



Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



# STRUCTURAL CALCULATIONS FOR DANA POINT HARBOR BUILDING 12

KPFF Job #1900799



JUNE 1, 2021

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**DPH – BUILDING 12**

KPFF Job #1900799


May 28, 2021

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 18400 Von Karman Avenue, Suite 600 Irvine, CA 92612-1518 (949) 252-1022 tel (949) 252-8082 fax	project	Dana Point Harbor (Bldg 10)	by	PD	sheet no.
	location	Dana Point CA	date	5/28/2021	
	client	SMS ARCH	job no.	1900799	

Buildings Safety: OCPW Azar and B 12/22/2025  
 Permits: BNR21-0246, LEE21-0853, MEC21-0514, PLB21-0900

**Floor In Bldg**


Dead Load	Deck	Including Beams	Including Girders	Including Columns	Including Seismic
Floor Finish (ceramic/quarry tile (3/4	10.0	10.0	10.0	10.0	10.0
W3 Decking (16 ga)	3.5	3.5	3.5	3.5	3.5
3.25" LWT Concrete Topping	44.0	44.0	44.0	44.0	44.0
1/2 inch overpour	4.5	4.5	4.5	4.5	4.5
Mechanical	3.0	3.0	3.0	3.0	3.0
Plumbing	1.0	1.0	1.0	1.0	1.0
ceiling	5.0	5.0	5.0	5.0	5.0
lights	1.0	1.0	1.0	1.0	1.0
Sprinklers	2.0	2.0	2.0	2.0	2.0
Gravity Misc	2.0	2.0	2.0	2.0	2.0
Beams/ Trusses		6.0	6.0	6.0	6.0
Girders			2.0	2.0	2.0
Columns				2.0	2.0
Future Solar Panels	0.0	0.0	0.0	0.0	0.0
Exterior Walls (including thin brick veneer)					25.0
CMU Walls Below					0.0
Interior Walls					10.0
Seismic Misc					2.0
<b>Subtotal =</b>	<b>76.0</b>	<b>82.0</b>	<b>84.0</b>	<b>86.0</b>	<b>123.0</b>

**County of Orange - OC Public Works**  
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A set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to the plans without the written permission of the County Engineer. The stamping of these plans by the County Engineer shall not be held to be an approval of the violation of any provisions of any County Ordinance or State Law.

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 BUILDING OFFICIAL

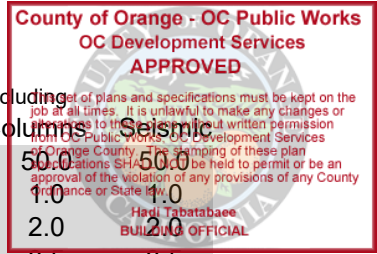
**Live Load** **100.0** **PSF**

 Consulting Engineers 18400 Von Karman Avenue, Suite 600 Irvine, CA 92612-1518 (949) 252-1022 tel (949) 252-8082 fax	project	Dana Point Harbor (Bldg 10)	by	PD	sheet no.
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**Exterior Balcony**

Dead Load	Deck	Including Beams	Including Girders	Including Columns	Including Seismic
4" thick paving	50.0	50.0	50.0	50.0	50.0
PVC weather barrier	1.0	1.0	1.0	1.0	1.0
Drainage composite	2.0	2.0	2.0	2.0	2.0
W3 Decking (16 ga)	3.5	3.5	3.5	3.5	3.5
3.25" LWT Concrete Topping	44.0	44.0	44.0	44.0	44.0
3/4" overpour	7.0	7.0	7.0	7.0	7.0
Mechanical	3.0	3.0	3.0	3.0	3.0
Plumbing	1.0	1.0	1.0	1.0	1.0
ceiling	5.0	5.0	5.0	5.0	5.0
lights	1.0	1.0	1.0	1.0	1.0
Sprinklers	2.0	2.0	2.0	2.0	2.0
Gravity Misc	2.5	2.5	2.5	2.5	2.5
Beams/ Trusses		6.0	6.0	6.0	6.0
Girders			2.0	2.0	2.0
Columns				2.0	2.0
Future Solar Panels	0.0	0.0	0.0	0.0	0.0
Exterior Walls Below					5.0
CMU Walls Below					0.0
Interior Walls					5.0
Seismic Misc					2.0
<b>Subtotal =</b>	<b>122.0</b>	<b>128.0</b>	<b>130.0</b>	<b>132.0</b>	<b>144.0</b>



**Live Load** **100.0 PSF**

\* Future solar panel gravity load is already accounted for in roof design live load  
 Full roof design live load cannot occur over panels.  
 Future solar panel seismic load is average over entire sloped roof area.

## A\_LOADING CRITERIA

### Wall Type Breakdown

#### Exterior Wall (Thin Brick Veneer)

5/8" gypboard	2.75	psf
Studs	2	psf
Insulation	1	psf
5/8" gypboard/densdeck	2.75	psf
Metal lath	1	psf
Scratch & brown coat	11.25	psf
Thin brick veneer	10.6	psf
Misc.	3.65	psf
<b>Total</b>	<b>35</b>	

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At the roof around the parapet, there is the additional thin brick

#### Exterior Wall (Wood Siding)

5/8" gypboard	2.75	psf
Studs	2	psf
Insulation	1	psf
5/8" gypboard/densdeck	2.75	psf
Wood siding	3	psf
Misc.	3.5	psf
<b>Total</b>	<b>15</b>	psf

The exterior wall w/ corrugated metal panel will be light

#### Exterior Wall (Glazing)

1" glazing	15	psf
Misc.	5	psf
<b>Total</b>	<b>20</b>	psf

#### Interior Wall (Wood Siding)

5/8" gypboard	2.75	psf
Studs	2	psf
Insulation	1	psf
5/8" gypboard	2.75	psf
Misc.	1.5	psf
<b>Total</b>	<b>10</b>	psf

Dana Point Harbor Revitalization – Retail

Tsunami Basis of Design & Design Implications Summary

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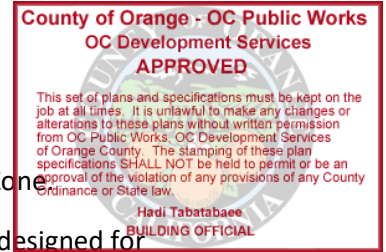
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PLB21-0900

2019 California Building Code, Section 1615

ASCE 7-16, Chapter 6

Tsunami Resilience Design required for Risk Category III structures within a Tsunami Zone

Structures determined to have a Tsunami inundation depth less than 3', need not be designed for Tsunami Resiliency.



The proposed site contains:

- (8) Two-story Risk Category III new structures (Bld 1, 6, 7, 8, 9, 10, 11, 12)
- (1) Two-story Risk Category III existing structure (Bld 5A)
- (2) One-story Risk Category III existing structures (Bld 2, 5B)
- (2) Risk Category II structures (Bld 3, 4)

**Tsunami Analysis and Load Determination**

Maximum Tsunami Inundation depth,  $h_{max}$ , for the proposed Risk Category III structures has been determined to be **5.83'**. This was determined through an Energy Grade Line Analysis and based upon elevation points provided by civil drawings and ASCE 7 Tsunami Hazard Tool.

**Tsunami Building Design Implications**

For all two-story, Risk Category III structures, **seismic** has been determined to govern the LFRS design.

For all one-story, Risk Category III structures, **tsunami** has been determined to govern the LFRS design.

- Based on the intent of tsunami resilience design, to mitigate collapse prevention of a structure, so that the building occupants may evacuate to a higher occupiable level, it appears to be impractical to design a one-story Risk Category III structure for tsunami resilience.
- **C6.8.1 Performance of Tsunami Risk Category II and III Buildings and Other Structures**  
*Where the structure does not have an occupiable floor with an elevation exceeding 1.3 times the Maximum Considered Tsunami inundation elevation by more than 10 ft, the facility should implement a plan and procedure for evacuation to a location above and outside of the Tsunami Evacuation Zone or to a designed Tsunami Vertical Evacuation Refuge Structure.*
- In this case, without an occupiable floor above 17.6' (1.3(5.83') + 10'), it appears to be impractical to design a one-story, Risk Category III structure for tsunami resilience.

### Tsunami Building Design Implications (cont.)

Although the (6) two-story, Risk Category III structures are governed by seismic demands on the LFRS, Debris Impact Loads and Hydrostatic Foundation loads must still be considered.

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### Debris Impact Loads

- Vehicular impact loads must be considered at all building perimeter structural elements.  
Tvhc = 30k
- Wood Log and Poles impact loads must be considered at all building perimeter structural elements.

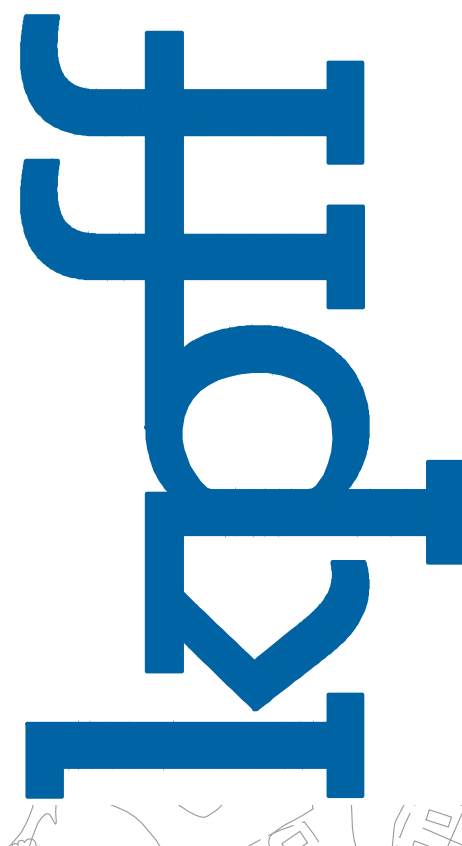


### Hydrostatic Foundation Loads

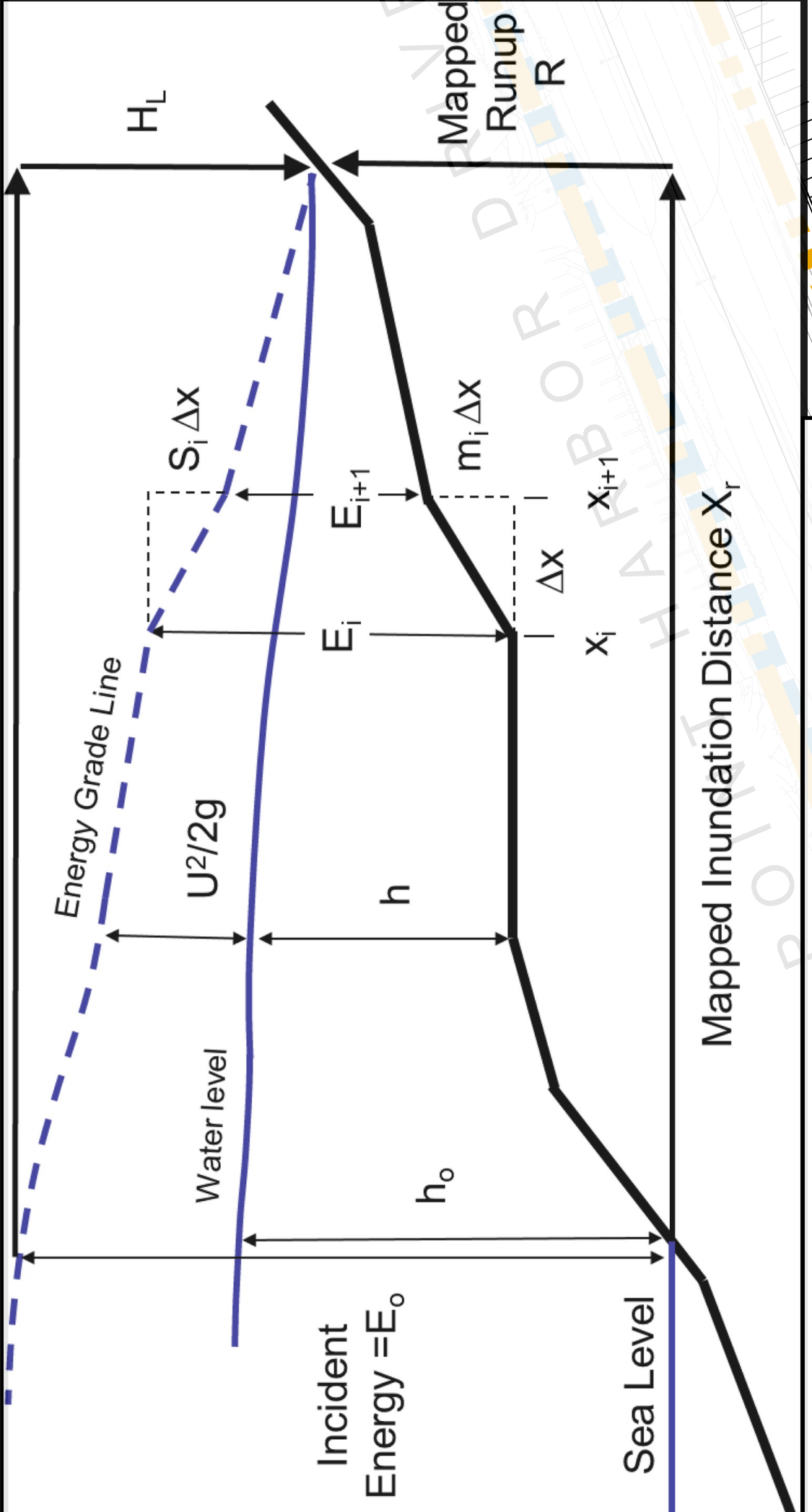
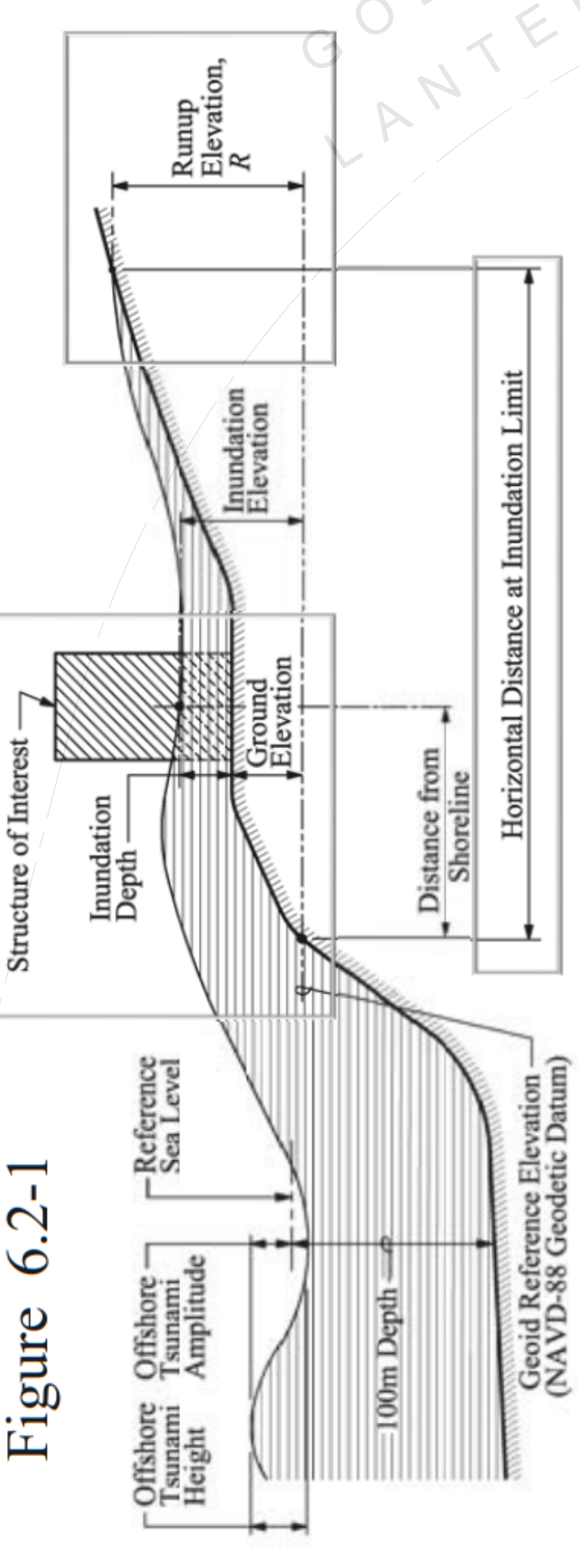
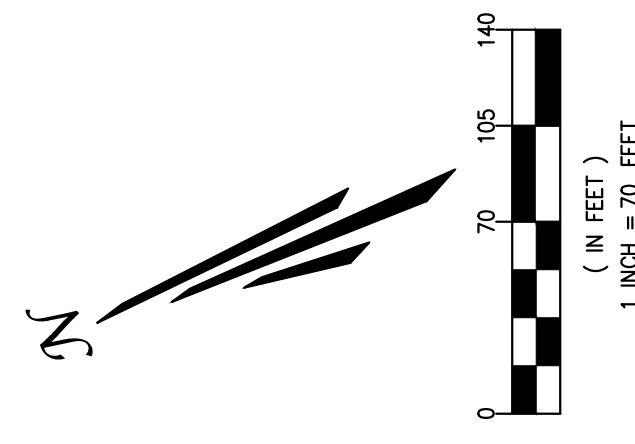
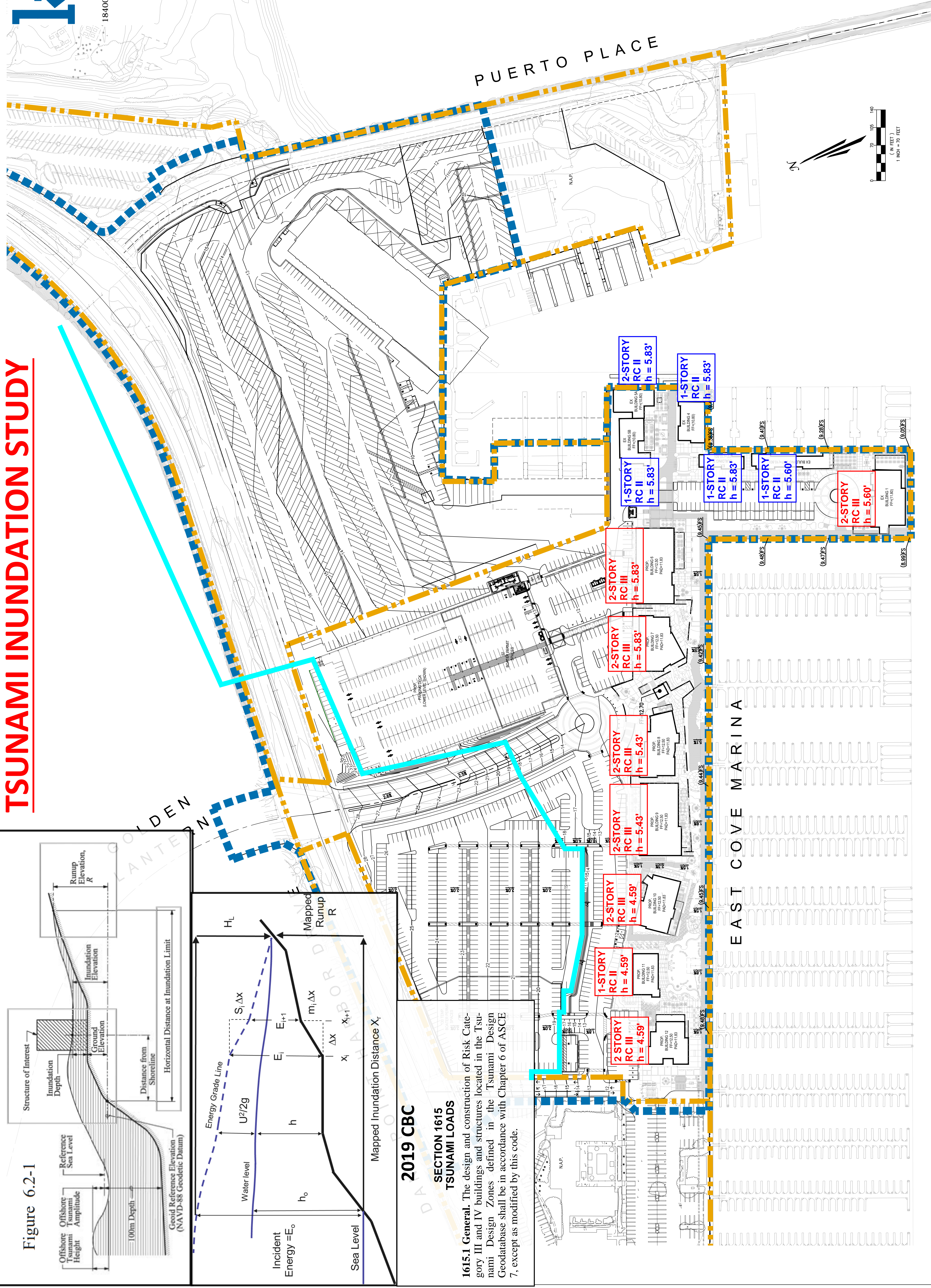
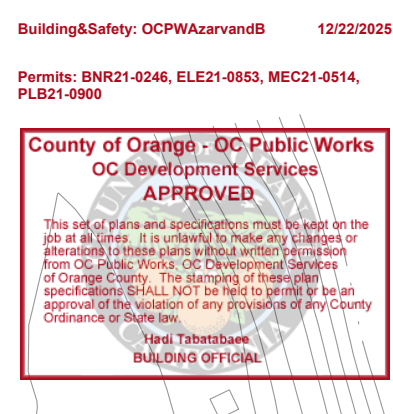
- **The following considerations have been mitigated by soil improvements outlined in the soils report for this project.**
  - Loss of soil shear strength must be considered at 1.2 times inundation depth. Reduced soil bearing capacity due to pore pressure softening.
  - Scour depth must be considered at 1.2 times inundation depth.
  - General erosion.
  - Must be discussed and coordinated with Geotechnical Engineer
    - o *Even though stability analysis of concrete structures is a structural engineering responsibility, the analysis must be performed with input from other disciplines. It is necessary to determine hydrostatic loads consistent with water levels determined by hydraulic and hydrological engineers. Geotechnical engineers and geologists must provide information on properties of foundation materials, and must use experience and judgement to predict behavior of complex foundation conditions. To ensure that the proper information is supplied, it is important that those supplying the information understand how it will be used by the structural engineer...*
- Therefore, it is recommended that the report of the geotechnical investigation for a project in the Tsunami Design Zone include explanation of the derivation of the design values for explicit use in strength design load combinations...

**THE FOLLOWING ASCE 7-16 TSUNAMI ANALYSIS PROVIDED, HAS DETERMINED TSUNAMI LOADING DOES NOT GOVERN FOR ANY OF THE STRUCTURES WITHIN THIS PROJECT.**

# TSUNAMI INUNDATION STUDY



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www.kpff.com



## 2019 CBC SECTION 1615 TSUNAMI LOADS

**1615.1 General.** The design and construction of Risk Category III and IV buildings and structures located in the Tsunami Design Zones defined in the Tsunami Design Geodatabase shall be in accordance with Chapter 6 of ASCE 7, except as modified by this code.

NO.		REVISIONS		ENGR. APPROV. DATE	
7					
6					
5					
4					
3					
2					
1					

DATE	DESIGNED BY:	DATE	RECOMMENDED BY:

DATE	DRAWN BY:	DATE	SCALE NO.

PREPARED UNDER THE SUPERVISION OF:	DATE
TAIT	

DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	DATE

PREPARED UNDER THE SUPERVISION OF:	DATE
TAIT	

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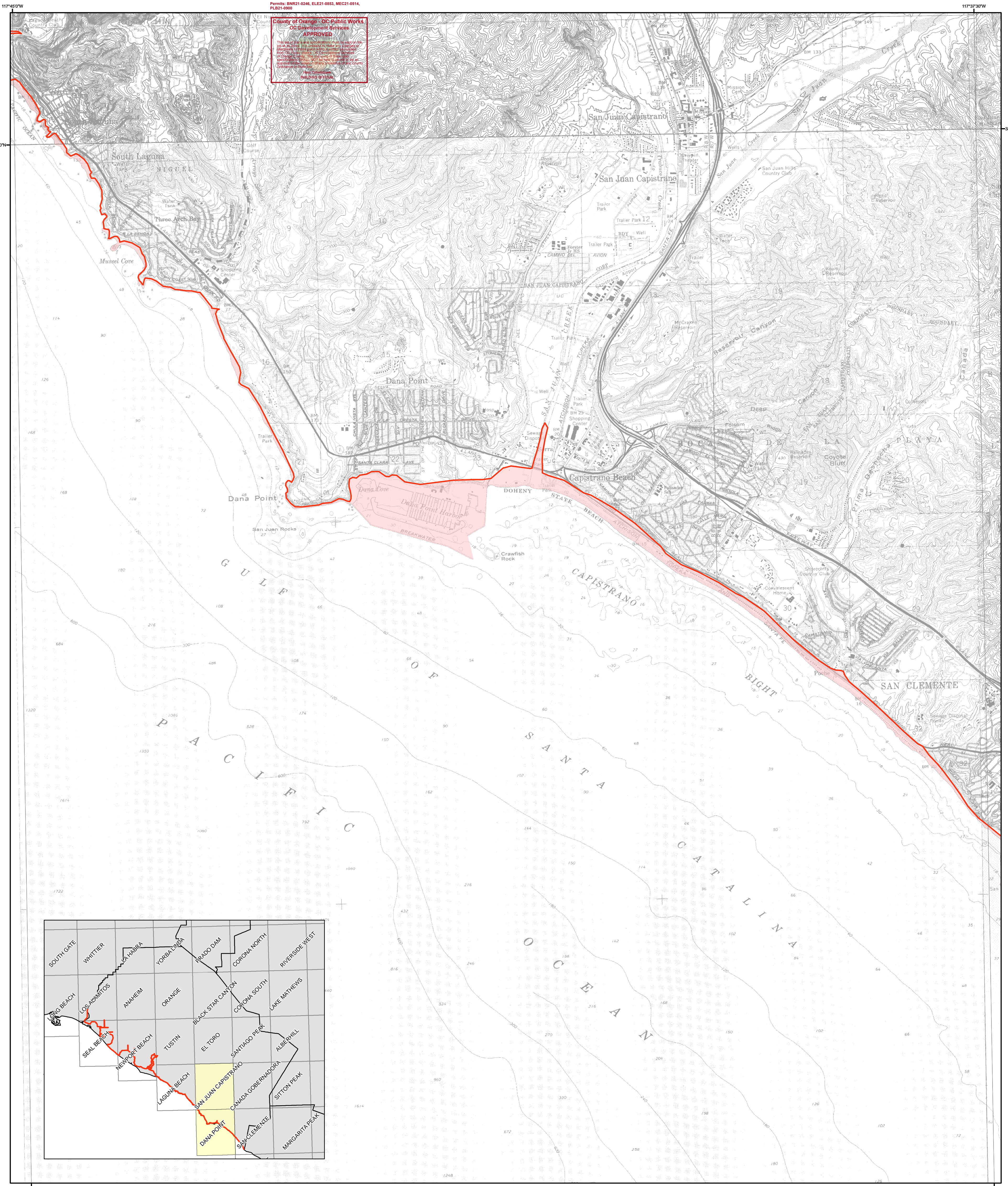
DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	DATE

## DANA POINT HARBOR REVITALIZATION

DANA POINT HARBOR PARTNERS, LLC  
B W P BURHAMWARD PROPERTIES DEVELOPMENT  
R.D. OLSON FINANCIAL GROUP  
BELLWETHER

Building & Safety, OCPWA Services  
Permits: ENR21-0246, ELE21-0593, MEC21-0514,  
PLB21-0900  
12/22/2021

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OC Department Services  
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This map is a technical drawing prepared by the County of Orange Public Works Department. It is not a legal document and does not meet disclosure requirements for real estate transactions nor for any other regulatory purpose.



**METHOD OF PREPARATION**

Initial tsunami modeling was performed by the University of Southern California (USC) Tsunami Research Center funded through the California Emergency Management Agency (CalEMA) by the National Tsunami Hazard Mitigation Program. The tsunami modeling process utilized the MOST (Method of Splitting Tsunamis) computational program (Version 0), which allows for wave evolution over a variable bathymetry and topography used for the inundation mapping (Titov and Gonzalez, 1997; Titov and Synolakis, 1998).

The bathymetric/topographic data that were used in the tsunami models consist of a series of nested grids. Near-shore grids with a 3 arc-second (75- to 90-meters) resolution or higher, were adjusted to "Mean High Water" sea-level conditions, representing a conservative sea level for the intended use of the tsunami modeling and mapping.

A suite of tsunami source events was selected for modeling, representing realistic local and distant earthquakes and hypothetical extreme undersea, near-shore landslides (Table 1). Local tsunami sources that were considered include offshore reverse-thrust faults, restraining bends on strike-slip fault zones and large submarine landslides capable of significant seafloor displacement and tsunami generation. Distant tsunami sources that were considered include great subduction zone events that are known to have occurred historically (1960 Chile and 1964 Alaska earthquakes) and others which can occur around the Pacific Ocean "Ring of Fire."

In order to enhance the result from the 75- to 90-meter inundation grid data, a method was developed utilizing higher-resolution digital topographic data (3- to 10-meters resolution) that better defines the location of the maximum inundation line (U.S. Geological Survey, 1993; Intermap, 2003; NOAA, 2004). The location of the enhanced inundation line was determined by using digital imagery and terrain data on a GIS platform with consideration given to historic inundation information (Lander, et al., 1993). This information was verified, where possible, by field work coordinated with local county personnel.

The accuracy of the inundation line shown on these maps is subject to limitations in the accuracy and completeness of available terrain and tsunami source information, and the current understanding of tsunami generation and propagation phenomena as expressed in the models. Thus, although an attempt has been made to identify a credible upper bound to inundation at any location along the coastline, it remains possible that actual inundation could be greater in a major tsunami event.

This map does not represent inundation from a single scenario event. It was created by combining inundation results for an ensemble of source events affecting a given region (Table 1). For this reason, all of the inundation region in a particular area will not likely be inundated during a single tsunami event.

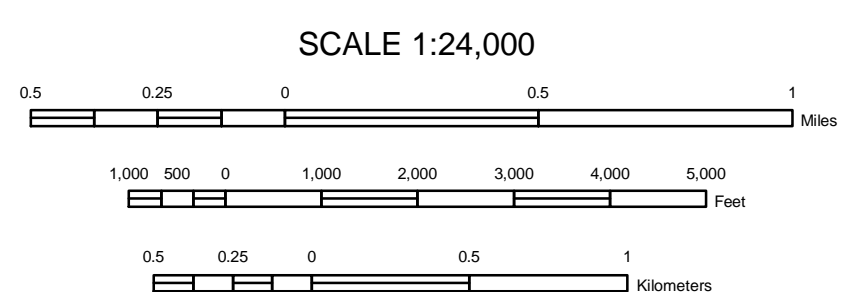
**References:**

Intermap Technologies, Inc., 2003, Intermap product handbook and quick start guide: Intermap NEXTmap document on 5-meter resolution data, 112 p.  
Lander, J.F., Lockridge, P.A., and Kozuch, M.J., 1993, Tsunamis Affecting the West Coast of the United States 1806-1992: National Geophysical Data Center Key to Geophysical Record Documentation No. 29, NOAA, NESDIS, NGDC, 242 p.  
National Atmospheric and Oceanic Administration (NOAA), 2004, Interferometric Synthetic Aperture Radar (ISAR) Digital Elevation Models from GeoSAR platform (EarthData): 3-meter resolution data.  
Titov, V.V., and Gonzalez, F.I., 1997, Implementation and Testing of the Method of Tsunami Splitting (MOST): NOAA Technical Memorandum ERL PMEL - 112, 11 p.  
Titov, V.V., and Synolakis, C.E., 1998, Numerical modeling of tidal wave runup: Journal of Waterways, Port, Coastal and Ocean Engineering, ASCE, 124 (4), pp 157-171.  
U.S. Geological Survey, 1993, Digital Elevation Models: National Mapping Program, Technical Instructions, Data Users Guide 5, 48 p.

**TSUNAMI INUNDATION MAP FOR EMERGENCY PLANNING**

**State of California ~ County of Orange  
DANA POINT QUADRANGLE  
SAN JUAN CAPISTRANO QUADRANGLE**

March 15, 2009



**MAP EXPLANATION**

- Tsunami Inundation Line
- Tsunami Inundation Area

**PURPOSE OF THIS MAP**

This tsunami inundation map was prepared to assist cities and counties in identifying their tsunami hazard. It is intended for local jurisdictional, coastal evacuation planning uses only. This map, and the information presented herein, is not a legal document and does not meet disclosure requirements for real estate transactions nor for any other regulatory purpose.

The inundation map has been compiled with best currently available scientific information. The inundation line represents the maximum considered tsunami runup from a number of extreme, yet realistic, tsunami sources. Tsunamis are rare events; due to a lack of known occurrences in the historical record, this map includes no information about the probability of any tsunami affecting any area within a specific period of time.

Please refer to the following websites for additional information on the construction and/or intended use of the tsunami inundation map:

State of California Emergency Management Agency, Earthquake and Tsunami Program: <http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/B1EC51BA215931768825741F005E8D80?OpenDocument>

University of Southern California - Tsunami Research Center: <http://www.usc.edu/dept/tsunamis/2005/index.php>

State of California Geological Survey Tsunami Information: [http://www.conservation.ca.gov/cgs/geologic\\_hazards/Tsunami/index.htm](http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/index.htm)

National Oceanic and Atmospheric Agency Center for Tsunami Research (MOST model): <http://nctr.pmel.noaa.gov/time/background/models.html>

**MAP BASE**

Topographic base maps prepared by U.S. Geological Survey as part of the 7.5-minute Quadrangle Map Series (originally 1:24,000 scale). Tsunami inundation line boundaries may reflect updated digital orthophotographic and topographic data that can differ significantly from contours shown on the base map.

**DISCLAIMER**

The California Emergency Management Agency (CalEMA), the University of Southern California (USC), and the California Geological Survey (CGS) make no representation or warranties regarding the accuracy of this inundation map nor the data from which the map was derived. Neither the State of California nor USC shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.

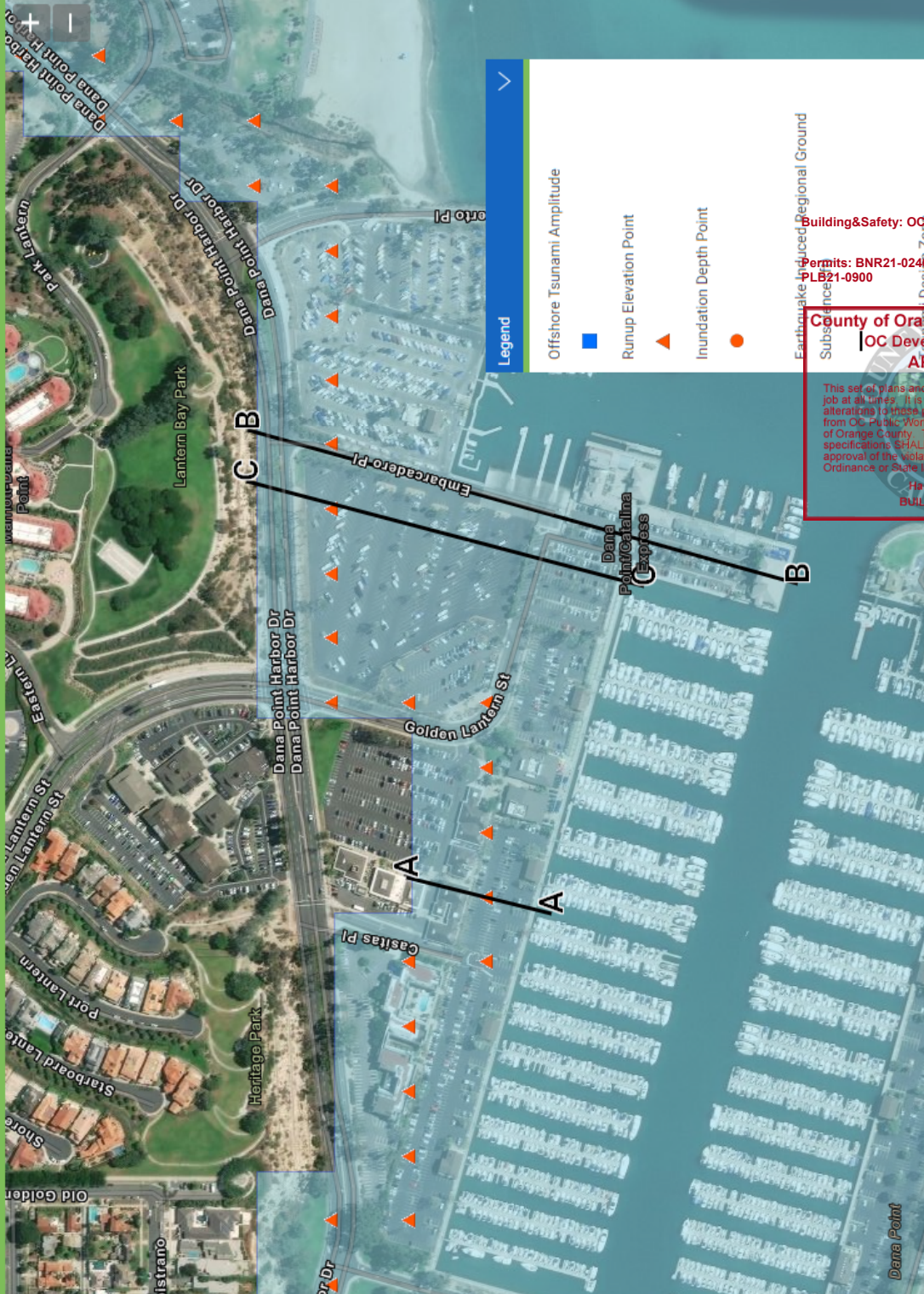
Table 1: Tsunami sources modeled for the Orange County coastline.

Sources (M = moment magnitude used in modeled event)	Areas of Inundation Map Coverage and Sources Used		
	Long Beach Harbor	Newport Harbor	Dana Point
<b>Local Sources</b>			
Catalina Fault	X	X	X
Channel Thrust Fault			X
Newport-Inglewood Fault	X	X	X
San Mateo Thrust Fault			X
Palos Verdes Submarine Landslide #1	X	X	
Palos Verdes Submarine Landslide #2	X	X	
Cascadia Subduction Zone #3 (M9.2)	X		X
Central Aleutians Subduction Zone#1 (M8.9)	X		X
Central Aleutians Subduction Zone#2 (M8.9)	X	X	X
Central Aleutians Subduction Zone#3 (M9.2)	X	X	X
Chile North Subduction Zone (M9.4)	X	X	X
1960 Chile Earthquake (M9.3)	X	X	X
1952 Kamchatka Earthquake (M9.0)	X	X	X
1964 Alaska Earthquake (M9.2)	X	X	X
Japan Subduction Zone #2 (M8.8)	X		X
Kuril Islands Subduction Zone #2 (M8.8)	X		X
Kuril Islands Subduction Zone #3 (M8.8)	X		X
Kuril Islands Subduction Zone #4 (M8.8)	X		X



# ASCE Tsunami Hazard Tool

ASCE Tsunami Design Geodatabase Version 2016-1.0



Enter Structure Information

Enter Location  LAT/LONG  FIND ON MAP

ADDRESS  FIND address or place

Select Criteria

Tsunami Risk Category

Measurements  Customary  SI

Select Data Type for Analysis

DATA POINTS	TRANSECT
<input type="text" value="A"/>	<input type="button" value="PLOT TRANSECT"/>
<input type="text" value="B"/>	<input type="button" value="PLOT TRANSECT"/>
<input type="text" value="C"/>	<input type="button" value="PLOT TRANSECT"/>

Add a Transect

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Hadi Tabatabaee  
 BUILDING OFFICIAL

All data are per the requirements of the ASCE/SEI 7 standard;

ENERGY GRADE LINE ANALYSIS  
ASCE 7-16 Section 6.6

Inland Inundation Distance from Map,  $X_k$  (ft) = 916 ft

Manning's coefficient, Table 6.6-1,  $n = 0.03$

Runup Elevation from NAVD-88,  $R$  (ft) = 17.2 ft

50 Year Sea Level Change,  $SIC$  (ft) = 0.88 ft

NAVD88 - MHW = 4.41 ft

$Z_{FF} = 12.5$  ft

$X_{FF} = 90$  ft

$h_{max} = 5.83$  ft

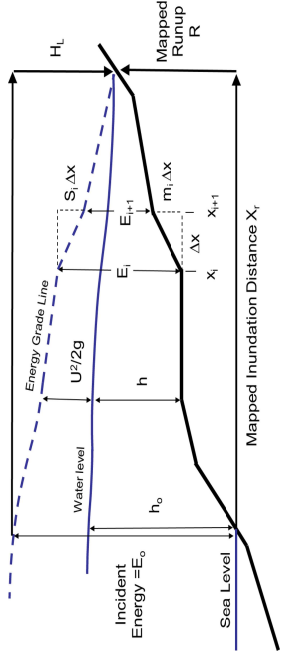
$U_{max} = 11.67$  ft/s

$g = 32.2$  ft/s<sup>2</sup>

$\alpha = 1.0$

$h_0 = 0.1$  ft

Figure 6.6-1 Energy Method for Overland Tsunami Flow Depth and Velocity

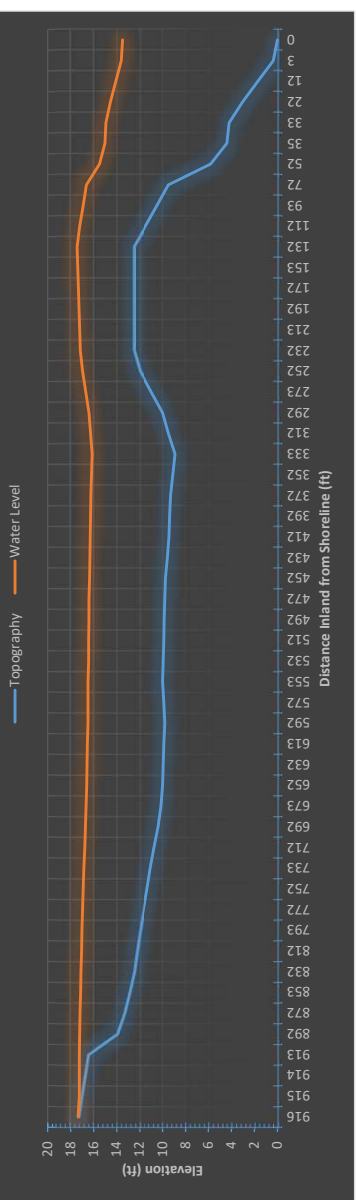


Froude number specified at shoreline  
Assume non-zero depth << 1

Transect Profile		slope increments		slope		manning		x/x <sub>k</sub>		Froude		friction		energy head		inundation depth		fluid velocity		inundation elevation	
input	$z_i$ (ft)	$\Delta x$ (ft)	$\Delta z$ (ft)	$\phi$	$n_i$	$n_i$	$\phi$	$x/x_k$	$F_{ri}$	$F_{ri}$	$S_i$	$S_i$	$E_{gh}$ (ft)	$h_i$ (ft)	$u_i$ (ft/s)	$u_{min}$ (ft/s)	$h_i + z_i$ (ft)				
0	916	17.24			0.03			1.00	0.00000		0		0.00	0.10	0.00		17.34				
1	915	16.97	1.07	0.2523	0.03			1.00	0.034179		0.000457481		0.27	0.27	0.10	10.00	17.24				
2	914	16.69	1.08	0.2593	0.03			1.00	0.04845		0.000340041		0.55	0.55	0.20	10.00	17.24				
3	913	16.42	1.07	0.2523	0.03			1.00	0.059292		0.000250217		0.82	0.82	0.30	10.00	17.24				
4	892	13.94	20.36	0.4218	0.03			0.97	0.160451		0.001229949		3.33	3.28	1.65	10.00	17.22				
5	872	13.33	20.37	0.61	0.0299	0.03		0.95	0.219054		0.000572215		3.95	3.86	2.44	10.00	17.19				
6	853	12.89	19.3	0.44	0.0228	0.03		0.93	0.262786		0.000701438		4.40	4.25	3.08	10.00	17.14				
7	832	12.48	20.37	0.41	0.0201	0.03		0.91	0.302153		0.00084034		4.83	4.62	3.68	10.00	17.10				
8	812	12.23	20.37	0.25	0.0123	0.03		0.89	0.336951		0.000962845		5.10	4.82	4.20	10.00	17.05				
9	793	11.98	19.29	0.25	0.0130	0.03		0.87	0.366875		0.001092583		5.37	5.03	4.67	10.00	17.01				
10	772	11.67	20.37	0.31	0.0152	0.03		0.84	0.396026		0.001220883		5.70	5.29	5.17	10.00	16.96				
11	752	11.37	20.37	0.3	0.0147	0.03		0.82	0.423175		0.001325841		6.03	5.54	5.65	10.00	16.91				
12	733	11.09	19.29	0.28	0.0145	0.03		0.80	0.447367		0.001415878		6.34	5.76	6.09	10.00	16.85				
13	712	10.75	20.37	0.34	0.0167	0.03		0.78	0.471569		0.001511406		6.71	6.04	6.58	10.00	16.79				
14	692	10.4	20.37	0.35	0.0172	0.03		0.76	0.494588		0.001586556		7.09	6.32	7.05	10.00	16.72				
15	673	10.15	19.3	0.25	0.0130	0.03		0.73	0.51545		0.001646636		7.37	6.51	7.46	10.00	16.66				
16	652	9.96	20.37	0.04	0.0020	0.03		0.69	0.556918		0.001838249		7.64	6.61	7.83	10.00	16.61				
17	633	9.88	19.3	0.08	0.0041	0.03		0.67	0.575526		0.001962116		7.75	6.65	8.42	10.00	16.53				
18	592	9.79	20.37	0.09	0.0044	0.03		0.65	0.594533		0.002080839		7.89	6.70	8.73	10.00	16.49				
19	572	9.89	20.36	-0.1	-0.0049	0.03		0.62	0.612943		0.002195316		7.83	6.59	8.93	10.00	16.48				
20	553	10.01	19.3	-0.12	-0.0062	0.03		0.60	0.629897		0.002315687		7.76	6.47	9.09	10.00	16.48				
21	532	9.94	20.37	0.07	0.0034	0.03		0.58	0.64731		0.002535177		7.88	6.51	9.37	10.00	16.45				
22	512	9.89	20.37	0.05	0.0025	0.03		0.56	0.664267		0.002652906		7.98	6.54	9.64	10.00	16.43				
23	492	9.86	19.29	0.03	0.0016	0.03		0.54	0.679935		0.002768521		8.07	6.55	9.88	10.00	16.41				
24	472	9.82	20.37	0.04	0.0020	0.03		0.52	0.696097		0.002896471		8.16	6.57	10.13	10.13	16.39				
25	452	9.74	20.37	0.08	0.0039	0.03		0.49	0.711893		0.00301971		8.31	6.63	10.40	10.40	16.37				
26	432	9.59	19.29	0.15	0.0078	0.03		0.47	0.728534		0.003119289		8.52	6.74	10.70	10.70	16.33				
27	412	9.45	20.37	0.14	0.0069	0.03		0.45	0.741682		0.003197126		8.72	6.84	11.01	11.01	16.29				
28	392	9.39	20.37	0.06	0.0029	0.03		0.43	0.756526		0.003276724		8.85	6.88	11.26	11.26	16.27				
29	372	9.3	19.3	0.09	0.0047	0.03		0.41	0.770327		0.003377902		9.00	6.94	11.52	11.52	16.24				
30	352	9.11	20.36	0.19	0.0093	0.03		0.38	0.784622		0.003472244		9.26	7.08	11.85	11.85	16.19				
31	333	8.91	19.3	0.2	0.0104	0.03		0.36	0.797937		0.003519949		9.53	7.23	12.18	12.18	16.14				
32	312	8.5	20.37	-0.59	-0.0290	0.03		0.34	0.811754		0.003569022		9.01	6.78	11.99	11.99	16.28				
33	292	8.0	20.37	-0.5	-0.0245	0.03		0.32	0.825339		0.003934106		8.59	6.41	11.86	11.86	16.41				
34	273	7.5	19.29	-1	-0.0518	0.03		0.30	0.838		0.004289449		7.68	5.68	11.34	11.34	16.68				
35	252	7.2	20.37	-1	-0.0491	0.03		0.28	0.851167		0.00492917		6.78	4.98	10.77	10.77	16.98				
36	232	6.8	20.37	-0.5	-0.0245	0.03		0.25	0.864132		0.005876067		6.40	4.66	10.58	10.58	17.16				
37	213	6.5	19.3	0	0.0000	0.03		0.23	0.87624		0.006453223		6.52	4.71	10.80	10.80	17.21				
38	192	6.2	20.36	0	0.0000	0.03		0.21	0.888834		0.006563247		6.66	4.77	11.02	11.02	17.27				
39	172	5.8	20.37	0	0.0000	0.03		0.19	0.901258		0.006665662		6.79	4.83	11.24	11.24	17.33				
40	153	5.5	19.3	0	0.0000	0.03		0.17	0.912873		0.006755309		6.92	4.89	11.45	11.45	17.39				
41	132	5.2	20.37	0	0.0000	0.03		0.14	0.924974		0.006855971		7.06	4.95	11.67	11.67	17.45				
42	112	4.8	20.36	1	0.0491	0.03		0.12	0.936913		0.006949131		8.20	5.70	12.69	12.69	17.20				
43	93	4.5	19.3	1	0.0518	0.03		0.10	0.948092		0.006173575		9.32	6.43	13.64	13.64	16.93				
44	72	4.2	20.37	1	0.0491	0.03		0.08	0.959749		0.005607698		10.44	7.15	14.56	14.56	16.65				
45	52	3.8	20.37	3.67	0.1802	0.03		0.06	0.971266		0.005169372		14.21	9.66	17.13	17.13	15.49				
46	35	4.4	17.15	1.43	0.0834	0.03		0.04	0.980858		0.003901095		15.71	10.61	18.13	18.13	15.01				
47																					

SITE  
SITE  
SITE  
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SITE  
SEAWALL

Topography vs. Energy Method



Building&Safety: OCPWazardvB 12/22/2025  
Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

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**OC Development Services**  
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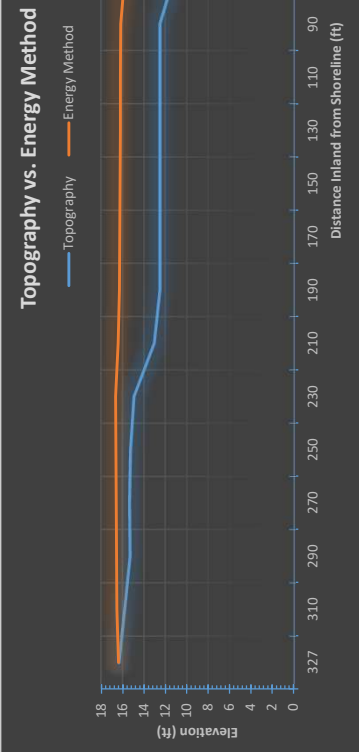
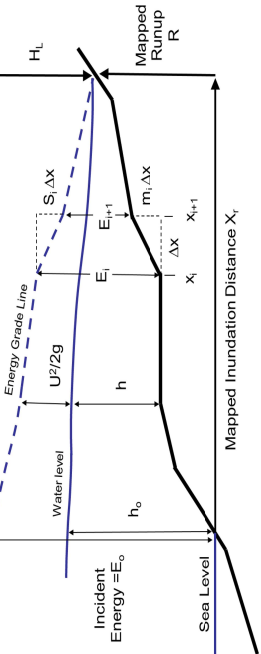
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48	33	4.21	2.14	0.19	0.0888	0.03	0.04	0.982048	0.00356046	15.91	10.73	18.26	18.26	19.02	18.26	14.94
49	22	3.03	10.72	1.18	0.1101	0.03	0.02	0.987989	0.003561709	17.13	11.51	19.02	19.02	19.02	19.02	14.54
50	12	1.7	9.65	1.33	0.1378	0.03	0.01	0.993307	0.00333727	18.49	12.38	19.83	19.83	19.83	19.83	14.08
51	3	0.37	9.65	1.33	0.1378	0.03	0.00	0.998596	0.003154206	19.85	13.24	20.62	20.62	20.62	20.62	13.61
52	0	0	2.57	0.37	0.1440	0.03	0.00	1	0.002956674	20.23	13.48	20.84	20.84	20.84	20.84	13.48
53	-1	-0.09	0.64	0.09	0.1406	0.03	0.00	1.000349	0.002906222	20.32	13.54	20.89	20.89	20.89	20.89	13.45
54	-2	-0.24	1.08	0.15	0.1389	0.03	0.00	1.000939	0.002897166	20.47	13.64	20.98	20.98	20.98	20.98	13.40
55	-3	-0.3	1.07	0.06	0.0561	0.03	0.00	1.001522	0.002879979	20.53	13.68	21.02	21.02	21.02	21.02	13.38
56	-4	-0.31	1.07	0.01	0.0093	0.03	0.00	1.002105	0.002875594	20.55	13.68	21.03	21.03	21.03	21.03	13.37
57	-5	-0.31	1.07	0	0.0000	0.03	-0.01	1.002688	0.002878227	20.55	13.68	21.04	21.04	21.04	21.04	13.37
58	-6	-0.32	1.07	0.01	0.0093	0.03	-0.01	1.00327	0.002882259	20.56	13.68	21.06	21.06	21.06	21.06	13.36
59	-7	-0.33	1.08	0.01	0.0093	0.03	-0.01	1.003858	0.002884921	20.58	13.68	21.07	21.07	21.07	21.07	13.35
60	-8	-0.35	1.07	0.02	0.0187	0.03	-0.01	1.004439	0.002887556	20.60	13.69	21.09	21.09	21.09	21.09	13.34
61	-9	-0.36	1.07	0.01	0.0093	0.03	-0.01	1.005021	0.002888781	20.61	13.70	21.11	21.11	21.11	21.11	13.34

ENERGY GRADE LINE ANALYSIS  
ASCE 7-16 Section 6.6

Inland Inundation Distance from Map,  $X_k$  (ft) = 327 ft  
 Manning's coefficient, Table 6.6-1,  $n = 0.025$   
 Runup Elevation from NAVD-88,  $R$  (ft) = 16.3 ft  
 50 Year Sea Level Change,  $S_LC$  (ft) = 0.88 ft  
 NAVD88 - MHW = 4.41 ft  
 $Z_{FF} = 12.5$  ft  
 $X_{FF} = 90$  ft  
 $h_{max} = 4.69$  ft  
 $U_{max} = 10.00$  ft/s



$g = 32.2$  ft/s<sup>2</sup>  
 $\alpha = 1.0$   
 $h_0 = 0.1$  ft

Froude number specified at shoreline  
 Assume non-zero depth  $\ll 1$

Figure 6.6-1 Energy Method for Overland Tsunami Flow Depth and Velocity

Transect Profile		slope increments		slope		manning		Froude		friction		energy head		inundation depth		fluid velocity		inundation elevation	
input	$x_i$ (ft)	$z_i$ (ft)	$\Delta x$ (ft)	$\Delta z$ (ft)	$\phi$	$n_i$	$x/x_k$	$F_{ri}$	$S_i$	$E_{gi}$ (ft)	$h_i$ (ft)	$u_i$ (ft/s)	$u_{min}$ (ft/s)	$h_i + z_i$ (ft)					
0	327	16.31				0.025	1.00	0.0000	0	0.00	0.10	0.00		16.41					
1	310	15.79	17.51	0.52	0.0297	0.025	0.95	0.231304	0.014549608	0.77	0.75	1.14	10.00	16.54					
2	290	15.28	20.24	0.51	0.0252	0.025	0.88	0.339624	0.00415698	1.37	1.29	2.19	10.00	16.57					
3	270	15.33	19.46	-0.05	-0.0026	0.025	0.83	0.418096	0.00367296	1.39	1.28	2.68	10.00	16.61					
4	250	15.23	19.84	0.1	0.0050	0.025	0.76	0.485206	0.005007207	1.59	1.42	3.28	10.00	16.65					
5	230	14.92	20.24	0.31	0.0153	0.025	0.70	0.545223	0.005683855	2.01	1.75	4.10	10.00	16.67					
6	210	13.02	20.24	1.9	0.0939	0.025	0.64	0.599259	0.005567652	4.03	3.41	6.28	10.00	16.43					
7	190	12.5	19.84	0.52	0.0262	0.025	0.58	0.647868	0.003343069	4.61	3.81	7.18	10.00	16.31					
8	170	12.5	20.24	0	0.0000	0.025	0.52	0.693956	0.003434232	4.68	3.77	7.65	10.00	16.27					
9	150	12.5	19.85	0	0.0000	0.025	0.46	0.736361	0.003906722	4.76	3.75	8.09	10.00	16.25					
10	130	12.5	19.85	0	0.0000	0.025	0.40	0.776452	0.004377393	4.85	3.72	8.50	10.00	16.22					
11	110	12.5	20.23	0	0.0000	0.025	0.34	0.815286	0.004852775	4.95	3.71	8.91	10.00	16.21					
12	90	12.5	19.85	0	0.0000	0.025	0.27	0.85167	0.005313728	5.05	3.71	9.30	10.00	16.21					
13	70	11	19.85	1.5	0.0756	0.025	0.21	0.886563	0.005766139	6.67	4.79	11.00	11.00	15.79					
14	50	10	19.84	1	0.0504	0.025	0.15	0.920117	0.004811134	7.76	5.45	12.19	12.19	15.45					
15	40	9.5	10.12	0.5	0.0494	0.025	0.12	0.936769	0.004376373	8.31	5.77	12.77	12.77	15.27					
16	30	5.1	10.12	4.4	0.4348	0.025	0.09	0.95313	0.004279669	12.75	8.77	16.01	16.01	13.87					
17	24	4.42	5.84	0.68	0.1164	0.025	0.07	0.962446	0.002873409	13.45	9.19	16.56	16.56	13.61					
18	19	3.86	4.67	0.56	0.1199	0.025	0.06	0.96983	0.002783446	14.02	9.53	16.99	16.99	13.39					
19	10	2.21	9.34	1.65	0.1767	0.025	0.03	0.984433	0.00276409	15.69	10.57	18.16	18.16	12.78					
20	0	0.01	10.11	2.2	0.2176	0.025	0.00	1	0.002572372	17.92	11.95	19.61	19.61	11.96					
21	-10	-2.13	10.12	2.14	0.2115	0.025	-0.03	1.015343	0.002346668	20.08	13.25	20.97	20.97	11.12					

SITE

SEAWALL

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



## STRUCTURAL DESIGN PROCEDURES FOR TSUNAMI EFFECTS

### ASCE 7-16 SECTION 6.8

$h_{\max} =$	5.83 ft	EGLA	maximum site inundation depth
$u_{\max} =$	11.67 ft/s	EGLA	maximum site flow velocity
$\gamma_{sw} =$	64.0 lb/ft <sup>3</sup>	6.8.4	effective weight density of sea water
$\rho_{sw} =$	2.0 sl/ft <sup>3</sup>	6.8.4	effective mass density of sea water
$k_s =$	1.1	6.8.4	fluid density factor to account for micro-debris
$I_{tsu} =$	1.25	T6.8-1	tsunami importance factor
$\gamma_s = k_s \gamma_{sw} =$	70.4 lb/ft <sup>3</sup>	(6.8-4)	fluid weight density
$\rho_s = k_s \rho_{sw} =$	2.2 sl/ft <sup>3</sup>	(6.8-5)	fluid mass density

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Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



#### 6.8.3.1 Load Cases

##### **Load Case 1**

The minimum condition of combined hydrodynamic force with buoyant force shall be evaluated with respect to the depth of water in the interior.

Interior water depth: 6.9.1 Buoyancy

Uplift caused by buoyancy shall include enclosed spaces without tsunami breakaway walls that have opening area less than 25% of the inundated exterior wall area.

The volumetric displacement of foundation elements, excluding deep foundations, shall be included in this calculation of uplift.

$$F_v = \gamma_s V_w \quad (6.9-1)$$

\*This is mitigated by soil improvement methods per geotechnical engineer.

##### **Load Case 2**

Depth at 2/3 of max inundation depth when max velocity and max specific momentum flux shall be assumed to occur in either incoming or receding directions.

Figure 6.8-1

##### **Load Case 3**

Maximum inundation depth when velocity shall be assumed at 1/3 of maximum in either incoming or receding directions.

Figure 6.8-1

#### 6.8.3.3 Load Combinations

$$0.9D + F_{TSU} + H_{TSU} \quad (6.8-1a)$$

$$1.2D + F_{TSU} + 0.5L + 0.2S + H_T \quad (6.8-1b)$$

### 6.8.6 Directionality of Flow

The principal inflow direction shall be assumed to vary by **±22.5 degrees** from the transect perpendicular to the orientation of the shoreline averaged over 500 ft to either side of the site.

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### 6.8.7 Minimum Closure Ratio for Load Determination

Minimum closure ratio of **70%** of the inundated project area along the perimeter of the structure.



### 6.9 HYDROSTATIC LOADS

$$F_v = \gamma_s V_w \quad (6.9-1) \text{ buoyancy}$$

$$F_h = 0.5\gamma_s b h_{\max}^2 \quad (6.9-2) \text{ unbalanced lateral hydrostatic force}$$

$$p_r = \gamma_s h_r \quad (6.9-3) \text{ residual water surcharge load on floors and walls}$$

$$h_r = h_{\max} - h_s$$

$$p_s = \gamma_s h_{\max} \quad (6.9-3) \text{ surcharge pressure on foundation}$$

$$p_s = \boxed{410.2} \text{ psf}$$

### 6.10 HYDRODYNAMIC LOADS

#### BUILDING 6 LOADING SUMMARY

$$p_{uw} = 1.25 I_{tsu} \gamma_s h_{\max} \quad (6.10-1)$$

$$h_{\max} = \boxed{5.83} \text{ ft}$$

$$p_{uw} = \boxed{641} \text{ psf}$$

$$h_{\text{applied}} = \boxed{7.57} \text{ ft}$$

$$6.8.7 \text{ Closure Ratio} = 0.7$$

$$w = \boxed{148} \text{ ft}$$

building width perpendicular to inflow/outflow

$$V_{TSU} = \boxed{503} \text{ kips}$$

total tsunami base shear for inflow/outflow direction

### 6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 900 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 1688 \text{ kips}$$

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SEISMIC GOVERNS LFRS DESIGN

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### BUILDING 7 LOADING SUMMARY

$$p_{uw} = 1.25I_{tsu}\gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 5.83 \text{ ft}$$

$$p_{uw} = 641 \text{ psf}$$

$$h_{applied} = 7.58 \text{ ft}$$

$$6.8.7 \text{ Closure Ratio} = 0.7$$

$$w = 120 \text{ ft}$$

building width perpendicular to inflow/outflow

$$V_{TSU} = 408 \text{ kips}$$

total tsunami base shear for inflow/outflow direction

### 6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 879 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 1648 \text{ kips}$$

SEISMIC GOVERNS LFRS DESIGN

### BUILDING 8 LOADING SUMMARY

$$p_{uw} = 1.25I_{tsu}\gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 5.43 \text{ ft}$$

$$p_{uw} = 597 \text{ psf}$$

$$h_{applied} = 7.06 \text{ ft}$$

$$6.8.7 \text{ Closure Ratio} = 0.7$$

$$w = 125 \text{ ft}$$

building width perpendicular to inflow/outflow

$$V_{TSU} = 369 \text{ kips}$$

total tsunami base shear for inflow/outflow direction

### 6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 978 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 1834 \text{ kips}$$

**SEISMIC GOVERNS LFRS DESIGN**

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**County of Orange - OC Public Works  
OC Development Services  
APPROVED**

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Hadi Tabatabaee  
BUILDING OFFICIAL

### BUILDING 9 LOADING SUMMARY

$$p_{uw} = 1.25I_{tsu}\gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 5.43 \text{ ft}$$

$$p_{uw} = 597 \text{ psf}$$

$$h_{applied} = 7.06 \text{ ft}$$

$$6.8.7 \text{ Closure Ratio} = 0.7$$

$$w = 140 \text{ ft}$$

building width perpendicular to inflow/outflow

$$V_{TSU} = 413 \text{ kips}$$

total tsunami base shear for inflow/outflow direction

### 6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 905 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 1697 \text{ kips}$$

**SEISMIC GOVERNS LFRS DESIGN**

### BUILDING 10 LOADING SUMMARY

$$p_{uw} = 1.25I_{tsu}\gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 4.59 \text{ ft}$$

$$p_{uw} = 505 \text{ psf}$$

$$h_{applied} = 5.97 \text{ ft}$$

$$6.8.7 \text{ Closure Ratio} = 0.7$$

$$w = 111 \text{ ft}$$

building width perpendicular to inflow/outflow

$$V_{TSU} = 234 \text{ kips}$$

total tsunami base shear for inflow/outflow direction

6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 158 \text{ kips}$$

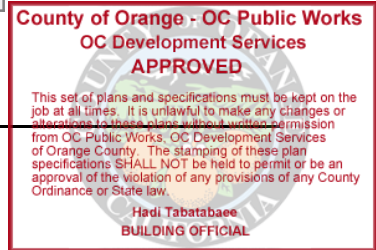
$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 296 \text{ kips}$$

**SEISMIC GOVERNS LFRS DESIGN**

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



**BUILDING 11 LOADING SUMMARY**

$$p_{uw} = 1.25I_{tsu} \gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 4.59 \text{ ft}$$

$$p_{uw} = 505 \text{ psf}$$

$$h_{applied} = 5.97 \text{ ft}$$

6.8.7 Closure Ratio = 0.7

w = 125 ft

building width perpendicular to inflow/outflow

$V_{TSU} = 264$  kips

total tsunami base shear for inflow/outflow direction

6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 168 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 315 \text{ kips}$$

**SEISMIC GOVERNS LFRS DESIGN**

**BUILDING 12 LOADING SUMMARY**

$$p_{uw} = 1.25I_{tsu} \gamma_s h_{max} \quad (6.10-1)$$

$$h_{max} = 4.69 \text{ ft}$$

$$p_{uw} = 516 \text{ psf}$$

$$h_{applied} = 6.10 \text{ ft}$$

6.8.7 Closure Ratio = 0.7

w = 98 ft

building width perpendicular to inflow/outflow

$V_{TSU} = 216$  kips

total tsunami base shear for inflow/outflow direction

### 6.8.3.4 LFRS Acceptance Criteria Check

$$V_{EQ} = 228 \text{ kips}$$

$$\Omega_o = 2.5$$

$$0.75(\Omega_o)V_{EQ} = 428 \text{ kips}$$

**SEISMIC GOVERNS LFRS DESIGN**

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



## 6.11 DEBRIS IMPACT LOADS

### 6.11.2 Wood Logs and Poles

$$F_{ni} = u_{max} \sqrt{k m_d} \quad (6.11-2)$$

$$k_{min} = 350 \text{ kip/in}$$

$$m_{dmin} = 1000 \text{ lbs}$$

$$F_{ni} = 6906 \text{ lbs}$$

$$F_i = I_{tsu} C_o F_{ni} R_{max} \quad (6.11-3)$$

$$F_i = 8.42 \text{ kips}$$

$$h_{applied} = 5.83 \text{ ft}$$

### 6.11.3 Impact by Vehicles

$$F_i = 37.5 \text{ kips}$$

$$h_{applied} = 5.83 \text{ ft}$$

### 6.11.4 Impact by Submerged Tumbling Boulder and Concrete Debris

$$F_i = 10.0 \text{ kips} \quad \text{*only when } h_{max} > 6'-0''$$

$$h_{applied} = 2.00 \text{ ft}$$

## 6.12 FOUNDATION DESIGN

$$\phi = 0.67$$

\*to be applied to all foundation element capacities, including anchorage **resisting uplift from tsunami loading only.**

### 6.12.2.1 Uplift and Underseepage Forces

Uplift and underseepage must be considered for cases where

- soil expected to be saturated before tsunami
- soil saturation is anticipated to occur over course of tsunami event

c. the area of concern is expected to remain inundated after the tsunami

#### 6.12.2.2 Loss of Strength

Loss of shear strength shall be accounted for up to a depth of 1.2 times the maximum inundation depth.

**7.0** ft (1.2xh) from top of general site erosion

\*This is mitigated by soil improvement methods per geotechnical engineer.

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



#### 6.12.2.3 General Erosion

General erosion must be considered and determined by civil and geotechnical engineer.

\*This is mitigated by soil improvement methods per geotechnical engineer.

#### 6.12.2.4 Scour

Sustained flow scour depth, D

**D = 1.2h** Table 6.12-1

D = **7.0** ft

\*This is mitigated by soil improvement methods per geotechnical engineer.

Transect	Latitude	Longitude	Transect Distance(ft.)	Elevation MHW (ft.)	Transect Distance from NAVD-88 (ft.)	Elevation NAVD-88(ft.)
C Transect	33.46244	-117.69211	925.14	12.82	915.92	17.24 RUNUP
C Transect	33.46243	-117.69211	924.07	12.55	914.85	16.97
C Transect	33.46243	-117.69211	922.99	12.27	913.77	16.69
C Transect	33.46243	-117.69211	921.92	12	912.7	16.42
C Transect	33.46237	-117.69213	901.56	9.52	892.34	13.94
C Transect	33.46232	-117.69214	881.19	8.91	871.97	13.33
C Transect	33.46227	-117.69216	861.89	8.47	852.67	12.86
C Transect	33.46222	-117.69218	841.52	8.06	832.3	12.48
C Transect	33.46216	-117.69219	821.15	7.81	811.93	12.23
C Transect	33.46211	-117.69221	801.86	7.56	792.64	11.98
C Transect	33.46206	-117.69223	781.49	7.25	772.27	11.67
C Transect	33.462	-117.69224	761.12	6.95	751.9	11.37
C Transect	33.46195	-117.69226	741.83	6.67	732.61	11.07
C Transect	33.4619	-117.69228	721.46	6.33	712.24	10.77
C Transect	33.46184	-117.69229	701.09	5.98	691.87	10.47
C Transect	33.46179	-117.69231	681.79	5.73	672.57	10.17
C Transect	33.46174	-117.69233	661.43	5.58	652.21	9.87
C Transect	33.46168	-117.69235	641.06	5.54	631.84	9.57
C Transect	33.46163	-117.69236	621.76	5.46	612.54	9.27
C Transect	33.46158	-117.69238	601.39	5.37	592.17	8.97
C Transect	33.46152	-117.6924	581.03	5.47	571.81	8.67
C Transect	33.46147	-117.69241	561.73	5.59	552.51	8.37
C Transect	33.46142	-117.69243	541.36	5.52	532.14	8.07
C Transect	33.46136	-117.69245	520.99	5.47	511.77	7.77
C Transect	33.46131	-117.69246	501.7	5.44	492.48	7.47
C Transect	33.46126	-117.69248	481.33	5.4	472.11	7.17
C Transect	33.46121	-117.6925	460.96	5.32	451.74	6.87
C Transect	33.46115	-117.69251	441.67	5.17	432.45	6.57
C Transect	33.4611	-117.69253	421.3	5.03	412.08	6.27
C Transect	33.46105	-117.69255	400.93	4.97	391.71	5.97
C Transect	33.46099	-117.69257	381.63	4.88	372.41	5.67
C Transect	33.46094	-117.69258	361.27	4.69	352.05	5.37
C Transect	33.46089	-117.6926	341.97	4.49	332.75	5.07
C Transect	33.46084	-117.69262	321.6	4.32	312.38	4.77
C Transect	33.46078	-117.69263	301.23	4.54	292.01	4.47
C Transect	33.46073	-117.69265	281.94	4.59	272.72	4.17
C Transect	33.46068	-117.69267	261.57	4.17	252.35	3.87
C Transect	33.46062	-117.69268	241.2	3.82	231.98	3.57
C Transect	33.46057	-117.6927	221.9	3.67	212.68	3.27
C Transect	33.46052	-117.69272	201.54	3.59	192.32	2.97
C Transect	33.46046	-117.69273	181.17	3.48	171.95	2.67
C Transect	33.46041	-117.69275	161.87	3.28	152.65	2.37
C Transect	33.46036	-117.69277	141.5	3.07	132.28	2.07
C Transect	33.4603	-117.69279	121.14	2.96	111.92	1.77
C Transect	33.46025	-117.6928	101.84	2.82	92.62	1.47
C Transect	33.4602	-117.69282	81.47	2.61	72.25	1.17
C Transect	33.46014	-117.69284	61.1	1.41	51.88	0.87
C Transect	33.4601	-117.69285	43.95	-0.02	34.73	0.57
C Transect	33.46009	-117.69285	41.81	-0.21	32.59	0.27
C Transect	33.46006	-117.69286	31.09	-1.39	21.87	-0.03
C Transect	33.46004	-117.69287	21.44	-2.72	12.22	-0.38
C Transect	33.46001	-117.69288	11.79	-4.05	2.57	-0.68
C Transect	33.46001	-117.69288	9.22	-4.42	0	-0.98
C Transect	33.46	-117.69288	8.58	-4.51	-0.64	-1.28
C Transect	33.46	-117.69288	7.5	-4.66	-1.72	-1.58
C Transect	33.46	-117.69288	6.43	-4.72	-2.79	-1.88
C Transect	33.46	-117.69288	5.36	-4.73	-3.86	-2.18
C Transect	33.45999	-117.69288	4.29	-4.73	-4.93	-2.48
C Transect	33.45999	-117.69289	3.22	-4.74	-6	-2.78
C Transect	33.45999	-117.69289	2.14	-4.75	-7.08	-3.08
C Transect	33.45998	-117.69289	1.07	-4.77	-8.15	-3.38
C Transect	33.45998	-117.69289	0	-4.78	-9.22	-3.68

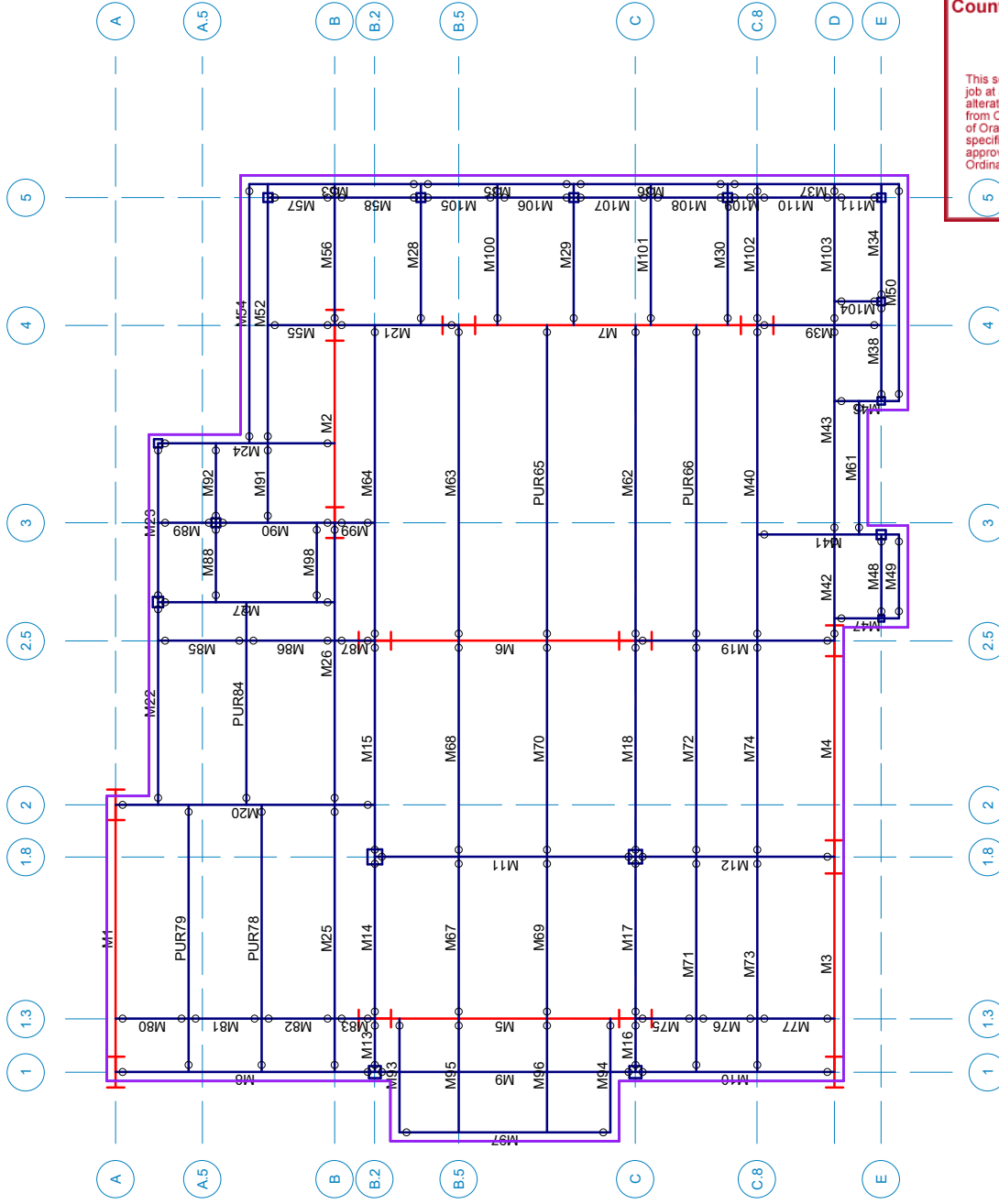
Building&Safety: **OC PW AzarvandB** 12/22/2025

Permits: **BNR21-0228, LE21-0853, MEC21-0514, PLB21-0900**



# B\_GRAVITY DESIGN

B1



Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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**OC Development Services**  
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 Hadi Tabatabaee  
 BUILDING OFFICIAL

## Level 2 Member Labels & End Releases

Loads: DL, PreComp - PreComposite Dead Load Results for LC 1, Service Dead

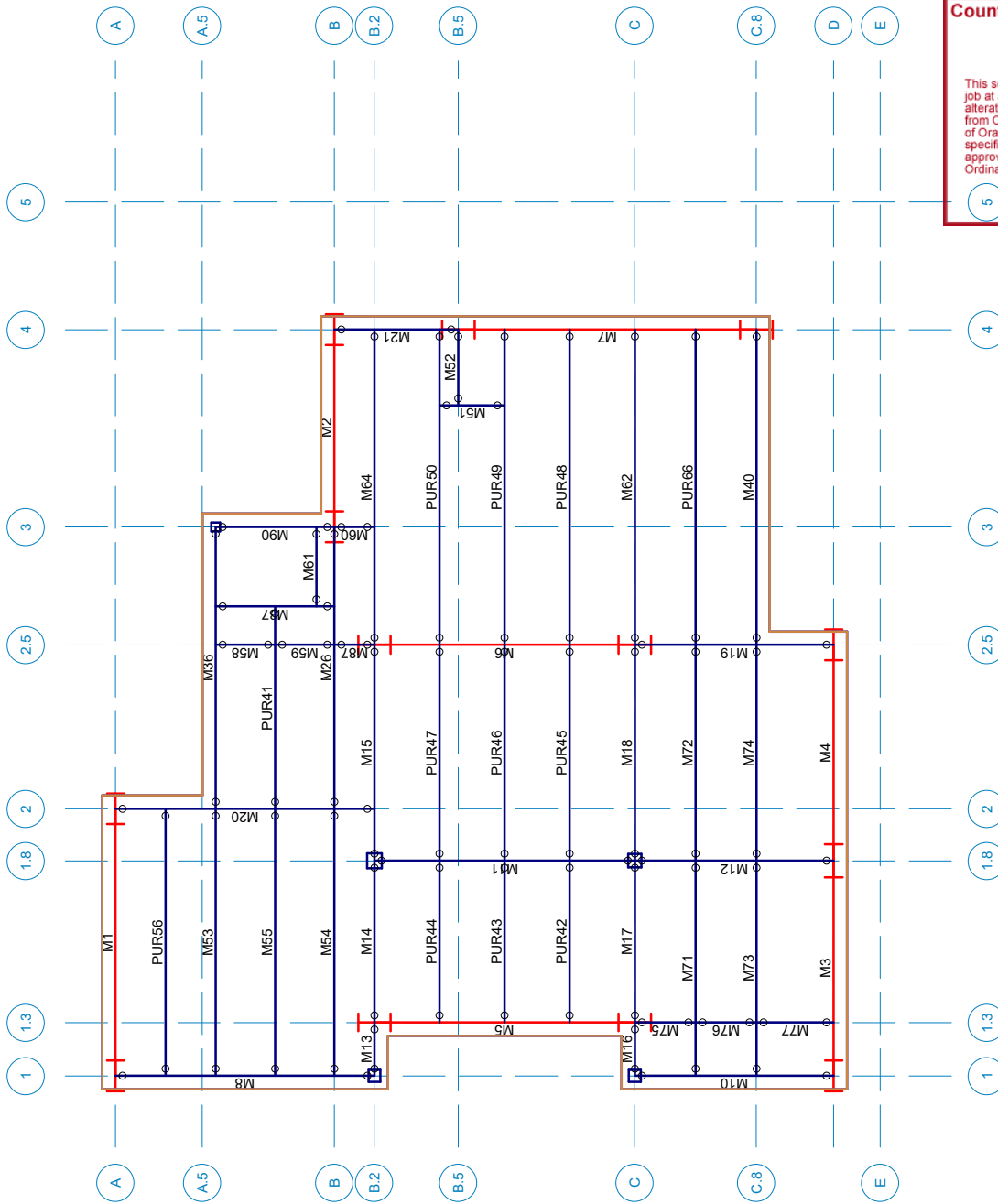
KPFF

PD

1900799

Level 2  
Dana Point Harbor\_Bld'g. 12

SKS  
May 27, 2021 at 11:55 PM  
2021\_05\_27\_11:55\_12.rfl



Building&Safety: OCPWazarvand 12/22/2025  
 Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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MAY 27 2021 at 11:53 PM  
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Roof Member Labels & End Releases

Loads: DL, PreComp - PreComposite Dead Load  
 Results for LC 1, Service Dead

Roof  
 Dana Point Harbor\_Bld'g. 12

KPFF

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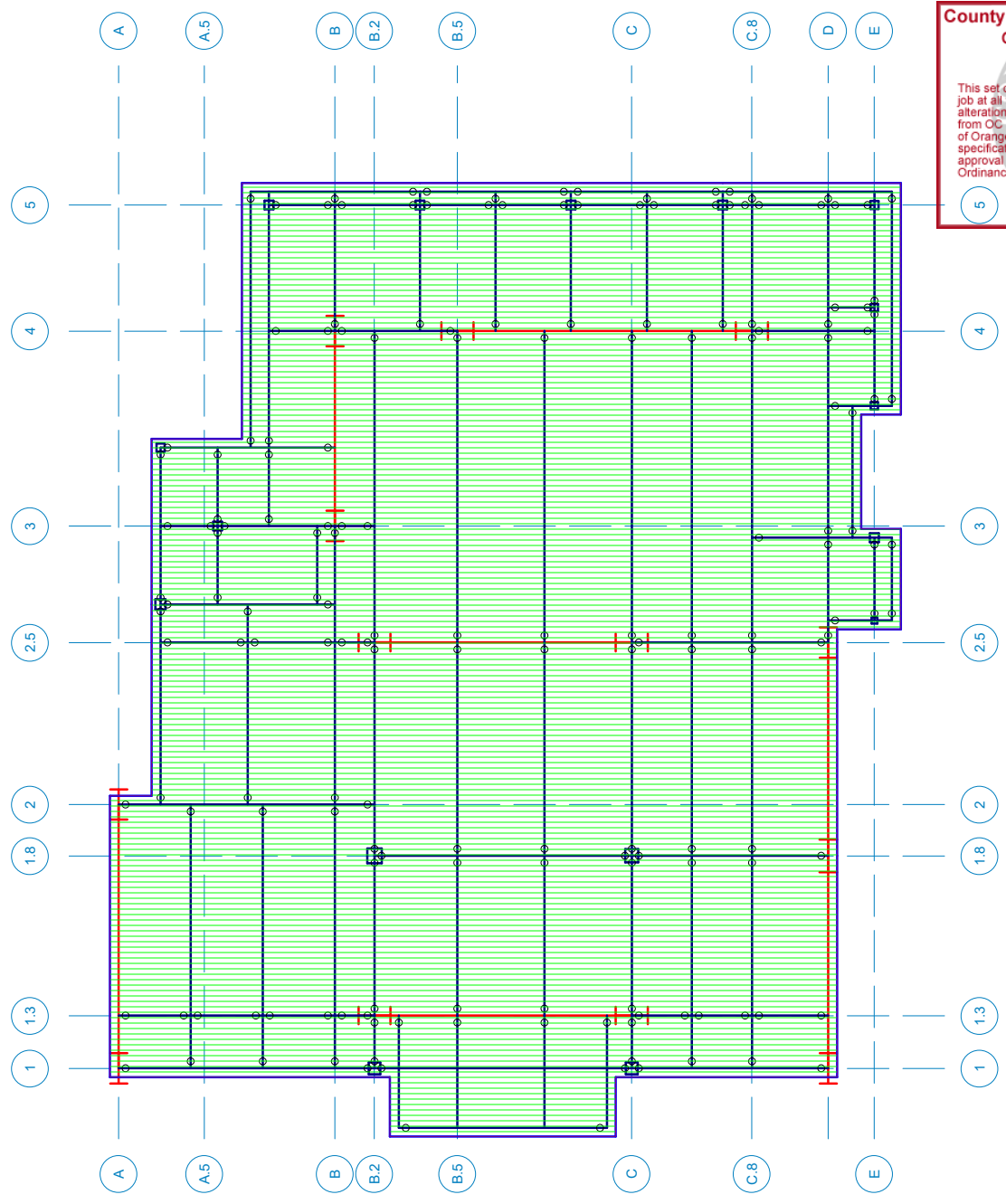
1900799

B3

Deck Type  
w/ Default

- Concrete Deck
- Composite Deck
- Metal Deck
- Wood

Lateral Gravity



Building&Safety: OCPWazarand 12/22/2025  
 Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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Level 2 Deck Assignment

Loads: DL, PreComp - PreComposite Dead Load  
 Results for LC 1, Service Dead

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PD

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Level 2

Dana Point Harbor\_Bld'g. 12

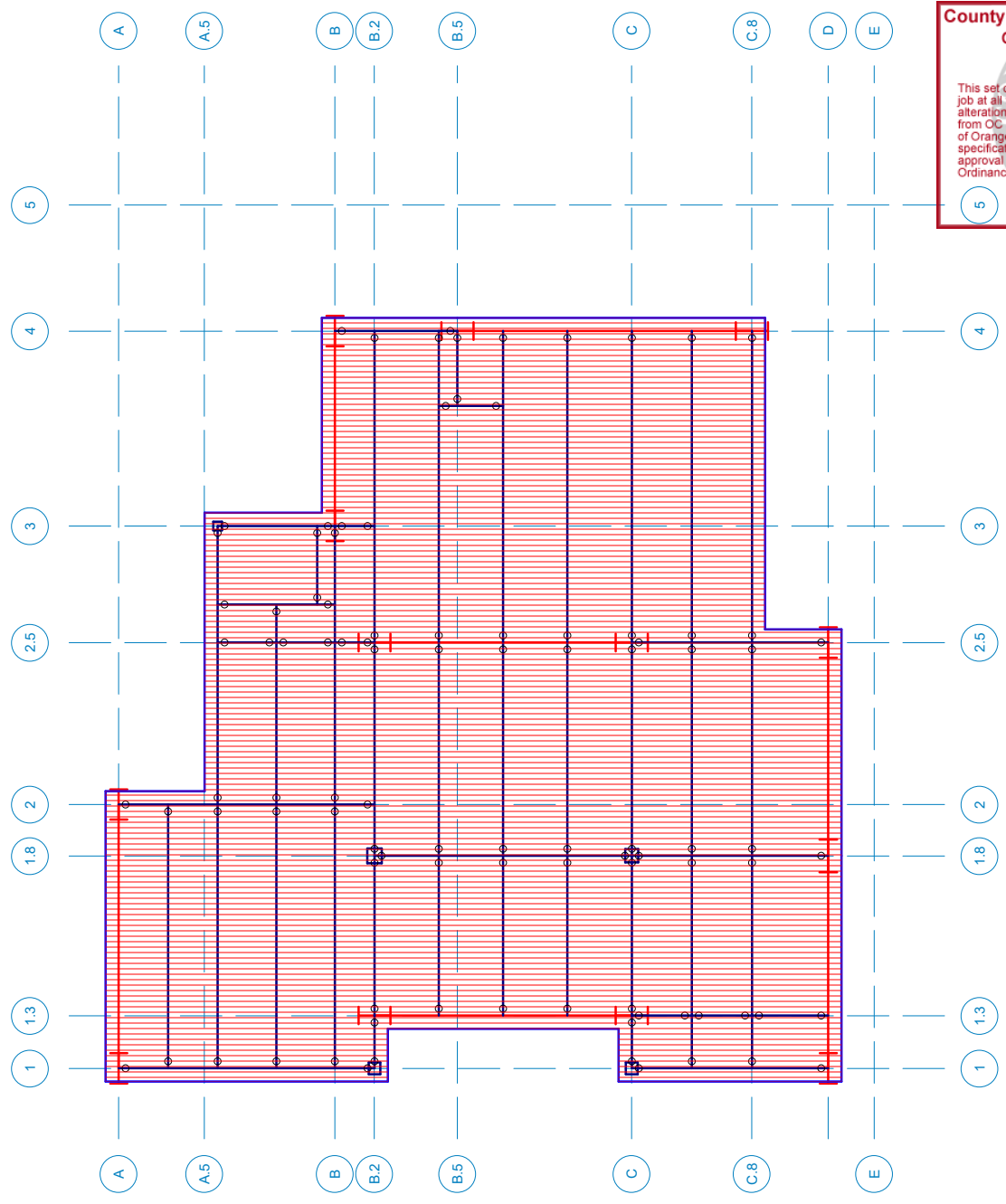
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B4

Deck Type  
w/ Default

- Concrete Deck
- Composite Deck
- Metal Deck
- Wood

Lateral Gravity



Building&Safety: OCPWazarvand 12/22/2025  
 Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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Roof Deck Assignment

Loads: DL, PreComp - PreComposite Dead Load  
 Results for LC 1, Service Dead

Roof

Dana Point Harbor\_Bld'g. 12

KPFF

PD

1900799

12/22/2025 11:58 PM

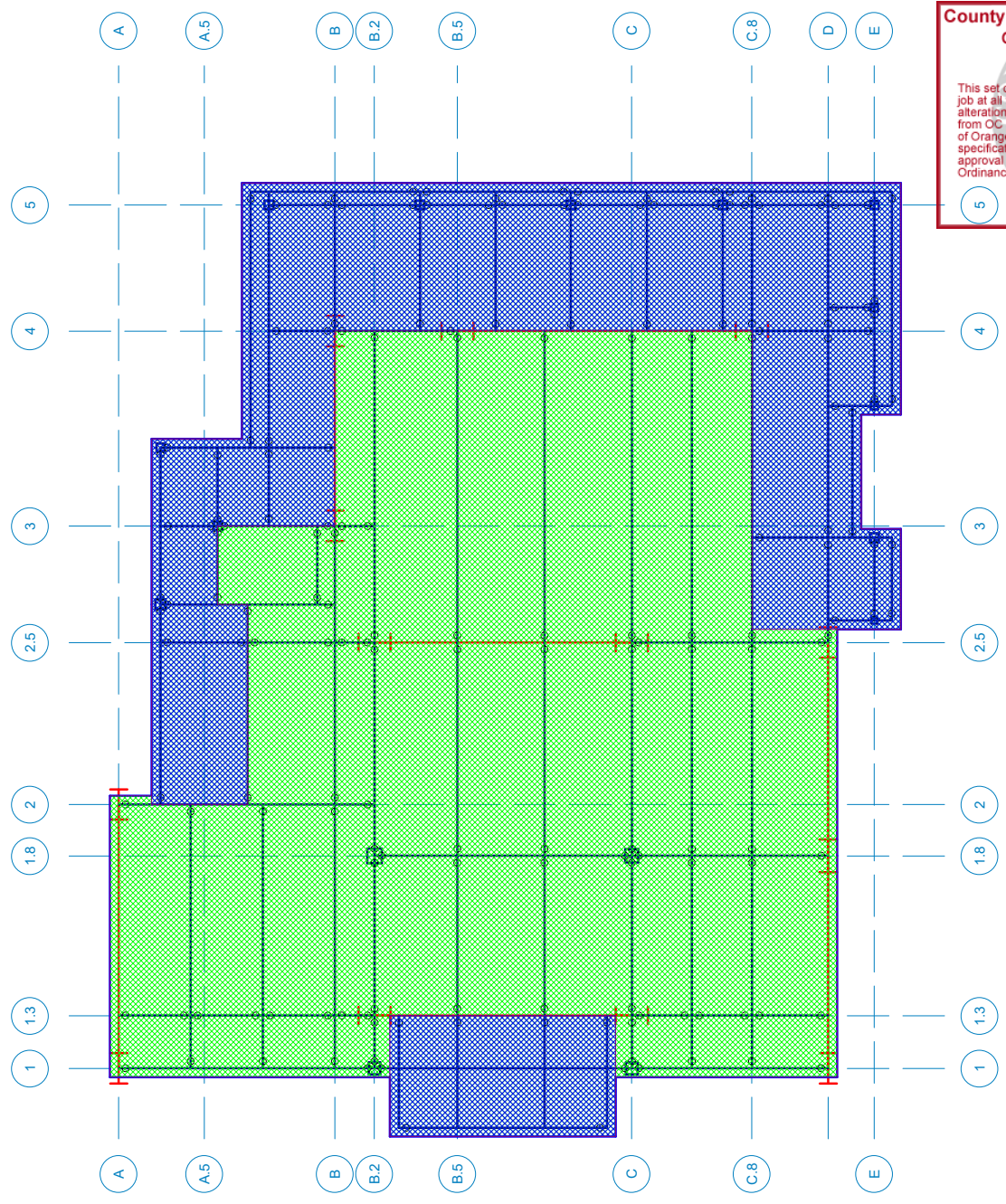
B5

Area Load w/ Default

Exterior Balco. Floor in Bld'g

Flat Roof

Lateral Gravity



Level 2 Area Load Assignments

Building&Safety: OCPWazarvand 12/22/2025

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Loads: DL, PreComp - PreComposite Dead Load  
 Results for LC 1, Service Dead

KPFF	Level 2
PD	Dana Point Harbor_Bld'g. 12
1900799	

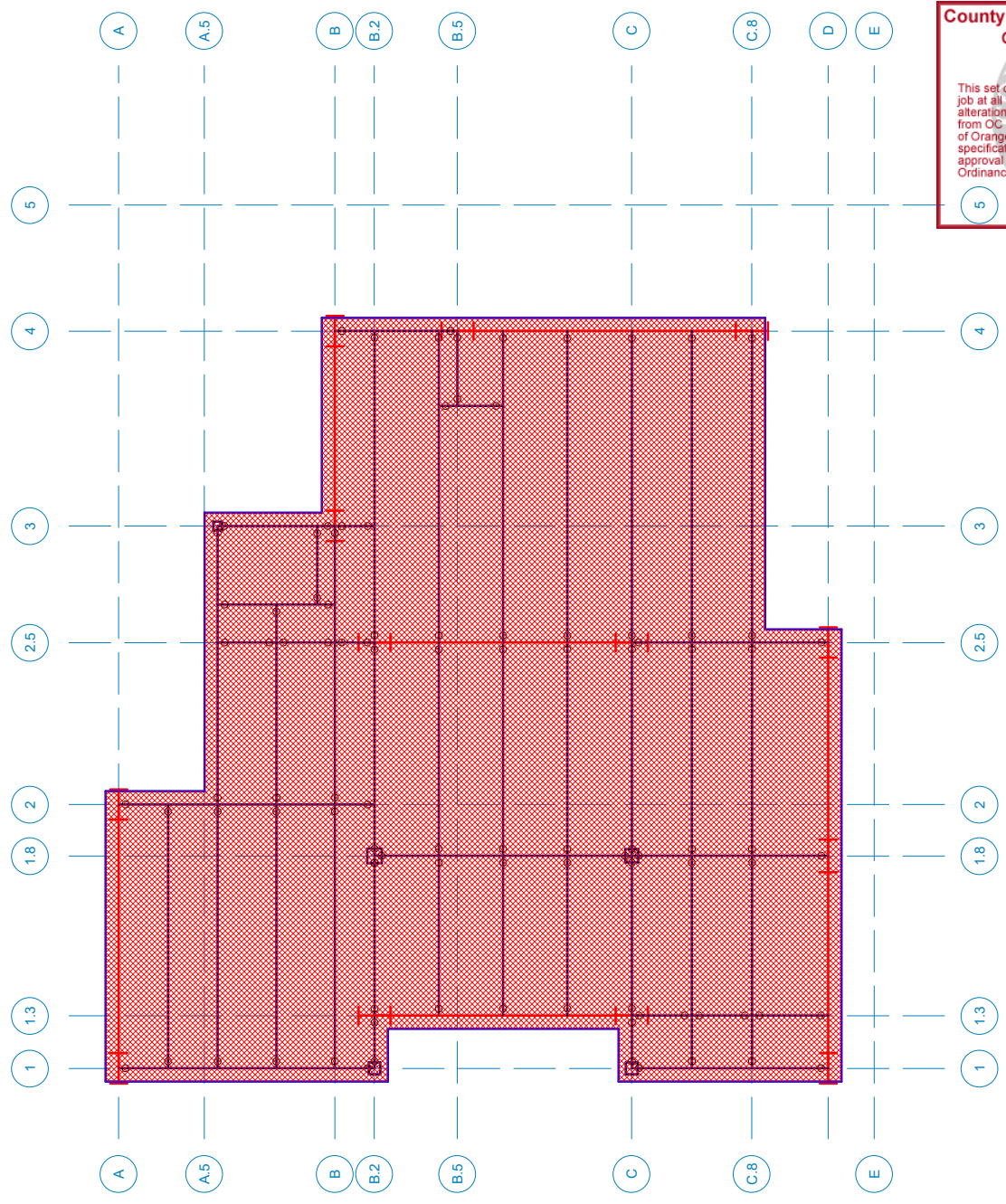
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B6

Area Load w/ Default

Exterior Balco. Floor in Bld'g Flat Roof

Lateral Gravity



Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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 BUILDING OFFICIAL

Roof Area Load Assignments

Roof  
 Dana Point Harbor\_Bld'g. 12

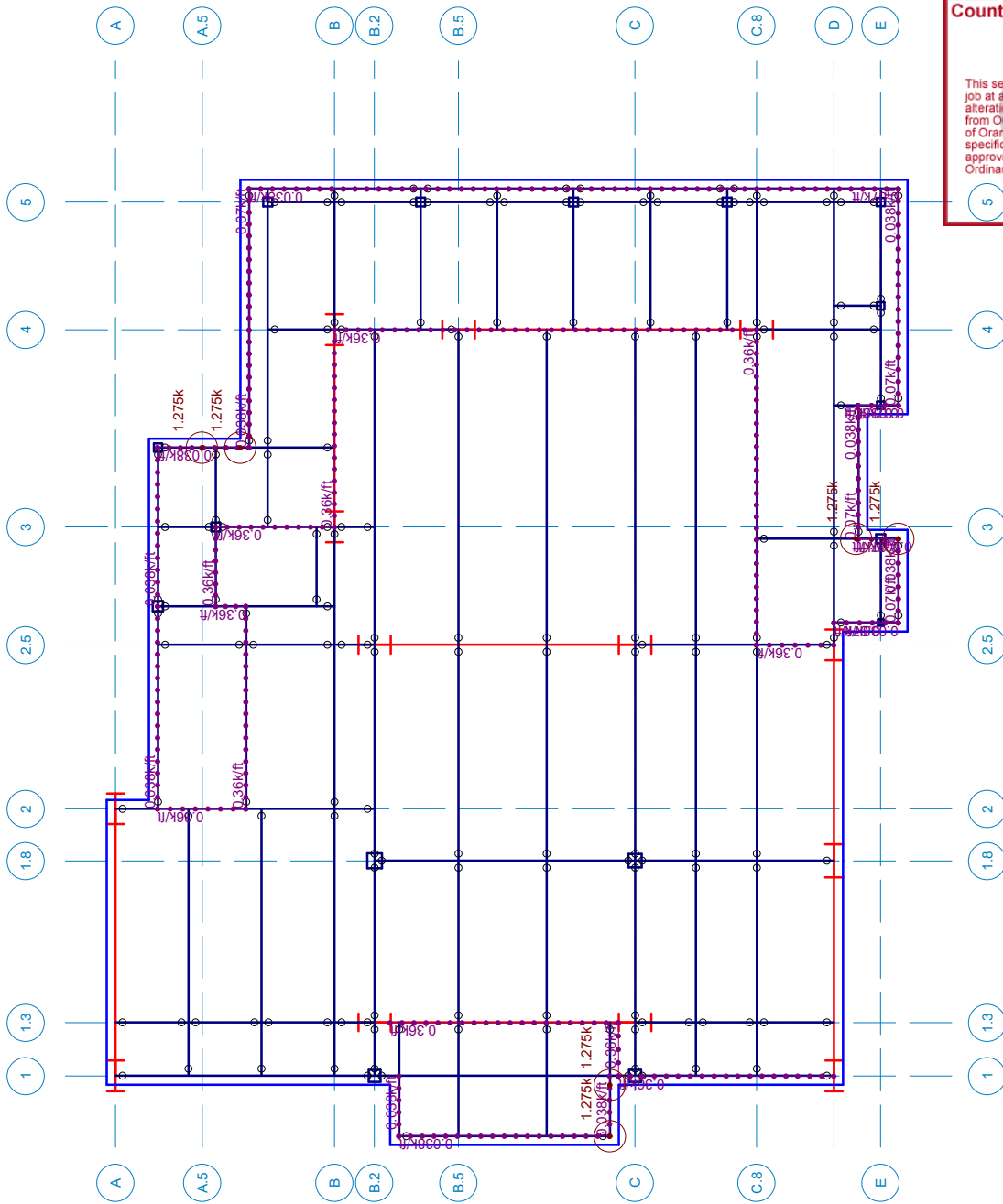
Loads: DL, PreComp - PreComposite Dead Load  
 Results for LC 1, Service Dead

KPFF

PD

1900799

SKG  
 MAY 28, 2021 at 12:00 AM  
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Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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 BUILDING OFFICIAL

**Level 2 Line & Point Loads (Post DL)**

Loads: DL, PostComp - PostComposite Dead Load  
 Results for LC 1, Service Dead

KPFF

PD

1900799

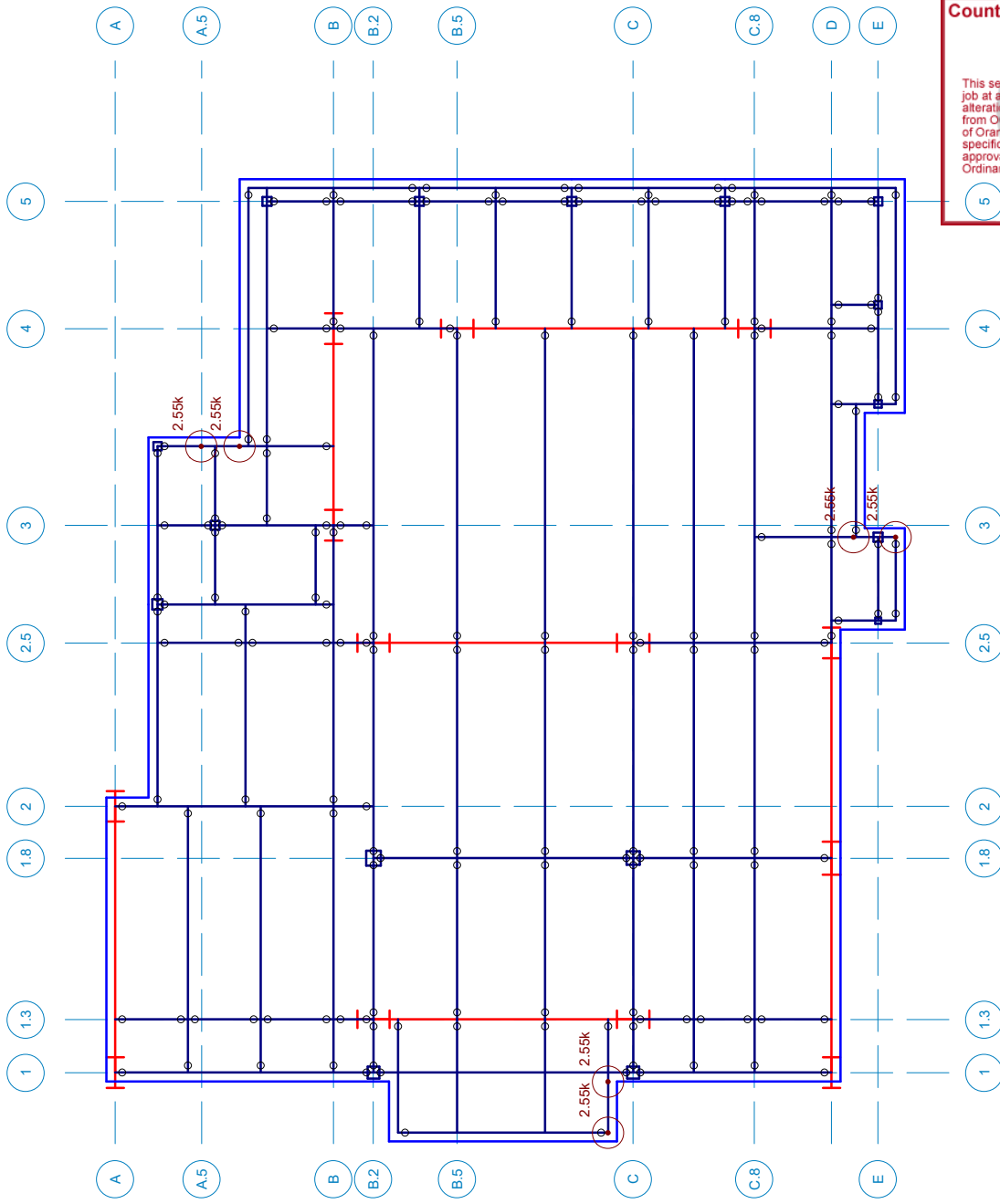
Level 2

Dana Point Harbor\_Bld'g. 12

SK 7

12/28/2021 at 12:01 AM

2021\_08\_28\_Bldg\_12.rfl



Level 2 Line & Point Loads (LL)

Building&Safety: OCPWazarvand 12/22/2025  
 Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

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Loads: LL-Non - Live Load  
 Results for LC 1 - Service Dead

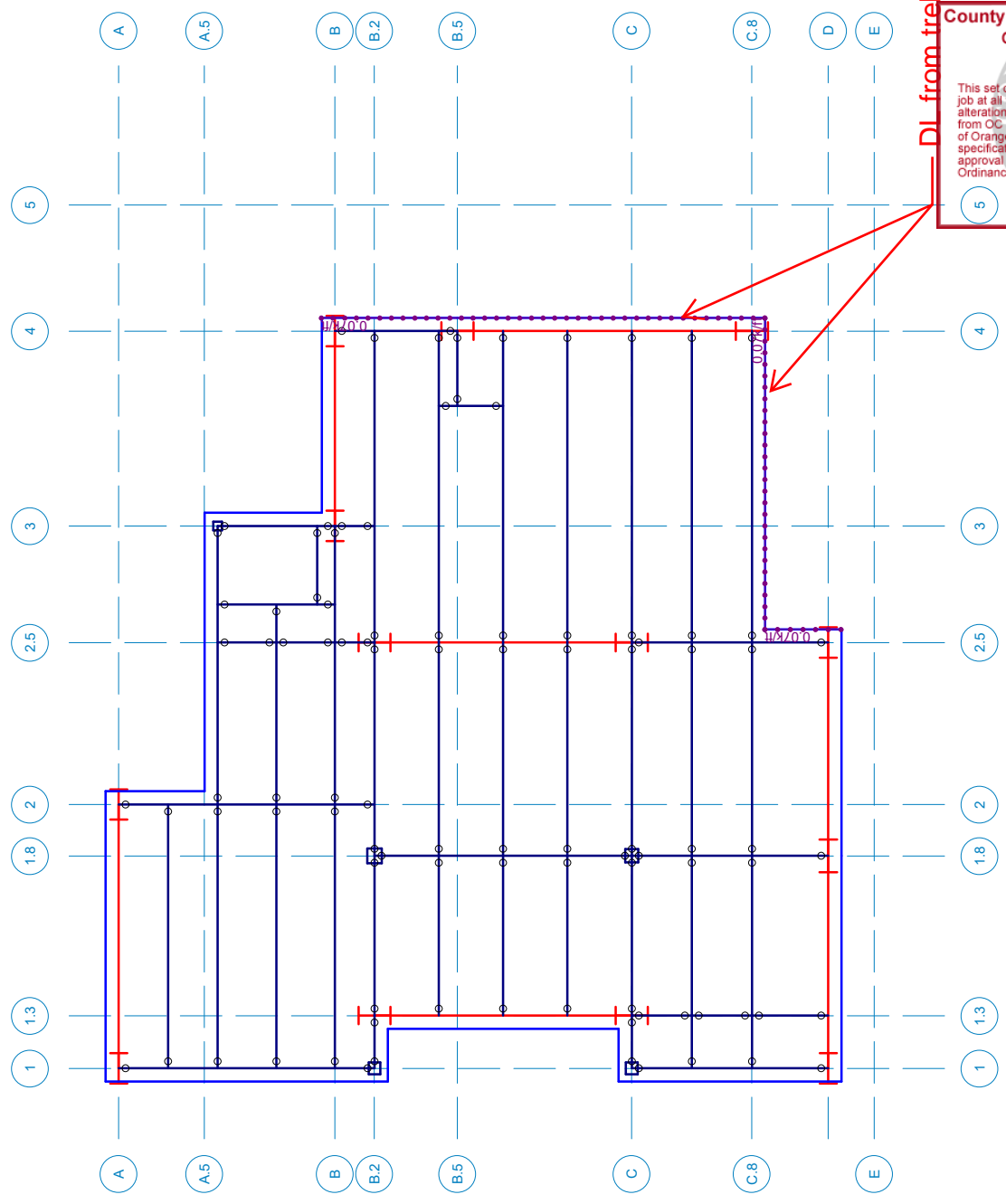
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PD

1900799

Level 2  
 Dana Point Harbor\_Bld'g. 12

SKS  
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Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, REC21-0514, LB21-0900

DL from trellis

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BUILDING OFFICIAL

MAY 28, 2021 at 12:04 AM  
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Roof\_Line & Point Loads (Post DL)

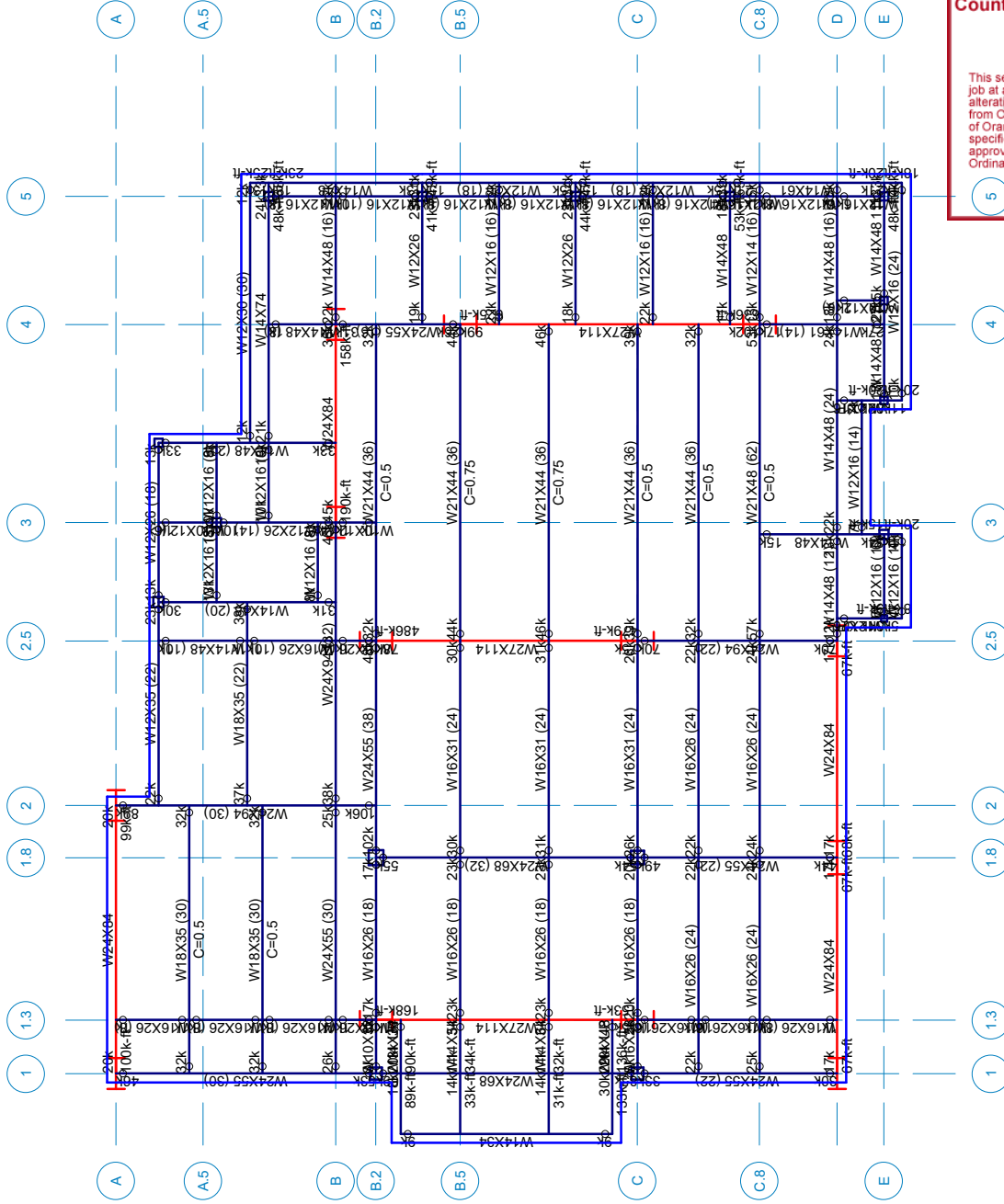
Loads: DL, PostComp - PostComposite Dead Load  
Results for LC 1, Service Dead

Roof  
Dana Point Harbor\_Bld'g. 12

KPFF

PD

1900799



**Level 2 Design Results**

Building&Safety: OCPWazarvand 12/22/2025  
 Permits: BNR21-0246, ELE21-0855, REC21-0514, PLB21-0900

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Level 2

Dana Point Harbor\_Bld'g. 12

Member Camber and Reactions  
 Loads: Envelop Results

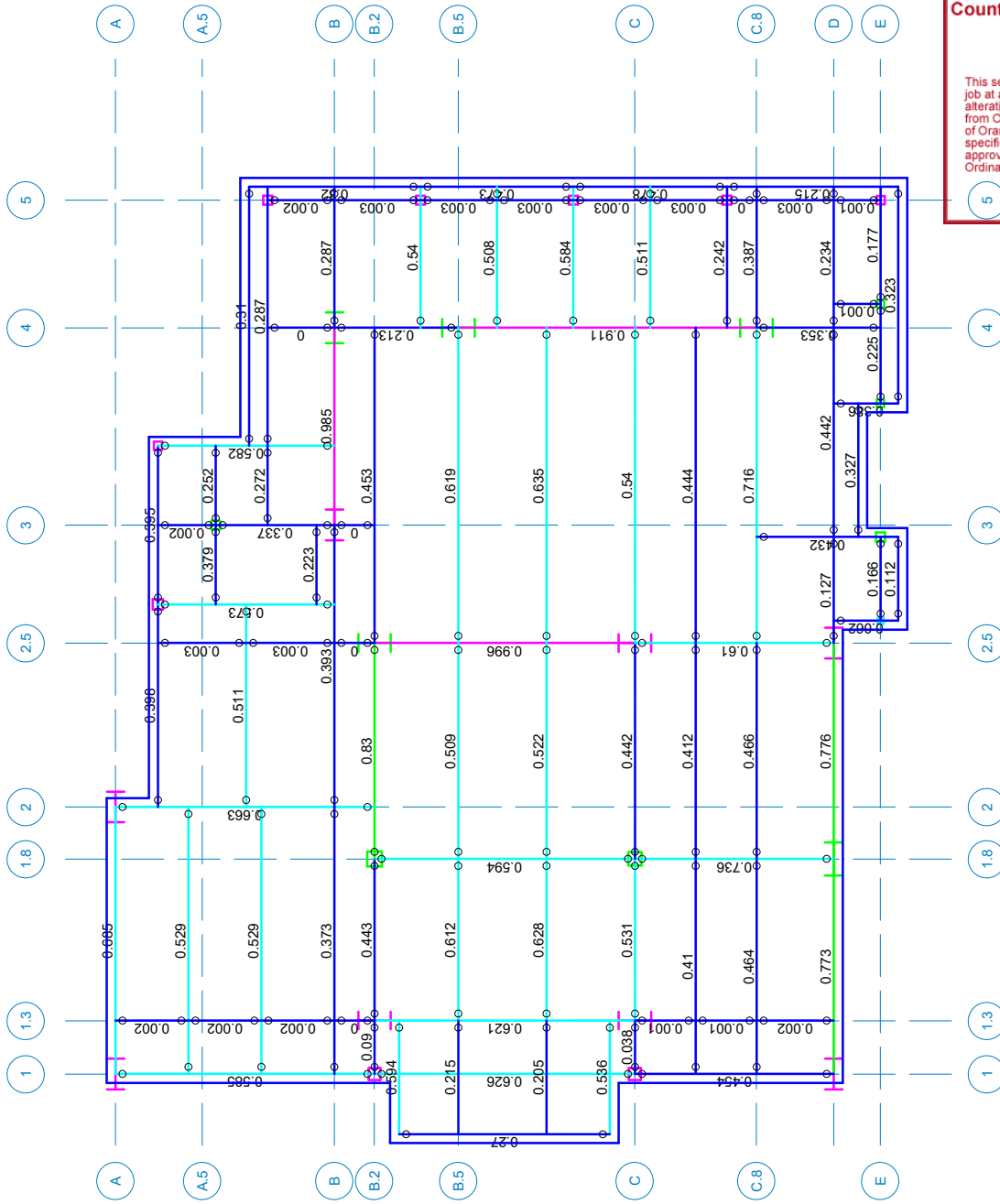
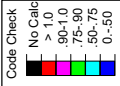
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1900799

12/22/2025 12:05 AM  
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Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, REC21-0514, PLB21-0900

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**OC Development Services**  
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This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without the written permission from OC Public Works, OC Development Services of Orange County. The standard of these plans and specifications SHALL NOT be held liable for any approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL

SK 12  
 MAY 28 2021 at 12:07 AM  
 2021-05-28\_12:00 PM 12.rfl

Level 2 Bending Check

Level 2

Dana Point Harbor\_Bld'g. 12

Member Bending Check  
 Loads: Envelop Results

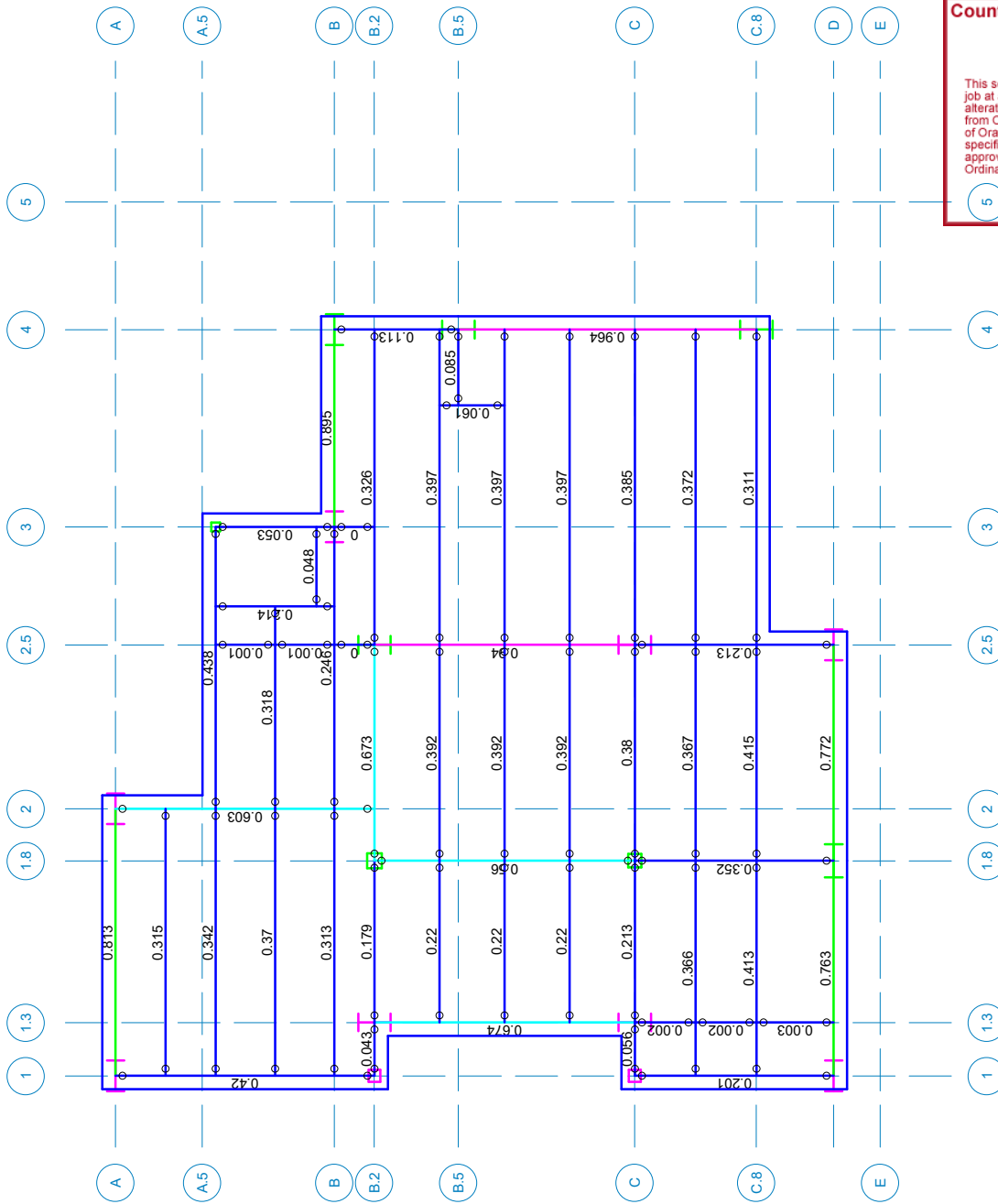
KPFF

PD

1900799



Code Check	
No. Calc	> 1.0
90-1.0	75-90
50-75	0-.50



Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, REC21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
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Roof Bending Check

Roof

Dana Point Harbor\_Bld'g. 12

KPFF

PD

1900799

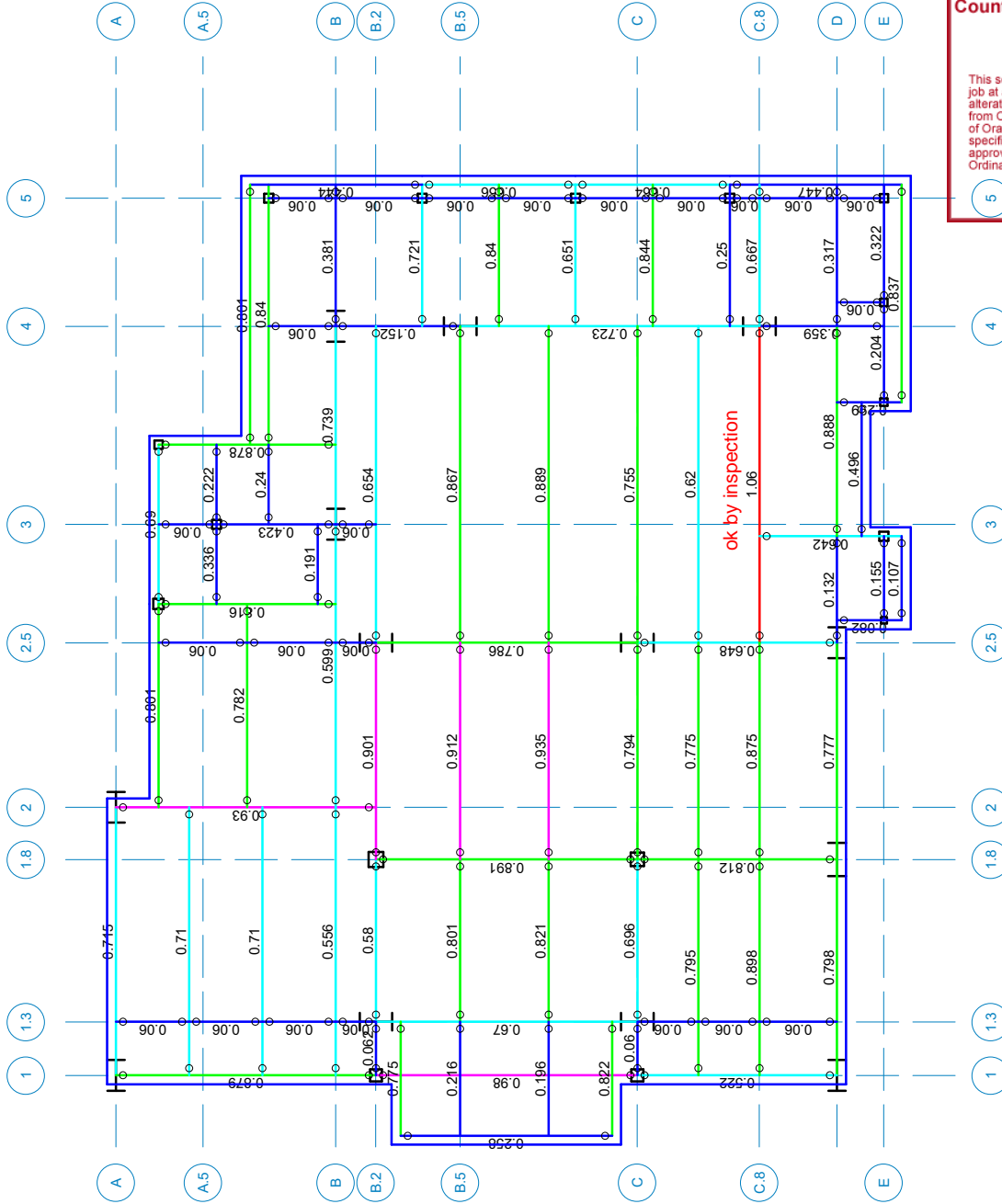
Member Bending Check  
 Loads: Envelop Results

May 28, 2021 at 12:08 AM

2021\_05\_28\_Bldg\_12.rvt



Defl Limit	No. Calc
> 1.0	90-110
0.75-1.0	75-90
0.50-0.75	50-75
0-.50	0-50



Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, MEC21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Level 2 Deflection Check

Level 2

Dana Point Harbor\_Bld'g. 12

KPFF

PD

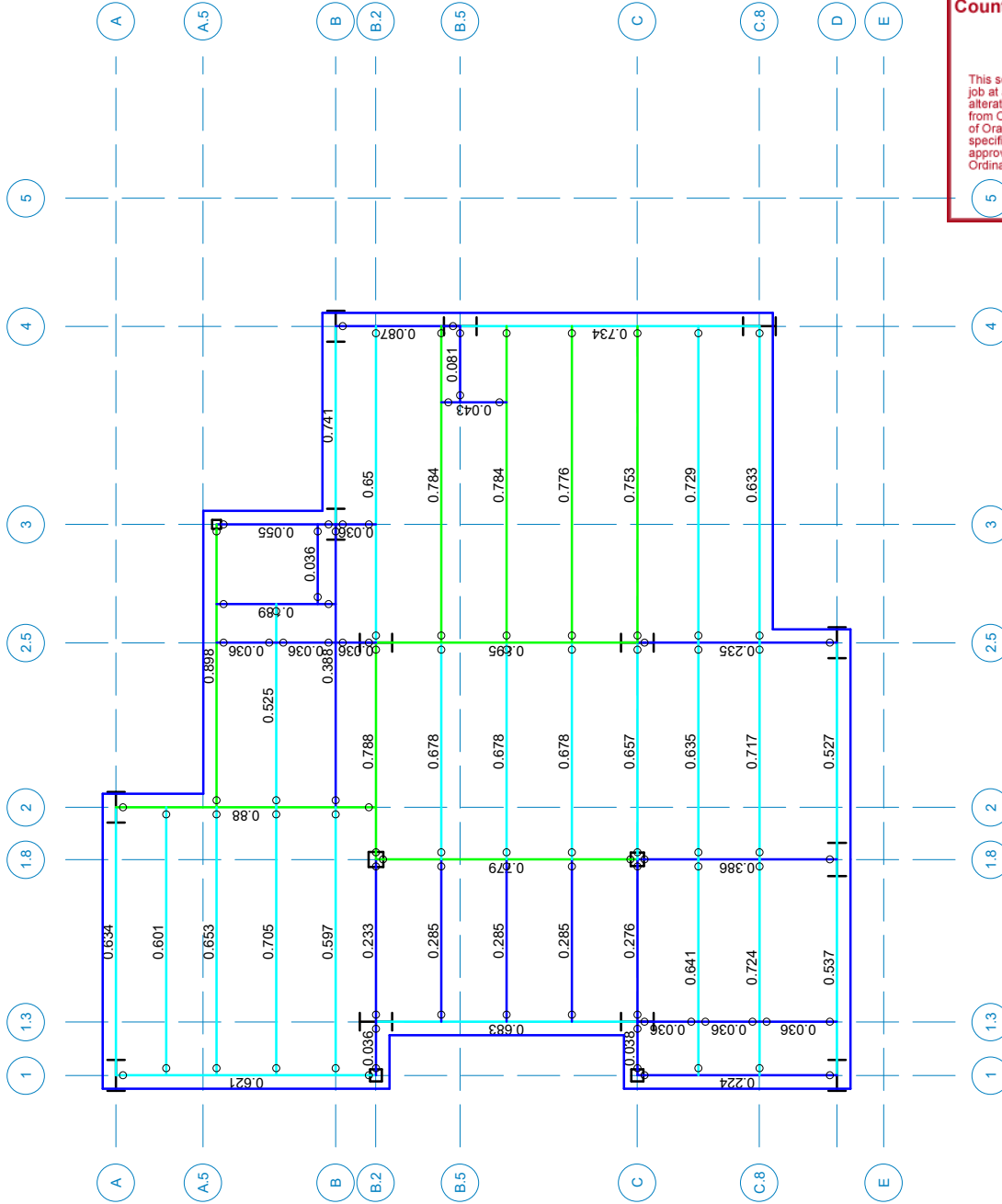
1900799

Member Deflection Check  
 Loads: Envelop Results

SK 14  
 MAY 28, 2021 at 12:09 AM  
 2021\_05\_28\_Bldg\_12.rfl



Defl Limit
No Calc
> 1.0
90-110
75-90
50-75
0-.50



Building&Safety: OCPWazarvand 12/22/2025

Permits: BNR21-0246, ELE21-0854, REC21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
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Hadi Tabatabaee  
 BUILDING OFFICIAL

SK 15  
 MAY 28, 2021 at 12:11 AM  
 2021\_05\_28\_Bldg\_12.rfl

Roof Deflection Check

Roof

Dana Point Harbor\_Bld'g. 12

Member Deflection Check  
 Loads: Envelop Results

KPFF

PD

1900799



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B16  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

### Project Grid Lines

Building & Safety: OCPWA Approved 12/22/2025

	Label	Start Z [ft]	End Z [ft]	Start X [ft]	End X [ft]	Start Bubble	End Bubble
1	1	0	0	-8	92	Permits: BNR21-0246, ELE21-0853, MEC21-0514, PI B21-0001	Yes
2	1.3	6	6	-8	92	Yes	Yes
3	1.8	24.167	24.167	-8	92	Yes	Yes
4	2	30	30	-8	92	Yes	Yes
5	2.5	48.417	48.417	-8	92	Yes	Yes
6	3	61.667	61.667	-8	92	Yes	Yes
7	4	83.833	83.833	-8	92	Yes	Yes
8	5	98.167	98.167	-8	92	Yes	Yes
9	E	-8	114	0	0	Yes	Yes
10	D	-8	114	5.25	5.25	Yes	Yes
11	C.8	-8	114	13.917	13.917	Yes	Yes
12	C	-8	114	27.583	27.583	Yes	Yes
13	B.5	-8	114	47.417	47.417	Yes	Yes
14	B.2	-8	114	56.833	56.833	Yes	Yes
15	B	-8	114	61.333	61.333	Yes	Yes
16	A.5	-8	114	76.167	76.167	Yes	Yes
17	A	-8	114	85.917	85.917	Yes	Yes

City of Orange - OC Public Works  
 OC Development Services  
 APPROVED  
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 Hadi Tabatabaie  
 Building Official

### Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.25	65	1.15
8	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

### General Material Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E5 F)	Density[k/ft^3]
1	gen Conc3NW	3155	1372	0.15	0.6	0.145
2	gen Conc4NW	3644	1584	0.15	0.6	0.145
3	gen Conc3LW	2085	906	0.15	0.6	0.11
4	gen Conc4LW	2408	1047	0.15	0.6	0.11
5	gen Alum	10100	4077	0.3	1.29	0.173
6	gen Steel	29000	11154	0.3	0.65	0.49
7	gen Plywood	1800	38	0	0.3	0.035
8	RIGID	1e+6		0.3	0	0

### Deck General Properties

	Label	Material Type	Deck	Unbraced[ft]	Max Spa...
1	Concrete Deck	Conc3000NW	6 in	3	10
2	Composite Deck	Verco PLW3-W3 Formlok	6.25"LW 16ga W3 Formlok, Conc3000LW, 1.5in, ...	2	10
3	Metal Deck	Verco Steel Roof Deck	16ga PLB-36	2	9.5
4	Wood	Wood Deck	1 in	1	4

### Deck Loads

	Label	Two Way	Self Wt [ksf]	Super DL [ksf]	Const DL [ksf]	Const LL [ksf]
1	Concrete Deck		0.073	0	0	0.02
2	Composite Deck		0.047	0	0	0.02
3	Metal Deck		0.003	0	0	0.02
4	Wood		0.003	0	0	0.02



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B17  
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 Checked By: \_\_\_\_\_

**Design Size/U.C. Parameters**

Building & Safety: OCPDWAgazv00dP 12/22/2025

Label	Max Depth[in]	Min Depth[in]	Max Width[in]	Min Width[in]	Max Bending Chk	Max Shear Chk
1 Floor Beam					1	1
2 Roof Beam					1	1
3 SMF Beam						

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PI #21-0900

County of Orange - OC Public Works  
 OC Development Services  
**APPROVED**

**Design Deflection Parameters**

Label	DL Defl[in]	DL Ratio	LL Defl[in]	LL Ratio	DL+LL ...	DL+LL ...	Category	Defl[in]	Ratio
1 Floor Beam	240		600		360		None	360	360
2 Roof Beam	240		360		360		None	360	360
3 SMF Beam	240		600		360		None	360	360

This set of plans and specifications must be kept on the job at all times and it is the responsibility of the contractor to make any changes or additions to the plans and specifications. No changes or additions shall be made without the written approval of the County Engineer. The stamping of these plans by the County Engineer does not constitute an endorsement of any product or service. Specifications SHALL NOT be held to permit of an exception of the violation of any provision of any County Ordinance or State law.  
 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Design Camber Parameters**

Label	Min Camber[in]	Max Camber[in]	Increment[in]	% DL	DL Included	Min Beam Length[ft]
1 Floor Beam	0	0.75	0.25	75	Total DL	30
2 Roof Beam	0	0	0.25	75	Total DL	30
3 SMF Beam	0	0	0.25	75	Total DL	30

**Uniform Area Loads**

Label	Additive	PreDL[ksf]	PostDL[ksf]	LL[ksf]	LL Type	VL[ksf]	Dyn Load[ksf]
1 Exterior Balcony		0.007	0.068	0.1	LL-Non	0.011	0.144
2 Floor in Bld'g		0.005	0.024	0.1	LL-Non	0.011	0.123
3 Flat Roof			0.027	0.05	LL-Non	0.011	0.062

**Point Locations : Level 2**

Label	Z [ft]	X [ft]	Elev Offset [ft]
1 N1	0	85.91667	0
2 N2	30	85.91667	0
3 N3	61.6667	61.3333	0
4 N4	83.8333	61.3333	0
5 N5	0	5.25	0
6 N6	24.1667	5.25	0
7 N7	48.41667	5.25	0
8 N8	6	56.8333	0
9 N9	6	27.5833	0
10 N10	48.41667	56.8333	0
11 N11	48.41667	27.5833	0
12 N12	83.8333	47.41667	0
13 N13	83.8333	13.91667	0
14 N14	0	56.8333	0
15 N15	0	27.5833	0
16 N16	24.1667	56.8333	0
17 N17	24.1667	27.5833	0
18 N18	52.74997	81.16667	0
19 N19	70.5834	81.16667	0
20 N20	98.1667	68.8334	0
21 N21	98.1667	51.66667	0
22 N22	98.1667	34.5	0
23 N23	98.1667	17.24997	0
24 N24	98.1667	0	0
25 N25	86.5	0	0
26 N26	75.3333	0	0
27 N27	60.3334	0	0
28 N28	50.91667	0	0
29 N29	30	56.8333	0
30 N30	30	81.16667	0
31 N31	70.5834	61.3333	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B18  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

Building & Safety: OCPW/Asst/Asst/Asst 4/22/2025

**Point Locations : Level 2 (Continued)**

	Label	Z [ft]	X [ft]	Elev Offset [ft]
32	N32	61.6667	74.6667	0
33	N33	0	61.3333	0
34	N34	30	61.3333	0
35	N35	52.74997	61.3333	0
36	N36	83.8333	51.66667	0
37	N37	99.6667	51.66667	0
38	N38	83.8333	34.5	0
39	N39	83.8333	17.24997	0
40	N40	99.6667	34.5	0
41	N41	99.6667	17.24997	0
42	N42	99.6667	0	0
43	N43	83.8333	0	0
44	N44	48.41667	13.91667	0
45	N45	60.3334	13.91667	0
46	N46	60.3334	5.25	0
47	N47	83.8333	5.25	0
48	N48	98.1667	5.25	0
49	N49	86.5	5.25	0
50	N50	75.3333	5.25	0
51	N51	50.91667	5.25	0
52	N52	50.91667	-2	0
53	N53	60.3334	-2	0
54	N54	75.3333	-2	0
55	N55	99.6667	-2	0
56	N56	98.1667	13.91667	0
57	N57	98.1667	70.9167	0
58	N58	70.5834	70.9167	0
59	N59	99.6667	70.9167	0
60	N60	98.1667	61.3333	0
61	N61	70.5834	68.8334	0
62	N62	99.6667	68.8334	0
63	N63	83.8333	68.8334	0
64	N64	99.6667	61.3333	0
65	N65	83.8333	43.083335	0
66	N66	98.1667	43.083335	0
67	N67	83.8333	25.874985	0
68	N68	98.1667	25.874985	0
69	N69	60.3334	2.5	0
70	N70	75.3333	2.5	0
71	N71	83.8333	27.5833	0
72	N72	48.41667	47.41667	0
73	N73	83.8333	56.8333	0
74	N74	48.41667	37.499985	0
75	N75	83.8333	37.499985	0
76	N76	48.41667	20.749985	0
77	N77	83.8333	20.749985	0
78	N78	6	47.41667	0
79	N79	24.1667	47.41667	0
80	N80	6	37.499985	0
81	N81	24.1667	37.499985	0
82	N82	0	20.749985	0
83	N83	24.1667	20.749985	0
84	N84	0	13.91667	0
85	N85	24.1667	13.91667	0
86	N86	6	20.749985	0
87	N87	6	13.91667	0
88	N88	6	5.25	0

Permits: BNR21-0246-ELE21-0853, MEC21-0514, PI B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Had Tabatabaee  
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Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B19  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

Building & Safety: OCPW/Asst/CPD 42/22/2025

**Point Locations : Level 2 (Continued)**

	Label	Z [ft]	X [ft]	Elev Offset [ft]
89	N89	0	69.527757	0
90	N90	30	69.527757	0
91	N91	0	77.722213	0
92	N92	30	77.722213	0
93	N93	6	85.91667	0
94	N94	6	77.722213	0
95	N95	6	69.527757	0
96	N96	6	61.3333	0
97	N97	30	71.249985	0
98	N98	52.74997	71.249985	0
99	N99	48.41667	81.16667	0
100	N100	48.41667	71.249985	0
101	N101	48.41667	61.3333	0
102	N102	52.74997	74.6667	0
103	N103	61.6667	81.16667	0
104	N104	61.6667	68.8334	0
105	N105	70.5834	74.6667	0
106	N106	0	54.08337	0
107	N107	6	54.08337	0
108	N108	0	30.4166	0
109	N109	6	30.4166	0
110	N110	0	47.41667	0
111	N111	0	37.499985	0
112	N112	-6.75	54.08337	0
113	N113	-6.75	30.4166	0
114	N114	-6.75	37.499985	0
115	N115	-6.75	47.41667	0
116	N116	52.74997	63.3334	0
117	N117	61.6667	63.3334	0
118	N118	61.6667	56.8333	0
119	N119	30	82.16667	0
120	N120	71.5834	82.16667	0
121	N121	71.5834	71.9167	0
122	N122	100.6667	71.9167	0
123	N123	100.6667	-3	0
124	N124	74.3333	-3	0
125	N125	74.3333	1.5	0
126	N126	61.3334	1.5	0
127	N127	61.3334	-3	0
128	N128	49.91667	-3	0
129	N129	49.91667	13.91667	0
130	N130	-7.75	55.08337	0
131	N131	6	55.08337	0
132	N132	6	29.4166	0
133	N133	-7.75	29.4166	0
134	N134	0	29.4166	0
135	N135	60.3334	2.75	0
136	N136	70.5834	71.9167	0
137	N137	70.5834	76.208327	0
138	N138	99.6667	43.083335	0
139	N139	99.6667	25.874985	0
140	N140	99.6667	13.91667	0
141	N141	99.6667	5.25	0
142	N142	-1	30.4166	0

Permits: BNR21-0246-ELE21-0853, MEC21-0514, PI B21-0900

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Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B20  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Point Locations : Roof**

Building & Safety: OCPW/Asst/CPD 42/22/2025

	Label	Z [ft]	X [ft]	Elev Offset [ft]
1	N1	0	85.91667	0
2	N2	30	85.91667	0
3	N3	61.6667	61.3333	0
4	N4	83.8333	61.3333	0
5	N5	0	5.25	0
6	N6	24.1667	5.25	0
7	N7	48.41667	5.25	0
8	N8	6	56.8333	0
9	N9	6	27.5833	0
10	N10	48.41667	56.8333	0
11	N11	48.41667	27.5833	0
12	N12	83.8333	47.41667	0
13	N13	83.8333	13.91667	0
14	N14	0	56.8333	0
15	N15	0	27.5833	0
16	N16	24.1667	56.8333	0
17	N17	24.1667	27.5833	0
18	N18	52.74997	81.16667	0
19	N19	70.5834	81.16667	0
20	N20	98.1667	68.8334	0
21	N21	98.1667	51.66667	0
22	N22	98.1667	34.5	0
23	N23	98.1667	17.24997	0
24	N24	98.1667	0	0
25	N25	86.5	0	0
26	N26	75.3333	0	0
27	N27	60.3334	0	0
28	N28	50.91667	0	0
29	N29	30	56.8333	0
30	N30	30	81.16667	0
31	N31	70.5834	61.3333	0
32	N32	61.6667	74.6667	0
33	N33	0	61.3333	0
34	N34	30	61.3333	0
35	N35	52.74997	61.3333	0
36	N36	83.8333	51.66667	0
37	N37	99.6667	51.66667	0
38	N38	83.8333	34.5	0
39	N39	83.8333	17.24997	0
40	N40	99.6667	34.5	0
41	N41	99.6667	17.24997	0
42	N42	99.6667	0	0
43	N43	83.8333	0	0
44	N44	48.41667	13.91667	0
45	N45	60.3334	13.91667	0
46	N46	60.3334	5.25	0
47	N47	83.8333	5.25	0
48	N48	98.1667	5.25	0
49	N49	86.5	5.25	0
50	N50	75.3333	5.25	0
51	N51	50.91667	5.25	0
52	N52	50.91667	-2	0
53	N53	60.3334	-2	0
54	N54	75.3333	-2	0
55	N55	99.6667	-2	0
56	N56	98.1667	13.91667	0
57	N57	98.1667	70.9167	0

Permits: BNR21-0246-ELE21-0853, MEC21-0514, PI B21-0900

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Had Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B21  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

Building & Safety: OCPW/Asay/rodr B 42/22/2025

**Point Locations : Roof (Continued)**

	Label	Z [ft]	X [ft]	Elev Offset [ft]
58	N58	70.5834	70.9167	0
59	N59	99.6667	70.9167	0
60	N60	98.1667	61.3333	0
61	N61	70.5834	68.8334	0
62	N62	99.6667	68.8334	0
63	N63	83.8333	68.8334	0
64	N64	99.6667	61.3333	0
65	N65	83.8333	43.083335	0
66	N66	98.1667	43.083335	0
67	N67	83.8333	25.874985	0
68	N68	98.1667	25.874985	0
69	N69	60.3334	2.5	0
70	N70	75.3333	2.5	0
71	N71	83.8333	27.5833	0
72	N72	48.41667	47.41667	0
73	N73	83.8333	56.8333	0
74	N74	48.41667	37.499985	0
75	N75	83.8333	37.499985	0
76	N76	48.41667	20.749985	0
77	N77	83.8333	20.749985	0
78	N78	6	47.41667	0
79	N79	24.1667	47.41667	0
80	N80	6	37.499985	0
81	N81	24.1667	37.499985	0
82	N82	0	20.749985	0
83	N83	24.1667	20.749985	0
84	N84	0	13.91667	0
85	N85	24.1667	13.91667	0
86	N86	6	20.749985	0
87	N87	6	13.91667	0
88	N88	6	5.25	0
89	N89	0	69.527757	0
90	N90	30	69.527757	0
91	N91	0	77.722213	0
92	N92	30	77.722213	0
93	N93	6	85.91667	0
94	N94	6	77.722213	0
95	N95	6	69.527757	0
96	N96	6	61.3333	0
97	N97	30	71.249985	0
98	N98	52.74997	71.249985	0
99	N99	48.41667	81.16667	0
100	N100	48.41667	71.249985	0
101	N101	48.41667	61.3333	0
102	N102	52.74997	74.6667	0
103	N103	61.6667	81.16667	0
104	N104	61.6667	68.8334	0
105	N105	70.5834	74.6667	0
106	N106	0	54.08337	0
107	N107	6	54.08337	0
108	N108	0	30.4166	0
109	N109	6	30.4166	0
110	N110	0	47.41667	0
111	N111	0	37.499985	0
112	N112	-6.75	54.08337	0
113	N113	-6.75	30.4166	0
114	N114	-6.75	37.499985	0

Permits: BNR21-0246-ELE21-0853, MEC21-0514, PI B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Had Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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 12:12 AM  
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**Point Locations : Roof (Continued)**

Building & Safety: OCPW/Asst/0000000000 4/22/2025

	Label	Z [ft]	X [ft]	Elev Offset [ft]
115	N115	-6.75	47.41667	0
116	N116	30	74.6667	0
117	N117	0	64.104142	0
118	N118	30	64.104142	0
119	N119	0	71.374985	0
120	N120	30	71.374985	0
121	N121	0	78.645827	0
122	N122	30	78.645827	0
123	N123	30	68	0
124	N124	52.74997	68	0
125	N125	6	34.8958	0
126	N126	24.1667	34.8958	0
127	N127	6	42.2083	0
128	N128	24.1667	42.2083	0
129	N129	6	49.5208	0
130	N130	24.1667	49.5208	0
131	N131	48.41667	34.8958	0
132	N132	48.41667	42.2083	0
133	N133	48.41667	49.5208	0
134	N134	83.8333	34.8958	0
135	N135	83.8333	42.2083	0
136	N136	83.8333	49.5208	0
137	N137	75.3333	49.5208	0
138	N138	75.3333	42.2083	0
139	N139	75.3333	47.41667	0
140	N140	6	78.645827	0
141	N141	6	71.374985	0
142	N142	6	64.104142	0
143	N143	48.41667	74.6667	0
144	N144	48.41667	68	0
145	N145	61.6667	56.8333	0
146	N146	52.74997	63.3334	0
147	N147	61.6667	63.3334	0
148	N148	85.3333	62.8333	0
149	N149	85.3333	12.41667	0
150	N150	49.91667	12.41667	0
151	N151	49.91667	3.75	0
152	N152	0	74.6667	0
153	N153	0	68	0
154	N154	0	80.291685	0
155	N155	30	80.291685	0

Permits: BNR21-0246-ELE21-0853, MEC21-0514, PI B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Had Tabatabaee  
 BUILDING OFFICIAL

**Columns : Level 2**

	Label	Point	Shape	Material	Function	Angle (d...	Orient Point	Desi...	Splice Dist...	Splice Type	Splice...	Parap...	Top Fi...
1	(A-1)_L1	N1	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
2	(A-2)_L1	N2	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
3	(B-3)_L1	N3	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
4	(B-4)_L1	N4	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
5	(D-1)_L1	N5	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
6	(D-1.8)_L1	N6	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
7	(D-2.5)_L1	N7	Wide Flange	A992	Lateral	90		Floo...	Yes 19.5	Default (Mo...	None	NA	NA
8	(B.2-1.3)_L1	N8	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default (Mo...	None	NA	NA
9	(C-1.3)_L1	N9	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default (Mo...	None	NA	NA
10	(B.2-2.5)_L1	N10	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default (Mo...	None	NA	NA
11	(C-2.5)_L1	N11	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default (Mo...	None	NA	NA
12	(B.5-4)_L1	N12	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default (Mo...	None	NA	NA



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Columns : Level 2 (Continued)**

Building & Safety - OCPWA Approved 12/22/2025

Label	Point	Shape	Material	Function	Angle (d...	Orient Point	Desi...	Splice Dist...	Splice Type	Splice...	Parap...	Top Fi...
13 (C.8-4) L1	N13	Wide Flange	A992	Lateral			Floo...	Yes 19.5	Default	None	NA	NA
14 (B.2-1) L1	N14	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
15 (C-1) L1	N15	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
16 (B.2-1.8) L1	N16	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
17 (C-1.8) L1	N17	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
18 CS18 L1	N18	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
19 CS19 L1	N19	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
20 CS20 L1	N20	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
21 CS21 L1	N21	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
22 CS22 L1	N22	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
23 CS23 L1	N23	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA
24 (E-5) L1	N24	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	Pinned
25 CS25 L1	N25	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	Pinned
26 CS26 L1	N26	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	Defau...	Pinned
27 CS27 L1	N27	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	Defau...	Pinned
28 CS28 L1	N28	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	Defau...	Pinned
29 CS29 L1	N32	SquareTube	A500 Gr...	Gravity			Floo...	Yes 19.5	Shear	None	NA	NA

Permits: BNR21-0246, EL21-0853, MEC21-0514, PLB21-0000  
 County of Orange, CA  
 16 Level Agent Splices  
 APPROVED  
 This set of plans and specifications is prepared for the project on the job at hand. It is intended to be used as a guide for construction and any changes or alterations to these plans must be approved by the County of Orange. The stamping of these plans is specific to the project and shall not be used for any other project without the approval of the violator of any provisions of any County Ordinance.  
 Heidi Trabasso  
 Building Official

**Columns : Roof**

Label	Point	Shape	Material	Function	Angle (d...	Orient Point	Desi...	Splice Dist...	Splice Type	Splice...	Parap...	Top Fi...
1 (A-1) L1	N1	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
2 (A-2) L1	N2	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
3 (B-3) L1	N3	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
4 (B-4) L1	N4	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
5 (D-1) L1	N5	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
6 (D-1.8) L1	N6	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
7 (D-2.5) L1	N7	Wide Flange	A992	Lateral	90		Floo...				Defau...	Fixed
8 (B.2-1.3) L1	N8	Wide Flange	A992	Lateral			Floo...				Defau...	Fixed
9 (C-1.3) L1	N9	Wide Flange	A992	Lateral			Floo...				Defau...	Fixed
10 (B.2-2.5) L1	N10	Wide Flange	A992	Lateral			Floo...				NA	Fixed
11 (C-2.5) L1	N11	Wide Flange	A992	Lateral			Floo...				NA	Fixed
12 (B.5-4) L1	N12	Wide Flange	A992	Lateral			Floo...				Defau...	Fixed
13 (C.8-4) L1	N13	Wide Flange	A992	Lateral			Floo...				Defau...	Fixed
14 (B.2-1) L1	N14	SquareTube	A500 Gr...	Gravity			Floo...				Defau...	Pinned
15 (C-1) L1	N15	SquareTube	A500 Gr...	Gravity			Floo...				Defau...	Pinned
16 (B.2-1.8) L1	N16	SquareTube	A500 Gr...	Gravity			Floo...				NA	Pinned
17 (C-1.8) L1	N17	SquareTube	A500 Gr...	Gravity			Floo...				NA	Pinned
18 CS29 L1	N32	SquareTube	A500 Gr...	Gravity			Floo...				Defau...	Pinned

**Column Design Parameters : Level 2**

Label	Lbyy[ft]	Lbzz[ft]	Lcomp Top[ft]	Lcomp Bot[ft]	L-torque...	Kyy	Kzz	Cb	a[ft]
1 (A-1) L1									NA
2 (A-2) L1									NA
3 (B-3) L1									NA
4 (B-4) L1									NA
5 (D-1) L1									NA
6 (D-1.8) L1									NA
7 (D-2.5) L1									NA
8 (B.2-1.3) L1									NA
9 (C-1.3) L1									NA
10 (B.2-2.5) L1									NA
11 (C-2.5) L1									NA
12 (B.5-4) L1									NA
13 (C.8-4) L1									NA
14 (B.2-1) L1									NA
15 (C-1) L1									NA



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Column Design Parameters : Level 2 (Continued)**

Building & Safety: OCPW/Approved/12/22/2025

Label	Lbyy[ft]	Lbzz[ft]	Lcomp Top[ft]	Lcomp Bot[ft]	L-torque...	Kyy	Kzz	Cb	a[ft]
16 (B.2-1.8)_L1									NA
17 (C-1.8)_L1									NA
18 CS18_L1									NA
19 CS19_L1									NA
20 CS20_L1									NA
21 CS21_L1									NA
22 CS22_L1									NA
23 CS23_L1									NA
24 (E-5)_L1									NA
25 CS25_L1									NA
26 CS26_L1									NA
27 CS27_L1									NA
28 CS28_L1									NA
29 CS29_L1									NA

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PL B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Design Parameters : Roof**

Label	Lbyy[ft]	Lbzz[ft]	Lcomp Top[ft]	Lcomp Bot[ft]	L-torque...	Kyy	Kzz	Cb	a[ft]
1 (A-1)_L1									NA
2 (A-2)_L1									NA
3 (B-3)_L1									NA
4 (B-4)_L1									NA
5 (D-1)_L1									NA
6 (D-1.8)_L1									NA
7 (D-2.5)_L1									NA
8 (B.2-1.3)_L1									NA
9 (C-1.3)_L1									NA
10 (B.2-2.5)_L1									NA
11 (C-2.5)_L1									NA
12 (B.5-4)_L1									NA
13 (C.8-4)_L1									NA
14 (B.2-1)_L1									NA
15 (C-1)_L1									NA
16 (B.2-1.8)_L1									NA
17 (C-1.8)_L1									NA
18 CS29_L1									NA

**Column Stacks**

Stack Label	Project	Z [ft]	X [ft]	Lift No.	Length	Bot El.	Top El.	Shape	Material	Function	Design R...	Flexural L...	Shear La...
1 (A-1)	A-1	0	85.917	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
2 (A-2)	A-2	30	85.917	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
3 (B-3)	B-3	61.667	61.333	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
4 (B-4)	B-4	83.833	61.333	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
5 (D-1)	D-1	0	5.25	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
6 (D-1.8)	D-1.8	24.167	5.25	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
7 (D-2.5)	D-2.5	48.417	5.25	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
8 (B.2-1.3)	B.2-1.3	6	56.833	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
9 (C-1.3)	C-1.3	6	27.583	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
10 (B.2-2.5)	B.2-2.5	48.417	56.833	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
11 (C-2.5)	C-2.5	48.417	27.583	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
12 (B.5-4)	B.5-4	83.833	47.417	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
13 (C.8-4)	C.8-4	83.833	13.917	1	33.5	0	33.5	Wide Flan...	A992	Lateral	Floor Beam	N/A	N/A
14 (B.2-1)	B.2-1	0	56.833	1	33.5	0	33.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A	N/A
15 (C-1)	C-1	0	27.583	1	33.5	0	33.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A	N/A
16 (B.2-1.8)	B.2-1.8	24.167	56.833	1	33.5	0	33.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A	N/A
17 (C-1.8)	C-1.8	24.167	27.583	1	33.5	0	33.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A	N/A
18 CS18	-	52.75	81.167	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A	N/A



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Column Stacks (Continued)**

Building & Safety - OCPWA Approved 12/22/2025

Stack Label	Project	Z [ft]	X [ft]	Lift No.	Length	Bot El.	Top El.	Shape	Material	Function	Design R...	Flexural L...	Shear La...
19	CS19	-	70.583	81.167	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
20	CS20	-	98.167	68.833	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
21	CS21	-	98.167	51.667	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
22	CS22	-	98.167	34.5	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
23	CS23	-	98.167	17.25	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
24	(E-5)	E-5	98.167	0	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
25	CS25	-	86.5	0	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
26	CS26	-	75.333	0	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
27	CS27	-	60.333	0	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
28	CS28	-	50.917	0	1	19.5	0	19.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A
29	CS29	-	61.667	74.667	1	33.5	0	33.5	SquareTu...	A500 ...	Gravity	Floor Beam	N/A

Permits: BNR21-0246, ELE21-0852, MEC21-0514, PL B21-1940

Beam of N/A Range : OCPWA Public Works

OC Development Services

APPROVED

Plans of plan and specifications shall be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without the permission from the Public Works, OC Development Services of Orange County. The stamping of these plans constitutes a representation that the plans have been approved by the stamping of these plans. Approval of the violation of any provisions of any County Ordinance or Law.

Hand Tabstamped  
 Date: 05/28/21  
 Signature: [Signature]

**Beam Primary Data : Level 2**

Label	Start Point	End Point	Shape	Material	Design Rules	Function	Orientation	Start Rel...	End Rel...	Outrigger?
1	M1	N1	N2	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
2	M2	N3	N4	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
3	M3	N5	N6	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
4	M4	N6	N7	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
5	M5	N8	N9	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
6	M6	N10	N11	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
7	M7	N12	N13	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
8	M8	N1	N14	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
9	M9	N14	N15	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
10	M10	N15	N5	W24X55	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
11	M11	N16	N17	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
12	M12	N17	N6	W24X55	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
13	M13	N14	N8	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
14	M14	N8	N16	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
15	M15	N16	N10	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
16	M16	N15	N9	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
17	M17	N9	N17	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
18	M18	N17	N11	W16X31	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
19	M19	N11	N7	W24X94	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
20	M20	N2	N29	W24X94	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
21	M21	N4	N12	W24X55	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
22	M22	N30	N18	W12X35	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
23	M23	N18	N19	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
24	M24	N19	N31	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
25	M25	N33	N34	W24X55	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
26	M26	N34	N3	W24X94	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
27	M27	N18	N35	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
28	M28	N36	N37	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
29	M29	N38	N40	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
30	M30	N39	N41	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
31	M34	N25	N42	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
32	M35	N37	N40	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
33	M36	N40	N41	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
34	M37	N41	N55	W14X61	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
35	M38	N26	N25	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
36	M39	N13	N43	W14X61	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
37	M40	N44	N13	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
38	M41	N45	N53	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
39	M42	N7	N46	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
40	M43	N46	N47	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
41	M46	N50	N54	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed
42	M47	N51	N52	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Fixed



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Primary Data : Level 2 (Continued)**

Building & Safety: OCPW/Agenda/B 12/22/2015

Label	Start Point	End Point	Shape	Material	Design Rules	Function	Orientation	Start Rel...	End Rel...	Outtrigger?
43	M48	N28	N27	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
44	M49	N52	N53	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
45	M50	N54	N55	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
46	M52	N61	N62	W14X74	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
47	M53	N59	N37	W14X48	A992	Floor Beam	Gravity	Strong Axis	Fixed	Pinned
48	M54	N58	N59	W12X30	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
49	M55	N63	N4	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
50	M56	N4	N64	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
51	M57	N20	N60	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
52	M58	N60	N21	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
53	M61	N69	N70	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
54	M62	N11	N71	W21X44	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
55	M63	N72	N12	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
56	M64	N10	N73	W21X44	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
57	PUR65	N74	N75	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
58	PUR66	N76	N77	W21X44	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
59	M67	N78	N79	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
60	M68	N79	N72	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
61	M69	N80	N81	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
62	M70	N81	N74	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
63	M71	N82	N83	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
64	M72	N83	N76	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
65	M73	N84	N85	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
66	M74	N85	N44	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
67	M75	N9	N86	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
68	M76	N86	N87	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
69	M77	N87	N88	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
70	PUR78	N89	N90	W18X35	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
71	PUR79	N91	N92	W18X35	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
72	M80	N93	N94	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
73	M81	N94	N95	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
74	M82	N95	N96	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
75	M83	N96	N8	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
76	PUR84	N97	N98	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
77	M85	N99	N100	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
78	M86	N100	N101	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
79	M87	N101	N10	W16X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
80	M88	N102	N32	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
81	M89	N103	N32	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
82	M90	N32	N3	W12X26	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
83	M91	N104	N61	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
84	M92	N32	N105	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
85	M93	N112	N107	W14X34	A992	Floor Beam	Gravity	Strong Axis	Fixed	Pinned
86	M94	N113	N109	W14X48	A992	Floor Beam	Gravity	Strong Axis	Fixed	Pinned
87	M95	N115	N78	W14X34	A992	Floor Beam	Gravity	Strong Axis	Fixed	Pinned
88	M96	N114	N80	W14X34	A992	Floor Beam	Gravity	Strong Axis	Fixed	Pinned
89	M97	N112	N113	W14X34	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
90	M98	N116	N117	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
91	M99	N3	N118	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
92	M100	N65	N138	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
93	M101	N67	N139	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
94	M102	N13	N140	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
95	M105	N21	N66	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
96	M106	N66	N22	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
97	M107	N22	N68	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
98	M108	N68	N23	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
99	M109	N23	N56	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned

Permits: BNR21-0246, EL21-0853, MEC21-0514, M19C-Mann  
 OC Public Works  
 OC Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the project site at all times and available to make any changes or alterations to these plans without written permission from the Planning and Development Services of Orange County. The stamping of these plans shall constitute an acknowledgment that the applicant has been held to permit or be an approval of the violation of any provisions of any County Ordinance.  
 Heidi Tabatabaee  
 Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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 12:12 AM  
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**Beam Primary Data : Level 2 (Continued)**

Building & Safety: OCPDWAgazvoodB 12/22/2025

Label	Start Point	End Point	Shape	Material	Design Rules	Function	Orientation	Start Rel...	End Rele...	Outtrigger?
100	M103	N47	N141	W14X48	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
101	M104	N49	N25	Wide Flange	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
102	M110	N56	N48	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned
103	M111	N48	N24	W12X16	A992	Floor Beam	Gravity	Strong Axis	Pinned	Pinned

Permits: BNR21-0246, ELEC21-0853, MEC21-0514, M111, M110, M104

OC Development Services APPROVED

**Beam Primary Data : Roof**

Label	Start Point	End Point	Shape	Material	Design Rules	Function	Orientation	Start Rel...	End Rele...	Outtrigger?
1	M1	N1	N2	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
2	M2	N3	N4	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
3	M3	N5	N6	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
4	M4	N6	N7	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
5	M5	N8	N9	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
6	M6	N10	N11	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
7	M7	N12	N13	Wide Flange	A992	SMF Beam	Lateral	Strong Axis	Fixed	Fixed
8	M8	N1	N14	W24X55	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
9	M10	N15	N5	W24X55	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
10	M11	N16	N17	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
11	M12	N17	N6	W24X55	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
12	M13	N14	N8	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
13	M14	N8	N16	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
14	M15	N16	N10	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
15	M16	N15	N9	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
16	M17	N9	N17	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
17	M18	N17	N11	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
18	M19	N11	N7	W24X94	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
19	M20	N2	N29	W24X62	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
20	M21	N4	N12	W24X55	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
21	M26	N34	N3	W24X55	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
22	M40	N44	N13	W21X44	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
23	M62	N11	N71	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
24	M64	N10	N73	W21X44	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
25	PUR66	N76	N77	W21X44	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
26	M71	N82	N83	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
27	M72	N83	N76	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
28	M73	N84	N85	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
29	M74	N85	N44	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
30	M75	N9	N86	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
31	M76	N86	N87	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
32	M77	N87	N88	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
33	M87	N101	N10	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
34	M90	N32	N3	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
35	M36	N116	N32	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
36	M37	N102	N35	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
37	PUR41	N123	N124	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
38	PUR42	N125	N126	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
39	PUR43	N127	N128	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
40	PUR44	N129	N130	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
41	PUR45	N126	N131	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
42	PUR46	N128	N132	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
43	PUR47	N130	N133	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
44	PUR48	N131	N134	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
45	PUR49	N132	N135	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
46	PUR50	N133	N136	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
47	M51	N137	N138	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
48	M52	N139	N12	Wide Flange	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
49	M58	N143	N144	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services or the County Engineer. Specifications SHALL NOT be held to permit or be an Ordinance or State law.  
 Approved by: [Signature] Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Primary Data : Roof (Continued)**

Building & Safety: OCPWAzaronodB 12/22/2025

Label	Start Point	End Point	Shape	Material	Design Rules	Function	Orientation	Start Rel...	End Rele...	Outrigger?
50	M59	N144	N101	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
51	M60	N3	N145	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
52	M61	N146	N147	W16X26	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
53	M53	N152	N116	W18X35	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
54	M54	N33	N34	W18X35	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
55	M55	N153	N123	W18X35	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned
56	PUR56	N154	N155	W18X35	A992	Roof Beam	Gravity	Strong Axis	Pinned	Pinned

Permits: BNR15-0246, ELEC21-0853, MEC21-0514, M147, Mann

**OC Public Works**

**OC Development Services**

**APPROVED**

This set of plans and specifications must be kept on the job site at all times and available to make any changes or alterations to these plans without written permission of the Planning & Development Services of Orange County. The stamping of these plans specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 FULLY QUALIFIED

**Hot Rolled : Level 2**

Label	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp To...	Lcomp Bot...	L-torqu...	Cb	Composite	Camber[in]	B-ef Left	B-ef Right
1	M1	30				Framing					
2	M2	22.167				Framing					
3	M3	24.167				Framing					
4	M4	24.25				Framing					
5	M5	29.25				Framing					
6	M6	29.25				Framing					
7	M7	33.5				Framing					
8	M8	29.083				Framing		Yes			
9	M9	29.25				Framing					
10	M10	22.333				Framing		Yes			
11	M11	29.25				Framing		Yes			
12	M12	22.333				Framing		Yes			
13	M13	6				Framing					
14	M14	18.167				Framing		Yes			
15	M15	24.25				Framing		Yes			
16	M16	6				Framing					
17	M17	18.167				Framing		Yes			
18	M18	24.25				Framing		Yes			
19	M19	22.333				Framing		Yes			
20	M20	29.083				Framing		Yes			
21	M21	13.917				Framing		Yes			
22	M22	22.75				Framing		Yes			
23	M23	17.833				Framing		Yes			
24	M24	19.833				Framing		Yes			
25	M25	30				Framing		Yes			
26	M26	31.667				Framing		Yes			
27	M27	19.833				Framing		Yes			
28	M28	15.833				Framing		Yes			
29	M29	15.833				Framing		Yes			
30	M30	15.833				Framing		Yes			
31	M34	13.167				Framing		Yes			
32	M35	17.167				Framing		Yes			
33	M36	17.25				Framing		Yes			
34	M37	19.25				Framing		Yes			
35	M38	11.167				Framing		Yes			
36	M39	13.917				Framing		Yes			
37	M40	35.417				Framing		Yes			
38	M41	15.917				Framing		Yes			
39	M42	11.917				Framing		Yes			
40	M43	23.5				Framing		Yes			
41	M46	7.25				Framing		Yes			
42	M47	7.25				Framing		Yes			
43	M48	9.417				Framing		Yes			
44	M49	9.417				Framing		Yes			
45	M50	24.333				Framing		Yes			
46	M52	29.083				Framing		Yes			



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWAzayyadB 12/22/2025

Label	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp To...	Lcomp Bot...	L-torqu...	Cb	Composite Camber[in]	B-eff Left...	B-eff Righ...
47	M53	19.25				Framing		Yes		
48	M54	29.083				Framing		Yes		
49	M55	7.5				Framing		Yes		
50	M56	15.833				Framing		Yes		
51	M57	7.5				Framing		Yes		
52	M58	9.667				Framing		Yes		
53	M61	15				Framing		Yes		
54	M62	35.417				Framing		Yes		
55	M63	35.417				Framing		Yes		
56	M64	35.417				Framing		Yes		
57	PUR65	35.417				Framing		Yes		
58	PUR66	35.417				Framing		Yes		
59	M67	18.167				Framing		Yes		
60	M68	24.25				Framing		Yes		
61	M69	18.167				Framing		Yes		
62	M70	24.25				Framing		Yes		
63	M71	24.167				Framing		Yes		
64	M72	24.25				Framing		Yes		
65	M73	24.167				Framing		Yes		
66	M74	24.25				Framing		Yes		
67	M75	6.833				Framing		Yes		
68	M76	6.833				Framing		Yes		
69	M77	8.667				Framing		Yes		
70	PUR78	30				Framing		Yes		
71	PUR79	30				Framing		Yes		
72	M80	8.194				Framing		Yes		
73	M81	8.194				Framing		Yes		
74	M82	8.194				Framing		Yes		
75	M83	4.5				Framing		Yes		
76	PUR84	22.75				Framing		Yes		
77	M85	9.917				Framing		Yes		
78	M86	9.917				Framing		Yes		
79	M87	4.5				Framing		Yes		
80	M88	8.917				Framing		Yes		
81	M89	6.5				Framing		Yes		
82	M90	13.333				Framing		Yes		
83	M91	8.917				Framing		Yes		
84	M92	8.917				Framing		Yes		
85	M93	12.75				Framing		Yes		
86	M94	12.75				Framing		Yes		
87	M95	12.75				Framing		Yes		
88	M96	12.75				Framing		Yes		
89	M97	23.667				Framing		Yes		
90	M98	8.917				Framing		Yes		
91	M99	4.5				Framing		Yes		
92	M100	15.833				Framing		Yes		
93	M101	15.833				Framing		Yes		
94	M102	15.833				Framing		Yes		
95	M105	8.583				Framing		Yes		
96	M106	8.583				Framing		Yes		
97	M107	8.625				Framing		Yes		
98	M108	8.625				Framing		Yes		
99	M109	3.333				Framing		Yes		
100	M103	15.833				Framing		Yes		
101	M104	5.25				Framing		Yes		
102	M110	8.667				Framing		Yes		
103	M111	5.25				Framing		Yes		

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PL B21-0900

**County of Orange : OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Hot Rolled : Roof**

Building & Safety: OCPW/Asayood/B 12/22/2025

Label	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp To...	Lcomp Bot...	L-torqu...	Cb	Composite Camber[in]	B-eff Left...	B-eff Righ...
1	M1	30								
2	M2	22.167								
3	M3	24.167								
4	M4	24.25								
5	M5	29.25								
6	M6	29.25								
7	M7	33.5	16.75							
8	M8	29.083								
9	M10	22.333								
10	M11	29.25								
11	M12	22.333								
12	M13	6								
13	M14	18.167								
14	M15	24.25								
15	M16	6								
16	M17	18.167								
17	M18	24.25								
18	M19	22.333								
19	M20	29.083								
20	M21	13.917								
21	M26	31.667								
22	M40	35.417								
23	M62	35.417								
24	M64	35.417								
25	PUR66	35.417								
26	M71	24.167								
27	M72	24.25								
28	M73	24.167								
29	M74	24.25								
30	M75	6.833								
31	M76	6.833								
32	M77	8.667								
33	M87	4.5								
34	M90	13.333								
35	M36	31.667								
36	M37	13.333								
37	PUR41	22.75								
38	PUR42	18.167								
39	PUR43	18.167								
40	PUR44	18.167								
41	PUR45	24.25								
42	PUR46	24.25								
43	PUR47	24.25								
44	PUR48	35.417								
45	PUR49	35.417								
46	PUR50	35.417								
47	M51	7.313								
48	M52	8.5								
49	M58	6.667								
50	M59	6.667								
51	M60	4.5								
52	M61	8.917								
53	M53	30								
54	M54	30								
55	M55	30								
56	PUR56	30								

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PL B21-0900

**County of Orange : OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B31  
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 12:12 AM  
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**Diaphragm Parameters : Level 2**

Building & Safety: OCPW/AgarwoodB 12/22/2025

Floor	Diaphragm	Type	Region	Design Rule	SGAF	Material Offset Thickness
1	Level 2	D1	Rigid	N/A	N/A	N/A
2	Roof	D2	Flexible	N/A	N/A	N/A

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PI B21-0900

**Diaphragm Parameters : Roof**

Floor	Diaphragm	Type	Region	Design Rule	SGAF	Material Offset Thickness
1	Level 2	D1	Rigid	N/A	N/A	N/A
2	Roof	D2	Flexible	N/A	N/A	N/A

County of Orange - OC Public Works  
 OC Development Services

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This plan and specifications are based on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL  
 Dyn Load[k]

**Point Loads : Level 2**

Point Label	PreDL[k]	PostDL[k]	LL[k]	LL Type	Dyn Load[k]
1	N53	1.275	2.55	LL-Non	5.1
2	N135	1.275	2.55	LL-Non	5.1
3	N136	1.275	2.55	LL-Non	5.1
4	N137	1.275	2.55	LL-Non	5.1
5	N113	1.275	2.55	LL-Non	5.1
6	N142	1.275	2.55	LL-Non	5.1

**Point Loads : Roof**

Point Label	PreDL[k]	PostDL[k]	LL[k]	LL Type	Dyn Load[k]
No Data to Print ...					

**Line Loads : Level 2**

	Start Point	End Point	Start Pre...	End PreD...	Start Post...	End Post...	Start LL[k]	End LL[k/ft]	LL Type	St Dyn Load[k/ft]	End Dyn Load[...]
1	N30	N97			0.36	0.36			LL-Non		
2	N97	N98			0.36	0.36			LL-Non		
3	N98	N102			0.36	0.36			LL-Non		
4	N102	N32			0.36	0.36			LL-Non		
5	N32	N3			0.36	0.36			LL-Non		
6	N3	N4			0.36	0.36			LL-Non		
7	N4	N13			0.36	0.36			LL-Non		
8	N13	N44			0.36	0.36			LL-Non		
9	N44	N7			0.36	0.36			LL-Non		
10	N131	N132			0.36	0.36			LL-Non		
11	N132	N134			0.36	0.36			LL-Non		
12	N134	N5			0.36	0.36			LL-Non		
13	N106	N112			0.038	0.038			LL-Non		
14	N112	N113			0.038	0.038			LL-Non		
15	N113	N108			0.038	0.038			LL-Non		
16	N30	N18			0.038	0.038			LL-Non		
17	N18	N19			0.038	0.038			LL-Non		
18	N19	N58			0.038	0.038			LL-Non		
19	N58	N59			0.038	0.038			LL-Non		
20	N59	N55			0.038	0.038			LL-Non		
21	N55	N54			0.038	0.038			LL-Non		
22	N54	N70			0.038	0.038			LL-Non		
23	N70	N69			0.038	0.038			LL-Non		
24	N69	N53			0.038	0.038			LL-Non		
25	N53	N52			0.038	0.038			LL-Non		
26	N52	N51			0.038	0.038			LL-Non		
27	N51	N52			0.07	0.07			LL-Non		
28	N52	N53			0.07	0.07			LL-Non		
29	N53	N69			0.07	0.07			LL-Non		
30	N69	N70			0.07	0.07			LL-Non		
31	N70	N54			0.07	0.07			LL-Non		
32	N54	N55			0.07	0.07			LL-Non		



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Line Loads : Level 2 (Continued)**

Building & Safety: OCPDW-AZ-2020-012/22/2025

Start Point	End Point	Start Pre...	End PreD...	Start Post...	End Post...	Start LL[k...	End LL[k/ft]	LL Type	St Dyn Load[k/ft]	End Dyn Load[...
33	N55	N59				0.07	0.07	LL-Non		
34	N59	N58				0.07	0.07	LL-Non		

Permits: BNR21-0248, ELE21-0853, MEC21-0514, PI B21-0900

**Line Loads : Roof**

Start Point	End Point	Start Pre...	End PreD...	Start Post...	End Post...	Start LL[k...	End LL[k/ft]	LL Type	S Dyn Load[k/ft]	End Dyn Load[...
1	N148	N149				0.07	0.07	LL-Non		
2	N149	N150				0.07	0.07	LL-Non		
3	N150	N151				0.07	0.07	LL-Non		
4	N148	N149						LL-Non	0.15	0.15
5	N149	N150						LL-Non	0.15	0.15
6	N150	N151						LL-Non	0.15	0.15

**APPROVED**

**County of Orange - OC Public Works  
OC Development Services**

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Have Tabatabaee

BUILDING OFFICIAL

**Tapered Area Loads : Level 2**

A Point	B Point	C Point	D Point	Base Mag[ksf]	Peak Mag[ksf]	Category	Direction
No Data to Print ...							

**Tapered Area Loads : Roof**

A Point	B Point	C Point	D Point	Base Mag[ksf]	Peak Mag[ksf]	Category	Direction
No Data to Print ...							

**Combinations**

Label	Sol...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...
1	Service ...	Yes	DL	1																
2	Service ...	Yes	DL	1	LL	1	LLS	1												
3	IBC 16-1...	Yes	DLP...	1.4																
4	IBC 16-2...	Yes	DLP...	1.2	LLC...	1.6														
5	IBC 16-1...	Yes	DL	1.4																
6	IBC 16-2...	Yes	DL	1.2	LL	1.6	LLS	1.6	RLL	0.5										
7	IBC 16-2...	Yes	DL	1.2	LL	1.6	LLS	1.6												
8	IBC 16-3...	Yes	DL	1.2	RLL	1.6	LL	1	LLS	1										
9	IBC 16-3...	Yes	DL	1.2	LL	0.5	LLS	1												

**Floors**

Label	Elevation[ft]	Floor Type	Area Load Default	Inactive	Splice Dis...	Splice Ty...	No Wind/...	Parapet Hei...
1	Level 2	19.5	Floor Beam	Floor in Bld'g		19.5	Moment	0
2	Roof	33.5	Floor Beam	Flat Roof		14	Moment	0

**Beam Floors**

Label	Deck Default	Deck Angle Default (deg)	Parent	
1	Level 2	Composite Deck	90	None
2	Roof	Metal Deck	90	None

**Beam Design for Hot Rolled : Level 2**

Label	Size	Explicit	Studs	Camber[in]	Material	Max Start R...	Max End R...	Min Start R...	Min End Re...	
1	M1	W24X84	No		0	A992	19.916	19.815	6.394	6.276
2	M2	W24X84	No		0	A992	44.921	35.812	10.835	8.495
3	M3	W24X84	No		0	A992	16.633	16.579	5.225	5.132
4	M4	W24X84	No		0	A992	16.614	16.575	5.124	5.109
5	M5	W27X114	No		0	A992	20.862	14.125	5.498	5.297
6	M6	W27X114	No		0	A992	77.155	74.73	24.634	23.877
7	M7	W27X114	No		0	A992	98.933	101.36	27.927	29.419
8	M8	W24X55	No	30	0	A992	45.114	52.61	14.767	17.32
9	M9	W24X68	No		0	A992	68.851	84.999	19.365	19.471



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Design for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Label	Size	Explicit	Studs	Camber(in)	Material	Max Start R...	Max End R...	Min Start R...	Min End R...	
10	M10	W24X55	Yes	22	0	A992	32.484	29.618	7.184	6.28
11	M11	W24X68	No	32	0	A992	54.781	53.424	17.586	17.17
12	M12	W24X55	Yes	22	0	A992	48.749	43.043	15.549	13.78
13	M13	W10X12	No		0	A992	2.806	2.806	0.814	0.814
14	M14	W16X26	Yes	18	0	A992	16.162	16.162	4.934	4.934
15	M15	W24X55	No	38	0	A992	101.894	47.303	3.711	3.711
16	M16	W16X26	Yes	38	0	A992	4.223	4.223	1.6	1.6
17	M17	W16X26	Yes	18	0	A992	19.394	19.394	5.87	5.87
18	M18	W16X31	Yes	24	0	A992	25.961	25.961	7.92	7.92
19	M19	W24X94	Yes	22	0	A992	69.718	69.665	21.181	21.643
20	M20	W24X94	Yes	30	0	A992	88.173	105.205	25.963	33.141
21	M21	W24X55	Yes	16	0	A992	30.055	25.508	8.393	6.561
22	M22	W12X35	Yes	22	0	A992	21.707	22.033	5.755	5.999
23	M23	W12X26	Yes	18	0	A992	12.343	12.343	3.244	3.244
24	M24	W14X48	Yes	20	0	A992	32.583	32.176	7.258	8.269
25	M25	W24X55	Yes	30	0	A992	25.068	24.948	8.195	8.096
26	M26	W24X94	Yes	32	0	A992	37.976	45.091	12.51	14.372
27	M27	W14X48	Yes	20	0	A992	29.423	30.786	7.633	8.392
28	M28	W12X26	Yes		0	A992	18.409	53.862	3.608	14.212
29	M29	W12X26	Yes		0	A992	17.091	55.26	3.313	14.219
30	M30	W14X48	Yes		0	A992	10.62	55.139	2.093	15.004
31	M34	W14X48	Yes		0	A992	4.555	43.37	0.043	10.825
32	M35	W12X26	Yes	18	0	A992	14.597	14.597	3.736	3.736
33	M36	W12X26	Yes	18	0	A992	14.668	14.668	3.754	3.754
34	M37	W14X61	Yes		0	A992	20.543	30.764	5.763	8.231
35	M38	W14X48	Yes	12	0	A992	12.767	26.4	3.744	7.736
36	M39	W14X61	Yes	14	0	A992	16.009	26.097	4.863	7.641
37	M40	W21X48	No	62	0.5	A992	56.598	52.25	14.216	12.863
38	M41	W14X48	Yes		0	A992	14.992	44.026	3.851	8.611
39	M42	W14X48	Yes	12	0	A992	11.046	12.788	3.152	3.502
40	M43	W14X48	Yes	24	0	A992	21.709	23.678	6.03	6.53
41	M46	W12X16	Yes		0	A992	-1.792	18.005	-0.064	3.857
42	M47	W12X26	Yes		0	A992	-0.807	7.257	-0.014	1.532
43	M48	W12X16	Yes	10	0	A992	5.33	5.33	1.408	1.408
44	M49	W12X16	Yes	10	0	A992	3.592	3.592	0.824	0.824
45	M50	W12X16	Yes	24	0	A992	9.281	9.281	2.13	2.13
46	M52	W14X74	Yes		0	A992	20.577	55.462	5.035	15.503
47	M53	W14X48	Yes		0	A992	30.24	12.16	8.059	3.438
48	M54	W12X30	Yes	30	0	A992	11.369	11.519	2.836	2.874
49	M55	W14X48	Yes	8	0	A992	0.063	0.063	0.045	0.045
50	M56	W14X48	Yes	16	0	A992	21.333	21.466	5.735	5.891
51	M57	W12X16	Yes	8	0	A992	0.084	0.084	0.06	0.06
52	M58	W12X16	Yes	10	0	A992	0.108	0.108	0.077	0.077
53	M61	W12X16	Yes	14	0	A992	6.431	6.431	1.489	1.489
54	M62	W21X44	Yes	36	0.5	A992	38.195	38.195	11.893	11.893
55	M63	W21X44	No	36	0.75	A992	43.94	43.94	13.559	13.559
56	M64	W21X44	Yes	36	0.5	A992	31.913	31.905	10.091	10.081
57	PUR65	W21X44	No	36	0.75	A992	45.053	45.053	13.881	13.881
58	PUR66	W21X44	Yes	36	0.5	A992	31.337	31.337	9.906	9.906
59	M67	W16X26	Yes	18	0	A992	22.342	22.342	6.725	6.725
60	M68	W16X31	No	24	0	A992	29.895	29.895	9.06	9.06
61	M69	W16X26	Yes	18	0	A992	22.912	22.912	6.89	6.89
62	M70	W16X31	No	24	0	A992	30.656	30.656	9.281	9.281
63	M71	W16X26	No	24	0	A992	21.281	21.174	6.641	6.515
64	M72	W16X26	No	24	0	A992	21.193	21.193	6.475	6.475
65	M73	W16X26	No	24	0	A992	24.085	23.963	7.473	7.33
66	M74	W16X26	No	24	0	A992	23.985	23.985	7.285	7.285

Permits: BNR21-0246, ELE21-8853, MEC21-0514, B21-0901  
 County of Orange - Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from the County of Orange, Department of Public Works. The stamping of these plans specific to ALL NOT BE TO DO permit or be an approval of the violation of any provision of any County Ordinance or the law.  
 Heidi Tabatabaee  
 Public Works Director



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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 May 28, 2021  
 12:12 AM  
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**Beam Design for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPDW Approved 12/22/2025

Label	Size	Explicit	Studs	Camber[in]	Material	Max Start R...	Max End R...	Min Start R...	Min End Re...
67	M75	W16X26	Yes	6	0	A992	0.125	0.125	0.089
68	M76	W16X26	Yes	6	0	A992	0.125	0.125	0.089
69	M77	W16X26	Yes	8	0	A992	0.159	0.159	0.089
70	PUR78	W18X35	Yes	30	0.5	A992	31.713	31.559	9.924
71	PUR79	W18X35	Yes	30	0.5	A992	31.713	31.559	9.924
72	M80	W16X26	Yes	8	0	A992	0.15	0.15	0.059
73	M81	W16X26	Yes	8	0	A992	0.15	0.15	0.059
74	M82	W16X26	Yes	8	0	A992	0.15	0.15	0.059
75	M83	W16X26	Yes	4	0	A992	0.082	0.082	0.059
76	PUR84	W18X35	No	22	0	A992	36.959	37.232	9.066
77	M85	W14X48	Yes	10	0	A992	0.333	0.333	0.238
78	M86	W16X26	Yes	10	0	A992	0.181	0.181	0.13
79	M87	W16X26	Yes	4	0	A992	0.082	0.082	0.059
80	M88	W12X16	Yes	8	0	A992	12.806	12.806	3.045
81	M89	W10X12	No	6	0	A992	0.055	0.055	0.039
82	M90	W12X26	Yes	14	0	A992	9.402	13.537	1.914
83	M91	W12X16	Yes	8	0	A992	9.211	9.211	2.368
84	M92	W12X16	Yes	8	0	A992	8.526	8.526	2.198
85	M93	W14X34	Yes		0	A992	37.305	-12.813	10.368
86	M94	W14X48	Yes		0	A992	57.825	-19.422	11.029
87	M95	W14X34	Yes		0	A992	26.702	4.836	6.988
88	M96	W14X34	Yes		0	A992	26.59	5.372	6.669
89	M97	W14X34	Yes		0	A992	8.655	8.709	2.469
90	M98	W12X16	Yes	8	0	A992	7.552	7.552	2.264
91	M99	W10X12	No	4	0	A992	0.038	0.038	0.027
92	M100	W12X16	Yes	16	0	A992	21.029	21.163	5.381
93	M101	W12X16	Yes	16	0	A992	21.13	21.265	5.406
94	M102	W12X14	No	16	0	A992	14.728	14.821	3.794
95	M105	W12X16	Yes	8	0	A992	0.096	0.096	0.069
96	M106	W12X16	Yes	8	0	A992	0.096	0.096	0.069
97	M107	W12X16	Yes	8	0	A992	0.097	0.097	0.069
98	M108	W12X16	Yes	8	0	A992	0.097	0.097	0.069
99	M109	W12X16	Yes	4	0	A992	0.037	0.037	0.027
100	M103	W14X48	Yes	16	0	A992	17.412	17.495	4.787
101	M104	W10X12	No	6	0	A992	0.044	0.044	0.032
102	M110	W12X16	Yes	8	0	A992	0.097	0.097	0.069
103	M111	W12X16	Yes	6	0	A992	0.059	0.059	0.042

Permits: BNR21-0346, ELE21-0853, MEC21-0514, B21-09M.  
 Count of Change: 0  
 Public Works  
 Development Indices  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times and is unlawful to make any changes or alterations to these plans without written permission from Orange County, OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be used to permit or be an approval of the location of any provisions of any County Ordinance or law.  
 Hadi Tabatabaee  
 Bldg. Div. of Public

**Beam Design for Hot Rolled : Roof**

Label	Size	Explicit	Studs	Camber[in]	Material	Max Start R...	Max End R...	Min Start R...	Min End Re...
1	M1	W21X83	No		0	A992	7.92	7.92	0.757
2	M2	W21X83	No		0	A992	4.876	5.007	0.386
3	M3	W21X83	No		0	A992	8.514	8.505	0.708
4	M4	W21X83	No		0	A992	8.525	8.49	0.652
5	M5	W24X94	No		0	A992	15.051	15.051	1.765
6	M6	W24X94	No		0	A992	41.036	41.02	4.964
7	M7	W24X94	No		0	A992	38.111	34.694	4.894
8	M8	W24X55	Yes		0	A992	25.255	26.291	3.533
9	M10	W24X55	Yes		0	A992	14.105	12.741	1.979
10	M11	W24X55	No		0	A992	29.09	29.09	3.432
11	M12	W24X55	Yes		0	A992	23.464	20.748	2.772
12	M13	W10X12	No		0	A992	1.344	1.235	0.105
13	M14	W16X26	Yes		0	A992	6.54	6.54	0.595
14	M15	W21X44	No		0	A992	43.591	19.952	5.997
15	M16	W10X12	No		0	A992	1.752	1.643	0.122
16	M17	W16X26	Yes		0	A992	7.776	7.776	0.647



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B35  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam Design for Hot Rolled : Roof (Continued)**

Building & Safety: OCPDW Approved 4/22/2025

Label	Size	Explicit	Studs	Camber[in]	Material	Max Start R...	Max End R...	Min Start R...	Min End R...
17	M18	W16X26	Yes	0	A992	10.38	10.38	0.804	0.804
18	M19	W24X94	Yes	0	A992	28.202	25.065	4.186	3.78
19	M20	W24X62	Yes	0	A992	36.92	45.556	5.137	4.186
20	M21	W24X55	Yes	0	A992	13.409	19.098	1.998	1.998
21	M26	W24X55	Yes	0	A992	13.328	15.09	2.008	2.404
22	M40	W21X44	Yes	0	A992	12.327	12.575	0.199	0.199
23	M62	W21X44	No	0	A992	15.544	15.544	0.000	0.000
24	M64	W21X44	Yes	0	A992	13.179	13.162	0.000	0.000
25	PUR66	W21X44	Yes	0	A992	15.049	15.049	1.69	1.69
26	M71	W16X26	Yes	0	A992	10.081	10.03	0.937	0.937
27	M72	W16X26	Yes	0	A992	10.041	10.04	0.85	0.85
28	M73	W16X26	No	0	A992	11.382	11.326	0.999	0.933
29	M74	W16X26	No	0	A992	11.337	11.337	0.904	0.904
30	M75	W10X12	No	0	A992	0.058	0.058	0.041	0.041
31	M76	W10X12	No	0	A992	0.058	0.058	0.041	0.041
32	M77	W10X12	No	0	A992	0.073	0.073	0.052	0.052
33	M87	W16X26	Yes	0	A992	0.082	0.082	0.059	0.059
34	M90	W16X26	Yes	0	A992	1.911	4.313	0.339	0.55
35	M36	W18X35	No	0	A992	11.375	15.636	1.432	1.873
36	M37	W16X26	Yes	0	A992	5.434	7.958	0.783	0.999
37	PUR41	W16X26	Yes	0	A992	9.239	9.368	0.834	0.985
38	PUR42	W16X26	Yes	0	A992	8.03	8.03	0.658	0.658
39	PUR43	W16X26	Yes	0	A992	8.03	8.03	0.658	0.658
40	PUR44	W16X26	Yes	0	A992	8.03	8.03	0.658	0.658
41	PUR45	W16X26	No	0	A992	10.718	10.718	0.878	0.878
42	PUR46	W16X26	No	0	A992	10.718	10.718	0.878	0.878
43	PUR47	W16X26	No	0	A992	10.718	10.718	0.878	0.878
44	PUR48	W21X44	No	0	A992	16.039	16.039	1.731	1.731
45	PUR49	W21X44	No	0	A992	16.056	15.571	1.751	1.772
46	PUR50	W21X44	No	0	A992	16.062	14.822	1.758	1.763
47	M51	W10X12	No	0	A992	1.387	0.592	0.167	0.104
48	M52	W10X12	No	0	A992	1.873	1.873	0.148	0.148
49	M58	W16X26	Yes	0	A992	0.122	0.122	0.087	0.087
50	M59	W16X26	Yes	0	A992	0.122	0.122	0.087	0.087
51	M60	W16X26	Yes	0	A992	0.082	0.082	0.059	0.059
52	M61	W16X26	Yes	0	A992	3.605	3.605	0.309	0.309
53	M53	W18X35	Yes	0	A992	11.38	11.38	1.188	1.188
54	M54	W18X35	Yes	0	A992	10.396	10.396	1.146	1.146
55	M55	W18X35	Yes	0	A992	12.291	12.291	1.226	1.226
56	PUR56	W18X35	Yes	0	A992	10.469	10.469	1.149	1.149

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0901  
 County of Orange - OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plans specific to OC SHALL NOT be valid if it is not a permit or be an approval of the violation of any provisions of any County Ordinance or the law.  
 Hadi Tabatabaee  
 Building Official

**Beam Code Summary for Hot Rolled : Level 2**

Label	Size	Explicit	Studs	Camb...	Material	Bending...	Loc[ft]	LC	Defl Ch...	Loc[ft]	Cat	Shear C...	Loc[ft]	LC	
1	M1	W24X84	No	0	A992	0.685	0	6	0.715	15	DL+...	0.235	0	6	
2	M2	W24X84	No	0	A992	0.985	0	6	0.739	10.391	DL+...	0.399	0	6	
3	M3	W24X84	No	0	A992	0.773	24.167	6	0.798	11.832	DL+...	0.285	0	6	
4	M4	W24X84	No	0	A992	0.776	0	6	0.777	12.125	DL+...	0.285	0	6	
5	M5	W27X114	No	0	A992	0.621	0	6	0.67	14.625	DL+...	0.228	3.047	6	
6	M6	W27X114	No	0	A992	0.996	0	6	0.786	14.625	DL+...	0.399	0	6	
7	M7	W27X114	No	0	A992	0.911	33.5	6	0.723	17.099	DL+...	0.383	33.5	6	
8	M8	W24X55	No	30	0	A992	0.585	16.359	6	0.879	14.845	DL+...	0.209	29.0...	6
9	M9	W24X68	No	0	A992	0.626	19.195	6	0.98	14.93	DL+...	0.288	29.25	6	
10	M10	W24X55	Yes	22	0	A992	0.454	13.493	6	0.522	11.167	DL+...	0.129	0	6
11	M11	W24X68	No	32	0	A992	0.594	19.195	6	0.891	14.625	DL+...	0.186	0	6
12	M12	W24X55	Yes	22	0	A992	0.736	13.493	6	0.812	11.167	DL+...	0.194	0	6
13	M13	W10X12	No	0	A992	0.09	3	6	0.062	3	DL+...	0.05	6	6	



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B36  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam Code Summary for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPDW AzarwoodB 4/22/2025

Label	Size	Explicit	Studs	Camb...	Material	Bending...	Loc[ft]	LC	Defl Ch...	Loc[ft]	Cat	Shear C...	Loc[ft]	LC	
14	M14	W16X26	Yes	18	0	A992	0.443	9.083	6	0.58	9.083	DL+...	0.153	18.1...	6
15	M15	W24X55	No	38	0	A992	0.83	5.81	6	0.901	10.609	DL+...	0.405	0	6
16	M16	W16X26	Yes	18	0	A992	0.038	3	6	0.06	0	DL+...	0.196	24.25	6
17	M17	W16X26	Yes	18	0	A992	0.531	9.083	6	0.696	9.083	DL+...	0.198	24.25	6
18	M18	W16X31	Yes	24	0	A992	0.442	12.125	6	0.794	12.125	DL+...	0.198	24.25	6
19	M19	W24X94	Yes	22	0	A992	0.61	13.493	6	0.648	11.399	DL+...	0.198	24.25	6
20	M20	W24X94	Yes	30	0	A992	0.663	14.845	6	0.93	14.845	DL+...	0.198	24.25	6
21	M21	W24X55	Yes	16	0	A992	0.213	4.494	6	0.152	6.668	DL+...	0.196	24.25	6
22	M22	W12X35	Yes	22	0	A992	0.398	11.375	6	0.801	11.612	DL+...	0.196	24.25	6
23	M23	W12X26	Yes	18	0	A992	0.395	8.917	6	0.69	8.917	DL+...	0.147	11.7...	6
24	M24	W14X48	Yes	20	0	A992	0.582	10.33	6	0.878	10.123	DL+...	0.231	0	6
25	M25	W24X55	Yes	30	0	A992	0.373	15	6	0.556	15	DL+...	0.21	0	6
26	M26	W24X94	Yes	32	0	A992	0.393	19.792	6	0.599	16.163	DL+...	0.12	31.6...	6
27	M27	W14X48	Yes	20	0	A992	0.573	9.917	6	0.816	9.917	DL+...	0.219	19.8...	6
28	M28	W12X26	Yes	18	0	A992	0.54	14.349	6	0.721	15.833	LL	0.368	14.3...	6
29	M29	W12X26	Yes	18	0	A992	0.584	14.349	6	0.651	15.833	LL	0.395	14.3...	6
30	M30	W14X48	Yes	20	0	A992	0.242	14.349	6	0.25	15.833	DL+...	0.27	14.3...	6
31	M34	W14X48	Yes	20	0	A992	0.177	11.795	6	0.322	13.167	DL+...	0.231	11.7...	6
32	M35	W12X26	Yes	18	0	A992	0.473	8.583	6	0.656	8.583	DL+...	0.173	17.1...	6
33	M36	W12X26	Yes	18	0	A992	0.478	8.625	6	0.664	8.625	DL+...	0.174	0	6
34	M37	W14X61	Yes	20	0	A992	0.215	11.43	6	0.447	19.25	DL+...	0.131	17.2...	6
35	M38	W14X48	Yes	12	0	A992	0.225	8.491	6	0.204	6.398	DL+...	0.188	11.1...	6
36	M39	W14X61	Yes	14	0	A992	0.353	8.698	6	0.359	7.683	DL+...	0.167	13.9...	6
37	M40	W21X48	No	62	0.5	A992	0.716	16.233	6	1.06	17.708	DL+...	0.262	0	6
38	M41	W14X48	Yes	20	0	A992	0.432	8.622	6	0.642	15.917	DL+...	0.24	13.7...	6
39	M42	W14X48	Yes	12	0	A992	0.127	6.082	6	0.132	5.958	DL+...	0.091	11.9...	6
40	M43	W14X48	Yes	24	0	A992	0.442	12.24	6	0.888	12.24	DL+...	0.168	23.5	6
41	M46	W12X16	Yes	10	0	A992	0.386	5.286	6	0.299	7.25	DL+...	0.128	5.286	6
42	M47	W12X26	Yes	18	0	A992	0.062	5.286	6	0.082	7.25	DL+...	0.054	5.286	6
43	M48	W12X16	Yes	10	0	A992	0.166	4.708	6	0.155	4.708	DL+...	0.067	9.417	6
44	M49	W12X16	Yes	10	0	A992	0.112	4.708	6	0.107	4.708	DL+...	0.045	9.417	6
45	M50	W12X16	Yes	24	0	A992	0.323	12.167	6	0.837	12.167	DL+...	0.117	0	6
46	M52	W14X74	Yes	20	0	A992	0.287	13.33	6	0.84	29.083	DL+...	0.168	27.8...	6
47	M53	W14X48	Yes	20	0	A992	0.32	9.625	6	0.444	0	DL+...	0.126	2.206	6
48	M54	W12X30	Yes	30	0	A992	0.31	15.148	6	0.801	15.148	DL+...	0.12	29.0...	6
49	M55	W14X48	Yes	8	0	A992	0	3.75	3	0.06	0	LL	0	7.5	3
50	M56	W14X48	Yes	16	0	A992	0.287	8.082	6	0.381	8.082	DL+...	0.153	15.8...	6
51	M57	W12X16	Yes	8	0	A992	0.002	3.75	3	0.06	0	LL	0.001	7.5	3
52	M58	W12X16	Yes	10	0	A992	0.003	4.833	3	0.06	0	LL	0.001	9.667	3
53	M61	W12X16	Yes	14	0	A992	0.327	7.5	6	0.496	7.5	DL+...	0.081	15	6
54	M62	W21X44	Yes	36	0.5	A992	0.54	17.708	6	0.755	17.708	LL	0.176	35.4...	6
55	M63	W21X44	No	36	0.75	A992	0.619	17.708	6	0.867	17.708	LL	0.202	35.4...	6
56	M64	W21X44	Yes	36	0.5	A992	0.453	17.708	6	0.654	17.708	LL	0.147	0	6
57	PUR65	W21X44	No	36	0.75	A992	0.635	17.708	6	0.889	17.708	LL	0.207	35.4...	6
58	PUR66	W21X44	Yes	36	0.5	A992	0.444	17.708	6	0.62	17.708	LL	0.144	35.4...	6
59	M67	W16X26	Yes	18	0	A992	0.612	9.083	6	0.801	9.083	DL+...	0.211	18.1...	6
60	M68	W16X31	No	24	0	A992	0.509	12.125	6	0.912	12.125	DL+...	0.228	24.25	6
61	M69	W16X26	Yes	18	0	A992	0.628	9.083	6	0.821	9.083	DL+...	0.216	18.1...	6
62	M70	W16X31	No	24	0	A992	0.522	12.125	6	0.935	12.125	DL+...	0.234	24.25	6
63	M71	W16X26	No	24	0	A992	0.41	11.832	6	0.795	11.832	DL+...	0.201	0	6
64	M72	W16X26	No	24	0	A992	0.412	12.125	6	0.775	12.125	DL+...	0.2	24.25	6
65	M73	W16X26	No	24	0	A992	0.464	11.832	6	0.898	11.832	DL+...	0.227	0	6
66	M74	W16X26	No	24	0	A992	0.466	12.125	6	0.875	12.125	DL+...	0.226	24.25	6
67	M75	W16X26	Yes	6	0	A992	0.001	3.417	3	0.06	0	LL	0.001	6.833	3
68	M76	W16X26	Yes	6	0	A992	0.001	3.417	3	0.06	0	LL	0.001	6.833	3
69	M77	W16X26	Yes	8	0	A992	0.002	4.333	3	0.06	0	LL	0.001	8.667	3
70	PUR78	W18X35	Yes	30	0.5	A992	0.529	15	6	0.71	15	LL	0.199	0	6

Permits: BNR 21-0246, LE 21-0853, MEC 21-0514, B71, N11  
 Count of Orange OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job site until it is confirmed that no changes or alterations have been made without the permission of the Planning and Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the validity of any provision of any County Ordinance.  
 Had Tabataee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B37  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam Code Summary for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWA Approved 4/22/2025

Label	Size	Explicit	Studs	Camb...	Material	Bending...	Loc[ft]	LC	Defl Ch...	Loc[ft]	Cat	Shear C..	Loc[ft]	LC	
71	PUR79	W18X35	Yes	30	0.5	A992	0.529	15	6	0.71	15	LL	0.099	0	6
72	M80	W16X26	Yes	8	0	A992	0.002	4.097	3	0.06	0	LL	0.001	8.194	3
73	M81	W16X26	Yes	8	0	A992	0.002	4.097	3	0.06	0	LL	0.001	8.194	3
74	M82	W16X26	Yes	8	0	A992	0.002	4.097	3	0.06	0	LL	0.001	8.194	3
75	M83	W16X26	Yes	4	0	A992	0	2.25	3	0.06	0	LL	0	4.5	3
76	PUR84	W18X35	No	22	0	A992	0.511	11.375	6	0.782	11.612	D	0.162	13.3...	6
77	M85	W14X48	Yes	10	0	A992	0.003	4.958	3	0.06	0	LL	0.001	8.583	3
78	M86	W16X26	Yes	10	0	A992	0.003	4.958	3	0.06	0	LL	0.001	8.583	3
79	M87	W16X26	Yes	4	0	A992	0	2.25	3	0.06	0	LL	0	4.5	3
80	M88	W12X16	Yes	8	0	A992	0.379	4.458	6	0.336	4.458	D	0.162	13.3...	6
81	M89	W10X12	No	6	0	A992	0.002	3.25	3	0.06	0	LL	0	6.5	3
82	M90	W12X26	Yes	14	0	A992	0.337	5.833	6	0.423	6.528	DL+	0.161	13.3...	6
83	M91	W12X16	Yes	8	0	A992	0.272	4.458	6	0.24	4.458	DL+	0.116	8.917	6
84	M92	W12X16	Yes	8	0	A992	0.252	4.458	6	0.222	4.458	DL+	0.108	8.917	6
85	M93	W14X34	Yes		0	A992	0.594	6.641	6	0.775	0	DL+	0.162	6.773	6
86	M94	W14X48	Yes		0	A992	0.536	6.641	6	0.822	0	DL+	0.211	6.641	6
87	M95	W14X34	Yes		0	A992	0.215	6.641	6	0.216	0	DL+	0.112	6.641	6
88	M96	W14X34	Yes		0	A992	0.205	6.641	6	0.196	0	DL+	0.112	6.641	6
89	M97	W14X34	Yes		0	A992	0.27	12.326	6	0.258	11.587	DL+	0.073	23.6...	6
90	M98	W12X16	Yes	8	0	A992	0.223	4.458	6	0.191	4.458	DL+	0.095	8.917	6
91	M99	W10X12	No	4	0	A992	0	2.25	3	0.06	0	LL	0	4.5	3
92	M100	W12X16	Yes	16	0	A992	0.508	8.082	6	0.84	8.082	DL+	0.267	15.8...	6
93	M101	W12X16	Yes	16	0	A992	0.511	8.082	6	0.844	8.082	DL+	0.268	15.8...	6
94	M102	W12X14	No	16	0	A992	0.387	8.082	6	0.667	8.082	DL+	0.231	15.8...	6
95	M105	W12X16	Yes	8	0	A992	0.003	4.292	3	0.06	0	LL	0.001	8.583	3
96	M106	W12X16	Yes	8	0	A992	0.003	4.292	3	0.06	0	LL	0.001	8.583	3
97	M107	W12X16	Yes	8	0	A992	0.003	4.313	3	0.06	0	LL	0.001	8.625	3
98	M108	W12X16	Yes	8	0	A992	0.003	4.313	3	0.06	0	LL	0.001	8.625	3
99	M109	W12X16	Yes	4	0	A992	0	1.667	3	0.06	0	LL	0	3.333	3
100	M103	W14X48	Yes	16	0	A992	0.234	7.752	6	0.317	7.752	DL+	0.124	15.8...	6
101	M104	W10X12	No	6	0	A992	0.001	2.625	3	0.06	0	LL	0	5.25	3
102	M110	W12X16	Yes	8	0	A992	0.003	4.333	3	0.06	0	LL	0.001	8.667	3
103	M111	W12X16	Yes	6	0	A992	0.001	2.625	3	0.06	0	LL	0	5.25	3

**Beam Code Summary for Hot Rolled : Roof**

Label	Size	Explicit	Studs	Camb...	Material	Bending...	Loc[ft]	LC	Defl Ch...	Loc[ft]	Cat	Shear C..	Loc[ft]	LC	
1	M1	W21X83	No		0	A992	0.813	30	6	0.634	15	DL+	0.128	30	6
2	M2	W21X83	No		0	A992	0.895	22.167	6	0.741	11.314	DL+	0.12	22.1...	6
3	M3	W21X83	No		0	A992	0.763	24.167	6	0.537	11.832	DL+	0.152	0	6
4	M4	W21X83	No		0	A992	0.772	0	6	0.527	12.125	DL+	0.152	0	6
5	M5	W24X94	No		0	A992	0.674	0	6	0.683	14.625	DL+	0.178	0	6
6	M6	W24X94	No		0	A992	0.94	0	6	0.895	14.625	DL+	0.303	0	6
7	M7	W24X94	No		0	A992	0.964	0	6	0.734	16.75	DL+	0.271	0	6
8	M8	W24X55	Yes		0	A992	0.42	14.239	6	0.621	14.542	DL+	0.104	29.0...	6
9	M10	W24X55	Yes		0	A992	0.201	13.493	6	0.224	11.167	DL+	0.056	0	6
10	M11	W24X55	No		0	A992	0.56	14.625	6	0.779	14.625	DL+	0.116	29.25	6
11	M12	W24X55	Yes		0	A992	0.352	13.493	6	0.386	11.167	DL+	0.093	0	6
12	M13	W10X12	No		0	A992	0.043	3	6	0.036	0	LL	0.024	0	6
13	M14	W16X26	Yes		0	A992	0.179	9.083	6	0.233	9.083	DL+	0.062	18.1...	6
14	M15	W21X44	No		0	A992	0.673	5.81	6	0.788	10.609	DL+	0.201	0	6
15	M16	W10X12	No		0	A992	0.056	3	6	0.038	3	DL+	0.031	0	6
16	M17	W16X26	Yes		0	A992	0.213	9.083	6	0.276	9.083	DL+	0.073	18.1...	6
17	M18	W16X26	Yes		0	A992	0.38	12.125	6	0.657	12.125	DL+	0.098	24.25	6
18	M19	W24X94	Yes		0	A992	0.213	13.493	6	0.235	11.167	DL+	0.075	0	6
19	M20	W24X62	Yes		0	A992	0.603	17.874	6	0.88	14.542	DL+	0.149	29.0...	6
20	M21	W24X55	Yes		0	A992	0.113	4.494	6	0.087	6.813	DL+	0.076	13.9...	6



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Code Summary for Hot Rolled : Roof (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Label	Size	Explicit	Studs	Camb...	Material	Bending...	Loc[ft]	LC	Defl Ch...	Loc[ft]	Cat	Shear C...	Loc[ft]	LC
21	M26	W24X55	Yes	0	A992	0.246	18.472	6	0.388	16.163	DL+...	0.00	31.5...	6
22	M40	W21X44	Yes	0	A992	0.311	17.708	6	0.633	17.708	DL+...	0.058	35.4...	6
23	M62	W21X44	No	0	A992	0.385	17.708	6	0.753	17.708	DL+...	0.07	35.4...	6
24	M64	W21X44	Yes	0	A992	0.326	17.708	6	0.65	17.708	DL+...	0.06	35.4...	6
25	PUR66	W21X44	Yes	0	A992	0.372	17.708	6	0.729	17.708	DL+...	0.069	35.4...	6
26	M71	W16X26	Yes	0	A992	0.366	11.832	6	0.641	11.832	DL+...	0.07	24.25	6
27	M72	W16X26	Yes	0	A992	0.367	12.125	6	0.635	12.125	DL+...	0.095	24.25	6
28	M73	W16X26	No	0	A992	0.413	11.832	6	0.724	11.832	DL+...	0.07	24.25	6
29	M74	W16X26	No	0	A992	0.415	12.125	6	0.717	12.125	DL+...	0.07	24.25	6
30	M75	W10X12	No	0	A992	0.002	3.417	3	0.036	0	L	0.001	6.833	3
31	M76	W10X12	No	0	A992	0.002	3.417	3	0.036	0	L	0.001	6.833	3
32	M77	W10X12	No	0	A992	0.003	4.333	3	0.036	0	LL	0.001	8.667	3
33	M87	W16X26	Yes	0	A992	0	2.25	3	0.036	0	LL	0	4.5	3
34	M90	W16X26	Yes	0	A992	0.053	9.306	6	0.055	7.222	DL+...	0.041	13.3...	6
35	M36	W18X35	No	0	A992	0.438	18.802	6	0.898	16.493	DL+...	0.098	31.6...	6
36	M37	W16X26	Yes	0	A992	0.214	6.667	6	0.189	6.667	DL+...	0.075	13.3...	6
37	PUR41	W16X26	Yes	0	A992	0.318	11.375	6	0.525	11.612	DL+...	0.088	22.75	6
38	PUR42	W16X26	Yes	0	A992	0.22	9.083	6	0.285	9.083	DL+...	0.076	18.1...	6
39	PUR43	W16X26	Yes	0	A992	0.22	9.083	6	0.285	9.083	DL+...	0.076	18.1...	6
40	PUR44	W16X26	Yes	0	A992	0.22	9.083	6	0.285	9.083	DL+...	0.076	18.1...	6
41	PUR45	W16X26	No	0	A992	0.392	12.125	6	0.678	12.125	DL+...	0.101	24.25	6
42	PUR46	W16X26	No	0	A992	0.392	12.125	6	0.678	12.125	DL+...	0.101	24.25	6
43	PUR47	W16X26	No	0	A992	0.392	12.125	6	0.678	12.125	DL+...	0.101	24.25	6
44	PUR48	W21X44	No	0	A992	0.397	17.708	6	0.776	17.708	DL+...	0.074	35.4...	6
45	PUR49	W21X44	No	0	A992	0.397	18.446	6	0.784	18.446	DL+...	0.074	0	6
46	PUR50	W21X44	No	0	A992	0.397	18.446	6	0.784	18.446	DL+...	0.074	0	6
47	M51	W10X12	No	0	A992	0.061	2.133	6	0.043	3.123	DL+...	0.025	0	6
48	M52	W10X12	No	0	A992	0.085	4.25	6	0.081	4.25	DL+...	0.033	8.5	6
49	M58	W16X26	Yes	0	A992	0.001	3.333	3	0.036	0	LL	0.001	6.667	3
50	M59	W16X26	Yes	0	A992	0.001	3.333	3	0.036	0	LL	0.001	6.667	3
51	M60	W16X26	Yes	0	A992	0	2.25	3	0.036	0	LL	0	4.5	3
52	M61	W16X26	Yes	0	A992	0.048	4.458	6	0.036	0	LL	0.034	8.917	6
53	M53	W18X35	Yes	0	A992	0.342	15	6	0.653	15	DL+...	0.071	30	6
54	M54	W18X35	Yes	0	A992	0.313	15	6	0.597	15	DL+...	0.065	30	6
55	M55	W18X35	Yes	0	A992	0.37	15	6	0.705	15	DL+...	0.077	30	6
56	PUR56	W18X35	Yes	0	A992	0.315	15	6	0.601	15	DL+...	0.066	30	6

**Beam Shear Results for Hot Rolled : Level 2**

Label	Size	Fy[ksi]	PhiVn[k]	Vu[k]	Shear Check	Loc[ft]	LC	
1	M1	W24X84	50	84.651	19.916	0.235	0	6
2	M2	W24X84	50	112.5	44.921	0.399	0	6
3	M3	W24X84	50	58.286	16.633	0.285	0	6
4	M4	W24X84	50	58.286	16.614	0.285	0	6
5	M5	W27X114	50	135.42	30.822	0.228	3.047	6
6	M6	W27X114	50	193.155	77.155	0.399	0	6
7	M7	W27X114	50	264.96	101.36	0.383	33.5	6
8	M8	W24X55	50	251.694	-52.61	0.209	29.083	6
9	M9	W24X68	50	295.065	84.999	0.288	29.25	6
10	M10	W24X55	50	251.694	32.484	0.129	0	6
11	M11	W24X68	50	295.065	54.781	0.186	0	6
12	M12	W24X55	50	251.694	48.749	0.194	0	6
13	M13	W10X12	50	56.259	2.806	0.05	6	6
14	M14	W16X26	50	105.975	16.162	0.153	18.167	6
15	M15	W24X55	50	251.694	101.894	0.405	0	6
16	M16	W16X26	50	105.975	4.223	0.04	6	6
17	M17	W16X26	50	105.975	19.394	0.183	18.167	6



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Shear Results for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Label	Size	Fy[ksi]	PhiVn[k]	Vu[k]	Shear Check	Loc[ft]	LC
18	M18	W16X31	50	131.175	-25.961	0.198	24.25
19	M19	W24X94	50	375.435	69.718	0.186	0
20	M20	W24X94	50	375.435	-105.205	0.28	29.083
21	M21	W24X55	50	251.694	30.055	0.119	0
22	M22	W12X35	50	112.5	-22.033	0.196	22.75
23	M23	W12X26	50	84.18	12.343	0.147	11.93
24	M24	W14X48	50	140.76	32.583	0.231	14.349
25	M25	W24X55	50	251.694	25.068	0.1	14.349
26	M26	W24X94	50	375.435	45.091	0.12	14.349
27	M27	W14X48	50	140.76	-30.786	0.219	19.833
28	M28	W12X26	50	84.18	30.962	0.368	14.349
29	M29	W12X26	50	84.18	33.232	0.395	14.349
30	M30	W14X48	50	140.76	38.021	0.27	14.349
31	M34	W14X48	50	140.76	32.472	0.231	11.795
32	M35	W12X26	50	84.18	-14.597	0.173	17.167
33	M36	W12X26	50	84.18	14.668	0.174	0
34	M37	W14X61	50	156.375	-20.563	0.131	17.245
35	M38	W14X48	50	140.76	26.4	0.188	11.167
36	M39	W14X61	50	156.375	26.097	0.167	13.917
37	M40	W21X48	50	216.3	56.598	0.262	0
38	M41	W14X48	50	140.76	-33.841	0.24	13.761
39	M42	W14X48	50	140.76	12.788	0.091	11.917
40	M43	W14X48	50	140.76	23.678	0.168	23.5
41	M46	W12X16	50	79.2	10.167	0.128	5.286
42	M47	W12X26	50	84.18	4.51	0.054	5.286
43	M48	W12X16	50	79.2	5.33	0.067	9.417
44	M49	W12X16	50	79.2	3.592	0.045	9.417
45	M50	W12X16	50	79.2	9.281	0.117	0
46	M52	W14X74	50	191.7	32.229	0.168	27.871
47	M53	W14X48	50	140.76	17.729	0.126	2.206
48	M54	W12X30	50	95.94	-11.519	0.12	29.083
49	M55	W14X48	50	140.76	0.063	0	7.5
50	M56	W14X48	50	140.76	21.466	0.153	15.833
51	M57	W12X16	50	79.2	0.084	0.001	7.5
52	M58	W12X16	50	79.2	0.108	0.001	9.667
53	M61	W12X16	50	79.2	6.431	0.081	15
54	M62	W21X44	50	217.35	-38.195	0.176	35.417
55	M63	W21X44	50	217.35	-43.94	0.202	35.417
56	M64	W21X44	50	217.35	31.913	0.147	0
57	PUR65	W21X44	50	217.35	-45.053	0.207	35.417
58	PUR66	W21X44	50	217.35	-31.337	0.144	35.417
59	M67	W16X26	50	105.975	22.342	0.211	18.167
60	M68	W16X31	50	131.175	-29.895	0.228	24.25
61	M69	W16X26	50	105.975	22.912	0.216	18.167
62	M70	W16X31	50	131.175	-30.656	0.234	24.25
63	M71	W16X26	50	105.975	21.281	0.201	0
64	M72	W16X26	50	105.975	-21.193	0.2	24.25
65	M73	W16X26	50	105.975	24.085	0.227	0
66	M74	W16X26	50	105.975	-23.985	0.226	24.25
67	M75	W16X26	50	105.975	0.125	0.001	6.833
68	M76	W16X26	50	105.975	0.125	0.001	6.833
69	M77	W16X26	50	105.975	0.159	0.001	8.667
70	PUR78	W18X35	50	159.3	31.713	0.199	0
71	PUR79	W18X35	50	159.3	31.713	0.199	0
72	M80	W16X26	50	105.975	0.15	0.001	8.194
73	M81	W16X26	50	105.975	0.15	0.001	8.194
74	M82	W16X26	50	105.975	0.15	0.001	8.194

Permits: BNR24-0246, ELE21-0856, MEC21-0514, PI B21-0067

County of Orange - OC Public Works  
 Development Services  
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This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plans shall NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Shear Results for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWAzayawB 12/22/2025

Label	Size	Fy[ksi]	PhiVn[k]	Vu[k]	Shear Check	Loc[ft]	LC
75	M83	W16X26	50	105.975	0.082	0	3
76	PUR84	W18X35	50	159.3	-37.232	0.234	6
77	M85	W14X48	50	140.76	0.333	0.002	6
78	M86	W16X26	50	105.975	0.181	0.002	3
79	M87	W16X26	50	105.975	0.082	0	3
80	M88	W12X16	50	79.2	12.806	0.162	6
81	M89	W10X12	50	56.259	0.055	0	3
82	M90	W12X26	50	84.18	13.537	0.161	6
83	M91	W12X16	50	79.2	9.211	0.116	6
84	M92	W12X16	50	79.2	8.526	0.108	6
85	M93	W14X34	50	119.7	19.399	0.162	6
86	M94	W14X48	50	140.76	-29.712	0.211	6
87	M95	W14X34	50	119.7	-13.414	0.112	6
88	M96	W14X34	50	119.7	-13.383	0.112	6
89	M97	W14X34	50	119.7	8.709	0.073	6
90	M98	W12X16	50	79.2	7.552	0.095	6
91	M99	W10X12	50	56.259	0.038	0	3
92	M100	W12X16	50	79.2	-21.163	0.267	6
93	M101	W12X16	50	79.2	-21.265	0.268	6
94	M102	W12X14	50	64.26	-14.821	0.231	6
95	M105	W12X16	50	79.2	0.096	0.001	3
96	M106	W12X16	50	79.2	0.096	0.001	3
97	M107	W12X16	50	79.2	0.097	0.001	3
98	M108	W12X16	50	79.2	0.097	0.001	3
99	M109	W12X16	50	79.2	0.037	0	3
100	M103	W14X48	50	140.76	17.495	0.124	6
101	M104	W10X12	50	56.259	0.044	0	3
102	M110	W12X16	50	79.2	0.097	0.001	3
103	M111	W12X16	50	79.2	0.059	0	3

Permits: BNR22-0246, ELE21-0853, MEC21-0514, PI B21-0907  
 County of Orange - OC Public Works  
 909 Development Services  
 4.5 APPROVED  
 This seal, plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works. The stamping of these plans by Orange County Public Works SHALL NOT be held to be an approval of the violation of any provisions of any County Ordinance or State law.  
 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Beam Shear Results for Hot Rolled : Roof**

Label	Size	Fy[ksi]	PhiVn[k]	Vu[k]	Shear Check	Loc[ft]	LC
1	M1	W21X83	50	62.1	7.92	0.128	6
2	M2	W21X83	50	41.607	5.007	0.12	6
3	M3	W21X83	50	56.166	8.514	0.152	6
4	M4	W21X83	50	56.166	8.525	0.152	6
5	M5	W24X94	50	84.651	15.051	0.178	6
6	M6	W24X94	50	135.42	41.036	0.303	6
7	M7	W24X94	50	140.76	38.111	0.271	6
8	M8	W24X55	50	251.694	26.291	0.104	6
9	M10	W24X55	50	251.694	14.105	0.056	6
10	M11	W24X55	50	251.694	29.09	0.116	6
11	M12	W24X55	50	251.694	23.464	0.093	6
12	M13	W10X12	50	56.259	1.344	0.024	6
13	M14	W16X26	50	105.975	6.54	0.062	6
14	M15	W21X44	50	217.35	43.591	0.201	6
15	M16	W10X12	50	56.259	1.752	0.031	6
16	M17	W16X26	50	105.975	7.776	0.073	6
17	M18	W16X26	50	105.975	10.38	0.098	6
18	M19	W24X94	50	375.435	28.202	0.075	6
19	M20	W24X62	50	305.73	45.556	0.149	6
20	M21	W24X55	50	251.694	19.098	0.076	6
21	M26	W24X55	50	251.694	15.09	0.06	6
22	M40	W21X44	50	217.35	12.575	0.058	6
23	M62	W21X44	50	217.35	15.544	0.072	6
24	M64	W21X44	50	217.35	13.179	0.061	6



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Shear Results for Hot Rolled : Roof (Continued)**

Building & Safety: OCPWAzayvoodP 4/22/2025

Label	Size	Fy[ksi]	PhiVn[k]	Vu[k]	Shear Check	Loc[ft]	LC	
25	PUR66	W21X44	50	217.35	15.049	0.069	35.417	6
26	M71	W16X26	50	105.975	10.081	0.095	0	6
27	M72	W16X26	50	105.975	10.041	0.095	24.25	6
28	M73	W16X26	50	105.975	11.382	0.107	0	6
29	M74	W16X26	50	105.975	11.337	0.107	24.25	6
30	M75	W10X12	50	56.259	0.058	0.001	0.000	6
31	M76	W10X12	50	56.259	0.058	0.001	0.000	6
32	M77	W10X12	50	56.259	0.073	0.001	0.000	6
33	M87	W16X26	50	105.975	0.082	0	4.5	3
34	M90	W16X26	50	105.975	4.313	0.041	13.333	6
35	M36	W18X35	50	159.3	15.636	0.098	31.667	6
36	M37	W16X26	50	105.975	7.958	0.075	13.333	6
37	PUR41	W16X26	50	105.975	9.368	0.088	22.75	6
38	PUR42	W16X26	50	105.975	8.03	0.076	18.167	6
39	PUR43	W16X26	50	105.975	8.03	0.076	18.167	6
40	PUR44	W16X26	50	105.975	8.03	0.076	18.167	6
41	PUR45	W16X26	50	105.975	10.718	0.101	24.25	6
42	PUR46	W16X26	50	105.975	10.718	0.101	24.25	6
43	PUR47	W16X26	50	105.975	10.718	0.101	24.25	6
44	PUR48	W21X44	50	217.35	16.039	0.074	35.417	6
45	PUR49	W21X44	50	217.35	16.056	0.074	0	6
46	PUR50	W21X44	50	217.35	16.062	0.074	0	6
47	M51	W10X12	50	56.259	1.387	0.025	0	6
48	M52	W10X12	50	56.259	1.873	0.033	8.5	6
49	M58	W16X26	50	105.975	0.122	0.001	6.667	3
50	M59	W16X26	50	105.975	0.122	0.001	6.667	3
51	M60	W16X26	50	105.975	0.082	0	4.5	3
52	M61	W16X26	50	105.975	3.605	0.034	8.917	6
53	M53	W18X35	50	159.3	11.38	0.071	30	6
54	M54	W18X35	50	159.3	10.396	0.065	30	6
55	M55	W18X35	50	159.3	12.291	0.077	30	6
56	PUR56	W18X35	50	159.3	10.469	0.066	30	6

Permits: BNR21-0946, ELE21-0855, MEC21-0514, PL B21-0946

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 Development Services  
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This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from the County of Orange, Department of Development Services. The stamping of these plans specifies that ALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 Seal No. 10124

**Beam Bending Results for Hot Rolled : Level 2**

Label	Size	Co...	Studs	Fy[ksi]	Lb Top[...]	Lb Bot[ft]	L-tor...	Cb	Cm	PhiM...	Mu[k-ft]	Tmax...	Cf[ksi]	Bendin...	Loc[ft]	LC	Equ...
1	M1	W2...	No	50	2	30	30	2.359	0	144.5...	-99.068			0.685	0	6	H1-1b
2	M2	W2...	No	50	2	22.167	22.1...	2.389	0	192	-189...			0.985	0	6	H1-1b
3	M3	W2...	No	50	2	24.167	24.1...	2.385	0	86.625	-66.922			0.773	24.1...	6	H1-1b
4	M4	W2...	No	50	2	24.25	24.25	2.378	0	86.625	-67.225			0.776	0	6	H1-1b
5	M5	W2...	No	50	2	29.25	29.25	2.241	0	269.6...	-167...			0.621	0	6	H1-1b
6	M6	W2...	No	50	2	29.25	29.25	2.298	0	487.5	-485...			0.996	0	6	H1-1b
7	M7	W2...	No	50	2	33.5	33.5	2.275	0	697.5	-635...			0.911	33.5	6	H1-1b
8	M8	W2...	Yes	30	50					746.3...	436.6...	397.8	227.1...	0.585	16.3...	6	I3.2.a
9	M9	W2...	No	50	2	29.25	29.25	1.004	0	663.75	415.2...			0.626	19.1...	6	H1-1b
10	M10	W2...	No	22	50	2	22.333	22.3...	1.001	0	502.5	228.3...		0.454	13.4...	6	H1-1b
11	M11	W2...	Yes	32	50					884.1...	525.6...	727.2...	192.1...	0.594	19.1...	6	I3.2.a
12	M12	W2...	No	22	50	2	22.333	22.3...	1.004	0	502.5	369.6...		0.736	13.4...	6	H1-1b
13	M13	W1...	No	50	2	6	6	1.014	0	46.904	4.208			0.09	3	6	H1-1b
14	M14	W1...	No	18	50	2	18.167	18.1...	1.001	0	165.75	73.402		0.443	9.083	6	H1-1b
15	M15	W2...	Yes	38	50					676.6...	561.3...	525.22	146.4...	0.83	5.81	6	I3.2.a
16	M16	W1...	No	50	2	6	6	1.014	0	165.75	6.335			0.038	3	6	H1-1b
17	M17	W1...	No	18	50	2	18.167	18.1...	1.001	0	165.75	88.083		0.531	9.083	6	H1-1b
18	M18	W1...	Yes	24	50					356.2...	157.3...	456.5	206.7...	0.442	12.1...	6	I3.2.a
19	M19	W2...	No	22	50	2	22.333	22.3...	1.007	0	952.5	580.5...		0.61	13.4...	6	H1-1b
20	M20	W2...	Yes	30	50					1244...	824.9...	460.9...	262.0...	0.663	14.8...	6	I3.2.a
21	M21	W2...	Yes	16	50					612.0...	130.4...	346.0...	87.351	0.213	4.494	6	I3.2.a



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B42  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam Bending Results for Hot Rolled : Level 2 (Continued)**

Building & Safety - OCPWA Approved 12/22/2025

Label	Size	Co...	Studs	Fy[ksi]	Lb Top	Lb Bot	L-tor	Cb	Cm	PhiM	Mu[k-ft]	Tmax	Cfk[ksi]	Bendin...	Loc[ft]	LC	Egu...
22	M22	W1...	Yes	22	50					312.7...	124.4...	382.2...	189.5...	0.395	8.917	6	H1-1b
23	M23	W1...	No	18	50	2	17.833	17.8...	1.002	0	139.5	55.133		0.395	8.917	6	H1-1b
24	M24	W1...	Yes	20	50					420.9...	245.0...	346.0...	174.7...	0.582	10.33	6	H1-1b
25	M25	W2...	No	30	50	2	30	30	1.001	0	502.5	187.4...		0.379	10.33	6	H1-1b
26	M26	W2...	No	32	50	2	31.667	31.6...	1.001	0	952.5	374.4...		0.393	10.33	6	H1-1b
27	M27	W1...	Yes	20	50					423.6...	242.6...	462.0...	174.7...	0.395	8.917	6	H1-1b
28	M28	W1...	No		50	1.5	15.833	15.8...	1	0	79.389	-42.84		0.242	4.43	6	H1-1b
29	M29	W1...	No		50	1.5	15.833	15.8...	1	0	79.389	-46.386		0.242	4.43	6	H1-1b
30	M30	W1...	No		50	1.5	15.833	15.8...	1	0	224.39	-54.352		0.242	4.43	6	H1-1b
31	M34	W1...	No		50	1.5	13.167	13.1...	1	0	244.8...	-43.436		0.177	3.14	6	H1-1b
32	M35	W1...	Yes	18	50					228.4...	108.0...	174.0...	157.2...	0.473	8.583	6	I3.2 a
33	M36	W1...	Yes	18	50					228.4...	109.1...	174.0...	157.2...	0.478	8.625	6	I3.2 a
34	M37	W1...	No		50	2	19.25	19.25	1	0	382.5	82.12		0.215	11.43	6	H1-1b
35	M38	W1...	No	12	50	2	11.167	11.1...	1.009	0	294	66.212		0.225	8.491	6	H1-1b
36	M39	W1...	No	14	50	2	13.917	13.9...	1.153	0	382.5	135.1...		0.353	8.698	6	H1-1b
37	M40	W2...	Yes	62	50					711.5...	509.3...	705	424.7...	0.716	16.2...	6	I3.2 a
38	M41	W1...	No		50	2	15.917	15.9...	1.031	0	294	127.1...		0.432	8.622	6	H1-1b
39	M42	W1...	No	12	50	2	11.917	11.9...	1.013	0	294	37.239		0.127	6.082	6	H1-1b
40	M43	W1...	No	24	50	2	23.5	23.5	1.007	0	294	130.0...		0.442	12.24	6	H1-1b
41	M46	W1...	No		50	2	7.25	7.25	1	0	49.51	-19.094		0.386	5.286	6	H1-1b
42	M47	W1...	No		50	2	7.25	7.25	1	0	129.0...	-7.955		0.062	5.286	6	H1-1b
43	M48	W1...	No	10	50	2	9.417	9.417	1.008	0	75.375	12.549		0.166	4.708	6	H1-1b
44	M49	W1...	No	10	50	2	9.417	9.417	1.008	0	75.375	8.456		0.112	4.708	6	H1-1b
45	M50	W1...	Yes	24	50					174.8...	56.461	198.9	206.7...	0.323	12.1...	6	I3.2 a
46	M52	W1...	No		50	2	29.083	29.0...	1.005	0	472.5	135.6...		0.287	13.33	6	H1-1b
47	M53	W1...	No		50	2	19.25	19.25	1.055	0	294	94.143		0.32	9.625	6	H1-1b
48	M54	W1...	Yes	30	50					269.9...	83.556	203.0...	241.2...	0.31	15.1...	6	I3.2 a
49	M55	W1...	No	8	50	2	7.5	7.5	1.044	0	294	0.119		0	3.75	3	H1-1b
50	M56	W1...	No	16	50	2	15.833	15.8...	1.016	0	294	84.448		0.287	8.082	6	H1-1b
51	M57	W1...	No	8	50	2	7.5	7.5	1.044	0	75.375	0.158		0.002	3.75	3	H1-1b
52	M58	W1...	No	10	50	2	9.667	9.667	1.006	0	75.375	0.262		0.003	4.833	3	H1-1b
53	M61	W1...	No	14	50	2	15	15	1.005	0	75.375	24.641		0.327	7.5	6	H1-1b
54	M62	W2...	Yes	36	50					626.7...	338.1...	650	310.1...	0.54	17.7...	6	I3.2 a
55	M63	W2...	Yes	36	50					628.4...	389.0...	650	310.1...	0.619	17.7...	6	I3.2 a
56	M64	W2...	Yes	36	50					624.1...	282.4...	650	310.1...	0.453	17.7...	6	I3.2 a
57	PUR65	W2...	Yes	36	50					628.4...	398.9...	650	310.1...	0.635	17.7...	6	I3.2 a
58	PUR66	W2...	Yes	36	50					624.5...	277.4...	650	310.1...	0.444	17.7...	6	I3.2 a
59	M67	W1...	No	18	50	2	18.167	18.1...	1.001	0	165.75	101.4...		0.612	9.083	6	H1-1b
60	M68	W1...	Yes	24	50					356.2...	181.2...	456.5	206.7...	0.509	12.1...	6	I3.2 a
61	M69	W1...	No	18	50	2	18.167	18.1...	1.001	0	165.75	104.0...		0.628	9.083	6	H1-1b
62	M70	W1...	Yes	24	50					356.2...	185.8...	456.5	206.7...	0.522	12.1...	6	I3.2 a
63	M71	W1...	Yes	24	50					312.1...	128.0...	384	206.7...	0.41	11.8...	6	I3.2 a
64	M72	W1...	Yes	24	50					312.2...	128.4...	384	206.7...	0.412	12.1...	6	I3.2 a
65	M73	W1...	Yes	24	50					312.1...	144.9...	384	206.7...	0.464	11.8...	6	I3.2 a
66	M74	W1...	Yes	24	50					312.2...	145.41	384	206.7...	0.466	12.1...	6	I3.2 a
67	M75	W1...	No	6	50	2	6.833	6.833	1.023	0	165.75	0.214		0.001	3.417	3	H1-1b
68	M76	W1...	No	6	50	2	6.833	6.833	1.023	0	165.75	0.214		0.001	3.417	3	H1-1b
69	M77	W1...	No	8	50	2	8.667	8.667	1.023	0	165.75	0.344		0.002	4.333	3	H1-1b
70	PUR78	W1...	Yes	30	50					447.9...	237.0...	515	258.4...	0.529	15	6	I3.2 a
71	PUR79	W1...	Yes	30	50					447.9...	237.0...	515	258.4...	0.529	15	6	I3.2 a
72	M80	W1...	No	8	50	2	8.194	8.194	1.044	0	165.75	0.307		0.002	4.097	3	H1-1b
73	M81	W1...	No	8	50	2	8.194	8.194	1.044	0	165.75	0.307		0.002	4.097	3	H1-1b
74	M82	W1...	No	8	50	2	8.194	8.194	1.044	0	165.75	0.307		0.002	4.097	3	H1-1b
75	M83	W1...	No	4	50	2	4.5	4.5	1.122	0	165.75	0.093		0	2.25	3	H1-1b
76	PUR84	W1...	Yes	22	50					411.5...	210.4...	515	189.5...	0.511	11.3...	6	I3.2 a
77	M85	W1...	No	10	50	2	9.917	9.917	1.005	0	294	0.826		0.003	4.958	3	H1-1b
78	M86	W1...	No	10	50	2	9.917	9.917	1.005	0	165.75	0.45		0.003	4.958	3	H1-1b

Permits: 20210246-ELE27-0850-MC27-0514, 20210305-CPWA-0850-MC27-0514  
 7. Columns Change - CC Public Works  
 79 Development Services  
 APPROVED  
 The stamping of these plans shall not be held to be an approval of any provision of any County Code, Ordinance or Resolution.



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B43  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam Bending Results for Hot Rolled : Level 2 (Continued)**

Building & Safety: OCPWAzayvoodR 42/22/2025

Label	Size	Co...	Studs	Fy[ksj]	Lb Top[...]	Lb Bot[ft]	L-tor...	Cb	Cm	PhiM...	Mu[k-ft]	Tmax...	Cf[ksj]	Bendin...	Loc[ft]	LC	Equ...	
79	M87	W1...	No	4	50	2	4.5	4.5	1.122	0	165.75	0.093		0.379	4.458	6	H1-1b	
80	M88	W1...	No	8	50	2	8.917	8.917	1.018	0	75.375	28.548		0.272	4.458	6	H1-1b	
81	M89	W1...	No	6	50	2	6.5	6.5	1.016	0	46.904	0.089		0.397	4.458	6	H1-1b	
82	M90	W1...	No	14	50	2	13.333	13.3...	1.13	0	139.5	46.964		0.397	4.458	6	H1-1b	
83	M91	W1...	No	8	50	2	8.917	8.917	1.018	0	75.375	20.532		0.272	4.458	6	H1-1b	
84	M92	W1...	No	8	50	2	8.917	8.917	1.018	0	75.375	19.006		0.272	4.458	6	H1-1b	
85	M93	W1...	No		50	2	12.75	12.75	1	0	148.9...	-88.441		0.245	6.041	6	H1-1b	
86	M94	W1...	No		50	2	12.75	12.75	1	0	248.0...	-132....		0.245	6.041	6	H1-1b	
87	M95	W1...	No		50	2	12.75	12.75	1	0	148.9...	-32.096		0.245	6.041	6	H1-1b	
88	M96	W1...	No		50	2	12.75	12.75	1	0	148.9...	-30.478		0.205	6.041	6	H1-1b	
89	M97	W1...	No		50	2	23.667	23.6...	1.002	0	204.75	55.244		0.27	12.3	6	H1-1b	
90	M98	W1...	No	8	50	2	8.917	8.917	1.018	0	75.375	16.835		0.223	4.458	6	H1-1b	
91	M99	W1...	No	4	50	2	4.5	4.5	1.122	0	46.904	0.043		0	2.25	3	H1-1b	
92	M100	W1...	Yes	16	50						163.8...	83.247	235.5	137.8...	0.508	8.082	6	I3.2.a
93	M101	W1...	Yes	16	50						163.8...	83.648	235.5	137.8...	0.511	8.082	6	I3.2.a
94	M102	W1...	Yes	16	50						150.58	58.303	208	137.8...	0.387	8.082	6	I3.2.a
95	M105	W1...	No	8	50	2	8.583	8.583	1.028	0	75.375	0.207		0.003	4.292	3	H1-1b	
96	M106	W1...	No	8	50	2	8.583	8.583	1.028	0	75.375	0.207		0.003	4.292	3	H1-1b	
97	M107	W1...	No	8	50	2	8.625	8.625	1.023	0	75.375	0.209		0.003	4.313	3	H1-1b	
98	M108	W1...	No	8	50	2	8.625	8.625	1.023	0	75.375	0.209		0.003	4.313	3	H1-1b	
99	M109	W1...	No	4	50	2	3.333	3.333	1.219	0	75.375	0.031		0	1.667	3	H1-1b	
100	M103	W1...	No	16	50	2	15.833	15.8...	1.004	0	294	68.852		0.234	7.752	6	H1-1b	
101	M104	W1...	No	6	50	2	5.25	5.25	1.035	0	46.904	0.058		0.001	2.625	3	H1-1b	
102	M110	W1...	No	8	50	2	8.667	8.667	1.023	0	75.375	0.211		0.003	4.333	3	H1-1b	
103	M111	W1...	No	6	50	2	5.25	5.25	1.035	0	75.375	0.077		0.001	2.625	3	H1-1b	

Permits: BNR21-0346, ELEC21-0856, MEC21-0514, PR 21-0540  
 Co. 002 Co. 25 - CC Public Works  
 Development Services  
 APPROVED  
 This set of drawings and specifications shall be kept on the job site and shall be used as a guide for construction. No changes or alterations shall be made without the written permission of the Design Services. The contractor shall be responsible for obtaining all necessary permits and approvals. The contractor shall be an approved contractor of any provisions of any County Ordinance or State Code.

**Beam Bending Results for Hot Rolled : Roof**

Label	Size	Co...	Studs	Fy[ksj]	Lb Top[...]	Lb Bot[ft]	L-tor...	Cb	Cm	PhiM...	Mu[k-ft]	Tmax...	Cf[ksj]	Bendin...	Loc[ft]	LC	Equ...
1	M1	W2...	No		50	2	30	30	2.358	0	48.503	-39.439		0.813	30	6	H1-1b
2	M2	W2...	No		50	2	22.167	22.1...	2.378	0	20.643	-18.465		0.895	22.1...	6	H1-1b
3	M3	W2...	No		50	2	24.167	24.1...	2.383	0	45.019	-34.359		0.763	24.1...	6	H1-1b
4	M4	W2...	No		50	2	24.25	24.25	2.377	0	44.714	-34.521		0.772	0	6	H1-1b
5	M5	W2...	No		50	2	29.25	29.25	2.068	0	130.6...	-88.045		0.674	0	6	H1-1b
6	M6	W2...	No		50	2	29.25	29.25	1.987	0	260.9...	-245....		0.94	0	6	H1-1b
7	M7	W2...	No		50	2	33.5	33.5	2.35	0	238.7...	-230....		0.964	0	6	H1-1b
8	M8	W2...	No		50	2	29.083	29.0...	1	0	502.5	210.9...		0.42	14.2...	6	H1-1b
9	M10	W2...	No		50	2	22.333	22.3...	1.002	0	502.5	101.2...		0.201	13.4...	6	H1-1b
10	M11	W2...	No		50	2	29.25	29.25	1.017	0	502.5	281.2...		0.56	14.6...	6	H1-1b
11	M12	W2...	No		50	2	22.333	22.3...	1.003	0	502.5	176.9...		0.352	13.4...	6	H1-1b
12	M13	W1...	No		50	2	6	6	1.014	0	46.904	2		0.043	3	6	H1-1b
13	M14	W1...	No		50	2	18.167	18.1...	1.001	0	165.75	29.704		0.179	9.083	6	H1-1b
14	M15	W2...	No		50	2	24.25	24.25	1.154	0	357.75	240.7...		0.673	5.81	6	H1-1b
15	M16	W1...	No		50	2	6	6	1.014	0	46.904	2.612		0.056	3	6	H1-1b
16	M17	W1...	No		50	2	18.167	18.1...	1.001	0	165.75	35.316		0.213	9.083	6	H1-1b
17	M18	W1...	No		50	2	24.25	24.25	1.004	0	165.75	62.927		0.38	12.1...	6	H1-1b
18	M19	W2...	No		50	2	22.333	22.3...	1.002	0	952.5	203.1...		0.213	13.4...	6	H1-1b
19	M20	W2...	No		50	2	29.083	29.0...	1	0	573.75	345.8...		0.603	17.8...	6	H1-1b
20	M21	W2...	No		50	2	13.917	13.9...	1.051	0	502.5	56.974		0.113	4.494	6	H1-1b
21	M26	W2...	No		50	2	31.667	31.6...	1.002	0	502.5	123.82		0.246	18.4...	6	H1-1b
22	M40	W2...	No		50	2	35.417	35.4...	1.002	0	357.75	111.2...		0.311	17.7...	6	H1-1b
23	M62	W2...	No		50	2	35.417	35.4...	1.002	0	357.75	137.63		0.385	17.7...	6	H1-1b
24	M64	W2...	No		50	2	35.417	35.4...	1.001	0	357.75	116.7...		0.326	17.7...	6	H1-1b
25	PUR66	W2...	No		50	2	35.417	35.4...	1.002	0	357.75	133.25		0.372	17.7...	6	H1-1b
26	M71	W1...	No		50	2	24.167	24.1...	1.009	0	165.75	60.67		0.366	11.8...	6	H1-1b
27	M72	W1...	No		50	2	24.25	24.25	1.004	0	165.75	60.873		0.367	12.1...	6	H1-1b
28	M73	W1...	No		50	2	24.167	24.1...	1.009	0	165.75	68.502		0.413	11.8...	6	H1-1b



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Bending Results for Hot Rolled : Roof (Continued)**

Building & Safety: OCPWAzayvndB 12/22/2025

Label	Size	Co...	Studs	Fy[ksi]	Lb Top	Lb Bot[ft]	L-tor...	Cb	Cm	PhiM...	Mu[k-ft]	Tmax...	Cf[ksi]	Bendin...	Loc[ft]	LC	Egu...
29	M74	W1...	No	50	2	24.25	24.25	1.004	0	165.75	68.73			0.002	3.417	6	H1-1b
30	M75	W1...	No	50	2	6.833	6.833	1.023	0	46.904	0.098			0.002	3.417	3	H1-1b
31	M76	W1...	No	50	2	6.833	6.833	1.023	0	46.904	0.098			0.002	3.417	3	H1-1b
32	M77	W1...	No	50	2	8.667	8.667	1.023	0	46.904	0.158			0.009	2.25	3	H1-1b
33	M87	W1...	No	50	2	4.5	4.5	1.122	0	165.75	0.093			0	2.25	3	H1-1b
34	M90	W1...	No	50	2	13.333	13.3...	1.002	0	165.75	8.851			0.050	9.083	6	H1-1b
35	M36	W1...	No	50	2	31.667	31.6...	1	0	249.3...	109.1...			0.438	15	6	H1-1b
36	M37	W1...	No	50	2	13.333	13.3...	1.034	0	165.75	35.53			0.214	9.083	6	H1-1b
37	PUR41	W1...	No	50	2	22.75	22.75	1.003	0	165.75	52.716			0.348	15	6	H1-1b
38	PUR42	W1...	No	50	2	18.167	18.1...	1.001	0	165.75	36.468			0.22	9.083	6	H1-1b
39	PUR43	W1...	No	50	2	18.167	18.1...	1.001	0	165.75	36.468			0.22	9.083	6	H1-1b
40	PUR44	W1...	No	50	2	18.167	18.1...	1.001	0	165.75	36.468			0.22	9.083	6	H1-1b
41	PUR45	W1...	No	50	2	24.25	24.25	1.004	0	165.75	64.981			0.392	12.1...	6	H1-1b
42	PUR46	W1...	No	50	2	24.25	24.25	1.004	0	165.75	64.981			0.392	12.1...	6	H1-1b
43	PUR47	W1...	No	50	2	24.25	24.25	1.004	0	165.75	64.981			0.392	12.1...	6	H1-1b
44	PUR48	W2...	No	50	2	35.417	35.4...	1.002	0	357.75	142.01			0.397	17.7...	6	H1-1b
45	PUR49	W2...	No	50	2	35.417	35.4...	1.003	0	357.75	142.0...			0.397	18.4...	6	H1-1b
46	PUR50	W2...	No	50	2	35.417	35.4...	1.003	0	357.75	142.1...			0.397	18.4...	6	H1-1b
47	M51	W1...	No	50	2	7.313	7.313	1.154	0	46.904	2.872			0.061	2.133	6	H1-1b
48	M52	W1...	No	50	2	8.5	8.5	1.028	0	46.904	3.981			0.085	4.25	6	H1-1b
49	M58	W1...	No	50	2	6.667	6.667	1.019	0	165.75	0.203			0.001	3.333	3	H1-1b
50	M59	W1...	No	50	2	6.667	6.667	1.019	0	165.75	0.203			0.001	3.333	3	H1-1b
51	M60	W1...	No	50	2	4.5	4.5	1.122	0	165.75	0.093			0	2.25	3	H1-1b
52	M61	W1...	No	50	2	8.917	8.917	1.018	0	165.75	8.037			0.048	4.458	6	H1-1b
53	M53	W1...	No	50	2	30	30	1.001	0	249.3...	85.35			0.342	15	6	H1-1b
54	M54	W1...	No	50	2	30	30	1.001	0	249.3...	77.971			0.313	15	6	H1-1b
55	M55	W1...	No	50	2	30	30	1.001	0	249.3...	92.182			0.37	15	6	H1-1b
56	PUR56	W1...	No	50	2	30	30	1.001	0	249.3...	78.517			0.315	15	6	H1-1b

Permits: BAP21-0256, ELE21-0858, MEC21-0514, PR 24, rma  
 Co-Ordinate Grange - GC Public Works  
 Development Services  
 APPROVED  
 This set of plans contains information that is kept on the job site and is not to be used for any changes or alterations without the written permission of the City of Dana Point. The City of Dana Point is not responsible for the stamping of these plans. No work shall be performed on these plans without the approval of the position of any supervisor of any County of Orange State local agency.

**Beam Deflections, Relative for Standard Cats : Level 2**

Beam	Camber[in]	PreDL[in]	PreDL Ratio	DL[in]	DL Ratio	LL[in]	LL Ratio	DL+LL[in]	DL+LL Ratio	
1	M1	0	0.231	1557	0.325	1109	0.391	921	0.715	503
2	M2	0	0.13	2052	0.326	817	0.22	1207	0.546	487
3	M3	0	0.204	1424	0.289	1005	0.354	819	0.643	451
4	M4	0	0.197	1479	0.28	1039	0.348	837	0.628	464
5	M5	0	0.178	1971	0.363	967	0.29	1209	0.653	537
6	M6	0	0.247	1420	0.346	1015	0.42	836	0.766	458
7	M7	0	0.233	1723	0.427	942	0.381	1056	0.807	498
8	M8	0	0.394	886	0.482	723	0.369	945	0.852	410
9	M9	0	0.25	1404	0.542	647	0.413	850	0.955	367
10	M10	0	0.111	2419	0.208	1286	0.181	1485	0.389	689
11	M11	0	0.363	968	0.461	762	0.408	860	0.869	404
12	M12	0	0.193	1386	0.273	982	0.331	809	0.604	443
13	M13	0	0.004	10000	0.006	10000	0.007	10000	0.012	5850
14	M14	0	0.109	2001	0.156	1399	0.195	1116	0.351	621
15	M15	0	0.303	960	0.415	701	0.313	930	0.728	400
16	M16	0	0	10000	0.002	10000	0.002	10000	0.003	10000
17	M17	0	0.13	1682	0.186	1172	0.235	927	0.421	518
18	M18	0	0.334	872	0.393	740	0.248	1172	0.642	453
19	M19	0	0.138	1937	0.257	1041	0.225	1192	0.482	556
20	M20	0	0.342	1019	0.527	662	0.375	931	0.902	387
21	M21	0	0.023	7276	0.04	4143	0.03	5519	0.071	2367
22	M22	0	0.272	1002	0.415	658	0.192	1421	0.607	450
23	M23	0	0.106	2023	0.238	898	0.172	1243	0.41	521
24	M24	0	0.206	1153	0.364	653	0.216	1101	0.58	410
25	M25	0	0.184	1953	0.256	1405	0.3	1201	0.556	647



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Deflections, Relative for Standard Cats : Level 2 (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Beam	Camber[in]	PreDL[in]	PreDL Ratio	DL[in]	DL Ratio	LL[in]	LL Ratio	DL+LL[in]	DL+LL Ratio
26	M26	0	0.201	1887	0.327	1162	0.305	1249	0.632
27	M27	0	0.203	1170	0.359	663	0.18	1319	0.539
28	M28	0	0.053	3232	0.112	1536	0.137	832	0.249
29	M29	0	0.048	3604	0.097	1773	0.127	92	0.027
30	M30	0	0.009	7946	0.016	3005	0.027	6268	0.043
31	M34	0	0.007	5280	0.018	2026	0.014	2499	0.018
32	M35	0	0.157	1314	0.256	806	0.119	1725	0.382
33	M36	0	0.16	1295	0.26	795	0.122	1702	0.382
34	M37	0	0.054	2960	0.114	1496	0.079	1745	0.493
35	M38	0	0.022	6149	0.044	3069	0.032	4147	0.071
36	M39	0	0.047	3530	0.095	1750	0.071	2344	0.167
37	M40	0.5	0.248	1713	0.723	587	0.528	805	1.252
38	M41	0	0.054	2166	0.113	1095	0.094	1148	0.206
39	M42	0	0.014	10000	0.029	4852	0.023	6270	0.052
40	M43	0	0.19	1488	0.393	718	0.303	931	0.695
41	M46	0	0.008	6118	0.023	2044	0.016	2942	0.04
42	M47	0	0.002	10000	0.007	7049	0.004	10000	0.011
43	M48	0	0.013	8932	0.027	4147	0.021	5263	0.049
44	M49	0	0.007	10000	0.022	5170	0.012	9539	0.034
45	M50	0	0.33	884	0.522	560	0.157	1860	0.679
46	M52	0	0.165	1665	0.309	979	0.279	763	0.589
47	M53	0	0.063	2888	0.134	1463	0.094	1823	0.228
48	M54	0	0.329	1061	0.574	608	0.203	1723	0.776
49	M55	0	0	10000	0	10000	0	10000	0
50	M56	0	0.053	3564	0.113	1679	0.088	2159	0.201
51	M57	0	0	10000	0	10000	0	10000	0
52	M58	0	0.001	10000	0.001	10000	0	10000	0.001
53	M61	0	0.055	3254	0.158	1140	0.09	1993	0.248
54	M62	0.5	0.195	2183	0.323	1316	0.535	795	0.858
55	M63	0.75	0.292	1456	0.189	2245	0.614	692	0.803
56	M64	0.5	0.348	1220	0.21	2027	0.463	917	0.673
57	PUR65	0.75	0.311	1368	0.212	2005	0.63	675	0.842
58	PUR66	0.5	0.329	1293	0.184	2310	0.439	968	0.623
59	M67	0	0.148	1468	0.214	1021	0.271	803	0.485
60	M68	0	0.382	762	0.451	646	0.287	1015	0.737
61	M69	0	0.152	1433	0.219	996	0.278	783	0.497
62	M70	0	0.391	744	0.462	630	0.294	989	0.756
63	M71	0	0.347	835	0.404	718	0.236	1227	0.64
64	M72	0	0.34	856	0.395	736	0.231	1260	0.626
65	M73	0	0.391	743	0.455	637	0.268	1082	0.723
66	M74	0	0.383	761	0.445	653	0.262	1111	0.707
67	M75	0	0	10000	0	10000	0	10000	0
68	M76	0	0	10000	0	10000	0	10000	0
69	M77	0	0	10000	0	10000	0	10000	0
70	PUR78	0.5	0.332	1085	0.184	1955	0.426	845	0.61
71	PUR79	0.5	0.332	1085	0.184	1955	0.426	845	0.61
72	M80	0	0	10000	0	10000	0	10000	0
73	M81	0	0	10000	0	10000	0	10000	0
74	M82	0	0	10000	0	10000	0	10000	0
75	M83	0	0	10000	0	10000	0	10000	0
76	PUR84	0	0.239	1143	0.399	685	0.194	1406	0.593
77	M85	0	0	10000	0	10000	0	10000	0
78	M86	0	0	10000	0	10000	0	10000	0
79	M87	0	0	10000	0	10000	0	10000	0
80	M88	0	0.023	4606	0.057	1865	0.042	2520	0.1
81	M89	0	0	10000	0	10000	0	10000	0
82	M90	0	0.04	3992	0.122	1306	0.065	2447	0.188

Permits: BNR21-0346, ELE21-0853, MEC21-0514, PRR21-0999  
 City of Orange - OC Public Works  
 OC Development Services  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without the permission from OC Public Works. All Development Services of Orange County. The stamping of these plan specifications shall NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or Law.  
 T. Tabatabaee  
 Buildings or Fields



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Deflections, Relative for Standard Cats : Level 2 (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Beam	Camber[in]	PreDL[in]	PreDL Ratio	DL[in]	DL Ratio	LL[in]	LL Ratio	DL+LL[in]	DL+LL Ratio
83	M91	0	0.018	5923	0.04	2699	0.032	3371	0.071
84	M92	0	0.017	6382	0.037	2913	0.029	3644	0.066
85	M93	0	0.094	1720	0.207	781	0.141	1146	0.349
86	M94	0	0.071	2271	0.191	849	0.179	905	0.27
87	M95	0	0.025	6562	0.053	3083	0.045	3621	0.097
88	M96	0	0.018	8976	0.042	3843	0.046	3523	0.08
89	M97	0	0.024	5014	0.051	2316	0.034	3499	0.087
90	M98	0	0.017	6195	0.025	4299	0.032	3371	0.057
91	M99	0	0	10000	0	10000	0	10000	0
92	M100	0	0.232	818	0.318	598	0.126	1512	0.44
93	M101	0	0.233	814	0.319	595	0.126	1505	0.446
94	M102	0	0.19	998	0.256	743	0.096	1977	0.352
95	M105	0	0	10000	0	10000	0	10000	0
96	M106	0	0	10000	0	10000	0	10000	0
97	M107	0	0	10000	0	10000	0	10000	0
98	M108	0	0	10000	0	10000	0	10000	0
99	M109	0	0	10000	0	10000	0	10000	0
100	M103	0	0.045	4211	0.095	2010	0.073	2614	0.167
101	M104	0	0	10000	0	10000	0	10000	0
102	M110	0	0	10000	0	10000	0	10000	0
103	M111	0	0	10000	0	10000	0	10000	0

Permits: BNR21-0946, ELE21-0851, CMC21-0514, P1, R21-0900  
 County of Orange - OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times and shall not be altered, changed or altered in any way without the written permission of Orange County. The stamping of these plans and specifications shall NOT be held liable or be an approval of the isolation of any provisions of any County Ordinance or State law.  
 Hani Tabbatabaee  
 Building & Safety

**Beam Deflections, Relative for Standard Cats : Roof**

Beam	Camber[in]	PreDL[in]	PreDL Ratio	DL[in]	DL Ratio	LL[in]	LL Ratio	DL+LL[in]	DL+LL Ratio
1	M1	0	0.062	5798	0.263	1371	0.371	970	0.634
2	M2	0	0.044	6049	0.221	1206	0.327	813	0.548
3	M3	0	0.036	8096	0.175	1658	0.258	1126	0.432
4	M4	0	0.033	8691	0.171	1700	0.255	1142	0.426
5	M5	0	0.074	4712	0.282	1245	0.384	913	0.666
6	M6	0	0.103	3420	0.373	942	0.5	702	0.872
7	M7	0	0.104	3851	0.376	1068	0.444	906	0.82
8	M8	0	0.082	4256	0.264	1320	0.338	1034	0.602
9	M10	0	0.022	10000	0.073	3681	0.094	2850	0.167
10	M11	0	0.086	4089	0.322	1090	0.437	802	0.76
11	M12	0	0.032	8338	0.122	2203	0.166	1617	0.287
12	M13	0	0	10000	0.002	10000	0.003	10000	0.006
13	M14	0	0.013	10000	0.058	3764	0.083	2629	0.141
14	M15	0	0.088	3289	0.281	1036	0.356	817	0.637
15	M16	0	0	10000	0.003	10000	0.005	10000	0.008
16	M17	0	0.014	10000	0.068	3211	0.099	2196	0.167
17	M18	0	0.045	6415	0.216	1350	0.315	923	0.531
18	M19	0	0.024	10000	0.082	3276	0.093	2876	0.175
19	M20	0	0.116	3001	0.375	931	0.479	729	0.853
20	M21	0	0.006	10000	0.019	8825	0.021	7851	0.04
21	M26	0	0.064	5955	0.185	2053	0.225	1691	0.41
22	M40	0	0.089	4759	0.386	1100	0.361	1178	0.747
23	M62	0	0.1	4254	0.376	1129	0.512	830	0.889
24	M64	0	0.099	4294	0.333	1275	0.434	979	0.767
25	PUR66	0	0.099	4306	0.366	1162	0.495	859	0.861
26	M71	0	0.048	6048	0.212	1366	0.304	953	0.517
27	M72	0	0.045	6523	0.209	1392	0.305	955	0.514
28	M73	0	0.051	5658	0.238	1220	0.345	840	0.583
29	M74	0	0.047	6130	0.234	1244	0.345	842	0.579
30	M75	0	0	10000	0	10000	0	10000	0
31	M76	0	0	10000	0	10000	0	10000	0
32	M77	0	0	10000	0	10000	0	10000	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Deflections, Relative for Standard Cats : Roof (Continued)**

Building & Safety: OCPWAzaron@Bldg 12/22/2025

Beam	Camber[in]	PreDL[in]	PreDL Ratio	DL[in]	DL Ratio	LL[in]	LL Ratio	DL+LL[in]	DL+LL Ratio
33	M87	0	0	10000	0	10000	0	10000	0
34	M90	0	0.004	10000	0.011	10000	0.013	10000	0.024
35	M36	0	0.123	3086	0.412	922	0.535	710	0.943
36	M37	0	0.011	10000	0.036	4387	0.047	3373	0.084
37	PUR41	0	0.039	6950	0.165	1655	0.233	1173	0.398
38	PUR42	0	0.015	10000	0.07	3116	0.103	2124	0.173
39	PUR43	0	0.015	10000	0.07	3116	0.103	2124	0.173
40	PUR44	0	0.015	10000	0.07	3116	0.103	2124	0.173
41	PUR45	0	0.046	6311	0.222	1310	0.326	893	0.548
42	PUR46	0	0.046	6311	0.222	1310	0.326	893	0.548
43	PUR47	0	0.046	6311	0.222	1310	0.326	893	0.548
44	PUR48	0	0.101	4203	0.387	1098	0.529	803	0.916
45	PUR49	0	0.105	4066	0.392	1083	0.533	797	0.926
46	PUR50	0	0.105	4031	0.393	1081	0.533	798	0.926
47	M51	0	0.001	10000	0.005	10000	0.006	10000	0.011
48	M52	0	0.002	10000	0.009	10000	0.014	7412	0.023
49	M58	0	0	10000	0	10000	0	10000	0
50	M59	0	0	10000	0	10000	0	10000	0
51	M60	0	0	10000	0	10000	0	10000	0
52	M61	0	0	10000	0.004	10000	0.005	10000	0.009
53	M53	0	0.07	5165	0.274	1313	0.379	951	0.653
54	M54	0	0.067	5352	0.253	1423	0.344	1046	0.597
55	M55	0	0.072	5004	0.294	1226	0.411	876	0.705
56	PUR56	0	0.067	5337	0.255	1414	0.347	1039	0.601

Permits: BNR21-0246, ELE21-0856, MEC21-0514, BLD21-0990  
 County of Orange - OC Public Works  
 CC Development Services  
 APPROVED  
 This set of plans and specifications shall be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without the written permission from OC Public Works. OC Development Services of Orange County. The stamping of these plan specifications shall NOT be held to be an approval of the violation of any provisions of any County Ordinance or Law.  
 J. Tabatabaee  
 Building Official

**Beam Absolute Deflections : Level 2**

Beam	PreDL[in]	DL[in]	LL[in]	DL+LL[in]	
1	M1	0.231	0.325	0.391	0.715
2	M2	0.13	0.326	0.22	0.546
3	M3	0.204	0.289	0.354	0.643
4	M4	0.197	0.28	0.348	0.628
5	M5	0.178	0.363	0.29	0.653
6	M6	0.247	0.346	0.42	0.766
7	M7	0.233	0.427	0.381	0.807
8	M8	0.394	0.482	0.369	0.852
9	M9	0.25	0.542	0.413	0.955
10	M10	0.111	0.208	0.181	0.389
11	M11	0.363	0.461	0.408	0.869
12	M12	0.193	0.273	0.331	0.604
13	M13	0.004	0.006	0.007	0.012
14	M14	0.109	0.156	0.195	0.351
15	M15	0.303	0.415	0.313	0.728
16	M16	0	0.002	0.002	0.003
17	M17	0.13	0.186	0.235	0.421
18	M18	0.334	0.393	0.248	0.642
19	M19	0.138	0.257	0.225	0.482
20	M20	0.472	0.703	0.51	1.213
21	M21	0.023	0.04	0.03	0.071
22	M22	0.383	0.583	0.317	0.899
23	M23	0.106	0.238	0.172	0.41
24	M24	0.276	0.54	0.336	0.876
25	M25	0.368	0.55	0.592	1.142
26	M26	0.337	0.55	0.522	1.072
27	M27	0.351	0.585	0.391	0.971
28	M28	0.09	0.187	0.196	0.382
29	M29	0.212	0.388	0.353	0.734



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Absolute Deflections : Level 2 (Continued)**

Building & Safety: OCPDW-Azaron@B 4/22/2025

Beam	PreDL[in]	DL[in]	LL[in]	DL+LL[in]
30	M30	0.041	0.074	0.07
31	M34	0.007	0.018	0.014
32	M35	0.135	0.22	-0.086
33	M36	0.147	0.241	0.099
34	M37	0.057	0.125	0.083
35	M38	0.022	0.044	0.032
36	M39	0.058	0.116	0.087
37	M40	0.32	0.857	0.642
38	M41	0.42	0.986	0.687
39	M42	0.211	0.482	0.341
40	M43	0.329	0.707	0.526
41	M46	0.288	0.611	0.481
42	M47	0.054	0.121	0.087
43	M48	0.013	0.027	0.021
44	M49	-0.082	-0.186	-0.13
45	M50	0.271	0.416	-0.228
46	M52	0.271	0.575	0.468
47	M53	-0.051	-0.1	-0.079
48	M54	0.454	0.823	0.371
49	M55	0.263	0.545	0.409
50	M56	0.074	0.161	0.117
51	M57	0.052	0.116	0.077
52	M58	0.052	0.116	0.077
53	M61	0.177	0.423	0.286
54	M62	0.315	0.548	0.729
55	M63	0.397	0.342	0.793
56	M64	0.42	0.318	0.524
57	PUR65	0.5	0.513	0.946
58	PUR66	0.441	0.389	0.622
59	M67	0.323	0.501	0.565
60	M68	0.639	0.789	0.631
61	M69	0.333	0.518	0.581
62	M70	0.657	0.813	0.652
63	M71	0.474	0.604	0.452
64	M72	0.478	0.613	0.464
65	M73	0.534	0.681	0.512
66	M74	0.54	0.697	0.527
67	M75	0.209	0.328	0.356
68	M76	0.236	0.372	0.404
69	M77	0.236	0.372	0.404
70	PUR78	0.761	0.781	0.864
71	PUR79	0.651	0.624	0.75
72	M80	0.337	0.49	0.565
73	M81	0.394	0.573	0.656
74	M82	0.394	0.573	0.656
75	M83	0.249	0.36	0.402
76	PUR84	0.642	1.031	0.629
77	M85	0.314	0.641	0.504
78	M86	0.314	0.641	0.504
79	M87	0.302	0.495	0.466
80	M88	0.171	0.354	0.271
81	M89	0.106	0.238	0.172
82	M90	0.04	0.122	0.065
83	M91	0.187	0.453	0.336
84	M92	0.137	0.332	0.254
85	M93	0.236	0.514	0.368
86	M94	0.217	0.519	0.438

Permits: BNR21-0246, ELE21-0853, MEC21-0814, PLR21-0400

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works Development Services of Orange County. The signers of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi H. Azaron  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Absolute Deflections : Level 2 (Continued)**

Building & Safety: OCPDW-Azaron@B 4/22/2025

Beam	PreDL[in]	DL[in]	LL[in]	DL+LL[in]
87	M95	0.326	0.723	0.538
88	M96	0.323	0.735	0.574
89	M97	0.349	0.781	0.576
90	M98	0.243	0.424	0.377
91	M99	0.28	0.409	0.479
92	M100	0.329	0.482	0.214
93	M101	0.409	0.628	0.364
94	M102	0.208	0.295	0.122
95	M105	0.078	0.188	0.126
96	M106	0.078	0.188	0.126
97	M107	0.099	0.229	0.163
98	M108	0.099	0.229	0.163
99	M109	0.049	0.109	0.076
100	M103	0.099	0.207	0.152
101	M104	0.081	0.166	0.123
102	M110	0.065	0.14	0.096
103	M111	0.065	0.14	0.096

Permits: BNR21-0246, BLD-21-0853, MEC21-0514, PL B21-0400

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Habashpe  
 BUILDING OFFICIAL

**Beam Absolute Deflections : Roof**

Beam	PreDL[in]	DL[in]	LL[in]	DL+LL[in]
1	M1	0.062	0.263	0.371
2	M2	0.044	0.221	0.327
3	M3	0.036	0.175	0.258
4	M4	0.033	0.171	0.255
5	M5	0.074	0.282	0.384
6	M6	0.103	0.373	0.5
7	M7	0.104	0.376	0.444
8	M8	0.082	0.264	0.338
9	M10	0.022	0.073	0.094
10	M11	0.086	0.322	0.437
11	M12	0.032	0.122	0.166
12	M13	0	0.002	0.003
13	M14	0.013	0.058	0.083
14	M15	0.088	0.281	0.356
15	M16	0	0.003	0.005
16	M17	0.014	0.068	0.099
17	M18	0.045	0.216	0.315
18	M19	0.024	0.082	0.093
19	M20	0.154	0.493	0.629
20	M21	0.006	0.019	0.021
21	M26	0.131	0.404	0.505
22	M40	0.101	0.426	0.406
23	M62	0.154	0.571	0.739
24	M64	0.102	0.342	0.444
25	PUR66	0.133	0.487	0.636
26	M71	0.07	0.293	0.413
27	M72	0.068	0.294	0.413
28	M73	0.077	0.33	0.468
29	M74	0.074	0.33	0.468
30	M75	0.055	0.224	0.313
31	M76	0.061	0.252	0.354
32	M77	0.061	0.252	0.354
33	M87	0.111	0.336	0.416
34	M90	0.004	0.011	0.013
35	M36	0.197	0.647	0.834
36	M37	0.138	0.457	0.59



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam Absolute Deflections : Roof (Continued)**

Building & Safety: OCPDW-Azaron@B 4/22/2025

Beam	PreDL[in]	DL[in]	LL[in]	DL+LL[in]
37	PUR41	0.177	0.608	0.797
38	PUR42	0.068	0.269	0.374
39	PUR43	0.095	0.373	0.515
40	PUR44	0.068	0.269	0.374
41	PUR45	0.107	0.446	0.628
42	PUR46	0.141	0.57	0.795
43	PUR47	0.107	0.446	0.628
44	PUR48	0.178	0.666	0.875
45	PUR49	0.175	0.646	0.866
46	PUR50	0.138	0.513	0.692
47	M51	0.123	0.454	0.598
48	M52	0.101	0.373	0.498
49	M58	0.178	0.588	0.759
50	M59	0.151	0.507	0.659
51	M60	0.094	0.317	0.411
52	M61	0.097	0.3	0.376
53	M53	0.179	0.624	0.824
54	M54	0.149	0.512	0.672
55	M55	0.191	0.673	0.893
56	PUR56	0.132	0.461	0.61

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PL B21-0400

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Jabbari  
 BUILDING OFFICIAL

**Beam End Reactions : Level 2**

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC	
1	M1	Start	4.567	6.402	7.646	0	0	RLL	19.916	7	6.394	3
2		End	4.483	6.318	7.646	0	0	RLL	19.815	7	6.276	3
3	M2	Start	7.74	19.89	13.158	0	0	RLL	44.921	7	10.835	3
4		End	6.068	16.128	10.286	0	0	RLL	35.812	7	8.495	3
5	M3	Start	3.732	5.278	6.437	0	0	RLL	16.633	7	5.225	3
6		End	3.665	5.213	6.452	0	0	RLL	16.579	7	5.132	3
7	M4	Start	3.66	5.213	6.474	0	0	RLL	16.614	7	5.124	3
8		End	3.649	5.2	6.459	0	0	RLL	16.575	7	5.109	3
9	M5	Start	3.927	8.449	6.702	0	0	RLL	20.862	7	5.498	3
10		End	3.783	7.334	3.328	0	0	RLL	14.125	7	5.297	3
11	M6	Start	17.596	24.72	29.682	0	0	RLL	77.155	7	24.634	3
12		End	17.055	23.953	28.742	0	0	RLL	74.73	7	23.877	3
13	M7	Start	19.948	38.96	32.613	0	0	RLL	98.933	7	27.927	3
14		End	21.014	39.316	33.863	0	0	RLL	101.36	7	29.419	3
15	M8	Start	10.658	14.767	17.121	0	0	RLL	45.114	7	14.767	1
16		End	12.546	17.32	19.892	0	0	RLL	52.61	7	17.32	1
17	M9	Start	13.832	29.301	21.056	0	0	RLL	68.851	7	19.365	3
18		End	13.908	33.863	27.727	0	0	RLL	84.999	7	19.471	3
19	M10	Start	6.56	13.095	10.481	0	0	RLL	32.484	7	9.184	3
20		End	5.914	12.184	9.374	0	0	RLL	29.618	7	8.28	3
21	M11	Start	12.561	17.609	21.032	0	0	RLL	54.781	7	17.586	3
22		End	12.265	17.185	20.501	0	0	RLL	53.424	7	17.17	3
23	M12	Start	11.106	15.609	18.761	0	0	RLL	48.749	7	15.549	3
24		End	9.843	13.813	16.542	0	0	RLL	43.043	7	13.78	3
25	M13	Start	0.603	0.888	1.087	0	0	RLL	2.806	7	0.844	3
26		End	0.603	0.888	1.087	0	0	RLL	2.806	7	0.844	3
27	M14	Start	3.524	5.041	6.32	0	0	RLL	16.162	7	4.934	3
28		End	3.524	5.041	6.32	0	0	RLL	16.162	7	4.934	3
29	M15	Start	23.033	36.427	36.364	0	0	RLL	101.894	7	32.247	3
30		End	10.75	16.376	17.282	0	0	RLL	47.303	7	15.05	3
31	M16	Start	0.834	1.586	1.45	0	0	RLL	4.223	7	1.167	3
32		End	0.834	1.586	1.45	0	0	RLL	4.223	7	1.167	3
33	M17	Start	4.193	6.019	7.607	0	0	RLL	19.394	7	5.87	3



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam End Reactions : Level 2 (Continued)**

Building & Safety: OCPW/Asst/Inspr/B 4/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
34	End	4.193	6.019	7.607	0	0	RLL	19.394	7	3.87	3
35	M18 Start	5.657	8.094	10.155	0	0	RLL	25.961	7	7.92	3
36	End	5.657	8.094	10.155	0	0	RLL	25.961	7	7.92	3
37	M19 Start	15.133	25.749	24.262	0	0	RLL	69.718	7	19.643	3
38	End	14.03	28.473	22.186	0	0	RLL	69.665	7	19.643	3
39	M20 Start	18.545	34.292	29.39	0	0	RLL	88.173	7	25.055	3
40	End	23.672	38.642	36.772	0	0	RLL	105.205	7	25.055	3
41	M21 Start	5.995	11.624	10.066	0	0	RLL	30.055	7	6.661	3
42	End	4.686	10.702	7.917	0	0	RLL	25.508	7	6.661	3
43	M22 Start	4.111	9.118	6.728	0	0	RLL	21.707	7	5.999	3
44	End	4.285	9.325	6.777	0	0	RLL	22.033	7	5.999	3
45	M23 Start	2.317	5.233	3.79	0	0	RLL	12.343	7	3.244	3
46	End	2.317	5.233	3.79	0	0	RLL	12.343	7	3.244	3
47	M24 Start	5.184	12.868	10.714	0	0	RLL	32.583	7	7.258	3
48	End	5.906	13.289	10.144	0	0	RLL	32.176	7	8.269	3
49	M25 Start	5.91	8.195	9.521	0	0	RLL	25.068	7	8.195	1
50	End	5.811	8.096	9.521	0	0	RLL	24.948	7	8.096	1
51	M26 Start	8.935	13.481	13.624	0	0	RLL	37.976	7	12.51	3
52	End	10.266	17.191	15.289	0	0	RLL	45.091	7	14.372	3
53	M27 Start	5.452	13.036	8.612	0	0	RLL	29.423	7	7.633	3
54	End	5.994	12.834	9.615	0	0	RLL	30.786	7	8.392	3
55	M28 Start	3.173	6.85	6.368	0	0	RLL	18.409	7	3.608	4
56	End	10.151	23.089	16.347	0	0	RLL	53.862	7	14.212	3
57	M29 Start	2.949	6.294	5.961	0	0	RLL	17.091	7	3.313	4
58	End	10.157	23.639	16.808	0	0	RLL	55.26	7	14.219	3
59	M30 Start	1.938	3.906	3.708	0	0	RLL	10.62	7	2.093	4
60	End	10.717	23.859	16.568	0	0	RLL	55.139	7	15.004	3
61	M34 Start	0.65	0.98	2.112	0	0	RLL	4.555	7	0.043	8
62	End	8.452	19.767	12.281	0	0	RLL	43.37	7	10.825	4
63	M35 Start	2.669	6.49	4.256	0	0	RLL	14.597	7	3.736	3
64	End	2.669	6.49	4.256	0	0	RLL	14.597	7	3.736	3
65	M36 Start	2.681	6.521	4.277	0	0	RLL	14.668	7	3.754	3
66	End	2.681	6.521	4.277	0	0	RLL	14.668	7	3.754	3
67	M37 Start	4.116	9.016	6.077	0	0	RLL	20.543	7	5.763	3
68	End	5.879	14.277	8.52	0	0	RLL	30.764	7	8.231	3
69	M38 Start	2.674	5.359	3.96	0	0	RLL	12.767	7	3.744	3
70	End	5.525	11.071	8.197	0	0	RLL	26.4	7	7.736	3
71	M39 Start	3.473	6.792	4.912	0	0	RLL	16.009	7	4.863	3
72	End	5.458	10.936	8.109	0	0	RLL	26.097	7	7.641	3
73	M40 Start	10.154	24.945	16.665	0	0	RLL	56.598	7	14.216	3
74	End	9.188	23.254	15.215	0	0	RLL	52.25	7	12.863	3
75	M41 Start	3.002	6.056	4.828	0	0	RLL	14.992	7	3.851	4
76	End	6.424	17.165	14.643	0	0	RLL	44.026	7	8.611	4
77	M42 Start	2.252	4.407	3.598	0	0	RLL	11.046	7	3.152	3
78	End	2.502	5.248	4.056	0	0	RLL	12.788	7	3.502	3
79	M43 Start	4.307	8.941	6.863	0	0	RLL	21.709	7	6.03	3
80	End	4.665	9.715	7.513	0	0	RLL	23.678	7	6.53	3
81	M46 Start	-0.045	-0.206	-0.965	0	0	RLL	-1.792	7	-0.064	3
82	End	2.931	8.792	4.659	0	0	RLL	18.005	7	3.857	4
83	M47 Start	-0.069	-0.144	-0.397	0	0	RLL	-0.807	7	-0.014	4
84	End	1.208	3.66	1.79	0	0	RLL	7.257	7	1.532	4
85	M48 Start	1.006	2.166	1.707	0	0	RLL	5.33	7	1.408	3
86	End	1.006	2.166	1.707	0	0	RLL	5.33	7	1.408	3
87	M49 Start	0.589	1.738	0.942	0	0	RLL	3.592	7	0.824	3
88	End	0.589	1.738	0.942	0	0	RLL	3.592	7	0.824	3
89	M50 Start	1.521	4.49	2.433	0	0	RLL	9.281	7	2.13	3
90	End	1.521	4.49	2.433	0	0	RLL	9.281	7	2.13	3

Permits: BNR21-0246, B-21-0853, MEC21-0514, B-21-0400  
 County of Orange OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. It is not to be used to make any changes or alterations to these plans without written permission from the Public Works Development Services of Orange County. The signing of these plan specifications shall be held to permit or be an approval of the violation of any provisions of any County Ordinance or Statute.  
 Bldg. Database  
 Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Beam End Reactions : Level 2 (Continued)**

Building & Safety: OCPDW AzarwoodR 4/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
91	M52	Start	4.32	8.337	6.607	0	0	20.57	7	5.035	4
92		End	11.153	25.04	15.884	0	0	55.462	7	15.503	4
93	M53	Start	5.757	14.247	8.214	0	0	30.24	7	8.059	3
94		End	2.456	5.528	3.454	0	0	12.16	7	2.836	3
95	M54	Start	2.026	5.582	2.919	0	0	11.369	7	2.836	3
96		End	2.053	5.642	2.968	0	0	11.519	7	2.836	3
97	M55	Start	0.045	0.045	0	0	0	0.063	7	0.045	3
98		End	0.045	0.045	0	0	0	0.063	7	0.045	3
99	M56	Start	4.096	8.717	6.795	0	0	21.333	7	5.735	3
100		End	4.208	8.828	6.795	0	0	21.466	7	5.735	3
101	M57	Start	0.06	0.06	0	0	0	0.084	5	0.06	2
102		End	0.06	0.06	0	0	0	0.084	5	0.06	2
103	M58	Start	0.077	0.077	0	0	0	0.108	5	0.077	2
104		End	0.077	0.077	0	0	0	0.108	5	0.077	2
105	M61	Start	1.064	3.051	1.731	0	0	6.431	7	1.489	3
106		End	1.064	3.051	1.731	0	0	6.431	7	1.489	3
107	M62	Start	8.495	12.055	14.831	0	0	38.195	7	11.893	3
108		End	8.495	12.055	14.831	0	0	38.195	7	11.893	3
109	M63	Start	9.685	13.793	17.118	0	0	43.94	7	13.559	3
110		End	9.685	13.793	17.118	0	0	43.94	7	13.559	3
111	M64	Start	7.208	10.165	12.322	0	0	31.913	7	10.091	3
112		End	7.201	10.158	12.322	0	0	31.905	7	10.081	3
113	PUR65	Start	9.915	14.13	17.561	0	0	45.053	7	13.881	3
114		End	9.915	14.13	17.561	0	0	45.053	7	13.881	3
115	PUR66	Start	7.076	9.98	12.101	0	0	31.337	7	9.906	3
116		End	7.076	9.98	12.101	0	0	31.337	7	9.906	3
117	M67	Start	4.803	6.911	8.781	0	0	22.342	7	6.725	3
118		End	4.803	6.911	8.781	0	0	22.342	7	6.725	3
119	M68	Start	6.472	9.285	11.721	0	0	29.895	7	9.06	3
120		End	6.472	9.285	11.721	0	0	29.895	7	9.06	3
121	M69	Start	4.921	7.083	9.008	0	0	22.912	7	6.89	3
122		End	4.921	7.083	9.008	0	0	22.912	7	6.89	3
123	M70	Start	6.629	9.515	12.024	0	0	30.656	7	9.281	3
124		End	6.629	9.515	12.024	0	0	30.656	7	9.281	3
125	M71	Start	4.744	6.725	8.257	0	0	21.281	7	6.641	3
126		End	4.654	6.635	8.257	0	0	21.174	7	6.515	3
127	M72	Start	4.625	6.614	8.285	0	0	21.193	7	6.475	3
128		End	4.625	6.614	8.285	0	0	21.193	7	6.475	3
129	M73	Start	5.338	7.585	9.365	0	0	24.085	7	7.473	3
130		End	5.236	7.483	9.365	0	0	23.963	7	7.33	3
131	M74	Start	5.203	7.458	9.397	0	0	23.985	7	7.285	3
132		End	5.203	7.458	9.397	0	0	23.985	7	7.285	3
133	M75	Start	0.089	0.089	0	0	0	0.125	5	0.089	2
134		End	0.089	0.089	0	0	0	0.125	5	0.089	2
135	M76	Start	0.089	0.089	0	0	0	0.125	5	0.089	2
136		End	0.089	0.089	0	0	0	0.125	5	0.089	2
137	M77	Start	0.113	0.113	0	0	0	0.159	5	0.113	2
138		End	0.113	0.113	0	0	0	0.159	5	0.113	2
139	PUR78	Start	7.089	10.039	12.292	0	0	31.713	7	9.924	3
140		End	6.96	9.91	12.292	0	0	31.559	7	9.744	3
141	PUR79	Start	7.089	10.039	12.292	0	0	31.713	7	9.924	3
142		End	6.96	9.91	12.292	0	0	31.559	7	9.744	3
143	M80	Start	0.107	0.107	0	0	0	0.15	5	0.107	2
144		End	0.107	0.107	0	0	0	0.15	5	0.107	2
145	M81	Start	0.107	0.107	0	0	0	0.15	5	0.107	2
146		End	0.107	0.107	0	0	0	0.15	5	0.107	2
147	M82	Start	0.107	0.107	0	0	0	0.15	5	0.107	2

Permits: BNR21-0246, EES21-0853, MEC21-0514, P1-B21-0500  
 County of Orange  
 OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. If any changes or alterations to these plans are made without written permission from OC Public Works Development Services of Orange County, the signing of these plan specifications shall be held to permit or be an approval of the violation of any provisions of any County Ordinance or Statute.  
 Building Database  
 Bldg ID: 12



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B53  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam End Reactions : Level 2 (Continued)**

Building & Safety: OCPW/Asst/Inspr/B 4/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
148	End	0.107	0.107	0	0	0	RLL	0.15	5	0.107	2
149	M83 Start	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
150	End	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
151	PUR84 Start	6.475	15.759	11.28	0	0	RLL	36.959	7	0.059	3
152	End	6.703	15.987	11.28	0	0	RLL	37.232	7	0.059	3
153	M85 Start	0.238	0.238	0	0	0	RLL	0.333	5	0.238	2
154	End	0.238	0.238	0	0	0	RLL	0.333	5	0.238	2
155	M86 Start	0.13	0.13	0	0	0	RLL	0.181	5	0.13	2
156	End	0.13	0.13	0	0	0	RLL	0.181	5	0.13	2
157	M87 Start	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
158	End	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
159	M88 Start	2.175	5.372	3.975	0	0	RLL	12.806	7	3.045	3
160	End	2.175	5.372	3.975	0	0	RLL	12.806	7	3.045	3
161	M89 Start	0.039	0.039	0	0	0	RLL	0.055	5	0.039	2
162	End	0.039	0.039	0	0	0	RLL	0.055	5	0.039	2
163	M90 Start	1.367	5.011	2.118	0	0	RLL	9.402	7	1.914	3
164	End	2.288	6.179	3.827	0	0	RLL	13.537	7	3.203	3
165	M91 Start	1.691	3.712	2.972	0	0	RLL	9.211	7	2.368	3
166	End	1.691	3.712	2.972	0	0	RLL	9.211	7	2.368	3
167	M92 Start	1.57	3.439	2.749	0	0	RLL	8.526	7	2.198	3
168	End	1.57	3.439	2.749	0	0	RLL	8.526	7	2.198	3
169	M93 Start	7.405	16.14	11.211	0	0	RLL	37.305	7	10.368	3
170	End	-2.141	-4.85	-4.371	0	0	RLL	-12.813	7	-2.997	3
171	M94 Start	7.878	21.755	19.825	0	0	RLL	57.825	7	11.029	3
172	End	-2.221	-5.917	-7.701	0	0	RLL	-19.422	7	-2.954	4
173	M95 Start	5.151	11.085	8.375	0	0	RLL	26.702	7	6.988	4
174	End	0.337	0.75	2.46	0	0	RLL	4.836	7	0.053	9
175	M96 Start	4.869	10.702	8.593	0	0	RLL	26.59	7	6.669	4
176	End	0.558	1.114	2.522	0	0	RLL	5.372	7	0.138	4
177	M97 Start	1.764	3.839	2.53	0	0	RLL	8.655	7	2.469	3
178	End	1.823	3.926	2.498	0	0	RLL	8.709	7	2.552	3
179	M98 Start	1.617	2.33	2.972	0	0	RLL	7.552	7	2.264	3
180	End	1.617	2.33	2.972	0	0	RLL	7.552	7	2.264	3
181	M99 Start	0.027	0.027	0	0	0	RLL	0.038	5	0.027	2
182	End	0.027	0.027	0	0	0	RLL	0.038	5	0.027	2
183	M100 Start	3.843	8.464	6.795	0	0	RLL	21.029	7	5.381	3
184	End	3.955	8.575	6.795	0	0	RLL	21.163	7	5.537	3
185	M101 Start	3.861	8.504	6.828	0	0	RLL	21.13	7	5.406	3
186	End	3.973	8.617	6.828	0	0	RLL	21.265	7	5.563	3
187	M102 Start	2.71	5.94	4.75	0	0	RLL	14.728	7	3.794	3
188	End	2.788	6.018	4.75	0	0	RLL	14.821	7	3.903	3
189	M105 Start	0.069	0.069	0	0	0	RLL	0.096	5	0.069	2
190	End	0.069	0.069	0	0	0	RLL	0.096	5	0.069	2
191	M106 Start	0.069	0.069	0	0	0	RLL	0.096	5	0.069	2
192	End	0.069	0.069	0	0	0	RLL	0.096	5	0.069	2
193	M107 Start	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2
194	End	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2
195	M108 Start	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2
196	End	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2
197	M109 Start	0.027	0.027	0	0	0	RLL	0.037	5	0.027	2
198	End	0.027	0.027	0	0	0	RLL	0.037	5	0.027	2
199	M103 Start	3.419	7.165	5.509	0	0	RLL	17.412	7	4.787	3
200	End	3.488	7.234	5.509	0	0	RLL	17.495	7	4.884	3
201	M104 Start	0.032	0.032	0	0	0	RLL	0.044	5	0.032	2
202	End	0.032	0.032	0	0	0	RLL	0.044	5	0.032	2
203	M110 Start	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2
204	End	0.069	0.069	0	0	0	RLL	0.097	5	0.069	2

Permits: BNR21-0246, EEE21-0853, MEC21-0514, PE21-0500  
 County of Orange  
 Department Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. If it is found that any changes or alterations to these plans are made without written permission from the County of Orange Department Services of Orange County, the stamping of these plan specifications shall not be held to permit or be an approval of the violation of any provisions of any County Ordinance or State Law.  
 Add to Database  
 Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B54  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam End Reactions : Level 2 (Continued)**

Building & Safety - OCPDW Approved 12/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
205	M111	Start	0.042	0.042	0	0	0	0.059	5	0.042	2
206		End	0.042	0.042	0	0	0	0.059	5	0.042	2

Permits: BNR21-0246, ELS21-0853, MEC21-0514, P-21-0500

**Beam End Reactions : Roof**

**County of Orange - OC Public Works  
OC Development Services**

**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to this set of plans without the written permission from OC Public Works or OC Development Services of Orange County. The signing of these plan specifications SHALL not be held to permit or be an approval of the validity of any provision of any County Ordinance or State law.

12/2 Database  
BUDW OFFICIAL

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
1	M1	Start	0.541	2.287	3.234	0	0	7.92	7	0.391	3
2		End	0.541	2.287	3.234	0	0	7.92	7	0.391	3
3	M2	Start	0.275	1.367	2.022	0	0	4.876	7	0.391	3
4		End	0.279	1.401	2.078	0	0	5.007	7	0.391	3
5	M3	Start	0.506	2.405	3.517	0	0	8.514	7	0.661	3
6		End	0.472	2.379	3.531	0	0	8.505	7	0.661	3
7	M4	Start	0.466	2.379	3.544	0	0	8.525	7	0.652	3
8		End	0.464	2.369	3.529	0	0	8.49	7	0.649	3
9	M5	Start	1.261	4.513	6.022	0	0	15.051	7	1.765	3
10		End	1.261	4.513	6.022	0	0	15.051	7	1.765	3
11	M6	Start	3.545	12.381	16.362	0	0	41.036	7	4.964	3
12		End	3.532	12.368	16.362	0	0	41.02	7	4.945	3
13	M7	Start	3.495	12.477	14.461	0	0	38.111	7	4.894	3
14		End	3.218	11.459	13.09	0	0	34.694	7	4.506	3
15	M8	Start	2.523	7.863	9.888	0	0	25.255	7	3.533	3
16		End	2.597	8.164	10.309	0	0	26.291	7	3.635	3
17	M10	Start	1.414	4.395	5.52	0	0	14.105	7	1.979	3
18		End	1.315	3.997	4.966	0	0	12.741	7	1.841	3
19	M11	Start	2.452	8.733	11.631	0	0	29.09	7	3.432	3
20		End	2.452	8.733	11.631	0	0	29.09	7	3.432	3
21	M12	Start	1.98	7.046	9.381	0	0	23.464	7	2.772	3
22		End	1.796	6.262	8.271	0	0	20.748	7	2.514	3
23	M13	Start	0.075	0.376	0.558	0	0	1.344	7	0.105	3
24		End	0.072	0.348	0.511	0	0	1.235	7	0.101	3
25	M14	Start	0.425	1.874	2.682	0	0	6.54	7	0.595	3
26		End	0.425	1.874	2.682	0	0	6.54	7	0.595	3
27	M15	Start	4.284	13.52	17.105	0	0	43.591	7	5.997	3
28		End	1.895	6.141	7.864	0	0	19.952	7	2.652	3
29	M16	Start	0.087	0.483	0.733	0	0	1.752	7	0.122	3
30		End	0.084	0.455	0.686	0	0	1.643	7	0.118	3
31	M17	Start	0.462	2.197	3.212	0	0	7.776	7	0.647	3
32		End	0.462	2.197	3.212	0	0	7.776	7	0.647	3
33	M18	Start	0.617	2.933	4.288	0	0	10.38	7	0.864	3
34		End	0.617	2.933	4.288	0	0	10.38	7	0.864	3
35	M19	Start	2.99	9.274	10.671	0	0	28.202	7	4.186	3
36		End	2.7	8.738	9.112	0	0	25.065	7	3.78	3
37	M20	Start	3.669	11.48	14.465	0	0	36.92	7	5.137	3
38		End	4.604	14.22	17.807	0	0	45.556	7	6.446	3
39	M21	Start	1.403	4.566	4.956	0	0	13.409	7	1.964	3
40		End	1.868	6.264	7.239	0	0	19.098	7	2.615	3
41	M26	Start	1.434	4.222	5.163	0	0	13.328	7	2.008	3
42		End	1.717	4.847	5.796	0	0	15.09	7	2.404	3
43	M40	Start	1.084	4.542	4.298	0	0	12.327	7	1.518	3
44		End	1.088	4.676	4.352	0	0	12.575	7	1.523	3
45	M62	Start	1.222	4.603	6.262	0	0	15.544	7	1.71	3
46		End	1.222	4.603	6.262	0	0	15.544	7	1.71	3
47	M64	Start	1.186	4.01	5.229	0	0	13.179	7	1.661	3
48		End	1.171	3.995	5.229	0	0	13.162	7	1.64	3
49	PUR66	Start	1.207	4.474	6.05	0	0	15.049	7	1.69	3
50		End	1.207	4.474	6.05	0	0	15.049	7	1.69	3
51	M71	Start	0.667	2.896	4.128	0	0	10.081	7	0.933	3



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B55  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam End Reactions : Roof (Continued)**

Building & Safety: OCPW/Asst/Lead/B 12/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
52	End	0.625	2.855	4.128	0	0	RLL	10.03	7	0.675	3
53	M72 Start	0.607	2.844	4.143	0	0	RLL	10.041	7	0.85	3
54	End	0.607	2.844	4.143	0	0	RLL	10.041	7	0.85	3
55	M73 Start	0.714	3.242	4.682	0	0	RLL	11.382	7	0.993	3
56	End	0.667	3.195	4.682	0	0	RLL	11.326	7	0.933	3
57	M74 Start	0.646	3.183	4.698	0	0	RLL	11.337	7	0.941	3
58	End	0.646	3.183	4.698	0	0	RLL	11.337	7	0.941	3
59	M75 Start	0.041	0.041	0	0	0	RLL	0.058	5	0.041	2
60	End	0.041	0.041	0	0	0	RLL	0.058	5	0.041	2
61	M76 Start	0.041	0.041	0	0	0	RLL	0.058	5	0.041	2
62	End	0.041	0.041	0	0	0	RLL	0.058	5	0.041	2
63	M77 Start	0.052	0.052	0	0	0	RLL	0.073	5	0.052	2
64	End	0.052	0.052	0	0	0	RLL	0.073	5	0.052	2
65	M87 Start	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
66	End	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
67	M90 Start	0.242	0.631	0.721	0	0	RLL	1.911	7	0.339	3
68	End	0.393	1.316	1.709	0	0	RLL	4.313	7	0.55	3
69	M36 Start	1.023	3.461	4.514	0	0	RLL	11.375	7	1.432	3
70	End	1.338	4.708	6.241	0	0	RLL	15.636	7	1.873	3
71	M37 Start	0.559	1.703	2.119	0	0	RLL	5.434	7	0.783	3
72	End	0.714	2.419	3.159	0	0	RLL	7.958	7	0.999	3
73	PUR41 Start	0.596	2.643	3.792	0	0	RLL	9.239	7	0.834	3
74	End	0.704	2.751	3.792	0	0	RLL	9.368	7	0.985	3
75	PUR42 Start	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
76	End	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
77	PUR43 Start	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
78	End	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
79	PUR44 Start	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
80	End	0.47	2.263	3.321	0	0	RLL	8.03	7	0.658	3
81	PUR45 Start	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
82	End	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
83	PUR46 Start	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
84	End	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
85	PUR47 Start	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
86	End	0.627	3.021	4.433	0	0	RLL	10.718	7	0.878	3
87	PUR48 Start	1.237	4.733	6.475	0	0	RLL	16.039	7	1.731	3
88	End	1.237	4.733	6.475	0	0	RLL	16.039	7	1.731	3
89	PUR49 Start	1.251	4.747	6.475	0	0	RLL	16.056	7	1.751	3
90	End	1.266	4.641	6.251	0	0	RLL	15.571	7	1.772	3
91	PUR50 Start	1.256	4.752	6.475	0	0	RLL	16.062	7	1.758	3
92	End	1.259	4.456	5.921	0	0	RLL	14.822	7	1.763	3
93	M51 Start	0.119	0.418	0.553	0	0	RLL	1.387	7	0.167	3
94	End	0.074	0.195	0.224	0	0	RLL	0.592	7	0.104	3
95	M52 Start	0.106	0.525	0.777	0	0	RLL	1.873	7	0.148	3
96	End	0.106	0.525	0.777	0	0	RLL	1.873	7	0.148	3
97	M58 Start	0.087	0.087	0	0	0	RLL	0.122	5	0.087	2
98	End	0.087	0.087	0	0	0	RLL	0.122	5	0.087	2
99	M59 Start	0.087	0.087	0	0	0	RLL	0.122	5	0.087	2
100	End	0.087	0.087	0	0	0	RLL	0.122	5	0.087	2
101	M60 Start	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
102	End	0.059	0.059	0	0	0	RLL	0.082	5	0.059	2
103	M61 Start	0.221	1.023	1.486	0	0	RLL	3.605	7	0.309	3
104	End	0.221	1.023	1.486	0	0	RLL	3.605	7	0.309	3
105	M53 Start	0.848	3.337	4.609	0	0	RLL	11.38	7	1.188	3
106	End	0.848	3.337	4.609	0	0	RLL	11.38	7	1.188	3
107	M54 Start	0.819	3.08	4.188	0	0	RLL	10.396	7	1.146	3
108	End	0.819	3.08	4.188	0	0	RLL	10.396	7	1.146	3

Permits: BNR21-0246, B5521-0853, MEC21-0514, B521-0400  
 County of Orange OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. If you want to make any changes or alterations to these plans, you must obtain written permission from the Public Works Development Services of Orange County. The stamping of these plan specifications shall be held to permit or be an approval of the violation of any provisions of any County Ordinance or Statute.  
 Building Database  
 Building Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B56  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Beam End Reactions : Roof (Continued)**

Building & Safety: OCPW Approved 12/22/2025

Beam	End	PreDL[k]	DL[k]	LL[k]	LLS[k]	Roof[k]	Roof Cat	Max[k]	LC	Min[k]	LC
109	M55	Start	0.876	3.576	5	0	RLL	12.291	7	1.226	3
110		End	0.876	3.576	5	0	RLL	12.291	7	1.226	3
111	PUR56	Start	0.821	3.099	4.219	0	RLL	10.469	7	1.149	3
112		End	0.821	3.099	4.219	0	RLL	10.469	7	1.149	3

Permits: BNR21-0246, EEP21-0853, MEC21-0514, P1 B21-0400  
 County of Orange OC Public Works  
 70C Development Services  
**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services or Orange Co. OC 31k stamp. OC 41k stamp. Specifications SHALL NOT be held to permit of be an approval of the violation of any provisions of any County Ordinance or State law.  
 Jodi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Axial Force**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1	(A-1)	1	Level 2	0,85.917	99.453	6	19.33	32.36	0	0	0
2		1	Roof				3.499	10.585	0	0	0
3	(A-2)	1	Level 2	30,85.917	154.4	6	28.549	55.688	0	0	0
4		1	Roof				4.758	14.315	0	0	0
5	(B-3)	1	Level 2	61.667,61....	129.655	6	24.201	52.313	0	0	0
6		1	Roof				3.045	8.189	0	0	0
7	(B-4)	1	Level 2	83.833,61....	107.368	6	19.198	43.898	0	0	0
8		1	Roof				2.23	6.621	0	0	0
9	(D-1)	1	Level 2	0,5.25	68.635	6	12.408	24.804	0	0	0
10		1	Roof				2.214	6.795	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	115.263	6	20.942	36.3	0	0	0
12		1	Roof				3.168	11.455	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	132.296	6	24.202	50.4	0	0	0
14		1	Roof				3.626	11.675	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	64.055	6	10.978	22.278	0	0	0
16		1	Roof				2.22	7.197	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	63.698	6	11.855	23.341	0	0	0
18		1	Roof				2.311	7.668	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56....	233.36	6	44.532	76.144	0	0	0
20		1	Roof				7.619	23.525	0	0	0
21	(C-2.5)	1	Level 2	48.417,27....	306.431	6	56.936	101.263	0	0	0
22		1	Roof				9.295	30.111	0	0	0
23	(B.5-4)	1	Level 2	83.833,47....	230.515	6	42.33	85.263	0	0	0
24		1	Roof				6.531	20.328	0	0	0
25	(C.8-4)	1	Level 2	83.833,13....	234.919	6	43.233	94.189	0	0	0
26		1	Roof				5.369	17.407	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	152.693	6	30.311	56.707	0	0	0
28		1	Roof				2.947	8.815	0	0	0
29	(C-1)	1	Level 2	0,27.583	138.354	6	23.461	54.08	0	0	0
30		1	Roof				1.776	5.153	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56....	253.376	6	47.378	84.302	0	0	0
32		1	Roof				7.62	24.586	0	0	0
33	(C-1.8)	1	Level 2	24.167,27....	219.419	6	39.717	68.799	0	0	0
34		1	Roof				5.922	21.319	0	0	0
35	CS18	1	Level 2	52.75,81.167	64.07	6	12.28	27.82	0	0	0
36	CS19	1	Level 2	70.583,81....	45.136	6	7.677	18.276	0	0	0
37	CS20	1	Level 2	98.167,68....	56.238	6	11.507	25.493	0	0	0
38	CS21	1	Level 2	98.167,51....	54.735	6	10.576	23.617	0	0	0
39	CS22	1	Level 2	98.167,34.5	56.097	6	10.569	24.148	0	0	0
40	CS23	1	Level 2	98.167,17.25	55.798	6	11.067	24.276	0	0	0
41	(E-5)	1	Level 2	98.167,0	43.792	6	8.703	20.052	0	0	0
42	CS25	1	Level 2	86.5,0	29.375	6	6.366	12.242	0	0	0
43	CS26	1	Level 2	75.333,0	30.997	6	5.769	14.328	0	0	0
44	CS27	1	Level 2	60.333,0	49.67	6	7.639	19.57	0	0	0
45	CS28	1	Level 2	50.917,0	12.774	6	2.346	5.972	0	0	0
46	CS29	1	Level 2	61.667,74....	48.726	6	7.062	19.532	0	0	0
47		1	Roof				1.718	5.478	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B57  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Dead & Other Categories : Shear z-z**

Building & Safety: OCPW/Arizona/BD 4/22/2025

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1	(A-1)	1	Level 2	0,85.917	0	9	0	0	0	0	0
2		1	Roof				0	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	9	0	0	0	0	0
4		1	Roof				0	0	0	0	0
5	(B-3)	1	Level 2	61.667,61....	0	6	0	0	0	0	0
6		1	Roof				0	0	0	0	0
7	(B-4)	1	Level 2	83.833,61....	0	9	0	0	0	0	0
8		1	Roof				0	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	6	0	0	0	0	0
10		1	Roof				0	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	6	0	0	0	0	0
12		1	Roof				0	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	6	0	0	0	0	0
14		1	Roof				0	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	6	0	0	0	0	0
16		1	Roof				0	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	6	0	0	0	0	0
18		1	Roof				0	0	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56....	0	9	0	0	0	0	0
20		1	Roof				0	0	0	0	0
21	(C-2.5)	1	Level 2	48.417,27....	0	9	0	0	0	0	0
22		1	Roof				0	0	0	0	0
23	(B.5-4)	1	Level 2	83.833,47....	0	9	0	0	0	0	0
24		1	Roof				0	0	0	0	0
25	(C.8-4)	1	Level 2	83.833,13....	0	9	0	0	0	0	0
26		1	Roof				0	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	9	0	0	0	0	0
28		1	Roof				0	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	9	0	0	0	0	0
30		1	Roof				0	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56....	0	6	0	0	0	0	0
32		1	Roof				0	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27....	0	6	0	0	0	0	0
34		1	Roof				0	0	0	0	0
35	CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0
36	CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0
37	CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0
38	CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0
40	CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0
46	CS29	1	Level 2	61.667,74....	0	6	0	0	0	0	0
47		1	Roof				0	0	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PL 21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Shear y-y**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1	(A-1)	1	Level 2	0,85.917	2.825	6	0.913	1.067	0	0	0
2		1	Roof				2.946	4.177	0	0	0
3	(A-2)	1	Level 2	30,85.917	-1.748	9	-0.9	-1.055	0	0	0
4		1	Roof				-2.909	-4.14	0	0	0
5	(B-3)	1	Level 2	61.667,61....	6.198	6	1.386	2.93	0	0	0
6		1	Roof				4.143	7.582	0	0	0



**Column Forces/Moments, Dead & Other Categories : Shear y-y (Continued)**

Building & Safety: OCPWAzaywvB 12/22/2025

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
7 (B-4)	1	Level 2	83.833,61....	-3.624	9	-1.14	-2.454	0	0	0	0
8	1	Roof				-3.428	-6.42	0	0	0	0
9 (D-1)	1	Level 2	0,5.25	1.777	6	0.598	0.676	0	0	0	0
10	1	Roof				1.957	2.922	0	0	0	0
11 (D-1.8)	1	Level 2	24.167,5.25	0,007	6	0	0	0	0	0	0
12	1	Roof				-0.006	0.001	0	0	0	0
13 (D-2.5)	1	Level 2	48.417,5.25	-1.105	9	-0.589	-0.668	0	0	0	0
14	1	Roof				-1.915	-2.887	0	0	0	0
15 (B.2-1.3)	1	Level 2	6,56.833	4.34	6	1.236	2.047	0	0	0	0
16	1	Roof				4.345	7.968	0	0	0	0
17 (C-1.3)	1	Level 2	6,27.583	-2.825	9	-1.221	-1.965	0	0	0	0
18	1	Roof				-4.3	-7.793	0	0	0	0
19 (B.2-2.5)	1	Level 2	48.417,56....	12.939	6	4.246	4.85	0	0	0	0
20	1	Roof				14.542	21.397	0	0	0	0
21 (C-2.5)	1	Level 2	48.417,27....	-7.889	9	-4.176	-4.759	0	0	0	0
22	1	Roof				-14.334	-21.146	0	0	0	0
23 (B.5-4)	1	Level 2	83.833,47....	17.896	6	5.02	7.741	0	0	0	0
24	1	Roof				16.835	27.888	0	0	0	0
25 (C.8-4)	1	Level 2	83.833,13....	-12.258	9	-5.193	-7.895	0	0	0	0
26	1	Roof				-17.278	-28.137	0	0	0	0
27 (B.2-1)	1	Level 2	0,56.833	0	6	0	0	0	0	0	0
28	1	Roof				0	0	0	0	0	0
29 (C-1)	1	Level 2	0,27.583	0	9	0	0	0	0	0	0
30	1	Roof				0	0	0	0	0	0
31 (B.2-1.8)	1	Level 2	24.167,56....	0	6	0	0	0	0	0	0
32	1	Roof				0	0	0	0	0	0
33 (C-1.8)	1	Level 2	24.167,27....	0	9	0	0	0	0	0	0
34	1	Roof				0	0	0	0	0	0
35 CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0	0
36 CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0	0
37 CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0	0
38 CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0	0
39 CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0	0
40 CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0	0
41 (E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0	0
42 CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0	0
43 CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0	0
44 CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0	0
45 CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0	0
46 CS29	1	Level 2	61.667,74....	0	6	0	0	0	0	0	0
47	1	Roof				0	0	0	0	0	0

Permits: BNR21-0246, ELE21-0855, MEC21-0514, PR 21-0900

County of Orange - OC Public Works  
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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Moment z-z (Top)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1 (A-1)	1	Level 2	0,85.917	21.922	6	-8.622	-10.581	0	0	0	0
2	1	Roof				-15.094	-25.188	0	0	0	0
3 (A-2)	1	Level 2	30,85.917	-14.873	9	8.501	10.46	0	0	0	0
4	1	Roof				14.92	25.015	0	0	0	0
5 (B-3)	1	Level 2	61.667,61....	45.693	6	-13.086	-32.692	0	0	0	0
6	1	Roof				-19.849	-37.958	0	0	0	0
7 (B-4)	1	Level 2	83.833,61....	-28.003	9	10.764	27.442	0	0	0	0
8	1	Roof				16.511	32.546	0	0	0	0
9 (D-1)	1	Level 2	0,5.25	13.886	6	-5.646	-6.631	0	0	0	0
10	1	Roof				-10.145	-18.45	0	0	0	0
11 (D-1.8)	1	Level 2	24.167,5.25	0,045	6	0.002	-0.005	0	0	0	0
12	1	Roof				0.05	-0.008	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B59  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Dead & Other Categories : Moment z-z (Top) (Continued)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
13	(D-2.5)	1	Level 2	48.417,5.25	-9.484	9	5.566	6.558	0	0	0
14		1	Roof				9.868	18.231	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	33.028	6	-11.672	-21.963	0	0	0
16		1	Roof				-23.763	-50.242	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	-23.124	9	11.526	20.968	0	0	0
18		1	Roof				23.554	49.427	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56....	100.662	6	-40.096	-47.764	0	0	0
20		1	Roof				-78.064	-136.5...	0	0	0
21	(C-2.5)	1	Level 2	48.417,27....	-67.567	9	39.437	46.826	0	0	0
22		1	Roof				77.066	135.373	0	0	0
23	(B.5-4)	1	Level 2	83.833,47....	135.905	6	-47.405	-81.937	0	0	0
24		1	Roof				-88.946	-167.4...	0	0	0
25	(C.8-4)	1	Level 2	83.833,13....	-99.93	9	49.032	83.335	0	0	0
26		1	Roof				90.746	167.631	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	9	0	0	0	0	0
28		1	Roof				0	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	6	0	0	0	0	0
30		1	Roof				0	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56....	0	9	0	0	0	0	0
32		1	Roof				0	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27....	0	6	0	0	0	0	0
34		1	Roof				0	0	0	0	0
35	CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0
36	CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0
37	CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0
38	CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0
40	CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0
46	CS29	1	Level 2	61.667,74....	0	9	0	0	0	0	0
47		1	Roof				0	0	0	0	0

Building Summary: OCPW Approved 12/22/2025

Permits: BNR21-0246, ELE21-0855, MEC21-0514, PR 21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Moment y-y (Top)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1	(A-1)	1	Level 2	0,85.917	0	4	0	0	0	0	0
2		1	Roof				0	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	4	0	0	0	0	0
4		1	Roof				0	0	0	0	0
5	(B-3)	1	Level 2	61.667,61....	0	9	0	0	0	0	0
6		1	Roof				0	0	0	0	0
7	(B-4)	1	Level 2	83.833,61....	0	6	0	0	0	0	0
8		1	Roof				0	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	9	0	0	0	0	0
10		1	Roof				0	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	9	0	0	0	0	0
12		1	Roof				0	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	9	0	0	0	0	0
14		1	Roof				0	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	9	0	0	0	0	0
16		1	Roof				0	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	9	0	0	0	0	0
18		1	Roof				0	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B60  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Dead & Other Categories : Moment y-y (Top) (Continued)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
19 (B.2-2.5)	1	Level 2	48.417,56....	0	6	0	0	0	0	0	0
20	1	Roof				0	0	0	0	0	0
21 (C-2.5)	1	Level 2	48.417,27....	0	6	0	0	0	0	0	0
22	1	Roof				0	0	0	0	0	0
23 (B.5-4)	1	Level 2	83.833,47....	0	6	0	0	0	0	0	0
24	1	Roof				0	0	0	0	0	0
25 (C.8-4)	1	Level 2	83.833,13....	0	6	0	0	0	0	0	0
26	1	Roof				0	0	0	0	0	0
27 (B.2-1)	1	Level 2	0,56.833	0	9	0	0	0	0	0	0
28	1	Roof				0	0	0	0	0	0
29 (C-1)	1	Level 2	0,27.583	0	9	0	0	0	0	0	0
30	1	Roof				0	0	0	0	0	0
31 (B.2-1.8)	1	Level 2	24.167,56....	0	6	0	0	0	0	0	0
32	1	Roof				0	0	0	0	0	0
33 (C-1.8)	1	Level 2	24.167,27....	0	6	0	0	0	0	0	0
34	1	Roof				0	0	0	0	0	0
35 CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0	0
36 CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0	0
37 CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0	0
38 CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0	0
39 CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0	0
40 CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0	0
41 (E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0	0
42 CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0	0
43 CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0	0
44 CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0	0
45 CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0	0
46 CS29	1	Level 2	61.667,74....	0	6	0	0	0	0	0	0
47	1	Roof				0	0	0	0	0	0

Building Name: OCPWA Approved 12/22/2020

Permits: BNR21-0246, ELE21-0855, MEC21-0514, PL 21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Moment z-z (Bot)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1 (A-1)	1	Level 2	0,85.917	21.922	6	8.903	9.906	0	0	0	0
2	1	Roof				26.025	33.117	0	0	0	0
3 (A-2)	1	Level 2	30,85.917	-14.873	9	-8.778	-9.781	0	0	0	0
4	1	Roof				-25.679	-32.771	0	0	0	0
5 (B-3)	1	Level 2	61.667,61....	45.693	6	13.512	23.552	0	0	0	0
6	1	Roof				37.982	67.87	0	0	0	0
7 (B-4)	1	Level 2	83.833,61....	-28.003	9	-11.114	-19.655	0	0	0	0
8	1	Roof				-31.334	-57.071	0	0	0	0
9 (D-1)	1	Level 2	0,5.25	13.886	6	5.83	6.334	0	0	0	0
10	1	Roof				17.172	22.338	0	0	0	0
11 (D-1.8)	1	Level 2	24.167,5.25	0,045	6	-0.002	0,001	0	0	0	0
12	1	Roof				-0.029	0,007	0	0	0	0
13 (D-2.5)	1	Level 2	48.417,5.25	-9.484	9	-5.748	-6.255	0	0	0	0
14	1	Roof				-16.862	-22.064	0	0	0	0
15 (B.2-1.3)	1	Level 2	6,56.833	33.028	6	12.052	17.322	0	0	0	0
16	1	Roof				36.88	60.979	0	0	0	0
17 (C-1.3)	1	Level 2	6,27.583	-23.124	9	-11.901	-16.737	0	0	0	0
18	1	Roof				-36.463	-59.356	0	0	0	0
19 (B.2-2.5)	1	Level 2	48.417,56....	100.662	6	41.401	45.328	0	0	0	0
20	1	Roof				124.924	162.095	0	0	0	0
21 (C-2.5)	1	Level 2	48.417,27....	-67.567	9	-40.72	-44.504	0	0	0	0
22	1	Roof				-123.011	-159.7...	0	0	0	0
23 (B.5-4)	1	Level 2	83.833,47....	135.905	6	48.948	66.632	0	0	0	0
24	1	Roof				146.038	221.792	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B61  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Dead & Other Categories : Moment z-z (Bot) (Continued)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
25 (C.8-4)	1	Level 2	83.833,13....	-99.93	9	-50.628	-68.195	0	0	0	0
26	1	Roof				-150.43	-225.1...	0	0	0	0
27 (B.2-1)	1	Level 2	0,56.833	0	9	0	0	0	0	0	0
28	1	Roof				0	0	0	0	0	0
29 (C-1)	1	Level 2	0,27.583	0	6	0	0	0	0	0	0
30	1	Roof				0	0	0	0	0	0
31 (B.2-1.8)	1	Level 2	24.167,56....	0	9	0	0	0	0	0	0
32	1	Roof				0	0	0	0	0	0
33 (C-1.8)	1	Level 2	24.167,27....	0	6	0	0	0	0	0	0
34	1	Roof				0	0	0	0	0	0
35 CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0	0
36 CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0	0
37 CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0	0
38 CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0	0
39 CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0	0
40 CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0	0
41 (E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0	0
42 CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0	0
43 CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0	0
44 CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0	0
45 CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0	0
46 CS29	1	Level 2	61.667,74....	0	9	0	0	0	0	0	0
47	1	Roof				0	0	0	0	0	0

Permits: BNR21-0246, ELE21-0855, MEC21-0514, PL 21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Dead & Other Categories : Moment y-y (Bot)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
1 (A-1)	1	Level 2	0,85.917	0	4	0	0	0	0	0	0
2	1	Roof				0	0	0	0	0	0
3 (A-2)	1	Level 2	30,85.917	0	4	0	0	0	0	0	0
4	1	Roof				0	0	0	0	0	0
5 (B-3)	1	Level 2	61.667,61....	0	9	0	0	0	0	0	0
6	1	Roof				0	0	0	0	0	0
7 (B-4)	1	Level 2	83.833,61....	0	6	0	0	0	0	0	0
8	1	Roof				0	0	0	0	0	0
9 (D-1)	1	Level 2	0,5.25	0	9	0	0	0	0	0	0
10	1	Roof				0	0	0	0	0	0
11 (D-1.8)	1	Level 2	24.167,5.25	0	9	0	0	0	0	0	0
12	1	Roof				0	0	0	0	0	0
13 (D-2.5)	1	Level 2	48.417,5.25	0	9	0	0	0	0	0	0
14	1	Roof				0	0	0	0	0	0
15 (B.2-1.3)	1	Level 2	6,56.833	0	9	0	0	0	0	0	0
16	1	Roof				0	0	0	0	0	0
17 (C-1.3)	1	Level 2	6,27.583	0	9	0	0	0	0	0	0
18	1	Roof				0	0	0	0	0	0
19 (B.2-2.5)	1	Level 2	48.417,56....	0	6	0	0	0	0	0	0
20	1	Roof				0	0	0	0	0	0
21 (C-2.5)	1	Level 2	48.417,27....	0	6	0	0	0	0	0	0
22	1	Roof				0	0	0	0	0	0
23 (B.5-4)	1	Level 2	83.833,47....	0	6	0	0	0	0	0	0
24	1	Roof				0	0	0	0	0	0
25 (C.8-4)	1	Level 2	83.833,13....	0	6	0	0	0	0	0	0
26	1	Roof				0	0	0	0	0	0
27 (B.2-1)	1	Level 2	0,56.833	0	9	0	0	0	0	0	0
28	1	Roof				0	0	0	0	0	0
29 (C-1)	1	Level 2	0,27.583	0	9	0	0	0	0	0	0
30	1	Roof				0	0	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B62  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Dead & Other Categories : Moment y-y (Bot) (Continued)**

Column St...	Lift No.	Floor Label	Coordinate...	Max Base ...	Max Bas...	DLPre[k]	DL[k]	OL1[k]	OL2[k]	OL3[k]	OL4[k]
31 (B.2-1.8)	1	Level 2	24.167,56....	0	6	0	0	0	0	0	0
32	1	Roof				0	0	0	0	0	0
33 (C-1.8)	1	Level 2	24.167,27....	0	6	0	0	0	0	0	0
34	1	Roof				0	0	0	0	0	0
35 CS18	1	Level 2	52.75,81.167	0	1	0	0	0	0	0	0
36 CS19	1	Level 2	70.583,81....	0	1	0	0	0	0	0	0
37 CS20	1	Level 2	98.167,68....	0	1	0	0	0	0	0	0
38 CS21	1	Level 2	98.167,51....	0	1	0	0	0	0	0	0
39 CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0	0	0
40 CS23	1	Level 2	98.167,17.25	0	1	0	0	0	0	0	0
41 (E-5)	1	Level 2	98.167,0	0	1	0	0	0	0	0	0
42 CS25	1	Level 2	86.5,0	0	1	0	0	0	0	0	0
43 CS26	1	Level 2	75.333,0	0	1	0	0	0	0	0	0
44 CS27	1	Level 2	60.333,0	0	1	0	0	0	0	0	0
45 CS28	1	Level 2	50.917,0	0	1	0	0	0	0	0	0
46 CS29	1	Level 2	61.667,74....	0	6	0	0	0	0	0	0
47	1	Roof				0	0	0	0	0	0

Permits: BNR21-0246, ELE21-0855, MEC21-0514, PR 21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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Indi. Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Axial Force**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc..	LL[k] (unre..	LLS Redu...	NonReduc..	LLS[k] (un...
1 (A-1)	1	Level 2	0,85.917	0	1	37.889	0	1	0	0
2	1	Roof		0	1	13.122	0	1	0	0
3 (A-2)	1	Level 2	30,85.917	0	1	54.734	0	1	0	0
4	1	Roof		0	1	17.699	0	1	0	0
5 (B-3)	1	Level 2	61.667,61....	0	1	41.8	0	1	0	0
6	1	Roof		0	1	9.527	0	1	0	0
7 (B-4)	1	Level 2	83.833,61....	0	1	34.181	0	1	0	0
8	1	Roof		0	1	7.034	0	1	0	0
9 (D-1)	1	Level 2	0,5.25	0	1	24.294	0	1	0	0
10	1	Roof		0	1	8.483	0	1	0	0
11 (D-1.8)	1	Level 2	24.167,5.25	0	1	44.814	0	1	0	0
12	1	Roof		0	1	15.346	0	1	0	0
13 (D-2.5)	1	Level 2	48.417,5.25	0	1	44.885	0	1	0	0
14	1	Roof		0	1	12.641	0	1	0	0
15 (B.2-1.3)	1	Level 2	6,56.833	0	1	23.326	0	1	0	0
16	1	Roof		0	1	9.216	0	1	0	0
17 (C-1.3)	1	Level 2	6,27.583	0	1	22.306	0	1	0	0
18	1	Roof		0	1	9.92	0	1	0	0
19 (B.2-2.5)	1	Level 2	48.417,56....	0	1	88.742	0	1	0	0
20	1	Roof		0	1	29.455	0	1	0	0
21 (C-2.5)	1	Level 2	48.417,27....	0	1	115.572	0	1	0	0
22	1	Roof		0	1	37.583	0	1	0	0
23 (B.5-4)	1	Level 2	83.833,47....	0	1	80.125	0	1	0	0
24	1	Roof		0	1	22.477	0	1	0	0
25 (C.8-4)	1	Level 2	83.833,13....	0	1	76.183	0	1	0	0
26	1	Roof		0	1	17.442	0	1	0	0
27 (B.2-1)	1	Level 2	0,56.833	0	1	52.903	0	1	0	0
28	1	Roof		0	1	10.867	0	1	0	0
29 (C-1)	1	Level 2	0,27.583	0	1	45.911	0	1	0	0
30	1	Roof		0	1	6.253	0	1	0	0
31 (B.2-1.8)	1	Level 2	24.167,56....	0	1	95.134	0	1	0	0
32	1	Roof		0	1	31.418	0	1	0	0
33 (C-1.8)	1	Level 2	24.167,27....	0	1	85.537	0	1	0	0
34	1	Roof		0	1	28.512	0	1	0	0
35 CS18	1	Level 2	52.75,81.1...	0	1	19.179	0	1	0	0
36 CS19	1	Level 2	70.583,81....	0	1	14.503	0	1	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B63  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Axial Force (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
37	CS20	1 Level 2	98.167,68...	0	1	16.029	0	1	0	0
38	CS21	1 Level 2	98.167,51...	0	1	16.497	0	1	0	0
39	CS22	1 Level 2	98.167,34.5	0	1	16.95	0	1	0	0
40	CS23	1 Level 2	98.167,17...	0	1	16.667	0	1	0	0
41	(E-5)	1 Level 2	98.167,0	0	1	12.331	0	1	0	0
42	CS25	1 Level 2	86.5,0	0	1	9.178	0	1	0	0
43	CS26	1 Level 2	75.333,0	0	1	8.627	0	1	0	0
44	CS27	1 Level 2	60.333,0	0	1	16.366	0	1	0	0
45	CS28	1 Level 2	50.917,0	0	1	3.505	0	1	0	0
46	CS29	1 Level 2	61.667,74...	0	1	15.805	0	1	0	0
47		1 Roof		0	1	6.962	0	1	0	0

Permits: BNR21-0246, ELE21-0858, MEC21-0514, B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Shear z-z**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
1	(A-1)	1 Level 2	0,85.917	0	1	0	0	1	0	0
2		1 Roof		0	1	0	0	1	0	0
3	(A-2)	1 Level 2	30,85.917	0	1	0	0	1	0	0
4		1 Roof		0	1	0	0	1	0	0
5	(B-3)	1 Level 2	61.667,61...	0	1	0	0	1	0	0
6		1 Roof		0	1	0	0	1	0	0
7	(B-4)	1 Level 2	83.833,61...	0	1	0	0	1	0	0
8		1 Roof		0	1	0	0	1	0	0
9	(D-1)	1 Level 2	0,5.25	0	1	0	0	1	0	0
10		1 Roof		0	1	0	0	1	0	0
11	(D-1.8)	1 Level 2	24.167,5.25	0	1	0	0	1	0	0
12		1 Roof		0	1	0	0	1	0	0
13	(D-2.5)	1 Level 2	48.417,5.25	0	1	0	0	1	0	0
14		1 Roof		0	1	0	0	1	0	0
15	(B.2-1.3)	1 Level 2	6,56.833	0	1	0	0	1	0	0
16		1 Roof		0	1	0	0	1	0	0
17	(C-1.3)	1 Level 2	6,27.583	0	1	0	0	1	0	0
18		1 Roof		0	1	0	0	1	0	0
19	(B.2-2.5)	1 Level 2	48.417,56...	0	1	0	0	1	0	0
20		1 Roof		0	1	0	0	1	0	0
21	(C-2.5)	1 Level 2	48.417,27...	0	1	0	0	1	0	0
22		1 Roof		0	1	0	0	1	0	0
23	(B.5-4)	1 Level 2	83.833,47...	0	1	0	0	1	0	0
24		1 Roof		0	1	0	0	1	0	0
25	(C.8-4)	1 Level 2	83.833,13...	0	1	0	0	1	0	0
26		1 Roof		0	1	0	0	1	0	0
27	(B.2-1)	1 Level 2	0,56.833	0	1	0	0	1	0	0
28		1 Roof		0	1	0	0	1	0	0
29	(C-1)	1 Level 2	0,27.583	0	1	0	0	1	0	0
30		1 Roof		0	1	0	0	1	0	0
31	(B.2-1.8)	1 Level 2	24.167,56...	0	1	0	0	1	0	0
32		1 Roof		0	1	0	0	1	0	0
33	(C-1.8)	1 Level 2	24.167,27...	0	1	0	0	1	0	0
34		1 Roof		0	1	0	0	1	0	0
35	CS18	1 Level 2	52.75,81.1...	0	1	0	0	1	0	0
36	CS19	1 Level 2	70.583,81...	0	1	0	0	1	0	0
37	CS20	1 Level 2	98.167,68...	0	1	0	0	1	0	0
38	CS21	1 Level 2	98.167,51...	0	1	0	0	1	0	0
39	CS22	1 Level 2	98.167,34.5	0	1	0	0	1	0	0
40	CS23	1 Level 2	98.167,17...	0	1	0	0	1	0	0
41	(E-5)	1 Level 2	98.167,0	0	1	0	0	1	0	0
42	CS25	1 Level 2	86.5,0	0	1	0	0	1	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B64  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Shear z-z (Continued)**

Building & Safety - OCPWA Approved 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...LL	Reduce	NonReduc...LL	[k] (unre...LLS	Redu...NonRedu...LLS	[k] (un...		
43	CS26	1	Level 2	75.333,0	0	1	0	0	1	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	1	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	1	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	1	0	0
47		1	Roof		0	1	0	0	1	0	0

Permits: BNR21-0246, ELE21-0858, MEC21-0514, B21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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 Hadi Tabatabaei  
 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Shear y-y**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...LL	Reduce	NonReduc...LL	[k] (unre...LLS	Redu...NonRedu...LLS	[k] (un...		
1	(A-1)	1	Level 2	0,85.917	0	1	0,965	0	1	0	0
2		1	Roof		0	1	3,598	0	1	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	-0,965	0	1	0	0
4		1	Roof		0	1	-3,598	0	1	0	0
5	(B-3)	1	Level 2	61,667,61...	0	1	1,676	0	1	0	0
6		1	Roof		0	1	4,07	0	1	0	0
7	(B-4)	1	Level 2	83,833,61...	0	1	-1,359	0	1	0	0
8		1	Roof		0	1	-3,458	0	1	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0,604	0	1	0	0
10		1	Roof		0	1	2,681	0	1	0	0
11	(D-1.8)	1	Level 2	24,167,5.25	0	1	0,004	0	1	0	0
12		1	Roof		0	1	0,019	0	1	0	0
13	(D-2.5)	1	Level 2	48,417,5.25	0	1	-0,608	0	1	0	0
14		1	Roof		0	1	-2,699	0	1	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	1,177	0	1	0	0
16		1	Roof		0	1	6,081	0	1	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	-0,935	0	1	0	0
18		1	Roof		0	1	-5,612	0	1	0	0
19	(B.2-2.5)	1	Level 2	48,417,56...	0	1	4,449	0	1	0	0
20		1	Roof		0	1	19,154	0	1	0	0
21	(C-2.5)	1	Level 2	48,417,27...	0	1	-4,357	0	1	0	0
22		1	Roof		0	1	-18,977	0	1	0	0
23	(B.5-4)	1	Level 2	83,833,47...	0	1	5,379	0	1	0	0
24		1	Roof		0	1	19,854	0	1	0	0
25	(C.8-4)	1	Level 2	83,833,13...	0	1	-5,568	0	1	0	0
26		1	Roof		0	1	-19,925	0	1	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	1	0	0
28		1	Roof		0	1	0	0	1	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	1	0	0
30		1	Roof		0	1	0	0	1	0	0
31	(B.2-1.8)	1	Level 2	24,167,56...	0	1	0	0	1	0	0
32		1	Roof		0	1	0	0	1	0	0
33	(C-1.8)	1	Level 2	24,167,27...	0	1	0	0	1	0	0
34		1	Roof		0	1	0	0	1	0	0
35	CS18	1	Level 2	52,75,81.1...	0	1	0	0	1	0	0
36	CS19	1	Level 2	70,583,81...	0	1	0	0	1	0	0
37	CS20	1	Level 2	98,167,68...	0	1	0	0	1	0	0
38	CS21	1	Level 2	98,167,51...	0	1	0	0	1	0	0
39	CS22	1	Level 2	98,167,34.5	0	1	0	0	1	0	0
40	CS23	1	Level 2	98,167,17...	0	1	0	0	1	0	0
41	(E-5)	1	Level 2	98,167,0	0	1	0	0	1	0	0
42	CS25	1	Level 2	86,5,0	0	1	0	0	1	0	0
43	CS26	1	Level 2	75,333,0	0	1	0	0	1	0	0
44	CS27	1	Level 2	60,333,0	0	1	0	0	1	0	0
45	CS28	1	Level 2	50,917,0	0	1	0	0	1	0	0
46	CS29	1	Level 2	61,667,74...	0	1	0	0	1	0	0
47		1	Roof		0	1	0	0	1	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B65  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Moment z-z (Top)**

Building & Safety - OCPWA Approved 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
1	(A-1)	1	Level 2	0,85.917	0	1	-12.247	0	1	0
2		1	Roof		0	1	-24.842	0	1	0
3	(A-2)	1	Level 2	30,85.917	0	1	12.247	0	1	0
4		1	Roof		0	1	24.842	0	1	0
5	(B-3)	1	Level 2	61.667,61...	0	1	-21.273	0	1	0
6		1	Roof		0	1	-22.813	0	1	0
7	(B-4)	1	Level 2	83.833,61...	0	1	17.248	0	1	0
8		1	Roof		0	1	19.967	0	1	0
9	(D-1)	1	Level 2	0,5.25	0	1	-7.67	0	1	0
10		1	Roof		0	1	-19.55	0	1	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	-0.053	0	1	0
12		1	Roof		0	1	-0.135	0	1	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	7.723	0	1	0
14		1	Roof		0	1	19.686	0	1	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	-14.94	0	1	0
16		1	Roof		0	1	-46.098	0	1	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	11.872	0	1	0
18		1	Roof		0	1	43.91	0	1	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	-56.469	0	1	0
20		1	Roof		0	1	-138.493	0	1	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	55.307	0	1	0
22		1	Roof		0	1	137.665	0	1	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	-68.28	0	1	0
24		1	Roof		0	1	-136.601	0	1	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	70.676	0	1	0
26		1	Roof		0	1	135.552	0	1	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	1	0
28		1	Roof		0	1	0	0	1	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	1	0
30		1	Roof		0	1	0	0	1	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	1	0
32		1	Roof		0	1	0	0	1	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	1	0
34		1	Roof		0	1	0	0	1	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	1	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	1	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	1	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	1	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	1	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	1	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	1	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	1	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	1	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	1	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	1	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	1	0
47		1	Roof		0	1	0	0	1	0

Permits: BNR21-0246, ELE21-0854, MEC21-0514, B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Moment y-y (Top)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	1	0
2		1	Roof		0	1	0	0	1	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	1	0
4		1	Roof		0	1	0	0	1	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	1	0
6		1	Roof		0	1	0	0	1	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B66  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Moment y-y (Top) (Continued)**

Building & Safety: OCPWAzayvndB 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
7	(B-4)	1	Level 2	83.833,61...	0	1	0	1	0	0
8		1	Roof		0	1	0	1	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	1	0	0
10		1	Roof		0	1	0	1	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	1	0	0
12		1	Roof		0	1	0	1	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	1	0	0
14		1	Roof		0	1	0	1	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	1	0	0
16		1	Roof		0	1	0	1	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	1	0	0
18		1	Roof		0	1	0	1	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	1	0	0
20		1	Roof		0	1	0	1	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	1	0	0
22		1	Roof		0	1	0	1	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	1	0	0
24		1	Roof		0	1	0	1	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	1	0	0
26		1	Roof		0	1	0	1	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	1	0	0
28		1	Roof		0	1	0	1	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	1	0	0
30		1	Roof		0	1	0	1	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	1	0	0
32		1	Roof		0	1	0	1	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	1	0	0
34		1	Roof		0	1	0	1	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	1	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	1	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	1	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	1	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	1	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	1	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	1	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	1	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	1	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	1	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	1	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	1	0	0
47		1	Roof		0	1	0	1	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Moment z-z (Bot)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
1	(A-1)	1	Level 2	0,85.917	0	1	6.272	1	0	0
2		1	Roof		0	1	25.375	1	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	-6.272	1	0	0
4		1	Roof		0	1	-25.375	1	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	10.894	1	0	0
6		1	Roof		0	1	33.997	1	0	0
7	(B-4)	1	Level 2	83.833,61...	0	1	-8.833	1	0	0
8		1	Roof		0	1	-28.294	1	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	3.928	1	0	0
10		1	Roof		0	1	17.87	1	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0.027	1	0	0
12		1	Roof		0	1	0.123	1	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B67  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Moment z-z (Bot) (Continued)**

Building & Safety: OCPWAzayvooB 4/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	-3.955	0	1	0
14		1	Roof		0	1	-17.994	0	1	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	7.651	0	1	0
16		1	Roof		0	1	38.781	0	1	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	-6.08	0	1	0
18		1	Roof		0	1	-34.423	0	1	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	28.918	0	1	0
20		1	Roof		0	1	128.866	0	1	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	-28.323	0	1	0
22		1	Roof		0	1	-127.217	0	1	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	34.967	0	1	0
24		1	Roof		0	1	140.528	0	1	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	-36.193	0	1	0
26		1	Roof		0	1	-142.564	0	1	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	1	0
28		1	Roof		0	1	0	0	1	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	1	0
30		1	Roof		0	1	0	0	1	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	1	0
32		1	Roof		0	1	0	0	1	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	1	0
34		1	Roof		0	1	0	0	1	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	1	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	1	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	1	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	1	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	1	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	1	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	1	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	1	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	1	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	1	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	1	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	1	0
47		1	Roof		0	1	0	0	1	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900

County of Orange - OC Public Works  
 OC Development Services  
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 BUILDING OFFICIAL

**Column Forces/Moments, Floor Live Load : Moment y-y (Bot)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	LL Reduce	NonReduc...	LL[k] (unre...	LLS Redu...	NonReduc...	LLS[k] (un...
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	1	0
2		1	Roof		0	1	0	0	1	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	1	0
4		1	Roof		0	1	0	0	1	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	1	0
6		1	Roof		0	1	0	0	1	0
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	1	0
8		1	Roof		0	1	0	0	1	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	1	0
10		1	Roof		0	1	0	0	1	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	1	0
12		1	Roof		0	1	0	0	1	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	1	0
14		1	Roof		0	1	0	0	1	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	1	0
16		1	Roof		0	1	0	0	1	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	1	0
18		1	Roof		0	1	0	0	1	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B68  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Floor Live Load : Moment y-y (Bot) (Continued)**

Building & Safety: OCPWAzayvndB 4/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...LL	Reduce NonReduc..LL[k] (unre..LLS	Redu... NonReduc..LLS[k] (un...
19	(B.2-2.5)	1 Level 2	48.417,56...	0	1	0
20		1 Roof		0	1	0
21	(C-2.5)	1 Level 2	48.417,27...	0	1	0
22		1 Roof		0	1	0
23	(B.5-4)	1 Level 2	83.833,47...	0	1	0
24		1 Roof		0	1	0
25	(C.8-4)	1 Level 2	83.833,13...	0	1	0
26		1 Roof		0	1	0
27	(B.2-1)	1 Level 2	0,56.833	0	1	0
28		1 Roof		0	1	0
29	(C-1)	1 Level 2	0,27.583	0	1	0
30		1 Roof		0	1	0
31	(B.2-1.8)	1 Level 2	24.167,56...	0	1	0
32		1 Roof		0	1	0
33	(C-1.8)	1 Level 2	24.167,27...	0	1	0
34		1 Roof		0	1	0
35	CS18	1 Level 2	52.75,81.1...	0	1	0
36	CS19	1 Level 2	70.583,81...	0	1	0
37	CS20	1 Level 2	98.167,68...	0	1	0
38	CS21	1 Level 2	98.167,51...	0	1	0
39	CS22	1 Level 2	98.167,34.5	0	1	0
40	CS23	1 Level 2	98.167,17...	0	1	0
41	(E-5)	1 Level 2	98.167,0	0	1	0
42	CS25	1 Level 2	86.5,0	0	1	0
43	CS26	1 Level 2	75.333,0	0	1	0
44	CS27	1 Level 2	60.333,0	0	1	0
45	CS28	1 Level 2	50.917,0	0	1	0
46	CS29	1 Level 2	61.667,74...	0	1	0
47		1 Roof		0	1	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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**Column Forces/Moments, Roof Load : Axial Force**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...RLL	Redu... NonReduc..RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1 Level 2	0,85.917	0	1	0	0	0
2		1 Roof		0	1	0	0	0
3	(A-2)	1 Level 2	30,85.917	0	1	0	0	0
4		1 Roof		0	1	0	0	0
5	(B-3)	1 Level 2	61.667,61...	0	1	0	0	0
6		1 Roof		0	1	0	0	0
7	(B-4)	1 Level 2	83.833,61...	0	1	0	0	0
8		1 Roof		0	1	0	0	0
9	(D-1)	1 Level 2	0,5.25	0	1	0	0	0
10		1 Roof		0	1	0	0	0
11	(D-1.8)	1 Level 2	24.167,5.25	0	1	0	0	0
12		1 Roof		0	1	0	0	0
13	(D-2.5)	1 Level 2	48.417,5.25	0	1	0	0	0
14		1 Roof		0	1	0	0	0
15	(B.2-1.3)	1 Level 2	6,56.833	0	1	0	0	0
16		1 Roof		0	1	0	0	0
17	(C-1.3)	1 Level 2	6,27.583	0	1	0	0	0
18		1 Roof		0	1	0	0	0
19	(B.2-2.5)	1 Level 2	48.417,56...	0	1	0	0	0
20		1 Roof		0	1	0	0	0
21	(C-2.5)	1 Level 2	48.417,27...	0	1	0	0	0
22		1 Roof		0	1	0	0	0
23	(B.5-4)	1 Level 2	83.833,47...	0	1	0	0	0
24		1 Roof		0	1	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B69  
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 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Axial Force (Continued)**

Building & Safety: OCPWAzayyadB 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..	RLL Redu...	NonReduc...	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0	0
26		1	Roof		0	1	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0	0
28		1	Roof		0	1	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0	0
30		1	Roof		0	1	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0	0
32		1	Roof		0	1	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0	0
34		1	Roof		0	1	0	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0	0
47		1	Roof		0	1	0	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900  
 County of Orange - OC Public Works  
 OC Development Services  
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**Column Forces/Moments, Roof Load : Shear z-z**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..	RLL Redu...	NonReduc...	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	0	0
2		1	Roof		0	1	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	0	0
4		1	Roof		0	1	0	0	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	0	0
6		1	Roof		0	1	0	0	0	0
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	0	0
8		1	Roof		0	1	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	0	0
10		1	Roof		0	1	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	0	0
12		1	Roof		0	1	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	0	0
14		1	Roof		0	1	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	0	0
16		1	Roof		0	1	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	0	0
18		1	Roof		0	1	0	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	0	0	0
20		1	Roof		0	1	0	0	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	0	0	0
22		1	Roof		0	1	0	0	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	0	0	0
24		1	Roof		0	1	0	0	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0	0
26		1	Roof		0	1	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0	0
28		1	Roof		0	1	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0	0
30		1	Roof		0	1	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B70  
 May 28, 2021  
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 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Shear z-z (Continued)**

Building & Safety: OCPWAzayyadB 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..RLL	Redu...	NonReduc..RLL[k] (un...	SL[k]	SLN[k]	RL[k]
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0
32		1	Roof		0	1	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0
34		1	Roof		0	1	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0
47		1	Roof		0	1	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900  
 County of Orange - OC Public Works  
 OC Development Services  
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**Column Forces/Moments, Roof Load : Shear y-y**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..RLL	Redu...	NonReduc..RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	0
2		1	Roof		0	1	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	0
4		1	Roof		0	1	0	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	0
6		1	Roof		0	1	0	0	0
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	0
8		1	Roof		0	1	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	0
10		1	Roof		0	1	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	0
12		1	Roof		0	1	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	0
14		1	Roof		0	1	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	0
16		1	Roof		0	1	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	0
18		1	Roof		0	1	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	0	0
20		1	Roof		0	1	0	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	0	0
22		1	Roof		0	1	0	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	0	0
24		1	Roof		0	1	0	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0
26		1	Roof		0	1	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0
28		1	Roof		0	1	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0
30		1	Roof		0	1	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0
32		1	Roof		0	1	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0
34		1	Roof		0	1	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Shear y-y (Continued)**

Building & Safety: OCPWAzayyodB 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible	RLL Redu...	NonReduc.	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
37	CS20	1 Level 2	98.167,68...	0	1	0	0	0	0	0
38	CS21	1 Level 2	98.167,51...	0	1	0	0	0	0	0
39	CS22	1 Level 2	98.167,34.5	0	1	0	0	0	0	0
40	CS23	1 Level 2	98.167,17...	0	1	0	0	0	0	0
41	(E-5)	1 Level 2	98.167,0	0	1	0	0	0	0	0
42	CS25	1 Level 2	86.5,0	0	1	0	0	0	0	0
43	CS26	1 Level 2	75.333,0	0	1	0	0	0	0	0
44	CS27	1 Level 2	60.333,0	0	1	0	0	0	0	0
45	CS28	1 Level 2	50.917,0	0	1	0	0	0	0	0
46	CS29	1 Level 2	61.667,74...	0	1	0	0	0	0	0
47		1 Roof		0	1	0	0	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B71-0900  
 County of Orange - OC Public Works  
 OC Development Services  
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**Column Forces/Moments, Roof Load : Moment z-z (Top)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible	RLL Redu...	NonReduc.	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1 Level 2	0,85.917	0	1	0	0	0	0	0
2		1 Roof		0	1	0	0	0	0	0
3	(A-2)	1 Level 2	30,85.917	0	1	0	0	0	0	0
4		1 Roof		0	1	0	0	0	0	0
5	(B-3)	1 Level 2	61.667,61...	0	1	0	0	0	0	0
6		1 Roof		0	1	0	0	0	0	0
7	(B-4)	1 Level 2	83.833,61...	0	1	0	0	0	0	0
8		1 Roof		0	1	0	0	0	0	0
9	(D-1)	1 Level 2	0,5.25	0	1	0	0	0	0	0
10		1 Roof		0	1	0	0	0	0	0
11	(D-1.8)	1 Level 2	24.167,5.25	0	1	0	0	0	0	0
12		1 Roof		0	1	0	0	0	0	0
13	(D-2.5)	1 Level 2	48.417,5.25	0	1	0	0	0	0	0
14		1 Roof		0	1	0	0	0	0	0
15	(B.2-1.3)	1 Level 2	6,56.833	0	1	0	0	0	0	0
16		1 Roof		0	1	0	0	0	0	0
17	(C-1.3)	1 Level 2	6,27.583	0	1	0	0	0	0	0
18		1 Roof		0	1	0	0	0	0	0
19	(B.2-2.5)	1 Level 2	48.417,56...	0	1	0	0	0	0	0
20		1 Roof		0	1	0	0	0	0	0
21	(C-2.5)	1 Level 2	48.417,27...	0	1	0	0	0	0	0
22		1 Roof		0	1	0	0	0	0	0
23	(B.5-4)	1 Level 2	83.833,47...	0	1	0	0	0	0	0
24		1 Roof		0	1	0	0	0	0	0
25	(C.8-4)	1 Level 2	83.833,13...	0	1	0	0	0	0	0
26		1 Roof		0	1	0	0	0	0	0
27	(B.2-1)	1 Level 2	0,56.833	0	1	0	0	0	0	0
28		1 Roof		0	1	0	0	0	0	0
29	(C-1)	1 Level 2	0,27.583	0	1	0	0	0	0	0
30		1 Roof		0	1	0	0	0	0	0
31	(B.2-1.8)	1 Level 2	24.167,56...	0	1	0	0	0	0	0
32		1 Roof		0	1	0	0	0	0	0
33	(C-1.8)	1 Level 2	24.167,27...	0	1	0	0	0	0	0
34		1 Roof		0	1	0	0	0	0	0
35	CS18	1 Level 2	52.75,81.1...	0	1	0	0	0	0	0
36	CS19	1 Level 2	70.583,81...	0	1	0	0	0	0	0
37	CS20	1 Level 2	98.167,68...	0	1	0	0	0	0	0
38	CS21	1 Level 2	98.167,51...	0	1	0	0	0	0	0
39	CS22	1 Level 2	98.167,34.5	0	1	0	0	0	0	0
40	CS23	1 Level 2	98.167,17...	0	1	0	0	0	0	0
41	(E-5)	1 Level 2	98.167,0	0	1	0	0	0	0	0
42	CS25	1 Level 2	86.5,0	0	1	0	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B72  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Moment z-z (Top) (Continued)**

Building & Safety: OCPWAzayyodB 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible	RLL Redu...	NonReduc.	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0	0
47		1	Roof		0	1	0	0	0	0

Permits: BNR21-0246, ELE21-0858, MEC21-0514, B21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works. OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval or endorsement of any laws or Ordinance of State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Roof Load : Moment y-y (Top)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible	RLL Redu...	NonReduc.	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	0	0
2		1	Roof		0	1	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	0	0
4		1	Roof		0	1	0	0	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	0	0
6		1	Roof		0	1	0	0	0	0
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	0	0
8		1	Roof		0	1	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	0	0
10		1	Roof		0	1	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	0	0
12		1	Roof		0	1	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	0	0
14		1	Roof		0	1	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	0	0
16		1	Roof		0	1	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	0	0
18		1	Roof		0	1	0	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	0	0	0
20		1	Roof		0	1	0	0	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	0	0	0
22		1	Roof		0	1	0	0	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	0	0	0
24		1	Roof		0	1	0	0	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0	0
26		1	Roof		0	1	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0	0
28		1	Roof		0	1	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0	0
30		1	Roof		0	1	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0	0
32		1	Roof		0	1	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0	0
34		1	Roof		0	1	0	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0	0
47		1	Roof		0	1	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B73  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Moment z-z (Bot)**

Building & Safety - OCPWA Approved 12/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..	RLL Redu...	NonReduc...	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	0	0
2		1	Roof		0	1	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	0	0
4		1	Roof		0	1	0	0	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	0	0
6		1	Roof		0	1	0	0	0	0
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	0	0
8		1	Roof		0	1	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	0	0
10		1	Roof		0	1	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	0	0
12		1	Roof		0	1	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	0	0
14		1	Roof		0	1	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	0	0
16		1	Roof		0	1	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	0	0
18		1	Roof		0	1	0	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	0	0	0
20		1	Roof		0	1	0	0	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	0	0	0
22		1	Roof		0	1	0	0	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	0	0	0
24		1	Roof		0	1	0	0	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0	0
26		1	Roof		0	1	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0	0
28		1	Roof		0	1	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0	0
30		1	Roof		0	1	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0	0
32		1	Roof		0	1	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0	0
34		1	Roof		0	1	0	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0	0
47		1	Roof		0	1	0	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900  
**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**  
 This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.  
 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Column Forces/Moments, Roof Load : Moment y-y (Bot)**

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ..	RLL Redu...	NonReduc...	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
1	(A-1)	1	Level 2	0,85.917	0	1	0	0	0	0
2		1	Roof		0	1	0	0	0	0
3	(A-2)	1	Level 2	30,85.917	0	1	0	0	0	0
4		1	Roof		0	1	0	0	0	0
5	(B-3)	1	Level 2	61.667,61...	0	1	0	0	0	0
6		1	Roof		0	1	0	0	0	0



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B74  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Column Forces/Moments, Roof Load : Moment y-y (Bot) (Continued)**

Building & Safety: OCPW/Arayon/BP 4/22/2025

Column Stack	Lift No.	Floor Label	Coordinat...	Reducible ...	RLL Redu...	NonReduc...	RLL[k] (un...	SL[k]	SLN[k]	RL[k]
7	(B-4)	1	Level 2	83.833,61...	0	1	0	0	0	0
8		1	Roof		0	1	0	0	0	0
9	(D-1)	1	Level 2	0,5.25	0	1	0	0	0	0
10		1	Roof		0	1	0	0	0	0
11	(D-1.8)	1	Level 2	24.167,5.25	0	1	0	0	0	0
12		1	Roof		0	1	0	0	0	0
13	(D-2.5)	1	Level 2	48.417,5.25	0	1	0	0	0	0
14		1	Roof		0	1	0	0	0	0
15	(B.2-1.3)	1	Level 2	6,56.833	0	1	0	0	0	0
16		1	Roof		0	1	0	0	0	0
17	(C-1.3)	1	Level 2	6,27.583	0	1	0	0	0	0
18		1	Roof		0	1	0	0	0	0
19	(B.2-2.5)	1	Level 2	48.417,56...	0	1	0	0	0	0
20		1	Roof		0	1	0	0	0	0
21	(C-2.5)	1	Level 2	48.417,27...	0	1	0	0	0	0
22		1	Roof		0	1	0	0	0	0
23	(B.5-4)	1	Level 2	83.833,47...	0	1	0	0	0	0
24		1	Roof		0	1	0	0	0	0
25	(C.8-4)	1	Level 2	83.833,13...	0	1	0	0	0	0
26		1	Roof		0	1	0	0	0	0
27	(B.2-1)	1	Level 2	0,56.833	0	1	0	0	0	0
28		1	Roof		0	1	0	0	0	0
29	(C-1)	1	Level 2	0,27.583	0	1	0	0	0	0
30		1	Roof		0	1	0	0	0	0
31	(B.2-1.8)	1	Level 2	24.167,56...	0	1	0	0	0	0
32		1	Roof		0	1	0	0	0	0
33	(C-1.8)	1	Level 2	24.167,27...	0	1	0	0	0	0
34		1	Roof		0	1	0	0	0	0
35	CS18	1	Level 2	52.75,81.1...	0	1	0	0	0	0
36	CS19	1	Level 2	70.583,81...	0	1	0	0	0	0
37	CS20	1	Level 2	98.167,68...	0	1	0	0	0	0
38	CS21	1	Level 2	98.167,51...	0	1	0	0	0	0
39	CS22	1	Level 2	98.167,34.5	0	1	0	0	0	0
40	CS23	1	Level 2	98.167,17...	0	1	0	0	0	0
41	(E-5)	1	Level 2	98.167,0	0	1	0	0	0	0
42	CS25	1	Level 2	86.5,0	0	1	0	0	0	0
43	CS26	1	Level 2	75.333,0	0	1	0	0	0	0
44	CS27	1	Level 2	60.333,0	0	1	0	0	0	0
45	CS28	1	Level 2	50.917,0	0	1	0	0	0	0
46	CS29	1	Level 2	61.667,74...	0	1	0	0	0	0
47		1	Roof		0	1	0	0	0	0

Permits: BNR21-0246, ELE21-0853, MEC21-0514, B21-0900  
 County of Orange - OC Public Works  
 OC Development Services  
 APPROVED  
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 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Hot Rolled Steel Column Code Checks**

Stack	Lift	Shape	Code Ch...	Elev[ft]	LC Shear C...	Elev[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [k]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	(A-1)	1	W18X211	0.902	19.193	7	0.157	33.5	7	153.067	410.85	52.791	113.877	2.214 H1-1a
2	(A-2)	1	W18X211	0.994	19.193	7	0.114	33.5	7	185.661	517.5	64.5	175.5	2.214 H1-1a
3	(B-3)	1	W18X211	0.945	19.193	7	0.125	33.5	7	186.486	567	64.875	261	2.203 H1-1a
4	(B-4)	1	W18X211	0.885	19.193	7	0.141	33.5	7	185.661	517.5	64.5	175.5	2.203 H1-1a
5	(D-1)	1	W18X211	0.943	19.193	7	0.113	33.5	7	89.53	371.25	37.875	102	2.216 H1-1a
6	(D-1.8)	1	W18X311	0.818	19.193	7	0.038	33.5	7	153.067	410.85	52.791	113.877	2.181 H1-1a
7	(D-2.5)	1	W18X211	1	19.193	7	0.092	33.5	7	151.004	436.95	52.5	145.5	2.215 H1-1a
8	(B.2-1.3)	1	W18X283	0.976	19.542	7	0.228	33.5	7	252.732	436.95	52.5	145.5	2.271 H1-1b
9	(C-1.3)	1	W18X283	0.94	33.5	7	0.217	33.5	7	252.732	436.95	52.5	145.5	2.268 H1-1b
10	(B.2-2.5)	1	W18X283	0.882	19.542	7	0.292	33.5	7	627.846	882	133.125	487.5	2.265 H1-1b
11	(C-2.5)	1	W18X283	0.936	19.193	7	0.289	33.5	7	456.128	882	133.125	487.5	2.215 H1-1a
12	(B.5-4)	1	W18X283	0.844	19.542	7	0.281	33.5	7	741.361	1003.5	158.25	611.25	2.243 H1-1b



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

B75  
 May 28, 2021  
 12:12 AM  
 Checked By: \_\_\_\_\_

**Hot Rolled Steel Column Code Checks (Continued)**

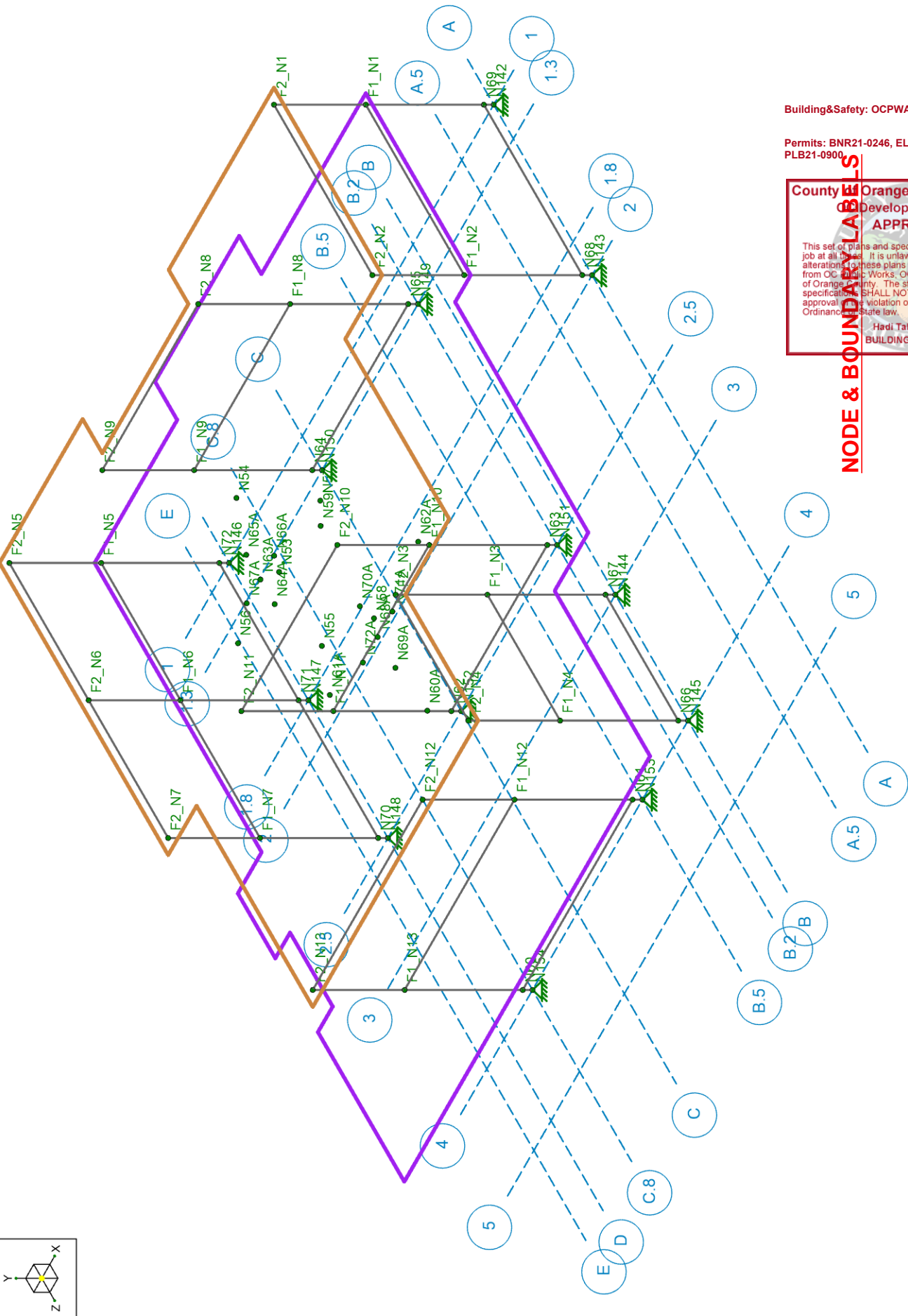
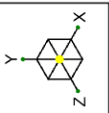
Building & Safety - OCPDW AzarwoodB 12/22/2025

Stack	Lift	Shape	Code Ch...	Elev[ft]	LC	Shear C...	Elev[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [k]	phi*Mn y...	phi*Mn z...	Cb	Egn
13	(C.8-4)	1	W18X283	0.848	19.542	7	0.283	33.5	7	741.361	1003.5	158.26	31.25	2.24	H1-1a
14	(B.2-1)	1	HSS8X8X3	0.999	19.193	7	0	33.5	7	152.769	222.318	43.381	43.381	1	H1-1a
15	(C-1)	1	HSS8X8X3	0.906	19.193	7	0	33.5	7	152.769	222.318	43.381	43.381	1	H1-1a
16	(B.2-1.8)	1	HSS10X1...	0.868	19.193	7	0	33.5	7	291.753	370.944	92.595	92.595	1	H1-1a
17	(C-1.8)	1	HSS9X9X4	0.882	19.193	7	0	33.5	7	248.761	332.442	77.768	77.768	1	H1-1a
18	CS18	1	HSS7X7X2	0.926	19.5	7	0	19.5	9	69.169	130.824	20.185	20.185	1	H1-1a
19	CS19	1	HSS5.5X5...	0.955	19.5	7	0	19.5	9	47.255	101.844	13.508	13.508	1	H1-1a
20	CS20	1	HSS6X6X2	0.959	19.5	7	0	19.5	9	58.645	111.78	15.688	15.688	1	H1-1a
21	CS21	1	HSS6X6X2	0.933	19.5	7	0	19.5	9	58.645	111.78	15.688	15.688	1	H1-1a
22	CS22	1	HSS6X6X2	0.957	19.5	7	0	19.5	9	58.645	111.78	15.688	15.688	1	H1-1a
23	CS23	1	HSS6X6X2	0.951	19.5	7	0	19.5	9	58.645	111.78	15.688	15.688	1	H1-1a
24	(E-5)	1	HSS5.5X5...	0.927	19.5	7	0	19.5	9	47.255	101.844	13.508	13.508	1	H1-1a
25	CS25	1	HSS5X5X2	0.809	19.5	7	0	19.5	9	36.303	92.322	11.538	11.538	1	H1-1a
26	CS26	1	HSS5X5X2	0.854	19.5	7	0	19.5	9	36.303	92.322	11.538	11.538	1	H1-1a
27	CS27	1	HSS6X6X2	0.847	19.5	7	0	19.5	9	58.645	111.78	15.688	15.688	1	H1-1a
28	CS28	1	HSS4X4X2	0.704	19.5	7	0	19.5	9	18.154	73.278	8.24	8.24	1	H1-1a
29	CS29	1	HSS6X6X2	0.831	19.193	7	0	33.5	7	58.645	111.78	15.688	15.688	1	H1-1a

Permits: BNR26-0246, BLP7-0863, MEC21-0514, 21-021-0001  
 County of Orange - OC Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job site. It is unlawful to make any changes or alterations to these plans without written permission from OC Development Services. The stamping of these plans by the County Engineer shall NOT be held to denote approval of the violation of any provisions of any County Ordinance or the law.  
 Hadi Taherabadi  
 Building Engineer

C\_LATERAL DESIGN

C1



Building&Safety: OCPWazaryandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**County of Orange - OC Public Works Development Services**  
**APPROVED**

This set of plans and specifications must be used on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works. OC Development Services of Orange County. The stamping of these plans and specifications SHALL NOT be held to be an approval or a violation of any provision of any County Ordinance or State law.

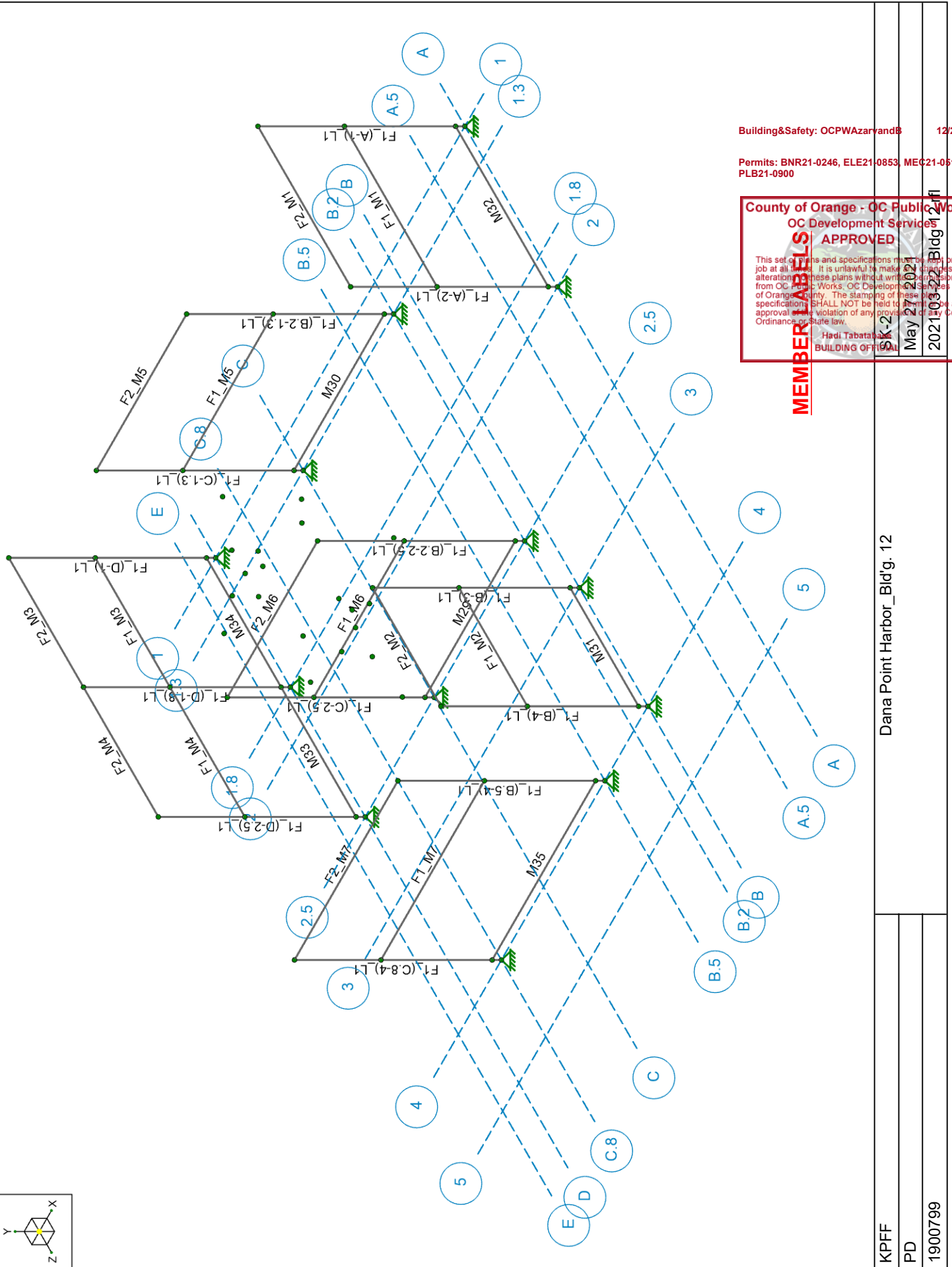
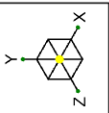
Hadi Tabatabaee  
 BUILDING OFFICIAL

**Node & Boundary Labels**

OC Bldg 12.rvt  
 May 27 2025  
 20210322

Dana Point Harbor\_Bld'g. 12

KPFF  
PD  
1900799



Building&Safety: OCPWazaryandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

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OC Development Services  
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**MEMBER**

Hadi Tabatabaie  
BUILDING OFFICIAL

Dana Point Harbor\_Bld'g. 12

KPFF

PD

1900799

OC K-2  
May 27 2025  
20210322 Bldg 12.rfl

# SEISMIC LOAD CALC (RISA)

C3

## Seismic Generation Input

Seismic Code:	<b>ASCE 7-16</b>	T_X (sec):	<b>Not Entered</b>	R_X:	<b>8</b>
Ct_X:	<b>0.028</b>	T_Z (sec):	<b>Not Entered</b>	R_Z:	<b>8</b>
Ct_Z:	<b>0.028</b>	Ct Exp. Z:	<b>0.8</b>		
Ct Exp. X:	<b>0.8</b>	TL (sec):	<b>8</b>		
Risk Cat	<b>III</b>	SDS (g):	<b>1.012</b>	S1 (g):	<b>0.455</b>
SD1 (g):	<b>0.455</b>	Parapet Ht (ft):	<b>0</b>		
Base Elev (ft):	<b>0</b>				

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Permits: 01455-246, ELE21-0853, MEC21-0514, PLB21-0900

## Seismic Generation Detail Results

T_X Used (sec):	<b>0.465</b>	T_X Method A:	<b>0.465</b>	T_X Upper Limit:	<b>0.651</b>
T_Z Used (sec):	<b>0.465</b>	T_Z Method A:	<b>0.465</b>	T_Z Upper Limit:	<b>0.651</b>
Importance Fac.:	<b>1.25</b>	Design Cat.:	<b>D</b>		
V_X (k):	<b>227.128</b>	Gov. Eqn.	<b>ASCE Eqn 12.8-3</b>	Cs_X:	<b>0.153</b>
V_Z (k):	<b>227.128</b>	Gov. Eqn.	<b>ASCE Eqn 12.8-3</b>	Cs_Z:	<b>0.153</b>

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**BUILDING OFFICIAL**

## Seismic Generation Force Results

Floor Level	Height (ft)	Weight (k)	Force X (k)	Force Z (k)	CG X (ft)	CG Z (ft)
<b>Roof</b>	<b>33.5</b>	<b>379.94</b>	<b>84.355</b>	<b>84.355</b>	<b>42.066</b>	<b>39.729</b>
<b>Level 2</b>	<b>19.5</b>	<b>1104.744</b>	<b>142.773</b>	<b>142.773</b>	<b>40.873</b>	<b>48.659</b>
<b>Totals</b>		<b>1484.684</b>	<b>227.128</b>	<b>227.128</b>		

## Seismic Generation Diaphragm Results

Floor Level	Width (X) (ft)	Length (Z) (ft)	X Plus (ft)	X Minus (ft)	Z Plus (ft)	Z Minus (ft)
<b>Roof</b>	<b>83.667</b>	<b>86.833</b>	<b>4.183</b>	<b>4.183</b>	<b>4.342</b>	<b>4.342</b>
<b>Level 2</b>	<b>89.917</b>	<b>108.417</b>	<b>4.496</b>	<b>4.496</b>	<b>5.421</b>	<b>5.421</b>

<b>kpff</b> Consulting Engineers 18400 Von Karman Avenue, Suite 600 Irvine, CA 92612-1518 (949) 262-1022 tel (949) 262-8082 fax	project	Dana Point Harbor	by	PD	sheet no.
	location	Dana Point CA	date	5/27/2021	
	client	SMS ARCH	job no.	1900799	

**Seismic Load**

$S_s = 1.286$   
 $S_1 = 0.455$   
 $S_{0.5} = 1.012$   
 $S_{0.1} = 0.455$   
 $I = 1.25$   
 $R = 8$

(Table 1.5-2)  
(Table 12.2-1)

Steel Special Moment Frame

Calculation of  $T_a$ :

$C_t = 0.028$  (Table 12.8-2)  
 $x = 0.8$  (Table 12.8-2)  
 $h_{total} = 33.5$   
 $T_a = C_t (h_{total})^x = 0.46 \text{ sec}$  (Eq 12.8-7)  
 $T_L = 8$  (Fig. 22-14)

$C_s = \frac{S_{0.5}}{(R/I)} = 0.158$  (Eq 12.8-2)  
 $C_{s,max} = \frac{S_{0.1}}{T(R/I)} = 0.153 \text{ for } T \leq T_L$  (Eq 12.8-3)  
 $C_{s,max} = \frac{S_{0.1} T_L}{T(R/I)} = \text{NA for } T > T_L$  (Eq 12.8-4)  
 $C_{s,min} = 0.044 S_{0.5} I = 0.056 \geq 0.01$  (Eq 12.8-5)  
 $C_{s,min} = 0.5 S_1 = \text{N/A for } S_1 > 0.6g$  (Eq 12.8-6)

$C_s = 0.153$  (Section 12.8.1.1)  
 $V = C_s W = 0.153 W$  (Section 12.8.1)

DESIGN SUMMARY	
Total bldg height	$h_n = 33.5 \text{ ft}$
Total bldg weight	$W = 1492 \text{ K}$
Total base shear	$V_s = V_b = 228.17 \text{ K}$
	$k = 1.00$

Cs coefficient & total base shear match RISA calc.

Vertical Distribution of Seismic Forces

$F_x = C_{vx} V$  (Eq 12.8-11)  
 $C_{vx} = \frac{w_x h_x^k}{\sum_{i=1}^n w_i h_i^k}$  (Eq 12.8-12)

Diaphragm force

$F_{jx} = \frac{F_x}{\sum_{i=1}^n W_i} W_{jx}$   
 $F_{jx} \geq 0.25 \text{ DS } W_{jx} = 0.253 \text{ wpk}$   
 $F_{jx} \leq 0.45 \text{ DS } W_{jx} = 0.506 \text{ wpk}$  (Eq 12.10-1)

$w_x h_x^k$

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SEISMIC LOAD CALC AND CALC.

Level Name	Ft to Fl Height ft	Height ft	Weight w <sub>x</sub> k	w <sub>x</sub> h <sub>x</sub> <sup>k</sup> k-ft	C <sub>vx</sub>	Lateral force		Diaphragm force		F <sub>px</sub>	F <sub>py</sub> /F <sub>x</sub>
						F <sub>x</sub> k	Story V k	V <sub>x</sub> = ΣF <sub>i</sub> k	ΣW <sub>i</sub> k		
12	0.0	0.0	0	0	0.0000	0	0	0	0		
11	0.0	0.0	0	0	0.0000	0	0	0	0		
10	0.0	0.0	0	0	0.0000	0	0	0	0		
9	0.0	0.0	0	0	0.0000	0	0	0	0		
8	0.0	0.0	0	0	0.0000	0	0	0	0		
7	0.0	0.0	0	0	0.0000	0	0	0	0		
6	0.0	0.0	0	0	0.0000	0	0	0	0		
5	0.0	0.0	0	0	0.0000	0	0	0	0		
4	0.0	0.0	0	0	0.0000	0	0	0	0		
3	-33.5	33.5	403	13513.967	0.389	89	89	403	0.253	102.1	1.15
2	14.0	19.5	1,088	21218.067	0.611	139	89	228.2	0.253	275.3	1.97
Ground	19.5	0.0	1,492	34732.034	1.000	228.2	228.2				

Vertical distribution of seismic forces approximately match RISA calc

A <sub>1</sub> ft <sup>2</sup>	A <sub>2</sub> ft <sup>2</sup>	A <sub>3</sub> ft <sup>2</sup>	A <sub>4</sub> ft <sup>2</sup>	Total ft <sup>2</sup>	Seismic Wt psf	W kips
Exterior Balcony	1877.0			2157	144.0	310.608
Floor in Bldg	6126.0	280.0		6126	123.0	753.5
Stairs (2)	160.0	160.0		480	50.0	24.0
Total				8763		1088

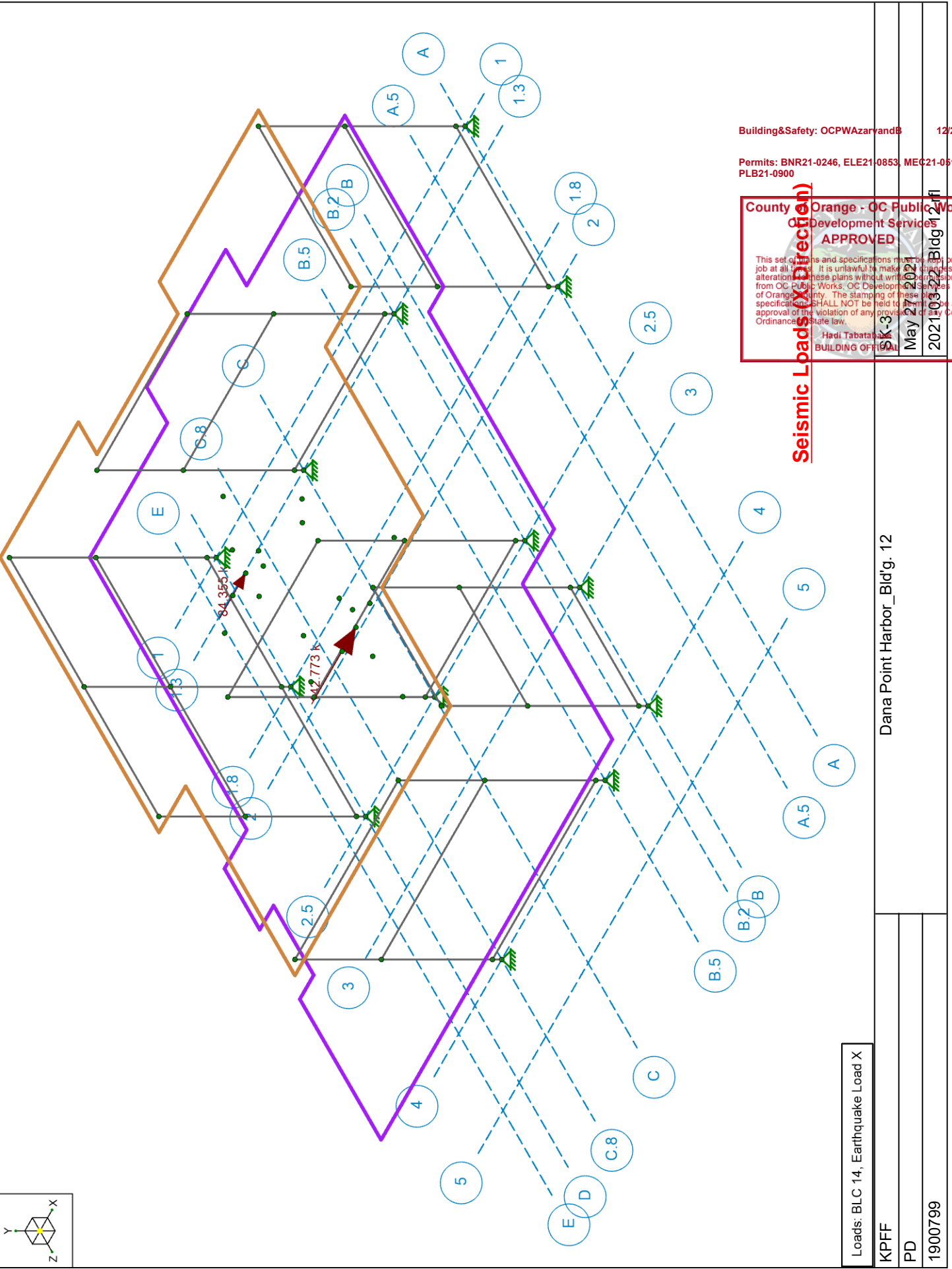
  

A <sub>1</sub> ft <sup>2</sup>	A <sub>2</sub> ft <sup>2</sup>	A <sub>3</sub> ft <sup>2</sup>	Total ft <sup>2</sup>	Seismic Wt psf	W kips
Flat Roof	6271.0		6271	62.0	388.8
Trellis	1460.0		1460	10.0	14.6
Total			7731		403

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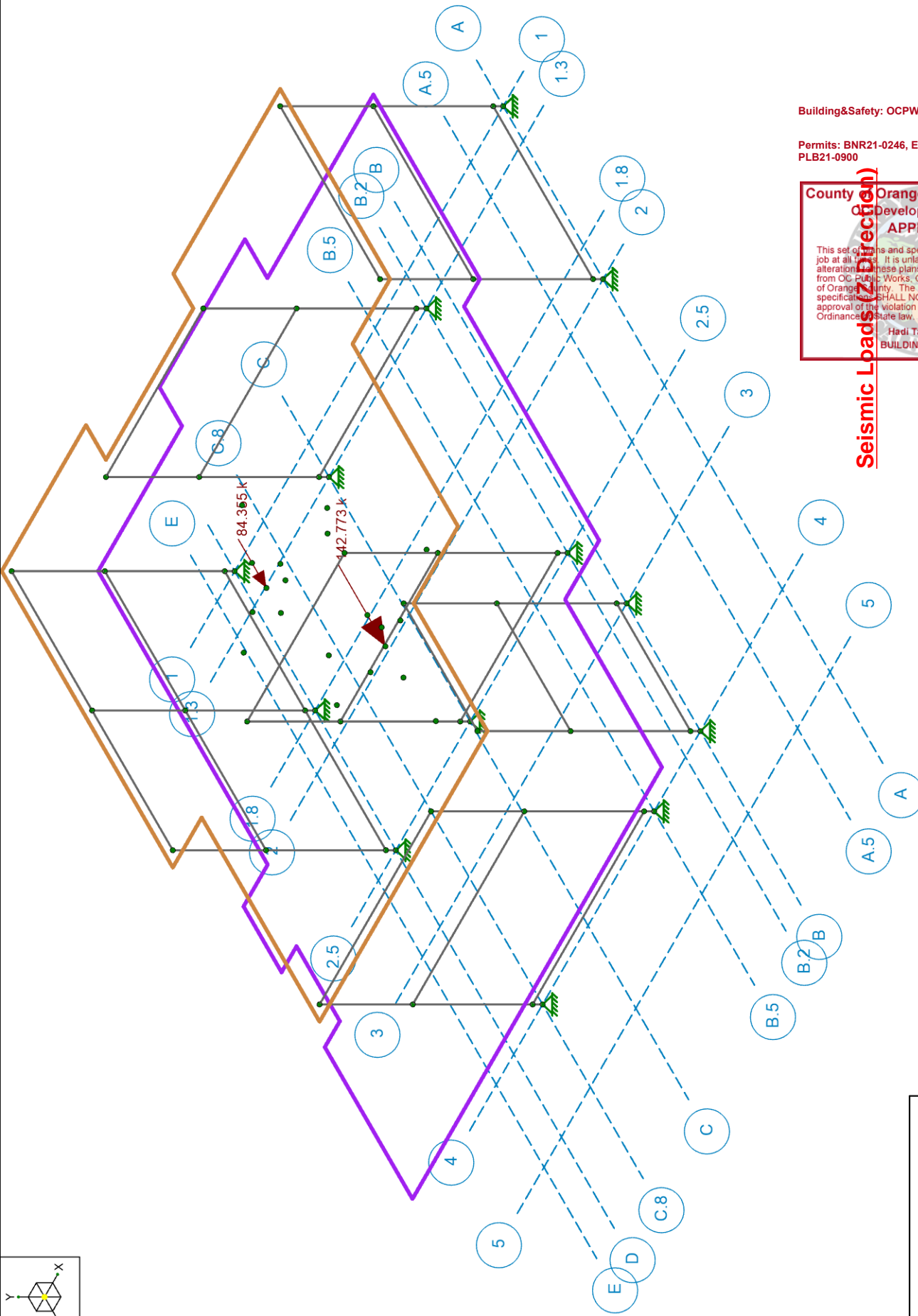
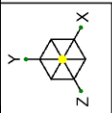
May 27 2025  
 20210322 Bldg 12.rfl

**Seismic Loads (X Direction)**

Loads: BLC 14, Earthquake Load X

Dana Point Harbor\_Bld'g. 12

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**Seismic Loads (Z-Direction)**

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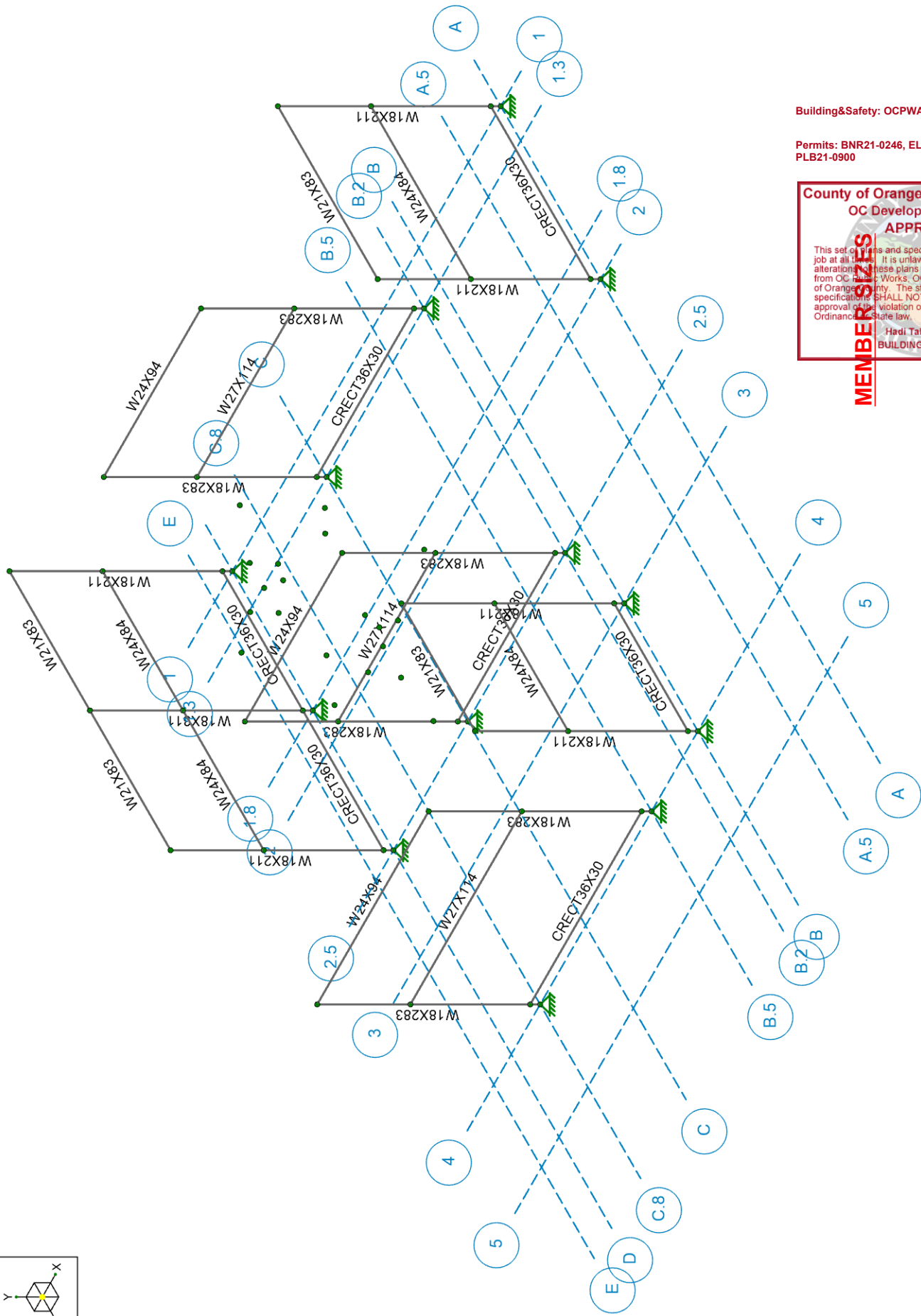
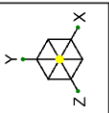
Dana Point Harbor\_Bld'g. 12

Loads: BLC 17, Earthquake Load Z

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K-5  
 May 27 2025  
 20210322 Bldg 12.rfl

Dana Point Harbor\_Bld'g. 12

KPFF  
PD  
1900799

# DRIFT CHECK

C9

ASCE Drift 0.015 le 1.25  
 h2 (ft) 14 Cd 5.5  
 h1 (ft) 19.5

Frame Line	Roof Displacement (in)	Floor Displacement (in)	2nd Story Drift (in)	2nd Story Allow. Story Drift (in)	OK/N.G.	%	1st Story Drift (in)	1st Story Allow. Story Drift (in)	OK/N.G.	%	Governing LC	Notes
Frame 1.3	1.195	0.771	0.424	0.573	OK	0.74	0.771	0.798	OK	0.97	34	W18x283 columns, W24x94 @ roof & W27x114 @ floor
Frame 2.5	1.233	0.766	0.467	0.573	OK	0.82	0.766	0.798	OK	0.96	33	
Frame 4	1.292	0.825	0.467	0.573	OK	0.82	0.825	0.798	OK Bv Insp.	1.03	33	
Frame A	1.239	0.772	0.467	0.573	OK	0.82	0.772	0.798	OK	0.97	30	W18x211 columns
Frame B	1.207	0.746	0.461	0.573	OK	0.80	0.746	0.798	OK	0.94	30	[W18x311 int. col.
Frame D	1.171	0.742	0.429	0.573	OK	0.75	0.742	0.798	OK	0.93	31	@D/1.8), W21x83

OK by inspection due to TOS being used as frame ht. (instead of using C.L. of beams as frame ht.)

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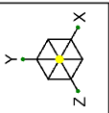
Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

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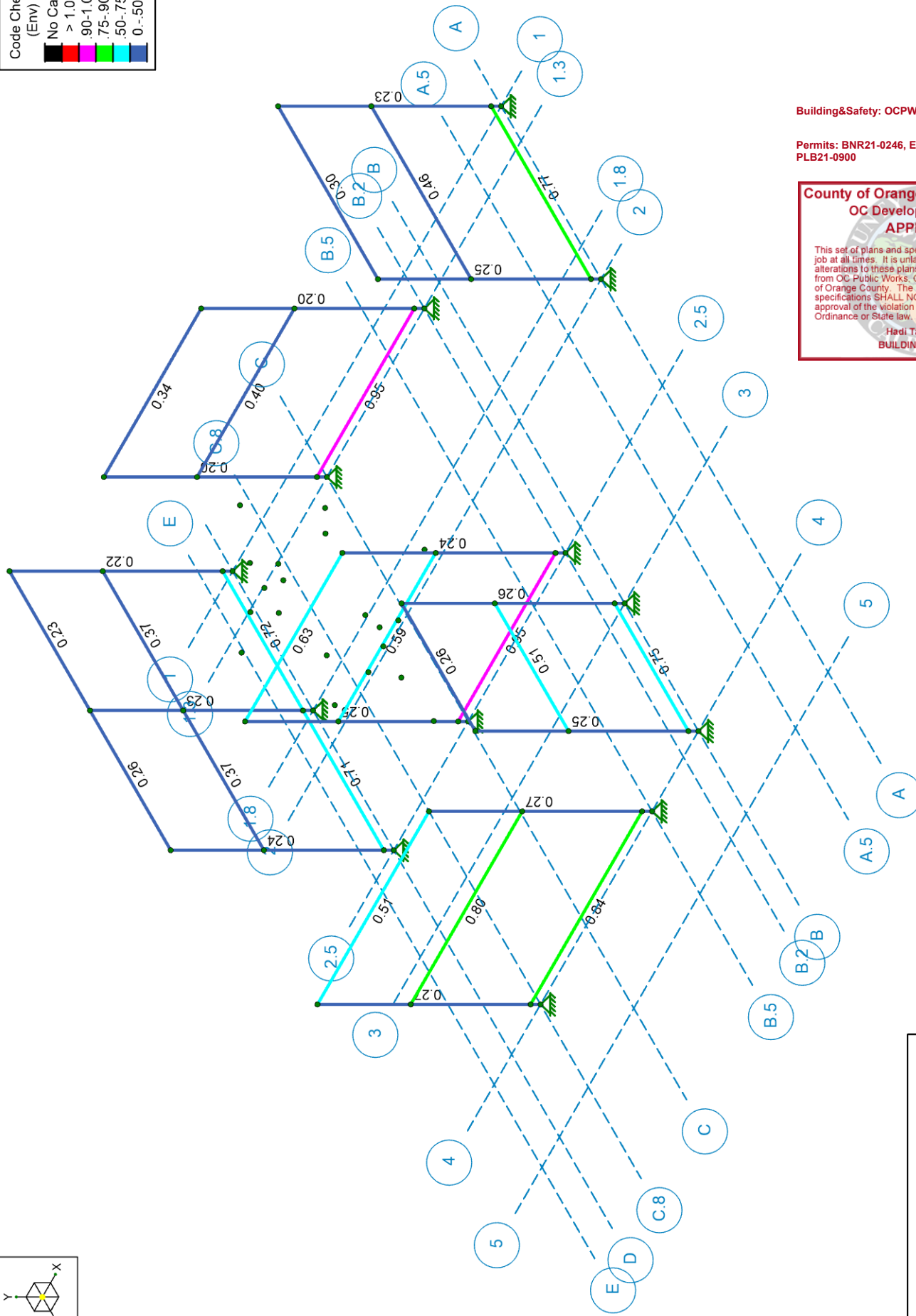
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C10



Code Check (Env)	
Black	No Calc
Red	> 1.0
Yellow	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



Building&Safety: OCPWazaryandB 12/22/2025

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Dana Point Harbor\_Bld'g. 12

Member Code Checks Displayed (Enveloped)

KPFF

PD

1900799

May 27 2025

20210322 Bldg 12.rvt

# RISA OUTPUTS



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C11  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

### Project Grid Lines

Building&Safety: OCPWazarvandB 12/22/2025

	Label	Start [ft]	End [ft]	Start [ft]	End [ft]	Start Bubble	End Bubble
1	1	0	0	-8	92	Yes	Yes
2	1.3	6	6	-8	92	Yes	Yes
3	1.8	24.167	24.167	-8	92	Yes	Yes
4	2	30	30	-8	92	Yes	Yes
5	2.5	48.417	48.417	-8	92	Yes	Yes
6	3	61.667	61.667	-8	92	Yes	Yes
7	4	83.833	83.833	-8	92	Yes	Yes
8	5	98.167	98.167	-8	92	Yes	Yes
9	E	-8	114	0	0	Yes	Yes
10	D	-8	114	5.25	5.25	Yes	Yes
11	C.8	-8	114	13.917	13.917	Yes	Yes
12	C	-8	114	27.583	27.583	Yes	Yes
13	B.5	-8	114	47.417	47.417	Yes	Yes
14	B.2	-8	114	56.833	56.833	Yes	Yes
15	B	-8	114	61.333	61.333	Yes	Yes
16	A.5	-8	114	76.167	76.167	Yes	Yes
17	A	-8	114	85.917	85.917	Yes	Yes

Permits: BNR21-0246, ELE21-0853, MEC21-0514, 21-0900

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### Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	F2_N1	85.91667	33.5	0	
2	F2_N2	85.91667	33.5	30	
3	F2_N3	61.3333	33.5	61.6667	
4	F2_N4	61.3333	33.5	83.8333	
5	F2_N5	5.25	33.5	0	
6	F2_N6	5.25	33.5	24.1667	
7	F2_N7	5.25	33.5	48.41667	
8	F2_N8	56.8333	33.5	6	
9	F2_N9	27.5833	33.5	6	
10	F2_N10	56.8333	33.5	48.41667	
11	F2_N11	27.5833	33.5	48.41667	
12	F2_N12	47.41667	33.5	83.8333	
13	F2_N13	13.91667	33.5	83.8333	
14	F1_N1	85.91667	19.5	0	
15	F1_N2	85.91667	19.5	30	
16	F1_N3	61.3333	19.5	61.6667	
17	F1_N4	61.3333	19.5	83.8333	
18	F1_N5	5.25	19.5	0	
19	F1_N6	5.25	19.5	24.1667	
20	F1_N7	5.25	19.5	48.41667	
21	F1_N8	56.8333	19.5	6	
22	F1_N9	27.5833	19.5	6	
23	F1_N10	56.8333	19.5	48.41667	
24	F1_N11	27.5833	19.5	48.41667	
25	F1_N12	47.41667	19.5	83.8333	
26	F1_N13	13.91667	19.5	83.8333	
27	N142	85.91667	0	0	
28	N143	85.91667	0	30	
29	N144	61.3333	0	61.6667	
30	N145	61.3333	0	83.8333	
31	N146	5.25	0	0	
32	N147	5.25	0	24.1667	
33	N148	5.25	0	48.41667	
34	N149	56.8333	0	6	
35	N150	27.5833	0	6	
36	N151	56.8333	0	48.41667	
37	N152	27.5833	0	48.41667	
38	N153	47.41667	0	83.8333	

**Node Coordinates (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
39	N154	13.91667	0	83.8333	
40	N60	13.91667	1.496667	83.8333	
41	N61	47.41667	1.496667	83.8333	
42	N62	27.5833	1.496667	48.41667	
43	N63	56.8333	1.496667	48.41667	
44	N64	27.5833	1.496667	6	
45	N65	56.8333	1.496667	6	
46	N66	61.3333	1.496667	83.8333	
47	N67	61.3333	1.496667	61.6667	
48	N68	85.91667	1.496667	30	
49	N69	85.91667	1.496667	0	
50	N70	5.25	1.496667	48.41667	
51	N71	5.25	1.496667	24.1667	
52	N72	5.25	1.496667	0	
53	N53	45.583335	33.5	41.91665	
54	N54	45.583335	33.5	28.891655	
55	N55	45.583335	33.5	54.941645	
56	N56	33.033335	33.5	41.91665	
57	N57	58.133336	33.5	41.91665	
58	N58	41.958335	19.5	46.45835	
59	N59	41.958335	19.5	30.195845	
60	N60A	41.958335	19.5	62.720855	
61	N61A	28.470835	19.5	46.45835	
62	N62A	55.445836	19.5	46.45835	
63	N63A	42.066028	33.5	39.728656	
64	N64A	42.066028	33.5	44.070321	
65	N65A	42.066028	33.5	35.386991	
66	N66A	46.249361	33.5	39.728656	
67	N67A	37.882694	33.5	39.728656	
68	N68A	40.873255	19.5	48.658569	
69	N69A	40.873255	19.5	54.079404	
70	N70A	40.873255	19.5	43.237734	
71	N71A	45.369088	19.5	48.658569	
72	N72A	36.377421	19.5	48.658569	

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**Node Boundary Conditions**

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
1	N142	Reaction	Reaction	Reaction
2	N143	Reaction	Reaction	Reaction
3	N144	Reaction	Reaction	Reaction
4	N145	Reaction	Reaction	Reaction
5	N146	Reaction	Reaction	Reaction
6	N147	Reaction	Reaction	Reaction
7	N148	Reaction	Reaction	Reaction
8	N149	Reaction	Reaction	Reaction
9	N150	Reaction	Reaction	Reaction
10	N151	Reaction	Reaction	Reaction
11	N152	Reaction	Reaction	Reaction
12	N153	Reaction	Reaction	Reaction
13	N154	Reaction	Reaction	Reaction

**Hot Rolled Steel Properties**

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e <sup>6</sup> F <sup>-1</sup> ]	Density [k/ft <sup>3</sup> ]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3



Company : KPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Hot Rolled Steel Properties (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e <sup>5</sup> F <sup>-1</sup> ]	Density [k/ft <sup>3</sup> ]	Yield [ksi]	Ry	Fu [ksi]	Rt
5 A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.6	58	1.3
6 A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7 A1085	29000	11154	0.3	0.65	0.49	50	1.29	60	1.18
8 A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.15

Permits: BNR21-0046, LE21-0853, MEC21-0514, PL21-0900  
 County of Orange - OC Public Works  
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 Hadri Moustafa  
 BUILDING OFFICER

**General Materials Properties**

Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e <sup>5</sup> F <sup>-1</sup> ]	Density [k/ft <sup>3</sup> ]	Yield [ksi]	Rt
1 gen Conc3NW	3155	1372	0.15	0.6	0.145	45	Isotropic
2 gen Conc4NW	3644	1584	0.15	0.6	0.145	45	Isotropic
3 gen Conc3LW	2085	906	0.15	0.6	0.11	45	Isotropic
4 gen Conc4LW	2408	1047	0.15	0.6	0.11	45	Isotropic
5 gen Alum	10100	4077	0.3	1.29	0.173	45	Isotropic
6 gen Steel	29000	11154	0.3	0.65	0.49	45	Isotropic
7 gen Plywood	1800	38	0	0.3	0.035	45	Isotropic
8 RIGID	1e+06		0.3	0	0	45	Isotropic

**Hot Rolled Steel Section Sets**

Label	Shape	Type	Design List	Material	Design Rule	Area [in <sup>2</sup> ]	Iyy [in <sup>4</sup> ]	Izz [in <sup>4</sup> ]	J [in <sup>4</sup> ]
1 HR1A	W10X33	Beam	None	A992	Floor Beam	9.71	36.6	171	0.583

**Member Primary Data**

Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1 F2 M1	F2 N1	F2 N2		W21X83	Beam	Wide Flange	A992	SMF Beam
2 F2 M2	F2 N3	F2 N4		W21X83	Beam	Wide Flange	A992	SMF Beam
3 F2 M3	F2 N5	F2 N6		W21X83	Beam	Wide Flange	A992	SMF Beam
4 F2 M4	F2 N6	F2 N7		W21X83	Beam	Wide Flange	A992	SMF Beam
5 F2 M5	F2 N8	F2 N9		W24X94	Beam	Wide Flange	A992	SMF Beam
6 F2 M6	F2 N10	F2 N11		W24X94	Beam	Wide Flange	A992	SMF Beam
7 F2 M7	F2 N12	F2 N13		W24X94	Beam	Wide Flange	A992	SMF Beam
8 F1 M1	F1 N1	F1 N2		W24X84	Beam	Wide Flange	A992	SMF Beam
9 F1 M2	F1 N3	F1 N4		W24X84	Beam	Wide Flange	A992	SMF Beam
10 F1 M3	F1 N5	F1 N6		W24X84	Beam	Wide Flange	A992	SMF Beam
11 F1 M4	F1 N6	F1 N7		W24X84	Beam	Wide Flange	A992	SMF Beam
12 F1 M5	F1 N8	F1 N9		W27X114	Beam	Wide Flange	A992	SMF Beam
13 F1 M6	F1 N10	F1 N11		W27X114	Beam	Wide Flange	A992	SMF Beam
14 F1 M7	F1 N12	F1 N13		W27X114	Beam	Wide Flange	A992	SMF Beam
15 F1 (A-1) L1	N142	F2 N1	90	W18X211	Column	Wide Flange	A992	Floor Beam
16 F1 (A-2) L1	N143	F2 N2	90	W18X211	Column	Wide Flange	A992	Floor Beam
17 F1 (B-3) L1	N144	F2 N3	90	W18X211	Column	Wide Flange	A992	Floor Beam
18 F1 (B-4) L1	N145	F2 N4	90	W18X211	Column	Wide Flange	A992	Floor Beam
19 F1 (D-1) L1	N146	F2 N5	90	W18X211	Column	Wide Flange	A992	Floor Beam
20 F1 (D-1.8) L1	N147	F2 N6	90	W18X311	Column	Wide Flange	A992	Floor Beam
21 F1 (D-2.5) L1	N148	F2 N7	90	W18X211	Column	Wide Flange	A992	Floor Beam
22 F1 (B.2-1.3) L1	N149	F2 N8		W18X283	Column	Wide Flange	A992	Floor Beam
23 F1 (C-1.3) L1	N150	F2 N9		W18X283	Column	Wide Flange	A992	Floor Beam
24 F1 (B.2-2.5) L1	N151	F2 N10		W18X283	Column	Wide Flange	A992	Floor Beam
25 F1 (C-2.5) L1	N152	F2 N11		W18X283	Column	Wide Flange	A992	Floor Beam
26 F1 (B.5-4) L1	N153	F2 N12		W18X283	Column	Wide Flange	A992	Floor Beam
27 F1 (C.8-4) L1	N154	F2 N13		W18X283	Column	Wide Flange	A992	Floor Beam
28 M35	N60	N61		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
29 M29	N62	N63		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
30 M30	N64	N65		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
31 M31	N66	N67		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
32 M32	N68	N69		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
33 M33	N70	N71		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam
34 M34	N71	N72		CRECT36X30	Beam	Rectangular	Conc4000NW	Floor Beam



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Hot Rolled Steel Design Parameters**

Building&Safety: OCPWazarvandB 12/22/2025

Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Lcomp bot [ft]	L-Torque [ft]	Function
1	F2_M1	W21X83	30		Floor			Lateral
2	F2_M2	W21X83	22.167		Floor			Lateral
3	F2_M3	W21X83	24.167		Floor			Lateral
4	F2_M4	W21X83	24.25		Floor			Lateral
5	F2_M5	W24X94	29.25		Floor			Lateral
6	F2_M6	W24X94	29.25		Floor			Lateral
7	F2_M7	W24X94	33.5	16.75	Floor			Lateral
8	F1_M1	W24X84	30		Floor			Lateral
9	F1_M2	W24X84	22.167		Floor			Lateral
10	F1_M3	W24X84	24.167		Floor			Lateral
11	F1_M4	W24X84	24.25		Floor			Lateral
12	F1_M5	W27X114	29.25		Floor			Lateral
13	F1_M6	W27X114	29.25		Floor			Lateral
14	F1_M7	W27X114	33.5		Floor			Lateral
15	F1 (A-1) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
16	F1 (A-2) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
17	F1 (B-3) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
18	F1 (B-4) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
19	F1 (D-1) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
20	F1 (D-1.8) L1	W18X311	33.5	Floor	Floor	Floor	Floor	Lateral
21	F1 (D-2.5) L1	W18X211	33.5	Floor	Floor	Floor	Floor	Lateral
22	F1 (B.2-1.3) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral
23	F1 (C-1.3) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral
24	F1 (B.2-2.5) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral
25	F1 (C-2.5) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral
26	F1 (B.5-4) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral
27	F1 (C.8-4) L1	W18X283	33.5	Floor	Floor	Floor	Floor	Lateral

Permits: BNP21-0049, ELE21-0853, MEC21-0514, PLB21-0900

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**Member RISACONNECTION Properties**

Label	Shape	Start Conn	End Conn	Start Release	End Release
1	F2_M1	None	None	Fixed	Fixed
2	F2_M2	None	None	Fixed	Fixed
3	F2_M3	None	None	Fixed	Fixed
4	F2_M4	None	None	Fixed	Fixed
5	F2_M5	None	None	Fixed	Fixed
6	F2_M6	None	None	Fixed	Fixed
7	F2_M7	None	None	Fixed	Fixed
8	F1_M1	None	None	Fixed	Fixed
9	F1_M2	None	None	Fixed	Fixed
10	F1_M3	None	None	Fixed	Fixed
11	F1_M4	None	None	Fixed	Fixed
12	F1_M5	None	None	Fixed	Fixed
13	F1_M6	None	None	Fixed	Fixed
14	F1_M7	None	None	Fixed	Fixed
15	F1 (A-1) L1	None	None	Fixed	Fixed
16	F1 (A-2) L1	None	None	Fixed	Fixed
17	F1 (B-3) L1	None	None	Fixed	Fixed
18	F1 (B-4) L1	None	None	Fixed	Fixed
19	F1 (D-1) L1	None	None	Fixed	Fixed
20	F1 (D-1.8) L1	None	None	Fixed	Fixed
21	F1 (D-2.5) L1	None	None	Fixed	Fixed
22	F1 (B.2-1.3) L1	None	None	Fixed	Fixed
23	F1 (C-1.3) L1	None	None	Fixed	Fixed
24	F1 (B.2-2.5) L1	None	None	Fixed	Fixed
25	F1 (C-2.5) L1	None	None	Fixed	Fixed
26	F1 (B.5-4) L1	None	None	Fixed	Fixed
27	F1 (C.8-4) L1	None	None	Fixed	Fixed



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Floor Diaphragms**

Building&Safety: OCPWazarvandB 12/22/2025

Elevation [ft]	Mass [k]	Mass MOI [k-ft <sup>2</sup> ]	Center Of Mass [ft]	Plus X Eccentricity [ft]	Minus X Eccentricity [ft]	Plus Z Eccentricity [ft]	Minus Z Eccentricity [ft]	Inactive	Diaphragm Type	Design Rule	SGAEMaterial	Thickness [in]	No Wind/Drift
1	33.5	379.94	4.098e+05	42.066, 39.729	%5	%5	%5	%5	D2	Flexible	N/A	N/A	N/A
2	19.5	1104.744	1.64e+06	40.873, 48.659	%5	%5	%5	%5	D1	Rigid	N/A	N/A	N/A

**Design Size and Code Check Parameters**

Label	Max Axial/Bending Chk
1 Floor Beam	1
2 Roof Beam	1
3 SMF Beam	1

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**Max Shear Chk**  
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**BUILDING OFFICIAL**

**Frame / HR Column Seismic Design Rule**

Label	Frame Type	Column Ductility	Column Overstrength	Beam Ductility	Connection	Beam Overstrength	Z Factor	Hinge Location [in]	Brace Ductility	Brace Overstrength	KL/r
1	OCBF	OCBF	High	Yes	High	Other/None		N/A	N/A	High	
2	SCBF	OCBF	High	Yes	High	Other/None	Yes	N/A	N/A	High	Yes
3	OMF	OCBF	High	Yes	High	BUEEP		N/A	N/A	High	
4	IMF	OCBF	High	Yes	High	BFP		N/A	N/A	High	
5	SMF-WUF-W	SMF	High	Yes	High	WUF-W	Yes	14.625	N/A		
6	SMF-Kaiser	OCBF	High	Yes	High	KBB-B		N/A	N/A	High	

**Node Loads and Enforced Displacements (BLC 1 : Dead Load)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	F2_N1	L	Y	-7.863
2	F2_N2	L	Y	-11.48
3	F2_N3	L	Y	-0.059
4	F2_N3	L	Y	-1.316
5	F2_N3	L	Y	-4.847
6	F2_N4	L	Y	-4.566
7	F2_N4	L	Y	-0.105
8	F2_N5	L	Y	-3.997
9	F2_N6	L	Y	-6.262
10	F2_N7	L	Y	-8.738
11	F2_N7	L	Y	-0.044
12	F2_N7	L	Y	-0.061
13	F2_N8	L	Y	-1.874
14	F2_N8	L	Y	-0.348
15	F2_N9	L	Y	-0.041
16	F2_N9	L	Y	-2.197
17	F2_N9	L	Y	-0.455
18	F2_N10	L	Y	-0.059
19	F2_N10	L	Y	-4.01
20	F2_N10	L	Y	-6.141
21	F2_N11	L	Y	-4.603
22	F2_N11	L	Y	-9.274
23	F2_N11	L	Y	-2.933
24	F2_N12	L	Y	-0.525
25	F2_N12	L	Y	-6.264
26	F2_N13	L	Y	-4.676
27	F2_N13	L	Y	-0.105
28	F2_N13	L	Y	-0.105
29	F1_N1	L	Y	-14.767
30	F1_N2	L	Y	-34.292
31	F1_N3	L	Y	-0.027
32	F1_N3	L	Y	-6.179
33	F1_N3	L	Y	-17.191
34	F1_N4	L	Y	-8.717
35	F1_N4	L	Y	-0.045
36	F1_N4	L	Y	-11.624
37	F1_N5	L	Y	-12.184

**Node Loads and Enforced Displacements (BLC 1 : Dead Load) (Continued)**

Building&Safety: OCPWAzarvandB 12/22/2025

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
38	F1_N6	L	Y	-13.813
39	F1_N7	L	Y	-4.407
40	F1_N7	L	Y	-28.473
41	F1_N8	L	Y	-0.059
42	F1_N8	L	Y	-5.041
43	F1_N8	L	Y	-0.888
44	F1_N9	L	Y	-0.089
45	F1_N9	L	Y	-6.019
46	F1_N9	L	Y	-1.586
47	F1_N10	L	Y	-0.059
48	F1_N10	L	Y	-10.165
49	F1_N10	L	Y	-16.376
50	F1_N11	L	Y	-12.055
51	F1_N11	L	Y	-25.749
52	F1_N11	L	Y	-8.094
53	F1_N12	L	Y	-13.793
54	F1_N12	L	Y	-10.702
55	F1_N13	L	Y	-5.94
56	F1_N13	L	Y	-23.254
57	F1_N13	L	Y	-6.792

Permits: BR21-0246, ELE21-0853, MEC21-0514, LB21-0900

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**Node Loads and Enforced Displacements (BLC 2 : Live Load)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	F2_N1	L	Y	-9.888
2	F2_N2	L	Y	-14.465
3	F2_N3	L	Y	-1.709
4	F2_N3	L	Y	-5.796
5	F2_N4	L	Y	-4.956
6	F2_N5	L	Y	-4.966
7	F2_N6	L	Y	-8.271
8	F2_N7	L	Y	-9.112
9	F2_N8	L	Y	-2.682
10	F2_N8	L	Y	-0.511
11	F2_N9	L	Y	-3.212
12	F2_N9	L	Y	-0.686
13	F2_N10	L	Y	-5.229
14	F2_N10	L	Y	-7.864
15	F2_N11	L	Y	-6.262
16	F2_N11	L	Y	-10.671
17	F2_N11	L	Y	-4.288
18	F2_N12	L	Y	-0.777
19	F2_N12	L	Y	-7.239
20	F2_N13	L	Y	-4.352
21	F1_N1	L	Y	-17.121
22	F1_N2	L	Y	-29.39
23	F1_N3	L	Y	-3.827
24	F1_N3	L	Y	-15.289
25	F1_N4	L	Y	-6.795
26	F1_N4	L	Y	-10.066
27	F1_N5	L	Y	-9.374
28	F1_N6	L	Y	-16.542
29	F1_N7	L	Y	-3.598
30	F1_N7	L	Y	-22.186
31	F1_N8	L	Y	-6.32
32	F1_N8	L	Y	-1.087
33	F1_N9	L	Y	-7.607
34	F1_N9	L	Y	-1.45
35	F1_N10	L	Y	-12.322

**Node Loads and Enforced Displacements (BLC 2 : Live Load) (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
36	F1_N10	L	Y	-17.282
37	F1_N11	L	Y	-14.831
38	F1_N11	L	Y	-24.262
39	F1_N11	L	Y	-10.153
40	F1_N12	L	Y	-17.118
41	F1_N12	L	Y	-7.917
42	F1_N13	L	Y	-4.75
43	F1_N13	L	Y	-15.215
44	F1_N13	L	Y	-4.912

Permits: BR21-0246, ELE21-0853, MEC21-0514, LB21-0900

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**Node Loads and Enforced Displacements (BLC 8 : Wind Load X)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N53	L	X	16.199
2	N58	L	X	45.191

**Node Loads and Enforced Displacements (BLC 9 : Partial X Wind Load 1)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N54	L	X	12.149
2	N59	L	X	33.893

**Node Loads and Enforced Displacements (BLC 10 : Partial X Wind Load 2)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N55	L	X	12.149
2	N60A	L	X	33.893

**Node Loads and Enforced Displacements (BLC 11 : Wind Load Z)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N53	L	Z	15.518
2	N58	L	Z	36.209

**Node Loads and Enforced Displacements (BLC 12 : Partial Z Wind Load 1)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N56	L	Z	11.638
2	N61A	L	Z	27.157

**Node Loads and Enforced Displacements (BLC 13 : Partial Z Wind Load 2)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N57	L	Z	11.638
2	N62A	L	Z	27.157

**Node Loads and Enforced Displacements (BLC 14 : Earthquake Load X)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N63A	L	X	84.355
2	N68A	L	X	142.773

**Node Loads and Enforced Displacements (BLC 15 : Earthquake Load X Plus Z Eccentr)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N64A	L	X	84.355
2	N69A	L	X	142.773

**Node Loads and Enforced Displacements (BLC 16 : Earthquake Load X Minus Z Eccent)**

Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> *ft)]	
1	N65A	L	X	84.355
2	N70A	L	X	142.773



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Loads and Enforced Displacements (BLC 17 : Earthquake Load Z)**

Building&Safety: OCPWazarvandB 12/22/2025

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> /ft)]
1	N63A	L	Z	84.355
2	N68A	L	Z	142.773

**Node Loads and Enforced Displacements (BLC 18 : Earthquake Load Z Plus X Eccentr)**

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> /ft)]
1	N66A	L	Z	84.355
2	N71A	L	Z	142.773

**Node Loads and Enforced Displacements (BLC 19 : Earthquake Load Z Minus X Eccent)**

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s <sup>2</sup> /ft, k*s <sup>2</sup> /ft)]
1	N67A	L	Z	84.355
2	N72A	L	Z	142.773

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**  
THESE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB AT ALL TIMES. IT IS UNLAWFUL TO MAKE ANY CHANGES OR ALTERATIONS TO THESE PLANS WITHOUT WRITTEN PERMISSION FROM OC PUBLIC WORKS/OC DEVELOPMENT SERVICES OF ORANGE COUNTY. THE STAMPING OF THESE PLAN SPECIFICATIONS SHALL NOT BE HELD TO PERMIT OR BE AN APPROVAL OF THE VIOLATION OF ANY PROVISIONS OF ANY COUNTY ORDINANCE OR STATE LAW.  
 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Member Point Loads (BLC 1 : Dead Load)**

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	F2 M3	Y	-0.052	6
2	F2 M5	Y	-2.263	21.938
3	F2 M5	Y	-2.263	14.625
4	F2 M5	Y	-2.263	7.313
5	F2 M6	Y	-3.021	21.938
6	F2 M6	Y	-4.733	21.938
7	F2 M6	Y	-3.021	14.625
8	F2 M6	Y	-4.747	14.625
9	F2 M6	Y	-3.021	7.313
10	F2 M6	Y	-4.752	7.313
11	F2 M7	Y	-4.474	26.667
12	F2 M7	Y	-4.603	19.833
13	F2 M7	Y	-4.733	12.521
14	F2 M7	Y	-4.641	5.208
15	F1 M1	Y	-0.107	6
16	F1 M2	Y	-13.289	8.917
17	F1 M3	Y	-0.113	6
18	F1 M5	Y	5.917	26.417
19	F1 M5	Y	-7.083	19.333
20	F1 M5	Y	-1.114	19.333
21	F1 M5	Y	-6.911	9.417
22	F1 M5	Y	-0.75	9.417
23	F1 M5	Y	4.85	2.75
24	F1 M6	Y	-14.13	19.333
25	F1 M6	Y	-9.515	19.333
26	F1 M6	Y	-13.793	9.417
27	F1 M6	Y	-9.285	9.417
28	F1 M7	Y	-3.906	30.167
29	F1 M7	Y	-9.98	26.667
30	F1 M7	Y	-8.504	21.542
31	F1 M7	Y	-12.055	19.833
32	F1 M7	Y	-6.294	12.917
33	F1 M7	Y	-14.13	9.917
34	F1 M7	Y	-8.464	4.333

**Member Point Loads (BLC 2 : Live Load)**

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	F2 M5	Y	-3.321	21.938
2	F2 M5	Y	-3.321	14.625
3	F2 M5	Y	-3.321	7.313
4	F2 M6	Y	-4.433	21.938



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Point Loads (BLC 2 : Live Load) (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
5	F2_M6	Y	-6.475
6	F2_M6	Y	-4.433
7	F2_M6	Y	-6.475
8	F2_M6	Y	-4.433
9	F2_M6	Y	-6.475
10	F2_M7	Y	-6.05
11	F2_M7	Y	-6.262
12	F2_M7	Y	-6.475
13	F2_M7	Y	-6.251
14	F1_M2	Y	-10.144
15	F1_M5	Y	6.311
16	F1_M5	Y	-9.008
17	F1_M5	Y	-0.81
18	F1_M5	Y	-8.781
19	F1_M5	Y	-0.794
20	F1_M5	Y	3.051
21	F1_M6	Y	-17.561
22	F1_M6	Y	-12.024
23	F1_M6	Y	-17.118
24	F1_M6	Y	-11.721
25	F1_M7	Y	-3.155
26	F1_M7	Y	-12.101
27	F1_M7	Y	-6.828
28	F1_M7	Y	-14.831
29	F1_M7	Y	-5.206
30	F1_M7	Y	-17.561
31	F1_M7	Y	-6.795

Permits: BNP21-0248, ECE21-0853, MEC21-0514, PLB21-0900

21.938  
14.625  
7.313  
26.667  
19.333  
9.417  
8.208  
8.917  
26.417

County of Orange - OC Public Works  
 OC Development Services  
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This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from the Public Works Development Services of Orange County. No stamping of these plan specifications shall be held to permit or be an approval of the project or any provisions of any County Ordinance or Statute.

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**Member Distributed Loads (BLC 1 : Dead Load)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]	
1	F2_M1	Y	-0.132	-0.132	0	30
2	F2_M2	Y	-0.069	-0.069	0	22.167
3	F2_M2	Y	-0.046	-0.046	1.5	22.167
4	F2_M2	Y	0	-0.046	0	1.5
5	F2_M3	Y	-0.178	-0.178	0	24.167
6	F2_M4	Y	-0.178	-0.178	0	24.25
7	F2_M5	Y	0	-0.046	0	1.5
8	F2_M5	Y	-0.046	-0.046	1.5	27.75
9	F2_M5	Y	-0.046	0	27.75	29.25
10	F2_M7	Y	-0.116	-0.116	0	33.5
11	F1_M1	Y	-0.387	-0.387	0	30
12	F1_M2	Y	-0.99	-0.99	0	22.167
13	F1_M3	Y	-0.405	-0.405	0	24.167
14	F1_M4	Y	-0.405	-0.405	0	24.25
15	F1_M5	Y	-0.36	-0.36	1.75	27.417
16	F1_M7	Y	-0.36	-0.36	0	33.5

**Member Distributed Loads (BLC 2 : Live Load)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]	
1	F2_M1	Y	-0.216	-0.216	0	30
2	F2_M2	Y	-0.113	-0.113	0	22.167
3	F2_M2	Y	-0.075	-0.075	1.5	22.167
4	F2_M2	Y	0	-0.075	0	1.5
5	F2_M3	Y	-0.292	-0.292	0	24.167
6	F2_M4	Y	-0.292	-0.292	0	24.25
7	F2_M5	Y	0	-0.075	0	1.5
8	F2_M5	Y	-0.075	-0.075	1.5	27.75



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Distributed Loads (BLC 2 : Live Load) (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
9	F2_M5	Y	-0.075	0	27.75
10	F2_M7	Y	-0.075	-0.075	0
11	F1_M1	Y	-0.51	-0.51	0
12	F1_M2	Y	-0.6	-0.6	0
13	F1_M3	Y	-0.533	-0.533	0
14	F1_M4	Y	-0.533	-0.533	0

Permits: BNP21-0246, ELEC21-0853, MEC21-0514, LB21-0900

**County of Orange - 30 - Public Works**  
**OC Development Services**  
**APPROVED**

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**Member Distributed Loads (BLC 28 : BLC 14 Transient Area Loads)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M5	X	4.695	4.695	0
2	F2_M5	X	0.308	0.308	2.925
3	F2_M5	X	0.308	0.308	5.85
4	F2_M5	X	0.308	0.308	8.775
5	F2_M5	X	0.313	0.313	11.7
6	F2_M5	X	0.326	0.326	14.625
7	F2_M5	X	0.33	0.33	17.55
8	F2_M5	X	0.33	0.33	20.475
9	F2_M5	X	0.329	0.329	23.4
10	F2_M5	X	1.765	1.765	26.325
11	F2_M6	X	4.606	4.606	0
12	F2_M6	X	0.838	0.838	2.925
13	F2_M6	X	0.845	0.845	5.85
14	F2_M6	X	0.632	0.632	8.775
15	F2_M6	X	0.564	0.564	11.7
16	F2_M6	X	0.564	0.564	14.625
17	F2_M6	X	0.564	0.564	17.55
18	F2_M6	X	0.563	0.563	20.475
19	F2_M6	X	0.563	0.563	23.4
20	F2_M6	X	1.813	1.813	26.325
21	F2_M7	X	0.695	0.695	0
22	F2_M7	X	0.245	0.245	3.35
23	F2_M7	X	0.297	0.297	6.7
24	F2_M7	X	0.276	0.276	10.05
25	F2_M7	X	0.246	0.246	13.4
26	F2_M7	X	0.305	0.305	16.75
27	F2_M7	X	1.303	1.303	20.1
28	F2_M7	X	1.224	1.224	23.45
29	F2_M7	X	1.182	1.182	26.8
30	F2_M7	X	1.454	1.454	30.15

**Member Distributed Loads (BLC 29 : BLC 15 Transient Area Loads)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M5	X	4.695	4.695	0
2	F2_M5	X	0.308	0.308	2.925
3	F2_M5	X	0.308	0.308	5.85
4	F2_M5	X	0.308	0.308	8.775
5	F2_M5	X	0.313	0.313	11.7
6	F2_M5	X	0.326	0.326	14.625
7	F2_M5	X	0.33	0.33	17.55
8	F2_M5	X	0.33	0.33	20.475
9	F2_M5	X	0.329	0.329	23.4
10	F2_M5	X	1.765	1.765	26.325
11	F2_M6	X	4.606	4.606	0
12	F2_M6	X	0.838	0.838	2.925
13	F2_M6	X	0.845	0.845	5.85
14	F2_M6	X	0.632	0.632	8.775
15	F2_M6	X	0.564	0.564	11.7
16	F2_M6	X	0.564	0.564	14.625



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Distributed Loads (BLC 29 : BLC 15 Transient Area Loads) (Continued)**

Building&Safety: OCPWArvandB 12/22/2025

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
16	F2_M6	X	0.564	14.625	17.55
17	F2_M6	X	0.564	17.55	20.475
18	F2_M6	X	0.563	20.475	23.4
19	F2_M6	X	0.563	23.4	26.325
20	F2_M6	X	1.813	26.325	29.25
21	F2_M7	X	0.695	0	3.35
22	F2_M7	X	0.245	3.35	6.7
23	F2_M7	X	0.297	6.7	10.05
24	F2_M7	X	0.276	10.05	13.4
25	F2_M7	X	0.246	13.4	16.75
26	F2_M7	X	0.305	16.75	20.1
27	F2_M7	X	1.303	20.1	23.45
28	F2_M7	X	1.224	23.45	26.8
29	F2_M7	X	1.182	26.8	30.15
30	F2_M7	X	1.454	30.15	33.5

Permits: BWP-21-0246, ELEC-21-0853, MEC-21-0514

County of Orange Public Works  
 OC Development Services  
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**Member Distributed Loads (BLC 30 : BLC 16 Transient Area Loads)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M5	X	4.695	0	2.925
2	F2_M5	X	0.308	2.925	5.85
3	F2_M5	X	0.308	5.85	8.775
4	F2_M5	X	0.308	8.775	11.7
5	F2_M5	X	0.313	11.7	14.625
6	F2_M5	X	0.326	14.625	17.55
7	F2_M5	X	0.33	17.55	20.475
8	F2_M5	X	0.33	20.475	23.4
9	F2_M5	X	0.329	23.4	26.325
10	F2_M5	X	1.765	26.325	29.25
11	F2_M6	X	4.606	0	2.925
12	F2_M6	X	0.838	2.925	5.85
13	F2_M6	X	0.845	5.85	8.775
14	F2_M6	X	0.632	8.775	11.7
15	F2_M6	X	0.564	11.7	14.625
16	F2_M6	X	0.564	14.625	17.55
17	F2_M6	X	0.564	17.55	20.475
18	F2_M6	X	0.563	20.475	23.4
19	F2_M6	X	0.563	23.4	26.325
20	F2_M6	X	1.813	26.325	29.25
21	F2_M7	X	0.695	0	3.35
22	F2_M7	X	0.245	3.35	6.7
23	F2_M7	X	0.297	6.7	10.05
24	F2_M7	X	0.276	10.05	13.4
25	F2_M7	X	0.246	13.4	16.75
26	F2_M7	X	0.305	16.75	20.1
27	F2_M7	X	1.303	20.1	23.45
28	F2_M7	X	1.224	23.45	26.8
29	F2_M7	X	1.182	26.8	30.15
30	F2_M7	X	1.454	30.15	33.5

**Member Distributed Loads (BLC 31 : BLC 17 Transient Area Loads)**

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M1	Z	0.721	0	3
2	F2_M1	Z	0.542	3	6
3	F2_M1	Z	0.584	6	9
4	F2_M1	Z	0.582	9	12
5	F2_M1	Z	0.605	12	15
6	F2_M1	Z	0.593	15	18
7	F2_M1	Z	0.593	18	21



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Distributed Loads (BLC 31 : BLC 17 Transient Area Loads) (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
7	F2_M1	Z	0.593	0.593	18	21
8	F2_M1	Z	0.592	0.592	21	24
9	F2_M1	Z	0.591	0.591	24	27
10	F2_M1	Z	0.585	0.585	27	30
11	F2_M2	Z	4.458	4.458	0	2.217
12	F2_M2	Z	0.826	0.826	2.217	4.433
13	F2_M2	Z	0.704	0.704	4.433	6.65
14	F2_M2	Z	0.646	0.646	6.65	8.867
15	F2_M2	Z	0.652	0.652	8.867	11.083
16	F2_M2	Z	0.878	0.878	11.083	13.3
17	F2_M2	Z	0.73	0.73	13.3	15.517
18	F2_M2	Z	0.646	0.646	15.517	17.733
19	F2_M2	Z	0.646	0.646	17.733	19.95
20	F2_M2	Z	1.174	1.174	19.95	22.167
21	F2_M3	Z	0.592	0.592	0	2.417
22	F2_M3	Z	0.296	0.296	2.417	4.833
23	F2_M3	Z	0.724	0.724	4.833	7.25
24	F2_M3	Z	0.483	0.483	7.25	9.667
25	F2_M3	Z	0.726	0.726	9.667	12.083
26	F2_M3	Z	0.485	0.485	12.083	14.5
27	F2_M3	Z	0.728	0.728	14.5	16.917
28	F2_M3	Z	0.486	0.486	16.917	19.333
29	F2_M3	Z	0.73	0.73	19.333	21.75
30	F2_M3	Z	0.487	0.487	21.75	24.167
31	F2_M4	Z	0.654	0.654	0	2.425
32	F2_M4	Z	0.563	0.563	2.425	4.85
33	F2_M4	Z	1.004	1.004	4.85	7.275
34	F2_M4	Z	0.99	0.99	7.275	9.7
35	F2_M4	Z	1.061	1.061	9.7	12.125
36	F2_M4	Z	1.041	1.041	12.125	14.55
37	F2_M4	Z	1.014	1.014	14.55	16.975
38	F2_M4	Z	1.099	1.099	16.975	19.4
39	F2_M4	Z	0.962	0.962	19.4	21.825
40	F2_M4	Z	2.89	2.89	21.825	24.25

Permits: BWP21-0246, ELEC21-0863, MEC21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
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**Member Distributed Loads (BLC 32 : BLC 18 Transient Area Loads)**

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M1	Z	0.721	0.721	0	3
2	F2_M1	Z	0.542	0.542	3	6
3	F2_M1	Z	0.584	0.584	6	9
4	F2_M1	Z	0.582	0.582	9	12
5	F2_M1	Z	0.605	0.605	12	15
6	F2_M1	Z	0.593	0.593	15	18
7	F2_M1	Z	0.593	0.593	18	21
8	F2_M1	Z	0.592	0.592	21	24
9	F2_M1	Z	0.591	0.591	24	27
10	F2_M1	Z	0.585	0.585	27	30
11	F2_M2	Z	4.458	4.458	0	2.217
12	F2_M2	Z	0.826	0.826	2.217	4.433
13	F2_M2	Z	0.704	0.704	4.433	6.65
14	F2_M2	Z	0.646	0.646	6.65	8.867
15	F2_M2	Z	0.652	0.652	8.867	11.083
16	F2_M2	Z	0.878	0.878	11.083	13.3
17	F2_M2	Z	0.73	0.73	13.3	15.517
18	F2_M2	Z	0.646	0.646	15.517	17.733
19	F2_M2	Z	0.646	0.646	17.733	19.95
20	F2_M2	Z	1.174	1.174	19.95	22.167
21	F2_M3	Z	0.592	0.592	0	2.417



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Distributed Loads (BLC 32 : BLC 18 Transient Area Loads) (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
22	F2_M3	Z	0.296	0.296	2.417	4.833
23	F2_M3	Z	0.724	0.724	4.833	7.25
24	F2_M3	Z	0.483	0.483	7.25	9.667
25	F2_M3	Z	0.726	0.726	9.667	12.083
26	F2_M3	Z	0.485	0.485	12.083	14.5
27	F2_M3	Z	0.728	0.728	14.5	16.917
28	F2_M3	Z	0.486	0.486	16.917	19.333
29	F2_M3	Z	0.73	0.73	19.333	21.75
30	F2_M3	Z	0.487	0.487	21.75	24.167
31	F2_M4	Z	0.654	0.654	0	2.425
32	F2_M4	Z	0.563	0.563	2.425	4.85
33	F2_M4	Z	1.004	1.004	4.85	7.275
34	F2_M4	Z	0.99	0.99	7.275	9.7
35	F2_M4	Z	1.061	1.061	9.7	12.125
36	F2_M4	Z	1.041	1.041	12.125	14.55
37	F2_M4	Z	1.014	1.014	14.55	16.975
38	F2_M4	Z	1.099	1.099	16.975	19.4
39	F2_M4	Z	0.962	0.962	19.4	21.825
40	F2_M4	Z	2.89	2.89	21.825	24.25

Permits: BWP21-0246, ELEC21-0853, MEC21-0514, PLB21-0900

**County of Orange, OC Public Works**  
**OC Development Services**  
**APPROVED**

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 BUILDING OFFICIAL

**Member Distributed Loads (BLC 33 : BLC 19 Transient Area Loads)**

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	F2_M1	Z	0.721	0.721	0	3
2	F2_M1	Z	0.542	0.542	3	6
3	F2_M1	Z	0.584	0.584	6	9
4	F2_M1	Z	0.582	0.582	9	12
5	F2_M1	Z	0.605	0.605	12	15
6	F2_M1	Z	0.593	0.593	15	18
7	F2_M1	Z	0.593	0.593	18	21
8	F2_M1	Z	0.592	0.592	21	24
9	F2_M1	Z	0.591	0.591	24	27
10	F2_M1	Z	0.585	0.585	27	30
11	F2_M2	Z	4.458	4.458	0	2.217
12	F2_M2	Z	0.826	0.826	2.217	4.433
13	F2_M2	Z	0.704	0.704	4.433	6.65
14	F2_M2	Z	0.646	0.646	6.65	8.867
15	F2_M2	Z	0.652	0.652	8.867	11.083
16	F2_M2	Z	0.878	0.878	11.083	13.3
17	F2_M2	Z	0.73	0.73	13.3	15.517
18	F2_M2	Z	0.646	0.646	15.517	17.733
19	F2_M2	Z	0.646	0.646	17.733	19.95
20	F2_M2	Z	1.174	1.174	19.95	22.167
21	F2_M3	Z	0.592	0.592	0	2.417
22	F2_M3	Z	0.296	0.296	2.417	4.833
23	F2_M3	Z	0.724	0.724	4.833	7.25
24	F2_M3	Z	0.483	0.483	7.25	9.667
25	F2_M3	Z	0.726	0.726	9.667	12.083
26	F2_M3	Z	0.485	0.485	12.083	14.5
27	F2_M3	Z	0.728	0.728	14.5	16.917
28	F2_M3	Z	0.486	0.486	16.917	19.333
29	F2_M3	Z	0.73	0.73	19.333	21.75
30	F2_M3	Z	0.487	0.487	21.75	24.167
31	F2_M4	Z	0.654	0.654	0	2.425
32	F2_M4	Z	0.563	0.563	2.425	4.85
33	F2_M4	Z	1.004	1.004	4.85	7.275
34	F2_M4	Z	0.99	0.99	7.275	9.7
35	F2_M4	Z	1.061	1.061	9.7	12.125
36	F2_M4	Z	1.041	1.041	12.125	14.55



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Member Distributed Loads (BLC 33 : BLC 19 Transient Area Loads) (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft. %)]	End Location [(ft. %)]
37	F2_M4	Z	1.014	1.014	14.55	16.975
38	F2_M4	Z	1.099	1.099	16.975	19.4
39	F2_M4	Z	0.962	0.962	19.4	21.25
40	F2_M4	Z	2.89	2.89	21.825	24.25

Permits: BWP21-0246, ELC21-0863, MEC21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
**APPROVED**

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Hadi Tabatabaee  
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**Load Combinations**

	Description	Solve	PDelta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	IBC 16-1	Yes	Y	DL	1.4								
2	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6	RLL	0.5		
3	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6				
4	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	1	LLS	1		
5	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	1	LL	1	LLS	1
6	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX+Z	1	LL	1	LLS	1
7	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX-Z	1	LL	1	LLS	1
8	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ	1	LL	1	LLS	1
9	IBC 16-5 (e)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ+X	1	LL	1	LLS	1
10	IBC 16-5 (f)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ-X	1	LL	1	LLS	1
11	IBC 16-5 (g)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	-1	LL	1	LLS	1
12	IBC 16-5 (h)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX+Z	-1	LL	1	LLS	1
13	IBC 16-5 (i)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX-Z	-1	LL	1	LLS	1
14	IBC 16-5 (j)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ	-1	LL	1	LLS	1
15	IBC 16-5 (k)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ+X	-1	LL	1	LLS	1
16	IBC 16-5 (l)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ-X	-1	LL	1	LLS	1
17	IBC 16-7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	1				
18	IBC 16-7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX+Z	1				
19	IBC 16-7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX-Z	1				
20	IBC 16-7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ	1				
21	IBC 16-7 (e)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ+X	1				
22	IBC 16-7 (f)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ-X	1				
23	IBC 16-7 (g)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	-1				
24	IBC 16-7 (h)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX+Z	-1				
25	IBC 16-7 (i)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX-Z	-1				
26	IBC 16-7 (j)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ	-1				
27	IBC 16-7 (k)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ+X	-1				
28	IBC 16-7 (l)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ-X	-1				
29	Drift (Z-direction)	Yes	Y	DL	1	Sds*DL	0.2	ELZ	1	LL	1		
30	Drift (Z-direction+X)	Yes	Y	DL	1	Sds*DL	0.2	ELZ+X	1	LL	1		
31	Drift (Z-direction-X)	Yes	Y	DL	1	Sds*DL	0.2	ELZ-X	1	LL	1		
32	Drift (X-direction)	Yes	Y	DL	1	Sds*DL	0.2	ELX	1	LL	1		
33	Drift (X-direction+Z)	Yes	Y	DL	1	Sds*DL	0.2	ELX+Z	1	LL	1		
34	Drift (X-direction-Z)	Yes	Y	DL	1	Sds*DL	0.2	ELX-Z	1	LL	1		
35	DL	Yes	Y	DL	1								
36	LL	Yes	Y	LL	1								
37	RLL	Yes	Y	RLL	1								
38	ELZ	Yes	Y	ELZ	1								
39	ELX	Yes	Y	ELX	1								
40	EL	Yes	Y	EL	1								

**Node Reactions**

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N142	0	78.905	33.606	0	0
2	1	N143	0	111.378	-33.729	0	0
3	1	N144	0	99.387	13.341	0	0
4	1	N145	0	88.818	-13.002	0	0
5	1	N146	0	61.725	15.765	0	0
6	1	N147	0	109.144	0.006	0	0
7	1	N148	0	97.609	-15.996	0	0



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
8	1	N149	-29.101	67.693	0	0	0
9	1	N150	29.053	69.35	0.001	0	0
10	1	N151	-23.504	140.907	0.001	0	0
11	1	N152	23.353	176.104	0.003	0	0
12	1	N153	-26.648	156.251	0.001	0	0
13	1	N154	26.85	168.951	0.003	0	0
14	1	Totals:	0	1426.222	0	0	0
15	1	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
16	2	N142	-0.001	128.241	25.688	0	0
17	2	N143	-0.003	183.056	-25.811	0	0
18	2	N144	-0.001	151.656	7.085	0	0
19	2	N145	-0.002	131.232	-6.452	0	0
20	2	N146	0	91.175	12.301	0	0
21	2	N147	-0.002	166.172	-0.238	0	0
22	2	N148	-0.003	155.167	-12.604	0	0
23	2	N149	-21.569	95.032	0.003	0	0
24	2	N150	21.374	95.443	0.001	0	0
25	2	N151	-6.38	262.722	0.007	0	0
26	2	N152	6.072	335.904	0.008	0	0
27	2	N153	-5.877	262.01	0.007	0	0
28	2	N154	6.392	266.826	0.006	0	0
29	2	Totals:	0	2324.636	0		
30	2	COG (ft):	X: 40.707	Y: 20.712	Z: 48.108		
31	3	N142	-0.001	128.241	25.688	0	0
32	3	N143	-0.003	183.056	-25.811	0	0
33	3	N144	-0.001	151.656	7.085	0	0
34	3	N145	-0.002	131.232	-6.452	0	0
35	3	N146	0	91.175	12.301	0	0
36	3	N147	-0.002	166.172	-0.238	0	0
37	3	N148	-0.003	155.167	-12.604	0	0
38	3	N149	-21.569	95.032	0.003	0	0
39	3	N150	21.374	95.443	0.001	0	0
40	3	N151	-6.38	262.722	0.007	0	0
41	3	N152	6.072	335.904	0.008	0	0
42	3	N153	-5.877	262.01	0.007	0	0
43	3	N154	6.392	266.826	0.006	0	0
44	3	Totals:	0	2324.636	0		
45	3	COG (ft):	X: 40.707	Y: 20.712	Z: 48.108		
46	4	N142	0	105.513	26.857	0	0
47	4	N143	-0.002	150.21	-26.973	0	0
48	4	N144	-0.001	126.732	8.716	0	0
49	4	N145	-0.001	110.568	-8.211	0	0
50	4	N146	0	76.826	12.755	0	0
51	4	N147	-0.001	138.939	-0.146	0	0
52	4	N148	-0.001	128.353	-13.019	0	0
53	4	N149	-22.835	81.154	0.001	0	0
54	4	N150	22.697	81.942	0.001	0	0
55	4	N151	-11.544	209.494	0.004	0	0
56	4	N152	11.302	266.544	0.005	0	0
57	4	N153	-12.24	213.98	0.004	0	0
58	4	N154	12.627	221.071	0.004	0	0
59	4	Totals:	0	1911.326	0		
60	4	COG (ft):	X: 40.645	Y: 20.052	Z: 47.957		
61	5	N142	0.44	118.836	33.172	0	0
62	5	N143	0.59	164.396	-30.4	0	0
63	5	N144	0.554	142.526	11.446	0	0
64	5	N145	0.413	121.983	-9.289	0	0
65	5	N146	0.336	83.913	14.163	0	0

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900

County of Orange - OC Public Works  
 OC Development Services  
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Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
66	5 N147	0.501	154.729	-2.922	0	0	0
67	5 N148	0.495	144.29	-16.19	0	0	0
68	5 N149	-65.684	155.538	0.047	0	0	0
69	5 N150	-11.879	27.371	-0.05	0	0	0
70	5 N151	-53.471	298.756	0.034	0	0	0
71	5 N152	-23.839	223.112	-0.03	0	0	0
72	5 N153	-53.894	291.977	0.049	0	0	0
73	5 N154	-21.69	190.089	-0.029	0	0	0
74	5 Totals:	-227.129	2117.517	0			
75	5 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
76	6 N142	0.47	121.422	35.136	0	0	0
77	6 N143	0.523	161.811	-28.442	0	0	0
78	6 N144	0.61	144.448	12.526	0	0	0
79	6 N145	0.389	120.061	-8.209	0	0	0
80	6 N146	0.391	81.437	12.987	0	0	0
81	6 N147	0.488	154.744	-6.667	0	0	0
82	6 N148	0.426	146.751	-17.347	0	0	0
83	6 N149	-63.486	152.57	0.108	0	0	0
84	6 N150	-9.654	30.338	-0.119	0	0	0
85	6 N151	-53.66	299.015	0.072	0	0	0
86	6 N152	-24.03	222.854	-0.078	0	0	0
87	6 N153	-55.888	294.361	0.107	0	0	0
88	6 N154	-23.708	187.706	-0.075	0	0	0
89	6 Totals:	-227.129	2117.517	0			
90	6 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
91	7 N142	0.409	116.251	31.208	0	0	0
92	7 N143	0.657	166.982	-32.357	0	0	0
93	7 N144	0.498	140.604	10.367	0	0	0
94	7 N145	0.437	123.905	-10.37	0	0	0
95	7 N146	0.281	86.389	15.338	0	0	0
96	7 N147	0.515	154.715	0.822	0	0	0
97	7 N148	0.564	141.829	-15.033	0	0	0
98	7 N149	-67.882	158.505	-0.013	0	0	0
99	7 N150	-14.106	24.404	0.018	0	0	0
100	7 N151	-53.282	298.497	-0.004	0	0	0
101	7 N152	-23.648	223.371	0.018	0	0	0
102	7 N153	-51.899	289.594	-0.01	0	0	0
103	7 N154	-19.673	192.473	0.016	0	0	0
104	7 Totals:	-227.129	2117.517	0			
105	7 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
106	8 N142	-0.011	72.084	4.008	0	0	0
107	8 N143	0.019	211.149	-59.286	0	0	0
108	8 N144	-0.017	69.238	-20.88	0	0	0
109	8 N145	0.002	195.271	-41.331	0	0	0
110	8 N146	-0.023	27.56	-6.481	0	0	0
111	8 N147	0.003	154.96	-70.942	0	0	0
112	8 N148	0.022	200.413	-36.455	0	0	0
113	8 N149	-27.772	91.919	0.26	0	0	0
114	8 N150	26.168	90.99	0.308	0	0	0
115	8 N151	-14.877	229.776	0.837	0	0	0
116	8 N152	14.744	292.093	1.151	0	0	0
117	8 N153	-15.429	235.781	0.827	0	0	0
118	8 N154	17.172	246.285	0.856	0	0	0
119	8 Totals:	0	2117.517	-227.129			
120	8 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
121	9 N142	-0.039	69.943	2.373	0	0	0
122	9 N143	0.072	213.29	-60.899	0	0	0
123	9 N144	-0.057	67.649	-21.778	0	0	0

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900  
 County of Orange - OC Public Works  
 OC Development Services  
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 Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
124	9 N145	0.011	196.86	-42.219	0	0	0
125	9 N146	-0.08	29.616	-5.498	0	0	0
126	9 N147	0.015	154.947	-67.833	0	0	0
127	9 N148	0.083	198.369	-35.501	0	0	0
128	9 N149	-29.602	94.375	0.212	0	0	0
129	9 N150	24.337	88.534	0.359	0	0	0
130	9 N151	-14.717	229.558	0.801	0	0	0
131	9 N152	14.904	292.311	1.188	0	0	0
132	9 N153	-13.763	233.802	0.773	0	0	0
133	9 N154	18.836	248.264	0.894	0	0	0
134	9 Totals:	0	2117.517	-227.129			
135	9 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
136	10 N142	0.015	74.225	5.643	0	0	0
137	10 N143	-0.034	209.008	-57.674	0	0	0
138	10 N144	0.023	70.827	-19.982	0	0	0
139	10 N145	-0.007	193.682	-40.443	0	0	0
140	10 N146	0.034	25.504	-7.464	0	0	0
141	10 N147	-0.008	154.972	-74.051	0	0	0
142	10 N148	-0.039	202.456	-37.409	0	0	0
143	10 N149	-25.941	89.463	0.309	0	0	0
144	10 N150	27.999	93.446	0.258	0	0	0
145	10 N151	-15.038	229.994	0.873	0	0	0
146	10 N152	14.584	291.874	1.113	0	0	0
147	10 N153	-17.095	237.76	0.881	0	0	0
148	10 N154	15.507	244.306	0.819	0	0	0
149	10 Totals:	0	2117.517	-227.129			
150	10 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
151	11 N142	-0.435	115.008	30.264	0	0	0
152	11 N143	-0.601	168.224	-33.298	0	0	0
153	11 N144	-0.551	139.68	9.847	0	0	0
154	11 N145	-0.422	124.829	-10.89	0	0	0
155	11 N146	-0.344	87.591	15.909	0	0	0
156	11 N147	-0.504	154.707	2.64	0	0	0
157	11 N148	-0.491	140.634	-14.471	0	0	0
158	11 N149	11.885	26.343	-0.05	0	0	0
159	11 N150	65.391	156.566	0.05	0	0	0
160	11 N151	23.901	160.972	-0.031	0	0	0
161	11 N152	52.883	360.897	0.039	0	0	0
162	11 N153	21.98	181.161	-0.042	0	0	0
163	11 N154	54.438	300.906	0.032	0	0	0
164	11 Totals:	227.129	2117.517	0			
165	11 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
166	12 N142	-0.456	112.428	28.303	0	0	0
167	12 N143	-0.545	170.804	-35.25	0	0	0
168	12 N144	-0.599	137.767	8.773	0	0	0
169	12 N145	-0.406	126.742	-11.965	0	0	0
170	12 N146	-0.408	90.075	17.088	0	0	0
171	12 N147	-0.49	154.693	6.398	0	0	0
172	12 N148	-0.412	138.164	-13.309	0	0	0
173	12 N149	9.658	29.311	-0.118	0	0	0
174	12 N150	63.192	153.598	0.114	0	0	0
175	12 N151	24.093	160.713	-0.078	0	0	0
176	12 N152	53.072	361.156	0.08	0	0	0
177	12 N153	23.999	178.777	-0.103	0	0	0
178	12 N154	56.431	303.289	0.067	0	0	0
179	12 Totals:	227.129	2117.517	0			
180	12 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
181	13 N142	-0.414	117.588	32.224	0	0	0

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900  
 County of Orange - OC Public Works  
 OC Development Services  
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 Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
182	13 N143	-0.658	165.645	-31.345	0	0	0
183	13 N144	-0.503	141.592	10.922	0	0	0
184	13 N145	-0.438	122.917	-9.815	0	0	0
185	13 N146	-0.28	85.106	14.73	0	0	0
186	13 N147	-0.518	154.722	-1.117	0	0	0
187	13 N148	-0.57	143.103	-15.632	0	0	0
188	13 N149	14.111	23.375	0.018	0	0	0
189	13 N150	67.588	159.533	-0.014	0	0	0
190	13 N151	23.71	161.231	0.016	0	0	0
191	13 N152	52.695	360.638	-0.003	0	0	0
192	13 N153	19.961	183.544	0.02	0	0	0
193	13 N154	52.444	298.522	-0.004	0	0	0
194	13 Totals:	227.129	2117.517	0			
195	13 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
196	14 N142	0.005	161.757	59.262	0	0	0
197	14 N143	-0.021	121.475	-4.251	0	0	0
198	14 N144	0.017	212.961	41.936	0	0	0
199	14 N145	-0.01	51.548	21.383	0	0	0
200	14 N146	0.015	143.937	36.36	0	0	0
201	14 N147	-0.006	154.477	70.65	0	0	0
202	14 N148	-0.026	84.518	5.98	0	0	0
203	14 N149	-26.309	89.957	-0.253	0	0	0
204	14 N150	27.631	92.951	-0.309	0	0	0
205	14 N151	-15.005	229.949	-0.828	0	0	0
206	14 N152	14.617	291.919	-1.137	0	0	0
207	14 N153	-16.754	237.355	-0.821	0	0	0
208	14 N154	15.847	244.711	-0.844	0	0	0
209	14 Totals:	0	2117.517	227.129			
210	14 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
211	15 N142	0.021	163.9	60.882	0	0	0
212	15 N143	-0.07	119.332	-2.62	0	0	0
213	15 N144	0.063	214.552	42.824	0	0	0
214	15 N145	-0.035	49.957	22.283	0	0	0
215	15 N146	0.057	141.879	35.39	0	0	0
216	15 N147	-0.017	154.489	67.538	0	0	0
217	15 N148	-0.087	86.564	5.011	0	0	0
218	15 N149	-24.471	87.491	-0.195	0	0	0
219	15 N150	29.468	95.417	-0.369	0	0	0
220	15 N151	-15.16	230.161	-0.792	0	0	0
221	15 N152	14.462	291.708	-1.174	0	0	0
222	15 N153	-18.417	239.33	-0.775	0	0	0
223	15 N154	14.185	242.736	-0.873	0	0	0
224	15 Totals:	0	2117.517	227.129			
225	15 COG (ft):	X: 40.626	Y: 19.848	Z: 47.91			
226	16 N142	-0.011	159.614	57.642	0	0	0
227	16 N143	0.029	123.618	-5.882	0	0	0
228	16 N144	-0.03	211.37	41.048	0	0	0
229	16 N145	0.014	53.139	20.482	0	0	0
230	16 N146	-0.026	145.995	37.33	0	0	0
231	16 N147	0.005	154.464	73.763	0	0	0
232	16 N148	0.036	82.472	6.949	0	0	0
233	16 N149	-28.148	92.423	-0.311	0	0	0
234	16 N150	25.792	90.485	-0.249	0	0	0
235	16 N151	-14.849	229.738	-0.863	0	0	0
236	16 N152	14.771	292.13	-1.101	0	0	0
237	16 N153	-15.092	235.38	-0.867	0	0	0
238	16 N154	17.509	246.686	-0.814	0	0	0
239	16 Totals:	0	2117.517	227.129			

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900

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Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
240	16	COG (ft):	X: 40.626	Y: 19.848	Z: 47.91		
241	17	N142	0.155	41.153	18.151	0	0
242	17	N143	0.144	53.662	-15.4	0	0
243	17	N144	0.198	50.89	7.421	0	0
244	17	N145	0.112	42.89	-5.704	0	0
245	17	N146	0.14	28.996	7.013	0	0
246	17	N147	0.145	54.396	-2.671	0	0
247	17	N148	0.116	50.387	-8.801	0	0
248	17	N149	-52.494	97.205	0.048	0	0
249	17	N150	-23.644	-28.919	-0.053	0	0
250	17	N151	-49.97	137.833	0.044	0	0
251	17	N152	-26.72	20.13	-0.049	0	0
252	17	N153	-50.786	132.194	0.052	0	0
253	17	N154	-24.526	29.849	-0.051	0	0
254	17	Totals:	-227.129	710.666	0		
255	17	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
256	18	N142	0.204	43.701	20.103	0	0
257	18	N143	0.084	51.114	-13.449	0	0
258	18	N144	0.247	52.783	8.492	0	0
259	18	N145	0.073	40.997	-4.632	0	0
260	18	N146	0.208	26.553	5.844	0	0
261	18	N147	0.141	54.41	-6.382	0	0
262	18	N148	0.044	52.816	-9.955	0	0
263	18	N149	-50.314	94.274	0.115	0	0
264	18	N150	-21.437	-25.988	-0.126	0	0
265	18	N151	-50.156	138.083	0.105	0	0
266	18	N152	-26.907	19.879	-0.117	0	0
267	18	N153	-52.776	134.54	0.125	0	0
268	18	N154	-26.54	27.503	-0.123	0	0
269	18	Totals:	-227.129	710.666	0		
270	18	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
271	19	N142	0.105	38.606	16.198	0	0
272	19	N143	0.204	56.21	-17.351	0	0
273	19	N144	0.149	48.997	6.349	0	0
274	19	N145	0.151	44.783	-6.776	0	0
275	19	N146	0.072	31.44	8.181	0	0
276	19	N147	0.148	54.381	1.04	0	0
277	19	N148	0.188	47.958	-7.647	0	0
278	19	N149	-54.674	100.135	-0.018	0	0
279	19	N150	-25.851	-31.849	0.021	0	0
280	19	N151	-49.784	137.582	-0.017	0	0
281	19	N152	-26.532	20.38	0.02	0	0
282	19	N153	-48.794	129.848	-0.02	0	0
283	19	N154	-22.512	32.195	0.021	0	0
284	19	Totals:	-227.129	710.666	0		
285	19	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
286	20	N142	-0.017	-4.71	-10.636	0	0
287	20	N143	0.018	99.525	-43.99	0	0
288	20	N144	-0.014	-21.116	-24.478	0	0
289	20	N145	0.008	114.896	-37.304	0	0
290	20	N146	-0.027	-26.458	-13.376	0	0
291	20	N147	0.001	54.62	-69.667	0	0
292	20	N148	0.025	105.618	-28.902	0	0
293	20	N149	-15.205	34.672	0.065	0	0
294	20	N150	13.771	33.614	0.112	0	0
295	20	N151	-11.649	70.13	0.21	0	0
296	20	N152	11.697	87.833	0.327	0	0
297	20	N153	-12.633	77.103	0.224	0	0

Permits: BNR21-0246, ELEC21-0053, MEC21-0514, PLB21-0900

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Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
298	20 N154	14.022	84.94	0.286	0	0	0
299	20 Totals:	0	710.666	-227.129			
300	20 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
301	21 N142	-0.059	-6.82	-12.261	0	0	0
302	21 N143	0.066	101.635	-45.597	0	0	0
303	21 N144	-0.048	-22.682	-25.37	0	0	0
304	21 N145	0.03	116.462	-38.185	0	0	0
305	21 N146	-0.094	-24.43	-12.4	0	0	0
306	21 N147	0.005	54.608	-66.586	0	0	0
307	21 N148	0.089	103.601	-27.95	0	0	0
308	21 N149	-17.02	37.098	0.012	0	0	0
309	21 N150	11.955	31.188	0.167	0	0	0
310	21 N151	-11.491	69.918	0.155	0	0	0
311	21 N152	11.854	88.044	0.382	0	0	0
312	21 N153	-10.97	75.155	0.159	0	0	0
313	21 N154	15.684	86.888	0.346	0	0	0
314	21 Totals:	0	710.666	-227.129			
315	21 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
316	22 N142	0.026	-2.6	-9.011	0	0	0
317	22 N143	-0.029	97.416	-42.383	0	0	0
318	22 N144	0.021	-19.551	-23.587	0	0	0
319	22 N145	-0.014	113.331	-36.422	0	0	0
320	22 N146	0.041	-28.487	-14.353	0	0	0
321	22 N147	-0.002	54.632	-72.748	0	0	0
322	22 N148	-0.039	107.635	-29.853	0	0	0
323	22 N149	-13.389	32.246	0.119	0	0	0
324	22 N150	15.587	36.04	0.058	0	0	0
325	22 N151	-11.806	70.341	0.264	0	0	0
326	22 N152	11.54	87.621	0.272	0	0	0
327	22 N153	-14.296	79.051	0.289	0	0	0
328	22 N154	12.36	82.993	0.227	0	0	0
329	22 Totals:	0	710.666	-227.129			
330	22 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
331	23 N142	-0.149	37.487	15.34	0	0	0
332	23 N143	-0.151	57.329	-18.207	0	0	0
333	23 N144	-0.193	48.165	5.878	0	0	0
334	23 N145	-0.117	45.615	-7.248	0	0	0
335	23 N146	-0.147	32.525	8.699	0	0	0
336	23 N147	-0.145	54.375	2.687	0	0	0
337	23 N148	-0.109	46.88	-7.135	0	0	0
338	23 N149	23.768	-29.743	-0.054	0	0	0
339	23 N150	52.321	98.03	0.05	0	0	0
340	23 N151	26.851	2.593	-0.05	0	0	0
341	23 N152	49.688	155.369	0.047	0	0	0
342	23 N153	24.491	23.522	-0.054	0	0	0
343	23 N154	51.022	138.522	0.046	0	0	0
344	23 Totals:	227.129	710.666	0			
345	23 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
346	24 N142	-0.189	34.944	13.391	0	0	0
347	24 N143	-0.1	59.871	-20.153	0	0	0
348	24 N144	-0.236	46.28	4.811	0	0	0
349	24 N145	-0.086	47.5	-8.315	0	0	0
350	24 N146	-0.224	34.976	9.871	0	0	0
351	24 N147	-0.141	54.36	6.41	0	0	0
352	24 N148	-0.028	44.443	-5.976	0	0	0
353	24 N149	21.561	-26.812	-0.128	0	0	0
354	24 N150	50.14	95.099	0.119	0	0	0
355	24 N151	27.039	2.342	-0.119	0	0	0

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900

**County of Orange - OC Public Works**  
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 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
356	24 N152	49.873	155.62	0.11	0	0	0
357	24 N153	26.506	21.175	-0.13	0	0	0
358	24 N154	53.012	140.868	0.109	0	0	0
359	24 Totals:	227.129	710.666	0			
360	24 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
361	25 N142	-0.109	40.029	17.289	0	0	0
362	25 N143	-0.201	54.786	-16.261	0	0	0
363	25 N144	-0.151	50.049	6.945	0	0	0
364	25 N145	-0.149	43.731	-6.181	0	0	0
365	25 N146	-0.07	30.073	7.528	0	0	0
366	25 N147	-0.149	54.389	-1.036	0	0	0
367	25 N148	-0.19	49.317	-8.293	0	0	0
368	25 N149	25.975	-32.674	0.02	0	0	0
369	25 N150	54.501	100.96	-0.018	0	0	0
370	25 N151	26.663	2.843	0.019	0	0	0
371	25 N152	49.502	155.119	-0.016	0	0	0
372	25 N153	22.476	25.868	0.021	0	0	0
373	25 N154	49.032	136.175	-0.017	0	0	0
374	25 Totals:	227.129	710.666	0			
375	25 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
376	26 N142	0.012	83.347	43.968	0	0	0
377	26 N143	-0.017	11.468	10.538	0	0	0
378	26 N144	0.015	120.165	37.548	0	0	0
379	26 N145	-0.014	-26.385	24.574	0	0	0
380	26 N146	0.02	87.973	28.902	0	0	0
381	26 N147	-0.001	54.15	69.674	0	0	0
382	26 N148	-0.024	-8.344	13.145	0	0	0
383	26 N149	-13.793	32.786	-0.062	0	0	0
384	26 N150	15.183	35.501	-0.115	0	0	0
385	26 N151	-11.771	70.293	-0.21	0	0	0
386	26 N152	11.575	87.669	-0.325	0	0	0
387	26 N153	-13.921	78.611	-0.227	0	0	0
388	26 N154	12.735	83.432	-0.282	0	0	0
389	26 Totals:	0	710.666	227.129			
390	26 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
391	27 N142	0.044	85.459	45.578	0	0	0
392	27 N143	-0.061	9.356	12.162	0	0	0
393	27 N144	0.057	121.732	38.43	0	0	0
394	27 N145	-0.051	-27.952	25.467	0	0	0
395	27 N146	0.073	85.942	27.938	0	0	0
396	27 N147	-0.004	54.162	66.59	0	0	0
397	27 N148	-0.088	-6.325	12.179	0	0	0
398	27 N149	-11.97	30.351	0	0	0	0
399	27 N150	17.005	37.936	-0.178	0	0	0
400	27 N151	-11.923	70.498	-0.156	0	0	0
401	27 N152	11.423	87.465	-0.379	0	0	0
402	27 N153	-15.58	80.555	-0.169	0	0	0
403	27 N154	11.076	81.488	-0.334	0	0	0
404	27 Totals:	0	710.666	227.129			
405	27 COG (ft):	X: 40.448	Y: 17.958	Z: 47.477			
406	28 N142	-0.02	81.235	42.357	0	0	0
407	28 N143	0.027	13.58	8.913	0	0	0
408	28 N144	-0.026	118.598	36.666	0	0	0
409	28 N145	0.023	-24.818	23.681	0	0	0
410	28 N146	-0.032	90.004	29.866	0	0	0
411	28 N147	0.002	54.138	72.758	0	0	0
412	28 N148	0.039	-10.363	14.112	0	0	0
413	28 N149	-15.616	35.221	-0.125	0	0	0

Permits: BNR21-0246, ELEC21-0653, MEC21-0514, P1821-0900

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Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C32  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
414	28	N150	13.36	33.065	-0.051	0	0
415	28	N151	-11.618	70.089	-0.263	0	0
416	28	N152	11.728	87.874	-0.271	0	0
417	28	N153	-12.261	76.667	-0.284	0	0
418	28	N154	14.394	85.376	-0.23	0	0
419	28	Totals:	0	710.666	227.129		
420	28	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
421	29	N142	-0.009	60.656	-2.837	0	0
422	29	N143	0.013	195.393	-52.811	0	0
423	29	N144	-0.012	55.697	-23.087	0	0
424	29	N145	0.002	181.926	-38.567	0	0
425	29	N146	-0.017	18.709	-10.899	0	0
426	29	N147	0.002	139.952	-69.403	0	0
427	29	N148	0.016	185.917	-33.08	0	0
428	29	N149	-22.237	82.08	0.219	0	0
429	29	N150	20.891	81.251	0.255	0	0
430	29	N151	-11.11	209.675	0.707	0	0
431	29	N152	10.958	266.907	0.968	0	0
432	29	N153	-11.414	213.588	0.695	0	0
433	29	N154	12.917	222.021	0.712	0	0
434	29	Totals:	0	1913.771	-227.129		
435	29	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
436	30	N142	-0.035	58.533	-4.459	0	0
437	30	N143	0.061	197.516	-54.416	0	0
438	30	N144	-0.047	54.154	-23.96	0	0
439	30	N145	0.012	183.469	-39.432	0	0
440	30	N146	-0.069	20.733	-9.905	0	0
441	30	N147	0.011	139.94	-66.39	0	0
442	30	N148	0.072	183.904	-32.109	0	0
443	30	N149	-24.095	84.569	0.174	0	0
444	30	N150	19.033	78.762	0.301	0	0
445	30	N151	-10.953	209.461	0.672	0	0
446	30	N152	11.115	267.12	1.004	0	0
447	30	N153	-9.717	211.58	0.645	0	0
448	30	N154	14.613	224.029	0.749	0	0
449	30	Totals:	0	1913.771	-227.129		
450	30	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
451	31	N142	0.017	62.779	-1.215	0	0
452	31	N143	-0.034	193.27	-51.205	0	0
453	31	N144	0.024	57.24	-22.215	0	0
454	31	N145	-0.008	180.382	-37.701	0	0
455	31	N146	0.035	16.684	-11.893	0	0
456	31	N147	-0.008	139.964	-72.416	0	0
457	31	N148	-0.039	187.93	-34.05	0	0
458	31	N149	-20.379	79.59	0.263	0	0
459	31	N150	22.749	83.741	0.209	0	0
460	31	N151	-11.268	209.888	0.741	0	0
461	31	N152	10.8	266.693	0.933	0	0
462	31	N153	-13.111	215.596	0.745	0	0
463	31	N154	11.221	220.013	0.676	0	0
464	31	Totals:	0	1913.771	-227.129		
465	31	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
466	32	N142	0.361	107.465	26.415	0	0
467	32	N143	0.478	148.584	-23.77	0	0
468	32	N144	0.45	128.248	8.865	0	0
469	32	N145	0.331	109.374	-6.844	0	0
470	32	N146	0.275	74.899	10.277	0	0
471	32	N147	0.409	139.724	-2.737	0	0

Permits: BNR21-0246, ELET21-0653, MEC21-0514, P1821-0900  
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 Hadi Tabatabaee  
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Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C33  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
472	32	N148	0.397	129.955	-12.222	0	0
473	32	N149	-60.101	145.532	0.042	0	0
474	32	N150	-17.054	17.799	-0.044	0	0
475	32	N151	-49.487	278.12	0.031	0	0
476	32	N152	-27.39	198.461	-0.028	0	0
477	32	N153	-49.898	269.571	0.043	0	0
478	32	N154	-25.902	166.038	-0.028	0	0
479	32	Totals:	-227.129	1913.771	0	0	0
480	32	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
481	33	N142	0.391	110.028	28.366	0	0
482	33	N143	0.419	146.021	-21.824	0	0
483	33	N144	0.499	130.114	9.915	0	0
484	33	N145	0.307	107.509	-5.793	0	0
485	33	N146	0.327	72.461	9.086	0	0
486	33	N147	0.398	139.738	-6.365	0	0
487	33	N148	0.335	132.379	-13.397	0	0
488	33	N149	-57.867	142.525	0.098	0	0
489	33	N150	-14.799	20.806	-0.107	0	0
490	33	N151	-49.674	278.374	0.069	0	0
491	33	N152	-27.578	198.208	-0.073	0	0
492	33	N153	-51.932	271.99	0.098	0	0
493	33	N154	-27.955	163.619	-0.072	0	0
494	33	Totals:	-227.129	1913.771	0		
495	33	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
496	34	N142	0.332	104.901	24.464	0	0
497	34	N143	0.538	151.148	-25.716	0	0
498	34	N144	0.4	126.382	7.815	0	0
499	34	N145	0.354	111.24	-7.895	0	0
500	34	N146	0.224	77.338	11.467	0	0
501	34	N147	0.421	139.71	0.892	0	0
502	34	N148	0.46	127.53	-11.047	0	0
503	34	N149	-62.334	148.539	-0.014	0	0
504	34	N150	-19.309	14.792	0.018	0	0
505	34	N151	-49.301	277.866	-0.006	0	0
506	34	N152	-27.202	198.715	0.017	0	0
507	34	N153	-47.863	267.152	-0.011	0	0
508	34	N154	-23.849	168.456	0.016	0	0
509	34	Totals:	-227.129	1913.771	0		
510	34	COG (ft):	X: 40.645	Y: 20.049	Z: 47.956		
511	35	N142	0	56.359	22.299	0	0
512	35	N143	0	79.558	-22.39	0	0
513	35	N144	0	71.001	8.775	0	0
514	35	N145	0	63.431	-8.521	0	0
515	35	N146	0	43.823	9.771	0	0
516	35	N147	0	78.487	-0.006	0	0
517	35	N148	0	69.46	-9.931	0	0
518	35	N149	-19.616	48.353	0	0	0
519	35	N150	19.58	49.535	0	0	0
520	35	N151	-15.912	100.653	0	0	0
521	35	N152	15.798	125.784	0.002	0	0
522	35	N153	-18.18	111.604	0	0	0
523	35	N154	18.331	120.683	0.001	0	0
524	35	Totals:	0	1018.73	0		
525	35	COG (ft):	X: 40.448	Y: 17.958	Z: 47.477		
526	36	N142	0	37.883	-1.783	0	0
527	36	N143	0	54.74	1.774	0	0
528	36	N144	0	41.555	-2.43	0	0
529	36	N145	0	34.426	2.656	0	0

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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
530	36 N146	0	23.941	-0.626	0	0	0
531	36 N147	0	45.34	-0.15	0	0	0
532	36 N148	-0.001	44.712	0.556	0	0	0
533	36 N149	1.951	23.136	0	0	0	0
534	36 N150	-2.052	22.495	0	0	0	0
535	36 N151	7.97	88.723	0.001	0	0	0
536	36 N152	-8.089	115.591	0	0	0	0
537	36 N153	9.893	80.047	0.001	0	0	0
538	36 N154	-9.671	76.26	0	0	0	0
539	36 Totals:	0	688.85	0			
540	36 COG (ft):	X: 40.995	Y: 23.767	Z: 48.807			
541	37 N142	0	0	0	0	0	0
542	37 N143	0	0	0	0	0	0
543	37 N144	0	0	0	0	0	0
544	37 N145	0	0	0	0	0	0
545	37 N146	0	0	0	0	0	0
546	37 N147	0	0	0	0	0	0
547	37 N148	0	0	0	0	0	0
548	37 N149	0	0	0	0	0	0
549	37 N150	0	0	0	0	0	0
550	37 N151	0	0	0	0	0	0
551	37 N152	0	0	0	0	0	0
552	37 N153	0	0	0	0	0	0
553	37 N154	0	0	0	0	0	0
554	37 Totals:	0	0	0			
555	37 COG (ft):	NC	NC	NC			
556	38 N142	-0.013	-44.023	-27.478	0	0	0
557	38 N143	0.013	44.023	-27.352	0	0	0
558	38 N144	-0.009	-69.78	-30.746	0	0	0
559	38 N145	0.008	69.78	-30.498	0	0	0
560	38 N146	-0.02	-56.76	-21.673	0	0	0
561	38 N147	0	0.23	-67.935	0	0	0
562	38 N148	0.018	56.529	-21.447	0	0	0
563	38 N149	-0.576	0.768	-0.016	0	0	0
564	38 N150	-0.576	-0.768	0.016	0	0	0
565	38 N151	0.049	-0.065	-0.017	0	0	0
566	38 N152	0.049	0.065	0.017	0	0	0
567	38 N153	0.529	-0.616	-0.02	0	0	0
568	38 N154	0.529	0.616	0.019	0	0	0
569	38 Totals:	0	0	-227.129			
570	38 COG (ft):	NC	NC	NC			
571	39 N142	0.035	1.724	1.326	0	0	0
572	39 N143	-0.035	-1.724	1.326	0	0	0
573	39 N144	0.029	1.257	0.714	0	0	0
574	39 N145	-0.029	-1.257	0.714	0	0	0
575	39 N146	0.046	-1.644	-0.809	0	0	0
576	39 N147	0	0.01	-2.459	0	0	0
577	39 N148	-0.046	1.635	-0.802	0	0	0
578	39 N149	-37.718	62.956	0.043	0	0	0
579	39 N150	-37.791	-62.956	-0.047	0	0	0
580	39 N151	-38.007	66.901	0.043	0	0	0
581	39 N152	-38.087	-66.901	-0.047	0	0	0
582	39 N153	-37.591	54.08	0.048	0	0	0
583	39 N154	-37.934	-54.08	-0.051	0	0	0
584	39 Totals:	-227.129	0	0			
585	39 COG (ft):	NC	NC	NC			
586	40 N142	0	0	0	0	0	0
587	40 N143	0	0	0	0	0	0

Permits: BNR21-0246, ELET21-0653, MEC21-0514, P1821-0900  
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**Node Reactions (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
588	40	N144	0	0	0	0	0
589	40	N145	0	0	0	0	0
590	40	N146	0	0	0	0	0
591	40	N147	0	0	0	0	0
592	40	N148	0	0	0	0	0
593	40	N149	0	0	0	0	0
594	40	N150	0	0	0	0	0
595	40	N151	0	0	0	0	0
596	40	N152	0	0	0	0	0
597	40	N153	0	0	0	0	0
598	40	N154	0	0	0	0	0
599	40	Totals:	0	0	0	0	0
600	40	COG (ft):	NC	NC	NC		

Permits: BNR21-0246, ELEC21-0053, MEC21-0514, P1821-0900

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**Node Displacements**

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1	1	F2_N1	-0.001	-0.011	0.007	1.122e-4	-1.787e-6	2.772e-6
2	1	F2_N2	-0.002	-0.017	0.005	-7.785e-5	-1.787e-6	4.958e-6
3	1	F2_N3	-0.002	-0.015	0.009	-3.9e-5	-1.769e-6	5.805e-6
4	1	F2_N4	-0.003	-0.013	0.007	6.566e-5	-1.769e-6	7.305e-6
5	1	F2_N5	-0.001	-0.008	0.006	8.067e-5	-1.794e-6	2.562e-6
6	1	F2_N6	-0.002	-0.009	0.005	1.226e-5	-1.717e-6	4.238e-6
7	1	F2_N7	-0.002	-0.015	0.004	-5.617e-5	-1.824e-6	5.972e-6
8	1	F2_N8	-0.003	-0.006	0.005	1.375e-5	-1.668e-6	1.162e-4
9	1	F2_N9	0	-0.007	0.005	1.178e-5	-1.668e-6	-1.083e-4
10	1	F2_N10	-0.008	-0.017	0.005	1.431e-5	-1.656e-6	2.965e-4
11	1	F2_N11	0	-0.022	0.005	1.238e-5	-1.656e-6	-2.666e-4
12	1	F2_N12	-0.009	-0.018	0.005	1.378e-5	-1.706e-6	2.123e-4
13	1	F2_N13	0.003	-0.019	0.004	1.129e-5	-1.706e-6	-1.862e-4
14	1	F1_N1	0	-0.009	0.003	9.197e-5	-9.071e-7	2.682e-6
15	1	F1_N2	-0.001	-0.014	0.003	-5.541e-5	-9.071e-7	4.852e-6
16	1	F1_N3	-0.001	-0.013	0.003	3.592e-4	-9.071e-7	5.67e-6
17	1	F1_N4	-0.002	-0.011	0.003	-2.703e-4	-9.071e-7	7.237e-6
18	1	F1_N5	0	-0.007	0.003	6.315e-5	-9.072e-7	2.48e-6
19	1	F1_N6	0	-0.007	0.003	1.25e-5	-9.072e-7	4.168e-6
20	1	F1_N7	-0.001	-0.013	0.003	-3.666e-5	-9.072e-7	5.884e-6
21	1	F1_N8	0	-0.005	0.003	1.363e-5	-9.069e-7	1.558e-4
22	1	F1_N9	0	-0.005	0.003	1.16e-5	-9.068e-7	-1.403e-4
23	1	F1_N10	-0.001	-0.014	0.003	1.39e-5	-9.065e-7	3.987e-4
24	1	F1_N11	-0.001	-0.018	0.003	1.189e-5	-9.064e-7	-3.688e-4
25	1	F1_N12	-0.002	-0.016	0.003	1.343e-5	-9.062e-7	6.722e-4
26	1	F1_N13	-0.002	-0.017	0.003	1.102e-5	-9.062e-7	-6.674e-4
27	1	N142	0	0	0	2.264e-4	-1.088e-8	3.554e-6
28	1	N143	0	0	0	-2.131e-4	-1.088e-8	3.733e-6
29	1	N144	0	0	0	7.158e-5	0	6.279e-6
30	1	N145	0	0	0	-7.329e-5	0	6.388e-6
31	1	N146	0	0	0	1.275e-4	-1.421e-8	3.867e-6
32	1	N147	0	0	0	4.711e-6	-1.603e-8	4.081e-6
33	1	N148	0	0	0	-1.197e-4	-1.391e-8	4.293e-6
34	1	N149	0	0	0	1.256e-5	-1.628e-8	1.52e-4
35	1	N150	0	0	0	1.232e-5	-1.628e-8	-1.507e-4
36	1	N151	0	0	0	1.242e-5	-1.627e-8	1.125e-4
37	1	N152	0	0	0	1.218e-5	-1.627e-8	-1.109e-4
38	1	N153	0	0	0	1.197e-5	-1.748e-8	1.286e-4
39	1	N154	0	0	0	1.169e-5	-1.747e-8	-1.178e-4
40	1	N60	0	-0.002	0	1.17e-5	-1.747e-8	-1.481e-4
41	1	N61	0	-0.001	0	1.197e-5	-1.748e-8	1.586e-4
42	1	N62	0	-0.002	0	1.219e-5	-1.627e-8	-1.372e-4



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
43	1	N63	0	-0.001	0	1.242e-5	-1.627e-8	1.39e-4
44	1	N64	0.001	0	0	1.233e-5	-1.628e-8	-1.834e-4
45	1	N65	-0.001	0	0	1.255e-5	-1.628e-8	3.091e-5
46	1	N66	0	-0.001	0	-9.416e-5	0	6.284e-6
47	1	N67	0	-0.001	0	9.3e-5	0	6.284e-6
48	1	N68	0	-0.001	-0.001	-2.672e-4	-1.088e-8	9.56e-6
49	1	N69	0	0	0.001	2.803e-4	-1.088e-8	9.56e-6
50	1	N70	0	-0.001	0	-1.454e-4	-1.391e-8	4.203e-6
51	1	N71	0	0	0	4.716e-6	-1.603e-8	4.08e-6
52	1	N72	0	0	0.001	1.528e-4	-1.421e-8	9.876e-6
53	1	N53	0	0	0	0	0	0
54	1	N54	0	0	0	0	0	0
55	1	N55	0	0	0	0	0	0
56	1	N56	0	0	0	0	0	0
57	1	N57	0	0	0	0	0	0
58	1	N58	-0.001	0	0.003	0	-9.064e-7	0
59	1	N59	-0.001	0	0.003	0	-9.064e-7	0
60	1	N60A	-0.001	0	0.003	0	-9.065e-7	0
61	1	N61A	-0.001	0	0.003	0	-9.066e-7	0
62	1	N62A	-0.001	0	0.003	0	-9.067e-7	0
63	1	N63A	0	0	0	0	0	0
64	1	N64A	0	0	0	0	0	0
65	1	N65A	0	0	0	0	0	0
66	1	N66A	0	0	0	0	0	0
67	1	N67A	0	0	0	0	0	0
68	1	N68A	-0.001	0	0.003	0	-9.067e-7	0
69	1	N69A	-0.001	0	0.003	0	-9.067e-7	0
70	1	N70A	-0.001	0	0.003	0	-9.068e-7	0
71	1	N71A	-0.001	0	0.003	0	-9.068e-7	0
72	1	N72A	-0.001	0	0.003	0	-9.068e-7	0
73	2	F2 N1	-0.006	-0.022	0.011	1.86e-4	1.46e-6	1.573e-5
74	2	F2 N2	-0.005	-0.032	0.007	-1.31e-4	1.46e-6	1.412e-5
75	2	F2 N3	-0.005	-0.025	0.015	-4.993e-5	1.628e-6	1.258e-5
76	2	F2 N4	-0.004	-0.021	0.011	9.116e-5	1.628e-6	1.107e-5
77	2	F2 N5	-0.006	-0.015	0.012	1.582e-4	1.541e-6	1.539e-5
78	2	F2 N6	-0.005	-0.018	0.009	2.263e-5	1.433e-6	1.4e-5
79	2	F2 N7	-0.005	-0.027	0.007	-1.141e-4	1.472e-6	1.273e-5
80	2	F2 N8	-0.011	-0.011	0.008	2.121e-5	1.493e-6	2.789e-4
81	2	F2 N9	-0.004	-0.011	0.009	2.305e-5	1.493e-6	-2.487e-4
82	2	F2 N10	-0.018	-0.036	0.009	2.325e-5	1.813e-6	6.809e-4
83	2	F2 N11	0.002	-0.047	0.009	2.613e-5	1.813e-6	-6.172e-4
84	2	F2 N12	-0.017	-0.034	0.009	2.286e-5	1.417e-6	4.918e-4
85	2	F2 N13	0.009	-0.034	0.009	2.475e-5	1.417e-6	-4.476e-4
86	2	F1 N1	-0.003	-0.017	0.005	2.641e-4	7.884e-7	1.506e-5
87	2	F1 N2	-0.003	-0.026	0.005	-2.114e-4	7.884e-7	1.329e-5
88	2	F1 N3	-0.003	-0.022	0.005	5.969e-4	7.885e-7	1.219e-5
89	2	F1 N4	-0.003	-0.019	0.005	-4.483e-4	7.885e-7	1.075e-5
90	2	F1 N5	-0.003	-0.012	0.005	1.715e-4	7.885e-7	1.498e-5
91	2	F1 N6	-0.003	-0.014	0.005	2.494e-5	7.885e-7	1.354e-5
92	2	F1 N7	-0.003	-0.023	0.005	-1.217e-4	7.885e-7	1.215e-5
93	2	F1 N8	-0.003	-0.009	0.005	2.07e-5	7.895e-7	3.034e-4
94	2	F1 N9	-0.003	-0.009	0.005	2.252e-5	7.897e-7	-2.384e-4
95	2	F1 N10	-0.003	-0.029	0.005	2.173e-5	7.904e-7	9.396e-4
96	2	F1 N11	-0.003	-0.038	0.005	2.398e-5	7.907e-7	-8.739e-4
97	2	F1 N12	-0.003	-0.029	0.005	2.167e-5	7.911e-7	1.286e-3
98	2	F1 N13	-0.003	-0.029	0.005	2.366e-5	7.911e-7	-1.296e-3
99	2	N142	0	0	0	1.715e-4	0	1.326e-5
100	2	N143	0	0	0	-1.543e-4	0	1.309e-5

Permits: BNR21-0246, ELEC21-0886, ME21-0514, LB21-0900

**County of Orange Public Works**

**OC Development Services**

**APPROVED**

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Hadley B. ...  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C37  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
101	2	N144	0	0	0	2.694e-5	0	1.106e-5
102	2	N145	0	0	0	-3.23e-5	0	1.097e-5
103	2	N146	0	0	0	1.015e-4	1.239e-8	1.273e-5
104	2	N147	0	0	0	9.412e-6	1.439e-8	1.273e-5
105	2	N148	0	0	0	-8.271e-5	1.296e-8	1.273e-5
106	2	N149	0	0	0	2.085e-5	1.381e-8	1.096e-5
107	2	N150	0	0	0	2.105e-5	1.382e-8	1.096e-5
108	2	N151	0	0	0	2.025e-5	1.096e-8	1.097e-5
109	2	N152	0	0	0	2.039e-5	1.097e-8	1.097e-5
110	2	N153	0	0	0	2.099e-5	1.582e-8	3.553e-6
111	2	N154	0	0	0	2.126e-5	1.582e-8	3.228e-5
112	2	N60	0	-0.002	0	2.126e-5	1.582e-8	2.506e-5
113	2	N61	0	-0.002	0	2.101e-5	1.582e-8	-4.348e-6
114	2	N62	0	-0.003	0	2.04e-5	1.097e-8	-3.297e-6
115	2	N63	0	-0.002	0	2.026e-5	1.096e-8	8.103e-6
116	2	N64	0	0	0	2.104e-5	1.382e-8	-1.267e-4
117	2	N65	0	0	0	2.086e-5	1.381e-8	1.327e-4
118	2	N66	0	-0.002	0	-4.266e-5	0	1.097e-5
119	2	N67	0	-0.002	0	3.832e-5	0	1.105e-5
120	2	N68	0	-0.002	0	-1.957e-4	0	1.31e-5
121	2	N69	0	-0.002	0.001	2.128e-4	0	1.325e-5
122	2	N70	0	-0.002	0	-1.029e-4	1.296e-8	1.274e-5
123	2	N71	0	-0.001	0	9.173e-6	1.439e-8	1.293e-5
124	2	N72	0	-0.001	0	1.212e-4	1.239e-8	1.311e-5
125	2	N53	0	0	0	0	0	0
126	2	N54	0	0	0	0	0	0
127	2	N55	0	0	0	0	0	0
128	2	N56	0	0	0	0	0	0
129	2	N57	0	0	0	0	0	0
130	2	N58	-0.003	0	0.005	0	7.907e-7	0
131	2	N59	-0.003	0	0.005	0	7.904e-7	0
132	2	N60A	-0.003	0	0.005	0	7.901e-7	0
133	2	N61A	-0.003	0	0.005	0	7.899e-7	0
134	2	N62A	-0.003	0	0.005	0	7.896e-7	0
135	2	N63A	0	0	0	0	0	0
136	2	N64A	0	0	0	0	0	0
137	2	N65A	0	0	0	0	0	0
138	2	N66A	0	0	0	0	0	0
139	2	N67A	0	0	0	0	0	0
140	2	N68A	-0.003	0	0.005	0	7.895e-7	0
141	2	N69A	-0.003	0	0.005	0	7.895e-7	0
142	2	N70A	-0.003	0	0.005	0	7.894e-7	0
143	2	N71A	-0.003	0	0.005	0	7.893e-7	0
144	2	N72A	-0.003	0	0.005	0	7.892e-7	0
145	3	F2_N1	-0.006	-0.022	0.011	1.86e-4	1.46e-6	1.573e-5
146	3	F2_N2	-0.005	-0.032	0.007	-1.31e-4	1.46e-6	1.412e-5
147	3	F2_N3	-0.005	-0.025	0.015	-4.993e-5	1.628e-6	1.258e-5
148	3	F2_N4	-0.004	-0.021	0.011	9.116e-5	1.628e-6	1.107e-5
149	3	F2_N5	-0.006	-0.015	0.012	1.582e-4	1.541e-6	1.539e-5
150	3	F2_N6	-0.005	-0.018	0.009	2.263e-5	1.433e-6	1.4e-5
151	3	F2_N7	-0.005	-0.027	0.007	-1.141e-4	1.472e-6	1.273e-5
152	3	F2_N8	-0.011	-0.011	0.008	2.121e-5	1.493e-6	2.789e-4
153	3	F2_N9	-0.004	-0.011	0.009	2.305e-5	1.493e-6	-2.487e-4
154	3	F2_N10	-0.018	-0.036	0.009	2.325e-5	1.813e-6	6.809e-4
155	3	F2_N11	0.002	-0.047	0.009	2.613e-5	1.813e-6	-6.172e-4
156	3	F2_N12	-0.017	-0.034	0.009	2.286e-5	1.417e-6	4.918e-4
157	3	F2_N13	0.009	-0.034	0.009	2.475e-5	1.417e-6	-4.476e-4
158	3	F1_N1	-0.003	-0.017	0.005	2.641e-4	7.884e-7	1.506e-5

Permits: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Had 1000e-5  
 Building Official  
 3.228e-5



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
159	3 F1 N2	-0.003	-0.026	0.005	-2.114e-4	7.884e-7	1.329e-5
160	3 F1 N3	-0.003	-0.022	0.005	5.969e-4	7.885e-7	1.219e-5
161	3 F1 N4	-0.003	-0.019	0.005	-4.483e-4	7.885e-7	1.498e-5
162	3 F1 N5	-0.003	-0.012	0.005	1.715e-4	7.885e-7	1.354e-5
163	3 F1 N6	-0.003	-0.014	0.005	2.494e-5	7.885e-7	1.354e-5
164	3 F1 N7	-0.003	-0.023	0.005	-1.217e-4	7.885e-7	1.354e-5
165	3 F1 N8	-0.003	-0.009	0.005	2.07e-5	7.895e-7	1.354e-5
166	3 F1 N9	-0.003	-0.009	0.005	2.252e-5	7.897e-7	1.354e-5
167	3 F1 N10	-0.003	-0.029	0.005	2.173e-5	7.904e-7	1.354e-5
168	3 F1 N11	-0.003	-0.038	0.005	2.398e-5	7.907e-7	1.354e-5
169	3 F1 N12	-0.003	-0.029	0.005	2.167e-5	7.911e-7	1.286e-3
170	3 F1 N13	-0.003	-0.029	0.005	2.366e-5	7.911e-7	-1.296e-3
171	3 N142	0	0	0	1.715e-4	0	1.326e-5
172	3 N143	0	0	0	-1.543e-4	0	1.309e-5
173	3 N144	0	0	0	2.694e-5	0	1.106e-5
174	3 N145	0	0	0	-3.23e-5	0	1.097e-5
175	3 N146	0	0	0	1.015e-4	1.239e-8	1.312e-5
176	3 N147	0	0	0	9.412e-6	1.439e-8	1.293e-5
177	3 N148	0	0	0	-8.271e-5	1.296e-8	1.273e-5
178	3 N149	0	0	0	2.085e-5	1.381e-8	1.084e-4
179	3 N150	0	0	0	2.105e-5	1.382e-8	-1.026e-4
180	3 N151	0	0	0	2.025e-5	1.096e-8	9.086e-7
181	3 N152	0	0	0	2.039e-5	1.097e-8	3.553e-6
182	3 N153	0	0	0	2.099e-5	1.582e-8	-1.098e-5
183	3 N154	0	0	0	2.126e-5	1.582e-8	3.228e-5
184	3 N60	0	-0.002	0	2.126e-5	1.582e-8	2.506e-5
185	3 N61	0	-0.002	0	2.101e-5	1.582e-8	-4.348e-6
186	3 N62	0	-0.003	0	2.04e-5	1.097e-8	-3.297e-6
187	3 N63	0	-0.002	0	2.026e-5	1.096e-8	8.103e-6
188	3 N64	0	0	0	2.104e-5	1.382e-8	-1.267e-4
189	3 N65	0	0	0	2.086e-5	1.381e-8	1.327e-4
190	3 N66	0	-0.002	0	-4.266e-5	0	1.097e-5
191	3 N67	0	-0.002	0	3.832e-5	0	1.105e-5
192	3 N68	0	-0.002	0	-1.957e-4	0	1.31e-5
193	3 N69	0	-0.002	0.001	2.128e-4	0	1.325e-5
194	3 N70	0	-0.002	0	-1.029e-4	1.296e-8	1.274e-5
195	3 N71	0	-0.001	0	9.173e-6	1.439e-8	1.293e-5
196	3 N72	0	-0.001	0	1.212e-4	1.239e-8	1.311e-5
197	3 N53	0	0	0	0	0	0
198	3 N54	0	0	0	0	0	0
199	3 N55	0	0	0	0	0	0
200	3 N56	0	0	0	0	0	0
201	3 N57	0	0	0	0	0	0
202	3 N58	-0.003	0	0.005	0	7.907e-7	0
203	3 N59	-0.003	0	0.005	0	7.904e-7	0
204	3 N60A	-0.003	0	0.005	0	7.901e-7	0
205	3 N61A	-0.003	0	0.005	0	7.899e-7	0
206	3 N62A	-0.003	0	0.005	0	7.896e-7	0
207	3 N63A	0	0	0	0	0	0
208	3 N64A	0	0	0	0	0	0
209	3 N65A	0	0	0	0	0	0
210	3 N66A	0	0	0	0	0	0
211	3 N67A	0	0	0	0	0	0
212	3 N68A	-0.003	0	0.005	0	7.895e-7	0
213	3 N69A	-0.003	0	0.005	0	7.895e-7	0
214	3 N70A	-0.003	0	0.005	0	7.894e-7	0
215	3 N71A	-0.003	0	0.005	0	7.893e-7	0
216	3 N72A	-0.003	0	0.005	0	7.892e-7	0

Permits: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

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Had 8/19/2021  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
217	4 F2 N1	-0.004	-0.017	0.009	1.523e-4	3.321e-7	1.05e-5
218	4 F2 N2	-0.004	-0.025	0.006	-1.069e-4	3.321e-7	1.021e-5
219	4 F2 N3	-0.004	-0.02	0.012	-4.376e-5	4.267e-7	1.028e-5
220	4 F2 N4	-0.004	-0.017	0.009	7.806e-5	4.267e-7	1.028e-5
221	4 F2 N5	-0.004	-0.012	0.009	1.248e-4	3.776e-7	1.028e-5
222	4 F2 N6	-0.004	-0.014	0.007	1.807e-5	3.374e-7	1.028e-5
223	4 F2 N7	-0.004	-0.021	0.006	-8.939e-5	3.285e-7	1.028e-5
224	4 F2 N8	-0.008	-0.009	0.007	1.756e-5	3.817e-7	1.028e-5
225	4 F2 N9	-0.002	-0.009	0.007	1.804e-5	3.817e-7	1.028e-5
226	4 F2 N10	-0.014	-0.028	0.007	1.883e-5	5.321e-7	1.028e-5
227	4 F2 N11	0.001	-0.036	0.007	1.98e-5	5.322e-7	1.028e-5
228	4 F2 N12	-0.013	-0.027	0.007	1.849e-5	3.198e-7	3.756e-4
229	4 F2 N13	0.006	-0.027	0.007	1.882e-5	3.198e-7	-3.396e-4
230	4 F1 N1	-0.002	-0.014	0.004	1.946e-4	1.989e-7	1.014e-5
231	4 F1 N2	-0.002	-0.021	0.004	-1.499e-4	1.989e-7	9.743e-6
232	4 F1 N3	-0.002	-0.018	0.004	4.885e-4	1.989e-7	9.37e-6
233	4 F1 N4	-0.002	-0.015	0.004	-3.671e-4	1.99e-7	8.992e-6
234	4 F1 N5	-0.002	-0.01	0.004	1.274e-4	1.989e-7	1.006e-5
235	4 F1 N6	-0.002	-0.011	0.004	1.956e-5	1.989e-7	9.713e-6
236	4 F1 N7	-0.002	-0.018	0.004	-8.789e-5	1.989e-7	9.398e-6
237	4 F1 N8	-0.002	-0.007	0.004	1.724e-5	1.996e-7	2.397e-4
238	4 F1 N9	-0.002	-0.007	0.004	1.77e-5	1.998e-7	-1.941e-4
239	4 F1 N10	-0.002	-0.023	0.004	1.787e-5	2.003e-7	7.154e-4
240	4 F1 N11	-0.002	-0.03	0.004	1.854e-5	2.005e-7	-6.648e-4
241	4 F1 N12	-0.002	-0.023	0.004	1.772e-5	2.008e-7	1.02e-3
242	4 F1 N13	-0.002	-0.024	0.004	1.817e-5	2.008e-7	-1.025e-3
243	4 N142	0	0	0	1.799e-4	0	9.427e-6
244	4 N143	0	0	0	-1.649e-4	0	9.38e-6
245	4 N144	0	0	0	3.983e-5	0	8.907e-6
246	4 N145	0	0	0	-4.376e-5	0	8.886e-6
247	4 N146	0	0	0	1.044e-4	0	9.425e-6
248	4 N147	0	0	0	7.373e-6	0	9.375e-6
249	4 N148	0	0	0	-9.019e-5	0	9.32e-6
250	4 N149	0	0	0	1.703e-5	0	1.166e-4
251	4 N150	0	0	0	1.708e-5	0	-1.126e-4
252	4 N151	0	0	0	1.668e-5	0	3.672e-5
253	4 N152	0	0	0	1.67e-5	0	-3.346e-5
254	4 N153	0	0	0	1.696e-5	0	3.445e-5
255	4 N154	0	0	0	1.704e-5	0	-1.772e-5
256	4 N60	0	-0.002	0	1.704e-5	0	-3.195e-5
257	4 N61	0	-0.002	0	1.697e-5	0	4.824e-5
258	4 N62	0	-0.002	0	1.671e-5	0	-4.619e-5
259	4 N63	0	-0.002	0	1.668e-5	0	4.972e-5
260	4 N64	0	0	0	1.708e-5	0	-1.382e-4
261	4 N65	0	0	0	1.703e-5	0	1.423e-4
262	4 N66	0	-0.001	0	-5.695e-5	0	8.887e-6
263	4 N67	0	-0.002	0	5.382e-5	0	8.906e-6
264	4 N68	0	-0.002	0	-2.082e-4	0	9.383e-6
265	4 N69	0	-0.001	0.001	2.23e-4	0	9.426e-6
266	4 N70	0	-0.002	0	-1.111e-4	0	9.323e-6
267	4 N71	0	-0.001	0	7.226e-6	0	9.374e-6
268	4 N72	0	0	0	1.249e-4	0	9.422e-6
269	4 N53	0	0	0	0	0	0
270	4 N54	0	0	0	0	0	0
271	4 N55	0	0	0	0	0	0
272	4 N56	0	0	0	0	0	0
273	4 N57	0	0	0	0	0	0
274	4 N58	-0.002	0	0.004	0	2.005e-7	0

Plans: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900  
 County of Orange Public Works  
 OC Development Services  
 APPROVED  
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 Hadji, D  
 BUILDING OFFICIAL  
 -4.715e-4

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
275	4	N59	-0.002	0	0.004	0	2.003e-7
276	4	N60A	-0.002	0	0.004	0	2.001e-7
277	4	N61A	-0.002	0	0.004	0	2.e-7
278	4	N62A	-0.002	0	0.004	0	1.998e-7
279	4	N63A	0	0	0	0	0
280	4	N64A	0	0	0	0	0
281	4	N65A	0	0	0	0	0
282	4	N66A	0	0	0	0	0
283	4	N67A	0	0	0	0	0
284	4	N68A	-0.002	0	0.004	0	1.997e-7
285	4	N69A	-0.002	0	0.004	0	1.996e-7
286	4	N70A	-0.002	0	0.004	0	1.996e-7
287	4	N71A	-0.002	0	0.004	0	1.995e-7
288	4	N72A	-0.002	0	0.004	0	1.995e-7
289	5	F2 N1	1.437	-0.019	-0.042	1.121e-4	1.566e-4
290	5	F2 N2	1.499	-0.028	-0.045	-1.746e-4	1.566e-4
291	5	F2 N3	1.513	-0.023	-0.011	-7.111e-5	1.166e-4
292	5	F2 N4	1.546	-0.019	-0.014	6.585e-5	1.166e-4
293	5	F2 N5	1.421	-0.013	0.046	1.691e-4	1.407e-4
294	5	F2 N6	1.465	-0.015	0.045	5.103e-5	1.439e-4
295	5	F2 N7	1.514	-0.024	0.043	-6.484e-5	1.647e-4
296	5	F2 N8	1.247	-0.015	-0.021	-6.7e-5	1.243e-4
297	5	F2 N9	1.251	-0.005	0.028	8.248e-5	1.243e-4
298	5	F2 N10	1.328	-0.036	-0.022	-7.53e-5	1.303e-4
299	5	F2 N11	1.342	-0.034	0.029	9.404e-5	1.303e-4
300	5	F2 N12	1.335	-0.035	-0.009	-4.361e-5	1.265e-4
301	5	F2 N13	1.359	-0.026	0.049	1.436e-4	1.265e-4
302	5	F1 N1	0.817	-0.015	-0.033	8.839e-5	6.665e-5
303	5	F1 N2	0.841	-0.023	-0.033	-2.775e-4	6.663e-5
304	5	F1 N3	0.866	-0.02	-0.013	4.875e-4	6.666e-5
305	5	F1 N4	0.884	-0.017	-0.013	-4.591e-4	6.669e-5
306	5	F1 N5	0.817	-0.011	0.032	2.184e-4	6.68e-5
307	5	F1 N6	0.836	-0.013	0.032	9.962e-5	6.679e-5
308	5	F1 N7	0.856	-0.02	0.032	-1.13e-5	6.681e-5
309	5	F1 N8	0.822	-0.012	-0.01	-6.735e-5	6.684e-5
310	5	F1 N9	0.822	-0.004	0.014	8.38e-5	6.682e-5
311	5	F1 N10	0.856	-0.03	-0.01	-7.059e-5	6.676e-5
312	5	F1 N11	0.856	-0.028	0.014	8.865e-5	6.674e-5
313	5	F1 N12	0.884	-0.029	-0.002	-4.033e-5	6.663e-5
314	5	F1 N13	0.884	-0.023	0.025	1.383e-4	6.656e-5
315	5	N142	0	0	0	1.277e-4	6.304e-7
316	5	N143	0	0	0	-2.806e-4	6.303e-7
317	5	N144	0	0	0	1.512e-5	6.917e-7
318	5	N145	0	0	0	-8.941e-5	6.918e-7
319	5	N146	0	0	0	1.791e-4	9.922e-7
320	5	N147	0	0	0	5.853e-5	1.027e-6
321	5	N148	0	0	0	-5.119e-5	7.7e-7
322	5	N149	0	0	0	4.735e-7	1.186e-6
323	5	N150	0	0	0	1.768e-5	1.186e-6
324	5	N151	0	0	0	6.618e-7	1.12e-6
325	5	N152	0	0	0	1.652e-5	1.12e-6
326	5	N153	0	0	0	3.766e-5	1.265e-6
327	5	N154	0	0	0	5.808e-5	1.264e-6
328	5	N60	0.046	-0.002	0.001	5.768e-5	1.264e-6
329	5	N61	0.046	-0.003	0	3.803e-5	1.265e-6
330	5	N62	0.042	-0.002	0	1.618e-5	1.12e-6
331	5	N63	0.042	-0.003	0	9.976e-7	1.12e-6
332	5	N64	0.042	0	0	1.717e-5	1.186e-6

Estimate: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
333	5	N65	0.04	-0.001	0	9.41e-7	1.186e-6	-1.946e-3
334	5	N66	0.067	-0.002	0	-1.043e-4	6.918e-7	-3.704e-3
335	5	N67	0.066	-0.002	0	3.351e-5	6.917e-7	0.478e-3
336	5	N68	0.062	-0.002	-0.003	-3.294e-4	6.303e-7	0.478e-3
337	5	N69	0.062	-0.001	0	1.81e-4	6.304e-7	-3.469e-3
338	5	N70	0.064	-0.002	0	-7.719e-5	7.7e-7	0.478e-3
339	5	N71	0.063	-0.001	0.001	5.56e-5	1.027e-6	0.478e-3
340	5	N72	0.063	-0.001	0.002	2.018e-4	9.922e-7	0.478e-3
341	5	N53	0	0	0	0	0	0
342	5	N54	0	0	0	0	0	0
343	5	N55	0	0	0	0	0	0
344	5	N56	0	0	0	0	0	0
345	5	N57	0	0	0	0	0	0
346	5	N58	0.854	0	0.002	0	6.65e-5	0
347	5	N59	0.841	0	0.002	0	6.655e-5	0
348	5	N60A	0.867	0	0.002	0	6.659e-5	0
349	5	N61A	0.854	0	0.013	0	6.66e-5	0
350	5	N62A	0.854	0	-0.009	0	6.664e-5	0
351	5	N63A	0	0	0	0	0	0
352	5	N64A	0	0	0	0	0	0
353	5	N65A	0	0	0	0	0	0
354	5	N66A	0	0	0	0	0	0
355	5	N67A	0	0	0	0	0	0
356	5	N68A	0.856	0	0.003	0	6.665e-5	0
357	5	N69A	0.86	0	0.003	0	6.666e-5	0
358	5	N70A	0.851	0	0.003	0	6.667e-5	0
359	5	N71A	0.856	0	0	0	6.668e-5	0
360	5	N72A	0.856	0	0.007	0	6.669e-5	0
361	6	F2 N1	1.346	-0.019	-0.112	3.589e-5	3.332e-4	-3.484e-3
362	6	F2 N2	1.476	-0.027	-0.116	-2.508e-4	3.332e-4	-3.938e-3
363	6	F2 N3	1.541	-0.023	-0.043	-1.004e-4	2.932e-4	-3.948e-3
364	6	F2 N4	1.623	-0.019	-0.046	3.657e-5	2.932e-4	-4.18e-3
365	6	F2 N5	1.327	-0.013	0.096	2.131e-4	3.201e-4	-3.355e-3
366	6	F2 N6	1.425	-0.015	0.094	9.307e-5	3.149e-4	-3.675e-3
367	6	F2 N7	1.53	-0.024	0.092	-2.082e-5	3.456e-4	-4.04e-3
368	6	F2 N8	1.19	-0.015	-0.06	-1.837e-4	2.918e-4	-1.577e-3
369	6	F2 N9	1.194	-0.005	0.055	1.675e-4	2.918e-4	-1.998e-3
370	6	F2 N10	1.333	-0.036	-0.063	-2.057e-4	3.06e-4	-1.574e-3
371	6	F2 N11	1.347	-0.034	0.058	1.921e-4	3.06e-4	-2.633e-3
372	6	F2 N12	1.392	-0.035	-0.032	-1.307e-4	2.977e-4	-1.697e-3
373	6	F2 N13	1.416	-0.026	0.104	3.104e-4	2.976e-4	-2.484e-3
374	6	F1 N1	0.768	-0.015	-0.083	-7.293e-5	1.566e-4	-3.347e-3
375	6	F1 N2	0.825	-0.023	-0.083	-4.388e-4	1.566e-4	-3.752e-3
376	6	F1 N3	0.884	-0.02	-0.037	4.162e-4	1.566e-4	-3.83e-3
377	6	F1 N4	0.926	-0.017	-0.037	-5.305e-4	1.566e-4	-4.09e-3
378	6	F1 N5	0.768	-0.011	0.068	3.287e-4	1.567e-4	-3.267e-3
379	6	F1 N6	0.814	-0.013	0.068	2.051e-4	1.567e-4	-3.571e-3
380	6	F1 N7	0.859	-0.02	0.068	9.907e-5	1.567e-4	-3.894e-3
381	6	F1 N8	0.779	-0.012	-0.029	-1.839e-4	1.567e-4	-2.359e-3
382	6	F1 N9	0.779	-0.004	0.026	1.709e-4	1.567e-4	-2.829e-3
383	6	F1 N10	0.859	-0.03	-0.029	-1.927e-4	1.567e-4	-2.192e-3
384	6	F1 N11	0.859	-0.028	0.026	1.811e-4	1.567e-4	-3.676e-3
385	6	F1 N12	0.926	-0.029	-0.011	-1.215e-4	1.566e-4	-1.994e-3
386	6	F1 N13	0.926	-0.022	0.052	2.989e-4	1.565e-4	-4.239e-3
387	6	N142	0	0	0	1.309e-5	1.695e-6	-3.323e-3
388	6	N143	0	0	0	-3.953e-4	1.695e-6	-3.351e-3
389	6	N144	0	0	0	-3.213e-5	1.533e-6	-3.817e-3
390	6	N145	0	0	0	-1.367e-4	1.533e-6	-3.837e-3

Permits: BNR21-0246, ERE21-0886, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

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Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C42  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
391	6 N146	0	0	0	2.549e-4	2.387e-6	-3.399e-3
392	6 N147	0	0	0	1.266e-4	2.611e-6	-3.434e-3
393	6 N148	0	0	0	2.471e-5	2.152e-6	-2.97e-3
394	6 N149	0	0	0	-2.407e-5	2.782e-6	-2.97e-3
395	6 N150	0	0	0	1.626e-5	2.781e-6	-2.179e-3
396	6 N151	0	0	0	-2.301e-5	2.629e-6	-2.97e-3
397	6 N152	0	0	0	1.422e-5	2.629e-6	-2.97e-3
398	6 N153	0	0	0	6.364e-5	2.971e-6	-2.97e-3
399	6 N154	0	0	0	1.116e-4	2.97e-6	-2.597e-3
400	6 N60	0.048	-0.002	0.002	1.107e-4	2.97e-6	-2.597e-3
401	6 N61	0.048	-0.003	0.001	6.452e-5	2.971e-6	-2.447e-3
402	6 N62	0.042	-0.002	0	1.342e-5	2.629e-6	-2.254e-3
403	6 N63	0.042	-0.003	0	-2.222e-5	2.629e-6	-2.117e-3
404	6 N64	0.04	0	0	1.508e-5	2.781e-6	-2.168e-3
405	6 N65	0.038	-0.001	0	-2.297e-5	2.782e-6	-1.833e-3
406	6 N66	0.069	-0.001	-0.002	-1.498e-4	1.533e-6	-3.836e-3
407	6 N67	0.069	-0.002	-0.002	-1.2e-5	1.533e-6	-3.818e-3
408	6 N68	0.06	-0.002	-0.005	-4.409e-4	1.695e-6	-3.35e-3
409	6 N69	0.06	-0.002	-0.002	6.953e-5	1.695e-6	-3.324e-3
410	6 N70	0.062	-0.002	0.002	-3.16e-6	2.152e-6	-3.466e-3
411	6 N71	0.062	-0.001	0.003	1.199e-4	2.611e-6	-3.434e-3
412	6 N72	0.061	-0.001	0.004	2.757e-4	2.387e-6	-3.4e-3
413	6 N53	0	0	0	0	0	0
414	6 N54	0	0	0	0	0	0
415	6 N55	0	0	0	0	0	0
416	6 N56	0	0	0	0	0	0
417	6 N57	0	0	0	0	0	0
418	6 N58	0.856	0	0	0	1.564e-4	0
419	6 N59	0.825	0	0	0	1.565e-4	0
420	6 N60A	0.886	0	0	0	1.566e-4	0
421	6 N61A	0.856	0	0.025	0	1.566e-4	0
422	6 N62A	0.856	0	-0.026	0	1.566e-4	0
423	6 N63A	0	0	0	0	0	0
424	6 N64A	0	0	0	0	0	0
425	6 N65A	0	0	0	0	0	0
426	6 N66A	0	0	0	0	0	0
427	6 N67A	0	0	0	0	0	0
428	6 N68A	0.86	0	0.001	0	1.566e-4	0
429	6 N69A	0.87	0	0.001	0	1.567e-4	0
430	6 N70A	0.85	0	0.001	0	1.567e-4	0
431	6 N71A	0.86	0	-0.007	0	1.567e-4	0
432	6 N72A	0.86	0	0.01	0	1.567e-4	0
433	7 F2 N1	1.529	-0.019	0.029	1.883e-4	-1.979e-5	-3.998e-3
434	7 F2 N2	1.522	-0.028	0.025	-9.84e-5	-1.98e-5	-4.023e-3
435	7 F2 N3	1.486	-0.022	0.022	-4.183e-5	-6.014e-5	-3.832e-3
436	7 F2 N4	1.469	-0.019	0.018	9.512e-5	-6.013e-5	-3.761e-3
437	7 F2 N5	1.515	-0.013	-0.003	1.251e-4	-3.889e-5	-3.897e-3
438	7 F2 N6	1.504	-0.015	-0.005	8.99e-6	-2.71e-5	-3.878e-3
439	7 F2 N7	1.498	-0.024	-0.007	-1.089e-4	-1.618e-5	-3.897e-3
440	7 F2 N8	1.304	-0.016	0.018	4.986e-5	-4.314e-5	-1.687e-3
441	7 F2 N9	1.307	-0.005	0	-2.489e-6	-4.315e-5	-2.108e-3
442	7 F2 N10	1.323	-0.036	0.018	5.508e-5	-4.533e-5	-1.564e-3
443	7 F2 N11	1.337	-0.034	0	-4.013e-6	-4.535e-5	-2.624e-3
444	7 F2 N12	1.278	-0.034	0.014	4.343e-5	-4.461e-5	-1.577e-3
445	7 F2 N13	1.302	-0.026	-0.007	-2.331e-5	-4.465e-5	-2.363e-3
446	7 F1 N1	0.865	-0.015	0.017	2.497e-4	-2.331e-5	-3.848e-3
447	7 F1 N2	0.857	-0.023	0.017	-1.161e-4	-2.333e-5	-3.825e-3
448	7 F1 N3	0.848	-0.02	0.011	5.589e-4	-2.329e-5	-3.725e-3

Permits: BNR21-0246, ELEC21-0514, LB21-0900  
 County of Orange Public Works  
 OC Development Services  
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 Hadji, D. B. 5/27/21  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
449	7 F1 N4	0.842	-0.017	0.011	-3.878e-4	-2.326e-5	-3.672e-3
450	7 F1 N5	0.865	-0.011	-0.005	1.081e-4	-2.311e-5	-3.801e-3
451	7 F1 N6	0.859	-0.013	-0.005	-5.85e-6	-2.311e-5	-3.99e-3
452	7 F1 N7	0.852	-0.02	-0.005	-1.217e-4	-2.309e-5	-3.98e-3
453	7 F1 N8	0.864	-0.013	0.009	4.922e-5	-2.306e-5	-2.598e-3
454	7 F1 N9	0.864	-0.004	0.001	-3.259e-6	-2.308e-5	-3.906e-3
455	7 F1 N10	0.852	-0.03	0.009	5.156e-5	-2.316e-5	-3.906e-3
456	7 F1 N11	0.852	-0.028	0.001	-3.839e-6	-2.318e-5	-3.906e-3
457	7 F1 N12	0.842	-0.029	0.007	4.08e-5	-2.33e-5	-3.906e-3
458	7 F1 N13	0.842	-0.023	-0.003	-2.227e-5	-2.337e-5	-3.906e-3
459	7 N142	0	0	0	2.424e-4	-4.348e-7	-3.614e-3
460	7 N143	0	0	0	-1.66e-4	-4.349e-7	-3.606e-3
461	7 N144	0	0	0	6.238e-5	-1.5e-7	-3.574e-3
462	7 N145	0	0	0	-4.216e-5	-1.499e-7	-3.573e-3
463	7 N146	0	0	0	1.032e-4	-4.02e-7	-3.632e-3
464	7 N147	0	0	0	-9.509e-6	-5.573e-7	-3.625e-3
465	7 N148	0	0	0	-1.271e-4	-6.131e-7	-3.616e-3
466	7 N149	0	0	0	2.498e-5	-4.09e-7	-2.136e-3
467	7 N150	0	0	0	1.905e-5	-4.092e-7	-2.41e-3
468	7 N151	0	0	0	2.433e-5	-3.892e-7	-2.158e-3
469	7 N152	0	0	0	1.881e-5	-3.896e-7	-2.261e-3
470	7 N153	0	0	0	1.17e-5	-4.409e-7	-2.269e-3
471	7 N154	0	0	0	4.585e-6	-4.42e-7	-2.356e-3
472	7 N60	0.043	-0.002	0	4.731e-6	-4.42e-7	-2.333e-3
473	7 N61	0.044	-0.003	0	1.158e-5	-4.409e-7	-2.21e-3
474	7 N62	0.042	-0.002	0	1.895e-5	-3.896e-7	-2.234e-3
475	7 N63	0.042	-0.003	0	2.422e-5	-3.892e-7	-2.097e-3
476	7 N64	0.044	0	0	1.922e-5	-4.092e-7	-2.394e-3
477	7 N65	0.042	-0.001	0	2.481e-5	-4.09e-7	-2.059e-3
478	7 N66	0.064	-0.002	0	-5.88e-5	-1.499e-7	-3.573e-3
479	7 N67	0.064	-0.002	0	7.902e-5	-1.5e-7	-3.574e-3
480	7 N68	0.065	-0.002	0	-2.18e-4	-4.349e-7	-3.606e-3
481	7 N69	0.065	-0.001	0.002	2.925e-4	-4.348e-7	-3.613e-3
482	7 N70	0.065	-0.002	-0.001	-1.512e-4	-6.131e-7	-3.617e-3
483	7 N71	0.065	-0.001	0	-8.687e-6	-5.573e-7	-3.625e-3
484	7 N72	0.065	-0.001	0	1.279e-4	-4.02e-7	-3.631e-3
485	7 N53	0	0	0	0	0	0
486	7 N54	0	0	0	0	0	0
487	7 N55	0	0	0	0	0	0
488	7 N56	0	0	0	0	0	0
489	7 N57	0	0	0	0	0	0
490	7 N58	0.853	0	0.005	0	-2.343e-5	0
491	7 N59	0.857	0	0.005	0	-2.34e-5	0
492	7 N60A	0.848	0	0.005	0	-2.337e-5	0
493	7 N61A	0.853	0	0.001	0	-2.337e-5	0
494	7 N62A	0.853	0	0.009	0	-2.334e-5	0
495	7 N63A	0	0	0	0	0	0
496	7 N64A	0	0	0	0	0	0
497	7 N65A	0	0	0	0	0	0
498	7 N66A	0	0	0	0	0	0
499	7 N67A	0	0	0	0	0	0
500	7 N68A	0.852	0	0.005	0	-2.333e-5	0
501	7 N69A	0.85	0	0.005	0	-2.333e-5	0
502	7 N70A	0.853	0	0.005	0	-2.332e-5	0
503	7 N71A	0.852	0	0.006	0	-2.331e-5	0
504	7 N72A	0.852	0	0.004	0	-2.329e-5	0
505	8 F2 N1	0.025	-0.014	1.271	2.166e-3	-5.779e-5	-7.209e-5
506	8 F2 N2	0.003	-0.032	1.268	1.879e-3	-5.78e-5	-1.483e-6

Permits: BNR21-0246, ERE21-0556, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

This set of plans and specifications must be kept on the job at all times. It is the responsibility of the contractor to make any changes or alterations to these plans and specifications without the written permission of Orange County. The statement of these plan specifications SHALL NOT be construed to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Had 3/9/2021  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
507	8 F2 N3	-0.013	-0.015	1.264	1.842e-3	-5.954e-5	2.911e-5
508	8 F2 N4	-0.03	-0.027	1.259	1.969e-3	-5.954e-5	8.23e-5
509	8 F2 N5	0.026	-0.007	1.206	1.889e-3	-5.831e-5	2.23e-5
510	8 F2 N6	0.009	-0.015	1.206	1.676e-3	-5.609e-5	1.93e-5
511	8 F2 N7	-0.009	-0.03	1.207	1.684e-3	-5.983e-5	3.456e-5
512	8 F2 N8	0.011	-0.01	1.384	3.533e-3	-5.334e-5	4.22e-5
513	8 F2 N9	0.016	-0.01	1.363	3.473e-3	-5.333e-5	7.71e-5
514	8 F2 N10	-0.017	-0.03	1.423	3.815e-3	-2.686e-5	3.054e-4
515	8 F2 N11	0	-0.04	1.414	3.84e-3	-2.685e-5	5.084e-4
516	8 F2 N12	-0.034	-0.03	1.404	3.709e-3	-6.902e-5	4.262e-4
517	8 F2 N13	-0.012	-0.03	1.372	3.576e-3	-6.902e-5	-3.466e-4
518	8 F1 N1	0.013	-0.011	0.804	3.185e-3	-2.935e-5	-7.082e-5
519	8 F1 N2	0.003	-0.027	0.804	2.819e-3	-2.939e-5	-6.278e-7
520	8 F1 N3	-0.008	-0.013	0.795	3.408e-3	-2.949e-5	2.758e-5
521	8 F1 N4	-0.016	-0.023	0.795	2.456e-3	-2.951e-5	8.03e-5
522	8 F1 N5	0.014	-0.006	0.776	2.897e-3	-2.972e-5	-7.662e-5
523	8 F1 N6	0.005	-0.013	0.776	2.668e-3	-2.975e-5	-2.166e-5
524	8 F1 N7	-0.004	-0.025	0.776	2.683e-3	-2.978e-5	3.456e-5
525	8 F1 N8	0.012	-0.008	0.794	3.465e-3	-2.973e-5	2.228e-4
526	8 F1 N9	0.012	-0.008	0.784	3.4e-3	-2.97e-5	-2.538e-4
527	8 F1 N10	-0.004	-0.025	0.794	3.604e-3	-2.96e-5	7.766e-4
528	8 F1 N11	-0.004	-0.032	0.784	3.575e-3	-2.958e-5	-7.145e-4
529	8 F1 N12	-0.016	-0.025	0.791	3.541e-3	-2.954e-5	1.158e-3
530	8 F1 N13	-0.016	-0.026	0.779	3.441e-3	-2.954e-5	-1.081e-3
531	8 N142	0	0	0	1.94e-3	-3.485e-7	-3.742e-5
532	8 N143	0	0	0	1.531e-3	-3.488e-7	-3.167e-5
533	8 N144	0	0	0	1.524e-3	-2.77e-7	4.985e-5
534	8 N145	0	0	0	1.42e-3	-2.771e-7	5.329e-5
535	8 N146	0	0	0	1.628e-3	-4.654e-7	-2.846e-5
536	8 N147	0	0	0	1.361e-3	-5.247e-7	-2.143e-5
537	8 N148	0	0	0	1.397e-3	-4.545e-7	-1.451e-5
538	8 N149	0	0	0	3.349e-3	-5.468e-7	1.004e-4
539	8 N150	0	0	0	3.341e-3	-5.464e-7	-1.725e-4
540	8 N151	0	0	0	3.271e-3	-7.557e-7	5.643e-5
541	8 N152	0	0	0	3.259e-3	-7.554e-7	-4.605e-5
542	8 N153	0	0	0	3.293e-3	-4.402e-7	9.291e-5
543	8 N154	0	0	0	3.286e-3	-4.402e-7	5.114e-6
544	8 N60	-0.001	-0.002	0.059	3.287e-3	-4.402e-7	-1.425e-5
545	8 N61	0	-0.002	0.059	3.293e-3	-4.402e-7	1.103e-4
546	8 N62	0	-0.003	0.059	3.261e-3	-7.554e-7	-6.266e-5
547	8 N63	0	-0.002	0.059	3.272e-3	-7.557e-7	7.319e-5
548	8 N64	0.002	0	0.06	3.341e-3	-5.464e-7	-2.02e-4
549	8 N65	0	0	0.06	3.348e-3	-5.468e-7	1.317e-4
550	8 N66	0	-0.002	0.029	1.353e-3	-2.771e-7	5.312e-5
551	8 N67	0	0	0.029	1.49e-3	-2.77e-7	5.003e-5
552	8 N68	0	-0.003	0.032	1.436e-3	-3.488e-7	-3.184e-5
553	8 N69	0	0	0.035	1.946e-3	-3.485e-7	-3.722e-5
554	8 N70	0	-0.002	0.028	1.338e-3	-4.545e-7	-1.478e-5
555	8 N71	0	-0.001	0.028	1.29e-3	-5.247e-7	-2.143e-5
556	8 N72	0	0	0.03	1.617e-3	-4.654e-7	-2.812e-5
557	8 N53	0	0	0	0	0	0
558	8 N54	0	0	0	0	0	0
559	8 N55	0	0	0	0	0	0
560	8 N56	0	0	0	0	0	0
561	8 N57	0	0	0	0	0	0
562	8 N58	-0.003	0	0.789	0	-2.955e-5	0
563	8 N59	0.003	0	0.789	0	-2.952e-5	0
564	8 N60A	-0.009	0	0.789	0	-2.947e-5	0

Permits: BNR21-0246, ELEC21-0856, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

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Hadji, D  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
565	8	N61A	-0.003	0	0.784	0	-2.945e-5
566	8	N62A	-0.003	0	0.793	0	-2.941e-5
567	8	N63A	0	0	0	0	0
568	8	N64A	0	0	0	0	0
569	8	N65A	0	0	0	0	0
570	8	N66A	0	0	0	0	0
571	8	N67A	0	0	0	0	0
572	8	N68A	-0.004	0	0.788	0	-2.938e-5
573	8	N69A	-0.006	0	0.788	0	-2.937e-5
574	8	N70A	-0.002	0	0.788	0	-2.936e-5
575	8	N71A	-0.004	0	0.79	0	-2.935e-5
576	8	N72A	-0.004	0	0.787	0	-2.933e-5
577	9	F2 N1	0.101	-0.014	1.329	2.229e-3	-2.04e-4
578	9	F2 N2	0.022	-0.033	1.326	1.942e-3	-2.04e-4
579	9	F2 N3	-0.036	-0.015	1.291	1.867e-3	-2.096e-4
580	9	F2 N4	-0.095	-0.027	1.286	1.994e-3	-2.096e-4
581	9	F2 N5	0.103	-0.007	1.165	1.852e-3	-2.043e-4
582	9	F2 N6	0.041	-0.015	1.165	1.641e-3	-1.963e-4
583	9	F2 N7	-0.022	-0.03	1.166	1.648e-3	-2.092e-4
584	9	F2 N8	0.057	-0.01	1.416	3.629e-3	-1.928e-4
585	9	F2 N9	0.063	-0.01	1.34	3.399e-3	-1.928e-4
586	9	F2 N10	-0.021	-0.03	1.456	3.92e-3	-1.723e-4
587	9	F2 N11	-0.005	-0.04	1.39	3.756e-3	-1.723e-4
588	9	F2 N12	-0.081	-0.03	1.423	3.778e-3	-2.105e-4
589	9	F2 N13	-0.06	-0.03	1.326	3.436e-3	-2.105e-4
590	9	F1 N1	0.054	-0.011	0.846	3.319e-3	-1.039e-4
591	9	F1 N2	0.016	-0.027	0.846	2.953e-3	-1.04e-4
592	9	F1 N3	-0.023	-0.013	0.815	3.467e-3	-1.041e-4
593	9	F1 N4	-0.051	-0.023	0.815	2.515e-3	-1.041e-4
594	9	F1 N5	0.054	-0.006	0.745	2.806e-3	-1.043e-4
595	9	F1 N6	0.024	-0.013	0.745	2.58e-3	-1.043e-4
596	9	F1 N7	-0.007	-0.025	0.745	2.591e-3	-1.043e-4
597	9	F1 N8	0.046	-0.008	0.81	3.561e-3	-1.043e-4
598	9	F1 N9	0.046	-0.008	0.773	3.327e-3	-1.042e-4
599	9	F1 N10	-0.007	-0.025	0.81	3.704e-3	-1.041e-4
600	9	F1 N11	-0.007	-0.032	0.773	3.497e-3	-1.041e-4
601	9	F1 N12	-0.051	-0.025	0.798	3.606e-3	-1.041e-4
602	9	F1 N13	-0.051	-0.027	0.756	3.307e-3	-1.041e-4
603	9	N142	0	0	0	2.035e-3	-1.235e-6
604	9	N143	0	0	0	1.626e-3	-1.235e-6
605	9	N144	0	0	0	1.563e-3	-9.773e-7
606	9	N145	0	0	0	1.459e-3	-9.774e-7
607	9	N146	0	0	0	1.565e-3	-1.633e-6
608	9	N147	0	0	0	1.305e-3	-1.841e-6
609	9	N148	0	0	0	1.334e-3	-1.595e-6
610	9	N149	0	0	0	3.369e-3	-1.872e-6
611	9	N150	0	0	0	3.342e-3	-1.871e-6
612	9	N151	0	0	0	3.291e-3	-2.007e-6
613	9	N152	0	0	0	3.261e-3	-2.007e-6
614	9	N153	0	0	0	3.271e-3	-1.853e-6
615	9	N154	0	0	0	3.242e-3	-1.853e-6
616	9	N60	-0.003	-0.002	0.058	3.243e-3	-1.853e-6
617	9	N61	-0.003	-0.002	0.059	3.271e-3	-1.853e-6
618	9	N62	0	-0.003	0.059	3.264e-3	-2.007e-6
619	9	N63	0	-0.002	0.059	3.292e-3	-2.007e-6
620	9	N64	0.003	0	0.06	3.343e-3	-1.871e-6
621	9	N65	0.002	0	0.061	3.368e-3	-1.872e-6
622	9	N66	-0.003	-0.002	0.029	1.39e-3	-9.774e-7

Permits: BNR21-0246, ELE21-0856, ME21-0514, LB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
623	9	N67	-0.003	0	0.03	1.528e-3	-9.773e-6	1.507e-4
624	9	N68	0.002	-0.003	0.034	1.528e-3	-1.235e-6	-1.383e-4
625	9	N69	0.003	0	0.036	2.038e-3	-1.235e-6	1.738e-5
626	9	N70	0.001	-0.002	0.027	1.277e-3	-1.595e-6	-1.007e-4
627	9	N71	0.002	-0.001	0.027	1.237e-3	-1.841e-6	-1.007e-4
628	9	N72	0.002	0	0.029	1.556e-3	-1.633e-6	1.126e-4
629	9	N53	0	0	0	0	0	0
630	9	N54	0	0	0	0	0	0
631	9	N55	0	0	0	0	0	0
632	9	N56	0	0	0	0	0	0
633	9	N57	0	0	0	0	0	0
634	9	N58	-0.004	0	0.791	0	-1.041e-4	0
635	9	N59	0.016	0	0.791	0	-1.041e-4	0
636	9	N60A	-0.025	0	0.791	0	-1.04e-4	0
637	9	N61A	-0.004	0	0.774	0	-1.04e-4	0
638	9	N62A	-0.004	0	0.808	0	-1.04e-4	0
639	9	N63A	0	0	0	0	0	0
640	9	N64A	0	0	0	0	0	0
641	9	N65A	0	0	0	0	0	0
642	9	N66A	0	0	0	0	0	0
643	9	N67A	0	0	0	0	0	0
644	9	N68A	-0.007	0	0.79	0	-1.04e-4	0
645	9	N69A	-0.014	0	0.79	0	-1.04e-4	0
646	9	N70A	0	0	0.79	0	-1.04e-4	0
647	9	N71A	-0.007	0	0.795	0	-1.039e-4	0
648	9	N72A	-0.007	0	0.784	0	-1.039e-4	0
649	10	F2 N1	-0.05	-0.014	1.213	2.103e-3	8.851e-5	1.388e-4
650	10	F2 N2	-0.016	-0.032	1.209	1.816e-3	8.85e-5	3.149e-5
651	10	F2 N3	0.009	-0.015	1.238	1.818e-3	9.046e-5	-1.766e-5
652	10	F2 N4	0.035	-0.027	1.233	1.945e-3	9.045e-5	-9.78e-5
653	10	F2 N5	-0.05	-0.007	1.247	1.925e-3	8.757e-5	1.412e-4
654	10	F2 N6	-0.024	-0.015	1.247	1.711e-3	8.408e-5	6.069e-5
655	10	F2 N7	0.003	-0.03	1.248	1.721e-3	8.949e-5	-2.356e-5
656	10	F2 N8	-0.036	-0.01	1.352	3.437e-3	8.611e-5	2.558e-4
657	10	F2 N9	-0.031	-0.01	1.386	3.546e-3	8.612e-5	-1.785e-4
658	10	F2 N10	-0.013	-0.031	1.39	3.709e-3	1.185e-4	5.613e-4
659	10	F2 N11	0.004	-0.04	1.438	3.923e-3	1.186e-4	-5.124e-4
660	10	F2 N12	0.014	-0.03	1.386	3.639e-3	7.248e-5	3.763e-4
661	10	F2 N13	0.036	-0.03	1.418	3.716e-3	7.248e-5	-3.966e-4
662	10	F1 N1	-0.027	-0.011	0.762	3.051e-3	4.522e-5	1.36e-4
663	10	F1 N2	-0.011	-0.027	0.762	2.685e-3	4.518e-5	2.851e-5
664	10	F1 N3	0.007	-0.014	0.776	3.349e-3	4.508e-5	-1.569e-5
665	10	F1 N4	0.019	-0.023	0.776	2.397e-3	4.505e-5	-9.58e-5
666	10	F1 N5	-0.027	-0.006	0.806	2.989e-3	4.481e-5	1.417e-4
667	10	F1 N6	-0.014	-0.013	0.806	2.755e-3	4.478e-5	5.92e-5
668	10	F1 N7	0	-0.025	0.806	2.775e-3	4.475e-5	-2.494e-5
669	10	F1 N8	-0.023	-0.008	0.778	3.369e-3	4.479e-5	3.217e-4
670	10	F1 N9	-0.023	-0.008	0.794	3.474e-3	4.482e-5	-1.549e-4
671	10	F1 N10	0	-0.025	0.778	3.504e-3	4.493e-5	7.678e-4
672	10	F1 N11	0	-0.032	0.794	3.652e-3	4.496e-5	-7.233e-4
673	10	F1 N12	0.019	-0.025	0.783	3.475e-3	4.5e-5	1.056e-3
674	10	F1 N13	0.019	-0.026	0.801	3.575e-3	4.5e-5	-1.182e-3
675	10	N142	0	0	0	1.845e-3	5.383e-7	8.321e-5
676	10	N143	0	0	0	1.437e-3	5.381e-7	7.434e-5
677	10	N144	0	0	0	1.485e-3	4.232e-7	-5.042e-5
678	10	N145	0	0	0	1.381e-3	4.23e-7	-5.567e-5
679	10	N146	0	0	0	1.691e-3	7.021e-7	6.849e-5
680	10	N147	0	0	0	1.418e-3	7.914e-7	5.788e-5

Estimate: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
681	10	N148	0	0	0	1.46e-3	6.858e-7	4.744e-5
682	10	N149	0	0	0	3.328e-3	7.78e-7	1.961e-4
683	10	N150	0	0	0	3.339e-3	7.785e-7	1.946e-4
684	10	N151	0	0	0	3.251e-3	4.958e-7	1.946e-4
685	10	N152	0	0	0	3.257e-3	4.962e-7	-5.454e-5
686	10	N153	0	0	0	3.314e-3	9.727e-7	1.21e-5
687	10	N154	0	0	0	3.33e-3	9.728e-7	1.21e-5
688	10	N60	0	-0.002	0.06	3.33e-3	9.728e-7	1.21e-5
689	10	N61	0.001	-0.002	0.06	3.315e-3	9.727e-7	1.21e-5
690	10	N62	0	-0.003	0.058	3.258e-3	4.962e-7	1.21e-5
691	10	N63	0	-0.002	0.058	3.253e-3	4.958e-7	1.21e-5
692	10	N64	0	0	0.06	3.339e-3	7.785e-7	-1.084e-4
693	10	N65	-0.002	0	0.06	3.328e-3	7.78e-7	2.253e-4
694	10	N66	0	-0.002	0.028	1.315e-3	4.23e-7	-5.542e-5
695	10	N67	0	0	0.028	1.452e-3	4.232e-7	-5.069e-5
696	10	N68	-0.001	-0.003	0.03	1.343e-3	5.381e-7	7.46e-5
697	10	N69	-0.001	0	0.033	1.854e-3	5.383e-7	8.291e-5
698	10	N70	0	-0.003	0.029	1.4e-3	6.858e-7	4.784e-5
699	10	N71	-0.001	-0.001	0.029	1.344e-3	7.914e-7	5.788e-5
700	10	N72	-0.001	0	0.031	1.679e-3	7.021e-7	6.799e-5
701	10	N53	0	0	0	0	0	0
702	10	N54	0	0	0	0	0	0
703	10	N55	0	0	0	0	0	0
704	10	N56	0	0	0	0	0	0
705	10	N57	0	0	0	0	0	0
706	10	N58	-0.002	0	0.786	0	4.5e-5	0
707	10	N59	-0.01	0	0.786	0	4.503e-5	0
708	10	N60A	0.007	0	0.786	0	4.51e-5	0
709	10	N61A	-0.002	0	0.794	0	4.512e-5	0
710	10	N62A	-0.002	0	0.779	0	4.517e-5	0
711	10	N63A	0	0	0	0	0	0
712	10	N64A	0	0	0	0	0	0
713	10	N65A	0	0	0	0	0	0
714	10	N66A	0	0	0	0	0	0
715	10	N67A	0	0	0	0	0	0
716	10	N68A	0	0	0.787	0	4.521e-5	0
717	10	N69A	0.003	0	0.787	0	4.522e-5	0
718	10	N70A	-0.003	0	0.787	0	4.523e-5	0
719	10	N71A	0	0	0.784	0	4.525e-5	0
720	10	N72A	0	0	0.789	0	4.526e-5	0
721	11	F2_N1	-1.445	-0.018	0.062	2.249e-4	-1.587e-4	3.76e-3
722	11	F2_N2	-1.508	-0.028	0.059	-6.179e-5	-1.587e-4	4.006e-3
723	11	F2_N3	-1.521	-0.022	0.037	-2.775e-5	-1.182e-4	3.909e-3
724	11	F2_N4	-1.554	-0.019	0.034	1.092e-4	-1.182e-4	3.994e-3
725	11	F2_N5	-1.429	-0.013	-0.027	1.037e-4	-1.393e-4	3.65e-3
726	11	F2_N6	-1.473	-0.015	-0.029	-1.142e-5	-1.427e-4	3.798e-3
727	11	F2_N7	-1.522	-0.023	-0.031	-1.302e-4	-1.634e-4	3.987e-3
728	11	F2_N8	-1.263	-0.005	0.036	1.028e-4	-1.239e-4	2.089e-3
729	11	F2_N9	-1.256	-0.016	-0.013	-4.563e-5	-1.238e-4	1.641e-3
730	11	F2_N10	-1.358	-0.025	0.037	1.132e-4	-1.295e-4	2.697e-3
731	11	F2_N11	-1.34	-0.045	-0.014	-5.396e-5	-1.295e-4	1.609e-3
732	11	F2_N12	-1.364	-0.025	0.025	8.249e-5	-1.269e-4	2.449e-3
733	11	F2_N13	-1.345	-0.035	-0.033	-1.067e-4	-1.269e-4	1.691e-3
734	11	F1_N1	-0.822	-0.015	0.042	3.273e-4	-6.653e-5	3.617e-3
735	11	F1_N2	-0.846	-0.023	0.042	-3.86e-5	-6.651e-5	3.811e-3
736	11	F1_N3	-0.871	-0.02	0.022	5.932e-4	-6.653e-5	3.797e-3
737	11	F1_N4	-0.889	-0.017	0.022	-3.534e-4	-6.656e-5	3.902e-3
738	11	F1_N5	-0.822	-0.011	-0.023	5.451e-5	-6.667e-5	3.556e-3

Estimate: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

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 OC Development Services  
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Had 7:09 PM  
 BUILDING OFFICIAL  
 6.488e-5



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
739	11 F1 N6	-0.841	-0.013	-0.023	-5.706e-5	-6.667e-5	3.69e-3
740	11 F1 N7	-0.86	-0.02	-0.023	-1.753e-4	-6.669e-5	3.842e-3
741	11 F1 N8	-0.826	-0.004	0.018	1.04e-4	-6.671e-5	3.77e-3
742	11 F1 N9	-0.826	-0.013	-0.005	-4.653e-5	-6.67e-5	3.52e-3
743	11 F1 N10	-0.86	-0.02	0.018	1.083e-4	-6.663e-5	3.728e-3
744	11 F1 N11	-0.86	-0.037	-0.005	-4.988e-5	-6.661e-5	3.49e-3
745	11 F1 N12	-0.889	-0.022	0.011	7.84e-5	-6.65e-5	3.705e-3
746	11 F1 N13	-0.889	-0.03	-0.016	-1.008e-4	-6.643e-5	3.46e-3
747	11 N142	0	0	0	2.975e-4	-6.325e-7	3.488e-3
748	11 N143	0	0	0	-1.109e-4	-6.324e-7	3.406e-3
749	11 N144	0	0	0	8.511e-5	-6.983e-7	3.716e-3
750	11 N145	0	0	0	-1.942e-5	-6.985e-7	3.724e-3
751	11 N146	0	0	0	6.644e-5	-9.86e-7	3.535e-3
752	11 N147	0	0	0	-4.254e-5	-1.02e-6	3.55e-3
753	11 N148	0	0	0	-1.64e-4	-7.635e-7	3.561e-3
754	11 N149	0	0	0	3.781e-5	-1.185e-6	2.298e-3
755	11 N150	0	0	0	2.062e-5	-1.185e-6	2.026e-3
756	11 N151	0	0	0	3.703e-5	-1.122e-6	2.274e-3
757	11 N152	0	0	0	2.114e-5	-1.121e-6	2.173e-3
758	11 N153	0	0	0	2.925e-7	-1.26e-6	2.496e-3
759	11 N154	0	0	0	-2.002e-5	-1.259e-6	2.407e-3
760	11 N60	-0.046	-0.003	0	-1.965e-5	-1.259e-6	2.345e-3
761	11 N61	-0.046	-0.002	0	-1.18e-7	-1.26e-6	2.471e-3
762	11 N62	-0.042	-0.003	0	2.145e-5	-1.121e-6	2.112e-3
763	11 N63	-0.042	-0.001	0	3.667e-5	-1.122e-6	2.247e-3
764	11 N64	-0.04	-0.001	0	2.108e-5	-1.185e-6	1.952e-3
765	11 N65	-0.042	0	0	3.73e-5	-1.185e-6	2.284e-3
766	11 N66	-0.067	-0.002	0	-3.691e-5	-6.985e-7	3.724e-3
767	11 N67	-0.067	-0.002	0	1.009e-4	-6.983e-7	3.716e-3
768	11 N68	-0.063	-0.002	0	-1.644e-4	-6.324e-7	3.498e-3
769	11 N69	-0.063	-0.001	0.003	3.46e-4	-6.325e-7	3.489e-3
770	11 N70	-0.064	-0.002	-0.002	-1.872e-4	-7.635e-7	3.561e-3
771	11 N71	-0.064	-0.001	0	-3.99e-5	-1.02e-6	3.549e-3
772	11 N72	-0.063	-0.001	0	9.198e-5	-9.86e-7	3.536e-3
773	11 N53	0	0	0	0	0	0
774	11 N54	0	0	0	0	0	0
775	11 N55	0	0	0	0	0	0
776	11 N56	0	0	0	0	0	0
777	11 N57	0	0	0	0	0	0
778	11 N58	-0.859	0	0.007	0	-6.638e-5	0
779	11 N59	-0.846	0	0.007	0	-6.642e-5	0
780	11 N60A	-0.872	0	0.007	0	-6.647e-5	0
781	11 N61A	-0.859	0	-0.004	0	-6.647e-5	0
782	11 N62A	-0.859	0	0.017	0	-6.651e-5	0
783	11 N63A	0	0	0	0	0	0
784	11 N64A	0	0	0	0	0	0
785	11 N65A	0	0	0	0	0	0
786	11 N66A	0	0	0	0	0	0
787	11 N67A	0	0	0	0	0	0
788	11 N68A	-0.861	0	0.006	0	-6.653e-5	0
789	11 N69A	-0.865	0	0.006	0	-6.654e-5	0
790	11 N70A	-0.856	0	0.006	0	-6.655e-5	0
791	11 N71A	-0.861	0	0.009	0	-6.655e-5	0
792	11 N72A	-0.861	0	0.002	0	-6.656e-5	0
793	12 F2 N1	-1.353	-0.018	0.133	3.009e-4	-3.379e-4	3.499e-3
794	12 F2 N2	-1.485	-0.028	0.129	1.422e-5	-3.379e-4	3.968e-3
795	12 F2 N3	-1.548	-0.022	0.069	1.38e-6	-2.976e-4	3.964e-3
796	12 F2 N4	-1.632	-0.019	0.066	1.383e-4	-2.976e-4	4.206e-3

Permits: BNR21-0246, ELEC21-0856, ME21-0514, LB21-0900

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Hadji Hadji  
 Building Official



Company : KPFF  
Designer : PD  
Job Number : 1900799  
Model Name : Dana Point Harbor\_Bld'g. 12

C49  
5/27/2021  
11:47:36 PM  
Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
797	12 F2 N5	-1.336	-0.014	-0.077	5.958e-5	-3.174e-4	3.383e-3
798	12 F2 N6	-1.434	-0.015	-0.078	-5.361e-5	-3.124e-4	3.696e-3
799	12 F2 N7	-1.537	-0.023	-0.08	-1.744e-4	-3.427e-4	3.056e-3
800	12 F2 N8	-1.207	-0.005	0.074	2.15e-4	-2.911e-4	0.034e-3
801	12 F2 N9	-1.199	-0.015	-0.04	-1.345e-4	-2.911e-4	1.586e-3
802	12 F2 N10	-1.363	-0.025	0.077	2.372e-4	-3.049e-4	0.034e-3
803	12 F2 N11	-1.345	-0.045	-0.043	-1.574e-4	-3.049e-4	6.036e-3
804	12 F2 N12	-1.422	-0.025	0.047	1.658e-4	-2.987e-4	1.501e-3
805	12 F2 N13	-1.402	-0.035	-0.089	-2.797e-4	-2.987e-4	1.751e-3
806	12 F1 N1	-0.773	-0.015	0.092	4.882e-4	-1.565e-4	3.056e-3
807	12 F1 N2	-0.829	-0.023	0.092	1.224e-4	-1.565e-4	3.777e-3
808	12 F1 N3	-0.889	-0.02	0.046	6.642e-4	-1.565e-4	3.849e-3
809	12 F1 N4	-0.93	-0.017	0.046	-2.824e-4	-1.565e-4	4.112e-3
810	12 F1 N5	-0.773	-0.011	-0.06	-5.618e-5	-1.566e-4	3.29e-3
811	12 F1 N6	-0.818	-0.013	-0.06	-1.629e-4	-1.566e-4	3.592e-3
812	12 F1 N7	-0.864	-0.02	-0.06	-2.86e-4	-1.566e-4	3.912e-3
813	12 F1 N8	-0.784	-0.004	0.037	-2.18e-4	-1.566e-4	2.883e-3
814	12 F1 N9	-0.784	-0.012	-0.018	-1.358e-4	-1.566e-4	2.401e-3
815	12 F1 N10	-0.864	-0.02	0.037	2.271e-4	-1.566e-4	3.738e-3
816	12 F1 N11	-0.864	-0.037	-0.018	-1.454e-4	-1.565e-4	2.24e-3
817	12 F1 N12	-0.93	-0.021	0.02	1.573e-4	-1.564e-4	4.228e-3
818	12 F1 N13	-0.93	-0.03	-0.043	-2.647e-4	-1.564e-4	1.997e-3
819	12 N142	0	0	0	4.119e-4	-1.703e-6	3.343e-3
820	12 N143	0	0	0	3.454e-6	-1.703e-6	3.37e-3
821	12 N144	0	0	0	1.321e-4	-1.55e-6	3.837e-3
822	12 N145	0	0	0	2.76e-5	-1.551e-6	3.856e-3
823	12 N146	0	0	0	-9.635e-6	-2.375e-6	3.419e-3
824	12 N147	0	0	0	-1.108e-4	-2.6e-6	3.454e-3
825	12 N148	0	0	0	-2.401e-4	-2.143e-6	3.487e-3
826	12 N149	0	0	0	6.295e-5	-2.781e-6	2.182e-3
827	12 N150	0	0	0	2.261e-5	-2.781e-6	1.91e-3
828	12 N151	0	0	0	6.176e-5	-2.632e-6	2.284e-3
829	12 N152	0	0	0	2.448e-5	-2.632e-6	2.183e-3
830	12 N153	0	0	0	-2.491e-5	-2.964e-6	2.617e-3
831	12 N154	0	0	0	-7.272e-5	-2.963e-6	2.528e-3
832	12 N60	-0.049	-0.003	-0.001	-7.184e-5	-2.963e-6	2.463e-3
833	12 N61	-0.048	-0.002	0	-2.588e-5	-2.964e-6	2.589e-3
834	12 N62	-0.042	-0.003	0	2.519e-5	-2.632e-6	2.122e-3
835	12 N63	-0.042	-0.001	0.001	6.089e-5	-2.632e-6	2.256e-3
836	12 N64	-0.038	-0.001	0	2.37e-5	-2.781e-6	1.838e-3
837	12 N65	-0.04	0	0.001	6.177e-5	-2.781e-6	2.171e-3
838	12 N66	-0.069	-0.002	0.001	8.375e-6	-1.551e-6	3.855e-3
839	12 N67	-0.069	-0.002	0.002	1.462e-4	-1.55e-6	3.838e-3
840	12 N68	-0.061	-0.002	0.003	-5.318e-5	-1.703e-6	3.37e-3
841	12 N69	-0.06	-0.001	0.005	4.572e-4	-1.703e-6	3.344e-3
842	12 N70	-0.063	-0.002	-0.003	-2.614e-4	-2.143e-6	3.486e-3
843	12 N71	-0.062	-0.001	-0.002	-1.044e-4	-2.6e-6	3.454e-3
844	12 N72	-0.061	-0.001	-0.001	1.781e-5	-2.375e-6	3.421e-3
845	12 N53	0	0	0	0	0	0
846	12 N54	0	0	0	0	0	0
847	12 N55	0	0	0	0	0	0
848	12 N56	0	0	0	0	0	0
849	12 N57	0	0	0	0	0	0
850	12 N58	-0.86	0	0.009	0	-1.563e-4	0
851	12 N59	-0.83	0	0.009	0	-1.564e-4	0
852	12 N60A	-0.891	0	0.009	0	-1.564e-4	0
853	12 N61A	-0.86	0	-0.016	0	-1.565e-4	0
854	12 N62A	-0.86	0	0.035	0	-1.565e-4	0

Permits: BNR21-0246, ELEC21-0886, ME21-0514, LB21-0900

**County of Orange - Public Works**

**OC Development Services**

**APPROVED**

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Hadji, C. C. 3.05.2021

Buildings Division

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
855	12	N63A	0	0	0	0	0
856	12	N64A	0	0	0	0	0
857	12	N65A	0	0	0	0	0
858	12	N66A	0	0	0	0	0
859	12	N67A	0	0	0	0	0
860	12	N68A	-0.864	0	0.007	0	-1.565e-4
861	12	N69A	-0.875	0	0.007	0	-1.565e-4
862	12	N70A	-0.854	0	0.007	0	-1.565e-4
863	12	N71A	-0.864	0	0.016	0	-1.565e-4
864	12	N72A	-0.864	0	-0.001	0	-1.566e-4
865	13	F2 N1	-1.537	-0.019	-0.008	1.489e-4	2.073e-5
866	13	F2 N2	-1.53	-0.028	-0.011	-1.378e-4	2.074e-5
867	13	F2 N3	-1.494	-0.023	0.005	-5.688e-5	6.112e-5
868	13	F2 N4	-1.477	-0.019	0.002	8.007e-5	6.112e-5
869	13	F2 N5	-1.523	-0.013	0.023	1.479e-4	3.869e-5
870	13	F2 N6	-1.512	-0.015	0.021	3.076e-5	2.689e-5
871	13	F2 N7	-1.507	-0.024	0.019	-8.607e-5	1.588e-5
872	13	F2 N8	-1.32	-0.004	-0.002	-9.179e-6	4.335e-5
873	13	F2 N9	-1.312	-0.016	0.015	4.334e-5	4.335e-5
874	13	F2 N10	-1.353	-0.025	-0.002	-1.091e-5	4.588e-5
875	13	F2 N11	-1.335	-0.045	0.016	4.943e-5	4.589e-5
876	13	F2 N12	-1.307	-0.026	0.002	-9.503e-7	4.488e-5
877	13	F2 N13	-1.288	-0.035	0.023	6.622e-5	4.492e-5
878	13	F1 N1	-0.87	-0.015	-0.009	1.663e-4	2.344e-5
879	13	F1 N2	-0.862	-0.023	-0.009	-1.996e-4	2.346e-5
880	13	F1 N3	-0.853	-0.02	-0.002	5.222e-4	2.342e-5
881	13	F1 N4	-0.847	-0.017	-0.002	-4.244e-4	2.339e-5
882	13	F1 N5	-0.87	-0.011	0.014	1.652e-4	2.325e-5
883	13	F1 N6	-0.863	-0.013	0.014	4.877e-5	2.324e-5
884	13	F1 N7	-0.857	-0.02	0.014	-6.451e-5	2.322e-5
885	13	F1 N8	-0.868	-0.003	0	-9.892e-6	2.319e-5
886	13	F1 N9	-0.868	-0.013	0.008	4.284e-5	2.321e-5
887	13	F1 N10	-0.857	-0.02	0	-1.05e-5	2.329e-5
888	13	F1 N11	-0.857	-0.037	0.008	4.559e-5	2.332e-5
889	13	F1 N12	-0.847	-0.022	0.002	-5.665e-7	2.344e-5
890	13	F1 N13	-0.847	-0.03	0.012	6.288e-5	2.35e-5
891	13	N142	0	0	0	1.831e-4	4.385e-7
892	13	N143	0	0	0	-2.253e-4	4.387e-7
893	13	N144	0	0	0	3.809e-5	1.534e-7
894	13	N145	0	0	0	-6.645e-5	1.533e-7
895	13	N146	0	0	0	1.425e-4	4.028e-7
896	13	N147	0	0	0	2.572e-5	5.591e-7
897	13	N148	0	0	0	-8.779e-5	6.151e-7
898	13	N149	0	0	0	1.263e-5	4.113e-7
899	13	N150	0	0	0	1.86e-5	4.116e-7
900	13	N151	0	0	0	1.231e-5	3.887e-7
901	13	N152	0	0	0	1.78e-5	3.891e-7
902	13	N153	0	0	0	2.553e-5	4.443e-7
903	13	N154	0	0	0	3.271e-5	4.454e-7
904	13	N60	-0.044	-0.003	0	3.258e-5	4.454e-7
905	13	N61	-0.044	-0.002	0	2.568e-5	4.443e-7
906	13	N62	-0.042	-0.003	0	1.771e-5	3.891e-7
907	13	N63	-0.042	-0.001	0	1.245e-5	3.887e-7
908	13	N64	-0.042	-0.001	0	1.843e-5	4.116e-7
909	13	N65	-0.044	0	0	1.281e-5	4.113e-7
910	13	N66	-0.065	-0.002	0	-8.22e-5	1.533e-7
911	13	N67	-0.065	-0.002	0	5.563e-5	1.534e-7
912	13	N68	-0.065	-0.002	-0.002	-2.756e-4	4.387e-7

Permits: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL  
 4.021e-3



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C51  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
913	13	N69	-0.065	-0.001	0	2.348e-4	4.385e-7	3.633e-3
914	13	N70	-0.065	-0.002	0	-1.129e-4	6.151e-7	3.637e-3
915	13	N71	-0.065	-0.001	0	2.46e-5	5.591e-7	3.637e-3
916	13	N72	-0.066	-0.001	0.001	1.661e-4	4.028e-7	3.637e-3
917	13	N53	0	0	0	0	0	0
918	13	N54	0	0	0	0	0	0
919	13	N55	0	0	0	0	0	0
920	13	N56	0	0	0	0	0	0
921	13	N57	0	0	0	0	0	0
922	13	N58	-0.857	0	0.004	0	2.357e-5	0
923	13	N59	-0.862	0	0.004	0	2.353e-5	0
924	13	N60A	-0.853	0	0.004	0	2.35e-5	0
925	13	N61A	-0.857	0	0.008	0	2.35e-5	0
926	13	N62A	-0.857	0	0	0	2.347e-5	0
927	13	N63A	0	0	0	0	0	0
928	13	N64A	0	0	0	0	0	0
929	13	N65A	0	0	0	0	0	0
930	13	N66A	0	0	0	0	0	0
931	13	N67A	0	0	0	0	0	0
932	13	N68A	-0.857	0	0.004	0	2.346e-5	0
933	13	N69A	-0.855	0	0.004	0	2.346e-5	0
934	13	N70A	-0.858	0	0.004	0	2.345e-5	0
935	13	N71A	-0.857	0	0.003	0	2.344e-5	0
936	13	N72A	-0.857	0	0.005	0	2.343e-5	0
937	14	F2_N1	-0.034	-0.023	-1.25	-1.829e-3	5.894e-5	9.731e-5
938	14	F2_N2	-0.012	-0.023	-1.254	-2.115e-3	5.895e-5	2.376e-5
939	14	F2_N3	0.005	-0.03	-1.238	-1.941e-3	5.8e-5	-8.328e-6
940	14	F2_N4	0.021	-0.011	-1.239	-1.794e-3	5.801e-5	-5.771e-5
941	14	F2_N5	-0.036	-0.02	-1.186	-1.616e-3	6.047e-5	1.023e-4
942	14	F2_N6	-0.017	-0.015	-1.19	-1.636e-3	5.712e-5	4.437e-5
943	14	F2_N7	0.001	-0.017	-1.195	-1.879e-3	5.994e-5	-1.279e-5
944	14	F2_N8	-0.027	-0.01	-1.368	-3.492e-3	5.306e-5	2.467e-4
945	14	F2_N9	-0.021	-0.01	-1.347	-3.434e-3	5.305e-5	-1.877e-4
946	14	F2_N10	-0.013	-0.031	-1.407	-3.772e-3	2.759e-5	5.621e-4
947	14	F2_N11	0.003	-0.04	-1.398	-3.796e-3	2.758e-5	-5.116e-4
948	14	F2_N12	0.004	-0.03	-1.389	-3.668e-3	6.967e-5	3.865e-4
949	14	F2_N13	0.026	-0.03	-1.356	-3.534e-3	6.967e-5	-3.864e-4
950	14	F1_N1	-0.018	-0.019	-0.795	-2.769e-3	2.952e-5	9.36e-5
951	14	F1_N2	-0.008	-0.019	-0.795	-3.135e-3	2.956e-5	2.2e-5
952	14	F1_N3	0.004	-0.026	-0.787	-2.327e-3	2.965e-5	-6.921e-6
953	14	F1_N4	0.012	-0.011	-0.787	-3.269e-3	2.967e-5	-5.83e-5
954	14	F1_N5	-0.018	-0.016	-0.767	-2.624e-3	2.989e-5	9.979e-5
955	14	F1_N6	-0.01	-0.013	-0.767	-2.625e-3	2.991e-5	4.304e-5
956	14	F1_N7	-0.001	-0.015	-0.767	-2.869e-3	2.994e-5	-1.355e-5
957	14	F1_N8	-0.016	-0.008	-0.785	-3.426e-3	2.99e-5	3.018e-4
958	14	F1_N9	-0.016	-0.008	-0.775	-3.362e-3	2.987e-5	-1.748e-4
959	14	F1_N10	-0.001	-0.025	-0.785	-3.564e-3	2.977e-5	7.696e-4
960	14	F1_N11	-0.001	-0.032	-0.775	-3.534e-3	2.974e-5	-7.215e-4
961	14	F1_N12	0.012	-0.025	-0.782	-3.501e-3	2.971e-5	1.077e-3
962	14	F1_N13	0.012	-0.026	-0.77	-3.401e-3	2.971e-5	-1.162e-3
963	14	N142	0	0	0	-1.515e-3	3.501e-7	5.711e-5
964	14	N143	0	0	0	-1.923e-3	3.503e-7	5.134e-5
965	14	N144	0	0	0	-1.423e-3	2.793e-7	-3.054e-5
966	14	N145	0	0	0	-1.528e-3	2.794e-7	-3.4e-5
967	14	N146	0	0	0	-1.382e-3	4.567e-7	4.812e-5
968	14	N147	0	0	0	-1.345e-3	5.243e-7	4.119e-5
969	14	N148	0	0	0	-1.612e-3	4.617e-7	3.419e-5
970	14	N149	0	0	0	-3.311e-3	5.479e-7	1.768e-4

Estimate: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

**County of Orange - Public Works**  
**OC Development Services**  
**APPROVED**

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 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
971	14 N150	0	0	0	-3.303e-3	5.475e-7	-9.608e-5
972	14 N151	0	0	0	-3.234e-3	7.556e-7	4.968e-5
973	14 N152	0	0	0	-3.222e-3	7.553e-7	2.22e-5
974	14 N153	0	0	0	-3.255e-3	4.45e-7	1.03e-5
975	14 N154	0	0	0	-3.249e-3	4.45e-7	-7.45e-5
976	14 N60	0	-0.002	-0.058	-3.249e-3	4.45e-7	3.20e-5
977	14 N61	0	-0.002	-0.058	-3.256e-3	4.45e-7	2.18e-5
978	14 N62	0	-0.003	-0.058	-3.224e-3	7.553e-7	0.920e-5
979	14 N63	0	-0.002	-0.058	-3.235e-3	7.556e-7	6.659e-5
980	14 N64	0	0	-0.059	-3.303e-3	5.475e-7	1.272e-4
981	14 N65	-0.002	0	-0.059	-3.311e-3	5.479e-7	2.065e-4
982	14 N66	0	0	-0.029	-1.494e-3	2.794e-7	-3.383e-5
983	14 N67	0	-0.003	-0.029	-1.355e-3	2.793e-7	-3.068e-5
984	14 N68	0	-0.002	-0.034	-1.929e-3	3.503e-7	5.155e-5
985	14 N69	-0.001	-0.002	-0.032	-1.419e-3	3.501e-7	5.691e-5
986	14 N70	0	-0.001	-0.029	-1.602e-3	4.617e-7	3.451e-5
987	14 N71	0	-0.001	-0.028	-1.274e-3	5.243e-7	4.119e-5
988	14 N72	0	-0.002	-0.028	-1.323e-3	4.567e-7	4.78e-5
989	14 N53	0	0	0	0	0	0
990	14 N54	0	0	0	0	0	0
991	14 N55	0	0	0	0	0	0
992	14 N56	0	0	0	0	0	0
993	14 N57	0	0	0	0	0	0
994	14 N58	-0.002	0	-0.78	0	2.971e-5	0
995	14 N59	-0.008	0	-0.78	0	2.969e-5	0
996	14 N60A	0.004	0	-0.78	0	2.963e-5	0
997	14 N61A	-0.002	0	-0.775	0	2.962e-5	0
998	14 N62A	-0.002	0	-0.785	0	2.958e-5	0
999	14 N63A	0	0	0	0	0	0
1000	14 N64A	0	0	0	0	0	0
1001	14 N65A	0	0	0	0	0	0
1002	14 N66A	0	0	0	0	0	0
1003	14 N67A	0	0	0	0	0	0
1004	14 N68A	-0.001	0	-0.779	0	2.954e-5	0
1005	14 N69A	0	0	-0.779	0	2.954e-5	0
1006	14 N70A	-0.003	0	-0.779	0	2.952e-5	0
1007	14 N71A	-0.001	0	-0.781	0	2.951e-5	0
1008	14 N72A	-0.001	0	-0.778	0	2.95e-5	0
1009	15 F2_N1	-0.111	-0.024	-1.309	-1.892e-3	2.079e-4	3.164e-4
1010	15 F2_N2	-0.03	-0.023	-1.312	-2.178e-3	2.079e-4	5.701e-5
1011	15 F2_N3	0.028	-0.03	-1.264	-1.965e-3	2.033e-4	-5.59e-5
1012	15 F2_N4	0.085	-0.011	-1.266	-1.818e-3	2.033e-4	-2.28e-4
1013	15 F2_N5	-0.114	-0.019	-1.145	-1.579e-3	2.112e-4	3.313e-4
1014	15 F2_N6	-0.05	-0.015	-1.149	-1.601e-3	1.995e-4	1.294e-4
1015	15 F2_N7	0.014	-0.018	-1.154	-1.842e-3	2.093e-4	-7.019e-5
1016	15 F2_N8	-0.074	-0.01	-1.4	-3.586e-3	1.911e-4	2.924e-4
1017	15 F2_N9	-0.068	-0.011	-1.325	-3.363e-3	1.911e-4	-1.42e-4
1018	15 F2_N10	-0.009	-0.031	-1.44	-3.878e-3	1.733e-4	5.582e-4
1019	15 F2_N11	0.007	-0.04	-1.373	-3.712e-3	1.733e-4	-5.155e-4
1020	15 F2_N12	0.052	-0.03	-1.408	-3.74e-3	2.125e-4	3.366e-4
1021	15 F2_N13	0.073	-0.03	-1.31	-3.392e-3	2.125e-4	-4.362e-4
1022	15 F1_N1	-0.059	-0.019	-0.837	-2.903e-3	1.042e-4	3.044e-4
1023	15 F1_N2	-0.021	-0.019	-0.837	-3.269e-3	1.042e-4	5.19e-5
1024	15 F1_N3	0.018	-0.026	-0.806	-2.386e-3	1.043e-4	-4.983e-5
1025	15 F1_N4	0.046	-0.01	-0.806	-3.328e-3	1.043e-4	-2.299e-4
1026	15 F1_N5	-0.059	-0.016	-0.736	-2.532e-3	1.045e-4	3.236e-4
1027	15 F1_N6	-0.029	-0.013	-0.736	-2.537e-3	1.045e-4	1.254e-4
1028	15 F1_N7	0.002	-0.015	-0.736	-2.777e-3	1.045e-4	-7.217e-5

Estimate: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900  
 County of Orange Public Works  
 OC Development Services  
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 Had 12/27/2021  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1029	15 F1 N8	-0.051	-0.008	-0.801	-3.521e-3	1.045e-4	4.01e-4
1030	15 F1 N9	-0.051	-0.008	-0.764	-3.289e-3	1.045e-4	-7.558e-5
1031	15 F1 N10	0.002	-0.025	-0.801	-3.664e-3	1.044e-4	1.400e-4
1032	15 F1 N11	0.002	-0.032	-0.764	-3.456e-3	1.044e-4	3.81e-4
1033	15 F1 N12	0.046	-0.025	-0.789	-3.568e-3	1.043e-4	9.749e-4
1034	15 F1 N13	0.046	-0.026	-0.747	-3.266e-3	1.043e-4	1.400e-4
1035	15 N142	0	0	0	-1.61e-3	1.235e-6	7.26e-5
1036	15 N143	0	0	0	-2.018e-3	1.235e-6	1.317e-4
1037	15 N144	0	0	0	-1.462e-3	9.83e-7	1.430e-4
1038	15 N145	0	0	0	-1.567e-3	9.831e-7	1.430e-4
1039	15 N146	0	0	0	-1.319e-3	1.597e-6	1.442e-4
1040	15 N147	0	0	0	-1.289e-3	1.831e-6	1.2e-4
1041	15 N148	0	0	0	-1.549e-3	1.611e-6	9.557e-5
1042	15 N149	0	0	0	-3.332e-3	1.87e-6	2.729e-4
1043	15 N150	0	0	0	-3.304e-3	1.87e-6	0
1044	15 N151	0	0	0	-3.255e-3	2.009e-6	4.147e-5
1045	15 N152	0	0	0	-3.225e-3	2.008e-6	-6.101e-5
1046	15 N153	0	0	0	-3.234e-3	1.86e-6	-8.66e-5
1047	15 N154	0	0	0	-3.205e-3	1.86e-6	-1.744e-4
1048	15 N60	0.002	-0.002	-0.058	-3.206e-3	1.86e-6	-1.903e-4
1049	15 N61	0.003	-0.002	-0.058	-3.234e-3	1.86e-6	-6.581e-5
1050	15 N62	0	-0.003	-0.058	-3.227e-3	2.008e-6	-7.73e-5
1051	15 N63	0	-0.002	-0.058	-3.255e-3	2.009e-6	5.855e-5
1052	15 N64	-0.002	0	-0.059	-3.305e-3	1.87e-6	-3.322e-5
1053	15 N65	-0.003	0	-0.06	-3.331e-3	1.87e-6	3.005e-4
1054	15 N66	0.003	0	-0.03	-1.532e-3	9.831e-7	-1.433e-4
1055	15 N67	0.002	-0.003	-0.03	-1.393e-3	9.83e-7	-1.322e-4
1056	15 N68	-0.003	-0.001	-0.036	-2.022e-3	1.235e-6	1.576e-4
1057	15 N69	-0.003	-0.002	-0.034	-1.511e-3	1.235e-6	1.765e-4
1058	15 N70	-0.002	-0.001	-0.028	-1.541e-3	1.611e-6	9.668e-5
1059	15 N71	-0.002	-0.001	-0.027	-1.221e-3	1.831e-6	1.2e-4
1060	15 N72	-0.003	-0.002	-0.026	-1.262e-3	1.597e-6	1.431e-4
1061	15 N53	0	0	0	0	0	0
1062	15 N54	0	0	0	0	0	0
1063	15 N55	0	0	0	0	0	0
1064	15 N56	0	0	0	0	0	0
1065	15 N57	0	0	0	0	0	0
1066	15 N58	0	0	-0.782	0	1.043e-4	0
1067	15 N59	-0.021	0	-0.782	0	1.043e-4	0
1068	15 N60A	0.02	0	-0.782	0	1.043e-4	0
1069	15 N61A	0	0	-0.765	0	1.043e-4	0
1070	15 N62A	0	0	-0.799	0	1.042e-4	0
1071	15 N63A	0	0	0	0	0	0
1072	15 N64A	0	0	0	0	0	0
1073	15 N65A	0	0	0	0	0	0
1074	15 N66A	0	0	0	0	0	0
1075	15 N67A	0	0	0	0	0	0
1076	15 N68A	0.002	0	-0.781	0	1.042e-4	0
1077	15 N69A	0.009	0	-0.781	0	1.042e-4	0
1078	15 N70A	-0.005	0	-0.781	0	1.042e-4	0
1079	15 N71A	0.002	0	-0.786	0	1.042e-4	0
1080	15 N72A	0.002	0	-0.775	0	1.042e-4	0
1081	16 F2 N1	0.042	-0.023	-1.192	-1.766e-3	-8.994e-5	-1.215e-4
1082	16 F2 N2	0.007	-0.023	-1.195	-2.052e-3	-8.993e-5	-9.503e-6
1083	16 F2 N3	-0.018	-0.03	-1.211	-1.917e-3	-8.734e-5	3.923e-5
1084	16 F2 N4	-0.042	-0.012	-1.213	-1.77e-3	-8.733e-5	1.127e-4
1085	16 F2 N5	0.043	-0.02	-1.227	-1.653e-3	-9.029e-5	-1.27e-4
1086	16 F2 N6	0.016	-0.015	-1.231	-1.671e-3	-8.527e-5	-4.068e-5

Permits: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. It is the responsibility of the contractor to make any changes or alterations to these plans and specifications in writing and obtain the written permission from the County of Orange Public Works Department. The signing of these plan specifications SHALL constitute the contractor's agreement to be bound by the approval of the violation of any provisions of any County Ordinance or State law.

Had 1430e-4  
 Building Official



**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1087	16 F2 N7	-0.012	-0.017	-1.236	-1.916e-3	-8.944e-5	4.458e-5
1088	16 F2 N8	0.02	-0.01	-1.337	-3.399e-3	-8.501e-5	2.01e-4
1089	16 F2 N9	0.026	-0.01	-1.37	-3.505e-3	-8.503e-5	2.99e-4
1090	16 F2 N10	-0.017	-0.03	-1.374	-3.666e-3	-1.181e-4	8.09e-5
1091	16 F2 N11	-0.001	-0.04	-1.422	-3.879e-3	-1.181e-4	5.07e-4
1092	16 F2 N12	-0.043	-0.03	-1.37	-3.596e-3	-7.32e-5	3.96e-5
1093	16 F2 N13	-0.022	-0.03	-1.402	-3.676e-3	-7.32e-5	3.96e-5
1094	16 F1 N1	0.022	-0.019	-0.754	-2.636e-3	-4.514e-5	7.892e-6
1095	16 F1 N2	0.006	-0.019	-0.754	-3.001e-3	-4.51e-5	5.09e-5
1096	16 F1 N3	-0.011	-0.026	-0.767	-2.268e-3	-4.5e-5	1.134e-4
1097	16 F1 N4	-0.023	-0.011	-0.767	-3.21e-3	-4.497e-5	1.134e-4
1098	16 F1 N5	0.022	-0.016	-0.797	-2.716e-3	-4.473e-5	-1.241e-4
1099	16 F1 N6	0.009	-0.013	-0.797	-2.713e-3	-4.47e-5	-3.94e-5
1100	16 F1 N7	-0.004	-0.015	-0.797	-2.961e-3	-4.466e-5	4.505e-5
1101	16 F1 N8	0.019	-0.008	-0.769	-3.331e-3	-4.47e-5	2.025e-4
1102	16 F1 N9	0.019	-0.008	-0.785	-3.434e-3	-4.474e-5	-2.741e-4
1103	16 F1 N10	-0.004	-0.025	-0.769	-3.464e-3	-4.484e-5	7.781e-4
1104	16 F1 N11	-0.004	-0.032	-0.785	-3.612e-3	-4.487e-5	-7.13e-4
1105	16 F1 N12	-0.023	-0.025	-0.774	-3.434e-3	-4.491e-5	1.178e-3
1106	16 F1 N13	-0.023	-0.026	-0.793	-3.536e-3	-4.492e-5	-1.06e-3
1107	16 N142	0	0	0	-1.42e-3	-5.344e-7	-6.301e-5
1108	16 N143	0	0	0	-1.828e-3	-5.341e-7	-5.421e-5
1109	16 N144	0	0	0	-1.384e-3	-4.247e-7	7.064e-5
1110	16 N145	0	0	0	-1.489e-3	-4.246e-7	7.591e-5
1111	16 N146	0	0	0	-1.445e-3	-6.832e-7	-4.796e-5
1112	16 N147	0	0	0	-1.402e-3	-7.829e-7	-3.76e-5
1113	16 N148	0	0	0	-1.675e-3	-6.882e-7	-2.716e-5
1114	16 N149	0	0	0	-3.29e-3	-7.743e-7	8.077e-5
1115	16 N150	0	0	0	-3.302e-3	-7.748e-7	-1.922e-4
1116	16 N151	0	0	0	-3.214e-3	-4.974e-7	5.79e-5
1117	16 N152	0	0	0	-3.22e-3	-4.978e-7	-4.458e-5
1118	16 N153	0	0	0	-3.276e-3	-9.702e-7	1.132e-4
1119	16 N154	0	0	0	-3.293e-3	-9.702e-7	2.54e-5
1120	16 N60	-0.001	-0.002	-0.059	-3.293e-3	-9.702e-7	5.649e-6
1121	16 N61	-0.001	-0.002	-0.059	-3.277e-3	-9.702e-7	1.302e-4
1122	16 N62	0	-0.003	-0.058	-3.221e-3	-4.978e-7	-6.122e-5
1123	16 N63	0	-0.002	-0.058	-3.216e-3	-4.974e-7	7.463e-5
1124	16 N64	0.002	0	-0.059	-3.301e-3	-7.748e-7	-2.212e-4
1125	16 N65	0	0	-0.059	-3.291e-3	-7.743e-7	1.125e-4
1126	16 N66	-0.001	0	-0.028	-1.456e-3	-4.246e-7	7.566e-5
1127	16 N67	-0.001	-0.003	-0.028	-1.318e-3	-4.247e-7	7.085e-5
1128	16 N68	0	-0.002	-0.032	-1.837e-3	-5.341e-7	-5.451e-5
1129	16 N69	0.001	-0.002	-0.03	-1.327e-3	-5.344e-7	-6.271e-5
1130	16 N70	0	-0.001	-0.031	-1.664e-3	-6.882e-7	-2.763e-5
1131	16 N71	0	-0.001	-0.029	-1.328e-3	-7.829e-7	-3.76e-5
1132	16 N72	0	-0.002	-0.029	-1.385e-3	-6.832e-7	-4.749e-5
1133	16 N53	0	0	0	0	0	0
1134	16 N54	0	0	0	0	0	0
1135	16 N55	0	0	0	0	0	0
1136	16 N56	0	0	0	0	0	0
1137	16 N57	0	0	0	0	0	0
1138	16 N58	-0.003	0	-0.777	0	-4.492e-5	0
1139	16 N59	0.006	0	-0.777	0	-4.495e-5	0
1140	16 N60A	-0.012	0	-0.777	0	-4.501e-5	0
1141	16 N61A	-0.003	0	-0.785	0	-4.503e-5	0
1142	16 N62A	-0.003	0	-0.77	0	-4.508e-5	0
1143	16 N63A	0	0	0	0	0	0
1144	16 N64A	0	0	0	0	0	0

Permits: BNR21-0246, ELEC21-0856, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

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Had 3/5/2021  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C55  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1145	16	N65A	0	0	0	0	0
1146	16	N66A	0	0	0	0	0
1147	16	N67A	0	0	0	0	0
1148	16	N68A	-0.004	0	-0.778	0	-4.512e-5
1149	16	N69A	-0.007	0	-0.778	0	-4.513e-5
1150	16	N70A	-0.001	0	-0.778	0	-4.515e-5
1151	16	N71A	-0.004	0	-0.776	0	-4.517e-5
1152	16	N72A	-0.004	0	-0.78	0	-4.518e-5
1153	17	F2 N1	1.386	-0.006	-0.046	1.981e-6	1.276e-4
1154	17	F2 N2	1.436	-0.008	-0.047	-9.273e-5	1.276e-4
1155	17	F2 N3	1.466	-0.007	-0.018	-4.023e-5	1.195e-4
1156	17	F2 N4	1.5	-0.006	-0.02	1.193e-5	1.195e-4
1157	17	F2 N5	1.381	-0.004	0.038	7.142e-5	1.266e-4
1158	17	F2 N6	1.419	-0.005	0.037	3.594e-5	1.238e-4
1159	17	F2 N7	1.46	-0.008	0.037	3.253e-6	1.346e-4
1160	17	F2 N8	1.232	-0.008	-0.024	-7.314e-5	1.165e-4
1161	17	F2 N9	1.231	0.002	0.021	6.331e-5	1.165e-4
1162	17	F2 N10	1.314	-0.014	-0.025	-7.526e-5	1.176e-4
1163	17	F2 N11	1.316	-0.005	0.021	6.53e-5	1.176e-4
1164	17	F2 N12	1.319	-0.014	-0.013	-4.703e-5	1.157e-4
1165	17	F2 N13	1.328	-0.005	0.04	1.135e-4	1.157e-4
1166	17	F1 N1	0.803	-0.005	-0.034	-6.867e-5	6.339e-5
1167	17	F1 N2	0.826	-0.007	-0.034	-1.421e-4	6.337e-5
1168	17	F1 N3	0.85	-0.007	-0.015	1.283e-4	6.339e-5
1169	17	F1 N4	0.867	-0.006	-0.015	-1.854e-4	6.342e-5
1170	17	F1 N5	0.803	-0.003	0.027	1.099e-4	6.353e-5
1171	17	F1 N6	0.822	-0.004	0.027	8.12e-5	6.353e-5
1172	17	F1 N7	0.84	-0.007	0.027	6.019e-5	6.354e-5
1173	17	F1 N8	0.808	-0.007	-0.012	-7.497e-5	6.357e-5
1174	17	F1 N9	0.808	0.002	0.01	6.643e-5	6.356e-5
1175	17	F1 N10	0.84	-0.012	-0.012	-7.579e-5	6.349e-5
1176	17	F1 N11	0.84	-0.004	0.01	6.719e-5	6.347e-5
1177	17	F1 N12	0.867	-0.011	-0.005	-4.778e-5	6.336e-5
1178	17	F1 N13	0.867	-0.005	0.021	1.149e-4	6.329e-5
1179	17	N142	0	0	0	3.13e-5	7.383e-7
1180	17	N143	0	0	0	-1.876e-4	7.382e-7
1181	17	N144	0	0	0	2.04e-6	6.24e-7
1182	17	N145	0	0	0	-7.015e-5	6.241e-7
1183	17	N146	0	0	0	1.175e-4	1.007e-6
1184	17	N147	0	0	0	5.075e-5	1.101e-6
1185	17	N148	0	0	0	-5.63e-6	9.186e-7
1186	17	N149	0	0	0	-1.161e-5	1.147e-6
1187	17	N150	0	0	0	5.129e-6	1.146e-6
1188	17	N151	0	0	0	-1.146e-5	1.131e-6
1189	17	N152	0	0	0	4.962e-6	1.131e-6
1190	17	N153	0	0	0	2.376e-5	1.258e-6
1191	17	N154	0	0	0	4.445e-5	1.257e-6
1192	17	N60	0.045	0	0	4.394e-5	1.257e-6
1193	17	N61	0.045	-0.001	0	2.424e-5	1.258e-6
1194	17	N62	0.042	0	0	4.48e-6	1.131e-6
1195	17	N63	0.041	-0.001	0	-1.1e-5	1.131e-6
1196	17	N64	0.041	0	0	4.61e-6	1.146e-6
1197	17	N65	0.04	0	0	-1.112e-5	1.147e-6
1198	17	N66	0.066	0	0	-7.93e-5	6.241e-7
1199	17	N67	0.066	0	0	1.396e-5	6.24e-7
1200	17	N68	0.062	0	-0.002	-2.124e-4	7.382e-7
1201	17	N69	0.062	0	0	6.045e-5	7.383e-7
1202	17	N70	0.063	0	0	-1.976e-5	9.186e-7

Permits: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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Had 3/20/21  
 BUILDING OFFICIAL



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1203	17	N71	0.063	0	0.001	4.809e-5	1.101e-6	-3.502e-3
1204	17	N72	0.063	0	0.002	1.287e-4	1.007e-6	-3.487e-3
1205	17	N53	0	0	0	0	0	0
1206	17	N54	0	0	0	0	0	0
1207	17	N55	0	0	0	0	0	0
1208	17	N56	0	0	0	0	0	0
1209	17	N57	0	0	0	0	0	0
1210	17	N58	0.839	0	0	0	6.324e-5	0
1211	17	N59	0.826	0	0	0	6.328e-5	0
1212	17	N60A	0.851	0	0	0	6.333e-5	0
1213	17	N61A	0.839	0	0.01	0	6.333e-5	0
1214	17	N62A	0.839	0	-0.011	0	6.337e-5	0
1215	17	N63A	0	0	0	0	0	0
1216	17	N64A	0	0	0	0	0	0
1217	17	N65A	0	0	0	0	0	0
1218	17	N66A	0	0	0	0	0	0
1219	17	N67A	0	0	0	0	0	0
1220	17	N68A	0.841	0	0	0	6.339e-5	0
1221	17	N69A	0.845	0	0	0	6.34e-5	0
1222	17	N70A	0.836	0	0	0	6.341e-5	0
1223	17	N71A	0.841	0	-0.003	0	6.341e-5	0
1224	17	N72A	0.841	0	0.004	0	6.342e-5	0
1225	18	F2 N1	1.298	-0.006	-0.116	-7.285e-5	2.98e-4	-3.244e-3
1226	18	F2 N2	1.414	-0.008	-0.116	-1.676e-4	2.98e-4	-3.606e-3
1227	18	F2 N3	1.493	-0.008	-0.05	-6.901e-5	2.906e-4	-3.732e-3
1228	18	F2 N4	1.574	-0.006	-0.051	-1.686e-5	2.906e-4	-3.971e-3
1229	18	F2 N5	1.289	-0.004	0.087	1.148e-4	3.012e-4	-3.187e-3
1230	18	F2 N6	1.381	-0.005	0.086	7.735e-5	2.898e-4	-3.47e-3
1231	18	F2 N7	1.475	-0.008	0.086	4.662e-5	3.097e-4	-3.768e-3
1232	18	F2 N8	1.176	-0.008	-0.062	-1.835e-4	2.79e-4	-1.725e-3
1233	18	F2 N9	1.175	0.002	0.047	1.435e-4	2.79e-4	-1.824e-3
1234	18	F2 N10	1.319	-0.014	-0.063	-1.89e-4	2.821e-4	-1.958e-3
1235	18	F2 N11	1.321	-0.005	0.048	1.482e-4	2.82e-4	-2.224e-3
1236	18	F2 N12	1.376	-0.014	-0.034	-1.215e-4	2.779e-4	-1.964e-3
1237	18	F2 N13	1.384	-0.005	0.092	2.642e-4	2.779e-4	-2.177e-3
1238	18	F1 N1	0.755	-0.005	-0.084	-2.275e-4	1.521e-4	-3.201e-3
1239	18	F1 N2	0.81	-0.007	-0.084	-3.01e-4	1.521e-4	-3.563e-3
1240	18	F1 N3	0.868	-0.007	-0.039	5.798e-5	1.521e-4	-3.693e-3
1241	18	F1 N4	0.908	-0.005	-0.039	-2.557e-4	1.521e-4	-3.95e-3
1242	18	F1 N5	0.755	-0.003	0.064	2.187e-4	1.522e-4	-3.157e-3
1243	18	F1 N6	0.8	-0.004	0.064	1.853e-4	1.522e-4	-3.441e-3
1244	18	F1 N7	0.844	-0.007	0.064	1.691e-4	1.522e-4	-3.732e-3
1245	18	F1 N8	0.766	-0.007	-0.031	-1.878e-4	1.522e-4	-2.499e-3
1246	18	F1 N9	0.766	0.001	0.023	1.509e-4	1.522e-4	-2.641e-3
1247	18	F1 N10	0.844	-0.012	-0.031	-1.901e-4	1.522e-4	-2.713e-3
1248	18	F1 N11	0.844	-0.004	0.023	1.528e-4	1.522e-4	-3.088e-3
1249	18	F1 N12	0.908	-0.012	-0.013	-1.231e-4	1.521e-4	-2.718e-3
1250	18	F1 N13	0.908	-0.005	0.048	2.674e-4	1.52e-4	-3.392e-3
1251	18	N142	0	0	0	-8.176e-5	1.823e-6	-3.315e-3
1252	18	N143	0	0	0	-3.007e-4	1.823e-6	-3.345e-3
1253	18	N144	0	0	0	-4.453e-5	1.478e-6	-3.777e-3
1254	18	N145	0	0	0	-1.167e-4	1.478e-6	-3.795e-3
1255	18	N146	0	0	0	1.923e-4	2.41e-6	-3.371e-3
1256	18	N147	0	0	0	1.179e-4	2.696e-6	-3.407e-3
1257	18	N148	0	0	0	6.933e-5	2.32e-6	-3.442e-3
1258	18	N149	0	0	0	-3.604e-5	2.746e-6	-1.927e-3
1259	18	N150	0	0	0	4.041e-6	2.746e-6	-2.078e-3
1260	18	N151	0	0	0	-3.561e-5	2.711e-6	-2.13e-3

Permits: BNR21-0246, ELE21-0856, ME21-0514, LB21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C57  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1261	18	N152	0	0	0	3.748e-6	2.71e-6	-2.242e-3
1262	18	N153	0	0	0	4.889e-5	3.018e-6	-2.447e-3
1263	18	N154	0	0	0	9.857e-5	3.017e-6	-2.447e-3
1264	18	N60	0.048	0	0.002	9.732e-5	3.017e-6	-2.387e-3
1265	18	N61	0.047	-0.001	0	5.005e-5	3.018e-6	-2.387e-3
1266	18	N62	0.042	0	0	2.59e-6	2.71e-6	-2.447e-3
1267	18	N63	0.041	-0.001	0	-3.452e-5	2.711e-6	-2.403e-3
1268	18	N64	0.039	0	0	2.798e-6	2.746e-6	-2.403e-3
1269	18	N65	0.038	0	0	-3.487e-5	2.746e-6	-1.87e-3
1270	18	N66	0.068	0	-0.002	-1.242e-4	1.478e-6	-3.794e-3
1271	18	N67	0.068	0	-0.001	-3.089e-5	1.478e-6	-3.778e-3
1272	18	N68	0.06	0	-0.004	-3.223e-4	1.823e-6	-3.344e-3
1273	18	N69	0.06	0	-0.003	-4.948e-5	1.823e-6	-3.316e-3
1274	18	N70	0.062	0	0.002	5.334e-5	2.32e-6	-3.441e-3
1275	18	N71	0.061	0	0.002	1.116e-4	2.696e-6	-3.407e-3
1276	18	N72	0.061	0	0.003	2.017e-4	2.41e-6	-3.372e-3
1277	18	N53	0	0	0	0	0	0
1278	18	N54	0	0	0	0	0	0
1279	18	N55	0	0	0	0	0	0
1280	18	N56	0	0	0	0	0	0
1281	18	N57	0	0	0	0	0	0
1282	18	N58	0.84	0	-0.003	0	1.519e-4	0
1283	18	N59	0.811	0	-0.003	0	1.52e-4	0
1284	18	N60A	0.87	0	-0.003	0	1.521e-4	0
1285	18	N61A	0.84	0	0.021	0	1.521e-4	0
1286	18	N62A	0.84	0	-0.028	0	1.521e-4	0
1287	18	N63A	0	0	0	0	0	0
1288	18	N64A	0	0	0	0	0	0
1289	18	N65A	0	0	0	0	0	0
1290	18	N66A	0	0	0	0	0	0
1291	18	N67A	0	0	0	0	0	0
1292	18	N68A	0.844	0	-0.001	0	1.522e-4	0
1293	18	N69A	0.854	0	-0.001	0	1.522e-4	0
1294	18	N70A	0.834	0	-0.001	0	1.522e-4	0
1295	18	N71A	0.844	0	-0.01	0	1.522e-4	0
1296	18	N72A	0.844	0	0.007	0	1.522e-4	0
1297	19	F2_N1	1.475	-0.005	0.023	7.681e-5	-4.263e-5	-3.724e-3
1298	19	F2_N2	1.459	-0.008	0.022	-1.789e-5	-4.264e-5	-3.685e-3
1299	19	F2_N3	1.439	-0.007	0.013	-1.144e-5	-5.18e-5	-3.62e-3
1300	19	F2_N4	1.425	-0.006	0.012	4.071e-5	-5.179e-5	-3.573e-3
1301	19	F2_N5	1.472	-0.004	-0.011	2.808e-5	-4.818e-5	-3.703e-3
1302	19	F2_N6	1.458	-0.005	-0.011	-5.471e-6	-4.236e-5	-3.663e-3
1303	19	F2_N7	1.445	-0.007	-0.012	-4.011e-5	-4.043e-5	-3.636e-3
1304	19	F2_N8	1.288	-0.009	0.013	3.735e-5	-4.608e-5	-1.834e-3
1305	19	F2_N9	1.287	0.002	-0.005	-1.68e-5	-4.609e-5	-1.932e-3
1306	19	F2_N10	1.31	-0.014	0.013	3.847e-5	-4.677e-5	-1.949e-3
1307	19	F2_N11	1.311	-0.005	-0.005	-1.757e-5	-4.679e-5	-2.215e-3
1308	19	F2_N12	1.263	-0.013	0.008	2.735e-5	-4.641e-5	-1.846e-3
1309	19	F2_N13	1.271	-0.005	-0.013	-3.722e-5	-4.645e-5	-2.059e-3
1310	19	F1_N1	0.851	-0.004	0.016	9.021e-5	-2.534e-5	-3.685e-3
1311	19	F1_N2	0.842	-0.007	0.016	1.677e-5	-2.536e-5	-3.633e-3
1312	19	F1_N3	0.833	-0.006	0.008	1.985e-4	-2.533e-5	-3.591e-3
1313	19	F1_N4	0.826	-0.006	0.008	-1.151e-4	-2.53e-5	-3.545e-3
1314	19	F1_N5	0.851	-0.004	-0.009	1.041e-6	-2.515e-5	-3.677e-3
1315	19	F1_N6	0.844	-0.004	-0.009	-2.286e-5	-2.515e-5	-3.633e-3
1316	19	F1_N7	0.837	-0.006	-0.009	-4.871e-5	-2.513e-5	-3.594e-3
1317	19	F1_N8	0.849	-0.007	0.007	3.794e-5	-2.51e-5	-2.735e-3
1318	19	F1_N9	0.849	0.002	-0.002	-1.802e-5	-2.512e-5	-2.877e-3

Permits: BNR21-0246, ELE21-0886, ME21-0514, PLB21-0900

**County of Orange Public Works**

**OC Development Services**

**APPROVED**

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Had 3/7/2021  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1319	19 F1 N10	0.837	-0.012	0.007	3.847e-5	-2.519e-5	-2.693e-3
1320	19 F1 N11	0.837	-0.004	-0.002	-1.839e-5	-2.522e-5	-3.068e-3
1321	19 F1 N12	0.826	-0.011	0.004	2.749e-5	-2.534e-5	-3.191e-3
1322	19 F1 N13	0.826	-0.005	-0.006	-3.777e-5	-2.54e-5	-3.191e-3
1323	19 N142	0	0	0	1.444e-4	-3.457e-7	-3.606e-3
1324	19 N143	0	0	0	-7.457e-5	-3.458e-7	-3.597e-3
1325	19 N144	0	0	0	4.861e-5	-2.302e-7	-3.597e-3
1326	19 N145	0	0	0	-2.357e-5	-2.301e-7	-3.597e-3
1327	19 N146	0	0	0	4.26e-5	-3.955e-7	-3.603e-3
1328	19 N147	0	0	0	-1.643e-5	-4.941e-7	-3.597e-3
1329	19 N148	0	0	0	-8.059e-5	-4.835e-7	-3.597e-3
1330	19 N149	0	0	0	1.279e-5	-4.527e-7	-2.155e-3
1331	19 N150	0	0	0	6.179e-6	-4.529e-7	-2.307e-3
1332	19 N151	0	0	0	1.269e-5	-4.487e-7	-2.11e-3
1333	19 N152	0	0	0	6.173e-6	-4.49e-7	-2.223e-3
1334	19 N153	0	0	0	-1.343e-6	-5.029e-7	-2.209e-3
1335	19 N154	0	0	0	-9.631e-6	-5.04e-7	-2.331e-3
1336	19 N60	0.043	0	0	-9.422e-6	-5.04e-7	-2.305e-3
1337	19 N61	0.042	-0.001	0	-1.539e-6	-5.029e-7	-2.154e-3
1338	19 N62	0.041	0	0	6.366e-6	-4.49e-7	-2.193e-3
1339	19 N63	0.041	-0.001	0	1.251e-5	-4.487e-7	-2.054e-3
1340	19 N64	0.043	0	0	6.385e-6	-4.529e-7	-2.278e-3
1341	19 N65	0.042	0	0	1.259e-5	-4.527e-7	-2.093e-3
1342	19 N66	0.063	0	0	-3.445e-5	-2.301e-7	-3.533e-3
1343	19 N67	0.064	0	0	5.881e-5	-2.302e-7	-3.536e-3
1344	19 N68	0.065	0	0	-1.024e-4	-3.458e-7	-3.6e-3
1345	19 N69	0.065	0	0.001	1.704e-4	-3.457e-7	-3.606e-3
1346	19 N70	0.064	0	0	-9.287e-5	-4.835e-7	-3.59e-3
1347	19 N71	0.065	0	0	-1.539e-5	-4.941e-7	-3.596e-3
1348	19 N72	0.065	0	0	5.573e-5	-3.955e-7	-3.602e-3
1349	19 N53	0	0	0	0	0	0
1350	19 N54	0	0	0	0	0	0
1351	19 N55	0	0	0	0	0	0
1352	19 N56	0	0	0	0	0	0
1353	19 N57	0	0	0	0	0	0
1354	19 N58	0.837	0	0.002	0	-2.547e-5	0
1355	19 N59	0.842	0	0.002	0	-2.543e-5	0
1356	19 N60A	0.832	0	0.002	0	-2.54e-5	0
1357	19 N61A	0.837	0	-0.002	0	-2.54e-5	0
1358	19 N62A	0.837	0	0.006	0	-2.538e-5	0
1359	19 N63A	0	0	0	0	0	0
1360	19 N64A	0	0	0	0	0	0
1361	19 N65A	0	0	0	0	0	0
1362	19 N66A	0	0	0	0	0	0
1363	19 N67A	0	0	0	0	0	0
1364	19 N68A	0.837	0	0.002	0	-2.537e-5	0
1365	19 N69A	0.835	0	0.002	0	-2.536e-5	0
1366	19 N70A	0.838	0	0.002	0	-2.536e-5	0
1367	19 N71A	0.837	0	0.003	0	-2.534e-5	0
1368	19 N72A	0.837	0	0	0	-2.533e-5	0
1369	20 F2 N1	0.027	0	1.242	2.024e-3	-5.511e-5	-7.41e-5
1370	20 F2 N2	0.006	-0.013	1.241	1.929e-3	-5.513e-5	-9.329e-6
1371	20 F2 N3	-0.01	0	1.235	1.851e-3	-5.698e-5	2.047e-5
1372	20 F2 N4	-0.026	-0.014	1.232	1.893e-3	-5.699e-5	6.979e-5
1373	20 F2 N5	0.028	0.002	1.179	1.772e-3	-5.622e-5	-7.921e-5
1374	20 F2 N6	0.011	-0.005	1.18	1.643e-3	-5.392e-5	-2.843e-5
1375	20 F2 N7	-0.006	-0.014	1.183	1.733e-3	-5.726e-5	2.425e-5
1376	20 F2 N8	0.016	-0.003	1.34	3.362e-3	-5.299e-5	4.046e-5

Permits: BNR21-0246, ELE21-0856, ME21-0514, LB21-0900  
 County of Orange Public Works  
 OC Development Services  
 APPROVED  
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 Had 3:59 PM  
 BUILDING OFFICE



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C59  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1377	20 F2 N9	0.018	-0.003	1.319	3.301e-3	-5.298e-5	-7.14e-5
1378	20 F2 N10	-0.006	-0.009	1.349	3.427e-3	-4.679e-5	1.493e-4
1379	20 F2 N11	-0.001	-0.011	1.331	3.385e-3	-4.678e-5	2.49e-5
1380	20 F2 N12	-0.023	-0.009	1.341	3.397e-3	-5.518e-5	-7.377e-5
1381	20 F2 N13	-0.016	-0.01	1.316	3.315e-3	-5.518e-5	-7.377e-5
1382	20 F1 N1	0.015	0	0.786	2.971e-3	-2.869e-5	3.12e-5
1383	20 F1 N2	0.005	-0.011	0.786	2.897e-3	-2.873e-5	3.12e-5
1384	20 F1 N3	-0.006	0	0.778	3.e-3	-2.882e-5	3.12e-5
1385	20 F1 N4	-0.014	-0.012	0.778	2.681e-3	-2.885e-5	3.12e-5
1386	20 F1 N5	0.015	0.002	0.758	2.748e-3	-2.906e-5	3.12e-5
1387	20 F1 N6	0.007	-0.004	0.758	2.61e-3	-2.908e-5	3.12e-5
1388	20 F1 N7	-0.002	-0.011	0.758	2.714e-3	-2.911e-5	2.551e-5
1389	20 F1 N8	0.013	-0.003	0.776	3.344e-3	-2.907e-5	3.973e-5
1390	20 F1 N9	0.013	-0.003	0.766	3.28e-3	-2.904e-5	-1.078e-4
1391	20 F1 N10	-0.002	-0.007	0.776	3.376e-3	-2.894e-5	2.02e-4
1392	20 F1 N11	-0.002	-0.009	0.766	3.32e-3	-2.892e-5	-1.805e-4
1393	20 F1 N12	-0.014	-0.008	0.773	3.354e-3	-2.888e-5	3.737e-4
1394	20 F1 N13	-0.014	-0.009	0.761	3.276e-3	-2.888e-5	-2.937e-4
1395	20 N142	0	0	0	1.807e-3	-3.523e-7	-4.443e-5
1396	20 N143	0	0	0	1.588e-3	-3.525e-7	-3.857e-5
1397	20 N144	0	0	0	1.48e-3	-2.789e-7	4.167e-5
1398	20 N145	0	0	0	1.409e-3	-2.79e-7	4.516e-5
1399	20 N146	0	0	0	1.54e-3	-4.639e-7	-3.545e-5
1400	20 N147	0	0	0	1.33e-3	-5.239e-7	-2.841e-5
1401	20 N148	0	0	0	1.417e-3	-4.575e-7	-2.143e-5
1402	20 N149	0	0	0	3.293e-3	-5.292e-7	3.904e-5
1403	20 N150	0	0	0	3.286e-3	-5.288e-7	-1.118e-4
1404	20 N151	0	0	0	3.276e-3	-5.71e-7	5.929e-5
1405	20 N152	0	0	0	3.267e-3	-5.706e-7	-5.205e-5
1406	20 N153	0	0	0	3.267e-3	-5.493e-7	1.023e-4
1407	20 N154	0	0	0	3.258e-3	-5.493e-7	-2.051e-5
1408	20 N60	0	0	0.059	3.258e-3	-5.493e-7	-3.631e-5
1409	20 N61	-0.001	0	0.059	3.267e-3	-5.493e-7	1.165e-4
1410	20 N62	0	0	0.059	3.268e-3	-5.706e-7	-6.523e-5
1411	20 N63	0	0	0.059	3.276e-3	-5.71e-7	7.241e-5
1412	20 N64	0.001	0	0.059	3.286e-3	-5.288e-7	-1.273e-4
1413	20 N65	0	0	0.059	3.293e-3	-5.292e-7	5.617e-5
1414	20 N66	0	-0.001	0.028	1.349e-3	-2.79e-7	4.497e-5
1415	20 N67	0	0	0.028	1.441e-3	-2.789e-7	4.187e-5
1416	20 N68	0	-0.001	0.032	1.517e-3	-3.525e-7	-3.878e-5
1417	20 N69	0	0	0.033	1.789e-3	-3.523e-7	-4.42e-5
1418	20 N70	0	-0.001	0.028	1.37e-3	-4.575e-7	-2.175e-5
1419	20 N71	0	0	0.028	1.26e-3	-5.239e-7	-2.841e-5
1420	20 N72	0	0	0.029	1.519e-3	-4.639e-7	-3.508e-5
1421	20 N53	0	0	0	0	0	0
1422	20 N54	0	0	0	0	0	0
1423	20 N55	0	0	0	0	0	0
1424	20 N56	0	0	0	0	0	0
1425	20 N57	0	0	0	0	0	0
1426	20 N58	-0.001	0	0.771	0	-2.889e-5	0
1427	20 N59	0.005	0	0.771	0	-2.886e-5	0
1428	20 N60A	-0.007	0	0.771	0	-2.881e-5	0
1429	20 N61A	-0.001	0	0.766	0	-2.879e-5	0
1430	20 N62A	-0.001	0	0.776	0	-2.875e-5	0
1431	20 N63A	0	0	0	0	0	0
1432	20 N64A	0	0	0	0	0	0
1433	20 N65A	0	0	0	0	0	0
1434	20 N66A	0	0	0	0	0	0

Permits: BNR21-0246, ELEC21-0886, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

This set of plans and specifications must be kept on the job at all times. It is the responsibility of the contractor to make any changes or alterations to these plans with the written permission from the Public Works and Development Services of Orange County. The signing of these plan specifications SHALL constitute approval of the approval of the violation of any provisions of any County Ordinance or State law.

Handwritten: 8/12/21  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C60  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1435	20	N67A	0	0	0	0	0
1436	20	N68A	-0.002	0	0.771	0	-2.872e-5
1437	20	N69A	-0.004	0	0.771	0	-2.871e-5
1438	20	N70A	0	0	0.771	0	-2.87e-5
1439	20	N71A	-0.002	0	0.772	0	-2.869e-5
1440	20	N72A	-0.002	0	0.769	0	-2.867e-5
1441	21	F2 N1	0.1	0	1.299	2.086e-3	-1.962e-4
1442	21	F2 N2	0.024	-0.013	1.298	1.991e-3	-1.962e-4
1443	21	F2 N3	-0.032	0	1.261	1.875e-3	-2.022e-4
1444	21	F2 N4	-0.089	-0.014	1.258	1.917e-3	-2.022e-4
1445	21	F2 N5	0.103	0.002	1.139	1.736e-3	-1.984e-4
1446	21	F2 N6	0.043	-0.005	1.14	1.609e-3	-1.902e-4
1447	21	F2 N7	-0.018	-0.013	1.143	1.697e-3	-2.018e-4
1448	21	F2 N8	0.063	-0.003	1.371	3.453e-3	-1.883e-4
1449	21	F2 N9	0.064	-0.003	1.297	3.232e-3	-1.883e-4
1450	21	F2 N10	-0.01	-0.009	1.38	3.519e-3	-1.829e-4
1451	21	F2 N11	-0.005	-0.011	1.309	3.314e-3	-1.829e-4
1452	21	F2 N12	-0.069	-0.009	1.358	3.457e-3	-1.893e-4
1453	21	F2 N13	-0.063	-0.01	1.272	3.189e-3	-1.893e-4
1454	21	F1 N1	0.055	0	0.827	3.102e-3	-1.023e-4
1455	21	F1 N2	0.018	-0.011	0.827	3.029e-3	-1.023e-4
1456	21	F1 N3	-0.021	0	0.797	3.058e-3	-1.024e-4
1457	21	F1 N4	-0.048	-0.012	0.797	2.74e-3	-1.024e-4
1458	21	F1 N5	0.055	0.001	0.728	2.658e-3	-1.026e-4
1459	21	F1 N6	0.025	-0.004	0.728	2.524e-3	-1.026e-4
1460	21	F1 N7	-0.005	-0.011	0.728	2.623e-3	-1.026e-4
1461	21	F1 N8	0.047	-0.003	0.792	3.437e-3	-1.026e-4
1462	21	F1 N9	0.047	-0.003	0.756	3.208e-3	-1.025e-4
1463	21	F1 N10	-0.005	-0.007	0.792	3.469e-3	-1.025e-4
1464	21	F1 N11	-0.005	-0.009	0.756	3.248e-3	-1.024e-4
1465	21	F1 N12	-0.048	-0.008	0.78	3.415e-3	-1.024e-4
1466	21	F1 N13	-0.048	-0.009	0.739	3.149e-3	-1.024e-4
1467	21	N142	0	0	0	1.9e-3	-1.255e-6
1468	21	N143	0	0	0	1.681e-3	-1.255e-6
1469	21	N144	0	0	0	1.519e-3	-9.906e-7
1470	21	N145	0	0	0	1.447e-3	-9.907e-7
1471	21	N146	0	0	0	1.478e-3	-1.637e-6
1472	21	N147	0	0	0	1.274e-3	-1.849e-6
1473	21	N148	0	0	0	1.354e-3	-1.614e-6
1474	21	N149	0	0	0	3.314e-3	-1.858e-6
1475	21	N150	0	0	0	3.287e-3	-1.857e-6
1476	21	N151	0	0	0	3.296e-3	-1.881e-6
1477	21	N152	0	0	0	3.269e-3	-1.88e-6
1478	21	N153	0	0	0	3.246e-3	-2.007e-6
1479	21	N154	0	0	0	3.214e-3	-2.007e-6
1480	21	N60	-0.002	0	0.058	3.214e-3	-2.007e-6
1481	21	N61	-0.003	0	0.058	3.246e-3	-2.007e-6
1482	21	N62	0	0	0.059	3.27e-3	-1.88e-6
1483	21	N63	0	0	0.059	3.295e-3	-1.881e-6
1484	21	N64	0.003	0	0.059	3.287e-3	-1.857e-6
1485	21	N65	0.002	0	0.06	3.313e-3	-1.858e-6
1486	21	N66	-0.003	-0.001	0.029	1.386e-3	-9.907e-7
1487	21	N67	-0.003	0	0.029	1.478e-3	-9.906e-7
1488	21	N68	0.003	-0.001	0.034	1.608e-3	-1.255e-6
1489	21	N69	0.003	0	0.035	1.88e-3	-1.255e-6
1490	21	N70	0.001	-0.001	0.026	1.309e-3	-1.614e-6
1491	21	N71	0.002	0	0.026	1.208e-3	-1.849e-6
1492	21	N72	0.002	0	0.027	1.458e-3	-1.637e-6

Permits: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works Department Services of Orange County. The signatories of these plan specifications SHALL be deemed to have given their approval of the violation of any provisions of any County Ordinance or State law.

Hadrian  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1493	21	N53	0	0	0	0	0	
1494	21	N54	0	0	0	0	0	
1495	21	N55	0	0	0	0	0	
1496	21	N56	0	0	0	0	0	
1497	21	N57	0	0	0	0	0	
1498	21	N58	-0.002	0	0.773	0	-1.024e-4	
1499	21	N59	0.018	0	0.773	0	-1.024e-4	
1500	21	N60A	-0.022	0	0.773	0	-1.024e-4	
1501	21	N61A	-0.002	0	0.757	0	-1.024e-4	
1502	21	N62A	-0.002	0	0.79	0	-1.023e-4	
1503	21	N63A	0	0	0	0	0	
1504	21	N64A	0	0	0	0	0	
1505	21	N65A	0	0	0	0	0	
1506	21	N66A	0	0	0	0	0	
1507	21	N67A	0	0	0	0	0	
1508	21	N68A	-0.005	0	0.772	0	-1.023e-4	
1509	21	N69A	-0.012	0	0.772	0	-1.023e-4	
1510	21	N70A	0.002	0	0.772	0	-1.023e-4	
1511	21	N71A	-0.005	0	0.778	0	-1.023e-4	
1512	21	N72A	-0.005	0	0.766	0	-1.023e-4	
1513	22	F2 N1	-0.046	-0.001	1.184	1.962e-3	8.604e-5	1.229e-4
1514	22	F2 N2	-0.012	-0.013	1.184	1.867e-3	8.602e-5	2.191e-5
1515	22	F2 N3	0.012	0	1.208	1.827e-3	8.82e-5	-2.477e-5
1516	22	F2 N4	0.037	-0.014	1.206	1.869e-3	8.819e-5	-1.009e-4
1517	22	F2 N5	-0.046	0.002	1.22	1.808e-3	8.59e-5	1.281e-4
1518	22	F2 N6	-0.02	-0.005	1.221	1.677e-3	8.231e-5	5.062e-5
1519	22	F2 N7	0.006	-0.014	1.224	1.769e-3	8.73e-5	-2.963e-5
1520	22	F2 N8	-0.03	-0.003	1.309	3.271e-3	8.234e-5	8.536e-5
1521	22	F2 N9	-0.028	-0.003	1.341	3.37e-3	8.236e-5	-2.65e-5
1522	22	F2 N10	-0.001	-0.009	1.318	3.335e-3	8.931e-5	1.453e-4
1523	22	F2 N11	0.003	-0.011	1.353	3.455e-3	8.932e-5	-1.352e-4
1524	22	F2 N12	0.024	-0.009	1.324	3.338e-3	7.892e-5	7.576e-5
1525	22	F2 N13	0.03	-0.01	1.36	3.441e-3	7.892e-5	-1.228e-4
1526	22	F1 N1	-0.025	0	0.745	2.839e-3	4.486e-5	1.242e-4
1527	22	F1 N2	-0.009	-0.011	0.745	2.765e-3	4.483e-5	1.985e-5
1528	22	F1 N3	0.008	0	0.758	2.942e-3	4.472e-5	-2.274e-5
1529	22	F1 N4	0.02	-0.012	0.758	2.623e-3	4.47e-5	-1.008e-4
1530	22	F1 N5	-0.025	0.002	0.788	2.838e-3	4.446e-5	1.312e-4
1531	22	F1 N6	-0.012	-0.004	0.788	2.697e-3	4.443e-5	5.038e-5
1532	22	F1 N7	0.001	-0.012	0.788	2.804e-3	4.44e-5	-3.17e-5
1533	22	F1 N8	-0.021	-0.003	0.761	3.251e-3	4.444e-5	1.374e-4
1534	22	F1 N9	-0.021	-0.003	0.776	3.351e-3	4.447e-5	-1.017e-5
1535	22	F1 N10	0.001	-0.007	0.761	3.282e-3	4.457e-5	1.935e-4
1536	22	F1 N11	0.001	-0.009	0.776	3.391e-3	4.46e-5	-1.89e-4
1537	22	F1 N12	0.02	-0.008	0.766	3.293e-3	4.464e-5	2.736e-4
1538	22	F1 N13	0.02	-0.008	0.784	3.403e-3	4.464e-5	-3.939e-4
1539	22	N142	0	0	0	1.713e-3	5.507e-7	7.641e-5
1540	22	N143	0	0	0	1.494e-3	5.505e-7	6.726e-5
1541	22	N144	0	0	0	1.442e-3	4.326e-7	-5.76e-5
1542	22	N145	0	0	0	1.37e-3	4.324e-7	-6.302e-5
1543	22	N146	0	0	0	1.602e-3	7.095e-7	6.126e-5
1544	22	N147	0	0	0	1.386e-3	8.005e-7	5.05e-5
1545	22	N148	0	0	0	1.479e-3	6.984e-7	3.985e-5
1546	22	N149	0	0	0	3.273e-3	7.993e-7	1.336e-4
1547	22	N150	0	0	0	3.284e-3	7.998e-7	-1.722e-5
1548	22	N151	0	0	0	3.255e-3	7.388e-7	5.106e-5
1549	22	N152	0	0	0	3.266e-3	7.391e-7	-6.028e-5
1550	22	N153	0	0	0	3.288e-3	9.084e-7	3.662e-6

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C62  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1551	22	N154	0	0	0	3.303e-3	9.084e-7	-1.191e-4
1552	22	N60	0.001	0	0.059	3.302e-3	9.084e-7	-1.33e-4
1553	22	N61	0	0	0.059	3.288e-3	9.084e-7	1.328e-5
1554	22	N62	0	0	0.059	3.266e-3	7.391e-7	6.436e-5
1555	22	N63	0	0	0.058	3.256e-3	7.388e-7	6.436e-5
1556	22	N64	0	0	0.059	3.284e-3	7.998e-7	6.436e-5
1557	22	N65	-0.002	0	0.059	3.273e-3	7.993e-7	6.436e-5
1558	22	N66	0.001	-0.001	0.027	1.311e-3	4.324e-7	5.792e-5
1559	22	N67	0.001	0	0.028	1.404e-3	4.326e-7	5.792e-5
1560	22	N68	-0.001	-0.001	0.03	1.426e-3	5.505e-7	7.605e-5
1561	22	N69	-0.001	0	0.031	1.698e-3	5.507e-7	7.605e-5
1562	22	N70	0	-0.001	0.029	1.431e-3	6.984e-7	4.033e-5
1563	22	N71	0	0	0.029	1.313e-3	8.005e-7	5.05e-5
1564	22	N72	-0.001	0	0.03	1.579e-3	7.095e-7	6.071e-5
1565	22	N53	0	0	0	0	0	0
1566	22	N54	0	0	0	0	0	0
1567	22	N55	0	0	0	0	0	0
1568	22	N56	0	0	0	0	0	0
1569	22	N57	0	0	0	0	0	0
1570	22	N58	0	0	0.769	0	4.464e-5	0
1571	22	N59	-0.009	0	0.769	0	4.467e-5	0
1572	22	N60A	0.009	0	0.769	0	4.474e-5	0
1573	22	N61A	0	0	0.776	0	4.476e-5	0
1574	22	N62A	0	0	0.761	0	4.481e-5	0
1575	22	N63A	0	0	0	0	0	0
1576	22	N64A	0	0	0	0	0	0
1577	22	N65A	0	0	0	0	0	0
1578	22	N66A	0	0	0	0	0	0
1579	22	N67A	0	0	0	0	0	0
1580	22	N68A	0.001	0	0.769	0	4.485e-5	0
1581	22	N69A	0.004	0	0.769	0	4.486e-5	0
1582	22	N70A	-0.002	0	0.769	0	4.488e-5	0
1583	22	N71A	0.001	0	0.767	0	4.489e-5	0
1584	22	N72A	0.001	0	0.772	0	4.491e-5	0
1585	23	F2_N1	-1.387	-0.005	0.053	1.097e-4	-1.312e-4	3.484e-3
1586	23	F2_N2	-1.438	-0.009	0.053	1.497e-5	-1.312e-4	3.653e-3
1587	23	F2_N3	-1.468	-0.007	0.027	1.215e-6	-1.229e-4	3.68e-3
1588	23	F2_N4	-1.503	-0.006	0.026	5.337e-5	-1.229e-4	3.781e-3
1589	23	F2_N5	-1.382	-0.004	-0.032	8.844e-6	-1.273e-4	3.45e-3
1590	23	F2_N6	-1.421	-0.005	-0.033	-2.385e-5	-1.245e-4	3.57e-3
1591	23	F2_N7	-1.462	-0.007	-0.033	-5.936e-5	-1.354e-4	3.705e-3
1592	23	F2_N8	-1.235	0.002	0.029	8.337e-5	-1.179e-4	1.895e-3
1593	23	F2_N9	-1.232	-0.009	-0.017	-5.44e-5	-1.179e-4	1.77e-3
1594	23	F2_N10	-1.322	-0.003	0.029	8.521e-5	-1.191e-4	2.249e-3
1595	23	F2_N11	-1.316	-0.017	-0.017	-5.657e-5	-1.191e-4	1.954e-3
1596	23	F2_N12	-1.328	-0.005	0.018	5.809e-5	-1.178e-4	2.117e-3
1597	23	F2_N13	-1.324	-0.014	-0.036	-1.063e-4	-1.178e-4	1.932e-3
1598	23	F1_N1	-0.804	-0.004	0.037	1.6e-4	-6.429e-5	3.445e-3
1599	23	F1_N2	-0.827	-0.007	0.037	8.655e-5	-6.427e-5	3.604e-3
1600	23	F1_N3	-0.852	-0.006	0.018	2.294e-4	-6.429e-5	3.647e-3
1601	23	F1_N4	-0.869	-0.006	0.018	-8.424e-5	-6.432e-5	3.756e-3
1602	23	F1_N5	-0.804	-0.004	-0.025	-4.727e-5	-6.443e-5	3.42e-3
1603	23	F1_N6	-0.823	-0.004	-0.025	-6.905e-5	-6.443e-5	3.541e-3
1604	23	F1_N7	-0.841	-0.006	-0.025	-9.704e-5	-6.444e-5	3.668e-3
1605	23	F1_N8	-0.809	0.002	0.015	8.662e-5	-6.447e-5	2.772e-3
1606	23	F1_N9	-0.809	-0.007	-0.008	-5.654e-5	-6.446e-5	2.619e-3
1607	23	F1_N10	-0.841	-0.002	0.015	8.731e-5	-6.439e-5	3.1e-3
1608	23	F1_N11	-0.841	-0.014	-0.008	-5.74e-5	-6.437e-5	2.711e-3

Estimate: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**

**OC Development Services**

**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is to remain in force. Any changes or alterations to these plans must be in writing and approved by the County Engineer. The signature of these plan specifications SHALL be the signature of the County Engineer or an authorized representative of the County Engineer. Approval of the violator of any provisions of any County Ordinance or State law.

Had G 7/5/21  
 BUILDING OFFICIAL  
 7.605e-5



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C63  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1609	23 F1 N12	-0.869	-0.004	0.008	5.954e-5	-6.426e-5	3.267e-3
1610	23 F1 N13	-0.869	-0.012	-0.018	-1.06e-4	-6.419e-5	2.606e-3
1611	23 N142	0	0	0	1.94e-4	-7.552e-7	2.102e-3
1612	23 N143	0	0	0	-2.491e-5	-7.55e-7	2.477e-3
1613	23 N144	0	0	0	6.909e-5	-6.404e-7	3.663e-3
1614	23 N145	0	0	0	-3.092e-6	-6.405e-7	2.102e-3
1615	23 N146	0	0	0	9.368e-6	-1.017e-6	3.506e-3
1616	23 N147	0	0	0	-4.625e-5	-1.113e-6	3.506e-3
1617	23 N148	0	0	0	-1.139e-4	-9.288e-7	3.52e-3
1618	23 N149	0	0	0	2.448e-5	-1.163e-6	2.102e-3
1619	23 N150	0	0	0	7.499e-6	-1.163e-6	2.042e-3
1620	23 N151	0	0	0	2.441e-5	-1.148e-6	2.232e-3
1621	23 N152	0	0	0	7.74e-6	-1.147e-6	2.122e-3
1622	23 N153	0	0	0	-1.144e-5	-1.274e-6	2.456e-3
1623	23 N154	0	0	0	-3.241e-5	-1.273e-6	2.332e-3
1624	23 N60	-0.045	-0.001	0	-3.191e-5	-1.273e-6	2.274e-3
1625	23 N61	-0.046	0	0	-1.198e-5	-1.274e-6	2.428e-3
1626	23 N62	-0.041	-0.001	0	8.189e-6	-1.147e-6	2.066e-3
1627	23 N63	-0.042	0	0	2.391e-5	-1.148e-6	2.202e-3
1628	23 N64	-0.04	0	0	7.989e-6	-1.163e-6	1.983e-3
1629	23 N65	-0.041	0	0	2.395e-5	-1.163e-6	2.165e-3
1630	23 N66	-0.066	0	0	-1.473e-5	-6.405e-7	3.67e-3
1631	23 N67	-0.066	0	0	7.853e-5	-6.404e-7	3.663e-3
1632	23 N68	-0.062	0	0	-5.415e-5	-7.55e-7	3.476e-3
1633	23 N69	-0.062	0	0.002	2.187e-4	-7.552e-7	3.464e-3
1634	23 N70	-0.063	0	-0.001	-1.253e-4	-9.288e-7	3.519e-3
1635	23 N71	-0.063	0	0	-4.357e-5	-1.113e-6	3.506e-3
1636	23 N72	-0.063	0	0	2.334e-5	-1.017e-6	3.491e-3
1637	23 N53	0	0	0	0	0	0
1638	23 N54	0	0	0	0	0	0
1639	23 N55	0	0	0	0	0	0
1640	23 N56	0	0	0	0	0	0
1641	23 N57	0	0	0	0	0	0
1642	23 N58	-0.84	0	0.003	0	-6.414e-5	0
1643	23 N59	-0.827	0	0.003	0	-6.418e-5	0
1644	23 N60A	-0.853	0	0.003	0	-6.423e-5	0
1645	23 N61A	-0.84	0	-0.007	0	-6.423e-5	0
1646	23 N62A	-0.84	0	0.014	0	-6.427e-5	0
1647	23 N63A	0	0	0	0	0	0
1648	23 N64A	0	0	0	0	0	0
1649	23 N65A	0	0	0	0	0	0
1650	23 N66A	0	0	0	0	0	0
1651	23 N67A	0	0	0	0	0	0
1652	23 N68A	-0.842	0	0.003	0	-6.429e-5	0
1653	23 N69A	-0.846	0	0.003	0	-6.43e-5	0
1654	23 N70A	-0.838	0	0.003	0	-6.431e-5	0
1655	23 N71A	-0.842	0	0.006	0	-6.432e-5	0
1656	23 N72A	-0.842	0	0	0	-6.433e-5	0
1657	24 F2 N1	-1.298	-0.005	0.123	1.843e-4	-3.039e-4	3.241e-3
1658	24 F2 N2	-1.416	-0.009	0.122	8.964e-5	-3.039e-4	3.617e-3
1659	24 F2 N3	-1.495	-0.007	0.059	2.986e-5	-2.966e-4	3.734e-3
1660	24 F2 N4	-1.578	-0.007	0.058	8.202e-5	-2.966e-4	3.983e-3
1661	24 F2 N5	-1.291	-0.005	-0.081	-3.463e-5	-3.007e-4	3.195e-3
1662	24 F2 N6	-1.382	-0.005	-0.082	-6.539e-5	-2.894e-4	3.474e-3
1663	24 F2 N7	-1.476	-0.007	-0.082	-1.029e-4	-3.09e-4	3.768e-3
1664	24 F2 N8	-1.179	0.002	0.066	1.895e-4	-2.803e-4	1.841e-3
1665	24 F2 N9	-1.175	-0.008	-0.044	-1.381e-4	-2.803e-4	1.716e-3
1666	24 F2_N10	-1.327	-0.003	0.066	1.938e-4	-2.832e-4	2.254e-3

Permits: BNR21-0246, ELEC21-0859, ME21-0514, LB21-0900

County of Orange - Public Works  
 OC Development Services  
 APPROVED

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Hadrian Office  
 Building Official



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C64  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1667	24 F2 N11	-1.321	-0.017	-0.044	-1.437e-4	-2.832e-4	1.959e-3
1668	24 F2 N12	-1.385	-0.004	0.038	1.294e-4	-2.805e-4	2.176e-3
1669	24 F2 N13	-1.381	-0.014	-0.089	-2.623e-4	-2.805e-4	3.196e-3
1670	24 F1 N1	-0.756	-0.004	0.087	3.185e-4	-1.53e-4	3.072e-3
1671	24 F1 N2	-0.811	-0.007	0.087	2.451e-4	-1.53e-4	3.571e-3
1672	24 F1 N3	-0.869	-0.006	0.042	2.994e-4	-1.53e-4	3.034e-3
1673	24 F1 N4	-0.91	-0.006	0.042	-1.43e-5	-1.53e-4	3.956e-3
1674	24 F1 N5	-0.756	-0.004	-0.061	-1.565e-4	-1.531e-4	3.012e-3
1675	24 F1 N6	-0.8	-0.004	-0.061	-1.734e-4	-1.531e-4	3.445e-3
1676	24 F1 N7	-0.845	-0.006	-0.061	-2.063e-4	-1.531e-4	3.736e-3
1677	24 F1 N8	-0.767	0.002	0.034	1.972e-4	-1.532e-4	2.655e-3
1678	24 F1 N9	-0.767	-0.007	-0.02	-1.431e-4	-1.531e-4	2.501e-3
1679	24 F1 N10	-0.845	-0.002	0.034	1.988e-4	-1.531e-4	3.11e-3
1680	24 F1 N11	-0.845	-0.014	-0.02	-1.454e-4	-1.531e-4	2.721e-3
1681	24 F1 N12	-0.91	-0.004	0.016	1.329e-4	-1.53e-4	3.387e-3
1682	24 F1 N13	-0.91	-0.012	-0.045	-2.614e-4	-1.529e-4	2.726e-3
1683	24 N142	0	0	0	3.069e-4	-1.847e-6	3.319e-3
1684	24 N143	0	0	0	8.791e-5	-1.847e-6	3.349e-3
1685	24 N144	0	0	0	1.155e-4	-1.506e-6	3.783e-3
1686	24 N145	0	0	0	4.327e-5	-1.506e-6	3.802e-3
1687	24 N146	0	0	0	-6.574e-5	-2.413e-6	3.375e-3
1688	24 N147	0	0	0	-1.136e-4	-2.703e-6	3.411e-3
1689	24 N148	0	0	0	-1.891e-4	-2.326e-6	3.447e-3
1690	24 N149	0	0	0	4.946e-5	-2.763e-6	2.078e-3
1691	24 N150	0	0	0	9.123e-6	-2.763e-6	1.928e-3
1692	24 N151	0	0	0	4.937e-5	-2.728e-6	2.242e-3
1693	24 N152	0	0	0	9.746e-6	-2.728e-6	2.132e-3
1694	24 N153	0	0	0	-3.594e-5	-3.034e-6	2.575e-3
1695	24 N154	0	0	0	-8.586e-5	-3.033e-6	2.451e-3
1696	24 N60	-0.047	-0.001	-0.002	-8.467e-5	-3.033e-6	2.391e-3
1697	24 N61	-0.048	0	0	-3.721e-5	-3.034e-6	2.545e-3
1698	24 N62	-0.041	-0.001	0	1.081e-5	-2.728e-6	2.075e-3
1699	24 N63	-0.042	0	0	4.819e-5	-2.728e-6	2.212e-3
1700	24 N64	-0.038	0	0	1.029e-5	-2.763e-6	1.871e-3
1701	24 N65	-0.039	0	0	4.821e-5	-2.763e-6	2.054e-3
1702	24 N66	-0.068	0	0.001	2.991e-5	-1.506e-6	3.8e-3
1703	24 N67	-0.068	0	0.002	1.232e-4	-1.506e-6	3.784e-3
1704	24 N68	-0.06	0	0.003	5.554e-5	-1.847e-6	3.348e-3
1705	24 N69	-0.06	0	0.004	3.283e-4	-1.847e-6	3.32e-3
1706	24 N70	-0.062	0	-0.003	-1.986e-4	-2.326e-6	3.445e-3
1707	24 N71	-0.061	0	-0.002	-1.072e-4	-2.703e-6	3.411e-3
1708	24 N72	-0.061	0	-0.002	-4.988e-5	-2.413e-6	3.376e-3
1709	24 N53	0	0	0	0	0	0
1710	24 N54	0	0	0	0	0	0
1711	24 N55	0	0	0	0	0	0
1712	24 N56	0	0	0	0	0	0
1713	24 N57	0	0	0	0	0	0
1714	24 N58	-0.841	0	0.006	0	-1.529e-4	0
1715	24 N59	-0.812	0	0.006	0	-1.529e-4	0
1716	24 N60A	-0.871	0	0.006	0	-1.53e-4	0
1717	24 N61A	-0.841	0	-0.019	0	-1.53e-4	0
1718	24 N62A	-0.841	0	0.031	0	-1.53e-4	0
1719	24 N63A	0	0	0	0	0	0
1720	24 N64A	0	0	0	0	0	0
1721	24 N65A	0	0	0	0	0	0
1722	24 N66A	0	0	0	0	0	0
1723	24 N67A	0	0	0	0	0	0
1724	24 N68A	-0.846	0	0.004	0	-1.531e-4	0

Permits: BNR21-0246, ELEC21-0856, ME21-0514, LB21-0900

**County of Orange - Public Works**  
**OC Development Services**  
**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is to be used for any changes or alterations to these plans. No work shall be performed from OC Public Works or Department Services of Orange County. The signing of these plan specifications SHALL constitute a permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadji Pappas  
 Building Official



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C65  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1725	24	N69A	-0.855	0	0.004	0	-1.531e-4
1726	24	N70A	-0.836	0	0.004	0	-1.531e-4
1727	24	N71A	-0.846	0	0.012	0	-1.531e-4
1728	24	N72A	-0.846	0	-0.004	0	-1.531e-4
1729	25	F2 N1	-1.476	-0.006	-0.016	3.501e-5	4.162e-5
1730	25	F2 N2	-1.46	-0.008	-0.017	-5.97e-5	4.163e-5
1731	25	F2 N3	-1.442	-0.007	-0.004	-2.743e-5	5.07e-5
1732	25	F2 N4	-1.427	-0.006	-0.005	2.472e-5	5.069e-5
1733	25	F2 N5	-1.473	-0.004	0.016	5.232e-5	4.601e-5
1734	25	F2 N6	-1.459	-0.005	0.016	1.769e-5	4.032e-5
1735	25	F2 N7	-1.447	-0.008	0.015	-1.586e-5	3.825e-5
1736	25	F2 N8	-1.291	0.002	-0.007	-2.265e-5	4.438e-5
1737	25	F2 N9	-1.288	-0.009	0.01	2.936e-5	4.439e-5
1738	25	F2 N10	-1.317	-0.003	-0.008	-2.333e-5	4.507e-5
1739	25	F2 N11	-1.311	-0.017	0.01	3.057e-5	4.508e-5
1740	25	F2 N12	-1.272	-0.005	-0.003	-1.328e-5	4.492e-5
1741	25	F2 N13	-1.268	-0.014	0.017	4.956e-5	4.495e-5
1742	25	F1 N1	-0.852	-0.004	-0.012	1.447e-6	2.445e-5
1743	25	F1 N2	-0.843	-0.007	-0.012	-7.199e-5	2.447e-5
1744	25	F1 N3	-0.834	-0.007	-0.005	1.595e-4	2.443e-5
1745	25	F1 N4	-0.828	-0.006	-0.005	-1.542e-4	2.44e-5
1746	25	F1 N5	-0.852	-0.003	0.011	6.192e-5	2.426e-5
1747	25	F1 N6	-0.845	-0.004	0.011	3.535e-5	2.426e-5
1748	25	F1 N7	-0.838	-0.006	0.011	1.22e-5	2.424e-5
1749	25	F1 N8	-0.85	0.002	-0.004	-2.386e-5	2.421e-5
1750	25	F1 N9	-0.85	-0.007	0.005	3.003e-5	2.422e-5
1751	25	F1 N10	-0.838	-0.002	-0.004	-2.417e-5	2.43e-5
1752	25	F1 N11	-0.838	-0.014	0.005	3.062e-5	2.432e-5
1753	25	F1 N12	-0.828	-0.004	0	-1.388e-5	2.444e-5
1754	25	F1 N13	-0.828	-0.012	0.009	4.93e-5	2.451e-5
1755	25	N142	0	0	0	8.121e-5	3.371e-7
1756	25	N143	0	0	0	-1.377e-4	3.373e-7
1757	25	N144	0	0	0	2.274e-5	2.244e-7
1758	25	N145	0	0	0	-4.945e-5	2.243e-7
1759	25	N146	0	0	0	8.447e-5	3.797e-7
1760	25	N147	0	0	0	2.115e-5	4.764e-7
1761	25	N148	0	0	0	-3.866e-5	4.678e-7
1762	25	N149	0	0	0	-5.302e-7	4.367e-7
1763	25	N150	0	0	0	5.846e-6	4.369e-7
1764	25	N151	0	0	0	-5.461e-7	4.328e-7
1765	25	N152	0	0	0	5.741e-6	4.331e-7
1766	25	N153	0	0	0	1.309e-5	4.848e-7
1767	25	N154	0	0	0	2.107e-5	4.859e-7
1768	25	N60	-0.043	-0.001	0	2.088e-5	4.859e-7
1769	25	N61	-0.043	0	0	1.329e-5	4.848e-7
1770	25	N62	-0.041	-0.001	0	5.57e-6	4.331e-7
1771	25	N63	-0.041	0	0	-3.576e-7	4.328e-7
1772	25	N64	-0.042	0	0	5.66e-6	4.369e-7
1773	25	N65	-0.043	0	0	-3.318e-7	4.367e-7
1774	25	N66	-0.064	0	0	-5.937e-5	2.243e-7
1775	25	N67	-0.064	0	0	3.389e-5	2.244e-7
1776	25	N68	-0.065	0	-0.001	-1.638e-4	3.373e-7
1777	25	N69	-0.065	0	0	1.09e-4	3.371e-7
1778	25	N70	-0.065	0	0	-5.198e-5	4.678e-7
1779	25	N71	-0.065	0	0	2.011e-5	4.764e-7
1780	25	N72	-0.065	0	0	9.655e-5	3.797e-7
1781	25	N53	0	0	0	0	0
1782	25	N54	0	0	0	0	0

Permits: BNR21-0246, ELE21-0856, ME21-0514, LB21-0900

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED  
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Hadji, B. B. B.  
 Building Official

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1783	25	N55	0	0	0	0	0	
1784	25	N56	0	0	0	0	0	
1785	25	N57	0	0	0	0	0	
1786	25	N58	-0.839	0	0	2.457e-5	0	
1787	25	N59	-0.843	0	0	2.454e-5	0	
1788	25	N60A	-0.834	0	0	2.451e-5	0	
1789	25	N61A	-0.839	0	0.005	2.451e-5	0	
1790	25	N62A	-0.839	0	-0.003	2.448e-5	0	
1791	25	N63A	0	0	0	0	0	
1792	25	N64A	0	0	0	0	0	
1793	25	N65A	0	0	0	0	0	
1794	25	N66A	0	0	0	0	0	
1795	25	N67A	0	0	0	0	0	
1796	25	N68A	-0.838	0	0.001	2.447e-5	0	
1797	25	N69A	-0.836	0	0.001	2.447e-5	0	
1798	25	N70A	-0.839	0	0.001	2.446e-5	0	
1799	25	N71A	-0.838	0	0	2.445e-5	0	
1800	25	N72A	-0.838	0	0.002	2.443e-5	0	
1801	26	F2 N1	-0.029	-0.01	-1.235	-1.912e-3	5.427e-5	7.954e-5
1802	26	F2 N2	-0.008	-0.004	-1.235	-2.007e-3	5.428e-5	1.419e-5
1803	26	F2 N3	0.007	-0.015	-1.226	-1.89e-3	5.357e-5	-1.512e-5
1804	26	F2 N4	0.023	0.001	-1.225	-1.828e-3	5.358e-5	-5.922e-5
1805	26	F2 N5	-0.03	-0.01	-1.174	-1.692e-3	5.62e-5	8.594e-5
1806	26	F2 N6	-0.013	-0.005	-1.176	-1.631e-3	5.305e-5	3.331e-5
1807	26	F2 N7	0.004	-0.001	-1.18	-1.789e-3	5.551e-5	-1.825e-5
1808	26	F2 N8	-0.02	-0.003	-1.335	-3.348e-3	5.086e-5	7.537e-5
1809	26	F2 N9	-0.018	-0.003	-1.315	-3.29e-3	5.085e-5	-3.649e-5
1810	26	F2 N10	-0.002	-0.009	-1.344	-3.413e-3	4.526e-5	1.462e-4
1811	26	F2 N11	0.002	-0.011	-1.326	-3.373e-3	4.525e-5	-1.344e-4
1812	26	F2 N12	0.014	-0.009	-1.336	-3.385e-3	5.4e-5	8.682e-5
1813	26	F2 N13	0.02	-0.01	-1.311	-3.303e-3	5.4e-5	-1.118e-4
1814	26	F1 N1	-0.016	-0.008	-0.783	-2.879e-3	2.783e-5	7.898e-5
1815	26	F1 N2	-0.006	-0.003	-0.783	-2.952e-3	2.787e-5	1.311e-5
1816	26	F1 N3	0.005	-0.013	-0.775	-2.642e-3	2.796e-5	-1.351e-5
1817	26	F1 N4	0.012	0	-0.775	-2.951e-3	2.798e-5	-6.096e-5
1818	26	F1 N5	-0.016	-0.009	-0.756	-2.685e-3	2.819e-5	8.564e-5
1819	26	F1 N6	-0.008	-0.004	-0.756	-2.598e-3	2.822e-5	3.295e-5
1820	26	F1 N7	0	-0.001	-0.756	-2.75e-3	2.824e-5	-1.945e-5
1821	26	F1 N8	-0.014	-0.003	-0.773	-3.33e-3	2.82e-5	1.156e-4
1822	26	F1 N9	-0.014	-0.003	-0.763	-3.269e-3	2.817e-5	-3.188e-5
1823	26	F1 N10	0	-0.007	-0.773	-3.362e-3	2.808e-5	1.954e-4
1824	26	F1 N11	0	-0.009	-0.763	-3.308e-3	2.805e-5	-1.87e-4
1825	26	F1 N12	0.012	-0.008	-0.77	-3.341e-3	2.801e-5	2.962e-4
1826	26	F1 N13	0.012	-0.008	-0.759	-3.265e-3	2.801e-5	-3.713e-4
1827	26	N142	0	0	0	-1.581e-3	3.41e-7	4.78e-5
1828	26	N143	0	0	0	-1.8e-3	3.413e-7	4.212e-5
1829	26	N144	0	0	0	-1.409e-3	2.711e-7	-3.578e-5
1830	26	N145	0	0	0	-1.482e-3	2.712e-7	-3.918e-5
1831	26	N146	0	0	0	-1.413e-3	4.399e-7	3.897e-5
1832	26	N147	0	0	0	-1.325e-3	5.048e-7	3.228e-5
1833	26	N148	0	0	0	-1.536e-3	4.47e-7	2.548e-5
1834	26	N149	0	0	0	-3.281e-3	5.117e-7	1.126e-4
1835	26	N150	0	0	0	-3.273e-3	5.113e-7	-3.825e-5
1836	26	N151	0	0	0	-3.263e-3	5.555e-7	5.292e-5
1837	26	N152	0	0	0	-3.255e-3	5.551e-7	-5.842e-5
1838	26	N153	0	0	0	-3.255e-3	5.331e-7	2.59e-5
1839	26	N154	0	0	0	-3.247e-3	5.331e-7	-9.687e-5
1840	26	N60	0.001	0	-0.058	-3.247e-3	5.331e-7	-1.112e-4

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C67  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1841	26	N61	0	0	-0.058	-3.255e-3	5.331e-7	4.158e-5
1842	26	N62	0	0	-0.058	-3.256e-3	5.551e-7	-7.146e-5
1843	26	N63	0	0	-0.059	-3.263e-3	5.555e-7	1.530e-5
1844	26	N64	0	0	-0.059	-3.273e-3	5.113e-7	1.530e-5
1845	26	N65	-0.001	0	-0.059	-3.28e-3	5.117e-7	1.281e-4
1846	26	N66	0	0	-0.029	-1.443e-3	2.712e-7	2.502e-5
1847	26	N67	0	-0.001	-0.028	-1.348e-3	2.711e-7	5.021e-5
1848	26	N68	0	0	-0.033	-1.783e-3	3.413e-7	4.230e-5
1849	26	N69	0	-0.001	-0.032	-1.51e-3	3.41e-7	4.757e-5
1850	26	N70	0	0	-0.029	-1.515e-3	4.47e-7	5.00e-5
1851	26	N71	0	0	-0.027	-1.256e-3	5.048e-7	3.227e-5
1852	26	N72	0	-0.001	-0.028	-1.366e-3	4.399e-7	3.864e-5
1853	26	N53	0	0	0	0	0	0
1854	26	N54	0	0	0	0	0	0
1855	26	N55	0	0	0	0	0	0
1856	26	N56	0	0	0	0	0	0
1857	26	N57	0	0	0	0	0	0
1858	26	N58	0	0	-0.768	0	2.802e-5	0
1859	26	N59	-0.006	0	-0.768	0	2.8e-5	0
1860	26	N60A	0.005	0	-0.768	0	2.794e-5	0
1861	26	N61A	0	0	-0.764	0	2.793e-5	0
1862	26	N62A	0	0	-0.773	0	2.789e-5	0
1863	26	N63A	0	0	0	0	0	0
1864	26	N64A	0	0	0	0	0	0
1865	26	N65A	0	0	0	0	0	0
1866	26	N66A	0	0	0	0	0	0
1867	26	N67A	0	0	0	0	0	0
1868	26	N68A	0	0	-0.768	0	2.785e-5	0
1869	26	N69A	0.002	0	-0.768	0	2.785e-5	0
1870	26	N70A	-0.001	0	-0.768	0	2.783e-5	0
1871	26	N71A	0	0	-0.769	0	2.782e-5	0
1872	26	N72A	0	0	-0.766	0	2.781e-5	0
1873	27	F2_N1	-0.103	-0.01	-1.292	-1.974e-3	1.978e-4	2.838e-4
1874	27	F2_N2	-0.026	-0.004	-1.293	-2.069e-3	1.978e-4	4.567e-5
1875	27	F2_N3	0.03	-0.015	-1.252	-1.914e-3	1.944e-4	-6.112e-5
1876	27	F2_N4	0.084	0.001	-1.251	-1.852e-3	1.944e-4	-2.209e-4
1877	27	F2_N5	-0.107	-0.01	-1.133	-1.656e-3	2.028e-4	3.04e-4
1878	27	F2_N6	-0.045	-0.005	-1.135	-1.596e-3	1.913e-4	1.143e-4
1879	27	F2_N7	0.016	-0.001	-1.139	-1.753e-3	2.001e-4	-7.157e-5
1880	27	F2_N8	-0.066	-0.003	-1.365	-3.437e-3	1.849e-4	1.204e-4
1881	27	F2_N9	-0.065	-0.004	-1.293	-3.223e-3	1.849e-4	8.588e-6
1882	27	F2_N10	0.002	-0.009	-1.375	-3.505e-3	1.816e-4	1.424e-4
1883	27	F2_N11	0.006	-0.011	-1.304	-3.302e-3	1.816e-4	-1.382e-4
1884	27	F2_N12	0.06	-0.009	-1.354	-3.446e-3	1.893e-4	3.787e-5
1885	27	F2_N13	0.066	-0.01	-1.268	-3.175e-3	1.893e-4	-1.607e-4
1886	27	F1_N1	-0.055	-0.008	-0.824	-3.011e-3	1.015e-4	2.818e-4
1887	27	F1_N2	-0.019	-0.003	-0.824	-3.084e-3	1.015e-4	4.177e-5
1888	27	F1_N3	0.02	-0.013	-0.794	-2.7e-3	1.016e-4	-5.511e-5
1889	27	F1_N4	0.047	0	-0.794	-3.009e-3	1.016e-4	-2.273e-4
1890	27	F1_N5	-0.056	-0.008	-0.726	-2.595e-3	1.018e-4	3.031e-4
1891	27	F1_N6	-0.026	-0.004	-0.726	-2.511e-3	1.018e-4	1.131e-4
1892	27	F1_N7	0.003	-0.001	-0.726	-2.659e-3	1.018e-4	-7.588e-5
1893	27	F1_N8	-0.048	-0.002	-0.789	-3.422e-3	1.018e-4	2.136e-4
1894	27	F1_N9	-0.048	-0.003	-0.753	-3.198e-3	1.018e-4	6.611e-5
1895	27	F1_N10	0.003	-0.007	-0.789	-3.456e-3	1.017e-4	1.872e-4
1896	27	F1_N11	0.003	-0.009	-0.753	-3.236e-3	1.016e-4	-1.953e-4
1897	27	F1_N12	0.047	-0.008	-0.777	-3.403e-3	1.016e-4	1.962e-4
1898	27	F1_N13	0.047	-0.008	-0.736	-3.137e-3	1.016e-4	-4.713e-4

Permits: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**

**OC Development Services**

**APPROVED**

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City of Orange County: The signing of these plan specifications SHALL constitute a permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadriyah Al-Hadi  
 Building Official



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C68  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
1899	27	N142	0	0	0	-1.675e-3	1.243e-6	1.682e-4
1900	27	N143	0	0	0	-1.894e-3	1.243e-6	1.475e-4
1901	27	N144	0	0	0	-1.448e-3	9.846e-7	1.482e-4
1902	27	N145	0	0	0	-1.52e-3	9.847e-7	1.482e-4
1903	27	N146	0	0	0	-1.351e-3	1.588e-6	1.349e-4
1904	27	N147	0	0	0	-1.269e-3	1.821e-6	1.495e-4
1905	27	N148	0	0	0	-1.474e-3	1.612e-6	1.626e-4
1906	27	N149	0	0	0	-3.301e-3	1.837e-6	2.076e-4
1907	27	N150	0	0	0	-3.275e-3	1.836e-6	5.666e-5
1908	27	N151	0	0	0	-3.284e-3	1.867e-6	1.405e-5
1909	27	N152	0	0	0	-3.256e-3	1.867e-6	-6.639e-5
1910	27	N153	0	0	0	-3.235e-3	1.995e-6	-7.253e-5
1911	27	N154	0	0	0	-3.202e-3	1.995e-6	-1.953e-4
1912	27	N60	0.003	0	-0.058	-3.203e-3	1.995e-6	-2.078e-4
1913	27	N61	0.002	0	-0.058	-3.234e-3	1.995e-6	-5.497e-5
1914	27	N62	0	0	-0.058	-3.257e-3	1.867e-6	-7.926e-5
1915	27	N63	0	0	-0.059	-3.283e-3	1.867e-6	5.838e-5
1916	27	N64	-0.002	0	-0.059	-3.275e-3	1.836e-6	3.749e-5
1917	27	N65	-0.003	0	-0.059	-3.3e-3	1.837e-6	2.209e-4
1918	27	N66	0.003	0	-0.029	-1.48e-3	9.847e-7	-1.476e-4
1919	27	N67	0.002	-0.002	-0.029	-1.386e-3	9.846e-7	-1.365e-4
1920	27	N68	-0.003	0	-0.035	-1.874e-3	1.243e-6	1.483e-4
1921	27	N69	-0.003	-0.001	-0.034	-1.601e-3	1.243e-6	1.674e-4
1922	27	N70	-0.002	0	-0.027	-1.454e-3	1.612e-6	8.751e-5
1923	27	N71	-0.002	0	-0.026	-1.203e-3	1.821e-6	1.107e-4
1924	27	N72	-0.002	-0.001	-0.026	-1.306e-3	1.588e-6	1.337e-4
1925	27	N53	0	0	0	0	0	0
1926	27	N54	0	0	0	0	0	0
1927	27	N55	0	0	0	0	0	0
1928	27	N56	0	0	0	0	0	0
1929	27	N57	0	0	0	0	0	0
1930	27	N58	0.001	0	-0.77	0	1.016e-4	0
1931	27	N59	-0.019	0	-0.77	0	1.016e-4	0
1932	27	N60A	0.021	0	-0.77	0	1.016e-4	0
1933	27	N61A	0.001	0	-0.754	0	1.016e-4	0
1934	27	N62A	0.001	0	-0.787	0	1.015e-4	0
1935	27	N63A	0	0	0	0	0	0
1936	27	N64A	0	0	0	0	0	0
1937	27	N65A	0	0	0	0	0	0
1938	27	N66A	0	0	0	0	0	0
1939	27	N67A	0	0	0	0	0	0
1940	27	N68A	0.004	0	-0.769	0	1.015e-4	0
1941	27	N69A	0.01	0	-0.769	0	1.015e-4	0
1942	27	N70A	-0.003	0	-0.769	0	1.015e-4	0
1943	27	N71A	0.004	0	-0.775	0	1.015e-4	0
1944	27	N72A	0.004	0	-0.764	0	1.015e-4	0
1945	28	F2_N1	0.045	-0.01	-1.177	-1.85e-3	-8.918e-5	-1.245e-4
1946	28	F2_N2	0.011	-0.004	-1.178	-1.945e-3	-8.916e-5	-1.729e-5
1947	28	F2_N3	-0.015	-0.015	-1.199	-1.866e-3	-8.734e-5	3.086e-5
1948	28	F2_N4	-0.039	0.001	-1.199	-1.804e-3	-8.733e-5	1.026e-4
1949	28	F2_N5	0.046	-0.011	-1.214	-1.728e-3	-9.044e-5	-1.323e-4
1950	28	F2_N6	0.019	-0.005	-1.216	-1.665e-3	-8.527e-5	-4.773e-5
1951	28	F2_N7	-0.008	-0.001	-1.22	-1.825e-3	-8.913e-5	3.505e-5
1952	28	F2_N8	0.027	-0.003	-1.304	-3.259e-3	-8.321e-5	3.03e-5
1953	28	F2_N9	0.028	-0.003	-1.337	-3.357e-3	-8.322e-5	-8.156e-5
1954	28	F2_N10	-0.006	-0.009	-1.313	-3.321e-3	-9.11e-5	1.5e-4
1955	28	F2_N11	-0.002	-0.011	-1.349	-3.443e-3	-9.111e-5	-1.306e-4
1956	28	F2_N12	-0.033	-0.009	-1.319	-3.324e-3	-8.13e-5	1.358e-4

Permits: BNR21-0246, ELEC21-0859, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED  
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Hadji M. Ousef  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1957	28 F2 N13	-0.027	-0.01	-1.355	-3.431e-3	-8.13e-5	-6.28e-5
1958	28 F1 N1	0.024	-0.008	-0.742	-2.747e-3	-4.581e-5	-1.238e-4
1959	28 F1 N2	0.008	-0.003	-0.742	-2.821e-3	-4.577e-5	2.8e-5
1960	28 F1 N3	-0.01	-0.013	-0.755	-2.584e-3	-4.567e-5	2.8e-5
1961	28 F1 N4	-0.022	0	-0.755	-2.893e-3	-4.564e-5	1.054e-4
1962	28 F1 N5	0.024	-0.009	-0.786	-2.776e-3	-4.54e-5	2.129e-4
1963	28 F1 N6	0.011	-0.004	-0.786	-2.684e-3	-4.537e-5	3.697e-5
1964	28 F1 N7	-0.002	-0.001	-0.786	-2.84e-3	-4.534e-5	1.764e-5
1965	28 F1 N8	0.021	-0.003	-0.758	-3.238e-3	-4.538e-5	1.764e-5
1966	28 F1 N9	0.021	-0.003	-0.774	-3.339e-3	-4.541e-5	1.299e-4
1967	28 F1 N10	-0.002	-0.007	-0.758	-3.268e-3	-4.552e-5	2.037e-4
1968	28 F1 N11	-0.002	-0.009	-0.774	-3.38e-3	-4.554e-5	-1.788e-4
1969	28 F1 N12	-0.022	-0.008	-0.763	-3.279e-3	-4.558e-5	3.961e-4
1970	28 F1 N13	-0.022	-0.009	-0.781	-3.393e-3	-4.558e-5	-2.713e-4
1971	28 N142	0	0	0	-1.487e-3	-5.61e-7	-7.264e-5
1972	28 N143	0	0	0	-1.706e-3	-5.607e-7	-6.331e-5
1973	28 N144	0	0	0	-1.371e-3	-4.428e-7	6.433e-5
1974	28 N145	0	0	0	-1.443e-3	-4.427e-7	6.986e-5
1975	28 N146	0	0	0	-1.475e-3	-7.08e-7	-5.695e-5
1976	28 N147	0	0	0	-1.381e-3	-8.117e-7	-4.618e-5
1977	28 N148	0	0	0	-1.598e-3	-7.182e-7	-3.526e-5
1978	28 N149	0	0	0	-3.26e-3	-8.134e-7	1.764e-5
1979	28 N150	0	0	0	-3.272e-3	-8.138e-7	-1.332e-4
1980	28 N151	0	0	0	-3.243e-3	-7.56e-7	6.089e-5
1981	28 N152	0	0	0	-3.254e-3	-7.563e-7	-5.045e-5
1982	28 N153	0	0	0	-3.276e-3	-9.284e-7	1.243e-4
1983	28 N154	0	0	0	-3.291e-3	-9.284e-7	1.553e-6
1984	28 N60	0	0	-0.059	-3.291e-3	-9.284e-7	-1.467e-5
1985	28 N61	-0.002	0	-0.059	-3.276e-3	-9.284e-7	1.381e-4
1986	28 N62	0	0	-0.058	-3.254e-3	-7.563e-7	-6.366e-5
1987	28 N63	0	0	-0.058	-3.243e-3	-7.56e-7	7.398e-5
1988	28 N64	0.002	0	-0.059	-3.272e-3	-8.138e-7	-1.482e-4
1989	28 N65	0	0	-0.059	-3.26e-3	-8.134e-7	3.524e-5
1990	28 N66	-0.001	0	-0.028	-1.405e-3	-4.427e-7	6.957e-5
1991	28 N67	-0.001	-0.001	-0.027	-1.311e-3	-4.428e-7	6.458e-5
1992	28 N68	0.001	0	-0.031	-1.692e-3	-5.607e-7	-6.368e-5
1993	28 N69	0.001	-0.001	-0.03	-1.419e-3	-5.61e-7	-7.227e-5
1994	28 N70	0	0	-0.03	-1.576e-3	-7.182e-7	-3.582e-5
1995	28 N71	0	0	-0.029	-1.308e-3	-8.117e-7	-4.617e-5
1996	28 N72	0.001	-0.001	-0.029	-1.427e-3	-7.08e-7	-5.642e-5
1997	28 N53	0	0	0	0	0	0
1998	28 N54	0	0	0	0	0	0
1999	28 N55	0	0	0	0	0	0
2000	28 N56	0	0	0	0	0	0
2001	28 N57	0	0	0	0	0	0
2002	28 N58	-0.001	0	-0.766	0	-4.558e-5	0
2003	28 N59	0.008	0	-0.766	0	-4.562e-5	0
2004	28 N60A	-0.01	0	-0.766	0	-4.568e-5	0
2005	28 N61A	-0.001	0	-0.773	0	-4.57e-5	0
2006	28 N62A	-0.001	0	-0.758	0	-4.575e-5	0
2007	28 N63A	0	0	0	0	0	0
2008	28 N64A	0	0	0	0	0	0
2009	28 N65A	0	0	0	0	0	0
2010	28 N66A	0	0	0	0	0	0
2011	28 N67A	0	0	0	0	0	0
2012	28 N68A	-0.002	0	-0.766	0	-4.579e-5	0
2013	28 N69A	-0.005	0	-0.766	0	-4.58e-5	0
2014	28 N70A	0	0	-0.766	0	-4.582e-5	0

Permits: BNR21-0246, ELE21-0886, ME21-0514, PLB21-0900  
 County of Orange Public Works  
 OC Development Services  
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**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2015	28	N71A	-0.002	0	-0.764	0	-4.583e-5
2016	28	N72A	-0.002	0	-0.769	0	-4.585e-5
2017	29	F2 N1	0.018	-0.013	1.186	2.092e-3	-4.18e-5
2018	29	F2 N2	0.002	-0.03	1.183	1.834e-3	-4.181e-5
2019	29	F2 N3	-0.01	-0.013	1.183	1.8e-3	-4.311e-5
2020	29	F2 N4	-0.022	-0.025	1.178	1.913e-3	-4.311e-5
2021	29	F2 N5	0.019	-0.006	1.132	1.835e-3	-4.241e-5
2022	29	F2 N6	0.006	-0.014	1.132	1.635e-3	-4.078e-5
2023	29	F2 N7	-0.007	-0.028	1.134	1.652e-3	-4.349e-5
2024	29	F2 N8	0.006	-0.009	1.266	3.225e-3	-3.846e-5
2025	29	F2 N9	0.012	-0.009	1.251	3.182e-3	-3.845e-5
2026	29	F2 N10	-0.015	-0.028	1.299	3.461e-3	-1.598e-5
2027	29	F2 N11	0	-0.036	1.294	3.491e-3	-1.597e-5
2028	29	F2 N12	-0.027	-0.027	1.284	3.373e-3	-5.151e-5
2029	29	F2 N13	-0.007	-0.028	1.26	3.271e-3	-5.151e-5
2030	29	F1 N1	0.009	-0.01	0.735	3.056e-3	-2.127e-5
2031	29	F1 N2	0.002	-0.025	0.735	2.704e-3	-2.131e-5
2032	29	F1 N3	-0.006	-0.012	0.729	3.241e-3	-2.14e-5
2033	29	F1 N4	-0.012	-0.022	0.729	2.378e-3	-2.142e-5
2034	29	F1 N5	0.01	-0.005	0.714	2.79e-3	-2.164e-5
2035	29	F1 N6	0.003	-0.011	0.714	2.568e-3	-2.166e-5
2036	29	F1 N7	-0.003	-0.023	0.714	2.584e-3	-2.169e-5
2037	29	F1 N8	0.008	-0.007	0.728	3.168e-3	-2.165e-5
2038	29	F1 N9	0.008	-0.007	0.72	3.122e-3	-2.162e-5
2039	29	F1 N10	-0.003	-0.023	0.728	3.285e-3	-2.152e-5
2040	29	F1 N11	-0.003	-0.03	0.72	3.268e-3	-2.149e-5
2041	29	F1 N12	-0.012	-0.023	0.725	3.233e-3	-2.145e-5
2042	29	F1 N13	-0.012	-0.024	0.716	3.158e-3	-2.145e-5
2043	29	N142	0	0	0	1.442e-3	-2.392e-7
2044	29	N143	0	0	0	1.121e-3	-2.394e-7
2045	29	N144	0	0	0	1.109e-3	-1.915e-7
2046	29	N145	0	0	0	1.033e-3	-1.916e-7
2047	29	N146	0	0	0	1.206e-3	-3.326e-7
2048	29	N147	0	0	0	9.792e-4	-3.619e-7
2049	29	N148	0	0	0	1.037e-3	-3.251e-7
2050	29	N149	0	0	0	3.074e-3	-3.71e-7
2051	29	N150	0	0	0	3.068e-3	-3.707e-7
2052	29	N151	0	0	0	3.009e-3	-5.49e-7
2053	29	N152	0	0	0	2.999e-3	-5.487e-7
2054	29	N153	0	0	0	3.029e-3	-2.726e-7
2055	29	N154	0	0	0	3.024e-3	-2.726e-7
2056	29	N60	0	-0.002	0.054	3.025e-3	-2.726e-7
2057	29	N61	0	-0.002	0.054	3.029e-3	-2.726e-7
2058	29	N62	0	-0.002	0.054	3.001e-3	-5.487e-7
2059	29	N63	0	-0.002	0.054	3.01e-3	-5.49e-7
2060	29	N64	0.001	0	0.055	3.068e-3	-3.707e-7
2061	29	N65	0	0	0.055	3.073e-3	-3.71e-7
2062	29	N66	0	-0.002	0.022	9.71e-4	-1.916e-7
2063	29	N67	0	0	0.022	1.072e-3	-1.915e-7
2064	29	N68	0	-0.002	0.024	1.036e-3	-2.394e-7
2065	29	N69	0	0	0.026	1.437e-3	-2.392e-7
2066	29	N70	0	-0.002	0.021	9.836e-4	-3.251e-7
2067	29	N71	0	-0.001	0.021	9.098e-4	-3.619e-7
2068	29	N72	0	0	0.022	1.188e-3	-3.326e-7
2069	29	N53	0	0	0	0	0
2070	29	N54	0	0	0	0	0
2071	29	N55	0	0	0	0	0
2072	29	N56	0	0	0	0	0

Permits: BNR21-0246, ELE21-0856, ME21-0514, LB21-0900

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 OC Development Services  
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**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2073	29	N57	0	0	0	0	0
2074	29	N58	-0.002	0	0.724	0	-2.146e-5
2075	29	N59	0.002	0	0.724	0	-2.143e-5
2076	29	N60A	-0.007	0	0.724	0	-2.138e-5
2077	29	N61A	-0.002	0	0.72	0	-2.137e-5
2078	29	N62A	-0.002	0	0.727	0	-2.133e-5
2079	29	N63A	0	0	0	0	0
2080	29	N64A	0	0	0	0	0
2081	29	N65A	0	0	0	0	0
2082	29	N66A	0	0	0	0	0
2083	29	N67A	0	0	0	0	0
2084	29	N68A	-0.003	0	0.723	0	-2.129e-5
2085	29	N69A	-0.004	0	0.723	0	-2.128e-5
2086	29	N70A	-0.002	0	0.723	0	-2.127e-5
2087	29	N71A	-0.003	0	0.725	0	-2.126e-5
2088	29	N72A	-0.003	0	0.722	0	-2.125e-5
2089	30	F2_N1	0.086	-0.012	1.239	2.151e-3	-1.735e-4
2090	30	F2_N2	0.019	-0.03	1.236	1.894e-3	-1.735e-4
2091	30	F2_N3	-0.03	-0.013	1.207	1.822e-3	-1.781e-4
2092	30	F2_N4	-0.08	-0.025	1.202	1.935e-3	-1.781e-4
2093	30	F2_N5	0.088	-0.006	1.095	1.801e-3	-1.739e-4
2094	30	F2_N6	0.035	-0.014	1.095	1.602e-3	-1.671e-4
2095	30	F2_N7	-0.019	-0.027	1.096	1.618e-3	-1.779e-4
2096	30	F2_N8	0.049	-0.009	1.295	3.311e-3	-1.64e-4
2097	30	F2_N9	0.055	-0.009	1.23	3.116e-3	-1.64e-4
2098	30	F2_N10	-0.019	-0.028	1.329	3.554e-3	-1.465e-4
2099	30	F2_N11	-0.004	-0.036	1.272	3.416e-3	-1.465e-4
2100	30	F2_N12	-0.071	-0.027	1.3	3.434e-3	-1.786e-4
2101	30	F2_N13	-0.051	-0.028	1.218	3.146e-3	-1.786e-4
2102	30	F1_N1	0.046	-0.01	0.772	3.181e-3	-8.857e-5
2103	30	F1_N2	0.014	-0.025	0.772	2.829e-3	-8.86e-5
2104	30	F1_N3	-0.02	-0.012	0.746	3.296e-3	-8.869e-5
2105	30	F1_N4	-0.043	-0.022	0.746	2.433e-3	-8.871e-5
2106	30	F1_N5	0.046	-0.005	0.686	2.704e-3	-8.889e-5
2107	30	F1_N6	0.02	-0.011	0.686	2.486e-3	-8.892e-5
2108	30	F1_N7	-0.006	-0.023	0.686	2.497e-3	-8.894e-5
2109	30	F1_N8	0.04	-0.007	0.742	3.254e-3	-8.89e-5
2110	30	F1_N9	0.04	-0.007	0.71	3.055e-3	-8.887e-5
2111	30	F1_N10	-0.006	-0.023	0.741	3.374e-3	-8.878e-5
2112	30	F1_N11	-0.006	-0.03	0.71	3.198e-3	-8.876e-5
2113	30	F1_N12	-0.043	-0.023	0.731	3.291e-3	-8.872e-5
2114	30	F1_N13	-0.043	-0.024	0.696	3.037e-3	-8.872e-5
2115	30	N142	0	0	0	1.511e-3	-9.97e-7
2116	30	N143	0	0	0	1.191e-3	-9.972e-7
2117	30	N144	0	0	0	1.137e-3	-7.933e-7
2118	30	N145	0	0	0	1.061e-3	-7.934e-7
2119	30	N146	0	0	0	1.159e-3	-1.366e-6
2120	30	N147	0	0	0	9.389e-4	-1.487e-6
2121	30	N148	0	0	0	9.908e-4	-1.336e-6
2122	30	N149	0	0	0	3.092e-3	-1.475e-6
2123	30	N150	0	0	0	3.068e-3	-1.475e-6
2124	30	N151	0	0	0	3.026e-3	-1.592e-6
2125	30	N152	0	0	0	3.001e-3	-1.591e-6
2126	30	N153	0	0	0	3.009e-3	-1.446e-6
2127	30	N154	0	0	0	2.984e-3	-1.447e-6
2128	30	N60	-0.002	-0.002	0.054	2.985e-3	-1.447e-6
2129	30	N61	-0.002	-0.002	0.054	3.009e-3	-1.446e-6
2130	30	N62	0	-0.002	0.054	3.003e-3	-1.591e-6

Permits: BNR21-0246, ELE21-0856, ME21-0514, PLB21-0900

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Hadi Tabatabaee  
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**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2131	30 N63	0	-0.002	0.054	3.027e-3	-1.592e-6	5.478e-5
2132	30 N64	0.003	0	0.055	3.069e-3	-1.475e-6	-2.237e-4
2133	30 N65	0.001	0	0.056	3.091e-3	-1.475e-6	3.7e-5
2134	30 N66	-0.002	-0.002	0.022	9.975e-4	-7.934e-7	3.7e-5
2135	30 N67	-0.002	0	0.022	1.098e-3	-7.933e-7	1.283e-4
2136	30 N68	0.002	-0.002	0.026	1.103e-3	-9.972e-7	1.02e-4
2137	30 N69	0.002	0	0.027	1.504e-3	-9.97e-7	0.02e-4
2138	30 N70	0.001	-0.002	0.02	9.389e-4	-1.336e-6	0.02e-4
2139	30 N71	0.002	-0.001	0.02	8.725e-4	-1.487e-6	0.02e-4
2140	30 N72	0.002	0	0.022	1.143e-3	-1.366e-6	0.02e-4
2141	30 N53	0	0	0	0	0	0
2142	30 N54	0	0	0	0	0	0
2143	30 N55	0	0	0	0	0	0
2144	30 N56	0	0	0	0	0	0
2145	30 N57	0	0	0	0	0	0
2146	30 N58	-0.004	0	0.726	0	-8.874e-5	0
2147	30 N59	0.014	0	0.726	0	-8.872e-5	0
2148	30 N60A	-0.021	0	0.726	0	-8.868e-5	0
2149	30 N61A	-0.004	0	0.711	0	-8.867e-5	0
2150	30 N62A	-0.004	0	0.74	0	-8.864e-5	0
2151	30 N63A	0	0	0	0	0	0
2152	30 N64A	0	0	0	0	0	0
2153	30 N65A	0	0	0	0	0	0
2154	30 N66A	0	0	0	0	0	0
2155	30 N67A	0	0	0	0	0	0
2156	30 N68A	-0.006	0	0.725	0	-8.861e-5	0
2157	30 N69A	-0.012	0	0.725	0	-8.86e-5	0
2158	30 N70A	0	0	0.725	0	-8.859e-5	0
2159	30 N71A	-0.006	0	0.729	0	-8.858e-5	0
2160	30 N72A	-0.006	0	0.72	0	-8.857e-5	0
2161	31 F2 N1	-0.05	-0.013	1.133	2.033e-3	8.993e-5	1.391e-4
2162	31 F2 N2	-0.015	-0.03	1.13	1.775e-3	8.991e-5	3.042e-5
2163	31 F2 N3	0.01	-0.013	1.159	1.777e-3	9.184e-5	-1.93e-5
2164	31 F2 N4	0.036	-0.025	1.154	1.89e-3	9.184e-5	-1.004e-4
2165	31 F2 N5	-0.051	-0.006	1.17	1.87e-3	8.907e-5	1.42e-4
2166	31 F2 N6	-0.024	-0.014	1.17	1.668e-3	8.549e-5	6.021e-5
2167	31 F2 N7	0.004	-0.028	1.171	1.687e-3	9.095e-5	-2.521e-5
2168	31 F2 N8	-0.037	-0.009	1.238	3.139e-3	8.711e-5	2.404e-4
2169	31 F2 N9	-0.031	-0.009	1.272	3.249e-3	8.712e-5	-1.607e-4
2170	31 F2 N10	-0.011	-0.028	1.27	3.368e-3	1.145e-4	5.184e-4
2171	31 F2 N11	0.004	-0.036	1.316	3.566e-3	1.145e-4	-4.744e-4
2172	31 F2 N12	0.016	-0.027	1.267	3.312e-3	7.557e-5	3.438e-4
2173	31 F2 N13	0.036	-0.027	1.301	3.397e-3	7.557e-5	-3.718e-4
2174	31 F1 N1	-0.027	-0.01	0.697	2.93e-3	4.603e-5	1.367e-4
2175	31 F1 N2	-0.01	-0.025	0.697	2.578e-3	4.6e-5	2.756e-5
2176	31 F1 N3	0.007	-0.012	0.711	3.186e-3	4.589e-5	-1.726e-5
2177	31 F1 N4	0.019	-0.021	0.711	3.223e-3	4.587e-5	-9.859e-5
2178	31 F1 N5	-0.027	-0.005	0.742	2.877e-3	4.562e-5	1.427e-4
2179	31 F1 N6	-0.014	-0.011	0.742	2.651e-3	4.559e-5	5.886e-5
2180	31 F1 N7	0	-0.023	0.742	2.67e-3	4.556e-5	-2.666e-5
2181	31 F1 N8	-0.023	-0.007	0.714	3.082e-3	4.56e-5	3.051e-4
2182	31 F1 N9	-0.023	-0.007	0.73	3.188e-3	4.563e-5	-1.329e-4
2183	31 F1 N10	0	-0.023	0.714	3.196e-3	4.574e-5	7.109e-4
2184	31 F1 N11	0	-0.03	0.73	3.339e-3	4.577e-5	-6.718e-4
2185	31 F1 N12	0.019	-0.023	0.719	3.174e-3	4.581e-5	9.562e-4
2186	31 F1 N13	0.019	-0.024	0.737	3.279e-3	4.581e-5	-1.091e-3
2187	31 N142	0	0	0	1.373e-3	5.189e-7	8.356e-5
2188	31 N143	0	0	0	1.052e-3	5.187e-7	7.45e-5

Permits: BNR21-0246, ELEC21-0886, ME21-0514, B21-0900

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 Had 1000e-4  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C73  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2189	31 N144	0	0	0	1.081e-3	4.102e-7	-5.262e-5
2190	31 N145	0	0	0	1.005e-3	4.101e-7	-5.801e-5
2191	31 N146	0	0	0	1.252e-3	7.015e-7	4.702e-5
2192	31 N147	0	0	0	1.019e-3	7.632e-7	7.096e-5
2193	31 N148	0	0	0	1.083e-3	6.858e-7	4.702e-5
2194	31 N149	0	0	0	3.056e-3	7.334e-7	3.006e-5
2195	31 N150	0	0	0	3.067e-3	7.338e-7	3.006e-5
2196	31 N151	0	0	0	2.991e-3	4.936e-7	3.006e-5
2197	31 N152	0	0	0	2.998e-3	4.938e-7	3.581e-5
2198	31 N153	0	0	0	3.048e-3	9.013e-7	2.000e-5
2199	31 N154	0	0	0	3.065e-3	9.013e-7	-6.907e-5
2200	31 N60	0	-0.002	0.055	3.065e-3	9.013e-7	-8.17e-5
2201	31 N61	0.001	-0.002	0.055	3.049e-3	9.013e-7	-5.308e-6
2202	31 N62	0	-0.002	0.054	2.999e-3	4.938e-7	-4.798e-5
2203	31 N63	0	-0.002	0.054	2.992e-3	4.936e-7	4.276e-5
2204	31 N64	0	0	0.055	3.067e-3	7.338e-7	-8.346e-5
2205	31 N65	-0.002	0	0.055	3.056e-3	7.334e-7	1.812e-4
2206	31 N66	0.001	-0.002	0.021	9.444e-4	4.101e-7	-5.774e-5
2207	31 N67	0	0	0.021	1.045e-3	4.102e-7	-5.291e-5
2208	31 N68	-0.001	-0.002	0.023	9.696e-4	5.187e-7	7.477e-5
2209	31 N69	-0.001	0	0.025	1.371e-3	5.189e-7	8.325e-5
2210	31 N70	0	-0.002	0.022	1.028e-3	6.858e-7	4.745e-5
2211	31 N71	-0.001	-0.001	0.022	9.47e-4	7.632e-7	5.769e-5
2212	31 N72	-0.001	0	0.023	1.233e-3	7.015e-7	6.8e-5
2213	31 N53	0	0	0	0	0	0
2214	31 N54	0	0	0	0	0	0
2215	31 N55	0	0	0	0	0	0
2216	31 N56	0	0	0	0	0	0
2217	31 N57	0	0	0	0	0	0
2218	31 N58	-0.001	0	0.722	0	4.581e-5	0
2219	31 N59	-0.01	0	0.722	0	4.584e-5	0
2220	31 N60A	0.008	0	0.722	0	4.591e-5	0
2221	31 N61A	-0.001	0	0.729	0	4.593e-5	0
2222	31 N62A	-0.001	0	0.714	0	4.598e-5	0
2223	31 N63A	0	0	0	0	0	0
2224	31 N64A	0	0	0	0	0	0
2225	31 N65A	0	0	0	0	0	0
2226	31 N66A	0	0	0	0	0	0
2227	31 N67A	0	0	0	0	0	0
2228	31 N68A	0	0	0.722	0	4.602e-5	0
2229	31 N69A	0.003	0	0.722	0	4.603e-5	0
2230	31 N70A	-0.003	0	0.722	0	4.604e-5	0
2231	31 N71A	0	0	0.72	0	4.606e-5	0
2232	31 N72A	0	0	0.725	0	4.608e-5	0
2233	32 F2 N1	1.28	-0.017	-0.036	1.003e-4	1.342e-4	-3.318e-3
2234	32 F2 N2	1.333	-0.025	-0.04	-1.567e-4	1.342e-4	-3.521e-3
2235	32 F2 N3	1.346	-0.021	-0.009	-6.382e-5	1.013e-4	-3.45e-3
2236	32 F2 N4	1.375	-0.017	-0.012	5.891e-5	1.013e-4	-3.521e-3
2237	32 F2 N5	1.266	-0.012	0.041	1.534e-4	1.214e-4	-3.224e-3
2238	32 F2 N6	1.304	-0.014	0.039	4.624e-5	1.235e-4	-3.352e-3
2239	32 F2 N7	1.346	-0.022	0.038	-5.904e-5	1.405e-4	-3.514e-3
2240	32 F2 N8	1.14	-0.014	-0.018	-5.716e-5	1.076e-4	-1.579e-3
2241	32 F2 N9	1.143	-0.004	0.024	7.175e-5	1.076e-4	-1.967e-3
2242	32 F2 N10	1.216	-0.034	-0.019	-6.37e-5	1.123e-4	-1.537e-3
2243	32 F2 N11	1.229	-0.031	0.025	8.094e-5	1.123e-4	-2.515e-3
2244	32 F2 N12	1.218	-0.032	-0.008	-3.639e-5	1.091e-4	-1.583e-3
2245	32 F2 N13	1.24	-0.023	0.042	1.238e-4	1.091e-4	-2.312e-3
2246	32 F1 N1	0.729	-0.014	-0.028	9.046e-5	5.776e-5	-3.201e-3

Estimate: BNR21-0246, ELEC21-0886, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Had 2/00/2021  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C74  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2247	32 F1 N2	0.75	-0.021	-0.028	-2.613e-4	5.774e-5	-3.365e-3
2248	32 F1 N3	0.772	-0.018	-0.011	4.423e-4	5.776e-5	-3.359e-3
2249	32 F1 N4	0.787	-0.015	-0.011	-4.165e-4	5.779e-5	-3.492e-3
2250	32 F1 N5	0.729	-0.01	0.028	2.047e-4	5.79e-5	-3.265e-3
2251	32 F1 N6	0.746	-0.011	0.028	9.021e-5	5.79e-5	-3.265e-3
2252	32 F1 N7	0.763	-0.018	0.028	-1.732e-5	5.791e-5	-3.492e-3
2253	32 F1 N8	0.733	-0.012	-0.008	-5.769e-5	5.794e-5	-3.492e-3
2254	32 F1 N9	0.733	-0.003	0.012	7.307e-5	5.793e-5	-2.076e-3
2255	32 F1 N10	0.762	-0.028	-0.008	-6.022e-5	5.786e-5	-2.076e-3
2256	32 F1 N11	0.762	-0.025	0.012	7.692e-5	5.784e-5	-2.076e-3
2257	32 F1 N12	0.787	-0.027	-0.002	-3.405e-5	5.773e-5	-1.796e-3
2258	32 F1 N13	0.787	-0.02	0.021	1.199e-4	5.766e-5	-3.85e-3
2259	32 N142	0	0	0	1.07e-4	5.181e-7	-3.099e-3
2260	32 N143	0	0	0	-2.137e-4	5.18e-7	-3.108e-3
2261	32 N144	0	0	0	1.199e-5	5.701e-7	-3.295e-3
2262	32 N145	0	0	0	-6.423e-5	5.702e-7	-3.302e-3
2263	32 N146	0	0	0	1.294e-4	8.47e-7	-3.138e-3
2264	32 N147	0	0	0	4.026e-5	8.46e-7	-3.151e-3
2265	32 N148	0	0	0	-3.897e-5	6.679e-7	-3.161e-3
2266	32 N149	0	0	0	9.132e-7	9.491e-7	-1.488e-3
2267	32 N150	0	0	0	1.587e-5	9.489e-7	-1.705e-3
2268	32 N151	0	0	0	1.056e-6	8.962e-7	-1.604e-3
2269	32 N152	0	0	0	1.493e-5	8.959e-7	-1.671e-3
2270	32 N153	0	0	0	3.312e-5	1.009e-6	-1.789e-3
2271	32 N154	0	0	0	5.095e-5	1.009e-6	-1.837e-3
2272	32 N60	0.035	-0.002	0	5.06e-5	1.009e-6	-1.808e-3
2273	32 N61	0.035	-0.003	0	3.346e-5	1.009e-6	-1.733e-3
2274	32 N62	0.032	-0.002	0	1.463e-5	8.959e-7	-1.639e-3
2275	32 N63	0.032	-0.003	0	1.362e-6	8.962e-7	-1.547e-3
2276	32 N64	0.032	0	0	1.543e-5	9.489e-7	-1.685e-3
2277	32 N65	0.03	-0.001	0	1.324e-6	9.491e-7	-1.42e-3
2278	32 N66	0.059	-0.001	0	-7.521e-5	5.702e-7	-3.302e-3
2279	32 N67	0.059	-0.002	0	2.622e-5	5.701e-7	-3.295e-3
2280	32 N68	0.056	-0.002	-0.002	-2.518e-4	5.18e-7	-3.108e-3
2281	32 N69	0.056	-0.001	0	1.494e-4	5.181e-7	-3.099e-3
2282	32 N70	0.057	-0.002	0	-5.86e-5	6.679e-7	-3.161e-3
2283	32 N71	0.057	-0.001	0	3.752e-5	8.46e-7	-3.151e-3
2284	32 N72	0.056	0	0.002	1.459e-4	8.47e-7	-3.139e-3
2285	32 N53	0	0	0	0	0	0
2286	32 N54	0	0	0	0	0	0
2287	32 N55	0	0	0	0	0	0
2288	32 N56	0	0	0	0	0	0
2289	32 N57	0	0	0	0	0	0
2290	32 N58	0.761	0	0.002	0	5.761e-5	0
2291	32 N59	0.75	0	0.002	0	5.765e-5	0
2292	32 N60A	0.772	0	0.002	0	5.769e-5	0
2293	32 N61A	0.761	0	0.011	0	5.77e-5	0
2294	32 N62A	0.761	0	-0.007	0	5.774e-5	0
2295	32 N63A	0	0	0	0	0	0
2296	32 N64A	0	0	0	0	0	0
2297	32 N65A	0	0	0	0	0	0
2298	32 N66A	0	0	0	0	0	0
2299	32 N67A	0	0	0	0	0	0
2300	32 N68A	0.763	0	0.003	0	5.776e-5	0
2301	32 N69A	0.767	0	0.003	0	5.776e-5	0
2302	32 N70A	0.759	0	0.003	0	5.778e-5	0
2303	32 N71A	0.763	0	0	0	5.778e-5	0
2304	32 N72A	0.763	0	0.006	0	5.779e-5	0

Permits: BNR21-0246, ELEC21-0556, ME21-0514, LB21-0900

County of Orange Public Works  
 OC Development Services  
 APPROVED

This set of plans and specifications must be kept on the job at all times. It is the responsibility of the contractor to make any changes or alterations to these plans and specifications in accordance with the approval of Orange County. The signing of these plan specifications SHALL constitute approval of the contractor to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Had 3/14/2021  
 BUILDING OFFICIAL



Company : KPPF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C75  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2305	33 F2 N1	1.197	-0.017	-0.1	2.881e-5	2.932e-4	-3.087e-3
2306	33 F2 N2	1.312	-0.025	-0.104	-2.282e-4	2.932e-4	-3.483e-3
2307	33 F2 N3	1.371	-0.021	-0.038	-9.106e-5	2.604e-4	-2.98e-3
2308	33 F2 N4	1.444	-0.017	-0.041	3.167e-5	2.604e-4	-2.98e-3
2309	33 F2 N5	1.182	-0.012	0.086	1.95e-4	2.831e-4	-2.98e-3
2310	33 F2 N6	1.268	-0.014	0.085	8.596e-5	2.775e-4	-2.98e-3
2311	33 F2 N7	1.36	-0.022	0.083	-1.747e-5	3.033e-4	-2.98e-3
2312	33 F2 N8	1.088	-0.014	-0.052	-1.61e-4	2.584e-4	-2.98e-3
2313	33 F2 N9	1.091	-0.004	0.049	1.49e-4	2.583e-4	-2.98e-3
2314	33 F2 N10	1.22	-0.034	-0.055	-1.788e-4	2.699e-4	-2.98e-3
2315	33 F2 N11	1.233	-0.031	0.052	1.69e-4	2.699e-4	-2.519e-3
2316	33 F2 N12	1.27	-0.032	-0.028	-1.127e-4	2.628e-4	-1.64e-3
2317	33 F2 N13	1.292	-0.023	0.092	2.737e-4	2.627e-4	-2.369e-3
2318	33 F1 N1	0.685	-0.014	-0.074	-6.105e-5	1.389e-4	-2.975e-3
2319	33 F1 N2	0.735	-0.021	-0.074	-4.128e-4	1.389e-4	-3.332e-3
2320	33 F1 N3	0.788	-0.018	-0.033	3.759e-4	1.389e-4	-3.406e-3
2321	33 F1 N4	0.825	-0.015	-0.033	-4.829e-4	1.389e-4	-3.636e-3
2322	33 F1 N5	0.685	-0.01	0.061	3.09e-4	1.39e-4	-2.908e-3
2323	33 F1 N6	0.725	-0.011	0.061	1.898e-4	1.39e-4	-3.176e-3
2324	33 F1 N7	0.766	-0.018	0.061	8.696e-5	1.39e-4	-3.46e-3
2325	33 F1 N8	0.695	-0.011	-0.025	-1.617e-4	1.391e-4	-2.234e-3
2326	33 F1 N9	0.695	-0.003	0.024	1.524e-4	1.39e-4	-2.666e-3
2327	33 F1 N10	0.766	-0.028	-0.025	-1.689e-4	1.39e-4	-2.086e-3
2328	33 F1 N11	0.766	-0.025	0.024	1.607e-4	1.39e-4	-3.462e-3
2329	33 F1 N12	0.825	-0.027	-0.009	-1.059e-4	1.389e-4	-1.912e-3
2330	33 F1 N13	0.825	-0.02	0.046	2.65e-4	1.388e-4	-3.966e-3
2331	33 N142	0	0	0	2.329e-5	1.428e-6	-2.967e-3
2332	33 N143	0	0	0	-2.973e-4	1.428e-6	-2.992e-3
2333	33 N144	0	0	0	-2.18e-5	1.292e-6	-3.404e-3
2334	33 N145	0	0	0	-9.802e-5	1.292e-6	-3.421e-3
2335	33 N146	0	0	0	1.851e-4	2.083e-6	-3.033e-3
2336	33 N147	0	0	0	8.875e-5	2.201e-6	-3.064e-3
2337	33 N148	0	0	0	1.683e-5	1.894e-6	-3.094e-3
2338	33 N149	0	0	0	-2.044e-5	2.278e-6	-1.4e-3
2339	33 N150	0	0	0	1.545e-5	2.278e-6	-1.617e-3
2340	33 N151	0	0	0	-1.959e-5	2.154e-6	-1.611e-3
2341	33 N152	0	0	0	1.377e-5	2.153e-6	-1.678e-3
2342	33 N153	0	0	0	5.732e-5	2.427e-6	-1.881e-3
2343	33 N154	0	0	0	1.002e-4	2.427e-6	-1.929e-3
2344	33 N60	0.036	-0.002	0.002	9.934e-5	2.427e-6	-1.897e-3
2345	33 N61	0.037	-0.003	0.001	5.813e-5	2.427e-6	-1.822e-3
2346	33 N62	0.032	-0.002	0	1.302e-5	2.153e-6	-1.646e-3
2347	33 N63	0.032	-0.003	0	-1.885e-5	2.154e-6	-1.555e-3
2348	33 N64	0.03	0	0	1.439e-5	2.278e-6	-1.601e-3
2349	33 N65	0.028	-0.001	0	-1.945e-5	2.278e-6	-1.335e-3
2350	33 N66	0.061	-0.001	-0.001	-1.073e-4	1.292e-6	-3.42e-3
2351	33 N67	0.061	-0.002	-0.001	-5.871e-6	1.292e-6	-3.405e-3
2352	33 N68	0.054	-0.002	-0.004	-3.323e-4	1.428e-6	-2.992e-3
2353	33 N69	0.053	-0.001	-0.002	6.885e-5	1.428e-6	-2.968e-3
2354	33 N70	0.056	-0.002	0.001	-4.699e-6	1.894e-6	-3.093e-3
2355	33 N71	0.055	-0.001	0.002	8.238e-5	2.201e-6	-3.064e-3
2356	33 N72	0.054	0	0.003	1.997e-4	2.083e-6	-3.034e-3
2357	33 N53	0	0	0	0	0	0
2358	33 N54	0	0	0	0	0	0
2359	33 N55	0	0	0	0	0	0
2360	33 N56	0	0	0	0	0	0
2361	33 N57	0	0	0	0	0	0
2362	33 N58	0.763	0	0	0	1.388e-4	0

Permits: BNR21-0246, ERE21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**  
 OC Development Services  
 APPROVED

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Had 1541e-3  
 BUILDING OFICIAL  
 -2.519e-3

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
2363	33	N59	0.735	0	0	1.388e-4	0	
2364	33	N60A	0.79	0	0	1.389e-4	0	
2365	33	N61A	0.763	0	0.022	1.389e-4	0	
2366	33	N62A	0.763	0	-0.023	1.389e-4	0	
2367	33	N63A	0	0	0	0	0	
2368	33	N64A	0	0	0	0	0	
2369	33	N65A	0	0	0	0	0	
2370	33	N66A	0	0	0	0	0	
2371	33	N67A	0	0	0	0	0	
2372	33	N68A	0.766	0	0.001	1.39e-4	0	
2373	33	N69A	0.775	0	0.001	1.39e-4	0	
2374	33	N70A	0.757	0	0.001	1.39e-4	0	
2375	33	N71A	0.766	0	-0.006	1.39e-4	0	
2376	33	N72A	0.766	0	0.009	1.39e-4	0	
2377	34	F2 N1	1.362	-0.017	0.028	1.719e-4	-2.475e-5	-3.549e-3
2378	34	F2 N2	1.353	-0.025	0.024	-8.515e-5	-2.476e-5	-3.559e-3
2379	34	F2 N3	1.322	-0.02	0.02	-3.658e-5	-5.782e-5	-3.398e-3
2380	34	F2 N4	1.305	-0.017	0.017	8.615e-5	-5.782e-5	-3.333e-3
2381	34	F2 N5	1.351	-0.012	-0.004	1.119e-4	-4.028e-5	-3.467e-3
2382	34	F2 N6	1.34	-0.014	-0.006	6.522e-6	-3.051e-5	-3.444e-3
2383	34	F2 N7	1.332	-0.021	-0.008	-1.006e-4	-2.235e-5	-3.451e-3
2384	34	F2 N8	1.192	-0.014	0.016	4.68e-5	-4.324e-5	-1.632e-3
2385	34	F2 N9	1.195	-0.004	0	-5.441e-6	-4.325e-5	-2.02e-3
2386	34	F2 N10	1.211	-0.034	0.017	5.138e-5	-4.529e-5	-1.532e-3
2387	34	F2 N11	1.224	-0.031	0	-7.132e-6	-4.53e-5	-2.51e-3
2388	34	F2 N12	1.166	-0.032	0.013	3.987e-5	-4.457e-5	-1.526e-3
2389	34	F2 N13	1.188	-0.023	-0.008	-2.62e-5	-4.46e-5	-2.255e-3
2390	34	F1 N1	0.773	-0.014	0.017	2.42e-4	-2.342e-5	-3.427e-3
2391	34	F1 N2	0.765	-0.021	0.017	-1.098e-4	-2.344e-5	-3.398e-3
2392	34	F1 N3	0.756	-0.018	0.01	5.087e-4	-2.341e-5	-3.312e-3
2393	34	F1 N4	0.749	-0.015	0.01	-3.501e-4	-2.337e-5	-3.261e-3
2394	34	F1 N5	0.773	-0.01	-0.006	1.005e-4	-2.323e-5	-3.39e-3
2395	34	F1 N6	0.766	-0.011	-0.006	-9.401e-6	-2.323e-5	-3.354e-3
2396	34	F1 N7	0.759	-0.018	-0.006	-1.216e-4	-2.321e-5	-3.332e-3
2397	34	F1 N8	0.771	-0.012	0.009	4.637e-5	-2.318e-5	-2.461e-3
2398	34	F1 N9	0.771	-0.003	0	-6.217e-6	-2.32e-5	-2.893e-3
2399	34	F1 N10	0.759	-0.027	0.009	4.842e-5	-2.327e-5	-2.067e-3
2400	34	F1 N11	0.759	-0.025	0	-6.895e-6	-2.33e-5	-3.443e-3
2401	34	F1 N12	0.749	-0.027	0.006	3.771e-5	-2.342e-5	-1.679e-3
2402	34	F1 N13	0.749	-0.02	-0.003	-2.526e-5	-2.348e-5	-3.734e-3
2403	34	N142	0	0	0	1.906e-4	-3.915e-7	-3.23e-3
2404	34	N143	0	0	0	-1.3e-4	-3.916e-7	-3.223e-3
2405	34	N144	0	0	0	4.578e-5	-1.521e-7	-3.186e-3
2406	34	N145	0	0	0	-3.044e-5	-1.52e-7	-3.184e-3
2407	34	N146	0	0	0	7.367e-5	-3.886e-7	-3.244e-3
2408	34	N147	0	0	0	-8.23e-6	-5.087e-7	-3.237e-3
2409	34	N148	0	0	0	-9.477e-5	-5.586e-7	-3.229e-3
2410	34	N149	0	0	0	2.223e-5	-3.795e-7	-1.575e-3
2411	34	N150	0	0	0	1.625e-5	-3.797e-7	-1.792e-3
2412	34	N151	0	0	0	2.17e-5	-3.612e-7	-1.596e-3
2413	34	N152	0	0	0	1.61e-5	-3.614e-7	-1.663e-3
2414	34	N153	0	0	0	8.953e-6	-4.085e-7	-1.698e-3
2415	34	N154	0	0	0	1.731e-6	-4.093e-7	-1.746e-3
2416	34	N60	0.033	-0.002	0	1.883e-6	-4.093e-7	-1.719e-3
2417	34	N61	0.033	-0.002	0	8.816e-6	-4.085e-7	-1.644e-3
2418	34	N62	0.031	-0.002	0	1.623e-5	-3.614e-7	-1.632e-3
2419	34	N63	0.032	-0.003	0	2.158e-5	-3.612e-7	-1.54e-3
2420	34	N64	0.033	0	0	1.643e-5	-3.797e-7	-1.77e-3

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900  
 County of Orange - OC Public Works  
 OC Development Services  
 APPROVED  
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 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWArvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2421	34 N65	0.032	-0.001	0	2.206e-5	-3.795e-7	-1.504e-3
2422	34 N66	0.057	-0.001	0	-4.311e-5	-1.52e-7	-3.184e-3
2423	34 N67	0.057	-0.002	0	5.832e-5	-1.521e-7	-3.245e-3
2424	34 N68	0.058	-0.002	0	-1.713e-4	-3.916e-7	-3.245e-3
2425	34 N69	0.058	-0.001	0.002	2.299e-4	-3.915e-7	-3.23e-3
2426	34 N70	0.058	-0.002	0	-1.125e-4	-5.586e-7	-3.23e-3
2427	34 N71	0.058	-0.001	0	-7.339e-6	-5.087e-7	-3.23e-3
2428	34 N72	0.058	0	0	9.207e-5	-3.886e-7	0
2429	34 N53	0	0	0	0	0	0
2430	34 N54	0	0	0	0	0	0
2431	34 N55	0	0	0	0	0	0
2432	34 N56	0	0	0	0	0	0
2433	34 N57	0	0	0	0	0	0
2434	34 N58	0.76	0	0.005	0	-2.355e-5	0
2435	34 N59	0.765	0	0.005	0	-2.351e-5	0
2436	34 N60A	0.755	0	0.005	0	-2.348e-5	0
2437	34 N61A	0.76	0	0	0	-2.348e-5	0
2438	34 N62A	0.76	0	0.008	0	-2.346e-5	0
2439	34 N63A	0	0	0	0	0	0
2440	34 N64A	0	0	0	0	0	0
2441	34 N65A	0	0	0	0	0	0
2442	34 N66A	0	0	0	0	0	0
2443	34 N67A	0	0	0	0	0	0
2444	34 N68A	0.759	0	0.004	0	-2.345e-5	0
2445	34 N69A	0.758	0	0.004	0	-2.344e-5	0
2446	34 N70A	0.761	0	0.004	0	-2.344e-5	0
2447	34 N71A	0.759	0	0.005	0	-2.343e-5	0
2448	34 N72A	0.759	0	0.003	0	-2.341e-5	0
2449	35 F2 N1	0	-0.008	0.005	7.894e-5	-1.151e-6	1.872e-6
2450	35 F2 N2	-0.001	-0.012	0.004	-5.458e-5	-1.151e-6	3.265e-6
2451	35 F2 N3	-0.002	-0.01	0.006	-2.845e-5	-1.145e-6	3.831e-6
2452	35 F2 N4	-0.002	-0.009	0.005	4.718e-5	-1.145e-6	4.797e-6
2453	35 F2 N5	0	-0.006	0.004	5.672e-5	-1.161e-6	1.743e-6
2454	35 F2 N6	-0.001	-0.007	0.003	8.721e-6	-1.109e-6	2.82e-6
2455	35 F2 N7	-0.001	-0.011	0.003	-3.928e-5	-1.175e-6	3.925e-6
2456	35 F2 N8	-0.002	-0.005	0.004	9.253e-6	-1.08e-6	8.236e-5
2457	35 F2 N9	0	-0.005	0.003	7.986e-6	-1.08e-6	-7.68e-5
2458	35 F2 N10	-0.006	-0.012	0.004	9.517e-6	-1.073e-6	2.112e-4
2459	35 F2 N11	0	-0.016	0.003	8.27e-6	-1.073e-6	-1.901e-4
2460	35 F2 N12	-0.006	-0.013	0.004	9.201e-6	-1.094e-6	1.512e-4
2461	35 F2 N13	0.002	-0.014	0.003	7.636e-6	-1.094e-6	-1.325e-4
2462	35 F1 N1	0	-0.006	0.002	6.865e-5	-5.891e-7	1.823e-6
2463	35 F1 N2	0	-0.01	0.002	-4.292e-5	-5.891e-7	3.221e-6
2464	35 F1 N3	0	-0.009	0.002	2.575e-4	-5.891e-7	3.759e-6
2465	35 F1 N4	-0.001	-0.008	0.002	-1.947e-4	-5.891e-7	4.773e-6
2466	35 F1 N5	0	-0.005	0.002	4.799e-5	-5.892e-7	1.695e-6
2467	35 F1 N6	0	-0.005	0.002	8.867e-6	-5.892e-7	2.787e-6
2468	35 F1 N7	0	-0.009	0.002	-2.923e-5	-5.892e-7	3.893e-6
2469	35 F1 N8	0	-0.004	0.002	9.202e-6	-5.889e-7	1.129e-4
2470	35 F1 N9	0	-0.004	0.002	7.891e-6	-5.889e-7	-1.02e-4
2471	35 F1 N10	0	-0.01	0.002	9.33e-6	-5.887e-7	2.859e-4
2472	35 F1 N11	0	-0.013	0.002	8.027e-6	-5.886e-7	-2.649e-4
2473	35 F1 N12	-0.001	-0.011	0.002	9.039e-6	-5.885e-7	4.814e-4
2474	35 F1 N13	-0.001	-0.012	0.002	7.498e-6	-5.885e-7	-4.781e-4
2475	35 N142	0	0	0	1.494e-4	0	2.404e-6
2476	35 N143	0	0	0	-1.419e-4	0	2.523e-6
2477	35 N144	0	0	0	4.638e-5	0	4.174e-6
2478	35 N145	0	0	0	-4.793e-5	0	4.245e-6

Permits: BNR21-0246, ELE21-0886, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2479	35 N146	0	0	0	7.85e-5	0	2.606e-6
2480	35 N147	0	0	0	2.687e-6	0	2.746e-6
2481	35 N148	0	0	0	-7.416e-5	0	0
2482	35 N149	0	0	0	8.541e-6	0	0
2483	35 N150	0	0	0	8.386e-6	0	-1.014e-4
2484	35 N151	0	0	0	8.475e-6	0	0
2485	35 N152	0	0	0	8.32e-6	0	0
2486	35 N153	0	0	0	8.174e-6	-1.056e-8	0
2487	35 N154	0	0	0	7.986e-6	-1.056e-8	0
2488	35 N60	0	-0.001	0	7.99e-6	-1.056e-8	0
2489	35 N61	0	-0.001	0	8.17e-6	-1.056e-8	0
2490	35 N62	0	-0.001	0	8.325e-6	0	-9.236e-5
2491	35 N63	0	0	0	8.471e-6	0	9.338e-5
2492	35 N64	0	0	0	8.39e-6	0	-1.234e-4
2493	35 N65	0	0	0	8.535e-6	0	1.241e-4
2494	35 N66	0	0	0	-6.161e-5	0	4.241e-6
2495	35 N67	0	0	0	6.046e-5	0	4.178e-6
2496	35 N68	0	0	0	-1.778e-4	0	2.518e-6
2497	35 N69	0	0	0	1.852e-4	0	2.409e-6
2498	35 N70	0	0	0	-9.01e-5	0	2.878e-6
2499	35 N71	0	0	0	2.681e-6	0	2.746e-6
2500	35 N72	0	0	0	9.418e-5	0	2.612e-6
2501	35 N53	0	0	0	0	0	0
2502	35 N54	0	0	0	0	0	0
2503	35 N55	0	0	0	0	0	0
2504	35 N56	0	0	0	0	0	0
2505	35 N57	0	0	0	0	0	0
2506	35 N58	0	0	0.002	0	-5.886e-7	0
2507	35 N59	0	0	0.002	0	-5.886e-7	0
2508	35 N60A	0	0	0.002	0	-5.887e-7	0
2509	35 N61A	0	0	0.002	0	-5.887e-7	0
2510	35 N62A	0	0	0.002	0	-5.888e-7	0
2511	35 N63A	0	0	0	0	0	0
2512	35 N64A	0	0	0	0	0	0
2513	35 N65A	0	0	0	0	0	0
2514	35 N66A	0	0	0	0	0	0
2515	35 N67A	0	0	0	0	0	0
2516	35 N68A	0	0	0.002	0	-5.888e-7	0
2517	35 N69A	0	0	0.002	0	-5.888e-7	0
2518	35 N70A	0	0	0.002	0	-5.889e-7	0
2519	35 N71A	0	0	0.002	0	-5.889e-7	0
2520	35 N72A	0	0	0.002	0	-5.889e-7	0
2521	36 F2 N1	-0.003	-0.008	0.003	5.607e-5	1.829e-6	7.266e-6
2522	36 F2 N2	-0.002	-0.011	0.001	-4.042e-5	1.829e-6	5.101e-6
2523	36 F2 N3	-0.002	-0.008	0.004	-1.034e-5	1.855e-6	4.01e-6
2524	36 F2 N4	-0.001	-0.006	0.003	2.145e-5	1.855e-6	2.431e-6
2525	36 F2 N5	-0.003	-0.005	0.004	5.564e-5	1.861e-6	7.357e-6
2526	36 F2 N6	-0.002	-0.006	0.003	7.484e-6	1.768e-6	5.649e-6
2527	36 F2 N7	-0.002	-0.009	0.002	-4.141e-5	1.86e-6	3.936e-6
2528	36 F2 N8	-0.005	-0.004	0.002	5.099e-6	1.746e-6	1.12e-4
2529	36 F2 N9	-0.002	-0.004	0.003	7.157e-6	1.746e-6	-9.762e-5
2530	36 F2 N10	-0.007	-0.013	0.002	5.265e-6	1.806e-6	2.669e-4
2531	36 F2 N11	0	-0.017	0.003	7.518e-6	1.806e-6	-2.434e-4
2532	36 F2 N12	-0.005	-0.012	0.002	5.603e-6	1.739e-6	1.939e-4
2533	36 F2 N13	0.004	-0.011	0.003	8.023e-6	1.739e-6	-1.805e-4
2534	36 F1 N1	-0.002	-0.006	0	1.152e-4	9.486e-7	7.179e-6
2535	36 F1 N2	-0.001	-0.009	0	-1.024e-4	9.486e-7	4.96e-6
2536	36 F1 N3	0	-0.007	0.001	1.798e-4	9.486e-7	4.008e-6

Permits: BNR21-0246, ELEC21-0856, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Had 1007e-4  
 Building official  
 1.066e-4



**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2537	36 F1 N4	0	-0.006	0.001	-1.354e-4	9.487e-7	2.365e-6
2538	36 F1 N5	-0.002	-0.004	0.002	7.285e-5	9.488e-7	7.329e-6
2539	36 F1 N6	-0.001	-0.005	0.002	8.675e-6	9.487e-7	8.09e-6
2540	36 F1 N7	-0.001	-0.007	0.002	-5.638e-5	9.488e-7	8.09e-6
2541	36 F1 N8	-0.001	-0.003	0.001	5.017e-6	9.492e-7	1.057e-4
2542	36 F1 N9	-0.001	-0.003	0.002	7.138e-6	9.493e-7	1.057e-4
2543	36 F1 N10	-0.001	-0.011	0.001	5.104e-6	9.496e-7	7.24e-6
2544	36 F1 N11	-0.001	-0.014	0.002	7.305e-6	9.497e-7	7.24e-6
2545	36 F1 N12	0	-0.01	0.001	5.476e-6	9.498e-7	4.424e-4
2546	36 F1 N13	0	-0.009	0.002	7.921e-6	9.498e-7	4.424e-4
2547	36 N142	0	0	0	-1.338e-5	1.101e-8	6.009e-6
2548	36 N143	0	0	0	1.621e-5	1.101e-8	5.815e-6
2549	36 N144	0	0	0	-1.983e-5	0	3.196e-6
2550	36 N145	0	0	0	1.735e-5	0	3.082e-6
2551	36 N146	0	0	0	-4.636e-6	1.469e-8	5.715e-6
2552	36 N147	0	0	0	2.535e-6	1.613e-8	5.487e-6
2553	36 N148	0	0	0	1.051e-5	1.468e-8	5.259e-6
2554	36 N149	0	0	0	5.882e-6	1.573e-8	-1.336e-5
2555	36 N150	0	0	0	6.131e-6	1.573e-8	1.518e-5
2556	36 N151	0	0	0	5.824e-6	1.515e-8	-5.657e-5
2557	36 N152	0	0	0	6.061e-6	1.515e-8	5.793e-5
2558	36 N153	0	0	0	6.384e-6	1.731e-8	-7.246e-5
2559	36 N154	0	0	0	6.694e-6	1.731e-8	7.836e-5
2560	36 N60	0	0	0	6.688e-6	1.731e-8	8.925e-5
2561	36 N61	0	0	0	6.393e-6	1.731e-8	-8.361e-5
2562	36 N62	0	-0.001	0	6.056e-6	1.515e-8	6.704e-5
2563	36 N63	0	0	0	5.832e-6	1.515e-8	-6.554e-5
2564	36 N64	0	0	0	6.124e-6	1.573e-8	1.749e-5
2565	36 N65	0	0	0	5.89e-6	1.573e-8	-1.556e-5
2566	36 N66	0	0	0	2.162e-5	0	3.088e-6
2567	36 N67	0	0	0	-2.373e-5	0	3.19e-6
2568	36 N68	0	0	0	1.906e-5	1.101e-8	5.823e-6
2569	36 N69	0	0	0	-1.624e-5	1.101e-8	6.002e-6
2570	36 N70	0	0	0	1.14e-5	1.468e-8	5.271e-6
2571	36 N71	0	0	0	2.386e-6	1.613e-8	5.488e-6
2572	36 N72	0	0	0	-5.641e-6	1.469e-8	5.704e-6
2573	36 N53	0	0	0	0	0	0
2574	36 N54	0	0	0	0	0	0
2575	36 N55	0	0	0	0	0	0
2576	36 N56	0	0	0	0	0	0
2577	36 N57	0	0	0	0	0	0
2578	36 N58	-0.001	0	0.001	0	9.496e-7	0
2579	36 N59	-0.001	0	0.001	0	9.495e-7	0
2580	36 N60A	0	0	0.001	0	9.494e-7	0
2581	36 N61A	-0.001	0	0.002	0	9.493e-7	0
2582	36 N62A	-0.001	0	0.001	0	9.491e-7	0
2583	36 N63A	0	0	0	0	0	0
2584	36 N64A	0	0	0	0	0	0
2585	36 N65A	0	0	0	0	0	0
2586	36 N66A	0	0	0	0	0	0
2587	36 N67A	0	0	0	0	0	0
2588	36 N68A	-0.001	0	0.001	0	9.491e-7	0
2589	36 N69A	0	0	0.001	0	9.491e-7	0
2590	36 N70A	-0.001	0	0.001	0	9.49e-7	0
2591	36 N71A	-0.001	0	0.001	0	9.49e-7	0
2592	36 N72A	-0.001	0	0.001	0	9.489e-7	0
2593	37 F2 N1	0	0	0	0	0	0
2594	37 F2 N2	0	0	0	0	0	0

Permits: BNR21-0246, ELEC21-0556, ME21-0514, PLB21-0900

**County of Orange Public Works**  
**OC Development Services**  
**APPROVED**

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Hard Hat  
 Builders Official

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2595	37 F2 N3	0	0	0	0	0	0
2596	37 F2 N4	0	0	0	0	0	0
2597	37 F2 N5	0	0	0	0	0	0
2598	37 F2 N6	0	0	0	0	0	0
2599	37 F2 N7	0	0	0	0	0	0
2600	37 F2 N8	0	0	0	0	0	0
2601	37 F2 N9	0	0	0	0	0	0
2602	37 F2 N10	0	0	0	0	0	0
2603	37 F2 N11	0	0	0	0	0	0
2604	37 F2 N12	0	0	0	0	0	0
2605	37 F2 N13	0	0	0	0	0	0
2606	37 F1 N1	0	0	0	0	0	0
2607	37 F1 N2	0	0	0	0	0	0
2608	37 F1 N3	0	0	0	0	0	0
2609	37 F1 N4	0	0	0	0	0	0
2610	37 F1 N5	0	0	0	0	0	0
2611	37 F1 N6	0	0	0	0	0	0
2612	37 F1 N7	0	0	0	0	0	0
2613	37 F1 N8	0	0	0	0	0	0
2614	37 F1 N9	0	0	0	0	0	0
2615	37 F1 N10	0	0	0	0	0	0
2616	37 F1 N11	0	0	0	0	0	0
2617	37 F1 N12	0	0	0	0	0	0
2618	37 F1 N13	0	0	0	0	0	0
2619	37 N142	0	0	0	0	0	0
2620	37 N143	0	0	0	0	0	0
2621	37 N144	0	0	0	0	0	0
2622	37 N145	0	0	0	0	0	0
2623	37 N146	0	0	0	0	0	0
2624	37 N147	0	0	0	0	0	0
2625	37 N148	0	0	0	0	0	0
2626	37 N149	0	0	0	0	0	0
2627	37 N150	0	0	0	0	0	0
2628	37 N151	0	0	0	0	0	0
2629	37 N152	0	0	0	0	0	0
2630	37 N153	0	0	0	0	0	0
2631	37 N154	0	0	0	0	0	0
2632	37 N60	0	0	0	0	0	0
2633	37 N61	0	0	0	0	0	0
2634	37 N62	0	0	0	0	0	0
2635	37 N63	0	0	0	0	0	0
2636	37 N64	0	0	0	0	0	0
2637	37 N65	0	0	0	0	0	0
2638	37 N66	0	0	0	0	0	0
2639	37 N67	0	0	0	0	0	0
2640	37 N68	0	0	0	0	0	0
2641	37 N69	0	0	0	0	0	0
2642	37 N70	0	0	0	0	0	0
2643	37 N71	0	0	0	0	0	0
2644	37 N72	0	0	0	0	0	0
2645	37 N53	0	0	0	0	0	0
2646	37 N54	0	0	0	0	0	0
2647	37 N55	0	0	0	0	0	0
2648	37 N56	0	0	0	0	0	0
2649	37 N57	0	0	0	0	0	0
2650	37 N58	0	0	0	0	0	0
2651	37 N59	0	0	0	0	0	0
2652	37 N60A	0	0	0	0	0	0

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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**Node Displacements (Continued)**

Building&Safety: OCPWArvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]	
2653	37	N61A	0	0	0	0	0	
2654	37	N62A	0	0	0	0	0	
2655	37	N63A	0	0	0	0	0	
2656	37	N64A	0	0	0	0	0	
2657	37	N65A	0	0	0	0	0	
2658	37	N66A	0	0	0	0	0	
2659	37	N67A	0	0	0	0	0	
2660	37	N68A	0	0	0	0	0	
2661	37	N69A	0	0	0	0	0	
2662	37	N70A	0	0	0	0	0	
2663	37	N71A	0	0	0	0	0	
2664	37	N72A	0	0	0	0	0	
2665	38	F2 N1	0.02	0.004	1.152	1.907e-3	-3.893e-5	-5.355e-5
2666	38	F2 N2	0.005	-0.004	1.152	1.906e-3	-3.895e-5	-8.426e-6
2667	38	F2 N3	-0.006	0.007	1.148	1.82e-3	-4.027e-5	1.273e-5
2668	38	F2 N4	-0.018	-0.007	1.146	1.81e-3	-4.027e-5	4.705e-5
2669	38	F2 N5	0.021	0.006	1.102	1.688e-3	-4.004e-5	-5.777e-5
2670	38	F2 N6	0.009	0	1.103	1.595e-3	-3.838e-5	-2.193e-5
2671	38	F2 N7	-0.003	-0.006	1.106	1.717e-3	-4.07e-5	1.509e-5
2672	38	F2 N8	0.013	0	1.217	3.03e-3	-3.804e-5	-1.333e-5
2673	38	F2 N9	0.013	0	1.202	2.986e-3	-3.802e-5	-1.333e-5
2674	38	F2 N10	-0.001	0	1.216	3.03e-3	-3.761e-5	1.135e-6
2675	38	F2 N11	-0.001	0	1.202	2.986e-3	-3.76e-5	1.135e-6
2676	38	F2 N12	-0.013	0	1.213	3.021e-3	-3.704e-5	1.444e-5
2677	38	F2 N13	-0.013	0	1.196	2.971e-3	-3.704e-5	1.444e-5
2678	38	F1 N1	0.011	0.004	0.715	2.798e-3	-2.044e-5	-5.48e-5
2679	38	F1 N2	0.004	-0.004	0.715	2.798e-3	-2.048e-5	-7.576e-6
2680	38	F1 N3	-0.004	0.006	0.708	2.699e-3	-2.057e-5	1.181e-5
2681	38	F1 N4	-0.01	-0.006	0.708	2.694e-3	-2.059e-5	4.746e-5
2682	38	F1 N5	0.011	0.005	0.695	2.609e-3	-2.08e-5	-5.967e-5
2683	38	F1 N6	0.005	0	0.695	2.5e-3	-2.083e-5	-2.201e-5
2684	38	F1 N7	0	-0.005	0.695	2.624e-3	-2.085e-5	1.624e-5
2685	38	F1 N8	0.01	0	0.707	3.031e-3	-2.081e-5	-2.9e-5
2686	38	F1 N9	0.01	0	0.7	2.985e-3	-2.078e-5	-2.9e-5
2687	38	F1 N10	0	0	0.707	3.031e-3	-2.069e-5	2.47e-6
2688	38	F1 N11	0	0	0.7	2.985e-3	-2.066e-5	2.47e-6
2689	38	F1 N12	-0.01	0	0.705	3.022e-3	-2.063e-5	2.954e-5
2690	38	F1 N13	-0.01	0	0.697	2.97e-3	-2.063e-5	2.954e-5
2691	38	N142	0	0	0	1.247e-3	-2.403e-7	-3.363e-5
2692	38	N143	0	0	0	1.247e-3	-2.405e-7	-2.94e-5
2693	38	N144	0	0	0	1.048e-3	-1.917e-7	2.795e-5
2694	38	N145	0	0	0	1.049e-3	-1.918e-7	3.049e-5
2695	38	N146	0	0	0	1.091e-3	-3.28e-7	-2.729e-5
2696	38	N147	0	0	0	9.514e-4	-3.58e-7	-2.221e-5
2697	38	N148	0	0	0	1.091e-3	-3.245e-7	-1.715e-5
2698	38	N149	0	0	0	3.011e-3	-3.495e-7	-2.23e-5
2699	38	N150	0	0	0	3.005e-3	-3.492e-7	-2.23e-5
2700	38	N151	0	0	0	3.011e-3	-3.464e-7	1.899e-6
2701	38	N152	0	0	0	3.005e-3	-3.462e-7	1.899e-6
2702	38	N153	0	0	0	2.999e-3	-3.826e-7	2.329e-5
2703	38	N154	0	0	0	2.992e-3	-3.826e-7	2.329e-5
2704	38	N60	0	0	0.054	2.992e-3	-3.826e-7	2.27e-5
2705	38	N61	0	0	0.054	2.999e-3	-3.826e-7	2.27e-5
2706	38	N62	0	0	0.054	3.005e-3	-3.462e-7	1.844e-6
2707	38	N63	0	0	0.054	3.01e-3	-3.464e-7	1.844e-6
2708	38	N64	0	0	0.054	3.005e-3	-3.492e-7	-2.165e-5
2709	38	N65	0	0	0.054	3.01e-3	-3.495e-7	-2.165e-5
2710	38	N66	0	0	0.021	9.995e-4	-1.918e-7	3.034e-5

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2711	38 N67	0	0	0.021	9.989e-4	-1.917e-7	2.81e-5
2712	38 N68	0	0	0.025	1.203e-3	-2.405e-7	-2.956e-5
2713	38 N69	0	0	0.025	1.203e-3	-2.403e-7	0
2714	38 N70	0	0	0.021	1.056e-3	-3.245e-7	0
2715	38 N71	0	0	0.021	8.836e-4	-3.58e-7	-2.221e-5
2716	38 N72	0	0	0.021	1.056e-3	-3.28e-7	0
2717	38 N53	0	0	0	0	0	0
2718	38 N54	0	0	0	0	0	0
2719	38 N55	0	0	0	0	0	0
2720	38 N56	0	0	0	0	0	0
2721	38 N57	0	0	0	0	0	0
2722	38 N58	0	0	0.704	0	-2.063e-5	0
2723	38 N59	0.004	0	0.704	0	-2.061e-5	0
2724	38 N60A	-0.004	0	0.704	0	-2.056e-5	0
2725	38 N61A	0	0	0.7	0	-2.054e-5	0
2726	38 N62A	0	0	0.707	0	-2.05e-5	0
2727	38 N63A	0	0	0	0	0	0
2728	38 N64A	0	0	0	0	0	0
2729	38 N65A	0	0	0	0	0	0
2730	38 N66A	0	0	0	0	0	0
2731	38 N67A	0	0	0	0	0	0
2732	38 N68A	0	0	0.704	0	-2.047e-5	0
2733	38 N69A	-0.002	0	0.704	0	-2.046e-5	0
2734	38 N70A	0	0	0.704	0	-2.044e-5	0
2735	38 N71A	0	0	0.705	0	-2.043e-5	0
2736	38 N72A	0	0	0.702	0	-2.042e-5	0
2737	39 F2 N1	1.225	0	-0.043	-4.792e-5	1.039e-4	-3.038e-3
2738	39 F2 N2	1.266	0	-0.043	-4.792e-5	1.039e-4	-3.158e-3
2739	39 F2 N3	1.296	0	-0.02	-1.831e-5	1.046e-4	-3.217e-3
2740	39 F2 N4	1.325	0	-0.02	-1.831e-5	1.046e-4	-3.303e-3
2741	39 F2 N5	1.223	0	0.031	2.794e-5	1.072e-4	-3.025e-3
2742	39 F2 N6	1.256	0	0.031	2.671e-5	1.019e-4	-3.123e-3
2743	39 F2 N7	1.288	0	0.031	2.796e-5	1.072e-4	-3.222e-3
2744	39 F2 N8	1.125	-0.005	-0.023	-6.665e-5	9.973e-5	-1.765e-3
2745	39 F2 N9	1.123	0.005	0.016	4.895e-5	9.972e-5	-1.752e-3
2746	39 F2 N10	1.203	-0.006	-0.023	-6.674e-5	9.959e-5	-2.022e-3
2747	39 F2 N11	1.201	0.006	0.016	4.873e-5	9.958e-5	-2.008e-3
2748	39 F2 N12	1.203	-0.004	-0.013	-4.28e-5	9.815e-5	-1.922e-3
2749	39 F2 N13	1.205	0.004	0.032	8.971e-5	9.812e-5	-1.936e-3
2750	39 F1 N1	0.715	0	-0.03	-1.018e-4	5.458e-5	-3.035e-3
2751	39 F1 N2	0.735	0	-0.03	-1.018e-4	5.456e-5	-3.161e-3
2752	39 F1 N3	0.756	0	-0.014	-4.472e-5	5.458e-5	-3.213e-3
2753	39 F1 N4	0.77	0	-0.014	-4.472e-5	5.461e-5	-3.306e-3
2754	39 F1 N5	0.715	0	0.022	7.025e-5	5.472e-5	-3.023e-3
2755	39 F1 N6	0.731	0	0.022	6.712e-5	5.472e-5	-3.123e-3
2756	39 F1 N7	0.747	0	0.022	7.028e-5	5.473e-5	-3.224e-3
2757	39 F1 N8	0.719	-0.004	-0.011	-6.884e-5	5.476e-5	-2.539e-3
2758	39 F1 N9	0.719	0.004	0.008	5.216e-5	5.474e-5	-2.533e-3
2759	39 F1 N10	0.747	-0.005	-0.011	-6.884e-5	5.468e-5	-2.734e-3
2760	39 F1 N11	0.747	0.005	0.008	5.2e-5	5.466e-5	-2.727e-3
2761	39 F1 N12	0.77	-0.004	-0.005	-4.486e-5	5.455e-5	-2.754e-3
2762	39 F1 N13	0.77	0.004	0.017	9.277e-5	5.448e-5	-2.761e-3
2763	39 N142	0	0	0	-5.635e-5	6.379e-7	-3.093e-3
2764	39 N143	0	0	0	-5.635e-5	6.378e-7	-3.104e-3
2765	39 N144	0	0	0	-2.278e-5	5.052e-7	-3.256e-3
2766	39 N145	0	0	0	-2.278e-5	5.053e-7	-3.263e-3
2767	39 N146	0	0	0	3.76e-5	8.555e-7	-3.11e-3
2768	39 N147	0	0	0	3.272e-5	9.397e-7	-3.124e-3

Estimate: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900  
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 Hadi Tabatabaee  
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**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2769	39 N148	0	0	0	3.765e-5	8.572e-7	-3.137e-3
2770	39 N149	0	0	0	-1.479e-5	9.172e-7	-1.56e-3
2771	39 N150	0	0	0	-2.394e-7	9.171e-7	-1.56e-3
2772	39 N151	0	0	0	-1.474e-5	9.158e-7	-1.56e-3
2773	39 N152	0	0	0	-2.174e-7	9.156e-7	-1.601e-3
2774	39 N153	0	0	0	1.562e-5	1.014e-6	-1.56e-3
2775	39 N154	0	0	0	3.387e-5	1.013e-6	-1.56e-3
2776	39 N60	0.034	0	0	3.338e-5	1.013e-6	-1.56e-3
2777	39 N61	0.034	0	0	1.609e-5	1.014e-6	-1.56e-3
2778	39 N62	0.031	0	0	-6.798e-7	9.156e-7	-1.550e-3
2779	39 N63	0.031	0	0	-1.431e-5	9.158e-7	-1.557e-3
2780	39 N64	0.03	0	0	-7.009e-7	9.171e-7	-1.519e-3
2781	39 N65	0.03	0	0	-1.435e-5	9.172e-7	-1.518e-3
2782	39 N66	0.059	0	0	-2.164e-5	5.053e-7	-3.263e-3
2783	39 N67	0.058	0	0	-2.164e-5	5.052e-7	-3.257e-3
2784	39 N68	0.056	0	-0.001	-5.422e-5	6.378e-7	-3.103e-3
2785	39 N69	0.056	0	-0.001	-5.422e-5	6.379e-7	-3.093e-3
2786	39 N70	0.056	0	0	3.637e-5	8.572e-7	-3.136e-3
2787	39 N71	0.056	0	0	3.026e-5	9.397e-7	-3.124e-3
2788	39 N72	0.056	0	0	3.63e-5	8.555e-7	-3.111e-3
2789	39 N53	0	0	0	0	0	0
2790	39 N54	0	0	0	0	0	0
2791	39 N55	0	0	0	0	0	0
2792	39 N56	0	0	0	0	0	0
2793	39 N57	0	0	0	0	0	0
2794	39 N58	0.746	0	-0.002	0	5.443e-5	0
2795	39 N59	0.735	0	-0.002	0	5.447e-5	0
2796	39 N60A	0.756	0	-0.002	0	5.452e-5	0
2797	39 N61A	0.746	0	0.007	0	5.452e-5	0
2798	39 N62A	0.746	0	-0.01	0	5.456e-5	0
2799	39 N63A	0	0	0	0	0	0
2800	39 N64A	0	0	0	0	0	0
2801	39 N65A	0	0	0	0	0	0
2802	39 N66A	0	0	0	0	0	0
2803	39 N67A	0	0	0	0	0	0
2804	39 N68A	0.747	0	0	0	5.458e-5	0
2805	39 N69A	0.751	0	0	0	5.459e-5	0
2806	39 N70A	0.743	0	0	0	5.46e-5	0
2807	39 N71A	0.747	0	-0.004	0	5.461e-5	0
2808	39 N72A	0.747	0	0.002	0	5.462e-5	0
2809	40 F2_N1	0	0	0	0	0	0
2810	40 F2_N2	0	0	0	0	0	0
2811	40 F2_N3	0	0	0	0	0	0
2812	40 F2_N4	0	0	0	0	0	0
2813	40 F2_N5	0	0	0	0	0	0
2814	40 F2_N6	0	0	0	0	0	0
2815	40 F2_N7	0	0	0	0	0	0
2816	40 F2_N8	0	0	0	0	0	0
2817	40 F2_N9	0	0	0	0	0	0
2818	40 F2_N10	0	0	0	0	0	0
2819	40 F2_N11	0	0	0	0	0	0
2820	40 F2_N12	0	0	0	0	0	0
2821	40 F2_N13	0	0	0	0	0	0
2822	40 F1_N1	0	0	0	0	0	0
2823	40 F1_N2	0	0	0	0	0	0
2824	40 F1_N3	0	0	0	0	0	0
2825	40 F1_N4	0	0	0	0	0	0
2826	40 F1_N5	0	0	0	0	0	0

Plans: BNR21-0246, ELEC21-0556, ME21-0514, PLB21-0900  
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 Had 1.550e-3  
 BUILDING SPECIAL

**Node Displacements (Continued)**

Building&Safety: OCPWazarvandB 12/22/2025

LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
2827	40 F1 N6	0	0	0	0	0	0
2828	40 F1 N7	0	0	0	0	0	0
2829	40 F1 N8	0	0	0	0	0	0
2830	40 F1 N9	0	0	0	0	0	0
2831	40 F1 N10	0	0	0	0	0	0
2832	40 F1 N11	0	0	0	0	0	0
2833	40 F1 N12	0	0	0	0	0	0
2834	40 F1 N13	0	0	0	0	0	0
2835	40 N142	0	0	0	0	0	0
2836	40 N143	0	0	0	0	0	0
2837	40 N144	0	0	0	0	0	0
2838	40 N145	0	0	0	0	0	0
2839	40 N146	0	0	0	0	0	0
2840	40 N147	0	0	0	0	0	0
2841	40 N148	0	0	0	0	0	0
2842	40 N149	0	0	0	0	0	0
2843	40 N150	0	0	0	0	0	0
2844	40 N151	0	0	0	0	0	0
2845	40 N152	0	0	0	0	0	0
2846	40 N153	0	0	0	0	0	0
2847	40 N154	0	0	0	0	0	0
2848	40 N60	0	0	0	0	0	0
2849	40 N61	0	0	0	0	0	0
2850	40 N62	0	0	0	0	0	0
2851	40 N63	0	0	0	0	0	0
2852	40 N64	0	0	0	0	0	0
2853	40 N65	0	0	0	0	0	0
2854	40 N66	0	0	0	0	0	0
2855	40 N67	0	0	0	0	0	0
2856	40 N68	0	0	0	0	0	0
2857	40 N69	0	0	0	0	0	0
2858	40 N70	0	0	0	0	0	0
2859	40 N71	0	0	0	0	0	0
2860	40 N72	0	0	0	0	0	0
2861	40 N53	0	0	0	0	0	0
2862	40 N54	0	0	0	0	0	0
2863	40 N55	0	0	0	0	0	0
2864	40 N56	0	0	0	0	0	0
2865	40 N57	0	0	0	0	0	0
2866	40 N58	0	0	0	0	0	0
2867	40 N59	0	0	0	0	0	0
2868	40 N60A	0	0	0	0	0	0
2869	40 N61A	0	0	0	0	0	0
2870	40 N62A	0	0	0	0	0	0
2871	40 N63A	0	0	0	0	0	0
2872	40 N64A	0	0	0	0	0	0
2873	40 N65A	0	0	0	0	0	0
2874	40 N66A	0	0	0	0	0	0
2875	40 N67A	0	0	0	0	0	0
2876	40 N68A	0	0	0	0	0	0
2877	40 N69A	0	0	0	0	0	0
2878	40 N70A	0	0	0	0	0	0
2879	40 N71A	0	0	0	0	0	0
2880	40 N72A	0	0	0	0	0	0

Permits: BNR21-0246, ELE21-0850, ME21-0514, PLB21-0900

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Envelope Node Reactions**

Building&Safety: OCPWazarvandB 12/22/2025

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N142	max	0.47	6	163.9	15	60.882	15	0	40	0	0	40
2		min	-0.456	12	-44.023	38	-27.478	38	0	1	0	0	1
3	N143	max	0.657	7	213.29	9	12.162	27	0	40	0	0	40
4		min	-0.658	13	-1.724	39	-60.899	9	0	1	0	0	1
5	N144	max	0.61	6	214.552	15	42.824	15	0	40	0	0	40
6		min	-0.599	12	-69.78	38	-30.746	38	0	1	0	0	1
7	N145	max	0.437	7	196.86	9	25.467	27	0	40	0	0	40
8		min	-0.438	13	-27.952	27	-42.219	9	0	1	0	0	1
9	N146	max	0.391	6	145.995	16	37.33	16	0	40	0	0	40
10		min	-0.408	12	-56.76	38	-21.673	38	0	1	0	0	1
11	N147	max	0.515	7	166.172	3	73.763	16	0	40	0	0	40
12		min	-0.518	13	0	37	-74.051	10	0	1	0	0	1
13	N148	max	0.564	7	202.456	10	14.112	28	0	40	0	0	40
14		min	-0.57	13	-10.363	28	-37.409	10	0	1	0	0	1
15	N149	max	25.975	25	158.505	7	0.309	10	0	40	0	0	40
16		min	-67.882	7	-32.674	25	-0.311	16	0	1	0	0	1
17	N150	max	67.588	13	159.533	13	0.359	9	0	40	0	0	40
18		min	-37.791	39	-62.956	39	-0.369	15	0	1	0	0	1
19	N151	max	27.039	24	299.015	6	0.873	10	0	40	0	0	40
20		min	-53.66	6	-0.065	38	-0.863	16	0	1	0	0	1
21	N152	max	53.072	12	361.156	12	1.188	9	0	40	0	0	40
22		min	-38.087	39	-66.901	39	-1.174	15	0	1	0	0	1
23	N153	max	26.506	24	294.361	6	0.881	10	0	40	0	0	40
24		min	-55.888	6	-0.616	38	-0.867	16	0	1	0	0	1
25	N154	max	56.431	12	303.289	12	0.894	9	0	40	0	0	40
26		min	-37.934	39	-54.08	39	-0.873	15	0	1	0	0	1
27	Totals:	max	227.129	12	2324.636	3	227.129	15					
28		min	-227.129	34	0	38	-227.129	30					

Permits: BNR21-0246, BCE21-0853, MEC21-0514, PLB24-0000

County of Orange - OC Public Works  
 OC Development Services  
 APPROVED

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Hadi O.atabaee  
 BUILDING OFFICIAL

**Envelope Node Displacements**

Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC	
1	F2_N1	max	1.529	7	0.004	38	1.329	9	2.229e-3	9	3.332e-4	6	4.021e-3	13
2		min	-1.537	13	-0.024	15	-1.309	15	-1.974e-3	27	-3.379e-4	12	-3.998e-3	7
3	F2_N2	max	1.522	7	0	39	1.326	9	1.991e-3	21	3.332e-4	6	4.043e-3	13
4		min	-1.53	13	-0.033	9	-1.312	15	-2.178e-3	15	-3.379e-4	12	-4.023e-3	7
5	F2_N3	max	1.541	6	0.007	38	1.291	9	1.875e-3	21	2.932e-4	6	3.964e-3	12
6		min	-1.548	12	-0.03	15	-1.264	15	-1.965e-3	15	-2.976e-4	12	-3.948e-3	6
7	F2_N4	max	1.623	6	0.001	27	1.286	9	1.994e-3	9	2.932e-4	6	4.206e-3	12
8		min	-1.632	12	-0.027	9	-1.266	15	-1.852e-3	27	-2.976e-4	12	-4.18e-3	6
9	F2_N5	max	1.515	7	0.006	38	1.247	10	1.925e-3	10	3.201e-4	6	3.917e-3	13
10		min	-1.523	13	-0.02	16	-1.227	16	-1.728e-3	28	-3.174e-4	12	-3.897e-3	7
11	F2_N6	max	1.504	7	0	40	1.247	10	1.711e-3	10	3.149e-4	6	3.899e-3	13
12		min	-1.512	13	-0.018	2	-1.231	16	-1.671e-3	16	-3.124e-4	12	-3.878e-3	7
13	F2_N7	max	1.53	6	0	40	1.248	10	1.769e-3	22	3.456e-4	6	4.055e-3	12
14		min	-1.537	12	-0.03	10	-1.236	16	-1.916e-3	16	-3.427e-4	12	-4.04e-3	6
15	F2_N8	max	1.304	7	0.002	25	1.416	9	3.629e-3	9	2.918e-4	6	2.144e-3	13
16		min	-1.32	13	-0.016	7	-1.4	15	-3.586e-3	15	-2.911e-4	12	-1.834e-3	19
17	F2_N9	max	1.307	7	0.005	39	1.386	10	3.546e-3	10	2.918e-4	6	1.825e-3	25
18		min	-1.312	13	-0.016	13	-1.37	16	-3.505e-3	16	-2.911e-4	12	-2.108e-3	7
19	F2_N10	max	1.333	6	0	38	1.456	9	3.92e-3	9	3.06e-4	6	2.701e-3	12
20		min	-1.363	12	-0.036	6	-1.44	15	-3.878e-3	15	-3.049e-4	12	-2.022e-3	39
21	F2_N11	max	1.347	6	0.006	39	1.438	10	3.923e-3	10	3.06e-4	6	1.959e-3	24
22		min	-1.345	12	-0.047	2	-1.422	16	-3.879e-3	16	-3.049e-4	12	-2.633e-3	6
23	F2_N12	max	1.392	6	0	38	1.423	9	3.778e-3	9	2.977e-4	6	2.51e-3	12
24		min	-1.422	12	-0.035	6	-1.408	15	-3.74e-3	15	-2.987e-4	12	-1.964e-3	18
25	F2_N13	max	1.416	6	0.004	39	1.418	10	3.716e-3	10	2.976e-4	6	1.991e-3	24
26		min	-1.402	12	-0.035	12	-1.402	16	-3.676e-3	16	-2.987e-4	12	-2.484e-3	6
27	F1_N1	max	0.865	7	0.004	38	0.846	9	3.319e-3	9	1.566e-4	6	3.87e-3	13

**Envelope Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC	
28		min	-0.87	13	-0.019	15	-0.837	15	-3.011e-3	27	-1.565e-4	6	-3.848e-3	7
29	F1_N2	max	0.857	7	0	39	0.846	9	3.029e-3	21	1.566e-4	6	3.846e-3	13
30		min	-0.862	13	-0.027	9	-0.837	15	-3.269e-3	15	-1.565e-4	6	-3.846e-3	13
31	F1_N3	max	0.884	6	0.006	38	0.815	9	3.467e-3	9	1.566e-4	6	3.846e-3	13
32		min	-0.889	12	-0.026	15	-0.806	15	-2.7e-3	27	-1.565e-4	6	-3.83e-3	6
33	F1_N4	max	0.926	6	0	27	0.815	9	2.74e-3	21	1.566e-4	6	3.846e-3	13
34		min	-0.93	12	-0.023	9	-0.806	15	-3.328e-3	15	-1.565e-4	6	-3.846e-3	13
35	F1_N5	max	0.865	7	0.005	38	0.806	10	2.989e-3	10	1.567e-4	6	3.846e-3	13
36		min	-0.87	13	-0.016	16	-0.797	16	-2.776e-3	28	-1.566e-4	6	-3.846e-3	13
37	F1_N6	max	0.859	7	0	40	0.806	10	2.755e-3	10	1.567e-4	6	3.846e-3	13
38		min	-0.863	13	-0.014	2	-0.797	16	-2.713e-3	16	-1.566e-4	6	-3.846e-3	13
39	F1_N7	max	0.859	6	0	40	0.806	10	2.804e-3	22	1.567e-4	6	3.912e-3	12
40		min	-0.864	12	-0.025	10	-0.797	16	-2.961e-3	16	-1.566e-4	6	-3.894e-3	6
41	F1_N8	max	0.864	7	0.002	25	0.81	9	3.561e-3	9	1.567e-4	6	3.122e-3	13
42		min	-0.868	13	-0.013	7	-0.801	15	-3.521e-3	15	-1.566e-4	6	-2.735e-3	19
43	F1_N9	max	0.864	7	0.004	39	0.794	10	3.474e-3	10	1.567e-4	6	2.737e-3	25
44		min	-0.868	13	-0.013	13	-0.785	16	-3.434e-3	16	-1.566e-4	6	-3.068e-3	7
45	F1_N10	max	0.859	6	0	38	0.81	9	3.704e-3	9	1.567e-4	6	3.738e-3	12
46		min	-0.864	12	-0.03	6	-0.801	15	-3.664e-3	15	-1.566e-4	6	-2.734e-3	39
47	F1_N11	max	0.859	6	0.005	39	0.794	10	3.652e-3	10	1.567e-4	6	2.721e-3	24
48		min	-0.864	12	-0.038	2	-0.785	16	-3.612e-3	16	-1.565e-4	6	-3.676e-3	6
49	F1_N12	max	0.926	6	0	38	0.798	9	3.606e-3	9	1.566e-4	6	4.228e-3	12
50		min	-0.93	12	-0.029	6	-0.789	15	-3.568e-3	15	-1.564e-4	6	-2.754e-3	39
51	F1_N13	max	0.926	6	0.004	39	0.801	10	3.575e-3	10	1.565e-4	6	2.726e-3	24
52		min	-0.93	12	-0.03	12	-0.793	16	-3.536e-3	16	-1.564e-4	6	-4.239e-3	6
53	N142	max	0	12	0	38	0	38	2.035e-3	9	1.823e-6	18	3.634e-3	13
54		min	0	6	0	15	0	15	-1.675e-3	27	-1.847e-6	24	-3.614e-3	7
55	N143	max	0	13	0	39	0	9	1.681e-3	21	1.823e-6	18	3.626e-3	13
56		min	0	7	0	9	0	27	-2.018e-3	15	-1.847e-6	24	-3.606e-3	7
57	N144	max	0	12	0	38	0	38	1.563e-3	9	1.533e-6	6	3.837e-3	12
58		min	0	6	0	15	0	15	-1.462e-3	15	-1.55e-6	12	-3.817e-3	6
59	N145	max	0	13	0	27	0	9	1.459e-3	9	1.533e-6	6	3.856e-3	12
60		min	0	7	0	9	0	27	-1.567e-3	15	-1.551e-6	12	-3.837e-3	6
61	N146	max	0	12	0	38	0	38	1.691e-3	10	2.41e-6	18	3.652e-3	13
62		min	0	6	0	16	0	16	-1.475e-3	28	-2.413e-6	24	-3.632e-3	7
63	N147	max	0	13	0	40	0	10	1.418e-3	10	2.696e-6	18	3.645e-3	13
64		min	0	7	0	2	0	16	-1.402e-3	16	-2.703e-6	24	-3.625e-3	7
65	N148	max	0	13	0	28	0	10	1.479e-3	22	2.32e-6	18	3.636e-3	13
66		min	0	7	0	10	0	28	-1.675e-3	16	-2.326e-6	24	-3.616e-3	7
67	N149	max	0	7	0	25	0	16	3.369e-3	9	2.782e-6	6	2.413e-3	13
68		min	0	25	0	7	0	10	-3.332e-3	15	-2.781e-6	12	-2.155e-3	19
69	N150	max	0	39	0	39	0	15	3.342e-3	9	2.781e-6	6	2.157e-3	25
70		min	0	13	0	13	0	9	-3.304e-3	15	-2.781e-6	12	-2.41e-3	7
71	N151	max	0	6	0	38	0	16	3.296e-3	21	2.711e-6	18	2.284e-3	12
72		min	0	24	0	6	0	10	-3.284e-3	27	-2.728e-6	24	-2.178e-3	6
73	N152	max	0	39	0	39	0	15	3.269e-3	21	2.71e-6	18	2.183e-3	12
74		min	0	12	0	12	0	9	-3.256e-3	27	-2.728e-6	24	-2.281e-3	6
75	N153	max	0	6	0	38	0	16	3.314e-3	10	3.018e-6	18	2.617e-3	12
76		min	0	24	0	6	0	10	-3.276e-3	16	-3.034e-6	24	-2.51e-3	6
77	N154	max	0	39	0	39	0	15	3.33e-3	10	3.017e-6	18	2.528e-3	12
78		min	0	12	0	12	0	9	-3.293e-3	16	-3.033e-6	24	-2.597e-3	6
79	N60	max	0.048	6	0	39	0.06	10	3.33e-3	10	3.017e-6	18	2.463e-3	12
80		min	-0.049	12	-0.003	12	-0.059	16	-3.293e-3	16	-3.033e-6	24	-2.57e-3	6
81	N61	max	0.048	6	0	38	0.06	10	3.315e-3	10	3.018e-6	18	2.589e-3	12
82		min	-0.048	12	-0.003	6	-0.059	16	-3.277e-3	16	-3.034e-6	24	-2.447e-3	6
83	N62	max	0.042	6	0	39	0.059	21	3.27e-3	21	2.71e-6	18	2.122e-3	12
84		min	-0.042	12	-0.003	12	-0.058	27	-3.257e-3	27	-2.728e-6	24	-2.254e-3	6
85	N63	max	0.042	6	0	38	0.059	21	3.295e-3	21	2.711e-6	18	2.256e-3	12

Permits: BMR21-0246, EPE21-0853, MEC21-0514, PLB21-2900  
 County of Orange OC Public Works  
 OC Development Services  
 APPROVED  
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 3/7/2021  
 Builders Official



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

C87  
 5/27/2021  
 11:47:36 PM  
 Checked By : \_\_\_\_\_

**Envelope Node Displacements (Continued)**

Building&Safety: OCPWAZarvandB 12/22/2025

Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC	
86		min	-0.042	12	-0.003	6	-0.059	27	-3.283e-3	27	-2.728e-6	6	-2.117e-3	6
87	N64	max	0.044	7	0	39	0.06	9	3.343e-3	9	2.781e-6	6	2.095e-3	25
88		min	-0.042	13	-0.001	13	-0.059	15	-3.305e-3	15	-2.781e-6	6	-2.095e-3	25
89	N65	max	0.042	7	0	25	0.061	9	3.368e-3	9	2.782e-6	6	2.095e-3	25
90		min	-0.044	13	-0.001	7	-0.06	15	-3.331e-3	15	-2.781e-6	12	-2.093e-3	19
91	N66	max	0.069	6	0	27	0.029	9	1.39e-3	9	1.533e-6	6	3.36e-3	13
92		min	-0.069	12	-0.002	9	-0.03	15	-1.532e-3	15	-1.551e-6	6	-3.36e-3	13
93	N67	max	0.069	6	0	38	0.03	9	1.528e-3	9	1.533e-6	6	3.36e-3	13
94		min	-0.069	12	-0.003	15	-0.03	15	-1.393e-3	15	-1.55e-6	6	-3.36e-3	13
95	N68	max	0.065	7	0	39	0.034	9	1.608e-3	21	1.823e-6	18	3.626e-3	13
96		min	-0.065	13	-0.003	9	-0.036	15	-2.022e-3	15	-1.847e-6	24	-3.606e-3	7
97	N69	max	0.065	7	0	38	0.036	9	2.038e-3	9	1.823e-6	18	3.633e-3	13
98		min	-0.065	13	-0.002	15	-0.034	15	-1.601e-3	27	-1.847e-6	24	-3.613e-3	7
99	N70	max	0.065	7	0	28	0.029	10	1.431e-3	22	2.32e-6	18	3.637e-3	13
100		min	-0.065	13	-0.003	10	-0.031	16	-1.664e-3	16	-2.326e-6	24	-3.617e-3	7
101	N71	max	0.065	7	0	40	0.029	10	1.344e-3	10	2.696e-6	18	3.645e-3	13
102		min	-0.065	13	-0.001	2	-0.029	16	-1.328e-3	16	-2.703e-6	24	-3.625e-3	7
103	N72	max	0.065	7	0	38	0.031	10	1.679e-3	10	2.41e-6	18	3.651e-3	13
104		min	-0.066	13	-0.002	16	-0.029	16	-1.427e-3	28	-2.413e-6	24	-3.631e-3	7
105	N53	max	0	40	0	40	0	40	0	40	0	40	0	40
106		min	0	1	0	1	0	1	0	1	0	1	0	1
107	N54	max	0	40	0	40	0	40	0	40	0	40	0	40
108		min	0	1	0	1	0	1	0	1	0	1	0	1
109	N55	max	0	40	0	40	0	40	0	40	0	40	0	40
110		min	0	1	0	1	0	1	0	1	0	1	0	1
111	N56	max	0	40	0	40	0	40	0	40	0	40	0	40
112		min	0	1	0	1	0	1	0	1	0	1	0	1
113	N57	max	0	40	0	40	0	40	0	40	0	40	0	40
114		min	0	1	0	1	0	1	0	1	0	1	0	1
115	N58	max	0.856	6	0	40	0.791	9	0	40	1.564e-4	6	0	40
116		min	-0.86	12	0	1	-0.782	15	0	1	-1.563e-4	12	0	1
117	N59	max	0.857	7	0	40	0.791	9	0	40	1.565e-4	6	0	40
118		min	-0.862	13	0	1	-0.782	15	0	1	-1.564e-4	12	0	1
119	N60A	max	0.886	6	0	40	0.791	9	0	40	1.566e-4	6	0	40
120		min	-0.891	12	0	1	-0.782	15	0	1	-1.564e-4	12	0	1
121	N61A	max	0.856	6	0	40	0.794	10	0	40	1.566e-4	6	0	40
122		min	-0.86	12	0	1	-0.785	16	0	1	-1.565e-4	12	0	1
123	N62A	max	0.856	6	0	40	0.808	9	0	40	1.566e-4	6	0	40
124		min	-0.86	12	0	1	-0.799	15	0	1	-1.565e-4	12	0	1
125	N63A	max	0	40	0	40	0	40	0	40	0	40	0	40
126		min	0	1	0	1	0	1	0	1	0	1	0	1
127	N64A	max	0	40	0	40	0	40	0	40	0	40	0	40
128		min	0	1	0	1	0	1	0	1	0	1	0	1
129	N65A	max	0	40	0	40	0	40	0	40	0	40	0	40
130		min	0	1	0	1	0	1	0	1	0	1	0	1
131	N66A	max	0	40	0	40	0	40	0	40	0	40	0	40
132		min	0	1	0	1	0	1	0	1	0	1	0	1
133	N67A	max	0	40	0	40	0	40	0	40	0	40	0	40
134		min	0	1	0	1	0	1	0	1	0	1	0	1
135	N68A	max	0.86	6	0	40	0.79	9	0	40	1.566e-4	6	0	40
136		min	-0.864	12	0	1	-0.781	15	0	1	-1.565e-4	12	0	1
137	N69A	max	0.87	6	0	40	0.79	9	0	40	1.567e-4	6	0	40
138		min	-0.875	12	0	1	-0.781	15	0	1	-1.565e-4	12	0	1
139	N70A	max	0.853	7	0	40	0.79	9	0	40	1.567e-4	6	0	40
140		min	-0.858	13	0	1	-0.781	15	0	1	-1.565e-4	12	0	1
141	N71A	max	0.86	6	0	40	0.795	9	0	40	1.567e-4	6	0	40
142		min	-0.864	12	0	1	-0.786	15	0	1	-1.565e-4	12	0	1
143	N72A	max	0.86	6	0	40	0.789	10	0	40	1.567e-4	6	0	40

Permits: BMR21-0246, EPE21-0853, MEC21-0514, PLB21-4900

**County of Orange OC Public Works**

**OC Development Services**

**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is the contractor's responsibility to make any changes or alterations to these plans and specifications in written permission from the County Public Works Department. The County of Orange County. The stamping of these plans and specifications shall be void until it is approved by the County of Orange or State of California.



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Envelope Node Displacements (Continued)**

Building&Safety: OCPWAzarvandB 12/22/2025

Node Label	X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
144	min	-0.864	12	0	1	-0.78	16	0	1	-1.566e-4	0	1

**Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks**

County of Orange - OC Public Works  
 OC Development Services  
 Approved  
 This seal is not to be used on any plans or alterations to these plans without the written permission of the County of Orange. The standards and specifications shall NOT be used as a part of an approval of the Division of any projects drawn County Ordinance 15-2017.

Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Eqn
1	F2 M1	W21X83	0.301	0	15	0.047	0	y	15	141.892	1098	114.375	2.326H1-1b
2	F2 M2	W21X83	0.258	22.167	9	0.054	22.167	y	9	259.898	1098	114.375	2.326H1-1b
3	F2 M3	W21X83	0.23	0	16	0.055	24.167	y	10	218.659	1098	114.375	2.365H1-1b
4	F2 M4	W21X83	0.259	0	16	0.055	0	y	16	217.16	1098	114.375	2.365H1-1b
5	F2 M5	W24X94	0.338	29.25	13	0.066	29.25	y	13	199.872	1246.5	140.625	2.304H1-1b
6	F2 M6	W24X94	0.629	0	6	0.125	0	y	6	199.872	1246.5	140.625	2.287H1-1b
7	F2 M7	W24X94	0.507	0	6	0.113	0	y	6	588.394	1246.5	140.625	2.294H1-1a
8	F1 M1	W24X84	0.462	30	9	0.096	0	y	15	164.553	1111.5	122.25	744.418 2.445H1-1b
9	F1 M2	W24X84	0.512	0	15	0.195	0	y	15	301.406	1111.5	122.25	670.297 2.348H1-1b
10	F1 M3	W24X84	0.368	24.167	10	0.105	24.167	y	10	253.58	1111.5	122.25	840 2.363H1-1b
11	F1 M4	W24X84	0.367	0	16	0.105	0	y	16	251.841	1111.5	122.25	840 2.317H1-1b
12	F1 M5	W27X114	0.399	29.25	13	0.114	26.203	y	13	291.557	1512	184.875	1250.063 2.271H1-1b
13	F1 M6	W27X114	0.588	0	6	0.195	0	y	6	291.557	1512	184.875	1286.25 2.402H1-1b
14	F1 M7	W27X114	0.795	33.5	12	0.237	33.5	y	12	222.272	1512	184.875	1104.255 2.427H1-1b
15	F1 (A-1) L1	W18X211	0.231	1.745	15	0.093	1.396	y	15	1690.35	2803.5	495	1837.5 1.964H1-1b
16	F1 (A-2) L1	W18X211	0.247	1.745	9	0.093	1.396	y	9	1690.35	2803.5	495	1837.5 1.964H1-1b
17	F1 (B-3) L1	W18X211	0.257	1.745	15	0.066	1.396	y	15	1690.35	2803.5	495	1837.5 1.966H1-1b
18	F1 (B-4) L1	W18X211	0.252	1.745	9	0.065	1.396	y	9	1690.35	2803.5	495	1837.5 1.966H1-1b
19	F1 (D-1) L1	W18X211	0.223	1.745	16	0.057	1.396	y	16	1690.35	2803.5	495	1837.5 1.964H1-1b
20	F1 (D-1.8) L1	W18X311	0.231	1.745	31	0.073	1.396	y	10	2598.78	4122	776.25	2827.5 1.963H1-1b
21	F1 (D-2.5) L1	W18X211	0.241	1.745	10	0.057	1.396	y	10	1690.35	2803.5	495	1837.5 1.964H1-1b
22	F1 (B.2-1.3) L1	W18X283	0.203	1.745	34	0.074	1.396	y	7	2334.116	3748.5	693.75	2535 1.966H1-1b
23	F1 (C-1.3) L1	W18X283	0.201	1.745	13	0.074	1.396	y	13	2334.116	3748.5	693.75	2535 1.968H1-1b
24	F1 (B.2-2.5) L1	W18X283	0.24	1.745	6	0.059	1.396	y	6	2334.116	3748.5	693.75	2535 1.971H1-1b
25	F1 (C-2.5) L1	W18X283	0.254	1.745	12	0.059	1.396	y	12	2334.116	3748.5	693.75	2535 1.971H1-1b
26	F1 (B.5-4) L1	W18X283	0.266	19.193	6	0.066	16.75	y	6	2334.116	3748.5	693.75	2535 2.081H1-1b
27	F1 (C.8-4) L1	W18X283	0.269	19.193	12	0.066	16.75	y	12	2334.116	3748.5	693.75	2535 2.084H1-1b

**Envelope AISI S100-16: ASD Member Cold Formed Steel Code Checks**

No Data to Print...

**Envelope AWC NDS-18: ASD Member Wood Code Checks**

No Data to Print...

**Envelope Concrete Beam Design Results**

Member	Shape	UC Max Top Loc[ft]	UC LC UC Max Bot Loc[ft]	UC LC Shear UC Loc[ft]	UC LC Phi*Mnz Top[k-ft]	Phi*Mnz Bot[k-ft]	Phi*Vny[k]
1	M35	CRECT36X30	0.843 1.047 12	0.779 1.047 39	0.491 5.583 12	649.193 545.076	91.074
2	M29	CRECT36X30	0.953 28.336 33	0.799 0.914 39	0.492 5.789 12	545.076 545.076	91.074
3	M30	CRECT36X30	0.955 28.336 34	0.779 0.914 39	0.494 6.094 13	545.076 545.076	91.074
4	M31	CRECT36X30	0.748 21.243 15	0.651 21.243 38	0.496 5.08 9	545.076 545.076	91.074
5	M32	CRECT36X30	0.765 0.938 9	0.601 29.063 38	0.46 3.438 9	545.076 545.076	91.074
6	M33	CRECT36X30	0.711 23.24 16	0.589 0.758 28	0.485 20.714 16	545.076 545.076	91.074
7	M34	CRECT36X30	0.718 1.007 10	0.617 23.411 38	0.49 3.524 10	545.076 545.076	91.074

**Envelope Concrete Column Design Results**

No Data to Print...



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Envelope AA ADM1-15: ASD - BUILDING Member Aluminum Code Checks**

Building&Safety: OCPWazarvandB 12/22/2025

No Data to Print...

Permits: BNR21-0246, ELE21-0853, MEC21-0814, PLB21-0900

**Envelope AISC 14TH (360-10): ASD Member Stainless Steel Code Checks**

No Data to Print...

County of Orange - OC Public Works  
 OC Development Services

**Envelope AISC 15th (360-16): ASD BRB Code Checks**

No Data to Print...

**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

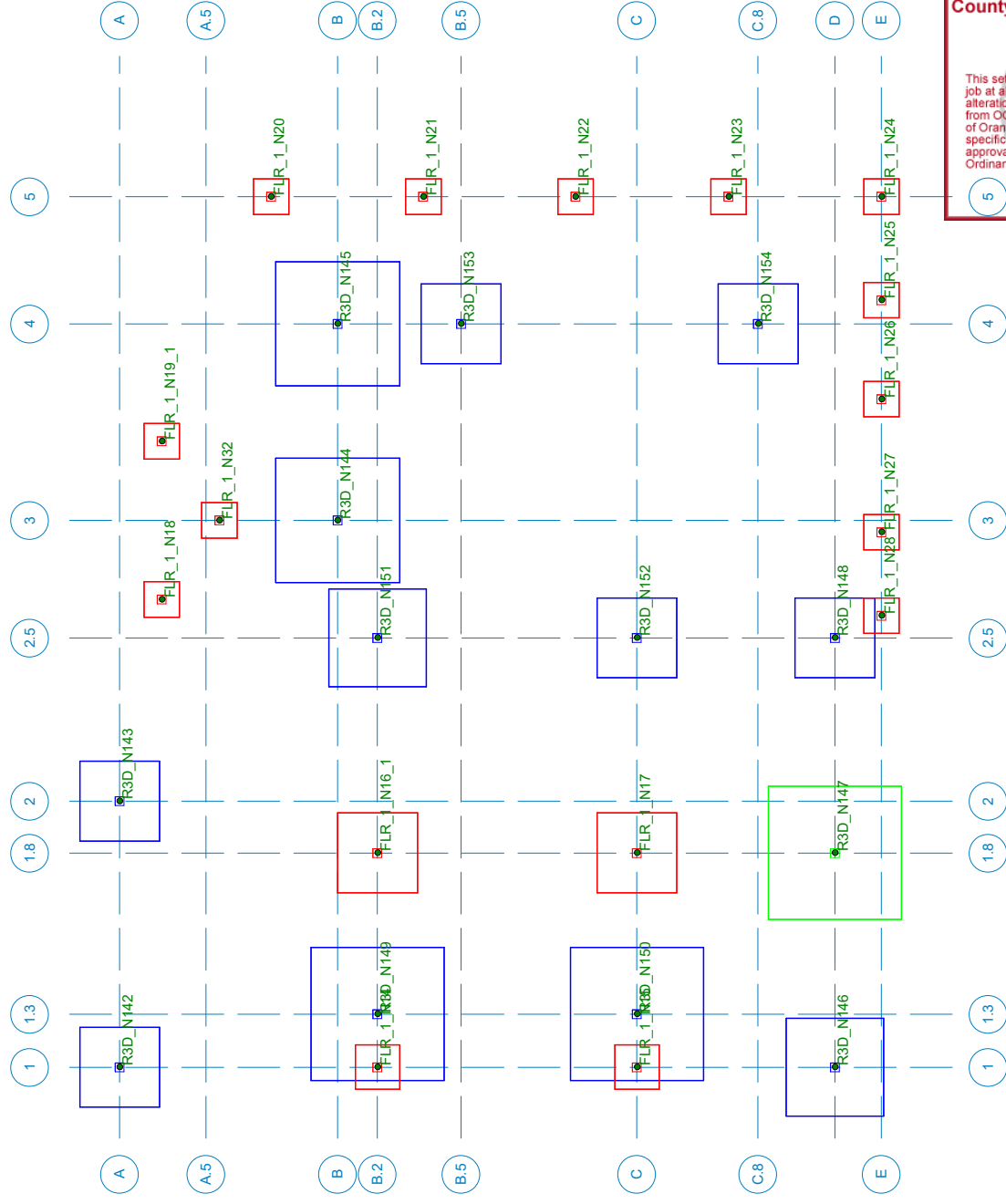
# D FOUNDATION DESIGN

D1



Footling Sets

- Lateral Ext. Ft'g.
- Lateral Int. Ft'g.
- Gravity Ft'g.



Building&Safety: OCPWazarvand 12/22/2025  
Permits: BNR21-0246, ELE21-0851, REC21-0514, PLB21-0900

**County of Orange - OC Public Works**  
OC Development Services  
**APPROVED**  
This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without the written permission from OC Public Works. OC Development Services of Orange County. The stamping of these plans and specifications SHALL NOT be construed to be an approval of the violation of any provisions of any County Ordinance or State law.  
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Results for LC 1, IBC 16-1

KPFF

PD

1900799

Dana Point Harbor\_Bld'g. 12

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2021-05-22 12:12.rfl



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

D2  
 May 28, 2021  
 12:33 AM  
 Checked By: \_\_\_\_\_

### Project Grid Lines

Building & Safety: OCPWA Approved 12/22/2025

Label	Start Z [ft]	End Z [ft]	Start X [ft]	End X [ft]	Start Bubble	End Bubble
1	1	0	-8	92	Yes	Yes
2	1.3	6	-8	92	Yes	Yes
3	1.8	24.167	-8	92	Yes	Yes
4	2	30	-8	92	Yes	Yes
5	2.5	48.417	-8	92	Yes	Yes
6	3	61.667	-8	92	Yes	Yes
7	4	83.833	-8	92	Yes	Yes
8	5	98.167	-8	92	Yes	Yes
9	E	-8	114	0	Yes	Yes
10	D	-8	114	5.25	Yes	Yes
11	C.8	-8	114	13.917	Yes	Yes
12	C	-8	114	27.583	Yes	Yes
13	B.5	-8	114	47.417	Yes	Yes
14	B.2	-8	114	56.833	Yes	Yes
15	B	-8	114	61.333	Yes	Yes
16	A.5	-8	114	76.167	Yes	Yes
17	A	-8	114	85.917	Yes	Yes

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PI B21-0000  
 Yes of Orange - OC Public Works  
 Yes OC Development Services  
 APPROVED  
 The set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services or Orange County. The stamping of these plan specifications SHALL NOT be taken as a permit or be an approval of the violation of any provisions of any County Ordinance or State law.  
 Hadi Tabatabaie  
 BUILDING OFFICIAL

### Soil Definitions

Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?	
1	Default	173	5	None	Yes

### Concrete Properties

Label	E [ksi]	G [ksi]	Nu	Therm (/1E...)	Density[k/ft...]	f'c[ksi]	Lambda	Flex Steel[...]	Shear Steel...	
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3	1	60	60
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3.5	1	60	60
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
4	Conc3000LW	2085	907	0.15	0.6	0.11	3	0.75	60	60
5	Conc3500LW	2252	979	0.15	0.6	0.11	3.5	0.75	60	60
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4	0.75	60	60

### General Design Parameters

Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]	
1	Typical	1	1	3	3

### Footing/Pile Cap Rebar Parameters

Label	Top Bar	Bottom Bar	
1	Typical	#6	#6

### Slab Rebar Parameters

Label	Top Bar	Bottom Bar	Max Top Bar S...	Min Top Bar S...	Max Bot Bar S...	Min Bot Bar S...	Spacing In...	Rebar Options	
1	Typical	#8	#8	18	3	18	3	1	Optimize

### Beam Rebar Parameters

Label	Optimize Rebar	Min Flex Bar	Max Flex Bar	Shear Bar	Legs per Stirr...	Side Cover[in]	Top/Bottom B...	Shear Bar Sp...	
1	Typical	Optimize	#8	#10	#4	2	3	2	12

### General Properties

Label	Min Steel ...	Max Steel...	Material	Design Ru...	Equal Bar Spacing	Group Design	Concrete Bearing	Force Top Bar
1	Lateral Ex...	0.002	0.007	Conc4000...	Typical	Yes	Yes	
2	Lateral Int...	0.002	0.007	Conc4000...	Typical	Yes	Yes	
3	Gravity Ft...	0.002	0.007	Conc4000...	Typical	Yes	Yes	



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Soil Properties**

Building & Safety: OCPW/Asst/eng/B 42/22/2025

	Label	Overburden[ksf]	Passive[k]	Friction Coefficient	Gross/Net
1	Lateral Ext. Ftn'g.	0.1	10.8	0.35	Gross
2	Lateral Int. Ftn'g.	0.1	18	0.35	Gross
3	Gravity Ftn'g.	0.1	0	0	Gross

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PI B21-0900

County of Orange OC Public Works  
 OC Development Services  
**APPROVED**

**Slabs**

Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburden [ksf]	Icr Factor
No Data to Print ...							

**Beams**

Label	Start P...	End Po...	Shape	Material	Design Ru...	Start Rele...	End Relea...	Flexural L...	Shear Lay...	Analysis O...	Icr Fact...
No Data to Print ...											

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 Hadi Tabatabaee  
 BUILDING OFFICIAL

**Point Loads and Moments (Cat 1 : DL)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D N142	Y	56.363
2	R3D N142	Z	-24.001
3	R3D N143	Y	79.554
4	R3D N143	Z	24.088
5	R3D N144	Y	70.994
6	R3D N144	Z	-9.529
7	R3D N145	Y	63.439
8	R3D N145	Z	9.285
9	R3D N146	Y	44.092
10	R3D N146	Z	-11.259
11	R3D N147	Y	77.96
12	R3D N147	Z	-0.006
13	R3D N148	Y	69.719
14	R3D N148	Z	11.423
15	R3D N149	X	20.785
16	R3D N149	Y	48.353
17	R3D N150	X	-20.749
18	R3D N150	Y	49.535
19	R3D N151	X	16.785
20	R3D N151	Y	100.65
21	R3D N152	X	-16.677
22	R3D N152	Y	125.787
23	R3D N153	X	19.031
24	R3D N153	Y	111.609
25	R3D N154	X	-19.175
26	R3D N154	Y	120.678
27	FLR 1 N14	Y	56.707
28	FLR 1 N15	Y	54.08
29	FLR 1 N16 1	Y	84.302
30	FLR 1 N17	Y	68.799
31	FLR 1 N18	Y	27.82
32	FLR 1 N19 1	Y	18.276
33	FLR 1 N20	Y	25.493
34	FLR 1 N21	Y	23.617
35	FLR 1 N22	Y	24.148
36	FLR 1 N23	Y	24.276
37	FLR 1 N24	Y	20.052
38	FLR 1 N25	Y	12.242
39	FLR 1 N26	Y	14.328
40	FLR 1 N27	Y	19.57
41	FLR 1 N28	Y	5.972



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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 May 28, 2021  
 12:33 AM  
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**Point Loads and Moments (Cat 1 : DL) (Continued)**

Building & Safety: OCPWA Approved 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
42	FLR_1_N32	Y	19.532

Permits: BNR21-0246, ELE21-0853, MEC21-0514, R21-0900

**Point Loads and Moments (Cat 2 : LL)**

County of Orange - OC Public Works

OC Development Services  
**APPROVED**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	Y	37.883
2	R3D_N142	Z	1.948
3	R3D_N143	Y	54.74
4	R3D_N143	Z	-1.94
5	R3D_N144	Y	41.543
6	R3D_N144	Z	2.716
7	R3D_N145	Y	34.433
8	R3D_N145	Z	-2.934
9	R3D_N146	Y	23.923
10	R3D_N146	Z	0.756
11	R3D_N147	Y	45.387
12	R3D_N147	Z	0.147
13	R3D_N148	Y	44.684
14	R3D_N148	Z	-0.693
15	R3D_N149	X	-2.108
16	R3D_N149	Y	23.135
17	R3D_N150	X	2.207
18	R3D_N150	Y	22.496
19	R3D_N151	X	-8.598
20	R3D_N151	Y	88.72
21	R3D_N152	X	8.71
22	R3D_N152	Y	115.594
23	R3D_N153	X	-10.594
24	R3D_N153	Y	80.053
25	R3D_N154	X	10.382
26	R3D_N154	Y	76.254
27	FLR_1_N14	Y	52.903
28	FLR_1_N15	Y	45.911
29	FLR_1_N16_1	Y	95.134
30	FLR_1_N17	Y	85.537
31	FLR_1_N18	Y	19.179
32	FLR_1_N19_1	Y	14.503
33	FLR_1_N20	Y	16.029
34	FLR_1_N21	Y	16.497
35	FLR_1_N22	Y	16.95
36	FLR_1_N23	Y	16.667
37	FLR_1_N24	Y	12.331
38	FLR_1_N25	Y	9.178
39	FLR_1_N26	Y	8.627
40	FLR_1_N27	Y	16.366
41	FLR_1_N28	Y	3.505
42	FLR_1_N32	Y	15.805

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**Point Loads and Moments (Cat 26 : ELX)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	-0.037
2	R3D_N142	Y	1.795
3	R3D_N142	Z	-1.381
4	R3D_N143	X	0.037
5	R3D_N143	Y	-1.795
6	R3D_N143	Z	-1.381
7	R3D_N144	X	-0.03



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Point Loads and Moments (Cat 26 : ELX) (Continued)**

Building & Safety: OCPWAzaron@B 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
8	R3D_N144	Y	1.334
9	R3D_N144	Z	-0.758
10	R3D_N145	X	0.03
11	R3D_N145	Y	-1.334
12	R3D_N145	Z	-0.758
13	R3D_N146	X	-0.055
14	R3D_N146	Y	-1.728
15	R3D_N146	Z	0.829
16	R3D_N147	Y	0.01
17	R3D_N147	Z	2.629
18	R3D_N148	X	0.055
19	R3D_N148	Y	1.718
20	R3D_N148	Z	0.82
21	R3D_N149	X	37.864
22	R3D_N149	Y	63.003
23	R3D_N149	Z	-0.052
24	R3D_N150	X	37.717
25	R3D_N150	Y	-63.003
26	R3D_N150	Z	0.052
27	R3D_N151	X	38.265
28	R3D_N151	Y	67.084
29	R3D_N151	Z	-0.052
30	R3D_N152	X	38.104
31	R3D_N152	Y	-67.084
32	R3D_N152	Z	0.052
33	R3D_N153	X	37.513
34	R3D_N153	Y	53.878
35	R3D_N153	Z	-0.056
36	R3D_N154	X	37.666
37	R3D_N154	Y	-53.878
38	R3D_N154	Z	0.056

Permits: BNR21-0246, ELE21-0853, MEC21-0514, R21-0900

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**Point Loads and Moments (Cat 28 : ELZ)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	0.017
2	R3D_N142	Y	-43.691
3	R3D_N142	Z	27.162
4	R3D_N143	X	-0.017
5	R3D_N143	Y	43.691
6	R3D_N143	Z	27.158
7	R3D_N144	X	0.014
8	R3D_N144	Y	-70.129
9	R3D_N144	Z	30.863
10	R3D_N145	X	-0.014
11	R3D_N145	Y	70.129
12	R3D_N145	Z	30.779
13	R3D_N146	X	0.025
14	R3D_N146	Y	-56.806
15	R3D_N146	Z	21.023
16	R3D_N147	Y	0.232
17	R3D_N147	Z	69.198
18	R3D_N148	X	-0.025
19	R3D_N148	Y	56.574
20	R3D_N148	Z	20.946
21	R3D_N149	X	0.697
22	R3D_N149	Y	0.929



Company : KPFF  
 Designer : PD  
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**Point Loads and Moments (Cat 28 : ELZ) (Continued)**

Building & Safety: OCPWAzaron@B 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
23	R3D_N149	Z	0.023
24	R3D_N150	X	0.697
25	R3D_N150	Y	-0.923
26	R3D_N150	Z	-0.023
27	R3D_N151	X	-0.063
28	R3D_N151	Y	-0.083
29	R3D_N151	Z	0.023
30	R3D_N152	X	-0.063
31	R3D_N152	Y	0.083
32	R3D_N152	Z	-0.023
33	R3D_N153	X	-0.637
34	R3D_N153	Y	-0.742
35	R3D_N153	Z	0.025
36	R3D_N154	X	-0.637
37	R3D_N154	Y	0.742
38	R3D_N154	Z	-0.025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1 B21-0900  
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**Point Loads and Moments (Cat 29 : WLX)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	-0.009
2	R3D_N142	Y	0.456
3	R3D_N142	Z	-0.351
4	R3D_N143	X	0.009
5	R3D_N143	Y	-0.456
6	R3D_N143	Z	-0.351
7	R3D_N144	X	-0.008
8	R3D_N144	Y	0.339
9	R3D_N144	Z	-0.193
10	R3D_N145	X	0.008
11	R3D_N145	Y	-0.339
12	R3D_N145	Z	-0.193
13	R3D_N146	X	-0.014
14	R3D_N146	Y	-0.439
15	R3D_N146	Z	0.211
16	R3D_N147	Y	0.003
17	R3D_N147	Z	0.668
18	R3D_N148	X	0.014
19	R3D_N148	Y	0.437
20	R3D_N148	Z	0.209
21	R3D_N149	X	10.335
22	R3D_N149	Y	15.852
23	R3D_N149	Z	-0.013
24	R3D_N150	X	10.31
25	R3D_N150	Y	-15.852
26	R3D_N150	Z	0.013
27	R3D_N151	X	10.387
28	R3D_N151	Y	16.964
29	R3D_N151	Z	-0.013
30	R3D_N152	X	10.354
31	R3D_N152	Y	-16.964
32	R3D_N152	Z	0.013
33	R3D_N153	X	9.988
34	R3D_N153	Y	13.851
35	R3D_N153	Z	-0.014
36	R3D_N154	X	10.015
37	R3D_N154	Y	-13.851



Company : KPFF  
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**Point Loads and Moments (Cat 29 : WLX) (Continued)**

Building & Safety: OCPWAzayyadP 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
38	R3D_N154	Z	0.017

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1 B21-0900

**Point Loads and Moments (Cat 31 : WLZ)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	0.017
2	R3D_N142	Y	-10.15
3	R3D_N142	Z	6.27
4	R3D_N143	X	-0.017
5	R3D_N143	Y	10.15
6	R3D_N143	Z	6.27
7	R3D_N144	X	0.009
8	R3D_N144	Y	-15.391
9	R3D_N144	Z	7.299
10	R3D_N145	X	-0.009
11	R3D_N145	Y	15.391
12	R3D_N145	Z	7.285
13	R3D_N146	X	0.017
14	R3D_N146	Y	-12.012
15	R3D_N146	Z	4.677
16	R3D_N147	Y	0.054
17	R3D_N147	Z	15.273
18	R3D_N148	X	-0.017
19	R3D_N148	Y	11.958
20	R3D_N148	Z	4.652
21	R3D_N149	X	0.465
22	R3D_N149	Y	0.62
23	R3D_N149	Z	0.016
24	R3D_N150	X	0.465
25	R3D_N150	Y	-0.62
26	R3D_N150	Z	-0.016
27	R3D_N151	X	-0.04
28	R3D_N151	Y	-0.053
29	R3D_N151	Z	0.016
30	R3D_N152	X	-0.04
31	R3D_N152	Y	0.053
32	R3D_N152	Z	-0.016
33	R3D_N153	X	-0.426
34	R3D_N153	Y	-0.495
35	R3D_N153	Z	0.017
36	R3D_N154	X	-0.426
37	R3D_N154	Y	0.495
38	R3D_N154	Z	-0.017

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**Point Loads and Moments (Cat 38 : WLXP1)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	0.03
2	R3D_N142	Y	-1.458
3	R3D_N142	Z	1.122
4	R3D_N143	X	-0.03
5	R3D_N143	Y	1.458
6	R3D_N143	Z	1.122
7	R3D_N144	X	0.025
8	R3D_N144	Y	-1.082
9	R3D_N144	Z	0.615
10	R3D_N145	X	-0.025
11	R3D_N145	Y	1.082



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**Point Loads and Moments (Cat 38 : WLXP1) (Continued)**

Building & Safety: OCPWAzaronv08P 4/22/2025

	Label	Direction	Magnitude[k.k-ft]
12	R3D_N145	Z	0.615
13	R3D_N146	X	0.045
14	R3D_N146	Y	1.403
15	R3D_N146	Z	-0.673
16	R3D_N147	Y	-0.003
17	R3D_N147	Z	-2.135
18	R3D_N148	X	-0.045
19	R3D_N148	Y	-1.395
20	R3D_N148	Z	-0.665
21	R3D_N149	X	9.309
22	R3D_N149	Y	13.965
23	R3D_N149	Z	0.042
24	R3D_N150	X	9.29
25	R3D_N150	Y	-13.966
26	R3D_N150	Z	-0.042
27	R3D_N151	X	7.659
28	R3D_N151	Y	12.547
29	R3D_N151	Z	0.042
30	R3D_N152	X	7.634
31	R3D_N152	Y	-12.547
32	R3D_N152	Z	-0.042
33	R3D_N153	X	6.066
34	R3D_N153	Y	8.729
35	R3D_N153	Z	0.046
36	R3D_N154	X	6.086
37	R3D_N154	Y	-8.729
38	R3D_N154	Z	-0.046

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1-B21-0900  
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**Point Loads and Moments (Cat 39 : WLXP2)**

	Label	Direction	Magnitude[k.k-ft]
1	R3D_N142	X	-0.044
2	R3D_N142	Y	2.143
3	R3D_N142	Z	-1.649
4	R3D_N143	X	0.044
5	R3D_N143	Y	-2.143
6	R3D_N143	Z	-1.649
7	R3D_N144	X	-0.036
8	R3D_N144	Y	1.591
9	R3D_N144	Z	-0.904
10	R3D_N145	X	0.036
11	R3D_N145	Y	-1.591
12	R3D_N145	Z	-0.904
13	R3D_N146	X	-0.066
14	R3D_N146	Y	-2.062
15	R3D_N146	Z	0.989
16	R3D_N147	Y	0.012
17	R3D_N147	Z	3.138
18	R3D_N148	X	0.066
19	R3D_N148	Y	2.05
20	R3D_N148	Z	0.979
21	R3D_N149	X	6.194
22	R3D_N149	Y	9.813
23	R3D_N149	Z	-0.062
24	R3D_N150	X	6.175
25	R3D_N150	Y	-9.813
26	R3D_N150	Z	0.062



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**Point Loads and Moments (Cat 39 : WLXP2) (Continued)**

Building & Safety: OCPWAzayyadP 12/22/2025

	Label	Direction	Magnitude[k,k-ft]
27	R3D_N151	X	7.927
28	R3D_N151	Y	12.899
29	R3D_N151	Z	-0.062
30	R3D_N152	X	7.898
31	R3D_N152	Y	-12.899
32	R3D_N152	Z	0.062
33	R3D_N153	X	8.917
34	R3D_N153	Y	12.048
35	R3D_N153	Z	-0.067
36	R3D_N154	X	8.937
37	R3D_N154	Y	-12.048
38	R3D_N154	Z	0.067

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1 B21-0900  
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**Point Loads and Moments (Cat 40 : WLZP1)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	-0.016
2	R3D_N142	Y	-6.416
3	R3D_N142	Z	3.783
4	R3D_N143	X	0.016
5	R3D_N143	Y	6.416
6	R3D_N143	Z	3.782
7	R3D_N144	X	-0.013
8	R3D_N144	Y	-10.655
9	R3D_N144	Z	4.97
10	R3D_N145	X	0.013
11	R3D_N145	Y	10.655
12	R3D_N145	Z	4.959
13	R3D_N146	X	-0.024
14	R3D_N146	Y	-10.16
15	R3D_N146	Z	4.06
16	R3D_N147	Y	0.047
17	R3D_N147	Z	13.206
18	R3D_N148	X	0.024
19	R3D_N148	Y	10.113
20	R3D_N148	Z	4.035
21	R3D_N149	X	-0.686
22	R3D_N149	Y	-0.915
23	R3D_N149	Z	-0.023
24	R3D_N150	X	-0.686
25	R3D_N150	Y	0.915
26	R3D_N150	Z	0.023
27	R3D_N151	X	0.058
28	R3D_N151	Y	0.077
29	R3D_N151	Z	-0.023
30	R3D_N152	X	0.058
31	R3D_N152	Y	-0.077
32	R3D_N152	Z	0.023
33	R3D_N153	X	0.628
34	R3D_N153	Y	0.731
35	R3D_N153	Z	-0.025
36	R3D_N154	X	0.628
37	R3D_N154	Y	-0.731
38	R3D_N154	Z	0.025

**Point Loads and Moments (Cat 41 : WLZP2)**

	Label	Direction	Magnitude[k,k-ft]
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**Point Loads and Moments (Cat 41 : WLZP2) (Continued)**

Building & Safety: OCPW/Asst/Inspr/B 4/22/2025

	Label	Direction	Magnitude[k, k-ft]
1	R3D_N142	X	0.033
2	R3D_N142	Y	-8.809
3	R3D_N142	Z	5.624
4	R3D_N143	X	-0.033
5	R3D_N143	Y	8.809
6	R3D_N143	Z	5.624
7	R3D_N144	X	0.027
8	R3D_N144	Y	-12.431
9	R3D_N144	Z	5.979
10	R3D_N145	X	-0.027
11	R3D_N145	Y	12.431
12	R3D_N145	Z	5.968
13	R3D_N146	X	0.049
14	R3D_N146	Y	-7.857
15	R3D_N146	Z	2.955
16	R3D_N147	Y	0.034
17	R3D_N147	Z	9.703
18	R3D_N148	X	-0.049
19	R3D_N148	Y	7.824
20	R3D_N148	Z	2.942
21	R3D_N149	X	1.384
22	R3D_N149	Y	1.845
23	R3D_N149	Z	0.046
24	R3D_N150	X	1.384
25	R3D_N150	Y	-1.845
26	R3D_N150	Z	-0.046
27	R3D_N151	X	-0.117
28	R3D_N151	Y	-0.156
29	R3D_N151	Z	0.046
30	R3D_N152	X	-0.117
31	R3D_N152	Y	0.156
32	R3D_N152	Z	-0.046
33	R3D_N153	X	-1.266
34	R3D_N153	Y	-1.474
35	R3D_N153	Z	0.05
36	R3D_N154	X	-1.266
37	R3D_N154	Y	1.474
38	R3D_N154	Z	-0.05

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1 B21-0900  
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**Point Loads and Moments (Cat 42 : ELX+Z)**

	Label	Direction	Magnitude[k, k-ft]
1	R3D_N142	X	-0.089
2	R3D_N142	Y	4.324
3	R3D_N142	Z	-3.326
4	R3D_N143	X	0.089
5	R3D_N143	Y	-4.324
6	R3D_N143	Z	-3.326
7	R3D_N144	X	-0.073
8	R3D_N144	Y	3.211
9	R3D_N144	Z	-1.825
10	R3D_N145	X	0.073
11	R3D_N145	Y	-3.211
12	R3D_N145	Z	-1.825
13	R3D_N146	X	-0.133
14	R3D_N146	Y	-4.162
15	R3D_N146	Z	1.996



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Point Loads and Moments (Cat 42 : ELX+Z) (Continued)**

Building & Safety: OCPWAzaron@B 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
16	R3D_N147	Y	0.025
17	R3D_N147	Z	6.331
18	R3D_N148	X	0.133
19	R3D_N148	Y	4.137
20	R3D_N148	Z	1.975
21	R3D_N149	X	35.677
22	R3D_N149	Y	60.087
23	R3D_N149	Z	-0.125
24	R3D_N150	X	35.53
25	R3D_N150	Y	-60.087
26	R3D_N150	Z	0.125
27	R3D_N151	X	38.451
28	R3D_N151	Y	67.331
29	R3D_N151	Z	-0.125
30	R3D_N152	X	38.289
31	R3D_N152	Y	-67.331
32	R3D_N152	Z	0.125
33	R3D_N153	X	39.514
34	R3D_N153	Y	56.208
35	R3D_N153	Z	-0.135
36	R3D_N154	X	39.668
37	R3D_N154	Y	-56.208
38	R3D_N154	Z	0.135

Permits: BNR21-0246, ELE21-0853, MEC21-0514, P1-B21-0900  
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**Point Loads and Moments (Cat 43 : ELX-Z)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	0.015
2	R3D_N142	Y	-0.734
3	R3D_N142	Z	0.565
4	R3D_N143	X	-0.015
5	R3D_N143	Y	0.734
6	R3D_N143	Z	0.565
7	R3D_N144	X	0.012
8	R3D_N144	Y	-0.542
9	R3D_N144	Z	0.308
10	R3D_N145	X	-0.012
11	R3D_N145	Y	0.542
12	R3D_N145	Z	0.308
13	R3D_N146	X	0.023
14	R3D_N146	Y	0.705
15	R3D_N146	Z	-0.338
16	R3D_N147	Y	-0.004
17	R3D_N147	Z	-1.073
18	R3D_N148	X	-0.023
19	R3D_N148	Y	-0.701
20	R3D_N148	Z	-0.335
21	R3D_N149	X	40.05
22	R3D_N149	Y	65.918
23	R3D_N149	Z	0.021
24	R3D_N150	X	39.903
25	R3D_N150	Y	-65.918
26	R3D_N150	Z	-0.021
27	R3D_N151	X	38.08
28	R3D_N151	Y	66.838
29	R3D_N151	Z	0.021
30	R3D_N152	X	37.919



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Point Loads and Moments (Cat 43 : ELX-Z) (Continued)**

Building & Safety: OCPWAzayyadB 4/22/2025

	Label	Direction	Magnitude[k,k-ft]
31	R3D_N152	Y	-66.833
32	R3D_N152	Z	-0.021
33	R3D_N153	X	35.511
34	R3D_N153	Y	51.549
35	R3D_N153	Z	0.023
36	R3D_N154	X	35.665
37	R3D_N154	Y	-51.549
38	R3D_N154	Z	-0.023

Permits: BNR21-0246, ELE21-0853, MEC21-0514, POB21-0900  
**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**  
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**Point Loads and Moments (Cat 44 : ELZ+X)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	0.06
2	R3D_N142	Y	-45.789
3	R3D_N142	Z	28.775
4	R3D_N143	X	-0.06
5	R3D_N143	Y	45.789
6	R3D_N143	Z	28.771
7	R3D_N144	X	0.049
8	R3D_N144	Y	-71.685
9	R3D_N144	Z	31.748
10	R3D_N145	X	-0.049
11	R3D_N145	Y	71.685
12	R3D_N145	Z	31.663
13	R3D_N146	X	0.09
14	R3D_N146	Y	-54.788
15	R3D_N146	Z	20.055
16	R3D_N147	Y	0.22
17	R3D_N147	Z	66.128
18	R3D_N148	X	-0.09
19	R3D_N148	Y	54.568
20	R3D_N148	Z	19.988
21	R3D_N149	X	2.51
22	R3D_N149	Y	3.347
23	R3D_N149	Z	0.084
24	R3D_N150	X	2.51
25	R3D_N150	Y	-3.347
26	R3D_N150	Z	-0.084
27	R3D_N151	X	-0.213
28	R3D_N151	Y	-0.284
29	R3D_N151	Z	0.084
30	R3D_N152	X	-0.213
31	R3D_N152	Y	0.284
32	R3D_N152	Z	-0.084
33	R3D_N153	X	-2.297
34	R3D_N153	Y	-2.674
35	R3D_N153	Z	0.091
36	R3D_N154	X	-2.297
37	R3D_N154	Y	2.674
38	R3D_N154	Z	-0.091

**Point Loads and Moments (Cat 45 : ELZ-X)**

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N142	X	-0.027
2	R3D_N142	Y	-41.593
3	R3D_N142	Z	25.548
4	R3D_N143	X	0.027



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
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**Point Loads and Moments (Cat 45 : ELZ-X) (Continued)**

Building & Safety: OCPWAzayyadP 42/22/2025

	Label	Direction	Magnitude [k, k-ft]
5	R3D N143	Y	41.593
6	R3D N143	Z	25.544
7	R3D N144	X	-0.022
8	R3D N144	Y	-68.573
9	R3D N144	Z	29.973
10	R3D N145	X	0.022
11	R3D N145	Y	68.573
12	R3D N145	Z	29.894
13	R3D N146	X	-0.041
14	R3D N146	Y	-58.824
15	R3D N146	Z	21.990
16	R3D N147	Y	0.244
17	R3D N147	Z	72.269
18	R3D N148	X	0.04
19	R3D N148	Y	58.58
20	R3D N148	Z	21.904
21	R3D N149	X	-1.117
22	R3D N149	Y	-1.489
23	R3D N149	Z	-0.037
24	R3D N150	X	-1.117
25	R3D N150	Y	1.489
26	R3D N150	Z	0.037
27	R3D N151	X	0.094
28	R3D N151	Y	0.125
29	R3D N151	Z	-0.037
30	R3D N152	X	0.094
31	R3D N152	Y	-0.125
32	R3D N152	Z	0.037
33	R3D N153	X	1.023
34	R3D N153	Y	1.191
35	R3D N153	Z	-0.04
36	R3D N154	X	1.023
37	R3D N154	Y	-1.191
38	R3D N154	Z	0.04

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PZ R21-0900  
**County of Orange - OC Public Works**  
**OC Development Services**  
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**Load Combinations**

Label	So...	Se...	A...	SF	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	Cat...	Fac...	
1	IBC 16-1	Yes			DL	1.4															
2	IBC 16-2	Yes			DL	1.2	LL	1.6	LLS	1.6	RLL	0.5									
3	IBC 16-3	Yes			DL	1.2	RLL	1.6	LL	1	LLS	1									
4	IBC 16-5	Yes			DL	1.2	Sds...	0.2	ELX	1	LL	1	LLS	1							
5	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	1	LL	1	LLS	1							
6	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	1	LL	1	LLS	1							
7	IBC 16-5	Yes			DL	1.2	Sds...	0.2	ELZ	1	LL	1	LLS	1							
8	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	1	LL	1	LLS	1							
9	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	1	LL	1	LLS	1							
10	IBC 16-5	Yes			DL	1.2	Sds...	0.2	ELX	-1	LL	1	LLS	1							
11	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	-1	LL	1	LLS	1							
12	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	-1	LL	1	LLS	1							
13	IBC 16-5	Yes			DL	1.2	Sds...	0.2	ELZ	-1	LL	1	LLS	1							
14	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	-1	LL	1	LLS	1							
15	IBC 16-5	Yes			DL	1.2	Sds...	0.2	EL...	-1	LL	1	LLS	1							
16	IBC 16-7	Yes			DL	0.9	Sds...	0.2	ELX	1											
17	IBC 16-7	Yes			DL	0.9	Sds...	0.2	EL...	1											
18	IBC 16-7	Yes			DL	0.9	Sds...	0.2	EL...	1											
19	IBC 16-7	Yes			DL	0.9	Sds...	0.2	ELZ	1											





Company : KPFF  
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 Model Name : Dana Point Harbor\_Bld'g. 12

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**Footing Code Check (Continued)**

Building & Safety: OCPWA Approved 12/22/2020

Joint	Footing	Bearing Ra...	Bearing Pr...	Gov LC	UC Max	Muxx[k-ft]	Gov LC	UC Max	Muzz[k-ft]	Gov LC
6	R3D_N148	Lateral Ext...	0.438	2.921	49	0.224	225.275	9	0.204	178.749
7	R3D_N149	Lateral Ext...	0.201	1.337	34	0.151	256.238	6	0.204	346.797
8	R3D_N150	Lateral Ext...	0.201	1.343	40	0.152	257.902	12	0.204	348.062
9	R3D_N151	Lateral Ext...	0.419	2.792	45	0.268	337.891	5	0.223	406.907
10	R3D_N152	Lateral Ext...	0.691	4.609	51	0.317	319.56	11	0.383	385.667
11	R3D_N153	Lateral Ext...	0.609	4.059	45	0.258	260.42	5	0.327	274.413
12	R3D_N154	Lateral Ext...	0.624	4.158	51	0.266	268.348	11	0.336	336.336
13	R3D_N147	Lateral Int. ...	0.2	1.33	49	0.206	350.87	9	0.16	18.02
14	FLR_1_N18	Gravity Ftn'g	0.665	3.327	29	0.091	18.02	2	0.091	13.704
15	FLR_1_N32	Gravity Ftn'g	0.52	2.599	29	0.069	13.704	2	0.069	12.695
16	FLR_1_N1...	Gravity Ftn'g	0.488	2.439	29	0.064	12.695	2	0.064	15.817
17	FLR_1_N20	Gravity Ftn'g	0.597	2.985	29	0.08	15.817	2	0.08	15.394
18	FLR_1_N21	Gravity Ftn'g	0.579	2.897	29	0.078	15.394	2	0.078	15.777
19	FLR_1_N22	Gravity Ftn'g	0.592	2.959	29	0.08	15.777	2	0.08	15.693
20	FLR_1_N23	Gravity Ftn'g	0.59	2.949	29	0.08	15.693	2	0.08	12.317
21	FLR_1_N24	Gravity Ftn'g	0.483	2.414	29	0.062	12.317	2	0.062	8.262
22	FLR_1_N25	Gravity Ftn'g	0.346	1.729	29	0.042	8.262	2	0.042	8.718
23	FLR_1_N26	Gravity Ftn'g	0.274	1.827	44	0.044	8.718	2	0.044	13.97
24	FLR_1_N27	Gravity Ftn'g	0.527	2.636	29	0.071	13.97	2	0.071	3.593
25	FLR_1_N28	Gravity Ftn'g	0.151	1.009	44	0.018	3.593	2	0.018	55.342
26	FLR_1_N15	Gravity Ftn'g	0.878	4.39	29	0.234	55.342	2	0.234	61.077
27	FLR_1_N14	Gravity Ftn'g	0.955	4.774	29	0.258	61.077	2	0.258	225.224
28	FLR_1_N1...	Gravity Ftn'g	0.521	2.605	29	0.519	225.224	2	0.519	195.039
29	FLR_1_N17	Gravity Ftn'g	0.459	2.295	29	0.449	195.039	2	0.449	

**Footing Geometry Results**

Joint	Footing	Length[ft]	Width[ft]	Thickness[in]	ex[in]	ez[in]	Pedestal Ht[in]	Ped Xdim[in]	Ped Zdim[in]
1	R3D_N142	Lateral Ext...	9	9	36	0	0	12	12
2	R3D_N143	Lateral Ext...	9	9	36	0	0	12	12
3	R3D_N144	Lateral Ext...	14	14	36	0	0	12	12
4	R3D_N145	Lateral Ext...	14	14	36	0	0	12	12
5	R3D_N146	Lateral Ext...	11	11	36	0	0	12	12
6	R3D_N148	Lateral Ext...	9	9	36	0	0	12	12
7	R3D_N149	Lateral Ext...	15	15	36	0	0	12	12
8	R3D_N150	Lateral Ext...	15	15	36	0	0	12	12
9	R3D_N151	Lateral Ext...	11	11	36	0	0	12	12
10	R3D_N152	Lateral Ext...	9	9	36	0	0	12	12
11	R3D_N153	Lateral Ext...	9	9	36	0	0	12	12
12	R3D_N154	Lateral Ext...	9	9	36	0	0	12	12
13	R3D_N147	Lateral Int. ...	15	15	36	0	0	12	12
14	FLR_1_N18	Gravity Ftn'g	4	4	24	0	0	12	12
15	FLR_1_N32	Gravity Ftn'g	4	4	24	0	0	12	12
16	FLR_1_N1...	Gravity Ftn'g	4	4	24	0	0	12	12
17	FLR_1_N20	Gravity Ftn'g	4	4	24	0	0	12	12
18	FLR_1_N21	Gravity Ftn'g	4	4	24	0	0	12	12
19	FLR_1_N22	Gravity Ftn'g	4	4	24	0	0	12	12
20	FLR_1_N23	Gravity Ftn'g	4	4	24	0	0	12	12
21	FLR_1_N24	Gravity Ftn'g	4	4	24	0	0	12	12
22	FLR_1_N25	Gravity Ftn'g	4	4	24	0	0	12	12
23	FLR_1_N26	Gravity Ftn'g	4	4	24	0	0	12	12
24	FLR_1_N27	Gravity Ftn'g	4	4	24	0	0	12	12
25	FLR_1_N28	Gravity Ftn'g	4	4	24	0	0	12	12
26	FLR_1_N15	Gravity Ftn'g	5	5	24	0	0	12	12
27	FLR_1_N14	Gravity Ftn'g	5	5	24	0	0	12	12
28	FLR_1_N1...	Gravity Ftn'g	9	9	24	0	0	12	12
29	FLR_1_N17	Gravity Ftn'g	9	9	24	0	0	12	12



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Envelope Footing Soil Pressures**

Building & Safety: OCPW/Agawood/B 4/22/2025

Label	UC	LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
1 Lateral Ext. Ftn'...	0.45	54	3.002	5	D
2 Lateral Ext. Ftn'...	0.548	29	2.74	5	B
3 Lateral Ext. Ftn'...	0.226	54	1.509	6.665	C
4 Lateral Ext. Ftn'...	0.218	36	1.451	6.665	C
5 Lateral Ext. Ftn'...	0.054	61	0.268	5	C
6 Lateral Ext. Ftn'...	0.442	29	2.212	6.665	C
7 Lateral Ext. Ftn'...	0.201	34	1.337	6.665	C
8 Lateral Ext. Ftn'...	0.201	40	1.343	6.665	C
9 Lateral Ext. Ftn'...	0.442	29	2.211	5	A
10 Lateral Ext. Ftn'...	0.742	29	3.712	5	C
11 Lateral Ext. Ftn'...	0.609	45	4.059	6.665	A
12 Lateral Ext. Ftn'...	0.624	51	4.158	6.665	D
13 Lateral Int. Ftn'g...	0.217	29	1.084	5	B
14 Gravity Ftn'g. - ...	0.665	29	3.327	5	A
15 Gravity Ftn'g. - ...	0.52	29	2.599	5	A
16 Gravity Ftn'g. - ...	0.488	29	2.439	5	A
17 Gravity Ftn'g. - ...	0.597	29	2.985	5	A
18 Gravity Ftn'g. - ...	0.579	29	2.897	5	A
19 Gravity Ftn'g. - ...	0.592	29	2.959	5	A
20 Gravity Ftn'g. - ...	0.59	29	2.949	5	A
21 Gravity Ftn'g. - ...	0.483	29	2.414	5	A
22 Gravity Ftn'g. - ...	0.346	29	1.729	5	A
23 Gravity Ftn'g. - ...	0.365	29	1.825	5	A
24 Gravity Ftn'g. - ...	0.527	29	2.636	5	A
25 Gravity Ftn'g. - ...	0.196	29	0.982	5	A
26 Gravity Ftn'g. - ...	0.878	29	4.39	5	A
27 Gravity Ftn'g. - ...	0.955	29	4.774	5	A
28 Gravity Ftn'g. - ...	0.521	29	2.605	5	A
29 Gravity Ftn'g. - ...	0.459	29	2.295	5	A

Permits: BNR21-0246, ELE21-0856, MEC21-0514, P12, Q12  
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 6.665 OC Development Services  
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**Footing Safety Factors**

Joint	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
1 R3D_N142	Lateral Ext. Ftn'g.	1.818	60	2.23	60	370.868	60	1.22	66
2 R3D_N143	Lateral Ext. Ftn'g.	2.271	66	2.892	66	459.542	66	1.338	60
3 R3D_N144	Lateral Ext. Ftn'g.	1.958	60	2.254	60	622.56	60	1.2	60
4 R3D_N145	Lateral Ext. Ftn'g.	1.841	66	2.116	66	587.353	66	1.129	66
5 R3D_N146	Lateral Ext. Ftn'g.	1.527	61	1.701	61	236.281	60	1.351	61
6 R3D_N148	Lateral Ext. Ftn'g.	1.771	67	2.042	67	247.71	66	1.443	67
7 R3D_N149	Lateral Ext. Ftn'g.	2.156	64	1.867	64	1.172	64	264.667	63
8 R3D_N150	Lateral Ext. Ftn'g.	2.179	58	1.888	58	1.188	58	266.836	57
9 R3D_N151	Lateral Ext. Ftn'g.	2.584	63	2.108	63	1.083	63	238.322	63
10 R3D_N152	Lateral Ext. Ftn'g.	2.864	57	2.236	57	1.118	57	245.186	57
11 R3D_N153	Lateral Ext. Ftn'g.	3.1	63	2.315	63	1.155	63	231.163	63
12 R3D_N154	Lateral Ext. Ftn'g.	3.311	57	2.458	57	1.229	57	246.541	57
13 R3D_N147	Lateral Int. Ftn'g.	6.206	67	740.911	67	NA	1	0.983	67
14 FLR_1_N18	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
15 FLR_1_N32	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
16 FLR_1_N19_1	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
17 FLR_1_N20	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
18 FLR_1_N21	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
19 FLR_1_N22	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
20 FLR_1_N23	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
21 FLR_1_N24	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
22 FLR_1_N25	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
23 FLR_1_N26	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1
24 FLR_1_N27	Gravity Ftn'g.	NA	1	NA	1	NA	1	NA	1



Company : KPFF  
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 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

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**Footing Safety Factors (Continued)**

Building & Safety: OCPWA Approved 12/22/2025

Joint	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
25	FLR_1_N28	Gravity Ftn'g.	NA	1	NA	1	NA	1	1
26	FLR_1_N15	Gravity Ftn'g.	NA	1	NA	1	NA	1	1
27	FLR_1_N14	Gravity Ftn'g.	NA	1	NA	1	NA	1	1
28	FLR_1_N16_1	Gravity Ftn'g.	NA	1	NA	1	NA	1	1
29	FLR_1_N17	Gravity Ftn'g.	NA	1	NA	1	NA	1	1

Permits: BNR21-0246, ELE21-0853, MFC21-0514, P1 B21-0800

County of Orange - OC Public Works  
 OC Development Services

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**Footing Steel**

Joint	Footing	Bot x Steel[in^2]	Bot z Steel[in^2]	Top x Steel[in^2]	Top z Steel[in^2]
1	R3D_N142	Lateral Ext. F...	7.069	7.069	0
2	R3D_N143	Lateral Ext. F...	7.069	7.069	0
3	R3D_N144	Lateral Ext. F...	11.045	11.045	0
4	R3D_N145	Lateral Ext. F...	11.045	11.045	0
5	R3D_N146	Lateral Ext. F...	8.836	8.836	0
6	R3D_N148	Lateral Ext. F...	7.069	7.069	0
7	R3D_N149	Lateral Ext. F...	11.928	11.928	0
8	R3D_N150	Lateral Ext. F...	11.928	11.928	0
9	R3D_N151	Lateral Ext. F...	8.836	8.836	0
10	R3D_N152	Lateral Ext. F...	7.069	7.069	0
11	R3D_N153	Lateral Ext. F...	7.069	7.069	0
12	R3D_N154	Lateral Ext. F...	7.069	7.069	0
13	R3D_N147	Lateral Int. Ft...	11.928	11.928	0
14	FLR_1_N18	Gravity Ftn'g.	2.209	2.209	0
15	FLR_1_N32	Gravity Ftn'g.	2.209	2.209	0
16	FLR_1_N19_1	Gravity Ftn'g.	2.209	2.209	0
17	FLR_1_N20	Gravity Ftn'g.	2.209	2.209	0
18	FLR_1_N21	Gravity Ftn'g.	2.209	2.209	0
19	FLR_1_N22	Gravity Ftn'g.	2.209	2.209	0
20	FLR_1_N23	Gravity Ftn'g.	2.209	2.209	0
21	FLR_1_N24	Gravity Ftn'g.	2.209	2.209	0
22	FLR_1_N25	Gravity Ftn'g.	2.209	2.209	0
23	FLR_1_N26	Gravity Ftn'g.	2.209	2.209	0
24	FLR_1_N27	Gravity Ftn'g.	2.209	2.209	0
25	FLR_1_N28	Gravity Ftn'g.	2.209	2.209	0
26	FLR_1_N15	Gravity Ftn'g.	2.651	2.651	0
27	FLR_1_N14	Gravity Ftn'g.	2.651	2.651	0
28	FLR_1_N16_1	Gravity Ftn'g.	4.86	4.86	0
29	FLR_1_N17	Gravity Ftn'g.	4.86	4.86	0

**Footing Shear Check**

Joint	Footing	UC Shear	Vux[k]	Gov LC	UC Shear	Vuz[k]	Gov LC
1	R3D_N142	Lateral Ext. Ftn'g.	0.117	38.799	14	0.072	23.744
2	R3D_N143	Lateral Ext. Ftn'g.	0.139	46.031	8	0.094	30.945
3	R3D_N144	Lateral Ext. Ftn'g.	0.134	68.75	14	0.113	57.961
4	R3D_N145	Lateral Ext. Ftn'g.	0.124	63.763	8	0.103	53.138
5	R3D_N146	Lateral Ext. Ftn'g.	0.1	40.454	15	0.075	30.406
6	R3D_N148	Lateral Ext. Ftn'g.	0.117	38.593	9	0.089	29.328
7	R3D_N149	Lateral Ext. Ftn'g.	0.082	45.103	6	0.112	61.59
8	R3D_N150	Lateral Ext. Ftn'g.	0.082	45.396	12	0.112	61.81
9	R3D_N151	Lateral Ext. Ftn'g.	0.155	62.514	5	0.191	76.986
10	R3D_N152	Lateral Ext. Ftn'g.	0.159	52.433	11	0.199	65.598
11	R3D_N153	Lateral Ext. Ftn'g.	0.129	42.731	5	0.171	56.551
12	R3D_N154	Lateral Ext. Ftn'g.	0.133	44.032	11	0.176	57.994
13	R3D_N147	Lateral Int. Ftn'g.	0.113	62.35	9	0.087	47.774
14	FLR_1_N18	Gravity Ftn'g.	0	0.032	2	0	0.032
15	FLR_1_N32	Gravity Ftn'g.	0	0.024	2	0	0.024
16	FLR_1_N19_1	Gravity Ftn'g.	0	0.023	2	0	0.023



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

D18  
 May 28, 2021  
 12:33 AM  
 Checked By: \_\_\_\_\_

**Footing Shear Check (Continued)**

Building & Safety - OCPWA Approved 12/22/2025

Joint	Footing	UC Shear	Vux[k]	Gov LC	UC Shear	Vuz[k]	Gov LC
17	FLR_1_N20 Gravity Ftn'g.	0	0.028	2	0	0.028	2
18	FLR_1_N21 Gravity Ftn'g.	0	0.027	2	0	0.027	2
19	FLR_1_N22 Gravity Ftn'g.	0	0.028	2	0	0.028	2
20	FLR_1_N23 Gravity Ftn'g.	0	0.028	2	0	0.028	2
21	FLR_1_N24 Gravity Ftn'g.	0	0.022	2	0	0.022	2
22	FLR_1_N25 Gravity Ftn'g.	0	0.015	2	0	0.015	2
23	FLR_1_N26 Gravity Ftn'g.	0	0.015	2	0	0.015	2
24	FLR_1_N27 Gravity Ftn'g.	0	0.025	2	0	0.025	2
25	FLR_1_N28 Gravity Ftn'g.	0	0.006	2	0	0.006	2
26	FLR_1_N15 Gravity Ftn'g.	0.075	8.647	2	0.075	8.647	2
27	FLR_1_N14 Gravity Ftn'g.	0.083	9.543	2	0.083	9.543	2
28	FLR_1_N16_1 Gravity Ftn'g.	0.314	65.104	2	0.314	65.104	2
29	FLR_1_N17 Gravity Ftn'g.	0.272	56.378	2	0.272	56.378	2

Permits: BNP 0246, ELE21-0853, MEC21-0514, PI B21-Mak  
 County of Orange - OC Public Works  
 Development Services  
 APPROVED  
 This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from the County of Orange, OC Development Services of Orange County. The stamping of these plans shall NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.  
 Hadi Tabatabaee  
 Building Official

**Footing Pedestal Results**

Joint	Footing	UC Bend	UC Bend LC	UC Shear	UC Shear LC	UC Punch	UC Punch LC
1	R3D_N142 Lateral Ext. ...	0	1	0	NC	0.125	14
2	R3D_N143 Lateral Ext. ...	0	1	0	NC	0.163	8
3	R3D_N144 Lateral Ext. ...	0	1	0	NC	0.183	14
4	R3D_N145 Lateral Ext. ...	0	1	0	NC	0.168	8
5	R3D_N146 Lateral Ext. ...	0	1	0	NC	0.118	15
6	R3D_N148 Lateral Ext. ...	0	1	0	NC	0.154	9
7	R3D_N149 Lateral Ext. ...	0	1	0	NC	0.136	6
8	R3D_N150 Lateral Ext. ...	0	1	0	NC	0.137	12
9	R3D_N151 Lateral Ext. ...	0	1	0	NC	0.244	5
10	R3D_N152 Lateral Ext. ...	0	1	0	NC	0.276	11
11	R3D_N153 Lateral Ext. ...	0	1	0	NC	0.225	5
12	R3D_N154 Lateral Ext. ...	0	1	0	NC	0.232	11
13	R3D_N147 Lateral Int. ...	0	1	0	NC	0.144	2
14	FLR_1_N18 Gravity Ftn'g.	0	1	0	NC	NA	NC
15	FLR_1_N32 Gravity Ftn'g.	0	1	0	NC	NA	NC
16	FLR_1_N19 Gravity Ftn'g.	0	1	0	NC	NA	NC
17	FLR_1_N20 Gravity Ftn'g.	0	1	0	NC	NA	NC
18	FLR_1_N21 Gravity Ftn'g.	0	1	0	NC	NA	NC
19	FLR_1_N22 Gravity Ftn'g.	0	1	0	NC	NA	NC
20	FLR_1_N23 Gravity Ftn'g.	0	1	0	NC	NA	NC
21	FLR_1_N24 Gravity Ftn'g.	0	1	0	NC	NA	NC
22	FLR_1_N25 Gravity Ftn'g.	0	1	0	NC	NA	NC
23	FLR_1_N26 Gravity Ftn'g.	0	1	0	NC	NA	NC
24	FLR_1_N27 Gravity Ftn'g.	0	1	0	NC	NA	NC
25	FLR_1_N28 Gravity Ftn'g.	0	1	0	NC	NA	NC
26	FLR_1_N15 Gravity Ftn'g.	0	1	0	NC	0.198	2
27	FLR_1_N14 Gravity Ftn'g.	0	1	0	NC	0.219	2
28	FLR_1_N16 Gravity Ftn'g.	0	1	0	NC	0.466	2
29	FLR_1_N17 Gravity Ftn'g.	0	1	0	NC	0.403	2

**Envelope Slab Soil Pressures**

Label	UC	LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
No Data to Print ...					

**Slab Overturning Safety Factors**

LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
No Data to Print ...								



Company : KPFF  
 Designer : PD  
 Job Number : 1900799  
 Model Name : Dana Point Harbor\_Bld'g. 12

D19  
 May 28, 2021  
 12:33 AM  
 Checked By: \_\_\_\_\_

**Slab Sliding Safety Factors**

Building & Safety: OCPWAzazayadB 12/22/2025

LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
No Data to Print ...								

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**Design Strips**

Label	Rebar	Angle from Pl...	No. of Design Cuts	Design Rule
No Data to Print ...				

**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Strip Reinforcing**

Label	UC Top	LC	Top Bars	Governin...	UC Bot	LC	Bot Bars/...	Governin...	UC Shear	UC Governin...
No Data to Print ...										

**Envelope Beam Soil Pressures**

Label	UC	LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
No Data to Print ...					

**Beam Section Forces**

LC	Beam Label	Sec	y Shear[k]	Torque[k-ft]	z-z Moment[k-ft]
No Data to Print ...					

**Beam Design Results**

Beam	Shape	UC M... Loc[ft]	LC	UC M... Loc[ft]	LC	Shear UC Loc[ft]	LC	Phi*Mnz ...Phi*Mnz ..Phi*Vny[k]
No Data to Print ...								

**Beam Bending Reinforcement**

Beam	Shape	Span	Left Top	Left Bot	Mid Top	Mid Bot	Right Top	Right Bot
No Data to Print ...								

**Beam Shear Reinforcement**

Beam	Span	Region 1	Region 2	Region 3	Region 4
No Data to Print ...					

# E EXTERIOR METAL STUD DESIGN

E1 sheet no.



18400 Von Karman Ave., Suite 600  
Irvine, CA 92612  
(949) 252-1022 Fax (949) 252-8082

project	DPH	by	SH
location	DPH, CA	date	5/27/2021
client	SMS	job no.	1900799
Building 10 Monoslope Metal Stud Loading			

Building&Safety: OCPWazarvandB 12/22/2025

## Components & Cladding Wind Loads

(ASCE 7-16 - Ch 30, Part 1)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

County of Orange - OC Public Works  
OC Development Services  
**APPROVED**

### Wind Coefficients

Risk Category	III	Table 1.5-1
Basic Wind Speed	102	mph, Fig. 26.5-1C
Enclosure Classification	Enclosed	Sec. 26.2
G <sub>cpi</sub>	0.18	Table 26.13-1
K <sub>d</sub>	0.85	Table 26.6-1
Exposure Category	D	Sec. 26.7.3
G	0.85	Sec. 26.11.1
K <sub>e</sub>	1.00	Table 26.9-1
K <sub>z</sub> @ h	1.14	Table 26.10-1
q <sub>h</sub>	25.7	psf, Eq. 26.10-1

### Elevation and Structure Dimensions

Ground Elevation Above Sea Level	0	ft
Ground to Top of Roof	35.0	ft
Bottom of Roof to Top of Roof	26.5	ft
Mean Roof Height	30.75	ft
Roof Angle, $\theta$	0	degrees
Width of Structure, B	84	ft
Length of Structure, L	111	ft
Width of Pressure Coefficient, a	8.4	ft
Parapet?	No	h <sub>parapet</sub> 0 ft
Calculate K <sub>zt</sub> ?	No	K <sub>zt</sub> 1.00

Strength or Allowable	Strength
Roof Type	Monoslope Roof
Roof Overhang	Yes

### Strength Level Wall Pressures (psf)

Fig. 30.3-1

Zone	Effective Wind Area (ft <sup>2</sup> )						
	10	20	50	100	200	500	270
4	30.4	29.0	27.2	25.8	24.5	22.7	23.9
	-33.0	-31.6	-29.8	-28.4	-27.0	-25.2	-26.5
5	30.4	29.0	27.2	25.8	24.5	22.7	23.9
	-40.7	-37.9	-34.3	-31.6	-28.9	-25.2	-27.7

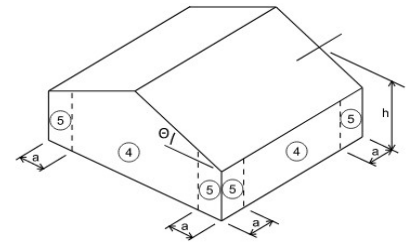


Fig. 30.3-1

### Strength Level Roof Pressures (psf)

Fig. 30.3-5B

Zone	Effective Wind Area (ft <sup>2</sup> )						
	10	20	50	100	200	500	1000
1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Overhang	-38.1	-36.6	-34.5	-33.0	-33.0	-33.0	-33.0
2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Overhang	-45.8	-42.7	-38.6	-35.5	-35.5	-35.5	-35.5
3	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Overhang	-79.3	-72.3	-63.1	-56.1	-56.1	-56.1	-56.1

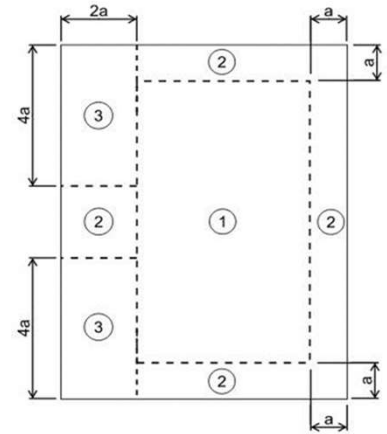


Fig. 30.3-5B

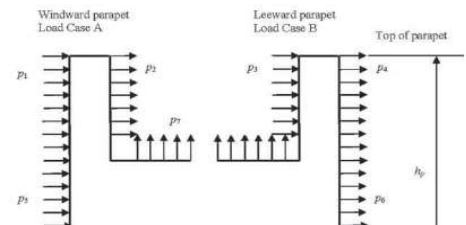


Fig. 30.8-1

$$q_h = 0.00256 K_z K_{zt} K_d K_e V^2 \quad \text{Eq. 26.10-1}$$

$$K_{zt} = (1 + K_1 K_2 K_3)^2 \quad \text{Eq. 26.8-1}$$

$$p = q_h [(GC_p) - (GC_{pi})] \quad \text{Eq. 30.3-1}$$

$$p = q_p [(GC_p) - (GC_{pi})] \quad \text{Eq. 30.8-1}$$



18400 Von Karman Ave., Suite 600  
Irvine, CA 92612  
(949) 252-1022 Fax (949) 252-8082

project	DPH	by	SH	sheet no. E2
location	DPH, CA	date	5/27/2021	
client	SMS	job no.	1900799	
Building 10 Monoslope Metal Stud Loading				

Building&Safety: OCPWazarvandB 12/22/2025

### Components & Cladding Wind Loads

(ASCE 7-16 - Ch 30, Part 1 & Part 6)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

County of Orange - OC Public Works  
OC Development Services  
**APPROVED**

#### Wind Coefficients

Risk Category	III	Table 1.5-1
Basic Wind Speed	102	mph, Fig. 26.5-1C
Enclosure Classification	Enclosed	Sec. 26.2
Gcpi	0.18	Table 26.13-1
Kd	0.85	Table 26.6-1
Exposure Category	D	Sec. 26.7.3
G	0.85	Sec. 26.11.1
Ke	1.00	Table 26.9-1
Kz @ h	1.04	Table 26.10-1
qh	23.6	psf, Eq. 26.10-1

#### Elevation and Structure Dimensions

Ground Elevation Above Sea Level	0	ft
Ground to Top of Roof	0.0	ft
Bottom of Roof to Top of Roof	0.0	ft
Mean Roof Height	16.0	ft
Roof Angle, $\theta$	0	degrees
Width of Structure, B	84	ft
Length of Structure, L	111	ft
Width of Pressure Coefficient, a	6.4	ft
Parapet?	Yes	h <sub>parapet</sub> 4 ft
Calculate K <sub>zt</sub> ?	No	K <sub>zt</sub> 1.00

Strength or Allowable	Strength
Roof Type	Flat Roof
Roof Overhang	No

#### Strength Level Wall Pressures (psf)

Fig. 30.3-1

Zone	Effective Wind Area (ft <sup>2</sup> )						
	10	20	50	100	200	500	10
4	25.5	24.3	22.9	21.7	20.6	19.1	25.5
	-27.6	-26.5	-25.0	-23.8	-22.7	-21.2	-27.6
5	25.5	24.3	22.9	21.7	20.6	19.1	25.5
	-34.0	-31.7	-28.7	-26.5	-24.2	-21.2	-34.0

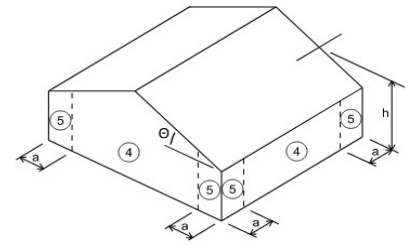


Fig. 30.3-1

#### Strength Level Roof Pressures (psf)

Fig. 30.3-2A

Zone	Effective Wind Area (ft <sup>2</sup> )							
	10	20	50	100	200	500	1000	10
1'	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	-25.5	-25.5	-25.5	-25.5	-21.9	-17.2	-16.0	-25.5
1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	-44.3	-41.4	-37.6	-34.6	-31.7	-27.8	-27.8	-44.3
2	25.5	24.3	22.9	21.7	20.6	19.1	19.1	25.5
	-58.5	-54.7	-49.8	-46.0	-42.2	-37.3	-37.3	-58.5
3	25.5	24.3	22.9	21.7	20.6	19.1	19.1	25.5
	-58.5	-54.7	-49.8	-46.0	-42.2	-37.3	-37.3	-58.5

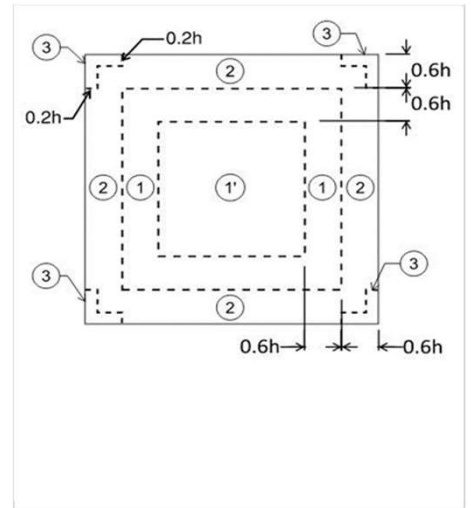


Fig. 30.3-2A

#### Strength Level Parapet Net Pressures (psf)

q<sub>p</sub> 24.5 psf

Fig. 30.8-1

Zone	Effective Wind Area (ft <sup>2</sup> )							
	10	20	50	100	200	500	1000	10
4	78.0	72.9	66.2	61.1	56.1	50.4	50.4	78.0
	-54.3	-51.9	-48.8	-46.5	-44.1	-42.2	-42.2	-54.3
5	78.0	72.9	66.2	61.1	56.1	50.4	50.4	78.0
	-60.9	-57.4	-52.7	-49.2	-45.7	-42.2	-42.2	-60.9

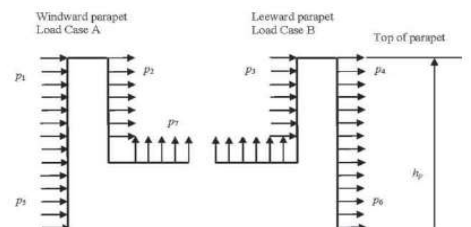


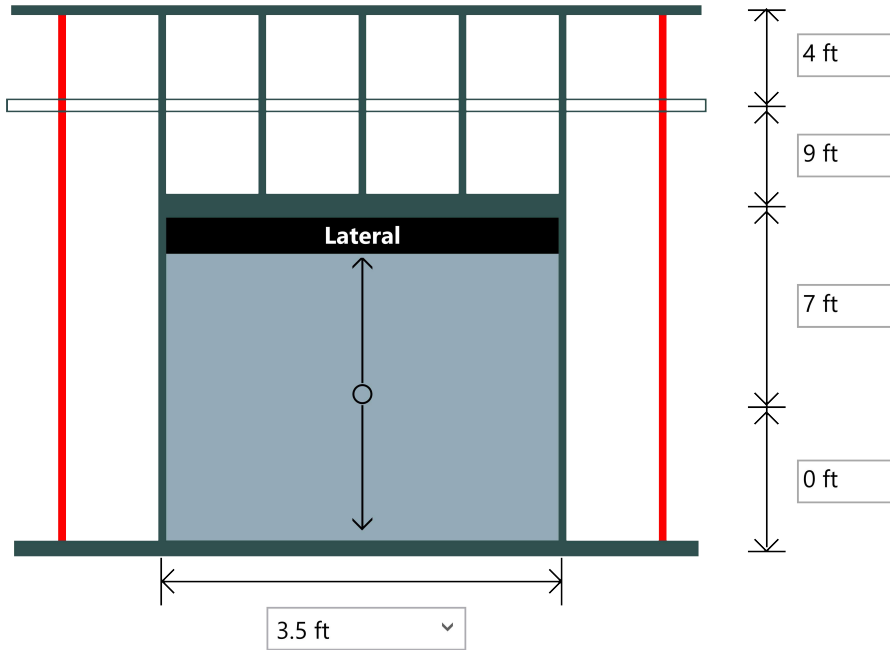
Fig. 30.8-1

$$q_h = 0.00256 K_z K_{zt} K_d K_e V^2 \quad \text{Eq. 26.10-1}$$

$$K_{zt} = (1 + K_1 K_2 K_3)^2 \quad \text{Eq. 26.8-1}$$

$$p = q_h [(GC_p) - (GC_{pi})] \quad \text{Eq. 30.3-1}$$

$$p = q_p [(GC_p) - (GC_{pi})] \quad \text{Eq. 30.8-1}$$



**Design Loads**

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900  
 Wall Lateral Pressure : **20 psf**  
 RO Lateral Pressure : **20 psf**  
 Parapet Lateral Pressure : **20 psf**  
 Lateral Element Forces multiplied by 1 for strength checks  
 Lateral Forces multiplied by 0.7 for deflection determination  
 Header: **Box (lateral combined)**  
 Gravity Load at Header: **20 psf**



Lateral Pressure to: **Head/Sill Only**

**Brace Settings**

Component(s)	Members(s)	Flexural Bracing (in)	Axial KyLy (in)	Axial KtLt (in)	Distortional K-Phi(lb-in/in)	Distortional LM(in)	Interconnection Spacing(in)
Wall Studs	600S162-54(50), Single@16 in o/c	60 in	60 in	60 in	0	None	N/A
Jamb Studs	600S250-54(50), Single	60 in	60 in	60 in	0	None	N/A
Vertical Header	400S162-43(33), Back-To-Back	Full	N/A	N/A	0	None	N/A
Lateral Header	600T125-54(50), Single	Full	N/A	N/A	0	None	N/A

**Summary Analysis Results**

Component(s)	Members(s)	Axial Load (lb)	Max. Moment (Ft-Lb)	Max. Shear(lb)	Bottom Reaction (lb)	Top or End Reaction (lb)
Wall Studs	600S162-54(50), Single@16 in o/c	0.0	750.0	226.7	200.0	333.3
Jamb Studs	600S250-54(50), Single	455.0	1353.3	240.0	362.5	275.6
Vertical Header	400S162-43(33), Back-To-Back	N/A	398.1	455.0	N/A	455.0
Lateral Header	600T125-54(50), Single	N/A	217.8	248.9	N/A	248.9

**Summary Design Results**

Component(s)	Members(s)	Deflection		Bending +Axial Interaction	Shear Interaction	Web Stiffeners	Design OK
		Span	Parapet				
Wall Studs	600S162-54(50), Single@16 in o/c	L/692	L/523	0.417	0.12	NA	Yes

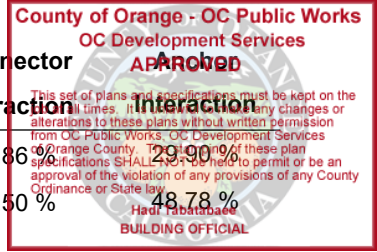
Project Name: CFS\_stud-hdr-jmb design  
 Model: Opening A - 1/S4.0.1  
 Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

Jamb Studs	600S250-54(50), Single	L/579	L/411	0.673	0.51	NA	Yes	Building & Safety: OCPWazarvandB Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900	12/22/2025
Vertical Header	400S162-43(33), Back-To-Back	L/2518	NA	0.29	0.13	No	Yes		
Lateral Header	600T125-54(50), Single	L/8260	NA	0.15	0.09	No	Yes		

**Simpson Strong-Tie® Connectors @ Studs**

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie® Connector	Connector Interaction	Anchor Interaction
R2	333.33	0.00	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	43.86 %	29.00 %
R1	200.00	533.33	600T125-54 (50) & (1) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	21.50 %	48.78 %



\* Reference catalog for connector and anchor requirement notes as well as screw placements requirement

**Simpson Strong-Tie® Connectors @ Jamb**

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie® Connector	Connector Interaction	Anchor Interaction
R2	275.56	0.00	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	36.26 %	24.71 %
R1	362.50	815.00	600T125-54 (50) & (1) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	77.92 %	88.41 %

\* Reference catalog for connector and anchor requirement notes as well as screw placements requirement

**Simpson Strong-Tie® Wall Stud Bridging Connectors @ Studs**

Span/CantiLever	Bracing Length (in.)	Design Number of Braces	Pn(lb.)	LSUBH (Min) <sup>1</sup>	LSUBH (Max) <sup>1</sup>	SUBH (Min) <sup>1</sup>	SUBH (Max) <sup>1</sup>	MSUBH (Min) <sup>1</sup>	MSUBH (Max) <sup>1</sup>
Top CantiLever	Span	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Span	60	N/A	0.0	OK (0.47)	OK (0.34)	OK (0.38)	OK (0.24)	OK (0.23)	OK (0.15)

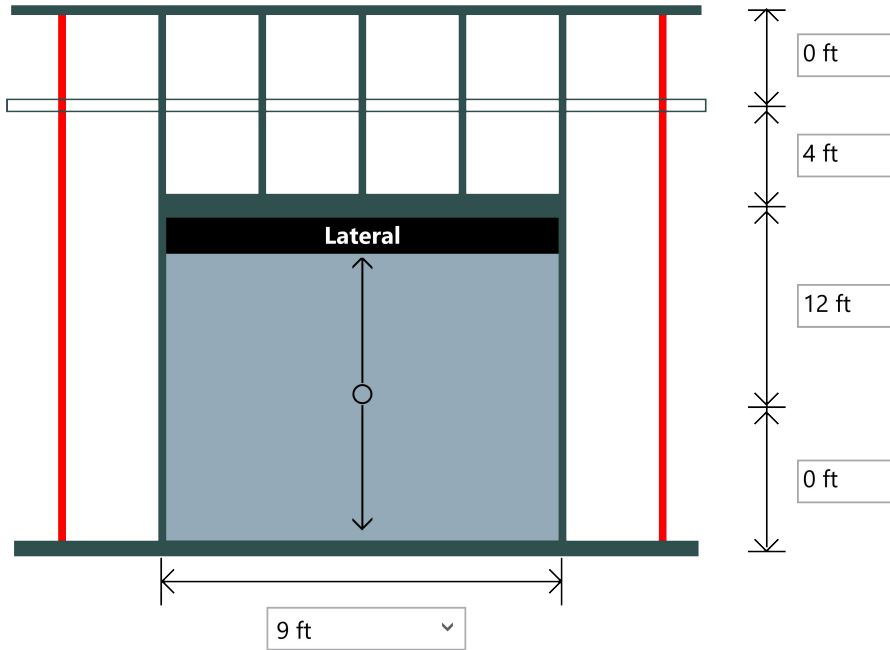
**Simpson Strong-Tie® Wall Stud Bridging Connectors @ Jamb**

Span/CantiLever	Bracing Length (in.)	Design Number of Braces	Pn(lb.)	LSUBH (Min) <sup>1</sup>	LSUBH (Max) <sup>1</sup>	SUBH (Min) <sup>1</sup>	SUBH (Max) <sup>1</sup>	MSUBH (Min) <sup>1</sup>	MSUBH (Max) <sup>1</sup>
Top CantiLever	Span	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Span	60	4	11295.7	OK (0.90)	OK (0.63)	OK (0.72)	OK (0.46)	OK (0.44)	OK (0.28)

**Notes:**

- 1) Values in parentheses are stress ratios.
- 2) Bridging connectors are not designed for back-back, box, or built-up sections.
- 3) Reference [www.strongtie.com](http://www.strongtie.com) for latest load data, important information, and general notes
- 4) CFS Designer will not select bridging connectors unless all flexural and axial bracing settings are the same.
- 5) If the bracing length is larger than the span length, bridging connectors are not designed.

Project Name: CFS\_stud-hdr-jmb design  
 Model: Opening B - 2/S4.0.2  
 Code: AISI S100-16



**Design Loads**

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Wall Lateral Pressure : **20 psf**

RO Lateral Pressure : **20 psf**

Lateral Element Forces multiplied by 1 for strength checks

Lateral Forces multiplied by 0.7 for deflection determination

Header: **Box (lateral combined)**

Gravity Load at Header: **20 psf**



Lateral Pressure to: **Head/Sill Only**

**Brace Settings**

Component(s)	Members(s)	Flexural Bracing (in)	Axial KyLy (in)	Axial KtLt (in)	Distortional K-Phi(lb-in/in)	Distortional LM(in)	Interconnection Spacing(in)
Wall Studs	600S162-54(50), Single@16 in o/c	60 in	60 in	60 in	0	None	N/A
Jamb Studs	600S137-54(50), Boxed	60 in	60 in	60 in	0	None	12 in
Vertical Header	600S162-54(50), Boxed	Full	N/A	N/A	0	None	N/A
Lateral Header	600T150-54(50), Boxed	Full	N/A	N/A	0	None	N/A

**Summary Analysis Results**

Component(s)	Members(s)	Axial Load (lb)	Max. Moment (Ft-Lb)	Max. Shear(lb)	Bottom Reaction (lb)	Top or End Reaction (lb)
Wall Studs	600S162-54(50), Single@16 in o/c	0.0	853.3	213.3	213.3	213.3
Jamb Studs	600S137-54(50), Boxed	360.0	2480.0	646.7	826.7	646.7
Vertical Header	600S162-54(50), Boxed	N/A	810.0	360.0	N/A	360.0
Lateral Header	600T150-54(50), Boxed	N/A	1620.0	720.0	N/A	720.0

**Summary Design Results**

Component(s)	Members(s)	Deflection		Bending +Axial Interaction	Shear Interaction	Web Stiffeners	Design OK
		Span	Parapet				
Wall Studs	600S162-54(50), Single@16 in o/c	L/589	L/0	0.475	0.08	NA	Yes
Jamb Studs	600S137-54(50), Boxed	L/435	L/0	0.686	0.66	NA	Yes

Project Name: CFS\_stud-hdr-jmb design

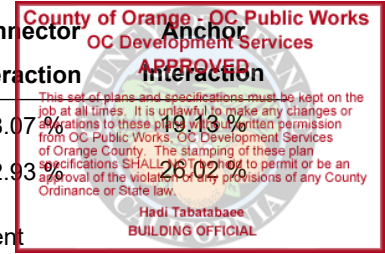
Model: Opening B - 2/S4.0.2

Code: AISI S100-16

Vertical Header	600S162-54(50), Boxed	L/1543	NA	0.18	0.06	No	Building & Safety: OCPWAZarvandB	Yes	12/22/2025
Lateral Header	600T150-54(50), Boxed	L/925	NA	0.53	0.13	No	Permits: BNR2086, ELE21-0853, MEC21-0514, PLB21-0900	Yes	

**Simpson Strong-Tie® Connectors @ Studs**

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie® Connector	Connector Interaction	Anchor Interaction
R2	213.33	0.00	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	28.07%	19.13%
R1	213.33	426.67	600T125-54 (50) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	22.93%	26.02%



\* Reference catalog for connector and anchor requirement notes as well as screw placements requirement

**Simpson Strong-Tie® Connectors @ Jambs**

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie® Connector	Connector Interaction	Anchor Interaction
R2	646.67	0.00	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	85.09 %	58.00 %
R1	826.67	733.33	600T125-54 (50) & (3) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	59.23 %	67.21 %

\* Reference catalog for connector and anchor requirement notes as well as screw placements requirement

**Simpson Strong-Tie® Wall Stud Bridging Connectors @ Studs**

Span/CantiLever	Bracing Length (in.)	Design Number of Braces	Pn(lb.)	LSUBH (Min) <sup>1</sup>	LSUBH (Max) <sup>1</sup>	SUBH (Min) <sup>1</sup>	SUBH (Max) <sup>1</sup>	MSUBH (Min) <sup>1</sup>	MSUBH (Max) <sup>1</sup>
Span	60	N/A	0.0	OK (0.47)	OK (0.34)	OK (0.38)	OK (0.24)	OK (0.23)	OK (0.15)

**Simpson Strong-Tie® Wall Stud Bridging Connectors @ Jambs**

Span/CantiLever	Bracing Length (in.)	Design Number of Braces	Pn(lb.)	LSUBH (Min) <sup>1</sup>	LSUBH (Max) <sup>1</sup>	SUBH (Min) <sup>1</sup>	SUBH (Max) <sup>1</sup>	MSUBH (Min) <sup>1</sup>	MSUBH (Max) <sup>1</sup>
Span	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Notes:**

- 1) Values in parentheses are stress ratios.
- 2) Bridging connectors are not designed for back-back, box, or built-up sections.
- 3) Reference [www.strongtie.com](http://www.strongtie.com) for latest load data, important information, and general notes
- 4) CFS Designer will not select bridging connectors unless all flexural and axial bracing settings are the same.
- 5) If the bracing length is larger than the span length, bridging connectors are not designed.

Project Name: CFS\_stud-hdr-jmb design  
 Model: Wind Module – Monoslope Roof  
 Code: ASCE 7-16

Page 1 of 1  
 Date: 05/27/2021

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

### **WIND LOAD - ASCE 7-16**

95 mph, Exposure D, Mean Roof Height = 26.5 ft

$K_{zt}$  at Base = 1

$K_d$  = 0.85 , Roof Slope 15.0 degrees

Enclosed Building,  $GC_{pi}$  = 0.18

(Wind Loads Shown are for Alternate Basic Load Combinations Using Allowable Stress Design and are Multiplied by a Factor of 0.6 to convert to ASD)

### **WALL COMPONENTS AND CLADDING** per ASCE7-16 Figure 30.3-1

Tributary Area (ft <sup>2</sup> )	<b>GC<sub>p</sub> by Zone</b>	
	Zone 4 (+/-)	Zone 5 (+/-)
10 ft <sup>2</sup>	1.00/-1.10	1.00/-1.40
50 ft <sup>2</sup>	0.88/-0.98	0.88/-1.15
500 ft <sup>2</sup>	0.70/-0.80	0.70/-0.80

Height z (ft)	$K_z$	$K_{zt}$	$K_e$	$q_z$ (psf)	Tributary Area (ft <sup>2</sup> )	<b>Wind Pressures (psf) by Zone ( )</b>		
						Windward (4,5)	Leeward (4)	Leeward (5)
0 - 26.5	1.14	1.00	1.00	22.34	10	15.8	-17.2	-21.2
					50	14.2	-15.5	-17.9
					500	11.8	-13.1	-13.1

Building&Safety: OCPWazarvandB 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900



Project Name: CFS\_stud-hdr-jmb design

Page 1 of 2

Model: Wind Module – Roof Deck

Date: 05/27/2021

Code: ASCE 7-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

**WIND LOAD - ASCE 7-16**

Building&amp;Safety: OCPWazarvandB 12/22/2025

95 mph, Exposure D, Mean Roof Height = 16.0 ft

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

 $K_{zt}$  at Base = 1 $K_d$  = 0.85 , Roof Slope 0.0 degreesEnclosed Building,  $GC_{pi}$  = 0.18

Min. 3' high parapet around perimeter of roof

(Wind Loads Shown are for Alternate Basic Load Combinations Using Allowable Stress Design and are

Multiplied by a Factor of 0.6 to convert to ASD)

**WALL COMPONENTS AND CLADDING** per ASCE7-16 Figure 30.3-1

Tributary Area (ft <sup>2</sup> )	<u>GC<sub>p</sub> by Zone</u>	
	Zone 4 (+/-)	Zone 5 (+/-)
10 ft <sup>2</sup>	0.90/-0.99	0.90/-1.26
50 ft <sup>2</sup>	0.79/-0.88	0.79/-1.04
500 ft <sup>2</sup>	0.63/-0.72	0.63/-0.72

Height z (ft)	<u>Wind Pressures (psf) by Zone ( )</u>				Tributary Area (ft <sup>2</sup> )	Windward (4,5)	Leeward (4)	Leeward (5)
	$K_z$	$K_{zt}$	$K_e$	$q_z$ (psf)				
0 - 16	1.04	1.00	1.00	20.46	10	13.3	-14.4	-17.7
					50	11.9	-13.0	-15.0
					500	9.9	-11.0	-11.0

**PARAPETS**

Tributary Area (ft <sup>2</sup> )	<u>GC<sub>p</sub> by Case and Zone</u>			
	Case A (Zone 4/-2) Front/-Back	Case A (Zone 4 or 5/-3) Front/-Back	Case B (Zone -4/4 or 5) -Front/Back	Case B (Zone -5/4 or 5) -Front/Back
10 ft <sup>2</sup>	0.90/-2.30	0.90/-2.30	-0.99/0.90	-1.26/0.90
50 ft <sup>2</sup>	0.79/-1.93	0.79/-1.93	-0.88/0.79	-1.04/0.79
500 ft <sup>2</sup>	0.63/-1.40	0.63/-1.40	-0.72/0.63	-0.72/0.63

Top of Parapet (ft)	<u>Wind Pressures (psf) by Case and Zone ( )</u>								
	$K_z$	$K_{zt-p}$	$K_e$	$q_{h-p}$	Tributary Area (ft <sup>2</sup> )	Case A (4/-2)	Case A (4 or 5/-3)	Case B (-4/4 or 5)	Case B (-5/4 or 5)
20	1.08	1.00	1.00	21.27	10	40.8	40.8	-24.1	-27.6
					50	34.7	34.7	-21.3	-23.4
					500	25.9	25.9	-17.2	-17.2

The GC<sub>p</sub> Values

Do Not Always Vary Linearly between these Areas in Figures 30.3-1 through 30.5-1.

Therefore, Interpolation of These Calculated Values is Not Recommended.

**ROOF COMPONENTS AND CLADDING - Gable ROOF**

ASCE7-16 Figure 30.3-2A

 $K_h$  = 1.04;  $K_{zt}$  at roof = 1.00;  $K_e$  = 1.00;  $q_h$  = 20.46 psf

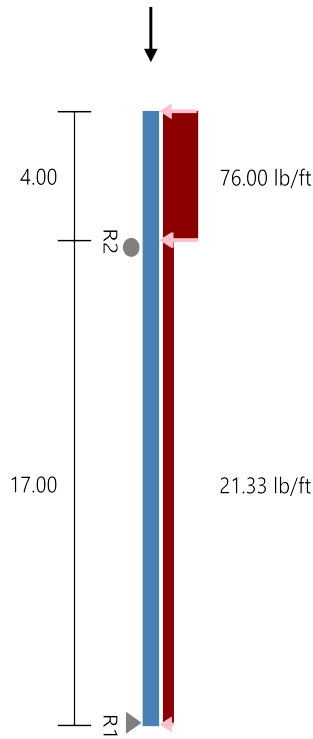
Zone	Positive Pressure, p (psf)				Negative Pressure, p (psf)				Permits: BNR21-0246, ELE21-0853, MEC21-0514, PB21-0900	
	A=10		A=100		A=10		A=100		A=500	
	GC <sub>p</sub>	p	GC <sub>p</sub>	p	GC <sub>p</sub>	p	GC <sub>p</sub>	p	GC <sub>p</sub>	p
Roof 1	0.30	9.60	0.20	9.60	-1.70	-23.08	-1.29	-18.02	-1.00	-14.49
Roof 2	1.00	14.49	0.82	12.28	-2.30	-30.45	-1.77	-23.94	-1.40	-19.40
Roof 3	1.00	14.49	0.82	12.28	-2.30	-30.45	-1.77	-23.94	-1.40	-19.40
Roof 1'	0.30	9.60	0.20	9.60	-0.90	-13.26	-0.90	-13.26	-0.55	-6.60

Engineering & Safety: OCPW Azarvand B 12/22/2025

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Hadi Tabatabaee  
 BUILDING OFFICIAL



**Section :** 600S162-54 (50 ksi) @ 16" Single C Stud (punched) 12/22/2025

**Maxo =** 2313.4 Ft-Lb **Va =** 2822.9 lb **I =** 2.86 in<sup>4</sup>

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Loads have not been modified for strength checks  
 Loads have been multiplied by 0.70 for deflection calculations.

**Bridging Connectors - Design Method = AISI S100**

Span	Axial KyLy, KtLt	Flexual, Distortional
Top Cant.	None, None	None, 48.0"
Span	60.0", 60.0"	60.0", 204.0"

County of Orange - OC Public Works  
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 Connector Ratio  
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**Web Crippling**

Support	Load (lb)	Bearing (in)	Pa (lb)	M (ft-lbs)	Max Int.	Stiffener?
R2	521.1	--Shear Connection w/ clip--				NO
R1	145.6	--Shear Connection w/ clip--				NO

**Gravity Load**

Type	Load (lb)
Uniform	26.67plf (Top Cantilever), 26.67plf (Span)

	Code Check	Required	Allowed	Interaction	Notes
Top Cant.	Max. Axial, lbs	106.7(c)	4876.0(c)	2%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	304.0	1947.4	16%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	608.0	1930.2	31%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	388.1	2275.5	17%	
	Shear/Moment	0.31	1.00	31%	Shear 304.0, Moment 608.0
	Axial/Moment	0.34	1.00	34%	Axial 106.7(c), Moment 608.0
	Deflection Cant., in	0.018	--meets L/5336--		
Span	Max. Axial, lbs	560.0(c)	4170.1(c)	13%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	217.1	1947.4	11%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	608.0	1930.2	31%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	496.6	1801.9	28%	
	Shear/Moment	0.29	1.00	29%	Shear 217.1, Moment 608.0
	Axial/Moment	0.38	1.00	38%	Axial 393.2(c), Moment 493.2
	Deflection Span, in	0.178	--meets L/1146--		

Project Name: CFS\_stud-hdr-jmb design

Model: Typ Stud - Windward

Date: 05/27/2021

Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie Connector	Connector Interaction	Anchor Interaction
R2	521.1	0.0	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	68.37 %	40.74 %
R1	145.6	560.0	600T125-33 (33) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	21.16 %	33.05 %

Building Safety: OC-PWA-Zarwan-B 12/22/2025  
 Permits: BNR21-0248, EL21-0053, MEC21-0514, PLB21-0900

\* Reference catalog for connector and anchor requirement notes as well as screw placement requirements

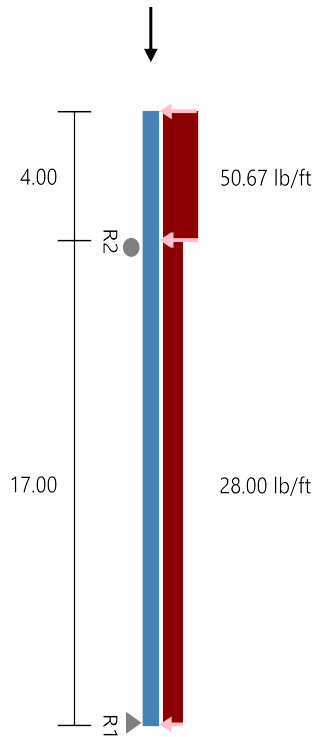
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Project Name: CFS\_stud-hdr-jmb design  
 Model: Typ Stud - Leeward  
 Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0



**Section :** 600S162-54 (50 ksi) @ 16" Single C Stud (punched) 12/22/2025

**Maxo =** 2313.4 Ft-Lb **Va =** 2822.9 lb **I =** 2.86 in<sup>4</sup>

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Loads have not been modified for strength checks  
 Loads have been multiplied by 0.70 for deflection calculations.

**Bridging Connectors - Design Method = AISI S100**

Span	Axial KyLy, KtLt	Flexual, Distortional
Top Cant.	None, None	None, 48.0"
Span	60.0", 60.0"	60.0", 204.0"



**Web Crippling**

Support	Load (lb)	Bearing (in)	Pa (lb)	(ft-lbs)	Max Int.	Stiffener?
R2	464.5	--Shear Connection w/ clip--				NO
R1	214.2	--Shear Connection w/ clip--				NO

**Gravity Load**

Type	Load (lb)
Uniform	26.67plf (Top Cantilever), 26.67plf (Span)

	Code Check	Required	Allowed	Interaction	Notes
Top Cant.	Max. Axial, lbs	106.7(c)	4876.0(c)	2%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	202.7	1947.4	10%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	405.3	1930.2	21%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	258.8	2275.5	11%	
	Shear/Moment	0.20	1.00	20%	Shear 202.7, Moment 405.3
	Axial/Moment	0.23	1.00	23%	Axial 106.7(c), Moment 405.3
	Deflection Cant., in	0.174	--meets L/553--		
Span	Max. Axial, lbs	560.0(c)	4170.1(c)	13%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	261.8	1947.4	13%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	819.0	1930.2	42%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	819.0	1799.4	46%	
	Shear/Moment	0.35	1.00	35%	Shear 0.0, Moment 819.0
	Axial/Moment	0.56	1.00	56%	Axial 368.2(c), Moment 816.1
	Deflection Span, in	0.332	--meets L/614--		

Project Name: CFS\_stud-hdr-jmb design

Model: Typ Stud - Leeward

Date: 05/27/2021

Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie Connector	Connector Interaction	Anchor Interaction
R2	464.5	0.0	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	61.12 %	41.56 %
R1	214.2	560.0	600T125-33 (33) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	31.13 %	48.63 %

Building Safety: OC PWA Zarfand B 12/22/2025  
 Permits: BNR21-0248, EL 21-0853, MEC21-0514, PLB21-0900

\* Reference catalog for connector and anchor requirement notes as well as screw placement requirements

**County of Orange - OC Public Works**  
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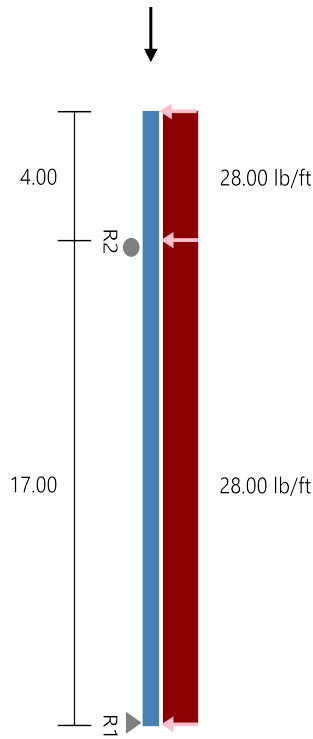
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Project Name: CFS\_stud-hdr-jmb design  
 Model: Typ Stud - Uniform  
 Code: AISI S100-16

Page 1 of 2  
 Date: 05/27/2021

Simpson Strong-Tie® CFS Designer™ 3.4.5.0



**Section :** 600S162-54 (50 ksi) @ 16" Single C Stud (punched) 12/22/2025

**Maxo =** 2313.4 Ft-Lb **Va =** 2822.9 lb **I =** 2.86 in<sup>4</sup>

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Loads have not been modified for strength checks  
 Loads have been multiplied by 0.70 for deflection calculations.

**Bridging Connectors - Design Method = AISI S100**

Span	Axial KyLy, KtLt	Flexual, Distortional
Top Cant.	None, None	None, 48.0"
Span	60.0", 60.0"	60.0", 204.0"



**Web Crippling**

Support	Load (lb)	Bearing (in)	Pa (lb)	M (ft-lbs)	Max Int.	Stiffener?
R2	363.2	--Shear Connection w/ clip--				NO
R1	224.8	--Shear Connection w/ clip--				NO

**Gravity Load**

Type	Load (lb)
Uniform	26.67plf (Top Cantilever), 26.67plf (Span)

	Code Check	Required	Allowed	Interaction	Notes
Top Cant.	Max. Axial, lbs	106.7(c)	4876.0(c)	2%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	112.0	1947.4	6%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	224.0	1930.2	12%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	143.0	2275.5	6%	
	Shear/Moment	0.11	1.00	11%	Shear 112.0, Moment 224.0
	Axial/Moment	0.14	1.00	14%	Axial 106.7(c), Moment 224.0
	Deflection Cant., in	0.243	--meets L/395--		
Span	Max. Axial, lbs	560.0(c)	4170.1(c)	13%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	251.2	1947.4	13%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	902.6	1930.2	47%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	902.6	1798.4	50%	
	Shear/Moment	0.39	1.00	39%	Shear 0.2, Moment 902.6
	Axial/Moment	0.60	1.00	60%	Axial 358.3(c), Moment 899.6
	Deflection Span, in	0.379	--meets L/539--		

Project Name: CFS\_stud-hdr-jmb design

Model: Typ Stud - Uniform

Date: 05/27/2021

Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie Connector	Connector Interaction	Anchor Interaction
R2	363.2	0.0	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	47.79 %	32.57 %
R1	224.8	560.0	600T125-33 (33) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	32.68 %	51.05 %

Building Safety: OC PWA Zarfand B 12/22/2025  
 Permits: BNR21-0246, FILED 0453, MEC21-0514, PLB21-0900

\* Reference catalog for connector and anchor requirement notes as well as screw placement requirements

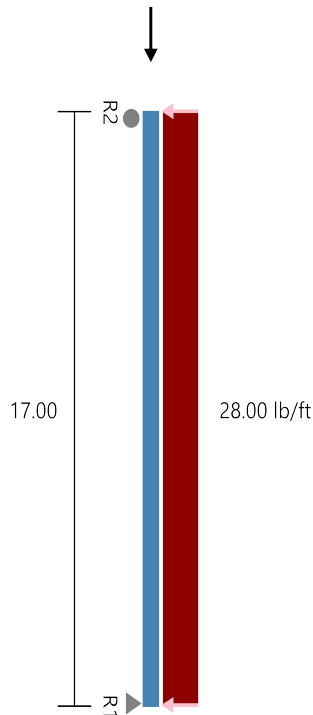
**County of Orange - OC Public Works**  
**OC Development Services**  
**APPROVED**

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Hadi Tabatabaee  
 BUILDING OFFICIAL

Project Name: CFS\_stud-hdr-jmb design  
 Model: Typ Stud - Simple  
 Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0



**Section :** 600S162-54 (50 ksi) @ 16" o.c. Single C Stud (punched) 12/22/2025

**Maxo =** 2313.4 Ft-Lb **Va =** 2822.9 lb **I =** 2.86 in<sup>4</sup>

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Loads have not been modified for strength checks

Loads have been multiplied by 0.70 for deflection calculations.

**Bridging Connectors - Design Method =** AISI S100

Span	Axial KyLy, KtLt	Flexural, Distortional
Span	60.0", 60.0"	60.0", 204.0"

**Web Crippling**

Support	Load (lb)	Bearing (in)	Pa (lb)	M (ft-lbs)	Max Int. Stiffener?
R2	238.0	--Shear Connection w/ clip--			NO
R1	238.0	--Shear Connection w/ clip--			NO

**Gravity Load**

Type	Load (lb)
Uniform	26.67plf (Span)

**APPROVED**

County of Orange - OC Public Works  
 Development Services

This project and specifications shall be kept on the job and unless it is lawful to make changes or alterations to these plans without written permission of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 MARKING OFFICER

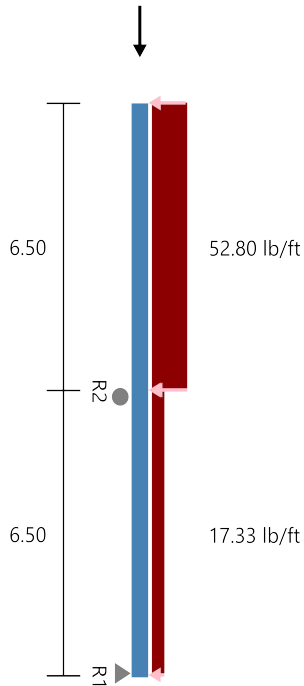
SUBH3-26 (Min) 0.52

	Code Check	Required	Allowed	Interaction	Notes
Span	Max. Axial, lbs	453.3(c)	4170.1(c)	11%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	238.0	1947.4	12%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	1011.5	1930.2	52%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	1011.5	1797.3	56%	
	Shear/Moment	0.44	1.00	44%	Shear 0.0, Moment 1011.5
	Axial/Moment	0.63	1.00	63%	Axial 239.4(c), Moment 1008.3
	Deflection Span, in	0.437	--meets L/467--		
Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie Connector	Connector Interaction	Anchor Interaction
R2	238.0	0.0	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	31.32 %	21.35 %
R1	238.0	453.3	600T125-33 (33) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	34.59 %	54.04 %

\* Reference catalog for connector and anchor requirement notes as well as screw placement requirements

Project Name: CFS\_stud-hdr-jmb design  
 Model: High Parapet (MEP Well)  
 Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0



**Section :** 600S162-54 (50 ksi) @ 16" o.c. Single C Stud (punched)  
**Maxo =** 2313.4 Ft-Lb **Va =** 2822.9 lb **I =** 2.86 in<sup>4</sup>  
 Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Loads have not been modified for strength checks  
 Loads have been multiplied by 0.70 for deflection calculations

**Bridging Connectors - Design Method = AISI S100**

Span	Axial KyLy, KtLt	Flexual, Distortional	Stress Connector Ratio
Top Cant.	60.0", 60.0"	60.0", 78.0"	LSUBH3.25 (Min) 0.95
Span	60.0", 60.0"	60.0", 78.0"	LSUBH3.25 (Min) 0.33

**Web Crippling**

Support	Load (lb)	Bearing (in)	Pa (lb)	M (ft-lbs)	Max Int.	Stiffener?
R2	571.1	--Shear Connection w/ clip--				NO
R1	-115.3	--Shear Connection w/ clip--				NO

**Gravity Load**

Type	Load (lb)
Uniform	26.67plf

**APPROVED**

County of Orange - OC Public Works  
 Development Services

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 BUILDING OFFICIAL

	Code Check	Required	Allowed	Interaction	Notes
Top Cant.	Max. Axial, lbs	173.3(c)	4006.4(c)	4%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	343.2	1947.4	18%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	1115.4	1930.2	58%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	712.1	1788.3	40%	
	Shear/Moment	0.51	1.00	51%	Shear 343.2, Moment 1115.4
	Axial/Moment	0.67	1.00	67%	Axial 173.3(c), Moment 1115.4
	Deflection Cant., in	0.376	--meets L/415--		
Span	Max. Axial, lbs	346.7(c)	4478.9(c)	8%	KΦ=0.00 lb-in/in
	Max. Shear, lbs	227.9	1947.4	12%	Shear (Punched)
	Max. Moment (MaFy, Ma-dist), ft-lbs	1115.4	1930.2	58%	Ma-dist (control), KΦ=0.00 lb-in/in
	Moment Stability, ft-lbs	832.4	1788.3	47%	
	Shear/Moment	0.50	1.00	50%	Shear 227.9, Moment 1115.4
	Axial/Moment	0.66	1.00	66%	Axial 173.3(c), Moment 1115.4
	Deflection Span, in	0.038	--meets L/2066--		

Project Name: CFS\_stud-hdr-jmb design

Model: High Parapet (MEP Well)

Date: 05/27/2021

Code: AISI S100-16

Simpson Strong-Tie® CFS Designer™ 3.4.5.0

Support	Rx(lb)	Ry(lb)	Simpson Strong-Tie Connector	Connector Interaction	Anchor Interaction
R2	571.1	0.0	SCB45.5(2) & (2) #12-24 SST X or XL to A36 Steel	75.13 %	51.22 %
R1	-115.3	346.7	600T125-33 (33) & (2) .157" SST PDPA/PDPAT-62KP to steel (3/16" to 1/2" thickness)	16.75 %	26.17 %

Building Safety: OC PWA Zarfand B 12/22/2025  
 Permits: BNR21-0246, EL521-0853, MEC21-0514, PLB21-0900

\* Reference catalog for connector and anchor requirement notes as well as screw placement requirements

**County of Orange - OC Public Works**  
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Hadi Tabatabaee  
 BUILDING OFFICIAL

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
 Software copyright ENERCALC, INC. 1983-2020, Build:12.20.8.24

**KPFF CONSULTING ENGINEERS**  
 Building Safety - OCF Hazards 12/22/2025

DESCRIPTION: HIGH CANOPY - HSS BM (10' OC)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**County of Orange - OC Public Works  
 OC Development Services  
 APPROVED**

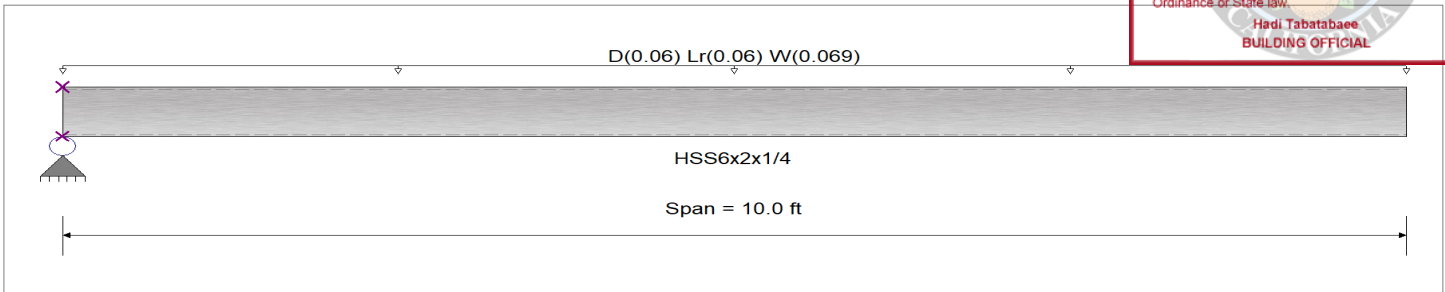
**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield : 46.0 ksi  
 E: Modulus : 29,000.0 ksi

This set of plans and specifications must be kept on the job site. It is unlawful to make any changes or alterations to these plans without written permission of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
 Uniform Load : D = 0.020, Lr = 0.020, W = 0.0230 ksf, Tributary Width = 3.0 ft

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.000 : 1</b>	Maximum Shear Stress Ratio =	<b>0.000 : 1</b>
Section used for this span	<b>HSS6x2x1/4</b>	Section used for this span	<b>HSS6x2x1/4</b>
Ma : Applied	0.000 k-ft	Va : Applied	0.0 k
Mn / Omega : Allowable	0.000 k-ft	Vn/Omega : Allowable	0.0 k
Load Combination		Load Combination	
Location of maximum on span	0.000 ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.000 in	Ratio =	0 <360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.000 in	Ratio =	0 <240.0
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values					Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega Cb	Rm	Va Max	Vnx	Vnx/Omega
D Only													
+D+Lr													
+D+0.750Lr													
+D+0.60W													
+D+0.750Lr+0.450W													
+D+0.450W													
+0.60D+0.60W													
+0.60D													

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
	1	0.0000	0.000		0.0000	0.000

**Vertical Reactions**

Load Combination	Support 1	Support 2

Support notation : Far left is #1

Values in KIPS

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building Safety - OCF Hazards 12/22/2025

DESCRIPTION: HIGH CANOPY - HSS BM (cont)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

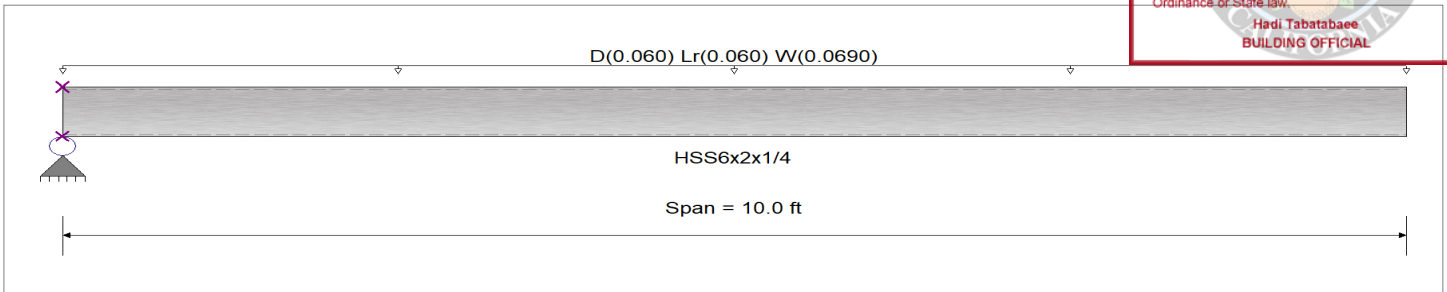
Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16



**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield : 46.0 ksi  
 E: Modulus : 29,000.0 ksi



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
 Loads on all spans...

Uniform Load on ALL spans : D = 0.020, Lr = 0.020, W = 0.0230 ksf, Tributary Width = 3.0 ft

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	0.000 : 1	Maximum Shear Stress Ratio =	0.000 : 1
Section used for this span	HSS6x2x1/4	Section used for this span	HSS6x2x1/4
Ma : Applied	0.000 k-ft	Va : Applied	0.0 k
Mn / Omega : Allowable	0.000 k-ft	Vn/Omega : Allowable	0.0 k
Load Combination		Load Combination	
Location of maximum on span	0.000ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.000 in	Ratio =	0 < 360
Max Upward Transient Deflection	0.000 in	Ratio =	0 < 360
Max Downward Total Deflection	0.000 in	Ratio =	0 < 240.0
Max Upward Total Deflection	0.000 in	Ratio =	0 < 240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values				
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega	
D Only															
+D+Lr															
+D+0.750Lr															
+D+0.60W															
+D+0.750Lr+0.450W															
+D+0.450W															
+0.60D+0.60W															
+0.60D															

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
	1	0.0000	0.000		0.0000	0.000

**Vertical Reactions**

Load Combination	Support 1	Support 2

Support notation : Far left is #1

Values in KIPS

**Steel Beam**

Lic. #: KW-06003761

File: HSS Design.ec6  
 Software copyright ENERCALC, INC. 1983-2020, Build:12.20.8.24

**KPFF CONSULTING ENGINEERS**  
 Building Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(A) - 1/S4.0.1 (strong axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

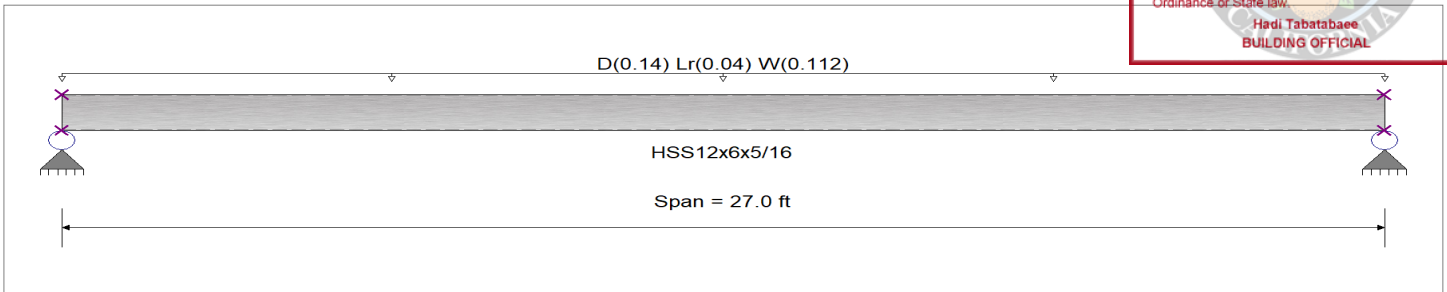
Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield :  
 E: Modulus :

450 KSI  
 29,000 KSI  
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**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading

Uniform Load : D = 0.140, Lr = 0.040, W = 0.1120 k/ft, Tributary Width = 1.0 ft, (Wall Above + Canopy)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.267 : 1</b>	Maximum Shear Stress Ratio =	<b>0.032 : 1</b>
Section used for this span	<b>HSS12x6x5/16</b>	Section used for this span	<b>HSS12x6x5/16</b>
Ma : Applied	23.374 k-ft	Va : Applied	3.463 k
Mn / Omega : Allowable	87.455 k-ft	Vn/Omega : Allowable	107.027 k
Load Combination	+D+0.750Lr+0.450W	Load Combination	+D+0.750Lr+0.450W
Location of maximum on span	13.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.252 in	Ratio =	1,285 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.577 in	Ratio =	561 >=240
Max Upward Total Deflection	0.000 in	Ratio =	0 <240

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values				
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega	
D Only															
Dsgn. L = 27.00 ft		1	0.183	0.022	16.05		16.05	146.05	87.46	1.14	1.00	2.38	178.74	107.03	
+D+Lr															
Dsgn. L = 27.00 ft		1	0.225	0.027	19.69		19.69	146.05	87.46	1.14	1.00	2.92	178.74	107.03	
+D+0.750Lr															
Dsgn. L = 27.00 ft		1	0.215	0.026	18.78		18.78	146.05	87.46	1.14	1.00	2.78	178.74	107.03	
+D+0.60W															
Dsgn. L = 27.00 ft		1	0.254	0.031	22.17		22.17	146.05	87.46	1.14	1.00	3.28	178.74	107.03	
+D+0.750Lr+0.450W															
Dsgn. L = 27.00 ft		1	0.267	0.032	23.37		23.37	146.05	87.46	1.14	1.00	3.46	178.74	107.03	
+D+0.450W															
Dsgn. L = 27.00 ft		1	0.236	0.029	20.64		20.64	146.05	87.46	1.14	1.00	3.06	178.74	107.03	
+0.60D+0.60W															
Dsgn. L = 27.00 ft		1	0.180	0.022	15.75		15.75	146.05	87.46	1.14	1.00	2.33	178.74	107.03	
+0.60D															
Dsgn. L = 27.00 ft		1	0.110	0.013	9.63		9.63	146.05	87.46	1.14	1.00	1.43	178.74	107.03	

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+0.750Lr+0.450W	1	0.5774	13.577		0.0000	0.000

Project Title:  
 Engineer:  
 Project ID:  
 Project Descr:

E22

**Steel Beam**

File: HSS Design.ec6  
 Software copyright ENERCALC, INC. 1983-2020, Build:12.20.8.24

Lic. # : KW-06003761

**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(A) - 1/S4.0.1 (strong axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514,  
 Values in KIPS

**Vertical Reactions**

Support notation : Far left is #1

Load Combination	Support 1	Support 2
Overall MAXimum	3.463	3.463
Overall MINimum	0.540	0.540
D Only	2.377	2.377
+D+Lr	2.917	2.917
+D+0.750Lr	2.782	2.782
+D+0.60W	3.285	3.285
+D+0.750Lr+0.450W	3.463	3.463
+D+0.450W	3.058	3.058
+0.60D+0.60W	2.334	2.334
+0.60D	1.426	1.426
Lr Only	0.540	0.540
W Only	1.512	1.512



**Steel Beam**

Lic. #: KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OCF WAZarVandB 12/22/2025

DESCRIPTION: HSS HDR(A) - 1/S4.0.1 (weak axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

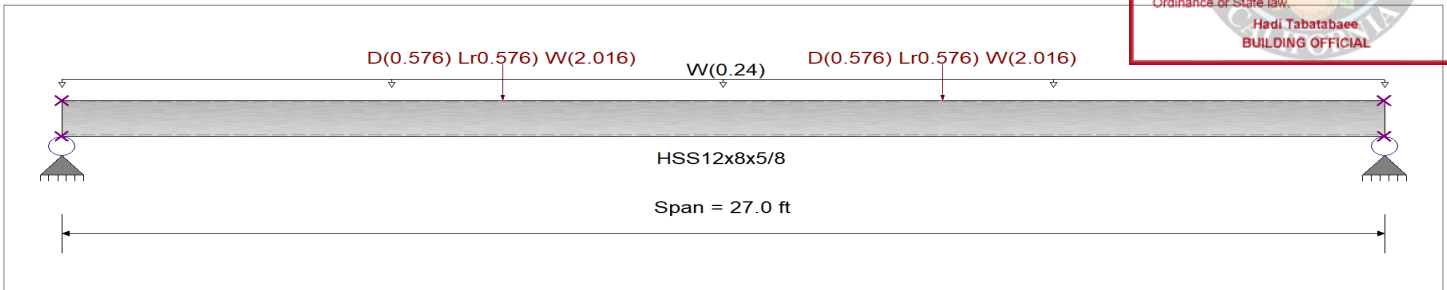
**CODE REFERENCES**

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Minor Axis Bending

Fy : Steel Yield : 45.0 ksi  
 E: Modulus : 29,000.0 ksi



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added

Load(s) for Span Number 1

Point Load : D = 0.5760, Lr = 0.5760, W = 2.016 k @ 9.0 ft, (Canopy)

Point Load : D = 0.5760, Lr = 0.5760, W = 2.016 k @ 18.0 ft, (Canopy)

Uniform Load : W = 0.240 k/ft, Tributary Width = 1.0 ft, (Wind - OOP)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.205 : 1</b>	Maximum Shear Stress Ratio =	<b>0.031 : 1</b>
Section used for this span	<b>HSS12x8x5/8</b>	Section used for this span	<b>HSS12x8x5/8</b>
Ma : Applied	29.192 k-ft	Va : Applied	3.730 k
Mn / Omega : Allowable	142.086 k-ft	Vn/Omega : Allowable	120.161 k
Load Combination	+D+0.60W	Load Combination	+D+0.60W
Location of maximum on span	13.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.873 in	Ratio =	370 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.640 in	Ratio =	507 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mny	Mny/Omega	Cb	Rm	Va Max	Vny	Vny/Omega
D Only	Dsgn. L = 27.00 ft	1	0.036	0.005	5.18		5.18	237.28	142.09	1.14	1.00	0.58	200.67	120.16
+D+Lr	Dsgn. L = 27.00 ft	1	0.073	0.010	10.37		10.37	237.28	142.09	1.14	1.00	1.15	200.67	120.16
+D+0.750Lr	Dsgn. L = 27.00 ft	1	0.064	0.008	9.07		9.07	237.28	142.09	1.14	1.00	1.01	200.67	120.16
+D+0.60W	Dsgn. L = 27.00 ft	1	0.205	0.031	29.19		29.19	237.28	142.09	1.14	1.00	3.73	200.67	120.16
+D+0.750Lr+0.450W	Dsgn. L = 27.00 ft	1	0.191	0.028	27.08		27.08	237.28	142.09	1.14	1.00	3.37	200.67	120.16
+D+0.450W	Dsgn. L = 27.00 ft	1	0.163	0.024	23.19		23.19	237.28	142.09	1.14	1.00	2.94	200.67	120.16
+0.60D+0.60W	Dsgn. L = 27.00 ft	1	0.191	0.029	27.12		27.12	237.28	142.09	1.14	1.00	3.50	200.67	120.16
+0.60D	Dsgn. L = 27.00 ft	1	0.022	0.003	3.11		3.11	237.28	142.09	1.14	1.00	0.35	200.67	120.16

**Steel Beam**

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**KPFF CONSULTING ENGINEERS**  
 Building Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(A) - 1/S4.0.1 (weak axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "-" Defl	Location in Span
W Only	1	0.8748	13.577		0.0000	0.0000

**Vertical Reactions**

Support notation : Far left is #1

Load Combination	Support 1	Support 2
Overall MAXimum	5.256	5.256
Overall MINimum	0.346	0.346
D Only	0.576	0.576
+D+Lr	1.152	1.152
+D+0.750Lr	1.008	1.008
+D+0.60W	3.730	3.730
+D+0.750Lr+0.450W	3.373	3.373
+D+0.450W	2.941	2.941
+0.60D+0.60W	3.499	3.499
+0.60D	0.346	0.346
Lr Only	0.576	0.576
W Only	5.256	5.256

Values in KIPS

**APPROVED**

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations to these plans without written permission from OC Public Works, OC Development Services of Orange County. The stamping of these plan specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any County Ordinance or State law.

Hadi Tabatabaee  
 BUILDING OFFICIAL

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(B) - 2/S4.0.1\_A (strong axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

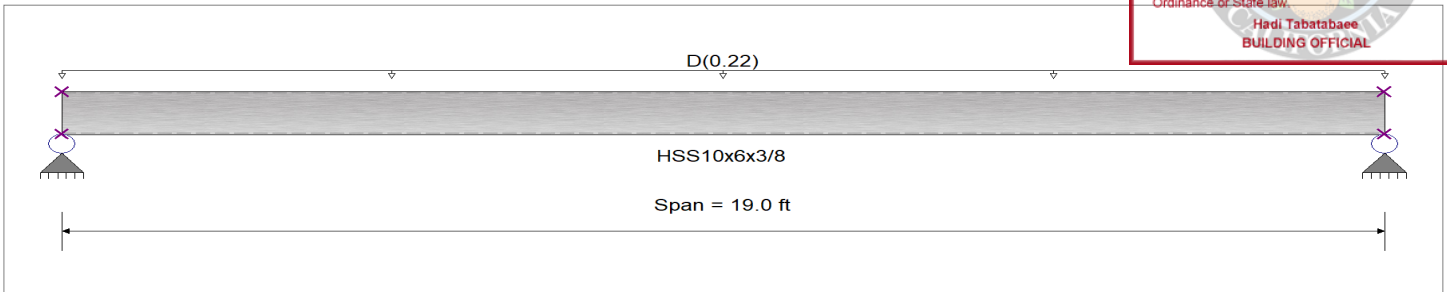
Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield :  
 E: Modulus :

46,000 KSI  
 29,000,000 KSI  
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**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading  
 Uniform Load : D = 0.220 k/ft, Tributary Width = 1.0 ft, (Wall Above)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.150 : 1</b>	Maximum Shear Stress Ratio =	<b>0.024 : 1</b>
Section used for this span	<b>HSS10x6x3/8</b>	Section used for this span	<b>HSS10x6x3/8</b>
Ma : Applied	11.628 k-ft	Va : Applied	2.448 k
Mn / Omega : Allowable	77.585 k-ft	Vn/Omega : Allowable	103.280 k
Load Combination	D Only	Load Combination	D Only
Location of maximum on span	9.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.000 in	Ratio =	0 <360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.191 in	Ratio =	1193 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
D Only	Dsgn. L = 19.00 ft	1	0.150	0.024	11.63		11.63	129.57	77.58	1.14	1.00	2.45	172.48	103.28
+0.60D	Dsgn. L = 19.00 ft	1	0.090	0.014	6.98		6.98	129.57	77.58	1.14	1.00	1.47	172.48	103.28

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.1911	9.554		0.0000	0.000

**Vertical Reactions**

Load Combination	Support 1	Support 2
Overall MAXimum	2.448	2.448
Overall MINimum	1.469	1.469
D Only	2.448	2.448
+0.60D	1.469	1.469

Support notation : Far left is #1

Values in KIPS

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(B) - 2/S4.0.1 (weak axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

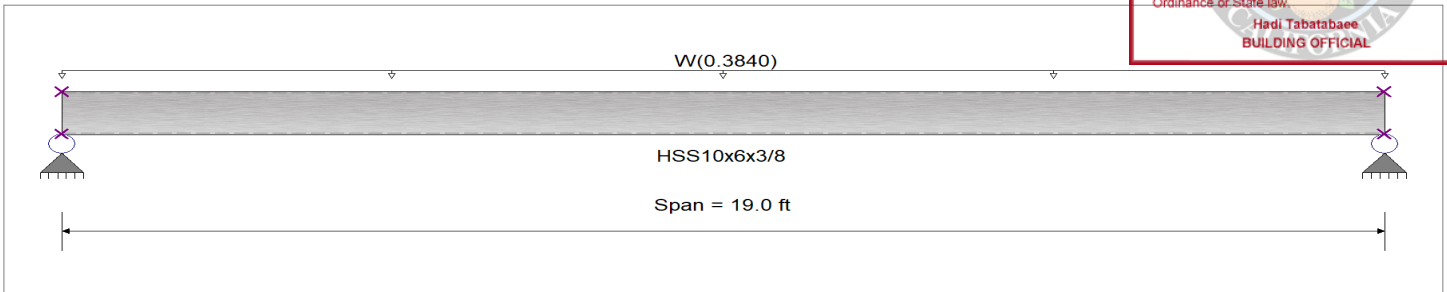
**CODE REFERENCES**

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Minor Axis Bending

Fy : Steel Yield : 46.0 ksi  
 E: Modulus : 29,000.0 ksi



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
 Loads on all spans...  
 Uniform Load on ALL spans : W = 0.0320 ksf, Tributary Width = 12.0 ft

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.191</b> : 1	Maximum Shear Stress Ratio =	<b>0.038</b> : 1
Section used for this span	<b>HSS10x6x3/8</b>	Section used for this span	<b>HSS10x6x3/8</b>
Ma : Applied	10.397 k-ft	Va : Applied	2.189 k
Mn / Omega : Allowable	54.401 k-ft	Vn/Omega : Allowable	57.137 k
Load Combination	+0.60W	Load Combination	+0.60W
Location of maximum on span	9.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.630 in	Ratio =	361 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.379 in	Ratio =	602 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mny	Mny/Omega	Cb	Rm	Va Max	Vny	Vny/Omega
Dsgn. L = 19.00 ft		1		0.000				90.85	54.40	1.00	1.00	-0.00	95.42	57.14
+0.60W														
Dsgn. L = 19.00 ft		1	0.191	0.038	10.40		10.40	90.85	54.40	1.14	1.00	2.19	95.42	57.14
+0.450W														
Dsgn. L = 19.00 ft		1	0.143	0.029	7.80		7.80	90.85	54.40	1.14	1.00	1.64	95.42	57.14

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
W Only	1	0.6311	9.554		0.0000	0.000

**Vertical Reactions**

Load Combination	Support notation : Far left is #1		Values in KIPS	
	Support 1	Support 2		
Overall MAXimum	3.648	3.648		
Overall MINimum	1.642	1.642		
+0.60W	2.189	2.189		
+0.450W	1.642	1.642		
W Only	3.648	3.648		

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Public Works 12/22/2025

DESCRIPTION: HSS HDR(D) - 1/S4.0.2 (strong axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

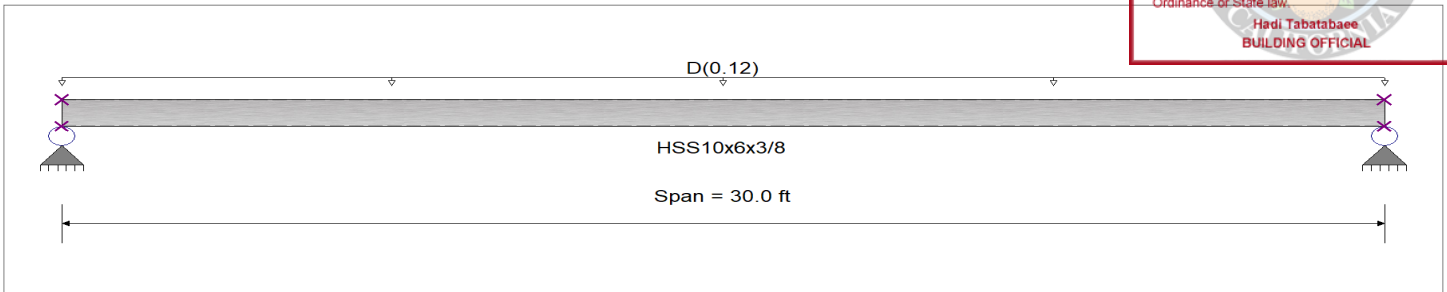
**CODE REFERENCES**

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield : 46.0 ksi  
 E: Modulus : 29,000.0 ksi



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading  
 Uniform Load : D = 0.020 ksf, Tributary Width = 6.0 ft, (Wall Above)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.229 : 1</b>	Maximum Shear Stress Ratio =	<b>0.023 : 1</b>
Section used for this span	<b>HSS10x6x3/8</b>	Section used for this span	<b>HSS10x6x3/8</b>
Ma : Applied	17.740 k-ft	Va : Applied	2.365 k
Mn / Omega : Allowable	77.585 k-ft	Vn/Omega : Allowable	103.280 k
Load Combination	D Only	Load Combination	D Only
Location of maximum on span	15.000ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.000 in	Ratio =	0 <360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.727 in	Ratio =	495 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
D Only	Dsgn. L = 30.00 ft	1	0.229	0.023	17.74		17.74	129.57	77.58	1.14	1.00	2.37	172.48	103.28
+0.60D	Dsgn. L = 30.00 ft	1	0.137	0.014	10.64		10.64	129.57	77.58	1.14	1.00	1.42	172.48	103.28

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.7267	15.086		0.0000	0.000

**Vertical Reactions**

Load Combination	Support 1	Support 2
Overall MAXimum	2.365	2.365
Overall MINimum	1.419	1.419
D Only	2.365	2.365
+0.60D	1.419	1.419

Support notation : Far left is #1

Values in KIPS

**Steel Beam**

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS HDR(D) - 1/S4.0.2 (weak axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

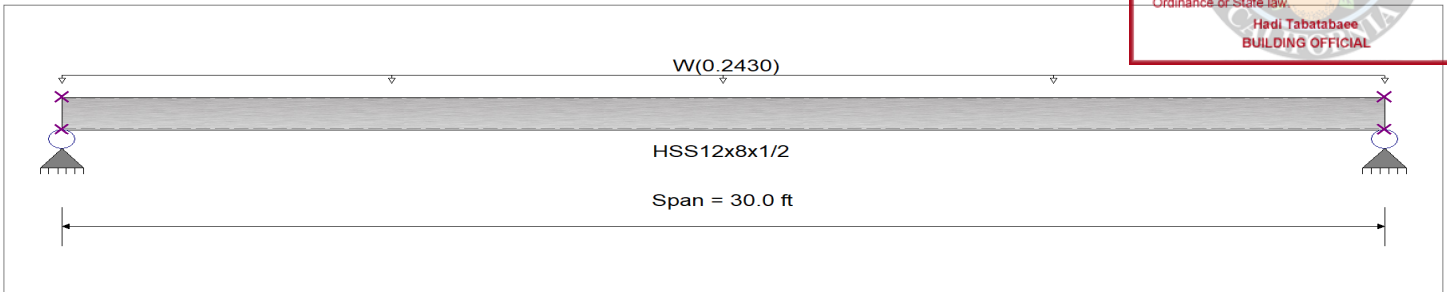
**CODE REFERENCES**

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Minor Axis Bending

Fy : Steel Yield : 45.0 ksi  
 E: Modulus : 29,000.0 ksi



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
 Loads on all spans...  
 Uniform Load on ALL spans : W = 0.0270 ksf, Tributary Width = 9.0 ft

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.139</b> : 1	Maximum Shear Stress Ratio =	<b>0.022</b> : 1
Section used for this span	<b>HSS12x8x1/2</b>	Section used for this span	<b>HSS12x8x1/2</b>
Ma : Applied	16.403 k-ft	Va : Applied	2.187 k
Mn / Omega : Allowable	118.214 k-ft	Vn/Omega : Allowable	101.519 k
Load Combination	+0.60W	Load Combination	+0.60W
Location of maximum on span	15.000ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.861 in	Ratio =	417 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.517 in	Ratio =	696 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mny	Mny/Omega	Cb	Rm	Va Max	Vny	Vny/Omega
Dsgn. L = 30.00 ft		1		0.000				197.42	118.21	1.00	1.00	-0.00	169.54	101.52
+0.60W														
Dsgn. L = 30.00 ft		1	0.139	0.022	16.40		16.40	197.42	118.21	1.14	1.00	2.19	169.54	101.52
+0.450W														
Dsgn. L = 30.00 ft		1	0.104	0.016	12.30		12.30	197.42	118.21	1.14	1.00	1.64	169.54	101.52

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
W Only	1	0.8619	15.086		0.0000	0.000

**Vertical Reactions**

Load Combination	Support notation : Far left is #1		Values in KIPS	
	Support 1	Support 2		
Overall MAXimum	3.645	3.645		
Overall MINimum	1.640	1.640		
+0.60W	2.187	2.187		
+0.450W	1.640	1.640		
W Only	3.645	3.645		

**Steel Beam**

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**KPFF CONSULTING ENGINEERS**  
 Building Safety - OCF WAZAR VANDI 12/22/2025

DESCRIPTION: HSS HDR - 2/S4.0.2\_La Cantina(strong axis)

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

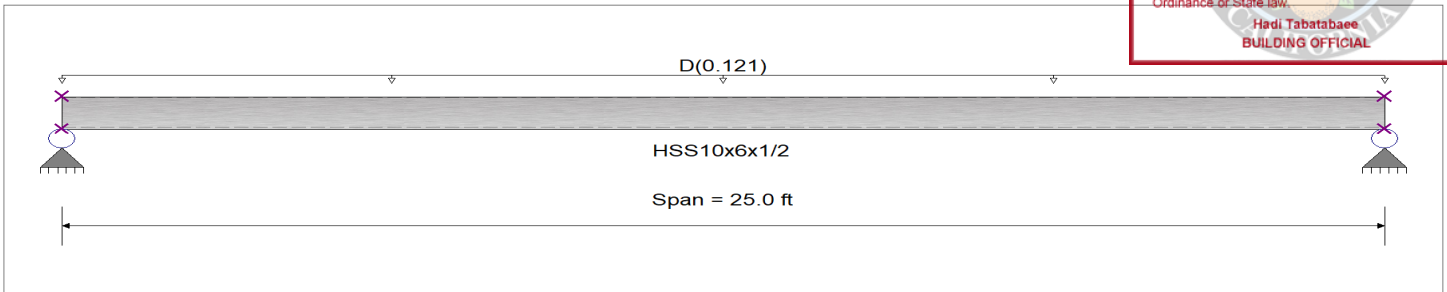
Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Major Axis Bending

Fy : Steel Yield :  
 E: Modulus :

460 KSI  
 29,000,000 KSI  
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**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading  
 Uniform Load : D = 0.1210 k/ft, Tributary Width = 1.0 ft, (Top Hung + Transom Above)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.134 : 1</b>	Maximum Shear Stress Ratio =	<b>0.016 : 1</b>
Section used for this span	<b>HSS10x6x1/2</b>	Section used for this span	<b>HSS10x6x1/2</b>
Ma : Applied	13.270 k-ft	Va : Applied	2.123 k
Mn / Omega : Allowable	98.703 k-ft	Vn/Omega : Allowable	132.259 k
Load Combination	D Only	Load Combination	D Only
Location of maximum on span	12.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.000 in	Ratio =	0 < 600.0
Max Upward Transient Deflection	0.000 in	Ratio =	0 < 600.0
Max Downward Total Deflection	0.302 in	Ratio =	992 >= 480.
Max Upward Total Deflection	0.000 in	Ratio =	0 < 480.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
D Only	Dsgn. L = 25.00 ft	1	0.134	0.016	13.27		13.27	164.83	98.70	1.14	1.00	2.12	220.87	132.26
+0.60D	Dsgn. L = 25.00 ft	1	0.081	0.010	7.96		7.96	164.83	98.70	1.14	1.00	1.27	220.87	132.26

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.3024	12.571		0.0000	0.000

**Vertical Reactions**

Load Combination	Support 1	Support 2
Overall MAXimum	2.123	2.123
Overall MINimum	1.274	1.274
D Only	2.123	2.123
+0.60D	1.274	1.274

Support notation : Far left is #1

Values in KIPS

**Steel Beam**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**

DESCRIPTION: HSS HDR - 2/S4.0.2\_La Cantina(weak axis)

Building Safety: OCF WAZAR VANDS 12/22/2025

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

**CODE REFERENCES**

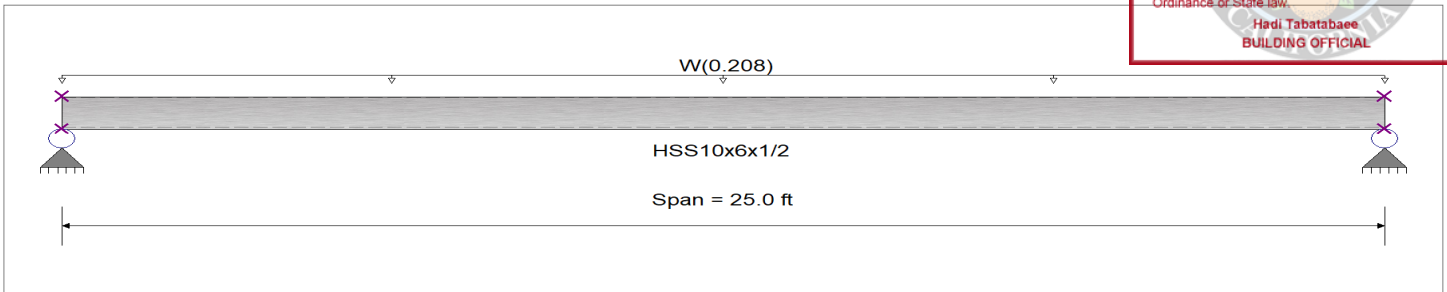
Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combination Set : ASCE 7-16

**Material Properties**

Analysis Method : Allowable Strength Design  
 Beam Bracing : Completely Unbraced  
 Bending Axis : Minor Axis Bending

Fy : Steel Yield :  
 E: Modulus :

450 KSI  
 29,000,000 KSI



**Applied Loads**

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
 Uniform Load : W = 0.2080 k/ft, Tributary Width = 1.0 ft, (Wind OOP)

**DESIGN SUMMARY**

**Design OK**

Maximum Bending Stress Ratio =	<b>0.141 : 1</b>	Maximum Shear Stress Ratio =	<b>0.022 : 1</b>
Section used for this span	<b>HSS10x6x1/2</b>	Section used for this span	<b>HSS10x6x1/2</b>
Ma : Applied	9.750 k-ft	Va : Applied	1.560 k
Mn / Omega : Allowable	69.092 k-ft	Vn/Omega : Allowable	70.779 k
Load Combination	+0.60W	Load Combination	+0.60W
Location of maximum on span	12.500ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.824 in	Ratio =	363 >=360.
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360.0
Max Downward Total Deflection	0.495 in	Ratio =	606 >=240.
Max Upward Total Deflection	0.000 in	Ratio =	0 <240.0

**Maximum Forces & Stresses for Load Combinations**

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mny	Mny/Omega	Cb	Rm	Va Max	Vny	Vny/Omega
Dsgn. L = 25.00 ft		1		0.000				115.38	69.09	1.00	1.00	-0.00	118.20	70.78
+0.60W														
Dsgn. L = 25.00 ft		1	0.141	0.022	9.75		9.75	115.38	69.09	1.14	1.00	1.56	118.20	70.78
+0.450W														
Dsgn. L = 25.00 ft		1	0.106	0.017	7.31		7.31	115.38	69.09	1.14	1.00	1.17	118.20	70.78

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
W Only	1	0.8246	12.571		0.0000	0.000

**Vertical Reactions**

Support notation : Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	2.600	2.600
Overall MINimum	1.170	1.170
+0.60W	1.560	1.560
+0.450W	1.170	1.170
W Only	2.600	2.600

**Steel Column**

Lic. # : KW-06003761

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
 Building & Safety - OC Hazardous 12/22/2025

DESCRIPTION: HSS JAMB - 1/S4.0.1

Permits: BNR21-0246, ELE21-0853, MEC21-0514, PLB21-0900

Code References

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10  
 Load Combinations Used : ASCE 7-16

General Information

Steel Section Name : **HSS8x6x3/8**  
 Analysis Method : **Allowable Strength**  
 Steel Stress Grade  
 Fy : Steel Yield **46.0 ksi**  
 E : Elastic Bending Modulus **29,000.0 ksi**

Overall Column Height  
 Top & Bottom Fixity **Top & Bottom Pinned**  
 Brace condition for deflection (buckling) along columns  
 X-X (width) axis :  
 Unbraced Length for buckling ABOUT Y-Y Axis = 17.0 ft, K = 1.0  
 Y-Y (depth) axis :  
 Unbraced Length for buckling ABOUT X-X Axis = 17.0 ft, K = 1.0



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Column self weight included : 553.86 lbs \* Dead Load Factor

AXIAL LOADS . . .

27' HSS HDR: Axial Load at 12.0 ft, Yecc = 4.0 in, D = 2.380, LR = 0.540, W = 1.512 k

BENDING LOADS . . .

27' HSS HDR: Lat. Point Load at 12.0 ft creating Mx-x, D = 0.580, LR = 0.580, W = 5.260 k

Canopy: Lat. Point Load at 12.0 ft creating Mx-x, D = 0.580, LR = 0.580, W = 2.016 k

DESIGN SUMMARY

**Bending & Shear Check Results**

**PASS** Max. Axial+Bending Stress Ratio = **0.3535** : 1  
 Load Combination **+D+0.60W**  
 Location of max. above base **12.094** ft  
 At maximum location values are . . .  
 Pa : Axial **0.5539** k  
 Pn / Omega : Allowable **150.730** k  
 Ma-x : Applied **19.452** k-ft  
 Mn-x / Omega : Allowable **55.319** k-ft  
 Ma-y : Applied **0.0** k-ft  
 Mn-y / Omega : Allowable **45.449** k-ft

**PASS** Maximum Shear Stress Ratio = **0.04943** : 1  
 Load Combination **+D+0.60W**  
 Location of max. above base **12.094** ft  
 At maximum location values are . . .  
 Va : Applied **3.965** k  
 Vn / Omega : Allowable **80.208** k

Maximum Load Reactions . . .  
 Top along X-X **0.0** k  
 Bottom along X-X **0.0** k  
 Top along Y-Y **5.166** k  
 Bottom along Y-Y **2.110** k

Maximum Load Deflections . . .  
 Along Y-Y **0.4432** in at **9.470** ft above base  
 for load combination : **W Only**  
 Along X-X **0.0** in at **0.0** ft above base  
 for load combination :

Load Combination Results

Load Combination	Maximum Axial + Bending Stress Ratios				Cb <sub>x</sub>	Cb <sub>y</sub>	K <sub>x</sub> L <sub>x</sub> /R <sub>x</sub>	K <sub>y</sub> L <sub>y</sub> /R <sub>y</sub>	Maximum Shear Ratios		
	Stress Ratio	Status	Location	Stress Ratio					Status	Location	
D Only	0.079	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.011	PASS	12.09 ft	
+D+Lr	0.152	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.021	PASS	12.09 ft	
+D+0.750Lr	0.134	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.019	PASS	12.09 ft	
+D+0.60W	0.353	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.049	PASS	12.09 ft	
+D+0.750Lr+0.450W	0.340	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.048	PASS	12.09 ft	
+D+0.450W	0.285	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.040	PASS	12.09 ft	
+0.60D+0.60W	0.322	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.045	PASS	12.09 ft	
+0.60D	0.047	PASS	12.09 ft	1.41	1.00	68.69	85.71	0.006	PASS	12.09 ft	

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	Axial Reaction	X-X Axis Reaction		Y-Y Axis Reaction		M <sub>x</sub> - End Moments		M <sub>y</sub> - End Moments	
	@ Base	@ Base	@ Top	@ Base	@ Top	@ Base	@ Top	@ Base	@ Top
D Only	2.934			0.295	0.865				
+D+Lr	3.474			0.625	1.695				
+D+0.750Lr	3.339			0.542	1.488				
+D+0.60W	3.841			1.561	3.965				



### Steel Column

File: HSS Design.ec6  
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**KPFF CONSULTING ENGINEERS**  
Building & Safety - OC - Hazarvands 12/22/2025

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PLB21-0900

#### Sketches

8.00in

6.00in

+Y

Load 1

+X

6.42k 3.18k

4.432k

Height = 17.0

Height = 17.0

County of Orange - OC Public Works  
OC Development Services  
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Hadi Tabatabaee  
BUILDING OFFICIAL