General Notes

GN. GENERAL

GN.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH ALL OTHER DISCIPLINES' DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER AND ARCHITECT.

GN.2 DESIGN CRITERIA:

A. CODES AND SPECIFICATIONS:

1. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2015 EDITION.

2. DESIGN LOAD CRITERIA:
MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7

3. CONCRETE:
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318.

4. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 360.

5. STEEL JOISTS:
STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS, STEEL JOIST INSTITUTE, SJI.

6. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, ROOF DECKS AND CELLULAR METAL FLOOR DECK WITH ELECTRICAL DISTRIBUTION.

7. MASONRY:
BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, TMS 402/ACI 530/ASCE 5. SPECIFICATION FOR MASONRY STRUCTURES, TMS 602/ACI 530.1/ASCE 6.

B. DESIGN LOADS (PSF):

1. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

2. LIVE LOADS:
ROOF (REDUCIBLE)----------------------------------20

3. SNOW LOAD:
GROUND SNOW LOAD (Pg)----------------------------5.0
FLAT-ROOF SNOW LOAD (Pf)-------------------------3.15
SNOW EXPOSURE FACTOR (Ce)------------------------0.9
SNOW LOAD IMPORTANCE FACTOR (Is)-----------------1.0
THERMAL FACTOR (Ct)------------------------------1.0

4. WIND LOADS:
BASIC WIND SPEED (3 – SECOND GUST)------------115 MPH
WIND IMPORTANCE FACTOR (Iw)----------------------1.0
BUILDING CATEGORY---------------------------------II
WIND EXPOSURE CATEGORY-----------------------------B
INTERNAL PRESSURE COEFFICIENT------------------±0.18

WALL COMPONENT AND CLADDING WIND PRESSURE-SEE DRAWINGS

5. SEISMIC LOADS:
SEISMIC IMPORTANCE FACTOR (Ie)-------------------1.0

MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss---------------------------------------0.262
S1---------------------------------------0.104
SITE CLASS---C
SITE COEFFICIENTS:
Fa---------------------------------------1.200
Fv---------------------------------------1.696
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
Sds--------------------------------------0.210
Sd1--------------------------------------0.118
SEISMIC DESIGN CATEGORY----------------------------B
BASIC SEISMIC-FORCE-RESISTING SYSTEM: ORDINARY REINFORCED MASONRY SHEAR WALLS

DESIGN BASE SHEAR--------------------------31.0 KIPS

SEISMIC RESPONSE COEFFICIENT (Cs)--------------0.105
RESPONSE MODIFICATION FACTOR(R)------------------2.0
OVER-STRENGTH FACTOR (?o)------------------------2.5
DEFLECTION AMPLIFICATION FACTOR (Cd)------------1.75

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE METHOD

REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SEISMIC SUPPORT AND ATTACHMENT REQUIREMENTS FOR UTILITIES.

GN.3 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

GN.4 SPECIAL INSPECTIONS/STRUCTURAL ENGINEER'S SITE VISITS:

A. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE. REFER TO DRAWINGS.

B. SITE VISITS BY STRUCTURAL ENGINEER:

1. STRUCTURAL ENGINEER'S SITE VISITS ARE FOR VISUAL OBSERVATION OF THE IN-PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION.

2. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AND ARCHITECT, PER THE SCHEDULE STATED BELOW, WHEN SUCH ITEMS HAVE PROGRESSED TO THE POINT WHERE THEY WILL BE IN PLACE AND READY FOR REVIEW. FAILURE TO NOTIFY MAY REQUIRE REMOVAL OF COMPLETED CONSTRUCTION.

NOTIFY PRIOR TO THE FOLLOWING SCHEDULED TASKS	REQUIRED DAYS NOTIFICATION
FIRST FOUNDATION POUR	2 DAYS
GROUTING MASONRY WALL CONSTRUCTION	2 DAYS
COVERING METAL ROOF DECK	2 DAYS

C. SITE VISITS BY THE STRUCTURAL ENGINEER'S OFFICE DO NOT REPLACE INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

GN.5 SUBMITTALS:

A. REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTING TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL SHOP DRAWINGS MUST BE REVIEWED AND "APPROVED" BY THE CONTRACTOR PRIOR TO SUBMITTAL.

B. HARDCOPY SHOP DRAWING SUBMITTALS: SUBMIT ALL SHOP DRAWINGS ON THREE PRINTS ONLY. ONE PRINT WILL BE RETURNED TO THE CONTRACTOR. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED. IF ADDITIONAL PRINTS ARE SUBMITTED, THEY WILL BE RETURNED UNMARKED.

C. ELECTRONIC SHOP DRAWING SUBMITTALS: SUBMIT ALL ELECTRONIC SHOP DRAWINGS IN .PDF FORMAT. REVIEWED SHOP DRAWINGS WILL BE RETURNED IN .PDF FORMAT. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED.

D. RESUBMITTED SHOP DRAWINGS: RESUBMITTED SHOP DRAWINGS SHALL HAVE ALL CHANGES SINCE THE PREVIOUS SUBMISSION IDENTIFIED BY CLOUDING OR OTHER CLEAR COMMUNICATION. RE-REVIEWED SHOP DRAWINGS WILL ONLY BE REVIEWED FOR IDENTIFIED CHANGES.

E. SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. ITEMS MARKED (#) SHALL BE SUBMITTED FOR STRUCTURAL ENGINEER'S RECORD ONLY.

1. CONCRETE MIX DESIGNS
2. CONCRETE REINFORCING
3. STRUCTURAL STEEL
4. STEEL JOIST
5. STEEL DECK
6. MASONRY MORTAR MIX DESIGNS
7. MASONRY GROUT MIX DESIGNS
8. MASONRY REINFORCING

F. DESIGN CALCULATIONS: THE CONTRACTOR SHALL SUBMIT FOR STRUCTURAL ENGINEER'S RECORD, DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED FOR THE FOLLOWING ITEMS.

1. STEEL JOIST (SEE STEEL JOIST SECTION OF GENERAL NOTES)

GN.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

GN.7 THE CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

GN.8 CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS/ROOFS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT LOADS DO NOT EXCEED THE DESIGN LIVE LOAD.

FD. FOUNDATION

FD.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY ECS, TITLED "REPORT OF GEOTECHNICAL EXPLORATION - PATRIOT PARK IMPROVEMENTS, OAK GROVE ROAD, HOMEWOOD, ALABAMA" ECS PROJECT NO. 30-1575 DATED MAY 22, 2017". THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS.

FD.2 DESIGN BEARING PRESSURES (PSF):

COLUMN FOOTINGS-----------------------------------2500
CONTINUOUS WALL FOOTINGS--------------------------2500
ALL OTHER---2500

FD.3 ALL FOUNDATION BEARING SURFACES SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE COMPLIANCE WITH PRESSURES NOTED. THE FINAL BEARING ELEVATIONS MAY VARY AS REQUIRED TO PROVIDE PROPER BEARING CAPACITY IN AN APPROVED BEARING STRATUM AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

FD.4 FOOTINGS SHALL BE PLACED THE SAME DAY AS INSPECTION BY THE GEOTECHNICAL ENGINEER UNLESS EXTENDED TIME IS APPROVED BY THE GEOTECHNICAL ENGINEER.

FD.5 FOOTINGS SHALL BE NEATLY EXCAVATED WHERE POSSIBLE WITH SIDES AND TOP EDGES FREE OF LOOSE OR WET MATERIALS. WHERE NEAT EXCAVATION IS NOT POSSIBLE, FOOTING EXCAVATION SHALL BE FILLED WITH CONCRETE TO THE TOP OF FOOTING. THE BOTTOM EXCAVATION SHALL BE CLEAN AND DRY WITH ALL LOOSE MATERIAL REMOVED FOR AN ESSENTIALLY FLAT BEARING SURFACE. WHERE SOFT OR UNSUITABLE BEARING SURFACES ARE ENCOUNTERED, THE AREA SHALL BE UNDERCUT AS REQUIRED AND REPLACED WITH LEAN CONCRETE OR COMPACTED DENSE GRADED CRUSHED STONE AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

FD.6 COMPACTED FILL SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT. EXCAVATED MATERIAL MAY BE USED AS BACKFILL MATERIAL WITH WRITTEN APPROVAL FROM THE GEOTECHNICAL ENGINEER STATING THAT SUCH MATERIAL IS SUITABLE AS BACKFILL AND INSTRUCTIONS ARE GIVEN FOR PROPER MOISTURE CONTENT AND COMPACTION.

FD.6 SLABS ON GRADE:
SUBGRADE MODULUS--------------------------------110 PCI
UNIFORM LOAD------------------------------------100 PSF

FD.7 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE WALL.

FD.8 RETAINING WALL DESIGN CRITERIA:
ACTIVE DESIGN PRESSURE---------------------------60 PCF
PASSIVE DESIGN PRESSURE--------------------------60 PCF
COFFICIENT OF FRICTION---------------------------0.35

FD.9 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.

FD.10 PROVIDE 4" OF COMPACTED GRANULAR FILL BENEATH ALL SLABS ON GRADE. PROVIDE 10 MIL VAPOR RETARDER BETWEEN BOTTOM OF SLAB AND TOP OF GRANULAR FILL.

FD.11 FOUNDATIONS SHALL BE CENTERED ABOUT COLUMN LINES, UNLESS NOTED.

FD.12 UNDERPINNING OF EXISTING ADJACENT FOUNDATIONS MAY BE REQUIRED. ALL ENGINEERING DESIGNS AND MEANS AND METHODS OF CONSTRUCTION RELATED TO UNDERPINNING ARE THE SOLE RESPONSIBILTY OF THE CONTRACTOR.

CN. CONCRETE

CN.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

CN.2 MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM W/C (WATER/CEMENTITIOUS MATERIALS RATIO), AIR CONTENT, SLUMP AND CONCRETE USE:

STRENGTH	TYPE	W/C	AIR	SLUMP	USE
3000	NORMAL WT.	0.57	---	3" TO 5"	SLAB ON GRADE
3000	NORMAL WT.	0.57	---	3" TO 5"	FOOTINGS

CN.3 REINFORCING BARS: ASTM A615 GRADE 60.

CN.4 WELDED WIRE REINFORCEMENT (WWR): ASTM A185. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2" OR 6".

CN.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS IS A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

CN.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS.

CN.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED UNLESS NOTED OR APPROVED BY THE STRUCTURAL ENGINEER.

CN.8 SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

CN.9 REINFORCING MARKED "CONTINUOUS" SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

CN.10 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

FOOTINGS-------------------------------2" TOP & 3" BOTTOM & SIDES
FOUNDATION RETAINING WALLS-------------------------2" BOTH FACES
SUMP AND PIT WALLS---------------------------------2" BOTH FACES
WWR IN SLABS ON GRADE------------------------------------2" TOP

CN.11 WALL VERTICAL REINFORCING: DOWEL TOFOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.

CN.12 FOR CONCRETE WALLS WITH A SINGLE LAYER OF REINFORCING, REINFORCING TO BE CENTERED IN WALL UNLESS NOTED.

CN.13 SLABS ON GRADE: 4" THICK, REINFORCED WITH 6X6 W2.9/W2.9 WWR AT MID-DEPTH OF SLAB, UNLESS NOTED.

SS. STRUCTURAL STEEL

SS.1 FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

SS.2 THE STEEL FRAME IS "NON-SELF SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL THE LATERAL FORCE RESISTING SYSTEM AND STABILITY OF THE COMPLETED STRUCTURE IS IN PLACE.

SS.3 LATERAL FORCE RESISTING SYSTEM AND STABILITY OF THE BUILDING IN THE COMPLETED STRUCTURE IS PROVIDED AS FOLLOWS:

A. ROOF DIAPHRAGM: STEEL ROOF DECKING

B. COLLECTOR ELEMENTS/DRAG STRUTS: NONE

D. LATERAL FORCE RESISTING SYSTEM: MASONRY SHEAR WALLS (TYP), STEEL MOMENT FRAMES FOR CANOPY

SS.4 STRUCTURAL STEEL AND STRUCTURAL STEEL CONNECTIONS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE:

W SHAPES	ASTM A992
PLATES AND ANGLES	ASTM A36
HOLLOW STRUCTURAL SECTIONS	ASTM A500, GRADE C
WELDED CONNECTIONS	E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16"
HEADED ANCHOR RODS	ASTM F1554 GRADE 36 ANCHOR AND HEAVY HEX NUT, UNLESS INDICATED.
BOLTS	ASTM A325 OR A490
NUTS	ASTM A563
WASHERS	ASTM F436

SS.5 WHERE NO CAMBER IS INDICATED, BEAMS SHOULD BE ERECTED WITH NATURAL CAMBER ORIENTED UPWARD.

SS.6 BEAMS SHALL BE EQUALLY SPACED IN BAYS, UNLESS NOTED.

SS.7 HSS MEMBERS SHALL HAVE A 1/4" CLOSURE PLATE.

SS.8 FOUR ANCHOR RODS MINIMUM FOR BASE PLATES UNDER COLUMNS.

SS.9 GROUT UNDER BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC TYPE. GROUT SHALL HAVE A SPECIFIED DESIGN COMPRESSIVE STRENGTH TWO TIMES THAT OF THE SUPPORTING CONCRETE.

SS.10 STRUCTURAL STEEL MEMBERS SHALL NOT BE CUT, SPLICED, OR MODIFIED IN THE FIELD UNLESS NOTED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

SS.12 STRUCTURAL STEEL NOT EXPOSED TO VIEW SHALL BE PRIMED WITH MANUFACTURER'S STANDARD SHOP PRIMER. STRUCTURAL STEEL EXPOSED TO WEATHER IN ITS FINAL POSITION SHALL BE COATED PER ARCHITECTURAL REQUIREMENTS. SEE COATING/PAINTING SPECIFICATIONS.

SS.13 DRAIN HOLES SHALL BE PROVIDED IN ALL STEEL AS REQUIRED TO PREVENT WATER ACCUMULATION. HOLES THROUGH STRUCTURAL STEEL MEMBERS SHALL BE GROUND SMOOTH AND NOT EXCEEDING 1/2" DIAMETER. DRAIN HOLES SHALL BE LEFT CLEAN AND UNOBSTRUCTED.

SC. STRUCTURAL STEEL CONNECTIONS

SC.1 ALL WELDS SHALL CONFORM TO THE AMERICAN WELDING SOCIETY (ANSI/AWS D1.1) STANDARDS AND MUST BE PERFORMED BY AN ANSI/AWS CERTIFIED WELDER.

SC.2 ALL WELD SIZES ARE TO BE CONSIDERED AS EFFECTIVE WELD SIZES AND MUST BE INCREASED TO ACCOUNT FOR ANY GAPS OR SKEWS BETWEEN MEMBERS AS REQUIRED BY ANSI/AWS D1.1.

SC.3 BOLTED CONNECTIONS SHALL USE BEARING TYPE A325-N OR A490-N IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

SC.4 ALL BOLTS SHALL BE 3/4" DIAMETER OR GREATER, UNLESS NOTED. USE SNUG TIGHT BEARING CONNECTIONS FOR ALL BOLTED CONNECTIONS UNLESS NOTED.

SC.5 DO NOT REUSE PRETENSIONED BOLTS.

SJ. STEEL JOISTS

SJ.1 DESIGN, FABRICATE, AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE SJI.

SJ.2 PROVIDE A MINIMUM END BEARING ON STEEL SUPPORTS AS REQUIRED BY SJI. STAGGER THE ENDS OF JOIST IF NECESSARY. CONTRACTOR COORDINATE METAL DECK SPLICE LOCATION TO CENTER OVER JOIST.

SJ.3 PROVIDE HORIZONTAL AND DIAGONAL BRIDGING IN ACCORDANCE WITH SJI TO PROVIDE ADEQUATE JOIST CHORD BRACING.

SJ.4 AT JOISTS PARALLEL TO MASONRY WALL, WELD EACH BRIDGING ROW TOP AND BOTTOM TO AN ANGLE 3X3X3/16X0'-6". ANCHOR ANGLE WITH TWO 3/8" DIAMETER SLEEVE ANCHORS WITH A TWO-INCH EMBEDMENT INTO WALL.

SJ.5 PROVIDE SLOPED BEARING ENDS WHERE JOIST SLOPE EXCEEDS 1/4" PER FT.

SJ.6 AT JOISTS PARALLEL TO BEAMS, ANCHOR BRIDGING ROWS BY WELDING TO BEAMS.

SJ.7 DESIGN ROOF JOISTS TO RESIST NET WIND UPLIFT PRESSURES. SEE THE COMPONENT AND CLADDING WIND LOAD TABLE SHOWN ON THE DRAWINGS.

SJ.8 DESIGN CALCULATIONS SHALL BE SUBMITTED FOR THE FILES OF THE STRUCTURAL ENGINEER AND ARCHITECT FOR JOISTS WITH CANTILEVERS OR CONCENTRATED LOADS AND FOR JOIST SIZES FOR WHICH STANDARD SJI LOAD TABLES ARE NOT APPLICABLE. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING JOISTS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

SJ.9 PROVIDE JOIST REINFORCEMENT AT ANY CONCENTRATED LOADS NOT LOCATED AT A JOIST PANEL POINT.

SJ.10 CAMBER AND DEFLECTION SHOULD BE CONSIDERED WHEN DETAILING / CONSTRUCTING FRAMING ADJACENT TO OR ATTACHING TO JOISTS.

SJ.11 JOISTS SHALL BE EQUALLY SPACED IN BAYS, UNLESS NOTED.

SD. STEEL DECK

SD.1 DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.

SD.2 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS.

SD.3 DO NOT SHORE DECK.

SD.4 ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 22 GAGE, 1-1/2" DEEP, AND 20 GAGE, 3" DEEP, GALVANIZED. SHEET STEEL FOR DECK SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI.

SD.5 COLD-FORMED METAL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES AND DUCTS OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE METAL ROOF DECK.

SD.6 PROVIDE 6" CLOSURE STRIP OF SAME GAGE AS DECK WHERE CHANGES IN DECK DIRECTION OCCUR.

MA. MASONRY

MA.1 MASONRY CONSTRUCTION SHALL CONFORM TO TMS 402/ACI 530/ASCE 5 AND TMS 602/ACI 530.1/ASCE 6 SPECIFICATIONS.

MA.2 CONCRETE MASONRY UNITS (CMU) SHALL BE NORMAL WEIGHT (DENSITY = 115 PCF), CONFORMING TO ASTM C90, UNLESS NOTED.

MA.3 COMPRESSIVE STRENGTH OF MASONRY (F'm): 2000 PSI AT 28 DAYS.

MA.4 GROUT SHALL CONFORM TO ASTM C476 WITH COMPRESSIVE STRENGTH (F'g) OF 2500 PSI AT 28 DAYS. GROUT SHALL BE PLACED ACCORDING TO TMS 602/ACI 530.1/ASCE 6 SECTION 3.5.

MA.5 MORTAR SHALL CONFORM TO ASTM C270, TYPE S OR M FOR TYPICAL CONDITIONS, TYPE M FOR BASEMENT AND RETAINING WALLS.

MA.6 ALL MASONRY SHALL BE RUNNING BOND, UNLESS NOTED.

MA.7 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.

MA.8 SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS AND OPENINGS.

MA.9 REINFORCING BARS: ASTM A615 GRADE 60. LAP REINFORCING BARS ACCORDING TO TYPICAL DETAILS.

MA.10 HORIZONTAL JOINT REINFORCING: LADDER TYPE, 9 GAGE SPACED VERTICALLY AT 16", UNLESS NOTED. PLACE REINFORCING ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. LAP REINFORCING A MINIMUM OF 6".

MA.11 WHEN REINFORCING BARS ARE SPECIFIED, PROVIDE AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS ACCORDING TO TYPICAL DETAILS. REINFORCING BARS TO BE CENTERED IN WALL, UNLESS NOTED.

MA.12 CONDUIT, PIPING, AND SLEEVES OF ANY MATERIAL TO BE EMBEDDED IN MASONRY SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

A. CONDUIT, PIPING, AND SLEEVES OF ALUMINUM SHALL NOT BE EMBEDDED IN MASONRY.

B. CONDUIT, PIPING, AND SLEEVES SHALL NOT PASS THROUGH JAMBS, LINTELS, BOND BEAMS, OR SHEAR WALLS WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.

C. REINFORCING SHALL NOT BE CUT, BENT, OR DISPLACED FOR PLACEMENT OF CONDUIT, PIPING, AND SLEEVES.

D. CONDUIT, PIPING, AND SLEEVES SHALL BE NO CLOSER THAN 3 DIAMETERS ON CENTER. MINIMUM SPACING OF DIFFERENT DIAMETERS SHALL BE DETERMINED USING THE LARGER DIAMETER.

MA.13 TEMPORARY BRACING OF CMU WALLS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL PERMANENT RESTRAINT IS PROVIDED.

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LBYD ENGINEERS
PROJECT NO. 101-17-136.002

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 22239 WIN G. BISHOP, JR. 10/6/17

HOMEWOOD PATRIOT PARK POOL

HOMEWOOD PARKS & RECREATION

HOMEWOOD PARKS AND RECREATION: HOMEWOOD, AL

DAVIS ARCHITECTS

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SUITE 400
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314-894-1245
ATTN: JEFF NODORFT

REV	DATE	DESCRIPTION

DATE OCTOBER 6, 2017
PHASE 100% CONSTRUCTION DOCUMENTS
ISSUED FOR
ISSUED BY DAVIS ARCHITECTS PROJECT NO. 3822
SHEET TITLE General Notes
DRAWING NO. S0.01