



Office of the City Clerk

City Hall
121 N. LaSalle St.
Room 107
Chicago, IL 60602
www.chicityclerk.com

Legislation Details (With Text)

File #: Or2017-567
Type: Order **Status:** Passed
File created: 11/8/2017 **In control:** City Council
Final action: 11/21/2017
Title: Issuance of permits for sign(s)/signboard(s) at 7601 S Cicero Ave - 870 sq. ft.
Sponsors: Curtis, Derrick G.
Indexes: SIGNS/SIGNBOARDS
Attachments: 1. Or2017-567.pdf

Date	Ver.	Action By	Action	Result
11/21/2017	1	City Council	Passed	Pass
11/14/2017	1	Committee on Zoning, Landmarks and Building Standards		
11/8/2017	1	City Council	Referred	

CITY COUNCIL
 COMMITTEE ON ZONING, LANDMARKS AND BUILDING STANDARDS

COUNCIL ORDER

RE: Approval of sign over 100 square feet in area or over 24 feet above grade

ORDERED, that the City Council hereby approves the following sign application submitted by:

Applicant:* pOtf* t^CUU ~ PffcA,^ U(T DVI

(* The Applicant is the owner of the real property or the business tenant of the real property. Do not list the sign contractor, sign erector, sign company or advertising entity in the above space.)

This Order approves the following sign in accordance with Municipal Code of Chicago Section 13-20-680:

Address of Sign: ~7(f?OI 15. C\Cf^YO (oVf^^d- Chicago, IL 606

Zoning District:

DOB Sign Permit Application #:

Sign Details: ly

1. On-premise /* OR Off-premise

2. Static sign OR Dynamic-image display sign

3. Number of sign faces ^

4. Projecting over the public way hJ (Yes or No) If yes. Public Way Use #:

5. Dimensions: Length?(^)^ feet Lo inches Height feet inches

Total square feet in area^1^ feet inches SJIQ CkjJrOJiJKSiCi

6. Height above grade: ~"7 feet inches

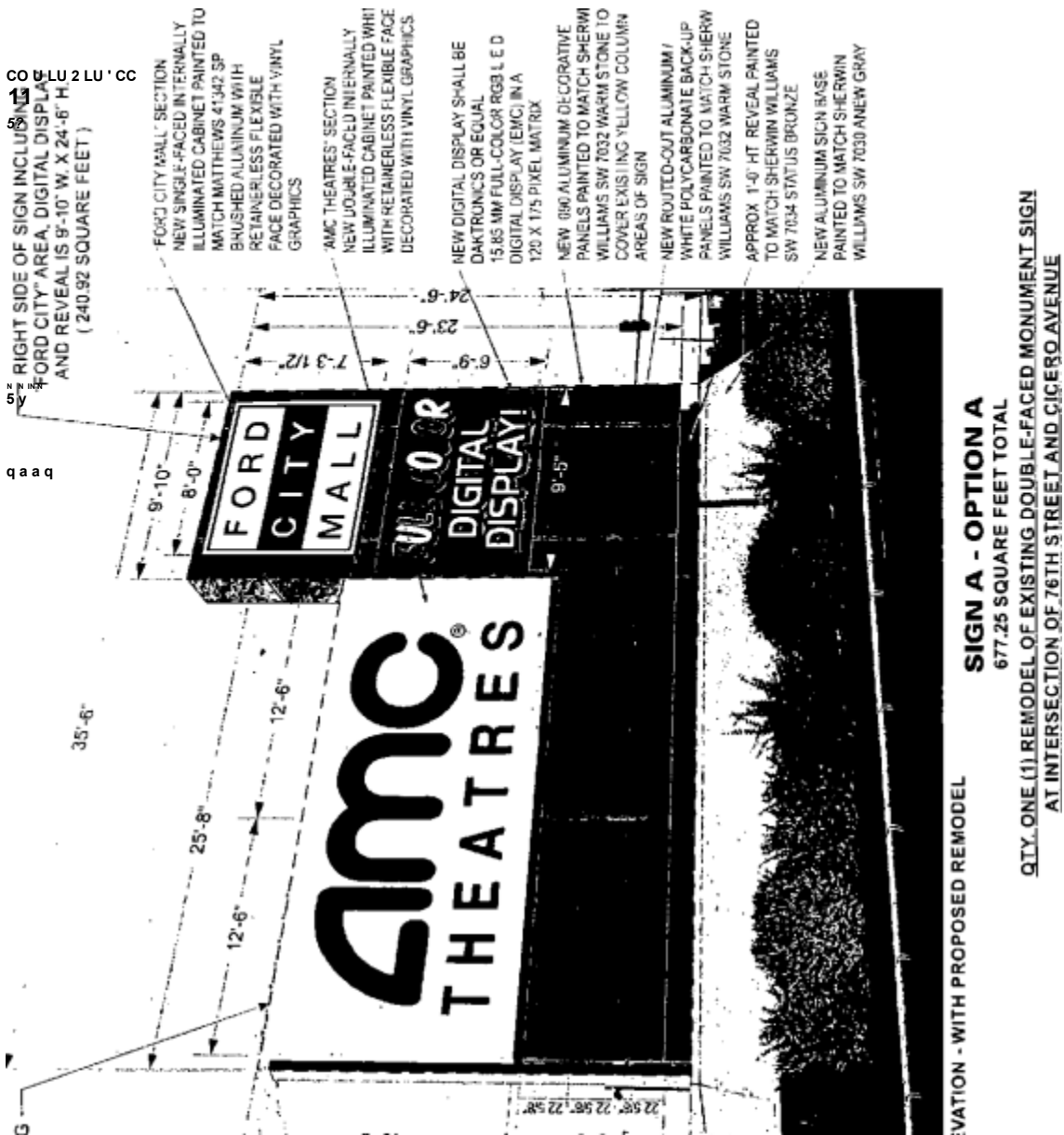
7. Elevation (side of building or lot where the sign will be erected): CDmCr JM"ko4 CI CC TO

8. Name of Sign Contractor/Erector: Aril (k.rjhf &LPjY\ Inc

To be legal, such sign shall comply with all provisions of Title 17 of the Chicago Municipal Code ("Zoning Ordinance") and all other provisions of the Municipal Code governing the permitting, construction and maintenance and removal of signs and sign structures. Failure of the applicant and the applicant's sijeassors to comply shall be grounds for invalidation or revocation of the sign permit.

/Zth

Alderman Ward



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||³

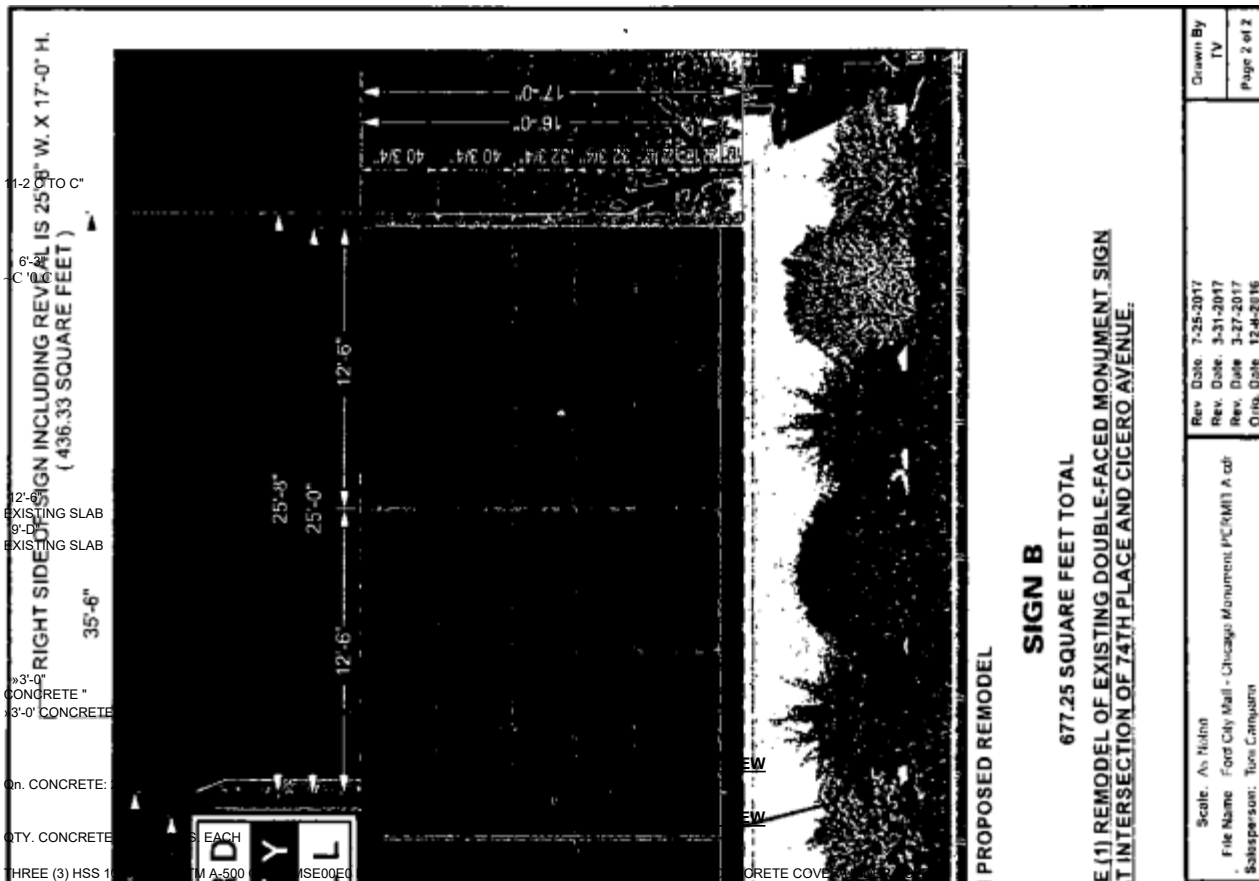
52 E

■ o E

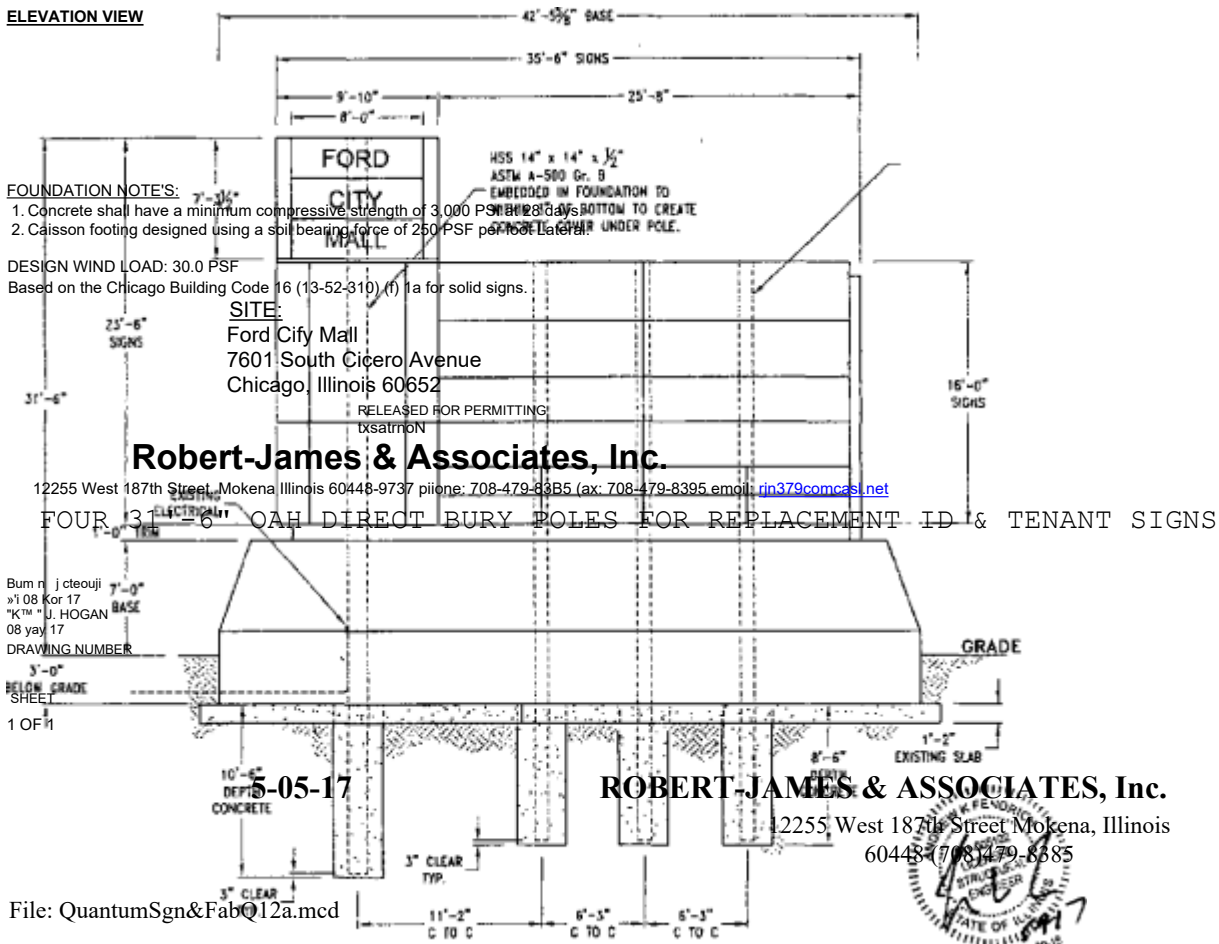
not

K

LT
13"



ELEVATION VIEW



FOUNDATION NOTES:

1. Concrete shall have a minimum compressive strength of 3,000 PSI at 28 days.
2. Caisson footing designed using a soil bearing force of 250 PSF per sq. ft. under pole.

DESIGN WIND LOAD: 30.0 PSF

Based on the Chicago Building Code 16 (13-52-310) (f) 1a for solid signs.

SITE:

Ford City Mall
7601 South Cicero Avenue
Chicago, Illinois 60652

RELEASED FOR PERMITTING
EXAMINATION

Robert-James & Associates, Inc.

12255 West 187th Street, Mokena Illinois 60448-9737 phone: 708-479-8385 (ax: 708-479-8395 email: rjn379comcas.net)

FOUR 3" CLEAR 6" OAH DIRECT BURY POLES FOR REPLACEMENT ID & TENANT SIGNS

Bum n j cleouji
11 08 Kor 17
"KTM" J. HOGAN
08 yav 17
DRAWING NUMBER

3'-0"
BELOW GRADE
SHEET
1 OF 1

1705040

ROBERT-JAMES & ASSOCIATES, Inc.

12255 West 187th Street Mokena, Illinois
60448-9737 (708) 479-8385

Sht 1 of 5

File: QuantumSgn&Fab012a.mcd

Site: Ford City Mall
7601 South Cicero Avenue Chicago, Illinois
60652

Project: Design of direct bury pole structures and caisson footings for replacement signage and base trim. Caisson footings will be set placed in cored holes thru existing 1'-2" thick slab footing where top of slab is 3'-0" below grade. This will be done for both the South and North elevation sign pylons. Drawing No. 1705040 rev. A

Design Wind Load : (PSF) WL := 30.0 Based on the Chicago BuildingCode 16 (13-52-310)(f) 1a.

Reference: Manual of Steel Construction, AISC 13th Edition.

Tube: ASTM A-500 Gr. B Fy = 46.0ksi.; Fb = 30.36 ksi.; Fv = 18.40ksi.

Reference : American Concrete Institute, Code 318.10 Rebar. ASTMA-615

Qade60 Fy =60.0 ksi. Concrete : 3,000 psi. compressive strength at 28 days.

Design Loads at Top of Footing, for the 16'-0" x 25'-0" Sign Section : (3'-0" Below Grade.)

17.0
SgnTrm = 242196.45 ft.Ibs.
Signage:
+ 10.0
SgnTrm := (17.0-25.67-WL)
Base = 38793.3 ft.Ibs.

+ 3.0

(Including 1 -0" of base trim and 8" of side trim.)

Base : Base := (7.0-28.42-WL)- '7.0

Moment: (ft.lbs.) MtTOF := SgnTrm + Base MtTOF = 280989.75

Shear: (lbs.) ShrTOF := (17.0-25.67*WL) + (7.0-28.42-WL) ShrTOF = 19059.9



081-005102 Y ~ LICENSED ' STRUSTUR ENONEFJ

EXPIRES: 11-30-18

MtPoleTOF = 93663.25

Design of Pole Structures at Top of Footing for the 16'-0" x25'-0" Sign Section Section Modulus of Tube : (in.*) HSS 10" x 10" x 3/8" wall - TubeSM := 40.4

Moment per Pole: (ft.lbs.) MtPoleTOF := MtTOF

Bending Stress : (psi.) fi := MtPoleTOF-12,, / TubeSM fi, = 27820.767

ShrPoleTOF = 6353.3

Area of Tube : (in.2) HSS 10" x 10" x 3/8" wall - TubeArea := 13.2

Shear per Pole: (lbs.) ShrPoleTOF := ShrTOF

ShrPoleTOF TubeArea fv = 481.311

Shear Stress : (psi.) fv :=

5-05-17

Sht 2 of 5

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OK
UCPoles = 0.943 < 100
30360 18400

Unity Check - Poles : UC Poles :

Ma := MtPoleTOF Va := ShrPoleTOF P := Va

_ Ma ~ Va

Design of Caisson Footings : Overturning Moment: (ft.Ibs.) Shear: (lbs.)

Applied Lateral Force ■ (lbs.)

Allowable Lateral Soil Pressure: (lbs.'ft.² per ft.)

Diameter of Round Footing: (ft.)

Distance in Feet From Ground Surface to Point of Application of "P"

Depth of Footing Below the Top of the Existing Slab : (ft.) (3'-0" below grade.)

Ma = 93663.25 Va = 6353.3 P = 6353.3 LP := 250

bl := 3.0

h = 14.742

dl := 8.5

S3:=dlLP

S3 = 2125

Allowable Lateral Soil Bearing Pressure Pursuant to the 2012 International Building Code Section 1807.3 .2.2 and Table 1806.2.

Required Depth : (ft.)

OK

d2:= 4.25-

Ph

S3-M

d2 = 7.902 < dl = 8.5

Check Tensile Stress in Footing:

Overturning Moment About Heel Point: (ft.Ibs.) Mh := Ma + (Va-dl) Treat as a cantilever at bottom.

c Ji-(bl2)

Sw := —: —

32

4>Ft:= 0.65-(5-Vfc) (Mh-12)"

Compressive Strength of Concrete: (psi.) Yield Strength of Rebar: (psi.)

Section Modulus of Footing: (in.³)

Allowable Concrete Stress: (psi.)
Sw

Tensile Stress in Concrete: (psi.)

ft:=

(bl 121 - 10.0

Design of Reinforcing Steel in Caisson : Moment for USD Design : Mu := 1 7-Mh
coeff := •
coeff = 0.112

$$d := [(bl12) - 80) Mu12$$

To Plot for "ju ":

$$Mh = 147666.3$$

$$fc := 3000 \quad fy := 60000$$

$$Sw = 4580.442$$

$$o>Ft = 178.01$$

ft = 386.861 > dtFt = 178.01 REBAR REQUIRED FOR STRESS

$$Mu = 251032.71 \quad d = 15.8$$

$$ju := 0.88$$

fc-bl-12-d

5-05-17

Sht. 3 of 5

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Required Area : (in.²) Reinforcement Requirement:

Use yield strength of direct bury tube to check. Yield Strength of Tube (psi.)

$$As := \frac{Mu-12}{jufyd-0.90}$$

As = 5.233 < TubeArea = 13.2 No rebar required with the direct bury tube.

fy := 46000 As = 5.233

Quantity of Concrete : (yds.³) CY :=
CY - 2.015 Each

$$f \frac{Tt-bl dl ^ 4-27 j}{2} = 0.83 -(dl - 0.25) 27$$

Note : Keep bottom of tube 3" from bottom of footing to create concrete cover for water exclusion.

Design Loads at Top of Footing for the 23'-6" x 9'-1 0" Section : (3'-0" Below Grade.)

$$24^{15} j + 10.oj \frac{SgnTrm}{2} = 160757.363 \text{ ft.Ibs.}$$

Base = 15588.3 ft.Ibs

Signage: SgnTrm := (24.5-9.83 WL)
7.0 ,
+ 3.0
2
(Including 1'-0" of base trim.)

Base: Base := (7.0-11.42-WL)

Moment: (ft lbs.) MtTOF := SgnTrm + Base MtTOF = 176345.663

Shear: (lbs.) ShrTOF := (24.5-9.83-WL) + (7.011.42 WL) ShrTOF = 9623.25

Design of Pole Structures at Top of Footing for the 23'-6" x 9'-1 0" Section :

Section Modulus of Tube: (in.³) HSS 14" x 14" x 3/8" wall - TubeSM := 82.5

$$\text{Bending Stress : (psi.) } f_t := \frac{MtTOF-12}{TubeSM} = 25650.278$$

Area of Tube : (in.²) HSS 14"x14"x 3/8" wall - TubeArea := 18.7

$$\text{Shear Stress : (psi.) } f_v := \frac{ShrTOF}{TubeArea} = 514.612$$

$$\text{Unity Check - Poles : } UCPoles := \frac{f_t}{30360} + \frac{f_v}{18400} = 0.873 < 1.00 \text{ OK}$$

Design of Caisson Footing :

Overturing Moment: (ft.lbs.)	Ma := MtTOF	Ma = 176345.663
Shear: (lbs.)	Va := ShrTOF	Va = 9623.25
Applied Lateral Force : (lbs.)	P := Va	P = 9623.25
Allowable Lateral Soil Pressure : (lbs./ft. ² per ft.)		LP := 250

Sht4 of 5
5-05-17

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Ma Va
S3 := dl-LP
OK

Diameter of Round Footing: (ft.)
h:-

Distance in Feet From Ground Surface to Point of Application of "P"

Depth of Footing Below the Top of the Existing Slab : (ft.) (3'-0" below grade.)

Ph S3bl
d2:= 4.25-

Allowable Lateral Soil Bearing Pressure Pursuant to the 2012 International Building Code Section 1807.3.2.2 and Table 1806.2.

Required Depth : (ft.)

$$bl := 3.0 \quad h = 18.325$$

$$dl := 10.5 \quad S3 = 2625$$

$$d2 = 9.756 < dl = 10.5$$

Check Tensile Stress in Footing:

Overturing Moment About Heel Point: (ft.lbs.) Mh := Ma + (Vadl) Treat as a cantilever at bottom.

Compressive Strength of Concrete: (psi.)

$$\frac{71(bl12)''}{32}$$

32

$$rJ)Ft := 0.65-(5-v/fc)$$

$$(Mh-12)'' \quad Sw$$

Yield Strength of Rebar: (psi.)

Section Modulus of Footing: (in.³) Sw :=

Allowable Concrete Stress : (psi.)

Tensile Stress in Concrete: (psi.) ft :
(bl-12) - 14.0

Design of Reinforcing Steel in Caisson .

Moment for USD Design : Mu := 1.7-Mh
coeff :=
coeff = 0.165

$$d := [(bl\ 12) - .80] Mu^{1/2}$$

To Plot for "ju":

$$Mh = 277389.787$$

$$fc := 3000\ fy := 60000$$

$$Sw = 4580.442$$

$$d \gg Ft = 178.01$$

ft = 726.715 > 4 * Ft = 178.01 REBAR REQUIRED FOR STRESS

$$Mu = 471562.639\ d = 17.8$$

$$ju = 0.65$$

fc-bl-12-d

Use yield strength of direct bury tube to check.

As:=

Yield Strength of Tube ■ (psi.) Required Area : (in.²)

Reinforcement Requirement

Mu-12
jufy-d-0.90

As= 11.814 < TubeArea= 18.7 No rebar required with the direct bury tube.

fy := 46000 As= 11.814

Sht5 of 5

5-05-17

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f -> \R.bl"dl

I.17--(dl - 0.25)

CY = 2.229

Quantity of Concrete . (yds.³) CY:=
27

V 4-27

Note . Keep bottom of tube 3" from bottom of footing to create concrete cover for water exclusion.

«4'-10" EXISTING SLAB

1 !

1T-2" C TO C "

6-3" C TO C

6-3" _ "C TO C



.2-6" EXISTING SLAB
9'-0" EXISTING SLAB

T"
»3'-0"
CONCRETE
»3'-0" J
CONCRETE

PLAN VIEW

QTY. CONCRETE: 2.3 CU. YDS.

PLAN VIEW

QTY. CONCRETE: 2.0 CU. YDS. EACH

-42'-5%" BASE --35'-6" SIGNS -

"C TO C"

6'-3"

I,
-9'-10" - 6"-0"
FQRD
CIT Y
MAI _L
6'-3
C TO C "

HSS 14" x 14" t y2" ASTM A-500 Gr B - EMBEDDED IN FOUNDATION TO WITHIN 3" OF BOTTOM TO CREATE CONCRETE COVER UNDER POLE.

ELEVATION VIEW

GRADE
S0> .



HSS 14" x 14" t y2" ASTM A-500 Gr. i - EMBEDDED IN FOUNDATION TO WITHIN 3" OF BOTTOM TO CREATE CONCRETE COVER UNDER POLE.

SITE:
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7601 South Cicero Avenue
Chicago, Illinois 60652

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FOUNDATION NOTES:

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DESIGN WIND LOAD: 30.0 PSF

Based on the Chicago Building Code 16 (13-52-310) (f) ta for solid signs.

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O	DATE	DESIGNER	HOGAN
V			APPROVED

Robert-James & Associates, Inc.

12255 West 187th Street, Mokena Illinois 60448-9737 phone: 708-479-8385 fax: 708-479-8395 email: rjo37@comcast.net

D=1 08 U<7 17
J. GREENAN
SOU NONE
SHEET

1 OF 1

REV.

A

FOUR 31'-6" OAH DIRECT BURY POLES FOR REPLACEMENT ID & TENANT SIGNS

1 May 17

DRAWING NUMBER

1705040