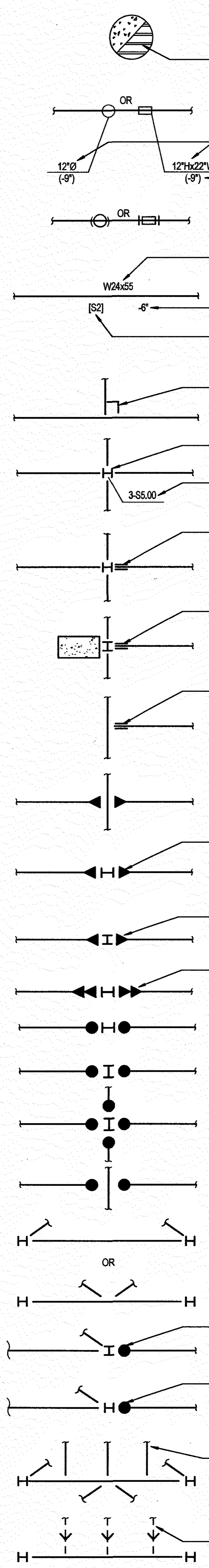
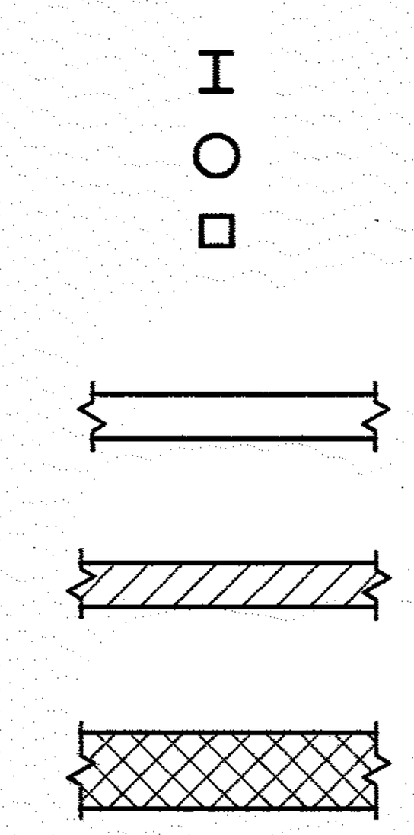
LEGEND:



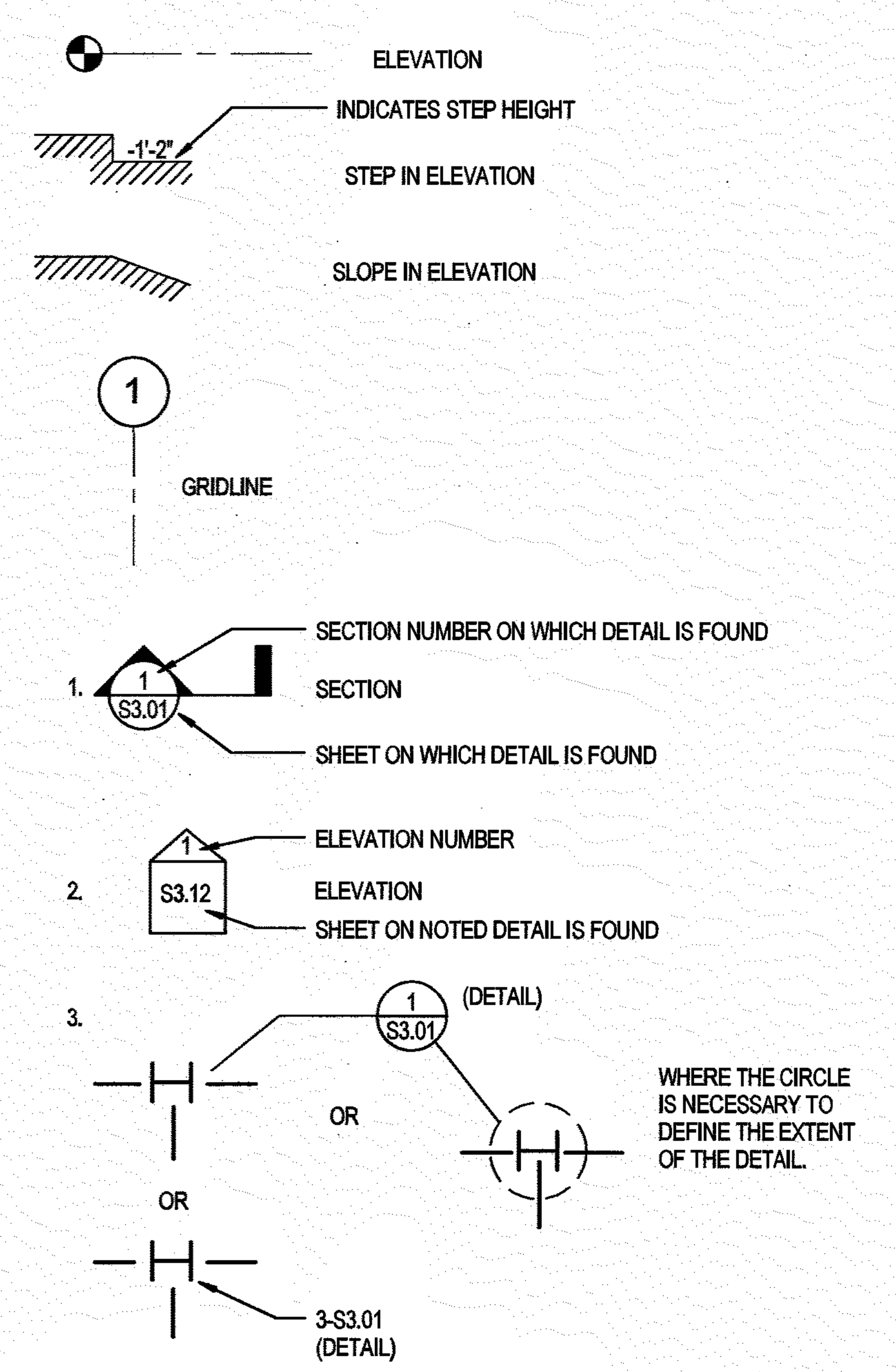
- INDICATES CONCRETE FILL ON STEEL DECK SEE PLAN FOR DECK & FILL INFO
- INDICATES DECK ORIENTATION
- INDICATES UNREINFORCED ROUND OR RECTANGULAR PENETRATION THROUGH BEAM WEB. SEE 4-S5.01
- PENETRATION DIMENSION
- DISTANCE FROM TOP OF BEAM TO ℄ OF PENETRATION.
- INDICATES REINFORCED PENETRATION THROUGH BEAM WEB, SEE S5.01.
- INDICATES BEAM OR GIRDER SIZE.
- INDICATES TOP OF STEEL RELATIVE TO NOMINAL T.O. STEEL @ EACH LEVEL.
- INDICATES STUD PATTERN, SEE 13-S5.02.
- INDICATES FULL DEPTH STIFFENER PLATE. USED WHERE NOT INDICATED ON REFERENCED DETAIL. SEE 8-S4.06
- INDICATES ORIENTATION OF WIDE FLANGE COLUMN.
- REFERS TO SPECIFIC DETAIL WHEN NOTED ON PLAN.
- INDICATES DOUBLE SHEAR TAB CONNECTION PER 2-S5.00
- INDICATES DOUBLE SHEAR TAB CONNECTION PER 18-S10.01 @ LEVELS 2 & 3, 19-S10.01 @ ROOF.
- INDICATES DOUBLE SHEAR TAB CONNECTION PER 4-S5.00
- INDICATES MOMENT CONNECTION OF BEAM TO GIRDER, SEE 12-S5.00
- INDICATES MOMENT CONNECTION TO COLUMN FLANGE, SEE 5-S5.00
- INDICATES MOMENT CONNECTION TO COLUMN WEB, SEE 6-S5.00
- INDICATES SEISMIC CRITICAL MOMENT CONNECTION TO COLUMN FLANGE, SEE 7-S4.05
- INDICATES WELDED COLLECTOR CONNECTION PER 1-S4.10
- INDICATES WELDED COLLECTOR CONNECTION PER 5-S4.10
- INDICATES WELDED COLLECTOR CONNECTION PER 3-S4.10
- RFI #0050: INDICATES WELDED COLLECTOR CONNECTION THROUGH BEAM-GIRDER CONDITION PER 12-S5.00 SIM.
- INDICATES BRACED FRAME. SEE ELEVATIONS FOR SIZES, CONFIGURATIONS, & DETAIL REFERENCES
- INDICATES WELDED COLLECTOR CONNECTION. SEE 7-S4.06
- INDICATES WELDED COLLECTOR CONNECTION. SEE 6-S4.06
- INDICATES BOTTOM FLANGE BRACING OF FRAME BEAM. PROVIDE W16x26 TYP. U.O.N. SEE 8-S4.06
- INDICATES BOTTOM FLANGE BRACING PROVIDE L4x4x1/2 TYP. U.O.N. ∨ IS THE DIRECTION OF DOWNWARD SLOPE. SEE 16-S5.00



- STEEL "W" SECTION
- STEEL PIPE OR ROUND HSS SECTION
- STEEL HSS SECTION
- CAST-IN-PLACE CONCRETE OR SHOTCRETE WALL IN PLAN OR SECTION
- ENGINEERED FILL IN SECTION
- EXPANDED POLYSTYRENE IN SECTION

DRAWING SYMBOLS:

A. THE SYMBOLS ON PLANS TO INDICATE SECTIONS, ELEVATIONS, AND DETAILS ARE AS FOLLOWS:



B. SEE LEGEND ON PLAN SHEETS FOR ADDITIONAL SYMBOLS.

DETAIL NUMBERING:

THE NUMBERING SYSTEM FOR SECTIONS, ELEVATIONS AND DETAILS ON THESE DRAWINGS TYPICALLY IS AS SHOWN ON THE FOLLOWING DIAGRAM:

20	16	12	8	4
19	15	11	7	3
18	14	10	6	2
17	13	9	5	1

WHERE MORE THAN ONE BLOCK IS USED FOR A SINGLE DETAIL, THE NUMBER OF THE LOWER RIGHT CORNER IS USED; THUS NUMBERS ARE ALWAYS IN THE SAME LOCATION ON THE SHEET.

ABBREVIATIONS (MAY BE USED WITH OR WITHOUT PERIOD):

&	AND
@	AT
℄	CENTERLINE
DIA.	DIAMETER OR ROUND
#	POUND OR NUMBER
(E)	EXISTING
(N)	NEW
S L	STEP LINE
A.B.	ANCHOR BOLT
ADD'L	ADDITIONAL
ADJ.	ADJACENT
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
B.	BOTTOM
BLDG.	BUILDING
BM	BEAM
B.O.	BLOCK OUT
BOT.	BOTTOM
B.O.F.	BOTTOM OF FOOTING
BRB.	BUCKLING-RESTRAINED BRACE
BRBF	BUCKLING-RESTRAINED BRACE FRAME
BSMT.	BASEMENT
BTWN.	BETWEEN
B.U.	BACK-UP
C.A.	COARSE AGGREGATE
CANT	CANTILEVER
C.I.P.	CAST-IN-PLACE
C.J.	CONSTRUCTION JOINT
CJP.	COMPLETE JOINT PENETRATION
CLG.	CEILING
CLR.	CLEAR
CCA	CRYSTALINE CAPILLARY ADMIXTYPE
C.M.U.	CONCRETE MASONRY UNIT
CNTR.	CONTRACTOR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
C.P.	COMPLETE PENETRATION
CTR. OR CNTR.	CENTER
DBA.	DEFORMED BAR ANCHOR
DBL.	DOUBLE
DCW.	DEMAND CRITICAL WELDS
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DO.	DITTO
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELEC.	ELECTRICAL
EMBED.	EMBEDMENT
E.O.D.	EDGE OF DECK
E.P.S.	EXPANDED POLYSTYRENE
EQ.	EQUAL
EQPT.	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXT.	EXTERIOR
FDN.	FOUNDATION
F.D.P.P.	FULL DEPTH PARTIAL PENETRATION
F.F.	FAR FACE
FIN.	FINISH
FL.	FLOOR
F.O.C.	FACE OF CONCRETE
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
FPRF.	FIREPROOF
F.S.	FAR SIDE
FT.	FOOT OR FEET
FTG. OR FTNG.	FOOTING
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRADE BEAM
GR.	GRADE
HORIZ.	HORIZONTAL
H.S.B.	HIGH STRENGTH BOLT
H.S.S.	HOLLOW STRUCTURAL SECTION
HT.	HEIGHT
HVFA	HIGH VOLUME FLY ASH
I.D.	INSIDE DIAMETER
I.F.	INSIDE FACE
INSUL.	INSULATION
INT.	INTERIOR
JT.	JOINT
LB.	POUND
LFRS	LATERAL FORCE RESISTING SYSTEM
LLH.	LONG LEG HORIZONTAL
LLV.	LONG LEG VERTICAL
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MT	MAGNETIC TESTING
N.	NORTH
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OH.	OPPOSITE HAND
OPNG.	OPENING
OPP.	OPPOSITE
P.S.F.	POUNDS PER SQUARE FOOT
PH.	PENTHOUSE
P.Q.R.	PROCEDURE QUALIFICATION RECORD
P.S.I.	POUNDS PER SQUARE INCH
PT.	POINT
P.P.	PARTIAL PENETRATION
PTN.	PARTITION
RAD.	RADIUS
REFE.	REFERENCE
REINF.	REINFORCING
REQ.	REQUIRED
R.O.	ROUGH OPENING
S.A.D.	SEE ARCH. DRAWINGS
S.C.	SLIP CRITICAL BOLT
S.C.D.	SEE CIVIL DRAWINGS
SCW.	SEISMIC CRITICAL WELDS
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SIM.	SIMILAR
S.J.	SAWCUT JOINT
S.L.D.	SEE LANDSCAPE DRAWING
SLRS.	SEISMIC LOAD RESISTING SYSTEM
S.M.D.	SEE MECH. DRAWINGS
SMRF	SPECIAL MOMENT RESISTING FRAME
S.O.G.	SLAB ON GRADE
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STIRR.	STIRRUP
STRL.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
S.W.	SEISMIC WELD
T	TOP
T&B	TOP AND BOTTOM
TB	TIE BEAM
THK.	THICK
T.O.C.	TOP OF CONCRETE
T.O.D.	TOP OF STEEL DECK
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
U.N.O.	UNLESS NOTED OTHERWISE
U.T.	ULTRASONIC TESTING
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
WA	WEDGE ANCHORS
W/	WITH
W.P.	WORK POINT
W/O	WITHOUT
WP.	WATERPROOFING
W.P.S.	WELDING PROCEDURE SPECIFICATION
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
XEPS	EXSTRUDED POLYSTYRENE FOAM

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Reviewed by: Gini Krippner
Date: 10/19/11
Project #: 900020

ISSUED FOR	REV	DATE
100% CONSTRUCTION DOCUMENTS		15 JUNE 2011

SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER
DAVID ALAN HUGO UGEN
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EXP. 09/30/12
STRUCTURAL
STATE OF CALIFORNIA

Revision #1

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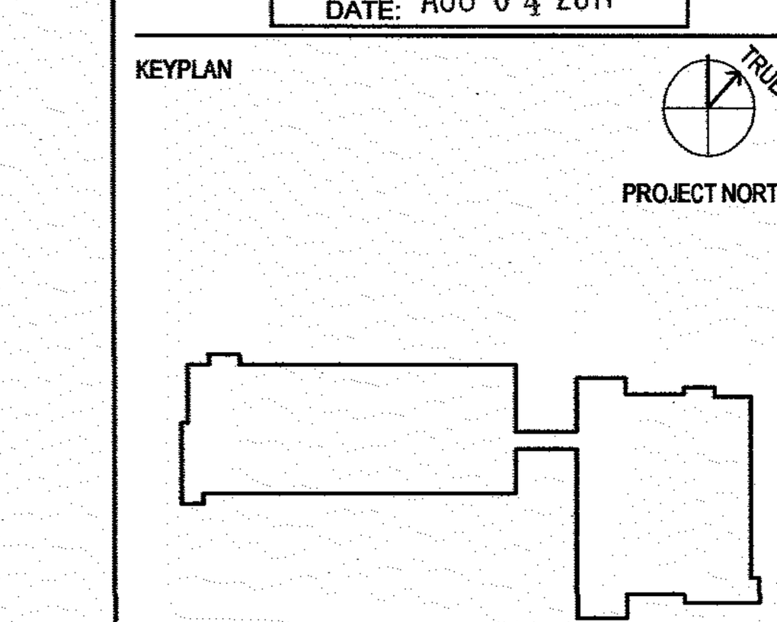
KEYPLAN



DRAWING TITLE
GENERAL NOTES

NO SCALE
SCALE

900020
UCM PROJECT NUMBER

38354.000
SG PROJECT NUMBER

S0.01
DRAWING NUMBER

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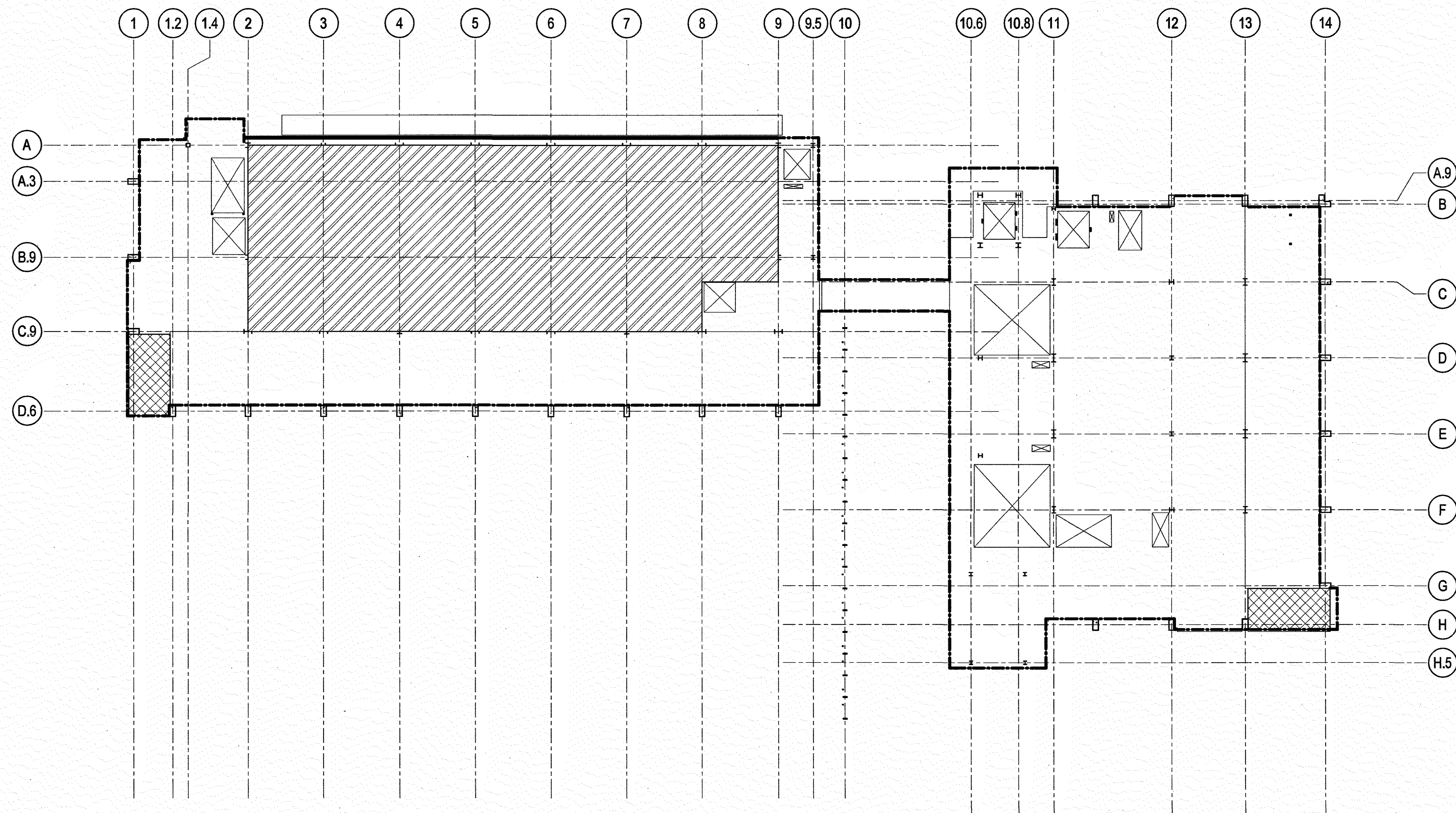

LOAD TABLE LEGEND

PLAN FILL PATTERN	FLOOR USAGE	SUPERIMPOSED a. DEAD LOAD b. GRAV/SEISMIC	LIVE LOAD	VIBRATION CRITERIA
	OFFICE SPACE	a. 34 PSF b. 24 PSF	100 PSF RED.	SENSITIVE EQUIP V <16,000 microin/sec @ 75 steps/min
	LAB SPACE	a. 44 PSF b. 34 PSF	100 PSF RED.	SENSITIVE EQUIP V <2,000 microin/sec @ 75 steps/min
	BALCONY	a. 75 PSF b. 75 PSF	100 PSF RED.	N.A.

NOTE:
SUPERIMPOSED DEAD LOAD INCLUDESCOMBINED WEIGHT OF CEILINGS, M.E.P., PARTITIONS, AND CABINETRY.

CLADDING LOADS LEGEND

PLAN LINEWORK STYLE	CLADDING DESCRIPTION	SUPERIMPOSED DEAD LOAD
	FACADE	570 PLF (15 PSF x 38'-0" HEIGHT)
	FACADE	225 PLF (15 PSF x 15'-0" HEIGHT)

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Reviewed by: Gini Krippner
Date: 7/25/11
Project #: 900020

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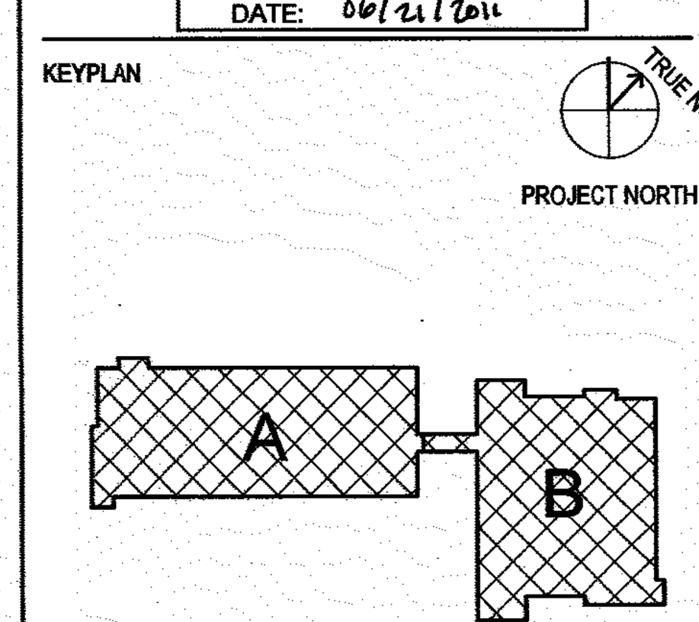

DRAWING TITLE
LEVEL 2 LOADING AND VIBRATION CRITERIA

1/16" = 1'-0"
SCALE

900020
UCM PROJECT NUMBER

38354.000
SG PROJECT NUMBER

S0.05
DRAWING NUMBER

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Plot Date: 6/9/2011 6:01:22 PM

LOAD TABLE LEGEND

PLAN FILL PATTERN	FLOOR USAGE	SUPERIMPOSED a. DEAD LOAD b. GRAV/SEISMIC	LIVE LOAD	VIBRATION CRITERIA
	OFFICE SPACE	a. 34 PSF b. 24 PSF	100 PSF RED.	SENSITIVE EQUIP V <16,000 microin/sec @ 75 steps/min
	LAB SPACE	a. 44 PSF b. 34 PSF	100 PSF RED.	SENSITIVE EQUIP V <2,000 microin/sec @ 75 steps/min
	BALCONY	a. 75 PSF b. 75 PSF	100 PSF RED.	N.A.

NOTE:
SUPERIMPOSED DEAD LOAD INCLUDESCOMBINED WEIGHT OF CEILINGS, M.E.P., PARTITIONS, AND CABINETRY.

CLADDING LOADS LEGEND

PLAN LINEWORK STYLE	CLADDING DESCRIPTION	SUPERIMPOSED DEAD LOAD
	FACADE	570 PLF (15 PSF x 38'-0" HEIGHT)
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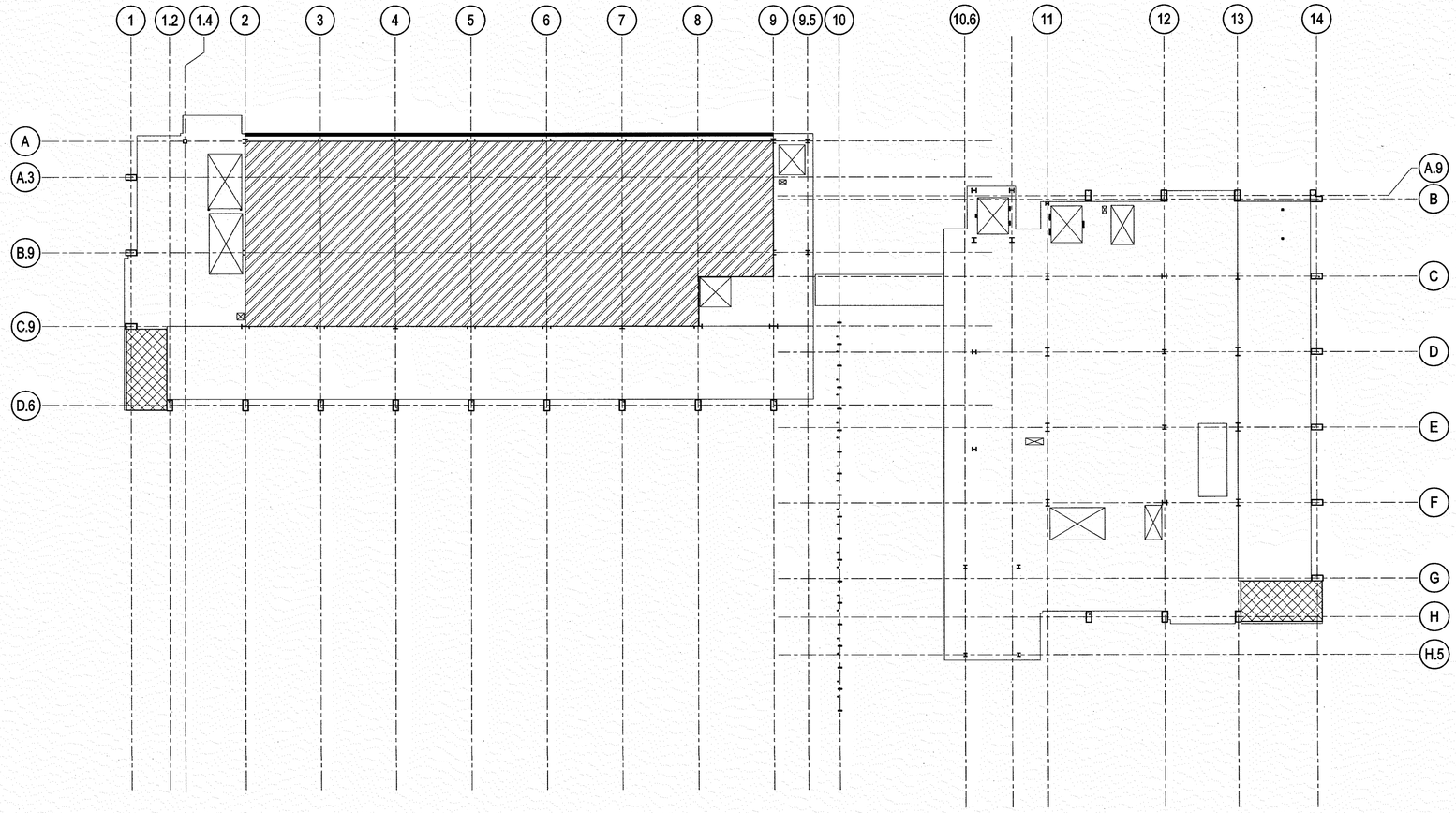

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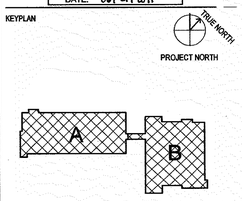
KEYPLAN



DRAWING TITLE

LEVEL 3 LOADING AND VIBRATION CRITERIA

1/16" = 1'-0"

SCALE	
900020	38354.000
UCM PROJECT NUMBER	SG PROJECT NUMBER

S0.06
DRAWING NUMBER

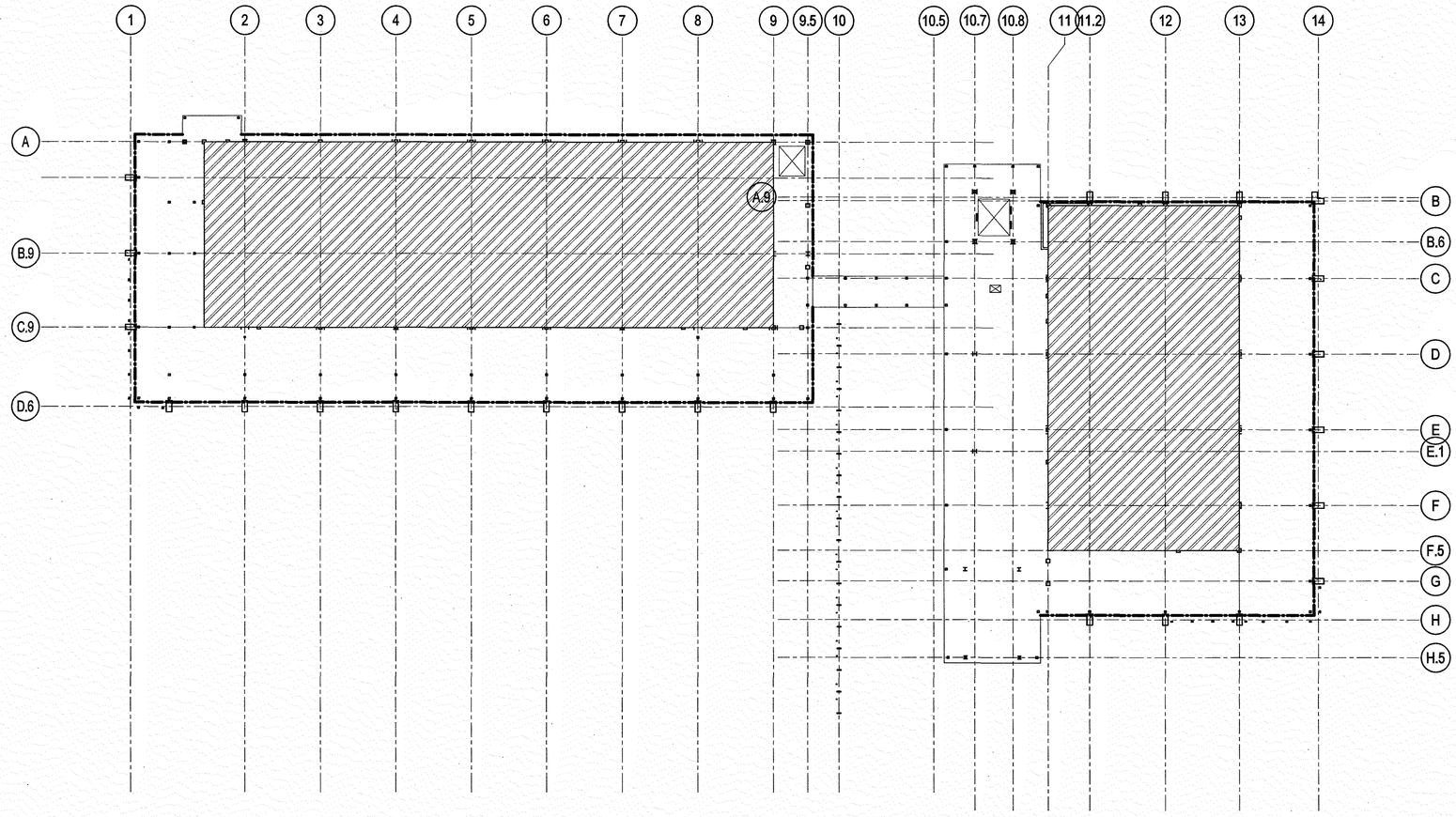
LOAD TABLE LEGEND

PLAN FILL PATTERN	FLOOR USAGE	SUPERIMPOSED a. DEAD LOAD b. GRAV/SEISMIC	LIVE LOAD	VIBRATION CRITERIA
	NON-MECHANICAL	a. 34 PSF b. 29 PSF	20 PSF RED.	N.A.
	MECHANICAL	a. 189 PSF* b. 84 PSF	20 PSF RED.	N.A.

* INCLUDES CURBS, PADS, MECHANICAL EQUIPMENT, AND MISC. EQUIPMENT.

CLADDING LOADS LEGEND

PLAN LINEWORK STYLE	CLADDING DESCRIPTION	SUPERIMPOSED DEAD LOAD
	ROOF EYEBROW	15 PSF



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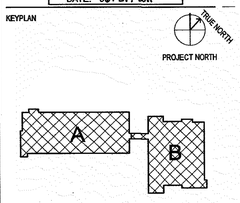
KEYPLAN



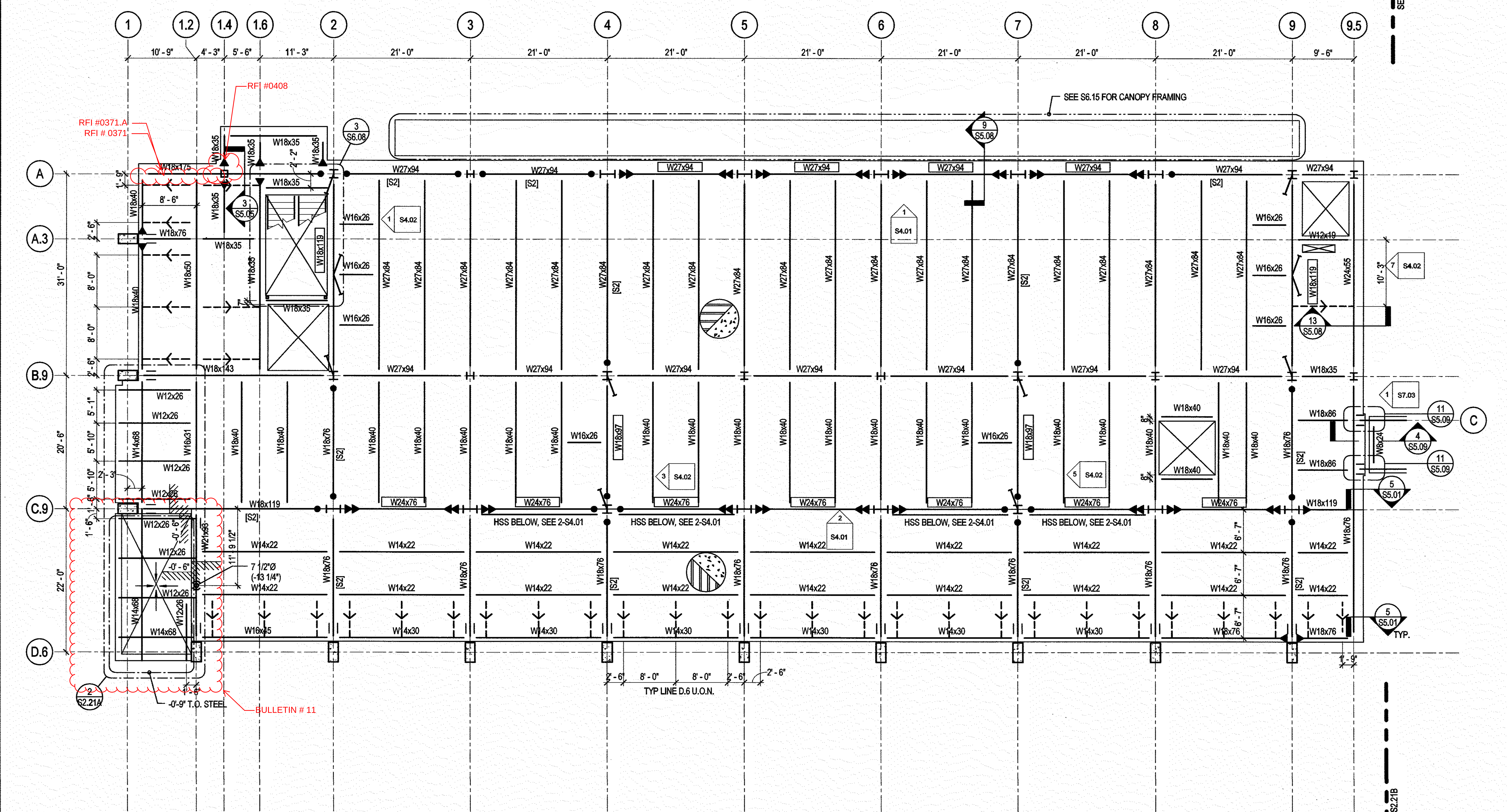
DRAWING TITLE

ROOF LEVEL LOADING CRITERIA

1/16" = 1'-0"
SCALE

900020 — UCM PROJECT NUMBER
38354.000 — SG PROJECT NUMBER

S0.07
DRAWING NUMBER

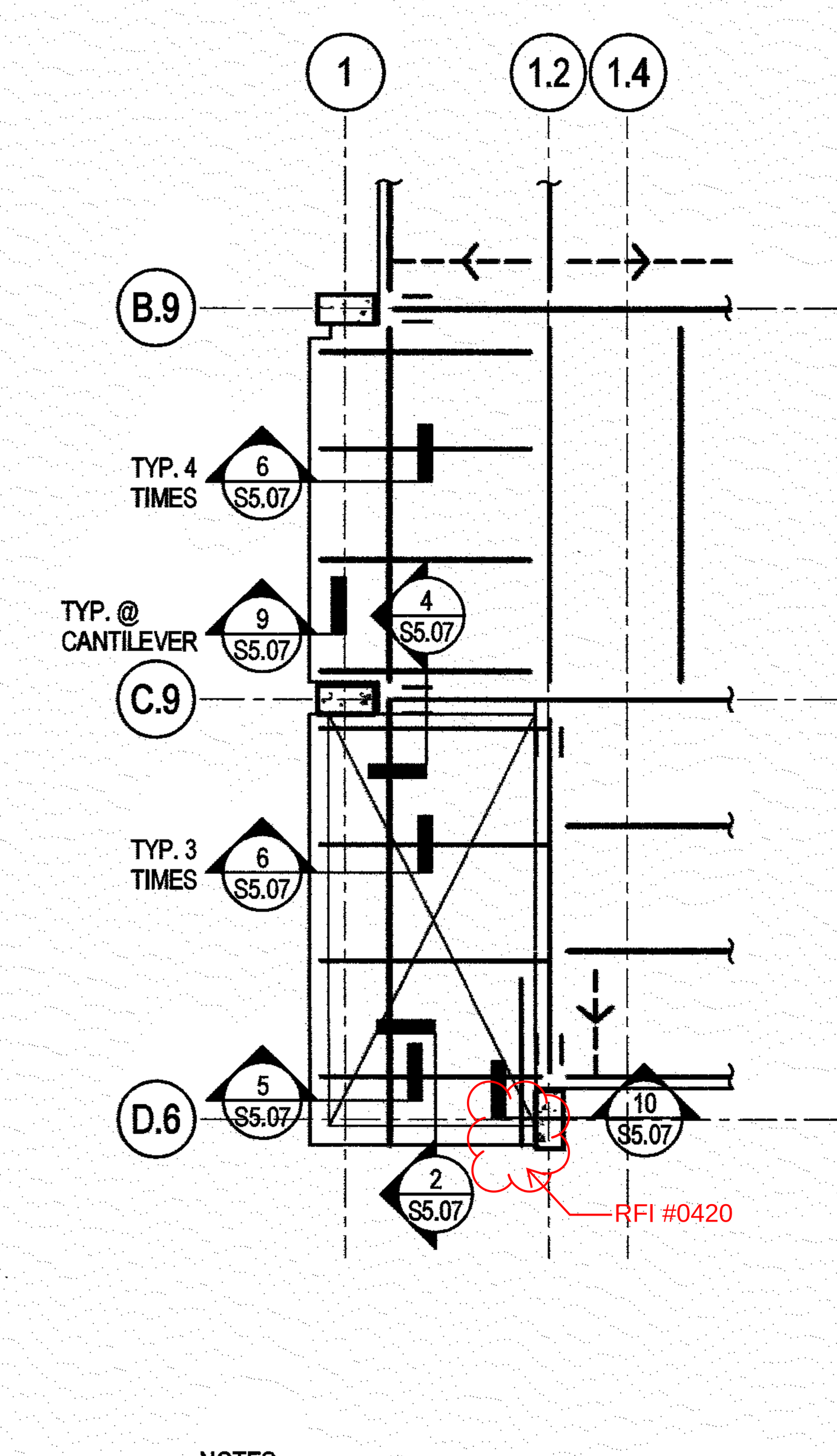


SHEET NOTES:

1. LEVEL 2 TOP OF CONCRETE ELEVATION = +270'-0".
2. TOP OF STEEL ELEVATON IS 269'-51/2", SAME AS 61/2" BELOW TOP OF CONCRETE, TYPICAL, U.O.N.
3. SEE SHEET NOTES S2.11A.

LEGEND

- INDICATES DIRECTION OF DECK
- INDICATES 4 1/2" N.W.C. OVER W2 DECK; SEE PLAN
- INDICATES PRECAST CONCRETE COLUMN; SEE S10.01.
- INDICATES EXTENT OF NON-TYPICAL REINFORCEMENT PATTERN.
- #4 @ 9" O.C. — INDICATES SIZE AND SPACING OF NON-TYPICAL REINFORCEMENT.
- INDICATES EXTENT OF DEPRESSED SLAB. SEE AS.XX SERIES FOR EXTENT AND DEPTH OF DEPRESSION. USE 3/4"Ø x 3 1/2" SHEAR STUD AT REDUCED FILL DEPTH.
- INDICATES DEPTH OF DEPRESSION WHERE NOT SHOWN ON AS.XX SERIES.



NOTES:
1. FILL THICKNESS VARIES. 4 1/2" MIN. THICKNESS.
2. PARTIAL PLAN USED TO SHOW DETAIL REFERENCES ONLY.

PARTIAL PLAN 2
1/8" = 1'-0"

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Reviewed by: Gini Krippner
Date: 10/19/11
Project #: 900020

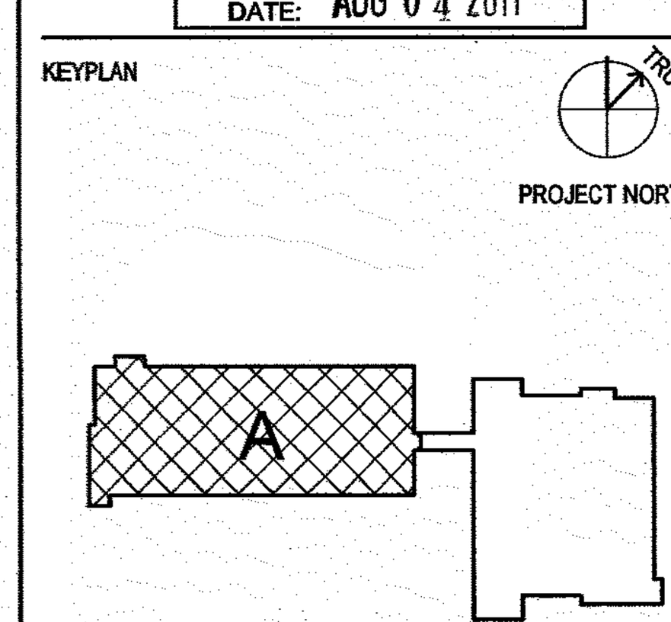
ISSUED FOR	REV	DATE
100% CONSTRUCTION DOCUMENTS		15 JUNE 2011

SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER DAVID ALAN HUGO BREN 4089 EXP. 09/30/12 STRUCTURAL STATE OF CALIFORNIA

Revision #1
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
FILE NO. 01-UC MERCED
APPL. NO. 01-111533
AC — FLS — SS —
DATE: AUG 0 4 2011

KEYPLAN



DRAWING TITLE
LEVEL 2 FRAMING PLAN AREA A

1/8" = 1'-0"
SCALE

900020	38354.000
UCM PROJECT NUMBER	SG PROJECT NUMBER

S2.21A
DRAWING NUMBER

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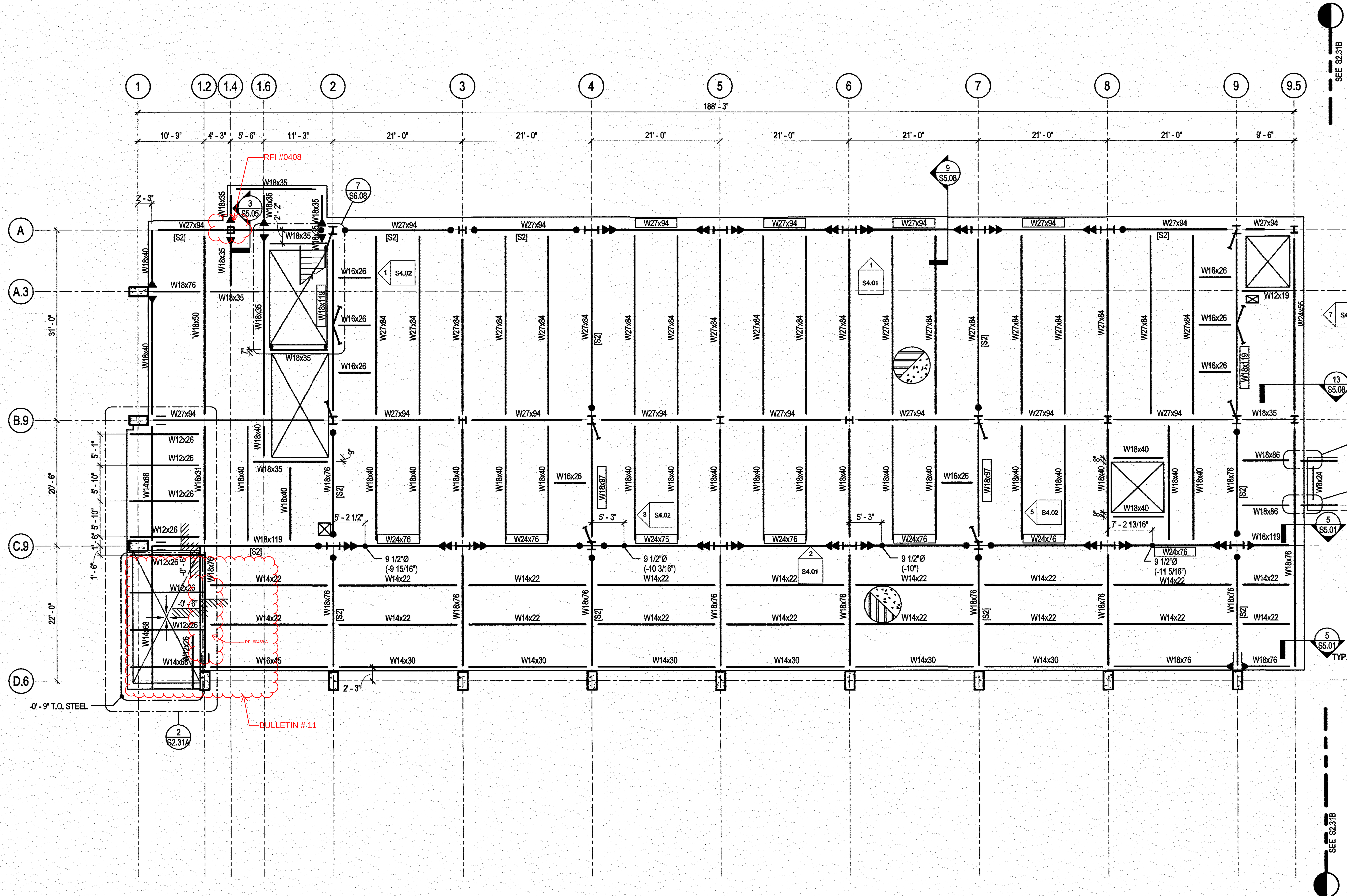
Plot Date: 8/2/2011 6:42:38 AM

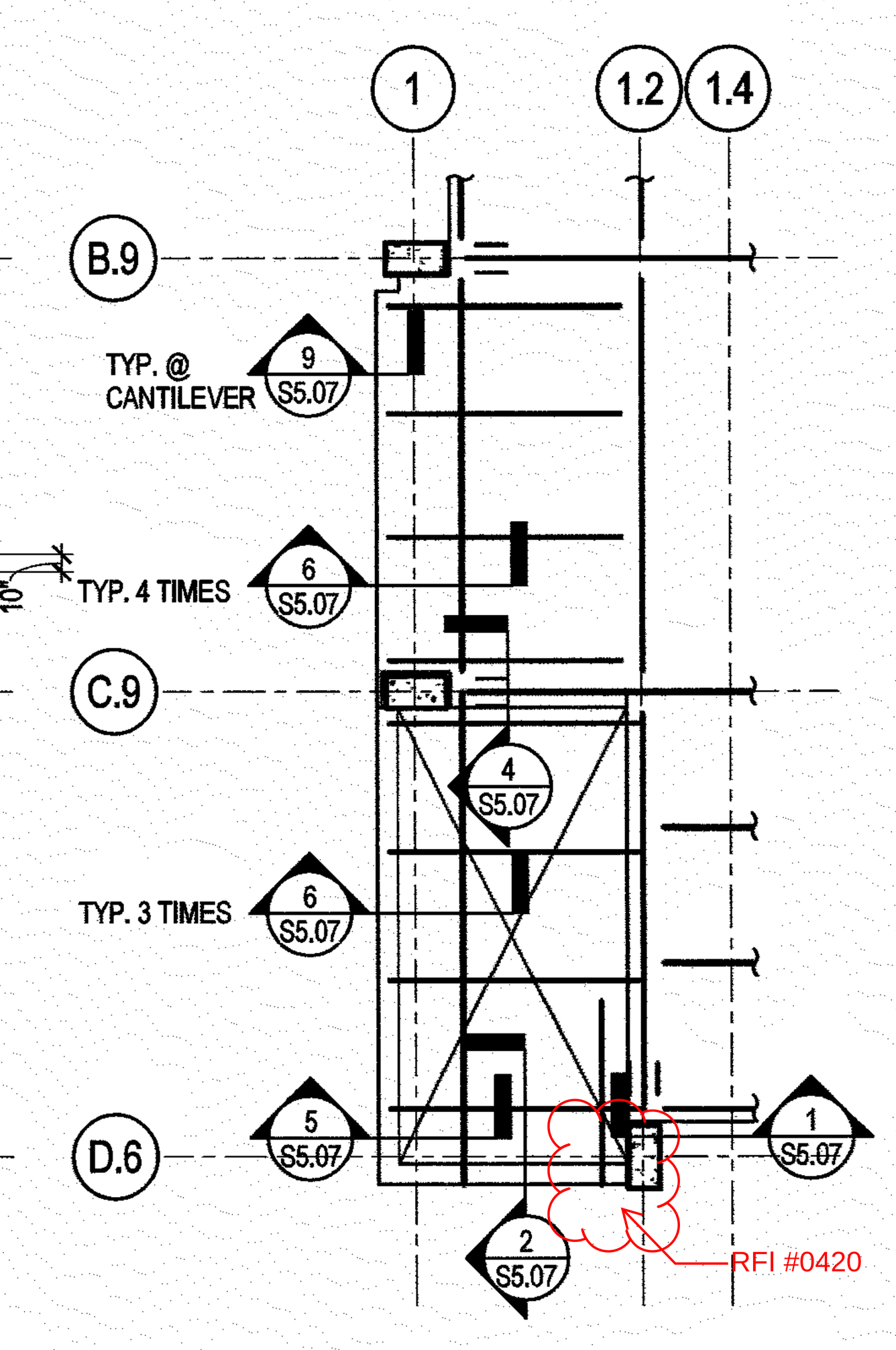
SHEET NOTES:

1. LEVEL 3 TOP OF CONCRETE ELEVATION = +285'-0", TYP U.O.N.
2. TOP OF STEEL ELEVATON IS 284'-51/2", SAME AS 61/2" BELOW TOP OF CONCRETE, TYPICAL, U.O.N.
3. SEE SHEET NOTES S2.21A.

LEGEND

- INDICATES DIRECTION OF DECK
- INDICATES 4 1/2" N.W.C. OVER W2 DECK; SEE PLAN
- INDICATES PRECAST CONCRETE COLUMN; SEE S10.01.
- INDICATES EXTENT OF NON-TYPICAL REINFORCEMENT PATTERN.
- #4 @ 9" O.C. — INDICATES SIZE AND SPACING OF NON-TYPICAL REINFORCEMENT.
- INDICATES EXTENT OF DEPRESSED SLAB. SEE AS.XX SERIES FOR EXTENT AND DEPTH OF DEPRESSION. USE 3/4"Ø x 3 1/2" SHEAR STUD AT REDUCED FILL DEPTH.
- INDICATES DEPTH OF DEPRESSION WHERE NOT SHOWN ON AS.XX SERIES.





NOTE:
1. FILL THICKNESS VARIES. 4 1/2" MIN. THICKNESS.
2. PARTIAL PLAN USED TO SHOW DETAIL REFERENCES ONLY.

PARTIAL PLAN 2
1/8" = 1'-0"

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Reviewed by: Gini Krippner
Date: 10/19/11
Project #: 900020

ISSUED FOR	REV	DATE
100% CONSTRUCTION DOCUMENTS		15 JUNE 2011

SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER DAVID ALAN HUGO COHEN 4068 EXP. 09/30/12 STRUCTURAL STATE OF CALIFORNIA

Revision #1

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APPL. NO. 01-111533
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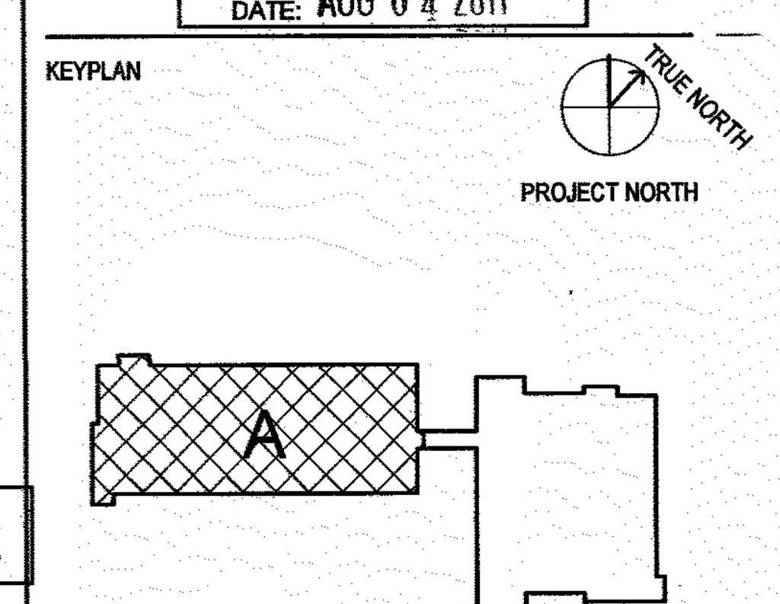
DATE: AUG 0 4 2011

KEYPLAN



DRAWING TITLE

LEVEL 3 FRAMING PLAN AREA A

1/8" = 1'-0"
SCALE

900020
UCM PROJECT NUMBER

38354.000
SG PROJECT NUMBER

S2.31A
DRAWING NUMBER

C:\Projects\UC Merced\REVIT\seo_UCMERCEDSE2_RS11_20110531.rvt
Plot Date: 8/2/2011 6:42:45 AM

SHEET NOTES:

1. ROOF LEVEL TOP OF CONCRETE ELEVATION = +300'-0" TYP. U.O.N.
2. TOP OF STEEL ELEVATON IS 51/2" BELOW TOP OF CONCRETE, TYPICAL, U.O.N.
3. TOP OF PRE-CAST CONCRETE COLUMNS 299'=81/2", SAME AS 31/2" BELOW TOP OF CONCRETE, TYPICAL..
4. SEE SHEET NOTES S2.31A.

RFI #0073

LEGEND

INDICATES DIRECTION OF DECK

INDICATES 3 1/2" N.W.C. OVER W2 DECK; SEE PLAN

INDICATES PRECAST CONCRETE COLUMN; SEE S10.01.

INDICATES EXTENT OF NON-TYPICAL REINFORCEMENT PATTERN.

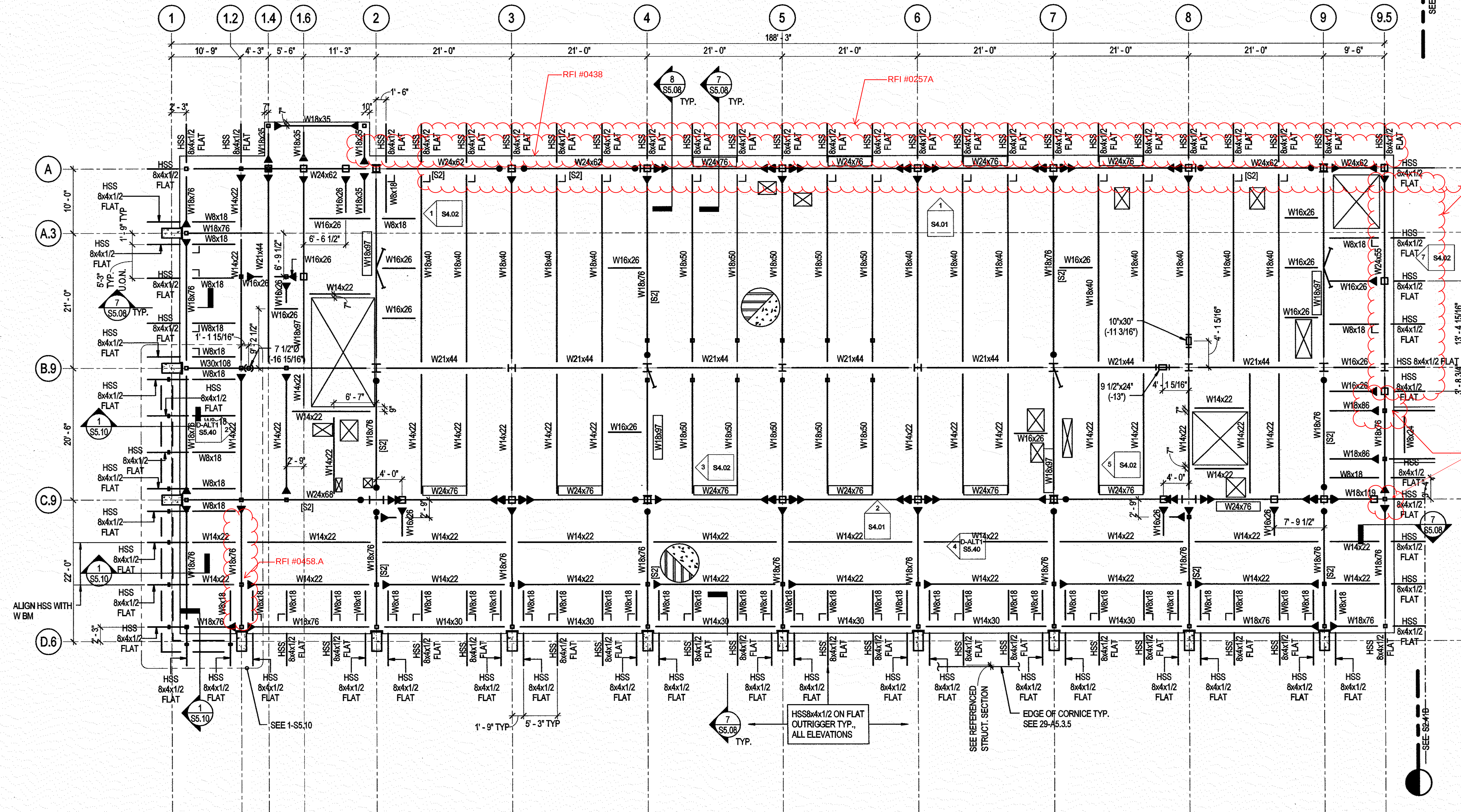
#4 @ 9" O.C. INDICATES SIZE AND SPACING OF NON-TYPICAL REINFORCEMENT.

ROOF DESIGN LOAD NOTES

1. ROOF FRAMING INSIDE OF 16' PARAPET WALLS IS DESIGNED TO SUPPORT 100 PSF MECHANICAL EQUIPMENT LOAD PLUS A 6" NWC CONCRETE SLAB. ROOF FRAMING SUPPORTING MECHANCIAL EQUIPMENT SHOWN ON MECHANICAL DRAWINGS AND WEIGHING MORE THAN 100 PSF IS DESIGNED FOR THE OPERATING WEIGHT OF THAT EQUIPMENT.

2. ROOF FRAMING OUTSIDE OF THE 16' PARAPET WALLS, NOT INCLUDING THE EYEBROW, IS DESIGNED TO SUPPORT 25 PSF MECHANICAL EQUIPMENT.

3. THE ABOVE NOTED LOADS ARE ADDITIVE TO 20 PSF ROOF LIVE LOAD. ROOF LIVE LOAD IS REDUCED PER CBC SECTION 1607.9.1



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Reviewed by: Gini Krippner
Date: 10/19/11
Project #: 900020

ISSUED FOR	REV	DATE
100% CONSTRUCTION DOCUMENTS		15 JUNE 2011

SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER DAVID ALAN HUGO BREN 4088 EXP. 09/30/12 STRUCTURAL STATE OF CALIFORNIA

Revision #1

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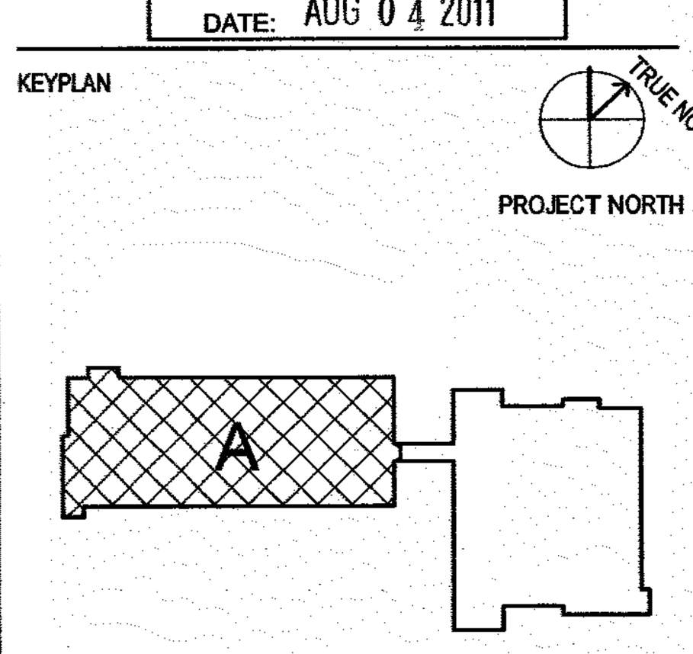
DATE: AUG 0 4 2011

KEYPLAN



DRAWING TITLE

ROOF FRAMING PLAN
AREA A

1/8" = 1'-0"

SCALE

900020 UCM PROJECT NUMBER

38354.000 SG PROJECT NUMBER

S2.41A

DRAWING NUMBER

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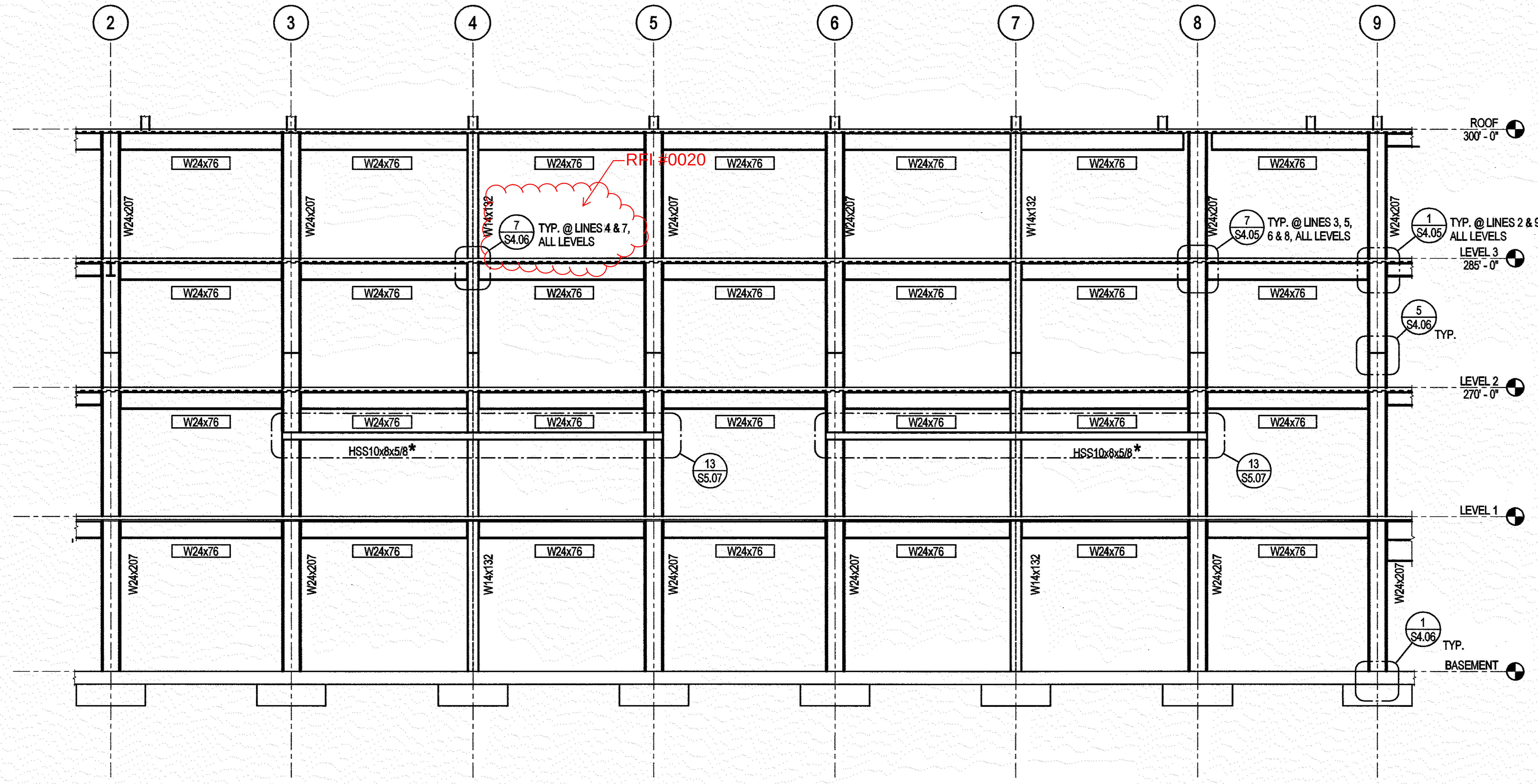
Plot Date: 8/2/2011 6:42:51 AM

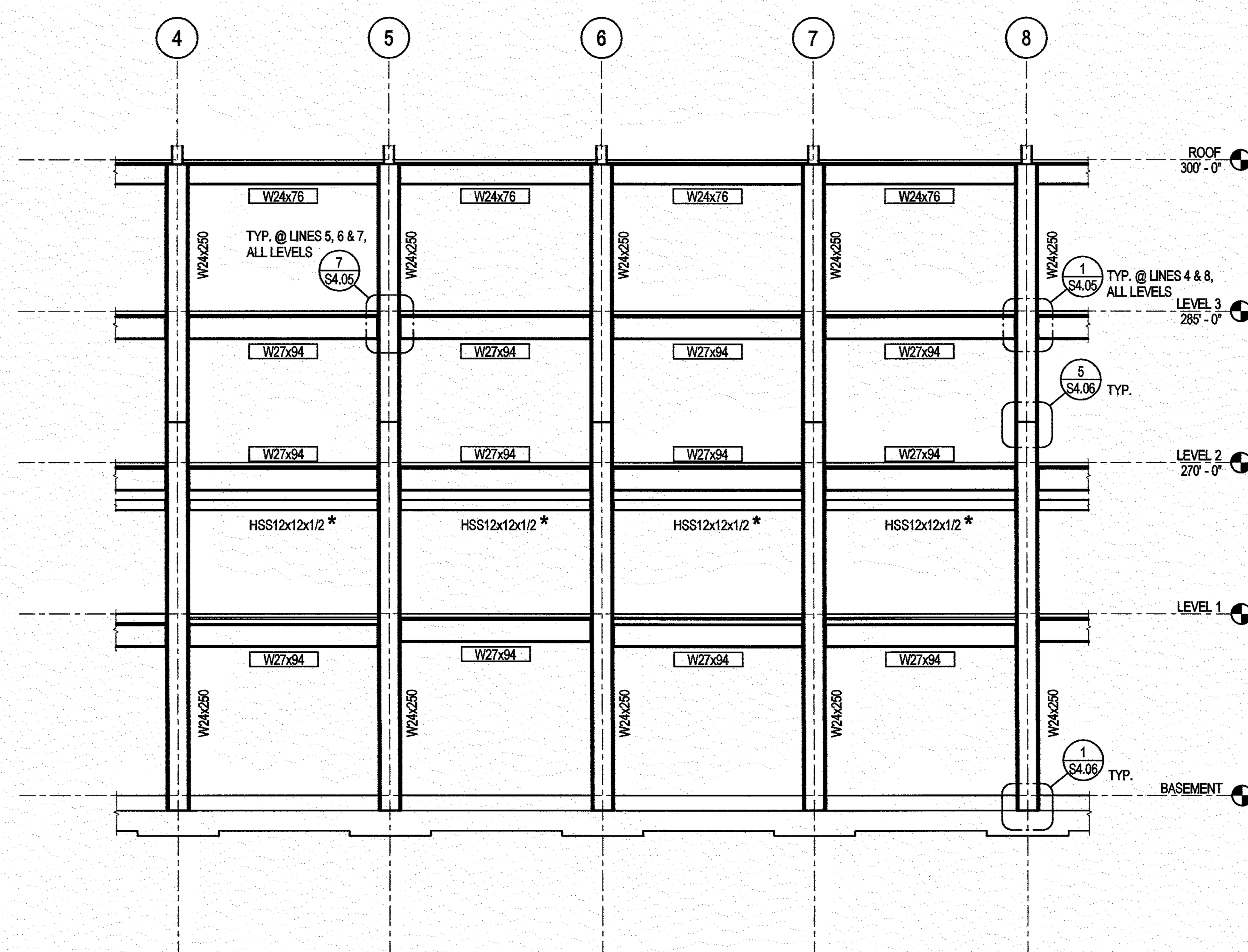
MOMENT FRAME SHEET NOTES

1. SEE S4.05 TO S4.06 FOR MOMENT FRAME CONNECTION DETAILS.
2. SEE 5-S4.06 FOR COLUMN SPLICE DETAIL FOR FRAME COLUMNS.
3. SEE 1-S4.06 FOR BASE PLATE DETAILS AT FRAME COLUMNS.
4. SEE PARAPET ELEVATIONS ON S5.20 & S5.21 FOR PARAPET SUPPORT POST INFORMATION NOT SHOWN OR NOTED.



* HSS MEMBERS & CONNECTIONS NOT PART OF LATERAL FORCE RESISTING SYSTEM.

SMRF ELEVATION LINE C.9 — 2
1/8" = 1'-0"



* HSS MEMBERS & CONNECTIONS NOT PART OF LATERAL FORCE RESISTING SYSTEM.

SMRF ELEVATION LINE A — 1
1/8" = 1'-0"

NOTE: ALL STEEL FRAMING ON THIS SHEET IS INCLUDED IN THE LATERAL FORCE RESISTING SYSTEM, U.O.N.

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Reviewed by: Gini Krippner
Date: 10/19/11
Project #: 900020

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SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER — DAVID ALAN HUGO BREEN — 4088 — EXP. 09/30/12 — STRUCTURAL — STATE OF CALIFORNIA

Revision #1
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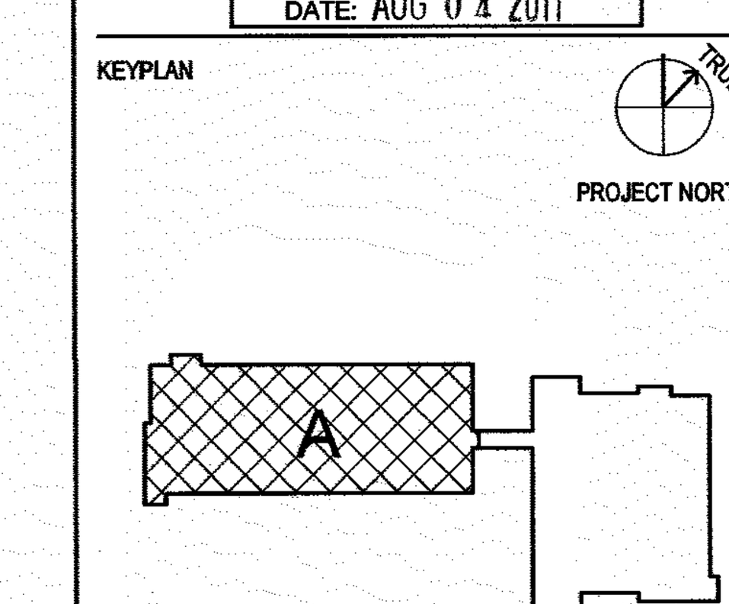
DATE: AUG 0 4 2011

KEYPLAN



DRAWING TITLE
MOMENT FRAME ELEVATIONS AREA A

SCALE 1/8" = 1'-0"
900020 — UCM PROJECT NUMBER
38354.000 — SG PROJECT NUMBER

DRAWING NUMBER
S4.01

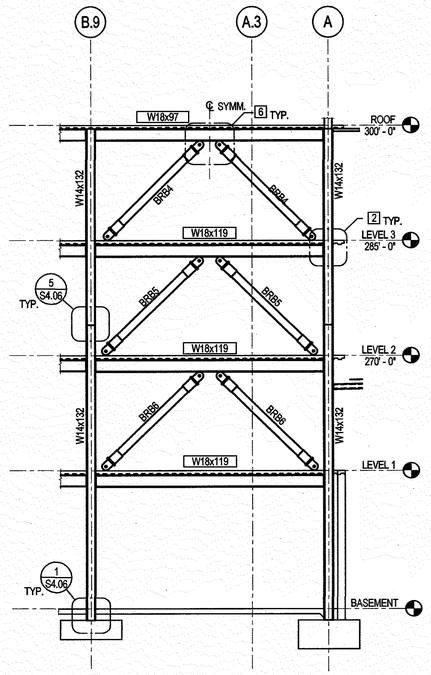
BUCKLING RESTRAINED BRACE SCHEDULE

BRACE MARK	AREA OF STEEL CORE, Asc (IN²)	TENSILE YIELD STRENGTH OF BRACE, Pysc (K)	AXIAL BRACE DEFORMATION, Δbm (IN)	MAXIMUM ALLOWED SLEEVE SIZE (WIDTH×HEIGHT)	ADJUSTED BRACE STRENGTH (K)	
					MAXIMUM TENSION	MAXIMUM COMPRESSION
BRB4	4.0	168	0.44	10"x10"	211	215
BRB5	5.0	210	0.55	10"x10"	264	269
BRB6	6.0	252	0.55	10"x10"	317	323

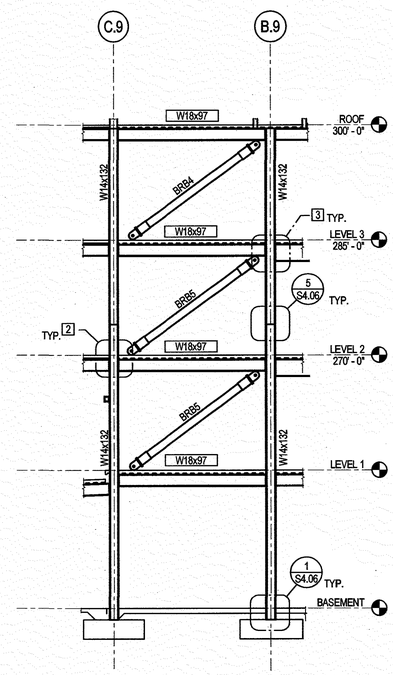
NOTES:
1. THE NUMBER FOLLOWING BRB INDICATES THE REQUIRED AREA (Asc) IN SQUARE INCHES OF THE STEEL CORE PLATE THAT SHALL BE PROVIDED BY THE BRACE MANUFACTURER. SEE SPECIFICATIONS SECTION 05120 FOR ADDITIONAL INFORMATION.
2. Keff = 1.5.
3. ω = 1.14. ωβ = 1.17. Ry = 1.1.
4. Fy = 38KSI MIN TO 46KSI MAX BASED ON COUPON TESTING. COUPON TESTS REQUIRED.
5. TENSILE YIELD STRENGTH OF BRACE, Pysc = AREA OF STEEL CORE x Fy, WHERE Fy = 42 ksi.
6. ADJUSTED BRACE STRENGTH IN TENSION = ω Ry Pysc.
7. ADJUSTED BRACE STRENGTH IN COMPRESSION = ωβ Ry Pysc.
8. CORE PLATE THICKNESS TO MATCH GUSSET PLATE THICKNESS, SEE SCHEDULE ON DETAILS 1- S4.07, 1-S4.08, & 1-S4.09.
9. THE CASING SIZE SHALL BE DETERMINED BY THE MANUFACTURER'S ENGINEER. THE CASING SIZE IS SUBJECT TO LIMITATIONS ABOVE. THE SMALLER DIMENSION IN THE TABLE ABOVE INDICATES THE MAX ALLOWABLE DIMENSION OUT OF PLANE OF THE BRACED FRAME.

BRACE FRAME SHEET NOTES:

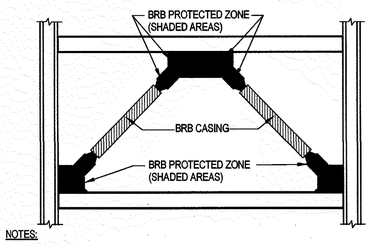
1. BRACE CONNECTION DETAIL CALLOUTS REFER TO DETAIL NUMBERS ON SHEETS S4.07, S4.08 & S4.09.
2. SEE SHEETS S4.07, S4.08, & S4.09 FOR BRACE FRAME CONNECTION SCHEDULES AND DETAILS.
3. S4.07 CORRESPOND TO STAR SEISMIC CLEVIS PIN CONNECTION.
4. S4.08 CORRESPONDS TO NIPPON CRUCIFORM AND CORE BRACE BOLTED CONNECTION.
5. S4.09 CORRESPONDS TO STAR SEISMIC WELDED CONNECTION.
6. SEE 1-S4.06 FOR BASE PLATE DETAILS AT FRAME COLUMNS.
7. SEE 5-S4.06 FOR COLUMN SPLICE DETAIL FOR FRAME COLUMNS.
8. SEE 9-S4.02 FOR PROTECTED ZONES AREA FOR THE BRACE FRAMES.
9. SEE PARAPET ELEVATIONS ON S5.20 & S5.21 FOR INFORMATION NOT SHOWN OR NOTED.



BRBF ELEVATION LINE 9
1/8" = 1'-0" 7

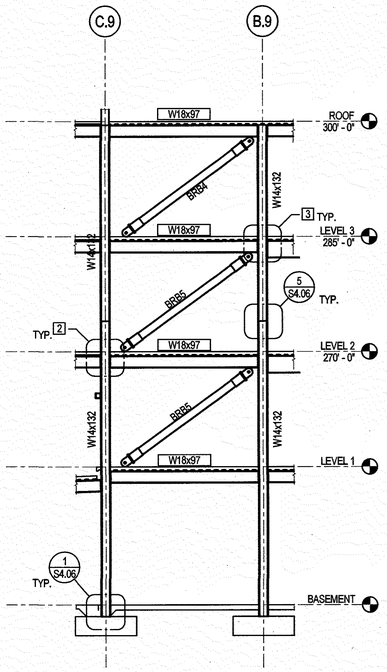


BRBF ELEVATION LINE 4
1/8" = 1'-0" 3

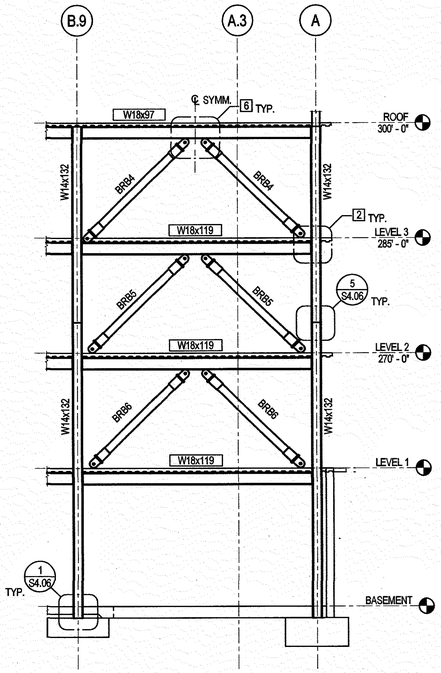


NOTES:
1. THE STEEL CORE OF THE BRACE MEMBER AND THE CONNECTION OF THE BRACE TO THE BEAMS AND COLUMNS ARE CONSIDERED "PROTECTED ZONES" IN ACCORDANCE WITH AISC 341-05, SECTION 16.6. WITHIN THE PROTECTED ZONE, DISCONTINUITIES CREATED BY FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING SHALL BE REPAIRED AS REQUIRED BY STRUCTURAL ENGINEER OF RECORD WITH APPROVAL OF OSHPD. NO CONNECTIONS FOR BRACE ANGLES, EXTERNAL FACADES, PARTITIONS, DUCT WORK, PIPING OR OTHER CONSTRUCTION SHALL BE PLACED IN THE PROTECTED ZONE.
2. PROTECTED ZONE SHOWN FOR INVERTED-V TYPE BRACE CONFIGURATION. PROTECTED ZONE SIMILAR FOR OTHER BRACE CONFIGURATIONS (V-TYPE, SINGLE DIAGONAL, ETC.)
3. CONNECTIONS OF LIGHT GAUGE FRAMING FOR PARTITIONS MAY BE MADE TO THE BRACE CASING. SUCH CONNECTIONS SHALL BE MADE USING WELDS OR SCREW. SHOT PINS TO THE BRACE CASING ARE NOT ALLOWED.

9



BRBF ELEVATION LINE 7
1/8" = 1'-0" 5



BRBF ELEVATION LINE 2
1/8" = 1'-0" 1

NOTE: ALL STEEL FRAMING ON THIS SHEET IS INCLUDED IN THE LATERAL FORCE RESISTING SYSTEM, U.O.N.

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Reviewed by: Gini Krippner
Date: 7/25/11
Project #: 900020

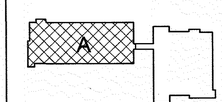
ISSUED FOR	REV	DATE
100% CONSTRUCTION DOCUMENTS		15 JUNE 2011

SEALS AND SIGNATURES

REGISTERED PROFESSIONAL ENGINEER — 4085 — EXP. 09/30/12 — STRUCTURAL — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
FILE NO. 01-UC MERCED
APPL. NO. 01-111533
AC — FLS — SS —
DATE: 06/21/2011

KEYPLAN



DRAWING TITLE
BRACE FRAME ELEVATIONS AREA 'A'

As indicated

SCALE
900020 — UCM PROJECT NUMBER
38354.000 — SG PROJECT NUMBER

S4.02
DRAWING NUMBER