

COLUMN FOOTING SCHEDULE

COLUMN DESIGNATION	FOOTING SIZE AND REINFORCING	PIER SIZE AND REINFORCING	COMMENTS
E-2 THRU E-9	8'-0"x8'-0"x1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	1'-8"x1'-8" (8) #6 BARS, VERT. ROD & DOWEL #3 TIES @ 12" O.C.	INTERIOR COLUMNS TOP OF PIER ELEVATION = 0'-8"
E-1	8'-0"x8'-0"x1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	3'-0"x3'-0" (8) #6 BARS, VERT. ROD & DOWEL #3 TIES @ 12" O.C.	-
A-2 THRU A-9 J-2 THRU J-9	8'-0"x8'-0"x1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	1'-4"x2'-0", (6) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C. BELOW HARPEN, # TIES @ 3" O.C. ABOVE HARPEN	-
A-1, J-1	8'-0"x8'-0"x1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	2'-10"x2'-0", (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C. BELOW HARPEN, # TIES @ 3" O.C. ABOVE HARPEN	-
B-1, B-10, C-1, C-10, D-1, D-10, E-10, F-1, F-10, G-1, G-10, H-1, H-10	4'-0"x4'-0"x1'-0" #5 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP AT D-10, E-10 & F-10 ONLY	1'-4"x2'-0" (6) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	-
A-10, J-10	4'-0"x4'-0"x1'-0" #5 @ 12" O.C. E.W. BOT.	2'-0"x2'-0" (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	-
C-11, D-11, D-12, E-12, F-11, F-12, G-11	4'-0"x4'-0"x1'-0" #5 @ 12" O.C. E.W. BOT.	2'-6"x2'-6" (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	OFFICE COLUMN FOOTINGS & PIERS TOP OF PIER EL. = (-)0'-8"
E.2-13, E.8-13	2'-6"x2'-6"x2'-0" THICK #5 @ 12" O.C. EA. WAY TOP & BOT.	NO PIER	OFFICE PORCH COLUMN FOOTINGS. SEE FOUNDATION PLAN FOR TOP OF FTG.

NOTES:

- COVER FOR FOOTING REINFORCING IS 3" BOTTOM AND 2" TOP.
- COVER FOR PIER TIES IS 2".
- PIER #6 VERTICAL RODS AND DOWELS TO BE LAPPED 1'-7" MIN. DOWEL TO HAVE 1'-0" LONG 90° BOTTOM HOOK PLACED IN THE PLANE OF THE FOOTING'S BOTTOM REINFORCING. (LOWER BARS OF THE BOTTOM MAT).
- TOP OF PIER ELEVATION = (+)0'-0" UNLESS NOTED OTHERWISE.

GENERAL STRUCTURAL NOTES

A. NOTES TO CONTRACTOR

- DRAWINGS REPRESENT THE DESIRED RESULT OF CONSTRUCTION. THE METHODS OF CONSTRUCTION AND THE RISKS INVOLVED DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BUILDING'S STRUCTURAL INTEGRITY AT ALL STAGES OF CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS DURING CONSTRUCTION AND REPORT IMMEDIATE ANY DISCREPANCIES TO THE A/E.
- ALL CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY A/E PRIOR TO COMMENCING ANY PERTINENT WORK.
- SEE IMPORTANT NOTE TO CONTRACTOR ON THE FOUNDATION PLAN REGARDING NOT STARTING WORK ON THE BUILDING FOUNDATIONS UNTIL THE PRE-ENGINEERED BUILDING DESIGN IS APPROVED AND THE ENGINEER HAS CONFIRMED THE FOUNDATIONS SHOWN ON THE DRAWINGS ARE COMPATIBLE WITH THE BUILDING DESIGNED (SOME FOUNDATION REVISIONS MAY BE REQUIRED).

B. DESIGN CRITERIA

THIS STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE KENTUCKY BUILDING CODE (2007) AND FOR THE SPECIFIC LOADS WHICH ARE LISTED BELOW.

- ROOF LOADS
  - DEAD LOAD = 5 PSF (APPROX.)
  - COLLATERAL ROOF LOAD = 5 PSF
  - LIVE LOAD = 20 PSF (SUBJECT TO CODE REDUCTIONS, BUT NOT LESS THAN 16 PSF)
  - SNOW LOAD:
    - PF = 10.5 PSF
    - CE = 1
    - I = 1
    - CT = 1
- WIND LOAD
  - BASIC WIND SPEED (3 SEC. GUST) = 90 MPH
  - I = 1
  - WIND EXPOSURE CATEGORY - B (ASSUMED, METAL BLDG. DESIGNER MAY CHOOSE A MORE SEVERE CATEGORY)
  - INTERNAL PRESSURE COEFFICIENT - PER METAL BLDG. DESIGNER
  - COMPONENTS AND CLADDING - PER METAL BLDG. DESIGNER
- SEISMIC DESIGN DATA
  - OCCUPANCY CATEGORY - II (SEISMIC IMPORTANCE FACTOR 1)
  - S(S) = 0.251 ; S(1) = 0.082
  - SITE CLASS: D (ASSUMED)
  - S(DS) = 0.268; S(D1) = 0.131
  - SEISMIC DESIGN CATEGORY - B
  - BASIC SEISMIC-FORCE-RESISTING SYSTEM: \*
  - DESIGN BASE SHEAR: \*
  - SEISMIC RESPONSE COEFFICIENT, CS = \*
  - RESPONSE MODIFICATION FACTOR, R = \*
  - ANALYSIS PROCEDURE: \*

\*PER PRE-ENGINEERED BUILDING MANUFACTURER/DESIGNER

4. ROCK (WEATHERED SHALE) BEARING CAPACITY = 6000 PSF

5. PRE-ENGINEERED BUILDING SERVICEABILITY REQUIREMENTS  
A) SEE SPECIFICATIONS.

C. FOUNDATION, FILLING AND EXCAVATION NOTES.

- SEE GEOTECHNICAL REPORT DATED APRIL 21, 1999 BY QORE PROPERTY SCIENCES. BUILDING FINISH FLOOR ELEVATION IS TO BE 967.00'. BASED ON BORINGS B-4 AND B-5 (APPROXIMATELY UNDER BUILDING FOOTPRINT), TOP OF WEATHER SHALE IS APPROXIMATELY AT ELEVATION 963.00 TO 964.00.
- THIS STRUCTURE HAS BEEN DESIGNED TO BE ROCK (WEATHERED SHALE) BEARING. WHERE TOP OF ROCK IS ABOVE REQUIRED BOTTOM OF FOOTING ELEVATION (SEE FOUNDATION PLAN FOR TOP OF FOOTING ELEVATION), ROCK SHALL BE REMOVED AS REQUIRED. WHERE TOP OF ROCK IS BELOW REQUIRED BOTTOM OF FOOTING ELEVATION, ONE OF TWO OPTIONS MAY CHOOSE: A) USE FLOWABLE FILL TO FILL THE VOID BETWEEN TOP OF ROCK AND BOTTOM OF FOOTING, OR B) WHEN POURING THE FOOTING, USE THE SAME FOOTING CONCRETE TO BOTH FILL THE VOID AND POUR THE FOOTING AT THE SAME TIME WHILE KEEPING THE FOOTING REINFORCING IN THE ELEVATION AS SHOWN IN THE DRAWING DETAILS (THE FOOTING'S BOTTOM COVER IN THIS CASE WOULD BE LARGER THAN 3" AS SHOWN IN THE DETAILS).

D. CONCRETE NOTES

- CONCRETE FOR FOOTINGS SHALL HAVE COMPRESSIVE STRENGTH OF F'C = 3500 PSI. ALL OTHER CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF F'C = 4000 PSI.
- REINFORCING SHALL BE DEFORMED STEEL RODS, FY = 60 KSI AND MEETING ASTM A615. WELDED WIRE FABRIC SHALL MEET ASTM A185. SHOULD WELDING OF REINFORCING RODS BE REQUIRED, SUBSTITUTE ASTM A706 BARS FOR ASTM A615. ASTM A615 SHALL NOT BE WELDED.
- SPLICES IN CONTINUOUS VERTICAL OR HORIZONTAL REINFORCING BARS SHALL BE 40 BAR DIAMETER LAP SPLICE UNLESS NOTED AND SHALL BE EITHER CONTINUOUS OR SPLICED WITH CORNER BARS AT CORNERS.
- CLEARANCES BETWEEN REINFORCING AND CONCRETE SURFACES SHALL BE THE MINIMUM ALLOWED BY ACI 318, CURRENT EDITION, UNLESS NOTED OTHERWISE.

E. STRUCTURAL STEEL

- ANCHOR BOLTS SHALL MEET ASTM A307 OR ASTM A36. FOR NON-HEADED ANCHOR BOLT, PROVIDE SUFFICIENT THREADING AT THE EMBEDDED END FOR A HEX NUT WHICH SHALL BE THREADED ONTO THE ANCHOR BOLT AND TACK WELDED TO THE BOLT. MINIMUM EMBEDMENT SHALL BE 1'-10", EXCEPT AT PORCH COLUMNS, WHICH MAY BE 1'-0".
- ALL WELDS SHALL BE MADE WITH E70XX RODS AND SHALL BE PERFORMED PER LATEST ASW CODE.
- STEEL SMOOTH ROD TIE RODS SHALL BE A36.

STATEMENT OF SPECIAL INSPECTIONS:

THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE: MARTY FRIEDMAN, ARCHITECT.

THE SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLINES:

1. STRUCTURAL

THE SEISMIC-FORCE-RESISTING SYSTEM CONSISTS OF THE FOLLOWING: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (ASSUMED). THIS BUILDING IS TO BE DESIGNED BY THE PRE-ENGINEERED BUILDING MANUFACTURER WHO MAY CHOOSE ANOTHER SYSTEM.

IMPORTANT NOTES REGARDING SPECIAL INSPECTIONS:

- THE SPECIAL INSPECTOR SHALL BE RETAINED BY THE OWNER OR MSE OF KENTUCKY, INC.
- THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH INSPECTION REPORTS TO THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND TO THE STRUCTURAL ENGINEER.
- DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND THE BUILDING OFFICIAL.
- A FINAL REPORT OF SPECIAL INSPECTIONS IS REQUIRED BY KBC TO BE SUBMITTED BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE TO THE BUILDING OFFICIAL PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE FOLLOWING MATERIALS, SYSTEMS, COMPONENTS AND WORK ARE REQUIRED TO HAVE SPECIAL INSPECTION OR TESTING.

A. INSPECTION OF PRE-ENGINEERED BUILDING FABRICATOR. SEE KBC 1702.2.1. SPECIAL INSPECTION OF FABRICATOR IS NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTIONS.

B. STEEL CONSTRUCTION. SEE KBC 1704.2 AND TABLE 1704.3.

1. INSPECTION OF HIGH-STRENGTH BOLTING.

- BEARING-TYPE CONNECTIONS - PERIODIC.
- SLIP-CRITICAL CONNECTIONS. MONITORING OF BOLT INSTALLATION FOR PRETENSIONING USING THE CALIBRATED WRENCH METHOD OR THE TURN-OF-NUT METHOD WITHOUT MATCHMARKING SHALL BE PERFORMED ON A CONTINUOUS BASIS. WHEN USING DIRECT TENSION INDICATORS AND TWIST-OFF BOLTS, ONLY PERIODIC INSPECTION REQUIRED.

SLIP-CRITICAL CONNECTIONS ARE NOT ANTICIPATED IN THIS PROJECT. SEE PRE-ENGINEERING SHOP DRAWINGS.

2. INSPECTION OF WELDING STRUCTURAL STEEL

- COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS.
- MULTIPASS FILLET WELDS - CONTINUOUS.
- SINGLE-PASS FILLET WELDS LARGER THAN 5/16 INCH - CONTINUOUS.
- SINGLE-PASS FILLET WELDS 5/16 INCH OR SMALLER - PERIODIC.

THE WELDS DESCRIBED IN A, B, C & D ABOVE ARE NOT ANTICIPATED TO BE REQUIRED FOR THE PRE-ENGINEERED BUILDING. SEE THE PRE-ENGINEERED BUILDING SHOP DRAWINGS.

3. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS - PERIODIC. SEE BELOW.

- DETAILS SUCH AS BRACING AND STIFFENING.
- MEMBER LOCATIONS.
- APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

C. CONCRETE CONSTRUCTION. SEE KBC1704.4 AND TABLE 1704.4.

- INSPECTION OF REINFORCING STEEL AND PLACEMENT - PERIODIC.
- VERIFYING USE OF REQUIRED DESIGN MIX - PERIODIC.
- AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE - CONTINUOUS.
- INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES - PERIODIC.
- INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED - PERIODIC.

D. SOILS. SEE KBC 1704.7 AND TABLE 1704.7.

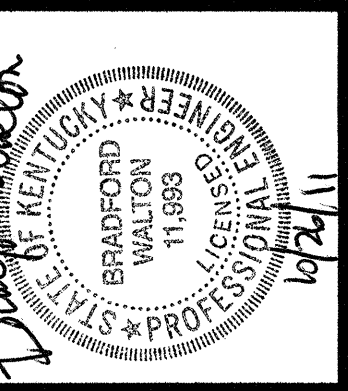
- VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY - PERIODIC.
- VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL - PERIODIC.
- PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS - PERIODIC. NOTE THAT IF TOTAL DEPTH OF CONTROLLED FILL IS 12 INCHES OR LESS, SPECIAL INSPECTION NOT REQUIRED.
- VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES - CONTINUOUS.
- PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY - PERIODIC.

THE FOLLOWING ELEMENTS ARE REQUIRED TO HAVE SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. SEE KBC 1707.

THIS SECTION NOT REQUIRED.

STRUCTURAL TESTING FOR SEISMIC RESISTANCE. TESTING AND VERIFICATION OF THE FOLLOWING MATERIALS AND ASSEMBLIES ARE REQUIRED. SEE KBC 1708.

THIS SECTION NOT REQUIRED.



SPECULATIVE BUILDING DEVELOPMENT AUTHORITY  
MMRC

DATE	REVISION	BY

PROJECT NO. <b>EW</b>	DESIGNED BY <b>EW</b>	DRAWN BY <b>ML</b>	CHECKED BY <b>EW</b>	REVIEWED BY <b>EW</b>	DATE <b>OCTOBER 2011</b>	SCALE <b>AS NOTED</b>
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