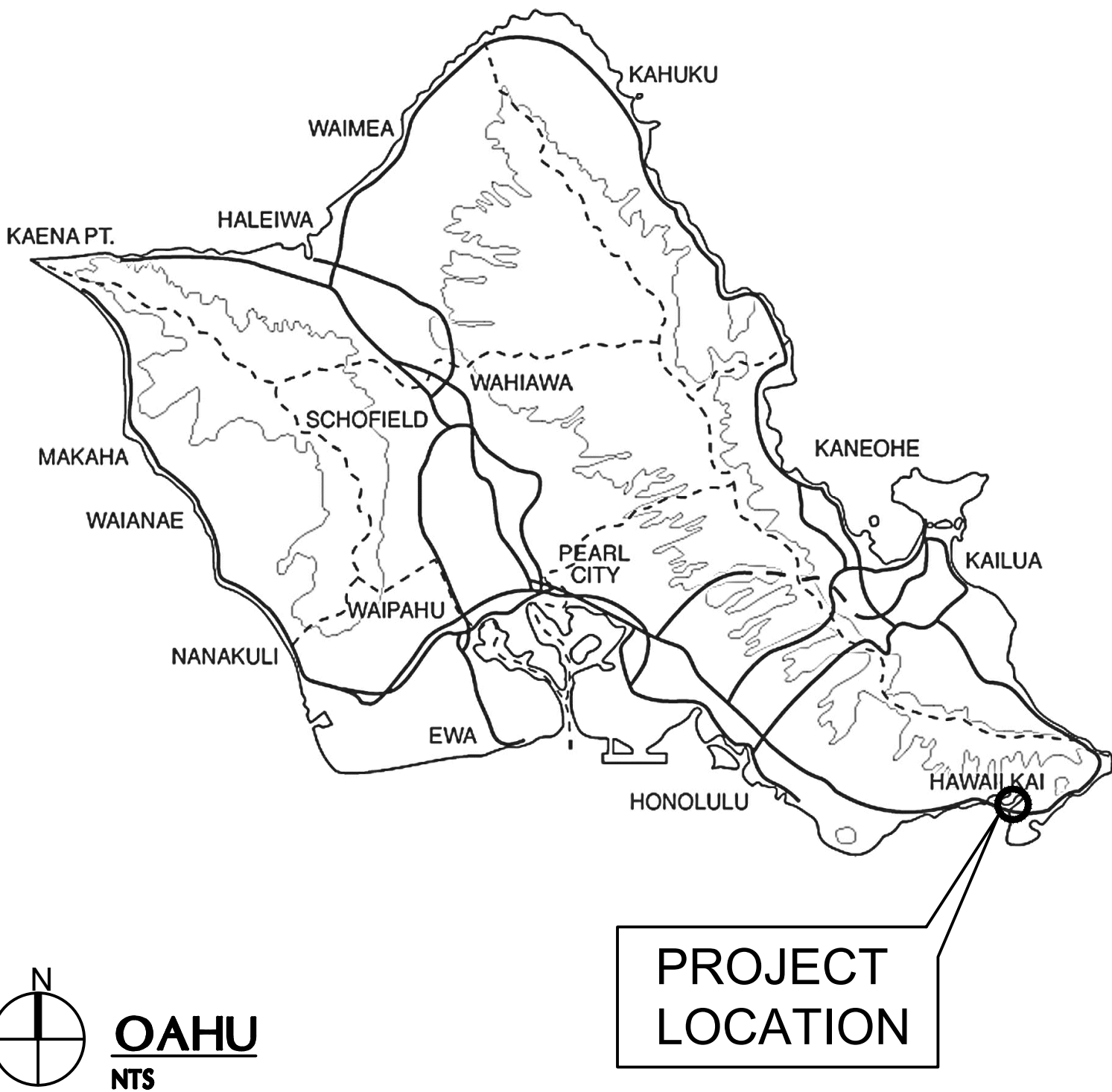
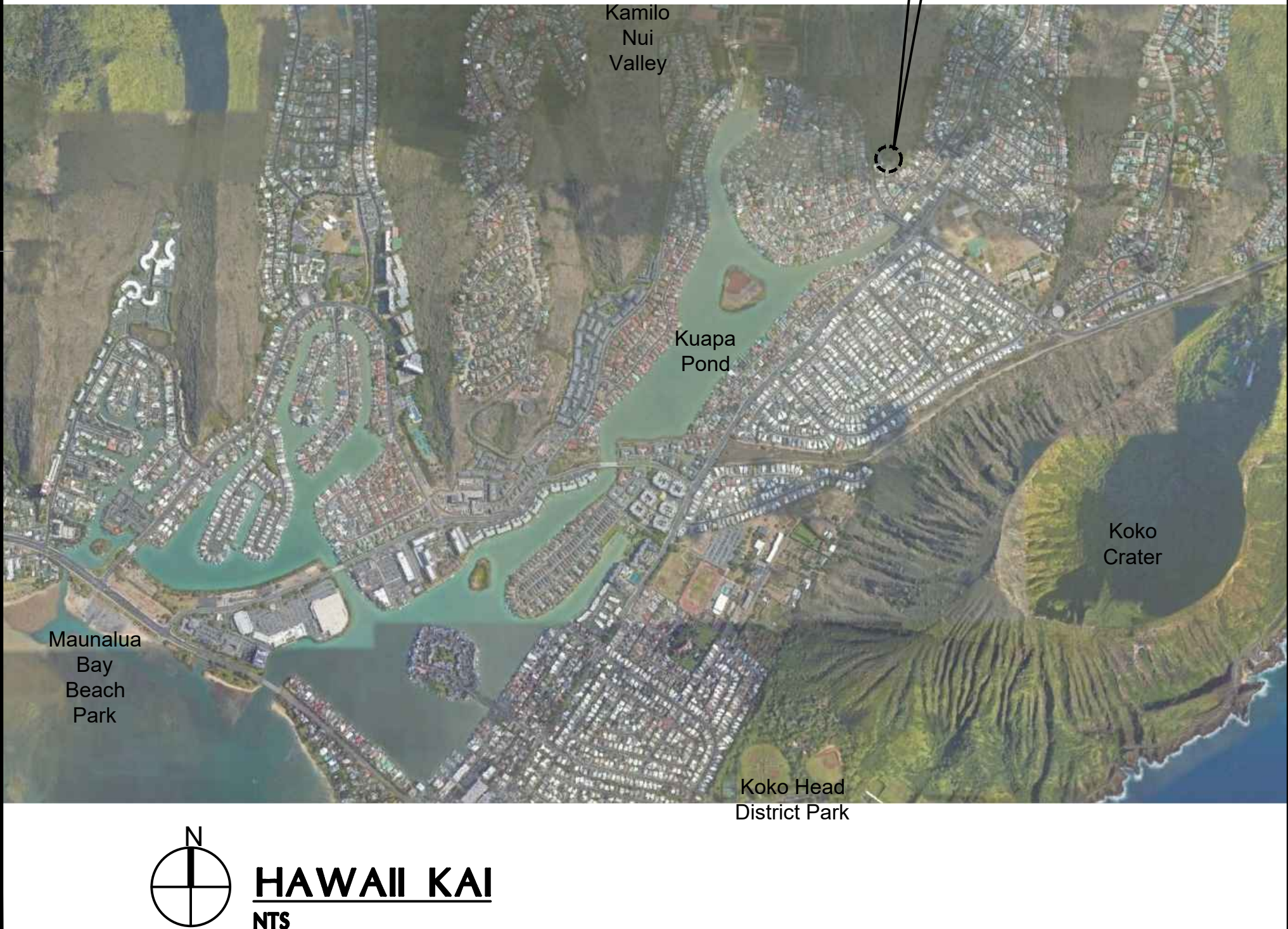


PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS

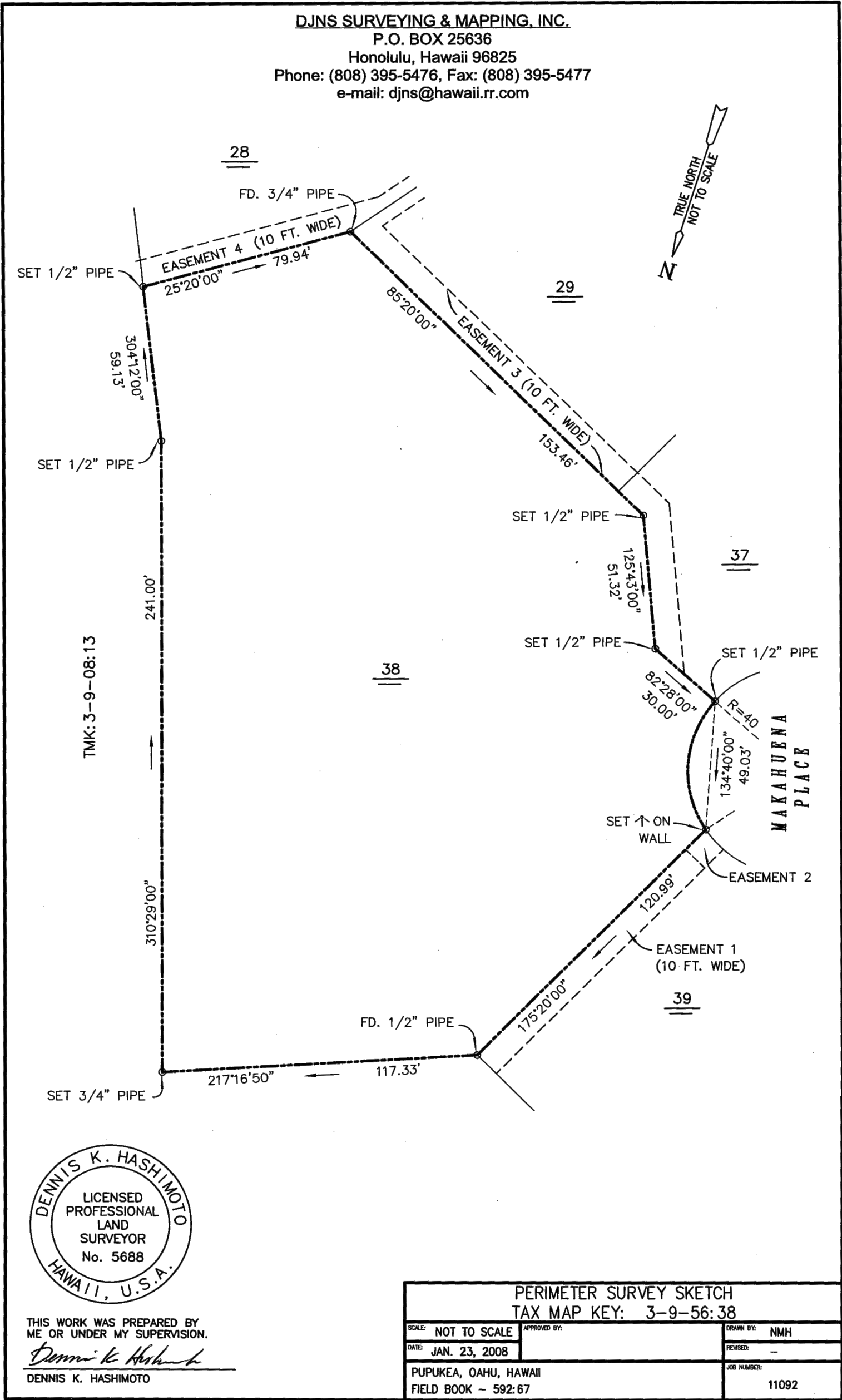
ISLAND MAP



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:

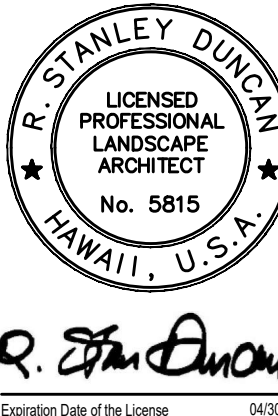
- International Building Code (IBC), 2006 Edition with local amendments
- International Energy Conservation Code (IECC), 2006 Edition with local amendments
- Uniform Plumbing Code (UPC), 2006 Edition with local amendments
- Uniform Fire Code (UFC), NFPA 1 2012 Edition with local amendments
- National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



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 |
|----------|-------------|
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DRAWING TITLE

TITLE SHEET

SCALE:

| | |
|-------------|-------------|
| DRAWN BY: | CHECKED BY: |
| PBR | RH |
| PROJECT NO. | DRAWING NO. |
| 3558.01 | 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.

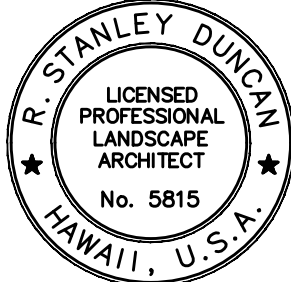
LANDSCAPE CONTRACTOR WILL DRENCH ALL SOILS OR LOOSE NURSERY MATERIALS WITH THE PROPER MIXTURE OF SEVIN PER GALLON OF WATER INDICATED BY THE MANUFACTURER AND FOLLOW MANUFACTURER'S SAFETY PRECAUTIONS.

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 |



R. Stanley Duncan
Expiration Date of the License: 06/30/22

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 |
|----------|-------------|
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DRAWING TITLE

PROJECT NOTES

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

3558.01

DATE:

11/06/2020

DRAWING NO.

G-002

- 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.
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PROJECT TITLE

**PAHUA HEIAU PUBLIC
VIEWING AREA
LANDSCAPE
IMPROVEMENTS**

7142 MAKAHUENA PLACE
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.

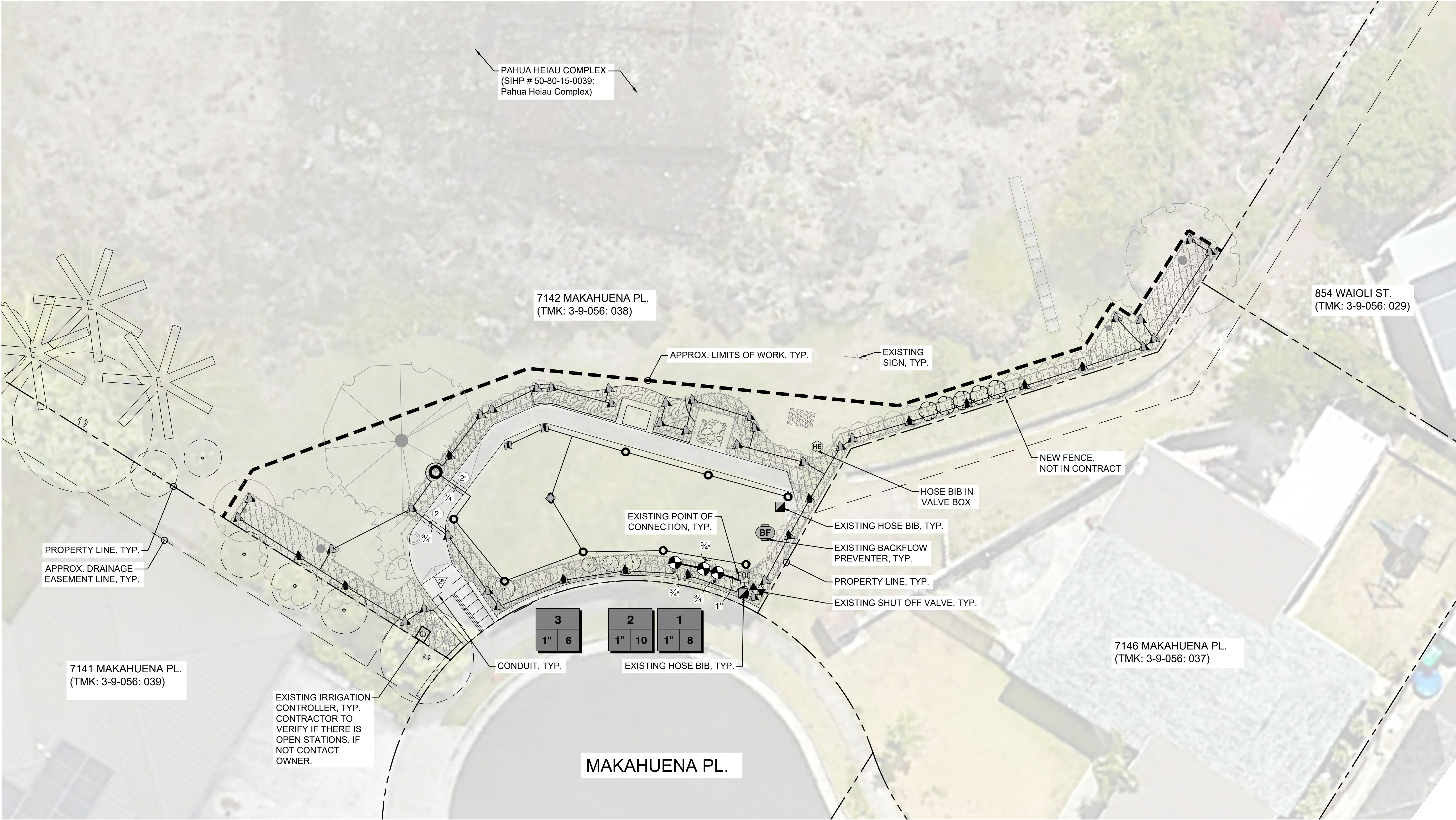
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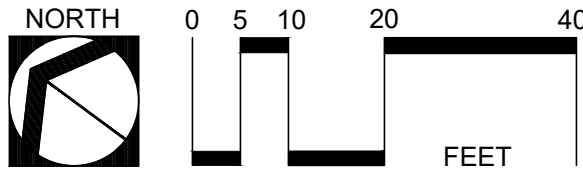
11/06/2020

L-200


















1 IRRIGATION PLAN






1" = 20'-0"



IRRIGATION SCHEDULE

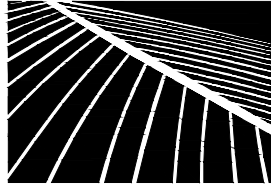
| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | ARC | PSI | GPM | RADIUS |
|---|--|-----|-----|------|--------|
|  | RAIN BIRD R-VAN14 1804-SAM-P45 TURF ROTARY, 8' -14' 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 4.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM 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.



PBR HAWAII
& ASSOCIATES, INC.
1201 BISHOP STREET
25th FLOOR, SUITE 600
HONOLULU, HAWAII 96813
TEL: (808) 521-9831 FAX: (808) 523-1402
WWW.PBRHAWAII.COM

Expiration Date of the License 04/30/22

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 |
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DRAWING TITLE

**IRRIGATION SCHEDULE &
NOTES**

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

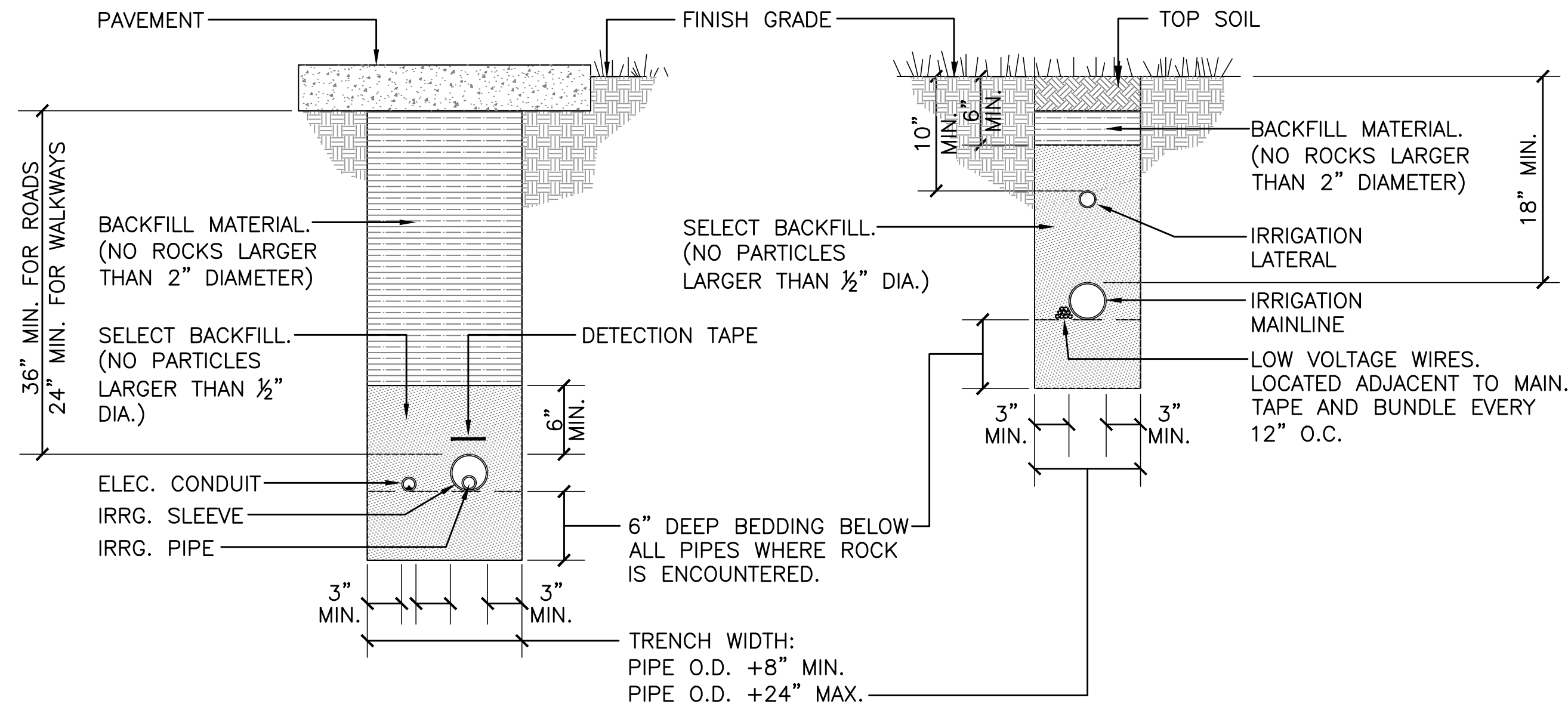
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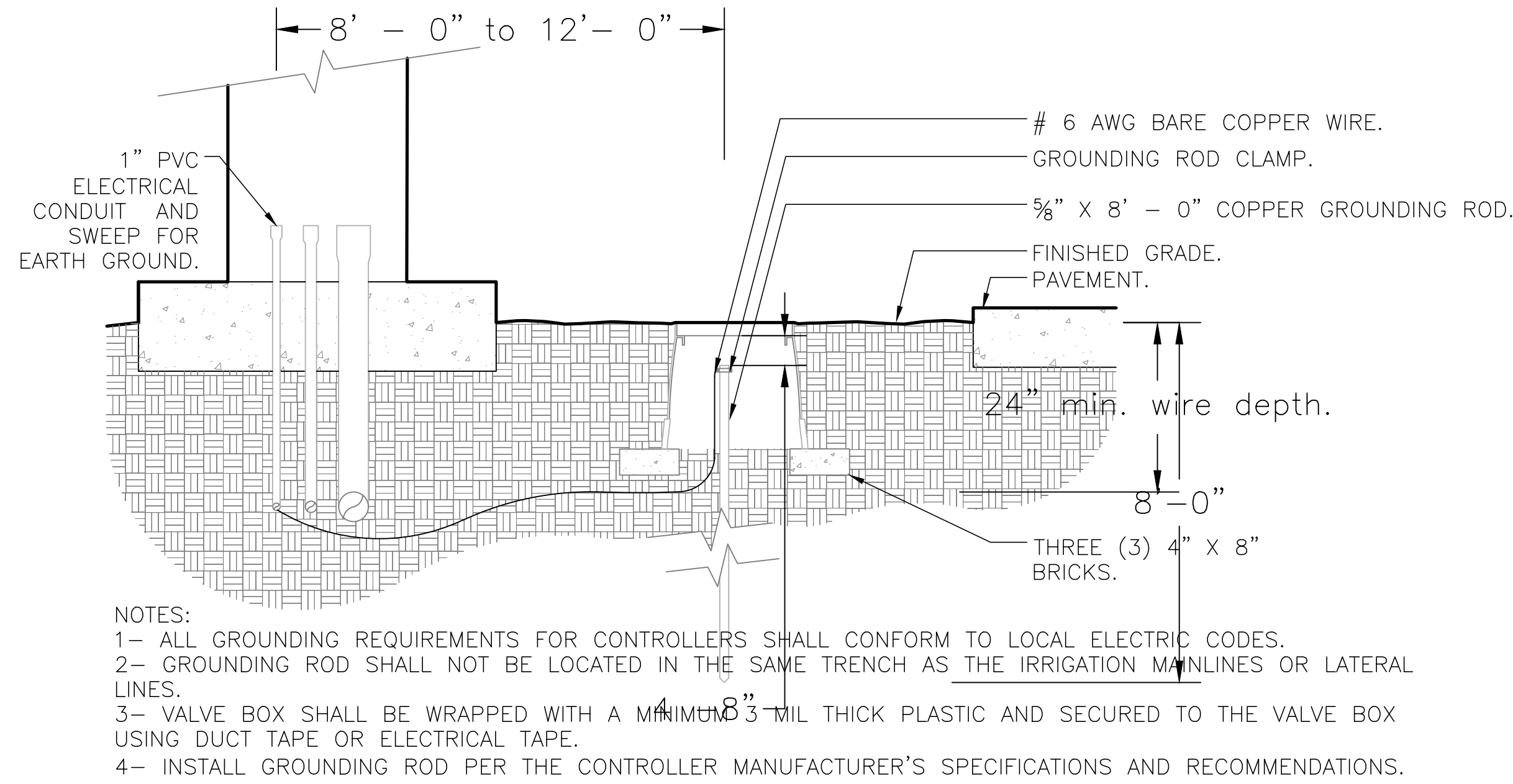
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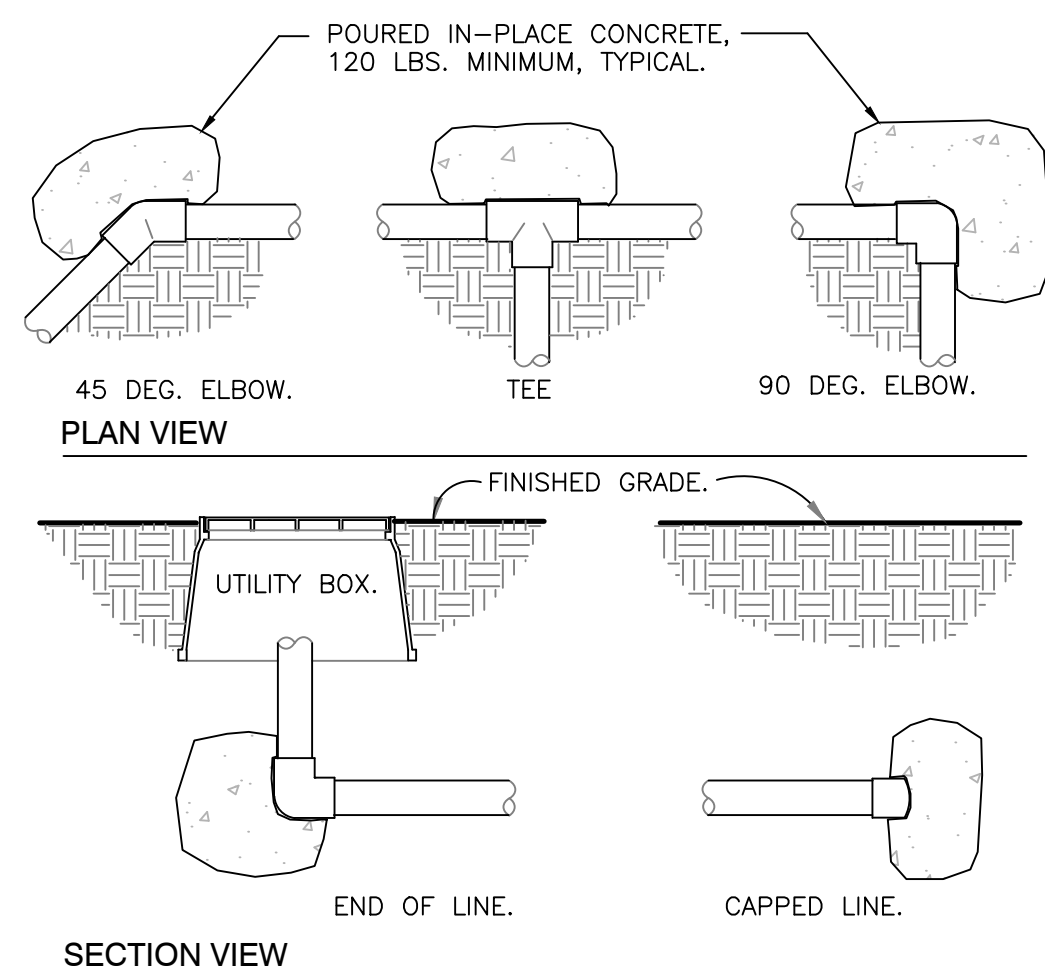


1 IRRIGATION TRENCHING DETAIL
1" = 1"

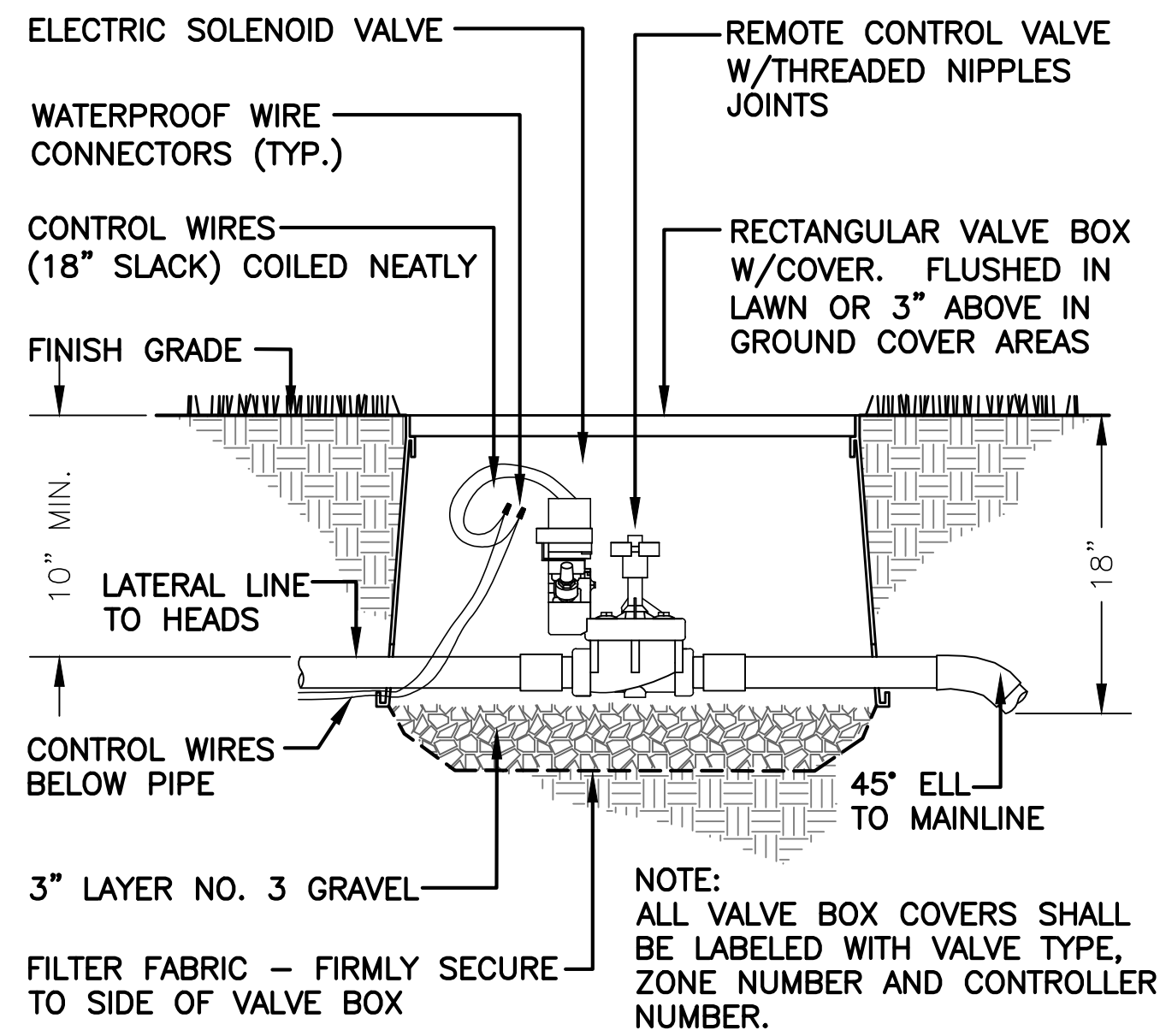


5 GROUNDING ROD
1 1/2" = 1'-0"

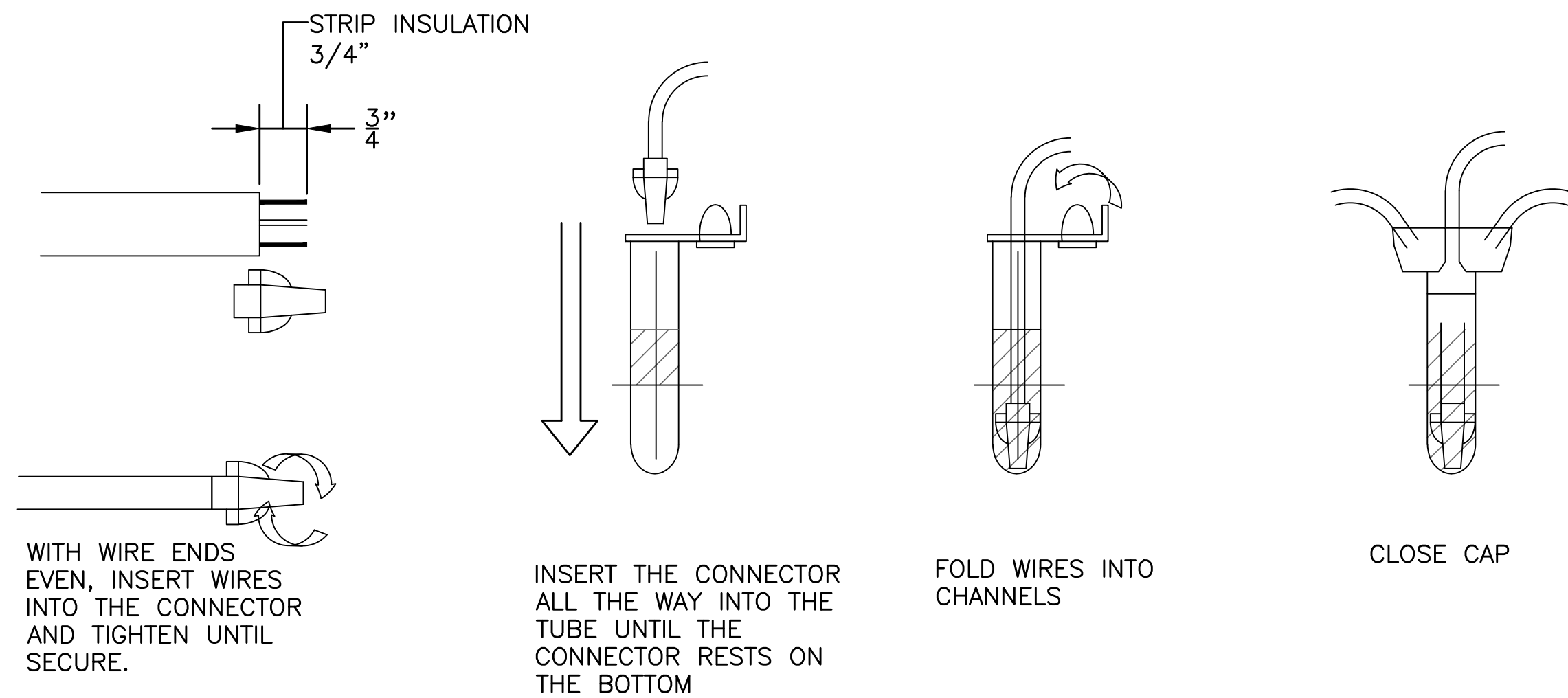
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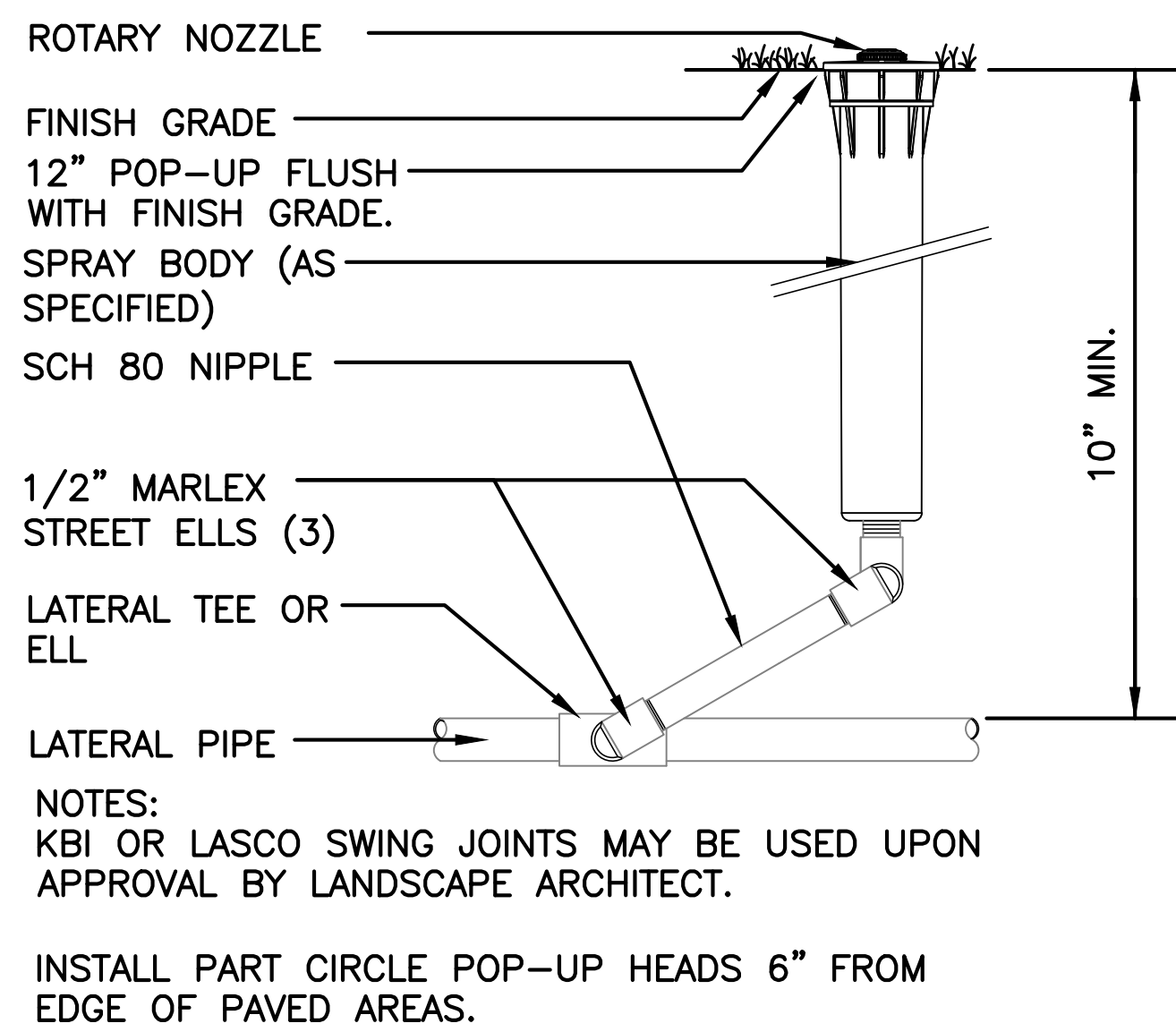
2 THRUST BLOCKING
3/4" = 1'-0" 03568.01-35



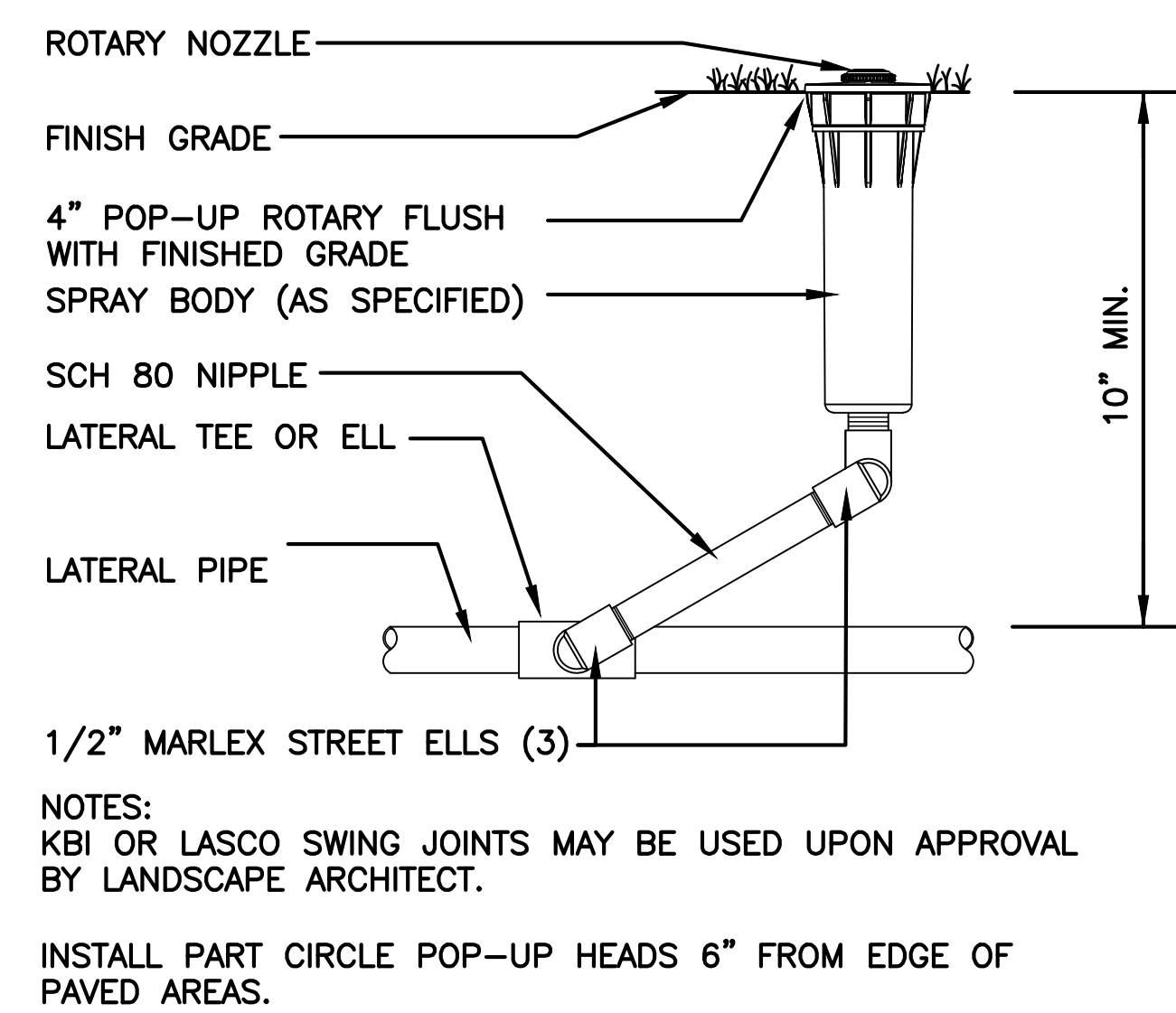
4 REMOTE CONTROL VALVE
NOT TO SCALE 03568.01-13



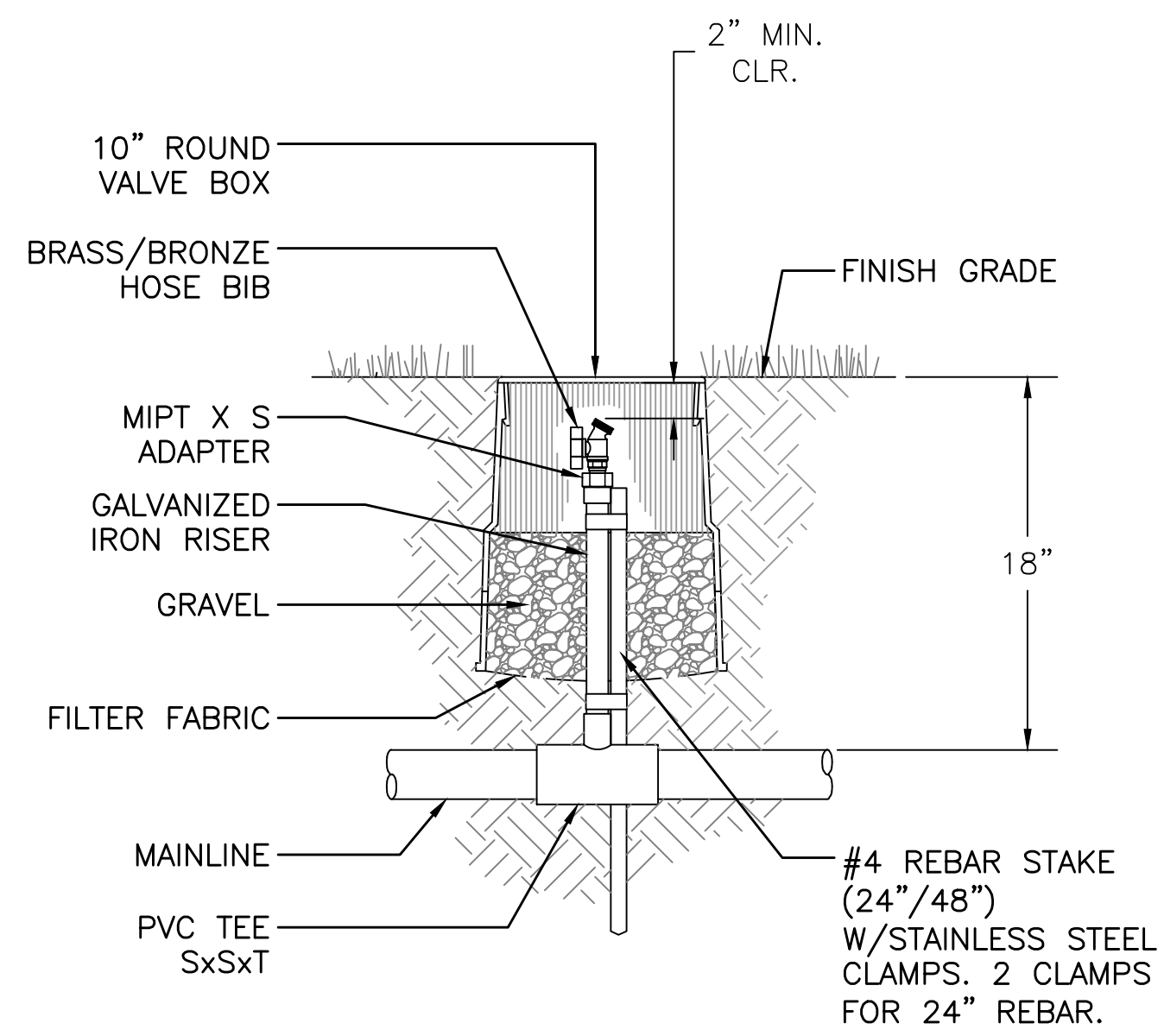
7 DBR6 & DBR Y-6 WIRE SPLICE DETAIL
1" = 1" 03568.01-16



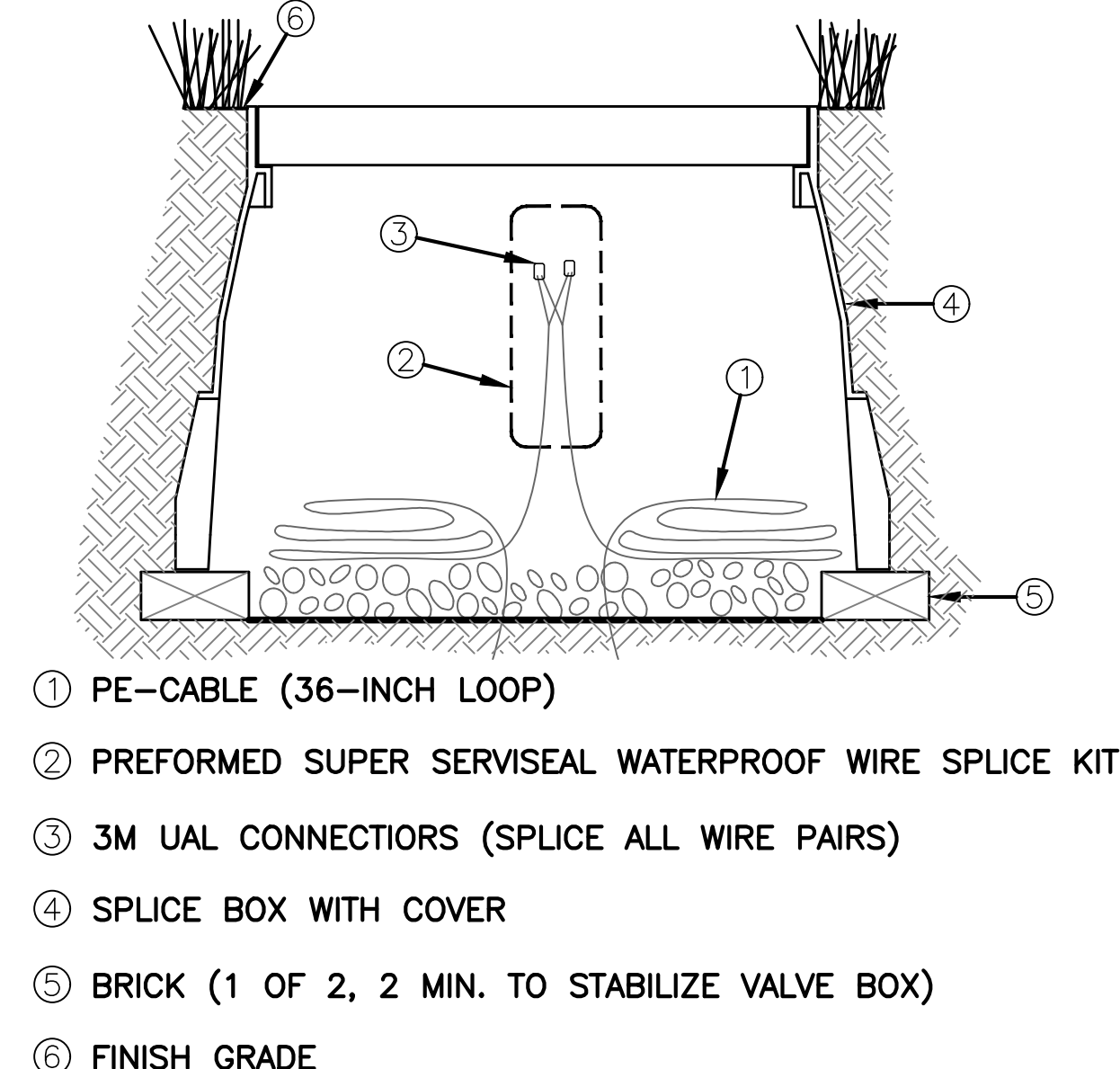
3 12" ROTARY POP UP
NOT TO SCALE 03568.01-11



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



Expiration Date of the License 04/2022
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PROJECT TITLE
PAHUA HEIAU PUBLIC VIEWING AREA LANDSCAPE IMPROVEMENTS
7142 MAKAHUENA PLACE
HONOLULU, HI 96825
TMK 3-9-056: 038

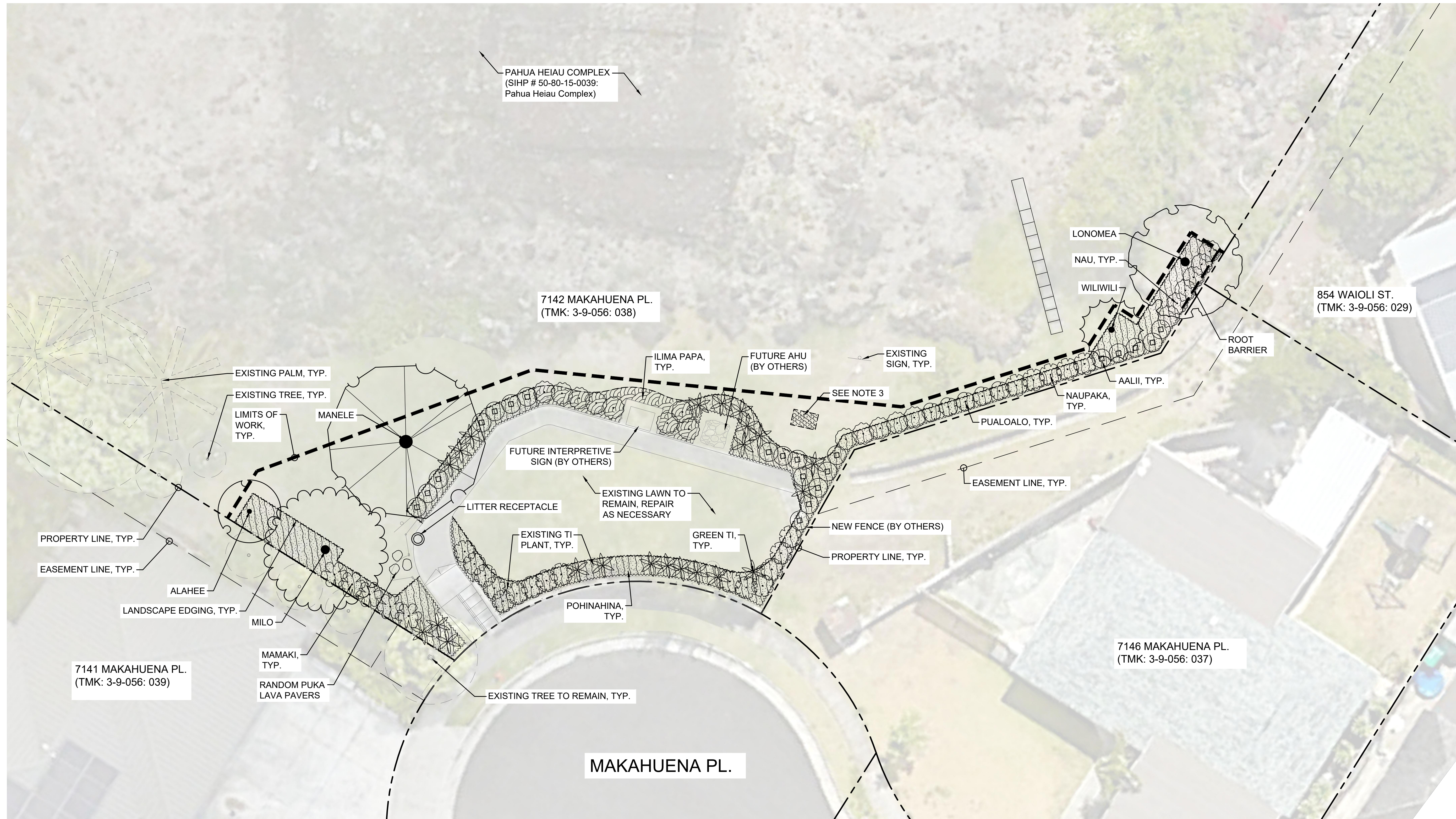
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DRAWING TITLE
IRRIGATION DETAILS

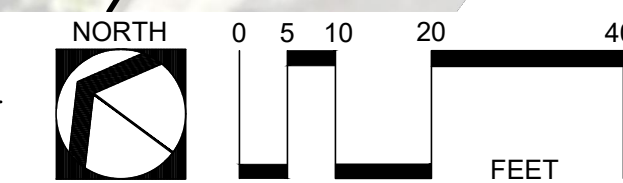
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| PBR | RH |
| PROJECT NO. | DRAWING NO. |
| 3558.01 | L-211 |
| DATE: | |
| 11/06/2020 | |

NOTES:

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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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.












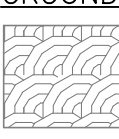
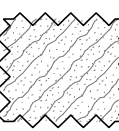
PROJECT TITLE
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7142 MAKAHUENA PLACE
HONOLULU, HI 96825
TMK 3-9-056: 038

| REVISIONS | |
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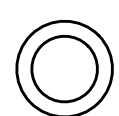
DRAWING TITLE
PLANTING PLAN

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| SCALE: | |
| DRAWN BY: PBR | CHECKED BY: RH |
| PROJECT NO. 3558.01 | DRAWING NO. L-300 |
| DATE: 11/06/2020 | |

PLANT SCHEDULE

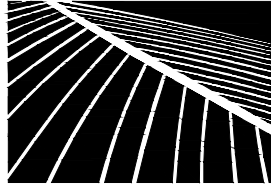
| TREES | QTY | BOTANICAL NAME | COMMON NAME | SIZE | CONTAINER | HEIGHT | TRUNK | REMARKS |
|---|--------|-------------------------------------|-------------------|---------|--------------|--|----------------|---------------------------|
|  | 1 | ERYTHRINA SANDWICENSIS | WILIWILI | 5 GAL. | | 3'-5' 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

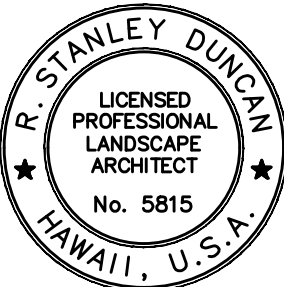
| SYMBOL | DESCRIPTION | QTY |
|---|---|--------|
| | IMPORTED SCREENED TOPSOIL - 4" LAYER | 13 CY |
| | BARK MULCH - 2" LAYER | 6.5 CY |
| - - - - | LANDSCAPE EDGING (RECYCLED COMPOSITE HEADER) | 310 LF |
| - - - - | ROOT BARRIER - 24" DEPTH | 10 LF |
|  | TEXTURED RANDOM PUKA LAVA PAVER SIZE: 18" DIAMETER 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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R. Stanley Duncan
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.

PROJECT TITLE

PAHUA HEIAU PUBLIC
VIEWING AREA
LANDSCAPE
IMPROVEMENTS

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

REVISIONS

| No./Date | Description |
|----------|-------------|
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| △ | |

DRAWING TITLE

PLANT SCHEDULE &
NOTES

SCALE:

DRAWN BY:

PBR

CHECKED BY:

RH

PROJECT NO.

3558.01

DRAWING NO.

DATE:

11/06/2020

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

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

2 x DIAMETER OF ROOTBALL

NOT TO SCALE

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, secured with pins.
- The top edge of the barrier must be at grade (typical).
- The barrier is installed around a tree root ball, ensuring a minimum 3" overlap.
- The barrier is secured with pins, with a minimum depth of 24" (24" MIN.).
- The barrier is labeled "DEEPROOT PLASTIC ROOT BARRIER".
- The area around the root ball is labeled "SOIL BACKFILL, REFER TO PLANTING DETAILS".
- The barrier is installed adjacent to a "FENCE" and "FOOTING".
- The barrier is installed at a distance of 4'-0" from the fence/footing.

2 NOT TO SCALE

TYP. SHRUB (AS SPECIFIED)

4" SOIL BERM.

FINISH GRADE

ROOT BALL

BACKFILL MIXTURE: REFER TO SPECS

2 x DIA. OF ROOT BALL

TOP OF ROOT BALL TO BE SET 1" ABOVE SOIL SURFACE TO ACCOUNT FOR SETTLEMENT

TWO (2) PLANTING TABLETS (21 GRAMS, 20-10-5)

SCARIFY ROOT BALL PUDDLE AND SETTLE BOTTOM FILL PRIOR TO SETTING SHRUB.

3 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.

2 x DIA.
OF
ROOTBALL

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

4 NOT TO SCALE P-0A-0HA-02

NOTE:

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

EDGE OF PAVEMENT OR WALL

PLANT LOCATION

5 NOT TO SCALE P-0A-0HA-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.

The diagram shows a cross-section of a hydro sprig. It consists of a central core with a wavy, textured pattern, labeled 'HYDRO SPRIG' with an arrow. This core is surrounded by a layer of amendment, labeled '2" LAYER AMENDMENT' with an arrow. The entire assembly is set within a larger area of top soil, labeled '2" LAYER TOP SOIL' with an arrow. A vertical dimension line on the left indicates the total height of the amendment and top soil layers is 4 inches.

6 NOT TO SCALE

NOT TO SCALE

SECTION VIEW

COMPOSITE HEADER BOARD

FINISH GRADE AT LAWN SIDE

FINISH GRADE AT SHRUB & GROUND COVER SIDE

COMPACT GRADE ON EACH SIDE OF HEADER

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

1/2"

1"

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" |

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

8 NOT TO SCALE P-QA-QHA-14

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

| |
|-------------------------------|
| MINIMUM RADIUS POSSIBLE |
| 36" |

PLAN VIEW

MINIMUM RADIUS 36" -

6'-0"

EQ. TYP. EQ. TYP. EQ. TYP.

1" W x 12" HT. TREX SELECT FASCIA
@ 12 FT BOARD LENGTH, TYP.

2" W x 6" L x 12" HT. TREX SELECT SQUARE EDGE
BOARD (FROM ONE 12FT BOARD), TYP.

15"

15"

PLAN VIEW

1" x 12" TREX SELECT FASCIA

2" x 6" TREX SELECT SQUARE EDGE BOARD, TYPE 1

LANDSCAPE FILTER FABRIC, LINE BOTTOM & SIDES

ORGANIC POTTING SOIL FOR FUTURE UALA PLANTING

NOT TO SCALE

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

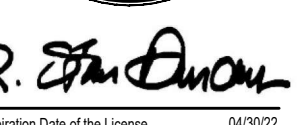
ALIGN END TYP.

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

TYPICAL SUPPORT POST TYPE-316 S.S. WOOD SCREW, ALIGN SCREW VERTICALLY O.C. TYP



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REFERENCES

DATE: _____

DATE: _____
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L-302