



City of Chicago



Or2014-41

Office of the City Clerk

Document Tracking Sheet

Meeting Date:	2/5/2014
Sponsor(s):	Burke (14)
Type:	Order
Title:	Issuance of permits for sign(s)/signboard(s) at 4357 S Archer Ave
Committee(s) Assignment:	Committee on Zoning, Landmarks and Building Standards

City Council

Meeting Date: 2/5/14

Committee on Buildings

(signs)

ORDERED, That the Commissioner of Buildings is hereby directed to
issue a sign permit to: (Contractor's name and address)

AD DELUXE SIGN CO
23856 WEST ANDREW ROAD SUITE 103
PLAINFIELD IL 60585

for the erection of a sign / signboard over 24 feet in height and / or over 100
square feet (in area of one face) at: (Business NAME & ADDRESS)

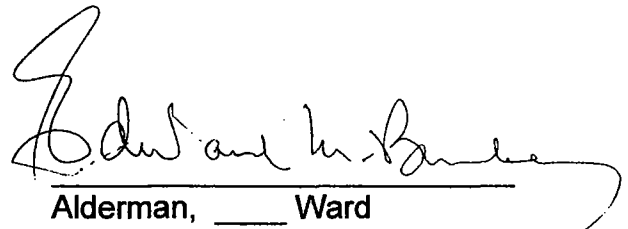
CAR OUTLET
4357 SOUTH ARCHER AVENUE
CHICAGO, IL 60632

Dimensions: Leng' 23'-0" Height 6'-6"

Height above grade / roof to top of sign 32' FROM GRADE TO BOTTOM

TOTAL SQUARE FOOT AREA 150 SQUARE FEET

Such sign(s) shall comply with all applicable provisions of TITLE 17 of the
Chicago Zoning Ordinance and all other applicable provisions of the Municipal
Code of the City of Chicago governing the construction and maintenance of
outdoor signs, signboards and structures.


Alderman, ____ Ward



Sign Permit Application

APPROVAL NUMBER	APPLICATION NUMBER 100524516	ANNUAL FEE	WORK CODE	DRAWINGS ATTACHED ☐ YES ☐ NO
DATE OF APPLICATION 01/20/2014			TYPE OF SIGN FLAT OR BOX	
ADDRESS OF SIGN 4537 S ARCHER AVE, 60632-			LENGTH 23	HEIGHT 6
BUILDING	ORIGINAL PERMIT NUMBER		AREA 150	WEIGHT 500
TYPE OF PERMIT NEW CONSTRUCTION (SIGN)			SIGN HEIGHT ABOVE GRADE/ROOF 32	
PAYER OF ANNUAL INSPECTION STILLMAN, HOWARD 2917 WEST IRVING PARK ROAD CHICAGO, IL 60618 (773)737-4843			SHAPE OF SIGN REGULAR	
SIGN MANUFACTURER AD DELUXE SIGN COMPNY			SIGN WILL READ CAR OUTLET	
ADDRESS WHERE SIGN CAN BE SEEN PRIOR TO ERECTION			NO. OF LAMPS 48	
TICKET NUMBER 0			TOTAL WATTAGE 4800	
REINSPECTION CONTROL NUMBER			TYPE OF LAMP FLUORESCENT	
TYPE OF SUPPORT FOR SIGN POLE			NO. OF BALLAST/TRANSFORMERS 8	
SIGN BOARD SUPPORT MEMBERS STEEL			INPUT OF TRANSFORMERS 120	
ANNUAL FEE CONSTRUCTION FEE 1017 B FEE TOTAL FEE AMOUNT PAID BALANCE DUE			CONTRACTOR WILL INSTALL ☒ FEEDERS ☐ CUSTOMER LEADS	
200.00 200.00 200.00 200.00			TYPE OF SWITCH KNIFE	
Check # for Zoning			LOCATION OF SWITCH OUTSIDE SIGN	
Check # for DCAP			SIGN LOCATION FURNISH AND INSTALL 6'-6" X 23' DOUBLE FACE POLE SIGN ON TWO POLES 32' FROM GRADE TO BOTTOM OF SIGN. COPY WILL READ "CAR OUTLET".	

The undersigned certify that the statements in this application are true and correct and that all work done under the proposed permit will conform to the requirements of the Chicago Municipal Code

ELECT CONTR FULLER-BURRELL ELECTRIC CONTRA	REG. NO. E68756
ADDRESS 1424 N. LUNA AVE. CHICAGO, IL 60651-	ELECTR
SUPERVISOR SIGNATURE <i>Sam Burrell</i>	

BOND NO.	REG. NO. N92559
SIGN ERECTOR AD DELUXE SIGN CO INC.	SIGNER
ADDRESS 23856 W ANDREW RD STE103 PLAINFIELD IL, 60585-	
SIGNATURE <i>Michael Merchant</i>	

The permit issued on this application will authorize only signs here applied for. If other signs are to be erected they must be covered by additional permits

City of Chicago
Rahm Emanuel, MayorDepartment of Buildings
Michael Merchant, Commissioner

TYPE OF BUSINESS
COMMERCIAL Other: **CAR DEALERSHIP**
Name: **4537 S ARCHER AVE**
LIC #:
Renewal

Projects Over:

☐ Private Property

☒ Public Way Grant Permit #: **1110394**

☐ Planned Development/Manufacturing PMD/PD#:
Zoning District: **C1** Other: **C1-2**

TYPE OF SIGN:

☐ ADVERTISING

☒ ILLUMINATE

☐ MOVEABLE

☒ BUSINESS

☐ FLASHING

TOTAL STREET FRONTAGE OF LOT (IN FEET) **100**

TOTAL AREA OF NEW SIGN (SQ.FT.) **150**

TOTAL AREA OF ALL SIGNS ON LOT (SQ.FT.) **150**

HEIGHT OF SIGN ABOVE GRADE (TO TOP) **38ft 6in**

DISTANCE OF CURB LINE OUTER EDGE (ft) **19**

DISTANCE OF STRUCTURE INNER EDGE (ft) **30**

DISTANCE FROM (ft):

A. PUBLIC PARK (OVER 10 ACRES) **1,000**

B. EXPRESSWAY (IF LESS THAN 1,000 FT.) **1,000**

C. RESIDENCE DISTRICT (ADVERTISING SIGNS ONLY) **150**

IF REPLACEMENT SIGN OR CHANGE OF FACE, WHAT DOES THE EXISTING SIGN READ?

Original Payee:

Landmark Hold: ☐ Status:

ZONING (OFFICE USE ONLY)

SIGN BOND REQUIRED? ☐ YES
COUNCIL ORDER REQUIRED ☒ YES
IS SPECIAL PERMISSION REQUIRED FROM CHIEF ELECTRICAL
☒ YES
IF YES, ATTACH LETTER OF REQUEST

TIME STAMP

SIGN CLERK

APPROVED FOR PERMIT

REMARKS

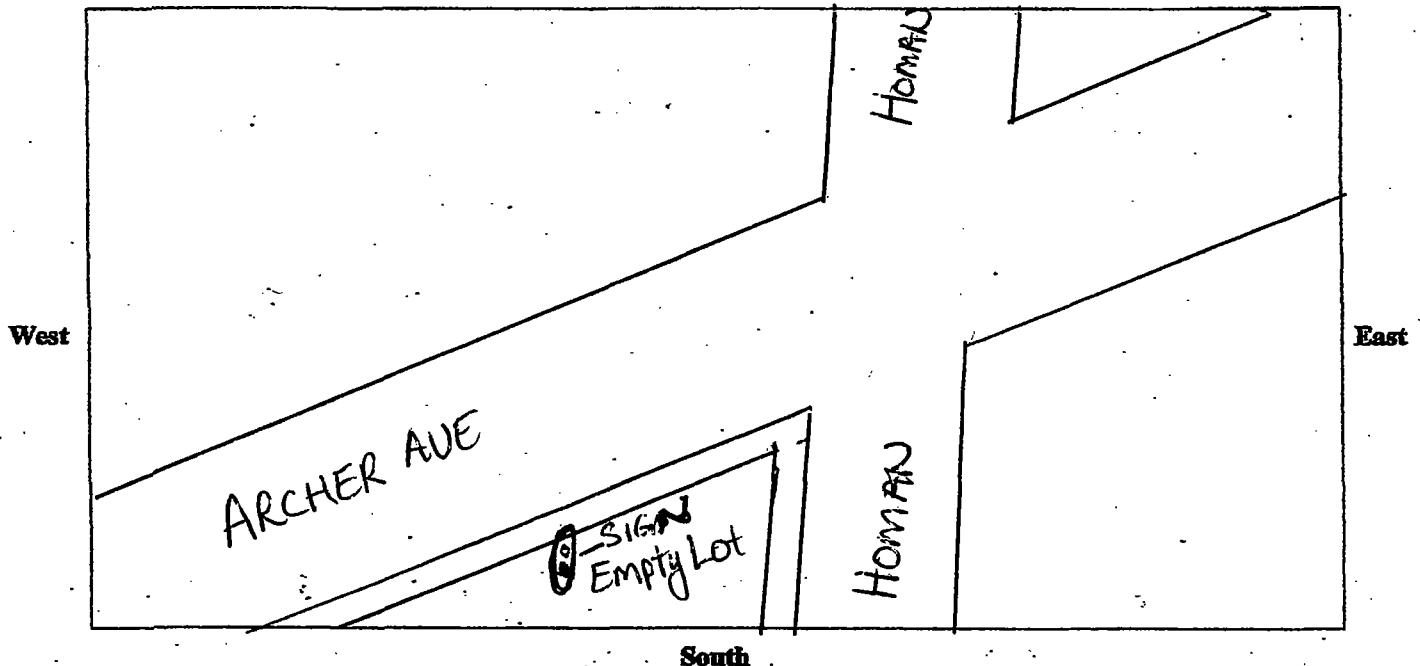
CITY OF CHICAGO
DEPARTMENT OF ZONING AND LAND USE PLANNING
SIGN SITE PLAN

(ALL INFORMATION MUST BE COMPLETED AND LEGIBLE).

Site Address: 4537 S ARCHER AVE CHICAGO, IL 60632 of 1 applications

Sign Company: AD DELUXE SIGN CO Rep Name: AHMET DEMIR

Phone (815) 556-8469 EXT NA (Below: Building, streets and location of sign on lot or structure)
North



SIGN USE:

Bus. ID (On-premise) ☒

Bus. ID (Off-premise) ☐

Adve. ☐ (On-premise)

PERMIT TYPE:

New Construction ☒

Change of Face ☐

Previous Permit # ☐

TYPE OF SIGN:

Flat Wall ☐

Freestanding ☐

Awning ☐

Marquee ☐

High Rise Building ☐

Projecting Private ☐

Projecting Public Way ☒

Public Way Use - Permit # 1110394

SIGN CHARACTERISTICS:

Non-Illuminated ☐

Illuminated ☒

Changing Image ☐

Video Display ☐

Flashing ☐

DISTANCE FROM:

Curb Line: 9'

Expressway, Toll Roads

or Major Route

(n/a if over 1000 ft) 1000

Park (over 10 acres) 1000

Residential Zone 150

Existing Off-premise on
same side of street: NO

TOTAL SQUARE FOOTAGE:

Square footage of this proposed sign 150

Gross area of all proposed signs 0

Area of all existing signs

(not including proposed) on Zoning Lot 150

Signature: Ahmet Demir

Date: 1-20-14

[illegible]

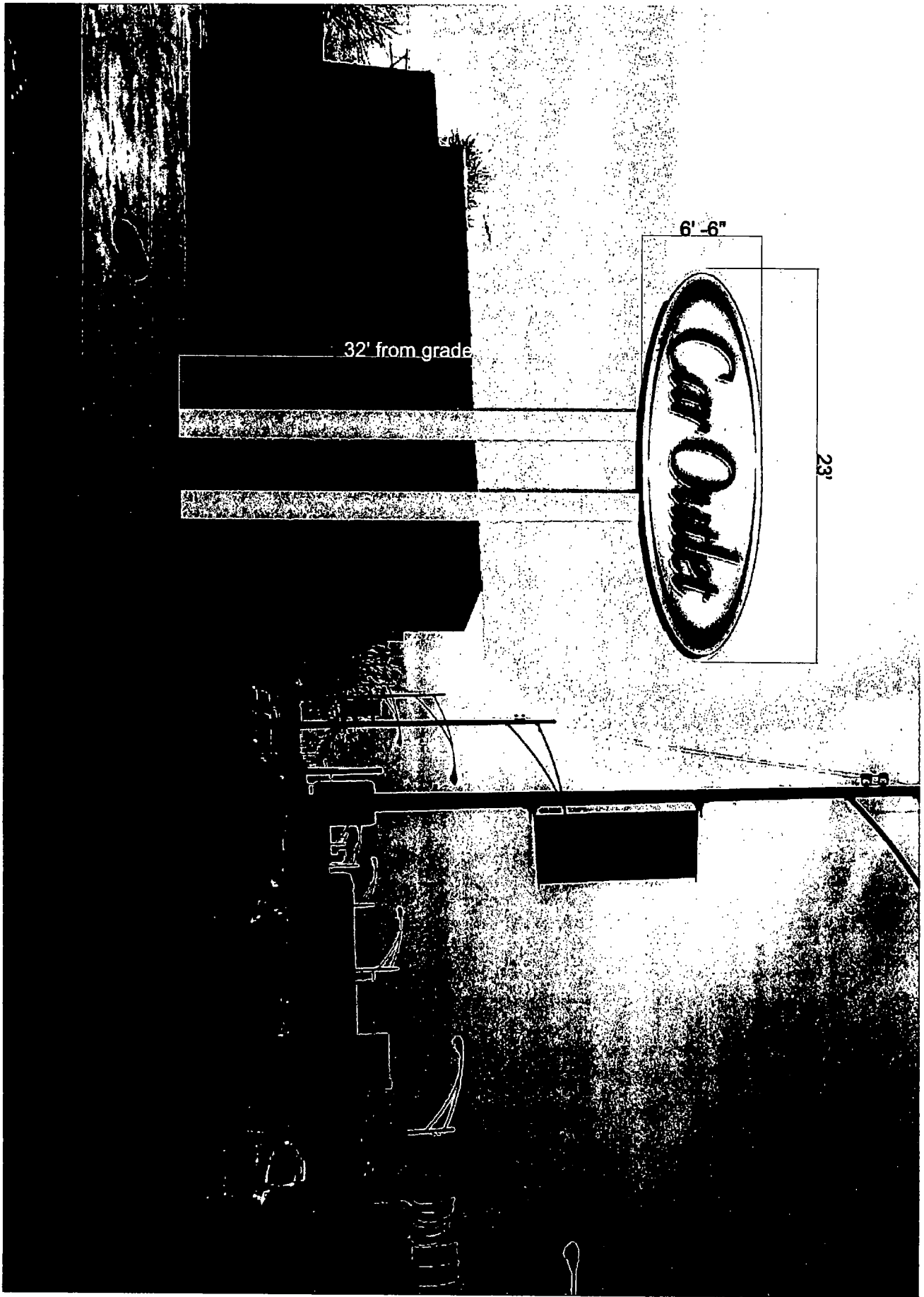
01/09/2014 - Stan Adams

DBA Name	<u>4537 S. ARCHER, LLC</u>
Location	<u>4537 S. ARCHER AVE.</u>
Zip Code	<u>60632</u>
Account Number	<u>66905</u>
Site Number	<u>13</u>
Area	<u>PERMIT</u>
Permit Type	<u>SIGN</u>
Permit Number	<u>1110394</u>

Next steps: Department of Buildings -- Permit process for signs

Your Public Way Use permit number is shown above. This number is to be used for each item on your DOB application and is needed for the Buildings (DOB) online sign application located @ www.cityofchicago.org/buildings. All signs, canopies, banners, marquees and awnings require a buildings permit. Only a licensed sign erector may apply for the Buildings permit online. The Buildings permit application will ask for the Public Way Use permit number supplied above. For additional information please contact the Buildings Department at (312) 744-3400.

Please return the completed Public Way Use application to City Hall - 121 N. LaSalle Street, Chicago, IL 60602 Room 800. The completed application package must include a copy of the completed DOB application and the Public Way Use application. The Public Way Use application must contain the Alderman's signature, site plans on 8 1/2 X 11 paper, photos of the item(s), the signed Acceptance letter and a copy of the insurance certificate. For additional information please contact BACP at (312)-74-GOBIZ (312-744-6249).



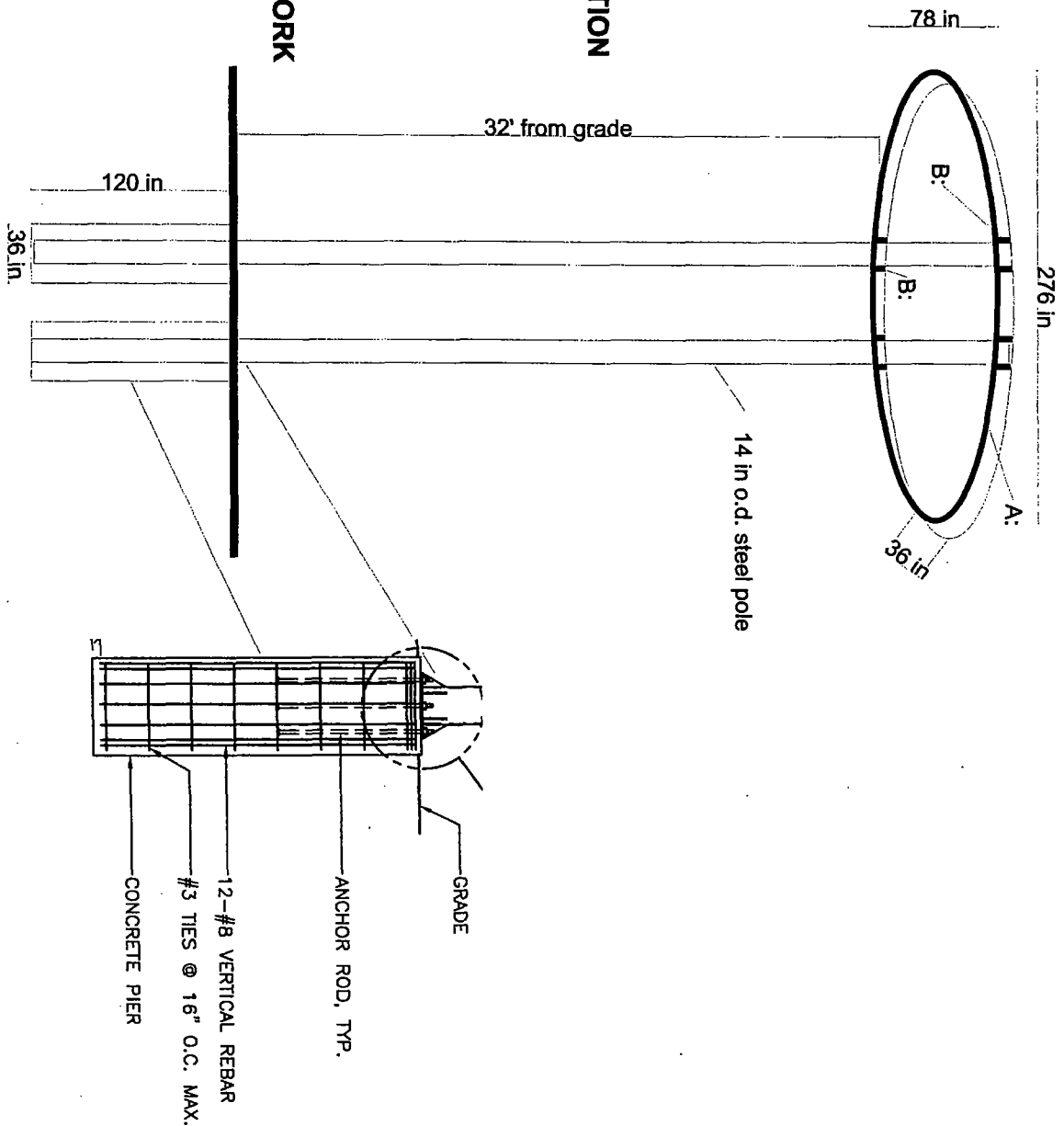
6'-6"

32' from grade

23'

Car Outlet

A: 6" x 23' x 3' OVAL SIGN CABINET
 CONSTRUCTED OF 0.90 MILL FINISH
 ALUMINUM SHEETS, INNER FRAMEWORK
 DOUBLE ROW OF 2" x 2" x 3/16"
 GALVANIZED ANGLE IRON, FRAMEWORK
 BOLTED TO CABINET WITH 2" x 3/8"
 CARRIAGE BOLTS EVERY 18" - 24"
 ALL CROSS MEMBERS ARE 2" x 2" x 3/16"
 ANGLE IRON WELDED AND BOLTED IN POSITION
 ILLUMINATED WITH HIGH OUTPUT
 LAMPS AND ELECTRONIC BALLAST
 ALL MATERIAL U.L. LISTED
 WHITE LEXAN FACE WITH COPY AS PER
 APPROVED ARTWORK.
 B: 2" x 2" x 3/16" GALVANIZED ANGLE IRON
 SUPPORTS UPPER AND LOWER SADDLE
 SUPPORTS WELDED TO POLE AND FRAMEWORK



Map Constructed on Mon Jan 20 06:38:07 CST 2014



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Building REMOVED FROM Location
Empty Lot

Zoning Map

Created on: 12/26/2013 4:19 P.M.



Address

4537 S ARCHER AVE

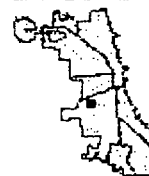
Zoning

- Business
- Commercial
- Manufacturing
- Residential
- Planned Development
- Planned Manufacturing
- Downtown Core
- Downtown Service
- Downtown Mixed
- Downtown Residential
- Transportation
- Parks & Open Space
- Zoning Boundaries

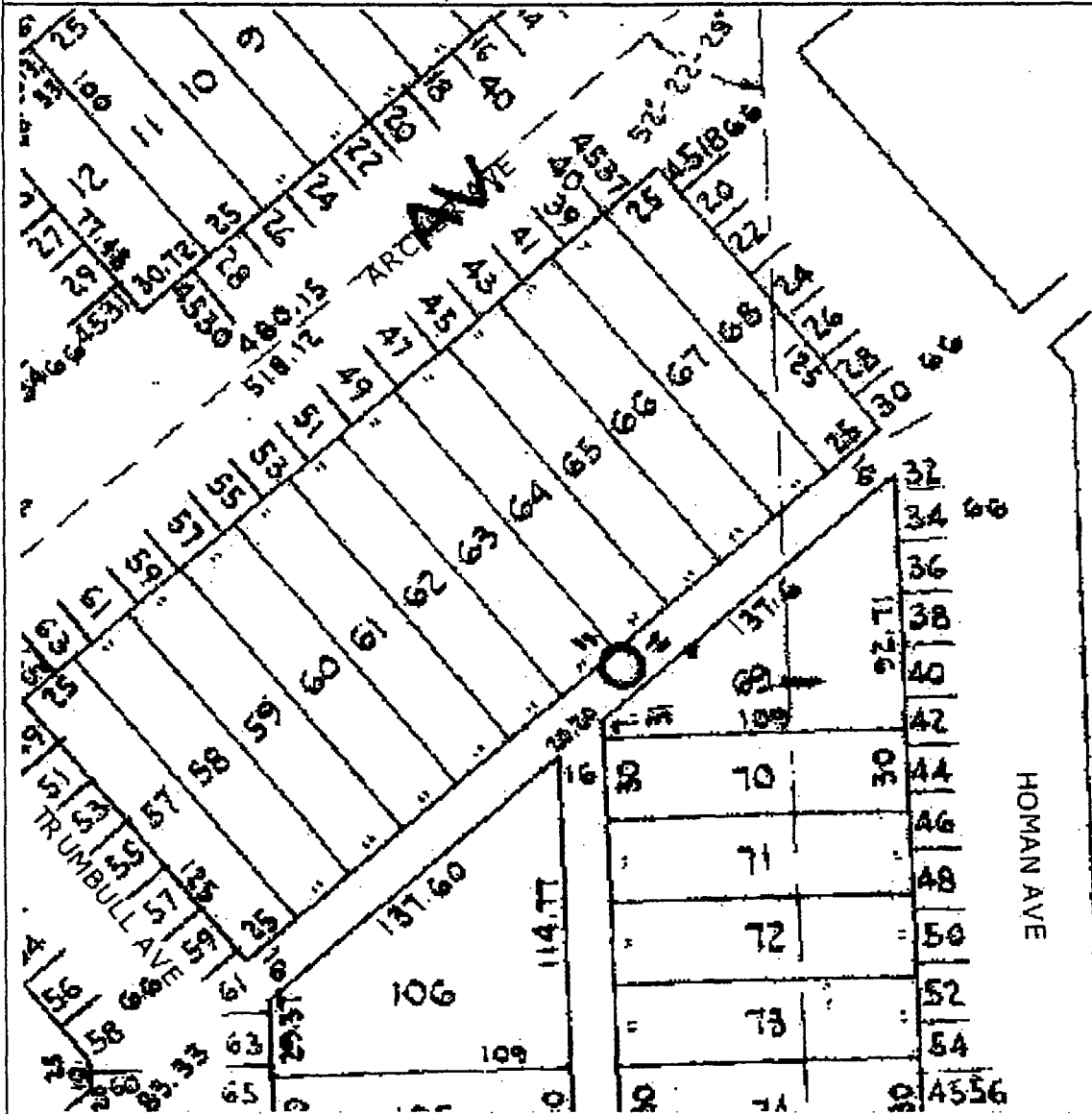
Historic Preservation

- CHICAGO LANDMARKS**
- Chicago Landmarks
- Landmark Districts
- Chicago Historic Resources Survey - Buildings subject to Demolition-Delay Ordinance**
- Red
- Orange
- Water
- Cemetery

- Lakefront
- Pedestrian Streets
- Buildings
- Parcels
- Streets
- Curbs
- Forest Preserve
- Aerials (April 2008)



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ZONE Classification	Ordinance Number	Ordinance Date
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C1-2

Building Id	From Add	To Add	Dir	Street	Type	Stories	Units	Built	Sq.ft.	Condition	Vacancy
-------------	----------	--------	-----	--------	------	---------	-------	-------	--------	-----------	---------

885493 4537 4537 S ARCHER AVE

Map Index	Page Number
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10-J

130B

PIN	From Address	To Address	Dir	Street	Type	Suffix
-----	--------------	------------	-----	--------	------	--------

1902418012 4537 4537 S ARCHER AVE

Ward	Alderman	Phone	Address
------	----------	-------	---------

14 EDWARD M. BURKE 773-471-1414 2650 W. 51st Street

Close Window

**MOSHE CALAMARO
& ASSOCIATES, INC**
STRUCTURAL ENGINEERS
YOUR STRUCTURAL DREAM TEAM

This bound document has been specifically prepared by a Licensed Structural Engineer. Each detail attached herein has been reviewed by a Licensed Structural Engineer who is responsible for the designs.

This bound document is exclusively for the client listed below:

Ad Delux Sign Co.
Mr. John Miller, primary contact
23856 W. Andrew Rd., Ste. #103
Plainfield, IL 60585-8770

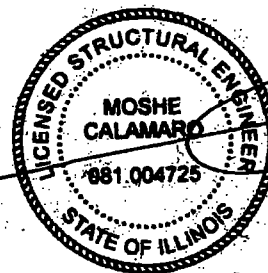
CALCULATIONS

JOB NAME: Car Outlet Sign
Chicago, Illinois

JOB File #: MC# 114004

I hereby verify that this document was prepared by me or under my direct supervision and that I am a duly Licensed Structural Engineer.

THESE DESIGNS HAVE BEEN PREPARED
UNDER MY DIRECT SUPERVISION



Date 1-16-2014
License Expires 11-30-2014

This document is permanently bound. The staples used must not be removed. If any modifications are made, this sealed document is no longer valid.

Loads:

Wind = 30 psf

Sign DL = 20 psf

Dead load:

$$20 \text{ psf} \cdot 6.5' \cdot 23' = 2.99 \text{ k} / 2 \text{ cols} = 1.50 \text{ k}$$

Wind load:

$$30 \text{ psf} \cdot 23' = .69 \text{ klf} / 2 \text{ cols} = .35 \text{ klf top } 6.5' \text{ of column}$$

Notional Load

Sign = 1.50 k

$$\text{Column} = 72.16 \text{ lbs} \cdot 38.5' = \frac{2.778 \text{ k}}{4.278 \text{ k} \cdot .002} = 8.6 \text{ lbs}$$

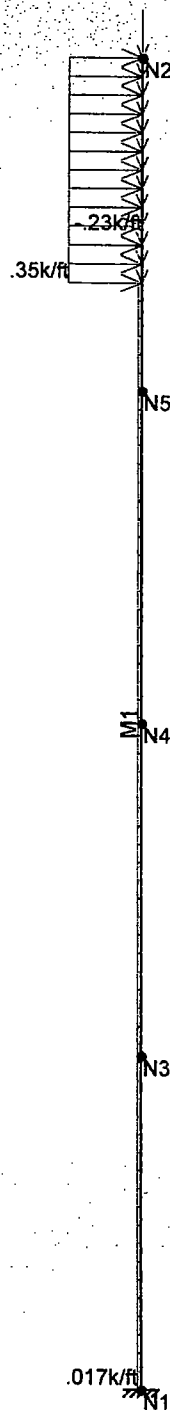
Wind Load on column:

$$(.7 \cdot 20) \cdot \frac{14''}{12} = 16.3 \text{ plf}$$

Loads on outriggers:

$$DL = 20 \text{ psf} \cdot 6.5' / 2 = .065 \text{ klf}$$

$$WL = 30 \cdot '' = .098 \text{ klf}$$



Loads: LC 4, Service: D+W
Results for LC 1, 1.4D

Moshe Calamaro and Ass...

CJG

114004

Car Outlet Sign Post

Member and joint labels with applied loads

SK - 1

Jan 15, 2014 at 2:25 PM

114004 Sign 03.r3d

Column: **M1**

Shape: **HSS14x0.5**

Material: **A500 Gr.42**

Length: **38.5 ft**

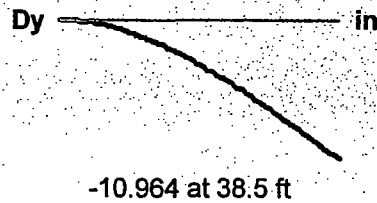
I Joint: **N1**

J Joint: **N2**

LC 2: **1.2D+1.6Wx + 1.6NLX**

Code Check: **0.547 (bending)**

Report Based On 97 Sections

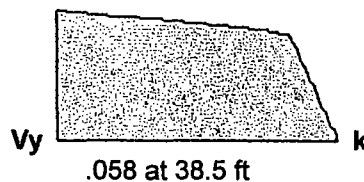


Dz _____ in

4.907 at 0 ft



4.564 at 0 ft



Vz _____ k

T _____ k-ft

145.249 at 0 ft



My _____ k-ft

fa _____ ksi

.248 at 0 ft

26.934 at 0 ft



ft _____ ksi

-26.934 at 0 ft

AISC 13th(360-05): LRFD Code Check

Direct Analysis Method

Max Bending Check **0.547**

Location **0 ft**

Equation **H1-1b**

Bending Flange **Compact**

Bending Web **Compact**

Max Shear Check **0.020 (s)**

Location **0 ft**

Max Defl Ratio **L/42**

Compression Flange **Non-Slender**

Compression Web **Non-Slender**

Fy **42 ksi**
phi*Pnc **421.996 k**
phi*Pnt **748.44 k**
phi*Mny **268.38 k-ft**
phi*Mnz **268.38 k-ft**
phi*Vny **224.532 k**
phi*Vnz **224.532 k**
phi*Tn **252.901 k-ft**
Cb **1**

Lb **38.5 ft**
KL/r **96.589**

L Comp Flange **38.5 ft**
Warp Length **NC**
L-torque **38.5 ft**
Tau_b **1**

Column: **M1**

Shape: **HSS14x0.5**

Material: **A500 Gr.42**

Length: **38.5 ft**

I Joint: **N1**

J Joint: **N2**

LC 4: Service: **D+W**

Code Check: **0.340 (bending)**

Report Based On 97 Sections

Dy _____ in.

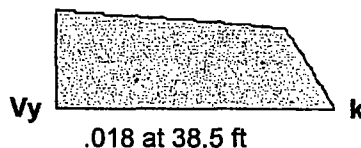
-5.426 at 38.5 ft

Dz _____ in.

4.089 at 0 ft



2.835 at 0 ft



Vz _____ k

.018 at 38.5 ft

T _____ k-ft

89.912 at 0 ft



My _____ k-ft

Mz _____ k-ft

.207 at 0 ft

fa _____ ksi

16.672 at 0 ft



ft _____ ksi

-16.672 at 0 ft

AISC 13th(360-05): LRFD Code Check

Max Bending Check **0.340**

Location **0 ft**

Equation **H1-1b**

Bending Flange **Compact**

Bending Web **Compact**

Max Shear Check **0.013 (s)**

Location **0 ft**

Max Defl Ratio **L/85**

Compression Flange **Non-Slender**

Compression Web **Non-Slender**

Fy **42 ksi**
phi*Pnc **421.996 k**
phi*Pnt **748.44 k**
phi*Mny **268.38 k-ft**
phi*Mnz **268.38 k-ft**
phi*Vny **224.532 k**
phi*Vnz **224.532 k**
phi*Tn **252.901 k-ft**
Cb **1**

Lb **38.5 ft**
KL/r **96.589**

Z-Z
38.5 ft
96.589

L Comp Flange **38.5 ft**
Warp Length **NC**

Moshe Calamaro & Associates**Structural Engineers**

930 Pitner Ave., Ste. #7, Evanston, IL 60202

Phone: (847) 733-0015 Fax: (847) 733-0018

© Moshe Calamaro & Associates

Job: Car Outlet Sign

MC # 114004

Calc by: CJG

Check by:

Date: 1/15/2014

Date:

Pier Embedment based on IBC 2006 1805.7.2.1

IBC 2012 1807.3.2.1

Mark: Minimum pier for sign columns

Description:

P= 2819 lbs
 M= 89912.0 lb-ft
 equiv. h= 31.89 ft

A= 2.87

Total d= 11.52 ft

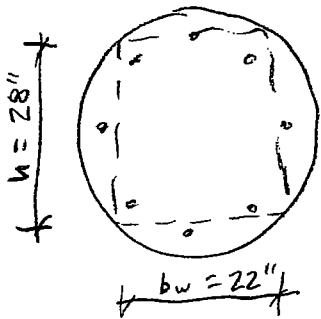
b= 2.00 ft
 Trial d= 11.50 ft
 Lateral Bearing 300 psf/ft
 $S_1 = 1150$ psf

Assume 2,000 psf soil
 $\therefore$ lateral bearing is
 $150 \text{ psf} \cdot 2 = 300 \text{ psf}$
 per IBC 2012 table
 1806.2

 S_1 is based on $\frac{1}{3}d$

$\frac{1}{3} \cdot 11.5 = 3.83'$ which is below
 frost $\therefore$ OK

Pier: Try 36" $\varnothing$ $A_{\text{pier}} = \frac{\pi \cdot 36^2}{4} = 1018 \text{ in}^2$ $A_{s, \text{min}} = .005 \cdot 1018 = 5.09$
 9-#7, min



Check pier as inscribed rectangle
 w/ 3 bars acting $d = 28 - 2 = 26"$

$$A_s = 3 \cdot .6 = 1.8 \text{ in}^2 \quad a = \frac{1.8 \cdot 60}{.85 \cdot 3 \cdot 22} = 1.93 \quad c = 2.26$$

$$\epsilon_t = \frac{26 - 2.26}{2.26} \cdot .003 = .031 \therefore \phi = .9$$

$$\phi M_u = .9 \cdot 1.8 \cdot 60 \left(26 - \frac{1.93}{2} \right) = 202.8 \text{ k-ft}$$

$$M_u = 145 \text{ k-ft} \quad \underline{\text{OK}}$$

Company: Moshe Calamaro and Associates, Inc.
 Specifier: CJG
 Address: 930 Pitner Avenue Suite #7
 Phone / Fax: (847) 733-0015 | (847) 733-0018
 E-Mail: moshe@moshecal.com

Page:
 Project:
 Sub-Project / Pos. No.:
 Date:

1
 Car Outlet Sign
 114004
 1/15/2014

Specifier's comments:

1 Input data

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 36 1 1/4

Effective embedment depth: $h_{ef} = 24.000$ in.

Material: ASTM F 1554

Proof: design method ACI 318-08 / CIP

Stand-off installation: $e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.

Anchor plate: $l_x \times l_y \times t = 22.000$ in. $\times$ 22.000 in. $\times$ 0.750 in.; (Recommended plate thickness: not calculated)

Profile: S shape (AISC); (L $\times$ W $\times$ T $\times$ FT) = 3.000 in. $\times$ 2.330 in. $\times$ 0.170 in. $\times$ 0.260 in.

Base material: cracked concrete, 2500, $f'_c = 2500$ psi; $h = 420.000$ in.

Reinforcement: tension: condition B, shear: condition B;
 edge reinforcement: none or $\leq$ No. 4 bar

Seismic loads (cat. C, D, E, or F) no

Geometry [in.] & Loading [kip, ft.kip]

$$T_u = 27.9 \text{ k (bolts 1, 4, 6)}$$

$$.9 - 60 - A_s > 27.9$$

$$A_s > .517 \rightarrow \text{use \#7 bars}$$

$$A_s = .6 \text{ in}^2$$

$$l_d = \frac{60,000 - 1 - 1}{20 \cdot \sqrt{3000}} = .875 = 47.9$$

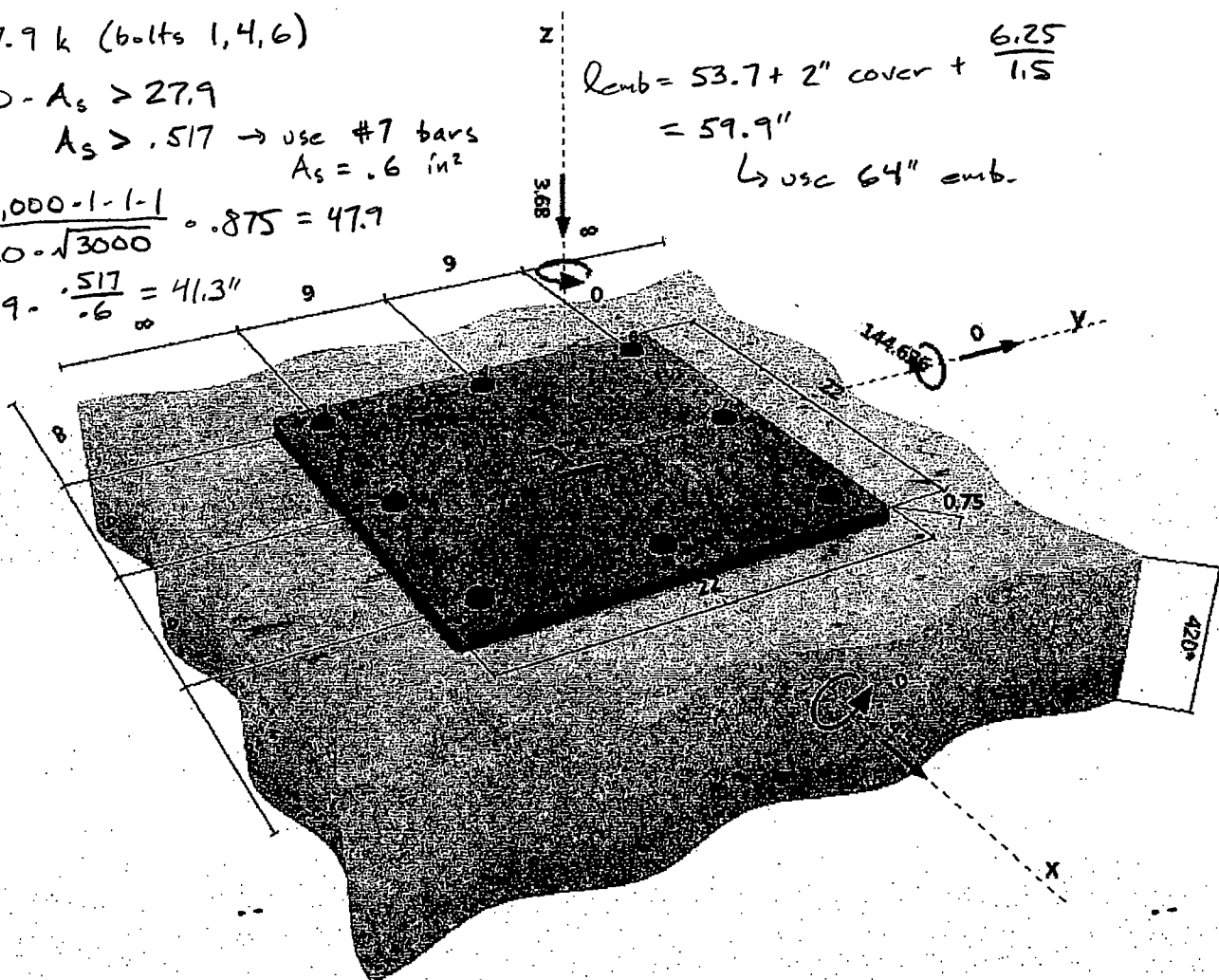
$$l_d' = 47.9 \cdot \frac{.517}{.6} = 41.3"$$

$$l_{splice} = 1.3 \cdot 41.3 = 53.7$$

$$l_{emb} = 53.7 + 2" \text{ cover} + \frac{6.25}{1.5}$$

$$= 59.9"$$

$\rightarrow$ use 64" emb.



2 Load case/Resulting anchor forces

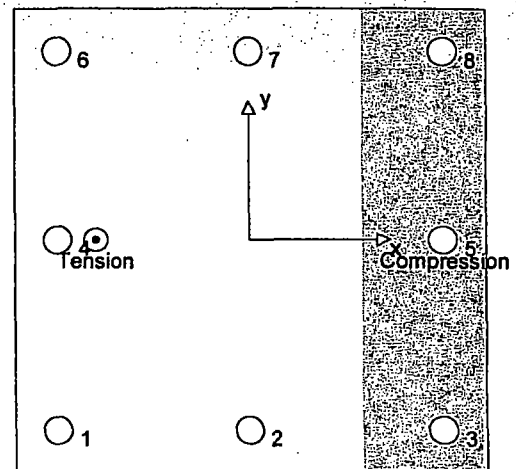
Load case: Design loads

Anchor reactions [kip]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	27.883	0.566	0.566	0.000
2	10.332	0.566	0.566	0.000
3	0.000	0.566	0.566	0.000
4	27.883	0.566	0.566	0.000
5	0.000	0.566	0.566	0.000
6	27.883	0.566	0.566	0.000
7	10.332	0.566	0.566	0.000
8	0.000	0.566	0.566	0.000

max. concrete compressive strain: 0.40 [‰]
 max. concrete compressive stress: 1721 [psi]
 resulting tension force in (x/y)=(-7.217/0.000): 104.314 [kip]
 resulting compression force in (x/y)=(9.099/0.000): 107.994 [kip]



3 Tension load

	Load N_{ua} [kip]	Capacity ϕN_n [kip]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	27.883	42.151	67	OK
Pullout Strength*	27.883	31.318	90	OK
Concrete Breakout Strength**	104.314	149.698	70	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* anchor having the highest loading **anchor group (anchors in tension)

3.1 Steel Strength

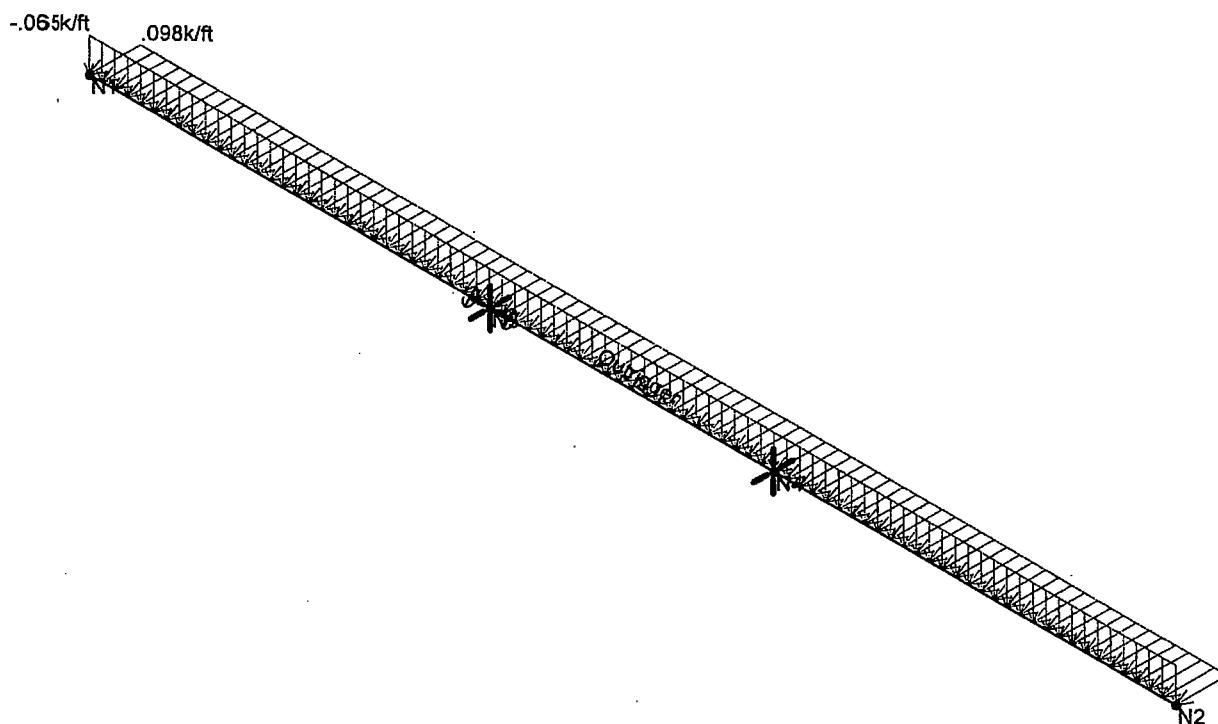
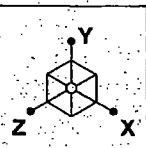
N_{sa} [kip]	ϕ	ϕN_{sa} [kip]	N_{ua} [kip]
56.202	0.750	42.151	27.883

3.2 Pullout Strength

N_p [kip]	$\psi_{c,p}$	ϕ	ϕN_{pn} [kip]	N_{ua} [kip]
44.740	1.000	0.700	31.318	27.883

3.3 Concrete Breakout Strength

A_{Nc} [in. ²]	A_{Nco} [in. ²]	$c_{a,min}$ [in.]	c_{ac} [in.]	$\psi_{c,N}$	$\psi_{cp,N}$
7290.00	5184.00	∞	0.000	1.000	1.000
$e_{c1,N}$ [in.]	$\psi_{ec1,N}$	$e_{c2,N}$ [in.]	$\psi_{ec2,N}$	$\psi_{ed,N}$	k_{cr}
1.817	0.952	0.000	1.000	1.000	16
N_b [kip]	ϕ	ϕN_{cbg} [kip]	N_{ua} [kip]		
159.750	0.700	149.698	104.314		



Loads: LC 4, Service: D+W
Results for LC 1, 1.4D

Moshe Calamaro and Ass.

CJG

114004

Car Outlet Sign ~~Post~~ *Outrigger*

SK - 1

Jan 16, 2014 at 1:05 PM

114004 Pipe 01.r3d

Beam: **Outrigger**

Shape: **PIPE 4.0**

Material: **A53 Gr.B**

Length: **23 ft**

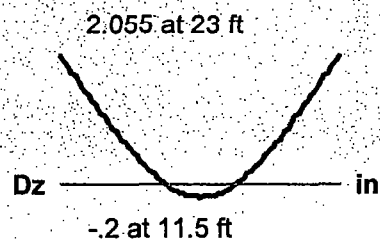
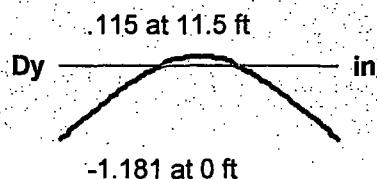
I Joint: **N1**

J Joint: **N2**

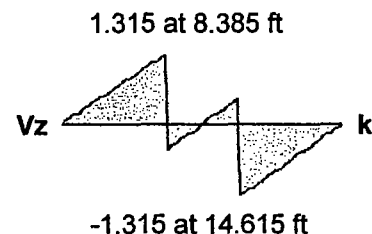
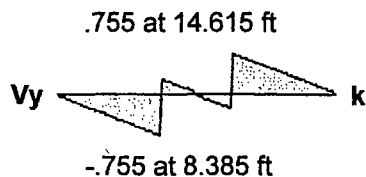
LC 2: **1.2D+1.6Wx**

Code Check: **0.608 (bending)**

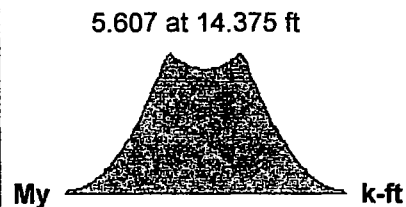
Report Based On 97 Sections



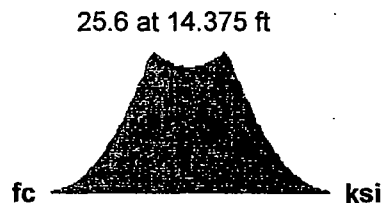
A k



T k-ft



fa ksi



AISC 13th(360-05): LRFD Code Check

Direct Analysis Method

Max Bending Check **0.608**

Location **14.375 ft**

Equation **H1-1b**

Bending Flange **Compact**

Bending Web **Compact**

Max Shear Check **0.054 (s)**

Location **8.385 ft**

Max Defl Ratio **L/122**

Compression Flange **Non-Slender**

Compression Web **Non-Slender**

Fy **35 ksi**
phi*Pnc **20.226 k**
phi*Pnt **93.24 k**
phi*Mny **10.631 k-ft**
phi*Mnz **10.631 k-ft**
phi*Vny **27.972 k**
phi*Vnz **27.972 k**
phi*Tn **10.011 k-ft**
Cb **1**

Lb **23 ft**
KL/r **181.829**

y-y **23 ft**
z-z **23 ft**

L Comp Flange **23 ft**
Warp Length **NC**
L-torque **23 ft**
Tau_b **1**

Beam: **Outrigger**

Shape: **PIPE 4.0**

Material: **A53 Gr.B**

Length: **23 ft**

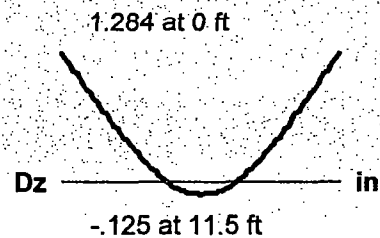
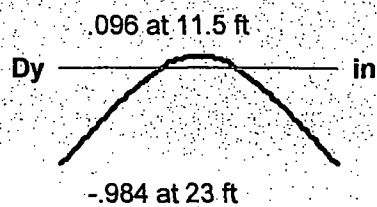
I Joint: **N1**

J Joint: **N2**

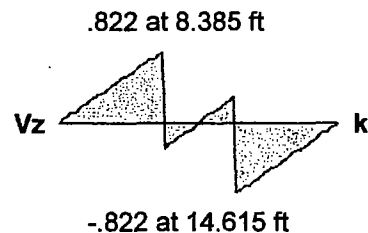
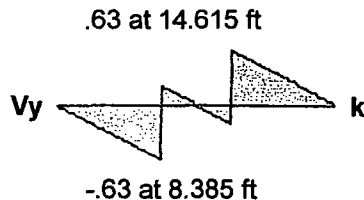
LC 4: Service: **D+W**

Code Check: **0.415 (bending)**

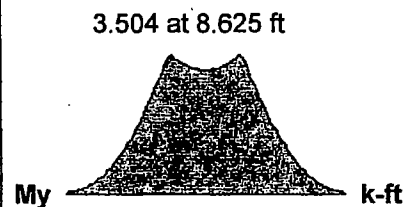
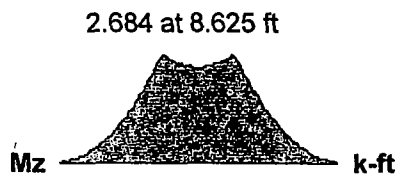
Report Based On 97 Sections



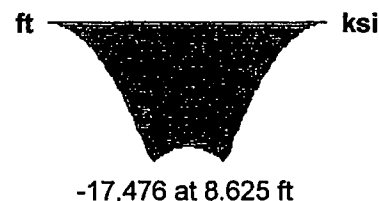
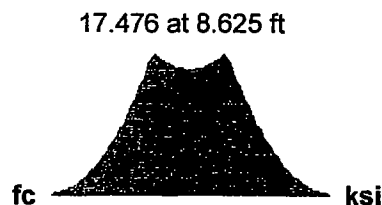
A ————— k



T ————— k-ft



fa ————— ksi



AISC 13th(360-05): LRFD Code Check

Direct Analysis Method

Max Bending Check **0.415**
Location **8.625 ft**
Equation **H1-1b**

Bending Flange **Compact**
Bending Web **Compact**

Max Shear Check **0.037 (s)**
Location **14.615 ft**
Max Defl Ratio **L/196**

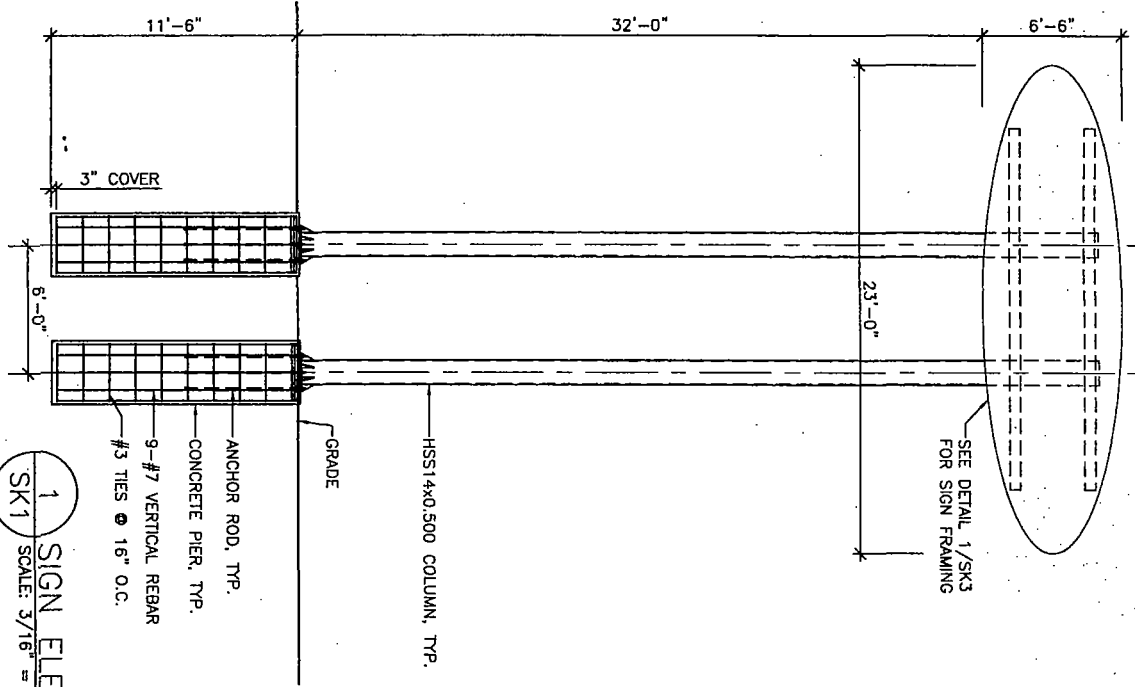
Compression Flange **Non-Slender**
Compression Web **Non-Slender**

Fy **35 ksi**
phi*Pnc **20.226 k**
phi*Pnt **93.24 k**
phi*Mny **10.631 k-ft**
phi*Mnz **10.631 k-ft**
phi*Vny **27.972 k**
phi*Vnz **27.972 k**
phi*Tn **10.011 k-ft**
Cb **1**

Lb **23 ft**
KL/r **181.829**

y-y **23 ft**
z-z **23 ft**

L Comp Flange **23 ft**
Warp Length **NC**
L-torque **23 ft**
Tau_b **1**



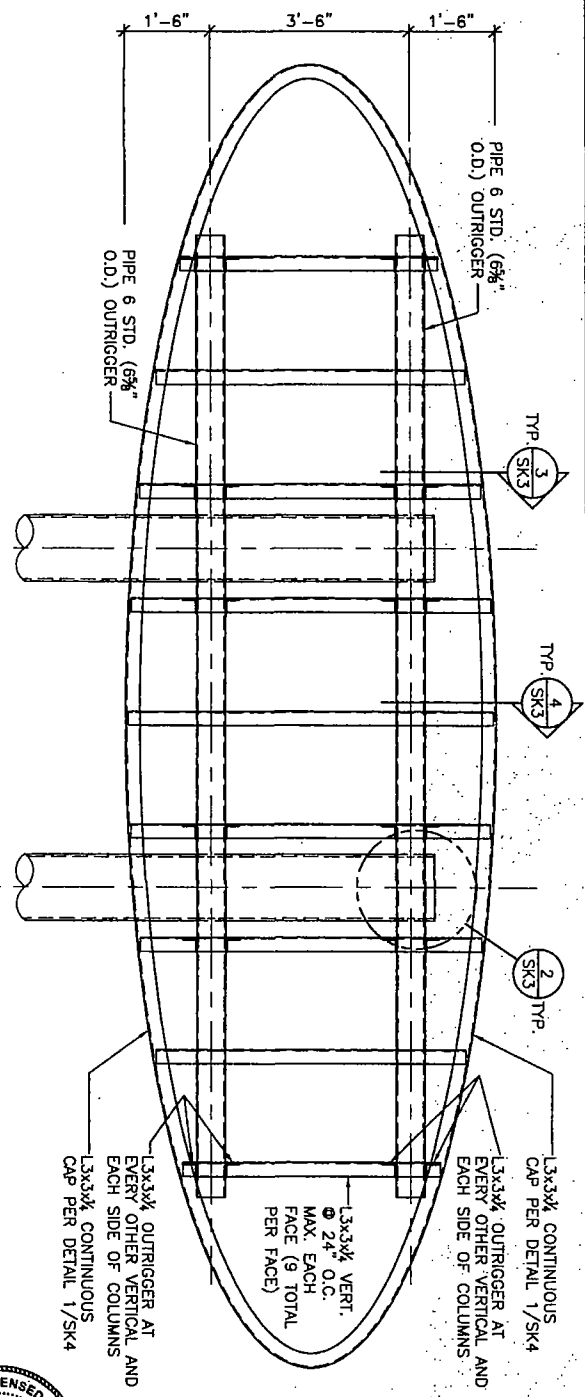
1 SIGN ELEVATION
SK1 SCALE: 3/16" = 1'-0"

Date: 1-16-2014
License Expires 11-30-2014

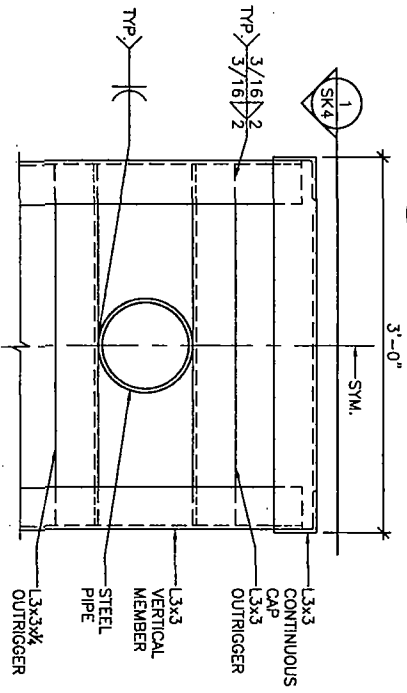


SK 1 SHEET 1	DRAWN BY: EJB 114004	SIGN ELEVATION NEW SIGN CAR OUTLET CHICAGO, ILLINOIS	MOSHE CALAMARDO & ASSOCIATES, INC. STRUCTURAL ENGINEERS 930 FITNER AVENUE, SUITE #7 - EVANSTON, ILLINOIS 60202 P: (847) 722-0018 • F: (847) 723-0018 • WWW.MOSHECALAMARDO.COM
	DRAWING DATE: 01-16-2014		

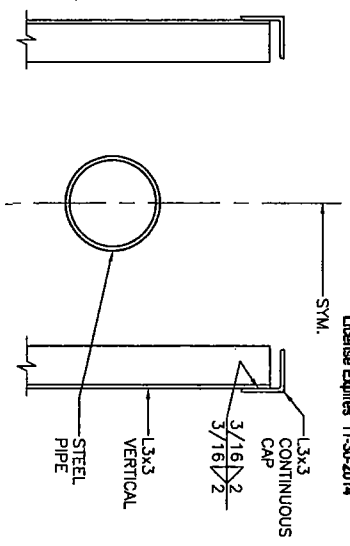
DRAWN BY: JLB
MC NUMBER:
114004
DRAWING DATE:
01-16-2014



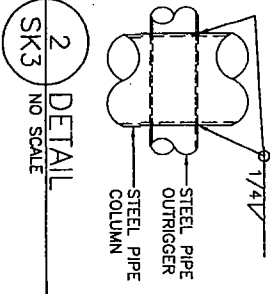
1 SIGN FRAMING ELEVATION
SK3 SCALE: 1/2" = 1'-0"



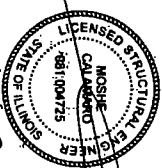
3 SECTION AT OUTRIGGER
SK3 NO SCALE



4 SECTION
SK3 NO SCALE

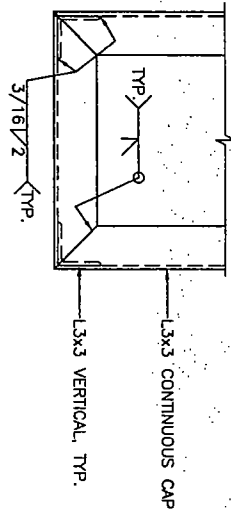


2 DETAIL
SK3 NO SCALE

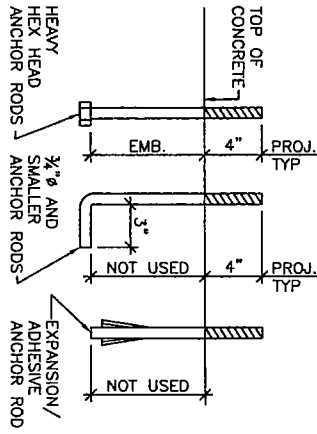


Date 1-16-2014
License Expires 11-30-2014

SK3 SHEET 114004 01-16-2014	DRAWN BY: CUB 114004	SIGN DETAILS NEW SIGN CAR OUTLET CHICAGO, ILLINOIS	MOSHE CALAMARDO & ASSOCIATES, INC. STRUCTURAL ENGINEERS 930 PITNER AVENUE, SUITE #7 - EVANSTON, ILLINOIS 60202 P (847) 733-0018 • F (847) 733-0018 www.moshecalamardo.com info@moshecalamardo.com
	CHECKED BY: CUB 114004		
	DATE: 01-16-2014		



1 PLAN VIEW DETAIL
SK4 NO SCALE



2 ANCHOR ROD DETAIL
SK4 NO SCALE

GENERAL STRUCTURAL NOTES

GOVERNING CODES AND SPECIFICATIONS:

DESIGN LOADS:

SOLID SIGN: 30 PSF

EXISTING CONDITIONS:

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND CONDITIONS AS SHOWN ON THE DRAWINGS.
- IF CONDITIONS IN THE FIELD ARE DIFFERENT FROM WHAT IS SHOWN ON THE DRAWINGS, NOTIFY ENGINEER IMMEDIATELY.

ALLOWABLE SOIL BEARING PRESSURE:

- ALL FOUNDATIONS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF. IF FOR ANY REASON THE INDICATED ALLOWABLE BEARING IS NOT ATTAINABLE AT ELEVATIONS SHOWN ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- BEARING SHALL BE ON VIRGIN, UNDISTURBED SOILS OR, IF FILL IS REQUIRED, SHALL BE APPROVED FOR USE BY AN APPROVED TESTING LABORATORY, AND SHALL BE COMPACTED IN ACCORDANCE WITH APPROPRIATE ASTM STANDARDS TO OBTAIN THE REQUIRED ALLOWABLE BEARING PRESSURE.

CONCRETE AND REINFORCEMENT:

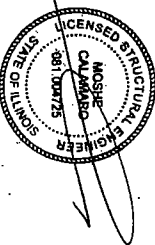
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE "AMERICAN CONCRETE INSTITUTE BUILDING CODE" (ACI 318) AND WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 307), LATEST EDITIONS.
- ALL CONCRETE SHALL OBTAIN THE FOLLOWING 28 DAY ULTIMATE COMPRESSIVE STRENGTHS:
FOOTINGS, FOUNDATION WALLS, PIERS: 3000 PSI NORMAL WEIGHT
SLABS ON GRADE: 3000 PSI NORMAL WEIGHT
- REINFORCEMENT GRAD: BAR REINFORCEMENTS SHALL CONFORM TO ASTM A615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- ALL CONCRETE SUBJECTED TO FREEZE-THAW SHALL BE 5% AIR-ENTRAINED.

STRUCTURAL STEEL:

- ASTM A36 FOR ALL MISCELLANEOUS STEEL, $F_y = 36$ KSI.
- ASTM A500 GRADE B FOR ALL ROUND HSS, $F_y = 42$ KSI.
- ASTM A53 GRADE B FOR ALL PIPE SHAPES, $F_y = 35$ KSI.
- ASTM A325 FOR ALL 3/4" DIAMETER BOLTS IN BEARING FOR ALL CONNECTIONS (EXCLUDING ANCHOR RODS/BOLTS), EXCEPT AS NOTED.
- ASTM F1554 GR. 36 (OR EQUIV.) FOR ALL ANCHOR RODS.
- ALL WELDING ELECTRODES SHALL BE E-70XX AND SHALL BE DONE BY WELDERS QUALIFIED IN ACCORDANCE WITH AWS STANDARDS AND RECOMMENDATIONS.
- ALL STEEL SHALL BE FABRICATED, DETAILED, AND ERECTED IN ACCORDANCE WITH AWS STANDARDS AND THE AISC CODE OF STANDARD PRACTICE.
- ALL CONNECTIONS SHALL BE WELDED OR BOLTED, EXCEPT WHERE SHOWN OTHERWISE.
- DURING CONSTRUCTION, UNTIL ALL FINAL CONNECTIONS HAVE BEEN MADE AND THE FRAME IS SELF-SUPPORTING AND STABLE, ALL STEEL SHALL RECEIVE TWO SHOP COATS OF RUST INHIBITIVE GRAY PRIMER.
- PROVIDE SHOP DRAWINGS PRIOR TO FABRICATION.

COORDINATION:

- ALL DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED BY THE GENERAL CONTRACTOR AND ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
- THE INFORMATION CONTAINED IN THE STRUCTURAL DRAWINGS IS IN ITSELF INCOMPLETE AND VOID UNLESS USED IN CONJUNCTION WITH ALL OF THE CONTRACT DOCUMENTS AND ALL SPECIFICATIONS, TRADE PRACTICES, APPLICABLE STANDARDS, CODES, ETC. INCORPORATED THEREIN BY REFERENCE.



Date 1-16-2014
License Expires 11-30-2014

DETAILS - GENERAL STRUCTURAL NOTES

NEW SIGN
CAR OUTLET
CHICAGO, ILLINOIS

MOSHE CALAMARDO
& ASSOCIATES, INC.
STRUCTURAL ENGINEERS

930 FITZGERALD AVENUE, SUITE #7 EVANSTON, ILLINOIS 60202
P: (847) 733-0019 - F: (847) 733-0018 WWW.HDRGENERAL.COM INFO@HDRGENERAL.COM

SK4

DRAWN BY: CJD
MS NUMBER:
114004
DRAWING DATE:
01-16-2014
SHEET: