



1717 S. Boulder, Suite 300 Tulsa, OK 74118  
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**Parallel**  
INFRASTRUCTURE

SHEET TITLE **AZPHU4390 Mobile Neilson Photographic Simulations**  
**Proposed 195' Self Support Tower**

REVISION:  
**A**

SHEET NUMBER:

**1**

LEGAL NOTE:  
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THEY ARE ACTING UNDER THE  
DIRECTION OF A LICENSED  
PROFESSIONAL ENGINEER, TO  
ALTER THIS DOCUMENT.

ISSUED FOR:  
REV. DATE: **A 1/24/17** TITLE SHEET

PROJECT NO: 96592.007.001  
DRAWN BY: JAE  
DATE DRAWN: 1/24/17  
CHECKED BY: GAM





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ISSUED FOR:  
REV. DATES: **A 1/24/17** **Aerial Map with Photo Locations**

PROJECT NO: 96592.007.001  
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Existing View



Photo Simulation of Proposed Tower from 1938' looking SW.





Existing View



Photo Simulation of Proposed Tower from 2173' looking SW.



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VIEW B

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**Existing View**



**Photo Simulation of Proposed Tower from 2850' looking SW.**



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VIEW C

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Existing View



Photo Simulation of Proposed Tower from 3540' looking NE.



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Existing View



Photo Simulation of Proposed Tower from 1990' looking NE.

## PHOTO SIMULATION METHODOLOGY

The process used to generate the enclosed photo simulation is a quantitative approach, which precisely creates the effect or anticipated visual impact of proposed tall structures.

The computations utilized to prepare the simulation are based on the theory of photogrammetry, which is the science of measurement by means of photographs. The scale and position of objects in photographs vary according to the distance and position of the corresponding actual objects relative to the camera. The photogrammetric relationship between height and distance is an inverse proportionate relationship.

When necessary, both horizontal and oblique photographs are utilized to control the accurate placement of the simulated tall structure within the target photograph.

Both reference photographs and target photographs are produced utilizing a fixed 50 mm camera lens and 35mm camera. A 50 mm camera lens is used because when combined with a 35 mm film format, it is considered to best approximate the viewpoint of the human eye.

The procedure utilized to produce our photo simulations is listed below:

- Reference photographs are taken of existing similar tall structures with known or measured heights, at a known distance from the tall structure.
- Target photographs are taken of the proposed tall structure location from various points of interest. Hand Held GPS is used to determine the distance from the camera lens to the proposed tall structure location.
- Digital photographs are up-loaded into an image-editing program, which is utilized to generate the photo simulation.
- Based on reference photograph and target photograph intelligence, the pictorial height and placement of the simulated tall structure is calculated and placed within the target photograph.



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REV.      DATE      DESCRIPTION  
A 1/24/17      PHOTO SIMULATION METHODOLOGY

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