CONTRACT AGREEMENT

THIS CONTRACT ("Contract") is made and entered into on this December 4, 2018, by and between the City of Manhattan Beach, a California municipal corporation ("CITY") and Oceanographic Teaching Stations, Inc., a nonprofit corporation incorporated under the laws of the State of California ("OTS") with respect to the following facts:

- A. There is, within the State Park System, a structure located at the western end of the Manhattan State Beach Pier in the County of Los Angeles ("Roundhouse"); and
- B. The State of California ("State") is the owner of the Manhattan State Beach Pier ("Pier") and all structures and improvements located thereon; and
- C. Pursuant to the provisions of Section 5080.30 et seq. of the Public Resources Code of the State of California, CITY and the State have entered into an Operating Agreement dated August 1, 1988 for the Beach Pier (the "Operating Agreement"); and
- D. The Operating Agreement provides that CITY shall provide for the operation, care, custodial maintenance, and control of the Pier; and
- E. OTS is dedicated to teaching students and visitors about the oceans, marine life and the environment, and provides both on-site classes and outreach classes through much of Los Angeles County; and
- F. OTS has occupied most of the first floor of the Roundhouse since 1980; and
- G. CITY and OTS entered into that certain Contract Agreement dated September 6, 2005 (the "Contract"), pursuant to which CITY authorized OTS to occupy portions of the Roundhouse and operate an aquarium therein (the "Roundhouse Aquarium"), subject to the terms and conditions of the Contract; and
- H. CITY, OTS, and the Harrison Greenberg Memorial Foundation entered into that certain Cooperation Agreement dated July 19, 2016 ("Cooperation Agreement"), providing for the renovation of the Roundhouse and the Roundhouse Aquarium; and
- I. CITY and OTS wish to amend and restate the Contract, to address changes to the Roundhouse arising from the Cooperation Agreement, and to make certain other modifications.

In consideration of the mutual promises set forth below, CITY and OTS agree as follows:

1. TERM

The term of this Contract shall continue until August 1, 2028 (the "Initial Term"), unless earlier terminated pursuant to Section 15. Upon expiration of the Initial Term, this Contract

shall continue, subject to the right of either party to terminate the Contract pursuant to Section 15.

2. ROLE OF OTS

- A. OTS may sponsor, publish, purchase, and distribute or sell appropriate maps and literature, illustrative materials, and other items which increase visitor understanding and appreciation of marine life and the State Park System values and purposes.
- B. OTS may acquire and display materials, equipment, and other items and funds for use in its educational programs.
- C. OTS may sponsor and support docent programs, environmental education activities, seminars, lectures, and other activities that contribute to its educational programs.
- D. OTS may plan, organize, and implement fundraising programs to acquire contributions to support the educational activities of the organization.
- E. OTS shall use its best efforts to maximize the public use of the facilities it occupies under this Contract.

3. CHARGES

OTS may levy charges for its programs and related literature and may charge for sales items as discussed in Section 4 below, provided that such charges are consistent with OTS's status as a non-profit public benefit corporation.

4. SALE ITEMS

- A. OTS may sell educational items and t-shirts, sweatshirts, hats, visors and similar items of apparel, to the extent such items relate to OTS or the Roundhouse and enhance the experience of visitors.
- B. OTS shall display any such sales items in a manner keeping with the general design and decor of the Roundhouse space.
- C. OTS is not by this Contract granted the right to sell items, the sale of which would infringe on applicable rights of a concession agreement with another party.

5. REVENUE

- A. OTS shall maintain financial records for the operation which shall be kept in accordance with State and federal law, and in keeping with good business practices.
- B. OTS shall make financial records for the operation available for the inspection by CITY at any reasonable time. CITY may, on reasonable notice, audit the records and review the internal controls of OTS's business operations.
- C. OTS shall separately account for all revenue derived from OTS Roundhouse space activities pursuant to this Contract. OTS may expend the excess revenue over costs derived from OTS Roundhouse space activities only for the purpose of accomplishing educational work and for the purpose of carrying out the terms of this Contract.

6. ANNUAL REPORT

OTS shall annually, on or prior to September 30, furnish CITY with a report of activities, with information as required by CITY and with a copy of its Form 990 as filed with the Internal Revenue Service.

7. FACILITIES

- A. CITY shall provide OTS with facilities to be used or occupied by OTS for the purpose of carrying out the terms of this Contract. Such facilities shall include the entire interior of the Roundhouse, but do not include the restrooms accessible from the exterior of the Roundhouse.
- B. OTS shall provide all maintenance, repair and janitorial services inside the space to be occupied by OTS, including replacement and/or repair of damaged or missing window screens, window hand cranks and other similar items, unless otherwise authorized by CITY. The interior area of the Roundhouse space shall be kept in a condition as could reasonably be expected for a public facility. Should OTS fail, neglect or refuse to do so, CITY shall have the right to perform such maintenance or repairs for OTS. In this event, OTS shall promptly reimburse CITY for the cost thereof; provided, however, that CITY shall first give OTS ten days' written notice of its intention to perform such maintenance or repairs for OTS for the purpose of enabling OTS to proceed with such maintenance or repairs at OTS's own expense. No such notice shall be required if CITY determines that immediate action is required to protect public safety or prevent or mitigate damage to property.
- C. CITY shall provide exterior maintenance of the Roundhouse including doors and windows plus the internal maintenance of the restroom facilities. It may be necessary to have access to the interior of the Roundhouse space to periodically replace door and window shutter mechanisms. To the extent practicable, CITY shall give OTS 72 hours' prior notice before undertaking any internal or external maintenance of the Roundhouse.

- D. OTS shall be responsible for payment of incidental utility services for the space to be occupied by OTS.
- E. CITY shall have emergency access to all facilities to make such inspections as CITY deems necessary. CITY personnel shall have access to conduct inspection of the Roundhouse space (including storage areas).
- F. No construction, structural alteration, repair, reconstruction, restoration or structural improvement may be made to the Roundhouse by OTS without first obtaining approval for any plans, specifications, and contracts from CITY. No additional tanks or equipment will be approved by CITY that would subject the first floor or the mezzanine level to a live load in excess of levels deemed safe by CITY. Nothing herein shall prevent OTS from repairing any tanks or other property of OTS maintained at the Roundhouse, provided that such repairs will not affect the structural integrity of the Roundhouse.
- G. Only vehicles with a gross vehicle weight of less than 10,000 pounds may be driven on the Pier to provide service or deliver goods to OTS. Only one such vehicle at a time shall be permitted to be driven on the Pier by or for OTS, and it shall not park on the Pier for greater than 20 minutes per visit. All vehicles authorized by OTS or its independent contractors to drive on the Pier must first deliver to CITY evidence of automobile insurance with a minimum \$1,000,000 coverage. Such proof of insurance shall be updated on an annual basis. Deliveries shall be limited to times when pedestrian traffic is slow, and any vehicle shall leave the Pier immediately when requested by the Police Department. For purposes of clarification, this paragraph shall also pertain to any outside company or independent contractors hired by OTS to perform repair work and or maintenance of the facility.
- H. CITY shall have the right to use the Roundhouse up to ten times per year for special functions. CITY shall provide a minimum of 30 days' advance notice to OTS prior to such special functions.
- I. All tanks shall be initially situated at the Roundhouse in accordance with the conformed construction plan dated February 1, 2018. OTS shall not move the shark tank, or any other tank weighing more than one thousand (1000) pounds when full, without the prior approval and consent of CITY.
- J. OTS shall be responsible for opening and closing all protective window shutters at the Roundhouse each day of Roundhouse operations. OTS shall be liable for any damage resulting from its failure to close the protective window shutters as required, or from any damage to the protective window shutters resulting from improper operation of the shutters.
- K. No signs, names, placards or advertising matter shall be inscribed, painted or affixed upon the exterior of the Roundhouse or upon the Pier without the prior written consent of the Director of Public Works of CITY.

L. Utility closets in the mezzanine area that contain heating, ventilation, telephone or radio equipment shall not be used by OTS as a storage area.

8. USE RESTRICTIONS

- A. No event, class, ceremony, or program may block public access to any part of the Pier without CITY approval.
- B. No alcohol is allowed on the Pier or inside the Roundhouse. This restriction may be waived by the City Council for special events held within the Roundhouse, on a case-by-case basis.
- C. OTS may apply to CITY on an event-by-event basis for a waiver of the restrictions set forth in Sections 8A and 8B above. Any waiver shall be granted in the sole discretion of CITY, and nothing herein shall be deemed to constitute an implied agreement to grant any waivers to OTS.

9. TITLE

All improvements, alterations, and restored facilities constructed under this Contract shall become the property of the State of California; and neither CITY nor State shall be responsible for the cost of such improvements, alterations, and restorations. Title to all improvements and fixtures shall vest in the State immediately on their becoming affixed to the State real property. Notwithstanding the foregoing, title to "Trade Fixtures" as hereinafter defined, shall remain with OTS. Trade Fixtures is defined to include those items listed on Schedule 1 to this Contract. If OTS removes any Trade Fixtures from the Roundhouse, it shall be responsible for ensuring that such removal does not (i) compromise the structural integrity and safety of the Roundhouse or (ii) impair access to the Roundhouse. OTS shall be responsible for reimbursing CITY for any damages caused to the Roundhouse facility as a result of the installation or removal of any Trade Fixtures.

10. EQUIPMENT

OTS, at OTS's own expense, shall completely equip the facility and shall keep the same equipment in a safe and first-class manner throughout the term of this Contract.

11. PERSONAL PROPERTY

Title to all personal property provided by OTS shall remain with OTS.

12. POSSESSORY INTEREST

It is not the intention of the parties to this Contract to create any possessory interest or tenure by OTS in any property of the State Park System; however, this Contract may create or cause to be created a possessory interest in public land within the meaning of Revenue and Taxation Code Section 107. In the event such possessory interest is created, OTS may be subject to the payment of property taxes levied on such possessory interest. OTS hereby agrees to pay any such property taxes levied. OTS agrees to pay, subject to its right to

contest in good faith, all lawful taxes, assessments, or charges which may at any time be levied by the State, county, CITY, or any tax or assessment levying body on any interest in this Contract which OTS may have in or to the premises covered by this Contract, as well as taxes and assessments on goods, merchandise, fixtures, appliances, equipment, and property owned by it in or around said premises.

13. OTS PERSONNEL

- A. OTS understands and specifically agrees to inform its employees that OTS is an independent contractor to the State and CITY.
- B. OTS understands and specifically agrees to inform its employees that they are not agents or employees of the State or CITY.
- C. Volunteers or independent contractors acting on behalf of OTS shall be informed by OTS that they are not agents or employees of the State or CITY.
- D. All OTS agents and employees involved in visitor contact shall be trained before assuming such responsibilities.
- E. OTS agents and employees who come in direct contact with the public shall wear identification by which they may be known and distinguished as agents or employees of OTS.
- F. OTS shall review the conduct of any of it agents and employees whose actions or activities are considered by OTS or CITY to be inconsistent with proper administration of the Roundhouse and enjoyment and protection of visitors, and shall take actions as are necessary in a timely manner to fully correct any situation that may arise.

14. NONDISCRIMINATION CLAUSE

OTS and its agents and employees shall not discriminate because of race, religion, color, ancestry, sex, sexual orientation, age, national origin, or physical disability against any person by refusing to furnish such person any accommodation, facility, service, or privilege offered to, or enjoyed by, the general public; nor shall OTS or its agents or employees publicize the accommodations, facilities, services, or privileges in any manner that would directly or inferentially reflect upon or question the acceptability of the patronage of any person because of race, religion, color, ancestry, sex, sexual orientation, age, national origin, or physical disability.

The following is the State's Nondiscrimination Clause (OCP-1), Standard Form 17A (new 5/83); and it is incorporated herein, per State Administrative Manual Section 1225(c). For the purposes of this Contract, the term "contractor" in said Standard Form 17A (new 5/83) shall mean "OTS".

"NONDISCRIMINATION CLAUSE (OCP-1)

- During the performance of this contract, contractor and its subcontractors shall not 1. unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex. Contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act Government Code, Section 12900 et seq.) and the applicable regulations promulgated hereunder (California Administrative Code, Title 2, Section 7285.0 et seq). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Administrative Code, are incorporated into this Contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- 2. This contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Contract."

15. TERMINATION OF CONTRACT

- A. CITY reserves the unqualified right to terminate this Contract, should such termination be required by the State, whether pursuant to the Operating Agreement (including termination of the Operating Agreement) or otherwise. Subject to applicable legal restrictions, CITY shall endeavor to provide OTS reasonable notice of any action by the State that would require CITY to terminate this Contract, and the effective date of such termination.
- B. CITY further may terminate this Contract for material breach by OTS of any of the provisions hereof, upon giving OTS 30 days' written notice of intent to terminate if any and all breaches identified in the notice are not cured. Termination shall be effective at the end of that period if the identified breaches have not been cured, provided that, if OTS provides documentation to CITY demonstrating that it has initiated in good faith action to cure the identified breaches during the 30-day period and the identified breaches cannot reasonably be cured within 30 days, then OTS shall have an additional 30 days to cure such breaches.
- C. CITY reserves the unqualified right to terminate this Contract following expiration of the Initial Term by giving OTS written notice of the effective date of such termination no less than 36 months prior to such termination date.
- D. OTS reserves the unqualified right to terminate this Contract following expiration of the Initial Term by giving CITY 12 months' prior written notice of the effective date of such termination. OTS further may terminate this Contract for breach by CITY of any of the provisions hereof upon giving CITY 90 days' written notice of

intent to terminate if any and all identified breaches are not cured. Termination shall be effective at the end of that period if the identified breaches have not been cured.

16. WAIVER

Waiver of a breach of this Contract by either party shall not be construed as a waiver of any subsequent breach of the same or any other provision.

17. BREACH

- A. This Contract is breached if OTS fails to meet the criteria outlined in State Public Resources Code Section 513 or this Contract.
- B. This Contract is breached if CITY fails to meet the criteria outlined in State Public Resources Code Section 513 or this Contract.

18. CONTRACTUAL OBLIGATIONS

A. This Contract constitutes the entire agreement between the parties and supersedes any and all prior oral or written agreements or understandings between them. No representations, warranties, or inducements expressed or implied have been made by either party to the other, except as set forth herein.

B. <u>Commercial General Liability Insurance</u>.

OTS, at its sole cost, shall procure and maintain, at all times during the term of this Contract, a policy with a current A.M. Best's rating of not less than A-: VIII providing Commercial General Liability Insurance (or, at its discretion, Comprehensive General Liability protecting the State, CITY and OTS against all claims, defense costs and loss costs arising from personal injury, including death, or property damage occurring directly or indirectly from the operation and/or maintenance of the Roundhouse. The State and CITY shall be named as Additional Insureds on this policy (see specific wording on the required the City of Manhattan Beach Insurance Endorsement Form #1 (General). Acceptable-minimum limits for this coverage are:

Per Occurrence:	\$1,000,000
General Aggregate:	\$2,000,000
Products/Completed Operations Aggregate:	\$2,000,000
Personal and Advertising Injury Aggregate:	\$1,000,000
Fire Damage:	\$ 50,000
Medical Payments:	\$ 5,000

In addition, Excess or Umbrella coverage should increase this policy's aggregate limits to a total of \$3,000,000. The policy shall not contain a provision that would

make this policy excess over, contributory with, or invalidated by the existence of any insurance, self-insurance or other risk-financing program maintained by CITY.

<u>Additional Insured</u>. The commercial general and automobile liability policies shall contain an endorsement naming CITY, its officers, employees, agents and volunteers as additional insureds.

<u>Primary and Non-Contributing</u>. The insurance policies required under this subsection shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to CITY. Any insurance or self-insurance maintained by CITY, its officers, employees, agents or volunteers, shall be in excess of OTS's insurance and shall not contribute with it.

<u>Contractor's Waiver of Subrogation</u>. The insurance policies required under this Section shall not prohibit OTS and OTS's employees, agents or subcontractors from waiving the right of subrogation prior to a loss. OTS hereby waives all rights of subrogation against CITY.

C. <u>Additional Requirements</u>.

The procuring of such required policies of insurance shall not be construed to limit OTS's liability hereunder, nor to fulfill the indemnification provisions and requirements of this Contract. There shall be no recourse against CITY for payment of premiums or other amounts with respect thereto. CITY shall notify OTS in writing of changes in the insurance requirements. If OTS does not deposit copies of acceptable insurance policies with CITY incorporating such changes within 60 days of receipt of such notice, OTS shall be deemed in default hereunder.

Any deductibles or self-insured retentions must be declared to and approved by CITY. Any deductible exceeding an amount acceptable to CITY shall be subject to the following changes:

- (1) Either the insurer shall eliminate or reduce such deductibles or self-insured retentions with respect to CITY and its officials, employees and agents (with additional premium, if any, to be paid by OTS); or
- (2) OTS shall provide satisfactory financial guarantee for payment of losses and related investigations, claim administration, and defense expenses.

D. Verification of Compliance.

OTS shall furnish CITY with original endorsements effecting coverage required by this Contract. The endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. Prior to the expiration date of any policy of insurance required by this Contract, OTS shall deliver to CITY a binder or certificate of insurance with respect to each renewal policy, bearing a notation evidencing payment of the premium therefore, or accompanied by other proof of payment satisfactory to CITY.

E. <u>Indemnity</u>.

- (1) To the fullest extent permitted by law, OTS shall indemnify, defend, and hold harmless CITY and its elective or appointive boards, officers, agents, attorneys and employees (collectively "Indemnitees"), from any and all claims, liabilities, expenses, or damages of any nature, including attorneys' fees (collectively "Liabilities"), arising out of, or in any way connected with performance of this Contract by OTS, OTS's agents, officers, employees, subcontractors, or independent contractor(s) hired by OTS. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by OTS. OTS shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. OTS shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.
- OTS shall indemnify, save, and hold harmless and defend the State against all fines, claims, damages, losses, judgments, and expenses arising out of, or from, any omission or activity of OTS activities, not co-sponsored by the State. OTS shall furnish the State a certificate of insurance stating that there is insurance currently in effect. The State shall be named as an additional insured but only insofar as the operations under this Contract are concerned.

19. AMENDMENTS

No amendment or modification of this Contract shall have an effect whatsoever, unless the same is in writing and signed by each of the parties hereto.

20. CONTRACT ASSIGNMENT

OTS shall not assign its rights under this Contract or any interest herein, or any part thereof, to any party.

21. NOTICES

Any notices herein provided to be given or which may be given by either party to the other shall be deemed to have been fully given when made in writing and deposited in the United States mail, postage prepaid, and addressed as follows:

OTS

Oceanographic Teaching Stations, Inc. P.O. Box 1
Manhattan Beach, California 90266

CITY	
City Manager City of Manhattan Beach 1400 Highland Avenue Manhattan Beach, California 90266	
City of Manhattan Beach, a California municipal corporation	Oceanographic Teaching Stations, Inc., a California nonprofit corporation
By:Bruce Moe, City Manager	By: Title: President
ATTEST:	
Liza Tamura, City Clerk	
APPROVED AS TO FORM:	

Quinn M. Barrow, City Attorney

SCHEDULE 1

TRADE FIXTURES

ROUNDHOUSE AQUARIUM TEACHING CENTER LIST OF TRADE FIXTURES

LSS information taken from "Harrison Greenberg Foundation Roundhouse Aquarium Beautification Project: Conformed Set of Construction Documents," dated 01 February 2018. Page number refers to the page in the Construction Documents.

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TABLE 1: SUMMARY OF TANKS

Tank ID	Tank Name	Tank Location	LSS
T-01	SHARK TANK	PIER LEVEL Habitat gallery	А
T-02 AB	A: WOLF EEL B; MORAY EEL	PIER LEVEL Education gallery	В
T-03	TOUCH TANK	PIER LEVEL Education gallery	С
T-O4	SANDY BOTTOM, PIER PILING	PIER LEVEL Education gallery	С
T-05	ROCKY REEF	PIER LEVEL Habitat gallery	С
T-06	SEA JELLY	MEZZ LEVEL, Immersion gallery	G
T-07	PORTHOLE A	MEZZ LEVEL	E
T-08	PORTHOLE B	MEZZ LEVEL	E
T-09	PORTHOLE E	MEZZ LEVEL	E
T-10	PORTHOLE F	MEZZ LEVEL	E
T-11 A	PIPEFISH	MEZZ LEVEL	В
T-11 B	OCTOPUS	MEZZ LEVEL	В
T-11 C	BABY ROCKFISH	MEZZ LEVEL	В
T-14	BRINE SHRIMP	MEZZ LEVEL	С
T-15	TOUCH TANK	MEZZ LEVEL Discovery Corner	С
T-16	TOUCH TANK	MEZZ LEVEL Discovery Corner	С
T-17	SEAHORSE	MEZZ LEVEL	D
T-18	GOLDFISH	MEZZ LEVEL	NA
		I	

T-19	ВЕТА	MEZZ LEVEL	NA
	HOSPITAL TANK	PIER LEVEL South Support Room	F

TABLE 2: SUMMARY OF LSS

			EXHI	BIT TANK SO	CHEDULE	
CVCTEM	TANK NO.	SYSTEM TEMP.	VOLUME	FLOW RATE	TURN OVER	CDECIEC
SYSTEM	TANK NO.	(F)	(gal.)	(gpm)	(min.)	SPECIES
100.4	T-01	CO0 CE0	3,760			SHARK TANK
LSS-A	SUMP	60° - 65°	240			
		TOTAL	4,000	70	57	
	T - 02		680	21	31	EEL TANK
	T-11a	1 [100			JEWEL TANK
LSS-B	T-11b	55° - 60°	50	9	31	OCTOPUS TANK
	T-11c	1	100	1		BABY ROCKFISH TANK
	SUMP	1	170			
		TOTAL	1,100	30	37	
	T-03		160	40	22	TOUCH TANK
	T-04	1 [250	13	32	SANDY BOTTOM TANK
LSS-C	T - 05	550 000	230	7	33	ROCKY REEF TANK
LSS-C	(T-15)	55° - 60°	(22)	N/A	N/A	Discovery Corner Touch Tank A (portable)
	(T-16)	1	(12)	N/A	N/A	Discovery Corner Touch Tank B (portable)
	SUMP	1	120			
		TOTAL	760	20	38	
1 00 D	T-17	700 750	110	10	11	SEA HORSE TANK
LSS-D	SUMP	70° - 75°	60			
		TOTAL	170	10	17	
	T - 07		15	1	15	PORTHOLE TANK A
	T-08	1	15	1	15	PORTHOLE TANK D
LSS-E	T-09	55° - 60°	15	1	15	PORTHOLE TANK E
	T-10	1	15	1	15	PORTHOLE TANK F
	SUMP	1	60			
		TOTAL	120	5		
				•		
100.5	QUARANTINE	500 750	94	5	19	QUARANTINE TANK
LSS-F	SUMP	50° - 75°	56			
		TOTAL	150	5	30	
		•		•	•	
100.0	T-06	550 000	337	5	67	SEA JELLY KREISEL TANK
LSS-G	SUMP	55° - 60°	53			
		TOTAL	390	5	78	

TABLE 3: LSS A

ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-F1-U-2A-D1/1DHM-238-F-45FH	4	120V	1	60
P-101, P-102	CIRCULATION PUMP	ABYZZ A400, 50 GPM @ 20' TDH, NO STRAINER, SUBMERSIBLE				
F -1 01	DRUM FILTER	MODEL F1, HEX BEECELL PANELS, 20 MICRON SCREEN				
FF-101	FOAM FRACTIONATOR	EXISTING: RK2 SYSTEMS RK25PE (REFURBISH AND USE EXISTING ONE ONSITE)				
UV-101	UV STERILIZER	40 mJ/cm2, 90% UVT, 45 GPM				
PG-101, PG-102	PRESSURE GAUGE					
HX-101	HEAT EXCHANGER	50,000 BTU HR SUBMERSIBLE, T24G-24-H-1NPT, TITANIUM IMMERSION				
LS-101	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-103	HX PUMP	WILO STAR 21 FC				
FM-101	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
FM-102	FLOW METER	ROTAMETER STYLE FLOW METER				
VB-101	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				
						L

TABLE 4: LSS B

		MECHANICAL EQUIPMENT SCHEDULE				
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-F1-U-2A-D0.5/0.5DHM-238-F-45FH	3	120V	1	60
P-201, P-202	CIRCULATION PUMP	ABYZZ A100, 15 GPM @ 15'TDH, NO STRAINER, NON-SUBMERSIBLE				
F-201	DRUM FILTER	MODEL F1, HEX BEECELL PANELS, 20 MICRON SCREEN W/ RINSE PUMP				
FF-201, FF-202	FOAM FRACTIONATOR	TUNZE DOC 9430DC, 11 GPM				
UV-201	UV STERILIZER	45 mJ/cm2, 90% UVT, 30 GPM / 45 GPM				
PG-201, PG-202	PRESSURE GAUGE					
HX-201	HEAT EXCHANGER	35,000 BTU/HR T20G-24-H-1NPT TITANIUM IMMERSION				
LS-201	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-203	HX PUMP	WILO STAR FC21				
FM-201	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-201 THR VB-204	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				
						L
						L

TABLE 5: LSS C

		MECHANICAL EQUIPMENT SCHEDULE				
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-B4-U-1.5A-D0.5/0.5DHM-238-F-45FH	1.2	120V	1	60
P-301	CIRCULATION PUMP	ABYZZ A200, 20 GPM @ 15' TDH, NO STRAINER, SUBMERSIBLE				
F-301	BAG FILTER	QUAD BAG FILTER				
FF-301	FOAM FRACTIONATOR	TUNZE DOC 9430DC, 11 GPM				
UV-301	UV STERILIZER	30 mJ/cm2, 90% UVT, 25 GPM				
PG-301, PG-302	PRESSURE GAUGE					
HX-301	HEAT EXCHANGER	35,000 BTU/HR, T16G-24-H-1NPT TITANIUM IMMERSION				
LS-301	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-302	WATERFALL PUMP	ABYZZ A100, 25 GPM @ 5' TDH, NON-SUBMERSIBLE				
P-303	HX PUMP	WILO STAR 21 FC				
FM-301	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-301, VB-302	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				

TABLE 6: LSS D

		MECHANICAL EQUIPMENT SCHEDULE				
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-B2-U-1.5A-S0.5DHM-238-F-45FH	1	120V	1	60
P-401	CIRCULATION PUMP	ABYZZ A200, 10 GPM @ 20' TDH, NO STRAINER, SUBMERSIBLE				
F-401	BAG FILTER	DUAL BAG FILTER				
FF - 401	FOAM FRACTIONATOR	TUNZE DOC 9415DC, 4 GPM				
UV-401	UV STERILIZER	60 mJ/cm2, 90% UVT, 10 GPM				
PG-401	PRESSURE GAUGE					
HX-401	HEAT EXCHANGER	10,000 BTU/HR, T16G-24-H-1NPT TITANIUM IMMERSION				
LS-401	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-402	HX PUMP	WILO STAR 21 FC				
FM-401	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-401	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				

TABLE 7: LSS E

		MECHANICAL EQUIPMENT SCHEDULE				
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-B2-U-1A-S1/3DHM-238-F-45FH	0.8	120V	1	60
P-501	CIRCULATION PUMP	ABYZZ A100, 5 GPM @ 20' TDH, NO STRAINER, SUBMERSIBLE				
F-501	BAG FILTER	DUAL BAG FILTER				
FF-501	FOAM FRACTIONATOR	TUNZE DOC 9415DC, 4 GPM				
UV-501	UV STERILIZER	60 mJ/cm2, 90% UVT, 5 GPM				
PG-501	PRESSURE GAUGE	-				
HX-501	HEAT EXCHANGER	10,000 BTU/HR, T16G-24-H-1NPT TITANIUM IMMERSION				
LS-501	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-502	HX PUMP	WILO STAR 21 FC				
FM-501	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-501 THRU VB-504	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				

TABLE 8: LSS F

		MECHANICAL EQUIPMENT SCHEDULE				
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-B2-U-1A-S1/3DHM-238-F-45FH	0.8	120V	1	60
P-601	CIRCULATION PUMP	ABYZZ A100, 5 GPM @ 15' TDH, NO STRAINER, SUBMERSIBLE				
F-601	BAG FILTER	DUAL BAG FILTER				
FF-601	FOAM FRACTIONATOR	TUNZE DOC 9415DC, 4 GPM				
UV-601	UV STERILIZER	60 mJ/cm2, 90% UVT, 5 GPM				
PG-601	PRESSURE GAUGE					
HX-601	HEAT EXCHANGER	15,000 BTU/HR, T16G-24-H-1NPT TITANIUM IMMERSION				
LS-601	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-602	HX PUMP	WILO STAR 21 FC				
FM-601	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-601	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				

TABLE 9: LSS G

MECHANICAL EQUIPMENT SCHEDULE						
ITEM TAG	DESCRIPTION	SPECIFICATION	KW	VAC	PHASE	Hz
	FILTRATION SYSTEM	INTEGRATED AQUA SYSTEMS, INC MODEL BSP-B2-U-1A-S1/3DHM-238-F-45FH	0.8	120V	1	60
P-701	CIRCULATION PUMP	ABYZZ A100, 5 GPM @ 15' TDH, NO STRAINER, SUBMERSIBLE				
F-701	BAG FILTER	DUAL BAG FILTER				
FF-701	FOAM FRACTIONATOR	TUNZE DOC 9415DC, 4 GPM				
UV-701	UV STERILIZER	60 mJ/cm2, 90% UVT, 5 GPM				
PG-701	PRESSURE GAUGE					
HX-701	HEAT EXCHANGER	15,000 BTU/HR, T16G-24-H-1NPT TITANIUM IMMERSION				
LS-701	LEVEL SWITCH	NARROW ANGLE LEVEL SWITCH				
P-702	HX PUMP	WILO STAR 21 FC				
FM-701	FLOW METER	SIGNET 2551 FLOW SENSOR W/ 9900 TRANSMITTER				
VB-701	VACUUM BREAKER	HAYWARD VB SERIES, 3/4" FPT				

TABLE 10: CHILLER SYSTEM

MECHANICAL EQUIPMENT SCHEDULE								
ITEM TAG	DESCRIPTION	SPECIFICATION	KW HP RPM VAC		PHASE Hz			
CH-801, CH-802	CONDENSER	DELTA HYDRONICS CARRIER 60-A 5 TON CHILLER	3.7	5		230	1	6
HX-801, HX-802	HEAT EXCHANGER	AQUACAL THERMOLINK HX W/ TITANIUM TUBING						
BT-801	BUFFER TANK	BOILER BUDDY BB-50-G						
P-801, P-802	CHILLER PUMP	MDM ADVANCE 1000		3/4		120	1	6
EX-801	EXPANSION TANK	AMTROL EXTROL SX-30V						
TP-801	TEMP. PROBE	TRERICE BX PLUS, THERMOMETER W/ RTD AND THERMOWELL						
TI-801	THERMOMETER	TRERICE AX9, 180 mm (7 INCH) (180mm)ADJUSTABLE ANGLE W/ THERMOWELL						

TABLE 11: AERATION SYSTEM

	MECHANICAL EQUIPMENT SCHEDULE							
ITEM TAG	DESCRIPTION	N SPECIFICATION KW			RPM	VAC	PHASE	Hz
AP-901, AP-902	AIR PUMP	PENTAIR AES, LINEAR DIAPHRAGM AIR PUMP LT28A. INCLUDE 2 RE-BUILD KITS LT28D		1/3		120	1	60
P-1001	SEAWATER INTAKE PUMP	LANCASTER, SPT5007, 10 GPM		1/2	3450	120	1	60
UV-1001	UV STERILIZER	PENTAIR, EMPEROR E50S-W, 60 mj/cm ² 2 @ 10 GPM	0.06			115	1	60
FS-1001	FLOW SWITCH	AQUALOGIC, FS-1						
PSV-1001	PRESSURE SUST. VALVE	PLASTO-MATIC, RVDT FOR 1/2" PIPE						

TABLE 12: AV SYSTEM

Roundhouse Aquarium - Revised Media Production and AV Hardware Matrix

Version Date: 05-25-17

AV#	Exhibit Title	AV Type	AV Hardware
AV01R	Kelp Forest Entry Video Wall Right - Incudes audio soundscape	Video hardware systems	7 - 55" SunBriteDS Marquee outdoor video displays, computer, speakers (\$10k per screen - includes outdoor display)
AV01L	Kelp Forest Entry Video Wall Left - Note: This program will include scenes and footage from the right wall program.	Video hardware systems	7 - 55" SunBriteDS Marquee outdoor video displays, computer, speakers
AV02	Program Monitor - West Gallery Pier Level	Digital signage	55" commercial video displays, Mac mini or Windows computer, speakers (Note: This is a standard commercial HD display and not the outdoor SunBrite display specified for the Kelp Forest wall)
AV03	Program Monitor - Mezzanine Discovery Area	Digital signage	55" commercial video displays, Mac mini or Windows computer, speakers (Note: This is a standard commercial HD display and not the outdoor SunBrite display specified for the Kelp Forest wall)
AV Racks	AV Rack and tower mounting equipment	Back of house AV equipment	Control Rack, Network Switch, Battery Backup, Control System, etc.

TABLE 13: SECURITY SYSTEM

1	Double 22" Monitors Double Sight DS-2200WB Dual LCD Monitor
1	Horn: Exterior Siren Dual Tone (Yelp and Steady) Self- Contained Siren ELK-SS30
1	ExacqVision A-series Network Video Recorder
1	Network Communicator 3G (HSPA) Cellular Alarm Communicator
1	Marine Grade Fish-eye Security Camera IRIS 710
3	Marine Grade Security Cameras IRIS 490

FIGURE 1: WELL PUMP REEL ASSEMBLY

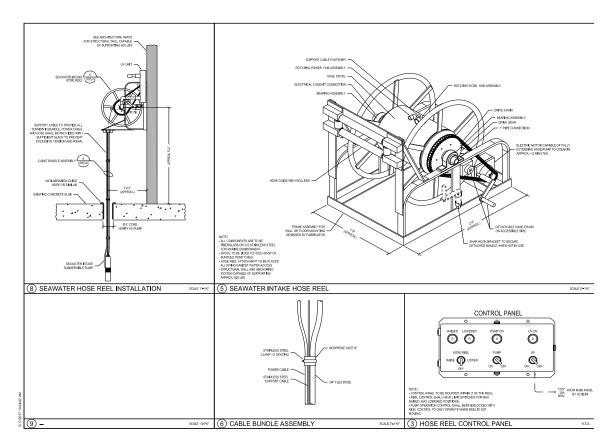


FIGURE 2: EEL DONATION JAR

