

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

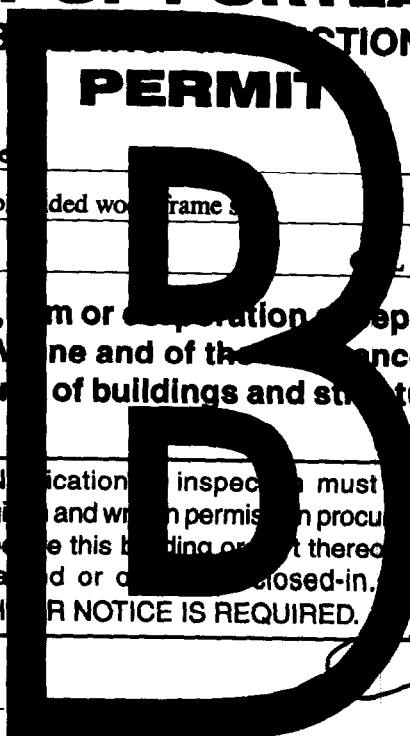
BUILDING INSPECTION

PERMIT

Permit Number: 030946

This is to certify that Maine Turnpike Authority/sect
has permission to Erect Aluminum 4' x 8' double ended work frame s
AT 420 Riverside St 320 A003001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.



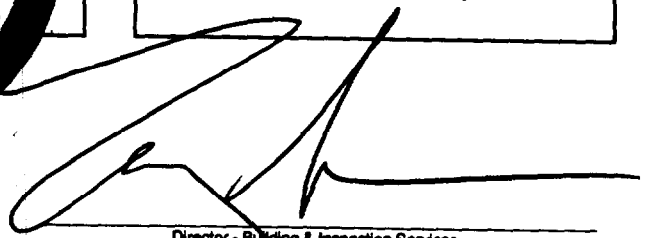
Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is altered or enclosed-in. **48 HOUR NOTICE IS REQUIRED.**

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____
Health Dept. _____
Appeal Board _____
Other _____
Department Name


Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 03-0946	Issue Date:	CBL: 320 A003001
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Location of Construction: 420 Riverside St	Owner Name: Maine Turnpike Authority	Owner Address: 430 Riverside St	Phone: 207-871-7771
Business Name: n/a	Contractor Name: self	Contractor Address: Portland	Phone:
Lessee/Buyer's Name n/a	Phone: n/a	Permit Type: Signs - Street <i>Free Standing Sign</i>	Zone: IM

Past Use: Commercial	Proposed Use: Commercial / Office; Erect aluminum 7m 4' x 8' double sided wood frame sign.	Permit Fee: \$98.00	Cost of Work: \$0.00	CEO District: 1
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Proposed Project Description:
 Erect Aluminum 4' x 8' double sided wood frame sign.
Free Standing

FIRE DEPT: <i>N/A</i>	<input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: <i>U</i> Type: <i>Sign</i> <i>BOLA 99</i>
Signature:		Signature: <i>[Signature]</i>

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: Approved Approved w/Conditions Denied

Signature: _____ Date: _____

Permit Taken By: gg	Date Applied For: 08/05/2003	Zoning Approval
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1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied
	Date: <i>8/20/03</i>	Date: <i>8/20/03</i>	Date: <i>[Signature]</i>

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

 SIGNATURE OF APPLICANT ADDRESS DATE PHONE

 RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 03-0946	Date Applied For: 08/05/2003	CBL: 320 A003001
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Location of Construction: 420 Riverside St	Owner Name: Maine Turnpike Authority	Owner Address: 430 Riverside St	Phone: 207-871-7771
Business Name: n/a	Contractor Name: self	Contractor Address: Portland	Phone:
Lessee/Buyer's Name: n/a	Phone: n/a	Permit Type: Signs - Permanent	

Proposed Use: Commercial / Office; Erect aluminum 4' x 8' double sided wood frame sign.	Proposed Project Description: Erect Aluminum 4' x 8' double sided wood frame sign.
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Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 08/20/2003
Note: 8/19/03 sign is one foot too tall - will call **Ok to Issue:**
8/20/03 Scott is faxing plans adjusting height to 10'

Dept: Building **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 08/22/2003
Note: **Ok to Issue:**
1) Signage Installation to comply with Chapter 31 BOCA 1999

Signage/Awning Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>430 RIVERSIDE ST</u>		
Total Square Footage of Proposed Structure <u>34 sq ft</u>	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# <u>320</u> Block# <u>A</u> Lot# <u>3</u>	Owner: <u>MAINE TURNPIKE AUTHORITY</u>	Telephone: <u>871-7771</u>
Lessee/Buyer's Name (if Applicable)	Applicant name, address & telephone: <u>SCOTT LACHANCE</u> <u>MTA</u> <u>430 RIVERSIDE ST</u> <u>PORTLAND, ME 04103</u>	Total s.f. of signage x \$1.00 per s.f. plus \$30.00 = Total Fee: <u>\$ 68.00</u> Awning Fee = Cost Of Work: \$ _____ Total Fee: \$ <u>98.00</u>
Current use: <u>OFFICE</u>		
If the location is currently vacant, what was prior use: _____		
Approximately how long has it been vacant: _____		
Proposed use: <u>OFFICE w/ FREESTANDING SIGN</u>		
Project description: <u>Aluminum 4' x 8' double sided wood frame</u>		
Contractor's name, address & telephone: <u>Self</u>		
Who should we contact when the permit is ready: <u>SCOTT LACHANCE 828-5819 call</u>		
Mailing address: _____		
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: _____		

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT. WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: <u>Scott Lachance</u>	Date: <u>6.24.03</u>
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This is NOT a permit, you may not commence ANY work until the permit is issued.

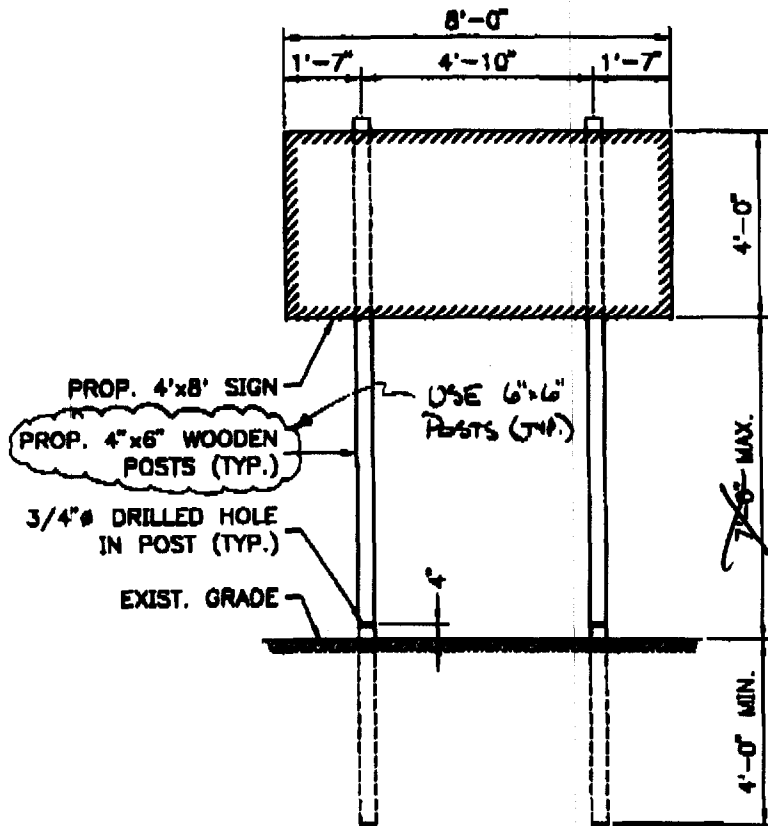
HNTB The HNTB Companies Calculations For MTA - SIGN SUPPORT	Made by TRC	Date 7/22/03	Job Number
	Checked by CC	Date 7/23/03	Sheet Number
	Backchecked by	Date	Y

PROPOSED SIGN - CROSSBY MAINTENANCE

SIGN INFO - 4' TALL x 8' WIDE
(FROM MTA) 2 - 4" x 6" WOOD POSTS

FROM MTDOT STANDARD DETAILS

ASSUME **MAX HEIGHT = 6'-0" TO BOTTOM OF SIGN**
 POST EMBEDMENT = 4'-0" MIN.
 POSTS DRILLED 4" ABOVE GRADE FOR BREAKAWAY
 POSTS SPACED ON SIGN PANEL @ 1/5 & 4/5 (1'-7", 6'-5")



10' high

PROP. SIGN ELEVATION

**Maine Turnpike Authority
Fax Cover Sheet**

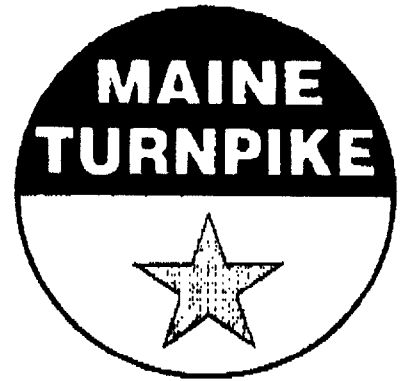
From: Scott N. Lachance
Right of Way Agent

To: Marge, City of Portland

Date: August 20, 2003

Fax No. 207-874-8716

Number of Sheets, Including This One: 2



430 Riverside Street
Portland, Maine 04103

Voice: 207-828-5819

Fax: 207-828-5815

Email: slachance@maineturnpike.com

Message:

Marge,

Revised sign support information.

Thanks,
Scott

PROPOSED SIGN - CROSBY MAINTENANCE

SIGN INFO - 4' TALL x 8' WIDE
(FROM MTA) 2 - 4" x 6" WOOD POSTS

See Revised

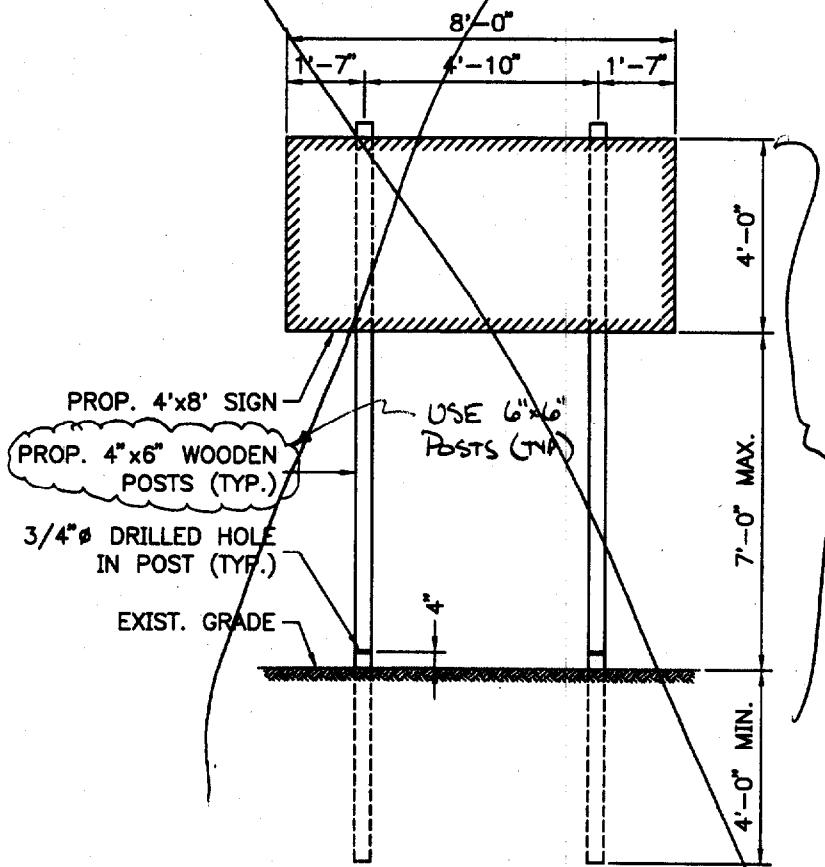
FROM MDOT STANDARD DETAILS

ASSUME: MAX HEIGHT = 7'-0" TO BOTTOM OF SIGN

POST EMBEDMENT = 4'-0" MIN.

POSTS DRILLED 4" ABOVE GRADE FOR BREAKAWAY

POSTS SPACED ON SIGN PANEL @ 1/5 & 4/5 (1'-7", 6'-5")



PROP. 4'x8' SIGN
 PROP. 4" x 6" WOODEN POSTS (TYP.)
 3/4" Ø DRILLED HOLE IN POST (TYP.)
 EXIST. GRADE

USE 6" x 6" POSTS (TYP)

PROP. SIGN ELEVATION

DESIGN SPECIFICATION

AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS
FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - 1994
4TH ED., 2001

LOADS

ASSUME VERTICAL LOADS WILL BE NEGLIGIBLE

DEAD LOAD - NEGLIGIBLE

LIVE LOAD - (USE DESIGN LIFE = 10 YEARS (TABLE 3-3))

WIND (STD. SPEC. 3.8)

$$P_z = 0.00256 K_z G V^2 I_r C_d \checkmark$$

$$K_z = \text{HEIGHT EXPOSURE FACTOR} = 0.87 \checkmark \text{ (16.4' OR LESS)}$$

$$G = \text{GUST FACTOR} = 1.14 \checkmark$$

$$V = \text{BASIC 50 YR WIND SPEED} = \text{SAY } 110 \text{ MPH (CONSERVATIVE)}$$

$$I_r = \text{IMPORTANCE FACTOR} = 0.54 \checkmark$$

$$C_d = \text{DRAG COEFFICIENT} = 1.19 \checkmark$$

$$P_z = 0.00256 (0.87)(1.14)(110)^2 (0.54)(1.19)(0.73) = 14.4 \text{ psf}$$

← C_v (TABLE 3-4)

$$P_z = 0.00256 (0.87)(1.14)(100)^2 (0.71)(1.19)(0.84) = 18.0 \text{ psf } \text{SAY } \text{OK}$$

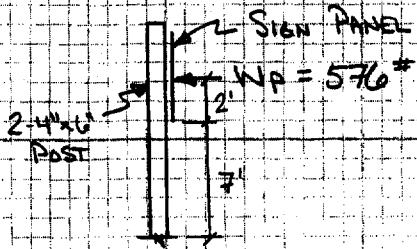
→ CHECK WIND PRESSURE
FOR CORRESPONDING NON-
HURRICANE WIND (NOTE ON
TABLE 3-2)

$$\underline{P_z = 18.0 \text{ psf}}$$

BY INSPECTION GROUP LOADING COMBINATION II WILL GOVERN
PERCENT ALLOWABLE STRESS @ COMBINATION II = 133%

SIGN LOADING

$$W_p = 4' \times 8' \times 18.07 \text{ psf} = 576 \text{ \#} \checkmark$$

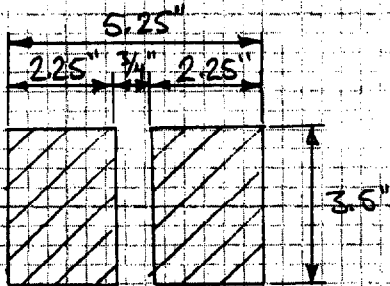


$$V_{max} = 576 \text{ \#} / 2 = 288 \text{ \#} / \text{POST} \checkmark$$

$$M_{max} = 576 \text{ \#} \times 9 \text{ ft} / 2 = 2,592 \text{ LB-FT} / \text{POST} \checkmark$$

CHECK CAPACITY OF 4x6 POSTS

$$4' \times 6' \text{ ACTUAL DIMENSIONS} = 3.5' \times 5.25' \checkmark$$



PER MAINE STANDARD SPECIFICATIONS
WOOD SHALL BE YELLOW PINE,
No. 2 OR BETTER.

SECTION THROUGH POST
AT DRILLED HOLE

BASIC DESIGN VALUES FOR WOOD POSTS (TABLE 9-3)

$$\text{SOUTHERN PINE (4'x6'), No. 2 : } F_b = 1250 \text{ psi} \checkmark$$

$$F_c = 1600 \text{ psi} \checkmark$$

$$F_v = 90 \text{ psi} \checkmark$$

$$\text{WET SERVICE FACTOR (C}_m\text{)} = F_b = 0.85 \checkmark$$

$$F_c = 0.80 \checkmark$$

$$F_v = 0.97 \checkmark$$

TABLE 9-7

HNTB The HNTB Companies	Made by TRC	Date 7/22/03	Job Number
	Checked by FC	Date 7/23/03	Sheet Number
Calculations For	Backchecked by	Date	4/

STRESS CALCULATIONS

$$S_{x \text{ Post}} = \frac{b h^2}{6} = \frac{3.5 (5.25)^2}{6} - \frac{3.5 (0.75)^2}{6} = 15.75 \text{ in}^3 \checkmark$$

$$F_c = 1.33 \times (0.80) \times 1600 \text{ psi} = 1,702 \text{ psi}$$

$$F_b = 1.33 \times (0.85) \times 1250 \text{ psi} = 1,413 \text{ psi} \checkmark$$

USE EQ. FOR COMBINED STRESSES (EQ. 9-2), SET $F_c = 0$

$$\left(\frac{F_c}{F_c} \right) + \frac{F_b}{F_b (1 - \frac{F_c}{F_c})} \leq 1.0 \Rightarrow F_b \leq F_b$$

$$F_b = M/S_x = \frac{(2,592 \text{ LB-FT} \times 12 \text{ in/ft})}{15.75 \text{ in}^3} = 1,975 \text{ psi} > 1,413 \text{ psi} \text{ N.G.} \checkmark$$

TRY 2-6" x 6" POSTS

$$S_x = \frac{5.25 \times (5.25)^2}{6} - \frac{5.25 (0.75)^2}{6} = 23.6 \text{ in}^3 \checkmark$$

For 6" x 6" POSTS: $F_b = 850 \text{ psi} \checkmark$

$$F_b = 1.33 (0.85) (850 \text{ psi}) = 961 \text{ psi} \checkmark$$

$$F_b = \left(\frac{2592 \times 12}{23.6} \right) = 1,318 \text{ psi} > 961 \text{ psi} \text{ N.G.} \checkmark$$

TRY USING 4" x 6" No. 1 SO. YELLOW PINE POSTS

$$F_b = 1.33 (0.85) (1650 \text{ psi}) = 1,865 \text{ psi} > 1,975 \text{ psi} \text{ N.G.}$$

TRY USING 6" x 6" No. 1 SO. YELLOW PINE POSTS

$$F_b = 1.33 (0.85) (1350 \text{ psi}) = 1,526 \text{ psi} > 1,318 \text{ psi} \text{ (OK)}$$

∞ USE 2-6" x 6" TREATED SO. YELLOW PINE, No 1 OR BETTER POSTS

CHECK POST EMBEDMENT DEPTH (AASHTO STD. SPEC. SEC. 13.10)

ASSUME: EMBEDMENT = 4'-0"

SOIL BEARING CAPACITY = 1 KSF

GRANULAR SOIL

CHECK POST CAPACITY USING FIGURE 13-4

$$D = 4 \text{ FT}$$

$$S_u = 1 \text{ KSF}$$

$$P = 0.29 \text{ KIPS } \checkmark$$

$$C = \frac{P}{S_u} = \frac{0.29}{1} = 0.29$$

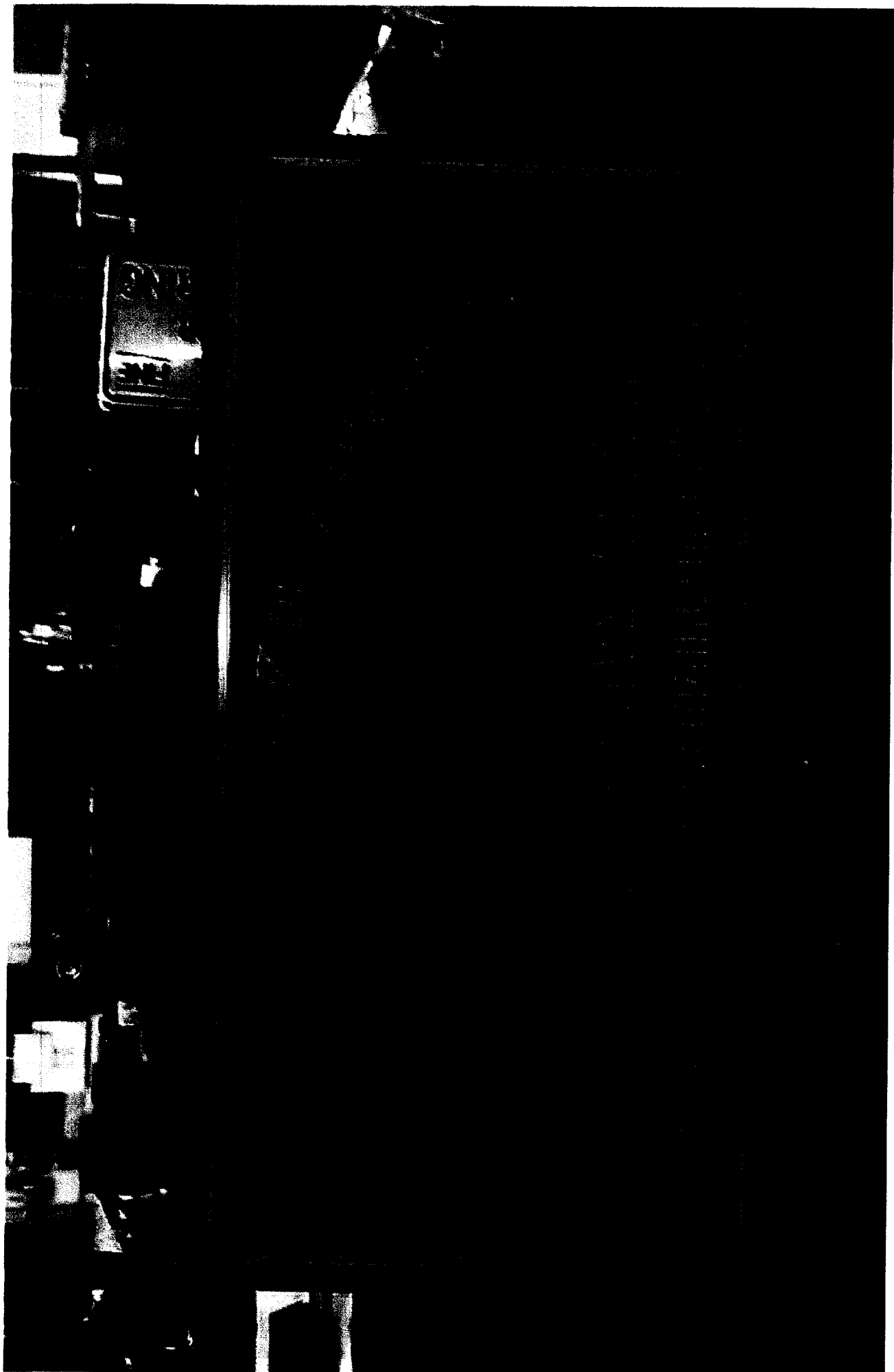
$$b = 0.5 \text{ FT}$$

$$L = \frac{C}{b} = \frac{0.29}{0.5} = 0.58$$

$$H = 9 \text{ FT}$$

FROM GRAPH 4 FT EMBEDMENT IS ADEQUATE WITH A
SOIL PRESSURE OF 1 KSF

$S_u = 1 \text{ KSF}$
CONSERVATIVE
SAY OK



SIGNAGE/AWNING PRE-APPLICATION QUESTIONNAIRE

PLEASE ANSWER ALL QUESTIONS

ADDRESS: 430 RIVERSIDE ST ZONE: IM

CBL: 320-A-3

SINGLE TENANT LOT? YES NO MULTI TENANT LOT? YES NO
MORE THAN ONE SIGN TOTAL WITH PROPOSED SIGN? YES NO

INFORMATION ON PROPOSED SIGN(S):

FREESTANDING (e.g., pole) SIGN? YES NO DIMENSIONS PROPOSED: 4'x8'
BLDG. WALL SIGN? (attached to bldg) YES NO DIMENSIONS PROPOSED: _____

INFORMATION ON ALREADY EXISTING AND PERMITTED SIGN(S):

FREESTANDING (e.g., pole) SIGN? YES NO DIMENSIONS: _____
BLDG. WALL SIGN(attached to bldg) ? YES NO DIMENSIONS: _____
AWNING? YES NO DIMENSIONS: _____

LOT FRONTAGE (FEET): 303' ±
TENANT/ALLOCATED BUILDING SPACE FRONTAGE (FEET): _____

AWNING YES NO IS AWNING BACKLIT? YES NO

HEIGHT OF AWNING: _____ LENGTH OF AWNING: _____ DEPTH: _____

IS THERE ANY COMMUNICATION, MESSAGE, TRADEMARK OR SYMBOL ON IT? YES NO

IF YES, TOTAL S.F. OF PANELS WITH COMMUNICATIONS/MESSAGE/TRADEMARK/SYMBOL? _____ s.f.

A SITE SKETCH AND BUILDING SKETCH SHOWING EXACTLY WHERE EXISTING AND NEW SIGNAGE IS LOCATED MUST BE PROVIDED. SKETCHES AND/OR PICTURES OF PROPOSED SIGNAGE ARE ALSO REQUIRED.

SIGNATURE OF APPLICANT: [Signature] DATE: 6-24-03

***** FOR OFFICE USE ONLY *****
IM single tenant - Free Standing sign
max Area - 35 sq ft
max height - 10' NO - 10' shown
Setback - 5' - 10' + shown
7/20/03 - See [unclear] showing 10ft - OK

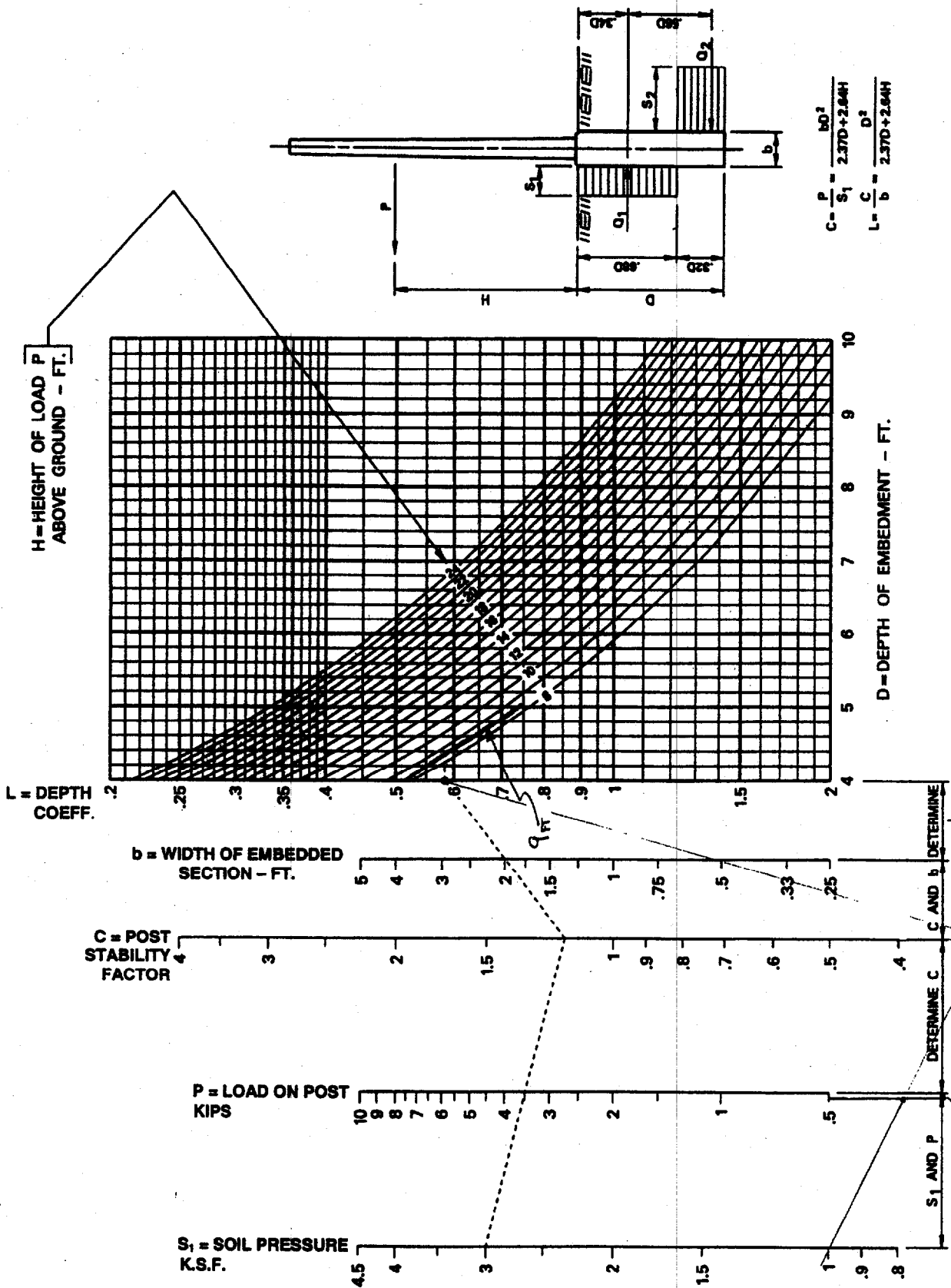
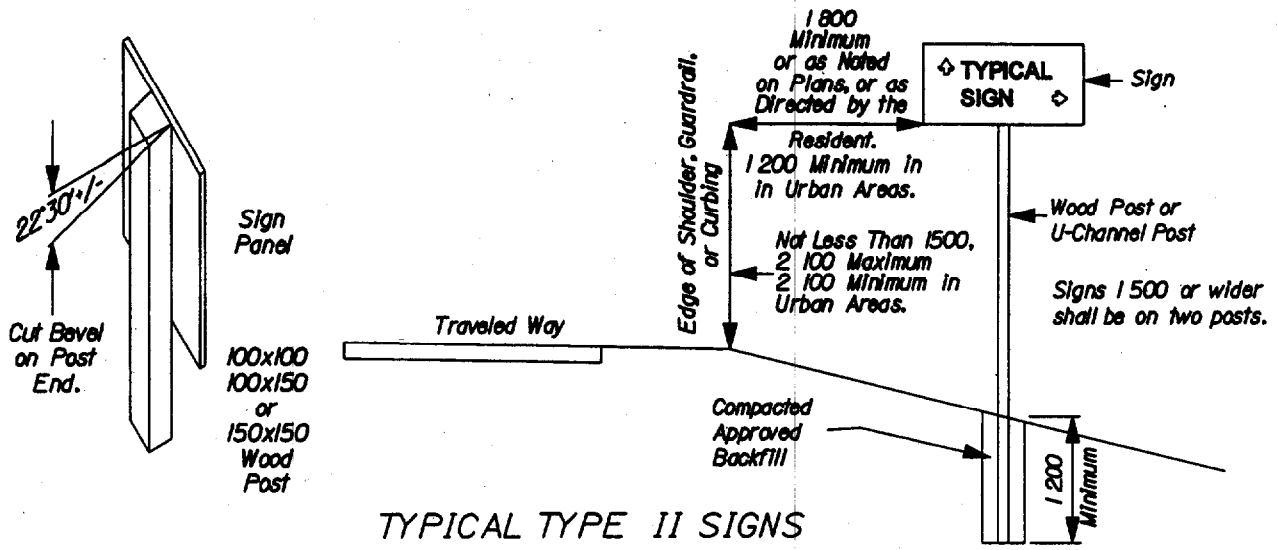
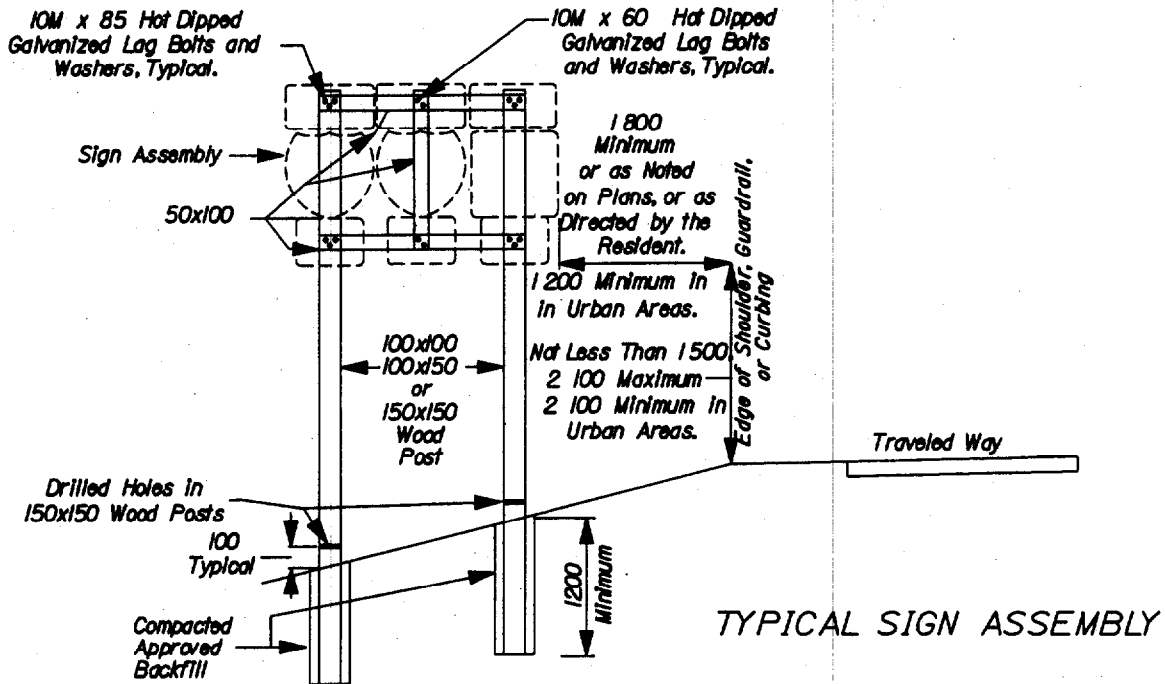


Figure 13-4. Embedment of Posts with Overturning Loads (U.S. Units)



TYPICAL TYPE II SIGNS



TYPICAL SIGN ASSEMBLY

NOTES:

Refer to Section 645.061 of the Standard Specifications to determine the size of wood posts. All wood posts and brackets shall be pressure treated to CCA 40. On 150x150 wood posts only, drill 18mm diameter holes at right angles to one another 100mm above ground level, to meet breakaway standards.

ITEM NO. 645.291
ITEM NO. 645.292

INSTALLATION OF TYPE II SIGNS
HIGHWAY SIGNING
645(09)