

# PLANNING COMMISSION STAFF REPORT

## AMENDMENTS TO CHAPTER 21A.40.120: Regulation of Fences Walls and Hedges Case #PLNPCM2010-00300 August 11, 2010



Planning and Zoning  
Division  
Department of Community  
and Economic Development

### Applicant

Sentry Security Systems

### Staff

Ray Milliner [.milliner@slcgov.com](mailto:milliner@slcgov.com)  
(801)535-7645

### Current Zone

N/A

### Master Plan Designation

N/A

### Council District

City Wide

### Lot Size

N/A

### Current Use

Not allowed

### Applicable Land Use Regulations

21.40.120 – Regulation of Fences,  
walls and Hedges

### Notice

- Notice mailed on July 22, 2010
- Published in Deseret News July 22,  
2010
- Posted on City & State Websites  
July 22, 2010

### Attachments

- A. Public Comment
- B. Department Comments
- C. Packet of Information from  
Applicant

## REQUEST

The applicant, Sentry Security Systems, represented by Michael Pate is requesting an amendment to Chapter 21A.40.120 of the Zoning Ordinance that would create language to allow electric security fences within Salt Lake City. Currently this type of fence is not allowed.

## STAFF RECOMMENDATION

Staff recommends that the Planning Commission review the proposed modifications to Chapter 21A.40.120 to allow electric security fences in certain zones as an **issue only item** conduct a public hearing and provide staff with direction.

Staff is not requesting a decision by the Planning Commission at this meeting. The matter will be scheduled for a future Public Hearing with a formal recommendation.

## Background

The applicant, Sentry Security Systems, represented by Michael Pate, is requesting a zoning ordinance text amendment to allow electric security fences in the zoning ordinance. In 2009, the applicant applied for a permit to install one of these fences at 1135 Pioneer Road. The application was reviewed by the staff, which made the following conclusions.

- The electric security fencing reviewed by staff pulses 7,000 volts of electricity through the fence every 1.3 seconds for a fraction of a second. The fence is powered by a 12 volt marine battery.
- The electric security fence is ten feet (10') tall with 20 horizontal strands of electrified wire and is intended to be constructed behind a typical boundary fence.
- The Salt Lake City Zoning Ordinance does not specifically address electric security fences in Chapter 21A.40.120 Regulation of Fences, Walls and Hedges
- Chapter 21A.40.120 specifically regulates barbed wire (21A.40.120.I) and razor wire (21A.40.120.J) fences. The fencing provisions limit the use of barbed wire and razor wire fencing to a limited number of zoning districts and include specific conditions for the use of such fencing.
- The purpose statement under 21A.12 Administrative Interpretations recognizes that the Zoning Ordinance is detailed and extensive but cannot, as a practical matter, address every specific situation to which the Zoning Ordinance may have to be applied. In situations such as this, interpretations of specific provisions of the Zoning Ordinance are allowed to be made by the Zoning Administrator.

Pursuant to these findings, the Zoning Administrator found that the proposed electric fence is not an allowed use under the current regulations of the Ordinance. These findings and his decision were forwarded on to the applicant, who appealed them to the Board of Adjustment. On January 25, 2010, the Board of Adjustment heard the case, and upheld the Zoning Administrator's decision (staff report and decision included as exhibit 6 of the applicant packet). Following the Board of Adjustment action, the applicant filed the amendment petition now before the Planning Commission.

## ***Public Participation***

This application was reviewed at a public open house on July 15, 2010. One individual provided comment. Comment attached as exhibit A. To date, no other written or verbal comment has been received.

## ***Summary of Proposed Code Changes***

The following is a synopsis of the changes proposed by Sentry Security Systems:

- A. The construction and use of electric fences shall be allowed in the city only as provided in this section, subject to the following standards.
  1. IEC standard 60335-2-76: unless otherwise specified herein, electric fences shall be constructed or installed in conformance with the specifications set forth in International Electro technical Commission (IEC) Standard No. 60335-2-76.

2. Electrification:

- a. The energizer for electric fences must be driven by a commercial storage battery not to exceed 12 volts DC. The storage battery is charged primarily by a solar panel. However the solar panel may be augmented by a commercial trickle charger.
- b. The electric charge produced by the fence upon contact shall not exceed energizer characteristics set forth in paragraph 22.108 and depicted in Figure 102 of IEC Standard No. 60335-2-76.

3. Perimeter Fence or Wall:

- a. No electric fence shall be installed or used unless it is completely surrounded by a non-electrical fence or wall that is not less than six feet.

4. Location: Electric fences shall be permitted on any non-residential outdoor storage areas.

5. Height: Electric fences shall have a height of 10 feet.

6. Warning Signs: Electric fences shall be clearly identified with warning signs that read: "Warning-Electric Fence" at intervals of not less than sixty feet.

7. Electric fences shall be governed and regulated under burglar alarm regulations and permitted as such.

8. It shall be unlawful for any person to install, maintain or operate an electric fence in violation of this section.

**Analysis:** The applicant has submitted this application with the intent of enabling an electric security fence at one site in the M-1 zone. Nevertheless, the proposed changes would have a wide ranging impact on a large portion of the City as the proposed language would allow these fences in "any non-residential outdoor storage area" therefore; the language would allow these fences in most non-residential zones.

The applicant argues that the use of electric fences is a safe and effective way for property owners to protect their assets and employees, that the fences are technologically advanced and that the proposed language would protect individuals from physical harm.

## **Issue**

Staff is requesting that the Planning Commission review the proposed language and provide direction as to whether or not electric security fences are an appropriate use for Salt Lake City. If approved, the language would allow the fences throughout the commercial zones of the City. Currently, most warehouses and storage areas in the City are protected by tall fences with barbed wire, and security guards. With the exception of the above mentioned case, staff has received very few requests for permits for electric fences.

Central in the discussion of electric security fences is the issue of aesthetics. If approved, these fences would create a “fortress” appearance around a property with a ten foot tall wire fence, and a 6 foot tall secondary fence. This type of fencing dramatically changes the appearance of a building or site, by immediately indicating it is off limits to anyone but those who are invited. Staff is requesting that the Planning Commission provide direction as to whether or not this type of fence is appropriate in Salt Lake City, and if so, in which zones it would be allowed.

Information provided by the City Police Department indicates that they are in favor of electric security fences, as they provide additional security and protection for expensive equipment. It is stated that the initial perimeter fence would provide sufficient safety to citizens, while providing an additional deterrent.

## **Design**

Research indicates that electric fences are designed to create an electrical circuit when touched. A component called a power energizer (in the case of the proposed language, a battery) converts power into a brief high voltage pulse. One terminal of the power energizer releases an electrical pulse along a connected bare wire about once per second. Another terminal is connected to a metal ground rod. A person or animal touching the wire and the ground simultaneously will complete an electrical circuit and conduct the pulse, causing a painful electric shock.

The primary object of an electric security fence is not to shock an intruder or trespasser, but to persuade them that it is not worth the trouble to try to get onto the property in the first place. This "lethal look" creates an illusion that the fence appears to be ready to kill, harm, hurt, or maim. Information provided by the applicant indicates that in spite of their appearance, the fences proposed are designed to be non-lethal and will administer pain or harm equivalent to a hard stinging slap (see exhibit 4 of the applicant information packet attachment C). Nonetheless, the lethal look is a very important component in the security feature of the fence

The proposed language requires that the electric fence be surrounded by a non-electric fence that would act as a deterrent and protection from innocent people touching the electrified section. The electric fence would be 10 feet tall, 4 feet higher than is currently allowed, and would be built from metal, while the perimeter fence would be at least 6 feet tall. Over a large area, this type of fence would be extremely visible from many vantage points.

## **Type**

As written, the proposed language would allow one type of security fence. Nonetheless, there are a number of different styles, types and technologies in the electric security fence industry that may be just as appropriate as the type proposed in the language. The following are types of fences that would not be allowed under the proposed regulations:

- Electric fence extension on top of a cement block wall, eliminating the need for a secondary perimeter fence.
- Electric fences in agricultural areas around pastures and corrals to control livestock.
- Electric fences around the top of a building on a parapet wall.

- Electric fences to control wild animals (keep deer out of gardens etc.).

## **Zone**

Currently the language would allow the use in all non-residential storage areas. This would cover most of the City, as storage is allowed in most commercial zones.

## **Discussion**

Staff requests that the Planning Commission review the proposal and provide staff with direction on the following questions:

- Are the security benefits of the fences greater than the visual costs?
- Should electric security fences be reviewed as conditional uses?
- What changes, if any, are needed to the proposed language?
- Should electric security fences be allowed in all commercial zones? If not, which zones would be appropriate?

***Attachment A***  
Public Comments

**OPEN HOUSE  
PUBLIC COMMENT FORM  
Zoning Ordinance Amendment  
July 15, 2010**



Planning and Zoning Division  
Department of Community and  
Economic Development

**Proposal to allow create language allowing electric security fences in  
Chapter 21A.40.120 of the Salt Lake City Zoning Ordinance.**

Name: Cindy Cromer

Address: 816 E 100 S

SLC Zip Code 84102-4109

Phone: 801 209-9225 E-mail 3cinslc@live.com

Comments: ① Need photographs of fence and  
relationship to surrounding fence

② Need documentation of risk w/o  
electric fence (In other words, prove  
that <sup>the</sup> existing ordinance does not allow  
fencing adequate to protect the property.)

③ How would fencing be deactivated  
if police responded?

Please provide your contact information so we can notify you of other meetings or hearings on this issue. You may submit this sheet before the end of the Open House, or you can provide your comments via e-mail at [ray.milliner@slc.gov](mailto:ray.milliner@slc.gov) or via mail at the following address: Ray Milliner, Salt Lake City Planning Division, and PO Box 145480, Salt Lake City, UT 84114-5480. Please provide your comments by August 1, 2010.



***Attachment B***  
Department Comments



# Work Flow History Report

## PLNPCM2010-00300

Date	Task/Inspection	Status/Result	Action By	Comments
5/18/2010	Staff Assignment	In Progress	Irvin, Thomas	
5/20/2010	Staff Assignment	Assigned	Coffey, Cheri	
5/21/2010	Staff Assignment	Assigned	Milliner, Ray	
5/21/2010	Staff Assignment	Routed	Milliner, Ray	
5/26/2010	Engineering Review	Complete	Drummond, Randy	We have no concerns regarding this zoning text amendment.
5/26/2010	Public Utility Review	Complete	Stoker, Justin	We have reviewed the proposed application and have no comments on the matter.
6/3/2010	Transporation Review	Complete	Walsh, Barry	require that the Elec fence be fully enclosed with a wall or fence that allows on site staging prior to entry of premiter barrier. we recommend that a minimum buffer be noted between the barrier and elec fence / BDW
6/8/2010	Zoning Review	Complete	Butcher, Larry	Electric security fence would exceed maximum height allowance in any required yard areas. Two fences are shown in the installation details.
7/9/2010	Community Open House	In Progress	Milliner, Ray	Scheduled for open house on July 15, 2010
7/9/2010	Planning Dept Review	Complete	Milliner, Ray	

Ray,

Regarding the electric fence mentioned in the above case, I recognize the security benefit realized by its usage. It sounds like there is another boundary fence that must first be defeated before one would be exposed to the electric fence. This outer perimeter fence is an extra measure of security and would go a long way to prevent accidental exposure to the inner electric fence. I see the benefits of this feature as it will assist in impeding or denying access to an area containing expensive equipment.

Thanks,

Lt Rich Brede  
SLCPD Fusion Division  
801-799-3180  
[.Brede@slcgov.com](mailto:Brede@slcgov.com)

***Attachment C***  
Applicant Packet