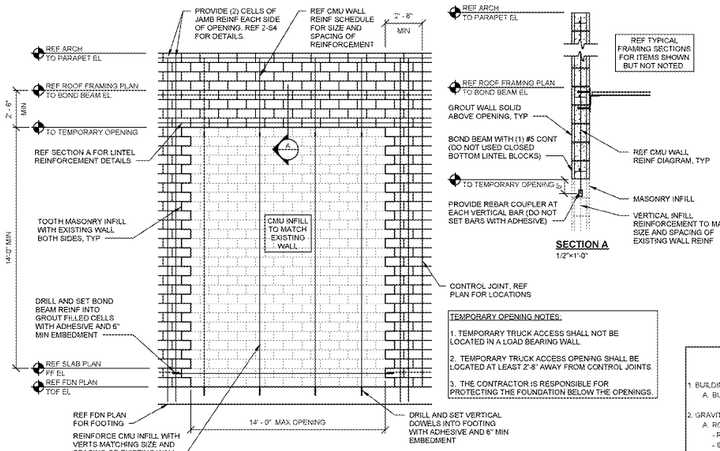
ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
BCB	BOTTOM CHORD BRACE
BFF	BELOW FINISHED FLOOR
BL	BLOCK LINTEL
BM	BEAM
BO	BOTTOM OF
BOM	BOTTOM OF MASONRY
BOS	BOTTOM OF STEEL
BRG	BEARING
CJ	CONTRACTION JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
COND	CONDENSER UNIT
CONST	CONSTRUCTION
CONT	CONTINUOUS
DIA	DIAMETER
EDC	ELECTRICAL DISTRIBUTION CENTER
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EW	EACH WAY
FDN	FOUNDATION
FF	FINISHED FLOOR
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GC	GENERAL CONTRACTOR
GYP	GYPSUM BOARD
H	HEIGHT
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SHAPE
INFO	INFORMATION
ISO	ISOLATION
JBE	JOIST BEARING ELEVATION
JST	JOIST
JT	JOINT
KSI	KIPS PER SQUARE INCH
L	LENGTH
LB	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANOUS
MO	MASONRY OPENING
MTL	METAL
NBPS	NOT BY PRECAST SUPPLIER
NIC	NOT IN CONTRACT
NO	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OSL	OUTSTANDING LEG
PAF	POWER ACTUATED FASTENER
PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUMB	PLUMBING
PMEJ	PREMOLDED EXPANSION JOINT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
QTY	QUANITY
RACK	REFRIGERATION RACK
REF	REFER TO
REINF	REINFORCING
REQD	REQUIRED
REV	REVERSE
RO	REVEAL OPENING
RTU	ROOF TOP UNIT
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SPCS	SPACES
SPECS	SPECIFICATIONS
STRUC	STRUCTURAL
T&B	TOP AND BOTTOM
THK	THICKNESS
TO	TOP OF
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOGB	TOP OF GRADE BEAM
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WIDTH
WP	WORK POINT



TEMPORARY TRUCK ACCESS WALL REINFORCEMENT

1/4" = 1'-0"
0 2' 4' 8'

SECTION A
1/2"=1'-0"

CONTROL JOINT, REF PLAN FOR LOCATIONS

TEMPORARY OPENING NOTES:

1. TEMPORARY TRUCK ACCESS SHALL NOT BE LOCATED IN A LOAD BEARING WALL.
2. TEMPORARY TRUCK ACCESS OPENING SHALL BE LOCATED AT LEAST 2'-8" AWAY FROM CONTROL JOINTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE FOUNDATION BELOW THE OPENINGS.

PRE-MANUFACTURED CANOPY NOTES

1.0 STRUCTURAL DESIGN LOADS
1.1 DESIGN DATA TABLE

ROOF DEAD LOAD	BY SUPPLIER
ROOF LIVE LOAD	20 PSF (UNREDUCIBLE)
GROUND SNOW LOAD	REF DESIGN LOADS ON SHEET S0
WIND LOAD	REF DESIGN LOADS ON SHEET S0
SEISMIC LOAD	REF DESIGN LOADS ON SHEET S0

1.2 LOAD COMBINATIONS WITH SNOW LOAD SHALL ALSO INCLUDE LOADS FROM HIGH-LOW ROOF DRIFTING FROM MAIN BUILDING ROOF, PER CODE.

2.0 CONSTRUCTION AND SAFETY
2.1 CANOPY ERECTOR SHALL PROVIDE TEMPORARY BRACING FOR THE ENTIRE CANOPY STRUCTURE UNTIL ALL STRUCTURE AND CONNECTIONS ARE INSTALLED AND FUNCTIONING AS THE DESIGNED UNIT.
2.2 THE BUILDING ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR.
2.3 THE CANOPY ERECTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE IN AND AROUND THE CANOPY INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY.

3.0 STRUCTURAL STEEL
3.1 ALL DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE CURRENT EDITION OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" OR AISI "COLD FORMED STEEL DESIGN MANUAL."
3.2 FIELD CONNECTIONS SHALL BE BOLTED EXCEPT WHERE WELDED CONNECTIONS ARE INDICATED ON THE MANUFACTURER'S DRAWINGS.
3.3 ANCHOR BOLTS SHALL BE SET IN STRICT COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
3.4 WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS D1.1 & D1.3).
3.5 MATERIALS (MINIMUM REQUIREMENTS):

A. W, WT STEEL SHAPES	ASTM A992, 50 KSI
B. HOLLOW STRUCTURAL SHAPES:	ASTM A500, GRADE B
C. OTHER STEEL SHAPES, BARS, AND PLATES:	ASTM A36, 36 KSI
D. METAL ROOF DECK:	ASTM A653 OR A1008
E. BOLTS	ASTM A307 OR A325
F. ANCHOR RODS:	ASTM F1554, 36 KSI

4.0 CANOPY FRAMING
4.1 MANUFACTURER SHALL DESIGN ALL CANOPY FRAMING AND SUBSEQUENT CONNECTIONS TO MEET THE DESIGN LOAD CRITERIA SHOWN.
4.2 PROFILES ARE SHOWN FOR GRAPHICAL PURPOSES ONLY AND NOT INTENDED TO SUGGEST CONFIGURATION OF PRIMARY MEMBERS.
4.3 STRUCTURAL DESIGN OF THE CANOPY SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE PROJECT STATE.
4.4 MANUFACTURER SHALL PROVIDE ALL FOUNDATION REACTIONS TO THE BUILDING ENGINEER FOR REVIEW AND VERIFICATION OF FOUNDATION DESIGN (FOUNDATION DESIGN BY BUILDING ENGINEER).
4.5 MANUFACTURER SHALL DESIGN AND SUPPLY ALL CONNECTIONS TO BUILDING WALL. MANUFACTURER SHALL PROVIDE ALL CONNECTION REACTIONS TO THE BUILDING ENGINEER FOR REVIEW AND VERIFICATION OF WALL DESIGN.

FOUNDATION SUBSURFACE PREPARATION

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THIS SUBSURFACE PREPARATION SHALL BE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 5 FEET BEYOND THE BUILDING AND APPURTENANCES.

APPURTENANCES ARE THOSE ITEMS ATTACHED TO THE BUILDING PROPER (REFER TO DRAWING SHEET SP1), TYPICALLY INCLUDING, BUT NOT LIMITED TO, THE BUILDING SIDEWALKS, GARDEN CENTER, PORCHES, RAMPS, STOOPS, TRUCK DOCKS, CONCRETE APRONS AT THE AUTOMOTIVE CENTER, COMPACTOR PAD, ETC. INSTALL A MINIMUM 10-MIL VAPOR RETARDER, MEETING ASTM E 1745, "CLASS A" REQUIREMENTS, PLACED ABOVE THE BASE AND DIRECTLY BELOW THE SLAB. NOTE: VAPOR BARRIER IS REQUIRED BY FLORIDA BUILDING CODE. DO NOT EXTEND BEYOND THE LIMITS OF THE ACTIVE BUILDING AND THE APURTENANCES. EXTREME CARE MUST BE TAKEN TO PERMIT SITE RUNOFF WATER AWAY FROM THE BUILDING AND PAVEMENT AREA INTO THE STORMWATER POND. AS DESIGN PRECAUTION, AND "GREEN" AREAS MUST BE CONSTRUCTED AWAY FROM STRUCTURAL AREAS.

ESTABLISH THE INITIAL SUBGRADE ELEVATION TO ALLOW FOR THE CONCRETE SLAB, AND BASE. REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED SLAB THICKNESS. THE 4" THICK BASE MATERIAL SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. LIMEROCK MATERIAL SHALL HAVE AT LEAST 97% (BY WEIGHT) PASSING A 3.5 INCH SIEVE AND SHALL BE GRADED UNIFORMLY DOWN TO DUST. THE FINE MATERIAL SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF AT LEAST 100 AND NO MORE THAN 20% FINES WHEN WASHED THROUGH A NO. 200 SIEVE. THE FLOOR SLAB BEARING SOILS SHALL BE COVERED BY A LAPPED VAPOR RETARDER OF AT LEAST 10-MIL THICKNESS, CONFORMING TO ASTM E 1745, CLASS A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL BUT AND FILL DEPTHS AND SUITABILITY OF EXISTING ONSITE SOILS. ANY PROPOSED EQUIVALENT BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 20 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CEC AND AOR.

EXISTING FOUNDATIONS, SLABS, PAVEMENTS, AND BELOW-GRADE STRUCTURES SHALL BE REMOVED FROM THE BUILDING AREA. REMOVE SURFACE VEGETATIONS, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT OR OTHERWISE UNSATISFACTORY MATERIAL (AS DEFINED IN SPECIFICATION SECTION 2300) FROM THE BUILDING AREA. PROOFROLL EXPOSED SUBGRADE. REMOVE AND REPLACE UNSATISFACTORY AREAS WITH SATISFACTORY MATERIAL. SUBGRADE MATERIAL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIALS, NON PLASTIC GRANULAR SOIL WITH LESS THAN 10 PERCENT PASSING THE NO. 200 MESH SIEVE, AND SHALL MEET THE FOLLOWING REQUIREMENTS:

		P.I. (2)	L.L.
(3)	LOCATION WITH RESPECT TO FINAL GRADE (3)		
(3)	BUILDING AREA, BELOW UPPER 4 FEET (3)	<NP > (3)	<NP>
(3)	BUILDING AREA, UPPER 4 FEET (3)	<NP >(3)	<NP >

SUBGRADE MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 96 PERCENT IN THE TOP 2 FEET AND 95 PERCENT BELOW THE TOP 2 FEET OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) AT A MOISTURE CONTENT WITHIN +/-2 PERCENT OF THE OPTIMUM MOISTURE CONTENT.

THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT COLUMNS AND CONTINUOUS SPREAD FOOTINGS AT WALLS. THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WAL-MART SPECIFICATIONS.

REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY ECS FLORIDA, LLC DATED MARCH 31, 2016 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION).

LEGEND

XXX'-XX"	INDICATES TOP OF BOND BEAM ELEVATION AT ROOF BEYOND (SEE ARCH PLANS FOR CONTROL JOINTS
RTU	ROOF TOP UNIT (RTU)
	INDICATES WALL CONTROL JOINT
	EXHAUST HOOD
	INDICATES CONCENTRATED MECHANICAL EQUIPMENT LOAD, REF NOTES ON SHEET S3 FOR JOIST LOADS
•	INDICATES CONCENTRATED LOAD ON TOP CHORD OF JOIST, REF NOTES ON SHEET S3 FOR JOIST LOADS
	SATELLITE DISH
	EXHAUST FAN (EF)
	BULKHEAD; REF NOTES ON SHEET S3 REF ARCH FOR EXACT LOCATIONS

ITEMS IN LEGEND MAY NOT OCCUR ON ALL PLANS.

STATEMENT OF SPECIAL INSPECTIONS

SPECIAL INSPECTIONS ARE REQUIRED. REFER TO THE APPLICABLE PROJECT SPECIFICATION SECTIONS FOR THE FOLLOWING INFORMATION REGARDING THE REQUIREMENTS OF SPECIAL INSPECTIONS:
1. THE MATERIALS, SYSTEMS, COMPONENTS AND WORK REQUIRED TO HAVE SPECIAL INSPECTIONS.
2. THE TYPE AND EXTENT OF EACH SPECIAL INSPECTION.
3. THE TYPE AND EXTENT OF EACH TEST.
4. ADDITIONAL SPECIAL INSPECTION REQUIREMENTS FOR WIND OR SEISMIC RESISTANCE (WHEN APPLICABLE)
5. THE FREQUENCY OF SPECIAL INSPECTIONS AND TESTING

THE SPECIAL INSPECTION REQUIREMENTS ARE BASED ON CHAPTER 17 OF THE IBC. THE EXEMPTIONS ALLOWED FOR CONCRETE CONSTRUCTION HAVE BEEN UTILIZED WHERE APPLICABLE.

DESIGN LOADS

1. BUILDING CODE
A. BUILDING CODE: 2014 FLORIDA BUILDING CODE

2. GRAVITY LOADS

	MAX	MIN
A. ROOF DEAD LOAD		
- ROOF INSULATION AND METAL DECK	6 PSF	3 PSF
- STEEL JOISTS	3 PSF	2 PSF
- MECH, ELEC, PLUMBING, SPRINKLER & MERCHANDISE	6 PSF	1 PSF
TOTALS	15 PSF	6 PSF

B. ROOF LIVE LOADS
1. ROOF: 20 PSF (MIN OR SNOW LOAD)
2. PONDING: 32 PSF (PEAK) (REF JOIST DIAGRAMS)

C. ROOF SNOW LOADS: 0 PSF

3. LATERAL LOADS
A. WIND LOADS
1. BASIC WIND SPEED (3-SECOND GUST)
- ULTIMATE DESIGN WIND SPEED: 134 MPH
- BASIC DESIGN WIND SPEED (SERVICE): 104 MPH
2. RISK CATEGORY: II
3. WIND EXPOSURE CATEGORY: B
4. VELOCITY PRESSURE EXPOSURE COEFFICIENT (Kh): +/-0.18
5. INTERNAL PRESSURE COEFFICIENT (GCpi): 6.7 PSF
6. WIDTH OF EDGE ZONE FOR EXTERIOR WALLS, JOISTS, AND ROOF ASSEMBLY
7. WIDTH OF EDGE ZONE FOR TS GIRDERS (2h): 33.5 FT

B. DESIGN WIND PRESSURES (SEE LOADS INCLUDE LOAD COMBINATION FACTOR FROM ASCE 7-10, SECTION 2.4.1)
1. EXTERIOR WALLS
- EXTERIOR ZONE: 20.5 PSF
- CORNER ZONE: 23.1 PSF
- PARAPETS: 40.9 PSF

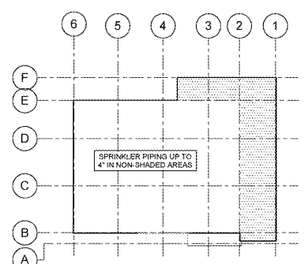
2. ROOF UPLIFT
- LOAD SATISFY THE EQUATION 0.6D + 0.6W FROM ASCE (SECTION 2.4.1)
- EXTERIOR EDGE ZONE: 13.2 PSF
- EXTERIOR INTERIOR ZONE: 5.0 PSF
- JOIST CORNER ZONE: 20.1 PSF
- JOIST EDGE ZONE: 20.1 PSF
- JOIST INTERIOR ZONE: 16.0 PSF

3. ROOF ASSEMBLY UPLIFT
- CORNER ZONE: 60.7 PSF
- EDGE ZONE: 40.1 PSF
- INTERIOR ZONE: 24.0 PSF

4. WALL OPENING DESIGN PRESSURES
- INTERNAL (0-26 SQ FT): 23.6 PSF
- EDGE (0-20 SQ FT): 29.3 PSF
- INTERNAL (20-50 SQ FT): 22.9 PSF
- EDGE (20-50 SQ FT): 27.3 PSF
- INTERNAL (50-100 SQ FT): 21.6 PSF
- EDGE (50-100 SQ FT): 24.7 PSF
- INTERNAL (100-200 SQ FT): 20.5 PSF
- EDGE (100-200 SQ FT): 23.1 PSF

C. SEISMIC LOADS (SERVICE)

1. 5% DAMPED SPECTRAL RESPONSE COEFF. (SDS)	0.084
2. 1-SEC PERIOD SPECTRAL RESPONSE COEFF. (SD1)	0.062
3. IMPORTANCE FACTOR (I)	1.0
4. RISK CATEGORY	II
5. SITE CLASS	D
6. SEISMIC DESIGN CATEGORY	A
7. BASIC STRUCTURAL SYSTEM AND SEISMIC RESPONSE SYSTEM	BEARING WALL SYSTEM WITH INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
8. RESPONSE MODIFICATION FACTOR (R)	3.5
9. OVERSTRENGTH FACTOR (Ωo)	2.0
10. ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
11. DESIGN BASE SHEAR	0.017W (SERVICE)



SPRINKLER PIPING UP TO 6" IN SHADED AREAS. (JOISTS HAVE BEEN DESIGNED FOR AN ADDITIONAL DEAD LOAD OF 4 PSF IN THIS AREA)

SPRINKLER PIPE LOADING PLAN

NTS

GENERAL NOTES

1.0 GENERAL
1.1 STEEL FRAMING IS NON-SELF SUPPORTING AND REQUIRES INTERACTION WITH OTHER ELEMENTS CLASSIFIED AS STRUCTURAL STEEL TO PROVIDE THE REQUIRED STABILITY AND RESISTANCE TO LATERAL FORCES.
1.2 THE STEEL FRAMING AND ALL CONCRETE AND CMU WALLS SHALL BE TEMPORARILY BRACED UNTIL ALL STEEL BRACING, JOISTS AND DECKS, AND CONCRETE AND CMU WALLS HAVE BEEN INSTALLED AND ALL CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE.
1.3 THE CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL AND PLUMBING WORK.

2.0 FOUNDATIONS AND SLABS-ON-GRADE
2.1 FOOTING DESIGNS ARE BASED ON A NET ALLOWABLE BEARING PRESSURE OF 2500 PSF.
2.2 THE CONTRACTOR MUST READ THE SOILS REPORT AND BE THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN.
2.3 THE BUILDING PAD WILL INCLUDE, BUT NOT BE LIMITED TO THAT WHICH IS PRESENTED UNDER "FOUNDATION SUBSURFACE PREPARATION": DESCRIPTION. THE "FOUNDATION SUBSURFACE PREPARATION" SHALL CONTROL IN DISCREPANCIES OR OPTIONS NOTED IN THE SOILS REPORT.
2.4 EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH. MINIMUM BEARING DEPTH IS 18 INCHES BELOW ADJACENT FINISHED GRADE. THICKENED SLAB EDGES FOR STOOPS, CANOPIES, ETC. SHALL BEAR TO SAME DEPTHS (UNO).
2.5 STANDARD PROCEDURES OF FROST PROTECTION FOR FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE DONE AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST.
2.6 SLABS-ON-GRADE ARE UNREINFORCED CONCRETE UNLESS NOTED OTHERWISE.
2.7 PROVIDE SAW CUT JOINTS AT 12'-0" OC MAXIMUM SPACING UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS.
2.8 PROVIDE (2) #4 BARS DIAGONAL LOOSE AT TOP OF SLAB AT REENTRANT CORNERS.
2.9 "CJ" INDICATES SAW CUT CONTRACTION JOINT IN SLAB-ON-GRADE. "CONST JT" INDICATES DOWELED CONSTRUCTION JOINT IN SLAB-ON-GRADE. REF SPECIFICATION SECTION 03312.
2.10 TRUCK DOCK RAMP SHALL BE 6" CONCRETE REINFORCED WITH #4 BARS AT 16" OC, EW PLACED 2" FROM TOP OF SLAB. PROVIDE CONTRACTION JOINTS AT 15'-0" MAX. REF SPECIFICATIONS 03310 FOR SLUMP AND AIR CONTENT. TRUCK DOCK BASE COURSE MATERIAL SHALL BE THE SAME AS FOR THE HEAVY DUTY PAVEMENT.
2.11 HORIZ BARS IN FOOTINGS AND CONCRETE STEM WALLS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS UNO. REF CORNER BAR DETAIL.
2.12 FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL TEMPORARY BRACING BEFORE BACKFILL IS PLACED AGAINST THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED.
2.13 FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER. PENETRATIONS SHALL BE THROUGH FOUNDATION STEMWALL OR 6" CLEAR BELOW FOOTING. REF 1-S2.1 FOR FOOTING STEP DETAIL. REF 1S-S2.1 FOR ROOF DRAIN FND PENETRATIONS.

3.0 CONCRETE AND REINFORCING STEEL
3.1 MINIMUM COMPRESSIVE STRENGTH (f'c) AT THE END OF 28 DAYS SHALL BE AS FOLLOWS:

A. STRUCTURAL CAST-IN-PLACE CONCRETE FOOTINGS	3000 PSI	SPECIFICATION SECTION 03310
B. STRUCTURAL FORMED CONCRETE WALLS	REF SPECS	SPECIFICATION SECTION 03310
C. EXTERIOR CAST-IN-PLACE CONCRETE SLABS	REF SPECS	SPECIFICATION SECTION 03310
D. INTERIOR CAST-IN-PLACE CONCRETE SLABS	3500 PSI	SPECIFICATION SECTION 03312
E. CAST-IN-PLACE CONCRETE COMPACTOR PAD	5000 PSI	SPECIFICATION SECTION 03310

FOR ALL OTHER CONCRETE PROPERTIES REFER TO SPECIFICATIONS.
3.2 CONCRETE EXPOSURE CLASSIFICATION FOR EXTERIOR CONCRETE SHALL BE NEGLIGIBLE F0.
3.3 REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A 615, DEFORMED BAR, GRADE 60 OR ASTM SPECIFICATION A 706, DEFORMED BAR, GRADE 60. REF SHEET S4 FOR LAP LENGTHS UNO ON DETAILS.
3.4 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.
3.5 LEAN CONCRETE - MIN 2 1/2 SACKS PORTLAND CEMENT PER CUBIC YARD.

4.0 STRUCTURAL STEEL
4.1 STRUCTURAL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTH AND SPECIFICATIONS:

STRUCTURAL STEEL	YIELD	ASTM SPECIFICATION
A. WIDE FLANGE STEEL SHAPES	50 KSI	A 992
B. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SHAPES:	50 KSI	A 500 GRADE C
C. ROUND HOLLOW STRUCTURAL SHAPES:	46 KSI	A 500 GRADE C
D. STRUCTURAL STEEL PIPE:	35 KSI	A 53, TYPE E, GRADE B
E. BARS, PLATES, CHANNELS, ANGLES, & ANCHOR BOLTS:	36 KSI	A 36, UNO
F. HEADED STUD ANCHORS	50 KSI	A 108 GRADE DESIGNATIONS 1010 TO 1020, INCLUSIVE)

4.2 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.
4.3 WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE. ELECTRODES SHALL BE 70 KSI LOW HYDROGEN.
4.4 THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.
4.5 PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION.
4.6 PROVIDE 1 1/2 INCH NON-SHRINK GROUT UNDER BASE PLATE AFTER ERECTION EXCEPT USE 2 1/2 INCH NON-SHRINK GROUT WHEN COLUMN ANCHOR BOLTS ARE 1 1/4 INCH DIAMETER OR LARGER.
4.7 PROVIDE L5x3x1/4 (LLV) FIELD-FABRICATED FRAME BETWEEN JOISTS AT OPENINGS IN ROOF GREATER THAN 10'x10", UNO, (INCLUDING ROOF DRAIN AND EXHAUST FAN OPENINGS REGARDLESS OF OPENING SIZE).
4.8 PROVIDE 3/8"x 4"x2'-10" BEARING PLATE WITH (2) 1/2" DIA x 8" HEADED STUD ANCHORS FOR STEEL BEAMS BEARING UPON MASONRY, UNO. FILL CELLS BELOW WITH GROUT AND PROVIDE (2) #6 VERTICAL REINFORCING BARS WITH DOWELS FROM FOUNDATION, UNO.

5.0 STEEL JOISTS AND JOIST GIRDERS
5.1 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.
5.2 JOISTS AND JOIST GIRDERS SHALL RESIST NET UPLIFT PRESSURE ON ROOF SHOWN IN THE DESIGN LOADS.
5.3 SPECIAL JOISTS AND JOIST GIRDERS THAT REQUIRE SPECIFIC ORIENTATION SHALL BE TAGGED AT ONE END. DEFINE LOCATION OF TAGGED END ON ERECTION DRAWINGS.
5.4 DIAGONAL BRIDGING SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS DISCONTINUOUS.
5.5 JOIST MANUFACTURER SHALL DESIGN THE COMPRESSION CHORD OF ALL JOISTS SUPPORTING ROOF TOP UNITS AND OTHER STRUCTURES FOR AN UNBRACED LENGTH APPLICABLE TO THE CONDITIONS AT THE PROJECT WHERE THE UNBRACED LENGTH IS GREATER THAN THE SJI MAXIMUM.

6.0 STEEL ROOF DECK
6.1 ROOF DECK SHALL BE PAINTED TYPE "B" (WIDE RIB) THREE SPAN MIN (UNO ON FRAMING PLAN) AS SHOWN ON ROOF FRAMING PLAN. THE STEEL ROOF DECK IS REQUIRED TO ACT AS A DIAPHRAGM. REFER TO THE ROOF DIAPHRAGM CONNECTION DIAGRAM AND SCHEDULE FOR ATTACHMENT PATTERN OPTIONS.
6.2 PROVIDE 2 LAYERS OF ROOF DECK WHERE SINGLE SPAN CONDITION EXISTS. MAKE DIAPHRAGM CONNECTIONS AFTER PLACEMENT OF BOTH LAYERS OF ROOF DECK. SINGLE SPAN SHALL BE CONSIDERED WHERE DECK IS NOT CONTINUOUS BETWEEN THREE ADJACENT JOISTS AND/OR PERIMETER ANGLE.
6.3 WHEN THE ROOF DECK IS WELDED, WELDING RODS SHALL BE E 6022.

7.0 LIGHT GAUGE STEEL FRAMING
7.1 FOR 18 GAUGE AND LIGHTER FRAMING, CONNECTIONS SHALL BE MADE USING SELF-DRILLING, SELF-TAPPING SCREWS OR POWDER ACTUATED FASTENERS.
7.2 FOR 16 GAUGE AND HEAVIER FRAMING, CONNECTIONS SHALL BE MADE BY SELF-DRILLING SELF-TAPPING SCREWS, POWDER ACTUATED FASTENERS, OR SY WELDING AS INDICATED ON THE DRAWINGS.
7.3 SELF-DRILLING SELF-TAPPING SCREW OR POWDER ACTUATED FASTENER CONNECTIONS ARE NOT PERMITTED TO BE USED WHERE WELDED STUD CONNECTIONS ARE SHOWN ON THE DRAWINGS.
7.4 ALL 18 GAUGE AND LIGHTER FRAMING SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. ALL 16 GAUGE AND HEAVIER FRAMING SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.
7.5 WHERE DETAILED CONNECTIONS OCCUR AT BRIDGING HOLES, INSTALL 16 GA x 1'-0" TRACK OVER STUD WITH (4) #10 SELF DRILLING SCREWS EACH LEG. CENTER TRACK ON CONNECTION.

8.0 MASONRY
8.1 CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C 90. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'm) SHALL BE 2000 PSI. THE NET AREA COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY UNITS SHALL BE 2800 PSI.
8.2 MORTAR SHALL BE A PREBLENDED DRY MIX CONFORMING TO ASTM C 1714 AND MEETING THE PROPERTY SPECIFICATIONS OF ASTM C 270 TYPE "