

	A	B	C	D	E	F	G	H
	STRUCTURAL ABBREVIATIONS:	GENERAL NOTES						
6	ACI AMERICAN CONCRETE INSTITUTE AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION ALT ALTERNATE ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS AWS AMERICAN WELDING SOCIETY ARCH ARCHITECTURAL B BOTTOM BLDG BUILDING BOTT BOTTOM CL CENTER LINE CFMF COLD FORM METAL FRAME CFS COLD FORMED STEEL CIP CAST IN PLACE CIPL CAST-IN-PLACE LINTEL CJ CONTROL JOINT CLG CEILING CLR CLEAR CMU CONCRETE MASONRY UNIT COEFF COEFFICIENT COL COLUMN CONC CONCRETE CONT CONTINUOUS COORD COORDINATE CSJ CONSTRUCTION JOINT CTJ CONTROL JOINT DIA DIAMETER DIAG DIAGONAL DIM DIMENSION DWG DRAWING DWL DOWEL EA EACH ELEC ELECTRICAL ELEV ELEVATION EMBED EMBEDMENT EQUIV EQUIVALENT ETC ET CETERA E.W. EACH WAY EXT EXTERIOR FTG FOOTING GA GAUGE HORIZ HORIZONTAL HRS HOURS IBC INTERNATIONAL BUILDING CODE INT INTERIOR Kg KILOGRAM KIP KIPS (1 KIP = 1,000 POUNDS) KN KILONEWTON kPa KILOPASCAL L# ANGLE (# INDICATES SIZE) LLV LONG LEG VERTICAL M METER MAX MAXIMUM MBM METAL BUILDING MANUFACTURER MBMA METAL BUILDING MANUFACTURERS ASSOCIATION MECH MECHANICAL MFG MANUFACTURER MID MIDDLE MIN MINIMUM MISC MISCELLANEOUS MM MILLIMETER MPa MEGAPASCAL MTL METAL MWFRS MAIN WIND FORCE RESISTING SYSTEM N NEWTON N NORTH N/A NOT APPLICABLE # NUMBER SYMBOL FOR REBAR SIZE NTS NOT TO SCALE O.C. ON CENTER OPNG OPENING P or PL PLATE PRE-ENG PRE-ENGINEERED REINF REINFORCED REQ'D REQUIRED SIM SIMILAR SPECS SPECIFICATIONS STD STANDARD STRUCT STRUCTURAL SW SHEAR WALL T TOP T/ TOP OF T/ELEV TOP ELEVATION T&B TOP AND BOTTOM THK THICK TM TRADE MARK TYP TYPICAL UFC UNIFIED FACILITIES CRITERIA UON UNLESS OTHERWISE NOTED VERT VERTICAL W WIDTH W/ WITH	1.0 THIS PROJECT HAS BEEN DESIGNED FOR THE WEIGHTS AND MATERIALS INDICATED ON THE SHEETS AND FOR THE LIVE LOADS INDICATED IN THE DESIGN CRITERIA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING AND SHORING, ETC. 1.1 COORDINATE THESE SHEETS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL SHEETS. ALL DIMENSIONS SHOWN ON THE SHEETS ARE MILLIMETERS UNLESS NOTED OTHERWISE. 1.2 THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL FLOOR AND ROOF OPENING SIZES AND LOCATIONS, EQUIPMENT PAD SIZES AND LOCATIONS, ANCHOR BOLT LAYOUTS, ETC WITH EQUIPMENT SELECTED. THE CONTRACTOR SHALL MAKE ANY REQUIRED MODIFICATIONS AT NO ADDITIONAL COST. 1.3 THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING SHEETS FOR SLEEVES, CURBS, INSERTS OR OPENINGS, ETC. NOT HEREIN INDICATED. 1.4 SLAB OPENINGS SMALLER THAN 250mm DIA TO BE CORE DRILLED IN FIELD UON. SEE MECHANICAL, ELECTRICAL AND PLUMBING SHEETS FOR LOCATIONS OF THESE OPENINGS. 1.5 WORK NOT INCLUDED ON THE SHEETS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES ELSEWHERE ON THE SHEETS SHALL BE REPEATED. 1.6 IN CASE OF CONFLICT BETWEEN THE NOTES, DETAILS AND SPECIFICATIONS THE MOST RIGID REQUIREMENTS SHALL GOVERN. 1.7 SEE ARCHITECTURAL SHEETS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. PROVIDE COMPRESSIBLE FIRESAFING AT TOP OF WALL AS REQUIRED BY ARCHITECTURAL SHEETS. 1.8 COORDINATE FINISHED FLOOR DATUM ELEVATION 0.0m WITH THE CIVIL SHEETS. 1.9 DESIGN PRE-ENGINEERED METAL BUILDINGS IN ACCORDANCE W/ MBMA LATEST EDITION PER DESIGN CRITERIA ON SHEET S2. 2.0 FOUNDATION NOTES 2.1 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 ON SHEET S2 SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER FOR CONSIDERATION AND DETERMINATION ON THE NEXT APPROPRIATE COURSE OF ACTION. 2.2 SEE THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS TO THOSE OUTLINED IN THE GEOTECHNICAL INVESTIGATION FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND THE SLAB ON GRADE SUBGRADE INCLUDING COMPACTION PROCEDURES. 2.3 EXCAVATIONS FOR FOOTINGS SHALL HAVE THE SIDES AND BOTTOMS TEMPORARILY LINED WITH 0.25mm POLYETHYLENE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HRS OF THE EXCAVATION OF THE FOOTING. 2.4 FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION WHICH DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE GENERAL CONTRACTOR BEFORE FURTHER CONSTRUCTION IS ATTEMPTED. SEE PROJECT SPECIFICATIONS. 2.5 NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, ICE OR LOOSE MATERIAL. FROST DEPTH ASSUMED TO BE 800MM 2.6 ALL SLAB-ON-GRADE, TRENCH BOTTOMS AND OTHER ON-GRADE INTERIOR HORIZONTAL SURFACES SHALL BE PLACED OVER A 0.25mm VAPOR RETARDER OVER A 100mm #57 STONE WATER BARRIER PLACED ON SUBGRADE PROPERLY PREPARED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. (UON) 2.7 SEE PLUMBING, ELECTRICAL & CIVIL SHEETS FOR REQUIRED UNDERSLAB UTILITIES. 2.8 SEE ARCHITECTURAL SHEETS FOR ALL WATERPROOFING DETAILS AND MATERIALS. 2.9 IF UNDERMINING OF FOOTINGS OCCURS, FILL VOIDS WITH 15MPa CONCRETE. DO NOT ATTEMPT TO REPLACE AND RECOMPACT SOIL. 3.0 CONCRETE 3.1 CONCRETE SHALL HAVE THE UNIT WEIGHT AND THE MINIMUM COMPRESSIVE STRENGTHS (f'c) AT 28 DAYS AS SHOWN IN THE CONCRETE MATERIALS SCHEDULE ON SHEET S3. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ENTRAIN AIR TO PRODUCE TOTAL AIR CONTENT ACCORDING TO THE SPECIFICATIONS FOR CONCRETE EXPOSED TO FREEZING TEMPERATURES (EXTERIOR FOOTINGS, SLAB TURNDOWNS, EXTERIOR SLABS AND SLABS-ON-GRADE, EXTERIOR RETAINING WALLS, AND EXTERIOR GRADE BEAMS.) 3.2 GROUT FOR BASE PLATES SHALL BE NON-SHRINKABLE GROUT AND SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 35MPa, UNLESS NOTED OTHERWISE. 3.3 NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE. 3.4 MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301M-05	3.5 ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318M MANUAL (metric), "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND REQUIREMENTS OUTLINED IN THE CONTRACT SPECIFICATIONS. WHEN THERE IS A CONFLICT BETWEEN ACI AND THE SPECIFICATIONS, THE MORE STRINGENT SHALL GOVERN. 3.6 CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 20mm x45 DEGREE CHAMFER UON. 3.7 CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615M-96a, GRADE 420. REINFORCING BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT, UNLESS INDICATED ON THE CONTRACT DOCUMENTS. ALL LAP SPLICES SHALL BE CLASS "B" UON. 3.8 HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED WITH A CLASS B TENSION SPLICE AT CORNERS AND INTERSECTIONS. TOP BAR CRITERIA SHALL APPLY IF 300mm OR MORE OF FRESH CONCRETE IS PLACED BELOW BAR. 3.9 SLABS-ON-GRADE SHALL HAVE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS AS SHOWN ON THE SHEETS. CONSTRUCTION JOINTS CAN BE USED AT CONTROL JOINT LOCATIONS AT CONTRACTORS OPTION. SEE SLAB PLANS & JOINT DETAILS FOR ADDITIONAL INFORMATION. FOR AREAS NOT SHOWN ON SHEETS, THE MAXIMUM SPACING OF CONSTRUCTION/ CRACK CONTROL JOINTS SHALL BE 4800mm 3.10 SEE SPECIFICATIONS FOR ALL WATERPROOFING/DAMP-PROOFING REQUIREMENTS. 3.11 ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED, AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318M, AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315M, LATEST EDITION. 3.12 SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. 3.13 ALL DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING, UNLESS NOTED OTHERWISE ON SHEETS. 3.14 ADDITIONAL BARS SHALL BE PROVIDED AROUND ALL FLOOR AND WALL OPENINGS AS SHOWN ON THE SHEETS. 3.15 SEE ARCHITECTURAL SHEETS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES. 3.16 THE CONTRACTOR SHALL COORDINATE ADDITIONAL WALL/SLAB OPENINGS NOT SHOWN ON STRUCTURAL SHEETS. SEE MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL SHEETS. 3.17 UNLESS NOTED OTHERWISE, ALL CURBS SHALL BE REINFORCED WITH AT LEAST (1)-#13 CONTINUOUS AND #13 AT 300mm O.C. DOWELS TO STRUCTURE BELOW. 3.18 THE SUB-CONTRACTOR SHALL VERIFY ALL OPENINGS, PAD SIZES, AND ANCHOR BOLTS WITH EQUIPMENT SELECTED. 3.19 FOR ALL WALLS & PIERS, PROVIDE DOWELS INTO FOOTING AT EACH VERT REINF BAR, UON DOWEL SIZE SHALL BE SAME AS VERT REINF. 3.20 ALL DEFORMED BAR ANCHORS SHALL BE TRS NELSON DIVISION OR EQUAL 15mm DIA (UON) CONFORMING TO ASTM A-496M WITH A MINIMUM TENSILE STRENGTH OF 550 MPa. INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS BY AUTOMATIC END WELDING AS INDICATED ON THE DRAWINGS. NO UNAUTHORIZED OR FIELD WELDING SHALL BE MADE WITHOUT AUTHORIZATION FROM THE MANUFACTURER. 3.21 ALL REINFORCING INDICATED TO BE WELDED SHALL BE IN ACCORDANCE WITH ASTM A706M. "LOW ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT". ANY INSTALLATIONS USING MANUFACTURER'S EQUIPMENT SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. 3.22 PROVIDE CONCRETE POUR STOPS OR FORMS AS REQUIRED FOR INSTALLATION OF ALL CONCRETE WORK. 3.23 PROVIDE ADDITIONAL (2)-#13 x 600mm REINFORCING BARS IN SLAB-ON-GRADE AT ALL RE-ENTRANT CORNERS. PLACE BARS AT MID-DEPTH OF SLAB WITH A CLEARANCE OF 50mm FROM CORNER UON. 4.0 CONCRETE MASONRY 4.1 MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THESE CONTRACT DOCUMENTS AND THE PROJECT SPECIFICATIONS. 4.2 THE SPECIFIED ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'm) ON THE NET AREA IS A MINIMUM OF 10.4 MPa. 4.3 PROVIDE TWO #16 BARS CONTINUOUS IN ALL CMU AND CAST-IN-PLACE BOND BEAMS UON ON THE SHEETS. INTERMEDIATE BOND BEAMS SHALL BE CONTINUOUS AND SPACED AT A MAXIMUM OF 1200mm OC VERTICALLY. ALL BOND BEAMS SHALL BE A MINIMUM OF 200mm IN DEPTH WITH REINFORCING BEING CONTINUOUS AND HAVING STANDARD ACI HOOKS AT EACH END. PROVIDE STANDARD BAR SPLICES AS SPECIFIED.	4.4 FOR WALL REINFORCING, SEE MIN CMU WALL REINFORCING DETAIL ON SHEET S12. 4.5 CMU CELLS THAT REQUIRE VERTICAL REINFORCING BARS AS INDICATED ON THE CONTRACT DRAWINGS AND/OR SPECS SHALL HAVE REINF BAR PLACED IN CENTERS OF CMU CELLS AND CONTINUOUSLY GROUTED UON. 4.6 PROVIDE LADDER TYPE JOINT REINFORCEMENT AT 200mm FOR EXTERIOR & 400mm FOR INTERIOR ON CENTER MAXIMUM, UON MINIMUM ROD SIZE USED SHALL BE 9 GA. DEFORMED WIRE AND CONFORM TO ASTM A82M, UON. 4.7 PROVIDE CONTROL JOINTS AS INDICATED ON THE ARCHITECTURAL SHEETS. 4.8 GROUT FOR MASONRY SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa AT 28 DAYS. GROUT SHALL CONFORM TO ASTM C476M. GROUT LIFTS SHALL NOT EXCEED 1400mm. 4.9 USE MORTAR TYPE S CONFORMING TO ASTM C270M, SEE SPECIFICATIONS. 4.10 CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT AND CONFORM TO ASTM C90M. 4.11 ALL CMU CELLS, OPEN CAVITIES, AND AIR SPACES SHALL BE GROUTED. TO STOP FRAGMENTS FROM MORTAR BLAST 4.12 BOND BEAM REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS (UON). MAXIMUM CONTROL JOINT SPACING SHALL BE AS INDICATED ON THE ARCHITECTURAL SHEETS. 4.13 CONTRACTOR SHALL COORDINATE LOCATION OF ALL OPENINGS SEE ARCH, MECH, ELEC, AND PLUMBING SHEETS. FOR SIZE AND LOCATION OF OPENINGS. 4.14 MASONRY WALLS SHALL NOT BE BACK FILLED PRIOR TO THE MORTAR AND GROUT ATTAINING THEIR RESPECTIVE MAXIMUM DESIGN STRENGTHS PER SPECIFICATIONS. 5.0 STEEL DECK 5.1 STEEL DECK SHALL BE ASTM A611M, GRADES C & D OR A653M STRUCTURAL QUALITY HAVING A MINIMUM YIELD STRENGTH OF 345 MPa FOR FLOOR DECK AND 228 MPa FOR ROOF DECK AS PER THE STEEL DECK INSTITUTE (SDI) DESIGN MANUAL. 5.2 STEEL DECK SHALL BE ERECTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND ERECTION LAYOUTS AND CONNECTED TO SUPPORTING MEMBERS AS INDICATED. 5.3 COMPOSITE FLOOR DECK 5.3.1 STEEL FLOOR DECK SHALL BE 51mm RIB HEIGHT, 18 GA HOT-DIP GALVANIZED (SDI TYPE ZVL-18) UON. 5.3.2 FLOOR DECK SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: MOMENT OF INERTIA, Ip 760mm ⁴ /mm WIDTH SECTION MODULUS (TOP OF DECK), Sn 27.5mm ³ /mm WIDTH SECTION MODULUS (BOTT OF DECK) Sp 27.8mm ³ /mm WIDTH 5.3.3 FLOOR DECK SHALL BE FASTENED TO THE SUPPORTS AS INDICATED IN THE BOTTOM OF THE FLUTES USING A SDI 36/7 PATTERN. DECK SIDELAPS SHALL BE ATTACHED USING #10 SELF-TAPPING TEK SCREWS WITH A MINIMUM 3-SIDE LAP CONNECTIONS PER SPAN. 5.3.4 SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, CONDUITS, PIPING OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL FLOOR DECK. 5.3.5 IN ADDITION TO MEETING THE MINIMUM REQUIREMENTS ABOVE, THE DECK MANUFACTURER SHALL DESIGN THE FLOOR DECK AND ATTACHMENTS TO STEEL FOR A MAXIMUM DEFLECTION DUE TO WET CONCRETE & 1 KPa CONSTANT LOAD OF L/240. FLOOR DECK SHALL NOT REQUIRE SHORING DURING CONCRETE PLACEMENT. 5.4 ROOF DECK 5.4.1 STEEL ROOF DECK SHALL BE 38mm RIB HEIGHT, 18 GA HOT-DIP GALVANIZED (SDI TYPE B-18) UON. 5.4.2 ROOF DECK SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: MOMENT OF INERTIA, Ip 399mm ⁴ /mm WIDTH SECTION MODULUS (TOP OF DECK), Sn 17.58mm ³ /mm WIDTH SECTION MODULUS (BOTT OF DECK) Sp 17.10mm ³ /mm WIDTH 5.4.3 ROOF DECK SHALL BE FASTENED TO THE SUPPORTS AS INDICATED IN THE BOTTOM OF THE FLUTES USING A SDI 36/7 PATTERN. DECK SIDELAPS SHALL BE ATTACHED USING #10 SELF-TAPPING TEK SCREWS WITH A MINIMUM 3-SIDE LAP CONNECTIONS PER SPAN. 5.4.4 SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, CONDUITS, PIPING OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK. 5.4.5 IN ADDITION TO MEETING THE MINIMUM REQUIREMENTS ABOVE, THE DECK MANUFACTURER SHALL DESIGN THE ROOF DECK AND ATTACHMENTS TO STEEL FOR A MAXIMUM DEFLECTION DUE TO WET CONCRETE & 1 KPa CONSTANT LOAD OF L/240. ROOF DECK SHALL NOT REQUIRE SHORING DURING CONCRETE PLACEMENT.	6.0 STRUCTURAL STEEL 6.1 STRUCTURAL STEEL ROLLED SHAPES AND PLATES SHALL CONFORM TO THE MATERIAL INFORMATION SCHEDULE. DIMENSIONS AND PROPERTIES SHALL BE IN ACCORDANCE TO ASTM A36M. 6.2 ANCHOR BOLTS SHALL CONFORM TO ASTM A36M, HEAVY HEX. 6.3 CONNECTION BOLTS FOR STRUCTURAL STEEL MEMBERS SHALL BE 20 DIA ASTM A325M-N, UON; NUTS SHALL CONFORM TO ASTM A563M; WASHERS SHALL CONFORM TO ASTM F436M. CONNECTION BOLTS SHALL HAVE A HARDENED WASHER PLACED UNDER THE ELEMENT TO BE TIGHTENED. 6.4 DETAILING OF STRUCTURAL STEEL CONNECTIONS MUST BE CONSISTENT WITH RECOGNIZED, PUBLISHED METHODS SUCH AS IN THE AISC "STEEL CONSTRUCTION MANUAL", THIRTEENTH EDITION; "ENGINEERING FOR STEEL CONSTRUCTION", OR "VOLUME II CONNECTIONS MANUAL OF STEEL CONSTRUCTION". 6.4.1 THE CODE OF STANDARD PRACTICE OF AISC THIRTEENTH EDITION IS AMENDED SUCH THAT THE FABRICATOR/DETAILER IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL CONNECTIONS. 6.5 STANDARD FRAMING CONNECTIONS SHALL BE DETAILED BY THE FABRICATOR IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL", THIRTEENTH EDITION. CONNECTIONS SHALL BE DESIGNED TO DEVELOP A MINIMUM END REACTION OF 54kN. 6.5.1 UNLESS NOTED OTHERWISE AS THUS: (##kN), CONNECTIONS SHALL BE DESIGNED AND DETAILED FOR THE END REACTION DETERMINED FROM PART 2 - "ALLOWABLE UNIFORM LOAD TABLES" FROM THE AISC STEEL CONSTRUCTION MANUAL THIRTEENTH EDITION OR A MINIMUM OF 54 kN WHICH EVER IS GREATER. 6.6 ALL MEMBERS AND CONNECTIONS ON THE CONTRACT DRAWINGS AND CONNECTIONS NOT SHOWN SHALL BE DESIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER, DETAILED AND SUBMITTED FOR APPROVAL AND SHOWN ON THE SHOP DRAWINGS. 6.7 ALTERNATIVE CONNECTION DETAILS MAY BE SUBMITTED ON SHOP DRAWINGS BY THE CONTRACTOR ONLY IF ACCOMPANIED BY COMPLETE STRUCTURAL CALCULATIONS PREPARED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED FOR REVIEW. 6.8 CALCULATIONS FOR DETAILS MUST SHOW A RATIONAL ANALYSIS OF A COMPLETE LOAD PATH, INCLUDING LOCAL EFFECTS ON WEBS, FLANGES, ETC OF THE CONNECTED MEMBERS AND THE DEVICES (PLATES, SEATS, BRACKETS, BOLTS, WEBS, ETC) AFFECTING ALL CONNECTIONS. FAILURE TO SUBMIT SUCH CALCULATIONS FOR REVIEW CONCURRENT WITH SHOP DRAWING ERECTION PLANS AND DETAILS WILL BE CAUSE FOR REJECTION OF THAT SUBMITTAL. 6.8.1 ALL SHEAR TAB CONNECTIONS SUBMITTED AS AN ALTERNATE FOR APPROVAL SHALL BE DESIGNED USING A FLEXIBLE SUPPORT CONDITION. 6.8.2 BEAM AND GIRDER CONNECTIONS SHALL BE DESIGNED SUCH THAT ALL ADDITIONAL STRESSES DUE TO CONNECTION ECCENTRICITY SHALL BE DEVELOPED BY THE CONNECTION AND NOT INDUCE ANY ADDITIONAL STRESSES INTO SUPPORTING MEMBERS. 6.9 STRUCTURAL STEEL DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" - LATEST EDITIONS. 6.10 WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE AWS D1.1. ELECTRODES FOR SHOP AND FIELD WELDS SHALL BE CLASS E70XX. ALL WELDING SHALL BE DONE BY QUALIFIED, CERTIFIED WELDERS PER THE ABOVE STANDARD. 6.11 SHOP AND FIELD TESTING OF WELDS AND BOLTS SHALL BE AS OUTLINED IN THE SPECIFICATIONS. 6.12 ALL FILLET WELDS SHALL BE A MINIMUM OF 5mm UNLESS NOTED OTHERWISE 6.13 THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR APPROVAL OF THE CONTRACTING OFFICER. 6.14 FOR FLOOR AND ROOF OPENINGS, THE FABRICATOR SHALL VERIFY OPENING LOCATIONS WITH EQUIPMENT SELECTED AND MAKE ANY NECESSARY MODIFICATIONS AT NO ADDITIONAL COST. THE CONTRACTOR SHALL COORDINATE MECHANICAL UNITS AND OPENINGS & ARCHITECTURAL ITEMS REQUIRED FOR COMPLETE INSTALLATION OF WORK. IT IS THE RESPONSIBILITY OF FABRICATOR TO RECEIVE ALL NECESSARY INFORMATION PRIOR TO FABRICATION OF THE STEEL. 6.15 ALL STRUCTURAL STEEL SHALL BE PRIMED AS PER THE SPECIFICATIONS. 6.16 ALL PLATES NOT INDICATED SHALL BE 13mm MIN THICKNESS. ALL ANGLES NOT INDICATED SHALL BE 76x76x7.9 MIN. ALL WELDS NOT INDICATED SHALL BE 6mm MIN ALL AROUND UON. 6.17 SEE MECHANICAL, ELECTRICAL, AND PLUMBING SHEETS FOR ADDITIONAL OPENINGS NOT SHOWN. ALL OPENINGS SHALL BE FRAMED 4 SIDES WITH C200x17'S UON.			



DATE	APR
DESCRIPTION	
SUBMIT	

DESIGNED BY: WJW	DATE: 09-30-09
DWN BY: RCG	SUBMITTED BY: BAKER
CHK BY: CWV	FILE NO: ANPDS-001XXX

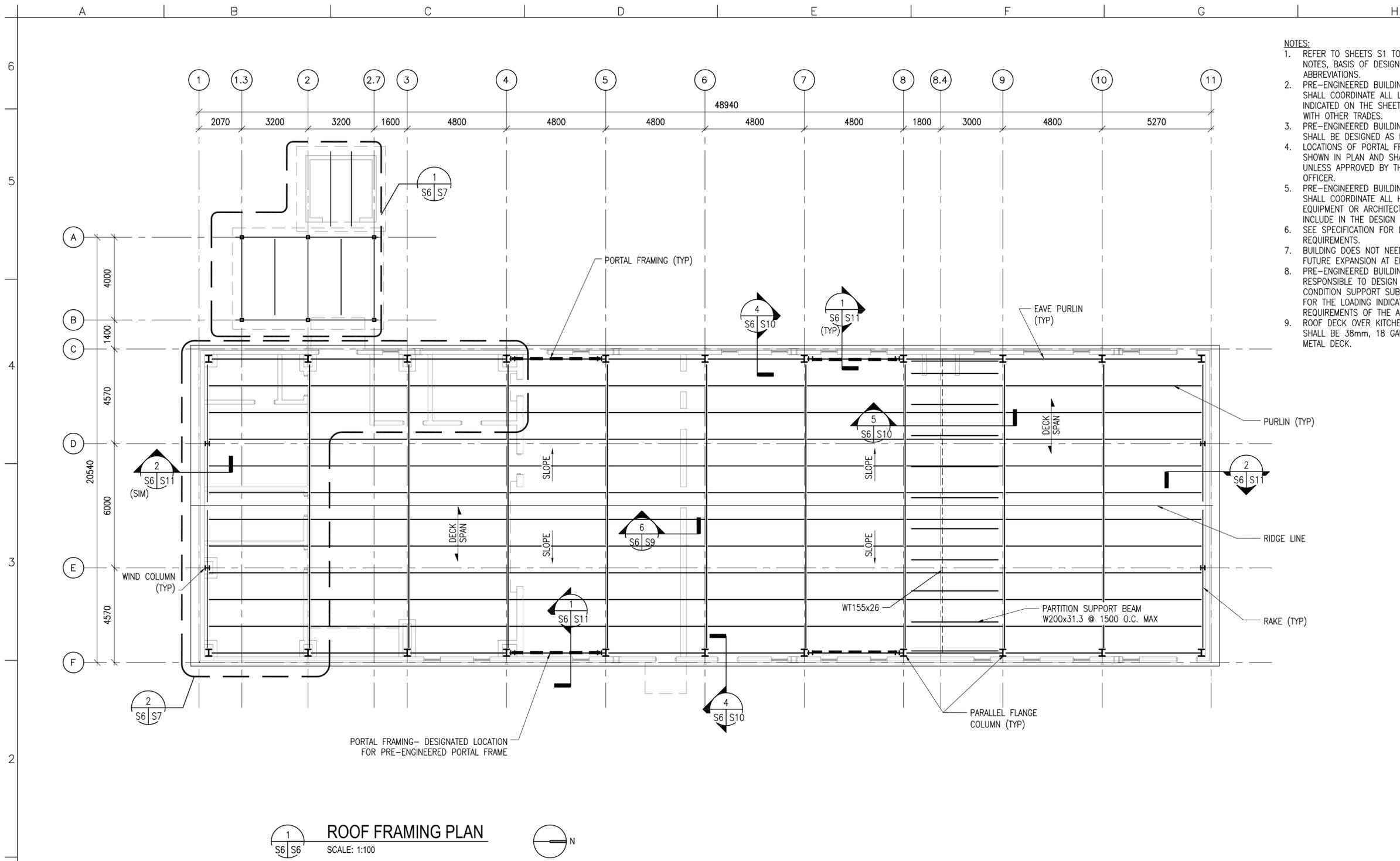
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AFGHAN NATIONAL POLICE
STANDARD DESIGN
DINING FACILITIES BUILDING (743 GSM)
ELECTRIC HEAT OPTION

GENERAL NOTES

SHEET REFERENCE NUMBER:
S1

100% SUBMISSION



ROOF FRAMING PLAN
 SCALE: 1:100

- NOTES:**
- REFER TO SHEETS S1 TO S4 FOR STRUCTURAL NOTES, BASIS OF DESIGN SYMBOLS AND ABBREVIATIONS.
 - PRE-ENGINEERED BUILDING MANUFACTURER SHALL COORDINATE ALL LOADING REQUIREMENTS INDICATED ON THE SHEETS AND SPECIFICATIONS WITH OTHER TRADES.
 - PRE-ENGINEERED BUILDING COLUMN BASES SHALL BE DESIGNED AS PINNED ONLY.
 - LOCATIONS OF PORTAL FRAMES HAVE BEEN SHOWN IN PLAN AND SHALL NOT BE MODIFIED UNLESS APPROVED BY THE CONTRACTING OFFICER.
 - PRE-ENGINEERED BUILDING MANUFACTURER SHALL COORDINATE ALL HANGING LOADING FROM EQUIPMENT OR ARCHITECTURAL ELEMENTS AND INCLUDE IN THE DESIGN OF THE FRAMING. SEE SPECIFICATION FOR LATERAL DRIFT REQUIREMENTS.
 - BUILDING DOES NOT NEED PROVISIONS FOR FUTURE EXPANSION AT END WALLS.
 - PRE-ENGINEERED BUILDING MANUFACTURER IS RESPONSIBLE TO DESIGN ALL JAMB AND HEAD CONDITION SUPPORT SUB-FRAMING AS REQUIRED FOR THE LOADING INDICATED AND THE REQUIREMENTS OF THE ATTACHED COMPONENTS.
 - ROOF DECK OVER KITCHEN ANNEX BUILDING SHALL BE 38mm, 18 GAUGE, TYPE B WIDE RIB METAL DECK.

US Army Corps of Engineers
 Afghanistan Engineer District

SYMBOL	DESCRIPTION	DATE	APP

DESIGNED BY: WJJ	DATE: 09-30-09
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CHK BY: CWV	FILE NO: ANFSDS-106XXX

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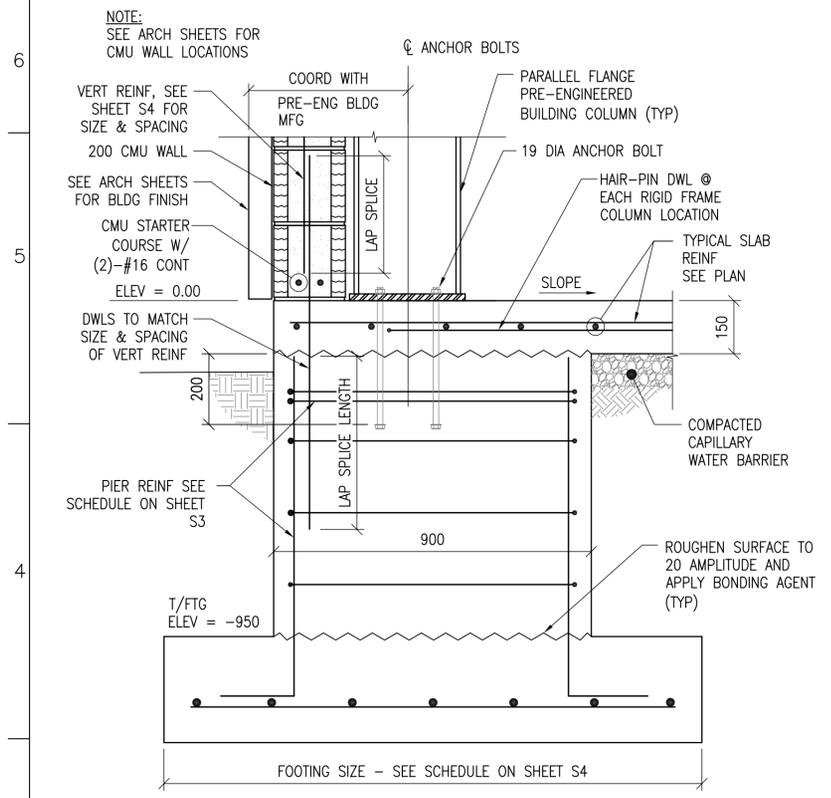
UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM)

 SCALE: 1: 100

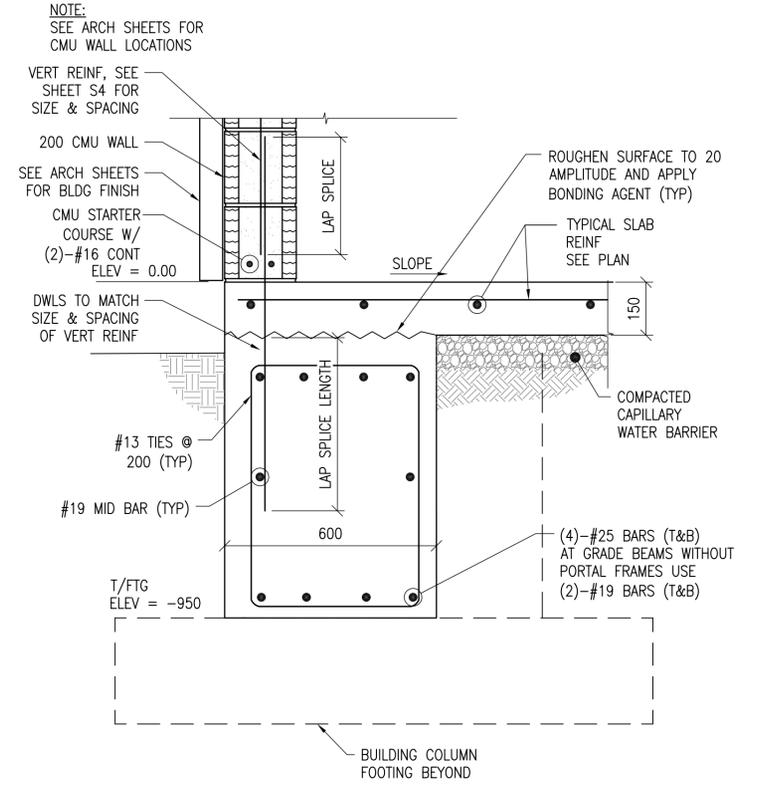
SHEET REFERENCE NUMBER:
S6

100% SUBMISSION

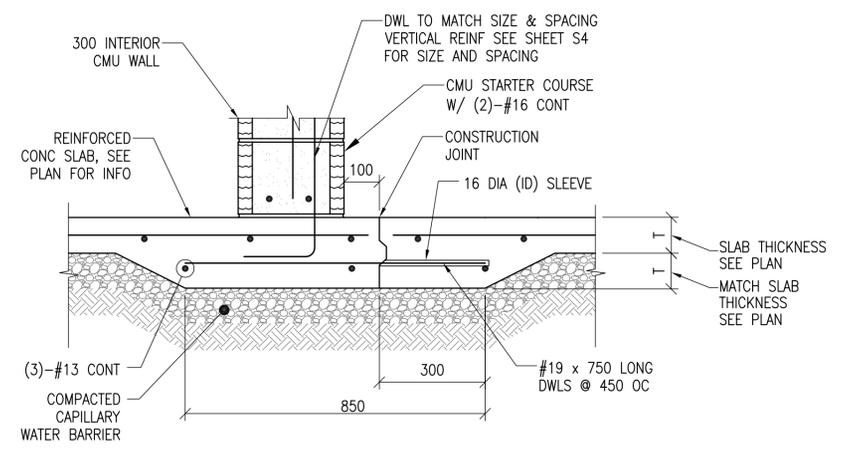
A B C D E F G H



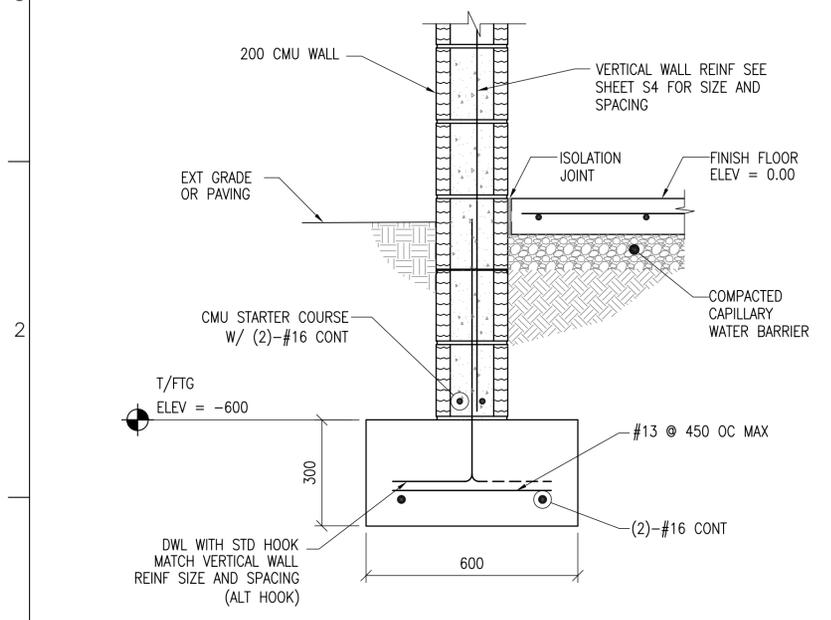
1 SECTION
S5 S8 SCALE: 1:10



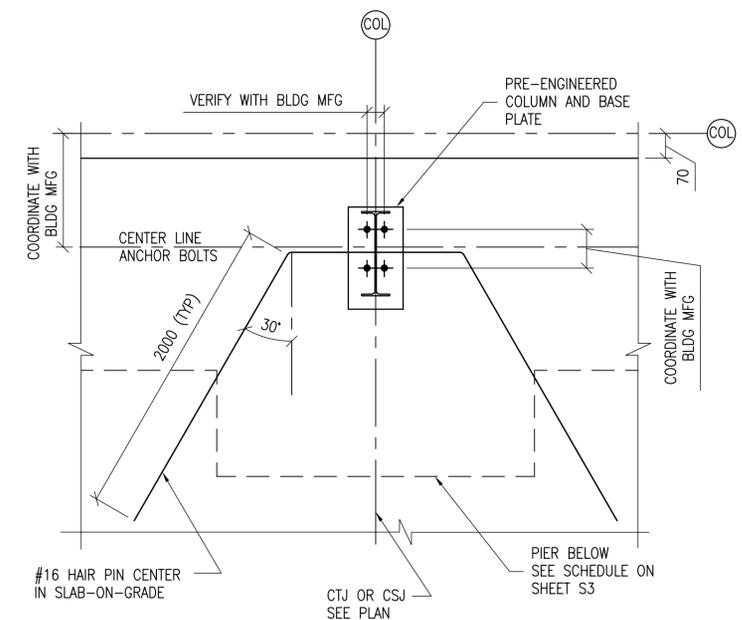
2 SECTION
S5 S8 SCALE: 1:10



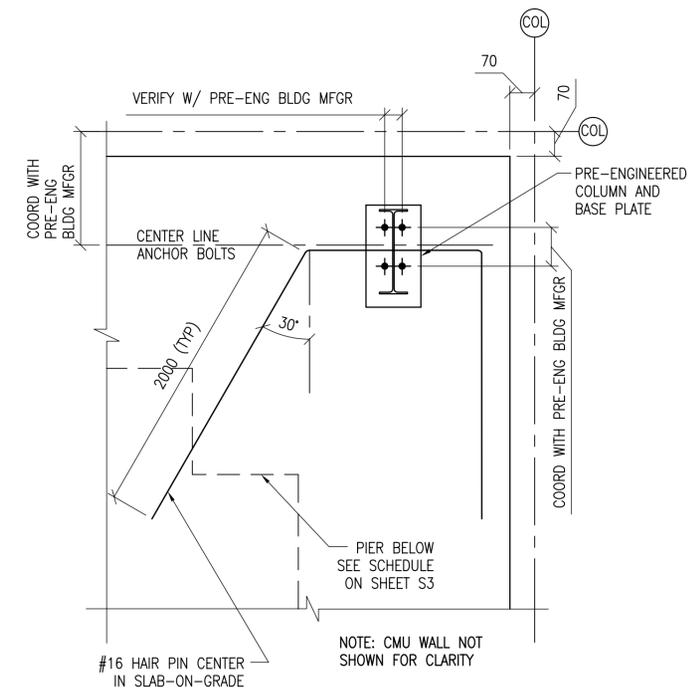
3 CONTROL JOINT DETAIL AT CMU WALL
S5 S8 SCALE: 1:10



4 SECTION
S5 S8 SCALE: 1:10



A COLUMN DETAIL
S5 S8 SCALE: 1:10



B COLUMN DETAIL
S5 S8 SCALE: 1:10

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

0 200 400 800
SCALE: 1: 10

US Army Corps of Engineers
Afghanistan Engineer District

DATE	DESCRIPTION	SYMBOL
APR		

DESIGNED BY: WJJ	DATE: 09-30-09
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ELECTRIC HEAT OPTION

SECTIONS & DETAILS

SHEET REFERENCE NUMBER:
S8

100% SUBMISSION

SYMBOL	DESCRIPTION	DATE	APP

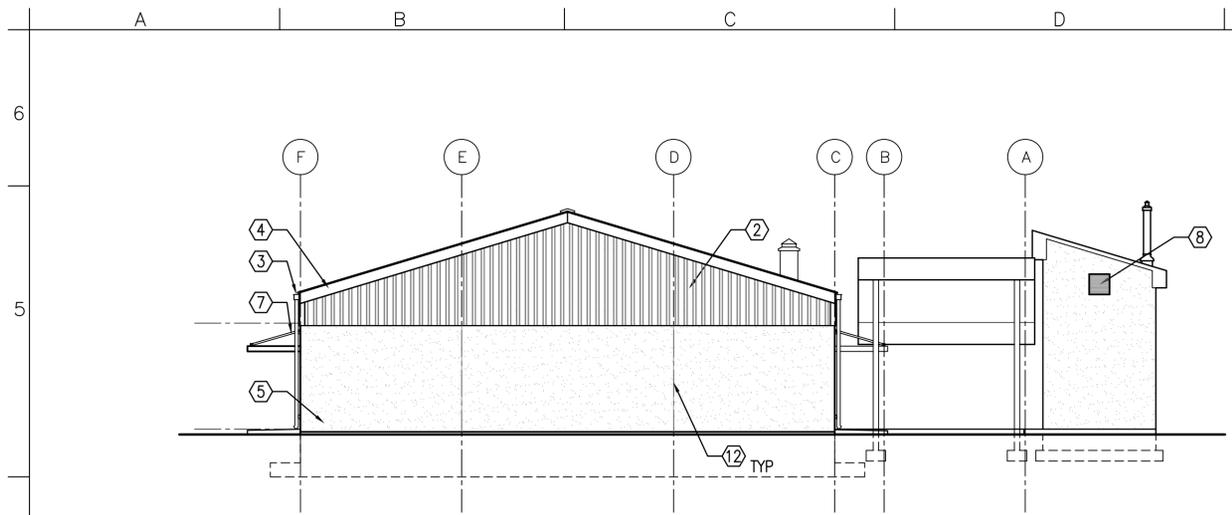
DESIGNED BY: DLB	DATE: 09-30-09
DWN BY: ECM	SUBMITTED BY: BAKER
CHK BY: NLJ	FILE NO: ANPSDA-203XXX

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1000 Business Park
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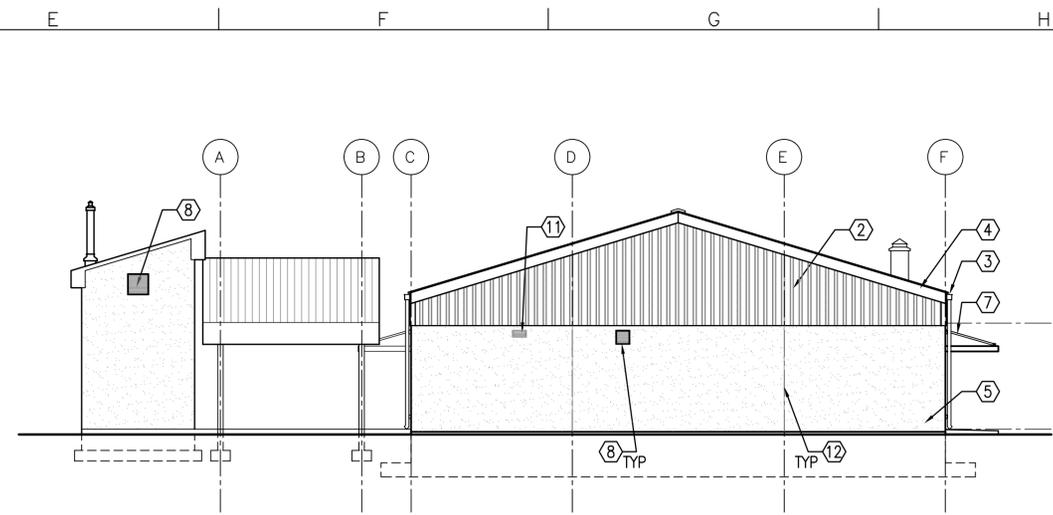
AFGHAN NATIONAL POLICE
STANDARD DESIGN
DINING FACILITIES BUILDING (743 GSM)
ELECTRIC HEAT OPTION
EXTERIOR ELEVATIONS

SHEET REFERENCE NUMBER:
A3

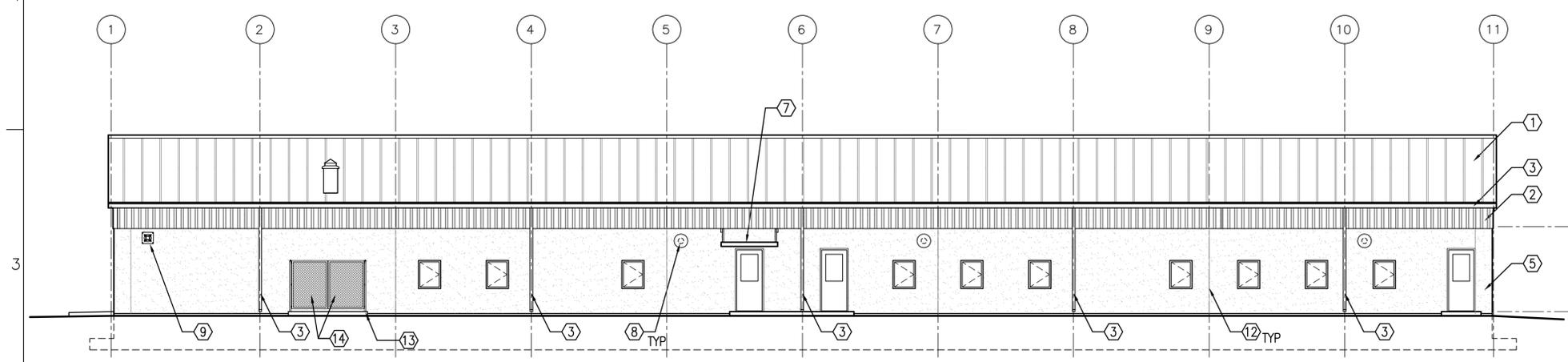
100% SUBMISSION



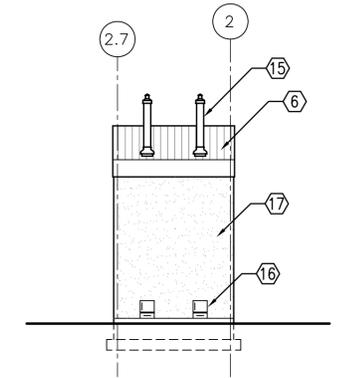
1 NORTH ELEVATION
SCALE: 1:100



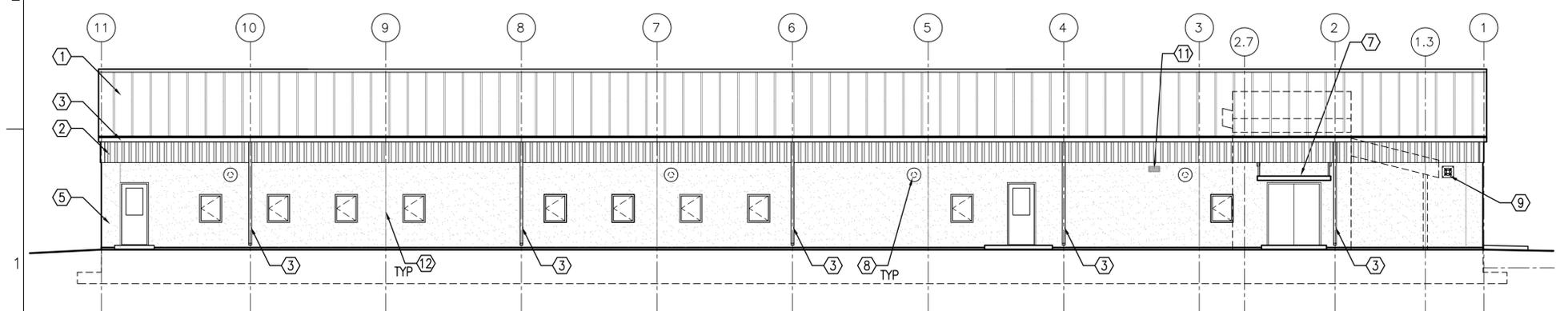
2 SOUTH ELEVATION
SCALE: 1:100



3 EAST ELEVATION
SCALE: 1:100



4 KITCHEN ANNEX ELEVATION
SCALE: 1:100



5 WEST ELEVATION
SCALE: 1:100

KEY NOTES:

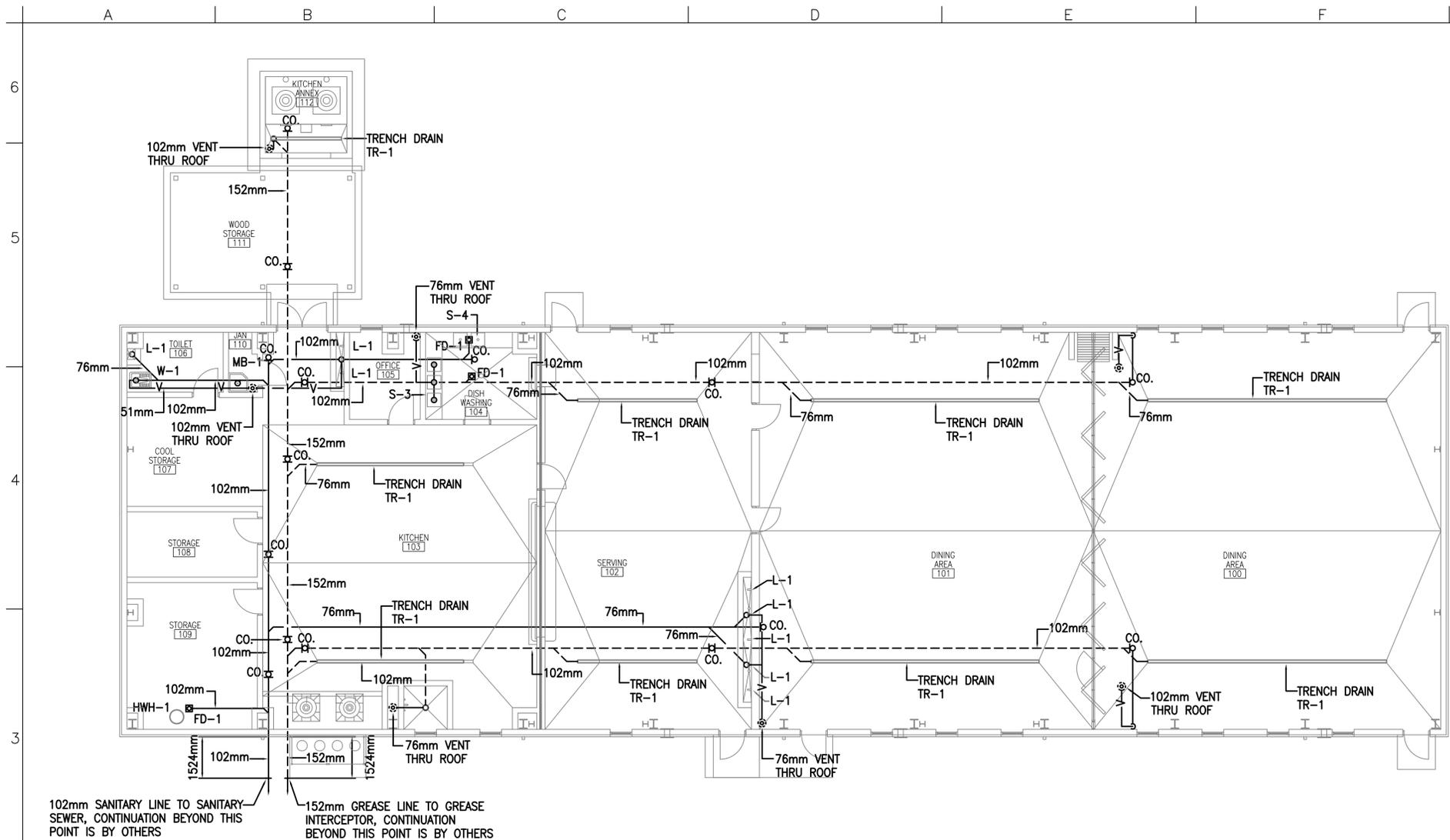
- PRE-FINISHED METAL ROOF PANELS BY METAL BUILDING MANUFACTURER.
- PRE-FINISHED METAL WALL PANELS BY METAL BUILDING MANUFACTURER.
- METAL GUTTERS AND DOWNSPOUTS BY METAL BUILDING MANUFACTURER, TYPICAL.
- RAKE TRIM BY METAL BUILDING MANUFACTURER
- STUCCO AND RIGID INSULATION ON CMU
- CORRUGATED METAL ROOF PANELS
- METAL ENTRANCE CANOPY
- TWO-PIECE WALL THIMBLE AND TRIM PLATE FOR OPTIONAL WOOD BURNING STOVE CHIMNEY PIPE. STOVE AND PIPE BY OTHERS.
- LOUVER - RE: MECHANICAL
- EXHAUST FAN - RE: MECHANICAL
- EXHAUST FAN WITH DUCT WALL CAP - RE: MECHANICAL
- CMU CONTROL JOINT, TYPICAL.
- POSTS: 50 MM DIAMETER GALVANIZED PIPE, RE: SHEET A9.
- GATES: GALVANIZED CHAINLINK FENCE ATTACHED TO 50 MM DIAMETER GALVANIZED PIPE. FINISHED HEIGHT SHALL BE 1800 MM MINIMUM.
- STAINLESS STEEL VENT PIPE
- CAST IRON DOORS
- STUCCO ON CMU

GENERAL NOTES:

- COORDINATE SIZE AND LOCATION OF OPENINGS FOR MECHANICAL ITEMS WITH MECHANICAL DRAWINGS.
- PROVIDE STRUCTURAL LINTELS AS REQUIRED - RE: STRUCT.
- PROVIDE CMU CONTROL JOINT AT EACH STEEL COLUMN -RE: DETAIL 6/A4.

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





102mm SANITARY LINE TO SANITARY SEWER, CONTINUATION BEYOND THIS POINT IS BY OTHERS
 152mm GREASE LINE TO GREASE INTERCEPTOR, CONTINUATION BEYOND THIS POINT IS BY OTHERS

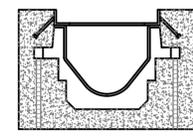
1 DFAC, KITCHEN ANNEX, AND WOOD STORAGE FLOOR PLAN - PLUMBING (SANITARY)
 SCALE: 1:100

- FLOOR PLAN 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.
 - REPORT ANY DISCREPANCIES FOUND IN THE PLUMBING DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ENGINEER.
 - ALL EASTERN STYLE WATER CLOSETS IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF W-1. EACH FIXTURE SHALL HAVE A (1) INCH (25mm) COLD WATER CONNECTION AND A (4) INCH (102mm) SANITARY CONNECTION.
 - ALL TROUGH FIXTURES IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF L-1. EACH FIXTURE SHALL HAVE A (1/2 INCH) (13mm) COLD WATER, (1/2 INCH) (13mm) HOT WATER CONNECTION AND A (3 INCH) (76mm) SANITARY CONNECTION.
 - PLUMBING CONTRACTOR TO PROVIDE WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.
 - PLUMBING CONTRACTOR TO PROVIDE TRAP PRIMERS AND 1/2" (13mm) COLD WATER LINES FOR ALL FLOOR DRAINS. COLD WATER LINES TO BE UNDER THE FLOOR FROM TRAP PRIMERS TO TRAPS ON FLOOR DRAINS.
 - REFER TO SHEET P4 FOR DETAILS AND SYMBOLS.
 - ALL WATER LINES TO BE EXPOSED. RUN LINES TIGHT TO CEILING AND WALL.

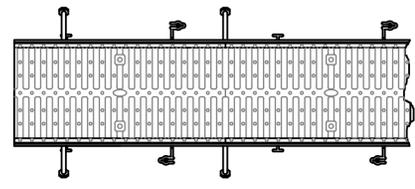
US Army Corps of Engineers
 Afghanistan Engineer District

SYMBOL	DESCRIPTION	DATE

DESIGNED BY: RMH DATE: 09-30-09
 DWN BY: RMH SUBMITTED BY: BAKER
 CHK BY: C.M. III FILE NO.: ANPSDP-101XXX
 Michael Baker, Jr. Inc.
 A Unit of Michael Baker Corporation
 1000 Business Park
 Moon Township, PA 15108
 www.mbakercorp.com



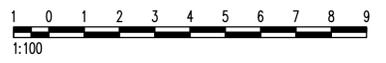
NOTE:
 COORDINATE DEPTH, WIDTH, AND SLOPE OF TRENCH DRAIN WITH ARCHITECTURAL PLANS.



2 TRENCH DRAIN DETAIL
 SCALE: NO SCALE

LEGEND

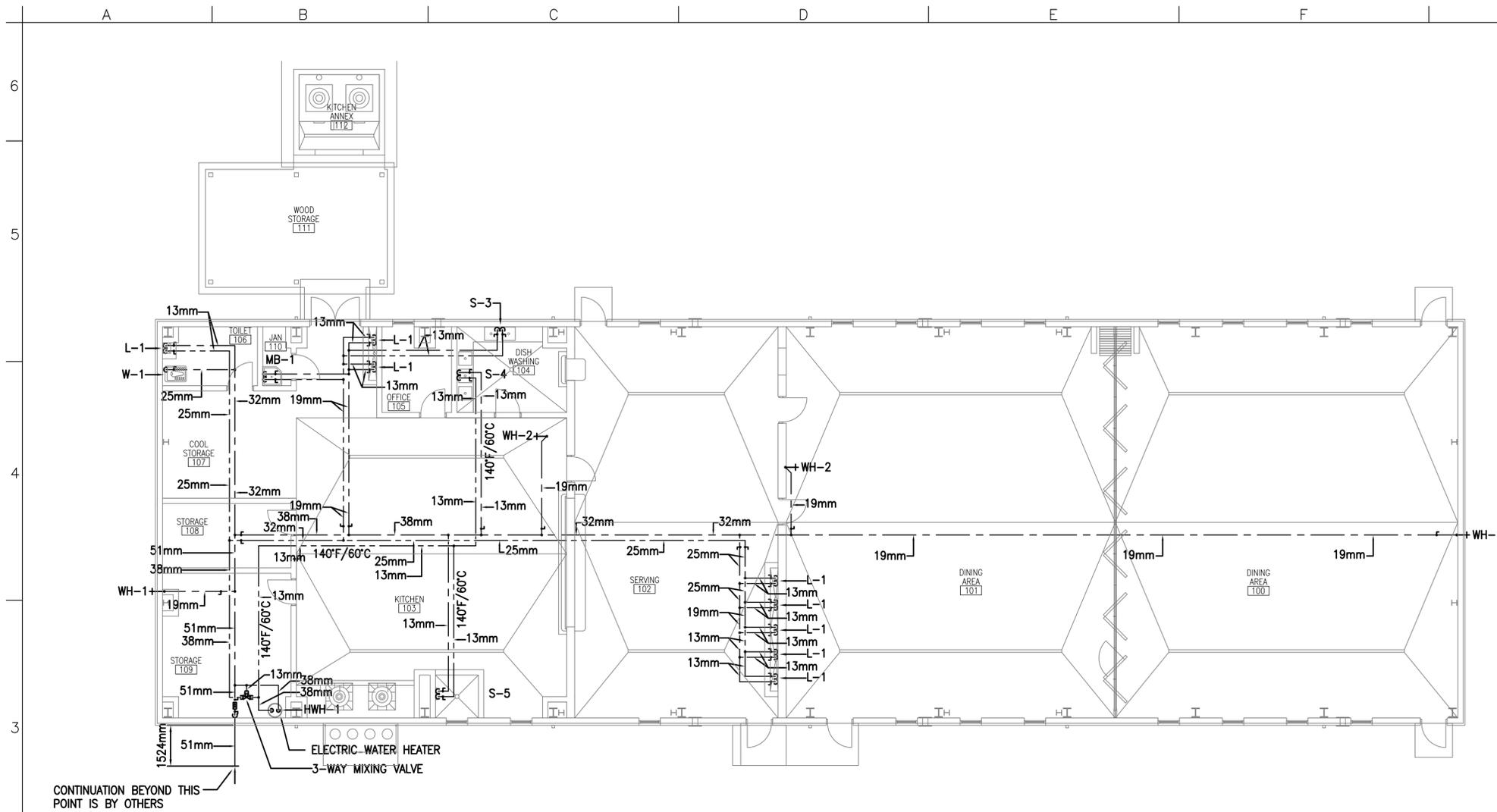
COLD WATER	---
HOT WATER	----
SANITARY UNDER GROUND	=====
GREASE SANITARY LINE UNDER GROUND	-----
VENT LINE	—V—



AFGHAN NATIONAL POLICE
 STANDARD DESIGN
 FACILITIES BUILDING (743 GSM)
 DINING FACILITIES BUILDING OPTION
 ELECTRIC HEAT OPTION
 FLOOR PLAN - PLUMBING

SHEET REFERENCE NUMBER:
P1

100% SUBMISSION



- FLOOR PLAN 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.
 - REPORT ANY DISCREPANCIES FOUND IN THE PLUMBING DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ENGINEER.
 - ALL EASTERN STYLE WATER CLOSETS IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF W-1. EACH FIXTURE SHALL HAVE A (1) INCH (25mm) COLD WATER CONNECTION AND A (4) INCH (102mm) SANITARY CONNECTION.
 - ALL TROUGH FIXTURES IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF L-1. EACH FIXTURE SHALL HAVE A (1/2 INCH) (13mm) COLD WATER, (1/2 INCH) (13mm) HOT WATER CONNECTION AND A (3 INCH) (76mm) SANITARY CONNECTION.
 - PLUMBING CONTRACTOR TO PROVIDE WATER HAMMER ARRESTORS AT ALL WATER CLOSETS.
 - PLUMBING CONTRACTOR TO PROVIDE TRAP PRIMERS AND 1/2" (13mm) COLD WATER LINES FOR ALL FLOOR DRAINS. COLD WATER LINES TO BE UNDER THE FLOOR FROM TRAP PRIMERS TO TRAPS ON FLOOR DRAINS.
 - REFER TO SHEET P4 FOR DETAILS AND SYMBOLS.
 - ALL WATER LINES TO BE EXPOSED. RUN LINES TIGHT TO CEILING AND WALL.

US Army Corps of Engineers
Afghanistan Engineer District

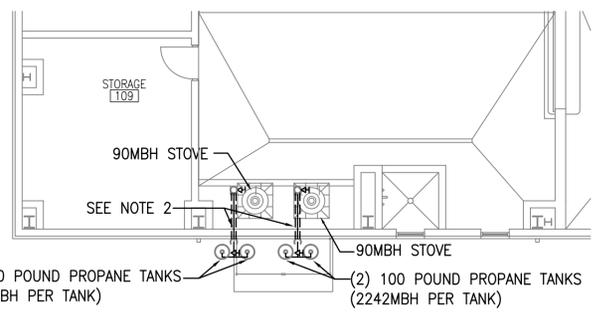
NO.	DESCRIPTION	DATE

DESIGNED BY: RMH	DATE: 09-30-09
DWN BY: RMH	SUBMITTED BY: BAKER
CHK BY: C.M. III	FILE NO: ANFSDP-102XXX

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1 DFAC, KITCHEN ANNEX, AND WOOD STORAGE FLOOR PLAN - PLUMBING (WATER)
SCALE: 1:100

- NOTE:**
- SEE SHEET P4 FOR PROPANE PIPING ISOMETRIC AND TANK SUPPORT.
 - EXTEND PROPANE LINE THRU WALL IN PIPE SLEEVE TO A POINT 100mm ABOVE FINISH FLOOR. PIPE SHALL TERMINATE IN FRONT OF PROPANE STOVE WITH SHUT OFF VALVE AND QUICK DISCONNECT NIPPLE.



2 PARTIAL DFAC, KITCHEN ANNEX, AND WOOD STORAGE FLOOR PLAN - PLUMBING (PROPANE)
SCALE: 1:100

LEGEND

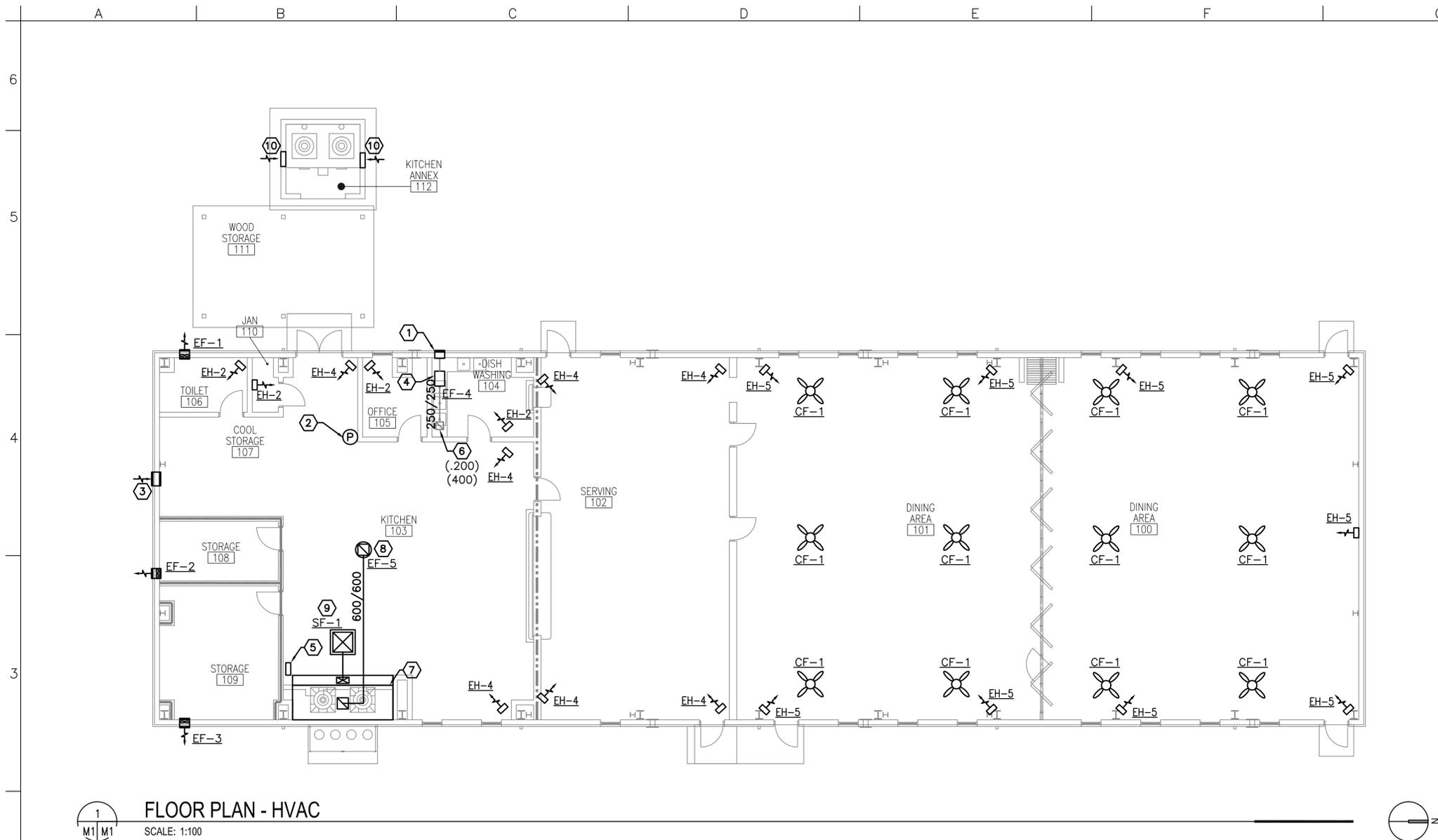
COLD WATER	---
HOT WATER	----
SANITARY UNDER GROUND	=====
GREASE WASTE LINE UNDER GROUND	-----
PROPANE FUEL LINE	—p—
VENT LINE	—v—



AFGHAN NATIONAL POLICE
STANDARD DESIGN
DINING FACILITIES BUILDING (743 GSM)
ELECTRIC HEAT OPTION
FLOOR PLAN - PLUMBING

SHEET REFERENCE NUMBER:
P2

100% SUBMISSION



NUMBERED NOTE:

- ① WALL CAP PER FAN MFG.
- ② REMOTE PULL STATION FOR HOOD FIRE SUPPRESSION SYSTEM.
- ③ 400X400 (16X16) LOW LEAKAGE GRAVITY WALL LOUVER FOR INTAKE RELIEF AIR. PROVIDE WEATHERPROOF LOUVER W/ 50mm (2") WASH DOWN FILTER AND SAND TRAP.
- ④ INLINE EXHAUST FAN, SECURED TO STRUCTURE ABOVE WITH SPRING ISOLATORS, DUCTED TO WALL CAP. FAN SUPPLIED AND INSTALLED BY EC. DUCT BY MC.
- ⑤ HOOD FIRE SUPPRESSION SYSTEM.
- ⑥ 250x250 (10x10) EGC, BALANCE TO CMS (CFM) IN PARENTHESIS.
- ⑦ 4M LONG UL RATED KITCHEN HOOD WITH UPBLAST EXHAUST FAN AND MAKE UP AIR FAN. HOOD SUPPLIED AND INSTALLED BY MC. SEE DETAILS ON M2. ALL FINAL ELECTRICAL CONNECTIONS SHALL BE BY E.C.
- ⑧ UPBLAST EXHAUST FAN CONNECTED TO HOOD DUCT SET AS REQUIRED. FAN SHALL SET LEVEL ON ROOF CURB. SEE DETAILS ON M2. ALL FINAL ELECTRICAL CONNECTIONS SHALL BE BY E.C.
- ⑨ FILTERED SUPPLY FAN SET LEVEL ON ROOF CURB. PROVIDE 500x500 DUCT DOWN TO FACE SUPPLY ON HOOD. MAINTAIN MIN. 3.1M BETWEEN EXHAUST AND INTAKE FANS. SEE DETAILS ON M2. ALL FINAL ELECTRICAL CONNECTIONS SHALL BE BY E.C.
- ⑩ 600X600 (24X24) WALL LOUVER, VERIFY LOCATION WITH ARCHITECTURAL DRAWINGS.

US Army Corps of Engineers
Afghanistan Engineer District

NO.	DATE	DESCRIPTION	SYMBOL

DESIGNED BY: RML	DATE: 09-30-09
DWN BY: JUN	SUBMITTED BY: BAKER
CHK BY: CJM	FILE NO: ANPSDM-101XXX

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AFGHAN NATIONAL POLICE
STANDARD DESIGN
DINING FACILITIES BUILDING (743 GSM)
ELECTRIC HEAT OPTION
HVAC FLOOR PLAN

SHEET REFERENCE NUMBER:
M1

1 FLOOR PLAN - HVAC
SCALE: 1:100

GENERAL NOTES:

- 1. DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.
- 2. ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES AND REGULATIONS OF THE GOVERNING AUTHORITIES.
- 3. 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
- ☐ EXHAUST AIR GRILLE

FAN SCHEDULE							
NO.	TYPE	FAN CMS	DRIVE	HP	SP mmH2O	ELECT. CHAR.	SWITCH
EF-1	WALL	0.050	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
EF-4	INLINE	0.200	DIRECT	FRACT	13	220/1/50	⊙ WALL
EF-5	UPBLAST	2.500	DIRECT	2	25	370/1/50	⊙ HOOD
SF-1	SUPPLY	2.400	DIRECT	2	13	370/1/50	⊙ HOOD

- NOTE:**
- 1. EF-2 SHALL BE EXPLOSION PROOF.
 - 2. INLINE FANS SHALL BE SURFACE MOUNTED WITH SPRING ISOLATORS.
 - 3. ALL FINAL ELECTRICAL CONNECTIONS ARE BY THE ELECTRICAL CONTRACTOR.

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
EH-5	.200	5	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.

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

- NOTES:**
- 1. FINAL ELECTRICAL CONNECTIONS BY EC.

