

Capital Project Worksheet

Directions:

Please complete all questions below and submit to Mike Thompson and Wayne Trawick for approval.
If this project is approved, you must complete the Pre-Project Worksheet and Budget forms.

Submitted by: David Thompson

Date Submitted: 8/26/2022

Is this purchase listed on the capital projects plan in the approved budget? No

What amount is approved in the plan for this project? \$24,000

In what year is this project shown to begin in the plan? N/A

Description of the project and why the project needs to be completed at this time.

Our A/C units on the Event Center have had issues since installation.

We have spent an estimated \$48,200 in repairs since opening and currently have a \$40,000 repair issue.

Can your job be performed without the completion of this project? Please explain below.

Not and provide a comfortable environment for all of our events.

Will not completing this project cause a public safety issue? Please explain below.

Yes, we will have issues with athletes overheating and humidity issues with flooring if we are not able to address.

Do you expect to come in, at, or under budget on this project? Please explain below.

In will come in under the proposed budget increase.

Is there a grant associated with this project? No

If so please list below the grant amount and the match required by the City.

Approval by City Administrator



Signature and Date

Approval by Council President

 8-29-22

Signature and Date

**PRELIMINARY COST ESTIMATE
EVENT CENTER LIGHTNING SUPPRESSION**

CITY OF FOLEY

August 2022

Item	Description	Quantity	Unit	Price	Total
1	CMCE-120 UNIT	EA	1	\$ 16,750.00	\$ 16,750.00
2	INSPECTION CERTIFICATION	EA	1	\$ 995.00	\$ 995.00
3	INSTALLATION	LS	1	\$ 3,450.00	\$ 3,450.00
4	MATERIALS	LS	1	\$ 1,209.00	\$ 1,209.00
6	CONTINGENCY 5%	LS	1	\$ 1,120.20	\$ 1,120.20
CONSTRUCTION SUBTOTAL					\$ 23,524.20
CONTINGENCY (0%)					
TOTAL					\$ 23,524.20



LIGHTNING PROTECTION TECHNOLOGY COMPARISON

DEVICE	CMCE	Franklin	E.S.E.	D.A.S.
TECHNOLOGY	Compensation	Lightning Attractor	Early Streamer Emitter	Dissipation Array System
Resists Lightning	+	-	-	-
Stops Lightning	+	-	-	-
Power-Free Operation	+	+	-	+
LEMP/EMP Protection	+	-	-	-
NATO Approved	+	-	-	-
NFPA 780 Certified	-	+	-	+
100% Critical Infrastructure Protection	+	-	-	-
100% Personnel Protection	+	-	-	-
100% Open Field Protection	+	-	-	-
100% Marine Vessel Protection	+	-	-	-
100% Success Rate	+	-	-	-

COVERAGE RADIUS

CMCE Coverage Radius Illustration
Statue of Liberty National Monument top view coverage illustrated radius.

- CMCE120 393 ft. radius
- CMCE55 180 ft. radius
- CMCE25 82 ft. radius

8/18/22, 11:59 AM

City of Foley Mail - CMCE Lightning Suppression Technology

To: David Organek <dorganek@empdefense.us>

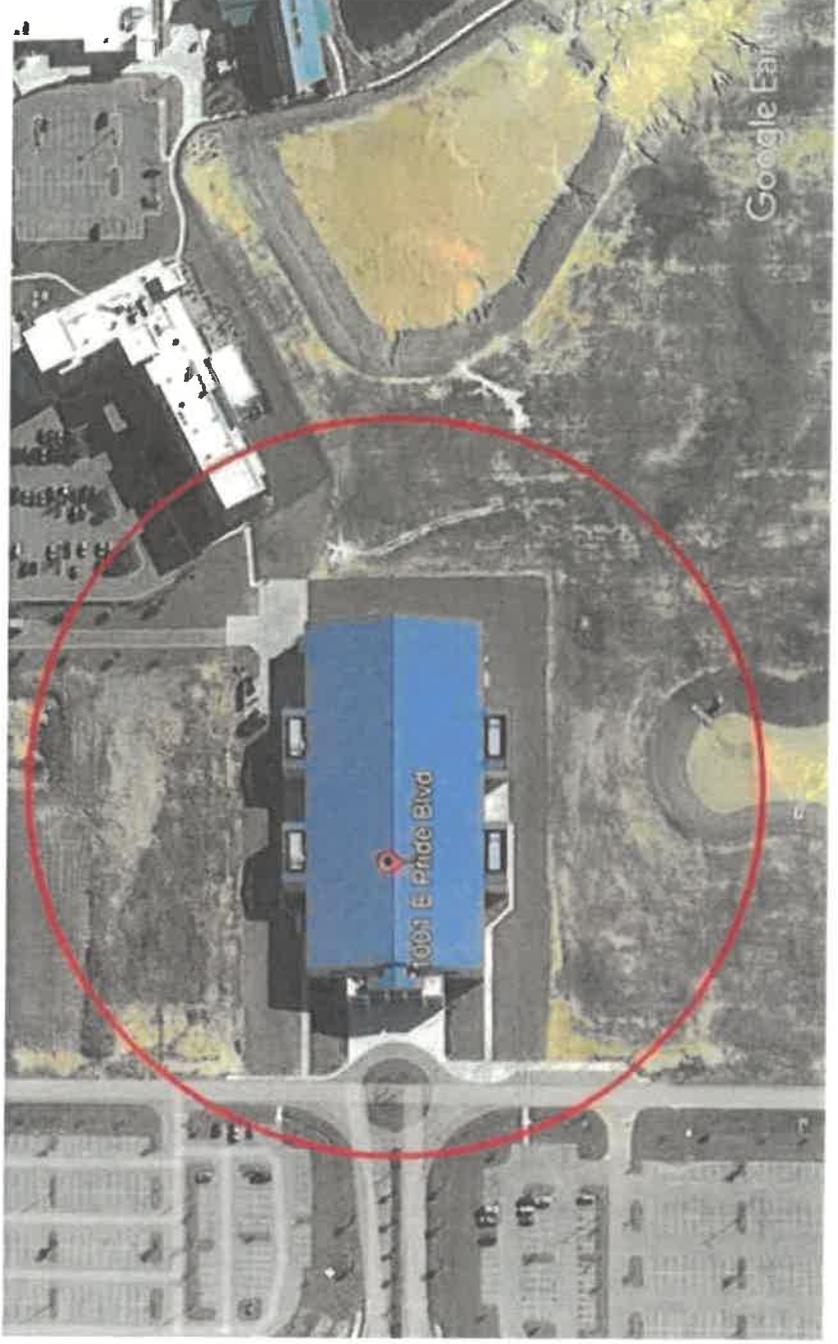
Subject: Re: CMCE Lightning Suppression Technology

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the update.

[Quoted text hidden]

[Quoted text hidden]





To help visualize the coverage radius of one CMCE120 Lightning Suppressor, imagine a 393 ft spherical orb enveloping the Statue of Liberty.

OPERATING PRINCIPLES

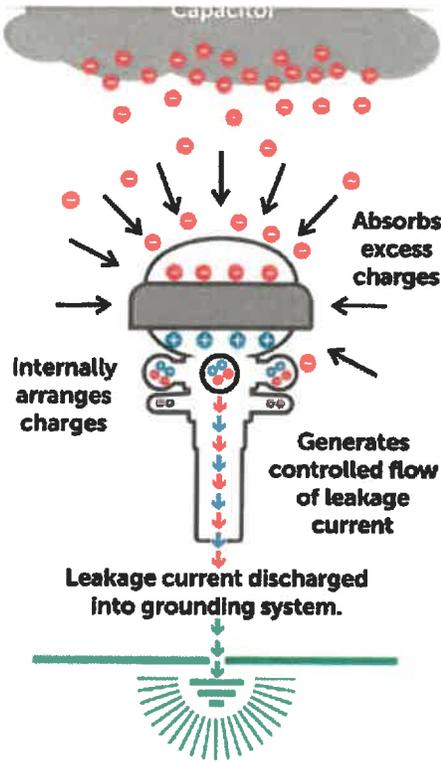
The technological innovation of the CMCE Multiple Electric Field Compensator, creates and maintains a balanced electric environment within its protective three-dimensional radius.

As an electrostatic current PASSIVE CAPTURING SYSTEM, the CMCE:

1. Absorbs charges that appear in the surrounding electromagnetic field,
2. Arranges charges internally based on their natural form,
3. Creates a controlled flow of leakage current in harmless milliamperes – between 50a and 350mA in fair weather and 700a to 1,800mA in storm phase – through the ground wire to the earth take.

When the electric field changes, provoked by variations in the surrounding environment, the CMCE reacts by absorbing and draining excess charges into the ground. This process eliminates upward streamers and prevents the development of lightning within the devices coverage radius.

EMP DEFENSE



THE REAL COSTS OF A STRIKE

Realistic numbers show that damage in the U.S. exceeds \$7 billion per year.

PETROCHEMICAL DOWNSTREAM COSTS

\$420,000,000

Plant losses in Texas

\$52,000,000

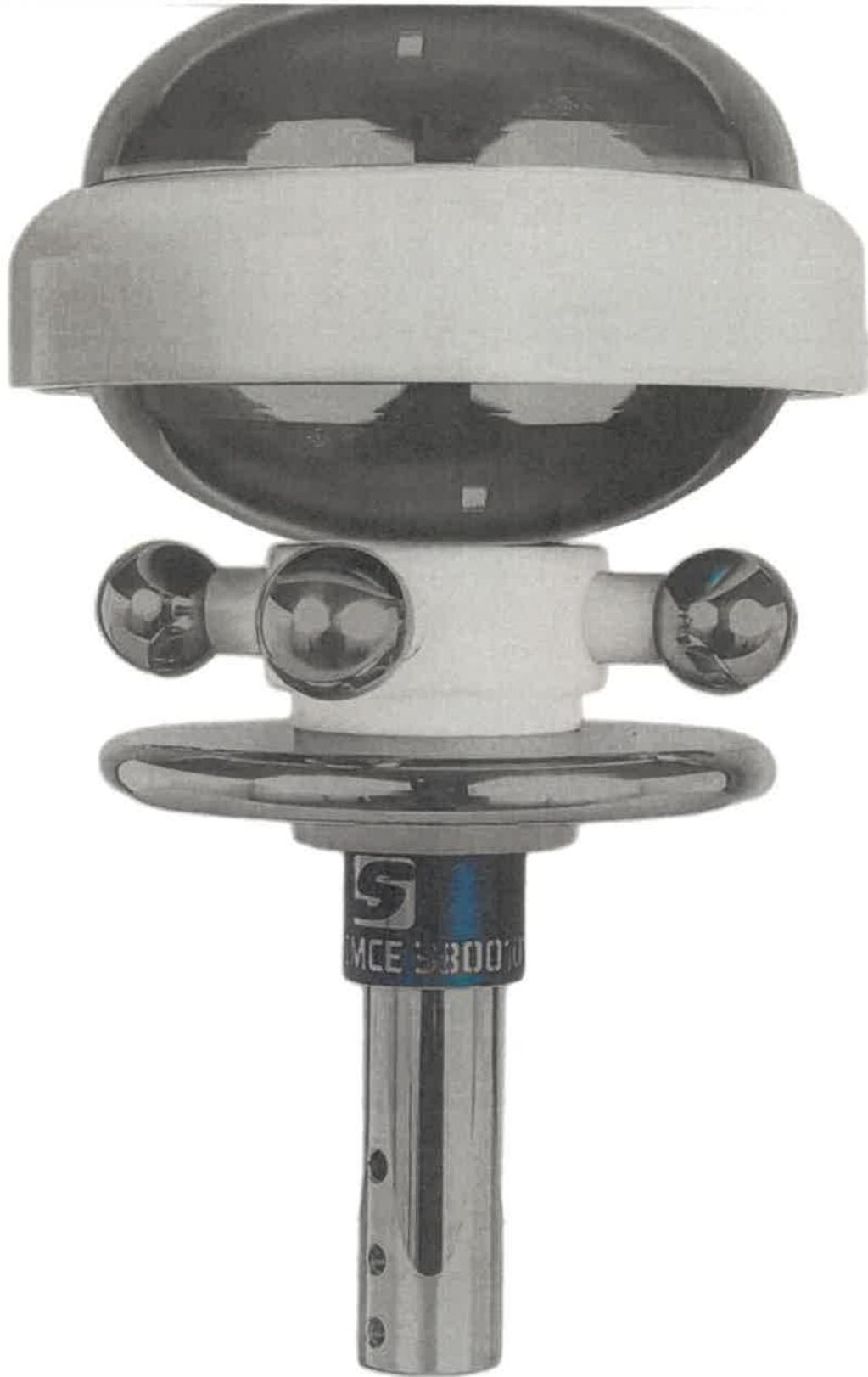
Plant losses in Oklahoma

\$52,000,000

Plant losses in Virginia

Source: Willis Energy Market Review, 12/13

STORAGE & PROCESSING ACTIVITIES



INDUSTRIAL & COMMERCIAL



Protect your most valuable assets with market leading lightning suppression technology

[View Case Studies](#)

ADVANCED LIGHTNING PROTECTION INSPIRED BY NIKOLA TESLA

The CMCE Lightning Suppressor is effective against lightning and other forms of electromagnetic pulses (EMP) that provide lightning protection with its speed of over 100,000 ft/sec. Installations worldwide using this technology... **over 15 years**... **CMCE Lightning** Suppressors patented to be the new standard in lightning protection.



100% effective lightning protection



No power required



Water proof, explosion proof and weather resistant



10 year manufacturer warranty

MARITIME LIGHTNING PROTECTION

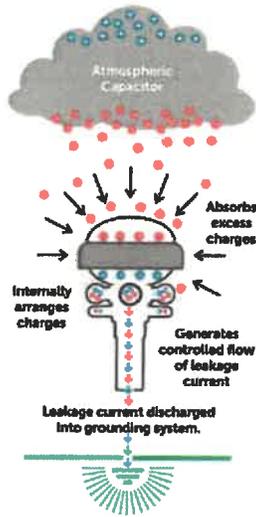
Equip your marine vessel with the most advanced lightning protection device.

[Learn More](#)

CMCE LIGHTNING SUPPRESSOR OPERATING PRINCIPLES



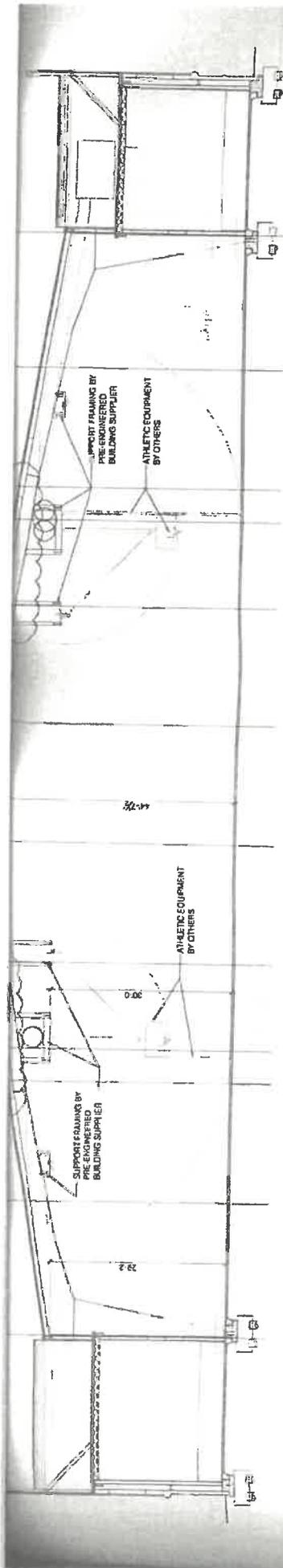
of energy - lightning! Damage ranges from minimal to catastrophic. The technological innovation of the CMCE Lightning Suppressor creates and maintains a balanced electric environment within its spherical area of protection. **CMCE Operation**



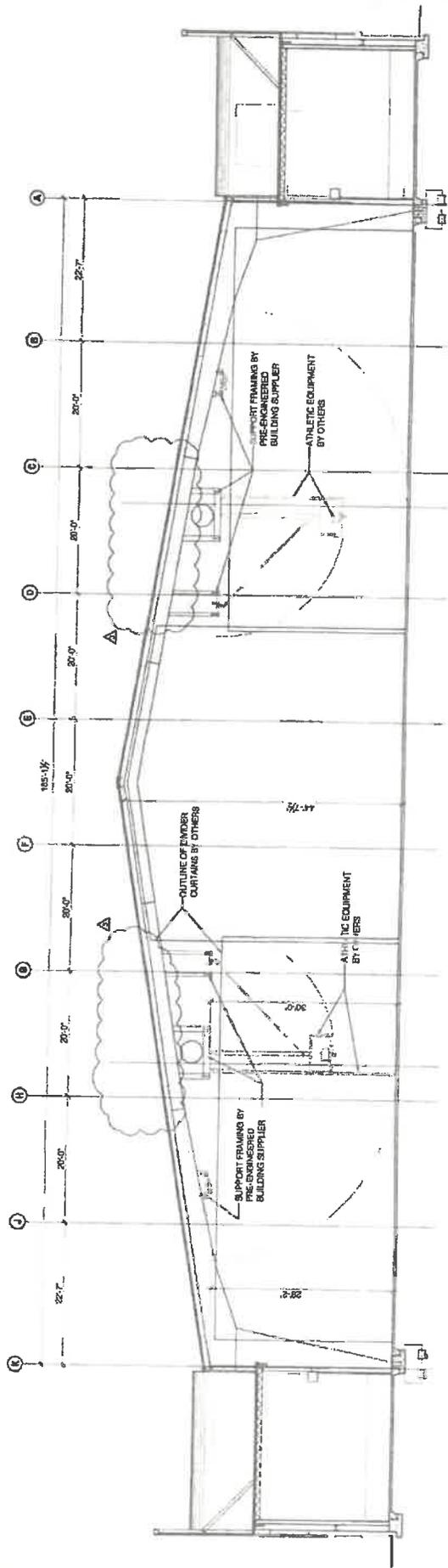
LIGHTNING PROTECTION SYSTEMS

Industrial

Commercial



SECTION - LOOKING AT BENTS AT COL. LINE 5, 10





CMCE Lightning Suppression Technology

David Organek <dorganek@empdefense.us>
To: Jeff Phillips <jphillips@cityoffoley.org>

Thu, Aug 18, 2022 at 9:42 AM

Good Morning,

Listed below is a budget based on other similar projects for your consideration. It is based on the assumption that we can access and connect to an existing grounding system. The materials budget is likely a bit higher than necessary but would prefer to be conservative until we finalize an installation plan. I suggest that if you decide to move forward that we do schedule a site visit to finalize the installation plan, test the grounding etc. I do have a project inspection coming up in the region (MS) in the near future and could coordinate the visit at that time. Please just let me know your thoughts.

Listed below is a **budgetary estimate** for installation of the CMCE-120 Unit:

Materials (assuming connection to existing grounding system):

- 1. 100' 1/0 Soft Drawn, Stranded, 19-strand Bare Copper Wire currently \$3.39/ft Wire & Cable Your Way **\$ 339.00**
- 1. 30' 1.5" I.D. Mast, type and material TBD **\$ 500.00**
- 6. Unistrut or alternative mast mounting bracketry – final method TBD **\$ 120.00**
- 1. Misc. Clamps, connectors, bolts and other hardware **\$ 250.00**

- EMPD Provided labor, mob/demob (From Houston Area) if desired **\$3,450.00**
- Lift/Assist Equipment provided by City of Foley if needed

\$ 4659.00
Labor + materials

From: Jeff Phillips <jphillips@cityoffoley.org>
Sent: Wednesday, August 17, 2022 9:37 AM

GENERAL INSTALLATION OVERVIEW

