

## **Memorandum of Understanding**

This Memorandum of Understanding (the "Memorandum") is made on October 19, 2021, by and between Las Positas College, of 3000 Campus Hill Dr, Livermore, California 94551 (hereinafter referred to as "LPC") and HEN Nozzles Inc, of 3650 Pinon Canyon Ct, Castro Valley, California 94552 (hereinafter referred to as "HEN") for the purpose of achieving the various aims and objectives relating to the NSF SBIR Phase-I project (the "Project").

WHEREAS LPC and HEN desire to enter into an agreement in which LPC and HEN will work together to complete the Project;

AND WHEREAS LPC and HEN are desirous to enter into a Memorandum of Understanding between them, setting out the working arrangements that each of the partners agree are necessary to complete the Project;

### **Purpose**

The purpose of this Memorandum is to provide the framework for any future binding contract regarding the NSF SBIR Phase-I project between LPC and HEN.

### **Obligations of the Partners**

The Partners acknowledge that no contractual relationship is created between them by this Memorandum, but agree to work together in the true spirit of partnership to ensure that there is a united visible and responsive leadership of the Project and to demonstrate financial, administrative and managerial commitment to the Project by means of the following individual services.

### **Cooperation**

The Partners will endeavor to have final approval and secure any financing necessary to fulfill their individual contributions at the start of the planning for the development of the Project. The activities and services for the Project shall include, but not limited to:

- a. Resources rendered by LPC include:
  1. Access to the high pressure water source for nozzle optimization studies at LPC.
  2. The access will be for up to 4 hours per week on a specific day of the week.
  
- b. HEN hereby agrees to provide the following financial, material and labor resources in respect of the Project:
  1. HEN would pay a rent of \$1,000 a month for the use of space for the experiments. The experiments would be for NSF SBIR phase II project, with Federal Award Number: 2127461.
  2. The purpose of the experiments would be evaluation of flow through nozzles and understand the stream behavior through fire nozzles.

3. The studies will be done over a period of 24 months, starting August-2021. The details of all the tasks conducted by HEN Nozzles are as follow:
  - Objective: Fundamental studies of Nozzle geometry vs stream parameters:
  - Resources required: Access to high pressure water source
  - Details of the task: HEN would gather detailed stream characteristics for various nozzles including GPM efficiency, range and surface area of the final stream. The task would allow HEN to validate the fluid dynamic simulation models and have empirical relationships including but not limited to: Residual pressure and GPM efficiency. These would be key to optimize the fluid dynamic simulation model and develop the final nozzles.

### **Permits and Regulations**

HEN shall be required to follow all regulations, laws and requirements of the District, the City of Livermore, the County of Alameda, any Water and Air District, and shall hold any and all necessary permits to conduct the project.

### **Communication Strategy**

Marketing of the vision and any media or other public relations contact should always be consistent with the aims of the Project and only undertaken with the express agreement of both parties. Where it does not breach any confidentiality protocols, a spirit of open and transparent communication should be adhered to. Coordinated communications should be made with external organizations to elicit their support and further the aims of the Project.

### **Indemnification**

Parties agree to that each shall defend, indemnify, and hold each party and its, officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of The Contractor, its officers, employees or agents.

### **Dispute Resolution**

In the event of a dispute between the Partners in the negotiation of the final binding contract relating to this Project, a dispute resolution group will convene consisting of the Chief Executives of each of the Partners together with one other person independent of the Partners appointed by the Chief Executives. The dispute resolution group may receive for consideration any information it thinks fit concerning the dispute. The Partners agree that a decision of the dispute resolution group will be final. In the event the dispute resolution group is unable to make a compromise and reach a final decision, it is understood that neither party is obligated to enter into any binding contract to complete the Project.

### **Term**

The arrangements made by the Partners by this Memorandum shall remain in place from August 1<sup>st</sup>, 2021 until July 31<sup>st</sup>, 2023. The term can be extended only by agreement of all of the Partners.

**Notice**

Any notice or communication required or permitted under this Memorandum shall be sufficiently given if delivered in person or by certified mail, return receipt requested, to the address set forth in the opening paragraph or to such other address as one party may have furnished to the other in writing.

**Governing Law**

This Memorandum shall be construed in accordance with the laws of the State of California.

**Assignment**

Neither party may assign or transfer the responsibilities or agreement made herein without the prior written consent of the non-assigning party, which approval shall not be unreasonably withheld.

**Amendment**

This Memorandum may be amended or supplemented in writing, if the writing is signed by the party obligated under this Memorandum.

**Catastrophic Events**

In the event of a catastrophic crisis such as a natural disaster, fires, severe windstorm damage, pandemics, floods, earthquakes, loss of power for excessive days, water shortages and or regulations imposed by the county or state, bad air quality, and or any event deemed by the College "LPC" as an immediate danger to student and staff safety, it shall have the right to suspend or cancel such project until deemed reasonably safe as determined by the governing board.

**Severability**

If any provision of this Memorandum is found to be invalid or unenforceable for any reason, the remaining provisions will continue to be valid and enforceable. If a court finds that any provision of this Memorandum is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision will be deemed to be written, construed, and enforced as so limited.

**Prior Memorandum Superseded**

This Memorandum constitutes the entire Memorandum between the parties relating to this subject matter and supersedes all prior or simultaneous representations, discussions, negotiations, and Memorandums, whether written or oral.

**Understanding**

It is mutually agreed upon and understood by and among the Partners of this Memorandum that:

- a. Each Partner will work together in a coordinated fashion for the fulfillment of the Project.
- b. In no way does this agreement restrict involved Partners from participating in similar agreements with other public or private agencies, organizations, and individuals.
- c. To the extent possible, each Partner will participate in the development of the Project.

d. Nothing in this memorandum shall obligate any Partner to the transfer of funds. Any endeavor involving reimbursement or contribution of funds between the Partners of this Memorandum will be handled in accordance with applicable laws, regulations, and procedures. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the Partners involved and shall be independently authorized by appropriate statutory authority. This Memorandum does not provide such authority.

e. This Memorandum is not intended to and does not create any right, benefit, or trust responsibility.

f. This Memorandum will be effective upon the signature of both Partners.

g. Any Partner may terminate its participation in this Memorandum by providing written notice to other Partner.

The following Partners support the goals and objectives of the NSF SBIR Phase-I project:

**Signatories**

This Agreement shall be signed on behalf of Las Positas College by \_\_\_\_\_ and on behalf of HEN Nozzles Inc. by \_\_\_\_\_. This Agreement shall be effective as of the date first written above.

\_\_\_\_\_  
Las Positas College  
By \_\_\_\_\_, its \_\_\_\_\_

\_\_\_\_\_  
HEN Nozzles Inc.  
By \_\_\_\_\_, its \_\_\_\_\_