

**GENERAL NOTES**

- IN CASES OF DISCREPANCIES IN DIMENSIONS AND ELEVATIONS BETWEEN STRUCTURAL AND ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL COORDINATE WITH ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY GUYS AND BRACING AS REQUIRED DURING CONSTRUCTION. STRUCTURE IS NOT STABLE UNTIL ALL STRUCTURAL MEMBERS, CONNECTIONS, AND DECKING ARE IN PLACE.
- CONTRACTOR SHALL BRACE THE STAGGERED TRUSSES DURING ERECTION AND TO LOAD TRUSSES EVENLY FROM BOTH SIDES TO PREVENT LATERAL, TORSIONAL, BUCKLING OF THE TRUSS.
- FIELD VERIFY ALL EXISTING CONDITIONS. NOTIFY DESIGN TEAM WHEN EXISTING CONDITIONS ARE IN CONFLICT WITH THE CONSTRUCTION DOCUMENTS.

**FOUNDATION NOTES**

- A SOIL INVESTIGATION HAS BEEN DONE FOR THIS SITE BY PALMERTON & PARRISH ON 09/18/2017. THE SOILS REPORT SHALL BE CONSIDERED A PART OF THESE FOUNDATION NOTES AND ALL RECOMMENDATIONS THEREIN SHALL BE FOLLOWED.
- IN THE AREA OF THE BUILDING, EXISTING ORGANIC MATERIAL, UNSUITABLE SOIL, ABANDONED FOOTINGS, PAVEMENT AND OTHER DELETERIOUS MATERIALS SHALL BE REMOVED.
- ALL UNDERCUTTING, SITE PREPARATION, FILL SELECTION, BACKFILLING AND COMPACTION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF A SOILS ENGINEER.
- TESTING OF CONTROLLED STRUCTURAL FILL SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY IN ACCORDANCE WITH THE SPECIAL INSPECTION NOTES.
- EXCAVATION FOR FOOTINGS SHALL BE CUT TO ACCURATE SIZE AND DIMENSIONS AS SHOWN ON PLANS. ALL SOIL BELOW SLABS AND FOOTINGS SHALL BE PROPERLY COMPACTED AND SUBGRADE BROUGHT TO A REASONABLE TRUE AND LEVEL PLANE BEFORE PLACING CONCRETE.
- AFTER EXCAVATION FOR FOUNDATIONS AND PRIOR TO PLACEMENT OF STEEL REINFORCEMENT OR CONCRETE, NOTIFY SOILS ENGINEER FOR INSPECTION OF SOIL CONDITIONS.
- FOOTINGS SHALL BEAR AT MINIMUM DEPTHS AS NOTED IN FOOTING SECTIONS AND PLANS OR INTO APPROVED BEARING STRATA, WHICHEVER DEPTH IS GREATER. NOTE THAT FOOTING BEARING ELEVATIONS GIVEN ON THE PLANS ARE ESTIMATED DEPTHS ONLY. WHERE UNSUITABLE SOIL IS ENCOUNTERED OR WHERE FINISHED EXTERIOR GRADE VARIES FROM THE ASSUMED EXTERIOR GRADE, FOOTING DEPTHS MAY VARY.
- CONTINUOUS SPREAD FOOTINGS AND ISOLATED FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE BEARING OF 12,000 PSF. FOR BEDROCK, AFTER FOOTING EXCAVATIONS HAVE BEEN MADE TO DESIGN ELEVATIONS, THE INDEPENDENT TESTING AGENCY EMPLOYED BY THE OWNER SHALL INSPECT AND TEST THE BEARING SOIL. WHEN SOIL OF INADEQUATE STRENGTH IS NOTED, CONTRACTOR SHALL FURTHER DEEPEN EXCAVATIONS UNTIL SUITABLE BEARING CONDITIONS ARE VERIFIED BY TESTING. OVER EXCAVATIONS MAY BE BACKFILLED WITH SUITABLE COMPACTED ENGINEERED FILL, SUITABLE GRANULAR BASE, LEAN CONCRETE OR STRUCTURAL CONCRETE BATCHWALL.
- ALL FOOTINGS ARE TO BE PLACED ON BEDROCK. IF FOOTINGS ARE TO BE PLACED ON FILL, CONTACT EOR FOR ADDITIONAL INSTRUCTIONS. FOOTING SIZES MAY INCREASE IF NOT FOUND ON LIMESTONE BEDROCK AS DESCRIBED IN THE GEOTECHNICAL INVESTIGATION.
- BOTTOM OF PIER ELEVATIONS SHOWN ON THE PIER SCHEDULE ARE FOR ESTIMATING PURPOSES ONLY AND ARE NOT NECESSARILY TO BE USED FOR CONSTRUCTION. BOTTOM OF PIERS SHALL BE ADJUSTED IN THE FIELD PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS TO ACHIEVE THE PROPER BEARING CAPACITY.

**SPECIAL INSPECTION NOTES**

- SPECIAL INSPECTIONS SHALL BE REQUIRED IN ACCORDANCE WITH CHAPTER 17 OF THE IBC REFERENCED IN THE LOAD TABLE. THE OWNER SHALL EMPLOY A THIRD PARTY TESTING AGENCY FOR ALL TESTING STATED HEREIN. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS WITH SAID INSPECTION AGENCY.
- THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO PERFORM THE REQUIRED INSPECTION TO THE SATISFACTION OF THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF INSPECTIONS. INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
- REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
- A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES SHALL BE SUBMITTED TO THE OWNER, BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AT THE COMPLETION OF THE STRUCTURAL PORTION OF THE WORK.
- THE THIRD PARTY TESTING AGENCY SHALL CONTACT THE STRUCTURAL ENGINEER OF RECORD PRIOR TO INITIATION OF CONSTRUCTION.

**SOIL TESTING AND INSPECTION**

**SEE FOUNDATION NOTES**

**CONCRETE CONSTRUCTION INSPECTION**

- INSPECT REINFORCING STEEL PRIOR TO PLACING CONCRETE. CHECK REINFORCING SIZE, SPACING AND LOCATION.
- CYLINDERS SHALL BE MADE FOR DETERMINING THE CONCRETE STRENGTH FROM EACH CLASS OF CONCRETE TO BE PLACED. SAMPLES SHALL BE TAKEN NOT LESS THAN ONCE A DAY NOR LESS THAN ONCE FOR EACH 1500 CUBIC YARDS OF CONCRETE NOR LESS THAN ONCE FOR EACH 5000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS.
- EACH TIME THE CYLINDERS ARE MADE THE SLUMP, AIR CONTENT AND TEMPERATURE OF THE CONCRETE SHALL ALSO BE CHECKED.
- THE CONTRACTOR'S METHOD OF MAINTAINING THE MINIMUM CURING TEMPERATURE AND CURING TECHNIQUE SHALL BE REVIEWED.
- PERIODICALLY VERIFY THAT THE HIGH-STRENGTH BOLTS ARE BEING USED.
- PERIODICALLY CHECK TIGHTENING OF HIGH-STRENGTH BOLTS USING THE TURN OF THE NUT METHOD WITH MATCH MARKING TECHNIQUES OR DIRECT TENSION INDICATOR BOLTS.
- WELDING PROCEDURES, MATERIALS AND WELDER QUALIFICATIONS FOR ALL FIELD WELDING SHALL BE VERIFIED PRIOR TO THE START OF WORK.
- PERIODICALLY VERIFY THAT THE PROPER SIZE, GRADE, SPACING, ETC. OF ALL FRAMING MEMBERS ARE USED.
- PERIODICALLY VERIFY THAT THE PROPER CONNECTIONS ARE USED INCLUDING FRAMING ANCHORS, HANGERS, SIZE, SPACING & NUMBER OF FASTENERS, ETC.
- PERIODICALLY VERIFY THAT ALL STRUCTURAL BRIDGERS, BLOCKING AND BRACING IS PROPERLY INSTALLED.

**CONCRETE NOTES**

- CONCRETE WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 309), LATEST EDITION.
- CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, MIXED AND PLACED UNDER THE SUPERVISION OF AN APPROVED CONCRETE TESTING AGENCY. SEE THE SPECIAL INSPECTION NOTES FOR ADDITIONAL INFORMATION.
- CONCRETE FOR FOOTINGS HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 1.25 BY WEIGHT. A MINIMUM OF 8 BAGS OF CEMENT SHALL BE USED PER CUBIC YARD WITH A SLUMP OF 4" +/- 1".
- CONCRETE FOR FOUNDATION WALLS, INTERIOR SLABS ON GRADE, TOPPING SLABS AND ELEVATED STRUCTURAL SLABS SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 1.25 BY WEIGHT. A MINIMUM OF 5 1/2 BAGS OF CEMENT SHALL BE USED PER CUBIC YARD WITH A SLUMP OF 4" +/- 1".
- CONCRETE FOR EXTERIOR USES, SIDEWALKS, EXTERIOR SLABS ON GRADE, ETC. SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI AND SHALL BE AIR-ENTRAINED TO 6% +/- 1% WITH AN AIR-ENTRAINING ADMIXTURE CONFORMING TO ASTM C260. A MINIMUM OF 3 3/4 BAGS OF CEMENT SHALL BE USED PER CUBIC YARD WITH A SLUMP OF 4" +/- 1". THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.45 BY WEIGHT.
- CONCRETE SLABS SHALL BE FINISHED TO THE FOLLOWING TOLERANCES:
  - SPECIFIED OVERALL VALUE F-95 F-53 MINIMUM LOCAL VALUE F-425 F-17
  - FLOOR TOLERANCE MEASUREMENTS FOR LEVELNESS AND FLATNESS SHALL BE TESTED IN ACCORDANCE WITH ASTM E 1155. ACTUAL OVERALL F-NUMBERS SHALL BE CALCULATED USING THE INFERIOR/SUPERIOR AREA METHOD.
  - ALL FLOOR TOLERANCE MEASUREMENTS SHALL BE MADE BY THE CONTRACTOR WITHIN 24 HOURS AFTER SLAB INSTALLATION AND BEFORE SAW CUTTING OF CONTROL JOINTS. IN ALL CASES, TOLERANCE MEASUREMENTS SHALL PRECEDE THE REMOVAL OF SHORES AND FORMS. RESULTS OF ALL FLOOR PROFILE TESTS SHALL BE PROVIDED TO THE CONTRACTOR WITHIN 48 HOURS OF EACH SLAB INSTALLATION. SECTIONS OF FLOOR NOT MEETING THE MINIMUM TOLERANCES HEREIN SHALL BE REMOVED OR REPAIRED AT THE DIRECTION OF THE ARCHITECT/ENGINEER.
  - SYNTHETIC FIBROUS REINFORCING MATERIAL SHALL BE MADE WITH 100% VIRGIN POLYPROPYLENE FIBRILLATED FIBERS SPECIFICALLY MANUFACTURED TO USE AS CONCRETE SECONDARY REINFORCEMENT. FIBERS SHALL HAVE A SPECIFIC GRAVITY OF 0.91, OPTIMUM GRADATION PER MANUFACTURER AND SHALL COMPLY WITH LOCAL AND NATIONAL BUILDING CODES. FIBERS SHALL MEET ASTM C-116 TYPE II, 4.1.3, STANDARD SPECIFICATION FOR FIBER REINFORCED CONCRETE AND SHOTCRETE. FIBERS SHALL BE ADDED AT THE CONCRETE BATCH PLANT AT A MINIMUM RATE OF 15 POUNDS PER CUBIC YARD. SYNTHETIC FIBROUS REINFORCING SHALL BE EQUAL TO 'FIBERESH IN FORCE'.
    - IF ADDITIONAL FLOWABILITY IS REQUIRED FOR PLACEMENT OF ANY CONCRETE MIX, A WATER-REDUCING ADDITIVE CONFORMING TO ASTM C494, TYPE A, SHALL BE USED. NO ADDITIONAL WATER MAY BE ADDED TO THE MIX.
    - FLY ASH MAY BE USED AS A ONE TO ONE REPLACEMENT FOR THE CEMENT UP TO 20% OF THE TOTAL CEMENT CONTENT AS LONG AS THE AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT.
    - DO NOT AIR ENTRAIN CONCRETE TO BE USED FOR FLOORS WITH A TROWELED FINISH. DO NOT ALLOW ENTRAPPED AIR CONTENT TO EXCEED 3%.
  - FINE AND COARSE AGGREGATE SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR GRADING SIZE, PARTICLE DISTRIBUTION, DELETERIOUS CONTENT, SOUNDNESS AND CHERT. COARSE AGGREGATES SHALL MEET THE REQUIREMENTS OF ASTM C33 TABLE 3 CLASS 45. FINE AGGREGATE MAY BE NATURAL OR MANUFACTURED SAND FROM QUARRIES OR PITTS WHICH HAVE GIVEN SATISFACTORY SERVICE PERFORMANCE WHEN EXPOSED IN A SIMILAR MANNER TO THAT TO BE ENCOUNTERED.
  - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. LAP ALL SPICES 30 BAR DIAMETERS, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A186. LAP FABRIC 6" ON SIDES AND ENDS. MAINTAIN WIRE 1" TO 2" BELOW TOP SURFACE OF SLABS ON GRADE.
  - WHERE FOOTINGS, WALLS OR OTHER STRUCTURAL ELEMENTS INTERSECT, CORNER OR TEE, PROVIDE CORNER BARS WITH REQUIRED LAP LENGTHS TO PROVIDE CONTINUITY OF HORIZONTAL REINFORCING UNLESS NOTED OTHERWISE.
  - COLD-WEATHER PLACEMENT SHALL COMPLY WITH ACI 306.1.
  - HOT-WEATHER PLACEMENT SHALL COMPLY WITH ACI 308R.

**PRECAST CONCRETE NOTES**

- PRECAST CONCRETE DOUBLE TEES, BEAMS, COLUMNS, ETC. SHALL BE DESIGNED AND FABRICATED BY A FIRM EXPERIENCED IN THIS FIELD. FABRICATOR SHALL ACCEPT FULL RESPONSIBILITY FOR THE DESIGN OF ALL MEMBERS AND CONNECTIONS TO STRUCTURE.
- FABRICATOR SHALL SUBMIT CALCULATIONS WITH SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OF PRECAST PANELS.
- FABRICATOR SHALL ADD REINFORCING AS REQUIRED FOR TRANSPORTING, LIFTING, ERECTION, ETC.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT SIZE AND LOCATIONS OF OPENINGS IN PANELS OR ADDITIONAL PANEL EMBEDMENTS.
- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND ELEVATIONS OF ALL PANEL JOINTS, AESTHETIC JOINTS AND DIMENSIONS OF PANELS.
- SEE OWNER/ARCHITECT FOR ALL COLOR, AGGREGATE, AND FINISH REQUIREMENTS FOR PRECAST MEMBERS. USE A SINGLE SOURCE FOR CONCRETE INGREDIENTS FOR THE ENTIRE PROJECT.
- PRECAST MANUFACTURER SHALL ENGINEER, FABRICATE, TRANSPORT, AND INSTALL ALL PRECAST UNITS, REINFORCING AND NECESSARY CONNECTIONS, ANCHORAGES, EMBEDDED REINFORCING, ETC. RELATED TO THE PRECAST TO WITHSTAND GRAVITY, WIND, SEISMIC AND THERMAL LOADS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE REFERENCED IN THE LOAD TABLE.
- THE DESIGN OF THE CONNECTIONS BETWEEN THE PRECAST MEMBERS SHALL BE THE RESPONSIBILITY OF THE PRECAST MANUFACTURER. WHERE OTHER MATERIALS CONNECT TO, OR ARE SUPPORTED BY, THE PRECAST MEMBERS, IT IS THE RESPONSIBILITY OF THE PRECAST MANUFACTURER TO DESIGN AND PROVIDE CONNECTIONS, WHERE MAJOR STRUCTURAL STEEL MEMBERS ATTACH TO PRECAST ELEMENTS, LOADS WILL BE PROVIDED.
- THE PRECAST MANUFACTURER SHALL PROVIDE ACCURATE EMBEDMENT PLANS SHOWING LOCATIONS OF WELD PLATES REQUIRED TO ATTACH PRECAST ELEMENTS TO CAST-IN-PLACE CONCRETE.
- WELD PLATES OR ANKLES FOR CONNECTION OF PRECAST ELEMENTS TO CAST-IN-PLACE CONCRETE SHALL BE DESIGNED AND SUPPLIED BY THE PRECAST MANUFACTURER.
- WELD JOISTS SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI) STANDARD SPECIFICATIONS FOR THE LOADS AND SPANS SHOWN ON THE PLANS WITH A MAXIMUM LIVE LOAD DEFLECTION OF L/360. PROVIDE THE RECOMMENDED CAMBER FOR JOIST SPAN. DO NOT WELD EXTENDED BOTTOM CHORDS OF JOIST UNTIL ALL DEAD LOADS IS IN PLACE.
- HORIZONTAL BRIDGING AND CROSS BRIDGING SHOWN ON THE PLANS IS FOR REFERENCE ONLY. JOIST MANUFACTURER SHALL DESIGN AND SUPPLY ALL BRIDGING REQUIRED. A NET WIND UPLIFT OF 10 PSF SHALL BE USED.
- ALL STEEL JOISTS AND BRIDGING SHALL BE DESIGNED TO CONFORM WITH THE U.L. FIRE ASSEMBLIES SPECIFIED. SEE ARCHITECTURAL DRAWINGS FOR U.L. FIRE ASSEMBLIES WHERE THEY ARE REQUIRED.
- ANY CONCENTRATED LOADS WHICH EXCEED 50 POUNDS, REQUIRED FOR TYPICAL CONSTRUCTION, AND ARE ATTACHED TO ROOF OR ELEVATED FLOOR STRUCTURE SUCH AS CEILING, PIPE HANGERS, MECHANICAL DUCTWORK, ELECTRICAL FIXTURES, ETC. SHALL BE ATTACHED TO PANEL POINTS OF BAR JOIST. IF SUCH LOADS MUST BE ATTACHED TO TOP OR BOTTOM CHORD OF BAR JOIST BETWEEN PANEL POINTS, PROVIDE ADDITIONAL FRAMING AS REQUIRED TO TRANSFER LOADS TO PANEL POINTS. DO NOT SUSPEND LOADS OVER 200 POUNDS FROM THE BAR JOIST UNLESS EQUIPMENT IS SHOWN AND NOTED IN THE PLANS AND STRUCTURAL PROVISIONS HAVE BEEN MADE FOR SUPPORT.
- THE GENERAL CONTRACTOR SHALL COORDINATE JOIST SPACING WITH ROOF PENETRATIONS FOR MECHANICAL EQUIPMENT OR OTHER ITEMS IN THIS CONTRACT WHICH MAY CONFLICT WITH JOIST SPACING SHOWN. JOIST MAY BE SHIFTED TO MISS REQUIRED PENETRATIONS. ISOLATED SPACES (NO MORE THAN 2 ADJACENT SPACES) MAY BE INCREASED OR DECREASED BY A MAXIMUM OF 1". ANY ADJUSTMENTS MUST BE SHOWN ON THE BAR JOIST SHOP DRAWINGS.
- PROVIDE AN L3.5x3.5x14 "H" FRAME BELOW ALL ROOF MOUNTED MECHANICAL EQUIPMENT UNLESS NOTED OTHERWISE.
- ROOF TOP MECHANICAL UNIT WEIGHTS INDICATED ON THE FRAMING PLANS ARE TO BE APPLIED IN ADDITION TO THE UNIFORM TOTAL LOAD/WEIGHTS INDICATED. VERIFY THE RTU LOCATIONS AND WEIGHTS WITH THE MECHANICAL CONTRACTOR.

**STEEL JOIST NOTES**

- STEEL JOISTS SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI) STANDARD SPECIFICATIONS FOR THE LOADS AND SPANS SHOWN ON THE PLANS WITH A MAXIMUM LIVE LOAD DEFLECTION OF L/360. PROVIDE THE RECOMMENDED CAMBER FOR JOIST SPAN. DO NOT WELD EXTENDED BOTTOM CHORDS OF JOIST UNTIL ALL DEAD LOADS IS IN PLACE.
- HORIZONTAL BRIDGING AND CROSS BRIDGING SHOWN ON THE PLANS IS FOR REFERENCE ONLY. JOIST MANUFACTURER SHALL DESIGN AND SUPPLY ALL BRIDGING REQUIRED. A NET WIND UPLIFT OF 10 PSF SHALL BE USED.
- ALL STEEL JOISTS AND BRIDGING SHALL BE DESIGNED TO CONFORM WITH THE U.L. FIRE ASSEMBLIES SPECIFIED. SEE ARCHITECTURAL DRAWINGS FOR U.L. FIRE ASSEMBLIES WHERE THEY ARE REQUIRED.
- ANY CONCENTRATED LOADS WHICH EXCEED 50 POUNDS, REQUIRED FOR TYPICAL CONSTRUCTION, AND ARE ATTACHED TO ROOF OR ELEVATED FLOOR STRUCTURE SUCH AS CEILING, PIPE HANGERS, MECHANICAL DUCTWORK, ELECTRICAL FIXTURES, ETC. SHALL BE ATTACHED TO PANEL POINTS OF BAR JOIST. IF SUCH LOADS MUST BE ATTACHED TO TOP OR BOTTOM CHORD OF BAR JOIST BETWEEN PANEL POINTS, PROVIDE ADDITIONAL FRAMING AS REQUIRED TO TRANSFER LOADS TO PANEL POINTS. DO NOT SUSPEND LOADS OVER 200 POUNDS FROM THE BAR JOIST UNLESS EQUIPMENT IS SHOWN AND NOTED IN THE PLANS AND STRUCTURAL PROVISIONS HAVE BEEN MADE FOR SUPPORT.
- THE GENERAL CONTRACTOR SHALL COORDINATE JOIST SPACING WITH ROOF PENETRATIONS FOR MECHANICAL EQUIPMENT OR OTHER ITEMS IN THIS CONTRACT WHICH MAY CONFLICT WITH JOIST SPACING SHOWN. JOIST MAY BE SHIFTED TO MISS REQUIRED PENETRATIONS. ISOLATED SPACES (NO MORE THAN 2 ADJACENT SPACES) MAY BE INCREASED OR DECREASED BY A MAXIMUM OF 1". ANY ADJUSTMENTS MUST BE SHOWN ON THE BAR JOIST SHOP DRAWINGS.
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- ROOF TOP MECHANICAL UNIT WEIGHTS INDICATED ON THE FRAMING PLANS ARE TO BE APPLIED IN ADDITION TO THE UNIFORM TOTAL LOAD/WEIGHTS INDICATED. VERIFY THE RTU LOCATIONS AND WEIGHTS WITH THE MECHANICAL CONTRACTOR.

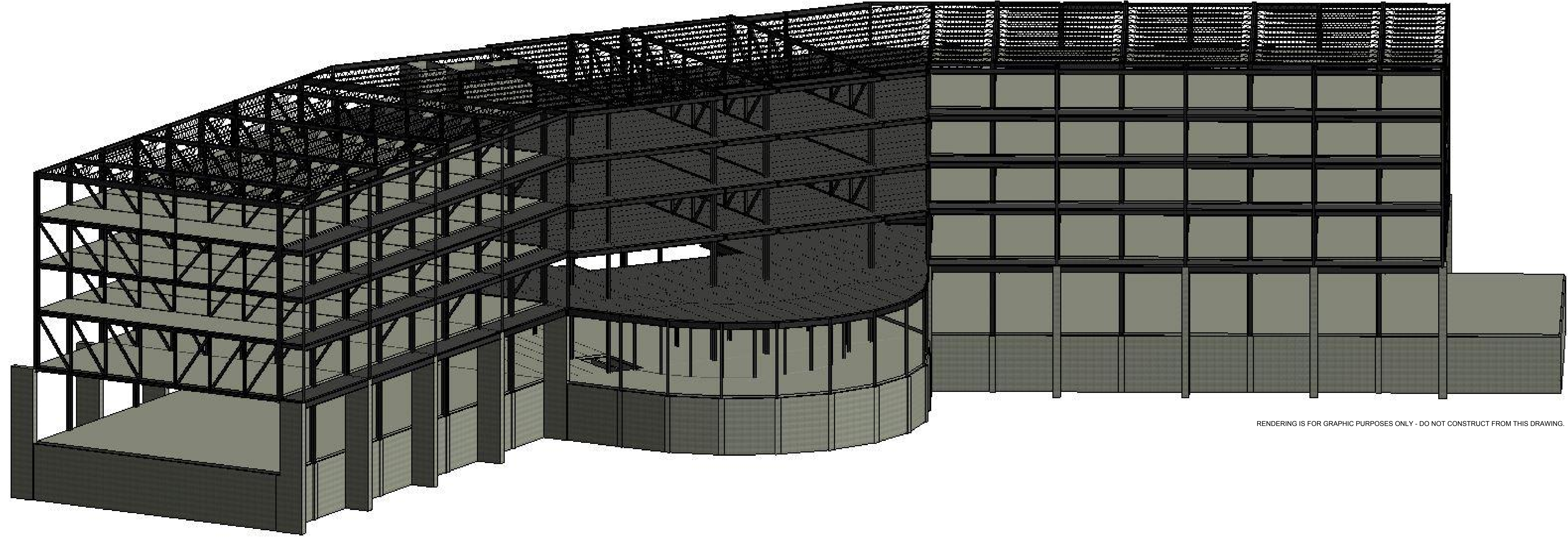
**METAL STUD FRAMING NOTES**

- STUDS SHALL BE DESIGNED, MANUFACTURED, AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) AND THE AMERICAN IRON AND STEEL INSTITUTE (AISI).
- EXTERIOR WALL STUDS SHALL BE 6" x 1 5/8" x 18 GAGE (SSMA 600S162-43) STEEL STUDS (FY = 33 KSI) AT 16" O.C.
- BOTTOM TRACK AT EXTERIOR WALLS SHALL BE 6" x 1 1/4" x 18 GAGE (SSMA 600T125-43) STEEL TRACK (FY = 33 KSI). TOP TRACK SHALL BE 18 GAGE DEFLECTION TRACK EQ TO CLARK DITTRICH MAX TRAK.
- PROVIDE HORIZONTAL BRIDGING AT 4'-0" O.C. IN ALL LOAD BEARING WALLS. BRIDGING MAY CONSIST OF BLOCK AND STRAP BRIDGING OR COLD ROLLED CHANNELS WITH BRIDGING CLIPS.

**STRUCTURAL STEEL NOTES**

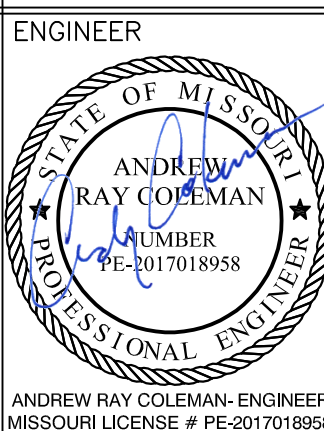
- ALL WIDE FLANGE STRUCTURAL STEEL BEAMS AND COLUMNS SHALL CONFORM TO ASTM A992, FY = 50 KSI, SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500, GRADE B, FY = 45 KSI AND ROUND HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500, GRADE B, FY = 42 KSI. ALL OTHER MISCELLANEOUS STEEL (CHANNELS, ANGLES, PLATES, ETC.) SHALL BE ASTM A36.
- ACI, AISI, AND AWS SPECIFICATIONS SHALL GOVERN ALL PHASES OF FABRICATION AND CONSTRUCTION.
- STRUCTURAL BOLTS SHALL BE ASTM A325. ALL ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 36.
- ALL WELDS SHALL BE E70XX, UNLESS NOTED OTHERWISE OR UNLESS REQUIRED FOR SPECIAL CONNECTIONS.
- WELDING OF STRUCTURAL MEMBERS SHALL BE PERFORMED BY CERTIFIED WELDERS AND WELDING SHALL BE IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY (AWS D1.1).
- DETAILS OUTLINE BASIC CONNECTION TYPES. NON-COMPOSITE BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS NOT DETAILED IN DRAWINGS SHALL BE SIZED BY STEEL DETAILER AS STANDARDS ASSC. TYPE 2 BEARING CONNECTIONS CAPABLE OF SUPPORTING REACTIONS DEVELOPED BY MAXIMUM UNIFORM LOAD CAPACITY ON A SIMPLE SPAN FOR BEAM TO BEAM SPAN GIVEN.
- ALL STRUCTURAL STEEL CONSTRUCTION SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH THE SPECIAL INSPECTION NOTES.

LOAD TABLE	
2012 IBC	
<b>DEAD LOADS</b>	
FLOOR	
SLAB ON GRADE	50 PSF
6" HOLLOW CORE PLANKS w/3" CIP TOP	85 PSF
10" HOLLOW CORE PLANKS w/3" CIP TOP	105 PSF
4" CONCRETE ON MTL DECK	40 PSF
ROOF	
WEIGHT OF BUILDING MATERIALS	10 PSF
BOTTOM CHORD	10 PSF
COLLATERAL LOAD	5 PSF
<b>LIVE LOADS</b>	
FLOOR	
SLAB ON GRADE	125 PSF
SLEEPING AREAS	40 PSF
PUBLIC SPACES/CORRIDORS/STAIRWAYS	100 PSF
PARTITIONS	15 PSF
ROOF	20 PSF
<b>OCCUPANCY CATEGORY</b>	
II	
<b>ROOF SNOW LOAD</b>	
FLOOR	
GROUND SNOW LOAD	$P_g$ 20.0 PSF
FLAT ROOF SNOW LOAD	$P_f$ 14.0 PSF
SNOW EXPOSURE FACTOR	$C_e$ 1.0
THERMAL FACTOR	$C_t$ 1.0
SNOW LOAD IMPORTANCE FACTOR	$I_s$ 1.0
<b>WIND DESIGN DATA</b>	
BASIC WIND SPEED	$V_{ult}$ 115.0 MPH
EXPOSURE CATEGORY	C
INTERNAL PRESSURE COEFFICIENT	$C_{pi}$ +/-0.18
<b>EARTHQUAKE DESIGN DATA</b>	
SEISMIC IMPORTANCE FACTOR	$I_e$ 1.00
MAPPED SPECTRAL RESPONSE	$S_s$ 0.219
ACCELERATIONS	$A$ 0.113
SITE CLASS	B
SPECTRAL RESPONSE	$S_{D1}$ 0.146
COEFFICIENTS	$S_{D2}$ 0.075
SEISMIC DESIGN CATEGORY	B
SEISMIC RESPONSE FACTOR	$R$ 3.25
BASIC SEISMIC-FORCE-RESISTING SYSTEM	I STEEL STAGGERED TRUSS & FRAMES ORDINARY MOMENT
SEISMIC RESPONSE COEFFICIENT	$C_u$ 0.045
DESIGN BASE SHEAR	$V$ 645 KIPS
ANALYSIS PROCEDURE USED	EQUIV LATERAL FORCE PROCEDURE

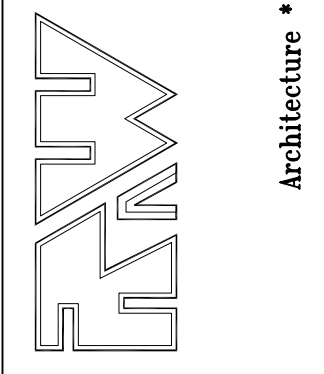


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**REVISIONS**



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**MILLER ENGINEERING, P.C.**  
 (STRUCTURAL AND FOUNDATION)

A. T.A. Freund Development for:  
**Holiday Inn Resort on Table Rock Lake**  
 4194 State Highway 86  
 Taney County,  
 Bridgedale, MO 65739

PROJECT: 5558 DATE: 06.25.2018  
 DRAWN: L. STEPHENS CHECKED: A. COLEMAN

**SO.O**  
 SHEET OF