GENERAL

A. THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.

B. NOT ALL EXISTING CONDITIONS, PROPOSED CONDITIONS, OR UTILITIES ARE SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE STRUCTURAL WORK WITH THE WORK OF OTHER TRADES. IN CASE OF CONFLICT, NOTIFY THE ENGINEER OF RECORD.

C. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETE STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND STRUCTURE DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE. TEMPORARY BRACING FOR THE STRUCTURE MUST BE PROVIDED IN ALL DIRECTIONS.

D. ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS.

E. ELEVATIONS INDICATED ON THE STRUCTURAL DRAWINGS ARE BASED ON A PROJECT DATUM INDICATED ON THE ARCHITECTURAL DRAWINGS.

F. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH WORK.

G. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE COMPLETE DESIGN OF THE STRUCTURE. THEY DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKERS, OR THEIR PERSONS DURING CONSTRUCTION.

H. OBSERVATION VISITS TO THE SITE BY ENGINEER OF RECORD OR REPRESENTATIVES OF THE ENGINEER OF RECORD MAY BE MADE DURING CONSTRUCTION. ANY SUPPORT SERVICES PERFORMED HEREIN SHALL BE DISTINGUISHED FROM INSPECTION AND / OR TESTING SERVICES PERFORMED BY OTHERS. AND ARE NOT TO BE CONSTRUED AS SUPERVISION AND / OR MANAGEMENT OF CONSTRUCTION.

I. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL MEMBERS AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT / ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS WITHIN THE STRUCTURE.

J. CONSTRUCTION MATERIALS SHALL NOT BE STACKED ON FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVE LOADS WHICH ARE INDICATED IN THE GENERAL NOTES. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE SUBCONTRACTORS ARE INFORMED AND DO NOT VIOLATE THIS IMPORTANT REQUIREMENT. IMPACT SHALL BE AVOIDED WHEN PLACING MATERIALS ON FLOORS OR ROOFS.

K. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO THE DETAILS RESENTED.SIMILAR DETAILS SHALL BE USED SUBJECT TO THE REVIEW OF ENGINEER OF RECORD.

L. SUBMIT WRITTEN REQUEST TO THE ARCHITECT FOR APPROVAL OF ANY PROPOSED CHANGE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. SPLICING, CUTTING, NOTCHING OR OTHER ALTERATIONS TO STRUCTURAL MEMBERS ARE NOT PERMITTED WITHOUT WRITTEN AUTHORIZATION OF THE ENGINEER. ANY UNAUTHORIZED DEVIATION FROM THE CONTRACT DOCUMENTS, AND CORRECTION THEREOF, IS THE RESPONSIBILITY OF THE CONTRACTOR. SUBSEQUENT DOCUMENTATION REQUESTS TO BUILDING ENGINEER OF RECORD FROM GENERAL CONTRACTOR SHALL INCLUDE EVALUATION OF DEVIATIONS BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

DESIGN CRITERIA

A. FLORIDA BUILDING CODE 6TH EDITION 2017, AS ADOPTED AND SUPPLEMENTED BY LOCAL REGULATIONS

B. ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

C. ACI 318-14, STRUCTURAL CONCRETE BUILDING CODE

D. AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION

E. NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, 2012 (AISI S100-12)

F. NDS-15, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

G. SERVICEABILITY AND DEFLECTION CRITERIA PER GOVERNING COMPONENT DESIGN STANDARD

DESIGN LOADING

A. ROOF LIVE LOADS: 20 PSF

B. ROOF DEAD LOAD: 20PSF

C. SNOW LOADING: 0 PSF

D. WIND LOADING

1. ULTIMATE DESIGN WIND SPEED, VULT: 140 MPH
2. NOMINIMUMAL WIND SPEED, VASD: 109 MPH
3. MIN SITE SPECIFIC WIND SPEED, VULT: 130 MPH
4. RISK CATEGORY (TABLE 1.5-1, ASCE 7): II
5. WIND EXPOSURE: C
6. ENCLOSURE CLASSIFICATION: ENCLOSED (+/- 0.18)
7. COMPONENT AND CLADDING : SEE THIS SHEET FOR C&C WIND PRESSURES.
8. NET UPLIFT LOADING (ASD - STEEL JOIST) SEE THIS SHEET FOR C&C WIND PRESSURES. USE 10PSF MAXIMUM. DEAD LOAD FOR UPLIFT CALCULATIONS.

E. FLOOD DESIGN DATA: NOT APPLICABLE

F. DESIGN LOAD-BEARING VALUES OF SOIL: 2500PSF

01003 SUBMITTALS

A. SHOP DRAWINGS / DATA TO BE SUBMITTED FOR APPROVAL.

1. STRUCTURAL STEEL SHOP DRAWINGS (INCLUDING STEEL JOISTS AND GIRDERS)
   a. ERECTION DRAWINGS
   b. PIECE DRAWINGS
   c. METAL DECK DRAWINGS
   d. PREP PROCEDURE AND PRIMINIMUMG MATERIAL
   e. CURRENT WELDERS CERTIFICATIONS
2. CONCRETE
   a. MIX DESIGN
   b. MATERIAL CERTIFICATES
   c. HISTORICAL TESTING BACKGROUND
3. MASONRY
   a. MATERIAL CERTIFICATION
   b. ASTM TEST DOCUMENTATION
4. CONCRETE REINFORCING SHOP DRAWINGS
   a. PLACEMENT DRAWINGS
   b. FABRICATION AND BENDING DETAILS
5. COLD-FORMED STEEL FRAMINIMUMG
   a. MANUFACTURER'S CUT SHEET FOR STUDS AND TRACK
6. THE FOLLOWING SUBMITTALS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT
   a. COLD-FORMED STEEL TRUSS SYSTEMS
   b. RTU TIE DOWNS

B. SEE SECTION 01003 IN THE PROJECT MANUAL AND SPECIFICATIONS FOR THE LIST OF REQUIRED STRUCTURAL SUBMITTALS / SHOP DRAWINGS.

C. SEE SECTION 01002-14 "SHOP DRAWINGS SUBMITTAL" IN THE PROJECT MANUAL AND SPECIFICATIONS FOR SUBMITTAL RESPONSIBILITIES AND REQUIREMENTS.

D. SHOP DRAWING REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT. CORRECTIONS OR COMMENTS MADE ON THIS REVIEW DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS AND OMISSIONS, AND FROM COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. CORRECTIONS OR COMMENTS DO NOT AUTHORIZE AN INCREASE IN THE CONSTRUCTION BUDGET.

E. APPROVAL OF SHOP DRAWINGS DOES NOT INDICATE ACCEPTANCE OF DEVIATIONS FROM CONTRACT DOCUMENTS OR PREVIOUS SHOP DRAWING REVIEW, UNLESS SPECIFICALLY NOTED THEREIN BY ENGINEER OF RECORD.

F. ANY CHANGES TO THE DESIGN CONCEPT SHOWN IN CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING AND APPROVED BY THE ARCHITECT AND ENGINEER PRIOR TO SUBMITTING SHOP DRAWINGS. ALL SUCH CHANGES SHALL BE "BUBBLED" ON THE SHOP DRAWINGS AND REFERENCED TO THE PROPER RFI.

G. SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS (SEE ITEM F ABOVE FOR EXCEPTION). NON-CONFORMING OR NON-REVIEWED SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

1. SHOP DRAWINGS SHALL BE "APPROVED" SIGNED AND DATED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO ENGINEER AND ARCHITECT OF RECORD.
2. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DRAWINGS.

H. PROVIDE COPIES OF MANUFACTURERS LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.

02001 EARTHWORK / FOUNDATION

A. FOUNDATION DESIGN IS BASED UPON THE FOLLOWING SOILS REPORT:
COMPANY NAME: ATC GROUP SERVICES, LLC
DATE: FEBRUARY 9, 2017
ATC PROJECT NO: Z249810031
THE DESIGN ALLOWABLE SOIL BEARING PRESSURE IS LISTED IN THE DESIGN LOADING CRITERIA.

B. SEE SECTION 02001-04 IN THE PROJECT MANUAL AND SPECIFICATIONS FOR EARTHWORKS TO INCLUDE BUT NOT LIMITED TO:

1. PREPARING AND GRADING SUBGRADES FOR SLABS-ON-GRADE
2. EXCAVATING AND BACKFILLING FOR BUILDINGS AND STRUCTURES
3. DRAINAGE AND MOISTURE - CONTROL FILL COARSE FOR SLABS-ON-GRADE
4. EXCAVATING AND BACKFILLING TRENCHES WITHIN BUILDING LINES
5. MATERIAL, INSPECTION, AND TESTING REQUIREMENTS

C. ANY FILL REQUIRED TO BACKFILL EXCAVATED AREA OR ACHIEVE FINISHED GRADE IN STRUCTURAL AREAS SHALL BE AS INDICATED BY GEOTECHNICAL ENGINEER. THE FILL SHALL BE PLACED IN LEVEL LIFTS NOT EXCEED 12" LOOSE THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF THE SOIL'S MODIFIED PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM SPECIFICATION D-1557.

D. IN-PLACE DENSITY TESTS SHALL BE PERFORMED BY AN EXPERIENCED ENGINEERING TECHNICIAN. TESTS SHALL BE PERFORMED FOR EACH 2,000 SQUARE FEET, IN EVERY COLUMN FOOTING LOCATION AND EACH 50'-0" ALONG WALL FOOTINGS. COPIES OF THE TEST REPORTS SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER.

E. REMOVE FREE WATER FROM EXCAVATIONS BEFORE PLACING CONCRETE. WATER TABLE ASSUMED BELOW 6'-0" PRECLUDING BUOYANCY CONDITIONS ON FOOTINGS.

F. CAUTION SHOULD BE USED WHEN OPERATING VIBRATORY COMPACTING EQUIPMENT NEAR THE EXISTING STRUCTURE TO AVOID THE RISK OF DAMAGE TO THE STRUCTURE.

G. REFER TO ARCHITECTURE DRAWINGS FOR ANY NECESSARY WATERPROOFING REQUIREMENTS.

03301 CAST-IN-PLACE CONCRETE

A. SEE SECTION 03301 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS
   a. SUBMITTALS
   b. QUALITY ASSURANCE / CODE REQUIREMENTS
2. PRODUCT / MATERIAL REQUIREMENTS
3. EXECUTION OF WORK REQUIREMENTS
   a. SHORING
   b. VAPOR RETARDER
   c. JOINTS
   d. PLACEMENT / FINISHING
   e. CURING
4. QUALITY CONTROL -- TESTING REQUIREMENTS

B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS SECTION 03301-02 PRODUCTS:

1. CONCRETE STRENGTH: 4,000 PSI
2. STEEL REINFORCEMENT: 60 KSI, (ASTM A615
3. PLAIN-STEEL WIRE FABRIC: ASTM A185, FLAT SHEETS

C. LAP SPLICE REINFORCEMENT LENGTH

LAP SPLICES (INCHES)

REINF SIZE	4000 PSI CONCRETE STREGTH
#3	16
#4	20
#5	24
#6	30
#7	48
#8	60

REF: CRSI, CLASS B, FY=60 KSI, UNCOATED BARS, NORMAL WEIGHT CONC.

D. CONCRETE COVER FOR REINFORCEMENT:

1. CAST AGAINST AND PERMANENTLY IN COTACT WITH THE GROUND: 3"
2. EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND: 2"
3. NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND: 1 1/2"

E. THERE SHALL BE NO HORIZONTAL JOINTS IN ANY CONCRETE POURS UNLESS SHOWN ON THE STRUCTURAL DRAWINGS. THE ENGINEER OF RECORD SHALL APPROVE ALL DEVIATIONS OR ADDITIONAL JOINTS IN WRITING.

F. SAW CUT CONTROL JOINTS SHALL BE LOCATED AT 12'-0" OC MAXIMUMIMUM, UNLESS OTHERWISE NOTED WITH LENGTH TO WIDTH RATIO NOT TO EXCEED 1.5:1.(INDICATED ON PLAN) JOINTS IN TERRAZZO FINISH FLOOR MUST ALIGN WITH CONCRETE CONTROL JOINTS.

G. LIQUID MEMBRANE FORMING CURING COMPOUNDS ARE PROHIBITED FROM USE ON THE BUILDING SLAB ON GRADE AS THEY MAY ADVERSELY AFFECT THE PERFORMANCE OF THE CONCRETE TERRAZZO TOPPING. PROVIDE FOR CURING OF THE SLAB VIA ALTERNATE OR TRADITIONAL METHODS. REFER TO ACI 308.1 FOR ADDITIONAL INFORMATION.

H. ALL EPOXY ANCHORS USED AT REINFORCED CONCRETE SHALL BE HILTI HIT HY 150 OR HIT HY 200, UNLESS OTHERWISE NOTED.

I. POWDER ACTUATED FASTENERS (PAFS) NOT PERMITTED AT CONCRETE, UNLESS OTHERWISE NOTED.

04200 UNIT MASONRY

A. SEE SECTION 04200 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS
   a. SUBMITTALS
   b. MATERIAL REQUIREMENTS
   c. HOT-WEATHER AND COLD-WEATHER REQUIREMENTS
2. PERFORMANCE REQUIREMENTS
   a. MASONRY COMPRESSIVE STRENGTH (f'm): 1,500-PSI
3. PRODUCTS
4. EXECUTION
5. FIELD QUALITY CONTROL

B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS SECTION 04200-03 PRODUCTS:

1. CONCRETE MASONRY UNITS: ASTM C 90 - NORMAL WEIGHT, TYPE (I) MOISTURE CONTROLLED
2. MORTAR: ASTM C 270, TYPE S
3. GROUT: ASTM C476, COARSE (MINIMUM, 2,000 PSI)
4. STEEL REINFORCING BARS: ASTM A 615 GRADE 60
5. MASONRY JOINT REINFORCEMENT ASTM A 951 HOT-DIP GALVANIZED CARBON STEEL WIRE

C. LAP SPLICE REINFORCEMENT IN CMU ... (#5 BARS) FOR (1) BAR PER CELL ... (#5 BARS) FOR (2) BARS PER CELL

D. ALL MASONRY LOCATED BELOW GRADE SHALL BE GROUTED SOLID.

E. GROUT FOR FILLED CELLS SHALL CONFORM TO ASTM C476. AND SHALL HAVE A SLUMP OF BETWEEN 8" AND 10". GROUT COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS. ALL GROUTING SHALL BE LOW LIFT. MAXIMUM GROUT POUR HEIGHT = 5'-0".

F. PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE OF FACE SHELL MORTAR BEDDING, HORIZONTAL AND VERTICAL. PROVIDE FULL MORTAR WEBS IN ALL COURSE OF GROUTED CELLS AND CELLS ADJACENT TO GROUTED CELLS.

G. PROVIDE 8" DEEP PRECAST REINFORCED CONCRETE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. MINIMUM END BEARING SHALL BE 8". LINTEL WIDTH TO MATCH MASONRY WIDTH.

H. ALL EPOXY ANCHORS USED IN MASONRY SHALL OCCUR AT GROUTED. REINFORCED CELLS.

J. REINFORCING, UNLESS OTHERWISE NOTED IN PLANS:

1. ALL OPENINGS IN CMU SHALL BE REINFORCED WITH AT LEAST (1) #5 BAR AT THE TOP, BOTTOM AND BOTH SIDES OF THE OPENING
2. BOND BEAM AT ROOF LEVEL SHALL BE DOUBLE COURSE KO / LINTEL BLOCK WITH (2) #5 CONT. BARS EACH COURSE, AND BOND BEAM AT PARAPET LEVEL SHALL BE SINGLE COURSE KO / LINTEL BLOCK WITH (2) #5 CONT BARS
3. HORIZONTAL WALL REINFORCING SHALL BE 9 GAUGE GALVANIZED LADDER TYPE AT 16" OC VERTICAL.
4. ALL REINFORCING HOOKS AND BENDS SHALL BE STANDARD ACI TYPE.
5. ALL WALL DOWELS SHALL MATCH REINFORCING SIZE AND QTY.

L. POWDER ACTUATED FASTENERS (PAFS) NOT PERMITTED AT MASONRY.

05120 STRUCTURAL STEEL

A. SEE SECTION 05120 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS
   a. FABRICATOR REQUIREMENTS
   b. SUBMITTALS
   c. CODE REQUIREMENTS
2. PRODUCT / MATERIAL REQUIREMENTS
3. PAINTING REQUIREMENTS
4. EXECUTION OF WORK REQUIREMENTS
   a. FABRICATION
   b. ERECTION
5. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)

B. SUMMARY OF PROJECT MANUAL AND SPECIFICATIONS 05120 PRODUCTS:

1. MATERIALS:
   a. W SHAPES: ASTM A992 (50 KSI)
   b. TUBE SHAPES: ASTM A500 GR B (46 KSI)
   c. PIPE SHAPES: ASTM A53, GR B
   d. CHANNELS AND ANGLES: ASTM A36 (36 KSI)
   e. PLATES: ASTM A36 (36 KSI)
   f. BOLTS: ASTM A 325
   g. ANCHOR BOLTS / RODS: ASTM F 1554, GRADE 55 (S1)
   h. ANCHOR BOLT NUT: HEAVY HEX HEAD ASTM A563
   i. ANCHOR BOLT WASHERS: ASTM F436
   j. ELECTRODES FOR WELDING: AWS CODE E70XX

C. TEMPLATES SHALL BE PROVIDED FOR ALL ANCHOR BOLTS / RODS CAST IN CONCRETE.

D. GALVANIZE STEEL MEMBERS INDICATED ON PLANS:

1. GALVANIZE STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES AFTER FABRICATION BY THE HOT-DIP PROCESS IN ACCORDANCE WITH ASTM A 123.
2. COATING REQUIREMENTS:
   a. CONFORM TO PARAGRAPH 6.1 OF ASTM A 123, TABLE 1 OF ASTM A 153, OR TABLE 2 OF ASTM A 767 AS APPROPRIATE.
   b. SURFACE FINISH: CONTINUOUS. ADHERENT, AS SMOOTH AND EVENLY DISTRIBUTED AS POSSIBLE AND FREE FROM ANY DEFECT DETRIMENTAL TO THE END USE OF THE COATED ARTICLE
   c. ADHESION: WITHSTAND NORMAL HANDLING CONSISTENT WITH THE NATURE AND THICKNESS OF THE COATING AND NORMAL USE OF THE ARTICLE.
3. REPAIR OF DAMAGED COATING: REPAIR DAMAGED AREAS BY WELDING, FLAME CUTTING OR DURING HANDLING, TRANSPORT OR ERECTION BY ONE OF THE APPROVED METHODS IN ACCORDANCE WITH ASTM A 780 WHENEVER DAMAGE EXCEEDS 3/16" IN WIDTH. MINIMUM THICKNESS REQUIREMENTS FOR THE REPAIR ARE THOSE DESCRIBED IN ASTM A 123 SECTION 6.2, CURRENT EDITION

E. CONNECTIONS, UNLESS OTHERWISE NOTED:

1. TIGHTEN BOLTS BY THE "SNUG-TIGHT" METHOD
2. FIELD CONNECTIONS SHALL BE MADE WITH 3/4" DIA. MINIMUMIMUM, HIGH-STRENGTH BEARING TYPE BOLTS (A325N) WITH THREADS ASSUMED TO BE INCLUDED IN SHEAR PLANES
3. ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL INCORPORATE THE MAXIMUM PERMISSIBLE 3/4" A325N BOLTS IN A SINGLE ROW BASED ON AVAILABLE WEB DEPTH
4. CONNECTIONS SHALL BE SINGLE PLATE TYPE, UNLESS OTHERWISE NOTED. ANGLE AND EXTENDED PLATE CONNECTIONS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED AS SUCH HEREIN

F. GROUT UNDER BEARING PLATES SHALL BE NON-METALLIC, NON-SHRINK TYPE WITH A COMPRESSIVE STRENGTH OF AT LEAST 6000 PSI WHEN BEARING ON 3000 PSI CONCRETE AND 8000 PSI WHEN BEARING ON 4000 PSI CONCRETE.

G. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED OR OTHERWISE PROTECTED.

H. ALL STEEL EXPOSED TO SOIL SHALL BE ENCASED IN CONCRETE OR COATED PER ASPHALTIC BASED CORROSION NOTE.

05210 STEEL JOISTS

A. SEE SECTION 05210 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS – STEEL JOISTS
   a. SUBMITTALS
   b. QUALITY ASSURANCE – REFERENCE SPECIFICATION REQUIREMENTS
   c. DELIVERY, STORAGE, AND HANDLING REQUIREMENTS
2. PRODUCT / MATERIAL REQUIREMENTS
   a. JOISTS, BRIDGING, AND ACCESSORIES
   b. PAINTING
3. EXECUTION OF WORK REQUIREMENTS
   a. INSTALLATION
4. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)

B. ALL JOISTS SHOWN IN THE PLANS ARE MINIMUM SIZES. DEPTH CANNOT BE INCREASED OR DECREASED WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.

C. STEEL JOIST GIRDERS SHALL BE DESIGNED PER THE LOADING SHOWN ON THE ROOF PLAN.

D. DIAGONAL BRIDGING / BRACING SHALL BE BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS DISCONTINUOUS.

E. ALL JOISTS AND GIRDERS SHOWN IN THE PLANS ARE MINIMUM SIZES. DEPTH CANNOT BE DECREASED OR INCREASED WITHOUT WRITTEN APPROVAL BY ARCHITECT / ENGINEER.

F. PROVIDE BRIDGING AND X-BRACING AS PER THE REQUIREMENTS OF SJI. SHOULD PLANS INDICATE BRIDGING AND X-BRACING IN EXCESS OF THAT REQUIRED BY SJI, PLANS WILL GOVERN.

G. PROVIDE SEATS, HEADER CHORD EXTENSIONS, OR OTHER ELEMENTS AND FEATURES SHOWN IN THE CONTRACT DOCUMENTS AND THOSE WHICH ARE REQUIRED FOR PROPER ERECTION AND PERFORMANCE OF STEEL JOISTS.

H. STEEL JOISTS, JOIST GIRDERS, BRIDGING AND X-BRACING SHALL BE DESIGNED FOR NET UPLIFT. NET UPLIFT, NOT PRESENTED IN PLANS SHALL BE BASED ON THE COMPONENTS AND CLADDING WIND LOADS INDICATED IN THE PLANS PER APPLICABLE ZONE AND TRIBUTARY AREA. LOAD COMBINATIONS SHALL CONFORM TO THE CODES SPECIFIED IN THE PROJECT DOCUMENTS.

I. SEE PLANS FOR CONCENTRATED LOADS AND / OR UNUSUAL LOAD PATTERNS.

J. AT A MINIMUM, PROVIDE BOTTOM CHORD BRACING EVERY OTHER JOIST AT JOIST-GIRDERS AND SUPPORTING W BEAMS. PROVIDE ADDITIONAL BRACING AS SPECIFIED HEREIN AS TYPICAL AND AS INDICATED IN PLANS.

K. ***MINIMUM WELDS, UNLESS OTHERWISE NOTED:***

1. BAR JOIST ENDS 3/16" FILLET, 2" LONG, EACH SIDE
2. JOIST GIRDER ENDS 1/4" FILLET, 3" LONG, EACH SIDE

05310 STEEL DECK

A. SEE ROOF PLAN FOR METAL DECK SIZE AND ATTACHMENT INFORMATION.

B. SEE SECTION 05310 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS
   a. SUBMITTALS
   b. QUALITY ASSURANCE – REFERENCE SPECIFICATION REQUIREMENTS
2. PRODUCT / MATERIAL REQUIREMENTS
3. EXECUTION OF WORK REQUIREMENTS
   a. INSTALLATION
   b. ACCESSORIES
   c. GALVANIZING REPAIR
4. QUALITY ASSURANCE REQUIREMENTS (INSPECTIONS & TESTING)

C. WELD METAL SHALL PENETRATE ALL LAYERS OF DECK MATERIAL. END LAPS AND SIDE JOINTS SHALL BE COMPLETELY FUSED TO THE SUPPORTING MEMBERS. USE PROPER SIZE WELDING ELECTRODE AND WELDING MACHINE CURRENT. SO THAT WELDS ARE ADEQUATE PENETRATION AND FREE FROM "BURN-THROUGH".

D. METAL DECK SHALL BE ERECTED CONTINUOUS FOR A MINIMUM OF 3 SPANS AND SHALL LAP AT THE CENTERLINE OF SUPPORTS A MINIMUM OF 2". PROVIDE A MINIMUM END BEARING OF 2" OVER, SUPPORTS.

E. PROVIDE SUPPORTS FOR METAL DECK AS REQUIRED WHERE METAL DECK IS CUT OUT. WELD DECK TO SUPPORTS SAME AS EDGE CONDITION.

F. DO NOT HANG OR ATTACH DUCTWORK, CONDUIT, PIPING, EQUIPMENT, CEILINGS, ETC. FROM METAL DECKING.

G. PROVIDE STL. SHIMS AND EMBEDS AS REQUIRED TO SUPPORT DECK ON "TYPICAL" BAY SPACING.

05400 COLD-FORMED METAL FRAMING

A. SEE SECTION 05400 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. GENERAL REQUIREMENTS
   a. STRUCTURAL PERFORMANCE
   b. SUBMITTALS
   c. QUALITY ASSURANCE – REFERENCE SPECIFICATION REQUIREMENTS
2. PRODUCT / MATERIAL REQUIREMENTS
   a. STEEL REQUIREMENTS
   b. WALL FRAMINIMUMG
   c. JOIST FRAMINIMUMG
   d. FABRICATION
   e. FASTENERS AND ACCESSORIES
   f. REPAIR PAINTING
3. EXECUTION OF WORK REQUIREMENTS
   a. INSTALLATION
      1. GENERAL
      2. TOLERANCES
      3. LOAD-BEARING WALL
      4. CURTAIN-WALL
      5. JOIST INSTALLATION
   b. REPAIRS

B. ALL FRAMING SHOWN IN THE PLANS ARE MINIMUM SIZES. DIMENSIONS CANNOT BE INCREASED WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.

C. PRE-ENGINEERED ROOF TRUSSES SHALL BE DESIGNED PER THE LOADING SHOWN IN DESIGN LOADING - THIS SHEET.

D. PRE-ENGINEERED ROOF TRUSSES SHALL BE DELIVERED, HANDLED, BRACED, AND INSTALLED PER AISI S214-07.

E. ALL CLIPS AND FASTENING HARDWARE SHALL BE TESTED AND RATED FOR THE LOAD RESISTED.

F. COLD-FORMED STEEL FRAMING SYSTEMS INCLUDING TRUSS SYSTEMS SHALL INCLUDE ALL NECESSARY PARTS AND ACCESSORIES, TEMPORARY AND PERMANENT, AS REQUIRED TO FORM A COMPLETE SYSTEM INCLUDING ANCHORAGE TO SUPPORT STRUCTURE.

G. STUDS AND TRACKS FOR HEADERS AND JAMBS SHOULD BE ONE PIECE LENGTH MEMBERS. SPLICING OF STUD AND TRACK MEMBERS IS NOT ALLOWED.

H. MATERIALS, UNLESS OTHERWISE NOTED:

54, 68 AND 97 MIL STUDS 50 KSI
27, 33, AND 43 MIL STUDS 33 KSI
RUNNERS AND ACCESSORIES 33 KSI

I. RIGID CLIP ANGLES SHALL BE COLD FORMED TO SHAPE FROM SHEET STEEL IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM A653/ A653M WITH STRUCTURAL STEEL (SS) GRADE 50 CLASS 1 FOR MEMBERS WITH A DESIGN THICKNESS OF 0.0566 (16G) OR GREATER.

J. ALL PARTS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A525 / ASTM A653.

K. ALL FRAMINIMUMG SCREWS SHALL BE A MINIMUM OF #10-16 DIAMETER EXCEPT WHERE LARGER SCREWS ARE NOTED AND SHALL BE SELF-DRILLING TAPPING SCREWS CONFORMING TO SAE J78. A MINIMUM OF THREE EXPOSED THREADS SHALL EXTEND THROUGH THE STEEL BEYOND ALL FRAMING COMPONENTS CONNECTED. SCREWS SHALL PENETRATE THE INDIVIDUAL FRAMING COMPONENTS OR CONNECTION MATERIAL WITHOUT CAUSING PERMANENT SEPARATION BETWEEN COMPONENTS. SCREWS SHALL BE INSTALLED SUCH THAT NEITHER THREADS NOR HOLES ARE STRIPPED. ALL FRAMING SCREWS SHALL BE GRABBER HEX HEAD SELF DRILLING TAPING SCREWS OR ITW BUILDEX TEKS SELF-DRILLING SCREWS. HILTI KWIK-PRO SELF- DRILLING SCREWS ARE ALSO ACCEPTABLE. SCREW DRILLING POINT ACCORDING TO MANUFACTURER SPECIFICATIONS, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL SCREWS SHALL HAVE A CORROSION RESISTANT COATING ACCORDING TO THE PROJECT SPECIFICATION.

L. WELDING OF COLD-FORMED STEEL MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.3: STRUCTURAL WELDING CODE - SHEET STEEL. WELDERS AND WELDING PROCEDURES SHALL BE QUALIFIED AS SPECIFIED IN AWS D1.3. ALL WELDS SHALL BE TOUCHED-UP WITH A ZINC-ENRICHED PAINT. WELDING ELECTRODES SHALL BE E60XX UNLESS OTHERWISE NOTED. DO NOT BURN THROUGH MEMBERS. MEMBERS WITH DAMAGE RELATED TO WELDING SHALL BE REPLACED AND NOT RE-USED, UNLESS OTHERWISE APPROVED IN WRITING BY ENGINEER OF RECORD.

M. ALL STUDS SHEATHED TO BOTH SIDES SHALL HAVE LATERAL BRACING AT 4'-0" ON CENTER VERT MAXIMUM, SEE 9/S8. ALL STUDS SHEATHED ONLY ON ONE SIDE OR LESS SHALL HAVE FULL DEPTH BLOCKING AT 4'-0" ON CENTER.

N. SPLICING OF STUDS, TRACKS AND OTHERS STRUCTURAL MEMBERS SHALL NOT BE PERFORMED WITHOUT AN APPROVED SPLICE DESIGN AND DETAIL.

O. COPING, CUTTING OR NOTCHING OF FLANGES AND EDGE STIFFENERS IS NOT PERMITTED FOR STRUCTURAL MEMBERS WITHOUT AN APPROVED DESIGN AND DETAIL.

P. TRUSS DELIVERY, HANDLING, BRACING AND INSTALLATION BY AISI S214-07.

Q. TRUSS ST...

TOP CHORD DEAD LOAD: 15 PSF
BOTTOM CHORD DEAD LOAD: 5 PSF

06100 ROUGH CARPENTRY / SHEATHING

A. SEE SECTION 06100 IN THE PROJECT MANUAL AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO:

1. PRODUCT / MATERIAL REQUIREMENTS
   a. LUMBER, GENERAL
   b. WOOD-PRESERVATIVE-TREATED MATERIALS
   c. DIMENSIONAL LUMBER: APPROVED GRADES AND SPECIES
   d. WOOD-BASED STRUCTURAL USE PANELS
   e. FASTENERS AND ANCHORS
2. EXECUTION OF WORK REQUIREMENTS
   a. INSTALLATION
      1. TOLERANCES
      2. FRAMING CONNECTION REQUIREMENTS
         a. "RECOMMENDED NAILING SCHEDULE" AFPA's NDS FOR WOOD CONSTRUCTION
         b. INTERNATIONAL BUILDING CODE TABLE 2304.9.1
3. FASTENER COATING REQUIREMENTS
4. REQUIRED PRACTICE STANDARDS REFERENCES
   a. AMERICAN PLYWOOD ASSOCIATION E30
   b. AMERICAN PLYWOOD ASSOCIATION T625 WOOD STRUCTURAL PANELS OVER METAL FRAMING

B. WALL AND PARAPET SHEATHING: APA RATED SHEATHING EXPOSURE 1 GRADE

1. NOMINAL THICKNESS: 5/8"
2. SPAN RATING: 24/16
3. SHEATHING: SHOULD BE PLACED PERPENDICULAR TO SUPPORTS

C. ROOF SHEATHING: APA RATED SHEATHING, EXTERIOR GRADE

1. NOMINAL THICKNESS: 5/8"
2. SPAN RATING: 32/16
3. SHEATHING: SHOULD BE PLACED PERPENDICULAR TO SUPPORTS

D. FASTENERS

1. GENERAL: PROVIDE FASTENERS OF SIZE AND TYPE INDICATED THAT COMPLY WITH REQUIREMENTS SPECIFIED IN THIS ARTICLE FOR MATERIAL AND MANUFACTURE.
2. SCREWS FOR FASTENING WOOD STRUCTURAL PANELS TO COLD-FORMED METAL FRAMING:ASTM C 954, EXCEPT WITH WAFER HEADS AND REAMER WINGS. LENGTH AS RECOMMENDED BY SCREW MANUFACTURER FOR MATERIAL BEING FASTENED.

E. COORDINATE WALL, PARAPET, AND ROOF SHEATHING INSTALLATION WITH FLASHING AND JOINT-SEALANT INSTALLATION SO THESE MATERIALS ARE INSTALLED IN SEQUENCE AND MANNER THAT PREVENT EXTERIOR MOISTURE FROM PASSING THROUGH COMPLETED ASSEMBLY.

F. COORDINATE SHEATHING INSTALLATION WITH INSTALLATION OF MATERIALS INSTALLED OVER SHEATHING SO SHEATHING IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT END OF THE WORKDAY WHEN RAIN IS FORECAST.

G. ALL PANELS (GENERAL):

1. IDENTIFICATION REQUIREMENTS: EACH PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF APA.
2. ALL PANELS HAVING ANY EDGE OR SURFACE EXPOSED LONG TERM TO WEATHER SHALL BE CLASSIFIED EXTERIOR.
3. PANEL PERFORMANCE CATEGORY, GRADE, AND GROUP NUMBER OR SPAN RATING SHALL BE AT LEAST EQUAL TO THAT SHOWN ON THE DRAWINGS. APPLICATION SHALL BE IN ACCORDANCE WITH APA.
4. 1/8" GAP REQUIRED AT ALL PANEL ENDS AND EDGES.
5. ZONES 1, 2 AND 4 (SEE S1) #10 BUGLE HEAD SCREWS AT 6" OC EDGES AND 6" FIELD. ZONES 3 AND 5 (SEE S1) #10 BUGLE HEAD SCREWS AT 4" OC EDGES AND 4" FIELD. ALL PANEL EDGES SHALL BE SUPPORTED BY FRAMING. FLAT STRAP BRACING OR SOLID BLOCKING. SEE SHEETS AND DETAILS FOR MORE INFORMATION.

09960 COATINGS FOR STEEL

A. SEE SPECIFICATIONS FOR GENERAL REQUIREMENTS, PRODUCTS, AND EXECUTION OF WORK.

B. ASPHALT-BASED CORROSION RESISTANCE COATING SHALL BE MADE WITH AN ASPHALT-BASE EMULSION COATING SYSTEM PER ASTM D 1187.

C. APPLY A MINIMUM 1/16-INCH THICK COATING IN TWO APPLICATIONS.

D. COATING TO BE APPLIED ON ALL SIDES OF MEMBERS – TO INCLUDE STEEL TO BE ADJACENT TO CAST-IN-PLACE CONCRETE.

E. COAT STRUCTURAL ANCHOR BOLTS, WELDS, AND ALL COMPONENTS IN THE AFFECTED AND DEFINED AREA.

F. ALL STEEL AND STEEL COMPONENTS (I.E., BASE PLATES AND ANCHOR BOLTS) EXPOSED TOP SOIL SHALL BE COATED FROM THE FOUNDATION (LOWEST LEVEL) UP TO 6" ABOVE THISLAB OR FINAL GRADE – WHICHEVER IS GREATER.

STRUCTURAL INSPECTION

A. THE CONTRACTOR OR OWNER SHALL EMPLOY A QUALIFIED INDEPENDENT INSPECTION AGENCY. THIS AGENCY (REFERRED TO AS INSPECTOR HEREIN) SHALL BE RESPONSIBLE FOR VERIFYING THAT PROJECT STRUCTURAL WORK IS ACCOMPLISHED IN CONFORMANCE WITH THE CONTACT DOCUMENTS.

B. DURATION AND FREQUENCY OF JOB VISITS SHALL BE SUFFICIENT FOR THE INSPECTOR TO STATE AT THE COMPLETION OF THE PROJECT THAT THE STRUCTURAL WORK IS ACCOMPLISHED, AND ITS RELATED ELEMENTS HAVE BEEN ERECTED IN ACCORDANCE WITH THE CONTACT DOCUMENTS. SPECIFIC SYSTEMS TO BE INSPECTED INCLUDE:

FOUNDATION
CONCRETE (GENERAL, SLAB ON GRADE)
STRUCTURAL STEEL (INCLUDING JOISTS & JOIST GIRDERS)
METAL DECK
LIGHT GAUGE FRAMING (INCLUDING TRUSS SYSTEMS)

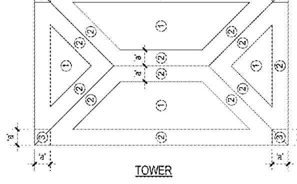
C. THE FOREGOING LIST IS NOT INTENDED TO BE ALL INCLUSIVE. THE INSPECTOR SHALL USE HIS PROFESSIONAL JUDGEMENT AND HIS KNOWLEDGE OF THE JOB SITE CONDITIONS AND THE OFFICIAL CONTRACT DOCUMENTS. THE INSPECTOR WILL NOT REPLACE THE QUALITY CONTROL PERSONNEL OF THE CONTRACTOR.

D. THE INSPECTOR DOES NOT RELIEVE THE CONTRACTORS CONTRACTUAL OR STATUTORY OBLIGATIONS. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DOCUMENTS. THE INSPECTOR WILL NOT REPLACE THE QUALITY CONTROL PERSONNEL OF THE CONTRACTOR.

E. ALL INSPECTION REPORTS SHALL BE FORWARD BY THE INSPECTOR TO THE ENGINEER AND ARCHITECT OF RECORD.

LIST OF STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT	MATL	MATERIAL
ADDL	ADDITIONAL	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MC	MOMENT CONNECTION
AHR	ANCHOR	MECH	MECHANICAL
ALT	ALTERNATE	MEZZ	MEZZANINE
APPROX	APPROXIMATE	MFR	MANUFACTURER
ARCH	ARCHITECT	MFR REC	MANUFACTURER'S RECOMMENDATION
B PL	BASE PLATE	MIN	MINIMUM
BC	BOTTOM CHORD	MISC	MISCELLANEOUS
BLDG	BUILDING	MTL	METAL
BM	BEAM	NIC	NOT IN CONTRACT
BOS	BOTTOM OF STEEL	NOM	NOMINIMUMAL
BOT	BOTTOM	NTS	NOT TO SCALE
BRDG	BRIDGING	OC	ON CENTER
BRG PL	BEARING PLATE	OPNG	OPENING
BRG	BEARING	OPP	OPPOSITE
BTWN	BETWEEN	PCC	PRECAST CONCRETE
CANTIL	CANTILEVER	PLYWD	PLYWOOD
CFMF	COLD FORMED METAL FRAMING	PREFAB	PREFABRICATE
CIP	CAST IN PLACE	PRELIM	PRELIMINIMUMARY
CJ	CONTROL JOINT	PSF	POUNDS PER SQUARE FOOT
CL	CENTERLINE	PSI	POUNDS PER SQUARE INCH
CLR	CLEAR	PT	PRESSURE TREATED
COL	COLUMN	PT	POST TENSIONED
CONC	CONCRETE	R	RADIUS
CONN	CONNECT	RCP	REINFORCED CONCRETE PIPE
CONST JT	CONSTRUCTION JT	RD	ROOF DRAIN
CONSTR	CONSTRUCTION	REBAR	REINFORCING STEEL BAR
CONT	CONTINUOUS	REF	REFERENCE
CMU	CONCRETE MASONRY UNIT	REINF	REINFORCING
CTR	CENTER	REQD	REQUIRED
DE	DECK EDGE	REV	REVISION
DET	DETAIL	RO	ROUGH OPENING
DIA	DIAMETER	RS	REINFORCING STEEL
DIM	DIMENSION	RTU	ROOF TOP UNIT
DIST	DISTANCE	SCHED	SCHEDULE
DL	DEVELOPMENT LENGTH	SE	STRUCTURAL ENGINEER
DR	DRAIN	SECT	SECTION
DWG	DRAWING	SIM	SIMILAR
EA	EACH	SP EL	SPOT ELEVATION
EE	EACH END	SPEC	SPECIFICATION
EF	EACH FACE	SQ	SQUARE
EJ	EXPANSION JOINT	SST	STAINLESS STEEL
EL	ELEVATION	STD	STANDARD
ENGR	ENGINEER	STL	STEEL
EQ	EQUAL	STRUCT	STRUCTURAL
EQUIP	EQUIPMENT	SYMM	SYMMETRICAL
EQUIV	EQUIVALENT	T&B	TOP AND BOTTOM
EXIST	EXISTING	T&G	TONGUE AND GROOVE
EXP	EXPANSION	THK	THICKNESS
EXT	EXTERIOR	THRD	THREADED
EW	EACH WAY	TOC	TOP OF CONCRETE
FD	FLOOR DRAIN	TOF	TOP OF FLOOR / FOOTING
FDTN	FOUNDATION	TOJ	TOP OF JOIST
FF EL	FINISHED FLOOR ELEVATION	TOM	TOP OF MASONRY
FIN	FINISH	TOS	TOP OF STEEL / SLAB
FLR	FLOOR	TS	TUBE STEEL
FTG	FOOTING	TYP	TYPICAL
GA	GAGE / GAUGE	UNO	UNLESS NOTED OTHERWISE
GALV	GALVANIZED	UON	UNLESS OTHERWISE NOTED
GALV STL	GALVANIZED STEEL	VERT	VERTICAL
GC	GENERAL CONTRACTOR	VIF	VERIFY IN FIELD
H	HIGH	WF	WIDE FLANGE
HDR	HEADER	W/	WITH
HORIZ	HORIZONTAL	W/O	WITHOUT
HS	HIGH STRENGTH	WD	WOOD
HT	HEIGHT	WT	WEIGHT
INT	INTERIOR	WH	WEEPHOLE
JT	JOINT	WP	WORKING POINT
K	KIPS	WWF	WELDED WIRE FABRIC
KO	KNOCKOUT	XBRA	CROSSBRACING
KSF	KIPS PER SQUARE FOOT	@	AT
KSI	KIPS PER SQUARE INCH	&	AND
L	ANGLE		
LBS	POUND		
LDH	LONG DIMENSION HORIZONTAL		
LDV	LONG DIMENSION VERTICAL		
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		

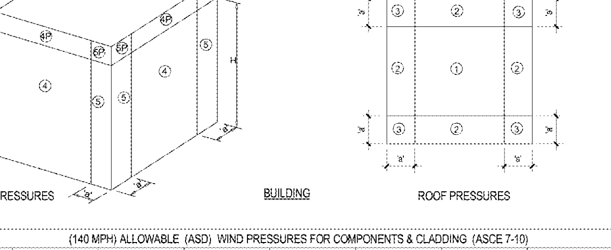


TOWER

(140 MPH) ALLOWABLE (ASD) WIND PRESSURES (ASCE 7-10) FOR COMPONENTS AND CLADDING

EFFECTIVE AREA (SQFT)	ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 5	
	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)
10	17.1	-27.2	17.1	-47.4	17.1	-70.0	29.7	-32.3	29.7	-39.8
20	15.6	-26.4	15.6	-43.5	15.6	-65.5	28.4	-31.0	23.4	-37.1
50	13.7	-25.5	13.7	-38.6	13.7	-59.5	26.6	-29.2	26.6	-33.6
A ≥ 100	12.1	-24.7	12.1	-34.8	12.1	-54.9	25.3	-27.8	25.3	-30.9

NOTES:
1. ROOF OVERHANG PRESSURES:
   a. ZONE 2 OH: +16 PSF AND -77.1 PSF
   b. ZONE 3 OH: +16 PSF AND -100.0 PSF
2. "A" DENOTES EDGE STRIP = 3' - 0".
3. POSITIVE & NEGATIVE SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM THE BUILDING SURFACES. RESPECTIVELY (FULL HEIGHT, UNO).
4. WIND PRESSURES INDICATED ABOVE ARE ALLOWABLE STRESS DESIGN WIND PRESSURES. DIVIDE THE PRESSURES BY A FACTOR OF 0.6 TO OBTAIN STRENGTH DESIGN WIND PRESSURES.



WALL PRESSURES BUILDING ROOF PRESSURES

(140 MPH) ALLOWABLE (ASD) WIND PRESSURES FOR COMPONENTS & CLADDING (ASCE 7-10)

EFFECTIVE AREA (SQ FT)	ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 4 PARAPET		ZONE 5		ZONE 5 PARAPET	
	PRESSURE	SUCTION	PRESSURE	SUCTION	PRESSURE	SUCTION	PRESSURE	SUCTION	CASE A	CASE B	PRESSURE	SUCTION	CASE A	CASE B
10	10.8 PSF	-26.6 PSF	24.3 PSF	-44.6 PSF	24.3 PSF	-44.6 PSF	24.3 PSF	-26.4 PSF	73.0 PSF	53.7 PSF	24.3 PSF	-32.5 PSF	73.0 PSF	60.1 PSF
20	10.2 PSF	-26.0 PSF	23.3 PSF	-39.9 PSF	23.3 PSF	-39.9 PSF	23.3 PSF	-25.3 PSF			23.3 PSF	-30.1 PSF		
50	9.6 PSF	-25.1 PSF	21.9 PSF	-33.6 PSF	21.9 PSF	-33.6 PSF	21.9 PSF	-23.9 PSF			21.9 PSF	-27.5 PSF		
A ≥100	9.6 PSF	-24.3 PSF	20.8 PSF	-28.8 PSF	20.8 PSF	-28.8 PSF	20.8 PSF	-22.8 PSF			20.8 PSF	-25.3 PSF		

NOTES:
1. PARAPET WIND PRESSURES:
   CASE A = PRESSURES TOWARD THE BUILDING.
   CASE B = PRESSURES AWAY FROM THE BUILDING.
2. 'P' DENOTES PARAPET PRESSURE VALUES.
3. 'a' DENOTES EDGE STRIP = 6'-0"
4. POSITIVE & NEGATIVE SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM THE BUILDING SURFACES, RESPECTIVELY (FULL HEIGHT, UNO).
5. WIND PRESSURES INDICATED ABOVE ARE ALLOWABLE STRESS DESIGN WIND PRESSURES. DIVIDE THE PRESSURES BY A FACTOR OF 0.6 TO OBTAIN STRENGTH DESIGN WIND PRESSURES

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PROJECT NAME
WAWA F110L 2018.01 STORE #5337 - MRC
SE MARICAMP RD. & SE 24th ST.
OCALA, FL

SHEET TITLE
DESIGN CRITERIA

Revision Schedule

No.	Description	Date
	PERMIT SET	07/28/2017
A	REV 2018.01	10/03/2018
	PRE-BID REVIEW SET	10/03/2018
	BID SET	10/23/2018

PROJECT NO. 2170250
DATE 08/04/2017
DRAWN RC
CHECKED JJ

S1

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