

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 30-Apr-2012	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO.(If applicable) PRCS050502RC
6. ISSUED BY AFGHANISTAN DISTRICT SOUTH (AES) US ARMY CORPS OF ENGINEERS APO AE 09355		CODE W5J9LE	7. ADMINISTERED BY (If other than item 6) <b>See Item 6</b>		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			X	9A. AMENDMENT OF SOLICITATION NO. W5J9LE-12-R-0048	
			X	9B. DATED (SEE ITEM 11) 18-Apr-2012	
				10A. MOD. OF CONTRACT/ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer 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 <u>1</u> 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)					
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>					
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 <input type="checkbox"/> is not, <input type="checkbox"/> 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.)  Project: Provincial Response company and Fire Department Tarin Kowt, Uruzgan Afghanistan Project # PRCS050502RC  The purpose of this amendment if to:  Reissue Barrack Building Type 3 (384 GSM) Design  Proposal due date remains 19 May 2012 at 4:00 P.M. Kandahar Time Point of contact is Nicholas Emanuel Nicholas.P.Emanuel@usace.army.mil					
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)		
			TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR  _____ (Signature of person authorized to sign)		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED  30-Apr-2012

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES**

(End of Summary of Changes)





**STRUCTURAL DESIGN CRITERIA (CONT)**

ALL DESIGNS SHALL CONFORM TO THE PROVISIONS OF THE IBC 2006 AS APPLICABLE

**1.5 WIND LOADS (PER IBC 2006)**

**1.5.1 DESIGN PARAMETERS**

BASIC WIND SPEED	137 Km/h
WIND IMPORTANCE FACTOR	1.0
WIND EXPOSURE CATEGORY	D
DIRECTIONALITY COEFFICIENT (Kd)	0.85
TOPOGRAPHIC FACTOR (Kzt)	1.0

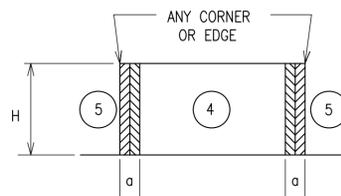
**1.5.2 DESIGN WIND PRESSURE – MAIN WINDFORCE RESISTING SYSTEM**

LOCATION	CORNER ZONE WIDTH "a"	MEAN ROOF HEIGHT (h)	WINDWARD WALL (@ MEAN ROOF HEIGHT)	LEEWARD WALL (@ MEAN ROOF HEIGHT)	ROOF
FIELD ZONE	N/A	4920 mm	680 N/m <sup>2</sup>	-480 N/m <sup>2</sup>	-470 N/m <sup>2</sup>
CORNER ZONE	1440mm	4920 mm	800 N/m <sup>2</sup>	-418 N/m <sup>2</sup>	-750 N/m <sup>2</sup>

a = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 0.9M.  
 h = MEAN ROOF HEIGHT, IN METERS, EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR ANGLE GREATER THAN 10°.

**1.5.3 DESIGN WIND PRESSURE – WALL COMPONENTS AND CLADDING**

EXTERIOR WALL SYSTEMS & THEIR ATTACHMENTS TO THE PRIMARY STRUCTURE SHALL BE DESIGNED FOR THE PRESSURES SHOWN IN THE DIAGRAM BELOW:



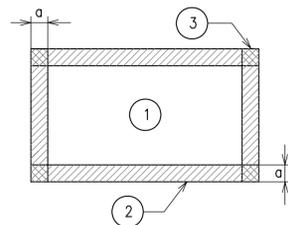
LOCATION	WINDWARD PRESSURE N/m <sup>2</sup> (inward)		LEEWARD PRESSURE N/m <sup>2</sup> (outward)		a
	④	⑤	④	⑤	
MAIN BUILDING					(mm)
AREA = 1 m <sup>2</sup>	788	788	-850	-1050	1440
AREA = 2 m <sup>2</sup>	748	748	-815	-967	1440
AREA = 5 m <sup>2</sup>	700	700	-765	-880	1440
AREA = 10 m <sup>2</sup>	648	648	-715	-750	1440

**NOTES:**  
 1. DESIGN WIND PRESSURES ABOVE REPRESENT THE NET PRESSURE (SUM OF INTERNAL AND EXTERNAL PRESSURE) APPLIED NORMAL TO ALL SURFACES.  
 2. LINEAR INTERPOLATION BETWEEN VALUES OF TRIBUTARY AREA IS PERMISSIBLE.  
 3. PLUS AND MINUS SIGNS SIGNIFY PRESSURE TOWARD AND AWAY FROM THE EXTERIOR SURFACE, RESPECTIVELY.

**1.5 WIND LOADS (CONT)**

**1.5.4 DESIGN WIND PRESSURE – ROOF COMPONENTS AND CLADDING**

ROOF COMPONENTS & THEIR ATTACHMENTS SHALL BE DESIGNED FOR THE PRESSURES SHOWN IN THE ADJACENT DIAGRAM & TABLE BELOW:



**ROOF MEAN HEIGHT**

LOCATION	GROSS UPLIFT PRESSURE N/m <sup>2</sup> (upward)			a
	①	②	③	
MAIN BUILDING				(mm)
AREA = 1 m <sup>2</sup>	-787	-931	-1738	1440
AREA = 2 m <sup>2</sup>	-787	-931	-1738	1440
AREA = 5 m <sup>2</sup>	-787	-931	-1738	1440
AREA = 10 m <sup>2</sup>	-787	-931	-1738	1440

**NOTES:**  
 1. DESIGN WIND PRESSURES ABOVE REPRESENT THE NET PRESSURE (SUM OF INTERNAL AND EXTERNAL PRESSURE) APPLIED NORMAL TO ALL SURFACES.  
 2. LINEAR INTERPOLATION BETWEEN VALUES OF TRIBUTARY AREA IS PERMISSIBLE.  
 3. PLUS AND MINUS SIGNS SIGNIFY PRESSURE TOWARD AND AWAY FROM THE EXTERIOR SURFACE, RESPECTIVELY.

**2.0 FOUNDATION DESIGN CRITERIA (TO BE CONFIRMED BY THE CONTRACTOR)**

THE GEOTECHNICAL ANALYSIS FOR THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AWARDED THE WORK. DESIGN VALUES USED IN THE STRUCTURAL ANALYSIS OF THE BUILDINGS HEREIN INDICATED HAVE BEEN ASSUMED AND SHALL BE CONFIRMED AND VERIFIED AS PART OF THE GEOTECHNICAL INVESTIGATION. VALUES WHICH DO NOT MEET THE REQUIREMENTS INDICATED BELOW SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER FOR CONSIDERATION AND DETERMINATION ON THE NEXT APPROPRIATE COURSE OF ACTION.

**2.1.1 SOIL DESIGN PARAMETERS**

NET ALLOWABLE SOIL BEARING CAPACITY	96.0 KPa
UNIT WEIGHT OF SOIL (moist)	1800 Kg/m <sup>3</sup>
COEFF ACTIVE EARTH PRESSURE (Kpa)	0.30
COEFF PASSIVE EARTH PRESSURE (Kpp)	3.33
COEFF AT-REST EARTH PRESSURE (Kpr)	.55
COEFF OF SOIL FRICTION	.35
SUBGRADE MODULUS	4120 g/cm <sup>3</sup>
MINIMUM BEARING DEPTH BELOW GRADE	800mm
SEISMIC SITE CLASS (based on in-situ soil)	D

**CONCRETE BEAM SCHEDULE**

GRADE BEAM						
MARK	SIZE (BxH)	REINFORCING			REMARKS	
		TOP	BOTTOM	STIRRUPS		
GB1	400x750	(3)-#22	(3)-#22	#13 @ 200	(1) #22 EF	TOP BAR LAP AT CENTER BOT BAR LAP PAST COL

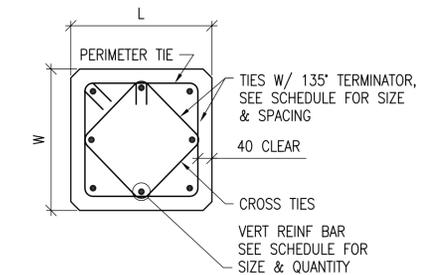
ROOF BEAM						
MARK	SIZE (BxH)	REINFORCING			REMARKS	
		TOP	BOTTOM	STIRRUPS		
RB1	400x600	(2)-#19	(2)-#19	#13 @ 250	N/A	TOP BAR LAP AT CENTER BOT BAR LAP PAST COL

**NOTE:**  
 1. DIMENSIONS NOTED ARE MILLIMETERS (mm) UON.

**CONCRETE COLUMN SCHEDULE**

MARK	SIZE (LxW)	REINFORCING	
		VERT BARS	TIES
C1	400x400	(8)-#25	#13 @ 100 (CORE OF EXT & CORNER COLUMNS) #13 @ 150 (CORE OF INTERIOR COLUMNS) #13 @ 200 (OTHER)

**NOTE:**  
 1. DIMENSIONS NOTED ARE MILLIMETERS (mm) UON.  
 2. SECOND STORY COLUMNS ARE SAME AS FIRST STORY COLUMNS.  
 3. CORE INDICATES THE AREA OF COLUMN & BEAM INTERSECTION  
 4. TIE INDICATES PERIMETER & CROSS TIE COMBINED



**1 COLUMN DETAIL**  
 SCALE: 1:10

**SPREAD FOOTING SCHEDULE**

MARK	FOOTING SIZE (mm)			FOOTING REINFORCING	REMARKS
	LENGTH	WIDTH	THICKNESS		
F1	4200	2400	300	(5) #22 LONG BOTT (6) #22 SHORT BOTT	-----
F2	6100	2100	350	(6) #25 LONG BOTT (8) #25 SHORT BOTT	-----
F3	2600	2000	300	(5) #22 LONG BOTT (4) #22 SHORT BOTT	-----

**NOTES:**  
 1. DIMENSIONS NOTED ARE MILLIMETERS (mm) UON.

US Army Corps of Engineers  
 Afghanistan Engineer District

DATE	DESCRIPTION	SYMBOL

DESIGNED BY: DATE: 09-30-09  
 MMY  
 SUBMITTED BY: BAKER  
 RCG  
 CHK BY: CWV  
 FILE NO: ANPSDS-02XXX  
 Michael Baker, Jr. Inc.  
 A Unit of Michael Baker Corporation  
 1000 Business Park  
 Moon Township, PA 15108  
 www.mbakercorp.com

AFGHAN NATIONAL POLICE  
 STANDARD DESIGN  
 BARRACK BUILDING (384 GSM)  
 WOOD FIRED HEAT OPTION  
 DESIGN CRITERIA & SCHEDULES

SHEET REFERENCE NUMBER:  
**S2**

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM)  
 0 200 400 600  
 SCALE: 1: 10

















SYMBOL	DESCRIPTION	DATE	APP

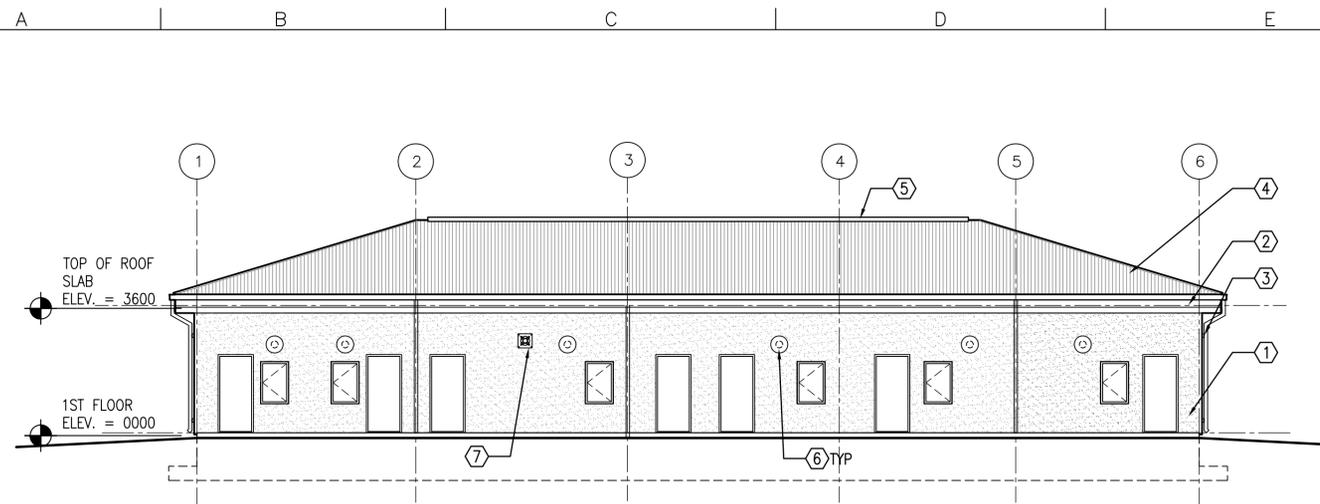
DESIGNED BY:	DLB	DATE:	09-30-09
DWN BY:	AAR	SUBMITTED BY:	BAKER
CHK BY:	KRC	FILE NO.:	ANPSDA-203XXX

Michael Baker, Jr. Inc.  
A Unit of Michael Baker Corporation  
1000 Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

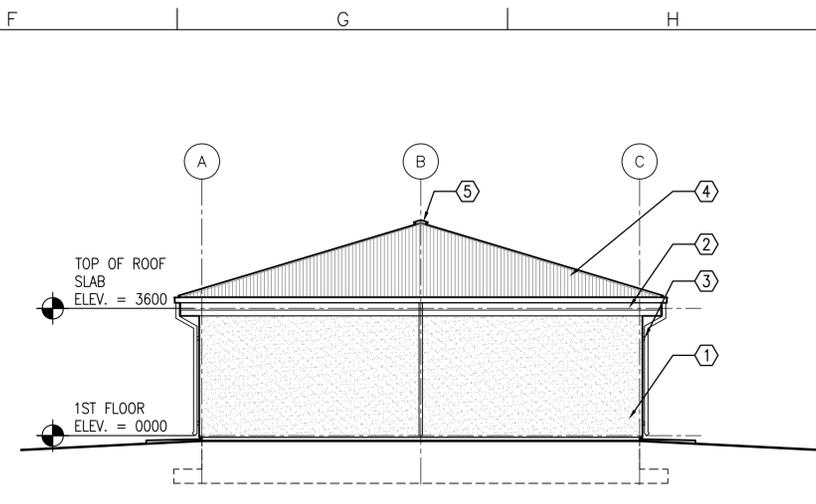
AFGHAN NATIONAL POLICE  
STANDARD DESIGN  
BARRACK BUILDING (384 GSM)  
WOOD FIRED HEAT OPTION  
EXTERIOR ELEVATIONS

SHEET REFERENCE NUMBER:  
**A3**

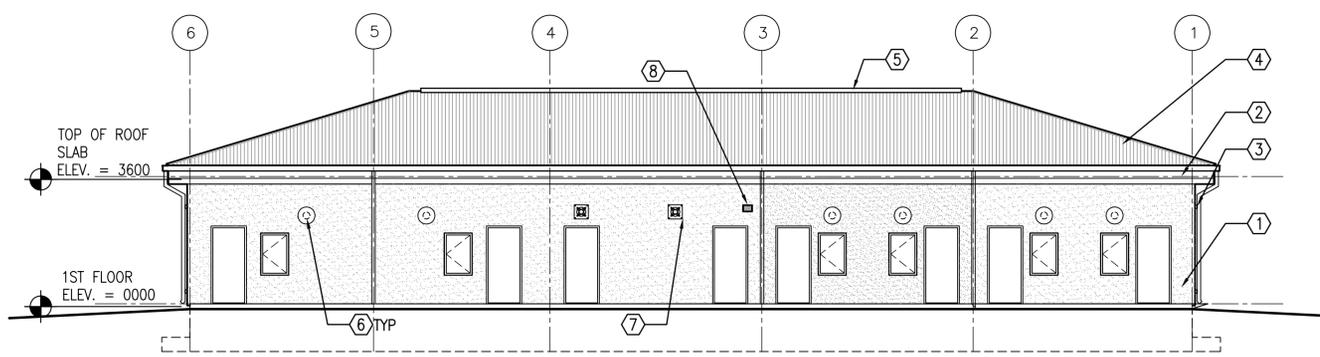
100% SUBMISSION



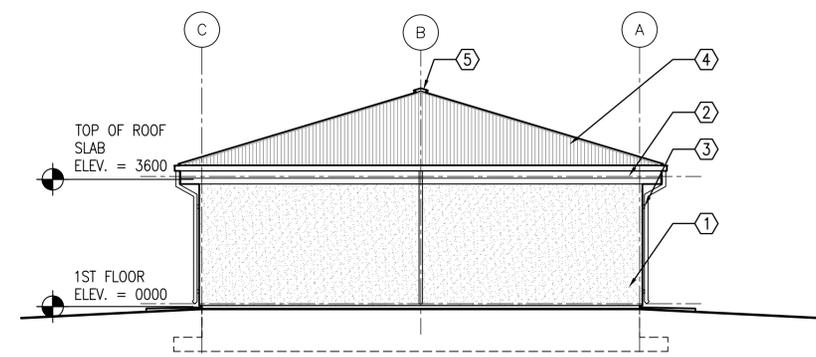
**1 EAST ELEVATION**  
A1 | A3 SCALE: 1:100



**2 NORTH ELEVATION**  
A1 | A3 SCALE: 1:100



**3 WEST ELEVATION**  
A1 | A3 SCALE: 1:100



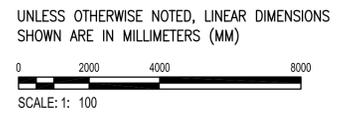
**4 SOUTH ELEVATION**  
A1 | A3 SCALE: 1:100

**KEY NOTES:**

1. STUCCO AND RIGID INSULATION SYSTEM OVER CMU AND CONCRETE.
2. METAL GUTTER
3. METAL DOWNSPOUT WITH SPLASH BLOCK
4. CORRUGATED METAL ROOF PANELS ON COLD-FORMED METAL FRAMING.
5. CONTINUOUS RIDGE VENT
6. TWO-PIECE WALL THIMBLE AND TRIM PLATE FOR OPTIONAL WOOD BURNING STOVE CHIMNEY PIPE. STOVE AND PIPE BY OTHERS.
7. EXHAUST FAN - RE: MECH
8. LOUVER - RE: MECH

**GENERAL NOTES:**

1. COORDINATE SIZE AND LOCATION OF OPENINGS FOR MECHANICAL ITEMS WITH MECHANICAL DRAWINGS.
2. PROVIDE STRUCTURAL LINTELS AS REQUIRED - RE: STRUCT





SYMBOL	DESCRIPTION	DATE

DESIGNED BY:	DLB	DATE:	09-30-09
DWN BY:	AAR	SUBMITTED BY:	BAKER
CHK BY:	KRC	FILE NO.:	ANPSDA-505XXX

Michael Baker, Jr. Inc.  
A Unit of Michael Baker Corporation  
1000 Business Park  
1000 Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

AFGHAN NATIONAL POLICE  
STANDARD DESIGN  
BARRACK BUILDING (384 GSM)  
WOOD FIRED HEAT OPTION  
DOOR, WINDOW & FINISH TYPES & DETAILS

SHEET REFERENCE NUMBER:  
**A5**

100% SUBMISSION

**WINDOW TYPES NOTES:**

- ALL EXTERIOR WINDOWS SHALL BE WOOD WITH INSECT SCREENS. WINDOWS SHALL BE COMMERCIAL GRADE.
- GLAZING SHALL BE ACRYLIC SHEET.

**DOOR TYPES NOTES:**

- INTERIOR AND EXTERIOR METAL DOORS AND FRAME COLORS SHALL MATCH ADJACENT WALL COLORS AS SELECTED BY THE CONTRACTING OFFICER.
- HARDWARE SHALL BE HEAVY DUTY, COMMERCIAL GRADE, STAINLESS STEEL WITH A MATTE FINISH.
- FRAMES, EXCEPT FIRE-RATED FRAMES, SHALL BE MOUNTED AND ADJUSTED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FRAMES SHALL BE FASTENED WITH MINIMUM OF THREE FASTENING POINTS PER SIDE AT REGULAR INTERVALS.
- DIMENSIONS SHOWN ON DOOR SCHEDULE ARE BASED UPON MODULAR MASONRY (OR ROUGH OPENING), HEIGHT OF 2200mm FOR STANDARD PERSONNEL DOORS. CONTRACTOR SHALL COORDINATE WITH DOOR SUPPLIER TO ENSURE THAT DIMENSIONS OF DOORS AND FRAMES PROVIDED ARE COMPATIBLE WITH DOOR OPENING DIMENSIONS.

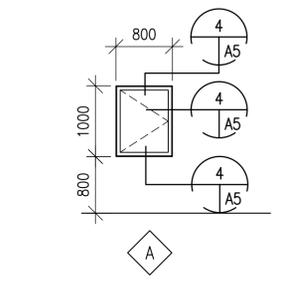


**DOOR HARDWARE TYPES:**

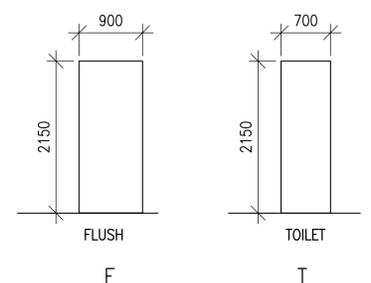
- HW-1 1-1/2 PR HINGES  
1 EA EXIT DEVICE, SURFACE MOUNTED F08  
1 EA CYLINDER, GRADE 1  
1 EA DOOR CLOSER, C02061, LOW RESISTANCE  
1 EA THRESHOLD J32130
- HW-5 1-1/2 PR HINGES, A8112  
1 EA LOCKSET W/LEVERS, GRADE 1  
1 EA DOOR STOP, L02101 OR L02161  
2 EA MOP PLATE, J103
- HW-6 1-1/2 PR HINGES  
1 EA LOCKSET, F93 ENTRY LOCK W/LEVERS, GRADE 1  
1 EA DOOR CLOSER, C02061, LOW RESISTANCE  
1 EA THRESHOLD J32130

A | B | C | D | E | F | G | H

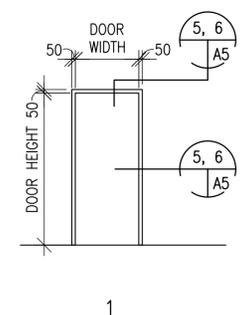
6  
5  
4  
3  
2  
1



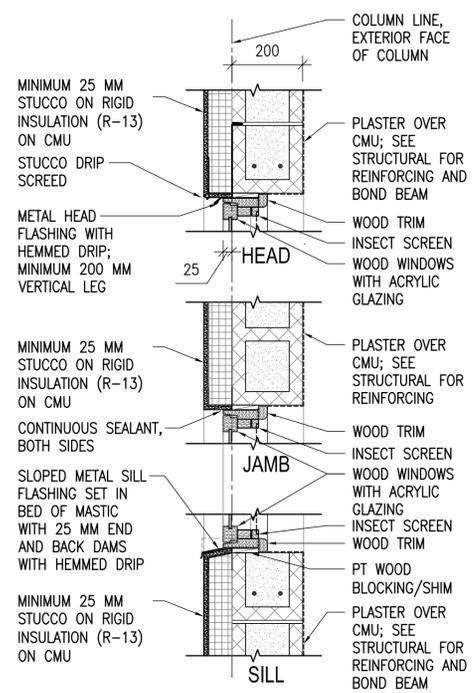
**1 WINDOW TYPES**  
SCALE: 1:50



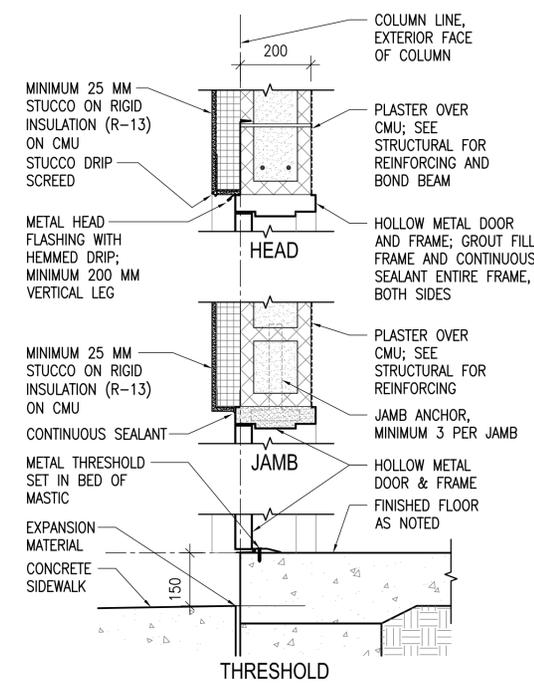
**2 DOOR TYPES**  
SCALE: 1:50



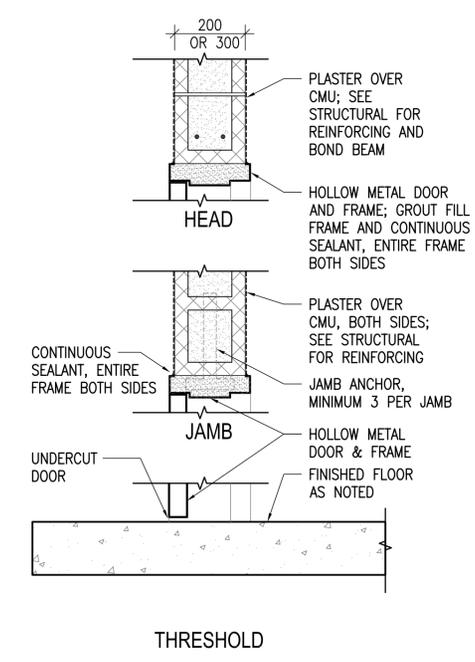
**3 FRAME TYPES**  
SCALE: 1:50



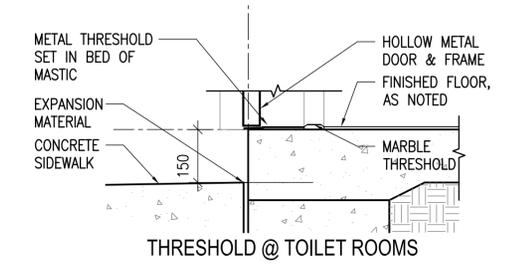
**4 WINDOW DETAILS**  
SCALE: 1:10



**5 EXTERIOR DOOR DETAILS**  
SCALE: 1:10

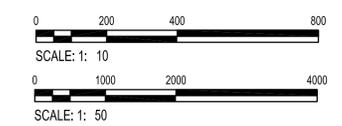


**6 INTERIOR DOOR DETAILS**  
SCALE: 1:10



**7 EXTERIOR THRESHOLD DETAILS**  
SCALE: 1:10

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM)

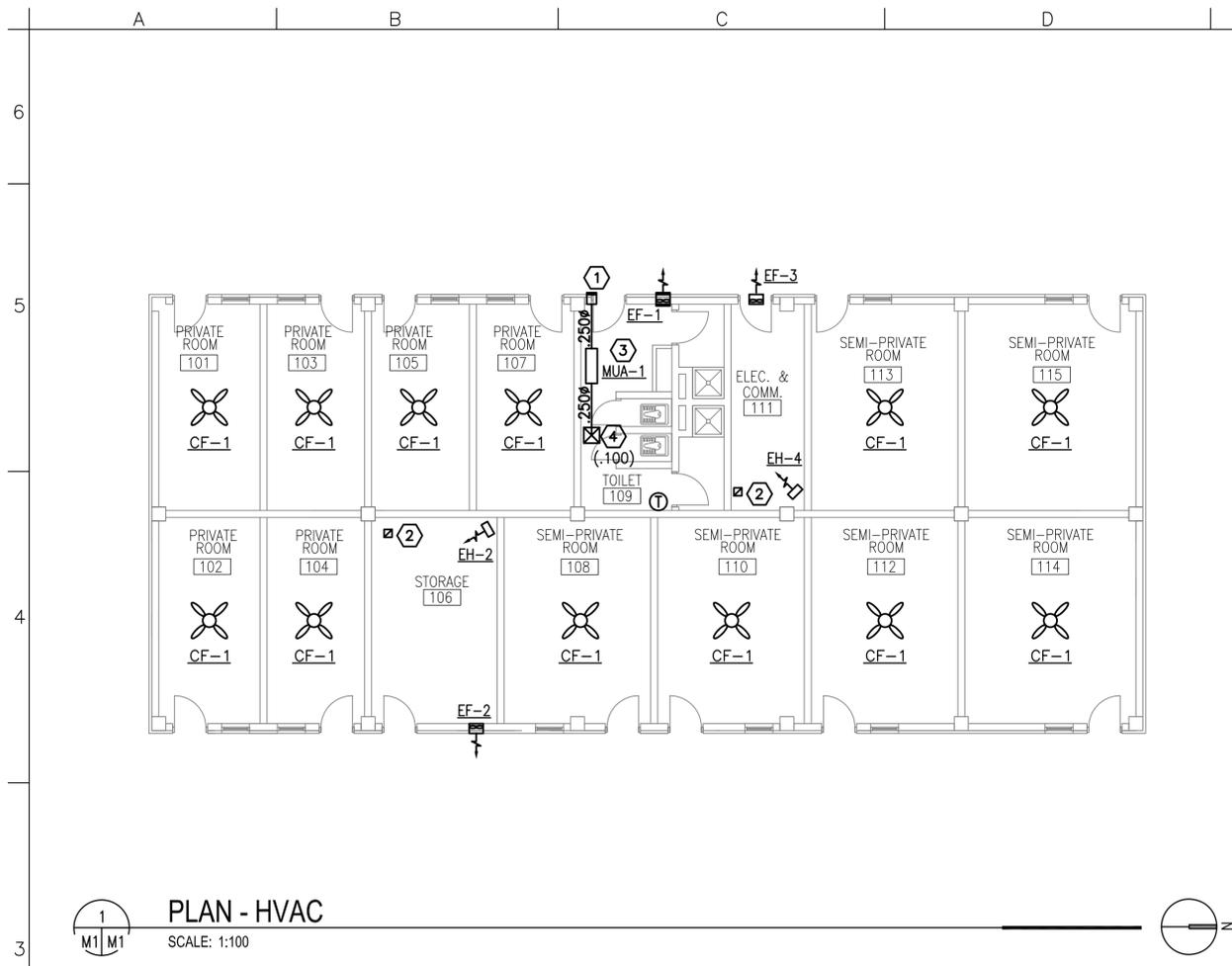












**EXHAUST FAN SCHEDULE**

NO.	TYPE	FAN CMS	DRIVE	HP	SP mmH2O	ELECT. CHAR.	SWITCH
EF-1	WALL	0.100	DIRECT	FRACT	13	220/1/50	⊗ WALL
EF-2	WALL	0.050	DIRECT	FRACT	13	220/1/50	⊗ WALL
EF-3	WALL	0.050	DIRECT	FRACT	13	220/1/50	⊗ WALL

NOTES:  
1. WALL MOUNTED EXHAUST FAN MOUNT AT 600mm BELOW CEILING.

**ELECTRIC UNIT HEATER SCHEDULE**

NO.	CMS	KW	F.A.T. °C	ELECT. CHAR.	MOUNTING
EH-2	.200	2.6	38	370/1/50	WALL HUNG
EH-4	.200	4	38	370/1/50	WALL HUNG

NOTES:  
1. UNIT HEATERS SHALL BE MOUNTED AS HIGH AS POSSIBLE.  
2. UNIT HEATERS SHALL HAVE TAMPER PROOF INTEGRAL STATS.

**MAKE UP AIR HEATERS**

NO.	BLOWER CMS	FUSE	KW	MIN. TEMP RISE °C	SP mmH2O	ELECT. CHAR.	CONTROL
MUA-1	0.100	30	5	20	13	220/1/50	REMOTE

NOTES:  
1. PROVIDE REMOTE MOUNTED THERMOSTAT WITH LOCKING COVER.  
2. INTERLOCK BLOWER OPERATION WITH EXHAUST FANS.  
3. BLOWER SHALL BE SET TO ENERGIZE WITH EXHAUST FAN(S), HEAT SHALL BE CONTROLLED BY THERMOSTAT. PROVIDE AIR SENSING SWITCH FOR HEATING OPERATION.

**CEILING FAN**

NO.	BLADE SIZE		VOLTAGE	SWITCH
	mm	IN		
CF-1	1320	52	220/1/50	⊗ WALL

NOTES:  
1. FINAL ELECTRICAL CONNECTIONS BY EC.

**GENERAL NOTES:**

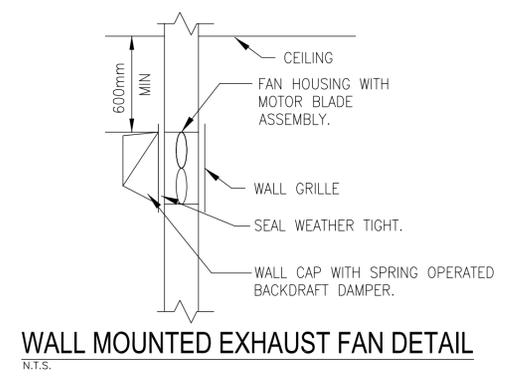
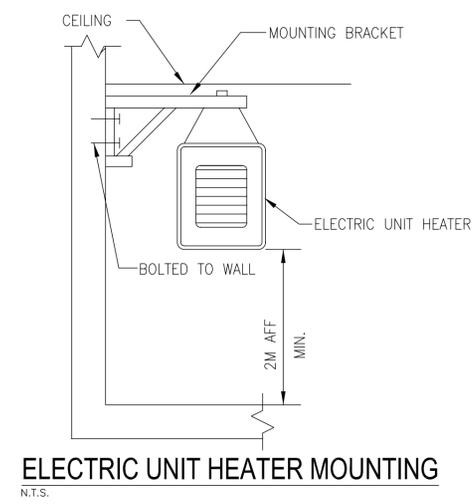
- DO NOT SCALE DRAWINGS – ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.
- ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES AND REGULATIONS OF THE GOVERNING AUTHORITIES.
- ALL WORK PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST SAFETY AND HEALTH STANDARDS.

**SYMBOLS:**

- (X) KEY NOTE
- (.050) AIR VOLUME IN CUBIC METERS PER SECOND (CMS)
- FD FIRE DAMPER

**NUMBERED NOTE:**

- 200X200 (8X8) LOW LEAKAGE GRAVITY WALL LOUVER FOR SUPPLY AIR. PROVIDE WEATHERPROOF LOUVER W/ 2" WASH DOWN FILTER AND SAND TRAP.
- 150X150 (6X6) TRANSFER GRILLE UP INTO ATTIC SPACE WITH FIRE DAMPER AT CEILING.
- ELECTRIC MAKE UP AIR HEATER SECURED TO STRUCTURE ABOVE. ALL FINAL ELECTRICAL CONNECTIONS SHALL BE BY THE EC.
- 150x150 (6x6) SUPPLY DIFFUSER CEILING WITH THREE WAY BLOW, BALANCE TO CMS IN PARENTHESIS.



US Army Corps of Engineers  
Afghanistan Engineer District

NO.	DATE	DESCRIPTION	SYMBOL

DESIGNED BY: DATE: 09-30-09  
RML  
SUBMITTED BY: BAKER  
DWN BY: JUN  
CHK BY: CUM III  
FILE NO: ANP5DM-101XXX

Michael Baker, Jr. Inc.  
A Unit of Michael Baker Corporation  
1000 Independence Blvd.  
Moon Township, PA 15108  
www.mbakercorp.com

AFGHAN NATIONAL POLICE  
STANDARD DESIGN  
BARRACK BUILDING (384 GSM)  
WOOD FIRED HEAT OPTION  
PLAN - HVAC

SHEET REFERENCE NUMBER:  
**M1**

100% SUBMISSION











