DRAFT

RESOLUTION 20xx-xxx

RESOLUTION **AUTHORIZING AGREEMENT** UNDER THE DISTRICT'S BLUE ECONOMY INCUBATOR WITH HYPERKELP INC. FOR A 2-YEAR PILOT PROJECT TO DEVELOP, TEST, AND VALIDATE **SMART** BUOY Α **PLATFORM** TAILORED FOR VARIOUS PORT MONITORING APPLICATIONS FOR AN AMOUNT NOT TO **EXCEED** \$250.000. FUNDING **FOR** THE PROPOSED PILOT PROJECT IS INCLUDED IN THE APPROVED FY 2024 ECONOMIC RECOVERY PROGRAM BUDGET

WHEREAS, the San Diego Unified Port District (District) is a public corporation created by the legislature in 1962 pursuant to Harbors and Navigation Code Appendix 1, (Port Act); and

WHEREAS, the District's Blue Economy Incubator (BEI) assists in the creation, development and scaling of new Blue Economy business ventures in and around San Diego Bay; and

WHEREAS, the program acts as a launch pad for sustainable aquaculture and Port-related blue tech ventures by removing barriers to early-stage companies and providing key assets and support services focused on pilot project facilitation; and

WHEREAS, BEI pilot project proposals are reviewed following a four-step cross-departmental due diligence process, culminating in a staff recommendation to the Board of Port Commissioners (BPC); and

WHEREAS, the review and selection process balances each proposal's potential social and environmental benefit, alignment with the District's core mission and Public Trust obligation, as well as potential financial return on investment; and

WHEREAS, to date, the District has approved the launch of nine (9) pilot projects, and a reinvestment in seaweed aquaculture, with projects ranging from shellfish nursery operations; copper remediation technology; a drive-in Boatwash; a smart marina application; a marine debris removal vessel; seaweed aquaculture; bio-enhancing shoreline armoring; a new approach to soil remediation in marine environments, and a real-time field-testing sensor device for stormwater monitoring; and

- **WHEREAS,** staff is now recommending the BPC authorize a pilot project with HyperKelp, Inc. (HyperKelp) to develop, test, and validate a smart buoy platform tailored for various port monitoring applications; and
- **WHEREAS,** HyperKelp is an early-stage company specializing in custom development of a sensor agnostic smart buoy platform, with the capabilities to collect and aggregate ocean data through a real-time online dashboard; and
- WHEREAS, the core technology of HyperKelp is their smart buoy technology platform including hardware (Kelp Smart Buoy (KSB)) and software (Ocean Data as a Service (ODaaS) dashboard) which can be tailored for various applications to collect, process, and transmit ocean data in near real-time; and
- WHEREAS, the aim of this pilot project is to develop, validate, and deploy custom sensor data payloads that enable real time and remote monitoring of a target set of parameters important for Port monitoring activities which include but is not limited to, dissolved copper concentrations, underwater noise levels, atmospheric carbon dioxide concentrations, and water quality parameters (e.g., dissolved oxygen (DO), Chlorophyll A, Turbidity, pH, water temperature and salinity); and
- **WHEREAS**, upon successful customization and integration, the smart buoy platform will be field validated at five (5) deployment sites located throughout the District to support various ongoing monitoring efforts; and
- **WHEREAS**, HyperKelp will work with the relevant District subject matter experts to establish the sensors and accuracy requirements of the sensing payloads and monitoring parameters and define desired customizations to the online interface; and
- **WHEREAS**, the proposed smart buoy platform to be developed for this pilot will require minimum maintenance which will be carried out by the HyperKelp team; and
- **WHEREAS**, results from the two-year pilot project will allow for case study development to support commercialization of Port environmental monitoring applications; and
- WHEREAS, the Incubator Committee finds the proposal (1) to support innovation that provides strategic mission alignment with various District Departments to enhance ocean data collection for several Port monitoring applications; (2) to be complementary to District's environmental stewardship mission and need to protect coastal-dependent assets; (3) to have principals that are well-qualified and experienced, and the company has validated product technology for various industries; and (4) has a financial return that is favorable based on the company market traction; and

WHEREAS, staff recommends the BPC authorize an agreement with HyperKelp for a two-year pilot project to develop, test, and validate a smart buoy platform tailored for various Port monitoring applications for a total amount not to exceed \$250,000; and

WHEREAS, in exchange for District's funding and other assistance, HyperKelp will pay District a revenue share over time up to a maximum \$1,750,000.

NOW, THEREFORE, BE IT RESOLVED by the Board of Port Commissioners of the San Diego Unified Port District (District) as follows:

That the Executive Director or their designee is hereby authorized to execute an agreement under the District's Blue Economy Incubator with HyperKelp, Inc. for a 2-year pilot project to develop, test and validate a smart buoy platform tailored for various Port monitoring applications for an amount not to exceed \$250,000. Funding for the proposed pilot project is included in the approved FY 2024 Economic Recovery Program budget.

APPROVED AS TO FORM AND LEGALITY: GENERAL COUNSEL

By: Assistant/Deputy

PASSED AND ADOPTED by the Board of Port Commissioners of the San Diego Unified Port District, this 14th day of November 2023, by the following vote: