AIA DOCUMENT AIDT, ABBREVIATED FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION PROJECTS OF LIMITED SCOPE - 1987 EDITION WITH GENERAL CONDITIONS MODIFIED WITH A NO LIEN AGREEMENT SHALL BE MADE A PART OF THESE SPECIFICATIONS AND GENERAL REQUIREMENTS. OWNERS OPTION TO BE THE GENERAL CONTRACTOR AND HAVE A CONSTRUCTION MANAGEMENT AGENT TO OVER SEE THE PROJECT FROM START TO COMPLITATION OF THE PROJECT..

<u> DIVISION I - GENERAL REQUIREMENTS</u>

I. TEMPORARY UTILITIES: CONTRACTOR SHALL VISIT SITE AND CONTACT OWNER TO DETERMINE SUITABLE ACCESS TO SITE, CONTRACTOR'S DESIGNATED PARKING, LOADING, UNLOADING, AND STORAGE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY UTILITIES, WORKING HOURS, UTILITY TAP-INS, TRASH REMOVAL, AND REQUIRED STORAGE.

A. DURING CONSTRUCTION, OWNER WILL PROVIDE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY UTILITIES, CONSISTING OF ELECTRICAL SERVICE AND WATER (GAS SERVICE DURING WINTER CONDITIONS).

B. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN SITE AT END OF EACH DAY AND PAY FOR DUMPSTER FEES. CONTRACTOR SHALL DAILY REMOVE ALL TRASH, RUBBISH, AND SURPLUS MATERIALS FROM PREMISES. SIDEWALKS, PARKING LOTS, DELIVERY AREAS, FIRE LANES, AND THE EXTERIOR OF THE BUILDING SHALL BE CLEAR OF CONTRACTOR'S EQUIPMENT, CONSTRUCTION MATERIALS, REFUSE, AND DEBRIS AT ALL

2. DIMENSIONS AND LAYOUT: CONTRACTOR SHALL MAINTAIN A COPY ON SITE AT ALL TIMES OF APPROVED PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF PARTITIONS AND VERIFYING DIMENSIONS. CONTRACTOR SHALL NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE INDICATED ON THE DRAWINGS.

3. PERMITS: CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LOCAL PERMITS REQUIRED AND ALL LEGALLY REQUIRED TAXES. CONTRACTOR SHALL GIVE AMPLE NOTICE OF WORK REQUIRING REVIEW TO ALL INSPECTION AGENCIES HAVING JURISDICTION PRIOR TO COMPLETION OF SUCH WORK.

4. INSURANCE: CONTRACTOR SHALL OBTAIN, PAY FOR, MAINTAIN, AND VERIFY WITH A CERTIFICATE OF INSURANCE PROPER MINIMUM COVERAGE AS SET FORTH:

PERSONAL INJURY \$ 500,000 PER OCCURRENCE PROPERTY DAMAGE \$ 500,000 PER 066URRENGE AUTOMOBILE LIABILITY \$ 500,000 PER PERSON PERSONAL INJURY \$ *500,000* PER *0CC*URRENCE PROPERTY DAMAGE \$ 500,000 PER OCCURRENCE WORKMAN'S COMPENSATION IN ACCORDANCE WITH STATE REGULATIONS EMPLOYER'S LIABILITY \$ 500,000 PER OCCURRENCE

IN ADDITION, THE OWNER AND THE ARCHITECT, SHALL BE NAMED ON THE CERTIFICATE(S) AS ADDITIONAL INSURED AND BE PROVIDED WITH A THIRTY (30) DAY WRITTEN NOTIFICATION IN THE EVENT OF CANCELLATION, RENEWAL OR A MATERIAL POLICY CHANGE.

5. COORDINATION AND COOPERATION

A. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL SUBMIT A PROJECT SCHEDULE INDICATING STARTING AND COMPLETION DATES TO THE OWNER.

B. THE MECHANICAL AND ELECTRIC SUBCONTRACTORS SHALL BE LICENSED. THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE CAPABLE OF PERFORMING QUALITY WORKMANSHIP AND ABLE TO WORK IN HARMONY WITH THE SUBCONTRACTORS.

C. CONTRACTOR SHALL COOPERATE WITH THE OWNER BY COORDINATING HIS WORK SO AS NOT TO DELAY OTHER WORK IN PROGRESS, INTERFERE WITH ANY EXISTING OPERATIONS, OR IMPEDE OR ENDANGER THE SAFETY OF THE GENERAL PUBLIC. CONTRACTOR AND SUBCONTRACTORS MUST HAVE SATISFACTORY LABOR RELATIONS TO AVOID LABOR DISPUTES WHICH WOULD INTERFERE WITH THE WORK AND OR WORK SCHEDULE.

6. INSPECTION AND ACCEPTANCE

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE INSPECTIONS BY THE APPROPRIATE BUILDING DEPARTMENT(S) AND OTHER INSPECTIONS AS NECESSARY TO COMPLY WITH THEIR REQUIREMENTS AND ALL CODES AND REGULATIONS. A COPY OF ALL INSPECTION REPORTS AND THEIR CERTIFICATES INCLUDING THE CERTIFICATES OF OCCUPANCY MUST BE SUBMITTED TO THE OWNER.

7. TEMPORARY BARRICADES: CONTRACTOR SHALL PROVIDE TEMPORARY BARRICADES AS REQUIRED TO SAFE. GUARD THE WORK AND GENERAL PUBLIC. CONTRACTOR SHALL DISMANTLE AND REMOVE BARRICADES AFTER W*o*rk is completed.

8 PROJECT CLOSE OUT: CONTRACTOR SHALL CONDUCT A FINAL CLEANING OF THE PROJECT THAT INCLUDES GENERAL VACUMING, REMOVAL OF GREASE, DIRT, STAINS, LABELS, PAINT SPLATTERS, FINGER PRINTS, AND OTHER FOREIGN MATERIALS ON INTERIOR AND EXTERIOR SURFACES. CONTRACTOR SHALL SUPPLY THE FOLLOWING IN TRIPLICATE:

A. RELEASE OF LIENS FROM CONTRACTOR, MATERIAL SUPPLIERS, AND SUBCONTRACTORS.

B. ONE YEAR WARRANTY ON ALL MATERIALS AND LABOR FROM DATE OF OWNER'S ACCEPTANCE OR SUBSTANTIAL

C. CERTIFICATE OF OCCUPANCY FROM THE LOCAL BUILDING AUTHORITY

D. EQUIPMENT SERVICE AND MAINTENANCE MANUALS.

9. SCOPE OF WORK: WORK COVERS ALL NEW CONSTRUCTION INCLUDING GENERAL, MECHANICAL, AND ELECTRIC SYSTEMS COMPLETE IN ALL RESPECTS FOR THE RADHA KRISHNA TEMPLE IN THE CITY OF ALLEN TEXAS. THE TEMPLE BUILDING IS A TWO STORY STEEL FRAME STRUCTURE WITH INFILL MASONARY WALLS, METAL DECK AND CONCRETE WITH DECORATIVE FIBER GLASS AND GRC APPLIQUE FEATURES.

A. COMPLY WITH CODES, ORDINANCES, RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF PUBLIC AUTHORITIES WHICH BEAR ON PERFORMANCE OF WORK.

B. THE OWNER MAY ACCOMPLISH CERTAIN ITEMS OF WORK PRIOR TO, DURING, AND AFTER THE CONSTRUCTION OF THIS PROJECT UTILIZING THE SERVICES OF ANY CONTRACTOR(S) OF HIS CHOICE WITHOUT OBLIGATION TO THIS

<u>DIVISION 2 — SITE</u>

A. ALL WORK SHALL BE AS FOUND ON THE SITE DRAWINGS AND SPECIFICATIONS. ALL SITE WORK SHALL BE IN COMPLIANCE WITH STANDARD SITE ENGINEERING & LANDSCAPING PRACTICE.

<u> DIVISION 3 - CONCRETE</u>

A. ALL WORK SHALL BE INCLUSIVE OF CAST-IN-PLACE CONCRETE; REINFORCING STEEL, FORMWORK, ANCHORS,

B. ALL WORK SHALL COMPLY WITH CONCRETE REINFORCING STEEL INSTITUTE (CRSI), AMERICAN CONCRETE INSTITUTE (ACI) ACI 3/8, AND THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) LATEST EDITIONS.

C. ALL REINFORCING SHALL BE GRADE 60 AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. WELDED WIRE MESH SHALL BE NEW RECTANGULAR WELDED STEEL FABRIC CONFORMING TO ASTM A185 OF A SPACING AND GAUGE NOTED.

D. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM STRENGTH AND MAXIMUM SLUMP DESIGN CRITERIA:

WALKS AND CURBS: 3,500 PSI - 5" SLUMP (AIR-ENTRAINING ADMIXTURE ASTM C260)

STRUCTURAL: 4*,000* PSI - 3" - 4" SLUMF

GROUT: 3,000 PSI - 7" SLUMP U.N.O.

FL00R SLAB: 3,000 PSI - 4" - 6" SLUMP

E. NO WATER SHALL BE ADDED DURING TRANSIT OR AT THE JOB WITHOUT SPECIFIC APPROVAL OF THE ARCHITECT.

F. THREE CYLINDERS AND ONE SLUMP TEST SHALL BE TAKEN FOR EACH DAY'S PLACEMENT OF STRUCTURAL CONCRETE. ONE CYLINDER SHALL BE TESTED AFTER 7 DAYS TO VERIFY MINIMUM 85 PERCENT OF COMPRESSIVE STRENGTH DESIGN CRITERIA. CONTRACTOR SHALL INCLUDE THE PRICE FOR TESTING IN HIS BID.

6. CONCRETE SHALL NOT BE PLACED IN FALLING TEMPERATURES BELOW 40°F NOR IN RIGING TEMPERATURES ABOVE 90°F. ANTI FREEZE ADMIXTURES ARE NOT PERMITTED.

H. BROOM FINISH EXTERIOR CONCRETE SLABS WITH TOOLED EDGING, STEEL TROWEL FINISH INTERIOR CONCRETE SLABS. CURE & SEAL ALL CONCRETE. CAULK ALL EXPANSION JOINTS. ALL SURFACES SHALL FINISH TRUE TO 1/4" +/- IN 10 FEET IN A STRAIGHT EDGE IN ANY DIRECTION. PROVIDE EXPANSION AND CONSTRUCTION JOINTS AS DIRECTED BY ARCHITECT. JOINT SPACING SHALL BE RESTRICTED TO 3 TIMES SLAB THICKNESS - 4" SLAB = |2'x|2' MAX SLAB SECTION. SAW CUT JOINTS SHALL BE MADE WITHIN 8 HOURS OF CONCRETE PLACEMENT.

<u>DIVISION 4 - MASONRY</u>

A. MAGONRY WORK SHALL INCLUDE: CEMENT MORTAR CONFORMING TO ASTM C270, TYPE "S" COLORED MORTAR TO MATCH COLORED CMU (USE "DRYBLOCK" ADDITIVE), HORIZONTAL JOINT REINFORCING TRUGG TYPE BY DUR-O-WALL; WALL FLASHING AS DETAILED; GRADE 60 REINFORCING RODS; TYPE I GRADE N-I CONCRETE MASONRY UNITS (CMU) CONFORMING TO ASTM C90 PLAIN, SPLIT FACED. EXPOSED ABOVE GRADE CMU SHALL BE MANUFACTURED WITH "DRYBL*OC*K" ADDITIVE.

B. CONTRACTOR SHALL STORE MASONRY MATERIALS ON SITE IN A DRY AND CLEAN ENVIRONMENT

C. NO MASONRY SHALL BE LAID DURING DROPPING TEMPERATURES BELOW 400F NOR SHALL ANTIFREEZE BE A

D. ALL MASONRY WORK SHALL BE PLUMB, LEVEL, AND TRUE TO LINE MATCHING ANY INTERSECTION AND MASONRY COURSING. ALL CORNERS SHALL BE SQUARE UNLESS NOTED OTHERWISE. MASONRY CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 530/ASCE 5/TMS 401.

E. ALL HEAD JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR. BONDS AND PATTERNS SHALL BE LAID AS INDICATED ON THE DRAWINGS. JOINTS SHALL BE TOOLED TO A COMPACT CONCAVE FINISHED JOINT FACE FREE OF VOIDS, FOREIGN MATERIAL, AND PERCEPTIBLE COLOR VARIATION.

F. CLEAN FINISHED MASONRY REMOVING ALL MORTAR DROPPINGS, STAINS, DIRT, ETC.

<u>DIVISION 5 — METALS</u>

A. PROVIDE SPECIAL INSPECTIONS BY AN INDEPENDANT INSPECTION SERVICE FOR ALL FIELD WELDED AND BOLTED CONNECTIONS AND FABRICATION. INSPECTOR SHALL PROVIDE A REPORT VERIFYING AWS AND ASTM CONFORMANCE. SHOP DRAWINGS SHALL BE REQUIRED TO COORDINATE FABRICATION WITH FIELD ERECTION.

B. STRUCTURAL AND MISCELLANEOUS STEEL FABRICATION AND EXECUTION PRACTICES SHALL COMPLY WITH AISC STEEL MANUAL LATEST EDITION. BOLTS SHALL BE ASTM A325, ANCHOR BOLTS SHALL BE ASTM A307. STRUCTURAL STEEL SHALL BE ASTM A50, MISCELLANEOUS STEEL SHALL BE ASTM A283.

C. ALL STEEL SHALL BE SHOP PAINTED 2 MILS DRY WITH CADILLACE #246 PRIMER OR EQUAL.

D. STEEL JOIST SHALL BE AS MANUFACTURED BY A STEEL JOIST INSTITUTE MEMBER & SHALL BE FURNISHED & INSTALLED IN COMPLIANCE WITH THE LATEST SJI MANUAL. WELD ALL JOIST BEARING CONDITIONS. STEEL ROOF DECKING SHALL BE 1-1/2" DEEP, TYPE B/BW, 22 GAUGE PAINTED SCREWED OR WELDED IN PLACE 12" OC.

E. STANDING SEAM METAL ROOF AND MISCELLANEOUS TRIM, FASCIA, AND FLASHING SHALL BE "STRUCTURAL" SIMILAR TO "UNA-CLAD" 24 GA GAL STL ROOF SYSTEM UC-6 AS MANUFACTURED BY COPPER SALES, INC. WITH TWO-COAT KYNAR 20 YEAR FINISH. PANEL PROFILE TO BE 1" DOUBLE LOCK STANDING SEAM 18" OC.

F. COLD FORMED METAL FRAMING SHALL BE G-60 GALVANIZED STEEL AS MANUFACTURED BY DIETRICH OR EQUAL. NON-STRUCTURAL STUDS SHALL BE MINIMUM 26 GAUGE. MINIMUM 20 GAUGE FOR ALL STRUCTURAL FRAMING. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR LOADING INDICATED.

6. SET STEEL TRUE, PLUMB, AND SQUARE. SHIM TO LINE AND GRADE, BRACE FOR TEMPORARY SUPPORT, GROUT AT MASONRY BEARING.

H. 'ANCHOR BOLTS' AS PER STRUCTURAL DRAWINGS. 'J' TYPE ANCHORS OPTION TO BE APPROVED BY STR.

<u>DIVISION 6 - WOOD AND PLASTICS</u>

A. FURNISH AND INSTALL ALL REQUIRED BLOCKING, SHIMS, FRAMING, BRIDGING, FURRING AND GROUNDS.

B. ALL LUMBER SHALL BE FRAMING GRADE SPF. USE FIRE TREATED "DRICON" LUMBER THROUGH OUT. USE "WOLMANIZED" LUMBER FOR ROOFING SYSTEM NAILER.

C. USE GALVANIZED ANCHORS AND FASTENERS THROUGHOUT

D. DO ALL CUTTING REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL TRADES WITHOUT ADVERSELY EFFECTING SOUND TRANSMISSION OR STRUCTURAL INTEGRITY. FIT NEATLY ALL PIECES TO MINIMIZE JOINTS AND FINISH PLUMB, TRUE, AND SQUARE.

<u>DIVISION 7 - THERMAL AND NOISE PROTECTION</u>

A FIBERGLASS SOUND BATT SHALL BE HIGH DENSITY UNFACED OF THICKNESS INDICATED ON THE DRAWINGS. FLAME SPREAD OF 25 AND A MAXIMUM SMOKE DEVELOPMENT OF 450 TESTED PER ASTM E84.

B. FIBERGLASS THERMAL BATT SHALL BE KRAFT UNLESS NOTED OTHERWISE FACED OF THICKNESS INDICATED ON

THE DRAWINGS, FLAME SPREAD OF 25 AND A MAXIMUM SMOKE DEVELOPMENT OF 450 TESTED PER ASTM E84. C. MINIMUM 15 YEAR NDL. MATERIAL AND LABOR WARRANTY FOR A FULLY ADHERED 60 MIL SINGLE PLY EPDM *CLASS "C" ROO*FING SYSTEM FURNISHED AND INSTALLED OVER MECHANICALLY FASTENED POLY ISOCYANURATE

I. FURNISH AND INSTALL ALCOA 6" O.G. ALLMINUM GUTTER WITH CONTINUOUS ALLMINUM APRON AND ALLMINUM HANGERS 24" O/C. OUT BOTTOM OF GUTTER, CALLK DOWNSPOUT TRANSITION WITH GUTTER SEAL AND RIVET TO GUTTER. ATTACH 3" X 4" ALCOA ALLMINUM DOWNSPOUTS TO BUILDING WALL AT NOTED INTERVALS WITH DOWNSPOUT STANDOFFS. RIVET SECTIONS OF DOWNSPOUT. RIVET AND USE GUTTER SEAL AT GUTTER JOINTS. TERMINATE ALL DOWNSPOUTS INTO PVC BOOTS 6" ABOVE FINISHED GRADE.

INSULATION ON TYPE "b" STEEL DECKING. PROVIDE WALK MATS AROUND ALL ROOF TOP HVAC UNITS.

P. ALL FLASHING AND COUNTER FLASHING SHALL BE STAINLESS STEEL TERNE COAT UNLESS NOTED OTHERWISE. THROUGH-WALL FLASHING SHALL BE "WASCOSEAL" ELASTOMERIC WALL FLASHING.

E. ALL COPING, FASCIA/ GRAVEL STOP SHALL BE 063 ALUMINUM SNAP LOCK WITH KYNAR FINISH. CONCEAL SPLICE PLATES AT JOINTS UNDER COPING, FASCIA/ GRAVEL STOP.

F. CAULK ALL WALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH "MONO". CAULK ALL JOINTS BETWEEN DRYWALL AND CONCRETE BLOCK, ALIMINUM AND STEEL FRAMES: AND MASONRY. CAULK AT ALL WALL PENETRATIONS. CAULK ALLMINUM FRAMES WITH ONE PART ACRYLIC TERPOLYMER. SEALANT SHALL BE NEATLY TOOLED IN COLOR(S) APPROVED BY THE OWNER. PROVIDE FILLER STRIPS AND BACKER ROD AS REQUIRED.

6. E.I.F.S. SHALL CONSIST OF AN APPROVED SUBSTRATE - I.E., CDX PLYWOOD AND/OR DENS GLASS GOLD, PRIME BASE COAT, FOAM ADHESIVE, E.P.S. INSULATION BOARD, REINFORCING MESH AND ACRYLIC FINISH COAT. SAND AND SCULPTURED FINISHES SHALL BE USED WHERE NOTED.

DIVISION 8 - DOORS AND WINDOWS

A. FURNISH AND INSTALL 1/4" DOUBLE GLAZED ARGON FILLED LOW "E" 1" NOMINAL WINDOW FURNISHED AND INSTALLED IN 2X4 6063-T5 ANODIZED ALLMINUM THERMALLY BROKEN FRAMES. PROVIDE TEMPERED GLAZING IN DOORS, SIDELIGHTS, ETC. AS REQUIRED BY BOCA.

B. GLASS BLOCK UNITS AS MANUFACTURED BY PITTSBURGH CORNING CORP. NOMINALLY 8" X 8" X 4" THICK SHALL BE PARTIALLY EVACUATED HOLLOW UNITS MADE OF CLEAR, COLORLESS GLASS; PATTERN TYPES DECORA AND VUE. GLASS BLOCK UNITS SHALL BE CLASSIFIED FOR 3/4 HOUR FIRE EXPOSURE ACCORDING TO ASTM EL63 OR UL 9. ALL SUCH GLASS BLOCK UNIT CARTONS SHALL CARRY UL LABELS. GLASS BLOCK SHALL HAVE A POLYVINYL BUTYRAL EDGE COATING TO PROVIDE FOR BETTER BONDING AND TO PROVIDE AN EXPANSION/CONTRACTION MECHANISM FOR EACH BLOCK.

I. PANEL REINFORCING: TWO PARALLEL 9 GAUGE WIRES 2 INCH ON CENTER WITH ELECTRICALLY BUTT-WELDED CROSS-WIRES AT REGULAR INTERVALS, GALVANIZED AFTER WELDING.

2. Palyethylene foam expansion strips.

3. STEEL STRIPS 24" LONG BY 1-3/4" WIDE, GALVANIZED AFTER PERFORATING.

4. ASPHALT EMULSION: A WATER BASED ASPHALT EMULSION, BY KARNAK CHEMICAL CORP. (KARNAK 100, 1-800-516- 4236), OR EQUAL.

5. SEALANT: NON STAINING, WATERPROOF MASTIC SILICONE OR URETHANE.

6. BACKER RODS: POLYETHYLENE FOAM, NEOPRENE, OAKUM OR EQUAL AS APPROVED BY SEALANT MANUFACTURER.

7. MORTAR: TYPE 5 IN ACCORDANCE WITH ASTM C170. (FOR EXTERIOR GLASS BLOCK PANELS, AN INTEGRAL-TYPE WATERPROOFER SHOULD BE ADDED TO THE MORTAR MIX).

A. PORTLAND CEMENT: WHITE — TYPE I, IN ACCORDANCE WITH ASTM C150. B. LIME: HYDRATED LIME ASTM C207 OR QUICKLIME ASTM C5.

C. SAND: A CLEAN, WHITE QUARTZITE TYPE, ESSENTIALLY FREE OF IRON COMPOUNDS, FOR THIN % PASSING A NO. 16 SIEVE. JOINTS, IN ACCORDANCE WITH ASTM C144, NOT LESS THAN 100

D. INTEGRAL TYPE WATERPROOFER: STEARATE TYPE BY SONNEBORN BUILDING PRODUCTS (HYDROCIDE POWDER: 6|3-258-2503 IN ONTARIO: 204-66|-6738 IN MANITOBA) OR EQUAL.

E. MIX ALL MORTAR COMPONENTS TO A CONSISTENCY THAT IS DRIER THAN MORTAR FOR ORDINARY MASONRY. DO NOT INSTALL GLASS BLOCK UNITS WHEN TEMPERATURE IS 40 DEGREES F AND FALLING. COVER SILL AREAS WITH A HEAVY COAT OF ASPHALT EMULSION. ALLOW EMULSION TO DRY AT LEAST TWO (2) HOURS BEFORE PLACING MORTAR. ADHERE EXPANSION STRIPS TO JAMBS AND HEAD. MAKE CERTAIN EXPANSION STRIP EXTENDS TO SILL. SET A FULL MORTAR BED JOINT, APPLIED TO SILL.

8. SET LOWER COURSE OF BLOCK. MAINTAIN A UNIFORM JOINT WIDTH OF 1/4" PLUS OR MINUS 1/8" ALL MORTAR JOINTS MUST BE FULL AND NOT FURROWED. STEEL TOOLS MUST NOT BE USED TO TAP BLOCK INTO POSITION. (PLACE A RUBBER CRUTCH TIP ON END OF TROWEL TO TAP BLOCK INTO POSITION). INSTALL PANEL REINFORCING ON 24" CENTERS HORIZONTALLY. LAP REINFORCING NOT LESS THAN 6" WHENEVER IT IS NECESSARY TO USE MORE THAN ONE LENGTH. PLACE FULL MORTAR BED FOR JOINTS NOT REQUIRING PANEL REINF*O*RCING — DO NOT FURROW. MAINTAIN UNIFORM JOINT WIDTH.

9. STRIKE JOINTS SMOOTH WHILE MORTAR IS STILL PLASTIC AND BEFORE FINAL SET. AT THIS TIME RAKE OUT ALL SPACES REQUIRING SEALANT TO A DEPTH EQUAL TO THE WIDTH OF THE SPACES. REMOVE SURPLUS MORTAR FROM FACES OF GLASS BLOCK AND WIPE DRY. TOOL JOINTS SMOOTH AND CONCAVE, BEFORE MORTAR TAKES

C. FURNISH AND INSTALL WEATHER STRIPPING AND THRESHOLD ON ALL EXTERIOR DOORS. UNLABELED INTERIOR DOORS SHALL BE FLUSH SOLID CORE BIRCH VENEER PRE-HUNG WOOD FRAME TYPE OR FLUSH HM. STEEL DOOR AND FRAME TYPE. (CONTRACTOR SHALL PROVIDE ALTERNATE PRICING.) CASINGS SHALL BE 3" RANCH FOR WOOD

D. EXTERIOR STEEL DOOR FRAMES SHALL BE 16 GAUGE FLUSH WELDED WITH RUBBER BUMPERS AND WEATHER STRIPPING WATERPROOF WITH MASTIC AND GROUT SOLID.

E. EXTERIOR STEEL DOORS SHALL HAVE 18 GALIGE STEEL FACE SHEETS, INSULATED CORES, WELDED TOP CAPS, NRP BUTTS, KICKPLATES, CLOSER, AND WIDE ANGLE PEEP HOLE.

F. DOOR HARDWARE SHALL BE US3 MEDIUM DUTY WITH EACH DOOR HAVING |- 1/2 PAIR OF BUTTS. ALLMINUM DOORS SHALL HAVE TOP AND BOTTOM PIVOTS. LOCKSETS SHALL BE MANUFACTURED BY BEST SERIES 9K DESIGN IS D LEVER OR BY SCHLAGE SERIES S DESIGN SATURN LEVER. KEY AS DIRECTED BY OWNER. PANIC DEVICES SHALL BE MANUFACTURED BY VON DUPRIN 39 SERIES. CLOSERS SHALL BE NORTON SERIES UNI 7500. PAIR OF ALUMINUM DOORS SHALL HAVE CONCEALED TOP AND BOTTOM RODS WITH CENTER LATCH FOR 3 POINT KEYED CYLINDER LOCKING. ALUMINUM DOORS SHALL HAVE ADA COMPLIANT PUSH PULLS.

G. OWNERS OPTION TO SELECT AND PROVIDE ALL DOORS AND HARDWARE FOR THE ENTIRE PROJECT AS LONG AS IT MEETS ALL THE CODE REQUIREMENTS.

<u>DIVISION 9 - FINISHES</u>

A ALL DRYWALL SHALL BE ASTM 36 MINIMUM 5/8" THICK (FIRE CODE TYPE X FOR FIRE RATED ASSEMBLIES), (DENS GLASS GOLD ASTM C630 AS AN EIFS SUBSTRATE) - SCREW ATTACHED TO STEEL FRAMING. JOINTS SHALL BE TAPED AND FINISHED WITH 3 SANDED COATS OF COMPOUND. USE METAL CORNER AND CASING BEADS. USE SEALANT AT JOINTS BETWEEN DRYWALL AND OTHER MATERIALS.

B. CEILING - NRC .50 - 60 USG RADAR 2'X4'X5/8" 23/0. HANGER WIRES SHALL BE 12 GAUGE ANNEALED MILD STEEL GALVANIZED WIRE. 15/16" EXPOSED WHITE BAKED ENAMELED GRID SYSTEM. INSTALL CEILING PLLMB, SQUARE, TRUE, AND LEVEL. CEILINGS IN TENANT #10 SHALL BE USG 1/4/X1/1" 3270 CEILING TILE AND GRID.

C. INTERIOR PAINTED SURFACES SHALL BE PREPARED TO RECEIVE ONE (1) PRIMER COAT. ALL EXTERIOR AND INTERIOR METAL SHALL BE PREPPED, PRIMED AND FINISHED WITH TWO (2) COATS OF OIL-TYPE HOUSE AND TRIM

D. OWNERS OPTION TO USE 12"x1/8" VCT AND 4" RUBBER BASE IN TOILET ROOM. FILOORING CONTRACTOR. TO PATCH, LEVEL AND PREP FLOORING. PROVIDE VINYL GRIP EDGE AT FLOOR MATERIAL TRANSITIONS. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL DETAILS.

<u>DIVISION 10 - SPECIALTIES</u>

A FURNISH AND INSTALL ON WALL SURFACES +54" AF.F. ADJACENT TO ROOM DOORS TACTILE SIGNAGE WITH BRAILLE INSERT IN COMPLIANCE WITH FEDERAL ADA. PROVIDE SIGNAGE FOR TOILETS AND EXITS.

B. TOILET ROOM ACCESSORIES SHALL BE PROVIDED AND CONSTRUCTED FROM 304 STAINLESS STEEL FINISH AS MANUFACTURED BY BOBRICK OR EQUAL. MOUNT STAINLESS STEEL FRAMED MIRRORS +40" AF.F., B-6106 AND B-6293 GRAB BARS +33" - 36" AFF., B-262 TOILET PAPER HOLDERS +28" AFF. PROVIDE CONCEALED WALL BLOCKING FOR CONCEALED ATTACHMENT OF ALL TOILET ROOM ACCESSORIES.

C. FURNISH AND INSTALL ONE WALL MOUNTED +27" AFF. 10 LB ABC FIRE EXTINGUISHER AT ALL EXIT DOORS AS NOTED ON DRAWINGS. USE HEAVY DUTY WALL BRACKET.

D. SEE DRAWINGS FOR FIBER GLASS AND GRC SPECIFICATIONS AND ADDITIONAL DATA.

DIVISION 15 - PLUMBING/FIRE PROTECTION

CONCEALED UNLESS OTHERWISE NOTED.

A. ALL PLUMBING WORK SHALL COMPLY WITH BOCA CHAPTER 29, INTERNATIONAL PLUMBING CODE, LOCAL, STATE AND FEDERAL AUTHORITIES. ALL RIGID AND FLEXIBLE WATER AND WASTE CONNECTIONS OF TOILET FIXTURES THAT ARE NOT SPECIFICALLY NOTED SHALL BE PROVIDED AND THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST RELATING TO SUCH WORK SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY.

B. EXCAVATE, TRENCH, AND BACKFILL FOR ALL UNDERGROUND PLUMBING WORK. RUN ALL PLUMBING WORK

C. ALL WATER LINES SHALL BE TYPE "L" COPPER AND INSULATED WITH I" FIBERGLASS AND WHITE VINYL ASJ JACKET AND FITTINGS. USE "NO LEAD" SOLDER. LABEL TYPE AND FILOW DIRECTION OF ALL WATER LINES. INSULATE PIPING PENETRATING CONCRETE FLOOR SLABS.

D. ALL BUILDING VENT AND WASTE LINES SHALL BE SCH 40 PVC DWV AS PERMITTED BY GOVERNING AUTHORITIES. VENT ALL FIXTURES.

E. PROVIDE BALL VALVE SHUT OFFS ON HW & CW LINES AT EACH PLUMBING FIXTURE AND FROST PROOF HOSE BIB. PROVIDE SHOCK ABSORBERS AT THE END OF ALL WATER LINE RUNS. F. ALL GAS LINES SHALL BE SCHEDULE 40 BLACK IRON. PAINT ALL EXPOSED PIPE ONE (1) PRIME COAT AND TWO

(2) FINISH COATS OF OIL BASED ENAMEL. SLEEVE ALL PENETRATIONS. G. PROVIDE AN AUTOMATIC FIRE SUPPRESSION SYSTEM FOR ORDINARY HAZARD PER NEPA 13 COMPLETE WITH VALUES, DRAINS, FLOW SWITCHES, AND ALARM. THE SPRINKLER SUBCONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SIZING OF ALL LINES AND SPACING OF ALL HEADS USING HYDRAULIC CALCULATIONS PER NIFPA (3. PRIOR TO COMMENCING SPRINKLER WORK, THE SPRINKLER SUBCONTRACTOR SHALL SUBMIT TO LOCAL AND STATE AUTHORITIES SPRINKLER DESIGN CALCULATION AND LAYOUT FOR APPROVAL. HE SHALL PAY ALL RELATED FEES

I. FURNISH AND INSTALL NEW 6" SPRINKLER ENTRANCE SERVICE TO BUILDING. DOMESTIC SERVICE TO BE SEPARATE. CONTRACTOR TO PAY ALL TAP FEES AND PROVIDE ALL BOND MONEYS REQUIRED BY WATER AND LOCAL AUTHORITIES.

2. SPRINKLER LINES SHALL BE RUN CONCEALED IN ALL AREAS.

SMACNA REQUIREMENTS FOR STATIC PRESSURE CLASS OF 2".

3. PROVIDE SPRINKLER CABINET WITH 3 EXTRA HEADS.

H. FURNISH AND INSTALL ADA ACCESSIBLE TOILET FIXTURES. FURNISH AND INSTALL ALL PLUMBING FIXTURES NOTED ON THE DRAWINGS, INCLUDING METERS AND HOT WATER HEATERS. FURNISH AND INSTALL PLUMBING WORK INCLUDING ALL DRAINS, VALVES, AND FITTINGS. CAULK AROUND ALL TOILET FIXTURES.

<u>DIVISION 15 - HVAC</u>

AND PERMITS.

A. ALL. HVAC WORK SHALL COMPLY WITH BOCA CHAPTER 28, INTERNATIONAL MECHANICAL CODE, ASHRAE, AND

B. ALL GRILLES AND DIFFUSERS SHALL BE TITUS WHITE ENAMELED ALLMINUM WITH 24" X 24" TRIM FOR LAY-IN CEILING GRID.

C. ALL SUPPLY AIR DUCTS AND FITTINGS SHALL BE INSULATED WITH I" DUCT WRAP.

D. HVAC SUBCONTRACTOR SHALL SET ALL ROOF TOP EQUIPMENT NO CLOSER THAN 10' FROM THE ROOF'S EDGE. E. INSULATED FLEXIBLE DUCTWORK IS ALLOWED ONLY FOR CONNECTION DROPS TO DIFFUSERS WITH A MAXIMUM RUN OF EIGHT FEET.

F. FURNISH AND INSTALL NUTONE CEILING EXHAUST FANS FOR ALL TOILETS. FAN SHALL BE ACTIVATED WHEN ROOM LIGHT SWITCH IS IN THE ON POSITION. DUCT FAN TO EXTERIOR AND TERMINATE WITH WALL CAP.

G. FURNISH AND INSTALL HIGH EFFICIENCY GAS FIRED AIR COOLED ROOF TOP PACKAGED UNITS (SIZES AS NOTED ON THE DRAWINGS) WITH REMOTE DIGITAL WALL THERMOSTAT, ON, OFF, AUTO, HEAT, COOL, AND NIGHT SET BACK. ALL POWER AND GAS SHALL BE RUN THROUGH 14" INSULATED ROOF TOP CURB. CARRIER, TRANE, LENNOX, AND YORK SHALL BE ACCEPTABLE MANUFACTURERS. FOR UNITS IN EXCESS OF 2,000 CFM PROVIDE RETURN AIR DUCT SMAKE DETECTOR. ACTIVATION OF DETECTOR SHALL SHUT DOWN UNIT. PROVIDE TEST/RESET SWITCH(S) ON WALL

H. ALL THERMOSTATS SHALL HAVE TAMPER PROOF VENTILATED METAL COVERS WITH KEY ACCESS ONLY.

I. FOR ADDITIONAL SPECIFICATIONS AND DETAILS SEE HVAC DRAWINGS.

<u> DIVISION 16 - ELECTRIC</u>

A ALL ELECTRIC WORK SHALL COMPLY WITH NFPA 70/NEC AND BOCA ARTICLE 27. FURNISH AND INSTALL NEW SERVICE TO THE BUILDING WITH FUSED MEANS OF DISCONNECT. PROVIDE AS REQUIRED USE SQUARE "D" METER PACKS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL SPECIFICATIONS

B. RUN ELECTRIC WORK CONCEALED.

C. ALL RACEWAY SHALL BE PVC SCHEDULE 40 UNDER GROUND, GALVANIZED RIGID STEEL EXPOSED SERVICE ABOVE GROUND, EMT AND M.C. EXPOSED ABOVE GROUND.

D. MIN. WIRE SIZE FOR 20 AMP CIRCUIT SHALL BE #12 AWG.

E. ALL WIRING SHALL BE RUN CONCEALED EXCEPT AS NOTED.

F. ALL WIRING DEVICES SHALL BE IVORY HUBBELL COMMERCIAL SPEC GRADE. DEVICES SHALL BE 20 AMP RATED.

6. ALL ELECTRIC EQUIPMENT SHALL BE NEMA & UL RATED.

H. ALL CIRCUITS SHALL BE PERMANENT AND CLEARLY MARKED ON THE PANELBOARDS.

I. VERIFY WITH THE OWNERS THE EXACT LOCATION, QUANTITY, TYPE OF POWER CONNECTIONS. THE OWNERS MAY MOVE ANY POWER OUTLET 5' ANY DIRECTION FROM LOCATION SHOWN IN PLANS AT NO ADDITIONAL COST TO THE

J. PROVIDE OF RECEPTACLES AT ALL SINK AREAS AND EXTERIOR LOCATIONS.

K. WIRE BATTERY PACK EMERGENCY AND EXIT LIGHTING TO GENERAL ROOM LIGHTING CIRCUIT AHEAD OF LOCAL

L. OWNRS SHALL PROVIDE PHONE SERVICE AND EQUIPMENT.

M. BALANCE PHASES ON PANELBOARDS AS REQUIRED.

FIBERGLASS REINFORCED PLASTIC (FRP)

I. GLASS CLOTH, MATT AND "CHOP" SHALL BE EQUAL TO THE PRODUCTS OF PPG-OWENS CORNING

2. POLYESTER RESINS SHALL BE CLASS A. THE RESIN WILL BE A FLAME RETARDANT, PROMOTED THIXOTROPIC POLYESTER RESIN DESIGNED FOR USE IN HAND LAY-UP AND SPRAY-UP PROCESSES THIS RESIN IS SPECIFICALLY FORMULATED FOR USE IN APPLICATIONS THAT REQUIRE AN ASTM E-84, CLASS | FLAME SPREAD RATING, WITHOUT THE USE OF FILLERS AN ANTIMONY TRIOXIDE, WITH AN ASTM E-84 FLAME SPREAD RATING OF LESS THAN 25 UNFILLER AND SMOKE DENSITY OF LESS THAN 400.

3. GEL-COAT SHALL BE PART OF SYSTEM SPECIFIED.

7.6EL-COAT THICKNESS SHALL BE 015" TO 015" OR 18 TO 12 MILS.

AFIBERGLASS REINFORCED POLYESTER COMPONENTS SHALL BE MANUFACTURED USING THE SPECIFIED RESINS, REINFORCED WITH THE CHOPPED GLASS FIBERS. ALL EXPOSED SURFACES SHALL BE FINISHED WITH COLORED GEL-COAT WITH U-V INHIBITOR.

5. INTERNAL METAL REINFORCEMENT ANCHORAGE CLIPS, BRACKETS, FASTENERS AND STAINLESS STEEL HARDWARE TO BE SUPPLIED BY CONTRACTOR OR INSTALLER. 6. FINAL RATIO OF MATERIALS, OTHER THAN METAL SHALL BE 25% FIBER, 75% RESIN FOR BODY OF COMPONENTS.

8FINISHED PANELS SHALL BE TRUE TO LINE INSHAPES INDICATED ON THE DRAWINGS, FREE OF WARPS, TWISTS, WAVES OR DISTORTION.

9.JOINTS IN COMPONENTS SHALL BE MATCHED AT THE FACTORY AND NUMBERED IF NECESSARY FOR FIELD INSTALLATION. COMPONENTS SHALL BE FABRICATED TO MINIMIZE EXPOSED FASTENERS. 10. PARTS SHALL HAVE A SMOOTH GEL-COAT FINISH MATCHING THAT OF THE FRP SAMPLE PROVIDED TO

ARCHITECT AND /OR OWNER.

I. THE FRP SHAPES WHEN INSTALLED SHALL BE CAPABLE OF WITH STANDING POSITIVE AND NEGATIVE WIND PRESSURE WITHOUT STRUCTURAL FAILURE, CRACKING, PERMANENT DISTORTATION OR DISPLACEMENT. 2. ALLOWABLE DESIGN STRESSES AND RESISTANCE SHALL BE CONSERVATIVELY SELECTED BY THE ENGINEER. 3. LOAD BEARING STRENGTHS: THE MAXIMUM TEMPORARY DEFLECTION DUE TO ALL LOADS SHALL NOT EXCEED 1/360th OF THE DISTANCE BETWEEN SUPPORT FRAMING MEMBERS

4. THERMAL MOVEMENT: DESIGN, FABRICATE AND INSTALL COMPONENT PARTS TO PROVIDE FOR EXPANSION AND CONTRACTION OVER AN AMBIENT 5. THE FIBERGLASS REINFORCED POLYESTER PLASTIC COMPONENTS SHALL BE ENGINEERED, FABRICATED AND ERECTED T*O CO*NFORM TO THE SPECIFICATIONS AND APPLICABLE REQUIREMENTS AS SPECIFIED BY LOCAL CODES

ASTN

TO FIT THE BUILDING STRUCTURE AND TO CONFORM TO THE ARCHITECT'S VISUAL DESIGN CRITERIA.

ASTM E-84 (TUNNEL TEST) FLAME SPREAD

ASTM E-84 (TUNNEL TEST) SMOKE DENSITY

TENSILE STRENGTH 18,000 ASTM D-638 FLEXURAL STRENGTH ASTM D-790 FLEXURAL MODULUS ASTM D-790 COMPRESSIVE STRENGTH 8,000 ASTM D-695 BEARING STRENGTH 0000 ASTM D-638 THERMAL EXPANSION 10 x 104 (in/in/F0) BARCOL HARDNESS ASTM

CERTAIN APPLICATIONS MAY BE BEST SUITED TO SPECIALTY RESINS NOT CAPABLE OF MFFTING THE ABOVE MECHANICAL STRENGTH VALUES. SUCH RESINS WILL BE

ALLOWED WITH COMPENSATORY INCREASES IN MINIMUM THICKNESS.

GLASS CONTENT

LESS THAN 380 (unfilled)

SPECIFICATIONS TO BE ADDED.

GLASS REINFORCED CEMENT (GRC)

WOOD DOOR SPECS

LESS THAN 25 (unfilled)

NOTE: FOR WOOD DOORS SEE DWG.A-10

TO BE GALVANIZE STEEL UNO. NOTE: ANCHORING SYSTEM FOR CAST STONE DECOR WILL BE HOOK, TIE AND GROUT

(HTG) TO STEEL STRUCTURE.

COPYRIGHT © 2015 BY SHASHI D. PATEL AIA. ALL RIGHTS RESERVED. REPRODUCTION IN PART OR WHOLE IS PROHIBITED WITHOUT A WRITTEN CONSENT FROM SHASHI D. PATEL AIA NCARB NOTE: DO NOT SCALE PRINTED DRAWINGS

NOTE: ALL STEEL FRAMING FOR SHIKHARS



10-05-2015 released for const.

AS NOTED drawn by CADD-SPA

HASHID. PATELAIA NCARB ARCHITECTS AND PLANNERS 442 EAST END AVE. STE-B. PITTSBURGH PA 15221

CONSTRUCTION DOCUMET PHASE

TECHNICAL SPECIFICATIONS

RADHA KRISHNA TEMPLE

ALLEN TEXAS

dwg. 07162013

A - 17