



Corporate Headquarters  
260 Palermo Avenue  
Coral Gables, Florida 33134

# FIRE PROTECTION/LIFE SAFETY PROPOSAL: LIFE SAFETY CONSULTING SERVICES

Bayshore Bath & Tennis Club  
925 N Halifax Ave  
Daytona Beach, FL 32118

**PREPARED FOR:**

Bayshore Bath & Tennis Club

**ATTENTION:**

Board of Directors

**DATED:**

3/11/2024

**SLS NO.:** ELSS# 6122



## I. INTRODUCTION

As requested, SLS Consulting, LLC. (SLS) has prepared this proposal to the Bayshore Bath & Tennis Club association to provide fire protection and life safety consulting services associated with the development, approvals and implementation of an *Engineered Life Safety System* (ELSS) within the building. This *Engineered Life Safety System* (ELSS) is required by Section 31.3.5.11.4 of the *Florida Fire Prevention Code* (FFPC – NFPA 101) and is understood to be required to be in place by December 31, 2025 unless the building is otherwise protected throughout by an automatic sprinkler system designed and installed in accordance with NFPA 13, *Standard for the Installation of Sprinklers*.

*Development of Performance Based Engineering Study:* As part of this scope, SLS will develop a *performance based design analysis* as part of the *Engineered Life Safety System* (ELSS) following Chapter 5 of the *Florida Fire Prevention Code* (FFPC) and utilizing Fire Dynamics Simulator (FDS), a computational fluid dynamics (CFD) model developed by the *National Institute of Standards and Technology* (NIST) submit the ELSS report to the City of Daytona Beach Fire Department and update to include responses to commented provided by the City of Daytona Beach Fire Department in order to obtain approvals. Specific scope and actions are outlined further in specific deliverables below.

It is noted that SLS Consulting, LLC.'s professional opinion is that complete sprinkler protection in accordance with NFPA 13 provides a higher level of fire protection and life safety than an *Engineered Life Safety System* and recommends consideration of complete sprinkler protection; however, the *Engineered Life Safety System* is a path to achieve minimum prescriptive code compliance that can be deemed acceptable by the City of Daytona Beach Fire Department. The decision to implement the *Engineered Life Safety System* is that of the Bayshore Bath & Tennis Club association in lieu of complete sprinkler protection.

## II. BASE SCOPE OF SERVICES

SLS proposes the following scope of services to Bayshore Bath & Tennis Club:

### Performance Based Design Analysis

If subjected to a required *performance based design analysis* as part of the *Engineered Life Safety System* (ELSS) following Chapter 5 of the *Florida Fire Prevention Code* (FFPC) and utilizing Fire Dynamics Simulator (FDS), a computational fluid dynamics (CFD) model developed by the *National Institute of Standards and Technology* (NIST), the following scope of work would be provided. It is noted that completion of a *performance based design analysis* is not intended to demonstrate that the fire protection and life safety systems included as part of an ELSS provide an equivalent level of fire protection and life safety as it is important for all to understand the tremendous benefits that a properly design sprinkler system have within a building for occupants and emergency responders; please note that SLS strongly recommends full sprinkler protection and believes that this is the best option for life safety within the building; however will work with the property and the Authorities Having Jurisdiction's (AHJ) to develop and implement an ELSS which meets the provisions allowed by the *Florida Fire Prevention Code* (FFPC).

1. *Performance Based Design Brief:* Develop a *performance based design brief* that outlines the analysis tool, design fires and clearly established goals and objectives. This will be in letter format which is intended to identify the goals/objectives of the analysis, the use of FDS as a modeling tool, specific



design fires which will be analyzed, clarity with respect to what acceptable criteria are with respect to visibility through smoke, temperature limits and toxicity/carbon monoxide limits. The purpose of this design brief is to establish what will be completed as part of the *performance based design* and if deemed acceptable will be accepted by the City of Daytona Beach Fire Department.

2. *City of Daytona Beach Fire Department Meeting – Goals & Objectives Review*: Prepare for and attend one (1) meeting with the City of Daytona Beach Fire Department to review the *performance-based design brief* to establish understood goals and objectives and discuss anticipated outcomes and preferences of the City of Daytona Beach Fire Department.
3. *Development of Fire Dynamics Simulator (FDS) Model*: Develop a Fire Dynamics Simulator (FDS) model which can be used to evaluate the eight (8) design fires required by Chapter 5 of the *Florida Fire Prevention Code (FFPC)*. Development of this model will be conceptual based on available drawings, understanding of the MEP systems within the building and a number of reasonable assumptions which will be made at the discretion of SLS.
4. *Analysis of Eight (8) Required Design Fires With FDS Model*: Utilize the *Fire Dynamics Simulator (FDS)* model to evaluate the eight (5) design fires required by the *Florida Fire Prevention Code (FFPC)* which include (1) an occupancy specific fire representative of a typical fire for the occupancy, (2) an ultrafast developing fire, in the primary means of egress, with interior doors open at the start of the fire, (3) a fire in a normally unoccupied room, potentially endangering a large number of occupants in a large room or other area, (4) a fire that originates in a concealed wall or ceiling space adjacent to a large occupied room, (5) a slowly developed fire, shielded from fire protection systems, in close proximity to a high occupancy area, (6) the most severe fire resulting from the largest possible fuel load characteristic of the normal operation of the building, (7) is an outside exposure fire and (8) a fire originating in ordinary combustibles in a room or area with each passive or active fire protection system independently rendered ineffective.
6. *Performance Based Design Analysis Addendum to ELSS Study*: Prepare an addendum to the ELSS report that outlines and summarizes the results of the *performance based design analysis* utilizing FDS.
7. *Project Team Meeting*: Prepare for and participate in a project team meeting with the Condo Association to review the results of the *performance based design analysis*.
8. *City of Daytona Beach Fire Department Meeting – Results Review*: Prepare for and participate in a meeting with the City of Daytona Beach Fire Department to review the results of the *performance based design analysis*.

### III. ADDITIONAL SCOPE OF SERVICES

Based on SLS's role on the project, examples of possible additional services potentially required for the project is:

1. Additional site visits, meetings with the project team and/or Building and Fire Departments.
2. Preparation of additional deliverables.
3. All appeals and/or equivalencies consulting
4. Alternative Methods of Code Compliance Approach Letters/Equivalencies.

### IV. CLIENT RESPONSIBILITIES

For SLS to complete the proposed scope of services, Bayshore Bath & Tennis Club, will be subject to the following responsibilities:

- 1) Provide electronic access to floor plan drawings
- 2) Coordinate meetings

### I. PROFESSIONAL FEES & EXPENSES

The scope of services outlined in this proposal will be provided to Bayshore Bath & Tennis Club based on the following breakdown:

#### BASE SCOPE OF SERVICES (as referenced in Item II above):

- *Performance Based Design Analysis*      \$40,000

### I. TERMS AND CONDITIONS & ACCEPTANCE

The terms set forth in this Proposal, the Scope(s) of Service(s), and the Professional Fees & Expenses attached hereto or included herein, and any other attached exhibits, if any, are subject to the Consultant's General Terms and Conditions. The General Terms and Conditions are periodically updated. This Proposal is subject to the General Terms and Conditions currently in effect as of the date of execution of this Proposal. Unless otherwise agreed upon Terms and Conditions, a copy of the effective General Terms and Conditions has been made available to Owner by Consultant or is otherwise available to Owner on Consultant's website at <https://www.slsfire.com/terms-conditions-1>. All capitalized terms hereto shall have the meaning set forth in the General Terms and Conditions, unless otherwise stated otherwise herein.

Either the Owner's signature of this Proposal, or the Owner's payment of any sum due according to this Proposal, shall constitute the Owner's full acceptance of this Proposal, any attachment hereto, and the General Terms and Conditions governing this Proposal. Once this Proposal has been accepted by the Owner as specified in the immediately preceding sentence, this Proposal with any attachment or exhibit





Proposal for Code Consulting Services  
for the Bayshore Bath & Tennis Club Project  
located in Daytona Beach, FL  
3/11/2024 SLS No. ELSS# 6122

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hereto, the Scope(s) of Service(s), and the Professional Fees & Expenses attached hereto or included herein, together with and subject to the Consultant's General Terms and Conditions, shall become the full and binding Agreement between the Parties.

By accepting this Proposal, Owner acknowledges and understands that:

- I. In signing or otherwise accepting this Proposal, Owner affirmatively represents that it has read and understood Consultant's General Terms and Conditions.
- II. Owner is solely responsible for reading and understanding Consultant's General Terms and Conditions, which are binding on the Parties; and
- III. Consultant would not have entered into any agreement with Owner but for Owner's reading, understanding, and acceptance of the Consultant's General Terms and Conditions.

By signing below, the Parties explicitly accept the terms of this Proposal, and agree to be legally bound by all terms and conditions of this Agreement, including any attachment or exhibit hereto, the Scope of Work & Fee Breakdown, and the General Terms and Conditions. This Agreement is entered by the Parties as of this \_\_\_\_ day of \_\_\_\_\_, 20\_(the "Effective Date").

**INFORMED CONSENT OF OWNER**

I HAVE READ AND UNDERSTOOD ALL THE TERMS CONTAINED IN THIS PROPOSAL, IN ANY ATTACHMENT HERETO, AND IN THE APPLICABLE GENERAL TERMS AND CONDITIONS. I HAD TIME AND OPPORTUNITY TO CONSULT WITH MY ATTORNEY BEFORE ENTERING INTO THIS AGREEMENT. I FREELY AND WILLINGLY AGREE TO ALL THE TERMS CONTAINED IN THIS PROPOSAL, ANY ATTACHMENT HERETO, AND THE APPLICABLE GENERAL TERMS AND CONDITIONS.

Owner: BAYSHORE CLUB MANAGEMENT ASSOC. INC.

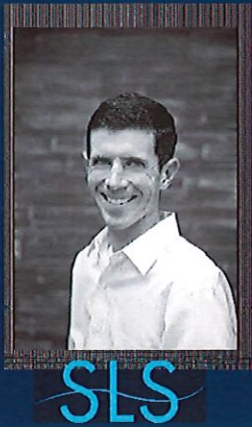
By: *Terrie Quick*  
Name: TERRIE QUICK

Title: PRESIDENT

Consultant: SLS Consulting,

LLC. *Michael Sheehan*

By: \_\_\_\_\_  
Michael Sheehan, P.E.  
Principal



# MICHAEL SHEEHAN

SLS FOUNDER AND PRINCIPAL

## PERSONAL PROFILE

Experienced engineer with a demonstrated history of successful life safety consulting across national and international projects ranging in complexity.

## CONTACT

260 Palermo Avenue  
Coral Gables, FL 33134



[msheehan@slsfire.com](mailto:msheehan@slsfire.com)



786-352-7377



/Michaelsheehan



## EDUCATION

Worcester Polytechnic Institute,  
Fire Protection Engineering,  
*Master of Science*

Worcester Polytechnic Institute,  
Mechanical Engineering, *Bachelor of*

*Science* Saint Anselm College,  
Manchester NH *Bachelor of*  
*Arts*

## LICENSES

- FPE Florida: 73971
- FPE Tennessee: 121515
- FPE Maryland: 53090
- FPE North Carolina: 047061

## WORK EXPERIENCE

- Provide fire protection and life safety consulting services to the A/E/C Community in South Florida.
- Review Architectural and Engineering drawings for compliance with local, state, and national codes and standards as well as accessibility rules and regulations.
- Work with clients and AHJ including the City of Fort Lauderdale Building and Fire Departments to engineer resolutions for fire protection and life safety for complex mixed-use and high-profile projects.

## AFFILIATIONS

- National Fire Protection Association (NFPA)
- Society of Fire Protection Engineers (SFPE)





Proposal for Code Consulting Services  
for the Bayshore Bath & Tennis Club Condominium Project  
located in Daytona Beach  
4/3/2023 SLS No. ELSS# \_\_\_\_\_  
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