



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY
APPLICATION #: OPM-0170-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

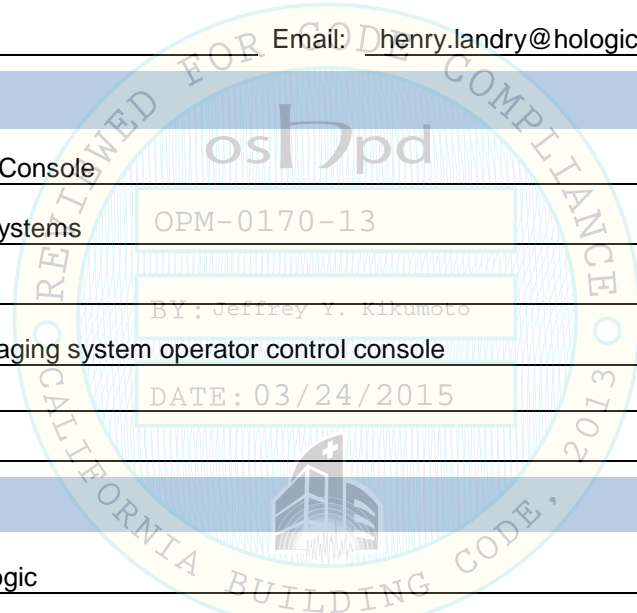
Type: [X] New [ ] Renewal [ ] Update to Pre-CBC 2013 OPA Number:

Manufacturer Information

Manufacturer: Hologic
Manufacturer's Technical Representative: Henry Landry, Lead Mechanical Engineer
Mailing Address: 36 Apple Ridge Road, Danbury, Ct 06810
Telephone: 203-207-4567 Email: henry.landry@hologic.com

Product Information

Product Name: Universal AWS Console
Product Type: Mammography Systems
Product Model Number:
General Description: Breast imaging system operator control console



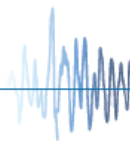
Applicant Information

Applicant Company Name: Hologic
Contact Person: Henry Landry, Lead Mechanical Engineer
Mailing Address: 36 Apple Ridge Road, Danbury, Ct 06810
Telephone: 203-207-4567 Email: henry.landry@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: [Signature] Date: 11/17/14
Title: Lead 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
FACILITIES DEVELOPMENT DIVISION

Registered Design Professional Preparing Engineering Recommendations

Company Name: Don Lee Engineering

Name: Donald E. Lee California License Number: S2311

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 criteria other than those adopted by the California Building Standards Code, 2013 (CBSC 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 CBSC 2013 may be used when approved by OSHPD prior to testing.

BY: Jeffrey Y. Kikumoto

DATE: 03/24/2015

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: Jeffrey Y. Kikumoto Date: March 23, 2015

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.

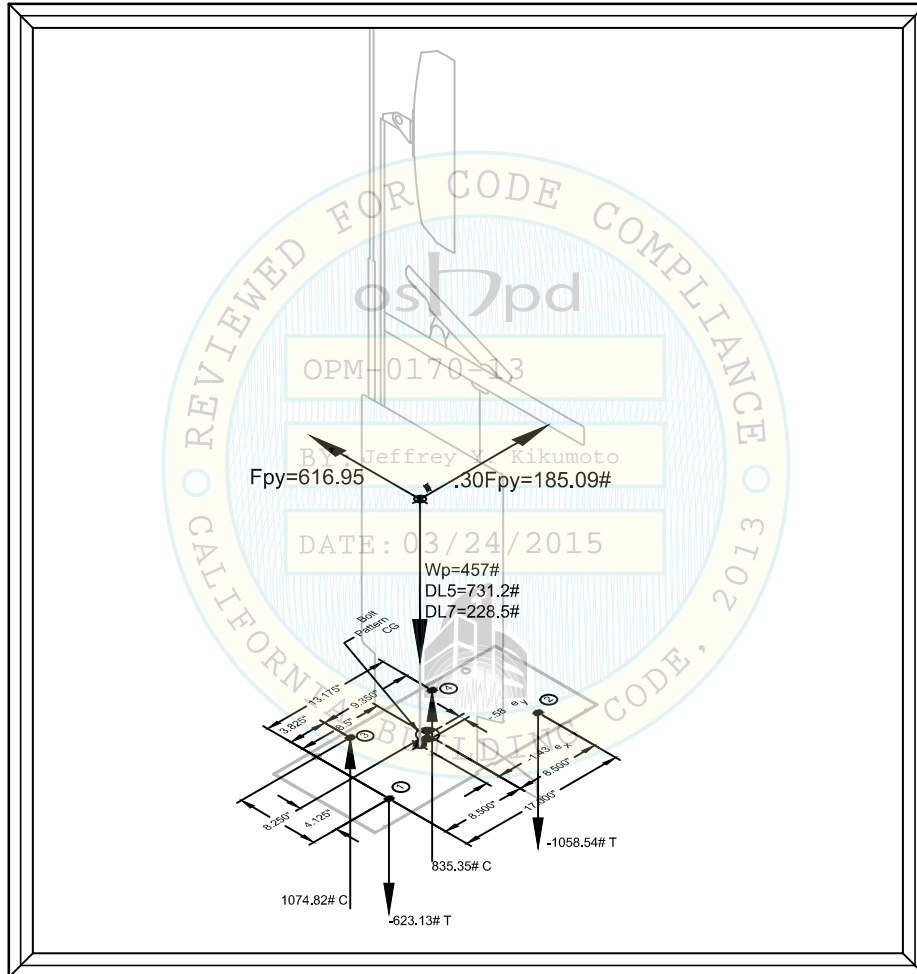
Lakewood, Ca 90715

562-860-7896

Donald E. Lee Structural Engineer #2311

## OPM-0170-13

### Hologic Universal AWS Console Attachment Forces & Details



Prepared by  
**Don Lee S. E. #2311**

Signed 3-2-2015



C:\myfiles\fitwawa\dle\Project\New Universal Console\Universal AWS Console.dwg, 3/21/2015 12:56:42 PM

Coordinates			Bolt Pattern Properties	
Location	X	Y		
①	0.00"	0.00"	$I_{xx}$	68.26 In <sup>4</sup>
②	17.00"	0.00"	$I_{yy}$	188.41 In <sup>4</sup>
③	3.83"	8.25"	<b>Zcg</b>	
④	13.18"	8.25"		
cg	8.50"	4.125"		

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.

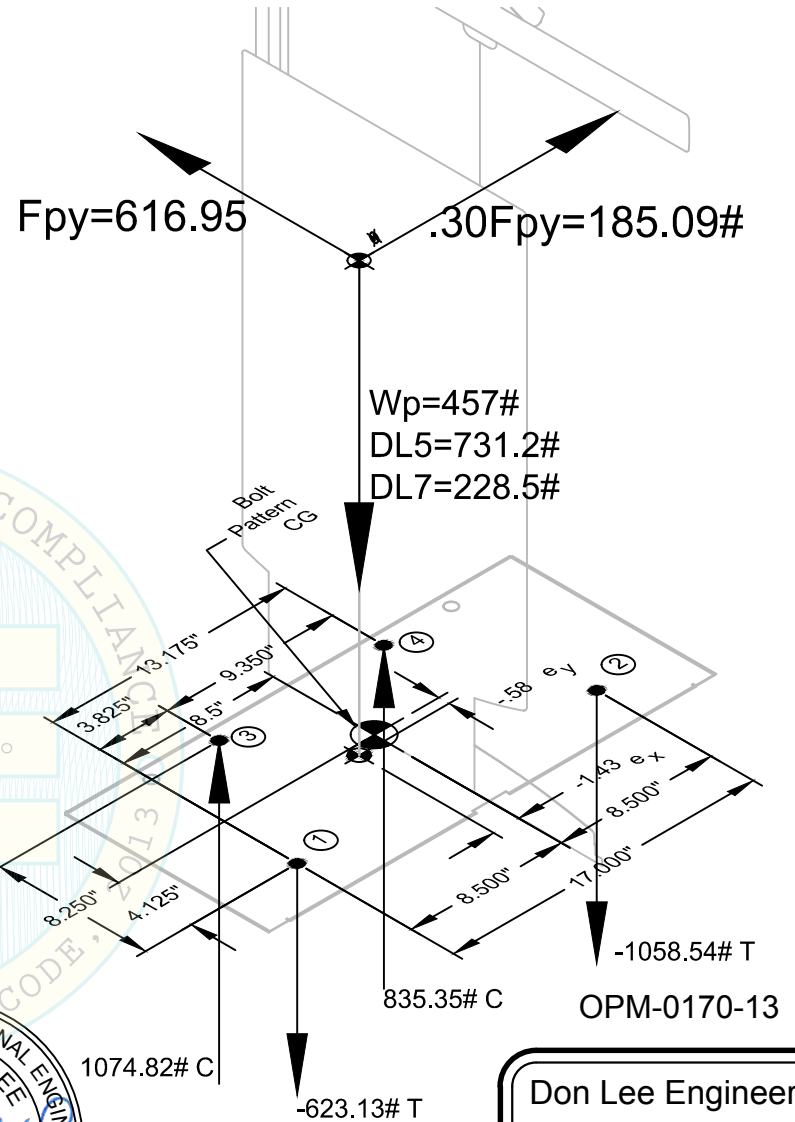
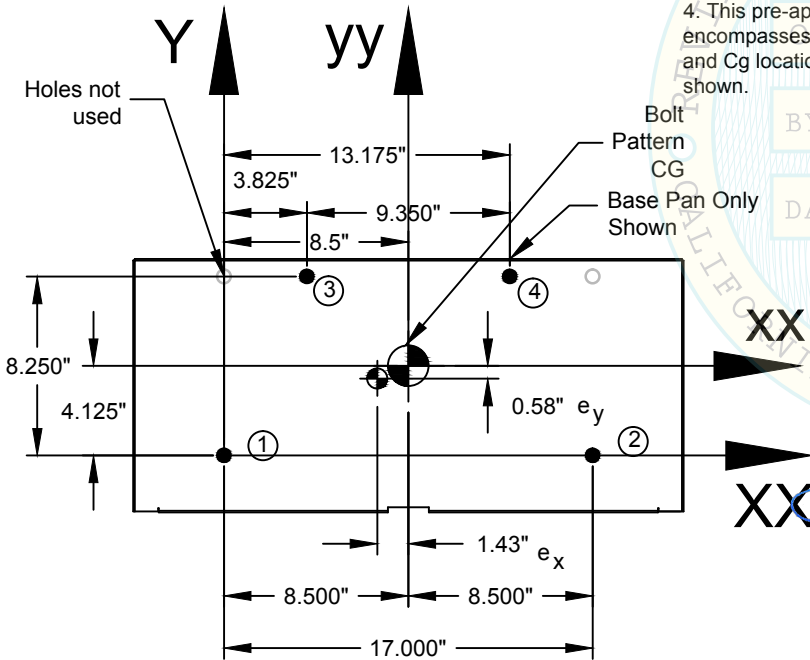
2. The details in this pre-approval may be used at any location in the state of California where Sds is  $\leq 2.00$

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=457 Lbs. Sds=2.00 Ip=1.5 z=0 h=1.0 Z/h=0 At Grade ASCE 7-10 Table 13.6-1: Other Mechanical or Electrical Equipment, ap=1.0 Rp=1.5  $\Omega_0=1.5$

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

BY: Jeffrey Y. Kikumoto

DATE: 03/24/2015



Signed 3-2-2015

# Universal AWS Console

**Don Lee Engineering**  
 21008 Sylvanwood Ave.  
 Lakewood, Ca 90715  
 562-860-7896

Project HL-2013	S0
Date January 8, 2015	
Scale None	

2 of 5 3/2/2015

**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 SDS & 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.

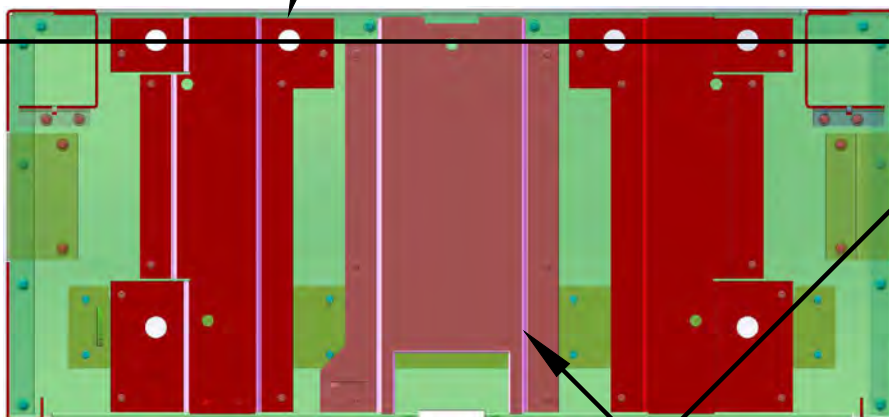
Provide any support structure required to support the weights and forces shown in addition to all other required loads.



Signed 3-2-2015

A See 3/S2 for anchor bolts.

Cold Formed Riveted Assembly, ASTM A653 Type B FS or CS. Fy=25 KSI Minimum. All items shown are integral with the machine except the anchor bolts and the plate washers.



Universal AWS Console Base Assembly

1/S3

OPM-0170-13

**Don Lee Engineering**

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

Project  
DLE-(A)-014

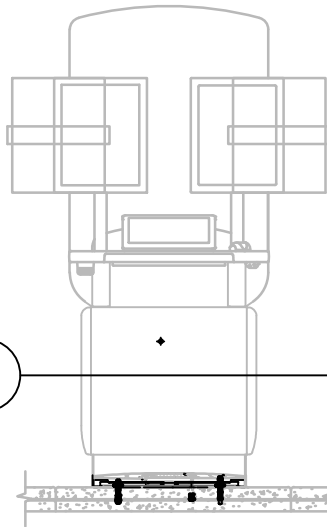
Date  
January 8, 2015

Scale  
None

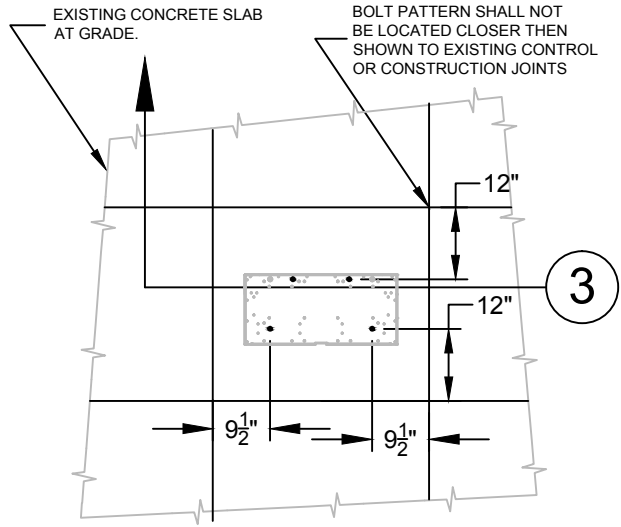
S1

3 of 5 3/2/2015

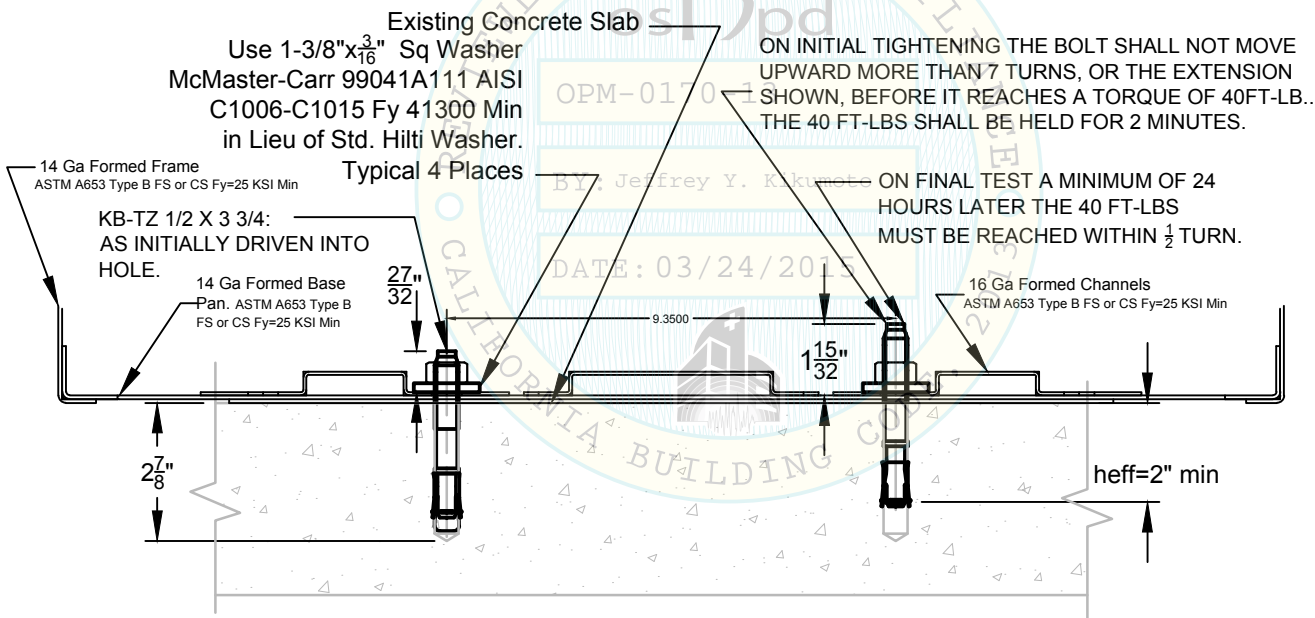
D:\MyFiles\FI\AAA DLE Projects\New Universal Console\Universal AWS Console.dwg, 3/2/2015 12:57:11 PM



**1** Universal AWS Console Front Elevation  
Scale: None



**2** Universal AWS Console Installed on Existing Concrete Slab.  
(4" Thick,  $f_c=2500$  psi) Minimum  
Scale  $\frac{3}{8}''=1'-0''$



**3**  
**S2**

**Expansion Bolt Installation Details (A-A)**

Scale 3"=1'-0"

1) See Sht S1 for Detailed Plan View of Base Pan.

OPM-0170-13



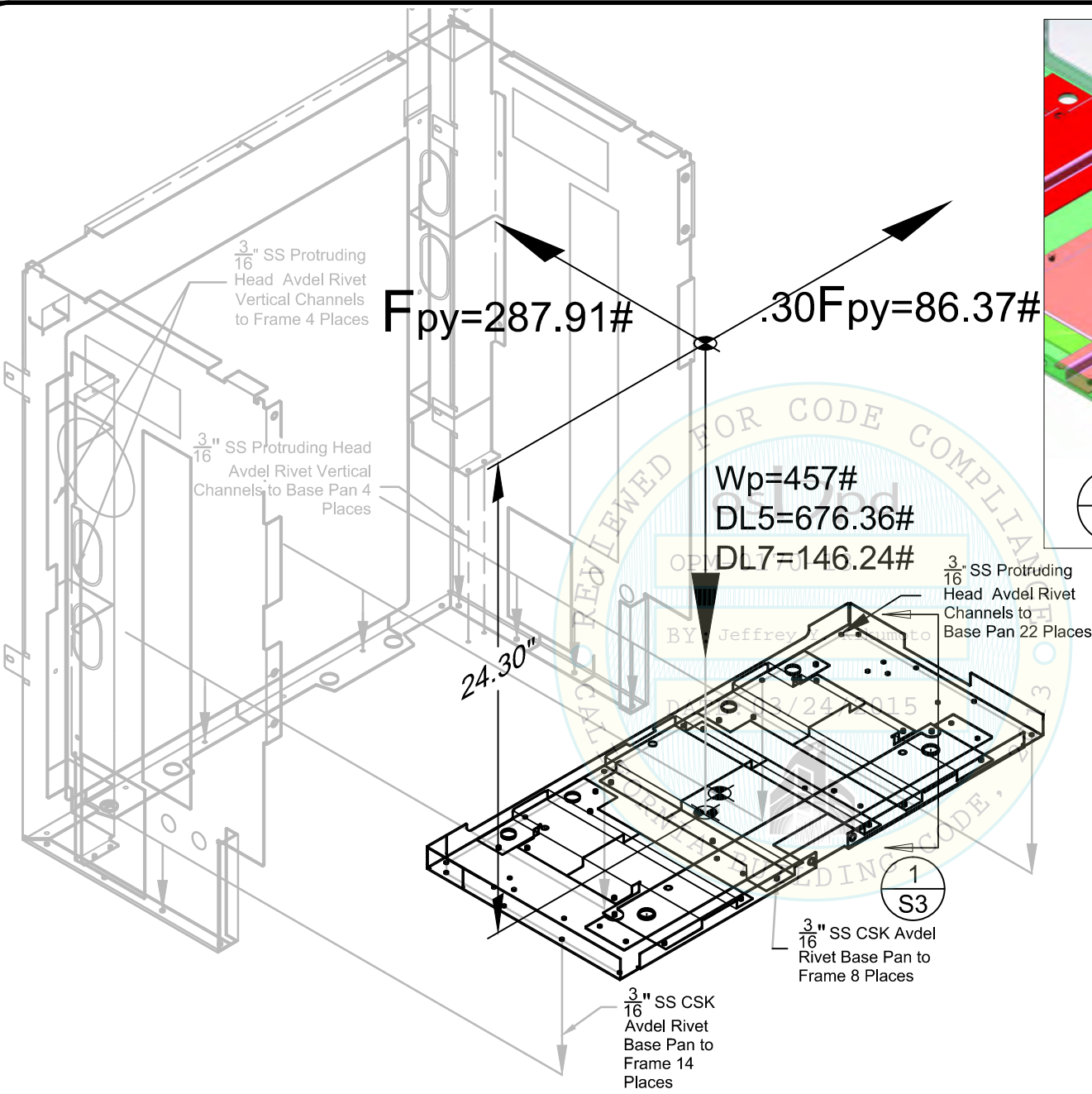
Signed 3-2-2015

**Universal AWS Console**

<b>Don Lee Engineering</b>	
21008 Sylvanwood Ave. Lakewood, Ca 90715 562-860-7896	
Project	DLE-(A)-014
Date	January 8, 2015
Scale	None
<b>S2</b>	

4 of 5 3/2/2015

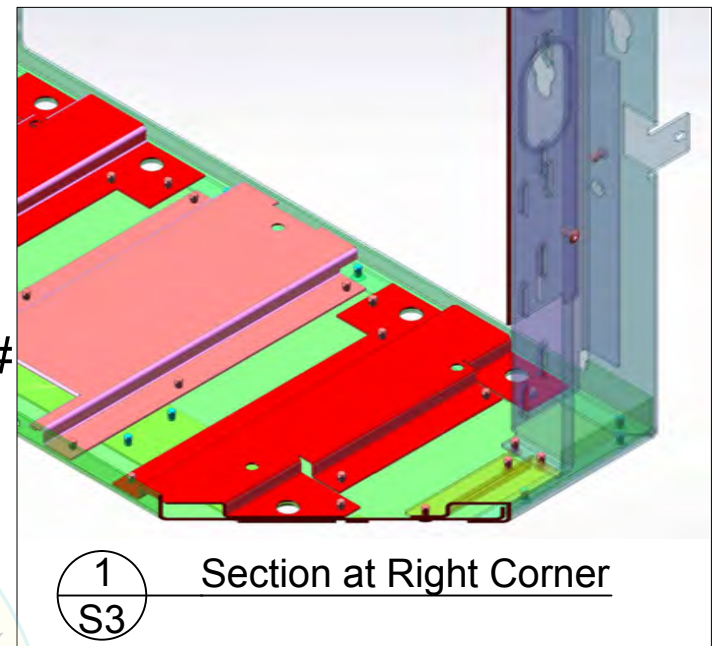
C:\w\files\fitwawa\dle-projects\new Universal Console\Universal AWS Console.dwg: 3/2/2015 12:55:05 PM



$F_{py} = 287.91\#$

$.30F_{py} = 86.37\#$

$W_p = 457\#$   
 $DL5 = 676.36\#$   
 $DL7 = 146.24\#$



1 S3 Section at Right Corner



Signed 3-2-2015

OPM-0170-13

<b>Don Lee Engineering</b>	
21008 Sylvanwood Ave. Lakewood, Ca 90715 562-860-7896	
Project HL-2013	<b>S3</b>
Date January 8, 2015	
Scale None	
5 of 5 3/2/2015	

# Universal AWS Console Assembly and Connections