

SECTION No.: 860060000
Permit No.: 2020-L-491-00014
COUNTY: Broward
S.R. No.: 842

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 **City of Fort Lauderdale**, a municipal corporation, existing under the Laws of Florida, hereinafter called the AGENCY.

WITNESSETH:

WHEREAS, the DEPARTMENT has jurisdiction over State Road 842 (Broward Boulevard) as part of the State Highway System as described in **Exhibit "A"**; and

WHEREAS, the AGENCY seeks to have installed by permit and maintain certain landscape improvements within the right of way of State Road 842 (Broward Boulevard) 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 corporate limits of the AGENCY; and

WHEREAS, the AGENCY is agreeable to maintaining those landscape improvements within the AGENCY'S limits including plant materials, irrigation system and/or hardscape which may contain specialty surfacing (concrete pavers, color stamped concrete and color stamped asphalt [also known as patterned pavement]) including any other nonstandard hardscape (if applicable), but excluding standard concrete sidewalk, and agree 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; and

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 AGENCY shall install and agrees to maintain the *landscape improvements* described herein 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 **Exhibit "B"**. *Hardscape* shall mean, but not be limited to any site amenities such as landscape accent lighting, bike racks, fountain, tree grates, decorative free-standing wall, and/or sidewalk, median and/or roadway specialty surfacing such as concrete pavers, stamped colored concrete and/or stamped colored asphalt (also known as patterned pavement).

- (a) All plant materials shall be installed and maintained in strict accordance with sound nursery practice prescribed by the International Society of Arboriculture (ISA). All plant materials installed shall be Florida #1 or better according to the most current edition of Florida Department of Agriculture, *Florida Grades and Standards for Nursery Stock*; and all trees shall meet Florida Power & Light, *Right Tree, Right Place, South Florida*.
- (b) Trees and palms within the right of way shall be installed and pruned to prevent encroachment to roadways, lateral offsets and sidewalks. Definition of these criteria is included in the most current editions of FDOT standards for design, construction, maintenance, and utility operations on the state highway system and **Exhibit "C"**, the Maintenance Plan.
- (c) Tree and palm pruning shall be supervised by properly trained personnel trained in tree pruning techniques and shall meet the most current standards set forth by the International Society of Arboriculture (ISA) and the American National Standard Institute (ANSI), Part A-300.
- (d) Irrigation installation and maintenance activities shall conform to the standards set forth by the Florida Irrigation Society (FIS) latest edition of FIS, *Standards and Specifications for Turf and Landscape Irrigation Systems*.
- (e) The AGENCY shall provide the FDOT Local Operation Center accurate as-built plans of the irrigation system so if in the future there is a need for the DEPARTMENT to perform work in the area, the system can be accommodated as much as possible. (See paragraph (I) for contact information)
- (f) If it becomes necessary to provide utilities (water/electricity) to the median or side areas, it shall be the AGENCY'S responsibility to obtain a permit for such work through the local Operations Center (see paragraph (I) below) and the AGENCY shall be responsible for all associated fees for the installation and maintenance of these utilities.

- (g) All specialty surfacing shall be installed and maintained in strict accordance with the most current edition of the *Florida Accessibility Code for Building Construction* and the *Interlocking Concrete Pavement Institute (ICPI)*.
- (h) All activities, including landscape improvements installation and future maintenance operations performed on State highway right of way, must be in conformity with the most current edition of the *Manual on Uniform Traffic Control (MUTCD)* and *FDOT Design Standards*, Index 600 Series, *Traffic Control through Work Zones*.
- (i) The most current edition of *FDOT Design Standards*, Index 546 (Sight Distance at Intersections) must be adhered to.
- (j) Lateral Offsets as specified in the *FDOT Plans Preparation Manual*, Volume 1, Chapters 2 and 4 must be adhered to.
- (k) Landscape improvements shall not obstruct roadside signs or permitted outdoor advertising signs, (see Florida Administrative Code [F.A.C.] Rule Chapter 14-10.)
- (l) The AGENCY shall provide the local FDOT Operation Center located at Broward Operations, 5548 NW 9th Avenue, Fort Lauderdale, FL 33309, (954)776-4300, a twenty-four (24) hour telephone number and the name of a responsible person that the DEPARTMENT may contact. The AGENCY shall notify the local maintenance office forty-eight (48) hours prior to the start of the landscape improvements.
- (m) If there is a need to restrict the normal flow of traffic, it shall be done on non-holiday, weekday off-peak hours (9 AM to 3 PM), and the party performing such work shall give notice to the local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the landscape improvements. The DEPARTMENT'S Operation Center Public Information Officer (see telephone number in Paragraph (l) shall also be notified.
- (n) The AGENCY shall be responsible to clear all utilities within the landscape improvement limits before construction commences.
- (o) The AGENCY shall follow the minimum level of maintenance guidelines as set forth in FDOT'S Rule Chapter 14-40 *Highway Beautification and Landscape Management*, in the *FDOT Guide to Roadside Mowing and Maintenance Management System*, and **Exhibit "C"**, the *Maintenance Plan* for maintenance activities for landscape improvements.

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 (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 plant materials; 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 and including trees, palms, shrubs, groundcover and turf. To maintain also means to remove or replace dead or diseased plant materials 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 also means to keep the header curbs that contain the specialty surfacing treatment in optimum condition. To maintain also means to keep the nonstandard 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 associated for the landscape improvements including any impact and/or connection fees, and the on-going cost of utility usage for water and electrical, are the maintaining AGENCY'S responsibility.

The AGENCY shall be directly responsible for impact and connection fees.

- 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 landscape improvements installation and/or maintenance responsibility 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, to place 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 the 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 Section 8 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.

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 day notice to remove said landscape improvements at the 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 landscape improvements rights of ways identified as a result of this document, 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) 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 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 right of way identified in **Exhibit "A"** of this Agreement that the AGENCY shall be responsible for maintaining 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. AGREEMENT TERMINATION

In addition to those conditions otherwise contained herein, this Agreement may be terminated under anyone (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.

9. 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.

10. 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. The AGENCY and DEPARTMENT shall be named as 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) day 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.

11. 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.

12. 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 (except the associated Permit).

13. 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 will/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.

14. DISPUTES

The DEPARTMENT'S District Secretary shall decide 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. Should the AGENCY disagree with the DEPARTMENT's District Secretary's decision, the AGENCY may pursue any and all legal and equitable remedies available under this Agreement.

15. ASSIGNMENT

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

16. 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. Venue with respect to judicial proceedings arising out of this Agreement shall be in Broward County, Florida.

17. 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:
FDOT District IV Landscape Architect

If to the AGENCY:
City of Fort Lauderdale
100 N. Andrews Avenue
Fort Lauderdale, FL 33301
Attention:
Christopher J. Lagerbloom
Title: City Manager

18. LIST OF EXHIBITS

Exhibit A: Landscape Improvements Maintenance Boundaries
Exhibit B: Landscape Improvement Plans
Exhibit C: Maintenance Plan for Landscape Improvements

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

CITY OF FORT LAUDERDALE, through its
CITY COMMISSIONERS

By: _____
Dean J. Trantalis, Mayor

_____ day of _____, 2021

Christopher J. Lagerbloom, ICMA-CM
City Manager

Approved as to form by Office of City Attorney

City Attorney

ATTEST:

Jeffrey A. Modarelli, City Clerk

(SEAL)

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: _____
Transportation Development Director

Attest: _____(SEAL)
Executive Secretary

Legal Review Date

Office of the General Counsel

SECTION No.:	860060000
Permit No.:	2020-L-491-00014
COUNTY:	Broward
S.R. No.:	

EXHIBIT A

LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES

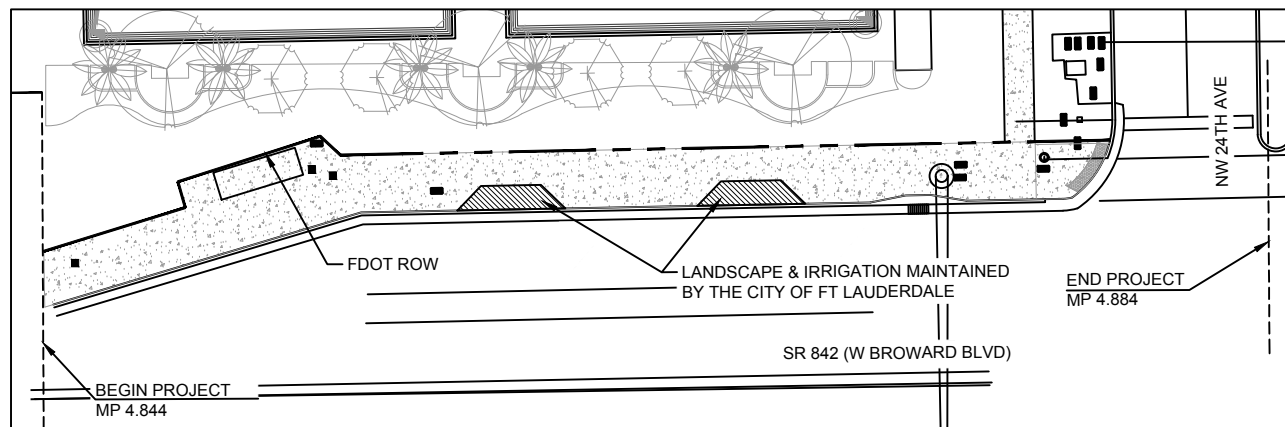
I. LIMITS OF MAINTENANCE FOR LANDSCAPE IMPROVEMENTS:


SECTION Number: 860060000

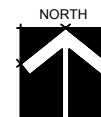
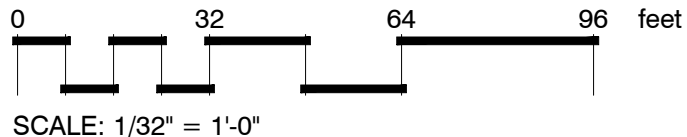
State Road 842 (Broward Boulevard) from M.P.4.844 to M.P. 4.884

II. LANDSCAPE IMPROVEMENTS MAINTENANCE RESPONSIBILITIES MAP:

Please see attached map



 LIMITS OF MAINTENANCE PROVIDED BY CITY OF FT LAUDERDALE



LANDSCAPE IMPROVEMENTS
MAINTENANCE BOUNDARY MAP
CITY OF FORT LAUDERDALE
FDOT LANDSCAPE PERMIT NO: 2020-L-491-00014
SR 842 (W. BROWARD BLVD)
MP4.844 - MP4.884
JANUARY 18,2021

SECTION No.:	860060000
Permit No.:	2020-L-491-00014
COUNTY:	Broward
S.R. No.:	842

EXHIBIT B

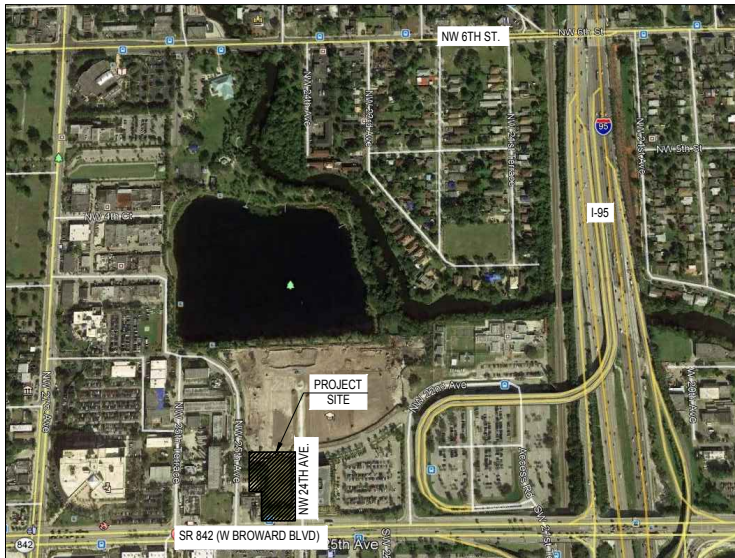
LANDSCAPE IMPROVEMENT PLANS

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: Hugh F. Johnson, RLA
Architectural Alliance Landscape

Date: December 16, 2020

Sheets – L – 1, 2
I – 1, 2



RIVERBEND STORAGE

SCOPE OF WORK

STATE ROAD NO: 842 (W BROWARD BLVD)
MILE POST: 4.844 TO 4.884

FDOT SPECIFICATIONS AND DESIGN STANDARDS

Governing Standard Plans: Florida Department of Transportation, 2020 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs)

Governing Standard Specifications: Florida Department of Transportation, 2020 Standard Specifications for Road and Bridge Construction

ROADWAY DESIGN SPEED FOR SR-842 = 45 MPH

INDEX OF SHEETS

SHEET No.	TITLE
CS-1	COVER SHEET

LANDSCAPE ARCHITECTURE

LP-1 LANDSCAPE PLAN
LP-2 PLANTING NOTES & DETAILS

IRRIGATION

IR-1	IRRIGATION PLAN
IR-2	IRRIGATION DETAILS

COVER SHEET

RIVERBEND STORAGE

W. BROWARD BLVD. & NW 24TH AVE
FORT LAUDERDALE, FLORIDA

Sheet Description

COVER
SHEET

Release Date
9-08-20

Project Number
1630B

Drawing Number

CS-1

Seal
RLA #855

Revision Dates
11/09/20
12/16/20

1. GOVERNING STANDARD PLANS: Florida Department of Transportation, 2020 Standard Plans for Road and Bridge Construction and applicable Interim Revisions. (IR's) GOVERNING STANDARD SPECIFICATIONS: Florida Department of Transportation, 2020 Standard Specifications for Road and Bridge Construction.
2. Contractor shall repair any and all damage done to FDOT property during demolition, relocation &/or installation activities at his sole expense.
3. Any plant material substitution within or impacting the FDOT Right of Way whether requested by the Contractor, Owner, Landscape Architect or other will need to get approval from the FDOT District Landscape Architect.
4. Ownership of all suitable excavated materials, as determined by the Department, shall remain in the Department until a final acceptance of the permitted project is fulfilled. Excavated materials shall be hauled by the Permittee, at their cost and expense from the site to the Broward Operations Center or stockpiled in those areas as directed by the Department, including asphalt millings.
5. Maintenance of Traffic (MOT) for this project will comply with FDOT Standard Plans Index (102 Series) and the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). Special attention will be given to FDOT Design Plans Standard Index 102-005, 102-010, 102-045, and 102-075.
6. Permittee will restore the Right-Of-Way as a minimum, to its original condition or better in accordance w/ FDOT's latest Standard Specifications for Road and Bridge Construction or as directed by the Resident Operations Engineer.
7. Restricted hours of operations will be from 9:00am to 3:30pm, (Monday-Friday), unless otherwise approved by the operations Engineer, or designee.
8. Permittee will ensure that all locates have been performed prior to scheduling of any WORKING activities. This shall include soft digs to verify vertical and horizontal alignment.
9. Permittee will coordinate all work with Asset Managment. Please contact David Moore of Transfield Services at 954-317-8044, moore@transfieldservices.com. Coordination will include a Pre-Construction meeting.

FDOT PLANTING NOTES

10. For the portion of landscape plant material that will be installed within the FDOT Right of Way landscape installation shall comply with current FDOT Maintenance Specifications 580-2.1. Online Reference: <http://www.fdot.gov/programmanagement/Maintenance/2019Jan/default.shtm>.
11. For the portion of landscape plant material that will be installed within the FDOT Right of Way refer to FDOT Standard Plans Index 580-001 Landscape Installation. Online Reference: <http://www.fdot.gov/design/standardplans/current/IDx/580-001.pdf>
12. No Category I or II invasive plants shall be planted on FDOT right of way.
13. Cypress Mulch is not permitted on FDOT right of way. Mulch permitted to be used are Hardwood Mulch (containing no Cypress products), Recycled Mulch or approved equal, certified by the Mulch and Soil Council (MSC). Submit proof of certification to the FDOT District Operations Permit Landscape Inspector upon inspection.

NOTES:

GENERAL PLANTING REQUIREMENTS

All sizes shown for plant material on the plans are to be considered Minimum. All plant material must meet or exceed these minimum requirements for both height and spread. Any other requirements for specific shape or effect as noted on the plan(s) will also be required for final acceptance.

All plant material furnished by the landscape contractor shall be Florida #1 or better as established by "Grades and Standards for Florida Nursery Plants" and "Grades and Standards for Florida Nursery Trees". All material shall be installed as per CSI specifications.

All plant material as included herein shall be warrantied by the landscape contractor for a minimum period as follows: All trees and palms for 12 months, all shrubs, vines, groundcovers and miscellaneous planting materials for 90 days, and all lawn areas for 60 days after final acceptance by the owner or owner's representative.

All plant material shall be planted in planting soil that is delivered to the site in a clean loose and friable condition. All soil shall have a well drained characteristic. Soil must be free of all rocks, sticks, and objectionable material including weeds and weed seeds as per CSI specifications.

Twelve inches (12") of planting soil 50/50 sand/topsoil mix is required around and beneath the root ball of all trees and palms, and 1 cubic yard per 50 bedding or groundcover plants.

All landscape areas shall be covered with Eucalyptus or sterilized seed free Melaleuca mulch to a minimum depth of three inches (3") of cover when settled. A four-inch clear space must be left for air between plant bases and the mulch. Cypress bark mulch shall not be used.

All plant material shall be thoroughly watered in at the time of planting; no dry planting permitted. All plant materials shall be planted such that the top of the plant ball is flush with the surrounding grade.

All landscape and lawn areas shall be irrigated by a fully automatic sprinkler system adjusted to provide 100% coverage of all landscape areas. All heads shall be adjusted to 100% overlap as per manufacturers specifications and performance standards utilizing a rust free water source. Each system shall be installed with a rain sensor.

It is the sole responsibility of the landscape contractor to insure that all new plantings receive adequate water during the installation and during all plant warranty periods. Deep watering of all new trees and palms and any supplemental watering that may be required to augment natural rainfall and site irrigation is mandatory to insure proper plant development and shall be provided as a part of this contract.

All plant material shall be installed with fertilizer, which shall be State approved as a complete fertilizer containing the required minimum of trace elements in addition to N-P-K, of which 50% of the nitrogen shall be derived from an organic source as per CSI specifications.

Contractors are responsible for coordinating with the owners and appropriate public agencies to assist in locating and verifying all underground utilities prior to excavation.

All ideas, designs and plans indicated or represented by this drawing are owned by and are the exclusive property of Architectural Alliance.

The plan takes precedence over the plant list.

SPECIAL INSTRUCTIONS

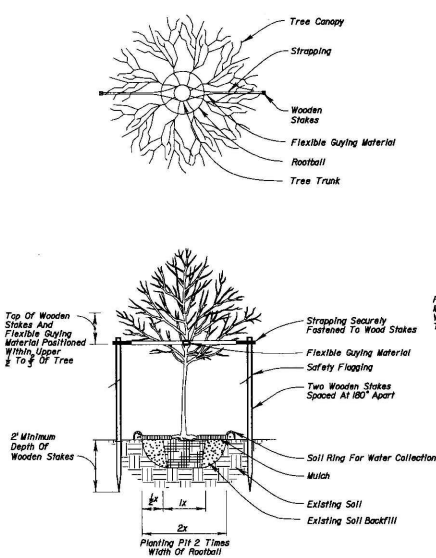
General site and berm grading to +/- 1 inch (1") shall be provided by the general contractor. All finished site grading and final decorative berm shaping shall be provided by the landscape contractor.

All sod areas as indicated on the planting plan shall receive Stenotaphrum secundatum, St. Augustine 'Palmetto' solid sod. It shall be the responsibility of the landscape contractor to include in the bid, the repair of any sod which may be damaged from the landscape installation operations.

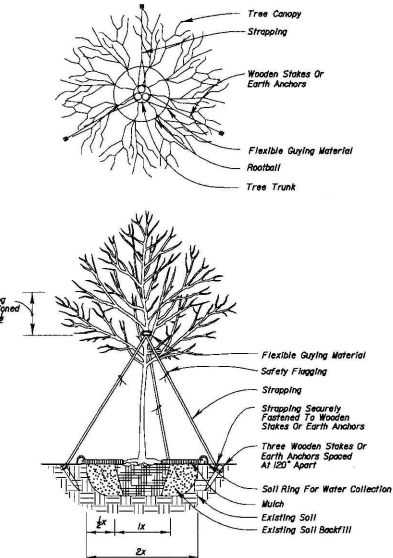
ADDITIONAL INSTRUCTIONS

For areas in which existing pavement is being removed and replaced with landscaped areas, -Contractor shall preserve a continuous band of undisturbed compacted subbase 18" from the back of curb. -Contractor shall insure that all unsuitable soil including concrete, pavement, road base, stones over 3" diameter and all construction debris, is removed from median area to be planted and replaced with specified planting soil, e.g. 60% sand and 40% muck.

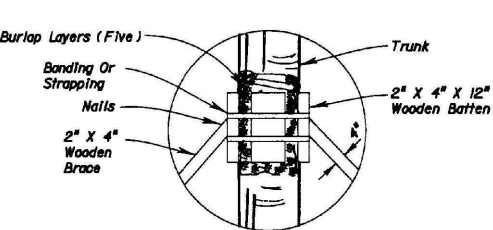
Areas to be planted with shrubs and/or groundcovers: removed compacted soil to a depth of 12" and replace with specified planting soil. Planting soil shall come up to 4" from top of curb, reserving space for 3" compacted mulch and 1" clear from top of curb.



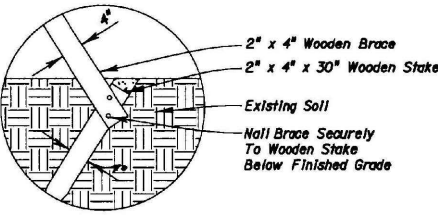
1" - 3 1/2" Caliper Tree Planting



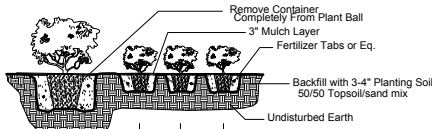
4" and Larger Caliper Tree Planting



Wooden Batten Detail

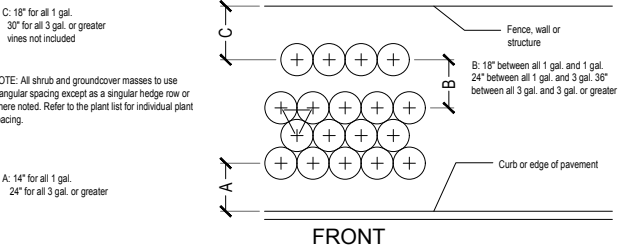


NOTE: Stake Into Firm, Existing Soil.
Wooden Staking Detail



Shrub & Ground Cover Planting Detail

NTS



Typical Plant Spacing

NTS

Architectural Alliance Landscape
612 SW 4th Ave., Fort Lauderdale, FL 33315 LCO00237
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HUGH JOHNSON
RLA #855

Seal

11/09/20
12/16/20

Revision Dates

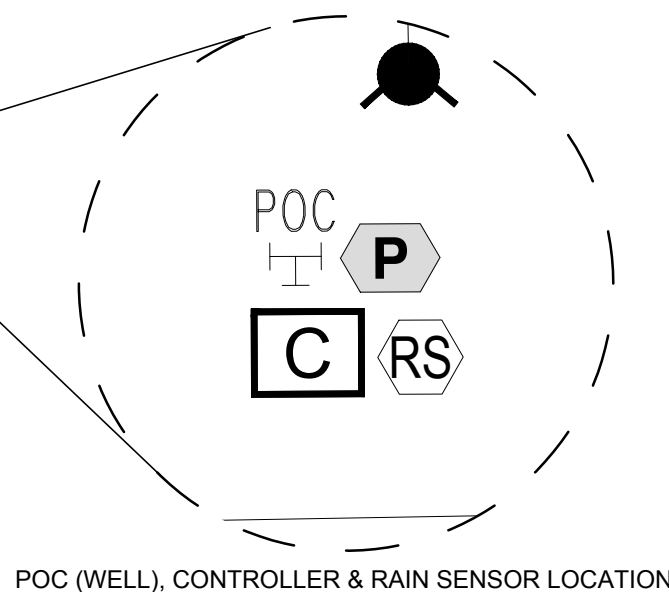
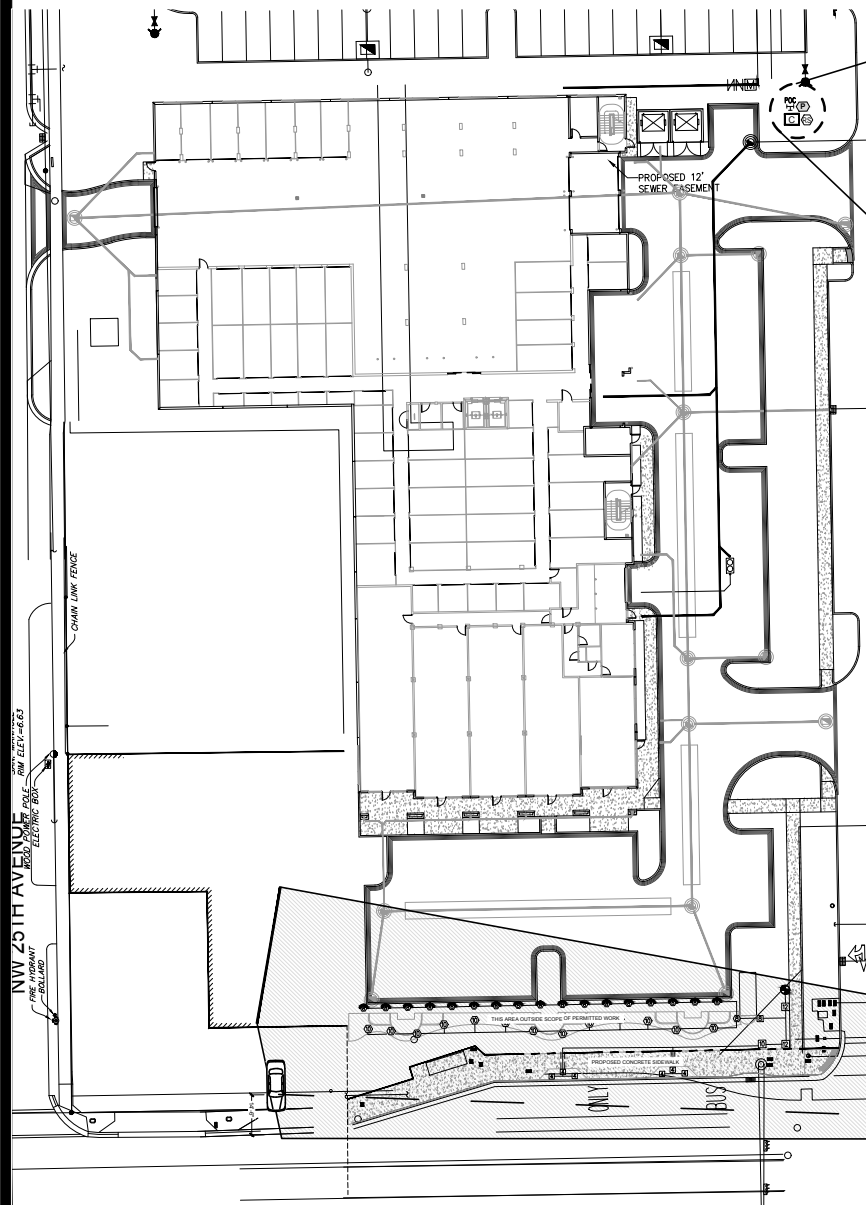
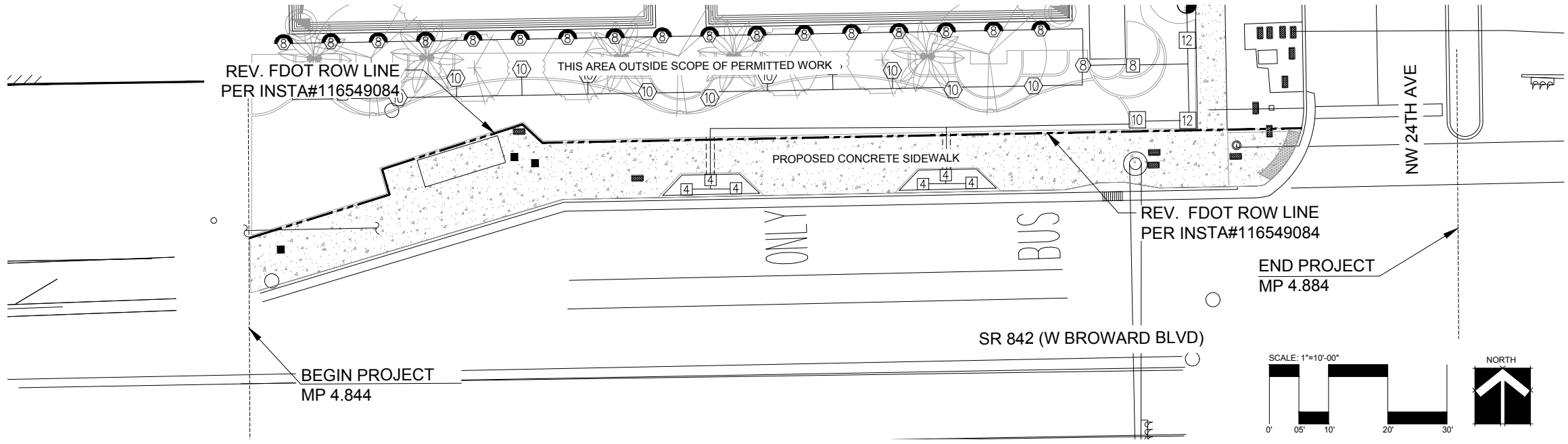
PLANTING NOTES & DETAILS
RIVERBEND STORAGE
W. BROWARD BLVD. & NW 24TH AVE
FT LAUDERDALE, FLORIDA

Sheet Description
PLANTING
NOTES &
DETAILS

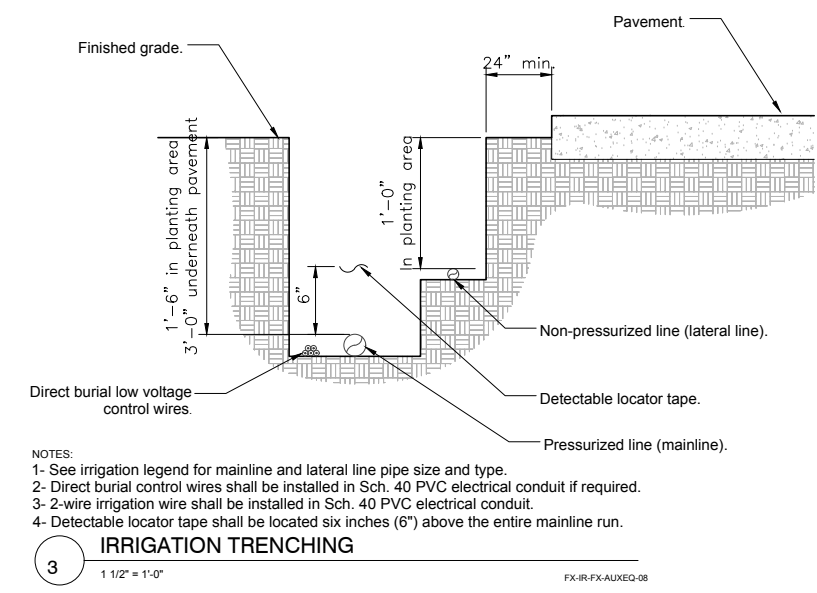
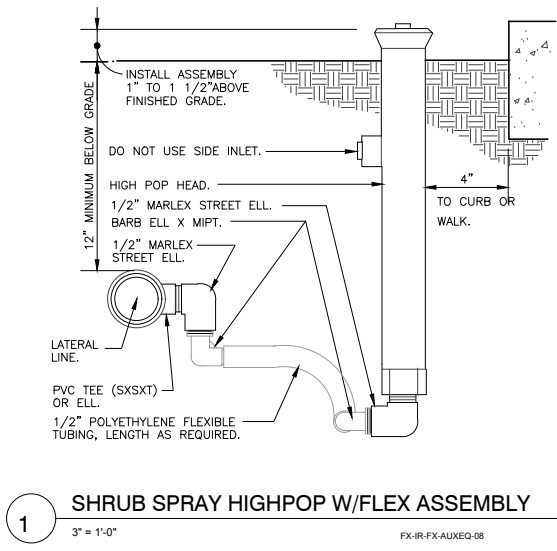
Release Date
9-08-20

Project Number
1630B

Drawing Number
LP-2



IRRIGATION SCHEDULE			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	RAIN BIRD 1812-PRS ADJ SHRUB SPRAY 12.0" POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2" NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.	6	30
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1 1/4" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 1" IN SIZE.	449.4 L.F.	
	PIPE SLEEVE: PVC SCHEDULE 40	12.2 L.F.	



HUGH JOHNSON
RLA #685

Seal

11/09/20
12/16/20

Revision Dates

IRRIGATION PLAN

RIVERBEND STORAGE

W. BROWARD BLVD. & NW 24TH AVE
FT LAUDERDALE, FLORIDA

Sheet Description
IRRIGATION
PLAN

Release Date
9-08-20

Project Number
1630B

Drawing Number
IR-1

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire, suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wire every 10" and run alongside the mainline. At all turns in direction, make a 2' coil of wire. At all valve boxes coil wire around a ¾" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
#14 white for common
#14 spare black common
#14 individual color coded hot wire
#14 spare yellow hot wire

Spare wires
Leaving each controller, run four spare wires in both directions (eight spare wires total). Install as 1 common spare (2 total) and 3 hot wires (6 total). Loop these wires into each RCV along their path and terminate in the last valve box controlled by the wires respective controller. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must all be color coded and numbered as required in the plans.

Controller and pump station Control Panel grounding - Contractor to utilize 4"x8"x5/8" copper grounding plates, 5/8"x10" copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 insulated copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded an tested. Each component must have its own separate ground grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways, 12" from building foundations, and 36" from uncurbed roadways.

Shrub heads shall be installed on ¾" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, building foundations, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of 2" above maintained height of plants and shall be installed a minimum of 6" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black or forest green paint, unless irrigation system will utilize reuse water; in this case the risers shall be purple PVC and shall not be painted.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer - only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the POC operates first and the closest to the POC operates last. The closest valve to the POC should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

Using an electric branding iron, brand the valve ID letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.

EQUIPMENT

All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints. All rotors shall be installed with PVC triple joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Wld Pipe: Cut all pipe square and deburr. Clean pipe an fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then urn the pipe a ¼ turn and hold for 10 seconds. make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded. Pipes must curve a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hous prior to filling with water.

BACK FILL

The back fill 6" below, 6" above, and around all piping shall be clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter. All piping and excavations shall be backfilled and compacted to a density of 95% modified Proctor, or greater.

Main line pipe depth measure to the top of pipe shall be:
24" minimum for ¾" - 2½" PVC with a 30" minimum at vehicular crossings;
30" minimum for 3" & 4" PVC with a 36" minimum at vehicular crossings.

Lateral line depths measure to top of pipe shall be:
18" minimum for ¾" - 3" PVC with a 30" minimum at vehicular crossings;
24" minimum for 4" PVC and above with a 30" minimum at vehicular crossings.

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2" on each side of every joint (bell fittings, 90's, tees, 45's, etc). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walks, walls and paving.

TESTING

Schedule testing with Owner's Representative a minimum of three (3) days in advance of testing.

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Hose bibs and gate valves shall not be tested against during a pressure test unless authorized by written permission from the owner. fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. There can be no loss in pressure at either gauge for solvent-welded pipe.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing - Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

Pre-Construction: Deliver five (5) copies of submittals to Owner's Representative within ten (10) working days from date of Notice to Proceed. Furnish information in 3-ring binder with table of contents and index sheet. Index sections for different components and label with specification section number and name of component. Furnish submittals for components on material list. Indicated which items are being supplied on catalog cut sheets when multiple items are shown on one sheet. Incomplete submittals will be returned without review. in lieu of hardcopies, an electronic package in PDF format can be submitted.

After project completion:
As a condition of final acceptance, the irrigation contractor shall provide the owner with:

1. Irrigation As-builts - shall be provided accurately locating all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format.

2. Controller charts - Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside the controller door. The reduction shall be hermetically sealed inside two 2ml pieces of clear plastic.

3. Grounding Certification - Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indication location tested (using IR plan symbols), date, time, test method and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED - Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

- 1.Pre-construction meeting - Designer and contractor to review entire install process and schedule with owner/general contractor.
2. Mainline installation inspection(s) - All mainline must be inspected for proper pipe, fittings, depth of coverage, backfill and installation method.
3. Mainline pressure test - All mainline shall be pressure tested according to this design's requirements.
4. Flow meter calibration - All flow meters must be calibrated. Provide certified calibration report for all flow meters.
5. Coverage and operational test
6. Final inspection
7. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. Final payment will not be released until these conditions are satisfied.

- 1.All above inspections are completed, documented, approved by owner.
- 2.Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside controllers.
4. All other submittals have been made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

- A. Turn on each zone from the controller to verify automatic operation.
- B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
- C. Check remote control valve to ensure proper setting, if present.
- D. Check setting on pressure regulator it verify proper setting, if present.
- E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
- F. Check for leaks - mainline, lateral lines, valves, heads, etc.
- G. Check all heads as follows:
 1. Proper set height (top of sprinkler is 1" below mow height
 2. Verify head pop-up height - 6" in turf, 12" in groundcover, and riser in shrub beds
 3. Check wiper seal for leaks - if leaking , clean head and re-insect.
 4. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
 5. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. - replace as needed
 6. Check for proper alignment - perfectly vertical; coverage area is correct;p minimize over spray onto hardscapes
 7. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
 8. Verify pop-ups retract after operation. If not, repair/replace as needed.
- H. Check controller/C.C.U. grounds for resistance (10 ohms or less) once per year. Submit written reports.
- I. check rain shut-off device monthly and clean/repair/replace as needed.
- J. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.
- K. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.
- L. Inspect all filters monthly and clean/repair/replace as needed.
- M. Check pump stations fpr proper operation, pressures, filtration, settings, etc. - refer to pump station operations manual.
- N. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.
- O. Winterize, if applicable, as weather in your area dictates. follow manufacturer recommendations and blow out all lines and equipment using compressed air. Perform seasonal startup of system as per manufacturer recommendations.
- P. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

SOIL MOISTURE SENSOR (When applicable)

1. Place all soil moisture sensor wiring in 1" SCH 40 PVC conduit
2. Soil moisture sensor should be placed in the middle of a spray or drip area as per manufacturer's recommendations.
3. Controller shall be set to the Florida Automated Weather Network's urban scheduler settings using the SMS as a moisture cut off device (like a rain switch) per manufacturer directions.

FDOT IRRIGATION NOTES

1. The irrigation system shall use the lowest quality water available which adequately and safely meets the water needs of the system. Storm water, reclaim water, or grey water irrigation shall be used whenever possible.
2. FDOT requires 24-hour emergency access to water source.
3. Contractor shall provide FDOT District Operations Manager with a set of "As- Built" irrigation plans.



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Seal

11/09/20
12/16/20

Revision Dates

IRRIGATION NOTES

RIVERBEND STORAGE

W. BROWARD BLVD. & NW 24TH AVE
FT LAUDERDALE, FLORIDA

Sheet Description

IRRIGATION
NOTES

Release Date

9-08-20

Project Number

1630B

Drawing Number

IR-2

CAM 21-0615

Exhibit 1

Page 19 of 27

FDOT LANDSCAPE PERMIT NO: 2020-L-491-00014

SECTION No.:	860060000
Permit No.:	2020-L-491-00014
COUNTY:	Broward
S.R. No.:	842

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): 842 from (M.P. 4.844) to (M.P. 4.884)

Permit or FM No(s): 2020-L-491-00014
RLA of Record: Hugh Johnson
Maintaining Agency: City of Ft Lauderdale
Date: March 1, 2021

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

The only plant material within the ROW is Dwarf carissa groundcover, found in the sidewalk planting beds.

Groundcover lateral growth shall be maintained to prevent foliage from growing beyond the limits of the planting areas shown on the plan.

Maintain the vertical height of Dwarf carissa between 12" and 18", full to ground.

Inspect groundcovers on a monthly basis for maintaining full ground coverage.

Joints and cracks in concrete, concrete pavers, concrete curbs, expansion joints, catch basins, gutter areas, etc. shall be inspected on a bi-monthly basis to keep those areas free of weeds.

Inspect the irrigation system performance on a bi-monthly basis to ensure the system's pressure is providing adequate coverage and clean or replace any irrigation nozzles that are not properly functioning.

Evaluate plant material on a bi-monthly basis for pests and diseases. If required, follow the integrated pest management program established by the Agency to ensure healthy plants.

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

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