#### LOCATION NO. 14

### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing chain link fence.
- 5. Removal of existing planter bed at 2237.
- 6. Removal of existing landscape and concrete patio adjacent to shed at 2243. Protect existing shed.
- 7. Removal of existing flagpole at 2243, if needed, and return to property owner.

### Location No. 14

#### General Items:

1. Water meter





## Lot #63, 2237 Poinciana St.

- 1. Small wall at front of house
- 2. 6' Vinyl chain link fence
- 3. Raised planter bed at rear.





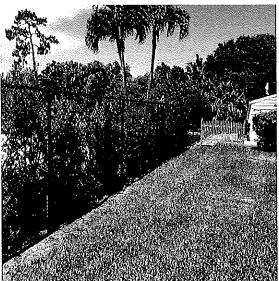
## Location No. 14 (Continued)

## Lot #64, 2243 Poinciana St.

- 1. Flagpole in front with light
- 2. Small wood fence at rear
- 3. Shed at rear with concrete pad and landscape rock







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#### LOCATION NO. 15

#### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing wood and chain link fence.
- 5. Removal of existing pavers and stacked on site.

### Location No. 15

### General Items:

1. Communication box





## Lot #72, 2457 Poinciana St.

- 1. Shrubs and landscape
- 2. Paver drive
- 3. 42" Chain link fence with gate at front
- 4. 42" Chain link fence side yard





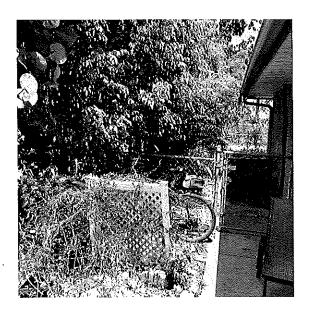
## Location No. 15 (Continued)

## Lot #73, 2465 Poinciana St.

- 1. Large oak tree (outside easement)
- 2. 42" Chain link fence at rear
- 3. Shrubs at side yard









### LOCATION NO. 16

### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing chain link fence at 2493 and return to property owner.
- 5. Protect existing chain link fence at 2473.

## Location No. 16

## General Items:





## Lot #75, 2473 Poinciana St.

- 1. Chain link fence near rear of house
- 2. Landscape at fence
- 3. 42" Chain link fence side yard
- 4. Pool deck adjacent to fence





## Location No. 16 (Continued)

## Lot #76, 2493 Poinciana St.

- 1. Gravel drive area east of easement
- 2. 42" Chain link fence with gate at front
- 3. 42" Hog wire fence at rear.
- 4. Miscellaneous items in yard









### LOCATION NO. 17

### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

None

### LOCATION NO. 18

### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing wood and chain link fence.
- 5. Relocation of existing shed at 2631 outside of easement, coordinate with property owner.
- 6. Removal of existing paver blacks at 231 and stacked on site.

### Location No. 18

## Description of Items:

- 1. FPL light pole to be held
- 2. FPL transformer
- 3. Communication at rear





## Lot #29, 2631 Poinciana St.

- 1. Shrubs at property line.
- 2. Shed in easement
- 3. 42" Chain link fence at rear (Poor Cond.)
- 4. Square paver blocks along house



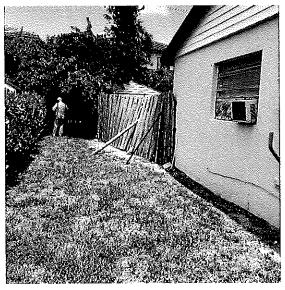
## Location No. 18 (Continued)

## Lot #28, 2663 Poinciana St.

- 1. Small tree
- 2. Shed close to easement
- 3. 42" Fence at rear (poor condition)









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#### LOCATION NO. 19

#### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

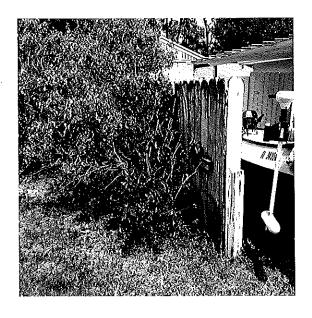
- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing wood and chain link fence.
- 5. Removal of existing concrete driveway aprons as required for proposed work.
- 6. Exercise care in work adjacent to aluminum carport at 2951.
- 7. Removal of existing shed and concrete patio at 2951. Coordinate with property owner.

## Location No. 19

### General Items:

1. FPL light pole to be held





## Lot #15, 2939 Poinciana Dr.

- 1. 42" Chain link fence at midpoint of house with gate, 42" fence at rear
- 2. Small shrubs
- 3. Masonry wing wall extending from house
- 4. Drive apron



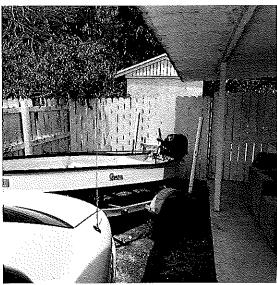


## Location No. 19 (Continued)

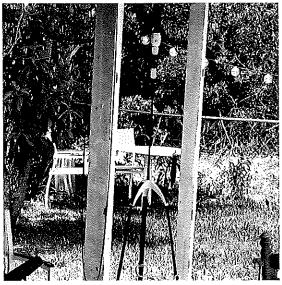
### Lot #14, 2951 Poinciana Dr.

- 6' Wood fence at property line extending back to midpoint of house w/ gate
- 2. Aluminum carport, close to easement
- 3. Shed/gazebo in easement
- 4. Concrete patio behind fence
- 5. 42" Chain link fence at property line to rear property line.









#### LOCATION NO. 20

#### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.
- 4. Removal of existing concrete drives as required by work.
- 5. Exercise care at existing wing wall at 3165. Remove only as necessary for work. Coordinate with property owner.

### Location No. 20

### General Items:

- 1. FPL light pole to be held
- 2. Utility boxes



Lot #6, 3165 Poinciana Dr.

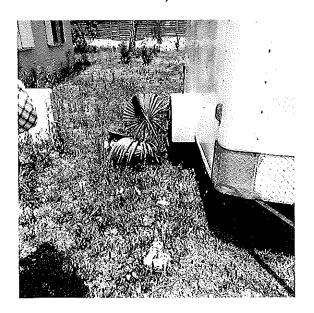
- 1. Masonry wing wall at house
- 2. Driveway apron





Lot #5, 3183 Poinciana Dr.

- 1. Landscaping
- 2. Landscape wall
- 3. Concrete driveway



#### LOCATION NO. 21

### REQUIRED ACTIVITIES

The following activities are required within the existing drainage easement and right of way as identified herein and on the plans. The Contractor shall be responsible for determining the existing site conditions and required actions. Work shall include, but not be limited to, clearing and removal of all existing improvements and vegetation to allow removal of the existing stormwater system and installation of the proposed stormwater system.

The following specific actions shall include, but not be limited to:

- 1. Removal and disposal of the existing stormwater system with restoration.
- 2. Installation of the proposed stormwater system with restoration.
- 3. Removal of existing trees and vegetation.

## Location No. 21

## General Items:



Lot #3, 3247 Poinciana Dr.

- 1. Palm tree at front
- 2. Palm tree at midpoint of house



Lot #2, 3277 Poinciana Dr.
1. Landscaping and shrubs



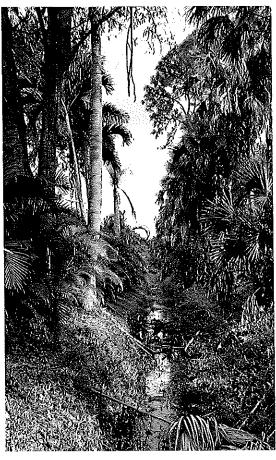


## LOCATION SOUTH PERIMETER DITCH

## <u>NOTE</u>

All photographs were taken in early December 2023. Photographs were taken looking west to east. References are to the various locations and stations identified on the plans.

See Plans and Details for additional information.



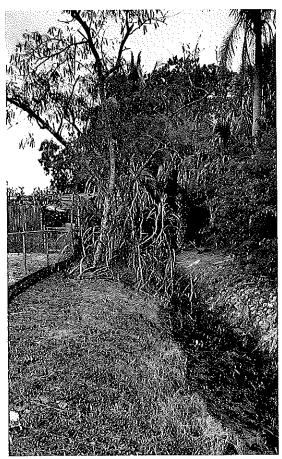
Station 100+00



Location 12



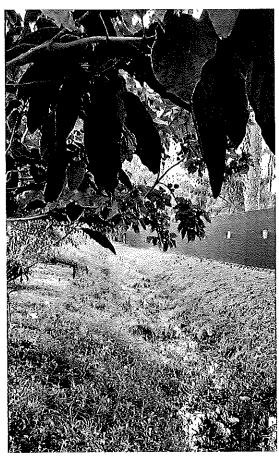
Station 102+50



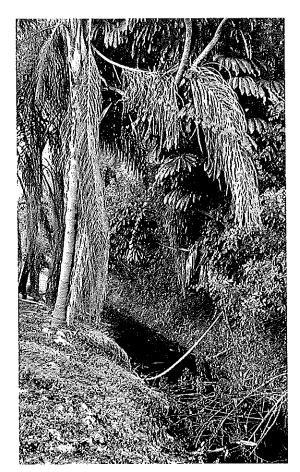
Station 105+00



Location 11



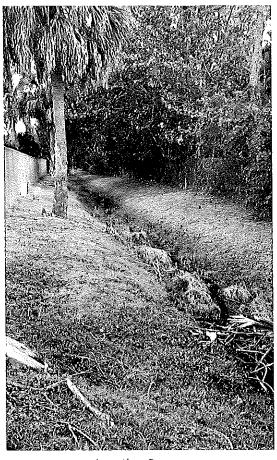
**Station 110.00** 



Station 107.50



Location 9



Location 8



Station 117+50



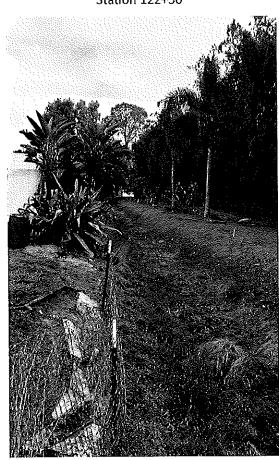
Location 7



Location 6



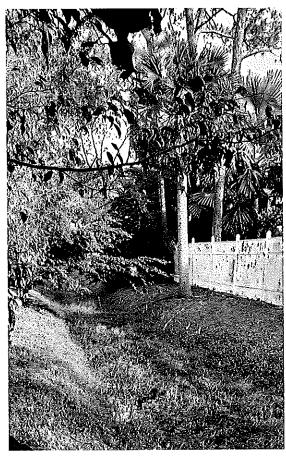
Station 122+50



Station 125+00



Location 5



Station 127+50



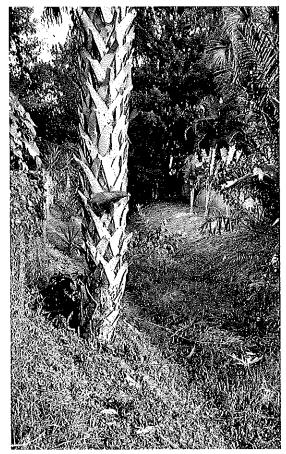
Location 3



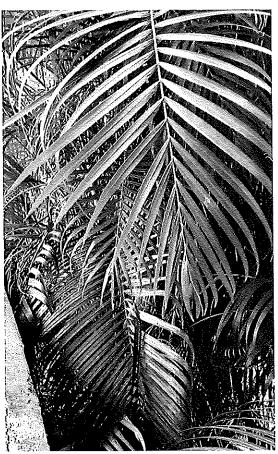
Location 2



Station 130+00



Station 132+50



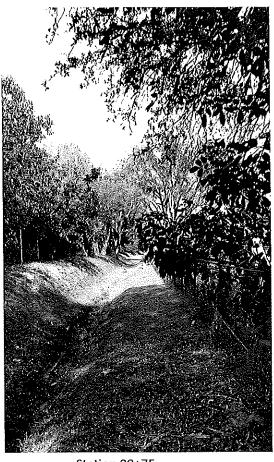
Location 1

## LOCATION WEST PERIMETER DITCH

## **NOTE**

All photographs were taken in early December 2023. Photographs were taken looking south to north. References are to the various locations and stations identified on the plans.

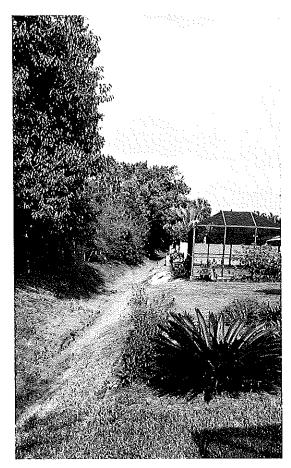
See Plans and Details for additional information.



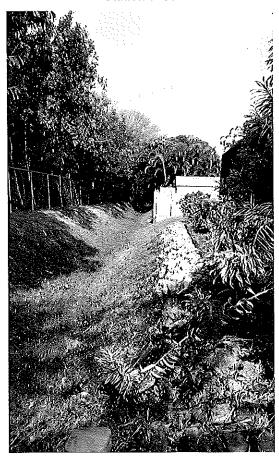
Station 00+75



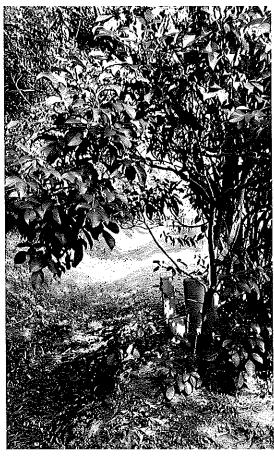
Location 13



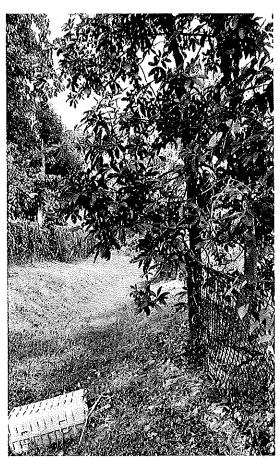
Station 3+00



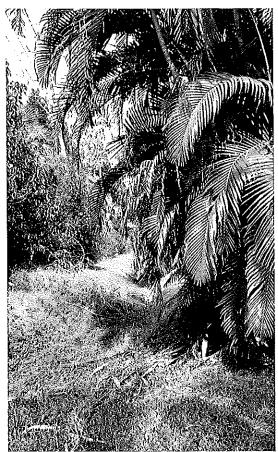
Station 6+00



Station 9+00



Station 13+00



Station 12+00

## LOCATION NORTH PERIMETER DITCH

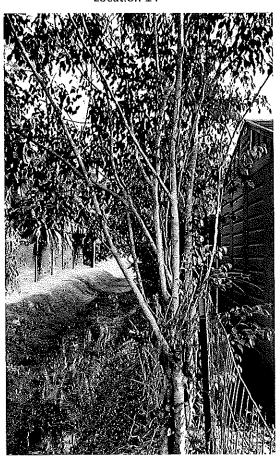
## **NOTE**

All photographs were taken in early December 2023. Photographs were taken looking west to east. References are to the various locations and stations identified on the plans.

See Plans and Details for additional information.



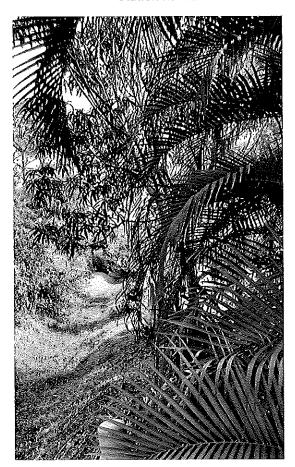
Location 14



Station 22+00



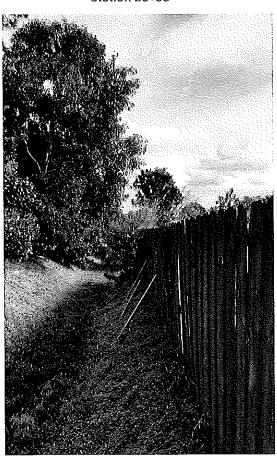
Station 18+00



Location 16



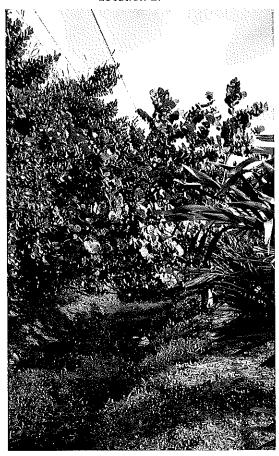
Station 26+00



Station 29+25



Location 17



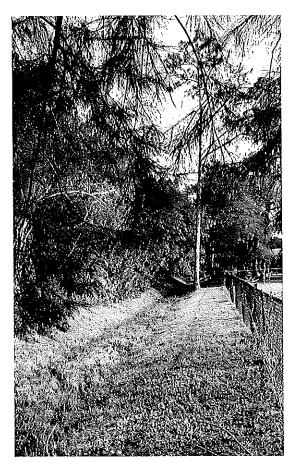
Location 18



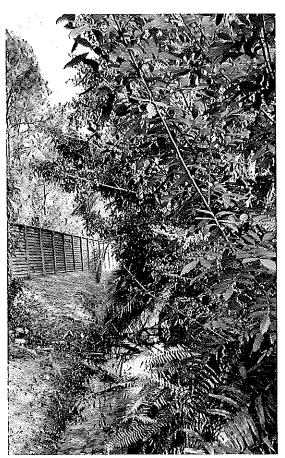
Station 34+00



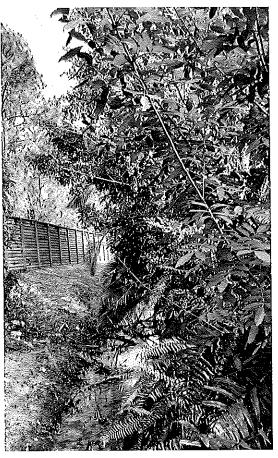
Location 19



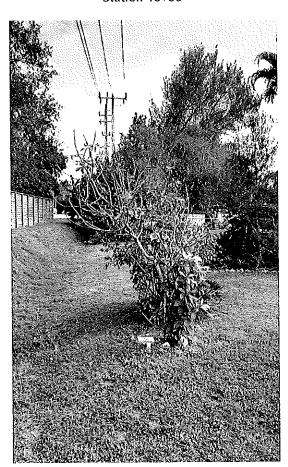
Station 38+00



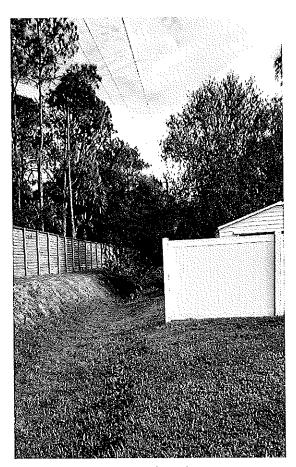
Station 42+00



Station 46+00



Location 21



Location 20

### POINCIANA VILLAGE STORMWATER IMPROVEMENTS

# SUPPLEMENTAL REQUIREMENTS ADDITIONAL ITEMS – COLLIER COUNTY SUPPLEMENTARY CONDITIONS

Following is a copy of Collier County Supplementary Conditions for the Poinciana Village Stormwater Improvements. The bidder shall review the requirements of these Supplementary Conditions. Where there is a discrepancy, the more stringent requirement of the Construction Plans, Construction Specifications, Stormwater General Conditions, or permit requirements shall apply.

- 1. The resulting contract will commence upon issuance of a notice to proceed (NTP) and be in effect until completion of the project. Time is of the essence on this project and construction activities from mobilization to demobilization, including final restoration, must be substantial complete within 360 days from the issued NTP and achieve final completion within 30 days of substantial completion.
- 2. Storage of material within the right-of-way is not allowed unless directed/authorized by Collier County. Any storage within the right-of-way shall be outside the required roadway clear zone.
- 3. Two (2) weeks prior to beginning construction in individual locations, the Contractor shall locate by pot holing or soft digging all utilities within the limits of the project (including sanitary sewer laterals at the ROW line) and provide the County, EOR, and CEI a report (before construction) of the findings at each location that includes the station and offset, location, utility type, depth from grade, size, material, date, time, and a minimum of two (2) pictures (an overall site picture and a picture of the utility found). The Contractor shall mark the found utility with a wooden lath and ribbon, with the utility type found, size, and depth written on the lath. This shall be reviewed with the County and Engineer to allow adjustment of infrastructure as required to minimize conflicts. If the Contractor fails to complete this requirement, Contractor payment applications will not be approved.
- 4. During construction, the Contractor shall keep one lane of traffic open at all times on all affected roads. Flaggers shall be utilized to assist traffic through the construction zone when two lanes of travel are not provided. Flaggers shall possess a Temporary Traffic Control (TTC) Basic Flagger Certificate per requirements set forth by the Florida Department of Transportation. Access onto existing streets and drives shall be maintained to local traffic, emergency vehicles, delivery vehicles, postal vehicles, public transportation, solid waste and recycling vehicles, and property owners. At all times, access must be provided to existing fire hydrants, valves, meters/backflow devices, manholes, and cleanouts.
- 5. Notification of road closures must be provided in writing to the Collier County Sherriff's Office and the Local Fire Rescue District at least 72 hours in advance of the road closures. Road Closure notification forms shall be submitted to the Collier County Growth Management Department and copies provided to the County Project Manager, EOR, and CEI each week. Access to each residence and business shall be maintained for emergency vehicles at all times. Contractor must provide a road closure plan and schedule for review by the County, EOR, and CEI at least seven (7) days prior to all proposed road closures.
- 6. Work shall be limited to 7:00 AM to 7:00 PM Monday through Saturday. No work shall be permitted on Sundays and Collier County observed holidays which includes but is not limited to: New Year's Day, Memorial Day, 4<sup>th</sup> of July, Labor Day, Thanksgiving Day, Christmas Day. Additional holidays observed by the County may be added to the list above and no work shall be permitted on those additional holidays.

- 7. Contractor's site superintendent(s) must attend all meetings relating to the project, including, but not limited to: progress meetings, neighborhood information meetings, onsite meetings, and any other meeting deemed necessary by Collier County.
- 8. The water and wastewater facilities within the project area are owned by the City of Naples. All City of Naples Utilities Standards (design criteria, specifications, and details) are applicable to this project and are made part of the Contract Documents by reference to current City Utilities Standards, located at their web site. In the event of a conflict between any applicable standard and these specifications and drawings, the more stringent requirement shall apply.
- 9. Contractor is responsible for all costs associated with installing and testing of all compact fill materials and road base and sub-base to avoid future settlement. Within paved areas, at a minimum, backfill and compaction shall be per detail FDOT Standard Plan Index 125001 and Specifications Section 125. Perform compaction density tests at all such backfill areas with spacing not to exceed 100 feet apart and on each compacted layer for paved areas.
  For unpaved areas, compaction shall be per FDOT index 125-001 and testing shall take place a minimum of every 500 feet, or a minimum of one test per every location of pipe installed. Compaction testing density shall be per ASTM D 1557.
- 10. Contractor is responsible for all inspections and testing unless otherwise specified. For tests to be made by the Contractor, the testing personnel shall make the necessary inspections, furnish all material and equipment to properly perform the testing, and furnish all results to Collier County for acceptance of all equipment and installation as required.
- 11. Contractor is responsible for the cost of all testing as required.
- 12. The Contractor shall provide for review by the Owner and Engineer a detailed sequence of construction that identifies how the secondary stormwater infrastructure, pump stations, and water main replacement will be installed, as well as system testing, while minimizing disruption to the community.
- 13. Clearing and grubbing shall be limited to work areas only. Contractor is responsible for restoring all areas disturbed by their work, except as noted on the plans. All disturbed areas shall be restored to preconstruction conditions. Contractor shall be required to water vegetation replaced until established/rooted.
- 14. Trees and shrubs within the work area shall be removed as directed by Collier County. The Contractor shall coordinate all work with the property owner. Private irrigation within the ROW shall be fully restored to preconstruction condition or better, unless in conflict with new utilities. Full irrigation coverage of property must be maintained during construction and demonstrated following the completion of the work. No additional payment shall be made for restoration per the ROW standards.

- 15. It is the Contractor's responsibility to replace/repair any existing landscaping, sod, irrigation systems, fencing etc. that is damaged/removed outside the limits of the ROW (on private property) to their original conditions or better, except as noted on plans. Contractor to coordinate with property owner and Collier County for access to private property via right of entry.
- 16. In accordance with the Collier County requirements, a pre-construction video shall be completed, with electronic copies provided to the County and Engineer. Contractor shall supplement these videos with still photographs (in addition to the pictures required in the Pre-Construction Assessment Forms) as necessary to reflect existing conditions. This shall include but not be limited to sod type, driveways and driveway culvert, and driveway conditions from the ROW to the property structure, as applicable. The Contractor may be required to restore private properties to conditions better than existing, at no additional cost to the County, if the Contractor fails to sufficiently document existing conditions. Upon completion of post construction video shall be completed with electronic copies provided to the County and Engineer.
- 17. Contractor is responsible for all construction layout and preparation of Record Survey in accordance with County requirements. This includes but is not limited to location of existing ROW, replacement water main, valves, fire hydrants, water services, stormwater improvements, and approved changes.
- 18. Contractor shall contact all utility suppliers, including but not limited to Collier County, Comcast, Summit Broadband, Inc., Florida Power & Light, and CenturyLink for locating of their facilities within the project corridor. Contractor shall coordinate with these utilities for protection and adjustment of their facilities as needed. All costs shall be included in individual bid items.
- 19. Contractor is responsible for all Maintenance of Traffic (MOT) for the project. MOT shall be in accordance with the FDOT Standard Index and the Manual of Uniform Traffic Control Devices (MUTCD, Part VI). Existing traffic conditions may warrant night work. If night work is required, the Contractor will be responsible for proper MOT at no additional cost.
- 20. The Contractor is responsible for obtaining equipment and material storage areas (including fencing 8-ft high with screen or as required by Collier County) and all necessary permits, ROW, and temporary construction access. For storage areas, the Contractor shall:
  - a. Provide a copy of all Agreements to the County and Engineer of Record.
  - b. Obtain a ROW permit for the storage area, as required.
  - c. Obtain a Temporary Use Permit for the storage area, as required.
- 21. The Contractor is responsible for maintaining all work areas in a safe and clean manner as identified in the documents. This includes but is not limited to daily watering and

- intermediate watering as needed of bare soil roadways and sweeping of roadway and sidewalk surfaces.
- 22. Contractor is responsible for restoration of areas damaged outside of work area if the damage is a result of the construction including, but not limited, to detours and construction traffic non-contiguous to the project area, offsite construction storage areas, receiving water bodies, etc.
- 23. If road/driveway dewatering ramps are utilized at roadways/driveways, the contractor shall provide barricades on either side of the ramps to protect/warn vehicles from driving over manifolds/connection sections on either side of all ramps.
- 24. All excavation shall be unclassified with no additional payment to be made for rock, unsuitable material, or dewatering. The Contractor is responsible for making his own site observations and exploration to determine site conditions prior to bidding.
- 25. The Contractor shall prepare and provide for review by the Owner and Engineer an MOT Plan, Tropical Storms and Hurricanes Plan, and Safety Program/ Risk Management Program prior to construction commencement.
- 26. The Contractor shall conform to the requirements in Collier County Ordinance 2019-17: An Ordinance providing for establishment of a water pollution control and prevention ordinance, providing for repeal of Ordinance No. 87-79, as amended, and resolution No. 88-311: providing for inclusion in the Code of Laws and Ordinances; providing for conflict and severability; and providing for an effective date.
- 27. It is recommended that the Contractor review and follow the recommendations for field measuring turbidity pursuant to the following FDEP SOP FT1600: <a href="https://www.youtube.com/watch?v=k6x22q9uoAY&feature=youtu.be">https://www.youtube.com/watch?v=k6x22q9uoAY&feature=youtu.be</a>
- 28. The Contractor shall coordinate with all other Contractors within the project limits for work within the ROW and/or private property and shall make accommodations to not inhibit work by other Contractors.
- 29. Coordination with the following agencies, above and beyond the Collier County Road Alert, may be required throughout the duration of construction: USPS, Collier County Sherriff's Office, Fire Department and EMS, Waste Management (garbage and recycling), and Collier County Public Schools (school bus routes). Additionally, if required by the USPS, a "mailbox bank" shall be installed by the Contractor at no additional charge.
- 30. The Contractor shall furnish, install, and maintain project identification sign(s) at the discretion of Collier County.

The Contractor shall update the information on the signs as required by the Owner up to two times during the project and shall remove the signs upon completion of

construction. Contractor's name and the name and telephone number of the Contractor's contact person shall be included on the sign.

Graphic design, style of lettering, and colors shall be approved by the Engineer and the Owner. The sign shall be manufactured by a professional, experienced in the type of work required and shall be painted to adequately resist weathering and fading for scheduled construction period. The sign shall be one piece and made of new marine grade plywood wood or metal, in sound condition, structurally adequate and suitable for specified finish, with a thickness as required to span framing members, to provide even, smooth surface without waves or buckles. All hardware shall be galvanized bolts, nuts and washers. Nailing will not be permitted. Each sign shall be of size of not less than 32 square feet with design, lettering, and construction as shown in the following Project Sign detail specifications:

The left one-quarter (1/4) of the sign shall contain the official Collier County logo and a list of the current Collier County Board of County Commissioners with names and district. Color shall be English Ivy Green glossy background with white letters.

Rick LoCastro - 1

Chris Hall - 2

Burt L. Saunders - 3

Dan Kowal - 4

William L. McDaniel, Jr. - 5



The right three-quarters of the sign shall contain the following on a white background with English Ivy Green letters (as an example):

Name of Project: Poinciana Village Stormwater Improvements

Project Design Professional: Bowman Consulting Group

Project Contractor: TBD

Project Management: Collier County Transportation Management

Services

Project Inspector: TBD

Project Completion Date: TBD

For more information, please call: (239) 227-XXXX or email

XXX@CollierCountyFL.gov

Color: White background with English Ivy Green letters

The right lower one quarter (1/4) of the sign shall contain the official County logo

- Overall border shall be glossy black.
- The size of the sign shall be four feet (4') high by eight feet (8') wide.
  - The sign shall be in conformance with the Collier County Land Development Code and in a format approved by the County.
- Construction sign shall be supported by a minimum of two 4" X 4" posts painted white.

- Removal and disposal of the sign after project completion is the responsibility of the contractor,
- A proof of the sign must be approved by the County, Engineer of Record, and CEI before the contractor sends it for production.
- 31. The following Permits for the Project will be obtained by Collier County or are the Contractor's responsibility to obtain, as noted below. Copies of all obtained Permits shall be made available to the Contractor. It shall be the Contractor's responsibility to read and understand all Permits and Permit Conditions.
  - FDEP Dewatering: The Contractor is required to obtain coverage under the Florida
    Department of Environmental Protection (FDEP) Generic Permit for Discharge of
    Groundwater from Dewatering Operations prior to discharging produced
    groundwater from dewatering activities. Alternatively, the Contractor may elect to
    obtain coverage under the Generic Permit for Stormwater Discharge from Large and
    Small Construction Activities, which will cover both construction and dewatering
    operations.
  - Collier County Temporary Use Permit (for storage areas) To be submitted by the Contractor.
  - SFWMD Generic Permit for Discharge of Ground Water from Dewatering Operations (as required).
  - SFWMD Dewatering Permit Letter Modification and Extensions to be obtained by Contractor (as required).
  - SFWMD Individual Water Use Permit for Dewatering: to be obtained by the Contractor (as required).

END OF SECTION

# POINCIANA VILLAGE STORMWATER IMPROVEMENTS

# SUPPLEMENTAL REQUIREMENTS ADDITIONAL ITEMS – PRECONSTRUCTION ASSESSMENT FORMS

# PRE- CONSTRUCTION ASSESSMENT FORM POINCIANA VILLAGE STORMWATER IMPROVEMENTS

# Driveway/Replacement Plan/Existing Sod

Address:		
Existing Condition Photographs	Date of photog	graphs:
"Photo"		"Photo"
"Photo"		"Photo"
Driveway Type:	Width at Pavement:	Width at R/W:
Sod Type:	Existing Percentage of Sod Type:	
Special Notes:		
Submitted by:		Pate:

# PRE- CONSTRUCTION ASSESSMENT FORM POINCIANA VILLAGE STORMWATER IMPROVEMENTS Easement Restoration

Address:		
Existing Condition Photographs	Date of photog	raphs:
"Photo"		"Photo"
"Photo"		"Photo"
Driveway Type:	Width at Pavement:	Width at R/W:
Sod Type:	Existing Percentage of Sod Type:	
Special Notes:		
		ate.

# POINCIANA VILLAGE STORMWATER IMPROVEMENTS

# SUPPLEMENTAL INFORMATION CITY OF NAPLES ASBESTOS WORK PLAN SPECIFICATION

Following is a copy of the City of Naples Asbestos Work Plan Specification. This document is in addition to any requirements contained in the City of Naples Utility Specification and Standards. The Contractor shall coordinate all work with asbestos pipe and materials with the City. Neither Collier County, Bowman Consulting Group, or their representatives shall take responsibility for the work associated with the removal or modification of the City's asbestos pipe or materials.

## **SECTION 02051**

# ASBESTOS WORK PLAN: REPAIR, REMOVAL AND MAINTENANCE OF ASBESTOS-CONTAINING CEMENTITIOUS PIPES

#### ASBESTOS WORK PLAN

The following work plan is for the repair, removal and maintenance of asbestos cement pipe (AC). This work plan should be considered as minimal guidelines for the disturbance of the material. The Contractor shall utilize all appropriate controls and work practices necessary to protect workers, people in the vicinity of the work area, and the environment, regardless of the inclusion or exclusion of this work plan. Contractor questions should be resolved prior to the start of the abatement project. The primary concerns and considerations of these work practices is the protection of human health and the environment, as well as to minimize the Owner's and Contractor's liability exposure before, during and after the abatement process.

#### **GENERAL**

The City of Naples, shall employ: referred to as the Contractor, for the purpose of repair, removal and maintenance of AC pipe.

#### INDEMNITY

The Contractor shall indemnify, defend and save the Owner harmless from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the of the Contractor and persons employed or utilized by the Contractor in the performance of the work associated with the project. The Contractor shall defend on behalf of the

Owner, severally, or Owner and Contractor jointly, any claim or action for or arising out of the foregoing. The monetary limitation on the extent of indemnification pursuant to this paragraph shall be \$1 million per occurrence. The Contractor shall indemnify, defend and save the Owner harmless against all damages, losses, and claims resulting from the activities, or lack of activities associated with the project. The Contractor

shall defend on behalf of the Owner, severally, or Owner and Contractor jointly, any claim or action for or arising out of the foregoing.

CITY
TECHNICAL SPECIFICATIONS

Section 02051 ASBESTOS WORK PLAN Page 1 of 6

# REGULATIONS, CODES AND STANDARDS

The Contractor shall comply with all regulations, codes and standards. These shall include, but are not limited to:

- Title 29, Code of Federal Regulations, Section 1910.134 and 1926.1101. Occupational Safety and Health Administration (OSHA), US Department of Labor.
- Title 40, Code of Federal Regulations, Part 61, Subparts A and M, National Emission Standards for Hazardous Air Pollutants. US Environmental Protection Agency (EPA).
- 3. State of Florida's Administrative Code 62-204.800. US EPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61, Subpart M).
- 4. State of Florida, Chapter 62-257, Florida Administrative Code.
- Florida Statutes, Chapter 469, Licensing Requirements (Exemptions 469.002)
- 6. State of Florida, City of Naples codes and ordinances as applicable.

## CONTRACTOR STAFFING

- 1. All work will be supervised by a qualified individual meeting the requirements of a *Competent Person\** and possessing the following minimum qualifications and training:
  - Satisfactory completion of an Asbestos Abatement Project Supervisor course
  - Medical examination for respirator use
  - Fit test for respirator type
  - Training in the maintenance, repair and removal of AC pipe
  - "A Competent Person, is capable of identifying existing asbestos hazards at the work place, determine if a Negative Exposure Assessment (NEA) exists, is qualified to train other workers, and has the authority to take prompt corrective measures to eliminate a hazardous exposure. In addition the competent person must be trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor.
- 2. Any direct contact with AC pipe will be performed by qualified workers possessing the following minimum qualifications and training:
  - Satisfactory completion of an OSHA Class II Worker course \*\*

Section 02051 ASBESTOS WORK PLAN Page 2 of 6

CITY TECHNICAL SPECIFICATIONS

- Medical examination for respirator use
- Fit test for respirator type
- Training in the maintenance, repair and removal of AC pipe
- \*\*Class II Training Requirements must be met for work involving building materials including roofing, flooring, siding materials, celling tiles or transite panels training shall include at a minimum the elements in paragraph 29 CFR 1926.1101 (k) (9)(iv)(A) and specific work practices and engineering controls set forth in paragraph (g). It shall include hands-on training and it is to be at least 8 hours in length. Annual refresher course work is required. The length of time for the refresher training is not specified.
- 3. Personal Protective Equipment (PPE) for each worker will include hard hat, steel toed shoes, disposable protective clothing, respiratory protection and high visibility reflective vests. Respirators shall be fitted with a P-100 filtering cassette. (The use of disposable protective clothing, and respiratory protection will be determined by the establishment of a Negative Exposure Assessment and continual personnel air monitoring).

# WORK PROCEDURES

Controlling Government Regulation:

OSHA's Construction Industry Standard for Occupational Exposure to Asbestos Subpart Z, 29 CFR 1926.1101 Asbestos.

Work-Task Assumptions/Requirements of the Employer at Project Work-Site:

Prior to commencing the demolition and removal of the A-C pipe, the contractor has:

- \_(1) Determined by thorough inspection the existence and the extent of any ACM.
- \_ (2) Given written notice to appropriate governmental agency at the beginning of abatement activity.
- (3) Conducted an Initial Exposure Assessment (IEA) test plan or baseline report, which complies with the criteria in Paragraph (f)(2)(iii) of the above referenced controlling government regulations (section), and which demonstrates that the employees' exposure to airborne asbestos fibers during removal of the Asbestos-Cement (A-C) pipe is expected to be consistently below the Permissible Exposure Levels (PELs) i.e... exposure must be less than 0.1 fiber/cubic centimeter (cc) of air for an eight (8) hour time-weighted average limit (TWA), and less than 1.0 fiber/cc of air as averaged over a sampling period of thirty (30) minutes, all as determined by the method prescribed in Appendix A to the referenced section, or by an equivalent method, and

Section 02051 ASBESTOS WORK PLAN Page 3 of 6 therefore, the employer intends to do the A-C pipe removal through the use of Negative Exposure Assessments (NEAs).

Procedures for Removal of Asbestos-Cements (A-C) Pipe, Also Commonly Referred to as Transite Pipe This work activity is identified as a Class II asbestos removal activity by OSHA's Subpart Z, 29 CFR 1926.1101, with the A-C pipe removal is being done utilizing a valid Negative Exposure Assessment (NEA).

# Preparation

Establish a regulated work area (RWA) using barricade tape.<Provide a hand/face wash station at the entry point to the RWA.<Post asbestos-warning signs at the RWA entry point.<Establish a waste loadout area attached to the RWA.<Once an RWA is established and work begins, no access should be permitted without the required personal protective equipment.

Prior to commencing work a ten day NESHAP notification (DEP Form 62-257 .900(1)

Effective 10-12-08) must be submitted the Florida Department of Environmental Protection (FDEP) office located at the following address:

FDEPAir Resource Management

2295 Victoria Avenue, Ste 364

P.O. Box 2549

Fort Myers, Florida 33902-2549

The form can be accessed online at:

http://www.dep.state.fl.us/air/rules/forms/asbestos/dep62\_257\_900(1).pdf

Air Monitoring and Sampling of Exposure to Airborne Asbestos Fibers:

As the work begins the competent person (or third party consultant) must conduct and record objective data to confirm the Initial Exposure Assessment (IEA), and that the specific job-site work activity confirms the findings of the IEA, and that the PELS are not being exceeded for this work activity.

CITY TECHNICAL SPECIFICATIONS Section 02051 ASBESTOS WORK PLAN Page 4 of 6

## Excavation:

- 1. Machine excavate to expose A-C pipe.
- 2. Hand excavate areas under pipe where cuts/breaks are planned,
- Excavation operations should be carefully executed so that pipe damage does not occur prior to removal.

# Abandonment of AC Pipes

- AC pipes can be abandoned in-place. The procedure for abandonment of pipes in place includes filling the section of pipe with a grout/cement slurry. The location of the pipes should be recorded on the master drawing of the right-of-way.
- 2. At no time will bursting, crushing, grinding or pulverizing of the AC pipe be conducted.

# AC Pipe Removal:

- 1. All pipe cutting or breaking operations require adequate wetting with potable water to prevent A-C materials from being crumbled by hand pressure and to keep the asbestos fibers from becoming air-borne (friable).
- Plan pipe cuts/breaks as necessary to accommodate the size/weight of pipe being removed.
- 3. Use a hammer or wheel-type pipe cutter (or equivalent tool) to make the initial cut and drain the pipe of residual liquids. If gas powered cutters are to be used they should be connected to a HEPA filtered vacuum and used in a manner that will not create elevated airborne fibers. If a gas powered cutter is utilized that is not connected to a HEPA filtration system, the work area should be contained to prevent the release of airborne fibers. In addition, a sufficient supply of water shall be applied to the cut point to further prohibit the release of asbestos fibers. A layer of 6 mil polyethylene should be placed beneath the cut point to contain the debris that will be generated. The debris shall be collected and treated as asbestos-containing waste.
- 4. Remove pipe sections at joint collars by breaking them with a sledgehammer, or cutting them with a wheel-type pipe cutter (soil-pipe cutter).
- Where pipe re-connection is required, trim pipe ends in a manner that will not cause asbestos
  fibers to become airborne. Any debris that is generated shall be collected and treated as
  asbestos-containing waste.
- 6. When applicable, remove pipe sections from trench in an "intact" condition. Wet and containerize waste materials as you go. Using lifting straps and methods that do not damage the pipe remove the material from the trench.
- 7. WASTE PIPES: The pipe should be placed in a leak tight waste container. An alternative option would be to wrap each section of pipe with two layers of 6 mil polyethylene. For both options water should be applied to each section of pipe before it is contained.
- 8. Identify A-C materials and stock-pile the waste in a designated load-out area with the following label warnings: (The label must also identify the generator of the AC Pipe waste).

DANGER Contains Asbestos Fibers-Avoid Creating Dust

Cancer and Lung Disease Hazard

CITY TECHNICAL SPECIFICATIONS Section 02051 ASBESTOS WORK PLAN Page 5 of 6

# Transportation of Asbestos Waste

9. All asbestos-containing waste shall be transported to a class I landfill in leak tight containers. Each shipment must be properly marked with the following notation:

DANGER Contains Asbestos Fibers Avoid Creating Dust Cancer and Lung

#### Disease Hazard

10. All asbestos-containing waste shall be disposed of in a timely manner at a class I landfill. All waste must be disposed of within a 30 day period from the time of removal. A waste shipment record must be provided for each shipment.

#### References:

1. Underground Contractors Association of Illinois Best Practices for Removing Asbestos Cement Pipe

Acknowledgement of Requirements
Signed:
Firm;
Date:/

**END OF SECTION** 

CITY TECHNICAL SPECIFICATIONS Section 02051 ASBESTOS WORK PLAN Page 6 of 6