APPENDIX A SCOPE OF SERVICES

APPENDIX A SCOPE OF WORK

Provide landscaping services for the Marina District South Redevelopment Project located at 190 E 13th ST, Avenue "C" between 15th and 11th Street and 13th Street between Avenue "C" and Broadway, Riviera Beach, FL. Landscaping services to include landscape maintenance services; grass maintenance; weeding; debris clean up; shrub hedging; turf edging; tree and palm trimming; blowing and walkway clearing; irrigation system check; pest and disease control; and hurricane prep. Additional services to be provided on an as need basis are mulching and fertilizing.

I. Mow Grass/Turf

- a. Frequency
 - i. Mow grass four (4) times per month: April through October.
 - ii. Mow grass three (3) times a month from November through March.
 - iii. In months where there are five weeks an additional mowing may be necessary in order to maintain a weekly schedule.
 - iv. Mowing frequencies can be deleted or increase by the CRA's designee due to weather factors.

b. Maintenance

- i. Celebration Bermuda
 - 1. Mow approximately 1.15 acres in accordance with Best Management Practices.
 - 2. Vertical cut turf minimum of one (1) time per year or as needed.
 - 3. Top dress with 80% course sand, 20% peat minimum 20 cubic yards per year.
- ii. St. Augustine "Captiva"
 - 1. Mow approximately two (2) acres in accordance with Best Management Practices.
- iii. Grass to be mowed to no less than four (4) inches in height and not to exceed six (6) in height.

c. Damage Prevention

- v. Mowing will not be done when weather or conditions will result in damaged turf.
- vi. All mowing must be done carefully so as not to "bark" trees or shrubs, intrude into ground cover beds, damage sodded berms, damage sprinkler heads, valves, manifolds, timeclocks curbs, or other facilities.
- vii. All mowers must be adjustable and adjusted to the proper cutting height and level for the kinds of grass and current condition of the turf.
- viii. Mower blade height adjustment is to be measured from a level floor surface to the parallel and level plane of the mower blade in order to set at proper height.
- ix. All mower blades are to be sharp enough to cut rather than to tear grass blades.

- vi. All litter and debris shall be removed from turf before mowing to avoid shredding that will damage turf appearance or items that may be propelled by mower blades.
- x. Grass is never to be mowed lower than four (4) inches in height.

d. Cleanup

- xi. Grass clippings or debris caused by mowing or trimming will be removed from adjacent walks, drives gutters, and curbs on surface on the same day as mowed or trimmed.
- xii. No grass clippings and/or leaves shall be visible after mowing operation is complete.

II. Edge and Trim

a. Frequency

- xiii. During each mowing operation and landscape service visit.
- xiv. Grass shall be trimmed four (4) times per month during or immediately following mowing: April through October.
- xv. Grass shall be trimmed three (3) times a month during or immediately following mowing: November through March.
- xvi. Edge and trim frequencies can be deleted or increase by the CRA's designee due to weather factors.

b. Maintenance

- xvii. Edge all turf edges abutting sidewalks, flush paved surfaces including all road curbs, drives, at shrub beds, flower beds, ground cover beds, hedges, and around trees where mulch bed exists at base.
- xviii. Trim the same height as adjacent turf is mowed.
- xix. Trim may be accomplished by hand, power shears, or rotary nylon (fish line) cutting machines.
- xx. Trim to remove grass from around all obstacles and vertical surfaces in the turf such as posts, trees, walls, and cement medians.
- xxi. Mechanical edging (vertical trimming) of all turf edges abutting. sidewalks, flush paved surfaces including all road curbs, drives, etc.
- xxii. Turf edging at shrub beds, flower beds, ground cover beds, hedges or around trees where "edging" rather than "trimming" is directed shall be edged with a manual or mechanical edger to a neat vertical uniform line.
- xxiii.Turf will be edged approximately ten (10) inches out from the drip line of shrubs and hedges.
- xxiv. Turf will be edged approximately eighteen (18) inches around all trees that are in lawn areas if directed by CRA Designee.
- xxv. Chemical edging with a chemical application may be used to kill weeds in and around areas such as planters, areas adjacent to buildings, trees, fence lines, sprinkler head, and cement medians (contractor is responsible for replacement of all damaged sod/landscaping material at his/her cost).
- xxvi. Prior to chemical application, all areas shall be trimmed to proper mowing height.

c. Damage Prevention

i. Special care to be taken around and near sprinkler heads and other irrigation system fixtures to prevent damage assure their proper water

- delivery function (contractor is responsible for repair and/or replacement of all damaged sprinkler heads at his/her cost).
- ii. No rotary nylon (fish line) weed eaters are permitted to be used around trees or plant beds to prevent damage to the plant materials.
- xxvii. Weed removal around trees or plants beds is to be removed by hand and/or chemical application.
- xxviii. During chemical edging, the chemical shall be applied in a manner to limit drift to six (6) inches.
 - 4. Contractor is responsible for replacement of all damaged sod/landscaping material at his/her cost.
 - 5. If not replaced within one (1) week of notification, the RBCRA may replace the materials and deduct the cost from the Contractor's pay request.

d. Cleanup

xxix. Remove all grass leaves from around all obstacles and vertical surfaces in the turf such as posts, trees, walls, cement medians.

xxx.Dirt and debris produced by edging or trimming will be removed or swept from adjacent hard surface.

xxxi. Grass clippings and dirt must not be allowed to collect in curb

areas. III. Weed Removal

a. Frequency

xxxii. Weeds are to be mowed, trimmed or edged from turf areas during each mowing operation and landscape service visit.

xxxiii. Weeds are to be removed four (4) times per month during or immediately following mowing: April through October.

xxxiv. Weeds are to be removed three (3) times a month during or immediately following mowing: November through March.

b. Maintenance

xxxv. Weeds are to be manually removed or chemically removed from shrubs, hedges, and ground cover of lower beds.

xxxvi. Weeds are to be removed from walkways; walkway and curb gutter expansion joints; and along fence lines and cement noses of concrete medians during each occasion.

xxxvii. Chemical weeding with a chemical application may be used to kill weeds in and around areas such as planters, areas adjacent to buildings, trees, fence lines, sprinkler head, and cement medians (contractor is responsible for replacement of all damaged sod/landscaping material at his/her cost).

c. Damage Prevention

xxxviii. During chemical weeding, the chemical shall be applied in a manner to limit drift to six (6) inches:

1. Contractor is responsible for replacement of all damaged sod/landscaping material at his/her cost.

xxxix. If not replaced within one (1) week of notification, the RBCRA may replace the materials and deduct the cost from the Contractor's pay request.

IV. Prune, Trim, and Detail Trees, Hedges, and Shrubs

- a. Shrub and Hedge Care
 - xl. Maintain shrubs in a healthy, growing correct, color condition, and the shape and area specified, or as specifically directed by RBCRA designee.
 - xli. Trimming shall be in accordance with Best Management practices to promote proper growth and allow site visibility.
 - xlii. All hedges shall be maintained to owner specified dimensions.

b. Hedge Trimming

- i. Hedge trimming will be done once a month.
- ii. Remove all cuttings and clippings from pruning and trimming operations. on the same day as operation occurs.

c. Palm Trees

- iii. Shall have dead fronds removed as they occur.
- iv. Dead fronds, fruit, and seed pods shall be removed from the palm head. and trunk of any palm species up to the defined height of 12 feet.
- v. Dead palm fronds that have fallen to the ground are to be removed at each mowing operation and landscape service visit.
- vi. Perform root soil drench four (4) times a year during first year of establishment.

d. Shade Trees

- i. Shall be pruned and trimmed per National Arborist Association for pruning of Shade Trees to keep the trees healthy and to maintain the natural character of the individual species.
- ii. Required pruning is limited to a height of 12 feet, providing for the use of extendable power pruners.
- iii. Pruning may include the following items:
 - 6. To remove sucker growth and to maintain clear visibility between grade and a height of seven (7) feet.
 - 7. Dead, dying, or unsightly parts of the tree.
 - 8. Spouts growing at or near the base of the tree trunk.
 - 9. Branches that grow towards the center of the tree.
 - 10. Crossed branches that may rub together.
 - 11. Multiple leaders of a tree that normally have only one stem.
 - 12. Branches that have strong potential for damage by storms. (preventative).
 - 13. Branches that have been damaged by storms (post storm event)
 - 14. Nuisance growth that interferes with view, walks, lighting, or signage.
 - 15. Nuisance growth that indicates potential conflict with people.

iv. Damage Prevention

- 16. No climbing spikes will be permitted.
- 17. Pruning paint is prohibited.
- 18. Sharp and proper pruning tools will remove portions of trees, including any sucker growth.
- 19. No chemical treatment to sucker growth will be permitted.

- 5. Branches, dead wood, and cuttings shall be removed from job site of pruning and disposed in an acceptable manner.
- 20. Do no use hedge shears for pruning.
- 21. Machetes will not be permitted for an operations.
- 22. All lawn and shrub areas damages by pruning equipment shall be replaced at the Contractor's expense.

v. Cleanup

1. All trimming and pruning debris is to be picked up and removed from the property on the day of each trimming by the Contractor and at the Contractor's expense.

V. Fertilize

- a. Sod
- vii. The fertilizer shall be a granular fertilizer with composition of 16-4-8 or 15-5-15.
- viii. It shall be a complete fertilizer containing both major and micro nutrients, sulfur coated, time released, and applied at a rate of one (1) pound of nitrogen per 1,000 square feet of sod.
- ix. Celebration Bermuda sod shall be fertilized six (6) times per year with turf special seasonal appropriate fertilizer.
- x. St. Augustine sod shall be fertilized three (3) times yearly, during the following months: January, April, and October.
- xi. Cost of fertilizer and application shall be included in the contract.
- xii. Contractor shall adjust the irrigation systems according to prior to applying the fertilizer.
- xiii. During heavy rain season, RBCRA may request a fourth application of fertilizer to all contract areas if need using a general fertilizer 6-6- at no extra charge to the RBCRA.
- xiv. Contractor shall notify the RBCRA when they plan to apply the fertilizer.
- b. Trees, Shrubs, and Ground Cover
 - xv. Fertilizer shall be applied to all trees, shrubs, and ground covers with the exception of Pine Trees, Sabal (Cabbage) Palms, Wax Myrtles, and Saw Palmettos.
 - xvi. Fertilizer shall be commercial grade.
 - xvii. Fertilizer shall be appropriate for specific species (please see attached plant list).
 - xviii. Granular fertilizer can be utilized for plants on level terrain.
- c. Chemical analysis sheets for all fertilizer to be applied shall be submitted to the RBCRA, prior to the application, particularly Palm Tree fertilizer, along with recommended application rates as notes by the manufacturer.
- d. Trees (excluding palms)
 - xix. Shall be fertilized three (3) times per year: March, June, and October; at the rate specified by the manufacturer.
 - xx. Granular fertilizer shall be applied on level maintenance areas at the dripline of the trees in a 4" wide band around the tree.
- e. Shrubs and ground covers.

- xxi. Shall be fertilized by broad casting the fertilizer over the landscape beds three (3) times yearly: March, June, and October at a rate of one (1) pound of fertilizer per every one (1) inch of main stem.
- xxii. No fertilizer shall be applied at the base against the trunks of stems of the plants.

f. Palms

- xxiii. All palms (excluding Cabbage and Medjool Palms) shall be fertilized two (2) times yearly (March and September) using a "Palm Special" fertilizer.
- xxiv. Medjool Palms to be fertilized four (4) times per year in May, July, September, and October with 8/4/12 with minors-improved palm special.
- xxv. Spike form only (similar to "Lutz" brand Palm Tree Maintenance Spikes).
- xxvi. Fertilizer used shall be complete with Magnesium, Potassium, and micronutrients.
- xxvii. Material shall be applied at label rate.
- xxviii. Fertilizer analysis shall be submitted to the RBCRA prior to application.
- xxix. Fertilizer used for palms shall meet or exceed the chemical analysis. quantities appearing on the "Lutz" Palm tree Maintenance Spikes (*if Lutz is used, one (1) application per year is required, other spike fertilizers will be applied twice yearly, unless label rates specify differently).
- xxx. Hurricane prep in July by removing all date stalks by cutting them at a point within six (6) inches of emergence and removal of two lowest set of fronds.

VI. Pest Management

- a. Inspect landscape and treat chemically for pests and needed.
- b. Inspect Medjool Palms once per month for signs of boring/chewing insects in canopy and on trunks.

VII. Irrigation Inspection and Repair

- a. Inspect during each service, inspection shall consist of:
 - xxxi. Inspecting the systems for proper operation of the pumps, controllers, rain sensor operation status, valves, timers, electric, water supply, and wet check of all spray and rotor heads.
 - xxxii. The Contractor shall go through the entire system zone by zone, clean, adjust and repair all broken sprinkler heads and nozzles and inspect for an leaking pipes.
 - xxxiii. The Contractor shall trim and clean around all sprinkler heads and adjust heads, as needed to provide free flow of water.
 - xxxiv. The Contractor shall also be responsible for setting the times of the clocks and operation times of the system.
- b. The Contractor shall notify the RBCRA of visible irrigation system problems.
- c. Irrigation System Repairs:
 - xxxv. The Contractor shall provide the RBCRA an hourly rate to perform all other irrigation system repairs such as broken pipes, mainlines, suction lines, pumps, controllers, valves, and timers.

xxxvi. The Contractor will provide to the RBCRA copies of all invoices for parts at costs needed for the repairs of the irrigation system and shall be reimbursed by the RBCRA on a monthly basis.

d. Damaged Irrigation System

- xliii. The RBCRA shall be notified immediately (by 3:30 of the present working day) of any inoperable system (i.e. pumps failed to come on)
- xliv. All damaged irrigation system components shall be reported by the Contractor to the RBCRA designee.
- xlv. Components damaged by the Contractor's equipment or personnel will be replaced by the Contractor at the Contractor's expense.

VIII. Refresh Mulch

- c. Inspect during each service.
- d. Every six (6) months top dress all mulched areas with one (1) inch of mulch.
- e. Mulch shall be maintained in plant beds (where it already exists) in order to maintain a depth of three (3) inches at all times.
- f. Beds shall be clear of weeds prior to the application of new mulch to maintain the three (3) inch depth to plant beds.
- g. Mulch shall be maintained around Trees up to three (3) inches in order to maintain a depth of three inches at all times.

IX. Litter and Debris Control

- h. Litter removal from turf areas and plant beds and designated Right-of-Way areas shall be complete prior to each mowing operation in the same day.
- i. Letter to be removed includes paper, glass, trash, undesirable materials, or debris (unauthorized paper signs) deposited or blown onto the sites.
- j. Palm fronds and tree limbs will also be removed.
- k. Litter is to be removed entirely from the sites and disposed of in accordance with the RBCRA and Riviera Beach Ordinances.
- 1. All debris, limbs, and fronds will be picked up the same day of pruning.
- m. Failure to pick up debris will result in a \$50.00 per day fees as long as the debris remains which shall be deducted from the Contractor's pay request.
- n. Debris from Marina Operations, vendors, or events shall not be included.
- **X. Blowing/Clearing** Contractor shall use a blower to clear all walkways, parking lots, and curbs along roadways to ensure a neat and clean appearance after mowing operation.

XI. Landscaping/Materials

- o. The Contractor shall notify the RBCRA of any damaged plant material that needs to be replaced.
- p. Any plant material damaged by the Contractor equipment or personnel will be replaced by the Contractor at the Contractor's expense.
- q. The RBCRA shall approve any proposed new landscaping in advance of any work being completed.
- r. Contractor shall provide hourly rates to perform instillation of replacement plant material.

XII. Supervision

a. Provide a trained supervisor on site that shall be capable of verbal and written communication and shall be able to adequately communicate with all service personnel.

Contractor shall inspect the grounds at least once per month to ensure proper service is being
provided.