| SECTION No.(s): | 860500 |
| :--- | :--- |
| S.R. No.(s): | A1A |
| FM No: | $435710-1-78-01$ |
| COUNTY: | BROWARD COUNTY |

## DISTRICT FOUR (4) AMENDMENT NUMBER EIGHT (8) TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION LANDSCAPE INCLUSIVE MEMORANDUM OF AGREEMENT

THIS AMENDMENT Number Eight (8) to the Agreement dated January 31, 2008, made and entered into this day of $\qquad$ 20 $\qquad$ by and between the State of Florida Department of Transportation hereinafter called the DEPARTMENT and the CITY OF FORT LAUDERDALE, a municipal subdivision of the State of Florida, hereinafter called the AGENCY.

## WITHNESSETH

WHEREAS, the parties entered into the Landscape Inclusive Maintenance of Agreement dated, January 31, 2008 for the purpose of maintaining the landscape improvements by the AGENCY on State Road A1A ; and,

WHEREAS, the DEPARTMENT and the AGENCY have agreed to add additional landscape to be installed on State Road A1A in accordance with the above referenced Agreement; and,

WHEREAS, the AGENCY by Resolution No. $\qquad$ dated $\qquad$ , attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorized its officers to do so; and,

NOW THEREFORE, for and in consideration of mutual benefits that flow each to the other, the parties covenant and agree as follows:

1. Pursuant to paragraph 13 of the Landscape Inclusive Maintenance Memorandum of Agreement for State Road A1A dated January 31, 2008, the DEPARTMENT will allow the AGENCY to construct additional landscape improvements or to modify an improvement located as indicated in Exhibit "A", State Road A1A from North Atlantic Boulevard (M.P. 4.456) to State Road 816 (Oakland Park Boulevard) (M.P. 5.382) in accordance with the plans attached as Exhibit "B".
2. The AGENCY shall agree to maintain the additional landscape improvements in the Agreement described above according the Exhibit "C" Maintenance Plan, attached to this Amendment.
3. The DEPARTMENT intends to enter into a separate contract with the AGENCY to have installed said landscape improvements for an approximate amount as indicated in Exhibit "D" not to exceed \$239,096.00.

Except as modified by this Amendment, all terms and conditions of the original Agreement and all Amendments thereto shall remain in full force and effect.

## LIST OF EXHIBITS

Exhibit A - Landscape Improvements Limits and Maintenance Boundaries and Location Map
Exhibit B - Landscape Improvement Plans
Exhibit C - Maintenance Plan Landscape Improvements
Exhibit D - Approximate Cost For Landscape Improvements Under Separate Proposed JPA Agreement

IN WITNESS WHEREOF, this Agreement is to be executed below for the purposes specified herein. Authorization has been given to enter into and execute this Agreement by Resolution $\qquad$ , hereto attached.

WITNESSES:
$\qquad$
[Witness type/print name]
[Witness type/print name]

Lee R. Feldman, City Manager

CITY OF FORT LAUDERDALE

John P. "Jack" Seiler, Mayor

## ATTEST:

Jonda K. Joseph, City Clerk

## APPROVED AS TO FORM:

Cole J. Copertino, Assistant City Attorney

## STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION
By:

Director of Transportation Development

Attest: $\qquad$ (SEAL) Executive Secretary
Legal Review Date

Office of the General Counsel

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SECTION No.(s): 860500
S.R.No.(s): A1A
FM No: 435710-1-78-01
COUNTY: BROWARD COUNTY
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## EXHIBIT A

LANDSCAPE IMPROVEMENTS PROJECT LIMITS MAINTENANCE BOUNDARIES LIMITS AND LOCATION MAP
I. LANDSCAPE PROJECT LIMITS:

State Road A1A from North Atlantic Boulevard (M.P. 4.456) to State Road 816 (Oakland Park Boulevard) (M.P. 5.382)
II. INCLUSIVE LANDSCAPE MAINTENANCE AGREEMENT LIMITS:

North Fort Lauderdale Beach Area (Section 86050000)
M.P. 2.039 (South of Poinsettia Street) to M.P. 6.410 (Flamingo Drive)
III. MAINTENANCE BOUNDARY LIMITS MAP:
*All limits of the original agreement and amendments shall apply

Please See Attached

| SECTION No.(s): | 860500 |
| :--- | :--- |
| S.R. No.(s): | A1A |
| FM No: | 435710-1-78-01 |
| COUNTY: | BROWARD COUNTY |

## EXHIBIT B

## LANDSCAPE IMPROVEMENT PLANS

The AGENCY agrees to install the landscape improvements in accordance with the plans and specifications attached hereto and incorporated herein.

Please see attached plans prepared by: Michael D. Conner RLA
Calvin \& Giordano
Date: January 14, 2015
Sheets 0-23 and 25-52


## GENERAL NOTES：

1．GOVERNING STANDARDS FOR CONSTRUCTION \＆ INSTALLATION SHALL BE AS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION，STANDARD INDEX 544 AND REVISED INDEX SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION， PLEASE NOTE THAT GOVERNING SPECIFICATIONS FOR LANDSCAPE INSTALATION SHALL BE MODIFIED SPECIAL PROVISION（MSP）AS PROVIDED IN TECHNICAL SPECIFICATIONS AND BID DOCUMENTS
2．FDOT INDEX CAN BE FOUND AT THE FOLLOWING WEBPAGE： http：／／www．dot．state．fl．us／rddesigniDesignstandards／Standards．shtm

3．STATE LAW MANDATES CONTACTING＂SUNSHINE STATE ONE－CALL OF FLORIDA，INC．＂AT BI I OR I－8OO－432－4770，AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF
CONSTRUCTION．
4．CONTRACTOR SHALL VIDEO TAPE WORK AREAS BEFORE （WORK COMMENCES）TO IDENTIFY EXISTING CONDITIONS，IF CEI NOT PRESENT ON PROJECT．DAMAGES TO CURBS AND ASPHALT DURING CONSTRUCTION SHALL BE REPAIRED AND／OR REPLACED位 SOLE EXPENSE．

5．CONTRACTOR（S）MUST OBTAIN FDOT PERMTS，AND SERARATE LANDSCAPE，RRIGATION $\$$ TREE RLOCATIONREMOVAL PERMITS FROM THE GOVERNING AGENCIES，AS REQUIRED．
6．LANDSCAPE CONTRACTOR MUST CALL THE LAMDSCAPE NSPECTOR WITH THE GOVERNING AGENCY TO SCHEDULE A PRF CONSTRUCTION MEETING，ALONG WITH THE OWNER＇S EPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO ANY gITE PREPARATION

7．ALL CLEARING，GRUBBING，EXCAVATION，FILL AND DISPOSAL OF ALL CONSTRUCTION MATERIAL IS INCIDENTAL TO WORK，AND SHALL BE INELUDED IN THE CONTRACT．
8．CONTRACTOR SHAL CONTACT FDOT＇OPERATIONS＇FOR IRECTION AS TO THE DISPOSAL OF EXCAVATED FILL BROWARD OPERATIONS：CONTACT ADRIAN CROUCH MAINTENANCE PROGRAM MANAGER AT（954）958－7643．

9．CONTRACTOR SHALL MAINTAIN CLEAR SIGHT AT MEDIA OPENINGS FOR VEHICLES TURNING ACROSS ONCOMING TRAFFIC，AS DEFINED PER FDOT INDEX 54G，EXCEFT WHER SIGNALIZED INTERSECTIONS THAT DO NOT GO FLASHING．
10．CONTRACTOR SHALL MAINTANN A HORIZONTAL CLEAR ZONE，AS DEFINED PER FDOT INDEX 700.

11．CONTRACTOR SHALL INSLURE THAT NO SIGNS WILL BE gLOCKED DURING NEW MEDIAN PLANTING，AND THAT NO PLANT MATERIAL WILL BE BLOCKING ANY SIGN．

PLANTING NOTES：
12．CONTRACTOR SHALL INSTALL PLANT MATERIAL AS DETAILED IN FDOT STANDARD INDEX 544 LANDSCAPE INSTALATION CURRENT EDTTION．
13．CHPRESS MULCH IS NOT PERMITTED ON FDOT RIGHT OF WAY．CONTRACTOR SHALL PROVIDE 3＂RECYCLED MULCH CEKIIFIED BY THE MULCH AND SOIL COUNCIL（MSC）．SUBMIT PERMTT LANDSCAPE INSPECTOR UPON INSPECTION．

UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY
BE ADVSED THAT UNDERGROUND UTILITIES SHOWN ON PLANS ARE APPROXIMATLONS，AND MAY NOT REFEECT ALL EXISTING UNDERGROUND UTLLITIES．
－it IS THE CONTRACTOR＇S RESFONSIBILITY TO CALL BII OR I－BOO－432－4770（SUNSHINE PRIOR TO ANY EXCAVATION，AS PER CHAPTER 556 OF THE FLORIDA STATUES．

CALL 4B HOURS BEFORE
YOU DIG IN FLORIDA，TSS THE LAWI
811 or 1－800－432－4770
SUNSHINE STATE ONE CALL OF FLORIDA，INC．

## TREE SURVEY STATUS CHART





TABULATION OF QUANTITIES / PLANT SCHEDULE

| $\begin{aligned} & \text { PAY } \\ & \text { ITEM NO. } \end{aligned}$ | PAY | sYu | botanical mame | COMMOT MAME | ${ }_{\text {INSTALIED }}^{\text {SIZE }}$ | MAXILUMMsize | SPACING | native | RROUGHT | UNIT | SHEET NUMEERS |  |  |  |  |  |  |  | $\begin{aligned} & \text { TOTAL } \\ & \text { FOR SHEETS } \\ & 37 \text { TO } 40 \end{aligned}$ |  | GRAND TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 37 |  | 38 |  | ${ }^{9}$ |  | 40 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | PLAN | FIMAL | PLAN | FINAL | PLAN | FINAL | Plan | FNAL | Plan | FINML | PLaN | FINAL |
| N/A | N/A | CNG | Cocos nuctiera 'Green Malayan | Coconut Palm | 12'.1616.W. | N/A | AS NOTED |  |  | EA. | 2 |  | ${ }^{8}$ |  | 2 |  | 5 |  | 17 |  | 36 |  |
| N/A | N/A | FES, | Ftyschosperma elegans | Soltarare Paim - Single | 12t.14'C.T. | N/A | AS NOTED |  |  | EA. |  |  |  |  |  |  | 2 |  | 2 |  | 13 |  |
| N/A | NA | VMM | Veltchua montgomeryana | Montgamery Palm |  | N/A | AS NOTEC |  |  | EA. |  |  |  |  |  |  |  |  |  |  | 10 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NA | NA | ABO | Aechmea blanchebana 'Dean' | Dean' Bromelads |  | $36^{1 / 2 .}$ | $24^{\circ} \mathrm{O} . \bar{C}$. |  |  | EA. | 25 |  | 248 |  | $\stackrel{29}{28}$ |  | 129 |  | 420 |  | $9 \overline{86}$ |  |
| N/ | NA | ACB | Neoregela 'orange crush | Orange crush bromeliad |  | 184 Ht. | $24^{\circ} \mathrm{OCC}$. |  |  | EA. | ${ }^{8}$ |  |  |  | 78 |  |  |  | 161 |  | 972 |  |
| WA | N/ | CES | Conocarpus erectus 'Sernaus', | Silver Buttonwood | $3 \mathrm{Gal}, 24^{\text {4 HL,XIS }}$ | 48" Ht. | $18^{\prime \prime}$ O.C. | Yes | Yes | EA. | 42 |  | 240 |  | 42 |  | 99 |  | 423 |  | 1,051 |  |
| N/A | NA | FMG | Ficus microcarapa 'Green .sland' | Green Island Ficus | 3 Gal. 15.1 Hex $\times 15$ | 24" Ht. | $24^{40} 0 . C$. |  |  | EA. | 69 |  | 298 |  | 108 |  | 340 |  | 807 |  | 1.730 |  |
| N/A | NA | TDF | Trpsacum filondanum | Dwarf Fakahatchee Grass | 3 Gal, $24^{4} \mathrm{Ht} . \times 24$ | 48" Hit. | $42^{\circ \prime}$ O.C. | Yes | Yes | EA. | 14 |  | 15 |  | 18 |  | 24 |  | 88 |  | 129 |  |
| NA | NA | JUN | Junuperus chinensis 'parsonu' | Parson's Juniper |  | 15'HE. | 18'0.C. |  |  | EA. | $\underline{52}$ |  |  |  |  |  |  |  | 532 |  | 4,341 |  |







































## IRRIGATION／WATERING NOTES：

GENERAL：
CONTRACTOR SHALL VERIFY CONDITION OF THE ENTRE EXISTING IRRIGATION SYSTEM（5），AND REPAR ANY NECESSARY TOR THE OPERATION AND ALTOMATIC WATERING OF ALL NEW 4 EXISTING PLANT MATERIAL MTHIN MEDIANERR．O．W．IN WHICH，
2．CONTRACTOR SHALL REPLACE ALL EXISTING HEADS WTH CONTRACTOR SHAN USE DUESTNG NOTDES WHE POSSIBLE，NEW NOZZLES WILL BE RERUIRED FOR LOCATIONS PREVIOUSLY COVERED BY PAVERS． IREIGATION LATERALS MTHINX EKSTING FAVER AREAS TIO BE REMOVED）WLL REQUIRE RETROFITING BY THE NEW SPRAY BODIES AND NOZZLES TO FULLY WATER AU LANDSCAPE AREAS．
3．REPAIR OF ANY DAMAGE TO THE EXISTING IRRIGATION YSTEM IS THE RESPONSIBILTY OF THE CONTRACTO O RETPAIR AT HISHITR EXPENSE
CONTRAGTOR SHALL COORDINATE WITH CITY OF TT． MARK ALMY 954－828－5869）PRIOR TO THE INSTALATION OF ANY IRRIGATION EQUIFMENT，
5．IRRIGATION PLANS ARE SCHEMATIC IN NATURE， MTHIN LANDSCAFE AREAS TO PROVIDE IOOD coverage．
6．INSTALATION OF LATE代ALS AROUND EXISTING TREES SHALL BE DUG BY HAND．EXTREME CARE MUST BE USED TO PREVENT DAMAGE TO THE ROOT SYSTEM OF EXISTING TREES．ROOTS LARGER THAN 2－I／2＇SHAL
NOT BE CUT，SOIL BENEATH THE ROOT SHALL BE CAREFULY EXCAVATED IN ORDER TO PASS ANY LATERAL BENEATH THE ROOT．SOIL SHALL BE BACK WASHED FOCKETS FROM FDRMING．

7．CONTRACTOR SHALL USE PVC SCH 40 OR PVC CLAS 200 PIFE WTH NEW PVC SCH4O FITTINGS．ALL JOINTSFIMINGS SHALL BE SOLVENT WED，UNLESS OTHERMSE 5 FECIFIED．
B．CONTRACTOR SHALL COORDINATE CLOCXICONTROLLERR SETIINGS WITH THE CITY OF FT．LAUDERDALE PARKS WRITTEN SCHEDULE．AS WEL AS PROVIDE THEM WTH AN AS－BUILT ORAMMNG SHOWING LOCATIONS OF ZONES LATERALS，VALVES SEXISTING AND NRN CONNECTED TO
ANY ZONE RLPAIRTD OR INSTAILED）AND LABELED IN ANY ZONE REPAIRED OR INSTALLED AND LABELED IN
SUCH A WAY TO BE RECOGNIZED WTH THE WRITEN SCHEDULE．
9．IF IT IS NOT POSSIBLE TO PROVIDE AUTOMATIC IRRIGAIION TO ANY OF THE NEW OR RELOCAED PALMS
\＄TREES，CONTRACTOR SHALL PROVIDE A WAE RING TREES，CONTRACTOR SHALL PROVIDE A WATERING FUNCTIONAL：

IRRIGATION SCHEDULE：

（15） QUANTITY
258

26

31
NEW head locations－Rann Bird RD－12－S－P30－F 15 Senes MPR NEW head locations－Rann Bird RD－12－S－P30－F 15 Senes MPR $180^{\circ}$（half circle）．Note these new locations wil require retroftting the existing laterals in the area to incorporate these heads unthout
loss of pressure \＆flow to the existing zones．
REPLACE existing spray bodies with new Ran Bird（RD－I 2－S－P30－F） use existing nozzles when possible．
use exsting nozies when possikte．

SPRAY BODIES，CONTRACTOR GHALL PROVIDE NEW RAINBIRD SERIES MOTE：WHEN REPLACING EXISTING SPRAY BO WHEN EXISTING NOZZIES ARE NOT FUNCTIONING PROPERLY

$\frac{\text { TTPICAL SWING JOINT }}{(3 \text { ELL OFTION })}$

NOTE：CONTRACTOR SHALL PROVIDE
MANUFACTURERIS CIT SHEETS IF LSING RE－MAAUIFACTURERED SWING JINNS，
FOR APPROVAL PRIOR TO ORDERING，
（1）$F$ INSH GRADE
（2）I／2＇HIGH DENSITY POLYETHMLENE（MARLEX） （3）SCH 80 NIPPLE（LENGTH AS REQUIRED）
（4）SCH 40 LATERAL TEE（SST）OR ELL（ST） INSTALL THREAD OUTLLET SIDEWAYS
（5）LATERAL PIPE
（B）POP－LUP SPRAY BODY（SEE PLANS＊
SCHEDULE FOR TYPE）
（7）BLACK MMON TE STRAPS TOTAL OF 3 PER RISER EQUALIY SPACED
（日）Spray notzle（per plan \＆schedule）
（9）SHRUBS IREFER TO PLANTING PLAN $\$$ SCHEDULE FOR SHRUB MAINTANED HEIGHT）
PVC UVR（＂BROWNLINED）SCH 80 NIPPLE （LENGTH AS REOUIRED）
（11）SCH 40 THREADED COUPLER
（12） $3 / 4^{4}$ PVE SCV 40 PIPE（ PAINTED BLACK）



















## traffic cintrol plan－general ndtes

1．traffic shall be maintained in accurdance with latest fidt design standards INDEX 600 SERIES，MUTCD 2009 AND PRDJECT PLANS．
 be maintained at the existing pasted speed linit df 35 mph
3．existing signs shall be maintained at all times umbess dtherwise directed by THE PRDJECT ADMINISTRATIR

4．The cantractur shall provide a 24 hdir emergency contact nane and mumber
5．traffic and travel ways shall nat be altered by the cantractor to create a wdrk zone UNTIL ALL LABZR AND MATERIALS ARE AVALLABLE FIR THE CDNSTRUCTIBN IF THAT PARTICILAR AREA BE CDVERED PER INDEX 600 QR REMDVED DURING INACTIVE WIRK PERIDDS，


6．full time flarida certified mat supervisar shall be an site when contractar is yarking AND SHALL BE GN CALL FIR EMERGENCIES WHEN THE CINTRACTIR IS NIT WIRKING．CDPY OF HIS／HER AND SHALL BE IN CALL FDR EMERGENCIES WHEN THE CLNTRACTI
CUREENT CERTIFICATIN SHALL BECDME PART OF PRIJECT FILE，
7．ALL LLANES ON S．R．ALA／M，OCEAN gLVD．MUST TE IPPEN FIR TRAFFIC DURING AN EVACUATIZN NOTICE FIR A


B．WDRK ZINE Majnline Lane clasure time restrictians
ndrmal wark haurs will be limited ta manday through friday fram 9100 AM TD 4100 PM ．

Lane clasure will be limiten TO Either the lane adjacent to the medial or the dutside but nat bath at ant given time，
no lane closure are perhitted on holidays．
9．AT THE DISCRETILN IF THE ENGINEER，IF A LANE CLOSING CAUSES EXTENDED CINGESTIIN， THE CONTRACTIR SHALL BE DIRECTED TO REDPEN THE CLISED LANECS UNTIL SUCH TIME as traffic flaw has returned to an acceptable level
10．THE CZNTRACTIR SHALL NIT STIRE MATERIALS DR EQUIPMENT VITHIN THE CLEAB ZONE DURING CONSTRUCTION ACTIVITY PERIDD，THE CONTRACTIR SHALL LIMIT THE STRRAGE GF MATERIAL AND －
 Reflect pavement markings．

|  |  | REMSIONS |  |  $\rightarrow 1$ Calm，Glordano \＆Anocisele，Inc． |  | $\begin{gathered} \text { FORT LAUDERDALE HIGIHWAY } \\ \text { BEAUTIFICATION GRANT } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | manomo． | cosurr | FFWNCOL PROUECT ID |
|  |  | S．R．A1A |  | BROWARD | 435710－1－78－01 |  |  |  |



SECTION No.(s): 860500
S.R. No.(s): A1A

FM No:
COUNTY:

435710-1-78-01
BROWARD COUNTY

## EXHIBIT C

## LANDSCAPE IMPROVEMENT MAINTENANCE PLANS

# MAINTENANCE PLAN Landscape Improvements 

Project State Road No(s):<br>Project Limits:<br>FM No(s):<br>Maintaining Agency:<br>RLA of Record:<br>State Road A1A<br>From North Atlantic Boulevard (M.P. 4.456) to State Road 816 (Oakland Park Boulevard) (M.P. 5.382)<br>435710-1-78-01<br>City of Fort Lauderdale<br>Michael D. Conner (LA0001181)<br>Date:<br>November 5, 2014

## 1. GENERAL MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS:

The purpose of a plan for the landscape improvements maintenance practices is to allow the plant material on your project to thrive in a safe and vigorous manner while fulfilling their intended purpose and conserving our natural resources. Plantings and all other landscape improvements shall be maintained to avoid potential roadway hazards and to provide required clear visibility, accessibility, clearance, and setbacks as set forth by Florida Department of Transportation (FDOT) governing standards and specifications: FDOT Design Standards, FDOT Plans Preparation Manual Vol. I, Chapter 2.11 and FDOT Standard Specifications for Road and Bridge Construction, as amended by contract documents, and all other requirements set forth by the District 4 Operations Maintenance Engineer. The initial portion of the Maintenance Plan describes general maintenance requirements and recommendations. The concluding section provides recommendations prepared by the Registered Landscape Architect of Record specific to the attached approved plans.

## WATERING REQUIREMENTS

Watering is a critical concern for not only the maintenance of healthy plant material but also for observing water conservation practices. The amount of water to apply at any one time varies with the weather, drainage conditions and water holding capacity of the soil. For plant materials that have been established, it is imperative that any mandated water restrictions be fully conformed to on FDOT roadways.

Proper watering techniques should provide even and thorough water dispersal to wet the entire root zone, but not saturate the soil or over-spray onto travel lanes.

## IRRIGATION SYSTEM

The Agency shall ensure there are no roadway overspray or irrigation activities during daytime hours (most notably "rush hour" traffic periods). It is imperative the irrigation controller is properly set to run early enough that the watering process will be entirely completed before high traffic periods, while adhering to mandated water restrictions. To ensure water conservation, the Agency shall monitor the system for water leaks and the rain sensors to ensure they are functioning properly so that the system shuts down when there is sufficient rainfall.

## INTEGRATED PLANT MANAGEMENT

An assessment of each planting area's soil is recommended to periodically determine the nutrient levels needed to sustain healthy, vigorous plant growth.

Palms, shrubs, trees and turf areas shall be fertilized in such a manner and frequency to ensure that the plant material remains healthy and vigorously growing. Establishment of an integrated pest management program is encouraged to ensure healthy plants, which are free of disease and pests.

## MULCHING

Mulch planting beds in such a manner as to prevent weed growth, retain moisture to the plants, protect against soil erosion and nutrient loss, maintain a more uniform soil temperature, and improve the appearance of the planting beds. Avoid mulch mounded up on the trunks of trees, palms, and the base of shrubs to encourage air movement in this area which aids in lowering disease susceptibility. Cypress mulch is prohibited on state right of way.

## PRUNING

All pruning, and the associated safety criteria, shall be performed according to American National Standard Institute (ANSI) A300 standards and shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist. Pruning shall be carried out with the health and natural growth of plant materials in mind, to specific pruning heights maintaining clear visibility for motorists, and provide vertical clearance for pedestrian, bicyclist, and truck traffic where applicable. Visibility windows must be maintained free of view obstructions, and all trees and palms must be maintained to prevent potential roadway and pedestrian hazards, all palms are to be kept fruit free. The specific pruning heights are determined by understanding the designer's intent when selecting and placing the plants. The intended mature maintained height and spread of plants are noted on the plans (See Exhibit B.) and see Part II. Specific Requirements and Recommendations for guidelines. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be maintained at a height in compliance with FDOT Design Standards Index 546; Page 6 of 6, Window Detail. Vertical tree heights must meet FDOT Maintenance Rating Program (MRP) standards.

## STAKING AND GUYING

All staking materials, except for replacements, are to be removed by the completion of FDOT warranty period or at one year (whichever comes first). Any subsequent staking and guying activities by the Agency must adhere to FDOT Design Standards guidelines (See Index 544). The Agency shall closely monitor staking and guying attachment materials so that they are securely fastened to avoid potential roadway hazards.

## TURF MOWING:

All grassed areas are to be mowed and trimmed with sufficient frequency to maintain a deep, healthy root system while providing a neat and clean appearance to the urban landscape. All turf efforts, mowing, curb/sidewalk edging and turf condition, must at a minimum, meet FDOT Maintenance Rating Program (MRP).

## LITTER CONTROL:

The project site shall remain as litter free as practicable. It is recommended to recycle this litter to avoid unnecessary waste by its reuse. Litter removal efforts must meet FDOT Maintenance Rating Program (MRP) standards.

## WEEDING/HERBICIDE

All planting areas shall be maintained as weed free as practicable by enlisting integrated pest management practices in areas specified on the plans and maintaining proper mulch levels. Extreme care is recommended if using a chemical herbicide to avoid overspray onto plant materials. It is the applicator's responsibility to restore any damage, resulting from overspray to the plantings, per the approved plans.

## PLANT REPLACEMENT

Plant replacement shall be the same species and specification as the approved plan. Move and replace all plant materials that may conflict with utility relocations and service. Only plants graded Florida \#1 or better, per the Florida Department of Agriculture and Consumer Services, Grades and Standards for Nursery Plants are permitted on FDOT roadways. Should it become necessary to change the species, a general use permit is required from FDOT for approval by the FDOT District Landscape Architect.

## HARDSCAPE (SPECIALTY SURFACING)

All tree grates and specialty surfacing (if applicable) shall be maintained in such a manner as to prevent any potential tripping hazards and protect damage to the pavers and tree grates. Final surface tolerance from grade elevations shall, at a minimum, meet the most current Interlocking Concrete Pavement Institute (ICPI), Guide Specifications for Pavers on an Aggregate Base, Section 231413 Interlocking Concrete Pavers, Part 3.05. If the specialty surfacing or tree grates become damaged, they shall be replaced with the same type and specification as the approved plan.

## HARDSCAPE (NON-STANDARD) TRAVELWAY SURFACING

It shall be the responsibility of the AGENCY to restore an unacceptable ride condition of the roadway, including asphalt pavement (if applicable), caused or contributed by the installation or failure of non-standard surfacing, and/or the header curb, on the Department of Transportation right-of-way within the limits of this Agreement. Pavement restoration areas or "patches" will have a minimum length of 10 -ft, measured from the edge of the header curb, and a width to cover full lanes for each lane affected by the restoration.

Pavement restoration will be performed in accordance with the most current edition of the FDOT Standard Specifications for Road and Bridge Construction, and the FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System.

It shall be the responsibility of the AGENCY to maintain all signs located within a non-standard surfacing area. Such maintenance to be provided by the AGENCY shall include repair and replacement of the sign panel, post, and base.

## HARDSCAPE (LANDSCAPE ACCENT LIGHTING)

Landscape accent lighting shall be maintained in such a manner as to prolong the life of the lighting fixture and prevent potential safety hazards. If the lighting fixtures and their system become damaged, they shall be replaced with the same type and specification as the approved plan. Landscape lighting shall meet requirements for the sea turtle nesting and hatching.

## MAINTENANCE OF TRAFFIC CONTROL

Reference the FDOT website regarding the selection of the proper traffic control requirements to be provided during routine maintenance and / or new installations of this DOT roadway.

## VEGETATION MANAGEMENT AT OUTDOOR ADVERTISING (ODA)

To avoid conflicts with permitted outdoor advertising, please reference the State of Florida website regarding the vegetation management of outdoor advertising. This website provides a portal to search the FDOT Outdoor Advertising Inventory Management System Database. The database contains an inventory of outdoor advertising structures, permits and other related information maintained by the Department.

Also, reference the Florida Highway Beautification Program website link for "Vegetation Management at ODA signs" "Florida Statutes" and "Florida Administrative Code" related to vegetation management at outdoor advertising sign, permit applications for vegetation management and determining mitigation value of roadside vegetation.

## II. SPECIFIC PROJECT SITE MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS

The only specific maintenance requirements for the planting design for this project, other than those outlined and specified in Part I, are as follows:

1. The Silver Buttonwood hedge shall be maintained at a maximum height of $48^{\prime \prime}$.
2. The Dwarf Fakahatchee Grass does not need to be pruned or trimmed back. It is located in areas that do not have sight distance restrictions, and therefore can be left natural.
3. Likewise, the 'Dean' Bromeliads should not be pruned or trimmed back. They are located in areas that do not have sight distance restrictions, and therefore can be left natural.
4. Both the 'Orange Crush.' Bromeliads and the 'Parsons' Juniper are located within sight distance restrictions. The 'Orange Crush.' Bromeliads shall be maintained at a maximum height of $18^{n}$. If an individual plant does get too large then the whole plant shall be removed completely, not just trimmed back. The 'Parsons' Juniper shall be maintained at a maximum height of $15^{\prime \prime}$.
5. The 'Green Island' Ficus are located in areas that do not have sight distance restrictions, and therefore shall be maintained at a maximum height of 24 ".

## REFERENCES

This reference list is provided as a courtesy. The list may not contain the most current websites. The most current references must be accessed for up to date information.

Accessible Sidewalk (ADA)
http://www.access-board.gov/guidelines-and-standards/streets-sidewalks
Americans with Disabilities Act (ADA) (ADAAG)
http://www.ada.gov/2010ADAstandards index.htm
American National Standard Institute, ANSI A300, (Part 1) for Tree Care Operations - Trees, Shrub, and Other Woody Plant Maintenance - Standard Practices (Pruning), available for purchase
http://webstore.ansi.org
Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Florida Grades and Standards for Nursery Plants
http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Plant-and-Apiary-Inspection/Plant-Inspection\#pubs

Florida Department of Community Affairs (DCA), Florida Board of Building Codes \& Standards, 2010 Florida Building Code, Chapter 11 Florida Accessibility Code for Building Construction Part A
http://www2.iccsafe.org/states/florida codes/
Florida Department of Transportation, FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 544 Landscape Installation
http://www.dot.state.fl.us/rddesign/DS/15/IDx/00544.pdf
Florida Department of Transportation, FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 546 Sight Distance at Intersections
http://www.dot.state.fl.us/rddesign/DS/15/IDx/00546.pdf
Florida Department of Transportation, FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 600 Traffic Control through Work Zones
http://www.dot.state.fl. us/rddesign/DS/15/IDx/00600.pdf
Florida Department of Transportation, FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 700 Roadside Offsets http://www.dot.state.fl. us/rddesign/DS/15/lDx/00700.pdf

Florida Department of Transportation, FDOT Plans Preparation Manual (PPM) Vol. I Chapter 2.11 Horizontal Clearance

Table 2.11.5 Horizontal Clearance to Trees
Table 2.11.11 Recoverable Terrain
http://www.dot.state.fl.us/rddesign/PPMManual/2014PPM.shtm
Florida Department of Transportation, FDOT Standard Specifications for Road and Bridge Construction, Section 580 Landscape Installation
http://www.dot.state.fl.us/specificationsoffice/Maintenance/Jul14/Files/SS5800000.doc
http://www.dot.state.fl.us/specificationsoffice/Implemented/Workbooks/JulWorkbook2014/Files/S P5800000FA.pdf

Florida Department of Transportation, Landscape Architecture Website www.MyFloridaBeautiful.com

Florida Department of Transportation, Maintenance Rating Program Handbook http://www.dot.state.fl.us/statemaintenanceoffice/MaintRatingProgram.shtm

Florida Department of Transportation Outdoor Advertising Database http://www2.dot.state.fl.us/rightofway/

Florida Exotic Pest Plant Council Invasive Plant Lists
http://www.fleppc.org/list/list. htm
Florida Irrigation Society
http://www.fisstate.org
Florida Power and Light (FPL), Plant the Right Tree in the Right Place http://www.fpl.com/residential/trees/right tree right place.shtml

A Guide to Roadside Vegetation Management http://www.dot.state.fl. us/statemaintenanceoffice/DOT\%20Final\%20(3)Turf\%20Management \%20Guide\%20UF.pdf

Interlocking Concrete Pavement Institute (ICPI)
http://www.icpi.org/
International Society of Arboriculture (ISA)
www.isa-arbor.com
UF IFAS: Selecting Tropical and Subtropical Tree Species for Wind Resistance http://edis.ifas.ufl.edu/pdffiles/FR/FR17500.pdf
U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices
http://www.mutcd.fhwa.dot.gov

SECTION No.(s): 860500
S.R.No.(s): A1A

FM No:
COUNTY:

435710-1-78-01
BROWARD COUNTY

## EXHIBIT D

## APPROXIMATE COST FOR LANDSCAPE IMPROVEMENTS UNDER SEPARATE PROPOSED JPA AGREEMENT

This Exhibit forms an integral part of the DISTRICT FOUR (4) LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT between the State of Florida, Department of Transportation and the AGENCY.

COST ESTIMATE:
S.R. A1A - Florida Highway Beautification Council Grant FPID \# 435710~1-78-01
Date: January 14, 2015

*** Denotes an item of work that the City of Fort Lauderdale may perform outside of the scope of this project.

