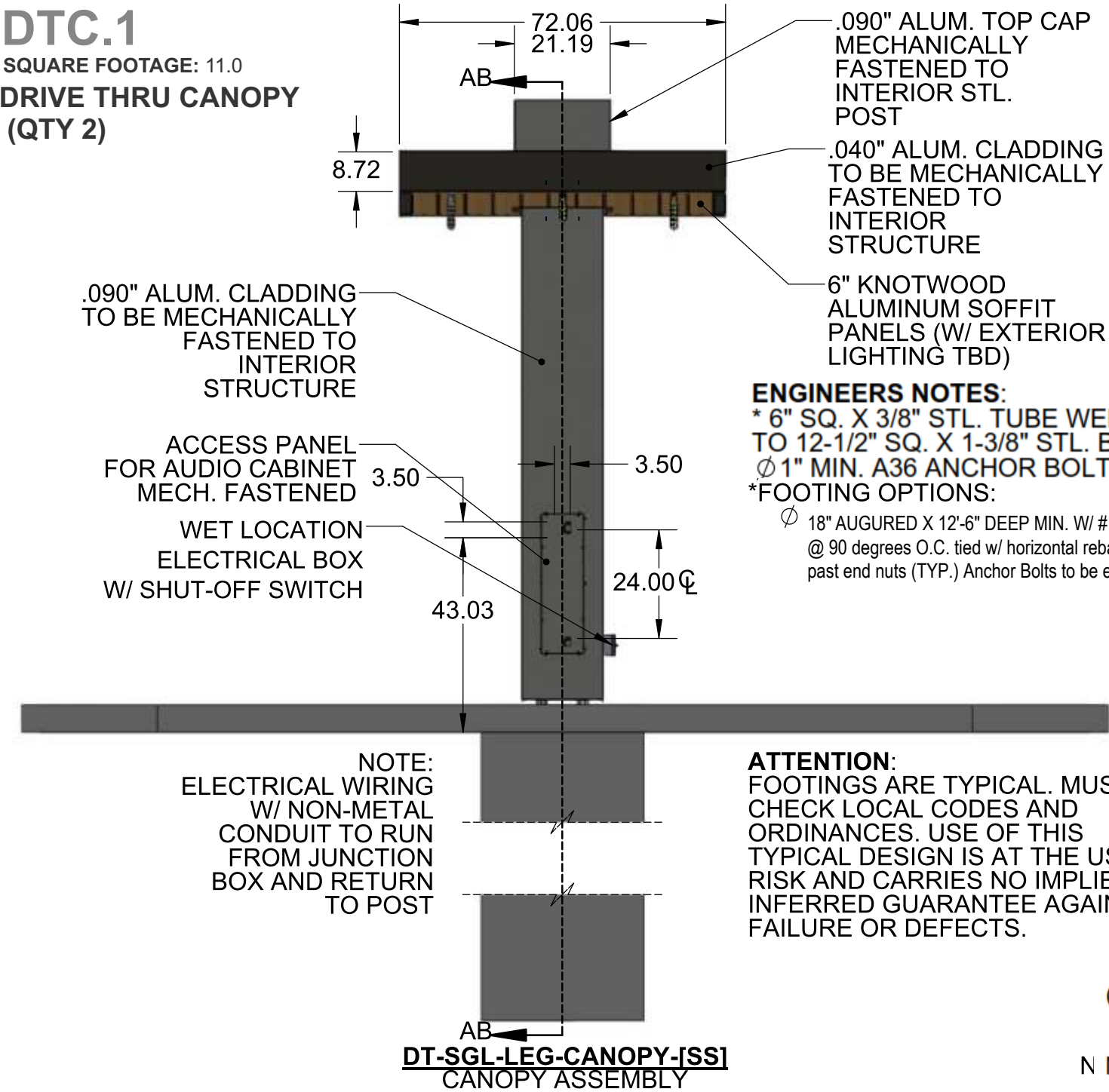


DTC.1
SQUARE FOOTAGE: 11.0
DRIVE THRU CANOPY
(QTY 2)

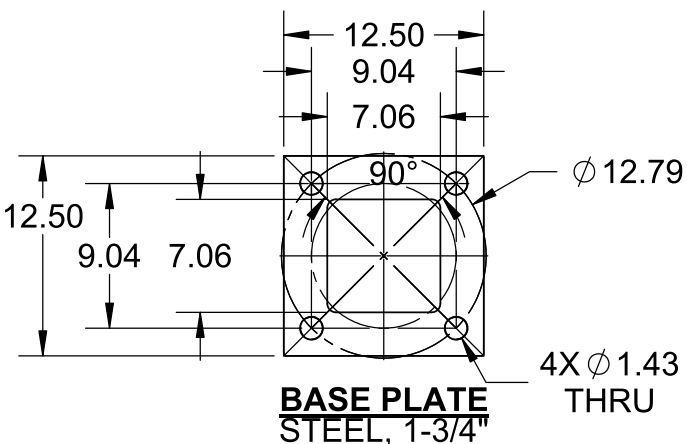
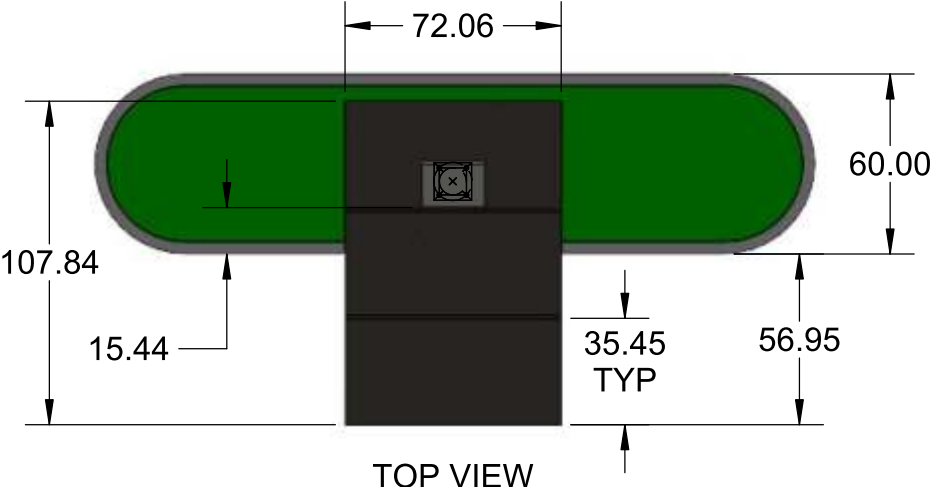
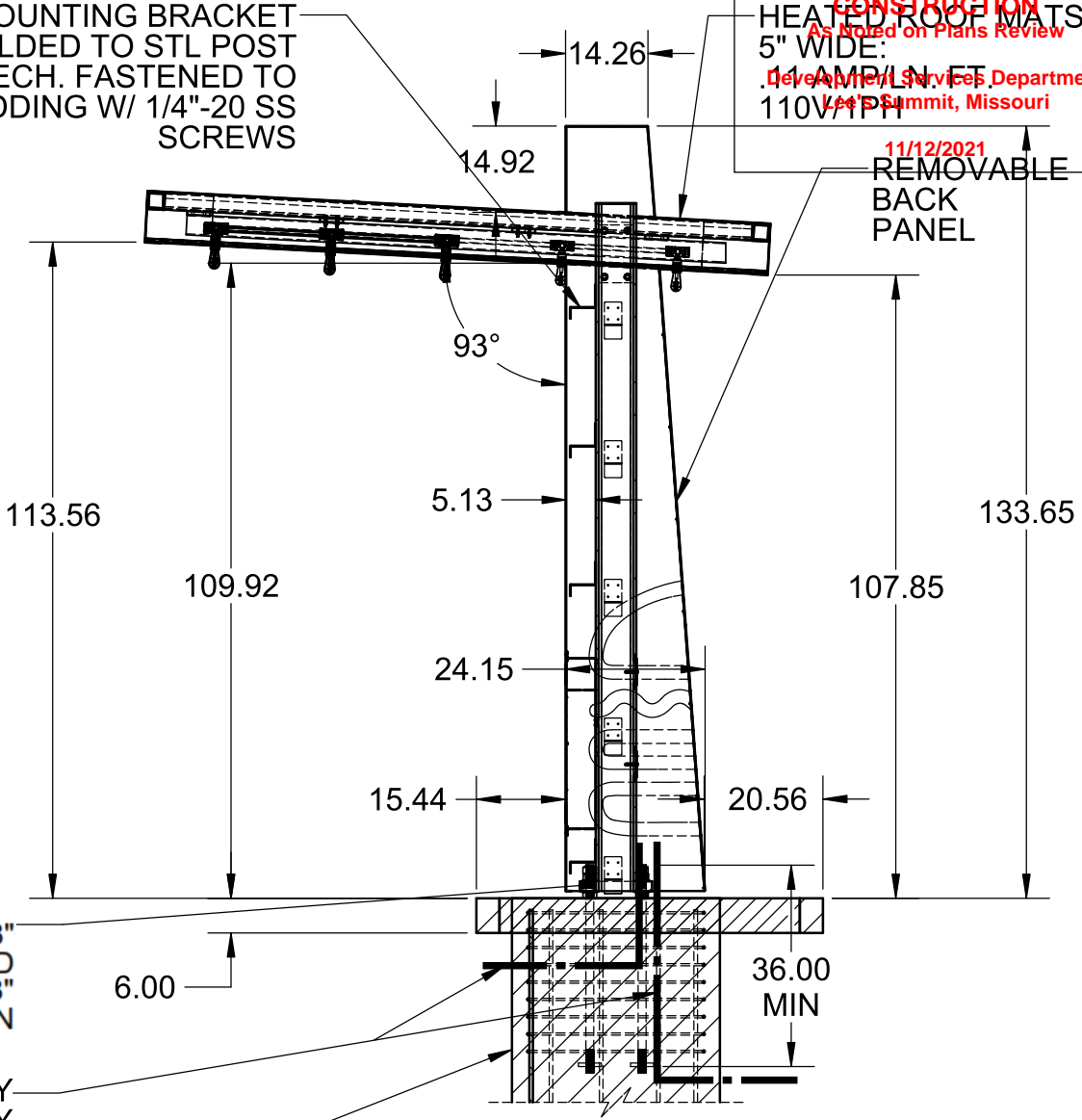


ENGINEERS NOTES:
* 6" SQ. X 3/8" STL. TUBE WELDED
TO 12-1/2" SQ. X 1-3/8" STL. BASE PLATE W/ (4)
Ø 1" MIN. A36 ANCHOR BOLTS.
*FOOTING OPTIONS:
Ø 18" AUGURED X 12'-6" DEEP MIN. W/ # 4 REBAR in 12" circle
@ 90 degrees O.C. tied w/ horizontal rebar @ 6" O.C. & 12" O.C.
past end nuts (TYP.) Anchor Bolts to be embd. min. 20" (TYP.)

ATTENTION:
FOOTINGS ARE TYPICAL. MUST
CHECK LOCAL CODES AND
ORDINANCES. USE OF THIS
TYPICAL DESIGN IS AT THE USER'S
RISK AND CARRIES NO IMPLIED OR
INFERRED GUARANTEE AGAINST
FAILURE OR DEFECTS.

DESIGN SPECIFICATIONS				
IBC	2018	with	MO	amendments
ASCE	7-16	Minimum Design Loads for Buildings & Other Structures		
ACI	318-14	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		
DESIGN LOADS				
Wind	V =	115	mph	
Exposure	C			
Risk Cat.	II			
Grnd. Snow	Pg =	20	psf	

MOUNTING BRACKET
WELDED TO STL POST
AND MECH. FASTENED TO
CLADDING W/ 1/4"-20 SS
SCREWS



**MURDOCH
ENGINEERING**
SIGN STRUCTURE PROFESSIONALS
2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215 x0
Rev. 10/27/2021
Jere Murdoch, PE
Professional Engineer
MO PE Lic. #2014038163

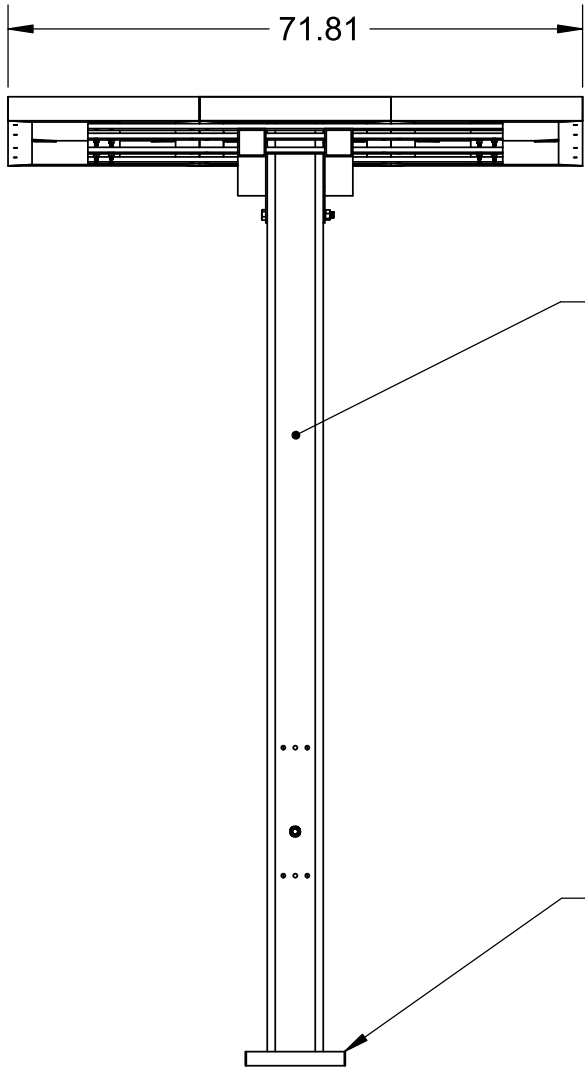
DTC.1 DRIVE THRU CANOPY (QTY 2)
SQUARE FOOTAGE: 11.0

DESIGN SPECIFICATIONS				
IBC	2018	with	MO	amendments
ASCE	7-16	Minimum Design Loads for Buildings & Other Structures		
ACI	318-14	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		
DESIGN LOADS				
Wind	V =	115 mph		
Exposure	C			
Risk Cat.	II			
Grnd. Snow	Pg =	20 psf		

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri

11/12/2021



FRONT VIEW
(STRUCTURE)

6" X 6" X 3/8" WALL
STL. SUPPORT TUBE

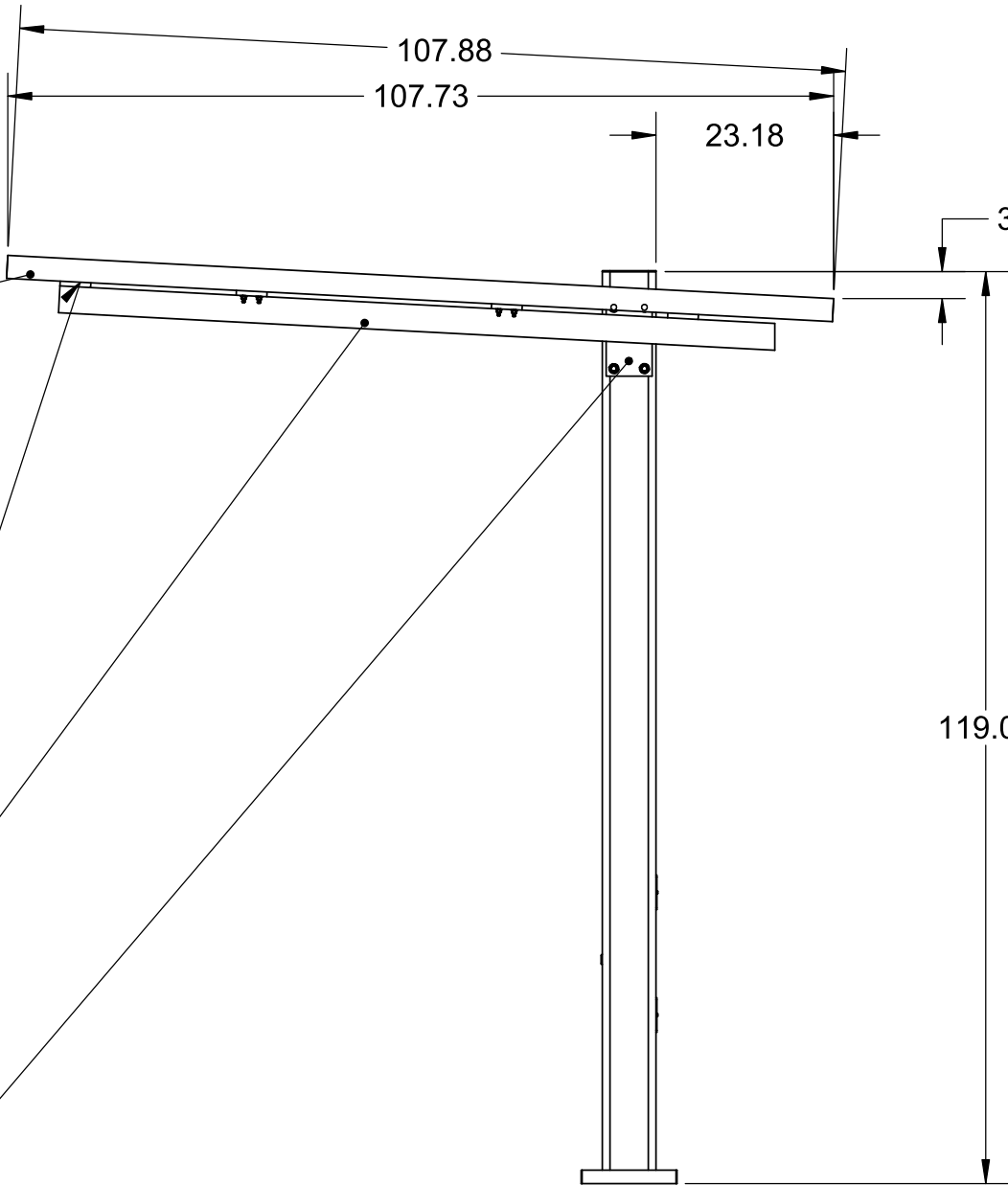
12-1/2" X 12-1/2" X 1-3/8"
STL BASE PLATE W/
CONTINUOUS WELD
BOTH SIDES

4" X 4" ALUM.
SUPPORT TUBE
FRAME WELDMENT

4" X 5/8" STL. PLATES
W/ 3/8"-16 X 1-3/4"L
STL. BOLTS, WASHERS
AND NUTS

3-1/2" X 3-1/2" X 3/16" WALL
STL. SUPPORT TUBE

6" X 10" X 3/16" STL
PLATE WELDED TO
HSS 3-1/2" SQ. STL.
TUBE AND MECH.
FASTENED TO STL.
SUPPORT TUBE



SIDE VIEW
(STRUCTURE)



MURDOCH ENGINEERING
SIGN STRUCTURE PROFESSIONALS
2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215 x0
Jere Murdoch
Rev. 10/27/2021
Jere Murdoch, PE REV. 11/12/2021
Professional Engineer
MO PE Lic. #2014038163

JONES SIGN
Your Vision. Accomplished.
WWW.JONESSIGN.COM

JOB #: **250360-R16**
DATE: 12.14.2020
DESIGNER: S. Wiands
SALES REP:
PROJ MGR: S. KOSTKA

REV.	DATE	BY	DESCRIPTION
5	04.16.21	SW	REVISE PER MARK-UPS
6	04.23.21	SW	REVISE PER MARK-UPS
7	05.04.21	SW	REVISE PER MARK-UPS
8	05.20.21	SW	UPDATE ELEVATIONS AND VARIOUS
9	05.21.21	SW	UPDATE PER REQUEST
10	06.09.21	SW	REVISED PER REQUEST
12	07.12.21	SW	ADDED ENGINEERING
13	07.22.21	JD	UPDATE FAUX NEON SIGNS
14	08.05.21	SW	REVISED PER REQUEST
15	08.09.21	SW	REVISED ENGINEERING
16	09.28.21	JD	REVISED PER REQUEST

CLIENT APPROVAL	DATE
LANDLORD APPROVAL	DATE
QC	

SHAKE SHACK

SHAKE SHACK
2051 NW LOWENSTEIN DR
LEE'S SUMMIT, MO 64081

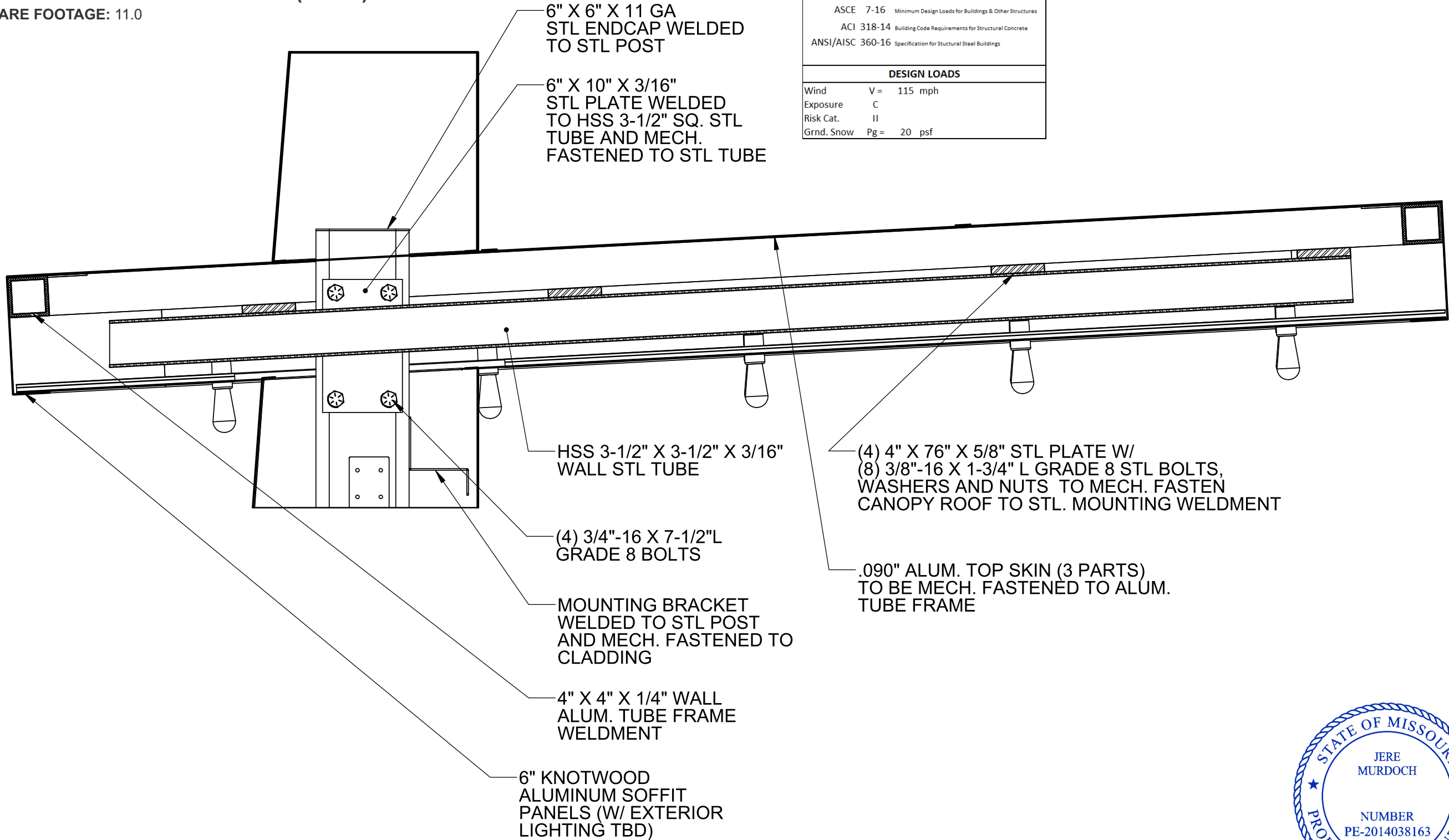
DESIGN PHASE: CONCEPTUAL

SHEET NUMBER

8.3

This is an original, unpublished drawing by Jones Sign Co., Inc. It is for your personal use in conjunction with a project being planned for you by JONES SIGN. It is not to be shown to anyone outside of your organization, nor is it to be used, reproduced, copied or exhibited in any fashion. Use of this design or the salient elements of this design in any sign done by any other company, without the express written permission of JONES SIGN, is forbidden by law and carries a civil forfeiture of up to 25% of the purchase price of the sign. JONES SIGN will endeavor to closely match colors, including PMS, where specified. We cannot guarantee exact matches due to varying compatibility of surface materials and paints used. All sizes and dimensions are illustrated for client's conception of project and are not to be understood as being exact size or exact scale.

DTC.1 DRIVE THRU CANOPY (QTY 2)
SQUARE FOOTAGE: 11.0



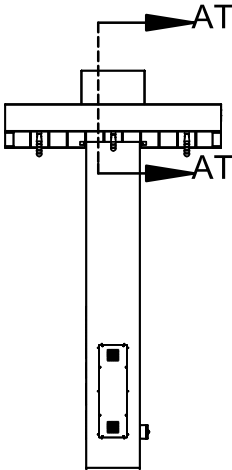
DESIGN SPECIFICATIONS				
IBC	2018	with	MO	amendments
ASCE	7-16	Minimum Design Loads for Buildings & Other Structures		
ACI	318-14	Building Code Requirements for Structural Concrete		
ANSI/AISC	360-16	Specification for Structural Steel Buildings		
DESIGN LOADS				
Wind	V =	115	mph	
Exposure	C			
Risk Cat.	II			
Grnd. Snow	Pg =	20	psf	

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri

11/12/2021

SECTION AT



MURDOCH
ENGINEERING
SIGN STRUCTURE PROFESSIONALS

2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215

Rev. 10/27/2021

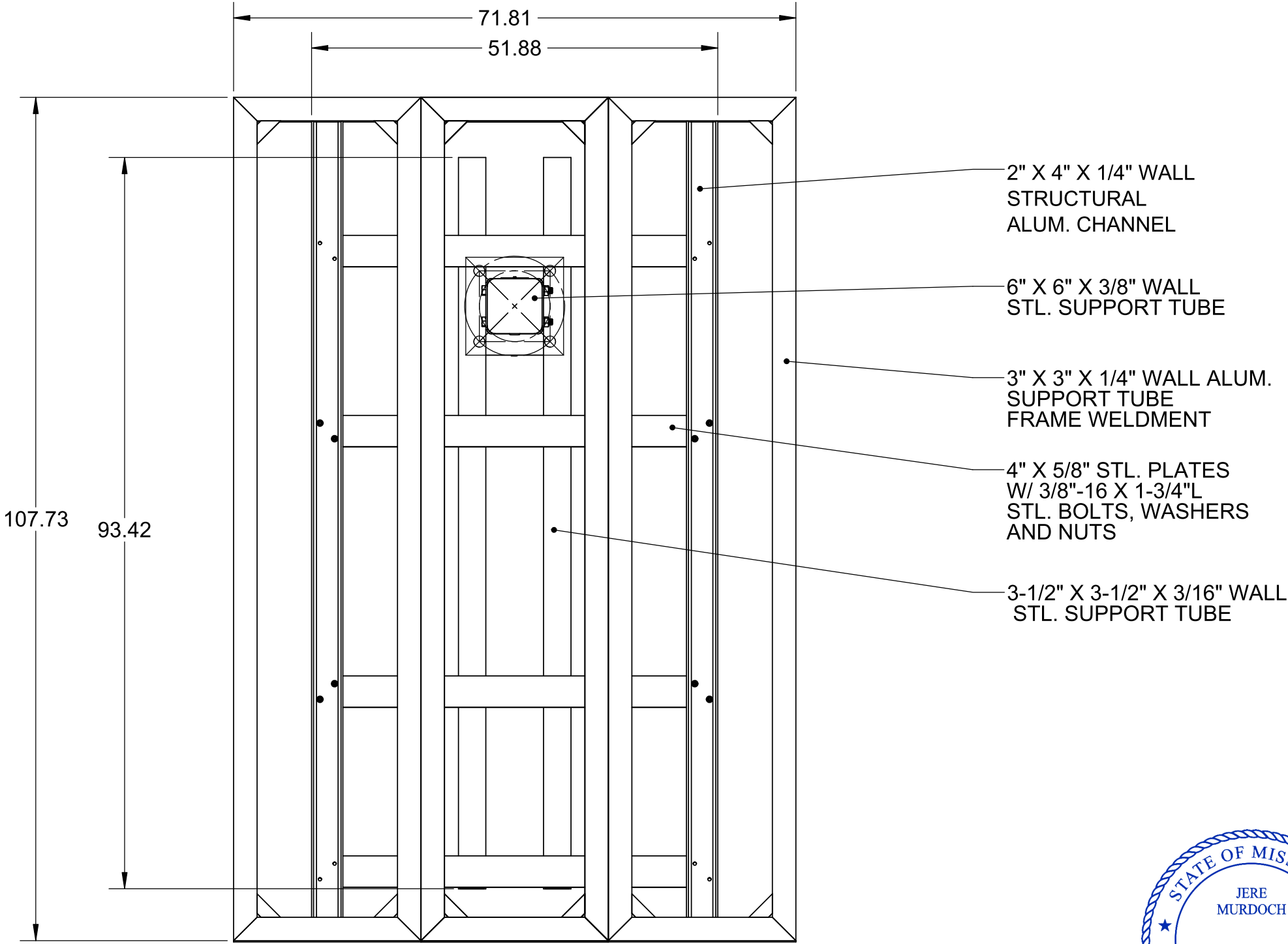
Jere Murdoch, PE
Professional Engineer
MO PE Lic. #2014038163

<div>JONES SIGN</div> <div>Your Vision. Accomplished.</div> <div>WWW.JONESSIGN.COM</div>	<div>JOB #: 250360-R16</div> <div>DATE: 12.14.2020</div> <div>DESIGNER: S. Wiands</div> <div>SALES REP:</div> <div>PROJ MGR: S. KOSTKA</div>	REV.	DATE	BY	DESCRIPTION	CLIENT APPROVAL	DATE	SHAKE SHACK	SHAKE SHACK	SHEET NUMBER
		5	04.16.21	SW	REVISE PER MARK-UPS	LANDLORD APPROVAL	DATE		2051 NW LOWENSTEIN DR LEE'S SUMMIT, MO 64081	
		6	04.23.21	SW	REVISE PER MARK-UPS					
		7	05.04.21	SW	REVISE PER MARK-UPS					
		8	05.20.21	SW	UPDATE ELEVATIONS AND VARIOUS					
9	05.21.21	SW	UPDATE PER REQUEST	QC	DATE	DESIGN PHASE: CONCEPTUAL				
10	06.09.21	SW	REVISED PER REQUEST							
12	07.12.21	SW	ADDED ENGINEERING							
13	07.22.21	JD	UPDATE FAUX NEON SIGNS							
14	08.05.21	SW	REVISED PER REQUEST							
15	08.09.21	SW	REVISED ENGINEERING	8.4						
16	09.28.21	JD	REVISED PER REQUEST							

This is an original, unpublished drawing by Jones Sign Co., Inc. It is for your personal use in conjunction with a project being planned for you by JONES SIGN. It is not to be shown to anyone outside of your organization, nor is it to be used, reproduced, copied or exhibited in any fashion. Use of this design or the salient elements of this design in any sign done by any other company, without the express written permission of JONES SIGN, is forbidden by law and carries a civil forfeiture of up to 25% of the purchase price of the sign. JONES SIGN will endeavor to closely match colors, including PMS, where specified. We cannot guarantee exact matches due to varying compatibility of surface materials and paints used. All sizes and dimensions are illustrated for client's conception of project and are not to be understood as being exact size or exact scale.

DTC.1 DRIVE THRU CANOPY (QTY 2)

SQUARE FOOTAGE: 11.0



TOP VIEW
(STRUCTURE)

RELEASED FOR CONSTRUCTION	
IBC 2018 with MO amendments	As Noted on Plans Review
ASCE 7-16 Minimum Design Loads for Buildings & Other Structures	Development Services Department
ACI 318-11 Concrete	Lee's Summit, Missouri
ANSI/AISC 360-16 Specification for Structural Steel Buildings	11/12/2021
DESIGN LOADS	
Wind	V = 115 mph
Exposure	C
Risk Cat.	II
Grnd. Snow	Pg = 20 psf



MURDOCH ENGINEERING
SIGN STRUCTURE PROFESSIONALS

2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215 x0

Rev. 10/27/2021

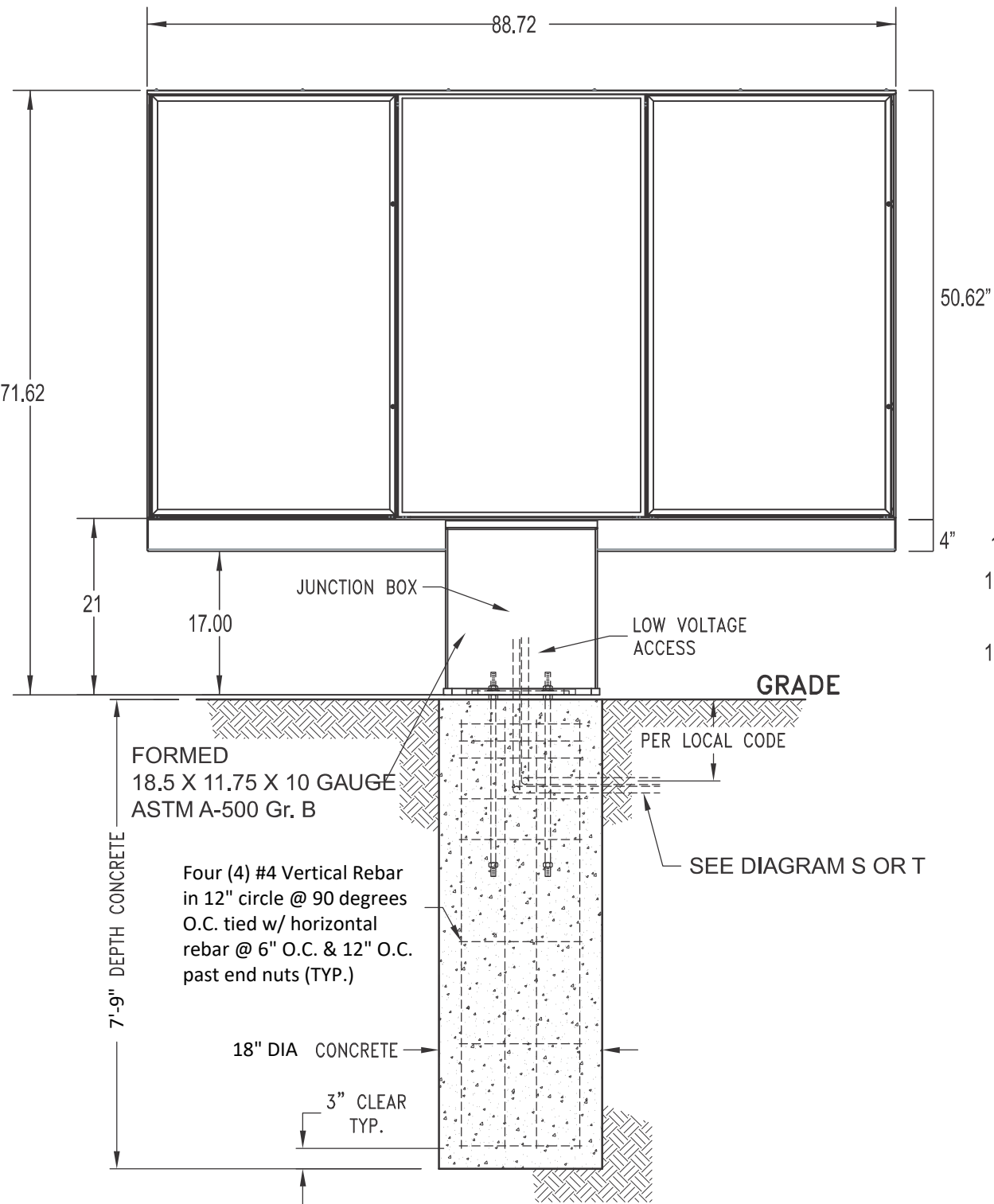
Jere Murdoch, PE
Professional Engineer
MO PE Lic. #2014038163

Rev. 11/12/2021

<div>JONES SIGN</div> <div>Your Vision. Accomplished.</div> <div>WWW.JONESSIGN.COM</div>	JOB #: 250360-R16	REV.	DATE	BY	DESCRIPTION	CLIENT APPROVAL	DATE	SHAKE SHACK	SHAKE SHACK	SHEET NUMBER
	DATE: 12.14.2020	5	04.16.21	SW	REVISE PER MARK-UPS	LANDLORD APPROVAL	DATE		2051 NW LOWENSTEIN DR	
	DESIGNER: S. Wiands	6	04.23.21	SW	REVISE PER MARK-UPS				LEE' S SUMMIT, MO 64081	
	SALES REP:	7	05.04.21	SW	REVISE PER MARK-UPS	QC	DESIGN PHASE: CONCEPTUAL			
	PROJ MGR: S. KOSTKA	8	05.20.21	SW	UPDATE ELEVATIONS AND VARIOUS					
		9	05.21.21	SW	UPDATE PER REQUEST					
		10	06.09.21	SW	REVISED PER REQUEST					
		12	07.12.21	SW	ADDED ENGINEERING					
		13	07.22.21	JD	UPDATE FAUX NEON SIGNS					
		14	08.05.21	SW	REVISED PER REQUEST					
		15	08.09.21	SW	REVISED ENGINEERING					
		16	09.28.21	JD	REVISED PER REQUEST					

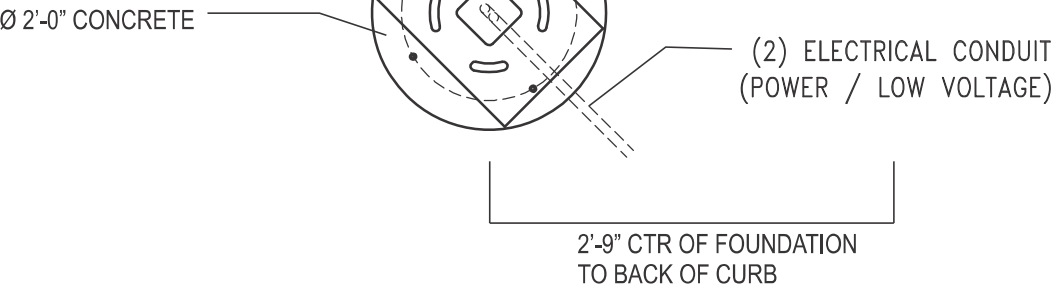
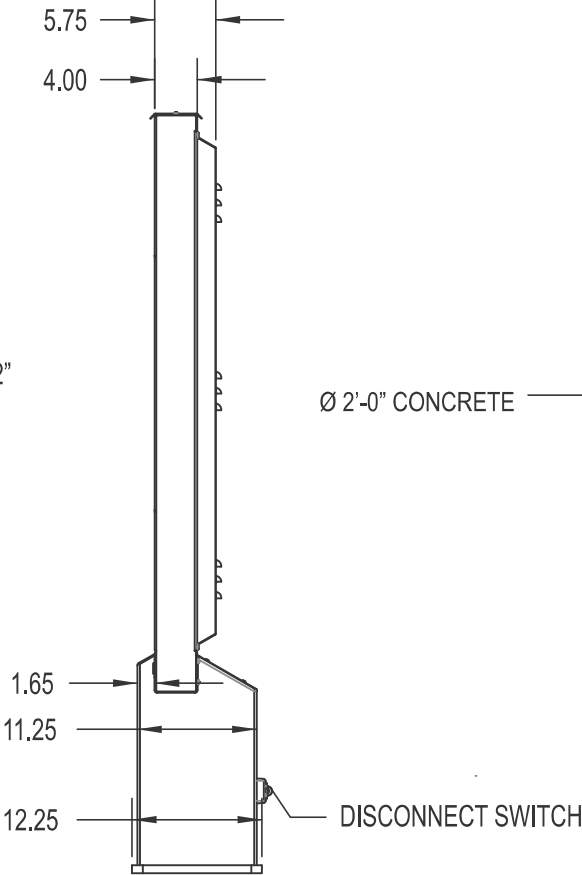
This is an original, unpublished drawing by Jones Sign Co., Inc. It is for your personal use in conjunction with a project being planned for you by JONES SIGN. It is not to be shown to anyone outside of your organization, nor is it to be used, reproduced, copied or exhibited in any fashion. Use of this design or the salient elements of this design in any sign done by any other company, without the express written permission of JONES SIGN, is forbidden by law and carries a civil forfeiture of up to 25% of the purchase price of the sign. JONES SIGN will endeavor to closely match colors, including PMS, where specified. We cannot guarantee exact matches due to varying compatibility of surface materials and paints used. All sizes and dimensions are illustrated for client's conception of project and are not to be understood as being exact size or exact scale.

DMB.1 EXTERIOR MENU BOARD (QTY 2)

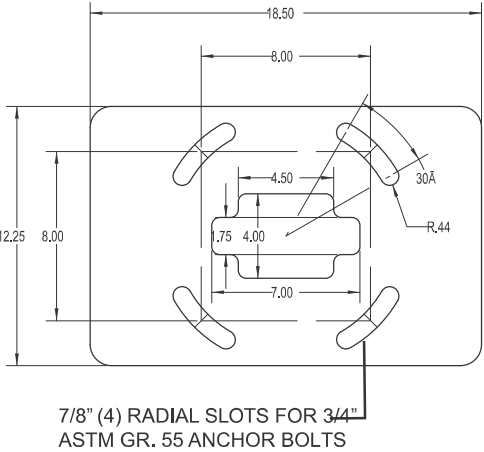


ELEVATION VIEW

Engineers Note:
Murdoch Engineering scope of work to baseplate, anchor bolt and footing.
Sign box pre-engineered to withstand applicable loading.



PLAN VIEW
QTY. CONCRETE: 0.7 CU. YDS.



BASE PLATE DETAIL
3/4" ASTM A-36 STEEL

RELEASED FOR CONSTRUCTION	
IBC 2018 with MO amendments	As Noted on Plans Review
ASCE 7-16 Minimum Design Loads for Buildings & Other Structures	Development Services Department
ACI 308-7R Concrete	Lee's Summit, Missouri
ANSI/AISC 360-16 Specification for Structural Steel Buildings	11/12/2021
DESIGN LOADS	
Wind	V = 115 mph
Exposure	C
Risk Cat.	II
Grnd. Snow	Pg = 20 psf



MURDOCH ENGINEERING
SIGN STRUCTURE PROFESSIONALS

2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215 x0

Rev. 10/27/2021
Jere Murdoch, PE
Professional Engineer
MO PE Lic. #2014038163

JONES SIGN
Your Vision. Accomplished.
WWW.JONESSIGN.COM

JOB #: 250360-R16
DATE: 12.14.2020
DESIGNER: S. Wiands
SALES REP:
PROJ MGR: S. KOSTKA

REV.	DATE	BY	DESCRIPTION
5	04.16.21	SW	REVISE PER MARK-UPS
6	04.23.21	SW	REVISE PER MARK-UPS
7	05.04.21	SW	REVISE PER MARK-UPS
8	05.20.21	SW	UPDATE ELEVATIONS AND VARIOUS
9	05.21.21	SW	UPDATE PER REQUEST
10	06.09.21	SW	REVISED PER REQUEST
12	07.12.21	SW	ADDED ENGINEERING
13	07.22.21	JD	UPDATE FAUX NEON SIGNS
14	08.05.21	SW	REVISED PER REQUEST
15	08.09.21	SW	REVISED ENGINEERING
16	09.28.21	JD	REVISED PER REQUEST

CLIENT APPROVAL	DATE
LANDLORD APPROVAL	DATE
QC	

SHAKE SHACK

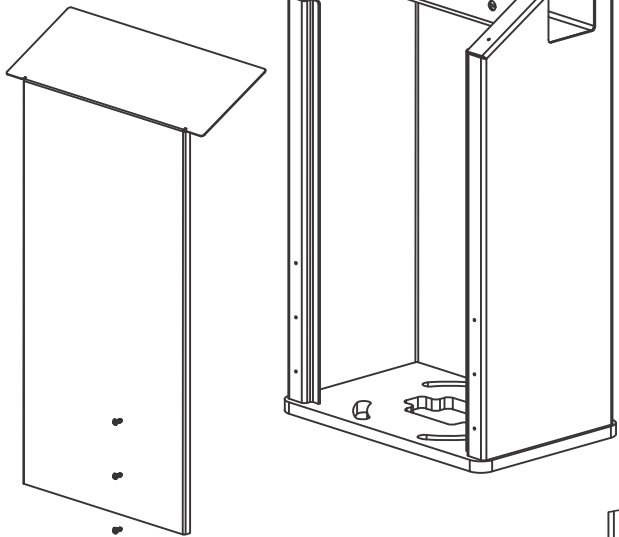
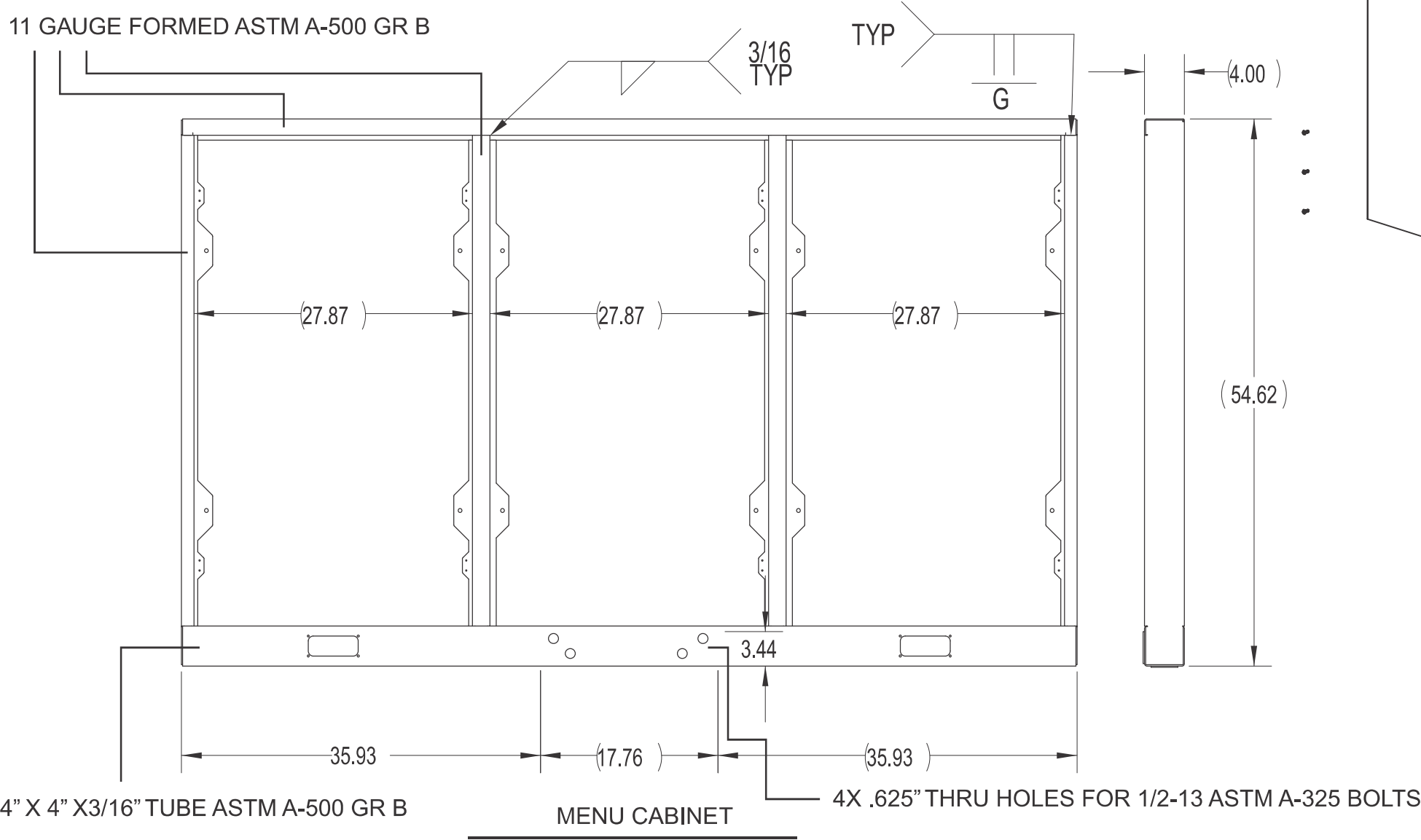
SHAKE SHACK
2051 NW LOWENSTEIN DR
LEE'S SUMMIT, MO 64081

DESIGN PHASE: CONCEPTUAL

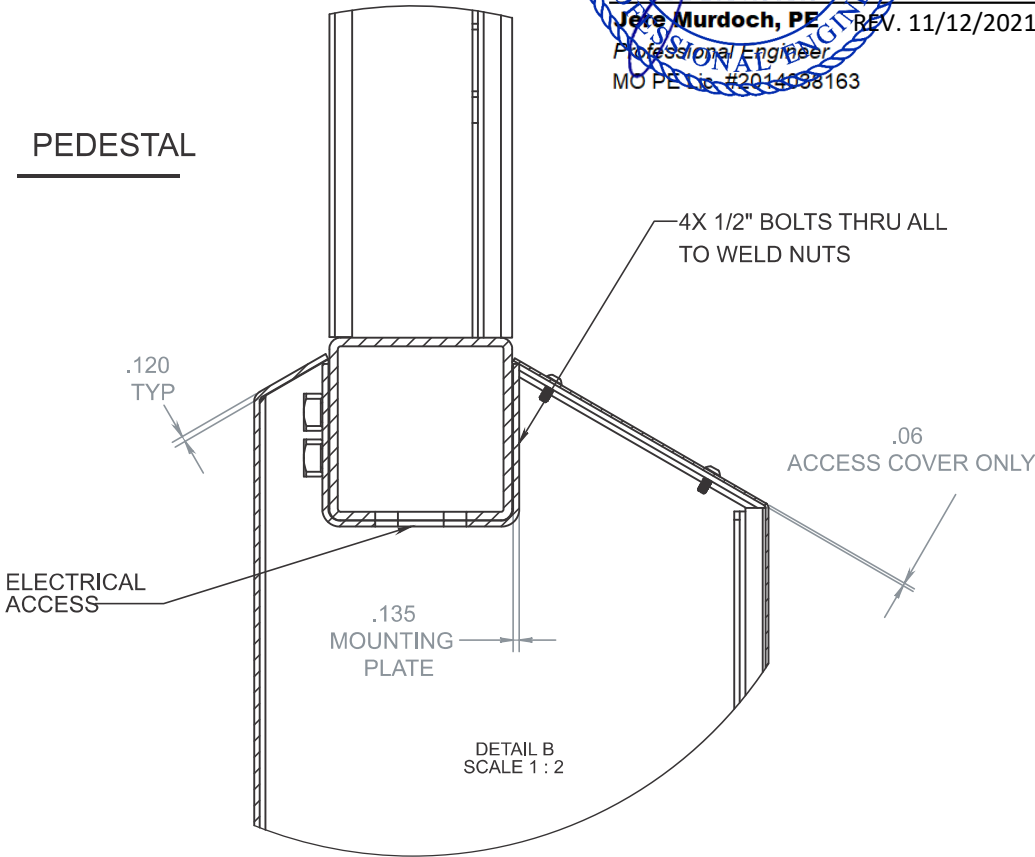
SHEET NUMBER

9.1

DMB.1 EXTERIOR MENU BOARD (QTY 2)



PEDESTAL



CUT AWAY VIEW PEDESTAL TO CABINET CONNECTION

DESIGN SPECIFICATIONS	
IBC 2018 - with MO amendments	
ASCE 7-16 - Minimum Design Loads for Buildings & Other Structures	
ACI 308 - Concrete	
ANSI/AISC 360-16	Specification for Structural Steel Buildings
11/12/2021	

DESIGN LOADS	
Wind	V = 115 mph
Exposure	C
Risk Cat.	II
Grnd. Snow	Pg = 20 psf

STATE OF MISSOURI

ENGINEERING

DESIGN STRUCTURE PROFESSIONALS

JERE MURDOCH

2389 A-2 N.J. 34

MANASQUAN, NJ 08736

(973) 570-8215

PE-2014038163

Rev. 10/27/2021

Rev. 11/12/2021

Jere Murdoch, PE

Professional Engineer

MO PE Lic. #2014038163

<div>JONES SIGN</div> <div>Your Vision. Accomplished.</div> <div>WWW.JONESSIGN.COM</div>	JOB #: 250360-R16	REV.	DATE	BY	DESCRIPTION	CLIENT APPROVAL	DATE	SHAKE SHACK	SHAKE SHACK	SHEET NUMBER
	DATE: 12.14.2020	5	04.16.21	SW	REVISE PER MARK-UPS	LANDLORD APPROVAL	DATE		2051 NW LOWENSTEIN DR LEE'S SUMMIT, MO 64081	
	DESIGNER: S. Wiands	6	04.23.21	SW	REVISE PER MARK-UPS					
	SALES REP:	7	05.04.21	SW	REVISE PER MARK-UPS					
	PROJ MGR: S. KOSTKA	8	05.20.21	SW	UPDATE ELEVATIONS AND VARIOUS					
		9	05.21.21	SW	UPDATE PER REQUEST					
		10	06.09.21	SW	REVISED PER REQUEST					
12		07.12.21	SW	ADDED ENGINEERING						
	13	07.22.21	JD	UPDATE FAUX NEON SIGNS	QC		DESIGN PHASE: CONCEPTUAL			
	14	08.05.21	SW	REVISED PER REQUEST						
	15	08.09.21	SW	REVISED ENGINEERING						
	16	09.28.21	JD	REVISED PER REQUEST					9.2	

This is an original, unpublished drawing by Jones Sign Co., Inc. It is for your personal use in conjunction with a project being planned for you by JONES SIGN. It is not to be shown to anyone outside of your organization, nor is it to be used, reproduced, copied or exhibited in any fashion. Use of this design or the salient elements of this design in any sign done by any other company, without the express written permission of JONES SIGN, is forbidden by law and carries a civil forfeiture of up to 25% of the purchase price of the sign. JONES SIGN will endeavor to closely match colors, including PMS, where specified. We cannot guarantee exact matches due to varying compatibility of surface materials and paints used. All sizes and dimensions are illustrated for client's conception of project and are not to be understood as being exact size or exact scale.

GENERAL:

- ALL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE INTERNATIONAL BUILDING CODE (IBC).
- CONSTRUCTION METHODS AND PROJECT SAFETY: DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION. THE EOR WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES THAT ARE FOUND. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
- ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND FIELD INSPECTOR. THE ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
- WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, CONSTRUCT IN ACCORDANCE WITH THE STEEL CONSTRUCTION MANUAL, 14TH EDITION OR 2010 ALUMINUM DESIGN MANUAL .
- WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
- ANY CHANGE TO THE DESIGN AS SHOWN ON THE DRAWINGS REQUIRES PRIOR WRITTEN APPROVAL FROM DESIGN ENGINEER OF RECORD BEFORE CONSTRUCTION.
- WORK PERFORMED IN CONFLICT WITH THE STRUCTURAL DRAWINGS OR APPLICABLE BUILDING CODE REQUIREMENTS SHALL BE CORRECTED AT THE EXPENSE OF THE CONTRACTOR.
- VERIFICATION: VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE EOR IMMEDIATELY OF ANY DISCREPANCIES.

EXISTING CONDITIONS:

- IF EXISTING CONDITIONS ARE NOT AS DETAILED IN THIS DESIGN, THE INSTALLER SHALL CEASE WORK AND NOTIFY MURDOCH ENGINEERING IMMEDIATELY.
- MURDOCH ENGINEERING WILL NOT BE PERFORMING ON-SITE INSPECTIONS OR VERIFICATIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER, STRUCTURE OWNER, AND PROPERTY OWNER TO IDENTIFY EXISTING CONDITIONS AND CONTACT MURDOCH ENGINEERING WITH ANY DISCREPANCIES OR CONCERNS.
- INSTALLER SHALL CONFIRM THE DIAMETER AND THICKNESS OF EXISTING MEMBERS AND NOTIFY MURDOCH ENGINEERING OF ANY DISCREPANCIES.
- INSTALLER SHALL INSPECT AND CONFIRM THE QUALITY OF EXISTING STRUCTURE AS "IN GOOD REPAIR". IF THERE ARE ANY INDICATIONS THAT THIS IS NOT THE CASE, INSTALLER SHALL CEASE WORK IMMEDIATELY AND NOTIFY MURDOCH ENGINEERING.
- ANY EXISTING INFORMATION SHOWN HAS BEEN FURNISHED BY THE PERSON(S) OR COMPANY THIS DOCUMENT WAS PREPARED FOR (SEE TITLE BLOCK). MURDOCH ENGINEERING IN NO WAY CERTIFIES THIS INFORMATION AS "AS-BUILT". IF THERE IS ANY REASON TO BELIEVE THE EXISTING CONDITIONS DETAILED HEREIN ARE NOT ACCURATE, MURDOCH ENGINEERING SHALL BE NOTIFIED IMMEDIATELY.

STEEL

- STEEL SHAPES SHALL CONFORM TO THE FOLLOWING:

ROUND HSS	ASTM A500, GR B	Fy=42 KSI MIN.
SQUARE/RECT HSS	ASTM A500, GR B	Fy=46 KSI MIN.
THREADED ROD	ASTM A36	Fy=46 KSI MIN.
STEEL PLATE	ASTM A36 ASTM	Fy=36 KSI MIN.
STD. PIPE	A53, GR B	Fy=35 KSI MIN.
- BOLTS SHALL CONFORM TO ASTM A307 UNO..
- BOLTS AND THREADED ROD SHALL BE HOT-DIP GALVANIZED PER ASTM F2329 UNO.
- ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 UNO.
- NUTS SHALL CONFORM TO ASTM A563.
- WASHERS SHALL CONFORM TO ASTM F844.
- STEEL HARDWARE SHALL BE HOT-DIP GALVANIZED PER ASTM A153 UNO
- WELDING:
 - WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1 AND AISC SPECIFICATION, CHAPTER J. WELDERS SHALL BE CERTIFIED AS REQUIRED BY GOVERNING CODE AUTHORITY. WELDING SHALL BE DONE BY ELECTRIC ARC PROCESS USING LOW-HYDROGEN ELECTRODES WITH SPECIFIED TENSILE STRENGTH NOT LESS THAN 70 KSI UNLESS NOTED OTHERWISE.
 - ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH ACTIVE STATUS AT TIME OF WELDING
 - UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELDS PER AISC SPECIFICATION, SECTION J2, TABLE J2.4
 - BASE PLATES SHALL BE WELDED ON TOP AND BOTTOM WITH CONTINUOUS WELDS OF AT LEAST 1/4" (IF PLATE IS CUT TO FIT TUBE INTO PLATE)

ALUMINUM:

- FABRICATE AND ERECT ALUMINUM IN COMPLIANCE WITH THE ALUMINUM ASSOCIATION (AA) 2010 ALUMINUM DESIGN MANUAL (ADM) 1, THE SPECIFICATIONS FOR ALUMINUM SHEET METAL WORK (ASM35), AND IBC CHAPTER 20.
- PIPE AND TUBE SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ft_u=38 KSI MIN, Ft_y=35 KSI MIN, Ft_uw=24 KSI MIN, Ft_yw=15 KSI MIN.
- STD STRUCTURAL PROFILES SHALL BE 6061-T6 PER B308 WITH Ft_u=38 KSI MIN, Ft_y=35 KSI MIN, Ft_uw=24 KSI MIN, Ft_yw=15 KSI MIN.
- SHEET AND PLATE SHALL BE 6061-T6 PER ASTM B209 WITH Ft_u=42 KSI MIN, Ft_y=35 KSI MIN, Ft_uw=24 KSI MIN, Ft_yw=15 KSI MIN.
- EXTRUSIONS SHALL BE 6061-T6 PER ASTM B241 OR B429 WITH Ft_u=38 KSI MIN, Ft_y=35 KSI MIN, Ft_uw=24 KSI MIN, Ft_yw=15 KSI MIN.
- ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY AN AWS OR ICC CERTIFIED WELDER WITH CURRENT STATUS AT TIME OF WELDING
- UNLESS A LARGER WELD SIZE IS INDICATED, PROVIDE MINIMUM SIZE WELD PER ADM. ALL ALUMINUM WELDED JOINTS SHALL HAVE WELD SIZES OF AT LEAST 1/4 INCH
- FILLET WELDS SHALL NOT EXCEED THINNEST MEMBER WALL THICKNESS JOINED.
- ALUMINUM WELD FILLER SHALL BE 5356 ALLOY
- WELDING PROCESS GMAW OR GTAW SHALL BE IN ACCORDANCE WITH AWS D1.2
- ALUMINUM CHANNEL LETTERS SHALL BE CONSTRUCTED OF 0.090" RETURNS AND 0.125" BACKS MINIMUM, UNLESS A LARGER SIZE IS INDICATED ON DRAWINGS. THIS NOTE SHALL SUPERCEDE DRAWING DETAILS.
- PROVIDE NEOPRENE GASKET BETWEEN DISSIMILAR METALS TO PREVENT GALVANIC CORROSION
- ALUMINUM DIRECTLY EMBEDDED INTO CONCRETE SHALL BE CAPPED AT BOTTOM AND COATED WITH BITUMINOUS COATING OR POLYURETHANE WHERE IN CONTACT WITH CONCRETE.
- FASTENERS BETWEEN DISSIMILAR METALS SHALL BE STAINLESS STEEL 316.

CONCRETE & REINFORCEMENT

- MINIMUM 28-DAY COMPRESSIVE STRENGTH (f_c') SHALL BE 3,000 PSI. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.45 BY WEIGHT. A MINIMUM OF 5-3/4 BAGS OF CEMENT SHALL BE USED PER CUBIC YARD WITH A SLUMP OF 4" +/- 1.
- REINFORCEMENT TO BE ASTM A615 GR 60, F_y=60 KSI UNO
- CALCIUM CHLORIDE OR ADDED CHLORIDE IS NOT PERMITTED
- VIBRATION: ALL REINFORCED CONCRETE SHALL BE CONSOLIDATED WITH MECHANICAL VIBRATORS
- CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318-11
- PROVIDE A MINIMUM OF 2-1/2" COVER OF ALL EMBEDDED STEEL REBAR AND A MINIMUM OF 6 INCHES OF COVER FOR DIRECT BURIED PIPE OR TUBE MEMBERS.

FOUNDATIONS

- CONCRETE POURED INTO CONSTRAINED EARTH EXCAVATIONS MUST CURE UNDER PROPER CONDITIONS FOR A MINIMUM OF 7 DAYS PRIOR TO SIGN BOX INSTALLATION. (EXCEPTION: IF THE OVERALL HEIGHT OF THE SIGN IS LESS THAN 20 FEET AND THE SIGN IS ADEQUATELY BRACED AGAINST WIND LOADS FOR A MINIMUM OF 4 DAYS, THE BOX MAY BE INSTALLED THE SAME DAY AS THE FOOTING IS POURED)
- FOOTINGS MUST BE POURED AGAINST UNDISTURBED EARTH. SOIL BACKFILL IS UNACCEPTABLE. WHEN A SONOTUBE IS USED AS THE FORM, 3/4" BLUESTONE OR CONCRETE SHALL BE USED TO BACKFILL THE SPACE BETWEEN THE SONOTUBE AND UNDISTURBED EARTH.
- COLD WEATHER PLACEMENT: PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS OR LOW TEMPERATURES. DO NOT POUR CONCRETE DURING OR WHEN FREEZING TEMPERATURES ARE ANTICIPATED WITHIN 3 DAYS OF POUR.
- REINFORCEMENT IS NOT REQUIRED FOR DIRECT BURIAL TYPE SIGN FOOTINGS FOR SIGNS OF 25 FEET OVERALL HEIGHT OR LESS, DIRECT BURIED STEEL SHALL EXTEND TO 6 INCHES FROM BOTTOM OF FOOTING.
- FOR ANCHOR BOLT/ BASE PLATE - SQUARE FOOTINGS, PROVIDE A MINIMUM OF #5 VERTICAL REBAR @ 12" O.C., 4" OFFSET FROM PERIMETER, TOP AND BOTTOM OF FOOTING. PROVIDE #3 HORIZONTAL TIES @ 12" O.C. Unless otherwise noted.
- FOR ANCHOR BOLT/ BASE PLATE - ROUND FOOTINGS, PROVIDE A MINIMUM OF SIX (6) VERTICAL #5 REBARS, EVENLY SPACED, 4" OFFSET FROM FOOTING PERIMETER & #3 HORIZONTAL TIES, 12" O.C. Unless otherwise noted.
- ANCHOR BOLTS SHALL BE TIED TO REBAR CAGE AT A MINIMUM OF TWO LOCATIONS PER ANCHOR BOLT
- FOOTING DESIGN ASSUMES FOOTING SHALL BE EXCAVATED AND POURED IN UNDISTURBED NATURAL EARTH, CAPABLE OF WITHSTANDING A MINIMUM 1,500 PSF VERTICAL DESIGN BEARING PRESSURE AND 150 PSF/FT OF DEPTH OF LATERAL BEARING PRESSURE BASED ON SOIL DATA OBTAINED FROM THE USGS SOIL SURVEY.

SCOPE OF WORK:

- LIMITS OF LIABILITY TO EXTEND ONLY TO THE QUANTITY INDICATED. ATTEMPTS IN PART OR IN WHOLE TO INSTALL GREATER QUANTITIES THAN THOSE SPECIFIED WITHOUT CONSULTING MURDOCH ENGINEERING SHALL VOID ALL PROFESSIONAL LIABILITY AND COVERAGE.

DESIGN SPECIFICATIONS			
IBC	2018	with	MO amendments
ASCE	7-16	Minimum Design Loads for Buildings & Other Structures	
ACI	318-14	Building Code Requirements for Structural Concrete	
ANSI/AISC	360-16	Specification for Structural Steel Buildings	
DESIGN LOADS			
Wind	V =	115 mph	
Exposure	C		
Risk Cat.	II		
Grnd. Snow	Pg =	20 psf	

RELEASED FOR
CONSTRUCTION

As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri

MURDOCH
ENGINEERING
SIGN STRUCTURE PROFESSIONALS

murdochengineering.com
(973) 570-8215
73 Paterson St. 2nd Floor
New Brunswick, NJ 08901

PREPARED FOR:

JONES SIGN
Your Vision. Accomplished.
WWW.JONESSIGN.COM

PROJECT TITLE:

SHAKE SHACK

PROJECT ADDRESS:

2051 NW LOWENSTEIN DR
LEE'S SUMMIT, MO 64081



MURDOCH
ENGINEERING
SIGN STRUCTURE PROFESSIONALS

2399 A-2 NJ-34
MANASQUAN, NJ 08736
(973) 570-8215

Jere Murdoch, PE
Professional Engineer
MO PE Lic. #2014038163

DWG TITLE:

GENERAL NOTES

SHEET:

S.1

SIZE:

B

The designs, details and specifications contained in this drawing are confidential. The recipients of this drawing hereby acknowledge and agree that it is the sole property of Murdoch Engineering and that they shall neither use nor reveal any of the designs, details and specifications contained in this drawing, outside of the contractual agreement expressed written permission from Murdoch Engineering.

Deviations from this drawing shall not be made without consulting Murdoch Engineering. In case of incongruities between drawings, specifications, and details included in contract documents, Murdoch Engineering shall decide which indication must be followed and their decision shall be final.

Copyright Murdoch Engineering.
All rights reserved.