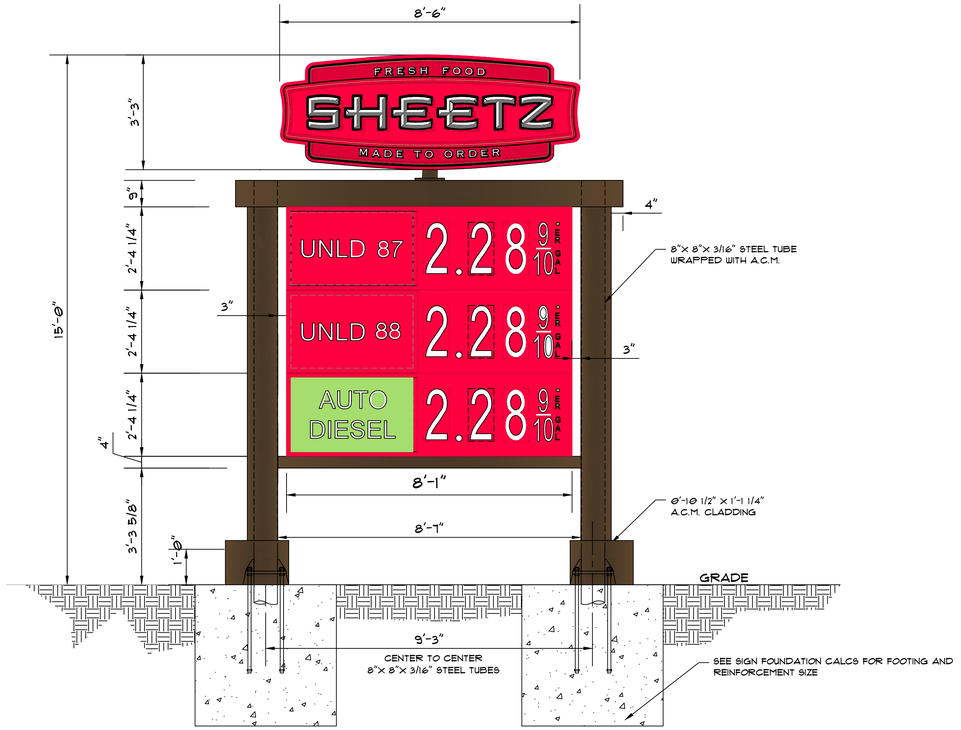
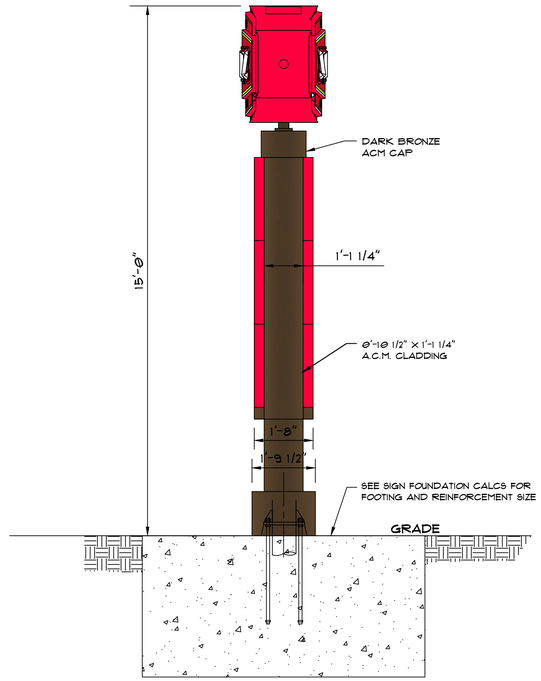


DOUBLE-FACED GAS PRICE SIGN DETAIL - PARTIAL ELEVATION

SCALE: 1/2" = 1'-0" AREA: 84.69 SQ. FT.

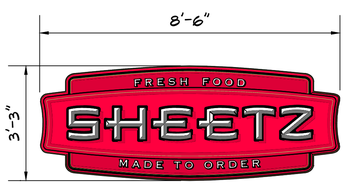


DOUBLE FACED GAS PRICE SIGN SIDE ELEVATION

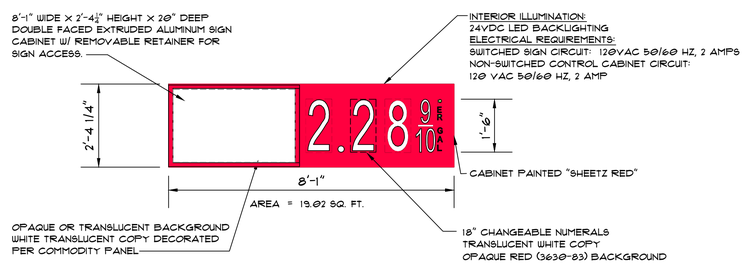
SCALE: 1/2"=1'-0"

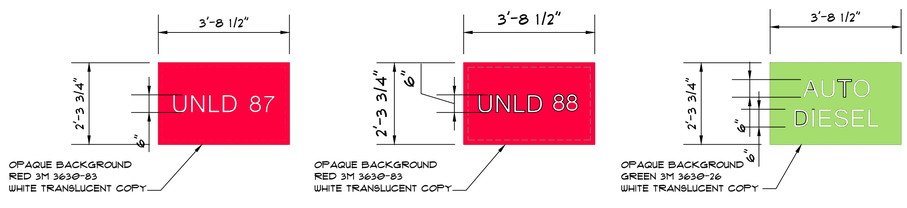
SIGN CABINET DETAILS

TOTAL SIGN AREAS: 84.69 SQ. FT.



OUTLINE AREA = 23.82 SQ. FT.
BOX AREA = 27.63 SQ. FT.





Convenience Architecture and Design P.C.
351 Sheetz Way, Claysburg, PA 16625
phone (814) 239-6013
email tcolumbu@sheetz.com
web site www.sheetz.com

PROJECT NAME:
NEW SHEETZ SITE
CAMERON

Cameron, NC
PSR #214196

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL

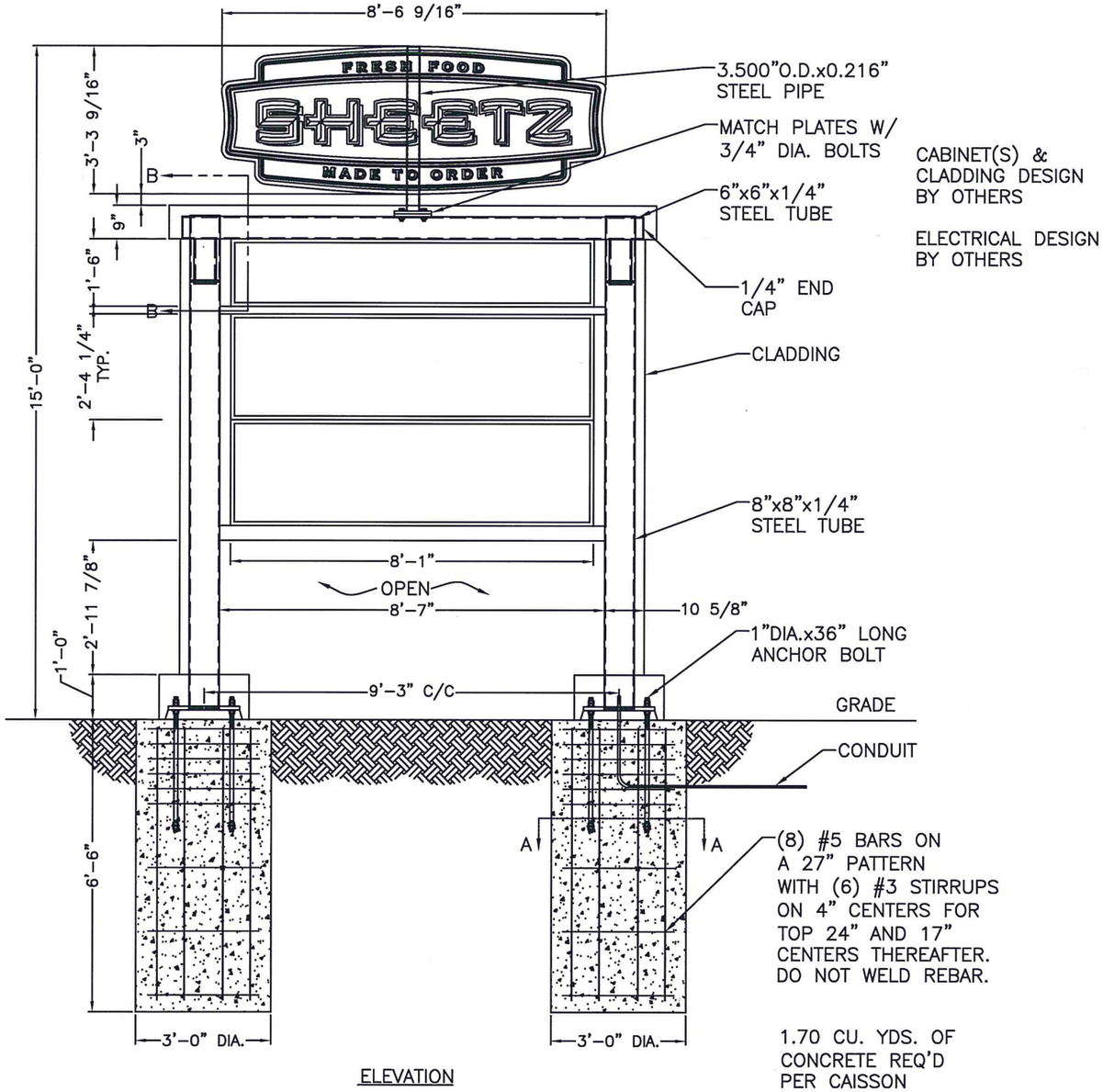
KEYPLAN

MARK	DATE	DESCRIPTION

ISSUE: 7-15-2020
PROJECT NO:
AUTHOR BY: JEB
REVIEW BY:
SHEET TITLE

POLE SIGN DETAILS

PS1



ELEVATION

CABINET(S) & CLADDING DESIGN BY OTHERS

ELECTRICAL DESIGN BY OTHERS

(8) #5 BARS ON A 27" PATTERN WITH (6) #3 STIRRUPS ON 4" CENTERS FOR TOP 24" AND 17" CENTERS THEREAFTER. DO NOT WELD REBAR.

1.70 CU. YDS. OF CONCRETE REQ'D PER CAISSON

General Notes:

1. Design is based on 120 mph, 3 second gust wind design per NCBC 2018/IBC 2015. Category II, Exposure C. Seismic Design Category C.
2. Spread foundation is based on a presumptive safe vertical soil bearing pressure minimum of 2000 psf. Caisson foundation is based on a presumptive safe lateral soil bearing pressure minimum of 150 psf per foot of depth. Isolated lateral bearing footings subject to short-term lateral loads and not adversely affected by a 1/2" motion at grade are permitted to be designed using twice the tabulated value of the corresponding soil class.
3. A soil report was not provided. Foundation analysis assumes Soil Classification 4. Allowable bearing pressure should be verified prior to placement of concrete. In the event that the stated requirements are not met and conditions appear deleterious, cease and secure excavation and immediately contact BLAIR SIGN COMPANY.
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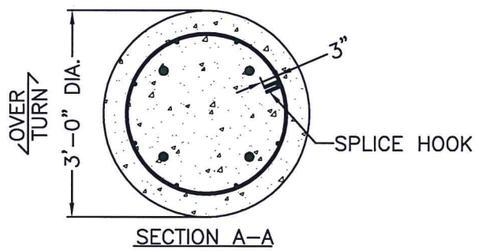


SECTION A-A

INSTALLATION ADDRESS:

SHEETZ - #716
2201 NC 24-87
CAMERON, NC

CLIENT:

blair
IMAGE ELEMENTS
5107 KISSELL AVENUE
ALTOONA, PA 16601
PHONE (814) 949-8287
FAX (814) 949-8293

REV	DATE	DESCRIPTION
1	-/-/-	----------
2	-/-/-	----------
3	-/-/-	----------
4	-/-/-	----------
5	-/-/-	----------
6	-/-/-	----------
7	-/-/-	----------

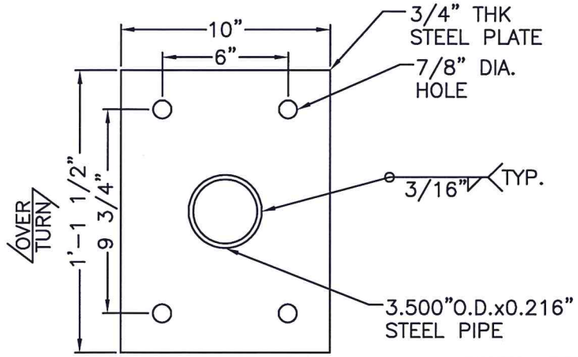
SEAL & SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 016218 ENGINEER IMAD N. KASHIF

3.12.21

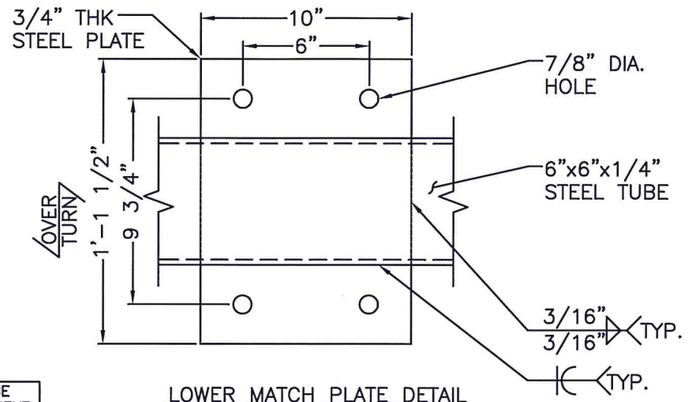
LINK Engineering, L.L.C.
135 South David Lane • Knoxville, Tennessee 37922
Phone: (865) 539-4001 • www.linkengr.com
North Carolina Certificate of Authorization No.: P-0483

Project Number:		Drawing Number:	
21-0162		B1071330	
SHT.	OF	DATE:	BY:
1	3	3/11/21	GHK

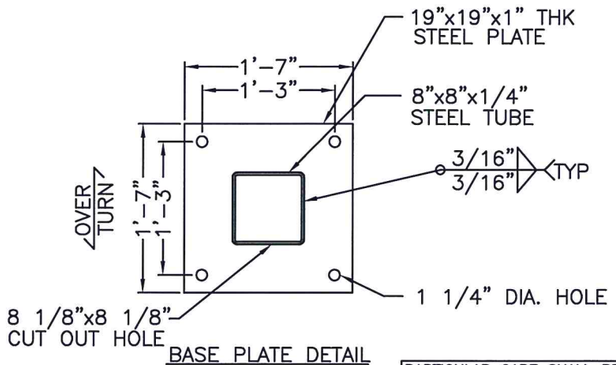


UPPER MATCH PLATE DETAIL

PARTICULAR CARE SHALL BE TAKEN TO PROVIDE SUFFICIENT PREHEAT OF THE THICKER ELEMENT FOR THE SOUNDNESS OF THE WELD. OTHERWISE, USE 1/4" MIN. WELD.

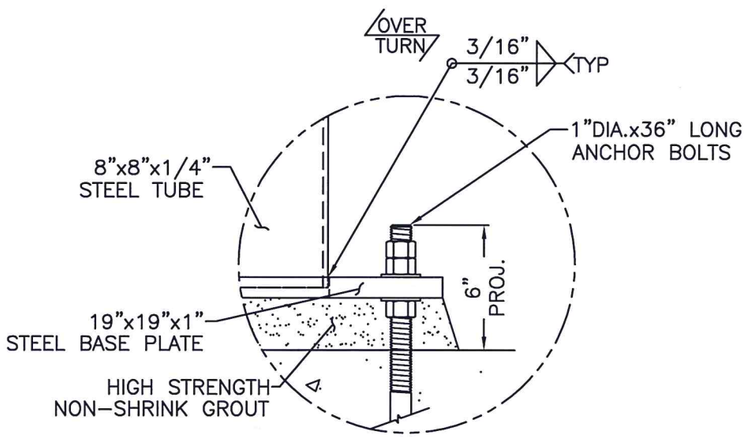


LOWER MATCH PLATE DETAIL

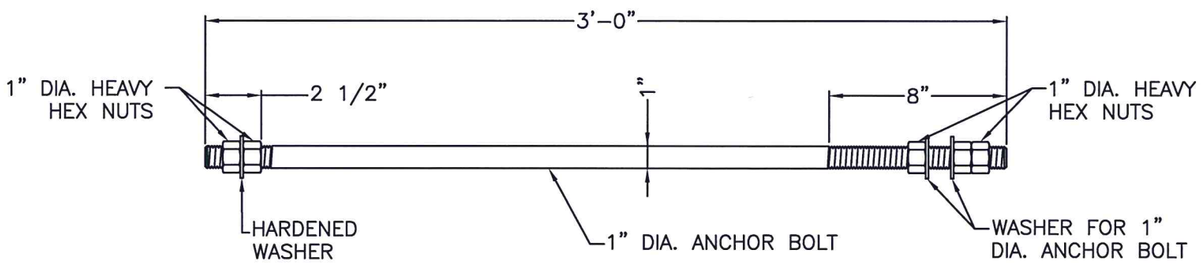


BASE PLATE DETAIL

PARTICULAR CARE SHALL BE TAKEN TO PROVIDE SUFFICIENT PREHEAT OF THE THICKER ELEMENT FOR THE SOUNDNESS OF THE WELD. OTHERWISE, USE 5/16" MIN. WELD.

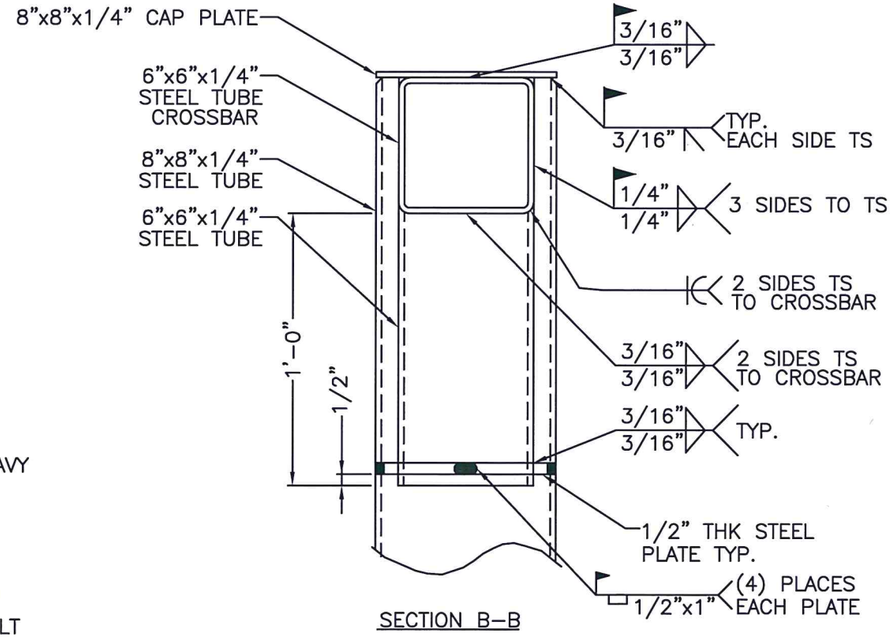


ANCHOR BOLT PROJECTION DETAIL



ANCHOR BOLT DETAIL
ALL-THREADED RODS A-36
ARE ACCEPTABLE REPLACEMENT

CUT SLOT IN TS 8X8 VERTICAL, SLEEVE IN TS 6X6, AND WELD AS SHOWN



SECTION B-B

INSTALLATION ADDRESS:

SHEETZ - #716
2201 NC 24-87
CAMERON, NC

CLIENT:

blair
IMAGE ELEMENTS
5107 KISSELL AVENUE
ALTOONA, PA 16601
PHONE (814) 949-8287
FAX (814) 949-8293

REV	DATE	DESCRIPTION
1	-/-/-	----------
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7	-/-/-	----------

SEAL & SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 016218 ENGINEER IMAD N. KASHIF

3.12.21

LINK Engineering, L.L.C.
135 South David Lane • Knoxville, Tennessee 37922
Phone: (865) 539-4001 • www.linkengr.com
North Carolina Certificate of Authorization No.: P-0483

Project Number:	Drawing Number:		
21-0162	B1071330		
SHT.	OF	DATE:	BY:
2	3	3/11/21	GHK

PROJECT #	21-0162		OWNER	SHEETZ		
	March 11, 2021			2201 NC 24-87		
DRAWING #	B1071330			CAMERON, NC		
WIND LOAD	22.116	PSF				
WIND SPEED	120	MPH	CLIENT:	BLAIR SIGN COMPANY		
# COLUMNS	2	NCBC 2018/IBC 2015		5107 KISSELL AVENUE		
DESIGNER	GHK			ALTOONA, PA		

ITEM	HEIGHT	WIDTH	SHAPE FACTOR	CENTROID HEIGHT	FACTORED AREA	TOTAL FORCE	MOMENT
SIGN	3.297	8.547	0.873	1.649	24.591	0.544	0.897
COLUMN	0.438	8.547	1.000	0.219	3.739	0.627	1.153
SIGN	7.276	10.354	1.000	3.638	75.337	2.293	11.773
COLUMN CLADDING	3.990	1.771	1.000	1.995	4.880	2.401	21.136
OAH	15.000						

COLUMN CALCULATIONS (CODES P=PIPE O=OTHER T=TUBE)

=	ITEM	COLUMN WIDTH	COLUMN DEPTH	COLUMN WALL	Ixx COLUMN	DESIGN MODULUS COLUMN	OBLIQUE LOAD MOMENT	AVAILABLE FLEXURAL STRENGTH	COLUMN CENTER DISTANCE	OBLIQUE LOAD FACTOR	UNITY
P	SIGN		3.500	0.201	2.8	2.19	0.897	3.83	9.250	1.448	0.302
P	COLUMN		3.500	0.201	2.8	2.19	1.153	3.83			0.369
T	SIGN	8.000	8.000	0.233	70.7	17.67	8.52	44.14			0.193
T	COLUMN CLADDING	8.000	8.000	0.233	70.7	17.67	15.30	44.14			0.347

BOLT CALCULATIONS

ITEM	MOMENT	BOLT SPACING	BOLTS/ PLATE	OBLIQUE TENSION/ BOLT	BOLT DIAM.	ALLOW. STRESS	ALLOWABLE TENSION
COLUMN	1.153	9.750	4.000	0.710	0.750	20.000	8.836
BASE PL.	21.136	15.000	4.000	6.120	1.000	19.100	15.001

PLATE CALCULATIONS

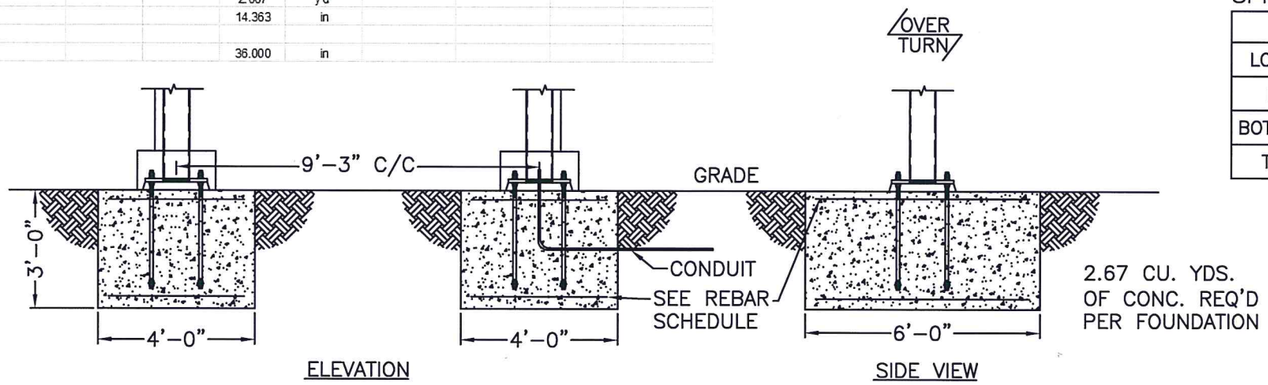
ITEM	TENSION/ BOLT	MOMENT ARM	MOMENT PLATE	PLATE WIDTH	PLATE DEPTH	PLATE THICK.	MINIMUM THICK.
COLUMN	0.710	3.969	2.816	5.875	13.500	0.750	0.326
BASE PL.	6.120	5.250	32.129	10.906	19.000	1.000	0.809

ANCHOR BOLT PROJECTION	ANCHOR EMBEDMENT	ANCHOR BOLT MIN LENGTH
6.000	12.175	19.000

*USE 36" A.B.

SPREAD FOUNDATION		
MOMENT AT GRADE	15.300	
TOTAL FORCE	1.738	kip
WEIGHT OF SIGN	0.698	kip
SLAB WIDTH	4.000	ft
SLAB LENGTH	6.000	ft
SLAB DEPTH	3.000	ft
SLAB WEIGHT	10.800	kip
TOTAL WEIGHT	11.498	kip
OVERTURNING MOMENT	20.513	
FACTOR OF SAFETY	1.682	
e = OTM/WT	1.784	
L/2 - e	1.216	
SOIL PRESSURE 2*WT/(3*(L/2-e)*WIDTH)	1576	
CONCRETE	2.667	yd³
MIN. THICKNESS W/O REBAR	14.363	in
SQRT(M*12*6*1.7*.75/(.178*12*WIDTH)		
ACTUAL THICKNESS	36.000	in

BOTTOM STEEL AREA REQ'D PER FT OF WIDTH		0.142	
TOP STEEL AREA REQ'D PER FT OF WIDTH		0.056	
LONG BOTTOM STEEL	REBAR SIZE	4.000	
	WEIGHT PER FT	0.668	
	SPACING	12.000	in
	AREA PER BAR	0.200	in²
BOTTOM STEEL AREA REQ'D PER FT OF WIDTH		0.142	
	AREA PER FT	0.200	
	EST NO. REQ'D	4.000	
	NUMBER REQ'D	4.000	
	LENGTH	5.500	ft
	WEIGHT	14.696	
	EDGE	6.000	
LONG TOP STEEL	REBAR SIZE	4.000	
	WEIGHT PER FT	0.668	
	SPACING	12.000	in
	AREA PER BAR	0.200	in²
TOP STEEL AREA REQ'D PER FT OF WIDTH		0.056	
	AREA PER FT	0.200	
	EST NO. REQ'D	4.000	
	NUMBER REQ'D	4.000	
	LENGTH	5.500	ft
	WEIGHT	14.696	
	EDGE	6.000	
CROSS STEEL	REBAR SIZE	4.000	
	WEIGHT PER FT	0.668	
	SPACING	12.000	in
	LENGTH	3.500	ft
	EST NO. REQ'D	6.000	
	NUMBER REQ'D	6.000	
	EDGE	6.000	in
	WEIGHT	28.056	
	TOTAL WEIGHT	57.448	
FOUNDATION WIDTH		4.000	ft
FOUNDATION LENGTH		6.000	ft
CAISSON			
MOMENT		15.300	FT-KIP
FORCE		1.738	KP
REFERENCE IBC 1807.3.2 & TABLE 1806.2			
ASSUME SOIL CLASS #4 SW, SP, SM, SC, GM & GC			
LATERAL BEARING PRESSURE - PSF/FT OF DEPTH		150.0	PSF/FT
S1		650.0	
DEPTH		6.500	FT.
DIAMETER		3.000	FT.
		8.804	FT.
		2.085	FT.
CALCULATED DEPTH		5.636	FT.
MINIMUM THICKNESS WITHOUT REINFORCEMENT		27.666	IN.
ACTUAL DIAMETER		36.000	IN.
CONCRETE		1.702	CU. YD.



2.67 CU. YDS. OF CONC. REQ'D PER FOUNDATION

OPTIONAL SPREAD FOUNDATION

REBAR SCHEDULE
SPREAD FOUNDATION

DO NOT WELD REBAR
3" MIN. CONC. COVER

PLACEMENT	SIZE	SPACING	QUANTITY
LONG BOTTOM STEEL	#4	12"	4
LONG TOP STEEL	#4	12"	4
BOTTOM CROSS STEEL	#4	12"	6
TOP CROSS STEEL	#4	12"	6

INSTALLATION ADDRESS:

SHEETZ – #716
2201 NC 24–87
CAMERON, NC

CLIENT:

blair
IMAGE ELEMENTS
5107 KISSELL AVENUE
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PHONE (814) 949-8287
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21-0162	B1071330		
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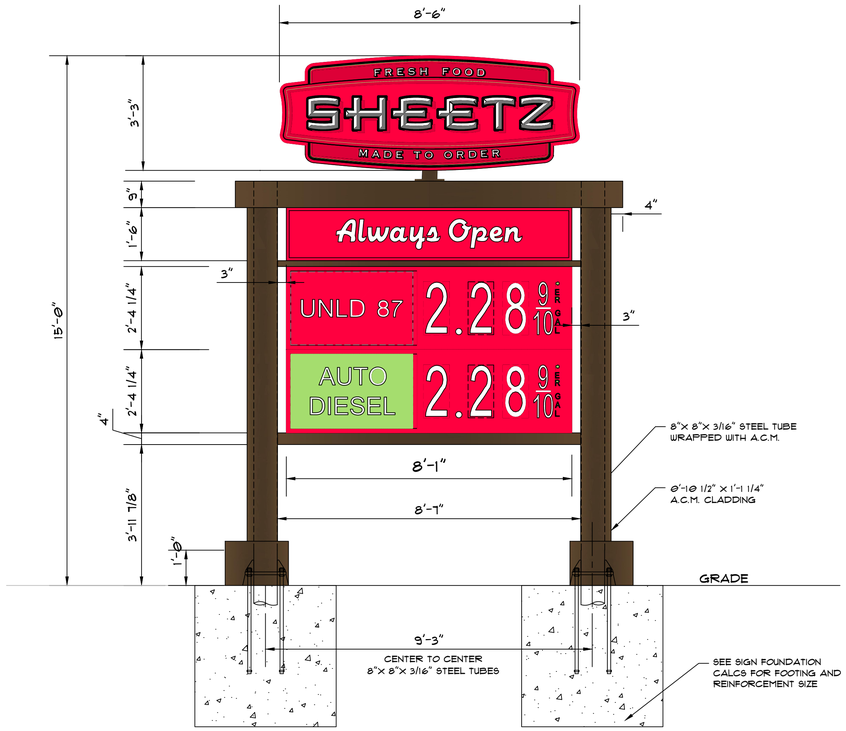
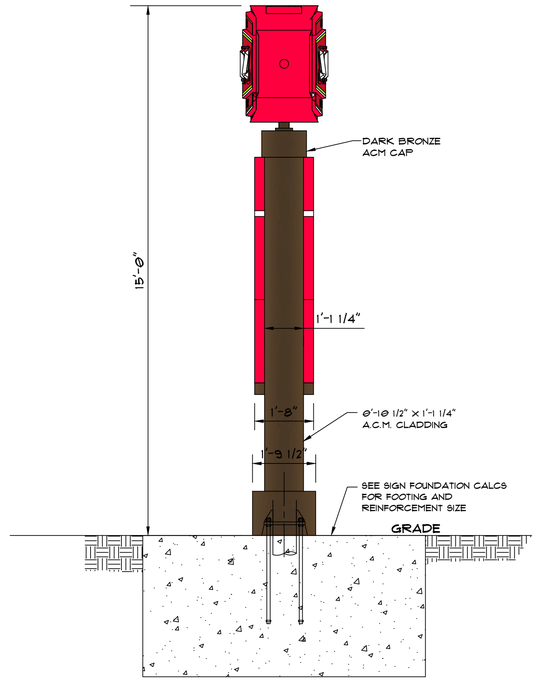
3	3	3/11/21	GHK



DOUBLE-FACED GAS PRICE SIGN DETAIL - PARTIAL ELEVATION

SCALE: 1/2" = 1'-0" AREA: 96.82 SQ. FT.

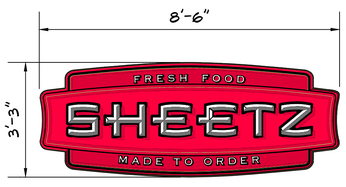


DOUBLE FACED GAS PRICE SIGN SIDE ELEVATION

SCALE: 1/2"=1'-0"

SIGN CABINET DETAILS

TOTAL SIGN AREAS: 96.82 SQ. FT.



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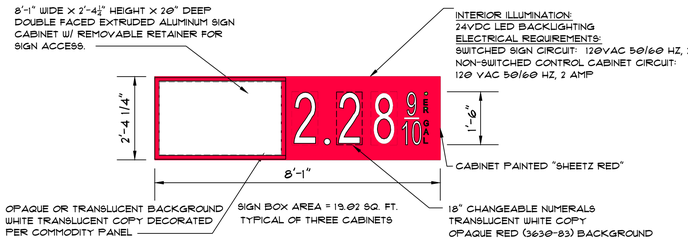
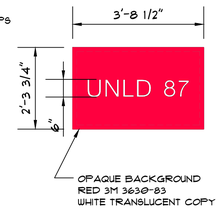
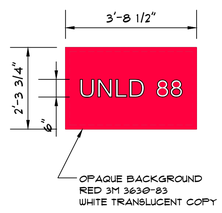
BOX AREA = 21.63 SQ. FT.

AREA: 12.13 SQ.FT.

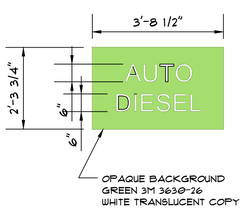




OPAQUE BACKGROUND
RED 3M 3630-83
WHITE TRANSLUCENT COPY



OPAQUE BACKGROUND
RED 3M 3630-83
WHITE TRANSLUCENT COPY



OPAQUE BACKGROUND
GREEN 3M 3630-26
WHITE TRANSLUCENT COPY

Convenience Architecture and Design P.C.
351 Sheetz Way, Claysburg, PA 16625
phone (814) 239-6013
email tcolumbu@sheetz.com
web site www.sheetz.com

PROJECT NAME:
NEW SHEETZ SITE
CAMERON

Cameron, NC
PSR #214196

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL

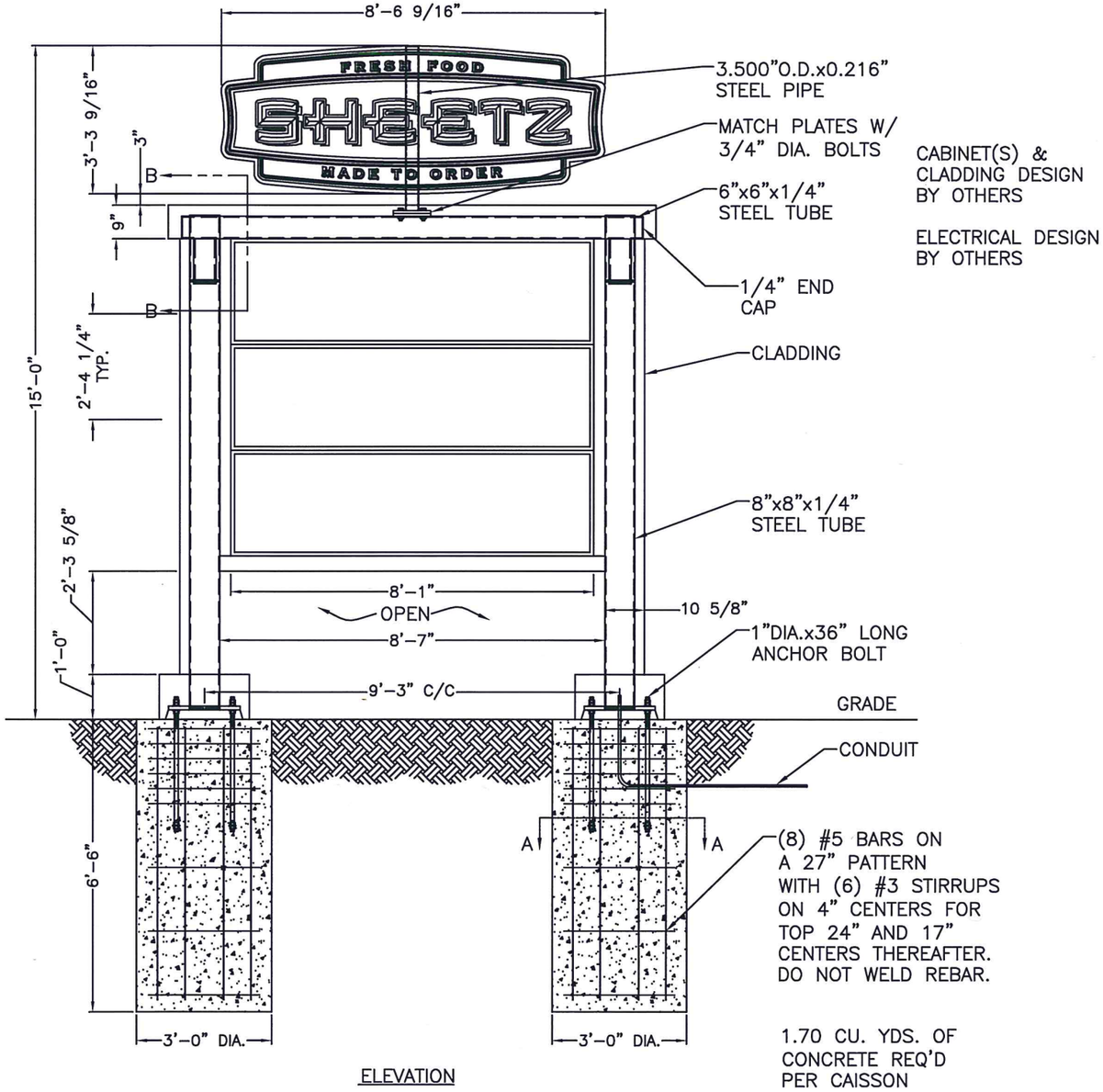
KEYPLAN

MARK	DATE	DESCRIPTION

ISSUE: 7-15-2020
PROJECT NO:
AUTHOR BY: NMI
REVIEW BY:
SHEET TITLE

POLE SIGN DETAILS

PS2



ELEVATION

CABINET(S) & CLADDING DESIGN BY OTHERS

ELECTRICAL DESIGN BY OTHERS

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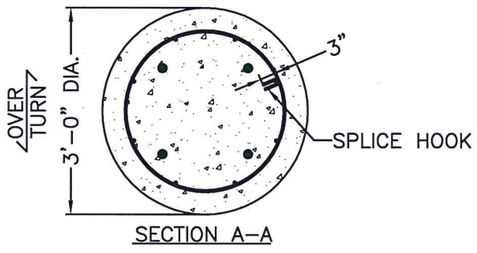
14. Any deviation from this design or from any part of this drawing, including the General Notes, without prior written consent from LINK Engineering voids this drawing in its entirety.
15. The structure designed on this drawing is intended to be installed at the address shown and should not be used at any other location.



SECTION A-A

INSTALLATION ADDRESS:

SHEETZ - #716
2201 NC 24-87
CAMERON, NC

CLIENT:

blair
IMAGE ELEMENTS
5107 KISSELL AVENUE
ALTOONA, PA 16601
PHONE (814) 949-8287
FAX (814) 949-8293

REV	DATE	DESCRIPTION
1	-/-/-	----------
2	-/-/-	----------
3	-/-/-	----------
4	-/-/-	----------
5	-/-/-	----------
6	-/-/-	----------
7	-/-/-	----------

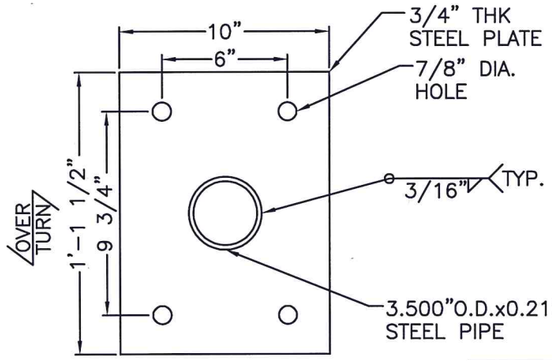
SEAL & SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 016218 ENGINEER IMAD N. KASHIF

3.12.21

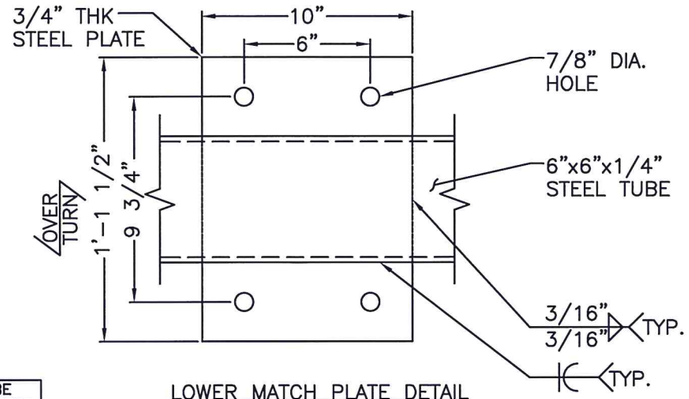
LINK Engineering, L.L.C.
135 South David Lane • Knoxville, Tennessee 37922
Phone: (865) 539-4001 • www.linkengr.com
North Carolina Certificate of Authorization No.: P-0483

Project Number:		Drawing Number:	
21-0162		B1071331	
SHT.	OF	DATE:	BY:
1	3	3/11/21	GHK

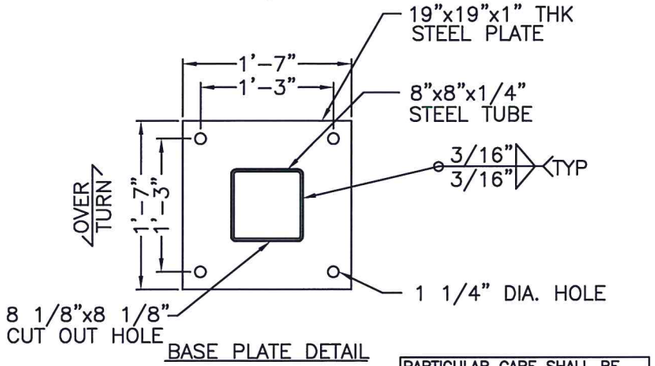


UPPER MATCH PLATE DETAIL

PARTICULAR CARE SHALL BE TAKEN TO PROVIDE SUFFICIENT PREHEAT OF THE THICKER ELEMENT FOR THE SOUNDNESS OF THE WELD. OTHERWISE, USE 1/4" MIN. WELD.

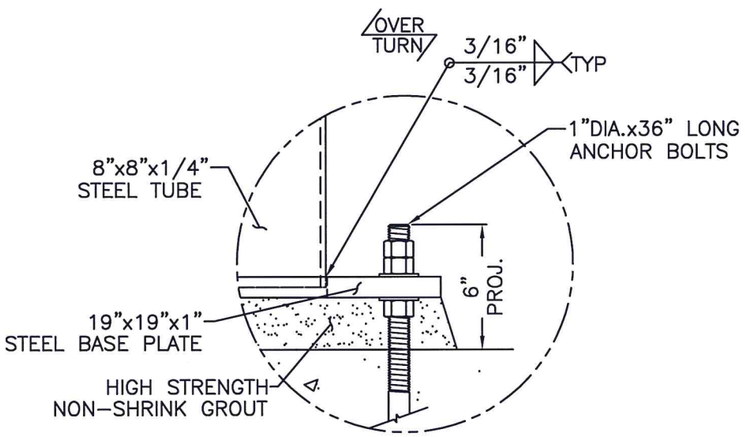


LOWER MATCH PLATE DETAIL

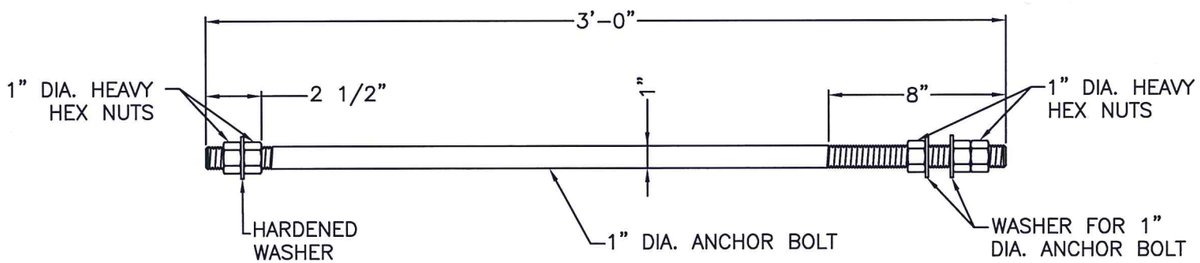


BASE PLATE DETAIL

PARTICULAR CARE SHALL BE TAKEN TO PROVIDE SUFFICIENT PREHEAT OF THE THICKER ELEMENT FOR THE SOUNDNESS OF THE WELD. OTHERWISE, USE 5/16" MIN. WELD.

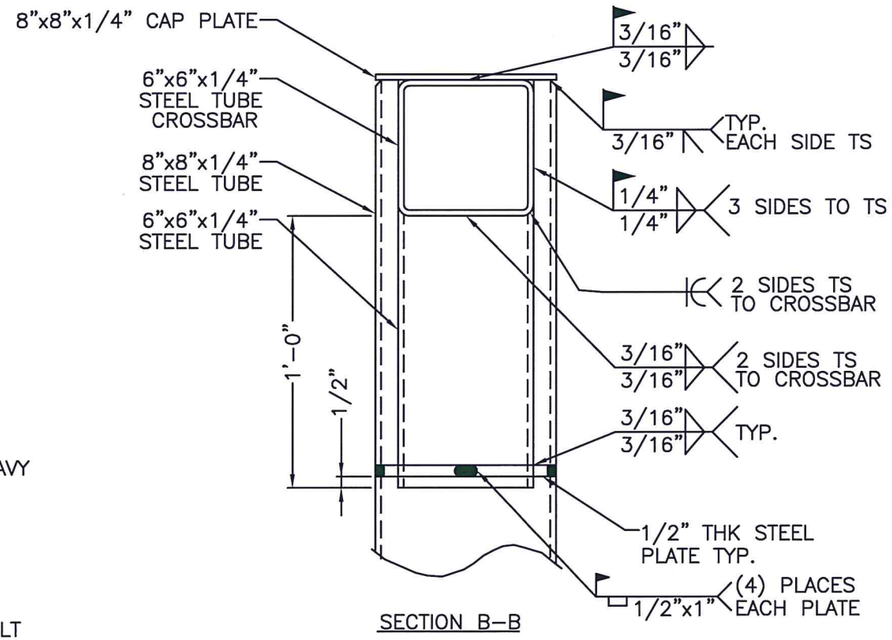


ANCHOR BOLT PROJECTION DETAIL



ANCHOR BOLT DETAIL
ALL-THREADED RODS A-36
ARE ACCEPTABLE REPLACEMENT

CUT SLOT IN TS 8X8 VERTICAL, SLEEVE IN TS 6X6, AND WELD AS SHOWN



SECTION B-B

INSTALLATION ADDRESS:

SHEETZ - #716
2201 NC 24-87
CAMERON, NC

CLIENT:

blair
IMAGE ELEMENTS
5107 KISSELL AVENUE
ALTOONA, PA 16601
PHONE (814) 949-8287
FAX (814) 949-8293

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SEAL & SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 016218 ENGINEER IMAD N. KASHIF

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LINK ENGINEERING

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North Carolina Certificate of Authorization No.: P-0483

Project Number:	Drawing Number:		
21-0162	B1071331		
SHT.	OF	DATE:	BY:
2	3	3/11/21	GHK

	PROJECT #	21-0162	OWNER:	SHEETZ	
	March 11, 2021			2201 NC 24-87	
	DRAWING #	B1071331		CAMERON, NC	
	WIND LOAD	**21.726**	PSF		
	WIND SPEED	120	MPH	CLIENT:	BLAIR SIGN COMPANY
	# COLUMNS	2	NCBC 2018/IBC 2015		5107 KISSELL AVENUE
	DESIGNER	GHK			ALTOONA, PA

ITEM	HEIGHT	WIDTH	SHAPE FACTOR	CENTROID HEIGHT	FACTORED AREA	TOTAL FORCE	MOMENT
SIGN	3.297	8.547	0.873	**1.649**	24.591	0.534	0.881
COLUMN	0.438	8.547	1.000	**0.219**	3.739	0.616	1.133
SIGN	7.964	10.354	1.000	3.982	82.456	2.407	13.167
COLUMN/CLADDING	3.302	1.771	1.000	1.651	**4.039**	2.495	21.260
OAH	15.000						

COLUMN CALCULATIONS (CODES P=PIPE;O=OTHER;T=TUBE)

=	ITEM	COLUMN WIDTH	COLUMN DEPTH	COLUMN WALL	Ixx COLUMN	DESIGN MODULUS COLUMN	OBLIQUE LOAD MOMENT	AVAILABLE FLEXURAL STRENGTH	COLUMN CENTER DISTANCE	OBLIQUE LOAD FACTOR	UNITY
P	SIGN		3.500	0.201	2.8	2.19	**0.881**	3.83	9.250	**1.448**	**0.295**
P	COLUMN		3.500	0.201	2.8	2.19	**1.133**	3.83			**0.361**
T	SIGN	8.000	8.000	0.233	70.7	17.67	9.53	44.14			0.216
T	COLUMN/CLADDING	8.000	8.000	0.233	70.7	17.67	15.39	44.14			0.349

BOLT CALCULATIONS

ITEM	MOMENT	BOLT SPACING	BOLTS/ PLATE	OBLIQUE TENSION/ BOLT	BOLT DIAM.	ALLOW. STRESS	ALLOWABLE TENSION
COLUMN	**1.133**	9.750	4.000	**0.697**	0.750	20.000	8.836
BASE PL.	**21.260**	15.000	4.000	**6.156**	1.000	19.100	15.001

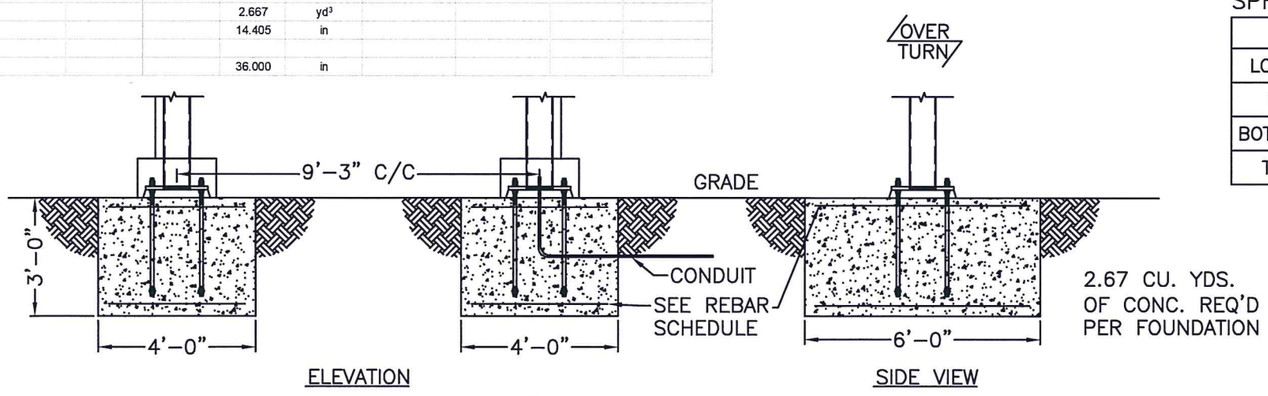
PLATE CALCULATIONS

ITEM	TENSION/ BOLT	MOMENT ARM	MOMENT PLATE	PLATE WIDTH	PLATE DEPTH	PLATE THICK.	MINIMUM THICK.
COLUMN	0.697	3.969	**2.767**	5.875	13.500	0.750	0.323
BASE PL.	6.156	5.250	**32.318**	10.906	19.000	1.000	0.811

ANCHOR BOLT PROJECTION	ANCHOR EMBEDMENT	ANCHOR BOLT MIN. LENGTH
6.000	12.247	19.000
		*USE 36" A.B.

SPREAD FOUNDATION		
MOMENT AT GRADE	**15.390**	
TOTAL FORCE	**1.806**	kip
WEIGHT OF SIGN	0.727	kip
SLAB WIDTH	4.000	ft
SLAB LENGTH	6.000	ft
SLAB DEPTH	3.000	ft
SLAB WEIGHT	10.800	kip
TOTAL WEIGHT	11.527	kip
OVERTURNING MOMENT	20.807	
FACTOR OF SAFETY	1.662	
e = OTM/WT	1.805	
L/2 - e	1.195	
SOIL PRESSURE 2*WT/(3*(L/2-e)*WIDTH)	1608	
CONCRETE	2.667	yd^3
MIN.. THICKNESS W/O REBAR	14.405	in
SQRT(M*12*6*1.7*.75/(.178*12*WIDTH)		
ACTUAL THICKNESS	36.000	in

BOTTOM STEEL AREA REQ'D PER FT OF WIDTH			**0.144**	
TOP STEEL AREA REQ'D PER FT OF WIDTH			**0.056**	
LONG BOTTOM STEEL	REBAR SIZE		4.000	
	WEIGHT PER FT		0.668	
	SPACING		12.000	in
	AREA PER BAR		0.200	in^2
BOTTOM STEEL AREA REQ'D PER FT OF WIDTH			0.144	
	AREA PER FT		0.200	
	EST NO. REQ'D		4.000	
	NUMBER REQ'D		4.000	
	LENGTH		5.500	ft
	WEIGHT		14.696	
	EDGE		6.000	
LONG TOP STEEL	REBAR SIZE		4.000	
	WEIGHT PER FT		0.668	
	SPACING		12.000	in
	AREA PER BAR		0.200	in^2
TOP STEEL AREA REQ'D PER FT OF WIDTH			0.056	
	AREA PER FT		0.200	
	EST NO. REQ'D		4.000	
	NUMBER REQ'D		4.000	
	LENGTH		5.500	ft
	WEIGHT		14.696	
	EDGE		6.000	
CROSS STEEL	REBAR SIZE		4.000	
	WEIGHT PER FT		0.668	
	SPACING		12.000	in
	LENGTH		3.500	ft
	EST NO. REQ'D		6.000	
	NUMBER REQ'D		6.000	
	EDGE		6.000	in
	WEIGHT		28.056	
	TOTAL WEIGHT		57.448	
FOUNDATION WIDTH			4.000	ft
FOUNDATION LENGTH			6.000	ft
CAISSON				
MOMENT			15.390	FT-KIP
FORCE			1.806	KIP
REFERENCE IBC 1807.3.2 & TABLE 1806.2				
ASSUME SOIL CLASS #4 SW, SP, SM, SC, GM & GC				
LATERAL BEARING PRESSURE - PSF/FT OF DEPTH			150.0	PSF/FT
S1			650.0	
DEPTH			6.500	FT.
DIAMETER			3.000	FT.
			8.522	FT.
			2.167	FT.
CALCULATED DEPTH			5.699	FT.
MINIMUM THICKNESS WITHOUT REINFORCEMENT			27.716	IN.
ACTUAL DIAMETER			36.000	IN.
CONCRETE			1.702	CU. YD.



2.67 CU. YDS. OF CONC. REQ'D PER FOUNDATION

OPTIONAL SPREAD FOUNDATION

REBAR SCHEDULE
SPREAD FOUNDATION

DO NOT WELD REBAR
3" MIN. CONC. COVER

PLACEMENT	SIZE	SPACING	QUANTITY
LONG BOTTOM STEEL	#4	12"	4
LONG TOP STEEL	#4	12"	4
BOTTOM CROSS STEEL	#4	12"	6
TOP CROSS STEEL	#4	12"	6

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21-0162	B1071331		
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3	3	3/11/21	GHK