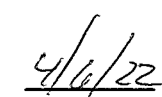


TREE PROTECTION / PRESERVATION NOTES (CONTINUE)

- I. AT THE END OF THE FLMP, A FINAL INSPECTION OF THE TREES SHALL BE HELD. SHOULD THE OIC, DUF AND PMRS DETERMINE THAT ALL OR CERTAIN PORTIONS OF THE WORK ARE NOT ACCEPTABLE AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL BE REQUIRED TO:
    - I. PROVIDE AN ADDITIONAL 60-DAY MAINTENANCE PERIOD AT NO COST TO THE CITY.
    - II. DURING THIS PERIOD, THE CONTRACTOR SHALL MEET ALL CONTRACT REQUIREMENTS AND CORRECT ALL DEFICIENCIES.
    - III. SHOULD ANY TREE SHOW DECLINING HEALTH OR FAIL TO SURVIVE THE DURATION OF THE FLMP, THE CONTRACTOR SHALL PROVIDE AND INSTALL A REPLACEMENT PLANT OF THE SAME SIZE AND SPECIES AT NO COST TO THE CITY.
  - J. AFTER THE SUCCESSFUL COMPLETION OF THE FLMP AND ANY EXTENSION CONTRACTOR SHALL:
    - I. REMOVE THE WATERING BERMS AROUND TREES.
    - II. LEVEL TO FINISH GRADE AND, IF DIRECTED BY DUF, INSTALL A FOUR-INCH THICK MULCH BLANKET.
    - III. RESTORE GRASS AROUND THE TREE.
  - K. THE CONTRACTOR SHALL NOT BE LIABLE HOWEVER, FOR ANY TREE LOSS DUE TO THE LACK OF PROPER MAINTENANCE BY THE CITY, VANDALISM AND/OR ACCIDENT NOT CAUSED BY THE CONTRACTOR OR ITS SUBCONTRACTORS.
  - L. IF THE QA AND LC ARE UNABLE TO RELOCATE, PLANT NEW OR PLANT REPLACEMENT TREES AND SHRUBS WITHIN THE PARK DUE TO THE LACK OF SPACE OR UTILITY LINES, THEN THESE TREES SHALL BE PLANTED AT ONE OF THE FOLLOWING LOCATIONS AS DETERMINED BY DUF:
    - I. AS STREET TREES FRONTING THE PARK.
    - II. AS PARKING LOT TREES.
    - III. AT A CITY-OWNED FACILITY (LOCATION DETERMINED BY DUF).
    - IV. OR DELIVERED TO THE CITY TREE NURSERY.
  - M. PARTIAL APPROVAL FOR MULTIPLE TREE INSTALLATIONS WILL NOT BE GIVEN
  11. LANDSCAPE IMPROVEMENTS, i.e. GRASS, GROUND COVERS, SHRUBS, IRRIGATION SYSTEM, GROUNDS RESTORATION AND AERATION
    - A. THE CONTRACTOR SHALL PROVIDE A 90-CALENDAR DAY FLMP WHICH SHALL INCLUDE, BUT NOT BE LIMITED TO:
      - I. IRRIGATION MODIFICATION, WATERING
      - II. SHRUB PRUNING/TRIMMING
      - III. MOWING, WEEDING, SOIL AERATION (AERATOR EQUIPMENT)
      - V. RE-GRASSING, FERTILIZATION, TOP-DRESSING
    - B. FINAL ACCEPTANCE FOR LANDSCAPE IMPROVEMENTS, i.e. GRASS, GROUND COVERS, SHRUBS, IRRIGATION SYSTEM, GROUNDS RESTORATION AND AERATION SHALL BE AFTER THE SUCCESSFUL COMPLETION OF THE 90-CALENDAR DAY FLMP AND ANY EXTENSIONS.
    - C. AT THE COMPLETION OF ALL PLANTING OPERATIONS:
      - I. A PRE-MAINTENANCE INSPECTION SHALL BE HELD PRIOR TO START OF FLMP.
      - II. PRE-MAINTENANCE INSPECTION SHALL INCLUDE OIC, A/EC, DUF, PMRS, CONTRACTOR AND LC.
      - III. ISSUANCE OF THE COMMENCEMENT DATE FOR THE FLMP IS CONTINGENT UPON ACCEPTANCE OF THE CORRECTION OF ALL DEFICIENCIES AND ACCEPTANCE BY OIC, DUF AND PMRS
    - D. FINAL ACCEPTANCE OF GROUND COVER PLANTING AT THE END OF THE FLMP:
      - I. SHALL BE CONTINGENT UPON 95% GROUND COVER COVERAGE OF THE OVERALL AREA AND LESS THAN 5% WEEDS.
      - II. INDIVIDUAL BARE SPOTS SHALL NOT EXCEED ONE SQUARE FOOT IN AREA.
      - III. FINAL ACCEPTANCE INSPECTION SHALL INCLUDE OIC, DUF AND PMRS.
      - IV. SHOULD ANY SHRUB SHOW DECLINING HEALTH OF FAIL TO SURVIVE THE DURATION OF THE FLMP, THE CONTRACTOR SHALL PROVIDE AND INSTALL A REPLACEMENT PLANT OF THE SAME SIZE AND SPECIES AT NO COST TO THE CITY.
    - E. IF WORK NOT ACCEPTABLE AT THE END OF THE FLMP CONTRACTOR SHALL:
      - I. PROVIDE AN ADDITIONAL 60-CALENDAR DAYS OF MAINTENANCE AT NO COST TO THE CITY.
      - II. DURING THIS PERIOD, THE CONTRACTOR SHALL MEET ALL REQUIREMENTS AND CORRECT ALL DEFICIENCIES.
    - F. WEEDS, DEFINED AS ANY PLANT, GRASS, BROADLEAF, OR SEDGE, OTHER THAN THAT SPECIFIED IN THE DRAWINGS, SHALL NOT EXCEED AN AREA GREATER THAN 5% OF THE OVERALL GRASS AREA, NOR SHOULD THEY CONSTITUTE MORE THAN 5% OF A 1,000 SQUARE FOOT AREA.
  12. DAMAGE TO THE TREES DUE TO CONTRACTOR'S EQUIPMENT:
    - A. IS NOT ALLOWED. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO MITIGATE DAMAGES.
    - B. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE QA OF BRANCH, ROOT AND/OR TRUNK INJURIES TO ON-SITE, OFF-SITE AND/OR PRIVATE PROPERTY TREES DUE TO THE CONSTRUCTION WORK.
    - C. THE QA SHALL EVALUATE THE INJURY AND NOTIFY DUF BEFORE APPLYING TREATMENT.
    - D. QA SHALL SUBMIT A WRITTEN REPORT OF ALL TREE INJURIES. THE REPORT SHALL INCLUDE THE TREE'S HEALTH ASSESSMENT AND TREATMENT.
    - E. CONTRACTOR SHALL SUBMIT THE REPORT TO DUF AND PMRS DESIGNATED STAFF.
    - F. UPON APPROVAL FROM DUF, THE QA SHALL HAVE THE CONTRACTOR PERFORM REMEDIAL WORK WHICH MAY INCLUDE BARK TRACING TO CLEAN THE WOUND, PROVIDE SUPPLEMENTAL WATERING, AND MONITORING AS REQUIRED.
    - G. THE USE OF TREE PAINT TO DRESS TREE WOUNDS IS NOT ALLOWED.
  13. TREE MITIGATION MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO:
    - A. WRAPPING THE TREE TRUNK WITH A THICK CARPET OR PROTECTIVE RUBBER PADDING OR "TREE TRUNK SHIELD".
    - B. A POLYPROPYLENE FABRIC WITH BAMBOO AND PVC PIPE INSERTS TO PROTECT THE TRUNK, ROOT FLARE, AND SURFACE ROOTS.
    - C. TREE PROTECTION ZONE FENCING.
    - D. TREE PROTECTION ZONE WARNING SIGNS.
    - E. THICK PLYWOOD BOARDS (FULL SIZE), STEEL PLATES.
    - F. HEAVY DUTY GROUND PROTECTION MATS OVER AN EIGHT-INCH ORGANIC MULCH LAYER UNDER THE TREE'S DRIP LINE.
    - G. PROTECTION TREE WELLS.
    - H. PLANTING STRIPS WITH EITHER PLASTIC BARRICADES (WATER FILLABLE) OR PORTABLE METAL BARRIERS.
  14. TREE ROOT/BRANCH PRUNING BY CONTRACTOR AND LC SHALL:
    - A. RECEIVE APPROVAL FROM DUF PRIOR TO THE START OF THE WORK.
    - B. NOTIFY DUF A MINIMUM OF SEVEN DAYS IN ADVANCE VIA EMAIL (SEE NOTE 4A) TO ATTEND A MEETING WITH THE QA, LC AND CONTRACTOR TO DISCUSS THE WORK.
    - C. BE PERFORMED UNDER THE DIRECT OBSERVATION AND SUPERVISION OF THE QA WHO WILL BE RESPONSIBLE FOR THE FOLLOWING:
      - I. INSPECT THE WORK TO PROTECT THE CITY FROM LIABILITY AND POOR WORKMANSHIP.
      - II. INSURE THAT THE WORK DOES NOT AFFECT THE HEALTH AND CAUSE FAILURE OR DEMISE OF THE TREE.
      - III. THE QA IS REQUIRED TO BE AT THE WORK SITE AT ALL TIMES DURING WORK PERFORMED ON OR NEAR TREES TO PROTECT THE CITY FROM LIABILITY AND POOR WORKMANSHIP.
      - IV. THE QA IS RESPONSIBLE TO INSURE THAT THE WORK PERFORMED DOES NOT DESTABILIZE THE TREE, AFFECT THEIR HEALTH AND/OR CAUSE FAILURE OF DEMISE OF THE TREE.
      - V. CONDUCT TREE HAZARD ASSESSMENT; INSPECT TREES FOR POTENTIAL FAILURE, CHECK ENVIRONMENT THAT MAY CONTRIBUTE TO THAT FAILURE; IDENTIFY POTENTIAL TARGETS (INJURIES TO PERSONS/DAMAGE TO OBJECTS).
    - D. EXPOSE THE TREE ROOTS PRIOR TO THE APPROVAL OF ANY DEMOLITION, GRADING, EXCAVATION, TRENCHING AND RESTORATION WORK.
    - E. IF THE QA IS UNABLE TO DETERMINE THROUGH VISUAL INSPECTION THE AMOUNT AND EXTENT OF THE ROOT SYSTEM IN LIEU OF BACKHOE EQUIPMENT AND SHOVELS, DUF MAY REQUIRE USE OF AN AIR-WAND (AIR SPADE GUN) TO EXPOSE THE EXISTING TREE ROOTS.
    - F. USE A CHAIN SAW WHEN MAKING THE INITIAL CUTS IN ROOT PRUNING. ALL FINAL CUTS SHALL BE MADE BY USING A SHARP HAND-SAW OR APPROVED ROOT PRUNING EQUIPMENT TO ENSURE CLEAN, NON-JAGGED CUTS.
    - G. FOR LARGE ROOT PRUNING USING BACKHOE EQUIPMENT FOR MAKING INITIAL CUTS THE OPERATOR SHALL NOT ALIGN THE FRONT EDGE OF THE BUCKET PARALLEL TO THE TREE ROOTS TO AVOID RIPPING ROOTS. ALL FINAL CUTS SHALL BE MADE USING A SHARP HAND-SAW OR APPROVED ROOT PRUNING EQUIPMENT TO ENSURE CLEAN, NON-JAGGED CUTS.
    - H. EXTENSIVE ROOT PRUNING MAY REQUIRE CROWN REDUCTION PRUNING.
  15. GUIDELINES AND STANDARDS FOR TREES IN URBAN AREAS (GSTUA):
    - A. FOR ADDITIONAL TREE PRESERVATION AND TREE PROTECTION NOTES REFER TO THE GSTUA IN THE PROJECT SPECIFICATIONS.
- DEPARTMENT OF PARKS & RECREATION (DPR) NOTES:**  
(FOR WORK WITHIN AREAS UNDER DPR JURISDICTION)
1. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING DIMENSIONS, AS-BUILT CONDITIONS, STRUCTURES, SITE IMPROVEMENTS, ETC., PRIOR TO BIDDING.
  2. ALL INDICATED ITEMS ARE NEW UNLESS OTHERWISE NOTED.
  3. THE CONTRACTOR SHALL CONTACT THE DPR DISTRICT MANAGER, PHONE NO. (808)\_\_\_\_\_ AND DPR'S DIVISION OF URBAN FORESTRY (DUF) AT [DUF@HONOLULU.GOV](mailto:DUF@HONOLULU.GOV) TWO WEEKS PRIOR TO START OF WORK.
  4. EXCEPT FOR PORTIONS OF THE PARK GROUNDS AND FACILITIES AFFECTED BY THIS CONTRACT, THE PARK FACILITIES WILL BE IN USE BY THE PUBLIC. THE CONTRACTOR SHALL PROVIDE FULL COOPERATION WITH THE DPR TO EFFECTIVELY MAINTAIN SUCH USE OF THE PARK FACILITIES.
  5. THE EXTENT OF REMOVAL AS INDICATED IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXTENT OF THE REMOVAL WORK TO PROPERLY ACCOMMODATE HIS METHOD OF CONSTRUCTING NEW WORK AS REQUIRED. ADDITIONAL REMOVAL, PATCHING, AND RESTORATION REQUIRED TO ACCOMMODATE CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE NEW WORK.
  6. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES AND OTHER SITE IMPROVEMENTS TO REMAIN. ANY DAMAGES RESULTING DIRECTLY OR INDIRECTLY FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE OFFICER-IN-CHARGE (OIC) AT NO ADDITIONAL COST TO THE CITY AND COUNTY OF HONOLULU (CITY).
  7. LOCATIONS OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING NEAR UTILITIES. ANY AND ALL DAMAGE SHALL BE IMMEDIATELY REPORTED TO THE PROJECT MANAGER, THEN REPAIRED, REPLACED, AND/OR ITEM(S) RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT THEIR COST. UTILITIES SHALL INCLUDE BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, SEWER, WATER, IRRIGATION SYSTEMS, ETC.
8. THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM THEIR SEARCH OF THEIR RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE UTILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTION OF NEW UTILITIES TO THE EXISTING UTILITIES ARE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
  9. NO TRACKED VEHICLES OR EQUIPMENT ALLOWED.
  10. EXISTING IRRIGATION SYSTEM:
    - A. THE EXISTING IRRIGATION SYSTEM SHALL BE REPAIRED AND/OR RELOCATED AS SHOWN AND/OR AS NOTED ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR IRRIGATION AND WATER SYSTEMS OF THE DEPARTMENT OF PARKS AND RECREATION, CITY AND COUNTY OF HONOLULU.
    - B. THE CONTRACTOR SHALL VERIFY AND OPERATE THE EXISTING IRRIGATION, WATER AND ELECTRICAL SYSTEMS TO BECOME FAMILIAR WITH THE RESPECTIVE SYSTEMS NOT AFFECTED BY THIS PROJECT BUT WITHIN THE PROJECT LIMITS PRIOR TO THE START OF CONSTRUCTION AND DEMOLITION.
    - C. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR EXISTING DAMAGES ON THE SYSTEMS IN PLACE PRIOR TO START OF DEMOLITION AND CONSTRUCTION.
    - D. THE CONTRACTOR SHALL COORDINATE OPERATION OF THE VARIOUS SYSTEMS WITH THE DPR'S DISTRICT MANAGER.
    - E. UPON COMMENCEMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT, MAINTAIN AND REPAIR THE PORTION OF THE EXISTING SYSTEMS WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE CONTRACT.
    - F. THE CONTRACTOR SHALL INCLUDE MAINTAINING WATER FOR THE FACILITIES AND IRRIGATION OF THE FIELDS AND GROUNDS TO THE SATISFACTION OF THE OIC AND SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
    - G. THE CONTRACTOR SHALL LOCATE, EXPOSE, AND VERIFY THESE EXISTING FACILITIES PRIOR TO COMMENCING WITH THE WORK. THE EXISTING SPRINKLER HEADS AND QUICK CONNECT VALVES MAY BE BURIED. THE LOCATION OF THE EXISTING WATER AND SPRINKLER LINES, HEADS AND VALVES AS SHOWN ARE APPROXIMATE ONLY.
    - H. THE CONTRACTOR SHALL PERFORM THE RELOCATION WORK IN SUCH A MANNER SO THAT SHUTTING DOWN OF THE EXISTING WATER AND SPRINKLER LINES ARE KEPT TO A MINIMUM AND ADJUST SPRINKLERS TO ASSURE PROPER COVERAGE AND OPERATION.
    - I. THE CONTRACTOR SHALL COORDINATE ALL SPRINKLER RELOCATION WORK WITH DPR'S PARK MAINTENANCE AND RECREATION SERVICES (PMRS) DISTRICT MANAGER.
    - J. THE CONTRACTOR SHALL MAINTAIN ALL AREAS AFFECTED BY THEIR OPERATIONS, INCLUDING THOSE AREAS OUTSIDE THEIR CONSTRUCTION AREA THAT MAY BE AFFECTED.
  11. THE CONTRACTOR SHALL COORDINATE THEIR OPERATIONS WITH THOSE OF OTHER CONTRACTORS WHO MAY BE EMPLOYED ON ADJACENT OR RELATED PROJECTS OF THE CITY AND AVOID UNNECESSARY DELAY OR HINDRANCE IN THE PERFORMANCE OF THEIR RESPECTIVE CONTRACTS.
  12. THE CONTRACTOR SHALL NOT OBSTRUCT THE ACCESS OR PARKING LOT TRAFFIC AND SHALL MAINTAIN PUBLIC USE OF THE PARKING LOT AT ALL TIMES.
  13. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE OIC TO IDENTIFY ANY EXISTING DAMAGES AND/OR DETERIORATED CONDITIONS TO THE EXISTING TREES, GRASS, LANDSCAPING, WALKWAYS AND PARKING LOT TO BE USED FOR THE CONSTRUCTION ACCESS. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DAMAGES IDENTIFIED BY THE OIC PRIOR TO CONSTRUCTION.
  14. UPON COMMENCEMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT, MAINTAIN, AND REPAIR ANY DAMAGES TO THE WALKWAYS AND PARKING LOT USED FOR THE CONSTRUCTION ACCESS.
  15. FOR THE DURATION OF THE CONSTRUCTION WORK, THE CONTRACTOR SHALL BE REQUIRED TO WATER THE TREES, GRASS, AND LANDSCAPING THAT IS AFFECTED BY THE CONSTRUCTION WORK INCLUDING ANY IRRIGATION SYSTEM THAT EXTENDS OUTSIDE OF THE PROJECT LIMITS. THE CONTRACTOR SHALL PAY FOR ALL WATER USAGE FOR THIS.
  16. FOR ALL DEPRESSIONS, LOW SPOTS, UPROOTED AREAS AND PROBLEM SPOTS AS DETERMINED BY DPR'S PMRS, THE CONTRACTOR SHALL RESTORE ALL AFFECTED AREAS ACCEPTABLE TO PMRS.
  17. THE CONTRACTOR SHALL RESTORE ALL DAMAGE CAUSED BY THEIR OPERATIONS TO ORIGINAL CONDITION OR BETTER AT THEIR OWN EXPENSE. ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH THE DPR STANDARDS AND ACCEPTABLE TO THE OIC.
  18. THE CONTRACTOR SHALL REPAIR AND REFINISH SLABS, CURBS AND WALLS TO MATCH ADJACENT SURFACES WHERE EXPOSED OR DAMAGED DUE TO REMOVAL WORK OR THE CONSTRUCTION.
  19. THE CONSTRUCTION OF IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND STANDARD DETAILS OF THE DEPARTMENT OF FACILITY MAINTENANCE (AS THEY MAY BE APPLICABLE), STANDARD DETAILS OF THE BOARD OF WATER SUPPLY, THE PARKS STANDARD DETAILS OF THE DEPARTMENT OF PARKS AND RECREATION, AND THE PROJECT SPECIFICATIONS AS THEY MAY BE APPLICABLE.
  20. THE CONTRACTOR SHALL CONSULT WITH THE DPR TO ENSURE THAT FIXTURES ARE CONSISTENT WITH DPR SUPPLIES, FOR EASE OF MAINTENANCE AND REPLACEMENT.

  
DIRECTOR, Department of Parks and Recreation

  
Date