

Article 5 - General Regulations

§154.212 Sign Regulations

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- A. *Purpose and Intent.* The purpose of this Ordinance is to provide standards to safeguard life, health, and property and to promote the public welfare by regulating the design, area, number, construction, location, and installation of all signs referred to hereunder. The City Council and Planning Commission of the City of Lake Elmo find that the visual environment has an effect on the welfare of the citizens of Lake Elmo and that careful control of signage can protect and enhance the community. To carry out this general purpose, the regulations set forth herein are intended to:
1. Protect the public from hazards that result from signs which are structurally unsafe, obscure the vision of motorists and/or compete or conflict with necessary traffic signals and warning signs.
 2. Preserve the land value of private property by assuring the compatibility of signs with nearby land uses.
 3. Foster high quality commercial and industrial development and to enhance economic development of existing businesses and industries by promoting reasonable, orderly, attractive and effective sign that meet the need for business identification, advertising and communication.
 4. Encourage creative and well-designed signs that contribute in a positive way to the community's visual environment, express local character and help develop a distinctive image in the city. When appropriate, signage is encouraged to utilize design elements that are consistent with the Lake Elmo Branding and Theming Study.
 5. Recognize that signs are a necessary form of communication and provide flexibility within the sign review and approval process to allow for unique circumstances.
 6. Provide applicants with clear and consistent rules and regulations.
- B. *Definitions.* The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:
- Abandoned Sign.* Any sign remaining in place which for a period of ninety (90) consecutive days or more no longer advertises or identifies an ongoing business, product, service, idea, or commercial activity located on the site or has not been properly maintained in accordance with the requirements of this Ordinance.
- Ancillary Sign.* A wall sign separate from and subordinate in area to the principal sign, identifying generic services, goods or departments in the building, such as pharmacy, optical, auto repair, or garden center, but not including the identification of brand names.
- Attention-Attracting Object.* Any streamer, pinwheel, pennant, flag, propeller, inflatable sign, statuary, tethered balloon, bunting, beacon, or other artificial device, figure, shape, color, sound, light or exhibit, whether live, animated, or still, that is intended to attract attention to the use or business being conducted on the site. Attention-attracting object does not include the flag of any governmental entity.
- Awning.* A roof-like cover consisting of fabric, plastic or structural protective cover that projects from the wall of a building which generally serves the purpose of shielding a doorway, entrance, window, or outdoor service area from the elements or to provide decorative distinction.

Banner. A suspended sign made of a flexible material such as canvas, sailcloth, plastic, paper, or fabric of any kind, and intended to be displayed on a temporary basis. A decorative banner is a banner containing no message or logo that is displayed for the purpose of adding color or interest to the surroundings or to the building to which it is attached. A flag or canopy shall not be considered a banner.

Beacon. A stationary or revolving light that flashes or projects illumination, single color or multicolored, in any manner that is intended to attract or divert attention.

Business Opening Sign. A temporary sign displayed prior or in addition to permitted permanent signs to promote the opening of a new business, a change of name or change of ownership.

Canopy. A detachable, roof-like cover, supported from the ground or deck, floor or walls of a structure, for protection from the sun or weather.

Changeable Copy Sign. A sign or portion thereof with characters, letters, or illustrations that can be changed or rearranged manually without altering the face or the surface of the sign and on which the message changes less than eight times a day and less than once per hour. A sign on which the only copy that changes is an electronic or mechanical indication of time or temperature shall not be considered a changeable copy sign.

Commercial Message. A message that directs attention to or acts as advertising for a business, commodity, product, service or form of entertainment or tends to encourage the occurrence of a commercial transaction related thereto.

Comprehensive Sign Plan. A complete signage plan for a building or lot that has been approved by the City.

Construction Sign. A sign identifying individuals or companies involved in design, construction, wrecking, financing, or development of a building or lot upon which the sign sits and/or identifying the future use of the building or lot upon which the sign sits.

Copy. Words, letters, numbers, figures, designs, or other symbolic representations incorporated into a sign.

Directional Sign, On-Premise. A sign without commercial message erected for the purpose of indicating the required or preferred direction of vehicular, bicycle, or pedestrian traffic on private property including, but not limited to "no parking," "entrance," "exit only," "loading only," and other similar signage.

Directional Sign, Off-Premise. Any sign without commercial message that is displayed for the purpose of informing people of or guiding people to a particular place for a specified event, including, but not limited to, an open house, garage sale, estate sale or other similar event.

Directly Illuminated Sign. Any sign designed to give any artificial light directly through any transparent or translucent material from a source of light originating within or on such sign.

Directory Sign. A sign which serves as a common or collective identification for a group of persons or businesses operating on the same lot. Such a sign commonly lists the tenants, occupants, floor plan, addresses or suite numbers of an office complex, shopping center or residential building complex.

Election Campaign Period. A period prior to a general election starting on August 1 until 10 days following the general election, or a period prior to a special election starting 13 weeks prior to the special election until 10 days following the special election.

Electronic Variable Message Sign. A changeable copy sign or portion thereof which can be electronically changed or rearranged without altering the face or the surface of the sign, not including signage or portions thereof displaying time and temperature.

Façade. Any separate face or surface of a building, including parapet walls, and roof surfaces or any part of a building which encloses or covers usable space. Where separate facades are oriented in the same direction, or where the inside angle at the intersection of two surfaces is greater than one-hundred and thirty-five (135) degrees, they are to be considered as part of a single façade.

Flag. A device generally made of flexible material, such as cloth, paper, or plastic, and displayed from a pole, cable or rope. It may or may not include copy.

Freeway Sign. A pole or freestanding sign adjacent to Interstate 94. To be a permitted freeway sign, the sign must be located within one-hundred and fifty (150) linear feet of the freeway right-of-way. A single sign structure having two identical or nearly identical faces back to back shall constitute a single sign.

Frontage. The boundary of a lot that abuts a public street.

Garage Sale Sign. A sign advertising the sale of personal property including estate sales, yard sales or rummage sales used to dispose of personal household possessions.

Government Sign. Any sign erected by the City of Lake Elmo or any other governmental entity in the exercise of official government business and authority.

Ground Sign. Any free-standing sign that is supported by structures or supports in or upon the ground and independent of support from any building. A single sign structure having two identical or nearly identical faces back to back shall constitute a single sign. For the purposes of this definition, a ground sign is intended to refer to a primary, permanent, ground-mounted sign, not a temporary sign or sign that is ancillary to the primary sign, such as a directional sign or portable sign.

Hanging Sign. A sign that is suspended from the underside of a surface and is supported by such surface.

Indirectly Illuminated Sign. A sign that is illuminated from a source outside of the actual sign.

Inflatable Sign. A freestanding or moored sign expanded or inflated with air or another gas, like a balloon, and which may rise and float above the ground.

Legal Non-Conforming Sign. Any sign which was lawfully erected and displayed on [City Clerk to insert effective date], but which does not conform to the requirements and limitations herein, or any sign which was lawfully erected and displayed on the effective date of any amendment to this Section, but which does not conform to such amendment.

Logo. A symbol or trademark commonly used to identify a business or organization.

Memorial Sign. A sign or tablet memorializing a person, event, place or structure.

Menu Sign. A permanent changeable copy sign associated with restaurants with drive-through windows, car washes, or other businesses with drive-up services which gives a detailed list of food or services available.

Monument Sign. A ground sign having a monolithic base or support structure of any material measuring no less than one-third (1/3) of the greatest width of the sign at any point.

Noncommercial Message. A message intended to direct attention to a political, social, community or public service issue or an idea, aim viewpoint, aspiration or purpose and not intended to produce any commercial benefit or tend to encourage a commercial transaction.

Off-Premise Sign. A sign which displays any message directing attention to a business, product, service, profession, commodity, activity, event, person, institution or any other commercial message, which is generally conducted, sold, manufactured, produced, offered or occurs elsewhere than on the lot where such sign is located.

On-Premise Sign. A sign which displays any message directing attention to a business, product, service, profession, commodity, activity, event, person, institution or any other commercial

ground or building-mounted sign for each additional frontage provided that such additional sign may not exceed 50% of the area allowed by the primary frontage and is oriented toward the additional frontage. For purposes of this code, the primary frontage shall be presumed to be the frontage upon which the main entrance to the building is located. The applicant, however, may identify a different frontage as the primary frontage to maximize the effectiveness of the signage.

11. *Resemblance to Traffic Signs.* No sign shall contain or resemble any sign resembling in size, shape, message, or color any traffic control devices compliant with the Minnesota State Manual on Uniform Traffic Control Devices.
- G. *Limitations According to the Type of Land Use.* Unless exempt under §154.212.K or as expressly provided elsewhere, no permanent or temporary signs shall be displayed except in conformity with the following regulations as they correspond to the type of land use and districts in which the sign is to be displayed.
1. Residential Uses in Residential Districts.
 - a. In connection with legal home occupations, a single sign which is limited in content to the name, address and legal home occupation of the owner or occupant of the premises, and which does not exceed two (2) square feet in area. Signs under this paragraph shall be wall signs only.
 - b. A residential condominium or multi-family apartment complex may display signs identifying the name of the condominium or apartment complex if the total acreage of the lot is one (1) acre or more and the condominium or apartment includes eight (8) or more units. One (1) wall sign and one (1) ground sign per street frontage may be displayed, with a maximum of two (2) wall signs and two (2) ground signs per lot. No identification sign shall exceed thirty-two (32) square feet in area, and the maximum height is one (1) story or twelve (12) feet above curb level, whichever is lower. For purposes of this paragraph, the term "lot," when used in reference to a condominium means all property within a common interest community.
 - c. A subdivision identification sign not exceeding thirty-two (32) square feet in sign area as approved by the City.
 2. *Institutional Uses in Residential Districts.* Nonresidential uses located in residential districts, such as churches and schools, located in residential districts may erect signs as follows:
 - a. Wall and Ground Signs
 - i. Area and Number: One (1) wall sign and one (1) ground sign per street frontage may be displayed, identifying the entity, with a maximum of two (2) wall signs and two (2) ground signs per lot. Additional wall or ground signs for wayfinding purposes may be permitted when the size of the lot, number of vehicular or pedestrian entrances, and layout of the buildings require additional signs in order to promote traffic and pedestrian safety. Signs under this paragraph, whether displayed on a wall or on the ground, shall not exceed twelve (12) square feet in area, except such signs may be increased in area by one (1) square foot for each additional foot that the sign is set back more than twelve (12) feet from a lot line. No sign under this section shall exceed thirty-two (32) square feet in area.
 - ii. *Height.* No identification sign shall project higher than one story, or twelve (12) feet above curb level, whichever is lower.
 - b. Temporary Signs
 3. Commercial, Mixed-Use and Industrial Districts
 - a. Ground Signs

- b. Directory Signs
 - c. Awning and Canopy Signs
 - d. Wall Signs
 - e. Projecting Signs
 - f. Hanging Signs
 - g. Window Signs
 - h. Directional and Informational Signs
 - i. Corporate Flags and Decorative Banners
 - j. Temporary Signs
 - k. I-94 Freeway Signs
4. *Planned Development Districts*. No permanent sign shall be displayed except a sign authorized by the City and included in the Comprehensive Sign Plan pertaining to the site. Temporary signs are permitted for commercial, institutional or industrial uses unless prohibited by the Comprehensive Sign Plan.
 5. *Conservancies and Parks*. No sign shall be permitted except those installed by direction of the Public Works Director.
 6. *Agricultural Sales Businesses*. Signage related to agricultural sales business may be erected as follows:
 - a. *On-Premises Signs, Agricultural Sales Businesses*. One (1) or more on-premises signs may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions:
 - i. Agricultural sales businesses utilizing less than 10 acres of land specifically for the growing of agricultural crops for the business are allowed 1 on-premises sign not to exceed thirty-two (32) gross square feet of advertising surface.
 - ii. Agricultural sales businesses utilizing more than 10 acres of land but less than 40 acres of land specifically for the growing of agricultural crops for the business are allowed up to two (2) on-premises signs not to exceed forty-eight (48) gross square feet of total advertising surface, with no individual sign surface exceeding thirty-two (32) square feet in size.
 - iii. Agricultural sales businesses utilizing more than 40 acres of land specifically for the growing of agricultural crops for the business are allowed up to three (3) on-premises signs not to exceed sixty-four (64) gross square feet of total advertising surface, with no individual sign surface exceeding thirty-two (32) square feet in size.
 - iv. Any illuminated sign shall be consistent with §154.212.F.7 and illuminated only during those hours when business is open to the public for conducting business.
 - b. *Temporary Off-Premises Signs, Agricultural Sales Businesses*. Independent of the total allowable sign area for an individual property anywhere within the city, a temporary off-premises sign may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions:
 - i. *Maximum Number*. Every agricultural sales business shall have no more than three (3) off-premises signs at any given time to direct the public to the location of the business.
 - ii. *Time Frame of Use*. Temporary off-premises signs may be erected for 45-day time periods no more than 4 times in any given calendar year. The required temporary

sign permit shall stipulate the range of dates for each of the 4 allowable time periods in any given calendar year.

- iii. *Size and Height.* An off-site agricultural sales advertising sign shall not exceed 50 square feet in area and shall not be taller than 10 feet in height.
- iv. *Setbacks.* Off-premises signs shall be a minimum of 25 feet from all side property lines, and a minimum of 50 feet from other off-premises advertising signs.
- v. *Permission Required.* Applicants for off-premises signs shall acquire permission from the property owner upon whose land the sign is to be erected.

H. *Regulations Pertaining to Specific Sign Type.* Except as expressly provided elsewhere, signs shall meet the following regulations according to sign type:

1. Wall Signs

- a. *Number.* No building occupant shall display more than one (1) wall sign per street frontage except as provided below:
 - i. One additional wall sign may be displayed on a building with no front setback provided that such sign is a flat sign that is either painted upon the building or does not extend outward more than six (6) inches.
 - ii. Up to three (3) ancillary wall signs may be displayed on buildings measuring at least 100 feet in length along the front lot line. Any ancillary sign displayed under this paragraph shall not exceed 50% of the net area or 50% of the height of the largest permitted wall sign displayed on that façade, nor shall the aggregate area of the ancillary signs exceed 50% of the net area of such wall sign.
- b. *Surface Area.* The total permitted sign surface area of all wall signs on a façade shall not exceed one (1) square foot of signage for each lineal foot of building frontage that is coterminous with the occupancy to which the sign refers, unless a different amount allocated to the building occupant is identified in an approved Comprehensive Sign Plan pursuant to §154.212.I. In addition, no individual wall sign shall exceed one hundred (100) square feet in area.
- c. *Location.* Wall signs shall be mounted parallel to building walls and only on a portion of an exterior wall that is coterminous with the occupancy to which the sign refers, unless a different location is identified in an approved Comprehensive Sign Plan pursuant to §154.212.I. No wall sign shall extend above or beyond the wall to which it is attached.
- d. *Installation Requirements.* No wall sign shall cover or interrupt significant architectural elements such as columns, column caps, friezes, door or window heads, embellishments, adornments, fenestration, or ornamental detailing on any building. All mounting brackets and other hardware used to affix a sign to a wall as well as all electrical service hardware and equipment shall be concealed by architectural elements of the building or the sign itself.

2. Ground Signs

- a. *Number.* There shall be no more than one (1) ground sign for each street on which the lot has frontage, except one additional ground sign per lot frontage may be allowed for any lot frontage over one thousand (1,000) linear feet. On lots occupied by two (2) or more occupants, or where a second ground sign is permitted, three (3) or more occupants, a directory sign shall be used in lieu of multiple ground signs. No single business or building occupant shall be allowed signage on both an individual ground sign and a ground directory sign on the same street frontage. On premises having no principal building, there shall be no more than one (1) ground sign for the premises.
- b. *Surface Area.* No ground sign shall exceed the size listed in Table 5-3.

- c. *Type of Sign.* Any permanent ground sign shall be erected as a monument sign. Pole signs are prohibited unless the pole portion of the sign is enclosed in a shroud that causes the sign to appear to have a monolithic base or support structure of any material measuring no less than one-third (1/3) of the greatest width of the sign at any point or unless the height is no greater than three (3) feet. The base of the monument sign shall not exceed the width of the widest portion of the sign face by more than twenty-five percent (25%).
- d. *Location.* Ground signs shall be placed with consideration for visibility, access, maintenance, and safety, consistent with the provisions of Section 154.212.F.2. Ground signs shall be located beyond required setbacks a distance equal to or greater than the height of the sign. If this is not possible, ground signs shall be located as far from required setback lines as possible. In no case shall a ground sign, as defined in this Ordinance, extend beyond a lot line of a property. A ground sign larger than 6 sq. ft. shall be located no closer than 100 feet of another ground sign or the furthest distance possible from another ground sign, whichever distance is shorter.
- e. *Height*
 - i. The height of a ground sign shall be measured from the approved grade at the base of the sign or the elevation of the street upon which the sign faces, whichever is lower, to the top of the highest attached component of the sign.
 - ii. A ground sign shall be mounted on a base not to exceed four (4) feet in height.
 - iii. Allowable height of a ground sign shall be as set forth in Table 5-3.
 - iv. No ground sign shall be taller than the principal building on the premises to which it pertains.
- f. *Landscaping.* Perennial plantings, grass or other landscaping features shall be incorporated around the base of all ground signs.
- g. *Exempt or Special Purpose Ground Signs.* The location of and maximum height and surface area of any other exempt or special-purpose ground sign expressly authorized by another section of this ordinance, shall be as set forth in such other section.

Table 5-3 Ground Signs

Table 5-3 describes the zoning districts in which ground signs may be displayed, and the maximum height and area of the signs, as determined by the speed limit on the adjacent roadway. For ground signs on zoning lots with more than one street frontage, use the miles per hour on the street with the faster speed limit to determine the maximum height and area allowed.

Ground Signs				
Zoning District		A ^a , LDR, OP, RE, RS, RR ^a , RT ^a	MDR, HDR	BP, C, CC, GB, LC, VMX
No. of Total Traffic Lanes	Speed Limit (MPH)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)	Max Height/ Area (Sq. Ft.)
1-3	0-34	-	6' / 32	10' / 32
	35-44	-	6' / 32	10' / 50

	45+	-	6' /32	10' /72
4-5	0-34	-	6' /32	10' /40
	35-44	-	6' /32	10' /64
	45+	-	6' /32	12' /80

Notes to Table 5-3:

a. Ground signs are only permitted in the A, RR and RT districts in conjunction with agricultural sales business.

3. Freeway Signs

- a. Number. Properties that are adjacent to Interstate 94 may have one (1) freeway sign in addition to the permitted number of ground signs on the property.
- b. Location. Freeway signs are only permitted within one-hundred and fifty (150) linear feet of the freeway right-of-way. Freeway signs shall be placed with consideration for visibility, access, maintenance, and safety, consistent with the provisions of Section 154.212.F.2. A freeway sign shall be located no closer than 100 feet of another freeway sign or the furthest distance possible from another freeway sign. No freeway sign may be located closer than 5 feet to a property line, roadway easement, or other public easement.
- c. Height. The maximum height for all freeway signs is twenty-five (25) feet.
- d. Surface Area. No freeway sign shall exceed one-hundred and fifty (150) square feet in size.
- e. Design Standards. Signs shall be constructed of similar materials, style, and color as that of the principle building. Pylon signs must have a pole cover or pylon cover. The pole or pylon cover must be constructed of similar materials and have a similar appearance as the principal building.

4. Window Signs

- a. Location: All window signs must be located inside an exterior window unless the sign is weatherproof and does not pose a danger from falling or being blown by the wind. Lettering or graphic elements that are directly mounted on a window shall not encroach upon the frame, mullions, or other supporting features of the glass.
- b. Permanent Signs. When a sign is painted on or otherwise attached or applied to the window area in a permanent manner, then such sign shall be included in the total allowable wall sign area for the building and shall not exceed twenty (20) percent of the total ground-floor window area of the building, excluding the door windows. All permanent window signs which have their lettering or graphic elements directly on the glazing shall be painted, metal leafed, vinyl transferred, or in some other manner permanently applied to the interior side of the glass of an exterior building window or door. No application using a temporary adhesive shall be permitted unless the Planning Director determines the application to be reasonably safe.
- c. Temporary Signs. Signs advertising sales and specials shall not exceed thirty (30) percent of the total ground-floor window area of any building, excluding the door windows. Such signs must be displayed in conformance with the temporary sign regulations listed in §154.212.J.



PLANNING COMMISSION
DATE: 4/13/15
AGENDA ITEM: 4B – PUBLIC HEARING
CASE # 2015-15

ITEM: Zoning Text Amendment – Pylon and Freestanding Signs
SUBMITTED BY: Nick Johnson, City Planner
REVIEWED BY: Kyle Klatt, Community Development Director
Casey Riley, Planning Intern
Adam Bell, City Clerk

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to hold a public hearing on a request submitted by Rihm Kenworth to amend the City's Sign Ordinance to allow pylon and freestanding signs with a maximum height of 25 feet and 250 sq/ft surface area for properties within all commercial zoning districts abutting Interstate 94. The current zoning districts with frontages along I-94 include Business Park (BP), Commercial (C), and Rural Transitional (RT). Staff is recommending that the Planning Commission recommend approval of a Zoning Text Amendment to allow freestanding signs with a maximum height of 25 feet and an area of 150 square feet on properties adjacent to interstate highways.

GENERAL INFORMATION

Applicant: Rihm Kenworth of Lake Elmo, 11530 Hudson Boulevard, Lake Elmo, MN 55042
Property Owners: EN Properties LLC, 11530 Hudson Boulevard, Lake Elmo, MN 55042
Location: N/A – Request would allow for pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area for commercial properties abutting Interstate 94.
Request: Rihm Kenworth of Lake Elmo is requesting to amend the City's Zoning Code to allow pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area in the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts for properties along I-94.
Existing Land Use: N/A
Existing Zoning: N/A
Surrounding Land Use: N/A
Surrounding Zoning: N/A
Comprehensive Plan: N/A
Proposed Zoning: N/A

History: In advance of sewerage growth in Lake Elmo, a major update to the Zoning Code was completed in 2012. As part of this Zoning Code update, the previous signage regulations were replaced by the current Sign Ordinance. Prior to the adoption of the current Sign Ordinance, pylon and freestanding signs were allowed for certain parcels along I-94 with a maximum height of 30 feet and a maximum area of 150 square feet. Attachment #2 includes the previous signage regulations for the City of Lake Elmo. Page 9 of the previous signage regulations include the provisions for the I-94 District.

The current Sign Regulations do not allow pylon and freestanding signs. The Code acknowledges that these signs exist and are defined in the “definition” section of the code. However, pylon and freestanding signs are not included in the current permitted signs for Commercial, Mixed-Use and Industrial. It should also be noted that in section L, *Prohibited Signs*, pylon and freestanding signs are not identified as a prohibited use.

Applicable Regulations: Sign Regulations (§154.212) in Current Zoning Code
Signs: I-94 District (§151.115) in Previous Zoning Code

REQUEST DETAILS

Rihm Kenworth has applied for a zoning text amendment to amend the City’s Zoning Code to allow pylon and freestanding signs as a permitted use in the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts that abut Interstate 94. The Planning Commission is asked to hold a public hearing on the request, as all changes to the City’s Zoning Code require a public hearing. The applicants currently operate a business at 11530 Hudson Blvd. N. along Interstate 94 on a parcel that is zoned Rural Development Transitional (RT).

BACKGROUND

Rihm Kenworth currently operates a business at 11530 Hudson Boulevard. The property is located along Interstate 94 in the southeast corner of the City west of Manning Avenue. They recently started operations on this site and are interested in marketing their business with a sign on I-94.

The applicants met with City staff in late January of 2015 to learn more about the City’s Sign Regulations along I-94. Upon review of the sign requirements, it was found that pylon and freestanding signs are currently not permitted in any zoning districts along Interstate 94. The best option remained a Ground Sign with a maximum height of 10 feet and maximum area of 72 feet. Unfortunately, with these requirements, the sign would not be legible from a car traveling 65 mph along I-94. After reviewing the sign requirements in the City’s Zoning Code, the applicant chose to request a Zoning Text Amendment. It should be noted that a variance request was also explored by the applicant. However, after discussing the desired outcome with City staff, it was determined that such a signage change would be more appropriate as an amendment to the Sign Ordinance, as there are many properties along I-94 that will likely have similar requests or be affected by such change.

After conducting research and consulting with City staff, the applicant recommends to amend the Sign Ordinance to allow pylon and freestanding signs with a maximum height of 25 feet and a maximum 250 sq. ft. surface area for properties abutting Interstate 94. The recommendation takes into consideration the elevation of the Interstate, and the 65 mile per hour travel speed. The applicant

has provided several supplemental documents including the United States Sign Council (USSC), the Woodbury Freestanding Sign Code, and the Oakdale Sign Code for consideration by the City.

STAFF REVIEW COMMENTS:

In order to review whether or not pylon and freestanding signs are an appropriate use along Interstate 94, staff reviewed sign requirements from numerous cities within the Metro. The results of staff research are found in Attachment 3, a table providing the provisions of various cities with regards to freestanding signs. The maximum height for a freestanding sign in the broader area was 50 feet in Albert Lea. The maximum surface area was found to be 250 square feet in Albert Lea, Richfield, Sauk Centre, and Bloomington. In the East Metro, Stillwater allows a maximum sign height of 25 feet and 200 square feet. Woodbury has a maximum sign height of 30 feet and 150 square feet. Oakdale allows freestanding signs to be a maximum of 25 feet in height and 80 square feet in area, whereas pylon signs are permitted to be a maximum of 30 feet in height and 150 square feet in area.

In addition, staff reviewed the sign requirements for Business Park, Commercial, and Rural Transitional zoning districts. It was found that pylon and freestanding signs are not a permitted use in Commercial, Mixed-Use and Industrial Districts. Based upon a number of previous inquiries, as well as the future context of a growing I-94 Corridor with additional commercial properties, it is staff's recommendation to provide some signage allowance for freestanding signs for commercial properties abutting the I-94 Corridor.

It should be noted that from a planning perspective, most cities have a supplemental code for businesses and commercial properties along an interstate as they are presented with different opportunities and challenges than typical businesses and commercial centers. The interstate allows the public and potential visitors to see a business from the highway, but can be a problem at the high speed of travel. The sign must be large enough to be both visible and readable at the travel speed. The applicant has included the "Sign Rules of Thumb" by the United States Sign Council to better inform the Zoning Text Amendment request. Staff has determined that a height of 25 feet is appropriate for the I-94 Corridor, but have also determined that an area of 250 square feet exceeds the size that is consistent with the desired character of Lake Elmo. Staff recommend that an a maximum area of 150 square feet would be appropriate for Lake Elmo, which would be consistent with other neighboring communities.

In addition, in determining whether or not pylon or freestanding signs are appropriate for the Commercial, Business Park and Rural Transitional zoning districts along Interstate 94, it should be noted that the proposed action does not remove or replace the sign regulation requirements. It is recommended that freestanding or pylon signs only be allowed for properties adjacent to interstate highways (I-94 in Lake Elmo's case). Different communities have different approaches to determine which parcels are eligible for freestanding signs. For example, the City of Woodbury requires that a freestanding freeway sign not be more than 100 feet from the freeway right-of-way or boundary.

In order to further clarify staff's recommended amendment to the City's Sign Ordinance, staff will provide recommended ordinance language at the Planning Commission meeting. As far as a general recommendation is concerned, staff recommends that the Planning Commission consider some allowance for freestanding signs, as the City has received a number of requests inquiring about taller freestanding signs adjacent to the I-94 Corridor. It is the opinion of staff that these requests will only increase as additional commercial development occurs within the I-94 Corridor. At this time, staff is recommending to allow signs that are 25 feet in height and 150 square feet in area for signs that are in proximity to the interstate highway.

RECCOMENDATION:

Staff is recommending that the Planning Commission recommend approval of the requested zoning text amendment to allow pylon and freestanding signs with a maximum height of 25 feet and 150 square feet for commercial properties abutting Interstate 94. The recommended motion is as follows:

“Move to recommend approval of the request amend the Sign Ordinance to allow pylon and freestanding signs for commercial properties adjacent to interstate highways. These sign should not exceed 25 feet in height and 150 square feet in area.”

ATTACHMENTS:

- 1. Land Use Application and Supporting Materials
- 2. Previous Signage Regulations
- 3. Staff Research of Metro Sign Ordinances

ORDER OF BUSINESS:

- IntroductionCommunity Development Director
- Report by Staff City Planner
- Questions from the Commission Chair & Commission Members
- Open the Public HearingChair
- Close the Public Hearing.....Chair
- Discussion by the Commission Chair & Commission Members
- Action by the Commission..... Chair & Commission Members



PLANNING COMMISSION
DATE: 4/27/15
AGENDA ITEM: 5A
CASE # 2015-15

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Adam Bell, City Clerk

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to review precedents for design standards for freestanding and pylon signs for the I-94 corridor. A public hearing was held on April 13, 2015 for a request submitted by Rihm Kenworth to amend the City’s Sign Ordinance to allow pylon and freestanding signs with a maximum height of 25 feet and 250 sq/ft surface area for properties within all commercial zoning districts abutting Interstate 94. At that time the Planning Commission requested research be done for design standards for freestanding and pylon signs. Staff recommends that the Planning Commission review the precedents from surrounding cities and discuss design standards for the properties with frontages along I-94. Staff is recommending that the Planning Commission recommend approval of a Zoning Text Amendment to allow freestanding signs with a maximum height of 25 feet and an area of 150 square feet on properties adjacent to interstate highways.

GENERAL INFORMATION

Applicant: Rihm Kenworth of Lake Elmo, 11530 Hudson Boulevard, Lake Elmo, MN 55042
Property Owners: EN Properties LLC, 11530 Hudson Boulevard, Lake Elmo, MN 55042
Location: N/A – Request would allow for pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area for commercial properties abutting Interstate 94.
Request: Rihm Kenworth of Lake Elmo is requesting to amend the City’s Zoning Code to allow pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area in the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts for properties along I-94.
Existing Land Use: N/A
Existing Zoning: N/A
Surrounding Land Use: N/A
Surrounding Zoning: N/A
Comprehensive Plan: N/A

Proposed Zoning: N/A

History: The Planning Commission discussed Freestanding and Pylon signs at the April 13, 2015 Planning Commission meeting and public hearing regarding the Zoning Text Amendment. No members of the public spoke at the public hearing on April 13. The discussion focused design standards and possibly adding a theming element to the I-94 corridor. The clarification was made that the Damon Farber Branding and Theming Study was aimed at public signs, and that the I-94 corridor would host private signs. Currently, the only mandatory element in the sign code is that signs must be constructed of high quality durable materials.

Applicable Regulations: Sign Regulations (§154.212) in Current Zoning Code
Signs: I-94 District (§151.115) in Previous Zoning Code

REQUEST DETAILS

The zoning text amendment was brought forward by Rihm Kenworth, a business located on the I-94 corridor. The zoning text amendment would permit freestanding and pylon signs for properties adjacent to the freeway within the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts.

At the April 13, 2015, Planning Commission meeting, the zoning text amendment was postponed and design standards were requested and discussed.

BACKGROUND

Rihm Kenworth currently operates a business at 11530 Hudson Boulevard. The property is located along Interstate 94 in the southeast corner of the City west of Manning Avenue. They recently started operations on this site and are interested in marketing their business with a sign on I-94. At the April 13 Planning Commission meeting, the company stated that 150 square feet of surface area would be an acceptable amount to market the business along I-94.

The Planning Commission met on April 13th, to consider amending the zoning text to allow freestanding and pylon signs along I-94. Design standards were requested at that time to move forward with the zoning text amendment. Questions and comments at the meeting focused on clarifying the proposed zoning amendment. In summary, the amendment would pertain only to properties abutting I-94. The recommended 150 sq. ft. surface area would be permissible per side, with two sides maximum. The 150 sq. ft. sign area refers to the commercial area of the sign, excluding the pole or supporting structure.

The City has adopted Design Standards. The standards were prepared by Damon Farber and Associates and include signage. The recommendations are as follows:

Goal: Residential signage should be subtle in nature and utilized to promote building identity and to properly direct automobile and pedestrian traffic.

- a. Signs shall be consistent with the architectural style of the building on which they are placed, including scale, lighting levels, color and material.

- b. Signs shall be constructed of quality materials.
- c. All signage should be illuminated and clearly visible after dark.
- d. Signs are encouraged to be creative in the use of two and three-dimensional forms, lighting and graphic design, and use of color, patterns, typography, and materials.
- e. Interior vehicle and pedestrian routes should be clearly marked.
- f. All buildings are encouraged to incorporate elements of community theming in appropriate signage, supporting district and city identity.

STAFF REVIEW COMMENTS:

Design Standards for freestanding and pylon signs from numerous cities within the metro were reviewed by staff. The majority of cities within the Metro along and interstate do not have design standards for freestanding and pylon signs. Those that do were reviewed and compiled into a table for review by the Planning Commission, see Attachment 1.

The key cities that address design standards are Belle Plaine, Brooklyn Center, Forest Lake, Roseville, and Woodbury. Belle Plaine requires a landscaped area surrounding the sign, as well as a pole cover or pylon cover for pylon signs. They specifically discourage pylon signs.

Brooklyn Center specifies that freestanding signs that exceed 16 feet in area shall not impede vision between a height of 2 ½ and 7 ½ feet above the centerline grade of the street. This means that freestanding signs cannot have a large and wide pole that obstructions vision.

Roseville requires freestanding signs to include materials that complement the architectural design/existing building materials, including but not limited to face brick, natural or cut stone, integrally colored concrete masonry units/rock faced block, glass, pre-finished metal stucco, and factory finished metal panels. Roseville also specifies that freestanding signs cannot be closer than 5 feet to a property line.

Woodbury is the only city found that includes an aspect ratio, or addresses the width of the sign compared to the base of the sign. Woodbury stipulates that “freestanding signs shall be attached to a base which is at least 75 percent of the width of the sign but shall not exceed the width of the sign by more than 20 percent.”

Specific design standards, such as renderings or images, for pylon and freestanding signs were not found for any city in the Metro area. The majority of cities addressed design standards in their code by requiring “quality materials,” or “similar materials and architecture to that of the primary structure.”

RECCOMENDATION:

Staff is recommending that the Planning Commission recommend approval of the requested zoning text amendment to allow pylon and freestanding signs with a maximum height of 25 feet and 150 square feet for commercial properties abutting Interstate 94. The recommended motion is as follows:

“Move to recommend approval of the request amend the Sign Ordinance to allow pylon and freestanding signs for commercial properties adjacent to interstate highways. These sign should not exceed 25 feet in height and 150 square feet in area.”

ATTACHMENTS:

1. Staff Research of Metro Sign Design Standards

ORDER OF BUSINESS:

- IntroductionCommunity Development Director
- Report by Staff City Planner
- Questions from the Commission Chair & Commission Members
- Discussion by the Commission Chair & Commission Members
- Action by the Commission Chair & Commission Members

Date Received: _____
Received By: _____
Permit #: _____



651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

LAND USE APPLICATION

- Comprehensive Plan Zoning District Amend Zoning Text Amend Variance*(see below) Zoning Appeal
- Conditional Use Permit (C.U.P.) Flood Plain C.U.P. Interim Use Permit (I.U.P.) Excavating/Grading
- Lot Line Adjustment Minor Subdivision Residential Subdivision Sketch/Concept Plan
- PUD Concept Plan PUD Preliminary Plan PUD Final Plan

Applicant: Rihm Kenworth of Lake Elmo
Address: 11530 Hudson Boulevard Lake Elmo, MN 55042
Phone # 612.860.1612
Email Address: dan.dunn@rihmkenworth.com

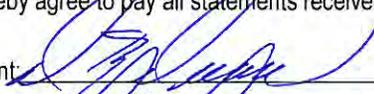
Fee Owner: Rihm Kenworth of Lake Elmo
Address: 11530 Hudson Boulevard Lake Elmo, MN 55042
Phone # 612.860.1612
Email Address: dan.dunn@rihmkenworth.com

Property Location (Address and Complete (long) Legal Description): See attached.

Detailed Reason for Request: Identification of our building & location from the Interstate 94 corridor for our customers and associates is critical to the successful operation of our business.

*Variance Requests: As outlined in Section 301.060 C. of the Lake Elmo Municipal Code, the applicant must demonstrate practical difficulties before a variance can be granted. The practical difficulties related to this application are as follows:

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant:  Date: 20 Feb 2015

Signature of fee owner:  Date: 20 Feb 2015

Property Description:

All that part of the Southeast Quarter of Section 36, Township 29 North, Range 21 West, City of Lake Elmo, Washington County, Minnesota described as follows:

Commencing at the southwest corner of said Southeast Quarter; thence North 00 degrees 54 minutes 36 seconds West, assumed bearing, along the west line of said Southeast Quarter a distance of 418.40 feet; thence North 89 degrees 04 minutes 57 seconds East, a distance of 67.00 feet to the point of beginning; thence continuing North 89 degrees 04 minutes 57 seconds East, a distance of 472.00 feet; thence South 00 degrees 54 minutes 36 seconds East, a distance of 259.00 feet; thence South 89 degrees 04 minutes 57 seconds West, a distance of 222.00 feet thence North 00 degrees 54 minutes 36 seconds West, a distance of 44.00 feet; thence South 89 degrees 05 minutes 24 seconds West, a distance of 34.00 feet; thence South 00 degrees 54 minutes 36 seconds East, a distance of 94.00 feet; thence South 89 degrees 04 minutes 57 seconds West, a distance of 36.01 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 34.00 feet; thence south 89 degrees 04 minutes 57 seconds West, a distance of 94.99 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 97.00 feet; thence South 89 degrees 05 minutes 24 seconds West, a distance of 85.00 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 177.99 feet to the point of the beginning.

Containing 5 acres, more or less.



RIHM KENWORTH

23 March 2015

Lake Elmo Planning Commission and City Council
3800 Laverne Avenue N.
Lake Elmo, MN 55042

Re: Zoning Text Amendment Request.

Ladies and Gentlemen of the Planning Commission and Council,

We are a new business in the Lake Elmo community located at 11530 Hudson Boulevard. Identification of our building and location for our customers and associates from the Interstate 94 corridor is critical to the successful operation of our business.

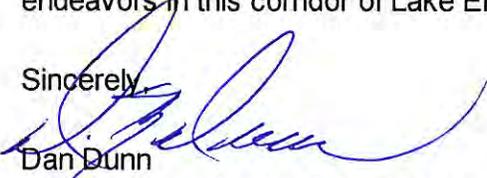
The current provisions of the Lake Elmo Zoning Text for Directory signs of 10' in height and 50 sq/ft surface area does not allow for that. Additionally, pylon signs are not currently permitted according to the City's signage provisions. Our branch locations in the cities of Albert Lea and Sauk Centre, MN., which also have Interstate frontage, have such provisions in their local zoning codes. Our signs in those communities are effective in communicating our whereabouts.

We recommend a change in the Zoning Text to allow for pylon and free standing signs with a maximum height of 25' and 250 sq/ft surface area per side, two sides total. We further suggest that pylon or freestanding signs be allowed for properties that abut Interstate 94 based on the elevation of the Interstate, and the 65 mph travel speeds on the Interstate highway along this frontage.

We respectfully submit two articles of expert testimony to support that request. One is the document Sign Legibility Rules Of Thumb published by the United States Sign Council, and the other a Letter Visibility Chart produced by the California Institute of Technology. Also tendered with this request are sign codes from the Cities of Oakdale and Woodbury, MN., which outline provisions in sign height of 25' and 20' respectively.

This proposed change to the Zoning Text would benefit not only our needs, but other commercial endeavors in this corridor of Lake Elmo, both existing and in the future.

Sincerely,



Dan Dunn

Director of Dealership Infrastructure and IT

LETTER VISIBILITY CHART

LETTER HEIGHT	MAXIMUM READABLE DISTANCE	READABLE DISTANCE FOR MAXIMUM IMPACT
3"	100'	30'
4"	150'	40'
6"	200'	60'
8"	350'	80'
9"	400'	90'
10"	450'	100'
12"	525'	120'
15"	630'	150'
18"	750'	180'
24"	1000'	240'
30"	1250'	300'
36"	1500'	360'
42"	1750'	420'
48"	2000'	480'
54"	2250'	540'
60"	2500'	600'

NOTE: The following distances will vary approximately 10% with various color combinations. Maximum distance in color would be RED or BLACK on a white background.

Prepared by the California Institute of Technology

Serving the Upper Midwest!



Sign
Legibility
Rules
Of
Thumb

UNITED
STATES
SIGN
COUNCIL

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SIGN LEGIBILITY

By Andrew Bertucci, United States Sign Council

Since 1996, the United States Sign Council (USSC) and its research arm, the United States Sign Council Foundation (USSCF) have funded an extensive array of studies into the legibility of on-premise signs and the manner in which motorists react to these signs in various roadside environments. Because of these ground breaking studies, it is now possible to determine, with a degree of certainty, the size of letters as well as the size of signs necessary to ensure motorist legibility. Most of this work has been synthesized in the current USSC publication entitled ***USSC Best Practices Standards for On-Premise Signs***, which details methods for ascertaining sign size, legibility, and height for on-premise signs that are directly in view of a motorist approaching the sign. In addition, a study completed in 2006 and entitled ***On-Premise Signs, Determination of Parallel Sign Legibility and Letter Heights*** now provides similar methods for ascertaining legibility factors for signs not directly in view, such as wall mount building signs usually parallel to a motorist's viewpoint.

The USSC Best Practices Standards and the parallel sign study offer relatively detailed analysis of the legibility factors involved with on-premise signs, and certainly should be utilized whenever such analysis is warranted. A number of equally useful generalizations, or time-saving rules-of-thumb based on the studies, however, can be applied to arrive at results which reflect legibility values which can be used as a general average applicable to most conditions. These are detailed below.



On Premise Sign Legibility Simplified Rules Of Thumb

How Motorists React To Signs In The Roadside Environment

Detecting and reading a roadside on-premise sign by a motorist involves a complex series of sequentially occurring events, both mental and physical. They include message detection and processing, intervals of eye and/or head movement alternating between the sign and the road environment, and finally, active maneuvering of the vehicle (such as lane changes, deceleration, and turning into a destination) as required in response to the stimulus provided by the sign.

Complicating this process is the dynamic of the viewing task, itself, involving the detection of a sign through the relatively constricted view provided by the windshield of a rapidly moving vehicle, with the distance between the motorist and the sign quickly diminishing. At 40 miles per hour, for example, the rate at which the viewing distance decreases is 58

feet per second, and at 60 miles per hour, it becomes an impressive 88 feet per second. Further complicating the process is the relative position of the sign to the eye of the motorist, whether directly in his/her field of view (perpendicular orientation), or off to the side and turned essentially parallel to the motorist's field of view (parallel orientation).

Research has now been able to quantify the viewing process and set a viewing time frame or viewing window of opportunity for both types of sign orientation. In the case of signs perpendicular to the motorist, this time frame is measured as Viewer Reaction Time (VRT), or the time frame necessary for a motorist traveling at a specific rate of speed to detect, read, and react to a sign within his/her direct field of vision with an appropriate driving maneuver. The driving maneuver itself can entail a number of mental and physical reactions, usually involving signaling, lane changes, acceleration and/or deceleration, and finally, a turn into the site of the sign.

In the case of signs parallel to the motorist's view, detecting and reading a sign is generally restricted to quick sideways glances as the sign is approached and the angle of view becomes more constricted. Because of this, the VRT involving these signs is, at best, necessarily compromised. Compensation for this reduction in the time frame involved in detecting and reading parallel signs is made through increases in letter height and size designed to facilitate rapid glance legibility. It must be understood however, that the parallel orientation will always present legibility problems, and in many cases, even if the sign is detected and read, sufficient time for a motorist to complete a driving maneuver in response to the sign may not be available.

Perpendicular Signs

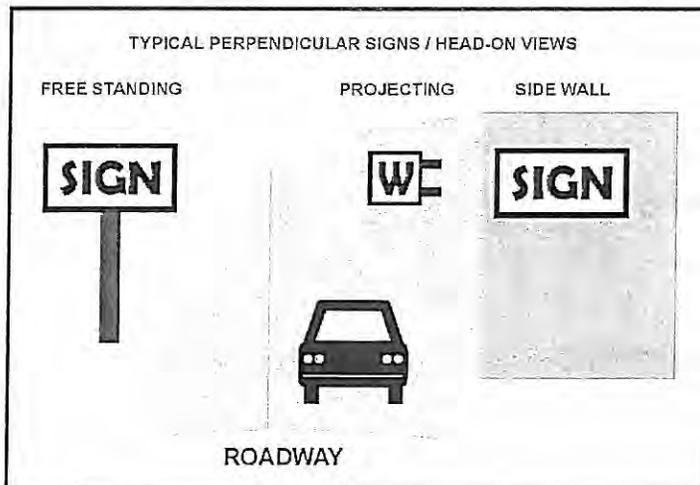


Figure 1. Perpendicular Sign Types

Perpendicular signs include most free standing signs, projecting signs, and, in some cases, flat wall signs placed on building walls that directly face on-coming traffic. (see figure 1). These signs are generally placed close to property lines and fall into the motorist's so-called "cone of vision", which is a view down the road encompassing ten degrees to the right or left of the eye, or twenty degrees total view angle. Signs falling within this cone can usually be viewed comfortably without excessive eye or head movement, and generally can be kept in the motorist's line-of-sight from the time they are first detected until they are passed. (see figure 2, cone of vision).

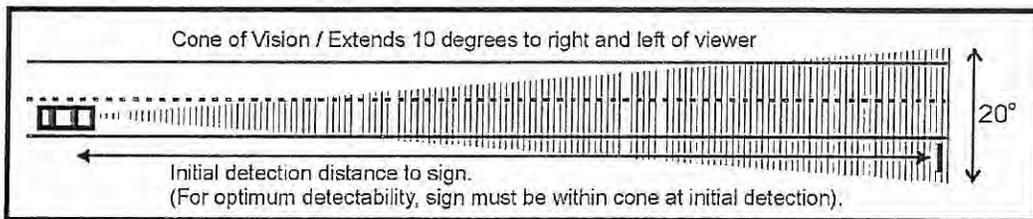


Figure 2. Cone of Vision

Because of this relatively constant view window, perpendicular signs can be designed and sized to provide for viewing time sufficient to allow for adequate detection, reading, and driving maneuvers. The key to providing adequate viewing time is an understanding of Viewer Reaction Time and Viewer Reaction Distance, and how these factors can be computed to provide for adequate letter heights and sign sizes under varied traffic conditions and vehicle speeds.

Viewer Reaction Time / Viewer Reaction Distance

Viewer Reaction Time is simply the time necessary for a motorist to detect, read, and react to the message displayed on an approaching on-premise sign that lies within his or her cone of vision. The USSC Guideline Standards offer precise mathematical procedures for calculating VRT for specific signs with specific copy located in varied locations of increasing traffic complexity and speed.

As a rule-of-thumb for average usage with signs displaying six words of copy (or 30 letters) or less however, VRT for vehicles traveling under 35 miles per hour in simple two to three lane environments can be estimated at eight (8) seconds; for vehicles traveling over 35 miles per hour in more complex four to five lane environments, at ten (10) seconds; and for vehicles traveling over 35 mph in high speed multi-lane environments at eleven to twelve (11-12) seconds.

These values include a maneuvering time of 4 seconds in the simple environment, 5 seconds in the complex environment, and 6 seconds in the high speed multi-lane environment. Although most roadside on-premise sign installations require a motorist to make the driving maneuver before the sign is passed and thus require the full VRT value, occasionally the maneuver can safely be made after the sign location has been passed. Where this is the case, the driving maneuver time of either 4, 5, or 6 seconds should not be included in computing Viewer Reaction Time.

Once VRT is ascertained, Viewer Reaction Distance for a given sign location, or the distance in feet which a vehicle travels during the VRT interval, can be calculated. It is necessary to know this distance because it determines the size of the letters and the size of the sign necessary for legibility to take place over that distance. It represents, in lineal feet, the distance between the motorist and the sign from the moment he or she has first detected it, and it rapidly diminishes as the motorist closes the distance at speed.

It is calculated by first converting travel speed in miles per hour (MPH) to feet per second (FPS) by using the multiplier 1.47, and then multiplying the feet per second by the Viewer Reaction Time. For example, a vehicle traveling at sixty miles per hour covers eighty-eight feet per second ($60 \times 1.47 = 88$). Eighty-eight feet per second times a Viewer Reaction Time of ten seconds equals eight hundred eighty feet (880) of Viewer Reaction Distance. The computation can be expressed also as this equation:

$$VRD = (MPH) (VRT) 1.47$$

Determining Letter Height and Sign Size

The overall legibility of a sign is essentially determined by the height, color, and font characteristics of the letters making up its message component. To this end, the USSC has, through extensive research, developed standard legibility indices for typical letter types and color combinations (see table 1, USSC Standard Legibility Index).

The Legibility Index (LI) is a numerical value representing the distance in feet at which a sign may be read for every inch of capital letter height. For example, a sign with a Legibility Index of 30 means that it should be legible at 30 feet with one inch capital letters, or legible at 300 feet with ten inch capital letters. The USSC Standard Legibility Index also reflects the 15 percent increase in letter height required when all upper case letters (all caps) are used instead of more legible upper and lower case letters with initial caps.

Table 1. The USSC Standard Legibility Index

ILLUMINATION	LETTER STYLE	LETTER COLOR	Background COLOR	LEGIBILITY INDEX	
				Upper & Lower Case	ALL CAPS
External	Helvetica	Black	White	29	25
External	Helvetica	Yellow	Green	26	22
External	Helvetica	White	Black	26	22
External	Clarendon	Black	White	28	24
External	Clarendon	Yellow	Green	31	26
External	Clarendon	White	Black	24	20
Internal Translucent	Helvetica	Black	White	29	25
Internal Translucent	Helvetica	Yellow	Green	37	31
Internal Translucent	Clarendon	Black	White	31	26
Internal Translucent	Clarendon	Yellow	Green	37	31
Internal Opaque	Helvetica	White	Black	34	29
Internal Opaque	Helvetica	Yellow	Green	37	31
Internal Opaque	Clarendon	White	Black	36	30
Internal Opaque	Clarendon	Yellow	Green	37	28
Neon	Helvetica	Red	Black	29	25
Neon	Helvetica	White	Black	38	32

Illumination Variations:

- External light source
- Internal light source with fully translucent background
- Internal light source with translucent letters and opaque background
- Exposed neon tube

To use the Legibility Index table to determine letter height for any given viewing distance, select the combination of font style, illumination, letter color, and background color that most closely approximates those features on the sign being evaluated. Then, divide the viewing distance (Viewer Reaction Distance) in feet by the appropriate Legibility Index value. The

result is the letter height in inches for the initial capital letter in upper and lower case configurations, or for every letter in an all caps configuration. For example, if the Viewer Reaction Distance is 600 feet, and the Legibility Index is 30, the capital letter height would be 20 inches ($600' / 30 = 20''$).

VRD (in feet) / LI = Letter Height (in inches)

The Legibility Index rule-of-thumb...30

In addition to the use of the Legibility Index chart, a simpler, rule-of-thumb Legibility Index of 30 is frequently used as an average to address most legibility requirements. Although generally acceptable, it should be understood that this is an average only, and it may fall short of meeting the legibility needs of any specific sign or environment. The USSC On-Premise Sign Standards provides a much more precise means of establishing this requirement, particularly for complex environments, and should be used whenever such precision is warranted.

Sign Copy Area and Negative Space – Computing Sign Size

The computation of overall sign size is of vital concern to anyone involved in designing or building on-premise signs, since it relates directly to both sign cost as well as to adherence to local building and zoning ordinances. It is for this reason that USSC has devoted so much research resources into developing methods for computing adequate sign sizes for varied environments, and into providing the industry with the means to compute the size of signs necessary to adequately transmit communicative messages to motorists traveling at different rates of speed. The use of the Legibility Index is the vital first step in this process, but there is frequently more involved than just letter height, especially in perpendicular signs involving the use of background panels. Clearly, in these instances, an understanding of how sign copy area and negative space interact to bring about optimum viewer legibility is critical.

In instances in which only letters comprise the total sign, such as channel letters on building walls, however, the computation of total sign size in square feet is relatively simple. In the case of these types of individual letter signs, overall size is frequently considered as the product of the height of the letters times the length of the line of letters. For example, if capital letter height is two feet, and the line of letters measures thirty feet horizontally, sign size would be calculated at sixty square feet ($2 \times 30 = 60$). There is an important exception to this mode of calculation in which only the space actually taken up by the letters themselves in square feet, and not the space between letters, is considered. In these cases, overall size becomes simply the sum of all the individual letter areas, and is generally a fairer method of computation when the letters and or/symbols

are spread out over a large area of building wall. In any event, for individual letter signs, it is essentially the height of the letters which is the prime determinant of overall sign size, and as we observed above, this can be calculated with some precision through use of the Legibility Index.

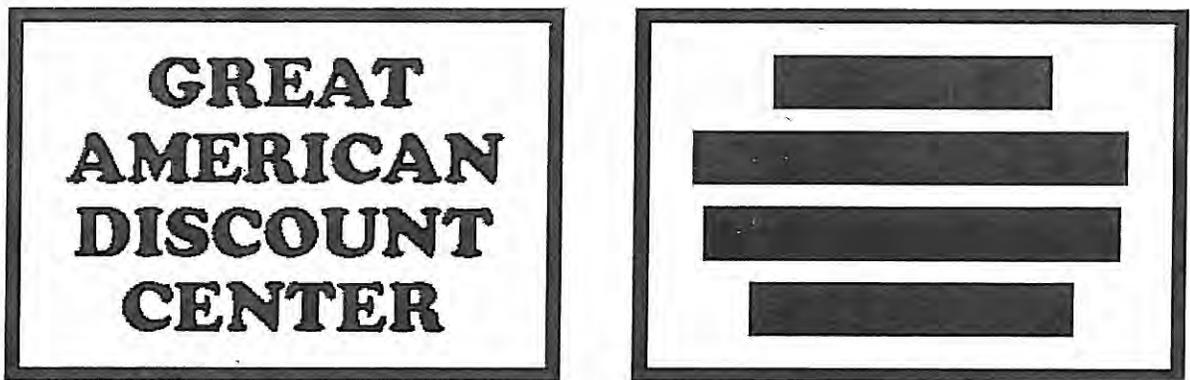
In this context, there is also another useful rule of thumb which can be used to give a working approximation of how much horizontal length a given number of letters would require once the letter height is established by simply multiplying capital letter height by the number of letters. For average fonts, this rule of thumb takes into account the space between letters in a line (usually $1/3$ the width of an individual letter and referenced as letterspace) and can give a surprisingly close determination of the actual length of the line of letters.

In the case of signs utilizing background areas, however, computation of the amount of space occupied by the lettering, also called copy area, is only the first step in computing overall sign size. Of equal importance in signs of this type is the amount of negative space surrounding the letters or copy area. It is this negative space which provides the background for the letters, makes legibility possible, and which must be accounted for in any computation to determine overall sign size.

Copy Area

The copy area of a sign is that portion of the sign face encompassing the lettering and the space between the letters (letterspace), as well as any symbols, illustrations, or other graphic elements. It is a critical component of effective sign design because it establishes the relationship between the message and the negative space necessary to provide the sign with reasonable legibility over distance.

Figure 3. Copy Area

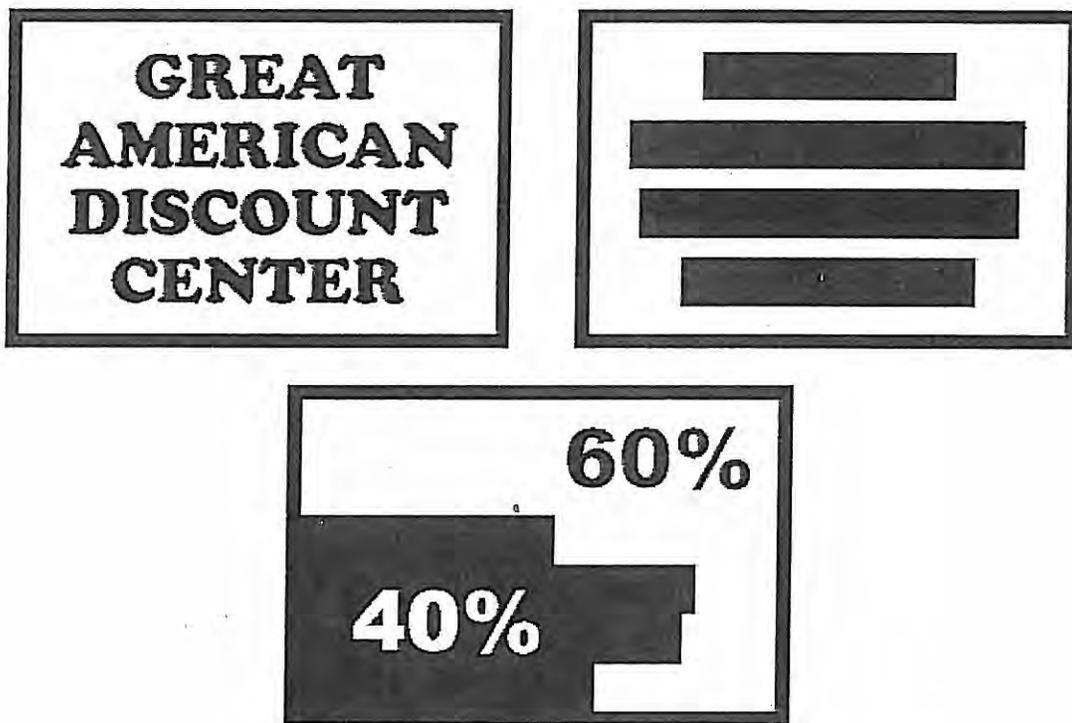


The illustration on the left depicts a typical on-premise sign face; while the one on the right, with black rectangles covering the copy area, affords a visual of the message layout

Negative Space

Negative space is the open space surrounding the copy area of a sign. It is essential to legibility, particularly in signs in which the copy is displayed within a background panel. Negative space ideally should not be less than 60 percent of the sign or background area. This requirement for a 40/60 relationship between the copy area and negative space is the minimum USSC standard. It is intended only to establish a measurable baseline for the negative space component of a sign, such that a reasonable expectation of legibility will exist.

Figure 4. Relationship Between Copy Area And Negative Space



The bottom sign panel illustrates how the aggregate copy area comprises 40 percent of the total sign panel area, with the remaining 60 percent forming the negative space area.

DETERMINING SIGN SIZE – Calculation Methodology

The size of a sign is determined by the size and length of the message and the time required to read and understand it. It can be calculated once the numerical values of the five size determinants –Viewer Reaction Time, Viewer Reaction Distance, Letter Height, Copy Area, and Negative Space – have been established.

The step-by-step process to determine sign size, which is explained below, is useful not only as a calculation method, but also as a means of understanding the elements involved in the calculation.

Area of Sign / Computation Process:

1. Determine speed of travel (MPH) in feet per second (FPS): $(\text{MPH} \times 1.47)$.
2. Determine Viewer Reaction Time (VRT).
3. Determine Viewer Reaction Distance $(\text{VRT} \times \text{FPS})$.
4. Determine Letter Height in inches by reference to the Legibility Index (LI): (VRD/LI) .
5. Determine Single Letter Area in square inches (square the letter height to obtain area occupied by single letter and its adjoining letterspace).
6. Determine Single Letter Area in square feet: $\text{Single Letter Area in square inches}/144$.
7. Determine Copy Area (Single Letter Area in square feet \times total number of letters plus area of any symbols in square feet).
8. Determine Negative Space Area at 60% of Sign Area $(\text{Copy Area} \times 1.5)$.
9. Add Copy Area to Negative Space Area.
10. Result is Area of Sign in square feet.

Computation Process / Calculation Example

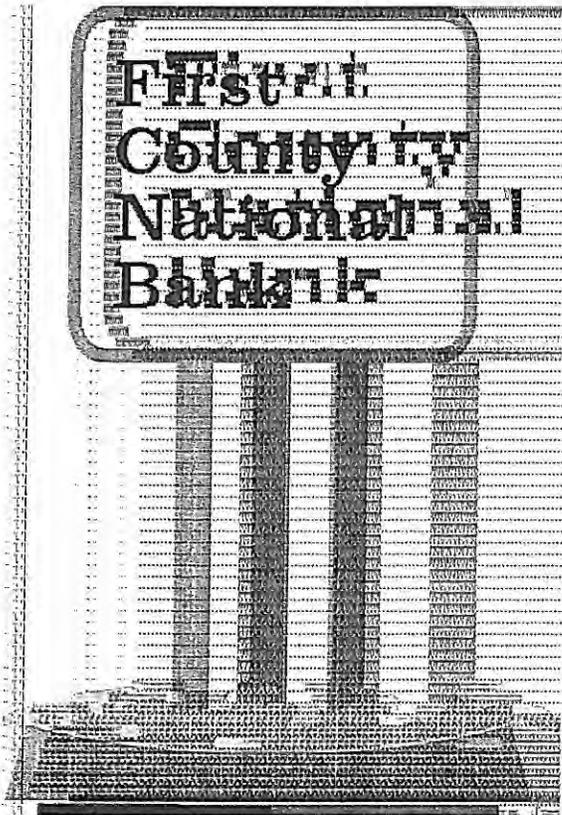


Figure 5. Calculation Example Sign

Location: Complex Driving Environment

Posted Traffic Speed of 40 MPH

Sign Background: White

Sign Copy: 23 Letters, Upper & Lower Case

Clarendon Style, Black

Internally Illuminated, Translucent Face

1. Determine speed of travel in feet per second; $40 \text{ MPH} \times 1.47 = 59 \text{ FPS}$
2. Determine Viewer Reaction Time – Complex Environment
 - Detection and Message Scan..... 5 seconds
 - Maneuver..... 5 seconds
 - Total Viewer Reaction Time = 10 seconds VRT
3. Determine Viewer Reaction Distance; $59 \text{ (FPS)} \times 10 \text{ (VRT)} = 590 \text{ feet}$
4. Determine Letter Height in inches - Refer to Legibility Index, Table 1
 - Black Clarendon letters on White background = Index of 31
 - $590 \text{ (VRD)} / 31 \text{ (LI)} = 19 \text{ inch letter height}$
5. Determine Single Letter Area in square inches
 - $19 \times 19 = 361 \text{ square inches, single letter area}$
6. Determine Single Letter Area in square feet
 - $361 / 144 = 2.5 \text{ square feet, single letter area}$
7. Determine Copy Area; single letter area (sq. ft.) x number of letters
 - $2.5 \times 23 = 57.5 \text{ square feet, copy area}$
8. Determine Negative Space @ 60% of sign area
 - $57.5 \times 1.5 = 86.25 \text{ square feet, negative space}$
9. Add Copy Area to Negative Space
 - $57.5 + 86.25 = 143.75 \text{ square feet}$
10. Result is Area of Sign, 144 square feet

Area of Sign – Equation / Specific Usage

In addition to the computation method above, the USSC has developed an algebraic equation to determine the Area (A_{sign}) for signs containing letters only, which will provide the same result but will simplify the process. The equation allows for insertion of all of the size determinants, except for Negative Space, which is fixed at the standard 40/60 ratios. (Note: If numbers are rounded off in the computation process, a very slight difference in result may occur between the computation process and the equation).

$$A_{\text{sign}} = \frac{3n}{80} \left[\frac{(\text{VRT})(\text{MPH})}{\text{LI}} \right]^2$$

Fixed Value:

40/60 ratio, letters/negative space

Variable Values:

Number of Letters (n)

Viewer Reaction Time (VRT)

Miles Per Hour (MPH)

Legibility Index (LI)

Here's how to work the equation:

Start with the first portion of the equation which is three times the number of letters divided by 80. Three times 23 letters is 69; when divided by 80 the result is .8625. Keep this number ready for later use. Compute the second part of the equation in brackets by multiplying VRT (Viewer Reaction Time), which is 10 by the MPH (miles per hour), which is 40. The multiplication product is 400. Divide 400 by the LI (Legibility Index), which is 31, and the result is 12.90. Square the 12.90 by multiplying it by itself (12.90 x 12.90) for a product of 166. Finally, multiply the 166 by the .8625 obtained from the first part of the equation, and the resulting square footage is 143.

Area of Sign – Equation / Broad Usage

To allow for a broader scientific evaluation of sign size and satisfy the minimal legibility requirements across a full range of reaction times and speed zones, USSC has also developed a second more simplified equation shown below. This formula fixes the average sign size determinants, leaving only Viewer Reaction Time (VRT) and the speed of travel (MPH) as the sole variables. It can be used effectively as a broad rule-of-thumb to ascertain the general size of signs necessary to adequately and safely convey roadside information to motorists traveling at a given rate of speed as well as to establish size parameters for signs across an entire community and/or road system. Table 2 below provides a handy look-up reference of the use of the equation.

$$A_{\text{sign}} = \frac{[(\text{VRT}) (\text{MPH})]^2}{800}$$

Fixed Values:

30 Letters

Legibility Index (LI) of 30

40/60 ratio, letters/negative space

Variable Values:

Viewer Reaction Time (VRT)

Miles Per Hour (MPH)

Here's how to work the equation,
assuming Viewer Reaction Time of 10 seconds and speed at 50 miles per hour:

Compute the values in the brackets by multiplying the VRT (Viewer Reaction Time) of 10 seconds by the MPH (miles per Hour), which is 50. The multiplication product is 500. Square the 500 by multiplying it by itself (500 x 500) for a product of 250,000. Divide 250,000 by 800 for the resulting square footage of 312.

Table 2. Freestanding Sign Sizes

Freestanding Sign Size in Square Feet

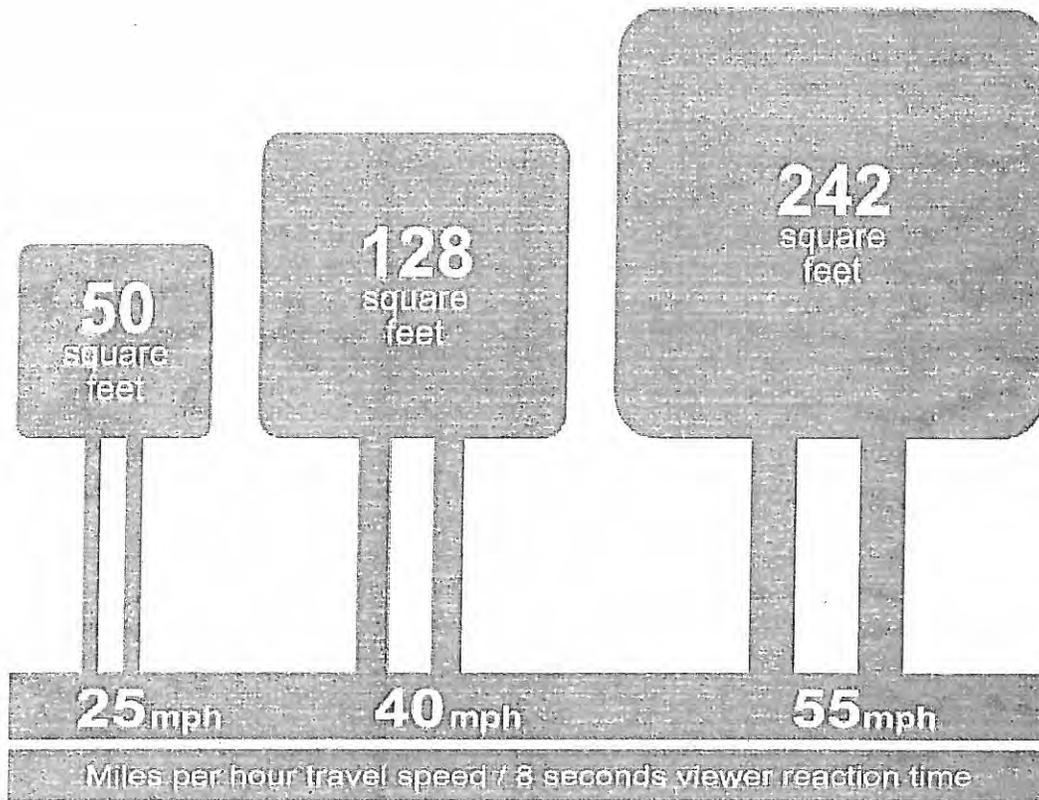
Sign Size (Square Feet) = $[(VRT)(MPH)]^2 / 800$

VRT = Viewer Reaction Time MPH = Miles Per Hour

VRT varies with roadside complexity:

simple or 2 lane = 8 seconds / complex or 4 lane = 10 seconds / multi lane = 11 seconds

MPH	Road Complexity	VRT	Sign Size
25	simple / 2 lane	8	50
25	complex / 4 lane	10	78
30	simple / 2 lane	8	72
30	complex / 4 lane	10	112
35	simple / 2 lane	8	98
35	complex / 4 lane	10	153
40	simple / 2 lane	8	128
40	complex / 4 lane	10	200
45	simple / 2 lane	8	162
45	complex / 4 lane	10	253
50	simple / 2 lane	8	200
50	complex / 4 lane	10	312
55	complex / 4 lane	10	378
60	complex / 4 lane	10	450
65	multi lane	11	639
70	multi lane	11	741
75	multi lane	11	850



Average sign size related to speed of travel and reaction time

Illustration from *Street Graphics and the Law*,
 American Planning Association, 2004

Parallel Signs

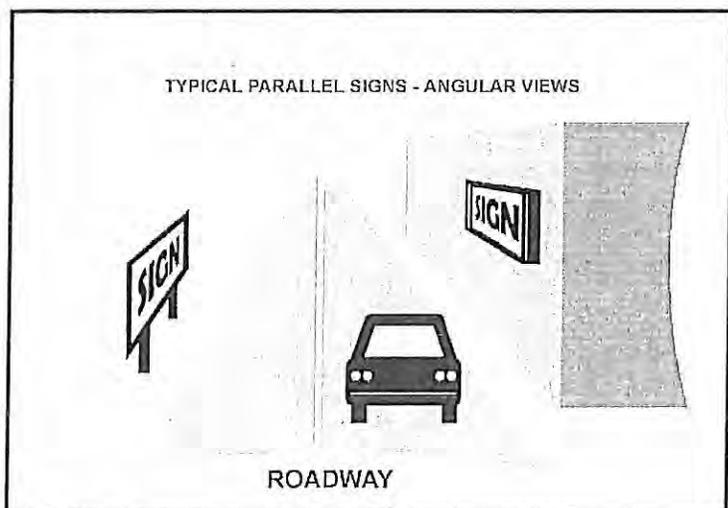


Figure 6. Parallel Sign Types

Everyday experience teaches us that parallel signs are more difficult to read than perpendicular signs simply because their orientation to the eye of any observer is at an acute angle. Now USSC research has corroborated this subjective impression with scientific evidence, and has made it possible to construct a mathematical model and attendant equations to account for the size increases necessary to allow parallel oriented signs to achieve at least some measure of the legibility quotient of perpendicular signs in a motorist oriented environment.

Parallel signs are harder to read because their orientation, or tilt, with respect to the driver makes it impossible to see the sign face at certain distances and offsets. When the driver can see the sign face, the content is often foreshortened and distorted. The driver must get close to the sign in order to increase the viewing angle to the point where the sign becomes legible. However, as drivers approach the sign, the time they have to read it gets shorter, while the sign moves further into their peripheral vision.

This condition places parallel signs at a threefold disadvantage relative to perpendicular signs. First, they are inherently more difficult to read because of the foreshortening of the message content caused by the angle of view. Second, because they become legible only after the angle of view exceeds 30 degrees, the time frame during which legibility can take place is compressed, and third, because they are usually placed back from the roadside well outside a driver's cone of vision, they are viewed by drivers only during short sideway glance durations, usually measured in fractions of seconds.

In many cases, their orientation causes not only severely compromised legibility compared to perpendicular signs, but results in the sign not being seen at all. In the USSC study, *Real World On-Premise Sign Visibility*, in which people were asked to drive through typical suburban shopping areas and locate specific signs, perpendicular signs were almost never missed while the subjects drove past 30 percent of the parallel signs, even though the parallel signs were two and three times larger than the perpendicular signs and the drivers were actively looking for them.

Parallel signs, therefore, must be read using a series of very quick glances at large visual angles during small windows of opportunity. Because of this, letter heights developed for perpendicular signs, where drivers have more time and can take longer straight ahead glances, cannot provide for adequate parallel sign legibility.

As we have noted in the case of perpendicular signs, the minimum distance at which a sign must become legible is a function of the time it takes to read the sign and the decisions and maneuvers required to comply with the sign. This is the Viewer Reaction time (VRT), which when combined with the speed of travel, becomes the Viewer Reaction Distance (VRD). Given the VRD, a perpendicular sign's letter height can be calculated using the Legibility Index.

The legibility of parallel signs, however, depends not on a driver's line of sight to a sign down the road, but rather when the sign becomes visible to the driver at a sight angle sufficient to allow at least some glance legibility to take place. A significant amount of research has now determined that this angle should be no less than 30 degrees to the driver's line of sight, and it is the visual restriction imposed by this angle, along with the number of lanes of travel, and the sign's offset from the curb, which determines the Maximum Available Legibility Distance, (or MALD) for a given parallel sign

While traversing this distance, however, a driver cannot be expected to register much more than a few quick glances at the sign without adversely affecting his/her view of the road. Thus it is essential to optimize reading speed for parallel signs in order to minimize the duration and frequency of glances that drivers must make to read the sign. Research has shown that reading speed increases to its maximum as letters are enlarged by a factor of three, and then tends to level off; and to ensure adequate letter height for parallel signs, a multiplier of three is used in the mathematical model to determine the letter heights and the legibility index for parallel signs.

Using this multiplier of three as a benchmark or rule of thumb, the Legibility Index for parallel signs falls to 10, instead of the Legibility Index of 30 we have shown as a rule of thumb for perpendicular signs. Thus a

parallel sign with a MALD of 500 feet, for example, would require a capital letter size of 50" (500/10=50). Conversely, a perpendicular sign at the same location, but directly viewable 500 feet down the road, would require a capital letter size of 17" (500/30=17)

Equations and Lookup Table

The following equations can be used to determine appropriate letter heights for parallel mounted signs given the number of lanes of travel and the lateral offset of the sign from the curb. Equation #1 uses an average LI of 10, while Equation #2 allows users to input the LI that most closely matches their sign conditions from the USSC Legibility Index table (Table 1) and applies the three times threshold constant to that LI. A parallel sign letter height lookup table is also provided for typical roadway cross-sections and lateral sign offsets (Table 3).

***When using the equations or the lookup table
always use the maximum number of lanes on the
primary target road.***

Parallel Letter Height Model Equations

Equation #1: $LH = (LN \times 10 + LO) / 5$

Equation #2: $LH = (LN \times 10 + LO) / (LI / 6)$

where:

LH is letter height in inches.

LN is the number of lanes of traffic.

LO is the lateral offset from curb in feet.

LI is the legibility index from Table 1

Examples of how to work the equations

2-Lane Roadway

Lateral offset is 37 feet from the curb.

User does not know the letter style.

Equation #1: $LH = (LN \times 10 + LO) / 5$

$$LH = (2 \times 10 + 37) / 5$$

$$LH = 57 / 5$$

$$LH = 11.4 \text{ inches}$$

Same scenario, but user knows the sign is: Externally Illuminated,
Helvetica, all Caps, Light Letters on Dark Background
(USSC LI = 22 ft/in)

Equation #2: $LH = (LN \times 10 + LO) / (LI / 6)$

$$LH = (2 \times 10 + 37) / (22 / 6)$$

$$LH = 57 / 3.67$$

$$LH = 15.5 \text{ inches}$$

Table 3. Parallel sign letter height lookup table.

Offset from Curb (ft)	Letter Height in Inches				
	Number of Lanes				
	1	2	3	4	5
10	4	6	8	10	12
20	6	8	10	12	14
40	10	12	14	16	18
60	14	16	18	20	22
80	18	20	22	24	26
100	22	24	26	28	30
125	27	29	31	33	35
150	32	34	36	38	40
175	37	39	41	43	45
200	42	44	46	48	50
225	47	49	51	53	55
250	52	54	56	58	60
275	57	59	61	63	65
300	62	64	66	68	70
325	67	69	71	73	75
350	72	74	76	78	80
375	77	79	81	83	85
400	82	84	86	88	90

Sec. 18.5-56. - Freestanding signs.

- (a) *Number.* Each building may have one freestanding sign per street frontage.
- (b) *Area.*
- (1) A building site having one street frontage may have one freestanding sign not to exceed 80 square feet.
 - (2) Building sites with two or more frontages may have one freestanding sign not to exceed 80 square feet and other freestanding signs not to exceed 40 square feet.
 - (3) Building sites adjacent to the freeway may have one freestanding sign on the freeway frontage not to exceed 150 square feet and one freestanding sign on a second frontage not to exceed 80 square feet and other signs not to exceed 40 square feet.
- (c) *Location.*
- (1) All portions of the sign shall be at least 15 feet from property lines.
 - (2) Freeway signs must be not more than 100 feet from the freeway property lines.
 - (3) No freestanding sign over three feet high shall be erected or maintained within the clear vision triangle.
 - (4) Freestanding signs shall not be erected or maintained any closer than three feet to any building.
- (d) *Height.* The maximum height for freestanding signs shall be 20 feet except freeway signs may be 30 feet.
- (e) *Design.* Freestanding signs shall be attached to a base which is at least 75 percent of the width of the sign but shall not exceed the width of the sign by more than 20 percent. The base shall be constructed of class I materials that match those used on the building for which the sign is installed. If no class I materials are used on the building, class I or II materials shall be used.

(Ord. No. 1641, § 1641.02, 1-10-96; Ord. No. 1764, § 1764.01, 8-24-2005; Ord. No. 1816, § 1816.01, 3-11-2009)

ARTICLE 19. SIGNS

Sec. 25-181 Purpose and Intent.

The purpose of this Ordinance is to protect and promote the general welfare, health, safety and order within the City of Oakdale through the standards, regulations and procedures governing the erection, use and/or display of devices, signs or symbols serving as visual communicative media to persons situated within or upon public rights-of-way or properties.

The provisions of this Ordinance are intended to encourage creativity, a reasonable degree of freedom of choice, an opportunity for effective communication and a sense of concern for the visual amenities on the part of those designing, displaying or otherwise utilizing needed communicative media of the types regulated by this Ordinance, while at the same time assuring that the public is not endangered, annoyed or distracted by the unsafe, disorderly, indiscriminate or unnecessary use of such communicative facilities.

Sec. 25-182 Definitions.

- (a) **Accessory Sign:** A sign relating in its subject matter to the premises on which it is located, or to products, accommodations, services or activities on the premises on which it is located.
- (b) **Accessory Use:** A use which is subordinate to the principal use being made of a parcel of land. Accessory uses are defined in the Zoning Code.
- (c) **Address Sign:** Postal identification numbers only, whether written or in numeric form.
- (d) **Area Identification Sign:** A free-standing sign which identifies the name of a neighborhood, a residential subdivision, a multiple residential complex consisting of three (3) or more structures, a shopping center or area, an industrial area, an office complex consisting of three (3) or more structures or any combination of the above that could be termed an area.
- (e) **Banners and Pennants:** Attention-getting devices which resemble flags and are of a non-permanent paper, cloth or plastic-like consistency.
- (f) **Bench Signs:** A sign which is affixed to a bench or shelter at a bus stop.
- (g) **Billboard:** A large outdoor advertising structure mounted on one or more legs and designed to display posters, composite graphics and electronic (Dynamic Displays) advertisements.
- (h) **Electronic Message Signs:** Displays, devices or portions thereof with lighted messages that change at intermittent intervals by electronic process or remote control. Also known as an automatic changeable copy sign, dynamic display message sign, electronic variable message center, electronic dynamic business sign, or video display sign. Electronic message signs are not identified as flashing or motion signs.
- (i) **Free-Standing Sign:** A sign which is placed in the ground and not affixed to any part of any structure.
- (j) **Illuminated Sign:** Any sign which is illuminated by an artificial light source.
- (k) **Institutional Sign:** Any sign or bulletin board which identifies the name and other characteristics of a public or private institution on the site where the sign is located.

(2) **Commercial District:**

- a) Wall Signs: One wall sign for each street frontage shall be permitted on a building for each business located within such building. The total area of all wall signs affixed to a building wall shall not exceed twenty (20) percent of the total area of that wall. No individual wall sign shall exceed 150 square feet.

A wall sign shall not project more than eighteen (18) inches from the wall to which the sign is to be affixed. Furthermore, wall mounted signs shall not exceed the roofline on any building.

Banners shall be included in the allowance for wall signs. The design and construction of all banners shall be professional looking and not be allowed to become torn or weathered.

- b) Free-Standing Sign: One freestanding sign is permitted for each building for each street frontage.

The total area of a freestanding sign for a building having one street frontage shall not exceed eighty (80) square feet. Where a building has two (2) or more street frontages, each permitted freestanding sign in excess of one shall be no greater than one-half the area of the first sign.

No part of a freestanding sign shall be closer than ten (10) feet to the front property line or exceed **twenty-five (25) feet in height**. The height shall be measured from the base of the sign or grade of the nearest adjacent roadway, whichever is lower.

- c) Bulletin Signs: Bulletin signs may have individual face areas of up to fifty (50) percent of the area of the display surface area of the business' identification or free-standing sign. Bulletin signs which are not wall-mounted must have a minimum elevation of ten (10) feet. Bulletin signs which are not wall-mounted must have a minimum elevation of ten (10) feet.

One portable bulletin sign up to 15 square feet may be displayed only during the merchant's business hours, with a permit. Such signs shall be located within the width of the storefront to which it is related.

- d) Pylon Signs: **Retail and service establishments on property abutting an interstate freeway right-of-way may erect one pylon sign not exceeding 150 square feet of display surface area in addition to their one free-standing sign.**

The minimum allowance distance of a pylon sign to an interstate right-of-way is fifty (50) feet, with a maximum height of thirty (30) feet.

P/D #
add surrounding
Vsee

City	Zone	Freestanding Sign Requirements	Freeway Sign Dimensions	Location	Height
Albert Lea	B-2, I-1, I-2, I-3		250 sf per side, max 2 sides.	Sign must be at least 100 ft from other freestanding signs including billboards.	50 ft.
Bloomington	Class 5 Sign District, Commercial and C/R along I-35W, I-494 and TH-77	1 identification sign allowed per frontage.	Max surface area for ground, pylon or monument is 250 sf. All other frontages 150 sf.	If the sign lights up, it must be 100 ft away from the surrounding residential buildings.	Final Pylon shall not have any part of the sign above 45 ft. the final grade. Signs on the same property have to match their final sign elevations.
Eden Prairie	Commercial		NTE 80 sq. Additional frontages may have sin NTE 36 sf.	Sign can be no closer than 300 ft to any other free-standing sign upon the building site, and 20 ft. from ROW.	Max 20 ft.
Maplewood	Business Commercial along Principal Arterial	1 freestanding sign permitted per frontage, if 2 frontages, signs must be 100 ft. from each other	Max size 180 sf.		Max 25 ft.
New Brighton	Commercial and B-3	1 ground sign is permitted per street frontage.	Max size of freeway ground sign is 170 sf.	Must be 13.5 ft. from ROW.	Max 35 ft.

Oakdale	Commercial	1 pylon sign allowed if retail is abutting freeway.	Pylon NTE 150 sf. Pylon is in addition to the freestanding sign (NTE 80 sf)	Pylon must be at least 50 ft from interstate ROW.	Max height 30 ft.
Richfield	C-2, MU-C I, MU-R	Total of all freestanding signs = 4 sf per ft of lot frontage.	200 sf per surface 250 sf per surface.		Max 27 ft. Max 27 ft.
Roseville	CB, RB, O/BP, CMU	2 on multiple frontage lot	100 sf max on a single loaded sign, 200 ft max on double loaded sign.	15 ft. min from property line	Max 25 ft.
Sauk Centre	General Commerce, Industrial/Commercial	1 freestanding sign, two sides per frontage. Plus one area identification sign per frontage NTE 64 sf.	NTE 250 sf on each side	Cannot be placed within 10 ft of ROW	Up to 45 ft.
Stillwater	BP District (HWY 36)	1 freestanding sign per development site.	NTE 100 sf. For each exposed face nor exceed an aggregate surface area of 200 sf.	15 ft. from ROW	Max 25 ft.
Woodbury	Nonresidential	1 freestanding sign per frontage, 1 st frontage 80 sf sign, 2 nd frontage 40 sf sign	Adjacent to freeway, sign on freeway not to exceed 150 sf, and 2 nd frontage NTE 80 sf. Other freestanding signs NTE 40 sf.	Freeway signs not to be more than 100 ft away from freeway.	Freeway signs can be up to 30 ft high. Other freestanding up to 20 ft high.

2. The scale and suitability of the mural sign shall be appropriate in the context of the surrounding properties;
3. The artist(s) commissioned to complete the mural must provide documentation of demonstrated craftsmanship on similar projects;
4. The applicant shall provide sureties to the city guaranteeing completion of the project within the proposed timeframe;
5. The applicant shall demonstrate that the necessary funds are available for the proposed project; and
6. The applicant must be able to show the final mural will last a minimum of 5 years and be reasonably resistant to vandalism and weather.

(3) Projecting, awning, and canopy signs.

- (a) Projecting signs and awning signs shall be located on street level.
- (b) If lighted, projecting, awning, and canopy signs shall use indirect illumination.
- (c) Awning or canopy signs shall not project higher than the top of the awning or canopy or below the awning or canopy.
- (d) Clearance. The bottom of a projecting sign or awning shall be a minimum of 8 feet above the ground surface when projecting over a private or public walkway.

(4) Freestanding signs. Freestanding signs shall not be erected or maintained any closer than 3 feet to any building.

(Q) Separation angle. So as not to create a double exposure or increase sign size limitations, there shall be a maximum separation angle of 45 degrees for signs which are back to back. In all residential districts, double-faced signs shall be parallel.

(R) Signs needing electricity. Signs needing electricity shall be subject to all applicable electrical codes as may be amended. Overhead wiring for such signs is prohibited.

(S) Special sign districts. All general sign regulations shall apply to signs within each of the special sign districts except as specifically noted herein.

(1) Old Village.

(a) Boundary. The boundary of the Old Village Sign District is depicted on the city's official sign district map. Modifications to the district boundary may be completed using the zoning map amendment process.

(b) Illumination. Indirect illumination or reverse lit letters shall be the permitted techniques for lighting all signs within the Old Village Sign District. Other forms of direct illumination are prohibited.

(c) Wall signs.

1. Wall signs in the Old Village Sign District shall not project higher than the parapet line of the wall to which the sign is to be affixed or 15 feet as measured from the base of the building wall to which the sign is affixed, whichever is lower.

2. Wall signs in the Old Village Sign District authorized by a master sign program shall not exceed 20 square feet per business, and all signs shall be visually consistent in location, design, and scale.

(d) Freestanding signs.

1. The area of a freestanding sign in the Old Village Sign District shall not exceed 30 square feet.

2. Freestanding signs in the Old Village Sign District shall not project higher than 6 feet, as measured from the average grade at the base of the sign or grade of the nearest roadway, whichever is lower.

(2) Agricultural Sales District.

(a) Boundary. The Agricultural Sales District shall include all properties zoned agricultural or rural residential.

(b) On-premises sign(s). Independent of the total allowable sign area for an individual property within the agricultural sales district, one or more additional on-premises signs may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions:

1. Agricultural sales businesses utilizing less than 10 acres of land specifically for the growing of agricultural crops for the business are allowed 1 on-premises sign not to exceed 32 gross square feet of advertising surface;

2. Agricultural sales businesses utilizing more than 10 acres of land but less than 40 acres of land specifically for the growing of agricultural crops for the business are allowed 1 or 2 on-premises signs not to exceed 48 gross square feet of advertising surface (with no sign surface exceeding 32 square feet in size);

3. Agricultural sales businesses utilizing more than 40 acres of land specifically for the growing of agricultural crops for the business are allowed 1, 2 or 3 on-premises signs not to exceed 64 gross square feet of advertising surface (with no sign surface exceeding 32 square feet in size);

4. Sign(s) shall be in the form of an allowable sign type in the underlying zoning district;

5. No dimension of any sign shall exceed 15 feet exclusive of supporting structures; and

6. Any illuminated sign shall be illuminated only during those hours when business is open to the public for conducting business.

(c) Temporary off-premises sign(s). Independent of the total allowable sign area for an individual property anywhere within the city, a temporary off-premises sign may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions.

1. Maximum number. Every agricultural sales business shall have no more than 2 off-premises signs at any given time to direct the public to the location of the business.

2. Time frame of use. Temporary off-premises signs may be erected for 45-day time periods no more than 4 times in any given calendar year. The required temporary sign permit shall stipulate the range of dates for each of the 4 allowable time periods in any given calendar year.

3. Size and height. An off-site agricultural sales advertising sign shall not exceed 50 square feet in area and shall not be taller than 10 feet in height.

4. Setbacks. Off-premises signs shall be a minimum of 25 feet from all side property lines, and a minimum of 50 feet from other off-premises advertising signs.

5. Permission required. Applicants for off-premises signs shall acquire permission from the property owner upon whose land the sign is to be erected.

(3) I-94 District.

(a) Boundary. The I-94 district shall include parcels within the BP, GB, HB, CB, and LB zoning districts which meet one of the following criteria:

1. The property is a buildable lot located to the south of Hudson Boulevard and to the north of Interstate 94; or

2. The property's southern boarder abuts Hudson Boulevard, and is not directly north, either wholly or partially, of a developable parcel lying between Hudson Boulevard and Interstate 94.

(b) Permits. Signs in the I-94 District may be erected in conformance with sign regulations governing the underlying zoning district without additional approvals. Signs proposed to conform to the special standards established for the I-94 District shall only be authorized through approval of an interim use permit.

(c) Illumination. All forms of illumination which conform to the general illumination standards for all signs shall be the permitted within the I-94 Sign District.

(d) Maximum total square footage of all sign surfaces. The maximum total square footage of all sign surfaces in the I-94 district shall be dictated by the maximum sign sizes for allowable sign types.

(e) Wall signs. The least restrictive of the following may be used to determine the allowable area for wall signs in the I-94 District:

1. The total area of all wall signs on any wall shall not exceed 10% of the area of the wall with a maximum allowable area of 80 square feet; or

2. The total area of all wall signs on any wall shall not exceed 5% of the area of the wall with a maximum allowable area of 300 square feet.

(f) Freestanding signs. In lieu of a freestanding sign meeting underlying zoning requirements, a building site within the I-94 District may have one freestanding sign within 50 feet of the property line nearest the interstate provided the sign does not exceed 150 square feet per side (300 square feet total) or 30 feet in height. The base of such a sign shall be at least 75% of the width of the sign and be constructed of materials that match those used on the building for which the sign is installed.

(g) Window signs. Window signs in the I-94 district shall not cover more than 1/3 of the window area.

(h) Awning, canopy, and projecting signs. One awning, canopy or projecting sign, in conformance with the underlying zoning requirements for height, location, and maximum size may also be erected for each business on a building site in the I-94 District.

(T) Substitution clause. The owner of any sign which is otherwise allowed by this subchapter may substitute non-commercial speech signs in lieu of any other commercial speech sign or other non-commercial speech sign. The purpose of this provision is to prevent any inadvertent favoring of commercial speech over noncommercial speech, or favoring of any particular noncommercial speech over any other noncommercial speech. This provision prevails over any more specific provision to the contrary.

(U) Temporary signs.

(1) Special events. Temporary signs may be allowed upon issuance of a permit for on-site advertising of special events such as openings and closings, change in management, sales events, or other special occasions. No more than 4 temporary sign permits may be issued in any calendar year for a given destination, and each temporary sign permit shall run for 15 days. Temporary signs for special events shall be subject to the following regulations:

- (a) Only 1 on-premises temporary sign shall be allowed per business or event;
- (b) Temporary signs shall be in the form, of an allowable sign type in the underlying zoning district; and
- (c) Temporary signs shall not exceed 32 square feet in area and shall not be taller than 10 feet in height.

(2) Residential development advertising signs. Independent of the total allowable sign area for individual properties or residences within a residential zoning district, one or more additional ground signs may be erected within a newly established unified residential area development subject to the following:

(a) Minimum development size.

1. Projects of less than 25 acres which create 10 or more dwelling units are allowed 1 on-premises ground sign not to exceed 100 square feet of advertising surface;

2. Projects of 26 through 50 acres which create 10 or more dwelling units are allowed 1 or 2 on-premises ground signs not to exceed 200 aggregate square feet of advertising surface on the project site; and

3. Projects over 50 acres which create ten or more dwelling units are allowed 1, 2, or 3 on-premises ground signs not to exceed 200 aggregate square feet of advertising surface on the project site.

(b) Restrictions.

1. No dimension shall exceed 25 feet exclusive of supporting structures.

2. The sign shall not remain once 90% of the lots in the development have been issued building permits.

3. The permit for the sign must be renewed annually by the Council.

4. Only indirect illumination is permitted and shall only occur during those hours when an on-site sales office or model home is open for conducting business.

(3) Temporary off-premises signs. Temporary off-premises signs may be erected if all of the following criteria are met:

(a) The destination to which the off-premises sign is advertising is a property for sale;

(b) An agent must be present at the destination property for sale, and the property must be open for viewing;

(c) The sign must be located on private property, and permission must have been obtained from the private property owner to erect the temporary sign;

(d) The temporary off-premises sign shall not exceed 6 square feet in size; and

(e) The temporary off-premises sign shall not cause the total square feet of signage on a property to exceed the allowed maximum in the underlying zoning district.

(V) Warning signs. Warning signs which do not exceed the minimum statutory requirements for size and number may be posted, and shall not count towards the overall permitted signage on a given property. Increases in either size or number over minimum statutory requirements shall count

City	Construction Standards	Landscape/Spatial Standards	Design Standards	Other
Bloomington			Monument Sign: One square foot may be added for each linear foot over one hundred (100) feet up to a maximum sign surface area of one hundred-fifty (150) square feet.	Pylon Sign: One square foot may be added for each linear foot over one hundred (100) feet up to a maximum sign surface area of one hundred twenty-five (125) square feet.
Belle Plaine	Highway design shall provide architecture, landscape architecture, and urban design guidelines that provide a complementary aesthetic to the Downtown District and embrace the large-scale nature of highway development.	Freestanding signs must be placed in a landscaped area with vegetation a minimum of 4 feet from the sign in each direction.	Pylon signs must have a pole cover or pylon cover. Pole signs are discouraged.	
Brooklyn Center			Freestanding: Unless set back 10 or more feet from the street right of way line, the supporting column(s) of a freestanding sign exceeding 16 feet in area shall not materially impede vision between a height of 2 ½ and 7	

			<p>½ feet above the centerline grade of the street.</p> <p>Freestanding signs located within the sight triangle shall have a minimum vertical clearance of 10 feet above the centerline grade of the intersecting streets.</p>	
Fridley	Determines allowable signage by lot size. Larger lots result in larger signs.			
Forest Lake	Parcels within 500 feet of I-35 shall be allowed 1 additional freestanding monument or pylon sign. Monument sign bases shall be constructed of similar materials, style, and color as that of the principal building.		To reduce clutter, signage shall be distinct and minimal. No “box” style signs shall be permitted. One sign for multiple residents, a sign plan must be submitted and approved.	One freestanding monument is allowed with a surface not to exceed 100 square feet.
Inver Grove Heights	Signs, billboards and other advertising structures shall be designed and constructed to withstand a wind pressure of not less than thirty (30) pounds per square foot of area, and shall be constructed in a good workmanlike manner so as to be a safe structure and shall be securely fastened so as not to be a hazard to persons or property.			

New Brighton	Signs shall be designed and constructed to meet the standards of the International Building Code. All signs shall be constructed in such a manner and of such material that they shall be safe and substantial. Signs that become unsafe shall be ordered repaired or removed by the City.			The City may determine areas of special control to establish special regulations for signs that are either more restrictive or less restrictive than those provided by this Chapter.
Oakdale			The total sign area of any multi-faced free-standing or projecting wall sign shall not exceed twice the permitted area of a two-sided sign or three times the area of a three-sided sign. All applications for signs of more than two sides shall be reviewed by the Planning Commission and Council.	
Roseville	Signs must be compatible with their surroundings. Signs shall be designed, constructed, installed, and maintained in a manner that does not adversely impact public	No freestanding sign shall be located closer than 5 feet to a property line, roadway easement, or other public easement. Signs must not interfere in any way with the proper functioning	All freestanding signs shall include materials that complement the architectural design/existing building materials, including but not limited to face brick, natural or cut stone, integrally	

	<p>safety or unduly distract motorists. All signs must be maintained by the sign owner in a safe, neat, clean, and attractive condition. A sign must be replaced or refurbished so as to restore the original appearance thereof whenever it begins to fade, chip, or discolor, rust, cease to be in good repair or become unsightly.</p>	<p>or purpose of a traffic sign or signal. No freestanding sign shall be located in the Traffic Visibility Triangle.</p>	<p>colored concrete masonry units/rock faced block, glass, pre-finished metal stucco, factory finished metal panels.</p>	
Shoreview	<p>All sign components shall be kept in a sound structural and attractive condition: replacement of defective, missing, or broken parts, including lighting; periodic cleaning.</p>	<p>Permanent freestanding signs shall have self-supporting structures erected on and permanently attached to concrete foundations.</p>	<p>Signs must be proportioned to the size of, and architecturally compatible with, the structures and other signs on the premises.</p> <p>At least 75 feet between freestanding signs, must be 5 feet from property line.</p>	
Stillwater			<p><i>Total allowable sign area.</i> The total aggregate sign area allowed on a property for all signs permitted in subparts (a) through (e) above shall be as follows: a minimum of 100 square feet; and at a rate of 15 percent of the building wall area facing a public street, up to a maximum of 300 square feet.</p>	

Woodbury			Freestanding signs shall be attached to a base which is at least 75 percent of the width of the sign but shall not exceed the width of the sign by more than 20 percent. The base shall be constructed of class I materials that match those used on the building for which the sign is installed. If no class I materials are used on the building, class I or II materials shall be used.	
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