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.

DESIGN CRITERIA:

A. 2012 VUSVC (2012 IBC) BUILDING CODE

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

C. ACI 318-11, STRUCTURAL CONCRETE BUILDING CODE

D. AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION

E. AISI 2008 COLD FORMED STEEL DESIGN MANUAL

F. NDS-2015, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

DELEGATED ENGINEERING:

THE FOLLOWING SYSTEMS REQUIRE DELEGATED ENGINEERING. REVIEW SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.

A. COLD-FORMED METAL FRAMING AND TRUSSES.
B. STRUCTURAL STEEL - CONNECTIONS.
C. STEEL OPEN WEB JOISTS.
D. ACCESS LADDER.
E. GATES, DOORS, AND FENESTRATION SYSTEMS.

DESIGN LOADING:

A. ROOF LIVE LOADS: 20 PSF

B. ROOF DEAD LOAD: 13PSF

C. SNOW LOADING:

1. GROUND SNOW LOAD, PG: 20 PSF
2. FLAT-ROOF SNOW LOAD, PF: 20 PSF
3. SNOW EXPOSURE FACTOR, CF: 1.00
4. SNOW LOAD IMPORTANCE FACTOR, IS: 1.00
5. THERMAL FACTOR, CF: 1.00
6. SNOW DRIFT LENGTH, SDL: 10'-0"
7. SNOW DRIFT LOAD, SD: 45 PSF

D. WIND LOADING

1. ULTIMATE DESIGN WIND SPEED, VULT: 112 MPH
2. NOMINAL WIND SPEED VASD: 87 MPH
3. RISK CATEGORY (TABLE 1.5-1, ASCE 7): II
4. WIND EXPOSURE: C
5. ENCLOSURE CLASSIFICATION: ENCLOSED (+/- 0.18)
6. COMPONENT AND CLADDING : SEE CHARTS THIS SHEET
7. NET UPLIFT LOADING (ASD - STEEL JOIST) SEE CHARTS THIS SHEET FOR C&C WIND PRESSURES. USE 10 PSF MAX DEAD LOAD FOR UPLIFT CALCULATIONS. USE 22 PSF MIN UPLIFT LOAD

E. SEISMIC LOADING (DESIGN CATEGORY AND CLASS)

1. RISK CATEGORY: II
2. SEISMIC IMPORTANCE FACTOR: 1.0
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS
   a. SS: 0.279 g
   b. S1: 0.060 g
4. SITE CLASS: D
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS
   a. SDS: 0.294 g
   b. SD1: 0.095 g
6. SEISMIC DESIGN CATEGORY: B
7. BASIC SEISMIC FORCE-RESISTING SYSTEM(S): "H" ASCE 7-10 TABLE 12.2-1
8. DESIGN BASE SHEAR(S): 25.2 KIPS
9. SEISMIC RESPONSE COEFFICIENT, CS: 0.084
10. RESPONSE MODIFICATION COEFFICIENT(S), R: 3.5
11. ANALYSIS PROCEDURE USED: ASCE 7-10, EQUIV. LATERAL METHOD

F. FLOOD DESIGN DATA: NOT APPLICABLE

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

01003 SUBMITTALS

A. SEE SECTION 01003-3 IN THE PROJECT MANUAL AND SPECIFICATIONS FOR THE LIST OF REQUIRED STRUCTURAL SUBMITTALS / SHOP DRAWINGS.

B. IN ADDITION TO THE SUBMITTALS LISTED IN THE PROJECT MANUAL AND SPECIFICATIONS, THE FOLLOWING SHOP DRAWING IS REQUIRED:

1. PREFABRICATED LIGHT GAUGE METAL ROOF TRUSSES.
2. CLIPS, SCREWS, BOLTS, AND FASTENER PRODUCT SHEETS.
3. SEE SECTION 01002-14 "SHOP DRAWINGS SUBMITTAL" IN THE PROJECT MANUAL AND SPECIFICATIONS FOR SUBMITTAL RESPONSIBILITIES AND REQUIREMENTS.

02001 EARTHWORK / FOUNDATION

A. FOUNDATION DESIGN IS BASED UPON THE FOLLOWING SOILS REPORT:
COMPANY NAME: ECS
DATE: OCTOBER 12, 2017
ECS PROJECT NO: 03:12598
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 2500 SQUARE FEET, AT 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 ... 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
3. PLAIN-STEEL WIRE FABRIC: ASTM A1064 FLAT SHEETS

C. LAP SPLICE REINFORCEMENT LENGTH = 44 x BAR DIAMETER

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 (MIN. 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 LENGTH = 21 INCHES (#5 BARS).

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 GRADE B (46KSI)
   c. CHANNELS AND ANGLES: ASTM A36 (36 KSI)
   d. PLATES: ASTM A36 (36 KSI)
   e. BOLTS: ASTM A 325
   f. ANCHOR BOLTS/RODS: ASTM F 1554, GRADE 36
   g. ANCHOR BOLT WASHERS: ASTM F 844
   h. 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.

05210 STEEL JOISTS

A. SEE SECTION 05120 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 WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.

C. STEEL JOIST FRAMING SHALL BE DESIGNED PER THE LOADING SHOWN ON THIS SHEET AND SHEET S3

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

05310 STEEL DECK

A. REFER TO 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)

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 FRAMING
   c. JOIST FRAMING
   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. LIGHT GAUGE FRAMING SYSTEMS INCLUDING TRUSS SYSTEMS SHALL INCLUDE ALL NECESSARY PARTS AND ACCESSORIES, TEMPORARY AND PERMANENT, AS REQUIRED TO FORM A COMPLETE SYSTEM (ANCHORAGE INCLUDED).

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 SHEATHING: APA RATED SHEATHING, EXTERIOR (C-C GRADE)

1. PANEL GRADE AND PERFORMANCE CATEGORY: STRUCTURAL 1: 5/8" PERFORMANCE CATEGORY
2. SPAN RATING: 40/20
3. BLOCKING: 2" WIDE 43 MIL STRAPPING
4. SHEATHING SHOULD BE PLACED PERPENDICULAR TO SUPPORTS

C. ROOF SHEATHING: APA RATED SHEATHING, EXTERIOR (C-C GRADE)

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

D. PARAPET SHEATHING: APA RATED SHEATHING, EXTERIOR (C-C GRADE)

1. PANEL GRADE AND PERFORMANCE CATEGORY: STRUCTURAL 1: 5/8" PERFORMANCE CATEGORY
2. SPAN RATING: 40/20
3. SHEATHING SHOULD BE PLACED PERPENDICULAR TO SUPPORTS

E. 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.

F. 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.

G. 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.

H. 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" SPACING REQUIRED AT ALL PANEL ENDS AND EDGES.

J. ROOF SHEATHING:

1. INSTALL WITH LONG DIMENSION OR STRENGTH AXIS OF THE PANEL ACROSS SUPPORTS.
2. FASTEN TO LIGHT GAUGE METAL TRUSSES USING #10 SELF DRILLING SCREWS AT 6" OC ALONG UNSUPPORTED EDGES AND 12" OC AT INTERMEDIATE FRAMING MEMBERS. PROVIDE ONE PLYWOOD CLIP PER SPAN BETWEEN SHEET EDGES.

K. WALL / PARAPET SHEATHING:

1. APPLY WEATHER-RESISTANT BARRIER OVER PANEL WALL SHEATHING.

09960 COATINGS FOR STEEL

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

B. ASPHALTIC 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.

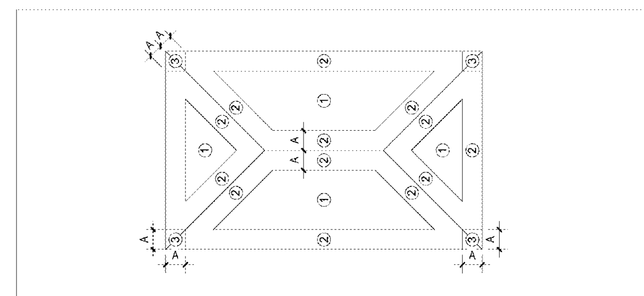
D. COATING TO BE APPLIED ON ALL SIDES OF MEMBERS – TO INCLUDE STEEL TO BE ADJACENT TO CAST-IN-PLACE CONCRETE.

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 TO SOIL SHALL BE COATED FROM THE FOUNDATION (LOWEST LEVEL) UP TO 6-INCHES ABOVE THE SLAB OR FINAL GRADE – WHICHEVER IS GREATER.

LIST OF STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLTS	MATL	MATERIAL
ADDL	ADDITIONAL	MAX	MAXIMUM
ALT	ALTERNATE	MB	MASONRY BEAM
ANCH	ANCHOR	MC	MOMENT CONNECTION
APPROX	APPROXIMATE	MC	MASONRY COLUMN
ARCH	ARCHITECT / ARCHITECTURAL	MCJ	MASONRY CONTROL JOINT
BB	BOND BEAM	MECH	MECHANICAL
BLDG	BUILDING	MEZZ	MEZZANINE
BM	BEAM	MFR	MANUFACTURE / MANUFACTURERS
BO	BOTTOM OF	MIN	MINIMUM
BOT / BTM	BOTTOM	MISC	MISCELLANEOUS
BP	BASE PLATE / BEARING PLATE	MTL	METAL
BRG	BEARING	NIC	NOT IN CONTRACT
BTW	BETWEEN	NOM	NOMINAL
CANT	CANTILEVER	NTS	NOT TO SCALE
CB	CONCRETE BEAM	OC	ON CENTER
CC	CONCRETE COLUMN	OPNG	OPENING
CIP	CAST IN PLACE	OPP	OPPOSITE
CJ	CONTROL JOINT	PB	PARAPET BEAM (MASONRY)
CL	CENTERLINE	PCC	PRECAST CONCRETE
CLR	CLEAR / CLEARANCE	PL	PLATE
COL	COLUMN	PLF	POUNDS PER LINEAR FOOT
CONC	CONCRETE	PLY	PLYWOOD
CONNX	CONNECTION	PRE-ENG	PRE-ENGINEERED
CONSTR	CONSTRUCTION	PEMB	PRE-ENGINEERED METAL BUILDING
CONT	CONTINUOUS	PRE-FAB	PRE-FABRICATED
CORR	CORRUGATED	PRELIM	PRELIMINARY
CMU	CONCRETE MASONRY UNIT	PROJ	PROJECTION
DET	DETAIL	PSF	POUNDS PER SQUARE FOOT
DIA / DIAM	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIM	DIMENSION	PT	PRESSURE TREATED
DIST	DISTANCE	PT	POST TENSION(ING) (ED)
DN	DOWN	PW	PANEL WIDTH
DR	DRAIN	RAD	RADIUS
DWG	DRAWING	RB	ROOF BEAM (MASONRY)
DWL	DOWEL	RCP	REINFORCED CONCRETE PIPE
EA	EACH	RD	ROOF DRAIN
EE	EACH END	REF	REFERENCE
EF	EACH FACE	REINF	REINFORCING
EJ	EXPANSION JOINT	REQ'D	REQUIRED
EL / ELEV	ELEVATION	REV	REVISION
ELECT	ELECTRICAL	RTU	ROOF TOP UNIT
EMB	EMBEDMENT	RW	RETAINING WALL
ENGR	ENGINEER	SECT	SECTION
EQ	EQUAL	SCH/SCHED	SCHEDULE
EQUIP	EQUIPMENT	SIM	SIMILAR
EQUIV	EQUIVALENT	SP / SPC	SPACE(S)
ES	EACH SIDE	SPECS	SPECIFICATIONS
EXIST	EXISTING	SQ	SQUARE
EXP	EXPANSION	SS	STAINLESS STEEL
EXT	EXTERIOR	STD	STANDARD
EW	EACH WAY	ST / STL	STEEL
FAB	FABRICATE	STRUC	STRUCTURAL
FD	FLOOR DRAIN	SYM	SYMMETRICAL
FDN	FOUNDATION	T & B	TOP AND BOTTOM
FF	FINISHED FLOOR	T & G	TONGUE AND GROOVE
FIN	FINISH(ED)	TE	THICKENED EDGE
FL / FLR	FLOOR	THK	THICK
FTG	FOOTING	THRD	THREAD(ED)
GA	GAGE / GAUGE	TB	TIE BEAM
GALV / GV	GALVANIZED	TOC	TOP OF CONCRETE
GC	GENERAL CONTRACTOR	TOM	TOP OF MASONRY
HAS	HEADED ANCHOR STUD	TOS	TOP OF STEEL
HB	HIGH BEAM (MASONRY)	TYP	TYPICAL
HORIZ	HORIZONTAL	TS	TUBE STEEL
HSB	HIGH STRENGTH BOLTS	UNO	UNLESS NOTED OTHERWISE
HSS	HOLLOW STEEL SECTION	UON	UNLESS OTHERWISE NOTED
HT	HEIGHT	VERT	VERTICAL
INT	INTERIOR	VIF	VERIFY IN FIELD
JST	JOIST	W	WIDE FLANGED
JT	JOINT	WB	WALL BEAM (TILT)
K	KIPS	WC	WALL COLUMN (TILT)
KO	KNOCK OUT	W/	WITH
KSF	KIPS PER SQUARE FOOT	W/O	WITHOUT
KSI	KIPS PER SQUARE INCH	WD	WOOD
L	ANGLE	WGT	WEIGHT
LB	LOW BEAM (MASONRY)	WH	WEEPHOLE
LBS	POUNDS	WP	WORKING POINT
LD	DEVELOPMENT LENGTH	WT	STEEL TEE SECTION
LDH	LONG DIMENSION HORIZONTAL	WWF	WELDED WIRE FABRIC
LDV	LONG DIMENSION VERTICAL	@	EACH AT
LGTH	LENGTH	&	AND
LLBB	LONG LEG BACK TO BACK		
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		

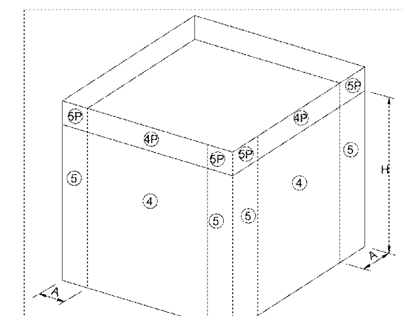


ALLOWABLE (ASD) WIND PRESSURES (ASCE 7-10) FOR COMPONENTS AND CLADDING

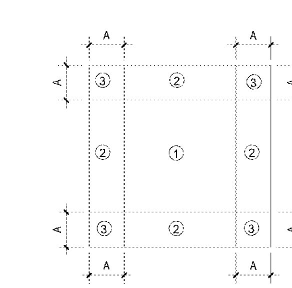
EFFECTIVE AREA (SQFT)	ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 5	
	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)	POS. (PSF)	NEG. (PSF)
10	12.0	-19.0	12.0	-32.5	12.0	-48.0	20.5	-22.5	20.5	-27.5
20	11.0	-18.5	11.0	-30.0	11.0	-45.0	19.5	-21.5	19.5	-25.5
50	10.0	-17.5	10.0	-26.5	10.0	-41.0	18.5	-20.0	18.5	-23.0
A ≥ 100	10.0	-17.0	10.0	-24.0	10.0	-37.5	17.5	-19.0	17.5	-21.5

NOTES:

1. ROOF OVERHANG PRESSURES:
   a. ZONE 2 OH: +16 PSF AND -32.5 PSF
   b. ZONE 3 OH: +16 PSF AND -55.0 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, U.N.O.).
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



ROOF PRESSURES

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	10.0 PSF	-18.0 PSF	16.5 PSF	-30.5 PSF	16.5 PSF	-30.5 PSF	16.5 PSF	-18.0 PSF	51.0 PSF	38.0 PSF	16.5 PSF	-22.0 PSF	51.0 PSF	42.0 PSF
20	10.0 PSF	-17.5 PSF	16.0 PSF	-27.0 PSF	16.0 PSF	-27.0 PSF	16.0 PSF	-17.5 PSF			16.0 PSF	-20.5 PSF		
50	10.0 PSF	-17.0 PSF	15.0 PSF	-23.0 PSF	15.0 PSF	-23.0 PSF	15.0 PSF	-16.5 PSF			15.0 PSF	-18.5 PSF		
A ≥100	10.0 PSF	-16.5 PSF	14.0 PSF	-20.0 PSF	14.0 PSF	-20.0 PSF	14.0 PSF	-15.5 PSF			14.0 PSF	-17.5 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, UNLESS NOTED).
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: U45-VA v2018.01-MA
STORE #8647 - PHM
PARHAM RD & THREE CHOPT RD.
HENRICO, VA

SHEET TITLE: GENERAL NOTES

Revision Schedule

No.	Description	Date
	PERMIT SET	09/21/2018
A	REV v2018.01	01/29/2019
	BID SET	01/29/2019

PROJECT NO. 2180130
DATE 09-21-2018
DRAWN RC
CHECKED JJ

S1