GENERAL NOTES

GENERAL NOTES
1. CONTRACTOR TO SECURE APPLICABLE BUILDING PERMITS FROM APPROPRIATE GOVERNING MUNICIPALITY.

2. ALL WORK SHALL COMPLY TO THE UNIFORM BUILDING CODE, LATEST EDITION.

3. ELECTRICAL IMPROVEMENTS SHALL BE INSTALLED BY A CERTIFIED ELECTRICIAN.

4. ALL CONTRACTORS SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND ENVIRONMENTAL QUALITY.

5. CONTRACTORS SHALL COMPLY WITH DETAILS AND SPECIFICATIONS AS SHOWN ON PLANS. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.

6. 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.

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 THE LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.

8. GENERAL CONTRACTOR SHALL FURNISH CONTRACT CLOSE OUT DOCUMENTS AND AS-BUILT PLAN INFORMATION FOR IRRIGATION, LIGHTING SLEEVING, DRAINAGE LINE RUNS, ETC. AS REQUESTED. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND FAMILIARIZING OWNER'S MAINTENANCE PERSONNEL WITH LIGHTING AND IRRIGATION, SYSTEM OPERATIONS AND CONTROLS.

9. PRIOR TO COMMENCEMENT OF WORK, THE GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR SHALL MEET WITH THE LANDSCAPE ARCHITECT AND OWNERS REPRESENTATIVE TO REVIEW PLANS AND SITE CONSTRUCTION SCOPE.

10. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, ELECTRICAL, CIVIL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND SHALL COORDINATE WITH ALL OTHER TRADES TO ENSURE PROPER, COORDINATION OF ALL WORK.

11. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT, OPERATE OR PARK EQUIPMENT UNDER THE BRANCHES OF ANY EXISTING PLANT TO REMAIN EXCEPT AS ACTUALLY REQUIRED FOR CONSTRUCTION IN THOSE AREAS. THE CONTRACTOR SHALL PROVIDE FENCES OR OTHER BARRIERS AS NECESSARY AT THE DRIP LINE OR AROUND TREE TRUNKS TO PROTECT EXISTING PLANTS FROM DAMAGE DURING CONSTRUCTION CALLED FOR BY THE PLANS.

12. IN THE EVENT THAT SUBSURFACE CULTURAL REMAINS SUCH AS ARTIFACTS, BURIALS, OR DEPOSITS OF SHELLS OR CHARCOAL ARE ENCOUNTERED DURING THE EXCAVATION WORK, THE CONTRACTOR SHALL STOP WORK IN THE AREA OF THE FIND IMMEDIATELY.

LAYOUT NOTES
1. THE GENERAL CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS, DISTANCES, AND SITE RELATED CONDITIONS PRIOR TO STARTING WORK. ANY CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DRAWING AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

2. PLUS/ MINUS DIMENSIONS ARE GIVEN FOR IMPROVEMENTS THAT MAY VARY SLIGHTLY. ALL OTHER DIMENSIONS ARE EXACT. CONTRACTOR SHALL STAKE PROPOSED HARDSCAPE WORK FOR THE LANDSCAPE ARCHITECT TO REVIEW, PRIOR TO CONSTRUCTION.

3. THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PROPOSED LIGHTING, IRRIGATION AND DRAINAGE SLEEVING WITH THE GENERAL CONTRACTOR. REFER TO GRADING, FIRE FEATURE, LIGHTING AND IRRIGATION PLANS FOR ADDITIONAL INFORMATION.

GRADING AND DRAINAGE NOTES
1. THE GENERAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS AND GRADES IN THE FIELD.

2. THE GENERAL CONTRACTOR SHALL EXCAVATE AND ROUGH GRADE THE SITE TO .10', TO SUPPORT THE FINISH GRADE ELEVATIONS SHOWN ON PLANS & DETAILS. ROUGH GRADING SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY TOPSOIL PLANTING & IRRIGATION WORK UNDER THIS CONTRACT. THE LANDSCAPE CONTRACTOR MUST VERIFY THE EXISTING SUBGRADE WITH THE GENERAL CONTRACTOR PRIOR TO TOPSOIL IMPORTATION TO CONFIRM THE SUBBASE IS DEEP ENOUGH TO RECEIVE THE MINIMUM SOIL DEPTHS.

3. EXISTING GRADES ARE BASED ON INFORMATION TAKEN DIRECTLY FROM CIVIL SURVEY AND ENGINEER'S PLANS. VERIFY EXISTING GRADES FOR ACCURACY PRIOR TO THE START OF GRADING AND NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.

4. PRIOR TO ANY DIGGING, VERIFY UNDERGROUND UTILITY LOCATIONS WHICH MAY INTERFERE WITH THE WORK TO BE DONE. VERIFY EXISTING SLEEVING LOCATIONS. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.

5. IT IS THE INTENT OF THESE DOCUMENTS TO BLEND THE TRANSITION FROM CONSTRUCTED ELEMENTS INTO THE NATURAL SETTING OF THE SITE. CONTOURS, SPOT ELEVATIONS, AND GRADING LIMITS INDICATED ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD AT THE LANDSCAPE ARCHITECT'S REQUEST. VERIFY GRADING LIMITS AND REQUIREMENTS WITH THE LANDSCAPE ARCHITECT PRIOR TO GRADING WORK.

6. AFTER ROUGH GRADING HAS BEEN COMPLETED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING/REFINING GRADING CONDITIONS AFTER TREE AND IRRIGATION MAINLINE INSTALLATION.

7. TOP AND TOE OF CONSTRUCTED SLOPES SHALL BE "FEATHERED" AND NATURALLY TRANSITION WITH NATIVE GRADE TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT. SHARP GRADE TRANSITIONS OR ENGINEERED "HINGES" SHALL BE SOFTENED TO APPEAR NATURAL.

8. ALL REQUIRED FILL SHALL BE COMPACTED PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS TO PREVENT FUTURE SETTLING AND MAINTAIN STRUCTURAL STABILITY.

9. FINISH GRADE MAY BE ADJUSTED IN THE FIELD AS REQUESTED / REQUIRED BY THE LANDSCAPE ARCHITECT. ALL FINISH GRADING SHALL BE UNIFORM AND SMOOTH.

10. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING AND PROPER SURFACE DRAINAGE IN ALL AREAS. FINE GRADING SHALL BE COMPLETED AS INDICATED BY CONTOURS AND SPOT ELEVATIONS ON THE PLANS. PROPOSED ELEVATIONS SHOWN ARE FINISHED (COMPACTED) GRADE.

11. LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.

GRADING AND DRAINAGE NOTES CONT.
12. ALL EXISTING DRAINAGE STRUCTURES SHALL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION.

13. LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM OF 1.5% SLOPE FOR A DISTANCE OF FIVE FEET AWAY FROM ALL EXISTING AND PROPOSED STRUCTURES. ENSURE POSITIVE DRAINAGE TOWARD DRAINAGE SWALES AND CATCH BASINS IN ALL LOCATIONS TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT.

14. LANDSCAPE CONTRACTOR SHALL PROTECT ALL WORK FROM EROSION UNTIL FINAL ACCEPTANCE.

15. THE CONTRACTOR IS REQUIRED TO IMPORT CLEAN TOPSOIL FOR PLANTING. NEW TOPSOIL SHALL BE THE BEST QUALITY AVAILABLE AND MIXED WITH ADDITIONAL AMENDMENTS. TOPSOIL DEPTH SHALL BE A MIN OF 12". FOR SHRUB AND GROUNDCOVER PLANTING BEDS AND 8" MIN FOR TURF AREAS.

PLANTING NOTES
1. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL MEET WITH THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE TO REVIEW THE PLANS, AND WALK THE SITE.

2. PROTECTION OF ALL EXISTING UTILITIES, HARDSCAPE, STRUCTURES AND EXISTING LANDSCAPING IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. THE LANDSCAPE CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES WHERE NEW WORK IS TO BE PERFORMED. LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATIONS OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT.

3. A QUALIFIED SUPERVISOR SHALL BE PRESENT ON SITE AT ALL TIMES DURING PLANTING.

4. PLANT TREES AND SHRUBS PLUMB, AND FACED TO GIVE THE BEST APPEARANCE FROM "PRIMARY VIEWS" AS IDENTIFIED BY THE LANDSCAPE ARCHITECT.

5. PLANT LOCATIONS ARE DIAGRAMMATIC AND MAY BE ADJUSTED IN THE FIELD AT THE LANDSCAPE ARCHITECT'S REQUEST PRIOR TO INSTALLATION. CARE SHALL BE TAKEN TO SPOT PLANT MATERIAL TO PROVIDE OPTIMUM GROWTH CONDITIONS AND MAXIMUM AESTHETICS. DO NOT INSTALL PLANT MATERIAL IN ANY AREA WHICH WILL CAUSE HARM TO ADJACENT BUILDING, HARDSCAPE OR UNDERGROUND UTILITY IMPROVEMENTS.

6. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO COORDINATE ALL PLANT MATERIAL 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. ALL PLANTS SHOULD BE LOCATED AWAY FROM TRANSFORMERS, FIRE HYDRANTS, LIGHT FIXTURES ETC., AND PLACED TO ALLOW PROPER MAINTENANCE ACCESS. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.

7. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY SHOULD SOIL CONDITIONS BE PRESENT WHICH PREVENT PROPER SOIL DRAINAGE AND ALLOW WATER TO STAND IN PLANTING PITS.

8. VERIFY PLANT QUANTITIES PRIOR TO INSTALLATION. QUANTITIES ARE LISTED FOR CONVENIENCE ONLY, THE ACTUAL NUMBER OF SYMBOLS INDICATED ON THE PLANTING PLAN SHALL HAVE PRIORITY OVER QUANTITIES DESIGNATED. NOTIFY THE LANDSCAPE ARCHITECT OF QUANTITY DISCREPANCIES OR UNLABELED MASSINGS IMMEDIATELY.

9. SMALL PLANTS SHALL BE SPOTTED BY THE LANDSCAPE CONTRACTOR FOR LANDSCAPE ARCHITECT'S REVIEW PRIOR TO PLANTING, AND ONLY AFTER IRRIGATION MAINLINE AND LATERALS HAVE BEEN INSTALLED AND LANDSCAPE FINE GRADE HAS BEEN RE-ESTABLISHED.

10. VINES SPECIFIED SHALL BE INSTALLED WITH VINE RUNNERS ESPALIERED TO THE ADJACENT WALLS, COLUMNS OR TREES WHERE SHOWN WITH NURSERY STAKES REMOVED. CONTRACTOR SHALL SUBMIT FASTENER INFORMATION TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

11. LIMIT OF LANDSCAPE PLANTING ZONES SHOWN ON PLANS MAY BE REVISED DURING CONSTRUCTION TO ADJUST FOR FIELD CONDITIONS. CONFIRM ALL ZONE LIMITS WITH THE LANDSCAPE ARCHITECT PRIOR TO IRRIGATION AND PLANTING OPERATIONS.

12. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANT LOCATIONS OR INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.

13. ALL PLANT MATERIAL SHALL BE PLANTED IN WETTED PLANTING PITS WITH PROPER FERTILIZATION TABS.

14. ALL PLANT MATERIALS SHALL BE OF THE QUALITY AND SIZE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK GUIDELINES.

15. ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.

16. THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.

17. TREES SHALL BE STAKED/GUYED ONLY AS DIRECTED BY THE LANDSCAPE ARCHITECT.

18. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL WASTE MATERIAL GENERATED FROM THE PLANTING OPERATIONS.

19. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT.

20. ROOT BARRIERS, WHERE INDICATED, SHALL BE INSTALLED PER THE PLANS.

21. THE LANDSCAPE CONTRACTOR SHALL STAKE TREE AND PALM LOCATIONS PER THE PLANS FOR APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO DIGGING PLANTING PITS OR PLANTING.

22. CRANE SERVICES MAY BE REQUIRED FOR THE INSTALLATION OF SPECIMEN TREES IN INACCESSIBLE AREAS. COORDINATE ALL CRANE OPERATIONS AND SCHEDULING WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.

23. UNLESS OTHERWISE PREVIOUSLY APPROVED BY THE LANDSCAPE ARCHITECT, NO BARE ROOT FIELD STOCK SHRUBS OR TREES WILL BE APPROVED FOR THE PROJECT.

24. NURSERY PLANT MATERIAL THAT HAS OUTGROWN ITS CONTAINER AND HAS BEEN ROOTED IN THE GROUND WILL BE REJECTED.

25. NURSERY PLANT MATERIAL THAT HAS SUFFERED DEHYDRATION DURING DELIVERY OR WHILE AWAITING PLANTING MAY BE REJECTED.

PLANTING NOTES CONT.
26. THE CONTRACTOR SHALL CONFIRM WITH THE LANDSCAPE ARCHITECT THAT ALL PLANT MATERIAL SPECIFIED FOR THE PROJECT HAS BEEN PROCURED AND IS IN TOP SHAPE NO LESS THAN 60 DAYS FROM COMMENCEMENT OF INSTALLATION.

27. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT LANDSCAPE ARCHITECT APPROVAL. ALL PLANT MATERIAL NOT APPROVED BY THE LANDSCAPE ARCHITECT WILL BE SUBJECT TO REJECTION.

MAINTENANCE AND GUARANTEE NOTES
1. LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT 7 DAYS (MIN) PRIOR TO PROJECT COMPLETION TO SCHEDULE A SUBSTANTIAL COMPLETION WALK. DURING THE WALK THE LANDSCAPE ARCHITECT WILL PREPARE A PUNCHLIST OF WORK TO BE CORRECTED. THE MAINTENANCE PERIOD WILL BEGIN WHEN ALL PUNCHLIST ITEMS HAVE BEEN CORRECTED.

2. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE LANDSCAPE FOR 90 CALENDAR DAYS (MIN), OR AS SPECIFIED BY CONTRACT.

3. LANDSCAPE CONTRACTOR SHALL PROVIDE A 90 DAY (MIN) WARRANTEE ON ALL SMALL PLANTS AND A 1 YEAR GUARANTEE TO WARRANTEE ALL TREES / PALMS AND IRRIGATION COMPONENTS FROM THE DATE OF FINAL ACCEPTANCE.

4. PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION DURING THE WARRANTEE PERIOD SHALL BE REMOVED AND REPLACED AT THE LANDSCAPE CONTRACTORS EXPENSE. NEW PLANT MATERIAL SHALL RECEIVE THE SAME WARRANTEE.

5. LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT ONE WEEK PRIOR TO END OF MAINTENANCE PERIOD TO CONFIRM THAT ALL PUNCHLIST ITEMS HAVE BEEN COMPLETED AND THAT THE PROJECT IS READY FOR A FINAL ACCEPTANCE WALK.

6. AS-BUILT PLANS SHALL BE PREPARED BY THE LANDSCAPE CONTRACTOR FOR "BACKBONE" IRRIGATION SYSTEM LAYOUT AND LIGHTING WIRING RUNS. PLANS WILL BE REQUIRED TO BE TURNED OVER TO THE GENERAL CONTRACTOR DURING THE FINAL ACCEPTANCE WALK. FINAL ACCEPTANCE WILL NOT BE GRANTED WITHOUT THESE PLANS.

STANDARD NOHEA NOTES
TOPSOIL NOTES:
1. MLRA CDC REQUIRES 9" MINIMUM DEPTH FOR TURF AREAS, 18" MINIMUM DEPTH FOR PLANTING BEDS, 36" MINIMUM DEPTH FOR THREE PLANTING PITS.
2. ALL TOPSOIL SHALL BE SOIL PLUS "1/3 MIX" OR BETTER.

IRRIGATION NOTES:
1. THIS RESIDENCE WILL BE INSTALLED WITH A FULLY AUTOMATED IRRIGATION SYSTEM THAT MEETS THE REQUIREMENTS OF THE MLRA CDC

PLANTING NOTES:
1. EACH LOT SHALL HAVE 3 SHADE TREES.
2. LAWN AREAS SHOULD NOT EXCEED APPX. 40% OF THE TOTAL LANDSCAPE AREA.
3. 50% OF SHRUB PLANTING SHALL BE 2-3 GALLON SIZE MINIMUM.
4. 50% OF SHRUB PLANTING SHALL BE 1 GALLON SIZE MINIMUM.
5. 4" POTS/1 GAL GROUNDCOVERS SHALL PROVIDE 100% COVERAGE IN 6 MONTHS.
6. ALL UTILITIES SHALL BE SCREENED FROM PUBLIC VIEW.

LIGHTING NOTES:
1. PER HAWAII COUNTY CODE, ALL LIGHTING FIXTURES MUST BE TURNED OFF NO LATER THAN 11:00 PM. ACCENT LIGHTS AIMED ABOVE A HORIZONTAL PLANE ARE DISCOURAGED

THE MLRA CDC MAY WALK THE SITE TO CONFIRM THE LANDSCAPE IS COMPLETE AND CONFORMS TO THE CDC GUIDELINES.

ANY DEVIATIONS MADE DURING CONSTRUCTION FROM THE APPROVED LANDSCAPE PLANS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CDC.

ANY / ALL ASSOCIATION LANDSCAPE AND /OR IRRIGATION THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE OWNER TO THE SATISFACTION OF THE NOHEA HOMEOWNERS ASSOCIATION.

SHEET INDEX

T01	COVER SHEET & GENERAL NOTES
L02	PLANTING PLAN
L03	IRRIGATION PLAN

MARK B. MAHANEY
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT NO. 11367
HAWAII U.S.A.
Exp._____

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

MAHANEY ENVIRONMENTAL DESIGN
67-1228 Halalena Place
Kamuela HI 96743
(808) 895-0826
WWW.HAWAIILANDSCAPEARCHITECT.COM
MARK@HAWAIILANDSCAPEARCHITECT.COM

NO.	DATE	REVISION

PROJECT NUMBER --

LOT 31

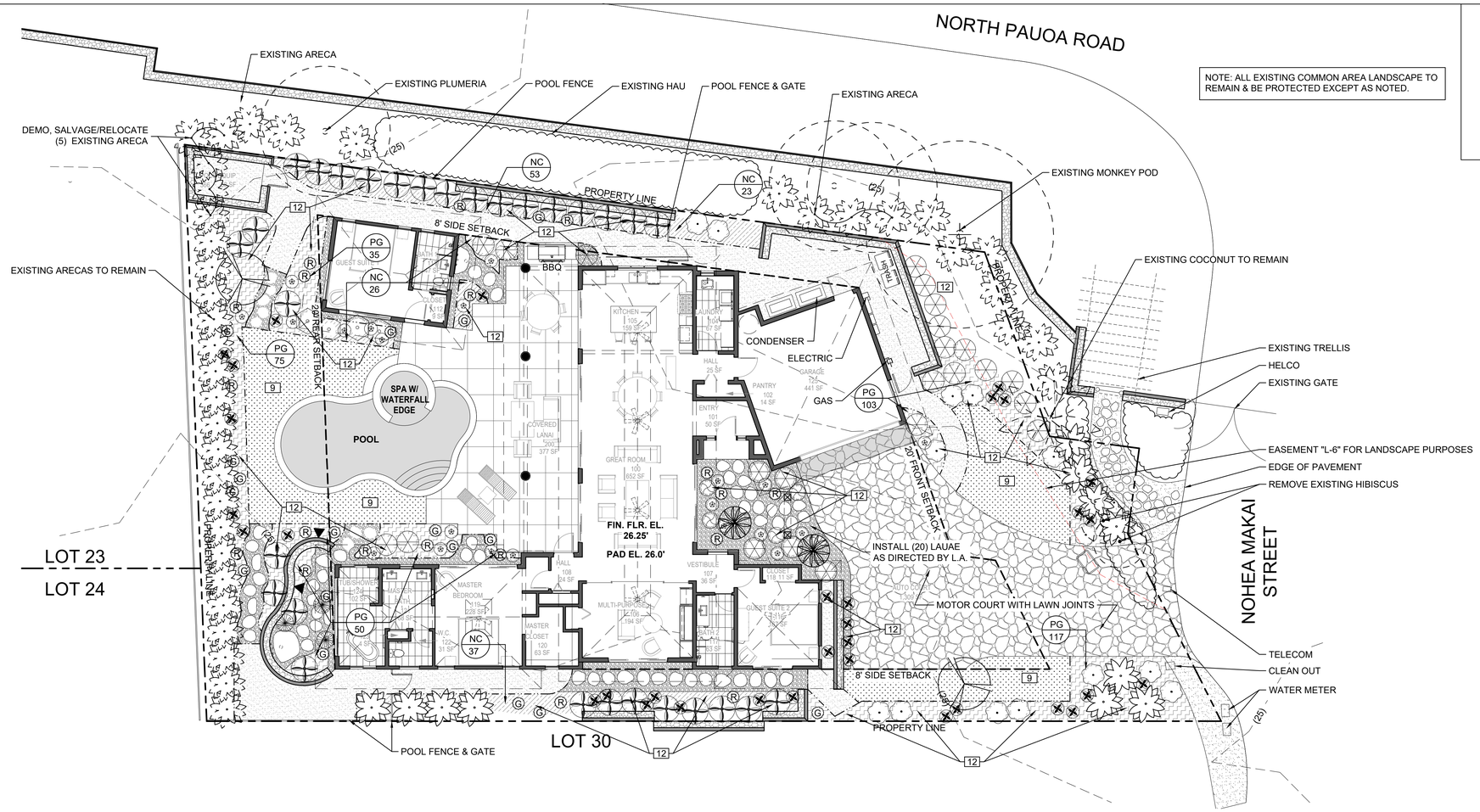
NOHEA AT MAUNA LANI
68-1038 AKEA PLACE
KAMUELA, HI 96743

TMK: 3-6-8-043:013

DRAWN BY:	MS
CHECKED BY:	MM
DATE:	2/7/2024
SCALE:	1/8" = 1'-0"

SHEET TITLE:
COVER SHEET & GENERAL NOTES

SHEET NUMBER:
T01



NOTE: ALL EXISTING COMMON AREA LANDSCAPE TO REMAIN & BE PROTECTED EXCEPT AS NOTED.

PLANTING LEGEND

TREES

Jatropha
Jatropha integerrima
25 gal Qty: 2
Mature Ht: 20'

PALMS

Cabadae Palm
Dypsis cabadae
25 gal, 10' Ht - multi stalk Qty: 2
Mature Ht: 20'

Areca Palm
Dypsis lutescens
10 gal - 8' Ht Qty: 11
Mature Ht: 20'

SHRUBS

Red Caribaea Heliconia
Heliconia caribaea 'Richmond Red'
3 gal - 2' Ht Qty: 30
Mature Ht: 6-8' (trimmed)

False Eranthemum (Purple)
Pseuderanthemum atropurpureum
2 - 3 gal - 2' Ht Qty: 4
Mature Ht: 6-8' (trimmed)

Variegated Shell Ginger
Alpinia zerumbet 'Variegata'
2 - 3 gal - 2' Ht Qty: 21
Mature Ht: ±5'

Green Ti Plant
Cordyline terminalis
Mix 1 & 3 gal, 2-4' ht. Qty: 25
Mature Ht: ±5'

Red Ti Plant
Cordyline terminalis
Mix 1 & 3 gal, 2-4' ht. Qty: 26
Mature Ht: ±5'

Canna (Red/Yellow/Orange)
Canna sp
1 gal - 2' Ht Qty: 3
Mature Ht: ±4'

Hualalai Lily
Hymenocallis latifolia
1 gal - 2' Ht Qty: 5
Mature Ht: ±3'

Parrot's Beak Heliconia
Heliconia psittacorum
1 gal - 2' Ht Qty: 34
Mature Ht: ±4'

Fishtail Fern
Cyrtomium falcatum
1 gal - 2' Ht Qty: 21
Mature Ht: ±3'

Croton 'Mammy'
Codiaeum variegatum 'Mammy'
3 gal - 2' Ht Qty: 19
Mature Ht: 2-3'

VINES

Kuhio Vine
Ipomea briggsii -Train vine to wall
1 gal Qty: 2

GROUNDCOVERS

Quantity — TS 15 — Plant species

NC — Kupukupu Fern
Nephrolepis cordifolia
4" pots 16" o.c. Qty: 139
Mature Ht: ±2'

PG — Regular Lauae Fern (not dwarf)
Phymatosorus grossus
4" pots 16" o.c. Qty: 380
Mature Ht: ±2'

MATERIALS

5/8" Screened Basalt Chips
Area: 1,072 sf

Lawn - El Toro Zoysia
Sprigged Area: 835 sf

Polished Black Ili Ili Stone
1-3" dia. 3" depth
Area: 522 sf

Basalt pavers with mortar joints at driveway apron and garage door

1 1/2" thick x 24" random cut puka lava stepping stones concrete set. Install 1"-3" ili-ili on edges and between stones as shown

Header - 1"X6" Bend-a-Board
Qty: 343 lf

PLANTING NOTES:

CONTRACTOR SHALL INCLUDE THE PURCHASE AND INSTALLATION OF THE FOLLOWING PLANTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.

- (200) 4" POTS
- (25) 1 GAL PLANTS
- (15) 2-3 GAL PLANTS
- (5) 5 GAL PLANTS

CONTRACTOR SHALL PROVIDE 1/2 CY SILICA SAND FOR TOP DRESSING OF LAWN AREAS TO FILL IN AND LEVEL LOW SPOTS PRIOR TO THE END OF THE MAINTENANCE PERIOD.

12 INDICATES TOPSOIL DEPTHS FOR ALL AREAS. TOPSOIL TO BE SOILS PLUS "1/3 MIX", OR EQUAL.

4' 0 4' 8' 16' 24'
1/8" = 1'-0"

SUNSET JUNE DEC SUNRISE N

MARK B. MAHANEY
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT NO. 1135T
HAWAII U.S.A.
Exp.

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

MAHANEY ENVIRONMENTAL DESIGN
67-1228 Halalena Place
Kamuela HI 96743
(808) 895-0826
WWW.HAWAIILANDSCAPEARCHITECT.COM
MARK@HAWAIILANDSCAPEARCHITECT.COM

NO.	DATE	REVISION

PROJECT NUMBER --

LOT 31

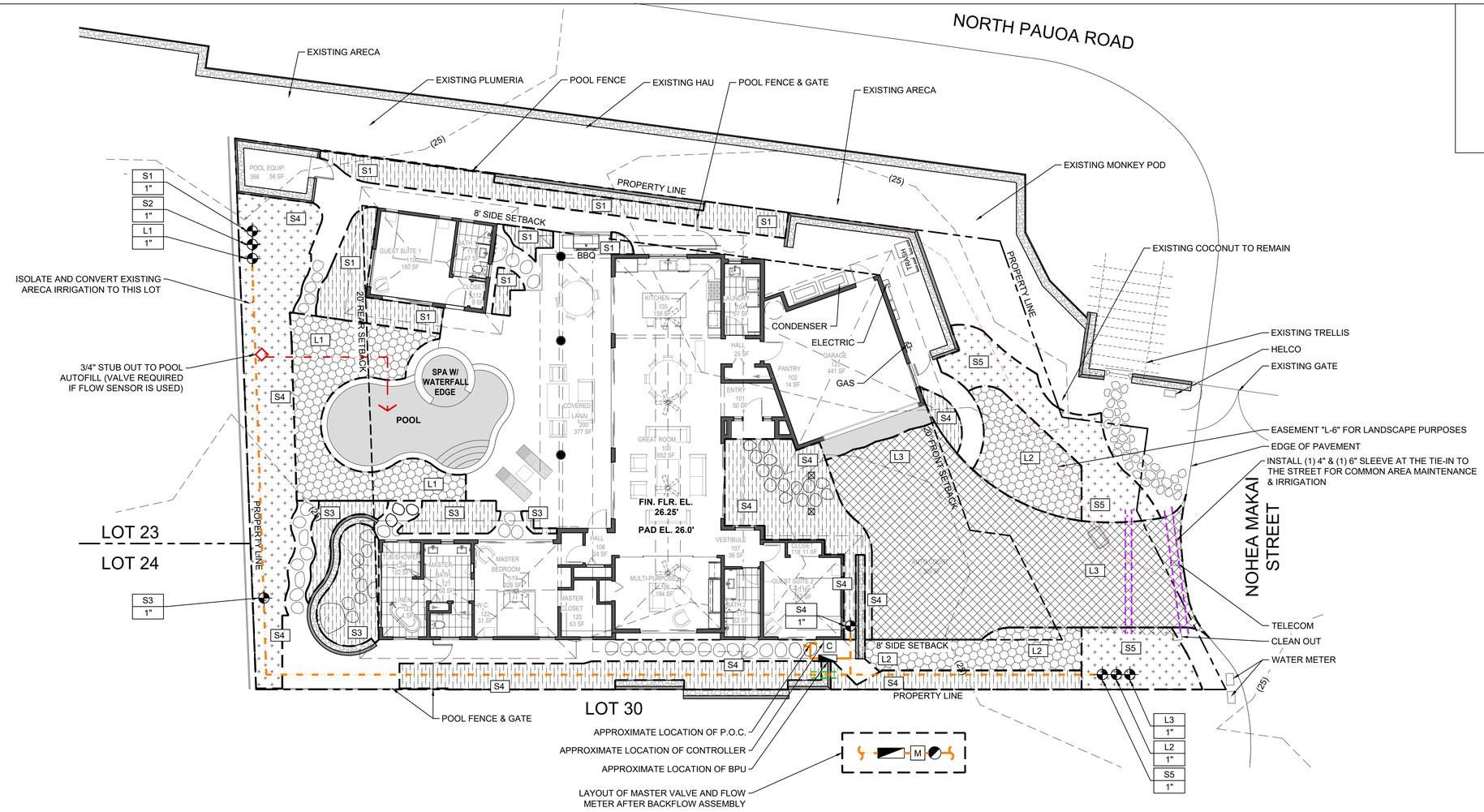
NOHEA AT MAUNA LANI
68-1038 AKEA PLACE
KAMUELA, HI 96743

TMK: 3-6-8-043:013

DRAWN BY:	MS
CHECKED BY:	MM
DATE:	2/7/2024
SCALE:	1/8" = 1'-0"

SHEET TITLE:
PLANTING PLAN

SHEET NUMBER:
L02



IRRIGATION LEGEND:

- FEBCO 825 Y, 1" BACKFLOW PREVENTER
- M — 1-1/4" MASTER VALVE (OPTIONAL)
- HUNTER HC-150-FLOW, 1-1/2" FLOW METER, INDEPENDENTLY HARD WIRED TO CONTROLLER (OPTIONAL)
- C — CONTROLLER - HUNTER HPC HPC-400 WITH 9 STATION EXPANSION KIT, PCM-900, OR EQUAL (2 WIRE) HYDRAWISE / WIFI CONTROLLER. COORDINATE FINAL LOCATION ADJACENT ELECT. RECEPTACLE ON BUILDING WALL.
- VALVES - HUNTER PGV 1"- 1-1/2" W/EZ-1, 2 WIRE DECODER SOLENOIDS (OR EQUAL). NO 3/4" SIZE.
- DRIP VALVES - HUNTER PGV-ASV 1" W/EZ-1, 2 WIRE DECODER SOLENOIDS AND ACCUSYNC-30 (OR EQUAL), 30PSI PRESSURE REGULATOR. NO FILTER REQUIRED.
- PROPOSED MAINLINE: SCHEDULE 40 PVC PIPE WITH SCHEDULE 80 PVC FITTINGS 1-1/4" LINE SIZE, PROVIDE 18" (MIN.) COVER
- (2) 3" SLEEVES, SCHEDULE 40 PVC AS SHOWN
- (2) 4" SLEEVES, SCHEDULE 40 PVC AS SHOWN
- POOL AUTOFILL

***NOTE FOR ALL SLEEVES:** PROVIDE, 12" MIN COVER AND EXTEND 12" MIN BEYOND PAVEMENT EDGES. TAPE ENDS TO PREVENT SOIL INTRUSION AND CAREFULLY AS-BUILT SLEEVE LOCATION AND DEPTH.

NOT SHOWN

LATERAL LINE: SCHEDULE 40 PVC PIPE W/ SCHEDULE 80 PVC SOLVENT-WELD FITTINGS; PROVIDE 12" (MIN.) COVER.

LATERAL LINE SIZE FLOW CHART
1-6 GPM - 3/4" PIPE
7-12 GPM - 1" PIPE
13-22 GPM - 1-1/4" PIPE
22-25 GPM - 1-1/2" PIPE

PEAK SYSTEM FLOW AT VALVES SHALL NOT EXCEED 25 GPM. USE SCH40 PVC PIPING FOR LATERALS

S1 — CONTROLLER STATION NUMBER (S = SHRUBS, T = TREES)
1" — VALVE SIZE

SMALL SHRUB BEDS (2'-6') - FLOOD/STREAM BUBBLER / SHORT RADIUS SYSTEMS
USE FLOOD / STREAM BUBBLERS OR 2' - 6' SHORT-RADIUS, MICRO SPRAY NOZZLES ON 6" POP-UPS, OR 12" RISERS @ 3'-6' SPACING.

LAWN
USE HUNTER PRS40 6" POP UPS WITH MP-1000 ROTATOR NOZZLES

LARGE SHRUB BEDS (6'-15' +) - SPRAY SYSTEMS
USE MEDIUM LOW TRAJECTORY SPRAY, OR MP ROTATOR NOZZLES ON RISERS.
ADJACENT TO LAWN OR PAVING EDGES (HIGHLY VISIBLE): USE HUNTER (OR EQUAL) 12"PROS-PRS40-12-SI-CV POP-UPS WITH 6-8" RISER EXTENSIONS, SPACING AS REQ'D. SET HEADS 12" MIN AWAY FROM LAWN OR PAVING.
IN MIDDLE OF PLANTING MASSINGS: USE 18"-30" RISERS WITH 6"-12" POP-UPS (OR HUNTER PRS40 SHRUB ADAPTORS) ON TOP OF RISERS TO LIGHTLY CLEAR GROUNDCOVER MASSINGS. STAKE ALL RISERS AS DETAILED.
ADJACENT BUILDINGS OR WALLS (BACK OF SHRUB MASSING, NOT HIGHLY VISIBLE):USE 18"-30" RISERS WITH HUNTER PRS40 SHRUB ADAPTORS) TO LIGHTLY CLEAR GROUNDCOVER MASSINGS. STAKE ALL RISERS. SET HEADS 12" MIN AWAY FROM WALLS AS DETAILED.

IN LINE DRIP SYSTEM
USE NETAFIM TLCV9-12 SURFACE DRIP LINE (OR EQUAL); SET LENGTHS ON GRADE IN PARALLEL ROWS 16" APART PROVIDING CONTINUOUS COVERAGE ACROSS ALL PROPOSED SHRUB/GROUND COVER PLANTING AREAS; TUBING MAY SIMPLY BE SET MEANDERING THROUGHOUT NARROWER PLANTERS AS REASONABLY EFFICIENT. PROVIDE COMPRESSION FITTINGS AND ADAPTORS PER MANUFACTURER'S SPECIFICATIONS; INSTALL #MDCFPCAP FLUSH END CAP WITH ADAPTOR AT TERMINUS OF EACH DRIP LINE RUN; OR FARTHEST POINT ON LOOP FROM RCV WITHIN ROUND BOX AS DETAILED. STAKE TO GRADE WITH THE "U" METAL, STAKES AT 3' O.C., SPACING (MAX.); ALL DRIP LINES SHALL BE EVENLY AND NEATLY SPACED. MAINTAIN A 12" OFFSET FROM PERIMETER DRIP LINES AND ADJACENT HEADERS, EDGE OF PLANTER, PAVING, ETC.

GENERAL IRRIGATION NOTES:

THE IRRIGATION PLAN IS DIAGRAMMATIC AND SUBJECT TO BEING ADJUSTED IN THE FIELD BY THE CONTRACTOR TO ADAPT TO EXISTING SITE CONDITIONS. ALL MATERIALS AND METHODS OF INSTALLATION SHALL BE DONE TO TYPICAL HIGH-END RESIDENTIAL IRRIGATION STANDARDS. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE COMPLETE AND PROPER IRRIGATION COVERAGE TO ALL LANDSCAPE AREAS. ANY QUESTIONS SHOULD BE DIRECTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY.

SHRUB SPRAY SYSTEMS SHALL BE COMPRISED OF 12" POP-UPS (AGAINST LAWN/PLANTING BOARDS) AND 18" STANDARD RISERS (WITHIN PLANTER OR ADJACENT HOUSE MAINTENANCE STRIPS) BASED ON LOCATION AND GROUNDCOVER TYPE SPECIFIED.

THE STATIC WATER PRESSURE MINIMUM IS CRITICAL TO THE LAYOUT AND DESIGN OF THE SYSTEM. ANY REDUCTION IN STATIC WATER PRESSURE BASED ON EXISTING CONDITIONS MAY REQUIRE ADDITIONAL VALVES AND CIRCUITING TO COMPENSATE FOR THE LOWER PRESSURE. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF THE EXISTING STATIC PRESSURE IS BELOW 60 PSI.

THE CONTRACTOR SHALL BE REQUIRED TO CREATE AN AS-BUILT PLAN OF THE "BACKBONE SYSTEM COMPONENTS" UPON COMPLETION. THE SUBMITTAL OF THIS PLAN IS REQUIRED FOR FINAL PROJECT ACCEPTANCE AND PAYMENT.

ALL MAINLINES TO HAVE A MINIMUM OF 18" OF COVER. (SCH40 PVC PIPE). ALL LATERALS AND SUB-MAIN PIPE TO HAVE A MINIMUM OF 12" OF COVER. (SCH 40 PVC PIPE).

ABSOLUTELY NO ROCKS OR OTHER EXTRANEOUS MATERIALS TO BE USED IN BACKFILLING OF TRENCHES.

ALL PIPING SHALL BE PROPERLY SEATED AND COVERED WITH SHADING.

CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, I.E. VERIFY ROOT BALL SIZE FOR PLANTING.

CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES. CONTRACTOR TO ADD EXTENSION RISER TO POP-UP HEADS WHEN NEEDED FOR PROPER COVERAGE.

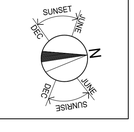
CONTRACTOR SHALL INSTALL SPRINKLER EQUIPMENT 12" FROM FOUNDATIONS. ALSO INSTALL SPRINKLERS 4" FROM CURB OR WALKS.

CONTRACTOR TO ADD EXTENSION RISER TO POP-UP HEADS WHEN
NEEDED FOR PROPER COVERAGE.

INSTALL BUILT-IN CHECK VALVE BODIES ANYWHERE LOW DRAINAGE MAY OCCUR.

INSTALL IN LINE CHECK VALVES WHERE LATERAL RUNS EXCEED 10' VERTICALLY.

4' 0 4' 8' 16' 24'
1/8" = 1'-0"



Exp:_____

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

MAHANEY ENVIRONMENTAL DESIGN
67-1228 Halalena Place
Kamuela HI 96743
(808) 895-0826
WWW.HAWAIILANDSCAPEARCHITECT.COM
MARK@HAWAIILANDSCAPEARCHITECT.COM

NO.	DATE	REVISION

PROJECT NUMBER --

LOT 31

NOHEA AT MAUNA LANI
68-1038 AKEA PLACE
KAMUELA, HI 96743

TMK: 3-6-8-043:013

DRAWN BY:	MS
CHECKED BY:	MM
DATE:	2/7/2024
SCALE:	1/8" = 1'-0"

SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

L03