

Planning and Zoning Commission Meeting

February 24, 2026 - 7 p.m.

New Haven Public Works Facility

205 Industrial Drive

New Haven, MO

Agenda

1. Call to Order
2. Roll Call
3. Approval of minutes, January 27, 2026 meeting, pages 1-2
4. Public Hearing
 - a. Section 405.075 Lighting Draft, pages 3-11
 - b. Protecting the Beautiful Night Sky, pages, 12-21
5. Motion to Close Public Hearing
6. Commission Discussion
7. Site Review
 - a. Applicant, Dave Grannemann Insurance Agency, LLC, is requesting site review approval to construct a 30x40 storage building in a C-1 zoning district, previously received permitted use upon review 1/27/26, and pending variance for setbacks and lot coverage 2/24/26, pages 22-63
8. Miscellaneous
 - a. Lions Field Parking lot stripping, pages 64-67
 - b. Felix Mesger Resignation, 68
9. Adjourn

Planning & Zoning Commission Meeting

January 27th, 2026

New Haven Public Works Facility

Meeting called to order by Phil McKernan

Roll Call of Members Present: Alan Bell, Austin Madden, Phil McKernan, Rob Hausmann, & Todd Blanc

Members Absent: Charles Tritch, Ed Shivers, & Felix Mesger, Mike Guittar

Staff Members Present: Sarah Skeen, Deborah Williams, & Nick Reed

Others Present: Steve Bertrand- Alderman Ward 2, David Luecke- Mayor, Tim Otten- Resident, & Dave Granneman- Applicant

Motion to Approve Minutes from November 25th, 2025: Alan Bell, 2nd Rob Hausmann

Uses Permitted Upon Review and Approval:

Dave Granneman Insurance Agency, LLC requested approval to construct a 30x40 storage building in a C-1 zoning district. The building is intended for storage, not commercial activity currently. Discussion covered setbacks: historical information from the previous city inspector suggested no setbacks, but current code specifies 25 ft front and 30 ft rear setbacks for general commercial zones. The uniqueness of the lot was highlighted—shared easements, mixed ownerships, and non-conforming existing structures. Several participants expressed concerns about the building's appearance compared to adjacent structures, but since those are vacant and/or may be torn down, consensus was to keep the new building front even with existing ones for uniformity. Clarification that no fence was required to the rear due to commercial zoning abutting commercial zoning. Fire safety and building code issues (distance to property lines, potential fire-resistant construction) were briefly discussed.

Variance and Exception Considerations: The group weighed the merits of requiring formal variances versus approving with exceptions, given the highly irregular lot and development pattern. Some voiced concerns about setting a precedent for approval with exceptions, but the majority agreed this case was unique due to historic subdivision and existing conditions. Noted the importance of keeping future developments even along the same line if other lots are redeveloped. **Approved upon Exception of front & back easements:** Austin Madden, 2nd Rob Hausmann

Discussion of Gas Station with Drive-Through: A developer expressed interest in building a new gas station with a drive-through on Highway 100. The group discussed whether a special use permit was required for a drive-through at a gas station, as code

addresses drive-throughs for restaurants but not gas stations. Clarified that banks and drug stores often have drive-through's without special review. The need to define the specific use (e.g., selling food vs. tobacco/alcohol vs. car wash) was emphasized before categorizing under code. It was suggested to consider queuing/staging requirements for such drive-throughs (e.g., five-car stack rule). Environmental considerations were noted, with discussion around existing underground tanks and the requirement for environmental studies as part of development. The broader topic of clarifying code definitions and updating the comprehensive plan to better distinguish between fuel stations, service stations, and drive-through functions was raised.

Motion to Adjourn: Alan Bell, 2nd Todd Blanc

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Deborah Williams", with a long, sweeping horizontal line extending to the right.

Deborah Williams

Section 405.725 Lighting

A. Purpose. The City of New Haven recognizes that some public areas need to be illuminated at night and that residents and businesses have the right to illuminate their properties for safety and commerce. Conversely, the City also recognizes that artificial light at night impacts conservation and health. All property owners, residents and businesses, have a right to experience the night. These regulations are intended to:

1. Protect the public health, safety, and general welfare;
2. Enable the fair and consistent enforcement of these regulations;
3. Control light spillover and glare to reduce the degradation of the sky from light pollution;
4. Encourage lighting systems which conserve energy and costs;
5. Preserve community character; and
6. Provide for nighttime safety, utility, security, and productivity.

B. Applicability.

1. Except as expressly provided herein, the requirements of this Section shall not apply to the following:
 - a. Holiday lights from November 15 to January 15, except that flashing holiday lights are prohibited. Holiday lights may be illuminated one (1) additional seven (7) day period per calendar year; and
 - b. Swimming pools (limited to the interior of pool basins)
2. The requirements of this Section shall apply to the following:
 - a. New construction in connection with all uses and structures; and
 - b. Lighting replacement in connection with all uses and structures

C. Definitions. Listed below are certain words and phrases cited in this Section with their intended meanings.

COLOR TEMPERATURE ("CCT")

The color appearance of a white LED. CCT is defined in degrees Kelvin; a warm light is around two thousand seven hundred (2,700) K, moving to neutral white at around four thousand (4,000) K, and to cool white at five thousand (5,000) K or more.

FIXTURE

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The assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole assembly, a lamp holder, a ballast, a reflector or mirror and/or a refractor or lens.

FOOTCANDLE

A measure of light falling on a surface. One (1) footcandle is equal to the amount of light generated by one (1) candle shining on a one-square-foot surface located one (1) foot away.

FULLY-SHIELDED

An outdoor fixture constructed in such a manner that it emits no light above the horizontal plane of the fixture.

GLARE

The effect produced by a light source within the visual field that is sufficiently brighter than the level to which the eyes are adapted, to cause annoyance, discomfort, or loss of visual performance and ability.

INSTALLED

The attachment or assembly fixed in place, whether or not connected to a power source, of any outdoor light fixture.

LAMP/LIGHT SOURCE

The component of luminaire that produces the actual light, commonly known as the "bulb" or "light bulb."

LUMEN

A unit measuring the amount of light emitted from a light source. One (1) footcandle is one (1) lumen per square foot.

LUMINAIRE

A complete lighting system and includes a lamp or lamps and a fixture.

OUTDOOR LIGHT FIXTURE

Outdoor electrically powered illuminating devices, outdoor lighting or reflective surface lamps and similar devices, permanently installed or portable, used for illumination of the following:

1. Buildings and structures; and
2. Recreational areas and facilities; and
3. Parking lots; and

4. Building overhangs and open canopies; and
5. Sidewalks, street corners, and intersections.

SHIELDING

A light fixture controlled in such a manner that a direct view of the lamp/light source from an adjacent property is prevented.

D. General Requirements.

1. Outdoor lighting shall be required for safety and personal security in areas of pedestrian assembly and sidewalks, and vehicular parking and drive aisles and in association with all uses where activity occurs outdoors during hours of darkness.

- a. For all applicable uses and structures, such lighting shall be so arranged and/or fully shielded as to eliminate the intrusion of light or glare onto adjoining residential property and streets.
- b. For commercial or industrial uses, such lighting shall provide a minimum of one-half (0.5) footcandle of lighting and a maximum average of three (3) footcandles of lighting at all places of pedestrian assembly and sidewalks, and vehicular parking and drive aisles.
- c. For multifamily residential and institutional uses, such lighting shall provide a minimum of one-fifth (0.2) footcandle of lighting and a maximum average of one and one-half (1.5) footcandles of lighting at all places of pedestrian assembly and sidewalks, and vehicular parking and drive aisles.
- d. Exception: Outdoor lighting shall not be required for events enhanced by darkness or dark skies.

2. All outdoor light fixtures/lamps/bulbs installed or hereafter replaced shall comply with the following:

- a. Light fixtures must be fully shielded.
- b. Light fixtures must be aimed directly downward [e.g., ninety degrees (90°) perpendicular] to the ground.

(1) Exception: Decorative uplighting is allowed to be aimed at a vertical surface so long as it is shielded in such a way that the light does not leak above the height of the surface or the overhang of the soffit.

- c. Lamps may not exceed a CCT of two thousand seven hundred (2,700) K.
- d. Lamps must be completely recessed so that the lamp is not visible.

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e. No light shall be emitted above ninety degrees (90°) from the lamp.

(1) Exceptions.

(a) Light from decorative uplighting mounted to a wall may be emitted above ninety degrees (90°) from the lamp. However, such lighting may not exceed a CCT of two thousand seven hundred (2,700) K.

(b) Uplighting for flagpoles.

f. Illumination at the ground level of the property line of subject property shall be zero (0) footcandles.

g. Every reasonable effort shall be made (through placement and lighting control devices) to minimize the visibility of any lamp that is required to be fully shielded.

h. Fixtures (building and parking) lighting the exterior area of non-residential property shall be turned off within one (1) hour after closing of business. Only security lighting may be used following one (1) hour after closing of business. Security lighting must be reduced to twenty-five percent (25%) or less of the normal lumen output. Motion sensor activation may be allowed to cause the light to resume normal lumen output only when activated and to be reduced back to twenty-five percent (25%) or less of normal lumen output within five (5) minutes after activation has ceased, and the light shall not be triggered by activity off the property.

i. Light standards are limited to twenty (20) feet, measured from the ground to the highest point of the standard.

3. Total outdoor light output, including proposed and existing street lights, pedestrian lights, building lights, landscape lights, and any other lighting and signage lighting, shall not exceed five footcandles (5 fc). The applicant must submit sufficient information to enable the City Administrative Officer to determine compliance.

E. Conformance With Applicable Codes.

1. All outdoor electrically powered illuminating devices shall be installed in conformance with all other applicable provisions of this Code and under appropriate permit and inspection.

2. Whenever the regulations of this Section are applicable, the applicant must submit sufficient information to enable the City Administrative Officer to determine whether the proposed and/or existing lighting scheme will comply with this Code. Such information may include, but is not limited to, the following:

- a. A layout of proposed luminaire and outdoor fixture locations;
- b. Aiming angles for the fixtures and shielding/shielding mechanisms;
- c. A description of proposed luminaires and outdoor lighting fixtures and associated equipment (catalog cuts);
- d. A description of glare control devices, shielding/shielding mechanisms;
- e. A description of proposed lamps;
- f. Overall and mounting heights and means of assembly/mounting;
- g. Location and use of adjacent properties;
- h. An illumination (footcandle) grid demonstrating adequate intensities and uniformity;
- i. For commercial and institutional uses:
 - (1) Hours of business operation; and
 - (2) The maximum footcandle average for all places of pedestrian assembly, sidewalks, and vehicular parking and drive aisles.
- j. Additional submissions may be required showing greater detail of areas that may require further clarification.

3. Where there is a conflict between the provisions of this Code and other regulations of the zoning ordinance, the most restrictive requirement shall govern.

F. Tracking, Monitoring, And Enforcement.

- 1. All lighting installations must comply with this Code and comply with the approved plans.
- 2. For all commercial, institutional and multi-family residential uses, as-built plans and inspections verifying compliance with the Code and approved plans will be required.
- 3. For all single-family and two-family residential uses, Code compliance and/or permit compliance will be addressed on a complaint basis, provided that the City's Administrative Officer retain authority to issue a notice of violation for any provision of this Section. Each notice of violation issued for violation of any provision of this Section shall state that the person receiving the notice may, within fifteen (15) days of receiving such notice, appeal the determination that his/her property is in violation of this Section to the City Administrative Officer.
 - a. Upon receipt of an appeal, the City Administrative Officer or designee shall make a final determination regarding compliance of any outdoor light fixture/lamps/bulbs

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within fifteen (15) days of receiving such complaint. Any final determination of the City Administrative Officer or designee shall be subject to review as provided herein.

b. Any person aggrieved by a final determination of the City Administrative Officer or designee may appeal, in writing, to the City Board of Aldermen within five (5) business days of the final determination. The appeal shall assert specific grounds for review and the City Board of Aldermen shall render a decision on the appeal within thirty (30) business days of receipt affirming, reversing or modifying the determination of the City Administrative Officer or his/her designee. The City Board of Aldermen may extend this time period for the purpose of any investigation or hearing deemed necessary by the Board. A decision affirming the City Administrative Officer or designee's determination shall be in writing and supported by findings establishing the reasonableness of the decision.

c. Any person aggrieved by the final determination of the City Board of Aldermen may file a petition for review pursuant to Chapter 536, RSMo., as amended, in the Circuit Court of Franklin County. Such petition shall be filed within thirty (30) days after the City Board of Aldermen decision.

d. Mediation.

(1) Request For Mediation. A resident who is concerned that a single-family or two-family residential property is in violation of this Section may request, in lieu of formal measurements of lighting, that the complainant, the owner or occupant of the property alleged to be in violation of this Section, and the City Administrative Officer meet at the property to determine if lighting can be modified or redirected to address the alleged violation. Mediation shall be voluntary and no inference shall be drawn from a refusal or failure to respond to a request for mediation. Mediation shall not be available for non-residential property.

(2) Upon receipt of a request for mediation, the City shall mail a notice to the owner and/or occupant of the property which is the subject of the complaint to provide notice that a complaint has been received and of the request for voluntary mediation. The notice shall direct the owner/occupant to contact the City within fifteen (15) days of receipt of such if they are interested in mediation. If no response is received by the City within that time period, the City may pursue other enforcement options.

(3) The City Administrative Officer shall contact the complainant and the owner/occupant of the property at issue, and shall arrange a mutually agreeable time to meet. At such mediation, the City Administrative Officer

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shall review the lighting arrangements, and make suggestions to redirect, reposition, or modify lighting to address the concerns raised. If the mediation resolves the complainant's concerns, the City may take no further action. If the mediation fails to address the complainants concerns, the City may take readings or measurements of the lighting, and may pursue other enforcement options.

G. Grandfathered Existing Fixtures. All outdoor light fixtures/lamps/bulbs lawfully installed prior to and operable on the effective date of this Section are exempt from all requirements of this Section, unless existing outdoor lighting fixtures are replaced, removed or reinstalled in connection with any use or structure to which this Section is applicable.

H. Waiver. The Board of Aldermen may waive any of the requirements of this Section.

I. Nothing herein shall be construed to prevent or inhibit the City from pursuing any legal or equitable means to address a violation of this Section of this Code.

Chapter 405. Zoning Regulations

Article X. Off-Street Parking and Loading Requirements

Section 405.725. Lighting.

[Ord. No. 918 §2, 5-1-2008]

- A. Parking lots and walkways shall be illuminated to provide for the safe use therefor; lighting studies shall be provided, as needed, to provide evidence of adequate lighting. Exterior lighting shall be provided throughout the development to promote general security.
- B. All lighting in non-residential zoning districts shall be designed so that the light from such facilities does not reflect directly or spill over onto residentially zoned or used property.
- C. Lighting from non-residential development shall not cause glare on adjacent roadways or in any way cause hazardous conditions.
- D. Lighting arrangements shall be as approved by the City Engineer or an authorized representative.

NOTICE OF PUBLIC HEARING

Notice is hereby given that public hearings at the following dates and times shall be held by The City of New Haven to discuss amending Section 405.725 Lighting Ordinance.

- Planning and Zoning Commission, February 24th 2026, 7 p.m.
- Board of Aldermen, March 9th, 2026, 7 p.m.

All meetings will be located at the New Haven Public Works Facility, 205 Industrial Drive

Interested citizens are invited to comment on the request at the Public Hearing. Copies of the proposed ordinance are available for review at City Hall, 101 Front Street, Monday through Friday between the hours of 8:00 a.m. and 4:30 p.m. If you cannot attend, citizens may direct written comments to the City of New Haven, PO Box 236, New Haven, MO 63068.

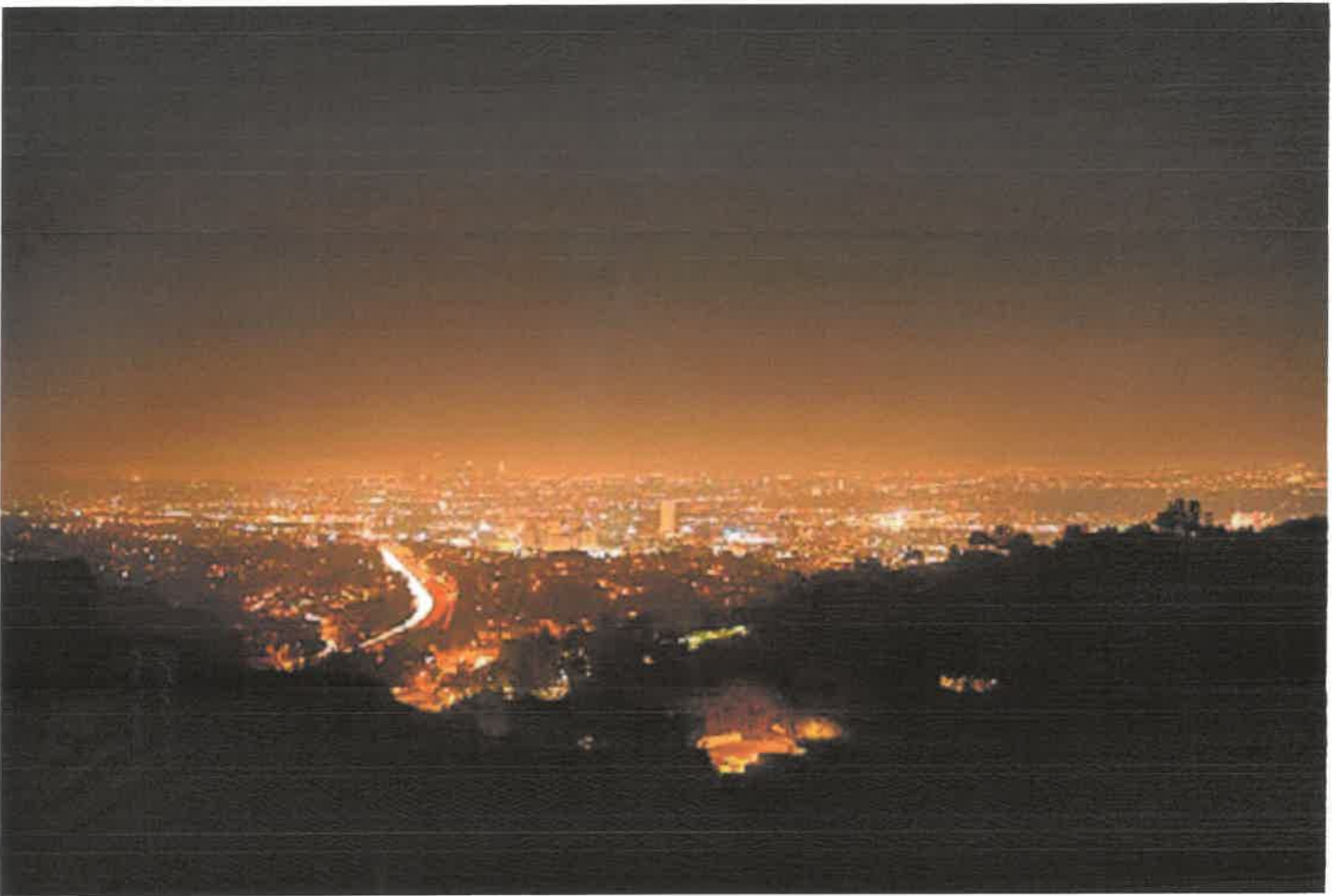
Publish in the New Haven Independent News February 11th and 18th 2026

PROTECTING THE BEAUTIFUL NIGHT SKY

Photo by Ben Caruthers

A COMMUNITY GUIDE FOR PREVENTING LIGHT POLLUTION





Skyglow over a city.

WHAT IS LIGHT POLLUTION?

Light pollution is any adverse or unintended effects from the use of artificial light at night, including light trespass, glare, skyglow, reduced visibility at night, and energy waste. Light pollution is a growing problem caused by excessive lighting and poor lighting design.

TYPES OF LIGHT POLLUTION:

Light Trespass: When light falls where it is not intended, needed, or wanted. Use fully shielded fixtures (see Figure 2) to eliminate light trespass.

Glare: Intense, blinding light that reduces visibility of objects around you and causes eye discomfort (Figure 3). Direct lights downward, use shielding, and use the lowest appropriate light intensity.

Skyglow: The night time brightening of the sky above and near urban areas (Figure 4). Skyglow is one of the most well-recognized kinds of light pollution, since it results in “losing the stars” from our night time field of vision. Use shielded fixtures and the lowest light intensity sufficient for public safety.

Clutter: The grouping of light sources in proximity, which can cause confusion and interfere with safe driving (Figure 5).

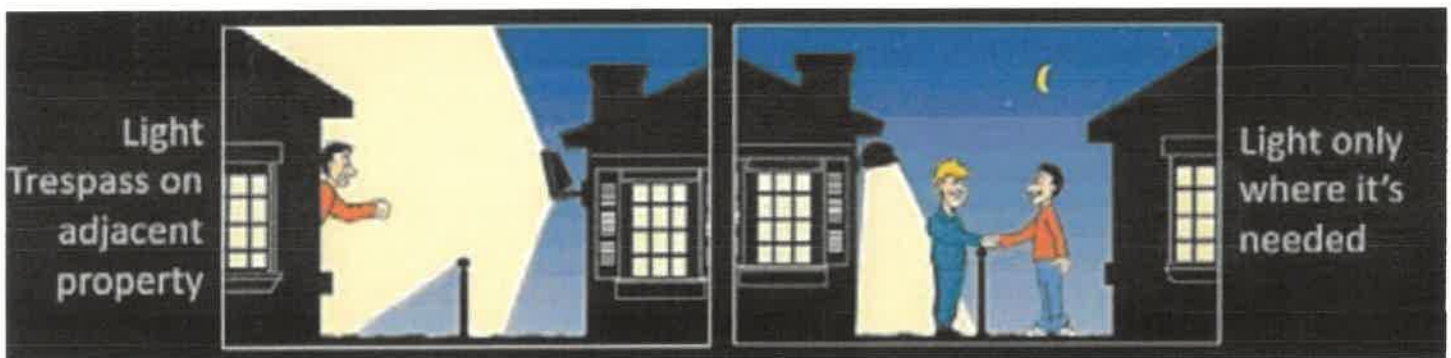


Figure 2: Light trespass is not just a nuisance, but can affect our ability to get a good night's sleep. Sleeping disorders can trigger other health issues, including high blood pressure, heart ailments, and obesity.

Figure 3: Badly designed light fixtures are responsible for causing glare. Glare impairs vision and can reduce both pedestrian and driver safety. Note the contrast between the brightly lit area right under the light, and the sudden transition to relative darkness toward the bottom right. A pedestrian attempting to cross the street from the far sidewalk, which is shrouded in darkness, is at risk of being invisible or only partly visible to drivers.





Figure 4 (Left): Badly designed light fixtures and intense lighting gives rise to skyglow, which can be seen many miles away from a city. In this image we see skyglow from Kirksville (about 5 miles away, far left in photo) and La Plata (about 20 miles away, bottom right in photo).

DARK SKY LIGHTING BASICS



Figure 5: Light clutter is a result of having too many light sources in a small space.

Shielding of Fixtures: Downward pointed, fully shielded lighting keeps unwanted and unnecessary light from shining onto adjacent properties or into the sky, contributing to skyglow. Outdoor lighting should be “fully shielded,” meaning no light emitting above a 90-degree angle (see Figure 6). Fully shielded lighting can either be purchased, or existing lights can be retrofitted with shielding.

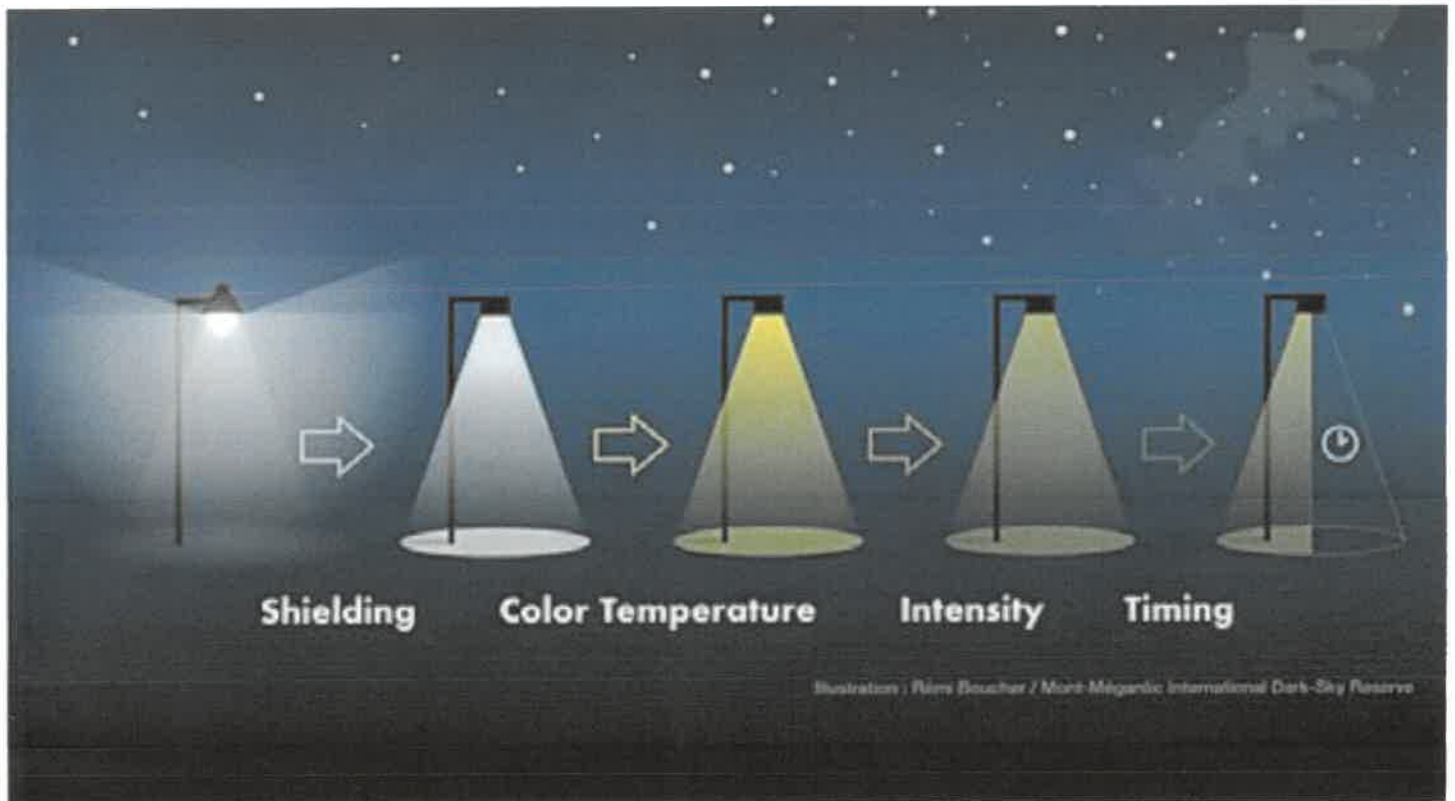


Figure 6: This diagram shows improvements in outdoor lighting, starting from bright, blue-white lights on an unshielded light fixture (far left), to a fully shielded light, to a warmer colored light, to a warmer light with lowered intensity, to a fully shielded, warm light of appropriate brightness on a timer (far right).

Amount of Light: Excessive lighting is a waste of energy and creates nuisance conditions. Light should be directed only onto the areas where it is truly needed, and only the lowest adequate lighting intensity should be used. Excessive light intensity is “overkill” and a waste of energy. Timers, motion sensors, dimmer switches and light cutoffs can be used for light fixtures when not needed, further reducing energy use (Figure 6).

Lighting Color: Blue light is harmful for wildlife and for human health, and contributes more to light pollution. Warmer, or amber-colored lights, are better for people and the environment. Warm lights are those with a temperature of less than 3000 Kelvin. Look at product packaging to determine the temperature, and use lights close to 2000 K, and certainly less than 3000 K (Figure 7).

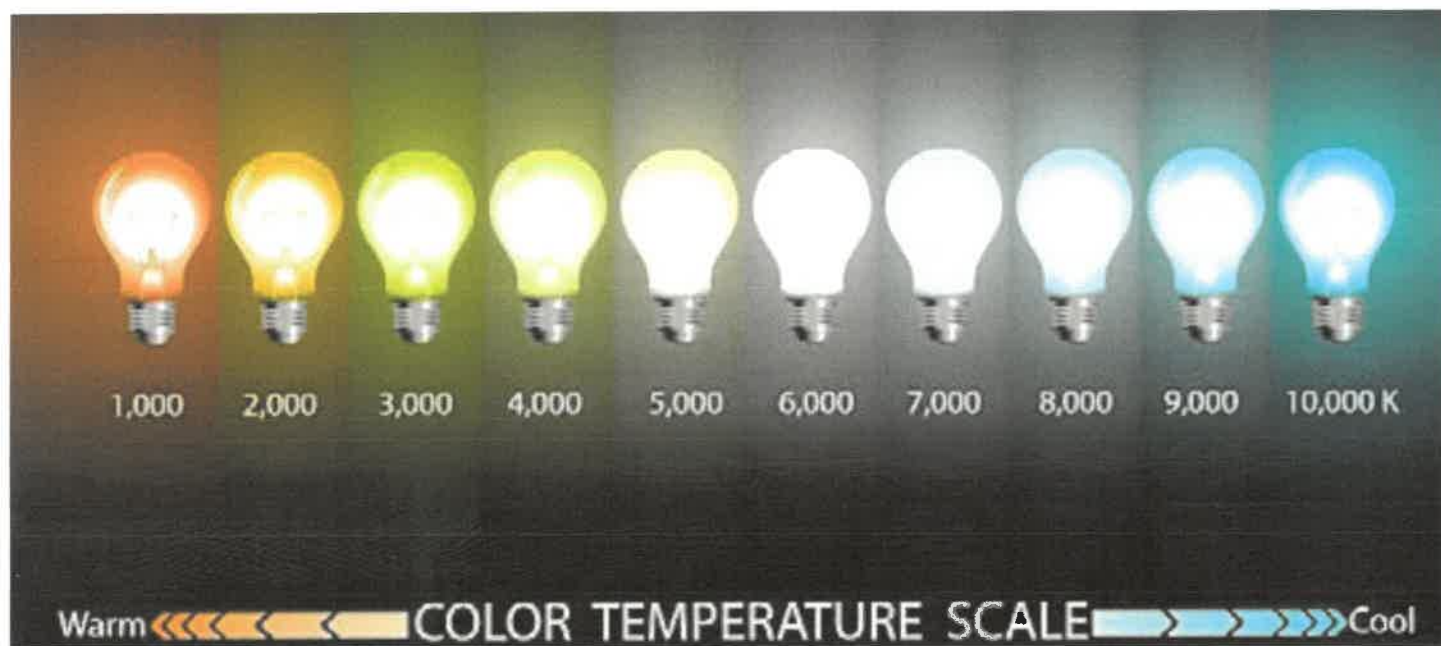


Figure 7: Amber colored light (2700K or less) are least disruptive to the environment and almost all living beings, and are preferred over lights above 3000K, which contain significant amounts of blue light.

PUBLIC SAFETY

“Bright” lighting does not necessary equate with “safe lighting.” The appropriate use of dark-sky friendly lighting actually improves overall safety. Overly bright, glaring lights create sharp contrast between light and darkness, making areas outside of the illuminated area difficult to see (see Figure 8). Sharp contrast between light and darkness creates deep shadows that make it easier for burglars to hide. Glare from overly bright streetlights causes driver discomfort and impairs driver visibility.

There is a tendency to overlight property for safety and security. Many people think this improves safety, but there is no scientific evidence to support this opinion. Our night vision works better in low light. We are better able to distinguish shapes in darkness, when our vision has adapted to lower light conditions, keeping us safe. Our pupils constrict when looking at a bright light at night and we tend to look away. Lower lighting levels, warmer light (< 3,000 K), and better coverage of areas needing illuminated are more efficient ways to enhance safety and security with lighting.

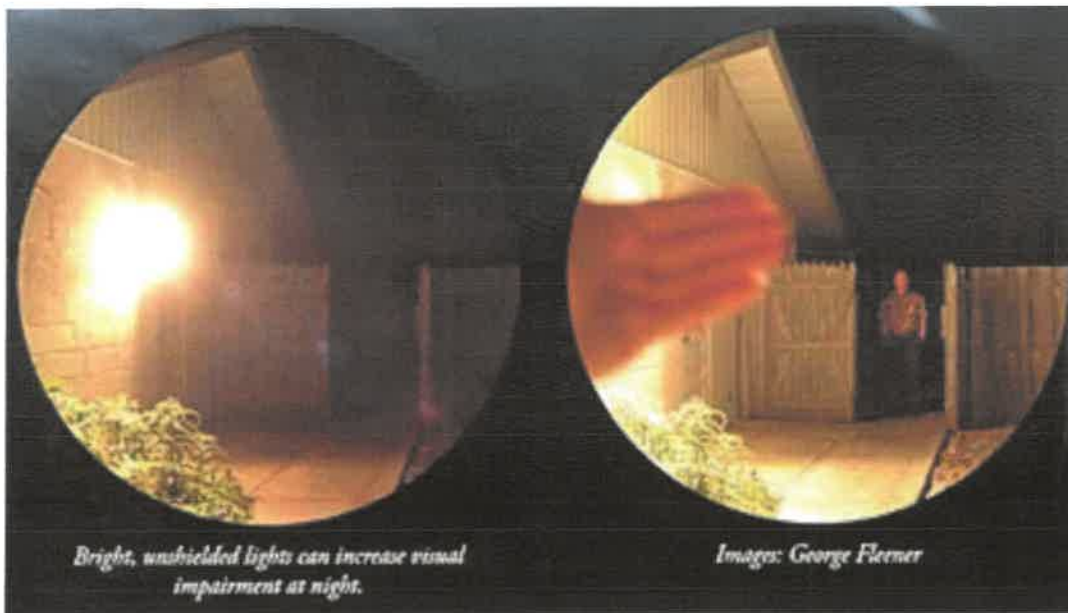


Figure 8: A classic demonstration of “brighter does not mean safer”. Unshielded, bright lights cause deep contrasts and shadows that make it harder to see.

ENERGY SAVINGS

Sixty percent of outdoor lighting is wasted energy. We have all seen images of city lights from space. Consider this—almost all the light that a satellite sees is wasted energy, because it is radiating out into space where it is not needed. For every \$100 spent on operating a dusk-to-dawn light, \$45 is wasted on light that never reaches the ground (Figure 9).



Cities are realizing the benefits of reducing and eliminating this energy waste through better lighting design and standards. Today, there are many energy-efficient lighting products that, when combined with proper design, can significantly reduce energy costs.

Light Emitting Diodes (LEDs) are replacing conventional lamp types for outdoor lighting. The improved quality and lower prices of LEDs make them efficient alternatives to conventional lamps. But some LEDs, especially early generation ones, emit an excessive amount of blue light, which increases glare and light pollution. Today, a new generation of “warmer color” LED products with temperatures below 3000K are available.

Figure 9: The amount of energy wasted due to bad and inefficient lighting.

LIGHTING FOR NATURE

Almost all wildlife and even humans and plants are affected by artificial light at night because the blue wavelengths of bright white light disrupt circadian rhythms—the night and day cycles associated with physiological changes. Even insects and pollinators are in decline partially due to artificial lights. Artificial light at night makes it harder for fireflies to find a mate because they must blink brighter to be seen.

Several major bird migration paths go through Missouri (Fig. 10). These ancient migration paths now bring birds over cities. Every year, millions of birds die during migration due to artificial lights. Most birds migrate at night to save energy and avoid predators, using the moon and stars to navigate. Artificial lights disorient birds and cause them to circle until they die from exhaustion or hit a structure, such as a building. Each year, one billion or more birds are killed in the U.S. by colliding with buildings (Figure 11). Lights out Heartland (Fig. 12) is a program working to reduce the negative impacts of artificial light at night on birds. For more information about Lights out Heartland, see the website, <https://www.lightsoutheartland.org>.

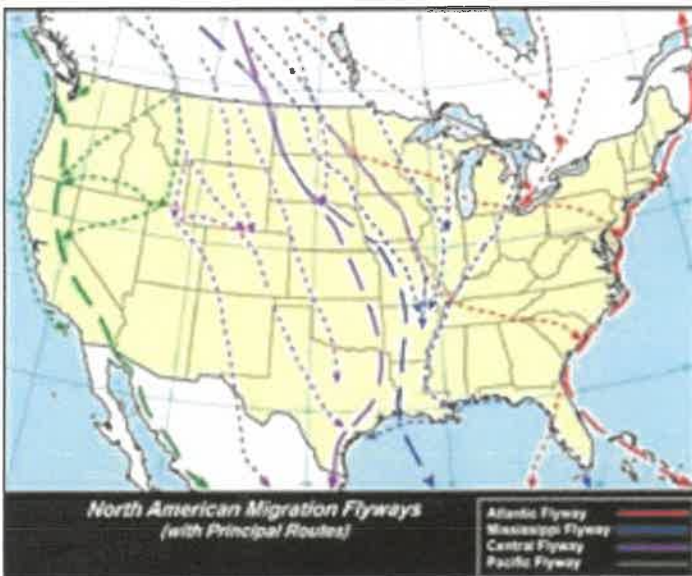


Figure 10: The major migration flyways over the United States. Migratory birds tend to follow rivers and coastlines, putting both Kansas City and Saint Louis along high traffic flyways.



Figure 11: Birds killed by collisions with high-rise buildings. Many of our largest cities in the Midwest, including Kansas City, Saint Louis, and Springfield, are along the Mississippi-Missouri Flyway. Bright lights in cities create an ecological trap for birds.



Figure 12: Lights Out Heartland Logo

CULTURAL TRADITIONS AND THE BEAUTY OF THE NIGHT SKY

Our ancestors grew up under dark skies, and the magic and thrill of brightly colored stars, planets and the moon were not lost on them. Over the last few decades, the amount of light pollution has grown much faster than the population, largely because we have become conditioned to believe that more and brighter lighting is always better. Today, more and more people are re-connecting with the truly awesome night sky. As more people become aware of what they're missing in areas with overly bright night skies, there is more interest in efforts to curb excessive lighting at night.

NIGHT SKY TOURISM

More and more, tourists are visiting places where they can enjoy the beauty of a star-studded night sky. As other areas of the country become more urbanized and light-polluted, Missouri will become a “dark sky destination,” where people come for night sky viewing, astronomical observations, and where the beautiful night sky can be seen and appreciated (Figure 13). Many parks are becoming designated as “dark sky parks” (Such as the Buffalo, in Arkansas. In Missouri, the Ozark National Scenic Riverways is currently applying for dark sky park status). But even rural areas or cities can curtail light pollution and protect the value of the night sky for the health and benefits of their citizens.



Figure 13: A Buffalo River at night basking in the glory of the Milky Way (photo by Ben Caruthers).

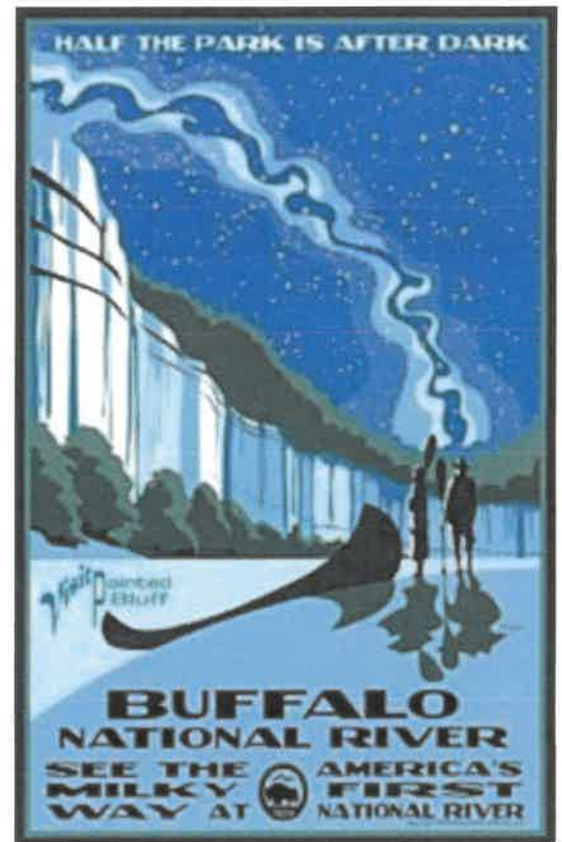


Figure 14: Artwork by Tyler Nordgren illustrating the National Parks motto of “Half the park is after dark.”

HUMAN HEALTH

Scientific research indicates that artificial light at night has detrimental effects on human health and well-being. Artificial light can disrupt circadian rhythm (night/day physiological processes, such as hormone production), resulting in increased risk of obesity, diabetes, mood disorders, reproductive problems, and cancers.

Five Lighting Principles for Responsible Outdoor Lighting

 DarkSky  Illuminating

Responsible outdoor lighting is

1 Useful

Use light only if it is needed

All light should have a clear purpose. Consider how the use of light will impact the area, including wildlife and their habitats.



2 Targeted

Direct light so it falls only where it is needed

Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.



3 Low Level

Light should be no brighter than necessary

Use the lowest light level required. Be mindful of surface conditions, as some surfaces may reflect more light into the night sky than intended.



4 Controlled

Use light only when it is needed

Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.



5 Warm-colored

Use warmer color lights where possible

Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.



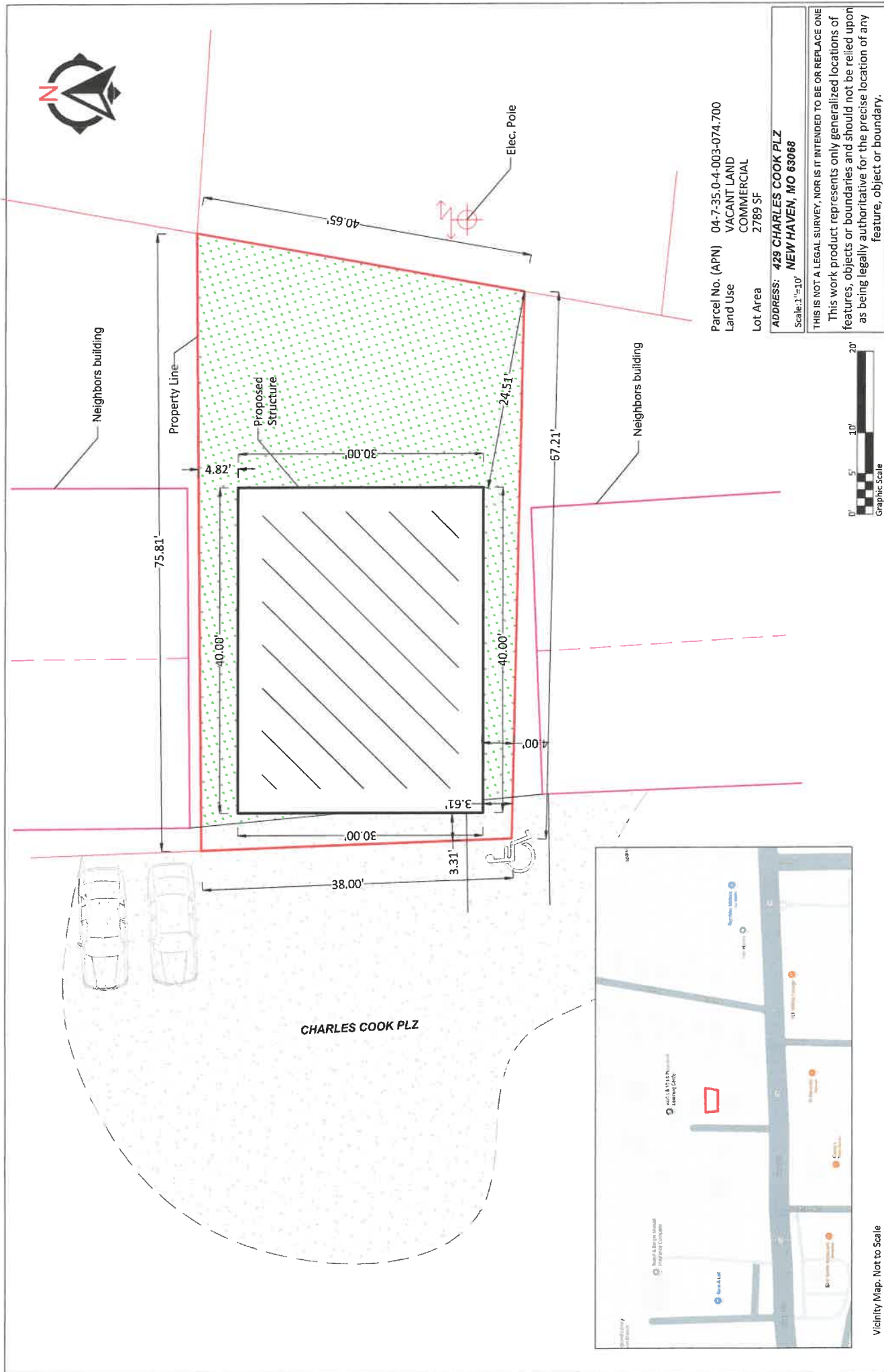
DARK SKY PLANNING AND CITY ORDINANCES

Many cities are examining their ordinances and lighting standards to see if dark sky provisions can be added, or if a new lighting ordinance could be established. DarkSky Missouri stands ready to assist any city that wishes to explore these ideas further. We can provide model ordinances for you to consider. A representative of our organization would be happy to come to your city to meet with leaders about adopting dark sky principles. Contact us through our website at Darkskymissouri.org

Light Pollution is Easy to Fix! Damage caused by artificial light at night is not permanent and can very often be stopped by a simple “flip of the switch.” Following the five principles of responsible outdoor lighting is simple, and is largely common sense. Every person has a responsibility for keeping the stars visible and the night sky beautiful for all of us!



The mission of DarkSky Missouri is to raise awareness about light pollution issues in Missouri, promote quality outdoor lighting, protect our natural environment and our beautiful night sky, and educate the public about reducing light pollution to lower energy costs.



Vicinity Map. Not to Scale

In 100W



Outlaw Metal Buildings

301 North Main Street, 2300
Winston Salem, North Carolina
27101
orders@outlawmetalbuildings.com
(336) 791-1596

Sales: Zach Scott

301 North Main Street, 2300
Winston Salem, North Carolina 27101
zach@outlawmetalbuildings.com
(336) 955-1159

Building Quote
QTE-003790

Date
11/25/2025

CUSTOMER DETAILS

Dave Grannemann

Billing Address



Shipping Address

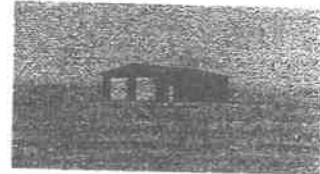


d_grannemann@hotmail.com



Triple Wide Garages - 30 x 40 x 12

- ☒ Roof Color: Black
☒ Trim Color: Black
☒ Sides/Ends Color: Quaker Gray
☐ Wainscot Color: NA



Ready for Installation? ☐ Jobsite Level? ☐ Permit Required? ☒ Inside City Limit? ☐ Electricity Available? ☐ Installation Surface? Concrete

Building Dimension
30'W x 40'L x 12'H

Roof Style
Vertical

Gauge
14 Gauge

Wind/Snow Rating
150 MPH + 40 PSF Certified

Distance on Center
4 Feet

12' Height

1

Ends - Closed | Horizontal

2

Woven R-17 (Full Building)

1

Left - 36x80" Walk-In Door (Man Door)

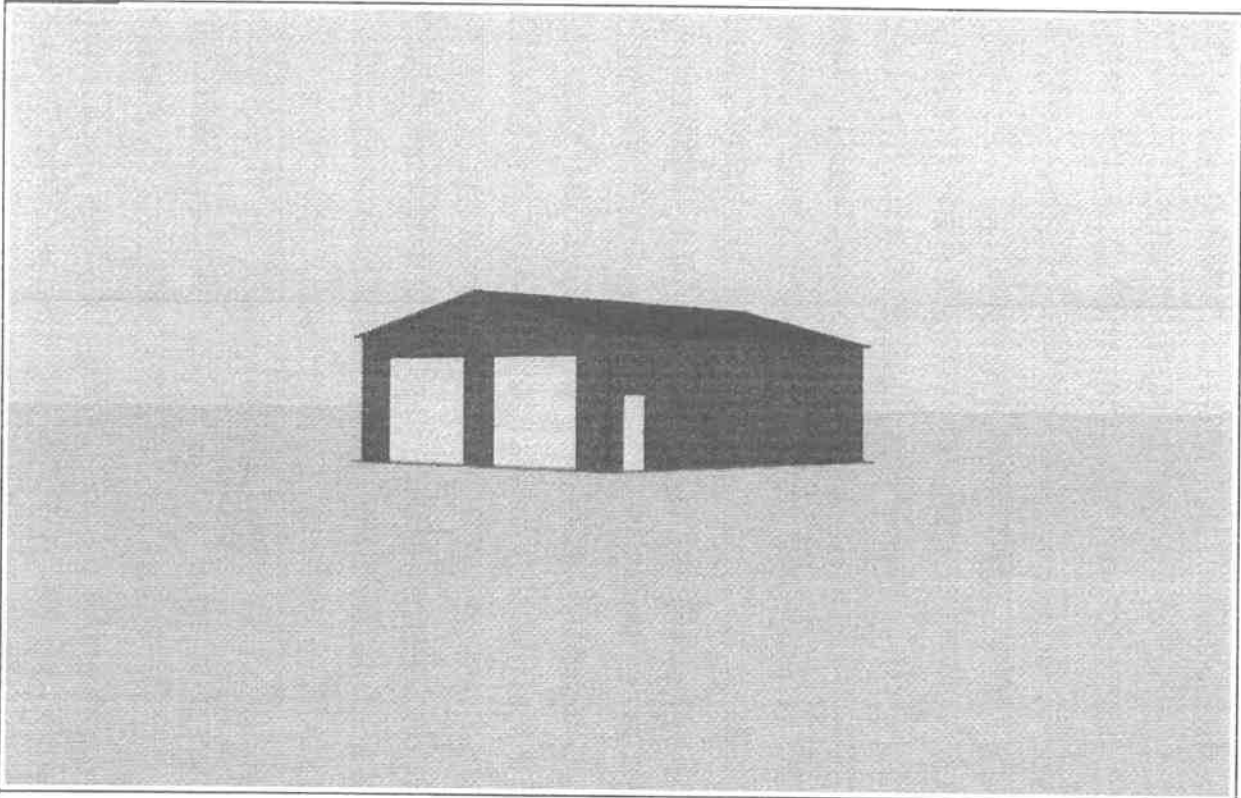
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Right - 36x80" Walk-In Door (Man Door)

1

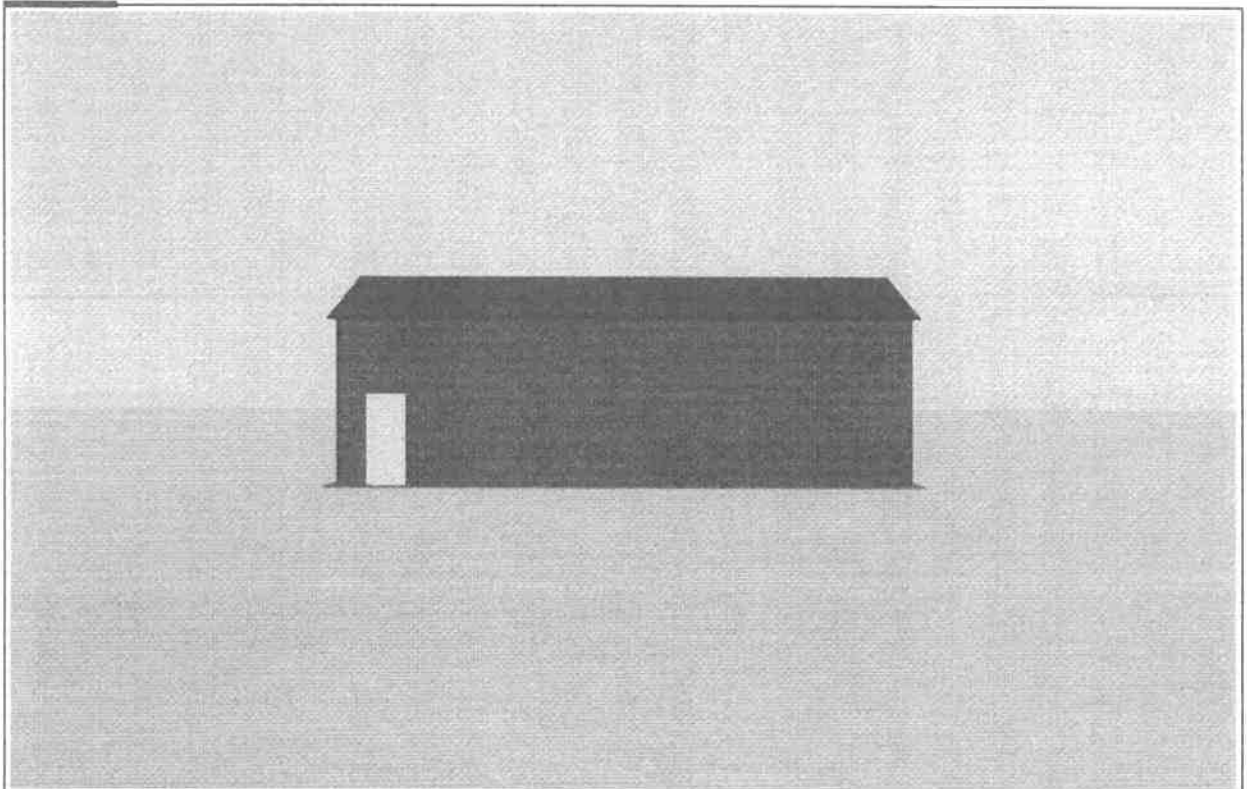
Concrete Work Fee : \$13,000.00

BUILDING VIEW



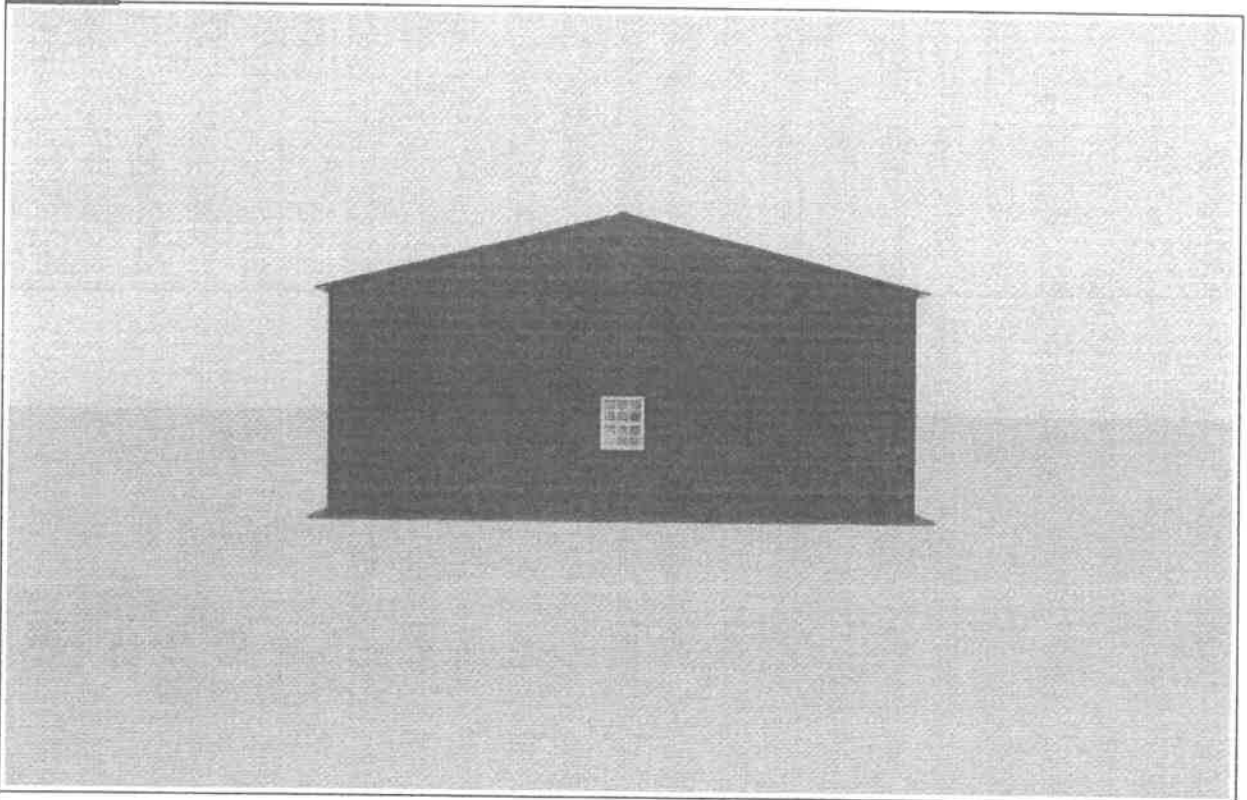
FRONT

BUILDING VIEW



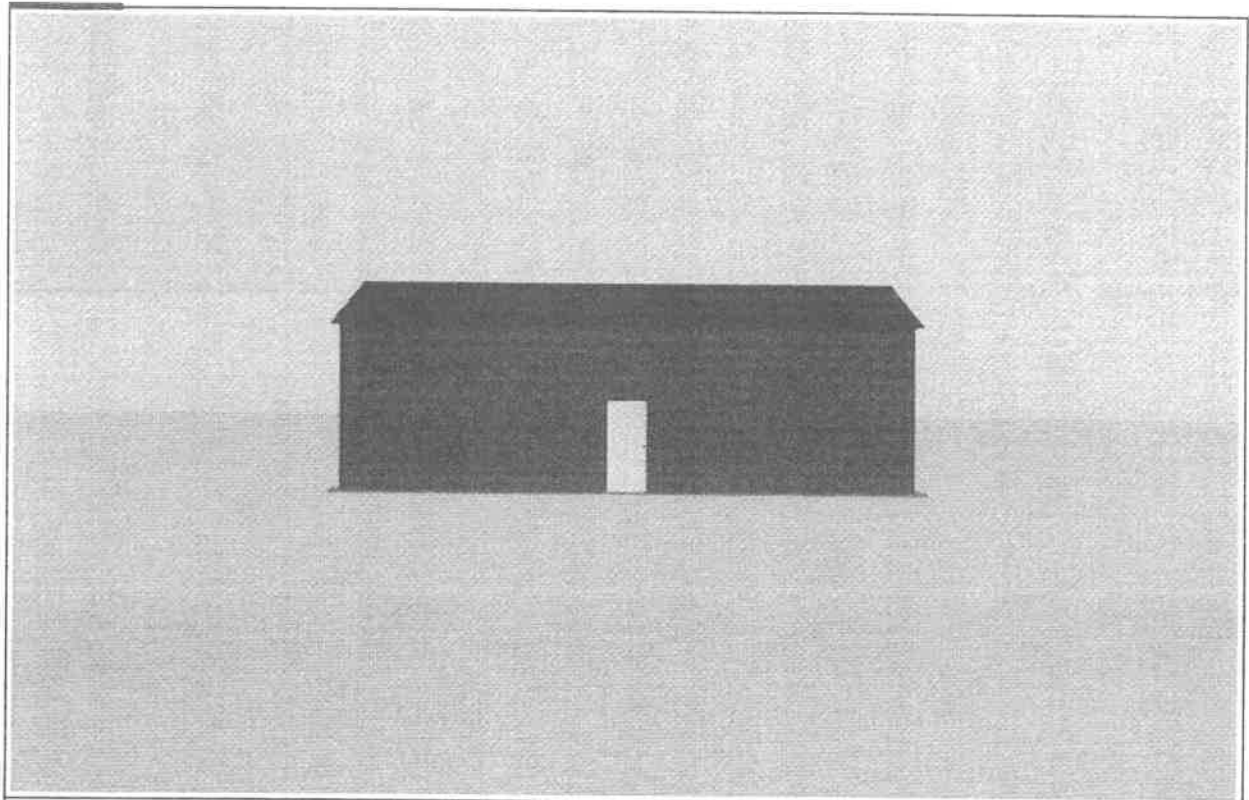
RIGHT

BUILDING VIEW

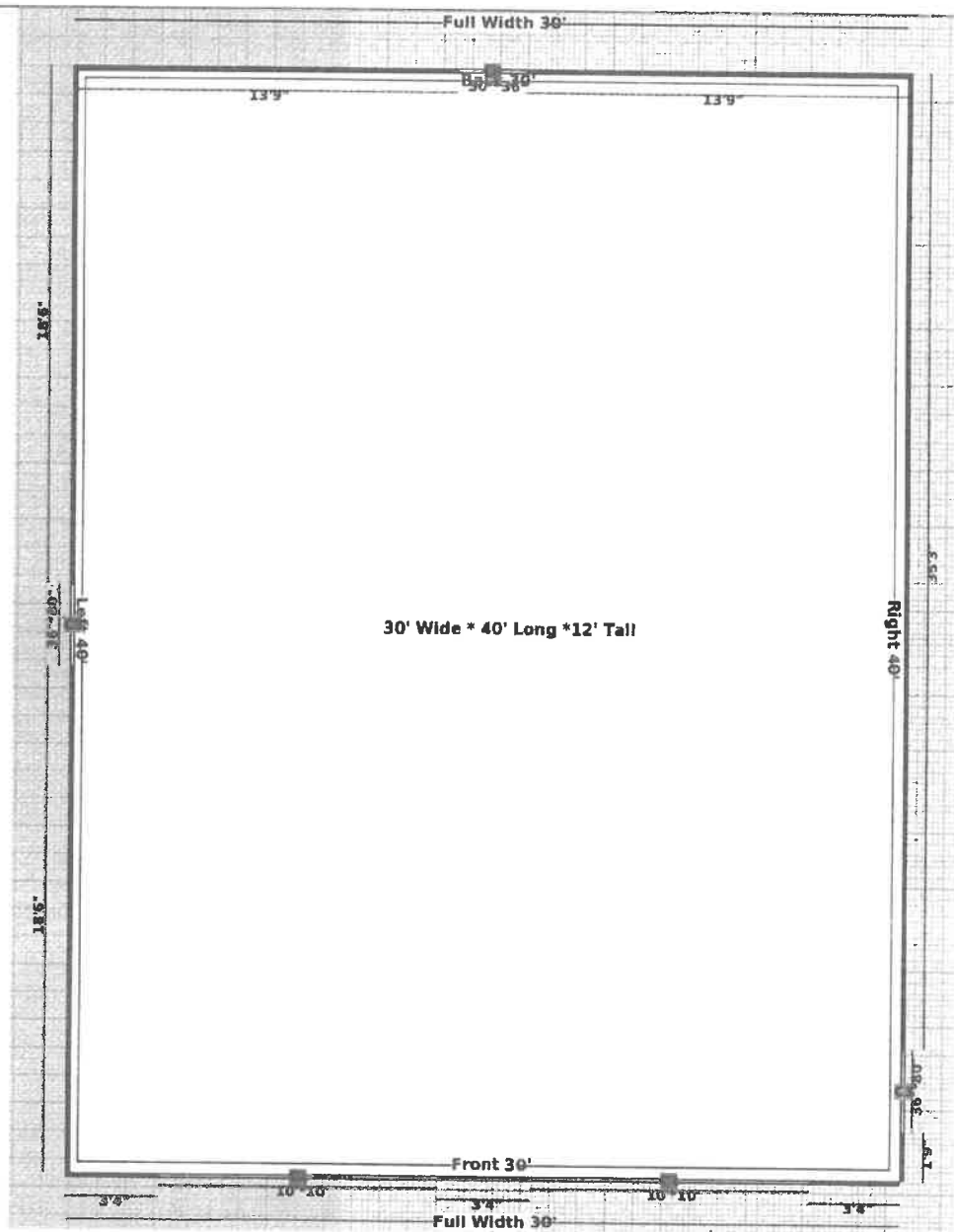


BACK

BUILDING VIEW



LEFT



LEGENDS

- Garage Door
- Garage Door Frameout
- Walk in Door
- Walk in Door Frameout
- Windows
- Windows Frameout
- Open Wall
- Close Wall
- Distance
- Storage Length (Utility)
- Cupola



**STRUCTURAL DESIGN
ENCLOSED BUILDING
HIGH SNOW PACKAGE**

**MAXIMUM 30'-0" WIDE X 20'-0"
HEIGHT-BOX EAVE FRAME**

24 September 2025

Revision 0

M&A Project No. 25169S

Prepared for:

**Outlaw Metal Buildings
301 North Main Street, Suite 2300
Winston Salem, NC 27101**

Prepared by:

**Moore and Associates Engineering and Consulting, Inc.
1009 East Avenue
North Augusta, SC 29841**

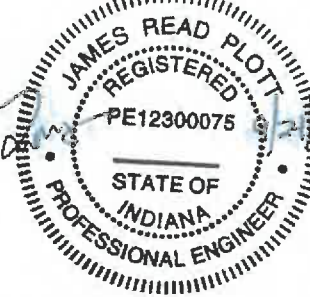
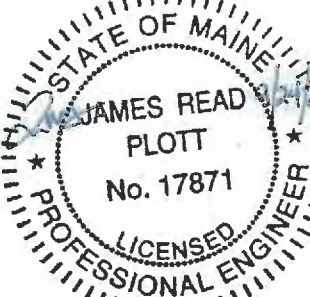
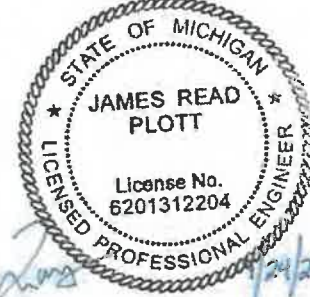
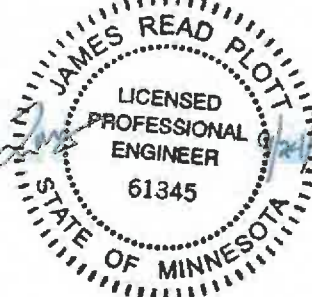
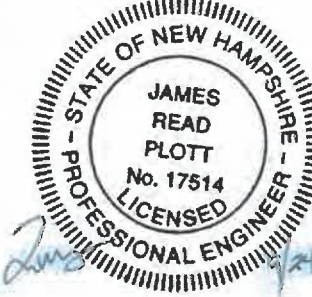
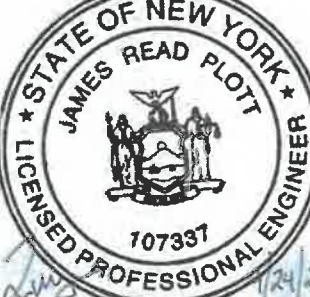
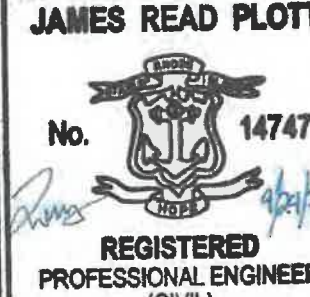
**401 S. Main Street, Suite 200
Mount Airy, NC 27030**



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Plans Expiration Date: 24 September 2027
Plans are valid for two years from issuance date

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		Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 60127, Expiration Date: <u>12/25/26</u>	
	I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota. Signature: _____ Typed or Printed Name: <u>JAMES READ PLOTT</u> Date: <u>9/24/25</u> License Number: <u>61345</u>		
			
Validity Notice Plans Expiration Date: 24 September 2027			

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DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0" x 20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

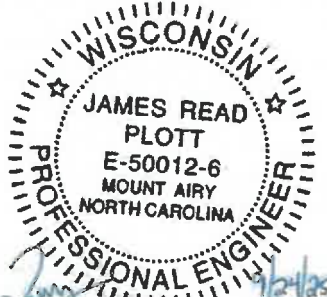
SHT. 1

SCALE: NTS

DWG. NO SK-3

JOB NO: 25169S

REV: 0

			
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BUILDINGS**

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Plans Expiration Date:

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SHT. 1B

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SHEET 1A	PE SEAL COVER SHEET
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INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR MAXIMUM 30'-0" WIDE x 20'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
2. DESIGN WAS DONE IN ACCORDANCE WITH ALL THE APPLICABLE BUILDING CODES LISTED ON SHEET 3A.
3. DESIGN LOADS ARE AS FOLLOWS:
 - A) ROOF DEAD LOADS:
 - SELF-WEIGHT = 1.5 PSF
 - MEP = 0 PSF
 - COLLATERAL = 0 PSF
 - B) ROOF LIVE LOAD = 12 PSF
 - C) FLOOR LIVE LOAD = 100 PSF (4" CONCRETE SLAB/FOOTING)
 - D) GROUND SNOW LOAD = 90 PSF FOR IBC 2006, IBC 2015, IBC 2018, AND IBC 2021
= 102 PSF FOR IBC 2024
 - E) FLAT ROOF SNOW LOAD = 72 PSF FOR IBC 2006, IBC 2015, IBC 2018, AND IBC 2021
= 102 PSF FOR IBC 2024
- NOTE: DROP-DOWN LEAN-TO'S (THOSE CAUSING A HEIGHT DIFFERENTIAL FROM THE MAIN STRUCTURE) SHALL BE LIMITED TO GROUND SNOW LOADS ≤ 65 PSF DUE TO ADDITIONAL SNOW DRIFT LOADING.
4. ULTIMATE 3-SECOND GUST WIND SPEED = ≤ 115 MPH (NOMINAL WIND SPEED = 89 MPH).
5. MAXIMUM RAFTER/POST AND END POST SPACING = 4.0 FEET (UNLESS NOTED OTHERWISE).
6. END WALL COLUMNS ARE EQUIVALENT TO SIDE WALL COLUMNS IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
7. RISK CATEGORY I (NOT FOR HUMAN OCCUPANCY).
8. WIND EXPOSURE CATEGORY B.
9. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 TYPE SS GRADE 50 WITH MINIMUM YIELD STRENGTH (F_y) OF 50 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS OF G60.
10. USE E70 ELECTRODES FOR WELDED CONNECTIONS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.3.
11. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2"x2 1/2"-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
12. CONNECTOR SLEEVES ARE MINIMUM 6' LONG, TS 2 1/4"x2 1/4"-14 GAUGE FOR 2 1/2"x2 1/2"-14 GAUGE (UNLESS NOTED OTHERWISE).
13. AVERAGE FASTENER SPACING ON-CENTERS = 9" O.C. (MAX.).
14. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR ROOF SLOPES OF 14° (3/12 PITCH) OR LESS. ROOF SLOPES LESS THAN 3/12 REQUIRE USE OF LAP JOINT SEALANT.
15. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH COLUMN.
16. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATIONS ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.
17. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
 - SOIL SITE CLASS = D
 - RISK CATEGORY I
 - $R = 3.25$ $I_E = 1.0$
 - $S_{DS} = 2.625$ g $V = C_S W$
 - $S_M = 2.13$ g
18. IF MORE THAN 50% OF COLUMN (LEG) ARE REMOVED IN ANY LONGITUDINAL (SIDE) WALL OF A BUILDING, THE ENGINEER IS TO BE NOTIFIED TO DETERMINE WHETHER PORTAL FRAMES OR OTHER LONGITUDINAL STABILITY ELEMENTS WILL BE REQUIRED.
19. ANALYSIS/DESIGN OF THIS STRUCTURE WAS BASED ON THE LOADS, BUILDING CODE, AND STRUCTURAL GEOMETRY NOTED HEREIN. NO CHANGES SHALL BE MADE TO THE STRUCTURE WITHOUT EXPRESS WRITTEN PERMISSION FROM THE DESIGN ENGINEER. ANY CHANGES IN THE USE OR GEOMETRY OF THE STRUCTURE IN ANY MANNER IS A VIOLATION OF THE BUILDING CODE AND NEGATES ANY LIABILITY ON THE PART OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.
20. WHEN USING GENERIC MASTER DESIGNS TO OBTAIN BUILDING PERMIT, IT MUST BE ACCOMPANIED BY SUFFICIENT ADDITIONAL INFORMATION TO INDICATE THE LOCATION, NATURE, AND EXTEND OF THE CONSTRUCTION AND SHOW IN DETAIL THAT IT WILL CONFORM TO ALL APPLICABLE CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS.
21. WHEN APPLYING FOR BUILDING PERMIT, THE BUILDING OFFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR OBTAINING A BUILDING PERMIT. GENERIC MASTER DESIGNS CAN NOT BE USED WHERE A SITE-SPECIFIC DESIGN IS REQUIRED.
22. ANY VARIATION FROM THE ANALYSIS/DESIGN PARAMETERS OF THE MASTER DESIGN REQUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

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**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 3

SCALE: NTS

DWG. NO: SK-3

JOB NO: 25169S

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LIST OF APPLICABLE BUILDING CODES

2024 INTERNATIONAL BUILDING CODE (IBC 2024)

2021 INTERNATIONAL BUILDING CODE (IBC 2021)

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2006 INTERNATIONAL BUILDING CODE (IBC 2006)

2021 IBC PORTION OF THE 2022 CT STATE BUILDING CODE
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

INDIANA BUILDING CODE, 2014 EDITION
(ADOPTS THE IBC 2012 WITH AMENDMENTS)

MAINE UNIFORM BUILDING AND ENERGY CODE (MUBEC)
(ADOPTS THE IBC 2021 WITH AMENDMENTS)
(IBC 2015, IBC 2021 (DEPENDENT UPON LOCAL JURISDICTION))

MARYLAND BUILDING CODE 2021
(ADOPTS THE IBC 2021 WITH AMENDMENTS)
(IBC 2006, IBC 2015 IBC 2018, IBC 2021
(DEPENDENT UPON LOCAL JURISDICTION))

MASSACHUSETTS STATE BUILDING CODE, 10TH ED., BASE VOLUME
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

MICHIGAN BUILDING CODE 2021
(ADOPTS THE IBC 2021 WITH AMENDMENTS)
DETROIT CITY BUILDING CODE 2019
(ADOPTS THE MI BC 2015 WITH AMENDMENTS)

MINNESOTA BUILDING CODE 2020
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE OF THE STATE OF NEW HAMPSHIRE
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

NEW JERSEY UCC BUILDING SUBCODE 2021
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

NEW YORK STATE BUILDING CODE 2020
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

OHIO BUILDING CODE 2024
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

PENNSYLVANIA BUILDING CODE 2018
(ADOPTS THE IBC 2018 WITH AMENDMENTS)
PHILADELPHIA BUILDING CODE 2018
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

SBC-1-2021, THE RHODE ISLAND STATE BUILDING CODE
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

VERMONT BUILDING CODE 2015
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

VIRGINIA UNIFORM STATEWIDE BUILDING CODE,
ART I, CONSTRUCTION/VIRGINIA CONSTRUCTION
CODE (VCC) 2021 (ADOPTS THE IBC 2021 WITH
AMENDMENTS)

WEST VIRGINIA BUILDING CODE 2018
(ADOPTS THE IBC 2018 WITH AMENDMENTS)

WISCONSIN BUILDING CODE 2021
(ADOPTS THE IBC 2021 WITH AMENDMENTS)

WYOMING BUILDING CODE 2024
(ADOPTS THE IBC 2024 WITHOUT AMENDMENTS)

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CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
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30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

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JOB NO: 25169S

SHT. 3A

DWG. NO: SK-3

REV: 0

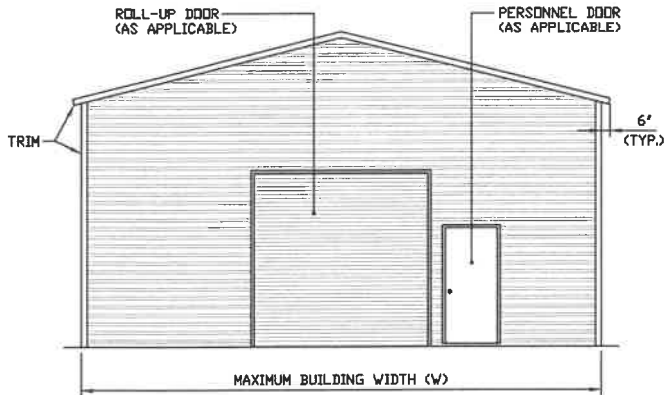
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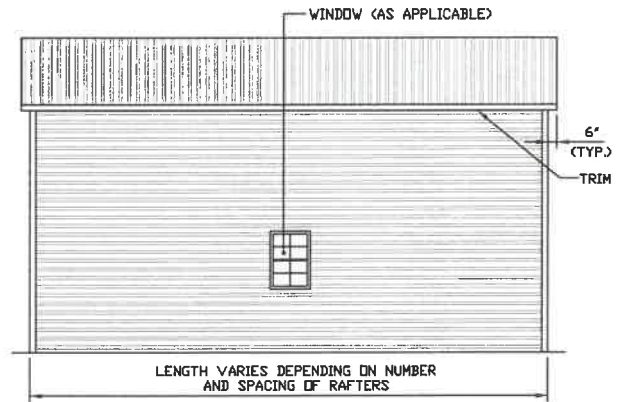
TYPICAL END AND SIDE ELEVATIONS

NOTE: VERTICAL ROOF PANELS ONLY.

BOX EAVE STRUCTURE



TYPICAL END ELEVATION
SCALE: NTS



TYPICAL SIDE ELEVATION
SCALE: NTS

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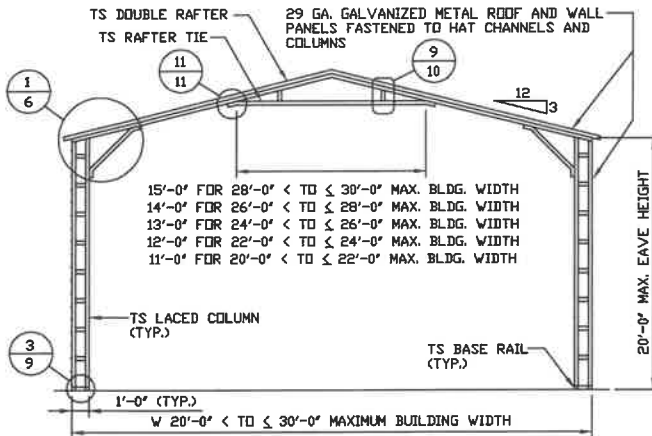
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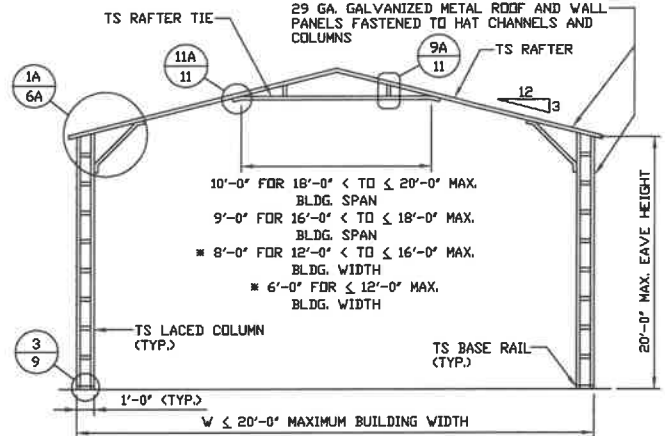
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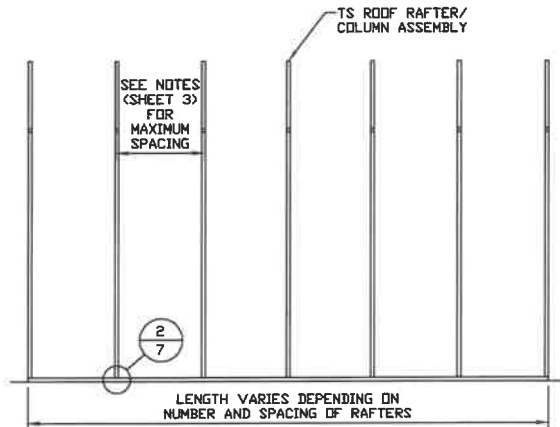
TYPICAL INTERIOR RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE STRUCTURE)



**TYPICAL INTERIOR RAFTER/
COLUMN FRAMING SECTION**
SCALE: NTS



**TYPICAL INTERIOR RAFTER/
COLUMN FRAMING SECTION**
SCALE: NTS
* NOTE: VERTICAL STRUTS NOT REQUIRED
FOR THESE TIE LENGTHS.



**TYPICAL RAFTER/COLUMN
SIDE FRAMING SECTION**
SCALE: NTS

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SHT. 5

SCALE: NTS

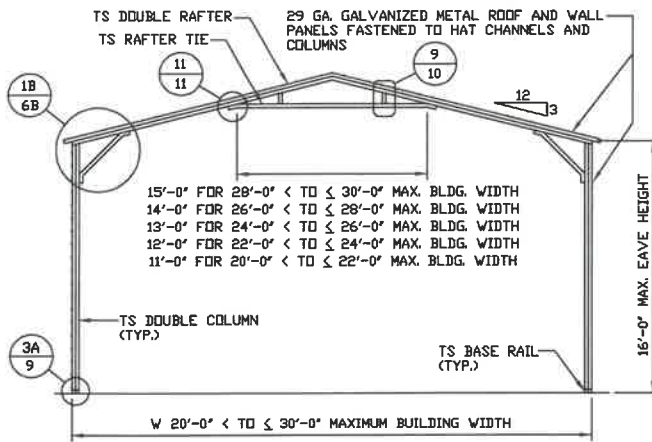
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JOB NO: 25169S

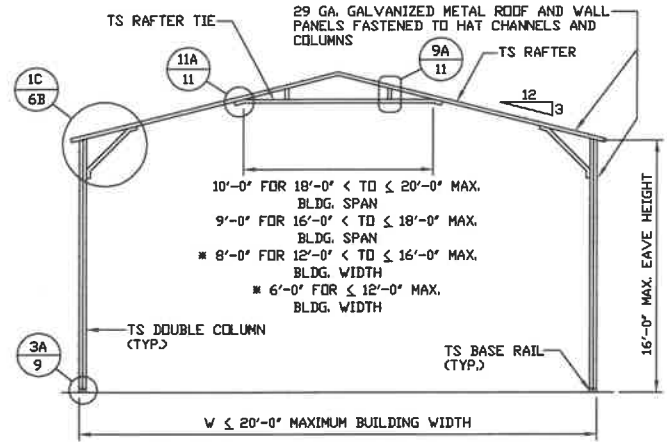
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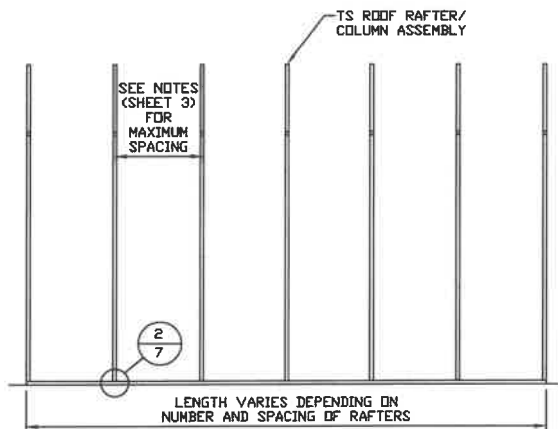
TYPICAL INTERIOR RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE STRUCTURE)



**TYPICAL INTERIOR RAFTER/
COLUMN FRAMING SECTION**
SCALE: NTS



**TYPICAL INTERIOR RAFTER/
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**TYPICAL RAFTER/COLUMN
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SHT. 5A

SCALE: NTS

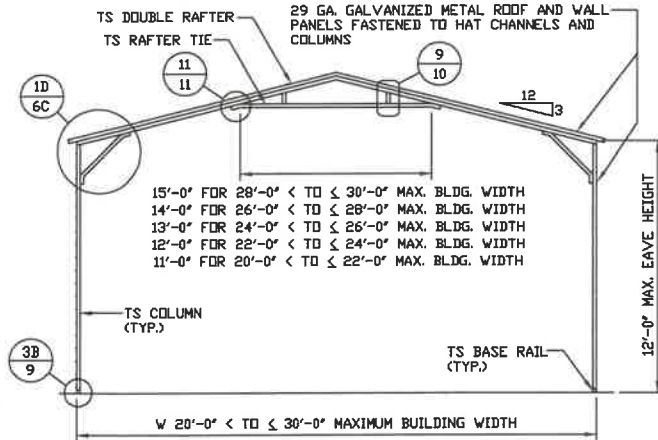
DWG. NO: SK-3

JOB NO: 25169S

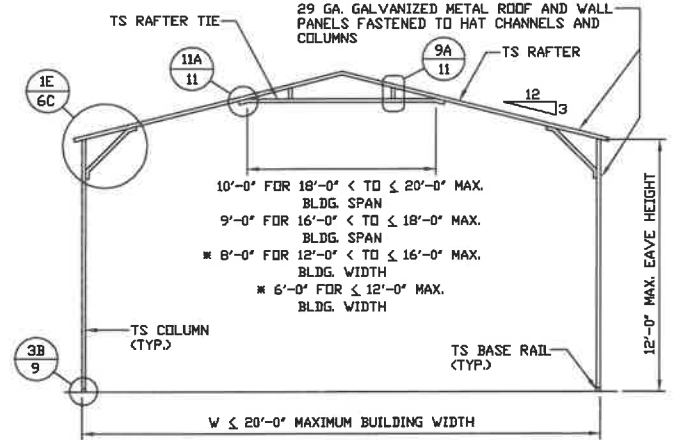
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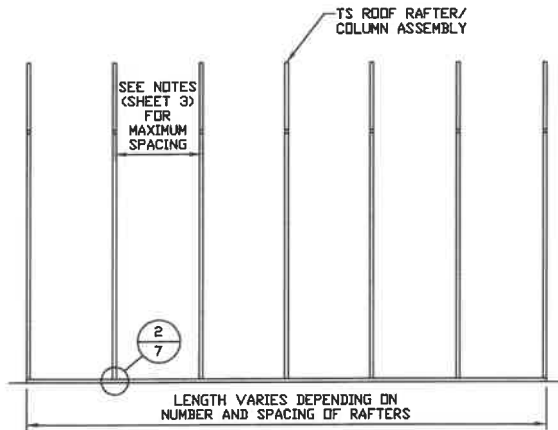
TYPICAL INTERIOR RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE STRUCTURE)



**TYPICAL INTERIOR RAFTER/
COLUMN FRAMING SECTION**
SCALE: NTS



**TYPICAL INTERIOR RAFTER/
COLUMN FRAMING SECTION**
SCALE: NTS
* NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



**TYPICAL RAFTER/COLUMN
SIDE FRAMING SECTION**
SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 5B

SCALE: NTS

DWG. NO: SK-3

JOB NO: 25169S

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TS DOUBLE RAFTER

CONNECTOR SLEEVE TO RAFTER TYP

3/16

3/16

12

3

(3-12)

3-12

6"

G, MINIMUM FOR E WITH SDF'S

W.P. (TYP.)

15°

4'-0"

14 GA. TS KNEE BRACE ATTACH TO COLUMN AND RAFTER

(2) MINIMUM 5' LONG x 5" WIDE 18 GA. PLATES. SECURE WITH (12) #12-14x3/4" SDF'S, (6) PER MEMBER

A

6

A

6

TS CHORD (TYP.)

TS LACED COLUMN

3/16

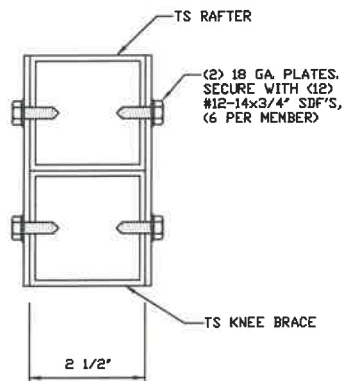
3/16

TYP

1'-0"

1'-8" (MAX.)

1



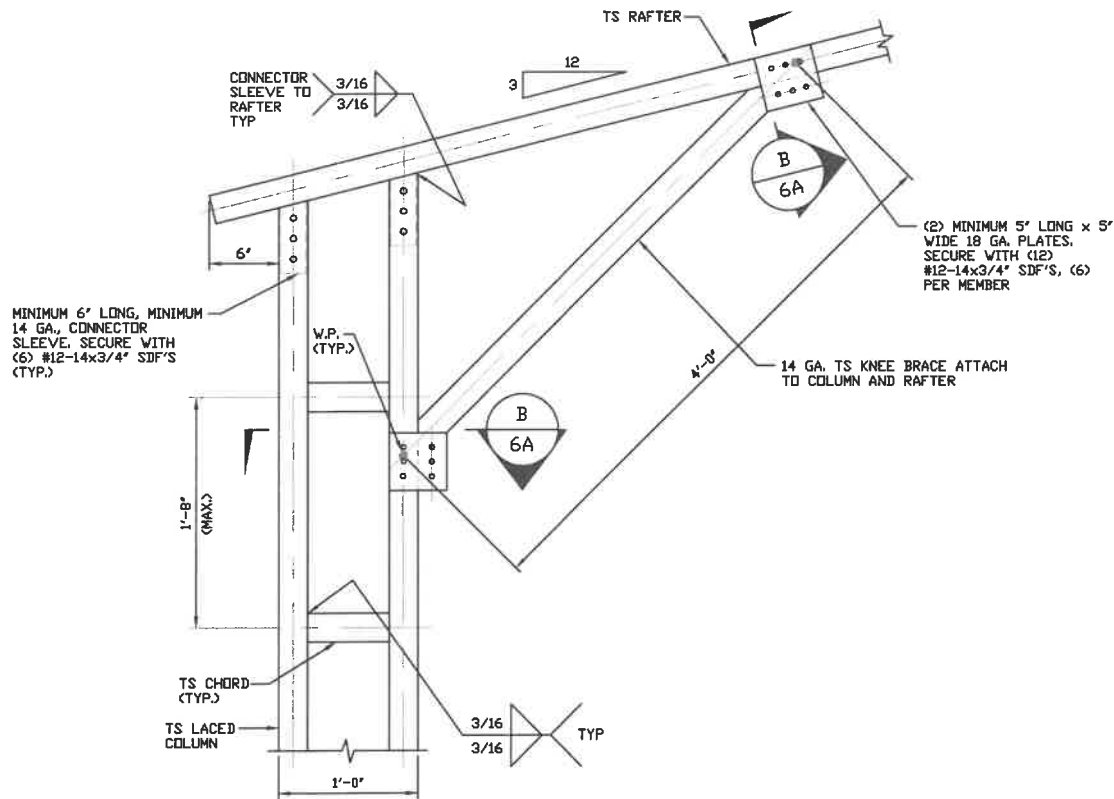
A BRACE SECTION
SCALE: NTS
NOTE: DOUBLE SECTIONS AND
LACED COLUMNS NOT
SHOWN FOR CLARITY.

24 September 2027

REV. 0

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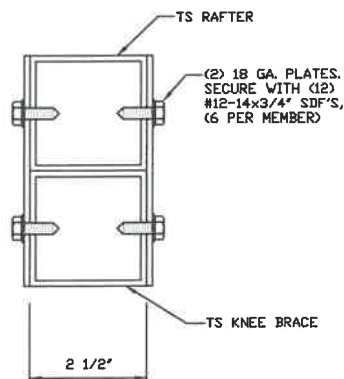
COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)



**BOX EAVE RAFTER/COLUMN
CONNECTION DETAIL FOR EAVE
HEIGHTS 16'-0" < TO ≤ 20'-0"**

1A

SCALE: NTS



B

BRACE SECTION

SCALE: NTS

NOTE: LACED COLUMNS NOT
SHOWN FOR CLARITY.

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SCALE: NTS

JOB NO: 25169S

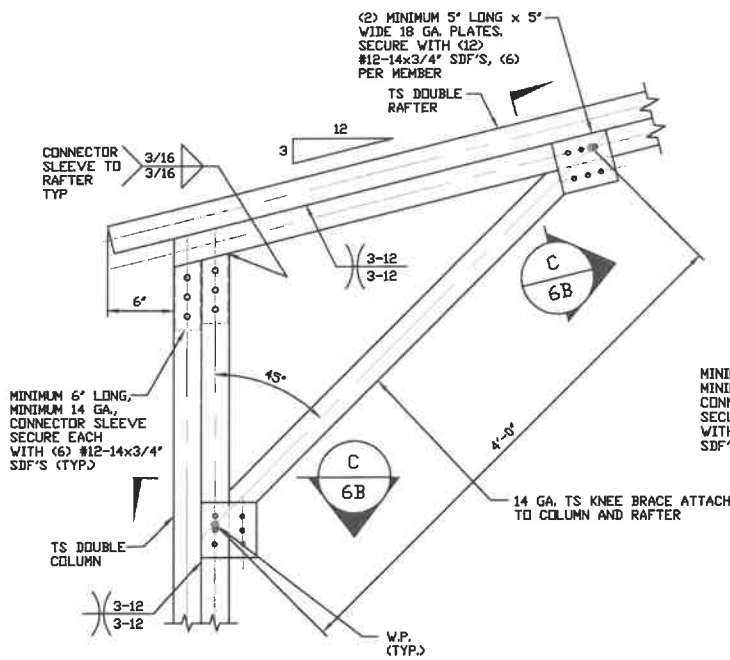
SHT. 6A

DWG. NO: SK-3

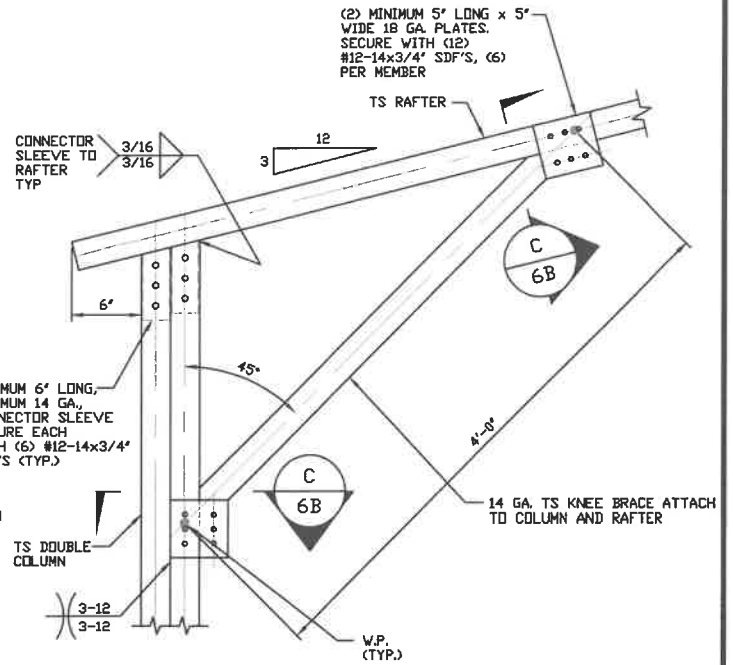
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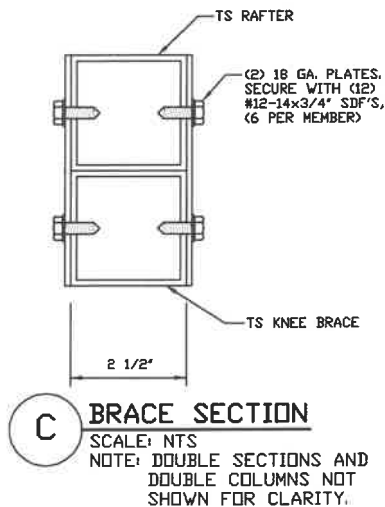
COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)



**BOX EAVE RAFTER/COLUMN
CONNECTION DETAIL FOR EAVE
HEIGHTS 12'-0" < TO ≤ 16'-0"**
SCALE: NTS



**BOX EAVE RAFTER/COLUMN
CONNECTION DETAIL FOR EAVE
HEIGHTS 12'-0" < TO ≤ 16'-0"**
SCALE: NTS



Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 6B

SCALE: NTS

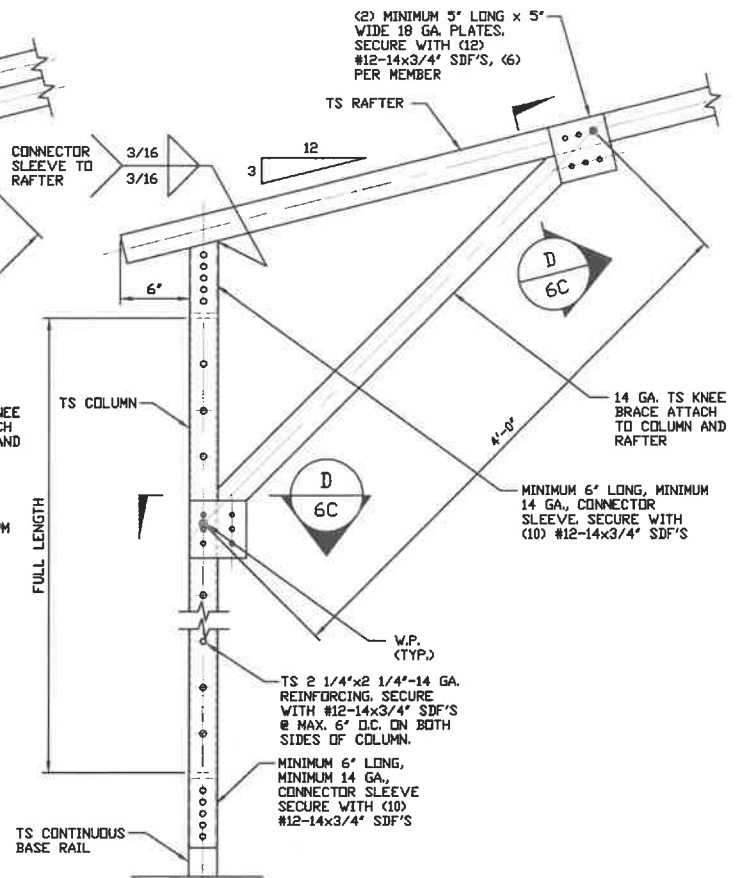
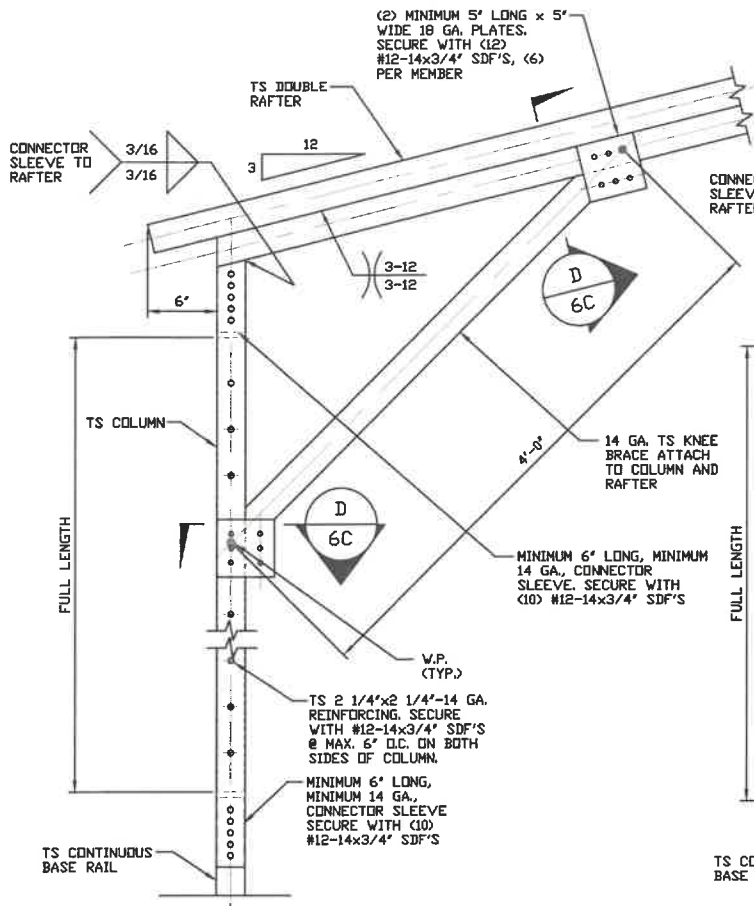
DWG. NO: SK-3

JOB NO: 25169S

REV: 0

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COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)



1D

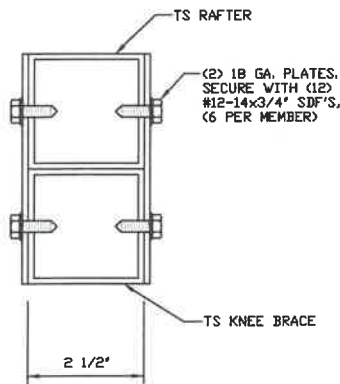
**BOX EAVE RAFTER/COLUMN
CONNECTION DETAIL FOR
EAVE HEIGHTS ≤ 12'-0"**

SCALE: NTS

1E

**BOX EAVE RAFTER/COLUMN
CONNECTION DETAIL FOR
EAVE HEIGHTS ≤ 12'-0"**

SCALE: NTS



D

BRACE SECTION

SCALE: NTS

NOTE: DOUBLE SECTIONS NOT
SHOWN FOR CLARITY.

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 6C

SCALE: NTS

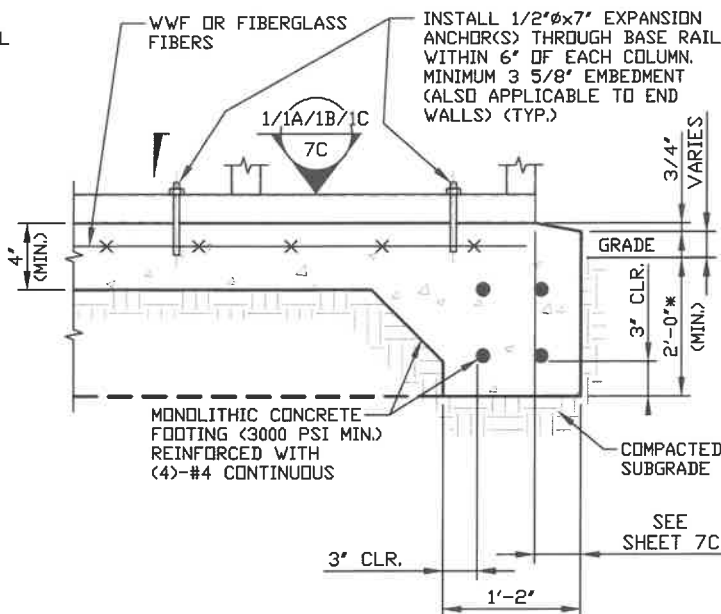
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JOB NO: 25169S

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BASE RAIL ANCHORAGE OPTIONS



CONCRETE MONOLITHIC SLAB
BASE RAIL ANCHORAGE

* COORDINATE WITH LOCAL CODES/ORD.
REGARDING MINIMUM FROST DEPTH REQ.

CONCRETE MONOLITHIC SLAB
BASE RAIL ANCHORAGE

* COORDINATE WITH LOCAL CODES/ORD.
REGARDING MINIMUM FROST DEPTH REQ.

GENERAL NOTES

NOTE: CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM
SOIL BEARING CAPACITY OF 2,000 PSF.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:
3" IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER, AND 1 1/2" ELSEWHERE.

REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

REINFORCEMENT MAY BE BENT IN THE
SHOP OR THE FIELD PROVIDED:

1. REINFORCEMENT IS BENT COLD,
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.

Validity Notice

Plans Expiration Date:

24 September 2027

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 7

SCALE: NTS

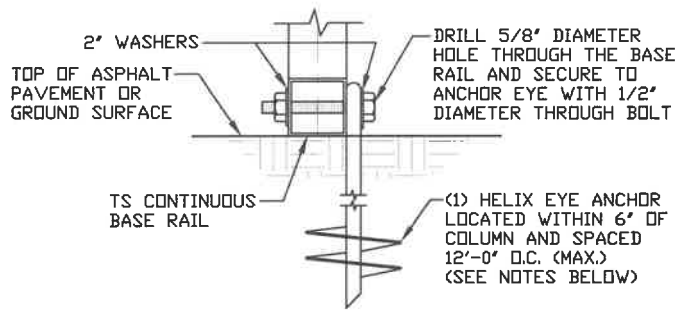
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JOB NO: 25169S

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BASE RAIL ANCHORAGE OPTIONS WITH AN ATTACHED LEAN-TO

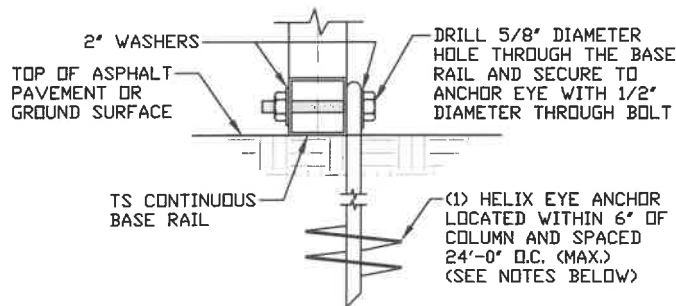


2B

GROUND BASE HELIX ANCHORAGE

SCALE: NTS (CAN BE USED FOR ASPHALT)
* COORDINATE WITH LOCAL CODE/ORD. REGARDING
MINIMUM FROST DEPTH REQUIRED.

BASE RAIL ANCHORAGE OPTIONS WITHOUT AN ATTACHED LEAN-TO



2C

GROUND BASE HELIX ANCHORAGE

SCALE: NTS (CAN BE USED FOR ASPHALT)
* COORDINATE WITH LOCAL CODE/ORD. REGARDING
MINIMUM FROST DEPTH REQUIRED.

GENERAL NOTES

HELIX ANCHOR NOTES:

1. FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILTS AND CLAYS, USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
2. FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
4. FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT.
5. FOR VERY LOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.

Validity Notice

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24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 7A

SCALE: NTS

DWG. NO: SK-3

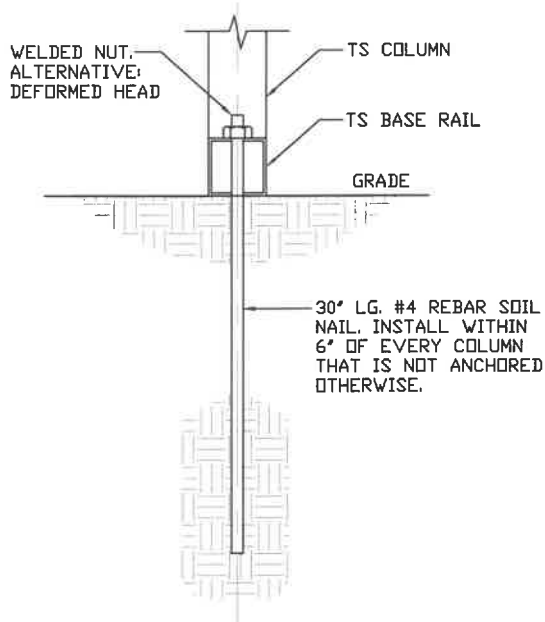
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45

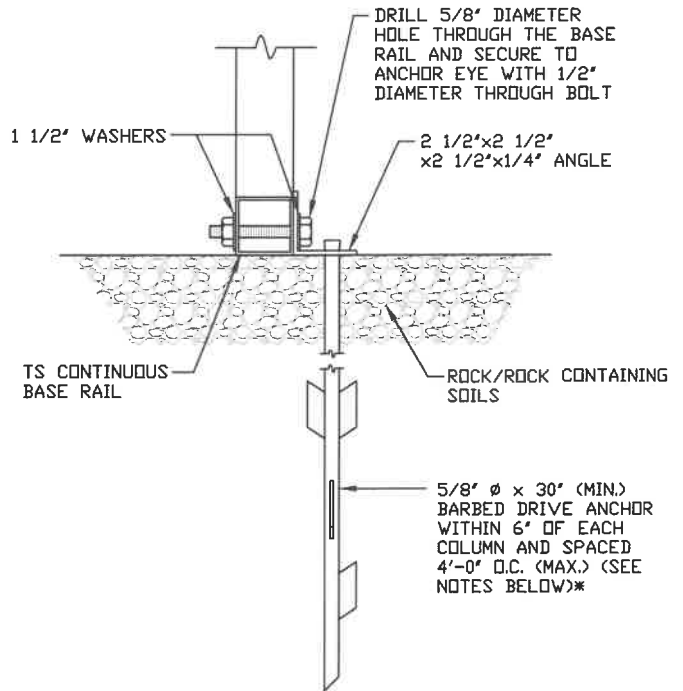
BASE RAIL ANCHORAGE OPTIONS



2D

GROUND BASE SOIL NAIL ANCHORAGE

SCALE: NTS
* COORDINATE WITH LOCAL BUILDING CODE
AND/OR D REGARDING MINIMUM FROST DEPTH
(LENGTH).



2E

ALTERNATIVE BASE ANCHORAGE

SCALE: NTS
* COORDINATE WITH LOCAL BUILDING CODE
AND/OR D REGARDING MINIMUM FROST DEPTH
(LENGTH).

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 7B

SCALE: NTS

DWG. NO: SK-3

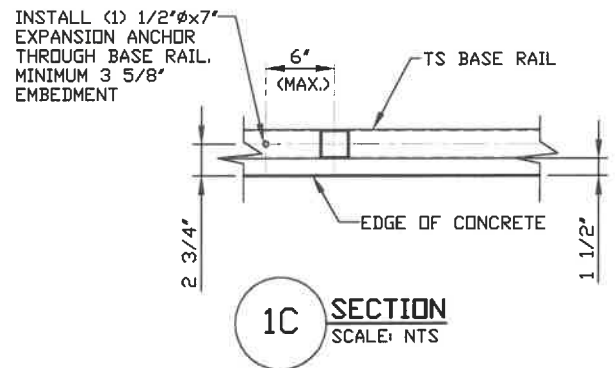
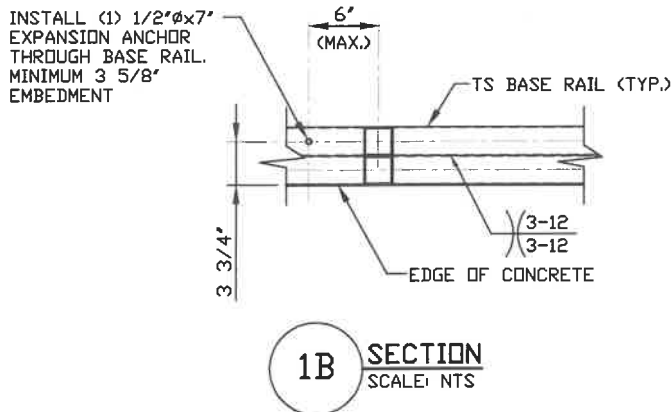
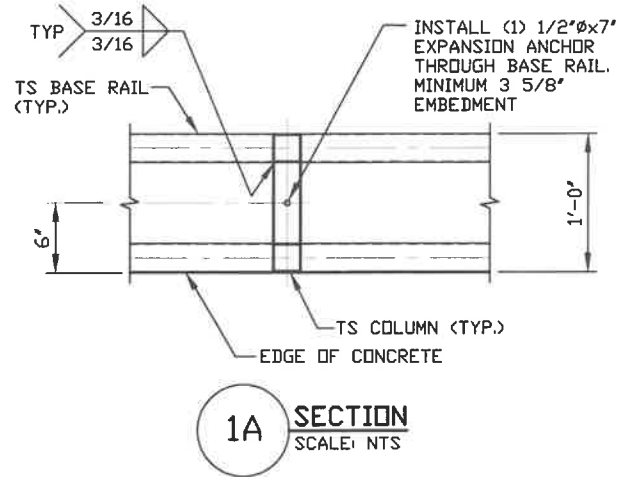
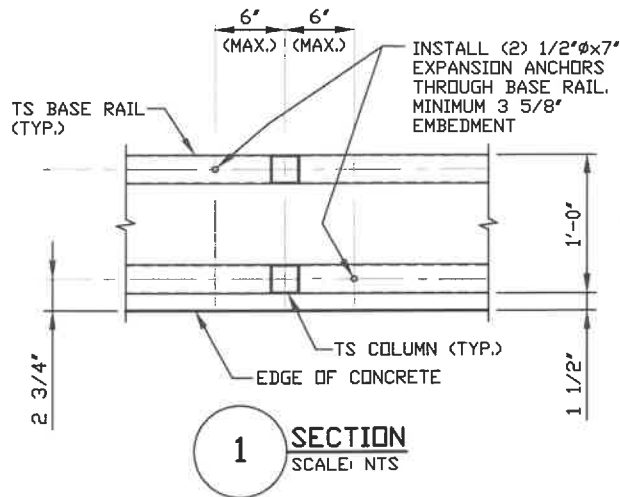
JOB NO: 25169S

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BASE RAIL ANCHORAGE OPTIONS WITH OR WITHOUT AN ATTACHED LEAN-TO



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CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL
BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SCALE: NTS

JOB NO: 25169S

SHT. 7C

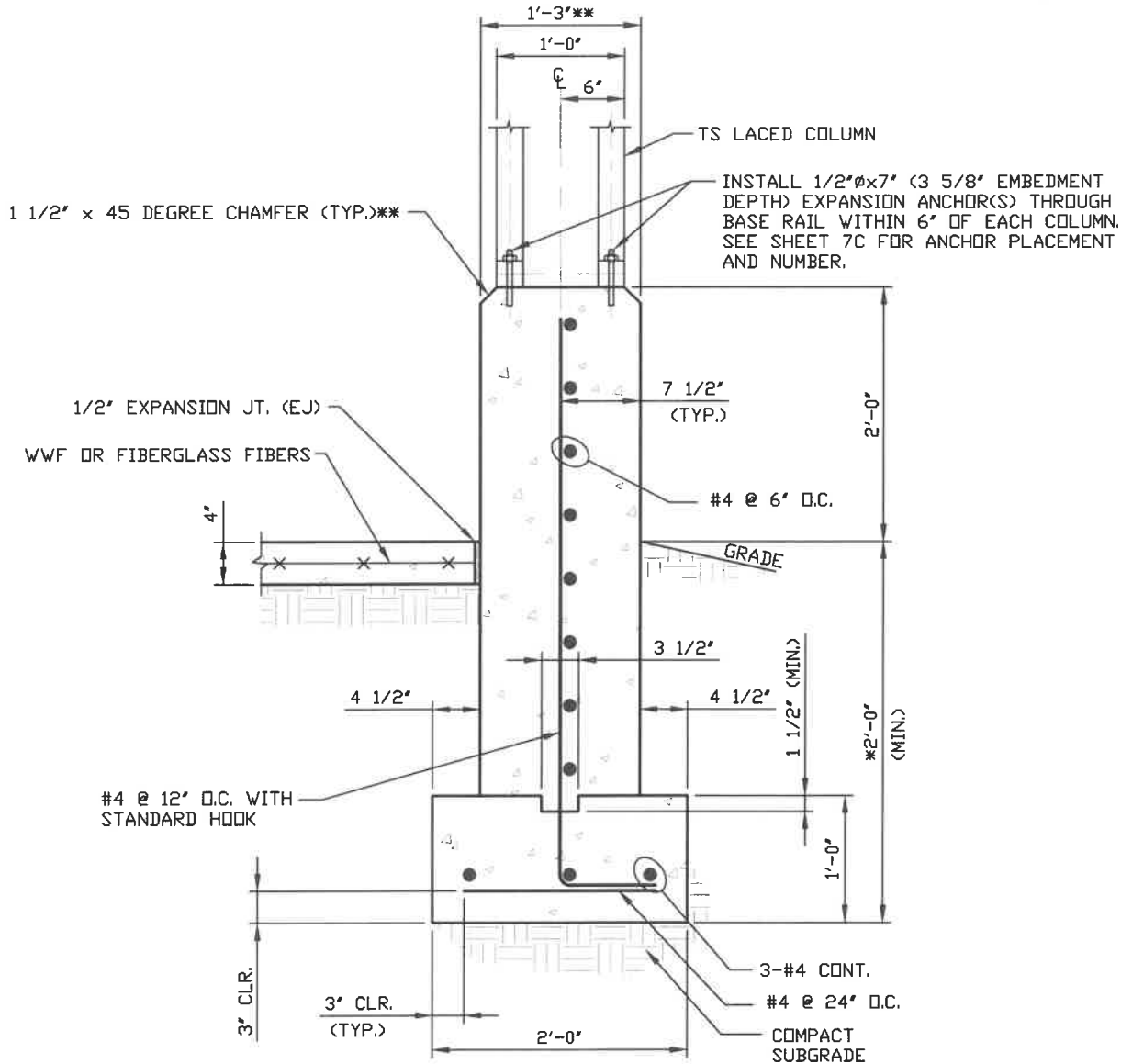
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48

BASE RAIL ANCHORAGE OPTION FOR FROST WALL FOR LACED COLUMNS



2G

CONCRETE STEM WALL BASE RAIL ANCHORAGE

SCALE: NTS

* COORDINATE WITH LOCAL BUILDING CODE AND/OR D REGARDING MINIMUM FROST DEPTH (LENGTH).

*** 1'-0" IF UTILIZING ONE (1) ANCHOR AT CENTER OF BASE RAILS. DO NOT CHAMFER CORNERS OF 1'-0" WIDE WALLS.

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL
BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SCALE: NTS

JOB NO: 25169S

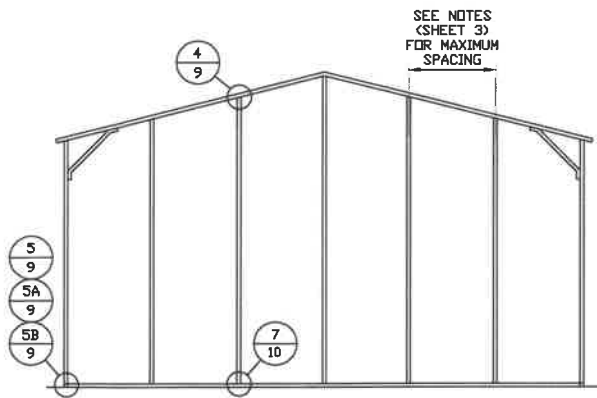
SHT. 7E

DWG. NO: SK-3

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TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOX EAVE STRUCTURE)

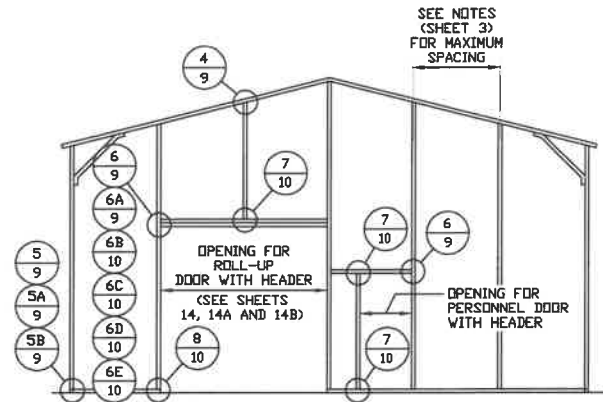


**TYPICAL BOX EAVE RAFTER
END WALL FRAMING SECTION**

SCALE: NTS

NOTE: END WALL COLUMNS SHALL BE THE FOLLOWING SIZES:

- * DOUBLE TUBE 2 1/2"x2 1/2"-14 GA. COLUMNS FOR EAVE HEIGHTS 12'-0" < TO ≤ 20'-0"
- * SINGLE TUBE 2 1/2"x 2 1/2"-14 GA. FOR EAVE HEIGHTS ≤ 12'-0"

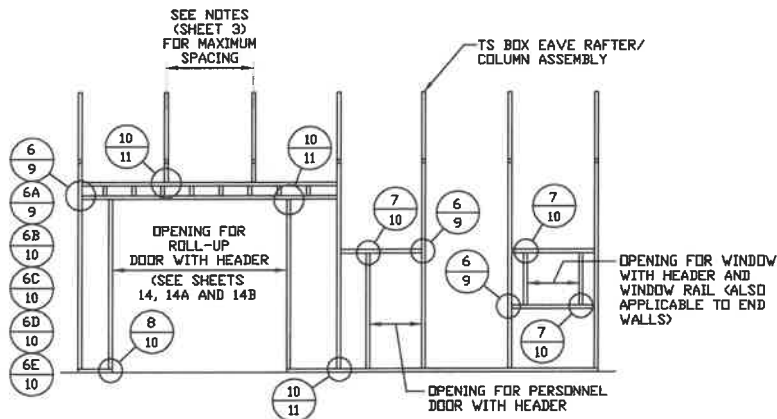


**TYPICAL BOX EAVE RAFTER END
WALL OPENINGS FRAMING SECTION**

SCALE: NTS

NOTE: END WALL COLUMNS SHALL BE THE FOLLOWING SIZES:

- * DOUBLE TUBE 2 1/2"x2 1/2"-14 GA. COLUMNS FOR EAVE HEIGHTS 12'-0" < TO ≤ 20'-0"
- * SINGLE TUBE 2 1/2"x 2 1/2"-14 GA. FOR EAVE HEIGHTS ≤ 12'-0"



**TYPICAL BOX EAVE RAFTER
SIDE WALL OPENINGS FRAMING SECTION**

SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL
BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 8

SCALE: NTS

DWG. NO: SK-3

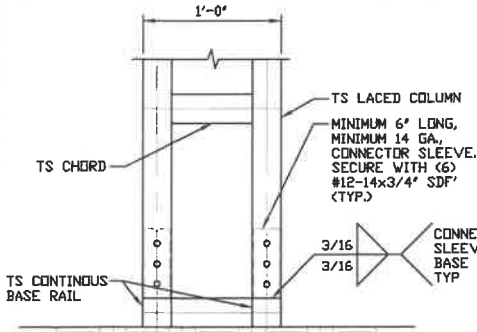
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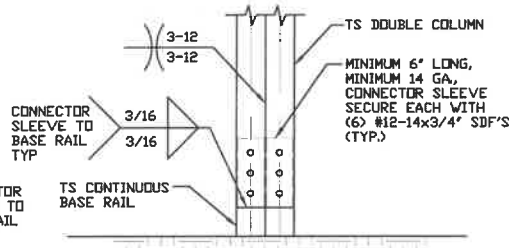
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CONNECTION DETAILS



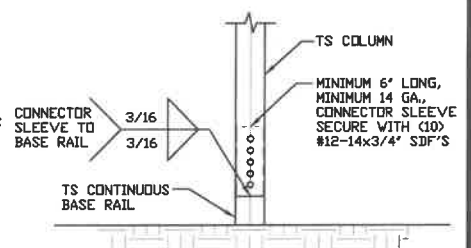
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**COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



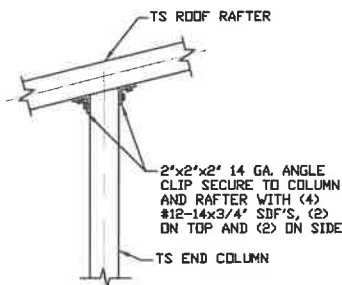
3A

**COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



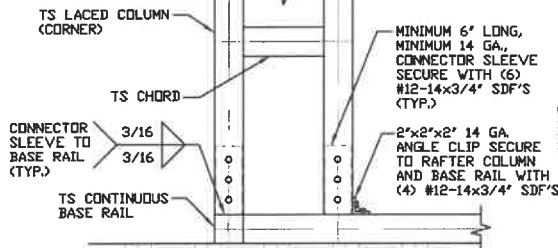
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**COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



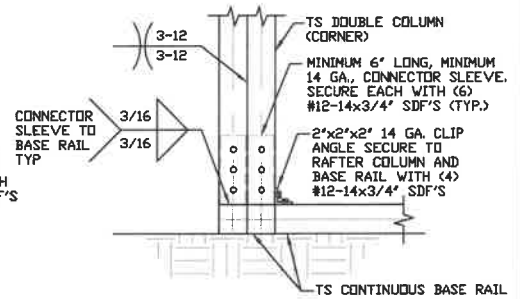
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**END COLUMN/RAFTER
CONNECTION DETAIL**
SCALE: NTS



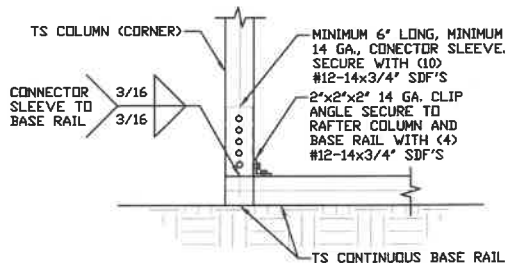
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**END COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



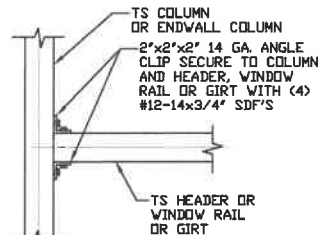
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**END COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



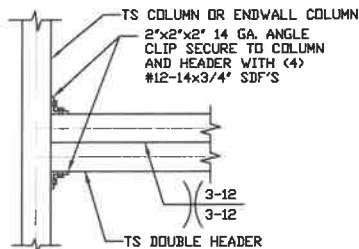
5B

**END COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



6

**HEADER OR WINDOW
RAIL/GIRT TO COLUMN
CONNECTION DETAIL**
SCALE: NTS



6A

**DOUBLE HEADER
TO COLUMN
CONNECTION DETAIL**
SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

CLIENT: OUTLAW METAL
BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 9

SCALE: NTS

DWG. NO: SK-3

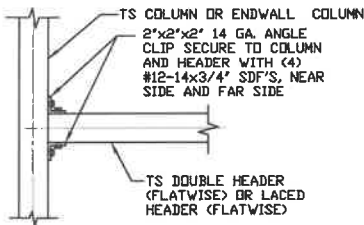
JOB NO: 25169S

REV: 0

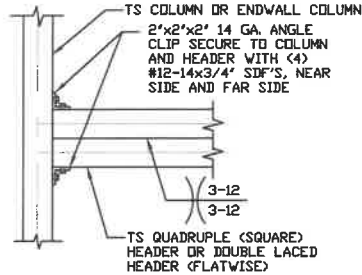
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51

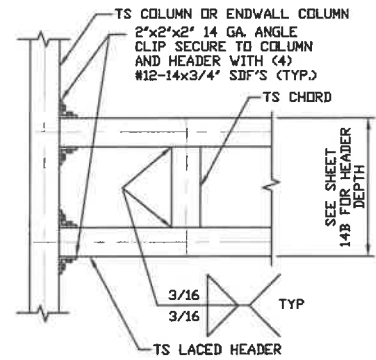
CONNECTION DETAILS



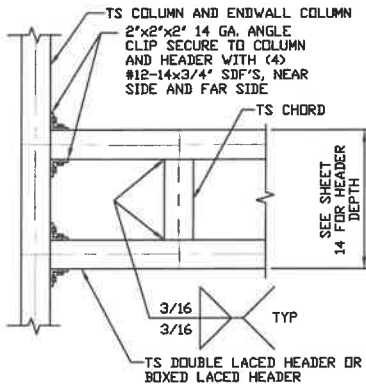
**DOUBLE HEADER
(FLATWISE) OR LACED
HEADER TO COLUMN
CONNECTION DETAIL**
SCALE: NTS



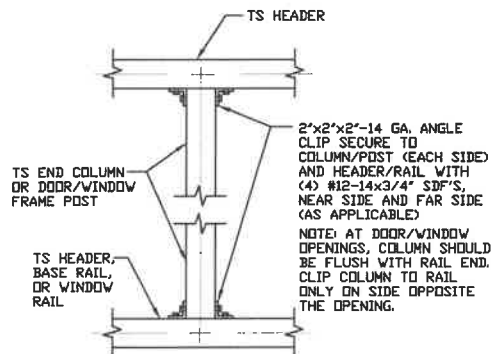
**QUADRUPLE (SQUARE)
HEADER OR DOUBLE
LACED HEADER
(FLATWISE) TO COLUMN
CONNECTION DETAIL**
SCALE: NTS



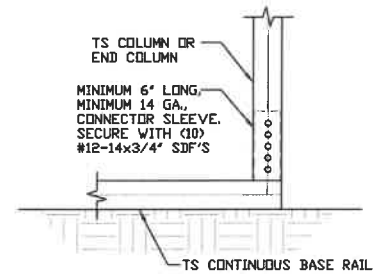
**LACED HEADER
TO COLUMN
CONNECTION DETAIL**
SCALE: NTS



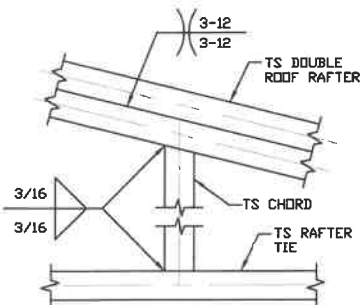
**DOUBLE LACED HEADER
OR BOXED LACED
HEADER TO COLUMN
CONNECTION DETAIL**
SCALE: NTS



**COLUMN/POST TO
HEADER, BASE RAIL,
OR WINDOW RAIL
CONNECTION DETAIL**
SCALE: NTS



**COLUMN/BASE RAIL
CONNECTION DETAIL**
SCALE: NTS



**RAFTER/TIE
TO CHORD
CONNECTION DETAIL**
SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"X20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 10

SCALE: NTS

DWG. NO: SK-3

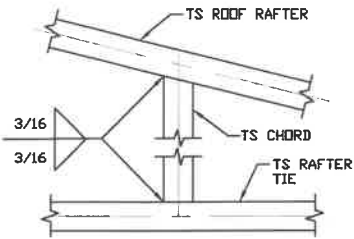
JOB NO: 25169S

REV: 0

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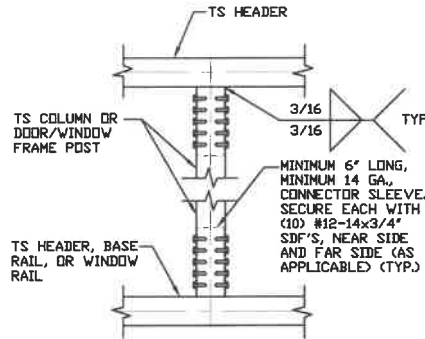
SA

CONNECTION DETAILS



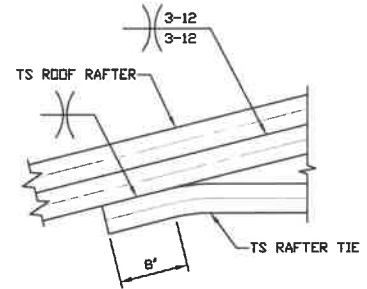
9A
**RAFTER/TIE
TO CHORD
CONNECTION DETAIL**

SCALE: NTS



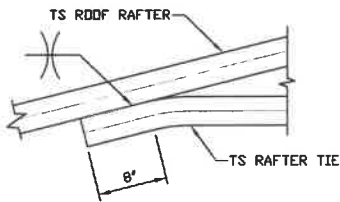
10
**COLUMN/POST TO
HEADER OR RAIL
CONNECTION DETAIL**

SCALE: NTS



11
**RAFTER TIE
CONNECTION DETAIL**

SCALE: NTS



11A
**RAFTER TIE
CONNECTION DETAIL**

SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 11

SCALE: NTS

DWG. NO: SK-3

JOB NO: 25169S

REV: 0

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Diagram illustrating the main structure and roof extension options. The diagram shows a cross-section of a building with a main structure and two optional lean-to roof extensions. The main structure is labeled "MAIN STRUCTURE". The left extension is labeled "ROOF EXTENSION OPTION" and the right extension is labeled "STANDARD LEAN-TO OPTION". The diagram includes various callouts for structural components and dimensions:

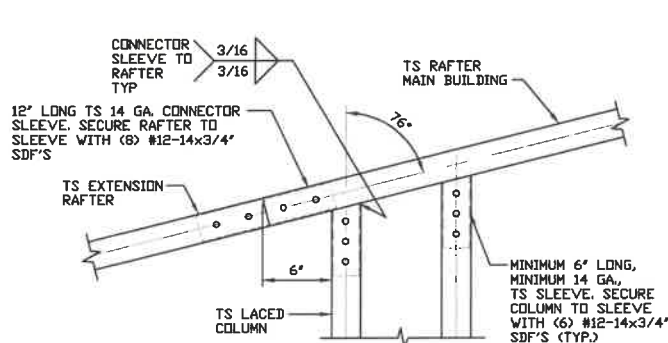
- Left extension callouts: 1, 6, 1C, 6B, 1A, 6A, 1D, 6C, 1B, 6B, 1E, 6C, 2, 7, 3, 9, 3A, 9, 3B, 9.
- Main structure callouts: 12, 12A, 12B, 12, 12, 12.
- Right extension callouts: 13, 12A, 13A, 12A, 13B, 12A, 1, 6, 1C, 6B, 1A, 6A, 1D, 6C, 1E, 6C, 2, 7, 3, 9, 3A, 9, 3B, 9.
- Dimensions: 12, 3, 12, 3, 12, 3.
- Notes: "SEE BELOW FOR MAX. LEAN-TO SPAN", "W ≤ 30'-0" MAXIMUM BUILDING WIDTH", "SEE SHEET 12A FOR MAX. LEAN-TO SPAN".

SCALE: NTS

NOTE: 1. REFER TO SHEET 6 FOR MAIN BUILDING COLUMN HEIGHTS AND TYPES.

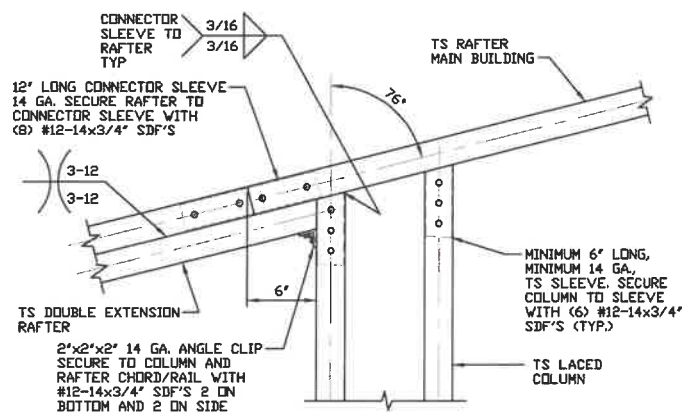
2. LEAN-TO COLUMN SPACING SHALL MATCH MAIN BUILDING.

3. LEAN-TO DETAILS SHOW GENERAL CONNECTION TO COLUMN, APPLICABLE FOR DOUBLE TUBE AND SINGLE TUBE COLUMNS AS WELL.



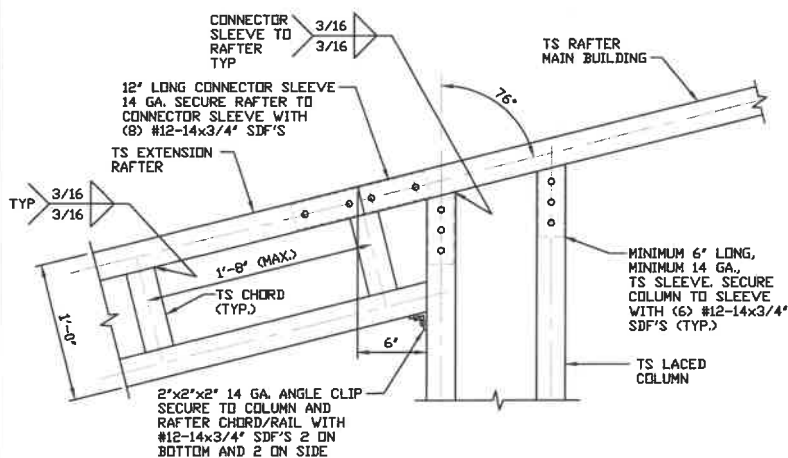
SIDE EXTENSION RAFTER COLUMN
DETAIL FOR SPANS < 10'-0"

SCALE: NTS



SIDE EXTENSION RAFTER
COLUMN DETAIL FOR SPANS
10'-0" < TO < 14'-0"

SCALE: NTS



SIDE EXTENSION RAFTER
COLUMN DETAIL FOR SPANS
14'-0" < TO ≤ 16'-0"

SCALE: NTS

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SCALE: NTS

JOB NO. 25169S

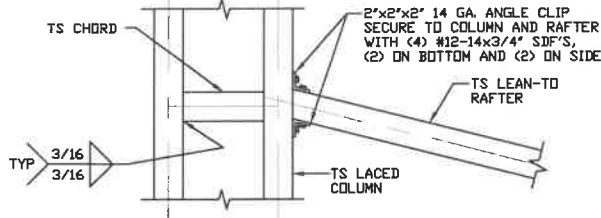
DWG. NO. SK-3

REV: 0

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BOX EAVE STRUCTURE LEAN-TO OPTIONS

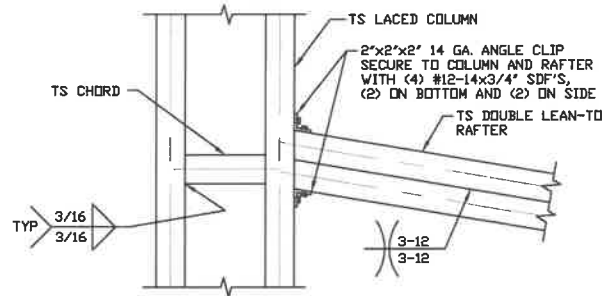
NOTE: LEAN-TO DETAILS SHOW GENERAL CONNECTION TO COLUMN, APPLICABLE FOR DOUBLE TUBE AND SINGLE TUBE COLUMNS AS WELL.



**LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS $\leq 10'-0''$**

13

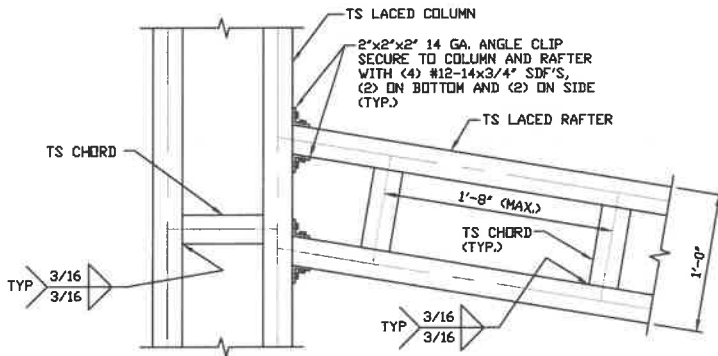
SCALE: NTS



**LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS
 $10'-0'' < TO \leq 14'-0''$**

13A

SCALE: NTS



**LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL
FOR RAFTER SPANS
 $14'-0'' < TO \leq 16'-0''$**

13B

SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

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PROJECT MGR: JRP

CLIENT: OUTLAW METAL
BUILDINGS

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 12A

SCALE: NTS

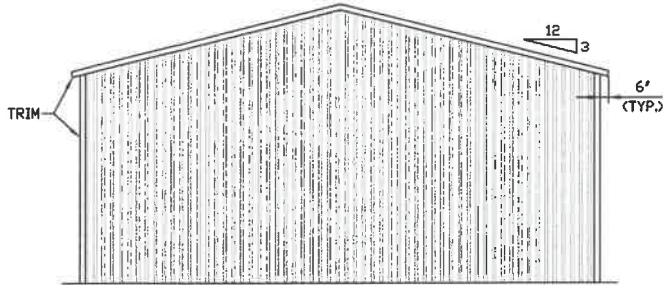
DWG. NO: SK-3

JOB NO: 25169S

REV: 0

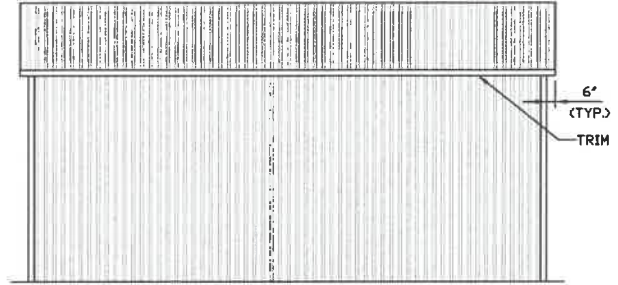
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BOX EAVE STRUCTURE VERTICAL ROOF/SIDING



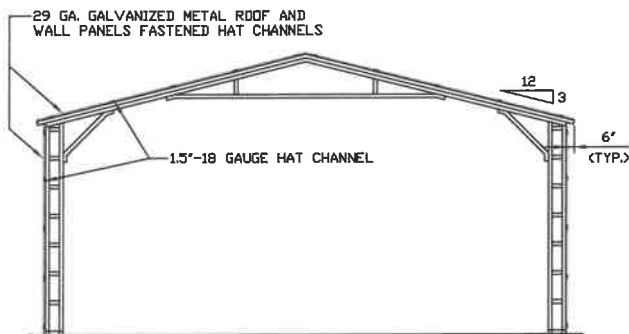
**TYPICAL END ELEVATION
VERTICAL ROOF/SIDING**

SCALE: NTS



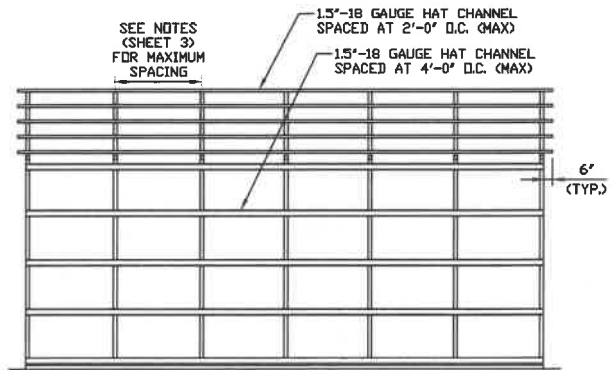
**TYPICAL SIDE ELEVATION
VERTICAL ROOF/SIDING**

SCALE: NTS



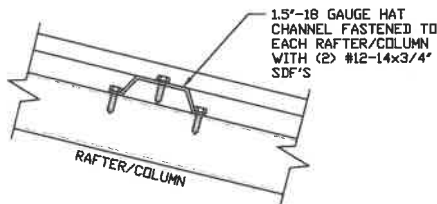
TYPICAL SECTION VERTICAL ROOF/SIDING

SCALE: NTS



TYPICAL FRAMING SECTION VERTICAL ROOF/SIDING

SCALE: NTS



PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS)

SCALE: NTS

Validity Notice

Plans Expiration Date:

24 September 2027

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ENGINEERING AND CONSULTING, INC.**

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BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0" x 20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 13

SCALE: NTS

DWG. NO: SK-3

JOB NO: 25169S

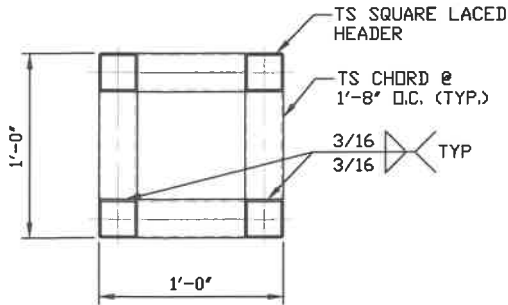
REV: 0

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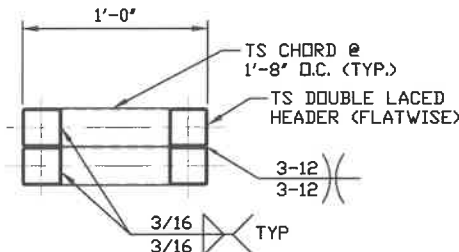
SIDE WALL HEADER OPTIONS FOR TS LACED COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



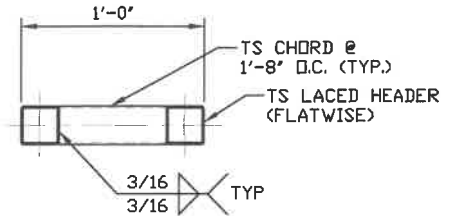
**HEADER DETAIL FOR
9'-0" < LENGTH ≤ 16'-0"**

SCALE: NTS



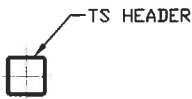
**HEADER DETAIL FOR
5'-0" < LENGTH ≤ 9'-0"**

SCALE: NTS



**HEADER DETAIL FOR
LENGTH ≤ 5'-0"**

SCALE: NTS



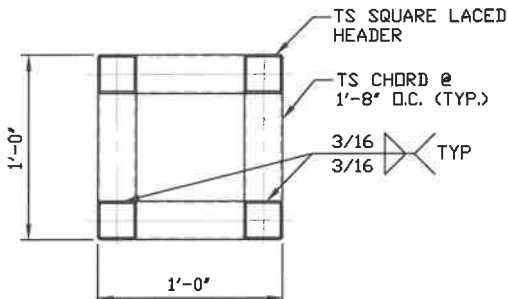
HEADER DETAIL FOR SINGLE TUBE

SCALE: NTS

NOTE: ONLY ALLOWED BETWEEN COLUMNS.

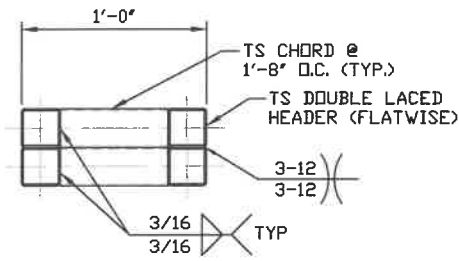
END WALL HEADER OPTIONS FOR TS LACED COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



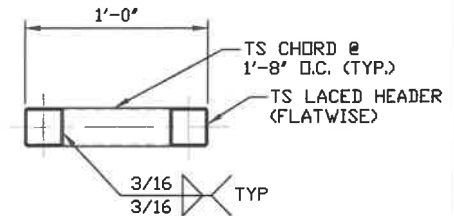
**HEADER DETAIL FOR
15'-0" < LENGTH ≤ 16'-0"**

SCALE: NTS



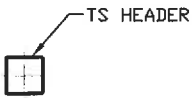
**HEADER DETAIL FOR
7'-0" < LENGTH ≤ 15'-0"**

SCALE: NTS



**HEADER DETAIL FOR
LENGTH ≤ 7'-0"**

SCALE: NTS



HEADER DETAIL FOR SINGLE TUBE

SCALE: NTS

NOTE: ONLY ALLOWED BETWEEN COLUMNS.

Validity Notice

Plans Expiration Date:

24 September 2027

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: JG

CHECKED BY: PDH

PROJECT MGR: JRP

**CLIENT: OUTLAW METAL
BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 14

SCALE: NTS

DWG. NO: SK-3

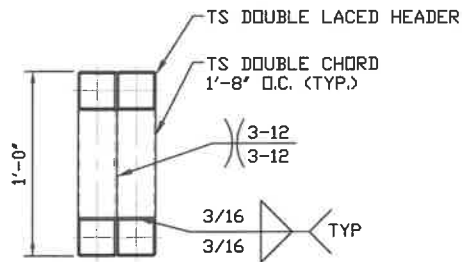
JOB NO: 25169S

REV: 0

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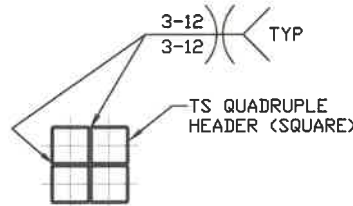
SIDE WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



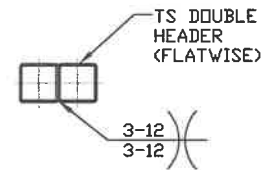
**HEADER DETAIL FOR
9'-0" < LENGTH ≤ 16'-0"**

SCALE: NTS



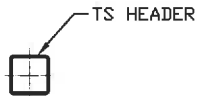
**HEADER DETAIL FOR
5'-0" < LENGTH ≤ 9'-0"**

SCALE: NTS



**HEADER DETAIL FOR
LENGTH ≤ 5'-0"**

SCALE: NTS



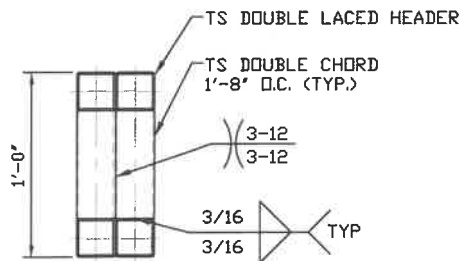
**HEADER DETAIL FOR
SINGLE TUBE**

SCALE: NTS

NOTE: ONLY ALLOWED BETWEEN COLUMNS.

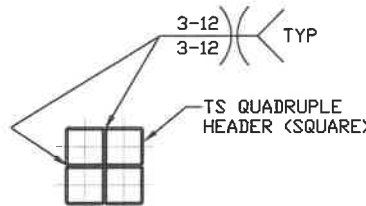
END WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



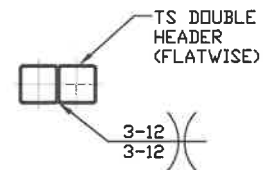
**HEADER DETAIL FOR
14'-0" < LENGTH ≤ 16'-0"**

SCALE: NTS



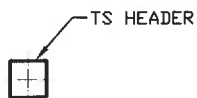
**HEADER DETAIL FOR
9'-0" < LENGTH ≤ 14'-0"**

SCALE: NTS



**HEADER DETAIL FOR
LENGTH ≤ 9'-0"**

SCALE: NTS



**HEADER DETAIL FOR
SINGLE TUBE**

SCALE: NTS

NOTE: ONLY ALLOWED BETWEEN COLUMNS.

Validity Notice

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24 September 2027

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ENGINEERING AND CONSULTING, INC.**

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**CLIENT: OUTLAW METAL
BUILDINGS**

OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0"x20'-0" HIGH SNOW ENCLOSED STRUCTURE

DATE: 9-24-25

SHT. 14A

SCALE: NTS

DWG. NO: SK-3

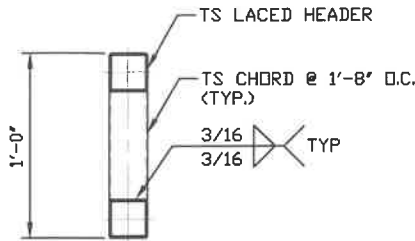
JOB NO: 25169S

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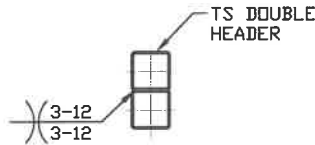
SIDE WALL HEADER OPTIONS FOR TS SINGLE COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



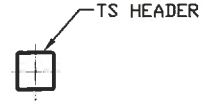
**HEADER DETAIL FOR
5'-0" < LENGTH ≤ 10'-0"**

SCALE: NTS



**HEADER DETAIL FOR
4'-0" < LENGTH ≤ 5'-0"**

SCALE: NTS

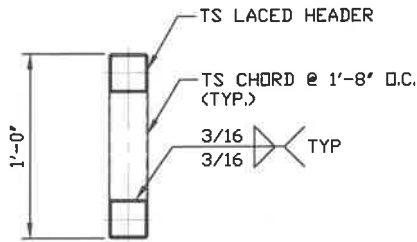


**HEADER DETAIL FOR
LENGTH ≤ 4'-0"**

SCALE: NTS

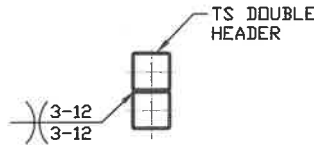
END WALL HEADER OPTIONS FOR TS SINGLE COLUMNS

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



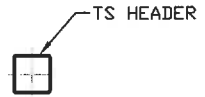
**HEADER DETAIL FOR
11'-0" < LENGTH ≤ 13'-0"**

SCALE: NTS



**HEADER DETAIL FOR
7'-0" < LENGTH ≤ 11'-0"**

SCALE: NTS



**HEADER DETAIL FOR
LENGTH ≤ 7'-0"**

SCALE: NTS

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BUILDINGS**

**OUTLAW METAL BUILDINGS
301 NORTH MAIN STREET, SUITE 2300
WINSTON SALEM, NC 27101
30'-0" x 20'-0" HIGH SNOW ENCLOSED STRUCTURE**

DATE: 9-24-25

SHT. 14B

SCALE: NTS

DWG. NO: SK-3

JOB NO: 25169S

REV: 0

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CITY OF NEW HAVEN

WWW.NEWHAVENMO.ORG
101 FRONT STREET
PO BOX 238
NEW HAVEN, MO 63068



PHONE 573-500-2530

INFO@NEWHAVENMO.ORG

FAX 573-237-4698

VARIANCE OR APPEAL APPLICATION

Please print or type

Applicant Information:

Name: Dave Grannemann Insurance Agency LLC Date: 1-30-26

Address: 465 Charles Cook Plaza

City: New Haven State: MO. Zip Code: 63068

Phone: 573-237-2144 Email: dgrannemann@shelterinsurance.com

Property Information:

Property Address: 429 Charles Cook Plaza New Haven, Mo. 63068

Property Tax ID # 82-3754952

Present Zoning Classification: Comm C-1 Legal Description: Comm Building EB Hammack Add 3 Pt II

Has an application for a building permit been filed with the City Building Official? YES / NO 04-7.35.0-4-003-074,700

Variance/Appeal Process:

1. Submit application, site plan, and fee (\$150). Site plan needs to include:
 - Boundary of the subject property.
 - Adjacent or connecting streets and their names.
 - Building(s) outline and floor area.
 - Parking areas and parking calculations, if applicable.
 - Curb cuts and cross access with adjacent parcels, if applicable.
 - Site features including light standards, trash enclosures, fencing.
 - General location of landscaping.
 - Setback and appropriate yards.
2. Public Hearing for proposed construction and/or use will be published in local newspaper two consecutive weeks prior to Board of Adjustment meeting (4th Tuesday of the month). Application, site plan, and fee must be submitted by the **last day of the prior month** to meet these deadlines.
3. Letters will be mailed to property owners within 200 feet of the property requiring a variance.
4. If a variance is approved, the Board of Adjustment will instruct the Administrator Officer to proceed with the building permit.
5. If a variance is denied, the applicant may appeal to Circuit Court.

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Description of Variance or Appeal Request

List the particular provision or requirement of the zoning code that this variance is being requested for (refer to Code Section).

25 foot from front of lot

Section 405.190(B) Lot coverage

Section 405.190(E) Dimensional Requirements

Describe the special conditions, circumstances or characteristics of the land, building or structure that prevent compliance with the requirements of the zoning code.

Garage / Storage

Description of Variance or Appeal Request

Describe in detail the hardship which would result if the particular requirements of the zoning code were strictly applied to the subject property and to what extent would it be necessary to vary the requirements to permit the proposed construction or use.

Building proximity to utility easement at rear of lot.

Keep front of Building Uniform/consistent at site

How will this construction an/or use affect the character of the surrounding area (lighting, noise, aesthetic changes)?

Won't

How will this construction and/or use affect the traffic conditions of the surrounding area?

Won't

How will this construction and/or use affect the public services (police, utilities, and streets)?

N/A - Won't

Please note: The City reserves the right to require additional information if necessary for evaluation of the permit application

I certify that the information contained herein is complete and accurate to the best of my knowledge.

Please Sign and Date:

Applicant(s) Signature:



Date: 1-30-26

CITY OF NEW HAVEN, MISSOURI

Planning & Zoning • Building Code Enforcement

101 Front Street • New Haven, MO 63090

Phone (573) 500-2530 • info@newhavenmo.org

DECISION OF THE BOARD OF ADJUSTMENT

Applicant:	Dave Grannemann
Address of Subject Property:	429 Charles Cook Plaza, New Haven MO 63068
Zoning District:	C-1
Building Use:	Commercial Storage
Hearing Date:	February 24, 2026

WHEREAS, the Board does find and determine that the property in question, located at 429 Charles Cook Plaza, is within the city limits of the City of New Haven and is located in a C-1, Commercial zoning district: and

WHEREAS, Section 405.190(B) Maximum Lot Coverage is 30%, and Section 405.270 (A) minimum depth of front yard is 25 feet and minimum depth of rear yard is 30 feet, and

WHEREAS, the applicant is requesting a variance from these requirements by proposing a lot coverage of 43% and minimum front yard setback at 3.3' and a minimum rear yard setback at 24.5',

NOW, THEREFORE, BE IT RESOLVED that the request to vary the minimum lot coverage and minimum front yard and rear yard setback is hereby granted, provided that all other ordinances and regulations of the City of New Haven are met. The Building Inspector is hereby directed to issue a building permit for such building as described, in accordance with this Resolution of Decision.

Roll Call Vote:

☐	Aye	☐	Nay	Jim Stiles
☐	Aye	☐	Nay	Gene Juedemann
☐	Aye	☐	Nay	Larry Scheer
☐	Aye	☐	Nay	Russell Dam
☐	Aye	☐	Nay	Vacant

Larry Scheer, Chair

Chapter 405. Zoning Regulations

Article X. Off-Street Parking and Loading Requirements

Section 405.740. Striping.

[Ord. No. 918 §2, 5-1-2008]

- A. All off-street parking shall be properly marked by durable paint in stripes a minimum of four (4) inches wide which extend the length of the parking space.
- B. Double striping may be approved by the Administrative Officer.
- C. In the case of double striping, the distance between the two (2) stripes comprising the double striping shall be twelve (12) inches from the center to center. The vehicular space width of nine (9) feet or twelve (12) feet for handicapped spaces shall be measured between the midpoint of each double striped pair.

Chapter 405. Zoning Regulations

Article X. Off-Street Parking and Loading Requirements

Section 405.745. Construction Standards (Drive Aisles and Parking).

[Ord. No. 918 §2, 5-1-2008; Ord. No. 1051 §7, 3-11-2013]

- A. All ground surface off-street drive aisles and parking shall be constructed to City of New Haven standards. Said drive aisles and parking shall be maintained in a clean, orderly and dust-free condition.
- B. Approved construction materials shall include concrete, asphalt, brick/stone road pavers or other materials of equal quality as approved by the City Engineer.
- C. The parking and loading areas shall be provided with adequate stormwater drainage to prevent damage or inconvenience to abutting property and/or public streets.
- D. Adequate curbing shall be provided as required on the site plan. Concrete curbing shall be required unless waived by the City Engineer.
- E. Upon the effective date of this Subsection (March 11, 2013), construction of new driveways and other off-street parking areas in "R" zoning districts shall be of hard surface material, to include concrete, asphalt, brick/stone road pavers or other materials of equal quality as approved by the Administrative Officer. Gravel and other rock surfacing shall not be permitted.

Section 405.750. Parking Access.

[Ord. No. 918 §2, 5-1-2008]

Parking access shall be designed allowing for a safe and efficient means of vehicular access to and from a street or alley.

Section 405.755. Size.

[Ord. No. 918 §2, 5-1-2008]

- A. Off-street parking spaces shall be designed and sized to accommodate standard sized automobiles in accordance with standards contained herein.
 - 1. Standard sized automobiles — off-street parking spaces for standard size automobiles shall be designed as follows:

PARKING STALL REQUIREMENTS

Parking Angle	Stall Width	Stall Depth	Minimum Aisle
30	9 feet	17 feet 3 inches	12 feet
45	9 feet	20 feet 8 inches	13 feet
60	9 feet	21 feet	18 feet
90	9 feet	19 feet	24 feet

- a. Parallel parking spaces shall be at least twenty-four (24) feet in length.
- b. The minimum one-way aisle shall be twelve (12) feet.
- c. The minimum two-way drive aisle shall be twenty-four (24) feet.

In the event that the desired parking angle is not specified by the previous table, the Administrative Officer may specify other equivalent dimensions associated with the desired parking angle by interpolating from dimensions listed in the table. The Planning and Zoning Commission will review and approve those dimensions which differ from those listed in the table.

Section 405.760. Handicapped Spaces.

[Ord. No. 918 §2, 5-1-2008]

Handicapped spaces shall be required as per this Section. Each space shall be inclusive of the off-street space requirements specified in this Article and shall be marked by an above grade sign. Said sign shall be centered at the interior end of the parking space at a minimum height of forty-eight (48) inches from the bottom of the sign to the parking space finished grade. Handicapped spaces shall be provided as follows:

ACCESSIBLE PARKING SPACES

Total Parking Spaces in Lot	Required Number of Accessible Spaces
Up to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of total
Over 1,000+	20 plus 1 for each 100 over 1,000

Each reserved parking space shall not be less than twelve (12) feet wide. Parking spaces for the physically handicapped shall be located as close to the principal entrances(s) as possible and shall be located so that physically handicapped persons are not compelled to wheel or walk behind parked cars to reach such entrance(s).



Resignation letter

From Felix <fcmesger@gmail.com>

Date Tue 2/10/2026 8:02 PM

To Sarah Skeen <sarah.skeen@newhavenmo.org>

I am officially turning in my resignation on the board of Planing and zoning. The resignation will take place immediately as youth sorts take up a lot of my time. I appreciate the opportunity.

Thanks

Felix Mesger