



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0390-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: New Renewal Update to Pre-CBC 2013 OPA Number: OPA-2946-10

Manufacturer Information

Manufacturer: Ortho Clinical Diagnostics (OCD)

Manufacturer's Technical Representative: Davis Freeman

Mailing Address: 100 Indigo Creek Drive, Rochester, NY 14626-5101

Telephone: (585) 426-7933

Email: davis.freeman@orthoclinicaldiagnostics.com

Product Information

Product Name: ORTHO VISION™ Analyzer and ORTHO VISION™ Max Analyzer

Product Type: Automated immunohematology laboratory instruments

Product Model Number: ORTHO VISION™ Analyzer (6904577) and ORTHO VISION™ Max Analyzer (6904576)

General Description: ORTHO VISION™ and ORTHO VISION™ Max Analyzers are instruments designed to automate in vitro immunohematology testing of human blood utilizing ID-MTS™ gel card technology. ORTHO VISION™ and ORTHO VISION™ Max Analyzers automate test processing functions including liquid pipetting, reagent handling, incubation, centrifugation, reaction grading and interpretation, and data management requirements using cards and digital image processing. ORTHO VISION™ and ORTHO VISION™ Max Analyzers can be used as standalone instrument or interfaced to the customer's Laboratory Information System (LIS).

Applicant Information

Applicant Company Name: Ortho Clinical Diagnostics (OCD)

Contact Person: Davis Freeman

Mailing Address: 100 Indigo Creek Drive, Rochester, NY 14626-5101

Telephone: (585) 426-7933

Email: davis.freeman@orthoclinicaldiagnostics.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:

Date: 11/03/16

Title: Program Manager

Company Name: Ortho Clinical Diagnostics (OCD)

"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: CYS Structural Engineers, INC.

Name: Dieter T. Siebald California License Number: SE4346

Mailing Address: 2495 Natomas Park Drive, Suite 650, Sacramento CA, 95833

Telephone: 916-920-2020 Email: dieters@cyseng.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 1950-16
- Other* (Please Specify): Calculation in accordance with the 2016 CBC

*Use of criteria other than those adopted by the California Building Standards Code, 2016 (CBSC 2016) 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 2016 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 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature:  Date: 01-23-2017

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

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



TABLE OF CONTENTS
OPM-0390-13

	PAGE
GENERAL NOTES	2
ABBREVIATIONS	4
SYSTEM OVERVIEW & DESIGN CRITERIA	5
ORTHO VISION™	
PLAN & ELEVATIONS	6
CONNECTION TO SUPPORT TABLE (30"x48")	7
ORTHO VISION™ MAX	
PLAN & ELEVATIONS	8
CONNECTION TO SUPPORT TABLE (30"x72")	9
SEISMIC LEFT (SL) BRACKET & SEISMIC RIGHT (SR) BRACKET DETAIL	10
SEISMIC LEFT (SLF) FRONT BRACKET DETAIL	11
SEISMIC FLOOR (SF) BRACKET	12
CONNECTIONS TO TABLE & EQUIPMENT	13
SUPPORT TABLES	
ORTHO VISION™ SUPPORT TABLE PLAN & ELEVATIONS	15
ORTHO VISION™ MAX SUPPORT TABLE PLAN & ELEVATIONS	16
ATTACHMENT DETAIL TO CONC FILL OVER MTL DECK (CASE 1)	17
ATTACHMENT DETAIL TO CONC SLAB (CASE 2)	19
ATTACHMENT DETAIL (CASE 3)	20

NOTES:

1. THESE DRAWINGS ARE PREPARED FOR ORTHO CLINICAL DIAGNOSTICS, ROCHESTER, NEW YORK.
2. THE CONTRACTOR & INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT (OSHPD) PRE-APPROVAL PROGRAMS WEBSITE.
3. THIS PRE-APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE EQUIPMENT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT, STAND & ATTACHMENT HARDWARE ARE SUPPLIED BY THE MANUFACTURER. THE EXPANSION ANCHORS, THRU-BOLTS & STRUT PLATES SHOWN IN THIS OPM SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR.



SHEET TITLE: TABLE OF CONTENTS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	1 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscdle:1 LfScale:6

GENERAL NOTES:

1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE W/ THIS OPM SHALL BE BASED ON THE CBC 2016.
2. IT IS THE RESPONSIBILITY OF THE SEOR FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR EA EQUIP IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
 - B. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPGS.
 - C. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS. THE SPCG SHOWN IN THE TEST LOADS TABLE ON PG 3 IS THE REQ MIN SPCG OF THE GIVEN DIA ANCHORS. THE REQ SPCG FROM ANCHORS OF OTHER DIAMETERS & EMBEDMENTS MAY VARY & SHALL BE EVALUATED BY THE SEOR.
 - D. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE CBC 2016 & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
 - E. THAT THE ACTUAL EQUIP'S WT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS, & THE MATERIAL & GAGE OF THE EQUIP WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFO SHOWN ON THE PRE-APPROVAL DOCUMENTS.
3. EXPANSION ANCHORS INSTALLED IN NWC OR SLWC SHALL BE CARBON OR STAINLESS STEEL HILTI KB-TZ EXPANSION ANCHORS AS NOTED COMPLYING W/ ESR-1917 REVISED FEBRUARY 2016.
 - A. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR & THE PARAMETERS GIVEN IN THE TABLE ON PG 3.
 - B. JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOBSITE TESTING IN ACCORDANCE W/ THE TEST LOAD TABLE PROVIDED IN THIS DOCUMENT. TEST 50% OF THE INSTALLED ANCHORS. THE TEST LOAD MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TORQUE IN THE ANCHOR SUCH AS CALIBRATED TORQUE WRENCH METHOD. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD (IOR). IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIP INSTALLATION. ALSO REFER TO CBC 1910A.5 "TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE".
 - C. FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
 - TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:
WEDGE TYPE: ONE-HALF (1/2) TURN OF THE NUT.
4. BOLTS THRU CONC ON MTL DECK:
 - A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUT AFTER SNUG TIGHT CONDITION IS ACHIEVED, UNO. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQ TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
 - B. THRU-BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16").
 - C. THRU-BOLTS IN CONC SHALL RECEIVE SPECIAL INSPECTION & TESTING IN ACCORDANCE W/ REQUIREMENTS FOR POST-INSTALLED ANCHORS. THRU-BOLTS W/ STL TO STL CONNECTION IN TENSION DO NOT REQUIRE TESTING.

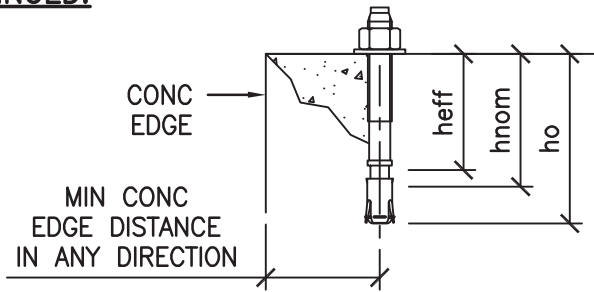


SHEET TITLE: GENERAL NOTES

 CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833	TEL (916) 920-2020 www.cyseng.com	Job No: 16118 Date: 01-17-2017 Page: 2 of 20
---	--------------------------------------	--

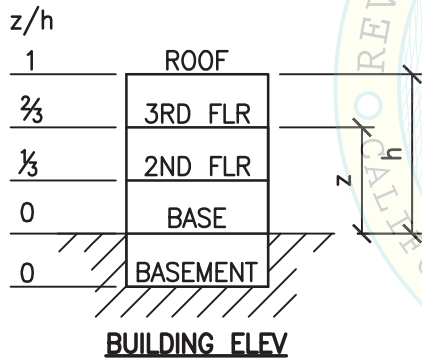
L:\Jobs\16118 OCD - Ortho Vision & Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscaler:1 LfScale:6

GENERAL NOTES CONTINUED:



ANCHOR DIA (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) heff	HOLE DEPTH (INCH) ho	MIN CONC THK (INCH) h	MIN CONC EDGE DISTANCE (INCH)	MIN ANCHOR SPCG (INCH)	TEST TORQUE (FT-LBS)	CONDITION OF ANCHORAGE
3/8	2 5/16	2	2 5/8	3/4	6	9.00	25	CASE 1
1/2	3 5/8	3 1/4	4	6	6	9.00	40	CASE 2
1/2	2 3/8	2	2 5/8	4	12	9.00	40	CASE 3

5. THREE (3) CASES OF ATTACHMENT ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:



CASE 1: ATTACHMENT DETAILS LOCATED AT UPPER FLRS ABV THE BASE OF A BUILDING. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 3/4" SLWC TOPPING OVER 3" DEEP MIN 20 GA MTL DECK (f'c = 3000 PSI, MIN).

CASE 2: ATTACHMENT DETAILS LOCATED AT OR BLW THE BASE OF A BUILDING. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 6" NWC SLAB (f'c = 3000 PSI, MIN). ANCHORS CAN BE CARBON OR STAINLESS STEEL.

CASE 3: ATTACHMENT DETAILS LOCATED AT OR BLW THE BASE OF A BUILDING. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 4" NWC SLAB (f'c = 3000 PSI, MIN). ANCHORS SHALL BE STAINLESS STEEL.



SHEET TITLE: GENERAL NOTES (CONTINUED)



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

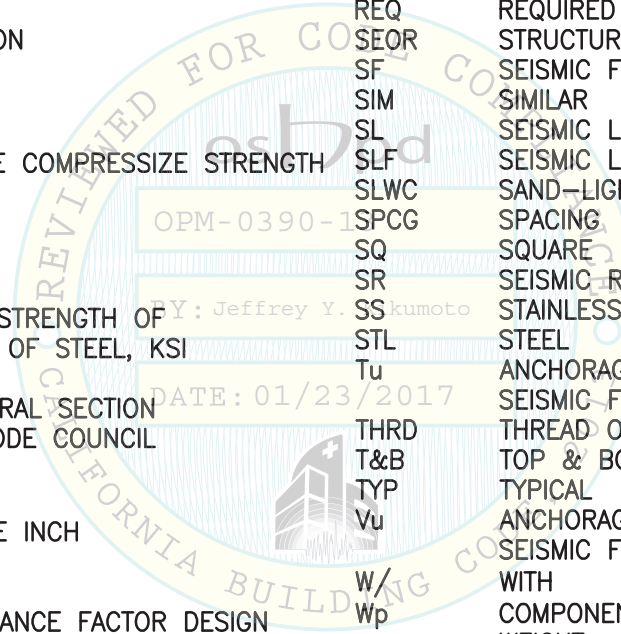
TEL (916) 920-2020
www.cyseng.com

Job No: 16118
Date: 01-17-2017
Page: 3 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:36pm Login:cammachom DimScale:1 L1Scale:6

ABBREVIATIONS:

@	AT	MTL	METAL
AB	ANCHOR BOLT	NO. (#)	NUMBER OR POUNDS
ALUM	ALUMINUM	NS	NEAR SIDE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	NWC	NORMAL WEIGHT CONCRETE
BLW	BELOW	OC	ON CENTER
BYD	BEYOND	OCD	ORTHO CLINICAL DIAGNOSTICS
CBC	CALIFORNIA BUILDING CODE	OP	OPERATING
CG	CENTER OF GRAVITY	OPG	OPENING
CLSE	CALIFORNIA LICENSED STRUCTURAL ENGINEER	OPM	OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
⊕	CENTERLINE	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
CONC	CONCRETE	PG	PAGE
CONN	CONNECTION	PHIL	PHILLIPS
DBL	DOUBLE	Ⓟ	PLATE
DTL(S)	DETAIL(S)	PSI	POUNDS PER SQUARE INCH
DIA (∅)	DIAMETER	REQ	REQUIRED
(E)	EXISTING CONDITION	SEOR	STRUCTURAL ENGINEER OF RECORD
EA	EACH	SF	SEISMIC FLOOR BRACKET
ELEV	ELEVATION	SIM	SIMILAR
EQUIP	EQUIPMENT	SL	SEISMIC LEFT BRACKET
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE	SLF	SEISMIC LEFT FRONT BRACKET
FLR	FLOOR	SLWC	SAND-LIGHTWEIGHT CONCRETE
FS	FAR SIDE	SPCG	SPACING
FT (')	FOOT/FEET	SQ	SQUARE
Fy	SPECIFIED YIELD STRENGTH OF REINFORCING, PS OF STEEL, KSI	SR	SEISMIC-RIGHT BRACKET
GA	GAUGE	SS	STAINLESS STEEL
HSS	HOLLOW STRUCTURAL SECTION	STL	STEEL
ICC	INTERNATIONAL CODE COUNCIL	Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE AT LRFD
IN (")	INCH	THRD	THREAD OR THREADED
INFO	INFORMATION	T&B	TOP & BOTTOM
KSI	KIPS PER SQUARE INCH	TYP	TYPICAL
L	LENGTH	Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE AT LRFD
LBS	POUNDS	W/	WITH
LRFD	LOAD AND RESISTANCE FACTOR DESIGN	Wp	COMPONENT OPERATING WEIGHT
LWC	LIGHT WEIGHT CONCRETE		
MAX	MAXIMUM		
MFR	MANUFACTURER		
MIN	MINIMUM		



SHEET TITLE: ABBREVIATIONS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	4 of 20

L:\Jobs\16118 OCD - Ortho Vision & Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:36pm Login:camachom Dimscdlr:1 LTScale:6

SYSTEM OVERVIEW & DESIGN CRITERIA:

1. TWO INSTALLATION CONFIGURATIONS OF THE ORTHO VISION™ AND ORTHO VISION™ MAX ARE COVERED BY THIS OPM. ORTHO VISION™ AND ORTHO VISION™ MAX ANALYZERS ARE INSTRUMENTS THAT ARE CONNECTED TO CORRESPONDING SUPPORT TABLES. THE TWO TABLES ARE THE SAME EXCEPT FOR OVERALL DIMENSIONS. THE SUPPORT TABLES ARE CONNECTED TO BRACKETS THAT ARE ATTACHED TO THE EXISTING FLOOR. MAXIMUM FORCES TO INDIVIDUAL ATTACHMENT BOLTS HAVE BEEN PROVIDED AND ENVELOPE BOTH CONFIGURATIONS.
2. SUPPORT & ATTACHMENT DESIGN IS PER 2016 CBC AT LRFD LEVEL FORCES.

OTHER MECHANICAL OR ELECTRICAL COMPONENTS PER TABLE 13.6-1 OF ASCE 7-10 SUPPLEMENT #1:

$a_p = 1.0$ $R_p = 1.5$ $I_p = 1.5$ $\Omega_0 = 1.5$ (FOR CONC ANCHORS ONLY)

W_p AS NOTED ON DRAWINGS

UPPER FLRS ABV THE BASE OF BUILDING, $z/h \leq 0.5$

CASE 1: $S_{DS} \leq 2.50$ $F_p = 2.00 W_p$

FLRS AT OR BLW THE BASE OF BUILDING, $z/h = 0$

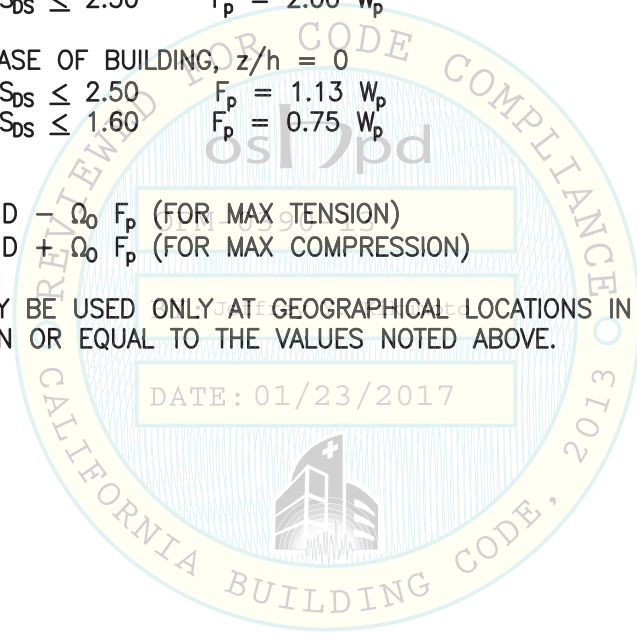
CASE 2: $S_{DS} \leq 2.50$ $F_p = 1.13 W_p$
 CASE 3: $S_{DS} \leq 1.60$ $F_p = 0.75 W_p$

LOAD COMBINATIONS

$(0.9 - 0.2 S_{DS}) D - \Omega_0 F_p$ (FOR MAX TENSION)
 $(1.2 + 0.2 S_{DS}) D + \Omega_0 F_p$ (FOR MAX COMPRESSION)

3. THIS PRE-APPROVAL MAY BE USED ONLY AT GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA WHERE S_{DS} IS LESS THAN OR EQUAL TO THE VALUES NOTED ABOVE.

DATE: 01/23/2017



SHEET TITLE: SYSTEM OVERVIEW & DESIGN CRITERIA



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
 SACRAMENTO, CA 95833

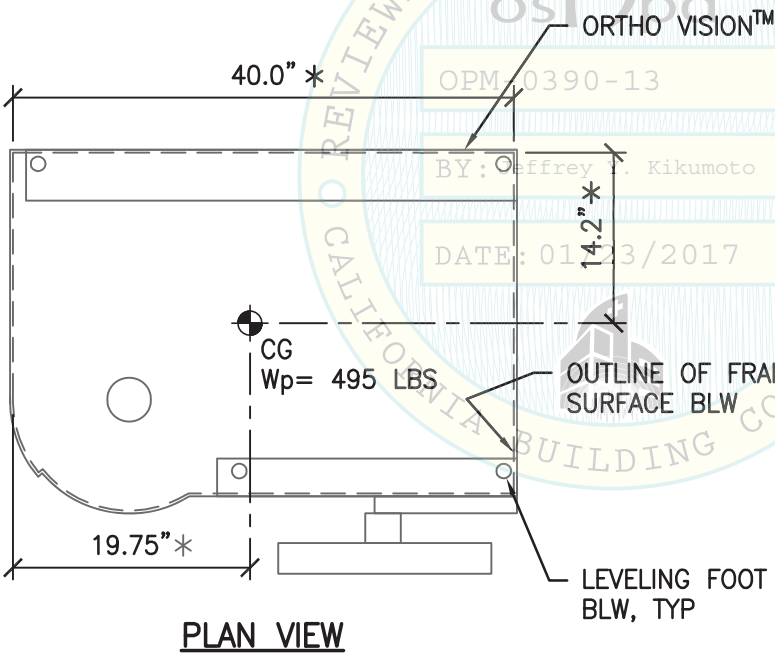
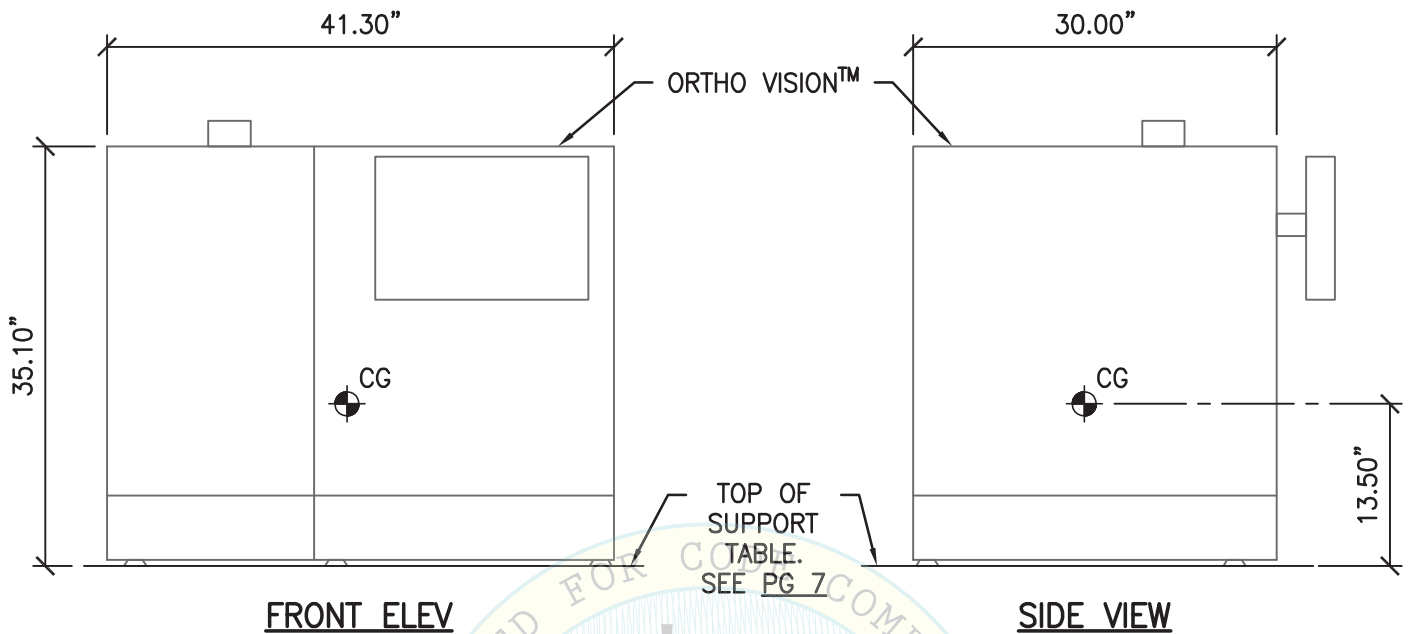
TEL (916) 920-2020
 www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	5 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscale:1 LITScale:6

ORTHO VISION™ & ORTHO VISION™ MAX ANALYZERS


Ortho Clinical Diagnostics



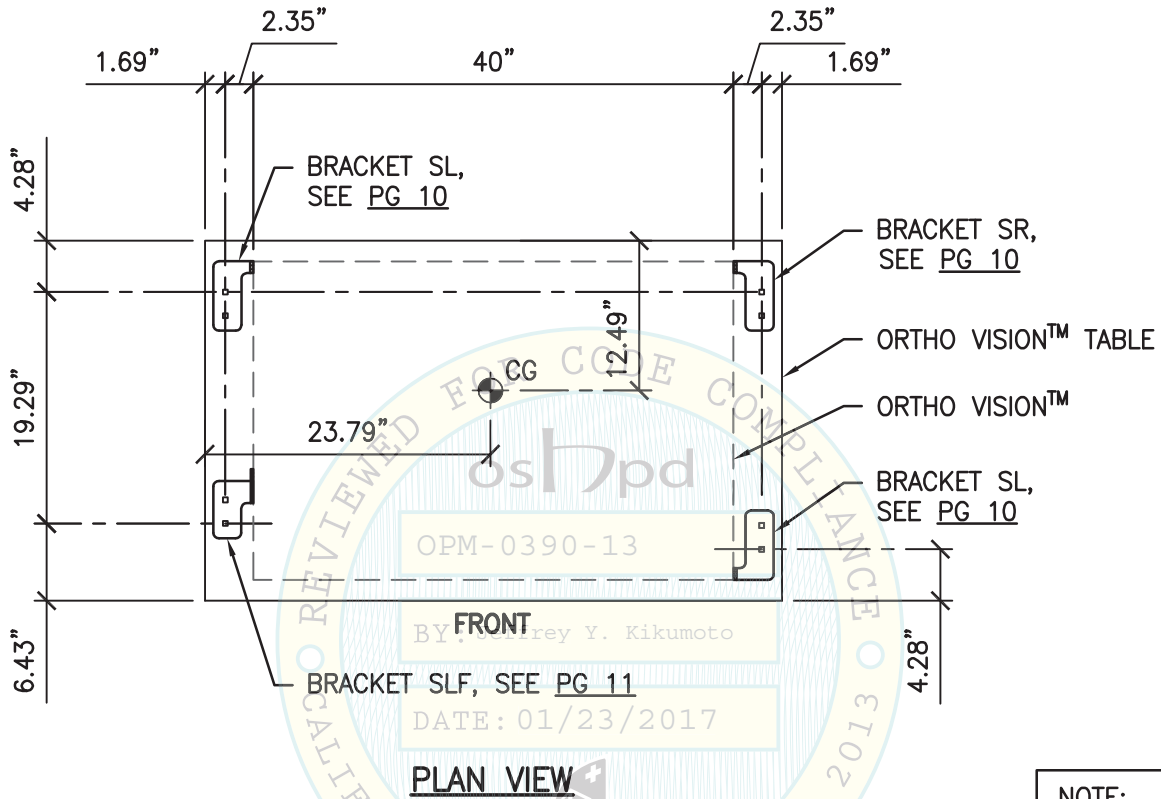
* NOTE:
MEASURED FROM FRAME SURFACE WHERE BRACKETS ATTACH.



SHEET TITLE: ORTHO VISION™
PLAN & ELEVATIONS

 <p>CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833</p>	TEL (916) 920-2020	Job No: 16118
	www.cyseng.com	Date: 01-17-2017
		Page: 6 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscale:1 L1Scale:6



NOTE:
CG LOCATION IS FOR UNIT ONLY.



SHEET TITLE: ORTHO VISION™
CONNECTION TO SUPPORT TABLE (30"x48")



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

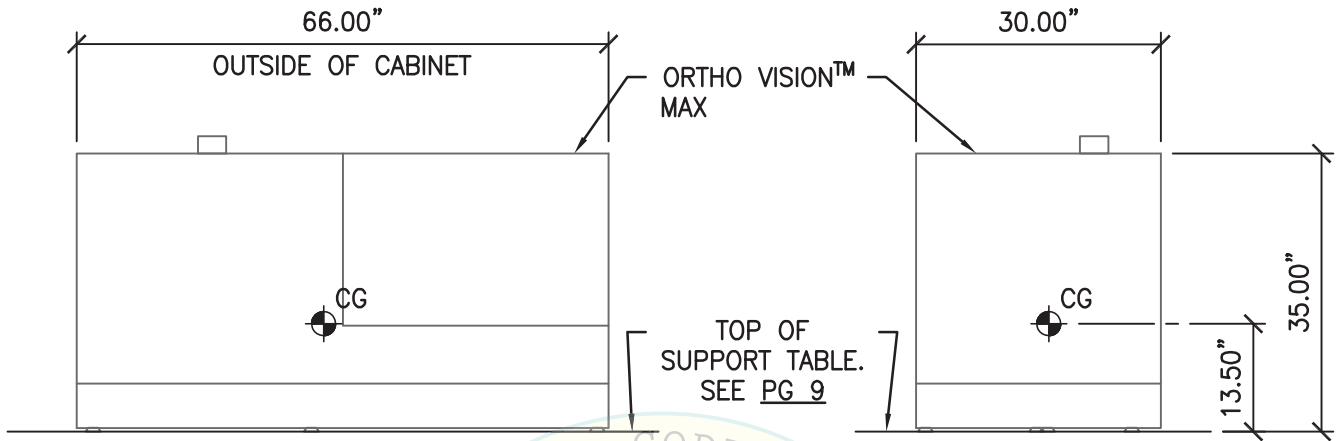
TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	7 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Login:camachom Dimstyle:1 LTScale:6

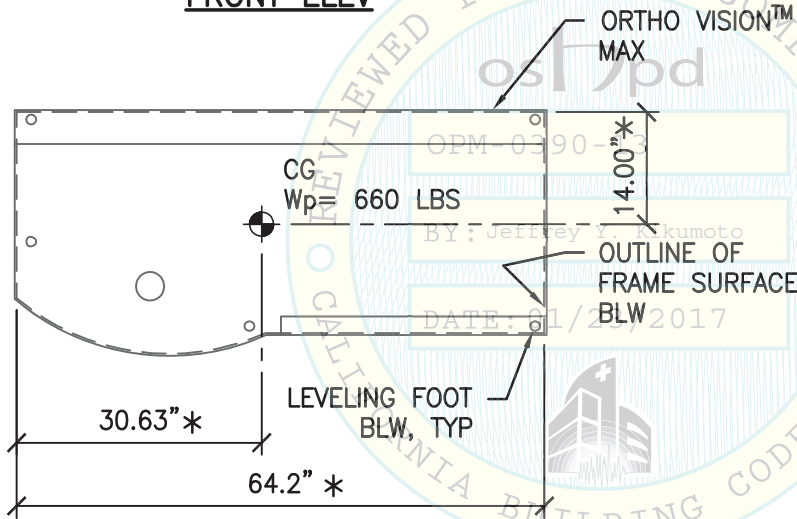
ORTHO VISION™ & ORTHO VISION™ MAX
ANALYZERS

Ortho Clinical Diagnostics



FRONT ELEV

SIDE VIEW



PLAN VIEW

*** NOTE:**
MEASURED FROM FRAME
SURFACE WHERE BRACKETS
ATTACH.



SHEET TITLE: ORTHO VISION™ MAX
PLAN & ELEVATIONS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

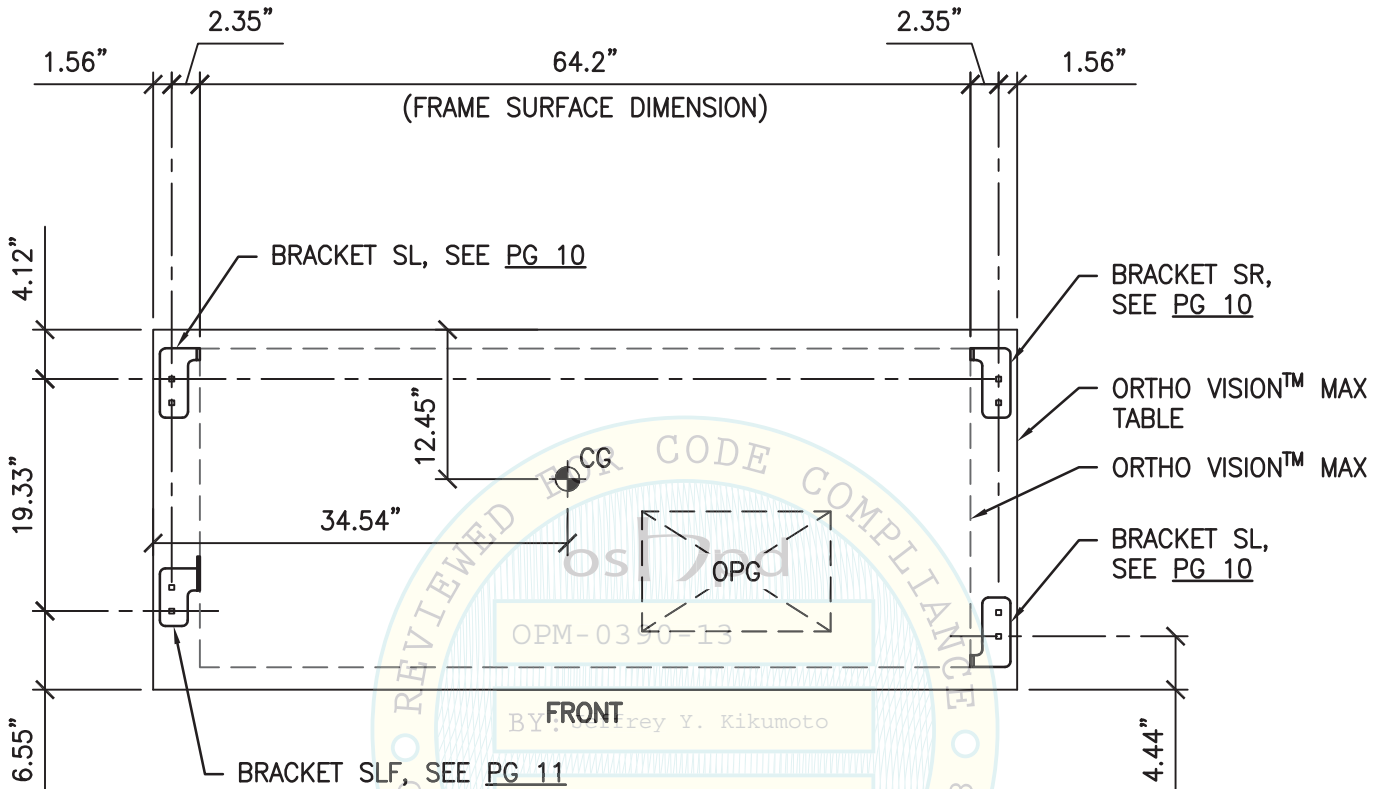
TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	8 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Login:cacmahom DimScale:1 LTScale:6

ORTHO VISION™ & ORTHO VISION™ MAX ANALYZERS

Ortho Clinical Diagnostics



CG
OPG
OPM-0390-13
FRONT
BY: Jeffrey Y. Kikumoto
DATE: 01/23/2017

PLAN VIEW

NOTE:
CG LOCATION IS FOR UNIT ONLY.



SHEET TITLE: ORTHO VISION™ MAX CONNECTION TO SUPPORT TABLE (30"x72")

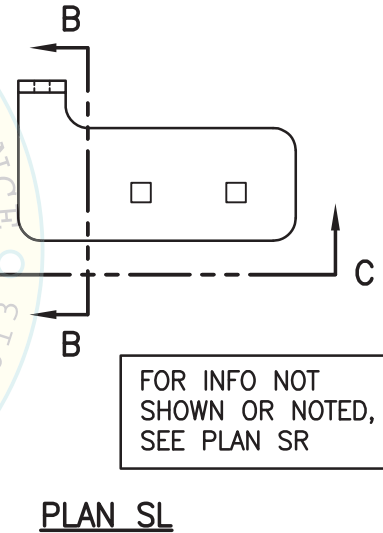
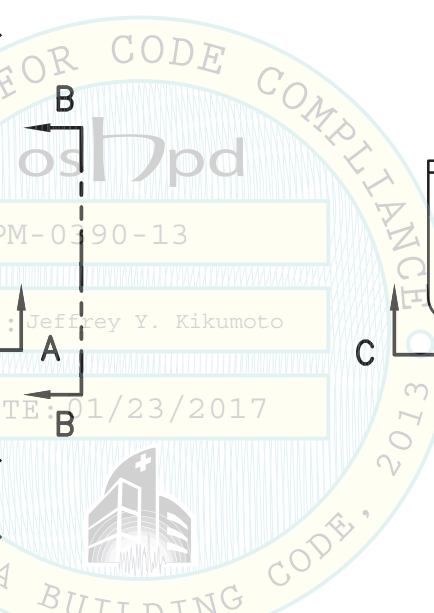
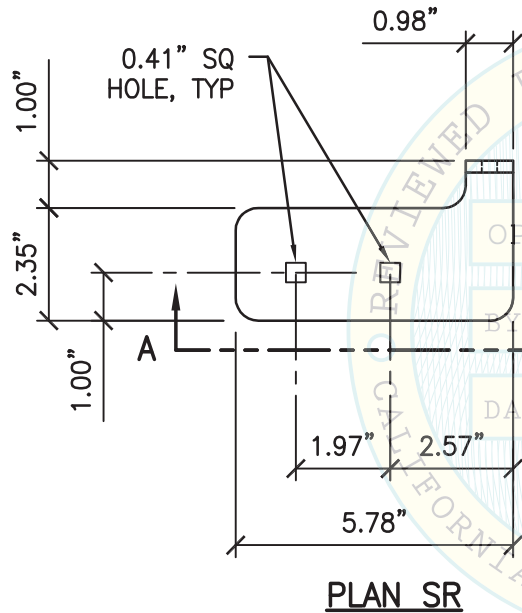
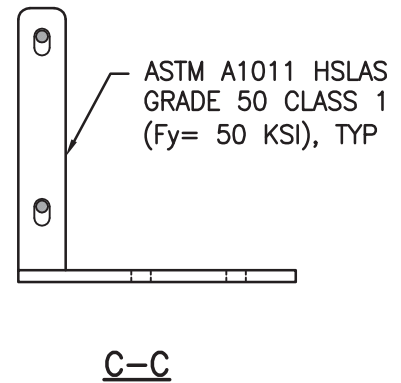
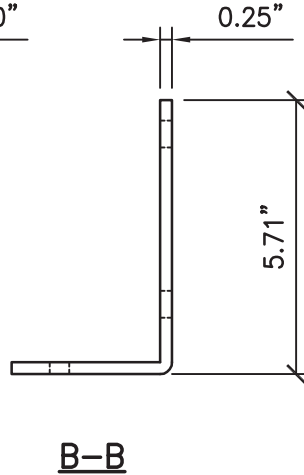
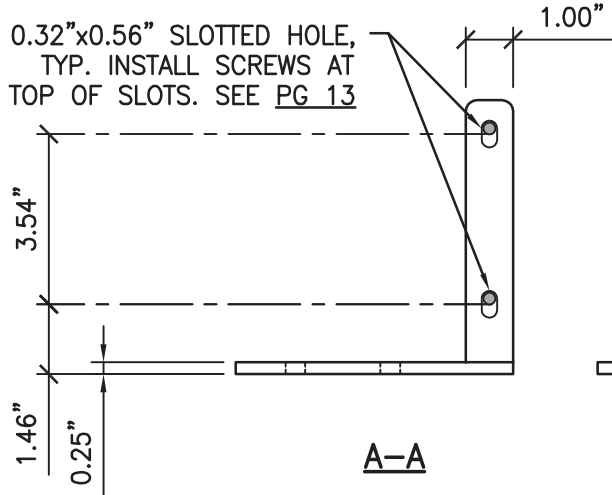
 <p>CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833</p>	TEL (916) 920-2020	Job No: 16118
	www.cyseng.com	Date: 01-17-2017
		Page: 9 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Logincamachom DimScale:1 L1Scale:6

ORTHO VISION™ & ORTHO VISION™ MAX ANALYZERS

Ortho Clinical Diagnostics

0.32"x0.56" SLOTTED HOLE, TYP. INSTALL SCREWS AT TOP OF SLOTS. SEE PG 13



FOR INFO NOT SHOWN OR NOTED, SEE PLAN SR

PLAN SL



SHEET TITLE: SEISMIC LEFT (SL) BRACKET & SEISMIC RIGHT (SR) BRACKET DETAIL

 CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833	TEL (916) 920-2020 www.cyseng.com	Job No: 16118 Date: 01-17-2017 Page: 10 of 20
---	--------------------------------------	---

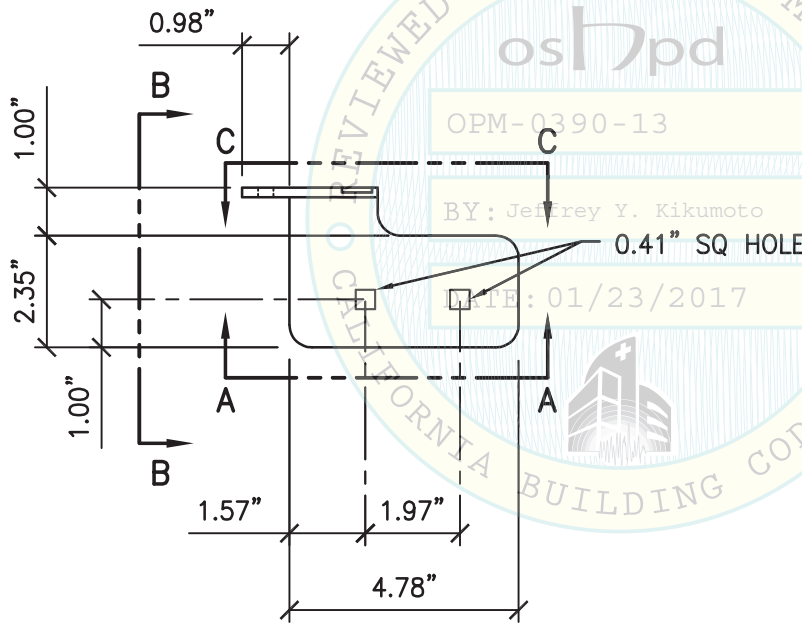
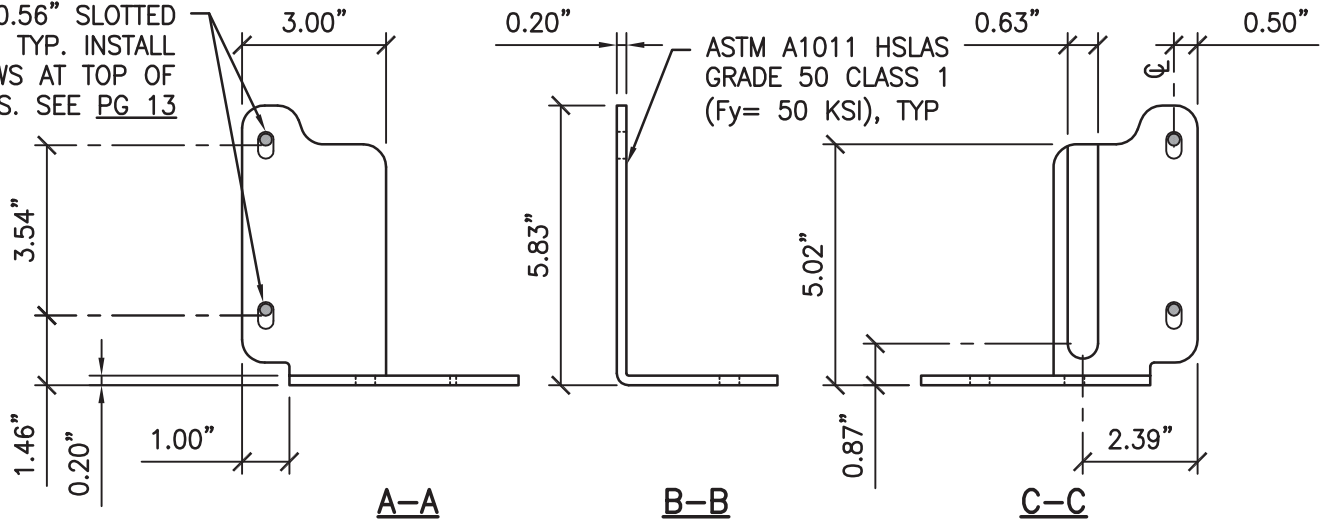
L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscale:1 LTScale:6

ORTHO VISION™ & ORTHO VISION™ MAX
ANALYZERS

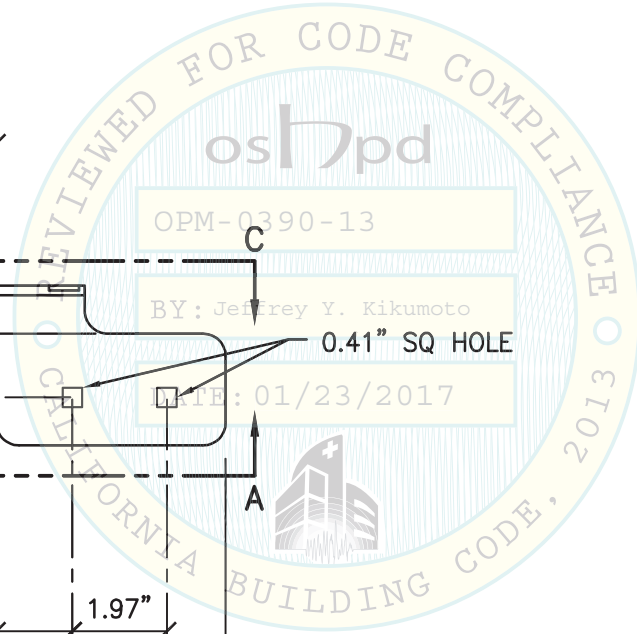
Ortho Clinical Diagnostics

0.32"x0.56" SLOTTED
HOLE, TYP. INSTALL
SCREWS AT TOP OF
SLOTS. SEE PG 13

ASTM A1011 HSLAS
GRADE 50 CLASS 1
(Fy= 50 KSI), TYP



PLAN SLF



SHEET TITLE: SEISMIC LEFT FRONT (SLF) BRACKET DETAIL



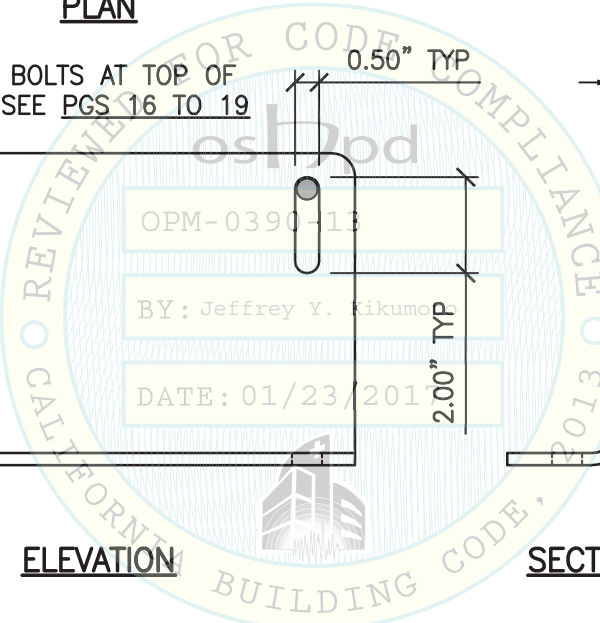
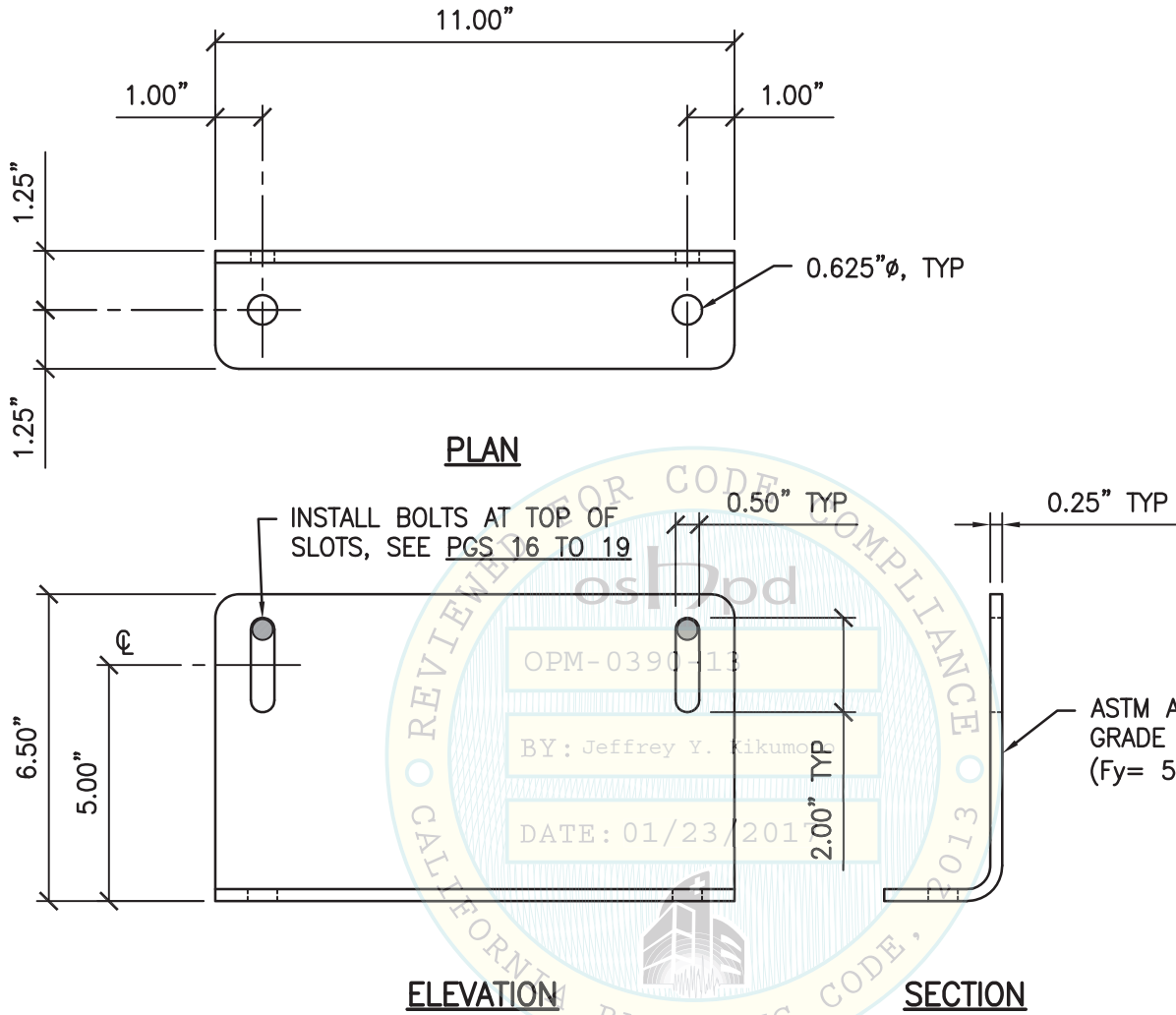
CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	11 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Login:casmachom Dimstyle:1 LTScale:6



SHEET TITLE: SEISMIC FLOOR (SF) BRACKET



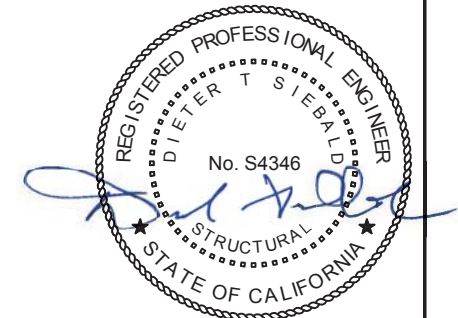
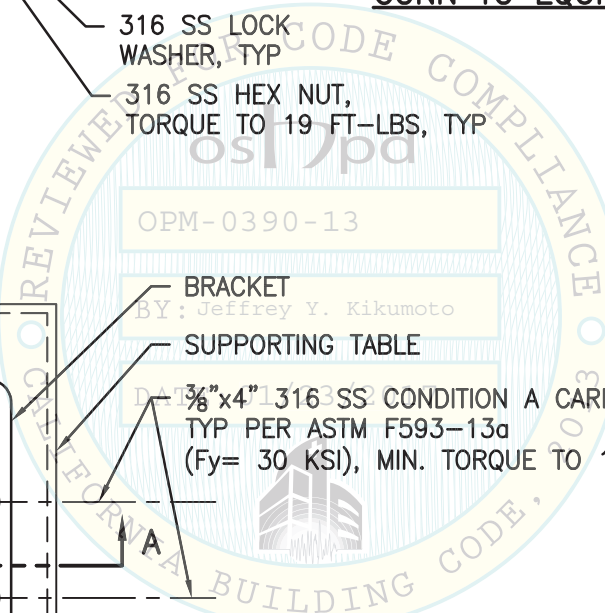
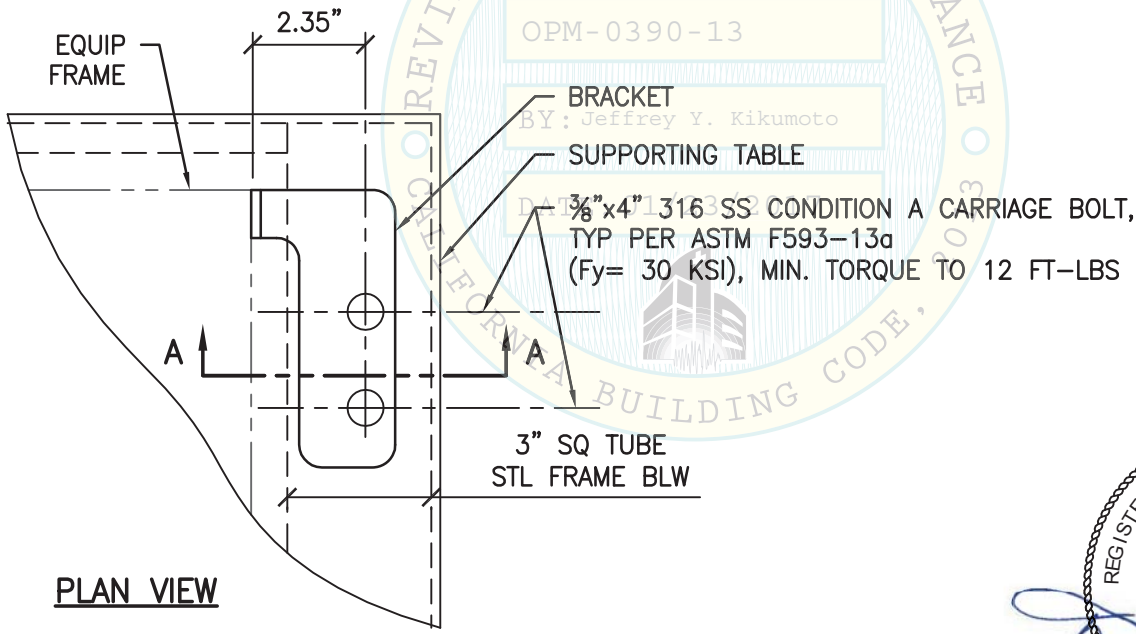
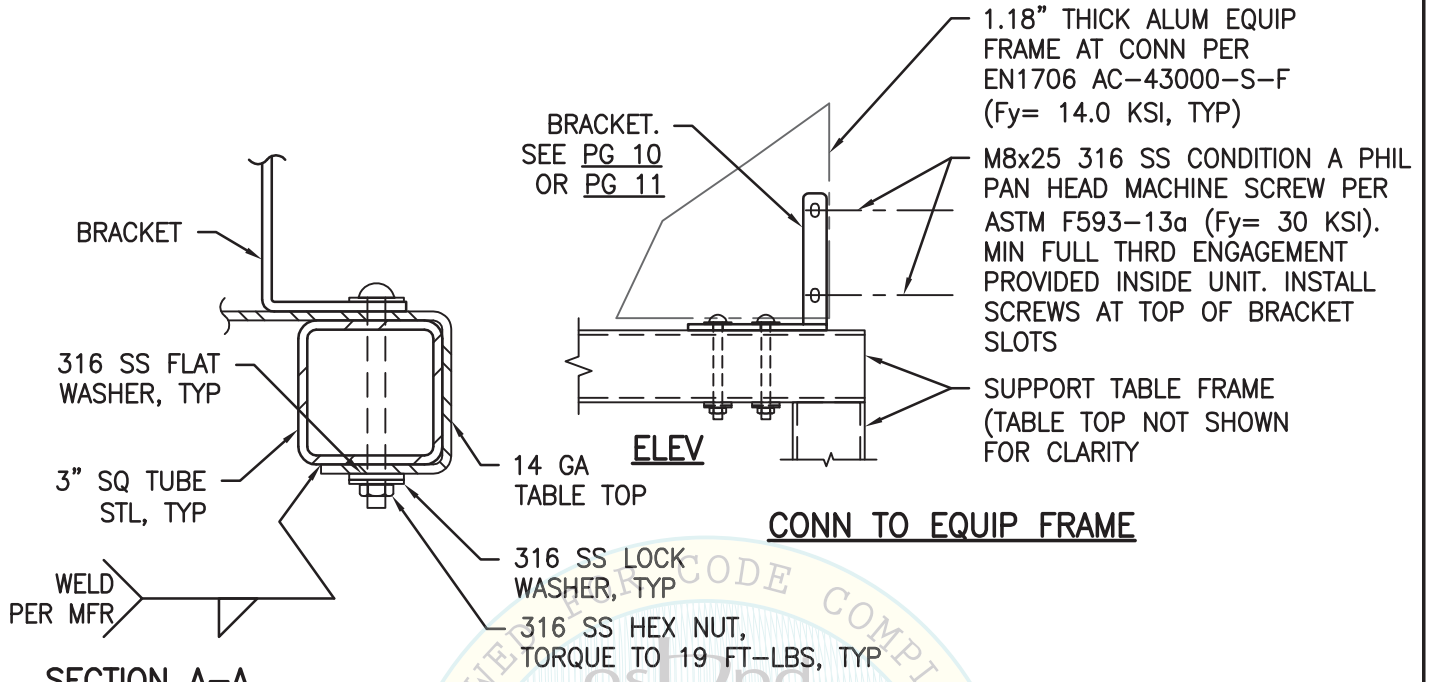
CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	12 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:36pm Logincamachom Dimscdle:1 L1Scale:6



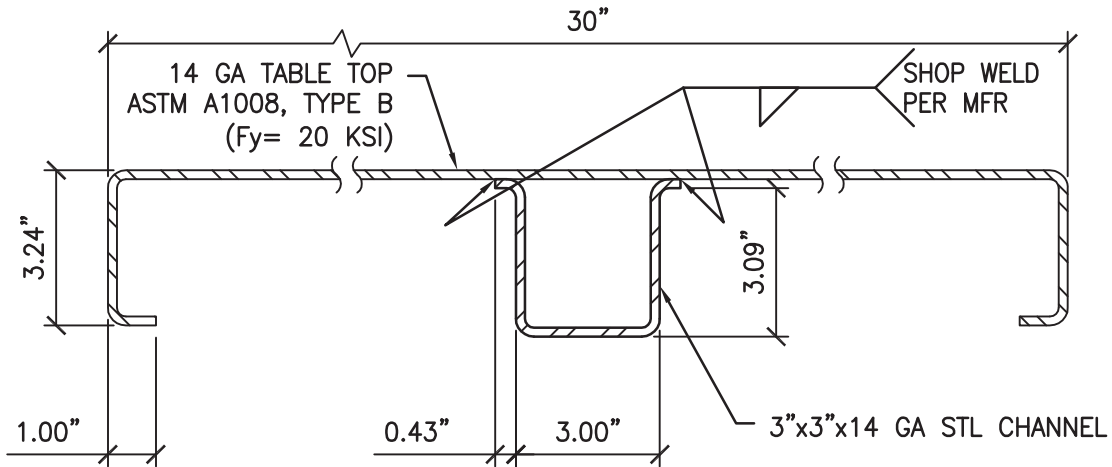
SHEET TITLE: CONNECTIONS TO TABLE & EQUIPMENT

 <p>CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833</p>	Job No: 16118
	Date: 01-17-2017
	Page: 13 of 20

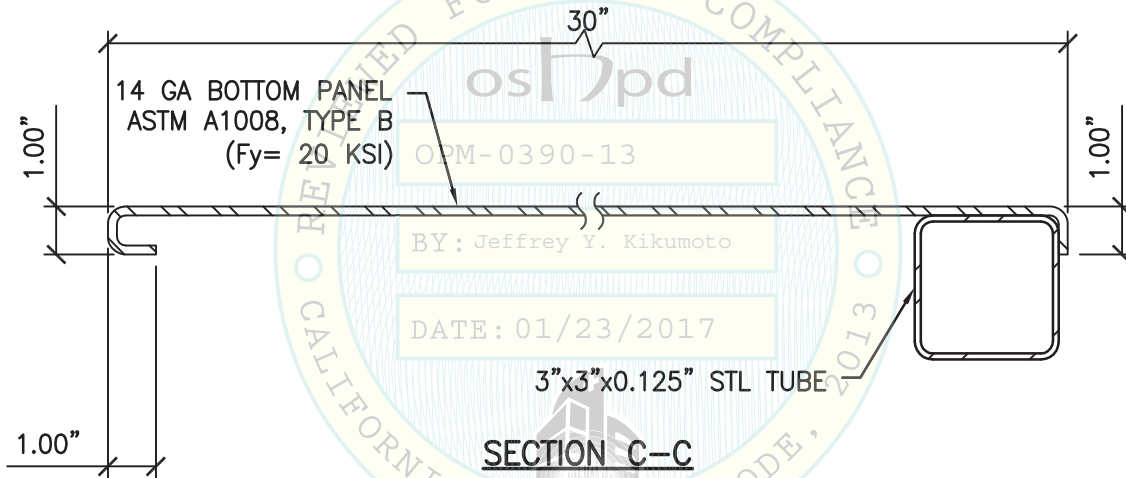
L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:37pm Logincamachom DimScale:1 LTScale:6

ORTHO VISION™ & ORTHO VISION™ MAX
ANALYZERS

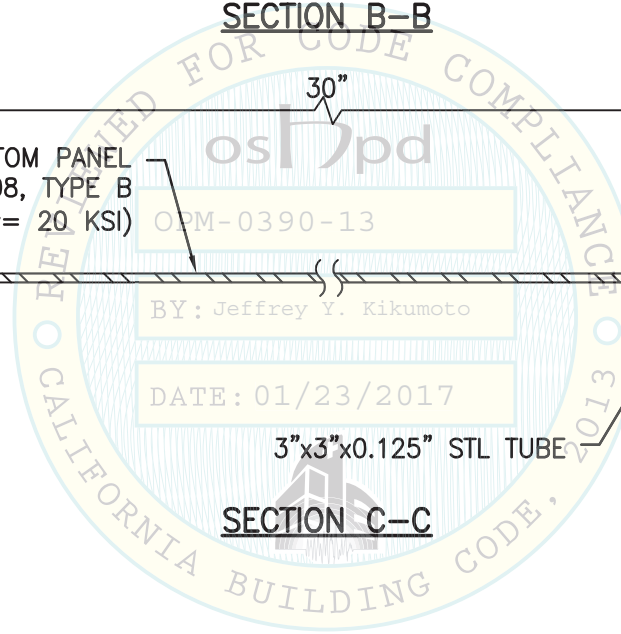
Ortho Clinical Diagnostics



SECTION B-B



SECTION C-C



SHEET TITLE: CONNECTIONS TO TABLE & EQUIPMENT



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

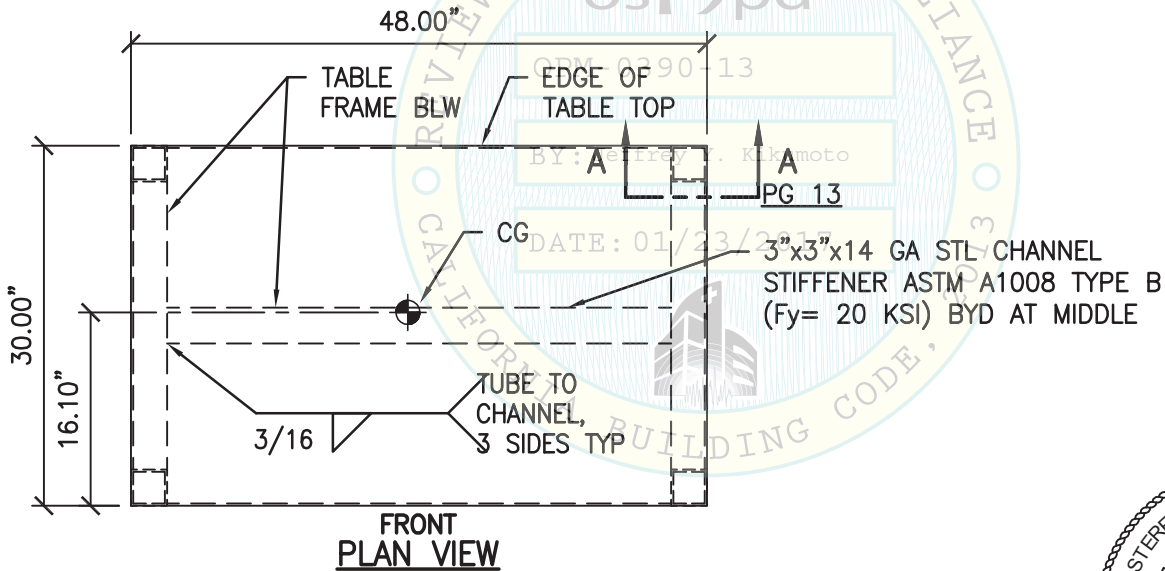
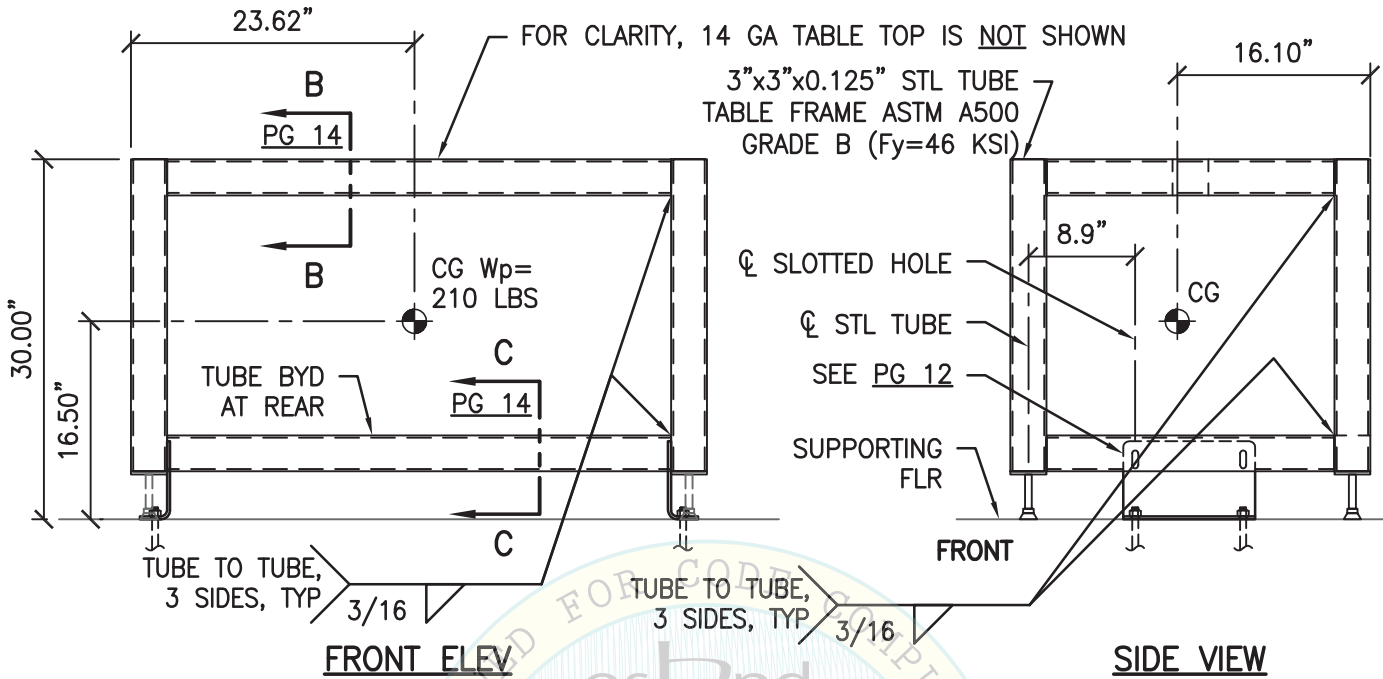
TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	14 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:37pm LogIn:camachom DimScale:1 LITScale:6

ORTHO VISION™ & ORTHO VISION™ MAX ANALYZERS

Ortho Clinical Diagnostics



NOTES:

1. THE SUPPORT TABLE IS PROVIDED BY OCD.
2. FOR CLARITY, ORTHO VISION™ IS NOT SHOWN.



SHEET TITLE: ORTHO VISION™ SUPPORT TABLE
PLAN & ELEVATIONS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

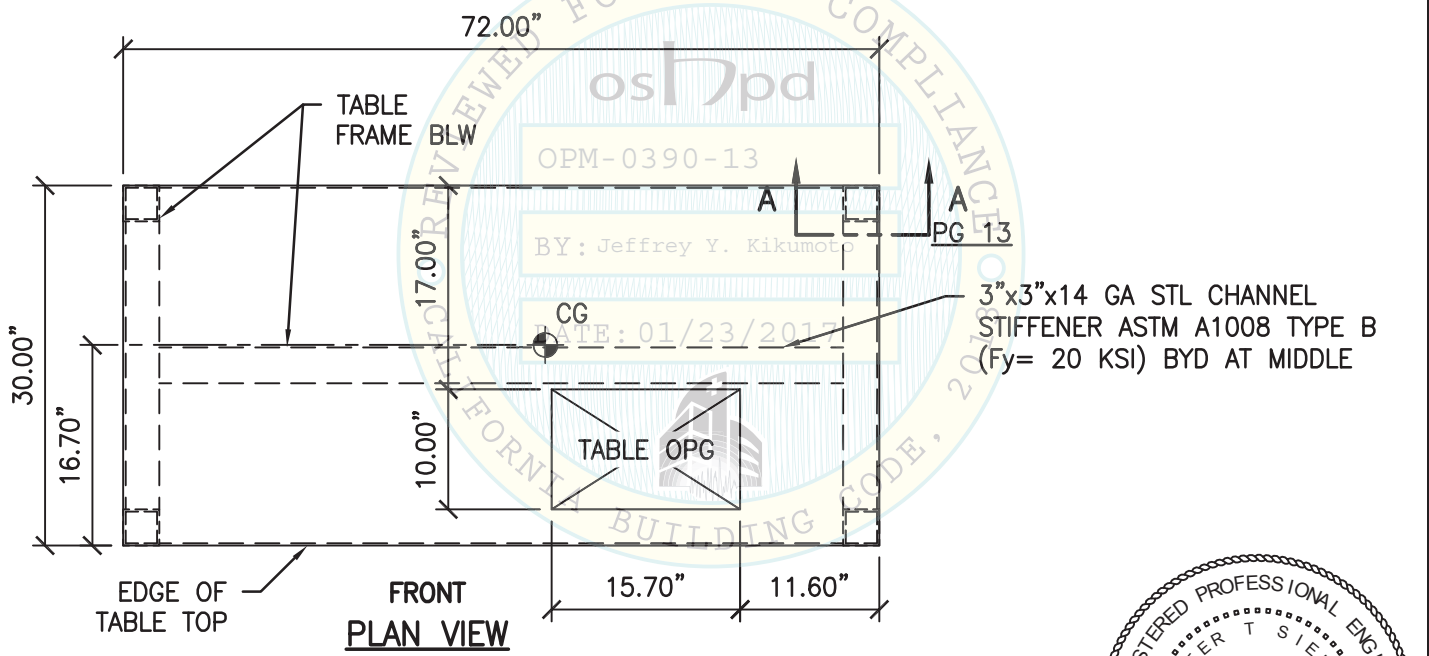
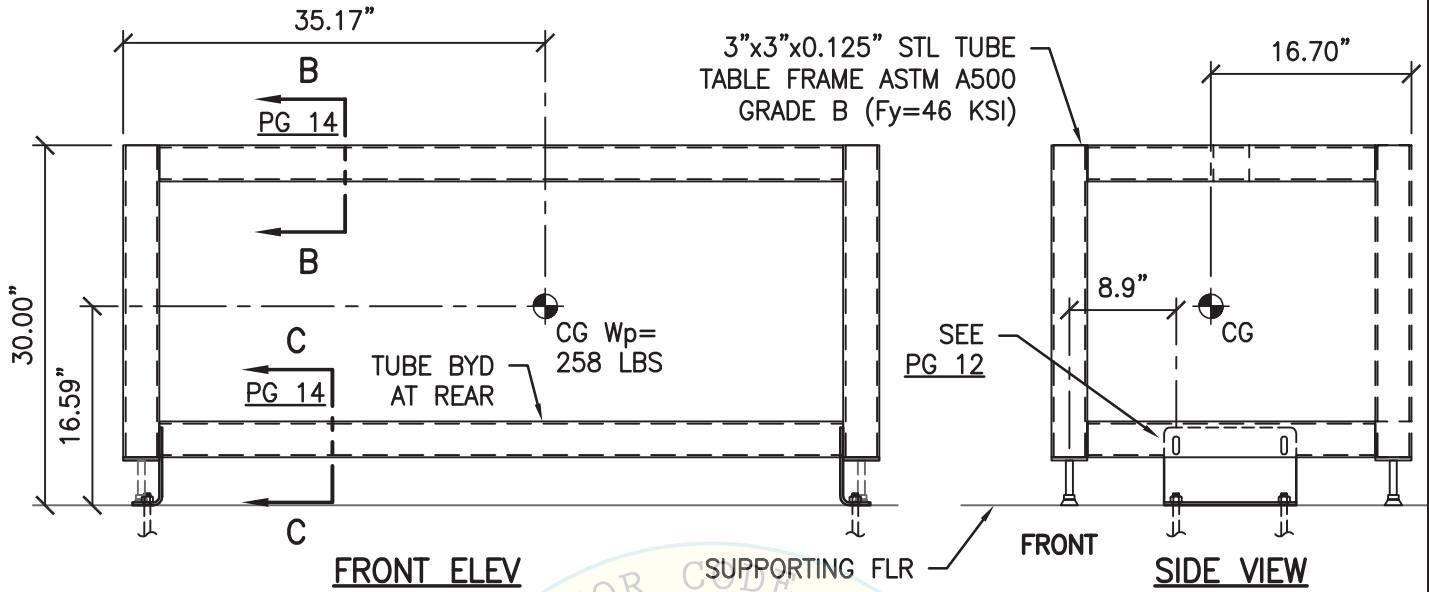
TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	15 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:37pm Logincamachom Dimscale:1 LTScale:6

ORTHO VISION™ & ORTHO VISION™ MAX ANALYZERS

Ortho Clinical Diagnostics



- NOTES:**
1. THE SUPPORT TABLE IS PROVIDED BY OCD.
 2. FOR CLARITY, ORTHO VISION™ MAX IS NOT SHOWN.
 3. FOR TABLE FRAME WELDS, SEE PG 15.



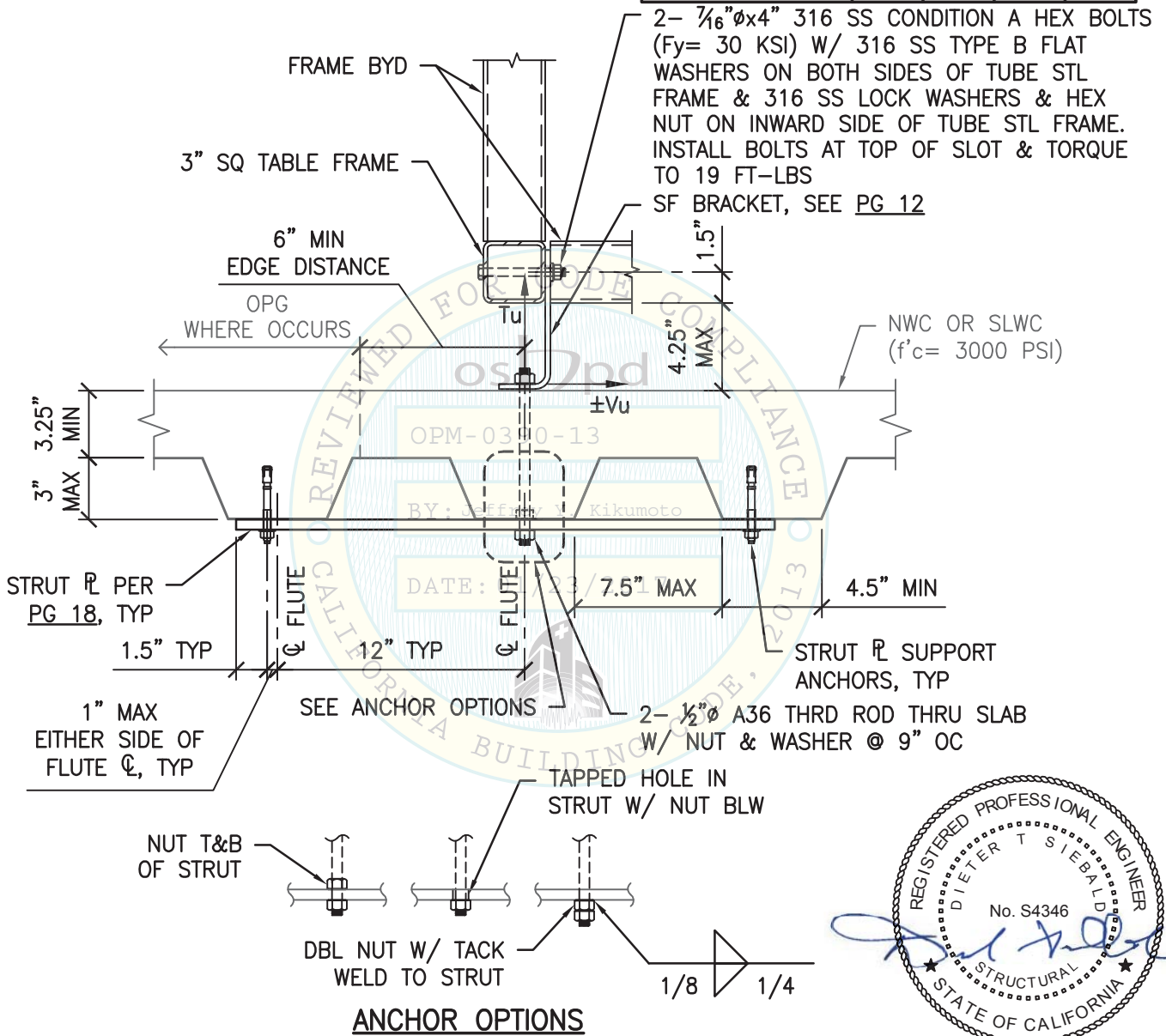
SHEET TITLE: ORTHO VISION™ MAX SUPPORT TABLE
PLAN & ELEVATIONS

 <p>CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 SACRAMENTO, CA 95833</p>	TEL (916) 920-2020 www.cyseng.com	Job No: 16118 Date: 01-17-2017 Page: 16 of 20
--	--------------------------------------	---

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:37pm Logincamachom Dimstyle:1 LTScale:6

SEOR SHALL PROVIDE STRUCTURE TO SUPPORT WTS & FORCES SHOWN IN COMBINATION W/ ALL OTHER LOADS THAT MAY BE PRESENT

MAX ANCHOR FORCES AT LRFD AT EA AB				
S_{DS}	VISION MAX		VISION	
	T_u	$\Omega_0 V_u$	T_u	$\Omega_0 V_u$
$(\leq 2.50 \text{ \& } z/h \leq 0.5)$	2281\#	822\#	1788\#	536\#



SHEET TITLE: ATTACHMENT DETAIL
CONC FILL OVER METAL DECK (CASE 1)



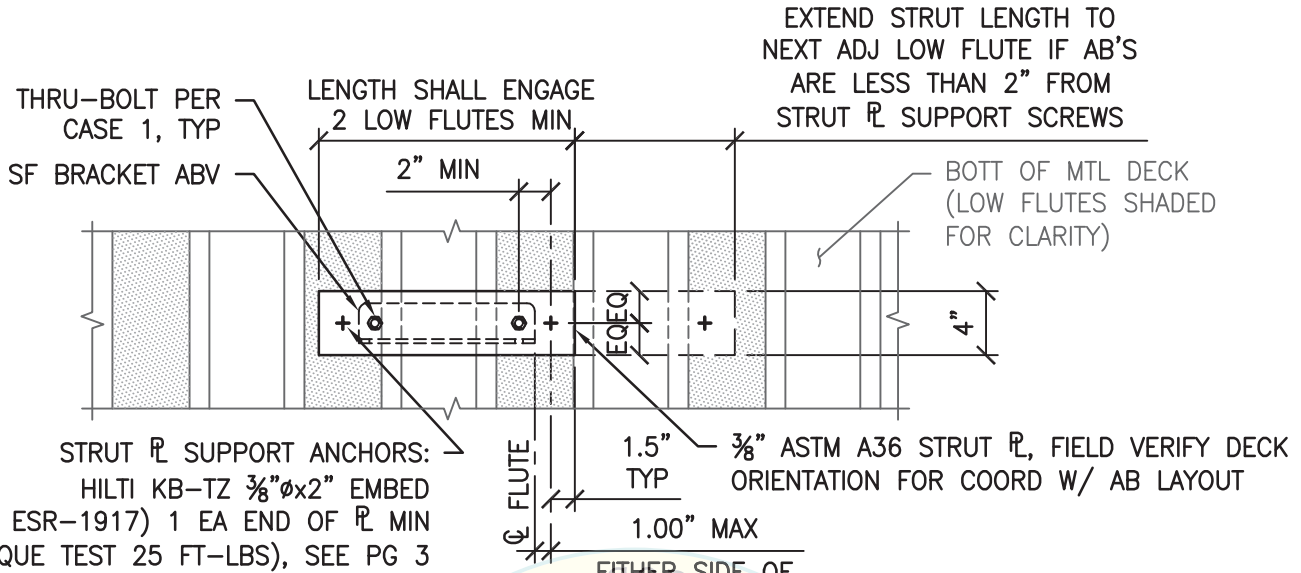
CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

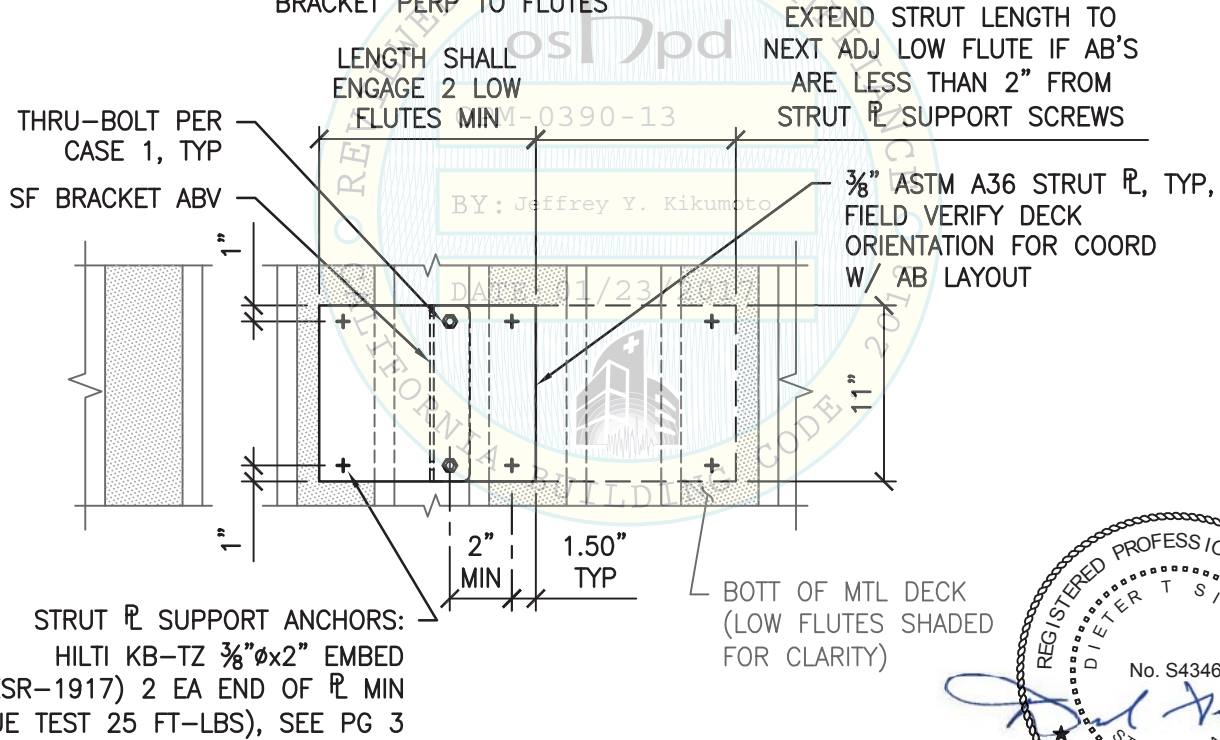
Job No:	16118
Date:	01-17-2017
Page:	17 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:37pm Logincamachom Dimscad1: L1Scale:6



PLAN VIEW

BRACKET PERP TO FLUTES



PLAN VIEW

BRACKET PARALLEL TO FLUTES



SHEET TITLE: ATTACHMENT DETAIL
STRUT PLATE



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

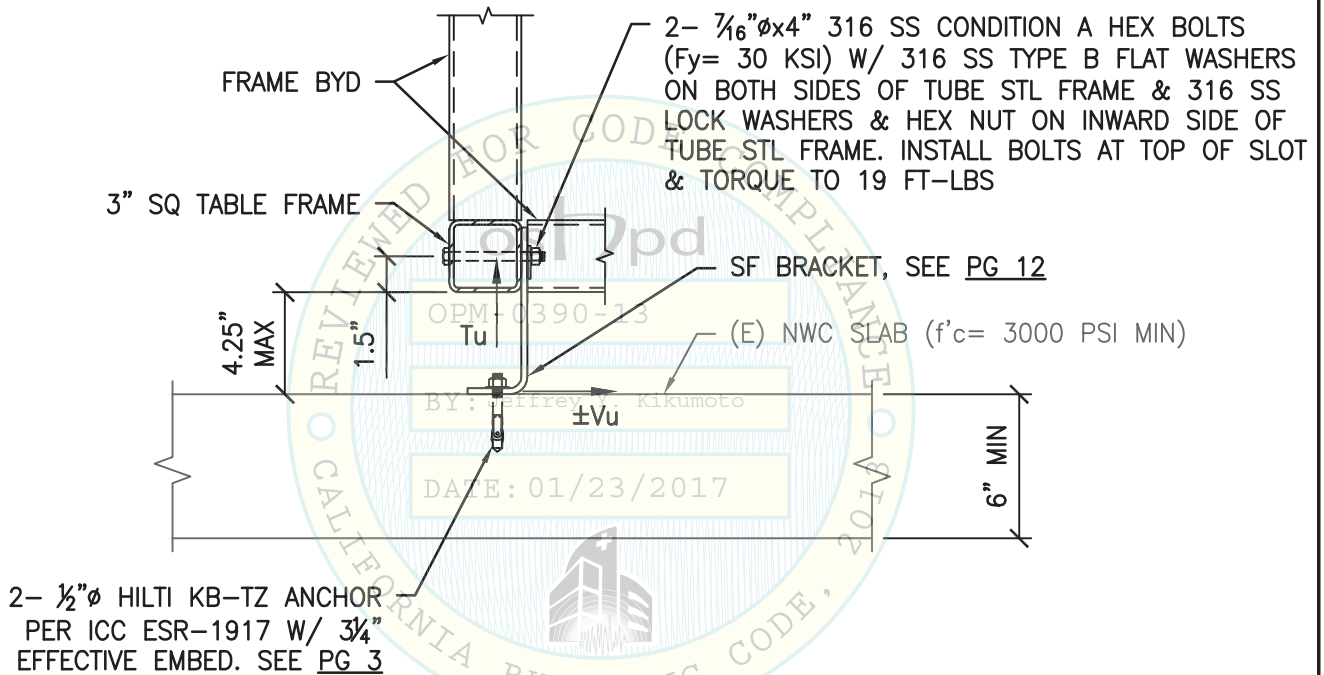
Job No:	16118
Date:	01-17-2017
Page:	18 of 20

L:\Jobs\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS1.DWG Time:Jan20,2017-02:37pm Logincamachom Dimscale:1 L1Scale:6

ORTHO VISION™ & ORTHO VISION™ MAX
ANALYZERS

Ortho Clinical Diagnostics

MAX ANCHOR FORCES AT LRFD AT EA AB				
	VISION MAX		VISION	
S_{ps}	$\Omega_0 T_u$	$\Omega_0 V_u$	$\Omega_0 T_u$	$\Omega_0 V_u$
≤ 2.50 $z/h=0$	1898#	838#	1488#	347#



SHEET TITLE: ATTACHMENT DETAIL
CONC SLAB (CASE 2)



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

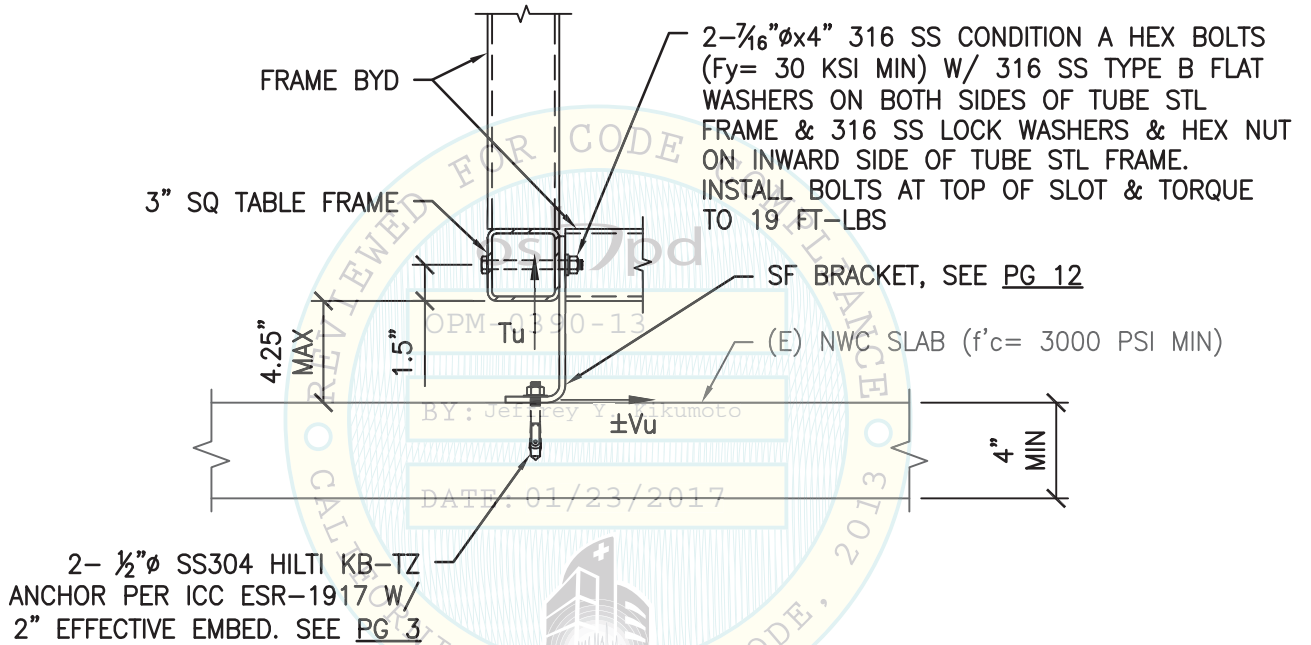
Job No:	16118
Date:	01-17-2017
Page:	19 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRUS\1.DWG Time:Jan20,2017-02:37pm Logincamachom Dimstyle:1 LTScale:6

ORTHO VISION™ & ORTHO VISION™ MAX
ANALYZERS

Ortho Clinical Diagnostics

MAX ANCHOR FORCES AT LRFD AT EA AB				
	VISION MAX		VISION	
S_{ps}	$\Omega_0 T_u$	$\Omega_0 V_u$	$\Omega_0 T_u$	$\Omega_0 V_u$
≤ 1.60 $z/h=0$	1194#	536#	880#	222#



NOTE:
STAINLESS STEEL KB-TZ ANCHORS
MUST BE USED FOR CASE 3



SHEET TITLE: ATTACHMENT DETAIL
(CASE 3)



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

TEL (916) 920-2020
www.cyseng.com

Job No:	16118
Date:	01-17-2017
Page:	20 of 20

L:\Jobs\16\16118 OCD - Ortho Vision Max OPM-0390-13\STRU\S1.DWG Time:Jan20,2017-02:37pm Log:incamachom Dim:scale:1 L1Scale:6