



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
ACTIVITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD PREAPPROVAL  
OF MANUFACTURER'S CERTIFICATION (OPM)**

<b>OFFICE USE ONLY</b>	
<b>APPLICATION #:</b>	<b>OPM-0097-13</b>

**OSHPD Preapproval of Manufacturer's Certification (OPM)**

**Type:**     New     Renewal     Update to Pre-CBC 2013 OPA Number: 2609-10

**Manufacturer Information**

Manufacturer: Hologic

Manufacturer's Technical Representative: Ken DeFreitas, Sr. Staff Mechanical Engineer

Mailing Address: 36 Apple Ridge Road, Danbury, Ct 06810

Telephone: 203-731-8309    Email: ken.defreitas@Hologic.com

**Product Information**

Product Name: Selenia Adjustable Height Console

Product Type: Mammography Systems    OPM-0097-13

Product Model Number: \_\_\_\_\_

General Description: Breast imaging system operator control console.

**Applicant Information**

Applicant Company Name: Hologic

Contact Person: Ken DeFreitas, Sr. Staff Mechanical Engineer

Mailing Address: 36 Apple Ridge Road, Danbury, Ct 06810

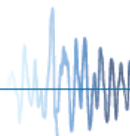
Telephone: 203-731-8309    Email: ken.defreitas@Hologic.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: \_\_\_\_\_ Date: 5-1-14

Title: Sr. Staff Mechanical Engineer    Company Name: Hologic

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
ACTIVITIES DEVELOPMENT DIVISION**

**Registered Design Professional Preparing Engineering Recommendations**

Company Name: Don Lee Engineering

Name: Donald E. Lee California License Number: SE 2311

Mailing Address: 21008 Sylvanwood Ave., Lakewood, Ca 90715

Telephone: 562-860-7896 Email: donleese@aol.com

**OSHPD Special Seismic Certification Preapproval (OSP)**

- Special Seismic Certification is preapproved under OSP- (Separate application for OSP is required)
- Special Seismic Certification is not preapproved

**Certification Method(s)**

- Testing in accordance with:  ICC-ES AC156  FM 1950-10
- Other\* (Please Specify): \_\_\_\_\_

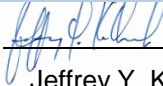
\*Use of test criteria other than those adopted by the California Building Standards Code, 2013 (CBC 2013) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBC 2013 may be used when approved by OSHPD prior to testing.

- Analysis
- Experience Data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify): \_\_\_\_\_

**List of Attachments Supporting the Manufacturer's Certification**

- Test Report  Drawings  Calculations  Manufacturer's Catalog
- Other(s) (Please Specify): \_\_\_\_\_

**OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2013 ONLY**

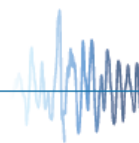
Signature:  Date: November 13, 2014

Print Name: Jeffrey Y. Kikumoto

Title: Senior Structural Engineer

Condition of Approval (if applicable): \_\_\_\_\_

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"



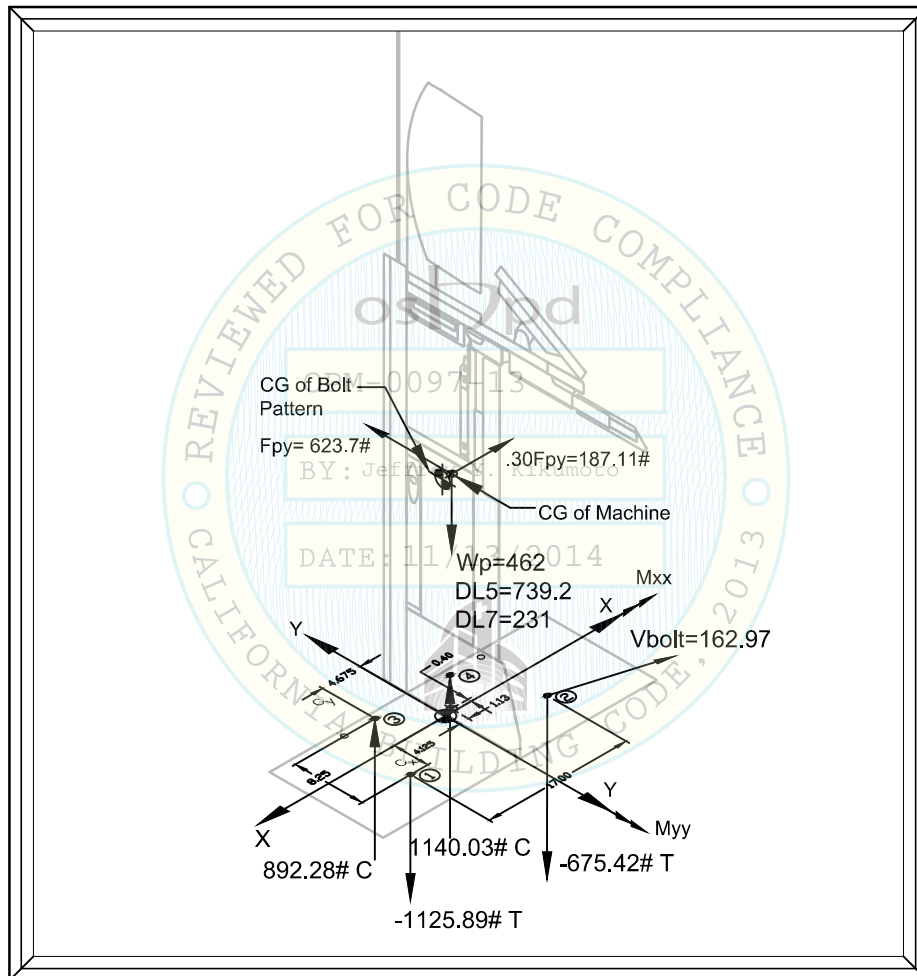
# Don Lee Engineering

21008 Sylvanwood Ave.  
Lakewood, Ca 90715  
562-860-7896

Donald E. Lee Structural Engineer #2311

## OPM-0097-13

### Selenia Dimensions Adjustable Height AWS Console Attachment Forces & Details



Prepared by  
Don Lee S. E. #2311

Signed 10-26-2014



Coordinates			Properties	
Location	X	Y	$I_{xx}$	68.26 In <sup>4</sup>
①	0.00"	0.00"	$I_{yy}$	188.41 In <sup>4</sup>
②	17.00"	0.00"		
③	3.825"	8.25"		
④	13.175"	8.25"		<b>Z</b>
cg	8.50"	4.125"	25.28	

1. This pre-approval covers only the supports & attachments of the unit to the structure based on the relation of the Cg and bolt pattern shown at the right.

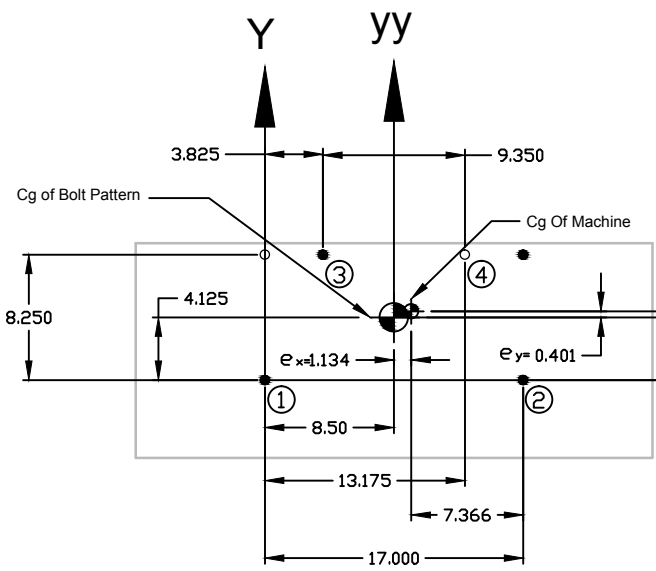
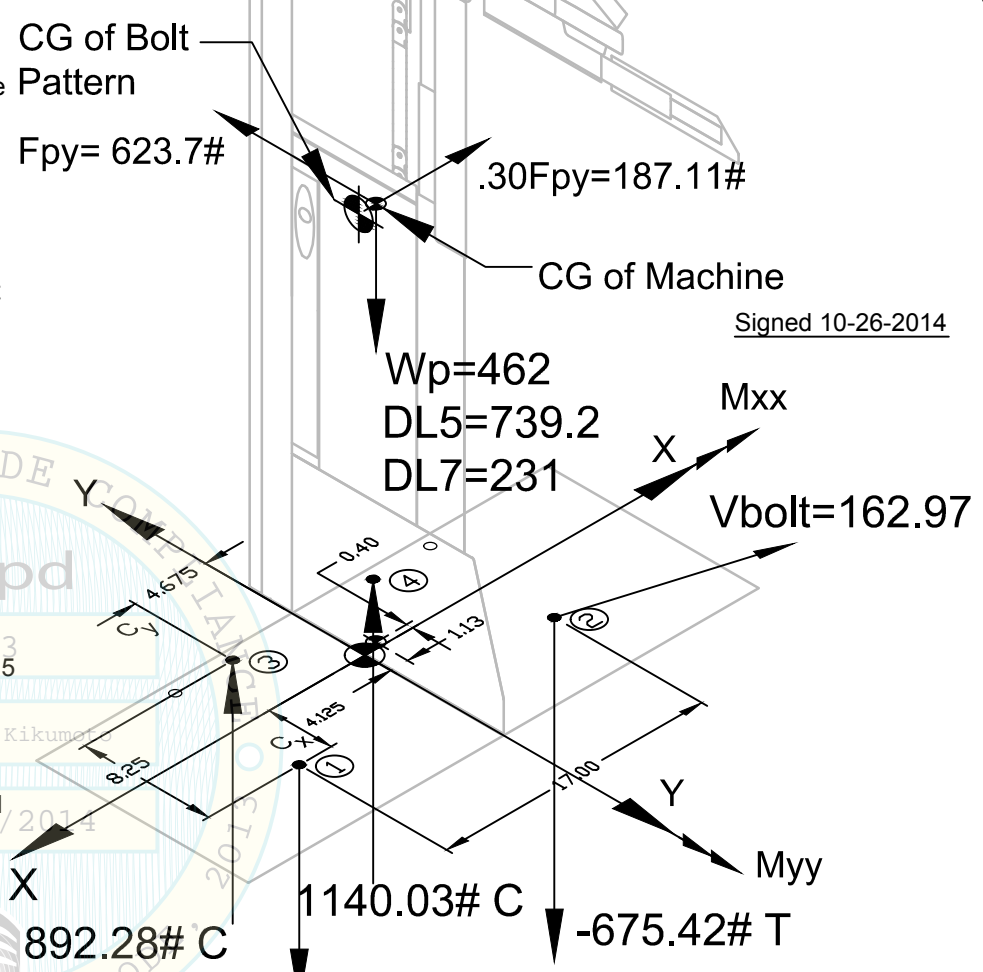
2. The details in this pre-approval may be used at any location in the state of California where Sds is  $\leq 2.00$

3. The forces shown using Strength Design were obtained from ASCE 7-10 Using Eqn's. 13.3-1,2,3 and Load Combinations 5 & 7 from Section 12.4.3.2 with these parameters:

Wp=462 Lbs Sds=2.00 lp=1.5  
z=0 h=1.0  
Z/h=0 At Grade

ASCE 7-10 Table 13.6-1:  
Other Mechanical or Electrical Equipment,  $a_p=1.0$   $R_p=1.5$   
 $\Omega_0=1.5$  (Where Req'd for Anchorage to Concrete.)

4. This pre-approval encompasses all of the weights and Cg locations up to those shown.



## Selenia Dimensions Adjustable Height AWS Console

**OPM-0097-13**

**Don Lee Engineering**  
21008 Sylvanwood Ave.  
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Project HL-2013	<b>S0</b>
Date October 26, 2014	
Scale None	

2 of 5 11/12/14

**EXPANSION BOLTS**

Version 12-18-2014

1. CONCRETE ANCHORS SHALL BE: HILTI KB-TZ-ESR1917, Corrected August 2014

2. INSPECTION AND TESTING OF EXPANSION BOLTS SHALL COMPLY WITH 2013 CBC Section 1913A.7 USING THE TORQUE WRENCH METHOD AND IN ACCORDANCE WITH THE PROCEDURES BELOW.

3. TORQUE WRENCHES SHALL BE FLAT OR ROUND BEAM TYPE CALIBRATED BY AN APPROVED LABORATORY IN ACCORDANCE WITH ACCEPTED PROCEDURES.

4. THE BOLTS SHALL BE INSTALLED AS DESCRIBED IN THE APPLICABLE ICC-ESR REPORT.

5. Testing of the post-installed anchors shall be done in the presence of the special inspector and a report of the test results shall be submitted to the enforcement agency.

6. THE HOLES SHALL NOT BE DRILLED UNTIL THE BOLTS TO BE USED ARE ON SITE.

7. INSPECTOR SHALL MEASURE THE LENGTH OF THE BOLTS AND ENSURE THAT THEY ARE THE PROPER PART NUMBER AND LENGTH SHOWN IN DETAIL 3/S2.

8. OBSERVE THE DRILLING OF THE HOLES AND MEASURE THE ACTUAL DEPTH.

9. IF THE HOLE DEPTH EXCEEDS THAT SHOWN IN DETAIL 3/S2, CARE SHALL BE TAKEN WHEN DRIVING THE BOLTS INTO THE HOLES SO THAT THE EXTENSION OF THE BOLT ABOVE THE SURFACE IS AS SHOWN IN DETAIL 3/S2.

10. **INITIAL INSTALLATION:** TIGHTEN ALL ANCHORS ON EACH UNIT TO THE SPECIFIED TORQUE AND HOLD IT FOR 2 MINUTES. THE NUT SHALL NOT CONTINUE TO TURN. THE REQUIRED TORQUE SHALL BE REACHED WITHIN THE NUMBER OF TURNS AND/OR STICK OUT SHOWN IN DETAIL 3/S2.

11. **FINAL TEST A MINIMUM 24 HOURS AFTER INITIAL INSTALLATION.** THE NUTS SHALL REACH THE REQUIRED TORQUE WITHIN 1/2 TURN.

12. BOLT HOLES MAY NOT BE REUSED. MINIMUM DISTANCE BETWEEN NEW BOLT AND ABANDONED HOLE SHALL BE 1-1/2". OLD HOLE SHALL BE FILLED WITH NON-SHRINK GROUT.

**GENERAL NOTES:**

Version 7-7-14

THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.

ALL CONSTRUCTION SHALL COMPLY WITH THE CBC 2013 & ITS REFERENCED STANDARDS.

THE SEISMIC ATTACHMENTS SHOWN ON THESE PLANS COMPLIES WITH THE PROVISIONS OF 2013 CBC 1909A FOR THE QUALIFICATION, DESIGN AND USE OF POST-INSTALLED ANCHORS IN CONCRETE.

THE CONTRACTOR SHALL VERIFY THAT THE SITE CONDITIONS ARE SUITABLE FOR INSTALLATION OF THE EQUIPMENT AS SHOWN ON THESE DRAWINGS AND ANY OTHER APPLICABLE PROJECT DRAWINGS. IF ANY PROBLEMS ARE FOUND, THE PERSON RESPONSIBLE FOR THE PROJECT SHALL BE NOTIFIED IN WRITING LISTING THE PROBLEMS.

LOCATE ALL REINFORCEMENT, CONDUIT, PIPES OR OTHER ITEMS IN THE CONCRETE SLAB PRIOR TO DRILLING THE BOLT HOLES. NOTIFY PERSON IN CHARGE OF THE PROJECT BEFORE CONTINUING IF ANY INTERFERENCE IS FOUND.

THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE CONSTRUCTION SAFETY PROCEDURES.

WHEN THE TEST LAB IS CALLED TO THE SITE, A REPORT MUST BE FILED STATING THE REASON FOR THE CALL AND THE DISPOSITION OF THE CALL.

**The Structural Engineer of Record Shall:**

Version 7-7-14

1. Verify the equipment is anchored to a normal weight concrete slab at grade (Minimum T=4" f'c=2500 Psi), located such that adequate bolt strength and foundation size are provided. The anchors shall meet the requirements of the applicable ICC-ESR.

2. Verify that the anchors are an adequate distance from any slab edge, opening or control joint. (see Detail 1/S2).

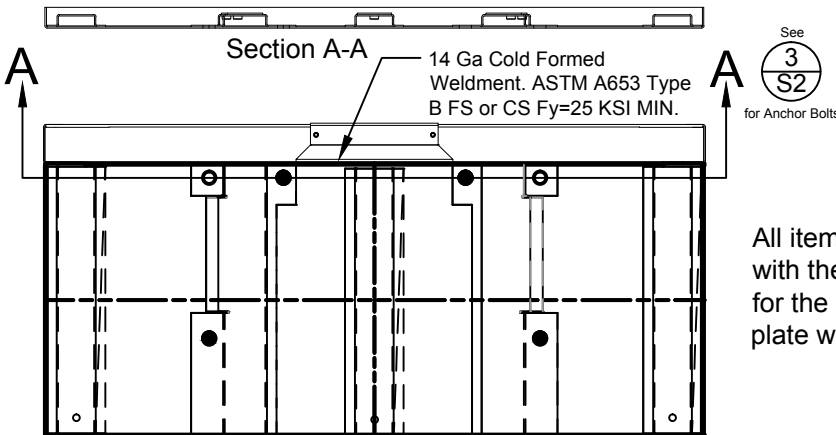
3. Verify that all new or existing anchors are an adequate distance from the anchors shown in this pre-approval. SEOR shall verify that there is no adverse interaction where other anchors are within 18" from this unit's anchors.

4. Verify that the installation is in conformance with the 2013 CBC, that the site specific values of S<sub>DS</sub> & z/h do not exceed the values shown on Sheet S0, and with the details shown in this pre-approval. Verify that the actual equipment's weight, CG location, anchor locations, anchor details, and the material and gage of the unit where attachments are made agree with the information shown on the pre-approval documents.

Provide any support structure required to support the weights and forces shown in addition to all other required loads.

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This pre-approval covers only the supports and attachments of the unit to the structure based on the relation of the Cg and bolt pattern shown on S0.



All items shown are integral with the machine except for the anchor bolts and plate washers.



Signed 10-26-2014

OPM-0097-13

Don Lee Engineering

21008 Sylvanwood Ave. Lakewood, Ca 90715 562-860-7896

Project DLE-(A)-014 Date October 26, 2014 Scale None

S1

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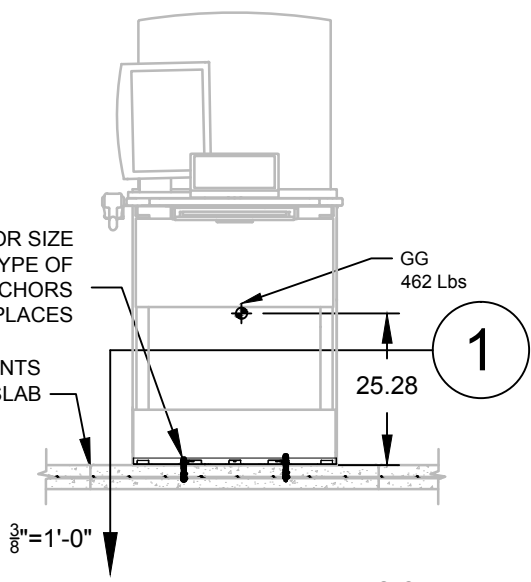
**Selenia Dimensions Adjustable Height AWS Console Base**

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SEE  $\frac{3}{32}$  FOR SIZE AND TYPE OF EXPANSION ANCHORS TYP 4 PLACES

EXISTING JOINTS IN SLAB

2

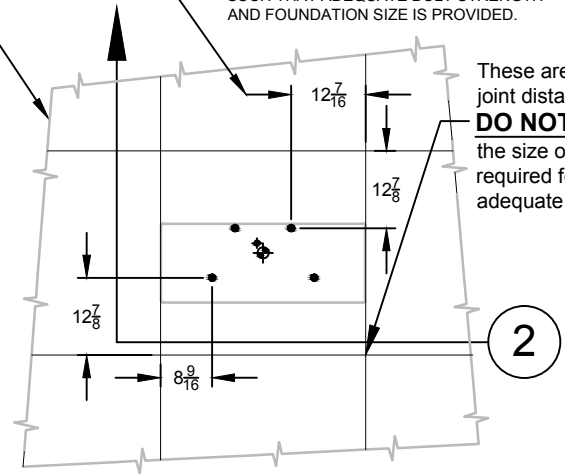


Selenia Dimensions Adjustable Height AWS Console

EXISTING CONCRETE SLAB AT GRADE.

EDGE DISTANCES ARE FOR UNREDUCED BOLT STRENGTH. SEOR IS RESPONSIBLE FOR LOCATING MACHINE SUCH THAT ADEQUATE BOLT STRENGTH AND FOUNDATION SIZE IS PROVIDED.

These are minimum joint distances and **DO NOT** represent the size of slab required for an adequate foundation.



1

SELENIA DIMENSIONS ADJUSTABLE HEIGHT AWS CONSOLE INSTALLED ON EXISTING CONCRETE SLAB.  
Minimum: 4" THICK, Normal Weight  $f_c=2500$  PSI

Scale  $\frac{3}{8}=1'-0"$

Existing Concrete Slab

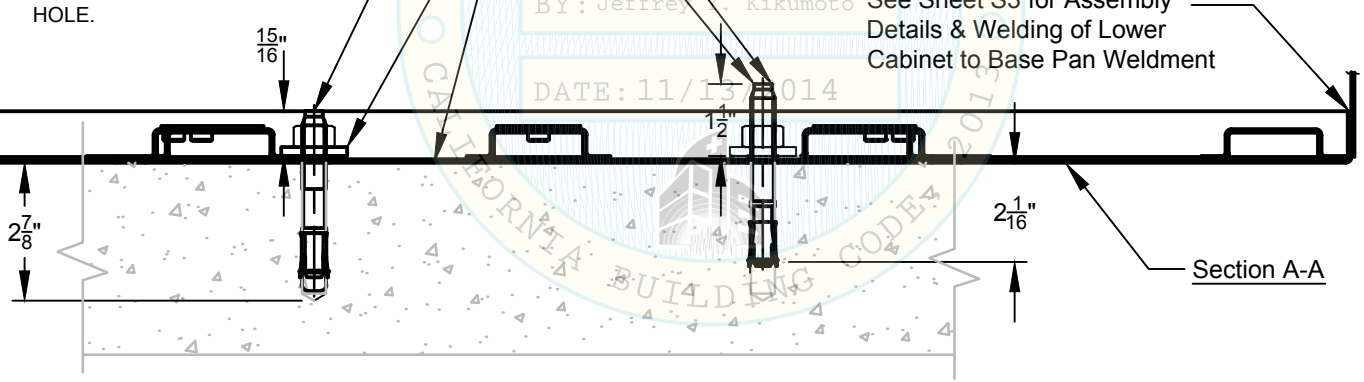
Use 1-3/8" x  $\frac{3}{16}$ " Sq Washer  
McMaster-Carr 99041A111 AISI C1006-C1015 Fy 41300 KSI Min in Lieu of Std. Hilti Washer.  
Typical 4 Places

KB-TZ 1/2 X 3 3/4:  
AS INITIALLY DRIVEN INTO HOLE.

ON INITIAL TIGHTENING THE BOLT SHALL NOT MOVE UPWARD MORE THAN 7 TURNS, OR THE EXTENSION SHOWN, BEFORE IT REACHES A TORQUE OF 40FT-LB.. THE 40 FT-LBS SHALL BE HELD FOR 2 MINUTES.

ON FINAL TIGHTENING A MINIMUM OF 24 HOURS LATER THE 40 FT-LBS MUST BE REACHED WITHIN  $\frac{1}{2}$  TURN.

See Sheet S3 for Assembly Details & Welding of Lower Cabinet to Base Pan Weldment



3  
S2

Expansion Bolt Installation Details

Scale 3"=1'-0"



Signed 10-26-2014

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OPM-0097-13

Don Lee Engineering

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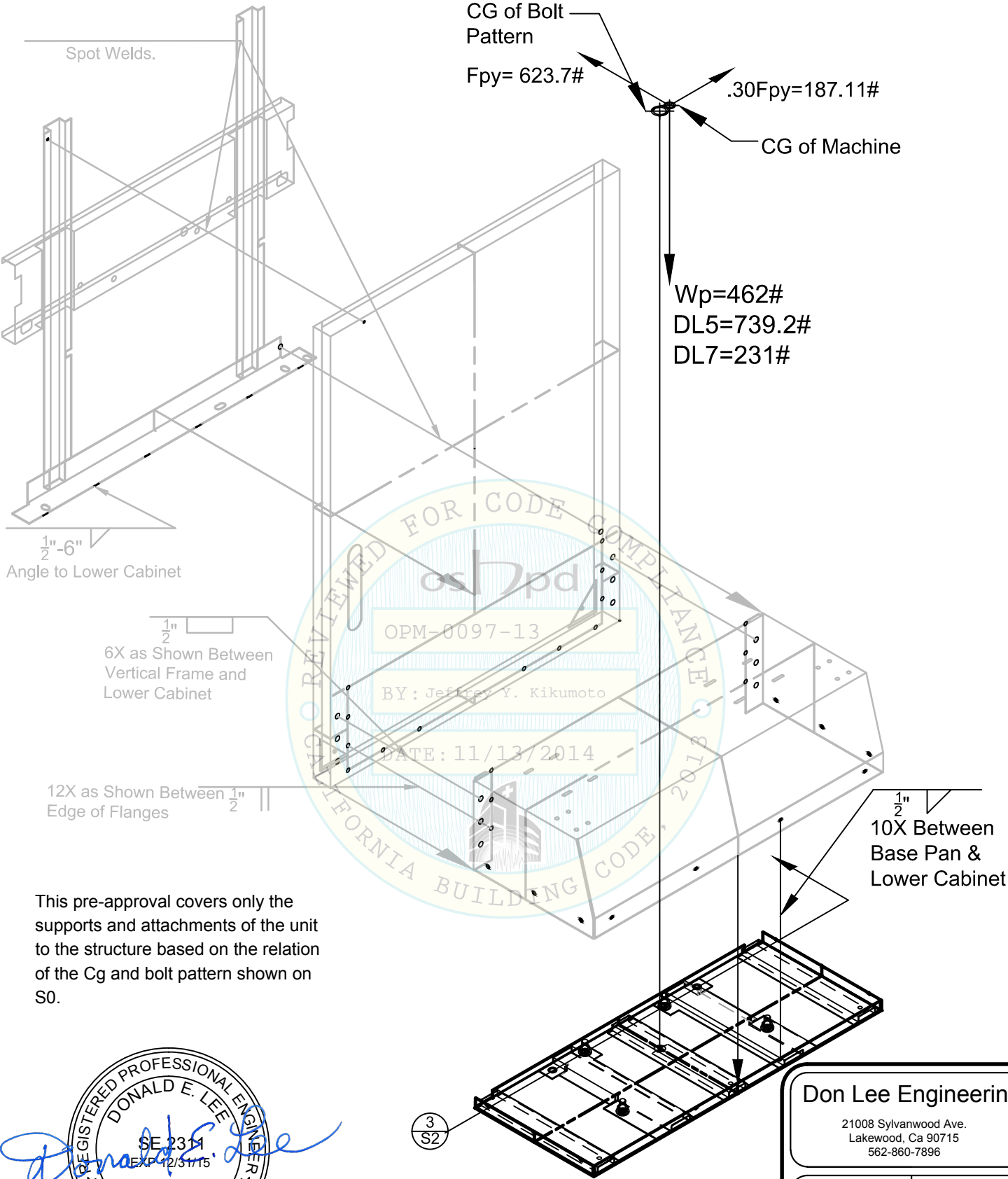
Project	DLE-(A)-014
Date	October 26, 2014
Scale	None

S2

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Selenia Dimensions Adjustable Height AWS Console

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CG of Bolt Pattern  
 $F_{py} = 623.7\#$   
 $.30F_{py} = 187.11\#$   
 CG of Machine

$W_p = 462\#$   
 $DL5 = 739.2\#$   
 $DL7 = 231\#$

Spot Welds.

$\frac{1}{2}$ "-6"  
 Angle to Lower Cabinet

$\frac{1}{2}$ "  
 6X as Shown Between  
 Vertical Frame and  
 Lower Cabinet

12X as Shown Between  $\frac{1}{2}$ "  
 Edge of Flanges

$\frac{1}{2}$ "  
 10X Between  
 Base Pan &  
 Lower Cabinet

This pre-approval covers only the supports and attachments of the unit to the structure based on the relation of the Cg and bolt pattern shown on S0.

REGISTERED PROFESSIONAL ENGINEER  
 DONALD E. LEE  
 SE 2314  
 EXP 12/31/15  
 STRUCTURAL  
 STATE OF CALIFORNIA

Signed 10-26-2014

<b>Don Lee Engineering</b>	
21008 Sylvanwood Ave. Lakewood, Ca 90715 562-860-7896	
Project DLE-(A)-014	<b>S3</b>
Date October 26, 2014	
Scale None	

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