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PROPOSED BUILDING

THE FOLLOWING BUILDING CODES AND STANDARDS SHALL BE REFERENCED DURING CONSTRUCTION:

IBC 2003 EDITION OF THE IBC INTERNATIONAL BUILDING CODE

ASCE 7 AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

ACI 301 AMERICAN CONCRETE INSTITUTE SPECIFICATION FOR STRUCTURAL CONCRETE

AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, NINTH EDITION

ACI 318 AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS

NDS NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION BY NATIONAL FOREST PRODUCTS ASSOCIATION, 2001.

REFERENCE ARCHITECTURAL PLANS FOR DIMENSIONS NOT SHOWN. REFERENCE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL PLANS FOR SIZES AND LOCATIONS OF WALL AND SLAB OPENINGS, DUCTS, PIPING, CURBS, AND EQUIPMENT PADS. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, OR NOTES ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION.

EXISTING DIMENSIONS AND CONDITIONS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION OR FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF DEVIATIONS OR CHANGES ARE REQUIRED TO THE CONTRACT DOCUMENTS OR APPROVED SHOP DRAWINGS DUE TO INTERFERENCES, FABRICATION ERRORS, OR OTHER CAUSES.

THE STRUCTURE IS SELF-SUPPORTING AND STABLE AFTER THE ENTIRE BUILDING IS COMPLETELY CONSTRUCTED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION PROCEDURES AND SEQUENCING DURING CONSTRUCTION AND ERECTION TO PROVIDE AND ENSURE LOCAL AND OVERALL STABILITY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION AND ERECTION. THE CONTRACTOR SHALL RETAIN A LICENSED STRUCTURAL ENGINEER TO DESIGN TEMPORARY BRACING/SHORING AND DETERMINE WHERE THE TEMPORARY BRACING/SHORING IS NEEDED.

**GENERAL NOTES** SCALE: NTS

LIVE LOAD:  
OFFICES = 50 PSF LIVE LOAD + 20 PSF PARTITION LOAD;  
LOBBIES AND FIRST FLOOR CORRIDORS = 100 PSF  
CORRIDORS ABOVE FIRST FLOOR = 80 PSF

SNOW LOADS:  
GROUND SNOW LOAD, P<sub>g</sub> = 60 PSF  
SNOW EXPOSURE FACTOR, C<sub>e</sub> = 1.0  
SNOW LOAD IMPORTANCE FACTOR, I = 1.0  
FLAT ROOF SNOW LOAD, P<sub>f</sub> = 42 PSF + DRIFT

MAIN WINDFORCE-RESISTING SYSTEM  
BASIC WIND SPEED = 100 MPH  
EXPOSURE B  
WIND LOADS (INCLUDES WINDWARD + LEeward) = 15.4 MPH  
COMPONENTS AND CLADDING = 23 MPH

SEISMIC CRITERIA:  
SOIL SITE CLASSIFICATION = D  
DESIGN SPECTRAL RESPONSE ACCELERATION  
S<sub>ds</sub> = .304  
S<sub>d1</sub> = .113  
SEISMIC USE GROUP I  
SEISMIC DESIGN CATEGORY C  
RESPONSE MODIFICATION COEFFICIENT..... R = 6.5  
OCCUPANCY IMPORTANCE FACTOR..... I<sub>e</sub> = 1.0  
BASE SHEAR..... V = C<sub>s</sub> \* W = 0.08 \* W

**DESIGN CRITERIA** SCALE: NTS

REFERENCE SUMMIT GEOENGINEERING GEOTECHNICAL REPORT DATED JANUARY 2002, FOR SUBGRADE AND SITE PREPARATION AND DETERMINATION (INCLUDING BY NOT LIMITED TO, EXCAVATION WORK, STRUCTURAL FILL GRADATION REQUIREMENTS, AND COMPACTION REQUIREMENTS) BENEATH FOOTINGS AND SLAB-ON-GRADES AND BEHIND FOUNDATION WALLS. IN THE EVENT OF A CONFLICT BETWEEN THE GEOTECHNICAL REPORT AND STRUCTURAL DRAWINGS, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION.

NATIVE AND FILL SOILS WITHIN PROPOSED CONSTRUCTION AREAS SHALL BE DENSIFIED AFTER STRIPPING AND PRIOR TO PLACING FILL. PROOF ROLLING SHOULD CONSIST OF A MINIMUM OF THREE PASSES ALONG THE LONGITUDINAL AXIS OF THE BUILDING AND THEN 3 PASSES IN THE TRANSVERS DIRECTION. SUBGRADE SOILS IN FOOTING TRENCHES SHOULD BE DENSIFIED FOLLOWING FOOTING EXCAVATION AND PRIOR TO FOOTING CONSTRUCTION. THE SLAB ON GRADE SHOULD BE CONSTRUCTED ON A MINIMUM OF 12 INCHES OF STRUCTURAL FILL, AS SPECIFIED BELOW, OR CRUSHED SONE.

SIEVE	% FINER BY WEIGHT
1/2 INCHES	60 TO 100
#40	0 TO 50
#200	0 TO 7

STRUCTURAL FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12 INCHES IN DEPTH AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER ASTM TEST D 1557. FOR MORE INFORMATION SEE SUBSURFACE INVESTIGATION REPORT BY SUMMIT GEOENGINEERING DATED JANUARY 2002.

PRESUMED ALLOWABLE SOIL BEARING PRESSURE USED IN DESIGN = 3000psf  
MINIMUM FROST DEPTH COVER = 4'-0" FOR EXTERIOR FOOTINGS BELOW FINAL EXTERIOR GRADE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY ON BOTH SIDES OF THE WALL. FOUNDATION WALLS AND SLAB-ON-GRADES SHALL REACH THEIR FULL 28 DAY COMPRESSIVE STRENGTH PRIOR TO BACKFILLING. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING/BRACING FOR WALLS WHEN BACKFILL IS PLACED PRIOR TO CONCRETE ACHIEVING ITS FULL 28 DAY STRENGTH. BACKFILL FOR FOUNDATION WALLS IS BASED ON DRAINED CONDITIONS. SEE ARCHITECTURAL, CIVIL, AND MECHANICAL DRAWINGS FOR FOUNDATION DRAINAGE SYSTEM. THE FOUNDATION SHALL BE BACKFILLED WITH FOUNDATION BACKFILL MEETING THE FOLLOWING GRADATION.

SIEVE	% FINER BY WEIGHT
1/2 INCHES	25 TO 70
#40	0 TO 30
#200	0 TO 5

PROTECT FOUNDATIONS FROM FROST AND KEEP BOTTOM OF TRENCH DRY DURING CONSTRUCTION. IF GROUNDWATER IS ENCOUNTERED NEAR OR ABOVE THE BASE OF THE FOOTINGS, EXCAVATIONS SHALL BE DEWATERED DURING CONSTRUCTION. SURFACE WATER SHALL BE DIVERTED AWAY FROM EXCAVATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHORING AND BRACING OF EXISTING STRUCTURES DURING EXCAVATION, BACKFILLING, AND CONSTRUCTION. CONTRACTOR SHALL SLOPE EXCAVATIONS TO ACHIEVE SOIL STABILITY.

**FOUNDATION NOTES** SCALE: NTS

ALL CONCRETE WORK, INCLUDING MATERIAL SELECTION, ADMIXTURES, MIXING, AND PLACEMENT OF CONCRETE SHALL BE IN CONFORMANCE WITH APPLICABLE BUILDING CODES. IN ADDITION, REFERENCE THE FOLLOWING CONCRETE STANDARDS AND SPECIFICATIONS:

ACI 318 AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

ACI 301 AMERICAN CONCRETE INSTITUTE SPECIFICATIONS FOR STRUCTURAL CONCRETE

ACI 305 STANDARD SPECIFICATIONS FOR HOT WEATHER CONCRETING

ACI 306 STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING

ACI 308 STANDARD PRACTICE FOR CURING CONCRETE

REQUIRED CONCRETE PARAMETERS ARE AS FOLLOWS:

LOCATION	MAX W/C RATIO	f <sub>c</sub>	AIR-ENTRAINMENT
INT. CONCR./WALLS/SLABS	.52	3,000 PSI	2% +/- 1 1/2%
FOUNDATIONS, FOOTINGS & FOUNDATION WALLS	.52	3,000 PSI	5-7%
INT. SLAB-ON-GRADE	.47	4,000 PSI	2% +/- 1 1/2%
EXT. SLAB-ON-GRADE	.45	4,000 PSI	6% +/- 1 1/2%

WHERE: W/C = WATER TO CEMENT RATIO AND  
f<sub>c</sub> = COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS

MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH, IN CONFORMANCE WITH ASTM C33.  
USE PORTLAND CEMENT TYPE II, IN CONFORMANCE WITH ASTM 150.  
AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C 260.  
ADMIXTURES SHALL CONFORM TO "SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE" ASTM C 494.  
FLY ASH USED AS ADMIXTURES SHALL CONFORM TO ASTM C 618.  
CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE IS NOT PERMITTED.  
MAXIMUM SLUMP AFTER THE ADDITION OF A WATER-REDUCING ADMIXTURE IS 8 INCHES.

CONCRETE EXPOSED TO FREEZING AND THAWING, INCLUDING FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, AND EXTERIOR WALKWAYS SHALL BE AIR ENTRAINED WITH AIR CONTENT BETWEEN 5% AND 6%. CONTRACTOR SHALL NOT PLACE CONCRETE ON FROZEN GROUND OR IN WATER. ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING NEAR-FREEZING OR FREEZING WEATHER. REFERENCE ACI 306, AS NOTED ABOVE, FOR RECOMMENDATIONS FOR COLD WEATHER CONCRETING.

CONTRACTOR SHALL SUBMIT PROPOSED CONCRETE MIX DESIGN AND LABORATORY TESTS OF FABRICATED CYLINDERS VERIFYING CONCRETE STRENGTH OR PERFORMANCE HISTORY OF MIX TO ENGINEER FOR ACCEPTANCE PRIOR TO PLACEMENT OF CONCRETE. CONCRETE USED ON SITE SHALL BE FIELD TESTED IN ACCORDANCE WITH AND IN THE PRESENCE OF AN APPROVED TESTING AGENCY. FIELD TESTING INFORMATION SHALL INDICATE SLUMP, AIR CONTENT, AND TEMPERATURE. COMPRESSION TEST 1 CYLINDER AT 7 DAYS AND 2 AT 28 DAYS. HOLD AN ADDITIONAL CYLINDER FOR A 56 DAY BREAK, IF NECESSARY. PROVIDE A SET OF 4 CYLINDERS FOR EACH PLACEMENT AND PER 50 CUBIC YARDS OF CONCRETE PLACED. THE OWNER SHALL PAY FOR ALL CONCRETE TESTING.

CONSTRUCTION JOINTS IN WALLS SHALL BE PERMITTED AS DETAILED ON THE STRUCTURAL DRAWINGS. SURFACES OF CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND LATANCE REMOVED. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED. VERTICAL CONSTRUCTION JOINTS IN WALLS SHALL NOT EXCEED A SPACING OF 40 FEET.

WHERE ELECTRICAL CONDUIT/RADIANT HEATING TUBES RUN IN THE SLAB, THEY SHALL BE LOCATED AT MID-DEPTH OF THE SLAB. ALUMINUM CONDUIT AND SLEEVES ARE NOT PERMITTED.  
ANCHOR BOLTS SHALL CONFORM TO ASTM A307. ANCHOR BOLTS SHALL HAVE HEAVY HEX NUTS AND LOCK WASHERS.

**CONCRETE NOTES** SCALE: NTS

USE DEFORMED BILLET-STEEL REINFORCING BARS, GRADE 60, IN CONFORMANCE WITH ASTM A 615. REINFORCEMENT SHALL BE ACCURATELY PLACED AND SUPPORTED PRIOR TO CONCRETE PLACEMENT, AND SHALL BE SECURED AGAINST DISPLACEMENT.

THE CONTRACTOR SHALL SUBMIT REINFORCING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO COMMENCING FABRICATION. REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES". SHOP DRAWINGS SHALL SHOW REINFORCING STEEL PLACEMENT DETAILS AND SECTIONS.

MINIMUM CONCRETE COVER FOR REINFORCEMENT	
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3 INCHES
CONCRETE EXPOSED TO EARTH OR WEATHER	2 INCHES
CONCRETE NOT EXPOSED TO EARTH OR WEATHER IN SLABS AND WALLS (FOR PRIMARY REINFORCEMENT, TIES, AND STIRRUPS)	1-1/2 INCHES
CONCRETE NOT EXPOSED TO EARTH OR WEATHER IN COLUMNS AND BEAMS	1-1/2 INCHES

CONTINUOUS REINFORCEMENT SHALL BE TENSION LAP SPLICED PER LAP SPLICE LENGTH TABLE, UNLESS OTHERWISE NOTED.

LAP SPLICE LENGTH TABLE	
BAR SIZE	#3 #4 #5 #6 #7 #8 #9
MIN LAP SPLICE (INCHES)	18 24 30 36 48 64 81

REINFORCEMENT HOOKS SHALL CONFORM TO STANDARD HOOKS ACCORDING TO ACI 318, UNLESS OTHERWISE NOTED.  
WELDING OF REINFORCEMENT IS NOT PERMITTED, UNLESS OTHERWISE NOTED.

**CONCRETE REINFORCING NOTES** SCALE: NTS

MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE5/TMS 402) AND SPECIFICATION FOR MASONRY STRUCTURES (ACI 530.1/ASCE6/TMS 602).

MINIMUM COMPRESSIVE STRENGTH OF MASONRY SHALL BE f<sub>m</sub> = 1500 PSI AT 28 DAYS.

ALL CONCRETE UNITS SHALL CONFORM TO ASTM C 90, GRADE N, TYPE 1, NORMAL WEIGHT. MINIMUM BLOCK COMPRESSIVE STRENGTH IS 1900 PSI. UNITS ARE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C 140. SUBMIT TEST RESULTS TO ENGINEER. SEE ARCH FOR COLOR.

MORTAR SHALL CONFORM TO ASTM C 270, TYPE S. SEE ARCH FOR COLOR.

HORIZONTAL JOINT REINFORCING SHALL BE DUR-0-WAL LADUR MEDIUM, 8 GAGE, TRUSS REINFORCEMENT OR EQUIVALENT PER ASTM 951, HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153. JOINT REINFORCING SHALL BE SPACED AT A MAXIMUM 16" O.C. VERTICAL, AT EVERY SECOND COURSE. PLACE REINFORCEMENT SUCH THAT LONGITUDINAL WIRES ARE EMBEDDED IN MORTAR WITH A MINIMUM COVER OF 5/8 INCHES WHEN EXPOSED TO EARTH AND WEATHER AND 1/2 INCHES WHEN NOT EXPOSED.

ALL UNITS SHALL BE LAID IN RUNNING BOND, UNLESS NOTED OTHERWISE. PLACE MASONRY WHILE MORTAR IS SOFT AND PLASTIC. REMOVE ANY UNIT DISTURBED TO THE EXTENT THAT THE INITIAL BOND IS BROKEN AFTER INITIAL POSITIONING AND RELAY IN FRESH MORTAR. NOTIFY THE ARCHITECT/ENGINEER WHEN BEARING OF THE MASONRY WYTHE ON ITS SUPPORT IS LESS THAN 2/3 TIMES THE THICKNESS OF THE WYTHE.

CONSTRUCT CHASES FOR PIPES, CONDUITS, ETC, AS MASONRY UNITS ARE LAID. ALUMINUM CONDUITS, PIPES, AND ACCESSORIES IN MASONRY, GROUT, OR MORTAR ARE NOT PERMITTED UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT REACTION BETWEEN ALUMINUM AND STEEL.

CONTRACTOR TO SUBMIT CONSTRUCTION PROCEDURES IF CONSTRUCTING DURING COLD OR HOT WEATHER (BELOW 40 DEGREES AND ABOVE 100 DEGREES FAHRENHEIT RESPECTIVELY).

PROVIDE VERTICAL CONTROL JOINTS IN WALLS AT A MAXIMUM SPACING OF 25'-0". REINFORCING IS CONTINUOUS THROUGH BOND BEAMS. ROUGHEN JOINT IN BOND BEAM AND APPLY SEALANT TO BOTH SIDES.

SECURE ALL CMU WALL SUPPORTED FIXTURES, EQUIPMENT, ETC. TO CMU WALL PER STRUCTURAL DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS. DO NOT USE EXPANSION ANCHORS.

**MASONRY NOTES** SCALE: NTS

ALL STRUCTURAL STEEL WORK SHALL CONFORM TO:

AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, NINTH EDITION

AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES

STRUCTURAL STEEL MEMBERS SHALL BE IN CONFORMANCE WITH THE FOLLOWING:

ALL STEEL, UNO ASTM A572, GRADE 50

ANGLES, PLATES ASTM A36, F<sub>y</sub>=36 KSI

STRUCTURAL TUBING ASTM A500, GRADE B, F<sub>y</sub>=46 KSI

STEEL PIPE ASTM A53, TYPE E OR S, GRADE B, F<sub>y</sub>=35 KSI

SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO COMMENCING FABRICATION. SHOP DRAWINGS SUBMITTALS SHALL INCLUDE:

CERTIFIED MILL TEST REPORTS OF STRUCTURAL STEEL (INCLUDING NAMES AND LOCATIONS OF MILLS AND SHOPS).

CERTIFIED MILL TEST REPORTS OF BOLTS, NUTS AND WASHERS (INCLUDING NAMES AND LOCATIONS OF MILLS AND SHOPS).

STRUCTURAL STEEL FABRICATION AND ERECTION DRAWINGS WHICH INCLUDE BOLTED CONNECTIONS (SHOP AND FIELD) AND WELDED CONNECTIONS (SHOP AND FIELD) DEPICTING AWS WELDING SYMBOLS.

METAL DECK SHOP DRAWINGS DEPICTING SHEAR STUD LAYOUT ON BEAMS AND GRIDERS.

OWNER SHALL RETAIN A QUALIFIED TESTING AGENCY TO PERFORM AND VERIFY THE FOLLOWING:

VISUAL INSPECTION OF ALL WELDS.

ULTRASONIC TESTING, IN ACCORDANCE WITH ASTM E-164, ON 100% OF ALL FIELD FULL PENETRATION WELDS.

PROVIDE RANDOM VERIFICATION VIA ULTRASONIC TESTING OF SHOP FULL PENETRATION WELDS.

FIELD BOLTED CONNECTIONS, INCLUDING VERIFICATION OF BOLT GRADES.

SHEAR STUD QUANTITY, PROPER INSTALLATION, SIZE, AND SPACING. SHEAR STUDS SHALL CONFORM TO AWS D1.1.

BOLTED CONNECTIONS

FIELD CONNECTIONS SHALL UTILIZE MINIMUM 3/4-INCH DIAMETER A325 HIGH STRENGTH BOLTS, UNO.

BOLTED CONNECTION SHALL BE SLIP CRITICAL (SC) AT ALL MOMENT FRAMES, BRACED FRAMES, AND AT ADDITIONAL LOCATIONS INDICATED IN THE DRAWINGS. SLIP CRITICAL CONNECTIONS SHALL UTILIZE LOAD INDICATOR WASHERS OR TENSION CONTROL BOLTS. BOLT HOLES SHALL BE STANDARD SIZE, UNO.

HIGH STRENGTH BOLTS SHALL BE INSTALLED AND TIGHTENED PER AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS.

ANCHOR BOLTS SHALL CONFORM TO ASTM A307, GRADE A, STANDARD HEX HEAD FURNISHED WITH HEAVY HEX NUTS AND LOCK WASHERS.

CONTRACTOR SHALL DESIGN CONNECTIONS NOT ALREADY DETAILED ON STRUCTURAL DRAWINGS. DESIGN SHALL BE STAMPED BY A LICENSED STRUCTURAL ENGINEER AND SUBMITTED PRIOR TO COMMENCING FABRICATION.

WELDED CONNECTIONS

WELDING SHALL CONFORM TO AWS D1.1. USE LOW-HYDROGEN SMAW ELECTRODES WITH MINIMUM TENSILE STRENGTH OF 70 KSI.

STRUCTURAL STEEL SHALL RECEIVE THE FOLLOWING PROTECTIVE COATINGS:

DO NOT PAINT SURFACES TO RECEIVE METAL DECK AND/ OR SHEAR CONNECTORS FASTENED BY WELDING, CONTACT SURFACES OF HIGH STRENGTH BOLTED CONNECTIONS, FINISHED BEARING SURFACES, AND SURFACES TO BE WELDED IN THE FIELD. IF REQUIRED, PROTECT THESE SURFACES BY RUST-INHIBITING COATING THAT CAN BE REMOVED EASILY PRIOR TO ERECTION

UNEXPOSED STRUCTURAL STEEL SHALL BE CLEANED IN ACCORDANCE WITH SSPC-SP3 AND PAINTED WITH PRIMER PAINT, NEMEC 10-99, OR EQUIVALENT, UNO.

EXPOSED STRUCTURAL STEEL TO RECEIVE ZINC-RICH EPOXY PAINT SHALL BE FIRST CLEANED IN ACCORDANCE WITH SSPC-SP6 ,COMMERCIAL BLAST CLEANING. USE NEMEC ZINC-RICH EPOXY PAINT, OR EQUIVALENT. APPLY FINISH COAT PER ARCHITECT.

EXPOSED STRUCTURAL STEEL TO BE HOT-DIPPED GALVANIZED SHALL BE IN ACCORDANCE WITH ASTM A123.

SHEAR CONNECTOR STUDS

SHEAR CONNECTOR STUDS SHALL BE NELSON, OR EQUIVALENT, 3/4-INCH DIAMETER, UNO. WELD STUDS PER STUD MANUFACTURER'S RECOMMENDATIONS THROUGH METAL DECKING. STUD LENGTH SHALL BE 1-INCH BELOW TOP OF CONCRETE SLAB ON DECK.

SHEAR STUDS, WHERE REQUIRED, ARE INDICATED ON THE DRAWINGS AS [xx] WHERE XX IS THE NUMBER OF STUDS EQUALLY SPACED BETWEEN SUPPORTS ON A BEAM OR GIRDER.

**STRUCTURAL STEEL NOTES** SCALE: NTS

QUALITY ASSURANCE: CONTRACTOR SHALL PROVIDE QUALITY CONTROL OVER ALL FABRICATION AND ERECTION ACTIVITIES.

STANDARDS: WORK SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS:  
AMERICAN IRON AND STEEL INSTITUTE (A.I.S.I.), LATEST EDITION OF "DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS."  
AMERICAN WELDING SOCIETY (A.W.S.) D.1.3, LATEST EDITION OF "STRUCTURAL WELDING CODE- STEEL SHEET"  
AMERICAN SOCIETY FOR TESTING AND MATERIALS (A.S.T.M.)  
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (A.I.S.C.)

PRODUCT HANDLING (PROTECTION OF PRODUCTS): MATERIAL SHALL BE PROTECTED FROM RAIN AND SNOW.

PRODUCTS:

- ALL FRAMING MATERIALS SHALL BE MANUFACTURED AND SUPPLIED BY DIETRICH INDUSTRIES (OR EQUIV) AND BE OF TYPE AND SIZE AS SHOWN ON THE STRUCTURAL DRAWINGS.
- GALVANIZED MATERIAL:  
A. ALL GALVANIZED STUDS AND JOISTS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF A.I.S.I. STANDARDS.  
B. ALL GALVANIZED STUDS, JOISTS, TRACKS, BRIDGING, AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF A.S.T.M. A653.
- THE PHYSICAL AND STRUCTURAL PROPERTIES LISTED BY DIETRICH INDUSTRIES SHALL BE CONSIDERED THE MINIMUM PERMITTED FOR FRAMING MEMBERS. ANY SUBSTITUTIONS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER. REPORT DISCREPANCIES TO STRUCTURAL ENGINEER.

POWER ACTUATED FASTENERS IN CONCRETE SHALL BE 0.145" DIAMETER HILTI X-DNI OR X-EDNI FOR STEEL, UNO. PROVIDE MINIMUM 1-1/8" EMBEDMENT INTO CONCRETE. PROTECTIVE COATINGS ON SCREW FASTENERS SHALL BE COMPATIBLE WITH LIGHT GAGE FRAMING.

TEMPORARY BRACING SHALL BE PROVIDED BY AND BE THE RESPONSIBILITY OF THE CONTRACTOR. PERMANENT BRACING AND BRIDGING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES. BRIDGING SHALL BE SPACED PER MANUFACTURER'S RECOMMENDATIONS. END BLOCKING SHALL BE PROVIDED FOR STEEL JOISTS WHERE JOIST ENDS ARE NOT OTHERWISE RESTRAINED AGAINST ROTATION.

ALL TRACK BUTT JOINTS, ABUTTING PIECES OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, SUCH AS A STUD, OR THEY SHALL BE BUTT WELDED TOGETHER. SPLINGING OF OTHER MEMBERS IS NOT PERMITTED, UNO.

JACK STUDS SHALL BE INSTALLED BELOW WINDOW SILLS, ABOVE WINDOW AND DOOR HEADS TO FURNISH SUPPORT AND SHALL BE SECURELY ATTACHED TO SUPPORTING MEMBERS. PROVIDE INSULATION EQUAL TO THAT SPECIFIED IN ARCHITECTURAL DRAWINGS IN ALL DOUBLE OR MORE JAMB STUDS OR HEADERS WHICH WILL NOT BE ACCESSIBLE TO THE INSULATION CONTRACTOR.

ALL WELDING SHALL BE TOUCHED UP WITH A ZINC RICH PAINT.

STEEL TRUSSES SHALL BE LATERALLY SUPPORTED AT ALL PANEL POINTS AND AS SHOWN ON PLANS. REQUIRED X-BRACING SHALL BE INSTALLED IMMEDIATELY AFTER ERECTION OF EACH ROOF TRUSS.

**LIGHT GAUGE STUD FRAMING** SCALE: NTS

AB ADDL ARCH &	ANCHOR BOLT ADDITIONAL ARCHITECT AND	L LL LB LF LLH LLV	ANGLE DOUBLE ANGLE POUND LINEAR FOOT LONG LEGS HORIZONTAL LONG LEGS VERTICAL
B/FTG, BOF BLDG BM BOT BRG BTWN	BOTTOM OF FOOTING BUILDING BEAM BOTTOM BEARING BEARING BETWEEN	MAX MECH MFR MIN MISC	MAXIMUM MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS
C CANT CP CJ CL CLR CMU CNJ COL CONC CONN CONTN CONTR CP CTR, CEN CY	STRUCTURAL STEEL CHANNEL CANTILEVER CAST-IN-PLACE CONCRETE CONTROL JOINT CENTERLINE CLEAR CONCRETE MASONRY UNIT CONSTRUCTION JOINT COLUMN CONCRETE CONNECTION CONTINUOUS CONTRACTOR COMPLETE PENETRATION WELD CENTER CUBIC YARD	NO NS NTS OC OF OPNG OPP P PL PP PREFAB PSF REINF REQ, RECD RD SC SECT SHEATH SW SOG SPAC SPECS SS STD STIFF STR STRUCT T T&B TOC, T/CONC T/FTG, TOF TEMP T/SHELF T/SLAB T/STL T/WALL TS TYP	NEAR FACE NUMBER NEAR SIDE NOT TO SCALE ON CENTER OUTSIDE FACE OPENING OPPOSITE PIER DESIGNATION PLATE PARTIAL PENETRATION WELD PREFABRICATED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH REINFORCING STEEL REQUIRED ROOF DRAIN SLIP CRITICAL SECTION SHEATHING SIMILAR SLAB ON GRADE SPACING SPECIFICATIONS STAINLESS STEEL STANDARD STIFFENER STEEL STRAIGHT STRUCTURAL
(E), EX, EXIST EA EF EL, ELEV EQ EQUIP ES EW EXP EXT	EXISTING EACH FACE ELEVATION EQUAL EQUIPMENT EACH SIDE EACH WAY EXPANSION EXTERIOR	SM SOG SPAC SPECS SS STD STIFF STR STRUCT	SECTION SHEATHING SIMILAR SLAB ON GRADE SPACING SPECIFICATIONS STAINLESS STEEL STANDARD STIFFENER STEEL STRAIGHT STRUCTURAL
F FDN FLG FLR FTG FV	FOOTING DESIGNATION FOUNDATION FINISH FLOOR FLANGE FLOOR FOOTING FIELD VERIFY	GA GALV	GAGE GALVANIZED
HOR, HORIZ HSS HT	HORIZONTAL HOLLOW STRUCTURAL SHAPE HEIGHT	IF IN INFO JT	INSIDE FACE INCH INFORMATION JOINT
K KSI	KIP (1 KIP = 1000 LBS) KIPS PER SQUARE INCH	VER, VERT VIF	VERTICAL VERIFY IN FIELD
		W W/O WP WT WNF	STRUCTURAL STEEL WIDE FLANGE WITH WITHOUT WORK POINT WEIGHT WELDED WIRE FABRIC

**ABBREVIATIONS** SCALE: NTS

SLOPE DESIGNATION UNDISTURBED EARTH

ELEVATION MARK LEDGE

ROOF PITCH COMPACTED STRUCTURAL FILL

SPAN DIRECTION CONCRETE

SECTION MARK GROUT

BRICK

CMU

NO.	DATE	ISSUE	FOR PERMIT
A	3-19-07		

**LEGEND** SCALE: NTS

NO.	DATE	ISSUE	FOR PERMIT
A	3-19-07		

SHEET TITLE:

**NOTES**

DESIGNED: SM

DRAWN: PM

DATE: 2-7-07

CADD FILE: 7016-S1.DWG

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**S0.1**