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

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

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

**Manufacturer Information**

- **Manufacturer:** TRUMPF Medical Systems, Inc.
- **Manufacturer’s Technical Representative:** Jeff Saunders
- **Mailing Address:** 1046 LeGrand Boulevard, Charleston, SC 29492
- **Telephone:** 843-534-0606  
- **Email:** Jeffrey.Saunders@us.trumpf.com

**Product Information**

- **Product Name:** TRULIGHT 1000
- **Product Type:** Wall Mounted Examination Light
- **Product Model Number:** None
- **General Description:** Wall Mounted Examination Light

**Applicant Information**

- **Applicant Company Name:** TRUMPF Medical Systems, Inc.
- **Contact Person:** Jeff Saunders
- **Mailing Address:** 1046 LeGrand Boulevard, Charleston, SC 29492
- **Telephone:** 843-534-0606  
- **Email:** Jeffrey.Saunders@us.trumpf.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:** 9/30/2013

**Title:** Manager, Customer Support  
**Company Name:** Trumpf Medical Systems
Registered Design Professional Preparing Engineering Recommendations

Company Name: CYS Structural Engineers, Inc.

Name: Dieter T. Siebold  California License Number: SE #4346

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 no 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.

☒ 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:  ___________________________  February 12, 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”
# TRULIGHT 1000
WALL MOUNTED EQUIPMENT SUPPORT & ATTACHMENT

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL NOTES</td>
<td>2</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>4</td>
</tr>
<tr>
<td>DESIGN CRITERIA</td>
<td>5</td>
</tr>
<tr>
<td>TRULIGHT 1000</td>
<td></td>
</tr>
<tr>
<td>ELEVATION</td>
<td>6</td>
</tr>
<tr>
<td>PLAN</td>
<td>7</td>
</tr>
<tr>
<td>WALL BEARING BRACKET</td>
<td>8</td>
</tr>
<tr>
<td>WALL SUPPORT</td>
<td></td>
</tr>
<tr>
<td>STUD WALL SUPPORT</td>
<td>9</td>
</tr>
<tr>
<td>STUD CONNECTION AT TOP</td>
<td>10</td>
</tr>
<tr>
<td>TUBE STEEL POST SUPPORT</td>
<td>11</td>
</tr>
<tr>
<td>TUBE STEEL POST TOP &amp; BOTTOM CONNECTIONS</td>
<td>12</td>
</tr>
<tr>
<td>MOUNTING PLATE ATTACHMENT</td>
<td>13</td>
</tr>
<tr>
<td>UNDERSIDE OF METAL DECK DETAIL</td>
<td>14</td>
</tr>
</tbody>
</table>

## NOTES:

1. THESE DRAWINGS ARE PREPARED FOR TRUMPF MEDICAL SYSTEMS, INC., CHARLESTON, SOUTH CAROLINA.

2. THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OSHPD PRE-APPROVAL PROGRAMS WEBSITE.

3. THIS PRE-APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE UNIT TO THE SUPPORTING STRUCTURE. THE UNIT AND WALL BEARING HARDWARE ARE SUPPLIED BY TRUMPF. ALL THREAD RODS, MOUNTING PLATE AND REQUIRED WALL SUPPORT ELEMENTS SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
GENERAL NOTES:

1. THIS OSPHPD PRE-APPROVAL OF MANUFACTURER’S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.

2. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD FOR A SITE SPECIFIC PROJECT TO VERIFY:
   A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES AND WEIGHT SPECIFIED FOR EACH EQUIPMENT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.
   B. THAT THE FLOOR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPENINGS.
   C. THAT THE FLOOR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS. THE SPACING SHOWN IN THE TEST LOADS TABLE ON PAGE 3 IS THE REQUIRED MINIMUM SPACING OF THE \( \frac{1}{2} \)" DIAMETER ANCHOR BOLTS. THE REQUIRED SPACING FROM ANCHORS OF OTHER DIAMETERS AND EMBEDMENTS MAY VARY AND SHALL BE EVALUATED BY THE SEOR.
   D. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CBC 2013 AND WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL.
   E. THAT THE ACTUAL EQUIPMENT’S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS, AND THE MATERIAL AND GAUGE OF THE EQUIPMENT WHERE ATTACHMENTS ARE MADE, AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.

3A. EXPANSION ANCHORS INSTALLED IN NORMAL WEIGHT OR SAND-LIGHTWEIGHT CONCRETE SHALL BE CARBON STEEL HILTI KB-TZ EXPANSION ANCHORS COMPLYING WITH ESR-1917 REISSUED MAY 1, 2013.

3B. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR AND THE PARAMETERS GIVEN IN THE TABLE ON PAGE 3.

C. TESTING:
   • JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE TESTING IN ACCORDANCE WITH THE TENSION 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 TENSION IN THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES OR CALIBRATED TORQUE WRENCH METHOD. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD. 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 EQUIPMENT INSTALLATION. ALSO REFER TO CBC 1913A.7 "FIELD TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE”.
   • FAILURE/Acceptance Criteria: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
     - HYDRAULIC RAM METHOD: APPLY AND HOLD TEST LOAD FOR A MINIMUM OF 15 SECONDS. THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD WHERE WASHERS ARE USED. FOR WEDGE TYPE ANCHORS, SUCH AS HILTI KB-TZ, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE.
     - TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: ONE-HALF (\( \frac{1}{2} \)) TURN OF THE NUT.
GENERAL NOTES CONTINUED:

3D. TEST VALUES: APPLY TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE, SEE TABLE BLW.

**MECHANICAL ANCHOR**

<table>
<thead>
<tr>
<th>ANCHOR DIA (INCH) da</th>
<th>INSTALLATION EMBED (INCH) hnom</th>
<th>EFFECTIVE EMBED (INCH) hef</th>
<th>HOLE DEPTH (INCH) ho</th>
<th>MIN CONC THICKNESS (INCH) h</th>
<th>MIN CONC EDGE DISTANCE (INCH)</th>
<th>MIN AB SPACING (INCH)</th>
<th>TEST LOAD TENSION LOAD (LBS)</th>
<th>TORQUE (FT-LBS)</th>
<th>CONDITION OF ANCHORAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2 1/8</td>
<td>2</td>
<td>2 1/8</td>
<td>9</td>
<td>4</td>
<td></td>
<td></td>
<td>25</td>
<td>CASE 1</td>
</tr>
</tbody>
</table>

* CONC THICKNESS MAY BE 3/4" AT CONC OVER MTL DECK. SEE TABLE 6 OF ESR-1917.

4. A SINGLE CASE OF ANCHORAGE IS SPECIFIED AND PRESENTED IN THIS PRE-APPROVAL:

\[ \frac{z}{h} \]

- 1 ROOF
- 3/8 3RD FLR
- 3/8 2ND FLR
- 0 BASE
- 0 BASEMENT

**BLDG ELEV**

CASE 1: ANCHORAGE DETAILS LOCATED AT ANY LEVEL OF A BLDG \( z/h = 1.0 \), IT IS ASSUMED THAT THE FLRS ARE BUILT OF A MIN 3 1/2" SAND-LWC OR NWC TOPPING OVER MTL DECK OR 4" NWC SLAB \( f'c = 3000 \text{ PSI}, \text{ MIN.} \).

5. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA, WHERE \( S_{30} \) IS LESS THAN OR EQ TO 2.50.

SHEET TITLE: GENERAL NOTES (CONTINUED)

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

Job No: 13084
Date: 2-11-2014
Page: 3 of 14
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>KSI</td>
</tr>
<tr>
<td>LBS</td>
<td>POUNDS</td>
</tr>
<tr>
<td>LRFD</td>
<td>LOAD &amp; RESISTANCE FACTOR DESIGN</td>
</tr>
<tr>
<td>LWC</td>
<td>LIGHT WEIGHT CONCRETE</td>
</tr>
<tr>
<td>MAX</td>
<td>MAXIMUM</td>
</tr>
<tr>
<td>MFR</td>
<td>MANUFACTURER</td>
</tr>
<tr>
<td>MIN</td>
<td>MINIMUM</td>
</tr>
<tr>
<td>NWC</td>
<td>NORMAL WEIGHT CONCRETE</td>
</tr>
<tr>
<td>OPM</td>
<td>OSPHD PRE-APPROVAL OF</td>
</tr>
<tr>
<td>OSHPD</td>
<td>OFFICE OF STATEWIDE HEALTH PLANNING &amp; DEVELOPMENT</td>
</tr>
<tr>
<td>PG(S)</td>
<td>PAGE(S)</td>
</tr>
<tr>
<td>PLATE</td>
<td></td>
</tr>
<tr>
<td>PSI</td>
<td>POUNDS PER SQUARE INCH</td>
</tr>
<tr>
<td>RDP</td>
<td>REGISTERED DESIGN PROFESSIONAL</td>
</tr>
<tr>
<td>Req</td>
<td>REQUIRED</td>
</tr>
<tr>
<td>SLWC</td>
<td>SAND LIGHT WEIGHT CONCRETE</td>
</tr>
<tr>
<td>SHEET METAL SCREWS</td>
<td></td>
</tr>
<tr>
<td>THREAD OR Threaded</td>
<td></td>
</tr>
<tr>
<td>TOC</td>
<td>TOP OF CONCRETE</td>
</tr>
<tr>
<td>TOP</td>
<td>TYPICAL</td>
</tr>
<tr>
<td>Wc</td>
<td>COMPONENT OPERATING WEIGHT</td>
</tr>
<tr>
<td>Wt</td>
<td>WITH</td>
</tr>
<tr>
<td>VERT</td>
<td>VERTICAL</td>
</tr>
</tbody>
</table>

**Sheet Title: Abbreviations**

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

Job No: 13084
Date: 2-11-2014
Page: 4 of 14
DESIGN CRITERIA

ANCHORAGE DESIGN FOR EXAM LIGHT IS PER 2013 CBC AT LRFD LEVEL FORCES.

\[ W_p = 20 \text{ LBS} \]
\[ z/h = 1.0 \quad \text{UPPER FLRS ABV THE BASE} \]
\[ S_{DS} = 2.50 \]
\[ I_p = 1.5 \]
\[ C_p = 2.5 \]
\[ F_p = 2.5 \]
\[ \text{MIN} \quad F_p = 0.30 \quad S_{DS} \quad I_p \quad W_p = 1.125 \quad W_p \]
\[ \text{MAX} \quad F_p = 1.60 \quad S_{DS} \quad I_p \quad W_p = 6.000 \quad W_p \]
\[ F_p = 0.4a \quad S_{DS} \quad I_p \quad W_p \quad (1+2 \quad z/h)/R_p = 4.5 \quad W_p = 90 \quad \text{LBS} \]
\[ F_{pv} = -0.20 \quad S_{DS} \quad W_p = -0.50 \quad W_p = \pm 10 \quad \text{LBS} \]

ANCHORAGE DESIGN FOR WALL IS PER 2013 CBC AT LRFD LEVEL FORCES.

\[ z/h = 1.0 \]
\[ S_{DS} = 2.50 \]
\[ I_p = 1.5 \]
\[ C_p = 1.0 \]
\[ F_p = 2.5 \]
\[ C_{lo} = 2.50 \quad \text{FOR CONC ANCHORS ONLY} \]
\[ F_p = 0.4a \quad S_{DS} \quad I_p \quad W_p \quad (1+2 \quad z/h)/R_p = 1.8 \quad W_p \]
\[ F_{pv} = \pm 0.20 \quad S_{DS} \quad W_p = \pm 0.50 \quad W_p \]
WALL SURFACE (SINGLE OR DBL LAYER OF GWB)

WALL BRG BRACKET, PROVIDED & INSTALLED BY TRUMPF, SEE PG 8

CG Wp= 20#

WALL MOUNTING BRACKET, PROVIDED & INSTALLED BY CONTRACTOR, SEE PG 13

EXAM LIGHT

NOTE: SAD OR ROOM LAYOUT DWGS FOR THE ATTACHMENT HT ABV FR.
WALL SURFACE (FACE OF FINISH)

WALL BRG BRACKET

MOUNTING PL
SEE PG 13

PLAN VIEW

WALL SURFACE

MOUNTING PL
SEE PG 13

WALL BRG BRACKET
(MIN t = 0.1575", ASTM A283 GRADE C
MIN Fy = 30 KSI)

3/8" HEX NUT (ASTM A563, GRADE A MIN),
LOCK WASHER & STD WASHER (ASTM F436
TYPE 'C') BY CONTRACTOR, TYP

SIDE VIEW

NOTE:
WALL BRG BRACKET IS SUPPLIED BY TRUMPF
AND MOUNTING PL IS SUPPLIED BY CONTRACTOR

 SHEET TITLE: TRULIGHT 1000 WALL BEARING BRACKET DETAIL

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

Job No: 13084
Date: 2-11-2014
Page: 8 of 14
400S162–68 MIN STUD
\[(I_{\text{min}} = 1.332 \text{ IN}^4; S_{\text{min}} = 0.666 \text{ IN}^3; F_{\text{ymin}} = 50 \text{ KSI})\]

OR 600S162–54 MIN STUD
\[(I_{\text{min}} = 2.84 \text{ IN}^4; S_{\text{min}} = 0.947 \text{ IN}^3; F_{\text{ymin}} = 50 \text{ KSI})\]

14 GA CLIP ANGLE 1\(\frac{1}{2}\)x1\(\frac{1}{2}\)x0\'–2\(\frac{1}{2}\)" (ASTM A1011 SS GRADE 50/1, MIN F\(_y\) = 50 KSI)
W/ 3–#10 SMS INTO EA LEG, TYP OF 4

IF STUDS ARE NOT BACK-TO-BACK, INSTALL 16 GA x 1'–6" LONG TRACK
W/ MIN 1\(\frac{1}{2}\)" FLANGES (F\(_y\) = 50 KSI)
OVER FLANGES W/ 4–#10 SMS ES

1\(\frac{1}{2}\)x1\(\frac{1}{2}\)x14 GA CLIP ANGLE (LENGTH \(\frac{1}{2}\)"
LESS THAN STUD DEPTH)(ASTM A1011
SS GRADE 50/1, MIN F\(_y\) = 50 KSI)
W/ 3–#10 SMS INTO STUD & 1–\(\frac{3}{8}\)" EXPANSION ANCHOR. SEE PGS 2 & 3
FOR INSTALLATION REQUIREMENTS, TYP EA STUD

NOTE:
The wall studs & connections to supporting structure have been designed for a max allowable interstory drift of
\[D_p = (0.015)(14'\times12''')(1.5) = 3.78''\]
**TRUMPF MEDICAL SYSTEMS**
**TRULIGHT 1000**

16 GA SLOTTED LEG DEFLECTION TRACK  
(ASTM A653 SS GRADE 50/1  
MIN. Fy= 50 KSI)

3- \( \frac{1}{2}'' \) EXPANSION ANCHORS  
MIN. SEE PGS 12 & 14 FOR  
INSTALLATION REQUIREMENTS

#10 SMS ES MIN, TYP

2.50''

0.75'' CLR

1.50'' MIN

3.00'' MIN

TOP OF GYPSUM BOARD.  
DO NOT CONNECT WALL  
FINISH TO TRACK

STUD ES OF EXAM  
LIGHT PER PG 9

PERPENDICULAR TO FLUTES

3- #10 SMS TRACK  
TO P, TYP

0.75'' CLR

#10 SMS ES MIN, TYP

16 GA SLOTTED LEG DEFLECTION TRACK  
(Fy = 50 KSI)

4''x1''-3''x16 GA P  
(Fy = 50 KSI)

W/ 2- \( \frac{1}{2}'' \) EXPANSION ANCHORS  
AT EA STUD. SEE PGS 2 & 3  
FOR INSTALLATION REQUIREMENTS

STUD ES OF EXAM  
LIGHT PER PG 9

PARALLEL TO FLUTES

**SHEET TITLE:** STUD CONNECTION AT TOP

---

CYS STRUCTURAL ENGINEERS, INC.  
2495 NATOMAS PARK DRIVE, SUITE 650  
SACRAMENTO, CA 95833  
TEL (916) 920-2020  
www.cyseng.com

Job No: 13084  
Date: 2-11-2014  
Page: 10 of 14
FOR POST TOP
CONN, SEE PG 12

(E) STUD WALL

HSS3x3x3/8 (ASTM A500
GR B, Fy = 46 KSI)

TRULIGHT MOUNTING P
SEE PG 13

HSS TO P
3/16

2- 3/8" EXPANSION ANCHORS.
SEE PG 12 FOR
INSTALLATION REQUIREMENTS

NOTE:
The HSS & CONNECTIONS TO SUPPORTING STRUCTURE HAS
BEEN DESIGNED FOR A MAX ALLOWABLE INTERSTORY DRIFT
OF Dp = (0.015)(14' x 12")/(1.5) = 3.78"

14'-0" MAX

(E) 3/4" MIN NWC OR SLWC
OVER MTL DECK OR NWC SLAB

2- 7/8" EXPANSION ANCHORS.
SEE PG 13 FOR
INSTALLATION REQUIREMENTS

NOTE:
The HSS & CONNECTIONS TO SUPPORTING STRUCTURE HAS
BEEN DESIGNED FOR A MAX ALLOWABLE INTERSTORY DRIFT
OF Dp = (0.015)(14' x 12")/(1.5) = 3.78"

OPM-0056-13
BY: Jeffrey Y. Kikumoto
DATE: 02/12/2014

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

Job No: 13084
Date: 2-11-2014
Page: 11 of 14
## TRUMPF MEDICAL SYSTEMS
### TRULIGHT 1000

<table>
<thead>
<tr>
<th>ALLOWABLE VERTICAL LOAD (LBS)</th>
<th>ANCHOR DIA (INCH)</th>
<th>EFFECTIVE EMBED (INCH)</th>
<th>HOLE DEPTH (INCH)</th>
<th>MIN SPACING (INCH)</th>
<th>MIN EDGE DISTANCE (INCH)</th>
<th>TORQUE (FT-LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T_{ASD}</td>
<td>½</td>
<td>2/4</td>
<td>2 ½</td>
<td>6 ¾</td>
<td>7</td>
<td>40</td>
</tr>
</tbody>
</table>

**NOTES:**
1. MIN SPACING REQUIREMENT IS ALONG FLUTE LENGTH ONLY.

---

**Diagram:**
- 10" MIN
- 26" MAX
- 4.50" MIN
- 3.25" MIN
- 3" MAX
- 1.00" TYP
- 12" TYP
- 1" MAX TYP
- ½" HILTI KB–TZ CONC ANCHOR

---

**Sheet Title:** UNDERSIDE OF METAL DECK

**CYS STRUCTURAL ENGINEERS, INC.**
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

Job No. 13084
Date: 2-11-2014
Page: 14 of 14