

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/CS/HB 241 Low-voltage Electric Fences

SPONSOR(S): Local, Federal & Veterans Affairs Subcommittee; Agriculture & Property Rights Subcommittee; Williamson and others

TIED BILLS: **IDEN./SIM. BILLS:** CS/CS/SB 190

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture & Property Rights Subcommittee	14 Y, 0 N, As CS	Thompson	Smith
2) Local, Federal & Veterans Affairs Subcommittee	12 Y, 0 N, As CS	Darden	Miller
3) Commerce Committee	28 Y, 0 N	Thompson	Hamon

SUMMARY ANALYSIS

The Florida Building Code, ch. 553, Part IV, F.S., is intended to create a single source of uniform standards for all aspects of construction statewide. Included in the Building Code is a uniform system for the installation permitting of low-voltage alarm systems (a device used to signal or detect a burglary, fire, robbery, or medical emergency).

The bill expands current law regarding the streamlined installation permitting of low-voltage alarm systems to include low-voltage electric fences. Specifically, the bill:

- Defines “low-voltage electric fence” as an alarm system, as defined in s. 489.505, F.S., that consists of a fence structure and an energizer powered by a commercial storage battery not exceeding 12 volts which produces an electric charge upon contact with the fence structure;
- Adds “new or existing low-voltage electric fence” to the types of projects that constitute a low-voltage alarm system project; and
- Adds “closed-circuit television systems,” “access controls,” and “battery recharging devices” to the types of ancillary components or equipment attached to a low-voltage alarm system.

The bill requires a low-voltage electric fence to meet all of the following requirements to be permitted as a low-voltage alarm system project, and prohibits any further permitting for the low-voltage alarm system project other than as provided in s. 553.793, F.S.:

- Must not produce an electric charge that exceeds specified international energizer characteristics;
- Must be completely enclosed by a nonelectric fence or wall;
- May be up to 2 feet higher than the perimeter nonelectric fence or wall;
- Must be identified using warning signs attached to the fence at intervals of not more than 60 feet;
- May not be installed in an area zoned exclusively for single-family or multi-family residential use; and
- May not be used to enclose portions of the property used for residential purposes.

The bill does not appear to have a fiscal impact on state government. The bill may impact local governments to the extent they currently charge a permitting fee for installing low-voltage electric fences.

The bill has an effective date of July 1, 2017.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

The Florida Building Code and Local Enforcement Agencies

The Florida Building Code, ch. 553, Part IV, F.S., applies statewide to all construction. The intent of the Florida Building Code is to create a single source of uniform standards for all aspects of construction. The Florida Building Commission is responsible for its general administration. With certain exceptions, state and local agencies can enforce the Florida Building Code.

A “local enforcement agency” is an agency of local government, a local school board, a community college board of trustees, or a university board of trustees in the State University System with jurisdiction to make inspections of buildings and to enforce the codes which establish standards for design, construction, erection, alteration, repair, modification, or demolition of public or private buildings, structures, or facilities.¹

Alarm System Contractors

Part II of ch. 489, F.S., regulates electrical and alarm system contracting.² The Electrical Contractors’ Licensing Board within DBPR generally handles the licensing and regulation of electrical and alarm system contractors.³

Low-Voltage Alarm Systems

Florida defines an “alarm system” as any electrical device, signaling device, or combination of electrical devices used to signal or detect a burglary, fire, robbery, or medical emergency.⁴ A “low-voltage alarm system project” is a project related to the installation, maintenance, inspection, replacement, or service of a new or existing alarm system, and attached ancillary components, that is hardwired and operating at low voltage.⁵

Uniform state law streamlines the permitting process for the installation of low-voltage alarm system projects.⁶ Generally, the law authorizes licensed electrical and alarm system contractors to purchase uniform basic permit labels (permits) from the local enforcement agencies without requiring detailed information about the project, and exempts the contractor from having to notify the local enforcement

¹ s. 553.71(5), F.S.

² s. 489.505(2), F.S., defines an “alarm system contractor I” as an alarm system contractor whose business includes all types of alarm systems other than fire, for all purposes, except as herein provided. Section 489.505(7), F.S. defines a “certified alarm system contractor as an alarm system contractor who possesses a certificate of competency issued by the Department of Business and Professional Regulation (DBPR). The scope of certification is limited to alarm circuits originating in the alarm control panel and equipment governed by the applicable provisions of Articles 725, 760, 770, 800, and 810 of the National Electrical Code, Current Edition, and National Fire Protection Association Standard 72, Current Edition; and the installation, repair, fabrication, erection, alteration, addition, or design of electrical wiring, fixtures, appliances, thermostats, apparatus, raceways, and conduit, or any part thereof not to exceed 98 volts (RMS), when those items are for the purpose of transmitting data or proprietary video (satellite systems that are not part of a community antenna television or radio distribution system) or providing central vacuum capability or electric locks; however, this provision governing the scope of certification does not create any mandatory licensure requirement.

³ s. 489.507, F.S.

⁴ s. 489.505(1), F.S.

⁵ s. 553.793(1)(b), F.S., incorporating by reference “low voltage” as defined in the National Electrical Code Standard 70, Current Edition.

⁶ s. 553.793, F.S.

agency of the details of a job prior to installation.⁷ Contractors have 14 days after completion of a project to submit a Uniform Notice of a Low Voltage Alarm System Project to the local enforcement agency.⁸ The local enforcement agency is then authorized to coordinate directly with the property owner or customer for inspection.⁹

Specifically, the law:

- Applies to all low-voltage alarm system projects for which a permit is required by a local enforcement agency;¹⁰
- Authorizes local enforcement agencies to determine whether to require permitting for low-voltage alarm systems;¹¹
- Prohibits local enforcement agencies from charging more than \$40 for a permit;¹²
- Prohibits local enforcement agencies from requiring any other charge associated with the installation or replacement of a new or existing hardwired, low-voltage alarm system;¹³
- Requires the permits to be valid for one year from the date of purchase;¹⁴
- Requires the permits to only be used in the jurisdiction where they are issued;¹⁵
- Prohibits a local enforcement agency from requesting any information for issuance of permits for purchase by a contractor other than identification information, proof of registration, or certification as a contractor;¹⁶
- Requires a contractor to post an unused permit in a conspicuous place on the premises of the low-voltage alarm system project site before commencing work on the project;¹⁷
- Exempts a contractor from notifying the local enforcement agency before commencing work on a low-voltage alarm system project;¹⁸
- Requires a contractor to submit a Uniform Notice of a Low-Voltage Alarm System Project to the local enforcement agency within 14 days after completing the project;¹⁹
- Authorizes a local enforcement agency to take disciplinary action against a contractor who fails to timely submit a Uniform Notice of a Low-Voltage Alarm System Project;²⁰
- Allows the Uniform Notice of a Low-Voltage Alarm System Project to be submitted electronically or by facsimile if all submissions are signed by the owner, tenant, contractor, or authorized representative of such persons;²¹
- Authorizes a local enforcement agency to coordinate directly with the owner or customer to inspect a low-voltage alarm system project to ensure compliance with applicable codes and standards;²²
- If a low-voltage alarm system project fails an inspection, requires the contractor to take corrective action as necessary to pass inspection;²³ and
- Prohibits a permit from being required for the subsequent maintenance, inspection, or service of an alarm system that was permitted in accordance with this law.²⁴

⁷ s. 553.793, F.S.

⁸ *Id.*

⁹ *Id.*

¹⁰ s. 553.793(2), F.S.

¹¹ *Id.*

¹² Section 553.793(4), F.S.

¹³ *Id.*

¹⁴ s. 553.793(4)(b), F.S.

¹⁵ *Id.*

¹⁶ s. 553.793(4)(a), F.S.

¹⁷ s. 553.793(5), F.S.

¹⁸ s. 553.793(6), F.S.

¹⁹ *Id.*

²⁰ *Id.*

²¹ s. 553.793(7), F.S.

²² s. 553.793(8), F.S.

²³ *Id.*

²⁴ s. 553.793(10), F.S.

A municipality, county, district, or other entity of local government may not adopt or maintain in effect an ordinance or rule regarding a low-voltage alarm system that is inconsistent with the streamlined low-voltage alarm system installation permitting of s. 553.793, F.S.²⁵

Effect of Proposed Changes

Low-Voltage Electric Fences

The bill expands current law regarding the streamlined installation permitting of low-voltage alarm systems to include “low-voltage electric fence” as a type of low-voltage alarm system project.

Specifically, the bill amends s. 553.793, F.S., to do the following:

- Add “new or existing low-voltage electric fence” to the types of projects that constitute a low-voltage alarm system project;
- Add “closed-circuit television systems,” “access controls,” and “battery recharging devices” to the types of ancillary components or equipment attached to a low-voltage alarm system;
- Define “low-voltage electric fence” as an alarm system, as defined in s. 489.505, F.S., that consists of a fence structure and an energizer powered by a commercial storage battery not exceeding 12 volts which produces an electric charge upon contact with the fence structure.

The bill requires that a low-voltage electric fence meet all of the following requirements to be permitted as a low-voltage alarm system project, and prohibits any further permitting for the low-voltage alarm system project other than as provided in s. 553.793, F.S.:

- The electric charge produced by the fence upon contact does not exceed energizer characteristics set forth in paragraph 22.108 and depicted in Figure 102 of International Electrotechnical Commission Standard No. 60335-2-76, Current Edition;
- A nonelectric fence or wall must completely enclose the perimeter of the low-voltage electric fence;
- The low-voltage electric fence may be up to 2 feet higher than the perimeter nonelectric fence or wall;
- The low-voltage electric fence must be identified using warning signs attached to the fence at intervals of not more than 60 feet;
- The low-voltage electric fence may not be installed in an area zoned exclusively for single-family or multi-family residential use; and
- The low-voltage electric fence may not enclose portions of the property used for residential purposes.

A municipality, county, district, or other entity of local government may not adopt or maintain in effect an ordinance or rule regarding a low-voltage alarm system project that is inconsistent with s. 553.793, F.S. Consequently, including a low-voltage electric fence within this classification will eliminate the authority of a local government to regulate low-voltage electric fences in a way that is inconsistent with the streamlined low-voltage alarm system installation permitting.

Electric Shock of Low-Voltage Electric Fences

Dr. John G. Webster, Professor Emeritus of Biomedical Engineering at the University of Wisconsin Madison, in a letter authored to answer questions regarding electric security fence medical treatment, states:

Electric security fences are safe because the brief electric shock occurs about once per second, therefore there is ample time for the person to jerk their hand away to avoid the second electric shock. If a person contacts an electric security fence, electric current is concentrated in the fingers and causes a deterrent shock; when the electric current continues to pass through the torso, it spreads out and becomes more diffuse. Therefore electric security fences are safe

²⁵ s. 553.793(9), F.S.

because the deterrent electric shock spreads out and becomes more diffuse and is of a very short duration.

Dr. Webster further explains that at the shock entry location there might be a slight temporary reddening of the skin similar to that of a mosquito bite but that no medical attention is required.²⁶

B. SECTION DIRECTORY:

Section 1 amends s. 553.793, F.S., relating to streamlined low-voltage alarm system installation permitting.

Section 2 provides an effective date of July 1, 2017.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

The bill has no fiscal impact on state revenues.

2. Expenditures:

The bill has no fiscal impact on state expenditures.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

By including low-voltage electric fences in s. 553.793, F.S., the bill requires local enforcement agencies, when permitting is required by the applicable local government entity, to charge not more than a \$40 permitting fee for the installation or replacement of a new or existing low-voltage electric fence.

2. Expenditures:

Local enforcement agencies that choose to require permitting for a low-voltage electric fence would be required to make permit labels available.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill limits permitting fees to not more than \$40 for electrical or alarm system contractors, when permitting is required by the applicable local government entity, for the installation or replacement of a new or existing low-voltage electric fence.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

²⁶ John G. Webster, Professor Emeritus, to Jack DeMao, CEO of Sentry Security Systems, LLC.
STORAGE NAME: h0241e.COM
DATE: 3/22/2017

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution may apply because the bill may reduce the authority that counties or municipalities have to raise revenues in the aggregate; however, the insignificant fiscal impact exemption may apply.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On February 22, 2017, the Agriculture & Property Rights Subcommittee adopted one strike-all amendment and reported the bill favorably as a committee substitute. The amendment:

- Adds battery recharging devices to the current list of ancillary components that may be attached to a low-voltage alarm system project; and
- Modifies the requirements for a low-voltage electric fence to:
 - Allow the low-voltage electric fence to be up to 2 feet higher than a perimeter nonelectric fence or wall;
 - Remove specific language required to be displayed on warning signs; and
 - Clarify that no further permit is required for a low-voltage alarm system project.

On March 8, 2017, the Local, Federal & Veterans Affairs Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment clarifies that a low-voltage electric fence may be used on a mixed-use property as long as the fence is not used to enclose areas used for residential purposes. This analysis is drafted to the committee substitute as passed by the Local, Federal & Veterans Affairs Subcommittee.