Exhibit B - Phase 2 Landscape Improvements CDs and Specifications

PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS

PROJECT & CODE INFORMATION

PROJECT DESCRIPTION:
Per recommendations from the Archaeological Preservation Plan (dated September 2017) approved by the Department of Land and Natural Resources (DLNR) - State Historic Preservation Division (SHPD), the scope of this project is to improve the existing landscaped area below Pahua Heiau Complex.

REFERENCE CODES:
- International Building Code (IBC), 2006 Edition with local amendments
- Uniform Plumbing Code (UPC), 2006 Edition with local amendments
- Uniform Fire Code (UFC), NFPA 1 2012 Edition with local amendments
- National Electrical Code, 2008 Edition

OTHER APPLICABLE CODES:
- 2004 AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES (2004 ADAAG)
- RELATING TO A PROJECT UNDER REVIEW FOR HAWAII REVISED STATUTES (HRS) 103.50.

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G-001 TITLE SHEET

D R A W I N G I N D E X
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L-200 IRRIGATION PLAN
L-202 IRRIGATION DETAILS
L-300 PLANTING PLAN
L-302 PLANTING DETAILS
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GENERAL NOTES

1. THESE NOTES ARE TO BE USED FOR GENERAL REFERENCE ONLY. THEY ARE NOT TO BE CONSIDERED AS PART OF THE SPECIFICATIONS OR OF THE CONTRACT DOCUMENTS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF ALL MATERIALS AND EQUIPMENT, AND FOR THE PROTECTION OF THE PROPERTY LINES AND EXISTING IMPROVEMENTS DURING THE PERIOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK RELATED TO THE INSTALLATION OF THE MATERIALS.

3. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NEEDED TO PERFORM THE WORK INCLUDING THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT.

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SPECIAL NOTE: LITTLE FIRE ANT PREVENTION

1. Prior to transporting to the project, inspect for pests. Inspect and destroy any plant material or equipment and vehicles used are free of fire ants and their eggs.

2. In the event of the presence of fire ants or their eggs, they shall be completely destroyed and disposed and the plant material, equipment, or vehicle treated as required by the State and Re-Inspected.

3. Report presence of fire ants or eggs to the HDOHA with a description of the infestation and the necessary steps taken to control it.

SPECIAL NOTE: COQUI FROG PREVENTION

1. Landscape contractor will notify landscape architect of record and the owners representative for approval, prior to delivery of any plant materials to the project.

2. Landscape contractor will submit a plan to the landscape architect and the owners representative for approval prior to delivery of any plant materials to the project.

3. Landscape contractor will buy plant material only from fire ant-free nurseries and suppliers.

4. Landscape contractor will test for LFA and identify the species correctly. Consistently without loss leaves testing and species identification.

5. Landscape contractor will wait at least 3 weeks for the best to be carried back to the colony for all plant and nursery materials at the supplier nursery regardless of the fire ant free claim.

6. Landscape contractor applies a barrier treatment, following the ban to all nursery materials at the supplier nursery regardless of the fire ant free claim.

7. Landscape contractor will stock all loose or nissy nursery materials with the powder mixture of sugar in the water or water indicated by the manufacturer and follow manufacturer’s safety precautions.
NOTES:
1. THIS PLAN IS DIAGRAMMATIC.
2. ALL PAVING IS EXISTING EXCEPT WHERE NOTED ON DEMOLITION PLAN.
3. PROVIDE NEW CONDUIT AND SLEEVING UNDER EXISTING WALKWAY WHERE SHOWN.

PROPERTY LINE, TYP.
EXISTING SHUT OFF VALVE, TYP.
EXISTING HOSE BIB, TYP.
CONDUIT, TYP.
EXISTING HOSE BIB IN VALVE BOX
EXISTING BACKFLOW PREVENTER, TYP.
PROPERTY LINE, TYP.
EXISTING POINT OF CONNECTION, TYP.
EXISTING HOSE BIB, TYP.
EXISTING SHUT OFF VALVE, TYP.
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EXISTING RAINGAGE CONTROLLER, TYP. CONTRACTOR TO VERIFY IF THERE IS OPEN STATIONS IF NOT CONTACT OWNER.
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CONDUIT, TYP.
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PROPERTY LINE, TYP.
IRRIGATION SCHEDULE

<table>
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<tr>
<th>MANUFACTURER/MODEL/DESCRIPTION</th>
<th>VALVE SIZE</th>
<th>CONDUIT &amp; SLEEVE CALLOUT</th>
<th>VALUE NUMBER</th>
<th>CONDUIT SIZE</th>
<th>VALUE FLOW</th>
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<tr>
<td>RAIN Bird PESB 1/2 IN-STEM REG</td>
<td>3/4&quot;</td>
<td></td>
<td>A1U945</td>
<td>1/2&quot;</td>
<td>7.6</td>
<td>1.27</td>
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<tr>
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<td></td>
<td>41U945</td>
<td>1&quot;</td>
<td>14</td>
<td>2.5</td>
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<tr>
<td>RAIN Bird PESB 1&quot; IN-STEM REG</td>
<td>1-1/2&quot;</td>
<td></td>
<td>81U945</td>
<td>1-1/2&quot;</td>
<td>28</td>
<td>4.7</td>
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<tr>
<td>RAIN Bird PESB 1-1/2&quot; IN-STEM REG</td>
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<td></td>
<td>81U955</td>
<td>2&quot;</td>
<td>35</td>
<td>6.0</td>
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</table>

IRRIGATION GENERAL NOTES

1. THIS PLAN IS DIAGRAMMATIC. IRRIGATION SYSTEM IS SUBJECT TO FIELD ADJUSTMENTS DUE TO MOUNTAINOUS SITE CONDITIONS. LOCATE ALL SPRINKLER HEADS WITHIN PLANTING AREAS, UNLESS OTHERWISE NOTED. PLACE MANIFOLD PAVING AREAS WHERE NO SLEEVES ARE SHOWN. AVOID ANY CONFLICT BETWEEN UNDERGROUND UTILITIES, STRUCTURES AND PLANTINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. BURY PRESSURE MAINS 24" DEEP MINIMUM AND LATERAL LINES 12" DEEP MINIMUM IN PLANTING AREAS.

2. CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT IN IRRIGATION LINES, CONTROL WIRES, VALVES, HEADS, ETC. PER SPECIFICATIONS. EXISTING GATE VALUES, POINT OF CONNECTION, ETC. ARE DERIVED FROM THE BEST AVAILABLE INFORMATION AND ON-SITE INSPECTION. THE CONTRACTOR SHALL VERIFY THESE POINTS OF CONNECTION NOTED AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.

3. THE IRRIGATION SYSTEM IS DESIGNED TO PERFORM WITH A STATIC PRESSURE OF 60 PSI AND WATER FLOW OF 16 GPM AT THE POINT OF CONNECTION (F.F.C.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THESE REQUIREMENTS THROUGH IN-SYSTEM TESTING AND REPORT THE FINDINGS TO THE LANDSCAPE ARCHITECT AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION.

4. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND OBSERVE ALL LOCAL CODES AND REGULATIONS. THE CONTRACTOR SHALL CONFIRM ALL SITES DIMENSIONS AND CONDITIONS, AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.

5. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SLEEVES, CONDUITS, JOINTS, MAINLINES AND LATERALS UNDER PAVEMENT AND THROUGH WALLS. CONTRACTOR SHALL ENSURE THAT THESE ITEMS ARE LABED PRIOR TO PLACEMENT OF PAVING OR WALL STRUCTURES.

6. LOCATE AND INSTALL ALL SPRINKLER HEADS 6" FROM SIDEWALKS, CURBS, DRIVEWAYS, BUILDING AND WALL UNLESS OTHERWISE NOTED. FLEX TUBING SHALL BE INSTALLED ON ALL SPRINKLER HEADS TO AVOID IF PLANTS ARE CUT PERPETRATED AND MAINLINE TO WATER REQUIREMENTS OF PLANTS.

7. PERFORM HYDROSTATIC TEST BY APPLYING CONTINUOUS STATIC PRESSURE OF 100 PSI MINIMUM FOR ONE (1) HOUR. NOTIFY THE ARCHITECT AT LEAST THREE (3) DAYS IN ADVANCE OF TEST. REPAIR LEAKS THAT DEVELOP AND REPEAT TEST. DO NOT BACKFILL UNTIL THERE IS NO FURTHER SIGN OF LEAKAGE.

8. PERFORM OPERABILITY TEST BY OPENING REMOTE CONTROL VALVE AND TEST CIRCUITS FOR LEAKS AROUND BONDED AND THREADED PVC FITTINGS. INSPECT LEAKS AND REPEAT TESTS. NOTIFY THE ARCHITECT AT LEAST THREE (3) DAYS IN ADVANCE OF TEST. DO NOT BACKFILL UNTIL THERE IS NO FURTHER SIGN OF LEAKAGE.

9. PERFORM COVERAGE TEST BEFORE PLANTING PERIOD. RUN AUTOMATIC CONTROLLER THROUGH ALL IRRIGATION CYCLES. CHECK WATERING COVERAGE AND UNIFORMITY TO COMPANY OF THE ENGINEER. RUN SYSTEM UNITS. THERE ARE PUDGES OR THERE IS SLOW FLOW TO DETERMINE INIAL IRRIGATION TIME AND NUMBER OF CYCLES FOR WEEK NEEDS TO WATER REQUIREMENTS OF PLANTS.

10. LOCATE VALUE BOXES AWAY FROM PEDESTRIAN WALKWAYS AND ENDS HOUSES AND SCREEN WITH PLANT MATERIAL. SCREEN WITH PLANT MATERIAL ON DIALED EFFICIENCY AND AS REQUIRED TO CREATE LARGE HOLES FOR INPLANTING DESIGN.

11. IF PLANS DO NOT SPECIFY DEPTH OF EXCAVATION, PROVIDE MINIMUM COVER TO FINISH GRADE AS FOLLOWS:
   a. 24" FOR IRRIGATION MAINLINE
   b. 12" FOR IRRIGATION LATERAL
   c. 8" FOR mainlagen AND CONDUIT UNDER LANDING PAVEMENT
   d. 8" FOR SLEEVES UNDER ROADWAY PAVEMENT
   e. FOR CONTROLLER WIRES AND CONDUITS IN PAVED AREAS. DEPTH EQUAL TO THAT OF PRESSURE IRRIGATION PIPES.

12. AFTER INSTALLATION OF IRRIGATION, LANDSCAPE CONTRACTOR SHALL PROVIDE MARK UP INFORMATION OF ANY CHANGES MADE IN THE FIELD TO THE FINAL DESIGN PLANS. PROVIDE THREE (3) REPRODUCIBLE DOCUMENTS SUCCESSIVE (TWO) 8" X 10" COPIES TO THE ARCHITECT UPON COMPLETION OF IRRIGATION INSTALLATION WORK ON OR BEFORE THE 30 DAYS BEFORE FINAL INSPECTION. WHILE/WHAT IS SUCCED.

13. IRRIGATION SYSTEM DESIGNED FOR CURRENT POTABLE WATER SYSTEM CONNECTION AND PRESSURE. IRRIGATION SYSTEM DESIGN AND COMPONENTS SHOULD BE REVISED TO ENSURE COMPATIBILITY WHEN SYSTEM IS CONNECTED TO FUTURE NON-POTABLE WATER SOURCE.

14. CONTRACTOR SHALL MAKE ALL WIRE SPLICES INSIDE OF VALUE BOXES WITH 3M DBR/Y-6 WIRE SPLICE KITS. SPLICE KITS SHALL BE UL Listed FOR WET ENVIRONMENTS AND RATED FOR 600 VOLT APPLICATIONS.
This work was prepared by me or under my supervision and construction of this project will be under my observation. Supervision and Observation of this project is as defined in Section 1.2 of the Hawaii Administrative Rules, Title 16, Chapter 115, Professional Engineers, Architects, Land Surveyors, and Landscape Architects.

**Drawing Title:** PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS

**Project Title:** 7142 MAKAHUENA PLACE

**Expiration Date of the License:**

**List of Drawings:**

1. Irrigation Trenching Detail
2. Thrust Blocking
3. Rotary Pop-Up
4. Remote Control Valve
5. Grounding Rod
6. Hose Bib in Valve Box Detail
7. DBR6 & DBR Y-6 Wire Splice Detail
8. Pre-Insulated Super Insulated Waterproof Wire Splice Kit

**Details:**

- 3558.01: 11/06/2020
- PBR RH
- PBR Hawaii

**Scale:**

- Piping and Fittings: 1/8"
- Structural: 1/4"
- Foundation: 1/4"
- Plan View: 1/4"
- Section View: 1/4"

**Notations:**

- Install part circle pop-up heads 6" from edge of paved area.
- 12" Rotary Pop-Up
- 4" Rotary Pop-Up Detail
- Hose Bib in Valve Box Detail
- Pre-Insulated Super Insulated Waterproof Wire Splice Kit
- Box valve with cover
- Brick (1 of 2, 2 min. to stabilize valve box)

**General Notes:**

- All drawing requirements per controllers shall comply to local electric code.
- Grounding rod shall not be located in the same trench at the buildings. Use separate lateral lines.
- Valve box shall be maintained with a watertight seal. They shall be installed to the valve box using the specified type of electrical wire.
NOTES:

1. ALL PROPERTY LINES & DRAINAGE EASEMENTS ARE APPROXIMATE ONLY. ALL EXISTING LAND FORMS SHOWN ON DRAWINGS ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION; CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING NEW WORK WITHIN THE LIMITS OF WORK AND THE PROPERTY BOUNDARY ONLY.

2. NEW FENCE, GATES, SEWER, AND AHW ARE NOT IN THIS CONTRACT.

3. NEW RAISED PLANTER FOR THE FUTURE PLANTING OF HALA DIETRICH'S POTATO BY COMMUNITY MEMBERS HAWAIKUS. REFER TO DETAIL H-3-3-1 FOR RAISED PLANTER DETAIL.

4. CONTRACTOR SHALL REPAIR ALL EXISTING LAWN AREAS DAMAGED BY CONSTRUCTION, INCLUDING ANY IRRIGATION WORK. NEW TURFGRASS SHALL MATCH EXISTING TURFGRASS; CONTRACTOR TO VERIFY ON SITE.

5. FURNISH NEW PLANTS TRUE TO GENUS, SPECIES, VARIETY, STEM FORM, SHAPE, AND LIVING FEATURES INDICATED IN THE PLANT SCHEDULE AND COMPLYING WITH ANSI Z60.1, AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING.

6. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, SOLELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGG, LARVAE, AND DEFECTS SUCH AS HOLES, SUN SCALD, INJURIES, ARBRESSIONS, AND DISFIGUREMENT.

7. NEW TREES AND PALMS WITH DAMAGED, CRACKED, MULTIPLE LEADERS, VERTICAL BRANCHES, CROSSING BRANCHES, OR STEM GIRLING, WILL BE REJECTED; NEW PALMS WITH DAMAGED BRANCHINGS WILL BE REJECTED.

EXPIRATION DATE OF THE LICENSE

This work was prepared by me or under my supervision and construction of this project will be under my observation.

Supervision and Observation of this project is as defined in Section 1.2 of the Hawaii Administrative Rules, Title 16, Chapter 115, Professional Engineers, Architects, Land Surveyors, and Landscape Architects.

PLANTING PLAN:

- 7142 MAKAHUENA PL.
- 7146 MAKAHUENA PL.
- 854 WAIOLI ST.
- 7141 MAKAHUENA PL.
- Property Line, Typ.
- Easement Line, Typ.
- Limits of Work, Typ.
- Existing Palm, Typ.
- Existing Tree, Typ.
- Landscape Edging, Typ.
- Random Puka Lava Pavers
- Property Line, Typ.
- Easement Line, Typ.
- Limits of Work, Typ.
- Existing Palm, Typ.
- Existing Tree, Typ.
- Existing Plant, Typ.
- Future AHW (by others)
- Future Interpretive Sign (by others)
- Future Arbor
ture Sign (by others)
- Future Arbor
ture Sign (by others)
- Property Line, Typ.
- Easement Line, Typ.
- Limits of Work, Typ.
- Existing Plant, Typ.
- Existing Tree to Remain, Typ.
- Existing Lawn to Remain, Repair as Necessary
- New Fence (by others)
- Root Barrier
- Litter Receptacle
- Random Puka Lava Pavers
- Future Arbor (by others)
## PLANT SCHEDULE

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### PLANTING NOTES:

1. **Landscape Contractor shall field verify all plant quantities and dimensions prior to installation. Quantities shown on the plant list and on the tree analysis report shall be for reference only.**
2. **The landscape contractor shall be responsible for locating and protecting existing utilities.**
3. **Prior to tree and shrub hole excavation, the landscape contractor shall be staked out by the contractor for approval by the landscape architect.**
4. **Plants shall be tagged by the LA and delivered to the project. Each tree shall be tagged by the LA, trees delivered to the project without LA's tag shall be rejected.**
5. **All tree work must be performed by an arborist.**
6. **Plants shall meet size, indicated by minimum height and spread. Plants shall be straight and uniformly shaped, unless unique or special characteristics are specified, and shall be undamaged, sound, healthy, vigorous and free of disease and insect infestation. Plants not conforming to these requirements on delivery to the project and at the end of the plant establishment period will be rejected.**
7. **The landscape contractor shall be solely responsible for the complete removal and damages resulting from planting any plant species listed on the Hawai'i Department of Agriculture 'Noxious Weed List' as defined in Title 4:68:1 or the Federal Noxious Weed List as defined in Title 7 of the Code of Federal Regulations or the ANSI-Z133 Safety Standards.**
8. **All tree work must be performed by an arborist.**
9. **For the duration of construction within the drip line of trees, there must be: no changes, alterations or disturbance to the tree canopy; no damages resulting from planting any tree species listed on the Hawai'i Department of Agriculture 'Noxious Weed List' as defined in Title 4:68:1 or the Federal Noxious Weed List as defined in Title 7 of the Code of Federal Regulations or the ANSI-Z133 Safety Standards.**
10. **The landscape architect shall inspect all trees at the place of growth and after the delivery to the project.**
11. **Each tree shall be tagged by the LA, trees delivered to the project without LA's tag shall be rejected.**
12. **The LA will inspect plants at the place of growth and after the delivery to the project. Each tree shall be tagged by the LA, trees delivered to the project without LA's tag shall be rejected.**

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**Notes:**

- **Materials schedules are for reference only.**
- **Verify actual quantities and dimensions prior to installation.**
- **Quantities shown on the plant list and on the tree analysis report shall be for reference only.**

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