PROPOSED SCOPE OF SERVICES FOR TOWN OF LAKE PARK STORMWATER & WATER QUALITY IMPROVEMENT MULTI-PROJECT DEVELOPMENT AND GRANT SOURCING

PART 1.0 BACKGROUND

The three following projects have been identified for further project development, based on the Town of Lake Park Stormwater Masterplan and pre-existing grant funding opportunities from the State of Florida. These projects focus on improving stormwater management at the existing sites in the Town with the aim of:

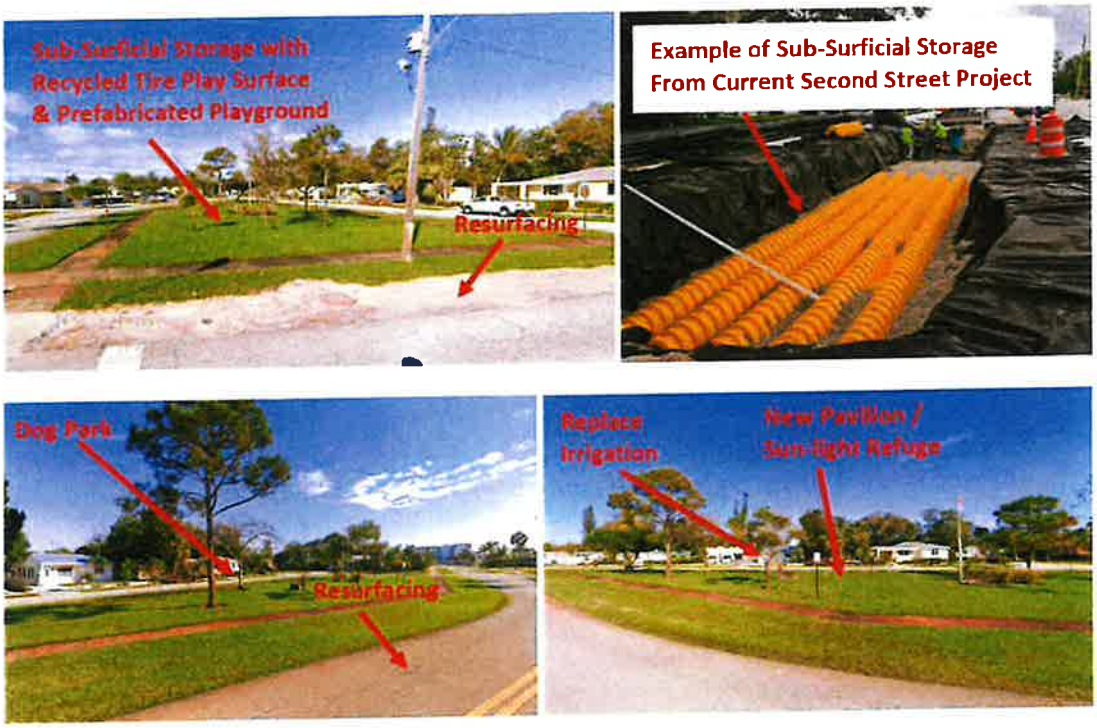
- Reduction of nuisance flooding,
- Improvements to the ingress and egress from the existing sites,
- Enhancement of Accessibility and Public Safety per the American Disabilities Act and existing Town Regulations and Standards,
- Provide Recreational Enhancements for Residents,
- Apply a sustainable stormwater management & water quality improvement approach to maximize grant funding eligibility through the State of Florida, for between 75% to 100% reimbursement.

Site Location A – Lake Park Elementary Roadway Drainage Improvements

The Right of Ways surrounding Lake Park Elementary lack existing drainage infrastructure which has been reported to cause nuisance flooding issues on the north, south and east sides of the school. Visual inspection of these areas indicates a lack of existing drainage inlets and indications of prior flooding. The roadway pavement on the south side of the school on Date Palm Dr near the school's drop-off lane indicates signs of wear from prolonged exposure to ponding runoff. Furthermore, the topography of the school site is on a downslope from 2nd Street, with the school area being on the low end of the downslope which further exacerbates the existing lack of inlets along Evergreen Dr, Date Palm Dr and 3rd Street as surficial runoff from the blocks to the east appear to indicate a flow direction towards the school.

Project Development at Site Location A would include the following:

- Drainage analysis and layout of drainage inlets on Date Palm Dr, Evergreen Dr and 3rd Street, affronting the school parcel, in an effort to eliminate nuisance flooding around the school
- The drainage inlets will collect surficial runoff which would then be piped to a storage facility to be sited under Lottie May Miller Park which is approximately 425 feet from the intersection at Date Palm and 3rd Street.
- Since the installation of a sub-surficial storage facility underneath the grassed area will require excavation and restoration of the park, this then also presents an opportunity for the Town of Lake Park to improve the park with additional enhancements including bio-swales similar to what was installed at Second Street as well as recreation site amenities, as follows.
- Additional general resurfacing, paving and grading improvements
- ADA enhancements for Proposed Site Features and Walkways
- A Prefabricated Playground with Permeable Recycled Tire Play Surface with Perimeter Fencing
- A fenced dog park with trash receptacles and dual-use water fountains
- Complete replacement of the existing irrigation system



Sub-Surficial Storage Concept for Lottie May Miller Park

Previously Developed Concept for Lottie May Miller Park

Site Location B – Second Street North of Park Avenue to Kalmia Dr

Based on information provided in the Stormwater Masterplan, and prior discussions with Town staff, the existing drainage on Second Street North of Park Avenue is reported to have nuisance flooding issues during intense microburst rainfall events. As is detailed in the Stormwater Masterplan, this is primarily because there are currently no existing drainage facilities on Second Street north of Park Avenue, excepting a few older exfiltration boxes which are located at the intersections along Second Street, and which are not connected to any sub-surface piping, nor do they provide any storage for runoff collected. This has led in the past to the ponding of stormwater in the roadway during typical minor rainfall events.

Continuous ponding of stormwater can lead to accelerated degradation of older asphalt and can also create access issues if the depth of ponding exceeds two inches or more. It is recommended that a new drainage system consisting of swale and sub-surficial storage be implemented to resolve this issue through improved roadway drainage, increased storage capacity, and exfiltration methods like what was constructed on Second Street south of Park Avenue. Notably however, the Right of Way on Second Street North of Park Avenue does not have the same width of Right of Way as areas to the South of Park Avenue, so the methods for storage may differ in certain areas, based on the width of Right of Way and the width of existing pervious areas on both sides of the roadway. It is likely that a combination of traditional swales, coupled with sub-surficial storage methods, will be required to provide sufficient drainage for Second Street. Currently the swales on Second Street north of Park Avenue are occupied by various forms of native and non-native vegetation which while contributing to aesthetics, occupy space that would normally be used for roadway drainage. However native trees and vegetation can also be useful tools in managing stormwater when deployed effectively.

Second Street R/W North of Park Avenue – Isolated Exfiltration Boxes

Second Street R/W North of Park Avenue – Large Trees in Swales

Project Development at Site Location B would include the following:

- Drainage analysis and layout of drainage inlets at all intersections along Second Street
- The drainage inlets will collect surficial runoff which would then be piped to sub-surficial storage systems sited underneath the roadway and at Blakeley Park
- Since the installation of a sub-surficial storage facility underneath the grassed area at Blakeley Park will require excavation and restoration of the park, this then also presents an opportunity for the Town of Lake Park to improve the park with additional enhancements including bio-swales like what was installed at Second Street as well as recreation site amenities, as follows.
- Additional general resurfacing, paving and grading improvements
- ADA enhancements for Proposed Site Features and Walkways
- A new Park Concept to be developed in concert with the PWD and other Town Departments
- Complete replacement of the existing irrigation system

Second Street R/W North of Park Avenue – Sub-Surficial Storage Site at Blakely Park

Site Location C – Ilex Ct GI and Stormwater Improvements

Based on information provided in the Stormwater Masterplan, and prior discussions with Town staff, the existing drainage on Ilex Ct was previously identified as a candidate site for drainage improvements. The stormwater masterplan identified this location based on hydraulic modeling which indicated surcharging due to existing pipe capacity constraints. The drainage issue has also been observable during severe wet weather. The objective of the project at Ilex Ct would be to provide additional storage capacity to relieve pressure on the existing pipe system while also making some site and roadway improvements that would be necessitated by the installation of sub-surficial storage.

Existing Playground Site at Ilex Park

Conceptual Alternative for Hybrid Sub-Surficial Storage and Bio-Swale Improvements at Ilex Ct

Project Development at Site Location C would include the following:

- Development and layout of potential bio-swale sites, restore all driveway aprons where needed
- General resurfacing, paving and grading improvements on Ilex Ct, 8th St and W Ilex Dr
- ADA enhancements for Proposed Site Features and Walkways
- Planting concept for bioswales to be sited on west side of 8th Street ROW
- Install Permeable Recycled Tire Play Surface above Sub-Surficial chamber field, then Re-Install Existing Playground Structure and Swing set
- New Piped Connections to Stormwater Sewers on Ilex Ct to provide pressure relief

PART 2.0 PROJECT DEVELOPMENT & FUNDING APPROACH

Project 1: "Second Street Neighborhood Stormwater & Water Quality Improvements Project"

Given that the Town of Lake Park has already made improvements to Second Street during the previous "Second Street Green Infrastructure Project", which was completed in early 2024, and which was fully funded by FDEP, and given that two of the projects proposed for development in site locations A and B are directly connected to or are in fact located on Second Street, there would be some efficiency in pursuing project funding for a project that would encompass all remaining portions of Second Street that have not yet been improved.
A combined project would include not only the section of Second Street North of Park Avenue, but also the remaining portion of Second Street South of Cypress Dr south of the limits of the previous project. In this sense, the combination of Site Locations A and B into one comprehensive project will allow for the Town to develop one grant application for design funding (and later construction) to be prepared for an improvement project which might be titled as the "Second Street Neighborhood Stormwater & Water Quality Improvements Project". This project would in effect complete all remaining runs of Second Street improving drainage, providing asphalt and sidewalk improvements, and making substantial improvements to two of the Town's historic pocket parks.

This approach provides value to the Town, because it will focus the existing funding and future funding on one design and construction effort for all of Second Street and would also represent a meaningful investment by the Town, but also the state, who is already familiar with the success of the previous Second Street project and would likely be willing to fund the project in light of a similar project approach with an even greater impact.

Project 2: "Ilex Court Stormwater and Water Quality Improvements Projects"

As it relates to site location C, this Ilex Court site location project development is focused on improving a site which was previously identified in the stormwater masterplan as a known location for nuisance or moderate flooding to in extreme cases, severe flooding. Given the issues at hand which are detailed at length in the stormwater masterplan, it is recommended that this project be approached on an individual basis, via its own grant application for design (and later construction) funding.

Further Funding Needs for Detailed Design and Construction to be Acquired

Following completion of the preliminary design phase scope of services, and successful award of grant funding for detailed design, WRMA / Cotleur & Hearing, shall prepare an additional scope of services for detailed design and grant application preparation for construction funding, which would include the preparation of 90% and 100% plans, cost estimates, and grant applications. The grant applications to secure funds for the detailed design may require up to a 50% match from the town. For the construction phase, the Town would seek 100% construction funding with no matching funds (if possible).

Total funding required for the design and construction of *Projects 1 and 2* is roughly estimated to be $3.63 Million, including $434,000 for design and $3,200,000 for construction. See breakdown:

Total Funding Requirements for Project 1	2ND STREET NEIGHBORHOOD improvements (SCHOOL / Lotti May Park / 2ND St. N.)
Total Project 1 Design Funding Required:	$350,000 (Grant Application 1)
50% Matching Fund Contribution from Town:	$175,000 (50% of $350,000)
Initial Seed Funding for Preliminary Design for Project 1:	$100,000 (counts as matching funds)
Remaining Matching Funds Contribution for Project 1:	$75,000 (contributed by Town later)
Total Project 1 Construction Funding Required:	$2,400,000 (no matching funds)

Total Funding Requirements for Project 2	ILEX COURT improvements
Total Project 2 Design Funding Required:	$84,000 (Grant Application 2)
50% Matching Fund Contribution from Town:	$42,000 (50% of $84,000)
Initial Seed Funding for Preliminary Design for Project 2:	$34,000 (counts as matching funds)
Remaining Matching Funds to be Contributed for Project 2:	$8,000 (contributed by Town later)
Total Project 2 Construction Funding Required:	$800,000 (no matching funds)

PART 3.0 SCOPE OF SERVICES

TASK 1.0 CONCEPTUAL GREEN INFRASTRUCTURE BMP PROJECT DEVELOPMENT SERVICES

1.1 Meet with Town Staff Onsite at All Three Sites
At project initiation, WRMA will attend onsite meetings at all three sites to discuss conceptual ideas for the project development and alternative options for site features and proposed improvements.

1.2 Meetings and Outreach Meeting Attendance
WRMA will attend meetings and coordinate with the Town Public Works and Planning Department on the conceptual designs until the conceptual layouts are complete and the grant packages are ready for transmittal. WRMA shall also attend any up to 4 outreach meetings with Town staff if required.

1.3 Develop Stormwater and Water Quality Conceptual Designs for All Three Sites
WRMA will prepare project plan sheets to a 60% level for each of the three proposed sites as described herein for the purpose of developing cost of construction takeoffs and to provide the basis for conceptual site exhibits to support the grant applications. This task shall include preliminary hydraulic modeling to provide calculations for the drainage improvements to provide data for future SFMWD permitting.

1.4 Develop Park Improvement and Conceptual Planting Plans with Visual 3D Rendering Exhibits in Plan/Section

WRMA shall work with Cotleur and Hearing, Professional Landscape Architects and Planners to develop conceptual site plans of the proposed bio-swales, site amenity improvements, and proposed irrigation plans based on the proposed BMP's and planting plans. Furthermore, Cotleur and Hearing shall prepare 3D photo-realistic renderings of the site improvements in both plan and cross section of the proposed bio-swales for each of the three project sites to support the grant applications and communicate the projects to the Commission, Town Management, State Agencies and all public stakeholders.

1.5 Prepare Grant Applications for Design Funding & Documentation for All Three Sites

WRMA shall prepare grant applications (min. of 2) for the two proposed projects 1 and 2, which shall be supported with the 60% plans, cost estimates for construction, and 3D photo-realistic conceptual renderings (as provided by Subtask 1.4). The grant applications shall be prepared for the purpose of securing funding for the detailed design phase, and then later, construction funding.

Task 1 Deliverables

- Regular Email Coordination, Virtual Meetings, In Person Meetings, Public Meetings
- Monthly Progress Reports
- 60% Plans for all three sites
- Conceptual Renderings for each of the three sites
- Grant Applications to Support Project Funding Requirements (min 2)

END OF SCOPE OF SERVICES

FEES

The Not-to-Exceed fee for this project is **$134,012.40**

This fee includes all time and materials, and lump sum subconsultant fees as follows:

Direct Labor	$89,382.40
Cotleur & Hearing, Landscape Architecture	$44,630.00 (no markup)
Total Fee	**$134,012.40**

Note that monthly progress billings are not tied to deliverables. Some tasks will require multiple billing periods prior to provision of 100% complete deliverables. Progress billings will be allowed prior to submission of completed deliverables.

A task-by-task breakdown of fees is provided for services.

WATER RESOURCES MANAGEMENT ASSOCIATES, INC.

TOWN OF LAKE PARK
WATER QUALITY MULTI-PROJECT DEVELOPMENT AND GRANT SOURCING
BREAKDOWN OF RATES AND MANHOURS

FEBRUARY 2025

TASK ITEM AND DESCRIPTION	Senior Project Manager $ 166.40	Professional Engineer $ 161.28	Total Hours (hrs)	Subconsultant Lump Sum (Cotleur & Hearing no markup)	Direct Labor Hourly NTE	Sub-Task Total	Task Total
1.0 CONCEPTUAL STORMWATER & WATER QUALITY PROJECT DEVELOPMENT SERVICES							**$ 134,012.40**
1.1 Initial Meeting with Town Staff Onsite At All Three Sites	4	4	8	$ -	$ 1,310.72	$ 1,310.72	
1.2 Meetings and Public/Outreach Meeting Attendance (4 In Person Meetings)	12	12	24	$ -	$ 3,932.16	$ 3,932.16	
1.3 Develop Stormwater and Water Quality Conceptual Designs for All Three Sites	24	424	448	$ -	$ 72,376.32	$ 72,376.32	
1.4 Develop Park Improvement and Conceptual Planting Plans with 3D Visual Exhibits	1	2	3	$ 44,630.00	$ 488.96	$ 45,118.96	
1.5 Prepare Grant Applications for Design Funding & Documentation for All Three Sites	60	8	68	$ -	$ 11,274.24	$ 11,274.24	
Subtotal Lump Sum				**$ 44,630.00**			
Subtotal Hourly Not to Exceed					**$ 89,382.40**		
GRAND TOTAL FEE NOT TO EXCEED							**$ 134,012.40**

Professional Engineering Services Proposal for Stormwater Multi-Project Development and Grant Sourcing Work for $134,012.40.

TOWN OF LAKE PARK

ATTEST:

By: _____
Vivian Mendez, Town Clerk

Date: _____

By: _____
Roger Michaud, Mayor

Date: _____

WATER RESOURCES MANAGEMENT ASSOICATES, INC.
250 Tequesta Drive
Suite #302
Tequesta, Florida 33469

By: _____
Raul Mercado, WRMA

Its: President
Title

Raul M. Mercado, P.E.
Written Name

Date: 6/30/2025