

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0005	3. EFFECTIVE DATE 8/8/03	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (if applicable)	
6. ISSUED BY U.S. Army Corps of Engineers Honolulu Engineer District Construction/A-E Contract Branch Building 200 Fort Shafter, Hawaii 96858-5440		CODE	7. ADMINISTERED BY (if other than Item 6) U.S. Army Corps of Engineers Honolulu Engineer District Schofield Resident Office Building 230 Fort Shafter, Hawaii 96858-5440		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			(<input checked="" type="checkbox"/>)	9A. AMENDMENT OF SOLICITATION NO. DACA83-03-R-0013	
			(<input checked="" type="checkbox"/>)	9B. DATED (SEE ITEM 11) 7/3/03	
				10A. MODIFICATION OF CONTRACTS/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 extended, is not extended.

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 _____ 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.

(<input checked="" type="checkbox"/>)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN 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 FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	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.)
FY03 MCA/BUP PN 52068/69, Whole Barracks Renewal Brigade Complex, Phase 3A, Quad C, Schofield Barracks, Oahu, Hawaii

(See pages 2 and 3 of 3 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 <i>(Signature of person authorized to sign)</i>	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY <i>(Signature of Contracting Officer)</i>	16C. DATE SIGNED

AM-0005
No. DACA83-03-R-0013
Item 14 (Continued)

Standard Form 30
Page 2 of 2 Pages

1. CHANGES TO SPECIFICATIONS. Attached hereto are new and revised pages and sections to the specifications. The revision mark "(AM-0005)" is shown on each new and revised page.

A. REVISIONS. The following are revised paragraphs to the specifications. Changes are indicated in bold. The following are new, revised, and deleted paragraphs to the specification.

SF 1442

Statement of Work

Chapter 5 paragraphs: 5-5.12.1, 5-5.12.2, 5-5.12.3 and TABLE 5-5.12 - SOUND TRANSMISSION STANDS FOR WALL CONSTRUCTION

B. ADDITIONS. The following information has been added to the solicitation:

Section 00900 - Additional Responses to Contractor Questions

2. The proposal due date of August 18, 2003, 2:00 p.m. Hawaiian Standard Time, remains unchanged.

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NUMBER DACA83-03-R-0013	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 07/03/03	PAGE OF PAGES 1 of 7 *
	IMPORTANT - The "offer" section on the reverse must be fully completed by the offeror.			

4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER
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7. ISSUED BY U.S. Army Corps of Engineers Honolulu Engineer District Construction/A-E Contracts Branch Building 230 Fort Shafter, Hawaii 96858-5440	CODE	8. ADDRESS OFFER TO U.S. Army Corps of Engineers Honolulu Engineer District Construction/A-E Contracts Branch Building 200 Fort Shafter, Hawaii 96858-5440
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9. FOR INFORMATION CALL	A. NAME Renee Hicks	B. TELEPHONE NUMBER (Include area code) (NO COLLECT CALLS) (808)438-8564
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SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying number, date):

FY03 MCA/BUP PN 52068/69, WHOLE BARRACKS RENEWAL BRIGADE COMPLEX PHASE 3A, QUAD C, SCHOFIELD BKS, OAHU, HI
(SEE MAIN TABLE OF CONTENTS)

11. The Contractor shall begin performance within 7 calendar days and complete it 900 calendar days after award, notice to proceed. This performance period is mandatory, negotiable. (See 52.211-10)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	12B. CALENDAR DAYS 14
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13. ADDITIONAL SOLICITATION REQUIREMENTS:
- A. Sealed offers in original and _____ copies to perform the work required are due at the place specified in Item 8 by 2:00pm HST (hour) local time *8/18/03* (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelope containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.
- B. An offer guarantee is, is not required.
- C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.
- D. Offers providing less than 120 * calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

RESPONSES TO CONTRACTOR QUESTIONS

Nan, Inc., Walter Yuen/Patrick Shin

1. Per Paragraph 2.3.1, Relevant Contracts, page 00120-4, for a contract to be considered relevant, one of the criteria is that the contract needs to be “declared substantially complete.” This is an unreasonable requirement as a project can be declared “substantially complete”, yet the Government does not issue the final performance evaluation (PE) until after all contractual obligations (i.e. punchlist, modifications) are met. It has been in our experience that this process can take from 6 months to 1 year after the project is “substantially complete” to receive a final PE. Therefore, we ask that the Government also consider interim PE’s as well.

In addition, please define what is considered “substantially complete” for a single construction or design-build contract. For example, if a project is completed in that personnel are allowed to occupy the facility, yet the Contractor is currently completing punchlist items or Government approval of modifications are pending; would such a project be considered “substantially complete”? Or how about in the case of a phased-project involving multiple buildings, of which buildings are turned over after each is completed; would this project be “substantially complete” if majority of the buildings are completed (i.e. 3 out of 5 buildings)?

Response - The intent of identifying relevant contracts as being those that have been declared substantially complete is to allow offerors to highlight experience on completed contracts even though the offeror may not have received a final performance evaluation for that contract. In that case, the offeror must provide, with their offer, documentation from the contracting activity, or the contracting officer, stating that the contract has been declared substantially complete, as defined by that contracting activity. Contracts identified by an offeror that have a final performance evaluation will be evaluated for both experience and past performance. However, contracts identified by an offeror as being only substantially complete (no final performance evaluation) will be evaluated only for experience and will receive a Neutral rating for past performance. Interim performance evaluations will not be considered as evidence of contract substantial completion. Similarly, if a contract contains multiple projects, offeror must provide documentation of contract substantial completion not documentation that some of the projects have been declared substantially complete.

2. In relation to the above questions, in regards to an IDIQ-type contract, would the contract be considered “substantially complete” for either of these two scenarios: (a) the final option year of the contract has ended, yet task orders within the contract are on-going, and dependent upon the definition of “substantially complete:”, are not of one of the submitted task orders or (b)

majority of the contract is completed (i.e. for a base and four (4) option year contract, base year and two option years are completed)? Please define what is considered “substantially complete” for an IDIQ-type contract.

Response - For an IDIQ contract to be considered substantially complete, as stated in the RFP, both the submitted task order and the contract must meet the criteria for substantially completion.

3. In relations to Questions 1 and 2, we particularly feel that a contract 50% complete can be evaluated just as fair as a contract that is “substantially complete”, as majority of the problems on a project occur during the set-up and initial phases of the project. In addition, would it not be more advantageous in the Government’s evaluation of this RFP to award to an Offeror that is currently managing a sizeable staff and an extensive workload, rather than a company who performed at the same capacity, but five years ago? We feel this would be since projects that are most current would reflect an Offeror’s current management style/program, which carries through to the end of the project. Additionally, the Government will be able to better understand the Offeror on on-going projects in comparison to an Offeror that completed a project awhile ago, and may have experienced a downturn in projects in the time since. With the current requirements, the Government is eliminating current projects, and therefore, will not be getting the “best-value” out of their evaluation. Therefore, we feel that current projects should carry the same weight as past projects, in regards to relevant experience and past performance, and that the Government should include on-going projects in their evaluation of this RFP.

Response - The concerns surfaced by the offeror were considered during the establishment of the solicitations evaluation criteria. The Government believes that the evaluation factors and criteria meets the needs of the Government.

4. Regarding the request for a Small Business Subcontracting Plan from Large Business Concerns, as this is a design-build contract, it is very difficult for an Offeror to list definite subcontractors for this project at the time of bid submittal. If an Offeror is required to list subcontractors to be used on this project, this will limit the competition to only large businesses, as most small businesses do not have the capacity to estimate a project of this size. Therefore we ask that the Government hold the Offeror liable to the small business percentage goals presented in its plan, and not necessarily the goals for a specific trade.

For example, if an Offeror proposes to use a women-owned small business painting subcontractor for an X% of the total planned subcontracting dollars. However, after award of the project the Offeror finds that that particular subcontractor is unable to perform on this project. In that case, an Offeror should not be held liable to replace the trade of the subcontract, but rather the

percentage proposed for that small business subcontracting concern (i.e. replace with a WOSB plumbing contractor for X%).

Response - The offeror should include the names of those contractors with whom the offeror has a working relationship. Past experience may be a good indicator. As far as compliance with the *subcontracting plan*, DFARS 219.704(a)(4) states:

"In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, prime contractors shall notify the administrative contracting officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable."

I interpret this to mean that the contracting officer *does not* need to be notified if the prime contractor substitutes a SDB with another SDB, the subcontractor's trade does not enter into the picture. The objective is to ensure that you provide a good faith effort to ensure that the SDB goal is met or exceeded. (For example, if you do not use an SDB plumber, you should award more to SDB carpenters or electricians.)

5. Paragraph 2 under Paragraph 2.5.1, Relevant contracts, page 00120-5, states, "IDIQ-type contracts may be submitted only if a single task order on that contract involves at least four (4) of the characteristics for either a Construction contract or a Design-Build contract, as applicable." Therefore, we interpret this sentence to mean that if an Offeror submits an IDIQ-type contract, with a contract value over \$25 million and has more than one task order that meets at least four (4) of the specified characteristics for either a Construction contract or a Design-Build contract, this IDIQ-type contract, as a whole, will qualify in demonstrating experience in meeting Characteristic #1. Do you concur?

Response - No, a task order type contract can be counted only once

6. Suppose that an Offeror submits an IDIQ-type contract with various task orders (Task Orders A, B, and C) that involve at least four (4) of the characteristics for either a Construction contract or a Design-Build contract, which are as follows:

Task Order A meets Characteristics #2,3,4,5

Task Order B meets Characteristics #4,5,6,7

Task Order C meets Characteristics #6,7,8,9

In evaluating the contract, will the Offeror be evaluated as meeting Characteristics #2 through #9?

Response - The situation presented by the offeror will not occur. Offerors are reminded that only one task order (and its relevant characteristics) will be considered for an IDIQ contract. In the offeror's example, the evaluation will only consider the first TO (in this case TO A) and any other TO will be discarded - therefore if the following is submitted,

Task Order A meets Characteristics #2, 3, 4, 5 (will be counted)
Task Order B meets Characteristics #4, 5, 6, 7 (will NOT be counted)
Task Order C meets Characteristics #6, 7, 8, 9 (will NOT be counted)

The Offeror will be evaluated as meeting only Characteristics #2 through #5.

7. We are currently working on a project at Quad F, Schofield Barracks (Contract No. DACA83-02-C-0001) with elements of work similar to that of this Quad C project. However, our contract did not involve ACM removal, as it was performed by another contractor, R&D Technologies, on a separate contract, prior to our mobilization on the project. Therefore, as our contract price did not involve asbestos removal, would it be possible for the Government to disclose the contract amount for the work performed on R&D's contract?

Response - The Government will not be disclosing the requested information. As is standard industry practice, the Offeror is responsible for obtaining his own pricing information necessary to prepare an offer.

8. In relation to the above-mentioned question and project, our proposal also did not include consideration of AT/FP requirements. Would the government disclose the Government's estimated amount, as well as the Offeror's option amount?

Response - It is not standard practice for the Government to release its estimates, unless revealed in a public bid opening forum.

9. The RFP documents include Attachment 15, Proposal Data Sheet. This form indicates that it is to be provided at the beginning of the Offeror's proposal. However, it is not referenced anywhere else in the RFP documents. Is this Attachment required for proposal submission?

Response - Attachment 15, Proposal Data Sheet, will be deleted by an amendment.

10. In the Statement of Work, Chapter 6, Structural Design, within para. 6-5.5 on page SOW 6-4 of the RFP, referencing AT/FP, one paragraph mentions "The requirement to design and retrofit existing floor slabs (with FRP or similar top

slab reinforcing) to withstand upward blast loads as given by paragraph B-2.1.3 of UFC 4-101-01 shall be treated as a bid option to this project...". However, Section 00010, Proposal Schedule does not reflect this option. Please review and clarify.

Response - Bid Option will be added by an amendment.

Dick Pacific Construction Co., Inc., Kelvin Osborne/Edward Requilman

11. Where reference is made to Quad F are the documents going to be furnished, i.e. Gear wash, Design? Quad "F" Gymnasium design solution 15-11?

Response - Gear Wash information is provided in Attachment 25. No information will be provided for the Gymnasium.

12. Will the original drawings and photos for Quad C be provided to the Contractor.

Response - Existing architectural floor plans were issued by an amendment. After the contract is awarded the contractor may obtain original drawings and photographs of Quad C, as available, from the Directorate of Public Works and the Schofield Barracks Museum, respectively.

13. Similar but As-built drawings

Response - Existing architectural floor plans were issued by an amendment. After the contract is awarded the contractor may obtain as-built drawings, as available, from the Directorate of Public Works.

14. Do I need to conform to life safety code (NFPA 101) when existing floor transition is greater than 1"? Do we need to fill adjacent floor to meet the requirement?

Response - Yes, NFPA 101 must be complied with.

15. Can small business plan be submitted 10:00 am following day of bid?

Response - No, the plan shall be turned in with proposal on due date

16. Can you provide us the following to be used in preparing for our bid proposal?

1. RFP CAD design drawings.
2. Plans of existing condition of the buildings to be renovated.
3. Selective demolition plans of the renovated buildings.

Response - 1) CAD drawings will not be provided prior to contract award.

2) See responses to Questions 12 & 13.

3) Demolition plans will not be provided.

17. Can we replace the specified material to a renewable material, (i.e. VCT vs. linoleum)?

Response - Linoleum may be used in lieu of vinyl composition tile. Other material substitutions will need the Contacting Officer's approval.

18. Can you provide a RFP facility SPiRiT rating sheet?

Response - A SPiRiT rating analysis will be provided by an amendment.

19. Can you postpone and move the date for the submission of the bid proposal?

Response - Revised proposal closing date will be issued by an amendment.

Cedric D.O. Chong and Associates, Inc., Avin Oshiro

20. RFP mandates "low ozone depleting" refrigerants for chillers. Will this allow us to use R-22, R134a or R-123?

Response - Refrigerants shall comply with SOW Ch 10 which states that the design shall comply with UFGS 15620A.

21. No mention of freezers (not compressors) or chill boxes in the kitchen. Do we replace, reuse or refurbish? Do we improve design? Are the conditions the same?

Response - See SOW Ch 5, PARA.5-1.2.4, requiring demolition of all existing interior partitions. Regarding mechanical items specified in SOW Ch 8 (Plumbing), Ch 10 (Heating, Ventilating, and Air Conditioning), Ch 11 (Energy Conservation) and Ch 12 (Fire Protection) or shown on M-, P-, and FP- sheets shall be new unless otherwise indicated. All existing items shall be removed unless otherwise indicated.

22. Sanitary piping on plan shows 2 lines. Why can't we connect all the risers into one larger main?

Response - The 2 lines shown on the sanitary piping plan sheet P-3 and 1/Detailed Plumbing Floor Plan on Sheet P-4 may be combined as long as the following minimum design criteria are met:

- a. The minimum distance required by IPC is provided (i.e. for connections to offsets and bases of stacks, see IPC Chapter 7, paragraph 704.3).
- b. No floor cleanouts are located in billeting modules.

23. Do we process the paperwork to obtain HECO rebate?

Response - If necessary, an amendment will be issued to add this requirement to the RFP.

24. DDC controls states "BACNET" compatible. Are other systems allowed? Is compatibility of the new DDC system with an existing system required or necessary?

Response - See SOW Ch 10, para. 10-9, building controllers shall be fully BACNET compatible.

25. There are no specifications on control points. Does this mean we can provide only a minimum system?

Response - Minimum requirements on control points are stated in SOW Chapter 10 paragraph 10-9.

26. Are there minimum efficiencies for the equipment?

Response - As noted in Chapter 10 paragraph 10-1.2, minimum efficiencies shall be in accordance with UFGS.

27. Do we follow mechanical RFP or directive from energy efficiency section?

Response - The design shall comply with Ch 10 and Ch 11. Items provided shall be in accordance with both chapters. If there are specific conflicting items, it shall be brought to the attention of the Contracting Officer.

Hawaiian Dredging Construction Co., Bruce Patterson

28.. SOW 5-1, Int. Furn (5-1.1.2); Sow 14-1, Int. Furn (14.1.2.I); SOW-2: Who installs?

Response - SOW Ch 5, PARA. 5-1.1.2, and SOW Ch 2, para. 2-1.7, indicate which items are Government or Contractor installed.

29. When can we expect the funds for this project to be appropriated?

Response - Funds for the project were appropriated and RFP will be revised by an amendment to correct this information.

30. Will this contract bid date be extended, if so when will it be announced?

Response - See response to Question 19.

31. T-3 Dept of Army Facility Stdization Pgm; Std CO Oper Facility Feb 1994: How can we see a copy of this?

Response - Copies of the Standard Company Operations Facility are available for review at the U.S. Army Engineer District, Honolulu, Contracting Office.

32. If "as built" are not available, what can we expect to verify some of the structural elements more clearly?

Response - There are no structural as-built drawings for Quad C. Ch 6, Structural Design, of the Scope of Work will be revised by an amendment to provide more information on the existing structure.

33. 5-1.2.4 "Roof structure and roofing will have to be removed ... " need more detail.

Response - The RFP will be amended to provide more information on the roof structure.

34. What surrounding areas will be allowed for contractor equipment?

Response - Information on the Contractor's Operation and Storage Area will be provided by an amendment.

35. Will there be additional opportunities to walk thru the project site?

Response - The date and time for an additional site visit will be issued by an amendment.

RESPONSES TO CONTRACTOR QUESTIONS

Architectural Window Systems., Mark Braunschweig

36. In the Statement of Work for this project the RFP is clear that the AT/FP requirements are to meet the July 31, 2002 DOD standards, specifically UFC 4-010-01. The windows and entrance doors are shown and called out to be wood, which will not meet these blast requirements (even with the laminated glass). Is there something in the specifications that we are perhaps overlooking that alleviates these requirements as they pertain to the windows?

Response- See RFP Specification paragraph 5-7.1.8 for exterior window and door requirements. See RFP Concept Design Drawings, sheet A-4.1, for NOTE, which indicates type of material.

Dick Pacific Construction, Edward Requilman

37. It appears that the exterior concrete walls are covered in plaster on both the interior face and exterior face. Is it the intent of the seismic / AT/FP strengthening provided in the RFP to have the shotcrete applied directly over the plaster, or does the plaster need to be removed prior to applying the shotcrete?

Response- Concrete surfaces on which shotcrete is to be installed shall have all debris, chemicals, contaminants including plaster removed in accordance with ACI 506R-90.

Kiewit Pacific Co, Robert Iwasaki

38. Chapter 9, SOW9-7 paragraph 9-1.27 Personnel Alerting System (PAS) states the system shall be compatible with the existing base master equipment. What type of system is the existing?

Response- The existing base receiving/transmitting equipment is a wireless system made by MadahCom, Inc.

39. The window details show concrete sills under the windows. The majority of the bump outs do not have these sills. Will these concrete sills be required to be installed if they don't already exist?

Response- Windows require reinforced concrete sills as indicated for each building on the exterior elevation of the RFP Concept Design drawings. Further information provided for windows. Regarding Building Notes in RFP Concept Design Drawings for each building - Original Historic Window Note

reads: “ the original historic windows were previously removed and the opening was blocked with concrete. Contractor shall remove the existing windows and the concrete patch to the original opening size and install new windows as scheduled.” The following is offered for clarification: rough open size of existing windows have been reduced; the contractor is required to restore the window rough openings to original historic size and coordinate that the opening will accommodate the new window scheduled.

40. The structural concept design assumed specific strengths of materials and assumed structural details from other buildings due to a lack of complete structural documentation. Can the offerors make these same assumptions in their bids? Is a testing program (destructive or otherwise) to be performed per FEMA 310, Section 2.2 for final design and construction?

Response- Yes, structural concept design assumptions shall be used. Assume that the structure is adequate for the existing loads and strengthen for increased loads accordingly. Bids shall be based on concept design, however, all structural work not shown on the concept structural design but required for final structural design shall be provided by D-B contractor. D-B contractor may perform testing for the final design after award and NTP of the D-B contract.

41. Are enclosed stairwell doors exposed at the lanai to be heritage style doors or HM?

Response- The enclosed stairwell doors shall be hollow metal.

42. According to the plans : Buildings 355,357 electrical & telecom doors are to be HM. Buildings 356, 358 electrical & telecom doors to be wood. Are both correct?

Response- Provide Historic Doors as indicated on the RFP concept design drawings, see RFP specifications SOW Ch. 5, para., 5-4.9.1. Provide hollow metal doors for Utility spaces (i.e. Electrical, Mechanical, and Telecommunication Rooms).

43. Identify “Sisal fabric wallcovering” identified in SOW 2-4.1.1.3. Is this a vinyl type 3 wallcovering with “sisal like” pattern? Or is it “real” sisal fabric which is commonly used on floors. Please specify product name and manufacturer.

Response- ‘Sisal’ wall covering is real 100% natural fiber. Various companies manufacture and provide ‘Sisal’ wall covering material.

44. Will CID packages be returned from the COE to the design team after 50% and 90% submittals so the CID packages can be altered and resubmitted?

Response- the CID submittals will be returned for your use.

45. Are six 100% Design Submittals Color Boards as noted on 4.1 of section 01012 part of the three 100% CID packages? (Example : 3 separate color boards + 3 CID color boards = a total of 6 color boards).
OR are they in addition to the three 100% CID packages (example 6 separate color boards + 3 CID color boards = a total of 9 color boards) Please clarify.

Response- RFP specification SOW Ch. 14 indicates the requirements of a CID package. RFP specification section 1012, para., 4.1 indicates the quantity of CID packages required (6 total) under the column heading 'color board', which will be distributed to various addresses. The color board is one component of the total CID Package.

Nan, Inc.

46. On Sheet T-2 (Ring 2), note # 7, it is specified that "North of the line is to be for use of the Building 355 and 358 occupants." However, in Spec Section 01900, par. 1.13.2 Phasing, it states in part that Buildings 356, 357, and 358 will be turned over in February 1, 2004, and Building 355 will be turned over to the contractor in February 1, 2005. Please clarify that the Spec is correct and that the note on sheet T-2 should apply to Building 355 only.

Response- RFP Concept Design Drawings, Sheet T-2, Note 7, applies to Building 355 only.

Dick Pacific

47. PARAGRAPH 17.3.4

Foote Avenue Corridor (Glennan Ave. to Meigs Ave.)

Please verify that planting and walkway improvements are project requirements.

Response- Planting requirements for the Foote Ave Corridor are stated in 17.4.2 and 17.4.6.

48. Is there a Master Plan document illustrating the proposed treatment?

Response- No

49. Will planting improvements require automated irrigation system?

Response- Yes

50. Will topographic survey documentation be provided?

Response- Topographic survey is provided in Amendment No. 1..

51. PARAGRAPH 17.4.1.1

Topographic Survey

The SOW states additional existing tree inventory information/ topographic survey will be provided during the advertising period. We request a copy of this document.

Response- There is no additional tree inventory information.

52. PARAGRAPH 17.4.2

New Tree Plantings for Restoration

The SOW requires new Silk Oak tree plantings along three parking areas. Is there a concept drawing illustrating the proposed treatment?

Response- No. The silk oak plantings should replace the silk oak plantings but not at a one-for-one basis. Space new plantings approximately 35 feet apart.

53. Will new tree plantings require automated irrigation?

Response- Yes

54. Paragraph 17.4.6

Foote Avenue Corridor Streetscape

The SOW requires a minimum of 8 new Royal Palms planted “on the south side of the parking lot west of building 356”. Are these the same palms illustrated in the RFP Landscape Plan (sht. L-1) located along building 357?

Response- No, the palms indicated along building 357 in L-1 are additional plantings. Para 17.4.6 in the SOW requires planting of royal palms along the Foote Ave edge of the parking lot located west of bldg 356. Drawing L-1 does not show this parking lot area.

55. 17.4.13

Imported Screened Soil

Please verify SOW topsoil requirement for front and side courtyards of buildings “650, 651 and 652”.

Response- Typo error. It should read 356, 357, and 358.

56. 17.4.22.1

The SOW requires irrigating “street lawn areas of the Quad C parking lot along Foote, Meigs and Waianae Avenues”. Please clarify extent of the street lawn area for the Waianae Avenue portion.

Response- Provide irrigation for the entire green space north of the parking lot.

57. RFP REFERENCE DRAWING C-3

Reference Drawing C-3 (SITE PLAN) indicates “install curbed landscape planter (controlled access)” in both parking lots. The RFP Landscape Plan (sht. L-1) does not reflect these new planters. Are there planting and irrigation requirements for these planters?

Response- Yes, provide plants with irrigation.

58. The RFP indicates a requirement for a temporary air cooled chiller of 150 tons capacity and associated chilled water pump to service Building 355. Are there desirable locations and/or undesirable locations for the temporary air cooled chiller yard?

Response- The location of the temporary air cooled chiller yard is to be determined during design after award and should be located in the construction limits.

Dick Pacific Construction, Edward Requilman

59. The RFP documents note that contractor is responsible for calculating, sizing, and selecting the equipment to be provided for the project. The chilled water and domestic hot water system capacities noted in the RFP documents appears to be low compared to preliminary design figures.

For example, the RFP documents indicates a hot water storage tank capacity of 16,000 liters. It appears that the 16,000 liters will be dedicated to the two BEQ Buildings in order to comply with ETL 1110-3-489. Hot water storage capacity for the remaining buildings which include the kitchen facilities does not appear to be included. Also, the RFP documents indicates a total cooling load of 400 Tons. Our preliminary estimate for the four buildings is a total of 600 Tons.

If the RFP construction cost was based on the capacities noted in the RFP documents, will there be an adjustment made to the successful bidder to increase the construction cost should the design capacities be greater than the RFP?

Response- The contractor is responsible for calculating, sizing, and selecting the equipment to be provided for the project. The RFP construction cost shall be based on the capacities determined by the contractor. There will be no adjustment to the successful bidder to increase the construction cost should the design capacities be greater than the RFP since it is the contractor's responsibility to determine the equipment capacities.

60. Section 5-7.2.3 (Ceiling) on page SOW 5-13 indicates that the ceiling of the Arms Vault shall be 8" thick cast-in-place concrete reinforced with #5 bars at 6" on center, each way, each face. Since no retrofit of the existing structure is indicated on the RFP drawings, are we to assume that the existing ceiling meets this requirement? If it does not, is it the intent of the RFP to retrofit the existing concrete ceiling with one of the methods specified in AR 190-11 such as expanded metal or steel plates?

RESPONSE- The Arms Vault ceiling shall comply with AR 190-11. Expanded metal or steel plates will not be permitted.

61. Section 5-5.2.4 (page SOW 5-8) of Amendment No. 1 indicates "Interior seismic walls: these walls will be made of concrete." Please verify that interior CMU walls are not allowed for seismic resistance.

RESPONSE- Concrete masonry walls will be permitted if they meet design criteria and seismic requirements.

62. Section 5-5.2.2 (page SOW 5-8) of Amendment No. 1 indicates "Heavy storage areas for the Company Operation Facilities (COF) shall have full height masonry or concrete walls." It appears that there is a conflict and some of these walls (in particular the walls separating the Unit St. and the Equip. Main.) are shown as drywall partitions on the RFP drawings. Please verify which walls are required to be CMU or concrete.

RESPONSE- Architectural drawings for the First Floor of Building 355 was issued by amendment to clarify the use of concrete masonry unit in lieu of drywall partitions for COF Heavy Equipment Storage Areas.

Kiewit Pacific

63. Section 00800, Paragraphs DB-19 and DB-17 encourages the DB contractor "maximize the effectiveness of fast-tracking design and construction". Section 01012, Paragraph 1.2 indicates fast tracking is not allowed. Define fast tracking and clarify if construction activities may start after completion of specific accelerated design packages (e.g. hazardous materials abatement and selective demolition).

Response- As stated in Section 01012, para. 1.2, no fast tracking is allowed. Construction will not be allowed until the Contracting Officer approves the 100% Design. For clarification the 100% Design is for all designs and construction will not be allowed for separate design packages.

Dick Pacific

64. Structural Questions:Based on the concept drawings in the RFP, it appears that we will need to make approximately 11 penetrations through the existing structural slab at each unit. Since the design-build team is to assume that the structural slab is adequate for gravity loads, can we also assume that the existing structural slab has been checked for these openings and that nostrengthening is required?

Response- NO.

65. Acoustical Questions:The RFP Statement of Work Section 5-5.12.3 requires FSTC ratings and FIIC ratings. Standard industry practice is to subtract 5 points from the laboratory tested ratings, STC and IIC, to estimate the field tested ratings. We are assuming that acceptable design, i.e., laboratory, sound ratings will be 5 points higher than the field tested requirements. Is this correct?

Response- FSTC ratings have been revised in Table 5-5.12 and will be issued by amendment.

66. The RFP Statement of Work Section 5-5.12.3 requires an FSTC rating for the operable partition of 47. Standard industry practice is to subtract 5 points from the laboratory tested rating to estimate the field tested rating. Is the intent of the RFP to select an operable partition with an STC rating of 52?

Response- the rating indicated in Table 5-5.12 shall remain enforced.

67. The existing structural slab is 6-inches thick. The FSTC rating of this slab will not meet the required rating as specified in the RFP Statement of Work Section 5-5.12.3. However, the drawings do not call for a suspended gypsum board ceiling or topping to achieve this rating. Is the intent of the RFP to include a resiliently suspended gypsum board ceiling throughout the first and second floors with an acoustic tile ceiling suspended below the gypsum board ceiling?

Response- RFP Specifications Table 5-5.12-Sound Transmission Standards is revised to reflect wall requirements only. Revised Table 5-5.12 will be issued by amendment.

68. The RFP Statement of Work Section 5-5.12.3 requires an FIRC rating of 57 for buildings 355 and 357. This rating cannot be obtained with a vinyl composition tile without a resilient underlayment and a resiliently suspended gypsum board ceiling. Was the intent to have a suspended gypsum board ceiling and a resilient underlayment under the vinyl composition tile?

Response- RFP Specifications Table 5-5.12-Sound Transmission Standards is revised to reflect wall requirements only. Revised Table 5-5.12 will be issued by amendment.

69. The RFP does not have sound ratings for office or conference room walls. These are described on the drawings as one layer of 16mm gypsum on 92mm studs at 610mm o.c. This type of wall is typically not appropriate for mechanical rooms, conference rooms or other walls where sound isolation is important. If walls other than walls "between different organizational units" are required to be sound-rated please provide the required rating.

Response- Sound Ratings for Office or Conference room have been revised. Revised Table 5-5.12 will be issued by amendment.

70. The RFP states in the Statement of Work Section 5-5.12.3 " Party walls (floor/ ceiling construction between different organizational units) shall be designed to provide the minimum airborne sound transmission ratings and impact isolation ratings stated in Table 5-5.12." This statement seems to say that party walls are defined only as floor/ceiling assemblies. Please clarify what is meant by "Party Walls" in this statement.

Response- Party wall, as defined for this project is a common wall separating two spaces that extends from floor to ceiling.

71. Section 6-5.5 on page SOW 6-4 states that "*The Government has prepared a concept site plan which employs operational options for*

parking areas and roadways to meet all AT/FP standoff distance requirements of UFC 4-010-01 and to obviate the need to harden the existing Quad C buildings for anti-terrorism blast loads. Later in this same section it goes on to say ***“The offerors shall incorporate all AT/FP concept design report and the Site Development Plan (paragraph 3-5) into their design proposal submissions and shall include associated retrofit costs in their price proposal submissions.”*** The ***“AT/FP concept design”*** report by Mitsunaga and Associates, dated May 2003 includes both a section for blast hardening and one for progressive collapse. Please verify that this proposal is only required to incorporate the section on progressive collapse.

Response- The AT/FP concept design has been revised by amendment.

72. Per the UFC 4-010-01 (Standard 7, Progressive Collapse Avoidance), progressive collapse must be considered for these structures since they are at least three stories. Standard 7 indicates that *“For further guidance, refer to American Society of Civil Engineers Standard 7-98 and to detailed guidance in the DoD Security Engineering Manual.”* The *“AT/FP concept design”* report provided in the RFP is based on the guidelines in the *Department of Defense Interim AT/FP Construction Standards Guidance on Structural Requirements*. We have the following questions concerning the progressive collapse analysis.

Which document (i.e. design standard) is to be used to assess the structure for progressive collapse?

Response- UFC 4-010-01 should be used to assess the structure for progressive collapse. The other references should be used as applicable.

If the design-build team is required to follow the *DoD Security Engineering Manual* can we get a copy of this document?

Response- See above.

Can the design-build team assume that the progressive collapse scenarios reviewed in the *“AT/FP concept design”* report represent all of the cases that need to be investigated?

Response- The D-B Team is required to provide final progressive collapse design requirements including items not shown in the concept design but required for the final design. The concept design is for guidance/information.

For example, the *DoD Interim AT/FP Construction Standards Guidance on Structural Requirements* requires for load bearing walls the following: “At any floor level, remove a width of wall horizontally equal to two times the wall height but no less than the distance between expansion or control joints.” The “AT/FP concept design” report investigates removal of wall horizontally equal to two times the wall height, but it does not address whether or not this distance is less than or equal to the distance between control joints.

Response- There are no expansion or control joints in the existing bearing walls.

73. In section 6-3 (Minimum Load Standards) on page SOW 6-2 the RFP states “refer to the *Seismic Evaluation and Rehabilitation Report*” for the seismic load criteria. We have the following questions on the seismic criteria:

Will the design-builder be required to have a geotechnical engineer verify (and modify if required) the seismic site classification?

Response- No. Refer also to the preliminary geotechnical investigation report in attachment 26.

The *Seismic Evaluation and Rehabilitation Report* specifies a Seismic Use Group II and a Performance Level of Immediate Occupancy (IO). Seismic Use Group II is for essential facilities such as hospitals and firehouses. Since Quad C provides working and living accommodations for enlisted personnel, we wish to verify that a Seismic Use Group of II is appropriate for all of these buildings.

Response- Group II shall be used for Building 357 and Group I for all other buildings.

74. It appears that the progressive collapse criteria are only for exterior elements. Is it required, however, to consider progressive collapse on the interior adjacent to the arm’s vaults?

Response: No

75. The RFP drawings indicate seismic strengthening of the existing reinforced concrete walls by adding shotcrete. We have the following questions concerning the proposed seismic strengthening.

By retrofitting the existing concrete walls, the foundations supporting the walls will be required to resist greater lateral and gravity loads. Since the

RFP drawings do not indicate otherwise, are we to assume that the existing foundations are sufficient to resist these increased loads? If not, how is this information to be verified without the as-built drawings?

Response- No. Existing footing need to be enlarged based on appropriate engineering judgement. Nondestructive or destructive testing may be accomplished after award of contract.

Although not specified in the RFP drawings, Section 3.34 (Concrete Frames at the 3rd Floor) indicates that *“Retrofitting one bay of each concrete transverse frame at the 3^d floor is required to transfer roof diaphragm forces to the supporting structure below.”* The extent of the required strengthening, however, is not provided. Will this information be provided to the design-build teams? If not, how is the design-build team expected to price the retrofit without knowledge of the existing structure?

Response- No. Existing roof needs to be replaced or retrofit based on appropriate engineering judgment. Nondestructive or destructive testing may be accomplished after award of contract.

76. Section 6-5.8 (Existing and New Structural Systems) on page SOW 6-5 states *“Existing structural systems shall be analyzed and retrofitted to insure new live loads provided in section 6-2 (including IBC 2000 and /or Table 6-1) can be supported. New live loads shall include new cooling tower, machine rooms and arms rooms.”* We have the following questions concerning the structural framing for gravity loads.

Since no strengthening of the structural gravity load resisting system is indicated can it be assumed that where there is no change in the use of the space the existing framing is adequate?

Response- Yes.

Where the intended use has changed and the corresponding live loads are larger how is the design-build team to analyze the adequacy of the gravity framing without any knowledge of the existing structure?

Response- Assume that the structure is adequate for the existing loads and strengthen for increased loads accordingly. Nondestructive or destructive testing may be accomplished after award of contract.

77. Based on the RFP drawings, Building 355 has existing metal roof trusses and exposed metal roof decking that is to remain. Since we have no information on the existing roof structure, are we to assume that the existing metal roof trusses and metal roof deck are sufficient to transfer the required seismic forces and that no retrofit to this roof is required?

Response- No. Existing roof needs to be replaced or retrofitted based on appropriate engineering judgment. Nondestructive or destructive testing may be accomplished after award of contract.

78. The specifications for the referenced Contract call for the contractor to remove, handle, transport, and properly and legally dispose of contaminated materials, specifically the removal and disposal of asbestos containing materials, lead containing paint and coatings, pcb containing lighting ballasts, mercury containing light bulbs, and petroleum contaminated u/g storage tanks and soil.

In the contract documents specifications 13280A, and 13281A, paragraphs 3.8, the hazardous materials resulting from demolition shall become the property of the Contractor. This waste was generated by the Owner who must retain the legal title to this material even after proper disposal. While the Contractor accepts the obligation to properly handle and dispose of identified hazardous materials; they cannot carry the long-term liability associated with assuming the role of “generator” from the Owner. There is no language in the documents to indemnify the contractor from future responsibility for this hazardous material after proper disposal, including final cleanup and project clearances.

Please confirm in the next amendment that the Owner is considered the waste generator, reasonable party, and owner of the contaminated material and hazardous waste.

Please indemnify the Contractor from future responsibility after proper and legal disposal of the hazardous waste and materials.

Response- The Contractors will not be considered the owners of the waste material. The owner of the material is the Government.

CHAPTER 5

ARCHITECTURAL DESIGN

5-1 DESIGN GOALS. Overall architectural goals for the Whole Barracks Renewal Brigade Complex QUAD C are to provide a functional, visually appealing campus of facilities that is a source of pride for residents, other facility users, and the installation. This chapter applies to all buildings under this RFP unless specifically noted otherwise.

5-1.1.1 The architectural floor plan is established and approved as shown in the RFP Concept Design Drawings. All architectural criteria must be met and accounted for, see paragraph 5-2 Applicable Codes and Standards. Any changes shall be brought to the attention of the Contracting Officer for resolution in writing.

5-1.1.2 Furnishings, Fixtures and Equipment (FF&E): FF&E is part of this project. Fixtures and Equipment (lighting, plumbing, mechanical equipment, etc.) described for programmed spaces shall be provided by the offeror as part of the base bid. Interior Furnishings (tables, chairs, sofa, bed, etc.) will be Government furnished and installed. Refer to SOW Chapter 2, para. 2-1.7 for scope of Furnishings, Fixtures, and Equipment that will be required to be provided by the offeror. Any furniture layout depicted in the RFP concept design drawings will be adhered to and not deviated from without approval of the customer. The number and location of furnishings serve as an indicator of the number of power, data and communications connection points. See electrical section for more detail.

5-1.2 Existing Quad Building Background and New Space Planning Intent

The existing Quad consists of four buildings-three stories each - constructed in 1917. The buildings were originally open sleeping and living spaces and until recently, a mixture of office and living spaces.

5-1.2.1 Building 355: ground floor will be used for heavy equipment storage for four medium and one large Company Operations Facilities (COFs). The second floor is designated for the Administration Offices for three medium COFs. The third floor is designated for the Administration Offices for one medium COF and one large COF. Also, the third floor will contain the existing refinished Gymnasium. The total area of Building 355 is approximately 6,160 SM.

5-1.2.2 Buildings 356 and 358: is reserved exclusively for Unaccompanied Enlisted Personnel Housing (UEPH), Laundry Room, and Game Room. It will have 50 sleeping rooms per floor for a total of 150 rooms per building. The total area of Building 356 & 358 is approximately 6,820 SM per building.

5-1.2.3 Building 357: ground floor will be designated as the Dining Facility; the space includes: Kitchen, sit down dining area, and dining support spaces. The second floor will have Soldier Support Services, Soldier Community Functions, Troop Aid Station, COF Restroom facilities, Dining area, and Classrooms. The third floor will contain the Battalion HQ functional spaces and Battalion Restroom facilities. Building 357 is approximately 6,966 SM.

5-1.2.4 The selected offeror will be required to demolish all of the existing interior partitions as well as the complete flooring system in the toilet and shower areas. Also, the selected offeror will be required to determine the location of existing partitions with respect to the proposed Concept Design Drawings, in order to remove as required. This may include concrete masonry walls that are not structural. The roof structure and roofing will also have to be removed for Buildings 356, 357, and 358. All buildings will require the removal of existing windows and doors and provide a larger opening to install new fenestrations (door & windows) as designed to meet the approval of State Historic Preservation Office (SHPO). Adjacent wall finishes, both interior and exterior shall match the existing surfaces before the new windows are installed. Additionally, all existing plumbing, mechanical and electrical items need to be removed as indicated. For existing as-built drawings refer to Attachment No. 28 for Quad C RFP Information Drawings: contents include topographic survey and Building 355/356/357/358 floor plans.

5-1.2.5 The Quad C building renovation design intent is to follow the Department of the Army Facilities Standardization Program for a Standard Company Operations Facility, Battalion Headquarters, and Dining Facilities.

5-1.3 **Exterior Design Objectives.** Design buildings to enhance the visual environment of the installation. Exterior materials, roof forms, and detailing shall comply with the Installation Design Guide and concept design drawing, and shall be compatible with the immediate local context. Use durable, low-maintenance materials.

5-1.4 **Interior Design Objectives.** Arrange spaces in an efficient, functional manner. Provide simple circulation schemes that allow easy way finding within buildings. Use durable materials and furnishings that can be easily maintained and replaced. Maximize use of day lighting and operable windows. Use interior surfaces that are easy to clean and light in color; avoid trendy or bright color schemes. Provide telephone/data jacks on multiple walls to allow optional locations for furniture. Structure interior spaces to allow maximum flexibility for future modifications; companies and battalions often change size or mission, requiring reconfiguration of facilities. Refer to SOW Chapter 14-Comprehensive Interior Design for detailed information and CID Package requirements.

5-1.5 **Material and Product Selection Criteria.** Materials shall meet the requirements of the SOW. The SOW includes a range of specificity: some material requirements are specific (no option); other material requirements allow a range of options. The SOW requirements establish a minimum quality level.

5-2 APPLICABLE CODES AND STANDARDS. Except as specified otherwise in the RFP, design and construction of facilities shall comply with the latest editions (as of the date of the RFP) of the following. Major criteria and references for building design are as listed but not limited to this list. Additional requirements are included throughout the RFP.

5-2.1 National Fire Codes, published by the National Fire Protection Association (NFPA), including NFPA 101 Life Safety Code.

5-2.2 International Building Code (IBC), 2000

5-2.3 Americans With Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG), 1998.

5-2.4 Unified Facilities Criteria (UFC) 4-010-01 Department of Defense Minimum Antiterrorism Standards for Buildings July 31, 2002.

5-2.5 AR 190-11, Physical Security of Arms, Ammunition, and Explosives, Change 1, Appendix G, para G-2.

5-2.6 American Architectural Manufacturer's Association (AAMA)

5-2.7 Architectural Woodworking Institute, AWI Quality Standards

5-2.8 Builders Hardware Manufacturers Association, ANSI/BHMA

5-2.9 Underwriters Laboratories.

5-2.10 Tile Council of America (TCA) Handbook for Ceramic Tile Installation.

5-2.11 The Schofield Barracks Installation Design Guide (IDG), excerpts of which are included in an appendix to the Statement of Work.

- 5-2.12 UFC 3-600-01 Design: Fire Protection Engineering for Facilities (17 April 2003)
- 5-2.13 TI 800-01, Design Criteria, 20 July 1998
- 5-2.14 UFC 1-200-01, Design: General Building Requirements, July 31, 2002
- 5-2.15 Department of the Army Facilities Standardization Program, Standard Company Operations Facility, Dated February 1994.
- 5-2.16 Department of the Army Facilities Standardization Program, Standard Design for Brigade and Battalion Headquarters Facility, Dated August 1995.
- 5-2.17** AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive), Appendix B.

5-3 IBC OCCUPANCY AND BUILDING TYPE CLASSIFICATIONS.

5-3.1 **General.** Occupancy classifications, construction types, allowable areas, maximum building heights, and fire separation requirements shall comply with the requirements of the International Building Code. Prior to issuance of the RFP, the design district shall coordinate with the authority having jurisdiction to determine occupancy classifications. Consult with the users to determine the hazard classification of items to be stored in the supply spaces.

5-3.2 **Construction:** All four building are Type II-A structures. All structural components, floor construction, bearing walls, and the roof shall be constructed of one-hour fire resistive construction.

5-3.3 **Occupancy Classification.** The IBC occupancy classification for the quad is as follows. Buildings 356 and 358 are both a Group R-2 occupancy. Building 355 is a mixed occupancy. The first floor is a Group S-1. The second floor is a Group B and Group S-1. The third floor is a Group A-3 and a Group B. Building 357 is also a mixed occupancy. The first floor is a Group A-2 and Group B. The second floor is a Group B and Group S-1, and the third floor is a Group A-3, Group B, and S-1.

5-3.4 **NFPA Classification.** The NFPA 101 classification for the quad is: Buildings 356 and 358 are both New Apartment Building occupancies. Building 355 is a mixed occupancy. The first floor is a Storage occupancy. The second floor is a New Assembly occupancy, New Business occupancy and a Storage occupancy. The third floor is a New Assembly occupancy, and a New Business occupancy. Building 357 is also a mixed occupancy. The first floor is a New Assembly occupancy, and a New Business occupancy. The second floor is a New Business occupancy and a Storage occupancy, and the third floor is a New Assembly occupancy.

5-3.5 **UEPH Buildings.** Occupancy classification: Residential R-2.

5-3.6 **Company Operations Facilities** Occupancy classification of administrative areas, and locker room facilities serving less than 50 occupants: Business Group B. Common Locker Rooms for 50 or more occupants: Assembly Group A-Division-3. Occupancy classification for supply areas: Storage Group S, Division 1 (or Division 2- verify contents of space with user).

5-3.7 **Battalion Headquarters.** Occupancy classification of administrative areas: Business Group B. Occupancy classification of classroom areas: Assembly Group A-3.

5-4 EXTERIOR DESIGN.

5-4.1 **General** the buildings are considered historical and any exterior construction shall be

sensitive to the original design. See the Historic Narrative for detailed narrative on the historic importance, general design intent and requirements, see SOW 15. The exterior design should closely replicate the original 1917 design. The Concept Design Drawings contrast the original design where the building must conform to NFPA 101, Life Safety Code. Some of the areas include the exterior stairways; rated partitions and doors are added to enclose the stairs. Also, some window and door openings were removed to provide a separation when enclosing the stairs was not practical.

5-4.2 **Acceptable Materials and Colors.** Exterior elements of the facilities shall comply with the attached architectural concept design drawings and the Installation Design Guide (IDG) unless required otherwise by applicable codes or this Statement of Work

5-4.3 **Quad Building Superstructure:** No specific requirement for the type of structural system is imposed other than to meet the applicable regulations, to dimensionally fit within the space allocated for structure and to accommodate the exterior materials shown on the exterior elevations and building sections.

5-4.4 **Detached Building Structures.** Concept design is based on a load-bearing masonry exterior wall with a manufactured steel truss roof structure.

5-4.4.1 Alternative pre-cast concrete beams or trusses, pre-engineered steel structure, or conventional steel rafter / purlin systems.

5-4.5 **Exterior Closure:**

5-4.5.1 **Exterior Finishes.** Emphasis shall be placed on low maintenance and durability for exterior finish materials. Materials shall be residential in size, scale, and texture. Exterior wall materials shall be painted concrete or concrete masonry unit:

5-4.5.2 Termite decay and protection for exterior wood materials (siding, trims, etc.) shall be in accordance with National Wood Window and Door Association (NWWDA) Standards. Each piece of treated material shall bear identification of the testing agency to indicate performance in accordance with NWWDA.

5-4.5.3 Trim elements. Aluminum or vinyl clad wood trim is preferred over painted or stained wood trim. Painted exterior surfaces shall be minimized. When exterior exposed wood trim is used the following requirements apply:

5-4.5.4 Exposed wood, such as window trim, door sills, window sills, railings and balusters, trellis, wood fencing, arbors, solar shading devices including louvers, arbors, and trellis shall be treated for rot resistance in accordance with NWWDA Industry Standards I.S.4, Water Repellent Preservative Treatment for Millwork.

5-4.5.5 Exterior surfaces requiring painting shall receive a minimum of one prime coat and two finish coats of paint. Wood trim frames, etc., shall be back primed. Exterior semi-transparent low sheen stains, two coats, are acceptable, where appropriate for wood, plywood, etc.

5-4.5.6 Existing exterior stair treads and landings shall be provided with non-slip type treads. Existing exterior stairs shall be provided with metal railings.

5-4.6 **Roofs.** Roofing material and color shall comply with the attached architectural concept design drawings. Roofing system shall have Underwriters Laboratory (UL) Class A rating for fire resistance, UL 90 wind resistance rating, and Factory Mutual (FM) 1-90 fire and wind resistance rating.

5-4.6.1 **Quad Building, Chiller Plant Building and Pump House Building Roofs.** Built-up roofs shall have a minimum pitch of 1:24 (1/2-inch: 1 foot.).

5-4.6.1.1 **Built-Up Roofing.** Provide 4-ply, built-up roofing for use over rigid board insulation on metal

decking for Quad Building Roofs. Provide 4-ply, built-up roofing for use over rigid board insulation on concrete slab of metal decking for Chiller Plant and Pump House Building. Provide manufacturers 20-year finish warranty.

5-4.6.2 **Gear Wash/Recreation Building Roofs.** Gear Wash/Recreation Building shall have sloped roof with a minimum pitch of 4:12. Refer to Attachment #25, Quad F Gear Wash/Recreational Building Sketches.

5-4.6.2.1 **Metal Roofing.** Standing seam steel or aluminum roof panels with integral or metal fascias. Provide manufacturers 20-year finish warranty.

5-4.6.3 **Roof water.** Conductor heads, scuppers and downspouts shall be provided for all roof areas. Provide calculation of gutter and downspout size if the existing conductor heads, scuppers and downspout dimensions cannot be determined. Calculations should be in accordance with SMACNA-03, Architectural Sheet Metal Manual. Provide 20-year manufacturers finish warranty. Downspouts draining onto a lower roof shall have metal or plastic splash deflectors. Downspouts shall be connected to the underground storm drainage system. Provide cast iron boot at the bottom of all downspouts.

5-4.6.4 **Rainfall Calculations:** Conductor heads, scuppers and downspouts shall be adequately sized to meet the following Design Rainfall Intensities:

Schofield Barracks: Design Rainfall Intensity (hourly in inches for a 5-minute period to be expected once in 10 years) = 188 mm (7.4 inches).

5-4.6.5 **Roof surface.** Roof surfaces shall be light colored to minimize heat gain. Roof water shall be diverted away from entrances and foundations.

5-4.6.6 **Roof Eave.** Existing Quad Building roof eave shall be removed and restored to its original Historic design and character. Use durable, low-maintenance materials. Refer to Architectural Concept Design Drawings for detail reference.

5-4.6.7 **Sheet Metal Work.** All Sheet metal material shall be copper.

Note: Flashing - Continuous stepped flashing to be installed at wall adjacent to roof slope. Design to facilitate easy maintenance and removal of roofing without removing or damaging the wall sidings. Provide metal drip edge of flashing at roof eaves.

5-4.7 **Trim and Flashing.** Materials shall comply with the RFP concept design drawings. Gutters, downspouts, and fascias shall be copper; comply with SMACNA Architectural Sheet Metal Manual; provide 20-year manufacturers finish warranty.

5-4.8 **Miscellaneous Exterior Elements.** Comply with the attached architectural concept design drawings. It is advisable to prohibit any use of exterior wood with painted finish; require pre-finished metal trim. Coordinate with user to include requirements for any building-mounted operational items such as communications antennae, special lighting, warning beacons, etc.

5-4.9 **Exterior Doors and Frames.**

5-4.9.1 **Doors.** Provide Historic doors as indicated on the concept design drawings. Refer to RFPconcept design drawings for door types and details. Fully glazed doors shall comply with wind load requirements of applicable codes. Telecomm Room doors shall be secured per AR 380-19 Information Systems Security.

5-4.9.4.1 **Hollow Metal Doors and Frames.** comply with ANSI A250.8/SDI 100. Doors shall be Level

3, physical performance Level A, Model 2; insulated; top edge closed flush. Frames shall be Level 3, 14 gauge, with continuously welded corners and seamless face joints. Doors and frames shall be constructed of hot dipped zinc coated steel sheet, complying with ASTM A653, Commercial Steel, Type B, minimum A60 coating weight; factory primed. Anchors and accessories shall be zinc coated. Frames in masonry shall have bituminous back-coating, plaster guards, and shall be grouted solid. Provide concealed wall and head anchors in frame sufficient to support the weight of the grouted frame. Provide minimum four concealed wall anchors at masonry rough openings. Provide minimum one concealed head anchor for frame rough openings greater than three feet. Fire-rated openings shall comply with NFPA 80, and the requirements of the labeling authority.

5-4.9.5 **Exterior Door Finish Hardware.**

5-4.9.5.1 **Hinges.** ANSI/BHMA A156.1; template, full mortise, heavy duty, anti-friction ball bearing, minimum size 114 mm x 114 mm [4 ½" x 4 ½"], stainless steel, non-removable pins.

5-4.9.5.2 **Locksets for Typical Exterior Door.** Provide stand-alone programmable electronic door locksets with audit capabilities. The lockset construction shall be all-metal, heavy-duty, and mortise. The lockset is equipped with hidden mechanical key override, an anti-pick latch and dead bolt, and a magnetic stripe reader. Each magnetic stripe card will be programmed to gain access into its respective module and sleeping/living rooms. Lockset shall be similar to Kaba Ilco, Solitaire 710-II Series or approved equal. The lockset shall include knob and lever torque test and "Ultra" finish with two-year warranty.

5-4.9.5.3 **Locksets for Typical Exterior Utility and Maintenance Doors.** spaces with doors covered by this paragraph include: Mechanical Rooms, Electrical Rooms, Telecommunication Rooms, Communication Rooms, Toilets, Janitor, and Stairwell. ANSI/BHMA A156.13; series 1000, grade 1, mortise lockset with removable core, non-ferrous base metal.

5-4.9.5.4 **Exit (Panic) Devices.** ANSI/BHMA 156.3; heavy-duty touch-pad type, through-bolted mounting. Listed and labeled for panic protection based on UL 305. Doors shall be provided with exit device if required by Building Code.

5-4.9.5.5 **Closers.** ANSI/BHMA A156.4; series C02000, Grade 1, hydraulic, factory-sized, adjustable to meet field conditions. Provide for all exterior doors, all doors to living units, and all doors opening to corridors and as required by codes. At exterior doors to lobbies, corridors, mechanical rooms, janitors closets, and COF supply areas provide overhead holders or closers with hold-open capability.

5-4.9.5.6 **Auxiliary Hardware.** ANSI/BHMA A156.16. Provide wall or floor stops for all exterior doors that do not have overhead holder/stops. Provide solid wood backing in the stud wall cavity for wall-mounted doorstops. Provide other hardware as necessary for a complete installation.

5-4.9.5.7 **Thresholds.** ANSI/BHMA A156.21; non-ferrous metal. Provide at all exterior doors. Provide inter-locking type threshold for UEPH Building 356 & 358 Living Unit only (threshold for Interior corridor door).

5-4.9.5.8 **Weatherstripping.** ANSI/BHMA A156.22. Provide at all exterior doors.

5-4.9.5.9 **Kick Plates.** ANSI/BHMA A156.6; stainless steel, 254 mm [10"]high x 51 mm [2"] less than door width. Provide at push side of all doors with closers.

5-4.9.5.10 **Locks and keys.** Lock cylinders shall have six pin tumblers and interchangeable cores, which are removable by a control key. Provide a master keying system. Locks for each organizational unit, including exterior storage shall be keyed alike. Contractor shall obtain the key biting report from the hardware manufacturer and provide the report to DPW at the end of the project. Locks and keys shall conform to the standards and requirements of the Builders Hardware Manufacturers Association (BHMA) listed above.

5-4.10 **Exterior Windows.** Provide Historic windows as indicated on the concept design drawings. Refer to concept design drawings for window types and details. Fully glazed windows shall comply with wind load requirements of applicable codes. All sleeping rooms shall have operable windows complying with egress requirements of applicable codes. Windows shall be operable and shall have locks.

5-4.10.1 **Screens.** Fiberglass screens shall be provided at all operable windows and be of window manufacturer's standard design. Fiberglass insect screens, 18 x 16 mesh size, shall be provided for all windows and sliding glass doors and should be the window or door manufacturers standard design for use with the windows and doors being provided. Insect screen frames shall be removable type for easy cleaning.

5-4.10.2 **Exterior Glass and Glazing.** To comply with force protection minimum standards: Single glazing and the inner pane of insulated glass assemblies in exterior windows and doors shall be minimum 6 mm (1/4-inch) annealed laminated glass.

5-4.11 **Insulation.** Insulation shall be provided to meet the following requirements:

5-4.11.1 Thermal and sound insulation shall have a flame spread rating of 25 or less and a smoke development rating of 50 or less exclusive of the vapor barrier when tested in accordance with ASTM E 84. A vapor barrier shall be provided on the warm side of exterior and ceiling insulation for thermal insulation.

5-4.11.2 Urethane is not allowed as an insulation material.

5-4.11.3 Polycyene expanding foam insulation will be permitted as a material to insulate ceilings and walls.

5-4.11.3 **Thermal Insulation.** Provide exterior wall, floor, and roof/ceiling assemblies with thermal transmittance (U-values) required to comply with the proposed energy calculations for the facilities. Insulation shall not be installed directly on top of suspended acoustical panel ceilings.

5-4.12 **Louvers:** Aluminum-framed louvered panels. Louver finish shall be Kynar 500 or approved equal. Kynar 500 properties: a fluoropolymer-polyvinylidene fluoride (PVDF). Finish shall be factory applied and oven baked. Total overall dry film thickness shall be 0.025mm (1mil) thick.

5-4.13 **Exterior Railings.** All exterior handrails and guardrails shall be replaced. Existing railing design does not conform to original historic design for Quad C. Design of exterior handrails and guardrails shall conform to historic character of Quad C. The design shall be coordinated with the State Historical Preservation Office. Exterior railing materials, including bolts and fasteners shall be painted hot-dipped galvanized steel. Design shall comply with all applicable codes. Final handrail design shall be approved by DPW.

5-5 INTERIOR DESIGN.

5-5.1 Floors and Flooring Material

5-5.1.1 **Floors.** Comply with requirements of applicable codes. Non-combustible construction is preferable, even where combustible materials are allowed by code. Floor finish materials shall be as specified in functional and area requirements listed in Chapter 2 of the Statement of Work.

5-5.1.2 **Quarry Tile.** will be the abrasive surface type as stated in the Tile Council of American Standard 137.1 (Ceramic Tile). Epoxy coatings, linoleum, vinyl and VCT are not acceptable substitutes for quarry tile. Grouting material for quarry tile shall be a grout system employing epoxy resin and hardener portions especially formulated for commercial installations where chemical resistance is important. All grout joints shall be sealed.

5-5.1.3 **Ceramic Tile.** Comply with ANSI A 137.1 and the recommendations of Tile Council of America (TCA) Handbook For Ceramic Tile Installation. Provide marble threshold under doors where a ceramic tile floor meets a different floor finish. All grout joints shall be sealed.

5-5.1.4 **Vinyl Composition Tile.** Vinyl composition tile shall conform to ASTM F 1066, Class 2, through pattern tile, Composition 1, asbestos-free, and shall be 12 inches square and 1/8 inch thick. The tile shall have the color and pattern uniformly distributed throughout the thickness of the tile. Flooring in any one continuous area shall be from the same lot and shall have the same shade and pattern.

5-5.1.5 **Resilient Base.** Base shall be manufacturers standard rubber, coved style (installed with resilient flooring). Base shall be 4 inches high and a minimum 1/8-inch thick. Job formed corners shall be provided.

5-5.1.6 **Carpet.** Carpet construction shall be woven; Type: Broadloom 3.6m minimum usable carpet width; Pile Type: Level Loop; Pile Fiber: Commercial 100% branded federally registered trademark nylon continuous filament; Pile Height: minimum 3.4mm in accordance with ASTM D418; Yarn Pile: minimum 2; Pile density: minimum 4696; Dye method: solution dyed; backing material: backing material shall be 100% synthetic material. Static control shall be provided to control static buildup to less than 3.5 kV when tested at 20% RH and 21 degrees C in accordance with AATCC TM 134.

5-5.1.7 **Concrete Floors:** All concrete floors on the first floor of all Quad C Buildings that will receive vinyl composition tile or carpet shall be provided with hardener/sealer that conforms to the following requirements:

5-5.1.7.1 **Qualifications:** the installer of hardener/sealer shall be certified and shall be on a list of preapproved applicators of the product.

5-5.1.7.2 **Technical Representative:** Hardener/sealer manufacturer's Technical Representative shall be made available for initial training of applicators and field observation during installation of the hardener/sealer. Technical Representative shall certify installations for warranty.

5-5.1.7.3 **Warranty:** Hardener/sealer manufacturer's "Full System 10 year warranty" on the replacement of all flooring material and labor that delaminates due to moisture migration, excessive vapor emissions or contaminates, shall be provided on all concrete floors to receive carpet and resilient flooring.

5-5.2 **Interior Walls and Partitions.** Comply with requirements of applicable codes. Non-combustible construction is preferable, even where combustible materials are allowed by code. The use of 16 mm [5/8"] Type X gypsum board shall be utilized where drywall partition is required.

5-5.2.1 **Offices and Administration areas** are to have full height drywall on metal stud partitions with sound insulation. The use of 16 mm [5/8"] Type X gypsum board shall be utilized where drywall partition is required.

5-5.2.2 **Interior walls:** Masonry or concrete walls at Arms Room, Heavy storage areas for the Company Operation Facilities (COF) shall have full height masonry or concrete walls.

5-5.2.3 **Arms Vault** needs to meet requirements at AR 190-11, Physical Security of Arms, Ammunition, and Explosives. Additional Arms Vault requirements are explained in SOW Ch 5, paragraph 5-7.2 and SOW Ch 6, paragraph 6.5-4

5-5.2.4 **Interior seismic walls:** these walls will be made of concrete. The wall finish shall be smooth; no visible snap-ties or formwork is permitted. These walls will be furred with 64 mm [2-1/2"] metal studs and gypsum board.

5-5.2.5 **Metal Support Systems.** Non-load bearing metal studs and furring shall comply with ASTM C 645; stud gauge shall be as required by height and loading, but shall not be less than 25 gauge. Maximum stud spacing: 406 mm [16"] on center. Provide galvanized finish.

5-5.2.6 **Gypsum Board.** Comply with ASTM C 36. Minimum panel thickness: 16 mm [5/8"]. Provide Type X panels in fire-rated assemblies. Provide moisture resistant panels at locations subject to moisture. Provide abuse-resistant panels where indicated in functional and area requirements. Joint treatment: ASTM C 475. Screws ASTM C 646. Drywall installation: ASTM C 840.

5-5.2.7 **Ceramic Tile:** Comply with ANSI A 137.1 and the recommendations of Tile Council of America (TCA) Handbook For Ceramic Tile Installation. Substrate for wall tile shall be cement backer board (gypsum board is not acceptable).

5-5.2.8 **Concrete seismic wall on existing concrete wall:** these conditions occur at the exterior facing concrete walls. The finish surface shall be smooth for paint application.

5-5.3 **Telecommunication Room (Tele)**

5-5.3.1 Require coordination with Schofield Barracks Physical Security Office, Harold Evans, and the Directorate of Information Management, Marion Robinson.

5-5.3.2 Telecomm. rooms which may house SIPR servers shall be treated as classified open storage areas.

5-5.3.3 Security for Telecomm rooms shall be per AR 380-19 information systems security.

5-5.4 **Ceilings.** Non-combustible construction is preferable, even where combustible materials are allowed by code. Ceiling finish materials shall be as specified in functional and area requirements listed in Chapter 2 of the Statement of Work, as indicated on the Concept Design Drawings, and comply with requirements of applicable codes. Textured ceiling finish may be provided in areas other than laundry or bathrooms. Interior finish on walls and ceilings shall be in accordance with NFPA 101. Provide access doors to maintain and service equipment above the ceiling.

5-5.4.1 **Acoustic Ceiling Tile.** Acoustic tile shall be smooth, nondirectional finish on scratch-resistance surface. Acoustic tile shall be washable, humidity resistant, and soil resistant. Provide acoustic tile complying with Class A: Flame Spread 25 or under (UL Labeled) per ASTM E 1264; NRC: 0.70 minimum; CAC: 35 minimum; Light Reflect Coefficient: 0.89 minimum.

5-5.4.2 **Fiberglass Ceiling Tile.** Fiberglass ceiling tile (frp) shall be easy-to-clean panel and made of fiberglass reinforced plastic. Panel surface allows dirt and grease to be cleaned off quickly and easily. As a frp panel it is extremely resistant to most stains and chemicals. The entire panel is moisture resistant and does not support mold or mildew, and it will not rust or corrode. Provided fiberglass tile complying with Class A: Flame Spread 25 or under (UL Labeled) per ASTM E 1264. Light Reflect Coefficient: 0.89 minimum.

5-5.5 **Interior Doors and Frames.** Provide hollow metal doors, or flush wood solid core doors at UEPH and administration spaces. Provide hollow metal doors at COF supply spaces. All frames shall be hollow metal. Hollow metal doors and frames shall have a minimum A60 galvanizing. Hollow metal frames shall have a minimum of 3 wall anchors and one floor anchor per jamb.

5-5.5.1 **Wood Doors.** Provide flush wood solid core doors complying with National Wood Window and Door Association (NWWDA) I.S.-1A. Stile edges shall be non-finger jointed hardwood compatible with face veneer. Provide American Woodwork Institute (AWI) Grade A hardwood face veneer for transparent finished

doors; provide AWI Sound Grade hardwood face veneer for painted doors. Transparent finished doors are preferred.

5-5.5.2 **Hollow Metal Doors.** Comply with ANSI A250.8/SDI 100. Doors shall be Level 2, physical performance Level B, Model 2; top edge closed flush, factory primed. Anchors and accessories shall be zinc coated.

5-5.5.3 **Hollow Metal Frames.** Comply with ANSI A250.8/SDI 100. Frames shall be Level 2, 16 gauge, with continuously welded corners and seamless face joints; factory primed. Anchors and accessories shall be zinc coated. Frames in masonry shall have bituminous back-coating, plaster guards, and shall be grouted solid. All hollow metal doors frames shall be painted (typical).

5-5.5.4 Arms Vault doors and frames needs to meet opening requirements at AR 190-11, Physical Security of Arms, Ammunition, and Explosives. Additional Arms Vault Door and Frame requirements are explained in SOW Ch 5, paragraph 5-7.2 .

5-5.5.5 Telecom Room doors and frames to meet opening requirements for Secret-rated work.

5-5.5.6 **Fire-rated and Smoke Control Doors and Frames.** Comply with International Building Code (IBC), NFPA 80, and requirements of labeling authority. Doors and frames shall bear labels from Underwriters Laboratories (UL), Factory Mutual Engineering and Research (FM) or War. Comply with positive pressure testing requirements of IBC.

5-5.6 **Interior Door Finish Hardware.**

5-5.6.1 **Hinges.** ANSI/BHMA A156.1; template, full mortise; Grade 1, ball bearing on doors with closers; Grade 2, bearing on doors without closers. Minimum 114 mm x 114 mm [4 ½" x 4 ½"], stainless steel metal.

5-5.6.2 **Locksets for Typical Interior Door.** Provide stand-alone programmable electronic door locksets with audit capabilities. The lockset construction shall be all-metal, heavy-duty, and mortise. The lockset is equipped with hidden mechanical key override, an anti-pick latch and dead bolt, and a magnetic stripe reader complying with ISO standards and ABA dimensional specifications. Each magnetic stripe card will be programmed to gain access into its respective module and sleeping/living rooms. Lockset shall be similar to Kaba Ilco, Solitaire 710-II Series or approved equal. The lockset shall include knob and lever torque test and "Ultra" finish with two-year warranty ANSI/BHMA A156.13; mortise lockset with removable core; non-ferrous base metal.

5-5.6.3 **Locksets for Typical Interior Utility and Maintenance Doors.** spaces with doors covered by this paragraph include: Mechanical Rooms, Electrical Rooms, Telecommunication Rooms, Communication Rooms, Toilets, Janitor and Stairwell. ANSI/BHMA A156.2; series 4000, Grade 1, non-ferrous base metal, removable core.

5-5.6.4 **Exit (Panic) Devices.** ANSI/BHMA 156.3; heavy-duty touch-pad type, through-bolted mounting. Listed and labeled for panic protection based on UL 305. Doors shall be provided with exit device if required by code.

5-5.6.5 **Closers.** ANSI/BHMA A156.4; series C02000, Grade 1, hydraulic, factory-sized, adjustable to meet field conditions. Provide for all entry doors to living units, all doors opening to corridors and as required by codes.

5-5.6.6 **Auxiliary Hardware.** ANSI/BHMA A156.16. Provide wall or floor stops for all doors that do not have overhead holder/stops. Provide other hardware as necessary for a complete installation.

5-5.6.7 **Kick Plates.** ANSI/BHMA A156.6; stainless steel, 254 mm [10"]high x 51 mm [2"] less than door width. Provide at push side of all doors with closers.

5-5.7 **Fireproofing Roof Structure.** The exposed metal roof truss and metal roof deck shall be fireproofed for one-hour protection. The fire resistive coating shall be elastomeric type. The fireproof material shall be capable of receiving a material finish like paint for example.

5-5.8 **Casework.**

5-5.8.1 Service Areas in Living Units and Coffee Areas in Admin Areas.
Bathroom Vanity in Living Units
UEPH Building CQ Station Reception Desk
Vanity at Public Toilets

The following typical casework description shall apply to the spaces described above:

Provide architectural cabinetwork complying with AWI Quality Standards, Section 400, Custom Grade cabinets with high-pressure decorative laminate finish, meeting NEMA LD3 standards. Horizontal laminate: nominal .050" thick; vertical laminate: nominal .028" thick. Door and drawer edges shall be plastic laminate: nominal .028" thick. Countertop shall be post-formed high-pressure decorative laminate with waterfall front edge and integral coved backsplash, or solid surfacing material. Cabinets shall be constructed as specified and shall meet requirements of KCMA A161.1. The use of any particle board material for cabinet construction is not permitted.

5-5.8.2 **Other casework.** Provide architectural casework complying with AWI Section 400, Custom Grade cabinets with high-pressure decorative laminate finish meeting NEMA LD3 standards. Horizontal laminate: nominal 1.27mm [.050"] thick; vertical laminate: nominal 0.71mm [.028"] thick. Door and drawer edges shall be plastic laminate: nominal 0.71mm [.028"] thick. Work surfaces and counter shall be high-pressure decorative laminate, or solid surfacing material.

5-5.9 **Window Treatments.** Provide horizontal aluminum mini-blinds at all exterior windows. Blinds shall have one-inch wide by .008-inch thick slats with anti-static, anti-microbial polyester baked enamel finish. Provide heavy duty 25mm x 38mm [1" x 1-1/2"] steel headrail, and tubular steel bottom rail finished to match slats.

5-5.10 **Toilet Partitions.** Toilet partition panels shall be floor supported and reinforced to receive partition-mounted accessories. Finish shall be laminated plastic on solid phenolic core. Toilet partition hardware shall be stainless steel. Latching devices, pulls, and hinges for handicap compartments shall comply with Title III of the American Disability Act and Accessibility Guidelines.

5-5.11 **Elevators.** The offeror shall provide the services of an elevator inspector employed by an independent testing company to inspect the elevator, witness the final testing, and certify elevator. The inspector shall meet all qualification requirements of ASME QEI-1 and shall be certified in accordance with ASME QEI-1. The offeror shall provide an elevator certificate signed by the inspector for each elevator. The certificate shall be provided to the Contracting Officer within 30 days of the completion of testing.

5-5.12 **Sound Attenuation.**

5-5.12.1 **Testing. Certified proof-of-performance field tests will be conducted to demonstrate that the wall systems as constructed provide the required sound isolation.** Tests for air-borne sound shall be made in compliance with ASTM E336. Tests for impact sound shall be made in compliance with ASTM E1007. Testing of 10 percent (minimum) of each type of floor and wall system is required. Location of test sites will be chosen at random by the Contracting Officer.

5-5.12.2 **Any wall system found to be inadequate shall have the deficiencies corrected and the**

additional qualifying tests conducted at the contractor's expense. Testing at the contractor's expense of greater than 10 percent of each system may be required if the Contracting Officer determines that the quality of construction requires this additional testing.

5-5.12.3 Walls shall be designed to provide the minimum airborne sound transmission ratings and impact isolation ratings stated in Table 5-5.12

TABLE 5-5.12 - SOUND TRANSMISSION STANDARDS FOR WALL CONSTRUCTION

Area	FSTC ¹
Walls at UEPH Bldgs. 356 and 358 between 1+1 units & single units	50
Walls at UEPH Bldgs. 356 and 358 at all Other Locations	40
Walls at Bldg. 355 and 357 at all Other Locations	40
Walls at Conference Rooms	50
Walls at Administration Spaces	40
Walls at all Mechanical Rooms	50
Operable partition at Bldg. 357 Classroom/Classroom	47

Note¹: Field Sound Transmission Class. See ASTM E336.

Note²: Field Impact Isolation Class. See ASTM E1007.

5-6 PAINT FINISHES AND COATING

5-6.1 Interior surfaces, except factory pre-finished material, shall be painted a minimum of one prime coat and two finish coat. Baths and laundry rooms, and all their painted trim shall be finish painted with semi-gloss latex. Natural finished interior doors are acceptable. All other areas shall be water-based latex low sheen washable eggshell finish for walls/trims and water-based latex low sheen washable eggshell finish for ceilings. Oil-based paint is not allowed except for surfaces that require special coating. Interior paint finish may be textured. When semi-gloss and low sheen painted surfaces are adjacent to each other, the wall surfaces in the room shall be finished with semi-gloss paint to avoid having two different finishes adjacent to each other.

5-6.2 All exterior surfaces including all utility appendages, shall receive a minimum of one prime coat and two finish coats of paint. Exterior paint shall be water-based latex. Exterior low sheen stains (two coats) will be acceptable, where appropriate for wood. Oil-based paint is not allowed except for surfaces that require special coating.

5-6.3 All painting work conform to and be in compliance with Unified Facilities Guide Specifications, Division 09-FINISHES, Section 09900, Paintings and Coatings.

5-6.4 Paints used on surfaces in areas of high humidity where mildew is possible and on fabric or vapor barrier over insulation shall contain a mildewcide. The mildewcide will not adversely affect the color, texture, or durability of the coating. The mildewcide shall be incorporated into the paint by the manufacturer and shall attain a surface disfigurement rating of 8 or greater when tested in accordance with ASTM D 3273 and evaluated in accordance with ASTM D 3274. Mercurial mildewcide and insecticides shall not be used in paints.

5-6.5 Colors shall be as approved from schemes submitted with proposal. All interior paint surfaces shall

be painted off-white. Each proposal shall include three basic exterior and interior color coordinated schemes and color samples. Final selection of exterior colors will be made by the Installation Commander (USAGE-HI). Exterior color selections shall conform to the Installation Exterior Architectural Plan (IEAP).

All exterior wood trim to include framing members around garage door openings shall be "back-primed" (surfaces that will be inaccessible to field painting after installation of the wood trim shall be primed with one coat of primer before installation).

5-7 PHYSICAL SECURITY REQUIREMENTS.

5-7.1 **Anti Terrorism / Force Protection.** Designs shall conform to the Department of Defense Minimum Antiterrorism Standards for Buildings, July 31, 2002 listed as Reference 5-2.4. Offerors' proposals will be deemed acceptable provided they comply with the Physical Security Requirements described in paragraphs described below. UEPH buildings are classified as troop billeting structures; COFs, Locker Room Facilities, and Battalion HQs are classified as primary gathering structures

5-7.1.1 The AT/FP standard used to develop the proposed design is the Department of Defense Minimum Antiterrorism Standards for Buildings, July 31, 2002. Agreements regarding definitions include:

5-7.1.2 A perimeter barrier (controlled perimeter) is provided for this project.

5-7.1.3 Minimum Construction Standards based on conventional construction without analysis shall be provided. All minimum standoffs shall be provided according to the Standard.

5-7.1.4 The structure shall have a 33-foot exclusive clear zone.

5-7.1.5 Access to parking within 82 feet of Quad C Buildings will be controlled; defined in UFC 4-010-01, para. B-1.1.2.2.1. Parking along roadways within 82 feet of the buildings will not be allowed, defined in UFC 4-010-01, para. B-1.1.2.2.2.

5-7.1.6 UFC 4-010-01 The preferred location of electrical and mechanical equipment such as transformers, air-cooled condensers, and packaged chillers is outside the unobstructed space or on the roof. However, electrical and mechanical equipment is allowed within the unobstructed space as long as the equipment provides no opportunity for concealment of explosive devices, defined in para. B-1.3.1.

5-7.1.7 The Quad C structures shall be designed to resist progressive collapse since it is 3 stories in height. Progressive Collapse Vulnerability Assessment is attached to this RFP document for offerors' use.

5-7.1.8 Laminated 1/4 inch thick annealed glass is required for all exterior windows and doors, defined in para. B-3.1.1. Window frames shall be provided as defined in para. B-3.1.2.

5-7.1.9 Exterior doors that are not designated as Historic Type (See concept design drawings) are required to be hollow metal door type.

5-7.1.10 A Mass Notification Alert System is required for this project, defined in para. B-4.7

5-7.2 **Arms Vault at Company Operations Facilities.** Physical Security of Arms shall be in compliance with AR 190-11. Refer to SOW Ch 6, para. 6.5.4 for structural Arms Vault requirements. Refer to SOW Ch 2, para. 2-2.2.2 for Arms Vault in Building 355. New floors, walls, and ceilings shall be provided for each Arms Vault. Unless more stringent construction features are required by life safety or building codes, minimum construction requirements shall be as follows:

5-7.2.1 **Floor.** 152 mm [6"] slab on grade; reinforced with minimum 152 mm x 152 mm MW 25.8 x MW

25.8 [6 x 6, W2.4 x W2.4] welded wire fabric, on vapor barrier, on 152 mm [6"] deep porous fill.

5-7.2.2 **Walls.** 206 mm [8"] thick cast-in-place concrete reinforced with 15M [#5] bars at 152 mm [6"] on center, each way, each face. Concrete masonry units reinforced in a similar manner, as described, will be permitted.

5-7.2.3 **Ceiling.** 206 mm [8"] thick cast-in-place concrete reinforced with 15M [#5] bars at 152 mm [6"] on center, each way, each face.

5-7.2.4 **Door and Frame.** Provide 44mm [1-3/4"] thick hollow metal door, industrial type construction, minimum 14 ga. skin plate thickness, and internally reinforced vertically with continuous steel stiffeners spaced 152mm [6"] max. on center. Provide steel bar type, Dutch door style daygate with metal shelf for issuing arms and ammo. Daygate shall have lock operated from outside by key, and from inside by handle. Comply with egress requirements of applicable codes.

5-7.2.5 **Penetrations.** Penetrations shall be minimized. All openings or penetrations in Vault floor, walls or ceiling greater than .062 m² [96 square inches] shall be protected with welded steel rod-and-bar grid weighing 39.6 kg/m² [8.1 lb./sf], consisting of 25.4 mm x 4.8 mm [1" x 3/16"] vertical bearing bars at 25 mm [1"] on center, and 8 mm [5/16"] diameter horizontal rods at 50 mm [2"] on center; or equivalent protection.

5-7.2.6 **Arms Rack Anchor Rings.** Provide 10 mm [3/8"] diameter stainless steel bar bent into U-shape (25 mm inside radius). Overall length shall be 127 mm [5"]; embed 76 mm [3"] of horizontal legs (open end) in pre-drilled epoxy filled holes. U-shaped end will protrude from floor to provide anchorage for GFGI arms racks. Orient the projecting U-shape vertically. Provide anchor rings at 3'-0" on center along the floor inside the Arms Vault -Verify with DPW for exact installation and mounting location.

5-7.2.7 **Floor Anchors for GFGI Security Safes.** Provide 10 mm [3/8"] diameter stainless steel bar bent into U-shape (25 mm inside radius) with 2" long 90 degree returns at ends of vertical legs. Overall height shall be 127 mm [5"]; embed 76 mm [3"] of vertical legs (open end) in concrete floor slab; 51 mm [2"] of U-shaped end will protrude above slab to provide anchorage for GFGI security safe.

5-8 SIGNAGE

5-8.1 **Directional, Informational, and Motivational Signage.** Signs consist of exterior building signage, interior signage, Interior building directories, directional signs, and identification signs. All Exterior and Interior Signage shall comply with TM 5-807-10. Coordinate with installation facilities engineer (DPW) for location of all signs, color of sign, and verbiage to be included on all signs. All exterior signs and interior Building Directory Signs shall be constructed of minimum 0.090-inch thick aluminum sheets. All other signs shall be constructed of minimum 4.76 mm [3/16-inch] thick plastic acrylic sheets. All signage shall comply with requirements of ADAAG and UFAS. Refer to Attachment No. 1 for Sign Types described below.

5-8.2 **Exterior Signs:** provide the following Exterior Building Sign Types:

5-8.2.1 Provide a total of four Exterior Building Identification Signs, one per building, Type D4, Sign grid 1, size: 762 mm H x 1067 mm W [30"H x 42"W].

5-8.2.2 Provide a total of eight Exterior Building Number Signs, two per building, Type C8, wall mounted, Sign grid 1, size: 457 mm H x 1372 mm W [18"H x 54"W].

5-8.2.3 Provide all exterior doors with Room Identification Sign, Type BB2, wall mounted, size: 229 mm H x 229 mm W [9"H x 9"W].

- 5-8.2.4 Provide a total of 12 Exterior Guide Signs, Type AA5, wall mounted, size: 3 modules of 70 mm H x 457 mm [W 2-3/4"H x 18"W].
- 5-8.2.5 Provide a total of 12 Exterior Guide Signs, Type AA6, ceiling mounted, size: 3 modules of 102 mm H x 610 mm W [4"H x 24"W].
- 5-8.2.6 Provide a total of 15 Company Identification Sign, Type BB2 (similar), wall mounted, size: 305 mm H x 610 mm W [12"H x 24"W]. Text Size=1" Cap with 1/2" line spacing vertically in lieu of 3/8".
- 5-8.3 **Interior Signs:** provide the following Interior Building Sign Types:
 - 5-8.3.1 Provide eight Building Directory Signs, two per building, Type AA1, wall mounted, Sign grid 2, size: 1067 mm H x 1219 mm [42"H x 48"W].
 - 5-8.3.2 Provide all interior doors with Room Identification Sign, Type BB2, wall mounted, size: 229 mm H x 229 mm [9"H x 9"W].
- 5-8.4 See accessibility section for accessible signage requirements.

5-9 ACCESSIBILITY FOR HANDICAPPED (PHYSICALLY IMPAIRED) PERSONS, BARRIER FREE DESIGN.

- 5-9.1 Accessibility will be based on requirements of the Americans with Disabilities Act (ADA.) Public accommodation will be provided as described in the ADA Architectural Guidelines (ADAAG.). Refer to SOW Chapter 2 for ADA requirements for individual spaces.
- 5-9.2 Proposed accommodations generally consist of the following:
 - 5-9.2.1 Public areas will be ADA-compliant.
 - 5-9.2.2 Entries and exits accessible as required by ADA.
 - 5-9.2.3 An accessible path to all offices will be provided.
 - 5-9.2.4 Toilets Rooms to be ADA-compliant.
 - 5-9.2.5 All common use areas will be ADA-compliant.
 - 5-9.2.6 ADA-compliant directional and identification signage will be provided.
 - 5-9.2.7 All employee-only spaces will be provided with ADA-compliant approach, entry, turn-around and exit.
 - 5-9.2.8 Where disabled employees presently exist, provide path and floor area space suitable for accommodation should be provided. No disabled employees have been identified.
 - 5-9.2.9 ADA-compliant fire alarm systems are described in the Fire Protection Design Analysis.
 - 5-9.2.10 ADA-compliant communication systems are described in the Electrical Design Analysis.