



## City of North Port

### RESOLUTION NO. 2022-R-30

**A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF NORTH PORT, FLORIDA, AUTHORIZING THE CONVEYANCE OF REAL PROPERTY LOCATED ALONG THE NORTHEAST ENTRANCE ROADWAY TO THE CITY OF NORTH PORT SOUTHWEST WASTEWATER RECLAMATION FACILITY AND DESCRIBED AS A PORTION OF THE TRACT OF LAND LYING IN SECTION 33, TOWNSHIP 39 SOUTH, RANGE 20 EAST, SARASOTA COUNTY PROPERTY APPRAISER PARCEL IDENTIFICATION NUMBER 0786002200; PROVIDING FOR FILING OF DOCUMENTS; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City of North Port, Florida (the “City”) owns certain real property (the “Property”) that includes roadway improvements (the “Roadway Improvements”) providing access to the Southwest Wastewater Reclamation Facility (the “Facility”) that the City owns, operates, and maintains; and

**WHEREAS**, the West Villages Improvement District (the “District”) is a local unit of special-purpose government located within the jurisdictional boundary of the City; and

**WHEREAS**, to facilitate the development of the lands within the District, the District has requested that the City convey to it the portion of Property that includes the Roadway Improvements; and

**WHEREAS**, the City is amenable to the conveyance, provided that: (i) it has a perpetual access easement over the Roadway Improvements in order to operate and maintain the Facility; and (ii) the District constructs and/or installs, at its own cost and expense, certain fence and gate improvements within one-hundred and twenty (120) days after the conveyance; and

**WHEREAS**, the City Commission of the City of North Port, Florida finds that the conveyance of the Property and Roadway Improvements to the District serves the public health, safety, and welfare of the citizens of the City of North Port, Florida.

**NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF NORTH PORT, FLORIDA:**

#### **SECTION 1 – INCORPORATION OF RECITALS**

1.01 The above recitals are true and correct and are incorporated in this resolution by reference.

**SECTION 2 – RESOLUTION**

- 2.01 The real property at issue is a portion of Sarasota County Property Appraiser parcel identification number 078600200, located along the northeast entrance roadway to the City of North Port Southwest Wastewater Reclamation Facility, and is legally described as:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less.

- 2.02 The City Commission approves the *Consent by the City of North Port, Florida to Acquisition of Real Property by the West Villages Improvement District*, attached as Exhibit 1.
- 2.03 The City Commission approves the transfer of ownership of the Property identified in and transferred via the *Special Warranty Deed*, attached as Exhibit 2.
- 2.04 The City Commission approves the transfer of ownership of the Roadway Improvements identified in and transferred via the *Bill of Sale*, attached as Exhibit 3.
- 2.05 The City Commission approves the *Agreement Granting Non-Exclusive Perpetual Easement (Wastewater Facility Roadway)*, attached as Exhibit 4.
- 2.06 The City Commission approves the *Agreement Granting Non-Exclusive Temporary Easement (Wastewater Facility Roadway Fencing & Gate Improvements)*, attached as Exhibit 5.
- 2.07 The City Commission authorizes the City Manager and/or Mayor, as applicable pursuant to the North Port City Charter and other laws, to execute the approved documents.
- 2.08 All identified exhibits are incorporated in this resolution by reference.

**SECTION 3 – FILING OF DOCUMENTS**

- 3.01 The City Clerk is directed to file a certified copy of this resolution with the Sarasota County Clerk of the Circuit Court to be duly recorded in the official records of the county.

3.02 The City Clerk is directed to record the following fully executed documents with the Sarasota County Clerk of the Circuit Court to be duly recorded in the official records of the county, concurrent with the recording of this resolution:

- a. *Consent by the City of North Port, Florida to Acquisition of Real Property by the West Villages Improvement District;*
- b. *Special Warranty Deed;*
- c. *Agreement Granting Non-Exclusive Perpetual Easement (Wastewater Facility Roadway); and*
- d. *Agreement Granting Non-Exclusive Temporary Easement (Wastewater Facility Roadway Fencing & Gate Improvements).*

3.03 The West Villages Improvement District will pay all applicable recording fees.

**SECTION 4 – CONFLICTS**

4.01 In the event of any conflict between the provisions of this resolution and any other resolution, in whole or in part, the provisions of this resolution will prevail to the extent of the conflict.

**SECTION 5 – SEVERABILITY**

5.01 If a court of competent jurisdiction finds that any section, subsection, sentence, clause, phrase, or provision of this resolution is for any reason invalid or unconstitutional, that provision will be deemed a separate, distinct, and independent provision and will not affect the validity of the remaining portions of the resolution.

**SECTION 6 – EFFECTIVE DATE**

6.01 This resolution takes effect immediately.

ADOPTED by the City Commission of the City of North Port, Florida in public session on May 24, 2022.

CITY OF NORTH PORT, FLORIDA

---

PETE EMRICH  
MAYOR

ATTEST

---

HEATHER TAYLOR, MMC  
CITY CLERK

APPROVED AS TO FORM AND CORRECTNESS

---

AMBER L. SLAYTON  
CITY ATTORNEY

**CONSENT BY THE CITY OF NORTH PORT, FLORIDA  
TO THE ACQUISITION OF REAL PROPERTY  
BY THE WEST VILLAGES IMPROVEMENT DISTRICT**

The City of North Port, a Florida municipal corporation, acknowledges and consents to the following:

1. The West Villages Improvement District (“WVID”) is an independent special district of the State of Florida, organized and operating in accordance with the provisions of Chapter 2004-456, Laws of Florida, as amended and supplemented (together, the “Act”).

2. WVID’s jurisdiction encompasses real property, a substantial portion of which is located within the jurisdictional boundaries of the City of North Port, Florida (the “City”). The Act provides that WVID shall not obtain fee simple title to any real property located within the City without first obtaining the approval of the City Commission for such acquisition.

3. The WVID has informed the City that it plans to acquire real property within the City, bearing Sarasota County Property Appraiser Parcel Identification Number \_\_\_\_\_ and further described in the legal description attached as Exhibit “A” (the “Property”).

4. WVID will record this instrument in the public records of Sarasota County, Florida, at its expense.

NOW, THEREFORE, the City of North Port, Florida, hereby consents to West Villages Improvement District’s acquisition of the Property.

Approved by the City Commission of the City of North Port Florida on the \_\_\_\_ day of \_\_\_\_\_, 2022.

**ATTEST:**

**THE CITY OF NORTH PORT, FLORIDA**

\_\_\_\_\_  
Heather Taylor, MMC  
City Clerk

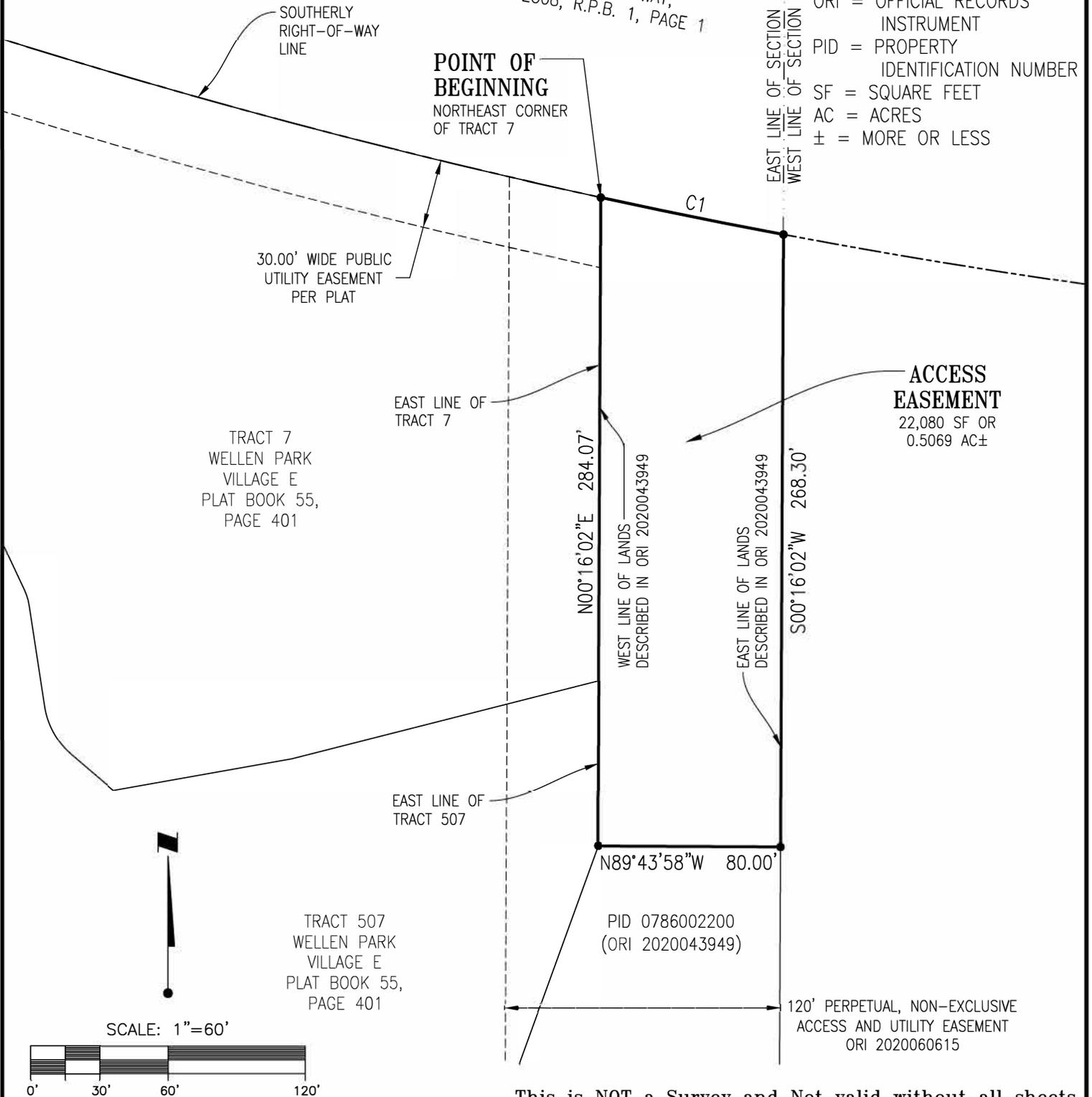
\_\_\_\_\_  
Pete Emrich  
Mayor

**APPROVED AS TO FORM AND CORRECTNESS:**

\_\_\_\_\_  
Amber L. Slayton  
City Attorney

U.S. 41/S.R. 45/S. TAMIAMI TRAIL  
 VARIABLE WIDTH PUBLIC RIGHT-OF-WAY,  
 F.D.O.T. SECTION 17010-2508, R.P.B. 1, PAGE 1

LEGEND:  
 ORB = OFFICIAL RECORDS BOOK  
 ORI = OFFICIAL RECORDS INSTRUMENT  
 PID = PROPERTY IDENTIFICATION NUMBER  
 SF = SQUARE FEET  
 AC = ACRES  
 ± = MORE OR LESS



This is NOT a Survey and Not valid without all sheets.

Mar 16, 2022 - 13:42:53 EDMEJIA\Y:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN  
 ACCESS EASEMENT LOCATED IN  
 SECTION 33, TOWNSHIP 39 S., RANGE 20 E.,  
 SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 1 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

# "EXHIBIT"

DESCRIPTION (as prepared by the certifying Surveyor and Mapper):

A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less

CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C1	3,011.73'	1°33'05"	81.54'	81.54'	S78°34'49"E

NOTES:

1. THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA SURVEYOR AND MAPPER.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF SECTION 33, BEING N00°30'26"E.
3. THIS IS A SKETCH ONLY AND DOES NOT REPRESENT A FIELD SURVEY.

\_\_\_\_\_  
*Joseph R. Jasper, P.S.M.*  
 Florida Registration No. 7168

\_\_\_\_\_  
*Date of Signature*

**This is NOT a Survey and Not valid without all sheets.**

Mar 16, 2022 - 13:42:53 EDMEJIA\V:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN  
 ACCESS EASEMENT LOCATED IN  
 SECTION 33, TOWNSHIP 39 S., RANGE 20 E.,  
 SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 2 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

This instrument prepared by,  
And when recorded, return to:

Lindsay Whelan, Esq.  
Kutak Rock LLP  
P.O. Box 10230  
Tallahassee, FL 32302

PID No.: 0786002200

**SPECIAL WARRANTY DEED**

THIS **SPECIAL WARRANTY DEED** is made this \_\_\_\_ day of \_\_\_\_\_, 2022, by and between the **CITY OF NORTH PORT, FLORIDA**, a municipal corporation of the State of Florida, whose address is 4790 City Hall Boulevard, North Port, Florida 34286 (“Grantor”) and **WEST VILLAGES IMPROVEMENT DISTRICT**, an independent district of the State of Florida, whose address is c/o Special District Services, Inc., 2501A Burns Road, Palm Beach Gardens, Florida 33410 (“Grantee”).

(Wherever used herein the terms “Grantor” and “Grantee” include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations or governmental entities.)

**WITNESSETH:**

The Grantor, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the Grantee, all that certain land situated in the City of North Port, Sarasota County, Florida, described in the attached **Exhibit A**.

Together with all the tenements, hereditaments, and appurtenances thereto belonging or in anywise appertaining, and to have and to hold the same in fee simple forever. Such conveyance is subject to all matters of record; however, reference hereto shall not operate to re-impose the same.

The Grantor hereby covenants with the Grantee that the Grantor is lawfully seized of said land in fee simple and that the Grantor has good right and lawful authority to sell and convey said land. Further, the Grantor hereby warrants the title to said land and will defend the same against the lawful claims of all persons or entities whomsoever claiming by, through or under the Grantor. Additionally, the Grantor warrants that it has complied with the provisions of Section 196.295, Florida Statutes.

**IN WITNESS WHEREOF**, the Grantor has executed this instrument as set forth below.

Approved by the City Commission of the City of North Port, Florida on \_\_\_\_\_, 2022.

CITY OF NORTH PORT, FLORIDA

\_\_\_\_\_  
A. Jerome Fletcher II, ICMA-CM, MPA  
City Manager

ATTEST

---

Heather Taylor, MMC  
City Clerk

APPROVED AS TO FORM AND CORRECTNESS

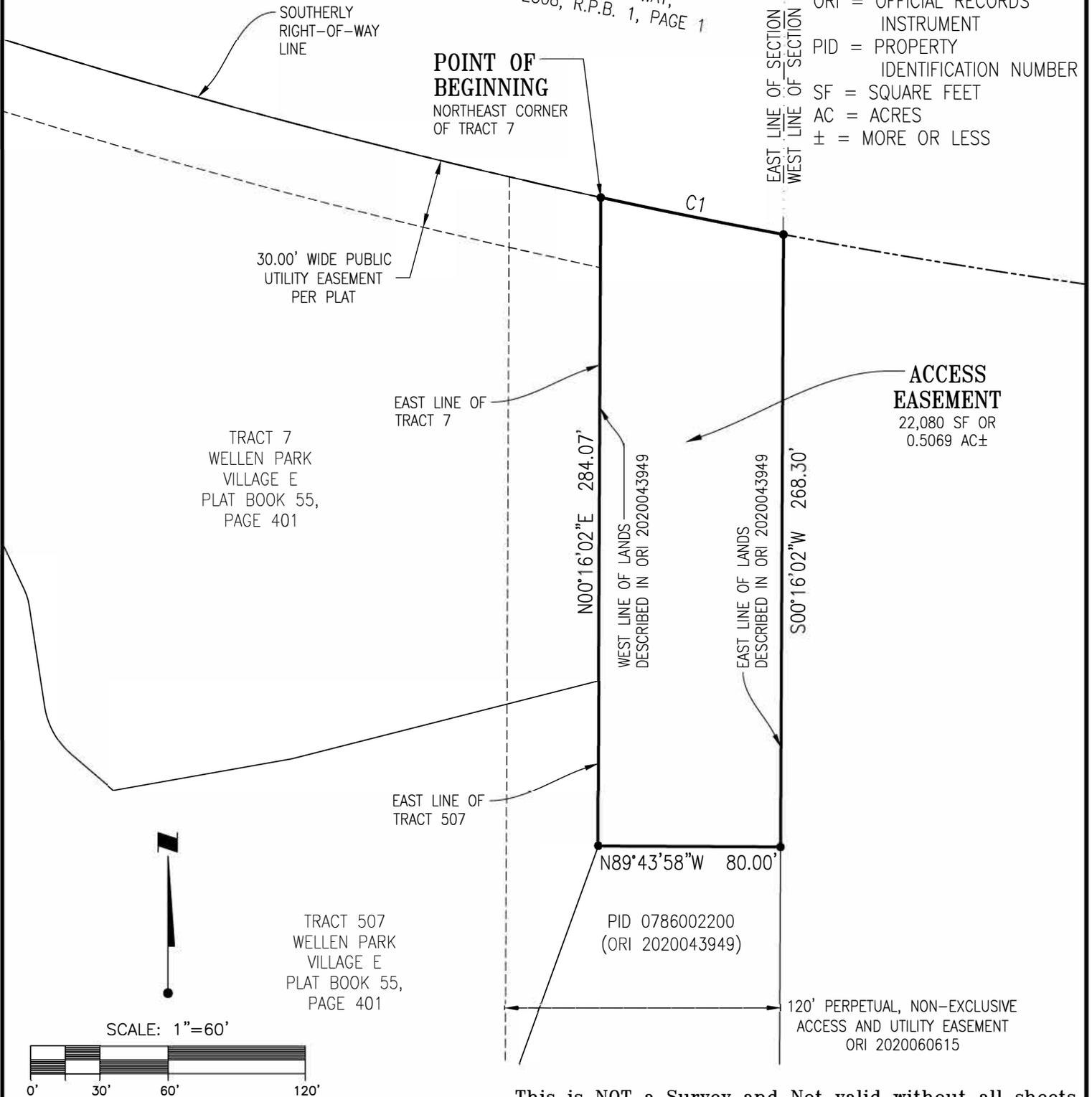
---

Amber L. Slayton  
City Attorney

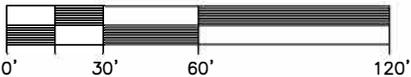
**Note to Recorder:** This deed conveys unencumbered property to a local unit of special-purpose government for no taxable consideration. Accordingly, pursuant to Rule 12B-4.014, F.A.C., only minimal documentary stamp tax is being paid hereon.

U.S. 41/S.R. 45/S. TAMiami TRAIL  
 VARIABLE WIDTH PUBLIC RIGHT-OF-WAY,  
 F.D.O.T. SECTION 17010-2508, R.P.B. 1, PAGE 1

LEGEND:  
 ORB = OFFICIAL RECORDS BOOK  
 ORI = OFFICIAL RECORDS INSTRUMENT  
 PID = PROPERTY IDENTIFICATION NUMBER  
 SF = SQUARE FEET  
 AC = ACRES  
 ± = MORE OR LESS



SCALE: 1"=60'



This is NOT a Survey and Not valid without all sheets.

Mar 16, 2022 - 13:42:53 EDMEJIA\Y:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN ACCESS EASEMENT LOCATED IN SECTION 33, TOWNSHIP 39 S., RANGE 20 E., SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 1 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

# "EXHIBIT"

DESCRIPTION (as prepared by the certifying Surveyor and Mapper):

A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less

CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C1	3,011.73'	1°33'05"	81.54'	81.54'	S78°34'49"E

NOTES:

1. THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA SURVEYOR AND MAPPER.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF SECTION 33, BEING N00°30'26"E.
3. THIS IS A SKETCH ONLY AND DOES NOT REPRESENT A FIELD SURVEY.

\_\_\_\_\_  
 Joseph R. Jasper, P.S.M.  
 Florida Registration No. 7168

\_\_\_\_\_  
 Date of Signature

**This is NOT a Survey and Not valid without all sheets.**

Mar 16, 2022 - 13:42:53 EDMEJIA\V:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN  
 ACCESS EASEMENT LOCATED IN  
 SECTION 33, TOWNSHIP 39 S., RANGE 20 E.,  
 SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 2 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

**BILL OF SALE**

KNOW ALL MEN BY THESE PRESENTS, that the **CITY OF NORTH PORT, FLORIDA**, a political subdivision of the State of Florida, whose address is 4790 City Hall Boulevard, North Port, Florida 34286 (the “**Seller**”), paid by the **WEST VILLAGES IMPROVEMENT DISTRICT**, a local unit of special purpose government organized and existing under Chapter 189, *Florida Statutes*, whose mailing address is 2501-A Burns Road, Palm Beach Gardens, Florida 33410 (the “**District**”), for good and valuable consideration, the receipt whereof is hereby acknowledged, has granted, bargained, sold, transferred and delivered, and by these presents does grant, bargain, sell, transfer, and deliver unto the District, its successors and assigns, the following described property, assets and rights, to-wit:

The roadway infrastructure and improvements, including but not limited to the asphalt, base, curb, and gutter, etc., all located on the real property described in **Exhibit A**, attached hereto and made a part hereof, situated, lying and being in Sarasota County, Florida.

TO HAVE AND TO HOLD all of the foregoing unto the District, its successors and assigns, for its own use forever, free and clear and discharged of and from any and all obligations, claims, or liens.

AND the Seller does hereby covenant to and with the District, its successors, and assigns, that it is the lawful owner of the above-described personal property and assets; that said personal property and assets are free from all liens and encumbrances; that Seller has good right to sell said personal property and assets; that all contractors, subcontractors, and materialmen furnishing labor or materials relative to the construction of the personal property and assets have been paid in full; and that Seller will warrant and defend the sale of its said personal property and assets hereby made, unto the District, its successors, and assigns, against the lawful claims and demands of all persons whosoever.

Approved by the City Commission of the City of North Port, Florida on \_\_\_\_\_, 2022.

**CITY OF NORTH PORT, FLORIDA**

\_\_\_\_\_  
A. Jerome Fletcher II, ICMA-CM, MPA  
City Manager

ATTEST

\_\_\_\_\_  
Heather Taylor, MMC  
City Clerk

APPROVED AS TO FORM AND CORRECTNESS

\_\_\_\_\_  
Amber L. Slayton  
City Attorney

**EXHIBIT A**

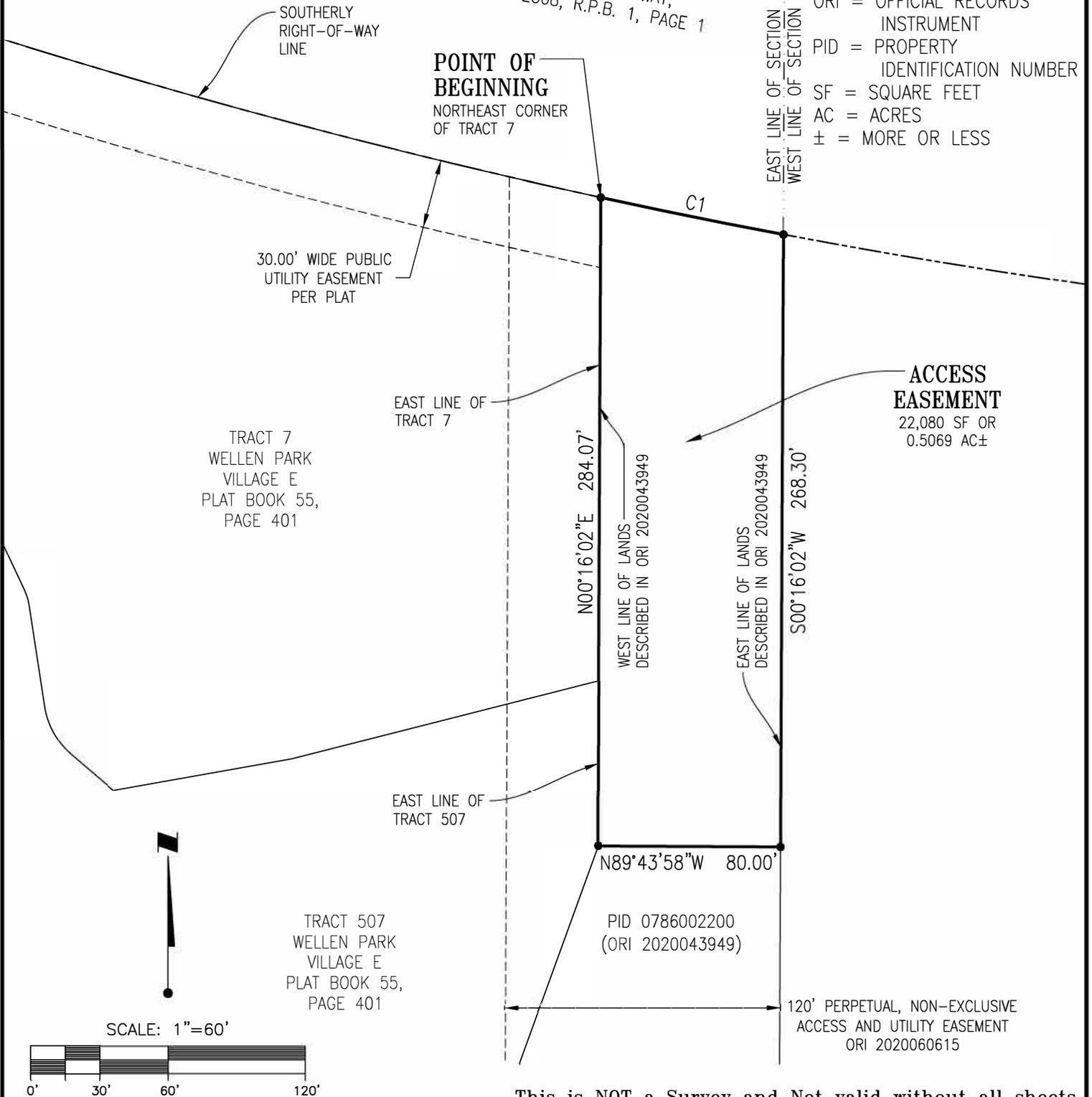
**LOCATION OF INFRASTRUCTURE**A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less.

U.S. 41/S.R. 45/S. TAMiami TRAIL  
 VARIABLE WIDTH PUBLIC RIGHT-OF-WAY,  
 F.D.O.T. SECTION 17010-2508, R.P.B. 1, PAGE 1

LEGEND:  
 ORB = OFFICIAL RECORDS BOOK  
 ORI = OFFICIAL RECORDS INSTRUMENT  
 PID = PROPERTY IDENTIFICATION NUMBER  
 SF = SQUARE FEET  
 AC = ACRES  
 ± = MORE OR LESS



This is NOT a Survey and Not valid without all sheets.

Mar 16, 2022 - 13:42:53 EDMEJIA\Y:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN  
 ACCESS EASEMENT LOCATED IN  
 SECTION 33, TOWNSHIP 39 S., RANGE 20 E.,  
 SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 1 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

**"EXHIBIT"**

DESCRIPTION (as prepared by the certifying Surveyor and Mapper):

A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less

CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C1	3,011.73'	1°33'05"	81.54'	81.54'	S78°34'49"E

NOTES:

1. THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA SURVEYOR AND MAPPER.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF SECTION 33, BEING N00°30'26"E.
3. THIS IS A SKETCH ONLY AND DOES NOT REPRESENT A FIELD SURVEY.

\_\_\_\_\_  
 Joseph R. Jasper, P.S.M.  
 Florida Registration No. 7168

\_\_\_\_\_  
 Date of Signature

**This is NOT a Survey and Not valid without all sheets.**

Mar 16, 2022 - 13:42:53 EDMEJIA\V:\2156\active\215616468\survey\drawing\sketches\215616468v-spsk07.dwg

SKETCH & DESCRIPTION OF AN  
 ACCESS EASEMENT LOCATED IN  
 SECTION 33, TOWNSHIP 39 S., RANGE 20 E.,  
 SARASOTA COUNTY, FLORIDA



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com  
 Licensed Business Number 7866

TASK CODE: 220	DRAWN BY: EDM	CHKED BY: JRJ	CAD FILE: 215616468v-spsk07	PROJECT NO: 215616468	SHEET 2 OF 2	DRAWING INDEX NO: B16468v-spsk07*	REV:
-------------------	------------------	------------------	--------------------------------	--------------------------	-----------------	--------------------------------------	------

This instrument prepared by,  
And when recorded, return to:

Lindsay Whelan, Esq.  
Kutak Rock LLP  
P.O. Box 10230  
Tallahassee, FL 32302

PID No.: 0786002200

---

**AGREEMENT GRANTING NON-EXCLUSIVE PERPETUAL EASEMENT**

**(WASTEWATER FACILITY ROADWAY)**

This **Agreement Granting Non-Exclusive Perpetual Easement** (“**Agreement**”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2022, by and between:

**West Villages Improvement District**, a local unit of special-purpose government established pursuant to Chapter 2004-456, *Laws of Florida*, located in the City of North Port and unincorporated Sarasota County, Florida (the “**Grantor**”); and

**City of North Port, Florida**, a municipal corporation of the State of Florida, whose address is 4790 City Hall Boulevard, North Port, Florida 34286 (the “**City**”).

**WITNESSETH**

**WHEREAS**, Grantor was established for the purpose of planning, financing, constructing, installing, repairing, operating, and/or maintaining certain public infrastructure improvements, including but not limited to roadway improvements; and

**WHEREAS**, pursuant to City of North Port Resolution No. 2022-R-30, the City conveyed to Grantor certain real property as shown on the attached **Exhibit A**, which is attached and incorporated as if set forth herein (the “**Easement Area**”) upon which roadway improvements are located; and

**WHEREAS**, the City owns, operates, and maintains the Southwest Wastewater Reclamation Facility (the “**Wastewater Facility**”) including an entrance driveway adjacent to Grantor’s property; and

**WHEREAS**, the City has a need to utilize the Easement Area, as defined herein, for ingress and egress to the Wastewater Facility and to operate, maintain, repair, and/or replace certain utility improvements located thereupon; and

**WHEREAS**, as consideration for the conveyance to the District, the District has agreed to install certain improvements; and

**WHEREAS**, Grantor and the City acknowledge that use of the Easement Area is necessary for Grantor and the City to carry out their essential purposes; and

**WHEREAS**, Grantor accordingly desires to grant to the City a perpetual, non-exclusive easement over the Easement Area for ingress and egress in order to allow the City to access the Wastewater Facility and to operate, maintain, repair and/or replace certain utility improvements located thereupon.

**NOW, THEREFORE**, in consideration of the sum of Ten and 00/100 Dollars (\$10.00) and other good and valuable consideration and the mutual covenants of the parties, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

**1. RECITALS.** The foregoing recitals are true and correct and by this reference are incorporated as a material part of this Agreement.

**2. GRANT OF EASEMENT; OPERATION AND MAINTENANCE.** Grantor hereby grants to the City and its successors and assigns, in perpetuity, a non-exclusive easement in, over, upon, under, through, and across the Easement Area for ingress and egress in order to allow the City, its contractors, licensees, and invitees to access the Wastewater Facility and to operate, maintain, repair, and/or replace certain utility improvements located thereupon, to have and to hold the same unto the City and its successors and assigns forever.

**3. MAINTENANCE OF ROADWAY.** Grantor and its successors and assigns will maintain all roadway improvements.

**4. FENCE & GATE IMPROVEMENTS.** Within 120 days after this conveyance, Grantor shall, at Grantor's sole cost and expense, construct the following improvements on Sarasota County Property Appraiser's Parcel Identification Number 0786002200, per the specifications as attached in **Exhibit B**, which is attached and incorporated as if set forth herein: (i) a gate with an electric opener across the roadway; and (ii) fencing connected to the gate and extending as designated by the City (collectively, the **Improvements**"). The City will designate the location for the Improvements prior to construction. The Improvements shall be built to commercial standards. Grantor shall secure all construction permits and approvals as required by local, state, and federal laws and regulations. The City shall be solely responsible for the maintenance of the Improvements.

**5. DAMAGE.** In the event that the City or its respective employees, agents, assignees, or contractors cause damage to the Easement Area or any of the improvements located within the Easement Area, or cause damage to Grantor's other property or any improvements located thereon, in the exercise of the easement rights granted herein, the City, at its sole cost and expense, agrees to commence and diligently pursue the restoration of the damages to as nearly as practical to the original condition and grade within thirty (30) days after receiving written notice of the occurrence of any such damage. Further, the City shall allow no lien to attach to the Easement Area or any improvements located on said property arising out of work performed by, for, or on behalf of the City. The City shall pay or transfer to other security all such liens, claims or demands before any action is brought to enforce the same against the Easement Area or Grantor.

**6. INCONSISTENT USE.** Grantor agrees and covenants that it shall not grant or exercise any rights in the Easement Area inconsistent with, or which interfere with, the rights herein accorded to the City.

**7. NON-INTERFERENCE.** City shall not unreasonably interfere with the right of ingress or egress of Grantor, its successors and assigns, or other authorized persons requiring access to the Easement Area or to any property abutting the Easement Area.

**8. DEFAULT.** A default by any party under this Agreement shall entitle the other party to all remedies available at law or in equity, which may include but not be limited to the right of actual damages, injunctive relief, and/or specific performance.

**9. NOTICES.** Any notice, demand, consent, authorization, request, approval or other communication that any party is required, or may desire, to give to or make upon the other party pursuant to this Agreement shall be effective and valid only if in writing, signed by the party giving notice and delivered personally to the other parties or sent by express overnight courier or delivery service or by certified mail of the United States Postal Service, postage prepaid and return receipt requested, addressed to the other party as follows (or to such other place as any party may by notice to the others specify):

**To Grantor:** West Villages Improvement District  
2501-A Burns Road  
Palm Beach Gardens, Florida 33410  
Attn: District Manager

**With a copy to:** Kutak Rock LLP  
P.O. Box 10230  
Tallahassee, Florida 32302  
Attn: District Counsel

**To the City:** City of North Port, Florida  
City Manager  
4970 City Hall Boulevard  
North Port, Florida 34286

**With copies of Notices to:** City of North Port, Florida  
City Attorney  
4970 City Hall Blvd.  
North Port, Florida 34286

Notice shall be deemed given when received, except that if delivery is not accepted, notice shall be deemed given on the date of such non-acceptance. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day shall be deemed received on the next business day. If any time for giving notice would otherwise expire on a non-business day, the notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the City and counsel for Grantor may deliver Notice on behalf of the City and Grantor.

**10. THIRD PARTIES.** This Agreement is solely for the benefit of the formal parties hereto, and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than the parties hereto any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions hereof. The City shall be solely responsible for enforcing its rights under this Agreement against any interfering third party, except when Grantor is an indispensable party. Nothing contained in this Agreement shall limit or impair the City's right to protect its rights from interference by a third party.

**11. ASSIGNMENT.** Neither party may assign, transfer or license all or any portion of its rights under this Agreement without the prior written consent of the other party. Any assignments attempted to be made by any party without the prior written approval of the other party are void.

**12. PUBLIC RECORDS.** The Parties understand and agree that all documents of any kind provided to either the Parties or their staff in connection with this Agreement are public records and are to be treated as such in accordance with Florida law.

**13. MISCELLANEOUS.**

- A. Authority to Execute Agreement. The signature by any person to this Agreement shall be deemed a personal warranty that the person has the full power and authority to bind any corporation, partnership, or any other business or governmental entity for which the person purports to act hereunder.
- B. Binding Effect/Counterparts. By the signatures affixed hereto, the Parties intend to be bound by the terms and conditions hereof. This Agreement is binding upon and shall inure to the benefit of the Parties and their respective heirs, executors, administrators, successors, and assigns. It may be signed in counterparts.
- C. Governing Law and Venue. The laws of the State of Florida govern the rights, obligations, and remedies of the Parties under this Agreement. The exclusive venues for any legal or judicial proceedings in connection with the enforcement or interpretation of this Agreement are the Circuit Court of the Twelfth Judicial Circuit in and for Sarasota County, Florida, and the United States District Court for the Middle District of Florida.
- D. No Agency. Nothing contained herein shall be deemed or construed as creating the relationship of principal and agent, or of partnership or joint venture, between the Parties, it being understood and agreed that no provision contained herein, or any acts of the Parties shall be deemed to create any relationship between them other than that as detailed in this Agreement.
- E. Severability. In the event any court shall hold any provision of this Agreement to be illegal, invalid, or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any breach of any

provision, term, condition, or covenant shall not be construed as a waiver of a subsequent breach by the other party.

- F. Headings. The descriptive titles appearing in each respective paragraph are for convenience only and are not a part of this Agreement and do not affect its construction.
- G. Complete Agreement. This Agreement incorporates and includes all prior negotiations, correspondence, agreements, or understandings between the parties, and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. This Agreement supersedes all other agreements between the parties, whether oral or written, with respect to the subject matter.
- H. Amendment. No amendment, change, or addendum to this Agreement is enforceable unless agreed to in writing by both parties and incorporated into this Agreement.
- I. Non-Discrimination. The City of North Port, Florida does not discriminate on the basis of race, color, national origin, sex, age, disability, family, or religious status in administration of its programs, activities, or services. Grantor shall not administer this Agreement in an unlawfully discriminatory manner, nor deny participation in or the benefits of same to any individual based on that individual's race, color, national origin, sex, age, disability, family or religious status, marital status, sexual orientation, gender identity or expression, or physical characteristic.
- J. Counterparts. This instrument may be executed in any number of counterparts, each of which, when executed and delivered, shall constitute an original, and such counterparts together shall constitute one and the same instrument. Signature and acknowledgment pages, if any, may be detached from the counterparts and attached to a single copy of this document to physically form one document.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as set forth below.

Signed, sealed, and delivered  
in the presence of:

**WEST VILLAGES IMPROVEMENT  
DISTRICT**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
Chairman, Board of Supervisors

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this \_\_\_ day of \_\_\_\_\_ 2022, by John Luczynski, as Chairman of the Board of Supervisors of the West Villages Improvement District, a unit of special purpose government created pursuant to Chapter 189, *Florida Statutes*, on behalf of said City.

\_\_\_\_\_

Notary Public

\_\_\_ Personally Known OR \_\_\_ Produced Identification  
Type of Identification Produced \_\_\_\_\_

Approved by the City Commission of the City of North Port, Florida on \_\_\_\_\_, 2022.

CITY OF NORTH PORT, FLORIDA

---

Pete Emrich  
Mayor

ATTEST

---

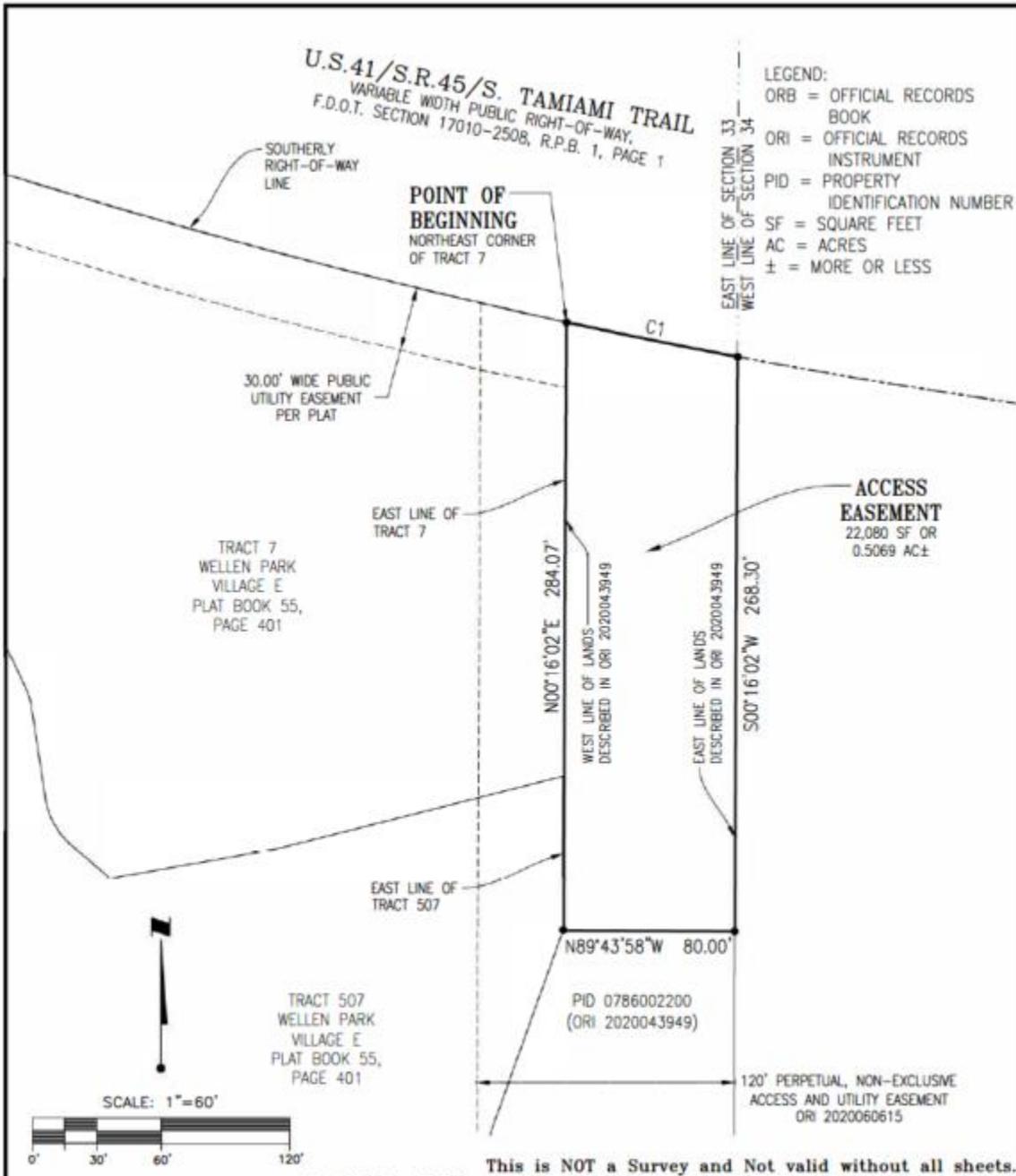
Heather Taylor, MMC  
City Clerk

APPROVED AS TO FORM AND CORRECTNESS

---

Amber L. Slayton  
City Attorney

**EXHIBIT A**



SKETCH & DESCRIPTION OF AN ACCESS EASEMENT LOCATED IN SECTION 33, TOWNSHIP 39 S., RANGE 20 E., SARASOTA COUNTY, FLORIDA				 <b>Stantec</b> <small>6900 Professional Parkway East, Sarasota, FL 34240-6414 Phone 941-867-6900 • Fax 941-867-6910 Certificate of Authorization K01913 • www.stantec.com Licensed Business Number 2988</small>			
TASK CODE: 220	DRAWN BY: EDM	CHKD BY: JRJ	CAD FILE: 215616468v--spsk07	PROJECT NO: 215616468	SHEET 1 OF 2	DRAWING INDEX NO: B16468v--spsk07*	REV:

**'EXHIBIT'**

DESCRIPTION (as prepared by the certifying Surveyor and Mapper):

A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less

CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C1	3,011.73'	1°33'05"	81.54'	81.54'	S78°34'49"E

NOTES:

1. THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA SURVEYOR AND MAPPER.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF SECTION 33, BEING N00°30'26"E.
3. THIS IS A SKETCH ONLY AND DOES NOT REPRESENT A FIELD SURVEY.

\_\_\_\_\_  
 Joseph R. Jasper, P.S.M.  
 Florida Registration No. 7168

\_\_\_\_\_  
 Date of Signature

**This is NOT a Survey and Not valid without all sheets.**

Mar 16, 2022 - 13:42:53 EDMEJJA:\2156\active\215616468\survey\drawing\sketches\215616468v-spk07.dwg

SKETCH & DESCRIPTION OF AN ACCESS EASEMENT LOCATED IN SECTION 33, TOWNSHIP 39 S., RANGE 20 E., SARASOTA COUNTY, FLORIDA				 <b>Stantec</b> <small>8900 Professional Parkway East, Sarasota, FL 34240-9414                  Phone 941-907-6900 • Fax 941-907-4810                  Certificate of Authorization #27113 • www.stantec.com                  Licensed Business Number 7988</small>			
TASK CODE: 220	DRAWN BY: EDM	CHKD BY: JRJ	CAD FILE: 215616468v-spk07	PROJECT NO: 215616468	SHEET 2 OF 2	DRAWING INDEX NO: B16468v-spk07*	REV:



# WOODRUFF & SONS, INC.

6450 - 31st Street East, Bradenton FL 34203

PO Box 10127, Bradenton FL 34282-0127

T# 941.756.1871 ~ F# 941.755.1379

[www.woodruffandsons.com](http://www.woodruffandsons.com)

## SHOP DRAWING COVER SHEET

### W&S PROJECT

Job# 2697 - West Villages Southwest WW Reclamation Facility

Submittal No.: 14B  
Date: 01.10.19  
Revision: 2  
Submitted By: USA Fence  
Content: Fencing

Spec Section:  
Project Manager Matt Anderson([matta@woodruffandsons.com](mailto:matta@woodruffandsons.com))

Cell (941) 737-0910  
 (941) 756-8727  
 Fax (941) 753-2109  
 (800) 741-1711

**Rich Gross**  
 Estimator/Project Manager  
 CRC016172 QB0000823 Exhibit 4 to Resolution No. 2022-R-30



# LETTER OF TRANSMITTAL

RETAIL - WHOLESALE - "We Finance Our Own"  
 1209 44th Ave. E., Bradenton, FL 34203

DATE	1-10-19	JOB NO.
ATTENTION	MATT ANDERSON	
RE:	WEST VILLAGES	
	FENCES AND GATES	

TO WOODCROFT & SONS

WE ARE SENDING  Attached  Under separate cover via \_\_\_\_\_ the following items:

Shop drawings  Prints  Plans  Samples  Specifications

Copy of letter  Change order

COPIES	DATE	NO	DESCRIPTION
1			6' Chain Link Fence w/ B/wire
1			CANTILEVER SLIDE gate
1			4' walk gate
1			Chain Link material spec sheets
1			Slide gate operator spec sheet
1			DoorKing 1802 spec sheet
1			Liftmaster CSL24U Manual Attached

THESE ARE TRANSMITTED as checked below:

For approval  Approved as noted  Resubmit \_\_\_\_\_ copies for approval

For your use  Returned for corrections  Submit \_\_\_\_\_ copies for distribution

As requested  Return \_\_\_\_\_ corrected prints

For review and comment \_\_\_\_\_

FOR BID DUE

REMARKS

Notes: 1) SAFETY Loops AND Vehicle Detectors are included.  
 2) DoorKing model 1802 Entry System Phone entry AND Pedestal are included.  
 3) All wiring is by others-to be brought to gate equipment.

SIGNED: [Signature]

4) Gate operator voltage listed: 120V/230V Single Phase.

COPY TO:



Exhibit 4 to Resolution No. 2022-R-30

807

# 1802 SERIES TELEPHONE ENTRY SYSTEMS

• RESIDENTIAL • MULTI-HOME • SMALL APARTMENT

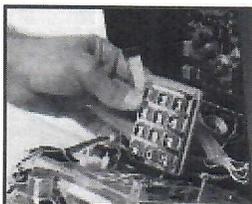


1802 & 1802-AP



1802-EPD

- Visitors use the phone system to communicate with a resident who can grant or deny access via their own touch-tone telephone
- Slim design for applications with limited space. Surface or flush mount styles available
- Hands free full duplex voice communication
- 1802, 1802-AP (Access Plus), 1802-EPD (Electronic Programmable Directory) provides service for up to 600 residents, 27 residents, and 100 residents respectively
- 2 year limited factory warranty



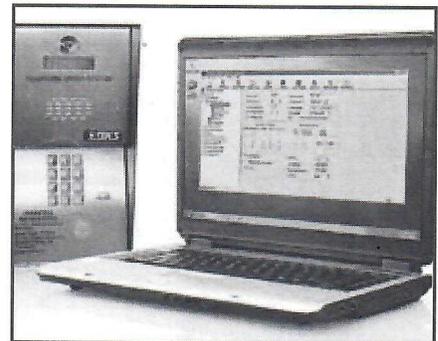
**modular design**  
makes installation and service easy



**1802 built-in display**  
indicates door/gate has been opened  
1802-EPD displays resident directory



**flush or surface**  
mount available for 1802 & 1802-EPD,  
surface mount only for 1802-AP

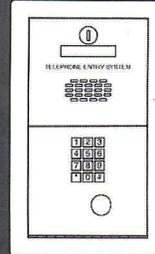


**1802-AP pc programmable**  
easy to use software included

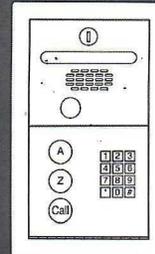
ACCESS CONTROL SOLUTIONS

# 1802 SERIES TELEPHONE ENTRY SYSTEMS

Exhibit 4 to Resolution No. 2022-R-30



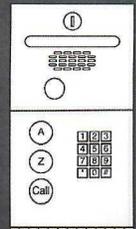
1802



1802-EPD



1802 / 1802-AP



1802-EPD

## Flush Mount

8.375" W x 14" H x 3.25" D  
(30.4cm W x 34.3cm H x 6.35cm D)

## Surface Mount

6.5" W x 12" H x 5" D  
(16.5cm W x 30.4cm H x 12.7cm D)

MODEL	MAX PHONE NUMBERS	DIRECTORY NAMES	ENTRY CODES <sup>1</sup>	DEVICE CODES <sup>2</sup>	RELAYS	AUXILIARY INPUTS <sup>3</sup>	EXPANSION <sup>4</sup>	PC PROGRAM <sup>5</sup>	TEMPORARY CODES	HOLIDAY SCHEDULE
<b>1802</b>	600	N/A	1000	0	2	1	No	No	5	No
<b>1802-EPD</b>	100	100	100	0	2	1	No	No	5	No
<b>1802-AP</b>	27	N/A	50	100	2	2	6 Max	Yes	10	Yes

1 Entry codes are four (4) digits only and are not the same as device codes. Entry codes grant access when entered on the entry system keypad (or secondary keypad) only.

2 Device codes refer to any five (5) digit RS-485 device used to access an entry point, such as cards, transmitters or PINs (Personal Identification Number). Five (5) digit device codes can also be used on the system keypad.

3 1802 and 1802EPD, auxiliary input allows a switch closure to activate relay 2, or can be set to auto-dial a preprogrammed telephone number. 1802 AP uses a standard RS-485 data input.

4 Six (6) additional entry points can be controlled via RS-485 card readers, AVID tag readers, RF receivers or digital keypads.

5. Programming software included. IP Addressable, programmable via direct connection to PC, LAN or the internet.

## Technical Features

### Mechanical

- Stainless steel faceplate
- Galvanized steel sub-plate
- Metal keypad
- Offset speaker holes for protection
- Hands free voice operation  
(Optional handset available on surface mount only)
- Built-in postal lock provision

### Electrical

- 16 VAC (power transformer included)
- Full Duplex voice communication
- Two relays allow for control of both a vehicular gate and a pedestrian gate

#### 1802 and 1802-EPD

- Programmable directory codes (1 to 4 digits)
- 16 digit dialing capability
- DTMF tone output allows for use with PBX and auto-attendant type phone systems
- Four-digit entry codes = 1000
- Five-digit entry codes = 6
- Built-in clock / calendar
- Time clock has its own backup power source
- Hold open time zones (4)
- Entry code time zones
- Flash entry codes

#### 1802

- Stores up to 600 phone numbers, 15 area code
- Two special inputs can be programmed for relay activation or dial-out function
- Time zone restrictions on selected entry codes
- LCD display for programming assistance and shows 'open' when access is granted

#### 1802-EPD

- Single-line 16 character LCD display
- Stores up to 100 phone numbers, 15 area codes
- LCD display for programming assistance
- Two relays to control two entry points

#### 1802-AP

- Up to 27 phone numbers (23 with intercom)
- 100 device codes (card, keypad, transmitter)
- 20 digit dialing capability
- 500 event history buffer
- 10 temporary access codes
- Add 6 additional entry points (RS485) using card, keypad, or proxy RF devices
- Access Plus programming software included
- Relay board available which allows use of existing 26-bit wiegand devices
- Holiday schedule

Four (4) hold open time zones

Schedule un-lock / lock times

Email notifications

LCD display for programming assistance and shows 'open' when access is granted

### Miscellaneous

Environmental: 10°F to 145°F (-12°C to 62°C)

ADA Compliant handset kit (P/N 1807-012) available on surface mount only

Camera Ready: Optional B&W or Color CCTV camera\*  
\*may require additional CCTV equipment

Shipping weight approximately 15-20 Lbs (6.8-9 kg)

FCC (US) DUF6VT-12874-0T-0

DOC (CAN) 1736 4507 A



Distributed by:

MEMBER:



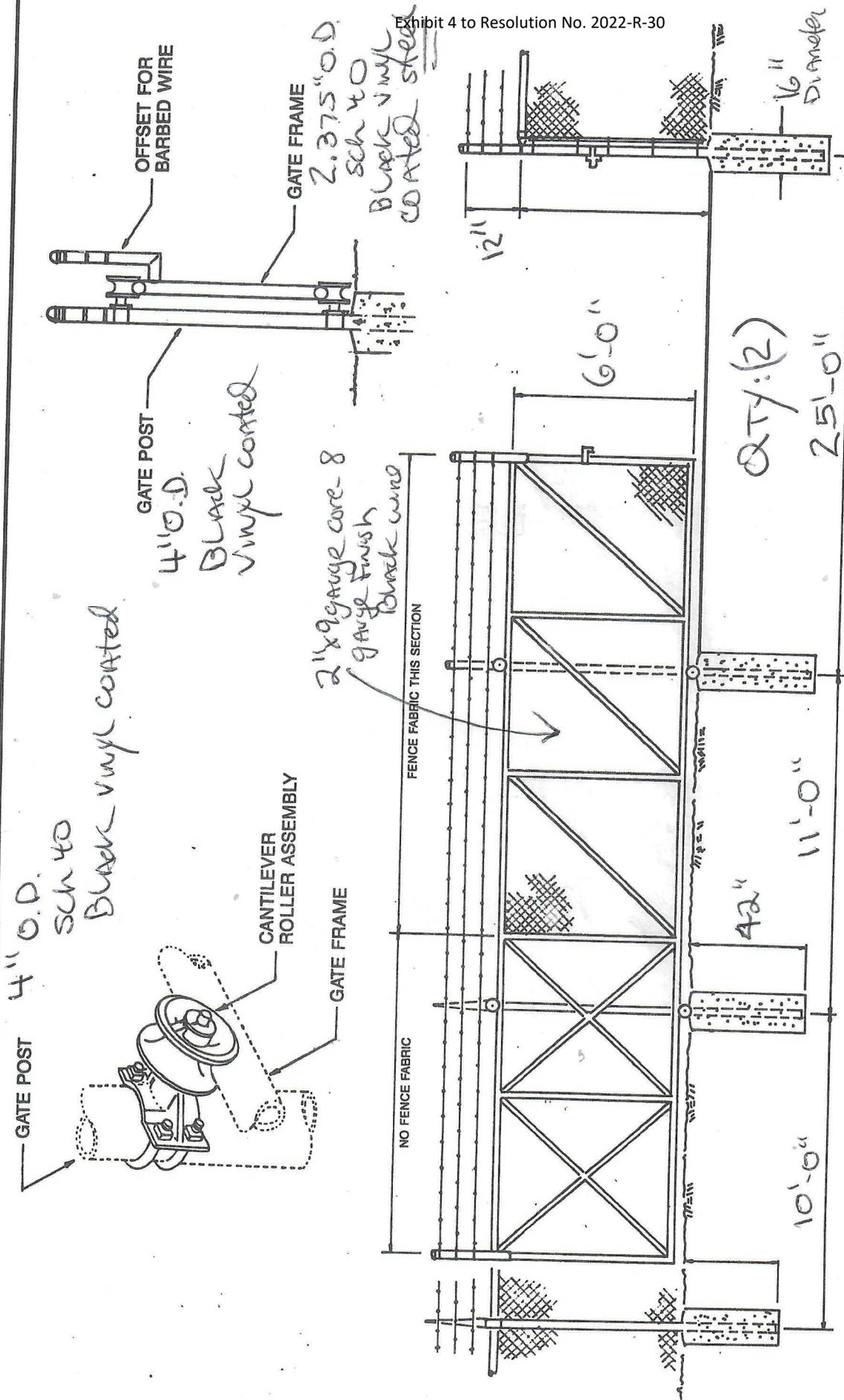
**DOORKING, INC.**

120 Glasgow Avenue, Inglewood, California 90301 U.S.A.

Tel: 310-645-0023 FAX: 310-641-1586 www.doorking.com

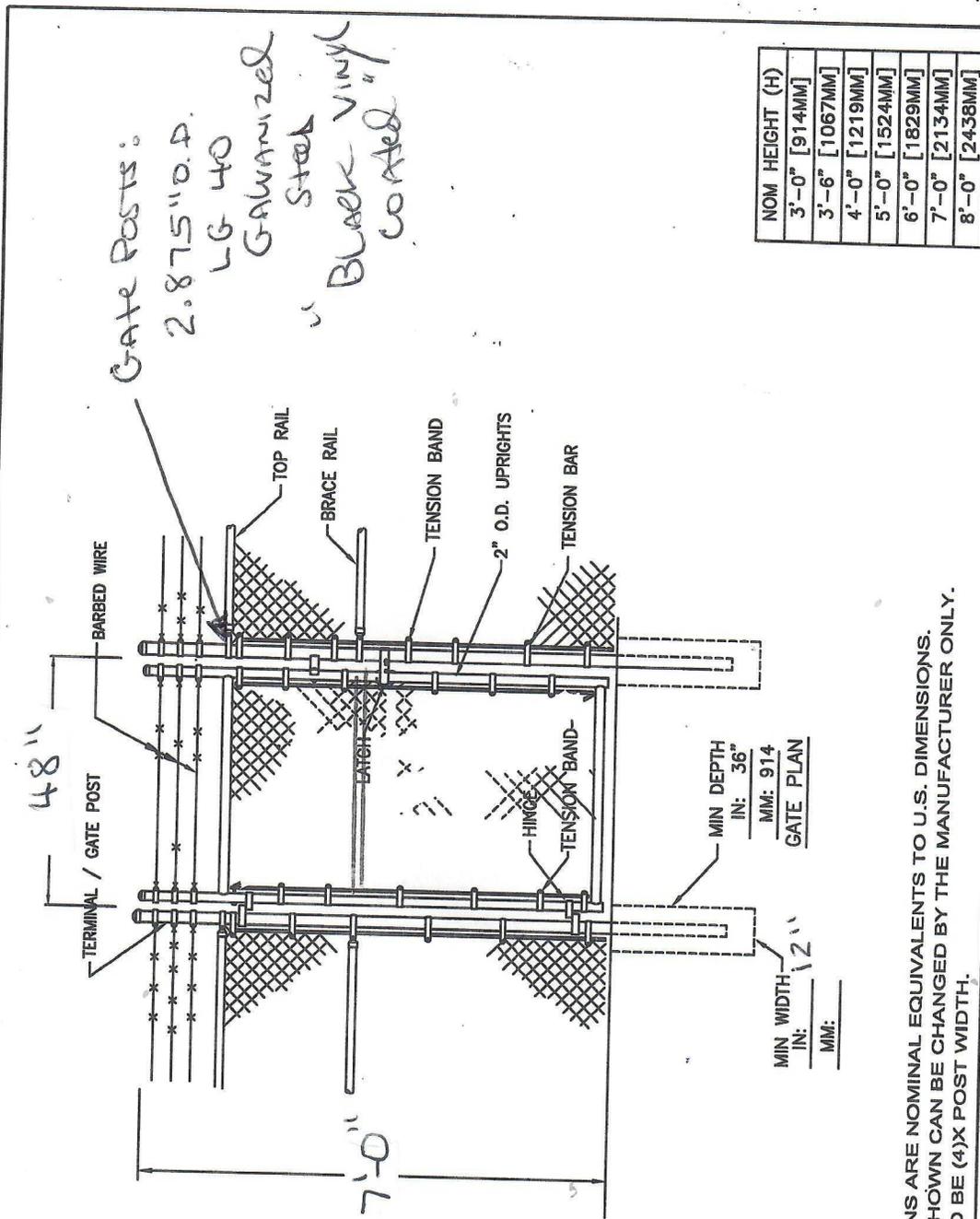
© 2016 All Rights Reserved. Product specifications may change without notice.  
Rev. 6/16





REVISED: Jan., 1992

SUBMITTED BY <b>USA Fence Co</b>	SUBMITTED TO <b>WOODRUFFSONS</b>	TYPICAL CANTILEVER GATE WITH BARBED WIRE		CONTRACTOR	ARCHITECT	ENGINEER	STANDARD DETAIL
		JOB / PROJECT <b>WEST Village Fence</b>					COMPILED BY
						DATE	DWG. NO. <b>SD-432R</b>
							SHT. <b>3</b> OF <b>3</b>



GATE POSTS:  
 2.875" O.D.  
 LG 40  
 GALVANIZED  
 STEEL  
 BLACK VINYL  
 COATED 1/2"

NOM HEIGHT (H)
3'-0" [914MM]
3'-6" [1067MM]
4'-0" [1219MM]
5'-0" [1524MM]
6'-0" [1829MM]
7'-0" [2134MM]
8'-0" [2438MM]

MIN WIDTH: 12"  
 IN: \_\_\_\_\_  
 MM: \_\_\_\_\_

MIN DEPTH: 36"  
 IN: \_\_\_\_\_  
 MM: 914

GATE PLAN

- NOTES:
1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
  2. SPECIFICATIONS SHOWN CAN BE CHANGED BY THE MANUFACTURER ONLY.
  3. FOOTING WIDTH TO BE (4)X POST WIDTH.

 <p><b>Merchants Metals</b>  <i>the first name in fence solutions</i></p>	SINGLE SWING GATE 4' OPENING W/BARBED WIRE	BY: USA Fence Co. DATE: REV:	DWG. NO. SDM-106 PED. SCALE: 1:40
	Copyright © 2005 Merchants Metals All Rights Reserved		

# Poly(Vinyl Chloride) (PVC)- Coated Steel Chain Link Fence Fabric Class 1 - Extruded

## ASTM F668, Federal specification RR-F-191 Type IV, AASHTO M-181 Type IV

# Merchants Metals Spec Tech

### 1. PRODUCT NAME

Extruded Poly(Vinyl Chloride)-PVC  
Coated Steel Chain Link Fence Fabric

### 2. MANUFACTURER

**Merchants Metals Manufacturing  
Locations:**

**Whittier, CA 90608**  
12482 East Putnam Street  
Phone: (800) 336-2396  
Fax: (562) 696-9604

**New Paris, IN 46553**  
71347 County Road 23  
Phone: (800) 831-4060  
Fax: (219) 831-3515

**Westfield, MA 01085**  
24 Fowler Street Extension  
Phone: (800) 447-5713  
Fax: (413) 572-3706

**Statesville, NC 28677**  
165 Fanjoy Road  
Phone: (800) 438-7016  
Fax: (704) 873-1313

**Houston, TX 77093**  
4901 Langley Road  
Phone: (800) 723-3623  
Fax: (713) 697-5806

**Bladensburg, MD 20710**  
4301- 46<sup>th</sup> Street  
Phone: (301) 927-4080  
Fax: (301) 927-0368

### 3. PRODUCT DESCRIPTION

#### *Basic Use:*

Extruded PVC coated fabric is a PVC-coated, high strength galvanized steel chain link fence fabric for industrial, commercial, and institutional applications. Extruded fabric is contained in local, state and federal government specifications for use in prison, road, dock, airport, housing, forestry, and military use.

#### *Composition and Materials:*

The galvanized steel core wire for producing extruded PVC coated steel chain link fence fabric is produced by cold-drawing good commercial grade steel rod into wire of the appropriate diameter. The steel rod from which the wire is drawn is produced by the open hearth, electric furnace or basic oxygen process. The galvanized coating is produced by passing the cleaned wire through a bath of molten zinc which conforms to ASTM B6.

The extruded PVC coating is produced by extruding PVC at a coating thickness up to 0.025 in. (0.64 mm) over a galvanized core wire.

#### *Standards:*

ASTM B 6 *Slab Zinc*  
ASTM F567 *Installation of Chain Link Fence*  
ASTM F668 *Poly(Vinyl Chloride) (PVC) and Other Organic Polymer-Coated Steel Chain Link Fence Fabric, Class 1*  
Federal specification RR-F-191K/1D *Fencing, Wire and Post Metal (Chain-Link Fence Fabric), Type IV*  
American Association of State Highway Transportation Officials (AASHTO) M-181 *Chain Link Fence, Type IV, Class A*

### 4. TECHNICAL DATA

#### *General:*

The manufacturer, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

#### *Chain Link Fence Fabric:*

The base metal of the chain link fence fabric is composed of commercial quality, medium-carbon galvanized (zinc coated) steel wire. The vinyl coating is continuously applied over the galvanized wire by the extrusion process. The extrusion process ensures a dense and impervious coating free of voids, as well as a smooth and lustrous surface appearance. Vinyl coating thickness, galvanized coating weight, and wire tensile strength conform to ASTM F668, Class 1, Federal specification RR-F-191 Type IV, and AASHTO M-181 Type IV, Class A, as shown in Table 1. The wire is PVC coated before weaving and is free and flexible at all joints. Unless otherwise specified, fabric woven in 2 in. (50 mm) mesh, under "72" (1,830 mm) in height, is knuckled at both selvages; fabric 72" (1,830 mm) high and over is knuckled at one selvage and twisted at the other. All fabrics woven into meshes under 2 in. (50 mm) have both selvages knuckled. See Table II.

#### *Wire Coating:*

Only plasticized poly(vinyl chloride) (PVC) with a low temperature (-20°C; -4°F) plasticizer and no extenders or extraneous matter other than the necessary stabilizers and pigments, is used. The PVC coating resists attack from prolonged exposure to dilute

solutions of most common mineral acids, seawater, and dilute solutions of most salts and alkali. See Table III.

#### *ASTM Color System:*

Standard colors conform to ASTM F934 and include:

	Dark Green	Brown	Black
L	28.61	27.76	22.30
A	-12.59	3.37	-0.09
B	1.95	4.28	-0.85

Other colors are available by special order.

### 5. INSTALLATION

Install fence in accordance with ASTM Practice 567. Handle all PVC coated material with care. If PVC coating is damaged during installation, contractor must replace or repair the material at own expense.

### 6. AVAILABILITY AND COST

#### *Availability:*

PVC-coated steel chain link fence fabric is available for shipment throughout the United States and worldwide.

#### *Cost:*

Material costs may vary depending on specific requirements. Costs may be obtained through all Merchants Metals Service Centers.

### 7. WARRANTY

Extruded PVC coated steel chain link fence fabric is warranted for 15 years against failure due to rust or corrosion.

### 8. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

### 9. TECHNICAL SERVICES

Technical services are available through the Merchants Technical Sales Department:

Phone: (888) 260-1600 (toll free)  
Facsimile: (888) 261-3600 (toll free)

or a local Merchants Metals Service Center.

  
**MERCHANTS METALS**  
*The First Name In Fence*

Issued: September, 2002

**Poly(Vinyl Chloride) (PVC)- Coated Steel Chain Link Fence Fabric  
Extruded and Adhered  
ASTM F668 Class 2a, Federal specification RR-F-191 Type IV,  
AASHTO M-181 Type IV, Class A**

**Table 1 – PVC-Coated Steel Wire Characteristics**

Zinc Coated Core Wire Size			PVC Coated Finished Wire Size	PVC Coated Wire Allowable Variance			Core Wire Zinc Coating Weight, min.		PVC Coating Thickness		Breaking Strength, minimum		Tensile Strength, min	
ga	inch	mm		ga	inch	mm	oz/ft <sup>2</sup>	g/m <sup>2</sup>	inch	mm	lbf	N	ksi	MPa
9	0.148	3.76	6	±0.005	±0.13	0.30	92	0.015 to 0.025	0.38 to 0.64	1,290	5,740	75	515	
11	0.120	3.05	8	±0.005	±0.13	0.30	92			850	3,780	75	515	
14	0.080	2.03	11	±0.005	±0.13	0.25	76			380	1,690	75	515	

Note: Core wire sizes less than 0.120" (3.05 mm) are not contained in Federal specification RR-F-191 or AASHTO M-181.

**Table 2 – PVC Coated Chain Link Fabric Sizes**

Mesh Size		Finished Wire Gage	Fabric Wire Height Inch (mm)	Selvage K-Knuckled, T-Twisted/Barbed	Roll Size	
inch	mm				ft	m
2"	50	6, 8	36 – 240 (910 – 6,100)	KK, KT, TT	50	15.24
1-3/4"	44	6, 8	36 – 240 (910 – 6,100)	KK Only	25	7.62
1"	25	8	36 – 144 (910 – 3,660)	KK Only	25	7.62

**Maximum Security Mesh**

5/8"	16	11	36 – 72 (910 – 1,830)	KK Only	25	7.62
1/2"	13	11	36 – 72 (910 – 1,830)	KK Only	25	7.62
3/8"	10	11	36 – 72 (910 – 1,830)	KK Only	25	7.62

Fabrics with other characteristics may be available. Contact the Merchants Metals Technical Sales Department or a Merchants Metals Service Center with specific requests.

**Table 3: Typical Vinyl Properties**

Test	Test Method	Value
Specific Gravity	ASTM D 792	1.30 ± 0.03
Hardness, Durometer	ASTM D 2240	A90 ± 5
Tensile Strength	ASTM D 412	2,600 ± 5%
Ultimate Elongation	ASTM D 412	275% ± 5%
Mandrel Bend Test, 10X mandrel	ASTM F 668	-20° F (-29° C)
Dielectric Strength, volt/mil	ASTM D 149	750
Compression cut-through, lbs	Bell Labs	1,500
Accelerated Aging Test	ASTM D 1499	1500 hrs. @145° F

Technical Sales Department:  
Telephone: (888) 260-1600  
Facsimile: (888) 261-3600

Issued September 2002



**Merchants Metals Spec Tech**

# Zinc Coated Framework – LG-40

Exhibit 4 to Resolution No. 2022-R-30

ASTM F1043 Group IC, Federal specification RR-F-191/3E Class 1 Grade B,  
AASHTO M-181 Grade 2

## 1. PRODUCT NAME

Galvanized Framework - LG-40

## 2. DISTRIBUTOR

Merchants Metals

Corporate Headquarters:

900 Ashwood Parkway, Suite 600

Atlanta, GA 30338

Phone: (866) 888-5611

Merchants Metals Service Centers are located throughout the United States.

## 3. PRODUCT DESCRIPTION

### Basic Use:

LG-40 pipe is used as end, corner or line posts, and rails, for commercial, industrial and institutional installations of chain link fencing. The requirements for this material are contained in various government specifications for use in prison, road, dock, airport, housing, forestry, and military installations.

LG-40 pipe is typically used in installations which incorporate zinc-coated or aluminum-coated steel chain link fence fabric, although it may also be specified for use with other types of fabric, i.e. PVC coated.

### Composition and Materials:

LG-40 pipe is manufactured using cold formed steel with a higher yield strength and tensile strength than schedule 40 pipe. The pipe is triple coated to provide and maintain a lustrous appearance in all climates and under the most severe atmospheric conditions.

## Standards:

LG-40 meets or exceeds the following specifications:

ASTM F1043 Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework, Group IC

ASTM F567 Installation of Chain Link Fence

Federal specification RR-F-191/3E, Class 1, Grade B

AASHTO M-181 Chain Link Fence, Grade 2 (American Association of State Highway Transportation Officials)

Federal Aviation Administration F162

Army Corps of Engineers UFGS

Department of the Navy

Federal Highway Administration

U.S. Department of Justice –

Federal Bureau of Prisons

## 4. TECHNICAL DATA

### General:

The manufacturer or distributor, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

### Yield Strength Requirement:

The yield strength of LG-40 pipe is 50,000 psi (344 MPa), min.

### Coating Requirements:

The exterior of LG-40 pipe is triple coated, ensuring the pipe will maintain its appearance. The triple coating consists of a metallic coating of zinc, plus a conversion coating and a clear organic film, conforming

to ASTM B6 coating requirements.

The interior of the pipe is coated with a zinc rich paint that provides a high level of corrosion resistance to the interior of the pipe.

## 5. INSTALLATION

Install fence posts in accordance with ASTM Practice 567.

## 6. AVAILABILITY AND COST

### Availability:

LG-40 pipe is available for shipment throughout the United States and worldwide.

### Cost:

Material costs may vary depending on specific requirements. Costs may be obtained through all Merchants Metals Service Centers.

## 7. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

## 8. TECHNICAL SERVICES

Specifications, drawings and other technical services are available through the Merchants Metals Technical Sales Department or your local Merchants Metals Service Center.

LG-40 Dimensions and Strength Characteristics

Fence Industry	Decimal O.D. Equivalent		Pipe Wall Thickness		Weight		Section Modulus	x	Min. Yield Strength	=	Max Bending Moment	Calculated Load (lbs.)		
	O.D.	in.	mm	in.	mm	lb./ft.						kg/m	in. <sup>3</sup>	psi
												4 ft.	6 ft.	
1 3/8 in.	1.315	33.40	.104	2.64	1.35	2.01	.1111	x	50,000	=	5,555	185	116	77
1 1/2 in.	1.660	42.16	.111	2.82	1.84	2.74	.1961	x	50,000	=	9,810	327	204	136
2 in.	1.900	48.26	.120	3.05	2.28	3.39	.2810	x	50,000	=	14,050	468	293	195
2 1/2 in.	2.375	60.33	.130	3.30	3.12	4.64	.4881	x	50,000	=	24,405	814	508	339
3 in.	2.875	73.03	.160	4.06	4.64	6.90	.8778	x	50,000	=	43,890	1463	914	610
3 1/2 in.	3.500	88.90	.160	4.06	5.71	8.50	1.3408	x	50,000	=	67,040	2235	1,397	931
4 in.	4.000	101.60	.160	4.06	6.56	9.76	1.7819	x	50,000	=	89,095	2970	1,856	1,237

Technical Sales Department:  
Telephone: (888) 260-1600 Fax: (888) 261-3600  
E-mail: Tech-Info@merchantsmetals.com  
Website: www.merchantsmetals.com

## ZINC COATED FRAMEWORK – LusterGuard™ LG-40 ASTM F1043 Group I-C, Federal specification RR-F-191 Class 1 Grade B, AASHTO M-181 Grade 2

### 1. PRODUCT NAME

Galvanized Framework,  
LusterGuard™, LG-40

### 2. DISTRIBUTOR

**Merchants Metals**

Corporate Headquarters:  
Houston, TX 77067  
515 West Greens Road  
Phone: (800) 254-0080  
Fax: (281) 876-0465

Merchants Metals Service Centers  
are located throughout the United  
States.

### 3. PRODUCT DESCRIPTION

#### **Basic Use:**

LusterGuard™ pipe is used as end, corner or line posts, and rails, for commercial, industrial and institutional installations of chain link fencing. The requirements for this material are contained in various government specifications for use in prison, road, dock, airport, housing, forestry, and military installations.

LusterGuard™ pipe is typically used in installations which incorporate zinc-coated or aluminum-coated steel chain link fence fabric, although it may also be specified for use with other types of fabric, i.e. PVC coated.

#### **Composition and Materials:**

LusterGuard™ pipe is manufactured using cold formed steel with a higher yield strength and tensile strength than schedule 40 pipe. The pipe is triple coated to provide and maintain a lustrous appearance in all climates and under the most severe atmospheric conditions.

#### **Standards:**

ASTM F1043 *Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework*, Group I-C Heavy Industrial

ASTM F567 *Installation of Chain Link Fence*

Federal specification RR-F-191K/3D *Fencing, Wire and Post Metal (Chain Link Fence Posts, Top Rails,*

*and Braces)*, Class 1, Grade B AASHTO M-181 *Chain Link Fence*, Grade 2 (American Association of State Highway Transportation Officials), Grade 2 Federal Aviation Administration AC 150/5370 *Item F162*

### 4. TECHNICAL DATA

#### **General:**

The manufacturer or distributor, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

#### **Zinc Coated Steel Framework:**

The information contained herein for high yield strength/high tensile strength pipe covers the requirements for pipe sizes NPS 1 to NPS 3½, corresponding to fence industry sizes 1-3/8" to 4". Note: The dimensionless designator, NPS is used instead of traditional terms such as nominal diameter, size, and nominal size.)

#### **Yield Strength Requirement:**

The yield strength of LusterGuard™ pipe is 50,000 psi (344 MPa), min.

#### **Coating Requirements:**

The exterior of LusterGuard™ pipe is triple coated, ensuring the pipe will maintain its appearance. The triple coating consists of a metallic coating of zinc, plus a conversion coating and a clear organic film, conforming to ASTM F1043 Type B coating requirements.

The interior of the pipe is coated with a zinc rich paint conforming to ASTM F1043 Type D coating requirements. This coating provides a high level of corrosion resistance to the interior of the pipe.

#### **Size and Tolerances:**

Sizes and other critical physical characteristics of LusterGuard™ LG-40 pipe typically used for fence installations are listed in Table 1.

The weight tolerance of the pipe is ± 5% of the nominal weights listed in Table 1.

Mill lengths may range from 18 ft to 24 ft, or posts are available cut-to-length. Post lengths must be noted on purchase orders, plans or specifications.

#### **LG-40 Strength Characteristics**

Strength calculations are provided in Table 2. The calculations are based on the specified diameters, wall thicknesses, and minimum specified yield strength. Strength calculations are in inch-pound units only.

Additional information regarding the size of pipe typically used for various heights of fence fabric is found in Table 3.

### 5. INSTALLATION

Install fence posts in accordance with ASTM Practice 567.

### 6. AVAILABILITY AND COST

**Availability:** LusterGuard™ pipe is available for shipment throughout United States and worldwide.

**Cost:** Material costs may vary depending on specific requirements. Costs may be obtained through all Merchants Metals Service Centers.

### 7. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

### 8. TECHNICAL SERVICES

Technical services are available through the Merchants Technical Sales Department:

Phone: (888) 260-1600 (toll free)  
Facsimile: (888) 261-3600 (toll free)

or your local Merchants Metals Service Center.

Additional information is available on our website: [www.merchantsmetals.com](http://www.merchantsmetals.com)



**Lusterguard™ LG-40**

**ASTM F1043 Group I-C, Federal specification RR-F-191 Class 1 Grade B,  
AASHTO M-181 Grade 2**

**Table 1 – LG-40 Pipe – Nominal Dimensions and Weights**

Designator			Outside Diameter		Wall Thickness		Weight	
Fence Industry	NPS	Metric	inch	Mm	inch	mm	lb/ft	kg/m
1-3/8	1	25	1.315	33.4	0.104	2.64	1.35	2.0
1-5/8	1-1/4	32	1.660	42.2	0.111	2.82	1.84	2.7
2	1-1/2	40	1.900	48.3	0.120	3.05	2.28	3.4
2-1/2	2	50	2.375	60.3	0.130	3.30	3.12	4.6
3	2-1/2	65	2.875	73.0	0.160	4.06	4.64	6.9
3-1/2	3	80	3.500	88.9	0.160	4.06	5.71	8.5
4	3-1/2	90	4.000	101.6	0.160	4.06	6.56	9.8

**Table 2 – LG-40 Pipe – Strength Characteristics – inch/pound units**  
Based on minimum yield strength of 50,000 psi

NPS	Outside Diameter o.d. inches	Wall Thickness inch	Inside Diameter i.d. inches	Section Modulus inch <sup>2</sup>	Maximum Bending Moment lb-inch	Calculated Load (lbs)		
						10 ft * Free Supported	Cantilever Load **	
							4 ft	6 ft
1	1.315	0.104	1.107	0.111	5,555	185	116	77
1¼	1.660	0.111	1.438	0.196	9,810	327	204	136
1½	1.900	0.120	1.660	0.281	14,050	Sizes above 1.660" o.d. are not normally used for top rail	293	195
2	2.375	0.130	2.115	0.488	24,405		508	339
2½	2.875	0.160	2.555	0.878	43,890		914	610
3	3.500	0.160	3.180	1.341	67,040		1,397	931
3½	4.000	0.160	3.680	1.782	89,100		1,856	1,237

- \* 10 ft Free Supported Calculated Load is representative of top rail for a typical chain link fence installation.  
\*\* 4 ft and 6 ft Cantilever Loads represent maximum calculated load applied at the top of the post with the bottom fixed.

**Table 3 Post Selection Guide – based on fabric height**

Fabric Height	O. D.		Wall Thickness		Weight	
	in.	mm	in.	mm	lb/ft	kg/m
<b>Terminal Posts: End, Corner and Pull</b>						
Fabric 6 ft (1,830 mm) and under	2.375	60.3	0.130	3.30	3.12	4.6
Fabric over 6 ft (1,830 mm) to 12 ft (3,660 mm)	2.875	73.0	0.160	4.06	4.64	6.9
<b>Line Posts</b>						
Fabric 6 ft (1,830 mm and under)	1.900	48.3	0.120	3.05	2.28	3.4
Fabric over 6 ft (1,830 mm) to 8 ft (2,440 mm)	2.375	60.3	0.130	3.30	3.12	4.6
Fabric over 8 ft (2,440 mm) to 12 ft (3,660 mm)	2.875	73.0	0.160	4.06	4.64	6.9
<b>Rails (Top, bottom, intermediate and brace)</b>						
All Heights	1.660	42.2	0.111	2.82	1.84	2.7

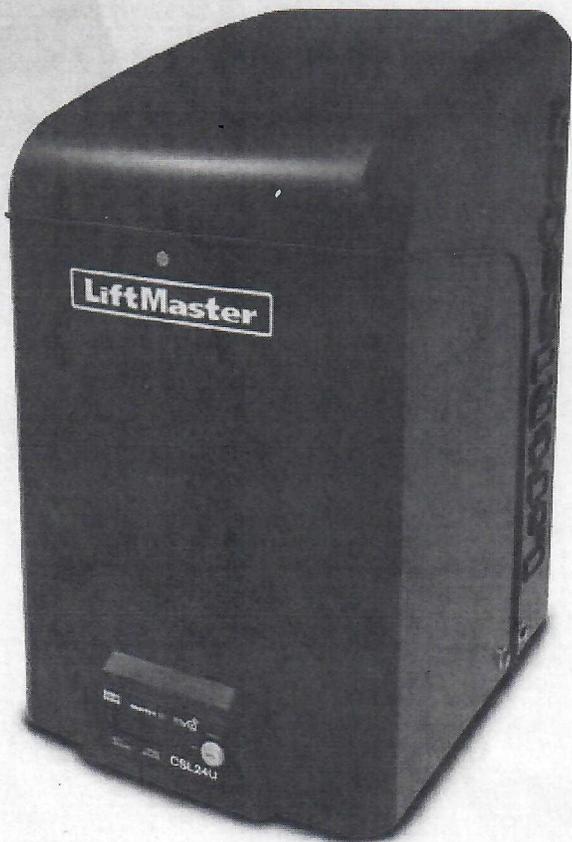
**Technical Sales Department:**  
Telephone: (888) 260-1600  
Facsimile: (888) 261-3600

24VDC High-Traffic Commercial  
Slide Gate Operator



It's Time to Make Gate Safety a Priority

**CSL24U**



## Unrivaled Performance, Safety and Accessibility

Built to deliver unsurpassed safety and performance, our 2016 UL Listed Gate Operators and Monitored Safety Entrapment Devices provide peace of mind for every gate application.

### NOW INCLUDED:

Monitored Retro-  
Reflective Photo Eye  
(LMRRU)



**LiftMaster**  
ELITE SERIES®

# CSL24U: Setting the New Standard with Best-in-Class Features

**Engineered for more than 1 Million Cycles, our P3 Motor®** is designed to perform in the most demanding environments.

**Heavy-Duty Commercial Gear-Driven Transmission** provides unsurpassed reliability.

**Soft Start/Stop Operation** extends hardware life in high-cycle and heavy-gate applications.

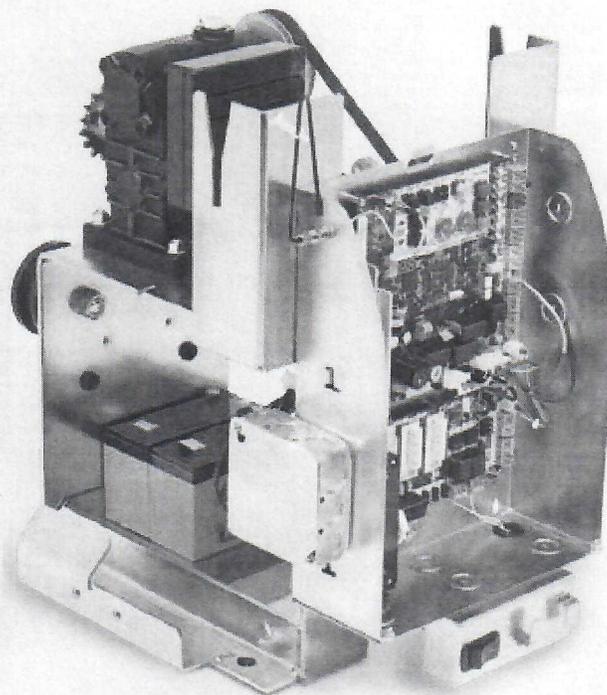
**Surge Suppression** provides industrial surge and lightning protection against strikes up to 50 feet away.

#### IDEAL FOR

Heavy-traffic applications such as large gated communities, residential developments and commercial complexes.

#### WARRANTY

Five years commercial.  
Seven years residential.



**Fire Department Compliance** allows gate to auto-open upon loss of AC power or battery depletion.

**Wireless Dual-Gate Communication** eliminates expensive conduit costs and avoids unsightly driveway scars.

**Keyed Manual Disconnect** when unlocked allows gate to be operated manually.

**Quick Close and Anti-Tailgate** quickly secures property, preventing unauthorized access.

## Exclusively LiftMaster®: What Sets Us Apart



Secures and safeguards your property by providing up to **208\* cycles or up to 24 days\*** of standby power when the power is down.



Keep traffic flowing with Security+ 2.0® Technology that utilizes a tri-band signal that virtually eliminates interference and offers extended range each time the remote control is used.



Securely control and monitor your Gate Operator from anywhere and get activity notifications through the MyQ® app.



LiftMaster has designed its own purpose built high-cycle high-temperature continuous duty motor to meet the exact requirements needed to open and close your gate.

\* Basic setup with remote controls programmed. Does not include added accessory power draw. LiftMaster low power draw accessories recommended to extend cycles and standby time on battery backup.

# New 2016 UL 325 Gate Guidelines

LiftMaster is committed to helping the industry design, install and service safe gate applications that are tested and certified to meet the most stringent industry safety standards.

## What You Need to Know:

- Two monitored safety entrapment protection devices must be installed at each entrapment point, including:
  - The inherent reversing system built in to each LiftMaster Gate Operator
  - LiftMaster Monitored Photo Eyes and/or Edge Sensors\*\*
- Gate operators will now monitor for fault conditions of external entrapment protection devices.
- New regulations go into effect January 2016.



## Safety Accessories

**Monitored Retro-Reflective Photo Eye (LMRRU)**

- Sensing distance up to 50 ft., NEMA 4X.
- Hoods come standard.



**Monitored Through-Beam Photo Eyes (LMTBU)**

- Wireless network mode eliminates the need to wire between operators in dual-gate applications.
- Sensing distance up to 90 ft., NEMA 4X.
- Hoods come standard.



**Monitored Wireless Edge Kit (LMWEKITU)**

- Low-energy Bluetooth® transmission provides industry-leading battery life (2 years).
- Accepts up to 4 transceivers, 2 resistive edges per transceiver.
- Sensing distance up to 130 ft., NEMA 4X.
- Compatible with LiftMaster Monitored Edges.

**Monitored Safety Inputs**

Come standard with the CSL24U.

- Includes 6 Monitored Safety Inputs to cover all entrapment points.

**\*\*Only LiftMaster Monitored Photo Eyes or Edge Sensors may be used with this operator to meet the 2016 UL 325 Standard.**

## Add to Your System



**Plug-in Loop Detector (LOOPDETLM)**

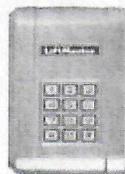
Ensures vehicles are easily identified to exit property or interrupt gate travel if a vehicle is in its path.

Power-efficient design uses less power to maximize cycles when operating on Battery Backup.



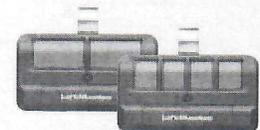
**Internet Gateway (828LM)\*\*\***

Connects your MyQ®-Enabled Gate Operator to the Internet with this device and the free MyQ app.



**Wireless Commercial Keypad (KPW250)**

Sleek, zinc-alloy metal front cover is extremely durable. Electronics encapsulated for reliable outdoor use. Compatible with Security+ 2.0®, Security+® and Linear MultiCode®† 250-code capacity.



**2-Button and 4-Button Security+ 2.0® Learning Remote Controls (892LT/894LT)**

Can learn or clone other LiftMaster codes or frequencies.

\*\*\* Internet Gateway Accessory functionality is dependent on communication with a MyQ®-Enabled Gate Operator. MyQ Technology communication can be limited by distance and type of exterior building materials. A general range estimate is 300 ft.

† MultiCode is a registered trademark of Nortek Security & Control LLC.

# 24VDC High-Traffic Commercial Slide Gate Operator

## CSL24U

### FEATURES

**LED DIAGNOSTIC DISPLAY** Simplifies installation and troubleshooting.



**SOLAR-READY ULTRA-RELIABLE SYSTEM** Simple solar conversion delivers power when you need it most and is extremely power efficient at all other times to maximize solar performance.

**PROGRAMMABLE AUXILIARY RELAYS**

Easily add additional features, such as warning lights/alarms.

**POSILOCK®** Automatically powers the operator and returns a gate to the closed position when gate is pushed off of closed limit.

**PRE-MOTION WARNING ALARM** Activates on-board alarm three seconds prior to gate motion.

**ANTI-TAILGATE** Prevents unauthorized access. Gate will pause when closing as vehicle pulls onto interrupt loop or breaks photo beam. Once vehicle backs up, gate will continue to close.

**QUICK CLOSE** Closes the gate immediately after a vehicle pulls off the interrupt loop.

**HOMELINK® COMPATIBLE** Version 4 and higher.

**SECURITY+ 2.0® ON-BOARD RADIO RECEIVER** Up to 50 remote controls (unlimited with 811LM/813LM).

### SPECIFICATIONS

**POWER**

120V/230V Single Phase.

**ACCESSORY POWER**

24VDC 500mA output. Switched and unswitched power.

**MONITORED SAFETY INPUTS**

3 Main Board, 3 Expansion Board.

**TEMPERATURE SPECIFICATIONS**

Without Heater:

-4°F (-20°C) to 140°F (60°C).

With Optional Heater (HTR):

-40°F (-40°C) to 140°F (60°C).

**UL USAGE CLASSIFICATION**

I, II, III, and IV.

**GATE TRAVEL SPEED**

12 in. per second.

### CONSTRUCTION

**P3 MOTOR®**

24VDC continuous-duty motor.

**OPERATOR DUTY RATING**

High-cycle, high-temperature continuous duty.

**CHASSIS**

Constructed with 1/4 in. gold zinc-plated steel for rust prevention.

**WORM GEAR REDUCTION**

Commercial oil bath gearbox providing 10:1 worm gear reduction.

**COVER**

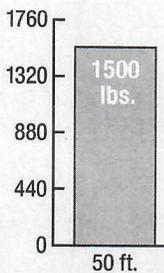
High-density, UV-resistant polycarbonate 2-piece cover for excellent heat and corrosion resistance.

**OPERATOR WEIGHT** 140 lbs.

**RECOMMENDED CAPACITIES**

Rated for gates up to 50 ft. in length or weighing up to 1,500 lbs.

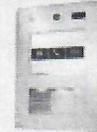
Slide Rating



### BATTERY BACKUP OPERATION

BATTERY	CYCLES	STANDBY TIME
(2) 7Ah	208	24 Days
(2) 33Ah	1179	105 Days

### ADDITIONAL ACCESSORIES



**Internet Protocol Access Control (IPAC)**  
Easy-to-use touch-screen outdoor access control system.



**3-Button Passport MAX Visor Remote Control (PPV3M)** Compatible with the IPAC and Passport Receiver (PPWR).



**Telephone Entry/Access Control System (EL2000SS)** High-capacity entry system.



**Universal Single and 3-Button Remote Controls (811LM/813LM)** Ideal for applications requiring a large number of remote controls.



**Solar Panel (SP10W12V)** Solar option available. Efficient reliable system (2 panels required).



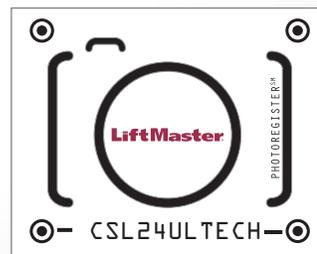
# Model CSL24UL



OPERATOR REQUIRES A LIFTMASTER EXTERNAL MONITORED ENTRAPMENT PROTECTION DEVICE BE INSTALLED IN ALL ENTRAPMENT ZONES

- THIS PRODUCT IS TO BE INSTALLED AND SERVICED BY A TRAINED GATE SYSTEMS TECHNICIAN ONLY.
- This model is for use on vehicular passage gates ONLY and not intended for use on pedestrian passage gates.
- This model is intended for use in Class I, II, III and IV vehicular slide gate applications.
- Visit [LiftMaster.com](http://LiftMaster.com) to locate a professional installing dealer in your area.
- This gate operator is compatible with MyQ® and Security+ 2.0® accessories.

Access installation and technical support guides or register this product



1. Take a photo of the camera icon including the points (⊙).
2. Send it in by texting the photo to 71403.



LiftMaster  
300 Windsor Drive  
Oak Brook, IL 60523

# LiftMaster®

## ELITE SERIES®

## TABLE OF CONTENTS

<b>SAFETY</b>	<b>2</b>	<b>OPERATION</b>	<b>27</b>
Safety Symbol and Signal Word Review.....	2	Gate Operator Setup Examples .....	27
Usage Class .....	3	Control Board Overview .....	28
UL325 Entrapment Protection Requirements .....	3	Manual Disconnect .....	29
Safety Installation Information.....	4	Reset Switch.....	29
Gate Construction Information.....	5	Operator Alarm .....	29
<b>INTRODUCTION</b>	<b>6</b>	Remote Control.....	29
Carton Inventory .....	6	<b>ACCESSORY WIRING</b>	<b>30</b>
Operator Specifications.....	7	External Control Devices.....	30
Site Preparation .....	8	Locks .....	31
<b>INSTALLATION</b>	<b>9</b>	Miscellaneous Wiring.....	31
Types of Installations.....	9	<b>EXPANSION BOARD</b>	<b>32</b>
Step 1 Determine Location for Operator.....	10	Expansion Board Overview .....	32
Step 2 Install the Operator.....	11	Auxiliary Relay 1 and 2 .....	33
Step 3 Attach the Chain .....	12	Wiring Accessories to the Expansion Board .....	34
Step 4 Install Entrapment Protection.....	14	<b>MAINTENANCE</b>	<b>35</b>
Step 5 Earth Ground Rod.....	16	Important Safety Instructions .....	35
Step 6 Power Wiring.....	16	Maintenance Chart.....	35
Step 7 Connect Batteries .....	18	Batteries.....	36
Step 8 Dual Gate Setup.....	20	Drive Train .....	36
Step 9 Install the Cover .....	22	<b>TROUBLESHOOTING</b>	<b>37</b>
<b>ADJUSTMENT</b>	<b>23</b>	Diagnostic Codes.....	37
Limit and Force Adjustment.....	23	Diagnostic Codes Table .....	38
Obstruction Test .....	24	Control Board LEDs .....	40
<b>PROGRAMMING</b>	<b>25</b>	Troubleshooting Chart .....	41
Remote Controls (Not Provided) .....	25	<b>APPENDIX</b>	<b>44</b>
LiftMaster Internet Gateway (not provided) .....	26	Step 6 Solar Panel(s).....	44
Erase All Codes.....	26	SAMS Wiring With Relays Not Energized .....	48
Erase Limits .....	26	Dual Gate Settings .....	48
Constant Pressure Override (CPO) .....	26	Limit Setup With a Remote Control .....	49
Gate Hold Open Feature.....	26	<b>WIRING DIAGRAM</b>	<b>50</b>
To Remove and Erase Monitored		<b>REPAIR PARTS</b>	<b>51</b>
Entrapment Protection Devices.....	26	<b>ACCESSORIES</b>	<b>52</b>
		<b>WARRANTY</b>	<b>54</b>

## SAFETY

### Safety Symbol and Signal Word Review

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of **Serious Injury or Death** if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock. Read the warnings carefully.

When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your gate and/or the gate operator if you do not comply with the cautionary statements that accompany it. Read them carefully.

#### IMPORTANT NOTE:

- *BEFORE attempting to install, operate or maintain the operator, you must read and fully understand this manual and follow all safety instructions.*
- *DO NOT attempt repair or service of your gate operator unless you are an Authorized Service Technician.*

 **WARNING:** This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

 **WARNING**

**MECHANICAL**

 **WARNING**

**ELECTRICAL**

 **CAUTION**

# SAFETY

## Usage Class

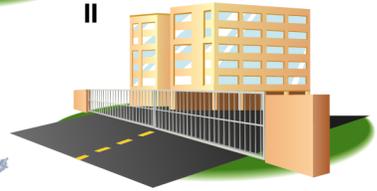
### Class I - Residential Vehicular Gate Operator

A vehicular gate operator (or system) intended for use in garages or parking areas associated with a residence of one-to four single families.



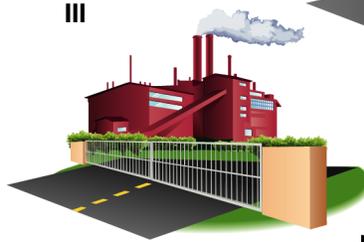
### Class II - Commercial/General Access Vehicular Gate

A vehicular gate operator (or system) intended for use in a commercial location or building such as a multi-family housing unit (five or more single family units), hotel, garages, retail store, or other buildings accessible by or servicing the general public.



### Class III - Industrial/Limited Access Vehicular Gate

A vehicular gate operator (or system) intended for use in an industrial location or building such as a factory or loading dock area or other locations not accessible by or intended to service the general public.



### Class IV - Restricted Access Vehicular Gate Operator

A vehicular gate operator (or system) intended for use in a guarded industrial location or building such as an airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via supervision by security personnel.



## UL325 Entrapment Protection Requirements

- A **minimum of two** independent\* monitored entrapment protection devices are required to be installed at each entrapment zone
- Every installation is unique. It is the responsibility of the installer to install external monitored entrapment protection devices in **each entrapment zone**
- This vehicular slide gate operator will operate only after installation of a **minimum of two** independent\* monitored entrapment protection devices in each direction; two in the open direction and two in the close direction.
- Entrapment protection device types include inherent (built into the operator), monitored external photoelectric sensors or monitored external edge sensors
- This operator is provided with an inherent entrapment protection device built into the operator that serves as one of the two independent devices

\* Independent - the same type of device shall NOT be used for both entrapment protection devices.

## IMPORTANT SAFETY INSTRUCTIONS

### ⚠ WARNING

To reduce the risk of INJURY or DEATH:

- READ AND FOLLOW ALL INSTRUCTIONS.
- NEVER let children operate or play with gate controls. Keep the remote control away from children.
- ALWAYS keep people and objects away from the gate. NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE.
- Test the gate operator monthly. The gate MUST reverse on contact with an object or reverse when an object activates the noncontact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of INJURY or DEATH.
- Use the emergency release ONLY when the gate is not moving.
- KEEP GATES PROPERLY MAINTAINED. Read the owner's manual. Have a qualified service person make repairs to gate hardware.
- The entrance is for vehicles ONLY. Pedestrians MUST use separate entrance.

• **SAVE THESE INSTRUCTIONS.**

# SAFETY

## Safety Installation Information

1. Vehicular gate systems provide convenience and security. Gate systems are comprised of many component parts. The gate operator is only one component. Each gate system is specifically designed for an individual application.
2. Gate operating system designers, installers and users must take into account the possible hazards associated with each individual application. Improperly designed, installed or maintained systems can create risks for the user as well as the bystander. Gate systems design and installation must reduce public exposure to potential hazards.
3. A gate operator can create high levels of force in its function as a component part of a gate system. Therefore, safety features must be incorporated into every design. Specific safety features include:
  - Edges Sensors (contact)
  - Guards for Exposed Rollers
  - Photoelectric Sensors
  - Screen Mesh
  - Vertical Posts
  - Instructional and Precautionary Signage
4. Install the gate operator only when:
  - a. The operator is appropriate for the construction and the usage class of the gate.
  - b. All openings of a horizontal slide gate are guarded or screened from the bottom of the gate to a minimum of 6 feet (1.8 m) above the ground to prevent a 2-1/4 inches (6 cm) diameter sphere from passing through the openings anywhere in the gate, and in that portion of the adjacent fence that the gate covers in the open position.
  - c. All exposed pinch points are eliminated or guarded, and guarding is supplied for exposed rollers.
5. The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening. The pedestrian access opening shall be designed to promote pedestrian usage. Locate the gate such that persons will not come in contact with the vehicular gate during the entire path of travel of the vehicular gate.
6. The gate must be installed in a location so that enough clearance is supplied between the gate and adjacent structures when opening and closing to reduce the risk of entrapment.
7. The gate must be properly installed and work freely in both directions prior to the installation of the gate operator.
8. Permanently mounted access controls intended for users to activate, must be located at least 6 feet (1.8 m) away from any moving part of the gate and where the user is prevented from reaching over, under, around or through the gate to operate the controls. Outdoor or easily accessible controls shall have a security feature to prevent unauthorized use. Exception: Emergency access controls only accessible by authorized personnel (e.g. fire, police) may be placed at any location in the line-of-sight of the gate.
9. The Stop and/or Reset (if provided separately) must be located in the line-of-sight of the gate. Activation of the reset control shall not cause the operator to start.
10. A minimum of two (2) WARNING SIGNS shall be installed in the area of the gate. Each placard is to be visible by persons located on the side of the gate on which the placard is installed.
11. For a gate operator utilizing a non-contact sensor:
  - a. Reference owner's manual regarding placement of non-contact sensor for each type of application. See Install Entrapment Protection section.
  - b. Care shall be exercised to reduce the risk of nuisance tripping, such as when a vehicle trips the sensor while the gate is still moving.
  - c. One or more non-contact sensors shall be located where the risk of entrapment or obstruction exists, such as the perimeter reachable by a moving gate or barrier.
12. For a gate operator utilizing a contact sensor such as an edge sensor:
  - a. One or more contact sensors shall be located where the risk of entrapment or obstruction exists, such as at the leading edge, trailing edge and post mounted both inside and outside of a vehicular horizontal slide gate.
  - b. A hard wired contact sensor shall be located and its wiring arranged so the communication between the sensor and the gate operator is not subject to mechanical damage.
  - c. A wireless device such as one that transmits radio frequency (RF) signals to the gate operator for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structures, natural landscaping or similar obstruction. A wireless device shall function under the intended end-use conditions.

# SAFETY

## Gate Construction Information

Vehicular gates should be installed in accordance with ASTM F2200: Standard Specification for Automated Vehicular Gate Construction. For a copy, contact ASTM directly at 610-832-9585 or [www.astm.org](http://www.astm.org).

### 1. General Requirements

- 1.1 Gates shall be constructed in accordance with the provisions given for the appropriate gate type listed, refer to ASTM F2200 for additional gate types.
- 1.2 Gates shall be designed, constructed and installed to not fall over more than 45 degrees from the vertical plane, when a gate is detached from the supporting hardware.
- 1.3 Gates shall have smooth bottom edges, with vertical bottom edged protrusions not exceeding 0.50 inches (12.7 mm) when other than the exceptions listed in ASTM F2200.
- 1.4 The minimum height for barbed tape shall not be less than 8 feet (2.44 m) above grade and for barbed wire shall not be less than 6 feet (1.83 m) above grade.
- 1.5 An existing gate latch shall be disabled when a manually operated gate is retrofitted with a powered gate operator.
- 1.6 A gate latch shall not be installed on an automatically operated gate.
- 1.7 Protrusions shall not be permitted on any gate, refer to ASTM F2200 for Exceptions.
- 1.8 Gates shall be designed, constructed and installed such that their movement shall not be initiated by gravity when an automatic operator is disconnected, in accordance with the following.
  - 1.8.1 Vehicular horizontal slide gate. Shall not result in continuous, unimpeded movement in either lineal direction of its travel.
  - 1.9 For pedestrian access in the vicinity of an automated vehicular gate, a separate pedestrian gate shall be provided. The pedestrian gate shall be installed in a location such that a pedestrian shall not come in contact with a moving vehicular access gate. A pedestrian gate shall not be incorporated into an automated vehicular gate panel.

### 2. Specific Applications

- 2.1 Any non-automated gate that is to be automated shall be upgraded to conform to the provisions of this specification.
- 2.2 This specification shall not apply to gates generally used for pedestrian access and to vehicular gates not to be automated.
- 2.3 When the gate operator requires replacement, the existing gate shall be upgraded to conform to the provisions of this specification.
- 2.4 When the gate of an automated gate system requires replacement, the new gate shall conform to the provisions of this specification.

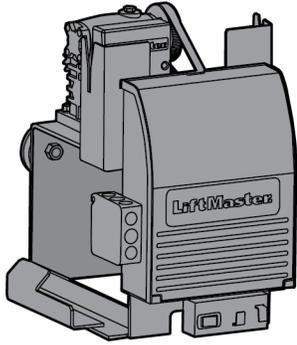
### 3. Vehicular Horizontal Slide Gates

- 3.1 The following provisions shall apply to Class I, Class II and Class III vehicular horizontal slide gates:
  - 3.1.1 All weight bearing exposed rollers 8 feet (2.44 m), or less, above grade shall be guarded or covered.
  - 3.1.2 All openings shall be designed, guarded, or screened from the bottom of the gate to the top of the gate or a minimum of 6 ft. (1.83 m) above grade, whichever is less, to prevent a 2 1/4 in. (57 mm) diameter sphere from passing through the openings anywhere in the gate, and in that portion of the adjacent fence that the gate covers in the open position. The gate panel shall include the entire section of the moving gate, including any back frame or counterbalance portion of the gate.
    - 3.1.3 A gap, measured in the horizontal plane parallel to the roadway, between a fixed stationary object nearest the roadway, (such as a gate support post) and the gate frame when the gate is in either the fully open position or the fully closed position, shall not exceed 2 1/4 inches (57 mm). Exception: All other fixed stationary objects greater than 16 in. (406 mm) from the gate frame shall not be required to comply with this section.
    - 3.1.4 Positive stops shall be required to limit travel to the designed fully open and fully closed positions. These stops shall be installed at either the top of the gate, or at the bottom of the gate where such stops shall horizontally or vertically project no more than is required to perform their intended function.
    - 3.1.5 All gates shall be designed with sufficient lateral stability to assure that the gate will enter a receiver guide, refer to ASTM F2200 for panel types.
- 3.2 The following provisions shall apply to Class IV vehicular horizontal slide gates:
  - 3.2.1 All weight bearing exposed rollers 8 feet (2.44 m), or less, above grade shall be guarded or covered.
  - 3.2.2 Positive stops shall be required to limit travel to the designed fully open and fully closed positions. These stops shall be installed at either the top of the gate, or at the bottom of the gate where such stops shall horizontally or vertically project no more than is required to perform their intended function.

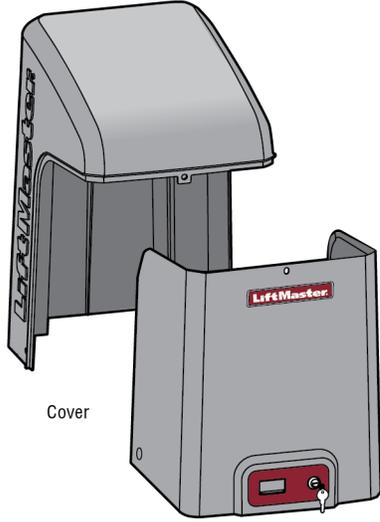
# INTRODUCTION

## Carton Inventory

**NOT SHOWN:** Documentation Packet, Chain #41 - 30 feet, Eye Bolt Kit



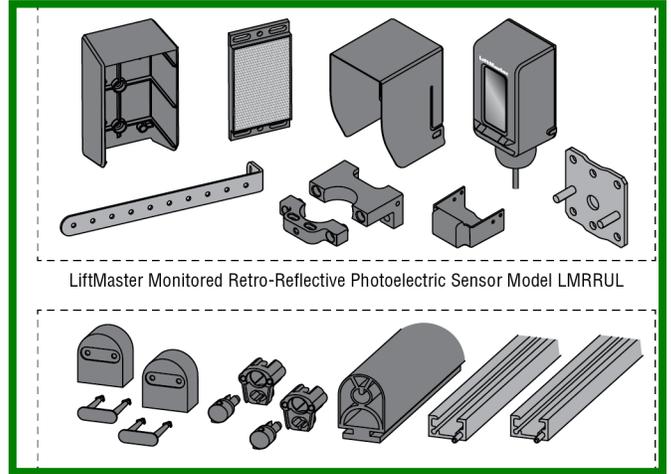
Operator



Cover



Warning Signs (2)  
and Warranty Card

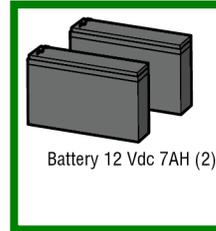


LiftMaster Monitored Retro-Reflective Photoelectric Sensor Model LMRRUL

5 ft. Edge sensor kit



Battery Tray



Battery 12 Vdc 7AH (2)

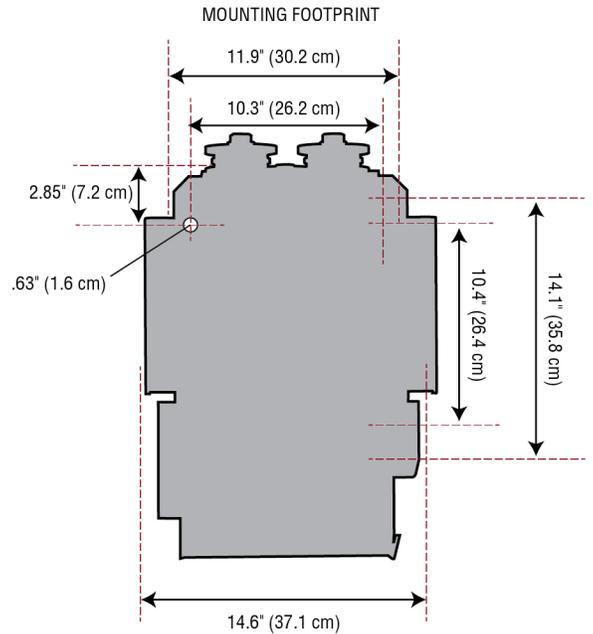
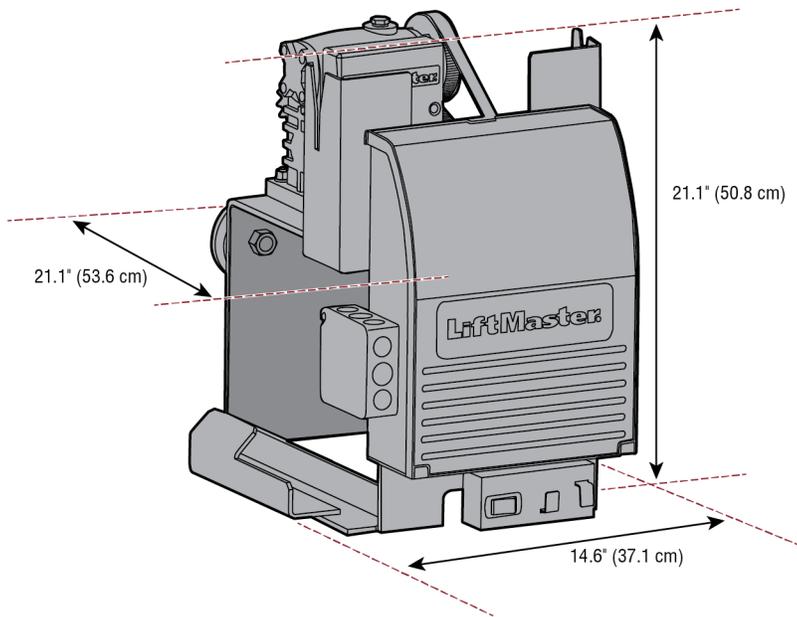


Key (2)

# INTRODUCTION

## Operator Specifications

<b>Usage Classification</b>	Class I, II, III, & IV
<b>Main AC Supply</b>	120 Vac, 4 Amps (10 Amps including Accessory Outlets) <b>OR</b> 240 Vac, 2 Amps When Optional Transformer Kit Model 3PHCONV is installed in the field, operator is rated 208/240/480/575 VAC, 4.8/4.2/2.1/1.7 A, 60 Hz, 1 PH
<b>System Operating Voltage</b>	24 Vdc Transformer Run / Battery Backup
<b>Accessory Power</b>	24 Vdc, 500mA max. for ON + SW (switched)
<b>Solar Power Max</b>	24 Vdc at 60 watts max.
<b>Maximum Gate Weight</b>	1500 lbs. (680.4 kg)
<b>Minimum Gate Travel Distance</b>	4 feet (1.2 m)
<b>Maximum Gate Travel Distance</b>	50 feet (15.24 m)
<b>Maximum Gate Travel Speed</b>	1 foot/second
<b>Maximum Daily Cycle Rate</b>	Continuous
<b>Maximum Duty Cycle</b>	Continuous
<b>Operating Temperature</b>	Without Heater: -20°C to 60°C (-4°F to 140°F) With Optional Heater: -40°C to 60°C (-40°F to 140°F)
<b>Expansion Board</b>	Provided
<b>External Entrapment Protection Device Inputs (non-contact and/or contact)</b>	Main board - up to 2 close entrapment protection devices and 1 open entrapment protection device. Expansion board - up to 3 entrapment protection devices configurable to either close or open and up to 4 edge sensors using wireless edge sensor kit model LMWEKITU .



# INTRODUCTION

## Site Preparation

Check the national and local building codes **BEFORE** installation.

### Conduit and Concrete Pad

Trench and install conduit. Before trenching, contact underground utility locating companies. Conduit must be UL approved for low and high voltage. Consider the operator placement **BEFORE** installing the pad or post.



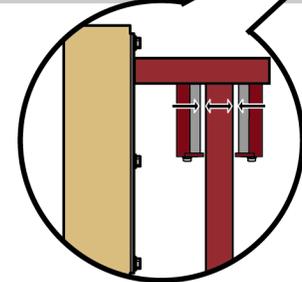
### Safety

Entrapment protection devices are required to protect against any entrapment or safety conditions encountered in your gate application. Install a warning sign (two provided) on the inside and outside of the property, where easily visible.



### Gate

Gate must be constructed and installed according to ASTM F2200 standards (refer to page 4). Gate must fit specifications of operator (refer to specifications).



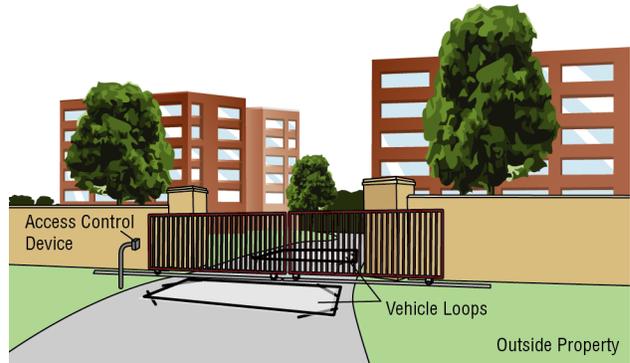
**SAFETY CATCH ROLLERS**  
Install catch rollers with safety covers on the side of a post or wall with a minimal distance of half an inch between the rollers and gate



**DO NOT** use a gate catch post. Because the coasting distance may vary due to changes in temperature, it is **NOT** recommended to install a catch post in front of the gate's path. To do so will cause the gate to hit the post in certain instances.

### Additional Accessories

The vehicle loops allow the gate to stay open when vehicles are obstructing the gate path. Suggested for vehicles 14 feet (4.27 m) or longer. Vehicle loops are not required but are recommended. Before installing your Access Control Device(s) be sure to complete a site survey and determine the best device for your site needs.



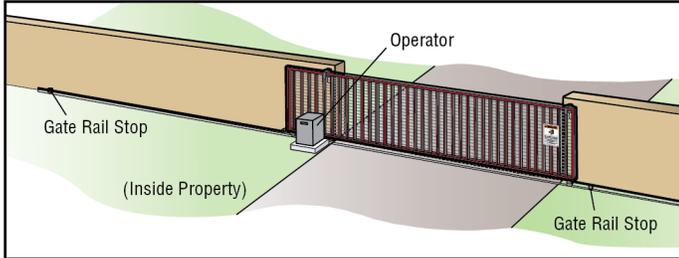
# INSTALLATION

## ⚠ CAUTION

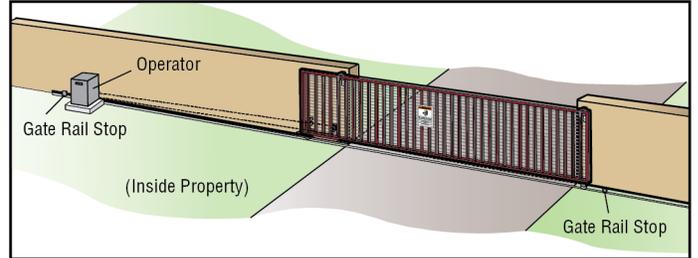
- To AVOID damaging gas, power or other underground utility lines, contact underground utility locating companies BEFORE digging more than 18 inches (46 cm) deep.
- ALWAYS wear protective gloves and eye protection when changing the battery or working around the battery compartment.

### Types of Installations

#### Standard Installation



#### Rear Installation



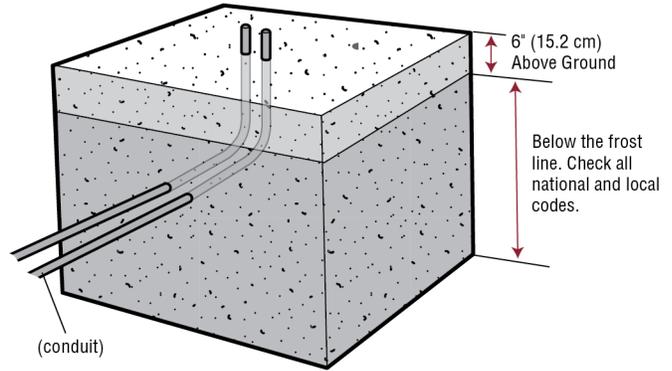
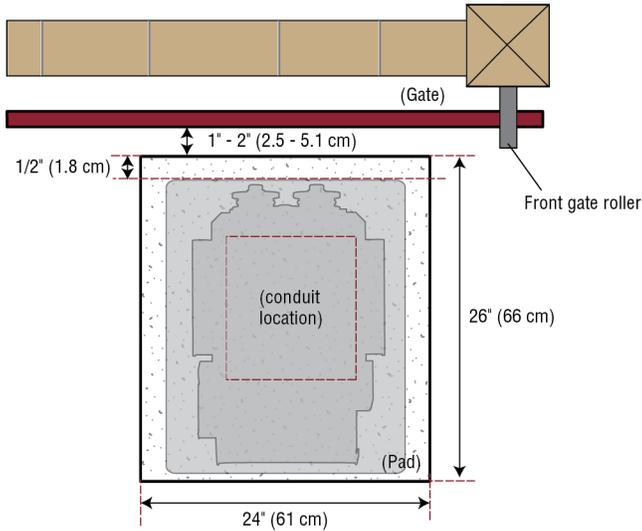
# INSTALLATION

## Step 1 Determine Location for Operator

Check the national and local building codes before installation.

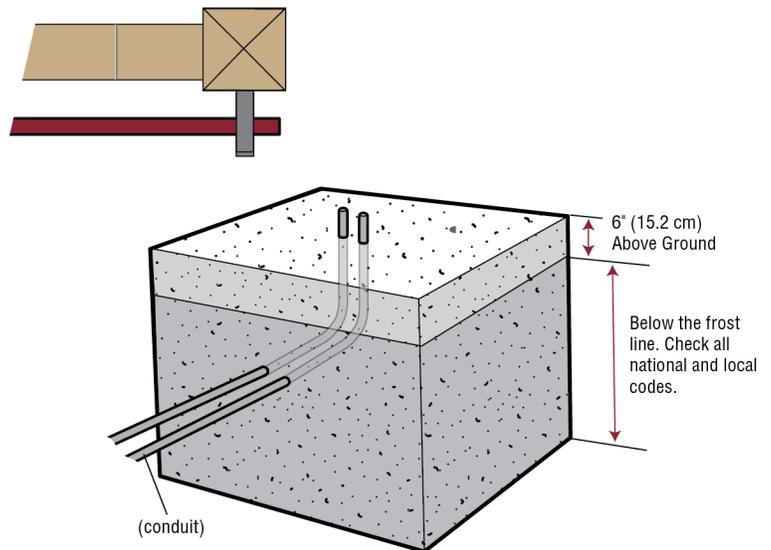
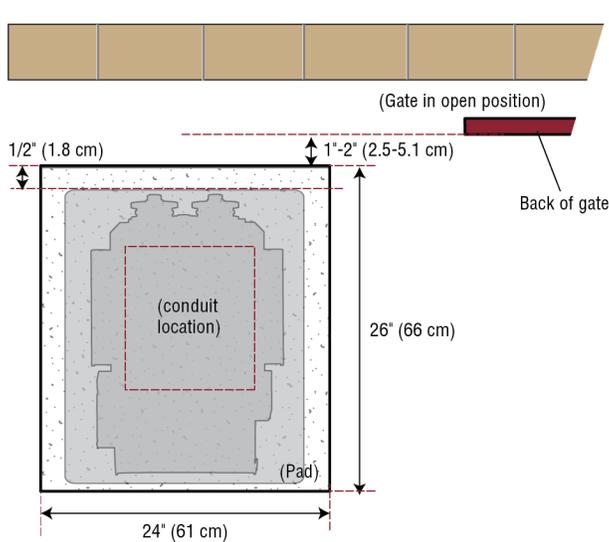
### Standard Installation

1. The gate operator should be installed near the front roller of the gate. Lay out the concrete pad.
2. Install the electrical conduit.
3. Pour a concrete pad (reinforced concrete is recommended).



### Rear Installation

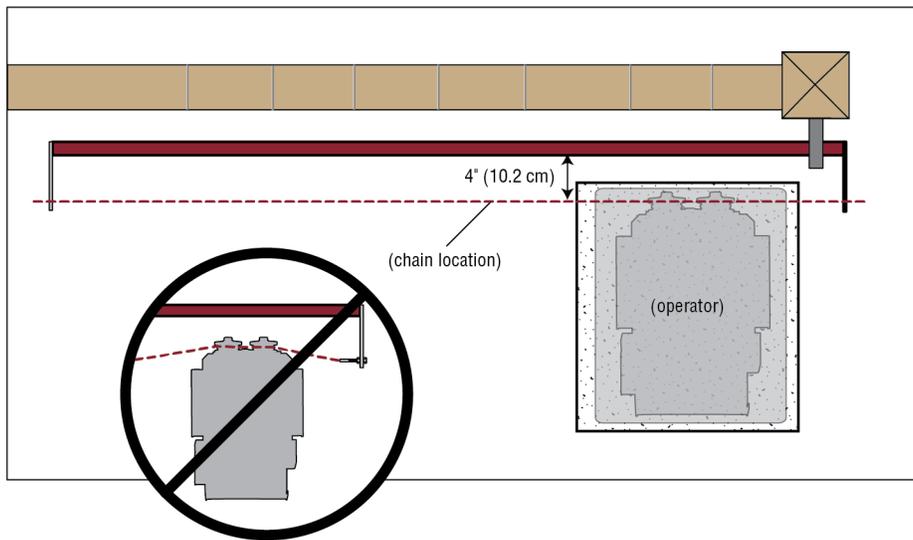
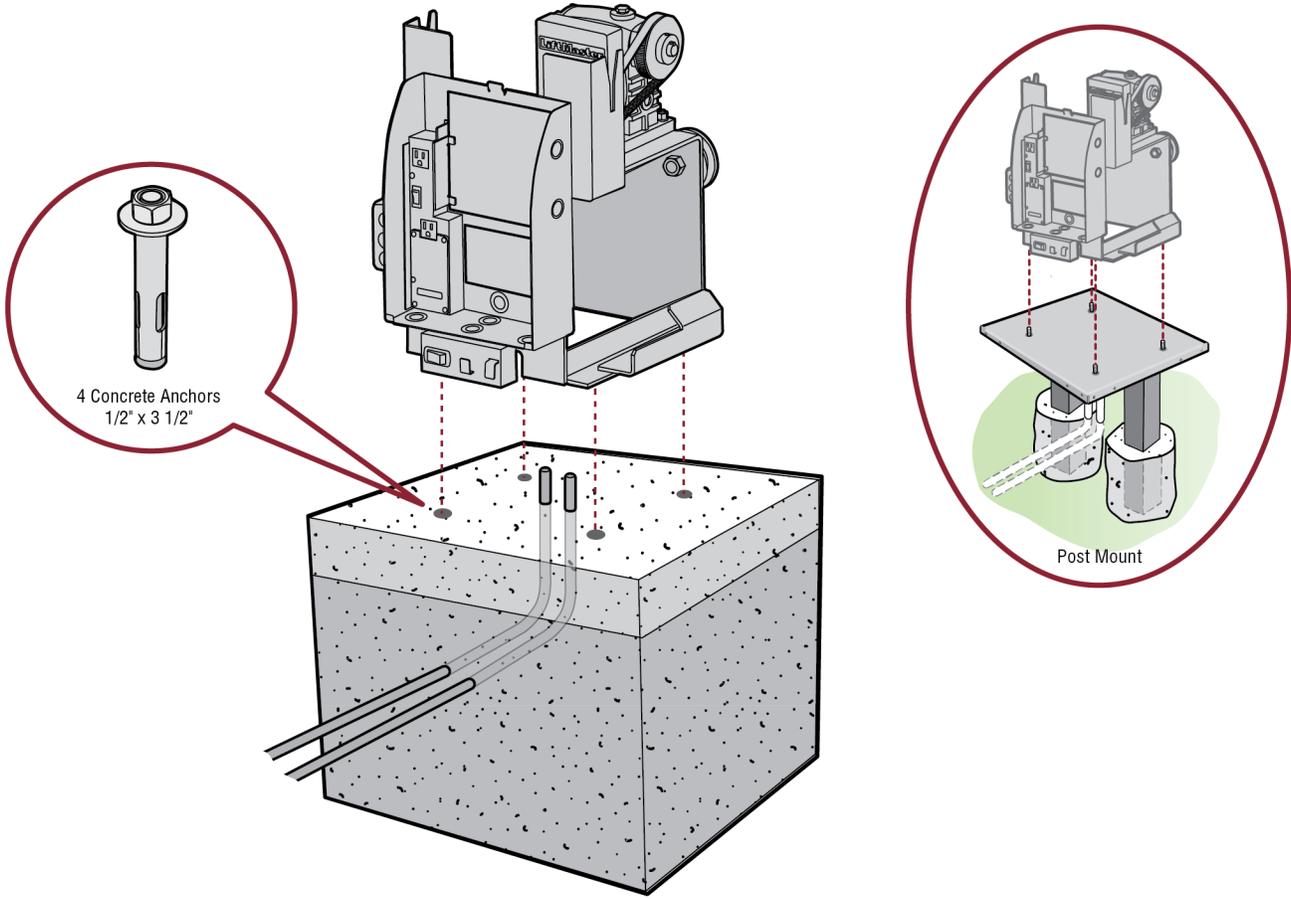
1. The gate operator should be installed near the back of the gate in the OPEN position. Lay out the concrete pad.
2. Install the electrical conduit.
3. Pour a concrete pad (reinforced concrete is recommended).



# INSTALLATION

## Step 2 Install the Operator

Attach the operator to the concrete pad with appropriate fasteners. The gate operator should be installed near the front roller of the gate or near the back of the gate (in the OPEN position). The space between the gate and the output sprocket must be a minimum of 4 inches (10.2 cm). **NOTE:** An alternative to a concrete pad is to post mount the operator (refer to Accessories).



# INSTALLATION

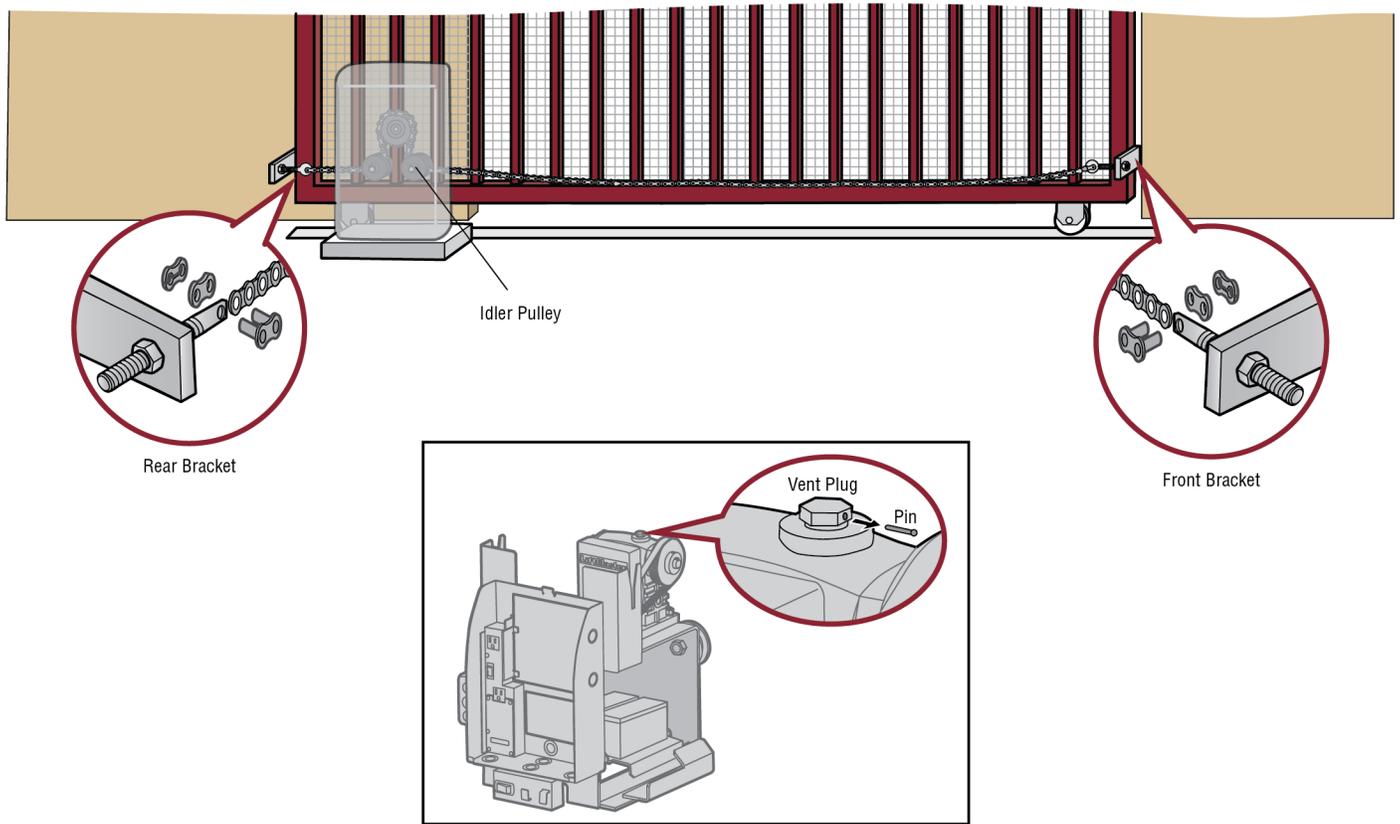
## Step 3 Attach the Chain

### Standard Installation

**DO NOT** run the operator until instructed.

1. Manually open the gate and line up the front bracket so the chain will be level with the idler pulley and parallel to the ground. Weld the front bracket in this position.
2. Manually close the gate and line up the rear bracket so the chain will be level with the idler pulley and parallel to the ground. Weld the rear bracket in this position.
3. Route the chain through the operator.
4. Connect the chain to the brackets using the eye bolt hardware. Chain should not be too tight or have excessive slack.
5. Remove the pin from the vent plug on the gear box.

**NOTE:** The chain should have no more than 1 inch (2.5 cm) of sag for every 10 feet (3 m) of chain length.



# INSTALLATION

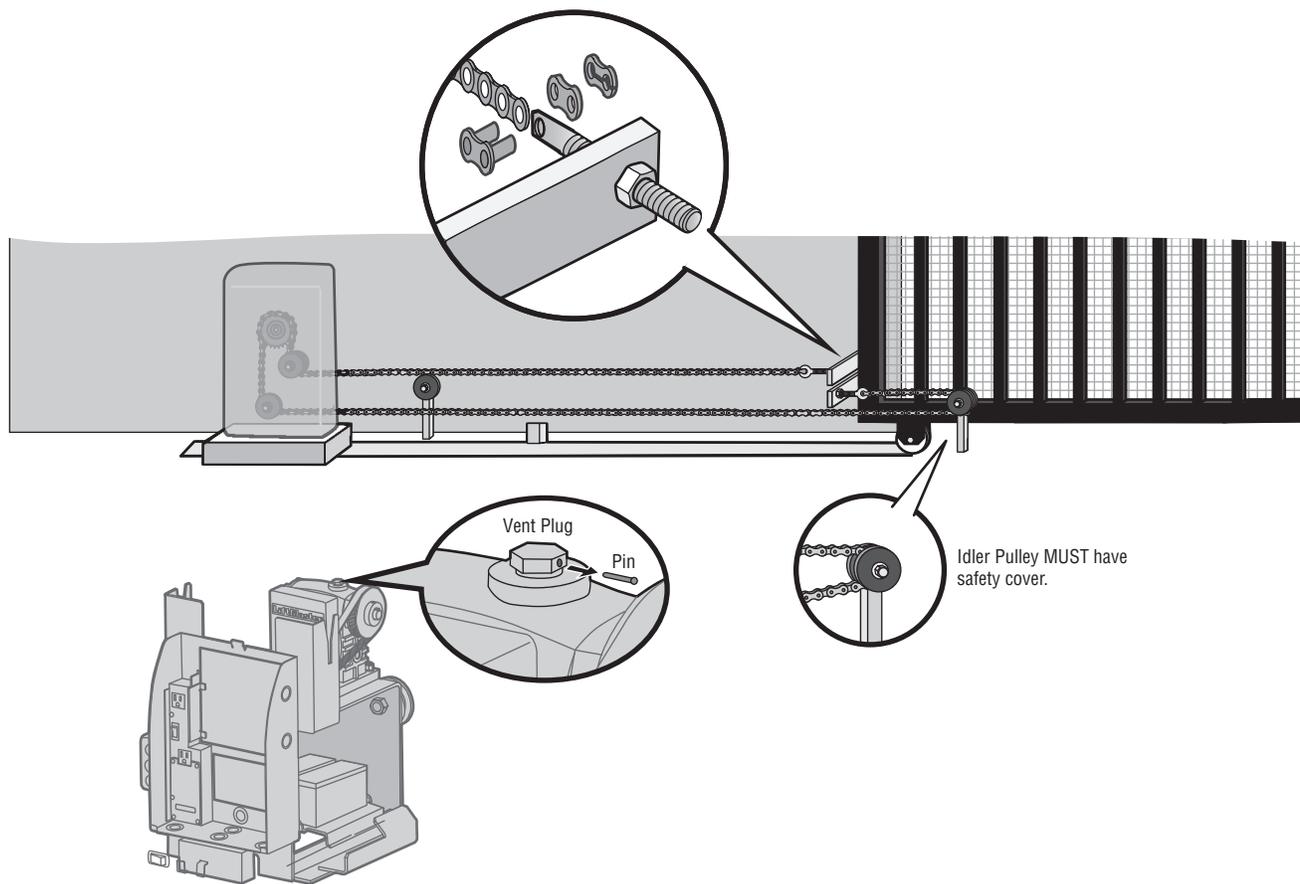
## Rear Installation

**DO NOT run the operator until instructed.**

**NOTE:** This installation will require two extra idler pulleys. Make sure all exposed pinch points are guarded. Refer to Gate Construction Information on page 4.

1. Move the back pulley to the bottom hole in the operator.
2. Manually close the gate and align the bottom bracket so the chain will be level with the bottom idler pulley and parallel to the ground. Weld the bottom bracket in this position.
3. Align the top bracket so the chain will be level with the top idler pulley and parallel to the ground. Weld the upper bracket in this position.
4. Route the chain through the operator.
5. Connect the chain to the brackets using the eye bolt hardware. Chain should not be too tight or have excessive slack.
6. Remove the pin from the vent plug on the gear box.

**NOTE:** The chain should have no more than 1 inch (2.5 cm) of sag for every 10 feet (3 m) of chain length.



# INSTALLATION

## ! WARNING

To prevent **SERIOUS INJURY** or **DEATH** from a moving gate:

- ALL gate operator systems **REQUIRE** two independent entrapment protection systems for each entrapment zone.
- Entrapment protection devices **MUST** be installed to protect anyone who may come near a moving gate.
- Locate entrapment protection devices to protect in **BOTH** the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and **RIGID** objects, such as posts, walls, pillars, columns, or operator itself.

### Step 4 Install Entrapment Protection

Entrapment protection **MUST** be installed according to the following UL 325 requirements:

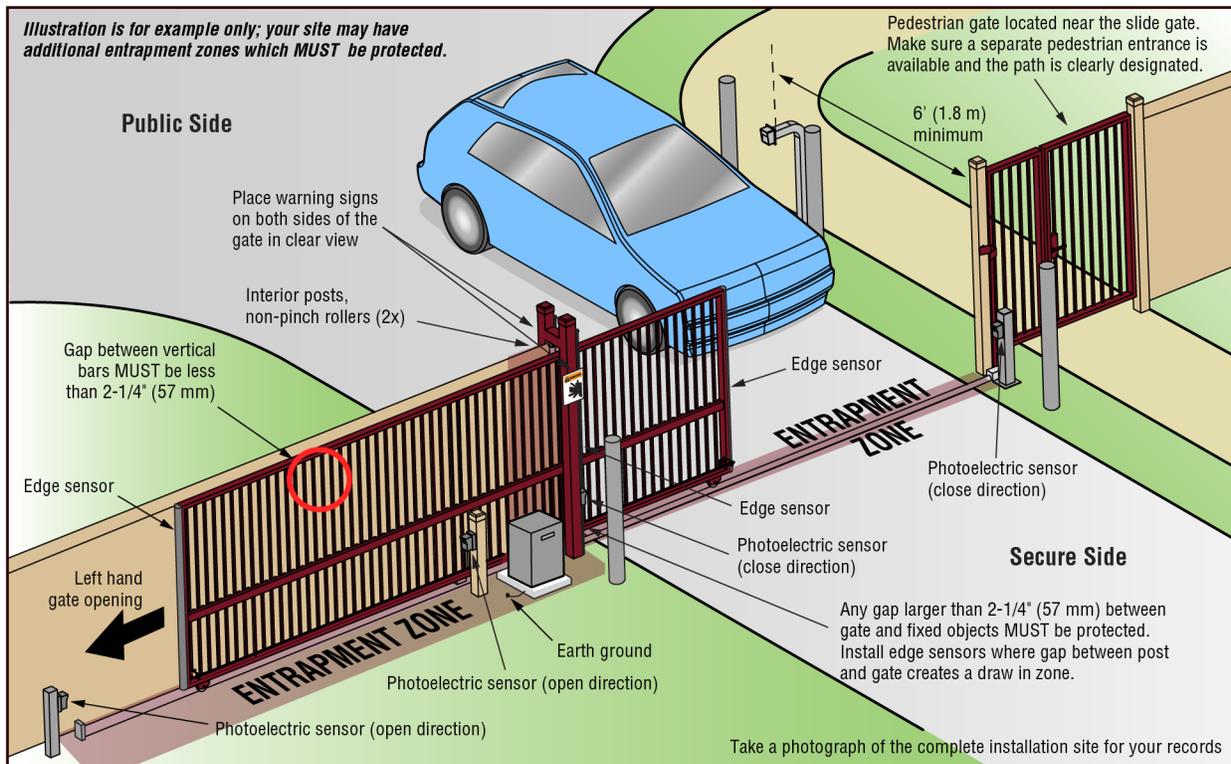
- Slide gate operators require a **minimum of two** external monitored entrapment protection devices to function; one in the open direction and one in the close direction.
- Every installation is unique. It is the responsibility of the installer to ensure that **ALL** entrapment zones are protected with an external monitored entrapment protection device, protecting both the open and close gate cycles.
- **LiftMaster** monitored external entrapment protection devices **MUST** be used with **LiftMaster** operators to meet UL325 requirements, see **Accessories**.
- Test **ALL** entrapment protection devices after completing installation of the operator. For testing instructions, refer to the manual provided with your entrapment protection device.

### Definitions

**ENTRAPMENT:** The condition when a person is caught or held in a position that increases the risk of injury.

**SLIDE GATE ENTRAPMENT ZONE:** An entrapment zone exists if at any point during travel, the gap between the gate and any opposing fixed edge or surface such as posts, walls, pillars, columns or operator itself, is less than 16" (406 mm) in a location up to 6 ft. (1.8 m) above grade.

*Illustrations provided by DASMA Gate Systems Safety Guide*



# INSTALLATION

## Wire Entrapment Protection Devices

There are three options for wiring the entrapment protection devices depending on the specific device and how the device will function. Refer to the specific entrapment protection device manual for more information. These entrapment protection device inputs are for monitored devices, which include pulsed photoelectric sensors, resistive edge sensors, and pulsed edge sensors. **Only one monitored entrapment protection device may be wired to each input.** Additional entrapment protection devices may be wired to the expansion board.

### Control Board

#### CLOSES EYES/INTERRUPT

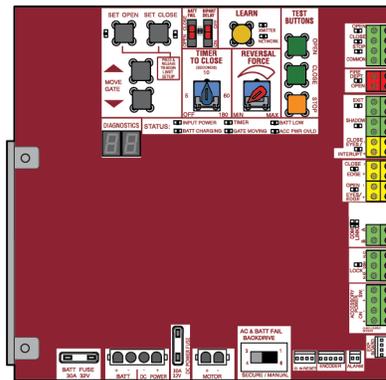
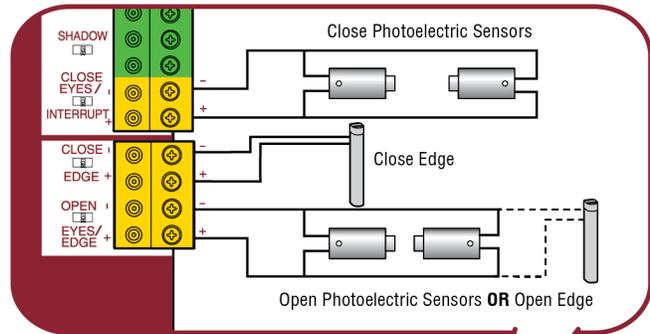
(2 Terminals) The CLOSE EYES/INTERRUPT input is for photoelectric sensor entrapment protection for the close direction. When an obstruction is sensed during gate closing the gate will open to the full open position and resets the Timer-to-Close. This input will be disregarded during gate opening.

#### CLOSE EDGE

(2 Terminals) The CLOSE EDGE input is for edge sensor entrapment protection for the close direction. When an obstruction is sensed during gate closing the gate will reverse to the full open position, disengaging the Timer-to-Close. This input will be disregarded during gate opening.

#### OPEN EYES/EDGE

(2 Terminals) The OPEN EYES/EDGE input is for photoelectric sensor or edge sensor entrapment protection for the open direction. When an obstruction is sensed during gate opening the gate will reverse for 4 seconds then stop. This input will be disregarded during gate closing.



### Expansion Board

#### EYE ONLY and COM

Open or Close Direction Photoelectric Sensors, the functionality is based on the switch settings (located next to the terminals)

**Switch set to CLOSE:** gate reverses fully when an obstruction is sensed

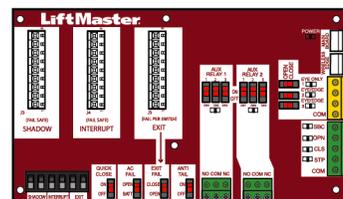
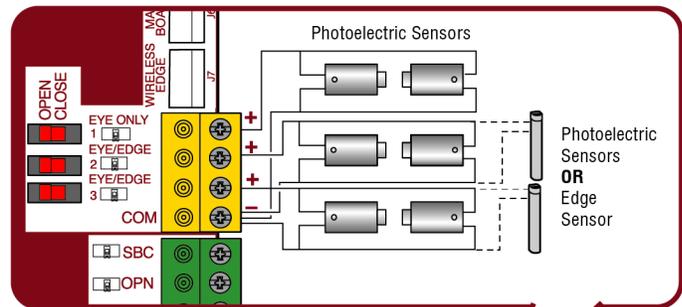
**Switch set to OPEN:** gate reverses 4 seconds when an obstruction is sensed

#### EYE/EDGE and COM

Open or Close Direction Photoelectric Sensors or Edge Sensor, the functionality is based on the switch settings (located next to the terminals)

**Switch set to CLOSE:** gate reverses fully when an obstruction is sensed

**Switch set to OPEN:** gate reverses 4 seconds when an obstruction is sensed



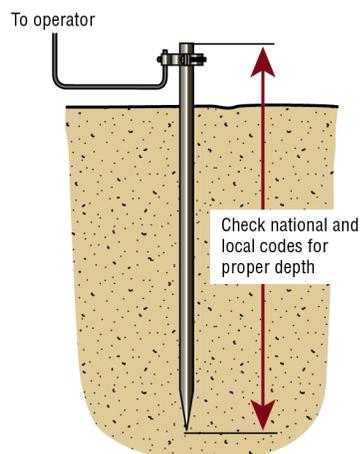
## INSTALLATION

### Step 5 Earth Ground Rod

Use the proper earth ground rod for your local area. The ground wire must be a single, whole piece of wire. Never splice two wires for the ground wire. If you should cut the ground wire too short, break it, or destroy its integrity, replace it with a single wire length.

1. Install the earth ground rod within 3 feet (.9 m) of the operator.
2. Run wire from the earth ground rod to the operator.

**NOTE:** If the operator is not grounded properly the range of the remote controls will be reduced and the operator will be more susceptible to lightning and surge damage.



### Step 6 Power Wiring

#### ⚠️ ⚡ WARNING

To reduce the risk of SEVERE INJURY or DEATH:

- ANY maintenance to the operator or in the area near the operator MUST NOT be performed until disconnecting the electrical power (AC or solar and battery) and locking-out the power via the operator power switch. Upon completion of maintenance the area MUST be cleared and secured, at that time the unit may be returned to service.
- Disconnect power at the fuse box BEFORE proceeding. Operator MUST be properly grounded and connected in accordance with national and local electrical codes. **NOTE:** The operator should be on a separate fused line of adequate capacity.
- ALL electrical connections MUST be made by a qualified individual.
- DO NOT install ANY wiring or attempt to run the operator without consulting the wiring diagram.
- ALL power wiring should be on a dedicated circuit and well protected. The location of the power disconnect should be visible and clearly labeled.
- ALL power and control wiring MUST be run in separate conduit.

The operator can be wired for either 120 Vac or 240 Vac or a solar panel (not provided). Follow the directions according to your application. An optional Transformer Kit (Model 3PHCONV) can be used to change the input voltage (208/240/480/575 Vac) to an output voltage of 120 Vac (refer to Accessories). For dual gate applications, power will have to be connected to each operator. Main power supply and control wiring MUST be run in separate conduits.

**SOLAR APPLICATIONS:** For solar applications refer to *Solar Panels* section in the Appendix. Follow the directions according to your application.

**NOTE:** If using an external receiver use shielded wire for the connections and mount the receiver away from the operator to avoid interference from the operator.

#### MAXIMUM WIRE LENGTH

AMERICAN WIRE GAUGE (AWG)	STANDARD OPERATOR			OPERATOR + ACCESSORIES POWERED BY TRANSFORMER KIT			
	120 VAC, 10A (includes fully loaded outlets)	120 VAC, 4A	240 VAC, 2A	208 VAC, 4.8A	240 VAC, 4.2A	480 VAC, 2.1A	575 VAC, 1.7A
14	100 (30.5 m)	250 (76.2 m)	1,000 (304.8 m)	360 (109.7 m)	480 (146.3 m)	1,900 (579.1 m)	2,800 (853.4 m)
12	160 (48.8 m)	400 (121.9 m)	1,600 (487.7 m)	570 (173.7 m)	750 (228.6 m)	3,000 (914.4 m)	4,500 (1,371.6 m)
10	250 (76.2 m)	630 (192 m)	2,500 (762 m)	900 (274.3 m)	1,200 (365.8 m)	4,800 (1,463 m)	7,100 (2,164.1 m)
8	400 (121.9 m)	1,000 (304.8 m)	4,000 (1,219.2 m)	1,400 (426.7 m)	1,900 (579.1 m)	7,600 (2,316.5 m)	11,300 (3,444.2 m)
6	636 (193.9 m)	1,600 (487.7 m)	6,400 (1950.7 m)	2,300 (701 m)	3,000 (914.4 m)	12,100 (3,688.1 m)	18,000 (5,486.4 m)
4	1,000 (304.8 m)	2,500 (762 m)	10,100 (3,078.5 m)	3,700 (1,127.8 m)	4,800 (1,463 m)	19,300 (5,882.6 m)	28,500 (8,686.8 m)

Chart assumes: copper wire, 65°C, 5% drop

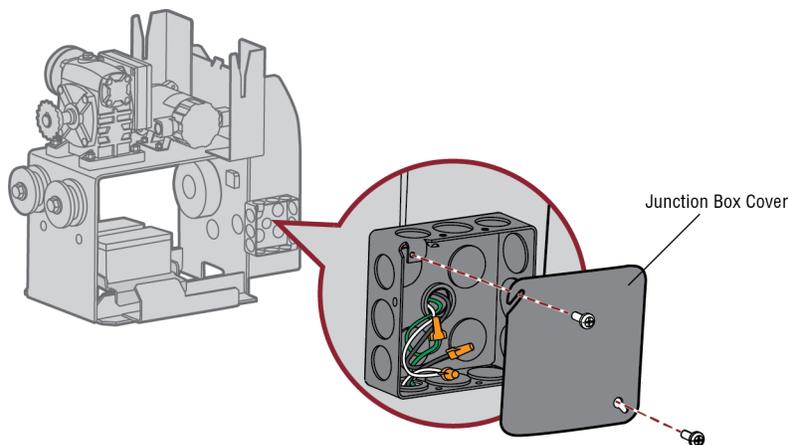
## INSTALLATION

All control wiring used to connect external devices to Class 2 circuits of the operator must be (QPTZ) Power-Limited Circuit Cables, Type CL2, CL2P, CL2R, or CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings.

### 240 VAC only

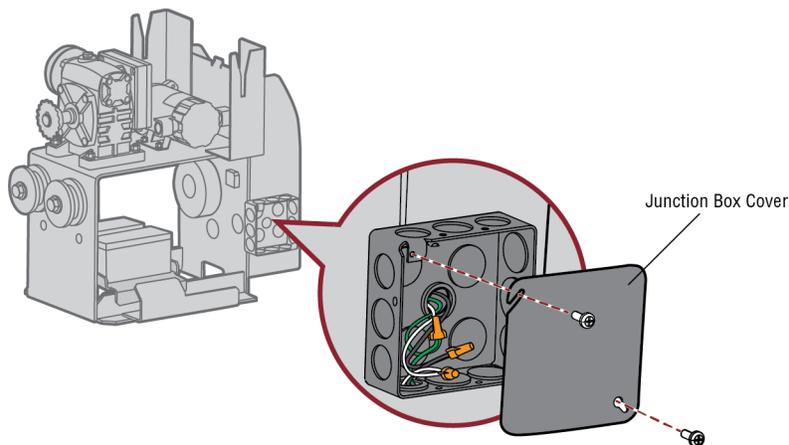
The accessory outlet is disabled and cannot be used with the 240 Vac option.

1. Remove the outlet housing from the electrical box by removing the screws (2).
2. Pull the outlet housing out and locate the power wiring connector on the EMI board.
3. Unplug the power wiring connector from the 120 Vac socket (factory default location) and plug it into the 240 Vac socket.
4. Replace the outlet housing by securing with the screws. The operator is now set for 240 Vac operation.



### 120 VAC and 240 VAC

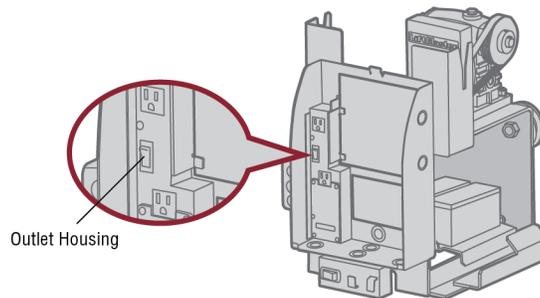
1. Turn off the AC power from the main power source circuit breaker.
2. Run the AC power wires to the operator.
3. Remove the junction box cover.
4. Connect the green wire to the earth ground rod and AC ground using a wire nut. **NOTE:** The earth ground rod can be grounded to the chassis.
5. Connect the white wire to NEUTRAL using a wire nut.
6. Connect the black wire to HOT using a wire nut.
7. Replace the junction box cover. Ensure the wires are not pinched.



# INSTALLATION

## AC power switch

The AC Power switch on the operator will turn the incoming 120/240 Vac power ON or OFF. The operator's AC Power switch ONLY turns off AC power to the control board and DOES NOT turn off battery power.

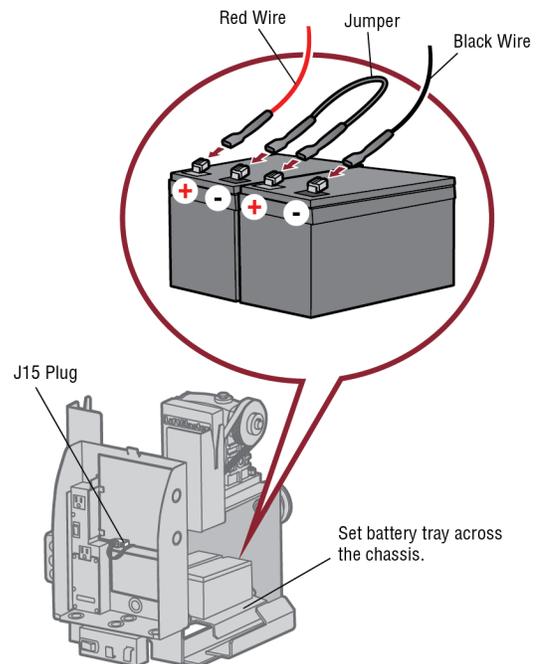


## Step 7 Connect Batteries

### 7AH battery

The batteries are charged in the circuit by the integrated transformer. The batteries are for battery backup.

1. Turn OFF AC power to the operator.
2. Unplug the J15 plug labeled BATT on the control board by squeezing the plug and pulling it from the control board. This disconnects the ac/dc power to the control board.
3. Connect a jumper between the positive (+) terminal of one battery to the negative terminal (-) of the other battery.
4. Connect the red wire from the J15 plug to the positive (+) terminal of the battery.
5. Connect the black wire from the J15 plug to the negative (-) terminal of the battery.
6. Plug the J15 plug back into the control board. This will power up the control board. **NOTE:** You may see a small spark when plugging the J15 plug into the board.
7. Turn ON AC power to the operator.
8. Turn ON the AC power switch on the operator.

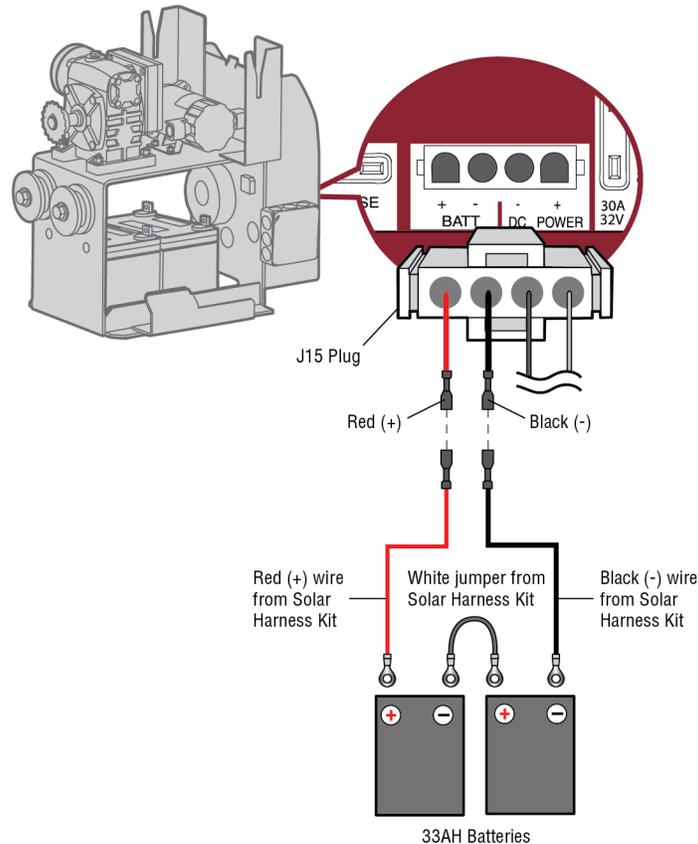


# INSTALLATION

## 33AH battery

The batteries are charged in the circuit by the integrated transformer. The batteries are for battery backup or solar installation. The 33AH application requires the Solar Harness Kit (Model K94-37236) and an additional battery tray (Model K10-34758-2).

1. Locate the J15 plug on the control board and disconnect it.
2. Connect the white jumper from the Solar Harness Kit between the positive (+) terminal of one battery and the negative (-) terminal of the other battery.
3. Connect one end of the red (+) wire from the Solar Harness Kit to the red wire from the J15 plug as shown. Connect the other end of the red (+) wire to the positive (+) terminal on the battery as shown.
4. Connect one end of the black (-) wire from the Solar Harness Kit to the black wire from the J15 plug as shown. Connect the other end of the black (-) wire to the negative (-) terminal on the battery as shown.
5. Turn ON AC power to the operator.
6. Turn ON the AC power switch on the operator.
7. Reconnect the J15 plug to the control board. **NOTE:** You may see a small spark when plugging the J15 plug into the board.



# INSTALLATION

## Step 8 Dual gate setup

There are two options for dual gate communication: wired or wireless. Follow the directions according to your application. Do not use wired and wireless communication simultaneously. Wired dual gate applications will have a longer battery standby time than wireless applications.

### Wireless setup

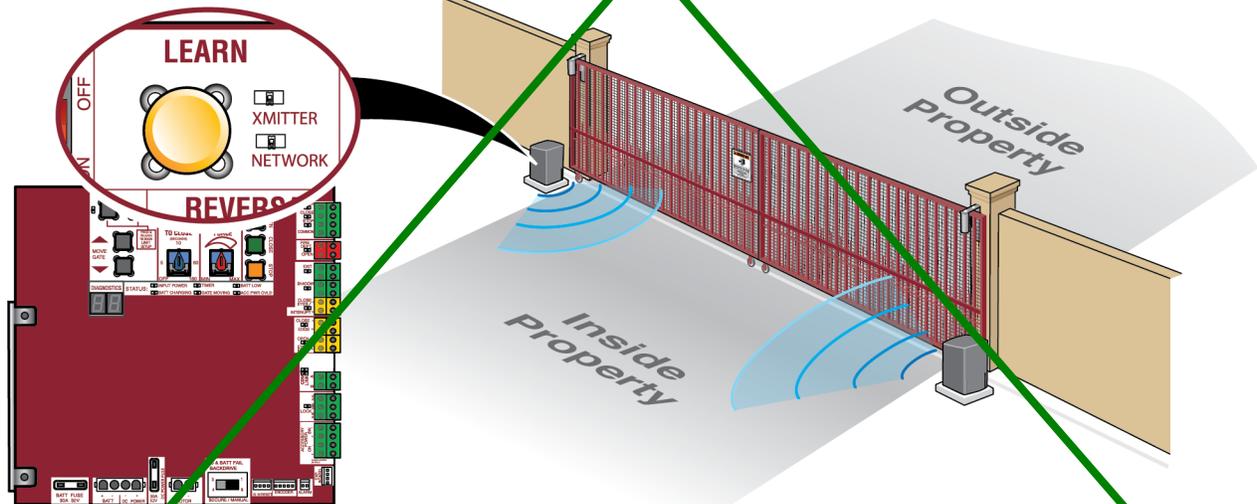
#### To activate the wireless feature:

1. Choose an operator to be the network primary operator. All wireless accessories will need to be programmed to the primary operator. **NOTE:** We recommend that all accessories and board configurations are set on the primary operator.
2. Press and release the LEARN button on the primary operator. The green XMITTER LED will light. **NOTE:** The operator will time out of programming mode after 180 seconds.
3. Press and release the LEARN button again on the primary operator. The yellow NETWORK LED will light.
4. Press and release the OPEN test button to assign this operator as network primary.
5. Press and release the LEARN button on the second operator. The green XMITTER LED will light.
6. Press and release the LEARN button again on the second operator. The yellow NETWORK LED will light.
7. Press and release the CLOSE test button to assign this operator as network second.

Both operators will beep and the yellow NETWORK LEDs will turn off indicating programming is successful.

#### To deactivate the wireless feature:

1. Press and release the LEARN button on either operator. The green XMITTER LED will light.
2. Press and release the LEARN button again on the same operator. The yellow NETWORK LED will light.
3. Press and hold the LEARN button for 5 seconds. The yellow NETWORK LED will blink (operator will beep) then turn off indicating successful deactivation.
4. Repeat the steps for the other operator.



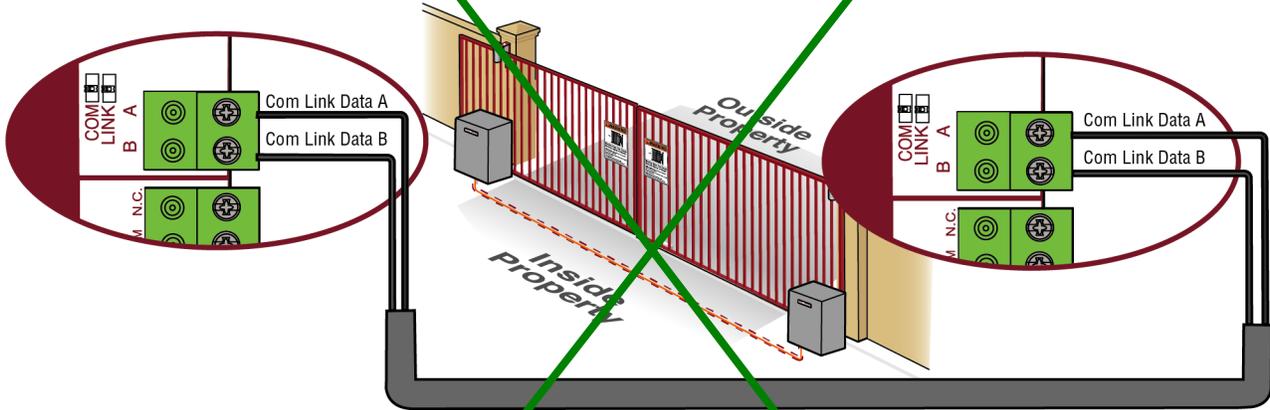
# INSTALLATION

## Wired setup

Before digging, contact local underground utility locating companies. Use PVC conduit to prevent damage to cables.

1. **Disconnect ALL power to the operator and unplug the J15 plug from the control board.**
2. Trench across driveway to bury the shielded twisted pair cable.
3. Connect the wires from the shielded twisted pair cable to the Com Link terminals on the primary gate operator control board. **NOTE: We recommend that all accessories and board configurations are set on the primary operator.**
4. Route the shielded twisted pair cable to the secondary gate operator's control board.
5. Connect the wires from the shielded twisted pair cable to the Com Link terminals on the secondary control board (Com Link A to Com Link A and Com Link B to Com Link B). Ground the shield of the cable to the chassis ground of one operator.
6. **Connect ALL power to the operator and plug the J15 plug into the control board.**

DUAL GATE WIRE TYPE (SHIELDED TWISTED PAIR CABLE)	
22AWG up to 200 feet (61 m)	18AWG - 200-1000 feet (61-305 m)
<b>Wire must be rated at 30 Volt minimum</b>	



## Bipart delay/synchronized close

The LOCK/BIPART DELAY switch is used only with dual gate applications and serves two functions:

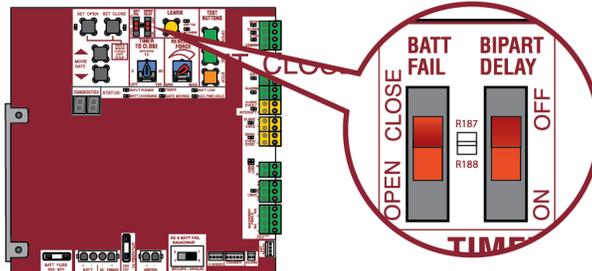
- **BIPART DELAY**

**SWING GATE APPLICATIONS:** The BIPART DELAY is used in applications where a mag-lock, solenoid lock, or decorative overlay would require one gate to close before the other. The operator with the LOCK/BIPART DELAY switch ON will delay from the close limit when opening and be the first to close from the open limit.

**SLIDE GATE APPLICATIONS:** Not applicable, set to OFF.

- **SYNCHRONIZED CLOSE**

The BIPART DELAY is also used in applications where one gate travels a longer distance than the other. To synchronize the closing of the gates, set the LOCK/BIPART DELAY switch to ON for both operators.



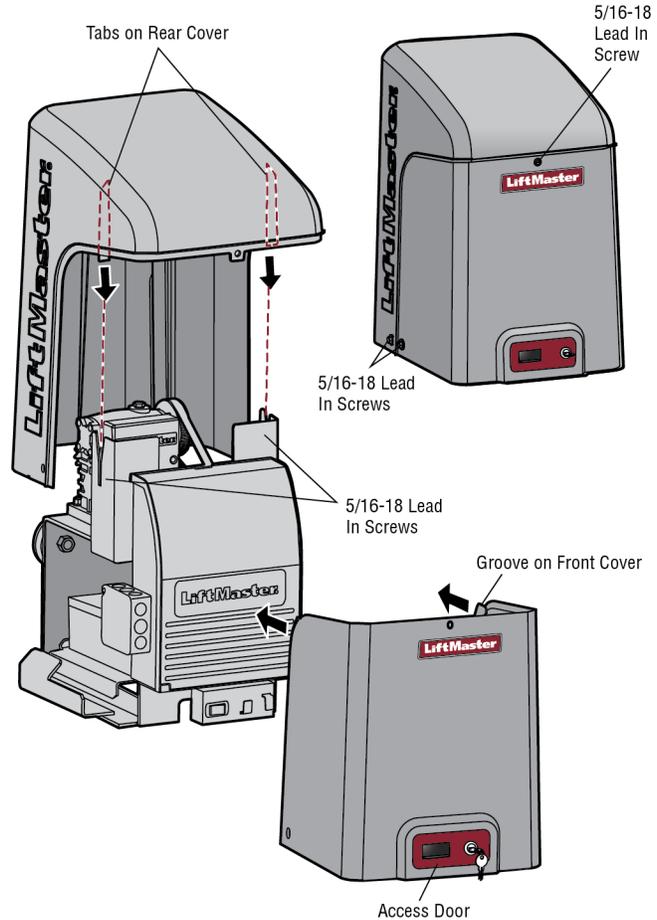
# INSTALLATION

## Step 9 Install the cover

*Before installing the cover, follow the instructions in the Adjustment section to adjust the limits and force.*

The operator cover consists of two pieces: a rear cover and a front cover. The front cover can easily be removed to access the electrical box. To access the reset switch slide the access door up. The front cover and access door can be locked with the key.

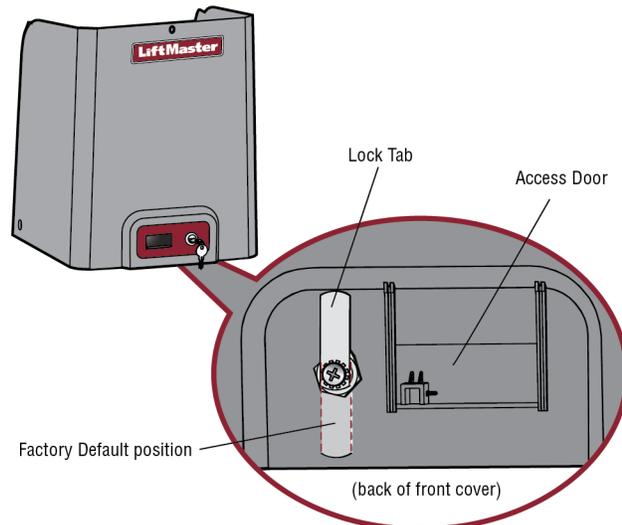
1. Align the tabs on the rear cover with the slots on the chassis and place the cover over the operator.
2. Secure both sides of the rear cover to the chassis with two 5/16-18 lead in screws.
3. Align the front cover with the back cover, making sure the grooves line up.
4. Secure the front cover to the chassis with two 5/16-18 lead in screws.
5. Secure the front cover to the rear cover using the 5/16-18 lead in screw.



### To Lock the Access Door

From the factory the access door for the reset switch will not be locked. To lock the access door follow the steps below:

1. Locate the lock tab on the back of the front cover and remove the screw securing the tab to the cover.
2. Turn the tab 180 degrees, then secure with the screw. The access door can now be locked.



The basic installation is complete.

# ADJUSTMENT

## Limit and Force Adjustment

### ! WARNING

To reduce the risk of SEVERE INJURY or DEATH:

- Without a properly installed safety reversal system, persons (particularly small children) could be SERIOUSLY INJURED or KILLED by a moving gate.
- Too much force on gate will interfere with proper operation of safety reversal system.
- NEVER increase force beyond minimum amount required to move gate.
- NEVER use force adjustments to compensate for a binding or sticking gate.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After ANY adjustments are made, the safety reversal system MUST be tested. Gate MUST reverse on contact with an object.

### Introduction

Your operator is designed with electronic controls to make travel limit and force adjustments easy. The adjustments allow you to program where the gate will stop in the open and close position. The electronic controls sense the amount of force required to open and close the gate. The force is adjusted automatically when you program the limits but should be fine tuned using the REVERSAL FORCE dial on the control board (refer to *Fine Tune the Force* section) to compensate for environmental changes. The limit setup LEDs (located next to the SET OPEN and SET CLOSE buttons) indicate the status of the limits, refer to the table to the right.

The limits can be set using the control board (below) or a remote control (refer to *Limit Setup with a Remote Control* in the Appendix). Setting the limits with a remote control requires a 3-button remote control programmed to OPEN, CLOSE, and STOP.

**NOTE:** The TEST buttons on the control board will not work until the limits have been set and the required entrapment protection devices are installed.

LIMIT SETUP LEDS			
SET OPEN LED	SET CLOSE LED	OPERATOR MODE	EXPLANATION
OFF	OFF	NORMAL MODE	Limits are set
BLINKING	BLINKING	LIMIT SETTING MODE	Limits are not set
BLINKING	ON	LIMIT SETTING MODE	Open limit is not set
ON	BLINKING	LIMIT SETTING MODE	Close limit is not set
ON	ON	LIMIT SETTING MODE	Limits are set

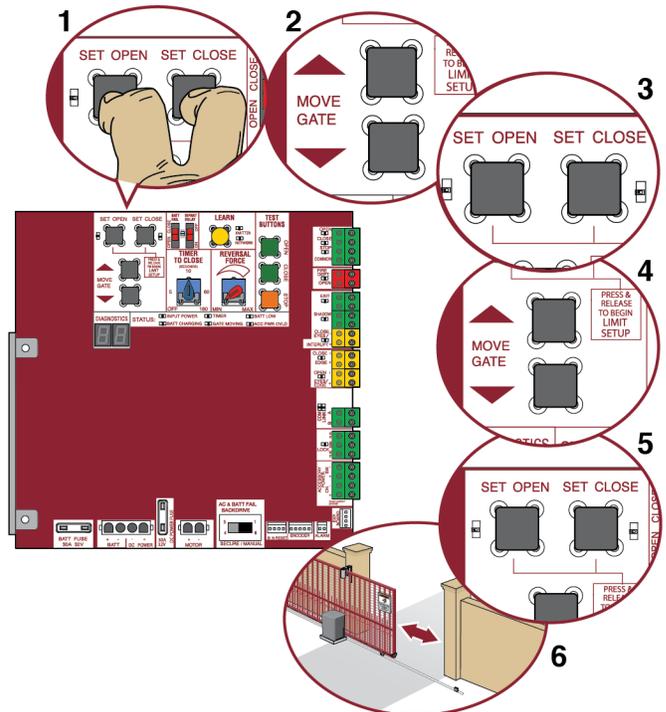
### Initial Limits and Force Adjustment

For dual gate applications the limits will have to be set for each operator. The gate MUST be attached to the operator before setting the limits and force.

For slide gate applications the open limit and closed limit MUST be set at least four feet apart.

1. Press and release the SET OPEN and SET CLOSE buttons simultaneously to enter limit setting mode.
2. Press and hold one of the MOVE GATE buttons to move the gate to the open or close limit.
3. Press and release the SET CLOSE or SET OPEN button depending on which limit is being set.
4. Press and hold one of the MOVE GATE button to move the gate to the other limit.
5. Press and release the SET CLOSE or SET OPEN button depending on which limit is being set.
6. Cycle the gate open and close. This automatically sets the force.

When limits are set properly the operator will automatically exit limit setting mode.



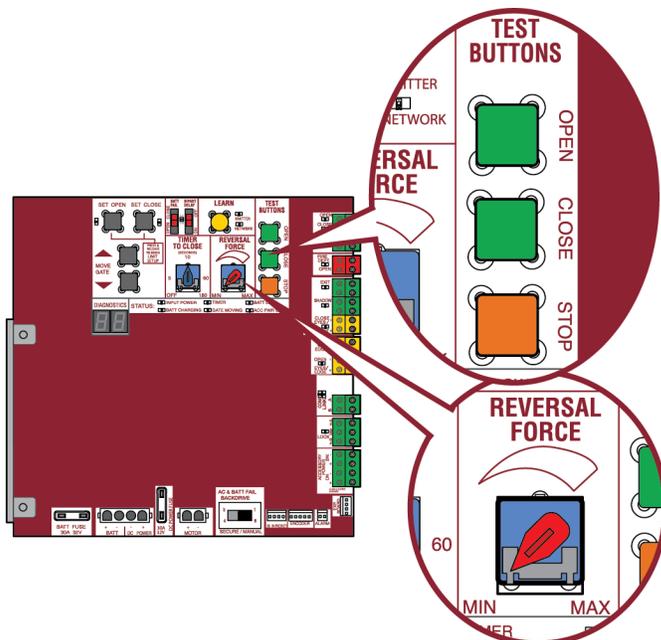
# ADJUSTMENT

## Fine Tune the Force

Once the initial limits have been set, the REVERSAL FORCE DIAL on the control board is used for fine tuning the force where wind or environmental changes may affect the gate travel. The REVERSAL FORCE DIAL is set to minimum at the factory.

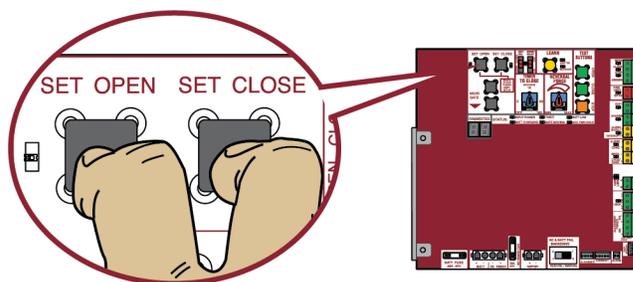
Based on the length and weight of the gate it may be necessary to make additional force adjustments. The force setting should be high enough that the gate will not reverse by itself nor cause nuisance interruptions, but low enough to prevent serious injury to a person. The force setting is the same for both the open and close gate directions.

1. Open and close the gate with the TEST BUTTONS.
2. If the gate stops or reverses before reaching the fully open or closed position, increase the force by turning the force control slightly clockwise.
3. Perform the "Obstruction Test" after every limit and force setting adjustment (see below).



## Adjust the Limits

After both limits are set and the operator is ready to run, one limit can be adjusted independently from the other by following steps 1-3 of the Initial Limit and Force Adjustment section.

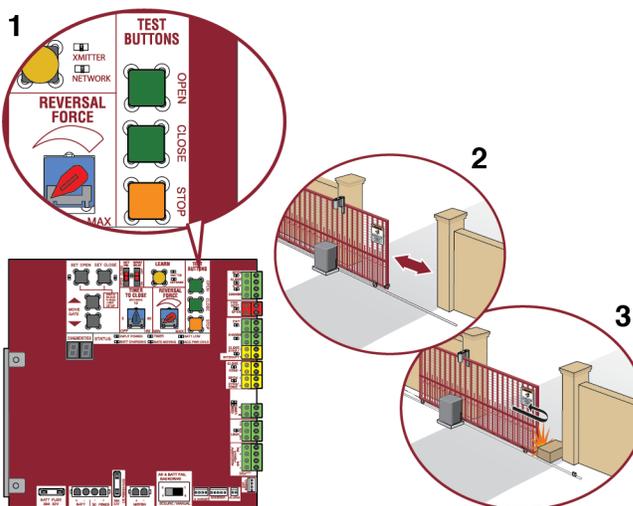


## Obstruction Test

The operator is equipped with an inherent (built in to the operator) obstruction sensing device. If the gate encounters an obstruction during motion, the operator will reverse direction of the gate and then stop. The following procedure will test ONLY the inherent (built in to the operator) obstruction sensing device:

1. Open and close the gate with the TEST BUTTONS, ensuring that the gate is stopping at the proper open and close limit positions.
2. Place an object between the open gate and a rigid structure. Make sure that any external entrapment protection devices will NOT be activated by the object.
3. Run the gate in the close direction. The gate should stop and reverse upon contact with the object. If the gate does not reverse off the object, reduce the force setting by turning the force control slightly counter-clockwise. The gate should have enough force to reach both the open and close limits, but MUST reverse after contact with an object.
4. Repeat the test for the open direction.

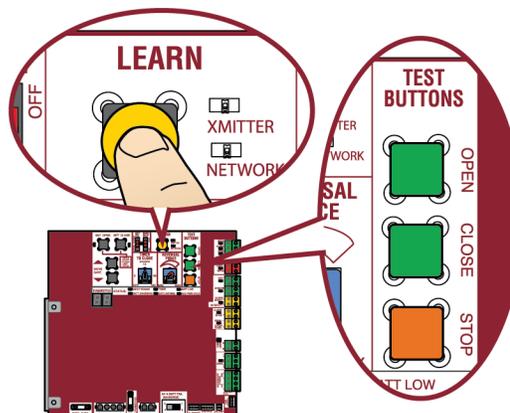
**Test the operator after any adjustments are made.**



## PROGRAMMING

### Remote Controls (Not Provided)

A total of 50 Security+ 2.0® remote controls or KPW250 keypads and 2 keyless entries (1 PIN for each keyless entry) can be programmed to the operator. When programming a third keyless entry to the operator, the first keyless entry will be erased to allow the third keyless entry to be programmed. When the operator's memory is full it will exit the programming mode and the remote control will not be programmed. The memory will need to be erased before programming any additional remote controls. **NOTE:** If installing an 86LM to extend the range of the remote controls DO NOT straighten the antenna.



There are 3 different options for programming the remote control depending on how you would like the remote control to function. Choose a programming option:

OPTION	DESCRIPTION	PROGRAMMING STEPS
Single button as OPEN only	Program a single button on the remote control for open only. The Timer-to-Close can be set to close the gate.	<ol style="list-style-type: none"> <li>Press and release the LEARN button (operator will beep and green XMITTER LED will light). <b>NOTE:</b> The operator will time out of programming mode after 30 seconds.</li> <li>Press the OPEN button.</li> <li>Press the remote control button that you would like to program.</li> </ol>
Single button (SBC) as OPEN, CLOSE, and STOP	Program one remote control button as an open, close, and stop.	<ol style="list-style-type: none"> <li>Press and release the LEARN button (operator will beep and green XMITTER LED will light). <b>NOTE:</b> The operator will time out of programming mode after 30 seconds.</li> <li>Press the remote control button that you would like to program.</li> </ol>
Three separate buttons as OPEN, CLOSE, and STOP	Program each remote control button as an open, close, and stop.	<ol style="list-style-type: none"> <li>Press and release the LEARN button (operator will beep and green XMITTER LED will light). <b>NOTE:</b> The operator will time out of programming mode after 30 seconds.</li> <li>Press the OPEN, CLOSE, or STOP button, depending on the desired function.</li> <li>Press the remote control button that you would like to program.</li> </ol>

The operator will automatically exit learn mode (operator will beep and green XMITTER LED will go out) if programming is successful. To program additional Security+ 2.0® remote controls or remote control buttons, repeat the programming steps above.

#### Entering programming mode using external reset button or 3-button control station:

- Make sure gate/door is closed.
- Give the operator an OPEN command.
- Within 30 seconds, when the gate/door is at the open limit press and release the RESET/STOP button twice to put the operator into programming mode. **NOTE:** The operator will time out of programming mode after 30 seconds.

NOTICE: This device complies with Part 15 of the FCC rules and Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device must be installed to ensure a minimum 20 cm (8 in.) distance is maintained between users/bystanders and device.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules and Industry Canada ICES standard. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## PROGRAMMING

### LiftMaster Internet Gateway (not provided)

To program the operator to the LiftMaster Internet Gateway:

#### Using the learn button on the operator's control board

1. Connect the ethernet cable to the LiftMaster Internet Gateway and the router.
2. Connect power to the LiftMaster Internet Gateway.
3. Create an online account by visiting [www.myliftmaster.com](http://www.myliftmaster.com).
4. Register the LiftMaster Internet Gateway.
5. Use an internet enabled computer or smartphone to add devices. The LiftMaster Internet Gateway will stay in learn mode for three minutes.
6. Press the Learn button twice on the primary operator (the operator will beep as it enters learn mode). The LiftMaster Internet Gateway will pair to the operator if it is within range and the operator will beep if programming is successful.

#### Using the reset button on the operator

1. Connect the ethernet cable to the LiftMaster Internet Gateway and the router.
2. Connect power to the LiftMaster Internet Gateway.
3. Create an online account by visiting [www.myliftmaster.com](http://www.myliftmaster.com).
4. Register the LiftMaster Internet Gateway.
5. Use an internet enabled computer or smartphone to add devices. The LiftMaster Internet Gateway will stay in learn mode for three minutes.
6. Ensure gate is closed.
7. Give the operator an OPEN command.
8. Within 30 seconds, when the gate is at the open limit press and release the reset button 3 times (on primary gate) to put primary operator into High Band Learn Mode (the operator will beep as it enters learn mode). The LiftMaster Internet Gateway will pair to the operator if it is within range and the operator will beep if programming is successful.

The status as shown by the LiftMaster Internet Gateway app will be either "open" or "closed". The gate operator can then be controlled through the LiftMaster Internet Gateway app.

### Erase All Codes

1. Press and release the LEARN button (operator will beep and green XMITTER LED will light).
2. Press and hold the LEARN button again until the green XMITTER LED flashes and then release the button (approximately 6 seconds). All remote control codes are now erased.

### Erase Limits

1. To erase the limits, press and hold the SET OPEN and SET CLOSE buttons simultaneously (5 seconds) until both the SET OPEN and SET CLOSE LEDs blink rapidly and the operator beeps.
2. Release the buttons and the SET OPEN and SET CLOSE LEDs will blink slowly indicating the limits will need to be set.

### Constant Pressure Override (CPO)

Constant Pressure Override is for use with KPW5 and KPW250 keypads (not provided). The KPW5/KPW250 wireless commercial keypads are security keypads and can only be programmed to ONE gate operator (see the KPW5/KPW250 manual for complete programming instructions).

The Constant Pressure Override feature is intended to temporarily override a fault in the entrapment protection system, in order to operate the gate until the external entrapment protection device is realigned or repaired. Use the feature only in line of sight of the gate when no obstructions to travel are present. External entrapment protection devices include LiftMaster monitored photoelectric sensors and LiftMaster monitored wired and wireless edge sensors. Be sure to repair or replace these devices promptly if they are not working properly.

#### To use Constant Pressure Override:

1. Enter a valid 4-digit PIN.
2. Press and hold # for 5 seconds to enter CPO. Continue to hold # to keep the operator in motion. A continuous tone will sound until limit is met and/or # is released.
3. The operator will stop when either the operator reaches a limit or the user releases #.

### Gate Hold Open Feature

The gate hold open feature will disable the timer and keep the gate at the open limit. The gate hold open feature can be activated through the Reset Button as described on Page 29 or through the KPW5 and KPW250 keypads (not provided).

#### To use the gate hold open feature:

1. Enter a valid 4-digit PIN when the gate is at the Open Limit and the timer is running
2. The Operator will chirp indicating the timer is canceled.

#### To restart the gate:

1. Re-enter the 4-digit PIN
2. Activate a Hard input or a programmed remote

### To Remove and Erase Monitored Entrapment Protection Devices

1. Remove the entrapment protection device wires from the terminal block.
2. Press and release the SET OPEN and SET CLOSE buttons simultaneously. The SET OPEN and SET CLOSE LEDs will turn on (entering learn limit mode).
3. Press and release both SET OPEN and SET CLOSE buttons again to turn off the SET OPEN and SET CLOSE LEDs (exiting learn limit mode).

## OPERATION

### Gate operator setup examples

The following are example setups for the gate operator. Your specific site requirements may be different. Always setup the operator system to the site requirements, including all necessary entrapment protection devices.

**RESIDENTIAL:** One to four residential homes sharing a gated entrance/exit, allowing vehicle access trumps security concerns

**COMMERCIAL/GENERAL ACCESS:** A residential community (more than four homes) having one or more gated entrances/exits, allowing vehicle access trumps security concerns

**COMMERCIAL:** Business site where security (gate closed) is important

**INDUSTRIAL:** Large business site where security is required

SETTING	RESIDENTIAL	COMMERCIAL/GENERAL ACCESS	COMMERCIAL	INDUSTRIAL
<b>Quick Close switch setting</b>	Normally set to OFF. Normal gate close (timer or control).	Normally set to OFF. Normal gate close (timer or control).	Normally set to OFF. Normal gate close (timer or control).	Set to ON, so that gate closes immediately after vehicle passes CLOSE EYES/Interrupt loop.
<b>AC Fail Open switch setting</b>	Normally set to BATT. Run on battery if AC power fails.	Normally set to BATT. For local jurisdiction requirement, set to OPEN so that the gate will open approximately 15 seconds after AC power fail.	Normally set to BATT. Run on battery if AC power fails.	Normally set to BATT. Run on battery if AC power fails.
<b>Low Battery switch setting</b>	Normally set to OPEN. If powered from battery and battery is low, gate automatically opens and stays open.	Normally set to OPEN. If powered from battery and battery is low, gate automatically opens and stays open.	Normally set to CLOSE. If powered from battery and battery is low, gate stays closed.	Normally set to CLOSE. If powered from battery and battery is low, gate stays closed.
<b>Anti-Tail switch setting</b>	Normally set to OFF. CLOSE EYES/Interrupt loop reverses a closing gate.	Normally set to OFF. CLOSE EYES/Interrupt loop reverses a closing gate.	Set to ON. In attempt to prevent vehicle tail-gating, CLOSE EYES/Interrupt loop pauses a closing gate.	Set to ON. In attempt to prevent vehicle tail-gating, CLOSE EYES/Interrupt loop pauses a closing gate.
<b>Bipart Delay switch setting</b>	For DUAL-GATE site, set to ON for gate that delays upon opening.	For DUAL-GATE site, set to ON for gate that delays upon opening.	For DUAL-GATE site, set to ON for gate that delays upon opening.	For DUAL-GATE site, set to ON for gate that delays upon opening.
<b>Aux Relay Out – Open Limit Switch</b>	Typically not required.	Use with SAMS (Sequence Access Management System).	1. Use with SAMS (Sequence Access Management System). 2. Connect “Gate Open” indicator (e.g. light).	1. Use with SAMS (Sequence Access Management System). 2. Connect “Gate Open” indicator (e.g. light).
<b>Aux Relay Out – Close Limit Switch</b>	Typically not required.	Typically not required.	Connect “Gate Close/Secure” indicator (e.g. light).	Connect “Gate Close/Secure” indicator (e.g. light).
<b>Aux Relay Out – Gate Motion</b>	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).
<b>Aux Relay Out – Pre-Motion Delay</b>	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).	Attach alert signal (audible or visual alert system).
<b>Aux Relay Out – Power</b>	Attach visual alert to know when system is charging batteries (i.e. not running on batteries).	Attach visual alert to know when system is charging batteries (i.e. not running on batteries).	Attach visual alert to know when system is charging batteries (i.e. not running on batteries).	Attach visual alert to know when system is charging batteries (i.e. not running on batteries).
<b>Aux Relay Out – Tamper (Slide Gates Only)</b>	Attach alert signal (audible or visual alert system) to indicate if gate is manually tampered with by being pushed off of close limit.	Attach alert signal (audible or visual alert system) to indicate if gate is manually tampered with by being pushed off of close limit.	Attach alert signal (audible or visual alert system) to indicate if gate is manually tampered with by being pushed off of close limit.	Attach alert signal (audible or visual alert system) to indicate if gate is manually tampered with by being pushed off of close limit.
<b>Cycle Quantity Feedback</b>	Use during servicing only to determine operator cycles.	Use during servicing only to determine operator cycles.	Use during servicing only to determine operator cycles.	Use during servicing only to determine operator cycles.
<b>Fire Dept Open Input</b>	Typically not required.	Connect emergency access system (Knox box switch, SOS system, etc.).	Typically not required.	Typically not required.
<b>Heater Accessory (Model HTR)</b>	The heater keeps the gearbox and batteries at a suitable temperature when the outside temperature is below -4°F. The thermostat MUST be set between 45°F and 60°F to ensure proper gate operation.	The heater keeps the gearbox and batteries at a suitable temperature when the outside temperature is below -4°F. The thermostat MUST be set between 45°F and 60°F to ensure proper gate operation.	The heater keeps the gearbox and batteries at a suitable temperature when the outside temperature is below -4°F. The thermostat MUST be set between 45°F and 60°F to ensure proper gate operation.	The heater keeps the gearbox and batteries at a suitable temperature when the outside temperature is below -4°F. The thermostat MUST be set between 45°F and 60°F to ensure proper gate operation.

# OPERATION

## Control Board Overview

**1 SET OPEN Button:** The SET OPEN button sets the OPEN limit. See *Adjust Limits* section.

**2 SET CLOSE Button:** The SET CLOSE button sets the CLOSE limit. See *Adjust Limits* section.

**3 MOVE GATE Buttons:** The MOVE GATE buttons will either open or close the gate when the operator is in Limit setting mode. See *Adjust Limits* section.

**4 BATT FAIL:**

- When AC power is OFF and battery voltage is critically low the gate will latch at a limit until AC power is restored or batteries voltage increases.
- Option select switch set to OPEN forces gate to automatically open and then latch at the OPEN limit until AC power is restored or battery voltage increases.
- Option select switch set to CLOSE forces gate to latch at CLOSE limit if at CLOSE limit or on next CLOSE command until AC power restored or battery voltage increases.
- Constant pressure on a hard command input overrides to open or close the gate.
- Critically low battery is less than 23 V

**5 BIPART DELAY Switch:** The LOCK/BIPART DELAY switch is used only for dual gates. See *Bipart Delay* section.

**6 LEARN Button:** The LEARN button is for programming remote controls and the network.

**7 TIMER-TO-CLOSE dial:** The TIMER-TO-CLOSE (TTC) dial can be set to automatically close the gate after a specified time period. The TTC is factory set to OFF. If the TTC is set to the OFF position, then the gate will remain open until the operator receives another command from a control. Rotate the TIMER-TO-CLOSE dial to the desired setting. The range is 0 to 180 seconds, 0 seconds is OFF. **NOTE:** Any radio command, single button control, or CLOSE command on the control board prior to the TTC expiring will close the gate. The TTC is reset by any signals from the open controls, loops, close edges, and close photoelectric sensors (IR's).

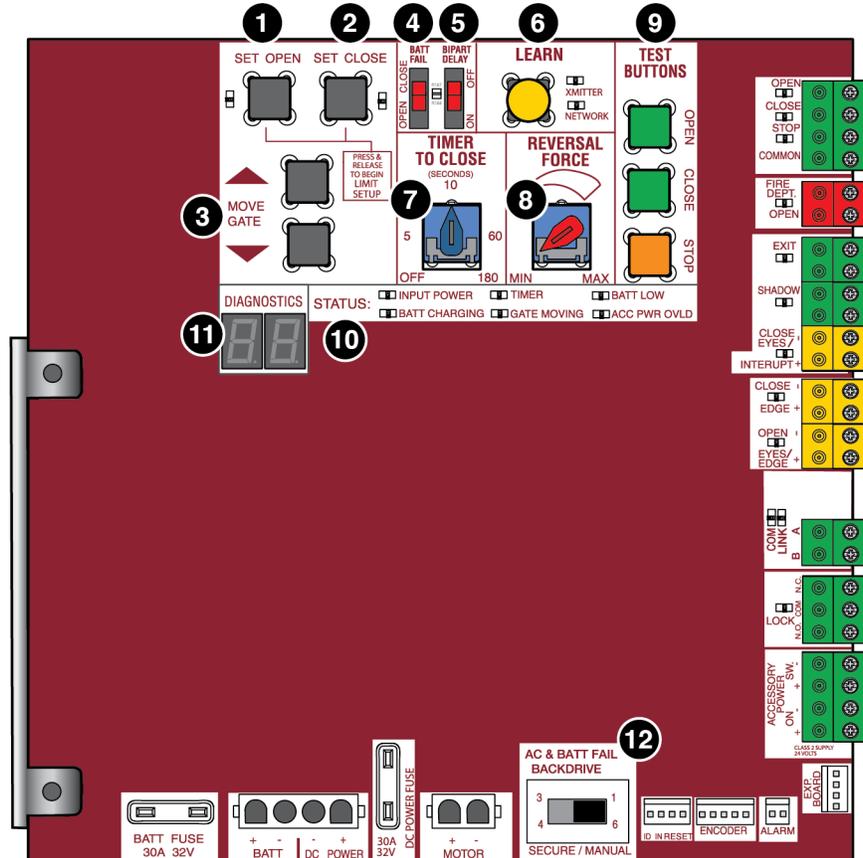
**8 REVERSAL FORCE dial:** The REVERSAL FORCE dial fine tunes the force. See *Force Adjustment* section.

**9 TEST BUTTONS:** The TEST BUTTONS will operate the gate (OPEN, STOP and CLOSE).

**10 STATUS LEDs:** The STATUS LEDs indicate the status of the operator. See *Status LED Chart* in the *Troubleshooting* section.

**11 DIAGNOSTICS Display:** The diagnostics display will show the operator type, firmware version, and codes. The operator type will display as "SL" followed by a "24" which indicates the operator type as CSL24UL. The firmware version will show after the operator type, example "1.2".

**12 BACKDRIVE Switch:** Set to MANUAL will allow the gate to be manually pushed open or closed if there is a loss of AC and battery power. Set to SECURE makes the gate difficult to push open or closed if there is a loss of AC and battery power.



## OPERATION

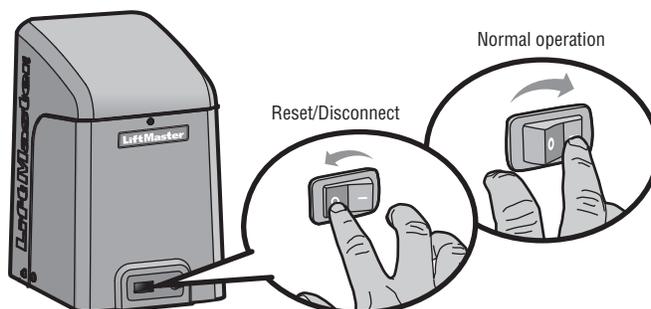
### Manual Disconnect

Press the reset switch to RESET/DISCONNECT. Release the handle on the operator arm to allow the gate to be opened and closed manually. On a dual gate application the handle must be released on both operators. To resume normal function tighten the handle by pushing it down.

### Reset Switch

The reset switch is located on the front of the operator and serves several functions.

Toggling the reset switch will stop a moving gate during a normal open/close cycle, like a stop button. The operator does not need to be reset after doing this. The reset switch will disable the gate in the present position and will energize the solenoid lock for two minutes and disable the maglock for two minutes.



### Operator Alarm

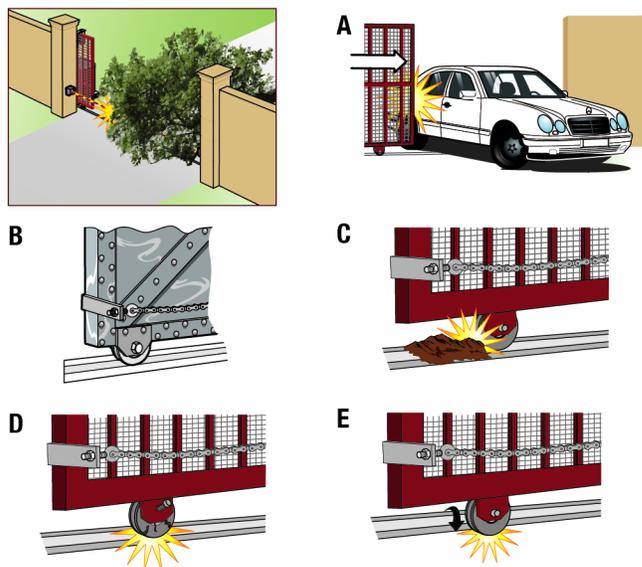
If a contact sensor detects an obstruction twice consecutively the alarm will sound (up to 5 minutes) and the operator will need to be reset.

When the inherent force of the operator (RPM/current sensor) detects the following (twice consecutively) the alarm will sound (up to 5 minutes) and the operator will need to be reset.

- The gate is hitting a wall or vehicle.
- The gate does not meet specifications.
- Debris is on the gate's track such as mud, rocks, dirt, etc.
- The gate has one or more broken axles or wheels.
- The gate wheel is off the gate rail.

Remove any obstructions. Press the reset button to shut off the alarm and reset the operator. After the operator is reset, normal functions will resume.

The operator alarm will beep 3 times with a command if the battery is low.



### Remote control

#### Single Button Control (SBC) Functionality

Once the remote control has been programmed the operator will operate as follows:

When gate is in the closed position, activation of the remote control button will open the gate. During the open cycle another activation of the remote control will stop the gate and the next activation of the remote control will close the gate.

When the gate is in the open position, activation of the remote control button will close the gate. If the remote control is activated while the gate is closing, the gate will stop and the next activation will open the gate.

# ACCESSORY WIRING

All control wiring used to connect external devices to Class 2 circuits of the operator must be (QPTZ) Power-Limited Circuit Cables, Type CL2, CL2P, CL2R, or CL2X or other cable with equivalent or better electrical, mechanical, and flammability ratings.

## External control devices

### EXIT (2 Terminals)

This input is a soft open command (maintained switch does not override external safeties and does not reset alarm condition). Used for exit probe, telephone entry, external exit loop detector, or any device that would command the gate to open.

- Opens a closing gate and holds open an open gate, if maintained, pauses Timer-to-Close at OPEN limit.

### SHADOW (2 Terminals)

This input is used for external shadow loop detector when loop is positioned under the swing of the gate.

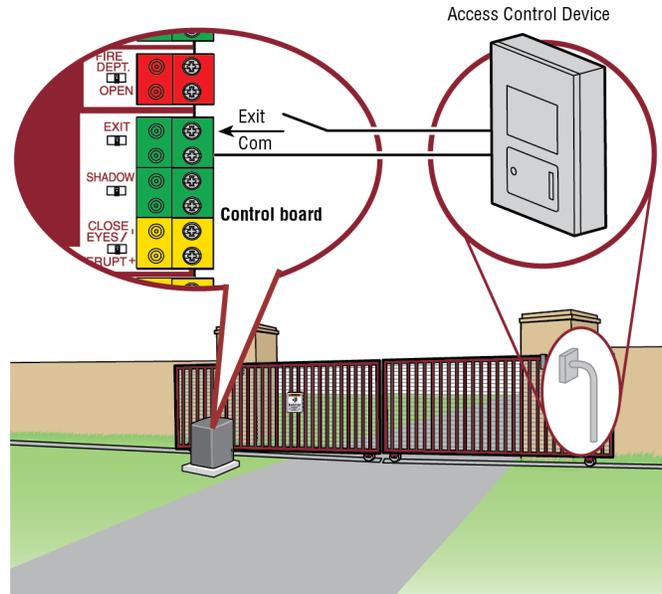
- Holds open gate at open limit
- Only active when the gate is at the OPEN limit, disregarded at all other times
- Pauses Timer-to-Close at OPEN limit

### INTERRUPT (2 Terminals)

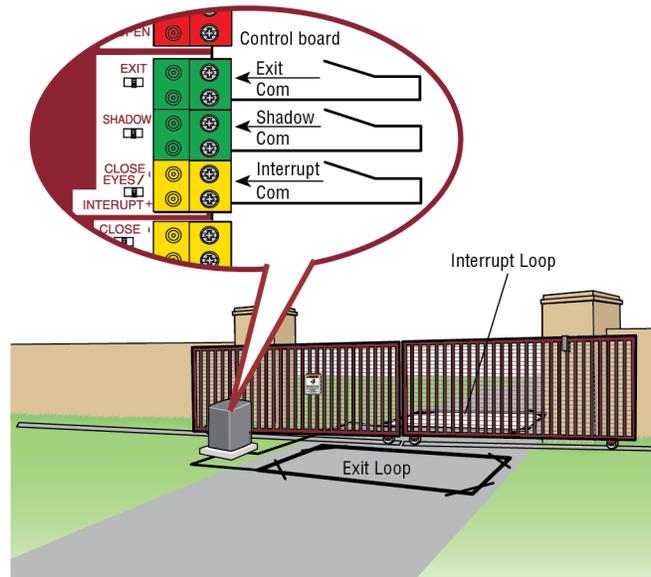
This input is used for photoelectric sensors and external interrupt loop detector when loop is on the outside of the gate.

- Holds open gate at open limit
- Stops and reverses a closing gate to open limit
- Pauses Timer-to-Close at OPEN limit, activates quick close and anti-tailgate features when enabled on the expansion board

Access control device wiring



Loop wiring

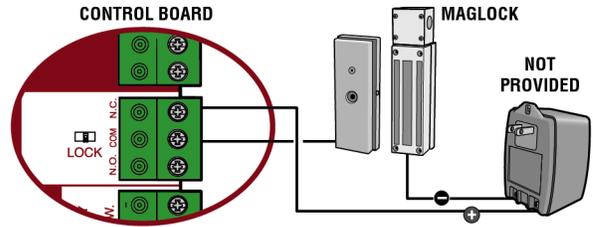


# ACCESSORY WIRING

## Locks

### Maglock (2 Terminals, N.C. and COM)

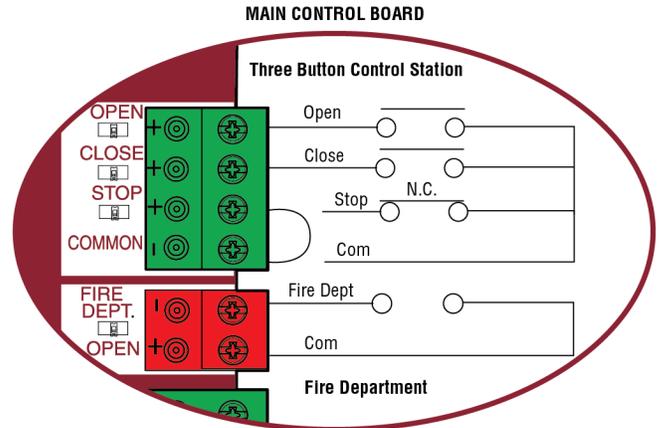
Relay contact output, Normally - closed (N.C.) output for maglocks.  
Relay activates prior to motor activation and during motor run. Relay is off when motor is off.



## Miscellaneous wiring

### Three button control station (4 Terminals)

- OPEN and COM: Opens a closed gate. Hard open (maintained switch overrides external safeties and resets alarm condition). If maintained, pauses Timer-to-Close at OPEN limit. Opens a closing gate and holds open an open gate (within line-of-sight).
- CLOSE and COM: Closes an open gate. Hard close (maintained switch overrides external safeties and resets alarm condition within line-of-sight)
- STOP and COM: Stops a moving gate. Hard stop (maintained switch overrides Open and Close commands and resets alarm condition). If maintained, pauses Timer-to-Close at OPEN limit. Overrides Open and Close commands (within line-of-sight).



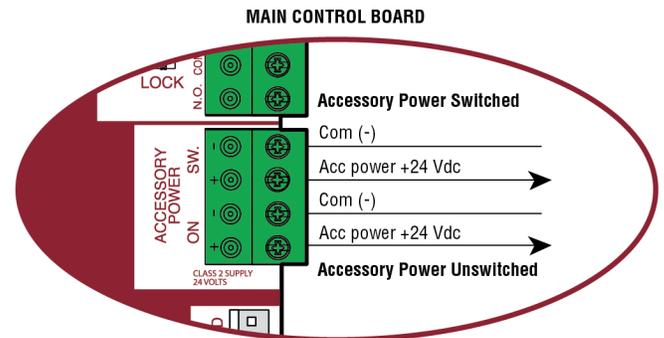
### Fire department open input (2 Terminals)

Acts as hard open.

Maintained input overrides (ignores) external safeties (photoelectric sensor and edge), pauses Timer-to-Close momentary input logic as single button control and safeties remain active, re-enables Timer-to-Close.

### Accessory power 24 VDC, MAX 500 mA (4 Terminals)

- SWITCHED: Switched ON with gate motion and at the open limit when Timer-to-Close is active. Turns off 5 seconds after motion.
- UNSWITCHED: 24 Vdc voltage out to power accessories, always ON.



# EXPANSION BOARD

## ⚠ CAUTION

- To AVOID damaging the circuit board, relays or accessories, DO NOT connect more than 42 Vdc (32 Vac) to the AUX relay contact terminal blocks.

### Expansion board overview

**1. QUICK CLOSE switch:**

OFF: No change to the gate's normal operation.  
 ON: When CLOSE EYES/Interrupt loop is deactivated it causes an opening or a stopped gate to close (ignores the Timer-to-Close).

**2. AC FAIL switch:**

OPEN: Loss of AC power will cause the gate to open approximately 15 seconds after AC power fail and remain OPEN until AC power is restored (enabling the Timer-to-Close).  
 BATT: With loss of AC power, gate will remain in present position and operator is powered from batteries.

**3. EXIT FAIL switch:**

When set to OPEN, if the EXIT plug-in loop detector (Model LOOPDETLM) detects a fault, then the gate will open and remain open until fault is cleared. When set to CLOSE, then plug-in EXIT loop detector faults are ignored (EXIT loop is faulted and inoperative).

**4. ANTI-TAIL switch:**

OFF: When CLOSE EYES/Interrupt loop is activated it causes a closing gate to stop and reverse.  
 ON: When CLOSE EYES/Interrupt loop is activated it causes a closing gate to pause. Once the vehicle is clear the gate will continue to close.

**5. AUX RELAY switches:**

Set the AUX RELAY switches as needed to obtain the desired function as shown on the following page.

**6. EYE/EDGE switches:**

Set the EYE/EDGE switches as needed to obtain the desired OPEN or CLOSE functionality.

**7. 1, 2, and 3 LEDs:**

LEDs indicating the status of the EYE/EDGE inputs. Also used to check the firmware version of the expansion board:

- Locate the 1, 2, and 3 LEDs on the expansion board.
- Disconnect AC/DC power to the main control board for 15 seconds.
- Connect power. The 1, 2, and 3 LEDs will flash in sequence until the main control board firmware revision is displayed. When the green POWER LED glows solid the LED 1 will flash the version number, then stop, then the LED 2 will flash the revision number (for example: For version 5.1 when the green POWER LED is solid the LED 1 will flash 5 times, then stop, then the LED 2 will flash once).

**8. MAIN BOARD input:**

Input Connection for the main board connector.

**9. Input LEDs:**

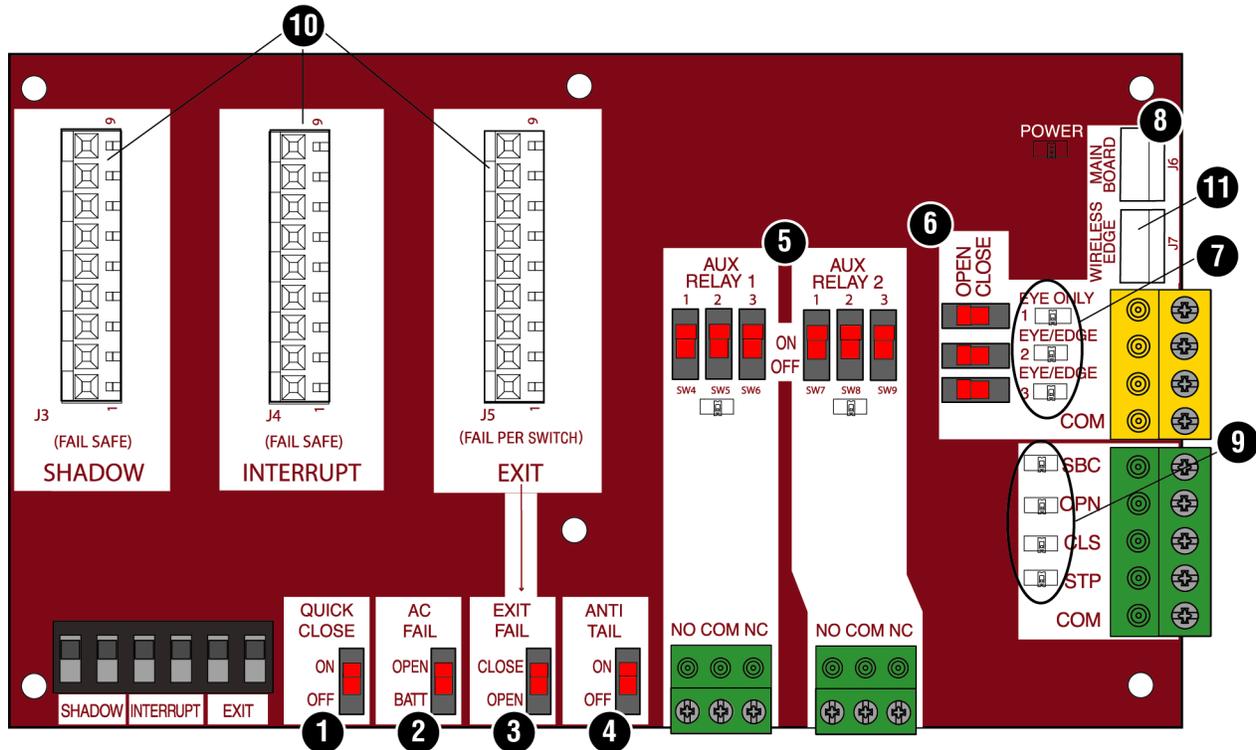
LEDs indicating the status of the SBC, OPN, CLS, and STP inputs.

**10. Loop detector inputs:**

Inputs for the Plug-In Loop Detectors (Model LOOPDETLM)

**11. Wireless edge input:**

Input for the Wireless Edge Kit (Model LMWEKITU)



# EXPANSION BOARD

## Auxiliary relay 1 and 2

Normally Open (N.O.) and Normally Closed (N.C.) relay contacts to control external devices, for connection of Class 2, low voltage (42 Vdc [34 Vac] max 5 Amps) power sources only. Function of relay contact activation determined by switch settings.

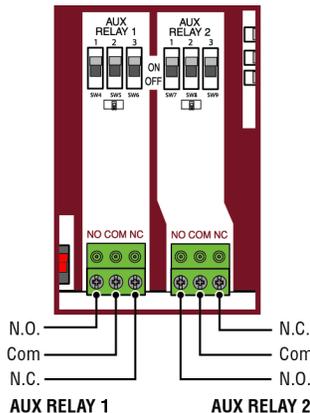
AUX RELAY SETTING	SWITCH SETTINGS			AUX RELAY 1	AUX RELAY 2
	1	2	3		
Off (no feature selected)	OFF	OFF	OFF	Relay always off. Use this Aux Relay setting to conserve battery power.	
Open Limit Switch	OFF	OFF	ON	Energizes at open limit. Use with SAMS (Sequenced Access Management System, jointly with barrier gate).	
Close Limit Switch	OFF	ON	OFF	Energizes when not at close limit. For an additional audible or visual display, connect an external light (low voltage).	
Gate Motion	OFF	ON	ON	Energizes when motor is on (gate in motion). For an additional audible or visual display, connect an external buzzer or light (low voltage).	
Pre-Motion Delay	ON	OFF	OFF	Energizes 3 seconds before gate motion and remains energized during gate motion. The onboard alarm will sound. For an additional audible or visual display, connect an external buzzer or light (low voltage).	Energizes 3 seconds before gate motion and remains energized during gate motion. For an additional audible or visual display, connect an external buzzer or light (low voltage).
Power	ON	ON	OFF	Energizes when AC power or solar power is present. There is approximately a 10-12 second delay before relay cutoff, after AC shutdown.	Energizes when on battery power. There is approximately a 10-12 second delay before relay cutoff, after AC shutdown.
Tamper	ON	OFF	ON	Energizes if gate is manually tampered with by being pushed off of close limit. For an additional audible or visual display, connect an external buzzer or light (low voltage).	
Cycle Quantity Feedback*	ON	ON	ON	The 1, 2, and 3 LEDs will blink out the cycle count (cycle count is stored on the control board). See below.	Red/green light functionality, see below.

### \* Cycle count

First, note the current Aux Relay switch positions. To determine the actual cycles that the gate operator has run (in thousands), set all three Aux Relay switches to the ON setting for Aux Relay 1. The Expansion Board's 1, 2, and 3 LEDs will blink out the cycle count, with 1 LED blinking 1000's, 2 LED blinking 10,000's, 3 LED blinking 100,000's, and simultaneously all three LED's blink 1,000,000's (e.g. 1 LED blinks 3 times, 2 LED blinks 6 times, and 3 LED blinks once. Cycle count is 163,000.). Cycle count displayed is between 1,000 and 9,999,000 cycles. After servicing, set Aux Relay switches back to their appropriate positions. Cycle count cannot be reset or changed. If under 1,000 cycles the 1, 2, and 3 LEDs will turn on for 10 seconds, then turn off.

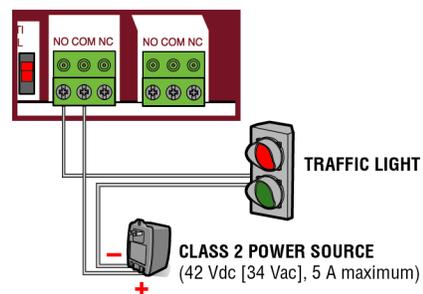
**NOTE:** The expansion board will flash the cycle count 3 times then all the LEDs will turn on solid for 10 seconds then turn off.

### Auxiliary relay wiring example



RED/GREEN LIGHT FUNCTIONALITY						
Red light wired to AUX RELAY 1. Green light wired to AUX RELAY 2.						
GATE STATE	AUX RELAY 1 SWITCHES			AUX RELAY 2 SWITCHES		
	1 OFF	2 OFF	3 OFF	1 ON	2 ON	3 ON
<b>Closed</b>	Red light OFF*			Green light OFF		
<b>Opening</b>	Red light ON/Flash			Green light OFF		
<b>Open</b>	Red light OFF			Green light ON		
<b>Closing</b>	Red light ON/Flash			Green light OFF		
<b>Defined Mid Stop</b>	n/a			n/a		
<b>Undefined Mid Stop</b>	Red light ON			Green light OFF		
<b>Timer more than 5 seconds</b>	Red light OFF			Green light ON		
<b>Timer less than 5 seconds</b>	Red light ON/Flash			Green light OFF		

\* For red light ON when gate is closed, set switch 1 on AUX RELAY 1 to ON

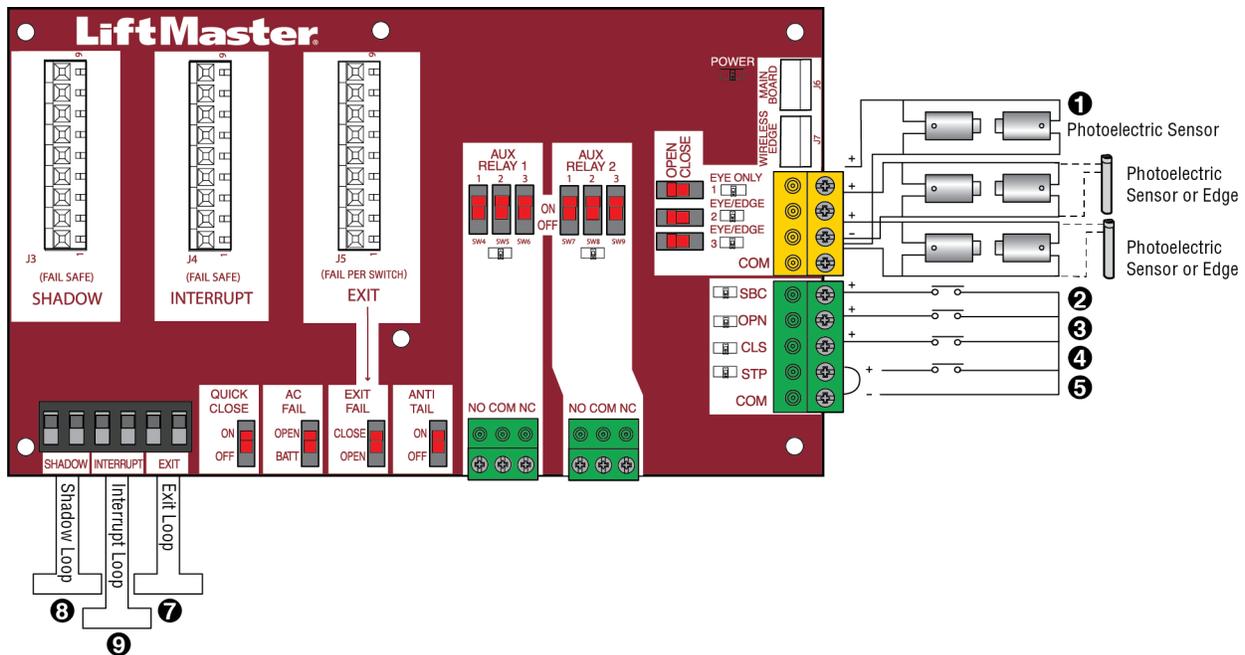


# EXPANSION BOARD

## Wiring accessories to the expansion board

Refer to the chart below and the corresponding image for a description of the expansion board inputs.

1	<b>Wireless edge</b>	Connection for wireless edge receiver
2	<b>Entrapment Protection Device Inputs (4 terminals total), Open or Close Direction based on switch setting next to inputs</b>	EYES ONLY Input: Open or Close Direction Photoelectric Sensors, Close: reverses fully, Open: reverses 4 seconds EYES/EDGE Input(s): Open or Close Direction Photoelectric Sensors, Infra-red detector wired or Edge Sensor, reverses 4 seconds
3	<b>Single Button Control, SBC (2 terminals)</b>	Gate command sequence - Open, Stop, Close, Stop, ... Soft Open ,Soft Close, Soft Stop (maintained switch does not override external safeties and does not reset alarm condition)
4	<b>Open Input (&amp; common) (3-Button Control Station, 4 terminals total)</b>	Open command - opens a closed gate. Soft open (maintained switch does not override external safeties and does not reset alarm condition) If maintained, pauses Timer-to-Close at OPEN limit. Opens a closing gate and holds open an open gate.
5	<b>Close Input (&amp; common) (3-Button Control Station, 4 terminals total)</b>	Close command - closes an open gate. Soft close (maintained switch does not override external safeties and does not reset alarm condition).
6	<b>Stop Input (&amp; common) (3-PB station, 4 terminals total)</b>	Stop command - stops a moving gate. Hard stop (maintained switch overrides Open and Close commands and resets alarm condition) If maintained, pauses Timer-to-Close at OPEN limit. Overrides an Open or Close command.
7	<b>Exit Loop Input (2 terminals)</b>	Loop wire connection for plug-in loop detector when loop is inside secured area near gate. Open command - opens a closed gate. Soft open (maintained switch does not override external safeties and does not reset alarm condition) If maintained, pauses Timer-to-Close at OPEN limit. Opens a closing gate and holds open an open gate.
8	<b>Shadow Loop Input (2 terminals)</b>	Loop wire connection for plug-in loop detector when loop is positioned under the gate. <ul style="list-style-type: none"> <li>• Holds open gate at open limit</li> <li>• Disregarded during gate motion</li> <li>• Pauses Timer-to-Close at Open Limit</li> </ul>
9	<b>Interrupt Loop Input (2 terminals)</b>	Loop wire connection for plug-in loop detector when loop is along the side of the gate. <ul style="list-style-type: none"> <li>• Holds open gate at open limit</li> <li>• Stops and reverses a closing gate</li> <li>• Pauses Timer-to-Close at Open Limit</li> </ul>



**MAINTENANCE****IMPORTANT SAFETY INSTRUCTIONS****⚠ WARNING**

To reduce the risk of SEVERE INJURY or DEATH:

- READ AND FOLLOW ALL INSTRUCTIONS.
- ANY maintenance to the operator or in the area near the operator MUST NOT be performed until disconnecting the electrical power (AC or solar and battery) and locking-out the power via the operator power switch. Upon completion of maintenance the area MUST be cleared and secured, at that time the unit may be returned to service.
- Disconnect power at the fuse box BEFORE proceeding. Operator MUST be properly grounded and connected in accordance with national and local electrical codes. **NOTE: The operator should be on a separate fused line of adequate capacity.**
- NEVER let children operate or play with gate controls. Keep the remote control away from children.
- ALWAYS keep people and objects away from the gate. NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE.
- The entrance is for vehicles ONLY. Pedestrians MUST use separate entrance.
- Test the gate operator monthly. The gate MUST reverse on contact with an object or reverse when an object activates the noncontact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of INJURY or DEATH.
- Use the manual disconnect release ONLY when the gate is NOT moving.
- KEEP GATES PROPERLY MAINTAINED. Read the owner's manual. Have a qualified service person make repairs to gate hardware.
- ALL maintenance MUST be performed by a LiftMaster professional.
- Activate gate ONLY when it can be seen clearly, is properly adjusted and there are no obstructions to gate travel.
- To reduce the risk of FIRE or INJURY to persons use ONLY LiftMaster part 29-NP712 for replacement batteries.

**• SAVE THESE INSTRUCTIONS.****⚠ CAUTION**

- ALWAYS wear protective gloves and eye protection when changing the battery or working around the battery compartment.

**Maintenance Chart**

**Disconnect all power (AC, solar, battery) to the operator before servicing.** The operator's AC Power switch ONLY turns off AC power to the control board and DOES NOT turn off battery power. ALWAYS disconnect the batteries to service the operator.

DESCRIPTION	TASK	CHECK AT LEAST ONCE EVERY		
		MONTH	6 MONTHS	3 YEARS
Entrapment Protection Devices	Check and test inherent (built into the operator) and external devices for proper operation	X		
Warning Signs	Make sure they are present and replace if worn or broken, see <i>Accessories</i>	X		
Manual Disconnect	Check and test for proper operation		X	
Sprockets and Chains	Check for excessive slack and lubricate		X	
Gate	Inspect for wear or damage; ensure it still complies with ASTM F2200, see page 5	X		
Accessories	Check all for proper operation		X	
Electrical	Inspect all wire connections		X	
Chassis Mounting Bolts	Check for tightness		X	
Operator	Inspect for wear or damage		X	
Batteries	Replace			X

**NOTES:**

- Severe or high cycle usage will require more frequent maintenance checks.
- Limits may have to be reset after any major drive chain adjustments.
- If lubricating chain, use only lithium spray. Never use grease or silicone spray.
- It is suggested that while at the site voltage readings be taken at the operator. Using a digital voltmeter, verify that the incoming voltage to the operator is within ten percent of the operator's rating.

## MAINTENANCE

### Batteries

Batteries will degrade over time depending on temperature and usage. The operator alarm will beep 3 times with a command if the battery is low. Batteries do not perform well in extremely cold temperatures. For best performance, the batteries should be replaced every 3 years. Use only LiftMaster part 29-NP712 for replacement batteries. The batteries contain lead and need to be disposed of properly.

The operator comes with two 7AH batteries. Two 33AH batteries (A12330SGLPK), with Solar Harness Kit (K94-37236) may be used in place of the 7AH batteries.

### Drive Train

Over time, the drive chain on the operator will stretch and need to be tightened. To tighten the drive chain adjust either of the two chain eye bolts. **NOTE:** *The chain should have no more than 1 inch of sag for every 10 feet of chain length.*

# TROUBLESHOOTING

## ⚡ WARNING

To protect against fire and electrocution:

- DISCONNECT power (AC or solar and battery) BEFORE installing or servicing operator.

For continued protection against fire:

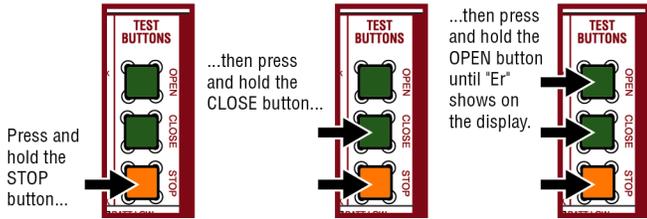
- Replace ONLY with fuse of same type and rating.

## Diagnostic Codes

**NOTE:** When cycling or disconnecting power (ac/dc) to the control board, it is recommended that you unplug the J15 plug.

### To View the Codes

The codes will show on the diagnostic display.



The operator will show the code sequence number followed by the code number:

#### CODE SEQUENCE NUMBER

The first number shown is the most recent code (example: "01"). The display will show the sequence of codes that occurred starting with "01" and going up to code "20".

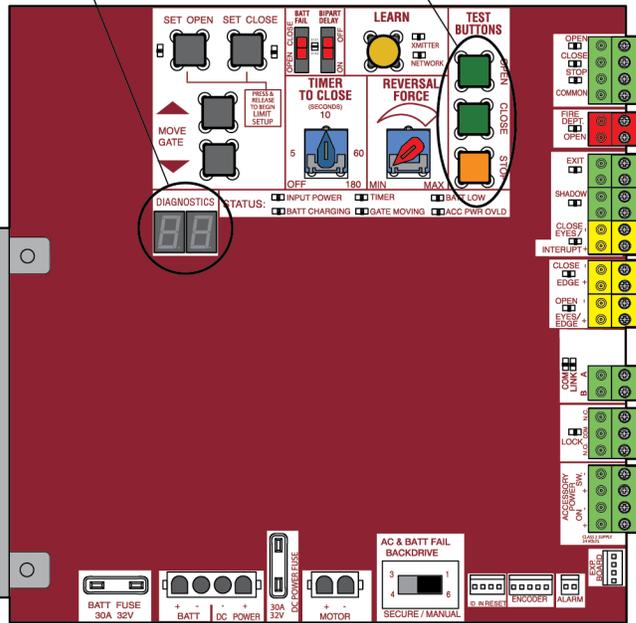
**A SECOND LATER....**

#### CODE NUMBER

The second number shown after the code sequence number is the code itself (31-99, example "31"). Refer to the chart on the following page for an explanation of each code.



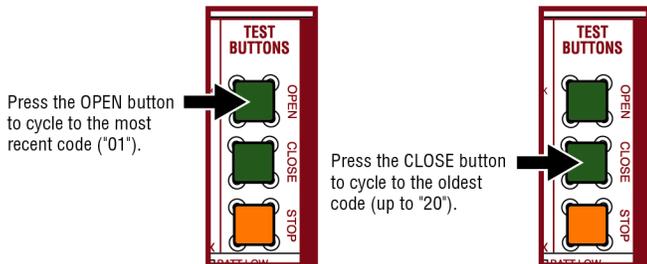
### DIAGNOSTICS DISPLAY OPEN, CLOSE, & STOP BUTTONS



### To Exit

Press and release the STOP button to exit. The display will also time out after two minutes of inactivity.

### To Scroll Through the Saved Codes



The operator will only keep track of up to 20 codes, then will start saving over the oldest codes as new codes occur.

### To Reset the Code History

1. Press and hold the STOP button for six seconds. The display will show "Er" then "CL" alternately for six seconds.
2. Release the STOP button. The code history has now been reset and the display will show "-" until a new code occurs.
3. Press and release the STOP button to exit.

## TROUBLESHOOTING

### Diagnostic Codes Table

Some codes are saved in the code history and some are not. If a code is not saved it will briefly appear on the display as it occurs, then disappear.

<span style="display: inline-block; width: 15px; height: 15px; background-color: #FFD700; border: 1px solid black; margin-right: 5px;"></span> LiftMaster System	<span style="display: inline-block; width: 15px; height: 15px; background-color: #FF8C00; border: 1px solid black; margin-right: 5px;"></span> Installed System	<span style="display: inline-block; width: 15px; height: 15px; background-color: #008080; border: 1px solid black; margin-right: 5px;"></span> Informational	<span style="display: inline-block; width: 15px; height: 15px; background-color: #800040; border: 1px solid black; margin-right: 5px;"></span> External Entrapment Protection	<span style="display: inline-block; width: 15px; height: 15px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></span> Inherent Entrapment Protection
--	---	--	---	---

Code	Meaning	Solution	Saved
31	Main control board has experienced an internal failure.	Disconnect all power, wait 15 seconds, then reconnect power (reboot). If issue continues, replace main control board.	NO
34	Absolute Position Encoder Error, not getting position information from encoder	Check APE assembly and wiring connections. Replace the APE assembly if necessary.	YES
35	Max-Run-Time Exceeded Error	Check for an obstruction, then reprogram the limits.	YES
36	Product ID Error	Was the control board just replaced? If so, erase limits, enter limit setup mode and set limits. If not, disconnect all power, wait 15 seconds, then reconnect power before changing product ID harness.	YES
37	Product ID Failure	Unplug product ID harness then plug back in. Disconnect all power, wait 15 seconds, then reconnect power before replacing product ID harness.	YES
38	Hard Stop Limit (Arm 1)	Limit may be set too tightly against a non-resilient hard stop (re-adjust limit). Operator may be at end of travel (re-adjust mounting).	NO
40	Battery overvoltage	Too much voltage on the battery. Check harness. Make sure there is NOT a 24V battery on a 12V system.	YES
41	Battery overcurrent	Possible short of the battery charge harness. Check harness. Make sure you do NOT have a 12V battery on a 24V system.	YES
42	No battery at boot up	Check battery connections and installation. Replace batteries if depleted to less than 20V on a 24V system or less than 10V on a 12V system. Make sure there is NOT a single 12V battery on a 24V system.	YES
43	Exit Loop Error	Failure or missing loop (SHORT or OPEN - LiftMaster Plug-in Loop Detector only) Check loop wiring throughout connection. May be a short in the loop, or an open connection in the loop.	YES
44	Shadow Loop Error		YES
45	Interrupt Loop Error		YES
46	Wireless edge battery low	Replace batteries in wireless edge.	YES
50	Run-Distance Error	The limits are less than the minimum requirement or longer than what was learned. Check limit positions and proper switch function. Run-distance can be re-learned by setting the handing again.	YES
53	Brownout occurred	AC/DC board supply dipped below allowable level. Review power supply and wiring. If rebooting, ensure enough time for discharge of power to force a fresh boot.	YES
54	Wireless Second Operator Communication Error	Check the second operator for power. If OFF, restore power and try to run the system. If powered, deactivate the wireless feature and then re-learn the second operator.	YES
60	Minimum number of monitored entrapment protection devices not installed.	Review monitored entrapment protection device connections. Slide gate operators require a minimum of two external safety devices; one in the close and one in the open direction.	NO
61	CLOSE EYE/INTERRUPT held more than 3 minutes	Check wired input on main control board; check for alignment or obstruction.	YES
62	CLOSE EDGE held more than 3 minutes		
63	OPEN EYE/EDGE held more than 3 minutes		
64	CLOSE EYE/INTERRUPT held more than 3 minutes	Check wired input on expansion board; check for alignment or obstruction.	YES
65	CLOSE EYE/EDGE held more than 3 minutes		
66	OPEN EYE/EDGE held more than 3 minutes		
67	Wireless edge triggered more than 3 minutes	Check wired input for wiring issue or obstruction.	YES
68	Wireless edge loss of monitoring	Check wireless edge inputs.	YES

## TROUBLESHOOTING

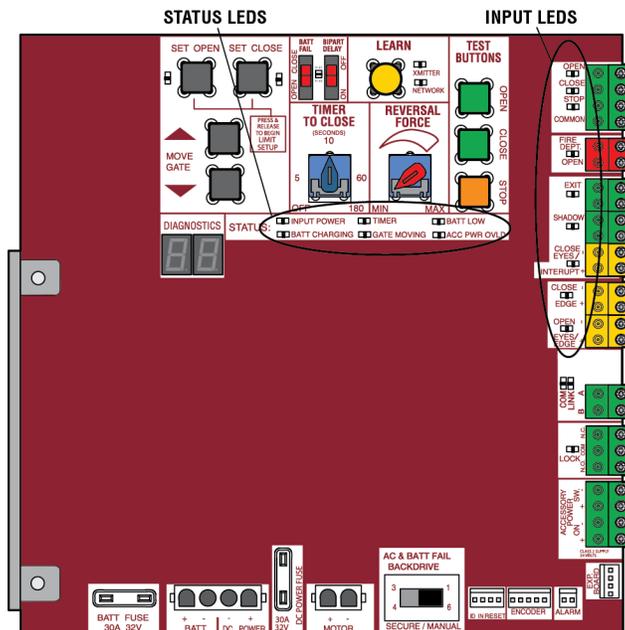
Code	Meaning	Solution	Saved
69	Wireless edge triggered	IF an obstruction occurred, no action required. If an obstruction did NOT occur, check inputs and wiring.	NO
70	CLOSE EYE/INTERRUPT triggered, causing reversal, preventing close, or resetting TTC	IF an obstruction occurred, no action required. If an obstruction did NOT occur, check alignment, inputs, and wiring on main control board	NO
71	CLOSE EDGE triggered, causing reversal, NO preventing close, or canceling TTC		
72	OPEN EYE/EDGE triggered, causing reversal or preventing opening		
73	CLOSE EYE/INTERRUPT triggered, causing reversal, preventing close, or resetting TTC	IF an obstruction occurred, no action required. If an obstruction did NOT occur, check alignment, inputs, and wiring on expansion board.	NO
74	CLOSE EYE/EDGE triggered, causing reversal and preventing close or canceling TTC		
75	OPEN EYE/EDGE triggered, causing reversal or preventing opening		
80	Close input (EYE/EDGE) communication fault from other operator	Check inputs and communication method between operators, either wired bus or radio. Ensure operator is powered. May have to erase the wireless communication and reprogram the two operators.	YES
81	Open input (EYE/EDGE) communication fault from other operator		
82	Close input (EYE/EDGE) communication fault (expansion board)	Check the connections between the main board and the expansion board.	YES
83	Open input (EYE/EDGE) communication fault (expansion board)		
84	Non-monitored device detected on the wireless safety system	Non-monitored contact closure devices are not supported. Make sure connected devices are monitored. Check edges for proper orientation and resistive end cap connection.	YES
91	Force Reversal (Operator 1)	Check for obstruction. If no obstruction, check that the mechanical assembly is engaged and free to move. See section on Limit and Force Adjustment, and Obstruction Test.	YES
93	RPM / STALL Reversal (Operator 1)	Check for obstruction. If no obstruction, check the operator wiring and that the mechanical assembly is engaged and free to move. Replace APE assembly.	YES
99	Normal Operation	No action required	YES

# TROUBLESHOOTING

## Control Board LEDs

STATUS LEDS		
INPUT POWER	OFF	OFF state
	ON	AC charger or Solar power available
BATT CHARGING	OFF	Not charging
	ON	Three stage battery charging
TIMER	OFF	The timer is disabled
	ON	The timer is enabled
	MEDIUM BLINK (1 blink per second)	The timer is running
	FAST BLINK (2 blinks per second)	The timer is paused
	FASTEST BLINK (8 blinks per second)	The timer is canceled
GATE MOVING	OFF	The gate is stopped
	ON	The gate is opening or closing
	MEDIUM BLINK (1 blink per second)	Operator is in E1 (single entrapment)
	FASTEST BLINK (8 blinks per second)	The operator is in E2 (double entrapment)
BATT LOW	OFF	No battery error
	ON	Battery low
	MEDIUM BLINK (1 blink per second)	Battery critically low
ACC PWR OVLD	OFF	Accessory power is okay
	ON	Accessory overload protector opened

INPUT LEDS		
OPEN, CLOSE, STOP INPUT	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
FIRE DEPT INPUT	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
EXIT	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
SHADOW	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
CLOSE EYES/INTERRUPT	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
CLOSE EDGE	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
OPEN EYES/EDGE	OFF	Input inactive
	ON	Input active
	BLINK	Input active on other operator
LOCK	OFF	Maglock relay inactive
	ON	Maglock relay active



## TROUBLESHOOTING

### Troubleshooting Chart

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
<b>Operator does not run and diagnostic display not on.</b>	<ul style="list-style-type: none"> <li>a. No power to control board</li> <li>b. Open fuse</li> <li>c. If on battery power only, low or dead batteries</li> <li>d. Defective control board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check AC and battery power</li> <li>b. Check fuses</li> <li>c. Charge batteries by AC or solar power or replace batteries</li> <li>d. Replace defective control board</li> </ul>
<b>Control board powers up, but motor does not run.</b>	<ul style="list-style-type: none"> <li>a. Reset switch is stuck</li> <li>b. Stop button active or jumper not in place for stop circuit</li> <li>c. If on battery power only, low or dead batteries</li> <li>d. Open or Close input active</li> <li>e. Entrapment Protection Device active</li> <li>f. Vehicle loop detector or probe active</li> <li>g. Defective control board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check reset switch</li> <li>b. Check Stop button is not “stuck on”, or verify that the stop button is a normally closed circuit, or put a jumper on the stop circuit.</li> <li>c. Charges batteries by AC or solar power or replace batteries</li> <li>d. Check all Open and Close inputs for a “stuck on” input</li> <li>e. Check all Entrapment Protection Device inputs for a “stuck on” sensor</li> <li>f. Check all vehicle detector inputs for a “stuck on” detector</li> <li>g. Replace defective control board</li> </ul>
<b>Gate moves, but cannot set correct limits.</b>	<ul style="list-style-type: none"> <li>a. Gate does not move to a limit position</li> <li>b. Gate is too difficult to move</li> <li>c. Limits are set too close (slide gate applications only)</li> </ul>	<ul style="list-style-type: none"> <li>a. Use manual disconnect, manually move gate, and ensure gate moves easily limit to limit. Repair gate as needed.</li> <li>b. Gate must move easily and freely through its entire range, limit to limit. Repair gate as needed.</li> <li>c. Ensure the gate moves at least four feet between the OPEN limit and the CLOSE limit.</li> </ul>
<b>Gate does not fully open or fully close when setting limits.</b>	<ul style="list-style-type: none"> <li>a. Gate does not move to a limit position</li> <li>b. Gate is too difficult to move</li> </ul>	<ul style="list-style-type: none"> <li>a. Use manual disconnect, manually move gate, and ensure gate moves easily limit to limit. Repair gate as needed.</li> <li>b. Gate must move easily and freely through its entire range, limit to limit. Repair gate as needed.</li> </ul>
<b>Operator does not respond to a wired control/command (example: Open, Close, SBC, etc.)</b>	<ul style="list-style-type: none"> <li>a. Check Open and Close command input LEDs</li> <li>b. Stop button is active</li> <li>c. Reset button is stuck</li> <li>d. If on battery power only, low or dead batteries</li> <li>e. Entrapment Protection Device active</li> <li>f. Vehicle loop detector or vehicle probe active</li> </ul>	<ul style="list-style-type: none"> <li>a. Check all Open and Close inputs for a “stuck on” input</li> <li>b. Check Stop button is not “stuck on”</li> <li>c. Check Reset button</li> <li>d. Charges batteries by AC or solar power or replace batteries</li> <li>e. Check all Entrapment Protection Device inputs for a “stuck on” sensor</li> <li>f. Check all vehicle detector inputs for a “stuck on” detector</li> </ul>
<b>Operator does not respond to a wireless control or transmitter</b>	<ul style="list-style-type: none"> <li>a. Check XMITTER LED when wireless control is active</li> <li>b. Stop button is active</li> <li>c. Reset button is stuck</li> <li>d. Poor radio reception</li> </ul>	<ul style="list-style-type: none"> <li>a. Activate wireless control and check XMITTER LED is on. Re-learn wireless control/transmitter to control board. Replace wireless control as needed.</li> <li>b. Check Stop button is not “stuck on”</li> <li>c. Check Reset button</li> <li>d. Check if similar wired control operates correctly. Check if wireless controls works properly when within a few feet of operator. Check operator’s antenna and antenna wire. Check other wireless controls or devices.</li> </ul>
<b>Gate stops during travel and reverses immediately.</b>	<ul style="list-style-type: none"> <li>a. Control (Open, Close) becoming active</li> <li>b. Vehicle loop detector active</li> <li>c. Low battery voltage</li> </ul>	<ul style="list-style-type: none"> <li>a. Check all Open and Close inputs for an active input</li> <li>b. Check all vehicle detector inputs for an active detector</li> <li>c. Battery voltage must be 23.0 Vdc or higher. Charge batteries by AC or solar power or replace batteries</li> </ul>

## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
<b>Gate opens, but will not close with transmitter or Timer-to-Close.</b>	<ul style="list-style-type: none"> <li>a. Open control active</li> <li>b. Vehicle loop detector active</li> <li>c. Loss of AC power with AC FAIL set to OPEN</li> <li>d. Low battery with LOW BATT set to OPEN</li> <li>e. Fire Dept input active</li> <li>f. Timer-to-Close not set</li> <li>g. Close Entrapment Protection Device active</li> </ul>	<ul style="list-style-type: none"> <li>a. Check all Open inputs for an active input</li> <li>b. Check all vehicle detector inputs for an active detector</li> <li>c. Check AC power and AC Fail option setting</li> <li>d. Check if AC power is available. If no AC power, then running on batteries and battery voltage must be 23.0 Vdc or higher. Charge batteries by AC or solar power or replace batteries.</li> <li>e. Check Fire Dept input</li> <li>f. Check Timer-to-Close (TTC) setting</li> <li>g. Check all Entrapment Protection Device inputs for an active sensor</li> </ul>
<b>Gate closes, but will not open.</b>	<ul style="list-style-type: none"> <li>a. Vehicle loop detector active</li> <li>b. Low battery with LOW BATT option set to CLOSE</li> </ul>	<ul style="list-style-type: none"> <li>a. Check all vehicle detector inputs for an active detector</li> <li>b. Check if AC power is available. If no AC power, then running on batteries and battery voltage must be 23.0 Vdc or higher. Charge batteries by AC or solar power or replace batteries.</li> </ul>
<b>Exit loop activation does not cause gate to open.</b>	<ul style="list-style-type: none"> <li>a. Exit vehicle detector setup incorrectly</li> <li>b. Defective Exit loop detector</li> <li>c. Low battery with LOW BATT option set to CLOSE</li> </ul>	<ul style="list-style-type: none"> <li>a. Review Exit loop detector settings. Adjust settings as needed.</li> <li>b. Replace defective Exit loop detector.</li> <li>c. Check if AC power is available. If no AC power, then running on batteries and battery voltage must be 23.0 Vdc or higher. Charge batteries by AC or solar power or replace batteries.</li> </ul>
<b>Interrupt loop does not cause gate to stop and reverse.</b>	<ul style="list-style-type: none"> <li>a. Vehicle detector setup incorrectly</li> <li>b. Defective vehicle loop detector</li> <li>c. Anti-tail set to ON</li> </ul>	<ul style="list-style-type: none"> <li>a. Review Interrupt loop detector settings. Adjust settings as needed.</li> <li>b. Replace defective Interrupt loop detector.</li> <li>c. Set anti-tail to OFF.</li> </ul>
<b>Shadow loop does not keep gate at open limit.</b>	<ul style="list-style-type: none"> <li>a. Vehicle detector setup incorrectly</li> <li>b. Defective vehicle loop detector</li> </ul>	<ul style="list-style-type: none"> <li>a. Review Shadow loop detector settings. Adjust settings as needed.</li> <li>b. Replace defective Shadow loop detector.</li> </ul>
<b>Obstruction in gate's path does not cause gate to stop and reverse.</b>	<ul style="list-style-type: none"> <li>a. Force adjustment needed</li> </ul>	<ul style="list-style-type: none"> <li>a. Refer to the Adjustment section to conduct the obstruction test and perform the proper force adjustment that is needed.</li> </ul>
<b>Photoelectric sensor does not stop or reverse gate.</b>	<ul style="list-style-type: none"> <li>a. Incorrect photoelectric sensor wiring</li> <li>b. Defective photoelectric sensor</li> </ul>	<ul style="list-style-type: none"> <li>a. Check photoelectric sensor wiring. Retest that obstructing photoelectric sensor causes moving gate to stop, and may reverse direction.</li> <li>b. Replace defective photoelectric sensor. Retest that obstructing photoelectric sensor causes moving gate to stop, and may reverse direction.</li> </ul>
<b>Edge Sensor does not stop or reverse gate.</b>	<ul style="list-style-type: none"> <li>a. Incorrect edge sensor wiring</li> <li>b. Defective edge sensor</li> </ul>	<ul style="list-style-type: none"> <li>a. Check edge sensor wiring. Retest that activating edge sensor causes moving gate to stop and reverse direction.</li> <li>b. Replace defective edge sensor. Retest that activating edge sensor causes moving gate to stop and reverse direction.</li> </ul>
<b>Alarm sounds for 5 minutes or alarm sounds with a command.</b>	<ul style="list-style-type: none"> <li>a. Double entrapment occurred (two obstructions within a single activation)</li> </ul>	<ul style="list-style-type: none"> <li>a. Check for cause of entrapment (obstruction) detection and correct. Press the reset button to shut off alarm and reset the operator.</li> </ul>
<b>Alarm beeps three times with a command.</b>	<ul style="list-style-type: none"> <li>a. Low battery</li> </ul>	<ul style="list-style-type: none"> <li>a. Check if AC power is available. If no AC power, then running on batteries and battery voltage must be 23.0 Vdc or higher. Charge batteries by AC or solar power or replace batteries</li> </ul>
<b>On dual-gate system, incorrect gate opens first or closes first.</b>	<ul style="list-style-type: none"> <li>a. Incorrect Bipart switch setting</li> </ul>	<ul style="list-style-type: none"> <li>a. Change setting of both operator's Bipart switch settings. One operator should have Bipart switch ON (operator that opens second) and the other operator should have Bipart switch OFF (operator that opens first).</li> </ul>
<b>Alarm beeps when running.</b>	<ul style="list-style-type: none"> <li>a. Expansion board setting</li> <li>b. Constant pressure to open or close is given</li> </ul>	<ul style="list-style-type: none"> <li>a. Pre-warning is set to "ON"</li> <li>b. Constant pressure to open or closed is given</li> </ul>

## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
<b>Expansion board function not controlling gate.</b>	<ul style="list-style-type: none"> <li>a. Defective main board to expansion board wiring</li> <li>b. Incorrect input wiring to expansion board</li> <li>c. Defective expansion board or defective main board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check main board to expansion board wiring. If required, replace wire cable.</li> <li>b. Check wiring to all inputs on expansion board.</li> <li>c. Replace defective expansion board or defective main board</li> </ul>
<b>Maglock not working correctly.</b>	<ul style="list-style-type: none"> <li>a. Maglock wired incorrectly</li> </ul>	<ul style="list-style-type: none"> <li>a. Check that Maglock is wired to N.C. and COM terminals. Check that Maglock has power (do not power maglock from control board accessory power terminals). If shorting lock's NO and COM wires does not activate Maglock, then replace Maglock or Maglock wiring (refer to Wiring Diagrams).</li> </ul>
<b>Solenoid lock not working correctly.</b>	<ul style="list-style-type: none"> <li>a. Solenoid wired incorrectly</li> </ul>	<ul style="list-style-type: none"> <li>a. Check that Solenoid is wired to N.O. and COM terminals. Check that Solenoid has power (do not power solenoid from control board accessory power terminals). If shorting lock's NC and COM wires does not activate Solenoid, then replace Solenoid lock or Solenoid wiring (refer to Wiring Diagrams).</li> </ul>
<b>Switched (SW) Accessory power remaining on.</b>	<ul style="list-style-type: none"> <li>a. In limit setup mode</li> </ul>	<ul style="list-style-type: none"> <li>a. Learn the limits</li> </ul>
<b>Accessories connected to Switch (SW) Accessory power not working correctly, turning off, or resetting.</b>	<ul style="list-style-type: none"> <li>a. Normal behavior</li> </ul>	<ul style="list-style-type: none"> <li>a. Move accessory to accessory power "ON"</li> </ul>
<b>Accessories connected to Accessory power not working correctly, turning off, or resetting.</b>	<ul style="list-style-type: none"> <li>a. Accessory power protector active</li> <li>b. Defective control board</li> </ul>	<ul style="list-style-type: none"> <li>a. Disconnect all accessory powered devices and measure accessory power voltage (should be 23 – 30 Vdc). If voltage is correct, connect accessories one at a time, measuring accessory voltage after every new connection.</li> <li>b. Replace defective control board</li> </ul>
<b>Quick Close not working correctly.</b>	<ul style="list-style-type: none"> <li>a. Quick Close setting incorrect</li> <li>b. Interrupt loop detector</li> <li>c. Defective Expansion board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check that Quick Close setting is ON</li> <li>b. Check operation of Interrupt Loop detector</li> <li>c. Replace defective Expansion board</li> </ul>
<b>Anti-Tailgating not working correctly.</b>	<ul style="list-style-type: none"> <li>a. Anti-Tail setting incorrect</li> <li>b. Interrupt loop detector</li> <li>c. Defective Expansion board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check that Anti-Tail setting is ON</li> <li>b. Check operation of Interrupt Loop detector</li> <li>c. Replace defective Expansion board</li> </ul>
<b>AUX Relay not working correctly.</b>	<ul style="list-style-type: none"> <li>a. AUX Relay setting incorrect</li> <li>b. AUX Relay wiring incorrect</li> <li>c. Defective Expansion board</li> </ul>	<ul style="list-style-type: none"> <li>a. Check AUX Relay switches settings</li> <li>b. Check that wiring is connected to either N.O. and COM or to N.C. and COM.</li> <li>c. Set AUX Relay to another setting and test. Replace defective expansion board.</li> </ul>
<b>Solar operator not getting enough cycles per day.</b>	<ul style="list-style-type: none"> <li>a. Insufficient panel wattage</li> <li>b. Excessive accessory power draw</li> <li>c. Old batteries</li> <li>d. Solar panels are not getting enough sunlight</li> </ul>	<ul style="list-style-type: none"> <li>a. Add more solar panels</li> <li>b. Reduce the accessory power draw by using LiftMaster low power accessories</li> <li>c. Replace batteries</li> <li>d. Relocate the solar panels away from obstructions (trees, buildings, etc.)</li> </ul>
<b>Solar operator, insufficient standby time.</b>	<ul style="list-style-type: none"> <li>a. Insufficient panel wattage</li> <li>b. Excessive accessory power draw</li> <li>c. Battery capacity too low</li> </ul>	<ul style="list-style-type: none"> <li>a. Add more solar panels</li> <li>b. Reduce the accessory power draw by using LiftMaster low power accessories</li> <li>c. Use batteries with higher amp hour (AH) rating</li> </ul>

# APPENDIX

## Step 6 Solar Panel(s)

SOLAR PANELS ARE NOT PROVIDED. SEE ACCESSORIES

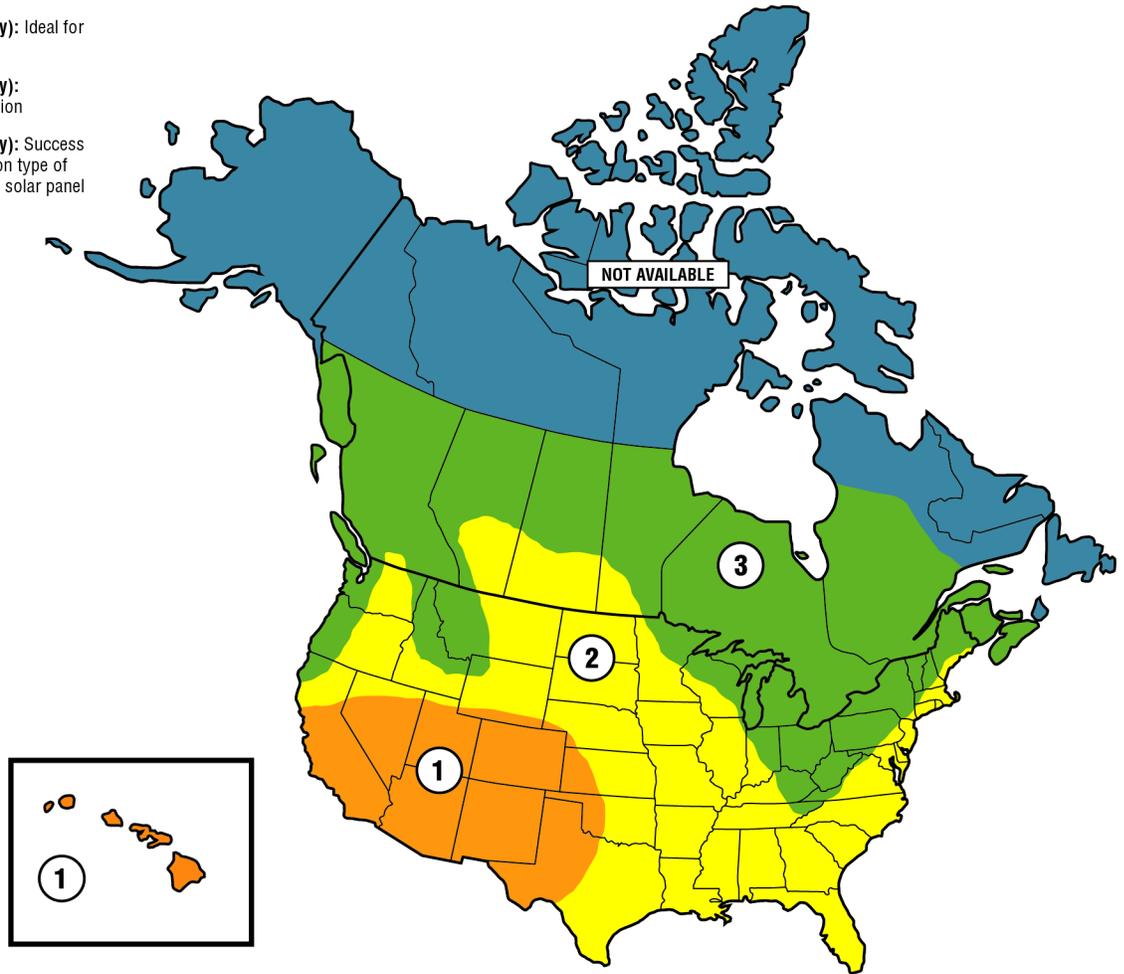
### Solar Application Requirements

- A minimum of two 10W solar panels in series (Model SP10W12V).
- A maximum of six 10W solar panels (Model SP10W12V).
- Solar Harness Kit (Model K94-37236).
- A heater cannot be used with a solar application.

### Solar Zones

Solar panel recommendations are based upon the average solar radiation and the temperature effects on batteries in the given zones as shown on the map below. Local geography and weather conditions may require additional solar panels. Solar powered gate operator installations are not supported in northern climates due to cold weather and a reduced number of hours of sunlight during the winter months. The cycles/day ratings are approximations. Ratings vary based on gate construction, installation, and temperature. Solar panels cannot be installed in areas that experience long periods of heavy fog, lake effect snow, or rain.

- 1** ZONE 1 (6 Hours of Sunlight/Day): Ideal for solar application
- 2** ZONE 2 (4 Hours of Sunlight/Day): Recommended for solar application
- 3** ZONE 3 (2 Hours of Sunlight/Day): Success of solar application will depend on type of gate operator and location of the solar panel
- NOT AVAILABLE**



## APPENDIX

### Solar usage guide

Typical System Standby Battery Current Consumption (mA)	
System voltage	24V
Main board with no radios programmed	2.7 mA
One or more LiftMaster® remote controls programmed	+1 mA
MyQ® device or wireless dual gate programmed	+2.4 mA
Expansion board	+11.1 mA
Per loop detector LOOPDETLM (up to 3 loop detectors can be plugged in to the expansion board)	+3.8 mA
Add up current draw by feature and accessory to determine total current draw	

**NOTE:** The use of photoelectric sensor heaters (models LMRRUL and LMTBUL) is NOT recommended in solar applications.

SOLAR GATE CYCLES PER DAY							
	BATTERY CURRENT DRAW (mA)	ZONE 1		ZONE 2		ZONE 3	
		7AH batteries	33AH batteries	7AH batteries	33AH batteries	7AH batteries	33AH batteries
<b>10W SOLAR PANEL</b>	5	26	28	15	17		
	15	22	24	12	13		
	20	20	22		11		
	40	12	14				
	60						
<b>20W SOLAR PANEL</b> (Two 10W 12V panels in series)	5	57	67	34	40	14	16
	15	52	62	30	36	10	12
	20	50	60	28	33		11
	50	36	45	15	20		
	100	15	23				
<b>40W SOLAR PANEL</b> (Two 20W 12V panels in series)	5	108	152	65	92	27	38
	15	103	147	60	87	23	34
	20	100	144	58	84	21	32
	100	58	99	21	44		
	200	14	47				
<b>60W SOLAR PANEL</b>	5	134	240	81	146	34	61
	15	128	234	76	140	29	56
	20	125	231	73	137	27	54
	100	82	181	34	92		18
	250	12	95		20		

# APPENDIX

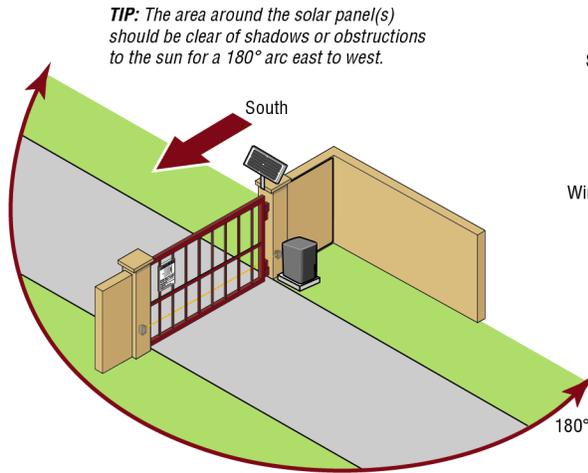
## Position

The location of the panel(s) is critical to the success of the installation. In general, the panel(s) should be mounted using the provided angle bracket facing **due south**. The solar panel(s) should be mounted in an area clear of all obstructions and shade from buildings and trees. If the panel(s) is not casting a shadow, the battery is not being charged.

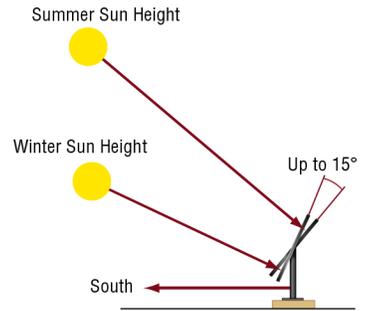
**NOTE:** Tall trees or buildings that do not shade the solar panel(s) in the summer could shade the solar panel(s) during the winter months when the sun sits lower in the sky.

MAXIMUM WIRE LENGTH			
AMERICAN WIRE GAUGE (AWG)	20 WATTS OF PANELS	40 WATTS OF PANELS	60 WATTS OF PANELS
16	235 (71.6 m)	115 (35.1 m)	80 (24.4 m)
14	375 (114.3 m)	190 (57.9 m)	125 (38.1 m)
12	600 (182.9 m)	300 (91.4 m)	200 (61 m)
10	940 (286.5 m)	475 (144.8 m)	315 (96 m)

*Chart assumes: copper wire, 65°C, 5% drop, 30V nominal*



**TIP:** The area around the solar panel(s) should be clear of shadows or obstructions to the sun for a 180° arc east to west.

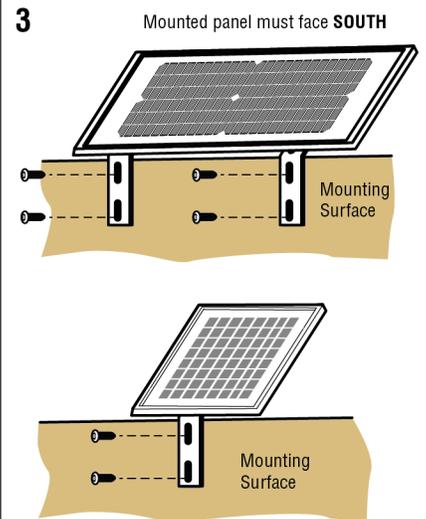
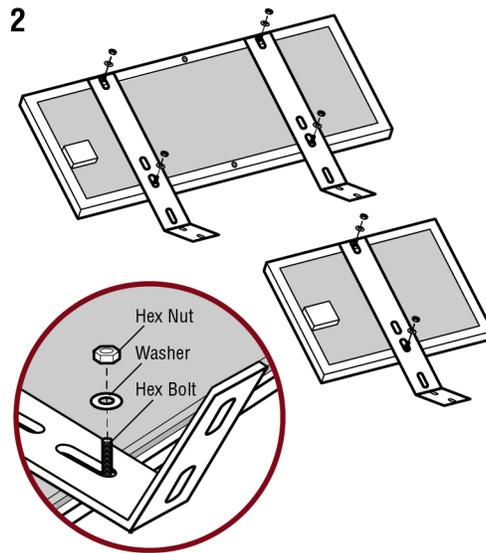
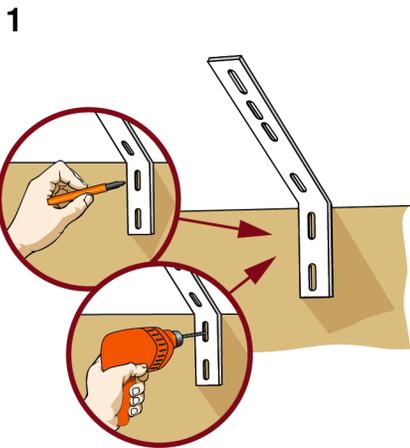


**TIP:** To optimize the system for winter operation the angle can be increased an additional 15° (solar panel(s) sits more vertical).

## Installation

Solar panel(s) **MUST** be installed facing south. Use a compass to determine direction. Below are general instructions for installing the solar panel(s). Your installation may vary slightly depending on the solar panel purchased.

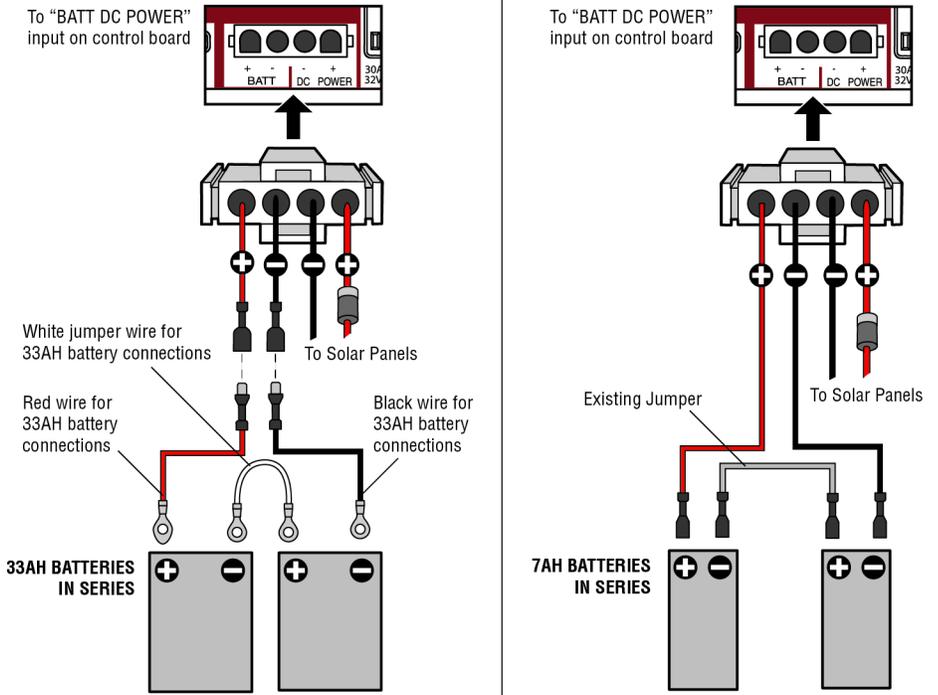
1. Position the mounting bracket on the mounting surface. Mark and drill holes.
2. Secure the solar panel to the mounting bracket using the hex bolts, hex nuts and washers provided.
3. Secure the solar panel to the mounting surface using lag screws provided.



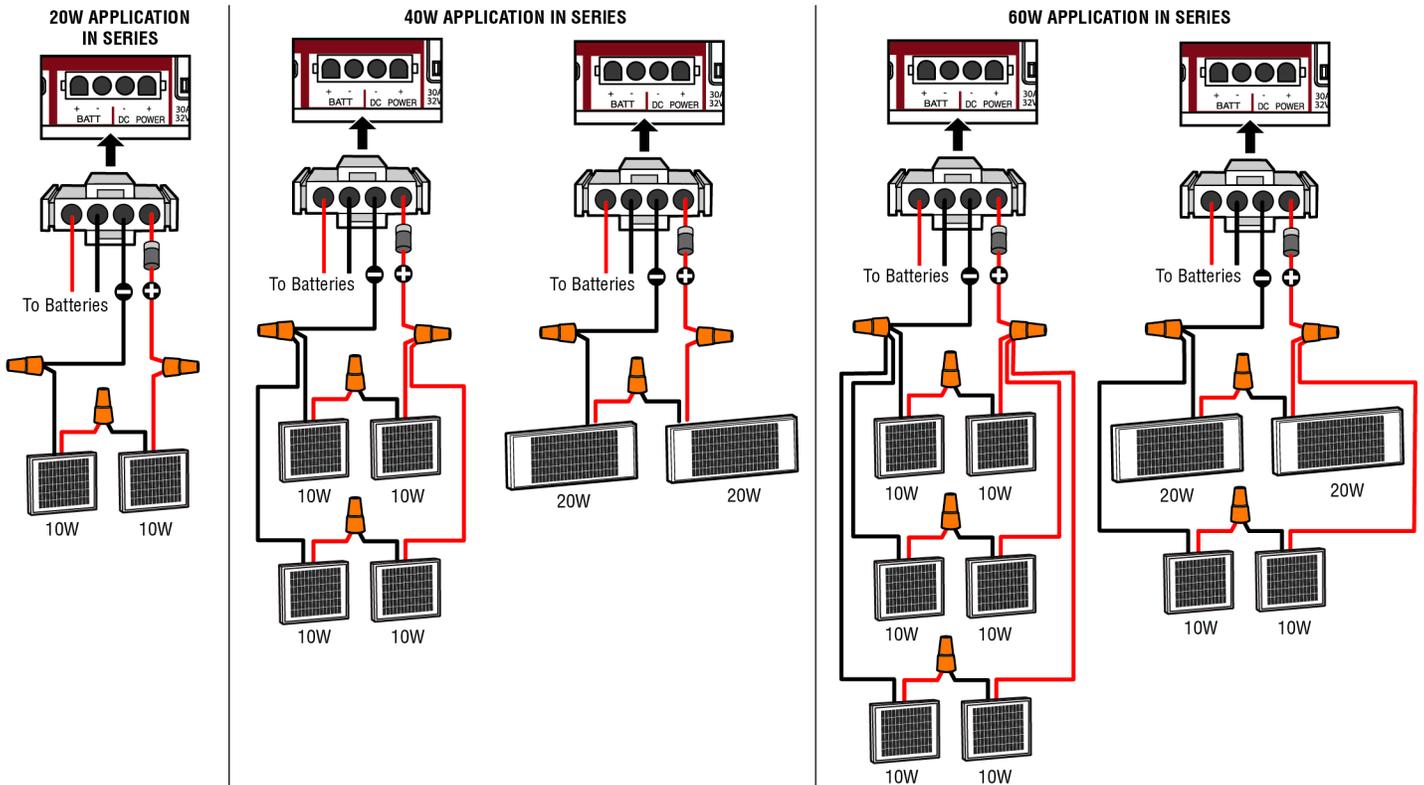
# APPENDIX

## Wire the Batteries

Solar panel applications require the Solar Harness Kit model K94-37236, see *Accessories*.



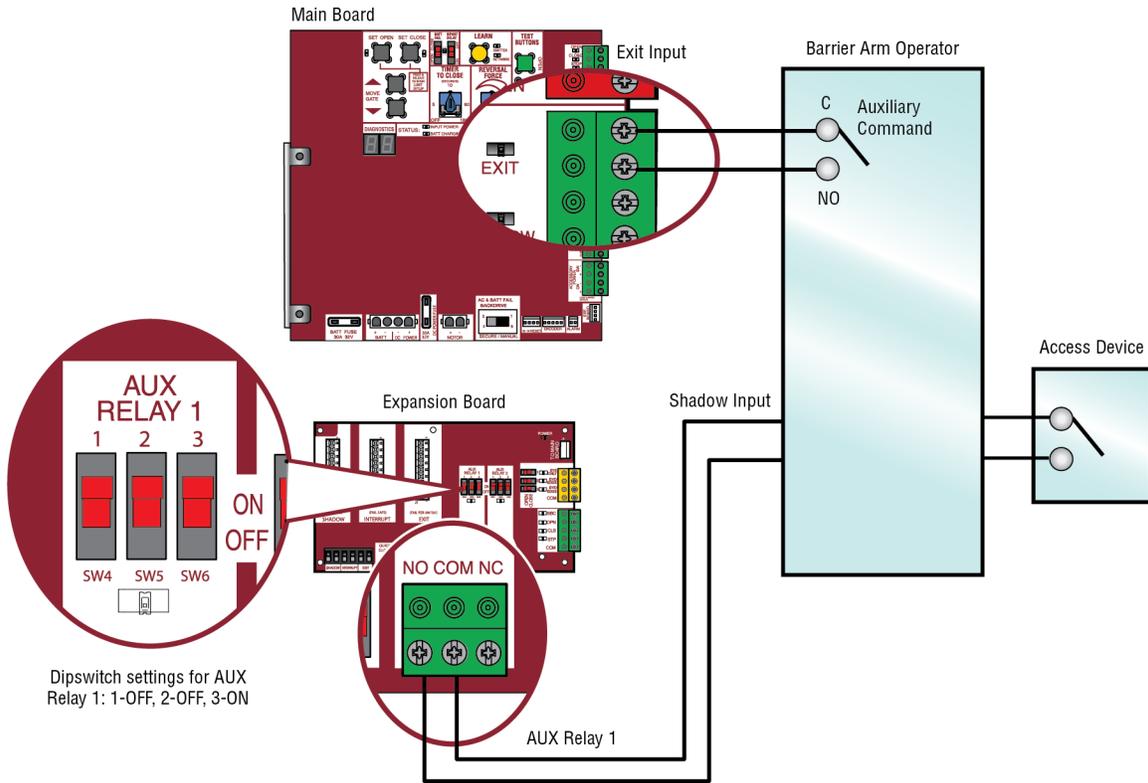
## Wire the solar panels



Proceed to the Dual Gate section (if applicable) or proceed to the Adjustment section.

# APPENDIX

## SAMS wiring with relays not energized



## Dual Gate Settings

*NOTE: We recommend that all accessories and board configurations are set on the primary operator.*

### Main control board

FEATURE	PRIMARY OPERATOR	SECONDARY OPERATOR
Timer-to-Close	Set the TTC dial to desired setting	OFF
Bi-Part Delay Switch	Bi-Part Delay: ON (will open last and close first) Tandem Mode: OFF Synchronized Close: ON	Bi-Part Delay: OFF (will open first and close last) Tandem Mode: OFF Synchronized Close: ON

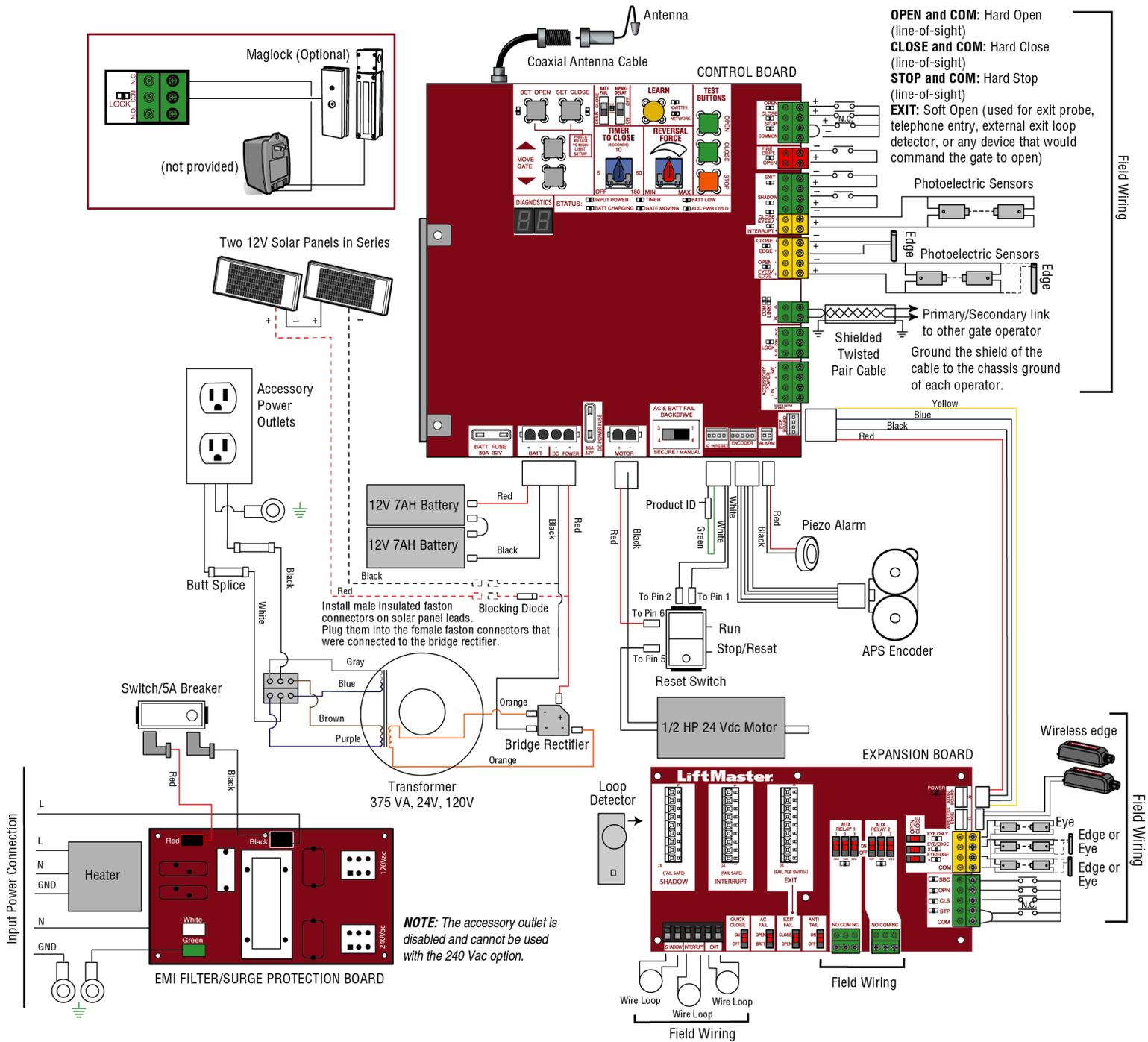
### Expansion board

FEATURE	PRIMARY OPERATOR	SECONDARY OPERATOR
QUICK CLOSE Switch	ON	OFF
ANTI-TAIL Switch	ON	OFF
LOW BATT Switch	Battery Fail OPEN: OPEN Battery Fail CLOSE: CLOSE	Battery Fail OPEN: OPEN Battery Fail CLOSE: CLOSE
AC FAIL OPEN/BATT Switch	OPEN	OPEN

### Accessories

ACCESSORY	PRIMARY OPERATOR	SECONDARY OPERATOR
Remote Controls	Program remote controls 1 to 50 to the primary operator.	Program remote controls 51 to 100 to the secondary operator
LiftMaster Internet Gateway	Program to primary operator.	
Garage and Gate Monitor	Program to primary operator.	





**NOTE:** The accessory outlet is disabled and cannot be used with the 240 Vac option.

**OPEN and COM:** Hard Open (line-of-sight)  
**CLOSE and COM:** Hard Close (line-of-sight)  
**STOP and COM:** Hard Stop (line-of-sight)  
**EXIT:** Soft Open (used for exit probe, telephone entry, external exit loop detector, or any device that would command the gate to open)

Primary/Secondary link to other gate operator  
 Ground the shield of the cable to the chassis ground of each operator.

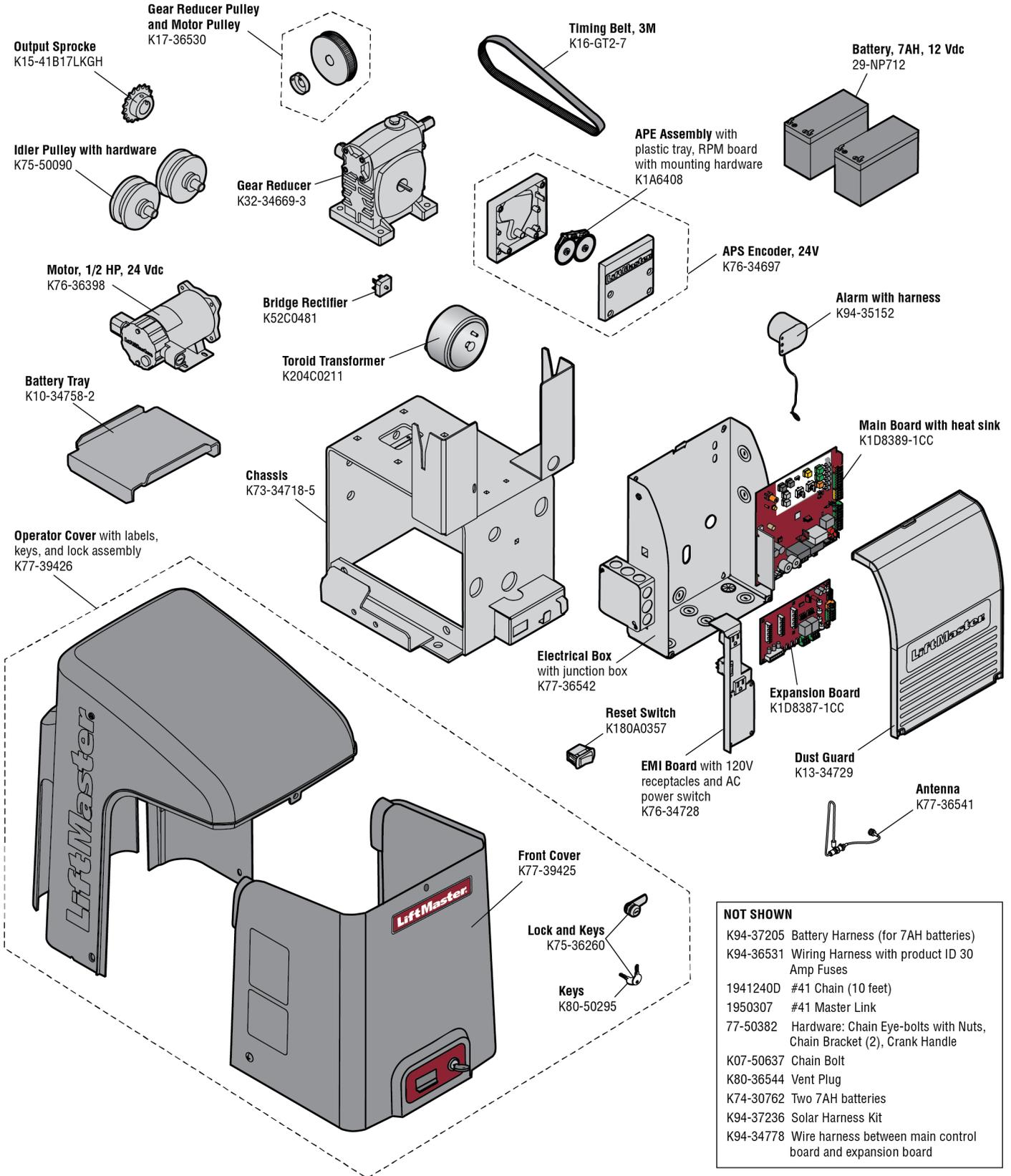
To protect against fire and electrocution:  
 • DISCONNECT power (AC or solar and battery) BEFORE installing or servicing operator.

For continued protection against fire:  
 • Replace ONLY with fuse of same type and rating.

**WARNING**

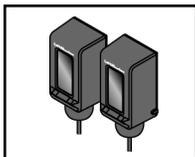
**WIRING DIAGRAM**

# REPAIR PARTS

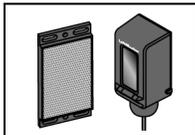


## ACCESSORIES

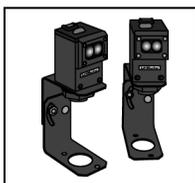
### Entrapment Protection



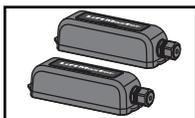
**LiftMaster monitored through beam photoelectric sensor**  
Model LMTBUL



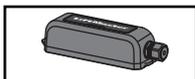
**LiftMaster monitored retro-reflective photoelectric sensor**  
Model LMRRUL



**LiftMaster Monitored Commercial Protector System®**  
Models CPS-UN4 and CPSUN4G



**LiftMaster monitored wireless edge kit (transmitter and receiver)**  
Model LMWEKITU



**LiftMaster monitored wireless edge transmitter**  
Model LMWETXU



**Large profile monitored edge (82 ft. roll)**  
Model L50

**Large profile ends kit (10 pair)**  
Model L50E

**Small profile monitored edge (82 ft. roll)**  
Model S50

**Small profile ends kit (10 pair)**  
Model S50E

#### Plastic channel

8 ft. (2.4 m) for both small and large profile edges (pack of 10).  
Model L50CHP

#### Aluminum channel

10 ft. (3.1 m) for both small and large edge profiles (pack of 8).  
Model L50CHAL

#### LiftMaster large profile monitored edges (4ft., 5ft., 6ft.)

Model L504AL, L505AL, L506AL

#### Wraparound round monitored edge (4 ft., 5 ft., 6 ft.)

Models WR4, WR5, WR6

#### Wraparound square monitored edge (4 ft., 5 ft., 6 ft.)

Models WS4, WS5, WS6

#### Edge cutting tool

Model ETOOL

### Remote Controls

*LiftMaster offers a variety of LiftMaster remote controls to satisfy your application needs. Single-button to 4-button, visor or key chain. The following remote controls are compatible with operators manufactured by LiftMaster after 1993. Contact your authorized LiftMaster dealer for additional details and options.*



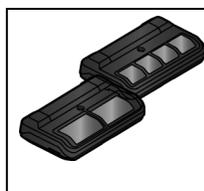
#### 3-button remote control

The 3-button remote control can be programmed to control the operator. Includes visor clip.  
Model 893MAX



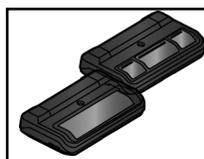
#### 3-button mini-remote control

The 3-button remote control can be programmed to control the operator. Includes key ring and fastening strip.  
Model 890MAX



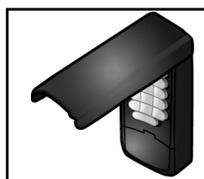
#### Security+ 2.0® learning remote controls

One button can control a gate operator and the other (s) can control garage door(s). It can also be programmed to Security+® or Security+ 2.0® code format.  
Models 892LT and 894LT



#### Universal single and 3-button remote controls

Ideal for applications requiring a large number of remote controls.  
Models 811LM and 813LM



#### Keyless entry

Enables homeowner to operate gate operator from outside by entering a 4-digit code on a specially designed keypad.  
Model 877MAX



#### Wireless commercial keypad

Durable wireless keypad with blue LED backlight metal keypad, zinc-alloy metal front cover and 5 year 9V lithium battery. Security+ 2.0® compatible.  
Model KPW250

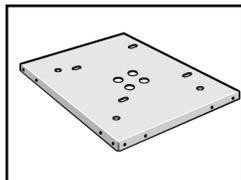


#### Commercial access control receiver

Access control receiver for up to 1,000 devices (any combination of remote controls and wireless keyless entries).  
Model STAR1000

# ACCESSORIES

## Miscellaneous



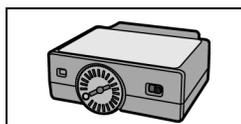
**Post-mounting plate**  
For post-mounting models CSL24UL, CSW24UL CSW200UL and SL3000UL commercial gate operators. Posts not included.

Model MPEL



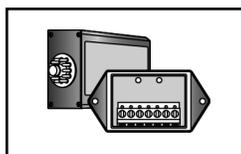
**Remote antenna extension kit**  
The remote antenna extension kit allows the antenna to be remotely installed.

Model 86LM



**Plug-in loop detector**  
Low power. Conveniently plugs into existing control board.

Model LOOPETLM



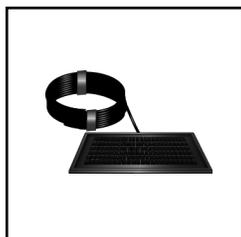
**Loop Detector**  
Low power loop detectors mounted and wired separately inside control box. LiftMaster low power accessory.

Model LD7LP



**Vehicle sensing probe**  
The vehicle sensing probe is buried in the ground and can detect a car as it approaches and will then open the gate.

Model CP3



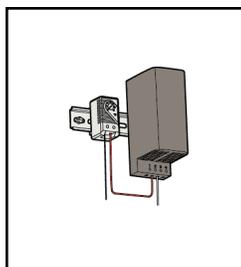
**Solar panel kit**  
This kit is to replace or add a solar panel to the operator application. 60W maximum for 24 Vdc operators and 30W maximum for 12 Vdc operators. Requires a 33AH battery harness.

Models SP10W12V (10 Watt, 12V) and SP20W12V (20 Watt, 12V)



**Magnetic gate lock**  
Outdoor magnetic lock, transformer, junction box, mounting plate and hardware. Not for use with Solar Applications. Must be powered separately.

Model MG1300



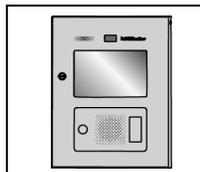
**Heater**  
The heater keeps the gearbox and batteries at a suitable temperature when the outside temperature is below -4°F (-20°C). The thermostat MUST be set between 45°F and 60°F (7°C and 15.5°C) to ensure proper gate operation. The heater can be powered by 110 to 250 Vac.

Model HTR



**LiftMaster® internet gateway**  
Internet enabled accessory which connects to the computer and allows you to monitor and control gate operators and lighting accessories enabled by MyQ® technology.

Model 828LM

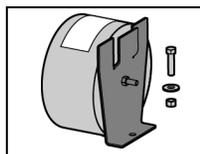


**LiftMaster Cloud™ connected access protocol - high capacity**

Model CAPXL



**Warning sign**  
Model 40-39235



**Transformer kit**  
Changes input voltage (208/240/480/575 Vac) to an output voltage of 120 Vac. Rated 208/240/480/575 Vac, 4.8/4.2/2.1/1.7 A, 60 Hz, 1 PH

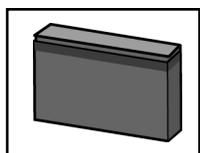
Model 3PHCONV

## Solenoid lock harness kit

Model K77-37972

## Batteries

Gate access system batteries replace or upgrade the gate operator batteries. Two identical 12 Vdc batteries are required for each gate operator. Do not mix 7AH and 33AH batteries within a gate operator.



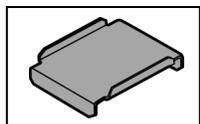
**7AH batteries**  
Standard 7 AMP-Hour Battery, 12 Vdc, to replace original batteries provided with operator. Reuse existing harnesses.

Models 29-NP712 (1) and K74-30762 (2)



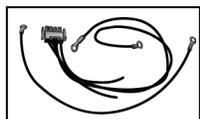
**33AH batteries**  
Upgrade 33 AMP-Hour Battery, 12 Vdc. Ideal for solar applications and extended battery backup. Two required.

Model A12330SGLPK



**Battery tray**  
Two required for 33AH applications.

Model K10-34758-2



**Universal solar wire harness kit**  
For 7AH and 33AH applications.

Model K94-37236

## WARRANTY

### LiftMaster 7 year residential / 5 year commercial Limited Warranty

LiftMaster ("Seller") warrants to the first purchaser of this product, for the structure in which this product is originally installed, that it is free from defect in materials and/or workmanship for a period of 7 year residential / 5 year commercial from the date of purchase [and that the CSL24UL is free from defect in materials and/or workmanship for a period of 7 year residential / 5 year commercial from the date of purchase]. The proper operation of this product is dependent on your compliance with the instructions regarding installation, operation, maintenance and testing. Failure to comply strictly with those instructions will void this limited warranty in its entirety.

If, during the limited warranty period, this product appears to contain a defect covered by this limited warranty, call **1-800-528-2806**, toll free, before dismantling this product. Then send this product, pre-paid and insured, to our service center for warranty repair. You will be advised of shipping instructions when you call. Please include a brief description of the problem and a dated proof-of-purchase receipt with any product returned for warranty repair. Products returned to Seller for warranty repair, which upon receipt by Seller are confirmed to be defective and covered by this limited warranty, will be repaired or replaced (at Seller's sole option) at no cost to you and returned pre-paid. Defective parts will be repaired or replaced with new or factory-rebuilt parts at Seller's sole option.

**ALL IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE 7 YEAR RESIDENTIAL / 5 YEAR COMMERCIAL LIMITED WARRANTY PERIOD SET FORTH ABOVE [EXCEPT THE IMPLIED WARRANTIES WITH RESPECT TO THE CSL24UL, WHICH ARE LIMITED IN DURATION TO THE 7 YEAR RESIDENTIAL / 5 YEAR COMMERCIAL LIMITED WARRANTY PERIOD FOR THE CSL24UL, AND NO IMPLIED WARRANTIES WILL EXIST OR APPLY AFTER SUCH PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. THIS LIMITED WARRANTY DOES NOT COVER NON-DEFECT DAMAGE, DAMAGE CAUSED BY IMPROPER INSTALLATION, OPERATION OR CARE (INCLUDING, BUT NOT LIMITED TO ABUSE, MISUSE, FAILURE TO PROVIDE REASONABLE AND NECESSARY MAINTENANCE, UNAUTHORIZED REPAIRS OR ANY ALTERATIONS TO THIS PRODUCT), LABOR CHARGES FOR REINSTALLING A REPAIRED OR REPLACED UNIT, OR REPLACEMENT OF BATTERIES.**

**THIS LIMITED WARRANTY DOES NOT COVER ANY PROBLEMS WITH, OR RELATING TO, THE GATE OR GATE HARDWARE, INCLUDING BUT NOT LIMITED TO THE GATE SPRINGS, GATE ROLLERS, GATE ALIGNMENT OR HINGES. THIS LIMITED WARRANTY ALSO DOES NOT COVER ANY PROBLEMS CAUSED BY INTERFERENCE. ANY SERVICE CALL THAT DETERMINES THE PROBLEM HAS BEEN CAUSED BY ANY OF THESE ITEMS COULD RESULT IN A FEE TO YOU.**

**UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES ARISING IN CONNECTION WITH USE, OR INABILITY TO USE, THIS PRODUCT. IN NO EVENT SHALL SELLER'S LIABILITY FOR BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE OR STRICT LIABILITY EXCEED THE COST OF THE PRODUCT COVERED HEREBY. NO PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS PRODUCT.**

Some states do not allow the exclusion or limitation of consequential, incidental or special damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



300 Windsor Drive  
Oak Brook, IL 60523  
**LiftMaster.com**

© 2018, The Chamberlain Group, Inc. - All Rights Reserved

01-39381B

This instrument prepared by,  
And when recorded, return to:

Lindsay Whelan, Esq.  
Kutak Rock LLP  
P.O. Box 10230  
Tallahassee, FL 32302

PID No.: 0786002200

---

**AGREEMENT GRANTING NON-EXCLUSIVE TEMPORARY EASEMENT**

**(WASTEWATER FACILITY ROADWAY FENCING & GATE IMPROVEMENTS)**

This **Agreement Granting Non-Exclusive Temporary Easement** (this “**Agreement**”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2022, by and between:

**City of North Port, Florida**, a municipal corporation of the State of Florida, whose address is 4790 City Hall Boulevard, North Port, Florida 34286 (the “**Grantor**”); and

**West Villages Improvement District**, a local unit of special-purpose government established pursuant to Chapter 2004-456, *Laws of Florida*, located in the City of North Port and unincorporated Sarasota County, Florida (the “**District**”).

**WITNESSETH**

**WHEREAS**, the District was established for the purpose of planning, financing, constructing, installing, repairing, operating, and/or maintaining certain public infrastructure improvements; and

**WHEREAS**, Grantor owns, operates, and maintains the Southwest Wastewater Reclamation Facility (the “**Wastewater Facility**”) which is identified as Sarasota County Property Appraiser’s Parcel Identification No. 0786002200 (the “**Easement Area**”); and

**WHEREAS**, pursuant to City of North Port Resolution No. 2022-R-30, the City conveyed to the District a service roadway adjacent to the Wastewater Facility for ultimate ownership, operation, and maintenance (hereinafter, the “**Roadway**”); and

**WHEREAS**, on the date of conveyance, the City and the District entered into that certain *Agreement Granting Non-Exclusive Perpetual Easement (Wastewater Facility Roadway)*, which requires the District to construct and/or install certain Improvements, as that term is defined in that agreement (the “**Improvements**”); and

**WHEREAS**, in order to construct and/or install the Improvements, the District needs to access the Easement Area, and the City is amenable to granting a temporary non-exclusive easement to the District for such purposes.

**NOW, THEREFORE**, in consideration of the sum of Ten and 00/100 Dollars (\$10.00) and other good and valuable consideration and the mutual covenants of the parties, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

**1. RECITALS.** The foregoing recitals are true and correct and by this reference are incorporated as a material part of this Agreement.

**2. GRANT OF EASEMENT.** Grantor hereby grants to the District, its successors, and assigns, a non-exclusive temporary easement in, over, upon, under, through, and across the Easement Area for ingress and egress in order to allow the District to construct and/or install the fencing and a gate on the property ("**Easement**") identified as Sarasota County Property Appraiser's Parcel Identification No. 0786002200.

**3. TERMINATION OF EASEMENT.** The Easement shall automatically terminate the earlier of one-hundred and twenty (120) days after the City's approval of this instrument, or upon completion of the Improvements.

**4. DAMAGE.** In the event that the District, its respective employees, agents, assignees, or contractors cause damage to the Easement Area or any of the improvements located within the Easement Area, or causes damage to Grantor's other property or any improvements located thereon, in the exercise of the easement rights granted herein, the District, at its sole cost and expense, agrees to commence and diligently pursue the restoration of the damages to as nearly as practical to the original condition and grade within thirty (30) days after receiving written notice of the occurrence of any such damage. Further, the District shall allow no lien to attach to the Easement Area or any improvements located on said property arising out of work performed by, for, or on behalf of the District. The District shall pay or transfer to other security all such liens, claims or demands before any action is brought to enforce the same against the Easement Area or Grantor.

**5. INCONSISTENT USE.** Grantor agrees and covenants that it shall not grant or exercise any rights in the Easement Area inconsistent with, or which interfere with, the rights herein accorded to the District.

**6. NON-INTERFERENCE.** District shall not unreasonably interfere with the right of ingress or egress of Grantor, its successors, and assigns, or other authorized persons requiring access to the Easement Area or to any property abutting the Easement Area.

**7. DEFAULT.** A default by any party under this Agreement shall entitle the other party to all remedies available at law or in equity, which may include but not be limited to the right of actual damages, injunctive relief, and/or specific performance.

**8. NOTICES.** Any notice, demand, consent, authorization, request, approval or other communication that any party is required, or may desire, to give to or make upon the other party pursuant to this Agreement shall be effective and valid only if in writing, signed by the party giving notice and delivered personally to the other parties or sent by express overnight courier or delivery service or by certified mail of the United States Postal Service, postage prepaid and

return receipt requested, addressed to the other party as follows (or to such other place as any party may by notice to the others specify):

**To the Grantor:** City of North Port, Florida  
4970 City Hall Boulevard  
North Port, Florida 34286  
Attn: City Manager

**With copies of Notices to:** City of North Port, Florida  
City Attorney  
4970 City Hall Blvd.  
North Port, Florida 34286

**To the District:** West Villages Improvement District  
2501-A Burns Road  
Palm Beach Gardens, Florida 33410  
Attn: District Manager

**With a copy to:** Kutak Rock LLP  
P.O. Box 10230  
Tallahassee, Florida 32302  
Attn: District Counsel

Notice shall be deemed given when received, except that if delivery is not accepted, notice shall be deemed given on the date of such non-acceptance. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day shall be deemed received on the next business day. If any time for giving notice would otherwise expire on a non-business day, the notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the District and counsel for Grantor may deliver Notice on behalf of the District and Grantor.

**9. THIRD PARTIES.** This Agreement is solely for the benefit of the formal parties hereto, and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Agreement. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon any person or corporation other than the parties hereto any right, remedy, or claim under or by reason of this Agreement or any of the provisions or conditions hereof. The District shall be solely responsible for enforcing its rights under this Agreement against any interfering third party, except when Grantor is an indispensable party. Nothing contained in this Agreement shall limit or impair the District's right to protect its rights from interference by a third party.

**10. LIMITATIONS ON LIABILITY.** The Grantor agrees that nothing contained in this Easement Agreement shall constitute or be construed as a waiver of District's limitations on liability set forth in section 768.28, Florida Statutes, and other applicable law.

**11. ASSIGNMENT.** Neither party may assign, transfer or license all or any portion of its rights under this Agreement without the prior written consent of the other party. Any assignments attempted to be made by any party without the prior written approval of the other party are void.

**12. PUBLIC RECORDS.** The Parties understand and agree that all documents of any kind provided to either the Parties or their staff in connection with this Agreement are public records and are to be treated as such in accordance with Florida law.

**13. MISCELLANEOUS.**

- A. Authority to Execute Agreement. The signature by any person to this Agreement shall be deemed a personal warranty that the person has the full power and authority to bind any corporation, partnership, or any other business or governmental entity for which the person purports to act hereunder.
- B. Binding Effect/Counterparts. By the signatures affixed hereto, the Parties intend to be bound by the terms and conditions hereof. This Agreement is binding upon and shall inure to the benefit of the Parties and their respective heirs, executors, administrators, successors, and assigns. It may be signed in counterparts.
- C. Governing Law and Venue. The laws of the State of Florida govern the rights, obligations, and remedies of the Parties under this Agreement. The exclusive venues for any legal or judicial proceedings in connection with the enforcement or interpretation of this Agreement are the Circuit Court of the Twelfth Judicial Circuit in and for Sarasota County, Florida, and the United States District Court for the Middle District of Florida.
- D. No Agency. Nothing contained herein shall be deemed or construed as creating the relationship of principal and agent, or of partnership or joint venture, between the Parties, it being understood and agreed that no provision contained herein, or any acts of the Parties shall be deemed to create any relationship between them other than that as detailed in this Agreement.
- E. Severability. In the event any court shall hold any provision of this Agreement to be illegal, invalid, or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any breach of any provision, term, condition, or covenant shall not be construed as a waiver of a subsequent breach by the other party.
- F. Headings. The descriptive titles appearing in each respective paragraph are for convenience only and are not a part of this Agreement and do not affect its construction.
- G. Complete Agreement. This Agreement incorporates and includes all prior negotiations, correspondence, agreements, or understandings between the parties,

and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. This Agreement supersedes all other agreements between the parties, whether oral or written, with respect to the subject matter.

- H. Amendment. No amendment, change, or addendum to this Agreement is enforceable unless agreed to in writing by both parties and incorporated into this Agreement.
  
- I. Non-Discrimination. The City of North Port, Florida does not discriminate on the basis of race, color, national origin, sex, age, disability, family, or religious status in administration of its programs, activities, or services. The District shall not administer this Agreement in an unlawfully discriminatory manner, nor deny participation in or the benefits of same to any individual based on that individual's race, color, national origin, sex, age, disability, family or religious status, marital status, sexual orientation, gender identity or expression, or physical characteristic.
  
- J. Counterparts. This instrument may be executed in any number of counterparts, each of which, when executed and delivered, shall constitute an original, and such counterparts together shall constitute one and the same instrument. Signature and acknowledgment pages, if any, may be detached from the counterparts and attached to a single copy of this document to physically form one document.

**IN WITNESS WHEREOF**, the parties executed this Agreement as set forth below.

*[This space intentionally left blank; signature pages follow]*

Approved by the City Commission of the City of North Port, Florida on \_\_\_\_\_, 2022.

**CITY OF NORTH PORT, FLORIDA**

\_\_\_\_\_  
Pete Emrich  
Mayor

ATTEST

\_\_\_\_\_  
Heather Taylor, MMC  
City Clerk

APPROVED AS TO FORM AND CORRECTNESS

\_\_\_\_\_  
Amber L. Slayton  
City Attorney

Signed, sealed, and delivered  
in the presence of:

**WEST VILLAGES IMPROVEMENT  
DISTRICT**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
Chairman, Board of Supervisors

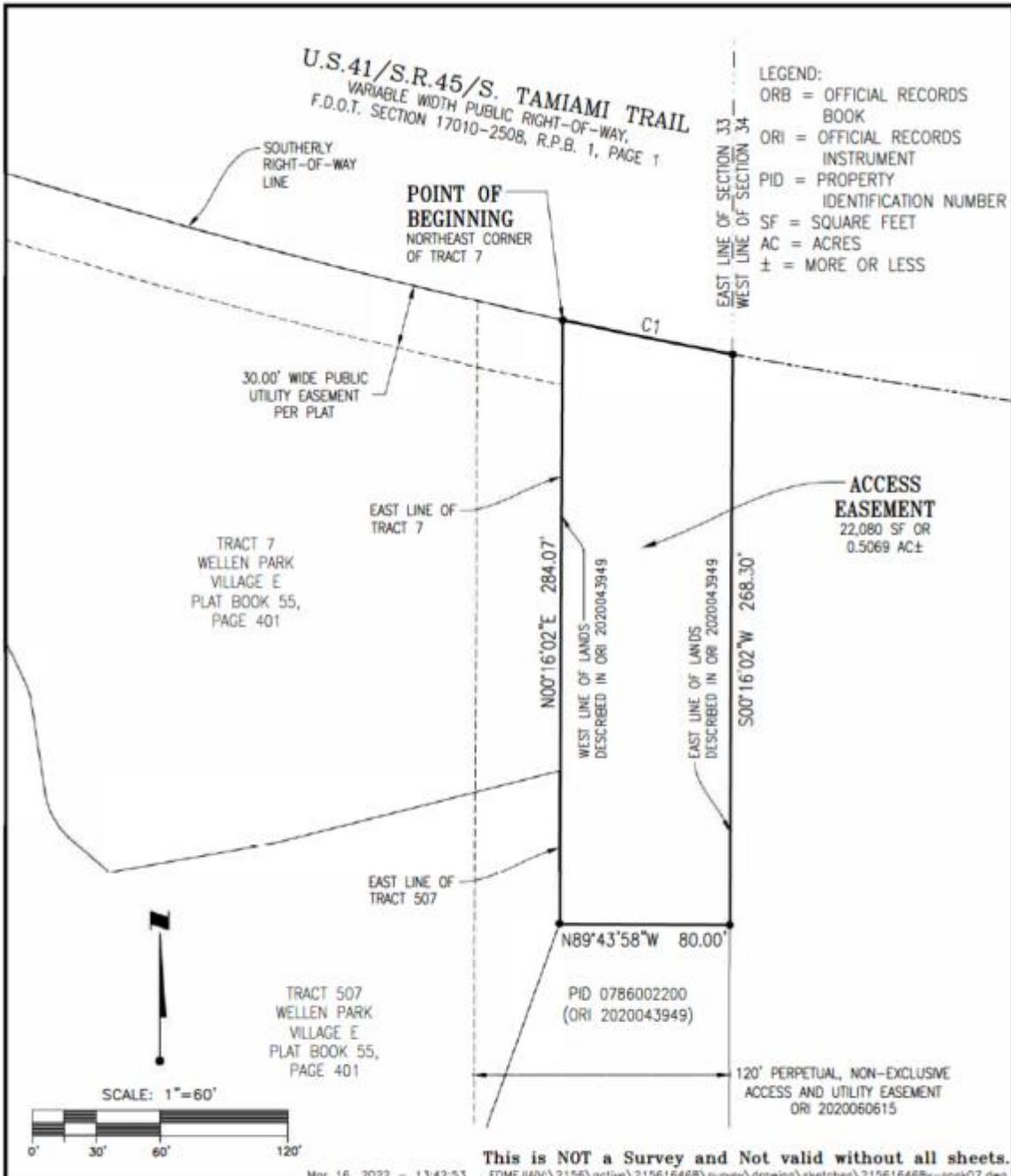
STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this \_\_\_ day of \_\_\_\_\_ 2022, by John Luczynski, as Chairman of the Board of Supervisors of the West Villages Improvement District, a unit of special purpose government created pursuant to Chapter 189, *Florida Statutes*, on behalf of said City.

\_\_\_\_\_  
Notary Public

\_\_\_ Personally Known OR \_\_\_ Produced Identification  
Type of Identification Produced \_\_\_\_\_

**EXHIBIT A**



This is NOT a Survey and Not valid without all sheets.

SKETCH & DESCRIPTION OF AN ACCESS EASEMENT LOCATED IN SECTION 33, TOWNSHIP 39 S., RANGE 20 E., SARASOTA COUNTY, FLORIDA				6000 Professional Parkway East, Sarasota, FL 34243-6414 Phone 941-867-6000 • Fax 941-907-6970 Certificate of Authorization #01913 • www.stantec.com Licensed Business Number: 088			
TASK CODE:	DRAWN BY:	CHKD BY:	CAD FILE:	PROJECT NO:	SHEET	DRAWING INDEX NO:	REV:
220	EDM	JRJ	215616468v--spsk07	215616468	1 OF 2	B16468v--spsk07*	

**'EXHIBIT'**

DESCRIPTION (as prepared by the certifying Surveyor and Mapper):

A tract of land lying in Section 33, Township 39 South, Range 20 East, Sarasota County, Florida, being more particularly described as follows:

Begin at the northeast corner of Tract 7 of Wellen Park Village E recorded in Plat Book 55, Page 401 of the Public Records of Sarasota County, Florida; said point being the point of curvature of a non-tangent curve to the left, having a radius of 3,011.73 feet and a central angle of 01°33'05"; thence Easterly along the arc of said curve and along the southerly right-of-way line of U.S.41/S.R.45/Tamiami Trail (variable width public right-of-way, Section 17010-2508) recorded in Road Plat Book 1, Page 114 of the said Public Records, a distance of 81.54 feet, said curve having a chord bearing and distance of S.78°34'49"E., 81.54 feet, to the end of said curve; thence S.00°16'02"W. along the easterly line of lands described in Official Records Instrument Number 2020043949 of said Public Record, a distance of 268.30 feet; thence N.89°43'58"W., a distance of 80.00 feet; thence N.00°16'02"E. along the westerly line of lands described in Official Records Instrument Number 2020043949 of said Public Record and along the east line of said Tract 7 and Tract 507 of said plat, a distance of 284.07 feet to the POINT OF BEGINNING.

Containing 22,080 square feet or 0.5069 acres, more or less

CURVE TABLE					
CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C1	3,011.73'	1°33'05"	81.54'	81.54'	S78°34'49"E

NOTES:

1. THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA SURVEYOR AND MAPPER.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF SECTION 33, BEING N00°30'26"E.
3. THIS IS A SKETCH ONLY AND DOES NOT REPRESENT A FIELD SURVEY.

\_\_\_\_\_  
 Joseph R. Jasper, P.S.M.  
 Florida Registration No. 7168

\_\_\_\_\_  
 Date of Signature

**This is NOT a Survey and Not valid without all sheets.**

Mar 16, 2022 - 13:42:53 EDMEJAN:\2156\active\215616468\survey\drawing\sketches\215616468v--spsk07.dwg

SKETCH & DESCRIPTION OF AN ACCESS EASEMENT LOCATED IN SECTION 33, TOWNSHIP 39 S., RANGE 20 E., SARASOTA COUNTY, FLORIDA				 <b>Stantec</b> <small>6900 Professional Parkway East, Sarasota, FL 34240-8414                  Phone 941-907-6900 • Fax 941-907-6910                  Certificate of Authorization R27013 • www.stantec.com                  Licensed Business Number 7988</small>			
TASK CODE: 220	DRAWN BY: EDM	CHECKED BY: JRJ	CAD FILE: 215616468v--spsk07	PROJECT NO: 215616468	SHEET 2 OF 2	DRAWING INDEX NO: B16468v--spsk07*	REV: