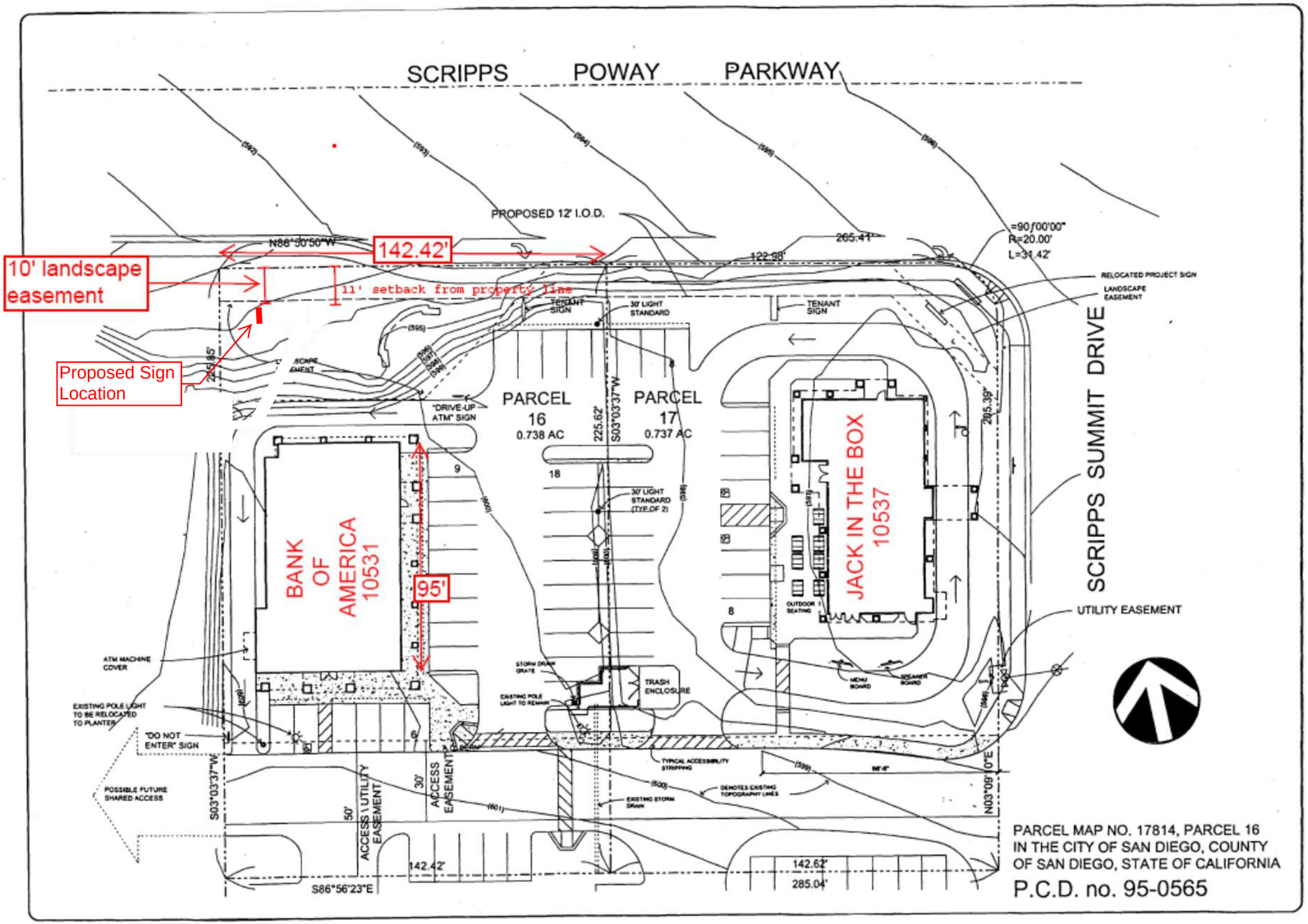
2600 NE Andresen Rd, Suite 50 Vancouver, WA 98661 – P 360.693.4773 – F 360.693.2747
www.vancouversigngroup.com

INDEX

Proposal:
We, Vancouver Sign Group, are proposing a monument sign for Bank of America at 6’6” illuminated monument sign for Bank of America at 10531 Scripps Poway Parkway San Diego California.

The signs aesthetics were chosen to match the latest in the Bank of America national branding scheme and the existing Bank of America branch at the location.

The location of the sign was chosen so that it would be visible to motorists while also not creating visual clutter to the shopping complex.



LICENSED ARCHITECT STATE OF CALIFORNIA

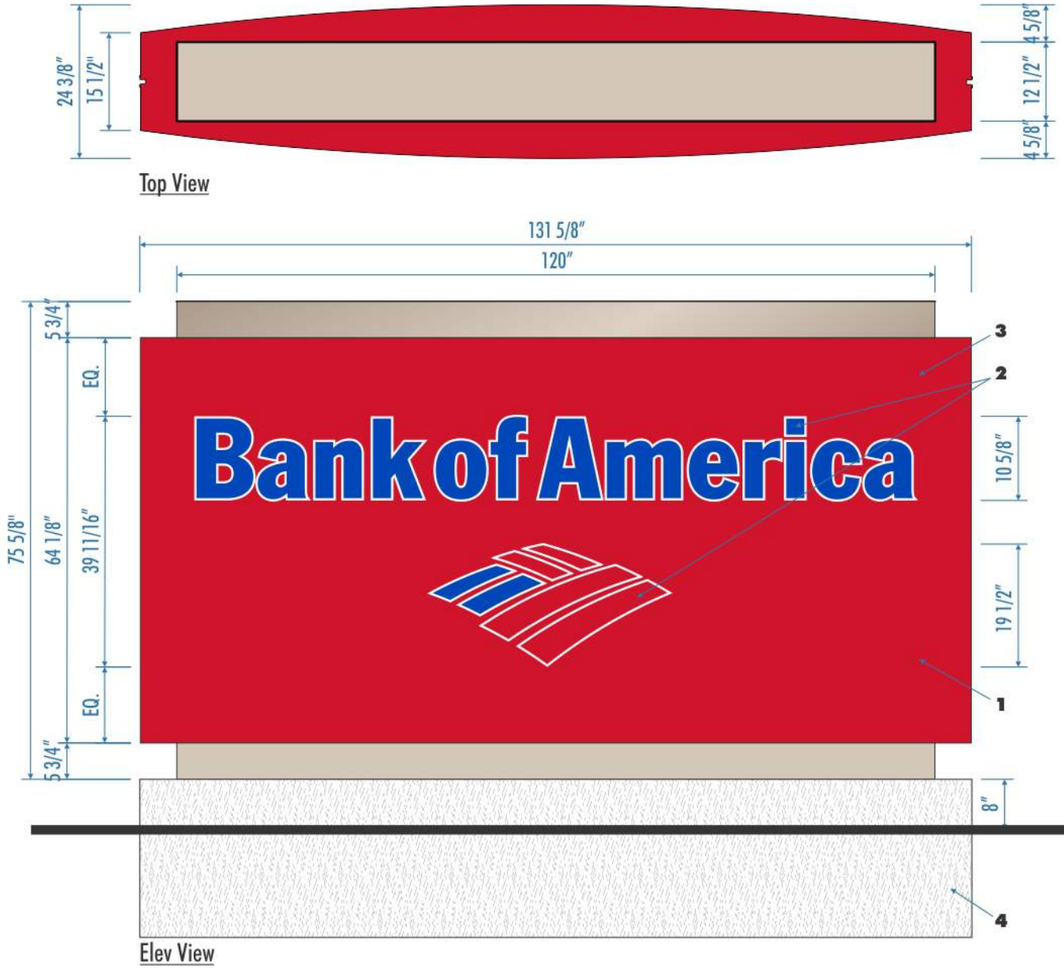
Name	BofA Scripps Poway R1.cdr	Located	San Diego CA	*Initial upon agreement*	*Date*
Design	15-1084	Designer	Dustin Zarracina	Client	
Date	8.3.15	Rev Date	10.6.15		
VSG Rep	Dick Miller	Rev no.	1	Landlord	

Bank of America
10531 Scripps Poway Parkway,
San Diego CA 92131

Vancouver Sign Group®
2600 NE Andresen Road Suite 50
Vancouver Washington 98661
P 360-693-4773
F 360-693-2747
Est. 1923

Members *Affiliations:* NORTHWEST SIGN COUNCIL

"Creative Signage Solutions Based on Quality and Social Responsibility."



A Double Face Illuminated Monument Sign
Scale: 1/2" = 1'- 0"

Furnish and install one (1) double face illuminated monument sign

1. Sign body to be aluminum construction painted as per color key.
2. Logo and letters "Bank of America" to be 3/4" push thru (1/2" visible) with 230-236 translucent vinyl overlay; reverse side diffused, edges to be clear.
3. Illuminate using HO florescent lights and universal transformers with photocell.
4. Concrete footing as per engineering specifications and calculations (NIC).

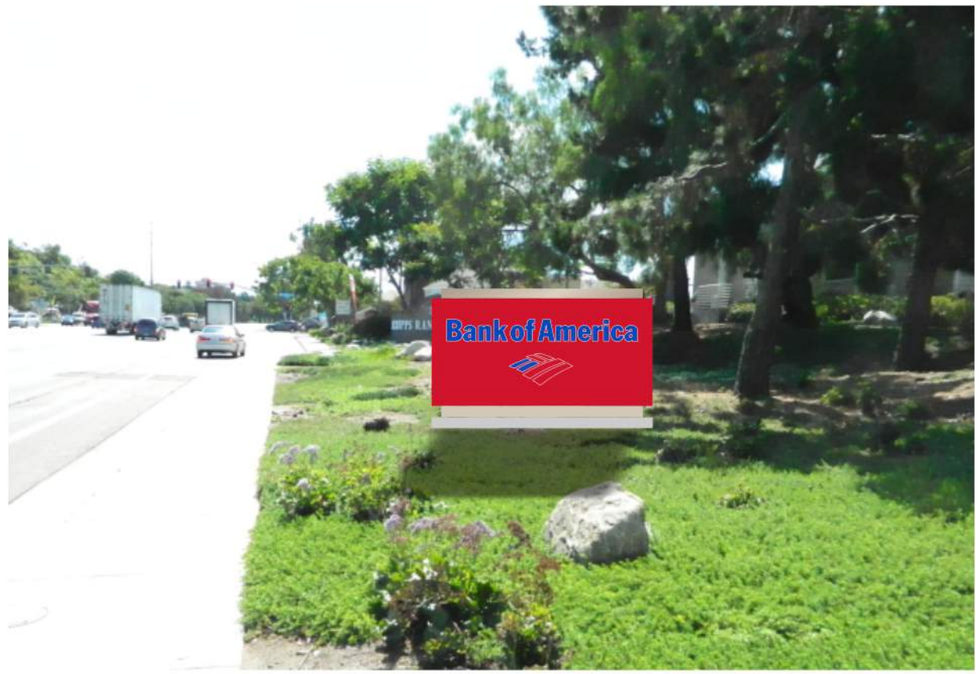
   Install sign into concrete footing using required fasteners.

Vinyl Color Key

- Red 3M 3632-2472
- Blue 3M 3632-8222

Paint Color Key

- P1 Champagne Metallic MP# 21314
- P2 Red MP# 49696
- P3 Blue MP# 2167



Proposed sign is shown at approximate scale in photo

Current Conditions

Name	BofA Scripps Poway R1.cdr	Located	San Diego CA	*Initial upon agreement*	*Date*
Design	15-1085	Designer	Dustin Zarracina	Client	
Date	8.3.15	Rev Date	10.6.15		
VSG Rep	Dick Miller	Rev no.	1	Landlord	

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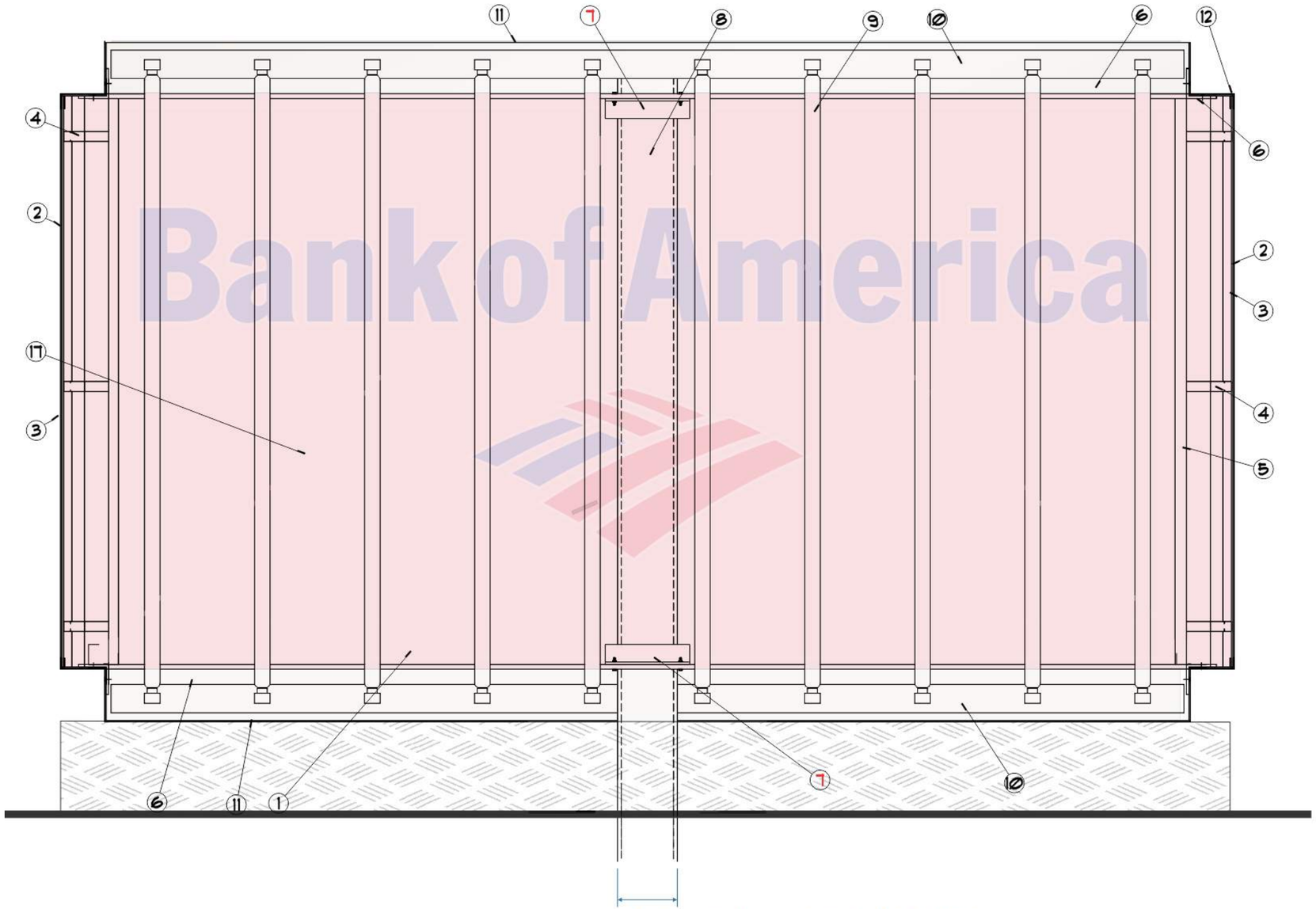
Note: No field welds. Through bolt sign to pole at time of installation.



4" x 4" square pipe (see approved engineering for further details.)

B Double Face Illuminated Monument Sign - Section Detail
Scale: NTS

NOTES:

1. SIGN FACE TO BE .177" CLEAR ACRYLIC (ACRYSTEEL OR APPROVED EQUAL). FIRST SURFACE DECORATE WITH 3M ~~3635-20~~ WHITE CUT TO THE FULL CHARACTER SIZE INCLUDING OUTLINE BASED ON .Ø22B. OVERLAY WITH 3M BOA BLUE (RED AT FLAGSCAPE) FILM CUT TO THE DIMENSIONED CAP HEIGHT. CENTER IN WHITE BACKGROUND FOR EVEN OUTLINE AT PERIMETER. SECOND SURFACE DECORATE WITH 3M BOA RED FILM. WEED OUT LETTERS/FLAGSCAPE TO EXTENT OF OUTLINE. OVERLAY ENTIRE SECOND SURFACE WITH 3M DIFFUSER FILM #3635-10 WHITE. HEAT BEND RETURNS AT ENDS OF FACE. DO NOT THERMOFORM (IT WILL STRETCH THE FILM AND CAUSE DISCOLORATION ON THE RETURN.) CHEM. WELD CONTINUOUS HANGING BAR AT TOP AS REQUIRED. 1/4"x 1/4" CLEAR ACRYLIC BAR. USE A 1/4"x1/4" CLEAR ACRYLIC BAR AT BOTTOM. NOTE: CHEM. WELD CONTINUOUS VERTICAL RETENTION BLOCK AS REQ'D. AT END OF HEAT BENT RETURNS AS SHOWN. ALLOW SUFFICIENT ROOM FOR EXPANSION AND CONTRACTION AS REQ'D.
2. .125" BREAK FORMED ALUMINUM REVEAL/RETAINER. PAINT FINISH ALL EXPOSED SURFACES RED SATIN FINISH. TWO HALVES CLAMSHELL. WELD ONE HALF TO VERTICAL TUBE SUPPORT BEHIND. MECHANICALLY ATTACH SECOND HALF WITH COUNTER SUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH.
3. .125" BREAK FORMED ALUMINUM RETURN. WELD TO VERTICAL SUPPORT TUBE AS SHOWN. PIECES TO HAVE A 10DEGREE FLANGE AS SHOWN. PAINT ALL EXPOSED SURFACES WITH SPRAY-LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
4. 1"x1"x.125" ALUM. TUBE "OUTRIGGERS". FORM AS SHOWN. WELD TO VERTICAL CHANNEL TO OUTSIDE AND 1"x1" VERTICAL TUBE TO INTERIOR. PAINT FINISH ALL EXPOSED SURFACES WITH SPRAY LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
5. 1-1/4"x1-1/4"x.125" ALUM. TUBE VERTICAL AS SHOWN. WELD TO ALUM. ANGLE FRAME TOP AND BOTTOM. PAINT FINISH ALL EXPOSED SURFACES WITH SPRAY LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
6. 2"x 2"x .25" ALUM. ANGLE FRAME. WELD AT CORNERS AS SHOWN. BOLT ATTACH TO STEEL ANGLES WELDED TO STEEL COLUMN AT TOP AND BOTTOM. PAINT FINISH ALL EXPOSED SURFACES WITH SPRAY LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
7. 3"x3"x .25" STEEL ANGLE(S) ~~WELDED~~ TO Through bolt HEAD STEEL COLUMN TO PROVIDE ATTACHMENT SURFACE FOR ALUM. ANGLE FRAME.
8. HEAD STEEL SUPPORT COLUMN. SLEEVE INTO LOWER COLUMN AS REQ'D. PROVIDE STOP PLATE AND PLATE AT BOTTOM OF COLUMN TO PREVENT TURNING. FINAL SIZING OF ALL STRUCTURAL COMPONENTS TO BE BY A LICENSED STRUCTURAL ENGINEER TO MEET OR EXCEED ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES. (6'x6" SHOWN IN EXAMPLE ONLY). PAINT FINISH ALL EXPOSED SURFACES WITH SPRAY LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
9. T - 12 H.O. DAYLIGHT FLUORESCENT BULB(S) AS REQ'D TO PROVIDE EVEN ILLUMINATION ACROSS SIGN FACE WITHOUT HOT SPOTS OR SHADOWS. USE TOMBSTONE FIXTURES TO EASE SERVICING.
10. UL. APPROVED ELECTRICAL RACEWAY AS REQ'D.
11. .125" BREAKFORMED ALUM. CLADDING/ACCESS PANEL. FORM AS SHOWN. PAINT FINISH CHAMPAGNE METALLIC. SEMI-GLOSS FINISH. ATTACH WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH.
12. Ø90° ALUM. RETAINER FORM AS SHOWN. PAINT FINISH RED. SATIN FINISH. ATTACH TO CABINET RETURNS WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH. (04)
13. .125" ALUM. BREAKFORMED COLUMN CLADDING. FORM AS SHOWN. PAINT FINISH CHAMPAGNE METALLIC. SEMI-GLOSS FINISH. ATTACH ONE HALF TO COLUMN, ATTACH OTHER HALF TO FIRST WITH COUNTERNTERSUNK FLATHEAD STAINLESS STEEL SCREWS IN REVEAL. PAINT HEADS TO MATCH.
14. BASE STEEL SUPPORT COLUMN. WELD BASE PLATE AT BOTTOM AS REQ'D. FINAL SIZING OF ALL STRUCTURAL COMPONENTS TO BE BY A LICENSED STRUCTURAL ENGINEER TO MEET OR EXCEED ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES. (8'x8" SHOWN IN EXAMPLE ONLY).
15. .125" ALUM. INTERIOR RETAINER RETURN. FORM A S SHOWN. WELD 3/16" ALUM. PLATE AT BASE TO ACT AS RETAINER FOR ACRYLIC HANGING BLOCK.
16. PROVIDE TEFLON TAPE TO INTERIOR OF EXTERIOR RETAINER RETURN TO PROTECT FILM DECOARTED FACE FROM SCRATCHING.
17. .25" DIA. STEEL THREADED SAG ROD(S). DOUBLE NUT ATTACH TO .25" ALUM ANGLE "CLIPS" AT COLUMN AND BASE.

GENERAL NOTES:

-FINAL SIZING FOR ALL STRUCTURAL MEMBERS (i.e. COLUMNS, MATCH PLATES, CONNECTION BOLTS, ANCHOR BOLTS, FOUNDATIONS AND REINFORCEMENT) TO BE SIZED BY A LICENSED ENGINEER TO MEET OR EXCEED ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES.
-FABRICATOR IS RESPONSIBLE FOR THE PREVENTION OF ANY LIGHT LEAKS.
-LEADS FROM BACK OF ILLUMINATED LETTERS / SYMBOL SHALL BE A MINIMUM OF 6'-0" IN LENGTH MEASURED FROM THE BACK SURFACE OF THE LETTERS / SYMBOL. -PAINT INTERIORS OF ALL CABINETS WITH SPRAY-LAT STAR BRITE WHITE LIGHT ENHANCEMENT PAINT.
-ALL PAINT TO BE TWO-PART POLYURETHANE.
-COLOR FILM TO BE MATCHED IN 3M #3632 SERIES FILM.

MATERIAL SPECIFICATIONS

PAINT
-CHAMPAGNE METALLIC - EITHER AKZO-NOBEL # BNK 250, MATTHEWS # MP 21314, MATTHEWS #30A61949P, OR MATTHEWS #SVOC12726P (VOC COMPLIANT)
-RED - MATTHEWS RED # MP 49696, AKZO-NOBEL #SIGN 20129
-BLUE - MATTHEWS BLUE #MP 21670R 6595,
-WHITE - MATTHEWS WHITE # MP 21668R 6595.

FILM
-BLUE - 3M # 3632-8222
-RED - 3M # 3632-2472
-DIFFUSER - 3M # 3635-10
~~WHITE - 3M 3630-20~~ (04)

ACRYLIC
-CLEAR ACRYSTEEL #OR APPROVED EQUAL

-FILM DECORATION CHANNEL LETTERS ONLY, ACRYSTEEL #2447 OR APPROVED EQ.
-WHITE TRANSLUCENT-ACRYSTEEL #1328 OR APPROVED EQ.

Name	BofA Scripps Poway R1.cdr	Located	San Diego CA	*Initial upon agreement*	*Date*
Design	15-1085a	Designer	Dustin Zarracina	Client	
Date	8.3.15	Rev Date	10.6.15		
VSG Rep	Dick Miller	Rev no.	1	Landlord	

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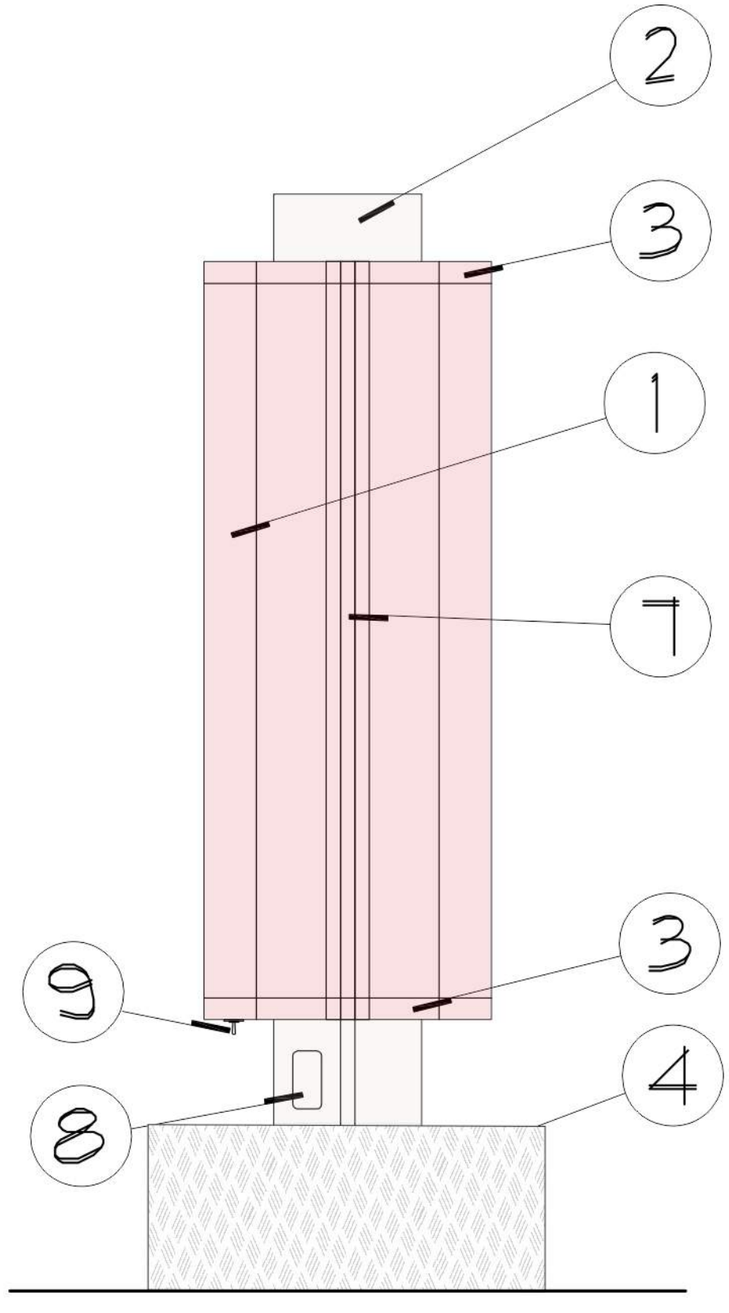

SIDE VIEW

FOR OUTLINE AND DECORATION DETAILS SEE SHEET I7.0I

NOTES:

1. SIGN FACE TO BE .I77" CLEAR ACRYLIC (ACRYSTEEL OR APPROVED EQUAL) FIRST SURFACE DECORATE WITH 3M 3632-20 WHITE CUT TO THE FULL CHARACTER SIZE INCLUDING OUTLINE BASED ON .022B. OVERLAY WITH 3M BOA BLUE (RED AT FLAGSCAPE) FILM CUT TO THE DIMENSIONED CAP HEIGHT. CENTER IN WHITE BACKGROUND FOR EVEN OUTLINE AT PERIMETER. SECOND SURFACE DECORATE WITH 3M BOA RED FILM. WEED OUT LETTERS/FLAGSCAPE TO EXTENT OF OUTLINE. OVERLAY ENTIRE SECOND SURFACE WITH 3M DIFFUSER FILM #3635-70 WHITE. HEAT BEND RETURNS AT ENDS OF FACE. DO NOT THERMOFORM (IT WILL STRETCH THE FILM AND CAUSE DISCOLORATION ON THE RETURN.) CHEM. WELD CONTINUOUS HANGING BAR AT PERIMETER. SEE DETAIL.

NOTE: WHERE REQUIRED, PLACE FILM SEAMS AS INDICATED. USE 60" MATERIAL TO MINIMIZE OR ELIMINATE SEAMS. ⅛" OVERLAY MAX.

2. .I25" BREAKFORMED ALUM. CLADDING/ACCESSPANEL. FORM AS SHOWN. PAINT FINISH CHAMPAGNE METALLIC. SEMI-GLOSS FINISH. ATTACH WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH.
3. Ø8Ø" ALUM. RETAINER. FORM AS SHOWN. PAINT FINISH RED. SATIN FINISH. ATTACH TO CABINET RETURNS WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH.
4. .I25" ALUM. BREAKFORMED BASE CLADDING. FORM AS SHOWN. PAINT FINISH CHAMPAGNE METALLIC. SEMI-GLOSS FINISH. ATTACH ONE HALF TO COLUMN. ATTACH OTHER HALF TO FIRST WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS IN REVEAL. PAINT HEADS TO MATCH.
5. "BANK OF AMERICA" AND PORTION OF FLAGSCAPE TO BE FIRST SURFACE DECORATED WITH 3M FILM BOA BLUE. SEE DETAIL FOR DECORATION AND BEVEL SIZING.
6. PORTIONS OF FLAGSCAPE TO FIRST SURFACE DECORATED WITH 3M FILM BOA RED. SEE DETAIL FOR DECORATION AND BEVEL SIZING.
7. .I25" BREAK FORMED ALUMINUM REVEAL/RETAINER. FORM AS SHOWN. SEE DETAIL. PAINT FINISH RED SATIN FINISH. TWO HALVES CLAMSHELL. WELD ONE HALF TO VERTICAL TUBE BEHIND. MECHANICALLY ATTACH SECOND HALF WITH COUNTERSUNK FLATHEAD STAINLESS STEEL SCREWS. PAINT HEADS TO MATCH.
8. PLACE PRODUCT LABEL HERE. SEE SHEET PL-1 FOR DETAILS.
9. RECESSED U.L. APPROVED EMERGENCY CUTOFF SWITCH.

GENERAL NOTES:

-FINAL SIZING FOR ALL STRUCTURAL MEMBERS (i.e. COLUMNS, MATCH PLATES, CONNECTION BOLTS, ANCHOR BOLTS, FOUNDATIONS AND REINFORCEMENT) TO BE SIZED BY A LICENSED ENGINEER TO MEET OR EXCEED ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES.
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-ALL PAINT TO BE TWO-PART POLYURETHANE.
-COLOR FILM TO BE MATCHED IN 3M #3632 SERIES FILM.

MATERIAL SPECIFICATIONS

PAINT
-CHAMPAGNE METALLIC - EITHER AKZO-NOBEL # BNK 250, MATTHEWS # MP 21314, MATTHEWS #SOA6I945P, OR MATTHEWS #5VOC12725P (VOC COMPLIANT)
-RED - MATTHEWS RED # MP 49696, AKZO-NOBEL #SIGN 20129
-BLUE - MATTHEWS BLUE #MP 21670R 6595, -WHITE - MATTHEWS WHITE # MP 21668R 6595.

FILM
-BLUE - 3M # 3632-8222
-RED - 3M # 3632-2472
-DIFFUSER - 3M # 3635-70
-WHITE - 3M 3632-20

ACRYLIC
-CLEAR ACRYSTEEL #OR APPROVED EQUAL

-FILM DECORATION CHANNEL LETTERS ONLY, ACRYSTEEL #2447 OR APPROVED EQ.
-WHITE TRANSLUCENT-ACRYSTEEL #7328 OR APPROVED EQ.

Name	BofA Scripps Poway R1.cdr	Located	San Diego CA	*Initial upon agreement*	*Date*
Design	15-1085b	Designer	Dustin Zarracina	Client	
Date	8.3.15	Rev Date	10.6.15	Landlord	
VSG Rep	Dick Miller	Rev no.	1		

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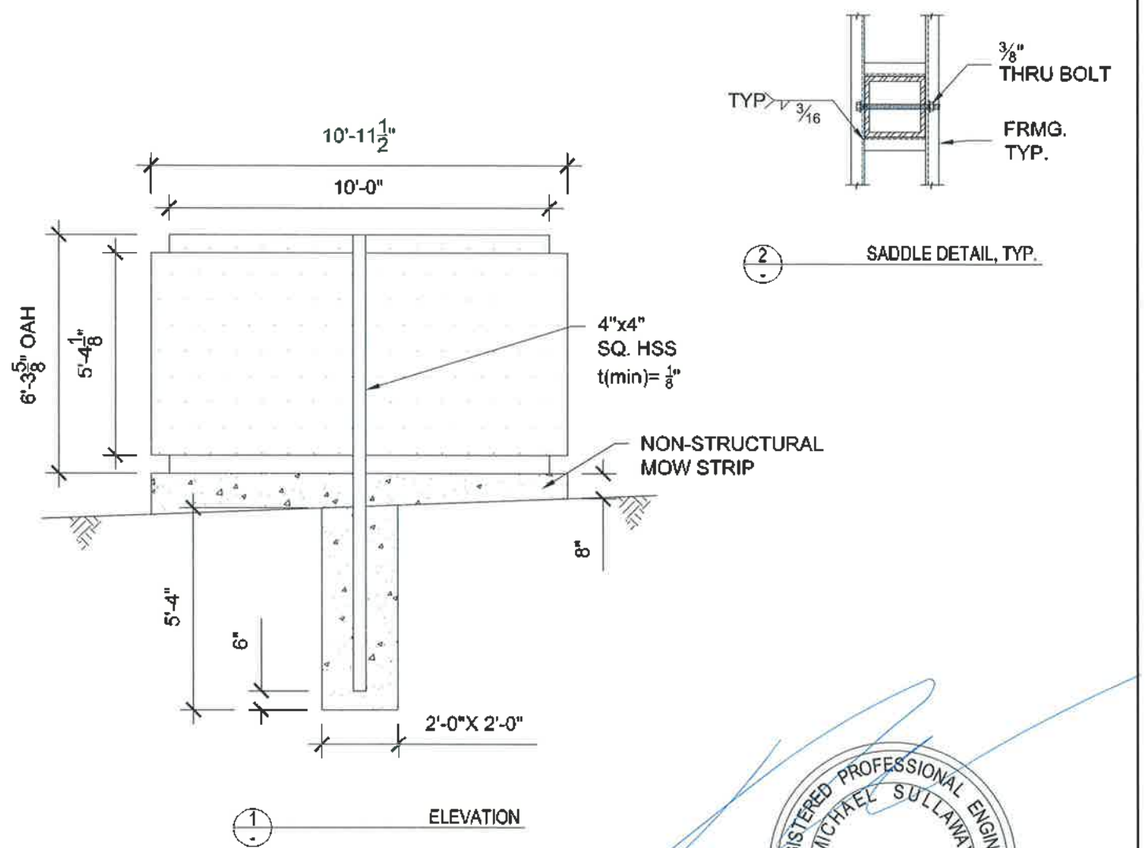
SULLAWAY
ENGINEERING

10815 RANCHO BERNARDO RD., SUITE 260, SAN DIEGO, CA 92127
PROJECTMANAGER@SULLAWAYENG.COM
PHONE: 1-858-312-5150 FAX: 1-858-777-3534

PROJECT:	BANK OF AMERICA, 10531 SCRIPPS POWAY PKWY, SAN DIEGO, CA	DATE:	09/15/15
PROJECT #:	9458-1 (REVISED 10-13-15)	ENGINEER:	MW
CLIENT:	VANCOUVER SIGN GROUP	PAGES:	



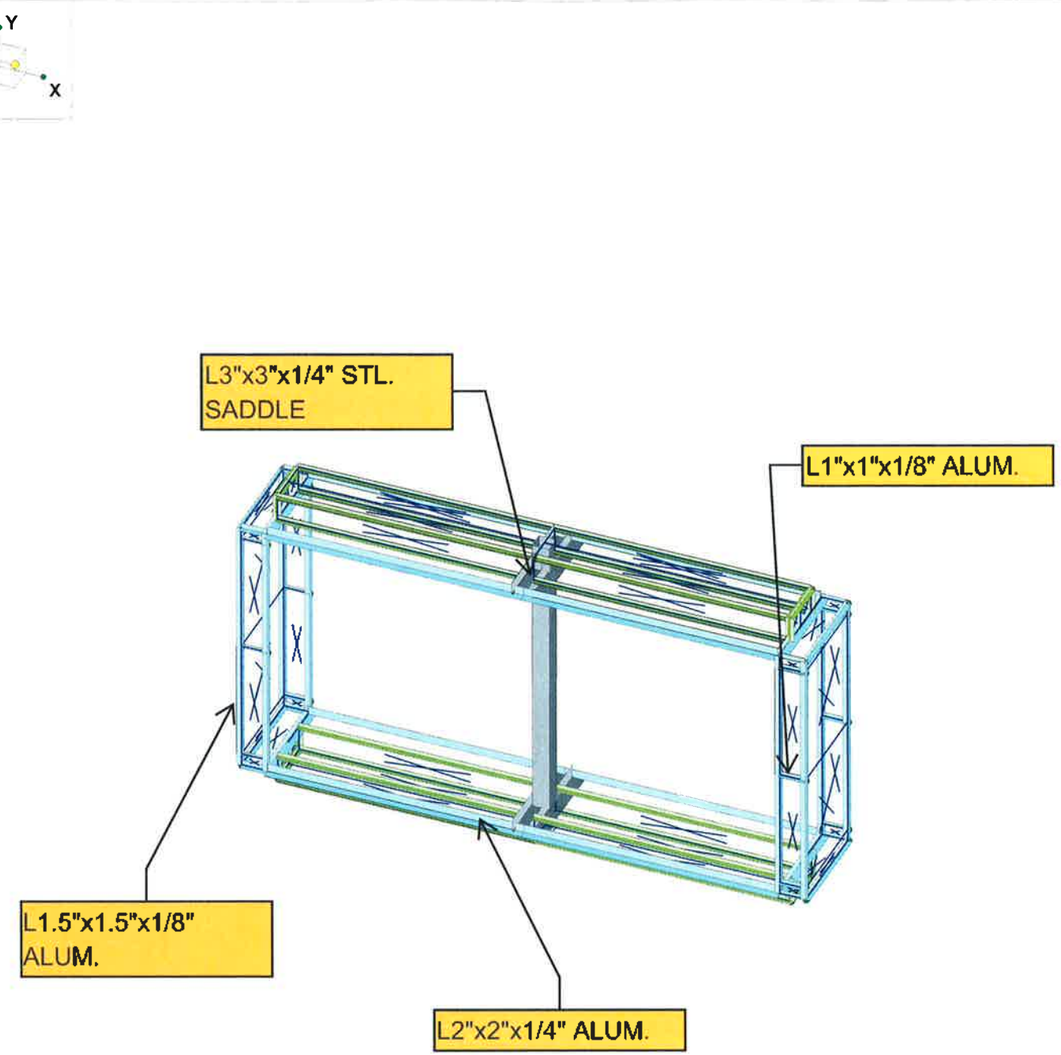
SULLAWAY
ENGINEERING

10815 RANCHO BERNARDO RD., SUITE 260, SAN DIEGO, CA 92127
PROJECTMANAGER@SULLAWAYENG.COM
PHONE: 1-858-312-5150 FAX: 1-858-777-3534

PROJECT:	BANK OF AMERICA, 10531 SCRIPPS POWAY PKWY, SAN DIEGO, CA	DATE:	09/15/15
PROJECT #:	9458	ENGINEER:	MW
CLIENT:	VANCOUVER SIGN GROUP	PAGES:	

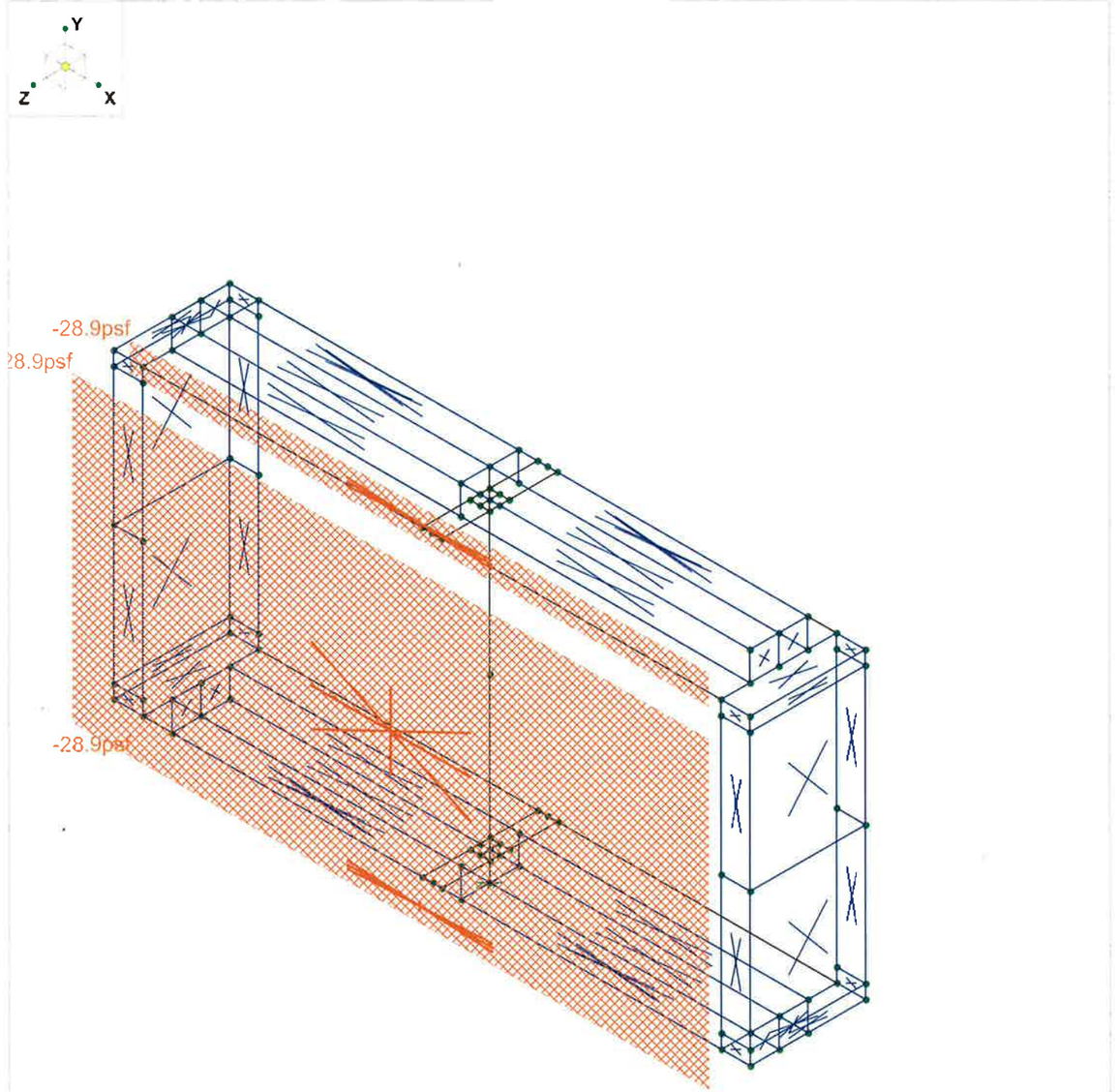
GENERAL NOTES

1. DESIGN CODE: CBC 2013
2. DESIGN LOADS: ASCE 7-10
3. WIND VELOCITY: 110 MPH EXPOSURE C
4. OCCUPANCY CATEGORY II, I = 1.0
5. WELD STRENGTH F_{exx}=70 KSI
6. SQ./RECT. HSS STEEL ASTM A500 GR.B, Fy =46KSI MIN.
7. LATERAL SOIL BEARING PER CBC CLASS 5 (100 PSF/FT)
8. ALUMINUM GRADE 6061-T6
9. ANGLE/PLATE STEEL ASTM A36
10. BOLT STEEL ASTM A307
11. CONCRETE 2500 PSI MIN
7. PROVIDE 3" MIN CLEAR COVER FOR ALL METAL IN CONCRETE
8. PROVIDE PROTECTION AGAINST DISSIMILAR METALS
9. PROVIDE ISOLATION BETWEEN STEEL IN CONTACT WITH ALUMINUM
10. GENERAL CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS ARE ADEQUATELY SUPPORTED AND CONNECTED PRIOR TO SIGN INSTALLATION
11. NOTICE TO THE APPLICANT/OWNER/OWNER'S AGENT/ARCHITECT OR ENGINEER OF RECORD: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.
12. NOTICE TO THE CONTRACTOR/BUILDER/INSTALLER/SUB-CONTRACTOR/ OWNER-BUILDER: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN YOU ACKNOWLEDGE AND ARE AWARE OF, THE REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS. YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF THE CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING, AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND, AS REQUIRED BY THE STATE OF CALIFORNIA CONSTRUCTION CODES.
13. STEEL FABRICATOR MUST BE REGISTERED AND APPROVED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATOR'S SHOP.
14. STEEL FABRICATOR SHALL SUBMIT AN 'APPLICATION TO PERFORM OFF SITE FABRICATION' TO THE INSPECTION SERVICES DIVISION FOR APPROVAL PRIOR TO COMMENCEMENT OF FABRICATION.
15. STEEL FABRICATOR SHALL SUBMIT A 'CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION' TO THE INSPECTION SERVICES DIVISION PRIOR TO ERECTION OF FABRICATED ITEMS AND ASSEMBLIES .
16. A PROPERTY OWNER'S FINAL REPORT FORM FOR WORK REQUIRED TO HAVE SPECIAL INSPECTIONS, TESTING AND STRUCTURAL OBSERVATION MUST BE COMPLETED BY THE PROPERTY OWNER, PROPERTY OWNER'S AGENT OF RECORD, ARCHITECT OF RECORD, ENGINEER OF RECORD AND SUBMITTED TO THE INSPECTION SERVICES DIVISION.
17. THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATORS SHOP.
18. THE SPECIAL INSPECTIONS IDENTIFIED ON PLANS ARE, IN ADDITION TO, AND NOT A SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A CITY'S BUILDING INSPECTOR.



Solution: Envelope

SULLAWAY Engineering		SK - 1
MTY		Oct 14, 2015 at 8:24 AM
		9458.r3d



Loads: BLC 2, WL 1
Solution: Envelope

SULLAWAY Engineering		SK - 2
MTY		Oct 14, 2015 at 9:04 AM
		9458-1.r3d

SULLAWAY ENGINEERING
10815 Rancho Bernardo RD., SD, CA 92127
projectmanager@sullawayeng.com
Phone: 858-312-5150 Fax: 858-777-3534

PROJECT: BANK OF AMERICA DATE: 10/13/15
PROJ. NO.: 9458 ENGINEER: MW
CLIENT: VANCOUVER SIGN GROUP

v2.9 building code: CBC 2013 units; pounds, feet unless noted otherwise

Applied Wind Loads; from ASCE 7-10

$F=q_z*G*C_f*A_f$ with $q_z = 0.00256K_zK_{zt}K_dV^2$ (29.3.2 & 29.4)

C_f= 1.519 (Fig. 29.4-1) max. height= 7.1
K_{zt}= 1.0 (26.8.2) (=1.0 unless unusual landscape)
K_z= from table 28.3-1 Exposure= c
K_d= 0.85 for signs (table 26.6-1)
V= 110 mph
G= 0.85 (26.9) weight= 0.778 kips
s/h= 0.887 M_{DL}= 0.00 k-ft
B/s= 1.74

Pole Loads	structure component	height at section c.g.	K_z	q_z	pressure q_z*G*C_f	A_f	shear	Wind Moment M_W
	1	0.4	0.85	22.38	28.90	8.8	253	101
	2	3.9510417	0.85	22.38	28.90	69.0	1995	7881
					sums:	77.8	2248	7.98 (M_w) k-ft arm= 3.6

P_u= 0.93 kip M= 7.98 k-ft $M=sqrt(M_{DL}^2+M_w^2)$

$M_u=sqrt(1.2M_{DL}^2+1.6M_W^2)$ = 8 k-ft

Pole Design section; tube

$M_u \le \phi M_n$ with $M_n = f_yZ$ f_y= 46 ksi ϕ= 0.9

H	M_u(k-ft)	Z req'd. (in)	Size(in)	t (in)	Z	USE
at grade	8.0	2.31	4	0.116	2.6	**SQ.HSS 4"X4", t(min)=1/8" ϕMn = 8.23 k-ft**

Footing Design footprint: rectangle

ω= 1.3 (CBC 1605.3.2) CBC Table 1606.2, sections 1806.3.4, 1807.3.2
P= 1.75 kip S1 = S x d / 3 A = 2.34 x P / (S1 x b) S= 267
S1= 472 d =0.5xA (1+ (1+4.36x h/A) ^.5) CBC 1807.3.2.1
A= 3.07

footing: **2' - 0" by 2' - 0 "**
5' - 4" deep

Global

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	37
Include Shear Deformation?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Increase Nailing Capacity for Wind?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automaticly Iterate Stiffness for Walls?	No
Maximum Iteration Number for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	12
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 13th(360-05): LRFD
Adjust Stiffness?	Yes(Iterative)
RISAConnection Code	AISC 13th(360-05): ASD
Cold Formed Steel Code	AISI NAS-01: LRFD
Wood Code	AF&PA NDS-05/08: ASD
Wood Temperature	< 100F
Concrete Code	ACI 318-05
Masonry Code	ACI 530-05: ASD
Aluminum Code	AA ADM1-10: ASD - Building

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Global, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	No
Ct Z	.035
Ct X	.035
T Z (sec)	Not Entered
T X (sec)	Not Entered
R Z	8.5
R X	8.5
Ct Exp. Z	.75
Ct Exp. X	.75
SD1	1
SDS	1
S1	1
TL (sec)	Not Entered
Risk Cat	I or II
Seismic Detailing Code	ASCE 7-05
Om Z	1
Om X	1
Rho Z	1
Rho X	1

Member Area Loads (BLC 2 : WL 1)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N46	N53	N50	N40	Z	Two Way	-28.9
2	N78A	N79A	N96	N95	Z	Two Way	-28.9
3	N57	N63	N60	N54A	Z	Two Way	-28.9

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	DL	DL		-1						
2	WL 1	WL							3	
3	Lr	LL								
4	SL	SL								
5	BLC 2 Transient Area...	None						66		

Load Combinations

	Description	Sol...	PD...	SR...	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	DL		Y		1	1												
2	1.2DL + 1.6 WL		Y		1	1.2	2	1.6										
3	1.2DL -1.6 WL		Y		1	1.2	2	-1.6										
4	0.9DL+1.6WL		Y		1	.9	2	1.6										
5	0.9DL-1.6WL		Y		1	.9	2	-1.6										
6	dl + .6wl	Yes	Y		1	1	2	.6										
7	dl - .6wl	Yes	Y		1	1	2	-.6										
8	dl+.45wl+.75Lr	Yes	Y		1	1	2	.45	3	.75								
9	DL+SL	Yes	Y		1	1	4	1										
10	dl+.45wl+.75SL	Yes	Y		1	1	2	.45	4	.75								

Company : SULLAWAY Engineering
Designer : MTY
Job Number :

Oct 14, 2015
9:03 AM
Checked By:_____

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	0	6	.271	7	1.175	6	3.666	6	.001	7	0	6
2		min	0	7	.271	6	-1.175	7	-3.671	7	0	6	0	9
3	Totals:	max	0	6	.271	7	1.175	6						
4		min	0	7	.271	6	-1.175	7						

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A363	29000	11154	.3	.65	.49	103	1.1	58	1.2
3	A500 Gr.42	29000	11154	.3	.65	.49	42	1.3	58	1.1
4	A500 Gr.46	29000	11154	.3	.65	.49	46	1.2	58	1.1

Aluminum Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[...	Table B.4	kt	Ftu[ksi]	Fty[ksi]	Fcy[ksi]	Fsu[ksi]	Ct
1	3003-H14	10100	3787.5	.33	1.3	.173	Table B....	1	19	16	13	12	141
2	6061-T6	10100	3787.5	.33	1.3	.173	Table B....	1	19	17.5	17.5	12	141
3	6063-T5	10100	3787.5	.33	1.3	.173	Table B....	1	22	16	16	13	141
4	6063-T6	10100	3787.5	.33	1.3	.173	Table B....	1	30	25	25	19	141
5	5052-H34	10200	3787.5	.33	1.3	.173	Table B....	1	34	26	24	20	141
6	6061-T6 W	10100	3787.5	.33	1.3	.173	Table B....	1	24	15	15	15	141
7	6063-T6W	10100	3787.5	.33	1.3	.173	Table B....	1	17	8	8	11	141

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	post	HSS4x4x2	Beam	Tube	A500 Gr.46	Typical	1.77	4.4	4.4	6.91
2	l3"	L3x3x4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Aluminum Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	2"	L2X2X0.25	Beam	Rectangular...	6061-T6 W	Typical	.944	.342	.342	.018
2	1"	LS1X1X0.125	Beam	Rectangular...	6061-T6 W	Typical	.234	.022	.022	.001
3	1.25	LS1.25X1.25X0...	Beam	Rectangular...	6061-T6 W	Typical	.297	.044	.044	.001

Envelope AISC 13th(360-05): LRFD Steel Code Checks

	Member	Shape	Code Ch...	Loc[ft]	LC	Shear Ch...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt...	phi*Mn ...	phi*Mn z-z [k-ft]	Cb	Eqn
1	M1	HSS4x4x2	.124	6.25	7	.020	5.903	z	7	62.932	73.278	8.24	8.24	3	H1-1b
2	M24	L3x3x4	.052	0	6	.010	.139	z	7	45.634	46.656	1.688	3.755	2....	H2-1
3	M20	L3x3x4	.048	0	6	.010	.639	z	6	45.634	46.656	1.688	3.755	2....	H2-1
4	M26	L3x3x4	.045	0	6	.008	.056	z	6	45.634	46.656	1.688	3.755	2....	H2-1
5	M18	L3x3x4	.041	0	6	.008	.194	z	6	45.634	46.656	1.688	3.755	1.79	H2-1
6	M35	L3x3x4	.014	.17	6	.004	0	z	6	46.626	46.656	1.688	3.755	1....	H2-1
7	M30	L3x3x4	.014	0	7	.006	0	z	7	46.626	46.656	1.688	3.755	1.67	H2-1
8	M34	L3x3x4	.009	0	7	.004	.005	z	7	46.626	46.656	1.688	3.755	1....	H2-1
9	M25	L3x3x4	.009	.194	6	.003	.194	y	6	45.634	46.656	1.688	3.755	1....	H2-1
10	M31	L3x3x4	.008	.17	6	.003	0	y	6	46.626	46.656	1.688	3.755	1....	H2-1
11	M19	L3x3x4	.007	.194	6	.003	.667	z	6	45.634	46.656	1.688	3.755	1.76	H2-1
12	M21	L3x3x4	.006	.194	7	.002	.194	y	7	45.634	46.656	1.688	3.755	2.13	H2-1
13	M37	L3x3x4	.005	.17	6	.002	0	y	7	46.626	46.656	1.688	3.755	1....	H2-1
14	M27	L3x3x4	.004	.194	7	.002	.194	y	6	45.634	46.656	1.688	3.755	1.44	H2-1
15	M36	L3x3x4	.004	0	6	.003	.17	y	6	46.626	46.656	1.688	3.755	1....	H2-1

Envelope AISC 13th(360-05): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Ch...	Loc[ft]	LC	Shear Ch...	Loc...	Dir	LC	phi*Pnc [k]	phi*Pnt...	phi*Mn ...	phi*Mn z-z [k-ft]	Cb	Eqn
16	M41	L3x3x4	.003	.17	7	.002	0	y	7	46.626	46.656	1.688	3.755	1....	H2-1
17	M40	L3x3x4	.003	0	7	.001	.17	y	6	46.626	46.656	1.688	3.755	1....	H2-1

Envelope AA ADM1-10: ASD - Building Aluminum Code Checks

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	Pnc/O...	Pnt/Om...	Mny/O...	Mnz/O...	Vny/O...	Vnz/O...	Cb	Eqn
1	M2	LS1.25X1...	1.158	5.25	7	.095	5.104	y	7	.233	2.7	- Code ...		.852	.852		H.3-1
2	M3	LS1.25X1...	1.532	5.25	6	.057	5.104	y	7	.233	2.7	- Code ...		.852	.852		H.3-1
3	M4	LS1.25X1...	1.390	5.25	7	.105	0	y	6	.233	2.7	- Code ...		.852	.852		H.3-1
4	M5	LS1.25X1...	1.662	5.25	6	.065	0	y	7	.233	2.7	- Code ...		.852	.852		H.3-1
5	M6	L2X2X0.25	.018	1.5	6	.059	1.5	y	7	5.616	8.582	- Code ...		2.727	2.727		H.3-1
6	M7	L2X2X0.25	.040	0	6	.293	1.5	y	6	5.616	8.582	- Code ...		2.727	2.727		H.3-1
7	M8	L2X2X0.25	.016	1.5	6	.069	1.5	y	7	5.616	8.582	- Code ...		2.727	2.727		H.3-1
8	M9	L2X2X0.25	.039	0	6	.312	1.5	y	6	5.616	8.582	- Code ...		2.727	2.727		H.3-1
9	M10	L2X2X0.25	.081	0	6	.039	4.722	z	6	1.965	8.582	- Code ...		2.727	2.727		H.3-1
10	M11	L2X2X0.25	.094	.278	6	.041	.278	z	6	1.965	8.582	- Code ...		2.727	2.727		H.3-1
11	M12	L2X2X0.25	.043	0	7	.006	5	z	7	1.965	8.582	- Code ...		2.727	2.727		H.3-1
12	M13	L2X2X0.25	.038	0	7	.006	0	z	7	1.965	8.582	- Code ...		2.727	2.727		H.3-1
13	M14	L2X2X0.25	.045	4.861	7	.046	4.722	z	7	1.965	8.582	- Code ...		2.727	2.727		H.3-1
14	M15	L2X2X0.25	.045	0	7	.041	.278	z	7	1.965	8.582	- Code ...		2.727	2.727		H.3-1
15	M16	L2X2X0.25	.058	0	6	.006	5	y	6	1.965	8.582	- Code ...		2.727	2.727		H.3-1
16	M17	L2X2X0.25	.043	0	6	.006	.139	y	6	1.965	8.582	- Code ...		2.727	2.727		H.3-1
17	M42	LS1.25X1...	.222	5.25	6	.064	5.104	y	7	.233	2.7	- Code ...		.852	.852		H.3-1
18	M43	LS1.25X1...	.210	5.25	7	.053	5.104	z	7	.233	2.7	- Code ...		.852	.852		H.3-1
19	M44	LS1X1X0....	.001	0	6	.087	0	y	6	1.618	2.127	- Code ...		.682	.682		H.3-1
20	M46	LS1X1X0....	.003	0	6	.095	0	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
21	M47	LS1X1X0....	.013	0	7	.060	0	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
22	M48	LS1X1X0....	.010	0	6	.018	0	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
23	M49	LS1X1X0....	.013	0	7	.013	0	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
24	M49A	LS1X1X0....	.003	0	7	.055	.5	y	6	1.618	2.127	- Code ...		.682	.682		H.3-1
25	M50	LS1.25X1...	.107	5.25	6	.053	0	y	6	.233	2.7	- Code ...		.852	.852		H.3-1
26	M51	LS1.25X1...	.134	5.25	7	.052	0	z	6	.233	2.7	- Code ...		.852	.852		H.3-1
27	M52	LS1X1X0....	.002	0	6	.092	0	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
28	M53	LS1X1X0....	.014	0	6	.090	.5	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
29	M54	LS1X1X0....	.015	0	7	.055	.5	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
30	M55	LS1X1X0....	.006	0	6	.018	0	y	6	1.618	2.127	- Code ...		.682	.682		H.3-1
31	M56	LS1X1X0....	.010	0	7	.013	.5	y	7	1.618	2.127	- Code ...		.682	.682		H.3-1
32	M57	LS1X1X0....	.007	0	7	.061	0	y	6	1.618	2.127	- Code ...		.682	.682		H.3-1
33	M59	LS1.25X1...	.002	0	7	.002	2	y	7	1.319	2.7	- Code ...		.852	.852		H.3-1
34	M60	LS1.25X1...	.004	0	7	.002	0	y	7	1.319	2.7	- Code ...		.852	.852		H.3-1
35	M62	LS1.25X1...	.009	0	7	.013	0	z	7	1.939	2.7	- Code ...		.852	.852		H.3-1
36	M63	LS1.25X1...	.006	0	6	.010	0	z	7	1.939	2.7	- Code ...		.852	.852		H.3-1
37	M64	LS1.25X1...	.003	0	6	.026	0	z	7	1.939	2.7	- Code ...		.852	.852		H.3-1
38	M65	LS1.25X1...	.000	0	6	.013	.472	z	7	1.939	2.7	- Code ...		.852	.852		H.3-1
39	M66	LS1.25X1...	.002	0	7	.001	0	y	6	1.319	2.7	- Code ...		.852	.852		H.3-1
40	M67	LS1.25X1...	.008	0	6	.018	0	z	6	1.939	2.7	- Code ...		.852	.852		H.3-1
41	M68	LS1.25X1...	.011	0	7	.011	0	z	6	1.939	2.7	- Code ...		.852	.852		H.3-1
42	M68A	LS1.25X1...	.000	0	6	.005	0	y	6	1.319	2.7	- Code ...		.852	.852		H.1-1
43	M69	LS1.25X1...	.009	0	7	.011	0	z	6	1.939	2.7	- Code ...		.852	.852		H.3-1
44	M70	LS1.25X1...	.008	0	6	.029	0	z	6	1.939	2.7	- Code ...		.852	.852		H.3-1

ALUM. ANGLE CHECK.
Fy ALLOW.=15 KSI OK

Envelope Member Section Stresses

	Member	Sec		Axial[k...	LC	y She...	LC	z She...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
1	M7	1	max	.239	6	1.494	6	.218	6	.738	7	.76	6	6.293	7	7.613	6
2			min	-.237	7	-1.561	7	-.206	7	-.76	6	-.738	7	-6.214	6	-7.71	7
3		2	max	.239	6	1.493	6	.218	6	4.71	6	5.081	7	8.62	6	11.056	7
4			min	-.237	7	-1.563	7	-.206	7	-5.081	7	-4.71	6	-9.025	7	-10.561	6
5		3	max	0	6	0	6	0	8	0	9	0	7	0	9	.001	7
6			min	0	7	0	7	0	9	0	7	0	9	-.001	7	0	9
7		4	max	.128	7	1.913	6	.036	7	4.715	7	5.068	6	8.888	7	11.356	6
8			min	-.127	6	-1.848	7	-.05	6	-5.068	6	-4.715	7	-9.269	6	-10.889	7
9		5	max	.128	7	1.912	6	.036	7	3.355	6	3.374	7	6.87	6	8.356	7
10			min	-.127	6	-1.85	7	-.05	6	-3.374	7	-3.355	6	-6.82	7	-8.416	6
11	M9	1	max	.232	6	1.529	6	.304	7	2.718	7	2.752	6	3.372	7	4.015	6
12			min	-.233	7	-1.596	7	-.293	6	-2.752	6	-2.718	7	-3.277	6	-4.131	7
13		2	max	.232	6	1.528	6	.304	7	5.062	6	5.437	7	7.432	6	9.599	7
14			min	-.233	7	-1.598	7	-.293	6	-5.437	7	-5.062	6	-7.835	7	-9.105	6
15		3	max	0	6	0	6	0	8	0	9	0	7	0	9	.001	7
16			min	0	7	0	7	0	9	0	7	0	9	-.001	7	0	9
17		4	max	.11	7	1.95	6	.028	7	4.828	7	5.178	6	8.553	7	10.948	6
18			min	-.11	6	-1.885	7	-.039	6	-5.178	6	-4.828	7	-8.936	6	-10.479	7
19		5	max	.11	7	1.949	6	.028	7	3.353	6	3.383	7	7.624	6	9.245	7
20			min	-.11	6	-1.886	7	-.039	6	-3.383	7	-3.353	6	-7.546	7	-9.34	6
21	M4	1	max	.066	7	.539	6	.218	7	6.8	7	6.806	6	3.573	6	4.548	7
22			min	-.073	6	-.514	7	-.226	6	-6.806	6	-6.8	7	-3.765	7	-4.315	6
23		2	max	.166	7	.012	6	.056	7	1.235	6	1.207	7	1.833	7	2.225	6
24			min	-.166	6	-.013	7	-.056	6	-1.207	7	-1.235	6	-1.842	6	-2.214	7
25		3	max	.438	7	.012	6	.349	6	.832	7	.817	6	3.114	6	3.731	7
26			min	-.429	6	-.013	7	-.349	7	-.817	6	-.832	7	-3.089	6	-3.76	6
27		4	max	.439	7	.025	7	.064	6	1.481	6	1.53	7	1.905	7	2.275	6
28			min	-.428	6	-.025	6	-.063	7	-1.53	7	-1.481	6	-1.884	6	-2.301	7
29		5	max	1.089	7	.259	7	.131	6	5.522	7	5.433	6	4.599	6	5.4	7
30			min	-1.061	6	-.229	6	-.144	7	-5.433	6	-5.522	7	-4.471	7	-5.554	6
31	M1	1	max	.204	7	.001	7	.048	7	.039	6	.02	7	1.168	7	1.167	6
32			min	-.122	6	-.015	6	-.048	6	-.02	7	-.039	6	-1.167	6	-1.168	7
33		2	max	.23	7	0	7	.223	6	.001	6	.01	7	.168	7	.166	6
34			min	-.099	6	0	6	-.224	7	-.01	7	-.001	6	-.166	6	-.168	7
35		3	max	.236	7	0	7	.223	6	-.003	6	.003	7	1.444	6	1.448	7
36			min	-.093	6	0	6	-.224	7	-.003	7	.003	6	-1.448	7	-1.444	6
37		4	max	.241	7	0	7	.223	6	.003	7	.007	6	3.056	6	3.061	7
38			min	-.088	6	0	6	-.223	7	-.007	6	-.003	7	-3.061	7	-3.056	6
39		5	max	.268	7	.016	7	.496	6	.056	7	.003	6	5.339	6	5.342	7
40			min	-.065	6	.007	6	-.495	7	-.003	6	-.056	7	-5.342	7	-5.339	6
41	M2	1	max	.09	6	.389	6	.187	7	6.247	7	6.015	6	3.963	6	4.732	7
42			min	-.099	7	-.422	7	-.174	6	-6.015	6	-6.247	7	-3.918	7	-4.787	6
43		2	max	.156	7	.009	6	.055	7	1.356	6	1.32	7	1.93	7	2.356	6
44			min	-.156	6	-.009	7	-.054	6	-1.32	7	-1.356	6	-1.951	6	-2.331	7
45		3	max	.435	7	.009	6	.351	6	.804	7	.782	6	3.215	6	3.839	7
46			min	-.426	6	-.009	7	-.35	7	-.782	6	-.804	7	-3.179	7	-3.883	6
47		4	max	.436	7	.027	7	.065	6	1.271	6	1.324	7	1.841	7	2.182	6
48			min	-.424	6	-.027	6	-.065	7	-1.324	7	-1.271	6	-1.807	6	-2.224	7
49		5	max	.907	7	.421	7	.203	6	6.498	7	6.642	6	3.841	6	4.754	7
50			min	-.88	6	-.444	6	-.195	7	-6.642	6	-6.498	7	-3.936	7	-4.639	6
51	M5	1	max	.325	6	.333	7	.15	6	4.005	6	4.217	7	2.19	7	2.731	6
52			min	-.334	7	-.301	6	-.162	7	-4.217	7	-4.005	6	-2.262	6	-2.645	7
53		2	max	.322	6	.02	7	.012	6	.433	7	.468	6	.276	6	.305	7
54			min	-.323	7	-.019	6	-.012	7	-.468	6	-.433	7	-.253	7	-.333	6
55		3	max	.591	6	.02	7	.012	6	.99	7	1.01	6	.309	6	.417	7
56			min	-.583	7	-.019	6	-.012	7	-1.01	6	-.99	7	-.345	7	-.373	6