CITY OF WASILLA
PLANNING COMMISSION MEETING AGENDA
WASILLA CITY COUNCIL CHAMBERS

Wasilla City Hall, 290 E. Herning Avenue, Wasilla, AK 99654 / 907-373-9020 phone

REGULAR MEETING **6 P.M.** **NOVEMBER 15, 2016**

I. CALL TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF AGENDA

V. REPORTS
- A. City Deputy Administrator
- B. City Public Works Director
- C. City Attorney
- D. City Planner

VI. PUBLIC PARTICIPATION *(three minutes per person, for items not scheduled for public hearing)*

VII. CONSENT AGENDA
- A. Minutes of October 11, 2016 regular meeting

VIII. NEW BUSINESS *(five minutes per person)*
- A. Public Hearing
  - 1. Item: Design Exception #16-01 (Reso. #16-14)
    Applicant: Valley Chiropractic Clinic
    Owner: James & Cindi Martin
    Request: Approval of two design exceptions to the Downtown Overlay District Design Standards. The first exception is to allow installation of a new wall sign on the Main Street side of the building that is 18.8 square feet larger (8.9 percent of the total wall area facing the street) than the 24 square feet of signage allowed

(five percent of the total wall area facing the street.) The second exception is to allow the sign to be a "backlit/halo" type of lighted sign, which is currently prohibited for signs in the Downtown Overlay District.

Total Area: 0.16 acres +/-
Location: 400 N. Main Street
Lot 1, Block 1, Birch Park Wasilla Subdivision
Zoning: Commercial – Downtown Overlay District

a. City Staff
b. Applicant
c. Private person supporting or opposing the proposal
d. Applicant

2. Item: Land Clearing Waiver #16-03 (Reso. #16-15)
Applicant: Troy Davis Homes, Inc.
Owner: Esther N. Baker
Request: Approval to clear 100% of proposed Lot 1 and 100% of proposed Lot 2, which is 30% more than the 70% clearing allowed in WMC 16.33.050(A)(2) in order to construct two commercial buildings. After construction of the buildings, 28% of proposed Lot 1 and 35% of proposed Lot 2 will be replanted with vegetation.
Total Area: Lot A14: 6.97 acres +/-
Lot A15: 6.97 acres +/-
Proposed Lot 1: 1.01 acres +/-
Proposed Lot 2: 1.57 acres +/-
Location: 1050 and 1150 E. Horvath Drive
Lots A14 and A15, Township 17 North, Range 1 West, Section 10 (Proposed Lots 1 and 2, T.D. Business Park Subdivision)
Zoning: Commercial

a. City Staff
b. Applicant
c. Private person supporting or opposing the proposal
d. Applicant

B. Committee of the Whole

1. Discussion regarding possible revisions to Title 16 to establish a minimum square footage for single family residential homes
2. Review of Comprehensive Plan Chapter 8, Intergovernmental Coordination
3. Discussion regarding possible revisions to the landscaping and land clearing requirements in Title 16

IX. UNFINISHED BUSINESS

X. COMMUNICATIONS
- A. Planning Commission meeting calendar for 2017
- B. Permit Information
- C. Enforcement Log
- D. Matanuska-Susitna Borough Planning Commission agenda

XI. AUDIENCE COMMENTS *(three minutes per person)*

XII. STAFF COMMENTS

XIII. COMMISSION COMMENTS

XIV. ADJOURNMENT

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REGULAR MEETING

I. CALL TO ORDER

The regular meeting of the Wasilla Planning Commission was called to order at 6:02 PM on Tuesday, October 11, 2016, in Council Chambers of City Hall, Wasilla, Alaska by Jessica Dean, Chair.

II. ROLL CALL

Commissioners present and establishing a quorum were:
Jessica Dean, Seat C
Loren Means, Seat D
Brian Mayer, Seat E

Commissioners absent and excused were:
Debra Barrett, Seat B

Commissioners absent and unexcused were:
Claudia Pinard, Seat A

Staff in attendance were:
Ms. Lyn Carden, City Deputy Administrator
Mr. Archie Giddings, Public Works Director
Ms. Tina Crawford, City Planner
Ms. Tahirih DesJardin, Planning Clerk

III. PLEDGE OF ALLEGIANCE

A. Mr. Giddings led the Pledge of Allegiance.

IV. APPROVAL OF AGENDA

GENERAL CONSENT: The agenda was approved as presented.

V. REPORTS

A. City Deputy Administrator

Ms. Carden provided an update on proposed revisions to Alaska Statutes, Title 4, which regulates alcohol licenses.

B. City Public Works Director

No report given.

C. City Attorney

No report given.

D. City Planner

No report given.

VI. PUBLIC PARTICIPATION *(Three minutes per person for items not on agenda)*
Mr. Stu Graham commented on the landscape regulation revisions that are currently being discussed by the Planning Commission under the Committee of the Whole and provided some ideas regarding code enforcement inspections. He also inquired about the permit status for the used car sales structure at Kendall Ford.

Ms. Crawford stated that a permit application has been received by Kendall Ford and is currently under review to determine whether the structure may permanently remain on site.

VII. CONSENT AGENDA
A. Minutes of September 27, 2016, regular meeting

GENERAL CONSENT: Minutes were approved as presented.

IX. NEW BUSINESS (*five minutes per person*)
A. Public Hearing
1. Resolution Serial No. 16-13: Supporting the goals and initiatives for the annual Capital Improvement Program (CIP).

a. City Staff
Mr. Giddings provided and brief summary of the CIP for Fiscal Year 2018-2021.

b. Private Person supporting or opposing the proposal
Chair Dean opened the public comment portion of the public hearing.

With no others stepping forward, Chair Dean closed the public hearing.

MOTION: Commissioner Mayer moved to approve Resolution Serial #16-13, as presented.

Discussion moved to the Commission.

MOTION: Commissioner Mayer moved to amend Resolution Serial #16-13 to add item #8 under FY2018 to read as follows:
8) Park Improvements

VOTE: The motion to amend Resolution Serial #16-13 to add item #8 under FY2018, passed unanimously.

VOTE: The motion to approved Resolution Serial #16-13 as amended, passed unanimously.

B. Committee of the Whole

MOTION: Commissioner Mayer moved to enter into the Committee of the Whole at 6:36 PM.

Entered into the Committee of the Whole for the following item:

1. Discussion regarding possible revisions to Title 16 to establish a minimum square footage for single family residential homes.
2. Discussion regarding possible revisions to the landscaping and land clearing requirements in Title 16.

MOTION: Commissioner Means moved to exit the Committee of the Whole at 7:52 PM.

X. UNFINISHED BUSINESS

No unfinished business.

XI. COMMUNICATIONS

No statements made regarding the following items.

A. Permit Information
B. Enforcement Log
C. Matanuska-Susitna Borough Planning Commission agenda

XII. AUDIENCE COMMENTS (*three minutes per person*)

Mr. Graham stated that he is a city resident and on the City Council but is not representing the Council at this time. He also stated that he was the one that asked for the Council to consider amending the code to prohibit homes smaller than 700 square feet.

XIII. STAFF COMMENTS

Ms. Carden stated that she is a city employee and resident and thanked the Commissioners for the time and effort to discuss items brought forward to them tonight.

Ms. Crawford provided on overview of the items that will be on the November agenda.

XIV. COMMISSION COMMENTS

Commissioner Means stated that he appreciates the information that was provided regarding the small homes.

Commissioner Mayer stated he appreciates the information provided by the City Planner and the discussion regarding small homes will be very interesting.

Commissioner Dean stated that she appreciated the discussion regarding small homes and appreciates the time the Commission and City staff has given to the items that were on the agenda.

XV. ADJOURNMENT

The regular meeting adjourned at 8:06 PM.

JESSICA DEAN, Chair Date

ATTEST:

TAHIRIH DESJARDIN, Planning Clerk

Adopted by the Wasilla Planning Commission -, 2016.

STAFF REPORT
Prepared by:
For the meeting of:

Case # DE 16-01
Planning Staff
November 15, 2016

I. SUMMARY FACTS:

Applicant/Owners:	James & Cindi Martin, Valley Chiropractic Clinic
Proposal:	Approval of two design exceptions to the Downtown Overlay District Design Standards. The first exception is to allow installation of a new wall sign on the Main Street side of the building that is 18.8 square feet larger (8.9 percent of the total wall area facing the street) than the 24 square feet of signage allowed (five percent of the total wall area facing the street.) The second exception is to allow the sign to be a "backlit/halo" type of lighted sign, which is currently prohibited for signs in the Downtown Overlay District
Location:	400 N. Main Street Lot 1, Block 1, Birch Park Wasilla Subdivision
Parcel Size:	0.16 acres±
Existing Zoning	Commercial – Downtown Overlay District
Future Land Use:	Commercial
Surrounding Zoning:	North: Commercial South: Commercial East: Commercial West: Commercial

II. STAFF RECOMMENDATION:

Denial of both waiver requests since they are inconsistent with the intent and regulations within the recently adopted Downtown Overlay District and Design Standards and there are no extenuating or unusual conditions impacting the subject property that support the request. Staff's findings of fact supporting the recommendation are included below for review and consideration by the Planning Commission.

III. COMPLIANCE WITH WMC 16.20.040(L) – DESIGN EXCEPTIONS

The planning commission may grant design exceptions if a proposed project is a unique and exceptional design concept that enhances the downtown overlay district, or if by reason of unusual circumstances, the strict application of any provision of this section would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question as provided in this subsection. The planning commission may impose additional conditions to ensure that the design is consistent with the purpose and intent of this section.

(1) Application. After the pre-application conference, the applicant shall submit an application for the design exception to the city planner with the appropriate application fee. The site plan for the application shall depict all information relevant to the requested waiver or modification.

Staff Finding: The applicant submitted the required application and fee.

(2) Public hearing. The planning commission shall hold a public hearing on the application. The notice, comment period, and hearing procedure shall be the same as provided in § 16.16.040 for a conditional use.

Staff Finding: All notification requirements above have been met.

(3) Consideration. In evaluating an application, the planning commission may consider any of the following alternatives to offset a design deficiency, if they find that the proposed alternative will serve the purpose of this section:

- ***(a) Fences and walls may be used in lieu of landscaping and may be allowed to screen parking when there is not enough room to provide an effective landscape screen.***
- ***(b) Additional enhanced architectural details, consisting of period and style appropriate appointments and materials not typically used due to high cost.***
- ***(c) More and higher quality architecturally appropriate windows.***
- ***(d) Quality public seating meeting the standards in this section, such as benches in front of shops and businesses.***
- ***(e) Installation of quality decorative pavement/paver designs, especially in areas highly visible to the public such as driveway aprons and building entrances along main streets.***
- ***(f) Additional or alternative storm water design solutions such as bio swales, rain gardens and cisterns.***
- ***(g) Use of a new, innovative or non-traditional energy efficient building technology, such as solar panels and insulated prefabricated wall panels.***

Staff Finding: The above alternatives are not applicable to this request.

(4) Decision. The planning commission may approve an application only if they find that the application meets one or more of the following standards:

- ***(a) The waiver or modification is consistent with the purpose of this section and will not materially adversely affect the surrounding area or the downtown overlay district as a whole;***

Staff Finding: Neither of the two waivers is consistent with the purpose of the design exception section or the sign regulations of the Downtown Overlay District (copy of the sign regulations is attached to the staff report.) The Downtown Overlay District and associated design standards was just adopted six months ago. Since that time, four businesses have revised their signage (Alaska Massage Clinic, H&R Block, K-9 Cuts, and Butterfly Native Thriftique) and three businesses have updated the exterior façade (the applicant's business, Alaska Massage Clinic, and K-9 Cuts) consistent with the adopted regulations.

The first waiver is a request to allow a sign that is 3.8% larger than allowed by the code is not consistent with the sign regulations and intent of the Downtown Overlay District and Design Standards that was just adopted in April 2016. Included as part of this staff report are renderings depicting signage that meets the current sign regulations (5% of the wall area), the requested signage that exceeds the allowed signage (8.8% of the wall area), and a photograph of signage for a nearby business on the same roadway that recently updated their signage consistent with the overlay sign regulations. As shown, the signs consistent with the regulations appear to be large enough to be viewed by both vehicular and pedestrian traffic along Main Street. Additionally, if the phone number was eliminated, an additional 5.3 square feet would be available to make the letters larger for the business name.

In support of the waiver request for a larger sign, the applicant included information from the U.S. Sign Council regarding industry standards for wall signage that is parallel to the roadway. What the information does not take into account is the specific building location and roadway information for the subject property and building. The building is on a corner lot located at an intersection with a four-way stop sign (Main Street/Swanson Avenue), it is allowed to have wall signage on each side of the building fronting a roadway, visibility is not obstructed in any direction from vegetation or other buildings, the speed limit for the roadway is 25 MPH, and it is a two-lane road with a center turn lane at the intersection. With the specific location factors for the subject property, the increased letter size typically needed for moving traffic to allow sufficient time to view the sign and make turning decisions is not needed.

The second waiver requested approval to allow "backlit/halo" lighting, which is specifically prohibited within the sign regulations for the Downtown Overlay District. Although the applicant states that "halo lit" signs are not the same as "backlit" signs, there is extensive information from sign companies that use the two terms interchangeably and even the definition in Merriam Webster online supports that they are the same type of lighting (copies from sign companies and from Merriam-Webster's dictionary are included with the staff report.)

(b) The proposed project is a unique and exceptional design concept that enhances the downtown overlay district; and

Staff Finding: The proposed larger and "backlit/halo lit" signage is not unique or exceptional in design in such a way that it enhances the downtown overlay district. As indicated in the findings above, the same updated sign design that matches the recent façade improvements on the building exterior is allowed but must just use slightly smaller letters and external lighting (see photos of nearby business that updated façade and signage that complies with the sign regulations included with the staff report.) It is staff's opinion that the applicant has not provided any special circumstances to support the request for the Planning Commission approve a larger sign that utilizes a type of lighting that is specifically prohibited.

(c) Strict application would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question. A hardship shall not qualify as an undue hardship if it is of a person's own making.

Staff Finding: The strict application of the sign regulations does not result in exceptional practical difficulty or undue hardship due to any circumstances that are unique to this property. As indicated in the photo simulations submitted by the applicant and the photograph of a nearby business, the sign regulations as written permit a sign that is visible to both vehicular and pedestrian traffic. There is no evidence that a larger sign or "halo/backlit" lighting of the sign is necessary to be visible to vehicular traffic.

IV. CONCLUSION:

Staff recommends denial of both of the requested design exceptions based on the findings above. However, if the Planning Commission determines that an exception to the size of the sign should be granted, staff recommends that it be approved with the following conditions:

1. All signage must be consistent with the drawings attached to this Resolution as Exhibit B with the exception that the sign must be lit with indirect lighting instead of "backlit/halo" type lighting. Any changes to these plans must be submitted to the City Planner for review and approval. Substantial modifications will require submittal of an amended design exception application, including application fee and Planning Commission review and approval.

2. The design exception is only approved for the proposed sign indicated in the drawings attached to this Resolution as Exhibit B. Any future changes to the sign, other than replacement/repair of damage due to fire or a natural disaster, must conform to the sign regulations in the Downtown Overlay District. All signage for future businesses or tenants in this building must conform to the sign regulations in place at that time.

(3) Any light fixtures submitted for approval by the Public Works Director shall meet the IES Cut-Off Style Guidelines and requirements.

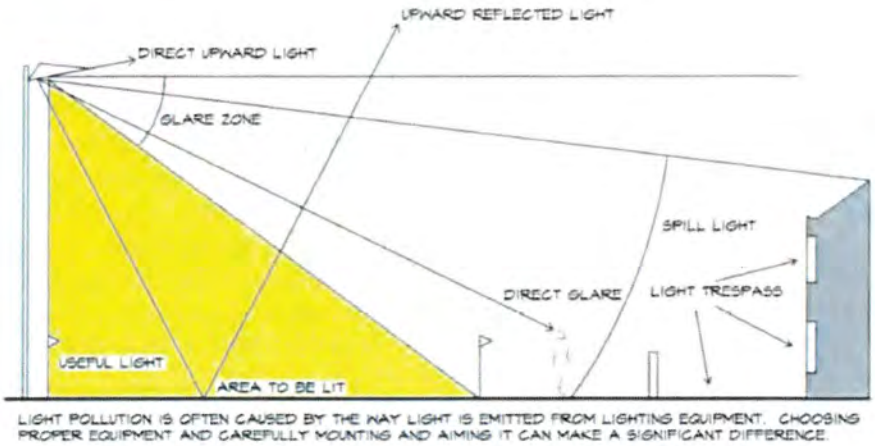

Figure 55 Light pollution can be eliminated or reduced by choosing the right fixtures

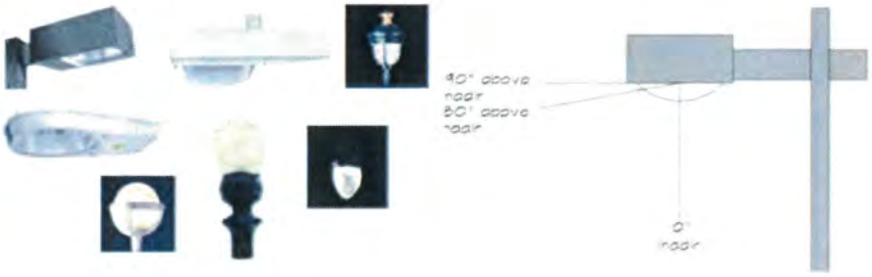

Figure 56 Sample of Cut-Off Style Light Fixtures and Diagram

6 Signage

Signs are an integral part of any downtown business area. A business sign can call attention to a store and help establish a business brand or image. Merchants often try to "out do" each other with large flashy signs. However, bigger, brighter, and attention grabbing signs are not better are often harmful and detract from the quality of life in the area. In the Downtown Overlay District, smaller, high quality, pedestrian-oriented signs that are often integrated with the building or high quality well detailed monument signs are required.

Figure 57 A – Desired Conditions **B – Undesirable Conditions**

A. **General requirements for all Signage**

(1) Requirements of the current sign regulations in WMC 16.32 apply to the Downtown Overlay District except as follows.

(a) Freestanding signs are not permitted in any part of the Downtown Overlay District except those that are grandfathered or that are on parcels with direct access/frontage on the Parks Highway. Both must comply with the applicable sign regulations in WMC 16.32. Signs must be placed adjacent and perpendicular to the Parks Highway.

(c) Wall signs may project beyond the building face up to six (6) inches. Awning signs may be placed on any surface of the awning as long as that awning does not project over the public right-of-way or building set back line.

(d) The maximum height of a wall or awning sign shall be twenty four feet (24'). The minimum height to the bottom of a wall sign shall be eight feet (8').

(2) If a rear customer entrance is provided, a small version of the main entrance sign may be used to denote the store's rear entrance.

B. **Sign Colors**

(1) Colors shall be consistent with the architecture and theme of the building.

(2) Day glow and fluorescent colors are not permitted.

(3) Spots, stripes, lines, and similar patterns of paint shall not be permitted on signs unless part of corporate logo.

C. **Sign Materials**

Materials shall not be limited except that all materials shall be appropriate for use in wet conditions if they are to be exposed to the elements. Signs may be made of wood, plastic, metal, or stone or any combination thereof.

D. **Lighting of Signs**

(1) Signs shall be indirectly lighted.

(2) Back lighting or internally lighting signs is not permitted except when signs are incorporated into awnings or on buildings and indirect lighting is not possible.

(3) Free standing signs shall be lit indirectly and not backlit.

(4) Neon Signs

(a) Neon signs are not permitted outside of any buildings.

(b) Neon signs may be used inside of businesses as long as they are not larger than 48" in either direction and no more than one per 10 percent of the window space is used.

E. **Digital Signs**

(1) Digital or electronic signs on which the display changes intermittently are not permitted except by special approval by the Planning Commission.

(2) Large TV's or similar projection devices with screens over 32" in any dimension including digital signs placed inside of buildings that have windows or openings shall be placed and angled so the screen is not readily visible from the street. Any such device of any size, used as a sign with messaging is not permitted.

F. **Directional Signage**

Directional or way finding signage shall be provided as needed for a site requiring such signage.

(1) This signage shall not include any logo, emblem or other marketing information and is only to be used for directing traffic.

(2) Different way finding signs shall be designed to complement each other and the architecture.

(3) Colors and materials shall match or compliment other site furnishings.

(4) Way finding signs shall not exceed 6' in height nor exceed 4 square feet each.

G. **Prohibited Sign Types**

(1) Signs with supporting members less than one third of the width of the sign face (known as "pylon, pole, or lollipop" signs) are prohibited.

(2) Freestanding and monument signs, except as permitted in subsection A above.

H. **Wall Mounted Signs**

Figure 59 A – Acceptable Examples **B – Typical Acceptable Wall Sign**

(1) Every business is entitled to have one street-facing wall sign per street frontage.

(2) Any business without a free-standing sign or a protruding sign and has more than one exposed side may have two wall signs which shall meet the following standards:

(a) Both wall signs may not be on the same wall.

(b) The street facing wall sign shall not exceed 5 percent of the applicable wall area.

(c) The non-street facing wall sign shall not exceed 5 percent of the applicable wall area.

(d) The total of both signs shall not exceed 225 square feet.

(3) Wall signs may be incorporated into a retaining wall or other site hardscape feature, as recommended by the City Planner.

(4) In lieu of any free-standing signs, a building containing four or more tenants shall be allowed additional wall sign area to place the name of their center on the building. The allowable sign area shall be 5 percent of the applicable wall area, not to exceed 180 square feet, whichever is less.

I. **Awnings and Canopies**

All graphics within the entire illuminated area of the awning or canopy shall be calculated toward the allowable wall sign area.

J. **Protruding Signs**

(1) Protruding signs are permitted and encouraged in the Downtown Overlay District.

(2) Protruding signs may not protrude more than 6' from a building face; the lowest portion of any such sign shall be a minimum of 8' above the sidewalk or pedestrian zone.

(3) Protruding signs must be securely fastened to a structure capable of supporting the weight and tension created by the sign.

(4) Protruding signs shall be free to artistically highlight the businesses brand and style. The use of intricate metal work, carved wood, wrought iron and similar designs is encouraged. The following examples illustrate the type of sign desired in the Downtown Overlay District.

Figure 60 A thru E – Typical Examples of Acceptable Signage

K. **Window Signage**

(1) Window signs are any signs placed on the glass both inside and out.

(2) No signs are allowed on the outside of windows at any time.

(3) Seasonal signs and messages related to holidays or special events may be painted on windows as long as the message area does not exceed 30% of the window.

L. **Address and Unit Numbering**

Every commercial or retail building shall have the street address or building number clearly visible to the street for which the address applies.

(1) The street address numbers shall be mounted or painted on either the free standing sign facing that street or placed above or adjacent to the main entrance door on the corresponding street.

(2) The address shall not be displayed on signs that abut or face the right-of-way of other streets to which the address does not apply.

(3) The size of the letters shall be suitable for viewing from the street and be a minimum of six (6) inches but not more than twelve (12) inches.

(4) The color and material must make the numbers clearly stand out from the wall or sign in the background but should not be obtrusive in color. Black or white or simple solid colors are preferred. Pin mounted metal numbers are the most desirable. Tiles with painted numbers are also acceptable.

M. **Artwork Perceived as Signs**

Sometimes artwork is constructed in order to attract business and not simply to beautify the open space. When an artwork such as a sculpture is greater than one story or approximately 8' in height or 12' in width, it tends to become an icon and therefore more of a sign than a piece of art. It is the intent of the City of Wasilla to control these types of elements. Therefore:

(1) Any sculptural or painted artwork exceeding 8' in height or 12' in width must be qualified as public art before it can be permitted.

(a) To be qualifiec as public art, a scaled design concept or mock-up must be presented to the Planning Commission for review.

(b) The Planning Commission will meet to make the determination.

(2) Any works perceived by the Planning Commission to be a sign shall not be permitted to be constructed. A typical example of artwork subject to this provision would ɔe a large fish sculpture in front of a seafood restaurant.

Figure 61 Example of Questionable Public Art

7 **Building Construction Standards**

Downtown structures are traditionally located adjacent to sidewalks and neighboring buildings. Buildings located along sidewalks clearly define the street edge. This building placement also creates a pedestrian-friendly atmosphere that entices people to explore and invites them into the buildings.

Throughout the United States these type of design symbolizes "downtown" in the minds of most citizens and Wasilla requires these design elements to be incorporated into new construction in the Downtown Overlay District. The goal of the Downtown Overlay District Design Standards is to create unique, well-designed building facades that will remain viable in the future and ensure the economic stability of the downtown area for future generations.

A. New Construction Standards for Buildings and Structures

(1) Building Height

The appearances of individual buildings collectively create the visual image of an entire downtown. Varying building heights in the Downtown Overlay District will help create a pedestrian scale with architectural interest.

(a) Maximum building height is three stories or 5C feet, whichever is less.

(b) Buildings are encouraged to be two or more stories.

Figure 62 A – Examples of building variation B- Example 2 story with prominent features

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Attachment to Staff Report for DE 16-01

Existing Signage

Attachment to Staff Report for DE 16-01

Proposed Larger Size (8.8% of the wall area)

Signage equal to 5% of the wall area

Photo showing recent façade improvements and wall signage that meets the maximum size and lighting regulations (14" letters on top and 8" letters on bottom.) Note: External lighting for sign is shown in picture below.

Attachment to Staff Report for DE 16-01

Merriam-Webster definition of "Backlight"

1.: illumination from behind; *also*: the source of such illumination

www.merriam-webster.com/dictionary/backlight

Dictionary.com definition of "backlight"

noun

1. *Movies, Television.* a light source placed behind an actor, object, or scene to create a highlight that separates the subject from the background.

verb (used with object), backlighted or backlit, backlighting.

2. to illuminate (something) from behind.

adjective

3. illuminated from behind: *a backlit screen*

www.dictionary.com/browse/backlit

Sign Letter Height Visibility Chart

How To Choose the Correct Letter Height

Using custom signs is a great way to attract and connect with new clients and customers. When designing window signs, banners, or car signs, make sure your target market can read what you want to tell them. The size of the letters and logos, as well as the colors you choose, are crucial in creating a visible, easy-to-read sign.

Letter Height (inches)	Distance for Best Impact (feet)	Max. Readable Distance (feet)
3"	30'	100'
4"	40'	150'
6"	60'	200'
8"	80'	350'
9"	90'	400'
10"	100'	450'
12"	120'	525'
15"	150'	630'
18"	180'	750'
24"	240'	1000'
30"	300'	1250'
36"	360'	1500'
42"	420'	1750'
48"	480'	2000'
54"	540'	2250'
60"	600'	2500'

Rule-of-Thumb

Signazon.com’s Letter Visibility Chart shows the maximum reading distance for your sign to make the best impact, as well as the overall readable distance. A good rule of thumb is every 1 inch of letter height provides 10 feet of readability with the best impact. For example, 3” tall letters make the best impact within 30’; however, they can still be seen and read from up to 100’ away.

Sign Location

When designing your sign, consider how you will be using it, as well as how far away the readers you want to impact will be. For example, if you are placing a sales advertisement inside your retail store, your text only needs to be visible to the people in the store. 1-2” letters (or smaller) would work just fine. However, if you are hanging banners and want drivers on a nearby highway to be able to see them, design your letters at 3” or even larger.

Color Scheme

Another important factor is to use contrasting colors when designing your sign. Text color with a contrasting background significantly increases the impact and visibility of your sign by making your text stand out more. On the other hand, using a background color that is similar to the text color can make your message almost impossible to see at any distance. Some of the most-visible text colors include black, red, and white, each of which can be seen the best with a contrasting background color. Readable distance can vary 10% depending on various color combinations.

Font Type

The font type that you choose can also impact the visibility of your text. Very thin fonts and script fonts can potentially decrease visibility. When choosing fonts, you should select a bold style that is easy to read and sufficient spacing between letters (kerning). Test this by typing your message in a computer program using different font styles, colors, and sizes. Printing the document out and post it against a wall. Stand back and view the message at different distances to see how font choice comes into play when choosing the proper lettering for your sign.

When ordering custom signs, there is a lot to consider. Your goal is to make the biggest impact on your intended audience. The size, colors, and styles you choose should all depend on what you want as your end result. Always consider how your sign will be viewed and who you are trying to reach. Trying to save a few dollars by purchasing a sign with smaller letters is not a wise decision. You may be wasting all your expense and efforts when the sign cannot be read by the customers or viewers you are trying to attract.

Page Authored By Katherine Halek

Your Customers Only Have A Few Seconds To Spot You

Viewing Ranges

Use This Table To Help Determine The Appropriate Character Size To Display Based Upon Viewing Distance And The Speed At Which The Viewer May Be Traveling.

Character Size	Max Viewing Distance		Maximum Viewing Time In Seconds						
Inches	Feet	5MPH	15MPH	25MPH	35MPH	45MPH	55MPH	65MPH	75MPH
2	60	8.2	2.7	1.6	1.2	0.9	0.7	0.6	0.5
6	180	24.5	8.2	4.9	3.5	2.7	2.2	1.9	1.6
8	240	32.7	10.9	6.5	4.7	3.6	3	2.5	2.2
9	270	36.8	12.3	7.4	5.3	4.1	3.3	2.8	2.5
10	300	40.9	13.6	8.2	5.8	4.5	3.7	3.1	2.7
12	360	49.1	16.4	9.8	7	5.5	4.5	3.8	3.3
17	510	69.5	23.2	13.9	9.9	7.7	6.3	5.3	4.6
24	720	98.1	32.7	19.6	14	10.9	8.9	7.5	6.5
36	1080	147.2	49.1	29.4	21	16.4	13.4	11.3	9.8

Green Shaded Areas Represent An Acceptable Exposure Time To View A Text Message

Do Not Miss Sales Opportunities

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SIGNLINE

ISSUE FIFTY ONE 2007

Conspicuity and Readability

Speech is a two-way interaction, in which one person conveys a message to another, and it is only complete when the recipient of the message understands it. If someone whispers in a crowded room, you cannot understand them. If their back is turned to you so that their words are muffled and you cannot read their lips, and others are attempting to talk to you at the same time, you cannot understand them. If someone covers their mouth while they are trying to speak, you cannot understand them. If they speak in a language you do not know, you cannot understand them. If they do not express themselves well enough, or speak too quickly, you cannot understand them.

Like any other form of speech, the purpose of any sign is to convey a message. But if that message is to be understood it must first be noticed and then read – that is, it must be conspicuous and readable. While this may appear to be obvious, the factors that result in a conspicuous and readable sign are numerous and complex. For the sign industry, "conspicuity and readability" have become synonymous with sufficiency in size, height, placement, and illumination to allow the message to be seen, read and comprehended.

Planners who regulate signage can benefit from understanding the numerous and complex factors that result in conspicuous and readable signage that can serve as a planning tool to facilitate efficient resource allocation, enhance traffic safety, beautify retail/commercial districts, and stimulate the local economy.

Definition of Terms

Before going further, four terms need to be defined: conspicuity, visibility, legibility and readability.

Conspicuity: The capacity of a sign to stand out or be distinguishable from its surroundings and thus be readily discovered by the eye. It is the noticeable contrast between a sign and its background, attributed to an exogenous (unplanned) or endogenous (planned) mindset, with the display having features that attract attention to the sign. Conspicuity is considered a subjective outcome.

Visibility: The physical attributes of a sign and its contents that allow for detection at a given distance, although legibility may be uncertain. Visibility is considered an objective stimulus.

Legibility: The physical attributes of a sign that allow for differentiation of its letters, words, numbers, or graphics and that directly relate to an observer's visual acuity. Legibility is considered an objective stimulus.

Readability: That which enables the observer to correctly perceive the information content of letters, numbers or symbols grouped together in words, sentences, or other meaningful relationships on the sign. Readability is the character of a sign that leads to comprehension of its intended message, and depends on legibility and other considerations of contents and time restraints. It is considered a subjective outcome.

The on-premise signs used by businesses to communicate with passing traffic are functioning in a complex environment. Those on the receiving end of the message signs convey are typically viewing the signs through the windshield of their vehicle. In order to mentally process and respond safely to the information on the sign, they must within seconds be capable of noticing it, reading it, comprehending it, and making a decision as to whether to maneuver through traffic and stop at the business. When a passing motorist sees a business that is interesting and either stops at the business or remembers it for future use, the benefit is shared by the business, its potential customer, and the municipality in which the business is located.

As a matter of good public policy and smart planning, sign regulations should be written to allow local businesses to communicate effectively with passing motorists. That means signs should be allowed sufficient size, height, placement, and illumination to be certain the sign will be noticed and its message understood. This brings numerous benefits to the local community, not the least of which is enhancement of public safety through effective wayfinding.

Time, Place and Manner

In the regulation of speech under the First Amendment, governments are constitutionally restrained from stepping outside the bounds of content-neutral regulation of "time, place and manner" of expression. In the case of signs, this refers to the "time" when a message may be displayed on a sign, the "place" at which the sign may be located, and the "manner" in which the message may be displayed. Translated into sign code language,

this means the government may regulate the size, height, placement, and illumination of a sign.

But the Court has placed limits on how far the government may go in regulating these factors. In Virginia State Board of Pharmacy v. Virginia Citizen Consumer Council, Inc.,[1] a First Amendment case, the Court laid out the test for determining whether a speech-restricting ordinance is constitutional:

> Time, place and manner restrictions on commercial speech are permissible only if the restrictions:
>
> (1) are justified without reference to the content of the speech,
> (2) serve a significant government interest, and
> (3) leave open ample alternative channels for effective communication of the information.

These guidelines were enhanced in Central Hudson Gas & Elec. Corp v. Public Service Comm.[2] Today, if a sign ordinance is to withstand a constitutional challenge, the government must show all of the following:

> (1) a substantial government interest that justifies the regulation;
> (2) the regulation directly advances that interest;
> (3) the regulation is narrowly tailored to achieve that interest; and
> (4) the regulation leaves open ample alternative avenues of communication for those it affects.

This was clarified in Cleveland Area Board of Realtors v. City of Euclid,[3] in which Euclid, Ohio passed an ordinance allowing real estate signs to be displayed only in windows, and barring them from their normal placement on front lawns. Euclid's ordinance was struck down largely because it did not allow for adequate alternative communication. The selling of real estate could only reasonably be facilitated through the placement of signs on front lawns. Placing the signs in windows rendered them virtually invisible to passing motorists. The Court found that it was not enough that the homeowners be able to "speak" by putting their for sale signs in their windows, their message also had to be capable of being "heard." In other words, the Court affirmed that for speech to be protected, the intended recipient had to be capable of receiving and understanding the message, and government could not arbitrarily interfere with the reception of that message.

As applied to sign regulations, this would indicate that signs must be allowed sufficient size, height, placement, and illumination to be capable of being seen, read and understood by the passing motorist. Most states require a minimum of 20/40 vision to obtain a driver's license; therefore, signs should minimally be capable of communicating effectively with drivers having 20/40 vision.

While we will not address at great length the variety of factors that affect individuals' abilities to read and comprehend the message on a sign, it is worthwhile for communities to consider whether they might need to accommodate the visual needs of particular members of society, at least where they relate to particular businesses. For instance, as people age, they are less able to distinguish between certain colors, have longer reaction times, their field of view narrows, and their vision declines. These individuals need to be able to see and read signs from a greater distance than others in order to safely read and react to them. Other issues that can interfere with a person's ability to see or read a sign include color blindness, cultural differences, and visual impairment. The special visual needs of the community should be considered as part of the zoning in areas where appropriate, such as in retirement communities and/or campuses.

Let's look a little more closely at visibility, conspicuity, legibility, and readability, both at what they mean and how they are achieved.

Visibility

The very first step in assuring a sign can communicate effectively is ensuring that sign can be seen – that it is visible. This is primarily a matter of placement, but other factors also affect visibility. For instance, in order to be visible at night a sign must be illuminated. If the sign does not sufficiently contrast with its environment, is poorly maintained, or is parallel to the roadway it can become essentially

The average person takes approximately 0.33 seconds to recognize a familiar single word or symbol.

Research has shown that parallel signs are missed significantly more times than perpendicular signs.

invisible. If it is too small, too high, or too low to be seen through a windshield, it has no visibility. Blockage by trees, other vehicles, buildings, inclement weather, or other signs can also impair a sign's visibility.

Imagine you are the owner of an independent bookstore and your business is located in the downtown area of a mid-sized town. Street trees have been added all along the street in front of your business, and your sign, though large enough to be seen from the road, is blocked from view by a lush, leafy tree. Your long-time customers know where you are, but because 16% of Americans relocate each year,[4] and almost as many change their work location each year,[5] they are slowly dwindling away and newcomers to your town do not know your business exists. Sure, word-of-mouth will replace some of your lost customers, but, at least according to one comprehensive survey,[6] half of an independent small business's first-time customers will stop at the business because they saw its sign. What all of this means is that unless you can find some other way to make your store more visible to passing motorists, your business will steadily decline or, at a minimum, fail to grow as it should.

Some businesses attempt to overcome visibility problems through the use of temporary signage, such as banners, sandwich board signs, balloons, flashing lights, etc. Many communities, however, view these alternative forms of signage as "clutter" and bar their use. The problem here is that by first infringing upon the right of the business to "speak" to passing motorists, and then refusing to allow alternate forms of communication, regulators are quite possibly engaging in unconstitutional censorship of speech.

Imagine you are looking to buy a book and would like to buy from an independent bookstore, rather than one of the very visible and well-known chain stores. You have never seen the independent book store downtown, but you have heard one is located there. As you try to safely maneuver through traffic, watching for pedestrians and cars entering and exiting the roadway, you are also looking for the bookstore's sign. Unfortunately, all you can see are trees. You become very frustrated, perhaps even risking further distraction by picking up your cell phone and dialing information in hopes of finding out the store's location. You may or may not eventually locate the store, but in the mean time you have taken safety risks and perhaps even driven around the block several times, wasting gas and time.

When signs are not visible, nobody is better off. For reasons of safety, economics, and even aesthetics, it is incumbent upon cities to ensure local businesses' signs can be seen by motorists.

Conspicuity

Whereas visibility addresses issues of physical conditions that allow a sign to be seen, conspicuity addresses issues related to the viewer noticing and being aware of the sign. For a sign to be conspicuous, the viewer must be able to differentiate it from the surrounding background.

Visibility can be objectively and consistently determined. For instance, a photograph will readily reveal whether a sign

Variables Affecting Conspicuity

Measurements and construction of the sign

- Placement of the sign
  - a. Height
  - b. Setback (distance to the first edge of the sign)
  - c. Obliquity of viewing angle
- Size of the sign
  - a. Letter height
  - b. Number and length of words
  - c. Dimensions of logos or other graphics
  - d. "White" space
  - e. Square footage
- Illumination (day or night) on the sign
  - a. Luminance (candelas per square foot or square meter)
  - b. Luminance contrast (positive or negative)
  - c. Color contrast
- Type of sign (roof, pole, projecting, monument, V, wall)

Considerations external to the sign

- a. Speed of traffic (affecting seeing, reading, and reacting times)
- b. Number of traffic lanes
- c. Artistic and attractive qualities of the sign
- d. Obstructions or distractions affecting conspicuity
- Community Aesthetics

is visible. Conspicuity, on the other hand, is subjective and cannot be consistently measured. One motorist might readily notice it, while another will drive right past it and never know it is there.

One of the reasons a sign will be conspicuous to one person and not another has to do with whether or not the person is looking for a particular business or type of business. If someone is hungry, that person is much more likely to notice a restaurant than someone who is simply on the way to work. Someone who has a special preference for the color red will be more likely to notice a business with a red sign than someone who has no feeling about the color one way or the other.

Most businesses need to be noticed and remembered by those who pass them on the street, but often their signs are placed among many other visual stimuli. Nonetheless, if a sign is properly designed and placed it will be noticed even by those who are not specifically seeking it at that moment. The conspicuity of a sign is enhanced by virtue of its placement within the cone of vision (see below), its angle in relationship to the viewer (signs facing the roadway are far more difficult to read than signs facing the oncoming motorist), the ease with which it can be read, the design elements (colors, shapes, contrast, illumination, motion, and borders) that differentiate it from its surroundings, the speed at which traffic is passing, and the familiarity of the sign's graphic elements, such as logos.

A sign's shape and color are usually noticed and recognized from a much greater distance than its legend. Corporations, chains and franchises know this, which is why they make the most of trademark colors, logos and shapes. Public roadway signage is designed based on the same principle. You don't need to read a stop sign to know what it is; its shape and color are only used for one purpose. When you see a green sign with white lettering along the highway, you know it will contain information about places ahead and how many miles away they are located.

Cone of Vision

The human eye is designed to focus in one direction, with peripheral vision extending out to either side, creating a fan-shaped zone of visual awareness. A sub-portion of that zone

Color contrasts and familiar symbols or logos are likely to enhance conspicuity.

TABLE 1

The Standard Relationship Between Vehicle Speed and Legibility Distance In Feet and Meters

Vehicle Speed		MRLD
55 mph (88 kph)	81’ /sec (25 m/sec)	440’ (134 m)
50 mph (90 kph)	73’ /sec (22.25 m/sec)	400’ (122 m)
45 mph (72 kph)	66’ /sec (20 m/sec)	360’ (110 m)
40 mph (64 kph)	59’ /sec (18 m/sec)	320’ (98 m)
35 mph (56 kph)	51’ /sec (15.5 m/sec)	280’ (85 m)
30 mph (48 kph)	44’ /sec (13.4 m/sec)	240’ (73 m)
25 mph (40 kph)	37’ /sec (11.3 m/sec)	200’ (61 m)

Source: Schwab, Richard N.;[7] also, Garvey, P.M., et al, 1996.[8]

is the “cone of vision,” which is variously reported to be limited to 18 to 24 degrees. Location within a range of 20 degrees from the motorist (the half-angle being 10 degrees) is recommended for on-premise signage, and outside of that visual cone, a sign’s conspicuity is dramatically diminished. Once the sign is noticed with peripheral vision, the motorist will have to make accurate eye movements to look directly at the sign with central vision for legibility and readability.

At night, the cone of vision is greatly reduced, often to only the area illuminated by the vehicle’s headlights. Unless a sign otherwise optimally visible is either internally illuminated or lighted by exterior flood lamps, it is essentially invisible at night. Even signs containing retroreflective materials cannot be seen unless they can be illuminated by vehicle headlights. For this to occur, a sign must be located near the right shoulder of the roadway.

Legibility

Legibility occurs when a sign’s letters, symbols and graphics are capable of being deciphered sufficiently that it’s meaning may then be understood. How easily a sign can be read by oncoming drivers of 20/40 visual acuity is first dependent on the sign’s legibility, which in turn is dependent upon such characteristics as letter size, font, spacing of letters and words, extent of negative space (blank area of sign), whether the sign contains a dark legend on a light background or a light legend on a dark background, the color combinations between legend and background, and (in the case of obliquely oriented signs) foreshortening effects, among other factors.

Before judging the legibility of a sign, it is essential to first determine the distance from the sign at which it must be legible. This, of course, is because the intended viewer of the sign’s message will not be standing in a sign shop or at a permit hearing looking at a drawing. They will be seated behind the windshield of a moving vehicle, focusing their attention on the driving task in an environment full of items vying for their attention. Moreover, they must be able to notice and read the sign in sufficient time to make a decision to stop at the business and then safely stop at the business. The key, therefore, is the speed at which they are traveling and the duration of time they will need to read and react to the sign.

In most research minimum sight distance is referenced as the MRLD, or the Minimum Required Legibility Distance at which a sign should be detectable and readable. The distance will vary according to the speed of approaching vehicles, the sign’s placement in relation to the roadway, its conspicuity and readability, and the complexity of the message. For simplicity’s sake, Table 1 offers the minimum distance at which a sign must be legible to the average driver of 20/40 visual acuity (the minimum required for a driver’s license). It assumes the sign being viewed is within 5 to 10 feet of the edge of the right-of-way, that it is of optimal height, that it is optimally conspicuous and readable, and that it is not subject to any environmental degradation, distractions or visual obstructions.

The next step is to determine how large the letters must be at that distance to be legible to the average driver of 20/40 visual acuity. Forbes and Holmes developed a Legibility Index (LI)[9] to describe the relative legibility of different letter sizes used on highway signs. They found that for every 50 feet of distance, lettering needed one inch in height to be read by a person with 20/23 visual acuity. Although the Forbes-Holmes standard was used for many years, the needs of drivers with lower visual acuity have been taken into consideration by the Federal Highway Administration, and the standard has been reduced to one inch of letter height for every 35 feet of distance. For a person of 20/40 visual acuity, however, one inch of letter height is needed for every 28.6 feet of distance.

Because the previous MRLD studies had been conducted primarily on test tracks where no driving tasks were involved, in 2001 a study by Chrysler, et al[10] was undertaken that included driving tasks. The test group, which included

TABLE 2

Standard Letter Height Guidelines for On-Premise Signs

Speed Limit (mph)	Speed Limit (kph)	MRLD (Feet)	MRLD (meters)	Letter Height (Inches)	Letter Height (Centimeters)
25	40	200	61	7	18
35	55	280	85	9	23
45	70	360	110	12	30
55	90	445	136	15	38

older drivers, was asked to find and read street name signs throughout Minneapolis, MN. The subjects were instructed to observe all traffic rules and engage in safe-driver behaviors. The test signs were located on both sides of the roadway in varying degrees of visual-field complexity, and consisted of several types of retroreflective materials.

The researchers found a mean legibility distance of 153 feet for 6-inch letters, or an LI of 25 feet/inch. For left-mounted signs using low reflectance materials, the LI dropped to 16 feet/inch, and if said signs were placed in high complexity locations, the LI dropped to 5.5 feet/inch. Clearly, when driving tasks are taken into account, drivers need larger lettering than has long been thought to be able to decipher roadway signs.

The reality of on-premise signs is that unlike highway signs, they are extremely varied in font, color, size, and design. This fact prompted Garvey, et al[11] to further study the detectability and legibility of a variety of on-premise signs under real life environmental conditions. The results of their study disclosed that even under the best conditions (daytime and low complexity), the LI was approximately 30 feet/inch. In high complexity circumstances, the LI dropped as low as 7 feet/inch (consistent with Chrysler, et al), with the mean LI determined at 25 feet/inch.

Clearly, then, an increase in letter height will increase legibility distance, although the ultimate size of lettering needed depends heavily on the selected font. Often the most aesthetically pleasing fonts are more difficult to read, while plain block fonts are most legible. Table 2 sets out recommended minimum letter heights based on standard highway-style fonts for 20/40 visual acuity and various speeds of traffic.

Speed, setback, distance, and letter size are not the only considerations. Of equal importance is the length of time needed to recognize and comprehend the message on the sign. Griffin and Bailey[12] have found that when test subjects are asked to read words that are flashed at them, a level of 75% accuracy in 0.7 seconds can be expected. Accuracy approaches 100% when the subject has 1 to 2 seconds to read the word. Table 3 can be used as a guideline when 0.7 time factor is applied. For example, a sign with three words would take 2.1 seconds (3 x 0.7 = 2.1). Note that individuals with literacy problems, such as those associated with dyslexia or in those who are not fluent in English, can be expected to have difficulty with word recognition with estimated more time being necessary.

Wall signs are particularly troublesome as communication devices in terms of legibility. This is so for two reasons. First, the effect of foreshortening is so intense that the words on the sign simply cannot be deciphered from any reasonable distance, no matter how large they are. Second, because the signs are parallel to the roadway, unless the driver is approaching from a direction directly or nearly-directly opposite, the sign is outside the cone of vision. To those driving past, it can only be discerned by a 90 degree sideways turn of the head. In many cases, neither action provides the driver enough time to safely slow down, brake, or change lanes should the sign prompt a responsive reaction or contain information the driver is looking for. According to Schwab,[13] a general assumption is that at angles greater than 2-3 degrees, the sign's legend or copy is foreshortened, thereby decreasing legibility and readability. One way to correct this problem is to install a building-mounted, double-faced projecting sign that is either "V" shaped or perpendicular to the roadway.

Although the "V" sign is a compromise between a perpendicular sign and a parallel wall sign, Griffin and Bailey[14] concluded that such a sign angled approximately 30 degrees from the wall of a building that is parallel to the roadway is highly readable (criterion of 75% accuracy under normal viewing conditions). They found, however, that readability at increasingly oblique angles is greatly reduced when a sign utilizes crowded letters (small spaces between letters); although, larger letters may be used to help offset crowding if wider spacing is not an option.

Readability

Readability is the ultimate goal of any sign, and it speaks to the ability of the message to be comprehended. Johnston and Cole (1976)[15] pointed out what researchers have consistently found about signs – that even when a driver is exposed to several signs within a short distance, the signs do not cause

TABLE 3

Readability Time per Number of Words

Number of Words	Normal Reader	Nonfluent or Dyslexic
1	0.7 seconds	3 to 13 seconds
2	1.4 seconds	6 to 16 seconds
3	2.1 seconds	9 to 19 seconds
4	2.8 seconds	12 to 22 seconds
5	3.5 seconds	15 to 25 seconds
6	4.2 seconds	18 to 28 seconds
7	4.9 seconds	21 to 31 seconds
8	5.6 seconds	24 to 34 seconds
9	6.3 seconds	27 to 37 seconds

traffic accidents. This is so because the normal human brain has a remarkable ability to process visual input, recognizing even highly complex items, such as the movement of vehicles and pedestrians on a crowded road, buildings, landscaping, signs, and more as single inputs, make rapid decisions and selectively choose items of importance requiring more attention, while rejecting others.

Engel (1977)[16] found that recognition relied not only on sensory and visual prominence, but also on cognitive recognition. In other words, the driver's psychological state, motivations, and familiarity with a sign and its contents greatly affect the ability of that driver to recognize and comprehend its message. The more familiar an object or figure on a sign is to the driver, the fewer glances he or she will require to recognize it, thereby reducing recognition time. In situations where a driver may become distracted by too much information in the visual field, the average driver will be quickly concentrate attention on the information he or she needs to attend to the driving task and ignore everything else.

Aesthetics play an important role in the readability of a sign. People who may only glance at a sign will within milliseconds comprehend a message about the business based on the fonts, colors, shapes and graphics used in the sign and use that information to decide whether to take a second look an attempt to read the words on the sign. For example, a person seeking a fast food restaurant will not bother to read a lavender colored sign with a lovely script font. Thus, all aspects of a sign contribute to the successful conveyance of its unique message.

A properly designed sign will meet the marketing needs of the business and conform to appropriate standards of safety, quality and functionality. If the community desires a thriving business district, then the sign that allows a business to flourish will be a sign that is compatible with the desired character of the community. The purpose of the sign code should be to facilitate the city's objectives without regulating the content or restricting creativity. Establishing minimum standards for conspicuity and readability of signs based on sound science will ensure that each sign serves the communication purpose for which it was intended, bringing benefit to the business, the consumer, and the community as a whole.

A sign code must resist content-interference, including interfering with the aesthetic features that flavor the textual content, as well as the imposition of physical constraints that result in design interference, and instead allow local businesses sufficient leeway to engage in creative expression within a framework of thoughtful design, structural safety, and community values. Undue restrictions on time, place and manner – or size, height, placement and illumination – simply

When a script font is used, the size of the lettering - and, thus, the size of the sign itself - must be increased to ensure readabiltiy.

work to undermine the attractiveness and effectiveness of the sign's communication ability. When forced to reduce a sign's message to fit into a smaller space, a business will have no choice but to abandon aesthetic elements and fonts and instead use the most basic, readable fonts and colors available to maximize visibility and legibility. The business's unique message is lost. Differentiation between the small, locally-owned business and major corporations begins to disappear, and the locally-owned small business is usually the one that suffers.

Constitutional application of content-neutral regulation of time, place and manner – or size, height, placement and illumination – will ensure that the sign's message, as designed by the speaker, is capable of being seen and comprehended by its intended recipient. It will ensure that signs are allowed to be readable and conspicuous, thereby functioning as effectively as possible in our highly mobile society.

Endnotes:

1. Virginia State Board of Pharmacy v. Virginia Citizen Consumer Council, Inc., 425 U.S. 748, 761-773 (1976).
2. Central Hudson Gas & Elec. Corp v. Public Service Comm., 447 U.S. 557 (1980).
3. Cleveland Area Bd. of Realtors v. City of Euclid, 88 F.3d 382, (6th Cir., 1996).
4. The rate for some groups is particularly high. More than one in three people aged 20 to 24 move each year, and nearly 31% of those between 25 and 29 move annually. Additionally, a full third of renters moves each year. Schimmel, Bruce, "Moving Facts", Philadelphia citypaper.net, April 10-17, 1997. <http://www.citypaper.net/articles/041097/article019.shtml>
5. Nolte, Carl, "Driving Force for Many – Parking: Survey finds 67% are alone at the wheel" San Francisco Chronicle, p. A13, September 4, 2000.
6. Based on a 1997-99 survey, in conjunction with Signtronix, of nearly 2500 first-time customers who were visiting 165 independent small businesses within 30 to 45 days after those businesses installed a new sign. The Signage Sourcebook. (Sherwood, OR: The Signage Foundation for Communication Excellence and the U.S. Small Business Administration, 2003), p. 183.
7. Richard N. Schwab, Ret., Safety and Human Factors: Design Considerations for On-Premise Commercial Signs. (Washington DC: International Sign Association, 1998).
8. P.M. Garvey, et al., Sign Visibility: Research and Traffic Safety Overview. (Bristol, PA: The United States Sign Council, 1996).
9. T.W. Forbes and R.S. Holmes, "Legibility Distance of Highway Destination Signs in Relation to Letter Height, Letter Width, and Reflectorization," Proceedings: Highway Research Board, Vol. 19, pp. 321-326, 1939.
10. S. Chrysler , et al., "Improving Street Name Sign Legibility for Older Drivers," Proceedings of the Human Factors and Ergonomics Society 45th Annual Meeting, pp. 1597-1601. (2001).
11. P.M. Garvey, et al., Real World On-Premise Sign Visibility: The Impact of the Driving Task on Sign Detection and Legibility. (Bristol, PA: The United States Sign Council, 2002).
12. J.R. Griffin and J.E. Bailey, Visual Science and Signage: Signtronix Report. (Torrance, CA: Signtronix, 2001).
13. Richard N. Schwab. Safety and Human Factors: Design Considerations for On-Premise Commercial Signs. (Washington DC: International Sign Association, 1998).
14. John Griffin and James Bailey, Horizontal Obliquity: Word Readability and Logo Identification. (Torrance, CA: Signtronix, 2002).
15. A.W. Johnston, B.L. Cole, Investigations of Distraction by Irrelevant Information. (Australian Road Research, 1976; 6:3-23).
16. F.L. Engle, Visual Conspicuity, Visual Search and Fixation Tendencies of the Eye. (Vision Research, 1977; 17:95-108).

Several legal issues are discussed throughout ISA's Signline series. Signline is offered for educational and informational purposes only and not to be construed as given legal advice to any user. Competent legal advice/advisors should be sought after and obtained by the user.

INTERNATIONAL SIGN ASSOCIATION

International Sign Association
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Alexandria, VA 22314-1911
www.signs.org

Can we help?

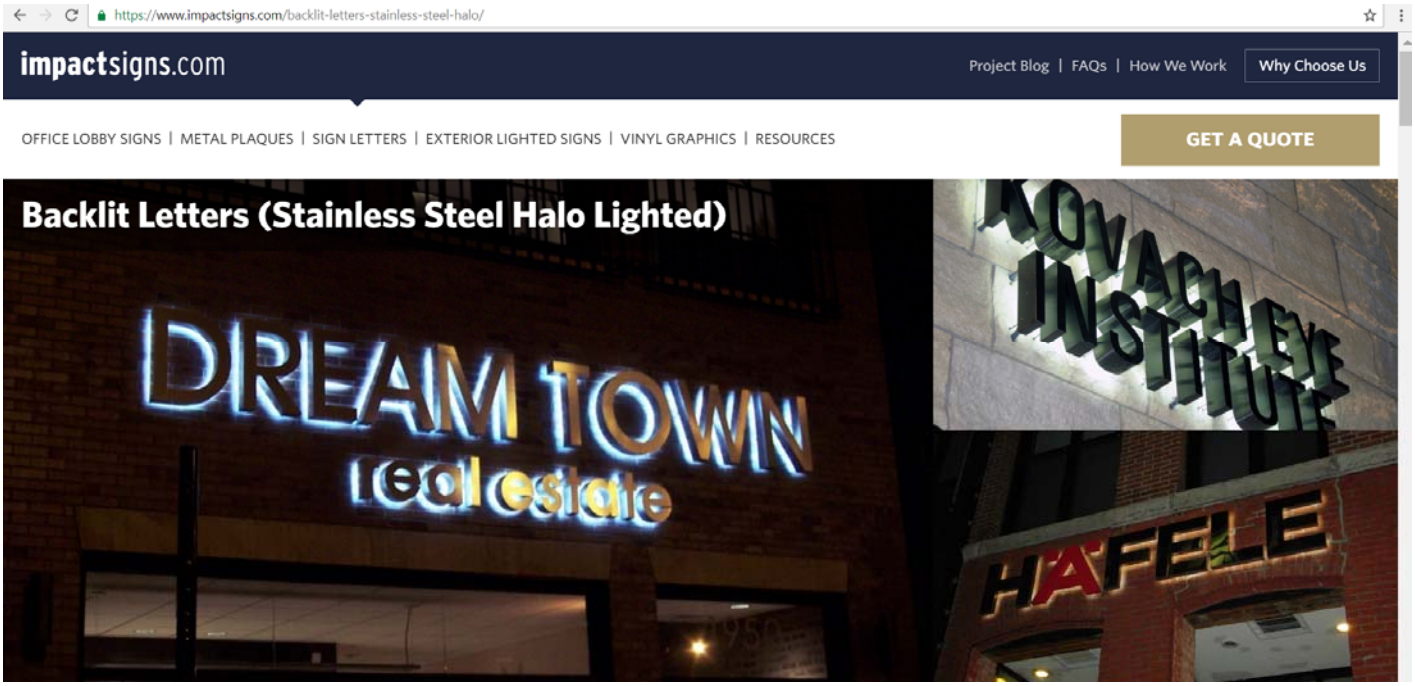
For more information:

International Sign Association
Email: signage.help@signs.org
Phone: (866) WHY-SIGN (866) 949-7446

For other signage resource help see:

http://www.sba.gov/smallbusinessplanner/start/pickalocation/signage/index.html

http://www.uschamber.com/signs.htm



Backlit stainless steel letters stand out

Create a dramatic halo lighting effect with reverse channel letters. We insert high-quality, low-voltage LED modules inside our fabricated stainless steel channel letters and provide a lexan backer. During installation, the letters are floated off the wall with spacers — and results are breathtaking, both indoors and outside. With thickness of up to 5”, our fabricated stainless steel letters are ideal when you’re looking for letters with a greater depth.

Over the past 25 years, our skilled experts have perfected the process of fabricated stainless steel letters, using both C304 and C316 stainless steel. We cut the faces of the letters using abrasive water jet or laser cutting systems, depending on the job requirements, while returns are precision-shaped by hand. We complete the fabrication by joining the faces and returns with high-strength, non-leaded silver solder.

Our fabricated stainless steel letters are available in a wide variety of options including:

- Sizes ranging from 4” to 36” tall
- Thickness from ½” to 5” deep
- Choice of standard alloy C304 or optional alloy C316, which provides additional corrosion and tarnishing resistance for marine and other harsh environments (additional costs apply)
- Finishes including #4 brushed finish, mirror-polished face and returns, and painted PMS colors
- Titanium coating available in gold, copper, bronze and black smoke finishes (adds 30% to cost)
- Mounting options include bottom stud mount and rail mount
- Typical stud mounting with threaded pins on straps or clips on backs of letters
- Minimum stroke of 1” is required on fabricated stainless steel letters
- LED halo effect backlighting with a lexan back creates breathtaking backlit letters
- Translucent acrylic face lights up the face in addition to the halo effect for bright and stunning lighting
- Panel assembly provides an additional architectural element and ease of installation

Installation considerations for backlit letters
Before you choose a backlit sign letters, keep in mind that you’ll need an electrical junction behind the wall or in the ceiling above. We will provide the power supply (transformer) needed to power the low voltage LEDs. Also, adequate access will be needed in the ceiling and wall to run the wiring (Read more in FAQ) Backlighting adds a significant amount to the letter’s price and installation costs. Learn more about installation here. Backlit fabricated letters can also be installed on panels, which is a great solution when accessing the wires is difficult or the wall surface isn’t ideal. This way, you only need a single electrical junction to for connection.

3D LED Backlit Signs With Painted Stainless Steel Letter Shell For Burberry

Detail of this signage:

- Individual LED backlit signage
- Painted fabricated 304 stainless steel signage shell
- Laser welding process
- Internally illuminated with LED
- Installation: use screws pins to fix on the wall. In order to get the best backlit effect, we suggest to make this kind of signage left the backing wall about 20mm.
- Accessories: AC transformer; 1:1 template; screws pins
- Tech data: 3D LED Backlit Business Signs With Painted Stainless Steel Letter Shell

Tweet

FREE QUOTATION

CUSTOM SIGNS

Category

- Appliances Brands
  - Apple
  - Bang & Olufsen
  - Bose
- Automobile Brands
  - Harley-Davidson
  - Lexus
  - Renault
- Bank
- Coffeehouse
  - Costa Coffee
  - McCafé
  - Starbucks
  - The Coffee Bean & Tea Leaf
  - Wagas
- Cosmetics Brands
  - Fancl
  - Gentlemen's Tonic
  - Jurlique
  - Melvita

3D LED Back-lit Signs With Painted Stainless Steel Letter Shell For Fendi

Detail of this signage:

- Individual LED back-lit signage
- Painted fabricated mirror polished 304 stainless steel signage shell
- Internally illuminated with LED
- Installation: use screws pins to fix on the wall. In order to get the best backlit effect, we suggest to make this kind of signage left the backing wall about 20mm.
- Accessories: AC transformer; 1:1 template; screws pins
- Tech data: 3D LED Backlit Business Signs With Painted Stainless Steel Letter Shell

Tweet

Custom Business Signs Like This

FREE QUOTATION

CUSTOM SIGNS

Category

- Appliances Brands
  - Apple
  - Bang & Olufsen
  - Bose
- Automobile Brands
  - Harley-Davidson
  - Lexus
  - Renault
- Bank
- Coffeehouse
  - Costa Coffee
  - McCafé
  - Starbucks
  - The Coffee Bean & Tea Leaf
  - Wagas
- Cosmetics Brands
  - Fancl
  - Gentlemen's Tonic
  - Jurlique
  - Melvita

We are adding more content to our new site every week. Please visit again.

Reverse or "Halo" Lit Letters

Reverse or "halo" lit channel letters are a much different look than face lit letters. Many people feel these give a very classy look. Reverse letters do not illuminate on the face because the face is constructed from aluminum and the lighting is facing backwards toward the wall. This light "floods" the wall behind the letter allowing the illumination to come out from behind and around the edges of the letters. This is also often referred to as a "halo" effect. The illumination is still inside the letter and can be either neon or LED.


COTTON BOWL


MARKET STREET
United


MARKET STREET
United


CHASE


FAMILY
HEALTHCARE
STANLEY C. EVANS, D.O.


FAMILY
HEALTHCARE
STANLEY C. EVANS, D.O.


FAMILY
HEALTHCARE


Acorn SHOPS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OF SURGERY
07 21 2009 17:45


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CENTER
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TOWN
CENTER
BANK


TOWN
CENTER
BANK


MARKET STREET


Pharmacy
MARKET STREET


SIGNATURE

Starlite Sign
7923 East McKinney
Denton, Texas, 76208

(940) 382-8850
(800) 659-2493 (toll free)
(940) 387-0429 (fax)

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Illuminated Signs

A sign that lacks a light source is readable for only half the day. When business owners want their sign to be visible at all times of the day, they have to buy illuminated signs. Illuminated signs use illuminated powered light sources to light up their signs. Business owners can choose between many different types of illuminated signs including backlit signs and channel signs, externally illuminated signs, and LED signs.

Backlit Signs and Channel Signs

These types of signs use a light box or source in the back of the sign and the front of these signs is made out of transparent plastic or glass. Backlit signs are typically found close the roadside entrance to businesses. They are especially useful if the business is not easily seen while driving. Channel signs are typically letter signs that are mounted above a storefront and spell out the name of a business. They are a useful way to identify a business during the day or night.

Externally Illuminated Signs

Externally illuminated signs use spot lights and other external light sources to illuminate the front of the sign. These signs can use plastic, metal, or any other type of material for the lettering, but the material must be easy to read in direct light. If the material is too reflective or not reflective enough, it may be difficult for visitors to read it clearly. For these signs to be effective, the business owner must make sure that he is using powerful enough lights and should check that the lights are effectively pointed toward the front of the sign, so that it's easy

should check that the lights are effectively pointed toward the front of the sign, so that it's easy to read.

LED Signs

These signs use electronic displays. They are easily seen during day or night as long as they are turned on. One of the best advantages to LED signs is that the front of the sign can be changed regularly to feature new information.

Contact Us

Contact Us

Name *

Email *

Message *

Captcha *

Send me a copy

Send

Home (/) | Signs (/category/1/signs.php) | LED Illuminated Letters (/category/13/illuminated-letters.php) | HALO Illuminated Letters

HALO Illuminated Letters

Create angelic letters with the addition of halo illumination

Halo illumination creates a soft glow of light around a built-up metal or acrylic letter as LEDs are positioned to shine out from the reverse of the letter.

Used alone or in combination with a face lit effect, halo illumination adds sophistication to a sign project whether mounted to a sign tray panel, fascia or substrate or installed individually. When added to a letter with a non-illuminated face, halo illumination brings clarity and definition to the letter and is often selected for letters with a shallow depth or small sign sizes.

Halo lit letters are most commonly specified with white LEDs which feature a warm white or cool white colour temperature. Controllers can be added to dim or brighten the light of the LEDs according to the intensity of the halo effect required, which may need to be discrete for some corporate signage. Applelec’s built-up metal and acrylic letters are created in our workshops where LEDs are fitted by our experienced installation team.

Key Features

- **Interior or exterior halo illuminated letters**
- **Perfect for shallow depth letters or small sign sizes.**
- **Modules calculated according to letter size and shape**
- **No modules wasted, no letters under populated**
- **Choose from LED range including ECA compliant modules**

Also in LED Illuminated Letters

Luxury Illuminated Letters (/product/12/13/luxury-illuminated-letters.php)
FACE Illuminated Letters (/product/10/13/face-illuminated-letters.php)
LED Light Sheet Letters (/product/45/13/led-light-sheet-letters.php)
Logomax Face Lit Letters (/product/11/13/logomax-face-lit-letters.php)

Related Documents

Applelec's Guide to Sign Fixings - **Download** (/assets/products_documents/9/Applelecs_Guide_to_Sign_ (889.92 KB)

Applelec's Guide to Sign Wiring - **Download** (/assets/products_documents/9/Applelecs_Guide_to_Sign_ (379.9 KB)

Popular with hotels, spas, restaurants and other leisure facilities are wall mounted halo illuminated letters which pick out the detail of the wall surface, such as stone or slate cladding, to create attractive light and shadow effects.

Once constructed, our halo illuminated letters can be secured to a sign tray panel or other fixing system or supplied individually for mounting as required.

For further information on **HALO Illuminated Letters** or any other product please get in touch.

Credits: Images courtesy of M4 UK Ltd (http://www.m4uk.com/) (Chesterfield College).

(/case-studies/5/langtree-park-built-up-letters.php)

Case Study: (/case-studies/5/langtree-park-built-up-letters.php)
Applelec and Vinyline deliver stadium sized illuminated signage in record time

view (/case-studies/5/langtree-park-built-up-letters.php)

Get in touch: **01274 774 477** **sales@applelec.co.uk (mailto:sales@applelec.co.uk)** Find our **offices (/page/3/contact.php)**

REVERSE CHANNEL LETTERS

Other Products

Reverse Channel Letter signs provide a distinctive and memorable approach to your client's signage program. Reverse channel letters (http://www.directsignwholesale.com) are often specified by signage clients who value a prestigious image. These letters are also called "halo lit" or "backlit" letters.

Reverse channel letters (/)are produced with aluminum faces and returns. These back lit letters are mounted away from the wall so a halo forms behind them. A clear polycarbonate back prevents animals from nesting inside the letter.

LED illumination (http://www.directsignwholesale.com/products/illumination)is utilized for reverse channel letters.

For Reverse channel letters, Direct Sign Wholesale offers:

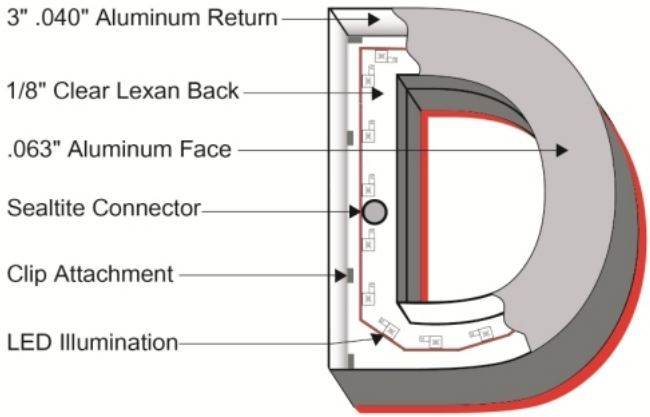
Personal School Loans (http://www.bessels.com/personal-school-loans)

- Any font style
- Painted any color
- 3" .040 aluminum returns
- .063 aluminum faces
- 1/8" Clear Lexan backs
- LED illumination
- 1.5" standoffs
- Sealtite connectors
- U.L. Listed

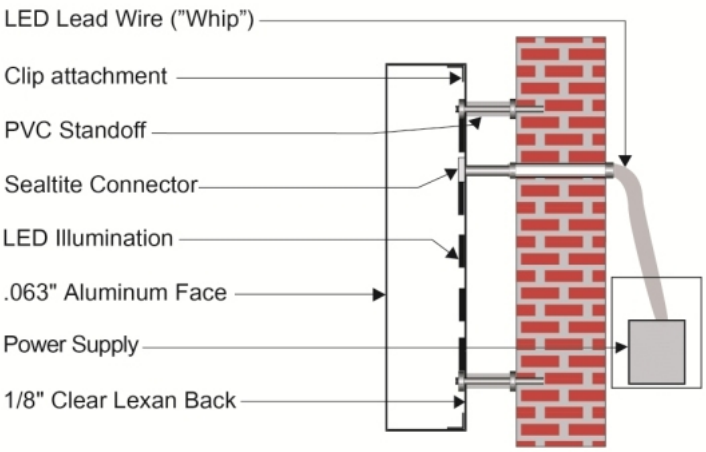
Nonstandard letters may be fabricated according to your specifications.

All of our wholesale channel letters (/)are U.L. listed, and we use only the highest quality materials along with field-proven components when producing your sign.

Reverse Lit Channel Letters



FRONT VIEW



SIDE VIEW

Newsletter Sign-Up: EMAIL ADDRESS

Keep in Touch:

COMPANY

About Us (/about)

Our Staff (/our-staff)

Testimonials (/testimonials)

Industry Association Memberships (/industry-association-memberships)

Green Manufacturing (/green-manufacturing)

Contact Us (/contact-us)

ADDITIONAL INFORMATION

How to Get a Fast Channel Letter Sign Quotation (/get-fast-channel-letter-sign-quotation)

How to Place an Order (/how-place-order)

Warranty Information (/warranty-information)

Case Studies (/case-studies)

Channel Letter Signage Illumination (/channel-letter-signage-illumination)

Channel Letter Power Supplies (/channel-letter-power-supplies)

LED Letter Installation (/led-channel-letter-installation-instructions)

Funny Signs (/funny-signs)

Cool Sign of the Month (/cool-sign-month)

SHIPPING INFORMATION

Channel Letter Packaging/Shipping (/shipping/channel-letter-shipping-packaging)

US Shipping Information (/shipping/us-shipping-information)

Canada Channel Letter Shipments (/shipping/canada-channel-letter-shipments)

NEWS ROOM

Blog (/blog)

In the News (/news)

E-Newsletter (/e-newsletter)

Site Map (/sitemap) | Privacy Policy (/privacy-policy)

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Date: 10-11-16
TID # 1004B01L001
Case No. DE 16 - 01

CITY OF WASILLA

•Planning Office•

290 East Herning Avenue • Wasilla • Alaska • 99654-7091

• Telephone 907-373-9020 •

APPLICATION FOR DESIGN EXCEPTION

I. PROPERTY OWNER*	OWNER'S REPRESENTATIVE (If Any)
Name: James & Cindi Martin	Name:
Mailing Address: 400 N Main St.	Mailing Address:
Wasilla, AK 99654	
Contact Phone: Day Night 907-373-2022	Contact Phone: Day Night
FAX: 907-373-2029	FAX:
E-mail: jcmartin@Mtaonline.net	E-mail:

II. PROPERTY INFORMATION	
Size of property	0.16
Property tax ID#	1004B01L001
Street Address:	400 N. Main St.
Legal Description: Lot(s) 1 Block 1 Subdivision Birch Park Addtn to Wasilla Townsite OR Parcel/Tract _____ Section _____ Township _____ Range _____	
Zoning:	☒ Commercial ☐ P Public

III. DESIGN EXCEPTION

Applicant seeks a Design Exception from the following general requirement (s):

WMC Code Section #: Downtown overlay Section 6

Describe problem and the minimum variation from code necessary to resolve the problem:

See attached

IV. APPLICATION

In addition to a site plan, elevation drawings, or other information necessary to explain the request, the applicant must describe how the requested design exception complies with at least one of the following standards listed in Section 16.20.040(L) of the Wasilla Municipal Code. You may use the space provided on this form or attach your answers.

1. The proposed project is a unique and exception design concept that enhances the downtown overlay district.

See attached

2. Due to unusual circumstances, the strict application of any provision of the downtown overlay design standards would result in exceptional practical difficulty or undue hardship due to the circumstances unique to this property. The hardship shall not qualify as an undue hardship if it is of a person's own making.

3. The waiver or modification is consistent with the purpose of the downtown overlay district regulations and design standards and will not materially adversely affect the surrounding area or the downtown overlay district as a whole.

See attached

IV. FEE

A Fee of $500 must accompany this application. # 10820 10/11/16

V. CERTIFICATION

I certify that the information contained in this application is true and correct to the best of my knowledge, and that I understand that any false statements made by me on this application, may be subject to revocation or denial of the Land Use Permit. I further certify that I am the property owner or that I have been designated by the property owner to act on their behalf. I understand that the City of Wasilla will not be held liable for any improvements made to this property if an appeal is filed or if other types of permits for this property are required by another agency. I further understand that no activity may be made to this property until a Land Use Permit is valid.

Cindy Martin
Applicant

10/11/16
Date

Owner (if different then applicant)

Date

Notice of Right to Appeal: All decisions of the Planning Commission are appealable to a Hearing Officer per WMC Section 16.36.

VALLEY CHIROPRACTIC CLINIC, INC.
DR. JAMES D. MARTIN
DR. DAVID J. MARTIN
400 N. MAIN ST.
WASILLA, AK 99654
907-373-2022

October 4, 2016

Variance request for Downtown overlay
Section 6

Good afternoon:

We have been in practice in the downtown area for over 30 years. We have always strived to beautify the downtown area of Wasilla with hanging baskets in the summer and exterior holiday lights in the winter to help brighten up the downtown area. We have contributed to the new library because we believe in the importance of business participation. We continue to help with the mayor's park and playground projects as well as his 4th of July picnics for the last several years. We are undergoing a remodel of both the exterior and interior of our clinic to help bring a more modern look and to enhance the downtown district. I would like to address two parts of section 6 of the downtown overlay guidelines with respect to our new sign we are placing on the building.

Variance #1. "The size shall not be more than 5% of the building face".

Our total current signage for our building on Main St. is in excess of 165 square feet which we have had for over 28 years. According to new City of Wasilla guidelines we can have 72 square feet of signage total for our building. Please see below:

Main St. Signage including phone number	Square Feet	%
Building face is 480 SF		
Current	92.5	19.0
Proposed # 1	42.8	8.8
Downtown overlay regulations	24	5.0
Difference is 3.8%		
Swanson Ave. Signage		
Building face is 960 SF		
Current	71.5	15.0
Proposed #1	37.0	3.9
Downtown overlay regulations	48.0	5.0
Difference is -1.1%		

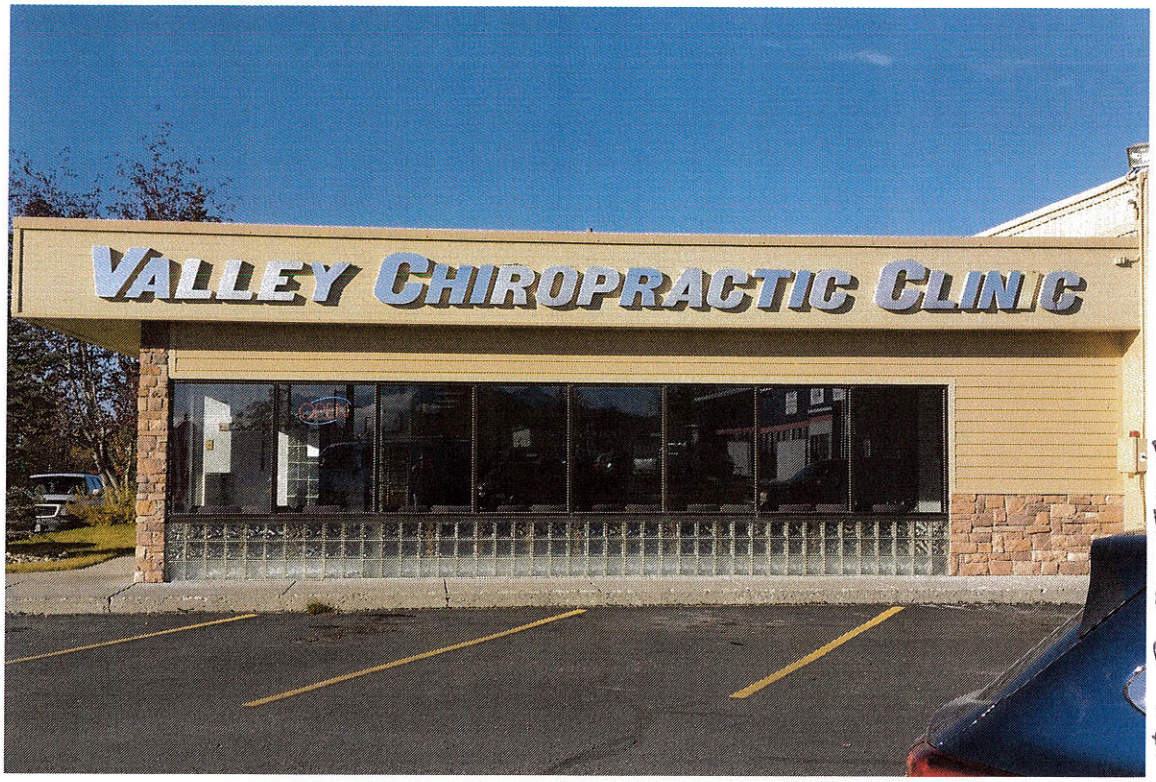
While this marginally exceeds the downtown overlay guidelines it reduces our total current signage by half. The US Sign Council has a publication entitled *On-Premise Signs, Determination of Parallel Sign Legibility and Letter Heights* which gives statistics on what size the sign and letters should be for parallel signs vs perpendicular signs. Using their guidelines for parallel signs, which would be what our Main street signage falls under, our proposal Number #1 of 15" letter height falls within their guidelines of 14-18" for a total square footage of 42.8 for the Main St. sign.

Variance #2. "Signs shall be indirectly lit". We believe this is in compliance without the need for variance.

We are using halo accent lighting for our sign. Halo illumination creates a soft glow of light around a built-up metal or acrylic letter as LEDs are positioned to shine onto the surface of a wall which cast a glow onto the wall picking out the detail of the wall surface, such as stone or slate cladding and to create attractive light and shadow effects. The lights shine onto the wall surface thus meeting the "indirectly lit" requirement. I have enclosed a picture showing our clinic with halo accent and a sample picture with some letters that are backlit. I would like to clarify that the letters for our building are not "backlit". We are using copper penny metal siding on the upper portion of our building and our sign is made of cast aluminum. Using this halo effect would be less harsh than an external spotlight shining on the sign. The LED bulbs emit 2400k which creates a soft warm glow on the building. We believe this would be more in keeping with what the city is looking for in its downtown district. We believe that the change to our building is a modern and unique design concept that will enhance the downtown overlay district. The variance we are requesting is consistent with the overall purpose of the downtown overlay district regulations and design standards and will not materially adversely affect the surrounding area or the downtown overlay district as a whole.

In conclusion, we appreciate the planning commission taking the time to review our request and look forward to helping make the downtown more appealing and modern in the years to come.

Dr. James and Cindi Martin



↖ removed Valley Chiro. Dr. James Martin Dr. David Martin & Phone #

Current Sign

590 Halo

890 Halo

Requested Sign @ 8.8%

590

Building is 12' Tall x 40 Feet Wide
Across Main St.
+ 12' x 80' down Swanson St.


Valley
CHIROPRACTIC CLINIC
400
373-2022
OPEN


Valley CHIROPRACTIC CLINIC
400
373-2022
OPEN

www.ussc foundation.org/ussc.sign Legi Rules Thumb.pdf

Parallel Signs

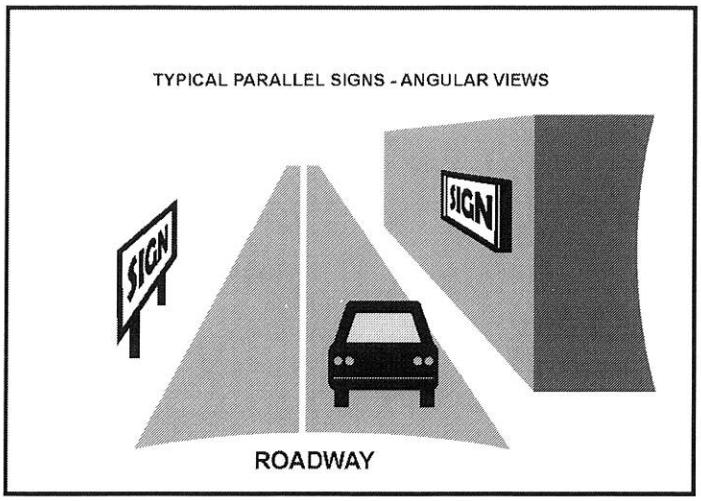


Figure 6. Parallel Sign Types

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 x 10 + LO) / 5

LH = (2 x 10 + 37) / 5
LH = 57 / 5
LH = 11.4 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 x 10 + LO) / (LI / 6)

LH = (2 x 10 + 37) / (22 / 6)

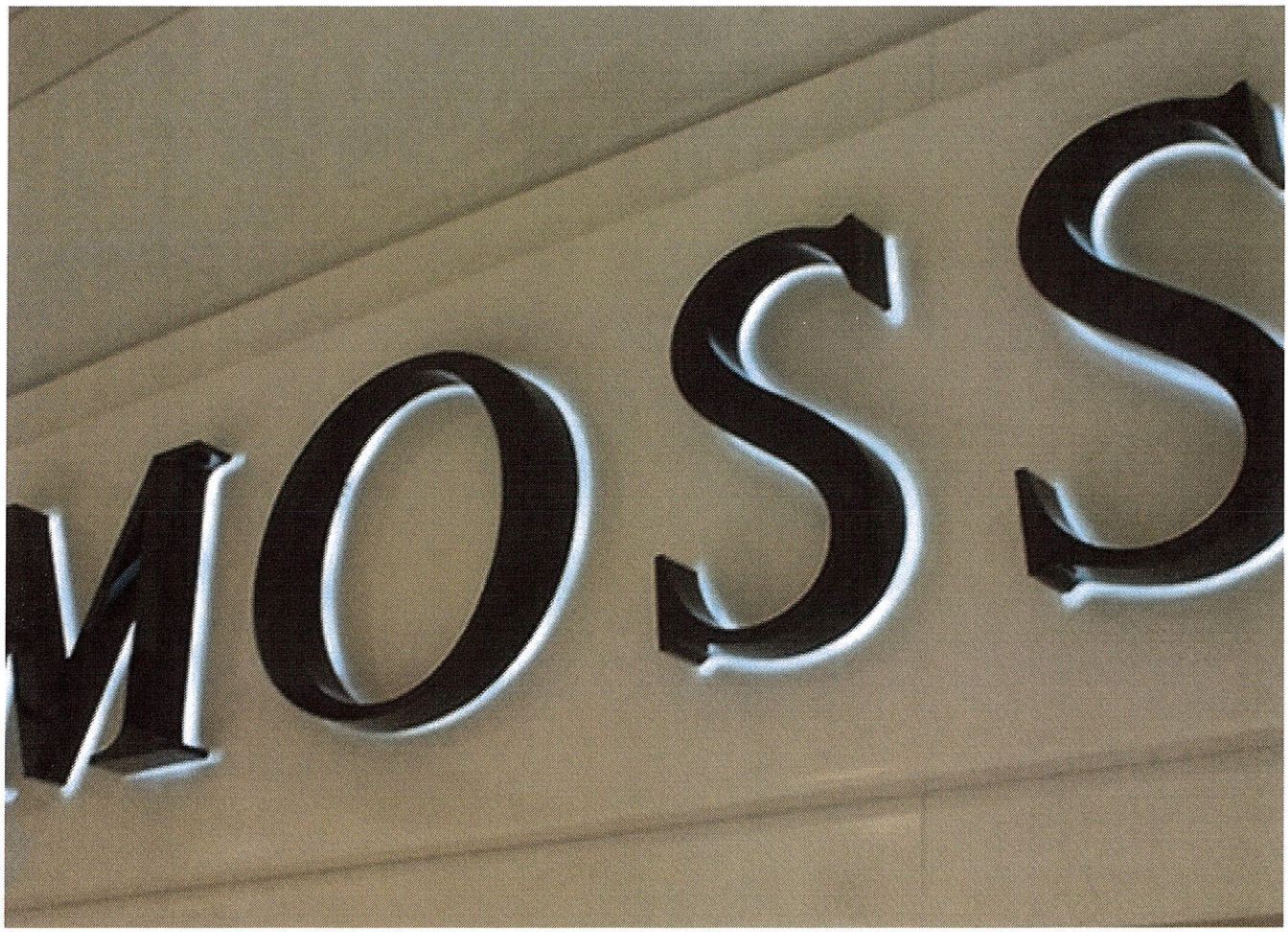
LH = 57 / 3.67
LH = 15.5 inches

Table 3. Parallel sign letter height lookup table.

	Letter Height in Inches				
	Number of Lanes				
Offset from Curb (ft)	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

Backlit

Backlit



Halo Example

Halo Example

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By: Planning
Public Hearing: 11/15/16
Adopted:

WASILLA PLANNING COMMISSION
RESOLUTION SERIAL NO. 16-14

A RESOLUTION OF THE WASILLA PLANNING COMMISSION DENYING A DESIGN EXCEPTION TO ALLOW INSTALLATION OF A NEW WALL SIGN ON THE MAIN STREET SIDE OF THE VALLEY CHIROPRACTIC CLINIC BUILDING THAT IS 18.8 SQUARE FEET LARGER (8.9 PERCENT OF THE TOTAL WALL AREA FACING THE STREET) THAN THE 24 SQUARE FEET OF SIGNAGE ALLOWED (FIVE PERCENT OF THE TOTAL WALL AREA FACING THE STREET) AND DENYING A DESIGN EXCEPTION TO ALLOW THE WALL SIGN TO BE A "BACKLIT/HALO" TYPE OF LIGHTED SIGN ON LOT 1, BLOCK 1, BIRCH PARK WASILLA SUBDIVISION.

WHEREAS, James and Cindi Martin, Valley Chiropractic Clinic, submitted an application for a design exception to the sign standards in the Downtown Overlay District Design Standards (DE16-01) on October 11, 2016; and

WHEREAS, the application included the required site plan and narrative that addresses the general approval criteria in §16.16.050 of the Wasilla Municipal Code; and

WHEREAS, notice of the application was mailed to all property owners within a 1,200 feet radius, the appropriate review agencies, the Wasilla Planning Commission, and the Wasilla City Council as required by §16.16.040(A)(2) of the Wasilla Municipal Code; and

WHEREAS, a notice of the Planning Commission public hearing was published in the Frontiersman on November 6, 2016; and

WHEREAS, the Planning Commission held a public hearing on this request on November 15, 2016; and

WHEREAS, the Wasilla Planning Commission deliberated on this request taking into account the information submitted by the applicant, the evaluation and recommendation by staff contained in the staff report, public testimony – both written and verbal, the applicable provisions of the Downtown Overlay District Design Standards, Wasilla Municipal Code, Comprehensive Plan, and other pertinent information brought before them; and

WHEREAS, the Wasilla Planning Commission adopted Findings of Fact, attached as Exhibit A, summarizing basic facts and reasoning of the Commission for denying the design exception requests; and

NOW, THEREFORE BE IT RESOLVED, that the Wasilla Planning Commission hereby denies this application with the Findings of Fact, attached as Exhibit A and incorporated herein.

ADOPTED by the Wasilla Planning Commission on --, 2016.

APPROVED:

_____
Jessica Dean, Chair

ATTEST:

_____
Tina Crawford, AICP, City Planner

EXHIBIT A
Wasilla Planning Commission Resolution 16-14
FINDINGS OF FACT
Section 16.20.040(L), Design Exceptions

16.24.040(L) – Design Exceptions

The planning commission may grant design exceptions if a proposed project is a unique and exceptional design concept that enhances the downtown overlay district, or if by reason of unusual circumstances, the strict application of any provision of this section would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question as provided in this subsection. The planning commission may impose additional conditions to ensure that the design is consistent with the purpose and intent of this section.

(1) Application. After the pre-application conference, the applicant shall submit an application for the design exception to the city planner with the appropriate application fee. The site plan for the application shall depict all information relevant to the requested waiver or modification.

Finding: The applicant submitted the required application and fee.

(2) Public hearing. The planning commission shall hold a public hearing on the application. The notice, comment period, and hearing procedure shall be the same as provided in § 16.16.040 for a conditional use.

Finding: All notification requirements above have been met.

(3) Consideration. In evaluating an application, the planning commission may consider any of the following alternatives to offset a design deficiency, if they find that the proposed alternative will serve the purpose of this section:

- ***(a) Fences and walls may be used in lieu of landscaping and may be allowed to screen parking when there is not enough room to provide an effective landscape screen.***
- ***(b) Additional enhanced architectural details, consisting of period and style appropriate appointments and materials not typically used due to high cost.***
- ***(c) More and higher quality architecturally appropriate windows.***
- ***(d) Quality public seating meeting the standards in this section, such as benches in front of shops and businesses.***
- ***(e) Installation of quality decorative pavement/paver designs, especially in areas highly visible to the public such as driveway aprons and building entrances along main streets.***
- ***(f) Additional or alternative storm water design solutions such as bio swales, rain gardens and cisterns.***

(g) Use of a new, innovative or non-traditional energy efficient building technology, such as solar panels and insulated prefabricated wall panels.

Finding: The above alternatives are not applicable to this request.

(4) Decision. The planning commission may approve an application only if they find that the application meets one or more of the following standards:

(a) The waiver or modification is consistent with the purpose of this section and will not materially adversely affect the surrounding area or the downtown overlay district as a whole;

Finding: Neither of the two waivers is consistent with the purpose of the design exception section or the sign regulations of the Downtown Overlay District. The Downtown Overlay District and associated design standards was just adopted six months ago. Since that time, four businesses have revised their signage (Alaska Massage Clinic, H&R Block, K-9 Cuts, and Butterfly Native Thriftique) and three businesses have updated the exterior façade (the applicant's business, Alaska Massage Clinic, and K-9 Cuts) consistent with the adopted regulations.

The first waiver is a request to allow a sign that is 3.8% larger than allowed by the code is not consistent with the sign regulations and intent of the Downtown Overlay District and Design Standards that was adopted in April 2016. The record included renderings depicting signage that meets the current sign regulations (5% of the wall area), the requested signage that exceeds the allowed signage (8.8% of the wall area), and a photograph of signage for a nearby business on the same roadway that recently updated their signage consistent with the overlay sign regulations. As shown in those documents, the signs consistent with the regulations appear to be large enough to be viewed by both vehicular and pedestrian traffic along Main Street. Additionally, if the phone number was eliminated, an additional 5.3 square feet would be available to make the letters larger for the business name.

The applicant included information from the U.S. Sign Council regarding industry standards for wall signage that is parallel to the roadway to support the waiver request for a larger sign. However, that report did not take into account is the specific building location and roadway information for the subject property and building. The building is on a corner lot located at an intersection with a four-way stop sign (Main Street/Swanson Avenue), it is allowed to have wall signage on each side of the building fronting a roadway, visibility is not obstructed in any direction from vegetation or other buildings,

the speed limit for the roadway is 25 MPH, and it is a two-lane road with a center turn lane at the intersection. With the specific location factors for the subject property, the increased letter size typically needed for moving traffic to allow sufficient time to view the sign and make turning decisions is not needed.

The second waiver requested approval to allow "backlit/halo" lighting, which is specifically prohibited within the sign regulations for the Downtown Overlay District. Although the applicant states that "halo lit" signs are not the same as "backlit" signs, extensive information was included in the record by staff from sign companies that use the two terms interchangeably and even the definition in Merriam-Webster dictionary online supports that they are the same type of lighting.

(b) The proposed project is a unique and exceptional design concept that enhances the downtown overlay district; and

Finding: The proposed larger and "backlit/halo lit" signage is not unique or exceptional in design in such a way that it enhances the downtown overlay district. As indicated in the findings above, the same updated sign design that matches the recent façade improvements on the building exterior is allowed but must just use slightly smaller letters and external lighting. The applicant has not provided any special circumstances to support the request for a larger sign that utilizes a type of lighting that is specifically prohibited.

(c) Strict application would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question. A hardship shall not qualify as an undue hardship if it is of a person's own making.

Finding: The strict application of the sign regulations does not result in exceptional practical difficulty or undue hardship due to any circumstances that are unique to this property. As indicated in the photo simulations and the photograph of a nearby business, the sign regulations as written permit a sign that is visible to both vehicular and pedestrian traffic. There is no evidence that a larger sign or "halo/backlit" lighting of the sign is necessary to be visible to vehicular traffic.

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By: Planning
Public Hearing: 11/15/16
Adopted:

WASILLA PLANNING COMMISSION
RESOLUTION SERIAL NO. 16-14

A RESOLUTION OF THE WASILLA PLANNING COMMISSION APPROVING A DESIGN EXCEPTION TO ALLOW THE INSTALLATION OF A NEW WALL SIGN ON THE MAIN STREET SIDE OF THE VALLEY CHIROPRACTIC CLINIC BUILDING THAT IS 18.8 SQUARE FEET LARGER (8.9 PERCENT OF THE TOTAL WALL AREA FACING THE STREET) THAN THE 24 SQUARE FEET OF SIGNAGE ALLOWED (FIVE PERCENT OF THE TOTAL WALL AREA FACING THE STREET) ON LOT 1, BLOCK 1, BIRCH PARK WASILLA SUBDIVISION.

WHEREAS, James and Cindi Martin, Valley Chiropractic Clinic, submitted an application for a design exception to the sign standards in the Downtown Overlay District Design Standards (DE16-01) on October 11, 2016; and

WHEREAS, the application included the required site plan and narrative that addresses the general approval criteria in §16.16.050 of the Wasilla Municipal Code; and

WHEREAS, notice of the application was mailed to all property owners within a 1,200 feet radius, the appropriate review agencies, the Wasilla Planning Commission, and the Wasilla City Council as required by §16.16.040(A)(2) of the Wasilla Municipal Code; and

WHEREAS, a notice of the Planning Commission public hearing was published in the Frontiersman on November 6, 2016; and

WHEREAS, the Planning Commission held a public hearing on this request on November 15, 2016; and

WHEREAS, the Wasilla Planning Commission deliberated on this request taking into account the information submitted by the applicant, the evaluation and

recommendation by staff contained in the staff report, public testimony – both written and verbal, the applicable provisions of the Downtown Overlay District Design Standards, Wasilla Municipal Code, Comprehensive Plan, and other pertinent information brought before them; and

WHEREAS, the Wasilla Planning Commission adopted Findings of Fact, attached as Exhibit A, summarizing basic facts and reasoning of the Commission; and

NOW, THEREFORE BE IT RESOLVED, that the Wasilla Planning Commission hereby approves this application with the Findings of Fact, attached as Exhibit A and incorporated herein, with the following conditions:

1. All signage must be consistent with the drawings attached to this Resolution as Exhibit B. Any changes to these plans must be submitted to the City Planner for review and approval. Substantial modifications will require submittal of an amended design exception application, including application fee and Planning Commission review and approval.
2. The sign may only be lit with indirect lighting.
3. The design exception is only approved for the proposed Valley Chiropractic Clinic sign indicated in the drawings attached to this Resolution as Exhibit B. Any future changes to the signage by this business, other than replacement/repair of damage due to fire or a natural disaster, must conform to the sign regulations in the Downtown Overlay District. Additionally, all signage for future businesses or tenants in this building must conform to the sign regulations in place at that time.

ADOPTED by the Wasilla Planning Commission on --, 2016.

APPROVED:

Jessica Dean, Chair

ATTEST:

Tina Crawford, AICP, City Planner

EXHIBIT A
Wasilla Planning Commission Resolution 16-14
FINDINGS OF FACT
Section 16.20.040(L), Design Exceptions

16.24.040(L) – Design Exceptions

The planning commission may grant design exceptions if a proposed project is a unique and exceptional design concept that enhances the downtown overlay district, or if by reason of unusual circumstances, the strict application of any provision of this section would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question as provided in this subsection. The planning commission may impose additional conditions to ensure that the design is consistent with the purpose and intent of this section.

(1) Application. After the pre-application conference, the applicant shall submit an application for the design exception to the city planner with the appropriate application fee. The site plan for the application shall depict all information relevant to the requested waiver or modification.

Finding: The applicant submitted the required application and fee.

(2) Public hearing. The planning commission shall hold a public hearing on the application. The notice, comment period, and hearing procedure shall be the same as provided in § 16.16.040 for a conditional use.

Finding: All notification requirements above have been met.

(3) Consideration. In evaluating an application, the planning commission may consider any of the following alternatives to offset a design deficiency, if they find that the proposed alternative will serve the purpose of this section:

- ***(a) Fences and walls may be used in lieu of landscaping and may be allowed to screen parking when there is not enough room to provide an effective landscape screen.***
- ***(b) Additional enhanced architectural details, consisting of period and style appropriate appointments and materials not typically used due to high cost.***
- ***(c) More and higher quality architecturally appropriate windows.***
- ***(d) Quality public seating meeting the standards in this section, such as benches in front of shops and businesses.***
- ***(e) Installation of quality decorative pavement/paver designs, especially in areas highly visible to the public such as driveway aprons and building entrances along main streets.***
- ***(f) Additional or alternative storm water design solutions such as bio swales, rain gardens and cisterns.***

(g) Use of a new, innovative or non-traditional energy efficient building technology, such as solar panels and insulated prefabricated wall panels.

Finding: The above alternatives are not applicable to this request.

(4) Decision. The planning commission may approve an application only if they find that the application meets one or more of the following standards:

(a) The waiver or modification is consistent with the purpose of this section and will not materially adversely affect the surrounding area or the downtown overlay district as a whole;

Finding: The first waiver request to allow a larger sign is consistent with the purpose of the sign regulations.

However, the second waiver request to light the sign with "backlit/halo" lighting is not consistent with the purpose of the design exception section or the sign regulations in the Downtown Overlay District since the proposed "halo/backlit" lighting it is specifically prohibited.

(b) The proposed project is a unique and exceptional design concept that enhances the downtown overlay district; and

Finding: The proposed sign is unique and exceptional in design in such a way that it enhances the downtown overlay district.

(c) Strict application would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question. A hardship shall not qualify as an undue hardship if it is of a person's own making.

Finding: The strict application of the code to require a sign that is smaller than allowed would result in exceptional practical difficulty or undue hardship due to any circumstances that are unique to this property. However, denial of the requested waiver to allow "halo/backlit" lighting of the sign does not result in exceptional practical difficulty or undue hardship since other lighting options are available.


Valley CHIROPRACTIC CLINIC
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By: Planning
Public Hearing: 11/15/16
Adopted:

WASILLA PLANNING COMMISSION
RESOLUTION SERIAL NO. 16-14

A RESOLUTION OF THE WASILLA PLANNING COMMISSION APPROVING A DESIGN EXCEPTION TO ALLOW THE INSTALLATION OF A NEW WALL SIGN ON THE MAIN STREET SIDE OF THE VALLEY CHIROPRACTIC CLINIC BUILDING THAT IS 18.8 SQUARE FEET LARGER (8.9 PERCENT OF THE TOTAL WALL AREA FACING THE STREET) THAN THE 24 SQUARE FEET OF SIGNAGE ALLOWED (FIVE PERCENT OF THE TOTAL WALL AREA FACING THE STREET) AND TO ALLOW THE WALL SIGN TO BE A "BACKLIT/HALO" TYPE OF LIGHTED SIGN ON LOT 1, BLOCK 1, BIRCH PARK WASILLA SUBDIVISION.

WHEREAS, James and Cindi Martin, Valley Chiropractic Clinic, submitted an application for a design exception to the sign standards in the Downtown Overlay District Design Standards (DE16-01) on October 11, 2016; and

WHEREAS, the application included the required site plan and narrative that addresses the general approval criteria in §16.16.050 of the Wasilla Municipal Code; and

WHEREAS, notice of the application was mailed to all property owners within a 1,200 feet radius, the appropriate review agencies, the Wasilla Planning Commission, and the Wasilla City Council as required by §16.16.040(A)(2) of the Wasilla Municipal Code; and

WHEREAS, a notice of the Planning Commission public hearing was published in the Frontiersman on November 6, 2016; and

WHEREAS, the Planning Commission held a public hearing on this request on November 15, 2016; and

WHEREAS, the Wasilla Planning Commission deliberated on this request taking into account the information submitted by the applicant, the evaluation and recommendation by staff contained in the staff report, public testimony – both written and verbal, the applicable provisions of the Downtown Overlay District Design Standards, Wasilla Municipal Code, Comprehensive Plan, and other pertinent information brought before them; and

WHEREAS, the Wasilla Planning Commission adopted Findings of Fact, attached as Exhibit A, summarizing basic facts and reasoning of the Commission; and

NOW, THEREFORE BE IT RESOLVED, that the Wasilla Planning Commission hereby approves this application with the Findings of Fact, attached as Exhibit A and incorporated herein, with the following conditions:

1. All signage must be consistent with the drawings attached to this Resolution as Exhibit B. Any changes to these plans must be submitted to the City Planner for review and approval. Substantial modifications will require submittal of an amended design exception application, including application fee and Planning Commission review and approval.
2. The design exception is only approved for the proposed Valley Chiropractic Clinic sign indicated in the drawings attached to this Resolution as Exhibit B. Any future changes to the signage by this business, other than replacement/repair of damage due to fire or a natural disaster, must conform to the sign regulations in the Downtown Overlay District. Additionally, all signage for future businesses or tenants in this building must conform to the sign regulations in place at that time.

ADOPTED by the Wasilla Planning Commission on --, 2016.

APPROVED:

Jessica Dean, Chair

ATTEST:

Tina Crawford, AICP, City Planner

EXHIBIT A
Wasilla Planning Commission Resolution 16-14
FINDINGS OF FACT
Section 16.20.040(L), Design Exceptions

16.24.040(L) – Design Exceptions

The planning commission may grant design exceptions if a proposed project is a unique and exceptional design concept that enhances the downtown overlay district, or if by reason of unusual circumstances, the strict application of any provision of this section would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question as provided in this subsection. The planning commission may impose additional conditions to ensure that the design is consistent with the purpose and intent of this section.

(1) Application. After the pre-application conference, the applicant shall submit an application for the design exception to the city planner with the appropriate application fee. The site plan for the application shall depict all information relevant to the requested waiver or modification.

Finding: The applicant submitted the required application and fee.

(2) Public hearing. The planning commission shall hold a public hearing on the application. The notice, comment period, and hearing procedure shall be the same as provided in § 16.16.040 for a conditional use.

Finding: All notification requirements above have been met.

(3) Consideration. In evaluating an application, the planning commission may consider any of the following alternatives to offset a design deficiency, if they find that the proposed alternative will serve the purpose of this section:

- ***(a) Fences and walls may be used in lieu of landscaping and may be allowed to screen parking when there is not enough room to provide an effective landscape screen.***
- ***(b) Additional enhanced architectural details, consisting of period and style appropriate appointments and materials not typically used due to high cost.***
- ***(c) More and higher quality architecturally appropriate windows.***
- ***(d) Quality public seating meeting the standards in this section, such as benches in front of shops and businesses.***
- ***(e) Installation of quality decorative pavement/paver designs, especially in areas highly visible to the public such as driveway aprons and building entrances along main streets.***
- ***(f) Additional or alternative storm water design solutions such as bio swales, rain gardens and cisterns.***

(g) Use of a new, innovative or non-traditional energy efficient building technology, such as solar panels and insulated prefabricated wall panels.

Finding: The above alternatives are not applicable to this request.

(4) Decision. The planning commission may approve an application only if they find that the application meets one or more of the following standards:

(a) The waiver or modification is consistent with the purpose of this section and will not materially adversely affect the surrounding area or the downtown overlay district as a whole;

Finding: The waiver is consistent with the purpose of the design exception section and the sign regulations in the Downtown Overlay District.

(b) The proposed project is a unique and exceptional design concept that enhances the downtown overlay district; and

Finding: The proposed sign is unique or exceptional in design in such a way that it enhances the downtown overlay district.

(c) Strict application would result in exceptional practical difficulty or undue hardship due to the circumstances unique to the particular property in question. A hardship shall not qualify as an undue hardship if it is of a person's own making.

Finding: The strict application does result in exceptional practical difficulty or undue hardship due to any circumstances that are unique to this property.


Valley CHIROPRACTIC CLINIC
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