

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS  
HONOLULU, HAWAII

SPECIAL PROVISIONS, SPECIFICATIONS, PROPOSAL, CONTRACT

FOR

MAINTENANCE OF LANDSCAPED AREAS AND  
MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM,

WAIAWA INTERCHANGE

DISTRICT OF EWA

ISLAND OF OAHU

PROJECT NO. H1D-01-24C(2R)

2024

**NOTICE TO BIDDERS**  
Hawaii Revised Statutes (HRS)  
Chapter 103D

The receiving of bids for **MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM, WAIAWA INTERCHANGE, DISTRICT OF EWA, ISLAND OF OAHU, PROJECT NO. H1D-01-24C(2R)**, will begin as of the HIePRO Release Date. Bidders shall register and submit complete bids through HIePRO only. Refer to the following HIePRO link for important information on Vendor Registration: <https://hiepro.ehawaii.gov/welcome.html>.

The solicitation, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HIePRO.

HIePRO OFFER DUE DATE & TIME is January 10, 2025, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HIePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of furnishing all labor, materials, tools and equipment necessary for the maintenance of certain designated landscaped areas, including applicable planter boxes within the highway right-of-way and maintenance, inspection of irrigation system.

To be eligible for award, bidders shall possess a valid State of Hawaii Specialty Contractor's "C-27" Landscaping Contractors license at the time of bidding. Bidders attention is also directed to Section 10.3 of the Specifications regarding additional bidder requirements.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HlePRO **no later than December 30, 2024, 2:00 p.m., HST.** RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HlePRO.

If there is a conflict between the solicitation and information stated in the responses to Request for Information questions the solicitation shall govern and control, unless as amended by formal addendum.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS § 11-355 which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled "Nondiscrimination in

Federally Assisted Programs of the U.S. Department of Transportation”, Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, or sex (as directed by 23 CFR Part 200).

For additional information, contact Jake Dickman, Project Manager, by phone at (808) 587-2189 or by email at [jake.j.dickman@hawaii.gov](mailto:jake.j.dickman@hawaii.gov)

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.



---

ROBIN K. SHISHIDO  
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: December 23, 2024

TABLE OF CONTENTS

Page No.

Notice to Bidders

Special Provisions .....SP-1 – SP-12

Specifications

Section 1     Definition and Terms .....1-1 – 1-4

Section 2     Proposal Requirements and Conditions .....2-1 – 2-3

Section 3     Award and Execution of Contract.....3-1 – 3-5

Section 4     Scope of Work .....4-1 – 4-3

Section 5     Control of Work.....5-1 – 5-3

Section 6     Control of Materials .....6-1 – 6-3

Section 7     Legal Relations and Responsibility .....7-1 – 7-4

Section 8     Prosecution and Progress .....8-1 – 8-8

Section 9     Payment.....9-1 – 9-2

Section 10    Maintenance of Landscaped Areas .....10-1 – 10-30

Section 11    Maintenance, Repair and Inspection  
                  of Irrigation System .....11-1 – 11-15

Appendices

Appendix A – Tree and Shrub Planting Detail .....A-1

Appendix B – Invasive Plant Removal.....B-1

Appendix B1 – Tree Pruning – Crown Raising Exhibit .....B1-1

Appendix B2 – Tree Pruning – Crown Cleaning Exhibit.....B2-1

Appendix C – Maintenance of Landscaped Areas,  
                  Task and Frequency Matrix .....C-1 – C-2

	<u>Page No.</u>
Appendix D – Irrigation System Maintenance Tasks, Frequency Checklist and Report.....	D-1 – D-7
Appendix D1 – Supplemental Irrigation System Maintenance Information .....	D1-1 – D1-3
Appendix D2 – Sample – Irrigation Controller Schedule.....	D2-1
Appendix E – Sample – Irrigation Trouble Call/Equipment Service Maintenance Report .....	E-1
Appendix F – Location Plan .....	F-1 – F-2
Appendix F1 – Summary of Required Annual Inspections .....	F1-1
Appendix G – Application & Permit for the Occupancy & Use of State Highway Right-Of-Way .....	G-1
Appendix G1 – Sample – Notice to Proceed Letter for Miscellaneous Work.....	G1-1
Appendix H – Landscape Maintenance Contractor Performance Rating .....	H-1 – H-2
Appendix H1 – Sample – Herbicide Application Record.....	H1-1
Appendix I – Sample – Monthly Invoice.....	I-1
Appendix I1 – Sample – Certified Payroll Report.....	I1-1
Appendix J – Sample – Satisfactory Evidence by Affidavit for Final Payment .....	J-1
Appendix K – Irrigation System Approximate Location.....	K-1
Proposal.....	PF-1 – PF-5
Proposal Schedule.....	PF-6 – PF-7

Forms

Sample Contract.....KF-1 – KF-3

Certificate for Performance of Services

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS  
HONOLULU, HAWAII

SPECIAL PROVISIONS



## SPECIAL PROVISIONS

The specifications contain herein are amended as follows:

(A) SECTION 1 – DEFINITIONS AND TERMS shall be amended as follows:

1. 1.33 SUBCONTRACTOR is amended by deleting it and replacing it with the following:

"1.33 SUBCONTRACTOR – An individual, partnership, firm, corporation, or joint venture or other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii Revised Statutes, as amended, which enters into agreement with the Contractor to perform a portion of the work."

2. 1.38 WORKING DAY shall be amended in its entirety to read as follows:

"1.38 WORKING DAY – Every day, except Saturdays, Sundays, State holidays as applicable and as observed.

Normal State holidays are as follows:

New Year's Day (The first day in January)  
Dr. Martin Luther King, Jr. Day (The third Monday in January)  
President's Day (The third Monday in February)  
Prince Jonah Kuhio Kalanianaʻole Day (The twenty-sixth day in March)  
Good Friday (The Friday preceding Easter Sunday)  
Memorial Day (The last Monday in May)  
King Kamehameha Day (The eleventh day in June)  
Independence Day (The fourth day in July)  
Statehood Day (The third Friday in August)  
Labor Day (The first Monday in September)  
General Election Day (The first Tuesday in November following the first Monday of even numbered years)  
Veteran's Day (The eleventh day in November)  
Thanksgiving Day (The fourth Thursday in November)  
Christmas Day (The twenty-fifth day in December)

State Holiday schedules can be obtained online at:

<http://dhrd.hawaii.gov/state-observed-holidays/>"

3. Add the following new subsections:

"1.39 HAWAII ePROCUREMENT SYSTEM (HIePRO) – The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.

1.40 ENGINEER – The respective District Engineer, acting directly or through his duly authorized representatives, who are responsible for engineering supervision of construction and other highway matters.

1.41 STANDARD SPECIFICATIONS – The Hawaii Standard Specifications for Road and Bridge Construction, 2005, Highways Division, Department of Transportation, including any amendments. To review the Standard Specifications, log on to:

<http://hidot.hawaii.gov/highways/s2005-standard-specifications/>

to review the 2005 Standard Specifications and their applicable amendments/Special Provisions.

The Contractor shall utilize the latest revision.

1.42 MUTCD – The Manual on Uniform Traffic Control Devices, 2009, Federal Highway Administration, U.S. Department of Transportation, including any amendments or revisions. To review the MUTCD, log on to:

<http://mutcd.fhwa.dot.gov/>

The Contractor shall utilize the latest revision.

1.43 HMSLM – The Hawaii Department of Transportation (HDOT) Highway Manual for Sustainable Landscape Maintenance, 2011, Highways Division, Hawaii Department of Transportation, including any amendments or revisions. To review the HMSLM, log on to:

<http://hidot.hawaii.gov/highways/landscape-architecture-program/>

1.44 OSHA – Occupational Safety and Health Administration/Act, U.S. Department of Labor, as amended, revised, or updated, applies to these Specifications. To review the OSHA, log on to:

<https://www.osha.gov/laws-regs>

The Contractor shall use the latest revision.

1.45 DEBRIS & LITTER – Rubbish and other objects that are unsightly, glass, trash, papers, cans, bottles, cigarette butts, palm fronds and tree limbs and the like.”

(B) SECTION 2 – PROPOSAL REQUIREMENTS AND CONDITIONS shall be amended as follows:

1. 2.1 QUALIFICATION OF BIDDERS is deleted in its entirety.
2. 2.3 PROPOSAL GUARANTY is deleted in its entirety.
3. 2.4 DELIVERY OF PROPOSALS shall be amended in its entirety to read as follows:

**“2.4 DELIVERY OF PROPOSALS – Bidders shall submit and upload the complete proposal to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Do not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. **Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO.****

**FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.**

If there is a conflict between the specifications document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.”

4. 2.5 WITHDRAWAL OF PROPOSALS is amended by replacing the entire subsection with:

**“2.5 WITHDRAWAL OF PROPOSALS – Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, and submitted and uploaded to HIePRO prior to the bid opening date and time.”**

5. 2.6 PUBLIC OPENING OF PROPOSALS is not applicable.
6. Add the following new subsection:

**“2.9 CERTIFICATE FOR PERFORMANCE OF SERVICES – Pursuant to Section 103-55, Hawaii Revised Statutes, and unless indicated otherwise, each bidder should submit the “Certificate for Performance of Services” in the event bids are more than \$25,000. The notarized certificate shall be submitted to the Contracts Office, Department of Transportation, 869 Punchbowl Street, Honolulu, Hawaii 96813, before entering a contract to perform services. This form is available in the Forms section.**

**Effective July 1, 2024**, salaries of State employees performing work similar to the work called for under this contract are as follows:

Class Title	Bargaining Unit (BU) Salary Schedule	Grade	Minimum Hourly Pay Rate
General Laborer I	BU-01	BC-02	\$24.35
General Laborer II	BU-01	BC-03	\$25.04
General Laborer III	BU-01	WS-03	\$26.80
Equipment Operator I	BU-01	BC-04	\$26.04
Equipment Operator II	BU-01	BC-06	\$28.17
Irrigation Service Worker II	BU-01	BC-07	\$29.30
Sprinkler System Repairer	BU-01	BC-05	\$27.09
Nursery Worker II	BU-01	WS-05	\$29.01
Grounds Maintenance Supervisor I	BU-02	F-103	\$28.37
Highway Maintenance Supervisor I & II	BU-02	F-105	\$31.09

The above information is provided to the Contractor for guidance only and is subject to change in accordance with existing collective bargaining contracts or shall change as contracts are renegotiated. It is the Contractor's responsibility to verify the accuracy of the wage rates contained herein and to provide for changes in the minimum wages, which shall be paid to personnel when work is done on this project. Information on the status of Bargaining Unit (BU) contracts, salary schedules, Class Specifications and minimum qualification requirements can be obtained from the State Department of Transportation, Highways Division, Personnel Management office (587-2229) or online at:

<http://dhrd.hawaii.gov/state-hr-professionals/class-and-comp/>

Bidders are further advised that they are not restricted to hire only those classifications of employees as listed but are free to employ such other classifications of workers as the bidder deems proper and proposes to use on the project, as may be according to the bidder's common hiring practice. However, the principal duties of employees other than those listed hereinabove working on the project shall be matched against those of State workers to determine the closest equivalent State employee classification, and the Contractor shall compensate such employee(s) at a rate which is no less than that of the equivalent State employee."

(C) SECTION 4 – SCOPE OF WORK shall be amended as follows:

1. 4.2 PERFORMANCE OF WORK shall be amended by adding the following to the end of the subsection:

"The Contractor shall perform work satisfactorily in the judgment of the Engineer during the contract period. If it appears at any time that the work contracted to be performed is not satisfactory, the Engineer may require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to satisfactory status.

In case the Contractor fails to comply after ten (10) working days from the date of receipt of such a written order from the Engineer, the Engineer may employ a working force and equipment and charge the Contractor for the reasonable cost thereof including depreciation for equipment and or he may terminate the contract."

(D) SECTION 5 – CONTROL OF WORK shall be amended as follows:

1. 5.3 COOPERATION OF CONTRACTOR AND STATE shall be amended by adding the following to the end of the subsection:

"Before starting work on the project, the Contractor shall designate in writing an authorized representative (i.e. superintendent) who shall have complete authority to represent and to act for the Contractor.

The Contractor shall furnish the State with a telephone number and electronic mail (email) address where they can be reached, either by voice or text, at all times. The Contractor or their designated representative shall return phone calls from the Engineer within one (1) hour of receipt of the phone call or text. All emails from the Engineer shall receive a response within three (3) hours of receipt of the email. Refer to Subsection 1.40 Engineer of the Special Provisions for the definition of Engineer."

2. 5.4 INSPECTION shall be amended by adding the following to the end of the subsection:

"The Director reserves the right to have all work as specified by the contract documents to be inspected by a State Inspector or by a State Contractor/Consultant-provided inspector.

The Contractor shall maintain all books, documents, papers, records, and other evidence pertaining to payroll: employee's name, employee's correct classification, wage rates, daily and weekly hours worked, deductions made, and actual wages paid. The Contractor shall make such materials and information available at their respective offices at all reasonable times during the contract period and for three (3) years from the date of final payment under the

contract for inspection by the State. Failure to comply with the conditions of this Section during the contract period may result in cancellation of the contract.”

3. 5.5 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK shall be amended by adding the following paragraphs to the end of the subsection:

“At any time during the performance of this contract, but no later than six months after the acceptance of the services or materials incorporated in accordance with the requirements of this contract, the State may require the Contractor to remedy by correction or replacement, any services or materials which have failed to comply with the requirements of this contract.”

4. Add the following new subsection:

“5.7 CONTRACTOR PERFORMANCE RATING – The Contractor shall be rated every month or more often determined by the engineer based on their performance for that period. The Contractor will be rated on twenty-five (25) performance factors related to compliance with the contract specifications. *Refer to Appendix H Landscape Maintenance Contractor Performance Rating*, of the Appendices for the twenty-five (25) performance factors and for the Contractor’s instructions prior to submitting their monthly invoice.

Deduction(s) is/are made as specified in Section 10.18(C) Deductions, of the Specifications for documented rating of “Doesn’t meet specifications” to any of the task.

The Contractor shall be rated at least every three (3) months or as determined by the Engineer. The Contractor will be rated on performance factors related to compliance with the contract specifications on administrative items and performance of field activities.

The Contractor’s continuous unsatisfactory performance to meet the contract requirements shall be grounds for non-extension of the contract.”

(E) SECTION 6 – CONTROL OF MATERIAL AND EQUIPMENT

6.2 TRADE NAMES AND ALTERNATES is amended as follows:

1. The first paragraph of A. QUALIFICATION BEFORE BID OPENING shall be replaced with the following:  
“A. QUALIFICATION BEFORE BID OPENING - When the specifications and/or plans specify one or more manufacturer's brand names of materials or equipment to indicate a quality, style, appearance, or performance, the bidder will be assumed to have based its bid on one of the specified named products, except where such proprietary product are specified, alternate brands may be qualified if found equal or better by the Department. The bidder shall submit a request to the

Department for review and approval at the earliest date possible. Requests shall be submitted via email to the Contact person listed in HiePRO for the solicitation and also posted as a question in HiePRO under the question/answer tab referencing the email with the request. The request must be posted in HiePRO no later than seven (7) calendar days before the bid opening date.”

2. The first sentence of the second paragraph of A. QUALIFICATION BEFORE BID OPENING shall be replaced with the following:

“It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent.”

- (F) SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY shall be amended as follows:

1. 7.8 LABOR AND COMPENSATION REQUIREMENTS shall be amended by replacing the first two paragraphs with the following:

“7.8 LABOR AND COMPENSATION REQUIREMENTS – Pursuant to Section 103-55, H.R.S., Wages, Hours, Working Conditions of Employees of Contractor’s Supplying Services, services to be rendered shall be performed by employees paid at wages or salaries not less than the wages paid to public officers and employees for similar work. The Contractor shall submit certified payroll affidavits weekly in the form approved by the Department.

Additional information on the requirements of Section 103.55, H.R.S. may be obtained at:

[https://www.capitol.hawaii.gov/hrscurrent/Vol02\\_Ch0046-0115/HRS0103/HRS\\_0103-0055.htm](https://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0103/HRS_0103-0055.htm).

The Contractor shall submit certified payroll report in the form approved by the Department, showing full information on the following:

- a. Name of each employee who worked during the reporting period,
- b. Their rates of pay,
- c. The number of hours worked,
- d. Gross earnings and
- e. Deductions made.

The Contractor shall be required to comply with the laws of the U.S. Citizenship and Immigration Services (USCIS). The Department reserves the right to periodically check the employable status of persons listed on the certified payroll certificates. Any person, who is found to be an illegal alien (undocumented alien)

under the laws of the USCIS, shall be immediately dismissed from the project and not be rehired until he or she is properly cleared.”

2. Add the following new subsection:

“7.10 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall always conduct maintenance operations with due regard to the convenience and safety of the public. The protection of persons and property shall be provided by the Contractor.

All work under this contract shall be in full compliance with Subsection 107.11, Safety: Accident Prevention and 107.12, Protection of Persons and Property of the Standard Specifications. Refer to Section 1.41 Standard Specifications, of the Special Provisions for the definition of Standard Specifications.

The Contractor shall take all necessary precautions to protect all personnel from hazards and injuries. The rules and regulations promulgated by the U.S. Department of Labor Occupational Safety and Health Acts (OSHA); the Hawaii Department of Labor and Industrial Relations (DLIR); the Hawaii Occupational Safety and Health Division (HIOSH) and any other applicable federal, state, and local rules and regulations are not included herein, but are applicable and made part of these Specifications.”

- (G) SECTION 8 – PROSECUTION AND PROGRESS shall be amended as follows:

1. 8.2 SUBCONTRACTING shall be amended by replacing the first paragraph with the following paragraphs:

“The Contractor shall give his personal attention to the fulfillment of the contract and shall always keep the work under his control.

The scope and nature of work required under this contract are such that any licensed Contractor as specified in the Notice to Bidders, should be able to do the work required without subcontracting any of it to others.

Any work, that falls outside of the authorized work of the licensed Contractor specified in the Notice to Bidders or work that requires specific training and certification, may be subcontracted only upon approval of the Director or the Contractor may employ these personnel that requires specific training and certification as part of their staff. The Director’s decision shall be final. Payment of all costs for such subcontractor work shall be according to prices or arrangements agreed upon prior to authorization of such work in writing.”

2. 8.6 LIQUIDATED DAMAGES shall be amended by adding the following to the end of the subsection:



“A. Liquidated Damages for Maintenance of Landscaped Areas:

1. Plants which die due to irrigation failure, as applicable, may be considered to have died due to the Contractor’s negligence, invasive plants, insects, disease, or malpractice and shall be replaced with the same species, spread and height at the Contractor’s expense within four weeks of notification from the Engineer. The Contractor shall pay liquidated damages to the Department for the replacement value of plants not replaced within four weeks after notification from the Engineer.

<b>Item</b>	<b>Unit Size/Description</b>	<b>Unit</b>	<b>Liquidated Damages</b>
<u>Gold Tree</u> [Tabebuia donnel-smithii]	95 Gallon Can, 8-10' ht, 6-10' Spd [must meet all above criteria]	Each	\$2,500.00
<u>Pink Tecoma</u> [Tabebuia heterophylla]	45 Gallon Can, 6-8' ht, 4-6' Spd [must meet all above criteria]	Each	\$1,750.00
<u>Rainbow Shower Tree</u> [Cassia x nealiae]	95 Gallon Can, 8-10' ht, 6-10' Spd [must meet all above criteria]	Each	\$2,500.00
<u>Royal Poinciana</u> [Delonix regia]	45 Gallon Can, 6-8' ht, 4-6' Spd [must meet all above criteria]	Each	\$1,750.00
<u>African Tulip Tree</u> [Spathodea campanulata]	45 Gallon Can, 6-8' ht, 4-6' Spd [must meet all above criteria]	Each	\$1,750.00
<u>Alexander Palm</u> [Archontophoenix alexandrae]	45 Gallon Can, 8-10' ht, brown trunk [must meet all above criteria]	Each	\$2,500.00
<u>Macarthur Palm</u> [Ptychosperma macarthurii]	Multi stem, 45 Gallon Can, 8-10' ht [must meet all above criteria]	Each	\$1,750.00

Liquidated Damages Table Continued:

Item	Unit Size/Description	Unit	Liquidated Damages
<u>Bestill</u> [Thevetia peruviana]	45 Gallon Can, 6-8' ht, 4-6' Spd [must meet all above criteria]	Each	\$1,750.00
<u>Kukui</u> [Aleurites moluccana]	95 Gallon Can, 8-10' ht, 6-10' Spd [must meet all above criteria]	Each	\$2,500.00
<u>Monkeypod</u> [Saman samanea]	95 Gallon Can, 8-10' ht, 6-10' Spd [must meet all above criteria]	Each	\$2,500.00
<u>Pothos</u> [Epipremnum]	6" potted plant	Each	\$35.00
<u>Snow Bush</u> [Breynia nivosa]	3-gallon potted plant	Each	\$75.00
<u>Monstera</u> [Monstera deliciosa]	3-gallon potted plant	Each	\$75.00
<u>Bermuda Grass</u> [Cynodon dactylon]	Sod	Square feet	\$2.50

2. \$75.00 for each and every calendar day for failure to respond to a phone call, voicemail, or email regarding work requests requiring immediate attention and other contractual issues as specified in these Contract Specifications.
3. \$400.00 for each calendar day for failure to have the required CLT Exterior Maintenance (or equivalent certificate) or CLT Exterior Irrigation (or equivalent certificate) on site during landscape and/or irrigation maintenance operations as specified in these Contract Specifications.

B. Liquidated Damages for routine and preventative Maintenance and Inspection of Irrigation System.

Timely performance by the Contractor of all his duties every calendar day is an essential part of this Contract and in case of failure on the part of the Contractor to perform any of his duties in a timely manner; damages will be sustained by the State. Since the value of damages are difficult to predetermine, the value of such damages is fixed in advance as follows:

1. For failure to provide satisfactory and timely maintenance and inspection service in accordance with the Specifications as determined by the Director. Liquidated damages shall be assessed to the Contractor for each calendar day at the rate of five percent (5%) of the unit price of the maintenance service items.
2. Five percent (5%) of current total monthly billing may be deducted from State's payment to the Contractor for each time it does not respond within two (2) hours after receipt of an irrigation trouble call request. For the purposes of this paragraph, the definition of the term "respond," means to have maintenance personnel on the jobsite and working on the equipment which is the subject of request."

(H) SECTION 9 – PAYMENT shall be amended as follows:

1. 9.2 RETAINAGE/DEDUCTION FROM PAYMENT shall be amended by adding the following to the end of the third paragraph:

“Retainage is deducted monthly starting on the first invoice of the applicable term and if contract performance is satisfactory, deduction will end after six months. The Contractor has **two options** to be paid the retainage amount:

- a. Submit the total retainage invoice at the end of the first term. Repeat the whole process of deducting retainage and submitting total retainage for payment for each contract term, or
- b. Submit the total retainage invoice held during the first term at the end of the final term, as applicable (end of the final option term or when contract is not renewed, etc.).

2. 9.4 PROGRESS PAYMENTS shall be amended by adding the following to the end of the subsection:

“The Contractor shall bill the State once a month. All monthly payments are approximate only and shall be subject to correction at any time prior to or in the final estimate and payment.

To expedite the processing of all payments for services rendered, the Contractor shall forward copies of the invoice as specified in the Specifications, to the following address:

Department of Transportation - Highways  
c/o District Engineer - Oahu District  
Highways Division  
727 Kakoi Street,  
Honolulu, Hawaii 96819

Each invoice shall include but not be limited to the following information:

- a. Contractor's name, address, phone number and email address
- b. Contract number, Project number and Project title.
- c. Bid item number, description of services, periods covered/date of service(s) performed, quantity, unit price, amount, subtotal, and total.
- d. Deductions, as applicable, shall be included in the invoices as separate subtotal(s) and labeled as either "Deductions", "Liquidated Damages and/or "Retainage."
  - i. Liquidated Damages – as specified in Section 8.6 Liquidated Damages, of the Special Provisions.
  - ii. Retainage as specified in Section 9.2 Retainage/Deduction from Payment, of the Special Provisions and the Specifications
  - iii. Certification by the Contractor that services as requested under the Contract have been performed as specified in Section 9.4 Progress Payments, of the Specifications.
- e. Refer to the sample invoice in Appendix I – Sample Monthly Invoice. Pursuant to Section 7.8 Labor and Compensation Requirements, of the Special Provisions, the Contractor shall submit certified copies of the payrolls with the monthly invoice within seven (7) days after the end of the month. The certification shall affirm that the payrolls are correct and complete. The certificates shall be forwarded to the same address as specified above.”

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

## SECTION 1 - DEFINITION AND TERMS

Whenever the following pronouns are used in these specifications, or in any documents or instruments where these specifications govern, the intent and meaning shall be interpreted as follows:

1.1 ADDENDA - A written document which may be issued by the Director during the bidding period involving changes to the specifications and plans, if any, which shall be considered and made a part of the contract.

1.2 AIRPORTS DIVISION - Airports Division, Department of Transportation, State of Hawaii.

1.3 AWARD - The written acceptance of a proposal by the State.

1.4 BIDDER - Any individual, partnership, corporation or other legal entity, or combination thereof, submitting a proposal for the work contemplated, acting either directly or through a duly authorized representative.

1.5 CALENDAR DAY - Every day shown on the calendar. If no designation of calendar or working day is made, "day" shall mean calendar day.

1.6 CHANGE ORDER - A written order issued by the Director to the Contractor requiring the contract work to be performed in accordance with a change or changes that may involve an adjustment in contract time and price or requiring performance of any unforeseen work essential to complete the contract.

1.7 CONTRACT - The written agreement between the State and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract includes the (1) notice to bidders, (2) proposal, (3) contract form and contract bond, (4) specifications, (5) special provisions and plans, if any, (6) addenda, (7) notice to proceed, and (8) change orders and agreements that are required to complete the work, all of which constitute one instrument.

1.8 CONTRACT BOND - The approved form of security, executed by the Contractor and its Surety or Sureties, guaranteeing the completion of the work in accordance with the terms of the contract, and guaranteeing full payment of all claims for labor, materials, and supplies used or incorporated in the work.

1.9 CONTRACT TIME - The number of working days or calendar days allowed for completion of the contract, including authorized time extensions.

If a calendar date is specified as the date of completion in lieu of the number of working days or calendar days, the contract shall be completed by that date.

In case the contract is for a specified period of time, the contract time shall be for said specified period of time.

1.10 CONTRACTOR - The individual, partnership, corporation or other legal entity, or combination thereof, contracting with the State for performance of the prescribed work.

1.11 DEPARTMENT - The State Department of Transportation.

1.12 DIRECTOR - The Director of Transportation, acting either directly or through the Director's duly authorized representative.

1.13 EQUAL OR APPROVED EQUAL - Whenever this term is used in the specifications and plans, if any, it means a brand or article pre-qualified in accordance with Section 6.2 Trade Names and Alternates and which may be used in place of the one specified.

1.14 H.A.R. or HAR - Hawaii Administrative Rules.

1.15 H.R.S. or HRS - Hawaii Revised Statutes.

1.16 HARBORS DIVISION - Harbors Division, Department of Transportation, State of Hawaii.

1.17 HIGHWAYS DIVISION - Highways Division, Department of Transportation, State of Hawaii.

1.18 HOLIDAYS - The days which are set apart and established as State holidays pursuant to Section 8-1, H.R.S.

1.19 INSPECTOR - The Director's authorized representative assigned to make detailed inspections of contract performance and materials supplied.

1.20 NOTICE TO BIDDERS - The public announcement, as required by law, inviting proposals for the work to be performed or materials to be furnished.

1.21 NOTICE OF FINAL ACCEPTANCE - Written notice from the Director to the Contractor that the entire contract has been completed in all respects in accordance with the specifications and plans, if any, and any changes thereof previously approved by the Director.

1.22 NOTICE TO PROCEED - Written notice from the Director to the Contractor advising the Contractor of the date on which he is to begin the prosecution of the work.

1.23 PLANS - The contract drawings approved by the Director which show the location, character, dimensions and details of the work to be done and shall be a part of the contract.

1.24 PROCUREMENT OFFICER - The Director's duly authorized representative including project managers, project engineers and contract administrators assigned to prepare, evaluate and administer contracts for the purchasing of goods and services.

1.25 PROPOSAL (OR BID) - The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

1.26 PROPOSAL FORM - The approved format prepared by the Department or a facsimile thereof on which bids for the work must be prepared and submitted. (Reasonable facsimile acceptable for bidding.)

1.27 PROPOSAL GUARANTY - The security furnished with a proposal to guarantee that the bidder will enter into the contract and furnish all other requirements if the bidder's proposal is accepted.

1.28 QUALIFICATION QUESTIONNAIRE - The specified forms on which the bidder shall furnish required information as to the bidder's ability to perform and finance the work.

1.29 S.L.H. or SLH - Session Laws of Hawaii.

1.30 SPECIAL PROVISIONS - Revisions to the specifications. The specific clauses setting forth conditions or requirements peculiar to the project under consideration which are not thoroughly or satisfactorily stipulated in these specifications.

1.31 SPECIFICATIONS - The directions, provisions, and requirements pertaining to the method and manner of performing the work and to the quantities and qualities of materials to be furnished under the contract.

1.32 STATE - The State of Hawaii.



1.33 SUBCONTRACTOR - An individual, partnership, corporation, other legal entity, or any combination thereof, that enters into an agreement with the Contractor to perform a portion of the work for the Contractor.

1.34 SUPERINTENDENT - The Contractor's representative who is responsible for and in charge of the work.

1.35 SURETY - The corporation, partnership or individual, other than the Contractor, executing a bond furnished by the Contractor and guaranteeing performance by the Contractor.

1.36 TITLES (OR HEADINGS) - The titles or headings of the Sections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation. Unless otherwise indicated, whenever the word "Section" is used, reference is being made to a Section in these specifications.

1.37 WORK - The furnishing of all labor, materials, equipment, and other incidentals necessary or convenient for the successful completion of the project and the execution of all the duties and obligations imposed by the contract.

1.38 WORKING DAY - Any day, except Saturdays, Sundays and State holidays.

## SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS

2.1 QUALIFICATION OF BIDDERS - Prospective bidders must be capable of performing the work for which bids are called.

In accordance with Section 103D-310, HRS, the Department may require any prospective bidder to submit answers to questions contained in the "Standard Qualification Questionnaire for Prospective Bidders on Public Works Contracts" on the form furnished by the Department, properly executed and notarized, setting forth a complete statement of the experience of such prospective bidder and its organization in performing similar work and a statement of the equipment proposed to be used, together with adequate proof of the availability of such equipment. Whenever it appears to the Department, from answers to the questionnaire or otherwise, that the prospective bidder is not fully qualified and able to perform the intended work, the Department will, after affording the prospective bidder an opportunity to be heard and if still of the opinion that the bidder is not fully qualified to perform the work, refuse to receive or consider any bid offered by the prospective bidder. All information contained in the answers to the questionnaire shall be kept confidential. Questionnaire so submitted shall be returned to the bidders after serving their purpose.

Failure to complete the qualification questionnaire will be sufficient cause for the Department to disqualify a prospective bidder.

No person, firm or corporation may bid where (1) the person, firm, or corporation, or (2) a corporation owned substantially by the person, firm, or corporation, or (3) a substantial stockholder or an officer of the corporation, or (4) a partner or substantial investor in the firm is in arrears in payments owed to the State of Hawaii or its political subdivisions or is in default as a surety or failure to do faithfully and diligently previous contracts with the State.

2.2 REJECTION OF PROPOSALS CONTAINING ALTERATIONS, ERASURES, OR IRREGULARITIES - Proposals may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind.

When proposals are signed by any agent, other than the officer or officers of a corporation authorized to sign contract on its behalf or a member of copartnership, a Power of Attorney must be on file with the Department prior to opening bids or shall be submitted with the proposal; otherwise, the proposal may be rejected as irregular and unauthorized.

Members of a joint venture may be requested to supply the Department with a copy of their joint venture agreement or each member of the joint venture may be required to sign the proposal.

2.3 PROPOSAL GUARANTY - A proposal guaranty (bid bond) is not required except when specifically noted in the proposal section of the bid document.

When a proposal guaranty is required with a bid, it will be specifically stated in the proposal; and no proposal totaling \$25,000 or more will be considered unless accompanied by one of the following forms of bidder's security:

- A. a deposit of legal tender; or
- B. a surety bid bond underwritten by a company licensed to issue bonds in the State of Hawaii and submitted on the standard form provided herewith; or
- C. a certificate of deposit, share certificate, cashier's check, treasurer's check, teller's check, or official check drawn by, or a certified check accepted by and payable on demand to the State by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).
  - 1. The bidder may use these instruments only to a maximum of one hundred thousand dollars (\$100,000.00).
  - 2. If the required security or bond amount totals over one hundred thousand dollars (\$100,000.00), more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be acceptable.
  - 3. The instrument shall be made payable at sight to the Department of Transportation, State of Hawaii.

According to Section 103D-323, HRS, the above shall be in a sum not less than five percent (5%) of the amount bid.

2.4 DELIVERY OF PROPOSALS - Each proposal shall be placed, together with the proposal guaranty when required, in an envelope and sealed and so marked as to indicate the identity of the project, the name and address of the bidder, and other required information and then delivered as indicated in the Notice to Bidders. Proposals will be received up to the time fixed in the Notice to Bidders for the opening of bids.

2.5 WITHDRAWAL OF PROPOSALS - Any proposal may be withdrawn at any time prior to the time fixed in the Notice to Bidders for the opening of proposals upon the filing of a written request therefore with the Department, executed by the bidder or a duly authorized representative. The withdrawal of a proposal shall not preclude a bidder from submitting a new proposal.

2.6 PUBLIC OPENING OF PROPOSALS - Proposals will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

2.7 DISQUALIFICATION OF BIDDERS - Any of the following reasons may be considered as being sufficient grounds for the disqualification of a bidder and the rejection of his proposal or proposals.

A. More than one proposal for the same work from an individual, firm, or corporation under the same or different name.

B. Evidence of collusion among bidders. Participants in such collusion will receive no recognition as bidders for any future work of the Department until such participant shall have been reinstated as a qualified bidder.

C. Evidence of assistance from a person who has been an employee of the agency within the preceding two years and who participated while in State office or employment in the matter with which the contract is directly concerned, pursuant to Section 84-15, H.R.S.

D. Lack of proposal guaranty.

E. Unsigned proposal or proposal not signed in ink by person or persons legally authorized to submit a proposal on behalf of the bidder.

2.8 MATERIAL GUARANTY - The bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the prosecution of the work, together with samples. Such samples may be subjected to tests to determine their quality and fitness for the work.

### SECTION 3 - AWARD AND EXECUTION OF CONTRACT

3.1 AWARD OF CONTRACT - The State reserves the right to reject any and all proposals and to waive any defects as may be deemed to be in the best interest of the public.

The award of contract, if it be awarded, shall be made within sixty (60) calendar days after the opening of bids to the lowest responsive and responsible bidder whose proposal complies with all the prescribed requirements. The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the sixty (60) calendar day period. Agreement to such an extension shall be made by a bidder in writing. Only bidders who have agreed to such an extension shall be eligible for the award.

**Requirement for award.** The Bidder, as proof of compliance with the requirements of section 103D-310(c), HRS, upon award of a contract made pursuant to section 103D-302, HRS, shall provide the documents listed below. The documents shall be submitted promptly to the Department. If a valid certificate/clearance is not submitted on a timely basis upon award, the Bidder may be deemed non-responsible.

**A. Tax Clearance.**

Pursuant to section 103D-310(c), 103-53 and 103D-328, HRS, the bidder shall submit a tax clearance certificate from the State of Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service (IRS), subject to section 103D-328, HRS, current within six months of issuance date.

FORM A6, TAX CLEARANCE CERTIFICATE, is available at the following website:

<https://tax.hawaii.gov/>

To receive DOTAX Forms by fax or mail, phone (808)587-4242 or 1-800-222-3229.

The application for the Tax Clearance Certificate is the responsibility of the bidder. Bidder shall submit directly to the DOTAX or IRS. The approved certificate may then be submitted to the Department.

**B. Certificate of Compliance.**

Pursuant to section 103D-310(c), HRS, the bidder shall submit a certificate of compliance for Hawaii Employment Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter 386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii Department of Labor and Industrial Relations (DLIR), current within six months of issuance date.

Form LIR#27, Application for Certificate of Compliance with section 3-122-112, HAR, is available at the following website:

<https://labor.hawaii.gov/>

Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for additional information.

Inquiries regarding the status of a LIR#27 Form are available from the DLIR Disability Compensation Division at (808)586-9200.

The application for the Certificate of Compliance is the responsibility of the bidder. Bidder shall submit directly to the DLIR. The approved certificate may then be submitted to the Department.

**C. Certificate of Good Standing.**

Pursuant to section 103D-310(c), HRS, the bidder shall submit a certificate of good standing from the business registration division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six months of issuance date, to demonstrate it is either:

- (1) incorporated or organized under the laws of the State; or
- (2) registered to do business in the State as a separate branch or division that is capable of fully performing under the contract.

A Hawaii business that is a sole proprietorship, is not required to register with the BREG, and therefore not required to submit a certificate of good standing. Bidders are advised of costs associated

with registering and obtaining a Certificate of Good Standing from the DCCA.

To purchase a Certificate of Good Standing, go to On-Line Services at the following website:

<https://cca.hawaii.gov/>

The application for the Certificate of Good Standing is the responsibility of the bidder. Bidder shall submit directly to the DCCA. The approved certificate may then be submitted to the Department.

- D.** IN LIEU OF the certificates referenced in subsection A, B, and C, bidder may make available proof of compliance through a state procurement office designated certification process.

3.2 CANCELLATION OF AWARD - The State reserves the right to cancel the award of any contract any time before the execution of said contract by all parties without any liability to the successful bidder or any other bidder.

3.3 RETURN OF PROPOSAL GUARANTY - All proposal guaranties, except those of the lowest two (2) bidders, will be returned immediately following the opening and checking of the proposals. The retained proposal guaranty of the second lowest bidder, if not a bid bond, will be returned within ten (10) calendar days following execution of contract by the successful bidder. The successful bidder's proposal guaranty, if not a bid bond, will be returned after a satisfactory contract bond has been furnished and the contract has been executed.

3.4 REQUIREMENT OF CONTRACT BOND - Only when required by the proposal, the successful bidder at the time of the execution of the contract shall file good and sufficient performance and payment bonds on the forms furnished by the Department, or a facsimile thereof, conditioned for the full and faithful performance of the contract in accordance with the terms and intent thereof and also for the prompt payment to all others for all labor and materials furnished by them to it and use in the prosecution of the work provided for in such contract, in the manner, form and amount required by Section 3-122-224(b) (2), H.A.R., which bonds shall be in an amount equal to fifty per cent (50%) of the contract price, including amounts estimated to be required for extra work, or in the case of price-term, open-end, or requirements contract under which the total amount to be paid to the Contractor cannot be accurately estimated at the time the contract is to be awarded, the bond amounts shall be as designated in the bid documents. Such bonds shall also by

their terms inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in the work so as to give them a right of action as contemplated by Section 103D-324, H.R.S.

The bidder shall limit the acceptable performance and payment bonds to the following:

- (a) Legal tender; or
- (b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or
- (c) A certificate of deposit; share certificate,; cashier's check; treasurer's check; teller's check drawn by or a certified check accepted by and payable on demand to the State by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

1. The bidder may use these instruments only to a maximum of one hundred thousand dollars (\$100,000.00).

2. If the required security or bond amount totals over one hundred thousand dollars (\$100,000.00) more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be acceptable.

3.5 EXECUTION OF CONTRACT - The contract and the "Certificate for Performance of Services", similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned, together with the contract bonds, when required, within ten (10) days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

Pursuant to Section 103D-309, H.R.S., the contract shall not bind the State in any way unless said contract has been fully and properly executed by all the parties thereto and the Comptroller has endorsed thereon a certificate that there is available an unexpended appropriation over and above all outstanding contracts, sufficient to cover the amount required by the contract.

3.6 FAILURE TO EXECUTE CONTRACT - Failure to execute the contract, Certificate for Performance of Services and file acceptable bonds, when required, within ten (10) days after



the award of the contract, or within such further time as the Director may allow, shall be cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award of the contract may then be made to the next lowest responsible bidder.

## SECTION 4 - SCOPE OF WORK

4.1 WORK TO BE DONE - The work to be done is described in the Section(s) following Section 9 of these specifications.

4.2 PERFORMANCE OF WORK - The Contractor shall employ, so far as possible, such methods and means in carrying out his work so as not to cause any interruption, disturbance, or interference with the public.

In case the Contractor is performing work in a building, the Contractor shall conduct the work in such a manner so as not to cause any interruption, disturbance, or interference with the business activities of the tenants in the building.

4.3 EXTRA WORK - New and unforeseen items of work will be classed as extra work when they cannot be covered by any of the various items for which there is a bid price.

### 4.4 CHANGES AND CLAIMS FOR ADJUSTMENT

A. Change order. By a written order, at any time, and without notice to any surety, the procurement officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:

1. Drawings, designs, or specifications, if the goods to be furnished are to be specially manufactured for the State in accordance therewith;
2. Method of shipment or packing;
3. Place of delivery;
4. Changes in the work within the scope of the contract; or
5. Changes in the time of performance of the contract that do not alter the scope of work.

B. Adjustments of price or time for performance. If any change order increases or decreases the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, an adjustment shall be made and the contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract. Failure of the parties to agree to an adjustment shall not excuse the contractor from proceeding with the contract as changed, provided that the procurement officer promptly and duly make the provisional adjustments in payment or time for performance as may be reasonable. By proceeding with the work, the contractor shall not be deemed to have

prejudiced any claim for additional compensation, or an extension of time for completion.

C. Time period for claim. Within thirty (30) days after receipt of a written change order under subsection (a) unless the period is extended by the procurement officer in writing, the contractor shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the contractor's claim unless the State or county is prejudiced by the delay in notification.

D. Claim barred after final payment. No claim by the contractor for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.

E. Other claims not barred. In the absence of a change order, nothing in this clause shall be deemed to restrict the contractor's right to pursue a claim as under the contract or for breach of contract.

#### 4.5 PRICE ADJUSTMENT

Any adjustment in contract price pursuant to a clause in this contract shall be made in one or more of the following ways:

A. By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;

B. By unit prices specified in the contract or subsequently agreed upon;

C. By the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as specified in the contract or subsequently agreed upon;

D. In such other manner as the parties may mutually agree; or

E. In the absence of agreement between the parties, by a unilateral determination by the procurement officer of the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as computed by the procurement officer in accordance with generally accepted accounting principles and applicable sections of chapters 3-123 and 3-126 of the Hawaii Administrative Rules.

#### 4.6 VARIATION IN QUANTITY

Upon agreement of the parties, the quantity of goods or services or both specified in this contract may be increased by a maximum of ten (10) percent provided (1) the unit prices will remain the same except for any price adjustments otherwise applicable and (2) the procurement officer makes a written determination that such an increase will either be more economical than awarding another contract or that it would not be practical to award another contract.

## SECTION 5 - CONTROL OF WORK

5.1 AUTHORITY OF DIRECTOR - The Director shall decide all questions which may arise as to the quality or acceptability of materials furnished and work performed; the manner of performance and rate of progress of the work; the compensation for work performed; the interpretation of the contract and the fulfillment of the contract on the part of the Contractor. The Director's decision shall be final and the Director shall have the authority to enforce any such decision and order which the Contractor fails to carry out promptly and diligently. The Director shall have the following powers in the way of enforcement:

- A. The right to suspend the work.
- B. The right to withhold payment due the Contractor.

5.2 COORDINATION OF PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS - These specifications, the plans, special provisions, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to describe and provide for the complete work.

5.3 COOPERATION OF CONTRACTOR AND DIRECTOR - The Contractor shall have available at the work site at all times, a copy of the specifications, special provisions and plans. The Contractor shall give the work constant attention to facilitate the progress thereof and shall cooperate with the Director in every way possible.

Before starting work on the project, the Contractor shall designate in writing a superintendent who shall have complete authority to represent and to act for the Contractor.

5.4 INSPECTION - The Director at all times shall have access to the work during its prosecution and shall be furnished with every reasonable facility for ascertaining that the materials and the workmanship are in accordance with the requirements and intentions of these specifications and special provisions. All work done and all materials furnished shall be subject to the Director's inspection and approval.

The inspection of the work shall not relieve the Contractor of any of its obligations to fulfill its contract as prescribed, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials may have been previously overlooked by the Director and accepted or included in an estimate for payment.

Projects financed in whole or in part with Federal funds shall be subject to inspection at all times by representatives of the Federal agency involved.

5.5 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK - All work which has been rejected shall be corrected or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed the Contractor for such correction or removal and replacement. Upon failure on the part of the Contractor to comply promptly with any order of the Director, the Director may cause any rejected work to be corrected or removed and replaced and to deduct the costs thereof from any monies due or to become due the Contractor.

5.6 CLAIMS AND DISPUTES - The Contractor may give notice in writing to the Director for claims that extra compensation, damages, or an extension of time for completion is due the Contractor for one or more of the following reasons:

- A. Requirements not clearly covered in the contract, or not ordered by the Director as extra work;
- B. Failure between the State and the Contractor to agree to an adjustment in price for a contract change order issued by the State; or
- C. An action or omission on the part of the Director requiring performance changes within the scope of the contract.

The Contractor shall continue with performance of the contract in compliance with the directions or orders of the procurement officer, but by so doing, the Contractor shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- A. The notice in writing be given:
  - 1. Before the commencement of the work involved, if at that time the Contractor knows of such requirements or the occurrence of such actions or omissions; or
  - 2. Within thirty (30) calendar days after the Contractor knows of such requirements or the occurrence of such action or omission if the Contractor did not have such knowledge before the commencement of the work; or
  - 3. Within thirty (30) calendar days after receipt of the written contract change order that was not

agreed upon by both parties; or

4. Within such further time as may be allowed by the Director in writing.

B. The notice shall clearly state the Contractor's intention to make claim and the reasons why the Contractor believes that additional compensation, changes or an extension of time may be remedies to which the Contractor is entitled; and afford the Director every facility for keeping records of the actual cost of work. Failure on the part of the Contractor to give such notification or to afford the procurement officer proper facilities for keeping strict account of actual cost shall constitute waiver of the claim for such extra compensation. The filing of such notice by the Contractor and the keeping of costs by the procurement officer shall not in any way be construed to prove the validity of the claim.

The Director will review the notice and render a decision. The Director's decision shall be final and conclusive unless, within thirty (30) calendar days from the date of the decision, the Contractor mails or otherwise furnishes a written appeal to the Director. The decision of the Director shall be final. Later notification of such claims shall not bar the Contractor's claim unless the State is prejudiced by the delay in notification. No claim by the Contractor for an adjustment hereunder shall be allowed if notice is not given before final payment under this contract.

Any adjustment in the contract price made pursuant to this clause shall be determined according to Section 4.5 - Price Adjustment.

The provisions of this Section shall not be construed as establishing any claims contrary to the terms of Section 4.4 - Changes and Claims for Adjustment.

Nothing herein contained, however, shall excuse the Contractor from compliance with any rules of law precluding any state officers and any Contractors from acting in collusion or bad faith in issuing or performing contract change orders which are clearly not within the scope of the contract.

SECTION 6 - CONTROL OF MATERIAL AND EQUIPMENT

6.1 DEFECTIVE MATERIALS - All materials not conforming to the requirements of these specifications or the special provisions shall be considered defective and all such materials, whether in place or not, shall be rejected. They shall be removed immediately from the site of the work, unless otherwise permitted by the Director. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Director. Upon failure on the part of the Contractor to comply promptly with any order to remove and replace defective materials, the Director may remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

6.2 TRADE NAMES AND ALTERNATES - For convenience in designation on the plans or in the specifications, certain equipment or articles or materials may be designated under a trade name or the name of a manufacturer and its information catalogue. The use of alternate equipment or an article or material which is of equal quality and of the required characteristics for the purposes intended will be permitted, subject to the written approval of the Director, in accordance with the following requirements:

A. QUALIFICATION BEFORE BID OPENING - When the specifications and/or plans specify one or more manufacturer's brand names of materials or equipment to indicate a quality, style, appearance, or performance, the bidder will be assumed to have based its bid on one of the specified named products, except where such proprietary product are specified, alternate brands may be qualified if found equal or better by the Director. Bidders requesting qualification of alternate proprietary products must submit a request to the Director for review and approval at the earliest date possible, but in any event, such request must be received at the Contracts office not later than ten (10) days before the bid opening date, not including the bid opening date.

It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Director that the alternate brand is qualified. The evidence shall be transmitted with a covering letter which shall list the evidence submitted and the items for which the substitution is requested.

If the evidence accompanying a request for substitution is insufficient to qualify a particular



model, the request shall be denied provided that further evidence may be submitted to qualify the item five (5) days prior to the bid opening date if the initial request was made prior to the deadline set above.

B. SUBSTITUTION AFTER BID OPENING - Substitution of material or equipment will not be allowed after the bid opening date except under the following unforeseen circumstances:

1. If a specified or pre qualified item is delayed by a lengthy strike in the factory or other unforeseeable contingency beyond the control of the Contractor which would cause an abnormal delay in the project completion.
2. If a specified or pre qualified item is found to be unusable due to change or other circumstances.
3. If the Contractor is willing to provide a more recently developed or manufactured item of material or equipment of the same manufacturer which the Director determines to be equal or better than the one specified or pre-qualified.

A substitution request, regardless of reason, shall be fully explained in writing by the Contractor and shall include its justification for said request, the quantities and unit prices involved, quotations and such other documents as are deemed necessary to support the request. Any savings in cost will accrue to the State and any additional cost for the substituted items will be paid by the Contractor.

The burden of proof as to the comparative quality and suitability of alternate equipment, articles, or materials shall be upon the bidder or Contractor and bidder or Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Director. The Director shall be the sole judge as to the comparative quality and suitability of alternate equipment, articles or materials and the Director's decisions shall be final.

The above shall not be construed to mean that substitution for brand name specified materials and equipment will be allowed; the Director reserves the right to deny any request he deems irregular or not in the best interest of the State.

6.3 ASSIGNMENT OF ANTITRUST CLAIMS FOR OVERCHARGES FOR GOODS AND MATERIALS PURCHASED

A. Vendor and purchaser recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, vendor hereby assigns to purchaser any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and which are not passed on to the purchaser under an escalation clause.

B. Contractor and owner recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the owner. Therefore, contractor hereby assigns to owner any and all claims for such overcharges as to goods and materials purchased in connection with this order or contract, except as to overcharges which result from antitrust violations commencing after the price is established under this order or contract and any change order. In addition, contractor warrants and represents that each of its first tier suppliers and subcontractors shall assign any and all such claims to owner, subject to the aforementioned exception.

SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY

7.1 LAWS TO BE OBSERVED - The Contractor shall comply with all federal, state, city and county laws, ordinances, rules and regulations which in any manner affect those engaged or employed in the work, the materials used in the work, and the conduct of the work. Any reference to such laws, ordinances, rules and regulations shall include any amendments thereto effective as of the date of the call for sealed proposals.

The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees against any claim or liability arising from or based on the violation of any such laws, ordinances, rules or regulations. If any discrepancy or inconsistency is discovered in the contract for the work in relation to any law, ordinance, rule, regulation, order or decree, the Contractor shall forthwith report the same to the Director in writing.

7.2 PERMITS AND LICENSES - The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

7.3 PATENTS - The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees from all suits at law or actions of every nature, for or on account of the use of any patented materials, equipment, devices or processes.

7.4 RESPONSIBILITY FOR INJURY AND DAMAGE - The State, its officers, agents and employees shall not be held accountable in any manner for any loss or damage to the work or any part thereof, or for any of the materials and equipment used or employed in performing the work, or for any injury to any person or persons either workers or the public, or for any damage to property caused by the Contractor or its workers or any one employed by the Contractor. The Contractor shall be responsible for any liability imposed by law for any injury to any person or any damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The acceptance of the completed work of the Contractor by the Director shall not relieve the Contractor from any liability which may have accrued or may accrue as a result of the performance of the work by the Contractor. The Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State, its officers, agents and employees, from all suits or actions of every name, kind and description, brought for or on account of

any injuries or damages sustained by any persons or property caused by the Contractor, its servants or agents, or by or on account of any act or omission of the Contractor or its servants or agents, regardless of whether such actions or any claim is brought against them or any one of them before or after the final acceptance of the work. In addition to any remedy authorized by law, the State may withhold payment of any money due to Contractor as shall be reasonable until disposition has been made of any suits or claims for injuries or damages.

It is not the intention of the parties to this contract to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party hereto to maintain a suit for personal injuries or property damage based on a contract theory of liability. In any event, the Contractor shall hold harmless, indemnify, defend and where appropriate, insure the State from suits and claims for personal injuries or property damage where such injuries or damage are caused by the negligent acts or omissions of the Contractor, its agents or employees.

7.5 COOPERATION BETWEEN CONTRACTORS - Where two or more Contractors are employed on related or adjacent work, each shall conduct its operations in such a manner as not to cause any unnecessary delay or hindrance to the other.

7.6 CONTRACTOR'S RESPONSIBILITY FOR WORK - Until the acceptance of the contract, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expenses thereof.

7.7 NO PERSONAL LIABILITY - Neither the Director nor any other officer or authorized employee of the Department shall be personally responsible for any liability arising under the contract.

7.8 LABOR AND COMPENSATION REQUIREMENTS - Wages paid each laborer employed by the Contractor or any subcontractor shall not be less than the prevailing minimum wage rate prescribed by law.

Every laborer employed by the Contractor or any subcontractor whose rate of compensation is Five Dollars (\$5.00) or less per day shall be paid his wages weekly pursuant to Section 103-54, H.R.S.

The Contractor's attention is directed to Chapter 377, H.R.S., Hawaii Employment Relations Act; Chapter 378, H.R.S., Employment Practices; Chapter 383, H.R.S., Hawaii Employment Security Law; Chapter 386, H.R.S., Workers' Compensation Law; Chapter 387, H.R.S., Wage and Hour Law; Chapter 392, H.R.S., Temporary Disability Insurance; Chapter 393, H.R.S., Prepared Health Care Act; Chapter 396, H.R.S., Occupational Safety and Health; and Section 103-55, H.R.S., Wages, Hours, Working Conditions of Employees of Contractor's Supplying Services.

7.9 INSURANCE - Prior to commencing with the work, the Contractor shall, at its own expense, obtain and submit to the Department, Certificate of Insurance from an insurance company authorized by the laws of the State to issue such insurance in the State of Hawaii showing full policy coverage of the Contractor.

TYPES OF INSURANCE:

A. Workers' Compensation:

The Contractor shall obtain worker's compensation insurance for all persons whom they employ in carrying out the work under this contract. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract. The minimum limit of liability for workers compensation is the HRS 386 statutory limit.

B. Comprehensive Automobile Liability:

The Contractor shall obtain Auto Liability Insurance covering all owned, non-owned and hired autos with a combined single Limit of not less than \$1,000,000 per accident for bodily injury and property damage with the State of Hawaii named as additional insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess

policies.

C. Commercial General Liability:

The Contractor shall obtain General Liability insurance with a limit of not less than \$1,000,000 per occurrence and in the aggregates. The General liability insurance shall include the State of Hawaii as an additional insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies.

All policies must provide that 30 days prior written notice of cancellation or material change in coverage be given to certificate holders stated above.

Such insurance when accepted by the Director in writing shall become applicable and shall remain unmodified throughout the entire term of the contract and in no event shall be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the State. Such insurance aforementioned shall cover the State for all work performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including other work performed outside of the work area, and all change orders.

Any delay in the submission and approval of insurance certificates shall not be justification of or grounds for a request by the Contractor postponing the issuance of a notice to proceed notwithstanding the fact that the Contractor shall not be allowed to proceed with the work until said certificates are submitted and approved.

Failure to obtain insurance in accordance with the Section, on the part of the Contractor, shall be considered a major breach of the contract; and should the State be forced to expend funds which would have been covered under the insurance, the Contractor agrees to assume the liability for such funds and to indemnify and hold the State harmless.

## SECTION 8 - PROSECUTION AND PROGRESS

8.1 NOTICE TO PROCEED - A "Notice to Proceed" letter will be written to the Contractor by the Director. Such letter will indicate the date the Contractor is to begin work and from which date the contract time will commence to run.

The Contractor shall diligently perform the required duties during the term of the contract, or if the work is to be completed within a specified time limit, the Contractor shall diligently prosecute the work to completion within the specified time limit.

8.2 SUBCONTRACTING - The Contractor shall give its personal attention to the fulfillment of the contract and shall keep the work under its control.

Subject to Section 103D-302, H.R.S., the Contractor may subcontract a portion of the work pursuant to the provisions of this section, but the Contractor shall be primarily responsible for the work so subcontracted. The Contractor shall not subcontract any work to any subcontractor who has been suspended by the State.

Before any work is started under a subcontract, the Contractor shall have the written approval of the Director on a written statement on forms furnished by the Department, indicating the work to be subcontracted, the names of the subcontractors and the description of each portion of the work to be so subcontracted and showing that the subcontractors are particularly experienced and equipped to do the work subcontracted. The Contractor shall give assurance that the minimum wage rate schedule as stated in the contract shall apply to labor performed on the work so subcontracted. Consent of the Director to the subcontracting of work shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

When any portion of the work which has been subcontracted by the Contractor is not prosecuted in a manner satisfactory to the Director, the Contractor, upon receipt of a notice thereof in writing from the Director, shall remove the subcontractor immediately from the project and the subcontractor shall not again be employed on the work.

8.3 ASSIGNMENT OF CONTRACT - The performance of the contract may be assigned only with the prior written consent of the Director and when applicable, the Contractor's surety. Consent to any assignment shall not relieve the Contractor or the Contractor's surety of any obligations of the contract.

8.4 INSUBORDINATION - If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the Director or shall appear to the Director to be incompetent or to act in a disorderly or improper manner, the subcontractor or person shall be removed immediately upon request by the Director and shall not again be employed on the work, nor shall it be employed upon any other Department project currently under contract to the same Contractor or subcontractor.

8.5 TEMPORARY SUSPENSION OF WORK

A. Order to stop work. The Director, may, by written order to the contractor, at any time, and without notice to any surety, require the contractor to stop all or any part of the work called for by this contract. This order shall be for a specified period not exceeding sixty (60) days after the order is delivered to the contractor, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this section. Upon receipt of such an order, the contractor shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the Director shall either:

1. Cancel the stop work order; or
2. Terminate the work covered by such order as provided in the "termination for default clause" or the "termination for convenience clause" of this contract.

B. Cancellation or expiration of the order. If a stop work order issued under this section is canceled or if the period of the order or any extension thereof expires, the contractor shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or contract price, or both, and the contract shall be modified in writing accordingly; if:

1. The stop work order results in an increase in the time required for, or in the contractor's cost properly allocable to, the performance of any part of this contract; and
2. The contractor asserts a claim for such an adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Director decides that the facts justify such



action, any such claim asserted may be received and acted upon at any time prior to final payment under this contract.

C. Termination of stopped work. If a stop work order is not canceled and the work covered by such order is terminated for default or convenience, the reasonable costs resulting from the stop work order shall be allowable by adjustment or otherwise.

D. Adjustment of price. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the price adjustment clause of this contract.

8.6 LIQUIDATED DAMAGES - It is mutually understood and agreed by and between the parties to the contract that the performance by the Contractor of its duties every calendar/working day is an essential part of the contract and in case of failure on the part of the Contractor to perform its duties for the time specified in the contract, the State will be damaged thereby and the amounts of said damages being difficult, if not impossible of definite ascertainment and proof, shall be estimated, agreed upon and fixed at the sum shown in the proposal for each and every calendar/working day that the Contractor fails to perform its duties during the period the contract is in effect; and the Contractor shall pay the liquidated damages as provided for in the proposal and, in case the same are not paid, the Department may deduct the amount thereof from any monies due or that may become due the Contractor under the contract.

#### 8.7 DEFAULT AND TERMINATION OF CONTRACT

A. Termination by Default. If the contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time specified in this contract, or any extension thereof, otherwise fails to timely satisfy the contract provisions, or commits any other substantial breach of this contract, the Director may notify the contractor in writing of the delay or non-performance and if not cured in ten (10) days or any longer time specified in writing by the Director, such officer may terminate the contractor's right to proceed with the contract or such part of the contract as to which there has been delay or a failure to properly perform. In the event of termination in whole or in part the Director may procure similar goods or services in the manner and upon terms deemed appropriate by the Director. The contractor shall continue performance of the contract to the extent it is not terminated and shall be liable for excess costs incurred in procuring

similar goods or services.

1. Contractor's duties. Notwithstanding termination of the contract and subject to any directions from the Director, the contractor shall take timely, reasonable, and necessary action to protect and preserve property in the possession of the contractor in which the State or county has an interest.

2. Compensation. Payment for completed goods delivered and accepted by the State shall be at the contract price. Payment for the protection and preservation of property shall be in an amount agreed upon by the contractor and Director; if the parties fail to agree, the Director shall set an amount subject to the contractor's rights under chapter 3-126, HAR. The State may withhold from amounts due the contractor such sums as the Director deems to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods and services.

3. Excuse for nonperformance or delayed performance. Except with respect to defaults of subcontractors, the contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms, including any failure by the contractor to make progress in the prosecution of the work hereunder which endangers such performance, if the contractor has notified the Director within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; acts of the State and any other governmental body in its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the contractor shall not be deemed to be in default, unless the goods or services to be furnished by the subcontractor were unreasonably obtained from other sources in sufficient time to permit the contractor to meet the contract requirements. Upon request of the contractor, the Director shall ascertain the facts and extent of such failure, and if such officer determines that any failure to perform was

occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the contractor's progress and performance would have met the terms of the contract, the delivery schedule shall be revised accordingly, subject to the rights of the State under the clause entitled "Termination for Convenience". As used in this paragraph of this clause, the term "subcontractor" means subcontractor at any tier.

4. Erroneous termination for default. If, after notice of termination of the contractor's right to proceed under the provisions of this clause, it is determined for any reason that the contractor was not in default under the provisions of the clause, or that the delay was excusable under the provisions of paragraph 3 above, Excuse for nonperformance or delayed performance of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the State, be the same as if the notice of termination had been issued pursuant to such clause.

5. Additional rights and remedies. The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

B. Termination for convenience. The Director may, when the interests of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Director shall give written notice of the termination to the contractor specifying the part of the contract terminated and when termination becomes effective.

1. Contractor's obligation. The contractor shall incur no further obligations in connection with the terminated work and on the dates set in the notice of termination the contractor will stop work to the extent specified. The contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Director may direct the contractor to assign the contractor's right, title, and interest under terminated orders or subcontracts to the State. The contractor must still complete the work not terminated by the notice of termination and may incur obligations as are necessary to do so.

2. Right to goods. The Director may require the contractor to transfer title and deliver to the State in the manner and to the extent directed by the Director:

- a. Any completed goods; and
- b. The partially completed goods and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights hereinafter called "manufacturing material," as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

The Contractor shall, upon direction of the Director, protect and preserve property in the possession of the contractor in which the State has an interest. If the Director does not exercise this right, the contractor shall use the Contractor's best efforts to sell such goods and manufacturing materials. Use of this section in no way implies that the State has breached the contract by exercise of the termination for convenience clause.

3. Compensation:

- a. The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, bearing on such claim. If the Contractor fails to file a termination claim within one (1) year from the effective date of termination, the Director may pay the Contractor, if at all, an amount set in accordance with subparagraph c. below.
- b. The Director and the Contractor may agree to settlement provided the Contractor has filed a termination claim supported by cost or pricing data to the extent required by subchapter 15, chapter 3-122, HAR, and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State, the proceeds of any sales of goods and manufacturing materials under paragraph (2) of this clause, and the contract price of the work not terminated.

c. Absent complete agreement under subparagraph b above, the Director shall pay the Contractor the following amounts, provided payments agreed to under subparagraph b shall not duplicate payments under this subparagraph for the following:

(i) Contract prices for goods or services accepted under the contract;

(ii) Costs incurred in preparing to perform and performing the terminated portion of the work plus a fair and reasonable profit on such portion of the work, such profit shall not include anticipatory profit or consequential damages, less amounts paid or to be paid for accepted goods or services; provided that if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(iii) Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to paragraph 1 of this clause. These costs must not include costs paid in accordance with subparagraph (ii) above.

(iv) The reasonable settlement costs of the Contractor including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this contract. The total sum to be paid the Contractor under this subparagraph shall not exceed the total contract price plus the reasonable settlement cost of the Contractor reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph b of this paragraph, and the contract price of work not terminated.

d. Cost claimed, agreed to, or established under subparagraphs b and c shall be in accordance with chapter 3-123, HAR. bearing on such claim.

8.8 FINAL INSPECTION - Upon notice from the Contractor of the completion of the work or contract, the Director shall make an inspection. If the contract is found completed to the Director's satisfaction, such inspection shall constitute the final inspection and acceptance of the work.

If the work is unsatisfactory in whole or in part, the Director shall notify the Contractor of the work necessary for final completion and acceptance and the Contractor shall forthwith perform the work required by the Director. Upon performance of such required work by the Contractor, another inspection shall be made which shall constitute the final inspection if the work is completed satisfactorily.

Within ten (10) days after final inspection and acceptance of the work, or as soon thereafter as is practicable, the Contractor shall be notified by the Director in writing of such acceptance.

8.9 TERMINATION OF CONTRACTOR'S RESPONSIBILITY - The contract will be considered complete when all work has been completed, the final inspection made, the work accepted by the Director, and the final estimate paid. The Contractor will then be released from further obligation except as set forth in the contract and bond, when applicable.

## SECTION 9 - PAYMENT

9.1 SCOPE OF PAYMENT - The Contractor's bid price shall be inclusive of all costs, direct or indirect, including all taxes, required for the fulfillment of the contract.

Contract payments to the Contractor by the State shall be full payment for the furnishing of all labor, tools, equipment, and other incidentals, including all taxes, necessary for performing all work and services contemplated and embraced under the contract.

9.2 RETAINAGE/DEDUCTION FROM PAYMENT - The Director may at any time retain or deduct out of any sums due the Contractor to cover claims of the State against the Contractor, or such sums sufficient to cover any unpaid claims of others supported by sworn statements filed in the office of the Director, without any liability for damages, interest or otherwise to the Contractor for such retention or deduction.

Provided the work of the Contractor is progressing satisfactorily in the judgment of the Director and in accordance with the provisions of this contract, monthly payments, less five percent (5%), will be made to the Contractor. The amount of such monthly payments shall be determined by the Director based on the Director's estimate of the items of work performed and materials incorporated in the work and the value therefor at the unit prices or lump sum prices set forth in the contract. All monthly payments are shall be subject to correction at any time prior to or in the final payment.

At any time after fifty per cent (50%) of the work has been completed, if the State determines that the work contracted to be performed is progressing satisfactorily, the State may make any of the remaining monthly payments in full.

If the Director finds that unsatisfactory progress is being made, the State may, from the beginning of such unsatisfactory progress, withhold any amount up to five per cent (5%) of any subsequent monthly payment.

9.3 ASSIGNMENT OF PAYMENTS - All monies payable under the contract, or any part thereof, shall be paid to the Contractor in accordance with the provisions of this Section and no assignment or order executed by the Contractor directing payment of any portion or all of such funds to any other person or persons shall be recognized by the State unless such assignment or order specifies the amounts to be so paid and the purposes for which the assignment or order is given. Such assignment or order shall have attached thereto, by endorsement or otherwise, the consent of the surety, when

applicable. No such assignment or order shall be binding on the State.

Any assignment of money shall, however, be subject to all proper set-offs in favor of the State, to all deductions provided for in the contract and to all liens and rights conferred by law on the State. All money withheld, whether assigned or not, shall be subject to being used by the State for the completion of the work in the event of the Contractor's default.

9.4 PROGRESS PAYMENTS - Payments under this contract shall be made only upon submission by the Contractor of an original invoice and 2 copies. The invoice shall specify the amount due less retainage and shall also certify that services requested under the contract have been performed by the Contractor according to the contract.

9.5 FINAL PAYMENT - Final payment will only be made after the Contractor receives final acceptance by the Director as provided in Section 8.8, and until the Contractor has filed with the Department the following:

A. Consent of the surety, when applicable, to payment of the final estimate;

B. Satisfactory evidence by affidavit that all debts resulting from the contract have been fully paid or satisfactorily secured;

C. A current "Certificate of Vendor Compliance" issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor's compliance with (a) Section 103D-328, HRS (for all contracts \$25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the Internal Revenue Service; (b) Chapters 383, 386, 392, and 393, HRS; and (c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in final payment being withheld until compliance is attained.

The filing of willfully false affidavits will disqualify the Contractor from bidding on future work of the Department.



**SECTION 10 – MAINTENANCE OF LANDSCAPED AREAS**

**10.1 DESCRIPTION**

The work shall consist of maintenance of planted areas through continued watering, weeding, fertilizing, mowing, reseeding, cultivating, spraying, mulching, trimming and care of shrubs and trees, edging, invasive plant removal, and other services necessary for care and upkeep of highway plantings. This section also describes replacement of dead or damaged plants, clearing and clearing of sidewalks, gutters, swales, and ditches within the contract limits and removal and disposal of trash and debris.

The location plan in Appendix F, depicts areas where landscaped maintenance services are to be provided.

**10.2 COORDINATION OF WORK**

All work under this contract shall be coordinated with the Engineer or a duly authorized representative.

Engineer Mr. Mike Medeiros District Engineer (DE) – Oahu District Phone: 808-831-6700 x128 Fax: 808-831-6725 Email: mike.medeiros@hawaii.gov	Authorized Representative of the DE Mr. Dean Takayama District Horticulturist – Oahu District Phone: 808-831-6700 x132 Fax: 808-831-6725 Email: dean.t.takayama@hawaii.gov
---	---

**10.3 QUALIFICATIONS OF BIDDERS**

The contractors shall provide documentation of licenses, certificates and other requirements listed in the subsection below. Requested documents shall be received by the Project Manager no later than five (5) working days from the date of written request from the State.

**(A) Contractor or Contractor's Responsible Managing Employee (RME) Qualification.**

- License.** At time of bidding, bidder shall possess a valid State of Hawaii Contractor’s license as specified in the Notice to Bidders. The Contractor shall possess the license throughout the duration of the contract and or any extensions. The Contractor shall provide a copy of the specified license and contractor license number as applicable.
- Work Experience.** At the time of bidding, the Contractor shall have a minimum of two (2) consecutive years of Hawaii Contractor’s license specified in the Notice to Bidders. The experience shall include a minimum of two (2) years in managing contracts like this project scope immediately prior to bid opening. The contractor shall provide the number of years of experience as applicable.

- a. The State may request a list of similar projects to substantiate the bidder's/contractor's experience. The list shall contain a minimum of three (3) different landscape projects and shall include a) name of the company, b) point of contact, c) phone number, d) description of landscaping work performed, and e) size of the project (cost wise)
3. Copy of the valid certification as a Certified Landscape Technician (CLT) **Exterior/Maintenance or equivalent.**
4. Copy of the valid certification as a CLT **Exterior/Irrigation or equivalent.**
5. **Sprinkler Technician.** The Contractor shall have a sprinkler technician capable of reading plans and have at least one (1) year experience in all phases of a sprinkler system installation and maintenance. A list of employed sprinkler technician and their work experience similar to the scope of this project shall be provided.
6. Copy of the respective certificate of training completion as Flagger, Traffic Control Technician and/or Traffic Control Supervisor, as applicable.
7. Copy of valid training completion certificate as Fall Protection Competent Person.
8. Possess a valid disposal permit and Proposed Disposal Site Location. This requirement shall be provided no later than seven (5) working days from written request from the State and shall be verified three (3) working days prior to the Notice to Proceed date to the lowest responsive bidder.
9. The contractor shall possess the required business and tax license to conduct business in the State of Hawaii.
10. Have all required equipment (e.g., handheld tools, utility trucks, aerial bucket trucks, chippers, etc.) necessary to perform the specified services in this document.
  - a. The following are required on all equipment/vehicles, as applicable:
    - i. Contractor's vehicles must have Contractor's company name and/or logo displayed on doors or side panels and shall be in letters large enough to be easily legible from a distance of one hundred (100) feet. Magnetic signs bearing the contractor's company name/logo are acceptable. Cost for the logo/contractor's company name shall be considered as incidental cost of palm pruning or removal services.

- ii. All vehicles shall be kept in good condition and appearance.
  - iii. Shall meet all State and County licensing and registration and safety requirements and shall be equipped properly in accordance with City, State, Federal and OSHA requirements.
  - iv. Equipment/vehicles parked on the shoulder shall require proper traffic signage (i.e., "Shoulder Work Ahead", etc.) traffic cones, barricades, etc. as necessary and placed in accordance with the MUTCD. Refer to Section 10.11(A)5, of the Specifications for more information.
  - v. The Contractor shall obtain insurance coverages as specified by Section 7.9 Insurance, of the Specifications.
  - vi. Operation of all equipment shall be in accordance with all applicable OSHA, other Federal, State, and local regulations and laws and the equipment operator's manual.
11. Be familiar with working on State Highways preferably on the Island of Oahu.
12. Be experienced on establishing required traffic control per the current U.S. Federal Highway Administration's 'Manual on Uniform Traffic Control Devices (MUTCD). The Contractor may employ a person or use a sub-contractor who is knowledgeable on traffic control.

**(B) Contractor or Contractor's RME or Contractor's Personnel Qualification.**

The Contractor shall determine the number of trained/certified staff personnel that is to be employed to satisfactorily perform all the tasks following all the safety requirements of the contract documents, but shall employ the minimum number of personnel as specified below who is trained/certified/licensed/experienced on the following:

1. **Lead Maintenance Person/Highway Maintenance Supervisor.** At the time of bidding, the Contractor shall employ, as a minimum, a CLT in good standing. The CLT shall have a minimum of one (1) year experience in supervising personnel performing general landscaping maintenance work on state highway's right-of-way areas or two (2) years of experience in general landscaping.
- a. The CLT shall be always present on-site during any work activity for this project. Liquidated Damages may be incurred if a CLT is not present.
  - b. A list of employed CLT with their certification shall be provided to the engineer at the Pre-Start Meeting (refer to Section 10.14).

2. **Traffic Control Personnel.** The Contractor shall have personnel with at least two (2) years' experience in establishing the required traffic control using the current U.S. Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD). The Contractor shall provide a list of personnel who is trained and certified on the following American Traffic Safety Services Association (ATSSA) courses or approve equivalent at the Pre-Start Meeting (refer to Section 10.14). The list shall include the full name of each personnel with their certification and expiration date, course information, and years' experience relative to the list below.
  - a. Flagger
  - b. Traffic Control Technician (TCT)
  - c. Traffic Control Supervisor (TCS)

For more information on the above courses, log on to:

<http://www.atssa.com/training>

The Contractor may, with approval from the engineer, use a sub-contractor who is qualified and knowledgeable with the traffic control. The subcontractor shall fulfill all training and certification requirements for this project.

3. **Fall Protection Competent Personnel.** The contractor shall have current personnel who satisfies the requirements of the 29 CFR 1926.503 and other Federal, State, and local regulations for Fall Protection. Have the requirement to meet the "Competent Person" as defined in 29 CFR 1926.32(f). A list of qualified personals shall include the full name of each personnel with their certification and expiration date, course information, and years of experience.
- (C) Falsification of personal qualifications, inability to successfully perform the work, or excessively high turnover of personnel assigned to this work shall constitute a major breach of this contract and the contract shall be subject to termination.
- (D) Supplementary Contractor Personnel Requirements.
1. Uniforms. Contractor employees on the job site shall be easily identified as the Contractor's employee by wearing a shirt, T-shirt or coverall with the company name or logo. All Contractor's personnel shall always present a neat and clean appearance. One color and style of uniform shirt shall be selected which will be worn by all Contractor personnel. Cost of employee's shirt, T-shirt or coverall shall be incidental to the unit price of palm pruning and removal services.
  2. Conduct of personnel. The State reserves the right to disqualify a person based on performance anytime during the contract. Upon disqualification, the Contractor has ten (10) working days to submit a qualified replacement.

3. The Contractor shall prohibit their personnel from parking their personal-owned vehicle along the highway right-of-way areas.

**(E) Schedule of Submitting Required Documents.**

The applicable requested documents in Section 10.3(A) and (B) shall be received by the Project Manager no later than five (5) working days from the date of receipt of the written request from the State.

All required and requested documents as listed below and/or specified in this contract shall be submitted prior to award and/or the notice to proceed date to the Engineer and Project Manager. The Engineer/Project Manager shall verify and approve all submittals.

Failure to submit required or requested documentation may result in bid rejection or termination of contract by the Department of Transportation.

1. Equipment List including lease agreement and equipment availability.
2. List of all personnel working on this contract including names, telephone numbers, and applicable license and certifications.
3. Safety Plan
4. Traffic Control Plan
5. Safety Data Sheets
6. Certified Payroll Affidavit (Submitted monthly when service is performed.)

**10.4 INSPECTION OF PLANS AND OF AREAS TO BE MAINTAINED**

- (A)** A set of detailed plans showing the limits of the areas and plant inventory to be maintained will be available for inspection at Oahu District Baseyard Office at 727 Kakoi Street, Honolulu, Hawaii 96819, from the first day of advertising for bids up to an including the day of bid opening. In case of dispute over limits of work areas, the limits shown on the detailed plans shall govern. It is the Contractor's responsibility to meet with District personnel and discuss the plans and specifications prior to submitting a proposal.
- (B)** In case of new construction and other State maintenance activities, whether planned or unplanned, the State reserves the right to reduce the scope of work and areas to be maintained within the landscaped areas as specified in the contract. The State shall issue a Change Order and shall modify the contract in writing as specified in Section 4.4, Changes and Claims for Adjustments. Adjustments in the contract price shall be determined in accordance with Section 4.5 Price Adjustment, of the Specifications.
- (C)** Once construction is complete and plants have been established on new construction, the State may request the Contractor to provide landscaped maintenance services. The State shall issue a Change Order and shall modify the contract in writing as specified.

- (D) Throughout the life of the contract, the State may add additional small areas that are not under contract which are “adjacent” or “within the vicinity” to the project limits and which are the property of the State, requiring services that are specified in this contract. For the purposes of these specifications, the work “adjacent” or “within the vicinity” shall be defined by the proximity of the closest landscaped area under contract to the proposed additional area and not by a certain measured linear distance. By this definition, as an example, the Engineer may add a small area as mentioned above which is located five (5) miles to the closest landscaped area under contract for as long as this landscape are under contract is the closest to the proposed additional small area. Payments for services to added areas will be paid under bid item Miscellaneous Work of the Proposal Schedule.

For the proposed additional small areas, the State reserves the right to solicit competitive quotations and have the landscape maintained by the lowest quotation.

### **10.5 SCOPE OF WORK**

All work shall be in accordance with these Specifications, best horticultural practices and the Highway Manual for Sustainable Landscape Maintenance (HMSLM). The location plan and maintenance of landscaped areas task and frequency can be found in the appendices. The Contractor shall bring the project up to specifications within thirty (30) days from the Notice to Proceed date. Additional time may be granted upon a request by the Contractor and approval of the Engineer.

- (A) **MOWING.** All turf shall be mowed uniformly at the required frequency stated in the Task and Frequency Matrix, Maintenance of Landscaped Areas.
1. During long dry periods, if directed by the Engineer in writing, grass height may govern mowing frequency.
  2. The turf height shall be from one and one-half (1-1/2) inch to two (2) inches on medians and areas with foot traffic and four (4) to six (6) inches on other open areas along the highway for erosion control.
  3. Remove all litter and debris prior to mowing. A bag chute shall be used to remove excess cuttings, or the area may be raked.
  4. Along Cane Haul Road Only, the Waipahu Street Bridge to Farrington Highway, mow 10 feet from edge of road towards adjacent guard rail along off-ramp (Exit 8A) to Farrington Highway westbound and 10 feet from guard rail towards Cane Haul Road. Do not mow on areas between these two ten-foot areas, except as requested by the Engineer. These unmown areas are for erosion control.

Along existing Right of Way (ROW) fence on residential area adjacent to Cane Haul Road, mow from edge for Cane Haul Road to existing ROW fence. *Refer to*

*page F-2 Location Plan, of the Appendices for the location of ROW fence.*

5. Clean and remove all clippings from hard surfaces, roadways and drainage swales by the end of each workday.
6. A payment deduction will be applied if trimmings are not removed by the end of each workday as specified in Deductions under Basis for Payment below.

**(B) EDGING AND TRIMMING OF GRASS.** Edging and trimming of all turf cover along sidewalks, roadways, expansion joints and cracks, plant beds or structures shall be incidental to turf mowing. Monofilament line trimmers shall not be used around the base of the trees unless a tree guard is installed. Chemical edging is unacceptable. Conspicuous and deleterious weeds shall be cut at the ground line.

**(C) WEEDING.** Weeds shall be considered as any undesirable plants not originally planted and noxious vegetation shall be defined by the “Hawaii Invasive Species Council List of Plant Species Designated as Noxious Weeds for Eradication or Control Purposes by the Hawaii Department of Agriculture (06/18/1992).” All pavement expansion joints and cracks are to be maintained free of weeds.

The weeding cycle shall be continuous and as needed. Weed infestation shall not exceed ten (10) percent of each designated area.

All landscaped areas shall not exceed ten (10) percent weed infestation of each designated area within thirty (30) days after commencement of work. The Contractor shall use pre-emergent herbicides as necessary to control excessive weeds in planting beds.

Conspicuous and deleterious weeds shall be removed by its roots in all landscaped areas. Removal by cutting or topping at the ground line will not be allowed. This requirement shall be strictly enforced. In maintenance areas without landscaping but only vegetative cover erosion control purposes, cutting or topping of weeds will be allowed at the Engineer’s discretion.

**(D) EDGING AND TRIMMING OF VINES AND GROUND COVER (AS APPLICABLE).**

Vines and ground cover shall be edged and/or trimmed by the best horticultural practice as required to maintain a neat appearance and safe roadway.

Vines or ground cover shall not be allowed to overgrow shrubbery, signs, streetlights, fences, valve boxes, guardrails or other structures unless otherwise instructed.

All work in this section shall be in order within thirty (30) days after commencement of the work. Unless directed otherwise, ground covers shall be maintained at a uniform height not exceeding twelve (12) inches or not less than six (6) inches above ground and

shall be cleared from around all sprinkler heads, valves and other utilities. All other undesirable vines and ground covers shall be entirely removed from the area.

**(E) CARING AND TRIMMING OF SHRUBS.**

Shrubbery shall be maintained and trimmed by the best horticultural practice as required to maintain a healthy and vigorous growth. Conform to the horticultural recommendations in publication A300-1995, "Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices," of the American National Standards Institute (ANSI).

**1. Caring of Shrubs.**

- a. **Apply a two (2) inch depth of compost** in all planting beds of shrubs in the first week of January, April, July and October.
- b. Application of compost to shrubs shall be performed at the request of the Engineer and if approved, will be paid by bid item Miscellaneous Work, of the Proposal Schedule.

**2. Trimming of Shrubs.**

- a. Shrubs shall be trimmed to a minimum frequency in accordance with the Task and Frequency Matrix for Maintenance of Landscaped Areas.
- b. Shrub pruning shall be performed to maintain a "natural" appearance; decorative, poodle cuts or other unnatural pruning will not be permitted unless box hedging is required by the Engineer.
- c. Shrubs in natural plantings or formal hedges shall be pruned as mass planting. Do not shear shrubs into topiary (shapes) unless specifically instructed to do so in writing by the Engineer. Under no circumstances shall shrubs be pruned more than twenty-five (25) percent. If a shrub is pruned more than 25% than the shrub shall be replaced with the same species, spread and height at the Contractor's expense within four (4) weeks of notification from the Engineer. Hedges shall be wider at the base than the top.
- d. The Contractor shall be responsible for trimming shrubs affecting the sight distance to the sign. Traffic signs shall be always visible. Trimming of shrubs to eliminate traffic hazards and to make traffic signs always visible at all times shall be continuous and as needed. The limbs shall not hang over the travel way.
- e. Trimming of shrubs shall be paid by the bid item Caring and Trimming of Shrubs, of the Proposal Schedule.



3. **Shrub Removal.** Shrub removal shall be performed at the request of the Engineer.
  - a. Removal, including stump grinding, shall be used to remove any unwanted shrubs. Stump grinding shall not be required for all removed trees but only in special cases, such as highly visible developed areas and special situations. The Engineer may require that stumps be grinded to a minimum of six (6) inches below the finish grade.
  - b. The cost of removal of unwanted shrubs, if approved by the Engineer, shall be negotiated and paid by bid item Miscellaneous Work, of the Proposal Schedule.

**(E1) CARING AND TRIMMING (*SIGHT DISTANCE/CLEAR ZONES/CLEAR SPACE*) OF TREES.**

These tasks shall be performed at a frequency in accordance to each subtask as scheduled below. Caring and trimming (sight distance/clear zones/clear space) of trees shall conform to the horticultural recommendations in publication A300-1995, "Tree, Shrub and Other Woody Plant Maintenance – Standard Practices," of the American National Standards Institute (ANSI).

**1. Caring of Trees.**

- a. **Mulching.** Apply a three (3) foot radius circle of two (2) inch depth of mulch around the base of all trees and palms by the first Thursday of March and September. Mulching shall be performed only at the request and approval of the Engineer. The cost shall be negotiated and paid by bid item Miscellaneous Work, of the Proposal Schedule.
- b. **Stakes and Guy wires** (as applicable). Stakes and guy wires shall be adjusted, or if necessary, removed as determined by the Engineer to prevent damage to the trees and to reduce hazards to the maintenance personnel. A minimum clear area of three (3) feet in radius shall ring young trees to prevent mowing, damage and choking. The cost of removing stakes and guy wires shall be incidental to bid item Caring and Trimming of Trees, of the Proposal Schedule.

**2. Trimming of Trees (*Sight Distance/Clear Zones/Clear Space*) – continuous and as needed.**

- a. **Traffic Signs.** The Contractor shall be responsible for trimming tree branches of all trees affecting the sight distance to a sign. Traffic signs shall always be visible. Trimming of trees to eliminate traffic hazards and

to make traffic signs visible at all times shall be continuous and as needed.  
The limbs shall not hang over the travel way.

- b. **Clear zone trees.** In the clear zone, remove all new saplings that will, at maturity, be greater than four (4) inches in tree trunk diameter. In the clear zone, remove all new tree saplings growing within six (6) feet, trunk-to-trunk spacing. Removing saplings in the clear zone shall be performed continuously and as needed.

The clear zone is measured from the travel lane line towards the right of way line or property line. The width of the clear zone varies due to the posted speed and the slope of shoulder. See chart below for the required clear zones for each speed.

Shoulder Slope			
Posted Speed	Upslope and Flat to 1' V:6' H	Down Slope 1' V:5' H to 1' V:4' H	Down Slope Slope >1' V:4' H
< 45 mph	16'	18'	Clear zone extends to bottom of slope
45 to 55 mph	22'	28'	
55 mph	24'	32'	
60 mph	32'	44'	

- c. **Clear space.** The Contractor shall trim trees to maintain a minimum ten (10) foot clear space below its canopy. At the direction of the Engineer, trees within thirty (30) feet of the edge of pavement may be lifted additionally. Side pruning of trees to provide clearances to signs, utility poles and lines, structures, etc., shall be included.
- d. **Trimming of Trees (*Sight Distance/Clear Zones/Clear Space*).** As specified above shall be paid by bid item Caring and Trimming of Trees, of the Proposal Schedule.

3. **Shrub Removal.** Shrub Removal shall be performed at the request of the Engineer.

- a. Removal, including stump grinding, shall be used to remove any unwanted shrubs. Stump grinding shall not be required for all tree removed but only in special cases, high visible developed areas and situations. The Engineer may direct that stumps be grinded to a minimum six (6) inches below finished grade.

- b. Removal of unwanted shrubs shall be if approved by the Engineer, the cost shall be negotiated in accordance with section 10.18(B) Miscellaneous Work, of the Specifications and paid by Bid Item No. 8
4. **Plant Replacement.** Refer to Section 8.6.A.1 Liquidated Damages, of the Specifications for the required tree replacement for trees that die due to neglect, invasive plants, insects, disease, or malpractice or vandalism and vehicular traffic.

**(F) CONTROLLING VEGETATION INTRUSION ALONG RIGHT-OF-WAY.**

The Contractor shall be responsible for controlling of all undesirable vegetation intrusions into right-of-way areas from the adjoining properties. In extreme cases, the inspectors who are responsible for the areas shall work with the Contractor and property owners to control the intrusions. Ultimately, it is the Contractor's responsibility to control or mitigate all undesirable vegetation intrusions.

**(F1) WATERING.**

The watering cycle shall be in accordance with the plant's needs to maintain a healthful, vigorous, and lush growth. Watering problems shall be called to the attention of the Engineer immediately to prevent plant damage.

The Contractor shall be responsible for the control of the irrigation system and shall minimize and conserve the use of water whenever possible.

The Contractor shall perform the following work:

1. Monitor the landscaped areas for water needs.
2. Water the landscaped areas as needed.
3. Promptly report all deficiencies of irrigation system pressure lines and the control clocks to the Engineer for repair.
4. The Contractor shall be charged liquidated damages for plants which die due to the failure of the Contractor to notify the Engineer.

**(G) FERTILIZING.**

Application of fertilizer shall be performed at the request of the Engineer and if approved, the cost shall be negotiated and paid by bid item Miscellaneous Work, of the Proposal Schedule.

1. **Lawn.** For best result under most highway conditions, a mixed lawn should receive one (1) pound of actual nitrogen per 1,000 square feet for each growing

months and shall be completed by the first Wednesday of January, March, May, July, September and November. For efficient plant consumption, consistent rates of lawn growth, and to minimize “fertilizer burn”, fertilizers should be applied frequently in small amounts rather than in large amounts at greater intervals. Lawns should never be fertilized while the grass is wet. Sufficient water should be applied after the application to dissolve the fertilizer and wash it into the root zone. This first watering must be thorough.

Fertilizers should be applied evenly with seeder-type spreaders or wheel-mounted fertilizer spreaders. Care should be taken with either type of spreader, to place the fertilizer strips to completely cover the area. Spreaders should not be filled on the lawn as fertilizer is too frequently spilled, killing the lawn in that area. Fertilizer shall be applied by mechanical apparatus, centrifugal throw spreader or motorized spreader at a rate of five hundred (500) pounds per acre or as directed by the Engineer. The Contractor is responsible for damages resulting from over fertilization. During the winter months, reduce or omit nitrogen applications for Bermuda grass in cooler and windward areas.

2. **Shrubs and Plant Beds.** Shrubs and planting beds shall be fertilized quarterly and shall be completed by the third Wednesday of February, May, August, and November. Fertilizer shall be a complete balance fertilizer (15:15:15) at a rate of two (2) pounds of slow-release nitrogen per 1,000 square feet per application.
3. **Trees and Palms.** Trees shall be fertilized annually in January with a slow-release fertilizer (15:15:15) at a rate of two (2) pounds of slow-release nitrogen per 1,000 square feet of root zone under the drip line. Fertilize native plantings sparingly or as recommended. Palms shall be fertilized annually with an approved Palm specific fertilizer with Epson salt to palm special blend with high magnesium and phosphorous. Notify the Engineer of fertilization schedule at least one week prior to fertilization.

#### **(H) SPRAYING PESTICIDE & HERBICIDE.**

1. Insecticides, fungicides and other pesticides shall be applied as directed by the Engineer to control insect pest and disease. Herbicides may be used for weed control. The Contractor shall obtain written approval from the Engineer before using pesticides and/or herbicides. The Contractor may purchase pesticide and herbicide from suppliers, but prior to purchase, the Contractor shall submit a list of needed pesticide and/or herbicide and their respective price to the Engineer for approval. Pesticide and herbicide purchased without the Engineer’s approval shall not be paid. Cost for the pesticide and herbicide shall be paid for under bid item Miscellaneous Work, of the Proposal Schedule.
2. It is the Contractor’s responsibility to maintain all plantings in good health, free of harmful insects and disease. Plant material that dies because of insect or disease

shall be replaced with the same species, spread and height at the Contractor's cost within four (4) weeks of notification from the Engineer. If the Contractor applies herbicide to areas not approved then the Contractor shall replace plants that are applied with herbicide with the same species, spread and height at the

Contractor's cost within four (4) weeks of notification from the Engineer.

The Contractor shall maintain a record of all pesticides and/or herbicides used on the project including the name of the pesticide and/or herbicide, location and areas of application, dates of application, rates of application and total quantity used per day. A copy of the record shall be submitted to the Engineer weekly or as requested.

The Contractor shall not spray herbicides or pesticides on windy or rainy days. The Contractor shall exercise care when spraying near drainage structures or swales and shall not spray within any drainage structures or swales and shall spray within ten (10) feet of these areas. Pre-emergents shall only be used in planting beds after bark mulch has been applied. The Contractor shall consider integrated vegetative management decision making and apply the appropriate means including mechanical, herbicide and/or organic herbicides for low lifecycle cost and environmental impact. If the undesirable vegetation is greater than five (5) feet in height, then it shall be cut first to a height no greater than six (6) inches and then sprayed.

3. If the Contractor chooses to use restricted pesticides, the Contractor shall obtain all proper certifications from the State of Hawaii, Department of Agriculture. All related certification documentation shall be submitted to the Engineer. The processing, handling, and application of the pesticide and/or herbicide must be in compliance with all rules and regulations of the State of Hawaii, Department of Agriculture, and all other applicable Federal, State, County and local rules and regulations.
4. All work shall be performed in strict compliance with the manufacturer's label and Safety Data Sheet (SDS) as applicable, and in accordance with all State, Federal, County and local rules and regulations. A copy of the SDS shall be submitted to the Engineer as a part of his approval to use pesticide and/or herbicide and a copy shall be maintained by the Contractor at the job site during processing, handling and application of pesticides and/or herbicides.
5. Any damage to man, vegetation, environment, or other property, within or outside the highway right-of-way due to the use of pesticides and/or herbicides by the Contractor shall be the sole responsibility of the Contractor. Damage of desired plants or erosion of soils shall be replaced at the Contractor's expense.

**(I) CLEARING GUTTERS, SWALES, AND DITCHES.**

Clear and maintain lined drainage ditches, swales, and roadway gutters to be free of vegetation, rock, silt and mud, papers, bottles, cans and maintain these areas clear of debris plant growth. Stabilize and replant any eroding areas immediately. Earth drainage ditches, swales and gutters will be turf maintained the same as the areas indicated above. All drainage culverts under roadways and embankments shall be maintained by the State. The Contractor shall notify the State immediately of any blockage detected during normal landscape work. The cost of clearing gutters, swales and ditches shall be paid for under bid item Litter Collection, of the Proposal Schedule.

**(J) PLANTINGS REQUIRING ADDITIONAL TASK.**

The additional tasks are summarized in the table below. The additional tasks shall be included in the bid price for the Maintenance of Landscaped Areas, of the Proposal Schedule.

<b>TREES</b>	<b>Additional Tasks</b>
<u>Gold Tree</u> [Tabebuia donnel-smithii]	Produces litter when blooming, prune annually to shape tree.
<u>Pink Tecoma</u> [Tabebuia heterophylla]	No known pests or diseases. No additional tasks are required.
<u>Royal Poinciana</u> [Delonix regia]	It is best to prune before the start of the spring regrowth. Notify the Engineer before the start of the spring regrowth. Pruning shall be performed by a separate State contract. Avoid line trimmers near the tree base as this can cause girdling. Install plastic tree guards on all trees.

PLANTING REQUIRING ADDITIONAL TASK TABLE (continuation):

<b>TREES</b>	<b>Additional Tasks</b>
<u>Rainbow Shower Tree</u> [Cassia x nealiae]	Produces litter when blooming, prune annually to shape tree. Protect trees less than 12-inch caliper trunk with tree guard. Pruning is best after flowering annually. Notify the Engineer after flower. Pruning shall be performed by a separate State contract. Fertilize twice a year with a fertilizer 16-16-16 Simplot or approved equal. Regular water is ideal. Water demand will be higher in Summer. Winter demand will be negligible, particularly when in its deciduous state. Susceptible to insects such as aphids and caterpillars. Monitor during warmer months and regularly spray them with insect repellent.
<u>African Tulip Tree</u> [Spathodea campanulata]	No known pests or diseases. No additional tasks are required.
<u>Alexander Palm</u> [Archontophoenix alexandrae]	<i>(Notify the Engineer when dried fronds and nuts are not being removed. Pruning and removal of palm trees are performed by another State Contract.)</i> May be damages by spider mites, Helminthosporium leaf spot in young plants, Phytophthora root rot, and aerial blight. Avoid weed whackers around the palm base.
<u>Macarthur Palm</u> [Ptychosperma macarthurii]	Sooty mold sometimes coats the trunk. Avoid weed whackers around the palm base.
<u>Bestill</u> [Thevetia peruviana]	All parts are poisonous. <b><u>Avoid ingesting.</u></b>
<u>Kukui</u> [Aleurites moluccana]	No known pests or diseases. No additional tasks are required.
<u>Monkeypod</u> [Saman samanea]	Prune surface roots if used near pavement. Noctuid moths are an occasional problem.

<b>SHRUBS</b>	<b>Additional Tasks</b>
<u>Pothos</u> [Epipremnum]	Prune to keep pothos within planting beds.
<u>Snow Bush</u> [Breynia nivosa]	No serious insect or disease problems. Remove Snow Bush that escapes planting beds.
<u>Monstera</u> [Monstera deliciosa]	No serious insect or disease problems. Fertilize with nitrogen and require shade and moisture.

<b>GROUND COVERS</b>	<b>Additional Tasks</b>
<u>Bermuda Grass</u> [Cynodon dactylon]	Susceptible to army worms and Bermuda grass mites. Check the White grubs and Pearl Scales and control if necessary. Apply preemergence herbicide to control crabgrass and goose grass. Apply post emergence herbicide in summer to control spurge and Lespedza.

**(K) INVASIVE PLANT REMOVAL.**

The Contractor is responsible for removal and damages resulting from invasive plants found onsite. Refer to the List of Plant Species Designated as Noxious Weeds for Eradication or Control Purposes by the Hawaii Department of Agriculture, dated June 18, 1992, or as amended or revised. This list is also in Hawaii Administrative Rules (HAR), Title 4, Chapter 68, Noxious Weed Rules (4-68-10).

The following species are a priority on Oahu: Guinea Grass, Sleeping grass, Wiregrass, Kyllinga, California Grass, Maile Pilau, Ivy Gourd, Opiuma, Mysore Thorn and Shoebuttton.

Further information may be obtained from The Oahu Invasive Species Committee, 743 Ulukahiki Street, Kailua, HI 96734, Office: (808)266-7994, Fax: (808)266-7995. Their website can be found at [www.oahuisc.org](http://www.oahuisc.org)

**(L) REMOVAL OF RUBBISH, DEBRIS, AND SOLID HAZARDOUS WASTE.**

The Contractor shall remove all rubbish and debris from the project contract limits. The project shall be maintained at a neat and clean appearance.

1. **Debris and litter on roadways, which originate from the landscape maintenance work.** Rubbish and debris on roadways shall be removed by the Contractor before the end of each work day, or immediately if it creates a traffic hazard. The cost of removal and disposal of debris and litter on roadway is incidental bid item Maintenance of Landscaped Areas, of the Proposal Schedule.
2. **General clean up.** Litter in landscaped areas, gutters and shoulders (papers, cigarette butts, bottles, cans, stockpiles, etc.) shall be removed and hauled offsite for proper disposal by the Contractor. General clean up shall be conducted three (3) days per week for areas covered by this contract as specified in the Maintenance of Landscaped Areas Task and Frequency Matrix, of the Appendices. During each general clean up day all litter shall be picked up along the entirety of all routes covered by this contract. If no litter is observed or picked up on a given general clean up day then this shall be documented on the Litter Collection Log (described below). This shall be strictly enforced.
3. **Litter collection.** The Contractor shall track and provide a log of the total number of bags of litter collected, including size of bags and estimated percent full, for each general clean up day. The form for documenting this information is provided in the appendices, Litter Collection Log. The litter collection log and weigh tickets documenting the quantity of debris disposed, solely from this contract, shall be provided monthly to the Engineer and or shall be readily available upon the request of the Engineer.



Cost for removal, completion of Litter Collection Logs, weigh tickets, and disposal of debris and litter during general clean up is incidental to bid item Litter Collection, of the Proposal Schedule.

4. **Prohibited Activities.**

- a. The burning of rubbish and debris in the highway right-of-way is prohibited.
- b. The Contractor shall under no circumstances stockpile debris, soil or garbage within the highway right-of-way. Any existing stockpiles at the beginning of the contract shall be removed within 30 days. The Contractor shall receive a payment deduction for any stockpiling.

5. **Solid/Hazardous Waste Disposal.** Disposal of solid/hazardous waste such as batteries, tires, tire shreds, machine parts, large debris (i.e., large furniture, etc.) will require a receipt from the certified landfill and a photograph of the waste materials in the original location. Payments shall not be processed without the required receipt and pictures. The Contractor shall submit to the State the required receipt and photographs with his/her monthly invoice. The total cost of disposal of the above solid/hazardous waste shall be paid for by allowance in bid item Miscellaneous Work, of the Proposal Schedule and shall be negotiated in a manner similar to Section 4.5, Price Adjustment of the Specifications and shall be no more than 1.5 x landfill cost. The landfill receipt shall clearly indicate the items, quantity and weight of the disposed items. The photographs submitted shall clearly show all waste items prior to the removal of waste material in the original locations.

6. **Biohazards** (i.e., drugs, needles, etc.) **and Biowaste** (i.e., human waste, etc.). When found at the highway right-of-way, do NOT touch these materials. Contact/notify the Engineer Oahu District's representative (Point of Contact) immediately. These materials are infectious or are potentially infectious and shall be handled by trained personnel only. Handling and disposal of these materials shall be performed by a separate State contract.

7. Debris, rubbish, and solid/hazardous shall be disposed of away from the highway right-of-way and in accordance with Federal, State, County and local rules and regulations.

**(M) REPORTING OF HAZARDOUS CONDITIONS AND DAMAGES TO LANDSCAPE AREAS.**

Pursuant to Chapter 14, Reporting of the HMSLM, the Contractor shall report the following to the Engineer:

1. Injuries.
2. Illnesses.
3. Damage to government property.
4. Blocked culverts, ditches, and swales.
5. Eroding areas.
6. Severe instances of illegal rubbish dumping.

**(N) TRAFFIC CONTROL/CLOSING OF LANES.**

If necessary, the Contractor shall furnish traffic control and closing of lanes and shall be in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways and shall be performed by trained and certified personnel only.

1. The Contractor shall make all the necessary coordination and shall request approval of the Engineer in writing seven (7) working days prior to the schedule lane closure/traffic control.
2. **Traffic control Plan.** All closing of lanes shall require a traffic control plan. The traffic control plan shall be prepared/developed by persons trained or certified on the fundamental principles of traffic control and work activities to be performed. The Engineer reserves the right to require the Contractor to submit a copy of the certificate of training of the person who prepared the traffic control plan. The Contractor shall submit this plan to the Engineer and shall request the Engineer's approval in writing seven (7) working days prior to the scheduled lane closure/traffic control. This work is incidental to bid item Maintenance of Landscaped Areas, of the Proposal Schedule.
3. **Permit for the Occupancy & Use of State Highway Right-Of-Way.**  
The Contractor shall submit this application to the Engineer, along with the traffic control plan. This permit shall be made part of the approval process specified in the "Traffic Control Plan" subsection. A copy of this application permit can be found in the appendices and online at:  
  
<https://hidot.hawaii.gov/highways/files/2020/03/Application-Permit-for-the-Occupancy-Use-of-State-Hwy-ROW.pdf>
4. Do not close traffic lanes or slow down traffic during the peak hours as specified in the Application & Permit for the Occupancy & Use of State Highway Right-Of-Way.
5. The Contractor may employ a person or use a sub-contractor who is knowledgeable on traffic control. The cost for traffic control shall include preparation of the traffic control plan, set-up and removal of all signs, cones, delineators, barricades, certified and trained flag persons or special duty police

officers, arrow boards, etc. as applicable, and shall be incidental to the bid item Maintenance of Landscaped Areas, of the Proposal Schedule.

6. The contractor is responsible for the work site and the work practices of all employees on the project site and is the controlling, exposing, correcting as well as the creating employer for purposes of this scope of work. The State of Hawaii Department of Transportation monitoring of the work in progress is not representative as the controlling employer for purposes of workplace and work practice safety and health compliance. The Contractor shall make all the necessary coordination and shall request approval of the Engineer in writing seven (7) working days prior to the scheduled lane closure/traffic control.

**(O) LANDSCAPED AREAS COMPREHENSIVE ANNUAL INSPECTION.**

1. For the purposes of a contract extension, on the second Monday on the fourth month after the Notice to Proceed date and the fourth month from the beginning of each contractual term for each contract renewal, as applicable.
2. For the purposes of contract closing, sixty (60) days to the end of the contract.
3. The Contractor and the Engineer or their respective representative shall perform a comprehensive annual inspection which shall include the following:
  - a. Plant Inventory.
  - b. Plant list comparison and replacement list.
  - c. Liquidate damages assessed.
  - d. Fertilization schedule review.
  - e. Herbicide schedule review.
  - f. Invasive species.
  - g. Discretionary fund projects for coming year.
  - h. Professional credential review.
  - i. Maintenance sustainability recommendations.

**(P) MISCELLANEOUS WORK.**

1. The State may request the Contractor to provide discretionary services that includes:
  - a. Mulching.
  - b. Manual watering, maintenance, and inspection of irrigation system.
  - c. Application of fertilizer.
  - d. Additional maintenance tasks to plantings.
  - e. Removal and disposal of solid hazardous waste.

2. For the Contractor to commence performance of all miscellaneous work, a Notice to Proceed letter shall be issue by the Engineer.

## **10.6 MAINTENANCE OF LANDSCAPED AREAS TASK AND FREQUENCY MATRIX**

The Contractor shall use the chart as a guideline for the frequency and duration of each maintenance task. Refer to Appendix C Maintenance of Landscaped Areas Task and Frequency Matrix, of the Appendices.

## **10.7 MATERIALS**

- (A) **FERTILIZER** - If the Engineer requests the Contractor to apply fertilizer, cost of fertilizer shall be paid by allowance in Bid Item No. 8 Miscellaneous Work, of the Proposal Schedule and shall be negotiated in a manner similar to Section 4.5 Price Adjustment, of the Specifications. The contractor shall submit a record of area fertilized, date applied and amount used after each application
- (B) **PESTICIDE & HERBICIDE** - Insecticides, fungicides and other pesticides shall be applied as needed to control insect pest and disease. Herbicides may be used for weed control. The Contractor shall obtain written approval from the Engineer before using pesticides and/or herbicides. The Contractor may purchase pesticide and herbicide from suppliers, but prior to purchase, the Contractor shall submit a list of needed pesticide and or herbicide and their respective price to the Engineer for approval. *Cost for the pesticide and herbicide shall be paid by Bid Item No. 6, Pesticide and Herbicide of the Proposal Schedule.* Pesticide and herbicide purchased without the Engineer's approval shall not be paid.

If the Contractor chooses to use restricted pesticides, the Contractor shall obtain a Category 6, Certification for Commercial Applicators for Restricted Pesticides from the Department of Agriculture. The processing, handling and application must be performed by a person or under the direct supervision of the person possessing the above certificate. A copy of the certificate shall be submitted to the Engineer.

All work shall be performed in strict compliance with the manufacturer's label and or Material Safety Data Sheet (MSDS) as applicable and in accordance with State, Federal and local regulations and laws. A copy of the MSDS shall be submitted to the Engineer as a part of his approval to use pesticide and or herbicide and a copy shall be maintained by the Contractor at the job site during processing, handling and application of pesticides and or herbicides.

- (C) **PLANT REPLACEMENT** - Replacement plants shall be the same species, spread and height. The Engineer will inspect plants at place of growth and after delivery to the Project. Each tree shall be tagged by the Engineer with consecutively numbered plastic tamper resistant self locking seal with a breaking strength of 55 lbs. Seals shall remain on

trees and only be removed by the Engineer. Plants not conforming to the Contract requirements shall be rejected.

- (D) COMPOST – Compost shall meet the requirements of the United State Composting Council (USCC) Seal for Testing Assure (STA) program. Compost shall be the result of the biological degradation and transformation of plant-derived materials under controlled conditions designed to promote aerobic decomposition. Compost shall be stable with regard to oxygen consumption and carbon dioxide generation. Compost shall be mature with regard to its suitability for serving as a soil amendment. The compost shall have a moisture content that has no visible free water or dust produced when handling the material. Compost feedstock may include, but is not limited to, leaves and yard trimmings, biosolids, food scraps, food-processing residual, manure or other agricultural residuals, forest residues, bark and paper. Ensure compost and wood chips do not contain any visible refuse, other physical contaminants, or any substance considered harmful to plant growth. Provide compost meeting all applicable 40 CFR 503 standards for Class A biosolids and State of Hawaii Department of Health public health and safety regulations.
- (E) MULCH – Mulch must be shredded bark and coconut husks, wood chips, or macadamia husks; these materials may be partially composted before use. Wood chips produced on site from tree trimmings may contain leaves and small twigs. Maximum size shall be 3 inches by 1-1/2 inches by 1/2 thick.

## **10.8 CONTRACTOR EVALUATION FORM**

The Contractor shall be evaluated on his or her performance using the form in Appendix H Landscape Maintenance Contractor Performance Rating, of the Appendices.

## **10.9 WORK SCHEDULE**

- (A) The Contractor shall bring the project up to the specifications within thirty (30) days of the contract's Notice to Proceed date. If the Contractor is unable to bring the project up to specifications within (30) days, he shall request a time extension from the Engineer.

Failure to bring the project up to specification or to request a time extension shall result in an unsatisfactory rating for this period. It is the Contractor's responsibility to ensure that adequate labor, equipment and provided for landscape maintenance.

- (B) The Contractor's normal work shall be performed during daylight hours, Monday to Friday (except State Holidays). All work shall be conducted in a professional manner and is not disruptive to the public and traffic flow.
- (C) The Engineer reserves the right to change the hours of operations.
- (D) Two (2) working days in advance of the required commencement date, the Contractor shall furnish a weekly schedule detailing the date, the location, the number of workers

and the type of work that is planned for each day of the schedule for work periods of not less than three (3) days per week.

- (E) The Schedule may be revised by the Engineer at any time. The Contractor shall maintain and revise the work schedule to always be current. Progress payments shall be withheld until a satisfactory work schedule is received by the Engineer. The Engineer reserves the right to instruct the Contractor to work in areas other than his contract areas if such areas require immediate attention.
- (F) For emergency services the Contractor shall be made available outside of normal working hours, seven (7) days a week, including State holidays.
- (G) The Engineer or authorized representative may contact the Contractor to schedule work as needed.

#### **10.10 ORDER TO STOP WORK**

- (A) Order to stop work shall be in accordance with Section 8.5.A Order to Stop Work, of the Specifications.
- (B) The Engineer or his authorized representative reserves the right to stop work at any time, to include but not limited to hazardous condition or unsafe acts as a result of the Contractor's palm pruning/removal operation or failure to follow a contractual requirement e.g., failure to have a CLT or equivalent certificate on site during landscape maintenance operations.
- (C) Upon receipt of either a written or verbal notification from the Engineer or his authorized representative, the Contractor shall immediately stop any practice or work as determined by the Engineer or his authorized representative as an obvious hazard or for failing to follow a contractual requirement. The Engineer shall document the safety or hazardous incidents and/or contractual violation.
- (D) Work may continue when the hazard has been rectified, removed and/or the contractual deficiency have been resolved. And the Contractor must obtain the approval from the Engineer prior to resuming work.
- (E) The Contractor may not be given additional time past the completion date of the Work Order for time that is lost during the "stop work."
- (F) Refer to Section 8.6 Liquidated Damages, of the Special Provisions, for liquidated damages that are charged against the Contractor for failure to comply with contractual requirements.

## **10.11 SAFETY AND ACCIDENT PREVENTION**

The Contractor shall conduct his maintenance operations with due regard to the convenience and safety of the public. The protection of persons and property shall be provided by the Contractor.

### **(A) SAFETY CONCERNS.**

1. The Contractor shall observe safety concerns that are mentioned in Section 7.10, Public Convenience and Safety, of the Special Provisions, to the fullest during performance of work.
2. The Contractor and Contractor's employees shall exercise due care in performing any work. The Contractor and Contractor's employees may be subject to slip, trip, fall, vehicular hazards, chemical hazards, noise hazards and other workplace hazards. **The Contractor shall maintain an internal aggressive safety program.**
3. All Contractor's methods and practices shall be in accordance with the U.S. Department of Labor (DOL) Occupational Safety and Health Acts (OSHA); the Hawaii Department of Labor and Industrial Relations (DLIR); Hawaii Occupational Safety and Health Division (HIOSH), the Environmental Protection Agency (EPA), American National Standard Institute (ANSI) Z133.1-2012, Arboricultural Operations – Pruning, Repairing, Maintaining, Removing Trees and Cutting Brush – Safety Requirement. Local and State occupational safety, health standards, and health programs required by the Hawaii Administrative Rules §12-110 and Hawaii Revised Statutes § 396, any other applicable federal, state, and local rules and regulations specified in Section 7.10 Public Convenience and Safety.
4. The Contractor is responsible for the work site and the work practices of all employees on the project site and is the controlling, exposing, correcting as well as the creating employer for purposes of this scope of work. The State of Hawaii, Department of Transportation, monitoring the work in progress is not a representative or responsible to control the employer workplace and work practice and health compliance.
5. All closing of lanes and traffic control and safety measures shall be performed in conformance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways.
6. Contractor shall at all times conduct work to assure the least possible obstruction to public traffic. The Safety and convenience of the general public and the protection of persons and property is of utmost importance, and the Contractor shall provide appropriate traffic control and safety measures. The Contractor and its employees shall treat members of the public in a fair and polite manner. All

Contractor's personnel shall present a professional appearance and always conduct themselves in a professional manner.

7. While working in the right-of-way areas, all employees under control of the Contractor shall wear OSHA-compliant personal protective equipment (PPE) appropriate to the hazards, including, but not limited to: head protection, safety hard hats, hearing protection, safety vest, safety belts, lanyards, fall arrest system, goggles, gloves, chemical gloves, safety shoes, chain-saw-resistant leg protection, clothing and footwear appropriate to the known hazard and other equipment as required. As a minimum, vest shall be the appropriate safety apparel that meets the current ANSI/ISEA 107 and the U.S. Department of Transportation's MUTCD High-visibility Safety Apparel Standards.

**(B) HAZARDOUS MATERIALS / ENVIRONMENTAL PROTECTION.**

1. The Contractor shall comply with all Federal, State, and local environmental laws and regulations when handling hazardous materials.
2. All work shall be performed in strict compliance with the manufacturer's label and or Safety Data Sheet (SDS) as applicable and in accordance with State, Federal and local regulations, and laws. A copy of the SDS shall be submitted to the **Engineer two days prior to the scheduled use** for approval prior to use **or immediately notify the Engineer by phone or fax for his verbal approval** in cases of emergency situations which occur during off hours. A copy of the SDS shall be submitted to the Engineer by close of business the following working day. Contractor's employees who are involved in the application of pesticides and herbicides shall complete a video training as specified in Section 10.11(C)1 of the Specifications. The Contractor at the jobsite shall maintain a copy while handling chemicals. The Contractor is responsible in notifying everyone the existence of hazardous chemicals within the project area.
3. The Contractor shall immediately contain and clean up the release or spill of hazardous material and shall report the incident to the Engineer.
4. The Contractor shall not allow debris from the landscape maintenance operation to get into irrigation canals, rivers, or any stream.
5. Work shall not cause air or storm water pollution. The Contractor shall be responsible for all hauling and lawful disposal of debris. Any unauthorized or illegal disposal is grounds for termination of the contract.

**(C) MANDATORY TRAINING.**

1. **Initial and Annual Training.** The Contractor's employees who are involved in the application of herbicide shall complete a video training before applying herbicide and shall be trained annually thereafter. The Contractor shall contact the Engineer for information on mandatory training. Completed training reports



shall be submitted to the Engineer. The training completion report shall contain the name of personnel attending, date, title of video, signature of person administering the training (or official of the firm)

2. **Annual Training.** The Contractor and his entire crew who are working on this contract shall attend training once every two (2) years to be conducted by the Department. Training will include State Highway Manual for Sustainable Landscape Maintenance (HMSLM). The Engineer will notify the Contractor to schedule the training. Attendees are required to pass a written exam at the end of the training to fulfill the requirements of the training.
3. Cost of time spent on mandatory training shall be incidental to the unit price of palm pruning/removing service. The runtime for the video is thirty (30) minutes and the departmental training will be for approximately two (2) days per two (2) years.

**(D) SAFETY PLAN.**

1. As a minimum and as applicable, the Safety Plan shall contain the following information: Project Number, Project Title, Contract Number, Activity description, hazard, action required to mitigate the hazard, special training requirements, engineering controls (i.e., guardrails, barricades, etc.), administrative controls (Standard Operating Procedures, signs, etc.), emergency information, safety equipment checklist, and required PPE.
2. The safety plan shall be prepared/developed by a qualified individual who is trained and knowledgeable on the current standard practice and principles of occupational safety, health, and the related work activities within this project. The credentials of the responsible person preparing the safety plan shall be submitted to the Engineer.

**(E) FALL PROTECTION PLAN.**

1. The fall protection plan shall be prepared, developed, signed, and certified by a person who is qualified and knowledgeable about the fundamental principles of occupational safety and health and work activities to be performed. The plan shall be complete with all Federal, State, and local regulations. Cost involved in the development of the Fall Protection Plan shall be incidental to the cost of maintenance of landscaped areas.
2. The Engineer reserves the right to require the Contractor to submit a copy of the certificate of training of the person who prepared the Fall Protection Plan. The Contractor shall submit and discuss his Fall Protection Plan, as applicable.

**10.12 CONTRACTOR’S RESPONSIBILITY FOR DAMAGE TO PROPERTY**

The Contractor is responsible for replacement or repair of any damaged equipment or State-owned property. Any damage caused by the Contractor as a result of his or her maintaining of landscaped areas operations including but not limited to damaged plants, broken sidewalk, guardrails, traffic signs, pavement markers, asphalt, concrete swales, curb, rutted lawn, broken water shut-offs, wire damage, building damage, damaged utilities (underground, on ground or overhead) and other non-contractual in the project area whether in public or private property shall be remedied or replaced by the Contractor in accordance with Section 107.12(A) Contractor’s Responsibility for Damage to Property, of the Standard Specifications to the satisfaction of the Engineer and or the injured party.

**10.13 SUBMITTALS/REPORTS SUMMARY**

The Contractor shall submit the following submittals/reports electronically or as a hard copy in a format as requested by the Engineer.

Item	Submittal/Reports	Reference	Required	Frequency	Submit to
1	Equipment List/Lease Agreement, as applicable.	Section 10.2 Coordination of Work of the Specifications.	Three (3) working days prior to the Notice to Proceed.	As revised	Engineer – Oahu District’s representative (Point of Contact (POC)).
2	Names, Telephone Number(s) and Addressee(s) of Contact for Contractual issues.	Section 10.3 Qualification of Bidders, 10.2 Coordination of Work and Section 10.14 Pre-start Meeting of the Specifications.	Prior to award and three (3) working days prior to the Notice to Proceed.	As revised	Project Manager, Construction and Maintenance Branch, Highways Division and the Engineer – Oahu District’s representative (Point of Contact).
3	List of personnel employed under the contract along with individual qualifications.	Section 10.3 Qualification of Bidders, Section 10.2 Coordination of Work and Section 10.14 Pre-start Meeting, of the Specifications	Prior to award and three (3) working days prior to Notice to Proceed date.	As revised	Project Manager, Construction and Maintenance Branch, Highways Division and the Engineer – Oahu District’s representative (Point of Contact).
4	Weight Tickets	Section 10.5(L)2 General Clean Up, of the Specifications	Monthly or as requested by the Engineer	As revised	Engineer – Oahu District’s representative (Point of Contact).

SUBMITTALS/REPORTS SUMMARY (continuation):

Item	Submittal/Reports	Reference	Required	Frequency	Submit to
5	Reporting of Hazardous Conditions and Danger to Landscaped Areas	Section 10.5(M) Reporting of Hazardous Conditions and Damages to Landscaped Areas	As required	As needed	Engineer – Oahu District’s representative (Point of Contact).
6	Fall Protection Plan	Section 10.11(E) of the Specifications.	During Pre-start Meeting	As needed/ As revised	Engineer – Oahu District’s representative (Point of Contact).
7	Traffic Control Plan	Section 10.5(N)2 of the Specifications.	Seven (7) working days prior to the scheduled lane closure	As required	Engineer – Oahu District’s representative (Point of Contact).
8	Safety Plan	Section 10.11(D) Safety Plans, of the Specifications	During Pre-start meeting	As needed/ As revised	Engineer – Oahu District’s representative (Point of Contact).
9	Permit for the Occupancy & Use of State Highway Right-Of-Way	Section 10.5(N)3 of the Specifications.	Within twenty (20) calendar days after completing all field work.	Annually.	Engineer – Oahu District’s representative (Point of Contact).
10	Safety Data Sheet, as applicable	Section 10.11(B)2	Two working days prior to use or immediately for emergency situations.	As needed.	Engineer – Oahu District’s representative (Point of Contact).
11	Record of herbicide application	Section 7.8 Labor and Compensation Requirements, of the Special Provisions.	Within seven (7) days after the end of each month. Submitted with the monthly invoice.	Monthly	Engineer – Oahu District’s representative (Point of Contact).

SUBMITTALS/REPORTS SUMMARY (continuation):

Item	Submittal/Reports	Reference	Required	Frequency	Submit to
12	Record of fertilizer application	Section 10.5(G) Fertilizer, of the Specifications	After each application	As needed	Engineer – Oahu District’s representative (POC).
13	Video Training Completion Report	Section 10.11(C)1 of the Specifications	Prior to application	Annually	Engineer – Oahu District’s representative (Point of Contact).
14	Certified Payroll Affidavit	Section 7.8 Labor and Compensation Requirements, of the Special Provisions	Within seven (7) days after the end of each month. Submitted with the monthly invoice.	Monthly (when a Work order is active)	Engineer – Oahu District’s representative (POC).

**10.14 PRE-START MEETING**

Pre-start meeting shall be done at the requested of the District Engineer or his authorized representative. The Contractor shall contact the Engineer to schedule the pre-start meeting no later than three (3) working days prior to the Notice to Proceed date. This meeting will include the Engineer, his authorized representative and other personnel as deemed necessary by the Engineer. The Contractor shall include the Lead Maintenance Person/Highway Maintenance Supervisor and main contact personnel for this project. The Contractor shall be prepared to discuss and submit the following.

- (A) Equipment quantities and location.
- (B) Coordination of access to the working areas as applicable.
- (C) List of required and applicable equipment, vehicles, materials, and supplies.
- (D) Personnel employed under this contract with applicable license and certification.
- (E) List of trained traffic control personnel.
- (F) Point of Contact phone number and email address.
- (G) Verification of quantities in the Proposal Schedule and boundaries of right-of-way areas.

**10.15 TERM OF CONTRACT**

The term of this contract shall be for TWELVE (12) months from the date indicated in the Notice to Proceed from the Department.

## **10.16 OPTION TO EXTEND TERM**

This contract may be extended FOUR (4) additional TWELVE (12) month period or parts thereof without the necessity for re-bidding upon mutual agreement between the State and the Contractor. The entire term of the contract, including extensions, shall not exceed SIXTY (60) months.

## **10.17 ESCALATION CLAUSE**

Escalation is not applicable to this contract.

## **10.18 BASIS FOR PAYMENT**

The Contractor's bid price shall be full compensation for furnishing all labor, materials, tools, equipment, vehicles, communication cost, taxes, insurance, overhead, travel, and incidental costs necessary for this project.

Incidental cost includes, but not limited to vehicle logos, employee uniforms, disposal of rubbish and litter, closing of lane/traffic control, traffic control plan, personnel protective equipment, mandatory training, certification of safety plan, and notifications to property owners or utility companies.

(A) Monthly Earnings are computed as follows:

1. For Bid Items No. 1 through 3 – monthly earnings shall be per unit bid prices as specified in the Proposal Schedule.

(B) Miscellaneous Work – Miscellaneous Work (Bid Item No. 8) will be used only at the discretion of the Engineer for miscellaneous work within the scope of work and within the project area. The cost of miscellaneous work shall be negotiated in a manner similar to Section 4.5 Price Adjust, of the of the Specifications and if approved, will be paid by the respective allowance.

(C) Deductions (as applicable):

1. If the Contractor fails to maintain the designated landscape areas satisfactorily as required within Section 10, Maintenance of Landscape Areas, a deduction from the monthly earnings will be made as follows and a report for with substantiating evidence and explanation shall be filed by the Engineer.
  - a. Deduction = Percent (%) estimated by the State and shall not be paid to the Contractor.
2. Liquidated Damages – This amount, if any, shall be retained by the State and shall not be paid to the Contractor. Specified in the Special Provisions.

3. Retainage – computed as specified in Section 9.2 Retainage of the Specifications. Refer to Section 9.2 Retainage /Deduction from Payment, of the Special Provisions for retainage invoicing procedures.
- (D) Monthly Payments – Total monthly payments payable to the Contractor will be the applicable monthly payments plus applicable Miscellaneous Work minus the applicable Deductions.

Refer to Section 9.4 Progress Payments, of the Special Provisions for the required information on monthly invoices.

## **SECTION 11 – MAINTENANCE OF IRRIGATION SYSTEM**

### **11.1 DESCRIPTION**

The work shall consist of furnishing labor, materials, tools equipment, vehicles, communication costs, taxes, insurance, overhead, travel, and incidental cost necessary for maintaining the irrigation system.

- (A) **Limits of work.** The irrigation system includes all appurtenances and/or components, from and including the remote-control valves to the sprinkler heads. The work include maintenance, repairing leakages, inspecting the irrigation system and submitting required reports as specified in the Specifications.
- (B) Current Operational Irrigation System(s):
1. At the date of bidding, the overall irrigation system is **currently one hundred (100%)** percent operational.
  2. The Contractor is required to maintain and inspect the operational irrigation system(s) as specified in these Specifications. The State may task the contractor to perform discretionary services to the operational irrigation system(s) as Miscellaneous Work, of the Proposal Schedule.
  3. The as-built Irrigation Plan in full scale is available for review at the Oahu District Office by making an appointment.
- (C) Upon approval of the Engineer, replacement parts will be ordered by the Contractor and paid for by the State under Bid Item No. 7 Replacement Parts, of the Proposal Schedule. The Contractor shall submit invoices of all authorized parts to the Engineer for payment.
- (D) The Contractor shall start repairing any damages of the irrigation system within forty-eight (48) hours of detection or from the time of notification by the State maintenance inspector or the public.
1. Within thirty (30) days after the Notice to Proceed date, the Contractor shall provide a written itemized report of all irrigation components to the Engineer that need to replace including but not limited to backflow preventers, controllers, valves and sprinkler heads. All components not listed in the report are the responsibility of the Contractor to replace at the Contractor's cost.
  2. Within thirty (30) days after the Notice to Proceed date, the Contractor shall Submit the "Irrigation Controller Schedule" for all controllers and shall be submitted with the itemized report as specified above.

3. Prior to sixty (60) days to the end of the contract the Contractor and Engineer shall perform a comprehensive inspection of all irrigation components to assure proper coverage and good working order. As the Contractor is the steward of maintaining the system, all components not functioning properly shall be replaced within thirty (30) days of the inspection solely at the Contractor's cost.

## **11.2 COORDINATION OF WORK**

Refer to Section 10.2, Coordination of Work, of these Specifications.

## **11.3 QUALIFICATION OF BIDDERS**

The Contractor may be asked to provide documentation of licenses, certifications, and other required documents listed in the subsections below. Requested documents shall be received by the Project Manager no later than five (5) working days from the date of receipt of the written request from the State.

Attention is direct to the provisions of Chapter 444, Contractors, of the Hawaii Revised Statutes, regarding the licensing of contractors in the State.

### **(A) Contractor's Personnel Qualifications**

1. **Lead Irrigation Person** – The Contractor shall have a valid Certified Landscape Technician with Exterior Irrigation in good standing. The CLT Exterior/Irrigation person shall have a minimum of one (1) year experience in supervising personnel performing irrigation work or at least two (2) years of experience in all phases of sprinkler maintenance and installation.
  - a. The CLT Exterior/Irrigation shall be always present on-site during any irrigation work for this project. Liquidated Damages may be incurred if a CLT is not present.
  - b. A list of employed CLT Exterior/Irrigation with their certification shall be provided to the engineer.
2. **Sprinkler Technician** – The Contractor shall have a sprinkler technician capable of reading plans and have at least one (1) year experience in all phases of a sprinkler system installation and maintenance. A list of employed sprinkler technician and their work experience similar to the scope of this project shall be provided.



#### **11.4 INSPECTION OF DETAILED PLANS AND EQUIPMENT DATA**

Detailed plans in full scale and limited manufacturer's catalog cuts and maintenance manuals for the Irrigation System will be made available for inspection at the Oahu District Office from the first day of advertising for bids up to and including the day of bid opening.

#### **11.5 MATERIALS**

It is intended that the Contractor shall reuse salvable materials wherever feasible. Any salvable materials damaged through the Contractor's negligence shall be replaced at the Contractor's expense. Materials will be subject to inspection at any time. Failure of the State's inspector to not faulty materials or workmanship during maintenance or installation will not relieve the Contractor of the irresponsibility for removing or replacing such materials and restoring the system to working order at the Contractor's expense. Any replacement of irrigation system components shall be made with materials of the same manufacturer and model as the original equipment. Substitutions of materials other than originals equipment will be approve only when the original equipment has been discontinued and is no longer available for purchase at any location. The substituted equipment must be completely compatible with the original and must be approved in advance by the Engineer. All repairs to the system shall be identical to the original installation, unless approved otherwise in advanced by the Engineer. *If a change to the installation will result in lower future maintenance costs, less frequent breakage, or an increase in public safety. Contractor shall request authorization to make the change from the Engineer.*

#### **11.6 SCOPE OF WORK**

All work shall conform to the best irrigation practices including but not limited to the manufacturer's maintenance standards, the most current requirements of Section 616, Irrigation System of the Standard Specifications and Chapter 12, Irrigation System of the HMSLM.

##### **(A) Maintenance and Inspection of Irrigation System (routine/preventive)**

1. As a minimum, perform the maintenance task as listed in Appendix D Irrigation System Maintenance Task, Frequency, Checklist, and Report, of the Appendices.
2. If any procedure in this Specification is found to contradict any manufacturer's recommendation contained in the Operations and Maintenance Manual, the Contractor shall immediately bring such contradiction to the Engineer who shall determine which of the procedures shall be followed.
3. The Contractor shall record all maintenance performance, malfunctions, and corrective actions taken on the irrigation system in performing its work under this contract. The Contractor shall utilize the form in Appendix E Irrigation Trouble Call/Equipment Service Maintenance Report, of the Appendices. The Engineer may modify this form as necessary.

4. No later than thirty (30) calendars after each twelve (12) month period, the Contractor shall submit annual reports of system status based on their assessment of preventive maintenance to the Engineer. The report shall include as a minimum:
  - a. An assessment of system adequacy, and
  - b. Recommendations for equipment replacement.
5. All routine/preventive maintenance work shall be completed within seven (7) working days of the schedule maintenance date and shall be performed during regular working hours.
6. Maintenance work shall be accomplished at the following schedule, as applicable:

Required maintenance task	Required completion date
Weekly	First three (3) days of the week
Monthly	During the last week of the month
Annual	Month of May
Years ending in "0" or "5"	Month of January

7. The Contractor shall prepare a schedule to satisfy the prescribe schedule in the Operations and Maintenance Manual of each equipment covered in this contract and submits to the Engineer as specified under Section 11.11 Submittals/Reports Summary, of the Specifications.

**(B) IRRIGATION CONTROLLER**

All run times should consider sprinkler rates, precipitation rates, soil conditions, microclimate conditions, evapotranspiration, and consideration of slope. Before scheduling run times, the site should be walked and planted areas inspected to observe plant stress and health. Soil moisture levels should be inspected throughout planted areas, and appropriate adjustments made to the irrigation schedule. Irrigation scheduling will be performed to encourage deep roots, including deep watering through use of multiple repeat cycles. On slopes, short irrigation cycles should be repeated to minimize water runoff. Soil probing shall be used to determine soil moisture depth, overall moisture levels and the need to adjust irrigation schedules. Soils will be allowed to dry to a 50% moisture depletion level between irrigations to avoid root-rot and allow adequate air to be present in the soil.

Irrigation cycles are to run only between the hours of 9:00 P.M. to 6:00 A.M. Watering times should be adjusted, where needed, to eliminate irrigation during heavy commuter hours. A proposed quarterly schedule of watering shall be provided to the Engineer thirty (30) after the notice to proceed date. The frequency and duration shall be set to

adequately irrigate plants and turf without causing significant surface runoff or ponding. Each time the schedule is changed due to seasons or any other reason, a revised schedule shall be provided to the Engineer. Controller enclosures are to remain locked

**(C) IRRIGATION VALVES**

Each valve should be inspected monthly to correct the following conditions: stuck valves, and broken risers, laterals, or mains. Contractor shall list and report all irrigation system damages to the Engineer with the cost estimate of repair/replacement. Each valve should be inspected monthly to correct the following conditions: stuck valves, and broken risers, laterals, or mains. Contractor shall list and report all irrigation system damages to the Engineer with the cost estimate of repair/replacement. Irrigation system pressure shall be checked and adjusted at least monthly to insure efficient operation of irrigation systems. On slopes where no vehicles traverse, plastic valve boxes are acceptable. On flat areas, concrete valve boxes with metal covers are required. Contractor shall maintain the bottom of all valves, a minimum 1" above gravel base. Contractor shall remedy all valves not 1" above gravel base by excavating all dirt from valve box to a depth of 4" below the bottom of the valve and installing filter fabric and a 3" layer of number three gravel.

**(D) SPRINKLER HEADS**

Inspect all sprinkler heads for misaligned irrigation heads, clogged or obstructed heads, missing or vandalized heads, low-head drainage conditions, overspray onto hardscaped areas, poor coverage or uniformity. If the irrigation is not adequate to provide uniform coverage, the Contractor agrees to upgrade the system to achieve site efficiency. To clear clogs, remove internal assembly, clean screen filter and reassemble head. Run test to confirm that clog has been cleared. Do not attempt to clean plastic nozzles by sticking knife blades or wire into the openings. The plastic will be scratched, and the pattern will be ruined.

**(E) MONTHLY IRRIGATION REPORT**

Develop and maintain a site log, which should contain the following information: monthly water consumption data, broken components, repairs areas of vandalism, and other site information. Submit this report with monthly invoice.

**(F) BATTERY POWERED CONTROLLERS/VALVES**

Battery powered controllers/valves shall be tested each month to check that the batteries are operating. Dead batteries shall be replaced immediately at the Contractor's cost.

**(G) RAIN SENSOR**

Rain sensor switches prevent irrigation systems from running when it is raining, or when it has recently rained. Maintain rain sensor free of debris and insects on the screen and funnel.

**(H) DRIP IRRIGATION**

Drip lines and spray heads shall be randomly checked on an ongoing basis such that the entire system is checked each month. Malfunctioning systems will be corrected immediately. Methods of detection include visual sightings of water on adjacent hardscape and property, soil probing, meter monitoring and specific line observations.

**(I) MANUAL WATERING**

When breakdowns or malfunctions exist, the Contractor shall hand water the same schedule as the irrigation controller to maintain all plant material in a healthy condition unless Engineer determines otherwise. Do not wait for approval to begin hand watering if it is required to save the plantings. Failure of the irrigation system to provide full and proper coverage shall not relieve the landscape maintenance Contractor of the responsibility to provide adequate irrigation. It is the Contractor's responsibility to make sure that the irrigation system is maintained and operates properly. Plants which die due to irrigation failure will be considered to have died due to the contractor's negligence and shall be replaced at the Contractor's expense in the amount as specified in Section 8.6 Liquidated Damages, of the Special Provisions.

**(J) WEEKLY INSPECTIONS**

The Contractor shall check the entire irrigation system weekly for items such as dry spots and missing or malfunctioning irrigation components. Check for leaking valves, water running across pavement, water standing in puddles, or any other condition which hampers the correct operation of the system or the public safety. The Contractor shall carefully observe plant materials for signs of wilting, indicating a lack of water. Plants which die due to irrigation failure will be considered to have died due to the Contractor's negligence and shall be replaced at the Contractor's expense.

**(K) IRRIGATION SYSTEM ANNUAL COMPREHENSIVE INSPECTION**

The Contractor and the Engineer shall perform a comprehensive annual inspection of the entire irrigation system annually.

1. For the purposes of contract extension, on the second Monday on the fourth month after the Notice to Proceed date and the fourth month from the beginning of each contractual term for each contract renewal, as applicable.

2. For contract closing, sixty (60) days to the end of the contract.
3. The irrigation System Annual Comprehensive Inspection shall include the following:
  - a. Irrigation equipment and component inventory
  - b. Each valve shall be individually operated and checked for any deficiencies.
  - c. The Contractor shall start repairing any damages of the sprinkler system within forty-eight (48) hours of detection of from the time of notification by the State maintenance inspector.

**(L) Repair/Trouble Calls**

The Contractor is subject to be called by the Engineer in case of, but not limited to, the following:

- mechanical/electrical failure,
- malfunction of the irrigation system
- leakage and damages caused by, but not limited to, vehicular traffic.

The number of personnel used to perform repair work on trouble calls by the contractor shall be fully justified and approved by the Engineer before starting the said repair work. The Contractor shall have adequate personnel, supervisors, and equipment necessary to perform trouble calls. The Contractor shall present his completed "Irrigation Trouble Call/Equipment Service Maintenance Report" to the Engineer or authorized representative for certification at the end of each day or each job, whichever is earlier.

**1. Trouble Calls During Regular Working Hours.**

- a. The Contractor shall respond within one (1) hour to the job site. The Contractor shall be charge liquidate damages as specified in Section 8.6 Liquidated Damages, of the Special Provisions if the Contractor fails to respond within the specified time.
- b. Trouble call during regular working hours shall be paid for based on the hourly bid price in the Contractor's proposal, Irrigation Trouble call work, Regular working hours – per man-hour, Sprinkler Technician (Bid Item No. 5), of the Proposal Schedule multiplied by the time spent at the job site to complete the repair work.
- c. Time spent at the job site to complete the repair work during regular working hours shall be taken to the closest one-quarter (1/4) of an hour

and any fraction of a one-quarter (1/4) of an hour shall be considered a full one-quarter (1/4) of an hour.

2. In order for the Contractor to receive payment, all completed “Irrigation Trouble Call/Equipment Service Maintenance Report” during regular working hours shall be certified and signed by the Engineer or his authorized representative.

**(M) Materials, Supplies, Equipment, Facilities, and Utilities**

1. The Contractor shall furnish the following:
  - a. All necessary supplies, materials, and equipment required to maintain the irrigation system.
  - b. Batteries for battery-powered controllers/valves.
2. The State shall furnish the following:
  - a. The current irrigation system, including all accessories as described in Section 11.1, Description, of the Specifications.
  - b. Electrical power to power the irrigation system.
  - c. Water to irrigate the landscape areas.
  - d. Applicable keys to the irrigation controller cabinets, as applicable.

**(N) Replacement Parts**

1. Minor Replacement Parts
  - a. “Minor Replacement Parts” shall mean repairs that will require a system to be shut down for no more than four (4) hours and cost to maintain and/or replace parts equal to or less than \$200.00.
  - b. Cost of new parts and materials and labor for removing old part(s) and replacing new part(s) based on normal wear and tear and included as part of preventive maintenance based on industry/manufacturing standards or the contractor’s own commercial policies and pricing practices shall be considered incidental to the cost of Bid Item No. 4 Maintenance and Inspection of Irrigation System, routine/preventive, of the Proposal Schedule. No additional payment will be made by the State.

2. Major Replacement Parts
  - a. “Major Replacement” shall mean repairs that will be require a system to be shut down for more than four (4) hours or cost work and replacement parts is more than \$200.00.
  - b. The Contractor is not authorized to commence on any major repair work more than \$200.00 without written authorization from the Engineer. The Contractor shall immediately notify the Engineer when a major repair/replacement is required or planned. The Contractor shall submit a written cost estimate for labor, materials and/or equipment to the Engineer as expeditious as possible for approval. The State reserves the right to solicit competitive bids and have work done by the lowest bidder.
  - c. All major repairs/replacement shall be negotiated separately in a manner similar to Section 4.5 Price Adjustment, of the Specifications and shall be paid by the corresponding labor hour under Irrigation Trouble Call work, Regular working hours – per man-hour, Sprinkler Technician (Bid Item No. 5), and/or allowed under Replacement Parts (Bid Item No. 7), of the Proposal Schedule, as applicable.
  - d. The Contractor shall be reimbursed for the cost of the new parts including shipping plus fifteen percent (15%) for overhead, profit, taxes and other incidental expenses. The Contractor shall substantiate its charges by submitting original billing as requested by the State.
  - e. Due care will be exercised to prevent physical damage to the equipment.
  - f. The Contractor shall submit a list of parts ordered but not received within thirty (30) days and explain in writing what parts are not received on the first day of each month.
3. **Replacement Parts for Damage Caused by Motorists.** Cost of new parts, materials, and labor for removing old part(s) and replacing new part(s) for damages caused by motorists shall be paid by the corresponding labor hour under Irrigation Trouble Call work, Regular working hours – per man-hour, Sprinkler Technician, in the Proposal Schedule, as applicable.
4. The Contractor shall make all materials salvageable for reuse.
  - a. Salvageable materials damaged through the Contractor’s negligence shall be replaced at the Contractor’s expense. Materials will be subject to inspection at any time. Failure of the State’s inspector to note faulty material or workmanship during maintenance or installation will not relieve the Contractor of the responsibility for removing or replacing such

materials and restoring the system to working order at the Contractor's expense.

- b. Replacement of irrigation system components shall be made with materials of the same manufacture and model as the original equipment. Substitutions of materials other than original equipment will be approved only when the original equipment has been discontinued and is no longer available for purchase at any location. The substituted equipment must be completely compatible with the original and must be approved in advance by the Engineer. All repairs to the system shall be identical to the original installation, unless approved otherwise in advance by the Engineer. If a change to the installation will result in lower future maintenance costs, less frequent breakage, or an increase in public safety, Contractor shall request authorization to make the change from the Engineer.

#### **(O) Miscellaneous Work and Requirements**

The State may request the Contractor to provide discretionary services that are mentioned below and be paid by allowance in Miscellaneous Work (Bid Item No. 8), of the Proposal Schedule and be negotiated.

1. **Upgrades.** Upgrade work requires authorization by the Engineer. Upgrade work may include but is not limited to the following:
  - a. Installation of new controller equipment.
  - b. Replacement of non-operative equipment/component.
  - c. Enhancing equipment as warranted or needed.
  - d. Install, modify, or upgrade devices as needed
2. The Contractor shall clean respective areas after maintenance service. Materials and equipment brought in by the Contractor for servicing shall be removed by the contractor when work is completed. Equipment and components that are serviced shall be wiped down and free of oil, grease, dirt, and handprints upon completion of service.
3. The Contractor shall immediately report hazardous conditions and items that require repair to the Engineer.
4. The Contractor shall be held accountable for any damage caused to fixtures, landscaping, pavements, or other features resulting from work for this project. Property damaged by action of the Contractor or the Contractor's employees shall



be replaced at the Contractor's expense and the replacement shall be approved by the Engineer.

Miscellaneous work, if approved by the Engineer, shall be paid by allowance Bid Item No. 8 Miscellaneous Work, of the Proposal Schedule.

**(P) Traffic Control/Closing of Lanes**

Refer to Section 10.5(N) TRAFFIC CONTROL/CLOSING LANES of the Specifications.

**11.7 WARRANTIES**

**(A) Commercial Warranties**

1. The Contractor shall be responsible for executing all manufacturer's commercial warranties on State-government equipment parts and systems under this contract. The Contractor shall report to the Engineer any difficulty in exercising manufacturer warranties and request assistance when necessary.
2. The Contractor shall maintain a file of the original warranties on new Equipment/component installed and maintain a list of manufacturer's telephone numbers and points of contact for all warranted equipment. A copy of the list shall be provided to the Engineer thirty (30) days after the notice to proceed date and when new equipment is added, or old warranties expire. This file shall be turned over to the Engineer upon completion or termination of this contract. These warranties shall list the "State of Hawaii, Department of Transportation" as the equipment owner.
3. State-government equipment installed by the Contractor that fails within a warranty period due to Contractor's poor workmanship, or by not following the manufacturer's installation, operation, and/or maintenance instruction shall be replaced or repaired at the Contractor's expense.
4. Labor warranty shall be a full thirty (30) calendar days on all items of equipment provided by the Contractor which period shall commence upon completion and acceptance by the Engineer.

**(B) Warranted Equipment/Component**

1. Warranted equipment and component parts shall not be repaired, removed, or replaced by the Contractor while under warranty by the manufacturer or by the installer.

2. All defect in workmanship or material, defective parts or improper installation found by the Contractor shall be reported in writing to the Engineer. The Contractor shall have the knowledge of the equipment and component that are covered by the original warranty and duration of the warranty.
3. The Contractor shall perform all preventive maintenance and inspection as prescribed by the manufacturer.

## **11.8 MATERIALS, SUPPLIES, EQUIPMENT, FACILITIES AND UTILITIES**

### **(A) Contractor-Furnish Supplies, Materials and Equipment**

1. The Contractor shall furnish all necessary supplies, materials and equipment that are required to maintain and repair the irrigation system
2. Batteries for battery-powered controllers/valves as specified in Paragraph € Battery Powered Controllers/Valves, Appendix D1 Supplemental Irrigation System Maintenance Information, of the Appendices.
3. Materials furnished by the Contractor shall be of quality to conform to these specifications.

### **(B) State Furnished Supplies, Materials and Equipment, Facilities and Utilities**

1. The current irrigation system including all accessories as described in Section 11.1 Description, of the Specifications.
2. The State will provide electrical power to power the current irrigation systems.
3. Water to irrigate the landscaped areas.
4. Applicable keys to the irrigation controller cabinets, as applicable, will be issued to the Contractor on the Notice to Proceed (NTP) date of this contract.

### **(C) Materials. *Refer to Section 11.5 Materials, of the Specifications***

- (D)** On Slope where no vehicles traverse, plastic, valve boxes are acceptable. On flat areas, concrete valve boxes with metal covers are recovered.

## **11.9 SAFETY AND ACCIDENT PREVENTION**

Refer to Section 10.11 SAFETY AND ACCIDENT PREVENTION, of the Specifications.

## **11.10 WORK SCHEDULE**

Refer to Section 10.9 WORK SCHEDULE, of the Specifications.

**11.11 SUBMITTAL/REPORTS SUMMARY**

The Contractor shall submit the following submittals/reports as a hard copy or in a format as requested by the Engineer:

Item	Submittals/Reports	Required	Frequency	Submit to
1	List of personnel employed under the contract along with individual qualifications.	Prior to award and three (3) working days prior to the Notice to Proceed date.	As revised	Project Manager, Construction and Maintenance Branch, Highways Division and the District Engineer or authorized representative (Point of Contact).
2	Work schedule, Proposed schedule for routine and preventative maintenance.	During the Pre-start meeting.	As revised by the Engineer	The District Engineer or authorized representative (Point of Contact).
3	Irrigation controller schedule of watering.	One (1) month after the Notice to Proceed date.	As required	The District Engineer or authorized representative (Point of Contact).
4	Monthly Irrigation Report.	Submit with the monthly invoice.	Monthly	The District Engineer or authorized representative (Point of Contact).
5	Parts requirements and maintenance record system and other essential information.	During pre-start meeting.	As required	The District Engineer or authorized representative (Point of Contact).
6	<b><u>Irrigation Weekly Service Maintenance Report</u></b>	Submit with the monthly invoice.	Weekly	The District Engineer or authorized representative (Point of Contact).
7	<b><u>Irrigation Monthly Service Maintenance Report</u></b>	Submit with the monthly invoice.	Monthly	The District Engineer or authorized representative (Point of Contact).
8	<b><u>Irrigation Annual Service Maintenance Report</u></b>	Submit with the monthly invoice.	Annually	The District Engineer or authorized representative (Point of Contact).
9	<b><u>Irrigation Service Maintenance Report for years ending in "5" or "0"</u></b>	Month of January, Submit with the monthly invoice.	For years ending in "5" or "0"	The District Engineer or authorized representative (Point of Contact).
10	<b><u>Irrigation Annual Report</u></b>	No later than thirty (30) calendar days after each one (1) year contractual period. Submit with the monthly invoice.	Annually	Project Manager, Construction and Maintenance Branch, Highways Division and the District Engineer or authorized representative (Point of Contact).

### **11.12 PRE-START MEETING**

Refer to Section 10.14 PRE-START MEETING, of the Specification.

### **11.13 MAINTENANCE TASKS, FREQUENCY, CHECKLIST AND REPORT**

The Contractor shall use the following chart as a guideline for the frequency, duration for each maintenance task and as a checklist and report. Failure to complete the tasks in the schedule shall result in payment deduction. *Refer to Appendix D Irrigation System Maintenance Tasks, Frequency, Checklist and Report.*

### **11.14 CONTRACTOR EVALUATION FORM**

The Contractor shall be evaluated on the performance for preventive maintenance for the entire irrigation system including the irrigation controllers, and respective inspection reports. Refer to Appendix H, Landscape Maintenance Contractor Performance.

### **11.15 BASIS FOR PAYMENT**

The Contractor's bid price shall be full compensation for furnishing all labor, technical knowledge and skills, materials, tools, equipment, vehicles, communication cost, taxes, insurance, overhead, travel, and incidental costs necessary for maintenance and inspection of the irrigation system as specified in this contract.

Incidental costs include, but are not limited to the following:

1. Batteries for battery powered controllers/valves.
2. Components not listed in the itemized report. These components include but are not limited to backflow preventers, controllers, valves and sprinkler heads.
3. Components not functioning properly sixty (60) days prior to contract closing. These components include but are not limited to backflow preventers, controllers, valves and sprinkler heads.

An annual estimated cost shall be provided to maintain the irrigation system.

(A) Monthly Earnings are computed as follows:

1. Maintenance and Inspection of Irrigation System (routine/preventive) (Bid Item No. 4) - monthly earnings shall be per unit bid price as specified in the Proposal Schedule.

2. Irrigation Trouble call work, Regular working hours – per man-hour, Sprinkler Technician (Bid Item No. 5) – monthly payments shall be made based on the actual number of services performed and the applicable unit price.
  3. Replacement Parts (Bid Item No. 7) – the Contractor shall be reimbursed for the cost of the new part in accordance with Section 11.6(N) of the Specifications.
- (B) Miscellaneous Work (Bid Item No. 8) will be used at the discretion of the Engineer for additional miscellaneous work within the scope of work and within the project area. The amount shall be negotiated in a manner similar to Section 4.5 price adjustment, of the Specifications.
- (C) Deductions (as applicable):  
If the Contractor fails to maintain the designated irrigation system satisfactorily as required within Section 11, Maintenance and Inspection of Irrigation system, a deduction from the monthly earnings will be made as follows and a report for with substantiating evidence and explanation shall be filed by the Engineer.

Deduction = Percent (%) estimated by the State and shall not be paid to the Contractor.

1. Liquidated Damages – The amount, if any, is be computed as specified in the Special Provisions and shall be retained by the State and shall not be paid to the Contractor.
  2. Retainage – computed as specified in Section 9.2 Retainage of the Specifications. Refer to Section 9.2 Retainage/Deduction from Payment, of the Special Provisions for retainage invoicing procedures.
- (D) **Total Monthly Payments.** The total monthly payments payable to the Contractor for maintenance and inspection of the irrigation system will be the applicable monthly earnings in Section 11.15(A), Monthly Earnings, plus the applicable miscellaneous work in Section 11.15(B), Miscellaneous Work, minus the applicable deduction(s) in Section 11.15(C), Deductions, of this section.

Refer to Section 9.4 Progress Payments, of the Special Provisions for the required information on monthly invoices.

It is the sole responsibility of the Contractor to ensure the proper operations of the irrigation system.

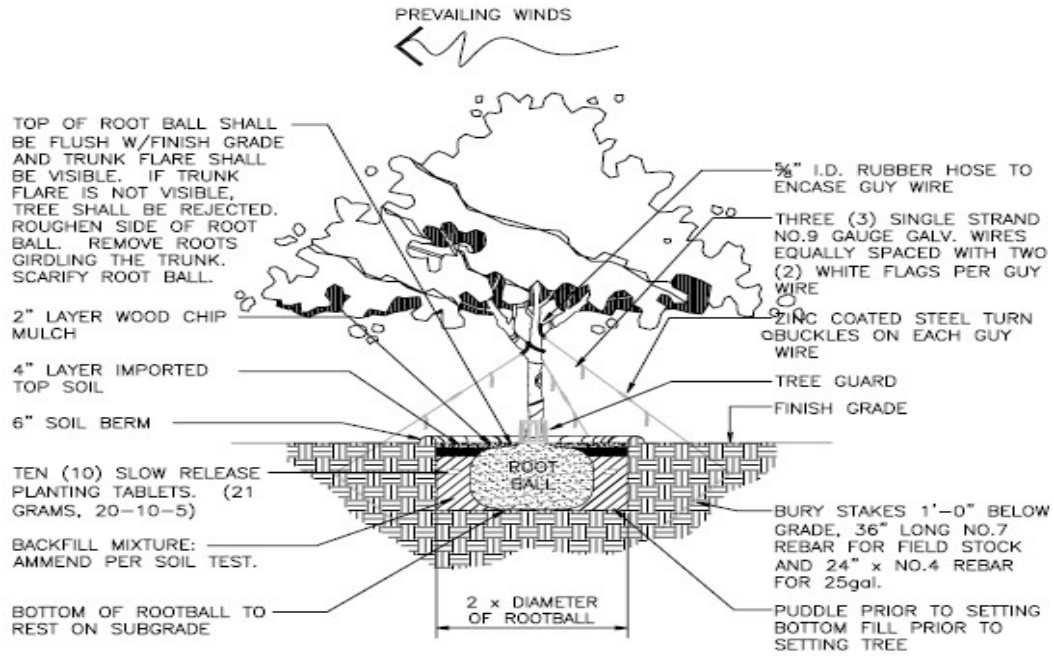
STATE OF HAWAII  
DEPARTEMENT OF TRANSPORTATION  
HIGHWAYS  
HONOLULU, HAWAII

APPENDICES

Contents:

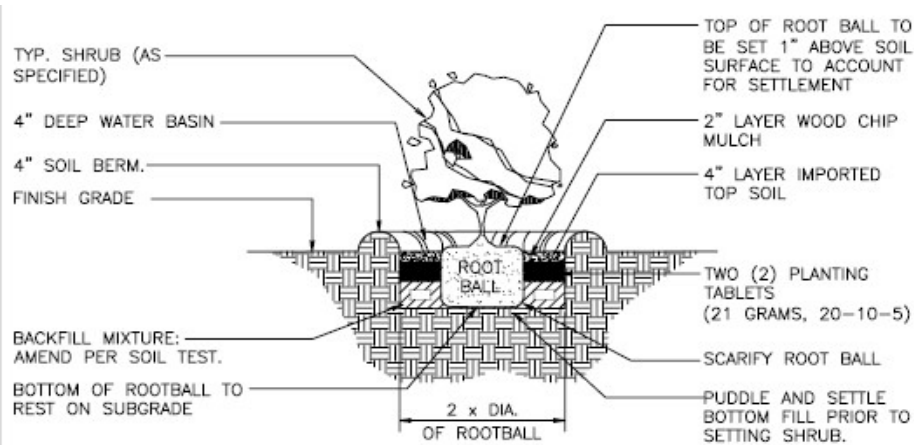
Appendix A	Tree and Shrub Planting Details
Appendix B	Invasive Plant Removal
Appendix B1	Tree Pruning- Crown Raising Exhibit
Appendix B2	Tree Pruning- Crown Cleaning Exhibit
Appendix C	Maintenance of Landscaped Areas Task and Frequency Matrix
Appendix D	Irrigation System Maintenance Task, Frequency, Checklist and Report
Appendix D1	Supplemental Irrigation System Maintenance Information
Appendix D2	Sample – Irrigation Control Schedule
Appendix E	Sample – Irrigation Trouble Call/Equipment Service Maintenance Report
Appendix F	Location Plan
Appendix F1	Summary of Required Annual Inspections
Appendix G	Application & Permit for the Occupancy & Use of State Highway Right-Of-Way
Appendix G1	Sample – Notice to Proceed Letter for Miscellaneous Work
Appendix H	Landscape Maintenance Contractor Performance Rating
Appendix H1	Sample – Record of Herbicide Application
Appendix I	Sample – Monthly Invoice
Appendix I1	Sample – Certified Payroll Report
Appendix J	Sample – Satisfactory Evidence by Affidavit for Final Payment
Appendix K	Irrigation System Approximate Location

# APPENDIX A TREE AND SHRUB PLANTING DETAIL



**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.

CONTAINER  
② TREE PLANTING DETAIL  
SCALE: N.T.S.



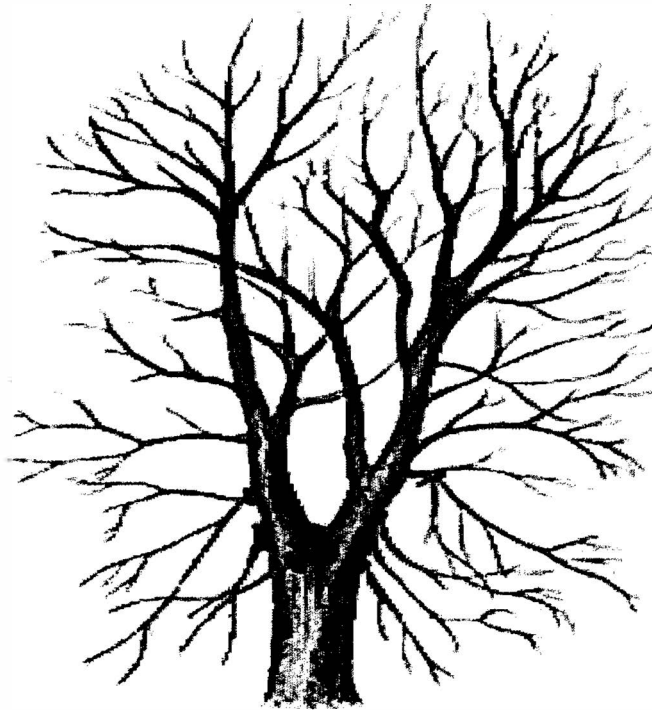
⑨ SHRUB PLANTING DETAIL  
SCALE: N.T.S.

**APPENDIX B  
INVASIVE PLANT REMOVAL**

<b>INVASIVE PLANT</b>	<b>REMOVAL INSTRUCTIONS</b>
Guinea Grass [ <i>Panicum maximum</i> ]	Susceptible to glyphosate, including drizzle application. Cut grass over 24" to 6" above grade and apply glyphosate (i.e. RoundUp). Young plants are susceptible to selective grass killers.
Sleeping Grass [ <i>Mimosa pudica</i> ]	Very Sensitive to picloram (0.25 lb/acre), sensitive to triclopyr (1 lb/ acre)
Wiregrass [ <i>Eleusine indica</i> ]	Sensitive to MSMA
Kyllinga [ <i>Cyperus brevifolius</i> ]	Remove by hand. Few herbicides are effective in controlling nutsedge, either because of lack of selectivity to other plants or lack of uptake.
California Grass [ <i>Brachiaria mutica</i> ]	Drizzle application of glyphosate at 1 lb/acre.
Maile Pilau [ <i>Paederia foetida</i> ]	If the Maile Pilau vine is not climbing over desirable vegetation, apply direct application to foliage with triclopyr herbicide and cut stem/stump at the ground and apply herbicide and follow-up at least once with a second application. If Maile Pilau is climbing over desirable vegetation, cut the stump and apply triclopyr herbicide (i.e., Garlon 4, etc.), and follow-up at least once with a second application. Exercise caution when removing the climbing Maile Pilau plant from the desirable vegetation.
Ivy Gourd [ <i>Coccoloba grandis</i> ]	Except for bagging fruits, physical control is not recommended. Grubbing or hand pulling generally does not kill the plant; rather, it breaks up into multiple plantlets which can grow back from roots or stems that touch the ground. Ivy gourd plants have responded well to a thin-line basal bark application of 100% Garlon 4 (triclopyr). If there are multiple stems, apply multiple times. Make sure to apply the triclopyr to each section that touches the ground. Leave the plants in place. Do not pull plants out of the trees or off of walls or fences, as this multiplies the number of plants and prevents translocation of the herbicide. The cut stump method is not recommended as it will lead to multiplying plants and prevents translocation of herbicide to the rest of the vine.
Mysore Thorn/ Cat's claw [ <i>Caesalpinia decapetala</i> ]	Cat's Claw is extremely prickly and attempts at physical control must be done carefully. This plant is sensitive to foliar applications of glyphosate and triclopyr, and to soil applications of tebuthiuron. Adequate coverage of Cat's Claw foliage in dense infestations is difficult. Timely repeat applications (every 3-9 months) of triclopyr ester at 0.25 lb/acre allows gradual reductions and opening of the canopy and eventual control. This strategy not only stresses the Cat's Claw over a longer period but also controls newly germinated Cat's Claw
Shoebuttan [ <i>Ardisia elliptica</i> ]	Small numbers of seedlings and shrubs can be eliminated by pulling and grubbing. A broadcast spray of glyphosate (i.e., Roundup) is effective in killing dense stands of seedlings but will also kill native plants. Larger plants can be killed by applying a basal spray of triclopyr (i.e., Garlon 4) mixed with an oil diluent.



**Appendix B1**  
**Tree Pruning – Crown Raising Exhibit**



**CROWN RAISING**

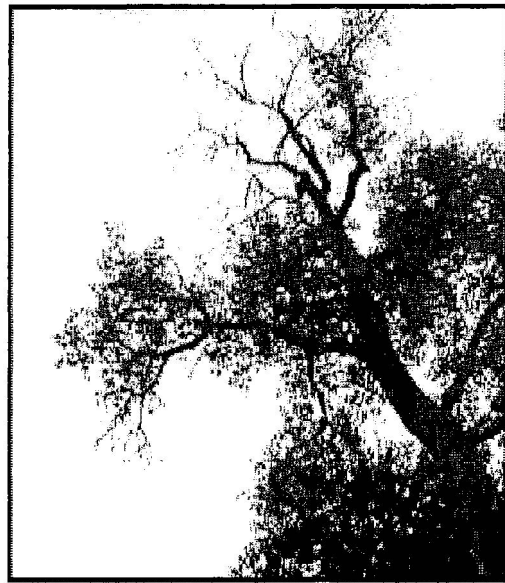
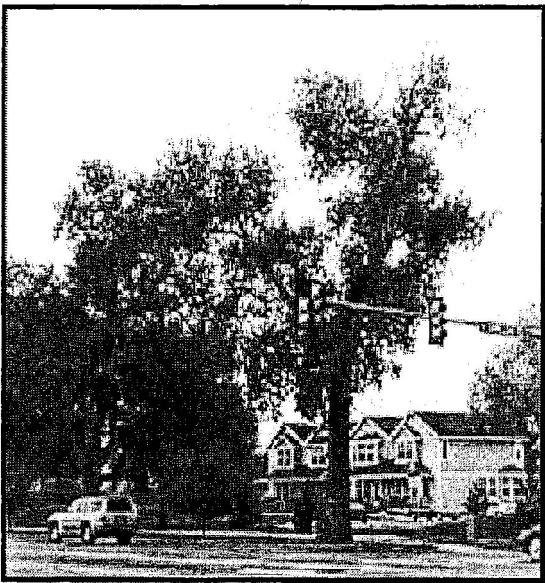
Crown Raising is simply removing branches from the bottom of the crown of a tree to provide clearance to pedestrians, vehicles, or lines of sight.

## Appendix B2 Tree Pruning – Crown Cleaning Exhibit

Prune mature trees with a purpose in mind.

### Crown Cleaning

- Removed dead, diseased, and broken branches



**APPENDIX C**  
**TASK AND FREQUENCY MATRIX, MAINTENANCE OF LANDSCAPED AREAS**

Section 10.5	TASK	MONTH												ANNUAL TOTAL
		J	F	M	A	M	J	J	A	S	O	N	D	
(A)	Mowing.	2	2	2	2	2	2	2	2	2	2	2	2	24
(B)	Edging and trimming of grass along curbs, edge of pavements, guardrails, fences, structures and around trees and shrubs.	2	2	2	2	2	2	2	2	2	2	2	2	24
(C)	Weeding.	2	2	2	2	2	2	2	2	2	2	2	2	24
(D)	Edging and trimming of vines and ground cover.	2	2	2	2	2	2	2	2	2	2	2	2	24
(E)	Caring and Trimming of Shrubs	1	1	1	1	1	1	1	1	1	1	1	1	12
(E1)	Caring and Trimming (Sight Distance/Clear Zones/Clear Space) of Trees.	In accordance with the Specifications.												
(E1)	Mulching													As requested.
(F)	Controlling vegetation intrusion of right-of-way line.	2	2	2	2	2	2	2	2	2	2	2	2	24
(F1)	Watering.	In accordance with the Specifications.												
(G)	Fertilizing.	In accordance with the Specifications.												As determined by the Engineer.
	Fertilizing Lawns	The months of January, March, May, July September, November & December												6
	Fertilizing Shrubs	The months of March & September												2
	Fertilizing Tree	The month of March												1
(H)	Spraying pesticide & herbicides.	In accordance with the Specifications.												As needed.
(I)	Clearing gutters, swales and ditches.	2	2	2	2	2	2	2	2	2	2	2	2	24
(J)	Plantings requiring additional / special tasks.	In accordance with the Specifications.												
(K)	Invasive Plant Removal.	2	2	2	2	2	2	2	2	2	2	2	2	24
(L)	<b>Removing and disposing rubbish and debris and litter resulting from the work activities</b> (i.e., paper, cans, bottles, cigarette butts, tree limbs, palm leaves, etc.), <u>including waste material resulting from the work activities.</u>	Required after any work activity.												
(L)	<b>General clean up.</b> Removing and disposing rubbish and debris and litter (i.e., paper, cans, bottles, cigarette butts, tree limbs, palm leaves, etc.)													156 (3 times per week)
(L)	Removing and disposing of solid/hazardous waste (i.e. batteries, mechanical parts, large furniture, etc.)													Required when solid/hazardous waste is found

**APPENDIX C**  
**TASK AND FREQUENCY MATRIX, MAINTENANCE OF LANDSCAPED AREAS**

Table (continuation):

Section 10.5	TASK	MONTH												ANNUAL TOTAL
		J	F	M	A	M	J	J	A	S	O	N	D	
(M)	Reporting of Hazardous Conditions and Damages to Landscaped Areas.	In accordance with the Specifications.												As needed
(N)	Traffic Control/Closing of Lanes.													As needed
(O)	Comprehensive Annual Inspection (Landscaped areas and irrigation system)	In accordance with Section 10.4(O) Comprehensive Annual Inspection, of the Specifications												1
(P)	Miscellaneous Work													As requested

**APPENDIX D**  
**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>A. ELECTRIC VALVE</b>				
1	CHECK FLOW CONTROL ON EACH VALVE FOR PROPER ADJUSTMENT. ADJUST AS NEEDED BASED ON HEAD OPERATIONS.	Monthly		
2	CHECK FOR VALVE WEEPING AT THE HEADS, REPLACE VALVE AS NEEDED AND IF APPROVED BY THE ENGINEER.	Monthly		
3	CHECK THE CONDITION OF WIRE SPLICES. REPLACE AS NEEDED AND IF APPROVED BY THE ENGINEER.	Monthly		
4	CHECK FOR LEAKS AT ALL THREADED CONNECTIONS. TIGHTEN AS NEEDED.	Monthly		
5	CERTIFY PERFORMANCE OF MONTHLY SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETE CHECKLIST WITH MONTHLY INVOICE.	Monthly		
6	CHECK EACH VALVE OHM READING FROM THE CONTROLLER AND RECORD FOR FUTURE REFERENCE (20-60 OHMS IS NORMAL). IF THE OHM READINGS DECREASE SIGNIFICANTLY FROM ONE YEAR TO THE NEXT, REPLACE SOLENOID EVEN IF IT STILL OPERATES. CONFIRM THAT THIS IS A SOLENOID PROBLEM AND NOT WIRE OR CONNECTION ISSUE.	Annual		
7	UNSCREW THE SOLENOID AND CHECK PLUNGER FOR SMOOTH OPERATIONS, CHECK SOLENOID AND PLUNGER FOR RUST OR CORROSION. REPLACE IF RUST OR CORROSION PRESENT AND IF APPROVED BY THE ENGINEER.	Annual		
8	CHECK WIRE LEADS FOR CRACKS OR EXPOSED WIRES.	Annual		
9	CHECK WIRE SPLICES. ENSURE THAT THE SPLICES ARE GOOD AND ARE STILL WATERPROOF. REPLACE AS NEEDED.	Annual		
10	IF VALVES ARE A “DIRTY WATER” VALVE, CHECK AND CLEAN SCREEN/FILTER. REPLACE AS NEEDED.	Annual		
11	CERTIFY PERFORMANCE OF ANNUAL SERVICES AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETE ANNUAL CHECKLIST WITH MONTHLY INVOICE.	Annual		
12	SUBMIT A RECOMMENDATION TO THE ENGINEER AND IF APPROVED REPLACE ALL SOLENOIDS, DIAPHRAGMS, SEAT, SPRING, WIRE SPLICES, AND CHECK AND CLEAN ALL PORTS AND SCREENS.	Month of January in years ending in “5” or “0”		

**APPENDIX D**

**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>B. SPRAY HEAD AND ROTOR HEAD MAINTENANCE</b>				
1	CHECK THE BODY FOR CRACKS AND LEAKS WHERE THE STEM RISES FROM THE BODY.	WEEKLY		
2	CHECK LEAKS COMPING UP FORM BELOW THE HEAD. REPAIR AS NEEDED.	WEEKLY		
3	CHECK THAT THE NOZZEL IS NOT CLOGGED OR SEMI-CLOGGED. UNCLOG OR REPLACE. CLEAN THE FILTER FOR SPRAY HEAD.	MONTHLY		
4	ON SPRAY HEADS THAT APPREAR CLOGGED, CHECK THE FILTER UNDER THE NOZZLE AND ADJUST ARC AS NECESSARY. REPLACE AS NEEDED AND IF APPROVED BY THE ENGINEER.	WEEKLY		
5	PRUNE OBSTRUCTING PLANTS ON ALL SPRINKLER HEADS.	WEEKLY		
6	CERTIFY PERFORMANCE OF WEEKLY SERVICE REPORT ALL DISCREPANCIES. SUBMIT CERTIFIED AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.			
7	ON ROTOR HEADS CHECK VISUALLY FOR TOO HIGH OR TOO LOW PRESSURE. ADJUST VALVE FLOW CONTROL OR PRESSURE REGULATOR AS NEEDED.	MONTHLY		
8	CERTIFY PERFORMANCE OF WEEKLY SERVICE AND REPORT ALL DISCREPANCIES, SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		
9	ON ROTOR HEADS, CHECK RADIUS OF HEAD COVERAGE, MAKE SURE THE SET ADJUSTMENT IS NOT SET INCORRECTLY.	MONTHLY		
10	CERTIFY PERFORMANCE OF MONTHLY SERVICE AND REPORT ALL DISCREPANCIES, SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		
11	REPLACE THE FILTERS UNDER THE NOZZLES AND AT THE BASE OF ALL HEADS.	ANNUALLY		
12	REPLACE WORN NOZZLES AND/OR NOZZELS THAT CANNOT EASILY BE UNPLUGGED.	ANNUALLY		
13	CHECK THAT THE CORRECT NOZZLES IS IN PLACE AND HAS BEEN INADVERTENTLY CHANGED DURING THE YEAR. ON ROTOR HEADS CHECK FOR MATCHED PRECIFITATION RATE AND REPLACE AS NECESSARY.	ANNUALLY		
14	CHECK STEM SEAL AND REPLACE IF LEAKING AND IF APPROVED BY THE ENGINEER.	ANNUALLY		
15	CHECK LOW OR TILTED HEADS AND RAISE AND/OR STRAIGHTEN AS NEEDED.	ANNUALLY		
16	CHECK FOR LOW HEAD DRAINAGE AND REPLACE LOW HEADS WITH HEADS WITH IN-HEAD CHECK VALVES.	ANNUALLY		

**APPENDIX D**  
**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacturer’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>B. SPRAY HEAD AND ROTOR HEAD MAINTENANCE (CONTINUATION)</b>				
17	ON SPRAY HEADS, USE A PRESSURE GAUGE WITH ADAPTER AND CHECK PREASURES AT THE BEGINNING, MIDDLE, AND END OF EACH ZONE. ADJUST PRESSURE AS NEEDED AND WHERE AVAILABLE. IF A PSI VARIATION IS GREATER THAN 10% EXSIST FROM THE HEAD COMPRARED TO THE LAST HEAD IN THE ZONE, CONSIDER PSI REGULATING NOZZLES RO HEADS FOR REPLACEMENT IF NOT CURRENTLY IN USE.	ANNUALLY		
18	ON ROTOR HEADS, USIGN PITOT TUBE, CHECK PRESSURE AT THE BEGINNIN, MIDDLE, AND END OF ZONE. ADJUST PRESSURE AS NEEDED AND WHERE AVAILABLE. IF A PSI VARIATION IS GREATER THAN 10% EXISTS FROM THE HEAD COMPRARED TO THE LAST HEAD IN THE ZONE, CONSIDER PSI REGULATING HEADS FO REPLACEMENT, IF NOT CURRENTLY IN USE. IF PRESSURE REGULATING ROTOR HEAD ARE NOT AVAILABLE, CONSIDER MAKIGN NOZZEL CHANGES TO BETTER REGULATE PRESSURE.	ANNUALLY		
19	ON ROTOR HEADS, CHECK ROTATION SPEED. ALL HEADS OF THE SAME TYPE FROMT EH SAME MANUFACTURER SHOULD ROTATE AT THE SAME SPEED.	ANNUALLY		
20	ON ROTOR HEADS, CHECK STEM SEAL AND REPLACE IF LEAKING.	ANNUALLY		
21	ON ROTOR HEADS, CHECK FOR LOW OR TILTED HEADS AND RAISE AND/OR STRAIGHTEN AS NEEDED.	ANNUALLY		
22	CERTIFY PERFORMANCE OF ANNUAL SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	ANNUALLY		
23	PERFORM A CATCH CAN TEST TO DETERMINE THE ZONE DISTRIBUTION UNIFORMITY (DU).	Month of January in years ending in "5" or "0"		
24	IF APPROVED BY THE ENGINEER, REPLACE ALL NOZZLES, FILTERS, AND STEM SEALS AND REPLACE ENTIRE SPRAY OR ROTOR HEAD IF PARTS EXCEED ENTIRE HEAD.	Month of January in years ending in "5" or "0"		
25	CHECK HEAD LOCATIONS AND MOVE AS NEEDED BASED ON CURRENT LANDSCAPE CONFIGURATION AND PLANT GROWTH.	Month of January in years ending in "5" or "0"		
26	TIGHTEN ALL CONNECTIONS WHERE THE HEAD CONNECTS TO THE UNDERGROUND PIPING.	Month of January in years ending in "5" or "0"		

**APPENDIX D**  
**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>C. VALVE BOX</b>				
1	TRIM INTRUDING GRASS AROUND BOX COVER.	MONTHLY		
2	CERTIFY PERFORMANCE OF WEEKLY SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		
3	CHECK LID FOR DAMAGE. REPLACE IF CRACKED OR BROKEN.	ANNUALLY		
4	CHECK FOR VALVE BOX SETTLING, RAISE, AND LEVEL BOX IF NOT AT FINISH GRADE.	ANNUALLY		
5	CHECK FOR DIRT INTRUSION. CLEAN OUT ALL DIRT IN BOX.	ANNUALLY		
6	CERTIFY PERFORMANCE OF ANNUAL SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY.	ANNUALLY		
7	IF APPROVED BY THE ENGINEER, REPLACE BOX IF WARPED OR DAMAGED IN ANYWAY. REINSTALL BOX TO FINISH GRADE.	Month of January in years ending in “5” or “0”		
8	IF APPROVED BY THE ENGINEER, REPLACE LANDSCAPE FABRIC AND GRAVEL IN BOX.	Month of January in years ending in “5” or “0”		
9	CERTIFY PERFORMANCE OF “5” OR “0” SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	Month of January in years ending in “5” or “0”		



**APPENDIX D**  
**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>D. WIRING</b>				
1	CHECK WIRE CONNECTIONS AT THE CONTROLLER AND AT THE VALVE BOX. TIGHTEN AND/OR REPLACE AS NEEDED.	MONTHLY		
2	CHECK FOR STRESS OR TIGHTNESS ON THE WIRES AND SPLICES IN THE VALVE BOX. REPAIR AS NEEDED.	MONTHLY		
3	CERTIFY PERFORMANCE OF MONTHLY SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		
4	MAKE SURE ALL WIRES ARE LABELED WITH CONTROLLER AND ZONE NUMBERS, CHECK AND REPLACE ANY FADED OR MISSING LABELS.	ANNUALLY		
5	CHECK EVERY SPLICE BOX AND CHECK THAT ALL SPLICES ARE SOUND AND WATERPROOF, REPLACE ALL DAMAGED OR COMPROMISED SPLICES.	ANNUALLY		
6	IDENTIFY, LABEL, AND OHM-OUT ALL EXTRA AND UNUSED WIRES SO THEY CAN BE USED IF NEEDED, IF OTHER WIRES FAIL.	ANNUALLY		
7	CERTIFY PERFORMANCE OF ANNUAL SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	ANNUALLY		
8	IF APPROVED BY THE ENGINEER, REPLACE ALL SPLICES IN ALL VALVE BOXES AND JUNCTION BOXES.	Month of January in years ending in “5” or “0”		
9	CHECK AND RE-LABEL ALL WIRES.	Month of January in years ending in “5” or “0”		
10	CERTIFY PERFORMANCE OF “5” OR “0” SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	Month of January in years ending in “5” or “0”		

**APPENDIX D**  
**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>E. CONTROLLER</b>				
1	CHECK THAT THE CORRECT IRRIGATION SCHEDULE IS SELECTED SINCE SOME CONTROLLERS REVERT TO THE FACTORY DEFAULT PROGRAM WHEN THERE IS LOSS OF POWER.	MONTHLY		
2	VERIFY THAT THE CONTROLLER HAS ALL THE SEASONAL SCHEDULES PROGRAMMED.	MONTHLY		
3	MANUALLY TEST RAIN SWITCH. REPLACE RAIN SWITCH IF NOT FUNCTIONING.	MONTHLY		
4	CHECK AND REPLACE BACKUP BATTERY AS APPLICABLE AND NECESSARY.	MONTHLY		
5	CERTIFY PERFORMANCE OF MONTHLY SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		
6	RECORD STANDARD WATERING SCHEDULES AND LAMINATE AND KEEP INSIDE CONTROLLER. UPDATE MAINTENANCE DRAWINGS TO REFLECT CURRENT SCHEDULE.	ANNUALLY		
7	CLEAN ALL INSCECTS IN CONTROLLER AND INSTALL MOTH BALLS IN CLOTH BAGS.	ANNUALLY		
8	CHECK THAT CONTROLLER ENCLOSURE IS SECURED AND WATERPROOF, REPAIR WATER-PROOFING AS NECESSARY TO ENSURE ENCLOSURE IS WATERPROFF. IF APPROVED BY THE ENGINEER. REPLACE ENCLOSURE IF LOCK IS NOT REPAIRABLE.	ANNUALLY		
9	IF RAIN SWITCH IS ELECTRONIC. THEN REPLACE BATTERY AT THE CONTRACTOR'S COST.	ANNUALLY		
10	CERTIFY PERFORMANCE OF ANNUAL SERVICE AND REPROT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	ANNUALLY		
11	SUBMIT RECOMMENDATION TO THE ENGINEER AND IF APPROVED. REPLACE ENTIRE CONTROLLER IF NOT FULLY FUNCTIONAL.	Month of January in years ending in "5" or "0"		
12	REPLACE ALL RAIN SWITCHES AND SENSORS.	Month of January in years ending in "5" or "0"		
13	CERTIFY PERFORMANCE OF "5" OR "0" SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	Month of January in years ending in "5" or "0"		

**APPENDIX D**

**IRRIGATION SYSTEM MAINTENANCE TASK, FREQUENCY, CHECKLIST AND REPORT**

All routine/preventive maintenance tasks shall be in accordance with the manufacture’s maintenance manual. All equipment/component that requires a replacement shall be approved by the Engineer.

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>F. RAIN SENSOR</b>				
1	REMOVE DEBRIS.	MONTHLY		
2	CERTIFY PERFORMANCE OF MONTHLY SERVICE AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATON AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	MONTHLY		

IRRIGATION SYSTEM COMPONENTS/TASK		FREQUENCY	Technicians Initial and Date after completion of task.	
			Date	Initial
<b>G. SITE INSPECTION</b>				
1	ANNUAL COMPREHENSIVE INSPECTION, SUPPLEMENTAL IRRIGATION SYSTEM MAINTENANCE.	ANNUALLY		
2	CERTIFY PERFORMANCE OF ANNUAL SITE INSPECTION AND REPORT ALL DISCREPANCIES. SUBMIT CERTIFICATION AND THIS COMPLETED CHECKLIST WITH MONTHLY INVOICE.	ANNUALLY		

**APPENDIX D1**  
**SUPPLEMENTAL IRRIGATION SYSTEM MAINTENANCE INFORMATION**

- (A) IRRIGATION CONTROLLER - All run times should take into account sprinkler rates, precipitation rates, soil conditions, microclimate conditions, evapotranspiration, and consideration of slope. Before scheduling run times, the site should be walked and planted areas inspected to observe plant stress and health. Soil moisture levels should be inspected throughout planted areas, and appropriate adjustments made to the irrigation schedule. Irrigation scheduling will be performed to encourage deep roots, including deep watering through use of multiple repeat cycles. On slopes, short irrigation cycles should be repeated to minimize water runoff. Soil probing shall be used to determine soil moisture depth, overall moisture levels and the need to adjust irrigation schedules. Soils will be allowed to dry to a 50% moisture depletion level between irrigations in order to avoid root-rot and allow adequate air to be present in the soil.

Irrigation cycles are to run only between the hours of 9:00 p.m. to 6:00 a.m. Watering times should be adjusted, where needed, to eliminate irrigation during heavy commuter hours. A proposed quarterly schedule of watering shall be provided to the Engineer thirty (30) days after the notice to proceed date. The frequency and duration shall be set to adequately irrigate plants and turf without causing significant surface runoff or ponding. Each time the schedule is changed due to seasons or any other reason, a revised schedule shall be provided to Engineer.

Controller enclosures are to remain locked and vandalism to enclosure shall be repaired within ten business days. Controllers are to be maintained free of insects and geckos. Contractor may employ moth balls. Keep solar-operated controller lenses clean of dirt and debris.

Refer to Appendix D2 Sample Irrigation Controller Schedule of the Appendices, for the required information.

- (B) IRRIGATION VALVES. Each valve should be inspected monthly to correct the following conditions: stuck valves, and broken risers, laterals or mains. Contractor shall list and report all irrigation system damages to the Engineer with the cost estimate of repair/replacement. Irrigation system pressure shall be checked and adjusted at least monthly to insure efficient operation of irrigation systems. On slopes where no vehicles traverse, plastic valve boxes are acceptable. On flat areas, concrete valve boxes with metal covers are required. Contractor shall maintain the bottom of all valves, a minimum 1" above gravel base. Contractor shall remedy all valves not 1" above gravel base by excavating all dirt from valve box to a depth of 4" below the bottom of the valve and installing filter fabric and a 3" layer of number three gravel.

- (C) SPRINKLER HEADS. Inspect all sprinkler heads for misaligned irrigation heads, clogged or obstructed heads, missing or vandalized heads, low-head drainage conditions, overspray onto hardscaped areas, poor coverage or uniformity. If the irrigation is not adequate to provide uniform coverage, the Contractor agrees to upgrade the system to achieve site efficiency. To clear clogs, remove internal assembly, clean screen filter, thread fine wire through orifice of nozzle, and reassemble head. Run test to confirm that

**APPENDIX D1**  
**SUPPLEMENTAL IRRIGATION SYSTEM MAINTENANCE INFORMATION**

clog has been cleared. Do not attempt to clean plastic nozzles by sticking knife blades or wire into the openings. The plastic will be scratched and the pattern will be ruined.

- (D) MONTHLY IRRIGATION REPORT. Develop and maintain a site log, which should contain the following information: monthly water consumption data, broken components, repairs areas of vandalism, and other site information. Submit this report with monthly invoice.
- (E) BATTERY POWERED CONTROLLERS/VAL YES. Battery powered controllers/valves shall be tested each month to check that the batteries are operating. Dead batteries shall be replaced immediately at the Contractor's cost.
- (F) RAIN SENSOR. Rain sensor switches prevent irrigation systems from running when it is raining, or when it has recently rained. Maintain rain sensor free of debris and insects on the screen and funnel.
- (G) DRIP IRRIGATION. Drip lines and spray heads shall be randomly checked on an ongoing basis such that the entire system is checked each month. Malfunctioning systems will be corrected immediately. Methods of detection include visual sightings of water on adjacent hardscape and property, soil probing, meter monitoring and specific line observations.
- (H) MANUAL WATERING. When breakdowns or malfunctions exist, the Contractor shall hand water the same schedule as the irrigation controller to maintain all plant material in a healthy condition unless Engineer determines otherwise. Do not wait for approval to begin hand watering if it is required to save the plantings. Failure of the irrigation system to provide full and proper coverage shall not relieve the landscape maintenance Contractor of the responsibility to provide adequate irrigation. It is the Contractor's responsibility to make sure that the irrigation system is maintained and operates properly. Plants which die due to irrigation failure will be considered to have died due to the contractor's negligence and shall be replaced at the Contractor's expense in the amount as specified in Section 8.6 Liquidated Damages, of the Special Provisions.
- (I) WEEKLY INSPECTION. The Contractor shall check the entire irrigation system weekly for items such as dry spots and missing or malfunctioning irrigation components. Check for leaking valves, water running across pavement, water standing in puddles, or any other condition which hampers the correct operation of the system or the public safety. The Contractor shall carefully observe plant materials for signs of wilting, indicating a lack of water. Plants which die due to irrigation failure will be considered to have died due to the Contractor's negligence and shall be replaced at the Contractor's expense.

**APPENDIX D1**  
**SUPPLEMENTAL IRRIGATION SYSTEM MAINTENANCE INFORMATION**

(J) IRRIGATION SYSTEM ANNUAL COMPREHENSIVE INSPECTION. The Contractor and the Engineer shall perform a comprehensive annual inspection of the entire irrigation system annually.

1. For purposes of contract extension, on the second Monday on the fourth month after the Notice to Proceed date and the fourth month from the beginning of each contractual term for each contract renewal, as applicable.
2. For purposes of contract closing, sixty (60) days to the end of the contract as specified in Section 11.1(B)5 of the Specifications.
3. The Irrigation System Annual Comprehensive Inspection shall include the following:
  - a. an irrigation inventory.
  - b. Each valve shall be individually operated and checked for any deficiencies.
  - c. The Contractor shall start repairing any damages of the sprinkler system within forty-eight (48) hours of detection or from the time of notification by the State maintenance inspector.

**APPENDIX D2  
SAMPLE - IRRIGATION CONTROLLER SCHEDULE**

Project No: H1D-01-24C(2R)

Contract No.: \_\_\_\_\_

Date: \_\_\_\_\_

Project Title: Maintenance of Landscaped Areas and Maintenance, Inspection of Irrigation System, Waiawa Interchange, District of Ewa, Island of Oahu

Contractor: \_\_\_\_\_

Controller No.	Valve No.	Valve Location			Irrigation Duration (Minutes, Hours)	Program				Daily Start Time				
			Weekly	Cyclical		1	2	3	4	1	2	3	4	
	1		M,T,W,Th,F,Sat,Sun											
	2		M,T,W,Th,F,Sat,Sun											
	3		M,T,W,Th,F,Sat,Sun											
	4		M,T,W,Th,F,Sat,Sun											
	5		M,T,W,Th,F,Sat,Sun											
	6		M,T,W,Th,F,Sat,Sun											
	7		M,T,W,Th,F,Sat,Sun											
	8		M,T,W,Th,F,Sat,Sun											
	9		M,T,W,Th,F,Sat,Sun											

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Printed Name of Submitter: \_\_\_\_\_

Signature of Submitter: \_\_\_\_\_

**APPENDIX G**

**SAMPLE - IRRIGATION TROUBLE CALL/EQUIPMENT SERVICE MAINTENANCE REPORT**

Date: \_\_\_\_\_

Sheet No.: \_\_\_\_\_

Project No.: H1D-01-24C(2R)

Contract No.: \_\_\_\_\_

Project Title: MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM, WAIAWA INTERCHANGE, DISTRICTS OF EWA ISLAND OF OAHU

Contractor: \_\_\_\_\_

Location (i.e., mile post no, etc.) \_\_\_\_\_

Date of Service Call: \_\_\_\_\_

Name of Person(s) Making Call: \_\_\_\_\_

Time In, Time Out at Site: \_\_\_\_\_

Person(s) Contacted: \_\_\_\_\_

Name of Service Call – (Routine Maintenance or Emergency – Explain) \_\_\_\_\_

Equipment Readings and Maintenance Performed (Listed all items serviced): \_\_\_\_\_

Remarks and Recommendation: \_\_\_\_\_

Printed Name of Submitter: \_\_\_\_\_

Signature of Submitter.: \_\_\_\_\_



# Appendix F

WAIKELE STREAM BRIDGE  
MP 6.50

WAIAWA INTERCHANGE  
MP 0.00 TO MP 0.80

WAIAWA RD  
MP 9.20

APPROXIMATE LAND AREA = 100 acres

Irrigation System Maintenance, Repair and Inspection **are included** in this project.

Tree trimming (light trimming, crown raising, lifting, etc.) and removal services **are excluded** as specified in Sections 10.4(E2) and 10.4(E)3 of the Specifications.

Caring and Trimming (sight distance/clear zones/clear space) of Trees **are included** as specified in Section 10.4(E1) of the Specifications when trees affect sight distance on traffic signs, clear zones and clear space.

*Refer to Section 10.3 Inspection of Plans and of Areas To be Maintained, of the Specifications for additional information.*

END PROJECT  
WAIKELE STREAM BRIDGE

WAIAWA INTERCHANGE  
BEGIN PROJECT

LIMITS OF PROJECT NO. H1D-01-24C(2R)

LOCATION PLAN  
PROJECT NO. H1D-01-24C(2R)  
NOT TO SCALE  
F-1



**APPENDIX F1**  
**SUMMARY OF REQUIRED ANNUAL INSPECTIONS**

Type of Inspection	Required for contract extension	Required for contract closing	Include the following
	2 <sup>nd</sup> Monday on the 4 <sup>th</sup> month after the Notice to Proceed date and 2 <sup>nd</sup> Monday on the 4 <sup>th</sup> month from the beginning of each contract term.	Sixty (60) days prior to the end of the last term of the contract [i.e., after four (4) contract extensions, etc.]	
Comprehensive Annual Inspection (Landscaped Areas)	<b>X</b>	<b>X</b>	<ul style="list-style-type: none"> <li>(a) Plant inventory,</li> <li>(b) Plant list comparison and replacement list,</li> <li>(c) Liquidated damages assessed,</li> <li>(d) Soil tests of troubled planting areas,</li> <li>(e) Fertilization schedule review,</li> <li>(f) Herbicide schedule review,</li> <li>(g) Invasive species,</li> <li>(h) Discretionary fund projects for coming year,</li> <li>(i) Professional credential review and</li> <li>(j) Maintenance sustainability recommendations.</li> </ul>
Comprehensive Annual Inspection (Irrigation System)	<b>X</b>	<b>X</b>	<ul style="list-style-type: none"> <li>(a) Irrigation inventory,</li> <li>(b) Each valve shall be individually operated and checked for any deficiencies,</li> <li>(c) The Contractor shall start repairing any damages of the sprinkler system within forty-eight (48) hours of detection or from the time of notification by the State maintenance inspector.</li> </ul>

APPENDIX G

DOT 4-689 (HWY-CM 6/15)

APPLICATION & PERMIT FOR THE OCCUPANCY & USE OF STATE HIGHWAY RIGHT-OF-WAY

Application date \_\_\_\_\_, 20\_\_\_\_

POLICE CHECKLIST: ITEMS 1 THRU 5.

Pursuant to the provisions of Chapter 264, Hawaii Revised Statutes as amended, application is hereby made to perform the following work, activity, or event, upon the state highway described below and at the location(s) specified below and at no other place.

1. Name of Highway \_\_\_\_\_ Route # /Section \_\_\_\_\_

2. Locations or limits on said highway \_\_\_\_\_

3. Description of work, activity, or event to be performed

- Engineering Survey Maintenance Inspection Landscaping Other

4. Dates between which work, activity, or event will be performed: \_\_\_\_\_

5. General Conditions

- a. No digging or disturbing of the highway will be permitted under this permit.
b. The work, activity, or event may be performed only during off-peak hours unless otherwise approved in writing.
c. All lanes shall be open to traffic during the hours from 6:00 AM to 8:30 AM, during the hours of 3:00 PM to 6:00 PM, and when no work is being done under this permit.
d. Parking permitted only in designated areas for vehicles actively engaged in, or loading or unloading materials for, the specified work, activity, or event.

6. Special Conditions and/or Restrictions \_\_\_\_\_

7. Submittals Required

- a. Traffic Control Plan (whenever there are lane closures)
b. Approved Landscaping Plan: It is agreed that upon final acceptance of the approved landscape work by the State, all improvements placed on said premises shall be and remain the property of the State and may be removed or otherwise disposed of by the State at any time.
c. Proof of State Indemnity
Certificate of Insurance naming State of Hawaii as an additional insured, having minimum coverages for Bodily Injury or Death Per Person; Bodily Injury or Death Per Accident; and Property Damages Per Accident of:
\$100,000, \$300,000, and \$500,000 respectively; or
combined single limit of \$500,000
Certificate attached or with Permit No.
Federal Non-Liability Clause (See Item 11 on the back of this permit)
Waived
d. Permit Fee \$\_\_\_\_\_ (make check payable to Dept. of Transportation, State of Hawaii)

The applicant hereby agrees that any agreement heretofore made or hereafter to be made, and the covenants and conditions stated on the reverse side hereof shall be binding upon him, his heirs, personal representatives, successors, contractors, and assigns.

APPLICANT: \_\_\_\_\_ (Name or owner, whether individual firm, partnership, corporation, governmental agency, etc)

ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

(Print Name & Title of Applicant or Authorized Rep.)

(Signature)

PERMIT NO. \_\_\_\_\_ DATE \_\_\_\_\_, 20\_\_\_\_

Permission to perform the above described work, activity, or event at the location(s) stated and between the dates set forth in said application is hereby granted. The applicant shall notify the issuing office in writing at least 24 hours before commencing work.

Director of Transportation or Authorized Representative

OAHU 831-6712 HAWAII 933-8866 MAUI 873-3535 KAUAI 274-3111

**APPENDIX G1**  
SAMPLE - NOTICE TO PROCEED LETTER FOR MISCELLANEOUS WORK

**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
**HIGHWAYS**  
OAHU DISTRICT  
727 KAKAI STREET  
HONOLULU, HAWAII 96819

Landscaped Services  
1234 Any Street  
Honolulu, Hawaii 12345

Dear Colleagues:

Subject: Maintenance of Landscaped Areas and Maintenance, Inspection of Irrigation System,  
Waiawa Interchange, Districts of Ewa, Island of Oahu, Project No. H1D-01-24C(R),  
Contract No. \_\_\_\_\_

In accordance with the contract, you are hereby given notice to proceed with miscellaneous work at the agreed upon price of \$3,000.00, including State tax, to plant three (3) each coconut trees along Highway adjacent to Name Park.

The funds will be paid from the "Allowance" for Miscellaneous Work.

Sincerely,

Ryan Nakata  
Oahu District Engineer

Enclosure (attach price quotation, etc.)

**APPENDIX H**  
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS

**CONTRACTOR PERFORMANCE RATING**

**PROJECT NO. H1D-01-24C(2R) CONTRACT NO.** \_\_\_\_\_

**PROJECT TITLE: MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM, WAIAWA INTERCHANGE, DISTRIC OF EWA, ISLAND OF OAHU**

**CONTRACTOR:** \_\_\_\_\_

**RATED BY.:** \_\_\_\_\_  
ENGINEER OR REPRESENTATIVE      PRINT NAME OR SIGNER      DATE  
(Signature and title of signer)

**Maintenance of Landscaped Areas**

Item	10.5	TASK DESCRIPTION (Reference Section 10.5, SCOPE OF WORK)	MEETS SPECIFICATIONS		REMARKS
			YES	NO	
1.	(A)	Mowing			
2.	(B)	Edging and Trimming - Grass			
3.	(C)	Weeding			
4.	(D)	Edging and Trimming - Vines and Ground Cover			
5.	(E)1.	Caring of Shrubs			
6.	(E)2.	Trimming of Shrub			
7.	(E)3.	Shrubs Removal			
8.	(E1)1.	Caring of Trees			
9.	(E1)2	Trimming of Trees – Sight Distance/Clear Zone			
10.	(E1)3.	Plant Replacement			
11.	(F)	Controlling Vegetation Intrusion Along ROW			
12.	(F1)	Watering			
13.	(G)1.	Fertilizing – Lawn			
14.	(G)2.	Fertilizing – Shrubs and Plant Beds			
15.	(G)3.	Fertilizing – Trees and Palms			
16.	(H)	Spraying Pesticide & Herbicide			
17.	(I)	Clearing of gutters, swales, and ditches			
18.	(J)	Planting requiring additional task			
19.	(K)	Invasive Plant Removal			
20.	(L)	Removal of Rubbish, Debris, and Solid Hazard			
21.	(L)1	Debris and Litter on Roadway			
22.	(L)2.	General Clean Up			
23.	(L)3.	Litter Collection			
24.	(L)4.	Prohibited Activities			
25.	(L)5.	Solid/Hazardous Waste Disposal			

**APPENDIX H**  
 STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS

Table Continued:

Item	10.5	TASK DESCRIPTION (Reference Section 10.5, SCOPE OF WORK)	MEETS SPECIFICATIONS		REMARKS
			YES	NO	
26.	(L)6.	Biohazards and Biowaste			
27.	(M)	Reporting of Hazardous Condition and Damages			
28.	(N)	Traffic Control/Closing of Lanes			
29.	(O)	Landscaped Areas Comprehensive Annual Inspection			
30.	(P)	Miscellaneous Work			

Maintenance of Irrigation System

Item	11.6	TASK DESCRIPTION (Reference Section 11.5, SCOPE OF WORK)	MEETS SPECIFICATIONS		REMARKS
			YES	NO	
31.	(A)	Maintenance of Inspection of Irrigation System (routine/preventive)			
32.	(B)	Irrigation Controller			
33.	(C)	Irrigation Valve			
34.	(D)	Sprinkler Head			
35.	(E)	Monthly Irrigation Report			
36.	(F)	Battery Powered Controller Valves			
37.	(G)	Rain Sensor			
38.	(H)	Drip Irrigation			
39.	(I)	Manual Watering			
40.	(J)	Weekly Inspection			
41.	(K)	Irrigation System Annual Comprehensive Inspection			
42.	(L)	Repair/Trouble Calls			
43.	(M)	Materials, Supplies, Equipment, Facilities and Utilities			
44.	(N)	Replacement Parts			
45.	(O)	Miscellaneous Work and Requirements			
46.	(P)	Traffic Control/Closing of Lanes			

**APPENDIX H1**  
**Sample - Herbicide Application Record**

**ONLY QUALIFIED AND TRAINED APPLICATOR ARE ALLOWED TO APPLY ANY HERBICIDE.**

Project No.: **H1D-01-24C(2R)**                      Contract No.: \_\_\_\_\_                      Date Applied: \_\_\_\_\_                      Sheet No.: \_\_\_\_\_

Project Title: Maintenance of Landscaped Areas and Maintenance, Inspection of Irrigation System, Waiawa Interchange, Districts of Ewa, Island of Oahu

A. ROUTE LOCATION (i.e. H-1 Freeway, etc). \_\_\_\_\_ From milepost: \_\_\_\_\_ To milepost: \_\_\_\_\_

Check as applicable:  Median     Shoulder     Drainage    Other location description: \_\_\_\_\_

**B. HERBICIDE APPLICATION**

Herbicide name brand: \_\_\_\_\_                      Active Ingredients: \_\_\_\_\_

Surfactant name brand: \_\_\_\_\_                      Amount: \_\_\_\_\_

Chemical rate/amount: \_\_\_\_\_                      Total amount of mixed herbicide used \_\_\_\_\_ gallons.

Application method(s) (check as applicable)

- Backpack Sprayer and spray nozzle                       Backpack Sprayer and wick applicator  
 Boom sprayer                       Other (describe) \_\_\_\_\_

**C. WEATHER CONDITIONS (DO NOT APPLY DURING HIGH WINDS, RAINING, OR IS FORCAST TO RAIN)**

CLEAR SKY     CLOUDY     OVERCAST                      Time of day: \_\_\_\_\_                      Temperature range: \_\_\_\_\_

Wind speed and direction: \_\_\_\_\_                      NO RAIN EXPECTED TODAY (yes/no) \_\_\_\_\_

D. NOTES AND RECOMMENDATIONS: \_\_\_\_\_

E. CERTIFICATION: I hereby certify that product was used in accordance with the manufacturer's recommendations and in compliance with all federal, state, and local laws and regulations.

Contractor (name of company): \_\_\_\_\_

\_\_\_\_\_  
Printed Name of Applicator

\_\_\_\_\_  
Applicator's License Number

\_\_\_\_\_  
Applicator's Signature/Date



**Appendix I**  
**SAMPLE - MONTHLY INVOICE**

## Landscaping Service

1234 Any Street, Honolulu, Hawaii 12345 Phone (808) 123-1234 Fax (808)-123-1234 Email: name@email.com

Bill To: District Engineer – Oahu District  
Highways  
Department of Transportation  
727 Kakoi Street  
Honolulu, Hawaii 96819

Date: \_\_\_\_\_  
Invoice No.: \_\_\_\_\_  
Contract No.: \_\_\_\_\_  
Purchase Order No.: \_\_\_\_\_  
Project No.: **H1D-01-24C(2R)**

Project Title: Maintenance of Landscaped Areas and Maintenance, Inspection of Irrigation System, Waiawa Interchange, District of Ewa, Island of Oahu

Periods Covered: (full pay period, head-to-tail format, first pay period from the NTP date to following month similar to this sample): **March 1, 2024, through March 31, 2024.**

Bid Item No.	Description	Qty	Unit	Unit Price	Amount
1	Maintenance of Landscaped Areas	#	Month	\$ _____	\$ _____
2	Caring and Trimming of Shrubs	#	Month	\$ _____	\$ _____
3	Caring and Trimming of Trees	#	Month	\$ _____	\$ _____
4	Maintenance of Irrigation System	#	Month	\$ _____	\$ _____
5	Irrigation Trouble call, Regular working hours work – per man-hour	#	Man-hour	\$ _____	\$ _____
6	Pesticide and Herbicide		Allowance	\$ _____	\$ _____
7	Replacement Part		Allowance	\$ _____	\$ _____
8	Miscellaneous Work		Allowance	\$ _____	\$ _____
Subtotal					\$ _____
Less Deductions					\$ _____
Subtotal					\$ _____
Less 5% retainage from payment					\$ _____
Total Amount Due					\$ _____

I certify that services requested under the contract have been performed by Landscaping Services in accordance to the contract.

\_\_\_\_\_  
Signature  
First J. Name  
President  
Landscaping Services

## APPENDIX II SAMPLE - CERTIFIED PAYROLL REPORT

STATE OF HAWAII		<b>CERTIFIED PAYROLL REPORT</b>															DAGSECP v1.0_06/10				
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES																	REPORT SUBMISSION DATE: <b>26-Aug-05</b>				
Public Works Division																					
Name is of: Contractor: <input type="checkbox"/> Subcontractor: <input type="checkbox"/>																	THIS IS AN AMENDED FORM PAYMENTS MADE ON SAME DAY TO ALL EMPLOYEES				
NAME: <input type="text"/>																					
PAYROLL NO. <b>34</b>	FOR WEEK ENDING <b>June 29, 2005</b>		PROJECT AND LOCATION <b>CHERRY COURTHOUSE, FIX ROTTEN TREES</b>										PROJECT NO. <b>99-99-9999</b>	VENDOR CODE <b>000003-98</b>							
<b>NAME, NO ADDRESS, AND LAST 4 DIGITS OF SOCIAL SECURITY NUMBER OF EMPLOYEE</b>	NO. OF WITHHOLDING EXEMPTIONS	WORK CLASSIFICATION	OT OR CRIST.	DAY AND DATE							TOTAL HOURS	RATE OF PAY	GROSS AMOUNT EARNED	TOTAL DEDUCTIONS						NET WAGES PAID FOR WEEK	DATE PAID TO EMPLOYEE
				S	M	T	W	TH	F	S				FICA	FED. WITH- HOLDING TAX	STATE WITH- HOLDING TAX	MEDICARE	OTHER DEDUC.	TOTAL DEDUCT		
				HOURS WORKED EACH DAY																	
Jack Sprat XXX-XX-9999		Runner	S	7.00	7.00	7.00	7.00	8.00	8.00	9.00	53.00	\$30.00	\$1,590.000	\$3.00	\$2.00	\$2.00	\$1.00	\$2.00	\$10.00	\$4,100.000	17-Jun-05
			O	8.00	8.00	8.00	8.00	8.00	8.00	8.00	56.00	\$45.00	\$2,520.000								
			T	15.00	15.00	15.00	15.00	16.00	16.00	17.00	109.00		\$4,110.000								
Leap Frog xxx-xx-5678		Jumper	S	2.00			6.00			4.00	12	\$20.00	\$240.000	\$4.00	\$5.00	\$6.00	\$6.00	\$3.00	\$24.00	\$216.000	
			O								0	\$30.00	\$0.000								
			T	2.00	0.00	0.00	6.00	0.00	0.00	4.00	12.00		\$240.000								
			S								0		\$0.000						\$0.00	\$0.000	
			O								0	\$0.00	\$0.000								
			T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		\$0.000								
			S								0		\$0.000						\$0.00	\$0.000	
			O								0	\$0.00	\$0.000								
			T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		\$0.000								
			S								0		\$0.000						\$0.00	\$0.000	27-Jan-05
			O								0	\$0.00	\$0.000								
			T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		\$0.000								
			S								0		\$0.000						\$0.00	\$0.000	
			O								0	\$0.00	\$0.000								
			T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		\$0.000								

**Appendix J**  
**Sample – Satisfactory Evidence by Affidavit for Final Payment**

**Landscape Services**

1234 Any Street, Honolulu, Hawaii 12345

Phone: (808) 123-1235

Email: name@email.com

Date:

State of Hawaii  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813-5097

Dear Colleagues:

Pursuant to Section 9.5.B, of the Specifications, I hereby certify that all debts resulting from Contract No \_\_\_\_\_, Project No. H1D-01-24C(2R). Project Title: Maintenance of Landscaped Areas and Maintenance, Inspection of Irrigation System, Waiawa Interchange, District of Ewa, Island of Oahu, have been fully paid or satisfactorily secured.

Cordially,

\_\_\_\_\_  
First J. Name  
President  
Custodial Services

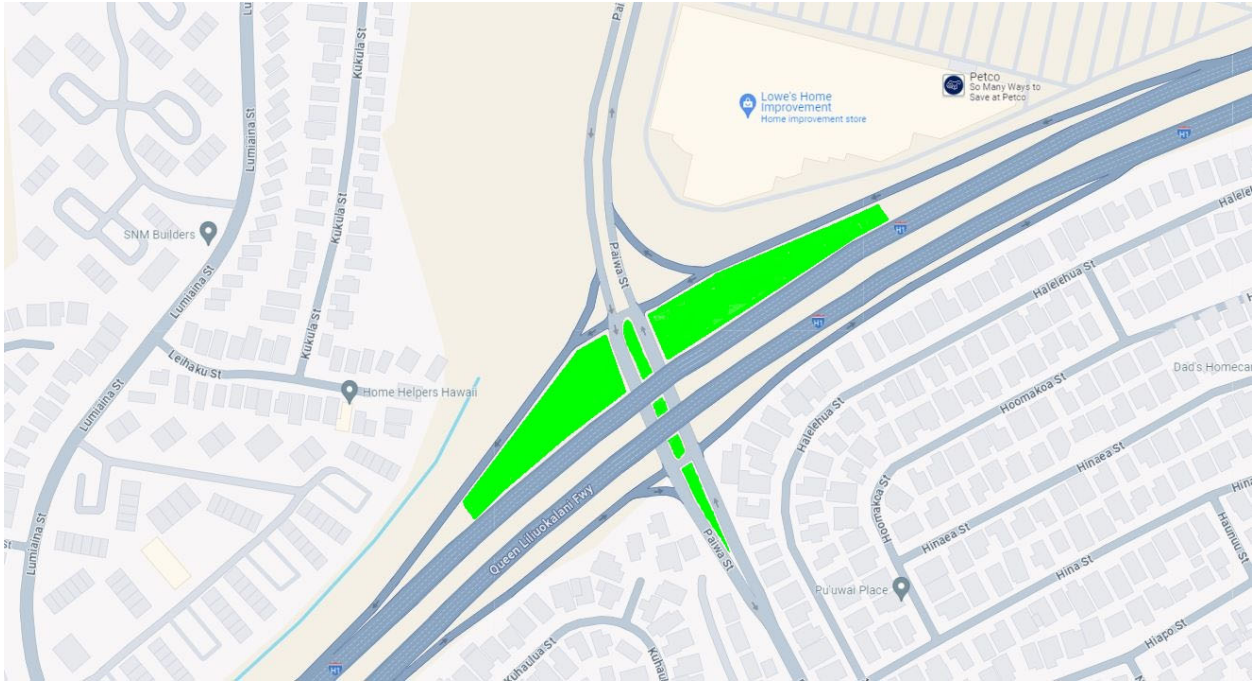
Subscribed and sworn to me  
This \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_\_\_.

\_\_\_\_\_  
Notary Public, First Judicial Circuit,  
State of Hawaii

My Commission Expires: \_\_\_\_\_

## Appendix K

### Irrigation System Approximate Location



\*Image above is not to scale and highlighted above in green is the approximate location of the irrigation system.

The irrigation system is one-hundred percent operational. The general area of the irrigation system is at the Waikēle Interchange at the on and off ramps near Safeway & Lowe's. The State only maintains the irrigation system on the lower part of the interchange/medians and The Waikēle Mall provides landscape and irrigation maintenance on the upper portion of the ramp medians. The controller box is on the North side of the H-1 Westbound on-ramp. If you have additional questions regarding the irrigation system location, please contact Dean Takayama at (808) 831-6700 x132.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS  
HONOLULU, HAWAII

PROPOSAL

PROPOSAL TO THE STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS

PROJECT: MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM, WAIAWA INTERCHANGE, DISTRICT OF EWA, ISLAND OF OAHU

PROJECT NO.: H1D-01-24C(2R)

CONTRACT TIME: Twelve (12) months from date indicated in the Notice to Proceed from the Department with options to extend as provided for in Section 10.16 of the Specifications.

LIQUIDATED DAMAGES: Refer to Section 8.6 Liquidated Damage, of the Special Provisions and Section 10.18 Basis of Payment, of the Specification for applicable deductions.

PROJECT MANAGER  
CONTACT INFORMATION: Jake Dickman  
869 Punchbowl Street, Room 404, Honolulu, HI 96813  
(808) 587-2189  
jake.j.dickman@hawaii.gov

ELECTRONIC SUBMITTAL: **Bidders shall submit and upload the complete proposal to HiePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. See SPECIAL PROVISIONS 2.4 DELIVERY OF PROPOSALS for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.**

NOTE: **PERFORMANCE BOND, BID BOND AND PAYMENT BONDS ARE NOT REQUIRED FOR THIS PROJECT.**

Director of Transportation  
AliiAIMoku Hale  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Sir:

The undersigned bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.

2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.
4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.

Receipt is hereby acknowledged and complete examination is hereby expressly guaranteed of the following listed items: the specifications, the notice to bidders, the special provisions, if any, the proposal, the plans, if any, and the contract form.



The undersigned acknowledges receipt of any addendum, issued by recording in the space below the date of receipt.

Addendum No. 1 \_\_\_\_\_ Addendum No. 3 \_\_\_\_\_

Addendum No. 2 \_\_\_\_\_ Addendum No. 4 \_\_\_\_\_

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct, final and are net prices.

\_\_\_\_\_  
Bidder (Company Name)

By \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Business Telephone

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contact Person (If different from above)

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

NOTE:

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts on behalf of the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign on behalf of the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above with the signature(s) of the general partner(s) authorized to sign contracts on behalf of the partnership. Please attach to this page current (not more than six months old) evidence of the authority of the partner(s) to sign on behalf of the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed in the space provided therefore on page PF-4.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department prior to the opening of bids or submitted with the bid; otherwise, the bid may be rejected as irregular and unauthorized.

PROPOSAL SCHEDULE  
FOR  
MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE,  
INSPECTION OF IRRIGATION SYSTEM WAIAWA INTERCHANGE  
DISTRICT OF EWA  
ISLAND OF OAHU  
PROJECT NO. H1D-01-24C(2R)

Bid Item No.	Description	Est. Quantity (a)	Unit	Unit Price (b)	Amount (a × b)
1	Maintenance of Landscaped Areas <i>[Refer to Sections 10.5(A) thru (D), (F) and (I) thru (O) of the Specifications and Appendix C of the Appendices]</i>	12	Month	\$ _____	\$ _____
2	<i>Caring and Trimming of Shrubs [Refer to Sections 10.5(E) of the Specifications]</i>	12	Month	\$ _____	\$ _____
3	Caring and Trimming of Trees (Sight Distance/Clear Zones/Clear Space only) – continuous [tree trimming (i.e. light trimming, crown raising, lifting, etc.) Refer to Section 10.5(E1) of the Specifications]	12	Month	\$ _____	\$ _____
4	Maintenance and Inspection of Irrigation System, routine/preventive <i>[Refer to Section 11.6(A) of the Specifications and Appendix D]</i>	12	Month	\$ _____	\$ _____
5	Irrigation Trouble call repair work, Regular working hours – per man-hour, Sprinkler Technician <i>[Refer to Section 11.6(L) of the Specifications]</i>	50	Man-hour	\$ _____	\$ _____
6	Pesticide and Herbicide <i>[Refer to Section 10.5(H) of the Specifications]</i>	Allow	Allowance	Allowance	\$2,000.00
7	Replacement Parts <i>[Refer to Section 11.6(N) of the Specifications]</i>	Allow	Allowance	Allowance	\$20,000.00
8	Miscellaneous Work <i>[Refer to Section 10.18(B) and 11.15(B) of the Specifications]</i>	Allow	Allowance	Allowance	\$50,000.00
<b>Total Amount for Comparison of Bids</b> ..... (Sum of Bid Item Nos. 1 through 8)					\$ _____

PROPOSAL SCHEDULE  
FOR  
MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE,  
INSPECTION OF IRRIGATION SYSTEM WAIAWA INTERCHANGE  
DISTRICT OF EWA  
ISLAND OF OAHU  
PROJECT NO. H1D-01-24C(2R)

**Notes:**

1. Bids shall include all Federal, State, County and other applicable taxes and fees.
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest responsible bidder.
3. In case of a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.
4. Bidder's shall make no changes to the bid. Bid submitted with changes to the bid shall be rejected.
5. **By submitting a proposal, the bidder acknowledges it has read and understands all the provisions of the Special Provisions, Specifications and is fully aware of all the conditions to be encountered in performing the work.**
6. **Bidders shall submit and upload the complete proposal to HiePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HiePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HiePRO.**

**FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HiePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.**

If there is a conflict between the specification document and the HiePRO solicitation, the specifications shall govern and control, unless otherwise specified.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HONOLULU, HAWAII

FORMS

Contents:

Sample Contract

Certificate for Performance Services

CONTRACT

THIS AGREEMENT, made this day \_\_\_\_\_, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE\_OF\_INCORPORATON» whose business/post office address is «ADDRESS», hereinafter referred to as "CONTRACTOR";

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to furnish, perform and/or deliver and pay for all labor, supplies, materials, equipment and services called for in «PROJECT\_NAME\_AND\_NO», or such a part thereof as shall be required by the STATE, the total amount of which labor, supplies, materials, equipment and services shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»-----DOLLARS (\$«BASIC\_NUMERIC») as follows:

Total Amount for Comparison of Bids.....\$«BASIC\_NUMERIC»

which sum shall be provided from State funds, all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans, if any, for «PROJECT\_NO\_ONLY», on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to furnish, perform and/or deliver all labor, supplies, materials, equipment and services as provided herein «WORKING\_DAYS» from the date indicated in the Notice to Proceed from the State, with an option to extend for TWO (2) additional TWELVE (12) MONTH periods subject to the terms specified in Section «SECTION\_REFERENCING\_OPTION\_YEAR» of the Specifications. The total term of this contract shall not exceed THIRTY SIX (36) MONTHS.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS (\$«BASIC\_NUMERIC») in lawful money, such payment to be made, subject to such additions hereto or deductions therefrom heretofore or hereafter made, in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA\_NUMERIC») is hereby provided for extra work and shall be provided from State funds.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

\_\_\_\_\_  
Director of Transportation

«CONTRACTOR»

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print name

\_\_\_\_\_  
Print Title

\_\_\_\_\_  
Date

SAMPLE



CERTIFICATE FOR PERFORMANCE OF SERVICES

The undersigned bidder does hereby certify that in performing the services required for MAINTENANCE OF LANDSCAPED AREAS AND MAINTENANCE, INSPECTION OF IRRIGATION SYSTEM, WAIAWA INTERCHANGE, DISTRICT OF EWA, ISLAND OF OAHU, PROJECT NO. H1D-01-24C(2R), it will fulfill the following conditions:

1. All applicable laws of the Federal and State governments relating to workers' compensation, unemployment compensation, payment of wages, and safety will be fully complied with; and
2. The services to be rendered shall be performed by employees paid at wages or salaries not less than the wages paid to public officers and employees for similar work, with the exception of professional, managerial, supervisory, and clerical personnel who are not covered by Section 103-55, HRS.

I understand that failure to comply with the above conditions during the period of the contract shall result in cancellation of the contract, unless such noncompliance is corrected within a reasonable period as determined by the Director of Transportation. Payment in the final settlement of the contract or the release of bonds, if applicable, or both shall not be made unless the Director of Transportation has determined that the noncompliance has been corrected; and

I further understand that all payments required by Federal and State laws to be made by employers for the benefit of their employees are to be paid in addition to the base wage required by Section 103-55, HRS.

DATED at Honolulu, Hawaii, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Name of Corporation, Partnership, or Individual

\_\_\_\_\_  
Signature and Title of Signer

NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this  
\_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary signature  
Notary public, State of \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

Doc. Date: \_\_\_\_\_ #Pages: \_\_\_\_\_  
Notary Name: \_\_\_\_\_ Circuit \_\_\_\_\_  
Doc. Description: \_\_\_\_\_

\_\_\_\_\_  
Notary signature  
Date \_\_\_\_\_

NOTARY CERTIFICATION