anchoring details as per manufacturer's standards.

1.5.4 Primer Certificate

Submit a certificate from the manufacturer stating that the primer conforms to requirements of FS TT-P-664.

1.5.5 Powder Coatings Certificate

Submit a certificate from the manufacturer stating that the powder coat conforms to ASTM D 3451.

PART 2 PRODUCTS

2.1 MATERIALS

Materials shall be the standard products of a manufacturer regularly engaged in the manufacture of such products. The materials provided shall be of a type with proven satisfactory usage for at least 2 years.

2.1.1 Metals

Metallic materials and products shall conform to Section 05500A MISCELLANEOUS METAL. Metal components shall be furnished with factory drilled holes. Components shall be free of excess weld and spatter. Metal components with holes that will not be filled by hardware or hidden by other components will be rejected. Structural steel products shall conform to ASTM A 36/A 36M, ASTM A 500 and ASTM A 501.

2.1.2 Structural Tubing

ASTM A 500.

2.1.3 Steel Pipe and Fittings

Steel pipe shall conform to ASTM A 53/A 53M, Type E or S, Grade B; standard malleable iron fittings shall conform to ASTM A 47/A 47M.

2.1.4 Gray Cast Iron

Gray cast iron shall conform to ASTM A 48/A 48M Class 35 or better. The Contractor shall provide castings manufactured true to pattern and component parts that fit together in a satisfactory manner. Castings shall be of uniform quality, free from blowholes, porosity, hard spots, shrinkage, distortion, or other defects. Smooth castings shall be well-cleaned by sand or shot blasting.

2.1.5 Cast Aluminum

Cast aluminum shall conform to ASTM B 26/B 26M and ASTM B 108. The Contractor shall provide castings manufactured true to pattern and component parts that fit together in a satisfactory manner. Castings shall be of uniform quality, free from blowholes, porosity, hard spots, shrinkage, distortion, or other defects. Smooth castings shall be well-cleaned by sand or shot blasting.

2.1.6 Aluminum Alloy Products

Conform to ASTM B 209M for sheet plate, ASTM B 221M for extrusions and ASTM B 26/B 26M or ASTM B 108 for castings, as applicable. Provide aluminum extrusions at least 3 mm thick and aluminum plate or sheet at least 1.3 mm thick.

2.1.7 Anchors and Hardware

Anchors shall be provided, where necessary, for fastening site furnishings securely in place and in accordance with approved manufacturer's instructions. Anchoring devices that may be used, when no anchors are otherwise specified or indicated, include anchor bolts, slotted inserts, expansion shields for concrete; toggle bolts and through bolts for masonry; machine carriage bolts for steel; and lag bolts and screws for wood. Anchor bolts shall conform to ASTM A 307. Hardware shall be stainless steel in accordance with ASTM A 153/A 153M and compatible with the material to which applied. All exposed hardware shall match in color and finish. Mounting hardware shall be concealed, recessed, and plugged.

2.1.7.1 Threaded Inserts and Expansion Anchors

Provide inserts recessed not less than 65 mm into concrete or masonry. Pullout 90 kg in concrete with f'c of 20 MPa, as tested per ASTM E 488. Expansion shields shall conform to FS A-A-1925, group II, type 4, class 1. Provide embedment required by manufacturer.

2.1.7.2 Lag Screws and Bolts

ANSI B18.2.1, type and grade best suited for the purpose.

2.1.7.3 Toggle Bolts

ANSI B18.2.1.

2.1.7.4 Bolts, Nuts, Studs and Rivets

ASME B18.2.2 or ASTM A 307.

2.1.7.5 Power Driven Fasteners

Follow safety provisions of ANSI A10.3.

2.1.7.6 Screws

ANSI B18.2.1, ASME B18.6.2, and ASME B18.6.3.

2.1.7.7 Washers

Provide plain washers to conform to ASME B18.22M . Provide beveled washers for American Standard beams and channels, square or rectangular, tapered in thickness, and smooth. Provide lock washers to conform to ASME B18.21.2M .

2.1.8 Ounce Metals

Bronze, copper, and other ounce metals shall conform to ASTM B 62.

2.1.9 Concrete

Ready-mixed concrete shall conform to ASTM C 94/C 94M, using 19 mm maximum size aggregate, and having minimum compressive strength of 20 MPa at 28 days. Portland cement shall conform to ASTM C 150. Cast-in-place concrete materials and products shall conform to Section 03300 CAST-IN-PLACE STRUCTURAL CONCRETE. Precast concrete material and products shall conform to Section 03410N PLANT-PRECAST STRUCTURAL CONCRETE. Reinforcing steel shall conform to ASTM A 615/A 615M. Welded wire fabric shall conform to ASTM A 185.

2.1.10 Masonry

Masonry material and products shall conform to Section 04200 MASONRY

2.1.11 Lumber

The Contractor shall provide premium grade wood free of knots; boards with eased edges and ends; and wood components with factory drilled holes. Components with holes that will not be filled by hardware or hidden by other components will be rejected. Wood products shall be selected to withstand the climatic conditions of the region in which the site is located. Lumber grades shall meet manufacturers standards of the grading rules under which they are manufactured. Where no standards exist the following shall be the minimum acceptable grades for species used.

- a. WWPA Grading Rules grading rules, Douglas Fir, Western Cedars, Choice & Btr, Select or A & Btr.per special western red cedar rules.
- b. WCLIB 17 standard grading rules, Douglas Fir, Western Cedars, A & Btr.
- c. SPIB 1003 grading rules, Southern Pine, C & Btr.
- d. SCMA Spec standard specification, Cypress, C-Select.

- e. RIS Grade Use standard specifications, Redwood, Clear, Clear All Heart.
- f. NHLA Rules rules, Cypress, Teak, B Finish, Select or Btr.

2.1.11.1 Moisture Content

Air-dry or kiln-dry lumber. Kiln-dry treated lumber after treatment. Maximum moisture content of wood products at time of delivery shall be as per manufacturers standard. If no manufacturer's standard exists, then moisture content shall be based on requirements for the product, grade and intended use.

2.1.11.2 Treatment

Wood that is not naturally rot and insect resistant shall be treated with standard procedures. Waterborne preservatives shall be free from arsenic and chromium. Creosote, pentachlorophenol, tributyl tin oxide shall not be used in conformance with ASTM F 1487. Ammonium Copper Quat (ACQ) shall not be used for surfaces likely to contact the skin of small children. AWPA C1 and AWPA C9, as applicable, and inspected in accordance with AWPA M2.

2.1.11.3 Wood Seats

Clear teak, maple, oak, Jarrah, Ipe or other suitable hardwood, not less than 40 mm thick with rounded edges.

2.2 PRETREATMENT, PRIMING AND PAINTING

Apply pretreatment, primer, and paint in accordance with manufacturer's printed instructions. On surfaces concealed in the finished construction or not accessible for finish painting, apply an additional prime coat to a minimum dry film thickness of 0.03 mm . Tint additional prime coat with a small amount of tinting pigment.

2.2.1 Nonferrous Metal Surfaces

Protect by plating, anodic, or organic coatings.

2.2.2 Aluminum Surfaces

Before finishes are applied, remove roll marks, scratches, rolled-in scratches, kinks, stains, pits, orange peel, die marks, structural streaks, and other defects which will affect uniform appearance of finished surfaces.

2.3 COATINGS AND FINISHES

2.3.1 Galvanizing

Hot-dip galvanize items specified to be zinc-coated, after fabrication where practicable. Galvanizing shall conform to ASTM A 123/A 123M, ASTM A 153/A 153M or ASTM A 653/A 653M, as applicable. Tailings and sharp protrusions formed as a result of the hot-dip process shall be removed and exposed edges burnished. Galvanize anchor bolts, grating fasteners, washers and parts or devices necessary for proper installation, unless otherwise indicated.

2.3.2 Polyester Powder

Powder-coated surfaces shall receive electrostatic zinc coating prior to painting. Powder coating shall be electrostatically applied and oven cured. Polyester powder coating shall be resistant to ultraviolet (UV) light.

2.3.3 Finish

Finish shall be as specified by the manufacturer or as indicated. Exposed surfaces and edges shall be rounded, polished, or sanded. Finish shall be non-toxic, non-glare, and resistant to corrosion. Thickness of powder coat finish shall be 10 mils. Exposed surfaces shall be smooth and splinter-free.

2.3.3.1 Wood Sealants

Exposed wood surfaces shall have, as a minimum, two shop coats of varnish, sealer, or other approved preservative. Sealants shall seal all applied surfaces from air.

2.3.3.2 Color

Color of site furnishing components shall be in accordance with the COLOR SCHEDULE.

2.4 SITE STANDARDS

Site furnishings shall be furnished with the dimensions and requirements indicated. Site furnishings placed in children's outdoor play areas shall meet the safety requirements of ASTM F 1487 for entrapment; sharp points, edges, and protrusions; entanglement; pinch, crush, and shear points. Site furnishings to be included in children's outdoor play areas shall be free from sharp vertical edges and any protruding elements and designed with a minimum radius of 13 mm on all vertical edges; this includes, but is not limited to, seat walls, containment curbs and planters. Where practical, horizontal edges exposed to children's activities shall be rounded.

2.5 BENCHES

Benches and chairs shall be furnished with no sharp edges or protruding hardware.

a. Height: The height above finished grade or specified surface shall be between 430-500 mm and level.

b. Seat: The seat surface shall be pitched or slotted to shed water; the seat depth shall be between 300-460 mm and pitched down at the back at a 0-5 degree angle. Seat shall have a minimum width of 610 mm per person, and shall overhang the support base by a minimum of 100 mm for heel space and to facilitate rising from a seating position.

c. Back Rest: When back rests are required, the height shall be between 340-460 mm from the top of the seat and the connection shall be at a 90-110 degree angle to the seat.

d. OMITTED

e. Weight Limit: Seats shall support a minimum 136 kg for each person they are designed to accommodate.

2.5.1 Wood Units, Type B1 (with Legs) and Type B2 (with Pedestals)

Provide manufacturer's standard wood units with metal supports as indicated. Provide fasteners and accessories required for onsite assembly.

Kiln dry and pressure treat wood components to manufacturer's standards. Pre-treat metal components and provide manufacturer's standard primer and powder coat finish complying with ASTM D 3451, color as selected.

- a. Design wood benches to sustain a live load of not less than 10 kPa .
- b. Provide kiln dried, surfaced four sides (S4S), clear all sides wood slats of species and sizes indicated.

(1) Species: Teakwood, Red Cedar, Clear Douglas Fir, Ipe.

(2) Nominal wood slat sizes: 25 by 100 mm 50 by 100 mm . Top and bottom rail may be larger in size and configuration for comfort of seating.

2.5.1.1 Support Pedestals (Type B2 Only)

Provide steel support pedestals as per manufacturer's standard as indicated on drawings.

2.5.2 Steel Units - Steel Slat Benches Type B3

Provide 3 mm by 38 mm bent bars combined to form armless, slatted benches with integral tubular steel cross members between end supports per manufacturer's standard. Components shall be fully welded together, with welds ground smooth.

- a. Design bench to sustain a live load of not less than 10 kPa.
- b. Mounting: Type as indicated.
- c. Hardware: Manufacturer's standard.
- d. Metal Finish: Powder coating conforming to ASTM D 3451 testing.

2.5.3 Accessories

Provide manufacturer's standard materials and accessories as required for assembly of units and as indicated on the assembly drawings. Provide unexposed aluminum, stainless steel or steel plates, angles and supports as required for complete assembly. Separate dissimilar materials to prevent electrolytic action.

2.5.4 Fasteners

Provide concealed fasteners except where specifically approved; types as required for specific usage.

2.5.5 Anchoring Brackets

Provide 6 mm zinc plated steel angle anchoring brackets, 47 mm wide by 90 mm deep by 150 mm high, pre-drilled for bolting benches to substrate.

2.6 BICYCLE RACKS

Design bicycle racks (stanchions) in accordance with manufacturer's standards and to meet design conditions indicated. Locate as shown on the drawings. Provide powder coat finish in color as selected from manufacturer's standards. Racks shall accommodate locking devices and secure, as a minimum, one wheel and part of the frame simultaneously. The spacing between racks shall be a minimum of 610 mm .

2.6.1 Metal Pipe Bicycle Racks

Provide ASTM A 53/A 53M schedule 40 steel pipe bicycle racks in configuration and of 114 mm pipe size. Type of mounting, bicycle rack capacity and height above the ground as shown on the drawings.

2.7 WASTE RECEPTACLES AND ASH RECEPTACLES

Provide for waste receptacles spun aluminum domed tops and removable semi-rigid plastic liner insert. Provide top-mounted ash trays for ash receptacles. Waste receptacles shall be furnished with weather protection, odor containment, and insect/animal-proofing. Container size shall be as shown on drawings.

a. Height: Trash and litter deposit openings shall be between 800-1000 mm above the ground.

b. Liners: Trash and litter receptacles shall be furnished with removable/reusable inner containers. Self-dumping type designs to include hinged bottom, top or sides will be rejected.

c. Anchors: Trash and litter receptacles that can be anchored to resist overturning by typical use, high winds, or animals shall be furnished and anchored in accordance with the manufacturer's recommendations.

d. Openings: Openings for trash and litter insertion shall be a minimum of 100 mm in diameter. Edges of the openings shall be crimped, rounded and smoothed.

e. Ash Receptacles: The Contractor shall provide ash receptacles with a fire-proof metal bowl or screen or sand-filled containers for ash containment. Ash receptacles shall have a minimum diameter of 200 mm ; ash containers shall have a fire-proof metal bowl or screen and shall be easily removable for cleaning.

2.8 TABLES

Picnic tables shall be furnished without attached benches that have no backrests. Table's exposed edges and corners shall be rounded, eased or chamfered.

a. Height: The table height shall be between 750-1200 mm from the finished grade to the lowest surface of the top, or as noted.

b. Clearance: A minimum vertical clearance of 230 mm between the seat top and the bottom edge of the table top shall be provided. A minimum of 460 mm of leg space under tables, measured from the inside edge of the seat top to the nearest table support, shall be provided. A minimum of 460 mm from the end of the table top to the nearest support leg shall be provided.

c. Top: Table top surfaces shall not contain recesses that might hold water or food particles. The table top width shall be a minimum of 460 mm when utilized from one side only, and a minimum of 900 mm when utilized from two sides. The table top length shall be a minimum of 610 mm per person.

d. Wheelchair Access: A minimum clear space of 740 mm from the finished grade to the underside of the table shall be provided for persons with disability to be able to pull a wheelchair beneath the table top at the end of the table; the minimum clear width shall be 860 mm .

2.8.1 Steel Slat Tables

Provide 6.3 mm by 38 mm bent end steel bars combined to form slatted table tops with integral cross member between support pedestals per manufacturer's standard. Weld tops to base as required for frame support.

- a. Steel pedestal base: ASTM A 53/A 53M square steel tube, 100 mm by 100 mm.
- b. Mounting: Type as indicated.
- c. Hardware: Zinc or cadmium plated nuts, bolts, screws, and lock washers.
- d. Metal finish: Powder coating conforming to ASTM D 3451 testing.

PART 3 EXECUTION

3.1 INSTALLATION

The Contractor shall verify that finished grades and other operations affecting mounting surfaces have been completed prior to the installation of site furnishings. Site furnishings shall be installed plumb and true, at locations indicated, in accordance with the approved manufacturer's instructions.

3.1.1 Assembly and Erection of Components

Items shall be shipped knocked-down (KD) to the extent practical, ready for site assembly. Packaged components shall be complete including all accessories and hardware. New parts shall be acquired from the manufacturer; substitute parts will not be accepted unless approved by the manufacturer. When the inspection of parts has been completed, the site furnishings shall be assembled and anchored according to manufacturer's instructions or as indicated. When site furnishings are assembled at the site, assembly shall not interfere with other operations or pedestrian and vehicular circulation.

3.1.2 Anchorage, Fastenings, and Connections

Furnish metal work, mounting bolts or hardware in ample time for securing into concrete or masonry as the work progresses. Provide anchorage where necessary for fastening furniture or furnishings securely in place. Provide, for anchorage not otherwise specified or indicated, slotted inserts, expansion shields, and power-driven fasteners, when approved for concrete; toggle bolts and through bolts for masonry; machine and carriage

bolts for steel; through bolts, lag bolts, and screws for wood. Do not use wood plugs in any material. Provide non-ferrous attachments for non-ferrous metal. Make exposed fastenings of compatible materials, generally matching in color and finish the fastenings to which they are applied. Conceal fastenings where practicable.

3.2 WELDING

Perform welding, welding inspection, and corrective welding, in accordance with AWS D1.1/D1.1M. Use continuous welds on all exposed connections. Grind visible welds smooth in the finished installation.

3.3 TESTING

Each site furnishing shall be tested to determine a secure and correct installation. A correct installation shall be according to the manufacturer's recommendations and by the following procedure: The Contractor shall measure the physical dimensions and clearance of each installed site furnishing for compliance with manufacturer's recommendations and as indicated. Site furnishings which do not comply shall be reinstalled. Fasteners and anchors determined to be non-compliant shall be replaced. A written report describing the results of the testing shall be provided.

3.4 FINISHES

3.4.1 Field Finishes

Where indicated, field finishes shall be applied in accordance with Section 09900 PAINTS AND COATINGS. Where dissimilar metals are in contact, protect surfaces with a coat conforming to FS TT-P-664 to prevent galvanic or corrosive action. Where aluminum is in contact with concrete, mortar, masonry, wood, or absorptive materials subject to wetting, protect with ASTM D 1187, asphalt-base emulsion.

3.4.2 Repair of Zinc-Coated Surfaces

Repair damaged surfaces with galvanizing repair method and paint conforming to ASTM A 780 or by the application of stick or thick paste material specifically designed for repair of galvanizing, as approved by the Contracting Officer. Clean areas to be repaired and remove the slag from the welds. Heat surfaces to which stick or paste material is applied, with a torch to a temperature sufficient to melt the metallics in stick or paste; spread the molten material uniformly over surfaces to be coated and wipe the excess material off.

3.5 CHILDREN'S PLAY AREAS

The site furnishings shall be installed outside the play structure use zone in accordance with ASTM F 1487. The contractor shall verify and mark the locations of the use zone. These zones are to be free from obstacles and hard surfaces. When child accessibility requirements are to be met, child anthropometric dimensions must be used and not adult anthropometric dimensions.

3.6 BICYCLE RACKS

Affix to base structure by flanges anchored to concrete or other existing masonry by expansion shields. Provide Series 300 stainless steel bolts to

anchor aluminum alloy flanges, of a size appropriate to the standard product of the manufacturer. Where aluminum or alloy fittings or extrusions are to be in contact with dissimilar metals or concrete, give the contact surface a heavy coating of bituminous paint.

3.7 RESTORATION AND CLEAN UP

When the installation has been completed, the Contractor shall clean up and protect the site. Existing areas that have been damaged from the installation operation shall be restored to original condition at Contractor's expense.

3.7.1 Clean Up

The site shall be cleaned of all materials associated with the installation. Site furnishing surfaces shall be cleaned of dirt, stains, filings, and other blemishes occurring from shipment and installation. Cleaning methods and agents shall be according to manufacturer's instructions or as indicated.

3.7.2 Protection

The area shall be protected as required or directed by providing barricades and signage. Signage shall be in accordance with Section 10430 EXTERIOR SIGNAGE.

3.7.3 Disposal of Materials

Excess and waste material shall be removed and disposed off Government property.

3.8 RE-INSTALLATION

Where re-installation is required, the following shall be accomplished:

- a. Re-install the product as specified. Material acquisition of replacement parts is the responsibility of the Contractor. Provide replacement materials that are new and supplied by the original manufacturer to match.
- b. Damage caused by the failed installation shall be repaired.

-- End of Section --

SUBMITTAL REGISTER, SEP 02, 2003

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01000	SD-01 Preconstruction Submittals														
			Title Evidence														
			Invoice Copies														
			Photographs	1.11													
			SD-03 Product Data														
			Cost or Pricing Data	1.6													
			Equipment Data	1.7													
			SD-10 Operation and Maintenance Data														
			O and M Data	1.8													
			Commissioning Activity for HVAC	1.2.5	G AR												
		01050	SD-01 Preconstruction Submittals														
			Shut Down Utility Services	1.4.2	G AR												
			Checklist	1.4.3	G AR												
			SD-07 Certificates														
			Operations Statement	1.10.2													
		01060	SD-01 Preconstruction Submittals														
			Safety Supervisor	1.3	G AR												
			SD-07 Certificates														
			Language Certification	1.3													
			SD-09 Manufacturer's Field Reports														
			Activity Phase Hazard Analysis Plan	1.3	G AR												
			Outline Report														
			OSHA Log														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01070	SD-01 Preconstruction Submittals														
			Procedures	3.4	G AR												
		01200	SD-04 Samples														
			Sample Tags	1.7.2.2													
		01320	SD-01 Preconstruction Submittals														
			Preliminary Project Schedule	3.4.1	G AR												
			Initial Project Schedule	3.4.2	G AR												
			Periodic Schedule Updates	3.4.3	G AR												
			Qualifications	1.3	G AR												
			Narrative Report	3.5.2	G AR												
			Schedule Reports	3.5.4	G AR												
		01451	SD-01 Preconstruction Submittals														
			CQC Plan	3.2	G AR												
			Phase Notification														
			Request		G AR												
			CQC Mgr Qualification		G AR												
			SD-05 Design Data														
			Notification of Changes	3.2.4													
			Punchlist	3.8.1													
			Minutes	3.3													
			SD-06 Test Reports														
			Tests	3.7.1													
			Documentation	3.9													
			Tests Performed	3.7.1													
			QC Records		G AR												
		01510	SD-04 Samples														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01510	Site Plan	1.8	G AR												
			Office and Parking Layout Plan		G AR												
			Temporary Electrical Work	1.6	G AR												
		01561	SD-05 Design Data														
			Facility Plan	1.9.4	G AR												
			Temporary Plan	1.9.5	G AR												
		01720	SD-02 Shop Drawings														
			Progress Prints		G AR												
			Final Prints		G AR												
			SD-03 Product Data														
			CADD Files														
		02300	SD-05 Design Data														
			Dewatering		G AR												
			Dewatering Plan		G ED												
			Blasting Plan		G ED												
			Blast Monitoring Plan		G ED												
			Preblast Survey Report														
			Blasting Notification		G AR												
			Blast Design														
			Blast Records														
			SD-06 Test Reports														
			Earthwork														
			Testing	3.18													
			Rock		G AR												
			SD-07 Certificates														
			Testing	3.18	G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION / REVIEW NO	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02315	SD-05 Design Data														
			Shoring and Bracing Plans		G ED												
			SD-06 Test Reports														
			Structural Fill		G ED												
			Settlement Plate Elevation		G ED												
			Readings														
			Testing														
			SD-07 Certificates														
			Testing Lab		G AR												
		02316	SD-05 Design Data														
			Dewatering		G AR												
			Dewatering Plan		G ED												
			Shoring and Bracing Plans		G ED												
			Blasting		G ED												
			SD-06 Test Reports														
			Field Density Tests														
			Testing of Backfill Materials														
			Flowable Fill		G ED												
			Rock		G AR												
			SD-07 Certificates														
			Testing Lab		G AR												
		02364A	SD-03 Product Data														
			Termiticide Application Plan		G AR												
			Termiticides	2.1													
			Foundation Exterior	3.2.3													
			Utilities and Vents	3.2.4													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02364A	Crawl and Plenum Air Spaces	3.2.5													
			Verification of Measurement	3.5													
			Application Equipment	3.4.1													
			SD-04 Samples														
			Termiticides	2.1													
			SD-06 Test Reports														
			Equipment Calibration and Tank Measurement	3.4.1													
			Soil Moisture	3.3.1													
			SD-07 Certificates														
			Qualifications	1.2	G AR												
		02391	SD-01 Preconstruction Submittals														
			Manufacturer's Data		G ED												
			Test Data		G ED												
			Calculations		G ED												
			SD-02 Shop Drawings														
			Shop Drawings		G G												
			SD-06 Test Reports														
			QC Inspection Report														
			QC Testing of Backfill														
		02466	SD-02 Shop Drawings														
			Drilled Piers		G ED												
			SD-05 Design Data														
			Concrete Mix Design		G ED												
			SD-06 Test Reports														
			Concrete and Grout														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02466	Rock Evaluation Coring														
			Concrete Coring of Piers														
			SD-07 Certificates														
			Survey		G AR												
			Qualifications	1.4	G AR												
		02510a	SD-03 Product Data														
			Installation	3.1													
			Waste Water Disposal Method														
			Satisfactory Installation														
			SD-06 Test Reports														
			Bacterial Disinfection	3.3													
			Hydrostatic Tests	3.2													
			SD-07 Certificates														
			Manufacturer's Representative	1.3													
			Installation	3.1													
		02531	SD-02 Shop Drawings														
			Precast Concrete Manholes	2.3.1													
			Metal items	2.3.4													
			Frames and covers for manholes														
			Precast Grease Interceptor	2.3.5	G ED												
			Calculations														
			Precast Grease Interceptor	2.3.5	G ED												
			Materials														
			Precast Grease Interceptor	2.3.5	G ED												
			Drawings														
			SD-03 Product Data														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02531	Pipeline materials	2.1													
			SD-06 Test Reports														
			Leakage and Infiltration Tests	3.2.2.1													
			Work Plan	1.7	G AR												
			SD-07 Certificates														
			Portland Cement	2.2.2													
		02532a	SD-03 Product Data														
			Calculations		G ED												
			Materials		G ED												
			Drawings		G ED												
			SD-05 Design Data														
			Force Main Connections		G AR												
			Wastewater Disposal (hydrostatic tests)														
			SD-09 Manufacturer's Field Reports														
			Hydrostatic Tests	3.2													
		02552	SD-05 Design Data														
			Asphalt Mix Design		G ED												
			SD-06 Test Reports														
			Density Testing	3.5													
			Plant Control	2.3	G AR												
			SD-07 Certificates														
			Tack Coat	2.5													
			Tack Coat	3.4													
			Prime Coat	2.4													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW NUMBER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02555a	SD-02 Shop Drawings Distribution System	3.4.9	G ED												
			SD-03 Product Data Distribution System	3.4.9	G ED												
			SD-07 Certificates Distribution System	3.4.9													
			Welding	1.6													
			SD-10 Operation and Maintenance Data														
			Distribution System	3.4.9	G AR												
		02620	SD-04 Samples Filtration Geotextile	2.2	G ED												
			SD-07 Certificates Filtration Geotextile	2.2	G ED												
			Pipe for Subdrains	2.1													
		02630a	SD-03 Product Data Placing Pipe	3.3													
		02714	SD-03 Product Data Plant, Equipment, Machines, and Tools														
			SD-06 Test Reports Sampling and Testing	1.7													
			Approval of Materials	1.7.6	G ED												
			Evaluation	3.2.7	G ED												
			SD-07 Certificates Testing Lab		G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02722	SD-03 Product Data														
			Plant, Equipment, Machines, and Tools	1.7													
			SD-04 Samples														
			Stabilization Geotextile		G ED												
			SD-06 Test Reports														
			Initial Tests		G ED												
			In-Place Tests														
			Coarse Aggregate	2.1.1	G ED												
			SD-07 Certificates														
			Stabilization Geotextile		G ED												
			Testing Lab		G AR												
		02763a	SD-03 Product Data														
			Equipment	1.4													
		02770	SD-05 Design Data														
			Concrete	2.1	G ED												
			SD-06 Test Reports														
			Field Quality Control	3.8													
		02821a	SD-07 Certificates														
			Chain Link Fence	2.1.1													
		02870	SD-02 Shop Drawings														
			Benches and Chairs		G ED												
			Tables	2.8	G ED												
			Bicycle Racks	2.6	G ED												
			Assembly Instruction Drawings	1.5.3													
			SD-03 Product Data														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02870	Benches	2.5													
			Tables	2.8													
			Bicycle Racks	2.6													
			Waste Receptacles	2.7													
			Ash Urn														
			SD-04 Samples														
			Finish	2.3.3	G ED												
			SD-06 Test Reports														
			Recycled Materials														
			Testing	3.3													
			SD-07 Certificates														
			Primer certificate	1.5.4													
			Powder coatings certificate	1.5.5													
		02921a	SD-03 Product Data														
			Equipment	3.1.3	G AR												
			Surface Erosion Control Material	3.4.1													
			Chemical Treatment Material	1.4.3													
			Delivery	1.4.1	G AR												
			Finished Grade and Topsoil	3.2.1	G AR												
			Topsoil	2.2	G AR												
			Quantity Check	3.5	G AR												
			Seed Establishment Period	3.9	G AR												
			Maintenance Record	3.9.3.5													
			Application of Pesticide	3.6	G AR												
			SD-04 Samples														
			Delivered Topsoil	1.4.1.1													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE SUBMITTED	DATE APPROVAL NEEDED	DATE MATERIAL NEEDED	DATE OF ACTION	DATE FWD TO APPR AUTH	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE RCD FRM APPR AUTH			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02921a	Soil Amendments	2.3													
			Mulch	2.4													
			SD-06 Test Reports														
			Equipment Calibration	3.1.3	G AR												
			Soil Test	3.1.4	G ED												
			SD-07 Certificates														
			Seed	2.1	G ED												
			Topsoil	2.2	G ED												
			pH Adjuster	2.3.1													
			Fertilizer	2.3.2													
			Organic Material	2.3.4													
			Soil Conditioner	2.3.5													
			Mulch	2.4													
			Asphalt Adhesive	2.5													
			Pesticide	2.7	G AR												
		02922a	SD-03 Product Data														
			Equipment	3.1.3	G AR												
			Chemical Treatment Material	1.4.3.2													
			Delivery	1.4.1	G AR												
			Finished Grade and Topsoil	3.2.1	G AR												
			Topsoil	2.2	G AR												
			Quantity Check	3.5	G AR												
			Sod Establishment Period	3.9	G AR												
			Maintenance Record	3.9.3.5													
			Application of Pesticide	3.6	G AR												
			SD-04 Samples														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02922a	Delivered Topsoil	1.4.1.2													
			Soil Amendments	2.3													
			Temporary Seeding	3.4	G AR												
			SD-06 Test Reports														
			Equipment Calibration	3.1.3	G AR												
			Soil Test	3.1.4	G ED												
			SD-07 Certificates														
			Sod	2.1	G ED												
			Topsoil	2.2	G ED												
			pH Adjuster	2.3.1													
			Fertilizer	2.3.2													
			Organic Material	2.3.4													
			Soil Conditioner	2.3.5													
			Pesticide	2.5	G AR												
		02930a	SD-02 Shop Drawings														
			Shop Drawings	3.3.1													
			Finished Grade, Topsoil and Underground Utilities	3.2.1	G AR												
			SD-03 Product Data														
			Geotextile	2.5													
			Chemical Treatment Material	1.4.3.2													
			Equipment	3.7.2	G AR												
			Delivery	1.4.1	G AR												
			Plant Establishment Period	3.9	G AR												
			Maintenance Record	3.9.2.6													
			Application of Pesticide	3.7	G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02930a	SD-04 Samples														
			Delivered Topsoil	1.4.1.3													
			Soil Amendments	3.1.4.2													
			Mulch	2.4													
			Geotextile	2.5													
			SD-06 Test Reports														
			Soil Test	3.1.4.2	G ED												
			Percolation Test	3.1.4.1	G ED												
			SD-07 Certificates														
			Plant Material	2.1	G ED												
			Topsoil	2.2	G ED												
			pH Adjuster	2.3.1	G AR												
			Fertilizer	2.3.2	G AR												
			Organic Material	2.3.3	G AR												
			Soil Conditioner	2.3.4	G AR												
			Organic Mulch	2.4.1	G AR												
			Pesticide	2.13	G AR												
			SD-10 Operation and Maintenance Data														
			Maintenance Instructions	3.9.5													
		03100a	SD-02 Shop Drawings														
			Formwork	3.1.1													
			SD-03 Product Data														
			Design	1.3													
			Form Materials	2.1													
			Form Releasing Agents	2.1.4													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						APPROVAL NEEDED BY	MATERIAL NEEDED BY	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE RCD FRM APPR AUTH				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		03100a	SD-04 Samples														
			Fiber Voids	2.1.5													
			SD-07 Certificates														
			Fiber Voids	2.1.5													
		03150a	SD-03 Product Data														
			Preformed Expansion Joint Filler	2.2													
			Sealant	2.3													
			SD-04 Samples														
			Lubricant for Preformed	2.3.2													
			Compression Seals														
			Field-Molded Type	2.3.4													
			Non-metallic Materials														
			SD-07 Certificates														
			Preformed Expansion Joint Filler	2.2													
			Sealant	2.3													
			Waterstops														
		03200a	SD-02 Shop Drawings														
			Reinforcement	3.1	G ED												
			SD-07 Certificates														
			Reinforcing Steel	2.3	G ED												
		03300	SD-04 Samples														
			Surface Retarder	2.3.5													
			SD-05 Design Data														
			Mixture Proportions	1.8	G ED												
			Cold Weather Requirements	3.5.3	G ED												
			Hot Weather Requirements	3.5.4	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		03300	SD-06 Test Reports														
			Testing and Inspection for Contractor Quality Control	3.14	G ED												
			SD-07 Certificates														
			Quality Control Qualifications	1.4													
		04200	SD-02 Shop Drawings														
			Masonry Work	1.5													
			SD-03 Product Data														
			Clay or Shale Brick	2.2													
			Concrete Brick	2.3													
			Insulation	2.14													
			Cold Weather Installation	3.1.2													
			SD-04 Samples														
			Concrete Masonry Units (CMU)	2.4													
			Concrete Brick	2.3													
			Clay or Shale Brick	2.2													
			Anchors, Ties, and Bar Positioners	2.9													
			Expansion-Joint Materials	2.13													
			Joint Reinforcement	2.10													
			Insulation	2.14													
			Portable Panel														
			SD-06 Test Reports														
			Efflorescence Test	3.22.3													
			Field Testing of Mortar	3.22.1													
			Field Testing of Grout	3.22.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		04200	Prism tests	3.22.4													
			Masonry Cement	2.7													
			Fire-rated CMU	2.4.3													
			Special Inspection	1.5													
			SD-07 Certificates														
			Clay or Shale Brick	2.2													
			Concrete Brick	2.3													
			Concrete Masonry Units (CMU)	2.4													
			Control Joint Keys	2.12													
			Anchors, Ties, and Bar Positioners	2.9													
			Expansion-Joint Materials	2.13													
			Joint Reinforcement	2.10													
			Reinforcing Steel Bars and Rods	2.11													
			Masonry Cement	2.7													
			Mortar Coloring	2.7.2													
			Insulation	2.14													
			Insulation	2.14													
			Precast Concrete Items	2.6													
			Mortar Admixtures	2.7.1													
			Grout Admixtures	2.8.1													
		04220	SD-02 Shop Drawings														
			Detail Drawings	2.4	G ED												
			Detail Drawings	2.10.1	G ED												
			Detail Drawings	2.10.3	G ED												
			SD-04 Samples														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		04220	Expansion Joint Materials	2.12													
			Clay or Shale Brick	2.1.1													
			Concrete Masonry Unit														
			Prefaced Concrete Masonry Unit														
			Sample Panel	1.3													
			SD-06 Test Reports														
			Masonry Veneer/Steel Stud Wall System														
			SD-07 Certificates														
			Clay or Shale Brick	2.1.1													
			Concrete Masonry Unit														
			Joint Reinforcement	2.3													
			Joint Reinforcement	3.10.9													
			Expansion Joint Materials	2.12													
			Insulation	2.5													
			Exterior Sheathing	2.7													
			Moisture Barrier	2.8.1													
			Vapor Retarder	2.8.2													
			Veneer Anchors	2.9													
			Welding	2.10.2													
		05120	SD-02 Shop Drawings														
			Structural Steel System		G ED												
			Structural Connections	3.2.1	G ED												
			SD-03 Product Data														
			Erection	3.2	G ED												
			Welding	3.3	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05120	SD-04 Samples														
			High Strength Bolts and Nuts	2.4													
			Carbon Steel Bolts and Nuts	2.5													
			Nuts Dimensional Style	2.6													
			Washers	2.7													
			SD-07 Certificates														
			Mill Test Reports		G ED												
			Welder Qualifications		G ED												
			Welding Inspector	1.5	G ED												
			Fabrication	3.1	G ED												
		05210N	SD-02 Shop Drawings														
			Steel joist structure	1.5.1	G ED												
			SD-06 Test Reports														
			Erection inspection	3.3.1													
			Welding inspections	3.3.1													
			SD-07 Certificates														
			Accessories	2.1													
			Welder qualification	1.5.2													
		05300	SD-02 Shop Drawings														
			Deck Units	2.1	G ED												
			Accessories	2.5	G ED												
			Attachments	3.2	G ED												
			Holes and Openings	3.3	G ED												
			SD-03 Product Data														
			Deck Units	2.1	G ED												
			Attachments	3.2	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05300	SD-04 Samples														
			Deck Units	2.1	G ED												
			Accessories	2.5	G ED												
			SD-07 Certificates														
			Deck Units	2.1	G ED												
			Attachments	3.2	G ED												
		05400a	SD-02 Shop Drawings														
			Framing Components	2.1	G ED												
			SD-07 Certificates														
			Mill Certificates		G ED												
			Welds	3.2.1	G ED												
		05500	SD-02 Shop Drawings														
			Miscellaneous Metal Items	1.6													
			SD-04 Samples														
			Miscellaneous Metal Items	1.6													
		06100	SD-02 Shop Drawings														
			Structural Wood Members	2.1.5	G ED												
			Installation of Framing	3.1	G ED												
			SD-03 Product Data														
			Structural Wood Members	2.1.5	G ED												
			SD-07 Certificates														
			Grading and Marking	2.1.1	G AR												
			Insulation	2.3													
		06200	SD-02 Shop Drawings														
			Finish Carpentry		G ED												
			SD-03 Product Data														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		06200	Wood Items, and Trim	2.1													
			SD-04 Samples														
			Moldings	2.1.7													
			Fascias and Trim	2.1.6													
		06400	SD-04 Samples														
			Reception Desk	2.2.1	G AR												
			Plastic Laminate	2.2.2	G ED												
			PVC Edge Banding	2.2.5.3	G ED												
			Fabric		G ED												
			Reception Desk Hardware	2.4	G ED												
			Solid Wood, Plywood or Plywood with Plastic Laminate Finish		G ED												
			Exposed Cabinet Hardware		G ED												
			Edge Banding		G ED												
		06650	SD-02 Shop Drawings														
			Shop Drawings		G ED												
			Installation														
			SD-03 Product Data														
			Solid polymer material	2.3	G ED												
			Qualifications	1.6													
			Fabrications	2.5	G ED												
			SD-04 Samples														
			Material	2.3	G ED												
			SD-06 Test Reports														
			Solid polymer material	2.3													
			SD-07 Certificates														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		06650	Fabrications	2.5													
			Qualifications	1.6													
			SD-10 Operation and Maintenance Data														
			Solid polymer material	2.3													
			Clean-up														
		07220a	SD-03 Product Data														
			Application of Insulation	3.7													
			Inspection	3.8													
			SD-07 Certificates														
			Insulation	2.2													
			Glass Roofing Felt	2.5													
			Organic Roofing Felt	2.6													
		07240	SD-02 Shop Drawings														
			Shop Drawings														
			SD-03 Product Data														
			Exterior Insulation and Finish System	1.3													
			Exterior Insulation and Finish System	1.3													
			Water Vapor Transmission Analysis	1.5													
			SD-04 Samples														
			Exterior Insulation and Finish System	1.3													
			SD-06 Test Reports														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07240	Exterior Insulation and Finish System	1.3													
			SD-07 Certificates														
			Qualifications	1.6.1													
			Qualifications	1.6.1													
			Installer	3.2													
			Warranty	1.9													
			Insulation Board	2.3													
			Quality Control	3.9.1													
			SD-10 Operation and Maintenance Data														
			Exterior Insulation and Finish System	1.3													
		07412A	SD-02 Shop Drawings														
			Metal Roofing	1.7.1	G AR												
			SD-04 Samples														
			Accessories	2.2													
			Roof Panels	2.1													
			Fasteners	2.3													
			Gaskets and Insulating Compounds	2.7													
			Sealant	2.6													
			SD-07 Certificates														
			Roof Panels	2.1													
			Installation	3.1													
			Accessories	2.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07412A	Installer	1.3.3													
			Warranties	1.7													
		07413a	SD-02 Shop Drawings														
			Siding	2.1													
			SD-04 Samples														
			Accessories	2.3	G AR												
			Siding	2.1													
			Fasteners	2.4													
			Insulation														
			Gaskets and Insulating Compounds	2.7													
			Sealant	2.6													
			Wall Liners														
			SD-07 Certificates														
			Siding	2.1													
			Installation	3.1													
			Accessories	2.3													
			Insulation														
		07416A	SD-02 Shop Drawings														
			Structural Standing Seam Metal Roof System		G ED												
			SD-03 Product Data														
			Design Analysis		G ED												
			Qualifications														
			SD-04 Samples														
			Accessories	2.3													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07416A	Roof Panels	2.1													
			Factory Color Finish	2.6	G ED												
			Fasteners	2.4													
			Insulation														
			Gaskets and Insulating Compounds	2.8													
			Sealant	2.7													
			Concealed Anchor Clips	2.2													
			Subpurlins	2.5													
			EPDM Rubber Boots	2.9													
			SD-06 Test Reports														
			Test Report for Uplift Resistance of the SSSMR		G ED												
			SD-07 Certificates														
			Structural Standing Seam Metal Roof System														
			Insulation														
		07551a	SD-03 Product Data														
			EVT and Flash Point	3.6													
			Materials	3.17													
			Installation	3.9													
			SD-07 Certificates														
			Manufacturer	1.2													
			Materials	3.17													
		07600	SD-02 Shop Drawings														
			Materials	2.1													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07762	SD-02 Shop Drawings														
			Concrete Paver System		G AR												
			SD-03 Product Data														
			Concrete Paver and Accessories		G AR												
			SD-04 Samples														
			Concrete Paver Unit		G AR												
		07840	SD-02 Shop Drawings														
			Firestopping Materials	2.1													
			SD-07 Certificates														
			Firestopping Materials	2.1													
			Installer Qualifications	1.5													
			Inspection	3.3													
		07900	SD-03 Product Data														
			Backing	2.2													
			Bond-Breaker	2.3													
			Sealant	2.6													
			SD-07 Certificates														
			Sealant	2.6													
		08110	SD-02 Shop Drawings														
			Doors	2.2	G ED												
			Frames	2.8	G ED												
			Accessories	2.6													
			SD-03 Product Data														
			Doors	2.2	G ED												
			Frames	2.8	G ED												
			Accessories	2.6													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08110	SD-04 Samples Factory-applied enamel finish		G ED												
		08120	SD-02 Shop Drawings Doors and frames	2.1	G ED												
			SD-08 Manufacturer's Instructions Doors and frames	2.1													
		08210	SD-02 Shop Drawings Wood Doors and Frames														
			SD-07 Certificates Adhesives	2.1.3													
		08510	SD-02 Shop Drawings Steel Windows	1.4													
			Insect Screens	2.5													
			SD-03 Product Data Steel Windows	1.4													
			Steel Windows	1.4													
			SD-04 Samples Steel Windows	1.4													
			SD-07 Certificates Steel Windows	1.4													
			SD-10 Operation and Maintenance Data														
			Steel Windows	1.4													
		08520a	SD-02 Shop Drawings Aluminum Windows		G ED												
			Insect Screens	2.3													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08520a	SD-03 Product Data Aluminum Windows														
			SD-04 Samples Aluminum Windows		G ED												
			SD-06 Test Reports Aluminum Windows														
			SD-07 Certificates Aluminum Windows														
		08700	SD-01 Preconstruction Submittals Hardware Schedule		G AR												
			SD-02 Shop Drawings Hardware Devices		G AR												
			SD-03 Product Data Hardware and Accessories														
			Keying Schedule		G AR												
			SD-07 Certificates Hardware and Accessories														
		08810	SD-02 Shop Drawings Installation	3.2													
			SD-03 Product Data Insulating Glass	1.6.1	G ED												
			Insulating Glass	2.2	G ED												
			Glazing Accessories	2.7													
			SD-04 Samples Insulating Glass	1.6.1													
			Insulating Glass	2.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08810	SD-07 Certificates														
			Insulating Glass	1.6.1													
			Insulating Glass	2.2													
			Glazing Accessories	2.7													
		08840A	SD-02 Shop Drawings														
			Translucent Panel Unit System														
			SD-03 Product Data														
			Translucent Panel Unit System		G ED												
			SD-04 Samples														
			Translucent Panel		G ED												
			Aluminum Extensions Sealant		G ED												
			Aluminum Frame		G ED												
			SD-06 Test Reports														
			Translucent Panel Unit System;		G ED												
			SD-07 Certificates														
			Plastic Sheets and Glazing Materials														
			SD-08 Manufacturer's Instructions														
			Installation and Operating Instructions of Translucent Panels														
			Plastic Sheets and Glazing Materials														
		09250	SD-02 Shop Drawings														
			Steel Framing	2.6.2													
			Steel Framing	3.1													
			Control Joints	3.3.6													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09250	Fire-Resistant Assemblies	3.8													
			SD-07 Certificates														
			Gypsum Wallboard	2.5.1													
			Gypsum Wallboard	3.8													
			Water-Resistant Gypsum Board	2.4.2													
			Exterior Gypsum Soffit Board	2.4.6													
			Steel Framing	2.6.2													
			Steel Framing	3.1													
			Fire-Rated Gypsum Board	2.4.1													
			Cementitious Backer Units	2.7													
		09310	SD-03 Product Data														
			Tile	2.1	G ED												
			Tile	2.1	G ED												
			Setting-Bed	2.2													
			Mortar, Grout, and Adhesive	2.4	G ED												
			Mortar and Grout	3.3.4													
			SD-04 Samples														
			Tile	2.1	G ED												
			Accessories	2.1.4	G ED												
			Marble Thresholds	2.5	G ED												
			SD-06 Test Reports														
			Testing														
			SD-07 Certificates														
			Tile	2.1													
			Mortar, Grout, and Adhesive	2.4													
		09510	SD-02 Shop Drawings														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09510	Approved Detail Drawings	1.3	G ED												
			SD-03 Product Data														
			Acoustical Ceiling Systems	2.5	G ED												
			SD-04 Samples														
			Acoustical Units	2.1	G ED												
			SD-06 Test Reports														
			Fire Resistive Ceilings	2.5													
			Ceiling Attenuation Class and Test	2.8	G ED												
			SD-07 Certificates														
			Acoustical Units	2.1													
		09650	SD-03 Product Data														
			Resilient Flooring and Accessories		G ED												
			SD-04 Samples														
			Flooring	3.2	G ED												
			SD-06 Test Reports														
			Moisture Test	3.3													
		09680	SD-02 Shop Drawings														
			Installation	3.4													
			Molding	2.4													
			SD-03 Product Data														
			Carpet	1.3													
			Carpet	2.1													
			Carpet	2.1.1													
			Carpet	2.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09680	Carpet	2.2.1													
			Carpet	3.1													
			Regulatory Requirements	1.3													
			SD-04 Samples														
			Carpet	1.3	G ED												
			Carpet	2.1	G ED												
			Carpet	2.1.1	G ED												
			Carpet	2.2	G ED												
			Carpet	2.2.1	G ED												
			Carpet	3.1	G ED												
			Molding	2.4	G ED												
			SD-06 Test Reports														
			Moisture and Alkalinity Tests	3.2													
			SD-07 Certificates														
			Carpet	1.3													
			Carpet	2.1													
			Carpet	2.1.1													
			Carpet	2.2													
			Carpet	2.2.1													
			Carpet	3.1													
			SD-10 Operation and Maintenance														
			Data														
			Carpet	1.3													
			Carpet	2.1													
			Carpet	2.1.1													
			Carpet	2.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09680	Carpet	2.2.1													
			Carpet	3.1													
			Cleaning and Protection	3.5													
		09720	SD-03 Product Data														
			Wallcoverings	2.1													
			Manufacturer's Instructions	3.2													
			Installation	3.3	G ED												
			Maintenance	1.6													
			Clean-Up	3.4													
			SD-04 Samples														
			Wallcoverings	2.1	G ED												
			SD-07 Certificates														
			Wallcoverings	2.1													
		09900	SD-03 Product Data														
			Paint	2.1													
			Mixing and Thinning	3.3													
			Application	3.4													
			SD-04 Samples														
			Moisture-Curing Polyurethane	1.5													
			Paint	2.1													
			SD-06 Test Reports														
			Paint	2.1													
			SD-07 Certificates														
			Lead	2.1.3													
			Mildewcide and Insecticide	2.1.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09900	Volatile Organic Compound (VOC) Content	2.1.5													
		10160	SD-02 Shop Drawings Approved Detail Drawings	1.3	G ED												
			SD-03 Product Data Toilet Partition System	1.3													
			Toilet Partition System	2.3													
			SD-04 Samples Toilet Partition System	1.3													
			Toilet Partition System	2.3													
		10201	SD-02 Shop Drawings Wall louvers	2.2													
			SD-04 Samples Wall louvers	2.2	G ED												
		10430	SD-02 Shop Drawings Approved Detail Drawings	3.1	G ED												
			SD-03 Product Data Exterior Signage System	2.1	G ED												
			Installation	3.1													
			Exterior Signs														
			Wind Load Requirements	1.3													
			SD-04 Samples Exterior Signs		G ED												
			SD-10 Operation and Maintenance Data														
			Protection and Cleaning	3.1.2													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		10440	SD-02 Shop Drawings														
			Detail Drawings	3.1	G ED												
			SD-03 Product Data														
			Installation	3.1	G ED												
			SD-04 Samples														
			Interior Signage	1.3	G ED												
			SD-10 Operation and Maintenance Data														
			Approved Manufacturer's Instructions	3.1													
			Protection and Cleaning	3.1.2													
		10500	SD-04 Samples														
			Locker Units		G ED												
			SD-09 Manufacturer's Field Reports														
			Static Load Tests	2.4													
			Metal Finishes	2.3.8	G ED												
			Finishes		G ED												
		10523	SD-02 Shop Drawings														
			Fire Extinguisher Cabinets		G AR												
			SD-03 Product Data														
			Extinguisher Cabinet		G AR												
			Wall Brackets		G AR												
			Replacement Parts														
			SD-04 Samples														
			Color and Finish		G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE SUBMITTED	DATE APPROVAL NEEDED	DATE MATERIAL NEEDED	DATE OF ACTION	DATE OF ACTION	DATE FWD TO APPR AUTH	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE RCD FRM APPR AUTH		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		10550	SD-01 Preconstruction Submittals														
			Manufacturers Data														
			SD-04 Samples														
			Material Description		G ED												
		10615	SD-02 Shop Drawings														
			Detail Drawings	1.5.1	G ED												
			SD-03 Product Data														
			Manufacturer's Installation														
			Instructions														
		10800	SD-03 Product Data														
			Finishes	2.1.2													
			Accessory Items	2.2													
			SD-04 Samples														
			Finishes	2.1.2													
			Accessory Items	2.2													
		11162A	SD-02 Shop Drawings														
			Loading Dock Levelers	2.1	G ED												
			SD-03 Product Data														
			Loading Dock Levelers	2.1	G ED												
			SD-10 Operation and Maintenance														
			Data														
			Loading Dock Levelers	2.1													
		11310	SD-02 Shop Drawings														
			Sewage Pump System		G ED												
			SD-03 Product Data														
			Sewage Pump System		G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		11310	Spare Parts														
			SD-06 Test Reports														
			Field Testing and Adjusting Equipment	3.3	G AR												
			SD-08 Manufacturer's Instructions Sewage Pump System														
			SD-10 Operation and Maintenance Data														
			Sewage Pump System		G AR												
		11400	SD-02 Shop Drawings														
			Food Service Equipment		G ED												
			SD-10 Operation and Maintenance Data														
			Food Service Equipment		G ED												
		12320	SD-02 Shop Drawings														
			Installation	3.1	G ED												
			SD-03 Product Data														
			Cabinets	2.1	G ED												
			Countertops and Backsplash	2.2	G ED												
			SD-04 Samples														
			Cabinets	2.1	G ED												
			Countertops and Backsplash	2.2	G ED												
			SD-06 Test Reports														
			Cabinets and Countertops														
		12490	SD-02 Shop Drawings														
			Approved Detail Drawings	3.1	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE OF ACTION	DATE RCD FRM APPR AUTH					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		12490	SD-03 Product Data														
			Window Treatments	3.1	G ED												
			Hardware	1.3													
			SD-04 Samples														
			Window Treatments	3.1	G ED												
		13080	SD-02 Shop Drawings														
			Bracing	3.1													
			Resilient Vibration Isolation Devices	3.4													
			Equipment Requirements	1.4													
			SD-03 Product Data														
			Bracing	3.1	G AR												
			Equipment Requirements	1.4	G AR												
		13110A	SD-02 Shop Drawings														
			Drawings	1.3.7	G ED												
			Contractor's Modifications	1.3.2	G ED												
			SD-03 Product Data														
			Equipment		G ED												
			Spare Parts	3.9													
			SD-06 Test Reports														
			Tests and Measurements	3.5	G ED												
			Contractor's Modifications	1.3.2	G ED												
			SD-07 Certificates														
			Cathodic Protection System														
			Services of 'Corrosion Expert'	1.3.1	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		13110A	SD-10 Operation and Maintenance Data														
			Cathodic Protection System		G ED												
			Training Course	3.6	G ED												
		13125	SD-02 Shop Drawings														
			Drawings		G ED												
			SD-03 Product Data														
			Paint System														
			SD-05 Design Data														
			Bridge Design Calculations		G ED												
			SD-07 Certificates														
			Material Certifications														
		13851A	SD-02 Shop Drawings														
			Fire Alarm Reporting System	1.4.1	G ED												
			SD-03 Product Data														
			Storage Batteries	2.2	G ED												
			Voltage Drop		G ED												
			Special Tools and Spare Parts	2.7.3	G ED												
			Technical Data and Computer Software	1.5	G ED												
			Training	3.5	G AR												
			Testing	3.4	G AR												
			SD-06 Test Reports														
			Testing	3.4	G AR												
			SD-07 Certificates														
			Equipment		G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						APPROVAL NEEDED BY	MATERIAL NEEDED BY	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE RCD FRM APPR AUTH				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		13851A	Qualifications	1.3.7	G AR												
			SD-10 Operation and Maintenance Data														
			Technical Data and Computer Software	1.5	G AR												
		13930A	SD-02 Shop Drawings														
			Sprinkler System Shop Drawings		G ED												
			As-Built Shop Drawings		G ED												
			SD-03 Product Data														
			Fire Protection Related Submittals	3.1	G ED												
			Components and Equipment Data		G ED												
			Hydraulic Calculations	1.7	G ED												
			Spare Parts		G ED												
			Preliminary Tests Procedures		G AR												
			Final Acceptance Test Procedures		G ED												
			On-site Training Schedule		G AR												
			Preliminary Tests	3.10	G AR												
			Final Acceptance Test		G AR												
			Fire Protection Specialist Qualifications														
			Sprinkler System Installer Qualifications	1.9													
			SD-06 Test Reports														
			Preliminary Tests Report		G AR.												
			Final Acceptance Test Report		G ED												
			SD-07 Certificates														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		13930A	Fire Protection Specialist Inspection														
			SD-10 Operation and Maintenance Data														
			Wet Pipe Sprinkler System		G AR												
		13965A	SD-02 Shop Drawings														
			Wet Chemical Fire Extinguishing System		G ED												
			SD-03 Product Data Similar Services														
			Wet Chemical Fire Extinguishing System		G ED												
			Preliminary Tests	3.2	G AR												
			Final Acceptance Tests	3.3	G ED												
			System Diagrams														
			Test Schedule														
			Field Training	3.4	G AR												
			SD-07 Certificates														
			Installation Technician	1.3.4													
			Installation Drawings	1.3.3													
			SD-10 Operation and Maintenance Data														
			Wet Chemical Fire Extinguishing System		G AR												
		15070A	SD-02 Shop Drawings														
			Coupling and Bracing	3.1													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15070A	Flexible Couplings or Joints	3.3													
			Equipment Requirements	1.3													
			Contractor Designed Bracing	1.2.4													
			SD-03 Product Data														
			Coupling and Bracing	3.1	G AR												
			Equipment Requirements	1.3	G AR												
			Contractor Designed Bracing	1.2.4	G AR												
			SD-07 Certificates														
			Flexible Ball Joints	2.2													
		15080A	SD-04 Samples														
			Thermal Insulation Materials		G AR												
		15181A	SD-02 Shop Drawings														
			Piping System	2.4	G AR												
			SD-03 Product Data														
			Piping System	2.4	G AR												
			Water Treatment Systems	2.12	G AR												
			Spare Parts														
			Qualifications	1.3													
			Field Tests	3.3	G AR												
			Demonstrations	3.4	G AR												
			Verification of Dimensions	1.6.1													
			SD-06 Test Reports														
			Field Tests	3.3	G ED												
			Condenser Water Quality Tests		G AR												
			One-Year Inspection	3.5	G AR												
			SD-07 Certificates														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15181A	Service Organization	2.1	G AR												
			SD-10 Operation and Maintenance Data														
			Operation Manuals		G AR												
			Maintenance Manuals	3.4	G AR												
			Water Treatment Systems	2.12													
		15182A	SD-02 Shop Drawings														
			Refrigerant Piping System	2.3	G AR												
			SD-03 Product Data														
			Refrigerant Piping System	2.3	G AR												
			Spare Parts		G AR												
			Qualifications	1.3	G AR												
			Refrigerant Piping Tests	3.3	G AR												
			Demonstrations	3.4	G AR												
			Verification of Dimensions	1.6.1	G AR												
			SD-06 Test Reports														
			Refrigerant Piping Tests	3.3	G AR												
			SD-07 Certificates														
			Service Organization	2.1	G AR												
			SD-10 Operation and Maintenance Data														
			Operation Manuals		G AR												
			Maintenance Manuals	3.4	G ED												
		15190A	SD-02 Shop Drawings														
			Gas Piping System	3.2	G ED												
			SD-03 Product Data														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION REVIEW NO	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15190A	Qualifications														
			SD-06 Test Reports														
			Testing														
			Pressure Tests	3.16.1													
			Pressure Tests for Liquified Petroleum Gas														
			Test With Gas	3.16.2													
		15400A	SD-02 Shop Drawings														
			Plumbing System	3.8.1	G ED												
			Electrical Schematics														
			SD-03 Product Data														
			Welding														
			Plumbing Fixture Schedule	3.9													
			Vibration-Absorbing Features														
			Plumbing System	3.8.1													
			SD-06 Test Reports														
			Tests, Flushing and Disinfection	3.8													
			Backflow Prevention Assembly														
			Tests														
			SD-07 Certificates														
			Materials and Equipment														
			SD-10 Operation and Maintenance														
			Data														
			Plumbing System	3.8.1													
		15569A	SD-02 Shop Drawings														
			Heating System		G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15569A	Piping Installation	3.2	G ED												
			Installation	3.2.5.4	G ED												
			Installation	3.2.8	G ED												
			SD-03 Product Data														
			Manufacturer's Catalog Data		G ED												
			Spare Parts Data														
			Water Treatment Plan														
			Boiler Water Treatment	2.13													
			Heating System Tests	3.6													
			Fuel System Tests	3.8													
			Welding	1.3.6													
			Qualification														
			Field Instructions	3.9													
			Tests	3.3													
			SD-06 Test Reports														
			Heating System Tests	3.6													
			Fuel System Tests	3.8													
			Water Treatment Tests														
			SD-07 Certificates														
			Bolts	2.9.8.3													
			Continuous Emissions Monitoring														
			SD-10 Operation and Maintenance														
			Data														
			Heating System														
			Water Treatment System	2.13													
		15620A	SD-02 Shop Drawings														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW NUMBER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		MAILED TO CONTR/ DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15620A	Drawings		G ED												
			Installation	3.1	G AR												
			SD-03 Product Data														
			Refrigeration System	3.1.1	G ED												
			Spare Parts														
			Posted Instructions	3.5													
			Verification of Dimensions	1.5.1													
			Manufacturer's Multi-Year Compressor Warranty	1.6													
			Factory Tests														
			System Performance Tests	3.4	G AR												
			Demonstrations	3.5	G AR												
			SD-06 Test Reports														
			Factory Tests		G AR												
			System Performance Tests	3.4	G AR												
			SD-07 Certificates														
			Refrigeration System	3.1.1	G AR												
			Service Organization	2.1													
			SD-10 Operation and Maintenance Data														
			Operation Manuals														
			Maintenance Manuals	3.5													
		15700A	SD-02 Shop Drawings														
			Drawings		G ED												
			SD-03 Product Data														
			Unitary Equipment	2.4	G ED												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15700A	Unitary Equipment	2.5	G ED												
			Unitary Equipment	2.6	G ED												
			Spare Parts Data		G AR												
			Posted Instructions	3.5	G AR												
			Verification of Dimensions	1.5.1	G AR												
			System Performance Tests	3.4	G AR												
			Demonstrations	3.5	G AR												
			SD-06 Test Reports														
			Refrigerant Tests, Charging, and Start-Up	3.3	G AR												
			System Performance Tests	3.4	G AR												
			SD-07 Certificates														
			Unitary Equipment	2.4	G ED												
			Unitary Equipment	2.5	G ED												
			Unitary Equipment	2.6	G ED												
			Service Organization	2.1													
			SD-10 Operation and Maintenance Data														
			Operation Manuals		G AR												
			Maintenance Manuals	3.5													
		15895A	SD-02 Shop Drawings														
			Air Supply, Distribution, Ventilation, and Exhaust Equipment		G ED												
			SD-03 Product Data														
			Components and Equipment	2.1													

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15895A	Air System Equipment		G ED												
			Air Handling Units		G ED												
			Terminal Units		G ED												
			Diffusers,Registers and Grilles		G ED												
			Test Procedures	2.11.1													
			Welding Procedures	3.1.1.1													
			System Diagrams														
			Similar Services														
			Welding Joints														
			Testing, Adjusting and Balancing	3.6													
			Field Training	3.8													
			SD-06 Test Reports														
			Performance Tests	3.7	G ED												
			SD-07 Certificates														
			Bolts	2.5.2.2													
			SD-10 Operation and Maintenance														
			Data														
			Air Supply, Distribution, Ventilation, and Exhaust Manuals														
		15951A	SD-02 Shop Drawings														
			HVAC Control System	3.1.1	G ED												
			SD-03 Product Data														
			Service Organizations		G AR												
			Equipment Compliance Booklet	1.6	G AR												
			Commissioning Procedures	3.4	G AR												

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15951A	Performance Verification Test Procedures	1.6	G AR												
			Training	3.6	G ED												
			SD-06 Test Reports														
			Commissioning Report	3.6.2	G AR												
			Performance Verification Test	3.5.3	G ED												
			SD-10 Operation and Maintenance Data														
			Operation Manual	1.5	G AR												
			Maintenance and Repair Manual	1.6													
		15990A	SD-02 Shop Drawings														
			TAB Schematic Drawings and Report Forms	3.3													
			SD-03 Product Data														
			TAB Related HVAC Submittals	3.2													
			TAB Procedures	3.5.1													
			Calibration	1.4													
			Systems Readiness Check	3.5.2													
			TAB Execution	3.5.1													
			TAB Verification	3.5.4													
			SD-06 Test Reports														
			Design Review Report	3.1	G ED												
			Systems Readiness Check	3.5.2	G ED												
			TAB Report	3.5.3	G ED												
			TAB Verification Report	3.5.4													
			SD-07 Certificates														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE SUBMITTED	DATE APPROVAL NEEDED	DATE MATERIAL NEEDED	DATE OF ACTION	DATE FWD TO APPR AUTH	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE RCD FRM APPR AUTH			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		15990A	Ductwork Leak Testing	3.4													
			TAB Firm	1.5.1													
			TAB Specialist	1.5.2													
		15995A	SD-03 Product Data														
			Commissioning Team	3.1													
			Test Procedures		G ED												
			Test Schedule														
			SD-06 Test Reports														
			Test Reports		G ED												
		16070A	SD-02 Shop Drawings														
			Lighting Fixtures in Buildings	3.2													
			Equipment Requirements														
			SD-03 Product Data														
			Lighting Fixtures in Buildings	3.2													
			Equipment Requirements														
			Contractor Designed Bracing	1.3.3													
		16375A	SD-02 Shop Drawings														
			Electrical Distribution System	3.10.3													
			As-Built Drawings														
			SD-06 Test Reports														
			Factory Tests	2.16													
			Field Testing	3.10													
			Cable Installation	3.2.1.4													
			SD-07 Certificates														
			Material and Equipment	2.1													
		16415A	SD-02 Shop Drawings														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		DATE RCD FRM APPR AUTH
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		16415A	Interior Electrical Equipment														
			SD-03 Product Data														
			Manufacturer's Catalog														
			Material, Equipment, and Fixture Lists														
			As-Built Drawings	1.2.6													
			SD-06 Test Reports														
			Field Test Reports	3.16													
			SD-07 Certificates														
			Materials and Equipment	1.4													
		16528A	SD-02 Shop Drawings														
			Detail Drawings														
			SD-03 Product Data														
			Equipment and Materials														
			SD-06 Test Reports														
			Ground Resistance	3.12.2													
			Measurements														
		16710A	SD-02 Shop Drawings														
			Premises Distribution System	1.7													
			Record Drawings														
			SD-03 Product Data														
			Record Keeping and Documentation														
			Spare Parts														
			Manufacturer's Recommendations	3.1.2													
			Test Plan														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		DATE OF ACTION
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		16710A	Qualifications	1.4													
			SD-06 Test Reports														
			Test Reports														
			SD-07 Certificates														
			Premises Distribution System	1.7													
			Materials and Equipment	2.1													
			Installers														
		16711A	SD-02 Shop Drawings														
			Telephone System														
			Installation	3.1													
			Record Drawings														
			SD-03 Product Data														
			Spare Parts														
			Equipment	1.5.2													
			Installation	3.1													
			Acceptance Tests	3.5													
			Cutover and Records	3.4													
			SD-06 Test Reports														
			Acceptance Tests	3.5													
			SD-07 Certificates														
			Telephone System														
			Qualifications	1.4													
		16770A	SD-02 Shop Drawings														
			Radio and Public Address System	1.3													
			Installation	3.1													
			SD-03 Product Data														

SUBMITTAL REGISTER

CONTRACT NO.
n/a

TITLE AND LOCATION						CONTRACTOR											
Unaccompanied Enlisted Personnel Housing (UEPH) 2																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					REMARKS	
						DATE FWD TO APPR AUTH/	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		16770A	Spare Parts														
			SD-06 Test Reports														
			Approved Test Procedures	3.3													
			Acceptance Tests	3.3													
			SD-10 Operation and Maintenance Data														
			Radio and Public Address System	1.3													
		16815A	SD-02 Shop Drawings														
			Cable Television Premises Distribution System														
			Installation	3.1													
			SD-03 Product Data														
			Spare Parts														
			Manufacturer's Recommendations														
			Test Plan														
			Qualifications	1.5													
			SD-06 Test Reports														
			Testing	3.6													
			SD-07 Certificates														
			Materials and Equipment	2.1													
			SD-10 Operation and Maintenance Data														
			Operation and Maintenance Manuals														

HARDWARE SCHEDULE – SEP 02, 2003

HDW # QTY.	ITEM	ANSI#	FINISH
942	NOT USED.		
943	NOT USED.		
944	NOT USED.		
945	NOT USED.		
946	NOT USED.		
947	NOT USED.		
948	NOT USED.		
949	NOT USED.		
950	2 Pr. Hinges	A5111 (NRP).....	630
	1 Ea. Exit Device	Type 3, Func. 04	630
	1 Ea. Closers w/dead stop.....	CO2021 PT-4G.....	619,630,646,
	1 Ea. Threshold	J35130	627
	1 Set Weather-stripping		
951	3 Pr. Hinges	A5111 (NRP).....	630
	1 Ea. Lockset / Latchset	F07	630
	1 Ea. Automatic Flush Bolt	Type 25	630
	2 Ea. Closers w/dead stop.....	CO2061 PT-4G.....	619,630,646,
	1 Ea. Door Coordinator		
	1 Ea. Astragal		
	1 Ea. Dust Proof Strike	LO4021	619,630,646,
	1 Ea. Threshold	J35130	627
	1 Ea. Kick Plate	J106	Black
	1 Set Weather-stripping		

HDW #	QTY.	ITEM	ANSI#	FINISH
952	1.5 Pr.	Hinges	A5111 (NRP).....	630
	1 Ea.	Lockset / Latchset	F07	630
	1 Ea.	Closer	CO2061 PT-4G.....	619,630,646,
	1 Ea.	Threshold	J35130	627
	1 Ea.	Kick Plate	J106	Black
	1 Set	Weather-stripping		
<hr/>				
953	4 Pr.	Hinges	A5111 (NRP).....	630
	2 Ea.	Exit Device	Type 6, Func. 04	630
	2 Ea.	Closer w/dead stop & Power Assisted	CO2021 PT-4G.....	619,630,646,
	2 Ea.	Dust Proof Strike	LO4021	619,630,646,
	1 Ea.	Threshold	J35130	627
	2 Ea.	Kick Plate	J106	Black
	1 Set	Weather-stripping		
<hr/>				
954	2 Pr.	Hinges	A5111 (NRP).....	630
	1 Ea.	Push Pull Bars	J504	630
	1 Ea.	Closers w/dead stop.....	CO2021 PT-4G.....	619,630,646,
	1 Ea.	Threshold	J35130	627
	1 Set	Silencers	LO3011	
<hr/>				
955	1.5 Pr.	Hinges	A8111	630
	1 Ea.	Lockset / Latchset	F13	630
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Transition Strip - Threshold		
	1 Ea.	Mop Plate	J107.....	Black
	1 Set	Silencers	LO3011	
<hr/>				
956	1.5 Pr.	Hinges	A8111	630
	1 Ea.	Lockset / Latchset	F82	630
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Transition Strip - Threshold		
	1 Ea.	Mop Plate	J107.....	Black
	1 Set	Silencers	LO3011	
<hr/>				
957	1.5 Pr.	Hinges	A8111.....	630
	1 Ea.	Lockset / Latchset	F07	630
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Transition Strip – Threshold		
	1 Ea.	Kick Plate	J106	Black

HDW #	QTY.	ITEM	ANSI#	FINISH
958	1.5 Pr.	Hinges	A8111	630
	1 Ea.	Mortise Dead Locks	E06061	630
	1 Set	Push – Pull Plates	J304 & J407	630
	1 Ea.	Closer w/ H.O & Power Assisted	CO2061	619,630,646,
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Threshold	Marble	
	1 Ea.	Mop Plate	J107	Black
	1 Ea.	Kick Plate	J106	Black
959	1.5 Pr.	Hinges	A8111	630
	1 Set	Push – Pull Plates	J304 & J407	630
	1 Ea.	Closer w/ H.O & Power Assisted	CO2061	619,630,646,
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Threshold	Marble	
	1 Ea.	Mop Plate	J107	Black
	1 Ea.	Kick Plate	J106	Black
960	3 Pr.	Hinges	A5111 (NRP).....	630
	2 Ea.	Push Pull Bars	J504	630
	2 Ea.	Closer w/dead stop & Power Assisted ...	CO2021 PT-4G.....	619,630,646,
	1 Ea.	Threshold	J35130	627
	2 Ea.	Kick Plate	J106	Black
	1 Set	Silencer		
961	1.5 Pr.	Hinges	A8111	630
	1 Ea.	Lockset / Latchset	F13	630
	2 Ea.	Closer	CO2021	619,630,646,
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Transition Strip - Threshold		
	1 Set	Silencers	LO3011	
962	1.5 Pr.	Hinges	A8111	630
	1 Ea.	Lockset / Latchset	F07	630
	1 Ea.	Closer	CO2011	619,630,646,
	1 Ea.	Dead Stop (wall mounted)	LO2101	
	1 Ea.	Transition Strip – Threshold		
	1 Ea.	Kick Plate	J106	Black

END OF SECTION

SECTION 09680, Sep 02, 2003

CARPET

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC TM 16	(1998) Test Method: Colorfastness to Light
AATCC TM 134	(1996) Test Method: Electrostatic Propensity of Carpets
AATCC TM 165	(1999) Test Method: Colorfastness to Crocking: Carpets - AATCC Crockmeter Method

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 418	(1993; R 1997) Pile Yarn Floor Covering Construction
ASTM D 1423	(1999) Twist in Yarns by the Direct-Counting Method
ASTM D 3278	(1996e1) Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus
ASTM D 5252	(1998a) Standard Practice for the Operation of the Hexapod Drum Tester
ASTM D 5417	(1999) Standard Practice for Operation of the Vettermann Drum Tester
ASTM E 648	(1999) Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source

CARPET AND RUG INSTITUTE (CRI)

CRI 104	(1996) Commercial Carpet Installation Standard
---------	--

CODE OF FEDERAL REGULATIONS (CFR)

16 CFR 1630	Standard for the Surface Flammability of Carpet and Rugs (FF 1-70)
40 CFR 247	Guidelines for Procurement of Products

that contain Recycled Material

GERMANY INSTITUTE FOR STANDARDIZATION (DIN)

DIN 54318 (1986) Machine-Made Textile Floor Coverings; Determination of Dimensional Changes Due to the Effects of Varied Water and Heat Conditions; Identical with ISO 2551 Edition 1981

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Installation
Molding

Three copies of drawings indicating areas receiving carpet, carpet types, textures and patterns, direction of pile, location of seams, and locations of edge molding.

SD-03 Product Data

Carpet

Manufacturer's catalog data and printed documentation stating physical characteristics, durability, resistance to fading, and flame resistance characteristics for each type of carpet material and installation accessory.

Regulatory Requirements

One copy of report stating that carpet contains recycled materials and/or involvement in a recycling or reuse program. Report shall include percentage of recycled material.

SD-04 Samples

Carpet; G ED
Molding; G ED

a. Carpet: One "Production Quality" samples 450 x 450 mm of each carpet proposed for use, showing quality, pattern, and color specified.

b. Vinyl or Aluminum Moldings: One piece of each type at least 300 mm long.

SD-06 Test Reports

Moisture and Alkalinity Tests

Three copies of test reports of moisture and alkalinity content

of concrete slab stating date of test, person conducting the test, and the area tested.

SD-07 Certificates

Carpet

Certificates of compliance from a laboratory accredited by the National Laboratory Accreditation Program of the National Institute of Standards and Technology attesting that each type of carpet and carpet with cushion material conforms to the standards specified.

SD-10 Operation and Maintenance Data

Carpet Cleaning and Protection

Three copies of carpet manufacturer's maintenance instructions describing recommended type of cleaning equipment and material, spotting and cleaning methods, and cleaning cycles.

1.3 REGULATORY REQUIREMENTS

Carpet and adhesives shall bear the Carpet and Rug Institute (CRI) Indoor Air Quality (IAQ) label or demonstrate compliance with testing criteria and frequencies through independent laboratory test results. Carpet type bearing the label will indicate that the carpet has been tested and meets the criteria of the CRI IAQ Carpet Testing Program, and minimizes the impact on indoor air quality. Contractor shall procure carpet in accordance with 40 CFR 247, shall submit a report stating that the carpet contains recycled materials and indicating the actual percentage of recycled material. Contractor shall, as much as possible, select material manufacturers that reduce pollutant and waste, recycle waste, reuse resources and scrap, and reclaim flooring materials instead of disposing into a landfill. Where possible, product shall be purchased locally to reduce emissions of fossil fuels from transporting.

1.4 DELIVERY AND STORAGE

Materials shall be delivered to the site in the manufacturer's original wrappings and packages clearly labeled with the manufacturer's name, brand name, size, dye lot number, and related information. Materials shall be stored in a clean, dry, well ventilated area, protected from damage and soiling, and shall be maintained at a temperature above 16 degrees C for 2 days prior to installation.

1.5 ENVIRONMENTAL REQUIREMENTS

Areas in which carpeting is to be installed shall be maintained at a temperature above 16 degrees C for 2 days before installation, during installation, and for 2 days after installation. A minimum temperature of 13 degrees C shall be maintained thereafter for the duration of the contract. Traffic or movement of furniture or equipment in carpeted area shall not be permitted for 24 hours after installation. Other work which would damage the carpet shall be completed prior to installation of carpet.

1.6 WARRANTY

Manufacturer's standard performance guarantees or warranties including minimum ten (10) year wear warranty, two (2) year material and workmanship and ten (10) year tuft bind and delamination.

1.7 EXTRA MATERIAL

Extra material from same dye lot consisting of uncut carpet tiles shall be provided for future maintenance. A minimum of 10 percent of total square meters of each carpet type, pattern, and color shall be provided.

PART 2 PRODUCTS

2.1 CARPET TYPE A

Carpet shall be first quality; free of visual blemishes, streaks, poorly dyed areas, fuzzing of pile yarn, spots or stains, and other physical and manufacturing defects. Carpet materials and treatments shall be reasonably nonallergenic and free of other recognized health hazards. All grade carpets shall have a static control construction which gives adequate durability and performance.

2.1.1 Physical Characteristics

Carpet shall comply with the following:

- a. Recycle Efforts: Use of nylon fiber with recycled content 25 per cent (minimum).
- b. Carpet Construction: Tufted.
- c. Type: Modular tile 609.6 x 609.6 mm square with 0.15 percent growth/shrink rate in accordance with DIN 54318.]
- d. Pile Type: Pattern loop modular carpet.
- e. Pile Fiber: 100% ECO solution Q premium braided SD nylon.
- f. Pile or Wire Height: Minimum 3.96 mm in accordance with ASTM D 418.
- g. Yarn Ply: Minimum 2 in accordance with ASTM D 1423.
- h. Gauge or Pitch: Minimum 39.4 mm in accordance with ASTM D 418.
- i. Stitches or Rows/Wires: Minimum 43.3 per 10 cm .
- j. Finished Pile Yarn Weight: Minimum .88 kg per square meter . This does not include weight of backings. Weight shall be determined in accordance with ASTM D 418.
- k. Pile Density: Minimum 1705 per 100 cm²
- l. Dye Method: Solution dyed.
- m. Backing Materials: Backing materials shall be 100% PVC-free recyclable backing system with recycle content, made from thermo-plastic polyolefin compound with a fiberglass reinforcing layer. Backing also contains florsept system antimicrobial protection.

2.1.2 Performance Requirements

- a. ARR (Appearance Retention Rating): Carpet shall be tested and have the minimum D rating for high durability when tested in accordance with either the ASTM D 5252 (Hexapod) or ASTM D 5417 (Vettermann) test methods using the number of cycles for short and long term tests as specified.
- b. Static Control: Static control shall be provided to permanently control static buildup to less than 3.5 kV when tested at 20 percent relative humidity and 21 degrees C in accordance with AATCC TM 134.
- c. Flammability and Critical Radiant Flux Requirements: Carpet shall comply with 16 CFR 1630. Carpet in corridors and exits shall have a minimum average critical radiant flux of 0.45 watts per square centimeter when tested in accordance with ASTM E 648.
- d. Tuft Bind: Tuft bind force required to pull a tuft or loop free from carpet backing shall be a minimum 40 N average force for loop pile.
- e. Colorfastness to Crocking: Dry and wet crocking shall comply with AATCC TM 165 and shall have a Class 4 minimum rating on the AATCC Color Transference Chart for all colors.
- f. Colorfastness to Light: Colorfastness to light shall comply with AATCC TM 16, Test Option E "Water-Cooled Xenon-Arc Lamp, Continuous Light" and shall have a minimum 4 grey scale rating after 40 hours.
- g. Delamination Strength: Delamination strength for tufted carpet with a secondary back shall be minimum of 440 N/m .

2.2 CARPET TYPE B

Carpet shall be first quality; free of visual blemishes, streaks, poorly dyed areas, fuzzing of pile yarn, spots or stains, and other physical and manufacturing defects. Carpet materials and treatments shall be reasonably nonallergenic and free of other recognized health hazards. All grade carpets shall have a static control construction which gives adequate durability and performance.

2.2.1 Physical Characteristics

Carpet shall comply with the following:

- a. OMITTED
- b. Carpet Construction: Tufted.
- c. Type: Broadloom 1.8 m minimum usable carpet width.
- d. Pile Type: Pattern loop.
- e. Pile Fiber: Commercial 100% branded (federally registered trademark) nylon continuous filament.

- f. Pile or Wire Height: Minimum 2.4 mm in accordance with ASTM D 418.
- g. Yarn Ply: Minimum 2 in accordance with ASTM D 1423.
- h. Gauge or Pitch: Minimum 1.98 mm in accordance with ASTM D 418.
- i. Stitches or Rows/Wires: Minimum .24 per square meter .
- j. Finished Pile Yarn Weight: Minimum 16.72 kg per square meter . This does not include weight of backings. Weight shall be determined in accordance with ASTM D 418.
- k. Pile Density: Minimum 7500 oz/yd³.
- l. Dye Method: Solution dyed.
- m. Backing Materials: Primary backing materials shall be polypropylene. Secondary backing to suit project requirements shall be those customarily used and accepted by the trade for each type of carpet, except when a special unitary back designed for gluedown is provided.

2.2.2 Performance Requirements

- a. ARR (Appearance Retention Rating): Carpet shall be tested and have the minimum 3.0-3.5 (Heavy) ARR when tested in accordance with either the ASTM D 5252 (Hexapod) or ASTM D 5417 (Vettermann) test methods using the number of cycles for short and long term tests as specified.
- b. Static Control: Static control shall be provided to permanently control static buildup to less than 3.5 kV when tested at 20 percent relative humidity and 21 degrees C in accordance with AATCC TM 134.
- c. Flammability and Critical Radiant Flux Requirements: Carpet shall comply with 16 CFR 1630. Carpet in corridors and exits shall have a minimum average critical radiant flux of .99 watts per square centimeter when tested in accordance with ASTM E 648.
- d. Tuft Bind: Tuft bind force required to pull a tuft or loop free from carpet backing shall be a minimum 10 N average force for loop pile.
- e. Colorfastness to Crocking: Dry and wet crocking shall comply with AATCC TM 165 and shall have a Class 4 minimum rating on the AATCC Color Transference Chart for all colors.
- f. Colorfastness to Light: Colorfastness to light shall comply with AATCC TM 16, Test Option E "Water-Cooled Xenon-Arc Lamp, Continuous Light" and shall have a minimum 4 grey scale rating after 40 hours.
- g. Delamination Strength: Delamination strength for tufted carpet with a secondary back shall be minimum of 440 N/m .

2.3 ADHESIVES AND CONCRETE PRIMER

Adhesives and concrete primers for installation of carpet shall be

waterproof, nonflammable, meet local air-quality standards, and shall be as required by the carpet manufacturer. Seam adhesive shall be waterproof, nonflammable, and nonstaining as recommended by the carpet manufacturer. Release adhesive for modular tile carpet shall be as recommended by the carpet manufacturer. Adhesives flashpoint shall be minimum 60 degrees C in accordance with ASTM D 3278.

2.4 MOLDING

Vinyl molding shall be heavy-duty and designed for the type of carpet being installed. Floor flange shall be a minimum 50 mm wide. Color shall be per the Color Schedule on drawing Sheet A-69.

2.5 TAPE

Tape for seams shall be as recommended by the carpet manufacturer for the type of seam used in installation.

2.6 COLOR, TEXTURE, AND PATTERN

Color, texture, and pattern shall be in accordance with the Color Schedule on drawing Sheet A-69.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

Carpet shall not be installed on surfaces that are unsuitable and will prevent a proper installation. Holes, cracks, depressions, or rough areas shall be repaired using material recommended by the carpet or adhesive manufacturer. Floor shall be free of any foreign materials and swept broom clean. Before beginning work, subfloor shall be tested with glue and carpet to determine "open time" and bond.

3.2 MOISTURE AND ALKALINITY TESTS

Concrete slab shall be tested for moisture content and excessive alkalinity in accordance with CRI 104.

3.3 PREPARATION OF CONCRETE SUBFLOOR

Installation of the carpeting shall not commence until concrete substrate is at least 90 days old. The concrete surfaces shall be prepared in accordance with instructions of the carpet manufacturer. Type of concrete sealer, when required, shall be compatible with the carpet.

3.4 INSTALLATION

Installation shall be in accordance with the manufacturer's instructions and CRI 104. Edges of carpet meeting hard surface flooring shall be protected with molding. Installation shall be in accordance with the molding manufacturer's instructions.

3.4.1 Broadloom Installation (Carpet Type B only)

Broadloom carpet shall be installed direct glue down and shall be smooth, uniform, and secure, with a minimum of seams. Seams shall be uniform, unnoticeable, and treated with a seam adhesive. Side seams shall be run toward the light where practical and where such layout does not increase

the number of seams. Breadths shall be installed parallel, with carpet pile in the same direction. Patterns shall be accurately matched. Cutouts, as at door jambs, columns and ducts shall be neatly cut and fitted securely. Seams at doorways shall be located parallel to and centered directly under doors. Seams shall not be made perpendicular to doors or at pivot points. Seams at changes in directions of corridors shall follow the wall line parallel to the carpet direction. Corridors with widths less than 1.8 m shall have the carpet laid lengthwise down the corridors.

3.4.2 Modular Tile Installation (Carpet Type A only)

Modular tiles shall be installed with release adhesive and shall be snugly jointed together. Tiles shall be laid in the same direction with accessibility to the subfloor where required.

3.5 CLEANING AND PROTECTION

3.5.1 Cleaning

After installation of the carpet, debris, scraps, and other foreign matter shall be removed. Soiled spots and adhesive shall be removed from the face of the carpet with appropriate spot remover. Protruding face yarn shall be cut off and removed. Carpet shall be vacuumed clean.

3.5.2 Protection

The installed carpet shall be protected from soiling and damage with heavy, reinforced, nonstaining kraft paper, plywood, or hardboard sheets. Edges of kraft paper protection shall be lapped and secured to provide a continuous cover. Traffic shall be restricted for at least 45 hours. Protective covering shall be removed when directed by the Contracting Officer.

3.6 REMNANTS

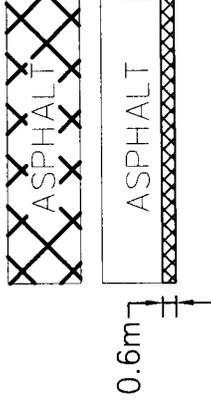
Remnants remaining from the installation, consisting of scrap pieces more than 600 mm in dimension with more than 0.6 square meters total, shall be provided. Non-retained scraps shall be removed from site and recycled appropriately.

-- End of Section --

C/L
INVE

PORTER S

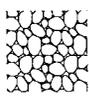
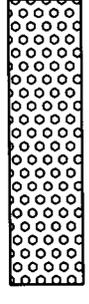
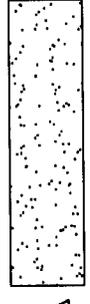
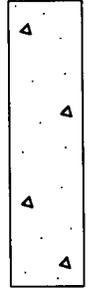
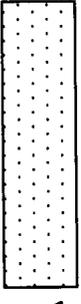
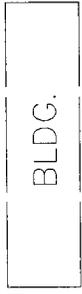
DEMOLITION



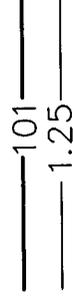
NEW
ROOF OVERHANG



EXISTING



CONTOUR INTERVALS
- ONE METER
- 1/4 METER



101

SPOT ELEVATION (METERS)

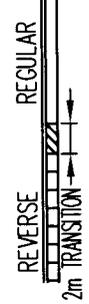


101.2x

CURB



CURB & GUTTER



CHAIN LINK FENCE



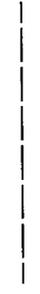
WOODEN GUIDE RAIL



WOODEN ENCLOSURE



RETAINING WALL



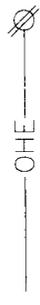
BENCH



BIKE RACK



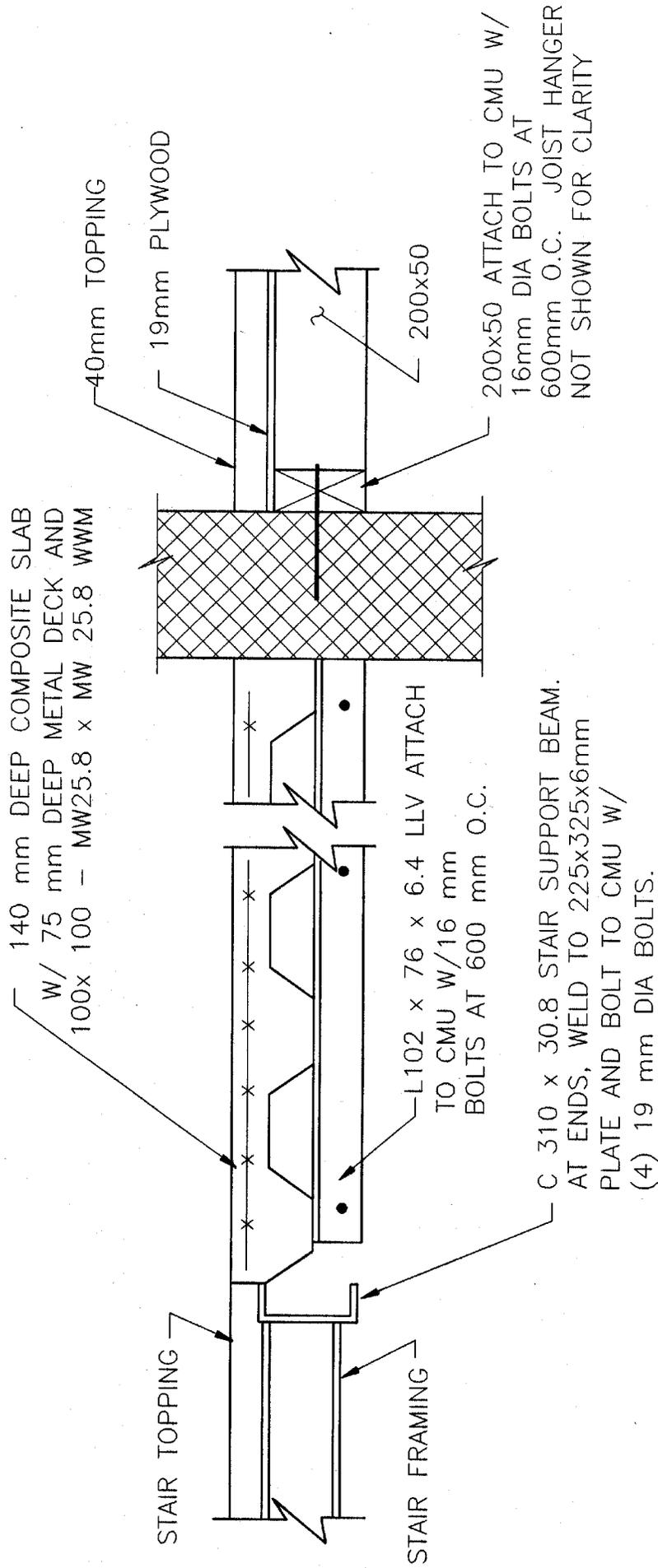
OVERHEAD ELECTRIC
AND POLE



OE

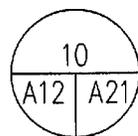
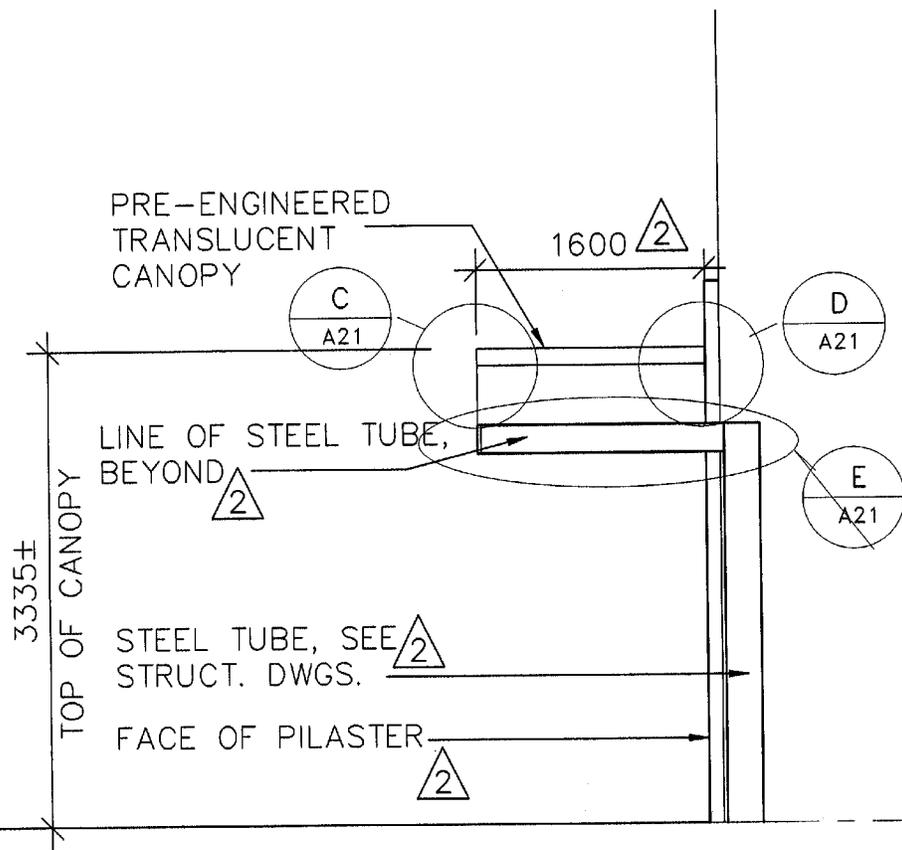
OE

OE



SECTION C
1:10 S28 S28

SK-K1



SECTION: ENTRANCE CANOPY



SCALE: 1 : 50 mm

UEPH COMPLEX II
ENLISTED BARRACKS

SK-A-4
DATE: 2 SEP 2003

PRE-ENGINEERED
TRANSLUCENT PANEL

NOTE: SEE DETAILS C
AND D, THIS SHEET

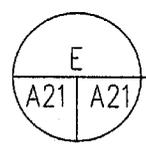
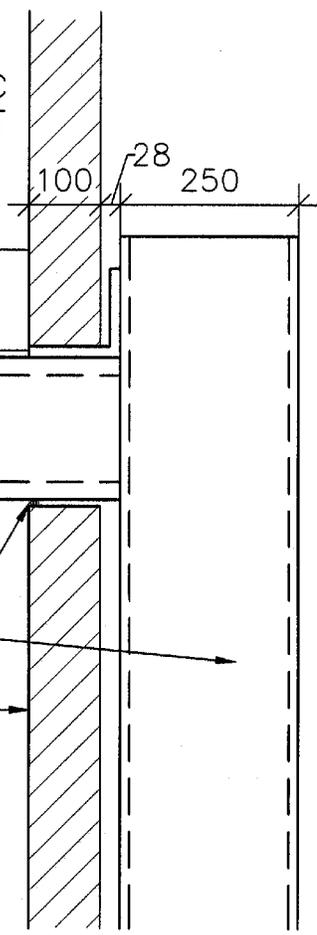
PRE-FINISHED
FASCIA PANEL

STEEL END PLATE
WELDED TO TUBE

WELDED STEEL TUBES,
SEE STRUCT. DWGS.

FACE OF PILASTER

SEALANT 3
SIDES, TYP.

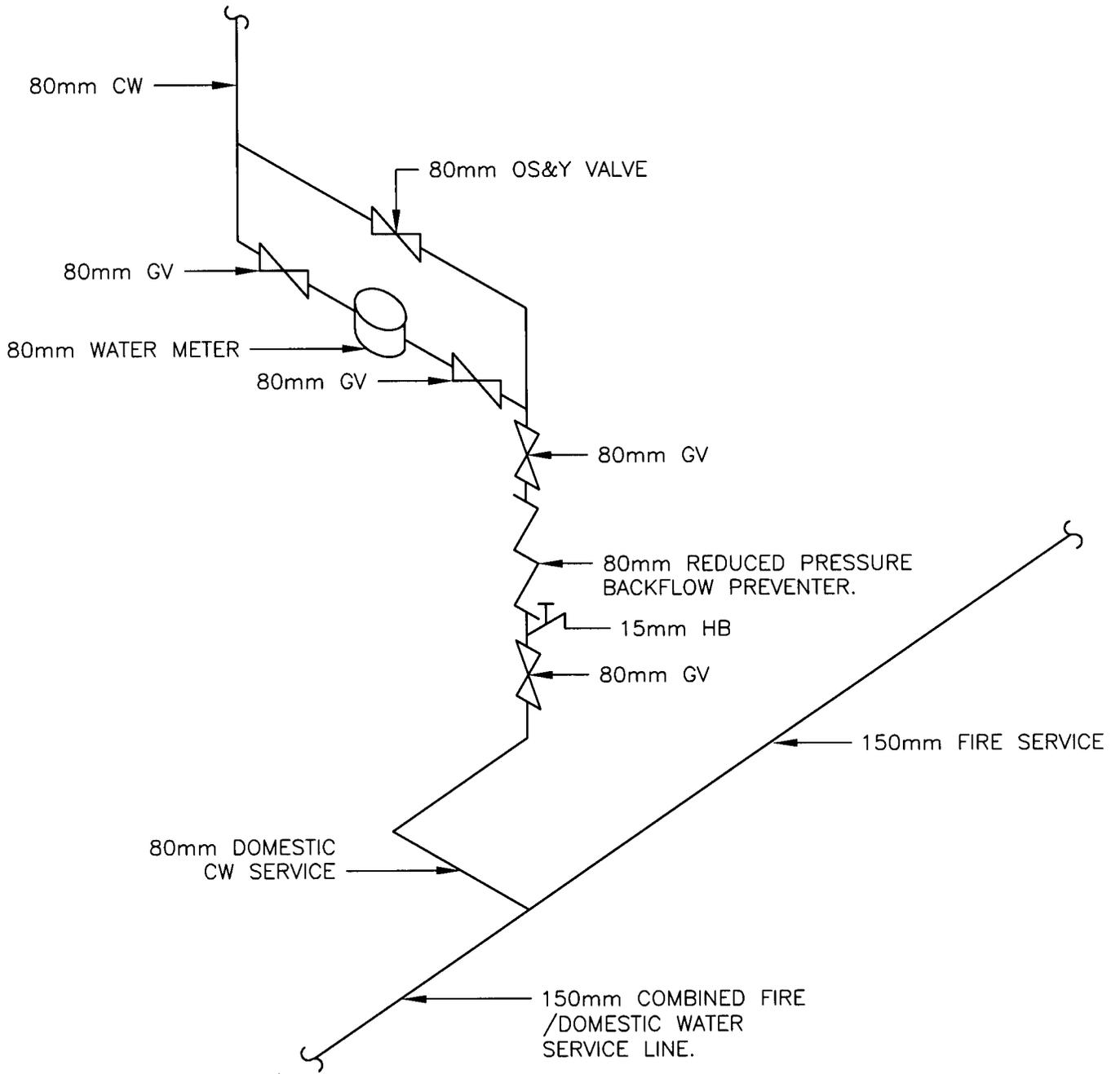


TYP DETAIL @ STEEL TUBE 2

SCALE: 1 : 10 mm

UEPH COMPLEX II
ENLISTED BARRACKS

SK-A-5
DATE: 2 SEP 2003



WATER METER PIPING DETAIL



NOT TO SCALE

SKETCH SK-MP-8

NOT TO SCALE

UEPH COMPLEX II

FT. DETRICK, MD

DATE - 9/2/2003

TELEPHONE AND CABLE T.V. SYSTEMS

FOUR 8-PIN MODULAR(RJ-45) CONNECTOR IN A DOUBLE GANG BOX WITH A DOUBLE GANG FACEPLATE. LABEL ALL DATA. M.H. 450mm AFF UON.

ONE 8-PIN MODULAR(RJ-45) CONNECTOR IN A SINGLE GANG BOX WITH A SINGLE GANG FACEPLATE, DEDICATED TO VOICE USE. M.H. 1500mm AFF UON.

ONE 8-PIN MODULAR(RJ-45) CONNECTOR IN A SINGLE GANG BOX WITH A SINGLE GANG FACEPLATE, DEDICATED TO VOICE USE. M.H. 1500mm AFF UON. THIS OUTLET IS FOR PAYPHONE.

TWO 8-PIN MODULAR(RJ-45) CONNECTORS IN A DOUBLE BOX WITH A DOUBLE FACEPLATE. LABEL ONE VOICE AND ONE DATA. M.H. 450mm AFF.

SINGLE CABLE TELEVISION OUTLET. M.H. 450mm AFF SEE DETAIL FOR TYPICAL CATV OUTLET.

TELEPHONE TERMINAL BACKBOARD (TTB). 1220mmx2439mmx19mm PLYWOOD.

CABLE TV DISTRIBUTION BACKBOARD, 1220mmx2439mmx19mm COMMUNICATIONS EQUIPMENT RACK, 475mm Wx2100mm HxSTANDARD DEPTH

CONDUITS (INCOMING AND STATION CABLE DISTRIBUTION BETWEEN FLOORS)

CONDUITS TO THE MANHOLE SYSTEM AND/OR STUBBED OUT 5 FEET FROM THE BUILDING.

SOLID BOTTOM, COMMUNICATIONS CABLE TRAY, 152.4mm Wx75mm MTD ABOVE CEILING IN THE DINING FACILITY

SOLID BOTTOM, COMMUNICATIONS CABLE TRAY, 229mm Wx102mm MTD ABOVE CEILING IN BARRACKS A AND R1

THE CABLE TRAY IN THE DINING FACILITY AND IN BOTH BARRACKS A AND R1 SHALL BE ELECTRICALLY CONTIGUOUS BY MEANS OF A #10 INSULATED STRANDED BONDING JUMPER. THE CABLE TRAY SHALL BE CONNECTED TO THE TOB BY MEANS OF A #10 AWG INSULATED STRANDED GROUND WIRE

SPEAKERS FOR THE PA SYSTEM

TELECOMMUNICATIONS GROUND BAR

MASTER GROUND BAR 900mmx40mmx10mm 1/4"-20 TAPPED HOLES EVERY 100mm

POWER

DUPLEX RECEPTACLE, NEMA 5-20R; M.H. = 450mm AFF, UNLESS OTHERWISE INDICATED. 20A, 125V, 2P, 3W, GROUNDING TYPE

RECEPTACLES MOUNTED ABOVE COUNTER TOPS SHALL BE 152MM ABOVE COUNTER TOPS. THE LETTERS AND NUMBER IE: (KP2-5) BESIDE THE RECEPTACLE SYMBOL DESIGNATES THE CIRCUIT NAME AND NUMBER

DUPLEX RECEPTACLE, NEMA 5-20R; M.H. = 450mm AFF, UNLESS OTHERWISE INDICATED. 20A, 125V, 2P, 3W, GROUNDING TYPE, WITH GROUND FAULT INTERRUPTER AND WEATHERPROOF RECEPTACLES MOUNTED ABOVE COUNTER TOPS SHALL BE 152MM ABOVE COUNTER TOPS.

SINGLE RECEPTACLE. RATINGS SHALL BE AS PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS

QUADRAPLEX RECEPTACLE: (2 DUPLEX RECEPTACLES IN A 2 GANG BOX) WITH SAME RATINGS AS A DUPLEX RECEPTACLE M.H. = 450mm AFF, UNLESS OTHERWISE INDICATED.

JUNCTION BOX SIZED AND RATED AS REQUIRED BY N.E.C. AND EQUIPMENT MANUFACTURER M.H.=600mm AFF, UON MOUNTING SHALL BE AS INDICATED.

MOTOR

MOTOR DISCONNECT/SAFETY SWITCH. M.H. = 1525mm TO TOP OF ENCLOSURE UNLESS OTHERWISE INDICATED. SWITCHES TO BE RATED 3/4" MIN HEAVY DUTY UNLESS OTHERWISE INDICATED. ENCLOSURES TO BE RATED NEMA 1 UNLESS OTHERWISE INDICATED.

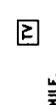
CIRCUIT BREAKER PANELBOARD. MOUNT AS INDICATED IN SCHEDULE AT HEIGHT = 1830mm TO TOP OF ENCLOSURE UNLESS OTHERWISE INDICATED. SIZE AND RATINGS AS INDICATED IN SCHEDULE.



◀ P4

◀ W

◀ P



TV

□

□

□

□

○

●

□

□

□

□

□

□

□

□

□

□

□

□

□

□

□

□

□

LIGHTING

WALL MOUNTED FIXTURE. LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE.

FLUORESCENT LIGHTING FIXTURE. CAPITAL LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE. THE NUMBER DENOTES THE NUMBER OF LAMPS/FIXTURE

THE SMALL LETTER DENOTES THE DIMMER SWITCH FOR THE FIXTURE

FLUORESCENT LIGHTING FIXTURE WITH EMERGENCY BATTERY PACK. LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE. THE E DENOTES EMERGENCY LIGHTING

COMPACT FLOURESCENT FIXTURES

EXTERIOR LIGHT FIXTURES

LED EXIT SIGN.

S SINGLE POLE WALL SWITCH. M.H. 1220mm 120V, 20A.

S₄ FOUR WAY WALL SWITCH. M.H. 1220mm 120V, 20A.

S₃ THREE WAY WALL SWITCH. M.H. 1220mm 120V, 20A.

S_D DIMMER SWITCH. M.H. 1220mm 120V, 20A.

S_M SMALL LETTER DENOTES CORRESPONDING LIGHT FIXTURES CONTROLLED BY THE SWITCH

MOTOR RATED TOGGLE SWITCH. (120V) M.H. 1500mm AFF WHERE WALL MOUNTED OTHERWISE MOUNTED WITH THE EQUIPMENT.

LC LIGHTING CONTACTOR

TC ASTRONOMICAL TIME CLOCK LIGHTING CONTROLLER

HOMERUN TO PANELBOARD. "P" INDICATES PANELBOARD THE HOMERUN IS SERVED FROM. "S" INDICATES THE CIRCUIT NUMBERS IN THE PANELBOARD FOR CONNECTION.

SYSTEM GROUND

2500A MANUAL TRANSFER SWITCH

2500A, 3P DISCONNECT SWITCH FOR GENERATOR

PA

1

1

1

1

1

1

1

1

1

1

1

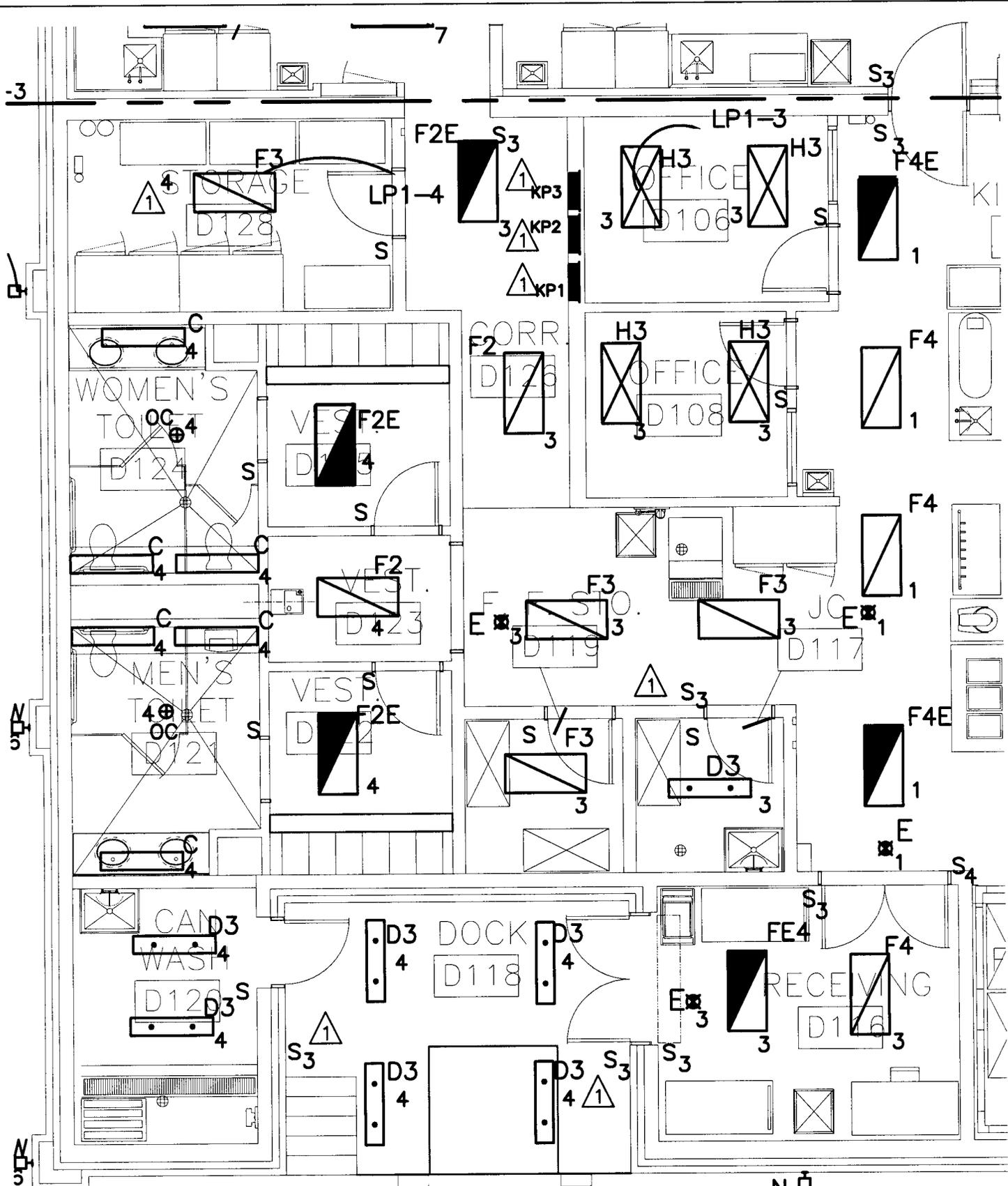
1

1

1

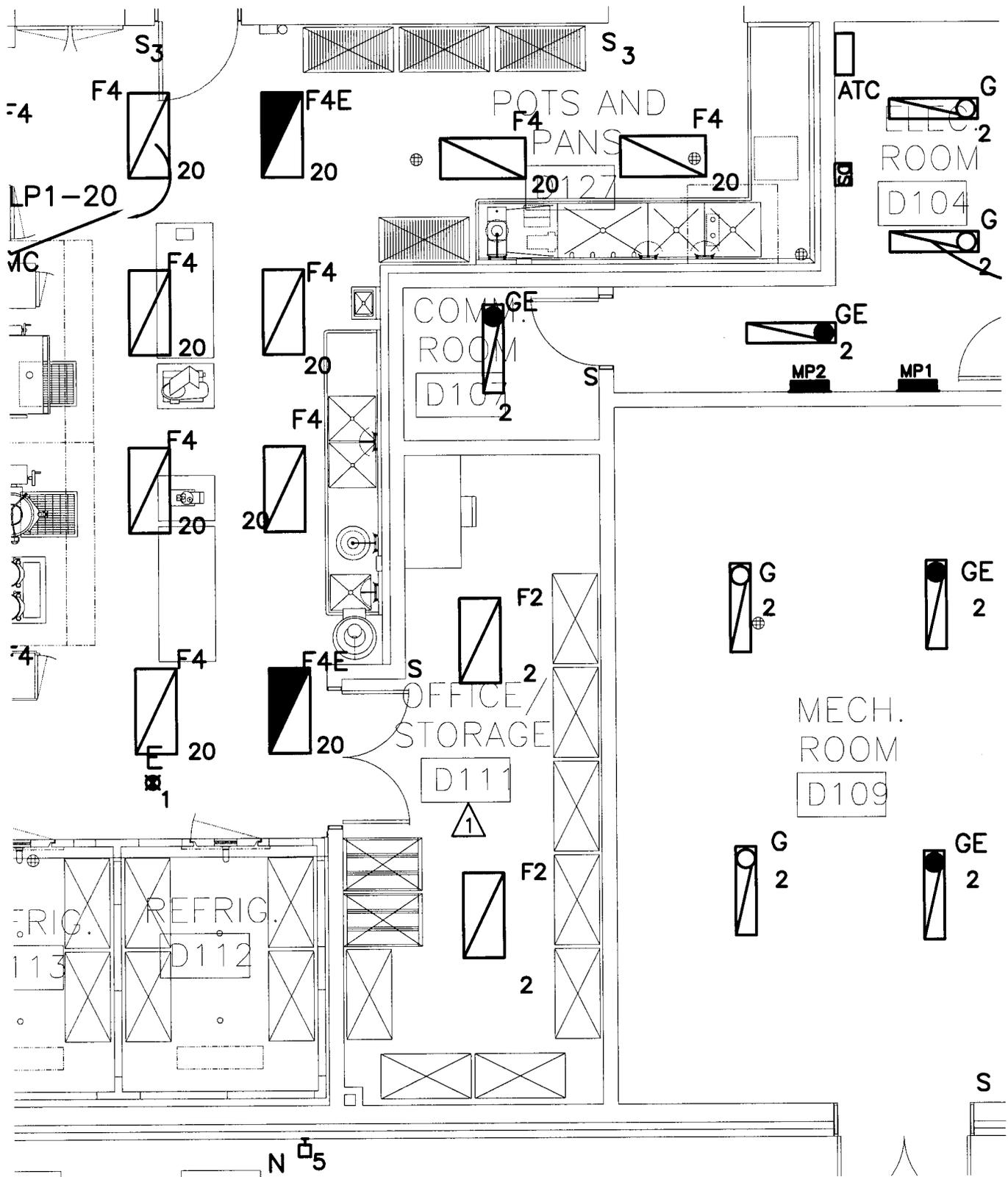
1

1



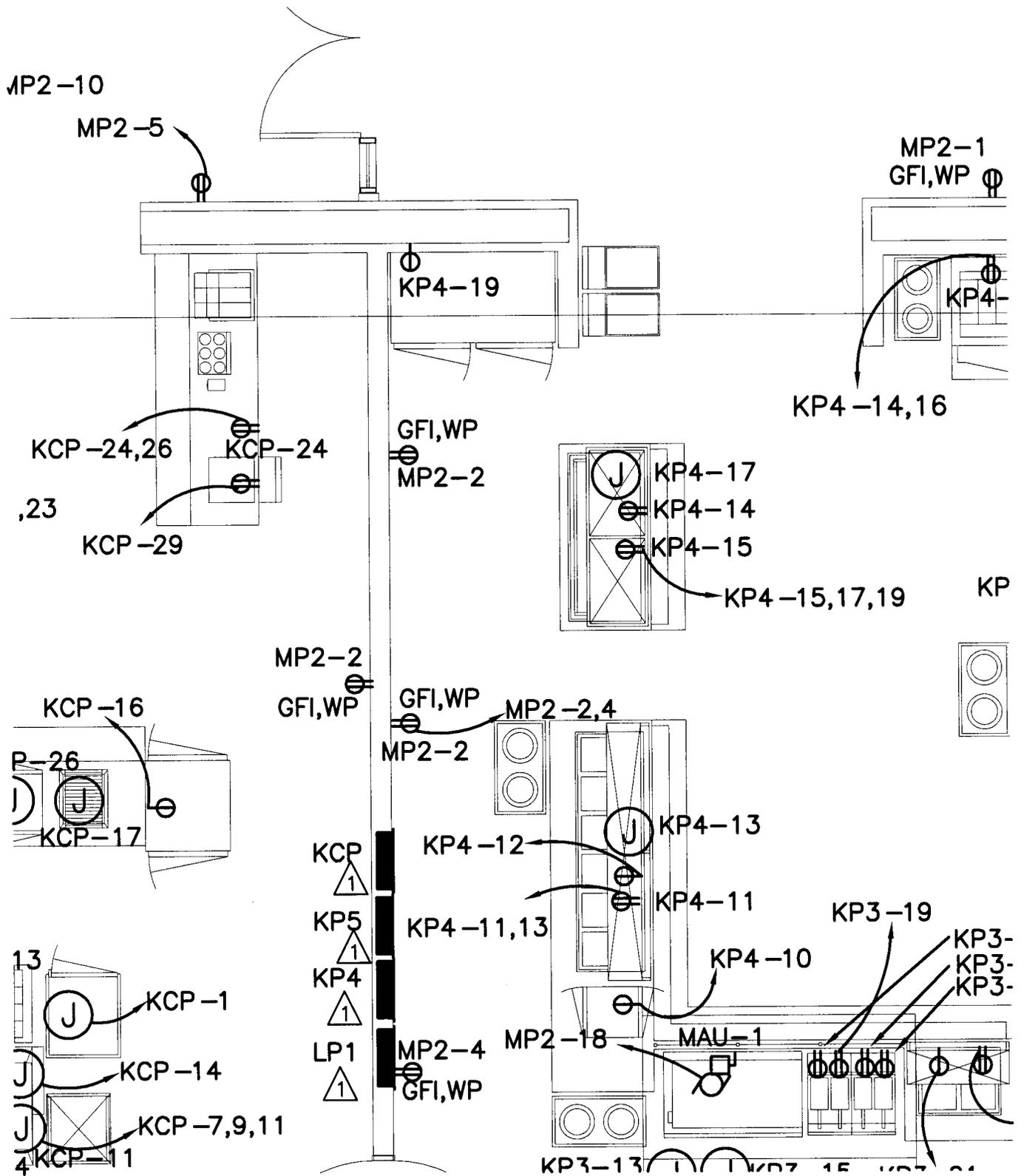
SKETCH SK-EE-4
02 SEPT 03

UEPH COMPLEX II



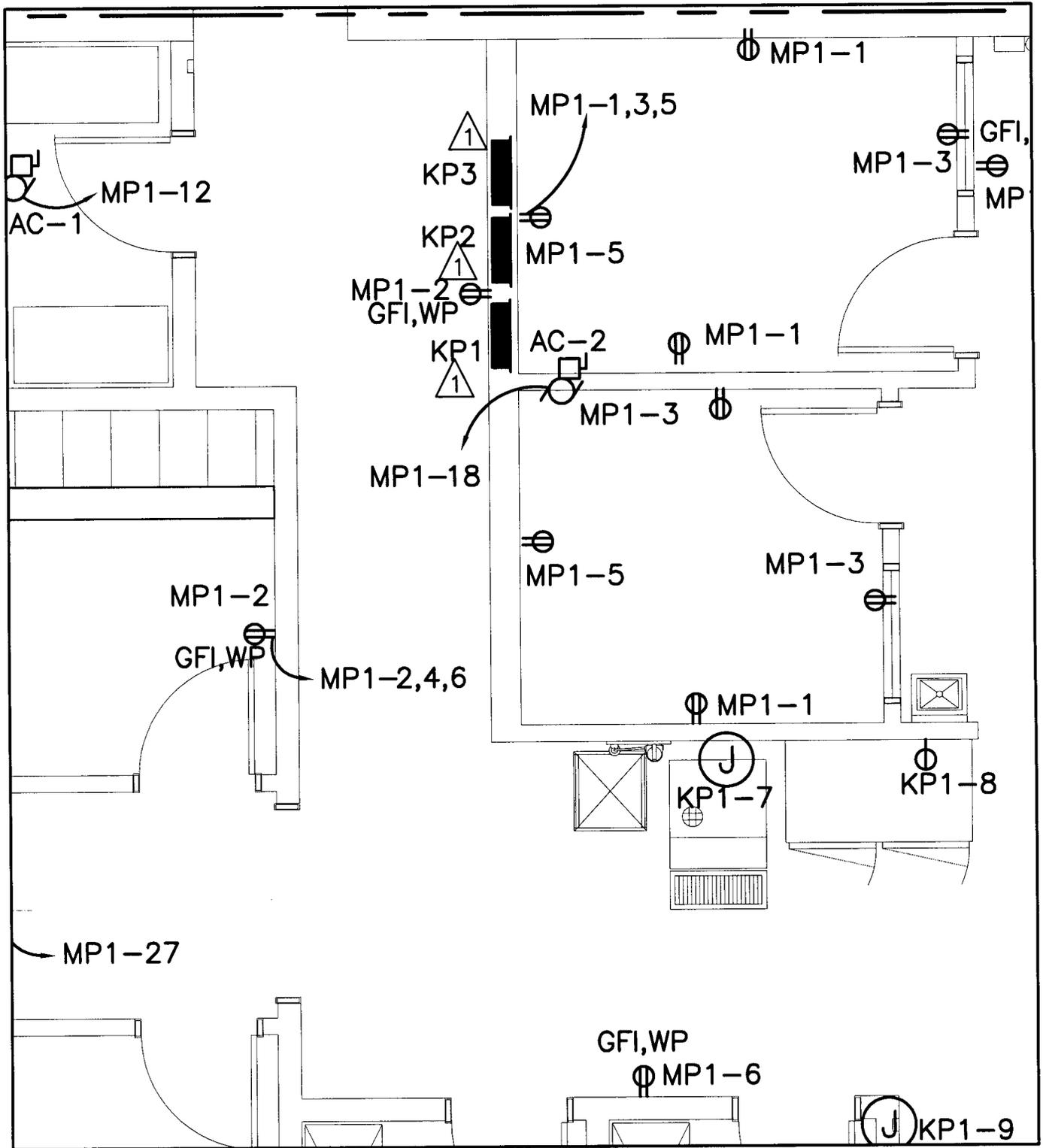
SKETCH SK-EE-5
02 SEPT 03

UEPH COMPLEX II



SKETCH-EE-6
02 SEPT 03

UEPH COMPLEX II

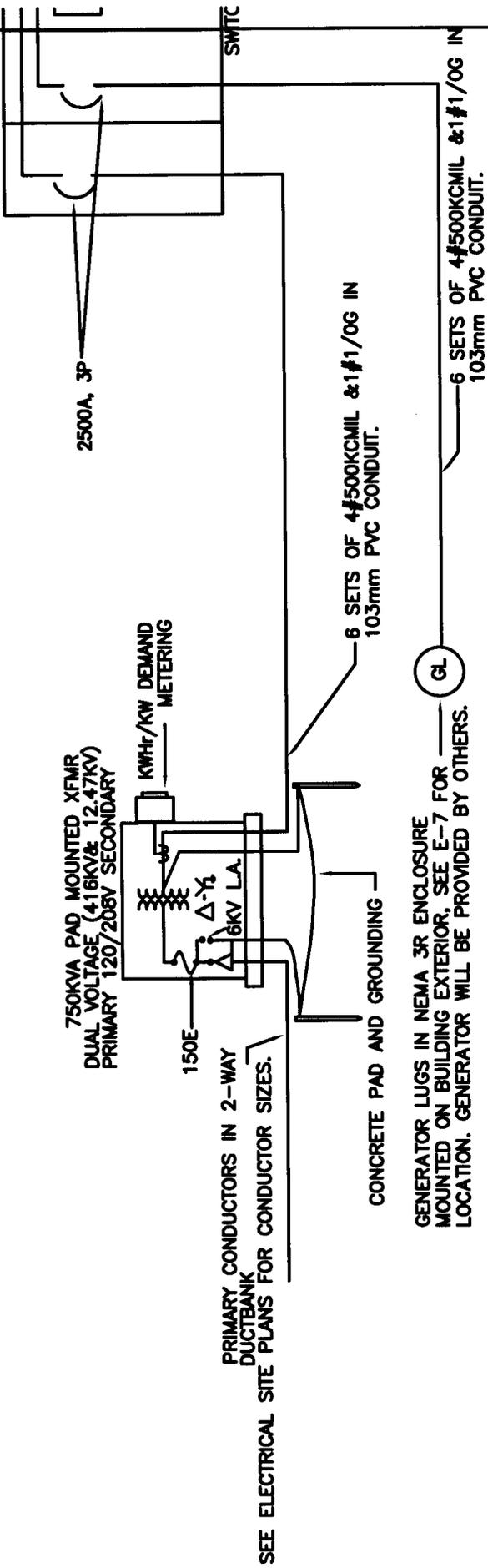


SKETCH SK-EE-7
02 SEPT 03

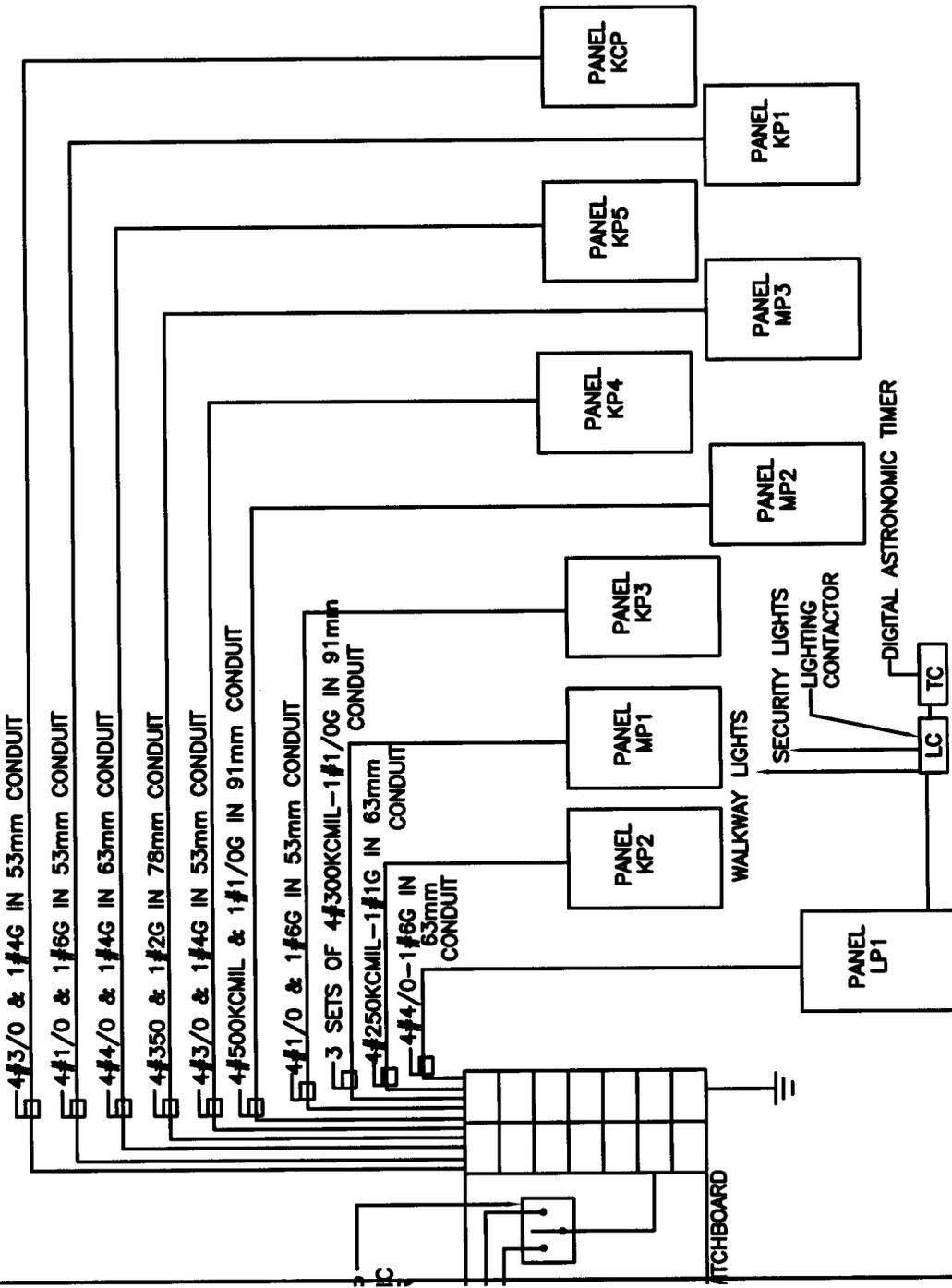
UEPH COMPLEX II

ONLINE NOTES:

1. PROVIDE TVSS (TRANSIENT VOLTAGE SURGE SUPPRESSION) ON THE SECONDARY SIDE OF THE TRANSFORMER, PANELBOARD OR IN A SEPARATE ENCLOSURE, AS PER THE UFGS SECTION 16415.
2. CONTRACTOR SHALL SUPPLY ALL CTs, PTs, AND KWHr/KW DEMAND METER.
3. THE SWITCHBOARD MAIN BREAKERS SHALL BE SYSTEM CIRCUIT BREAKERS, MANUALLY OPERATED, FIXED MOUNTED AND SHALL BE EQUIPPED WITH A STATIC SENSOR PROTECTIVE SYSTEM HAVING ADJUSTABLE TRIPPING CHARACTERISTICS AND SELF-CONTAINED GROUND FAULT PROTECTION.



CONTINUED ON SK-EE-9



CONTINUED ON SK-EE-8

SKETCH SK-EE-9
02 SEPT 03

UEPH COMPLEX II

1

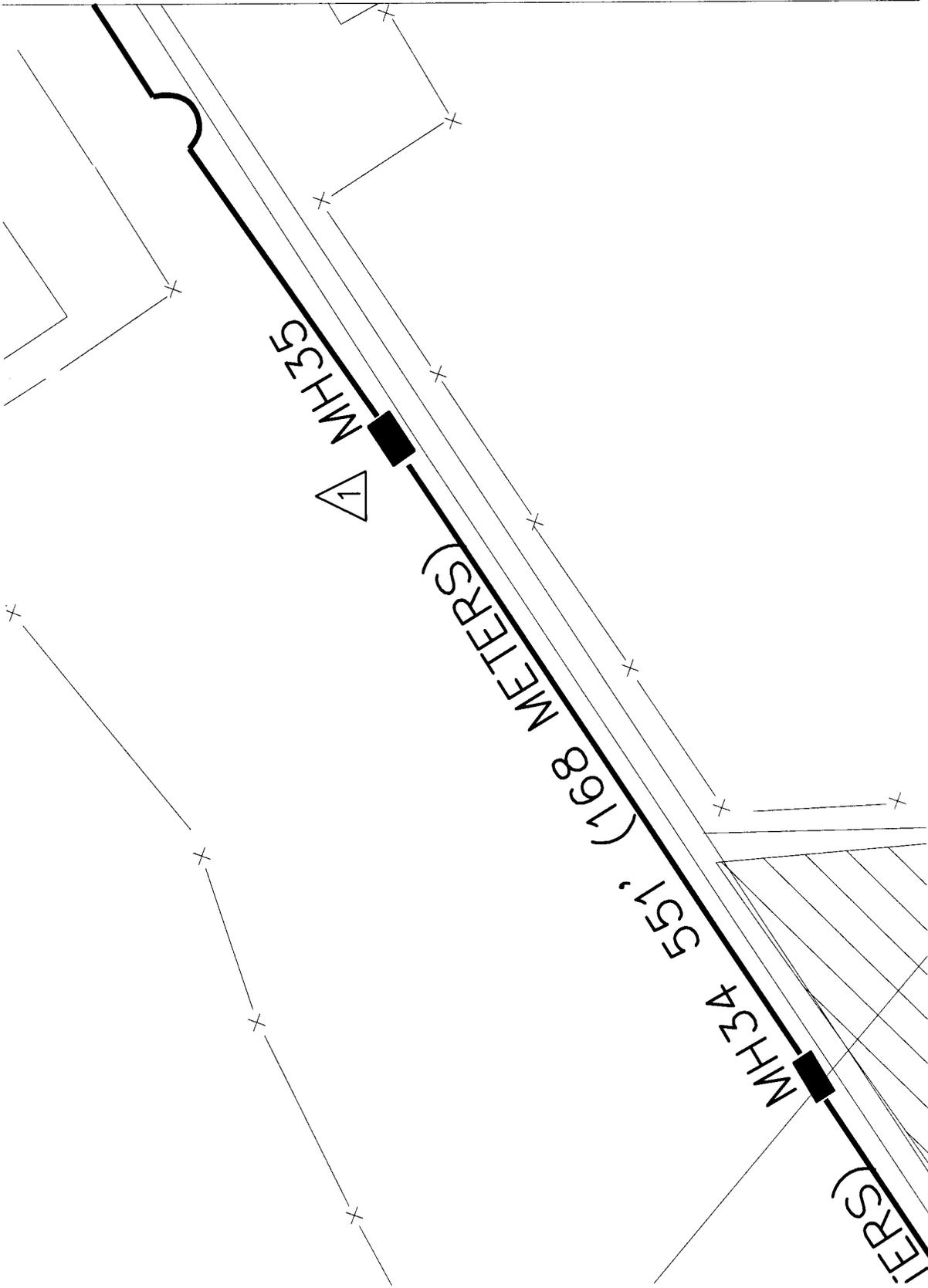
WIRING PANEL SCHEDULE P1											
3 PHASE 4 WIRE 120/208 VOLTS 225 AMPS MAINS SURFACE MOUNTED											
CIR-CUIT	DESCRIPTION	BREAKER		AMPERE ϕ			CIR-CUIT	DESCRIPTION	BREAKER		
		POLE	AMP	A ϕ	B ϕ	C ϕ			POLE	AMP	
1	FIRE ALARM CONTRL PANEL	1	20	2	3		2	EF-5 RM 110	1	20	
3	PUMP P-2 RM 110	3	40		18	1	4	2 UH-6 RM110	1	20	
							6	EF-6 RM 101	1	20	
				18	1		8	2 UH-5 RM101	1	20	
5	GLYCOL TANK RM 110	1	20		10	6	10	LTS-1ST FL COR MECH RM	1	20	
* 7	SEWAGE PUMP CONTROLS	1	20				12	LTSSTR#1&2CORREMRG1stFL	1	20	
9	RECPT 1ST FL MECH CL	1	20	12	12		14	RECEPT. CORR 100	1	20	
11	2 FC-1 UNITS-M1B	1	20		6	12	16	RECEPT.MECHR M101,201,301	1	20	
13	2 FC-1 UNITS-M1D	1	20				18	RECEPTS. MECH RM 110	1	20	
15	2 FC-1 UNITS-M1A	1	20	6	6		20	2 FC-1 UNIT-M1C	1	20	
					3	8					
17	PUMP B-2 RM 101	3	15				22	SEWAGE PUMP (1.5KW)	3	20	
				3	8						
					53	2	24	HWCP-1 RM 101	1	20	
19	PUMP P-1 RM 110	3	90				26	SPARE	1	20	
				53			28	SPARE	1	20	
* 21	AERATION FOUNTAIN CONTROLS	3	20		3		30	SPARE	1	20	
23	PUMP P-3 RM 110	1	15				32	SPARE	1	20	
				8	8						
* 25	AERATION FOUNTAIN(1.5KW)	3	20		8	8	34	SEWAGE PUMP(1.5KW)	3	20	
						8	8				
CONNECTED LOAD = 50 KVA				102	38	101	37	97	27	TOTALS 42 SPACE PANEL	
DEMAND LOAD = 35 KVA				140		138		124		MAIN LUGS ONLY	
SPARE (0.25) = 9 KVA											
TOTAL DEMAND LOAD = 44 KVA				MINIMUM A.I.C. RATING=22,000 AMPS SYMMETRICAL							

1

WIRING PANEL SCHEDULE MDP											
3 PHASE 4 WIRE 120/208 VOLTS 1200AMPS MAINS SURFACE MOUNTED											
CIR-CUIT	DESCRIPTION	BREAKER		AMPERE ϕ			CIR-CUIT	DESCRIPTION	BREAKER		
		POLE	AMP	A ϕ	B ϕ	C ϕ			POLE	AMP	
1	SUB-PANEL RM.103	2	50	44	44		2	SUB-PANEL RM.102	2	50	
						37	37				
3	SUB-PANEL RM.105	2	50				4	SUB-PANEL RM.104	2	50	
				37	37						
5	SUB-PANEL RM.107	2	50		44	44	6	SUB-PANEL RM.106	2	50	
						37	37				
7	SUB-PANEL RM.109	2	50	44	44		8	SUB-PANEL RM.108	2	50	
						37	37				
9	SPARE	1	20							282	
11	SPARE	1	20		379		10	PANEL P2	3	300	
						136	377				
13	PANEL P1	3	225				12	PANEL P3	3	150	
				140	266						
15	EXTERIOR WALL LIGHTS	1	20		4	280					
17	EXTERIOR WALL LIGHTS	1	20				14	PANEL P4	3	40	
						4	29				
* 19	PARKING LOT LIGHTS	2	40	27	28						
						27	29				
* 21	EXTERIOR WALKWAY LIGHTS	1	20				16	ACC-1	3	500	
* 23	PAVILION RECEPTACLES	1	20	5	364						
* 25	PAVILION LIGHTS	1	20			2	364				
27	SPARE	1	20				20	18	ACC-1 CONTROLS	1	30
CONNECTED LOAD = 525 KVA				297	1162	289	1168	213	979	TOTALS 42 SPACE PANEL	
DEMAND LOAD = 296 KVA				1459		1457		1192	MAIN CIRCUIT BREAKER= 1200A		
SPARE (0.25) = 74 KVA				100% RATED BREAKER							
TOTAL DEMAND LOAD = 370 KVA				MINIMUM A.I.C. RATING=22,000 AMPS SYMMETRICAL							

SKETCH SK-EE-10
02 SEPT 03

UEPH COMPLEX II



SKETCH SK-EE-11
02 SEPT 03

UEPH COMPLEX II