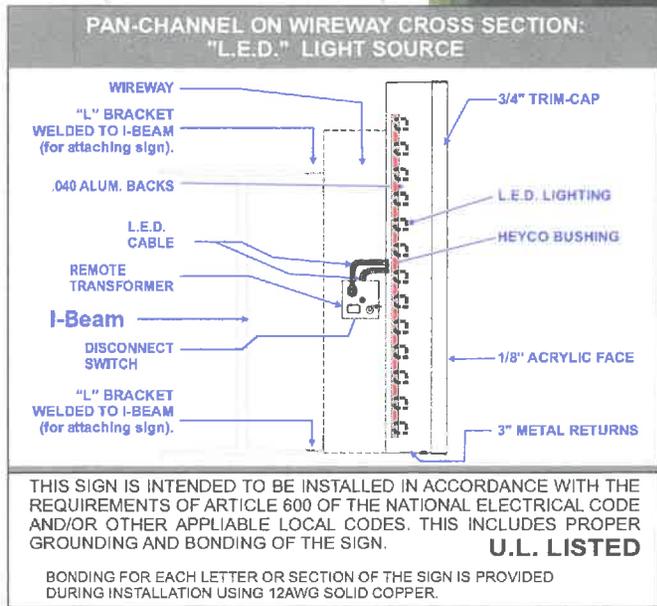
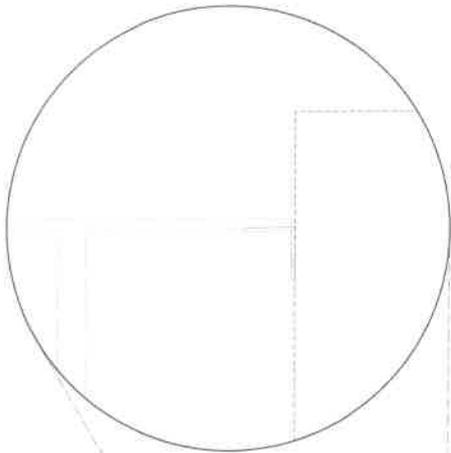


# SIGN PACKAGE CRITERIA

<b>DATE</b>	07/8, /2018
<b>PROJECT NAME</b>	Vertex "
<b>PROJECT ADDRESS</b>	1050 South Terrace Road
<b>TYPE</b>	Individual Internally Illuminated Pan Channel Letters
<b>ILLUMINATION</b>	LED
<b>MATERIAL</b>	Aluminum
<b>CONSTRUCTION</b>	Raceway mounted to existing steel beam
<b>LOGO</b>	Restricted to 25% of sign area
<b>COLOR</b>	Open Color
<b>SIZE RESTRICTION</b>	30" maximum sign height for 1 or 2 lines of copy. Not to exceed 80% of the leased suite frontage.
<b>INSTALLATION</b>	Install per approved engineering calculations. Inspection certificate and certified inspection required.
70 8 U \ y V u ) o 8 V o	k . . . . . 07



**\*NOTE:**  
SPECIAL INSPECTION OF FIELD WELDS  
REQUIRED.

**Approved sign Type:**

Face-Lit Pan Channel sign on Raceway.  
Metal sign attachment clips welded onto I-Beam.  
Raceway to attach to clips welded to I-Beam.  
Mount sign to raceway.





ELEVATION - BLDG A1

06.29.2018  
SCALE: 1/32"=1'

# APOLLO STRUCTURAL ENGINEERS, LLC

Client:

Date: 6/28/18 Sheet No.: 3

Project:

By: DS

CHECK SIGM1 CORR.:

TRY ANGLE CORR.'S

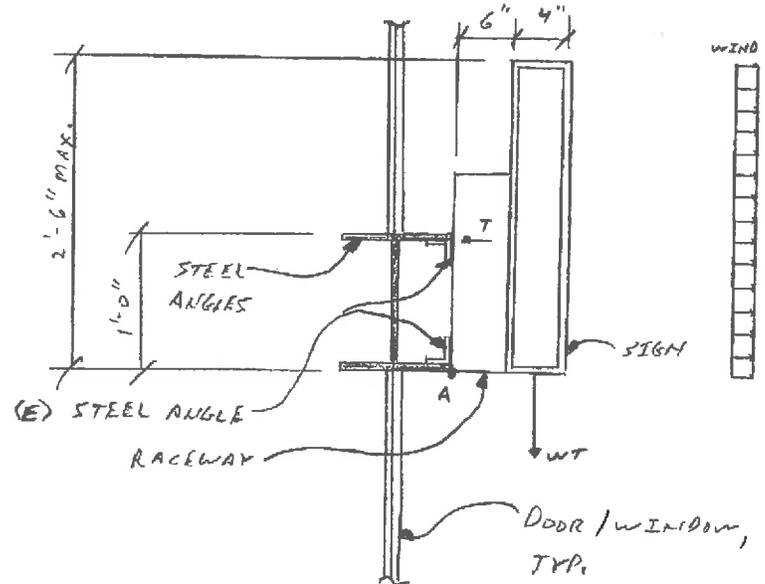
@ 48" O.C. (MAX.):

$$WT = 10 \text{ psf} (2.5') (4.0')$$

$$= 100 \text{ # (V)}$$

$$WIND = 23.9 \text{ psf} (2.5') (4.0')$$

$$= 239 \text{ #}$$



$$\sum M_A = 0: (239 \text{ #}) (-1.25') + (100) (-0.6') + M_A = 0$$

$$M_A = 366 \text{ #}'$$

$$T = 366 \text{ #}' / 1' = 366 \text{ #}$$

USE L 2 1/2" x 2 1/2" x 3/16" CLEPS @ TOP

+ BTM. FLANGE @ 48" O.C. MAX.

W/ 3/16" FILLET WELDS EA. SIDE

(2" LONG MIN.)

$$WELD AREA = 2" + 2" = 4"$$

$$V_T = 366 / 4 * 1 / 1,000 = 0.09 \text{ k/in.}$$

$$ALLOW = 3/16 * 0.70 * 0.3 * 70 = 2.78 \text{ k/in.}$$

$$> 0.09 \text{ k/in.} \text{ ok}$$

# APOLLO STRUCTURAL ENGINEERS, LLC

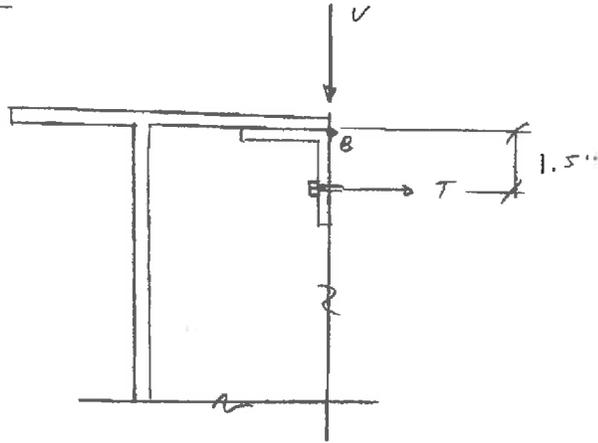
Client: \_\_\_\_\_ Date: 6/28/18 Sheet No.: 7

Project: \_\_\_\_\_ By: DS

SIGN CONN. CONT'D:

$$T = 366 \#$$

$$V = 100 \# / 2 = 50 \#$$



$$\oplus \sum M_B = 0 : (1.5)(366) - M_B = 0$$

$$M_B = 549 \# \text{in}$$

USE 6" LONG ANGLES @

TOP + BTM (48" O.C. MAX)

$$Z = (6)(0.1855^2) / 4 = 0.0525 \text{ in}^3$$

$$f_b = \frac{549}{0.035} = 15,411 \text{ psi} < (36,000)(0.6)$$

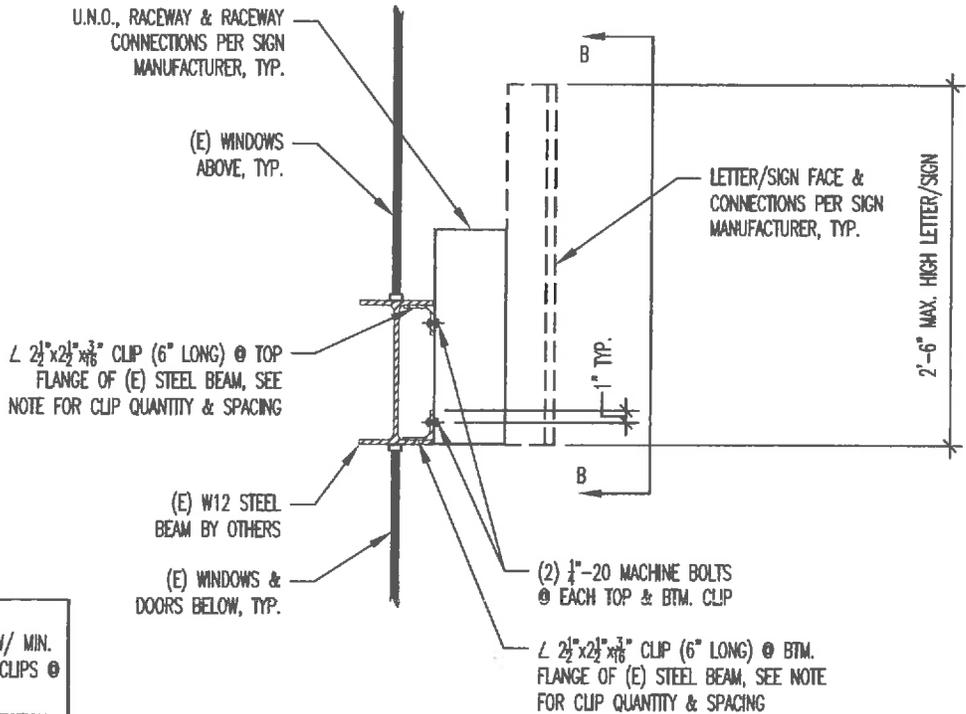
$$= 21,600 \text{ psi}$$

USE (2) 1/4" - 20 MACHINE BOLTS @

EA. ANGLE @ TOP + BTM.

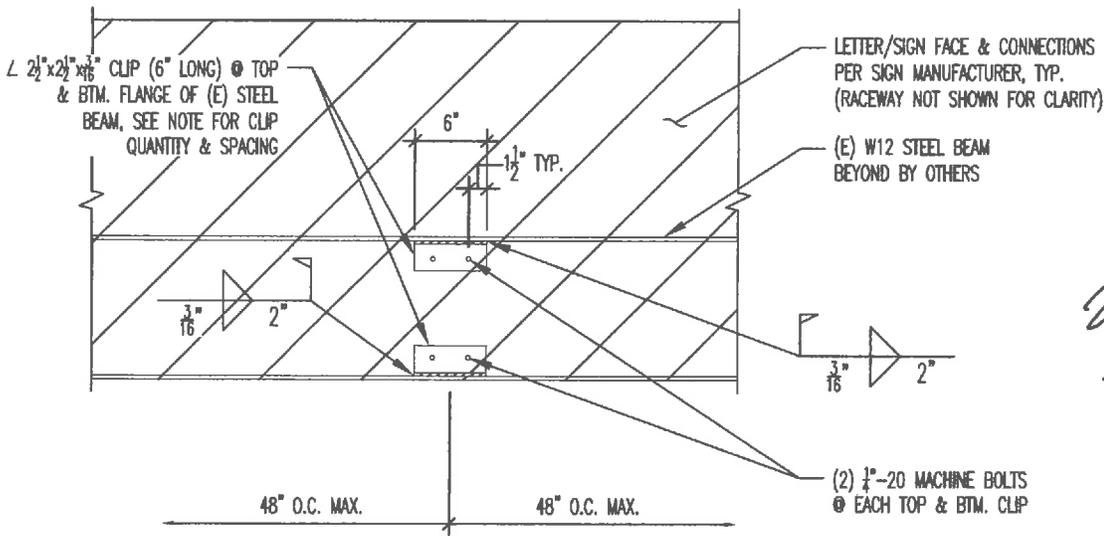
$$\text{ALLOW. SHEAR} = (2)(160) = 320 \# > 50 \# \text{ ok}$$

$$\text{ALLOW. TENSION} = (2)(200) = 400 \# > 366 \# \text{ ok}$$



SECTION A-A

**NOTES:**  
 1. INSTALL TOP & BTM. CLIPS AS PAIRS W/ MIN. 1-PAIR OF CLIPS PER LETTER OR SPACE CLIPS @ 48" O.C. MAX. @ SOLID SIGNS.  
 2. FIELD WELDING REQUIRES SPECIAL INSPECTION.  
 3. WELDING CONTRACTOR SHALL TAKE CARE TO PROTECT EXISTING WINDOWS/DOORS & THEIR COMPONENTS FROM EXCESS HEAT, SPATTER, ETC. DURING & AFTER WELDING OPERATIONS. WELDING CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS TO EXISTING BUILDING COMPONENTS, IF REQ'D.



SECTION B-B



EXPIRES: 12/31/2018

ELECTRONICALLY STAMPED & SEALED

**A P O L L O**  
**S T R U C T U R A L**  
**E N G I N E E R S , L L C**  
 17422 N. 54th Lane | Phone: 623-224-7454  
 Glendale, AZ 85308 | Dan@ApolloStructuralEngineers.com

**SIGN ATTACHMENT @ STL. BMS. O/ STORE FRONTS**  
**BUILDINGS A1 & C1**  
**1050 S. TERRACE ROAD, TEMPE, ARIZONA 85281**  
**FOR: CRAFT MASTER SIGN CORP.**

<b>DRAWN BY:</b> D. STEELE	<b>DATE DRAWN:</b> 6/28/18	<b>DESIGNED BY:</b> D. STEELE	<b>SCALE:</b> 3/4" = 1'-0"
-------------------------------	-------------------------------	----------------------------------	-------------------------------

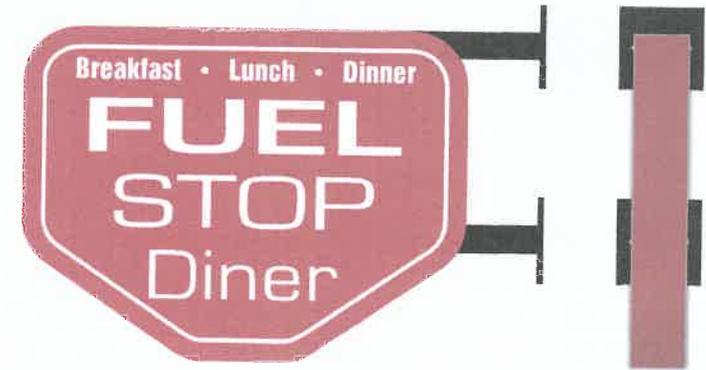
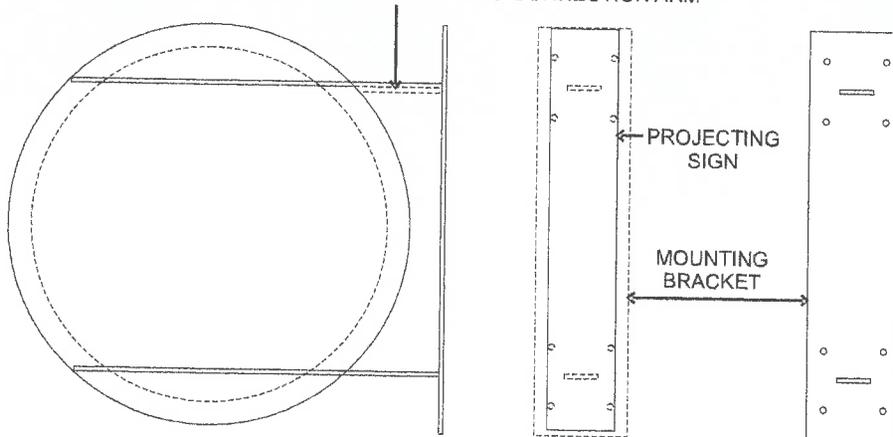
**JOB NO.:**  
18089  
**FIG. NO.:**  
6



**EXAMPLE A ILLUMINATED PROJECTING SIGN**

Internally illuminated double face, aluminum projecting sign with aluminum mounting bracket. Faces routed out and backed with flat acrylic backer or 3/4" acrylic push-thru, with translucent vinyl overlay. Internal LED Illumination.

WIREWAY  
(PAINTED TO MATCH CONNECTION ARM)  
ATTACHED TO CONNECTION ARM



**EXAMPLE B NON-ILLUMINATED PROJECTING SIGN**

Non-illuminated double face, aluminum projecting sign with aluminum mounting bracket. Painted faces with opaque vinyl overlay or routed out and backed with flat acrylic backer or 3/4" acrylic push-thru, with or without opaque vinyl overlay. Internal LED Illumination.

**CREATIVE DESIGN AND MULTI-DIMENSIONAL SIGNS ARE ENCOURAGED**

**TOTAL SQUARE FOOTAGE NOT TO EXCEED 12 SQUARE FEET. SIGN TO BE MOUNTED 9" FROM BOTTOM OF SIGN TO GRADE. NO EXPOSED ELECTRICAL CONDUIT ALLOWED.**

Type Styles XXXX



602-484-9588 / Fax: 602-484-0530  
1725 W Williams Dr, Phoenix, AZ 85027  
www.craftmastersign.com

Sales Rep: KS

Designer: RD

File Name: Bubbleology\_Vertex Apartments\_07.30.18

Date: 07-30-2018

Page:

Project Name: Bubbleology

Address: 1050 S Terrace Rd, Ste 112

Zoning:

Client Approval X: \_\_\_\_\_

Revision Notes:

Landlord Signature X: \_\_\_\_\_

R1:

Printed Name X: \_\_\_\_\_

R2:

Title X: \_\_\_\_\_

R3:

Company Name X: \_\_\_\_\_

R4:

Address: Tempe, AZ 85281

Pedestrian  
Retail

Contact: XXXX

Phone#: XXXX

5  
of  
6



**SIGN TO BE MOUNTED 9' FROM GRADE TO BOTTOM OF SIGN MINIMUM.  
SUGGESTED CENTERED ON COLUMN AND CENTER OF SIGN TO CENTER OF I-BEAM.**

Type Styles XXXX

**Craft Master Sign**  
CORPORATION

602-484-9588 / Fax: 602-484-0530  
1725 W Williams Dr, Phoenix, AZ 85027  
www.craftmastersign.com

**Sales Rep:** KS

**Designer:** RD

**Project Name:** Bubbleology

**Address:** 1050 S Terrace Rd, Ste 112

**Zoning:**

Pedestrian  
Retail

**Address:** Tempe, AZ 85281

**Contact:** xxxx

**Phone#:** XXXX

**File Name:** Bubbleology\_Vertex Apartments\_07.30.18

**Date:** 07-30-2018

**Page:**

**Client Approval** X: \_\_\_\_\_

**Landlord Signature** X: \_\_\_\_\_

**Printed Name** X: \_\_\_\_\_

**Title** X: \_\_\_\_\_

**Company Name** X: \_\_\_\_\_

**Revision Notes:**

R1:

R2:

R3:

R4:

6

of

6



SITE PLAN

■ RETAIL

Type Styles XXXX



602-484-9598 / Fax: 602-484-0530  
 1725 W Williams Dr, Phoenix, AZ 85027  
 www.craftmastersign.com

**Sales Rep:** KS      **Designer:** RD  
**Project Name:** Bubbleology  
**Address:** 1050 S Terrace Rd, Ste 112      **Zoning:** Pedestrian  
**Address:** Tempe, AZ 85281      Retail  
**Contact:** XXXX      **Phone#:** XXXX

**File Name:** Bubbleology\_Vertex Apartments\_07.30.18

**Client Approval** X: \_\_\_\_\_  
**Landlord Signature** X: \_\_\_\_\_  
**Printed Name** X: \_\_\_\_\_  
**Title** X: \_\_\_\_\_  
**Company Name** X: \_\_\_\_\_

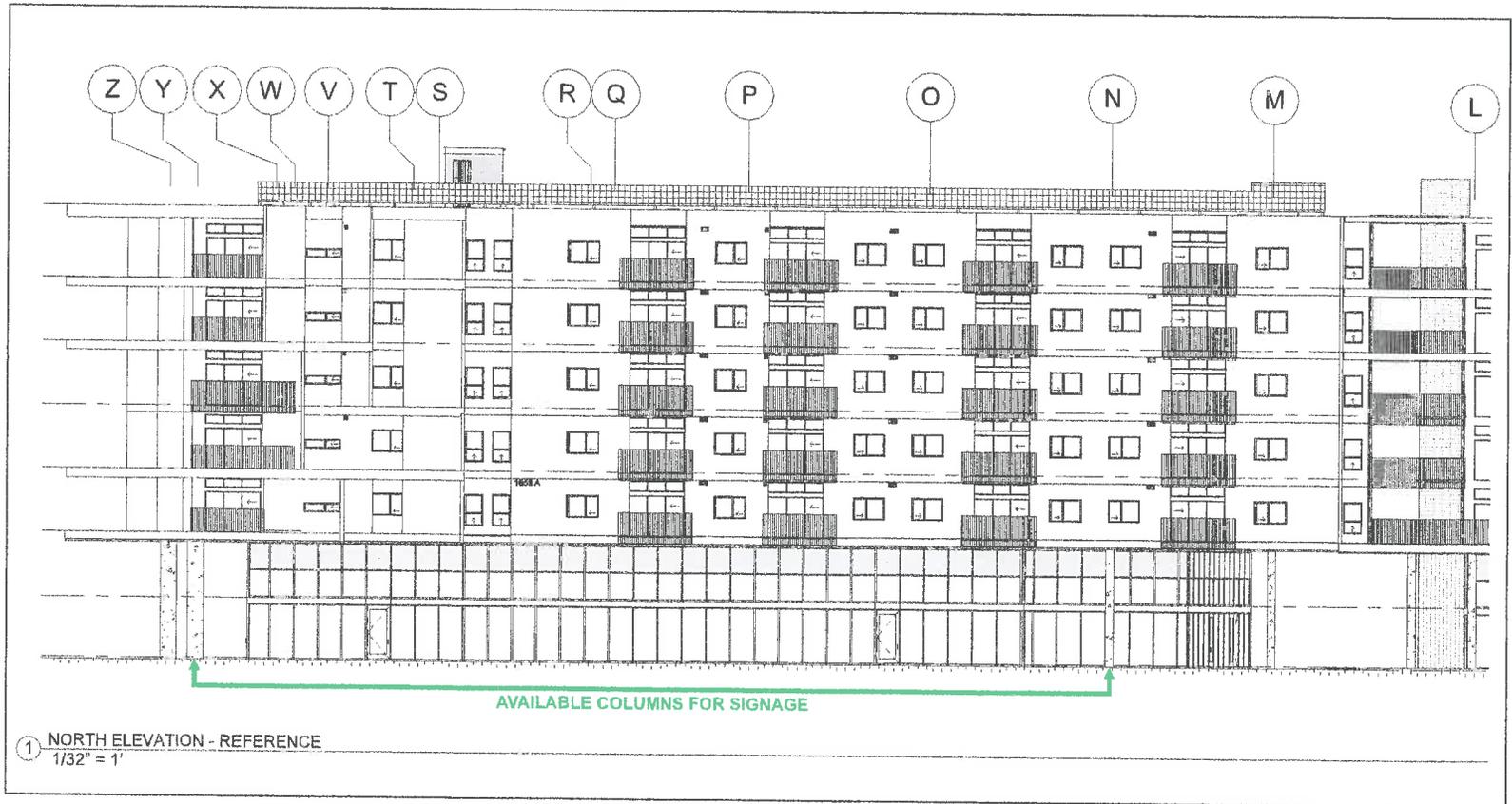
**Date:** 07-30-2018

**Revision Notes:**

R1:  
 R2:  
 R3:  
 R4:

**Page:**

2  
 of  
 6



ELEVATION - BLDG A1

SCALE: 1/32"=1'

Type Styles XXXX



602-484-9588 / Fax: 602-484-0530  
 1725 W Williams Dr, Phoenix, AZ 85027  
 www.craftmastersign.com

**Sales Rep:** KS

**Designer:** RD

**File Name:** Bubbleology\_Vertex Apartments\_07.30.18

**Date:** 07-30-2018

**Page:**

**Project Name:** Bubbleology

**Address:** 1050 S Terrace Rd, Ste 112

**Zoning:**

Pedestrian  
Retail

**Client Approval** X: \_\_\_\_\_

**Landlord Signature** X: \_\_\_\_\_

**Printed Name** X: \_\_\_\_\_

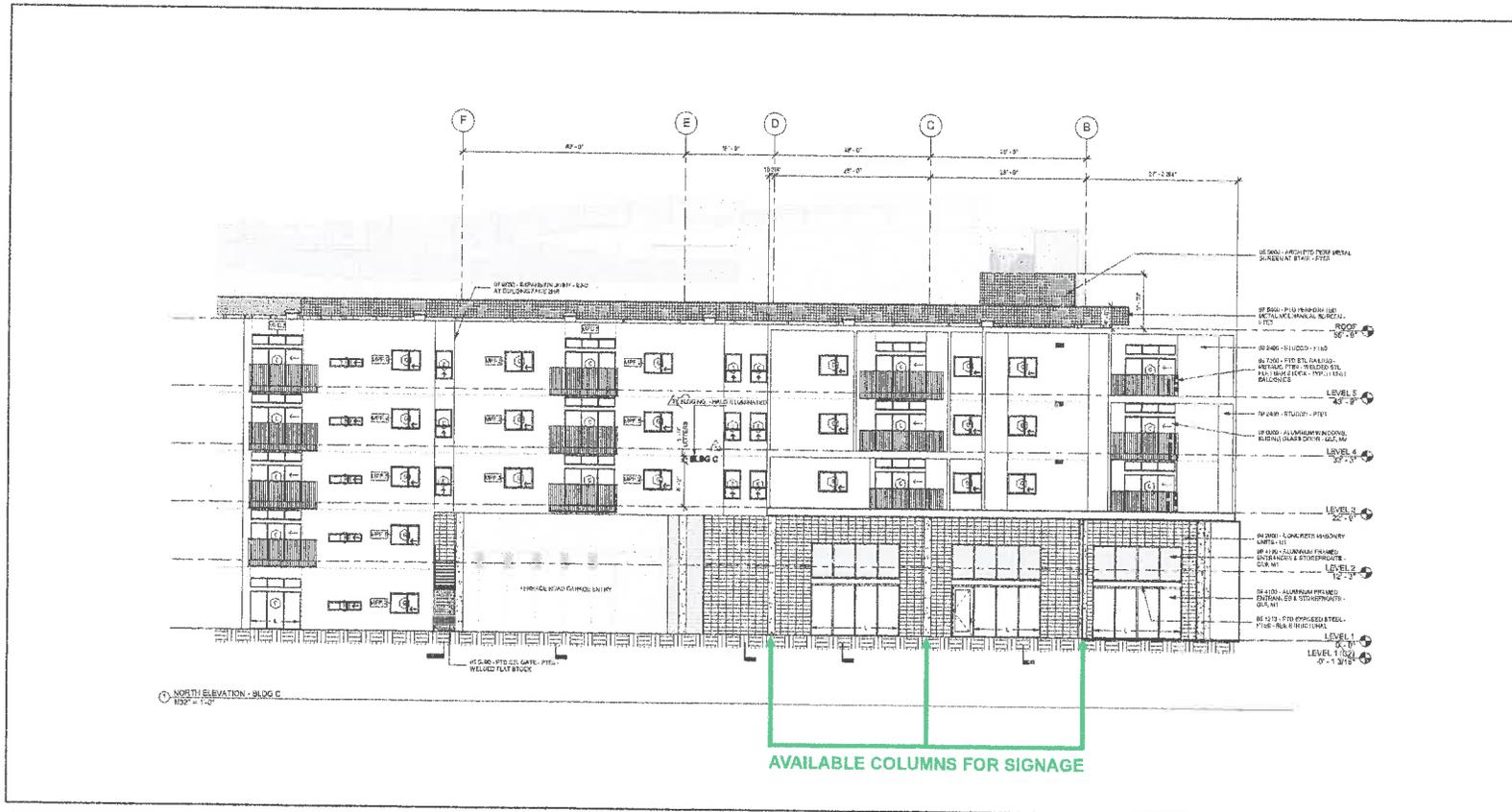
**Title** X: \_\_\_\_\_

**Company Name** X: \_\_\_\_\_

**Revision Notes:**

R1:  
R2:  
R3:  
R4:

**3**  
of  
**6**



ELEVATION - BLDG C

SCALE: 1/32"=1'

Type Styles XXXX



602-484-9588 / Fax: 602-484-0530  
 1725 W Williams Dr, Phoenix, AZ 85027  
 www.craftmastersign.com

**Sales Rep:** KS      **Designer:** RD  
**Project Name:** Bubbleology  
**Address:** 1050 S Terrace Rd, Ste 112      **Zoning:** Pedestrian Retail  
**Address:** Tempe, AZ 85281  
**Contact:** xxxxx      **Phone#:** xxxxx

**File Name:** Bubbleology\_Vertex Apartments\_07.30.18

**Date:** 07-30-2018

**Page:**

**Client Approval**  \_\_\_\_\_  
**Landlord Signature**  \_\_\_\_\_  
**Printed Name**  \_\_\_\_\_  
**Title**  \_\_\_\_\_  
**Company Name**  \_\_\_\_\_

**Revision Notes:**

R1:  
 R2:  
 R3:  
 R4:

4  
 of  
 6