



DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

Planning Division

m e m o r a n d u m

TO: Urbana Plan Commission

FROM: Jeff Engstrom, AICP, Interim Manager

DATE: January 16, 2015

SUBJECT: Plan Case 2242-T-14: An amendment to Articles IX and XI of the Urbana Zoning Ordinance to establish regulations for Digital Outdoor Advertising Sign Structures, Urbana Zoning Administrator, applicant.

Introduction

At the December 18, 2014 meeting of the Urbana Plan Commission, the Commission held a public hearing on Plan Case 2242-T-14, regarding Digital Outdoor Advertising Sign Structures (OASS). The case was continued to the January 8, 2015 meeting of Plan Commission. At that meeting, the Commission asked staff to address additional issues and present their findings at the next Plan Commission meeting. Staff has researched these issues and has addressed them below. In addition, some issues have resulted in modifications to the proposed text amendment, as attached in Exhibit A.

Brightness Levels

Plan Commission members had additional questions related to light levels. The questions focused on how the proposed light limits of 0.3 foot candles above ambient light levels would affect nighttime vision and what that limit would look like in real life. The question was asked if Champaign has the same light level limit and enforcement technique as proposed for Urbana.

The enforcement technique staff is proposing to use consists of taking a measurement of ambient light levels with the digital billboard turned off, and then again with the billboard display all white. Measurements are taken from 150 feet away from the face of the billboard. The difference between the two levels may not exceed 0.3 foot candles. Staff has spoken with the City of Champaign to find out what their light level limits are. Champaign does not have a quantified light limit. Instead, they require billboard brightness to match ambient brightness. Champaign staff has not received any complaints about digital billboard brightness. However Champaign's staff did note that digital billboards are only allowed along commercial corridors, which have a higher level of ambient brightness.

Urbana staff has measured the brightness of digital billboards in two locations in Champaign. These locations are the north side of University Avenue, just west of Sixth Street, and the east side of Neil Street, just south of Charles Street. Staff was unable to take brightness readings with the signs turned off, but we do have the ranges of brightness of the advertisements. At the Neil Street billboard, brightness levels varied from 0.21 to 0.29 foot candles. This includes all of the ambient light, such as street lights, as well as light from the billboard. At the corner of University Avenue and Sixth Street, brightness levels varied from 1.20 to 1.33 foot candles. This area had a much brighter level of ambient brightness, with more street lights, business signs, and traditional billboards. These measurements were taken from 7:10 to 7:30 PM, more than two hours after sunset. Photos of the two billboards are attached as Exhibit C.

From these readings staff has learned a few lessons. At the darker site along Neil Street, the overall light level did not exceed 0.29 foot candles. One of the ads at this site (for Houlihan's) had yellow text on a white background, which is near full brightness. Even if the surroundings had been fully dark, the light level from this billboard would not have exceeded the proposed 0.3 foot candle limit. One of the signs was about half black, and the light level measured with that sign was 0.21 foot candles. So the range of brightness for a typical billboard is approximately 0.1 foot candles.

Staff believes that the ambient brightness along Urbana's commercial corridors is generally brighter than this site and that the University Avenue site represents a better approximation of what a digital OASS would look like in Urbana. The University Avenue site brightness values ranged from 1.20 to 1.33, but this fluctuation could have included headlights from passing cars. Ads on this sign did not have as wide of a range as those on the Neil Street sign. For both sites, the digital billboards were not the brightest light sources in the field of view. Street lights, headlights, business signs, and private property/parking lot lighting all appeared to be brighter than the digital OASS. Traditionally lit OASS did appear to be less bright. Based on the readings taken at both sites, the currently proposed maximum brightness level of 0.3 foot candles above ambient levels appears to be reasonable. The proposed limit and measurement distance would match existing limits for electronic message boards in the Zoning Ordinance.

Photos of the digital billboard sites are attached to this memo. Please note that the camera adjusts exposure for the overall brightness level and displays images at a much higher contrast level than what the human eye sees. The best way to judge the brightness level of these signs is to observe it as a passenger in a vehicle driving by. Staff is working with Adams Outdoor Advertising to set up a demonstration to Plan Commission of what the signs look like at full brightness compared to when they are turned off.

OASS Violation Fines

The Plan Commission asked for the language regarding fines to be clarified to state that fines are to be issued for each day that a sign or OASS is in violation of the proposed standards. Staff has incorporated this change into the draft ordinance. This clarification is in harmony with the existing language of Section XI-9.A.5. Violations are issued based on whether a sign or OASS is in conformance with brightness, hold time, or other regulations. The sign or OASS itself would be

considered in violation if any of its constituent advertisements are out of conformance, and one violation ticket per day would be issued to the operator of the sign or OASS until the violation is corrected.

Fees

Plan Commission has recommended that digital OASS structures should generate revenue for the City to contribute to upkeep of the roads they depend on for viewers and to cover the staff cost of administering the proposed regulations. Staff has found that some cities charge a personal property rental tax that applies to billboards. These taxes are generally in the 2% to 8% range. Other cities require annually renewed licenses. These types of programs would be separate from the Zoning Ordinance. Staff can investigate the possibility of such fees during Council's annual review of licenses and fees if so directed.

Interstate vs. Local Roads

The Commission asked whether the safety studies staff has referenced included local roads as well as highways. Two of the studies staff looked at included local roads in addition to highways. The Federal Highway Administration 2013 study included both highways and arterial streets in Richmond, Virginia and Reading, Pennsylvania. In both cities, it was found that drivers look more at digital billboards from arterials than they did from highways. The University of Toronto study referenced by the APA policy document discusses traffic signals, which implies inclusion of arterial streets. That study found that traffic signals and digital billboards were equally distracting.

Impact on Bicyclists and Pedestrians

Plan Commission members asked if there have been any studies to measure the effects of digital billboards on pedestrian and bicyclist safety. Staff has consulted with the transportation engineers at the City and other resources and could not identify any studies that address the issue with such specificity. Traffic safety studies speak to the overall distraction level of billboards and digital billboards, and these results would apply to the safety of drivers as well as nearby pedestrians and bicyclists. The City Engineer has also consulted with the Illinois Department of Transportation, and they are not aware of any particular studies that state billboards are more impactful than other driver distractions.

Limitations on Advertisers

The Commission had a question about limitations on advertisers. Specifically, can the City prohibit digital billboard operators from turning down potential customers based on the content of their message? Staff is working with the City Attorney in order to answer this question and will present that answer at the January 22, 2015 Plan Commission meeting.

Practical Effect of Proposed Regulations

Plan Commission members asked for staff to explain the practical effect of the proposed regulations on Urbana's billboards. How many could conceivably be converted to digital under the given buffer and removal ratio requirements? Staff has attached a map, labeled Exhibit B, showing the maximum number of existing OASS that could be converted to digital. These converted OASS are shown as

green on the map. The red dots represent existing OASS that would have to be removed in order to accommodate the conversion of the OASS designated in green. Blue dots represent existing OASS that would remain. Under this particular scenario, up to 17 billboard faces on 10 structures could be converted to digital. In order to accomplish this, 49 total faces would need to be removed, resulting in a net reduction of 32 faces. However, this scenario is just one possible implementation of digital billboards in Urbana. If new OASS structures were to be built, the number of possible configurations is virtually limitless. Also, given the cost of digital OASS and limited number of high-traffic areas, it is unlikely that more than a few digital OASS would ever be installed in the City. Adams Outdoor Advertising has indicated to staff that they are interested in installing up to three digital OASS in Urbana.

Staff Recommendation

Based on the additional research presented in the discussion above, and without the benefit of considering additional evidence that may be presented at the continued public hearing, staff recommends that the Plan Commission recommend **APPROVAL** of the proposed text amendment to the Zoning Ordinance as revised and presented here in Exhibit A.

cc: Cain Kiser, Adams Outdoor Advertising

Attachments:

Exhibit A: Revised Digital Billboard Ordinance Proposed Text Amendments

Exhibit B: Map of Potential Digital OASS Replacement Locations

Exhibit C: Photos of Existing Digital OASS in Champaign

Section IX-2:

F. *Digital Outdoor Advertising Sign Structure (Digital OASS):* An OASS with an electronic display capable of displaying changeable copy, controlled by programming or electronic communications.

Section IX-6:

E. *Digital OASS.* Digital OASS shall be allowed only in conformance with the following provisions:

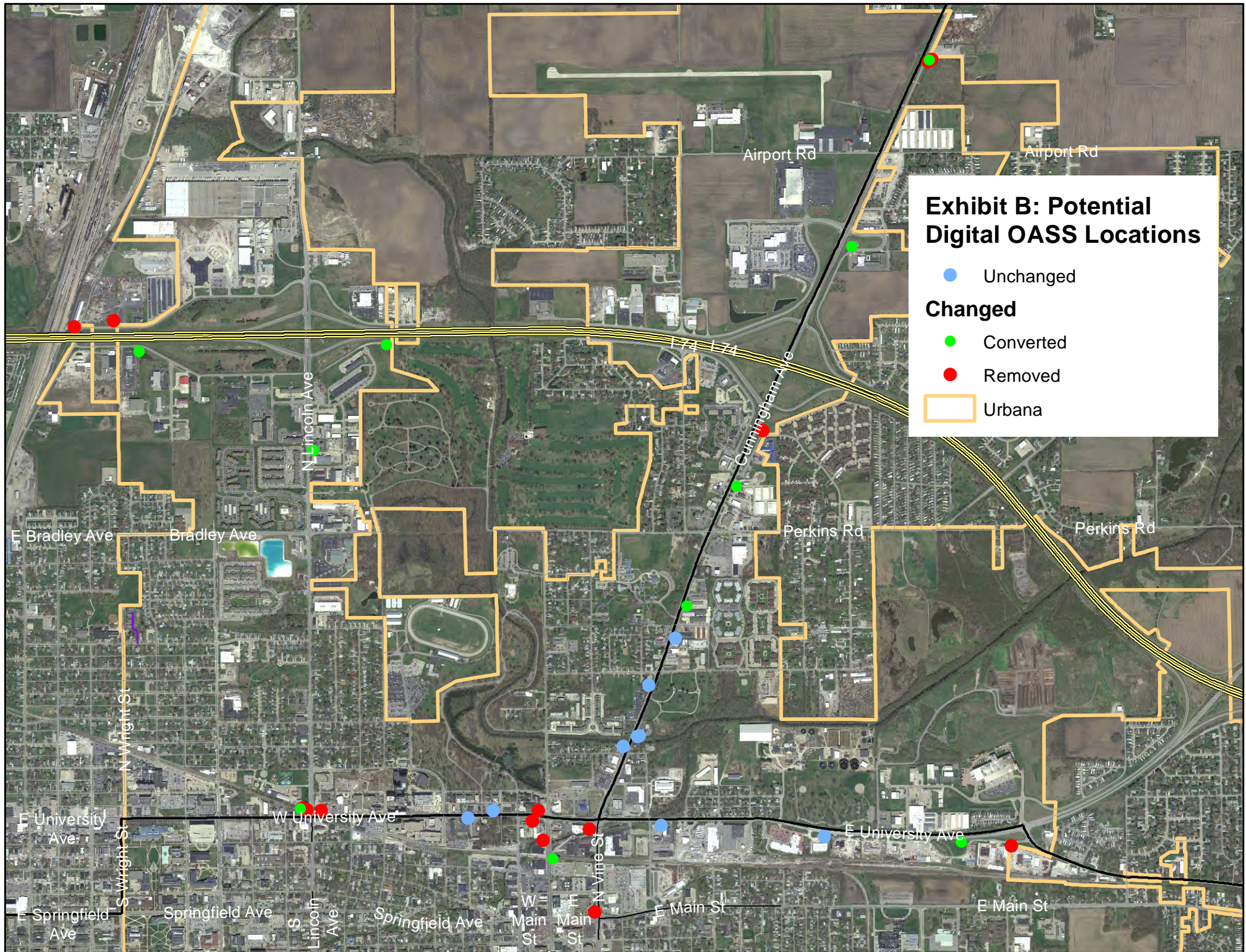
1. *Permit Required.* Digital OASS, including those where the Digital OASS is replacing the display area of a previously existing OASS, shall meet all requirements for a new OASS and shall require issuance of a new OASS permit in conformance with Section IX-6.C and IX-6.D.
2. *Existing Sign Removal.* New Digital OASS shall only be allowed upon removal of existing OASS display area. OASS to be removed shall be identified at the time of the application and removed prior to installation of the new Digital OASS. Existing signage to be removed shall be credited toward the new Digital OASS under one of the following provisions, at the following proportions. Where more than one of the following cases apply, the replacement provisions shall not be cumulative.
 - a. For every two square feet of OASS display area removed from properties in the B-4, Central Business district, one square foot of Digital OASS display area may be installed.
 - b. For every two square feet of OASS display area removed from lots containing a cluster of more than one OASS face, one square foot of Digital OASS display area may be installed. A lot with only one set of back-to-back OASS faces shall not qualify for this provision. The cumulative area of all faces shall count towards the replacement.
 - c. For every three square feet of OASS display area removed from OASS that do not meet other requirements of Section IX-6.D, one square foot of Digital OASS display area may be installed.
 - d. For every four square feet of OASS display area removed from any other OASS, one square foot of Digital OASS display area may be installed.
3. *Animation, Effects and Image Change Time.* Digital OASS shall not contain video, animated transitions, or otherwise be animated as defined by Section IX-2. Display images shall have a change frequency of no more than once every three minutes. Displays shall not utilize 3-D effects, optical illusions, or any other technology intended to give the appearance of motion or depth.
4. *Illumination.* Digital OASS shall conform to the illumination requirements of Section IX-4.C.4. Digital OASS shall be controlled by a dimmer switch to automatically reduce the level of brightness to no more than 0.3 footcandles above ambient light levels at any time of day, measured from 150 feet away.
5. *Emergency Override.* Digital OASS shall be directly connected to the Metropolitan Computer-Aided Dispatch system (METCAD) in order to allow emergency dispatchers to override the programmed message and display an emergency bulletin. The Director of METCAD or the Director's designee shall have authority to authorize such an override. Examples of an emergency justifying such override would be broadcasting from the Statewide "Yellow Alert" system regarding abducted children or imminent weather bulletins where the other aspects of the emergency broadcast system (sirens, cable override) are activated.

6. Malfunctioning Digital OASS. All Digital OASS shall contain a mechanism that will display a default message at a lowered brightness level In the event of a malfunction.
7. Traffic Signal Visibility. Digital OASS shall not be placed such that they interfere with motorist visibility of traffic signal as determined by the City Engineer.

Section XI-9:

C. *Minimum Fine Schedule for Certain Violations*

1. The minimum fine for parking in violation of Section VIII-4 is \$25.
2. The minimum fine for displaying a temporary sign in violation of Section IX-7 is \$25.
3. The minimum fine for displaying an electronic sign that is animated as defined in Section IX-2 or changes display more frequently than allowed by Section IX-4 is \$50. Each day which the violation occurs or continues shall be considered a separate violation.
4. The minimum fine for displaying a digital OASS that is animated as defined in Section IX-2, or otherwise does not comply with the brightness, hold time, or any other requirement of Section IX-6 is \$100. Each day which the violation occurs or continues shall be considered a separate violation.



South Neil Street in Champaign



West University in Champaign

