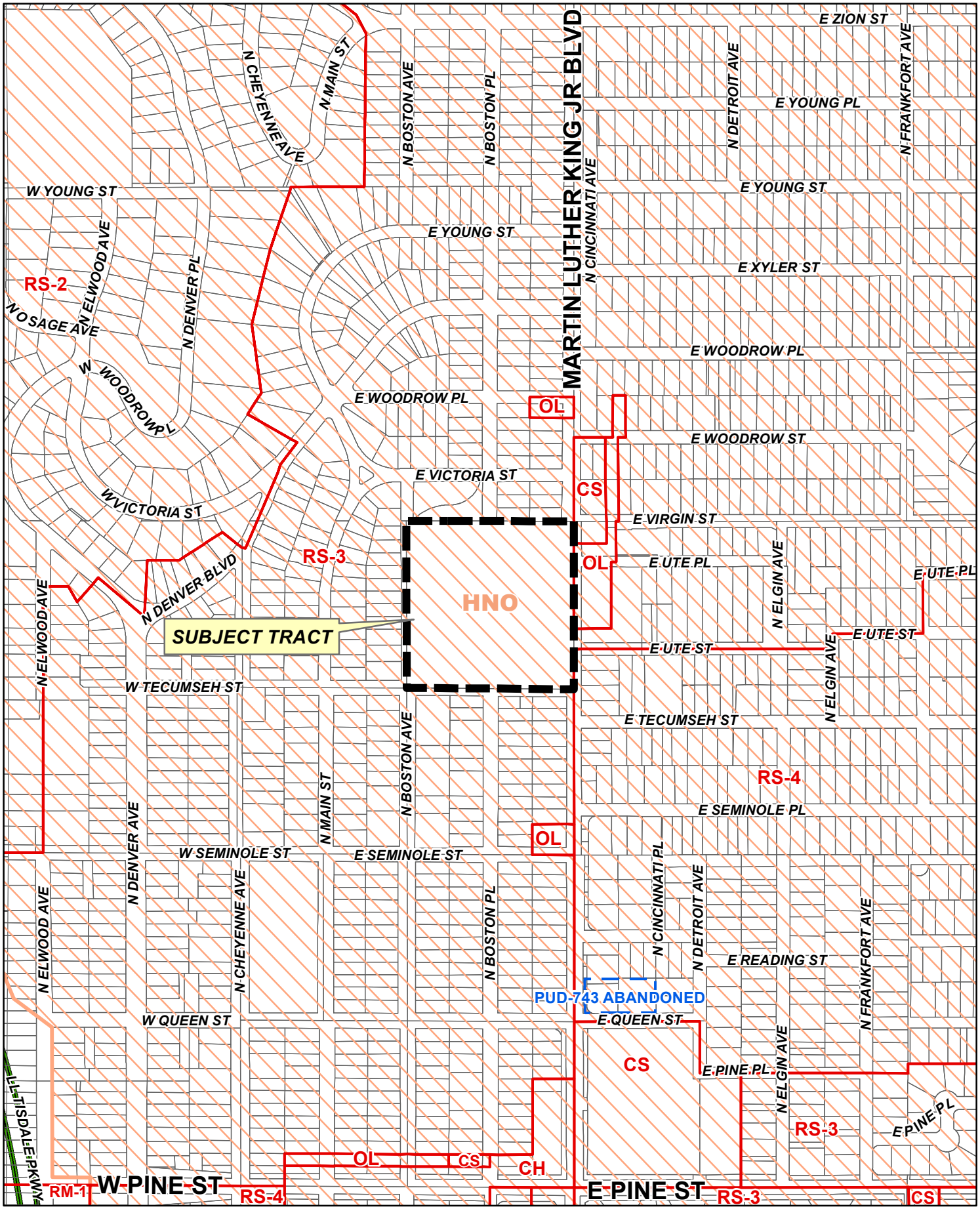


Feet
0 250 500

BOA-23262

20-12 26

N

BOARD OF ADJUSTMENT
CASE REPORT

STR: 0226 Case Number: **BOA-23262**

CZM: 28

CD: 1

HEARING DATE: 02/08/2022 1:00 PM

APPLICANT: Ryan Neurohr ,Image Builders

ACTION REQUESTED: Special Exception to permit a Dynamic Display sign in an Residential District containing a School Use (Sec. 60.050-B.2.c) Special Exception to permit a dynamic display sign within 200-feet of Residentially Zoned Lots (Sec. 60.100-F)

LOCATION: 1924 N MARTIN LUTHER KING JR BV E **ZONED:** RS-3

PRESENT USE: School **TRACT SIZE:** 435601.78 SQ FT

LEGAL DESCRIPTION: NE NE SE SEC 26 20 12 10AC,

RELEVANT PREVIOUS ACTIONS: None.

RELATIONSHIP TO THE COMPREHENSIVE PLAN: The Tulsa Comprehensive Plan identifies the subject property as part of an “Existing Neighborhood“ and an “Area of Stability“.

An **Existing Neighborhood** is intended to preserve and enhance Tulsa’s existing single-family neighborhoods. Development activities in these areas should be limited to the rehabilitation, improvement or replacement of existing homes, and small-scale infill projects, as permitted through clear and objective setback, height, and other development standards of the zoning code.

The **Areas of Stability** include approximately 75% of the city’s total parcels. Existing residential neighborhoods, where change is expected to be minimal, make up a large proportion of the Areas of Stability. The ideal for the Areas of Stability is to identify and maintain the valued character of an area while accommodating the rehabilitation, improvement or replacement of existing homes, and small-scale infill projects. The concept of stability and growth is specifically designed to enhance the unique qualities of older neighborhoods that are looking for new ways to preserve their character and quality of life. The concept of stability and growth is specifically designed to enhance the unique qualities of older neighborhoods that are looking for new ways to preserve their character and quality of life.

ANALYSIS OF SURROUNDING AREA: The subject tract is located at the NW/c of N. Martin Luther King Boulevard and E. Tecumseh St.

STAFF COMMENTS: The applicant is requesting a Special Exception to permit a Dynamic Display sign in an Residential District containing a School Use (Sec. 60.050-B.2.c) Special Exception to permit a dynamic display sign within 200-feet of Residentially Zoned Lots (Sec. 60.100-F).

Included in your packet are the standards for Sec. 60.050 and 61.100 for Dynamic Display signs in a Residential District and the general Regulations for Dynamic Display Signs.

SAMPLE MOTION:

Move to _____ (approve/deny) a **Special Exception** to permit a Dynamic Display sign in an Residential District containing a School Use (Sec. 60.050-B.2.c) **Special Exception** to permit a dynamic display sign within 200-feet of Residentially Zoned Lots (Sec. 60.100-F)

- Per the Conceptual Plan(s) shown on page(s) _____ of the agenda packet.
- Subject to the following conditions (including time limitation, if any): _____.

The Board finds that the requested Special Exception will be in harmony with the spirit and intent of the Code and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

60.040-D Dynamic Displays

Unless otherwise expressly stated, all signs that include a dynamic display are subject to the supplemental regulations of Section 60.100.

60.040-E Off-Premise Business Signs

Off-premise business signs may be approved for multi-tenant developments only when such developments are included in a mandatory development plan (See Section 70.040). The authority to approve off-premise business signs is intended to be used only when the location of the identified business or activity precludes placement of a sign that is visible to motorists and pedestrians along the highest (traffic) volume street that provides access to the subject development and when the result of the approval will be in keeping with the stated purposes of this chapter (§60.010-A). The intent of this off-premise business sign authorization is to provide flexibility in overcoming the locational and visibility challenges of lots within a mandatory development plan area, not to allow an overall increase in the amount of signage allowed or encourage a proliferation of signs within the area covered by the mandatory development plan. Any waiver, modification, or variance to the regulations of Section 60.040-E is considered a use variance and is thereby prohibited in accordance with §70.130-B1.

60.040-F Illumination

Except for authorized dynamic displays, the illumination on the face of any sign where illumination is permitted must be by constant light and may not exceed 70 foot candles measured at a distance of 2 feet from the face of the sign.

Section 60.050 Signs in R, AG, and AG-R Zoning Districts

60.050-A Applicability

The regulations of this section apply to signs in R, AG, and AG-R districts. See also the general regulations of Section 60.040.

60.050-B Signs Allowed

The following signs are allowed in R, AG, and AG-R districts in addition to any signs allowed pursuant to Section 60.030. On-premise roof signs, on-premise projecting signs and all off-premise outdoor advertising signs are prohibited in R, AG, and AG-R districts.

1. Apartment/Condo Buildings and Neighborhood and Subdivision Identification Signs

a. Lots occupied by one or more apartment/condo buildings are allowed a maximum of one freestanding sign per street frontage and a maximum of one wall sign per building wall. Wall signs may not exceed 32 square feet in area.

b. Residential neighborhoods and residential subdivisions, including manufactured housing parks, are allowed a single freestanding sign at each street entrance to the neighborhood or subdivision.

c. The freestanding signs allowed by this section may not exceed 32 square feet in area or 0.20 square feet of sign area per linear foot of street frontage, whichever is greater, but in no case may the sign exceed 150 square feet in area. The maximum sign area calculation must be based on

the street frontage to which the sign is oriented. Maximum height may not exceed 20 feet.

2. Nonresidential Uses

The following regulations apply to all principal nonresidential uses in R, AG, and AG-R districts.

a. Wall Signs

Nonresidential uses in R, AG, and AG-R districts are allowed a maximum of one wall sign per public building entrance. No individual wall sign may exceed 32 square feet in area. In buildings with multiple public building entrances, the sign area of all wall signs may not exceed 32 square feet in the aggregate.

b. Freestanding Signs

Nonresidential uses in R, AG, and AG-R districts are allowed a maximum of one freestanding sign per street frontage. Allowed freestanding signs are subject to a maximum height limit of 20 feet and may not exceed 32 square feet in area or 0.20 square feet of sign area per linear foot of street frontage, whichever is greater, but in no case may the sign exceed 150 square feet in area. The maximum sign area calculation must be based on the street frontage to which the sign is oriented.

c. Dynamic Displays

Dynamic displays are prohibited in R, AG, and AG-R districts except that on a lot occupied by an allowed public, civic or institutional use, the board of adjustment is authorized to approve a special exception for the allowed wall sign or the allowed freestanding sign to include a dynamic display.

(1) The allowed dynamic display component may not exceed 32 square feet in area, and no more than one (wall or freestanding) dynamic display is allowed per street frontage.

(2) The sign area allowed for a dynamic display is not in addition to the maximum sign area allowed for a wall or freestanding sign, but rather is counted as part of the maximum area of a wall or freestanding sign.

(3) Dynamic displays in R, AG, and AG-R districts may operate only between the hours of 7:00 a.m. and 9:00 p.m. unless otherwise expressly approved through the special exception process.

(4) Dynamic displays are subject to the dynamic display regulations of Section 60.100.

Section 60.060 Signs in Office Zoning Districts

60.060-A Applicability

The regulations of this section apply to signs in all office zoning districts. See also the general regulations of Section 60.040.

a. Off-premise outdoor advertising signs;

b. Dynamic displays;

c. Inflatable signs; and

d. Roof signs.

60.090-E MPD District

Except as otherwise expressly allowed as part of an approved MPD development plan:

1. Residential development areas are subject to the sign regulations that apply to R districts; and
2. Nonresidential development areas are subject to the sign regulations that apply to CS districts.

Section 60.100 Dynamic Displays

The supplemental regulations of this section apply to all signs with dynamic displays. Except as otherwise expressly stated, these regulations apply whether incorporated into off-premise outdoor advertising signs or on-premise signs that are allowed to include a dynamic display.

60.100-A The images and messages displayed on a dynamic display must have a minimum dwell time of at least 8 seconds and may not contain any movement, animation, audio, video, pyrotechnics or other special effects.

60.100-B The transition or change from one message to another must occur in one second or less and involve no animation or special effects.

60.100-C The images and messages displayed must be complete in and of themselves within the required dwell time.

60.100-D Dynamic displays may not be located within 50 feet of the driving surface of a signalized intersection, measured horizontally in a straight line from the nearest point of the sign structure to the nearest point of the intersection.

60.100-E Dynamic displays may not be located within or within 20 feet of the driving surface of a street, measured horizontally in a straight line from the nearest point of the sign structure to the nearest point of the street curb or edge of the traveled roadway marked or understood as such.

60.100-F Dynamic displays may not be located within 200 feet of any of the following: (1) an R or AG-R district (other than street, highway or freeway right-of-way); (2) a residential development area. This separation distance does not apply if the dynamic display is not visible from the referenced district, area or lot, and the requirements may be modified in R, AG, and AG-R districts if approved through the special exception process. Required separation distances must be measured horizontally in a straight line from the nearest point on a sign structure to the nearest point of an R or AG-R district or residential development area boundary.

60.100-G Dynamic displays must be equipped with a default mechanism that freezes the display in one position or presents a static or blank display if a malfunction occurs.

60.100-H Dynamic displays must be equipped with a light detector/photocell that automatically adjusts the display's brightness according to natural ambient light conditions.

60.100-I The maximum brightness level of a dynamic display may not exceed 6,500 nits (candelas per square meter) during daylight hours or 500 nits between 30 minutes after sunset and 30 minutes before sunrise, as those times are determined by the National Weather Service (Actual Time). Brightness must be measured from the brightest element of the sign's face.

60.100-J Any outdoor advertising sign that includes a dynamic display that was lawfully established before January 1, 2010, must be separated by a minimum distance of 1,200 feet from any other outdoor advertising sign that includes a dynamic display. This spacing limitation does not apply between signs separated by a freeway. The 1,200-foot distance must be measured in a straight line from the center of the subject sign structures, as located on the ground.

60.100-K Except as provided in §60.100-J, any outdoor advertising sign that includes a dynamic display and that was approved by a permit issued on or after January 1, 2009, must be separated by a minimum distance of 1,200 feet from any other outdoor advertising sign that includes a dynamic display facing the same traveled way. The 1,200-foot distance must be measured in a straight line from the center of the subject sign structures, as located on the ground

Section 60.110 Administration

60.110-A Any person proposing to erect any sign requiring a sign permit must submit a sign permit application to the development administrator. Applications for such permit must be accompanied by detailed plans, including scaled drawings of the proposed sign, a detailed site plan and other information deemed necessary by the development administrator to determine compliance with applicable regulations.

60.110-B Sign permit fees must be paid prior to the issuance of a sign permit.

60.110-C If the work associated with a sign permit has not been completed within 180 days of the date of the issuance of the permit, such permit will lapse and become null and void.

Section 60.120 Nonconforming Signs

See Section 80.060.

Section 60.130 Rules of Measurement

60.130-A Sign Area

1. Signs Enclosed in Frames or Cabinets

The area of a sign enclosed in a frame or cabinet is determined based on the outer dimensions of the frame or cabinet surrounding the sign face (see Figure 60-2).

DANNY WHITEMAN
SIGN PLANS EXAMINER
TEL (918)596-9664
EMAIL dwhiteman@cityoftulsa.org

DEVELOPMENT SERVICES
175 EAST 2nd STREET, SUITE 450
TULSA, OKLAHOMA 74103-3227

SIGN PLAN REVIEW

December 17, 2021

LOD Number: 1

Phone: 918-232-8024

Bonnie Moore
204 E. 5th Ave.
Owasso, OK 74055

APPLICATION NO: **SIGN-105657-2021** (*PLEASE REFERENCE WHEN CONTACTING OUR OFFICE*)
Location: **1924 N. Martin Luther King Jr. Blvd. E.**
Description: **Freestanding sign with dynamic display**

INFORMATION ABOUT SUBMITTING REVISIONS

OUR REVIEW HAS IDENTIFIED THE FOLLOWING CODE OMISSIONS OR DEFICIENCIES IN THE PROJECT APPLICATION FORMS, DRAWINGS, AND/OR SPECIFICATIONS. THE DOCUMENTS SHALL BE REVISED TO COMPLY WITH THE REFERENCED CODE SECTIONS.

REVISIONS NEED TO INCLUDE THE FOLLOWING:

1. A COPY OF THIS DEFICIENCY LETTER
2. A WRITTEN RESPONSE AS TO HOW EACH REVIEW COMMENT HAS BEEN RESOLVED
3. THE COMPLETED REVISED/ADDITIONAL PLANS FORM (SEE ATTACHED)

REVISIONS SHALL BE SUBMITTED DIRECTLY TO THE CITY OF TULSA PERMIT CENTER LOCATED AT 175 EAST 2nd STREET, SUITE 450, TULSA, OKLAHOMA 74103, PHONE (918) 596-9601. THE CITY OF TULSA WILL ASSESS A RESUBMITTAL FEE. DO NOT SUBMIT REVISIONS TO THE PLANS EXAMINERS.

SUBMITTALS FAXED / EMAILED TO PLANS EXAMINERS WILL NOT BE ACCEPTED.

IMPORTANT INFORMATION

1. SUBMIT TWO (2) SETS OF REVISED OR ADDITIONAL PLANS. REVISIONS SHALL BE IDENTIFIED WITH CLOUDS AND REVISION MARKS.
2. INFORMATION ABOUT ZONING CODE, THE INDIAN NATION COUNCIL OF GOVERNMENT (INCOG), BOARD OF ADJUSTMENT (BOA), AND THE TULSA METROPOLITAN AREA PLANNING COMMISSION (TMAPC) IS AVAILABLE ONLINE AT WWW.INCOG.ORG OR AT INCOG OFFICES AT 2 WEST 2ND STREET, 8TH FLOOR, TULSA, OK, 74103 OR TELEPHONE (918) 584-7526.
3. PRESENT THIS LETTER TO INCOG WHEN APPLYING FOR BOARD OF ADJUSTMENT OR PLANNING COMMISSION ACTION.

(Continued) Burroughs Elem

REVIEW COMMENTS

SECTIONS REFERENCED BELOW ARE FROM THE CITY OF TULSA ZONING CODE TITLE 42 AND CAN BE VIEWED AT WWW.INCOG.ORG

Application No. SIGN-105657-2021 1924 N. Martin Luther King Jr. Blvd. E.

This letter of deficiencies covers Sign Plan Review items only.

For ground, monument, pole & outdoor advertising structure sign applications only, you may receive additional letters from other disciplines such as Water/Sewer/Drainage for additional deficiencies regarding Utility Easement placement which are not addressed in this letter.

---

1. **City Ordinance 3107.16.2 Power Line Clearance**

No sign, or portion of a sign, shall be located or maintained within ten (10) feet of any high voltage overhead conductor.

Review Comments: It is not clear whether or not the proposed freestanding sign is within 10' of the nearby overhead power lines. Show this distance on the revised site plan, and relocate the sign if necessary to maintain this required distance. This is a building code requirement, not a zoning code requirement.

2. **Section 60.020 Prohibited Signs and Sign Characteristics**

60.020-E Signs located in or that project into the right-of-way or planned right-of-way of a public street, unless a special exception has been approved by the board of adjustment in accordance with the procedures of Section 70.120 and a license has been granted by the city in the case of the right-of-way or a removal agreement has been entered into in the case of the planned right-of-way.

Review comments: The proposed freestanding sign appears to be located in the City of Tulsa planned right of way (ROW). The planned ROW width along N. Martin Luther King Jr. Blvd. is 100 feet total. The minimum setback for the proposed ground sign is 50 feet from the C/L of the street. The proposed sign location is 34 feet from the C/L of the street; therefore, this sign is located in the planned ROW of this street and requires a City of Tulsa ROW license and removal agreement and a Special Exception from the COT Board of Adjustment (BOA). You may relocate the sign to comply with the minimum setback requirements or contact Lamar Banks @ 918- 596-9593 for information on acquiring a ROW license and removal agreement and INCOG @ 918-584-7526 to apply for a special exception from the BOA to permit a freestanding sign to be located in the planned ROW with a 50 foot setback from the center of N. Martin Luther King Jr. Blvd.

3. **Section 60.050 Signs in R and AG Zoning Districts**

60.050-B.2.c Dynamic displays are prohibited in R districts and AG districts except that on a lot occupied by an allowed public, civic or institutional use, the board of adjustment is authorized to approve a special exception for the allowed wall sign or the allowed freestanding sign to include a dynamic display.

(1) The allowed dynamic display component may not exceed 32 square feet in area, and no more than one (wall or freestanding) dynamic display is allowed per street frontage.

(2) The sign area allowed for a dynamic display is not in addition to the maximum sign area allowed for a wall or freestanding sign, but rather is counted as part of the maximum area of a wall or freestanding sign.

(3) Dynamic displays in R districts and in AG districts may operate only between the hours of 7:00 a.m. and 9:00 p.m. unless otherwise expressly approved through the special exception process.

(4) Dynamic displays are subject to the dynamic display regulations of Section 60.100.

Review comments: The proposed freestanding sign with a dynamic display is located in a RS-3 zoning district and requires a special exception from the BOA prior to issuance of a sign permit.

4. **Section 60.100 Dynamic Displays**

60.100-D Dynamic displays may not be located within 50 feet of the driving surface of a signalized intersection, measured horizontally in a straight line from the nearest point of the sign structure to the nearest point of the intersection.

Review comments: This proposed dynamic display sign is located within 50 feet of the driving surface of a

signalized intersection. You may relocate the sign to be at least 50 feet away from the signalized intersection, or you may apply for a variance from the BOA to permit a sign with a dynamic display to be located less than 50 feet of the driving surface of a signalized intersection.

5. **Section 60.100 Dynamic Displays**

60.100-E Dynamic displays may not be located within 20 feet of the driving surface of a street, measured horizontally in a straight line from the nearest point of the sign structure to the nearest point of the street curb or edge of the traveled road-way marked or understood as such.

Review comments: This leading edge of the proposed dynamic display sign is located 12 feet from the driving surface of the street. You may relocate the sign to be at least 20 feet away from the centerline of the street, or you may apply for a variance from the BOA to permit a sign with a dynamic display to be located 12 feet from the driving surface of N. Martin Luther King Jr. Blvd.

The sign review will resume once the required revised plans, removal agreement, and BOA approval paperwork is submitted.

NOTE: Please direct all questions concerning variances, special exceptions, appeals of an administrative official, Planned Unit Developments (PUD), Corridor (CO) zoned districts, zoning changes, platting, lot splits, lot combinations, alternative compliance landscape plans and all questions regarding (BOA) or (TMAPC) application forms and fees to an INCOG representative at 584-7526. It is your responsibility to send the decision of any actions by the BOA or TMAPC affecting the status of your application for a Sign Permit to our office so we may continue to process your application. INCOG does not act as your legal or responsible agent in submitting documents to the City of Tulsa on your behalf.

END – ZONING CLEARANCE AND SIGN CODE REVIEW

NOTE: THIS CONSTITUTES A PLAN REVIEW TO DATE IN RESPONSE TO THE SUBMITTED INFORMATION ASSOCIATED WITH THE ABOVE REFERENCED APPLICATION. ADDITIONAL ISSUES MAY DEVELOP WHEN THE REVIEW CONTINUES UPON RECEIPT OF ADDITIONAL INFORMATION REQUESTED IN THIS LETTER OR UPON ADDITIONAL SUBMITTAL FROM THE APPLICANT.

KEEP OUR OFFICE ADVISED OF ANY ACTION BY THE CITY OF TULSA BOARD OF ADJUSTMENT OR TULSA METROPOLITAN AREA PLANNING COMMISSION AFFECTING THE STATUS OF YOUR APPLICATION FOR A CITY OF TULSA SIGN PERMIT.

City of Tulsa Board of Adjustment
2 West 2nd Street, Suite 800
Tulsa, OK 74103

Thanks to Tulsa voters who approved funding for digital marquees in the 2021 bond package, Tulsa Public Schools will be submitting requests for approval for approximately 45 digital school marquees over the next year. The district is sensitive to neighborhood concerns and aware of city regulations. We intend to adhere to all elements of the Tulsa Zoning Code including those of Section 60.100 relating to dynamic displays.

Nearly all of the marquees will be replacing older, manually managed signs. Schools are truly excited about this opportunity to install dynamic digital signs for several reasons including:

Improved communication with families and neighbors:

- Messages can be easily displayed in multiple languages to match community needs
- Displays can be quickly changed to share emergency information when needed
- Sharing information about multiple and varied school activities helps spark and grow family and neighborhood interest and connections

Improved safety:

- The displays can be centrally managed via a cellular network to quickly share emergency notifications in multiple languages if needed. Messages can be controlled individually by school, by neighborhood or district wide.
- School staff will no longer need to climb on ladders in challenging weather to change out manual marquees.

Improved appearance and perception of our schools:

- New marquees will brighten and modernize the look and "curb appeal" of our schools and show the community that we are investing in our children, schools, and neighborhoods.

We know the importance of keeping families informed and we use multiple lines of communication to reach the families of our more than 33,000 students. We see the digital marquees as another valuable tool, especially for families who don't have reliable access to internet and technology. The marquee project was one of the bond items that generated the most positive response from parents and school leaders during the 2021 bond election and we look forward to meeting with members of the Board of Adjustment to discuss this work and answer any questions. We appreciate your time and consideration.

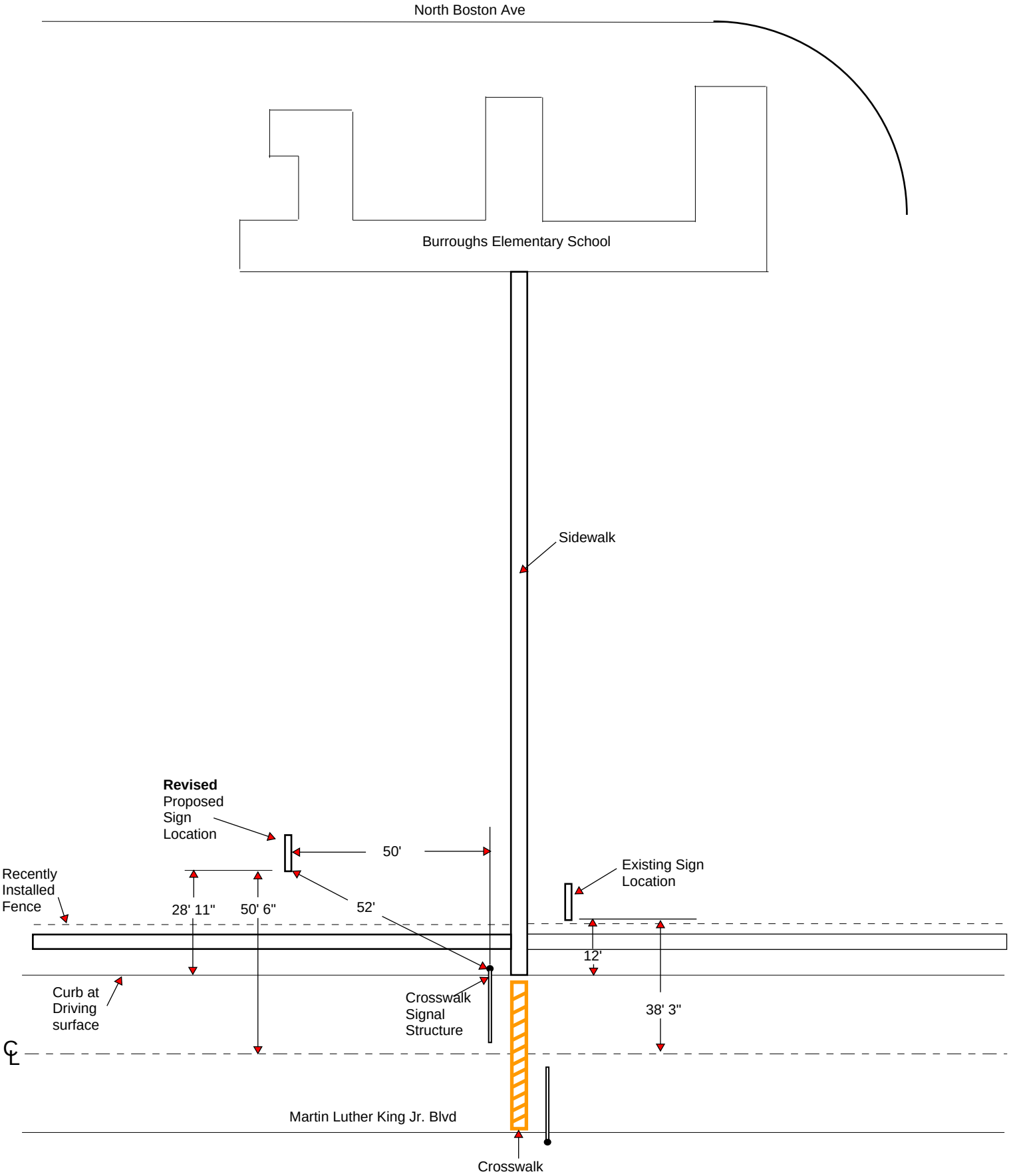
Sincerely,

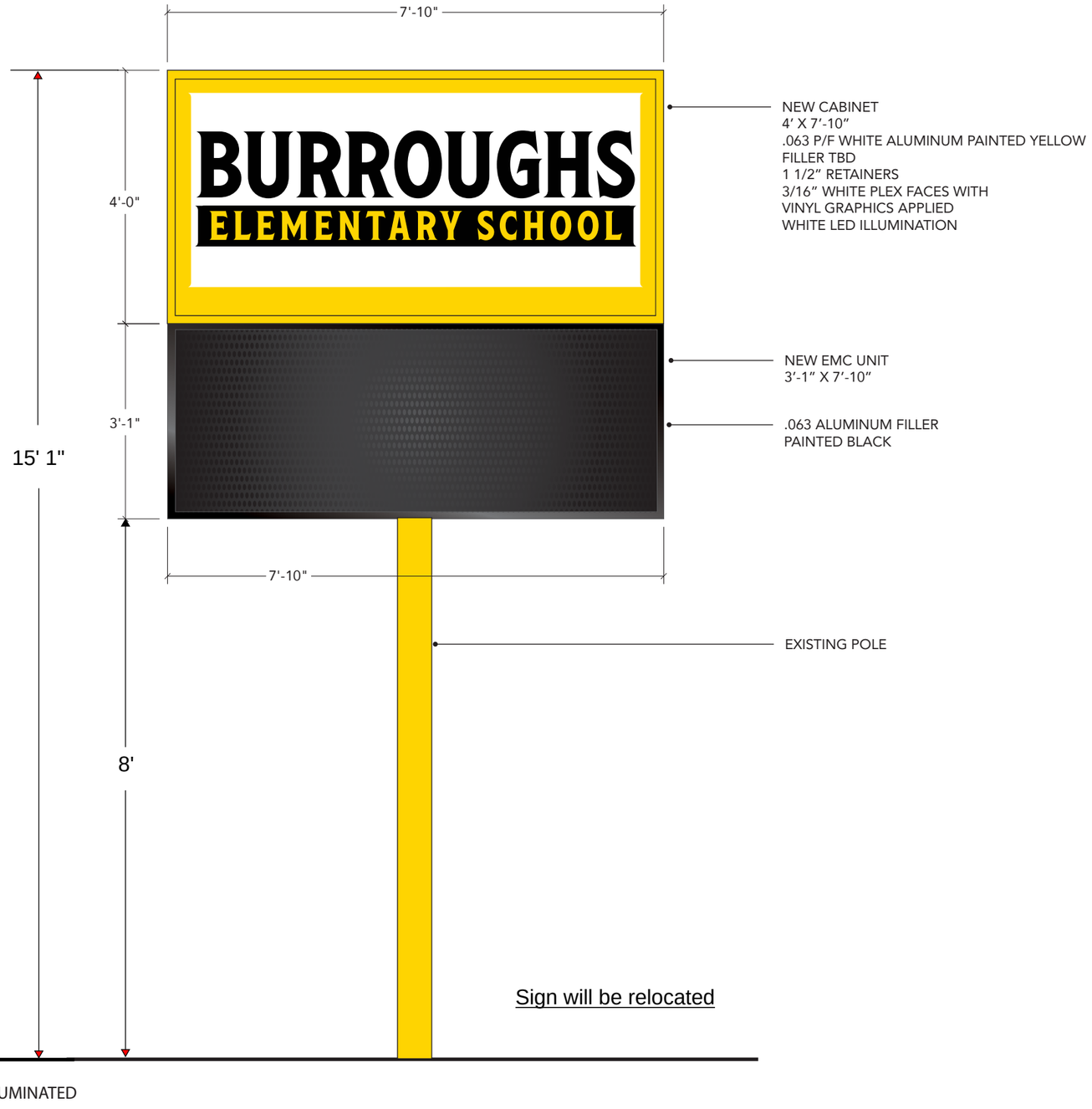
Jorge Robles

Chief Finance and Information Officer

Tulsa Public Schools

Burroughs Elementary School
1924 N Martin Luther King Blvd
Tulsa, OK 74055





A ELEVATION
SCALE: 1/2" = 1'-

D/F ILLUMINATED

EXISTING CONDITIONS

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IMAGE BUILDERS
image design • installation • maintenance • painting

☐ APPROVED AS SHOWN ☐ APPROVED AS NOTED

X
CLIENT NAME

DATE

PROJECT/CLIENT NAME:
JOHN BURROUGHS ELEMENTARY

LOCATION:
1924 MLK JR BLVD
TULSA, OK 74106

ACCOUNT EXECUTIVE:
RYAN NEUROHR

DESIGNER:
BILL SAMPLE

DATE OF ORIGINAL DWG:
OCT 18, 2021

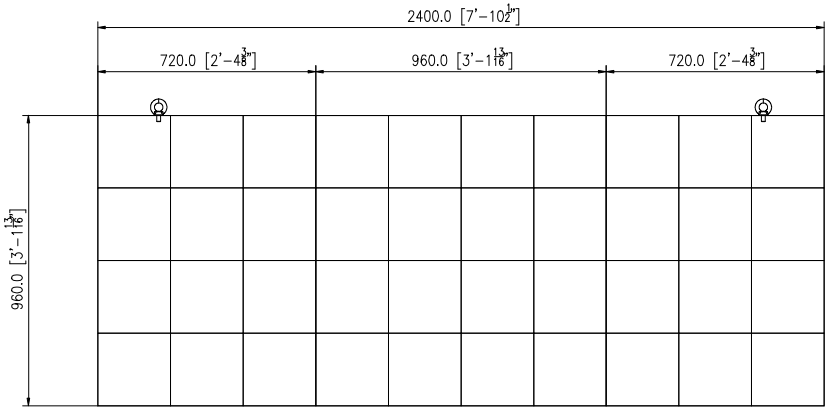
REVISION HISTORY:

SIGN TYPE/DESCRIPTION:
D/F ILLUMINATED

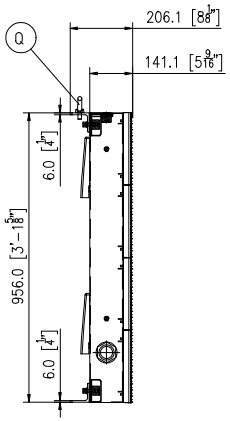
9.13

SHEET NAME:
ST-1.0

N Boston Ave
John Burroughs Elementary School
1924 M.L.K. Jr Blvd
Image Landsat / Copernicus
E Tecumseh St
649' front measure
Existing sign Location
34' center st.
12' set back
Traffic Light Pole
50'
52'
Proposed sign Location
28' 11" set back
Tree is no longer here
50' 6" center st.

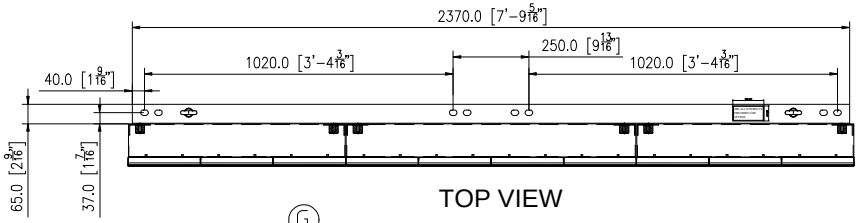


FRONT VIEW

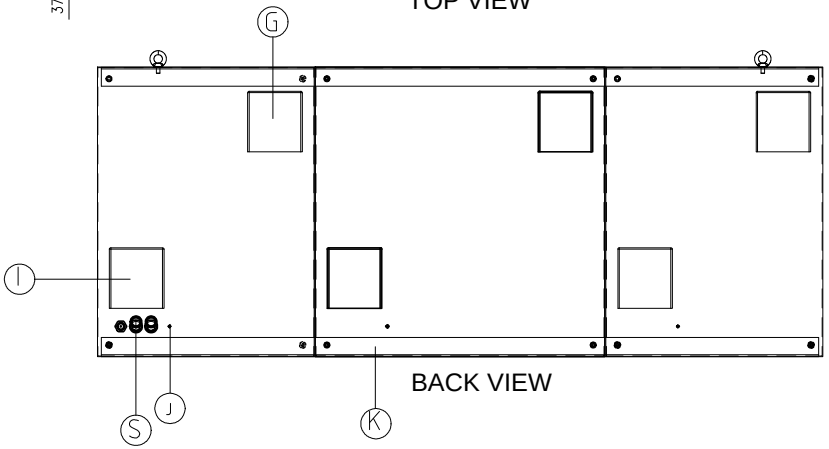


SIDE VIEW

K	ANGLE IRON-SEE DETAIL K
Q	EYEBOLT-SEE DETAIL Q
S	STRAIGHT CONDUIT-SEE DETAIL S
J	GROUND LUG
I	VENTILATION INTAKE
G	VENTILATION EXHAUST



TOP VIEW



BACK VIEW

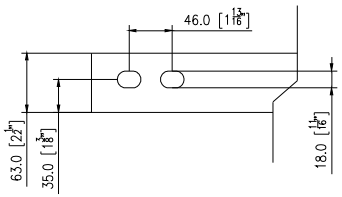
NOTES:
MATERIAL: 5052
FINISHING: MATT PLASTIC SPRAY, BLK
SPECS: 60x150 1R1G1B
PITCH: 16mm
WEIGHT:294 lbs/FACE

Note:
Positions and dimensions of the vents in this drawing are for reference only.
For accurate drawing, please request production drawing from Optec.

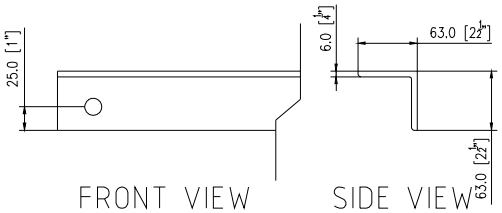
REV.	DATE	DESCRIPTION	BY	APPR

COPYRIGHT OPTEC DISPLAYS, INC .ALL RIGHTS RESERVED.UNAUTHORIZED REPRODUCTION AND DISTRIBUTION PROHIBITED

DISPLAY MODEL			
DRAWING NUMBER	2021-000755-INF-MOD-16mm-1R1G1B-QR-60X150-DF-V2		
REFERENCE			
DESIGNED BY		SCALE/SHEET SIZE	1:1
DRAWN BY		TOLERANCE	±1/4"
DATE	2021/09/02	UNITS	MM (INCHS)
PAGE		REVISION	

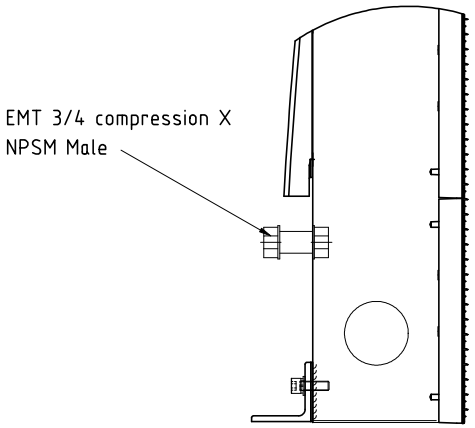


TOP VIEW

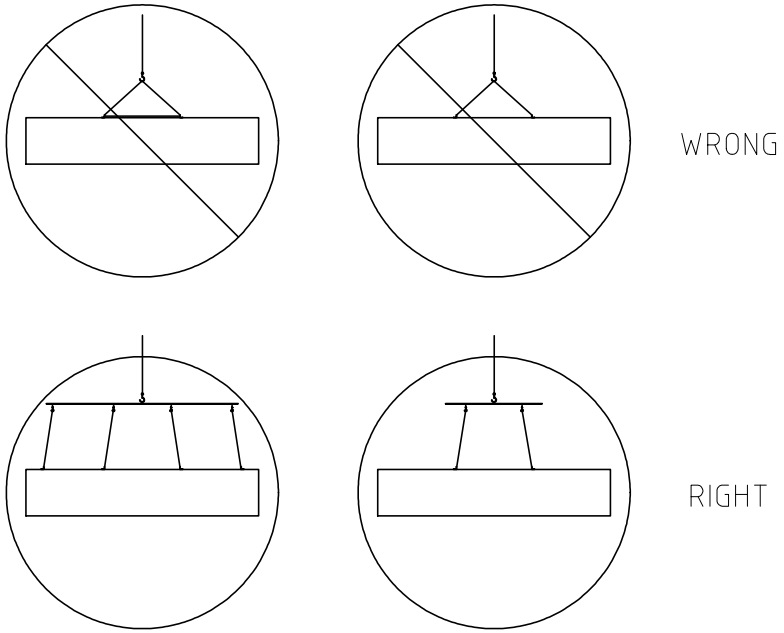


FRONT VIEW SIDE VIEW

DETAIL K

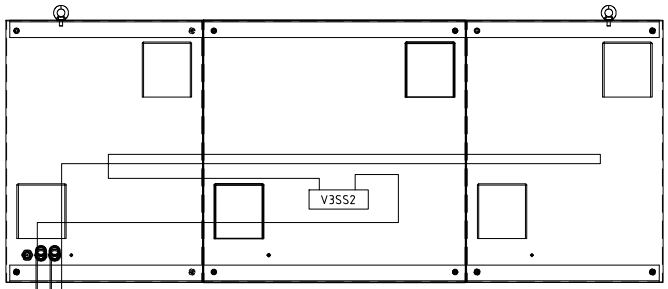


DETAIL S

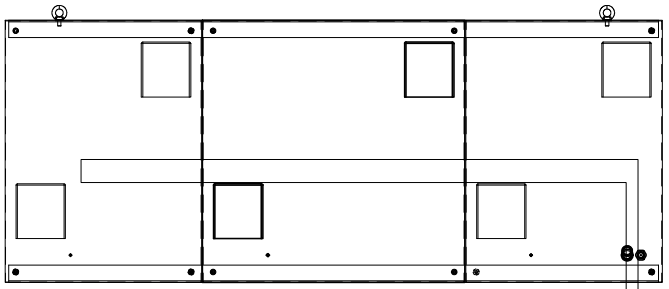


REV.	DATE	DESCRIPTION	BY	APPR

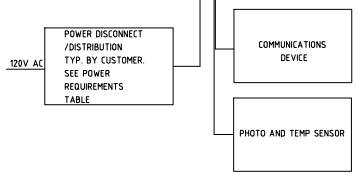
OPTEC DISPLAYS,INC	COPYRIGHT OPTEC DISPLAYS, INC .ALL RIGHTS RESERVED.UNAUTHORIZED REPRODUCTION AND DISTRIBUTION PROHIBITED		
DISPLAY MODEL			
DRAWING NUMBER	2021-000755-INF-MOD-16mm-1R1G1B-QR-60X150-DF-V2		
REFERENCE			
DESIGNED BY		SCALE/SHEET SIZE	1:1
DRAWN BY		TOLERANCE	±1/4"
DATE	2021/09/02	UNITS	MM [INCHS]
PAGE		REVISION	



PRIMARY BACK VIEW



SECONDARY BACK VIEW



Total Power Required: 1080 Watt/Face
Avg.Operating Power: 360 Watt/Face

	Max.Power Load Per Single Face				
	# of Circuits	120 VOLT Each Circuit		240 VOLT Each Circuit	
		WATTS	AMPS	WATTS	AMPS
Primary	1	1080	9		
Secondary	1	1080	9		

Total number of circits per face 1
INPUT VOLTAGE FOR DISPLAY MUST BE SPECIFIED AT TIME OF ORDER

××Electrical must be installed in accordance with the requirements of National Electrical Codes or local codes.

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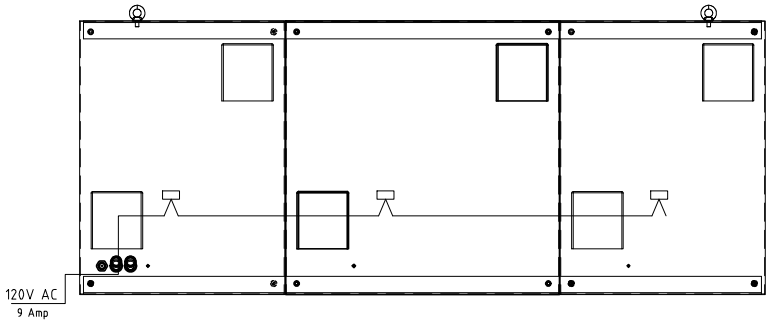
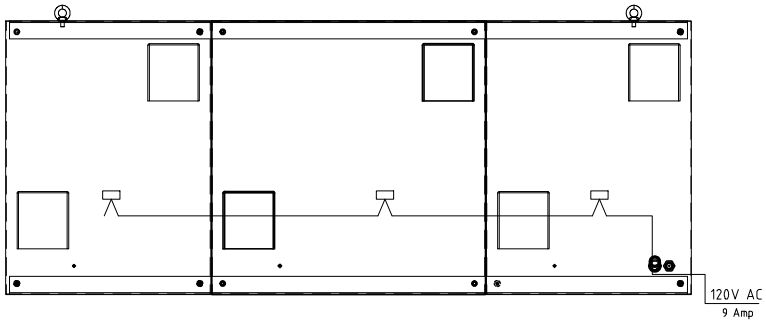
AC wiring Diagram



PRIMARY BACK VIEW



SECONDARY BACK VIEW

Total Power Required: 1080 Watt/Face
Avg.Operating Power: 360 Watt/Face

	Max.Power Load Per Single Face				
	# of Circuits	120 VOLT Each Circuit		240 VOLT Each Circuit	
		WATTS	AMPS	WATTS	AMPS
Primary	1	1080	9		
Secondary	1	1080	9		
	Total number of circits per face___1___ INPUT VOLTAGE FOR DISPLAY MUST BE SPECIFIED AT TIME OF ORDER				

××Electrical must be installed in accordance with the requirements of National Electrical Codes or local codes.

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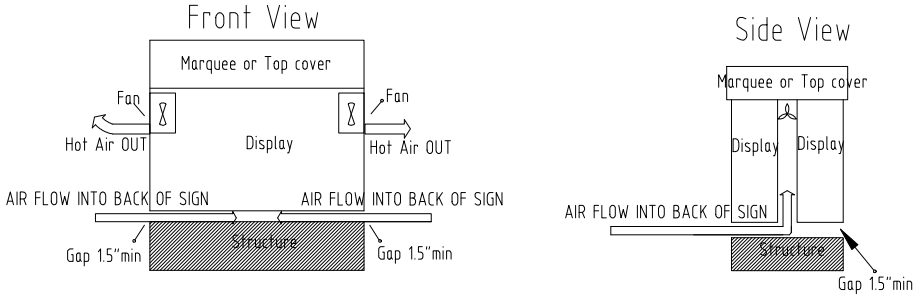
Air Ventilation Requirements(Force Air):
FAN CFM = 3.19 x Total Watts/20

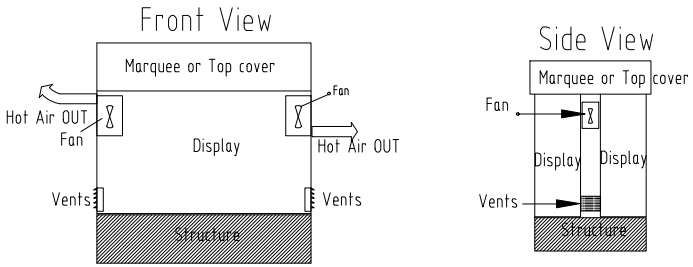
Forced Air Circulation



DO

DO Provide Sufficient Vents to allow outside air into a skinned/closed structure
DO Provide Fans if necessary to push Hot Air out of closed Structures
DO Maintain minimum of 1.5 inch clearance at bottom of enclosed sign
DO Maintain Temperature inside sign between _22to +130 Degrees F
DO Keep Temperatures below 110 Degrees F inside cabinet
DO Provide Axial Air Fans if Air Flow Restricted inside Frame/Structure
DO Provide Thermal Switches to tum on Fans at 90-105 degrees F

Forced Air Circulation



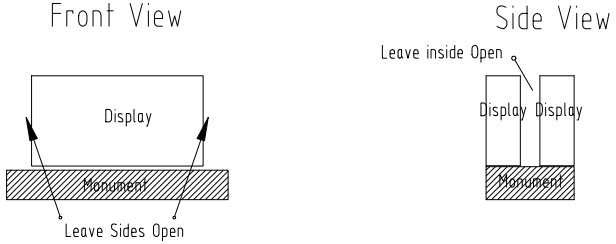
DON'T

DON'T Block Cabinet Vents at back of Display
DON'T Place cabinet against a wall without back side of cabinet open to outside air
DON'T Allow Heat to Rise above 110 Degrees F inside cabinet
DON'T Mount an ID Sign/Marquee Cover above or below the Optec LED Sign without 1.5" clearance needed for ventilation

NOTE: THE WARRANTY DOES NOT COVER DAMAGES CAUSED BY IMPROPER VENTILATION

AIR Ventilation Requirements(Natural Convection):

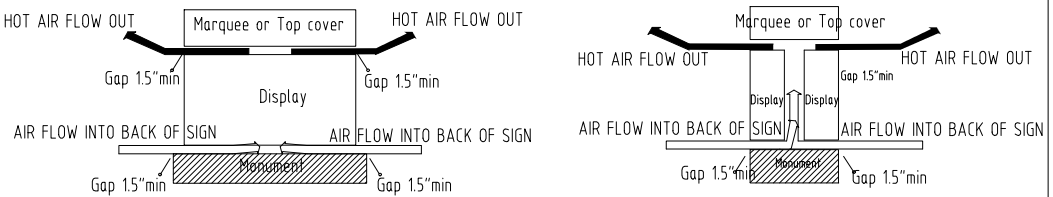
Natural Convection



DO

DO Provide Outside Air TO Reach Cabinet Air input Vents
DO Maintain Temperature inside sign _22 to +130 Degrees F
DO Provide Sufficient Venting For Natural Convection if Skinned
DO inspect Vents Periodically to Ensure they are Clear/Open
DO Keep inside cabinet temperature below 110 degrees F
DO Maintain clearance above and below cabinet a min of 1.5"

Natural Convection II



DON'T

DON'T Block Cabinet Air Vents in back of Display
DON'T Allow Temperature to Rise Above 110 degrees F

NOTE: THE WARRANTY DOES NOT COVER DAMAGES CAUSED

BY IMPROPER VENTILATION

REV.	DATE	DESCRIPTION	BY	APPR

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Feet
0 250 500

Subject Tract

BOA-23262

20-12 26

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: 2020/2021

N

Feet
0 50 100

Subject Tract

BOA-23262

20-12 26

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: 2020/2021

N