

THE CITY OF NAPOLEON

BUILDING & ZONING DEPARTMENT

255 W. RIVERVIEW

(419)592-4010

Sign Permit Zoning Only

Page 1 of 1

Permit Number: SG2005-12

Printed: 5/16/2005

Property Address: 905 American Rd.

Applicant CAT Scale Company
Address: 515 Sterling Drive
PO Box 630
Walcott, IA 52773

Approval Date: 5/16/2005

Phone: 563-284-6263

Owners

Contractors

Address: CAT Scale Company
515 Sterling Drive
Walcott, IA 52773

Phone 563-284-6263

Fees and Receipts:

Number	Description	Amount
FEE2005-422	Sign (Auto)	\$30.60
Total Fees:		\$30.60

Description of work to be done: 106 sf sign

Zoning Permit Only!
other permits may be required



Applicant signature: _____ **Date:** _____

City of Napoleon
Engineering Department

905 AMERICAN

Office Use Only	
Permit No:	_____
App. Date:	_____
Est. Cost:	_____
Base Fee:	_____
Plus Fee:	_____
Total Fee:	_____

Application for Sign Permit

Owner Name: IRON GRIDDLE RESTAURANT

Owner Address: NAPOLSON OHIO

Contractor Name: THREE CORN LLC

Contractor Address: ARCHOLD OHIO PH: 419 966 4032

Location of Project: ST RT 24/6 BY-PASS @ AM RD EXIT

Additional Information: Sign Type - Post Wall Ground Awning

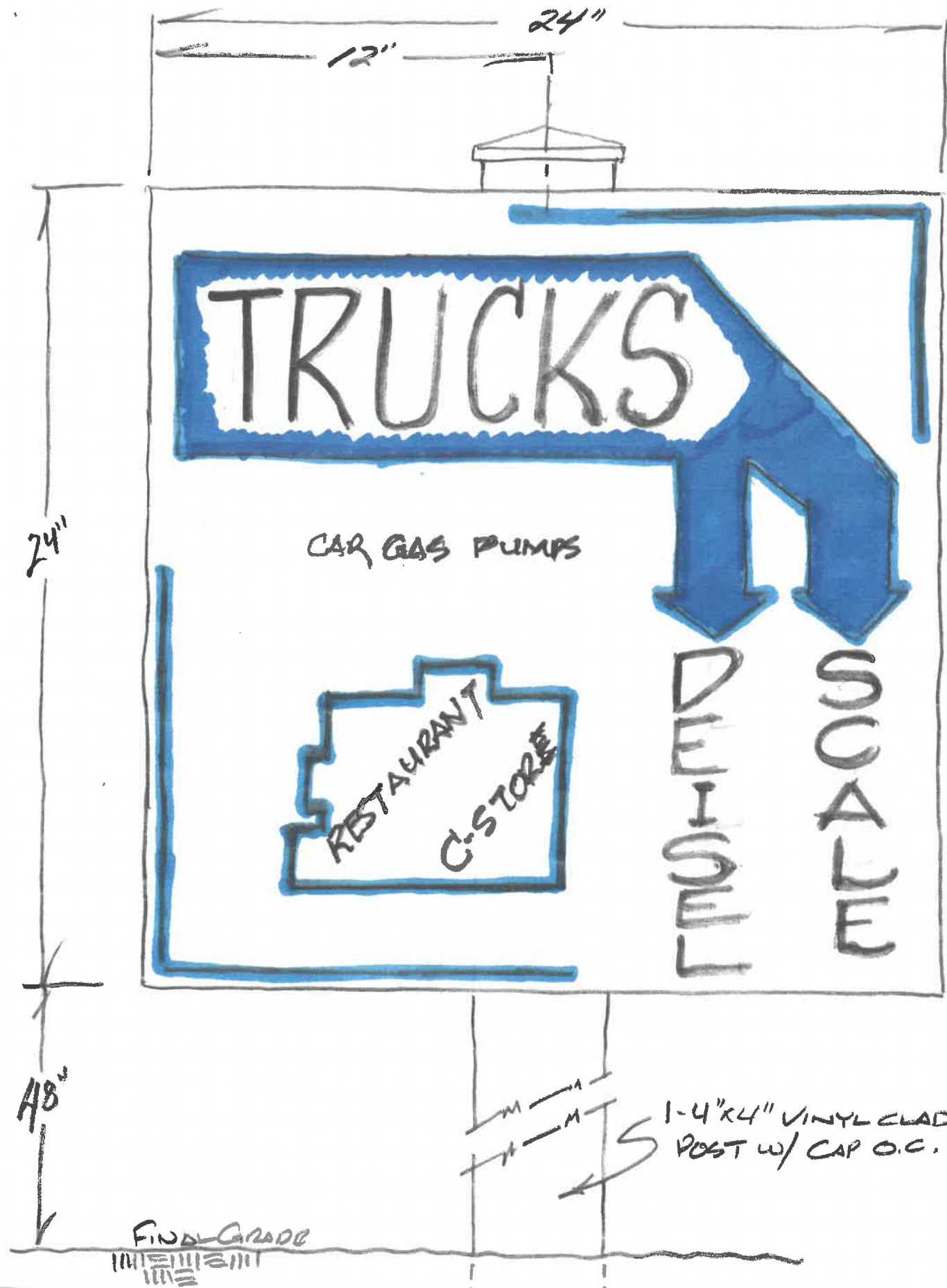
Dimensions: 2 @ 24" x 24" / 1 @ 48" x 96" Total S.F. 4' / 32'

Date: 9/13/05 Applicant Signature: Ron Bahler Three Corn LLC

Application must include a site drawing or a description of the location of the sign (where applicable) and a sketch of the proposed sign(s).

The permit fee is as follows: \$25.00 base which includes up to 50 square feet of sign area, plus .10 per square foot after 50 square feet, not to exceed \$100.00 in any case.

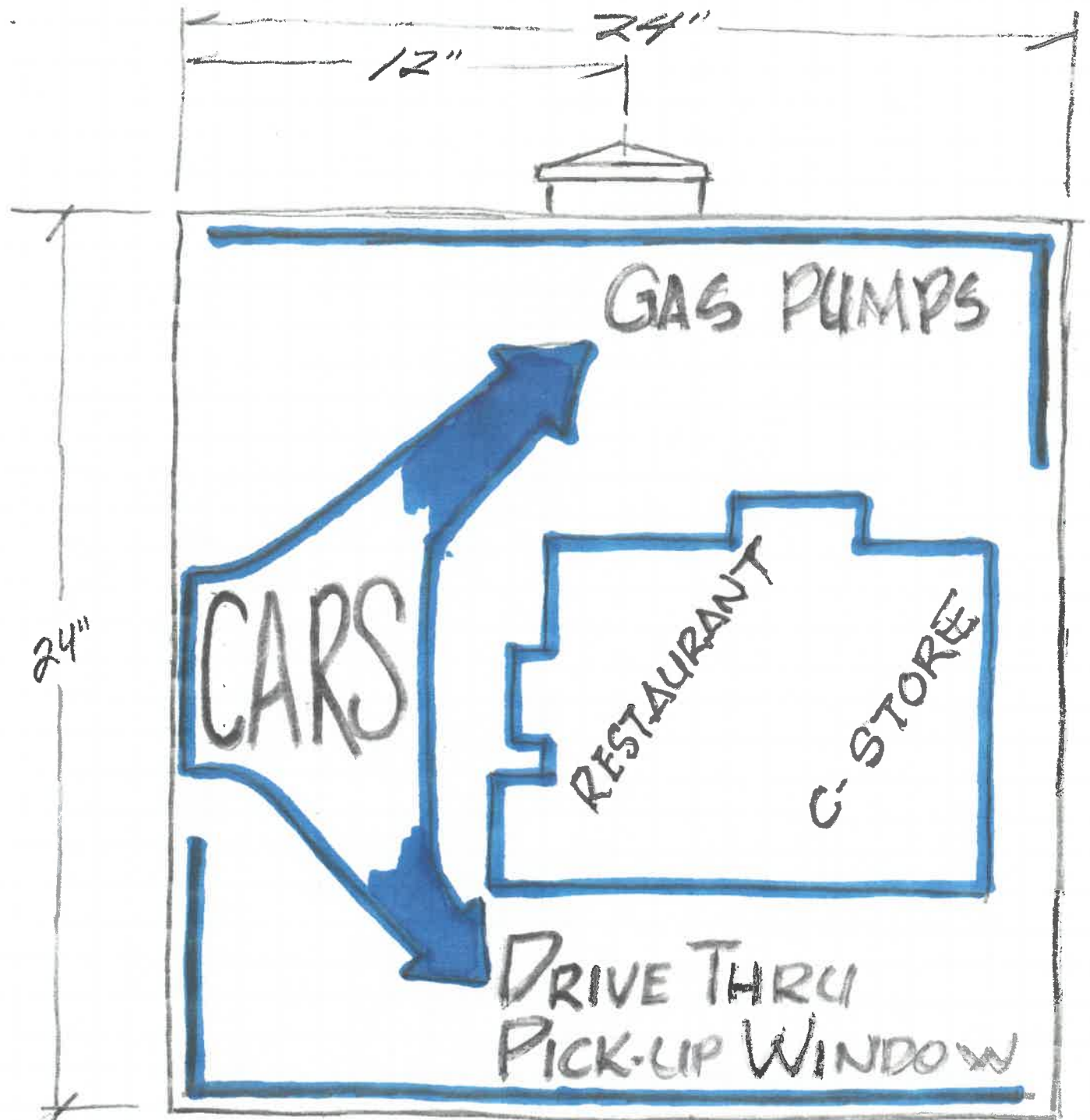
- (SIGN DESIGN DETAIL PREVIOUSLY SUBMITTED TO CITY)
- ⓐ - 4' x 8' DIRECTIONAL SIGN - SEE DRAWING FOR LOCATION
 - ⓓ 1 1/2' 2' x 2' " " - " " " "
- (SIGN DESIGN DETAIL ATTACHED)



D-1

EAST ENTRANCE SIGN

2/1/12



48"

1-4"x4" VINYL CLAD
POST W/ CAP O.C.

FRONT GRADIC

D-2

WEST ENTRANCE SIGN

2/8 9/13/15

Sign "A" (2)

U

Add: OPEN 24 HRS

419-592-1157



BAR & GRILL

Catering - All Occasions
Meeting Rooms

spelling

20'-0"

(100 SQFT)

2 SIGNS

1 MOUNTED @ EACH CORNER END

K

Sign B (1)

8'-6"

8'-0"

ENTRANCE
OPEN 24 HOURS

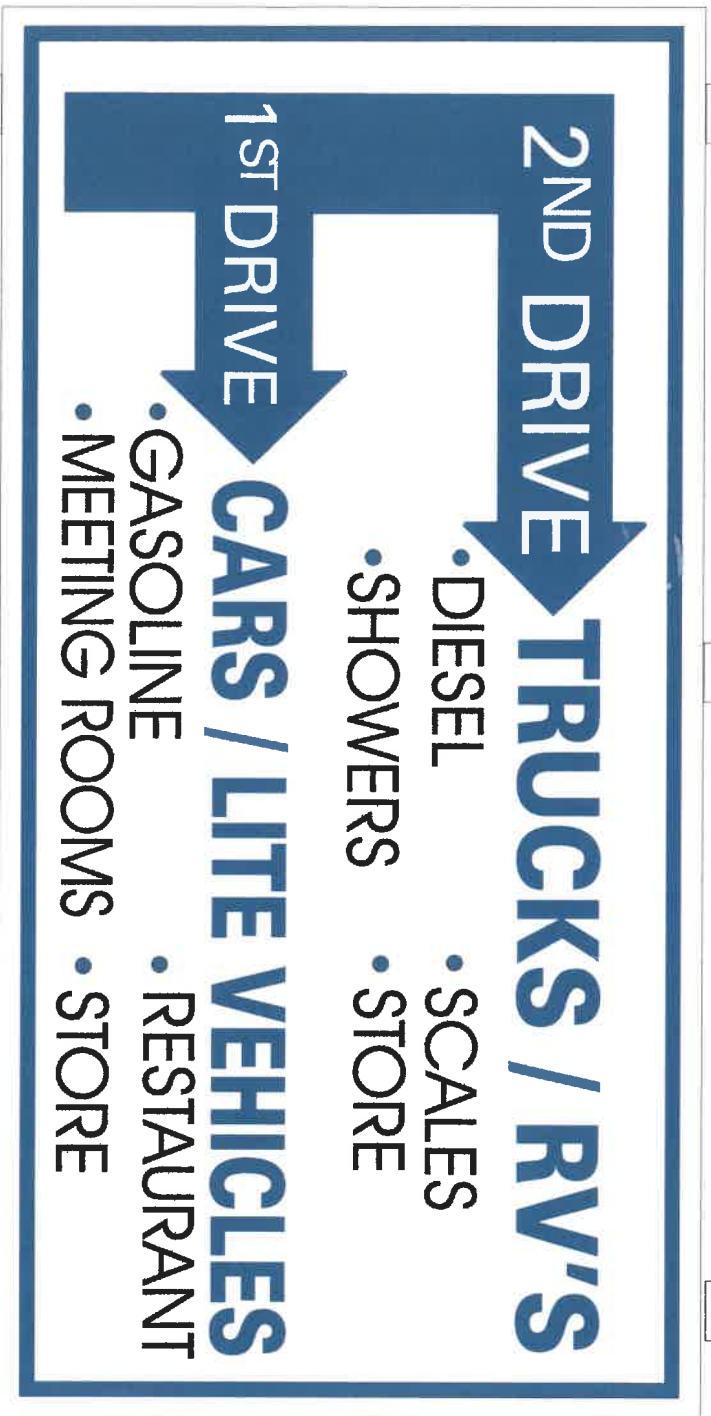
C - STORE
GASOLINE PURCHASES

FAMILY RESTAURANT
BAR & GRILL

CARRY OUT 419-592-1157

(2459PT)

8'0"



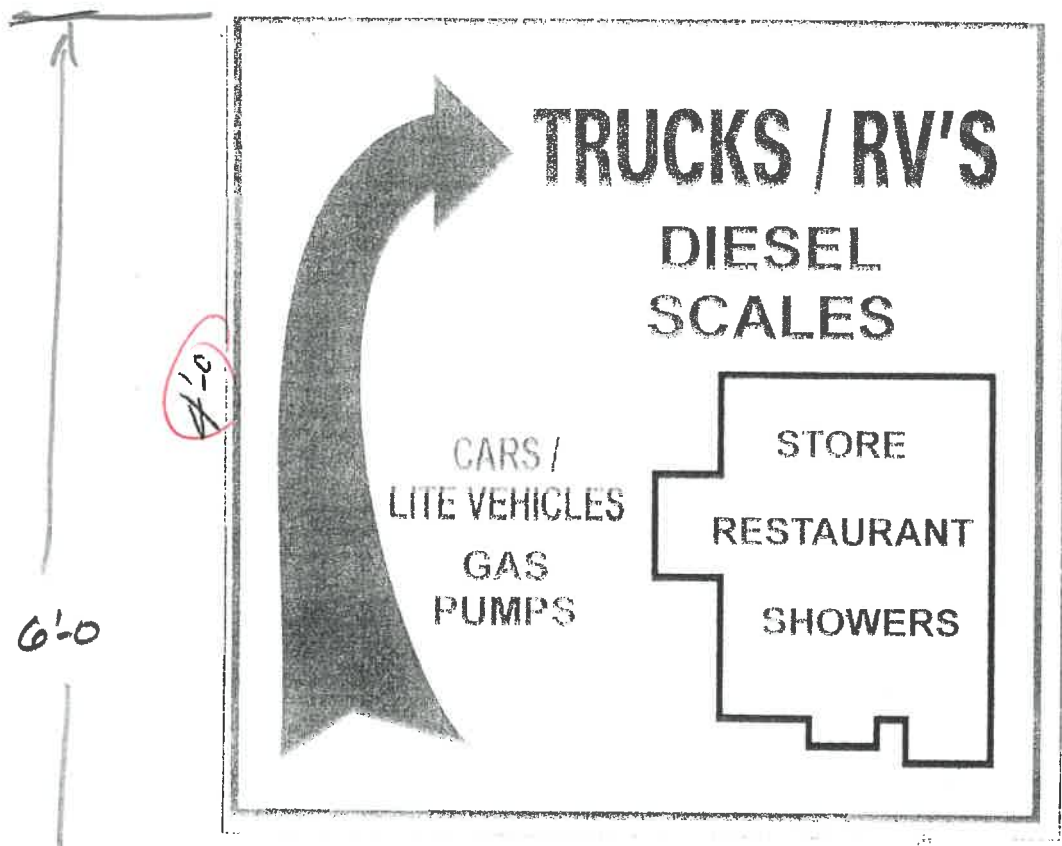
3 Vinyl clad posts w/ caps

(32 SQFT.)

Sign "C"

✓ For location

2nd copy
8/16



\$ 476.- + tax
 INCLUDES:
 2 VINYL POSTS/
 INSTALLATION

7 ALLIG ENTRANCES
 (COST)

4'-0"

✓ good size

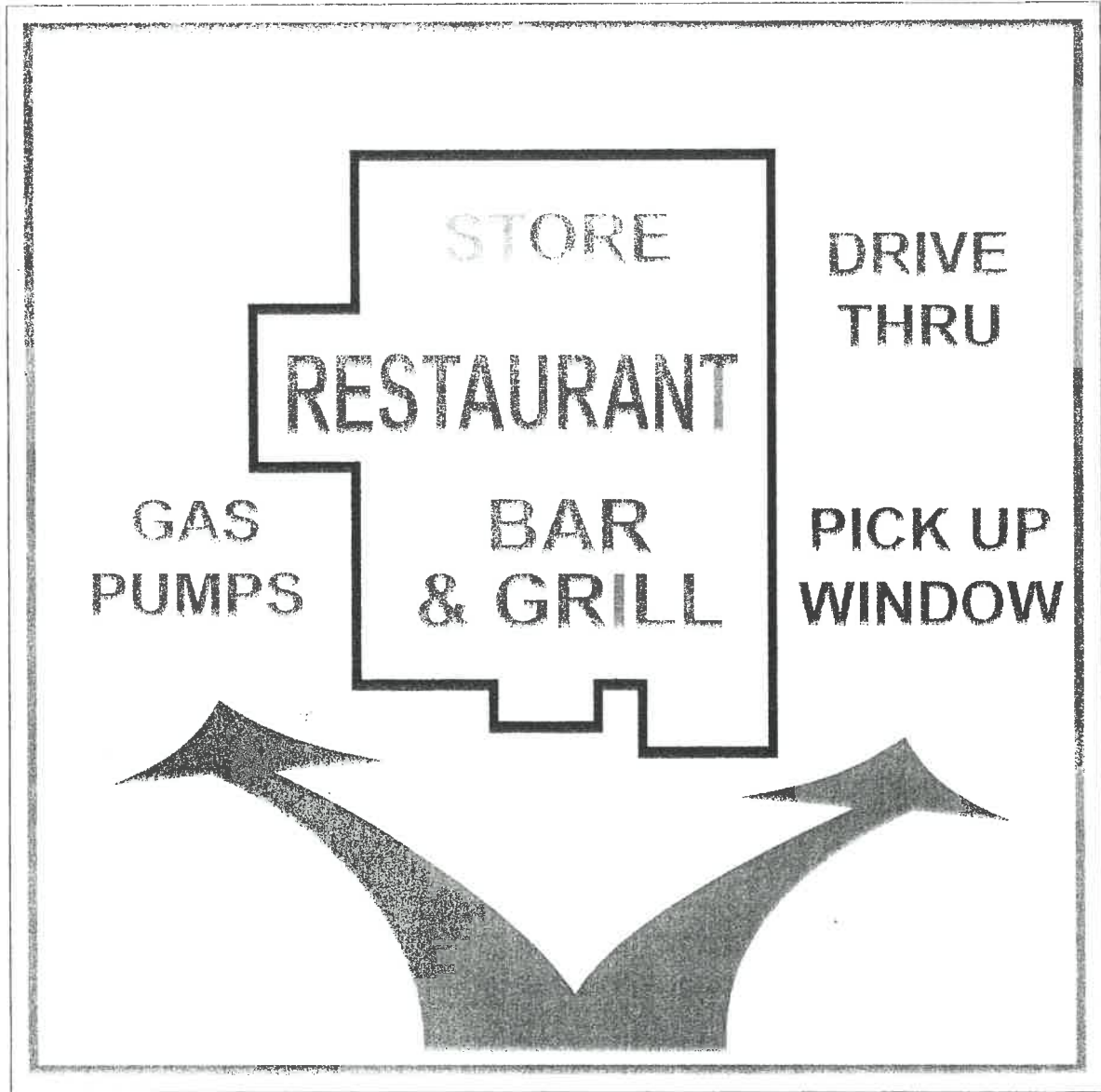
6'-0"

↓
 TO GRADE

MOUNTED ON 2 VINYL CLAD
 POST W/ CAPS

9'6" "D-1"
 (116 SQ FT)

4'-0"



4'-0"

↑
6'-0"
↓
TUGRAPO

MOUNTED ON 2 VINYL CLAD POST W/ CAPS

CAR ENTRANCE
(W 857)

SIGN "D-2"

(16 S.F.)

A & J IRON GIDDLES RESTAURANT
NAPOLSON OHIO 43545



SIGN "A" 5' X 20'
100 SQ FT
END OF BLDG: 1080 SQ FT

NORTH END VIEW



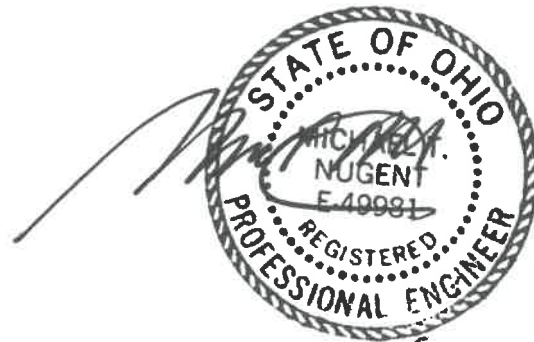
SIGN "B" 3' X 8'
24 SQ FT
SIDE OF BLDG: 900 SQ FT

SIGN CALCULATIONS
(80 MPH)

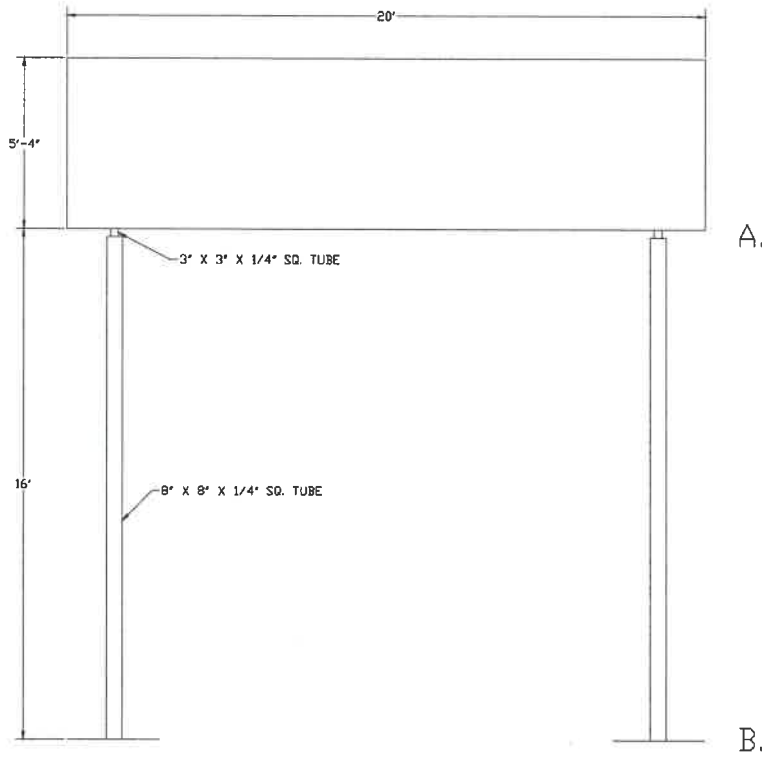
OWNER :North Point Travel Plaza

LOCATION :Napolean, OH

DATE :4/18/05



4-18-05



DL := 1000

#

F_{YTUBE} := 46

ksi

F_{YPLATE} := 36

ksi

f_c := 4000

psi

BOLTS A307B

WIND PER UBC AND IBC 80 MPH

$$C_e := 1.13$$

$$C_q := 1.4$$

$$q_s := 16.4$$

$$I := 1.0$$

$$P1 := C_e \cdot C_q \cdot q_s \cdot I$$

$$P1 = 25.9 \quad \text{psf}$$

WIND PER BOCA 80 MPH

$$P_v := 16.4$$

$$I_w := 1.0$$

$$K_2 := 0.87$$

$$GH := 1.29$$

$$C_f := 1.3$$

$$P2 := P_v \cdot I_w \cdot (K_2 \cdot GH \cdot C_f)$$

$$P2 = 23.9 \quad \text{psf}$$

USE: $P := P1$

$$P = 25.9 \quad \text{psf}$$

$$F_{SIGN} := P \cdot 5.3 \cdot 20$$

$$F_{SIGN} = 2750$$

#

$$F_{SIGNPERSIDE} := \frac{F_{SIGN}}{2}$$

$$F_{SIGNPERSIDE} = 1375$$

#

$$F_{COLUMN} := 2 \cdot 0.66 \cdot P \cdot 16$$

$$F_{COLUMN} = 548$$

#

$$F_{COLUMNPERSIDE} := \frac{F_{COLUMN}}{2}$$

$$F_{COLUMNPERSIDE} = 274$$

#

$$M_A := 5.75 \cdot \frac{1}{2} \cdot F_{SIGN}$$

$$M_A = 7907$$

ft-#

$$M_{APERSIDE} := \frac{M_A}{2}$$

$$M_{APERSIDE} = 3953$$

ft-#

$$M_B := M_A + 8 \cdot F_{COLUMN} + 16 \cdot F_{SIGN}$$

$$M_B = 56293$$

ft-#

$$M_{BPERSIDE} := \frac{M_B}{2}$$

$$M_{BPERSIDE} = 28146$$

ft-#

FOR 3"x3"x1/4" TUBE

$$A_3 := 2.59 \quad \text{in}^2$$

$$S_3 := 2.1 \quad \text{in}^3$$

$$I_3 := 3.16 \quad \text{in}^4$$

$$r_3 := 1.10 \quad \text{in}$$

FOR 8"x8"x1/4" TUBE

$$A_8 := 7.59 \quad \text{in}^2$$

$$S_8 := 18.8 \quad \text{in}^3$$

$$I_8 := 75.1 \quad \text{in}^4$$

$$r_8 := 3.15 \quad \text{in}$$

CHECK 3x3 TUBE

$$fb := \frac{M_{APERSIDE} \cdot 12}{S_3} \quad fb = 22591 \quad \text{psi}$$

$$fa := \frac{\frac{DL}{2}}{A_3} \quad fa = 193 \quad \text{psi}$$

$$\frac{fb}{0.6 \cdot 46000} + \frac{fa}{0.6 \cdot 46000} = 0.825 < 1.33 \quad \text{OK}$$

CHECK 8x8 TUBE

$$fb := \frac{M_{BPERSIDE} \cdot 12}{S_8} \quad fb = 17966 \quad \text{psi}$$

$$fa := \frac{\frac{DL}{2} + 16 \cdot 26}{A_8} \quad fa = 121 \quad \text{psi}$$

$$\frac{fb}{0.6 \cdot 46000} + \frac{fa}{0.6 \cdot 46000} = 0.655 < 1.33 \quad \text{OK}$$

CHECK COLUMN BASEPLATE

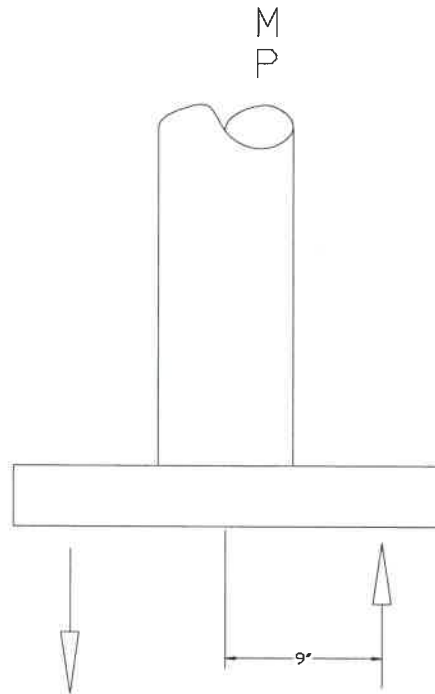
$$P := \frac{DL}{2} + 16.26$$

P = 916

#

M_{BPERSIDE} = 28146

ft-#



TRY: (8) 1 1/8" DIA. BOLTS

$$P_{BOLT} := \frac{M_{BPERSIDE} \cdot 12}{18.3} \quad (\text{NEGLECT DL})$$

P_{BOLT} = 6255

#

P_{ALLOW} := 1.33 · 0.6 · 36000 · 0.708

P_{ALLOW} = 20339

#

P.ALLOW > P.BOLT OK

$$f_b := \frac{3 \cdot P_{BOLT} \cdot (9 - 4) \cdot 6}{1.25^2 \cdot 18}$$

f_b = 20015 psi

F_b := 1.3 · 66 · 36000

F_b = 30888 psi

F_b > f_b OK

USE 1/2" GUSSETS AT EACH CORNER

3" TUBE WELD (CHECK 1/4" FILLET WELD ALL AROUND)

$$S := 3^2 + \frac{3^2}{3}$$

$$S = 12$$

$$W_b := \frac{M_{APERSIDE} \cdot 12}{S}$$

$$W_b = 3953 \quad \#/\text{in}$$

$$f_v := \frac{W_b}{.25 \cdot 707}$$

$$f_v = 22367 \quad \text{psi}$$

$$F_v := 0.3 \cdot 1.33 \cdot 60000$$

$$F_v = 23940 \quad \text{psi}$$

Fv > fv OK FOR E6010 OR E7018

8" TUBE WELD (CHECK 1/4" FILLET WELD ALL AROUND)

$$S := 8^2 + \frac{8^2}{3}$$

$$S = 85.333$$

$$W_b := \frac{M_{BPERSIDE} \cdot 12}{S}$$

$$W_b = 3958 \quad \#/\text{in}$$

$$f_v := \frac{W_b}{.25 \cdot 707}$$

$$f_v = 22394 \quad \text{psi}$$

$$F_v := 0.3 \cdot 1.33 \cdot 60000$$

$$F_v = 23940 \quad \text{psi}$$

Fv > fv OK FOR E6010 OR E7018

CHECK 5/8" BOLTS AT A

$$P_{BOLT} := \frac{M_{APERSIDE} \cdot 12}{4 \cdot 2.75}$$

$$P_{BOLT} = 4313$$

#

$$P_{ALLOW} := 1.33 \cdot 6.1 \cdot 1000$$

$$P_{ALLOW} = 8113$$

#

P.ALLOW > P.BOLT OK

SIGN FOUNDATION

THE FOUNDATION FOR THE SIGN IS THE SCALE PIT. THE PIER TO WHICH THE SIGN COLUMN BASE PLATE IS ATTACHED IS POURED MONOLITHICALLY ON THE EXTERIOR OF THE LONGITUDINAL PIT WALL AT THE EXIT END OF THE SCALES. THE BEARING AREA AND SECTION MODULUS OF THE WALL FOOTING IS 332 SQUARE FEET AND 4704 CUBIC FEET RESPECTIVELY. THE LOADS IMPOSED BY THE SIGN ARE VERY SMALL COMPARED TO THE SCALE LOADING.

SIGN FOUNDATION OK BY INSPECTION AND COMPARISON WITH THE SCALE FOUNDATION.