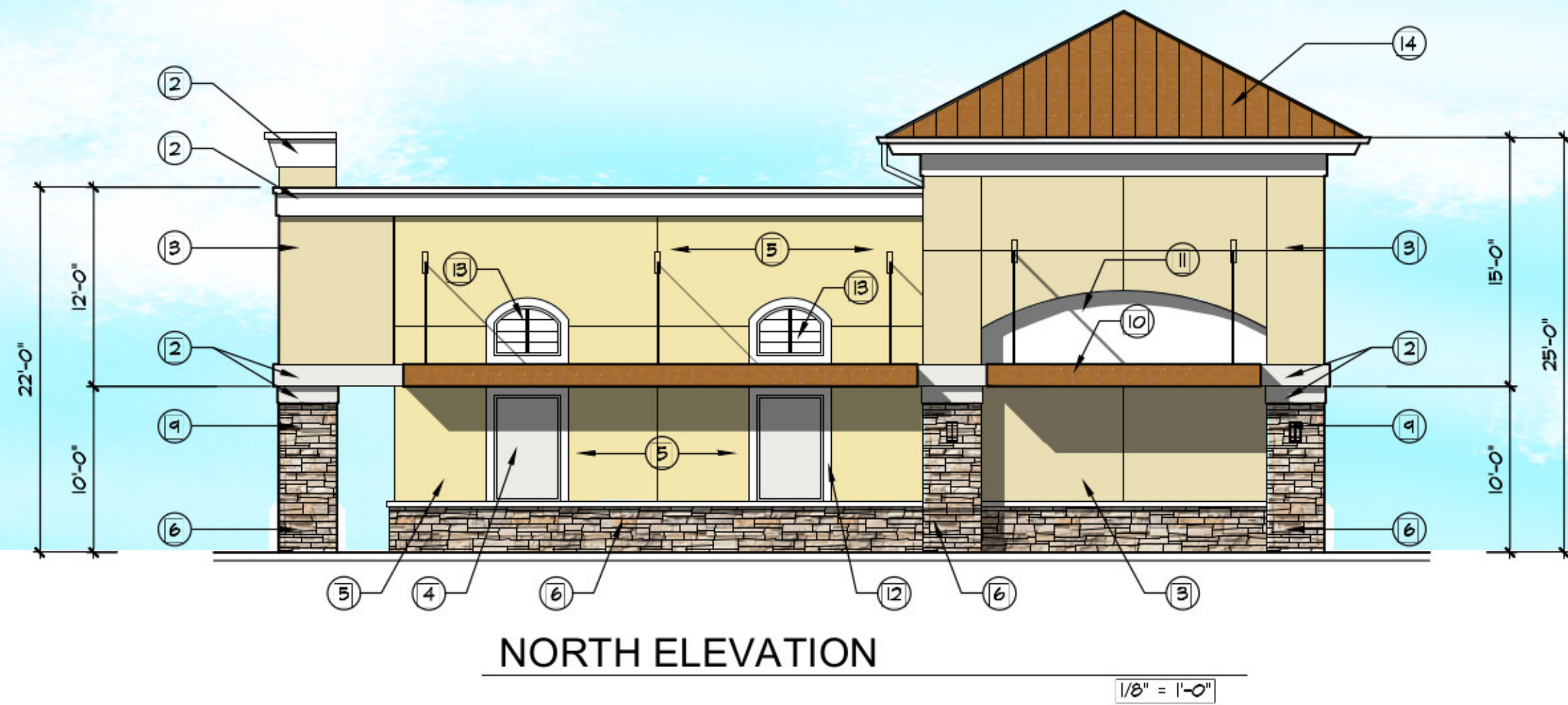




EAST ELEVATION
MAIN ENTRANCE



NORTH ELEVATION

FINISHES SCHEDULE			
MARK	DESCRIPTION	COLOR/CAT No.	NOTES
(1)	ALUMINUM COPING	PREFINISHED WHITE	
(2)	EIPS CORNISE / BAND	WHITE	MATCH NATURAL WICKER
(3)	STUCCO	SENERGY MERINGUE	
(4)	PAINTED STUCCO	BM NATURAL WICKER	
(5)	PAINTED STUCCO	LIGHT YELLOW	MATCH WOODLAND CREAM
(6)	STONE BASE	CULTURED STONE	SOUTHWEST BLEND
(7)	STOREFRONT DOOR	BRUSH ALUM FRAMES	
(8)	STOREFRONT WINDOW	BRUSH ALUM FRAMES	
(9)	WALL SCOFF	T.B.D.	
(10)	ALUMINUM CANOPY	MAPES CANOPY	MATCH METAL ROOF
(11)	PAINTED STUCCO	WHITE	
(12)	EIPS/STUCCO TRIM	WHITE	
(13)	METAL ROOF	ATLAS INT. STANDING SEAM	COPPERTONE #23
(14)	DECORATIVE LOUVERS	WHITE	

NOTE: ALL SIGNAGE UNDER SEPARATE PERMIT

MEETING DATES:
PRELIMINARY TAC - JUNE 18, 2018
FINAL TAC - SEPTEMBER 4, 2018

project no. 1518
scale: AS SHOWN
date: 04-20-17
drawn by: L.V.

08/16/18
revisions

seal

HARDING PLAZA REDEVELOPMENT
FEDERAL HIGHWAY & HARDING ST.
HOLLYWOOD, FLORIDA

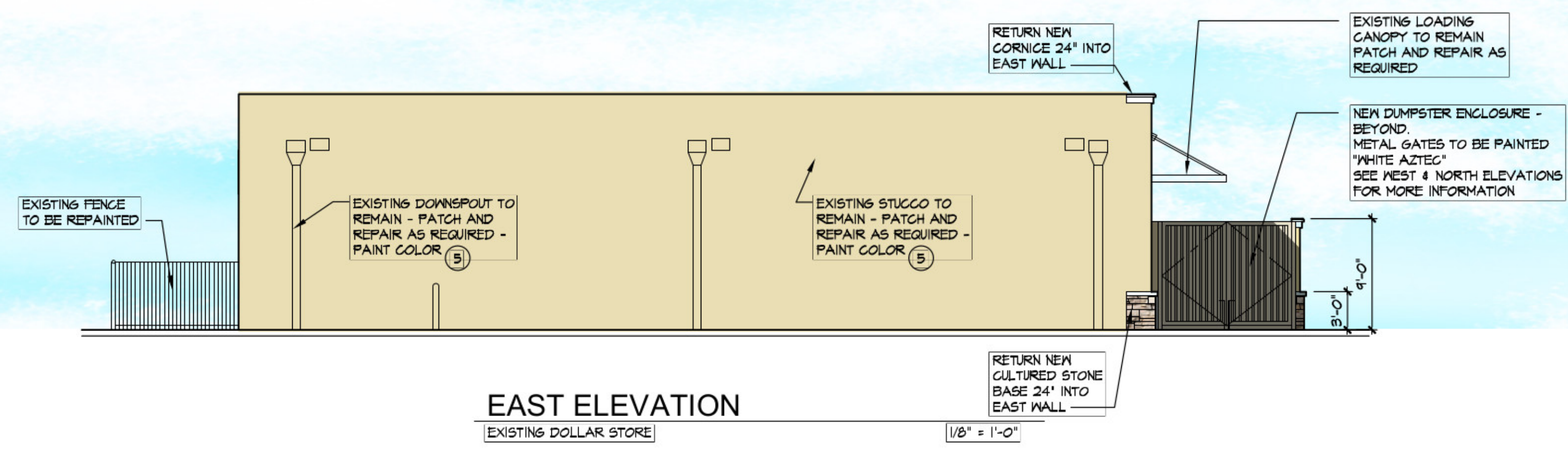
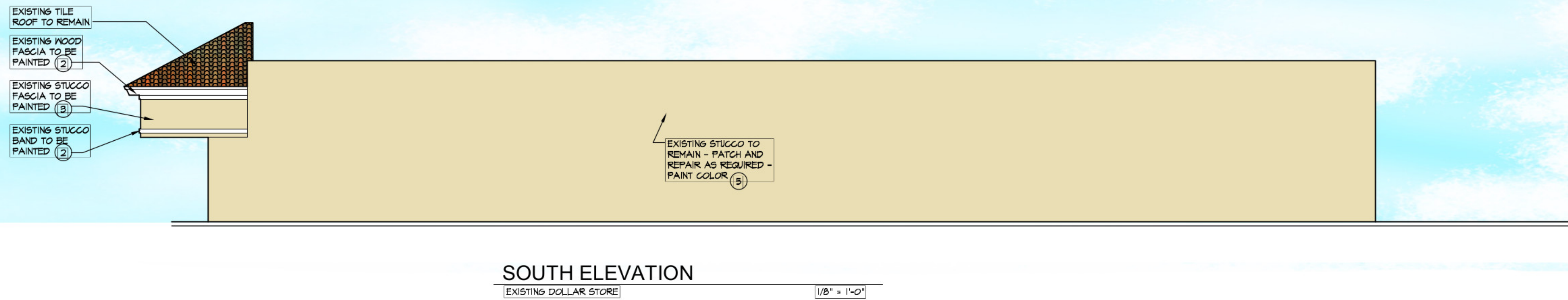
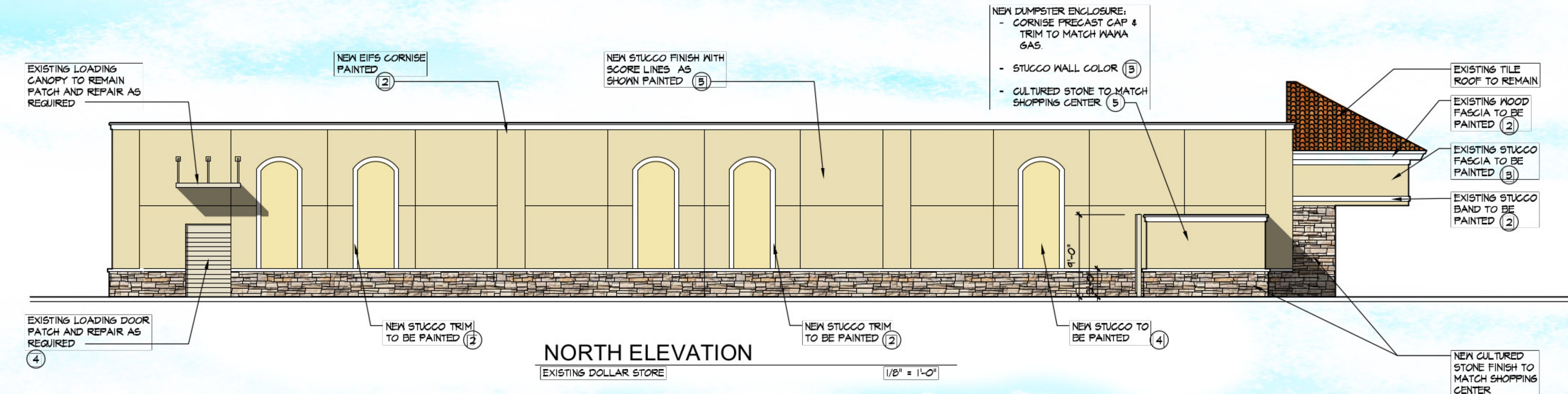
CKE GROUP
INCORPORATED
engineering • architecture • planning

15500 NEW BARN ROAD

SUITE 106

MIAMI LAKES, FLORIDA 33014

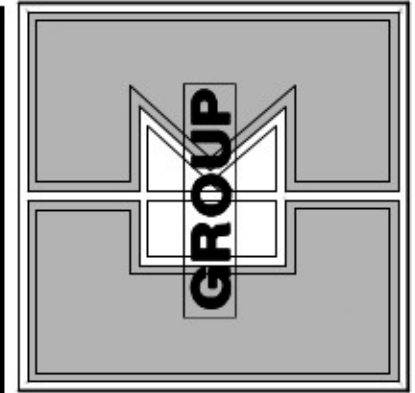
(305) 568-4124



FINISHES SCHEDULE			
MARK	DESCRIPTION	COLOR/CAT No.	NOTES
(1)	ALUMINUM COPING	PREFINISHED WHITE	
(2)	EIFS CORNISE / BAND	WHITE	MATCH NATURAL WICKER
(3)	STUCCO	SENERGY MERINGUE	
(4)	PAINTED STUCCO	BM NATURAL WICKER	
(5)	PAINTED STUCCO	LIGHT YELLOW	MATCH WOODLAND CREAM
(6)	STONE BASE	CULTURED STONE	SOUTHWEST BLEND
(7)	STOREFRONT DOOR	BRUSH ALUM FRAMES	
(8)	STOREFRONT WINDOW	BRUSH ALUM FRAMES	
(9)	WALL SCOFF	T.B.D.	
(10)	ALUMINUM CANOPY	MAPES CANOPY	MATCH METAL ROOF
(11)	PAINTED STUCCO	WHITE	
(12)	EIFS/STUCCO TRIM	WHITE	
(13)	DECORATIVE LOUVERS	WHITE	
(14)	EXISTING TILE ROOF		

NOT ALL FINISHES TO BE UTILIZED IN DOLLAR STORE

NOTE: ALL SIGNAGE UNDER SEPARATE PERMIT



CKE GROUP INCORPORATED
engineering • architecture • planning

HARDING PLAZA REDEVELOPMENT
FEDERAL HIGHWAY & HARDING ST.
HOLLYWOOD, FLORIDA

SUITE 106 • MIAMI LAKES, FLORIDA 33014

15500 NEW BARN ROAD

project no. 1518
scale: AS SHOWN
date: 04-20-17
drawn by: L.V.
revisions seal

MEETING DATES:
PRELIMINARY TAC - JUNE 18, 2018
FINAL TAC - SEPTEMBER 4, 2018

A-4
NEW SHEET



RIGHT (WEST) ELEVATION (FEDERAL HWY)



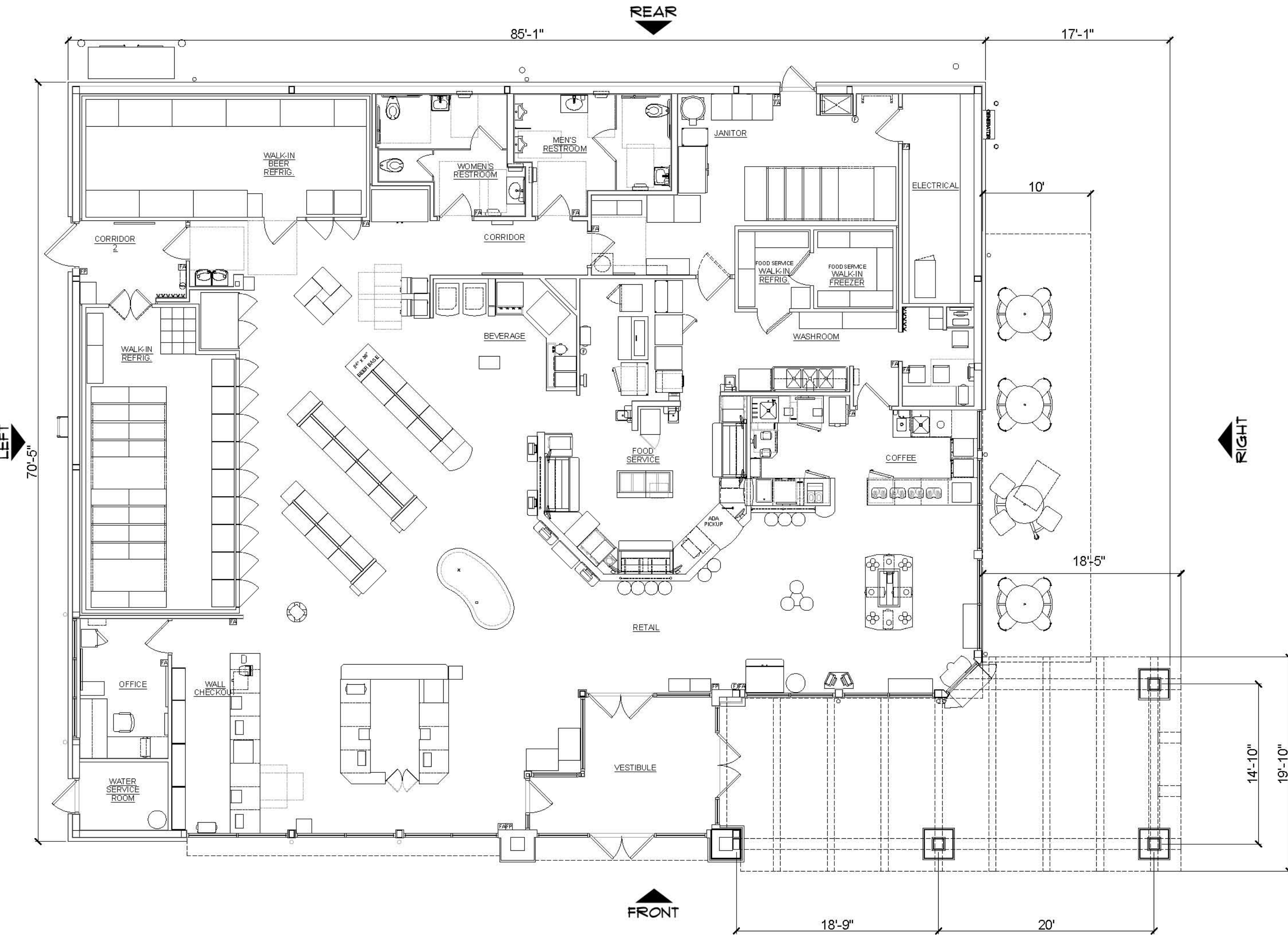
FRONT (NORTH) ELEVATION (HARDING RD.)



REAR (SOUTH) ELEVATION

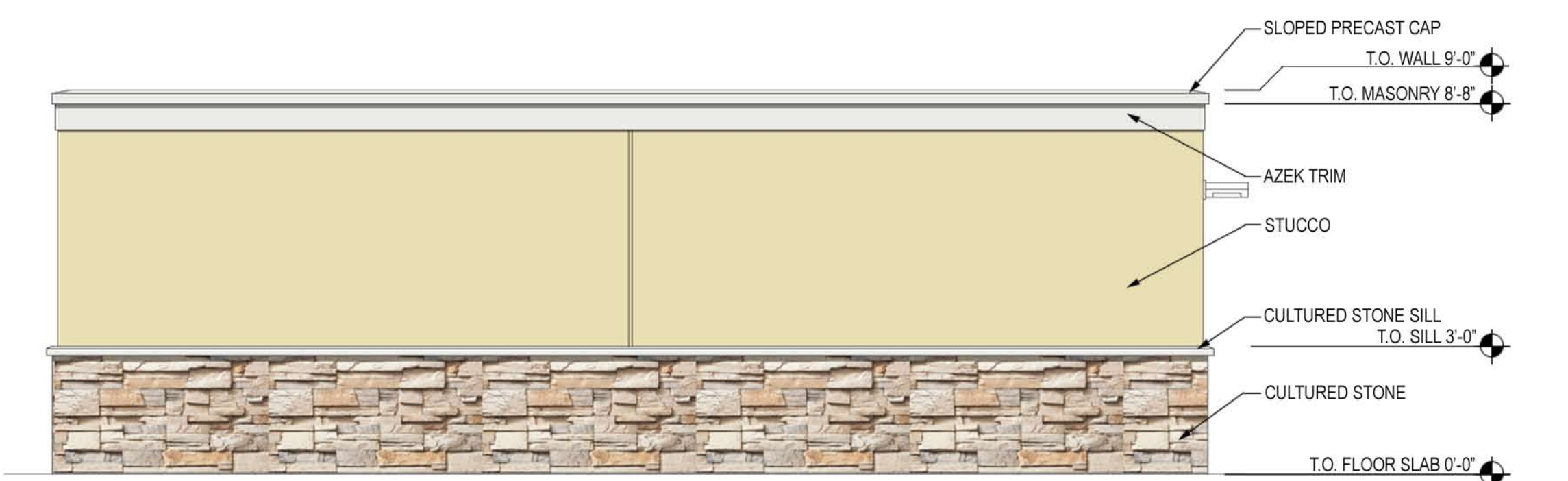
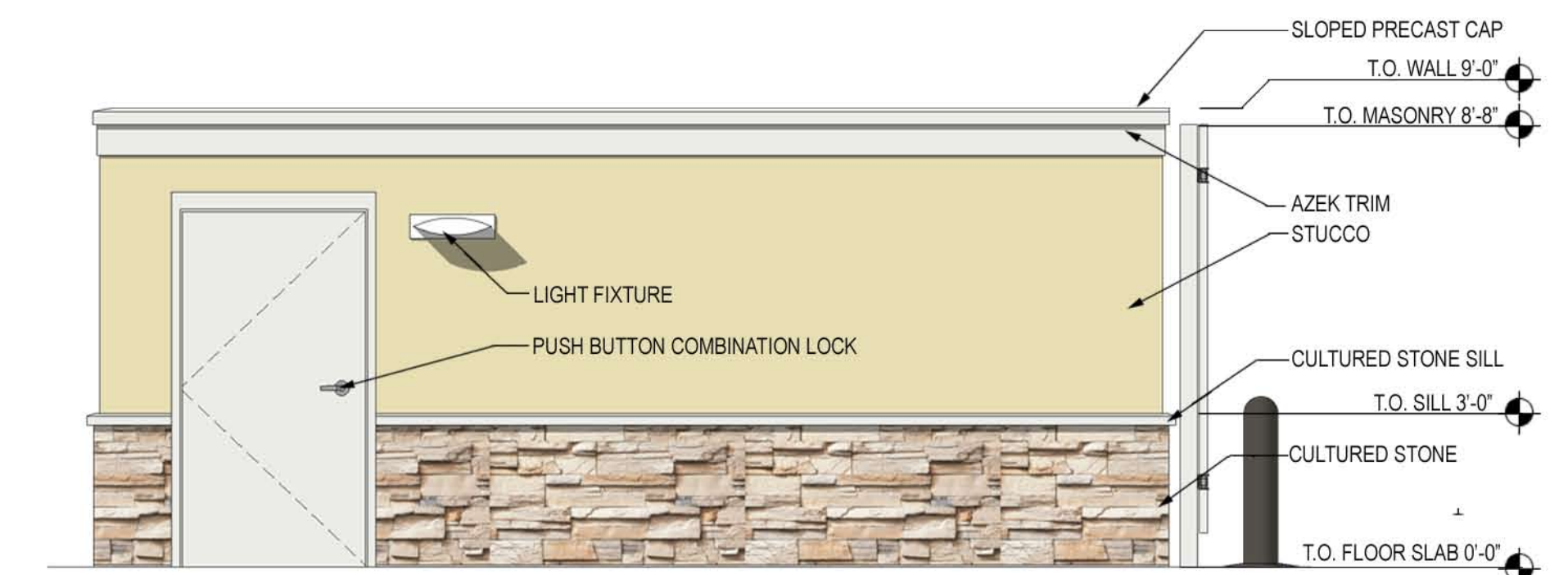
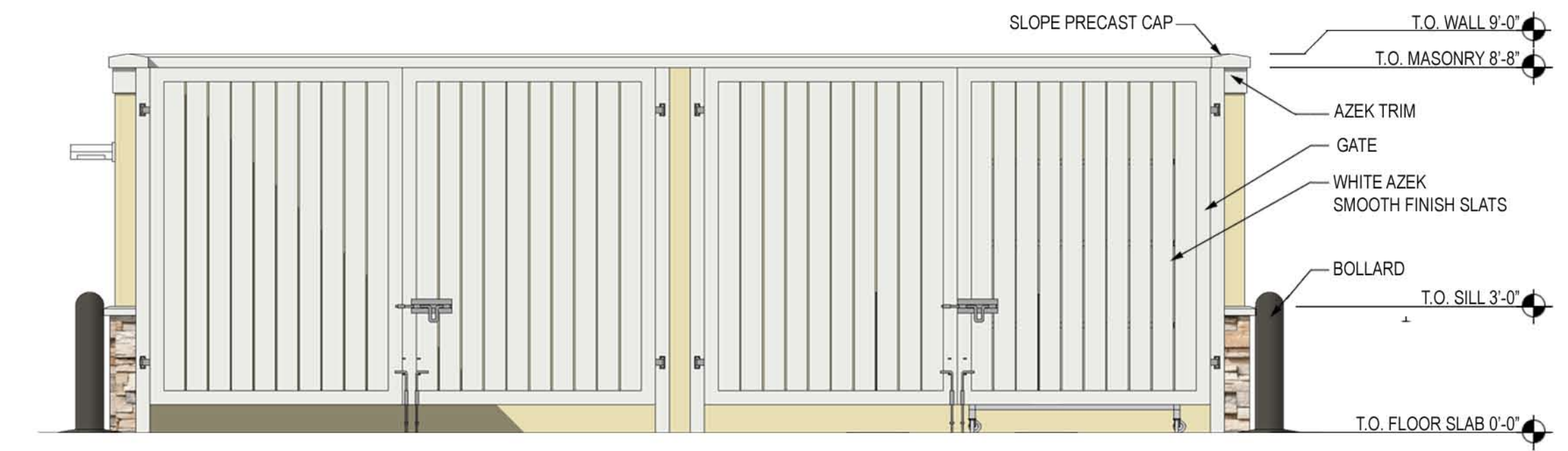


LEFT (EAST) ELEVATION



FLOOR PLAN

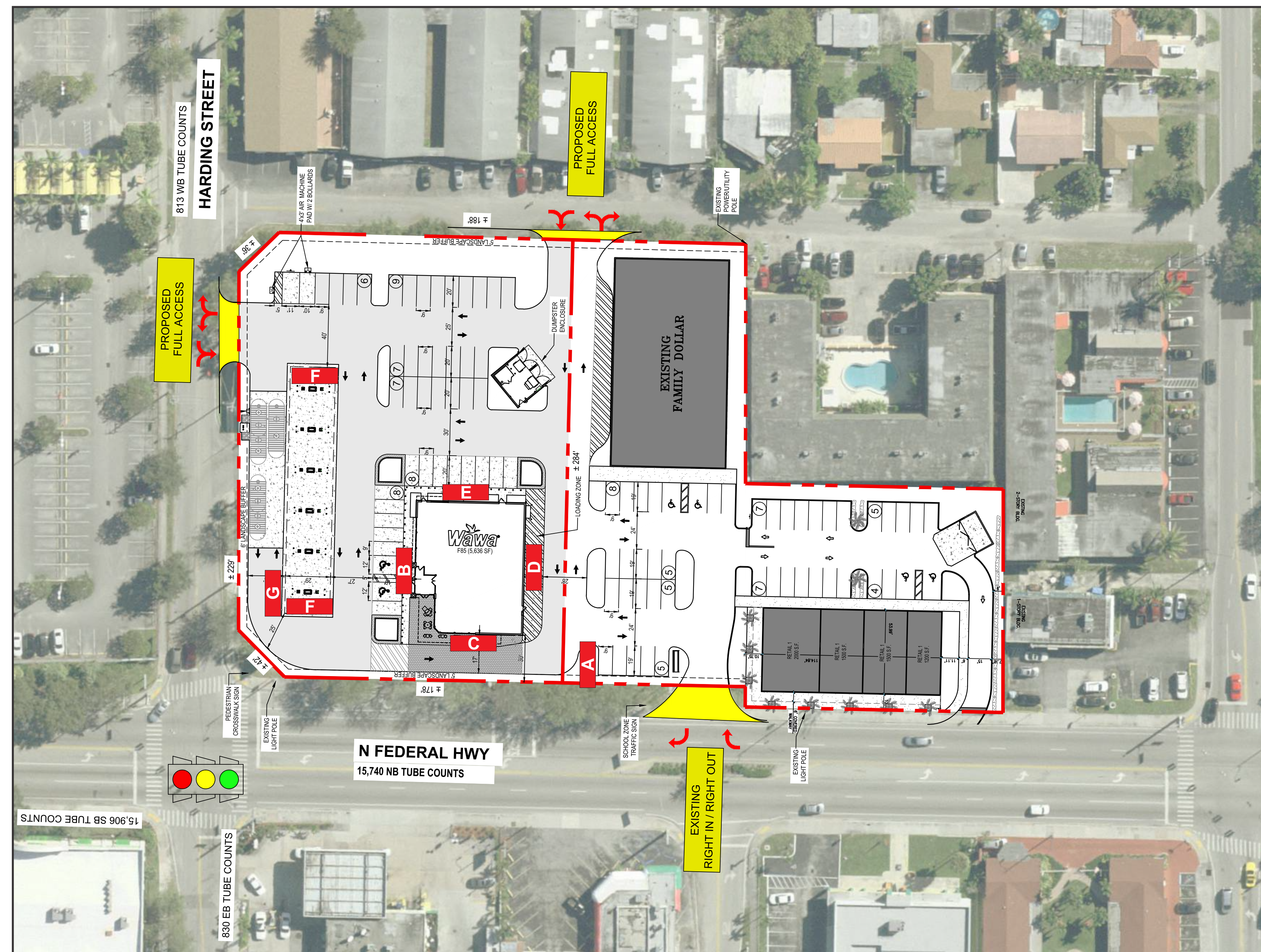
NOTE:
SIGNAGE IS SHOWN FOR REFERENCE ONLY
SEPARATE PERMIT REQUIRED





Market

WAWA FOOD MARKETS #1801
1801 N Federal Hwy
Hollywood, FL 33020



Note:
All signage shall be in compliance
with Zoning and Land Development
Regulations.

- PROPOSED SIGN LOCATION
- PROPOSED SIGN DESIGNATION

LEGEND

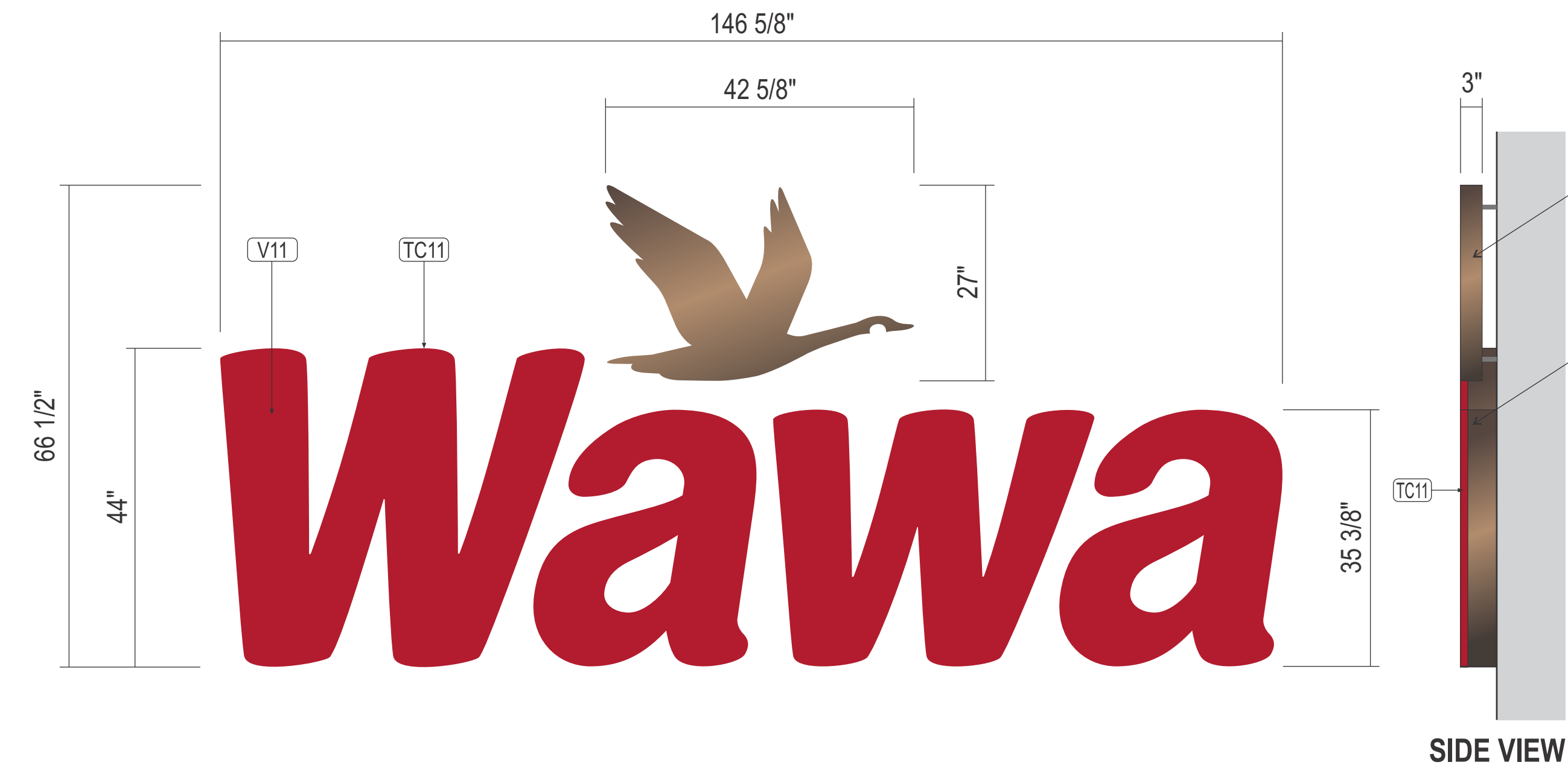




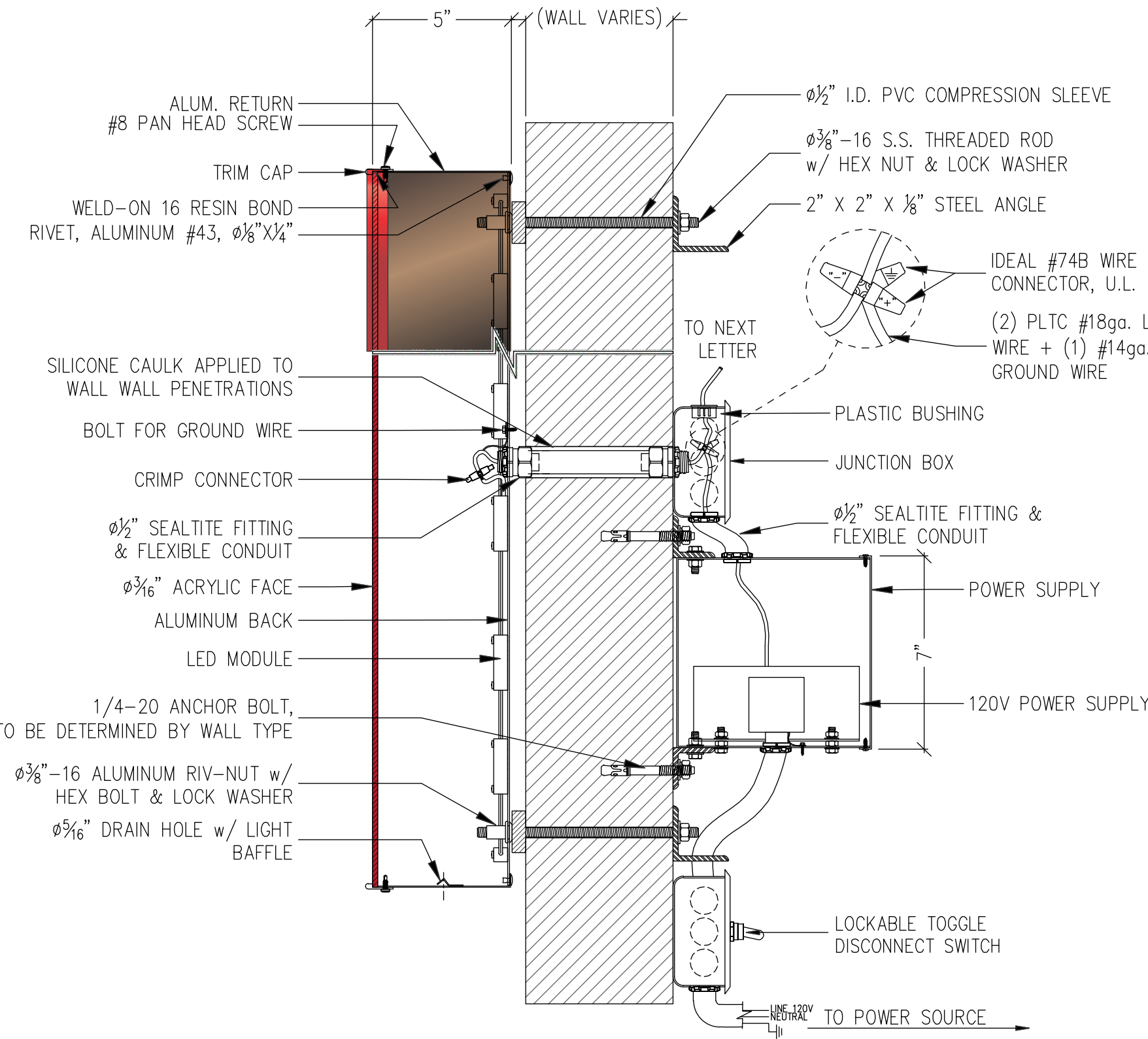
PROPOSED FRONT ELEVATION

General Requirements

1. All letter sets require a UL label
2. Letters are designed to meet 2014 Florida Building Code ASCE 7-10 (168 mph Exposure C)
3. Letters to be installed according to NEC and/or applicable local codes
4. The disconnect must be placed in direct view of the sign
5. Use white silicone to conceal light leaks

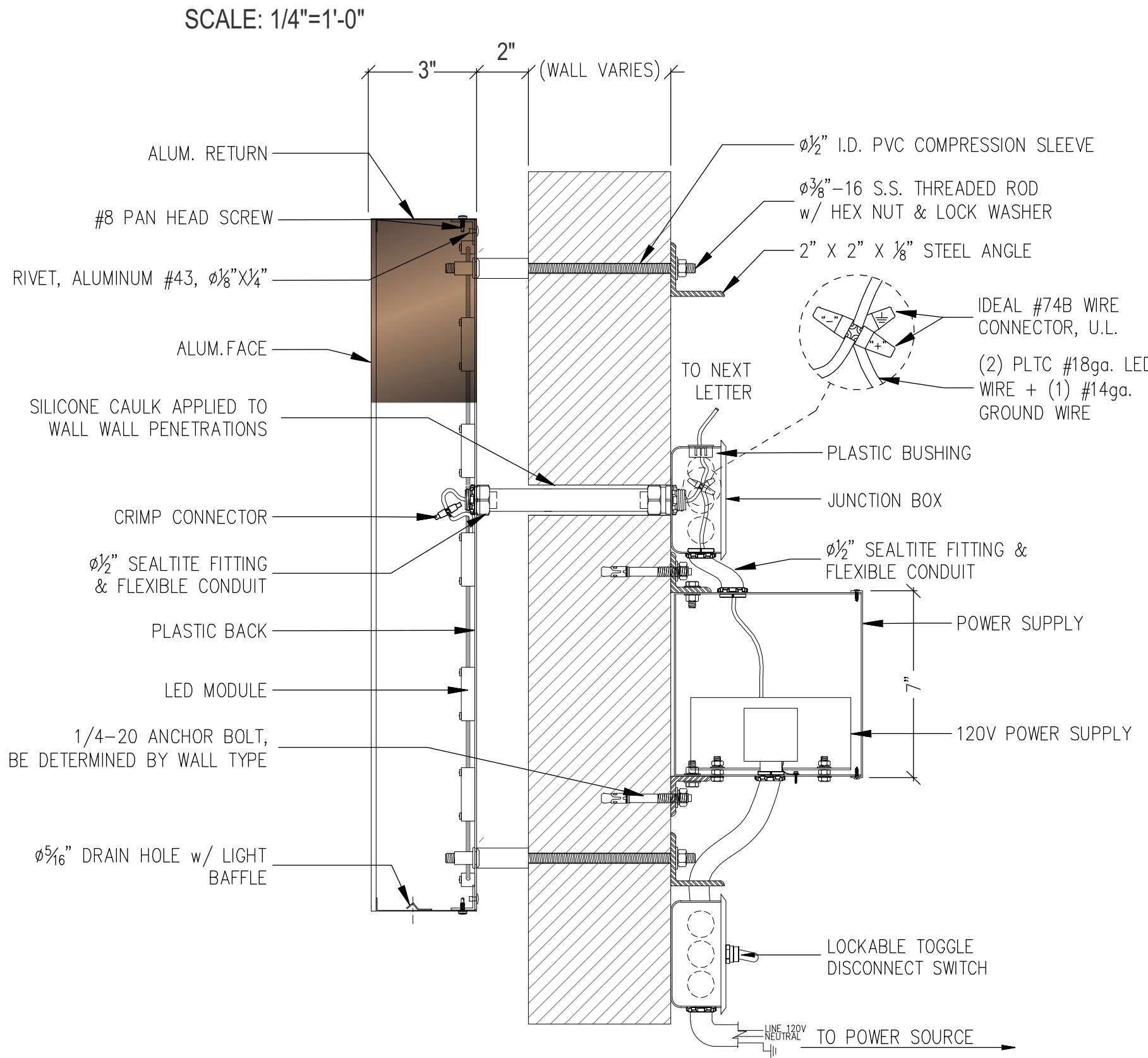


SIDE VIEW



SECTION @ FACE-LIT CHANNEL LETTER "W"

SCALE: NTS



SECTION @ HALO-LIT GOOSE LOGO

SCALE: NTS

Drawing prepared by:	PROPOSED SIGNAGE		Drawing prepared for:
Location:	1801 N Federal Hwy, Hollywood, FL 33020	Proj #:	3750
File Path:	Active\ACCOUNTS\IWWawa\Locations\Project 3570\3570_1801_ City of Hollywood_FL_24x36_R2	Loc #:	1801

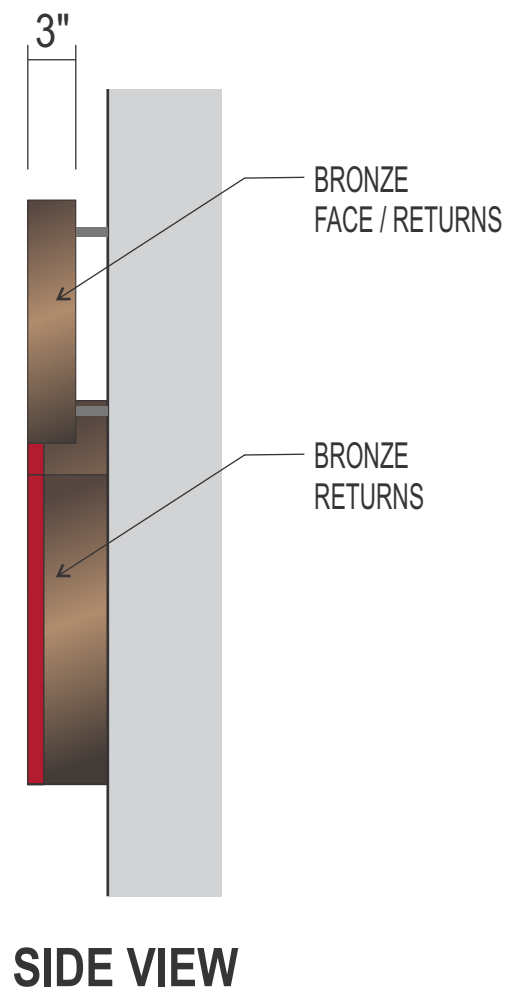
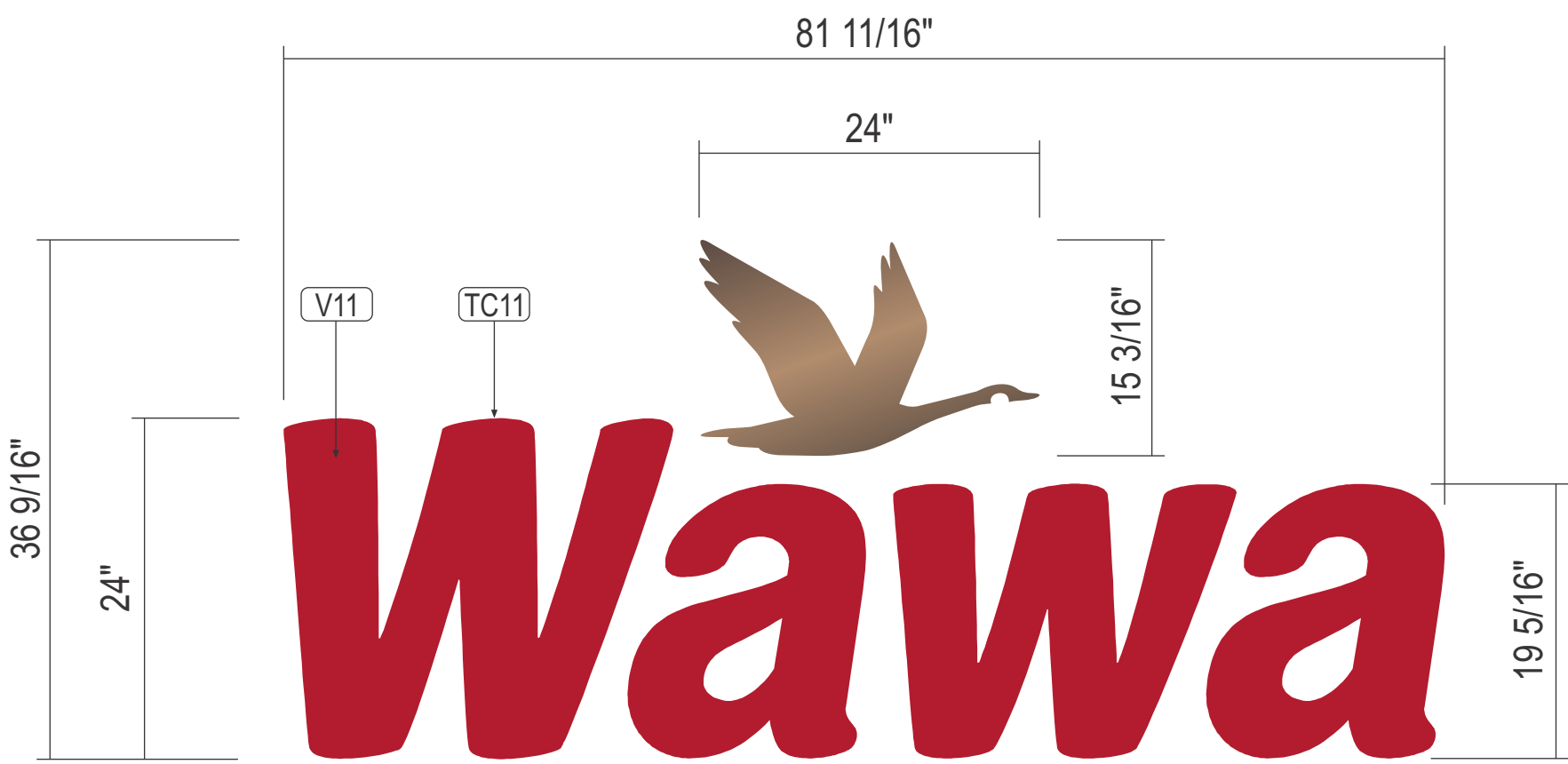


Rev #:	Req#:	Date:	Req. By:	Drawn By:	Revision Description:	Rev #:	Req#:	Date:	Req. By:	Drawn By:	Revision Description:
Original	262096	11/22/17	FJ	ABP		Rev 7	000000	00/00/00	XXX	XXX	Notes
Rev 1	301310	07/18/18	SG	ABP	Revised per request	Rev 8	000000	00/00/00	XXX	XXX	
Rev 2	301747	07/28/18	SG	ABP	Revised per request	Rev 9	000000	00/00/00	XXX	XXX	
Rev 3	000000	00/00/00	XXX	XXX		Rev 10	000000	00/00/00	XXX	XXX	
Rev 4	000000	00/00/00	XXX	XXX		Rev 11	000000	00/00/00	XXX	XXX	
Rev 5	000000	00/00/00	XXX	XXX		Rev 12	000000	00/00/00	XXX	XXX	
Rev 6	000000	00/00/00	XXX	XXX		Rev 13	000000	00/00/00	XXX	XXX	

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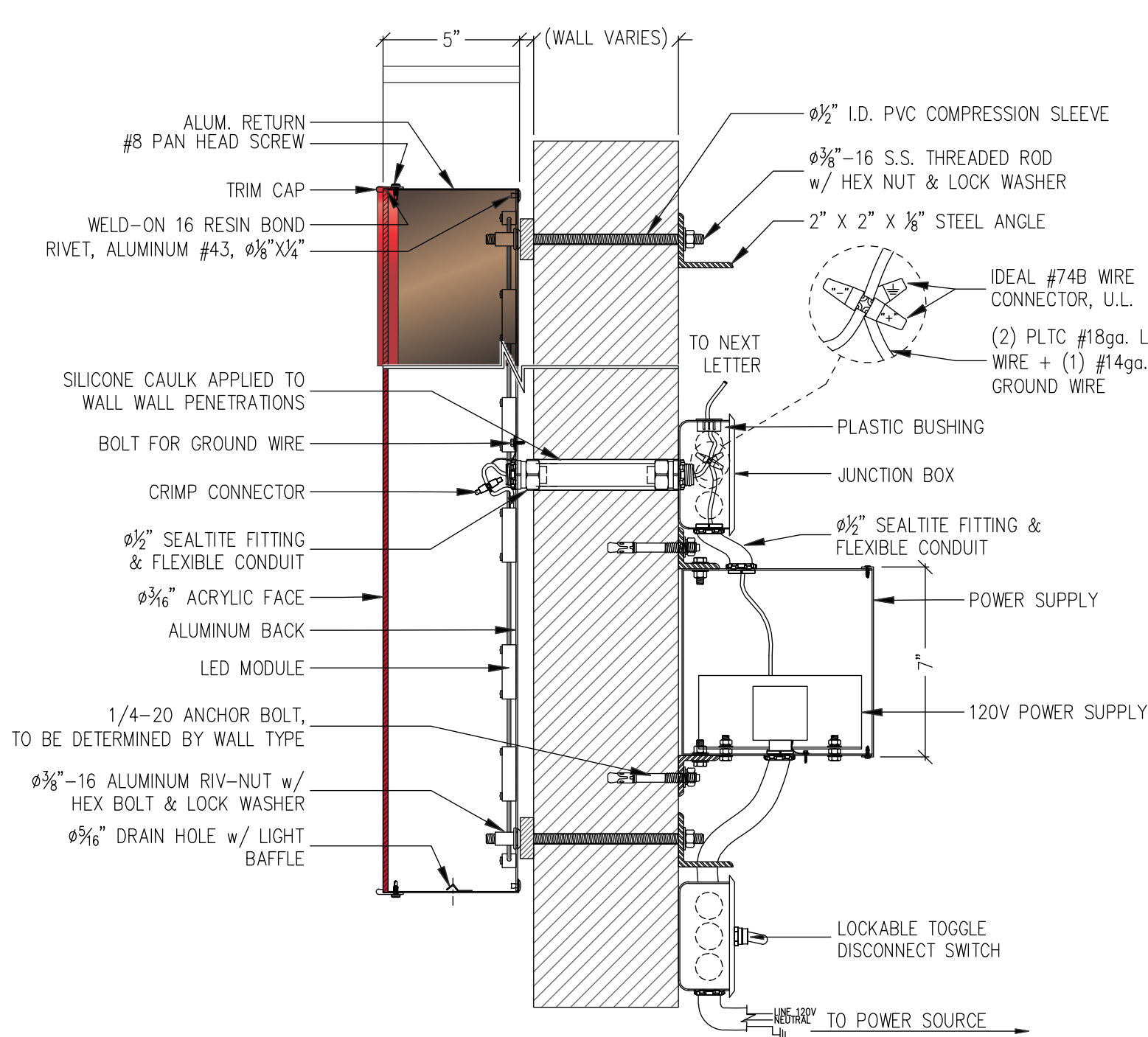
- General Requirements**
1. All letter sets require a UL label
 2. Letters are designed to meet 2014 Florida Building Code ASCE 7-10 (168 mph Exposure C)
 3. Letters to be installed according to NEC and/or applicable local codes
 4. The disconnect must be placed in direct view of the sign
 5. Use white silicone to conceal light leaks



C 24" ILLUMINATED CHANNEL LETTERS w/ BRONZE LIT GOOSE LOGO - 20.72 SF

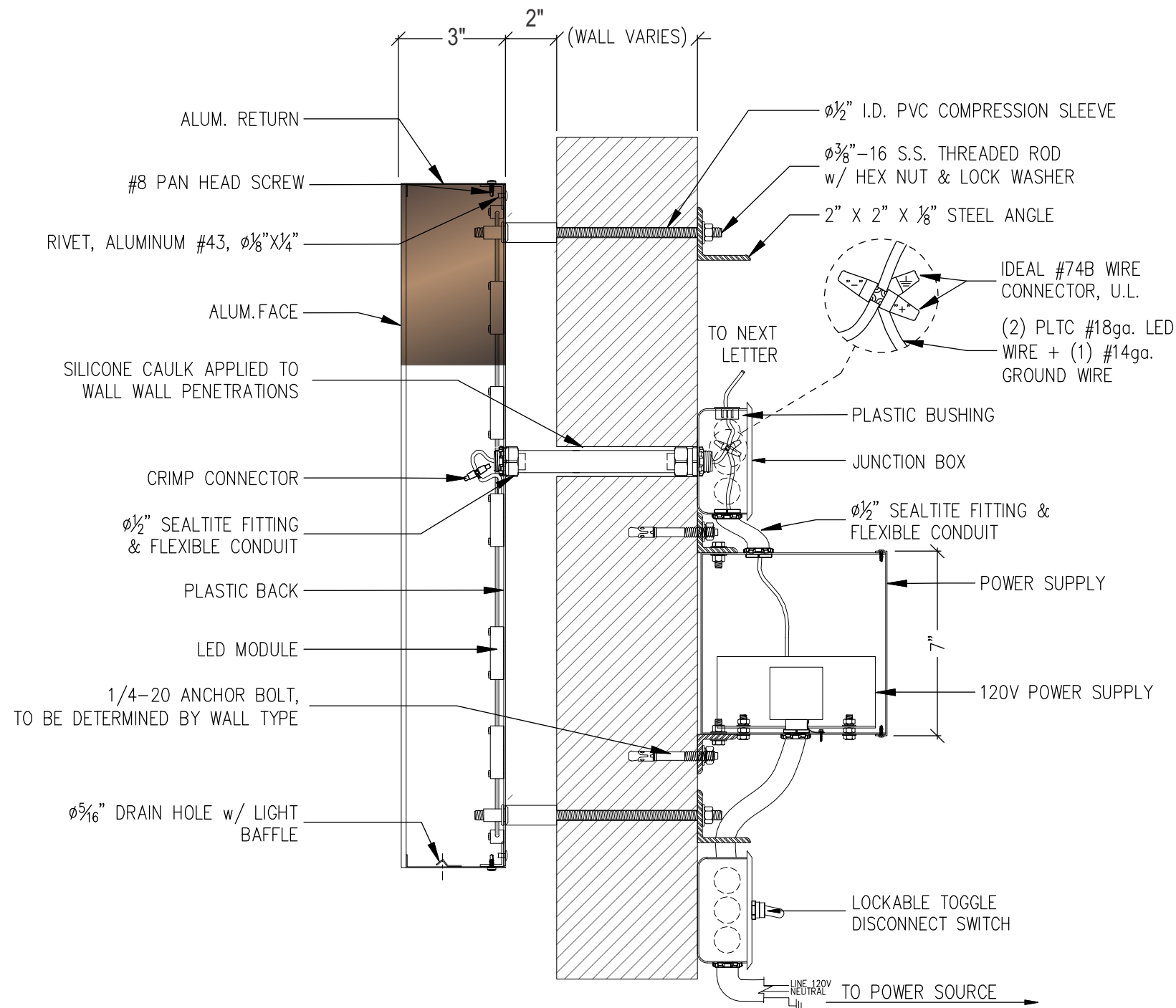
QTY: 1
STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY

SCALE: 1"=1'-0"



SECTION @ FACE-LIT CHANNEL LETTER "W"

SCALE: NTS



SECTION @ HALO-LIT GOOSE LOGO

SCALE: NTS

Drawing prepared by:	PROPOSED SIGNAGE	Drawing prepared for:		Rev #:	Req#:	Date:	Req. By:	Drawn By:	Revision Description:	Rev #:	Req#:	Date:	Req. By:	Drawn By:	Revision Description:	Drawings are the exclusive property of ICON. Any unauthorized use or duplication is not permitted.
Location:	1801 N Federal Hwy, Hollywood, FL 33020	Proj #:	3750	Original	262096	11/22/17	FJ	ABP		Rev 7	000000	00/00/00	XXX	XXX	Notes	
File Path:	Active\ACCOUNTS\IWWawa\Locations\Project 3570\3570_1801_ City of Hollywood_FL_24x36_R2	Loc #:	1801	Rev 1	301310	07/18/18	SG	ABP	Revised per request	Rev 8	000000	00/00/00	XXX	XXX		
				Rev 2	301747	07/28/18	SG	ABP	Revised per request	Rev 9	000000	00/00/00	XXX	XXX		
				Rev 3	000000	00/00/00	XXX	XXX		Rev 10	000000	00/00/00	XXX	XXX		
				Rev 4	000000	00/00/00	XXX	XXX		Rev 11	000000	00/00/00	XXX	XXX		
				Rev 5	000000	00/00/00	XXX	XXX		Rev 12	000000	00/00/00	XXX	XXX		
				Rev 6	000000	00/00/00	XXX	XXX		Rev 13	000000	00/00/00	XXX	XXX		

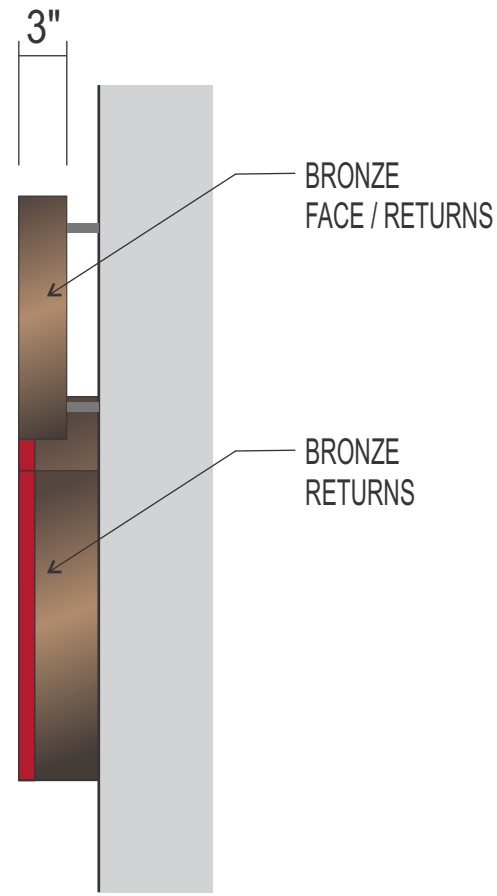
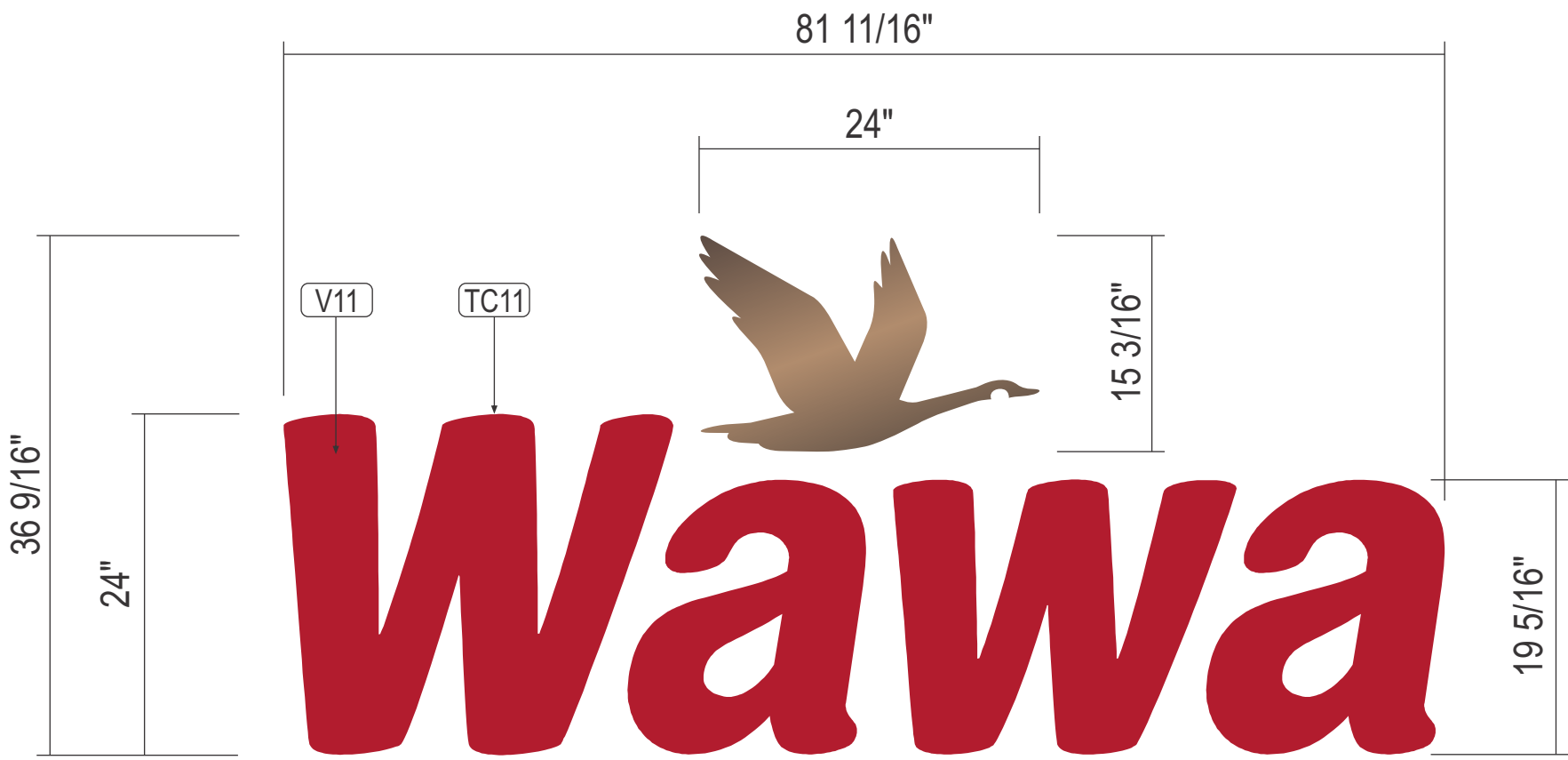


PROPOSED REAR ELEVATION

General Requirements

1. All letter sets require a UL label
2. Letters are designed to meet 2014 Florida Building Code ASCE 7-10 (168 mph Exposure C)
3. Letters to be installed according to NEC and/or applicable local codes
4. The disconnect must be placed in direct view of the sign
5. Use white silicone to conceal light leaks

SCALE: 1/4"=1'-0"

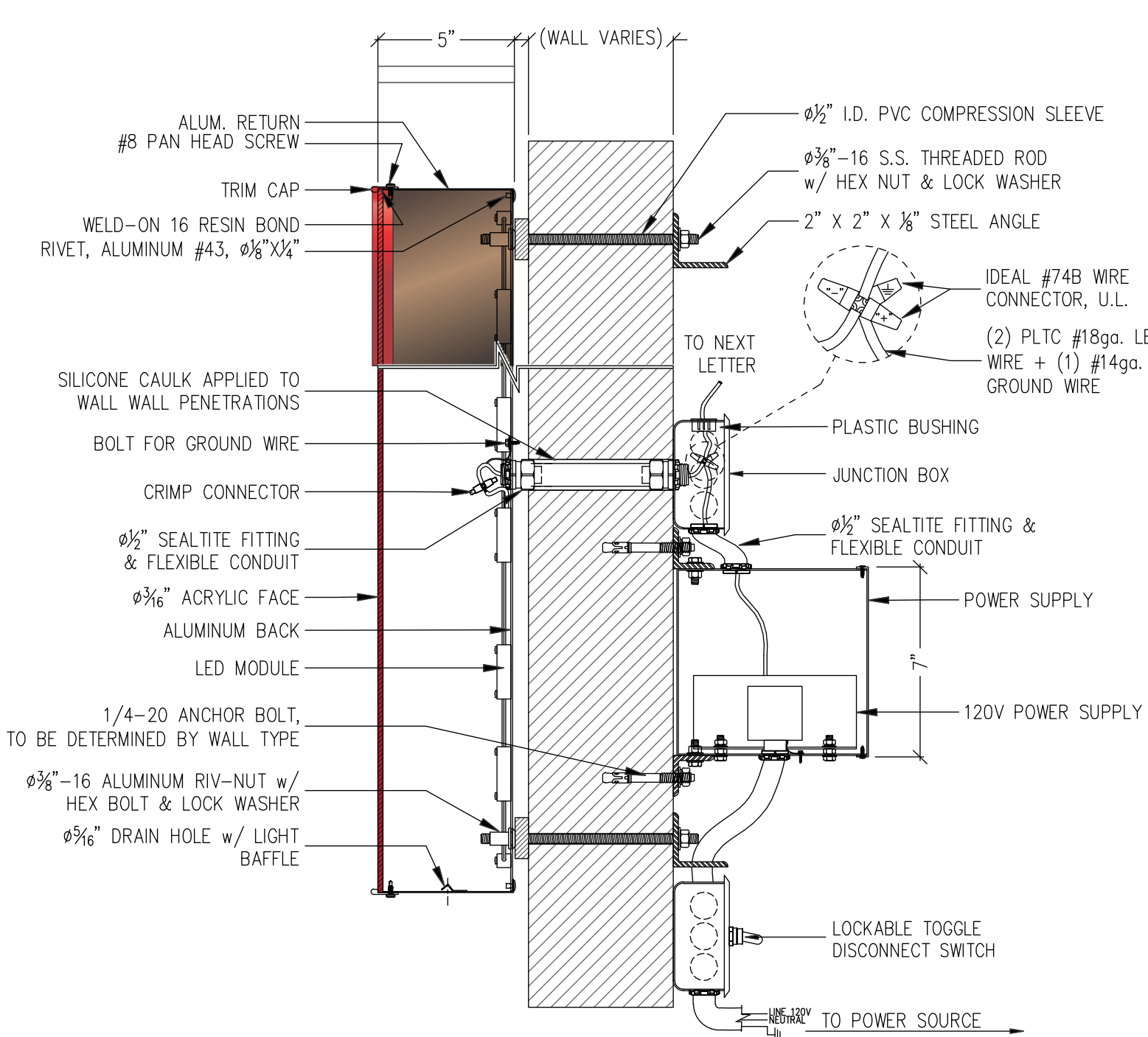


SIDE VIEW

D 24" ILLUMINATED CHANNEL LETTERS w/ BRONZE LIT GOOSE LOGO - 20.72 SF

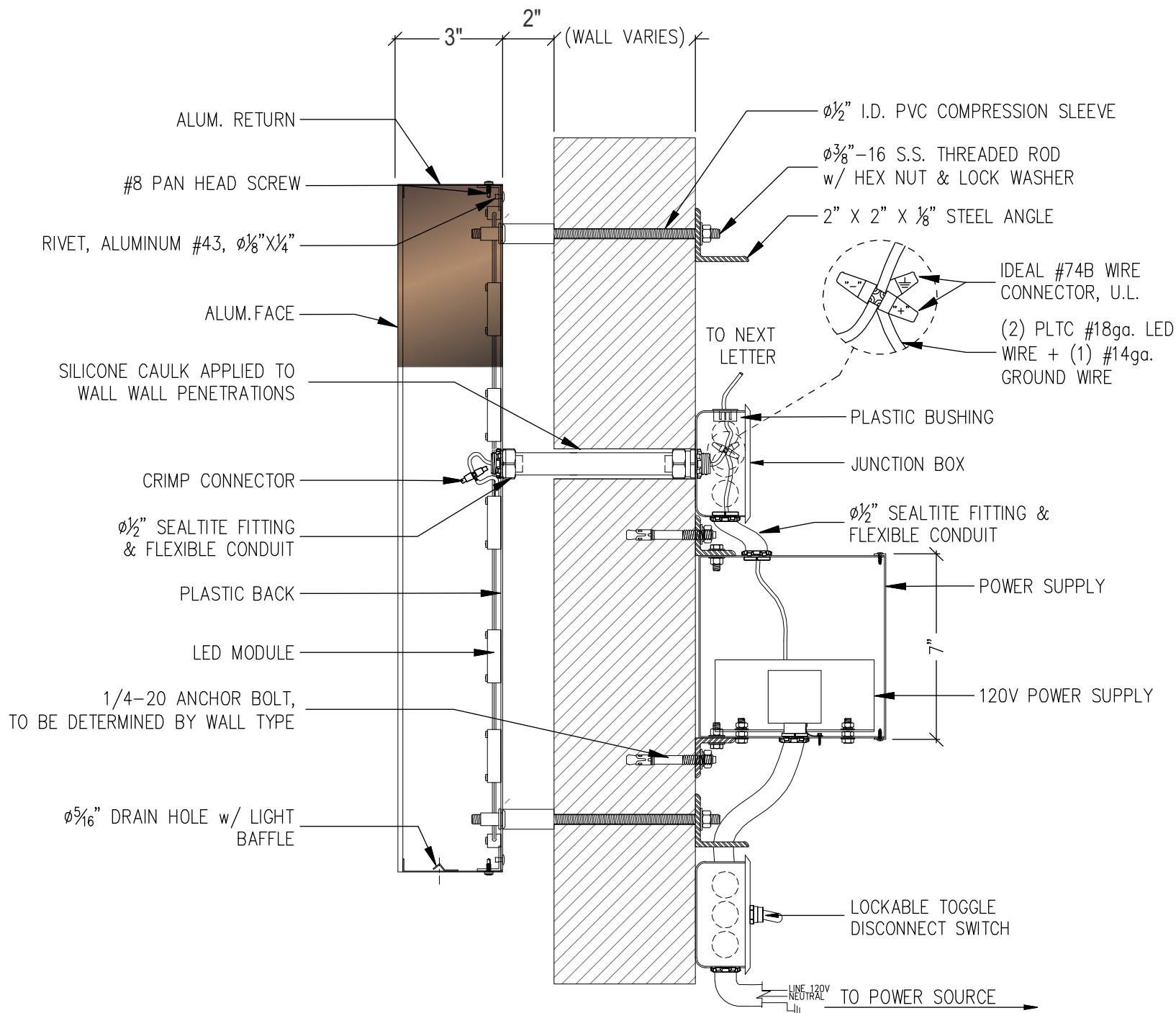
QTY: 1
STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY

SCALE: 1"=1'-0"



SECTION @ FACE-LIT CHANNEL LETTER "W"

SCALE: NTS



SECTION @ HALO-LIT GOOSE LOGO

SCALE: NTS

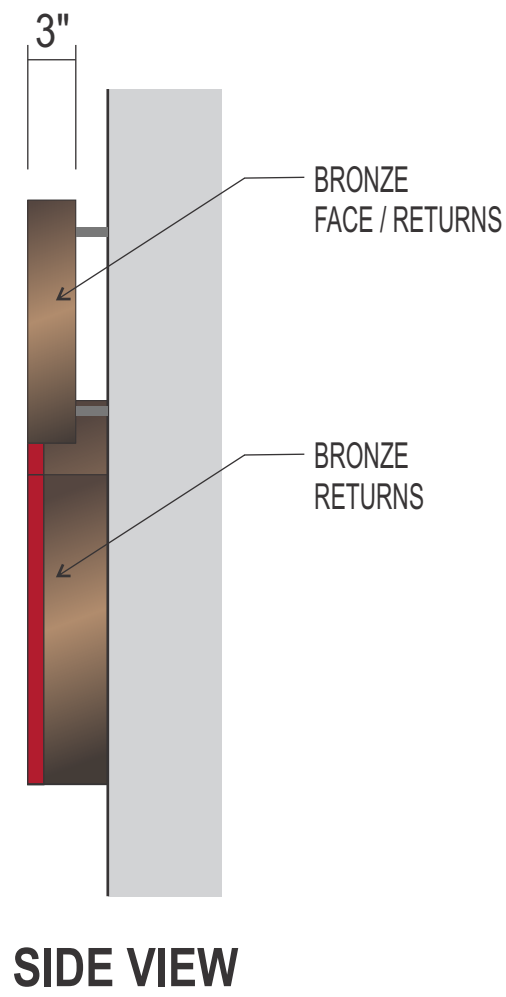
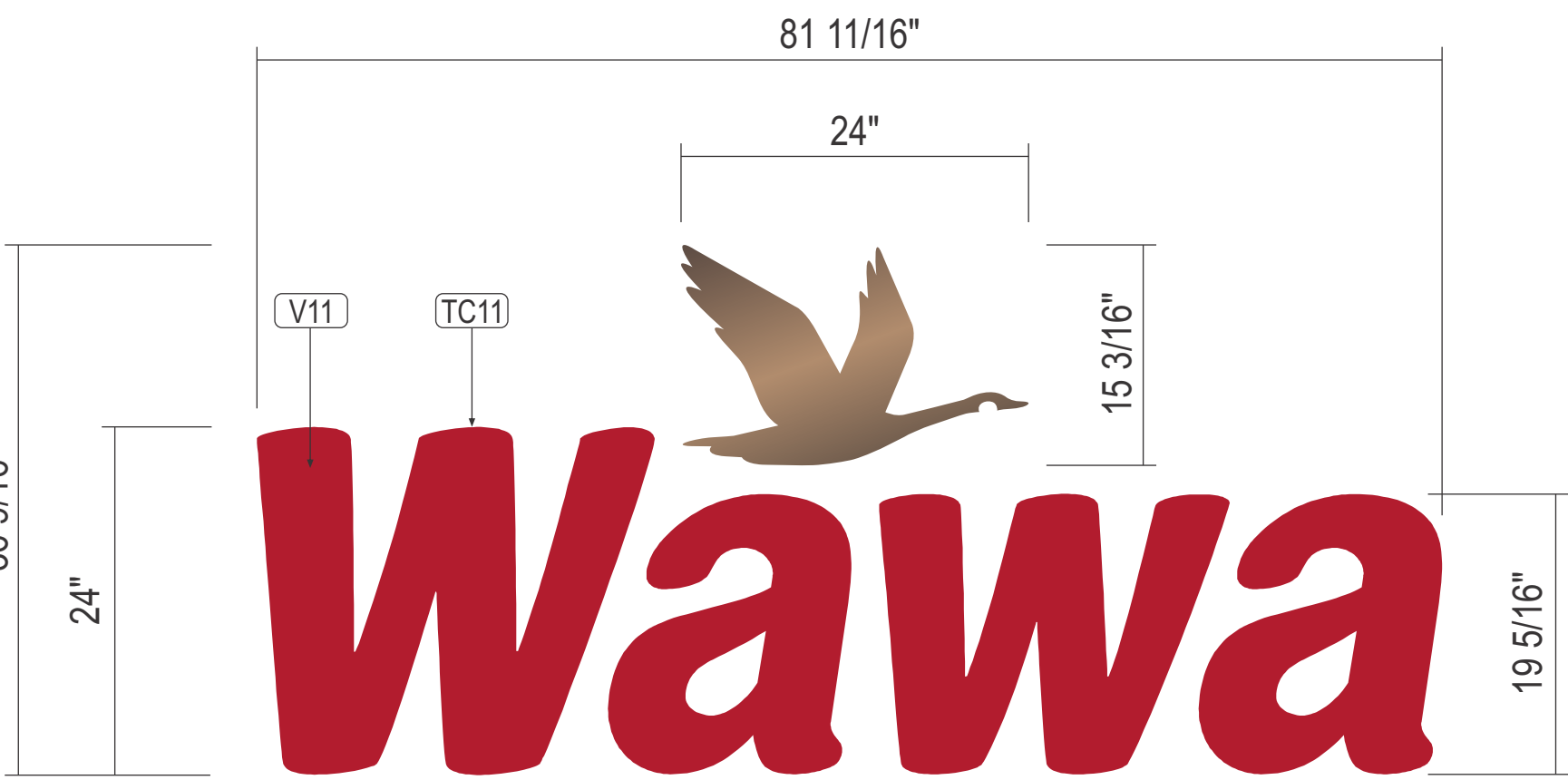
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General Requirements

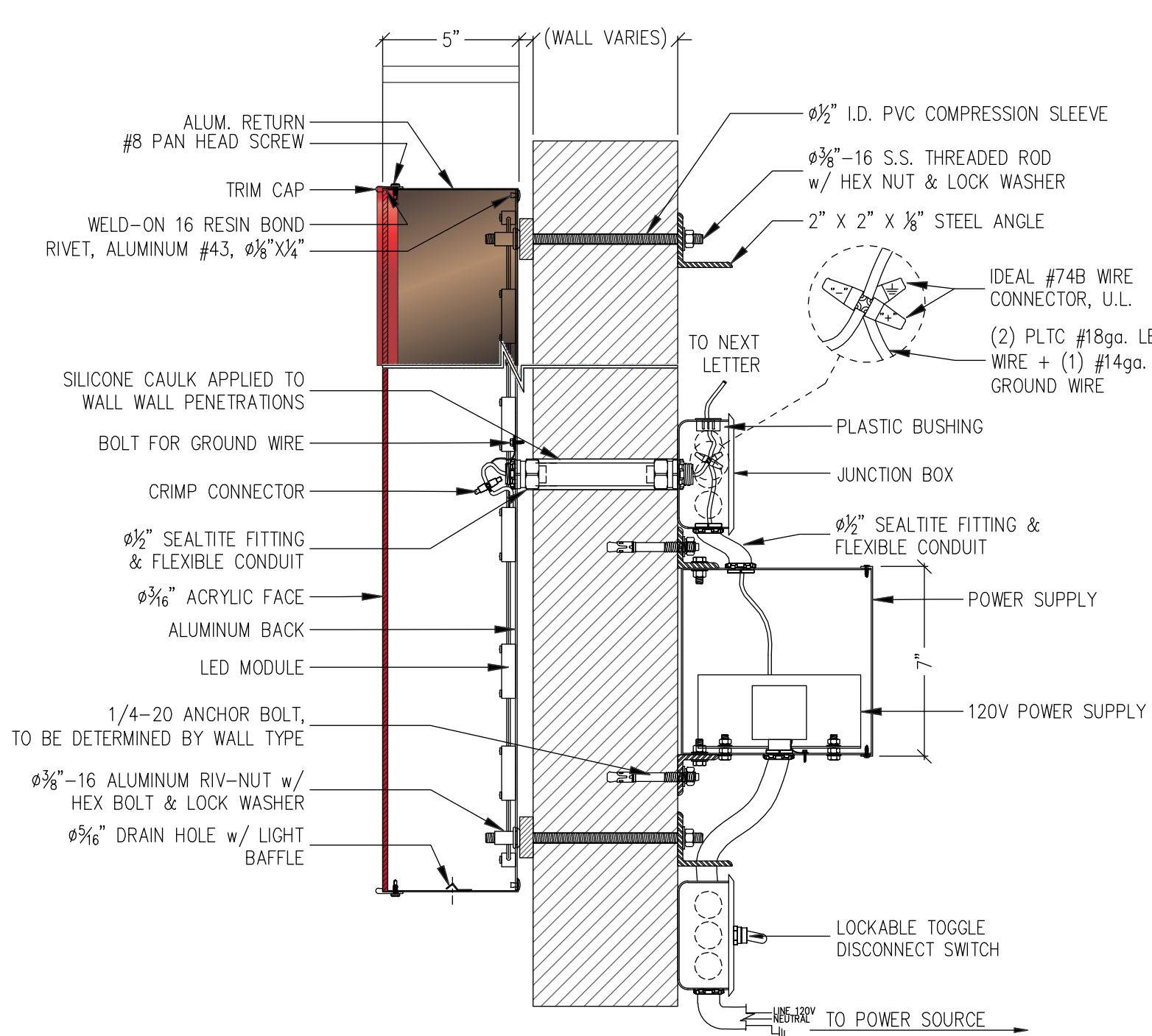
1. All letter sets require a UL label
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3. Letters to be installed according to NEC and/or applicable local codes
4. The disconnect must be placed in direct view of the sign
5. Use white silicone to conceal light leaks



E 24" ILLUMINATED CHANNEL LETTERS w/ BRONZE LIT GOOSE LOGO - 20.72 SF

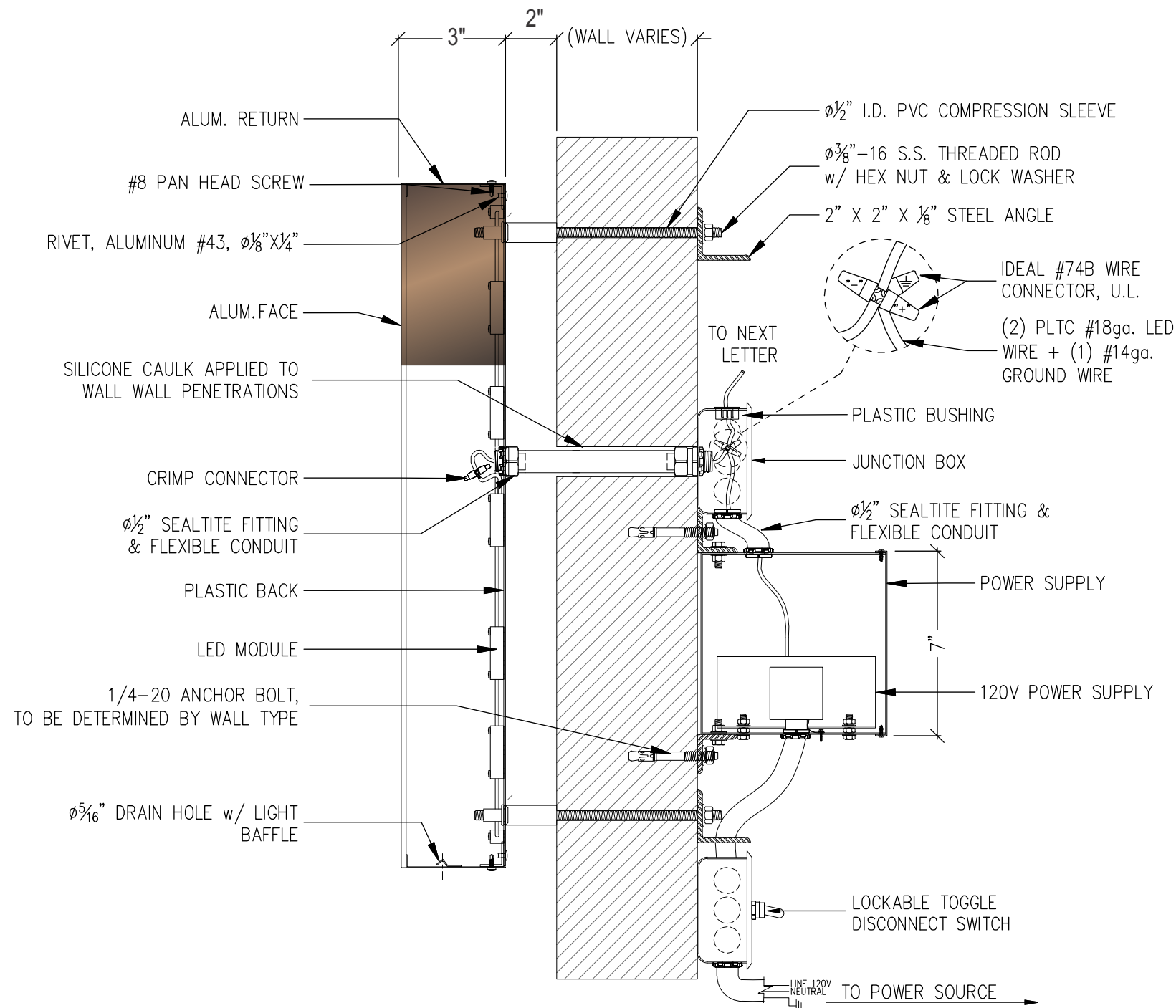
QTY: 1
STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY

SCALE: 1"=1'-0"



SECTION @ FACE-LIT CHANNEL LETTER "W"

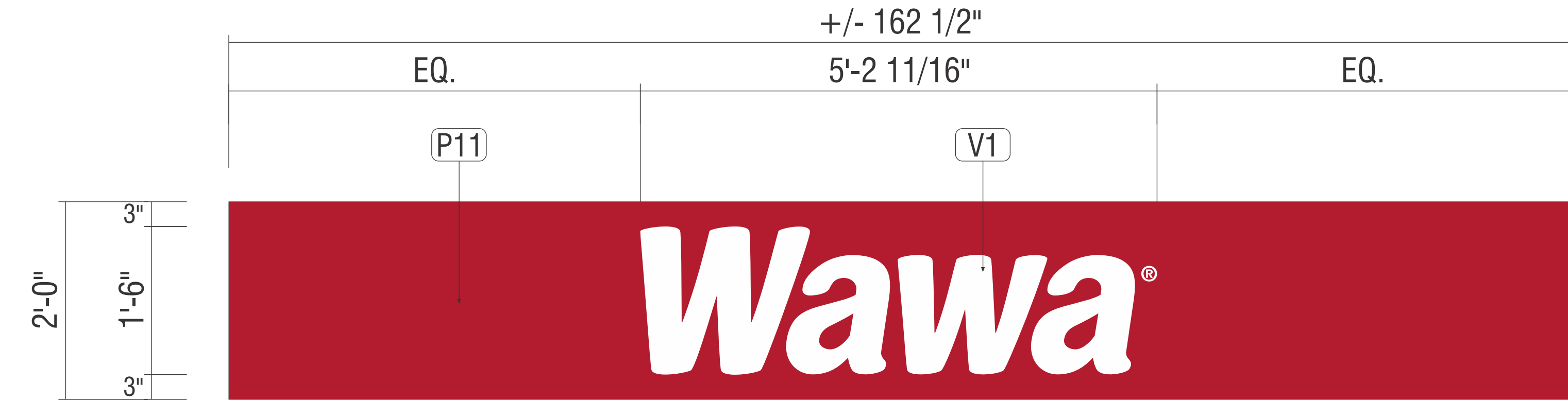
SCALE: NTS



SECTION @ HALO-LIT GOOSE LOGO

SCALE: NTS

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Location:	1801 N Federal Hwy, Hollywood, FL 33020	Proj #:	3750	Original	262096	11/22/17	FJ	ABP		Rev 7	000000	00/00/00	XXX	XXX	Notes	
File Path:	Active\ACCOUNTS\IWWawa\Locations\Project 3570\3570_1801_ City of Hollywood_FL_24x36_R2	Loc #:	1801	Rev 1	301310	07/18/18	SG	ABP	Revised per request	Rev 8	000000	00/00/00	XXX	XXX		
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				Rev 4	000000	00/00/00	XXX	XXX		Rev 11	000000	00/00/00	XXX	XXX		
				Rev 5	000000	00/00/00	XXX	XXX		Rev 12	000000	00/00/00	XXX	XXX		
				Rev 6	000000	00/00/00	XXX	XXX		Rev 13	000000	00/00/00	XXX	XXX		



F GAS PUMP SPANNER (STACKED PUMPS)

QTY: 2
NOTE: LENGTH TO BE VERIFIED
STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY

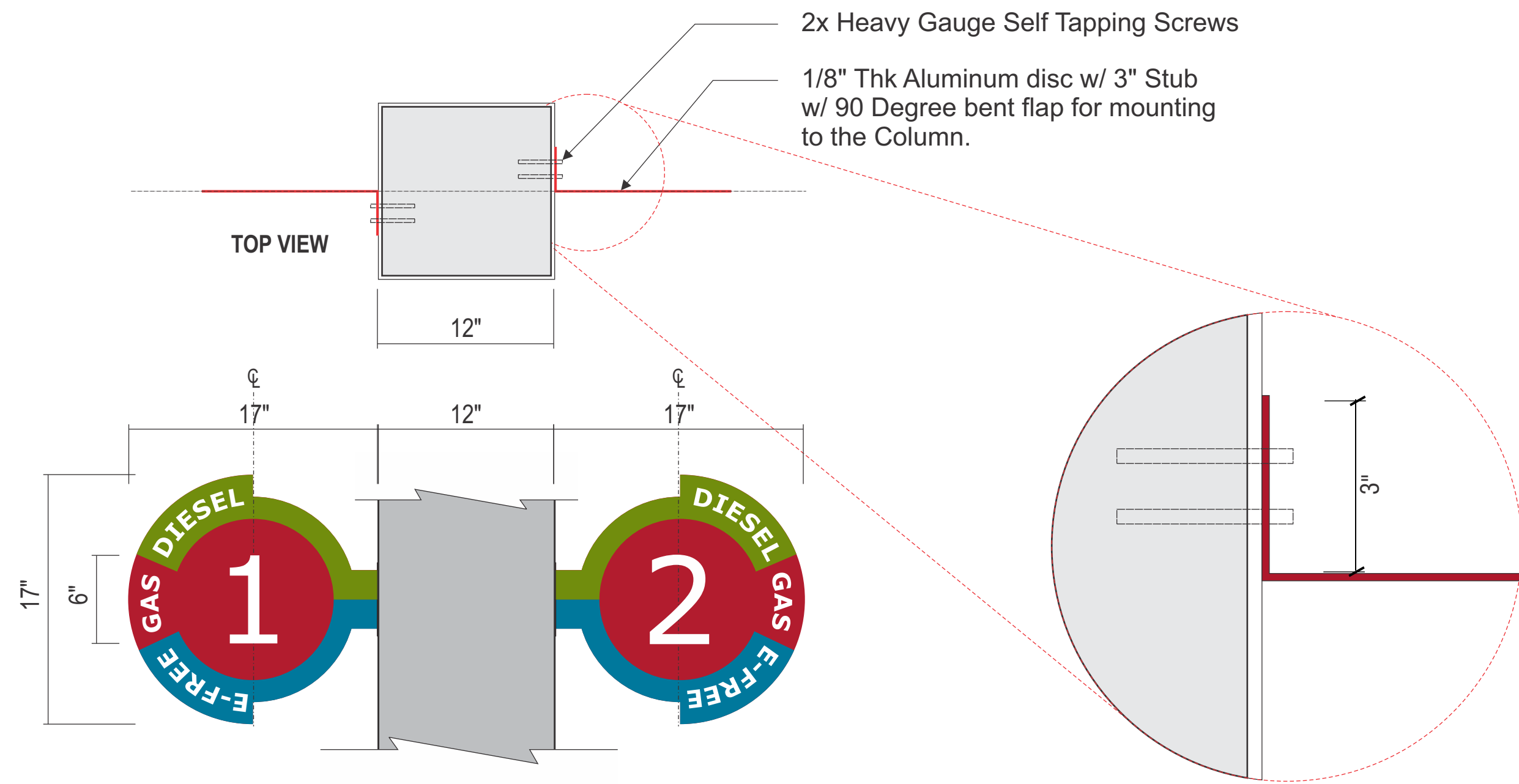
SCALE: 1"=1'-0"



CANOPY ELEVATION

QTY: 2
STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY

SCALE: 1/4"=1'-0"



H PUMP NUMBERS (NON-ILLUMINATED) @ GAS PUMP CANOPY

QTY: 16 TOTAL (1 EACH) SCALE: 1 1/2"=1'-0"

STANDARD SPECS - SEE COLOR SPECIFICATION LIBRARY



PUMP NUMBERS - E-FREE GAS & DIESEL

QTY 4 (1 - 2 & 11 - 12) SCALE: 1 1/2"=1'-0"

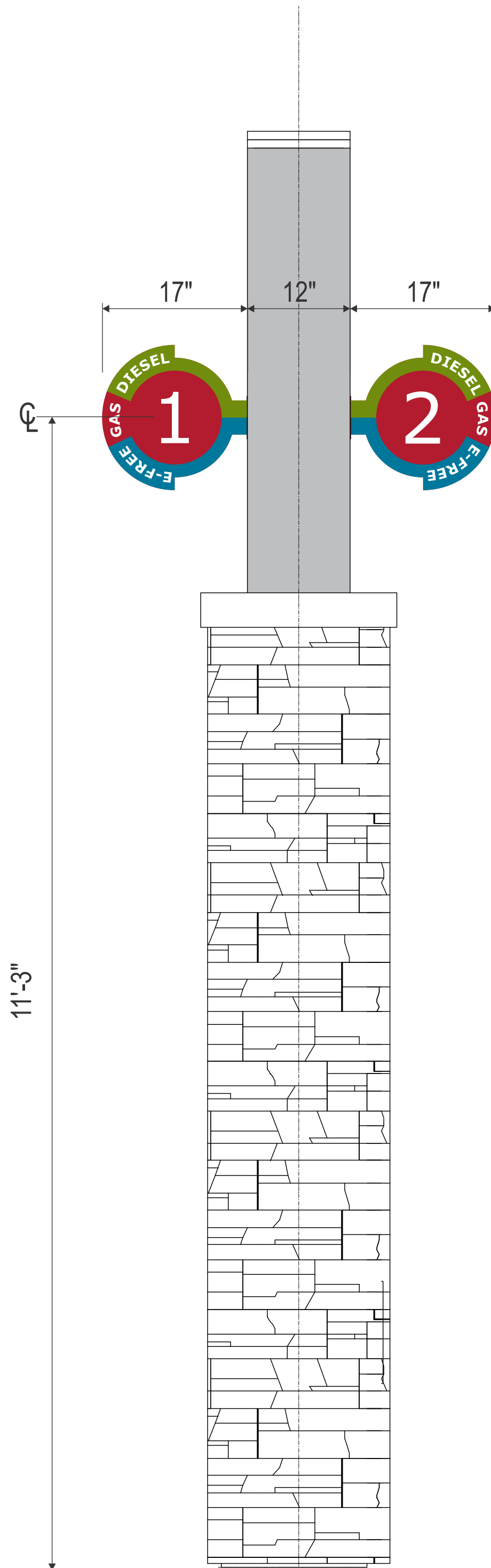


PUMP NUMBERS - E-FREE & GAS

QTY 8 (3 thur 10) SCALE: 1 1/2"=1'-0"

* NOTE:

- ALUMINUM FACES PAINTED w/ WHITE VINYL COPY
- FONT STYLE: VERDANA



SIDE ELEVATION DETAIL @ CANOPY COLUMN

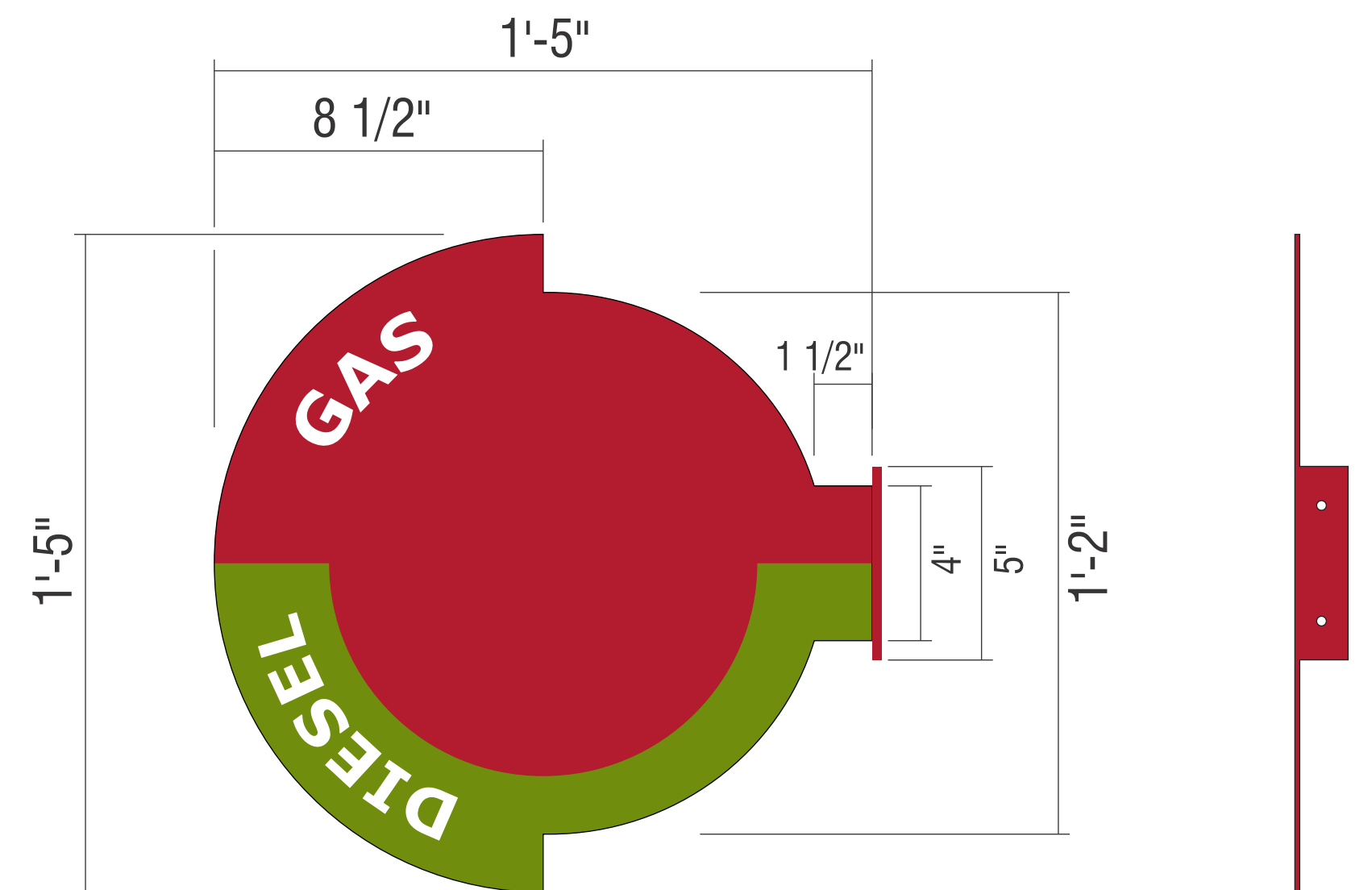
SCALE: 1"=1'-0"

PUMP NUMBERS - E-FREE & GAS

QTY 8 (3 thur 10) SCALE: 1 1/2"=1'-0"

* NOTE:

- ALUMINUM FACES PAINTED w/ WHITE VINYL COPY
- FONT STYLE: VERDANA

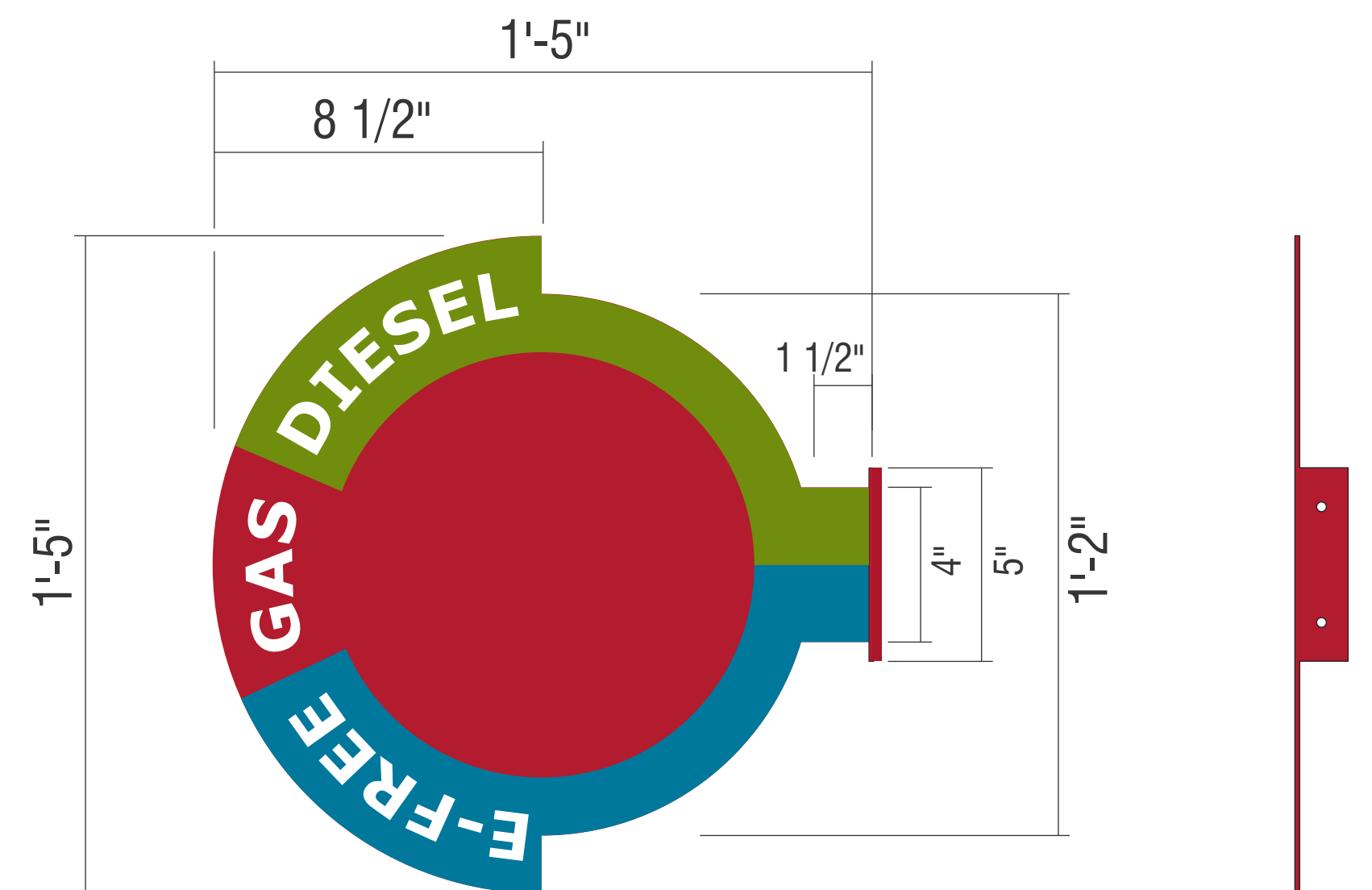


PUMP NUMBERS (DETAIL)

- ALUMINUM FACES PAINTED RED, BLUE (GREEN: DIESEL) w/ WHITE VINYL COPY SCALE: 3"=1'-0"

- FONT STYLE: VERDANA

- PMS 187C RED
- PMS 377C GREEN



PUMP NUMBERS (DETAIL)

- ALUMINUM FACES PAINTED RED, BLUE (GREEN: DIESEL) w/ WHITE VINYL COPY SCALE: 3"=1'-0"

- FONT STYLE: VERDANA

- PMS 187C RED
- PMS 7468C BLUE
- PMS 377C GREEN







FIRE FLOW CALCULATIONS

Harding Plaza – WAWA

Federal Hwy & Harding Street

Hollywood, Florida

1-Story Convenience Store
Joisted Masonry Retail 30 ft
5,636 sq ft
No exposures or communications

CONSTRUCTION TYPE

Construction Class 2 (Joisted Masonry)

Construction type coefficient (F) = 1.0

Effective area (A) = 5,636 SF

$$C = 18F \sqrt{A}$$

$$C = 18(1) \sqrt{5,636}$$

$$C = 18 (75.07)$$

$$C = 1,351$$

$$C = \mathbf{1,500} \text{ (rounded to the nearest 250 gpm)}$$

OCCUPANCY TYPE

Contractor equipment storage

Occupancy combustibility class C-3 (Combustible)

Occupancy factor (O) = 1.0

EXPOSTURE AND COMMUNICATIONS

None

Exposure and communication factor (X + P) = 0.0

CALCULATION

$$NFF = (C)(O)(1+(X+P))$$

$$NFF = (1,500)(1.00)(1+(0.0))$$

$$NFF = (1,500)(1.00)(1.0)$$

$$\mathbf{NFF = 1,500 \text{ gpm}}$$

FIRE FLOW CALCULATIONS

Harding Plaza – RETAIL

Federal Hwy & Harding Street
Hollywood, Florida

1-Story Convenience Store
Joisted Masonry Retail 30 ft
6,200 sq ft
No exposures or communications

CONSTRUCTION TYPE

Construction Class 2 (Joisted Masonry)

Construction type coefficient (F) = 1.0

Effective area (A) = 6,200 SF

$$C = 18F \sqrt{A}$$

$$C = 18(1) \sqrt{6,200}$$

$$C = 18 (78.74)$$

$$C = 1,417$$

$$C = \mathbf{1,500} \text{ (rounded to the nearest 250 gpm)}$$

OCCUPANCY TYPE

Contractor equipment storage

Occupancy combustibility class C-3 (Combustible)

Occupancy factor (O) = 1.0

EXPOSTURE AND COMMUNICATIONS

None

Exposure and communication factor (X + P) = 0.0

CALCULATION

$$NFF = (C)(O)(1+(X+P))$$

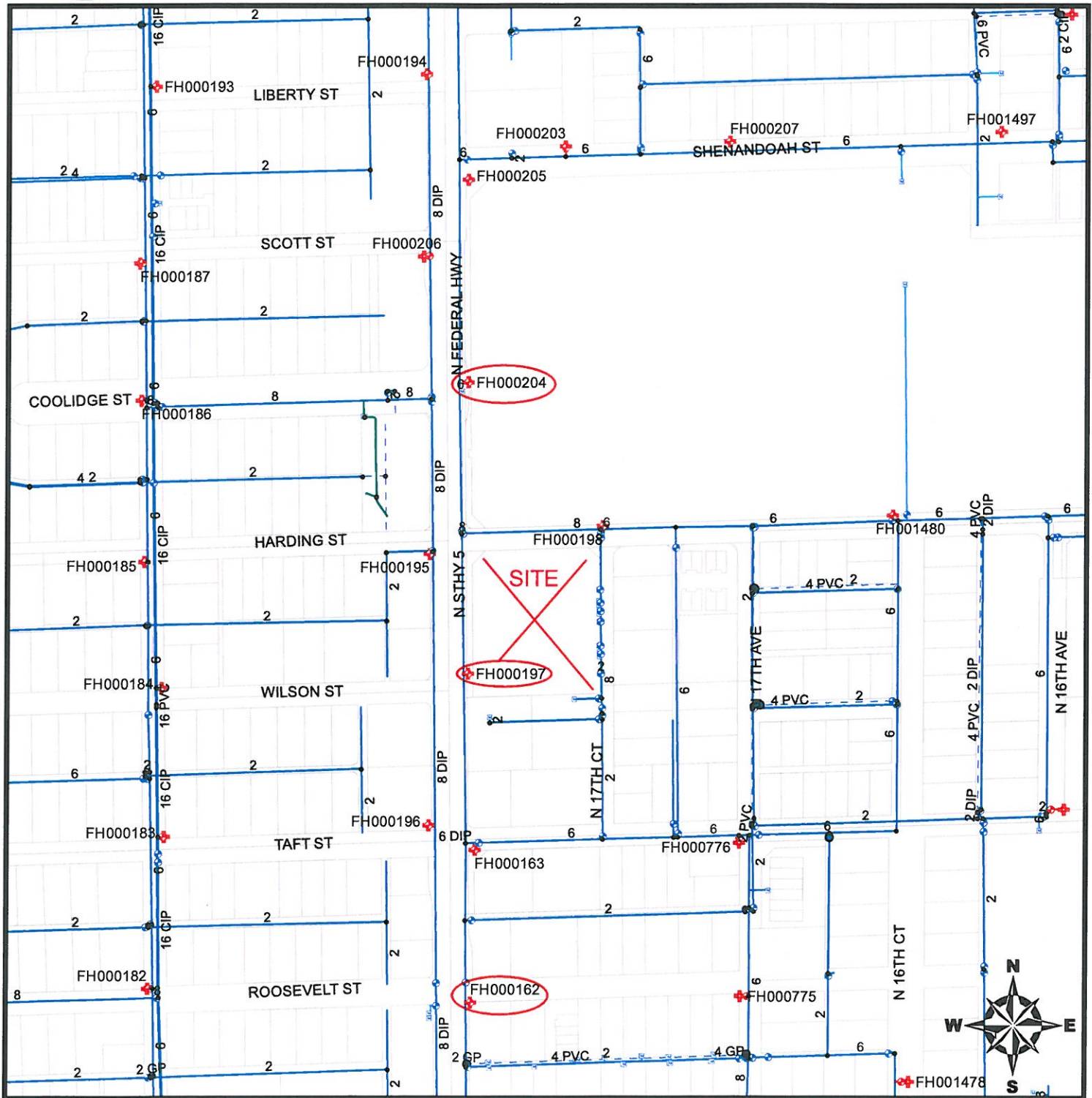
$$NFF = (1,500)(1.00)(1+(0.0))$$

$$NFF = (1,500)(1.00)(1.0)$$

$$\mathbf{NFF = 1,500 \text{ gpm}}$$



UTILITY ATLAS MAPLET



ACCESS TO INFORMATION CONTAINED WITHIN THIS DOCUMENT IS RESTRICTED UNDER FLORIDA STATUTE 119.07 SECTION 1 PARAGRAPH (EE) SUBSECTION (3). ALL PERSONS BEING PERMITTED ACCESS TO THIS DOCUMENT SHALL RESTRICT ACCESS TO OTHERS IN ACCORDANCE WITH THE ABOVE REFERENCED STATUTE. IF ANY QUESTION AS TO THE DISSEMINATION OF THIS INFORMATION EXISTS, IT SHALL BE FORWARDED TO THE DIRECTOR OF PUBLIC UTILITIES, CITY OF HOLLYWOOD FLORIDA FOR FINAL DETERMINATION.

INFORMATION PROVIDED IN THIS DOCUMENT, REGARDING SITE CONDITIONS, EXISTING STRUCTURES, AND EXISTING UNDERGROUND UTILITIES IS OFFERED SOLELY AS SUPPLEMENTAL INFORMATION. IT IS THE OWNER'S RESPONSIBILITY TO ENSURE ALL DATA IS FIELD VERIFIED AS TO ELEVATION, SIZE, AND LOCATION.



DRAINAGE CALCULATIONS

**Harding Plaza redevelopment
Federal Hwy. & Harding Street
Hollywood, Florida**

**CKE GROUP, INC. (CA #4432)
ENGINEERING – ARCHITECTURE
15500 NEW BARN ROAD
SUITE 106
MIAMI LAKES, FLORIDA 33014
(305) 558-4124**

Eduardo Carcache, PE 31914

Project Description

The proposed development is a re-development of the existing shopping center. The northern section of Harding Plaza will be demolished with only Dollar General remaining. The area will be re-developed by adding a WAWA service station with convenience store at the north sections of the plaza. Some of the current tenants will be relocated to the new retail building to be constructed

The entirety of the dry pre-treatment and total pretreatment volume required to serve the site will be provided in exfiltration trench that will be constructed in this development.

The site is currently in flood zone X. The proposed finish floor was designed to be at elevation 9.1 FT (NAVD).

Design Parameters :

Treatment Volume

Water quality treatment has been provided for the entire contributing drainage area excluding all roof areas. Water quality calculations are based on green space calculations of the development. The impervious surface area shown on the proposed construction plans. Water treatment and storage will be provided in the proposed exfiltration trench and swale.

Water Quantity

Water quantity for the proposed improvements has been provided to meet SFWMD and Broward County EPD criteria. Attenuation has been provided through the use of parking area storage, exfiltration trench and swale.

Time of Concentration

The minimum FDOT time of concentration of 10 minutes was used.

Rainfall

The on site stormwater system has been analyzed for the 10 year – 24 hour, and 100 year – 72 hour rainfall events.

<i>Storm Event</i>	<i>Rainfall (in)</i>	<i>Criteria</i>
10 year 24 hour	7.50	Roads / < 6" Parking Lot Flooding
25 year 72 hour	11.00	Perimeter Berm
100 year 72 hour	16.00	Min. Finished Floor Elev.

Drainage Calculations for Taco Bell

Harding Plaza redevelopment, Federal Hwy. & Harding Street

Post Condition Analysis Surface Water Management Calculations Soil Storage & Water Quality Calculations

Prepared By:
CKE Group, Inc.
15500 New Barn Road, Suite 106
Miami Lakes, FL 33014
Ph: (305) 558-4124 Fax: (305) 826-0619

I. Given Acreages				Elevations	
A.				From	To
1.	Total		2.639 acres		
2.	Impervious		2.196 acres		
		Buildings	0.499 acres		
		Paved Areas & Walks	1.697 acres	7.00	9.10
3.	Pervious		0.443 acres		
		Landscaped Areas	0.443 acres	5.00	8.00

Minimum elevations			
B.			
1.	Pavement/Roads	7.00 feet	NAVD 88
2.	Floors	9.10 feet	NAVD 88

C.	Control Water Elevation:	1.50 NAVD 88	B.C. Avg Wet Season Wtr Table
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Rainfall Amounts				
D.				
1.	10 year	1 day	8 inches	Per Fig. C-4 SFWMD Vol II
2.	25 year	3 day	14.5 inches	Per Fig. C-8 SFWMD Vol II
3.	100 year	3 day	17 inches	Per Fig. C-6 SFWMD Vol II

Quality (SFWMD Criteria)

E.

The greater of the following to be treated:

1. The first inch of runoff from the developed project:
 $1\text{ in} \times 2.639\text{ acres} \times 1\text{ ft}/12\text{ in} =$ **0.220 ac-ft** for first inch runoff
2. 2.5" times the percent imperviousness
 - a. Site area for water quality pervious/impervious
 Total project - (water surface + roof)
 2.140 acres
 - b. Impervious area for water quality pervious/impervious calculations
 Site area for water quality pervious/impervious - pervious
 1.697 acres
 - c. Percentage of imperviousness for water quality (b/a)
 79.30%
 - d. 2.5" x the percentage impervious
 1.98 inches to be treated

- e. Compute volume required for water quality detention:
inches to be treated x (total site - lake)

0.436 ac-ft required detention storage

3. **0.22 < 0.436 therefore 0.436 ac-ft. controls**

Water quality will be stored in a exfiltration trench and on-site dry retention areas.

Soil Storage

F.

- | | | | |
|----|--|--------------|-------------------------------|
| 1. | The c.w.e is | 1.50 NAVD 88 | B.C. Avg Wet Season Wtr Table |
| 2. | Average finished site grade for pervious areas | 6.5 | |
| | 0.443 acres | 1.50 | 100.00% |

Misc. Green/ Landscape Areas:

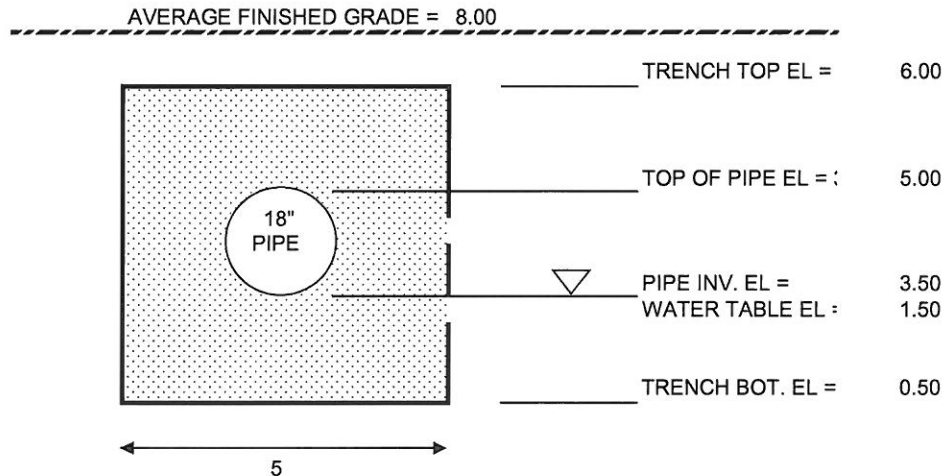
3. Avg. Depth to Water Table: 5.00
4. From the soil storage curve and using a depth of 5 feet, the soil storage is 10.9 in. Assuming 25% compaction, the soil storage is 8.175 in
S = 8.175 inches
5. Compute average soil storage
= storage available x pervious area
8.175 inches x 0.443 acres x 1 ft/12 inches = **0.302 ac-ft**
6. Convert soil storage to site-wide moisture storage
S = available soil storage/site area
S = 0.30179375 ac-ft/2.639 acres x 12 in/1 ft = **1.37 inches**

Drainage Calculations for Taco Bell
Harding Plaza redevelopment, Federal Hwy. & Harding Street
Exfiltration Trench Calculations

Prepared By:
 CKE Group, Inc.
 15500 New Barn Road, Suite 106
 Miami Lakes, FL 33014
 Ph: (305) 558-4124 Fax: (305) 826-0619

PROPOSED TRENCH LENGTH AND EXFILTRATION VOLUME

Volume to be provided: 1in x total area = 100% x 1in x 2.639 acres =2.639ac-in =0.22 ac-ft 2.6390 0.220



$$L = \frac{FS \times [(\%WQ) \times V]}{K[(H_2 \times W)(2 \times H_2 \times Du) - (Du^2) + (2 \times H_2 \times Ds)] + (1.39 \times 10^{-4})(W \times Du)}$$

$$V = (L) \times (K[(H_2 \times W) + (2 \times H_2 \times Du) - (Du^2) + (2 \times H_2 \times Ds)] + (1.39 \times 10^{-4})(W \times Du)) / [(FS) \times \%WQ]$$

FS=	2	
%WQ=	1	
K =	1.35E-04	cfs/ft ² -ft. head
Du =	4.5	ft.
Ds =	4.5	ft.
H ₂ =	6.50	ft.
W =	6	ft.
L =	520	ft.
V =	Volume exfiltrated	ac-in

Safety Factor
 Percent reduction in Req. Water Quality
 Hydraulic conductivity
 Non-saturated trench depth
 Saturated trench depth
 Depth to water table
 Trench width
 Trench length

$$V = 520 \text{ ft} \times (0.000135 \text{ cfs/ft}^2\text{-ft.head}) \times (((6.5 \times 6)) + 2 \times 6.5 \times 4.5) - (4.5)^2 + (2 \times 6.5 \times 4.5)) + (0.000139)(6 \times 4.5)) / (2 \times 1)$$

V = 5.74 Ac - in = **0.48 Ac-ft** This volume exceeds the volume required (0.22AF)

Drainage Calculations for Taco Bell

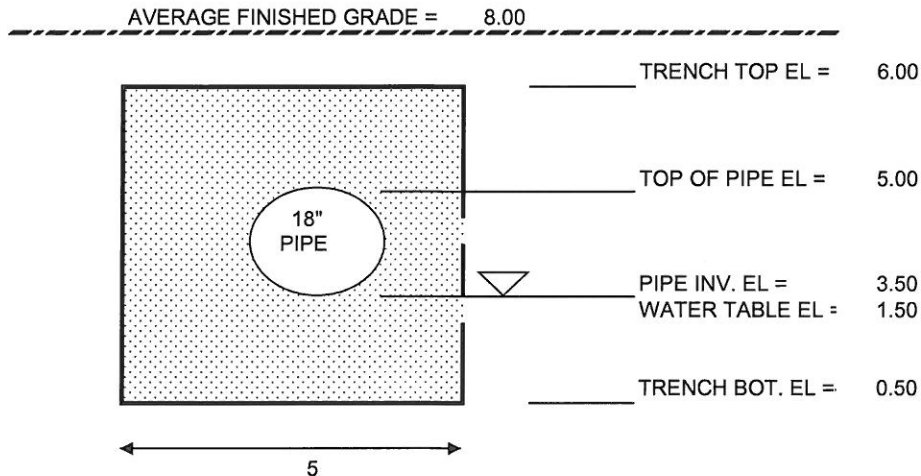
Harding Plaza redevelopment, Federal Hwy. & Harding Street

Exfiltration Trench Calculations

Prepared By:
 CKE Group, Inc.
 15500 New Barn Road, Suite 106
 Miami Lakes, FL 33014
 Ph: (305) 558-4124 Fax: (305) 826-0619

PROPOSED TRENCH LENGTH AND EXFILTRATION VOLUME

Volume to be provided: 2.5in x impervious area = 2.5in x 0.793 x 2.196 acres = 4.354ac-in = 0.363 ac 4.35 0.363



$$L = \frac{FS \times [(\%WQ) \times V]}{K[(H_2 \times W)(2 \times H_2 \times Du) - (Du^2) + (2 \times H_2 \times Ds)] + (1.39 \times 10^{-4})(W \times Du)}$$

$$V = [(L) \times (K[(H_2 \times W) + (2 \times H_2 \times Du) - (Du^2) + (2 \times H_2 \times Ds)] + (1.39 \times 10^{-4})(W \times Du))] / [(FS) \times \%WQ]$$

FS =	2	Safety Factor
%WQ =	1	Percent reduction in Req. Water Quality
K =	1.35E-04	cfs/ft ² -ft. head
Du =	4.5	ft.
Ds =	4.5	ft.
H ₂ =	6.50	ft.
W =	6	ft.
L =	520	ft.
V =	Volume exfiltrated	ac-in

$$V = [520 \text{ ft} (0.000135 \text{ cfs/ft}^2\text{-ft.head})((6.5 \times 6) + 2 \times 6.5 \times 4.5) - (4.5)^2 + (2 \times 6.5 \times 4.5)] + (0.000139)(6 \times 4.5)] / (2 \times 1)$$

$$V = 5.74 \text{ ac-in} = 0.48 \text{ Ac-ft} \text{ This volume exceeds the volume required (0.363AF)}$$

Post Condition Analysis
Harding Plaza redevelopment, Federal Hwy. & Harding Street
Surface Water Management Calculations
Soil Storage & Water Quality Calculations

Prepared By:
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<u>Item</u>	<u>L or V</u>	<u>From</u>	<u>To</u>	<u>Area (Ac)</u>	
Paved Areas/Walks	L	7.00	9.00	1.70	
Exfiltration Trench	V	1.50	6.00	0.48	ac-ft
Landscaped Areas	L	5.00	8.00	0.44	

<u>Stage</u>	<u>Paved Areas/Walks*</u>	<u>Exfiltration Trench</u>	<u>Landscaped Areas*</u>	<u>Total</u>	<u>Stage</u>
<u>1.5</u>	<u>0</u>	0.00	<u>0</u>	0.00	<u>1.5</u>
3.00	0.00	0.16	0.00	0.16	3.00
4.00	0.00	0.27	0.00	0.27	4.00
5.00	0.00	0.37	0.00	0.37	5.00
6.50	0.00	0.53	0.17	0.70	6.00
7.00	0.00	0.58	0.29	0.88	7.00
8.00	0.85	0.69	0.66	2.20	8.00
9.00	1.70	0.56	1.10	3.36	9.00
10.00	3.40	0.56	1.54	5.50	10.00
11.00	5.10	0.56	1.98	7.64	11.00
12.00	6.80	0.56	2.42	9.78	12.00

Project Name: Harding Plaza Redevelopment

Reviewer: ELC

Project Number: CKE-1581

Period Begin: Jan 01, 2018;0000 hr End: Jan 04, 2018;0000 hr Duration: 72 hr

Time Step: 0.2 hr, Iterations: 10

Basin 1: On Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 10 year

1 Day Rainfall: 7.5 inches

Area: 2.639 acres

Ground Storage: 1.37 inches

Time of Concentration: 0.1 hours

Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
-----	-----
1.50	0.00
3.00	0.16
4.00	0.27
5.00	0.37
6.50	0.70
7.00	0.88
8.00	2.20
9.00	3.36
10.00	5.50

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
-----	-----
0.00	1.50
72.00	1.50

Structure: 1

From Basin: On Site

To Basin: Offsite1

Structure Type: Gravity

Weir: None

Bleeder: None

Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
=====	=====	=====	=====	=====	=====	=====
0.00	0.00	0.00	0.00	0.00	1.50	1.50
1.00	0.05	0.00	0.00	0.00	1.50	1.50
2.00	0.09	0.00	0.00	0.00	1.50	1.50
3.00	0.14	0.00	0.00	0.00	1.50	1.50
4.00	0.18	0.00	0.00	0.00	1.50	1.50
5.00	0.23	0.00	0.00	0.00	1.50	1.50
6.00	0.27	0.00	0.00	0.00	1.50	1.50
7.00	0.32	0.01	0.00	0.00	1.50	1.50
8.00	0.37	0.01	0.00	0.00	1.51	1.50
9.00	0.41	0.02	0.00	0.00	1.52	1.50
10.00	0.46	0.03	0.00	0.00	1.54	1.50
11.00	0.50	0.03	0.00	0.00	1.56	1.50
12.00	0.55	0.04	0.00	0.00	1.59	1.50
13.00	0.59	0.04	0.00	0.00	1.62	1.50
14.00	0.64	0.05	0.00	0.00	1.65	1.50
15.00	0.68	0.05	0.00	0.00	1.69	1.50
16.00	0.73	0.05	0.00	0.00	1.73	1.50

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
17.00	0.78	0.06	0.00	0.00	1.77	1.50
18.00	0.82	0.06	0.00	0.00	1.82	1.50
19.00	0.87	0.06	0.00	0.00	1.86	1.50
20.00	0.91	0.06	0.00	0.00	1.91	1.50
21.00	0.96	0.07	0.00	0.00	1.96	1.50
22.00	1.00	0.07	0.00	0.00	2.02	1.50
23.00	1.05	0.07	0.00	0.00	2.07	1.50
24.00	1.10	0.07	0.00	0.00	2.13	1.50
25.00	1.16	0.11	0.00	0.00	2.21	1.50
26.00	1.23	0.12	0.00	0.00	2.30	1.50
27.00	1.29	0.12	0.00	0.00	2.39	1.50
28.00	1.36	0.12	0.00	0.00	2.48	1.50
29.00	1.43	0.12	0.00	0.00	2.57	1.50
30.00	1.49	0.13	0.00	0.00	2.67	1.50
31.00	1.56	0.13	0.00	0.00	2.77	1.50
32.00	1.63	0.13	0.00	0.00	2.87	1.50
33.00	1.69	0.13	0.00	0.00	2.98	1.50
34.00	1.76	0.14	0.00	0.00	3.08	1.50
35.00	1.83	0.14	0.00	0.00	3.18	1.50
36.00	1.89	0.14	0.00	0.00	3.29	1.50
37.00	1.96	0.14	0.00	0.00	3.39	1.50
38.00	2.03	0.14	0.00	0.00	3.50	1.50
39.00	2.09	0.14	0.00	0.00	3.61	1.50
40.00	2.16	0.15	0.00	0.00	3.71	1.50
41.00	2.23	0.15	0.00	0.00	3.82	1.50
42.00	2.29	0.15	0.00	0.00	3.94	1.50
43.00	2.36	0.15	0.00	0.00	4.05	1.50
44.00	2.43	0.15	0.00	0.00	4.17	1.50
45.00	2.49	0.15	0.00	0.00	4.30	1.50
46.00	2.56	0.15	0.00	0.00	4.42	1.50
47.00	2.63	0.15	0.00	0.00	4.55	1.50
48.00	2.69	0.15	0.00	0.00	4.68	1.50
49.00	2.77	0.17	0.00	0.00	4.82	1.50
50.00	2.84	0.18	0.00	0.00	4.96	1.50
51.00	2.93	0.21	0.00	0.00	5.06	1.50
52.00	3.03	0.25	0.00	0.00	5.15	1.50
53.00	3.16	0.32	0.00	0.00	5.26	1.50
54.00	3.32	0.40	0.00	0.00	5.39	1.50
55.00	3.50	0.47	0.00	0.00	5.56	1.50
56.00	3.72	0.55	0.00	0.00	5.76	1.50
57.00	3.97	0.66	0.00	0.00	5.98	1.50
58.00	4.29	0.82	0.00	0.00	6.27	1.50
59.00	4.71	1.20	0.00	0.00	6.59	1.50
60.00	7.61	12.94	0.00	0.00	7.26	1.50
61.00	8.45	1.50	0.00	0.00	7.49	1.50
62.00	8.83	0.90	0.00	0.00	7.55	1.50
63.00	9.07	0.59	0.00	0.00	7.60	1.50
64.00	9.29	0.59	0.00	0.00	7.63	1.50
65.00	9.43	0.35	0.00	0.00	7.66	1.50
66.00	9.56	0.35	0.00	0.00	7.68	1.50
67.00	9.70	0.35	0.00	0.00	7.70	1.50
68.00	9.83	0.35	0.00	0.00	7.72	1.50
69.00	9.92	0.24	0.00	0.00	7.74	1.50
70.00	10.01	0.24	0.00	0.00	7.75	1.50
71.00	10.10	0.24	0.00	0.00	7.77	1.50
72.00	10.19	0.24	0.00	0.00	7.78	1.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
On Site	7.78	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
On Site	1.91	0.00	0.00	0.00	1.91	0.00

Project Name: Harding Plaza Redevelopment

Reviewer: ELC

Project Number: CKE-1581

Period Begin: Jan 01, 2018;0000 hr End: Jan 04, 2018;0000 hr Duration: 72 hr

Time Step: 0.2 hr, Iterations: 10

Basin 1: On Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 25 year

3 Day Rainfall: 14.5 inches

Area: 2.639 acres

Ground Storage: 1.37 inches

Time of Concentration: 0.1 hours

Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
3.00	0.16
4.00	0.27
5.00	0.37
6.50	0.70
7.00	0.88
8.00	2.20
9.00	3.36
10.00	5.50

Offsite Receiving Body: Offsitel

Time (hr)	Stage (ft NGVD)
0.00	1.50
72.00	1.50

Structure: 1

From Basin: On Site

To Basin: Offsitel

Structure Type: Gravity

Weir: None

Bleeder: None

Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	1.50	1.50
1.00	0.06	0.00	0.00	0.00	1.50	1.50
2.00	0.13	0.00	0.00	0.00	1.50	1.50
3.00	0.19	0.00	0.00	0.00	1.50	1.50
4.00	0.26	0.00	0.00	0.00	1.50	1.50
5.00	0.32	0.01	0.00	0.00	1.50	1.50
6.00	0.39	0.02	0.00	0.00	1.52	1.50
7.00	0.45	0.04	0.00	0.00	1.54	1.50
8.00	0.52	0.05	0.00	0.00	1.57	1.50
9.00	0.58	0.06	0.00	0.00	1.61	1.50
10.00	0.65	0.07	0.00	0.00	1.66	1.50
11.00	0.71	0.07	0.00	0.00	1.71	1.50
12.00	0.78	0.08	0.00	0.00	1.77	1.50
13.00	0.84	0.09	0.00	0.00	1.84	1.50
14.00	0.91	0.09	0.00	0.00	1.90	1.50
15.00	0.97	0.10	0.00	0.00	1.98	1.50
16.00	1.04	0.10	0.00	0.00	2.05	1.50

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
17.00	1.10	0.11	0.00	0.00	2.13	1.50
18.00	1.17	0.11	0.00	0.00	2.22	1.50
19.00	1.23	0.11	0.00	0.00	2.30	1.50
20.00	1.30	0.12	0.00	0.00	2.39	1.50
21.00	1.36	0.12	0.00	0.00	2.48	1.50
22.00	1.43	0.12	0.00	0.00	2.58	1.50
23.00	1.49	0.12	0.00	0.00	2.67	1.50
24.00	1.56	0.13	0.00	0.00	2.77	1.50
25.00	1.65	0.19	0.00	0.00	2.91	1.50
26.00	1.75	0.19	0.00	0.00	3.05	1.50
27.00	1.84	0.20	0.00	0.00	3.20	1.50
28.00	1.94	0.20	0.00	0.00	3.35	1.50
29.00	2.03	0.20	0.00	0.00	3.50	1.50
30.00	2.13	0.21	0.00	0.00	3.65	1.50
31.00	2.22	0.21	0.00	0.00	3.81	1.50
32.00	2.32	0.21	0.00	0.00	3.97	1.50
33.00	2.41	0.21	0.00	0.00	4.14	1.50
34.00	2.50	0.22	0.00	0.00	4.31	1.50
35.00	2.60	0.22	0.00	0.00	4.49	1.50
36.00	2.69	0.22	0.00	0.00	4.67	1.50
37.00	2.79	0.22	0.00	0.00	4.85	1.50
38.00	2.88	0.22	0.00	0.00	5.02	1.50
39.00	2.98	0.22	0.00	0.00	5.10	1.50
40.00	3.07	0.22	0.00	0.00	5.18	1.50
41.00	3.17	0.23	0.00	0.00	5.27	1.50
42.00	3.26	0.23	0.00	0.00	5.35	1.50
43.00	3.36	0.23	0.00	0.00	5.44	1.50
44.00	3.45	0.23	0.00	0.00	5.53	1.50
45.00	3.55	0.23	0.00	0.00	5.61	1.50
46.00	3.64	0.23	0.00	0.00	5.70	1.50
47.00	3.74	0.23	0.00	0.00	5.79	1.50
48.00	3.83	0.23	0.00	0.00	5.87	1.50
49.00	3.94	0.26	0.00	0.00	5.97	1.50
50.00	4.04	0.26	0.00	0.00	6.07	1.50
51.00	4.17	0.32	0.00	0.00	6.18	1.50
52.00	4.31	0.37	0.00	0.00	6.31	1.50
53.00	4.49	0.48	0.00	0.00	6.48	1.50
54.00	4.72	0.59	0.00	0.00	6.61	1.50
55.00	4.98	0.70	0.00	0.00	6.76	1.50
56.00	5.29	0.81	0.00	0.00	6.94	1.50
57.00	5.65	0.98	0.00	0.00	7.04	1.50
58.00	6.10	1.20	0.00	0.00	7.11	1.50
59.00	6.70	1.75	0.00	0.00	7.20	1.50
60.00	10.83	18.66	0.00	0.00	7.74	1.50
61.00	12.01	2.15	0.00	0.00	8.08	1.50
62.00	12.56	1.30	0.00	0.00	8.19	1.50
63.00	12.90	0.84	0.00	0.00	8.25	1.50
64.00	13.22	0.84	0.00	0.00	8.31	1.50
65.00	13.41	0.51	0.00	0.00	8.35	1.50
66.00	13.60	0.51	0.00	0.00	8.39	1.50
67.00	13.80	0.51	0.00	0.00	8.43	1.50
68.00	13.99	0.51	0.00	0.00	8.46	1.50
69.00	14.12	0.34	0.00	0.00	8.49	1.50
70.00	14.24	0.34	0.00	0.00	8.51	1.50
71.00	14.37	0.34	0.00	0.00	8.54	1.50
72.00	14.50	0.34	0.00	0.00	8.56	1.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
On Site	8.56	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
On Site	2.85	0.00	0.00	0.00	2.85	0.00

Project Name: Harding Plaza Redevelopment

Reviewer: ELC

Project Number: CKE-1581

Period Begin: Jan 01, 2018;0000 hr End: Jan 04, 2018;0000 hr Duration: 72 hr

Time Step: 0.2 hr, Iterations: 10

Basin 1: On Site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 100 year

3 Day Rainfall: 17 inches

Area: 2.639 acres

Ground Storage: 1.37 inches

Time of Concentration: 0.1 hours

Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
3.00	0.16
4.00	0.27
5.00	0.37
6.50	0.70
7.00	0.88
8.00	2.20
9.00	3.36
10.00	5.50

Offsite Receiving Body: Offsitel

Time (hr)	Stage (ft NGVD)
0.00	1.50
72.00	1.50

Structure: 1

From Basin: On Site

To Basin: Offsitel

Structure Type: Gravity

Weir: None

Bleeder: None

Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	1.50	1.50
1.00	0.08	0.00	0.00	0.00	1.50	1.50
2.00	0.15	0.00	0.00	0.00	1.50	1.50
3.00	0.23	0.00	0.00	0.00	1.50	1.50
4.00	0.30	0.01	0.00	0.00	1.50	1.50
5.00	0.38	0.03	0.00	0.00	1.51	1.50
6.00	0.46	0.04	0.00	0.00	1.54	1.50
7.00	0.53	0.06	0.00	0.00	1.58	1.50
8.00	0.61	0.07	0.00	0.00	1.63	1.50
9.00	0.68	0.08	0.00	0.00	1.69	1.50
10.00	0.76	0.09	0.00	0.00	1.75	1.50
11.00	0.84	0.10	0.00	0.00	1.83	1.50
12.00	0.91	0.11	0.00	0.00	1.91	1.50
13.00	0.99	0.11	0.00	0.00	1.99	1.50
14.00	1.07	0.12	0.00	0.00	2.08	1.50
15.00	1.14	0.13	0.00	0.00	2.18	1.50
16.00	1.22	0.13	0.00	0.00	2.28	1.50

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
17.00	1.29	0.14	0.00	0.00	2.38	1.50
18.00	1.37	0.14	0.00	0.00	2.49	1.50
19.00	1.45	0.14	0.00	0.00	2.60	1.50
20.00	1.52	0.15	0.00	0.00	2.71	1.50
21.00	1.60	0.15	0.00	0.00	2.83	1.50
22.00	1.67	0.15	0.00	0.00	2.94	1.50
23.00	1.75	0.16	0.00	0.00	3.06	1.50
24.00	1.83	0.16	0.00	0.00	3.18	1.50
25.00	1.94	0.23	0.00	0.00	3.35	1.50
26.00	2.05	0.24	0.00	0.00	3.52	1.50
27.00	2.16	0.24	0.00	0.00	3.70	1.50
28.00	2.27	0.25	0.00	0.00	3.89	1.50
29.00	2.38	0.25	0.00	0.00	4.08	1.50
30.00	2.49	0.25	0.00	0.00	4.29	1.50
31.00	2.60	0.25	0.00	0.00	4.50	1.50
32.00	2.71	0.26	0.00	0.00	4.71	1.50
33.00	2.83	0.26	0.00	0.00	4.92	1.50
34.00	2.94	0.26	0.00	0.00	5.06	1.50
35.00	3.05	0.26	0.00	0.00	5.16	1.50
36.00	3.16	0.26	0.00	0.00	5.26	1.50
37.00	3.27	0.27	0.00	0.00	5.36	1.50
38.00	3.38	0.27	0.00	0.00	5.46	1.50
39.00	3.49	0.27	0.00	0.00	5.56	1.50
40.00	3.60	0.27	0.00	0.00	5.66	1.50
41.00	3.71	0.27	0.00	0.00	5.76	1.50
42.00	3.82	0.27	0.00	0.00	5.87	1.50
43.00	3.94	0.27	0.00	0.00	5.97	1.50
44.00	4.05	0.27	0.00	0.00	6.07	1.50
45.00	4.16	0.28	0.00	0.00	6.17	1.50
46.00	4.27	0.28	0.00	0.00	6.28	1.50
47.00	4.38	0.28	0.00	0.00	6.38	1.50
48.00	4.49	0.28	0.00	0.00	6.49	1.50
49.00	4.62	0.31	0.00	0.00	6.56	1.50
50.00	4.74	0.31	0.00	0.00	6.63	1.50
51.00	4.89	0.38	0.00	0.00	6.72	1.50
52.00	5.05	0.44	0.00	0.00	6.81	1.50
53.00	5.27	0.57	0.00	0.00	6.93	1.50
54.00	5.53	0.70	0.00	0.00	7.02	1.50
55.00	5.84	0.83	0.00	0.00	7.07	1.50
56.00	6.20	0.96	0.00	0.00	7.13	1.50
57.00	6.63	1.16	0.00	0.00	7.19	1.50
58.00	7.16	1.42	0.00	0.00	7.28	1.50
59.00	7.86	2.07	0.00	0.00	7.39	1.50
60.00	12.70	21.97	0.00	0.00	8.02	1.50
61.00	14.09	2.53	0.00	0.00	8.46	1.50
62.00	14.72	1.52	0.00	0.00	8.59	1.50
63.00	15.12	0.99	0.00	0.00	8.67	1.50
64.00	15.50	0.99	0.00	0.00	8.74	1.50
65.00	15.72	0.59	0.00	0.00	8.79	1.50
66.00	15.95	0.60	0.00	0.00	8.83	1.50
67.00	16.17	0.60	0.00	0.00	8.87	1.50
68.00	16.40	0.60	0.00	0.00	8.91	1.50
69.00	16.55	0.40	0.00	0.00	8.94	1.50
70.00	16.70	0.40	0.00	0.00	8.97	1.50
71.00	16.85	0.40	0.00	0.00	9.00	1.50
72.00	17.00	0.40	0.00	0.00	9.02	1.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
On Site	9.02	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
On Site	3.39	0.00	0.00	0.00	3.39	0.00

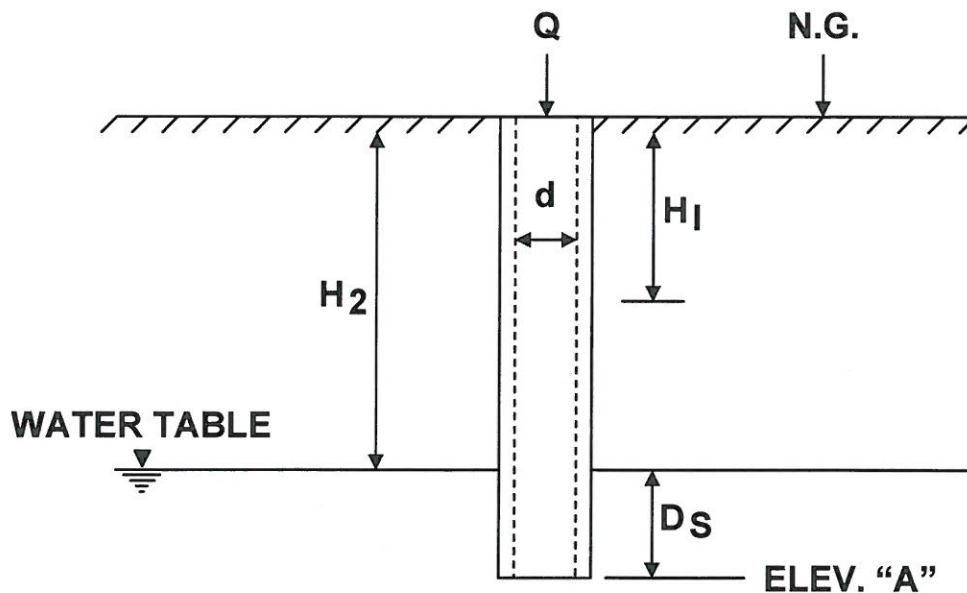
TABLE 1
SUMMARY OF PERCOLATION TEST RESULTS
WAWA GAS STATION
NEAR THE SWC OF HARDING ST & N FEDERAL HWY
HOLLYWOOD, FLORIDA
PSI PROJECT No.: 0397-1297

BORING	DATE	CASING DIAMETER	PERFORATED PVC DIAMETER	DEPTH OF HOLE	DEPTH TO GROUNDWATER			HYDRAULIC HEAD	SATURATED HOLE DEPTH,	AVERAGE FLOW RATE,	HYDRAULIC CONDUCTIVITY,
					LEVEL BELOW GROUND SURFACE (feet)	PRIOR TO TEST	DURING TEST				
NO.	PERFORMED	(inches)	(inches)	(feet)				H ₂ (feet)	D _S (feet)	Q (gpm)	K (cfs/ft ² -ft)
B-4	12/7/2017	6	4	10.0	5.5	0.0		5.5	4.5	2.0	1.05E-04
B-6	12/7/2017	6	4	10.0	5.1	0.0		5.1	4.9	3.0	1.66E-04

NOTES:

- (1) The above hydraulic conductivity values are for a french drain installed to the same depth as the borehole tests. The values represent an ultimate value. The designer should apply the appropriate factor of safety.
- (2) The hydraulic conductivity values were calculated based on the South Florida Water Management District's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure as shown on the following page.
- (3) A hole diameter of four inches was used in the computation of the Hydraulic Conductivity values presented in the above table.

USUAL OPEN – HOLE TEST



$$K = \frac{4Q}{\pi d (2H_2^2 + 4H_2D_S + H_2d)}$$

K= HYDRAULIC CONDUCTIVITY (CFS/FT.² - FT.HEAD)

Q= "STABILIZED" FLOW RATE (CFS)

d= DIAMETER OF TEST HOLE (FEET)

H₂ = DEPTH TO WATER TABLE (FEET)

D_S = SATURATED HOLE DEPTH (FEET)

ELEV. "A"= PROPOSED TRENCH BOTTOM ELEV.

H₁ = AVERAGE HEAD ON UNSATURATED HOLE SURFACE (FT.HEAD)