

GENERAL

- A. THE FOLLOWING NOTES APPLY TO ALL STRUCTURAL DRAWINGS...
B. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR PLAN NOTE IS SHOWN FOR ONE CONDITION...
C. ALL DESIGN AND CONSTRUCTION IS BASED ON AND SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2015 EDITION...

EXISTING CONDITIONS

- A. THE GENERAL CONTRACTOR SHALL SURVEY THE EXISTING STRUCTURE TO DETERMINE THAT ALL MODIFICATIONS AS INDICATED IN THE CONSTRUCTION DOCUMENTS ARE FEASIBLE AND PRACTICAL...
B. WHEN EXISTING FRAMING IS SHOWN ON THE STRUCTURAL DRAWINGS IT IS FOR REFERENCE ONLY AS IT RELATES TO THE STRUCTURAL SCOPE OF WORK...

SPECIAL INSPECTIONS

- A. SPECIAL INSPECTIONS ARE REQUIRED IN ADDITION TO THE INSPECTIONS SPECIFIED IN SECTION 110 OF THE BUILDING CODE.
B. ALL SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH DIVISION 01 SPECIFICATIONS.

SHOP DRAWINGS

- A. STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
B. THE GENERAL CONTRACTOR SHALL SUBMIT, AS REQUIRED, PRINTS OR ELECTRONIC COPIES AS DIRECTED, OF SHOP DRAWINGS FOR ALL FABRICATED MATERIALS TO THE CONTRACTING OFFICER REPRESENTATIVE FOR REVIEW.

DESIGN LOADS

- A. DESIGN ROOF DEAD LOAD:
1. 20 PSF
B. DESIGN ROOF LIVE LOAD:
1. 20 PSF
2. REDUCTIONS APPLIED PER TRIBUTARY AREA AS PERMITTED BY CODE
C. DESIGN WIND LOAD:
1. ULTIMATE DESIGN WIND SPEED, Vu10 = 60 MPH
2. NOMINAL DESIGN WIND SPEED, Vnsd = 46 MPH
3. RISK CATEGORY: II
4. WIND EXPOSURE CATEGORY: C
5. COMPONENTS AND CLADDING WIND PRESSURE: (SEE SCHEDULE)
6. INTERNAL PRESSURE COEFFICIENT (GCpi): +/- 0.18
D. DESIGN SEISMIC INFORMATION:
1. RISK CATEGORY: II
2. MAPPED SPECTRAL RESPONSE COEFFICIENT, Ss = 0.204
3. MAPPED SPECTRAL RESPONSE COEFFICIENT, S1 = 0.093
4. SPECTRAL RESPONSE COEFFICIENT, Sds = 0.218
5. SPECTRAL RESPONSE COEFFICIENT, Sd1 = 0.150
6. SITE CLASS: D (ASSUMED)
7. BASE SEISMIC-FORCE RESISTING SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
8. DESIGN BASE SHEAR: 27.7 K
9. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE (ASCE 7, SECTION 12.8)
10. RESPONSE MODIFICATION FACTOR, R: 3.0
11. SEISMIC DESIGN CATEGORY: C
12. SEISMIC IMPORTANCE FACTOR, Ie = 1.00
13. SEISMIC RESPONSE COEFFICIENT, Cs = 0.073
E. NO PROVISIONS HAVE BEEN MADE FOR FUTURE HORIZONTAL OR VERTICAL EXPANSION.

WELDING

- A. MINIMUM WELD SIZE SHALL BE 3/16" FILLET WELD UNLESS NOTED OTHERWISE.
B. FIELD WELDING SHALL BE SHOWN ON SHOP DRAWINGS AND ERECTION DRAWINGS.
C. REFER TO ARCHITECTURAL DOCUMENTS FOR EXPOSED STEEL AND JOINT LOCATIONS AND REQUIREMENTS. ALL EXPOSED WELDED CONNECTIONS SHALL BE GROUND SMOOTH AND SUBJECT TO CONTRACTING OFFICER REPRESENTATIVE APPROVAL. FABRICATOR SHALL ALTER JOINT DETAILING AS REQUIRED TO ENSURE THAT EFFECTIVE THROAT SPECIFIED IN WELD DETAIL IS MAINTAINED AFTER GRINDING OF WELD SURFACE.
D. WELDS INDICATED IN STRUCTURAL DETAILS ARE INTENDED AS THE BASIS OF DESIGN. FABRICATOR AND ERECTOR HAVE THE OPTION TO PROPOSE THE USE OF ALTERNATIVE WELDING PROCEDURES. ALTERNATIVE WELDS SHALL BE INDICATED ON SHOP DRAWINGS FOR REVIEW BY THE CONTRACTING OFFICER REPRESENTATIVE.
E. REINFORCING STEEL WELDING SHALL CONFORM TO AWS D1.4, STRUCTURAL WELDING CODE - REINFORCING STEEL BY AMERICAN WELDING SOCIETY FOR COMPLIANCE WITH ACI 318, SECTION 3.5.2.

STRUCTURAL STEEL

- A. ALL STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. SLOTTED HOLES FOR BEAM END CONNECTIONS ARE NOT ALLOWED FOR BEAMS ASSOCIATED WITH A BRACED FRAME OR MOMENT FRAME, OR NOTED WITH A REQUIRED AXIAL CONNECTION FORCE, UNLESS NOTED OTHERWISE.
C. GUSSET PLATES AND STIFFENER PLATES SHALL BE 3/8" MINIMUM, WELDED BOTH SIDES CONTINUOUSLY, UNLESS NOTED OTHERWISE.
D. MEMBERS SUPPORTING DECK AT THE PERIMETER OF THE BUILDING SHALL BE CONTINUOUS EXCEPT AT EXPANSION JOINTS. SQUARE GROOVE WELD (BUTT JOINT) CONTINUOUS MEMBERS PLACED END TO END UNLESS NOTED OTHERWISE.
E. STEEL COLUMNS AND BASE PLATES SHALL HAVE MINIMUM 3" CONCRETE COVER PROTECTION.
F. POWDER ACTUATED FASTENERS (OR POWDER DRIVEN FASTENERS) SHALL BE ANCHORED IN STEEL WITH MINIMUM FASTENER SPACING OF 1 1/2" AND MINIMUM EDGE DISTANCE OF 1 1/2".
G. GROUT UNDER BEARING PLATES SHALL BE MIN. 6,000 PSI COMPRESSIVE STRENGTH. LOADS OF STRUCTURE SHALL NOT OCCUR UNTIL GROUT IS INSTALLED UNDER BASE PLATES AND PROPERLY CURED.
H. MATERIALS:
1. W-SHAPES: ASTM A 992.
2. CHANNELS, ANGLES, M, S-SHAPES: ASTM A 36.
3. PLATE AND BAR: ASTM A 36.
4. COLD-FORMED HOLLOW STRUCTURAL SECTIONS: ASTM A 500, GRADE C, STRUCTURAL TUBING.
5. STEEL PIPE: ASTM A 53, TYPE E OR S, GRADE 60.
6. HIGH-STRENGTH BOLTS, NUTS, AND WASHERS: ASTM A 325, TYPE 1 OR ASTM A 490 TYPE 1 HEAVY HEX STEEL STRUCTURAL BOLTS ASTM A 193, GRADE D1, LAY UP HIGH CARBON STEEL NUTS; AND ASTM F 436, TYPE 1, HARDENED CARBON STEEL WASHERS WITH PLAIN FINISH.
7. SHEAR CONNECTORS: ASTM A 108, GRADES 50 THROUGH 100, WELDED STUD TYPE, COLD-FINISHED CARBON STEEL; AWS D1.1, TYPE 1.
8. UNHEADED ANCHOR RODS: ASTM F 1554, GRADE 36, CONFIGURATION TO BE STRAIGHT.
9. PLATE WASHERS: ASTM A 307, CARBON STEEL.
10. WASHERS: ASTM F 436, TYPE 1, HARDENED CARBON STEEL.
11. THREADED RODS: ASTM A 36.
12. NONMETALLIC PACKAGING FOR GROUT: ASTM C 1107, FACTORY-PACKAGED, NONMETALLIC AGGREGATE GROUT, NON-CORROSIVE AND NONSTAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 30-MINUTE WORKING TIME.

METAL STAIRS AND RAILING

- A. ALL METAL STAIR AND RAILING WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. SEE ARCHITECTURAL DRAWINGS FOR EXACT LAYOUT AND CONFIGURATION.

OPEN-WEB STEEL JOISTS

- A. ALL STRUCTURAL STEEL JOIST AND JOIST GIRDER WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. JOISTS SHALL BE EQUALLY SPACED BETWEEN COLUMN LINES OR OTHER SPECIFICALLY LOCATED FRAMING MEMBERS UNLESS NOTED OTHERWISE.
C. STAGGER CONNECTION FOR BEARING NOTE.
D. EXTEND LOWER JOIST CHORD AT ALL COLUMNS. DO NOT WELD TO STEEL TAB PLATE.
E. UNLESS NOTED OTHERWISE, K-SERIES STEEL JOIST SHALL HAVE 2 1/2" DEEP BEARING, LH-SERIES SHALL HAVE 3" DEEP BEARING.
1. WHERE STEEL JOIST OR GIRDER SLOPE EXCEEDS 1/4" PER FT., PROVIDE SLOPED BEARING AS NOTED IN SLOPED SEAT REQUIREMENTS OF S.JI.
F. HORIZONTAL BRIDGING SHALL BE PER SJI REQUIREMENTS.
1. BRIDGING SHALL BE DESIGNED TO FULLY BRACE TOP CHORD OF JOISTS UNDER SERVICE LOADS FOR JOISTS NOT BRACED BY STEEL ROOF DECK.
2. BOTTOM CHORD OF ROOF JOISTS SHALL BE DESIGNED FOR NET UPLIFT SHOWN IN DIAGRAM ON S-607.
3. BOTTOM CHORD OF ROOF JOIST GIRDERS SHALL BE DESIGNED FOR NET UPLIFT SHOWN IN DIAGRAM ON S-601.
4. PROVIDE ADDITIONAL BOTTOM CHORD BRIDGING AS REQUIRED FOR NET UPLIFT SHOWN IN DIAGRAM ON S-601.
G. AT A MINIMUM, K-SERIES STEEL JOISTS SHALL BE CONNECTED TO STEEL BY 1/8" WELD, 1 1/2" EACH SIDE OR (2) 1/2" DIAMETER BOLTS. AT A MINIMUM, LONG SPAN STEEL JOISTS SHALL BE CONNECTED TO STEEL BY 1/4" WELD, 2" LONG EACH SIDE OR (2) 3/4" DIAMETER BOLTS. AT A MINIMUM, JOIST GIRDERS SHALL BE CONNECTED TO STEEL BY 1/4" WELD, 6" LONG EACH SIDE OR (2) 3/4" DIAMETER BOLTS. JOIST SEAT CONNECTION DETAILS SHALL BE PROVIDED BY FABRICATOR (BOLTED OR WELDED CONNECTIONS) BASED ON SJI AND LOADING REQUIREMENTS.
H. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF WALLS, BEAM FRAMING, METAL DECKING, ETC. WITH THE PITCH AND CAMBER OF STEEL JOISTS TO ENSURE COMPATIBILITY OF ROOF FRAMING AND WALL SYSTEMS.

STEEL ROOF DECK

- A. ALL STEEL ROOF DECK WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. ALL INTERIOR STEEL ROOF DECK SHALL BE ASTM A1008 FACTORY PRIMED FOR PAINT. ALL ROOF DECK WITH EXTERIOR EXPOSURE (TOP OR BOTTOM OF DECK EXPOSED TO ELEMENTS) ALL ROOF DECK WITH CONCRETE TOPPING, AND ALL ROOF DECK RECEIVING SPRAY APPLIED FIREPROOFING SHALL BE ASTM A653 GALVANIZED G60. ALL STEEL ROOF DECK SHALL HAVE A MINIMUM YIELD STRENGTH OF 80,000 PSI, UNLESS NOTED OTHERWISE.
C. DECK SHALL BE SUPPORTED BY A MINIMUM OF FOUR SUPPORT LOCATIONS (THREE SPAN CONDITION).
D. MINIMUM FINAL ROOF SLOPE SHALL BE DETERMINED BY THE ARCHITECT, WHERE SLOPE IS NOT ACHIEVED BY STEEL STRUCTURE, CREATE IT WITH INSULATION ABOVE THE DECK (SEE ARCHITECTURAL DRAWINGS).
E. ALL INTERIOR EXPOSED ROOF DECK SHALL BE ASTM A1008 FACTORY PRIMED FOR PAINT. SEE ARCHITECTURAL DRAWINGS FOR EXTENTS.
F. STEEL ROOF DECK SHALL BE ATTACHED TO STEEL SUPPORTS AS NOTED ON S-601.

SUSPENDED LOADS AT STRUCTURE

- A. ATTACHMENT TO ROOF DECK OF ANY SUSPENDED LOADS IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM CONTRACTING OFFICER REPRESENTATIVE.
B. PIPE HANGERS SHALL BE ATTACHED TO BOTTOM FLANGE OF JOISTS OR BEAMS WITH APPROVED CLAMPS/CONNECTIONS.
C. ALL MULTIPLE MEMBER CABLE TRAYS, PIPE RACKS OR GROUPS OF PIPES OR DUCTS SHALL BE SUPPORTED FROM EACH ROOF FRAMING MEMBER WHERE THE GROUP CROSSES THE MEMBER OR AT 8' ON CENTER MAX. WHERE THE GROUP IS ORIENTED PARALLEL TO THE MEMBER, UNLESS NOTED OTHERWISE ON DRAWINGS.
D. HANGERS SHALL BE INSTALLED AT ALL PIPE VALVE AND FITTING LOCATIONS.
E. CONTRACTORS AND SUBCONTRACTORS SUSPENDING LOADS FROM STRUCTURE SHALL ACCORDANCE WITH ALL PROVISIONS OF ALL CONNECTIONS, STRUTS, TIES AND RIGGINGS REQUIRED FOR COMPLETE INSTALLATION AND SHALL FURNISH DRAWINGS SHOWING POINTS OF SUPPORT, SUPPORT LOADS AND ALL REQUIRED SUPPLEMENTAL BRACING, PROVIDE SUPPORTS AND HANGERS AS REQUIRED FOR PIPING AND EQUIPMENT SO THAT ALL COMBINED LOADING SHALL NOT EXCEED ALLOWABLE LOADINGS OF STRUCTURE AS SHOWN ON STRUCTURAL DRAWINGS. SUPPORT LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES AND SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS OF THE ITEMS SUPPORTED.
F. EXPENSE RESULTING FROM IMPROPER COORDINATION OR LOCATION OF ANCHOR BOLTS, OPENINGS, SLEEVES, INSERTS, HANGERS OR OTHER SUPPORTS REQUIRED FOR PIPING AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

COLD-FORMED STEEL FRAMING (STUDS AND JOISTS)

- A. ALL COLD-FORMED STEEL FRAMING WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. ISOLATION OF NON-LOAD-BEARING FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF VERTICAL LOADS SHALL ALLOW FOR A MINIMUM OF SPAN/240 MOVEMENT FROM LIVE LOAD.
C. SEE ARCHITECTURAL DRAWINGS FOR NON-LOAD BEARING WALLS AND TO VERIFY ALL DIMENSIONS SHOWN FOR LOAD BEARING WALLS.

METAL STAIRS AND RAILING

- A. ALL METAL STAIR AND RAILING WORK SHALL BE IN ACCORDANCE WITH DIVISION 05 SPECIFICATIONS.
B. SEE ARCHITECTURAL DRAWINGS FOR EXACT LAYOUT AND CONFIGURATION.

SEISMIC DESIGN OF NON-STRUCTURAL COMPONENTS

- A. ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS, INCLUDING THEIR SUPPORT AND ATTACHMENTS, SHALL BE DESIGNED TO RESIST SEISMIC FORCES IN ACCORDANCE WITH IBC CHAPTER 16, ASCE7 CHAPTER 13, AND ANY ADDITIONAL REQUIREMENTS OF THE STATE OR LOCAL JURISDICTION. THESE REQUIREMENTS SHALL BE SATISFIED BY:
1. PROJECT-SPECIFIC DESIGN AND DOCUMENTATION PREPARED AND SUBMITTED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE IN WHICH THE PROJECT IS LOCATED.
2. SUBMITTAL OF MANUFACTURER'S CERTIFICATION THAT THE COMPONENT IS SEISMICALLY QUALIFIED BY ANALYSIS, TESTING IN ACCORDANCE WITH SECTION 13.2.5, OR EXPERIENCE DATA IN ACCORDANCE WITH SECTION 13.2.6.
B. SEISMIC BRACING OF ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS NOT SPECIFICALLY SHOWN IN THE CONTRACT DOCUMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE IN WHICH THE PROJECT IS LOCATED.
C. ARCHITECTURAL COMPONENTS REQUIRING SEISMIC DESIGN AND DETAILING INCLUDING WALLS, HANGING PARTITIONS, SUSPENDED CEILING, AND INTERIOR/EXTERIOR VENEER ARE NOT LIMITED TO, ACCESS FLOORS, CLADDING, GLAZING, PARTIAL HEIGHT PARTITIONS, MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS REQUIRING SEISMIC DESIGN AND DETAILING INCLUDE, BUT ARE NOT LIMITED TO, DUCTS, LIGHT FIXTURES, PIPING, ITEMS, ROOF TOP UNITS, AND OTHER EQUIPMENT SUPPORTED BY OR SUSPENDED FROM ROOFS.
D. ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS CROSSING BUILDING EXPANSION JOINTS SHALL BE DETAILED IN ORDER TO ACCOMMODATE THE ANTICIPATED SEISMIC RELATIVE DISPLACEMENTS AT CROSS SECTION JOINT.
E. ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS CROSSING BUILDING EXPANSION JOINTS SHALL BE DETAILED IN ORDER TO ACCOMMODATE THE ANTICIPATED SEISMIC RELATIVE DISPLACEMENTS AT CROSS SECTION JOINT.

WIND DESIGN OF NON-STRUCTURAL COMPONENTS

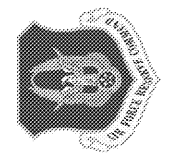
- A. REFER TO THE WIND COMPONENTS AND CLADDING SCHEDULE ON SHEET S-002 FOR WIND PRESSURES TO BE USED FOR THE DESIGN OF EXTERIOR COMPONENT AND CLADDING MATERIALS SPECIFICALLY DESIGNED BY THE STRUCTURAL ENGINEER OF RECORD.

CONSTRUCTION DOCS.

Table with columns: REV., DATE BY, DESCRIPTION. Rows: B, 2017-02-27, 65% SUBMITTAL; C, 2018-02-21, 65% SUBMITTAL; D, 2018-04-13, FOR CONSTRUCTION; E, 2018-06-01, FOR CONSTRUCTION.



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6/01/2018

REPAIR FACILITY & ADDITION
BUILDING 747
FGWB 08-0027
DOBBINS AIR RESERVE BASE, GEORGIA
GENERAL NOTES
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Table with columns: PROJECT, LOCATION, DRAWING, CONTRACT. Rows: PROJECT No: 2017-238; PROJ. OFFICER: J. MORGAN; DESIGNED: M. WILSON; CHECKED: M. PLANER; DATE: 2018-06-01; DRAWING: 4 OF 45.

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