

SECTION No.: 89060000  
FM No. (s): 422641-5-52-01  
COUNTY: Martin  
S.R. No.: 76

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
DISTRICT FOUR  
LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, by and between the **STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION**, a component AGENCY of the State of Florida, hereinafter called the DEPARTMENT and the Martin County, a political subdivision, existing under the Laws of Florida, hereinafter called the AGENCY.

**WITNESSETH:**

**WHEREAS**, the DEPARTMENT has jurisdiction over State Road as part of the State Highway System as described in **Exhibit "A"**; and

**WHEREAS**, the DEPARTMENT seeks to install and have maintained by the AGENCY certain landscape improvements within the right of way of State Road 76 (Kanner Highway), as described within **Exhibit "B"**; and

**WHEREAS**, as part of the continual updating of the State of Florida Highway System, the DEPARTMENT, for the purpose of safety, protection of the investment and other reasons, has constructed and does maintain the highway facility as described in **Exhibit "A"** (attached hereto and incorporated by reference herein), within the unincorporated County; and

**WHEREAS**, the AGENCY is agreeable to maintaining those Landscape Improvements within the AGENCY'S limits including plant materials, irrigation system and/or hardscape to the medians and areas outside the travelway to the right of way line and/or areas within the travelway that may contain specialty surfacing (concrete pavers, color stamped concrete and color stamped asphalt [also known as patterned pavement]) including any other hardscape (if applicable), but excluding standard concrete sidewalk; and agrees such improvements shall be maintained by periodic mowing, fertilizing, weeding, litter pick-up, pruning, necessary replanting, irrigation repair and/or repair of the median concrete replacements associated with the specialty surfacing (if applicable) as needed; and

**WHEREAS**, it is the intent of the AGENCY and the DEPARTMENT that the AGENCY shall maintain all right of way within the medians, outside the travelway and improvements made to the travelway that was made at the request of the AGENCY; and

**WHEREAS**, the parties hereto mutually recognize the need for entering into an Agreement designating and setting forth the responsibilities of each party; and

**WHEREAS**, the AGENCY by Resolution No. \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_\_\_\_, attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorizes its officers to do so;

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

1. The recitals set forth above are true and correct and are deemed incorporated herein.
2. INSTALLATION OF FACILITIES

The DEPARTMENT shall install or caused to be installed *landscape improvements* described as: plant materials, irrigation and/or hardscape on the highway facilities substantially as specified in plans and specifications hereinafter referred to as the Project(s) and incorporated herein as referenced in **Exhibit "B" and "C"**. *Hardscape* shall mean, but not be limited to, site furnishings, landscape accent lighting, bike racks, fountain, tree grates, decorative free standing or retaining wall(s) and/or any non-standard roadway, sidewalk, median or crosswalk surfacing, such as, but not be limited to the following: specialty surfacing (concrete pavers, color stamped concrete and color stamped asphalt [also known as patterned pavement]). If there are any major changes to the plan(s), the DEPARTMENT shall provide the modified plan(s) to the AGENCY and the AGENCY shall provide their approval or disapproval to the DEPARTMENT within 10 business days. The DEPARTMENT may elect to withdraw the landscape improvements if changes are not approved within the given time frame.

3. MAINTENANCE OF FACILITIES

- A. The AGENCY agrees to maintain the landscape improvements, as existing and those to be installed, within the physical limits described in **Exhibit "A"** and as further described in **Exhibit "B"**. The non-standard improvements within and outside the travelway shall be maintained by the AGENCY regardless if the said improvement was made by the DEPARTMENT, the AGENCY, or others authorized pursuant to section 7, by periodic mowing, pruning, fertilizing, weeding, curb and sidewalk edging, litter pickup, necessary replanting, irrigation system repair and/ or repair of any median concrete replacement associated with specialty surfacing (if applicable) following the DEPARTMENT'S landscape safety and maintenance guidelines, **Exhibit "C"**, the Maintenance Plan. The AGENCY'S responsibility for maintenance shall include all landscaped, turfed and hardscape areas on the sidewalk or within the medians and areas outside the travelway to the right-of-way and/or areas within the travelway containing specialty surfacing. It shall be the responsibility of the AGENCY to restore an unacceptable ride condition of the roadway caused by the differential characteristics of non-standard travelway surfacing and the associated header curb and concrete areas (if applicable) on DEPARTMENT right-of-way within the limits of this Agreement.
- B. Such maintenance to be provided by the AGENCY is specifically set out as follows: to maintain, which means to properly water and fertilize all plants; to keep them as free as practicable from disease and harmful insects; to properly mulch the planting beds; to keep the premises free of weeds; to mow the turf to the proper height; to

properly prune all plants which at a minimum includes: (1) removing dead or diseased parts of plants, (2) pruning such parts thereof to provide clear visibility to signage, permitted outdoor advertising signs (per Florida Statute 479.106), and for those using the roadway and/or sidewalk; (3) preventing any other potential roadway hazards. *Plant materials* shall be those items which would be scientifically classified as plants including trees, palms, shrubs, groundcover and turf. To maintain also means to remove or replace dead or diseased plants in their entirety, or to remove or replace those that fall below original project standards. Palms shall be kept fruit free year-round. To maintain means to keep the header curbs that contain the specialty surfacing treatment in optimum condition. To maintain also means to keep the hardscape areas clean, free from weeds and to repair said hardscape as is necessary to prevent a safety hazard. To maintain also means to keep litter removed from the median and areas outside the travel way to the right of way line. All plants removed for whatever reason shall be replaced by plants of the same species type, size, and grade as specified in the original plans and specifications. Any changes to the original plans shall be submitted by permit application to the DEPARTMENT for review and approval.

- C. If it becomes necessary to provide utilities (water/electricity) to the medians or areas outside the travelway to maintain these improvements, all costs associated with the utilities for the landscape improvements including, but not limited to any impact and connection fees, and the on-going cost of utility usage for water and electrical are the maintaining AGENCY'S responsibility.

(1) The AGENCY shall be solely responsible for any impact and/or connection fees

AND

(2) The AGENCY shall be responsible for the described ongoing utility costs after the installation period of the construction project and thereafter as defined in FDOT Specification 580.

AND

(3) AGENCY shall be responsible for improvements immediately after the establishment period of the construction project. The AGENCY shall be responsible for the maintenance of all landscape improvements including irrigation after the completion of the FDOT Specification 580 Contractor's Plant Establishment Period.

- D. The maintenance functions to be performed by the AGENCY may be subject to periodic inspections by the DEPARTMENT at the discretion of the DEPARTMENT. Such inspection findings will be shared with the AGENCY and shall be the basis of all decisions regarding, repayment, reworking or Agreement termination. The AGENCY shall not change or deviate from said plans without written approval of the DEPARTMENT.

#### 4. NOTICE OF MAINTENANCE DEFICIENCIES

- A. If at any time after the AGENCY has undertaken the maintenance responsibilities for the landscape improvements, it shall come to the attention of the DEPARTMENT'S District Secretary that the limits, or a part thereof, are not properly maintained pursuant to the terms of this Agreement, said District Secretary may at his/her option, issue a written notice that a deficiency or deficiencies exist(s), by sending a certified letter to the AGENCY, placing said AGENCY on notice thereof. Thereafter the AGENCY shall have a period of thirty (30) calendar days within which to correct the cited deficiencies. If said deficiencies are not corrected within this time period, the DEPARTMENT may at its option, proceed as follows:
- (1) Maintain the landscape improvements or any part thereof, with DEPARTMENT or Contractor's personnel and invoice the AGENCY for expenses incurred, and / or
  - (2) At the discretion of the DEPARTMENT, terminate the Agreement in accordance with Paragraph 9 of this Agreement and remove, by the DEPARTMENT or Contractor's personnel, all of the landscape improvements installed under this Agreement or any preceding Agreements, except as to trees and palms, and charge the AGENCY the reasonable cost of such removal.
- B. The AGENCY agrees to reimburse the DEPARTMENT all monies expended by the DEPARTMENT for the landscape improvements listed in **Exhibit "B"** in the amounts listed in **Exhibit "D"** should the landscape improvement fail to be maintained in accordance with the terms and conditions of this Agreement.

#### 5. FUTURE DEPARTMENT IMPROVEMENTS

It is understood between the parties hereto that the landscape improvements covered by this Agreement may be removed, relocated or adjusted at any time in the future as determined to be necessary by the DEPARTMENT in order that the adjacent state road be widened, altered or otherwise changed to meet future criteria or planning needs of the DEPARTMENT.

The AGENCY shall be given sixty (60) calendar days' notice to remove said landscape improvements at AGENCY'S expense after which time the DEPARTMENT may remove same. All permits (including tree permits), fees, and any mitigation associated with the removal, relocation or adjustments of these improvements are the maintaining AGENCY'S responsibility.

#### 6. FUTURE AGENCY IMPROVEMENTS

The AGENCY may construct additional landscape improvements within the limits of the improvements rights of ways identified herein, subject to the following conditions:

- (a) Plans for any new landscape improvements shall be subject to approval by the DEPARTMENT. The AGENCY shall not change or deviate from said plans without written approval by the DEPARTMENT.

- (b) The AGENCY shall procure a permit from the DEPARTMENT.
- (c) All landscape improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.
- (d) The AGENCY agrees to comply with the requirements of this Agreement with regard to any additional landscape improvements it chooses to have installed and there will be no cost to the DEPARTMENT.

## 7. ADJACENT PROPERTY OWNER IMPROVEMENTS

The DEPARTMENT may allow an adjacent property owner to construct additional landscape improvements within the limits of the rights of way identified in **Exhibit "A"** of this Agreement and the AGENCY shall be responsible for maintaining those improvements under this Agreement subject to the following conditions:

- (a) Plans for any new landscape improvements shall be subject to approval by the DEPARTMENT and shall require a valid permit attached with a letter of consent to said plans by the AGENCY. The plans shall not be changed or deviated from without written approval by the DEPARTMENT and the AGENCY.
- (b) All landscape improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.
- (c) The AGENCY agrees to comply with the requirements of this Agreement with regard to any additional landscape improvements installed by an adjacent owner.

## 8. LANDSCAPE IMPROVEMENTS COST

The DEPARTMENT agrees to enter into a contract for the installation of the landscape improvements with an estimated amount of \$382,029.46 as referenced in **Exhibit "D"**. This amount may be reduced or eliminated at the sole discretion of the DEPARTMENT or due to budgetary constraints of the DEPARTMENT.

The DEPARTMENT'S participation in the landscape improvements' cost, as described in **Exhibit "D"** is limited to only those items which are directly related to the Landscape improvement plans.

The AGENCY shall be invited to assist the DEPARTMENT in the final acceptance of the landscape improvements made by the DEPARTMENT at the completion of the installation of the standalone landscape project by the DEPARTMENT and then upon completion of the FDOT Specification 580 Contractor's Plant Establishment Period.

## 9. AGREEMENT TERMINATION

In addition to those conditions otherwise contained herein, this Agreement may be terminated under any one (1) of the following conditions:

- (a) By the DEPARTMENT, if the AGENCY fails to perform its duties under this Agreement, following ten (10) days written notice.
- (b) By the DEPARTMENT, for refusal by the AGENCY to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the AGENCY in conjunction with this Agreement.

#### 10. AGREEMENT TERM

- A. The term of this Agreement commences upon execution by all parties. The term of this Agreement shall remain in effect for twenty-five (25) years.
- B. If the DEPARTMENT chooses not to implement the landscape improvements described in **Exhibit "B"**, this Agreement becomes void and the original Agreement is reinstated if any.

#### 11. LIABILITY AND INSURANCE REQUIREMENTS

- A. With respect to any of the AGENCY'S agents, consultants, sub-consultants, contractors, and/or sub-contractors, such party in any contract for the landscape improvements shall agree to indemnify, defend, save and hold harmless the DEPARTMENT from all claims, demands, liabilities, and suits of any nature arising out of, because of or due to any intentional and/or negligent act or occurrence, omission or commission of such agents, consultants, subconsultants, contractors and/or subcontractors. The AGENCY shall provide to the DEPARTMENT written evidence of the foregoing upon the request of the DEPARTMENT. It is specifically understood and agreed that this indemnification clause does not cover or indemnify the DEPARTMENT for its own negligence.
- B. In the event that AGENCY contracts with a third party to provide the services set forth herein, any contract with such third party shall include the following provisions:
  - (1) AGENCY'S contractor shall at all times during the term of this Agreement keep and maintain in full force and effect, at contractor's sole cost and expense, Comprehensive General Liability with minimum limits of \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability and Worker's Compensation insurance with minimum limits of \$500,000.00 per Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability and Worker's Compensation policy without restrictive endorsements, as filed by the Insurance Services Office and shall name the DEPARTMENT as an additional insured on such policies.
  - (2) AGENCY'S contractor shall furnish AGENCY with Certificates of Insurance of Endorsements evidencing the insurance coverage specified herein prior to the beginning performance of work under this Agreement.

- (3) Coverage is not to cease and is to remain in full force and effect (subject to cancellation notice) until all performance required of AGENCY'S contractor is completed. All policies must be endorsed to provide the DEPARTMENT with at least thirty (30) days' notice of cancellation and or/or restriction. If any of the insurance coverage will expire prior to the completion of work, copies of renewal policies shall be furnished at least (30) days prior to the date of expiration.

## 12. E-VERIFY REQUIREMENTS

The AGENCY shall:

- (a) Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the AGENCY during the term of the contract; and
- (b) Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

## 13. SUPERSEDED AGREEMENTS

This writing embodies the entire Agreement and understanding between the parties hereto and there are no other Agreements and understanding, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby.

## 14. FISCAL TERMS

The DEPARTMENT, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The DEPARTMENT shall require a statement from the Comptroller of the DEPARTMENT that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the DEPARTMENT which are for an amount in excess of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year.

## 15. DISPUTES

The DEPARTMENT'S District Secretary shall decide all questions, difficulties and disputes of any nature whatsoever that may arise under or by reason of this Agreement, the prosecution or fulfillment of the service hereunder and the character, quality, amount and value thereof; and his decision upon all claims, questions and disputes shall be final and conclusive upon the parties hereto.

16. ASSIGNMENT

This Agreement may not be assigned or transferred by the AGENCY in whole or part without the consent of the DEPARTMENT.

17. LAWS GOVERNING

This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. The AGENCY agrees to waive forum and venue and that the DEPARTMENT shall determine the forum and venue in which any dispute under this agreement is decided.

18. NOTICES

Any and all notices given or required under this Agreement shall be in writing and either personally delivered with receipt acknowledgement or sent by certified mail, return receipt requested. All notices shall be sent to the following addresses.

If to the DEPARTMENT:  
State of Florida Department of Transportation  
3400 West Commercial Blvd.  
Ft. Lauderdale, FL 33309-3421  
Attention: Bann Williams, P.L.S.  
FDOT District IV Landscape Architect

If to the AGENCY:  
Martin County  
2401 S.E. Monterey Road  
Stuart, Florida 34996  
Attention: County Manager

19. LIST OF EXHIBITS

- Exhibit A: Landscape Improvements Maintenance Boundaries
- Exhibit B: Landscape Improvement Plans
- Exhibit C: Maintenance Plan for Landscape Improvements
- Exhibit D: Approximate Cost for Landscape Improvements

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement effective the day and year first above written.

ATTEST:

BOARD OF COUNTY COMMISSIONERS  
MARTIN COUNTY, FLORIDA

\_\_\_\_\_  
CAROLYN TIMMANN, CLERK OF THE  
CIRCUIT COURT AND COMPTROLLER

\_\_\_\_\_, CHAIR

APPROVED AS TO FORM & LEGAL SUFFICIENCY:

\_\_\_\_\_  
SARAH W. WOODS, COUNTY ATTORNEY

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

By: \_\_\_\_\_  
Transportation Development Director

Attest: \_\_\_\_\_ (SEAL)  
Executive Secretary

Legal Review

Date

\_\_\_\_\_  
Office of General Counsel

**SECTION No.:** 89060000  
**FM No. (s):** 422641-5-52-01  
**COUNTY:** Martin  
**S.R. No.:** 76

**EXHIBIT A**

**LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES**

**I. LIMITS OF MAINTENANCE FOR LANDSCAPE IMPROVEMENTS**  
State Road 76 (Kanner Highway) from M.P. 25.777 to M.P. 26.072

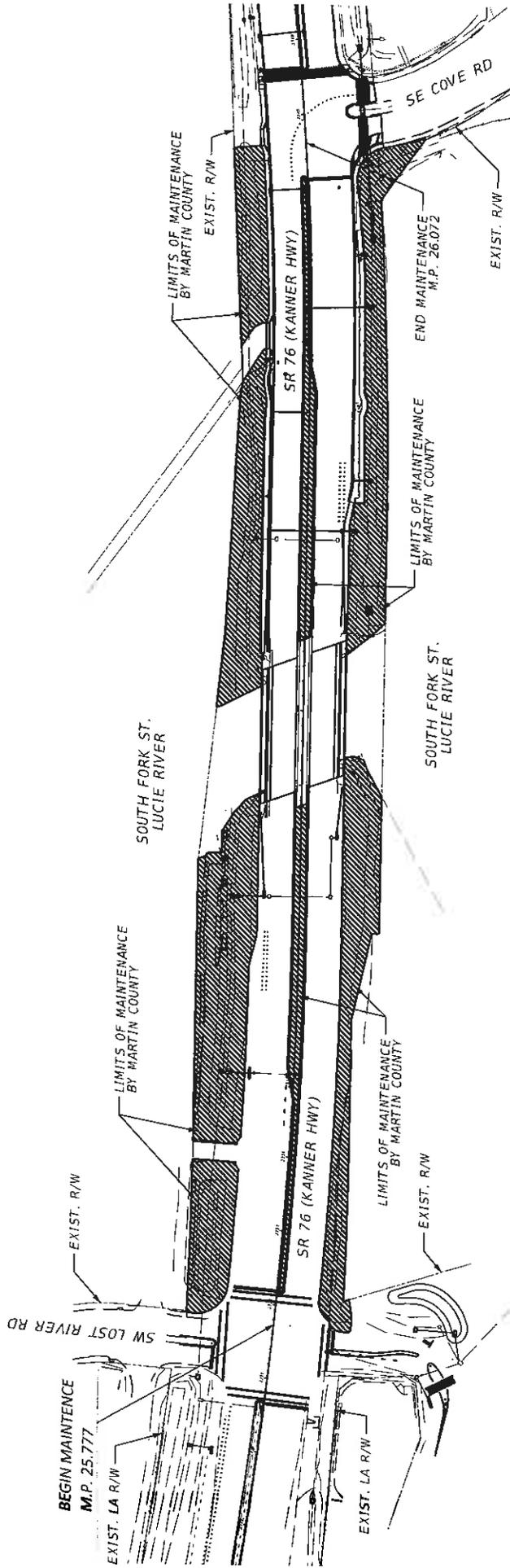
**II. LANDSCAPE IMPROVEMENTS MAINTENANCE RESPONSIBILITIES MAP:**

*See Attached*

**LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARY MAP**  
 FLORIDA DEPARTMENT OF TRANSPORTATION  
 FPID #422641-5-52-01  
 EXHIBIT A-III

SR 76 (KANNER HWY.)  
 FROM LOST RIVER RD. TO COVE RD.

 LIMITS OF MAINTENANCE  
 BY MARTIN COUNTY



**SECTION No.:** 89060000  
**FM No. (s):** 422641-5-52-01  
**COUNTY:** Martin  
**S.R. No.:** 76

**EXHIBIT B**

**LANDSCAPE IMPROVEMENT PLANS**

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

Please see attached plans prepared by: Robert J. Cotleur, PLA.

Date: September 5, 2019

**STATE OF FLORIDA**  
**DEPARTMENT OF TRANSPORTATION**

**CONTRACT PLANS**

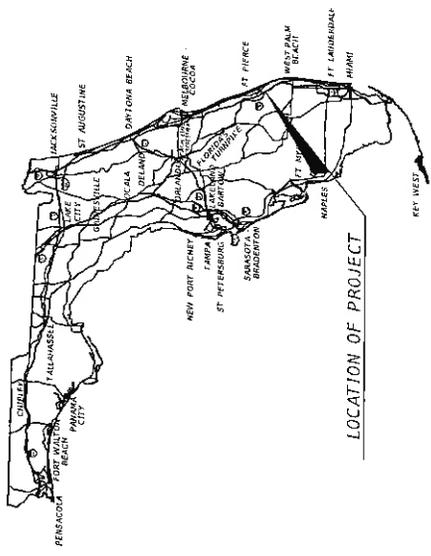
FINANCIAL PROJECT ID 422641-5-52-01

MARTIN COUNTY (89060000)  
STATE ROAD NO. 76 (KANNER HWY)  
FROM SW LOST RIVER RD TO SE COVE RD

**LANDSCAPE PLANS**

- INDEX OF LANDSCAPE PLANS**
- SHEET NO. SHEET DESCRIPTION
  - LD-1 KEY SHEET
  - LD-2 SIGNATURE SHEET
  - LD-3 SUMMARY OF PAY ITEMS
  - LD-4 TO LD-48 TABULATION OF QUANTITIES AND PLANT SCHEDULE
  - LD-5 GENERAL NOTES AND LANDSCAPE DETAILS
  - LD-6 LANDSCAPE PLAN
  - LD-7 TO LD-9 IRRIGATION TABULATION OF QUANTITIES
  - LD-10 IRRIGATION PLAN
  - LD-11 TO LD-13 IRRIGATION DETAILS
  - LD-14 IRRIGATION DETAILS
  - LD-15 TEMPORARY TRAFFIC CONTROL PLAN

TO STUART



**LANDSCAPE PLANS**  
**PROFESSIONAL OF RECORD:**  
ROBERT J. COTLEUR, R.L.A.  
R.L.A. NO: 1067  
COTLEUR & HEARING, INC.  
1931 Commerce Lane, Suite 1  
Jupiter, Florida 33458  
561-747-6336 Fax 561-747-1377  
Cdt. of Auth. LC-C000239  
Vendor No. 65-0270814  
CONTRACT NO. C-9041

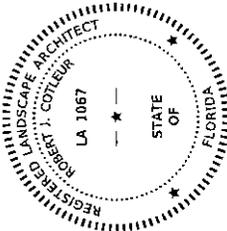
**FDOT PROJECT MANAGER:**  
JAMES HUGHES, PE

**GOVERNING DESIGN STANDARDS:**  
Florida Department of Transportation, FY2019-20 Design Standards eBook (DSeB) and applicable Design Standards Revisions (DSRs) at the following website:  
<http://www.dot.state.fl.us/rdesign/DesignStandards/Standards.shtm>

**GOVERNING STANDARD SPECIFICATIONS:**  
Florida Department of Transportation, January 2020 Standard Specifications for Road and Bridge Construction at the following website:  
<http://www.dot.state.fl.us/programmanagement/implemented/SpecBooks>

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
E4U26	20	LD-1

THIS DOCUMENT HAS BEEN REVIEWED, SIGNED AND SEALED BY:



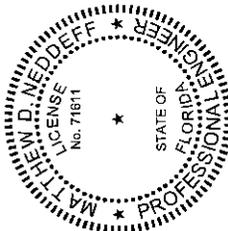
REGISTERED LANDSCAPE ARCHITECT  
 ROBERT J. COTLEUR  
 LA 1067  
 STATE OF FLORIDA

THE ABOVE NAMED PROFESSIONAL LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G10-11.011, F.A.C.

**LANDSCAPE PLANS**

- SHEET NO. KEY SHEET
- LD-1 SIGNATURE SHEET
- LD-2 SUMMARY OF PAY ITEMS
- LD-3B SUMMARY OF QUANTITIES
- LD-4B TABULATION OF QUANTITIES AND PLANT SCHEDULE
- LD-5 GENERAL NOTES AND LANDSCAPE DETAILS
- LD-6 LANDSCAPE PLAN
- LD-7 TO LD-9 IRRIGATION PLAN
- LD-10 IRRIGATION TABULATION OF QUANTITIES
- LD-11 TO LD-13 IRRIGATION DETAILS
- LD-14

THIS DOCUMENT HAS BEEN REVIEWED, SIGNED AND SEALED BY:



REGISTERED PROFESSIONAL ENGINEER  
 MATTHEW D. NEDDEFF  
 No. 71811  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G10-11.011, F.A.C.

**LANDSCAPE PLANS**

- SHEET NO. SHEET DESCRIPTION
- LD-2 SIGNATURE SHEET
- LD-4A SUMMARY OF QUANTITIES
- LD-15 TEMPORARY TRAFFIC CONTROL PLAN

DATE	DESCRIPTION	REVISIONS

Landscape Architect of Record: Robert J. Cotleur, P.E. #1067  
 COTLEUR & HEARING, INC.  
 1934 Commerce Lane, Suite 1  
 Jacksonville, FL 32208  
 904.747.4336  
 Cert. of Auth. LC-C000239

STATE OF FLORIDA	
DEPARTMENT OF TRANSPORTATION	
ROAD NO.	FINANCIAL PROJECT ID
76	422641-5-52-01
COUNTY	
MARTIN	

SHEET NO. LD-2

**SIGNATURE SHEET**

FLORIDA DEPARTMENT OF TRANSPORTATION  
PROPOSAL SUMMARY OF PAY ITEMS  
FOR PROPOSAL: E4026

LEAD PROJECT : 422641-5-52-01	DISTRICT : 04	COUNTY/SECTION : 89060000			
PROJECT(S) : 42264155201	COUNTY : MARTIN				
0001 SUMMARY OF LANDSCAPE / PERIPHERAL					
SPTS ALT	ITEM NUMBER	ITEM DESCRIPTION	UNIT	42264155201	QUANTITY TOTAL
	0999- 2-	LUMP SUM CONTRACT, ALTERNATIVE BIDDING 42264155201	LS	1.000	1.000

**PAY ITEM NOTES**

999-2 LUMP SUM CONTRACT: ALL OTHER PAY ITEM NUMBERS SHOWN IN THE CONTRACT PLANS ARE PROVIDED ONLY FOR THE PURPOSE OF DESCRIBING THE WORK TO BE PERFORMED. PAY ITEM DESCRIPTIONS ARE FOUND IN THE DEPARTMENT'S BASIS OF ESTIMATES MANUAL.

REFER TO TABULATION OF QUANTITIES FOR SUMMARY OF ALL OTHER PAY ITEMS.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. 76 COUNTY MARTIN FINANCIAL PROJECT ID 422641-5-52-01		SHEET NO. (P-1)
Language Makers Of Record, Robert J. Citterer, AIA #1067 COTLEUR & HEARING, INC. 1934 Commerce Lane Suite 1 Spring Hill, Florida 33489-7463 1377 Cert. of Auth. LC-C000239		<b>SUMMARY OF PAY ITEMS</b>
DATE DESCRIPTION	REVISIONS DATE DESCRIPTION	9/5/2019 9:10:00 AM



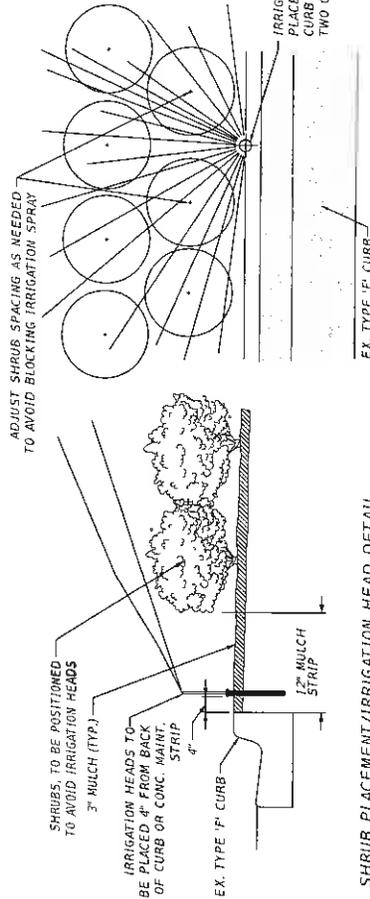


**GENERAL NOTES**

- 1) ENSURE UNDERGROUND FIBER LINES AND OTHER UTILITIES LOCATED WITHIN THE MEDIANS WILL BE PROTECTED FROM DAMAGE BY VERIFYING THEM (BY HAND) PRIOR TO DIGGING.
- 2) REMOVE EXISTING VEGETATION FROM MEDIANS PRIOR TO INSTALLING NEW PLANTS.
- 3) THE MAINTAINING AGENCY FOR LANDSCAPE AND IRRIGATION IS MARTIN COUNTY.
- 4) THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY.

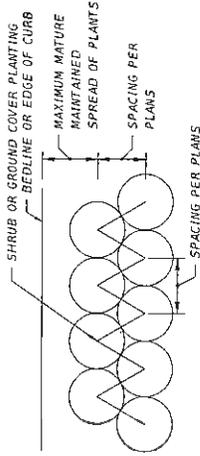
**UTILITY PROVIDERS LIST:**

PROVIDER	CONTACT	PHONE
AT&T DISTRIBUTION	LUKE FOLKERTS	321-993-6172
FLORIDA POWER & LIGHT - MARTIN	RYAN JOHNSON	561-402-4513
TECO PEOPLES GAS - PALM BEACH	RYAN JOHNSON	561-402-4513
FLORIDA POWER & LIGHT - MARTIN	RYAN JOHNSON	561-402-4513
MARTIN CO. PUBLIC SERVICES TRAFFIC DIVISION	ROB KOPPEL	772-335-2660
MARTIN COUNTY UTILITIES	DAWIAN BONO	772-338-5528
TECO PEOPLES GAS - PALM BEACH	STEVE VANDERSLUIS	772-321-7437
CROWN CASTLE FIBER	MAX CHAMORRO	954-453-0812
	DANNY HASKETT	786-246-7827



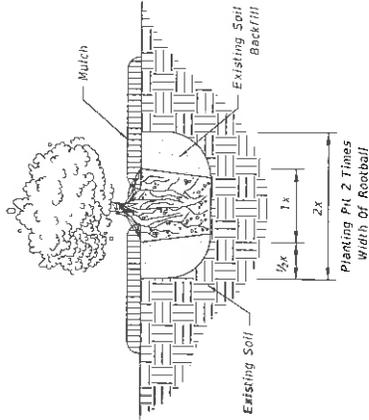
**SHRUB PLACEMENT/IRRIGATION HEAD DETAIL**

NOT TO SCALE



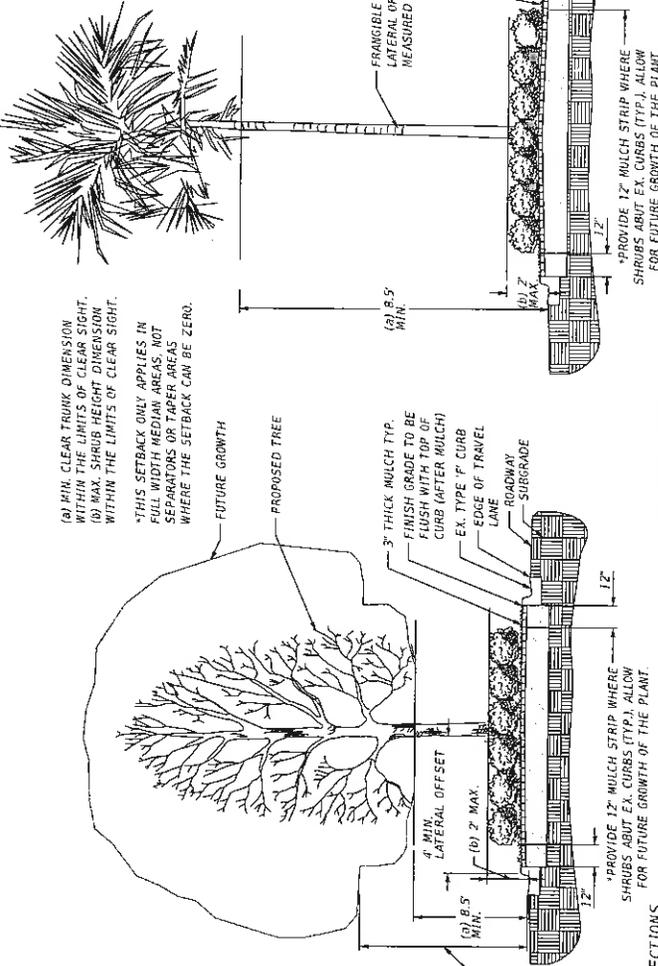
**GROUND COVER/SHRUB LAYOUT DETAIL**

NOT TO SCALE



**GROUND COVER/SHRUB PLANTING DETAIL**

NOT TO SCALE



**TYPICAL MEDIAN SECTIONS**

NOT TO SCALE

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

Landscape Architect of Record: Robert J. Collier, P.E. #100		STATE OF FLORIDA	
COTLERUS & HEARING, INC.		DEPARTMENT OF TRANSPORTATION	
1934 Commerce Lane Suite 1		ROAD NO.	
Jupiter, Florida 33408		76	
Tel: 561-749-1337		COUNTY	
Fax: 561-749-1337		MARTIN	
Lic. No. LC-C000230		FINANCIAL PROJECT ID	
		422641-5-52-01	

**GENERAL NOTES AND LANDSCAPE DETAILS**

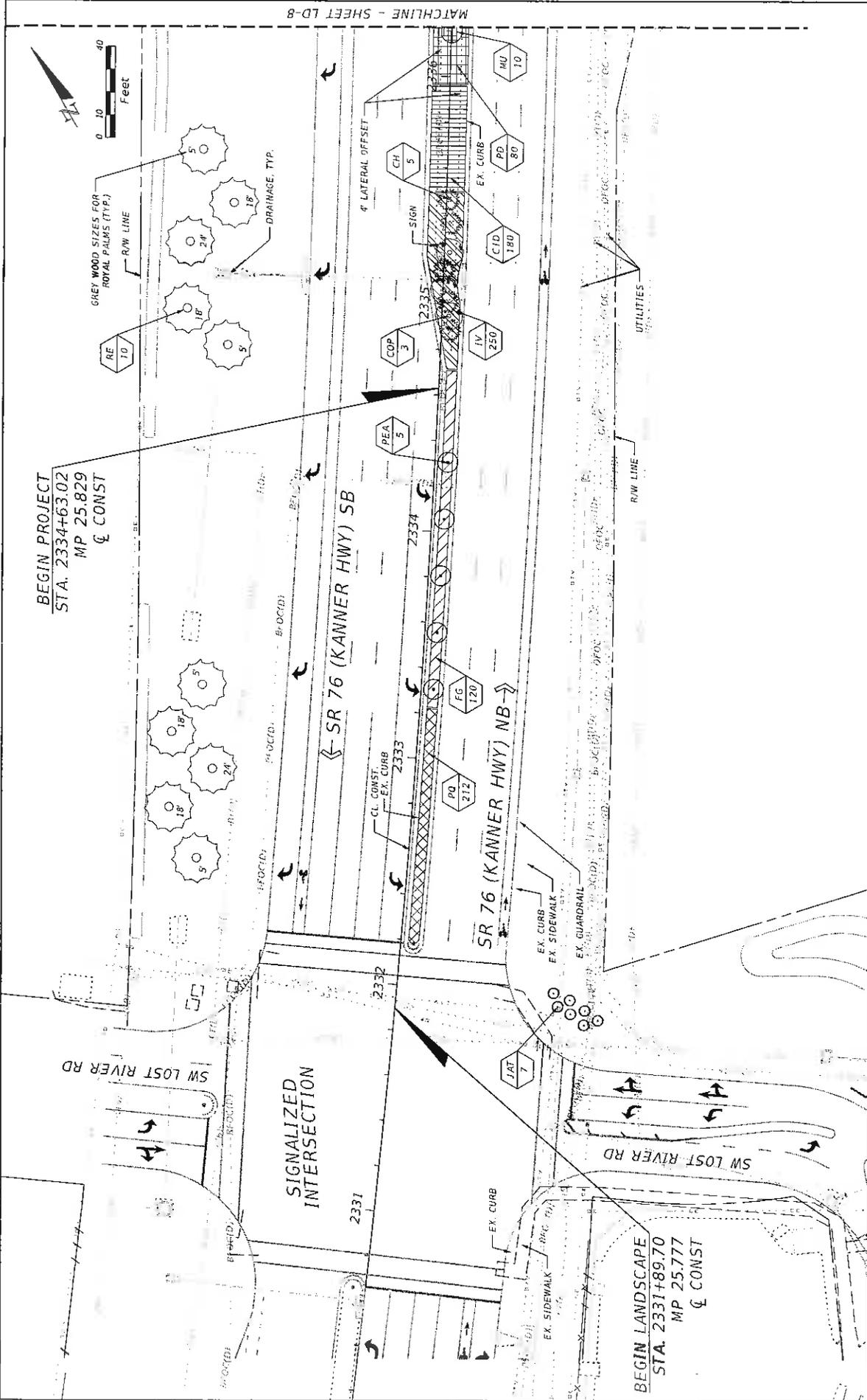
SHEET NO.

LD-6

9/5/2019

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C:\PROJECTS\DOT\19-0009 - SR 76 EAST HOV 3 TO NUMBERS 76X2700 (19)X2461-5-32



BEGIN PROJECT  
 STA. 2334+63.02  
 MP 25.829  
 & CONST

BEGIN LANDSCAPE  
 STA. 2331+89.70  
 MP 25.777  
 & CONST

MATCHLINE - SHEET LD-8

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
76	MARTIN	422641-5-52-01	

LANDSCAPE ARCHITECT OF RECORD: Robert J. Collier, RA # 1067	
COTLEUR & HEARING, INC.	
1934 Commerce Lane Suite 1	
Largo, Florida 33488	
Tel: 727-797-1377	
Fax: 727-797-1377	
Cert. of Auth. LC-CR00239	

9/17/09 9:00:55 AM Default

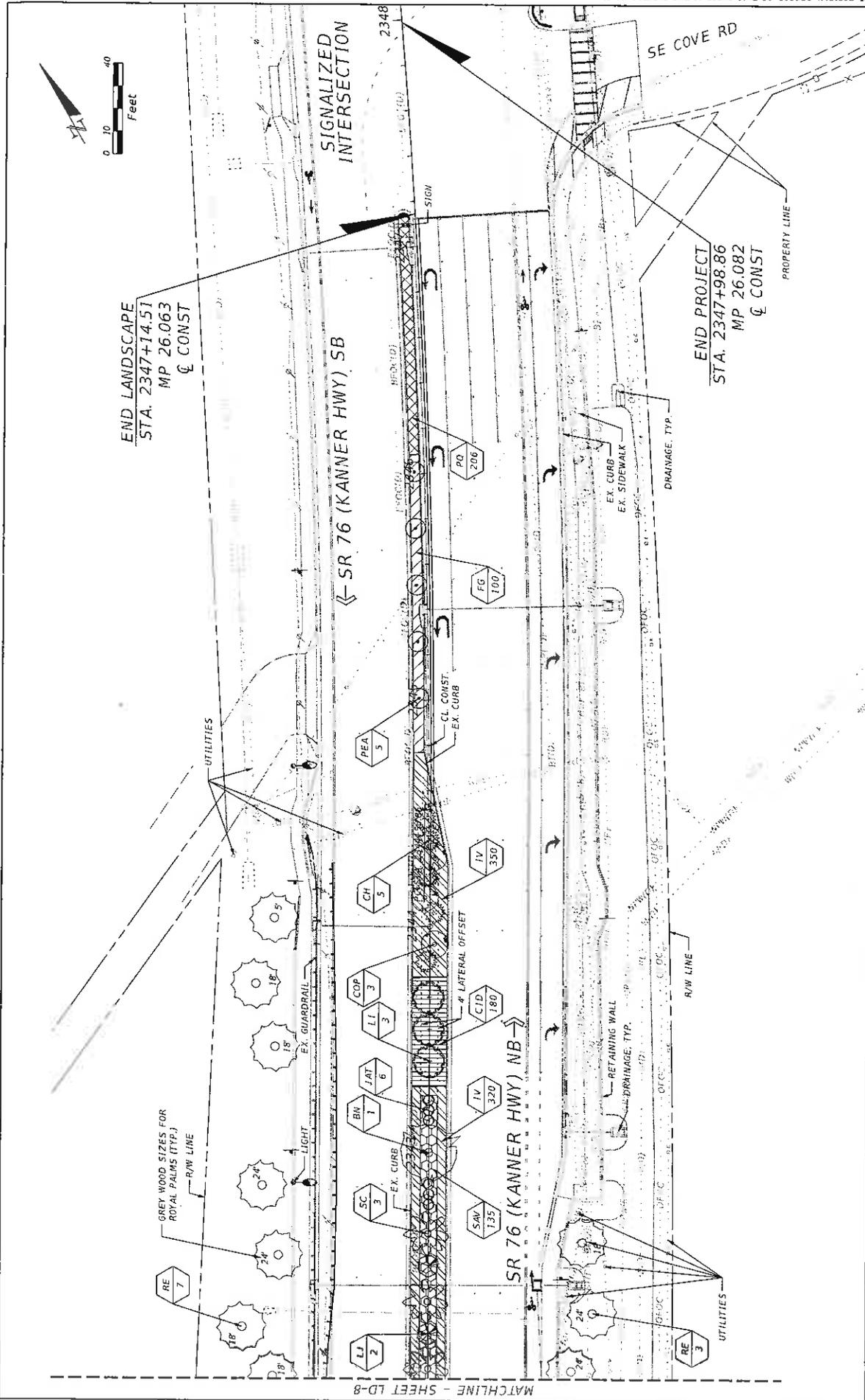
LANDSCAPE PLAN

SHEET NO.

LD-7

FOR PROJECTS: FDOT V&B 3809 - SR 76 Lost River to Monterey RA/CADD Files 422641-5-52-01.DWG





END LANDSCAPE  
STA. 2347+14.51  
MP 26.063  
± CONST

END PROJECT  
STA. 2347+98.86  
MP 26.082  
± CONST

SIGNALIZED INTERSECTION

← SR 76 (KANNER HWY) SB

SR 76 (KANNER HWY) NB →

SE COVE RD

REVISIONS		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA	
DEPARTMENT OF TRANSPORTATION	
ROAD NO.	FINANCIAL PROJECT ID
76	422641-5-52.01
COUNTY	MARTIN

LANDSCAPE ARCHITECT: OF RECORD: Robert J. Cotleur, P.L.A. #1067  
 COTLEUR & HEARING, INC.  
 1924 Commerce Lane Suite 1  
 Jupiter, Florida 33458  
 Cert. of Auth. LC-0000239

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F:\PROJECTS\FDOT\NR-8809 - SR 76 (lost River to Monterey)\RJACADD Files\22841-5-52-01\msssc\Planting.DWG.dgn

LANDSCAPE PLAN

SHEET NO.

LD-9

IRRIGATION LEGEND AND TABULATION OF QUANTITIES

SYM	DESCRIPTION	UNIT	QUANTITY BY SHEET			GRAND TOTAL
			LD-11	LD-12	LD-13	
⊙	RAIN BIRD 1404 BUBBLER	EA	13	16	22	51
⊙	RAIN BIRD 1812 - 12" POP-UP, END STRIP	EA	1		1	2
⊙	RAIN BIRD 1812 - 12" POP-UP, SIDE STRIP	EA	33		28	61
⊙	RAIN BIRD 1812 - 12" POP-UP, 15' QUARTER	EA		4		4
⊙	RAIN BIRD 1812 - 12" POP-UP, 15' HALF	EA	19	51	34	104
⊙	RAIN BIRD 1812 - 12" POP-UP, 10' HALF	EA	3		3	6
⊙	RAIN BIRD 1" PEB VALVE (MODEL #100-PEB) IN 12" x 18" TIER 8 CARSON VALVE BOX	EA	6	8	5	19
⊙	LET XC 12 STATION CONTROLLER WITH RAIN SENSOR	EA	1		1	2
⊙	1" RPZ BACKFLOW PREVENTER ASSEMBLY	EA	1			1
⊙	WATER SERVICE TAP & 5/8" METER IN 12"x18" CONCRETE METER BOX (PROVIDED AND INSTALLED BY COUNTY)	EA	1			1
---	*CLASS 200 LATERAL LINE (SIZE NOTED ON PLANS)	LF	781	758	1,055	2,594
---	*2" SCH. 40 PVC MAIN LINE	LF	516	300	712	1,528
---	*DIRECTIONAL BORE (SEE PLANS FOR SIZE)	LF	60			78

\*NOTE: PIPE LENGTHS BASED ON SCHEMATIC LAYOUT SHOWN IN THESE PLANS. ACTUAL QUANTITIES MAY VARY.

SYSTEM DESIGN CRITERIA FOR LATERAL PIPE SIZES

3/4"	0 - 8	GPM
1"	8 - 15	GPM
1-1/4"	15 - 22	GPM
1-1/2"	22 - 32	GPM
2"	32 - 50	GPM
3"	50 - 68	GPM
4"	68 - 120	GPM

ALL PIPE SHALL BE SIZED ACCORDING TO THE ABOVE CRITERIA UNLESS SPECIFICALLY NOTED.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 6100-11.01, F.A.C.

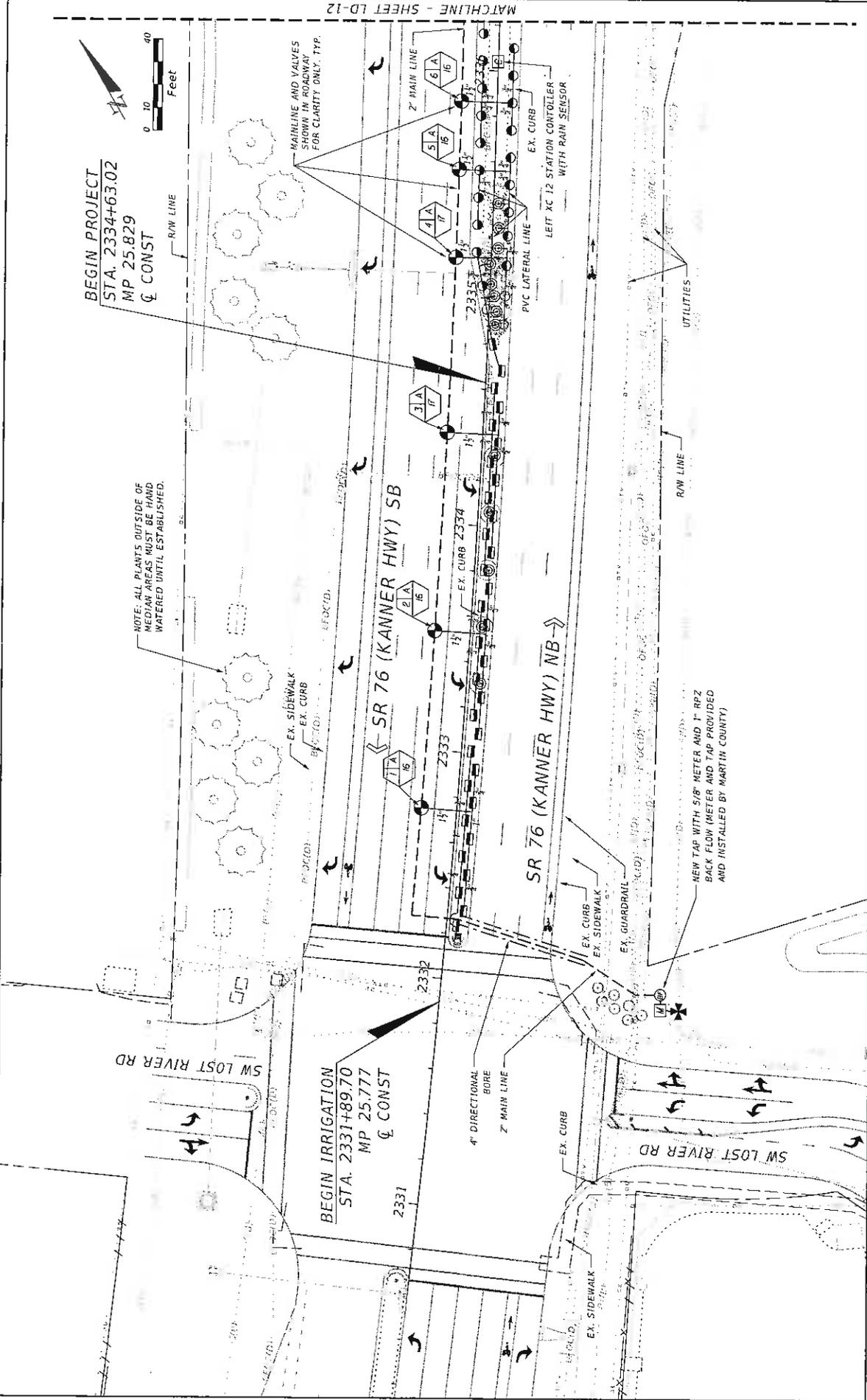
REVISIONS		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION

LANDSCAPE ARCHITECT OF FLORIDA, Robert J. Collier, No. A #1167 COLLEUR & HEARING, INC. 1934 Commerce Lane Suite 1 Dunedin, Florida 33459 Phone: 727-747-1377 Cert. of Auth. LC-C000239		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. 76 COUNTY MARTIN FINANCIAL PROJECT ID 422641-5-52-01	SHEET NO. LD-10
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MATCHLINE - SHEET LD-12

BEGIN PROJECT  
STA. 2334+63.02  
MP 25.829  
Q CONST

NOTE: ALL PLANTS OUTSIDE OF  
MEDIAN AREAS MUST BE HARD  
WATERED UNTIL ESTABLISHED.



REVISIONS		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
76	MARTIN	422641-5-52-01	

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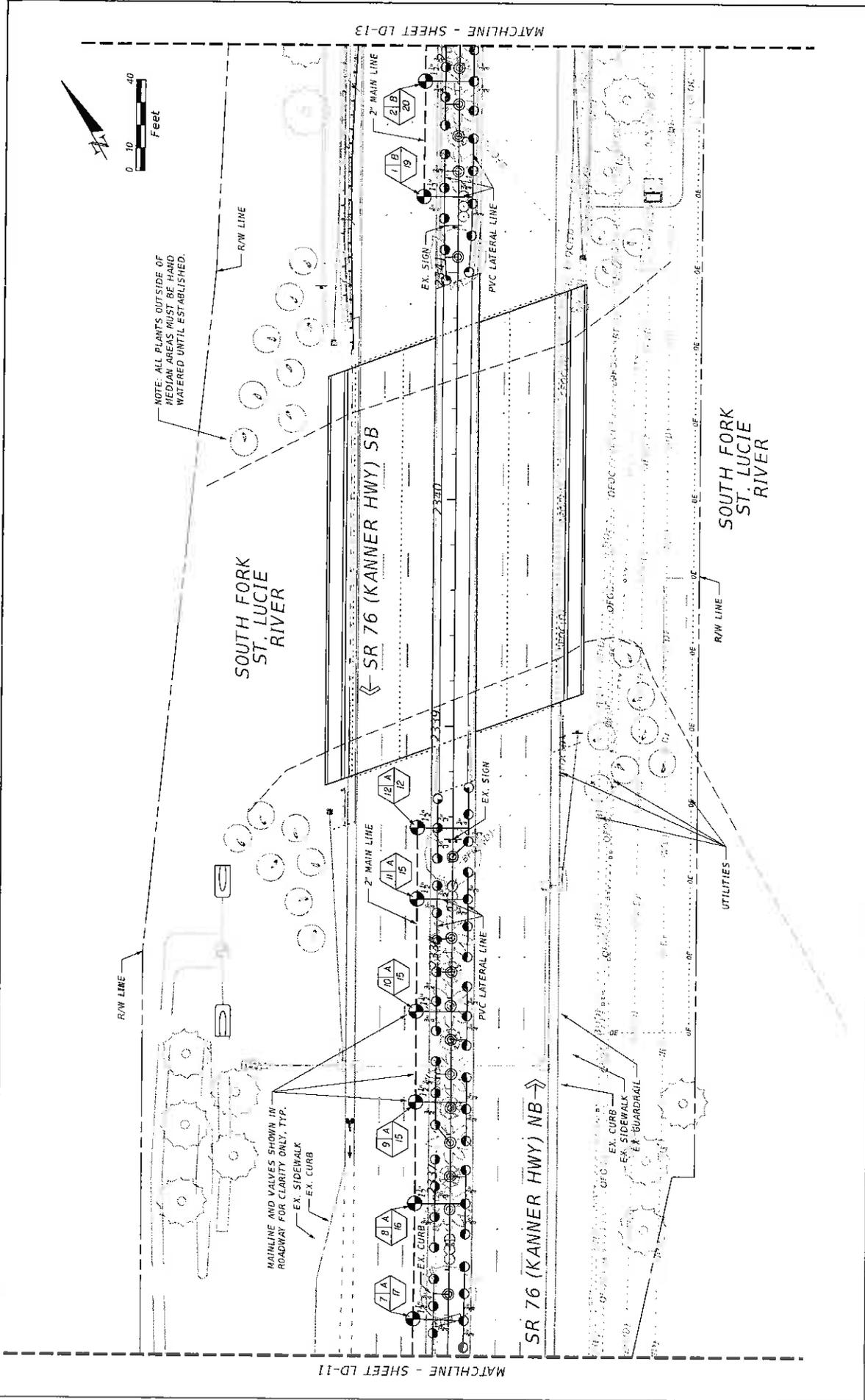
  

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**IRRIGATION PLAN**

SHEET NO. LD-11

PROJECTS\DOT\18-0899 - SR 76 Lost River to Monterey Rd\CADD FILES\22641-5-52-01\IrrigationPlan11.dwg

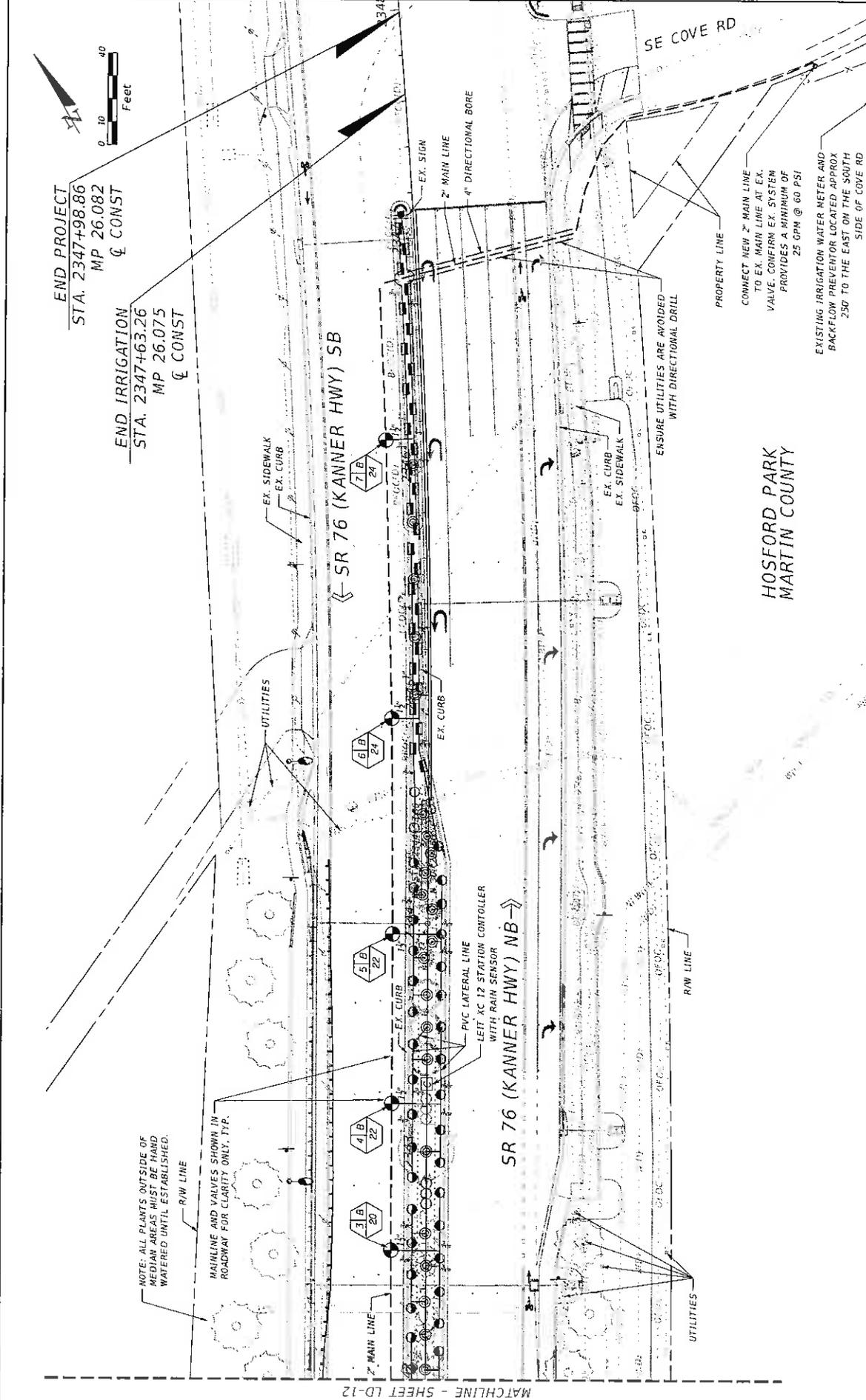


DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

9/17/2019 9:49:02 AM Default F:\PROJECTS\DOT\18-0609 - SR 76 (East River to Monterey Rd)\CADD FILES\28415-52-01\IrrigatnPlan.DWG		STATES OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. 76 COUNTY MARTIN FINANCIAL PROJECT ID 422641-5-52-01	SHEET NO. LD-12
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Landscape Services of Record: Robert J. Coleler, P.E., #1087  
 COLELER & HEARING, INC.  
 1934 Commerce Lane Suite 1  
 Jupiter, Florida 33458  
 Phone: 561-742-1377  
 Cert. of Auth. LC-C000239



END PROJECT  
STA. 2347+98.86  
MP 26.082  
∅ CONST

END IRRIGATION  
STA. 2347+63.26  
MP 26.075  
∅ CONST

SR 76 (KANNER HWY) SB

SR 76 (KANNER HWY) NB

HOSFORD PARK  
MARTIN COUNTY

EXISTING IRRIGATION WATER METER AND BACKFLOW PREVENTOR LOCATED APPROX 250 TO THE EAST ON THE SOUTH SIDE OF COVE RD

CONNECT NEW 2" MAIN LINE TO EX. MAIN LINE AT EX. VALVE. CONFIRM EX. SYSTEM PROVIDES A MINIMUM OF 25 GPM @ 60 PSI

ENSURE UTILITIES ARE AVOIDED WITH DIRECTIONAL DRILL

PROPERTY LINE

0 10 40 Feet

IRRIIGATION PLAN

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

ROAD NO. 76  
COUNTY MARTIN  
FINANCIAL PROJECT ID 422641-5-52-01

9/27/2009 9:10:04 AM Default



**SECTION No.:** 89060000  
**FM No. (s):** 422641-5-52-01  
**COUNTY:** Martin  
**S.R. No.:** 76

**EXHIBIT C**

**MAINTENANCE PLAN FOR LANDSCAPE IMPROVEMENTS**

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.

*Please see attached*

## MAINTENANCE PLAN Landscape Improvements

**Project State Road No(s):** 76 (Kanner Highway) M.P. 25.777 to M.P. 26.072  
**FM No:** 422641-5-52-01  
**Maintaining Agency:** Martin County  
**RLA of Record:** Robert J. Cotleur  
**Date:** August 21, 2019

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### **I. 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 Standard Plans*, *FDOT Plans Design Manual* 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. Please be alert to changes in

fertilization types per University of Florida, Institute of Food and Agricultural Services (I.F.A.S.) recommendations. 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 Project Site Maintenance Requirements and Recommendations as guidance. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be mature height in compliance with Window Detail. Vertical tree heights must meet *FDOT Maintenance Rating Program (MRP)* standards. See Reference pages.

### **STAKING AND GUYING**

All staking materials, except for replacements, are to be removed by the completion of FDOT establishment or after one year (whichever comes first). Any subsequent staking and guying activities by the Agency must adhere to *FDOT Standard Plans* guidelines (See Index 580-001). 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 when 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 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 surfacing and tree grates. Final surface tolerance from grade elevations shall, at a minimum, meet the most current FDOT Maintenance Rating Program Handbook for a sidewalk; ADA accessible sidewalk; and FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on The State Highway System. If the specialty surfacing or tree grates become damaged, they shall be replaced with the same type and specification as the approved plan.

#### **HARDSCAPE (CONCRETE PAVERS)**

All tree grates and concrete pavers (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 23 14 13 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.

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 (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*.

**HARDSCAPE (LANDSCAPE ACCENT LIGHTING)  
(IF APPLICABLE)**

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)  
(IF APPLICABLE)**

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**

1. General Information

Some of the unique landscape features provided include:

- The medians have solid shrub/ground cover plantings (without sod), large and small palms, accent trees and shrubs. The medians were designed with two irrigation systems utilizing spray heads. The water sources for the system will be potable county water. One system will utilize a new tap and meter provided by the County, the second system will connect to an existing main and expand the system into the medians. New solar controllers will be provided for both.
- The remainder of the landscape includes plantings of Sabal palms, Royal palms and Jatropha located to the north and south of SR 76 outside of the roadway. These trees will not be irrigated and were chosen based on their ability to thrive in these conditions.

2. Specific Maintenance Requirements

a. Specific Fertilization Requirements

- Several of the plant species utilized, must receive periodic feedings to keep them healthy. These species include Bismarck palms, European Fan palms, Caranday palms, Jatropha, Queen's Crepe Myrtle trees, Ligustrum trees, Solitaire palms, Royal palms and Puerto Rican Hat palms.

- Utilize a 'palm special' fertilizer blend with an 8-2-12 +4 Mg analysis. All macro-nutrients shall be controlled release, and the blend shall include all micro-nutrients. Utilize this fertilizer on all of the plants, including palms, trees and shrubs. Do not utilize fertilizers that are specifically formulated for trees and shrubs on the palms. Follow all manufacturer recommended rates and application methods. Ensure all fertilization practices conform to Martin County codes.
- b. Specific Pruning Requirements
- For all the palm trees, pruning should only be done to remove the fronds that are below 90° from the trunk, and only when broken or completely dead. Self-cleaning palms do not require pruning, as their fronds fall off when the available nutrients have been exhausted.
  - The trees should be pruned at least once a year to maintain all lateral offsets and vertical clearance requirements, increase wind resistance and develop a strong central leader (except multi-stemmed trees) and to correct structural problems; such as crossing branches or any other undesirable growth.
  - Pruning should be done before the height of the hurricane season, in June or July.
- c. Shrub Trimming
- The following species can be sheared as a mass to provide a uniform height. The edges of the mass should be leaned inward and should be rounded off at the top, as opposed to straight sides with square corners. The masses of different species should be maintained at different heights, as to provide more visual interest. These species include the Dwarf Cocoplum (2.5'), Green Island Ficus (2.6'), Dwarf Yaupon Holly (2.2'), Dwarf Podocarpus (2'), and Dwarf Variegated Schefflera (3.5').
  - The following monocot shrub should **not** be sheared, but instead should be cutback every year (or every other year, as needed) to remove bio-mass and regenerate the plant. This trimming should be done in early spring, (around March) and includes the Muhly Grass.
  - The Purple Queen ground covers should only be trimmed to remove dead or damaged leaves and to prevent plant from over growing the curbs, never to control height and never sheared. This species can become invasive so it's important to keep it from invading other plant beds.
3. Specific Irrigation Requirements
- The irrigation should be monitored monthly to ensure the plants are receiving the proper amount of supplemental water and are not being over-watered. Bubblers were provided on all trees and they can be shut off once the trees have become established.
4. Pest and Disease Management
- All plants should be checked for deficiencies monthly. Deficiencies including insect infestations, nutrient deficiencies and disease should be treated as soon as possible before adversely affecting the plant material.

## 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](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 2015*

<http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Plant-and-Apiary-Inspection>

Florida Department of Community Affairs (DCA), *Florida Board of Building Codes & Standards, 2017 Florida Building Code, Chapter 11 Florida Accessibility Code for Building Construction Part A*

[http://www.floridabuilding.org/fbc/workgroups/Accessibility\\_Code\\_Workgroup/Documentation/CHAPTER\\_11\\_w\\_florida\\_specifics.htm](http://www.floridabuilding.org/fbc/workgroups/Accessibility_Code_Workgroup/Documentation/CHAPTER_11_w_florida_specifics.htm)

Florida Department of Transportation, *Program Management, Maintenance Specifications Workbook Supplemental Specifications, Section 580 Landscape Installation*

<http://www.fdot.gov/programmanagement/Maintenance/2019Jan/default.shtm>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 580-001 Landscape Installation*

<http://www.fdot.gov/design/standardplans/current/IDX/580-001.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 212.11 Clear Sight Triangles*

<http://www.fdot.gov/roadway/FDM/current/2018FDM212Intersections.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 215.2.3 Clear Zone Criteria and 215.2.4 Lateral Offset*

*Table 215.2.1 Clear Zone Width Requirements*

*Table 215.2.2 Lateral Offset Criteria (for Trees)*

<http://www.fdot.gov/roadway/FDM/current/2018FDM215RoadsideSafety.pdf>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index Series 102-600 Traffic Control through Work Zones*

<http://www.fdot.gov/design/standardplans/current/IDx/102-600.pdf>

Department of Transportation, Landscape Architecture Website

[www.MyFloridaBeautiful.com](http://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](http://www.fpl.com/residential/trees/right_tree_right_place.shtml)

SECTION No.: 89060000  
FM No. (s): 422641-5-52-01  
COUNTY: Martin  
S.R. No.: 76

**EXHIBIT D**

**APPROXIMATE COST FOR LANDSCAPE IMPROVEMENTS**

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.

**\$ 382,029.46**

# SR76 (LOST RIVER TO COVE RD) - BUDGET BREAKDOWN

FPI# 422641-5, CH# 18-0809

Biddability Phase Submittal 8/30/2019

PAY ITEM NO.	DESCRIPTION	SIZE / REMARKS	UNIT	GRAND TOTAL	UNIT COST	SUB-TOTAL
999-2	LUMP SUM CONTRACT		LS	1	\$ 381,829.00	
101-1	MOBILIZATION	INCLUDES CONSTRUCTION PHASE ONLY (EST 12%)	LS	1	\$ 45,819.48	\$ 45,819.48
102-1	MAINTENANCE OF TRAFFIC (MOT)	INCLUDES CONSTRUCTION PHASE ONLY (EST 5%)	LS	1	\$ 19,091.45	\$ 19,091.45
107-1	LITTER REMOVAL AND DISPOSAL	INCLUDES CONSTRUCTION AND ESTABLISHMENT PHASES	AC	181.366	\$ 18.43	\$ 3,342.58
107-2	MOWING	INCLUDES CONSTRUCTION AND ESTABLISHMENT PHASES	AC	79.982	\$ 43.92	\$ 3,512.81
	BED PREPARATION	EXIST VEGETATION REMOVAL (INCLUDED IN LUMP SUM LANDSCAPE COST)	LS	1	\$ 1,500.00	\$ 1,500.00
570-1-2	PASPALUM NOTATUM - Bahia Sod		SY	280	\$ 3.60	\$ 1,008.00
580-1-1	SMALL PLANTS	SOLID SHRUB PLANTINGS IN MEDIANS	LS	1	\$ 20,274.50	\$ 20,274.50
580-1-2	LARGE PLANTS	BOLD PALMS IN MEDIANS AND NATIVE TREES AT R/W EDGES	LS	1	\$ 164,535.00	\$ 164,535.00
590-70	IRRIGATION SYSTEM	WATER METERS TO BE PROVIDED BY MARTIN COUNTY	LS	1	\$ 49,132.52	\$ 49,132.52
	2 YEAR EXTENDED MAINTENANCE FOR LANDSCAPE (14% 1ST YR + 10% 2ND YR OF LANDSCAPE COST)		LS	1	\$ 73,813.12	\$ 73,813.12

**TOTAL PROJECT COST \$ 382,029.46**

**TOTAL PROJECT BUDGET \$ 381,829.00**

**DIFFERENCE \$ (200.46)**

# SR76 (LOST RIVER TO COVE RD) - PLANT LIST AND COST ESTIMATE

FPI# 422641-5, CH# 18-0809

8/30/2019

*PAY ITEM NO.	SYMBOL	DESCRIPTION	SIZE / REMARKS	NATIVE	MAX. MAINT. SIZE	UNIT	QTY	UNIT COST	SUB-TOTAL
570-1-2		<i>Paspalum notatum</i> - Bahia Sod		Y		SY	280	\$ 3.60	\$ 1,008.00
580-1-1		<b>SMALL PLANTS</b>				LS			20,274.50
	CID	<i>Chrysobalanus icaco</i> 'Horizontalis' - Dwarf Cocoplum	#3 GAL, 1'x 1.5', 2' OC	Y	2.5'		360	\$ 16.00	\$ 5,760.00
	PQ	<i>Tradescantia pallida</i> 'Purpurea' - Purple Queen	#1 GAL, 6"x 12", 1.5' OC	N	1'		418	\$ 4.75	\$ 1,985.50
	FG	<i>Ficus Microcarpa</i> 'Green Island' - Green Island Ficus	#3 GAL, 1.5'x 1.5', 2.5' OC	N	2.6'		220	\$ 10.00	\$ 2,200.00
	MU	<i>Muhlenbergia capillaris</i> - Muhly Grass	#3 GAL, 1.5'x 1.5', 2.5' OC	Y	3.2'		267	\$ 9.50	\$ 2,536.50
	PD	<i>Podocarpus macr.</i> 'Pringles' - Dwarf Podocarpus	#3 GAL, 1'x 1', 2' OC	N	2'		110	\$ 35.00	\$ 3,850.00
	SAV	<i>Schefflera arboricola</i> 'Trinette' - Dwarf Var. Scheffli.#3 GAL, 1.5'x 1.5', 2.5' OC, COMPACT		N	3.5'		415	\$ 9.50	\$ 3,942.50
580-1-2		<b>LARGE PLANTS</b>				LS			164,545.00
	BN	<i>Bismarckia nobilis</i> 'Silver-Silver Bismarck Palm	10' CT, MIN 5x5' RB, RP, FF, NAC, MIN 8 LEAF COUNT	N	40' (NF)		4	\$ 2,700.00	\$ 10,800.00
	CH	<i>Chamaerops humilis</i> -European Fan Palm	6' OA, 3 STEMS MIN, MIN 1' STEM FOOTAGE PER TRUNK	N	15' (NF)		10	\$ 460.00	\$ 4,600.00
	COP	<i>Copernicia alba</i> - Caranday Palm	10' CT, FF, RP, NAC	N	40' (NF)		6	\$ 1,050.00	\$ 6,300.00
	IV	<i>Ilex vomitoria</i> 'Stokes Dwarf' - Dwarf Yaupon Holly	#7 GAL, 1'x 1'x 18", 2' OC	Y	2.2'		1,530	\$ 24.00	\$ 36,720.00
	JAT	<i>Jatropha</i> spp. - Jatropha	#7, 3'x3', BUSH FORM, LIMB UP 1'	N	8'		22	\$ 40.00	\$ 880.00
	LI	<i>Lagerstroemia speciosa</i> - Queen's Crepe Myrtle	12' OA x 5' SPRD, STANDARD	N	20' (NF)		3	\$ 395.00	\$ 1,185.00
	LJ	<i>Ligustrum japonicum</i> - Ligustrum Tree Form	#100G, 8' OA x 7' SPRD, FF, MULTI, LIMB UP 3'	N	15'		8	\$ 1,050.00	\$ 8,400.00
	PEA	<i>Phycosperma elegans</i> - Solitaire palm	MIN. 14' OA, MAX 4' CAL, SINGLE, MATCHED	N	25' (NF)		10	\$ 375.00	\$ 3,750.00
	RE	<i>Roystonea regia</i> - Florida Royal Palm	24' GW (SEE PLAN), MIN 5.5'x5.5' RB, RP, NAC, MIN 6 LEAF COUNT	Y	80' (NF)		8	\$ 1,900.00	\$ 15,200.00
	RE	<i>Roystonea regia</i> - Florida Royal Palm	18' GW (SEE PLAN), FF, NAC, MIN 7 LEAF COUNT	Y	80' (NF)		14	\$ 1,800.00	\$ 25,200.00
	RE	<i>Roystonea regia</i> - Florida Royal Palm	MIN 5' GW (SEE PLAN), 22' OA, FF, NAC, MIN 8 LEAF COUNT	Y	80' (NF)		9	\$ 500.00	\$ 4,500.00
	SC	<i>Sabal causerianum</i> - Puerto Rican Hat Palm	20'-22' OA, 12' CT, FF, SL, MIN 4'x4' RB, REGEN, RP, NAC, MIN 8 LEAF COUNT	N	40' (NF)		10	\$ 3,800.00	\$ 38,000.00
	SPC	<i>Sabal palmetto</i> - Sabal Palmetto	10', 14', 20' CT, STGG, (SEE PLAN), SLICK, CURVED TRUNK	Y	70' (NF)		25	\$ 360.00	\$ 9,000.00

**TOTAL PLANT COST \$ 185,817.50**

# SR 76 (Lost River Rd to Cove Rd) - IRRIGATION COST ESTIMATE

FPI# 422641-5-52-01, CH# 18-0809

8/30/2019

## IRRIGATION SYSTEM (PAY ITEM #590-70)

ITEM	QTY.	COST	SUB-TOTAL
Rain Bird 1404 Bubbler	51	\$ 12.00	\$ 612.00
Rain Bird #1812 - 12" Pop-Up, End Strip	2	\$ 40.50	\$ 81.00
Rain Bird #1812 - 12" Pop-Up, Side Strip	61	\$ 40.50	\$ 2,470.50
Rain Bird #1812 - 12" Pop-Up, 15' Quarter	4	\$ 40.50	\$ 162.00
Rain Bird #1812 - 12" Pop-Up, 15' Half	104	\$ 40.50	\$ 4,212.00
Rain Bird #1812 - 12" Pop-Up, 10' Half	6	\$ 40.50	\$ 243.00
Rain Bird PED 1" Valve in 12"x18" Tier 8 Carson Valve Box	19	\$ 860.00	\$ 16,340.00
Leit XC 12 Station Controller with Rain Sensor	2	\$ 1,650.00	\$ 3,300.00
1" RPZ Backflow Preventer	1	\$ 800.00	\$ 800.00
Class 200 Lateral Line (Size Noted on Plans)	2594	\$ 1.75	\$ 4,539.50
2" SCH. 40 Main Line	1528	\$ 4.00	\$ 6,112.00
Low Voltage Wire	6212	\$ 0.71	\$ 4,410.52
HDPE Directional Bore (Size Noted on Plans)	130	\$ 45.00	\$ 5,850.00
		<b>Total</b>	<b>\$ 49,132.52</b>