

### REQUIRED SPECIAL INSPECTIONS

IN ADDITION TO THE REGULAR INSPECTIONS REQUIRED BY SECTION 109, THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704 OF THE IBC 2003.

ITEM	SECTION
SOILS COMPLIANCE PRIOR TO FND INSPECTION	1704.7
STRUCTURAL CONCRETE OVER 2500 PSI	1704.4
FIELD WELDING	1704.3.1
HIGH STRENGTH BOLTS	1704.3.3
STRUCTURAL MASONRY	1704.5.2
ANCHOR BOLTS IN CONCRETE	1704.4.3

### 4 SPECIAL INSPECTIONS

NTS

### DESIGN LOADS

1. CODE	IBC 2003	
2. GRAVITY LOADS		
A. DEAD LOADS - ROOF	MAX	MIN
1. ROOFING, INSULATION, AND METAL DECK	6 PSF	3 PSF
2. JOISTS	3 PSF	2 PSF
3. JOISTS GIRDERS	2.5 PSF	2 PSF
4. MECHANICAL, ELECTRICAL, PLUMBING, AND SPRINKLERS	6 PSF	1 PSF
5. MISCELLANEOUS	2.5 PSF	0 PSF
TOTALS	20 PSF	8 PSF
B. LIVE LOADS	20 PSF	REDUCIBLE
1. ROOF	100 PSF	REDUCIBLE
2. SECOND FLOOR	100 PSF	
3. STAIRS	100 PSF	
3. LATERAL LOADS		
A. WIND LOADS	90 MPH	(3 SEC GUST)
1. WIND SPEED	1.0	
2. IMPORTANCE FACTOR (I)	C	
3. EXPOSURE CATEGORY		
4. WIDTH OF END ZONE (e)		
B. DESIGN WIND PRESSURE		
1. WALLS	PSF	
INTERIOR ZONE	PSF	
CORNER ZONE	PSF	
PARAPETS	PSF	
2. ROOF UPLIFT (NET)	PSF	
JOIST GIRDERS, EDGE ZONE	PSF	
JOIST GIRDERS, INTERIOR ZONE	PSF	
JOISTS, CORNER ZONE	PSF	
JOISTS, EDGE ZONE	PSF	
JOISTS, INTERIOR ZONE	PSF	

### 3 DESIGN LOADS

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### ABBREVIATION LEGEND

ABBR	DEFINITION	ABBR	DEFINITION
AB	ANCHOR BOLT	LLV	LONG LEG VERTICAL
ACI	AMERICAN CONCRETE INSTITUTE	LOC	LOCATION
AFF	ABOVE FINISHED FLOOR	LONG	LONGITUDINAL
AISI	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LSH	LONG SIDE HORIZONTAL
AISC	AMERICAN IRON AND STEEL INSTITUTE	LSV	LONG SIDE VERTICAL
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MC	MOMENT CONNECTION
AWS	AMERICAN WELDING SOCIETY	MECH	MECHANICAL
BFF	BELOW FINISHED FLOOR	MFR	MANUFACTURER
BL	BLOCK LINTEL	MIN	MINIMUM
BO	BOTTOM OF	MISC	MISCELLANEOUS
BOS	BOTTOM OF STEEL	MO	MASONRY OPENING
BRG	BEARING	MTL	METAL
CIP	CAST IN PLACE	NIC	NOT IN CONTRACT
CJ	CONTROL JOINT	NO	NUMBER
CL	CENTER LINE	NS	NEAR SIDE
CLR	CLEAR	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	OC	ON CENTER
COL	COLUMN	OD	OUTSIDE DIAMETER
CONC	CONCRETE	OH	OPPOSITE HAND
CONST	CONSTRUCTION	PAF	POUNDS ACTUATED FASTENER
CONT	CONTINUOUS	PCF	POUNDS PER CUBIC FOOT
DIA	DIAMETER	PENTR	PENETRATION
EAC	EACH	PL	PLATE
EDC	ELECTRICAL DISTRIBUTION CENTER	PLAM	PLASTIC LAMINATE
EFS	EXTERIOR INSULATION AND FINISH SYSTEM	PLF	POUNDS PER LINEAR FOOT
EJ	EXPANSION JOINT	PSF	POUNDS PER SQUARE FOOT
ELEV	ELEVATION	PSI	POUNDS PER SQUARE INCH
ELEC	ELECTRICAL	QTY	QUANTITY
EQ	EQUAL	REF	REFER TO
EW	EACH WAY	REINF	REINFORCING
EXIST	EXISTING	REQD	REQUIRED
EXP	EXPANSION	REV	REVERSE
EXT	EXTERIOR	RO	ROUGH OPENING
FDN	FOUNDATION	RTU	ROOF TOP UNIT
FF	FINISHED FLOOR	SCHED	SCHEDULE
FRP	FIBER REINFORCED PLASTIC	SDI	STEEL DECK INSTITUTE
FS	FAR SIDE	SHT	SHEET
FTG	FOOTING	SIM	SIMILAR
FV	FIELD VERIFY	SJI	STEEL JOIST INSTITUTE
GA	GAGE	SPECS	SPECIFICATIONS
GALV	GALVANIZED	STRUC	STRUCTURAL
GC	GENERAL CONTRACTOR	T&B	TOP AND BOTTOM
GYP BD	GYPSPUM BOARD	THK	THICKNESS
H	HEIGHT	TO	TOP OF
HORIZ	HORIZONTAL	TOC	TOP OF CONCRETE
HSA	HEADED STUD ANCHOR	TOF	TOP OF FOOTING
INFO	INFORMATION	TOGB	TOP OF GRADE BEAM
INT	INTERIOR	TOM	TOP OF MASONRY
ISO	ISOLATION	TOP	TOP OF PAVING
JBE	JOIST BEARING ELEVATION	TOS	TOP OF STEEL
JST	JOIST	TRANS	TRANSVERSE
JT	JOINT	JT	TYPICAL
KSI	KIPS PER SQUARE INCH	UNO	UNLESS NOTED OTHERWISE
L	LENGTH	VERT	VERTICAL
LB	POUNDS	W	WIDTH
LLH	LONG LEG HORIZONTAL	WP	WORK POINT

### 1 ABBREVIATION LEGEND

NTS

### GENERAL NOTES

**FOUNDATIONS AND SLABS-ON-GRADE:**

F1 PIER DESIGNS ARE BASED ON A NET ALLOWABLE BEARING PRESSURE OF 40,000 PSF AND A SKIN FRICTION RESISTANCE OF 6,000 PSF FOR PENETRATIONS A MINIMUM OF 2'-0" INTO GREY SHALEY LIMESTONE. REFERENCE SHT S3.0 FOR EXACT PIER PENETRATIONS REQUIRED. PIERS ARE DESIGNED IN ACCORDANCE WITH SOILS REPORT NO. G051147 DATED DECEMBER 8, 2005, PREPARED BY ALPHA TESTING, INC. REFER TO TYPICAL PIER DETAIL 1-S3.0.

F2 THE CONTRACTOR MUST READ THE SOILS REPORT AND BE THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN. ALL SUBGRADE PREPARATION, FILL, FILL PLACEMENT, AND FOUNDATION CONSTRUCTION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE STRUCTURAL DOCUMENTS AND THE SOILS REPORT, AND SHALL BE OBSERVED, TESTED, AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING.

F3 ALL ORGANIC AND DELETERIOUS MATERIAL, AS WELL AS ANY EXISTING PAVING, FOUNDATIONS, OR EXISTING FILL SHALL BE REMOVED FROM THE BUILDING PAD AREA PRIOR TO PLACEMENT OF FILL.

F4 EXCAVATE THE BUILDING PAD AS REQUIRED TO ALLOW FOR THE BUILDING SLAB, OVER A 10 MIL POLY VAPOR BARRIER, OVER A MINIMUM OF ONE FOOT OF SELECT, NON-EXPANSIVE FILL, OVER 4 FEET OF MOISTURE CONDITIONED SOIL. MOISTURE CONDITIONING SHALL EXTEND AT LEAST 5 FEET BEYOND THE BUILDING PERIMETER, INCLUDING CANOPIES, AND 10 FEET BEYOND THE BUILDING PERIMETER AT ENTRANCES. SELECT FILL SHALL NOT EXTEND BEYOND THE BUILDING PERIMETER. REFER TO THE SOILS REPORT SECTION 5.6.1 FOR MORE SPECIFIC INFORMATION.

F5 THE FINAL BUILDING PAD SHALL BE APPROVED BY THE OWNERS' GEOTECHNICAL REPRESENTATIVE PRIOR TO POURING CONCRETE.

F6 BUILDING PAD INFORMATION GIVEN ABOVE WAS TAKEN DIRECTLY FROM THE SOILS REPORT. REFERENCE THE SOILS REPORT NOTED ABOVE FOR MORE SPECIFIC BUILDING PAD PREPARATION INFORMATION.

F7 EXCAVATIONS THROUGH SHALEY LIMESTONE ENCOUNTERED BELOW A DEPTH OF ABOUT 6 FEET MAY REQUIRE SPECIAL EQUIPMENT, REFER TO THE SOILS REPORT.

F8 THE TOPS OF ALL PERIMETER PIERS SHALL BE AT LEAST 18 INCHES BELOW THE FINAL SURROUNDING GRADE.

F9 GRADE BEAM DIMENSIONS AND/OR LOCATIONS MAY NOT BE ALTERED WITHOUT APPROVAL OF THE ENGINEER OF RECORD.

F10 BELLING AT THE TOP OF PIERS SHALL BE AVOIDED. SHOULD BELLING OCCUR, SONOTUBE FORMS SHALL BE USED TO EXTEND THE PIER TO THE PROPER ELEVATION.

F11 A 6-INCH AIR VOID SHALL BE PROVIDED BENEATH ALL GRADE BEAMS USING COLLAPSIBLE CARDBOARD VOID BOXES.

F12 CONCRETE SHALL BE PLACED IN ALL PIER HOLES WITHIN 4 HOURS OF EXCAVATION. ANY ACCUMULATED WATER SHALL BE PUMPED FROM THE PIER HOLES PRIOR TO CONCRETE PLACEMENT.

F13 REFER TO THE SLAB CONSTRUCTION NOTES ON SHT S0.1 FOR ALL SLAB-ON-GRADE REQUIREMENTS.

F14 SLABS-ON-GRADE ARE REINFORCED CONCRETE, REFERENCE THE FOUNDATION PLAN FOR SIZE AND SPACING OF REINFORCEMENT.

F15 SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 'GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION', ACI 302.1.

F16 SLABS-ON-GRADE SHALL REST ON A 10 MIL VAPOR BARRIER OVER SELECT FILL. ANY STANDING WATER ON THE SURFACE OF THE VAPOR BARRIER SHALL BE REMOVED PRIOR TO CONCRETE PLACEMENT.

F17 PROVIDE SAW CUT JOINTS AS NOTED ON THE FOUNDATION PLAN. MAXIMUM SPACING OF JOINTS IS 15'-0" UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS.

F18 PROVIDE (1) #4 BAR, 2'-0" LONG DIAGONALLY AT TOP AND BOTTOM OF SLAB AT REENTRANT CORNERS.

F19 PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS UNO. REF CORNER BAR DETAIL.

F20 FOUNDATION WALLS SHALL HAVE TEMPORARY BRACING BEFORE BACKFILL IS PLACED AGAINST THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED.

F21 FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER.

**CONCRETE AND REINFORCEMENT:**

C1 CONCRETE SPECIFICATIONS SHALL BE AS FOLLOWS:

	28 DAY COMPRESSIVE STRENGTH	AGGREGATE	SUMP	MAX W/C RATIO
GRADE BEAMS	3,000 PSI	1" MAX H.R.	3" - 5"	0.53
PIERS	3,000 PSI	1" MAX H.R.	5" - 7"	0.53
SLABS-ON-GRADE	REF SLAB CONSTRUCTION NOTES	3/4" MAX H.R.	REF SLAB NOTES	

C2 REFER TO THE SLAB CONSTRUCTION NOTES FOR PROPERTIES OF INTERIOR CONCRETE FLOOR SLABS.

C3 CONCRETE SLUMPS INDICATED ABOVE ARE PRIOR TO THE ADDITION OF WATER-REDUCING ADMIXTURES. SLUMP AT THE POINT OF PLACEMENT SHALL NOT EXCEED 6".

C4 PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I. AGGREGATE SHALL CONFORM TO ASTM C-33 H.R. AND BE FROM A SINGLE SOURCE.

C5 DO NOT USE FLY ASH IN ARCHITECTURALLY EXPOSED CONCRETE. FLY ASH IS PERMITTED IN OTHER NON-ARCHITECTURALLY EXPOSED CONCRETE. FLY ASH SHALL CONFORM TO ASTM SPECIFICATION C-618, CLASS C OR CLASS F, AND SHALL NOT EXCEED 20 PERCENT BY WEIGHT FOR ALL CEMENTITIOUS MATERIAL USED. THE WEIGHT OF FLY ASH SHALL BE ADDED TO THE WEIGHT OF CEMENT IN THE CALCULATION OF THE WATER CEMENT RATIO.

C6 ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED. AIR CONTENT SHALL BE 5 PERCENT PLUS / MINUS 1.5 PERCENT. DO NOT AIR-ENTRAIN INTERIOR FLOOR SLABS.

C7 REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A-615, LATEST REVISION. BARS SHALL BE GRADE 60.

C8 REFER TO ACI 318 FOR CONCRETE COVER, ACI 315 FOR DETAILING PRACTICES AND FABRICATION, AND ACI 301 FOR STANDARD PRACTICE FOR MIXING AND PLACING CONCRETE.

**CONCRETE ANCHORS AND SHEAR CONNECTORS:**

A1 SHEAR CONNECTIONS SHALL BE NELSON FLUXED HEADED STUDS OR APPROVED EQUAL. STUDS SHALL BE AUTOMATICALLY END WELDED IN THE SHOP OR IN THE FIELD. ALL STUD WELDS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NELSON STUD WELDING DIVISION, LORAIN, OHIO. HEADED STUDS SHALL BE MANUFACTURED OF C-1015, C-1017, OR C-1020 COLD DRAWN STEEL CONFORMING TO ASTM SPECIFICATION A-108-58T.

A2 CONCRETE ANCHORS SHALL BE HILTI KWIK BOLT 3 EXPANSION-TYPE ANCHORS, AS MANUFACTURED BY HILTI, CORP OF TULSA, OKLAHOMA, OR APPROVED EQUAL.

**STRUCTURAL STEEL:**

S1 ALL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTHS AND SPECIFICATIONS:

	YIELD	SPECIFICATION
WIDE FLANGE STEEL SHAPES	50 KSI	A992
STRUCTURAL STEEL TUBING	46 KSI	A500 GRADE B
STRUCTURAL STEEL PIPE	35 KSI	A53 TYPE E, GRADE B
BAR, PLATES, CHANNELS, ANGLES, AND ANCHOR BOLTS	36 KSI	A36
HEADED STUD ANCHORS (HAS)	50 KSI	A108 GRADE DESIGNATIONS 1010 TO 1020 INCLUSIVE

S2 BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4" DIAMETER ASTM A 325-N HIGH-STRENGTH BOLTS, UNO. ALL BOLTED CONNECTIONS ARE BEARING TYPE. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT, UNO.

S3 WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE. ELECTRODES SHALL BE 70 KSI LOW HYDROGEN.

S4 THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.

S5 PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION. USE HALF HEIGHT NUTS UNDER BASE PLATE WHEN STEEL COLUMN ANCHOR BOLTS ARE 1 1/4" DIAMETER.

S6 PROVIDE 1 1/2 INCH NON-SHRINK GROUT UNDER PLATE AFTER ERECTION. NON-SHRINK GROUT, WHERE INDICATED ON PLANS, SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS.

S7 PROVIDE 1.5x3x1/4 (LLV) FIELD-FABRICATED FRAME BETWEEN JOISTS AT OPENINGS IN ROOF GREATER THAN 10"x10", UNO.

S8 ALL STRUCTURAL STEEL, EXCEPT EMBEDDED ITEMS, SHALL BE PAINTED WITH ONE SHOP COAT OF RUST INHIBITIVE PAINT. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED IN WHOLE OR IN PART FOR SHOP DRAWING SUBMITTALS.

**STEEL JOISTS AND JOIST GIRDERS:**

J1 ALL STEEL JOISTS AND JOIST GIRDERS SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC AND SJI SPECIFICATIONS FOR OPEN WEB STEEL JOISTS AND JOIST GIRDERS.

J2 JOIST, JOIST GIRDERS, AND ACCESSORIES SHALL BE PAINTED WITH ONE SHOP COAT OF RUST INHIBITIVE PAINT.

J3 HANGERS SUPPORTING MECHANICAL EQUIPMENT FROM JOIST CHORDS SHALL BE LOCATED WITHIN 3 INCHES OF JOIST PANEL POINTS OR JOIST SHALL BE REINFORCED PER JOIST REINFORCING DETAIL. HANGER LOADS GREATER THAN 150 POUNDS SHALL NOT BE ATTACHED TO THE EDGE OF CHORD ANGLES AND SHALL BE CENTERED ON JOIST CHORD.

J4 JOISTS AND JOIST GIRDERS SHALL RESIST THE NET UPLIFT PRESSURE ON ROOF SHOWN IN THE DESIGN LOADS.

J5 SPECIAL JOISTS AND JOIST GIRDERS THAT REQUIRE SPECIFIC ORIENTATION SHALL BE TAGGED AT ONE END. DEFINE LOCATION OF TAGGED END ON ERECTION DRAWINGS.

J6 DIAGONAL BRIDGING SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS DISCONTINUOUS.

J7 STEEL JOISTS DESIGNATED WITH THE TERM "ADD LOAD" SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE CONCENTRATED LOADS INDICATED ON THE ROOF FRAMING PLAN, LOCATED ANYWHERE ALONG THE JOIST, IN ADDITION TO THE DEAD AND LIVE LOADS INDICATED ON THE DRAWINGS.

**METAL ROOF DECK:**

RD1 ROOF DECK SHALL BE TYPE 1.59W36 MTL ROOF DECK (33,000 PSI MIN YIELD STRENGTH) AS MANUFACTURED BY WHEELING OR AN APPROVED EQUAL. REFER TO THE ROOF FRAMING PLAN FOR DECK GAGE.

RD2 ALL METAL ROOF DECK SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PAINT.

RD3 ROOF DECK SHALL SPAN ACROSS OF MINIMUM OF THREE JOISTS OR BEAMS.

RD4 ROOF DECK MANUFACTURER SHALL DESIGN DECK CONNECTION TO ALL STEEL SUPPORTS TO WITHSTAND THE UPLIFT LOADS INDICATED IN THE DESIGN LOADS. THE MINIMUM CONNECTION OF ROOF DECK TO SUPPORTING MEMBERS SHALL BE AS INDICATED ON THE ROOF DIAPHRAGM CONNECTION DETAIL ON SHEET S5.0.

**SLABS ON METAL FORM DECK:**

FD1 COMPOSITE FLOOR DECK SHALL BE TYPE 2.05B MTL DECK (50,000 PSI MIN YIELD STRENGTH) AS MANUFACTURED BY WHEELING OR AN APPROVED EQUAL. REFER TO THE FRAMING PLANS FOR DECK GAGE.

FD2 SLABS ON PERMANENT METAL FORM DECK SHALL HAVE A TOTAL THICKNESS AS INDICATED ON THE FRAMING PLAN(S).

FD3 SLABS SHALL BE REINFORCED WITH WELDED WIRE MESH, SUPPLIED IN FLAT SHEETS, AT MID-DEPTH OF SLAB, TYPICAL UNO. WIRE MESH SIZE SHALL BE AS INDICATED ON THE FRAMING PLAN(S).

FD4 METAL FORM DECK SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM DESIGNATION A653-94, GRADE 80 STEEL, GALVANIZED, WITH A G60 COATING.

FD5 BEAR DECK ON STEEL SUPPORTS WITH 1-1/2 INCH MINIMUM BEARING.

FD6 CONNECT FORM DECK TO ALL STEEL SUPPORTING MEMBERS WITH 5/8" DIAMETER PUDDLE WELDS MADE THROUGH CURVED WELD WASHERS AT 12" OC.

FD7 FASTEN SIDE LAPS OF PANELS BETWEEN SUPPORTS, AT INTERVALS NOT EXCEEDING THE LESSER OF 1/2 OF THE SPAN OR 36 INCHES WITH SELF-DRILLING NO. 10 DIAMETER OR LARGER CARBON-STEEL SCREWS, OR CLINCH OR BUTTON PUNCHING OR WITH A MINIMUM OF 1 1/2 INCH LONG WELDS.

FD8 ENDS OF DECK UNITS SHALL LAP A MINIMUM OF 2" AT SUPPORTS.

FD9 PREPARE AND REPAIR DAMAGED GALVANIZED COATINGS ON BOTH SURFACES OF DECK WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

**COLD ROLLED STEEL FRAMING SYSTEM:**

CR1 ALL STUDS AND/OR JOISTS AND ACCESSORIES SHALL BE MADE OF THE SIZE, TYPE, MATERIAL THICKNESS, AND SPACING SHOWN ON THE DRAWINGS.

CR2 C STUDS AND JOISTS ARE LISTED BY SIZExFLANGE WIDTHxGAGE, i.e.: C6x1 5/8 x 20 GA.

CR3 ALL GALVANIZED STUDS AND JOISTS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF 1996 AISI STANDARDS.

CR4 ALL STRUCTURAL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE AISI 'SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, 1996 EDITION.

CR5 ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A653-94.

CR6 ALL STRUCTURAL MEMBERS SHALL BE ZINC-COATED MEETING ASTM A924.

CR7 ALL STRUCTURAL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE AISI 'SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION.

CR8 DOUBLE STUDS SHALL BE USED TO SUPPORT THE ENDS OF LINTELS.

CR9 TOP AND BOTTOM RUNNER TRACKS OF EXTERIOR AND LOAD-BEARING INTERIOR WALLS SHALL BE SECURELY ANCHORED TO THE ROOF OR JOIST STRUCTURE OVERHEAD AND THE FLOOR STRUCTURE BELOW BY WELDING, NAILING, OR BOLTING AS APPLICABLE. VERTICAL WALL STUDS ABOVE OPENINGS SHALL BE ANCHORED TO CONTINUOUS EDGE ANGLES AND HORIZONTAL BRACE ANGLES AT EACH STUD LOCATION WITH LIGHT GAGE CLIP ANGLES CAPABLE OF SUSTAINING A GRAVITY LOAD OF 400 LBS AND A HORIZONTAL WIND LOAD OF 400 LBS, OR PROVIDE A 1/8 X 3 INCH FILLET WELD AT EACH LOCATION. FULL HEIGHT VERTICAL STUDS SHALL BE CONNECTED TO CONTINUOUS EDGE ANGLES WITH LIGHT GAGE CLIP ANGLES ALLOWING FOR VERTICAL MOVEMENT AND A HORIZONTAL WIND LOAD OF 400 LBS.

**MASONRY:**

M1 CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C 90, TYPE II. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) SHALL BE 1500 PSI.

M2 MORTAR SHALL MEET THE PROPERTY SPECIFICATIONS OF ASTM C 270 TYPE "S" MORTAR. MASONRY CEMENT SHALL NOT BE USED FOR MORTAR.

M3 GROUT SHALL MEET ASTM SPECIFICATION C 478 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.

M4 GROUT SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4" DIAMETER HEAD.

M5 HORIZONTAL JOINT REINFORCEMENT SHALL BE LADDER TYPE. JOINT REINFORCEMENT SHALL BE SPACED AT 8" OC.

M6 CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.

M7 CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR SHALL BE LIGHT WEIGHT OR NORMAL WEIGHT AND SHALL BE GROUTED ONLY AT REINFORCED CELLS AND BOND BEAMS, UNO.

M8 INSTALL TEMPORARY BRACING AT ALL CMU WALLS. DO NOT REMOVE TEMPORARY BRACING UNTIL WALL IS PERMANENTLY BRACED BY CONNECTION TO THE ROOF STRUCTURE.

M9 REFER TO CMU WALL REINFORCING DIAGRAM AND CMU WALL REMOVAL REINFORCING SCHEDULE FOR PRIMARY WALL REINFORCEMENT.

M10 REFER TO CMU WALL REINFORCING DIAGRAM, TYPICAL MASONRY WALL OPENING DIAGRAM AND SCHEDULE, AND SPECIAL WALL SECTION SCHEDULE AND DETAILS FOR ADDITIONAL REINFORCING AT OPENINGS, CONTROL JOINTS, CORNERS AND ENDS OF WALL PANELS.

M11 PROVIDE HORIZONTAL REINFORCEMENT AS INDICATED IN THE CMU WALL REINFORCING DIAGRAM. USE OPEN KNOCK OUT BOND BEAM BLOCK. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNO.

M12 MASONRY CONSTRUCTION REQUIRES SPECIAL INSPECTION. REF TO THE BUILDING CODE FOR REQUIREMENTS.

### 2 GENERAL NOTES

NTS

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Bridging God's Way

REGISTERED PROFESSIONAL ARCHITECT

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4/28/06

**TRINITY CHRISTIAN ACADEMY**

**NEW PERFORMING ARTS BLDG.**

EARLY SITE & FOUNDATION PACKAGE

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**GENERAL NOTES**

Project AS-081

**S0.0**

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DO NOT SCALE DRAWING

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