State of Utah

GARY R. HERBERT
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Department of Administrative Services
KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management
DAVID G. BUXTON
Director

ADDENDUM NO. 5

Date: October 31, 2012

To: Contractors

From: Matthias Mueller

Reference: Student Activity Center Addition to the Stromberg Athletic Complex
Weber State University – Ogden, Utah
DFCM Project No. 12031810

Subject: **Addendum No. 5**

Pages	Addendum Cover Sheet	1	page
	Revised Project Schedule	1	page
	Revised Cost Proposal Form	2	pages
	Architect's Addendum 5	17	pages
	Total	21	pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

5.1 **SCHEDULE CHANGES:** See attached Revised Project Schedule. Changes are highlighted.

5.2 **GENERAL ITEMS:**

5.2.1 See attached Revised Cost Proposal Form – includes two additive alternates.

5.2.2 See attached Architect's Addendum 5 dated October 31, 2012.

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

PROJECT SCHEDULE – REVISED
PER ADDENDUM NO. 5 ISSUED OCTOBER 31, 2012

PROJECT NAME: **STUDENT ACTIVITY CENTER ADDITION TO THE STROMBERG ATHLETIC COMPLEX WEBER STATE UNIVERSITY - OGDEN, UTAH**

DFCM PROJECT NO. **12031810**

Event	Day	Date	Time	Place
Request for Proposals Documents Available	Wednesday	September 5, 2012	3:00 PM	DFCM web site *
Mandatory Pre-Proposal Site Meeting	Monday	September 17, 2012	1:30 PM	Room 116 Swensen Bldg Weber State University Ogden, UT
Last Day to Submit Questions prior to submittal of Statements of Qualifications	Thursday	September 20, 2012	12:00 NOON	Bianca Shama - DFCM E- mail: bshama@utah.gov Fax: 801-538-3267
Addendum Deadline	Monday	September 24, 2012	3:00 PM	DFCM web site *
Prime Contractors turn in References, Statements of Qualifications, Management Plans (including Schedule), and Termination/Debarment Certifications	Thursday	September 27, 2012	3:00 PM	DFCM Room 4110 State Office Bldg SLC, UT
Short Listing by Selection Committee (if applicable) Contract Documents available	Wednesday	October 3, 2012	4:00 PM	DFCM web site *
Last Date to Submit Questions for Final Addendum	Thursday	October 18, 2012	4:00 PM	Bianca Shama - DFCM E- mail: bshama@utah.gov Fax: 801-538-3267
Final Addendum Deadline (exception for bid delays)	**Wednesday**	**October 31, 2012**	**4:00 PM**	**DFCM web site ***
Prime Contractors Turn In Cost Proposals and Cost Reduction Proposals	**Tuesday**	**November 6, 2012**	**2:00 PM**	**DFCM Room 4110 State Office Bldg SLC, UT**
Subcontractor List Due and Subcontractor's Bid Bonds	**Wednesday**	**November 7, 2012**	**2:00 PM**	**DFCM Room 4110 State Office Bldg SLC, UT**
Interviews	**Thursday**	**November 8, 2012**	**TBD**	**To be determined**
Announcement	**Friday**	**November 9, 2012**	**4:00 PM**	**DFCM web site ***
Substantial Completion Date	Thursday	August 1, 2013		

NOTE: * DFCM's web site address is **http://dfcm.utah.gov**.

COST PROPOSAL FORM – REVISED
PER ADDENDUM NO. 5 ISSUED OCTOBER 31, 2012

NAME OF PROPOSER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Request for Proposals" for the **STUDENT ACTIVITY CENTER ADDITION TO THE STROMBERG ATHLETIC COMPLEX - WEBER STATE UNIVERSITY - OGDEN, UTAH - DFCM PROJECT NO. 12031810** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

Base Bid: For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS ($_____)
(In case of discrepancy, written amount shall govern)

Additive Alternate No. 1: For all work shown on the Drawings and described in the Specifications and Contract Documents to remove a portion of the athletic track surface in the existing arena and replace with athletic rubber flooring, I/we agree to perform for the sum of:

_____ DOLLARS ($_____)
(In case of discrepancy, written amount shall govern)

Additive Alternate No. 2: To use intumescent paint on all existing trusses in the Stromberg arena, I/we agree to perform for the sum of:

_____ DOLLARS ($_____)
(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by _____ ***(specific date to be provided by contractor),*** should I/we be the successful proposer, and agree to pay liquidated damages in the amount of $**3,000.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.
Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____.

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable l00% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

_____
(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

_____

Respectfully submitted,

_____
Name of Proposer

ADDRESS:

_____

_____

_____
Authorized Signature

Addendum 005

project:	WSU Stromberg Student Activity Center	**project no:**	12475
date:	2012-10-31	**no. pages:**	17
owner:	DFCM		
contractor:			
bid date:	2012-11-06	**bid time:**	2:00 pm

This Addendum shall be considered part of the Contract Documents and Project Manual for the above mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents and Project Manual, the Addendum shall govern and take precedence.

General:

Item	Description
5.1	Please note the revised **Project Schedule Dates**: November 6 - Cost Proposals Due, at 2:00PM November 8 - Interviews, locations and times TBD A revised Project Schedule is posted on the DFCM website.
5.2	Please note a revised Bid Form is provided on the DFCM website.
5.3	In response to questions regarding a Hazardous Material Survey. The Stromberg Arena building has been tested and it has been recently determined that there is a tar layer on the roof that contains 12% asbestos. DFCM and Weber State University will be responsible for the removal of this material and will coordinate the schedule of this work with the awarded contractor. **Please note**: For the purposes of this bid there are **no changes** to the construction documents and the demolition work of the Stromberg Arena roof is to be bid as currently noted.
5.4	**Fireproofing and Intumescent Paint Clarification** - The **Base Bid** is to include the following work: All new and existing structural steel in the Stromberg Arena, roof deck, joists and trusses, are to be protected by spray applied fire proofing (SFRM) as required by Type IB construction. All existing trusses and deck in the Stromberg Arena are to be cleaned of existing primer down to steel by sandblasting, prior to installation of SFRM. The existing joists, noted as 32 LH in the anticipated existing conditions record drawings, do not need to be cleaned of primer. There are no changes to the protection of steel in the new addition and is to be bid as noted in the construction documents. - Revise **Bid Alternate #2** to be as follows: Provide an **additive** alternate to protect all existing Trusses in the Stromberg Arena with intumescent paint (IFRM). The Trusses are noted as T1, T2, T3, T4, T5, T6, HT1, HT2 and HT3 in the anticipated existing condition record drawing set. The existing joists, new joists and roof deck are to remain protected by spray applied fire proofing. All existing trusses and deck in the Stromberg Arena are to be cleaned of existing primer down to steel by sandblasting, prior to installation of IFRM on Trusses and SFRM on the joists and deck.

5.5	Please note, the fire sprinkler lines and heads in the Stromberg Arena in areas where deck is to be removed are to be removed and replaced as necessary.
5.6	Refer to the attached structural addenda.
5.7	Refer to the attached electrical addenda.

End of Addendum 005

ADDENDUM #05

Project: WSU Student Activity Center-Stromberg Addition **Project No.:** 12606
Location: Ogden, Utah **Date:** 31 October 2012
Addendum by: Jeremy Achter, S.E.

Sheet S002

-Reinforcing has been revised for the FC2, FC4, and FC5 in the footing schedule.

Sheet S113

-A column size has been added for the column at 4-G.
-The errant footing callout at 2.5-EC has been removed from the plans.
-The opening for the entry doors in the concrete wall on gridline EC.5 has been revised. The small piers between the openings have been deleted.
-Concrete jamb callouts have been revised at the three concrete walls on gridlines A, B, and D.5.

Sheet S122

-Headed studs have been added to the beams and rebar dowels have been added at the S-E mezzanine.

Sheet S123

-The concrete beam over the entry doors on gridline EC.5 has been clarified and detail cuts have been added.
-The door opening

Sheet S133

-Rebar has been added and detail cuts have been added to the plan B/S133.
-Dowels have been added to the columns in the plan A/S133 and the stringer design forces have been revised.

Sheet S143

-Framing has been added along gridline A between 4 and 5.

Sheet S143.1

-Detail cuts have been added to framing plan D/S143.1.

Sheet S202

-Details D5 and C5 have been revised to indicate the requirement for slip critical bolts.

Sheet S403

-Detail B2 has been revised to clarify the bolting requirement.
-A rebar tie has been added to detail E3.
-The dimensions and tie spacing of the grade beam in detail E5 have been revised.

Sheet S404

-A weld callout has been added to details C5, D5.

-Details D3, E2, and E4 have been revised to show an attachment to the top of the wall.

Sheet S406

-A weld callout has been added to detail B4.

Sheet S408

-Detail D4, D5, and E3 are new details.

Filing:(x) project file () other
WSU Student Activity Center-Stromberg Addition_Struct_ADD05_103112

Addendum No. Five
for the
Stromberg Student Activity Center
Stromberg Addition - BID SET
Weber State University
3750 Harrison Blvd. Ogden, UT 84408

CHANGES TO THE DRAWINGS: IN ORDER AS FOLLOWS:

E1.1 SHEET EE-004

1. Tie panel L10 to the 100A 3 pole circuit breaker in panel LP. Utilize 4 #3 THHN, 1 #8 THHN GND. in a 1-1/4" Conduit.

E1.2 SHEET EL1-01A Thru EL1-03C

1. Base bid for Occupancy Sensors shall be Wattstopper. Provide an alternate cost to provide equal Occupancy Sensors from System Sensor N-Light and from Green Gate.

END OF ADDENDUM No. 5

ELECTRICAL CONSULTING ENGINEERS
www.eceonline.com
801 521 8007 801 521 8057 FAX
939 SOUTH WEST TEMPLE SALT LAKE CITY UTAH 84101

K. COLD-FORMED STEEL

1. LIGHT GAUGE STEEL FRAMING
   a. STEEL FRAMING SIZE DESIGNATORS USED IN THE DRAWINGS FOLLOW THE CONVENTION ESTABLISHED BY THE STEEL STUD MANUFACTURERS' ASSOCIATION (SSMA) AND THE NORTH AMERICAN STEEL FRAMING ALLIANCE (NASFA). FRAMING MEMBERS PROVIDED SHALL meet or exceed all SSMA and NASFA STANDARDS AND DESIGN PROPERTIES.
   b. ALL LOAD BEARING STUDS (AND/OR) JOIST FRAMING MEMBERS ALONG WITH ALL RUNNERS, BRIDGING, AND END-TRACKS SHALL BE OF THE DESIGNATION SHOWN ON THE PLANS. ALL OF THE ABOVE ELEMENTS SHALL BE FORMED FROM STEEL MEETING REQUIREMENTS OF ASTM A1011/A1011M-04. ALL COMPONENTS SHALL BE GALVANIZED. ALL COMPONENTS SHALL HAVE THE FOLLOWING YIELD STRESSES:

COMPONENT	BASE METAL THICKNESS	YIELD STRESS
STUDS, JOISTS & TRACKS	33 & 43 MILL	33,000 PSI
	54, 68 & 97 MILL	50,000 PSI
END CLOSURES & BRIDGING	33, 43, 54 & 68 MILL	33,000 PSI

   c. FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS FOR THE USE OF THESE PRODUCTS.
   d. UNLESS NOTED OTHERWISE, ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS D1.3 AND THE STRUCTURAL DETAILS. ALL WELDS SHALL BE COMPLETED USING E60XX ELECTRODES.
2. CONNECTIONS, FASTENERS, AND ADHESIVE
   a. ALL SCREWS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

SCREW SIZE	SHANK DIAMETER
NO. 6	0.138"
NO. 8	0.164"
NO. 10	0.190"
NO. 12	0.216"

   b. UNLESS NOTED OTHERWISE, ALL FRAMING ANCHORS, SLIPS, HOLD DOWNS, STRAPS, ETC. TO BE PROVIDED BY THE STEEL NETWORK OR APPROVED EQUAL.
   c. UNLESS NOTED OTHERWISE, ALL EXTERIOR WALL BOTTOM TRACKS TO BE ANCHORED TO THE CONCRETE FOUNDATION WALL WITH HILTI KWIK HUS-EZ ¼"X2-1/2" EMBEDMENT ANCHOR BOLTS @ 16"O.C.
3. UNLESS NOTED OTHERWISE, ALL STEEL STUD WALLS SHALL BE CONTINUOUS BETWEEN TOP AND BOTTOM TRACKS WITH NO SPLICES.
4. UNLESS NOTED OTHERWISE, ALL STEEL STUD JOISTS AND BOX HEADER COMPONENTS SHALL BE CONTINUOUS WITH NO SPLICES BETWEEN BEARING SUPPORTS.
5. ALL TOP AND BOTTOM TRACKS OF STUD WALLS AND BOX HEADERS SHALL BE CONTINUOUS. WHERE LONG TRACKS ARE NOT AVAILABLE, TRACKS MAY BE WELDED TOGETHER PER NOTE 1D OF THESE NOTES, ON ALL SIDES OR TRACKS MAY BE SPLICED PER DETAIL x/xx.
6. SEE TYPICAL DETAIL FOR REINFORCEMENT OF KNOCK OUT HOLES AT BEARING AND POINT LOAD LOCATIONS ON STEEL JOISTS AND BOX HEADERS.
7. AT ALL OVERBUILD LOCATIONS, ROOF SHEATHING SHALL BE COMPLETE BELOW OVERBUILDS PRIOR TO OVERBUILD CONSTRUCTION.
8. UNLESS NOTED OTHERWISE, ALL WALLS SHALL BE 600S162-54 STUDS SPACED AT 16"O.C. W/ 600T125-54 TRACKS. ATTACH TRACK TO STUDS W/ (1) #8 TEK SCREWS EACH SIDE OF STUD.
9. ALL INTERIOR, NON-BEARING, STEEL STUD WALLS THAT EXTEND ABOVE THE CEILING BUT DO NOT ATTACH TO THE FLOOR OR ROOF DIAPHRAGM (ABOVE), SHALL HAVE DIAGONAL BRACES AT 45 DEGREES (+/-). SEE ARCHITECTURAL DETAILS.

L. 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. (###/###) DENOTES APPLIED TOTAL AND LIVE UNIFORMLY DISTRIBUTED LOADS IN POUNDS PER LINEAR FOOT OF JOIST, RESPECTIVELY.
3. SEE JOIST LOAD PROFILES FOR SPECIALLY LOADED JOISTS.
4. 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.
5. 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.
6. PROVIDE SPECIAL BEARING ENDS AS REQUIRED AT SLOPED BEARING CONDITIONS. CONTRACTOR SHALL COORDINATE WITH OTHER STRUCTURAL ELEMENTS.
7. ALL JOISTS SHALL BE CAMBERED PER SJI SPECIFICATIONS, UNLESS NOTED OTHERWISE.
8. 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.
9. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
10. 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.
11. 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.
12. FABRICATOR MUST SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL PER IBC 2206.5 STATING THAT WORK WAS PERFORMED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTS AND WITH SJI SPECIFICATIONS.
13. UNLESS NOTED OTHERWISE, ROOF JOISTS AND GIRDERS SHALL BE DESIGNED FOR A NET WIND UPLIFT OF 22 PSF.
14. ALL ROOF JOISTS BEARING ON EXTERIOR BEAMS SHALL BE DESIGNED TO TRANSFER 3.75 KIPS (ULTIMATE) TOP CHORD AXIAL FORCE THROUGH THE BEARING SHOE.
15. ALL K-SERIES JOISTS SHALL BE FABRICATED WITH 5" JOIST BEARING SEATS.
16. COORDINATE BRIDGING DESIGN AND LAYOUT WITH THE MECHANICAL PLANS AS DUCTWORK MAY OCCUR IN THE PLANE OF AND PARALLEL TO JOISTS REQUIRING THAT STRAIGHT BRIDGING BE USED IN LIEU OF DIAGONAL BRIDGING.

M. MASONRY

1. ALL HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C-90.
   f'm (MINIMUM) 1,500 PSI
   MINIMUM UNIT STRENGTH 1,900 PSI (TESTED IN ACCORDANCE WITH ASTM C-140)
2. ALL GROUT (SITE MIXED OR PRE-MIXED) SHALL CONFORM TO ASTM C-476 OR SECTION 2.2A OF TMS 602-08/ACI 530.1-08/ASCE 6-08. GROUT SHALL BE PLACED WITH SUFFICIENT WATER FOR POURING WITHOUT SEGREGATION. DO NOT USE MORTAR FOR GROUT. MECHANICALLY VIBRATE ALL GROUT.
3. GROUT STOPS SHALL BE AN APPROVED PRODUCT DESIGNED AND MANUFACTURED FOR USE AS A GROUT STOP. GROUT STOP SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW. OTHER GROUT STOP MATERIALS SUCH AS ASPHALT IMPREGNATED MATERIALS ARE NOT PERMITTED.
4. MORTAR SHALL BE TYPE S AND SHALL CONFORM TO ASTM C 270.
5. ALL MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.
6. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL 8" MASONRY WALLS SHALL BE AS FOLLOWS:
   a. VERTICAL: # 5 BARS IN CELLS ADJACENT TO ALL OPENINGS, AT CORNERS AND AT A MAXIMUM SPACING OF 32" THROUGHOUT THE WALL. ALL VERTICAL REINFORCEMENT INCLUDING, BUT NOT LIMITED TO JAMBS, COLUMNS, AND WALL REINFORCING SHALL BE DOWELED INTO AND THROUGH THE FOUNDATION WALL AND INTO THE FOOTING BELOW UNLESS SPECIFICALLY DETAILED OTHERWISE.
   b. HORIZONTAL: (2) #4 BARS IN 8" DEEP "H" BLOCK BOND BEAM UNITS AT 48"O.C. AND AT FLOORS, ROOF AND TOP OF WALL. BOND BEAMS AT ROOF WILL SLOPE TO MATCH SLOPING ROOF.
7. ALL BLOCK CELLS CONTAINING REINFORCING, BOLTS, OR ANCHORS SHALL BE GROUTED SOLID.
8. PROVIDE (1) #5 (MINIMUM), IN GROUTED SPACE, ON ALL SIDES AND ADJACENT TO EVERY OPENING WHICH EXCEEDS 24" IN EITHER DIRECTION. HORIZONTAL BARS SHALL EXTEND 24" BEYOND THE CORNERS OF THE OPENING AND VERTICAL BARS SHALL EXTEND TO TOP OF WALL. VERTICAL REINFORCING SHALL BE PROVIDED AT ENDS, CORNERS AND EACH SIDE OF CONTROL JOINTS. SEE TYPICAL DETAILS FOR OPENINGS WHICH EXCEED 32" IN EITHER DIRECTION.
9. SOLID GROUTING OF MASONRY IS UNACCEPTABLE EXCEPT AS SPECIFICALLY NOTED ON PLANS AND SCHEDULES.
10. WHERE WALLS ARE NOT GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE FLUSH WITH THE TOP OF THE UPPERMOST UNIT EXCEPT AT CELLS WITH VERTICAL REINFORCING WHERE GROUT SHALL BE 1-1/2" BELOW TOP OF UNIT TO PROVIDE CONSTRUCTION KEY. WHERE WALLS ARE GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE 1-1/2" BELOW TOP OF UNIT.
11. GROUT POURS SHALL NOT EXCEED 5'-0" UNLESS HIGH LIFT GROUTING PROCEDURES ARE FOLLOWED.
12. THE USE OF HIGH LIFT GROUTING PROCEDURES REQUIRE THE APPROVAL OF THE ARCHITECT AND ENGINEER AND SHALL NOT EXCEED THE MAXIMUM HEIGHTS GIVEN IN TABLE 1.19.1 OF TMS 402-08/ACI 530-08/ASCE 5-08. GROUT DEMONSTRATION PANELS, AS PRESCRIBED BY THE ARCHITECT AND ENGINEER, SHALL BE REQUIRED WHERE REQUESTED GROUTING PROCEDURES DO NOT MEET THE LIMITS OF TABLE 1.19.1. ADDITIONALLY, ALL HIGH LIFT GROUTING SHALL INCLUDE INSPECTION PROCEDURES NEEDED TO VERIFY GROUT PLACEMENT DURING CONSTRUCTION.
13. ALL MASONRY BEAMS SHALL BE BUILT INTEGRAL WITH SUPPORT. NO TOOTHING OR DOWELING PERMITTED. UNITS WITH ONE END OPEN SHALL BE USED FOR ALL MASONRY BEAMS.
14. PROVIDE VERTICAL CONTROL JOINTS AT MAXIMUM SPACINGS NOTED BELOW UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS AND/OR ON ARCHITECTURAL ELEVATIONS AND AT ALL CHANGES IN WALL ELEVATION AND MASONRY THICKNESS. CONTROL JOINTS SHALL NOT BE LOCATED DIRECTLY OVER OR CLOSER THAN 24" TO WALL OPENINGS (DOORS, WINDOWS, MECHANICAL OPENINGS, ETC.), OR WITHIN MASONRY JAMBS.
   REINFORCED MASONRY: 40 FT
   VENEER: 30 FT AND AT INTERFACE BETWEEN VENEER SUPPORTED BY FOUNDATIONS AND SUSPENDED STRUCTURAL ELEMENTS.
15. HORIZONTAL REINFORCEMENT SHALL TERMINATE AT EACH SIDE OF CONTROL JOINTS EXCEPT AT FLOOR AND ROOF LEVEL BOND BEAMS AND AT TOP OF PARAPET.
16. CONTROL JOINTS SHALL BE PROVIDED AT THE MASONRY SIDE OF EMBEDDED STEEL COLUMNS TO CONTROL CRACKING OF FACE SHELLS.
17. SUPPORT NON-BEARING, NON-STRUCTURAL WALLS AT TOP OF MASONRY AS PER TYPICAL DETAILS AT LOCATIONS WHERE INTERSECTING OR PERPENDICULAR WALLS ARE 12'-0" OR MORE APART OR WHERE END OF WALL OCCURS 6'-0" OR MORE FROM INTERSECTING WALL.
18. EMBED CHANNELS AND PLATES TO BE PLACED SO AS TO CREATE FLUSH SURFACE WITH FACE OF MASONRY. FLANGES ON CHANNEL EMBEDS SHALL BE HORIZONTAL.
19. ALL VERTICAL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO GROUTING USING WIRE POSITIONERS OR OTHER ACCEPTABLE DEVICES. REINFORCING SHALL BE SECURED AT BAR-SPLICE LOCATIONS AND AT A SPACING NOT MORE THAN 120 BAR DIAMETERS.
20. UNLESS NOTED OTHERWISE, MASONRY WALLS SHALL BE CONSTRUCTED UTILIZING COMMON RUNNING-BOND WITH FULLY MORTARED BED JOINTS AROUND GROUTED CELLS.
21. MASONRY VENEER SHALL BE ANCHORED AS FOLLOWS:
   MASONRY VENEER SHALL BE ANCHORED USING THE DUR-O-WAL 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. WOOD AND METAL STUDS; USE DUR-O-WAL D/A 213 HEAVY DUTY ANCHORS OR AN APPROVED EQUAL. THE DUR-O-WAL ASSEMBLY SHALL BE ATTACHED TO WOOD STUDS USING A # 12 X 2" WOOD SCREWS OR TO METAL STUDS USING #10 SCREWS.
22. ELECTRICAL CONDUIT SHALL NOT BE PLACED IN CELLS THAT CONTAIN REBAR. CONDUIT IS ALLOWED TO PASS THROUGH REINFORCED CELLS WHEN IT OCCURS PERPENDICULAR TO THE REBAR. CONDUIT SHALL NOT CONTACT REBAR AS IT PASSES. THERE SHALL BE 1" CLEAR BETWEEN CONDUIT AND REBAR.

N. HELICAL PIER FOUNDATIONS

1. HELICAL PIER FOUNDATIONS AND THEIR COMPONENTS SHALL BE CONSIDERED A "PILE FOUNDATION" AND SHALL BE SUBJECT TO CONTINUOUS SPECIAL INSPECTION AS REQUIRED BY THE SPECIAL INSPECTION SCHEDULE FOR PILE FOUNDATIONS AND PER IBC CHAPTER 17.
2. HELICAL PIER FOUNDATION SYSTEMS SHALL BE DESIGNED BY A LICENSED ENGINEER TO RESIST THE REQUIRED LOADS AS INDICATED ON THE PLANS AND SCHEDULES. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION CONCERNING REQUIREMENTS FOR DESIGN, TESTING, AND INSTALLATION OF HELICAL PIER FOUNDATIONS.
3. SHOP DRAWINGS AND CALCULATIONS PREPARED AND STAMPED BY A LICENSED ENGINEER SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION. AT A MINIMUM, SHOP DRAWINGS AND CALCULATIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, PIER LAY-OUT, QUANTITIES, SHAFT AND HELIX SIZES, FOUNDATION CONNECTION REQUIREMENTS, TEST PIER REQUIREMENTS, APPLIED SAFETY FACTORS, ETC.
4. HELICAL PIER FOUNDATION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH AN ICC EVALUATION SERVICES INC. RESEARCH REPORT BY CERTIFIED HELICAL PIER INSTALLERS.
5. ALL STEEL COMPONENTS OF HELICAL PIER FOUNDATION SYSTEMS SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153.
6. ALL HELICAL PIERS SHALL BE PLACED IN UNDISTURBED SOIL TO A MINIMUM DEPTH AS REQUIRED TO REACH THE SPECIFIED LOAD REQUIREMENTS NOTED ON THE PLANS, BUT NO LESS THAN 5 TIMES THE DIAMETER OF THE LARGEST HELIX BELOW THE UNDISTURBED SURFACE.
7. HELICAL PIER FOUNDATION SHALL BE DRIVEN INTO SOIL UNTIL THE REQUIRED TORQUE OR ULTIMATE LOAD RATING IS REACHED. TORQUE RESULTS AND HELICAL PIER DEPTHS SHALL BE RECORDED FOR EACH PIER AND SUBMITTED TO THE ENGINEER FOR REVIEW.
8. ALL PIERS SHALL BE PLACED SUCH THAT THE HELICES OF ADJACENT PIERS ARE NO CLOSER THAN 3 HELICE DIAMETERS APART (BASED ON THE LARGEST HELICE USED TO ATTAIN THE REQUIRED LOAD RATING) WHEN THE PIER HAS REACHED ITS FINAL DEPTH.
9. HELICAL PIER FOUNDATIONS USED TO RESIST CYCLICAL LOADING SHALL HAVE STEEL SHIMS INSTALLED IN THE COUPLING BOXES TO REMOVE SLACK AT COUPLERS.
10. THE NUMBER AND LOCATION OF HELICAL PIERS IS SHOWN SCHEMATICALLY ON THE PLANS. HELICAL PIER SUPPLIER IS RESPONSIBLE FOR DETERMINING THE ACTUAL NUMBER AND DEPTH OF PIERS REQUIRED TO RESIST THE LOADS SHOWN ON THE PLANS. LOADS SHOWN ARE BASED ON ALLOWABLE/DESIGN LEVEL FORCES.

O. 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. HELICAL PIERS / MICRO PILES (TO INCLUDE DETAILS SHOWING ATTACHMENT OF PIER/PILES TO EXISTING FOUNDATIONS, NEW GRADE BEAMS, ETC.).
   c. BRB BRACES, GUSSET PLATES, AND CONNECTIONS. THESE DESIGNS SHALL BE BASED UPON QUALIFIED CYCLIC TESTS IN ACCORDANCE WITH SECTION 16.2(C) OF AISC 341-05.
   d. SEISMIC BRACING OF ALL ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL ITEMS WHERE REQUIRED BY ASCE 7-05 AND THE PROJECT CONTRACT DOCUMENTS.
   e. STRUCTURAL STEEL STAIRS AND HANDRAILS.
   f. DISPLACEMENT RAMMED AGGREGATE PIERS.

CONCRETE WALL SCHEDULE (L)

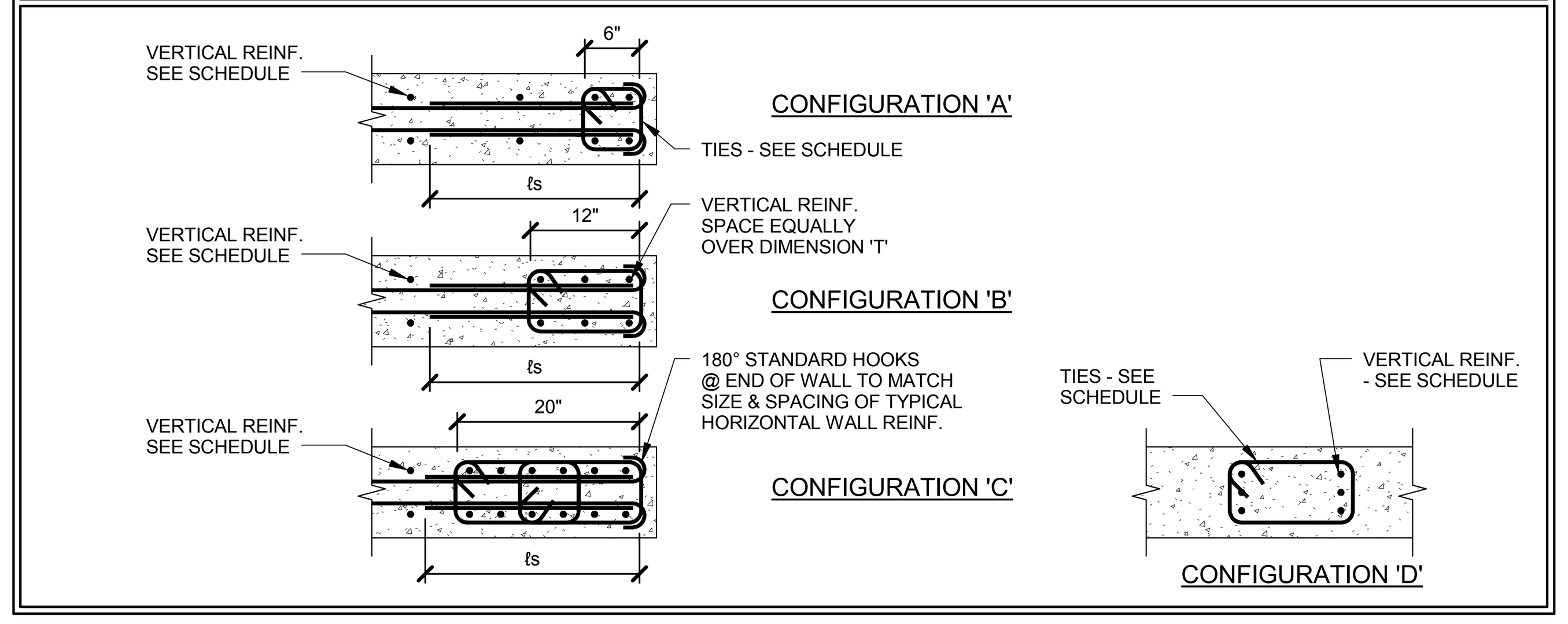
MARK	THICK.	VERT. REINF. SIZE	VERT. REINF. SPACING	HORIZ. REINF. SIZE	HORIZ. REINF. SPACING	COMMENTS
CW-1	10"	#4 EA. FACE	10"	#4 EA. FACE	18"	
CW-1A	10"	#4 EA. FACE	10"	#4 EA. FACE	12"	
CW-2	10"	#4 EA. FACE	10"	#4 EA. FACE	16"	

NOTES:
1. CONCRETE WALL CALLOUTS ON PLAN ARE NOTED FOR LEVEL ABOVE CALLOUT.
2. SEE STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
3. PLACE (2) #5 ON ALL SIDES OF OPENINGS. EXTEND AT LEAST 24" BEYOND EDGE OF OPENING.
4. PLACE (2) #4 x 48" 45 DEGREE DIAGONAL BARS AT THE CORNERS OF ALL WALL OPENINGS.

CONCRETE JAMB SCHEDULE (L)

MARK	VERTICAL REINF.	TIES	CONFIG.	COMMENTS
CJ-1	(4) #5	#3 TIES @ 8"o.c.	A	
CJ-2	(6) #6	#3 TIES @ 8"o.c.	B	
CJ-3	(12) #6	#3 TIES @ 8"o.c.	C	
CJ-4	(6) #4	#3 TIES @ 8"o.c.	D	

NOTES:
1. ALL VERTICAL REINFORCEMENT IS CONTINUOUS UP FULL HEIGHT OF WALL.
2. ALL VERTICAL REINFORCEMENT SHALL HAVE DOWELS CAST INTO FOOTING BELOW.
3. CONCRETE JAMB VERTICAL BARS SHALL HAVE SPLICE LENGTH PER 'BEAM TOP BARS' ACCORDING TO REBAR LAP SCHEDULE.



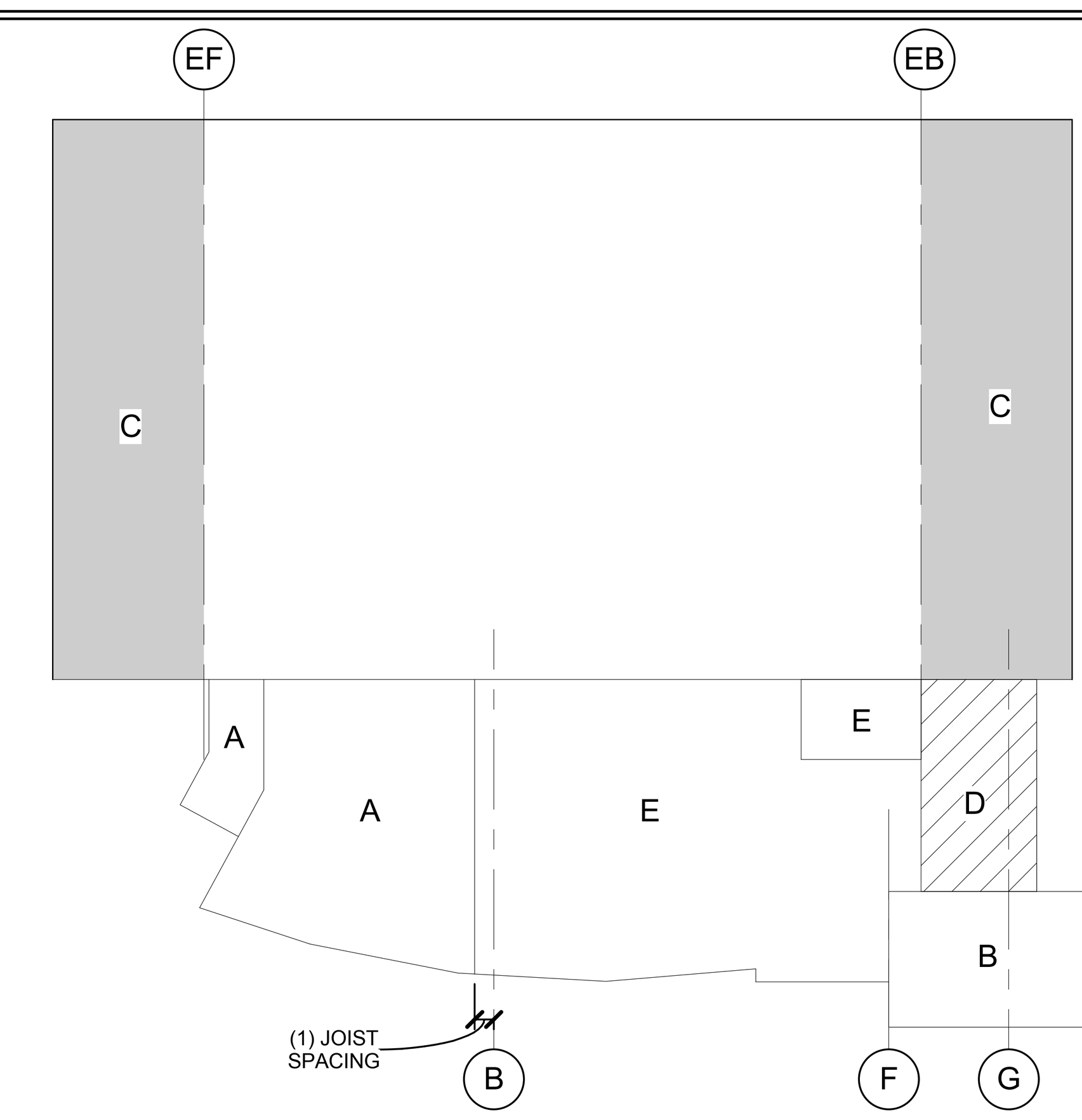
ROOF DECK SCHEDULE (L)

AREA	DECK DEPTH	DECK TYPE	DECK GA.	SUPPORTS DIA. WELD	SUPPORTS PATTERN	SIDE SEAMS #12 TEK SCREWS	SIDE SEAMS TOP SEAM WELD	SIDE SEAMS PUNCH LOCK	SUPPORTS PARALLEL TO FLUTES DIA. WELD	SUPPORTS PARALLEL TO FLUTES SPA.	MIN. SHEAR CAPACITY	COMMENTS
A	1 1/2	B	20	3/4	36/7	---	---	24"	3/4"	24"	750 PLF	---
B	1 1/2	B	20	3/4	36/7	---	---	8"	3/4"	4"	1093 PLF	---
C	1 1/2	B	16	3/4	36/7	---	---	12"	3/4"	12"	1760 PLF	ACOUSTICAL DECK
D	1 1/2	B	18	3/4	36/7	---	---	24"	3/4"	12"	1373 PLF	
E	1 1/2	B	20	3/4	36/7	---	---	18"	3/4"	16"	940 PLF	

FASTENING PATTERNS

WELD PATTERN : 36/7

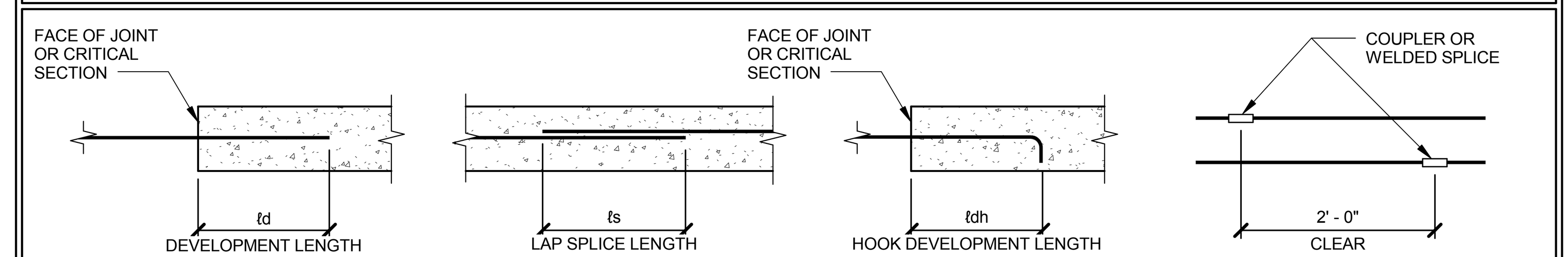
NOTES :
1. TOP SEAM WELDS SHALL BE 1-1/2" LONG AND SHALL BE ACCORDING TO SDI STANDARDS.
2. MIN. SHEAR CAPACITY IS THE CAPACITY REQUIRED FOR ALTERNATE SYSTEMS.
3. USE NESTABLE (OVERLAPPING) SIDE SEAMS AT SCREW ATTACHMENTS AND INTERLOCKING SIDE SEAMS AT WELDS.
4. N DECK END BUTT JOINTS OVER STEEL JOISTS 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 ICC APPROVAL FOR ALL DECKS.
7. OTHER PNEUMATIC FASTENING SYSTEMS MUST MEET MIN. SHEAR CAPACITY SHOWN IN SCHEDULE. ALL ALTERNATE SYSTEMS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW & APPROVAL.



KEY PLAN

2009 IBC REBAR LAP SPLICE SCHEDULE (L)

FOR CONCRETE APPLICATIONS (ACI 318 - 08)



CONCRETE REINFORCING & SPLICE LENGTHS (IN)

BAR LOCATION	CONCRETE TYPE	CONCRETE STRENGTH	#3 ℓd	#3 ℓs	#3 ℓdh	#4 ℓd	#4 ℓs	#4 ℓdh	#5 ℓd	#5 ℓs	#5 ℓdh	#6 ℓd	#6 ℓs	#6 ℓdh	#7 ℓd	#7 ℓs	#7 ℓdh	#8 ℓd	#8 ℓs	#8 ℓdh	#9 ℓd	#9 ℓdh	#10 ℓd	#10 ℓdh	#11 ℓd	#11 ℓdh	#14 ℓd	#14 ℓdh	#18 ℓd	#18 ℓdh
VERT. WALL BARS, FILL ON METAL DECK	NWC	3000 PSI	17	22	8	22	29	8	28	36	10	33	43	12	48	62	13	55	72	15	62	17	69	19	76	30	96	38	124	49
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	3000 PSI	17	22	8	22	29	8	28	36	10	33	43	12	48	62	13	55	72	15	62	17	69	19	76	30	96	38	124	49
BEAM BOTTOM BARS, COLUMN BARS	NWC	3000 PSI	17	22	8	22	29	11	28	36	14	33	43	16	48	62	19	55	72	22	62	25	69	27	76	30	96	38	124	49
FOOTING BOTTOM BARS	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	29	38	13	33	43	15	37	17	42	19	46	30				
BEAM TOP BARS	NWC	3000 PSI	22	29	8	29	38	11	36	47	14	43	56	16	63	82	19	72	94	22	81	25	90	27	98	30	125	38	161	49
SLAB ON GRADE	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	32	42	13	42	55	15	53	17	69	19	76	30				

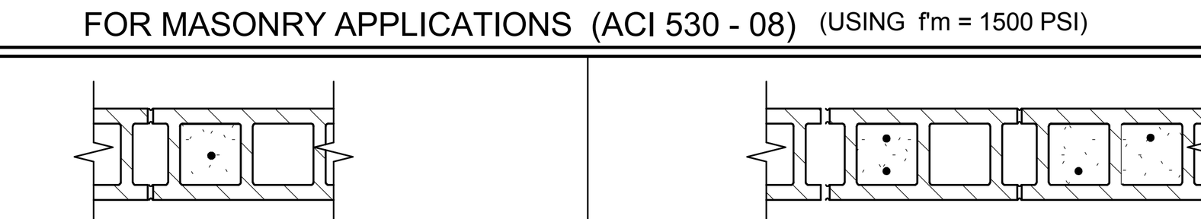
CONCRETE REINFORCING & SPLICE LENGTHS (IN)

BAR LOCATION	CONCRETE TYPE	CONCRETE STRENGTH	#3 ℓd	#3 ℓs	#3 ℓdh	#4 ℓd	#4 ℓs	#4 ℓdh	#5 ℓd	#5 ℓs	#5 ℓdh	#6 ℓd	#6 ℓs	#6 ℓdh	#7 ℓd	#7 ℓs	#7 ℓdh	#8 ℓd	#8 ℓs	#8 ℓdh	#9 ℓd	#9 ℓdh	#10 ℓd	#10 ℓdh	#11 ℓd	#11 ℓdh	#14 ℓd	#14 ℓdh	#18 ℓd	#18 ℓdh
VERT. WALL BARS, FILL ON METAL DECK	NWC	4500 PSI	14	18	7	18	23	6	23	30	8	27	35	9	40	52	11	45	59	13	51	14	56	16	62	25	79	31	101	40
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	4500 PSI	14	18	7	18	23	6	23	30	8	27	35	9	40	52	11	45	59	13	51	14	56	16	62	25	79	31	101	40
BEAM BOTTOM BARS, COLUMN BARS	NWC	4500 PSI	14	18	7	18	23	9	23	30	11	27	35	13	40	52	16	45	59	18	51	20	56	22	62	25	79	31	101	40
FOOTING BOTTOM BARS	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	24	31	11	27	35	13	31	14	34	16	37	25				
BEAM TOP BARS	NWC	4500 PSI	18	23	7	24	31	9	30	39	11	35	46	13	51	66	16	59	77	18	66	20	73	22	80	25	102	31	131	40
SLAB ON GRADE	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	27	35	11	34	44	13	44	14	56	16	62	25				

NOTES :
1. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24" AS INDICATED ABOVE.
2. DEVELOPMENT LENGTHS SHALL BE INCREASED BY 50% FOR STRAIGHT BAR DEVELOPMENT AND 20% FOR HOOKED BARS WHERE EPOXY COATING IS USED.
3. WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.
4. SPLICE #9 AND LARGER BARS USING MECHANICAL COUPLERS.

2009 IBC REBAR LAP SPLICE SCHEDULE

FOR MASONRY APPLICATIONS (ACI 530 - 08) (USING f'm = 1500 PSI)



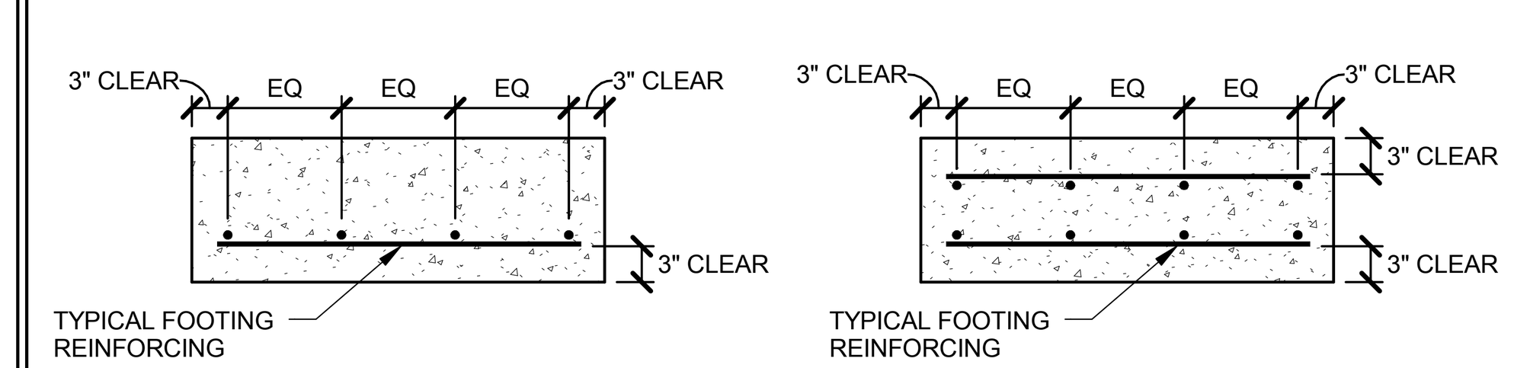
(POSSIBLE APPLICATIONS)

(1) BAR AT CL. OF WALL (VERTICAL OR HORIZONTAL) BAR SIZE NO.	DIA.	8" WALL	10" & 12" WALLS	BARS AT EACH FACE OF WALL (VERTICAL OR HORIZONTAL) BAR SIZE NO.	DIA.	8", 10" & 12" WALLS
2	0.250	12"	12"	2	0.250	12"
3	0.375	15"	15"	3	0.375	16"
4	0.500	20"	20"	4	0.500	29"
5	0.625	25"	25"	5	0.625	45"
6	0.750	43"	40"	6	0.750	54"
7	0.875	59"	46"	7	0.875	63"
8	1.000	MECH. COUPLER	MECH. COUPLER	8	1.000	MECH. COUPLER
9	1.128	MECH. COUPLER	MECH. COUPLER	9	1.128	MECH. COUPLER

NOTES:
1. MECHANICAL COUPLERS ARE REQUIRED FOR BARS IN MASONRY AS NOTED IN THE SCHEDULE.
2. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN IN SCHEDULE.
3. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITIES.
4. EPOXY-COATED REBAR LAP SPLICES SHALL BE TAKEN AS 150% OF THE LENGTHS PROVIDED IN THIS SCHEDULE.

FOOTING SCHEDULE (L)

MARK	WIDTH	LENGTH	THICK	LENGTHWISE REINF. NO.	LENGTHWISE REINF. SIZE	CROSSWISE REINF. NO.	CROSSWISE REINF. SIZE	CROSSWISE REINF. SPA.	REMARKS
FC2	2'-0"	CONT.	12"	(2)	#5	--	--	--	
FC4	4'-0"	CONT.	12"	(4)	#5	--	#3	24"o.c.	
FC5	5'-0"	CONT.	12"	(5)	#5	--	#3	18"o.c.	
FC5.5	5'-6"	CONT.	16"	(6)	#6	--	#5	12"o.c.	REINF. TOP & BOTTOM @ CW-1 & CW-2
FC8.5	8'-6"	CONT.	16"	(12)	#6	--	#5	12"o.c.	REINF. TOP & BOTTOM @ CW-1 & CW-2
F2.5	2'-6"	2'-6"	12"	(3)	#5	(3)	#5	--	
F3	3'-0"	3'-0"	12"	(3)	#5	(3)	#5	--	
F3.5	3'-6"	3'-6"	12"	(3)	#5	(3)	#5	--	
F4	4'-0"	4'-0"	14"	(4)	#5	(4)	#5	--	
F4.5	4'-6"	4'-6"	16"	(4)	#6	(4)	#6	--	
F5	5'-0"	5'-0"	16"	(5)	#6	(5)	#6	--	
F5.5	5'-6"	5'-6"	18"	(5)	#6	(5)	#6	--	
F6	6'-0"	6'-0"	20"	(6)	#6	(6)	#6	--	
F6.5	6'-6"	6'-6"	20"	(6)	#7	(6)	#7	--	
F7	7'-0"	7'-0"	22"	(7)	#7	(7)	#7	--	
F7.5	7'-6"	7'-6"	24"	(7)	#7	(7)	#7	--	
FS2	2'-0"	2'-0"	16"	(2)	#4	(2)	#4	--	
FS4	4'-0"	4'-0"	24"	(4)	#4	(4)	#4	--	
FS69	6'-0"	9'-0"	20"	(6)	#6	(9)	#6	--	
FS79	7'-0"	9'-0"	22"	(7)	#6	(9)	#6	--	



TYP. FOOTING SECTION

TYP. FOOTING SECTION W/ TOP & BOTTOM REINF.

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Student Activity Center
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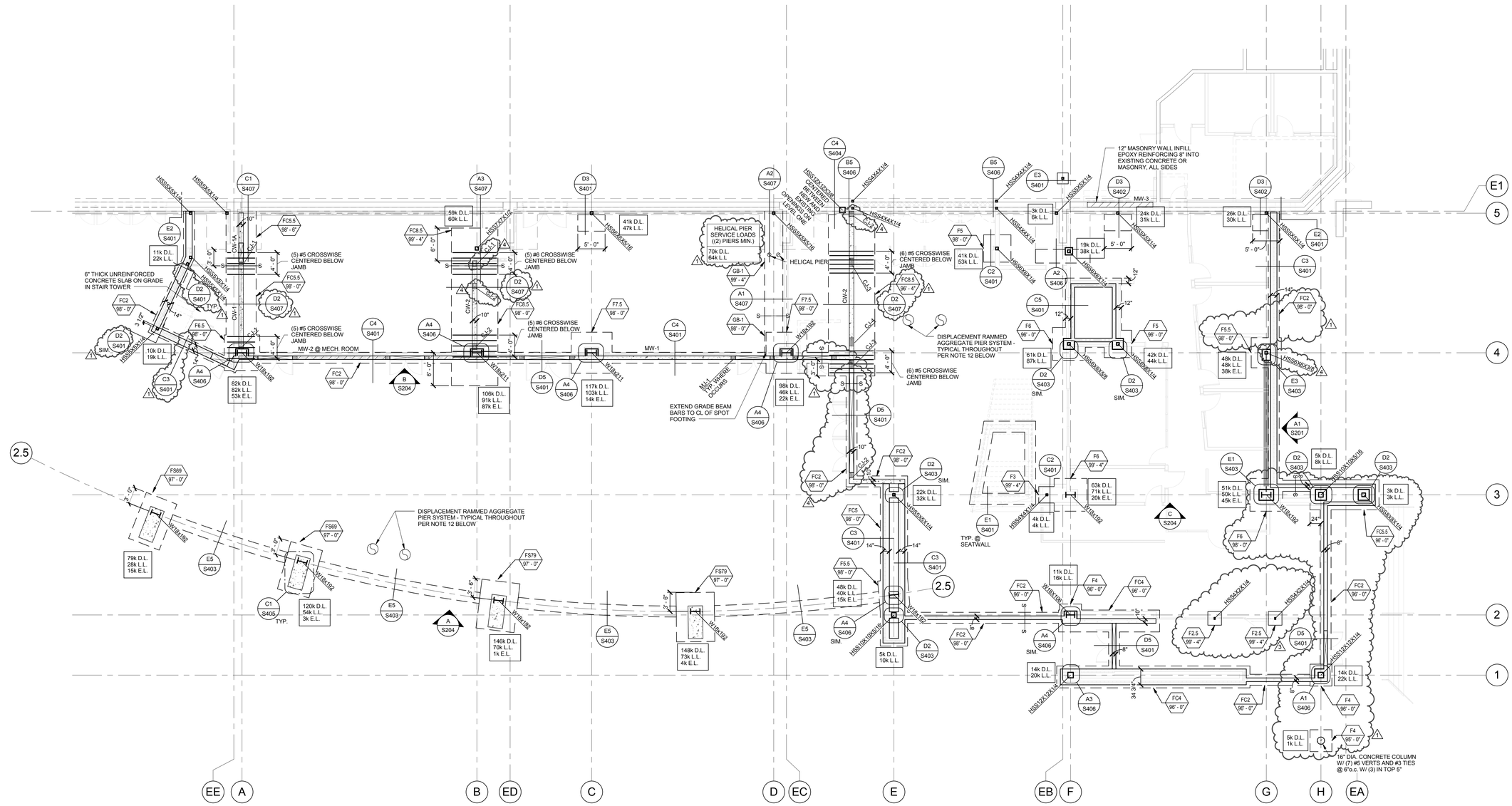
3750 Harrison Blvd. Ogden, UT 84408

Rev #	Date	Description
1	10/12/2012	ADD #2
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

STRUCTURAL NOTES & SCHEDULES

S002



FOOTING AND FOUNDATION PLAN - AREA C

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

A S113

NORTH

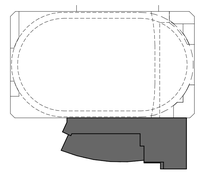
FOOTING & FOUNDATION NOTES

1. SEE SHEET S001 FOR 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 S002 FOR FOOTING SCHEDULE.
6. PROVIDE DOWELS IN FOOTINGS / FOUNDATIONS TO MATCH VERTICAL WALL REINFORCING U.N.O.
7. SEE SHEET S401 FOR 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 FOORINGS.
12. DISPLACEMENT RAMMED AGGREGATE PIERS® ARE REQUIRED AT A UNIFORM AND CONSISTENT SPACING AND DEPTH WITHIN THE FOOTPRINT OF THE BUILDING ADDITION AND FOR 5'-10' OUTSIDE THE FOOTPRINT AND BELOW THE FRAMELINE ALONG GRID 2.5 AND 5'-10' ON EITHER SIDE. PIERS, PIER LAYOUT, PIER SPACING AND DEPTH SHALL BE DESIGNED AND CONSTRUCTED BY A LICENSED INSTALLER PER THE SOILS REPORT. MAXIMUM COLUMN SERVICE LOADS HAVE BEEN PROVIDED ON THIS SHEET FOR USE IN DESIGNING THE DISPLACEMENT RAMMED AGGREGATE PIER SYSTEM. 1

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 S401 FOR CONTROL AND CONSTRUCTION JOINT INFORMATION.

KEY PLAN



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1	10/12/2012	ADD #2
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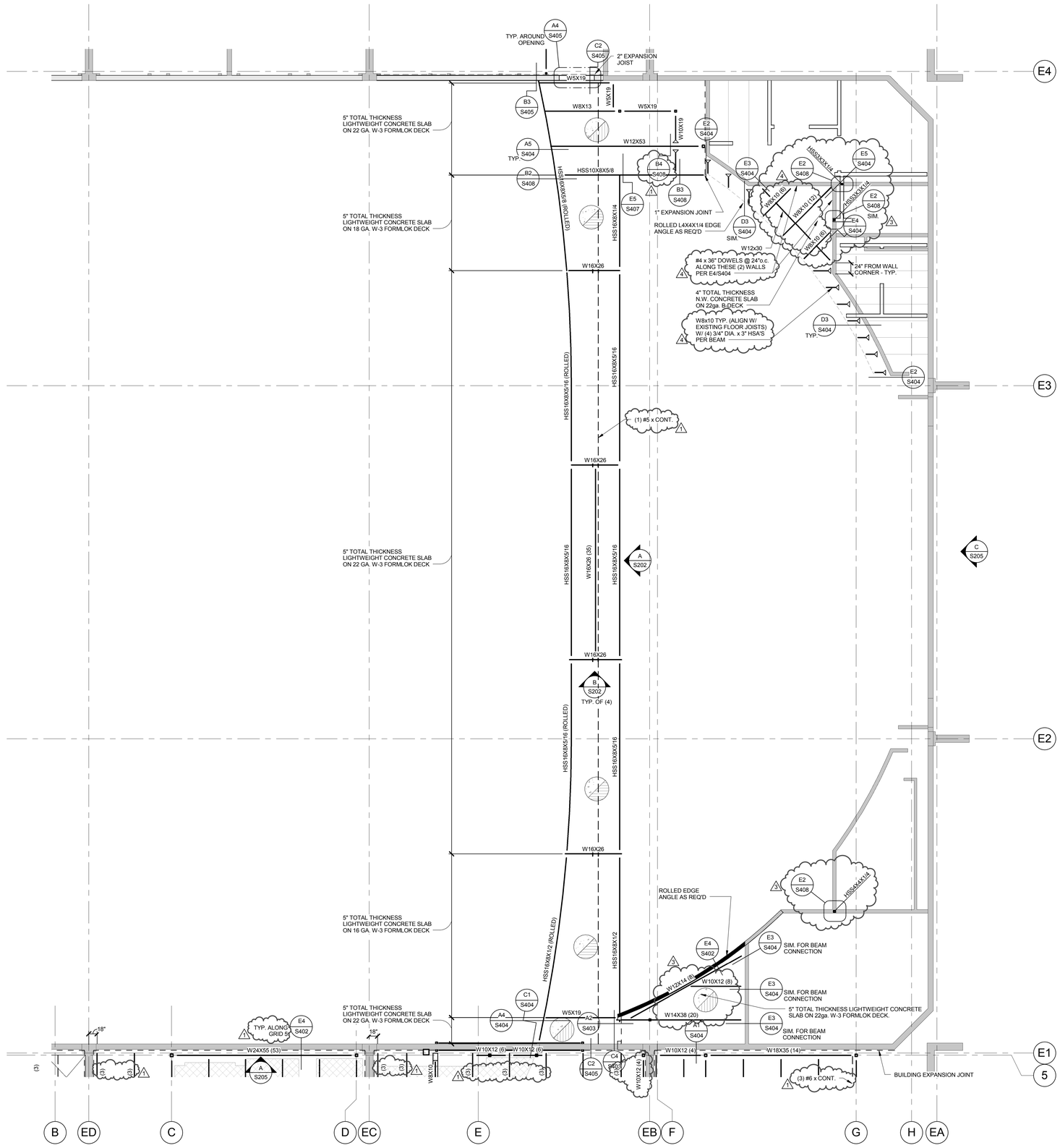
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

AREA C FOOTING AND FOUNDATION PLAN

S113

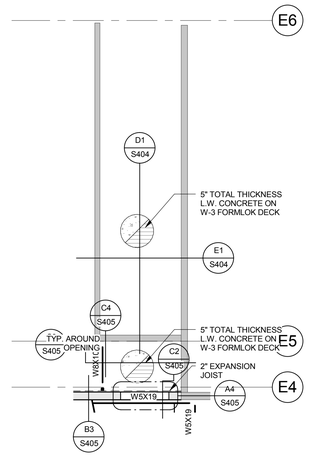
10/31/2012 11:06:04 AM



SECOND FLOOR FRAMING PLAN - AREA B

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

A S122



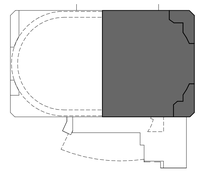
SECOND FLOOR FRAMING PLAN

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

B S122

NOTE:
SEE SHEET S123 FOR FLOOR FRAMING NOTES.

KEY PLAN



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Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

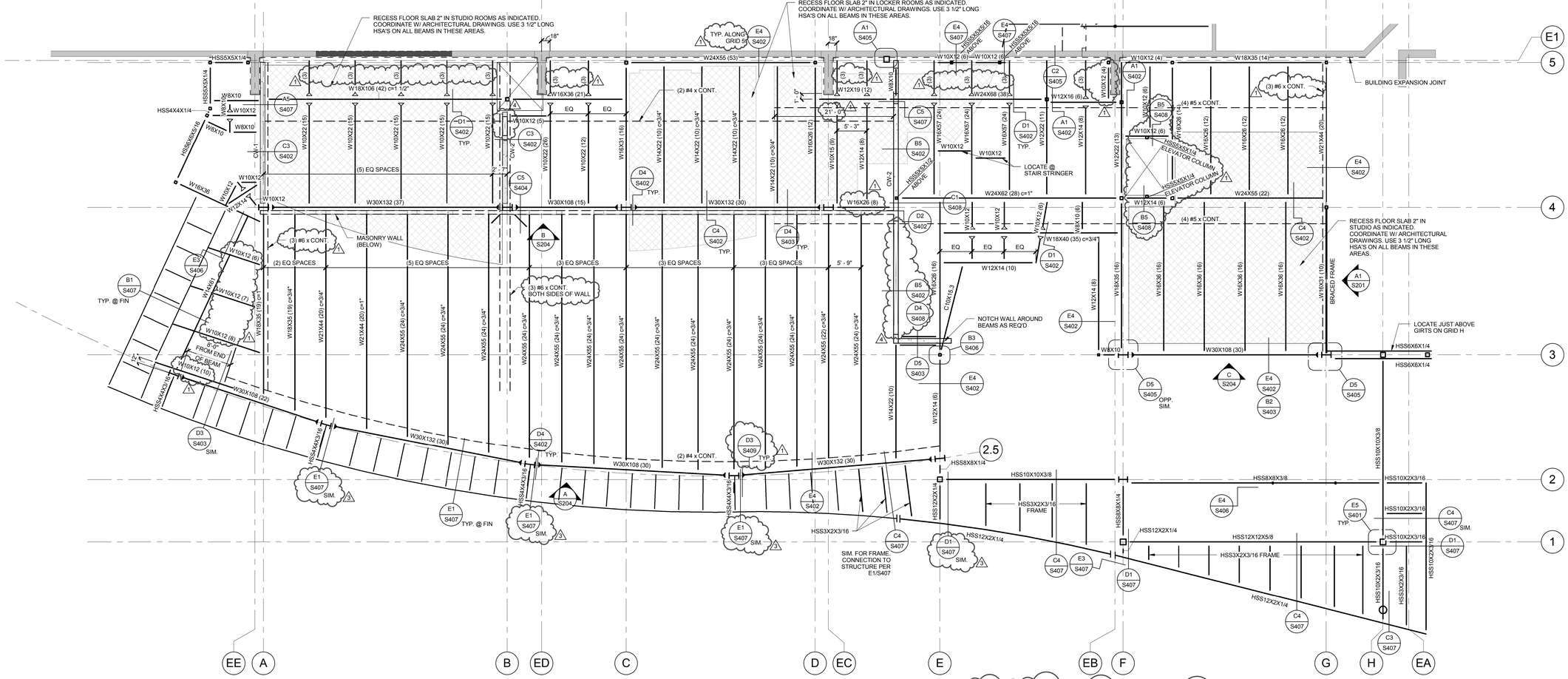
AREA B SECOND FLOOR FRAMING PLAN

S122

10/31/2012 11:06:03 AM

EXPANSION JOINT SIZE REQUIREMENTS		
LEVEL	CLEAR DIMENSION EAST - WEST	CLEAR DIMENSION NORTH - SOUTH
SECOND FLOOR	2"	2"
MEZZANINE	4 1/2"	3"
ROOF	7"	3"

NOTES:
1. TABULATED VALUES REPRESENT MINIMUM CLEAR DISTANCE BETWEEN NEW CONSTRUCTION AND EXISTING STRUCTURE.
2. COORDINATE ACTUAL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.



SECOND FLOOR FRAMING PLAN - AREA C

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

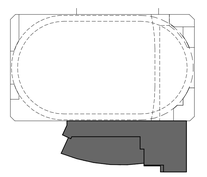
A S123

NORTH

FLOOR FRAMING NOTES:

1. SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
2. ADDITION CONCRETE FLOOR SLABS TO BE 6-1/2" THICK ON 20 GAUGE "W2" FORMLOK UNVENTED DECK REINFORCED WITH FIBERMESH (U.N.O.). SLAB THICKNESS IS TOTAL FROM BOTTOM OF DECK TO TOP OF CONCRETE.
3. RUNNING TRACK SLAB TO BE 5" THICK LIGHT-WEIGHT CONCRETE ON 20 GA. "W3" FORMLOK VENTED DECK REINFORCED WITH FIBERMESH U.N.O.
4. BRIDGE SLAB TO BE 5" THICK LIGHT-WEIGHT CONCRETE ON 22 GA. "W3" FORMLOK VENTED DECK REINFORCED WITH FIBERMESH U.N.O.
5. ( ) DENOTES NUMBER OF 3/4" DIAMETER X 4-1/2" LONG HSA ALONG BEAM TOP FLANGE.
6. C=< > DENOTES AMOUNT OF CAMBER IN W BEAM AT MIDSPAN.
7. PROVIDE TYPICAL SLAB CLOSURE AT ALL OPENINGS AND SLAB EDGES AS PER DETAIL S402. TYPICAL UNLESS NOTED OTHERWISE.
8. SEE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATIONS.
9. WHERE STEEL FLOOR DECK RUNS PERPENDICULAR TO BEAMS WITH HSA, HSA SHALL BE FIELD WELDED TO BEAMS THRU DECK MATERIAL.
10. 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.
11. DO NOT PROVIDE CONTROL JOINTS IN SUSPENDED CONCRETE SLABS EXCEPT WHERE SPECIFICALLY CALLED OUT.
12. CONSTRUCTION JOINTS IN SLABS ON DECK SHALL NOT BE CLOSER THAN 12" TO HSA.
13. 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.
14. ALL MOMENT CONNECTED CANTILEVERS SHALL BE THE SAME SIZE AS THE BACK SPAN, U.N.O.

KEY PLAN



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Student Activity Center
Stromberg Addition - BID SET
Weber State University
3750 Harrison Blvd. Ogden, UT 84408

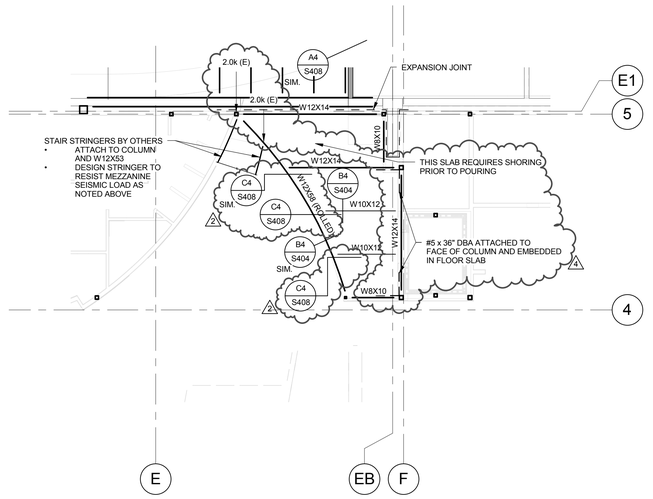
Rev #	Date	Description
1	10/12/2012	ADD #2
3	10/24/2012	ADD #4
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

AREA C SECOND FLOOR FRAMING PLAN

S123

10/31/2012 11:06:00 AM

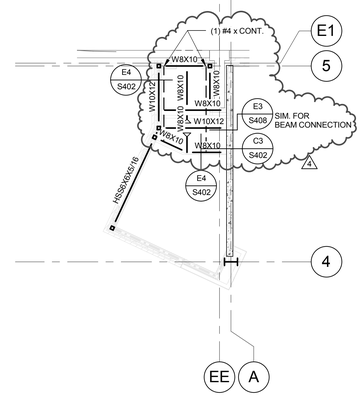


MEZZANINE FRAMING PLAN

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

A S133

NORTH



NEW TRACK LEVEL - AREA C STAIR

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

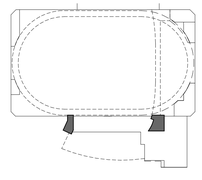
B S133

NORTH

EXPANSION JOINT SIZE REQUIREMENTS		
LEVEL	CLEAR DIMENSION EAST - WEST	CLEAR DIMENSION NORTH - SOUTH
SECOND FLOOR	2"	2"
MEZZANINE	4 1/2"	3"
ROOF	7"	3"

NOTES:
1. TABULATED VALUES REPRESENT MINIMUM CLEAR DISTANCE BETWEEN NEW CONSTRUCTION AND EXISTING STRUCTURE.
2. COORDINATE ACTUAL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.

KEY PLAN



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Rev #	Date	Description
2	10/19/2012	ADD #3
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

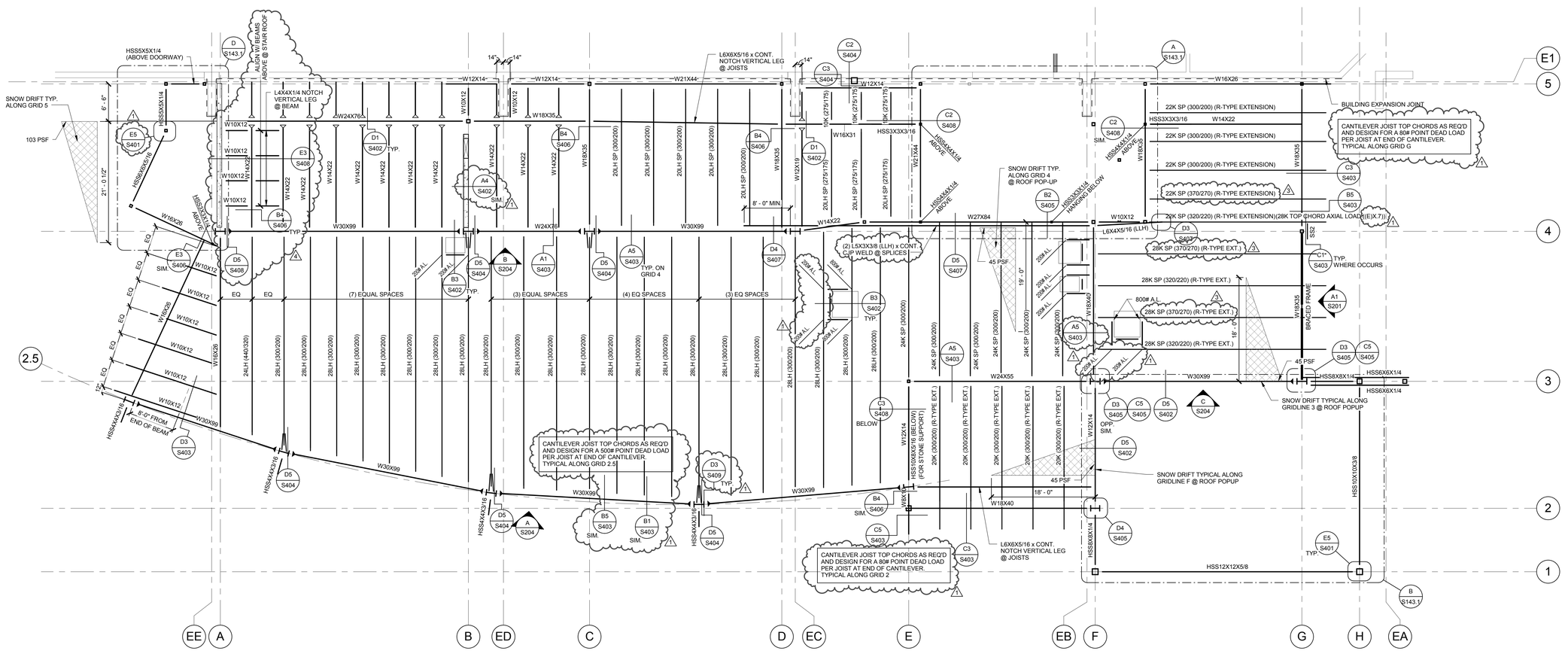
AREA C FRAMING PLAN

S133

10/31/2012 11:05:57 AM

EXPANSION JOINT SIZE REQUIREMENTS		
LEVEL	CLEAR DIMENSION EAST - WEST	CLEAR DIMENSION NORTH - SOUTH
SECOND FLOOR	2"	2"
MEZZANINE	4 1/2"	3"
ROOF	7"	3"

NOTES:
1. TABULATED VALUES REPRESENT MINIMUM CLEAR DISTANCE BETWEEN NEW CONSTRUCTION AND EXISTING STRUCTURE.
2. COORDINATE ACTUAL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.



ROOF FRAMING PLAN - AREA C

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

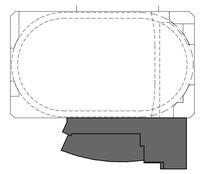
A S143

NORTH

ROOF FRAMING NOTES

1. SEE SHEET S001 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. (### / ###) DENOTES APPLIED TOTAL AND LIVE UNIFORMLY DISTRIBUTED LOADS IN POUNDS PER LINEAR FOOT OF JOIST, RESPECTIVELY.
4. JOISTS SUPPORTING MECHANICAL EQUIPMENT SHALL BE DESIGNED FOR ADDITIONAL LOADS INDICATED.
5. SNOW DRIFT LOADS INDICATED ON FRAMING PLANS SHALL BE APPLIED IN ADDITION TO UNIFORMLY DISTRIBUTED LOADS INDICATED PER NOTE 3. ⚠1
6. PROVIDE ADDED HORIZONTAL AND VERTICAL JOIST LOADS WHERE INDICATED ON PLAN OR DETAILS.
7. JOISTS AND GIRDERS SHALL BE DESIGNED FOR 22 PSF NET WIND UPLIFT.
8. SEE ROOF DECK SCHEDULE FOR REQUIRED DECK AND ATTACHMENTS.
9. SEE SHEET S402 FOR OPENINGS IN ROOF DECK. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
10. CONTRACTOR SHALL ERECT AND MAINTAIN ADEQUATE TEMPORARY BRACING UNTIL ALL ROOF FRAMING AND DECK ATTACHMENTS ARE COMPLETE.
11. CONCENTRATED LOADS FROM EQUIPMENT, PIPING, ETC., SHALL NOT BE HUNG FROM JOISTS EXCEPT AT PANEL POINTS AND AS APPROVED BY THE ENGINEER.
12. JOIST BRIDGING DESIGN AND LOCATION BY JOIST MANUFACTURER.
13. 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).
14. ANY ROOF SUPPORTED PIPING 6" OR LARGER RUNNING PARALLEL TO JOIST SHALL BE SUPPORTED BY TWO OR MORE JOISTS.
15. USE OF STRAIGHT AND DIAGONAL BRIDGING SHALL BE COORDINATED WITH THE MECHANICAL DRAWINGS AS DUCTWORK MAY OCCUR BETWEEN JOISTS.
16. ALL MOMENT CONNECTED CANTILEVERS SHALL BE THE SAME SIZE AS THE BACK SPAN U.N.O. ⚠1

KEY PLAN



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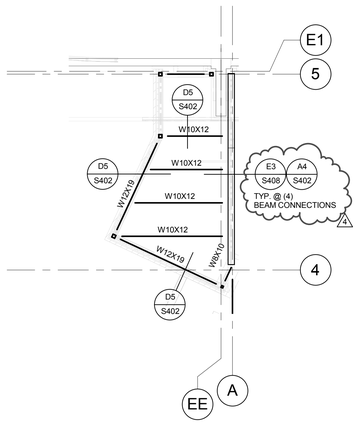
1	10/12/2012	ADD #2
3	10/24/2012	ADD #4
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

AREA C LOW ROOF FRAMING PLAN

S143

10/31/2012 11:05:56 AM

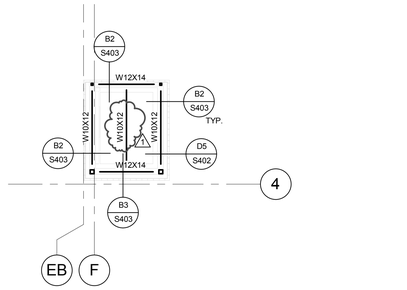


HIGH ROOF FRAMING PLAN - AREA C

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

D S143.1

NORTH

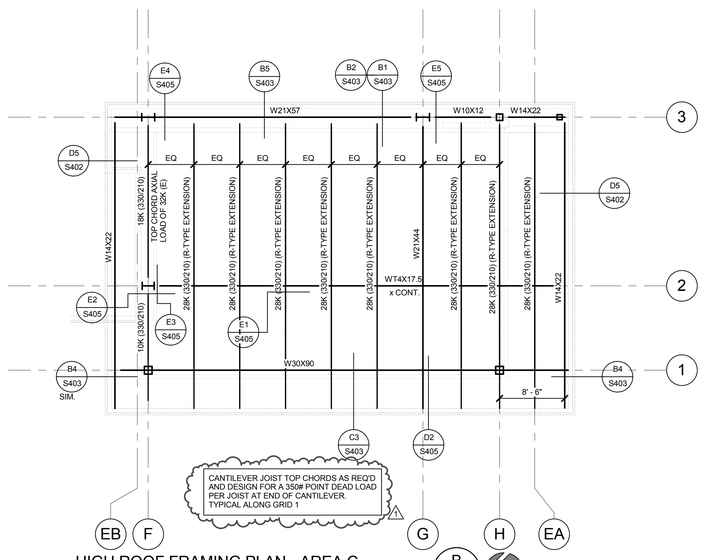


ELEVATOR ROOF FRAMING PLAN - AREA C

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

C S143.1

NORTH

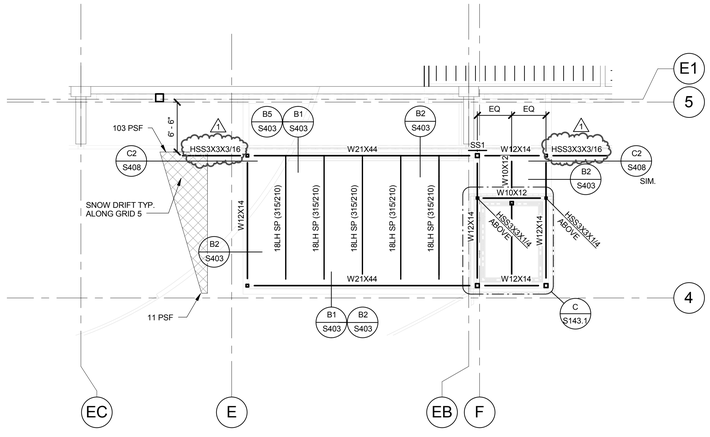


HIGH ROOF FRAMING PLAN - AREA C

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

B S143.1

NORTH



HIGH ROOF FRAMING PLAN - AREA C

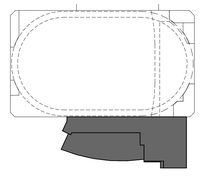
SCALE : 1/8" = 1'-0"

A S143.1

NORTH

NOTE:
ROOF FRAMING NOTES
ON SHEET S143.

KEY PLAN



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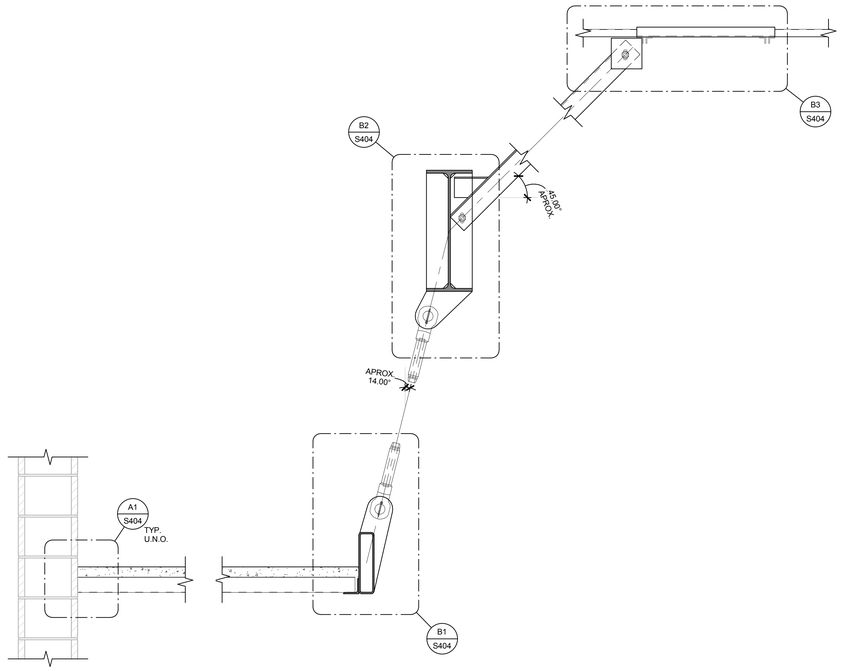
Date 10.03.2012
Owner # DFCM #12031810

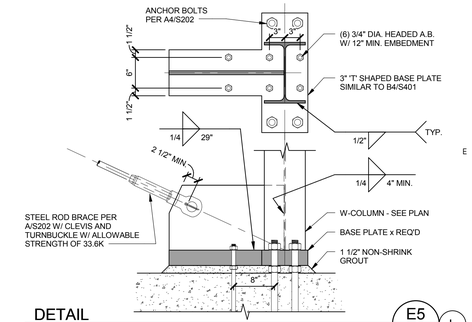
AREA C HIGH ROOF FRAMING PLAN

S143.1

10/31/2012 11:05:55 AM



TYPICAL TRACK SECTION
SCALE : NONE
C S202



DETAIL
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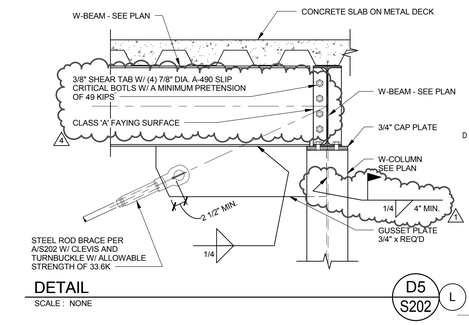
E5 S202 L



DETAIL
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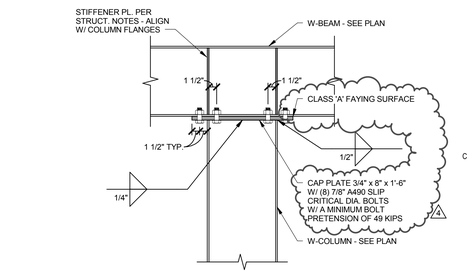
D5 S202 L



DETAIL
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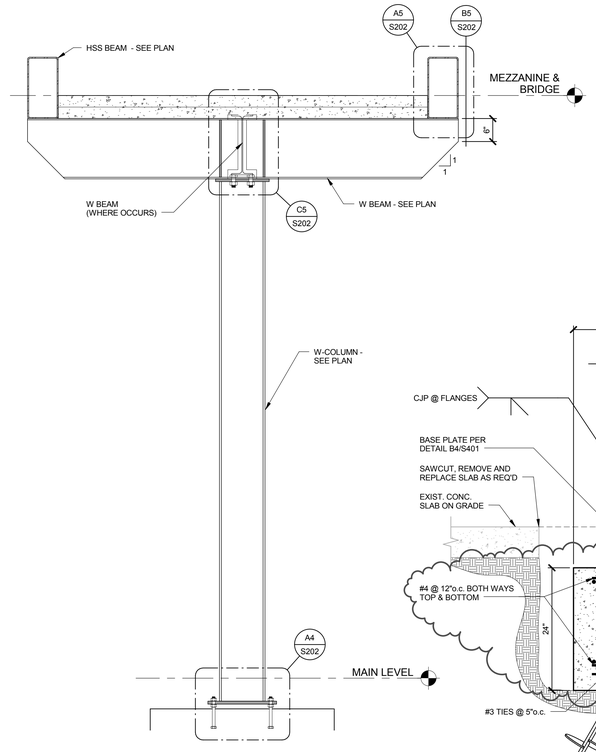
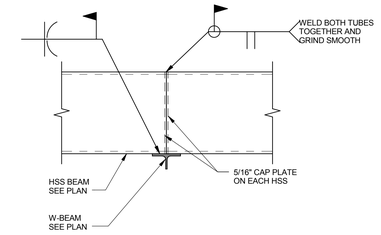
C5 S202 L





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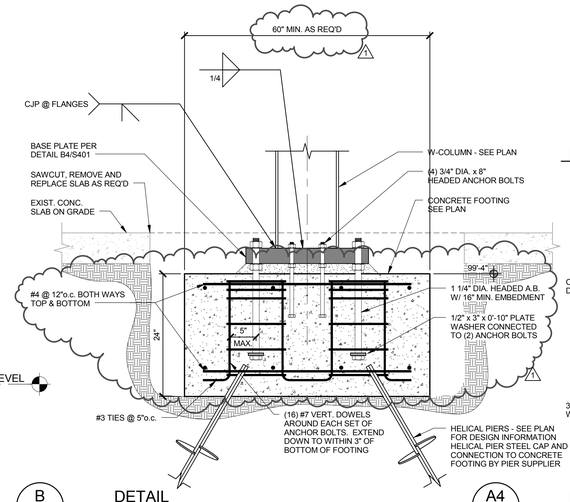
B5 S202



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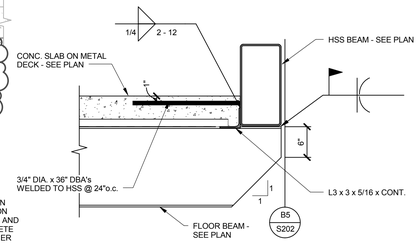
A4 S202



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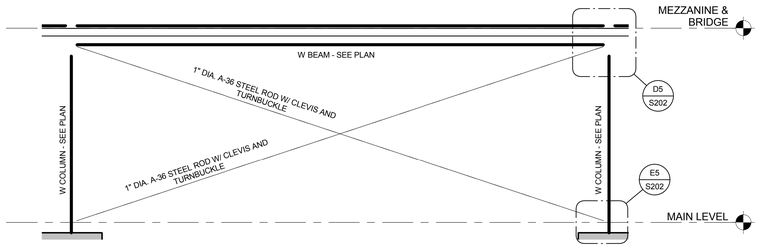

ELEVATION
SCALE : NONE
A S202 L

ELEVATION
SCALE : NONE
B S202

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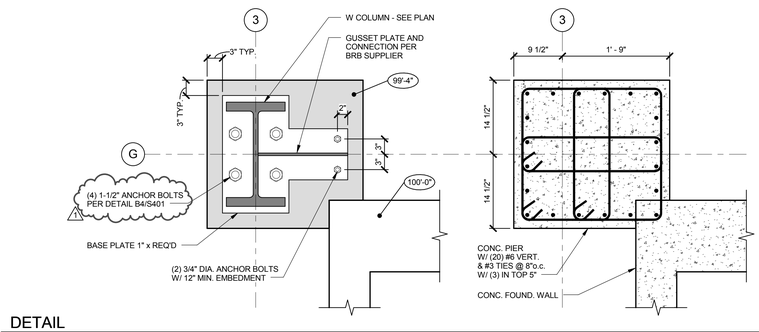
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

BRIDGE DETAILS

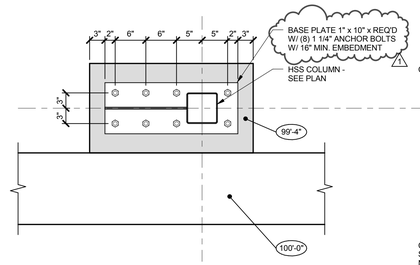
S202

10/31/2012 11:05:54 AM



DETAIL
SCALE : NONE

E1 S403 L



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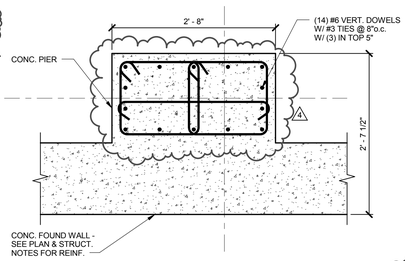
E3 S403 L



DETAIL
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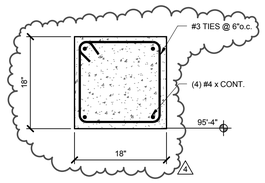
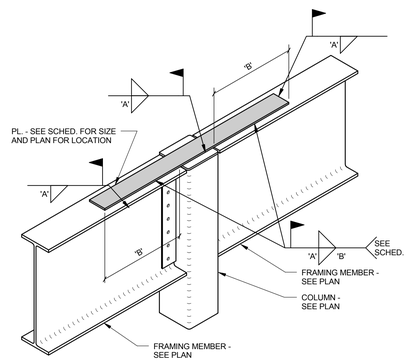
E5 S403



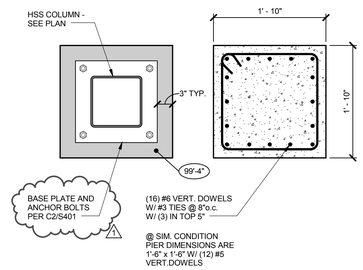
NOTE: #4 CONT. REBAR SHALL RUN CONTINUOUS THROUGH SPOT FOOTINGS



SEISMIC STRAP SCHEDULE			
MARK	STRAP SIZE	WELD SIZE 'A'	WELD LENGTH 'B'
SS1	PL. 1/4" x 4" x REQ'D	1/4"	6"
SS2	PL. 5/8" x 5" x REQ'D	1/4"	8"

SEISMIC STRAP SCHEDULE
SCALE : NONE

C1 S403 L



DETAIL
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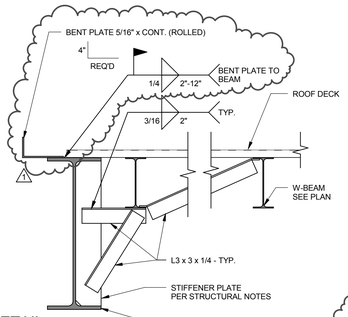
D2 S403



DETAIL
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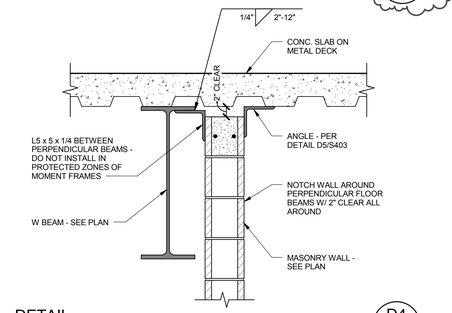
D3 S403 L



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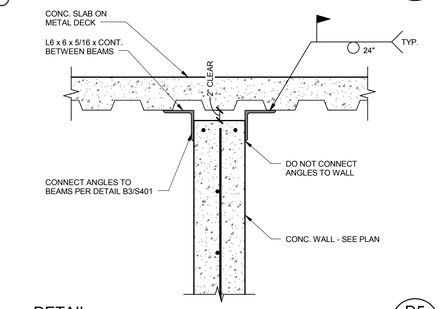
D4 S403



DETAIL
SCALE : NONE

D5 S403

DETAIL
SCALE : NONE

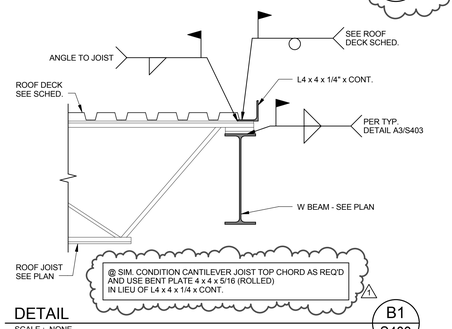
C3 S403 L

DETAIL
SCALE : NONE

C4 S403

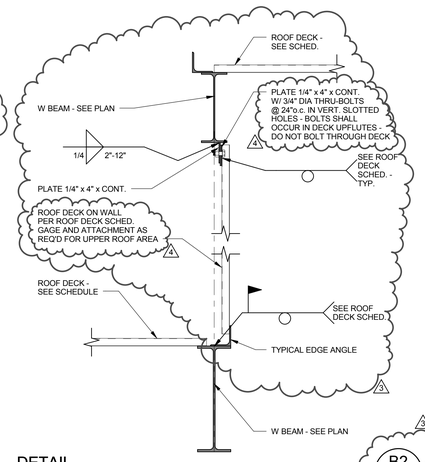
DETAIL
SCALE : NONE

C5 S403



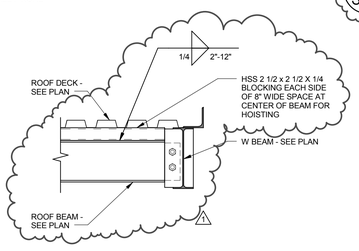
DETAIL
SCALE : NONE

B1 S403



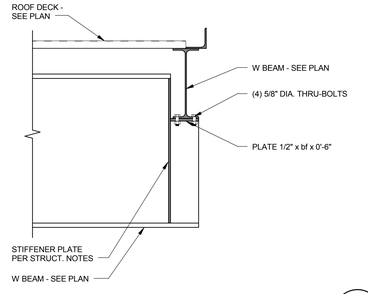
DETAIL
SCALE : NONE

B2 S403 L



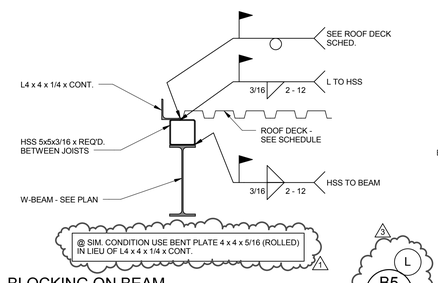
DETAIL
SCALE : NONE

B3 S403



DETAIL
SCALE : NONE

B4 S403



BLOCKING ON BEAM
SCALE : NONE

B5 S403 L

DETAIL
SCALE : NONE

A1 S403

DETAIL
SCALE : NONE

A2 S403

JOISTS ON BEAM
SCALE : NONE

A3 S403

BEAMS & JOISTS INTO HSS COLUMN
SCALE : NONE

A4 S403

DETAIL
SCALE : NONE

A5 S403 L

VCBO
ARCHITECTURE
VALENTINER
CRANE
BRUNJES
ONYON

PROFESSIONAL STRUCTURAL ENGINEER
Jeremy D. Achter
No. 353467
10.2.12
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524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
Phone: (801) 575-8800
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DFCM CODE COMPLIANCE STAMP

ARW ENGINEERS
structural consultants
1594 W. Park Dr. Ogden, Utah 84404
ph: 801.782.6008 fx: 801.782.4656

Student Activity Center
Stromberg Addition - BID SET
Weber State University
3750 Harrison Blvd. Ogden, UT 84408

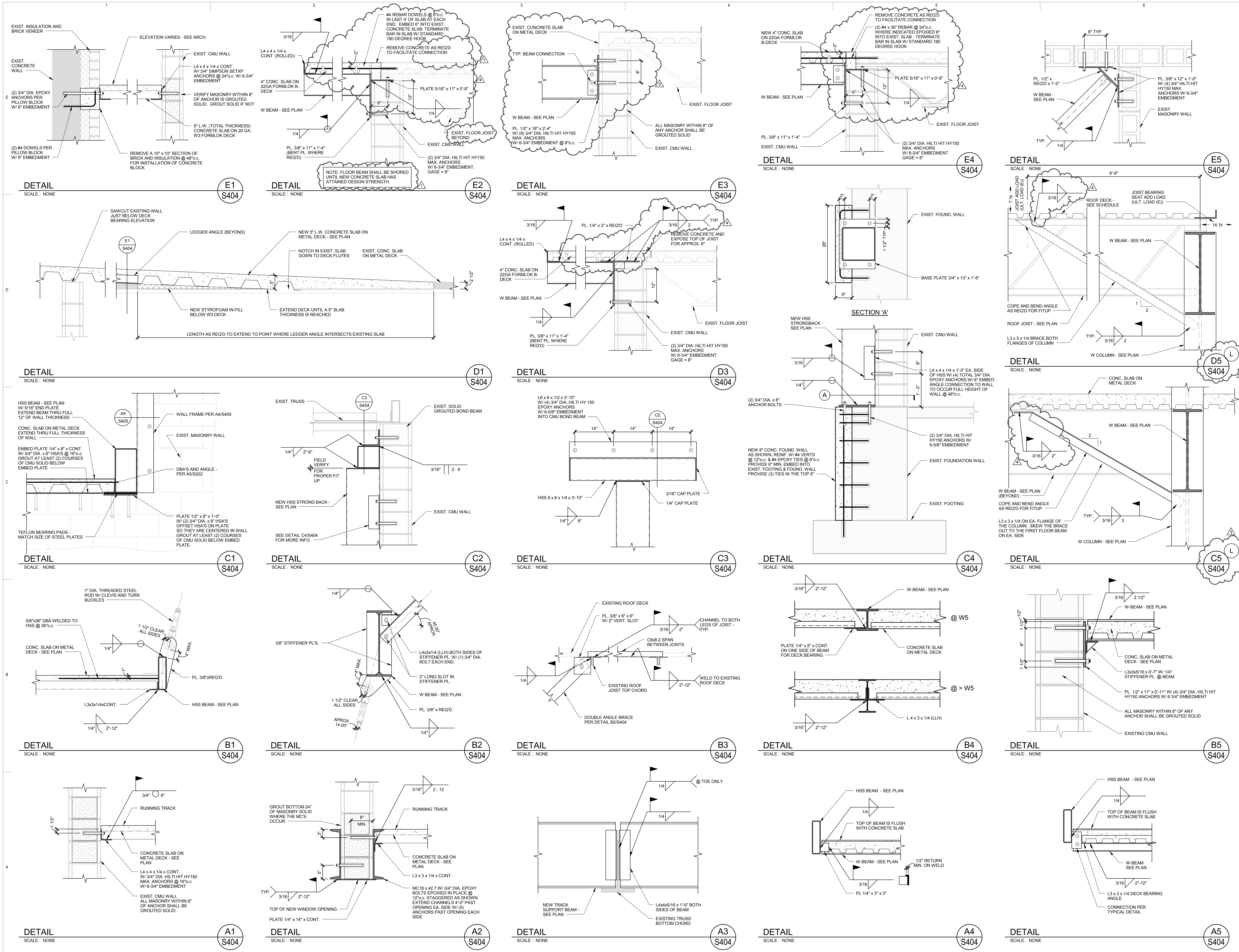
Rev #	Date	Description
1	10/12/2012	ADD #2
3	10/24/2012	ADD #4
4	10/31/2012	ADD #5

Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

DETAILS

S403

10/31/2012 11:05:50 AM



10/31/2012 11:05:49 AM

VCBO ARCHITECTURE
VALENTINER CRANE BRUNJES ONYON

PROFESSIONAL STRUCTURAL ENGINEER Jeremy L. Achter No. 353467 10.2.12 STATE OF UTAH

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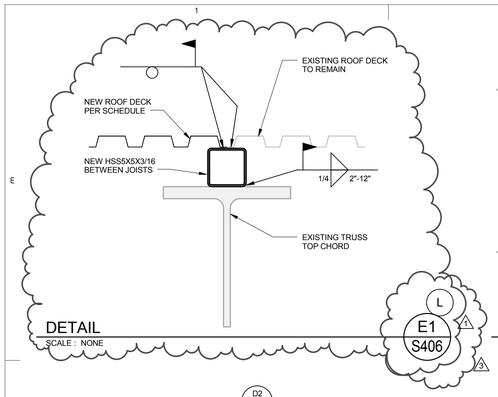
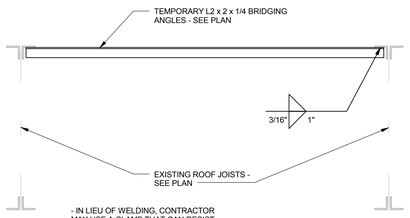
DETAILS

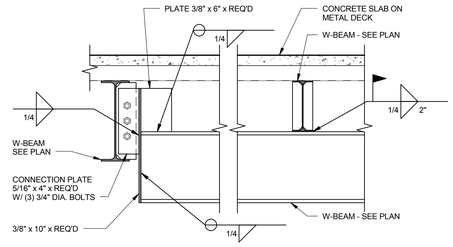
S404



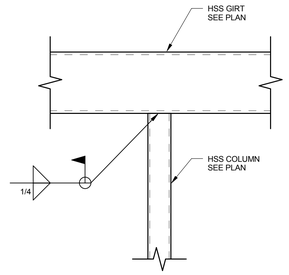
DETAIL
SCALE : NONE
E1 S406



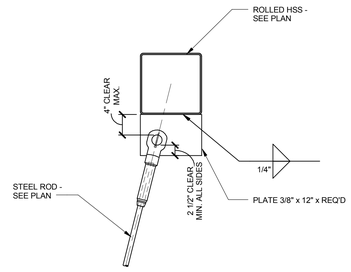
DETAIL
SCALE : NONE
E2 S406



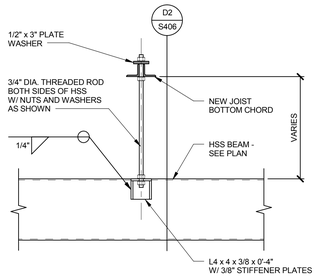
DETAIL
SCALE : NONE
E3 S406



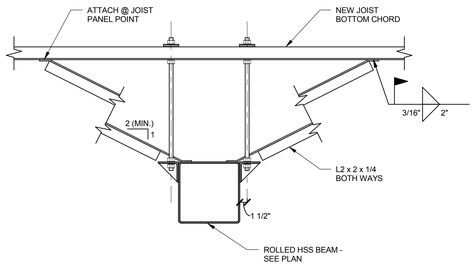
DETAIL
SCALE : NONE
E4 S406



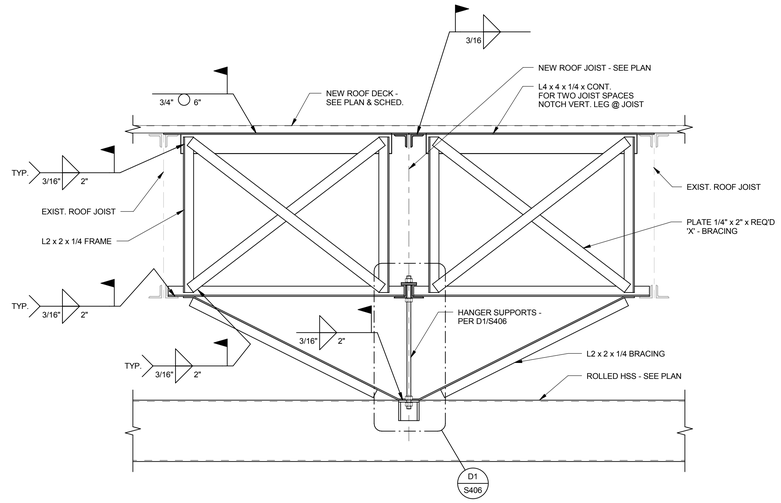
TYPICAL TRACK CORNER HANGER DETAIL
SCALE : NONE
E5 S406



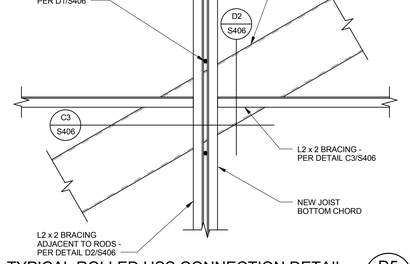
TYPICAL ROLLED HSS CONNECTION DETAIL
SCALE : NONE
D1 S406



TYPICAL ROLLED HSS CONNECTION DETAIL
SCALE : NONE
D2 S406



TYPICAL ROLLED HSS CONNECTION DETAIL
SCALE : NONE
C3 S406



TYPICAL ROLLED HSS CONNECTION DETAIL
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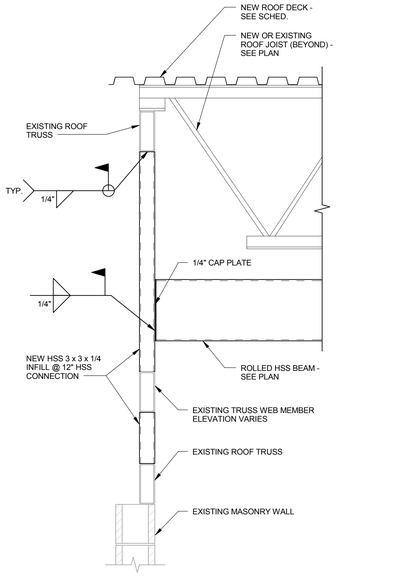
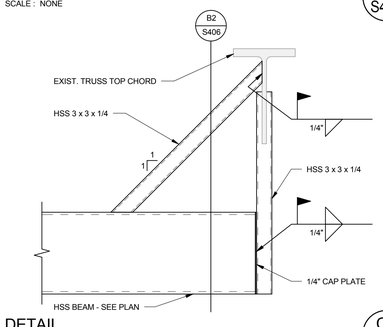
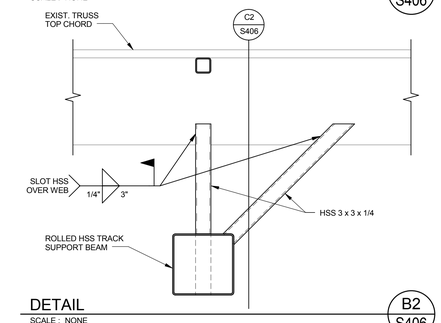
D5 S406



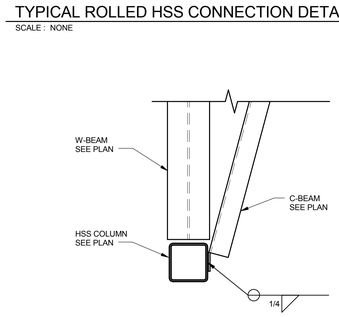
DETAIL
SCALE : NONE
B1 S406



DETAIL
SCALE : NONE
C2 S406



DETAIL
SCALE : NONE
B2 S406



DETAIL
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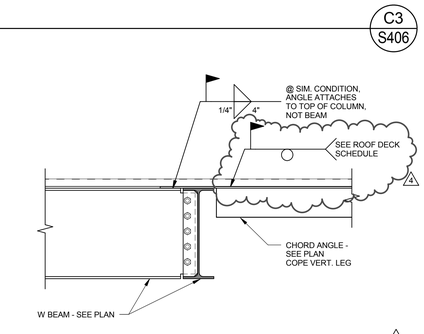
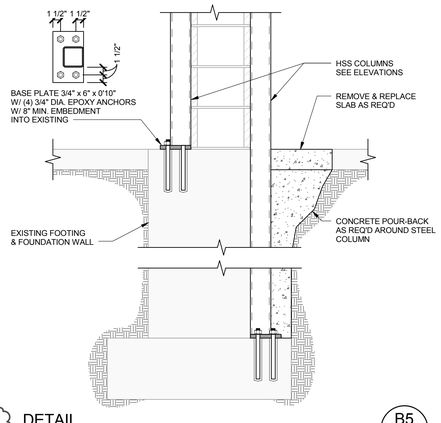
B3 S406



DETAIL
SCALE : NONE
B4 S406 L



DETAIL
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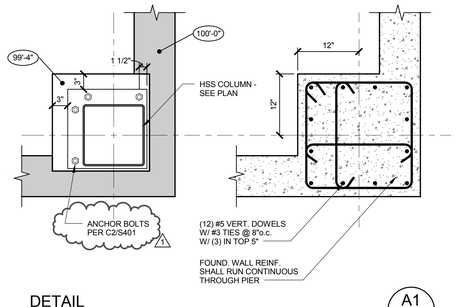
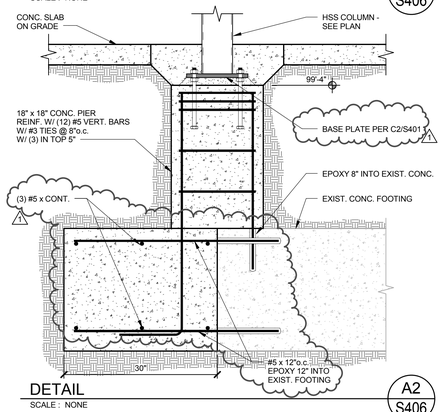
B5 S406



DETAIL
SCALE : NONE
A1 S406



DETAIL
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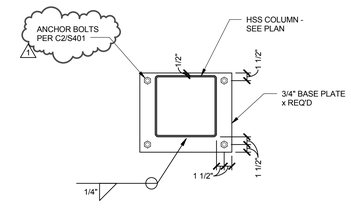
A2 S406



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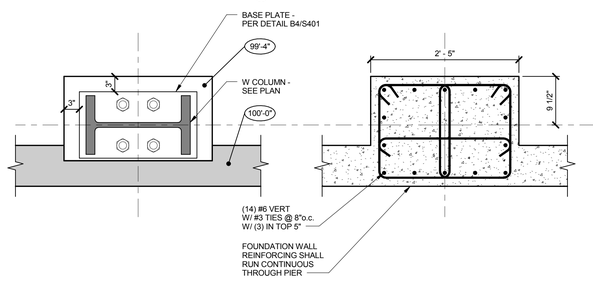
A3 S406



DETAIL
SCALE : NONE
A4 S406

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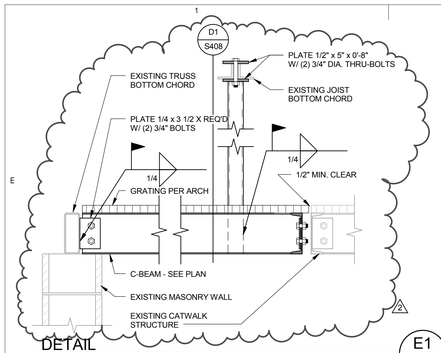
Job # 12475
CAD File
Drawn BLP Checked JLA
Date 10.03.2012
Owner # DFCM #12031810

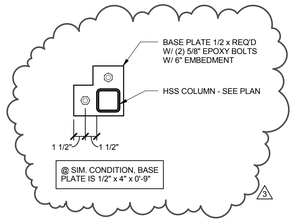
DETAILS

S406

10/31/2012 11:05:48 AM



DETAIL
SCALE : NONE
E1
S408



DETAIL
SCALE : NONE
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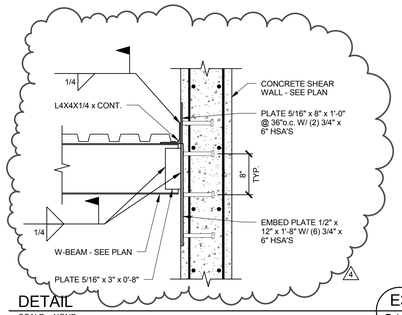
S408



DETAIL
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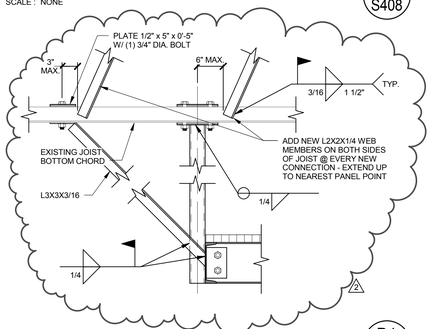
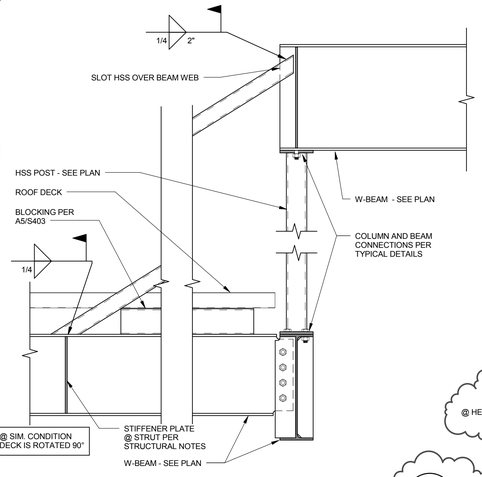
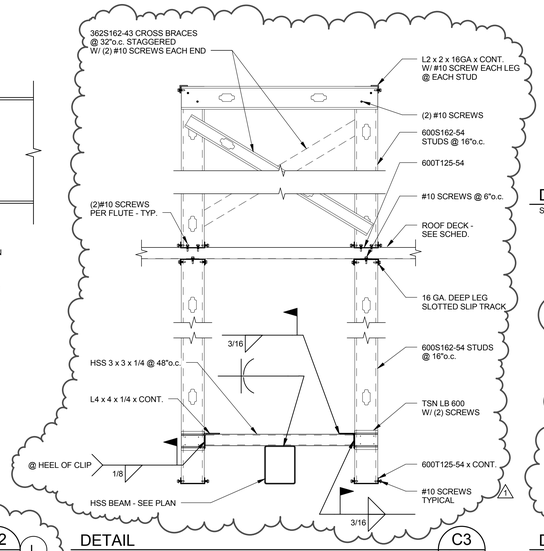
E3
S408



DETAIL
SCALE : NONE
D1
S408



DETAIL
SCALE : NONE
C2
S408
L



DETAIL
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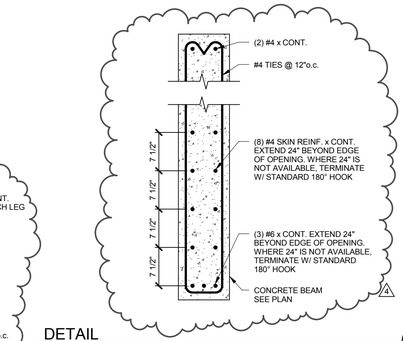
S408



DETAIL
SCALE : NONE
D4
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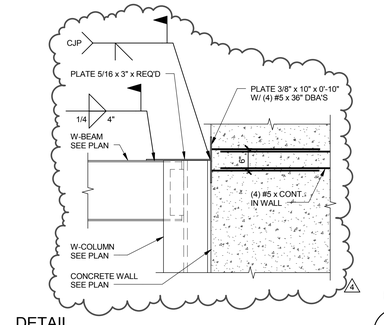
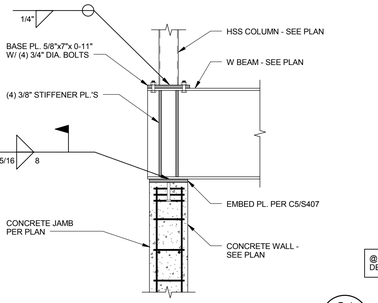


DETAIL
SCALE : NONE
L
D5
S408



DETAIL
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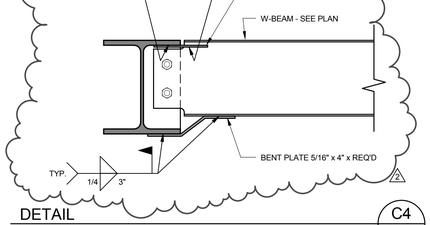
C1
S408



DETAIL
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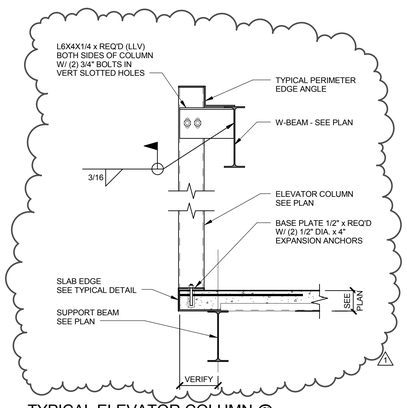
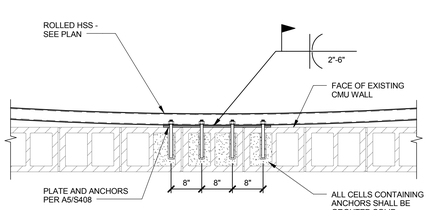


TYPICAL ELEVATOR COLUMN @ SUSPENDED SLAB
SCALE : NONE
B5
S408



DETAIL
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B1
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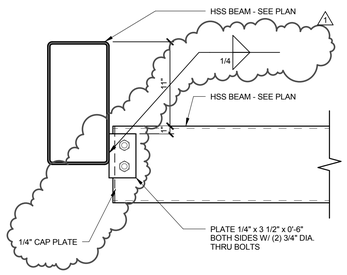

DETAIL
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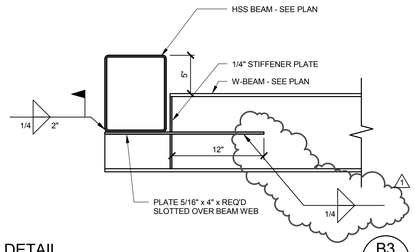

DETAIL
SCALE : NONE
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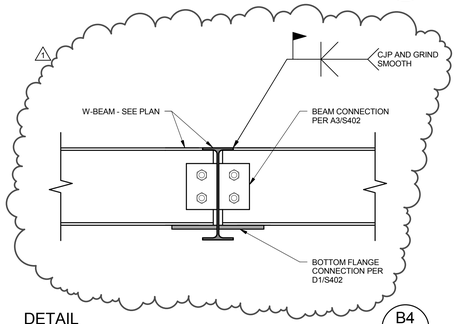
S408



DETAIL
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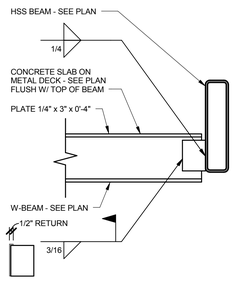

DETAIL
SCALE : NONE
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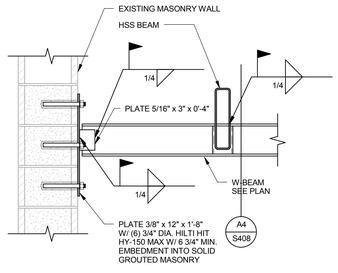

DETAIL
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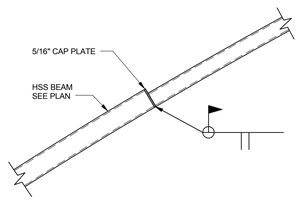

DETAIL
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A3
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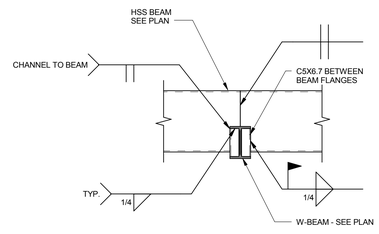

DETAIL
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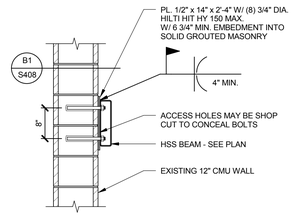

DETAIL
SCALE : NONE
A5
S408

10/31/2012 11:05:46 AM

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