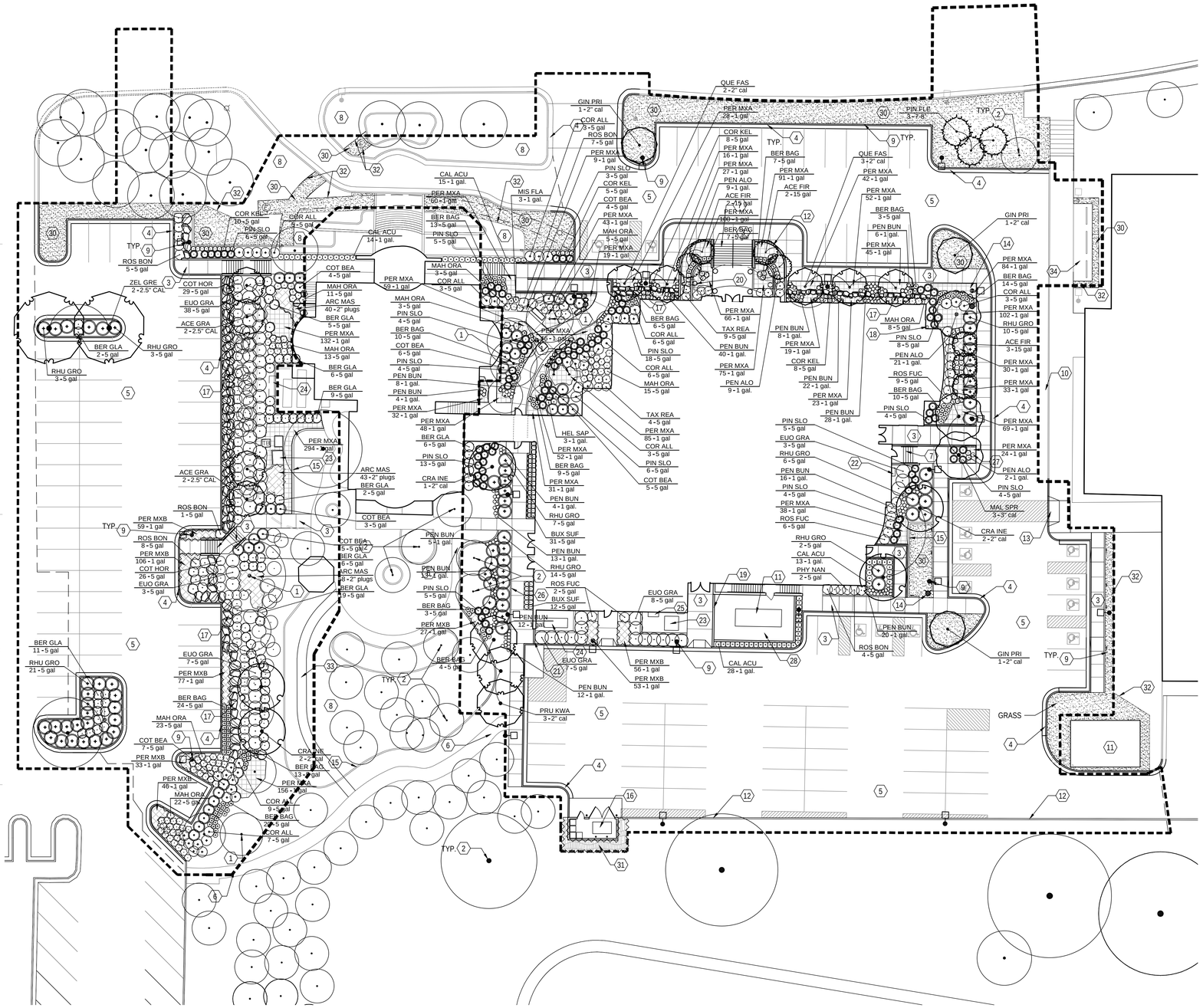

PLANTING PLAN

0 10' 20' 40'

SCALE: 1" = 20'-0"

KEYNOTES

1. EXISTING TREE - PRUNE AS REQUIRED FOR INSTALLATION OF NEW PATH. COORDINATE WITH CAMPUS HORTICULTURIST
2. EXISTING TREE
3. CONCRETE PAVING
4. CURB & GUTTER
5. ASPHALT PAVING
6. STAMPED CONCRETE PAVING
7. STAIR
8. LANDSCAPE AREA
9. LIGHT POLE
10. CURB
11. COOLING TOWER
12. CONCRETE WALL
13. ACCESSIBLE RAMP
14. HYDRANT
15. CONCRETE MOWSTRIP
16. DUMPSTER LOCATION
17. BOULDER WALL
18. FDC LOCATION
19. CONCRETE RETAINING WALL
20. BUILDING COLUMN - SEE ARCHITECTURAL
21. MASONRY SCREEN WALL
22. GAS METER
23. ELECTRICAL TRANSFORMER
24. EMERGENCY GENERATOR
25. CT CAN
26. TRENCH DRAIN
27. CALL STATION (POLE MOUNT)
28. GRAVEL PAVING
29. BENCH N.I.C
30. LAWN SOD
31. BIOMEADOW
32. APPROXIMATE EDGE OF EXISTING SOD
33. TEMPORARY ASPHALT PATH. PATCH AND REPAIR BOTH FOR CONSTRUCTION AND AFTER REMOVAL
34. BIKE RACK

GENERAL PLANTING NOTES

ALL PLANTS SHALL CONFORM TO THE MINIMUM STANDARDS OF HEIGHT, SIZE, CALIPER AND ETC. OF THE AMERICAN ASSOCIATIONS OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".

THIS CONTRACTOR SHALL SPREAD TOPSOIL TO A DEPTH OF 6" IN ALL LAWN PLANTING AREAS AND 12" IN ALL SHRUB AND PERENNIAL BEDS.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING FROM THE SITE ALL SOIL EXCAVATED FROM TREE PITS.

ALL MOWSTRIPS ARE TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE IRRIGATION SYSTEM SYSTEM AND THE LANDSCAPE PLANTING.

INSTALL 3" MIN. SHREDDED BARK MULCH IN ALL SHRUB PLANTING BEDS AFTER PLANT MATERIAL INSTALLATION.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THE REQUIRED AMOUNT OF TOPSOIL TO COMPLETE THE PROJECT. NEW TOPSOIL SHALL MATCH QUALITY AND TEXTURE OF THE EXISTING TOPSOIL ON SITE.

PROVIDE AND INSTALL WEED BARRIER FABRIC BELOW MULCH IN ALL SHRUB AREAS WITH THE EXCEPTION OF PERENNIAL AREAS.

MHTN ARCHITECTS, INC.
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Salt Lake City, Utah 84111
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WEBER STATE UNIVERSITY

HURST CENTER FOR LIFELONG LEARNING WEBER STATE UNIVERSITY

UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT- DFCM PROJECT NO. 07110810

SEAL

MHTN PROJECT NO. 20075556.00

DRAWN BY: J.Z. CHECKED BY: R.B.

ISSUED:

NO.	DATE	DESCRIPTION
1	10/26/07	SCHEMATIC DESIGN
2	12/18/07	DESIGN DEVELOPMENT
3	02/08/08	CONSTRUCTION DOCUMENTS
4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

PLANTING PLAN

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

LP101

PLANT SCHEDULE

TREES	BOTANICAL	COMMON	CONT	REMARKS
ACE GRA	Acer grandidentatum `Rocky Mnt. Glow`	Big Tooth Maple	2.5" CAL	
ACE FIR	Acer palmatum `Fireglow`	Fireglow Japanese Maple	15 gal	
CRA INE	Crataegus crusgalli `Inermis`	Thornless Cockspur Hawthorn	2" cal	
GIN PRI	Ginkgo biloba `Princeton Sentry`	Princeton Sentry Ginkgo	2" cal	
MAL SPR	Malus `Spring Snow`	Spring Snow Crab Apple	3" cal	Prune to 7`
PIN FLE	Pinus flexilis `Vanderwolf`s Pyramid`	Vanderwolf`s Pyramid Limber Pine	7-8`	
PRU KWA	Prunus serrulata `Kwanzan`	Flowering Cherry	2" cal	
QUE FAS	Quercus robur `Fastigiata`	Pyramidal English Oak	2" cal	
ZEL GRE	Zelkova serrata `Green Vase`	Sawleaf Zelkova	2.5" CAL	

SHRUBS	BOTANICAL	COMMON	CONT	REMARKS
BER GLA	Berberis gladwynensis `William Penn` TM	William Penn Barberry	5 gal	
BER BAG	Berberis thunbergii `Bagatelle`	Bagatelle Red Barberry	5 gal	
BUX SUF	Buxus sempervirens `Suffruticosa`	True Dwarf Boxwood	5 gal	
COR ALL	Cornus sericea `Alleman`s Compact`	Dwarf Red Twig Dogwood	5 gal	
COR KEL	Cornus sericea `Kelseyi`	Kelsy Dwarf Dogwood	5 gal	
COT BEA	Cotoneaster dammeri `Coral Beauty`	Bearberry Cotoneaster	5 gal	
COT HOR	Cotoneaster horizontalis	Rock Cotoneaster	5 gal	
EUO GRA	Euonymus japonicus `Grandifolia`	Grandifolia Japanese Euonymus	5 gal	
MAH ORA	Mahonia aquifollium `Compacta`	Compact Oragon Grape Holly	5 gal	
PHY NAN	Physocarpus opulifolius `Nanus`	Dwarf Ninebark	5 gal	
PIN SLO	Pinus mugo mugo `Slowmound`	Slowmound Mugo Pine	5 gal	
RHU GRO	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	5 gal	
ROS BON	Rosa acicularis `Meidomonac` TM	Meidiland Bonica Rose	5 gal	
ROS FUC	Rosa acicularis `Meipelta` TM	Fuchsia Meidiland Shrub Rose	5 gal	
TAX REA	Taxus baccata `Repandens`	Dwarf Spreading Yew	5 gal	

GRASSES	BOTANICAL	COMMON	CONT	REMARKS
CAL ACU	Calamagrostis acutifolia `Karl Foerster`	Foerster`s Reed Grass	1 gal.	
HEL SAP	Helictotrichon sempervirens `Sapphire`	Blue Oat Grass	1 gal.	
MIS FLA	Miscanthus sinensis purpurascens	Flame Grass	1 gal.	
PEN ALO	Pennisetum alopecuroides `Hameln`	Hamln Dwarf Fountain Grass	1 gal.	
PEN BUN	Pennisetum alopecuroides `Little Bunny`	Little Bunny Fountain Grass	1 gal.	

SHRUB AREAS	BOTANICAL	COMMON	CONT	REMARKS
PER MXA	Perennial Mix A	Sunny Mix	1 gal@ 12" oc	
PER MXB	Perennial Mix B	Shady Mix	1 gal@ 12" oc	

PERENNIALS	BOTANICAL	COMMON	CONT	MIX
	PERENNIAL MIX 'A'		SPACE @ 12" O.C.	% of Total Mix
	Dicentra spectabilis	Bleeding Heart	1 gal.	20
	Heuchera x 'Snow Angel'	Snow Angel Coral Bells	1 gal.	15
	Campanula glomerata superba	Clustered Bellflower	1 gal.	15
	Hosta 'Dark Star'	Plantain Lily	1 gal.	15
	Polemonium caeruleum 'Apricot Delight	Jacob's Ladder	1 gal.	15
	Lamium maculatum 'Beacon Silver'	Dead Nettle	1 gal.	10
	Galium odoratum	Sweet Woodruff	1 gal.	10
				100%

* Plant spacing is approximate. Group plants within area per Landscape Architects instruction in the field.

	PERENNIAL MIX 'B'		SPACE @ 12" O.C.	
	Antennaria	Pussy Toes	1 gal.	10
	Coreopsis grandiflora 'Baby Sun'	Baby Sun Coreopsis	1 gal.	15
	Echinacea purpurea 'fancy frills'	Fancy Frills Coneflower	1 gal.	15
	Gaillardia x grandiflora 'Goblin'	Goblin Blanket Flower	1 gal.	15
	Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	1 gal.	15
	Lavandula angustifolia 'Hidcote blue'	English Lavender	1 gal.	5
	Sedum reflexum 'Blue Spruce'	Blue Spruce Stonecrop	Flat	10
	Sedum x 'Autumn Joy'	Autumn Joy Stonecrop	1 gal.	10
	Thymus serphyllum 'Pink Chintz'	Pink Chintz Thyme	1 gal.	5
				100%

* Plant spacing is approximate. Group plants within area per Landscape Architects instruction in the field.

	BOULDER PERENNIAL MIX		SPACE @ 8" O.C.	
	Sedum kamtchaticum	Russian Stonecrop	Flat	35
	Sedum spurium 'Dragon's Blood'	Dragon's Blood Stonecrop	Flat	30
	Sedum reflexum 'Blue Spruce'	Blue Spruce Stonecrop	Flat	35
				100%

PLANT 2000 PLANTS OF THE BOULDER MIX BETWEEN ALL BOULDERS ON ALL BOULDER RETAINING WALLS.
PLANT DURING SPRING OR LATE FALL

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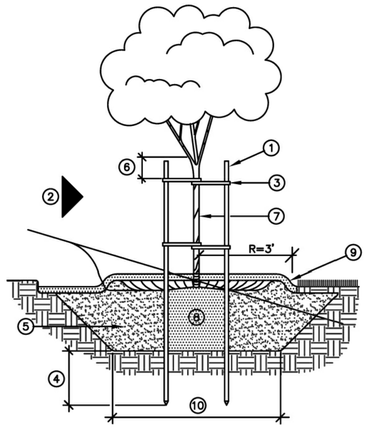
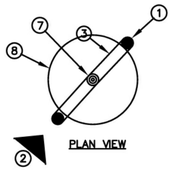


1. 2" DIA. x 10' STRAIGHT WOODEN STAKE (2 REQUIRED)
2. PREVAILING WIND DIRECTION
3. V.I.T. CINCH-TIE VINYL TREE TIE (2 PER STAKE, LENGTH AS REQ'D). SECURE TO STAKE W/ GALV. NAIL, 1 PER TIE
4. 24" MIN.
5. SEE TREE/SHRUB PLANTING DETAIL
6. 6" MAX.
7. TREE TRUNK
8. ROOTBALL
9. 3" LAYER SHREDDED BARK MULCH AROUND EACH TREE IN 3' RADIUS CIRCLE (WHEN IN TURF)
10. 3x ROOTBALL DIA. MIN., W/ 45° SIDES



PLAN VIEW

B1 DOUBLE TREE STAKING

NTS

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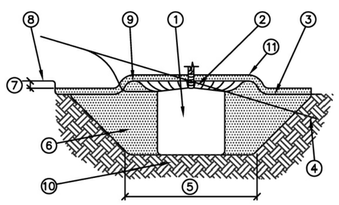

1. ROOTBALL
2. CROWN – 1"–2" ABOVE FINISH GRADE
3. FINISH GRADE
4. FINISH GRADE AT SLOPE (WHERE OCCURS)
5. 3X ROOTBALL DIA. PLUS 45° SIDES
6. BACKFILL MIX (SEE NOTES)
7. 2"
8. TOP OF PAVING
9. 3" HIGH WATERING BASIN
10. UNDISTURBED SOIL
11. 3" LAYER SHREDDED BARK MULCH AROUND EACH TREE IN 3' RADIUS CIRCLE (WHEN IN TURF)

A1 TREE / SHRUB PLANTING

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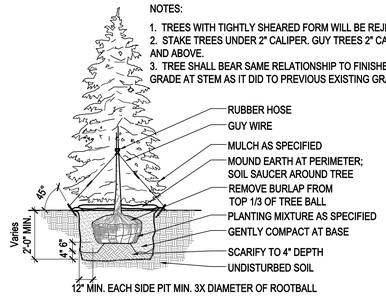
NOTES:

1. TREES WITH TIGHTLY SHEARED FORM WILL BE REJECTED.
2. STAKE TREES UNDER 2" CALIPER. GUY TREES 2" CALIPER AND ABOVE.
3. TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AT STEM AS IT DID TO PREVIOUS EXISTING GRADE.



A3 EVERGREEN PLANTING

NTS

L-DTPL-02

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WEBER STATE UNIVERSITY

HURST CENTER FOR LIFELONG LEARNING WEBER STATE UNIVERSITY

UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT- DFCM PROJECT NO. 07110810

SEAL

MHTN PROJECT NO: 20075556.00

DRAWN BY: STAFF CHECKED BY: MG

ISSUED:

NO.	DATE	DESCRIPTION
1	10/26/07	SCHEMATIC DESIGN
2	12/18/07	DESIGN DEVELOPMENT
3	02/08/08	CONSTRUCTION DOCUMENTS
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REVISIONS:

NO.	DATE	DESCRIPTION

PLANTING DETAILS

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

LP501

STRUCTURAL NOTES

A. GENERAL

1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT THE PROJECT SPECIFICATIONS WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS.
2. THE ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. THE STRUCTURAL DRAWINGS ARE SUPPLEMENTARY TO AND MUST BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONSULTANTS DRAWINGS. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
3. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER AS INDICATED IN SPECIFICATIONS. REVIEW OF SUBMITTALS BY ARW ENGINEERS IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO DESIGN DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE ARCHITECTURAL, STRUCTURAL, AND OTHER CONSULTANTS DRAWINGS.
4. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
5. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT OR OTHER EQUIPMENT BEFORE FABRICATING AND ERECTING STRUCTURAL ELEMENTS. SIZES AND LOCATIONS THAT DIFFER FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT.
6. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT FOR ARCHITECT AND/OR ENGINEER APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS OR SUBSTITUTIONS.
7. OBSERVATION VISITS TO THE SITE BY ARW ENGINEERS FIELD REPRESENTATIVES SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
8. DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON STRUCTURE WITHIN THE LIMITS OF DESIGN LOADS AS NOTED IN THESE DOCUMENTS.
9. SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER, TYPICAL OR SIMILAR DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN. TYPICAL OR SIMILAR DETAILS REFER TO THE CONDITION ADDRESSED AND ARE NOT NECESSARILY DETAILS LABELED "TYPICAL" OR "SIMILAR" IN THE PLANS AND DOCUMENTS.
10. DRAWINGS AND DETAILS HAVE BEEN PREPARED WITH THE INTENT TO VISUALLY REPRESENT INFORMATION PROVIDED IN SCALED FORM; HOWEVER CONTRACTOR/SUPPLIERS SHOULD NOT SCALE PLANS OR DETAILS FOR DIMENSIONAL INFORMATION.
11. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY SHORING AND BRACING FOR ALL STRUCTURAL ELEMENTS UNTIL THE ENTIRE STRUCTURAL SYSTEM IS COMPLETED. DESIGN OF ALL SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER.
12. ENGINEER SHALL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER CONTROL OF THE CONTRACTOR SUCH AS CONSTRUCTION SITE SAFETY, MEANS, METHODS, AND SEQUENCING OF CONSTRUCTION. ENGINEER SHALL NOT BE RESPONSIBLE FOR FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS AS PRESCRIBED BY OSHA OR OTHER REGULATORY AGENCIES REGARDLESS OF INDICATIONS IN THESE DOCUMENTS.

B. SPECIAL INSPECTION

1. SPECIAL INSPECTION SHALL BE PROVIDED BY AN INDEPENDENT AGENCY IN ACCORDANCE WITH IBC 1704 AND AS OUTLINED AND SCHEDULED IN THESE DOCUMENTS. CONTRACTOR SHALL COORDINATE AND COOPERATE WITH REQUIRED INSPECTIONS.
2. ITEMS REQUIRING SPECIAL INSPECTION ARE LISTED IN THE SPECIAL INSPECTION SCHEDULE.

C. BASIS OF DESIGN

1. GOVERNING BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC) 2006
   OCCUPANCY CATEGORY: 3
2. SUSPENDED FLOOR LOADS
   A. LIVE LOAD = 100 PSF AT CORRIDORS AND EXITS, 80 PSF ELSEWHERE
   B. DEAD LOAD = 70 PSF
3. ROOF LOADS
   A. FLAT-ROOF SNOW LOAD, Pf: 35 PSF
      (1) GROUND SNOW LOAD, Pg: 45.2 PSF
      (2) SNOW EXPOSURE FACTOR, Ce: 1.0
      (3) SNOW LOAD IMPORTANCE FACTOR, IS: 1.1
      (4) THERMAL FACTOR, Ct: 1.0
   B. DEAD LOAD = 20 PSF
4. WIND DESIGN:
   A. BASIC WIND SPEED (3 SECOND GUST): 90 MPH
   B. WIND IMPORTANCE FACTOR, IW: 1.15
   C. WIND EXPOSURE: C
   D. COMPONENT AND CLADDING DESIGN WIND PRESSURE SHALL BE AS REQUIRED PER ASCE 7-05.
5. SEISMIC DESIGN:
   A. SEISMIC IMPORTANCE FACTOR, IE: 1.25
   B. SITE CLASS: D
   C. SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.932 , SD1 = 0.584
   D. SEISMIC DESIGN CATEGORY: D
   E. BASIC SEISMIC-FORCE-RESISTING SYSTEM: INTERMEDIATE STEEL MOMENT RESISTING FRAMES.
   F. DESIGN BASE SHEAR: V = Cs * W
   G. SEISMIC RESPONSE COEFFICIENT, CS: 0.259
   H. RESPONSE MODIFICATION FACTOR, R: 4.5
   I. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE .
   J. NONSTRUCTURAL COMPONENTS AND THEIR ATTACHMENT SHALL BE DESIGNED AS REQUIRED PER ASCE 7-05.

D. FOUNDATION

1. DESIGN SOIL PRESSURE: 3000 PSF
2. SOILS REPORT BY: GSH GEOTECHNICAL CONSULTANTS, INC.
   REPORT #: 0149-007-07
   DATED: NOVEMBER 29, 2007 - INCLUDING THE SUPPLEMENT DATED JANUARY 11, 2008
3. SOIL PREPARATION UNDER FOOTINGS AND SLABS-ON-GRADE SHALL BE IN ACCORDANCE WITH THE SOILS REPORT.
4. TOP OF FOOTING ELEVATIONS SHOWN ON THE FOOTING AND FOUNDATION PLAN ARE BASED ON PRELIMINARY GRADING INFORMATION AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. STEPS WHERE SHOWN ARE AT APPROXIMATE LOCATIONS. ALL EXTERIOR FOOTINGS MUST BEAR A MINIMUM OF 30 INCHES BELOW LOWEST ADJACENT FINAL GRADE.
5. ALL WALLS (EXCEPT CANTILEVERED RETAINING WALLS) SHALL BE ADEQUATELY BRACED AGAINST LATERAL MOVEMENT PRIOR TO BACKFILLING. DESIGN AND ERECTION OF BRACING/SHORING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. BRACING SHALL REMAIN IN PLACE UNTIL SUPPORTING STRUCTURAL ELEMENTS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
6. UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS TO BE CENTERED BELOW COLUMNS.
7. UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.). WITH PRIOR APPROVAL OF ARCHITECT AND ENGINEER, CONCRETE FOR FOOTINGS CAN BE PLACED IN EXCAVATED "SOIL" FORMS PROVIDED THAT THE DIMENSIONS ARE INCREASED 3" ON EACH SIDE.

E. CONCRETE

1. ALL CONCRETE SHALL HAVE A DESIGN 28-DAY COMPRESSIVE STRENGTH AS FOLLOWS:

A.	GRAVITY FOOTINGS AND FOUNDATION WALLS:	3000 PSI
B.	GRADE BEAMS AND MOMENT FRAME FOOTINGS:	4000 PSI
C.	INTERIOR SUSPENDED SLABS	3000 PSI
D.	RETAINING WALLS:	4000 PSI
E.	EXTERIOR SLABS (DOCKS, ETC.):	4000 PSI
F.	INTERIOR SLABS ON GRADE:	3000 PSI

2. NO PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU STRUCTURAL CONCRETE ELEMENTS MUST BE APPROVED BY THE ENGINEER AND SHALL BE BUILT INTO THE ELEMENT PRIOR TO CONCRETE PLACEMENT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, ETC. TO BE CAST IN TO CONCRETE, AND FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
4. UNLESS OTHERWISE NOTED, MINIMUM REINFORCING IN ALL CONCRETE FOUNDATION WALLS SHALL BE AS FOLLOWS:

THICKNESS	TOP & BOTTOM BARS	VERTICAL	HORIZONTAL
6"	(1) #5	#4 AT 18" O.C.	#4 AT 16" O.C.
8"	(2) #5	#4 AT 18" O.C.	#4 AT 12" O.C.
10"	(2) #5	#4 AT 12" O.C.	#5 AT 12" O.C.
12"	(2) #5	#4 AT 18" O.C. EA FACE	#4 AT 16" O.C. EA FACE

5. UNLESS OTHERWISE NOTED CONCRETE SLABS ON EARTH SHALL BE REINFORCED AS FOLLOWS:
   4" THICK - UNREINFORCED.
6. UNLESS OTHERWISE NOTED, FOR OPENINGS LARGER THAN 12" IN ANY DIRECTION IN CONCRETE WALLS ADD (2) #5 BARS ALL SIDES IN ADDITION TO REGULAR WALL REINFORCING AND EXTEND 24" EACH WAY BEYOND OPENING. WHERE 24" IS NOT AVAILABLE, EXTEND BARS AS FAR AS POSSIBLE AND TERMINATE WITH A STANDARD HOOK.
7. CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE AND AS APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE 2 X 4 (SHAPED) KEYWAY IN ALL VERTICAL AND HORIZONTAL JOINTS UNLESS NOTED OR DETAILED OTHERWISE. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS UNLESS NOTED OTHERWISE. SEE TYPICAL DETAILS FOR COLD/CONSTRUCTION JOINTS FOR SLABS ON GRADE.

F. ANCHOR BOLTS/EMBEDDED BOLTS

1. ALL ANCHOR BOLTS SHALL HAVE ASTM A-563 HEAVY HEX NUT AND HARDENED WASHERS, GRADE A. ANCHOR BOLTS SHALL COMPLY WITH THE FOLLOWING:
   A. AT MOMENT RESISTING FRAMES - ASTM F1554 GRADE 105 HEADED BOLTS. (ASTM A449 THREADED ROD MAY BE USED WITH DOUBLE NUT AND WASHER)
   B. AT ALL OTHER ANCHOR BOLTS (UNLESS NOTED OTHERWISE) - ASTM F1554 GRADE 36 HEADED BOLTS. (ASTM A36 THREADED ROD MAY BE USED WITH DOUBLE NUT AND WASHER)
2. SEE TYPICAL ANCHOR BOLT DETAIL FOR DEFINITIONS OF EMBEDMENT LENGTH, ETC.
3. FURNISH TEMPLATES AND OTHER DEVICES AS NECESSARY FOR PRESETTING ALL BOLTS PRIOR TO PLACING CONCRETE AND/OR GROUT.
4. IF THREADED RODS ARE USED AS PERMITTED ABOVE, THEY SHALL BE CLEAR OF OIL AND DIRT.

G. SUSPENDED CONCRETE SLABS / SLABS ON METAL DECK

1. UNLESS OTHERWISE NOTED, ALL CONCRETE SLABS ON METAL DECK SHALL BE 6-1/2" TOTAL THICKNESS NORMAL WEIGHT CONCRETE WITH A WEIGHT LESS THAN 150 POUNDS PER CUBIC FOOT, REINFORCED WITH #3 @ 12" O.C. WHERE REINFORCING STEEL IS SHOWN ON THE PLANS IT SHALL BE CHAIRED TO 1" TOP COVER AT ALL BEAM LOCATIONS.
2. AROUND OPENINGS IN SUSPENDED CONCRETE SLABS, ADD REINFORCING BARS EQUIVALENT TO BARS CUT BY OPENING WITH HALF ON EACH SIDE OF OPENING. BARS PARALLEL TO PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF SPAN. BARS PARALLEL TO TEMPERATURE REINFORCING SHALL RUN 24" BEYOND OPENING.
3. ALL OPENINGS GREATER THAN 6" IN ANY DIRECTION IN CONCRETE FLOOR SLAB ON METAL DECK SHALL BE FRAMED ON 4 SIDES WITH STEEL ANGLES OR BENT PLATE (SEE TYPICAL DETAIL) UNLESS OTHERWISE NOTED.
4. EVERY EFFORT SHALL BE MADE TO PROVIDE A LEVEL FINISHED FLOOR WHILE MAINTAINING THE MINIMUM INDICATED SLAB THICKNESS.
5. CONTROL JOINTS IN SUSPENDED CONCRETE SLABS AND CONCRETE SLABS ON DECK SHALL NOT BE USED UNLESS SPECIFICALLY APPROVED AND DETAILED BY THE ENGINEER.
6. SEE TYPICAL DETAILS WHEN SLABS ARE MADE COMPOSITE WITH STEEL BEAMS.
7. ANY CONDUIT PLACED IN SLABS ON DECK SHALL BE SPACED NOT CLOSER THAN 18" O.C. CONDUIT LARGER THAN 3/4" DIAMETER SHALL BE PLACED IN DECK FLUTES, BUT MAY NOT BE PLACED IN FLUTES WITH REINFORCING STEEL OR HSA'S. NO CONDUIT LARGER THAN 1" IN DIAMETER SHALL BE PLACED IN SLABS ON DECK. CONDUIT CROSSOVERS ARE NOT ALLOWED AND A 1" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE DECK.
8. WHERE CONDUIT IS CLUSTERED TOGETHER TO RISE ABOVE SLAB OR PENETRATE SLAB, PENETRATION IN SLAB MUST BE SUPPORTED AS NOTED IN NOTE G.3 ABOVE.
9. CONTRACTOR SHALL PROVIDE ALL TEMPORARY SHORING, BRACING, AND GUYING AS REQUIRED DURING ERECTION AND PLACEMENT OF SUSPENDED CONCRETE SLABS ON METAL DECK.

H. REINFORCING STEEL

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60 . ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 315, TO MAINTAIN EXACT REQUIRED POSITION.
2. ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACINGS INDICATED REDUCED BY 1/3.
3. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
   A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.......3"
   B. EXPOSED TO EARTH OR WEATHER:
      (1) #6 & LARGER .... 2"
      (2) #5 & SMALLER........... 1-1/2"
   C. NOT EXPOSED TO WEATHER OR EARTH:
      (1) SLABS, WALLS, JOISTS, #11 & SMALLER............3/4"
      (2) BEAMS, COLUMNS: MAIN REINFORCING OR TIES.......1-1/2"
   D. SLAB ON GRADE:
      (1) PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE.
4. EXCEPT WHERE NOTED ON PLANS OR DETAILS CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT POINTS OF MINIMUM STRESS BY LAPPING PER THE REBAR LAP SCHEDULE.
5. REINFORCING STEEL MAY BE SPLICED WITH MECHANICAL COUPLERS THAT HAVE A TENSION CAPACITY OF AT LEAST 125% OF THE STRENGTH OF THE BAR. MECHANICAL COUPLERS SHALL BE A POSITIVE CONNECTING TYPE COUPLER, AND SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED ICC RESEARCH REPORT. WHERE THESE ARE USED, SPLICES ON ADJACENT BARS SHALL BE STAGGERED AT LEAST 24 INCHES ALONG THE LENGTH OF THE BARS.
6. ALL VERTICAL REINFORCING SHALL BE SPLICED WITH MATCHING DOWELS EMBEDDED WITHIN THE FOOTINGS OR STRUCTURE BELOW. SPLICE LENGTHS SHALL COMPLY WITH REBAR LAP SCHEDULE. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NOT MORE THAN 20" INTO FOOTING.
7. DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS. WHERE REINFORCING IS WELDED, USE ASTM A-706 REINFORCING.
8. REINFORCING BARS, TIES, AND TENDONS SHALL BE SUPPORTED BY NYLON CONES, PLASTIC-COATED TIE-WIRES, OR PLASTIC-COATED CHAIRS.
9. UNLESS NOTED OTHERWISE, HOOKS, STIRRUPS, TIES, AND OTHER BENDS IN REINFORCING STEEL SHALL MEET THE STANDARDS SET FORTH IN ACI 318/318R-05. UNLESS OTHERWISE PERMITTED BY THE ENGINEER, ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN ON THESE DRAWINGS OR OTHERWISE PERMITTED BY THE ENGINEER.
10. UNLESS SPECIFICALLY NOTED AND/OR DETAILED IN THE STRUCTURAL DRAWINGS CONDUIT SHALL NOT BE IN CONTACT WITH REINFORCING STEEL.

I. STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:
   A. ANSI/AISC 360-05 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY" AND "SUPPLEMENTS" AS REQUIRED BY BUILDING CODE.
   B. AISC 303-05 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCLUDING THE FOLLOWING SECTIONS: 4.4, 4.4.1, AND 4.4.2.
   C. AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
   D. AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
   E. AWS D1.1 AND 1.3, "STRUCTURAL WELDING CODE" (EXCEPT SPECIFIC ITEMS DO NOT APPLY IF THEY CONFLICT WITH AISC).
   F. ANSI/AISC 341-05 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS"
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING:
   A. WIDE FLANGE SHAPES - ASTM A992
   B. OTHER SHAPES AND PLATES - ASTM A-36 (UNO)
   C. TUBES (TS) AND HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A-500, GRADE B (FY = 46 KSI)
   D. PIPE COLUMNS - ASTM A-53, GRADE B TYPE E OR S
   E. DEFORMED BAR ANCHORS (DBA) - ASTM A-496, WELDED IN ACCORDANCE WITH AWS D1.1
   F. HEADED STUD ANCHORS (HSA) - ASTM A-108, GRADE 1015 STEEL AND WELDED IN ACCORDANCE WITH AWS D1.1 FOR TYPE "B". USE 3/4" DIAMETER STUDS, UNLESS OTHERWISE NOTED.
   G. THREADED ROD - ASTM A-449
3. CONNECTIONS SHALL COMPLY WITH THE STRUCTURAL DRAWINGS UNLESS WRITTEN APPROVAL TO CHANGE IS GIVEN BY THE STRUCTURAL ENGINEER.
4. ALL SHOP FABRICATIONS SHALL BE PERFORMED BY AN APPROVED FABRICATOR IN ACCORDANCE WITH SECTIONS 1702 AND 1704 OF THE IBC OR WITH SHOP INSPECTION BY AN INDEPENDENT AGENCY IN ACCORDANCE WITH SECTION 1704.2 OF THE IBC.
5. WELDING
   A. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION).
   B. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE. E-60XX MAY BE USED FOR WELDING STEEL DECKS.
   C. ALL INTERSECTING STEEL SHAPES WHICH ARE NOT CONNECTED WITH BOLTS SHALL BE WELDED TOGETHER WITH A FILLET WELD ALL AROUND UNLESS NOTED OTHERWISE. WHERE WELD SIZES ARE NOT SHOWN USE THE FOLLOWING: 1) WHERE ALL CONNECTED PARTS ARE THICKER THAN 1/4", WELD IS 1/16" LESS THAN THE THICKNESS OF THE THINNEST PART. 2) WHERE ANY OF THE CONNECTED PARTS IS LESS THAN 1/4" THICK, WELD IS SAME AS THICKNESS OF THE THINNEST PART.
   D. WELDING OF HSA'S AND DBA'S SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
   E. WHEREVER POSSIBLE, WELDS SHALL BE SHOP WELDS. SPECIAL CONSIDERATIONS, SUCH AS ITEMS WHICH MAY NEED ADJUSTMENT AT THE SITE, REQUIRE THAT SOME WELDS BE FIELD WELDS. WHERE QUESTIONS OR DISCREPANCIES OCCUR THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN THE SHOP FABRICATOR AND THE STEEL ERECTOR.
6. BOLTING
   A. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL TO STEEL CONNECTIONS SHALL USE HIGH STRENGTH BOLTS CONFORMING TO ASTM A-325.
   B. UNLESS NOTED OTHERWISE ALL BOLTING IS CLASSIFIED AS NON-SLIP CRITICAL BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. TIGHTEN BOLTS TO A SNUG TIGHT CONDITION, WITH ALL PLIES OF THE JOINT IN FIRM CONTACT.
   C. AT OVERSIZED AND SLOTTED HOLES, WASHERS SHALL CONFORM TO ASTM F-436 AND COMPLETELY COVER THE HOLE.
   D. WHERE A STEEL BEAM TO BEAM CONNECTION IS NOT SHOWN, PROVIDE AN AISC STANDARD FRAMED CONNECTION SIZED FOR 1/2 OF THE TOTAL LOAD CAPACITY OF THE BEAM FOR THE SPAN AND STEEL SPECIFIED.
7. METAL DECKING
   A. UNLESS NOTED OTHERWISE, METAL ROOF DECK SHALL BE 22 GAUGE PAINTED STEEL, TYPE B. SEE ROOF DECK SCHEDULE FOR ATTACHMENTS.
   B. UNLESS NOTED OTHERWISE, METAL FLOOR DECK SHALL BE 20 GAUGE PAINTED STEEL COMPOSITE, W-3. UNLESS NOTED OTHERWISE, ATTACH TO SUPPORTING STRUCTURE WITH 3/4" DIAMETER WELDS AT 24" MAXIMUM SPACING. ATTACH SIDE SEAMS WITH BUTTON PUNCH OR SIDE SEAM SCREWS AT 24" MAXIMUM SPACING. AN H.S.A. FIELD-WELDED THROUGH THE DECK MAY SUBSTITUTE FOR A PUDDLE WELD.
   C. ALL DECK SHALL BE CONTINUOUS OVER 3-SPANS. WHERE NOT POSSIBLE, THE DECK SUPPLIER/CONTRACTOR SHALL PROVIDE HEAVIER GAUGE DECK AS NEEDED TO PROVIDE THE EQUIVALENT PERFORMANCE OF THE SPECIFIED DECK WITH 3-SPAN CONTINUITY.
   D. SEE TYPICAL DETAILS FOR SUPPORT OF DECK AT OPENINGS.
   E. PROVIDE L2"X2"X3/16" FOR DECK SUPPORT AT LOCATIONS WHERE COLUMNS EXTEND THROUGH DECK.
   F. PAINTED STEEL DECK SHALL CONFORM TO ASTM A1008 AND GALVANIZED STEEL DECK SHALL CONFORM TO A653 GRADE G60.
   G. BUILDING ELEMENTS MAY BE SUPPORTED BY HANGING DIRECTLY FROM METAL DECKING, PROVIDED THAT THE TOTAL WEIGHT PER CONNECTION IS LESS THAN 50 LBS AND THAT THE ATTACHMENT TO THE DECKING IS DISTRIBUTED ACROSS AT LEAST TWO RIBS AND SPACED AT LEAST 6 FT. APART IN ANY DIRECTION.
8. PROVIDE FULL DEPTH WEB STIFFENER PLATES AT EACH SIDE OF STEEL BEAMS AT ALL BEARING (EXCEPT SECONDARY FRAMING) POINTS. STIFFENER PLATES SHALL BE THICKNESS SHOWN UNLESS OTHERWISE NOTED AND SHALL BE WELDED BOTH SIDES WITH FILLET WELDS ALL AROUND.

FLANGE WIDTH	STIFFENER THICKNESS	WELD THICKNESS
< 8 1/4"	1/4"	3/16"
8 1/4" < BF < 12 1/2"	3/8"	1/4"
12 1/2" < BF < 18"	1/2"	5/16"

9. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
10. WHEN DETERMINING THE FIRE RESISTANCE OF ASSEMBLIES, USE THE FOLLOWING: STEEL ROOF FRAMING MEMBERS ARE CONSIDERED UN-RESTRAINED AND STEEL FLOOR FRAMING MEMBERS ARE CONSIDERED RESTRAINED.

J. MOMENT FRAMES

1. STRUCTURAL STEEL IN MOMENT FRAMES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE SPECIFICATIONS NOTED IN THE STRUCTURAL STEEL NOTES ABOVE TO INCLUDE THE FOLLOWING:
   A. AISC 341 - RECOMMENDED SPECIFICATIONS AND QUALITY ASSURANCE GUIDELINES FOR STEEL MOMENT-FRAME CONSTRUCTION FOR SEISMIC APPLICATIONS.
2. STRUCTURAL STEEL IN MOMENT FRAMES SHALL COMPLY WITH THE REQUIREMENTS NOTED IN THE STRUCTURAL STEEL NOTES ABOVE TO INCLUDE THE FOLLOWING:
   A. ALL SHAPES OF GROUP 3 (WITH FLANGES THICKER THAN 1-1/2"), GROUP 4 AND GROUP 5, AS WELL AS ALL PLATES 2" AND THICKER, THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM SHALL HAVE CHARPY V-NOTCH ABSORBED ENERGY OF AT LEAST 20 FT-LBS. AT 70 DEGREES F.
3. BOLTED CONNECTIONS IN MOMENT FRAMES SHALL CONFORM TO AISC 358 FASTENER AND TIGHTENING REQUIREMENTS. ALL BOLTS IN MOMENT FRAMES SHALL BE INSPECTED AND TESTED.
4. WELDED CONNECTIONS BETWEEN THE PRIMARY MEMBERS OF MOMENT FRAMES SHALL BE TESTED FOR COMPLIANCE ACCORDING TO IBC TABLE 1704.3 AND THE CONTRACT SPECIFICATIONS AND PLANS. INSPECTION SHALL BE DONE BY A QUALIFIED TESTING INSPECTOR. AS A MINIMUM, THE TESTING SHALL INCLUDE THE FOLLOWING:
   A. ALL COMPLETE PENETRATION GROOVE WELDS CONTAINED IN JOINTS AND SPLICES SHALL BE TESTED 100% EITHER BY ULTRASONIC TESTING OR BY RADIOGRAPHY.
   B. BASE METAL THICKER THAN 1-1/2", WHEN SUBJECTED TO THROUGH THICKNESS WELD SHRINKAGE STRAINS SHALL BE ULTRASONICALLY INSPECTED FOR DISCONTINUITIES DIRECTLY BEHIND SUCH WELDS AND THREE INCHES ABOVE AND BELOW THE WELD AFTER JOINT ASSEMBLY COMPLETION.
   C. ANY MATERIAL DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF THE DEFECT RATING IN ACCORDANCE WITH THE UBC STANDARDS AS IT REFERS TO THE TESTING IN AWS D1.1 CHAPTER 6, EXCLUDING SECTIONS 6.1 THROUGH AND INCLUDING 6.6. ALL DEFICIENT WELDS SHALL BE CORRECTED AND TESTED AT NO ADDITIONAL COST TO THE OWNER.
5. ALL FULL PENETRATION WELDS USED IN MOMENT FRAMES ARE CONSIDERED DEMAND CRITICAL AND THE FOLLOWING SPECIAL PROVISION APPLY: WELDING METHODS, PROCEDURES AND QUALITY CONTROL SHALL COMPLY WITH AWS D1.1 AND THE FOLLOWING:
   A. TACK WELD QUALITY SHALL COMPLY WITH SECTION 5.18.
   B. ARC STRIKES, GOUGES AND OTHER IMPERFECTIONS WITHIN OR ADJACENT TO THE JOINT, SHALL BE REPAIRED OR REMOVED.
   C. PREHEAT AND INTER-PASS REQUIREMENTS AS OUTLINED IN SECTION 3.5.
   D. UNREPAIRED CRACKS, GOUGES, GROOVES AND NOTCHES WILL NOT BE PERMITTED IN THE JOINT AREA.
   E. USE ELECTRODES WITH CHARPY V-NOTCH ABSORBED ENERGY EQUAL TO OR GREATER THAN 20 FT-LBS AT 0 DEGREES FAHRENHEIT UNDER AWS A5 CLASSIFICATION TEST METHODS, AND 40 FT-LBS AT 70 DEGREES FAHRENHEIT USING TEST PROCEDURES PRESCRIBED IN APPENDIX X OF AISC 358. ACCEPTABLE ELECTRODES INCLUDE E70TG-K2, E71T-8, AND E71T-1.

K. OPEN WEB JOISTS AND GIRDERS

1. ALL OPEN WEB STEEL JOISTS AND GIRDERS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD SPECIFICATIONS AND CODE OF STANDARD PRACTICE" OF THE STEEL JOIST INSTITUTE.
2. CONCENTRATED POINT LOADS (NOT SPECIFICALLY SHOWN ON THE PLANS) OF LESS THAN 200 LBS FOR MECHANICAL UNITS, FIRE SPRINKLER MAINS, AND OTHER EQUIPMENT SUPPORTED FROM JOISTS SHALL BE SUPPORTED WITHIN 6" OF A CHORD PANEL POINT. SUPPORT BEYOND PANEL POINTS CAN BE PROVIDED BY ADDING (2) L2"X2"X1/4" DIAGONALS TO THE NEAREST OPPOSITE CHORD PANEL POINT. LOADS SHALL BE SPACED AT LEAST 6 FEET APART WITH NO MORE THAN 4 PER JOIST. SEE JOIST FABRICATOR FOR ADDITIONAL REQUIREMENTS.
3. ANY BRACING REQUIRED FOR MISCELLANEOUS ITEMS (I.E. DUCTWORK, PIPING, ETC.) MUST CONNECT TO THE TOP CHORD OF THE JOIST OR GIRDER. BRACING TO THE BOTTOM CHORD IS NOT ALLOWED UNLESS SPECIFICALLY DETAILED THAT WAY ON THE PLANS.
4. PROVIDE SPECIAL BEARING ENDS AS REQUIRED AT SLOPED BEARING CONDITIONS. CONTRACTOR SHALL COORDINATE WITH OTHER STRUCTURAL ELEMENTS
5. ALL JOISTS SHALL BE CAMBERED PER SJI SPECIFICATIONS, UNO.
6. FIELD MODIFICATIONS (INCLUDING HOLES IN THE CHORD OR WEB MEMBERS) SHALL NOT BE MADE TO ANY JOIST OR GIRDER WITHOUT PRIOR APPROVAL BY THE MANUFACTURER.
7. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
8. JOIST BRIDGING SHALL BE PROVIDED AS REQUIRED BY THE JOIST MANUFACTURER AND SJI STANDARDS. BRIDGING WHERE SHOWN ON THE STRUCTURAL DRAWINGS IS A SCHEMATIC REPRESENTATION ONLY. SEE JOIST MANUFACTURER FOR BRIDGING SIZE, CONNECTIONS, TYPE AND QUANTITY.
9. WHERE ADDED LOADS ARE SHOWN ON THE JOISTS BUT NOT SPECIFICALLY DIMENSIONED, THE JOIST DESIGNER SHALL PLACE THOSE LOADS ON THE JOIST AT A LOCATION THAT RESULTS IN THE HIGHEST STRESS IN THE MEMBERS. THE DESIGNER MAY ASSUME THAT THE LOAD OCCURS WITHIN 10 FEET OF A SCALED DIMENSION.
10. FABRICATOR MUST SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL PER IBC 2206.5.

L. MASONRY VENEER

1. MASONRY VENEER SHALL BE ANCHORED AS FOLLOWS :
   MASONRY VENEER SHALL BE ANCHORED USING THE DUR-O-WALL VENEER ANCHOR ASSEMBLY SYSTEM, OR AN APPROVED EQUAL. REGARDLESS OF BACK-UP SYSTEM, PROVIDE A CONTINUOUS HORIZONTAL 9 GAUGE WIRE AT 16" O.C. IN VENEER MORTAR JOINTS FOR ANCHOR ATTACHMENT. POSITIVE ANCHORAGE TO THE WIRE SHALL BE PROVIDED TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL, WITH A HORIZONTAL SPACING NOT EXCEEDING 18".
   A. METAL STUDS; USE DUR-0-WALL D/A 213 HEAVY DUTY ANCHORS OR AN APPROVED EQUAL. THE DUR-O-WALL ASSEMBLY SHALL BE ATTACHED TO METAL STUDS USING #10 SCREWS.

M. DEFERRED SUBMITTALS

1. DEFERRED SUBMITTALS ARE COMPLETE PACKAGES TO BE SUBMITTED FOR REVIEW THAT INCLUDE DRAWINGS AND CALCULATIONS FOR ALL ELEMENTS AND CONNECTIONS OF ITEMS LISTED BELOW. DEFERRED SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF THE DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN.
2. DEFERRED SUBMITTAL COMPONENTS SHALL NOT BE INSTALLED UNTIL APPROVED BY THE BUILDING OFFICIAL.
3. DEFERRED SUBMITTALS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
   A. OPEN WEB JOISTS & GIRDERS
   B. COLD FORMED STEEL STUDS / JOIST / TRUSSES.
   C. STRUCTURAL STEEL STAIRS.
   D. AGGREGATE PIER SOIL REINFORCEMENT.

N. STATEMENT OF SPECIAL INSPECTIONS

1. THE DESIGNATED SEISMIC/WIND SYSTEMS AND SEISMIC/WIND-FORCE-RESISTING SYSTEMS THAT ARE SUBJECT TO SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.1 ARE IDENTIFIED IN THE SEISMIC/WIND-FORCE-RESISTING SYSTEM KEY-PLAN ON SHEET SG601. OTHER ITEMS, DETAILS, AND SYSTEMS SUBJECT TO SPECIAL INSPECTIONS ARE ALSO IDENTIFIED ON THESE DOCUMENTS WITH A CIRCLE "L".
2. SPECIAL INSPECTIONS AND TESTING ARE TO BE PROVIDED AS REQUIRED BY IBC SECTIONS 1704 AND 1708 AND OTHER APPLICABLE SECTIONS OF THE IBC. ITEMS REQUIRING SPECIAL INSPECTION ARE IDENTIFIED IN THE SPECIAL INSPECTION SCHEDULE ON SHEET SG601. THE TYPE AND FREQUENCY OF TESTING AND SPECIAL INSPECTIONS SHALL BE AS NOTED IN THE SPECIAL INSPECTION SCHEDULE, THE JOB SPECIFICATIONS, AND IN ACCORDANCE WITH IBC SECTION 109 AND CHAPTER 17.
3. ALL TESTING AND SPECIAL INSPECTION SHALL BE PROVIDED BY A QUALIFIED SPECIAL INSPECTION AGENCY EMPLOYED AS OUTLINED IN THE JOB SPECIFICATIONS. REPORTS OF FINDINGS OR DISCREPANCIES SHALL BE NOTED AND FORWARDED TO THE CONTRACTOR, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL IN A TIMELY MANNER.
4. STRUCTURAL OBSERVATION VISITS SHALL BE PERFORMED BY A REPRESENTATIVE FROM ARW ENGINEERS IN ACCORDANCE WITH THE CONTRACT AS NEEDED TO OBSERVE THE CONSTRUCTION OF CRITICAL BUILDING ELEMENTS (I.E., FOOTINGS, MOMENT FRAMES, DRAG STRUTS AND THEIR CONNECTIONS, COLLECTORS, AND ROOF AND FLOOR DIAPHRAGMS). STRUCTURAL OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT FOR DISTRIBUTION TO THE CONTRACTOR AND BUILDING OFFICIAL. STRUCTURAL OBSERVATION VISITS SHALL NEITHER BE CONSTRUED AS SPECIAL INSPECTION NOR APPROVAL OF COMPLETED CONSTRUCTION.
5. IN ACCORDANCE WITH IBC SECTION 1706.1, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO CONSTRUCTION OF ANY SEISMIC/WIND-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC/WIND SYSTEM, OR COMPONENT IDENTIFIED IN THIS QUALITY ASSURANCE PLAN AND AS NOTED ON THE PLANS WITH A CIRCLE "L".

LEGEND OF SYMBOLS AND ABBREVIATIONS

AB	=	ANCHOR BOLT
ABV	=	ABOVE
ARCH	=	ARCHITECT
BLW	=	BELOW
BN	=	BOUNDRY NAILING
℄	=	CENTER LINE
CMU	=	CONCRETE MASONRY UNIT
COL	=	COLUMN
CONC	=	CONCRETE
DBA	=	DEFORMED BAR ANCHOR
DBE	=	DECK BEARING ELEVATION
ELEV	=	ELEVATION
EN	=	EDGE NAILING
FDN	=	FOUNDATION
FTG	=	FOOTING
FFE	=	FINISHED FLOOR ELEVATION
HSA	=	HEADED STUD ANCHOR
JBE	=	JOIST BEARING ELEVATION
MIN	=	MINIMUM
MAX	=	MAXIMUM
MECH	=	MECHANICAL
MEZZ	=	MEZZANINE
OAE	=	OR APPROVED EQUAL
OPP	=	OPPOSITE
℘	=	PLATE
REINF	=	REINFORCING
REQ	=	REQUIRED
SIM	=	SIMILAR
TOF	=	TOP OF FOOTING
TOB	=	TOP OF BEAM ELEVATION
TOM	=	TOP OF MASONRY ELEVATION
TOC	=	TOP OF CONCRETE SLAB
TOG	=	TOP OF GIRDER ELEVATION
TOS	=	TOP OF STEEL ELEVATION
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
NS, FS	=	NEAR SIDE, FARSIDE

FOOTING MARK
TOP OF FOOTING ELEV.
SECTION MARK
SHEET NUMBER
TOP OF FOUNDATION WALL OR COLUMN PIER ELEV.
SHEAR WALL - SEE SCHEDULE
MIN. LENGTH OF SHEAR WALL
FOOTING STEP
MASONRY WALL
DEPRESS FDN./WALL AND POUR FLOOR SLAB OVER
MASONRY BEAM
CONCRETE BEAM
WOOD BEAM
ELEVATION
HD - SIMPSON HOLD DOWN SIZE
POST - SIZE OF END POST CONNECTED TO HD
"A" - PLAN CONFIGURATION @ HD @ FOUNDATION
FRAMING ANGLE SEE TYPICAL DETAIL
FRAMING CHANNEL SEE TYPICAL DETAIL
ITEMS, DETAILS AND SYSTEMS PART OF THE LATERAL FORCE RESISTING SYSTEM.
MOMENT RESISTING CONNECTION

STRUCTURAL SHEET INDEX

SHEET NO.	SHEET TITLE
SG001	**STRUCTURAL NOTES**
SG601	STRUCTURAL SCHEDULES
SB101	**FOOTING / FOUNDATION PLAN**
SB501	DETAILS
SF101	FIRST FLOOR FRAMING PLAN
SF102	**SECOND FLOOR FRAMING PLAN**
SF102.A	ADD ALTERNATE - PATIO
SF103	ROOF FRAMING PLAN
SF201	MOMENT FRAME DETAILS
SF301	CHIMNEY FRAMING AND DETAILS
SF501	DETAILS
SF502	DETAILS

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WEBER STATE UNIVERSITY

HURST CENTER FOR LIFELONG LEARNING
WEBER STATE UNIVERSITY

UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Achter
No. 353467
STATE OF UTAH

MHTN PROJECT NO. 2007556.00
DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/26/07	SCHEMATIC DESIGN
#2	12/18/07	DESIGN DEVELOPMENT
#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

STRUCTURAL NOTES

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER
SG001

ROOF DECK SCHEDULE

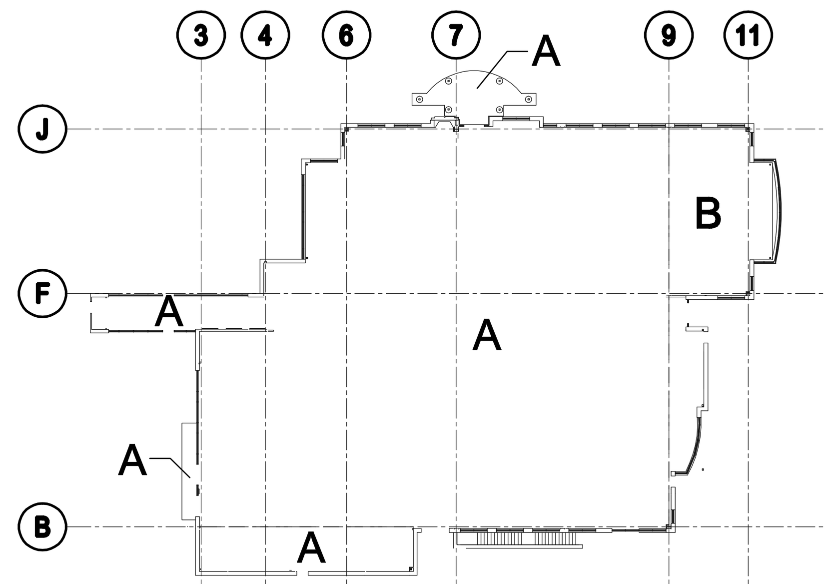
AREA	DECK			ATTACHMENT							MIN. SHEAR CAPACITY
				SUPPORTS		SIDE SEAMS			SUPPORTS PARALLEL TO FLUTES		
	DEPTH	TYPE	GA.	DIA. WELD	PATTERN	#12 TEK SCREWS	TOP SEAM WELD	PUNCH LOCK(7)	DIA. WELD	SPA.	
A	1 1/2	B	22	3/4"	36/7	–	—	24"o.c.	3/4"	12"	620 plf
B	1 1/2	B	22	3/4"	36/7	–	—	8"o.c.	3/4"	12"	784 plf

FASTENING PATTERNS

WELD PATTERN : 36/7

NOTES :

1. TOP SEAM WELDS SHALL BE 1 1/2" LONG AND SHALL BE ACCORDING TO SDI STANDARDS.
2. MIN. SHEAR CAPACITY IS THE CAPACITY REQUIRED FOR ALTERNATE SYSTEMS.
3. USE NESTABLE (OVERLAPPING) SIDE SEAMS AT SCREW ATTACHMENTS AND INTERLOCKING SIDE SEAMS AT WELDS.
4. N DECK END BUTT JOINTS OVER STEEL JOISTS SHALL USE 16 GA. x 6" CONTINUOUS SHEET BETWEEN DECK AND JOIST TOP CHORD ANGLES. DECK WELDS TO PENETRATE SHEET AND ENGAGE JOIST CHORD.
5. ALL DECK WITH A PROFILE DEPTH OF 2" OR LESS SHALL HAVE NESTED OR TELESCOPED END LAPS.
6. SUBMIT CURRENT ICBO APPROVAL FOR ALL DECKS.
7. OTHER PNUEMATIC FASTENING SYSTEMS MUST MEET MIN. SHEAR CAPACITY SHOWN IN SCHEDULE. ALL ALTERNATE SYSTEMS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW & APPROVAL.



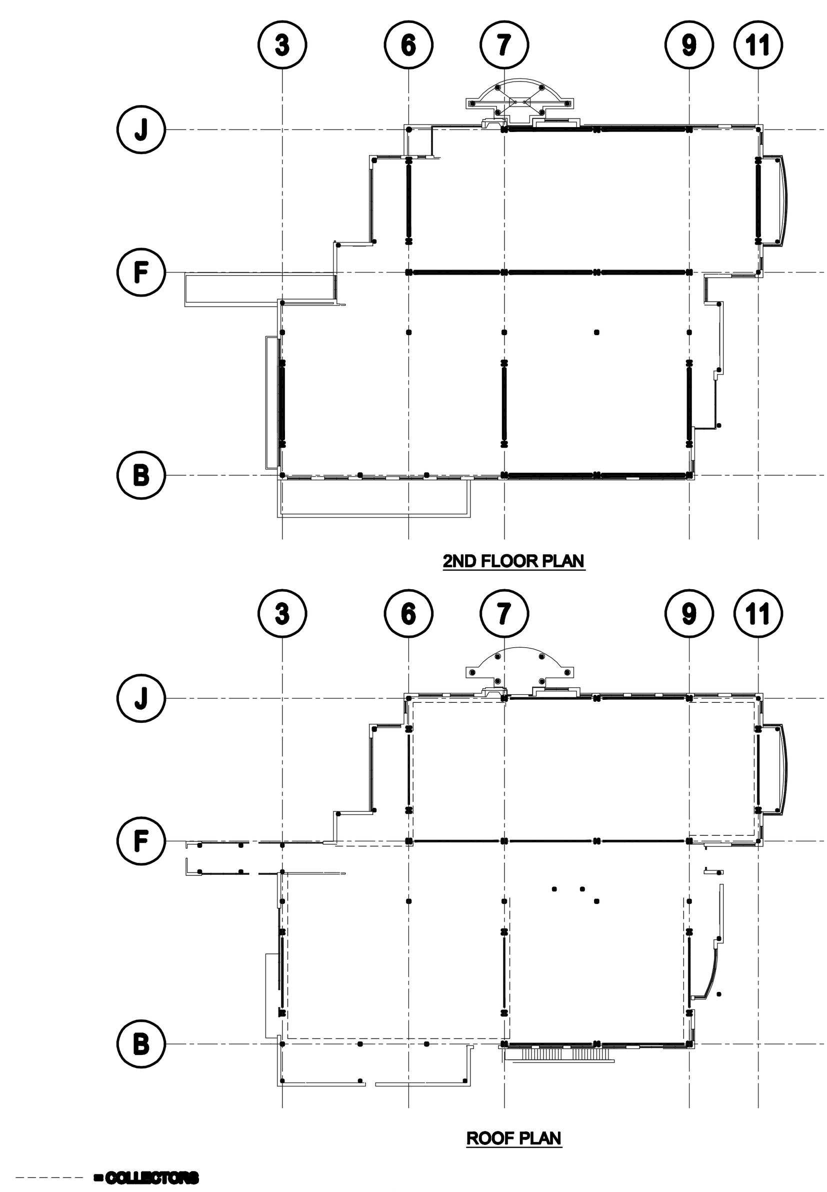
KEY PLAN

QUALITY ASSURANCE PLAN

ESTABLISHED PER 2006 IBC SECTION 1705.2

ITEM	DESCRIPTION
SPECIAL INSPECTIONS & TESTING	REFER TO SPECIAL INSPECTION SCHEDULE
STRUCTURAL OBSERVATIONS	OBSERVATION VISITS SHALL BE PERFORMED AS NEEDED TO VERIFY THE CONSTRUCTION OF CRITICAL BUILDING ELEMENTS, SUCH AS: FOOTINGS, MOMENT FRAMES, COLLECTORS, AND FLOOR & ROOF DIAPHRAGMS. OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT FOR DISTRIBUTION TO THE CONTRACTOR AND BUILDING OFFICIAL.

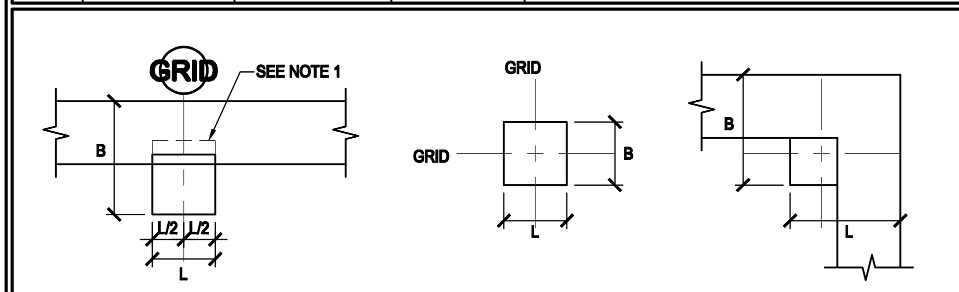
DESIGNATED SIESMIC & MAIN WIND-FORCE-RESISTING SYSTEM



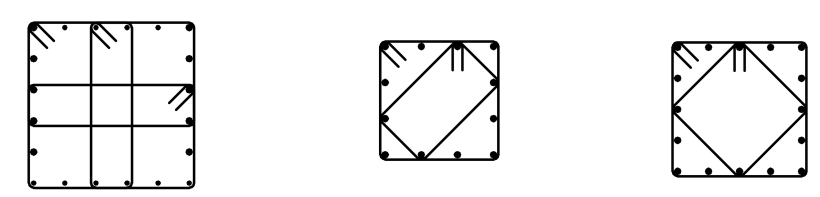
MOMENT FRAME KEY PLAN

CONCRETE PIER SCHEDULE

MARK	SIZE (B x L)	VERT REINF. (NOTE 2)	TIES	COMMENTS
CP-1	20" x 20"	(14) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-2	18" x 18"	(12) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-3	16" x 16"	(12) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-4	24" x 24"	(20) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-5	30" x 20"	(16) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-6	24" x 17"	(14) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-7	20" x 17"	(12) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-8	22" x 20"	(14) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-9	21" x 21"	(14) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-10	24" x 22"	(16) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-11	22" x 22"	(16) #5	#3 @ 8"	(3) TIES IN TOP 5"
CP-12	28" x 28"	(16) #5	#3 @ 8"	(3) TIES IN TOP 5"



PIER AT WALL   ISOLATED PIER   PIER AT CORNER



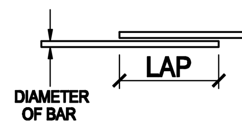
20 VERTS   12 VERTS   14 OR 16 VERTS

NOTES

1. WHERE T.O. PIER IS LOWER THAN T.O. FOUND. WALL, BLOCK OUT FOUND. WALL AS REQ'D FOR BASE PLATE CLEARANCE
2. VERTICAL PIER REINFORCING TO BE UNIFORMLY SPACED AROUND PERIMETER, 2" CLEAR FROM OUTSIDE OF PIER
3. TOP OF PIER ELEVATION IS 99'-6" EXCEPT WHERE OTHERWISE NOTED ON PLANS THUSLY

2006 IBC REBAR LAP SPLICE SCHEDULE

FOR CONCRETE APPLICATIONS (ACI 318 - 05)



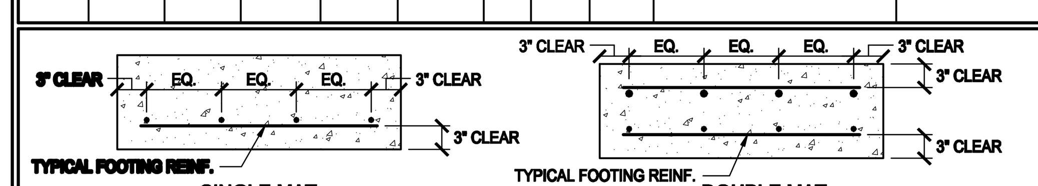
BAR SIZE		f'c = 3000 PSI				f'c = 4000 PSI			
		TYP. SPLICES		TOP BAR SPLICES		TYP. SPLICES		TOP BAR SPLICES	
NO.	DIA.	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'
2	0.250	12"	16"	15"	19"	12"	16"	13"	17"
3	0.375	17"	22"	22"	28"	15"	19"	19"	25"
4	0.500	22"	29"	29"	38"	19"	25"	25"	33"
5	0.625	28"	36"	36"	47"	24"	31"	31"	41"
6	0.750	33"	43"	43"	56"	29"	37"	37"	49"
7	0.875	48"	63"	63"	81"	42"	54"	54"	71"
8	1.000	55"	72"	72"	93"	48"	62"	62"	81"
9	1.128	62"	80"	80"	105"	54"	70"	70"	91"
10	1.270	69"	89"	89"	116"	60"	78"	78"	101"
11	1.410	76"	98"	98"	128"	66"	85"	85"	111"

NOTES:

1. ALL LAP SPLICE LENGTHS ARE CLASS 'A' UNLESS NOTED OTHERWISE.
2. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICED SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24".
3. CONCRETE LAP LENGTHS SHALL BE INCREASED BY 20% WHERE EPOXY COATING IS USED.
4. TOP BAR IS ANY HORIZONTAL BAR WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW IT.

FOOTING SCHEDULE [1.]

MARK	WIDTH	LENGTH	THICK	LENGTHWISE REINF.		CROSSWISE REINF.			MIN. THICKNESS OF REPLACEMENT GRANULAR FILL[2]	REMARKS
				NO.	SIZE	NO.	SIZE	SPA.		
FC2	2'-0"	CONT.	12"	(2)	#5	–	–	–	O FEET	
FC2.5	2'-6"	CONT.	12"	(2)	#5	–	–	–	O FEET	
FC3	3'-0"	CONT.	14"	(3)	#6	–	#3	24"	O FEET	
FC3.5	3'-6"	CONT.	12"	(3)	#5	–	#3	24"	O FEET	
FC8	8'-0"	CONT.	16"	(8)	#6	–	#3	12"	O FEET	
F3	3'-0"	3'-0"	12"	(3)	#4	(3)	#4	–	O FEET	
F3.5	3'-6"	3'-6"	12"	(3)	#5	(3)	#5	–	O FEET	
F4	4'-0"	4'-0"	12"	(4)	#5	(4)	#5	–	O FEET	
F4.5	4'-6"	4'-6"	12"	(4)	#5	(4)	#5	–	O FEET	
F5	5'-0"	5'-0"	14"	(5)	#5	(5)	#5	–	O FEET	
F5.5	5'-6"	5'-6"	14"	(5)	#6	(5)	#6	–	O FEET	
F6	6'-0"	6'-0"	16"	(6)	#6	(6)	#6	–	1.5 FEET	
F6.5	6'-6"	6'-6"	18"	(6)	#6	(6)	#6	–	1.5 FEET	
F7	7'-0"	7'-0"	18"	(7)	#6	(7)	#6	–	1.5 FEET	
F7.5	7'-6"	7'-6"	20"	(7)	#7	(7)	#7	–	2.5 FEET	
F8	8'-0"	8'-0"	24"	(8)	#7	(8)	#7	–	2.5 FEET	
F8.5	8'-6"	8'-6"	22"	(8)	#7	(8)	#7	–	3.5 FEET	
F9	9'-0"	9'-0"	24"	(9)	#7	(9)	#7	–	3.5 FEET	
F9.5	9'-6"	9'-6"	24"	(9)	#7	(9)	#7	–	4.5 FEET	
F10	10'-0"	10'-0"	26"	(10)	#7	(10)	#7	–	4.5 FEET	
F10.5	10'-6"	10'-6"	28"	(10)	#8	(10)	#8	–	4.5 FEET	
F11	11'-0"	11'-0"	28"	(11)	#8	(11)	#8	–	4.5 FEET	
F11.5	11'-6"	11'-6"	30"	(11)	#8	(11)	#8	–	4.5 FEET	
F12	12'-0"	12'-0"	32"	(12)	#8	(12)	#8	–	4.5 FEET	
F126	6'-0"	12'-6"	24"	(6)	#8	(12)	#7	–	4.5 FEET	



1. ALL FOOTINGS AT MOMENT FRAMES SHALL HAVE A DOUBLE MAT OF REINFORCINGS.
2. REFERENCE THE SOILS REPORT FOR MORE INFORMATION.

SPECIAL INSPECTION SCHEDULE [1, 2]

ESTABLISHED PER 2006 IBC SECTION 109 AND CHAPTER 17

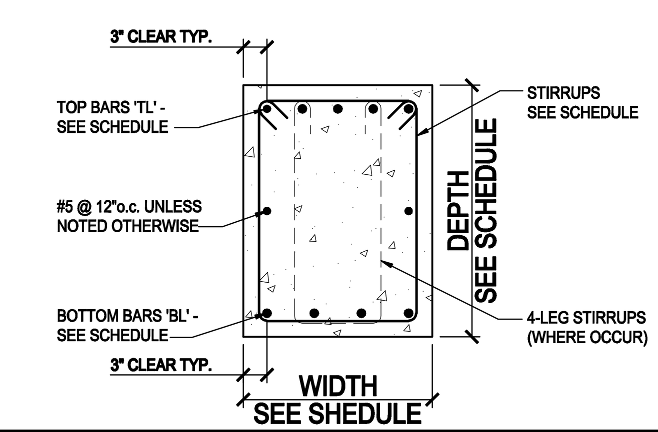
ITEM	CONTINUOUS [3]	PERIODIC [3]	REFERENCE	COMMENTS
PRE-FAB CONSTRUCTION (IBC 1704.2)			REFERENCE NOTES P1 & P2	P1. SPECIAL INSPECTION IS NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION, PROVIDED THE FABRICATOR COMPLIES WITH IBC P2. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. SPECIAL INSPECTION WILL NOT BE REQUIRED DURING PREFABRICATION IF THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION AND FURNISHES EVIDENCE OF COMPLIANCE. (SEE NOTE 2)
STEEL CONSTRUCTION (IBC 1704.3)			SEE IBC TABLE 1704.3	S1. WELDING INSPECTIONS SHALL BE IN COMPLIANCE WITH AWS D1.1. S2. ALL WELDS SHALL BE VISUALLY INSPECTED. ALL MATERIALS, WELDING PROCEDURES, AND QUALIFICATIONS OF WELDERS SHALL BE VERIFIED PRIOR TO THE START OF THE WORK. (IBC 1704.3) S3. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED ULTRASONICALLY OR BY USING ANOTHER APPROVED METHOD (IBC 1708.4). S4. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR VERIFICATION OF THE WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 IN ACCORDANCE WITH ANSI/AWS D1.4. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR WELDING OF OTHER ASTM A 706 REINFORCING STEEL NOT INCLUDED IN THE CONTINUOUS SPECIAL INSPECTION REQUIREMENTS NOTED ABOVE. S5. SLIP-CRITICAL CONNECTIONS MAY HAVE PERIODIC SPECIAL INSPECTION PROVIDED THAT THE TURN-OF-THE-NUT METHOD WITH MATCHMARKING TECHNIQUES IS USED.
SHOP[2] AND FIELD WELDING			REFERENCE NOTE S1	
SINGLE PASS FILLET WELD ≤ 5/16"		●	REFERENCE NOTE S2	
FILLET WELDS > 5/16"	●		REFERENCE NOTE S2	
MULTI-PASS FILLET WELDS	●		REFERENCE NOTE S2	
PARTIAL / COMPLETE PENETRATION WELDS	●		REFERENCE NOTE S3	
LIGHT GAUGE METAL FRAMING WELDING		●	REFERENCE NOTE S2	
FLOOR AND ROOF DECK WELDING		●	REFERENCE NOTE S2	
FLOOR AND ROOF DECK MECH. FASTENERS		●		
SIDE SEAM SCREWS, BUTTON PUNCHES ETC.				
WELDING OF ANCHORS & STUDS		●	REFERENCE NOTE S2	
WELDING STAIRS / RAILING SYSTEMS		●	REFERENCE NOTE S2	
REINFORCING STEEL				
WELDING OF REINFORCING STEEL	●	●	REFERENCE NOTE S4	
SHEAR REINFORCING	●			
OTHER REINFORCING		●		
INSPECTION OF STEEL FRAME JOINT DETAILS		●		
EMBEDDED PLATES		●		
HIGH STRENGTH BOLTING (IBC 1704.3.3)				
VERIFY MATERIALS OF NUTS, BOLTS & WASHERS		●		
BEARING TYPE CONNECTIONS		●		
SPRAY FIRE RESISTANT MATERIALS (IBC 1704.10)	●			
CONCRETE CONSTRUCTION (IBC 1704.4)			SEE IBC TABLE 1704.4 - REF. NOTE C1	C1. SPECIAL INSPECTION IS NOT REQUIRED FOR CONC. ISOLATED SPREAD FOOTINGS, CONTINUOUS FOOTINGS, NON-STRUCTURAL SLABS, FOUNDATION WALLS, PATIOS, DRIVEWAYS, AND SIDEWALKS PROVIDED THE REQUIREMENTS OF IBC 1704.4 ARE MET. C2. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR VERIFICATION OF THE WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 IN ACCORDANCE WITH ANSI/AWS D1.4. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR WELDING OF OTHER ASTM A 706 REINFORCING STEEL NOT INCLUDED IN THE CONTINUOUS SPECIAL INSPECTION REQUIREMENTS NOTED ABOVE. C3. PERFORM AIR, SLUMP AND TEMP. TESTS WHEN CONCRETE SAMPLES ARE CAST. C4. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR VERIFICATION OF IN-SITU CONCRETE STRENGTH FOR POST-TENSIONED CONCRETE PRIOR TO TENSIONING TENDONS OR REMOVING SHORING OR FORMS. C5. EPOXY AND EXPANSION ANCHORS INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT AND/OR ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED ICC ES RESEARCH REPORT NUMBERS.
REINFORCING STEEL PLACEMENT		●		
WELDING OF REINFORCING STEEL	●	●	REFERENCE NOTE C2	
EMBEDDED BOLTS & PLATES	●			
VERIFYING REQUIRED DESIGN MIX		●		
CONCRETE PLACEMENT / SAMPLING	●		REFERENCE NOTE C3	
CURING TEMPERATURE / TECHNIQUES		●		
EPOXY / EXPANSION ANCHOR PLACEMENT	●		REFERENCE NOTE C5	
SOILS (IBC 1704.7)			REFERENCE NOTE F1	F1. SPECIAL INSPECTION OF SOILS SHALL REFERENCE THE APPROVED SOILS REPORT TO DETERMINE COMPLIANCE. F2. SPECIAL INSPECTIONS ARE NOT REQUIRED DURING PLACEMENT OF FILL LESS THAN 12 INCHES DEEP.
MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY.		●	REFERENCE NOTE F1	
EXCAVATIONS EXTEND TO PROPER DEPTH AND REACH PROPER MATERIAL.		●	REFERENCE NOTE F2	
PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.		●	REFERENCE NOTE F2	
PERFORM MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	●		REFERENCE NOTE F1	
PROPERLY PREPARED SITE AND SUB-GRADE PRIOR TO FILL.		●	REFERENCE NOTE F1	
PIER FOUNDATIONS (IBC 1704.9)			REFERENCE NOTE PF1	PF1. MATERIALS USED IN PILE/PIER FOUNDATIONS SHALL BE SUBJECT TO ADDITIONAL SPECIAL INSPECTION TASKS IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS FOR THE SPECIFIED MATERIALS.
OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.	●			
VERIFY PLACEMENT LOCATIONS, AND PLUMBNESS, CONFIRM PIER DIAMETERS, LENGHTS, AND EMBEDMENT PER PROJECT SPECIFICATIONS.	●			

GENERAL SPECIAL INSPECTION NOTES :

1. THE ITEMS MARKED WITH A "●" IN THE SPECIAL INSPECTION SCHEDULE SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE MATERIAL SAMPLING AND TESTING SECTION, THE PROJECT SPECIFICATIONS, AND THE SPECIFIC GENERAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL. ANY ITEMS WHICH FAIL TO COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, ARCHITECT, AND ENGINEER PRIOR TO COMPLETION OF THAT PHASE OF WORK. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. ANY CONSTRUCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.
3. CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. (IBC SECTION 1702)

CONCRETE GRADE BEAM SCHEDULE

MARK	BEAM SIZE		REFERENCE	REINF. TOP BARS		REINF. BOTTOM BARS		STIRRUPS	COMMENTS
	WIDTH	DEPTH	DETAIL	LENGTHWISE	CROSSWISE	LENGTHWISE	CROSSWISE	(FROM EACH END)	
GB-1	36"	20"	C6/SB501	(3) #6	#4 @ 16"	(3) #6	#4 @ 16"	#3 @ 12"o.c.	
GB-2	24"	26"	–	(8) #10	–	(8) #10	–	#4 @ 12"o.c.	SEE PLAN FOR LENGTH OF GRADE BEAM
GB-3	24"	26"	D4/SF201	(5) #8	–	(15) #8	–	#4 @ 10"o.c.	SEE PLAN FOR LENGTH OF GRADE BEAM



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HURST CENTER FOR LIFELONG LEARNING WEBER STATE UNIVERSITY

UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER Jeremy L. Achter No. 353467 STATE OF UTAH

MHTN PROJECT NO. 2007556.00

DRAWN BY: B. PAINE   CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/26/07	SCHEMATIC DESIGN
#2	12/18/07	DESIGN DEVELOPMENT
#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

STRUCTURAL SCHEDULES

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SG601

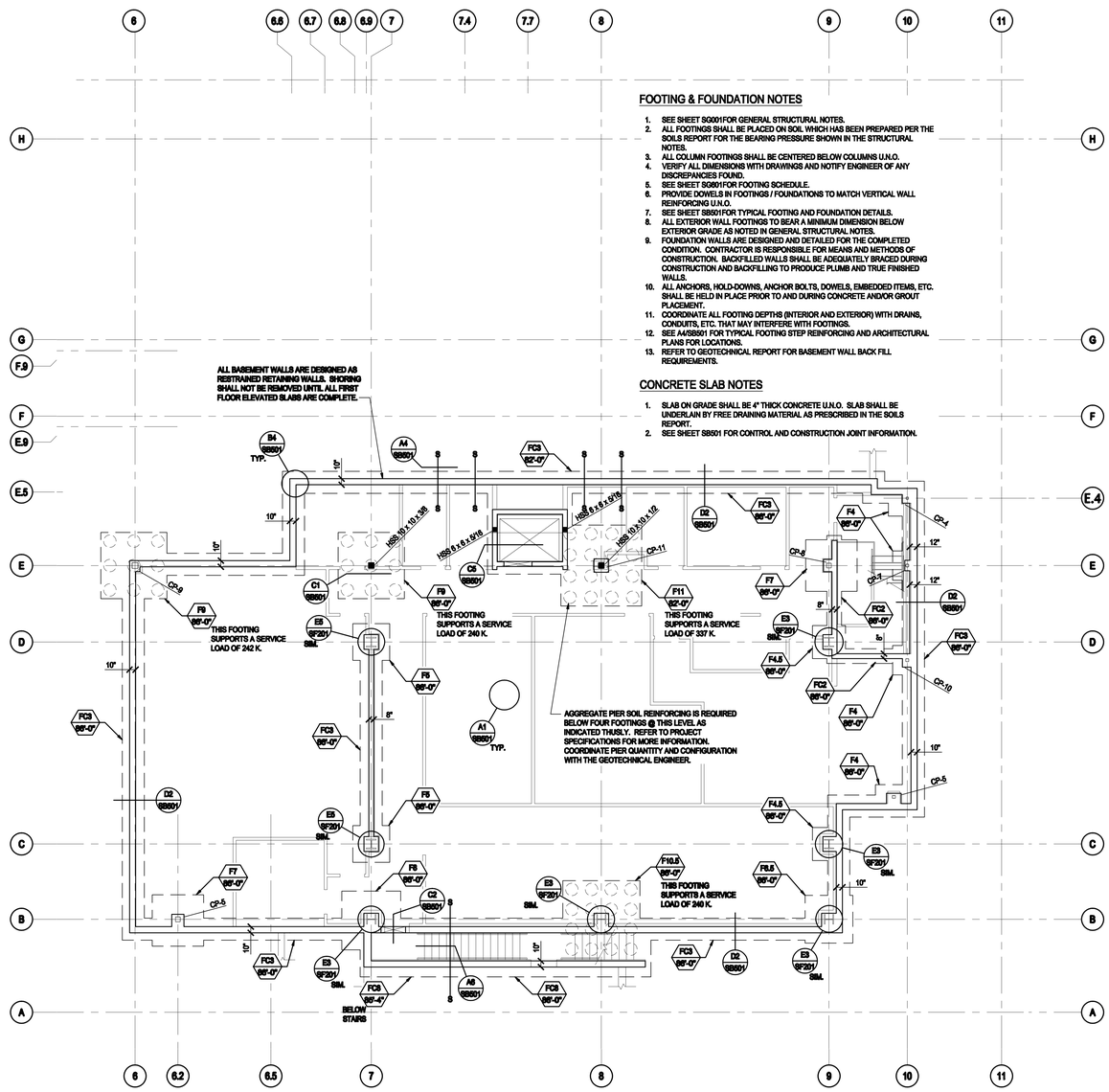
By: jasonr; Oct 20, 2006 - 2:46pm D:\DRAWINGS 2006\06092.H\ARCH\AE102A.dwg
X:\DRAWINGS 2007\07153\07153_SG601.dwg, 2/29/2008 9:07:50 AM, benjaminp, 1:1

FOOTING & FOUNDATION NOTES

1. SEE SHEET SG001FOR GENERAL STRUCTURAL NOTES.
2. ALL FOOTINGS SHALL BE PLACED ON SOIL WHICH HAS BEEN PREPARED PER THE SOILS REPORT FOR THE BEARING PRESSURE SHOWN IN THE STRUCTURAL NOTES.
3. ALL COLUMN FOOTINGS SHALL BE CENTERED BELOW COLUMNS U.N.O.
4. VERIFY ALL DIMENSIONS WITH DRAWINGS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOUND.
5. SEE SHEET SG001FOR FOOTING SCHEDULE.
6. PROVIDE DOWELS IN FOOTINGS / FOUNDATIONS TO MATCH VERTICAL WALL REINFORCING U.N.O.
7. SEE SHEET SB501FOR TYPICAL FOOTING AND FOUNDATION DETAILS.
8. ALL EXTERIOR WALL FOOTINGS TO BEAR A MINIMUM DIMENSION BELOW EXTERIOR GRADE AS NOTED IN GENERAL STRUCTURAL NOTES.
9. FOUNDATION WALLS ARE DESIGNED AND DETAILED FOR THE COMPLETED CONDITION. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. BACKFILLED WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION AND BACKFILLING TO PRODUCE PLUMB AND TRUE FINISHED WALLS.
10. ALL ANCHORS, HOLD-DOWNS, ANCHOR BOLTS, DOWELS, EMBEDDED ITEMS, ETC. SHALL BE HELD IN PLACE PRIOR TO AND DURING CONCRETE AND/OR GROUT PLACEMENT.
11. COORDINATE ALL FOOTING DEPTHS (INTERIOR AND EXTERIOR) WITH DRAINS, CONDUITS, ETC. THAT MAY INTERFERE WITH FOOTINGS.
12. SEE A4/SB501 FOR TYPICAL FOOTING STEP REINFORCING AND ARCHITECTURAL PLANS FOR LOCATIONS.
13. REFER TO GEOTECHNICAL REPORT FOR BASEMENT WALL BACK FILL REQUIREMENTS.

CONCRETE SLAB NOTES

1. SLAB ON GRADE SHALL BE 4" THICK CONCRETE U.N.O. SLAB SHALL BE UNDERLAIN BY FREE DRAINING MATERIAL AS PRESCRIBED IN THE SOILS REPORT.
2. SEE SHEET SB501 FOR CONTROL AND CONSTRUCTION JOINT INFORMATION.



FOOTING / FOUNDATION PLAN

SCALE : 1/8" = 1'-0"

A
SB101B

NORTH

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UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Adams
No. 333467
STATE OF UTAH

MHTN PROJECT NO. 2007505.00

DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/29/07	SCHEMATIC DESIGN
#2	12/10/07	DESIGN DEVELOPMENT
#3	02/05/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

FOOTING / FOUNDATION PLAN

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SB101

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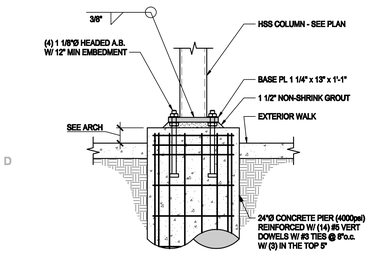
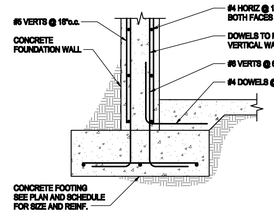


E1 DETAIL
SCALE = NONE



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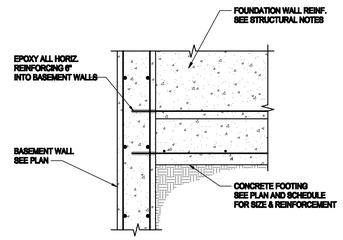

E3 DETAIL
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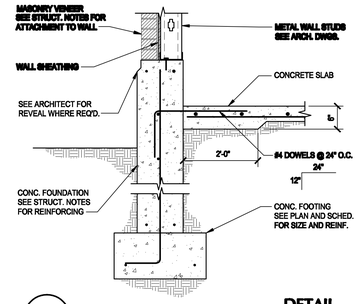

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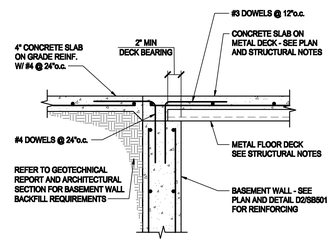

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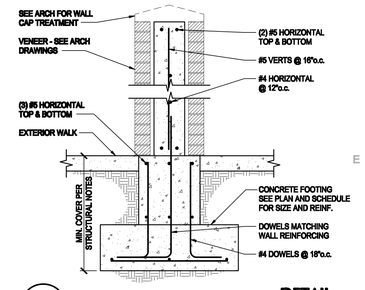

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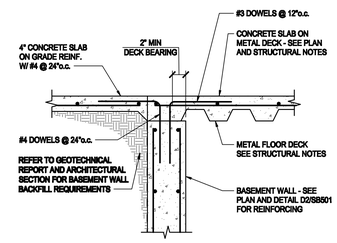
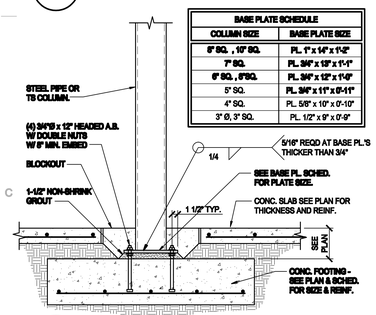


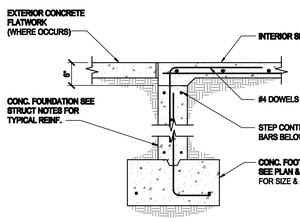
D1 (L) DETAIL
SCALE = NONE

BASE PLATE SCHEDULE	
COLUMN SIZE	BASE PLATE SIZE
8" SQ. , 10" SQ.	PL. 1" x 14" x 1'-2"
7" SQ.	PL. 3/4" x 13" x 1'-1"
6" SQ. , 5"SQ.	PL. 3/4" x 12" x 1'-0"
5" SQ.	PL. 3/4" x 11" x 0'-11"
4" SQ.	PL. 5/8" x 10" x 0'-10"
3" Ø, 3" SQ.	PL. 1/2" x 9" x 0'-9"



C1 TYPICAL DETAIL
SCALE = NONE

D2 DETAIL
SCALE = NONE



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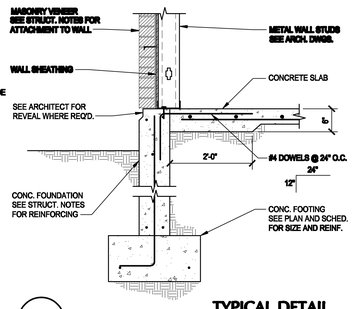
SCALE = NONE

D3 DETAIL
SCALE = NONE



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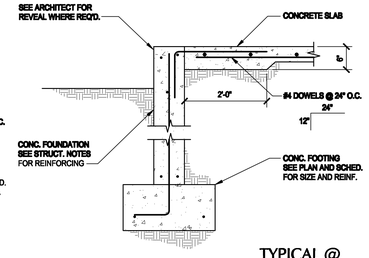
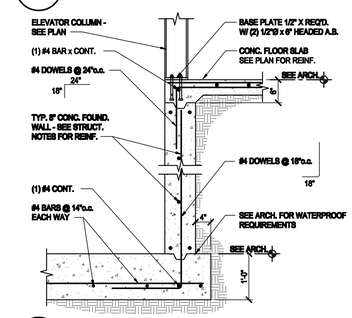
D4 DETAIL
SCALE = NONE



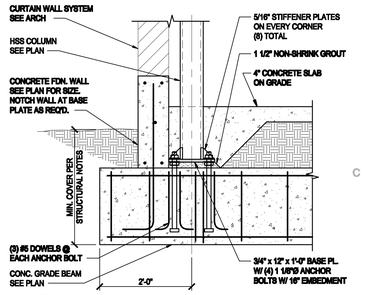
C4 TYPICAL @ WINDOW OPENING DETAIL
SCALE = NONE

D5 DETAIL
SCALE = NONE



C5 DETAIL
SCALE = NONE

D6 DETAIL
SCALE = NONE



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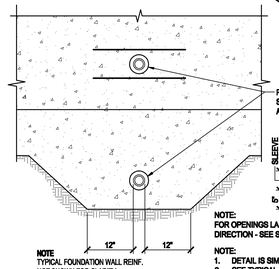
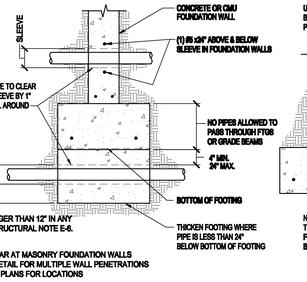


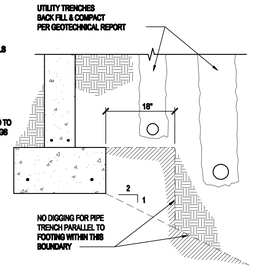
NOTE
TYPICAL FOUNDATION WALL REINF. NOT SHOWN FOR CLARITY



NOTE:
FOR OPENINGS LARGER THAN 12" IN ANY DIRECTION - SEE STRUCTURAL NOTE E-8.

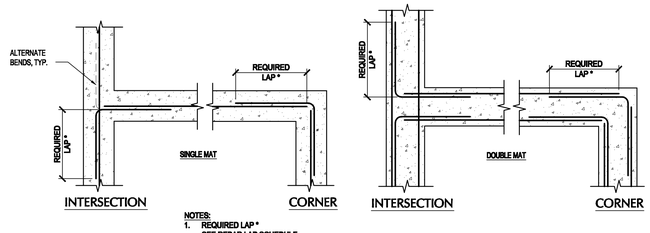
NOTE:
1. DETAIL IS SIMILAR AT MASONRY FOUNDATION WALLS
2. SEE TYPICAL DETAIL FOR MULTIPLE WALL PENETRATIONS
3. SEE PLUMBING PLANS FOR LOCATIONS

PIPE CROSSING FOOTING / FOUNDATION WALL



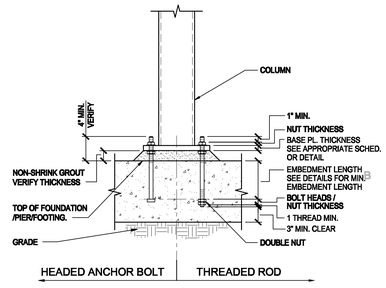
PIPE PARALLEL TO FOOTING

B1 TYPICAL PIPE PENETRATION DETAIL
SCALE = NONE

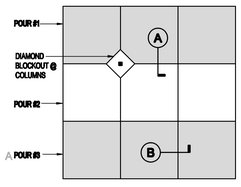


NOTES:
1. REQUIRED LAP * SEE REBAR LAP SCHEDULE
2. VERTICAL BARS NOT SHOWN
3. DETAIL IS SIMILAR @ SINGLE CURTAIN OF REINF.
4. THIS DETAIL IS APPLICABLE AT ALL FOOTINGS AND FOUNDATION WALLS

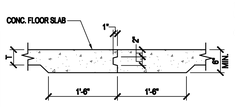
B4 TYPICAL DETAIL
SCALE = NONE



B6 TYPICAL ANCHOR BOLT DETAIL
SCALE = NONE



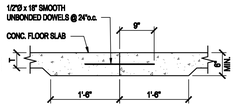
NOTES:
1. JOINTS SHALL OCCUR AT MAIN COLUMN/GRID LINES W/15'-0" MAX. SPACING BETWEEN JOINTS @ 4" SLABS; 20'-0" MAX. @ 5" & 6" SLABS
2. SEE PLAN FOR SLAB THICKNESS "T" AND REINFORCING SIZE AND SPACING



NOTE: THICKENING OF SLAB NOT REQUIRED FOR SLABS WITH T = 6" OR GREATER

T = SLAB THICKNESS

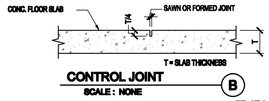
(OPTION 1)
CONSTRUCTION JOINT A
SCALE : NONE



NOTE: THICKENING OF SLAB NOT REQUIRED FOR SLABS WITH T = 6" OR GREATER

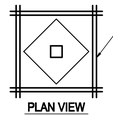
T = SLAB THICKNESS

(OPTION 2)
CONSTRUCTION JOINT A
SCALE : NONE



CONTROL JOINT B
SCALE : NONE

A1 TYPICAL DETAIL
SCALE = NONE

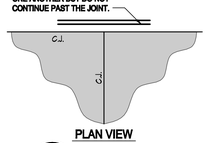


PLAN VIEW

(2) #4 x 4'-0" BARS SHALL BE PLACED IN THE SLAB WHERE CONTROL OR CONSTRUCTION JOINTS DO NOT EXTEND FROM THE CORNERS OF COLUMN BLOCK-OUTS IN SLABS.

(2) #4 x 4'-0" BARS SHALL BE PLACED IN THE SLAB WHERE CONTROL OR CONSTRUCTION JOINT INTERSECTIONS DO NOT OCCUR AT DEPRESSED SLAB CORNERS.

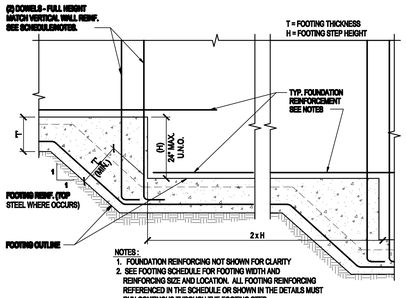
(2) #4 x 4'-0" BARS SHALL BE PLACED IN THE SLAB WHERE CONTROL OR CONSTRUCTION JOINTS INTERSECT ONE ANOTHER BUT DO NOT CONTINUE PAST THE JOINT.



PLAN VIEW

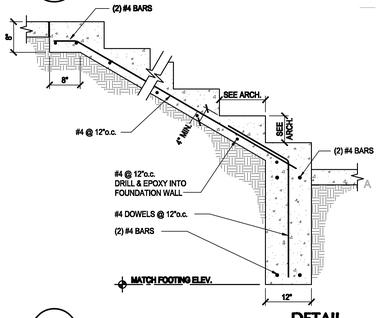
PLAN VIEW

A3 TYPICAL DETAIL
SCALE = NONE



NOTES:
1. FOUNDATION REINFORCING NOT SHOWN FOR CLARITY
2. SEE FOOTING SCHEDULE FOR FOOTING WIDTH AND REINFORCING SIZE AND LOCATION. ALL FOOTING REINFORCING REFERENCED IN THE SCHEDULE OR SHOWN IN THE DETAILS MUST RUN CONTINOUS THROUGH THE FOOTING STEP

A4 TYPICAL DETAIL
SCALE = NONE



A6 DETAIL
SCALE = NONE

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WEBER STATE UNIVERSITY

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UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Ashton
No. 334467
STATE OF UTAH

MHTN PROJECT NO. 2007/555.00

DRAWN BY: B. PAINE CHECKED BY: J. ASHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/26/07	SCHEMATIC DESIGN
#2	12/18/07	DESIGN DEVELOPMENT
#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

DETAILS

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

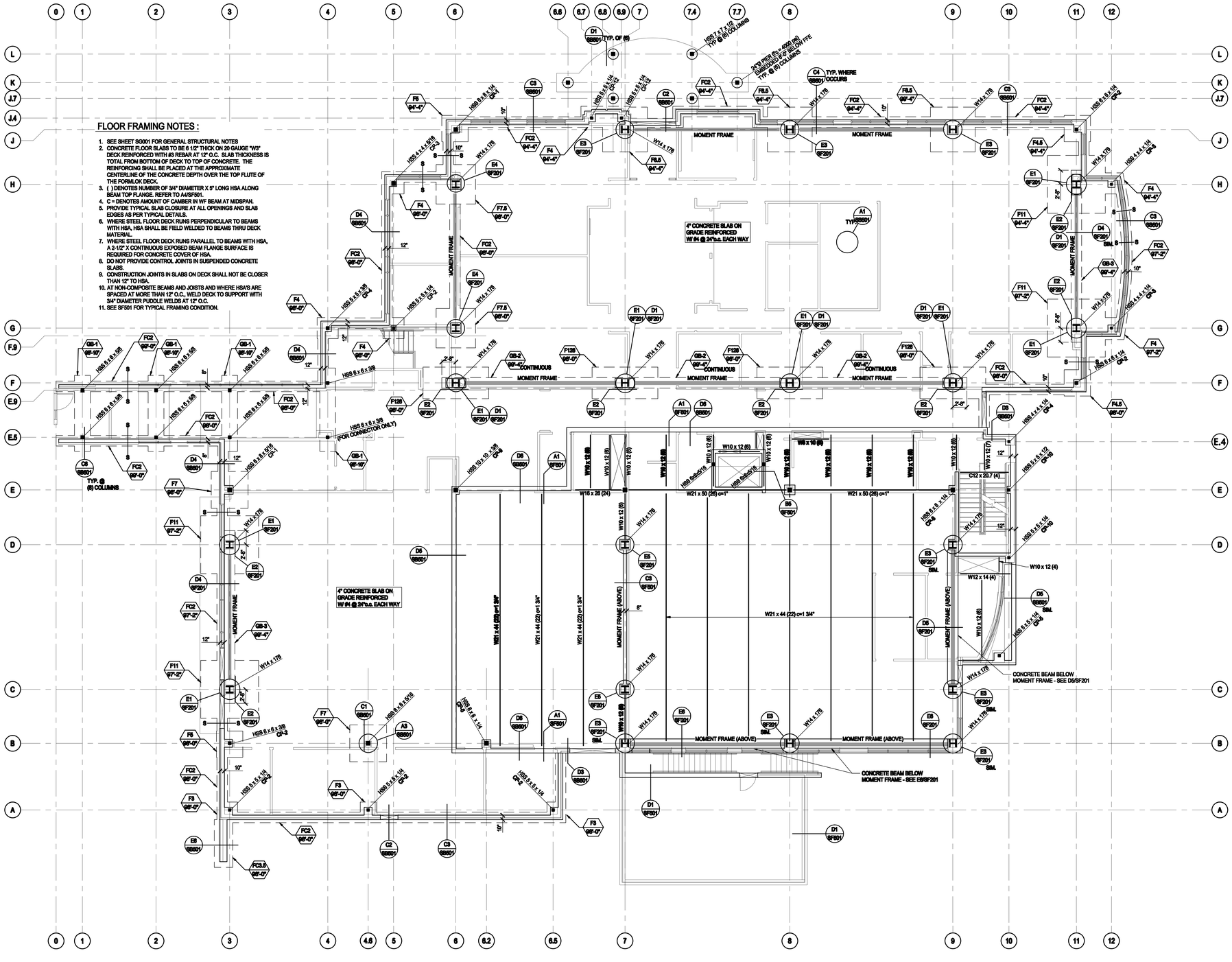
SHEET NUMBER

SB501

Rev. Plotted: Oct. 22, 2008 - 2:40pm
D:\Revit Projects\07110810-HURST CENTER\07110810-HURST CENTER.rvt
X:\DRAWINGS 2007\07157\07157_SB501.dwg, 2/29/2008 8:59:18 AM, bwojtowicz, 1:1

FLOOR FRAMING NOTES :

1. SEE SHEET SG001 FOR GENERAL STRUCTURAL NOTES
2. CONCRETE FLOOR SLABS TO BE 6 1/2" THICK ON 20 GAUGE "W3" DECK REINFORCED WITH #3 REBAR AT 12" O.C. SLAB THICKNESS IS TOTAL FROM BOTTOM OF DECK TO TOP OF CONCRETE. THE REINFORCING SHALL BE PLACED AT THE APPROXIMATE CENTERLINE OF THE CONCRETE DEPTH OVER THE TOP FLUTE OF THE FORMLOK DECK.
3. ( ) DENOTES NUMBER OF 3/4" DIAMETER X 5" LONG HSA ALONG BEAM TOP FLANGE. REFER TO A/SF501.
4. C = DENOTES AMOUNT OF CAMBER IN W' BEAM AT MIDSPAN.
5. PROVIDE TYPICAL SLAB CLOSURE AT ALL OPENINGS AND SLAB EDGES AS PER TYPICAL DETAILS.
6. WHERE STEEL FLOOR DECK RUNS PERPENDICULAR TO BEAMS WITH HSA, HSA SHALL BE FIELD WELDED TO BEAMS THRU DECK MATERIAL.
7. WHERE STEEL FLOOR DECK RUNS PARALLEL TO BEAMS WITH HSA, A 2-1/2" X CONTINUOUS EXPOSED BEAM FLANGE SURFACE IS REQUIRED FOR CONCRETE COVER OF HSA.
8. DO NOT PROVIDE CONTROL JOINTS IN SUSPENDED CONCRETE SLABS.
9. CONSTRUCTION JOINTS IN SLABS ON DECK SHALL NOT BE CLOSER THAN 12" TO HSA.
10. AT NON-COMPOSITE BEAMS AND JOISTS AND WHERE HSA'S ARE SPACED AT MORE THAN 12" O.C., WELD DECK TO SUPPORT WITH 3/4" DIAMETER PUDDLE WELDS AT 12" O.C.
11. SEE SF501 FOR TYPICAL FRAMING CONDITION.



FIRST FLOOR FRAMING PLAN

SCALE : 1/8" = 1'-0"

A SF101

NORTH

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UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER Jeremy L. Archer No. 334667 STATE OF UTAH

MHTN PROJECT NO. 2007/505.00

DRAWN BY: B. PANNE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/26/07	SCHEMATIC DESIGN
#2	12/18/07	DESIGN DEVELOPMENT
#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

FIRST FLOOR FRAMING PLAN

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SF101

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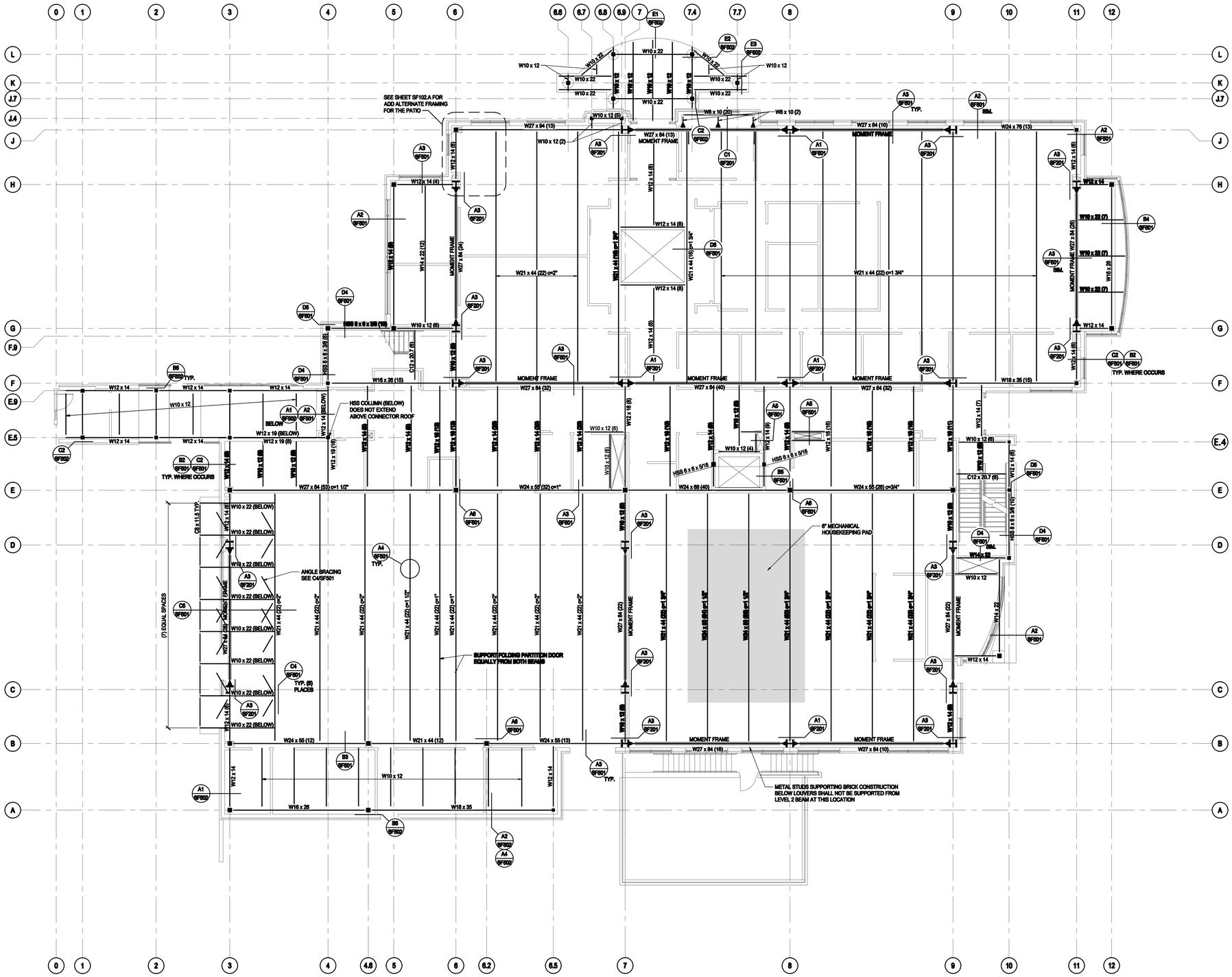

SECOND FLOOR FRAMING PLAN

SCALE : 1/8" = 1'-0"

SEE SHEET SF101 FOR FLOOR FRAMING NOTES

A
SF102

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SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Ashter
No. 335467
STATE OF UTAH

MHTN PROJECT NO. 2007556.00

DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/29/07	SCHEMATIC DESIGN
#2	12/18/07	DESIGN DEVELOPMENT
#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

SECOND FLOOR FRAMING PLAN

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SF102

Plot Scale: 1=1 Tue, 2006 - 3:42pm
D:\+DRAWINGS DGN\SF\SF-MECH-ELEC\SF102.dwg

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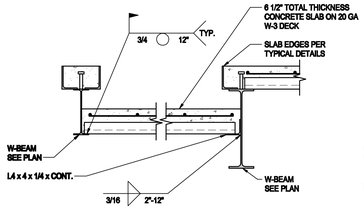

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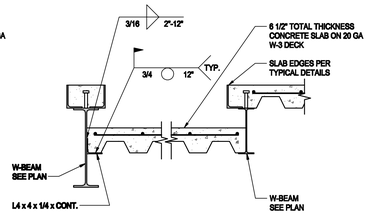

E2 DETAIL
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E3 DETAIL
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E4 DETAIL
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E5 DETAIL
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E6 DETAIL
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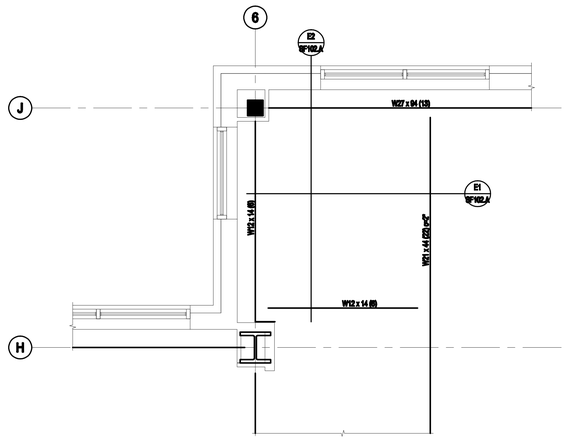

ADD ALTERNATE - PATIO

SCALE : 3/8" = 1'-0"

A
SF102.A

NORTH

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UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Achter
No. 335467
STATE OF UTAH

MHTN PROJECT NO. 20075556.00

DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/26/07	SCHEMATIC DESIGN
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#3	02/08/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

ADD ALTERNATE - PATIO

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

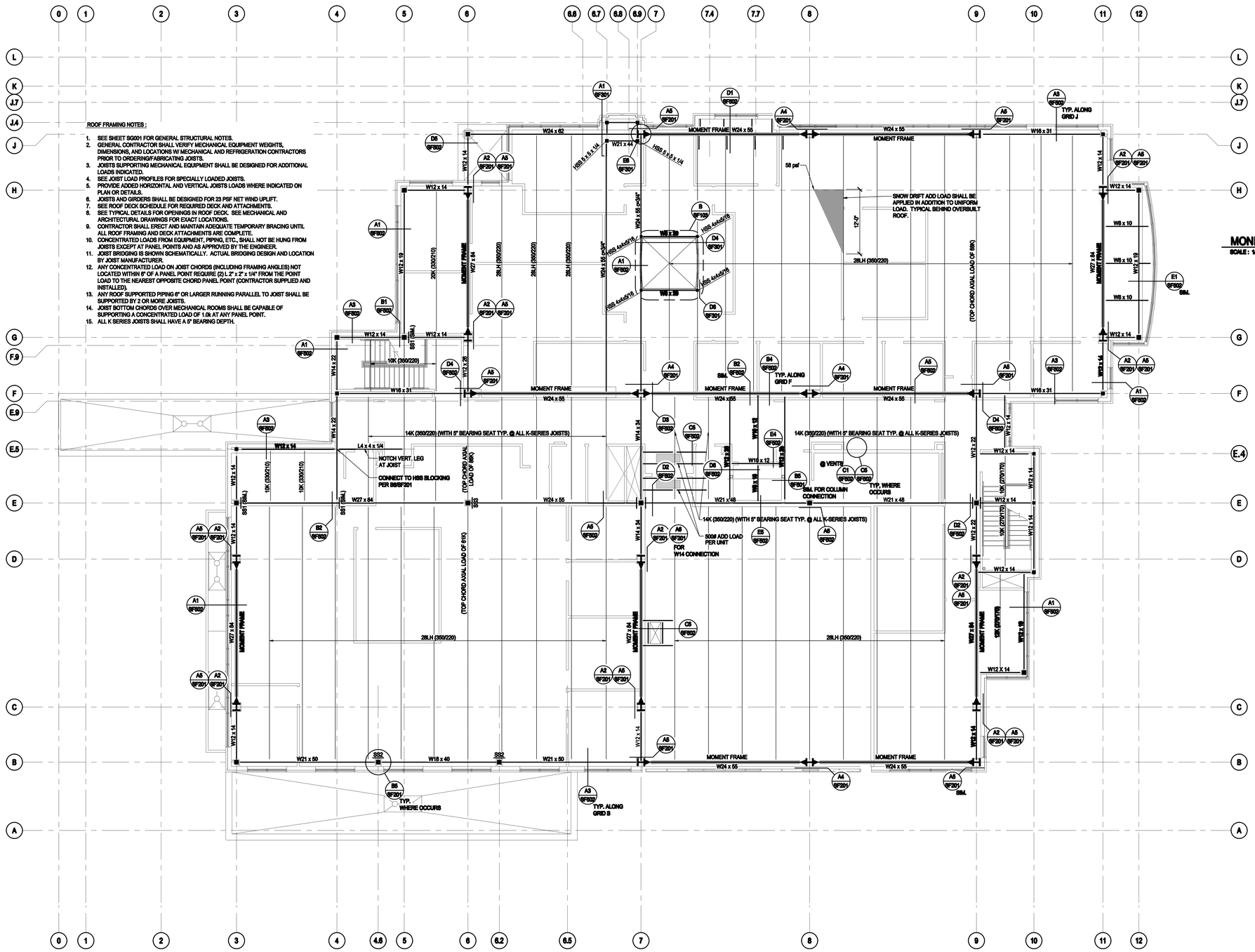
SF102.A

By: Jeremy Oct 03, 2006 - 2:42pm
B:\Projects\2005-50\SF\SF-ARCH-ALTERNATE.dwg

X:\DRAWINGS 2007\071513\071513_SF102-A.dwg, 3/29/2008 9:04:41 AM, bwojcewicz, 1:1

ROOF FRAMING NOTES :

1. SEE SHEET S0001 FOR GENERAL STRUCTURAL NOTES.
2. GENERAL CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT WEIGHTS, DIMENSIONS, AND LOCATIONS W/ MECHANICAL AND REFRIGERATION CONTRACTORS PRIOR TO ORDERING/FABRICATING JOISTS.
3. JOISTS SUPPORTING MECHANICAL EQUIPMENT SHALL BE DESIGNED FOR ADDITIONAL LOADS INDICATED.
4. SEE JOIST LOAD PROFILES FOR SPECIALLY LOADED JOISTS.
5. PROVIDE ADDED HORIZONTAL AND VERTICAL JOISTS LOADS WHERE INDICATED ON PLAN OR DETAILS.
6. JOISTS AND GIRDERS SHALL BE DESIGNED FOR 23 PSF NET WIND UPLIFT.
7. SEE ROOF DECK SCHEDULE FOR REQUIRED DECK AND ATTACHMENTS.
8. SEE TYPICAL DETAILS FOR OPENINGS IN ROOF DECK. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
9. CONTRACTOR SHALL ERECT AND MAINTAIN ADEQUATE TEMPORARY BRACING UNTIL ALL ROOF FRAMING AND DECK ATTACHMENTS ARE COMPLETE.
10. CONCENTRATED LOADS FROM EQUIPMENT, PIPING, ETC., SHALL NOT BE HUNG FROM JOISTS EXCEPT AT PANEL POINTS AND AS APPROVED BY THE ENGINEER.
11. JOIST BRIDGING IS SHOWN SCHEMATICALLY. ACTUAL BRIDGING DESIGN AND LOCATION BY JOIST MANUFACTURER.
12. ANY CONCENTRATED LOAD ON JOIST CHORDS (INCLUDING FRAMING ANGLES) NOT LOCATED WITHIN 6" OF A PANEL POINT REQUIRE (2) L 2" x 2" x 1/4" FROM THE POINT LOAD TO THE NEAREST OPPOSITE CHORD PANEL POINT (CONTRACTOR SUPPLIED AND INSTALLED).
13. ANY ROOF SUPPORTED PIPING 6" OR LARGER RUNNING PARALLEL TO JOIST SHALL BE SUPPORTED BY 2 OR MORE JOISTS.
14. JOIST BOTTOM CHORDS OVER MECHANICAL ROOMS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 1.0k AT ANY PANEL POINT.
15. ALL K SERIES JOISTS SHALL HAVE A 5" BEARING DEPTH.

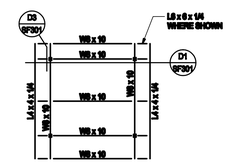


ROOF FRAMING PLAN

SCALE : 1/8" = 1'-0"

A / SF103

NORTH



MONITOR ROOF PLAN

SCALE : 1/8" = 1'-0"

B / SF103

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420 East South Temple
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WEBER STATE UNIVERSITY

HURST CENTER FOR LIFELONG LEARNING
WEBER STATE UNIVERSITY
UTAH STATE DIVISION OF FACILITIES CONSTRUCTION MANAGEMENT - DFCM PROJECT NO. 07110810

SEAL

LICENSED PROFESSIONAL ENGINEER
Jeremy L. Adcock
No. 333467
STATE OF UTAH

MHTN PROJECT NO. 2007558.00

DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

ISSUED:

NO.	DATE	DESCRIPTION
#1	10/29/07	SCHEMATIC DESIGN
#2	12/19/07	DESIGN DEVELOPMENT
#3	02/06/08	CONSTRUCTION DOCUMENTS
#4	03/04/08	CONSTRUCTION BID DOCUMENTS

REVISIONS:

NO.	DATE	DESCRIPTION

ROOF FRAMING PLAN

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SF103

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By:bwojcinsky Oct 26, 2006 - 3:42pm
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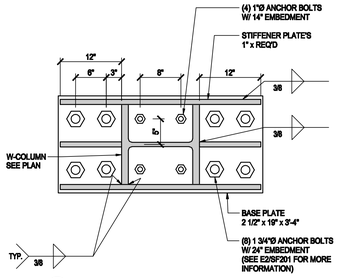

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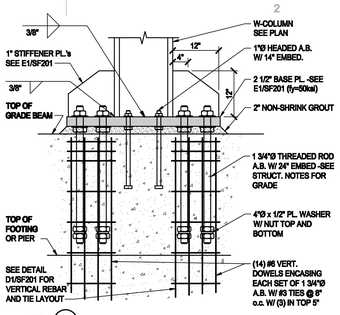

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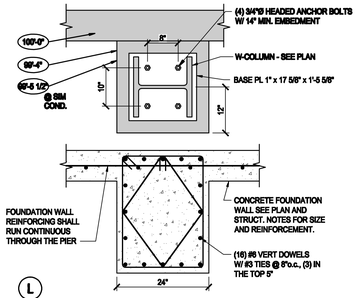

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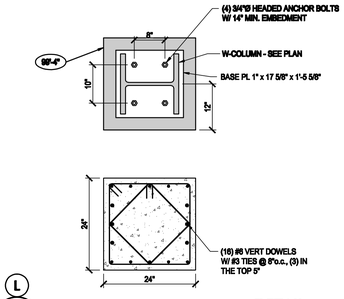

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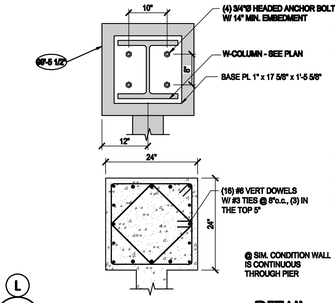

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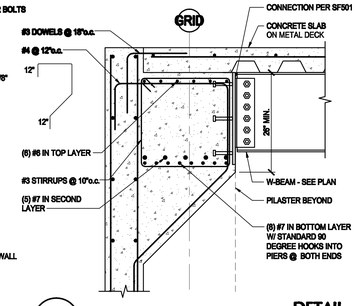

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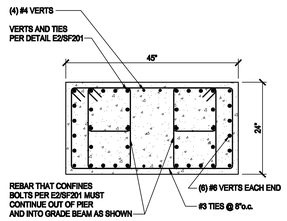

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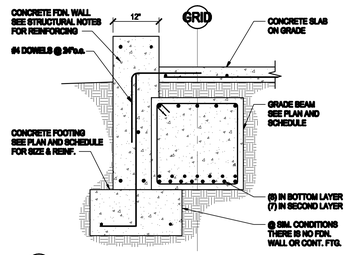
D3 DETAIL SCALE = NONE



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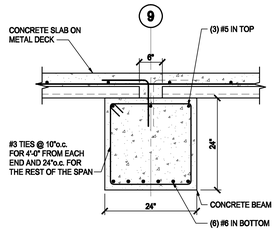

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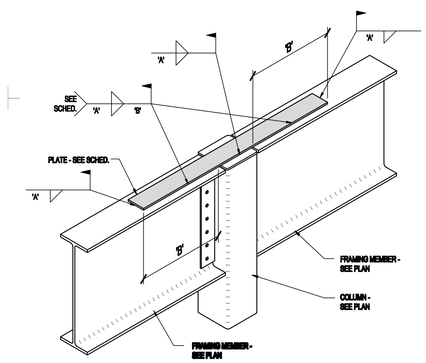
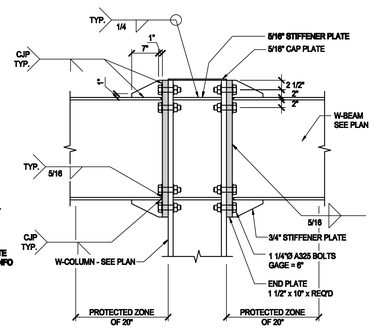


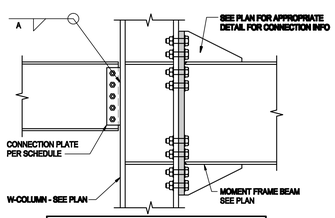
SEISMIC STRAP SCHEDULE			
MARK	STRAP SIZE	WELD SIZE 'A'	WELD LENGTH 'B'
SS1	PLATE 1/4"x6"x REQ'D	3/16"	6"
SS2	PLATE 5/16"x7 1/2"x REQ'D	1/4"	6"
SS3	PLATE 1/4"x6"x REQ'D	3/16"	6"



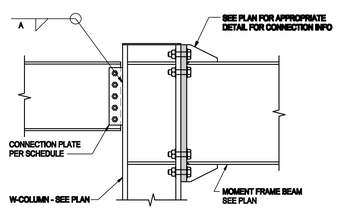
CONTRACTOR NOTE:

1. FLANGE TO END PLATE WELDS SHALL BE DONE WITHOUT BACKING. THE ROOT SHALL BE ON THE BEAM WEB SIDE OF THE FLANGE.
2.
   a. WITHIN THE PROTECTED ZONE, DISCONTINUITIES CREATED BY FACRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING SHALL BE REPAIRED AS REQUIRED BY THE ENGINEER OF RECORD.
   b. WELDED SHEAR STUDS AND DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE PROTECTED ZONE. DECKING ARC SPOT WELDS AS REQUIRED TO SECURE DECKING SHALL BE PERMITTED.
   c. WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS FOR PERIMETER EDGE ANGLES, EXTERIOR FACADES, PARTITIONS, DUCT WORK, PIPING OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE.

B5 DETAIL SCALE = NONE



BEAM SIZE	PLATE	BOLTS NO.	BOLTS SIZE	WELD 'A'
W16	3/8" x 3 1/2"	(4)	3/4"	1/4"
W18	3/8" x 3 1/2"	(5)	3/4"	1/4"
W21	3/8" x 3 1/2"	(6)	3/4"	1/4"
W12	3/8" x 3 1/2"	(3)	3/4"	1/4"



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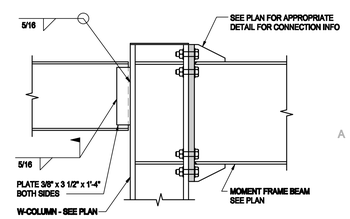

A1 DETAIL SCALE = NONE

A2 DETAIL SCALE = NONE

A3 DETAIL SCALE = NONE

A4 DETAIL SCALE = NONE

A5 DETAIL SCALE = NONE

A6 DETAIL SCALE = NONE

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SEAL

LICENSED PROFESSIONAL ENGINEER Jeremy L. Achter No. 335467 STATE OF UTAH

MHTN PROJECT NO. 2007555.00

DRAWN BY: B. PAINE CHECKED BY: J. ACHTER

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REVISIONS:

NO.	DATE	DESCRIPTION

DETAILS

CONSTRUCTION BID DOCUMENTS
MARCH 4, 2008

SHEET NUMBER

SF201

By: Jenny Oct 23, 2006 - 2:42pm
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