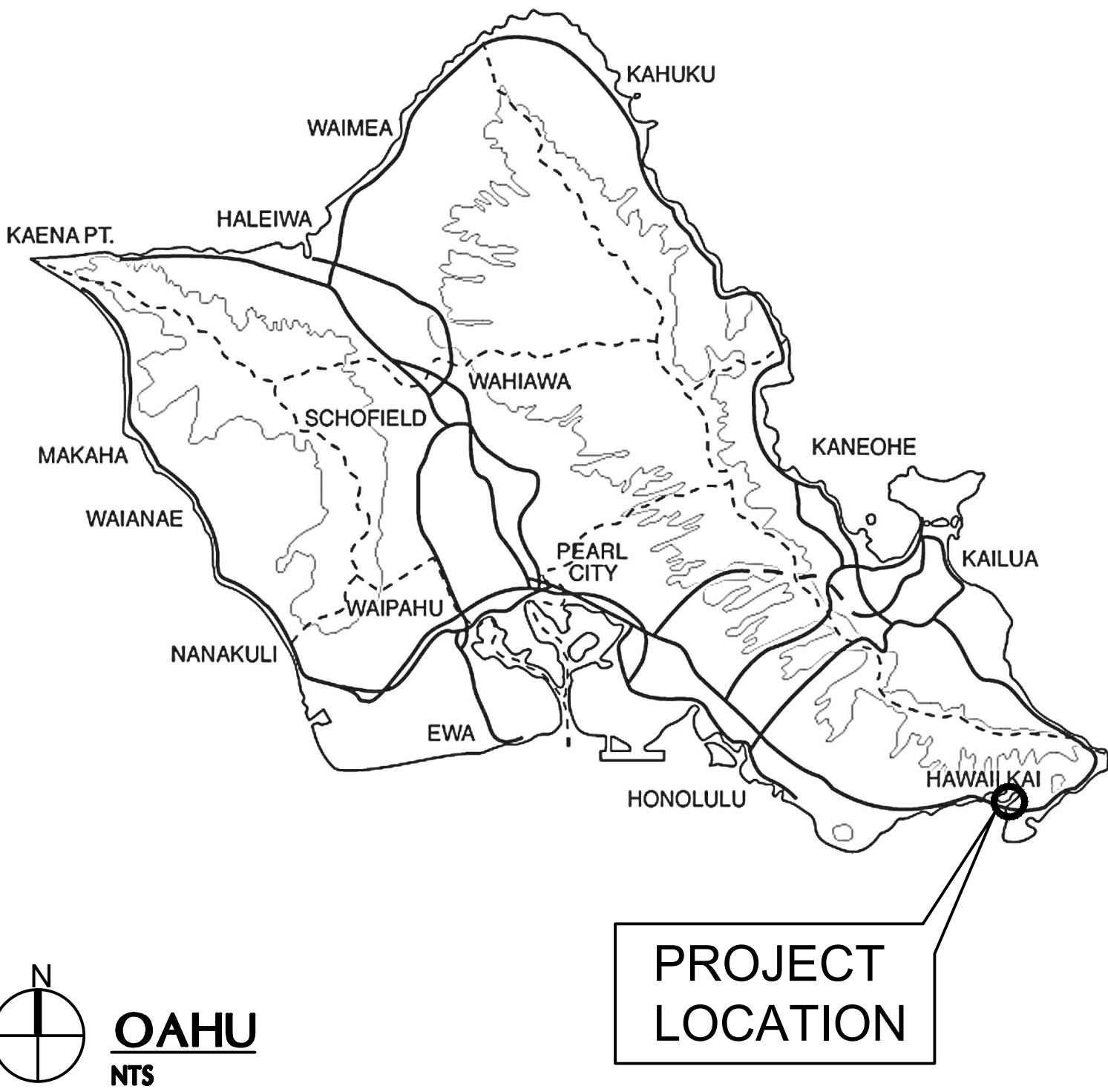
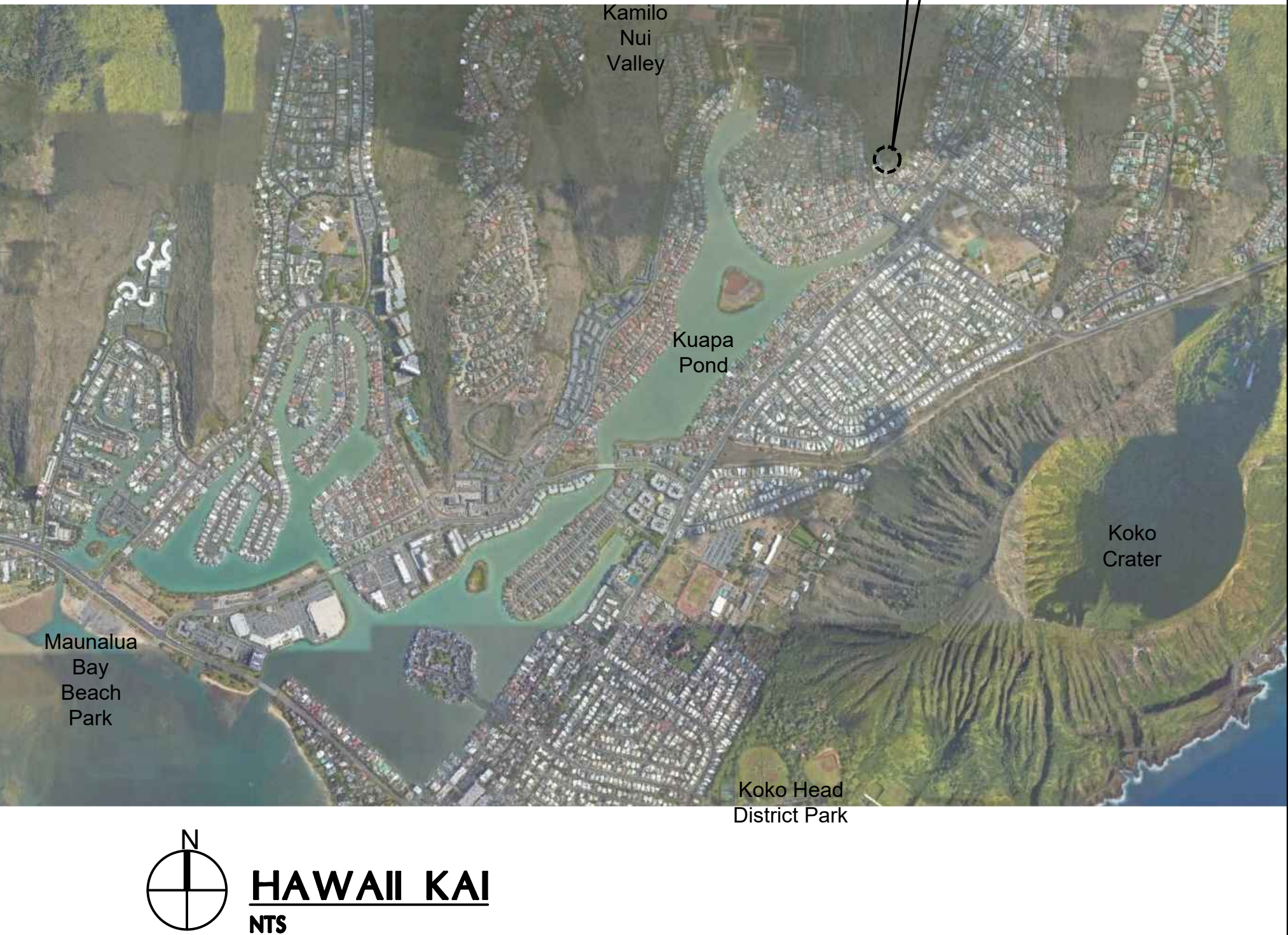


PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS

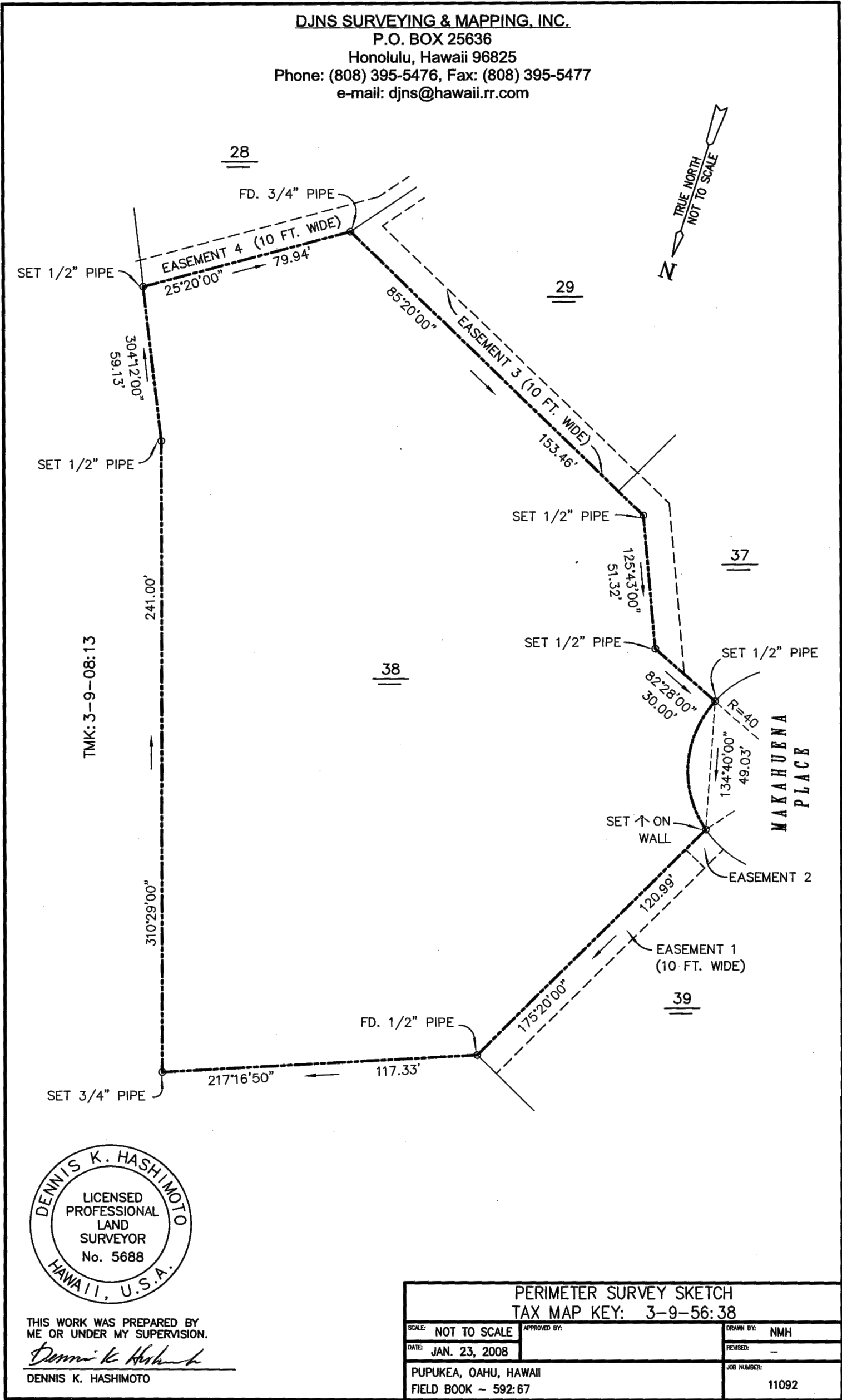
ISLAND MAP



VICINITY MAP



PROJECT SITE



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.

GENERAL INFORMATION:
PROPERTY OWNER: THE OFFICE OF HAWAIIAN AFFAIRS (OHA)
TAX MAP KEY: TMK 3-9-056: 038
STREET ADDRESS: 7142 MAKAHUENA PLACE
HONOLULU, HAWAII 96825
ZONING: RESIDENTIAL DISTRICT 5
STATE LAND USE DESIGN: URBAN
FEMA FLOOD DESIGNATION: D (UNDETERMINED FLOOD HAZARD)
LOT AREA: 50,057 SF (1.15 AC)
CULTURAL RESOURCES IDENTIFIED IN THE PROJECT AREA: SIHP # 50-80-15-0039: PAHUA HEIAU COMPLEX

REFERENCE CODES:
ALL CODES SHALL BE AS ADOPTED AND AMENDED BY THE CITY AND COUNTY OF HONOLULU:

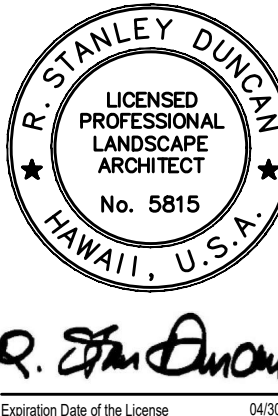
- International Building Code (IBC), 2006 Edition with local amendments
- International Energy Conservation Code (IECC), 2006 Edition with local amendments
- Uniform Plumbing Code (UPC), 2006 Edition with local amendments
- Uniform Fire Code (UFC), NFPA 1 2012 Edition with local amendments
- National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

OTHER APPLICABLE CODES:
EXCEPTION - 2004 AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES (2004 ADAAG)
RELATING TO A PROJECT UNDER REVIEW FOR HAWAII REVISED STATUTES (HRS) 103.50.
Project Name: Pahua Heiau Viewing Area Improvements (Office of Hawaiian Affairs)
Dept Project Number: 3297
The 2004 ADAAG contains a provision relating to "historic preservation." The general exception is applicable in alterations, as follows:

202.5 Alterations to Qualified Historic Buildings and Facilities. Alterations to a qualified historic building or facility shall comply with 202.3 and 202.4 EXCEPTION: Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply. 106.5 Defined Terms. Qualified Historic Building or Facility. A building or facility that is listed in or eligible for listing in the National Register of Historic Places, or designated as historic under appropriate State or local law.

DRAWING INDEX

SHEET	DESCRIPTION
G-001	TITLE SHEET
G-002	PROJECT NOTES
L-200	IRRIGATION PLAN
L-201	IRRIGATION SCHEDULE & NOTES
L-202	IRRIGATION DETAILS
L-300	PLANTING PLAN
L-301	PLANT SCHEDULE & NOTES
L-302	PLANTING DETAILS



PROJECT TITLE
PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS
7142 MAKAHUENA PLACE
HONOLULU, HI 96825
TMK 3-9-056: 038

REVISIONS	
No./Date	Description
△	
△	

DRAWING TITLE	
TITLE SHEET	
SCALE:	
DRAWN BY: PBR	CHECKED BY: RH
PROJECT NO. 3558.01	DRAWING NO. G-001
DATE: 11/06/2020	

GENERAL NOTES

1. THESE NOTES ARE TO BE USED FOR GENERAL REFERENCE IN CONJUNCTION WITH, AND AS A SUPPLEMENT TO ANY WRITTEN SPECIFICATIONS, APPROVED ADDENDA, AND CHANGE ORDERS ASSOCIATED WITH THESE LANDSCAPE CONSTRUCTION DOCUMENTS.
2. A QUALIFIED SUPERVISOR SHALL BE PRESENT ON SITE AT ALL TIMES.
3. THE GENERAL CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPED E THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL CONSTRUCTION ELEMENT LOCATIONS WITH OTHER TRADES PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATIONS OF EXISTING AND FUTURE UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH THE WORK TO BE DONE. NOTIFY THE OWNER OR LANDSCAPE ARCHITECT (LA) IMMEDIATELY SHOULD CONFLICTS ARISE.
4. OBSERVATION VISITS TO THE JOB SITE BY THE LANDSCAPE ARCHITECT DO NOT INCLUDE INSPECTIONS OF CONSTRUCTION METHODS AND SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
5. CONTRACTOR SHALL PROVIDE FIELD STAKING OF THE PROPERTY LINES WITHIN THE LIMITS OF WORK. FIELD STAKING OF THE PROPERTY LINES SHALL BE DONE BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF HAWAII. CONTRACTOR SHALL ENSURE THAT PROJECT WORK IS INSTALLED WITHIN THE PROPERTY LINES.
6. VERIFY CRITICAL DIMENSIONS, REFERENCE POINT LOCATIONS AND CONSTRUCTION CONDITIONS PRIOR TO INITIATING CONSTRUCTION. NOTIFY THE OWNER AND LA IMMEDIATELY SHOULD CONFLICTS ARISE.
7. CONSTRUCTION DETAILING, MATERIALS, EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED WITHIN THESE PLANS MAY BE CONSIDERED FOR USE PROVIDED PRIOR WRITTEN APPROVAL IS OBTAINED FROM OWNER, THE LA OR THE APPLICABLE GOVERNING AUTHORITY (AS REQUIRED) PRIOR TO IMPLEMENTATION.
8. AREAS TO BE PROTECTED FROM GRADING OR CONSTRUCTION DISTURBANCE ARE FENCED WITH ORANGE FENCING AS PER PLANS BY OWNER AND APPROVED BY LA PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITY OUTSIDE OF PROTECTED AREAS AND SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF PROTECTED AREAS ON A DAILY BASIS. DAMAGED AREAS THAT HAVE BEEN DESIGNATED TO BE PROTECTED SHALL BE RESTORED TO ORIGINAL CONDITIONS AT CONTRACTORS EXPENSE.
9. CONTRACTOR SHALL BE FAMILIAR WITH AND ADHERE TO ALL LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO THE PROJECT WORK. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF THE OWNER REPRESENTATIVE AND THE LA IMMEDIATELY.
10. CONTRACTOR SHALL INSPECT THE CONDITION OF EXISTING WORK FOR DEFECTS PRIOR TO BEGINNING WORK. ALL WORK WILL BE REVIEWED DURING THE FINAL ACCEPTANCE WALK. ANY DAMAGE TO EXISTING WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
11. WHERE 2 OR MORE REQUIREMENTS CREATE OVERLAPPING CONDITIONS, CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE LA IMMEDIATELY FOR INTERPRETATION.
12. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL DILIGENTLY CROSS-REFERENCE ALL CONTRACT DOCUMENTS. SHOULD CONTRACTOR NOTE OBVIOUS TECHNICAL OVERSIGHTS (I.E. LIGHT WITH NO ELECTRICAL HOOK-UP), IT IS TO BE ASSUMED THAT THIS WORK IS INCLUDED WITHIN THE BASE BID AMOUNT.
13. NEITHER THE LANDSCAPE ARCHITECT NOR THE OWNER WILL BE RESPONSIBLE FOR, OR HAVE CONTROL OR CHARGE OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NEITHER THE ARCHITECT NOR THE OWNER WILL BE RESPONSIBLE FOR, OR HAVE CONTROL OR CHARGE OVER, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OF THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.
14. IF ON ANY OCCASION THE CONTRACTOR FEELS THE OWNER OR ITS CONSULTANTS ARE REQUIRING WORK BEYOND THE CONTRACT DOCUMENTS, IT MUST BE IMMEDIATELY BROUGHT FORTH FORMALLY TO THE OWNER'S ATTENTION PER THE OR THE GENERAL CONDITIONS SO THAT A PROMPT RESOLUTION MAY BE DETERMINED WITH THE OWNER. WITHOUT THIS NOTIFICATION, ANY CLAIMS FOR ADDITIONAL COMPENSATION BASED ON EXCESSIVE CONSTRUCTION QUALITY STANDARDS SHALL BE WAIVED.
15. PUNCH LIST WORK WILL BE PERFORMED DURING REGULAR BUSINESS HOURS DURING THE WEEK UNLESS OTHERWISE DIRECTED BY THE OWNER.
16. IT IS TO BE UNDERSTOOD BY THE CONTRACTOR THAT IN ACCORDANCE WITH INDUSTRY, IT IS PROBABLE THAT ALL SPECIFIC CONSTRUCTION FIELD CONDITIONS ARE NOT DETAILED ON THE CONTRACT DOCUMENTS. IN THE EVENT OF THESE OCCURRENCES THE CONTRACTOR SHALL SUBMIT ITS PROPOSAL OF A DETAIL IN ACCORDANCE TO ACCEPTABLE INDUSTRY STANDARDS AND GOVERNING CODES AS WELL AS THE DESIGN INTENT OF THE CONTRACT DOCUMENTS. THE OWNER AND/OR ITS CONSULTANTS SHALL REVIEW SAID DETAIL FOR APPROVAL OR NECESSARY ALTERNATE EQUAL INDUSTRY STANDARDS. THE OWNER AND ITS CONSULTANTS WILL NOT BE RESPONSIBLE FOR ADDITIONAL COSTS OR CLAIMS TO THE WORK WITHIN THE AFORESAID POLICY.
17. IT IS THE INTENT THAT THE WORK INCLUDED UNDER EACH SECTION OF THE SPECIFICATIONS SHALL COVER THE MANUFACTURE, FABRICATION, DELIVERY, INSTALLATION, AND/OR ERECTION AND PERFORMANCE, WITH ALL INCIDENTALS THERETO, UNLESS OTHERWISE NOTED OR SPECIFIED.
18. THE CONTRACTOR IS CAUTIONED THAT WHEN A "WORK INCLUDED" OR "SECTION INCLUDES" PARAGRAPH IS INCLUDED, IT IS INTENDED TO BE GENERAL AND IN NO WAY LIMITS OR QUALIFIES THE CONTRACT REQUIREMENTS.
19. SPECIFICATIONS AND DRAWINGS ARE INTENDED TO AGREE AND BE MUTUALLY EXPLANATORY AND SHALL BE ACCEPTED AND USED AS A WHOLE AND NOT SEPARATELY. SHOULD ANY ITEM BE OMITTED FROM THE DRAWINGS AND BE INCLUDED IN THE SPECIFICATIONS OR VICE-VERSA, IT SHALL BE EXECUTED THE SAME AS IF SHOWN AND CONTAINED IN BOTH AT NO EXTRA COST TO THE OWNER. IT IS THE INTENT OF THE DOCUMENTS FOR THE CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS UNLESS NOTED OTHERWISE. ANY CONFLICT OR INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, ANY DISCREPANCIES WITHIN THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE SUBMITTED BY THE CONTRACTOR THROUGH THE OWNER TO THE LANDSCAPE ARCHITECT FOR INTERPRETATION.
20. ANY EXISTING GRADE ELEVATIONS AS DEPICTED ON THE CONTRACT DOCUMENTS ARE FOR INFORMATION PURPOSES AND ARE TO BE CONSTRUED AS ABSOLUTE. ANY OTHER FINISH GRADING REQUIRED TO MEET THE INDICATED FINAL GRADES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
21. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL ENSURE THAT THE PROJECT SITE IS CLOSED AND SECURE.
22. IN THE EVENT OF THE INADVERTENT DISCOVERY OF A HISTORIC PROPERTY DURING CONSTRUCTION, WORK WILL STOP IN THE IMMEDIATE VICINITY OF THE FIND. THE STATE HISTORIC PRESERVATION DIVISION (SHPD) WILL BE IMMEDIATELY NOTIFIED, AND THE PROCEDURES FOR THE INADVERTENT DISCOVERIES ESTABLISHED IN HAWAII ADMINISTRATIVE RULES 13-280 AND 13-300 WILL BE ADHERED TO.

PUBLIC HEALTH, SAFETY, & ENVIRONMENTAL NOTES

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND ENVIRONMENTAL QUALITY. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF THE OWNER REPRESENTATIVE AND THE LA IMMEDIATELY.
2. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
3. THE CONTRACTOR, AT HIS/HER OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS" AND TITLE 11, CHAPTER 55 "WATER POLLUTION CONTROL". BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46 "COMMUNITY NOISE CONTROL" IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION ACTIVITIES FOR THIS PROJECT WILL EXCEED THE ALLOWABLE NOISE LEVELS, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF HEALTH. THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 46 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES. APPLICATIONS AND INFORMATION ON VARIANCES ARE AVAILABLE AT THE ENVIRONMENTAL HEALTH SERVICES DIVISION, 591 ALA MOANA BLVD, HONOLULU, HAWAII 96813, OR BY TELEPHONE AT (586-4700).

ARCHAEOLOGICAL MONITORING NOTES

1. THE CONTRACTOR SHALL PROVIDE AN ARCHAEOLOGICAL MONITOR FOR THE DURING OF THE WORK WHERE GROUND DISTURBANCE WILL OCCUR (I.E. DIGGING, POURING FOOTINGS, ETC.).
- 1.1. CONTRACTOR SHALL PROVIDE AN ARCHAEOLOGICAL MONITOR FROM THE DLNR - SHPD PERMITTED FIRMS LIST FOR THE CURRENT YEAR.
- 1.2. THE PROJECT ARCHAEOLOGICAL MONITOR SHALL FOLLOW THE HAWAII ADMINISTRATIVE RULES, CHAPTER 13-279, RULES GOVERNING STANDARDS FOR ARCHAEOLOGICAL MONITORING STUDIES AND REPORTS.
2. THE CONTRACTOR SHALL OBTAIN A COPY OF THE SHPD-ACCEPTED "ARCHAEOLOGICAL PRESERVATION PLAN - PAHUA HEIAU" (DATED SEPTEMBER 2017) PREPARED BY NOHOPAPA HAWAII FROM THE OWNER.
- 2.1. THE CONTRACTOR AND ARCHAEOLOGICAL MONITOR SHALL BE RESPONSIBLE FOR REVIEW AND CONFORMANCE WITH THE ACCEPTED ARCHAEO. PRESERVATION PLAN.
- 2.2. ANY CONFLICTING DIRECTIONS BETWEEN THE ARCHAEO. PRESERVATION PLAN AND THIS DRAWING SET SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER.
3. THE CONTRACTOR SHALL COORDINATE AND ORGANIZE A PRE-CONSTRUCTION MEETING ATTENDED BY A REPRESENTATIVE FROM OHA, THE ARCHAEOLOGICAL MONITOR(S) FOR THE PROJECT, SHPD, WORK CREW SUPERVISOR(S), AND THE LANDSCAPE ARCHITECT. TOPICS THAT MUST BE DISCUSSED MUST INCLUDE INTENDED DEMOLITION EQUIPMENT AND GROUND DISTURBANCES. CONSTRUCTION MAY NOT BEGIN WITHOUT THIS MEETING.
4. THE CONTRACTOR SHALL NEITHER CONSTRUCT, STOCKPILE, DISTURB, NOR ALLOW VEHICULAR TRAFFIC BEYOND THE LIMITS OF WORK.

SPECIAL NOTE: LITTLE FIRE ANT PREVENTION

ELEUTHERODACTYLUS COQUI AND/OR ELUTHERODACTYLUS PLANROSTRIS:

1. PRIOR TO TRANSPORT TO THE PROJECT, INSPECT, TAKE PRECAUTIONS, AND CERTIFY THAT PLANT MATERIALS, EQUIPMENT AND VEHICLES ARE FREE OF COQUI FROGS AND/OR THIER EGGS.
2. IN THE EVENT OF THE PRESENCE OF COQUI FROGS AND/OR THEIR EGGS, THEY SHALL BE COMPLETELY DESTROYED AND REMOVED AND THE PLANT MATERIAL, EQUIPMENT, OR VEHICLE TREATED AS RECOMMENDED BY THE STATE AND RE-INSPECTED.
3. REPORT PRESENCE OF COQUI FROGS OR EGGS TO THE HAWAII DEPT. OF AGRICULTURE PEST HOTLINE AT (808) 643-PEST (7378), OR THE O'AHU INVASIVE SPECIES COMMITTEE (MISC) PH. (808) 266-7994 OR EMAIL: OISCMGR@HAWAII.EDU

SPECIAL NOTE: COQUI FROG PREVENTION

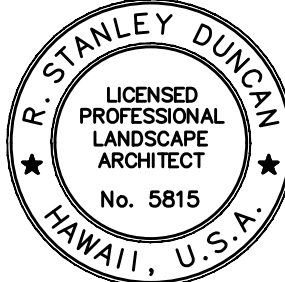
1. LANDSCAPE CONTRACTOR WILL NOTIFY LANDSCAPE ARCHITECT OF RECORD AND THE OWNER'S REPRESENTATIVE PRIOR TO DELIVERY OF ANY PLANT MATERIALS TO THE PROJECT.
2. LANDSCAPE CONTRACTOR WILL SUBMIT A PLAN TO THE LANDSCAPE ARCHITECT AND THE OWNER'S REPRESENTATIVE FOR APPROVAL TO PREVENT IMPORTATION OF LITTLE FIRE ANT (LFA) ONTO THE PROPERTY, I.E. PROVIDE QUARANTINE OR A HOLDING AREA FOR 6 WEEKS BEFORE PLANT DELIVERY TO PROJECT SITE.
3. LANDSCAPE CONTRACTOR WILL BUY PLANTS OR PLANTING MATERIALS ONLY FROM FIRE ANT-FREE NURSERIES AND SUPPLIERS.
4. LANDSCAPE CONTRACTOR WILL TEST FOR LFA AND IDENTIFY THE SPECIES CORRECTLY. CONSULT WEBSITE: WWW.LITTLEFIREANTS.COM FOR TESTING METHODS AND SPECIES IDENTIFICATION.
5. LANDSCAPE CONTRACTOR WILL BAIT AND ALLOW AT LEAST 2 WEEKS FOR THE BAIT TO BE CARRIED BACK TO THE COLONY FOR ALL PLANTS AND NURSERY MATERIALS AT THE SUPPLYING NURSERIES REGARDLESS OF THE FIRE ANT-FREE CLAIM.
6. LANDSCAPE CONTRACTOR WILL APPLY A BARRIER TREATMENT, FOLLOWING THE BAITING, TO ALL NURSERY MATERIALS AT THE SUPPLYING NURSERIES REGARDLESS OF THE FIRE ANT-FREE CLAIM.
7. LANDSCAPE CONTRACTOR WILL DRENCH ALL SOILS OR LOOSE NURSERY MATERIALS WITH THE PROPER MIXTURE OF SEVIN PER GALLON OF WATER INDICATED BY THE MANUFACTURER AND FOLLOW MANUFACTURER'S SAFETY PRECAUTIONS.

ABBREVIATIONS

ARCH	ARCHITECTURAL
ARCHAEO	ARCHAEOLOGICAL
⌀	BASELINE
BLDG	BUILDING
CAL	CALIPER
⊘	CENTRAL LINE
CJ	CONTROL JOINT
CONC	CONCRETE
CY	CUBIC YARD
DIA/ DIAM.	DIAMETER
DIAG	DIAGONAL
DLNR	DEPARTMENT OF LAND AND NATURAL RESOURCES
DET./DTL	DETAIL
DWG	DRAWING
EQ	EQUAL
ELEC	ELECTRICAL
EXST/ EXIST.	EXISTING
FG	FINISH GRADE
FP	FIRE PROTECTION
FT	FOOT/FEET
GAL	GALLON
GALV	GALVANIZED
HT	HEIGHT
LA	LANDSCAPE ARCHITECT
LC	LANDSCAPE CONTRACTOR
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OHA	OFFICE OF HAWAIIAN AFFAIRS
PA	PLANTING AREA
PL	PROPERTY LINE
POC	POINT OF CONNECTION
PSI	POUNDS PER SQUARE INCH
SF	SQUARE FEET
SHPD	STATE HISTORIC PRESERVATION DIVISION
SYM	SYMBOL
TYP	TYPICAL
TYP SYM.	TYPICAL SYMBOL
UNO	UNLESS NOTED OTHERWISE
W/	WITH

SYMBOLS

&	AND
@	AT
#	NUMBER
⌀	DIAMETER
%	PERCENT
=	EQUAL
±	PLUS OR MINUS
>	GREATER THAN
<	LESS THAN
≥	GREATER THAN OR EQUAL TO
≤	LESS THAN OR EQUAL TO
'	FOOT
"	INCH



Expiration Date of the License 06/2022

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.

PROJECT TITLE

PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS

7142 MAKAHUENA PLACE
HONOLULU, HI 96825
TMK 3-9-056: 038

REVISIONS

No./Date	Description
△	
△	

DRAWING TITLE

PROJECT NOTES

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

3558.01

DRAWING NO.

G-002

DATE:

11/06/2020

- 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.



Expiration Date of the License 04/2022

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.

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PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS
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HONOLULU, HI 96825
TMK 3-9-056: 038

REVISIONS

No./Date	Description
△	
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DRAWING TITLE

IRRIGATION PLAN

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

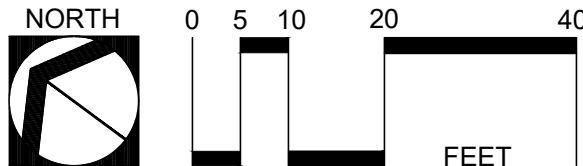
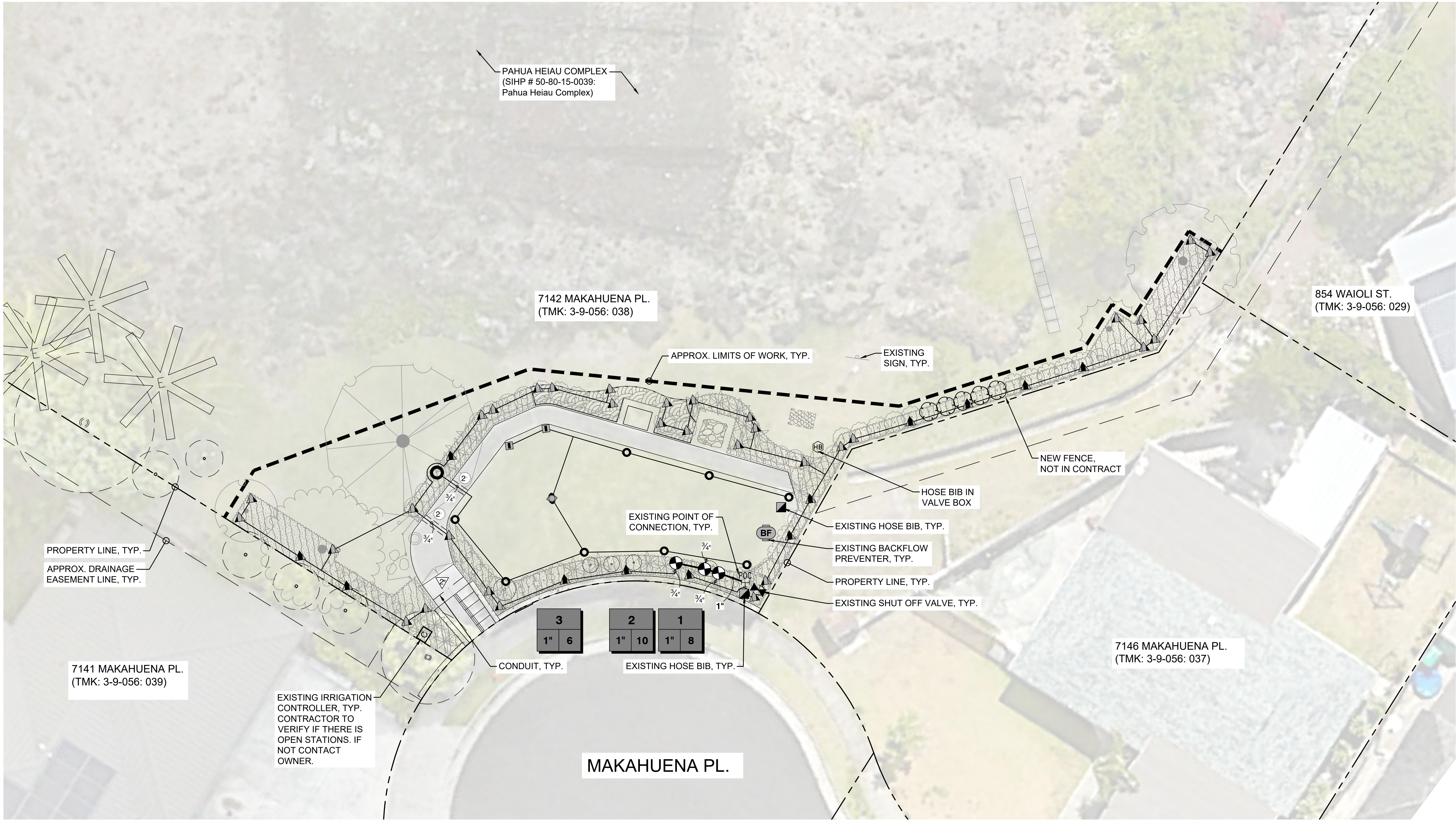
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DRAWING NO.

DATE:

11/06/2020

L-200



















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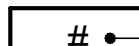

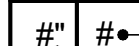

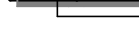
IRRIGATION PLAN

1" = 20'-0"

IRRIGATION SCHEDULE

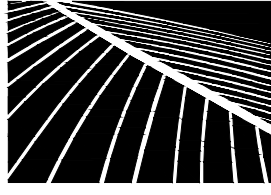
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	ARC	PSI	GPM	RADIUS
	RAIN BIRD R-VAN14 1804-SAM-P45 TURF ROTARY, 8' -14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	ADJ	45		11'
	RAIN BIRD R-VAN14 1804-SAM-P45 TURF ROTARY, 8' -14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	360	45	1.27	11'
	RAIN BIRD R-VAN18 1804-SAM-P45 TURF ROTARY, 13' -18' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	ADJ	45		13'
	RAIN BIRD R-VAN-STRIP 1812-SAM-P45 SHRUB ROTARY, 5' X15' (LCS AND RCS), 5' X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 SHRUB SPRAY BODY ON 12.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	LCS	45	0.24	4'x12'
	RAIN BIRD R-VAN-STRIP 1812-SAM-P45 SHRUB ROTARY, 5' X15' (LCS AND RCS), 5' X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 SHRUB SPRAY BODY ON 12.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	RCS	45	0.24	4'x12'
	RAIN BIRD R-VAN-STRIP 1812-SAM-P45 SHRUB ROTARY, 5' X15' (LCS AND RCS), 5' X30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 SHRUB SPRAY BODY ON 12.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	SST	45	0.48	4'x24'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD PESB 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION, WITH SCRUBBER TECHNOLOGY FOR RELIABLE PERFORMANCE IN DIRTY WATER IRRIGATION APPLICATIONS.
	EXISTING HOSE BIBB
	BUCKNER-SUPERIOR HB1F 3/4" X 1/2" FEMALE NPT RED BRASS HOSE BIBB.
	EXISTING SHUT OFF VALVE
	EXISTING REDUCED PRESSURE BACKFLOW PREVENTER 1"
	POINT OF CONNECTION 1" EXISTING POINT OF CONNECTION
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40
	CONTROL WIRE CONDUIT: PVC SCHEDULE 80 UL APPROVED TYPICAL CONDUIT FOR IRRIGATION CONTROL WIRE. CONDUIT SIZE SHALL ALLOW FOR IRRIGATION CONTROL WIRE TO EASILY SLIDE THROUGH CONDUIT MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

VALVE CALLOUT		CONDUIT & SLEEVE CALLOUT	
	VALVE NUMBER		CONDUIT SIZE
	VALVE FLOW		SLEEVE SIZE
	VALVE SIZE		

IRRIGATION GENERAL NOTES

- THIS PLAN IS DIAGRAMMATIC. IRRIGATION SYSTEM IS SUBJECT TO FIELD ADJUSTMENTS DUE TO UNANTICIPATED SITE CONDITIONS. LOCATE ALL MAINLINES, LATERALS, VALVES AND SPRINKLER HEADS WITHIN PLANTING AREAS, UNLESS OTHERWISE NOTED. PLACE MAINLINE IN PLANTING 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 MAINLINES 24" DEEP MINIMUM AND LATERAL LINES 12" DEEP MINIMUM IN PLANTING AREAS.
- CONTRACTOR SHALL INSTALL ALL IRRIGATION EQUIPMENT (IE. IRRIGATION LINES, CONTROL WIRES, VALVES, HEADS, ETC.) PER SPECIFICATIONS. EXISTING GATE VALVES, POINT OF CONNECTION, ETC. ARE DERIVED FROM THE BEST AVAILABLE INFORMATION AND ON-SITE INSPECTION. THE CONTRACTOR SHALL VERIFY THOSE POINTS OF CONNECTION NOTED AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- THE IRRIGATION SYSTEM WAS DESIGNED TO PERFORM WITH A STATIC PRESSURE OF 60 PSI AND WATER FLOW OF 16 GPM AT THE POINT OF CONNECTION (P.O.C.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THESE REQUIREMENTS THROUGH ONSITE TESTING AND SHALL REPORT THE FINDINGS TO THE LANDSCAPE ARCHITECT AT LEAST THIRTY (30) DAYS PRIOR TO START OF CONSTRUCTION.
- 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.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SLEEVES, CONDUITS, MAINLINES AND LATERALS UNDER PAVEMENT AND THROUGH WALLS. CONTRACTOR SHALL ENSURE THAT THESE ITEMS ARE LAID PRIOR TO PLACEMENT OF PAVEMENT OR WALL STRUCTURES.
- 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 HEAD ALONG SIDEWALKS, DRIVEWAYS, AND PARKING SPACES. ADJUST ALL SPRINKLER HEADS AND FLOW CONTROL FOR MAXIMUM COVERAGE AND MINIMUM OVERTHROW AND MISTING. OPERATE ONLY ONE VALVE AT A TIME PER CONTROLLER, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WORK.
- WITHIN 30 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT FOR THE ARCHITECT'S ACCEPTANCE SIX (6) COPIES OF DETAILED SCALED DRAWINGS AND WIRING DIAGRAMS FOR PERMANENT AND TEMPORARY IRRIGATION SYSTEMS. NOT PROPOSED DEVIATIONS FROM THE CONTRACT. INCLUDE SAMPLES OF MATERIALS, IF REQUIRED BY CONTRACT.
- PERFORM HYDROSTATIC TEST BY APPLYING CONTINUOUS STATIC PRESSURE OF 100 PSI MINIMUM FOR ONE (1) HOUR. NOTIFY THE ARCHITE 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.
- PERFORM OPERABILITY TEST BY OPENING REMOTE CONTROL VALVE AND TEST CIRCUITS FOR LEAKS AROUND BARBED AND THREADED PVC FITTINGS. REPAIR 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.
- PERFORM COVERAGE TEST. BEFORE PLANTING PERIOD, RUN AUTOMATIC CONTROLLER THROUGH ALL IT'S CYCLES. CHECK WATERING FOR COVERAGES AND UNIFORMITY IN COMPANY OF THE ENGINEER. RUN SYSTEM UNTIL THERE ARE PUDDLES OR THERE IS SHEET FLOW TO DETERMINE INITIAL IRRIGATION TIME AND NUMBER OF CYCLES PER WEEK NEEDED TO WATER REQUIREMENTS OF PLANTS.
- LOCATE VALVE BOXES AWAY FROM PEDESTRIAN WALKWAYS AND ENSURE BOXES ARE SCREEN WITH NEW PLANT MATERIAL. GROUP VALVE BOXES WHENEVER FEASIBLE AND AS APPROVED BY LANDSCAPE ARCHITECT. BOXES SHALL NOT DISPLACE PLANT MATERIAL TO CREATE LARGE VOIDS IN PLANTING DESIGN.
- IF PLANS DO NOT SPECIFY DEPTH OF EXCAVATION, PROVIDE MINIMUM COVER TO FINISH GRADE AS FOLLOWS:
 - 24" FOR IRRIGATION MAINLINE.
 - 12 INCHES FOR IRRIGATION LATERAL
 - 24 INCHES FOR SLEEVE OR CONDUIT UNDER LANDSCAPE PAVEMENT.
 - 36 INCHES FOR SLEEVE OR CONDUIT UNDER ROADWAY PAVEMENT.
 - FOR CONTROLLER WIRES AND CONDUITS IN UNPAVED AREAS, DEPTH EQUAL TO THAT OF PRESSURE IRRIGATION PIPE.
- 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 COPIES DOCUMENTING THESE 'AS-BUILT' CONDITIONS TO THE ARCHITECT UPON COMPLETION OF IRRIGATION INSTALLATION WORK OR THIRTY (30) DAYS BEFORE FINAL INSPECTION, WHICHEVER IS SOONER.
- IRRIGATION SYSTEM IS DESIGNED FOR CURRENT POTABLE WATER SYSTEM CONNECTION AND PRESSURE. IRRIGATION SYSTEM DESIGN AND COMPONENTS SHOULD BE REVIEWED TO ENSURE COMPATIBILITY WHEN SYSTEM IS CONNECTED TO FUTURE NON-POTABLE WATER SOURCE.
- CONTRACTOR SHALL MAKE ALL WIRE SPLICES INSIDE OF VALVE BOXES WITH 3M DBR/Y-6 WIRE SPLICE KITS. SPLICE KITS SHALL BE UL LISTED FOR WET ENVIRONMENTS AND RATED FOR 600-VOLT APPLICATIONS.



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Expiration Date of the License 04/30/22

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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.

PROJECT TITLE

**PAHUA HEIAU PUBLIC
VIEWING AREA
LANDSCAPE
IMPROVEMENTS**

7142 MAKAHUENA PLACE
HONOLULU, HI 96825
TMK 3-9-056: 038

REVISIONS

No./Date	Description
△	
△	

DRAWING TITLE

**IRRIGATION SCHEDULE &
NOTES**

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

3558.01

DRAWING NO.

DATE:

11/06/2020

L-301

1 IRRIGATION TRENCHING DETAIL
1" = 1'

5 GROUNDING ROD
1 1/2" = 1'-0"

2 THRUST BLOCKING
 $3/4" = 1'-0"$ 03568.01-35

4 REMOTE CONTROL VALVE
NOT TO SCALE 03568.01-13

7 DBR6 & DBR Y-6 WIRE SPLICE DETAIL
1" = 1"

3 12" ROTARY POP UP
NOT TO SCALE 03568.01-11

5 4" ROTARY POP-UP DETAIL

NOT TO SCALE

03568.01-08

8 HOSE BIB IN VALVE BOX DETAIL
1 1/2" = 1'-0" 01939.35-40

6 PE-WIRE SPLICE

NOT TO SCALE

03568.01-15



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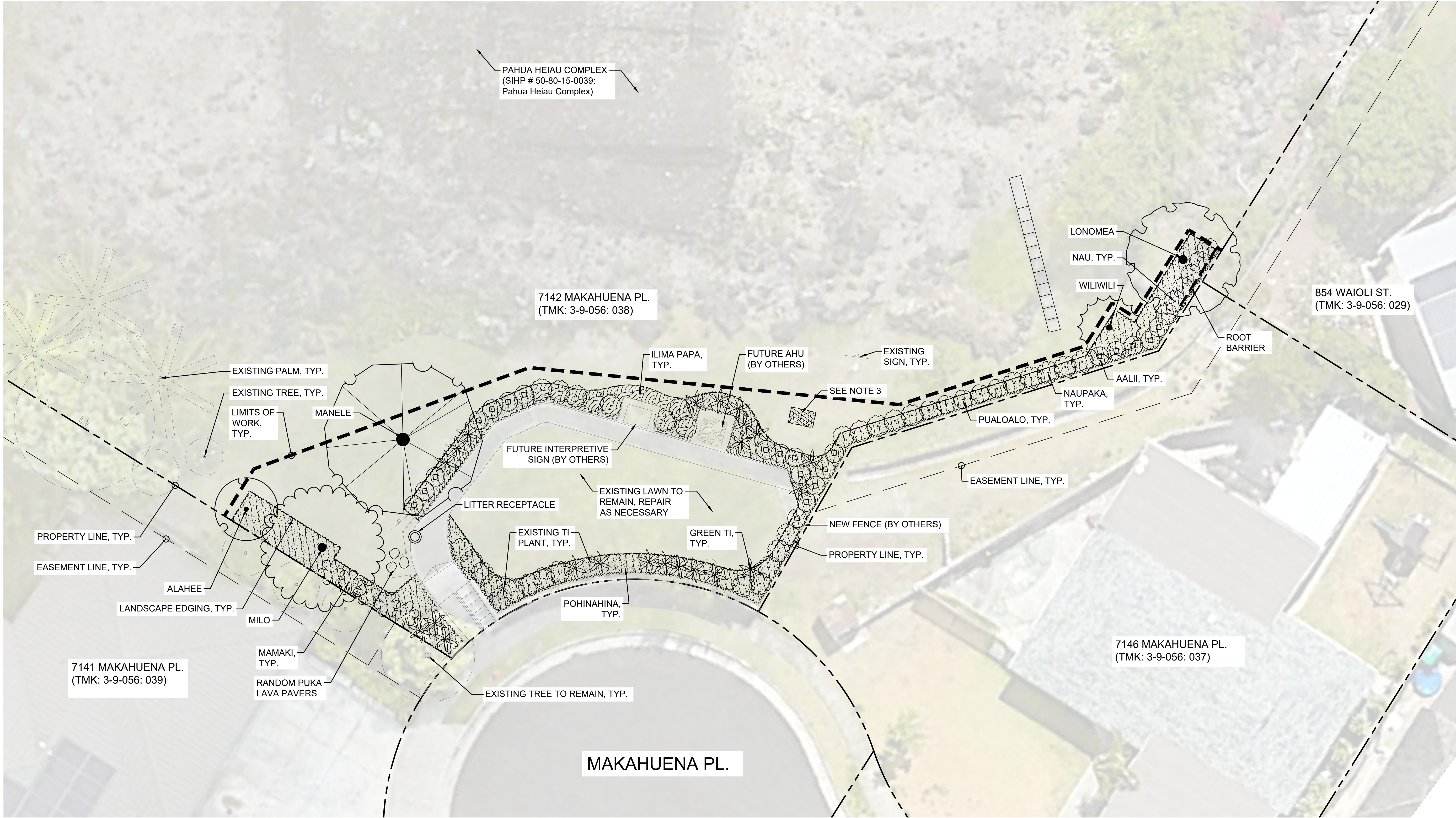
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IRRIGATION DETAILS

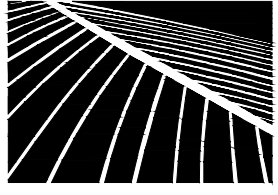
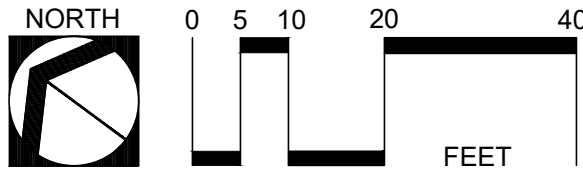
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DRAWN BY: PBR	CHECKED BY: RH
PROJECT NO. 3558.01	DRAWING NO. L-211
DATE: 11/06/2020	

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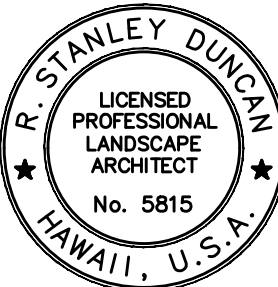
1. ALL PROPERTY LINES & DRAINAGE EASEMENTS ARE APPROXIMATE ONLY. ALL EXISTING CONDITIONS SHOWN ON DRAWINGS ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING NEW WORK WITHIN THE LIMITS OF WORK AND THE PROPERTY BOUNDARY ONLY.
2. NEW FENCE, GATES, SIGNAGE, AND AHU ARE NOT IN THIS CONTRACT.
3. NEW RAISED PLANTER FOR THE FUTURE PLANTING OF UALA (SWEET POTATO) BY COMMUNITY MEMBERS/ STEWARDS. REFER TO DETAIL 9/ L-302 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, SHEARING, AND OTHER 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, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, HOLES, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
7. NEW TREES/PALMS WITH DAMAGED, CROOKED, MULTIPLE LEADERS, TIGHT VERTICAL BRANCHES, CROSSING TRUNKS, OR STEM GIRDLING ROOTS WILL BE REJECTED; NEW PALMS WITH CROOKED TRUNKS WILL BE REJECTED.



1 PLANTING PLAN
1" = 20'-0"



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R. Stanley Duncan
Expiration Date of the License 06/2022

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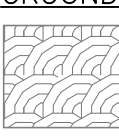
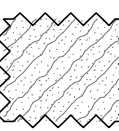
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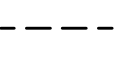


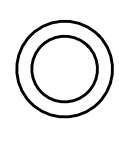
11/06/2020

L-300

PLANT SCHEDULE

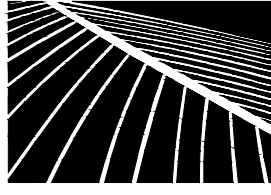
TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HEIGHT	TRUNK	REMARKS
	1	ERYTHRINA SANDWICENSIS	WILIWILI	5 GAL.		3'-5' HT.	STRAIGHT TRUNK	SYMMETRICAL BRANCHING
	1	PSYDRAX ODORATA	ALAHEE	25 GAL.	1" CAL. MIN.	4'-6' HT.	STRAIGHT TRUNK	SYMMETRICAL & FULL CANOPY
	1	SAPINDUS OAHUENSIS	LONOMEA	15 GAL.	1" CAL. MIN.	6'-8' HT.	STRAIGHT TRUNK	SYMMETRICAL & FULL CANOPY
	1	SAPINDUS SAPONARIA	MANELE	25 GAL.	2" CAL. MIN.	8'-10' HT.	STRAIGHT TRUNK	SYMMETRICAL & FULL CANOPY
	1	THESPESIA POPULNEA	MILO	25 GAL.	2" CAL. MIN.	8'-10' HT.	STRAIGHT TRUNK	SYMMETRICAL & FULL CANOPY
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS		
	22	CORDYLINE FRUTICOSA 'EMERALD GREEN'	'EMERALD GREEN' T	3 GAL	EQ. SPACING	BROWN TRUNK VARIED HT. 12"-18"		
	21	DODONEA VISCOSA	AALII	3 GAL	EQ. SPACING	FULL & BUSHY, UNIFORM SIZE, MIN. 2FT HT.		
	19	GARDENIA BRIGHAMII	NAU	3 GAL.	EQ. SPACING	FULL & BUSHY, UNIFORM SIZE, MIN. 2FT HT.		
	5	HIBISCUS ARNOTTIANUS 'PUALOALO'	PUALOALO	3 GAL.	EQ. SPACING	FULL & BUSHY, UNIFORM SIZE, MIN. 2FT HT		
	5	PIPTURUS ALBIDUS	MAMAKI	3 GAL.	AS SHOWN	FULL & BUSHY		
	20	SCAEVOLA SERICEA	NAUPAKA KAHAKAI	3 GAL.	EQ. SPACING	FULL & BUSHY, UNIFORM SIZE, MIN. 2FT. HT		
GROUNDCOVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS		
	110 SF	SIDA FALLAX 'PAPA'	'ILIMA PAPA	4" POTS	12" o.c.	TRIANGULAR SPACING		
	875 SF	VITEX ROTUNDIFOLIA	POHINAHINA	4" POTS	12" o.c.	TRIANGULAR SPACING		

MATERIALS SCHEDULE

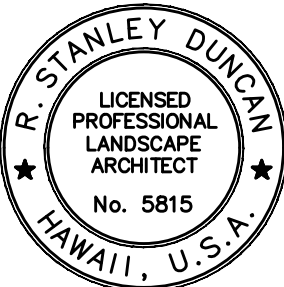
SYMBOL	DESCRIPTION	QTY
	IMPORTED SCREENED TOPSOIL - 4" LAYER	13 CY
	BARK MULCH - 2" LAYER	6.5 CY
	LANDSCAPE EDGING (RECYCLED COMPOSITE HEADER)	310 LF
	ROOT BARRIER - 24" DEPTH	10 LF
	TEXTURED RANDOM PUKA LAVA PAVER SIZE: 18" DIAMETER x 1.5" THICK SUPPLIER: GEOBUNGA PHONE: 808-422-4567 (KAKAAKO LOCATION) 808-259-5678 (WAIMANALO LOCATION)	3 EA
	36 GALLON SIDE-DEPOSIT LITTER RECEPTACLE MANUFACTURER: VICTOR STANLEY MODEL: SDC-36 WITH STANDARD LINER COLOR: BRONZE SALES REPRESENTATIVE: SARAH KWON EMAIL: sarahk@victorstanley.com PHONE: 1-800-368-2573 x372	1 EA

PLANTING NOTES:

1. LANDSCAPE CONTRACTOR SHALL FIELD VERIFY ALL PLANT QUANTITIES AND DIMENSIONS PRIOR TO INSTALLATION. QUANTITIES SHOWN ON PLANT LIST AND MATERIAL SCHEDULES ARE FOR REFERENCE ONLY, VERIFY ACTUAL QUANTITIES AS SHOWN ON PLAN. IF THERE IS A DISCREPANCY, THE PLANTING PLAN SHALL TAKE PRECEDENCE.
2. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES.
3. PRIOR TO TREE AND SHRUB HOLE EXCAVATION, ALL PLANTING LOCATIONS SHALL BE STAKED OUT BY CONTRACTOR FOR APPROVAL BY LANDSCAPE ARCHITECT (LA). DO NOT PLANT UNTIL GROUND HAS BEEN PREPARED AND FREE OF STONES GREATER THAN 1/2", DIA., SITE IS NEAT, ORDERLY, AND THE LA ACCEPTS SITE FOR PLANTING.
4. NOTIFY LA OF ANY DISCREPANCIES IN PLANT LOCATIONS OR INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCE IN PLANS AND ACTUAL FIELD CONDITIONS.
5. NOTIFY LA 30 DAYS PRIOR TO PLANTING OPERATIONS FOR APPROVAL OF ALL PLANT MATERIAL AT PLACE OF GROWTH. ALL PLANT MATERIAL NOT APPROVED BY THE LA WILL BE SUBJECT TO REJECTION. 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 WILL BE REJECTED.
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. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE COMPLETE REMOVAL AND DAMAGES RESULTING FROM PLANTING ANY PLANT SPECIES LISTED ON THE HAWAII DEPARTMENT OF AGRICULTURE 'NOXIOUS WEED RULES' AS DEFINED IN THE STATUTE, HAWAII ADMINISTRATIVE RULES 4:68:1 OR THE 'FEDERAL NOXIOUS WEED LIST' AS DEFINED IN TITLE 7 OF THE CODE OF FEDERAL REGULATIONS (CFR), PARTS 360 AND 361.
8. ALL TREE WORK MUST ADHERE TO AMERICAN NATIONAL STANDARD INSTITUTE (OR ANSI) - A300 TREE CARE STANDARDS AND ANSI-Z133 SAFETY STANDARDS FOR TREE WORK. WORK SHALL BE CONTRACTED TO ARBORISTS THAT HAS BEEN CERTIFIED IN GOOD STANDINGS AS AN ISA CERTIFIED ARBORIST FOR AT LEAST 5 YEARS TO ASSURE THAT TREE WORK IS PERFORMED PROPERLY AND TREES ARE NOT DAMAGED BY PRACTICES SUCH AS TOPPING, FLUSH CUTS, OVER-THINNING, OR CLIMBING WITH SPIKES. CONTRACTOR SHALL SUBMIT A COPY OF THE ISA ARBORIST CERTIFICATION OF GOOD STANDING OF 5 YEARS TO THE LANDSCAPE ARCHITECT A MINIMUM OF 7 DAYS PRIOR TO TREE PRUNING.
9. FOR THE DURATION OF CONSTRUCTION WITHIN THE DRIP LINE OF TREES TO REMAIN THERE MUST BE: NO CHANGES, ALTERATIONS OR DISTURBANCE TO THE GRADE BY ADDING FILL, EXCAVATING OR SCRAPING EXCEPT AS NOTED ON PLANS; NO STORAGE OF CONSTRUCTION MATERIAL OR EQUIPMENT; NO STOCKPILING OF ANY CONSTRUCTION MATERIAL OR ANY EXCAVATED MATERIAL NO DISPOSAL OF ANY LIQUIDS (E.G. CONCRETE SLEUTH, GAS, OIL, PAINT); NO VEHICULAR TRAFFIC, EQUIPMENT OR EXCESSIVE PEDESTRIAN TRAFFIC NO ATTACHMENT OF ANY WIRES, ROPES, LIGHTS, OR ANY OTHER SUCH ATTACHMENT OTHER THAN THOSE OF PROTECTIVE NATURE TO ANY TREE TO BE PRESERVED; AND NO CLEANING OF EQUIPMENT OR MATERIAL UNDER THE CANOPY OF ANY TREE OR GROUP OF TREES TO REMAIN.
10. PROVIDE AN EVEN LAYER OF PLANTING SOIL OVER ALL PLANTING AREAS. REFER TO THE SPECIFICATIONS FOR TOPSOIL MIXTURE DEPTH. REPRESENTATIVE SAMPLES OF SOIL FROM PROJECT SITE SHALL BE SUBMITTED TO A LABORATORY ACCEPTABLE TO THE LANDSCAPE ARCHITECT FOR ANALYSIS OF REQUIRED SOIL AMENDMENTS. TEST RESULTS AND FERTILIZATION SCHEDULE SHALL BE PRESENTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND ACCEPTANCE BEFORE PLACING PLANTING SOIL. UNIFORMLY DISTRIBUTE FERTILIZER AND AMENDMENTS OVER PLANTING AREAS AS RECOMMENDED BY THE SOIL ANALYSIS REPORT. ROTOTILL TOP LAYER OF SOIL TO EVENLY INCORPORATE FERTILIZER AND AMENDMENTS.
11. GUY WIRES, FLAGGING, STAKES, WINDBREAKERS, ETC. SHALL BE MAINTAINED AND REPLACED IF NECESSARY BY THE CONTRACTOR UNTIL THE TREE OR SHRUB IS ABLE TO STAND BY ITSELF. THE CONTRACTOR SHALL REMOVE AND DISPOSE AT THE END OF PLANT ESTABLISHMENT PERIOD.
12. AFTER INSTALLATION OF PLANTING & IRRIGATION, LANDSCAPE CONTRACTOR SHALL PROVIDE FINAL AS-BUILT PLANS SHOWING ALL CHANGES MADE IN THE FIELD.



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L-301

NOTE: TRUNK MUST BE PROTECTED FROM ROPE SLING BURNS AND ABRASIONS DURING MOVING. TREE SHALL BE PLUMB. IF TREE IS LEANING AT THE END OF THE PLANT ESTABLISHMENT PERIOD, THE TREE SHALL BE REJECTED.

PREVAILING WINDS

6" SOIL BERM

TEN (10) SLOW RELEASE PLANTING TABLETS.
(21 GRAMS, 20-10-5)

BACKFILL MIXTURE: REFER TO SPECS.

PUDDLE PRIOR TO SETTING BOTTOM FILL
PRIOR TO SETTING TREE

2 x DIAMETER OF ROOTBALL

5/8" I.D. RUBBER HOSE TO ENCASE GUY WIRE

THREE (3) SINGLE STRAND NO.9 GAUGE GALV. WIRES EQUALLY SPACED WITH TWO (2) WHITE FLAGS PER GUY WIRE

ZINC COATED STEEL TURN BUCKLES ON EACH GUY WIRE

TREE GUARD

FINISH GRADE

BURY STAKES 12" BELOW GRADE, 36" LONG NO.7 REBAR FOR FIELD STOCK AND 24" x NO.4 REBAR FOR 25gal.

ROOT BALL

1 TREE PLANTING AND GUYING

NOTES:

1. PLACE TOP EDGE OF PLASTIC ROOT BARRIER AT FINISH GRADE AND SECURE W/MANUFACTURER PROVIDED PINS.
2. SEAMS SHALL HAVE MINIMUM 3" OVERLAP. REFER TO MANUFACTURER INSTRUCTIONS FOR BONDING THE SEAM.
3. DO NOT ALLOW GAPS IN BARRIER DURING INSTALLATION OR BACKFILLING.
4. PLASTIC ROOT BARRIER SHOULD NOT BE LEFT EXPOSED TO SURFACE WATER OR SUNLIGHT FOR MORE THAN 12 HOURS SINCE HIGH TEMPERATURES AND SUNLIGHT REDUCE EFFECTIVE LIFE OF PRODUCT. REFER TO PRODUCT LABEL AND MSDS SHEET FOR SAFETY INFORMATION.
5. REFER TO PLANTING PLAN FOR TREE LOCATION(S).

Diagram illustrating the installation of a Deeproot Plastic Root Barrier:

- The barrier is installed vertically, sloping down from the finish grade to a depth of 24" minimum.
- The top edge of the barrier must be at grade.
- The barrier is placed between the fence/footing and the tree root ball.
- Labels indicate: FENCE, FOOTING, 4'-0", TOP OF ROOT BARRIER MUST BE AT GRADE, TYP., 3", ROOT BALL, 24" MIN., SOIL BACKFILL, REFER TO PLANTING DETAILS, and DEEPROOT PLASTIC ROOT BARRIER.

2 ROOT BARRIER

Diagram illustrating the specifications for shrub planting:

- TYP. SHRUB (AS SPECIFIED)**: The shrub being planted.
- TOP OF ROOT BALL TO BE SET 1" ABOVE SOIL SURFACE TO ACCOUNT FOR SETTLEMENT**: The root ball is positioned 1 inch above the soil surface.
- 4" SOIL BERM.**: A 4-inch wide soil berm is created around the base of the shrub.
- FINISH GRADE**: The ground level after planting.
- ROOT BALL**: The root system of the shrub, shown in a cross-section.
- TWO (2) PLANTING TABLETS (21 GRAMS, 20-10-5)**: Two tablets are placed in the backfill mixture.
- BACKFILL MIXTURE: REFER TO SPECS**: The soil mixture used to fill the hole around the root ball.
- SCARIFY ROOT BALL PUDDLE AND SETTLE BOTTOM FILL PRIOR TO SETTING SHRUB.**: The bottom of the hole is scarified and settled before placing the shrub.
- 2 x DIA. OF ROOTBALL**: The diameter of the hole is twice the diameter of the root ball.

3 SHRUB PLANTING

NOT TO SCALE

P-OA-OHA-0

NOTE:
IMMEDIATELY AFTER PLANTING, WATER HEAVILY
TO ENSURE SOIL SETTLES AROUND ROOTS.

TYP. GROUND COVER
(AS SPECIFIED)

SCARIFY SIDES OF
ROOTBALL & LIGHTLY
SPLIT BOTTOM

FINISH GRADE

BACKFILL MIXTURE:
AMEND PER SOIL
TEST.

TOP OF ROOT, BALL
TO BE SET 1"
ABOVE SOIL SURFACE

2" LAYER SOIL
AMENDMENT

ROOT
BALL

BOTTOM OF
ROOTBALL TO REST
ON FIRMLY
COMPACTED OR
UNDISTURBED SOIL

2 x DIA.
OF
ROOTBALL

The diagram illustrates the correct method for planting a tree rootball. It shows a cross-section of the ground with a horizontal line representing the 'FINISH GRADE'. Above this line, a rootball is shown with its top 1 inch above the soil surface. The rootball is labeled 'ROOT BALL' and has arrows pointing to its sides and bottom with the instruction 'SCARIFY SIDES OF ROOTBALL & LIGHTLY SPLIT BOTTOM'. A '2" LAYER SOIL AMENDMENT' is shown around the rootball. Below the finish grade, the rootball is shown resting on a '2 x DIA. OF ROOTBALL' layer of 'BACKFILL MIXTURE: AMEND PER SOIL TEST.' The bottom of the rootball is labeled 'BOTTOM OF ROOTBALL TO REST ON FIRMLY COMPACTED OR UNDISTURBED SOIL'. A 'TYP. GROUND COVER (AS SPECIFIED)' is shown above the rootball. A note at the top states: 'NOTE: IMMEDIATELY AFTER PLANTING, WATER HEAVILY TO ENSURE SOIL SETTLES AROUND ROOTS.'

4 GROUND COVER PLANTING

NOTE:


1. S = SPACING, (REFER TO PLANT LIST FOR SPACING)
2. USE SPACING LAYOUT FOR SHRUBS, GROUNDCOVERS, AND ANNUALS

Diagram illustrating the spacing layout for shrubs, groundcovers, and annuals. The diagram shows a rectangular area with a wavy line on the left representing a wall or pavement edge. Several black dots represent plant locations. Dimensions are indicated with arrows and labels: 'S' for the spacing between plants, '1/2 S' for the distance from the wall to the first plant, and '1/2 S' for the distance from the pavement edge to the first plant. A legend on the right indicates 'PLANT LOCATION' with a black dot.

5 TRIANGULAR SPACING NOT TO SCALE P-QA-OHA-01

HYDRO SPRIG:

SHALL BE SPECIFICALLY PROCESSED FIBER CONTAINING NO GROWTH OR GERMINATION INHIBITING FACTORS. IT SHALL BE SUCH THAT AFTER ADDITION AND AGITATION IN THE HYDRAULIC EQUIPMENT WITH SEEDS/SPRINGS, FERTILIZER, WATER AND, OTHER ADDITIVES NOT DETRIMENTAL TO PLANT GROWTH. THE FIBERS WILL FORM A HOMOGENEOUS SLURRY. WHEN HYDRAULICALLY SPRAYED ON THE SOIL, THE FIBERS SHALL FORM A BLOTTER—LIKE GROUND COVER WHICH READILY ABSORBS WATER AND ALLOWS INFILTRATION, COMPLETE COVERAGE OF THE SURFACE SHALL BE ATTAINED.



2" LAYER
AMENDMENT
2" LAYER TOP
SOIL

6 HYDRO-SEED/SPRIG DETAIL
NOT TO SCALE

TRIM EDGE. USE TRENCHING SHOVEL OR EQUIVALENT TO MAKE CLEAN EDGE.

GRASS

FINISH GRADE

GROUND COVER

2"

4"

7 SHOVEL CUT EDGE

SECTION VIEW

COMPOSITE HEADER BOARD

FINISH GRADE AT LAWN SIDE

FINISH GRADE AT SHRUB & GROUND COVER SIDE

1 1/2"

1"

COMPACT GRADE ON EACH SIDE OF HEADER

PLASTIC STAKE @ 3' O.C. MAX., USE PLATED DECK SCREWS FOR ATTACHMENT

PLAN VIEW

USE STEEL "J" STAKE AT EACH JOINT

COMPOSITE HEADER BOARD

PLASTIC STAKES MUST BE ATTACHED WITHIN 4" OF EITHER SIDE OF EACH HEADER JOINT

MINIMUM RADIUS 36"

PLASTIC STAKE @ 3' O.C. MAX., USE PLATED DECK SCREW FOR ATTACHMENT

NOTES:

1. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. COLOR TO BE CHOSEN BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL LINE OF COLORS.

HDR. SIZE	ACTUAL DIMENSIONS	MINIMUM RADIUS POSSIBLE
1X6	5-7/16"x9/16"x20'	36"

HDR. SIZE	ACTUAL DIMENSIONS	MINIMUM RADIUS POSSIBLE
1X6	5-7/16"x9/16"x20'	36"

8 RECYCLED COMPOSITE HEADER
NOT TO SCALE
P-OA-OHA-14

The image contains two technical drawings of a planter box:

- PLAN VIEW:** A top-down view of the rectangular planter box. The top edge is labeled "6'-0\" with three segments, each labeled "EQ. TYP." (equal typical). The left edge has two vertical sections labeled "1\" W x 12\" HT. TREX SELECT FASCIA @ 12 FT BOARD LENGTH, TYP." and "2\" W x 6\" L x 12\" HT. TREX SELECT SQUARE EDGE BOARD (FROM ONE 12FT BOARD), TYP.". The right edge has two vertical sections, each labeled "15\". The bottom edge shows four small rectangular details.
- SECTION VIEW:** A side view of the planter box. The top edge is labeled "1\" x 12\" TREX SELECT FASCIA". The bottom edge is labeled "2\" x 6\" TREX SELECT SQUARE EDGE BOARD, TYP.". The interior is filled with a cross-hatched pattern, labeled "LANDSCAPE FILTER FABRIC, LINE BOTTOM & SIDES". The bottom-most layer is labeled "ORGANIC POTTING SOIL FOR FUTURE UJALA PLANTING".

9 RAISED PLANTER DETAIL

1" x 12" TREX SELECT FASCIA

2" x 6" TREX SELECT SQUARE EDGE BOARD

SIMPSON STRONG-TIE #8 X 2-1/2" FLAT-HEAD TYPE-316 S.S. WOOD SCREW, ALIGN SCREWS VERTICALLY O.C., TYP.

TYPICAL CORNER CONDITION

ALIGN END TYP.

PACIFIC AMERICAN LUMBER
142 MOKAUEA ST., HONOLULU, HI 96819
PH: 808-845-8700
FAX: 808-842-6706

2" x 6" TREX SELECT SQUARE EDGE BOARD

FLUSH & PLUMB, TYP.

2"

2"

1" x 12" TREX SELECT FASCIA

LANDSCAPE FILTER FABRIC SECURED W/ S.S. STAPLES, 3" APART ALONG TOP OF BOARD

SIMPSON STRONG-TIE #8 X 2-1/2" FLAT-HEAD TYPE-316 S.S. WOOD SCREW, ALIGN SCREW VERTICALLY O.C. TYP.

TYPICAL SUPPORT POST

DATE: 11/06/2020	L-302
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