SCALE: 3/4"=1'-0" 0 2 4 8 12

SCALE: 1/2"=1'-0" 0 2 4 8 12

SCALE: 1/4"=1'-0" 0 2 4 8 12

SCALE: 1/8"=1'-0" 0 2 4 8 12

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GENERAL NOTES
100SN001-1

1. INTERPRETATION OF DRAWINGS & SPECIFICATIONS
   A. FOR CONVENIENCE, SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT AND ARE ARRANGED IN SEVERAL SECTIONS, BUT SUCH SEPARATION SHALL NOT BE CONSIDERED AS THE LIMITS OF THE WORK REQUIRED OF ANY SEPARATE TRADE. THE TERMS AND CONDITIONS OF SUCH LIMITATIONS ARE WHOLLY BETWEEN THE CONTRACTOR AND HIS SUBCONTRACTORS.
   B. IN GENERAL, THE WORKING DETAILS WILL INDICATE DIMENSIONS, POSITION AND KIND OF CONSTRUCTION, AND THE SPECIFICATIONS, QUALITIES AND METHODS. ANY WORK INDICATED ON THE WORKING DETAILS AND NOT MENTIONED IN THE SPECIFICATIONS, OR VICE VERSA, SHALL BE FURNISHED AS THOUGH FULLY SET FORTH IN BOTH. WORK NOT PARTICULARLY DETAILED, MARKED OR SPECIFIED, SHALL BE THE SAME AS SIMILAR PARTS THAT ARE DETAILED, MARKED OR SPECIFIED. IF CONFLICTS OCCUR ON DRAWINGS AND/OR SPECIFICATIONS, THE MOST EXPENSIVE MATERIALS OR METHODS WILL PREVAIL.
   C. SHOULD AN ERROR APPEAR IN THE WORKING DETAILS OR SPECIFICATIONS OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, THE CONTRACTOR SHALL NOTIFY THE VA AT ONCE AND IN WRITING. IF THE CONTRACTOR PROCEEDS WITH THE WORK SO AFFECTED WITHOUT HAVING GIVEN SUCH WRITTEN NOTICE AND WITHOUT RECEIVING THE NECESSARY APPROVAL, DECISION OR INSTRUCTIONS IN WRITING FROM THE VA, THEN HE SHALL HAVE NO VALID CLAIM AGAINST THE VA, FOR THE COST OF SO PROCEEDING AND SHALL MAKE GOOD ANY RESULTING DAMAGE OR DEFECT. NO VERBAL APPROVAL, DECISION, OR INSTRUCTION SHALL BE VALID OR BE THE BASIS FOR ANY CLAIM AGAINST THE VA, ITS OFFICERS, EMPLOYEES OR AGENTS. THE FOREGOING INCLUDES TYPICAL ERRORS IN THE SPECIFICATIONS OR NOTATIONAL ERRORS IN THE WORKING DETAILS WHERE THE INTERPRETATION IS DOUBTFUL OR WHERE THE ERROR IS SUFFICIENTLY APPARENT AS TO PLACE A REASONABLY PRUDENT CONTRACTOR ON NOTICE THAT, SHOULD HE ELECT TO PROCEED, HE IS DOING SO AT HIS OWN RISK.
2. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS.
3. SHOP DRAWING NOTE:
   A. SHOP DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH THE GENERAL REQUIREMENTS.
   B. THE PURPOSE OF SHOP DRAWINGS SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE VA THAT HE UNDERSTANDS THE DESIGN CONCEPT BY INDICATING WHICH MATERIAL HE INTENDS TO FURNISH AND INSTALL, AND BY DETAILING THE FABRICATION AND INSTALLATION METHODS HE INTENDS TO USE ON A STAND ALONE SET OF DOCUMENTS. DUPLICATION OF DESIGN DOCUMENTS FOR THE PURPOSE OF SHOP DRAWINGS IS NOT ACCEPTABLE.
   C. PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY THE VA. SHOP DRAWING SUBMITTALS SHALL INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, STRUCTURAL STEEL, REINFORCING STEEL, & GLUED LAMINATED BEAMS.
   D. PRIOR TO SUBMISSION THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SHALL STAMP SUBMITTALS AS BEING "REVIEWED FOR CONFORMANCE".
   E. SHOP DRAWINGS SUBMITTALS PROCESSED BY THE VA ARE NOT CHANGE ORDERS.
   F. ANY DETAIL ON THE SHOP DRAWING THAT DEVIATES FROM THE CONTRACT DOCUMENTS SHALL CLEARLY BE MARKED WITH THE NOTE "THIS A CHANGE".
   G. SHOP DRAWINGS OR CALCULATIONS SUBMITTED FOR REVIEW THAT REQUIRE RESUBMITTAL FOR RE-REVIEW SHALL BE BILLED HOURLY FOR SUCH TIME TO THE GENERAL CONTRACTOR. RE-REVIEW WILL NOT PROCEED WITHOUT WRITTEN APPROVAL FROM THE GENERAL CONTRACTOR FOR ADDITIONAL ENGINEERING REVIEW SERVICES.
4. SAFETY NOTE:
   A. IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS, AS THEY APPLY TO THIS PROJECT, OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF NEW MEXICO LATEST EDITION, AND ALL OSHA REQUIREMENTS.
   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED.
   C. THE VA DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
5. THE CONTRACTOR SHALL NOTIFY THE VA WHERE A CONFLICT OR DISCREPANCY OCCURS BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER PORTION OF THE CONTRACT DOCUMENTS OR EXISTING FIELD CONDITIONS. SUCH NOTIFICATION SHALL BE GIVEN IN DUE TIME SO AS NOT TO AFFECT THE CONSTRUCTION SCHEDULE. IN CASE OF A CONFLICT BETWEEN STRUCTURAL DRAWINGS AND SPECIFICATIONS THE MORE RESTRICTIVE CONDITION SHALL TAKE PRECEDENCE UNLESS WRITTEN APPROVAL HAS BEEN GIVEN FOR THE LEAST RESTRICTIVE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PRIOR TO COMMENCING ANY WORK.
6. WHERE NO SPECIFIC DETAIL IS SHOWN, THE CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT. SHOULD THERE BE ANY QUESTION, CONTACT THE VA PRIOR TO PROCEEDING.
7. WHEN CONSTRUCTION ATTACHES TO AN EXISTING BUILDING, A COMPLETE SET OF DRAWINGS OF THE EXISTING BUILDING SHALL BE KEPT ON THE JOB SITE. CONTRACTOR TO OBTAIN THESE DRAWINGS FROM THE VA.
8. ANY SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE OR DETAILS SHALL BE REVIEWED BY THE VA. SUCH REVIEW WILL BE BILLED ON A TIME AND MATERIALS BASIS TO THE GENERAL CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.
9. DO NOT SCALE DRAWINGS. CONTACT THE VA FOR ANY DIMENSIONS NOT SHOWN.
10. THESE DRAWINGS ARE NOT COMPLETE UNTIL REVIEWED AND ACCEPTED BY AND SIGNED BY THE VA AND THE STRUCTURAL ENGINEER.

ABBREVIATIONS
100SN003-1

AB	-----------	ANCHOR BOLT
ABV	-----------	ABOVE
BLW	-----------	BELOW
BOF	-----------	BOTTOM OF FOOTING
BTWN	----------	BETWEEN
CC	-----------	CENTER TO CENTER
CTJ	-----------	CONTROL JOINT
CJP	-----------	COMPLETE JOINT PENETRATION
CLR	----------	CLEAR
CMU	----------	CONCRETE MASONRY UNIT
CJ	----------	CONSTRUCTION JOINT
CONT	---------	CONTINUOUS
CONTR	-----------	CONTRACTOR
CSK	-----------	COUNTERSINK
DF	-----------	DOUGLAS FIR
DL	-----------	DEAD LOAD
DO	-----------	DITTO
DWG	----------	DRAWING
(E)	-----------	EXISTING
EF	-----------	EACH FACE
EJ	-----------	EXPANSION JOINT
EL	-----------	ELEVATION
EN	-----------	EDGE NAILING
EOS	-----------	EDGE OF SLAB
EQ	-----------	EQUAL
EW	-----------	EACH WAY
EWEF	----------	EACH WAY EACH FACE
FB	-----------	FACE OF BLOCK(OR BRICK) OR FLAT BAR
FC	-----------	FACE OF CONCRETE OR FRAMING CLIP(SIMPSON A35)
FF	-----------	FINISH FLOOR
FS	-----------	FACE OF STUD OR FAR SIDE
GA	-----------	GAUGE OR GAGE
GLB	-----------	GLUED LAMINATED BEAM
HB	----------	HEADED BOLT
HDR	-----------	HEADER
HSB	----------	HIGH STRENGTH BOLT
HSS	----------	HOLLOW STRUCTURAL SECTION
HT	-----------	HEIGHT
JH	-----------	JOIST HANGER
LL	-----------	LIVE LOAD
LLH	----------	LONG LEG HORIZONTAL
LLV	----------	LONG LEG VERTICAL
LS	-----------	LAG SCREW
LW	-----------	LIGHT WEIGHT
LWIC	----------	LIGHT WEIGHT INSULATING CONC
MB	-----------	MACHINE BOLT

MFR	-----------	MANUFACTURER
MI	-----------	MALLEABLE IRON
(N)	-----------	NEW
NIC	-----------	NOT IN CONTRACT
NS	-----------	NEAR SIDE
NTS	-----------	NOT TO SCALE
NW	-----------	NORMAL WEIGHT
OH	-----------	OPPOSITE HAND
OSB	-----------	ORIENTED STRAND BOARD
PC	-----------	PIECE
PJP	-----------	PARTIAL JOINT PENETRATION
PT	-----------	PRESSURE TREATED
RWD	-----------	REDWOOD
SC	-----------	SLIP CRITICAL
SHTG	----------	SHEATHING
SIM	-----------	SIMILAR
SMS	-----------	SHEET METAL SCREW
SP	-----------	STRUCTURAL PANEL
STFNR	----------	STIFFENER
STGRD	----------	STAGGERED
T&B	-----------	TOP & BOTTOM
T&G	-----------	TONGUE & GROOVE
THRD	----------	THREADED
TN	-----------	TOE NAIL
TO	-----------	TOP OF
TOC	-----------	TOP OF CONCRETE (SLAB UNO)
TOF	-----------	TOP OF FOOTING OR TOP OF FRAMING
TOS	-----------	TOP OF STEEL
TOW	-----------	TOP OF WALL
TS	-----------	TUBE STEEL
UNO	-----------	UNLESS NOTED OTHERWISE
W/	-----------	WITH
W/O	----------	WITHOUT
WP	-----------	WORK POINT
WS	-----------	WOOD SCREW
WWF	----------	WELDED WIRE FABRIC
VA	------------	DEPT. OF VETERANS AFFAIRS
CL	------------	CENTERLINE
PL	------------	PLATE
WF	------------	WIDE FLANGE
#	------------	NUMBER OR POUNDS
SQ	------------	SQUARE
Ø	-----------	ROUND
[symbol]	-----------	CONT WOOD IN SECTION
[symbol]	-----------	WOOD BLOCKING IN SECTION
	-----------	END OF WOOD PIECE
(A)	-----------	"MEMBER" ABOVE
(B)	-----------	"MEMBER" BELOW

DESIGN CRITERIA
100SN002-1

1. CODES AND STANDARDS
   2009 INTERNATIONAL BUILDING CODE (IBC)
   ASCE 7-05
   ACI 318-08
   AISC 360-05, 341-05, 358-05
   ACI 530-05/ASCE 5-05/TMS 402-05
   ACI 530.1-05/ASCE 6-05/TMS 602-05
2. VERTICAL LOADS
   ROOF SNOW LOAD = 20 PSF
   FLOOR LIVE LOAD = 100 PSF
   FLOOR PARTITION LIVE LOAD = 20 PSF
   CORRIDORS = 100 PSF
   LIVE LOADS ARE REDUCED WHERE PERMITTED BY CODE.
4. SOILS VALUES
   ALLOWABLE SOILS PRESSURE
   1) DL 1000 PSF
   2) DL + LL 2000 PSF
   3) DL + LL + SEISMIC 2667 PSF
   FOOTING
   MINIMUM DEPTH = 18''
   MINIMUM WIDTH = 18''
3. LATERAL LOADS
   SEISMIC:
   SITE CLASS D CS = 0.1390
   SS = 0.568 ; SDS = 0.510
   S1 = 0.171 ; SD1 = 0.241
   R = 5.5 ; I = 1.5 ; IP = 1.5
   ΩO = 2.5 ; CD = 4.0
   OCCUPANCY CATEGORY: IV
   SEISMIC DESIGN CATEGORY: D
   SEISMIC BASE SHEAR = 450 KIPS (NS DIR.)
   = 450 KIPS (EW DIR.)
   SEISMIC FORCE RESISTING SYSTEM:
   NON-BRG WALL-SPEC REINF CMU SW
   ANALYSIS PROCEDURE: EQ. LAT'L FORCE
   WIND:
   BASIC WIND SPEED = 90 MPH
   EXPOSURE CATEGORY C
   IW- = 1.15 ; GCPI = 0.18±

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND TESTING
100SN004-1

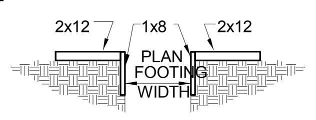
1. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED BY AN INSPECTION AGENCY, EMPLOYED BY THE CONTRACTOR, AND QUALIFIED BY THE VA TO INSPECT THE PARTICULAR TYPE OF CONSTRUCTION. TESTS AND INSPECTIONS, AS REQUIRED BY SECTIONS 109, 1704, 1707, AND 1708 OF THE 2009 IBC, SHALL BE PERFORMED DURING CONSTRUCTION ON THE TYPES OF WORK LISTED BELOW:

	INSPECTIONS	TESTING
■ STEEL CONSTRUCTION	SECTION 1704.3 & TABLE 1704.3	SECTION 1708.3
■ CONCRETE CONSTRUCTION	SECTION 1704.4 & TABLE 1704.4	SECTION 1708.2
■ MASONRY CONSTRUCTION-LEVEL 1	SECTION 1704.5 & TABLE 1704.5.1	-
■ MASONRY CONSTRUCTION-LEVEL 2	SECTION 1704.5 & TABLE 1704.5.3	-
□ WOOD CONSTRUCTION	SECTION 1704.6	-
□ HIGH-LOAD DIAPHRAGM	SECTION 1704.6.1	-
□ SOILS	SECTION 1704.7 & TABLE 1704.7	-
□ PILE FOUNDATIONS	SECTION 1704.8 & TABLE 1704.8	-
□ PIER FOUNDATIONS	SECTION 1704.9 & TABLE 1704.9	-

2. INSPECTIONS MAY BE CONTINUOUS OR PERIODIC AS ALLOWED BY THE INDIVIDUAL MATERIAL OR COMPONENT INSPECTION SECTIONS AND TABLES OF SECTION 1704.
3. THE SPECIAL INSPECTOR SHALL SUBMIT INSPECTION REPORTS TO THE VA. THE REPORTS SHALL INDICATE WHETHER WORK INSPECTED CONFORMED TO THE CONSTRUCTION DOCUMENTS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE VA.
4. ALL SPECIAL INSPECTION AGENCIES / INDIVIDUALS AND SHOP FABRICATORS SHALL BE APPROVED BY THE VA PRIOR TO COMMENCEMENT OF WORK.
5. TESTING AND INSPECTION RECORDS SHALL BE RETAINED UNTIL COMPLETION OF CONSTRUCTION.
6. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT TO THE VA ACKNOWLEDGING RESPONSIBILITY FOR CONSTRUCTION OF THE MAIN LATERAL-FORCE RESISTING SYSTEM PRIOR TO COMMENCEMENT OF THAT WORK AS REQUIRED BY SECTION 1706 OF THE 2009 IBC.
7. SPECIAL INSPECTIONS FOR SEISMIC AND WIND RESISTANCE SHALL BE CONDUCTED FOR ALL ITEMS LISTED IN SECTION 1705.3 AND 1705.4 AS APPLICABLE. SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE SHALL INCLUDE ALL ITEMS IN SECTION 1707. STRUCTURAL TESTING FOR SEISMIC RESISTANCE SHALL BE IN ACCORDANCE WITH SECTION 1708.
8. MASONRY CONSTRUCTION LEVEL 2 APPLIES TO STRUCTURES CLASSIFIED AS OCCUPANCY CATEGORY IV ONLY.
9. ALL SOILS AND FOUNDATION EXCAVATION INSPECTIONS SHALL BE BY THE VA
10. FOR TESTING AND INSPECTION REQUIREMENTS FOR NON-STRUCTURAL MATERIALS AND COMPONENTS, SEE CONSTRUCTION DOCUMENTS AND COMPLY WITH CHAPTER 17 OF THE 2009 IBC

FOUNDATIONS
200SN001-1

1. ALL FOUNDATION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS REPORT #66105035 BY TERRACON DATED 7/21/2010
2. FOUNDATIONS SHALL BEAR ON ENGINEERED FILL
   SEE NOTES AND DETAILS ON SHEET 10S1.2
3. ALL FILLING, BACKFILLING AND COMPACTION SHALL BE DONE UNDER THE OBSERVATION OF A REPRESENTATIVE OF THE VA AND MUST BE COMPACTED TO THE MINIMUM DENSITY SPECIFIED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE SOILS REPORT.
4. BUILDING PAD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE SOILS REPORT. THE EXTENT AND DEPTH OF OVEREXCAVATION AND PLACEMENT OF ENGINEERED FILL SHALL AT A MINIMUM BE AS SHOWN ON THE PLANS. FINAL DEPTH AND EXTENT OF EXCAVATION AND FILL SHALL BE DETERMINED AT TIME OF CONSTRUCTION BY A REPRESENTATIVE OF THE VA. FOUNDATION DEPTHS INDICATED ON PLANS ARE FOR ESTIMATING PURPOSES ONLY.
5. BOTTOMS OF ALL FOUNDATIONS SHALL BE LEVEL. CHANGES IN BOTTOM OF FOUNDATION ELEVATION SHALL BE MADE ACCORDING TO STEPPED FOOTING DETAIL ON THE TYPICAL DETAIL SHEET.
6. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE EXCAVATIONS ARE STABLE (AS DETERMINED BY A REPRESENTATIVE OF THE VA). OTHERWISE, FOUNDATIONS SHALL BE FULLY FORMED. USE MINIMUM PLANKING SHOWN TO PROTECT AGAINST SLOUGHING, AS REQUIRED. PLANKING DOES NOT REPLACE FORMWORK REQUIRED TO STABILIZE EXCAVATION.



7. THE SURFACE OF ALL HORIZONTAL CONSTRUCTION JOINTS SHALL BE CLEANED & ROUGHENED BY EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN MORTAR MATRIX.
8. NOTIFY THE VA 48 HOURS BEFORE CASTING FOUNDATIONS.
9. THE CONTRACTOR SHALL ADVISE THE VA IN WRITING THAT:
   A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED AND;
   C. THE FOUNDATION EXCAVATION DEPTH AND MATERIAL ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY; AND FORMING COMPLY WITH THE SOILS REPORT AND APPROVED PLAN.

CONCRETE
300SN001-1

1. STRUCTURAL CONCRETE SHALL ATTAIN 28 DAY COMPRESSIVE STRENGTH AS REQUIRED IN NOTE #28. MAXIMUM SLUMP SHALL NOT EXCEED 4 INCHES. SEE SPECS.
2. CONCRETE MIX DESIGNS SHALL BE PREPARED BY A REGISTERED CIVIL ENGINEER, REVIEWED BY VCONTRACTOR'S TESTING LABORATORY AND SUBMITTED TO THE VA FOR REVIEW.
3. CEMENTITIOUS MATERIALS:
   CEMENT SHALL CONFORM TO ASTM C-150 TYPE I OR II.
   FLY ASH SHALL CONFORM TO ASTM C-618. MAX. QUANTITY OF FLYASH SHALL BE AS GIVEN IN SPECS (15% MAX UNO).
4. CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33 FOR NORMAL WEIGHT CONCRETE .
5. NON-SHRINK GROUT OR DRYPACK SHALL CONSIST OF A PREMIXED NONMETALLIC FORMULA.
6. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 FOR #4 AND LARGER, AND ASTM A-615 GRADE 40 FOR #3 AND SMALLER, EXCEPT REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A-706. CONTRACTOR SHALL SUBMIT REBAR MILL CERTIFICATES.
7. ALL PREHEATING AND WELDING OF REINFORCING BARS SHALL BE DONE IN ACCORDANCE WITH AWS D1.4 LATEST EDITION AND SHALL BE CONTINUOUSLY INSPECTED BY A QUALIFIED LABORATORY. CONTRACTOR SHALL FURNISH WPS FOR ALL REBAR WELDING TO THE LABORATORY.
8. REINFORCING STEEL SHALL BE FABRICATED ACCORDING TO "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION".
9. WIRE FABRIC SHALL CONFORM TO ASTM A-185.
10. DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF BARS LISTED AND DENOTE CLEAR COVERAGE. NON-PRESTRESSED, CAST-IN-PLACE CONCRETE COVERAGE SHALL BE AS FOLLOWS, UNO:
    CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLABS)--- 3"
    CONCRETE EXPOSED TO GROUND OR WEATHER BUT PLACED IN FORMS:
    #5 AND SMALLER---------------------------- 1-1/2"
    #6 AND LARGER----------------------------- 2"
    BEAMS & COLUMNS (TIES)------------------------ 1-1/2"
    BEAMS & COLUMNS (MAIN REINFORCING)---------------- 2"
    CAST-IN-PLACE WALLS (EXTERIOR FACE & SOIL SIDE)--------- SEE ABOVE
    CAST-IN-PLACE WALLS (INTERIOR FACE-#11 & SMALLER)------- 3/4"
    TILT-UP WALLS------------------------------- SEE DETAILS
    SLABS (ON FORMS)---------------------------- 3/4"
    SLABS (ON GROUND)------------------- 2" CLEAR FROM TOP UNO
11. SPLICES IN CONTINUOUS REINFORCEMENT SHALL BE LAPPED UNO, SEE SCHEDULE THIS SHEET. SPLICES IN ADJACENT BARS SHALL BE GREATER THAN 5'-0" APART. SPLICE CONTINUOUS BARS IN SOIL-BEARING GRADE BEAMS, STRUCTURAL SLABS ON GRADE AND MAT FOUNDATIONS AS FOLLOWS UNO: TOP BARS AT CENTERLINE OF SUPPORT; BOTTOM BARS AT MID-SPAN. SPLICE CONTINUOUS BARS IN ELEVATED SLABS AND BEAMS, ETC. AS FOLLOWS UNO: TOP BARS AT MID-SPAN; BOTTOM BARS AT CENTERLINE OF SUPPORT. ALL BARS SIZE #14 AND LARGER SHALL BE CONTINUOUS FOR FULL LENGTH SHOWN OR SPLICED WITH MECHANICAL COUPLERS AS NOTED IN DETAILS. SPLICES IN WWF SHALL BE 1-1/2 MESHES WIDE.
12. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL NOT BE LESS THAN THE LARGER OF BAR DIAMETER, 1", OR 33% GREATER THAN THE MAXIMUM AGGREGATE SIZE (NOMINAL), WHICHEVER IS GREATEST. THIS REQUIREMENT ALSO APPLIES TO THE CLEAR SPACING BETWEEN DIFFERENT LAYERS OF PARALLEL BARS AND TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP SPLICE AND ADJACENT SPLICES OR BARS.
13. ALL HOOKS SHALL BE STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED. AT WALLS, PROVIDE HOOKS AT ENDS OF ALL REINFORCING AT ENDS, CORNERS AND INTERSECTIONS, UNO.
14. CONSTRUCTION JOINTS SHALL BE MADE ROUGH AND ALL LAITANCE REMOVED FROM THE SURFACE. CONCRETE MAY BE ROUGHENED BY CHIPPING THE ENTIRE SURFACE, SAND BLASTING, OR RAKING THE SURFACE TO PROVIDE 1/4" DEEP DEFORMATIONS.
15. REMOVE ALL DEBRIS FROM FORMS BEFORE CASTING ANY CONCRETE.
16. REINFORCING, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC. TO BE EMBEDDED IN CONCRETE SHALL BE SECURELY POSITIONED BEFORE PLACING CONCRETE.
17. ANCHOR BOLTS (AB'S) CAST IN CONCRETE OR MASONRY FOR WALL SILL AND LEDGER\ APPLICATIONS SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM A307, UNO. REFER TO "WOOD" NOTES FOR ADDITIONAL REQUIREMENTS FOR BOLTS IN CONTACT WITH PRESSURE TREATED OR FIRE RETARDANT MATERIAL. REFER TO 'STRUCTURAL STEEL' NOTE FOR REQUIREMENTS FOR ANCHOR RODS (AR'S) CAST IN CONCRETE FOR COLUMN BASE PLATE AND STEEL EMBED APPLICATIONS.
18. WALLS SHALL BE CAST IN HORIZONTAL LAYERS OF 2'-0" MAXIMUM DEPTH.
19. CONCRETE IN WALLS, PIERS OR COLUMNS SHALL SET AT LEAST 2 HOURS BEFORE PLACING CONCRETE IN BEAMS, SPANDRELS, OR SLABS SUPPORTED THEREON.
20. HORIZONTAL WALL BARS IN MULTI-CURTAIN CAST IN PLACE WALLS SHALL BE STAGGERED.
21. DOWEL ALL VERTICAL REINFORCING IN WALLS AND COLUMNS FROM FOUNDATION WITH SAME SIZE BAR.
22. CONSOLIDATE CONCRETE PLACED IN FORMS BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT AND PROCEDURES FOR CONSOLIDATION OF CONCRETE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF ACI 309 TO SUIT THE TYPE OF CONCRETE AND PROJECT CONDITIONS. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES HOPPERS AND CHUTES OR TRUNKS OF VARIABLE LENGTHS SHALL BE USED SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 6 FEET.
23. DRILL THROUGH STEEL COLUMNS, BEAMS AND PLATES TO PASS CONTINUOUS REINFORCING.
24. NO WOOD SPREADERS ALLOWED. NO WOOD STAKES ALLOWED IN AREAS TO BE CONCRETED.
25. PROVIDE #5 X 4'-0" DIAGONAL REINFORCING AT TOP AND BOTTOM OF SLAB AT ALL RE-ENTRANT CORNERS TYPICAL. THIS APPLIES TO SLAB ON GRADE, CONCRETE OVER METAL DECK, AND ELEVATED STRUCTURAL SLAB CONDITIONS.
26. ALL SAW CUTTING SHALL BE DONE AFTER INITIAL SET HAS OCCURRED TO AVOID TEARING OR DAMAGE BY THE SAW BLADE, BUT BEFORE INITIAL SHRINKAGE HAS OCCURRED.
27. NOTIFY THE VA A MINIMUM OF 48 HOURS BEFORE PLACING ANY CONCRETE.
28. CONCRETE STRENGTHS & MIX PROPERTIES:

ITEM	F'C AT 28 DAYS	MAX AGGR. SIZE	WEIGHT	MAX W/CM* RATIO
A. FOUNDATIONS	3000 PSI	1-1/2"	NW	0.58
B. SLAB ON GRADE	3500 PSI	1"	NW	0.45
C. NW CONC FILL OVER DECK	3500 PSI	3/4"	NW	0.45
D. SITE AND MISCELLANEOUS	2500 PSI	1"	NW	0.45

* W/CM = WATER : CEMENTITIOUS MATERIAL RATIO

TYPICAL DETAILS
APPLICABLE TO ALL DRAWINGS UNLESS NOTED OR SHOWN OTHERWISE

A / 10S1.1 REINFORCEMENT LAP SPLICE SCHEDULE
300SN002-1
(ALL LENGTHS SHOWN ARE IN INCHES.)
ACI 318-08
2009 IBC

FC' = 3000 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	19	37	47	56	81	93	105	118	131
	OTHER	15	29	36	43	63	72	81	91	101

FC' = 3500 PSI CONC

SPLICE CLASS	REINF LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
B	TOP	18	35	43	52	75	86	97	109	121
	OTHER	14	27	33	40	58	66	75	84	93

NOTES:
1. SCHEDULE APPLIES TO NORMAL WEIGHT CONCRETE WITH UNCOATED, GRADE 60 REINFORCING STEEL FOR #4 BARS AND LARGER (VALUES FOR #3 BARS BASED ON GRADE 40).
2. TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT LOCATED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE.
3. WHEN LIGHTWEIGHT CONCRETE IS USED, MULTIPLY LAP LENGTHS BY 1.30.
4. WHERE CLEAR SPACING OF BARS BEING SPLICED IS LESS THAN 2 BAR DIA. OR WHERE CLEAR COVER OF BARS BEING SPLICED IS LESS THAN 1 BAR DIA., MULTIPLY LAP LENGTHS BY 1.50, UNO.
5. WHERE NOTES #3 AND #4 OCCUR, MULTIPLY LAP LENGTHS BY 2.00, UNO.
6. WHERE CLASS A LAP SPLICE IS NOTED IN DETAIL, DIVIDE LENGTHS ABOVE BY 1.30.

STRUCTURAL STEEL
500SN001-1

1. FABRICATION, ERECTION AND MATERIALS SHALL CONFORM WITH THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, THE AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, AND THE INTERNATIONAL BUILDING CODE, LATEST EDITIONS.
2. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM WITH ASTM A992. ALL OTHER STRUCTURAL STEEL ROLLED SHAPES (CHANNELS, ANGLES, ETC) AND PLATES SHALL CONFORM WITH ASTM A36, UNO.
3. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPES E OR S, GRADE B.
4. ALL HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B.
5. ALL STRUCTURAL STEEL SHALL RECEIVE A MINIMUM OF ONE SHOP COAT OF RED PRIMER PAINT. DO NOT PAINT AREAS TO BE FIELD WELDED, FIREPROOFED, GALVANIZED, TO RECEIVE SLIP-CRITICAL HIGH STRENGTH BOLTS, OR TO BE EMBEDDED IN CONCRETE. PROVIDE ADDITIONAL PAINTING AS NOTED IN THE SPECIFICATIONS.
6. ALL STRUCTURAL STEEL SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND SHALL BE LEFT IN PLACE UNTIL OTHER MEANS ARE PROVIDED TO ADEQUATELY BRACE THE STRUCTURE. CONTRACTOR RESPONSIBLE FOR REVIEWING ALL BASE PLATE AND SUPPORT CONDITIONS DURING ERECTION AND BRACING AS REQUIRED. SEE AISC AND OSHA REQUIREMENTS.
7. PLACE NON-SHRINK GROUT UNDER ALL BASE PLATES BEFORE ADDING VERTICAL LOAD.
8. STRUCTURAL STEEL BELOW GRADE SHALL HAVE 3 INCHES MINIMUM OF CONCRETE COVER.
9. BOLTED CONNECTIONS SHALL CONSIST OF UNFINISHED BOLTS CONFORMING TO ASTM A307 UNLESS NOTED OTHERWISE. WHERE HIGH STRENGTH BOLTS ARE INDICATED, BOLTS CONFORMING TO ASTM A325 OR ASTM A490 AS NEEDED SHALL BE PROVIDED. ANCHOR RODS CAST IN CONCRETE OR MASONRY SHALL BE HEADED BOLTS WITH CUT THREAD, FULL DIAMETER BODY STYLE CONFORMING TO ASTM F1554 GR. 36, 55 (WELDABLE PER S1 SUPPLEMENTARY REQUIREMENTS), OR 105 AS INDICATED ON DRAWINGS. ALL BOLTED CONNECTIONS AND BASE PLATES SHALL HAVE STANDARD CUT WASHERS UNLESS NOTED OTHERWISE. WASHERS FOR BASE PLATES SHALL CONFORM TO ASTM F844 UNLESS NOTED OTHERWISE, AND SHALL BE PLACED AT TOP AND BOTTOM OF PLATE.
10. "SLIP-CRITICAL" BOLTED CONNECTIONS:
    A) "SLIP-CRITICAL" CONNECTIONS (A325SC DESIGN VALUES WITH SPECIAL INSPECTION) ARE REQUIRED AT ALL BRACED FRAME CONNECTIONS, AT ALL CONNECTIONS ALONG CHORD LINES AND DRAG LINES (AS NOTED ON PLANS), AND UNO, AT ALL BOLTS IN OVERSIZED OR SLOTTED HOLES.
    B) THE SPECIAL INSPECTOR MUST BE PRESENT DURING INSTALLATION AND TIGHTENING OPERATION OF "SLIP-CRITICAL" CONNECTIONS.
11. PROVIDE 1/2" DIAMETER STITCH BOLTS AND RING FILLS, SPACED AT NOT MORE THAN 2'-0" ON CENTER FOR ALL DOUBLE ANGLE MEMBERS.
12. AT WOOD TO STEEL PARALLEL CONTACT, BOLT WITH 1/2" DIAMETER BOLTS AT MAXIMUM 24"CC.
13. HOLES FOR UNFINISHED BOLTS SHALL BE OF THE SAME NOMINAL DIAMETER OF THE BOLT PLUS 1/16". USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE.
14. WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS IN ACCORDANCE WITH AMERICAN WELDING SOCIETY STANDARDS, USING ONLY CERTIFIED WELDERS. ALL GROOVE WELDS SHALL HAVE COMPLETE PENETRATION UNLESS NOTED OTHERWISE. ALL EXPOSED WELDS SHALL BE GROUND SMOOTH. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE, E70 SERIES MINIMUM.
15. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTHS REQUIRED.
16. MINIMUM FILLET WELDS: 3/16" @ T < 1/2"
    1/4" @ T < 3/4"
    5/16" @ T > 3/4"
17. WELDING PROCEDURE SPECIFICATIONS (WPS) FOR SHOP AND FIELD PREQUALIFIED WELD JOINTS AND WELD JOINTS QUALIFIED BY TEST SHALL BE PREPARED FOR REVIEW PRIOR TO FABRICATION. ALL WELDING PROCEDURE ITEMS SUCH AS BASE METALS, WELDING PROCESSES, FILLER METALS AND JOINT DETAILS THAT MEET THE REQUIREMENTS OF AWS D1.1 SECTION 5.1 SHALL BE CONSIDERED AS PREQUALIFIED. ANY CHANGE OR SUBSTITUTION THAT IS BEYOND THE RANGE OR TOLERANCE OR REQUIREMENTS FOR PREQUALIFICATION SHALL BE QUALIFIED BY TEST PER AWS D1.1 SECTION 5 PART B. QUALIFICATION TESTING IS REQUIRED WHEN THE DEPTH OF A PARTIAL PENETRATION OR COMPLETE PENETRATION WELD IS 2" OR GREATER.
18. FOR NONDESTRUCTIVE TESTING OF WELDED CONNECTIONS EXCLUDING PRIMARY MEMBERS OF MOMENT RESISTING FRAMES:
    A) WELDED CONNECTIONS SHALL BE TESTED BY NONDESTRUCTIVE METHODS FOR COMPLIANCE WITH AISC J2, AND JOB SPECIFICATIONS. ULTRASONIC TESTING SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E164 AND ASME SECTION V. RADIOGRAPHY SHALL BE IN ACCORDANCE WITH AWS D1.1, ASTM E94 AND E99, AND ASME SECTION V. THIS TESTING SHALL BE PART OF THE SPECIAL INSPECTION REQUIREMENTS OF IBC SECTION 1704.3 PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AS FOLLOWS:
       1. BASE METAL THICKER THAN 1 INCH WHEN SUBJECT TO THROUGH THICKNESS WELD SHRINKAGE STRAINS.
       2. ALL COMPLETE JOINT PENETRATION GROOVE OR BUTT WELDS.
       3. ALL PARTIAL JOINT PENETRATION GROOVE WELDS WHEN USED IN COLUMN SPLICES.
    B) ANY MATERIAL DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF DEFECT RATING IN ACCORDANCE WITH THE (LARGER REFLECTOR) CRITERIA OF AISC J2.

METAL DECK NOTES
530SN001-1

1. PROVIDE METAL DECKING OF TYPE AND GAUGE AS SHOWN ON PLANS.
2. METAL FLOOR DECK SHALL BE COMPOSITE TYPE, CONFORMING TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION.
3. METAL ROOF DECK SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH MINIMUM YIELD STRENGTH OF 38 KSI AND SHALL BE ZINC COATED PER ASTM A653, G60 COATING DESIGNATION.
4. PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE METAL DECKING, SHOWING DECK GAUGE, SIZE AND LAYOUT AS WELL AS CLOSURE CONDITIONS, WELDS TO SUPPORTS AND SIDE LAP DETAILS.
5. CONNECTION AND WELDING OF DECKING TO STRUCTURAL SUPPORTS AND DECK SIDE SEAMS SHALL BE AS SPECIFIED IN THE STRUCTURAL DRAWINGS. ALL ELECTRODES FOR WELDING SHALL COMPLY WITH AWS CODE, E60 SERIES MINIMUM.
6. ALL REINFORCED OPENINGS IN METAL DECK SHALL BE INSTALLED BY METAL DECK SUBCONTRACTOR.
7. AT METAL DECKS TO RECEIVE CONCRETE, ABSOLUTELY NO CONDUIT OR PIPING OF ANY TYPE IS TO BE PLACED HORIZONTALLY WITHIN THE DEPTH OF THE CONCRETE ABOVE THE METAL DECK.
8. AT METAL DECK WITHOUT CONCRETE FILL THE FOLLOWING MAY BE ATTACHED WITHOUT SPECIFIC APPROVAL OF THE VA: ACOUSTICAL TILE AND GYPSUM BOARD CEILINGS ONLY; NO PIPING, DUCTING OR CONDUIT. MAXIMUM CEILING WEIGHT - 3.5 PSF. MAXIMUM WIRE HANGER LOAD = 60#.
9. WHERE SUSPENSION OR HANGER WIRES ARE REQUIRED BY OTHERS, VERIFY AND COORDINATE LOCATIONS, PATTERNS, SPACINGS, ETC. WITH THE APPROPRIATE TRADE. DRILL OR PUNCH HOLES AT BOTTOM OF DECK FLUTES OF SUFFICIENT SIZE TO PASS SUPPORT WIRES. WIRE SUPPORTS SHALL BE LOOPED AND SECURED WITH A MINIMUM OF THREE (3) TIGHT TURNS AROUND A MINIMUM 1-1/2" X 12" LONG FURRING CHANNEL OR NO. 3 X 12" LONG REINFORCING BAR CENTERED ABOVE THE HOLE AND LAID IN THE DECK FLUTES.

COLD FORMED METAL FRAMING
540SN001-1

1. GALVANIZED SHEET STEEL SHALL CONFORM TO ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 43 MILS (18 GA) AND THINNER AND ASTM A653, STRUCTURAL QUALITY, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 54 MILS (16 GA) AND THICKER. HOT-ROLLED CARBON SHEET AND STRIP STEEL USED IN THE FABRICATION OF COLD-FORMED MEMBERS SHALL CONFORM TO ASTM A1011 WITH A RUST INHIBITIVE COATING.
2. METAL STUDS AND JOISTS SHALL BE OF SIZE AND THICKNESS SHOWN ON DRAWINGS WITH THE MINIMUM EFFECTIVE SECTION PROPERTIES SHOWN IN THE TABLE(S).
3. MINIMUM THICKNESS SHOWN IN TABLE FOR THE THICKNESS SPECIFIED REPRESENTS 95% OF DESIGN THICKNESS PER 2001 AISI-NAS W/ 2004 SUPPLEMENT.
4. METAL FRAMING SHALL BE PER ICC-ES NO. 4943P. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING VA APPROVAL FOR ANY SUBSTITUTIONS.
5. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE-SHEET STEEL". WELDERS SHALL BE AWS CERTIFIED. WELDING RODS: E60XX SERIES. ALL FIELD WELDING SHALL HAVE SPECIAL INSPECTION.
6. TYPICAL METAL TRACK SHALL BE SAME GAUGE AS STUDS WHICH IT SUPPORTS, UNPUNCHED, WITH A FLANGE WIDTH OF 1 1/4 INCHES AND A DEPTH EQUAL TO THE NOMINAL STUD PLUS 2 TIMES THE TRACK THICKNESS PLUS THE RADIUS. NESTED TRACKS SHALL BE FABRICATED TO FILL THE OUTSIDE OF A TYPICAL METAL TRACK. DEEP LEG TRACKS SHALL HAVE A MINIMUM FLANGE WIDTH OF 2 INCHES. USE SLOTTED SLIP TRACKS WHERE SPECIFIED. SEE SECTIONS AND TYPICAL METAL STUD DETAILS.
7. METAL STUDS SHALL NOT HAVE PUNCH-OUTS CLOSER THAN 10" FROM THE END OF THE STUD OR AT INTERMEDIATE LATERAL BEARING POINTS OF STUDS.

POWDER ACTUATED FASTENERS (SHOT PINS)
100SN016-1

1. THESE NOTES GOVERN ALL CONDITIONS CALLED OUT ON THE PLANS AS 'SHOT PINS' UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL SHOT PINS SHALL BE X-U UNIVERSAL KNURLED SHANK FASTENERS WITH SHANK DIAMETER OF 0.157" AS MANUFACTURED BY HILTI INCORPORATED IN ACCORDANCE WITH ICC ESR-2269 AND THE HILTI 2008 'PRODUCT TECHNICAL GUIDE'
3. ALL SHOT PINS SHALL INCLUDE P8 STEEL WASHERS.
4. SHOT PINS DRIVEN INTO STEEL BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL STEEL ELEMENTS OF 1/2" AND MINIMUM FASTENER SPACING SHALL BE 1". LENGTH OF PIN SHALL BE AS REQUIRED TO PENETRATE THRU STEEL MEMBER U.N.O. AT 3/4" THICK STEEL, PENETRATION NEED NOT EXCEED 1/2".
5. SHOT PINS DRIVEN INTO CONCRETE BASE MATERIAL SHALL MAINTAIN A MINIMUM EDGE DISTANCE AT ALL CONCRETE ELEMENTS OF 3" AND MINIMUM FASTENER SPACING SHALL BE 4". PINS SHALL HAVE 1 1/4" PENETRATION U.N.O. MINIMUM CONCRETE THICKNESS SHALL BE 3 TIMES THE PENETRATION DEPTH. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING SHOT PINS.
6. SHOT PINS DRIVEN INTO 3 1/4" MINIMUM LIGHT WEIGHT CONCRETE FILL OVER 3"X 20 GA MINIMUM METAL DECK MAY BE INSTALLED FROM THE TOP OR FROM THE BOTTOM IN EITHER THE HIGH OR LOW FLUTE. PINS INSTALLED FROM THE TOP SHALL BE SPACED AS NOTED ABOVE FOR TYPICAL CONCRETE ELEMENTS. PINS INSTALLED FROM THE BOTTOM IN THE HIGH FLUTES SHALL BE INSTALLED WITHIN 1" OF FLUTE CENTER. PINS INSTALLED FROM THE BOTTOM IN THE LOW FLUTES SHALL BE INSTALLED WITHIN 1" OF THE FLUTE CENTER AND SHALL BE NO CLOSER THAN 1 1/8" TO THE EDGE OF THE LOW FLUTE. PINS INSTALLED FROM THE BOTTOM SHALL BE SPACED NO CLOSER THAN 5.1" PARALLEL TO THE FLUTES. PINS SHALL HAVE 1" PENETRATION U.N.O. CONCRETE SHALL ATTAIN FULL DESIGN STRENGTH PRIOR TO INSTALLING SHOT PINS.
7. SHOT PINS MAY BE DRIVEN INTO 8" NOMINAL MINIMUM THICKNESS FULLY GROUTED NORMAL-WEIGHT CMU WITH TYPE S MORTAR AND MINIMUM F'M = 1500 PSI AT TIME OF INSTALLATION. SHOT PINS MAY BE INSTALLED INTO THE FACE SHELLS, HORIZONTAL MORTAR JOINTS OR VERTICALLY CENTERED IN THE TOP OF GROUTED CELLS. SHOT PINS SHALL NOT BE INSTALLED IN VERTICAL MORTAR JOINTS OR WITHIN 1" OF VERTICAL MORTAR JOINTS. NO MORE THAN ONE SHOT PIN MAY OCCUR IN AN INDIVIDUAL MASONRY UNIT CELL AND MUST BE INSTALLED A MINIMUM OF 4" FROM THE EDGE OF THE WALL. SHOT PINS IN MORTAR JOINTS MUST BE A MINIMUM OF 8" FROM THE END OF THE WALL AND SHALL HAVE A MINIMUM SPACING OF 8".
8. THE OPERATOR, TOOL, AND FASTENER SHALL BE PRE-QUALIFIED BY THE VA. SHOT PIN INSTALLERS SHALL BE CERTIFIED BY HILTI AND HAVE A CURRENT HILTI ISSUED OPERATORS LICENSE. SHOT PIN INSTALLATION SHALL MEET ALL OSHA REQUIREMENTS.

HOLLOW CONCRETE UNIT MASONRY (BLOCK)
410SN001-1

1. CONCRETE BLOCK UNITS SHALL CONFORM TO ASTM C-90 . COMPRESSIVE STRENGTH OF UNITS TO BE 1000 PSI FOR GROSS AREA AND 1900 PSI FOR NET AREA. F'M = 1500 PSI. F'M SHALL BE VERIFIED IN ACCORDANCE WITH SECTION 2105.2.2.1.2 OF THE 2009 IBC. CONCRETE BLOCK UNITS SHALL BE LIGHTWEIGHT, FULLY GROUTED CONCRETE BLOCK UNITS NOT TO EXCEED 115 PCF.
2. MORTAR SHALL BE PROPORTIONED TO ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 1800 PSI. USE A MINIMUM OF 1 PART PORTLAND CEMENT TO 1/4 - 1/2 PART HYDRATED LIME WITH SAND AT 2-1/2 TO 3 TIMES COMBINED VOLUME OF CEMENT AND LIME.
3. GROUT SHALL BE PROPORTIONED TO ATTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI. USE A MINIMUM OF 1 PART PORTLAND CEMENT TO 3 PARTS SAND. ADD 1 LB. OF SIKA GROUT AIDE TYPE II, OR EQUAL, PER 100 LB. OF CEMENTITIOUS MATERIAL. 1 TO 2 PARTS OF PEA GRAVEL SHALL BE USED WHERE THE LEAST CLEAR CELL DIMENSION EXCEEDS 2 INCHES. NOT MORE THAN 5% OF THE PEA GRAVEL SHALL PASS THE NO. 8 SIEVE AND 100% SHALL PASS THE 3/8" SIEVE. WHEN REQUIRED, GROUT STRENGTH SHALL BE VERIFIED IN ACCORDANCE WITH SECTION 2105.2.2.1.2 OF THE 2009 IBC.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 FOR #4 AND LARGER, GRADE 40 FOR #3 AND SMALLER.
5. MINIMUM REBAR CLEARANCE TO FACE SHELL IS ONE BAR DIAMETER OR 1/2", WHICHEVER IS GREATER.
6. BEFORE BLOCK IS PLACED ON CONCRETE, THOROUGHLY CLEAN CONCRETE OF ALL LAITANCE AND ALL LOOSE MATERIAL. ROUGHEN AS IN A CONCRETE CONSTRUCTION JOINT.
7. CONCRETE BLOCK MASONRY SHALL BE BUILT TO PRESERVE THE UNOBSTRUCTED VERTICAL CONTINUITY OF THE CELLS. ALL HEAD AND END JOINTS SHALL BE SOLIDLY FILLED WITH MORTAR FOR A DISTANCE IN FROM THE FACE OF THE WALL OR UNIT NOT LESS THAN THE THICKNESS OF THE LONGITUDINAL FACE SHELLS. BOND SHALL BE PROVIDED BY LAPPING SUCCESSIVE COURSES OR BY EQUIVALENT MECHANICAL ANCHORAGE.
8. VERTICAL CELLS SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR UNOBSTRUCTED CONTINUOUS VERTICAL CELL.
9. LOW-LIFT GROUTED CONSTRUCTION SHALL CONFORM TO ACI 530.1 SECTION 3.5. HIGH-LIFT GROUTED CONSTRUCTION SHALL CONFORM TO ACI 530.1 SECTION 3.5.
10. CLEAN OUT OPENINGS SHALL BE PROVIDED AT THE BOTTOMS OF ALL CELLS TO BE FILLED AT EACH LIFT OR POUR OF GROUT WHERE SUCH LIFT OR POUR OF GROUT IS IN EXCESS OF 4'-0" IN HEIGHT. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM INSIDE OF SUCH CELLS. THE CLEAN OUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE GROUTING. MECHANICALLY VIBRATE ALL GROUT POURS.
11. VERTICAL REINFORCING SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT TO EXCEED 192 BAR DIAMETERS.
12. THOROUGHLY CLEAN ALL CELLS AND BOND BEAMS OF MORTAR BEFORE GROUTING.
13. ALL CELLS SHALL BE FILLED SOLIDLY WITH GROUT. ALL GROUTING SHALL BE DONE UNDER THE CONTINUOUS OBSERVATION OF A QUALIFIED INSPECTOR WHERE INDICATED ON PLANS.
14. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE POUR OF GROUT 1-1/2" BELOW THE TOP OF THE UPPERMOST UNIT.
15. EVERY VERTICAL BAR IN WALLS SHALL BE LAPPED PER #22 BELOW WITH A DOWEL OF THE SAME SIZE EXTENDING FROM THE FOUNDATION. LOCATE VERTICAL REINFORCING AT CENTERLINE OF WALL UNLESS SHOWN OR NOTED OTHERWISE. CARRY EACH DOWEL TO WITHIN 3" OF THE BOTTOM OF THE FOUNDATION AND TERMINATE WITH 90 DEGREE HOOK. DOWELS SHALL BE STRAIGHT AND PLUMB.
16. PLACE ALL HORIZONTAL BARS IN BOND BEAM UNITS. WHEN 2 BARS ARE USED, STAGGER LAPS MINIMUM OF 5'-0".
17. PROVIDE 2 - #5 BARS WITH MATCHING FOOTING DOWELS (FULL HEIGHT OF WALL AT JAMBS AND EXTENDING A MINIMUM OF 2'-0" PAST EDGES OF OPENINGS AT HEAD AND SILL) EACH SIDE OF ALL OPENINGS AND EACH END OF ALL WALLS, UNLESS NOTED OTHERWISE ON DRAWINGS.
18. ALL EMBEDDED ITEMS (BOLTS, STRAPS, ETC.) SHALL BE SECURED IN PLACE PRIOR TO GROUTING. CUT A HOLE IN THE FACE SHELL TO ATTAIN A MINIMUM OF 1" GROUT ALL AROUND EMBEDDED ITEMS.
19. SINGLE CONDUITS (3/4" MAX) MAY BE PLACED IN VERTICAL CELLS NOT CONTAINING VERT. REBAR. NO HORIZONTAL CONDUITS ALLOWED IN WALL CONSTRUCTION.
20. ANCHOR BOLTS CAST IN MASONRY SHALL BE HEADED BOLTS WITH CUT THREADS CONFORMING TO ASTM A307, ASTM A36, OR ASTM A572.50 AS INDICATED ON DRAWINGS.
21. USE OPEN END BLOCK FOR ALL STACK BOND CONSTRUCTION.
22. ALL REBAR SHALL BE LAP SPLICED AS FOLLOWS(U.N.O.):

BAR TYPE	LAP LENGTH	NOTES
VERTICAL BARS	48D	SPLICES FOR MULTIPLE BARS
HORIZONTAL BARS	48D	IN THE SAME CELL MUST
JAMB BARS		BE STGRD 24" OR LAPPED 62D
CHORD BARS	72D	SPLICES FOR MULTIPLE BARS
VERTICAL BARS @	72D	IN THE SAME CELL MUST
ENDS & CORNERS	72D	BE STGRD 24" OR LAPPED 94D

METAL STAIRWAYS
550SN001-1

1. SUPPLIER SHALL PROVIDE COMPLETE DESIGN DRAWINGS AND CALCULATIONS FOR ALL METAL STAIRWAYS. STAIRWAYS SHALL BE DESIGNED FOR DEAD LOAD + 100 PSF LIVE LOAD, AND SEISMIC LOADS.
2. SUPPLIER SHALL DESIGN, SUPPLY, AND INSTALL ALL CONNECTION MATERIALS WHICH SHALL INCLUDE BUT ARE NOT NECESSARILY LIMITED TO EMBEDDED ITEMS, BEARING PLATES, STIFFENERS, DIAGONAL STRUTS, SUPPORT ANGLES, CHANNELS AND TUBES. ALL LOADING CONDITIONS RESULTING IN ECCENTRICITIES OR TORSION TO BEAMS AND/OR COLUMNS SHALL BE RESOLVED BY THE INSTALLATION OF STIFFENERS AND DIAGONAL STRUTS, DESIGNED, SUPPLIED AND INSTALLED BY THE SUPPLIER.
3. SEISMIC FORCES SHALL BE ACCOUNTED FOR AND BRACED BACK TO THE MAIN STRUCTURE. SLIP DETAILS SHALL BE INCORPORATED AT GROUND LEVEL FOR STORY DRIFT. POSITIVE TIES USING REBAR SHALL BE PROVIDED TO RESIST SEISMIC FORCES AT FLOOR LEVELS WITH CONCRETE FILL.
4. SEE ARCHITECTURAL DRAWINGS FOR STAIRWAY DIMENSIONS AND DETAILS.
5. SUBMIT SHOP DRAWINGS AND CALCULATIONS SIGNED BY A CIVIL ENGINEER, REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, FOR REVIEW AND APPROVAL BY THE VA PRIOR TO FABRICATION.
6. PROVIDE REBAR AT ALL CONCRETE FILL ON TREADS AND LANDINGS PER SPECS.
7. SEE SPECIFICATIONS FOR ADDITIONAL DESIGN CRITERIA.

ELEVATOR GUIDE RAILS AND SUPPORTS
100SN013-1

1. GUIDE RAILS, GUIDE RAIL SUPPORTS AND BRACKETS FOR ELEVATOR CAB OR COUNTERWEIGHT SHALL BE DESIGNED TO MEET THE FORCE FORCE AND DISPLACEMENT REQUIREMENTS OF ASCE7-05 13.6.10.
2. PROVIDE SHOP DRAWINGS AND ENGINEERING CALCULATIONS FOR THE GUIDE RAILS, GUIDE RAIL SUPPORTS AND SUPPORTING BRACKETS SIGNED BY A CIVIL ENGINEER, REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, FOR REVIEW AND APPROVAL BY THE VA PRIOR TO FABRICATION.
3. ALL LOADING CONDITIONS RESULTING IN ECCENTRICITIES OR TORSION TO BEAMS AND/OR COLUMNS SHALL BE RESOLVED BY THE INSTALLATION OF STIFFENERS AND DIAGONAL STRUTS DESIGNED AND INSTALLED BY THE SUPPLIER.
4. SEISMIC FORCES SHALL BE ACCOUNTED FOR AND BRACED BACK TO THE STRUCTURE. FOR ADDITIONAL REQUIREMENTS SEE NEW MEXICO CODE OF REGULATIONS .
5. SEE ARCHITECTURAL DRAWINGS FOR OPENING/PIT DIMENSIONS, LOCATIONS AND DETAILS.

DRILLED-IN ANCHORS
305SN001-1

1. EPOXY ANCHORS SHALL BE HILTI RE500-SD PER ESR-2322 OR SIMPSON SET-XP PER ESR-2508 FOR THR'D ROD & REBAR. EXPANSION ANCHORS SHALL BE HILTI KB-TZ PER ESR-1917 OR SIMPSON STRONG-BOLT PER ESR-1771. TYPE, SIZE & EMBEDMENT SHALL BE INDICATED IN DRAWINGS. POST-INSTALLED ANCHORS FOR REPAIR SHALL BE EVALUATED ON A CASE BY CASE BASIS. NOTIFY THE VA FOR REPAIRS.
2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC REPORT.
3. UNLESS NOTED OTHERWISE ANCHORS HAVE BEEN DESIGNED FOR SPECIAL INSPECTION. PROVIDE SPECIAL INSPECTION AS INDICATED IN THE ICC REPORT.
4. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING CONCRETE OR MASONRY, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING EXISTING REINFORCING BARS. DO NOT INSTALL ANCHORS IN PRESTRESSED CONCRETE ELEMENTS.
5. ANCHORS INSTALLED FROM THE BOTTOM INTO METAL DECK WITH CONCRETE SHALL BE INSTALLED IN THE CENTER OF THE LOW FLUTE OF THE DECKING UNLESS NOTED OTHERWISE IN ICC REPORT. THE DECKING SHALL HAVE A MINIMUM THICKNESS OF 20 GAUGE. THE MINIMUM THICKNESS OF THE CONCRETE ABOVE THE HIGH FLUTE OF THE METAL DECK SHALL BE AS INDICATED IN THE ICC REPORT. SEE ICC REPORT FOR ADDITIONAL REQUIREMENTS, INCLUDING MINIMUM DIMENSIONS FOR FLUTE WIDTH AND DEPTH.
6. THE INSPECTION OF THE ANCHORS SHALL BE DONE BY A QUALIFIED INSPECTION AGENCY AND A REPORT OF THE INSPECTION RESULTS SHALL BE SUBMITTED TO THE VA.

DEFERRED APPROVALS
100SN007-1

1. THE FOLLOWING ITEMS REQUIRE DEFERRED APPROVAL:
   A) WINDOW WALL/STOREFRONT SYSTEMS
   B) FIRE SPRINKLER SUPPORT
   C) METAL STAIRWAYS
2. THE DESIGN OF THE ABOVE ITEMS IS BY THE CONTRACTOR/MANUFACTURER. CONTRACTOR/ MANUFACTURER MUST PREPARE ALL NECESSARY CALCULATIONS AND DRAWINGS PER THE INTERNATIONAL BUILDING CODE UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, AND OBTAIN ALL NECESSARY PLAN CHECK APPROVALS FROM THE VA.
3. INSTALLATION OF THE ABOVE ITEMS SHALL NOT BE STARTED UNTIL DETAILED PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE VA AND THE SIGNATURE OF THE ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION, AND APPROVED BY THE VA.

DAVID A. HUTCHINSON · NEW MEXICO · 15293 · DEC. 31, 2011 · REGISTERED PROFESSIONAL ENGINEER

B&B
Buehler & Buehler
Structural Engineers, Inc.
600 Q Street, Suite 200, Sacramento, CA 95811
tel 916.443.0303 fax 916.443.0313

K.F. DAVIS ENGINEERING, INC
530 LA GONDA WAY, SUITE E
DANVILLE, CA 94526

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