

Executive Summary

The Long Range Pond Working Group (PWG) evaluated the status of our ponds. Of concern were obvious sites of erosion and evident problems. Also of concern was the possibility of more widespread gradual erosion that is not immediately apparent. The PWG's concerns were in part driven by recognition that should erosion result in significant silting of the ponds, a very expensive dredging operation would be necessary. In its deliberations, the PWG evaluated historical records and photographs, input from consultants and contractors, and information from neighboring communities. The PWG has made recommendations.

With this report, the work of the PWG is completed. The LRF Board is asked to discharge the PWG and assign the responsibilities for implementation of recommendations and monitoring to the Roads and Grounds Committee and/or another committee or group as the Board decides.

I. Introduction

In November 2017 the Lakeridge Falls (LRF) Board (See Appendix 1 for list of abbreviations.) received a report from the Road and Grounds Committee with the results of a pond survey conducted by this committee (Appendix 2). The Board appointed a special committee, the PWG, to further study this problem. The charge to this committee was: To study and make recommendations for the remediation of current erosion problems, as well as developing a long term plan to stabilize, and/or minimize, future erosion in our storm water drainage ponds. The group was empaneled by a Board Resolution, for the duration of the project. The group worked directly with current Board members, and the Board has agreed to commit whatever resources reasonably necessary to accomplish the foregoing goals, and to eventually arrive at a comprehensive plan looking toward future maintenance.

In response to this charge, the committee sought information and photos from long time residents, reviewed documents, evaluated a pond remediation project in another neighborhood, and met with contractors serving LRF.

II. Members of the PWG

Chuck Tierney (chair), Chuck Wilson, Tony Scacifero, Mary Lynne Collins and Judy Buffa. Board liaisons: Dick Dorn (through 2019), David Putnam (through 2019), Lori Klein (since 2019).

III. Background and History

A. Description of Storm Water Management system

The Lakeridge Falls storm water management system, as built by the original contractor, consists of 16 retention ponds (commonly referred to as "ponds") totaling 39.5 acres in area. See

Appendices 3 and 4. In addition, a natural Preserve, alternatively referred to as the “mitigation area” of 4.5 acres is located in the central portion of the community, bounded by Stirling Falls Circle on the north, east and west, and Bowen Falls Place on the south.

During rain storms, runoff from the front yards of the individual properties flows into the streets where the rainwater is transported into the ponds via the storm sewers along the curbs and in the case of the Sandstone neighborhood, catch basins in the center of the roadways. The lawns between and at the rear of the buildings are graded such that runoff is directed into the ponds. All of the ponds (except for the one by the back gate, Pond 7) are interconnected by concrete pipes and culverts that allow the storm water to flow ultimately into the mitigation area. (See Appendix 4) The mitigation area is designed to filter out any pollutants contained in the stormwater, which ultimately recharges back into the groundwater aquifer. If the water level in the mitigation area rises above its maximum design elevation, the excess water is discharged into a concrete catch basin on the east side of the area. The water then is transported away from the community westward through an underground 5-foot diameter pipe crossing under Tuttle Avenue and into Pearce Canal that finally flows into Sarasota Bay. According to the site plans, the typical pond section shows that the ponds were excavated during initial construction with a shallower slope at the top and a steeper slope at the bottom portion. The ponds were excavated to depths from a minimum of 8 feet and a maximum of 12 feet. There is an approximate 1-foot difference between the top of bank elevation and the discharge high water level, which allows that under normal conditions, the maximum storm water level would never overflow the brim of the ponds.

B. Regulatory requirements and regulatory reports

See Appendices 5 and 6 for engineering and water use permits. See link below for Southwest Florida Water Management District (SWFWMD) permits.

<http://www18.swfwmd.state.fl.us/ERP/ERP/Entry/ERP.aspx?id=27093&UniquePageID=9db62cdb-1460-45c5-b3d1-a642f76aa1ae>

C. Past problems

1. Pond 7

Pond 7 (referred to in some LRF plans as Pond B) is the tiny pond inside the LRF wall just south of the Lockwood exit gate. It does not drain into the LRF pond system, but rather drains under Lockwood Ridge Road to the usually dry pond by Glenbrook apartments. This pond existed before LRF was graded and developed. It has a very small watershed and has been a maintenance issue from the beginning of LRF. The main issue being water quality and the growth of various nuisance plants in the water.

In 2013, at the recommendation of our ponds maintenance contractor at that time – Cardno Entrix, the LRF Board agreed to stop trying to maintain Pond 7 as a pond and turn it into a wetland. Various aquatic plants were installed and added in subsequent years. Pond 7 is now a very successful wetland and a hospitable home for native species.

2. Problem at 4156 Cascade

In 2010, the owners of 4156 Cascade Falls Drive (John and Mary Ann Murphy) discovered a hole in their backyard just south of the SE corner of their house. Exploration of that hole by our landscaping contractor revealed that two sections of drain pipe between the mid-street storm drain in the street and Pond 11 had separated allowing the covering dirt to fall into the drain pipe and thus created the hole in the yard.

The Board was concerned that this seemed a major problem and contracted with C&M Road Builders, Inc. to analyze the situation and recommend a fix. The contractor undertook a major excavation from the point of the pipe break between 4156 Cascade and 4152 Cascade to the edge of Pond 11. The problem was established as a fault where the drain line entered Pond 11 below the normal waterline. At that point the drain pipe was supported by a concrete bracket shaped like an upside down U, with the feet of the U fixed in the bottom of the pond and the top of the U supporting the end of the drain pipe. The U bracket had slumped east into the Pond thus pulling the drain pipe with it and thus creating the separation of the drain pipe under the Murphy's property.

In order to reset the upside-down U bracket in the pond bed the water level in Pond 11 had to be partially lowered. To do that the contractor blocked the exit from the center drain in Cascade Falls Drive on the Pond 11 side. Note the street drains between Ponds 11 and 12 and between Pond 12 and Pond 15 can drain in both directions.

As the contractor began to pump water from Pond 11 into the center drain in Cascade Falls to drain into Pond 12 the water level in Pond 11 did not recede, thereby proving the drain pipe between Pond A (Walmart Pond) and Pond 11 did, in fact, exist. Once this was confirmed the contractor plugged the drain from Pond A to Pond 11 and Pond 11 was drained down to allow the project to proceed. Once the water level in Pond 11 was reduced the U bracket was reset in the base of Pond 11, the drain pipes were reconnected the dirt and the sod were replaced. The total cost of the project was \$12,030.

Shortly after completion of the project Chuck Wilson and Chuck Tierney walked the entire property to check if there were any other holes in the ground where drain pipes from the roads led to the ponds. They found no such holes or any other evidence of related problems.

There are continuing problems with this site (see IV.B .4)

3. Well pump

The well is located on the NE side of Pond 11. This well was here when the bulk of the LRF property was an orange grove. An underground pipe runs from the well to Pond 10 (Irrigation Pond). The purpose of the well is to maintain the water level in Pond 10 to support the irrigation system in the absence of normal rainfall.

When Lake 10 is getting below the desirable water level, the irrigation station will automatically send a signal to the well pump station located behind the row of houses on the north side of Lake 11. Unlike the irrigation station, the well pump station has one pump, not two, that has a 25 horse

power motor, which helps push water from the well to Lake 10. The well, just as a side note, is over 100 feet deep.

Basically the well pump is a binary system. It either works or it doesn't. It does not lend itself to preventive maintenance. The irrigation system began to operate in stages starting in 2002. Since then the pump has been replaced twice, most recently on June 1, 2016. In any case replacement of the pump will be required when it fails. Other major issues regarding the well are unlikely.

4. Banks surrounding Pond 11

In 2007 the Association contracted with an engineering firm to inspect our storm management system. The firm advised there needed to be major re-engineering of the pond banks in Sandstone and especially to the banks of Lake 11. The cost would be over \$20,000. The LRF Board was very concerned about this unbudgeted cost and sought another opinion. The Vice President of LRF Board had a neighbor where she had previously lived who was an attorney very familiar with SWFMWD matters who advised she did not believe there was any regulatory requirement to perform the major reconstruction work being recommended. Needless to say the Board engaged another engineering firm and they reported the storm water management system was in compliance with all regulatory requirements. Inspections of the system are required every five years so there have been several such inspections since 2007. This issue has never come up again.

5. Recent Pond Inspection

Crest Engineering performed a SWFWMD 5 year inspection on March 9, 2020. Maintenance of two control structures in Pond 7 were addressed. Vegetation, a number of plastic bottles and other trash inside the skimmers in CS-B were cleared. The top grate is heavily corroded and is being replaced. CS-1 on the west side of the wetland also had some vegetation around it that was cleared. A statement of Inspection for Proper Operation and Maintenance was certified on March 24, 2020 (see Appendix 9).

IV. Current Concerns

A. Downspout in Sandstone

Some owners in Sandstone have retrofitted their residences with gutter and downspouts. At the December 5, 2018 PWG meeting the problem of downspouts installed in Sandstone contributing to erosion was discussed. The PWG accepted the recommendation of Pete Nabor of Eco-Logics that the downspouts be emptied into the ponds by buried tubing. On this basis, the Architectural Review Board proposed a rule that was subsequently adopted by the LRF Board. All newly installed downspouts discharging water that flows toward a pond are required to be connected to piping that is buried and discharges directly to the pond. Downspouts already installed are not subject to this regulation per legal advice to LRF.

B. Future issues to monitor

1. Problems re “main drain” at NW corner of Preserve behind Stirling Falls Circle and problems with exit from main drain under Pond 14.

All LRF Retention Ponds are interconnected except for Ponds #4 and #5. Both of these ponds have individual weirs (dams) that drain excess water into the Preserve. During dry periods the water level in the ponds is below the drain level for the weirs. During heavy rain events, the water level rises and eventually reaches the designed maximum water level for that pond. When that level is reached, the weir overflows into the Preserve to remove the excess water and maintain the ponds at the designed level. The excess water drained from the ponds adds to the water level of the Preserve and ultimately is drained via the Preserve weir and the 60 inch cast concrete pipe to the West side of Tuttle avenue where it enters into the SWFWMD jurisdiction.

The weir in Pond 4 is in excellent condition and shows no need for repair or for routine monitoring. However, the weir in Pond 5 is experiencing some erosion at the ends of the concrete weir structure. If the erosion continues it could conceivably create a channel at the end of the weir structure lower than the height of the dam thus lowering the pond's level. The current erosion does not appear to have reached this point yet, but a proactive action of adding rip rap and sod at the ESE corner of the weir was recommended to prevent further erosion. Rip rap was installed. Periodic monitoring of this weir is recommended.

2. Drain to Pearce Canal off LRF property

This is not the responsibility of LRF. It is under the jurisdiction of SWFWMD.

3. Silt buildup of ponds

Should silt buildup occur, it would require that silted ponds be dredged. This would be extremely costly for LRF.

At the July 12, 2018 meeting, the PWG examined historical photographs to assess changes in the pond banks over time. While some specific problems were identified by noting changes in some areas (e.g. south banks of Pond 11), there was not evidence of massive erosion. It was agreed that LRF should attempt to measure what, if any, significant erosion may occur around the pond edges.

In the December 5, 2018 PWG meeting, Mr. Pete Nabor, the owner of Eco-Logic Services that currently maintains our ponds, indicated that due to the depth of our retention ponds and the fact that we have no streams or rivers bringing silt onto the property, silt build-up issues are unlikely. The only silt sources we will encounter are those from pond edge erosion and whatever sand or dirt enters the retention ponds from runoff and the street storm drains. Even assuming some pond edge erosion, the depth along the edge might decrease but the pond surface area would increase and there would be no significant change in the pond's designed capacity.

In summary, there is no likely emergence of a silt issue in the near future. Periodic monitoring of pond depths and banks should be used to detect any negative trend. This would entail the establishment of a baseline for our pond depths and a recheck of that data on a 2 or 3 year interval to detect any negative trend. Moreover, the PWG recommends installation of stakes to facilitate measurement of changes in the pond banks should be undertaken based on information provided by of Pete Nabor of Eco-logics. The PWG recommends that this monitoring be implemented.

4. Problems regarding drainage erosion around the landscaped banks of ponds

As noted above in III. C. 4., Pond 11 has long been an issue. As referenced in the July 2017 report from the Roads and Grounds Committee (Appendix 2), the LRF Association received a costly proposals to correct erosion issues around Pond 11. Specifically, bids from Crosscreek Environmental Inc. and Florida Shoreline & Foundation Experts were for services up to \$19,680 and \$18,680 respectively.

In the March 2019 PWG meeting, it was noted that the area behind 4162 Cascade has settled, probably due to natural compaction and/or washout of the sand below. Continual monitoring is recommended. At its March 19, 2019 meeting, the PWG recommended that distance between the top of the drain box and the sod should be measured at regular intervals. In February 2019, this distance was determined to be 1.5 inches. Significant erosion of the south bank of Pond 11 is evident.

5. Problems regarding erosion by wave activity around pond edges

Erosion of pond edges was discussed by the PWG with Pete Nabor at its December 5, 2018 meeting. In addition to drainage (rain runoff and drains), the other potential source of silt is wave erosion of the banks. It was noted that the fetch contributes to erosion. The possible use of stakes to measure erosion and aquatic plants to stabilize the banks was discussed (see 7. below).

6. Consideration of no mow approach

Using a no mow zone at the perimeter of the ponds to prevents erosion was evaluated by the PWG. This is recommended, not required, in Sarasota County. A visit to locations where this was implemented in the Meadows was made and input received from the Meadows Association and residents. See report to the PWG in Appendix 7. Based on this information, the PWG was considering recommending that the Board adopt a no mow trial when the PWG was informed of a decision by West Bay in February of 2019 to try a no mow approach at Pond 16. The no mow approach was undertaken by West Bay but was abandoned when it was determined by the contractor that it was difficult to maintain.

7. Use of aquatic plants

In 2017, The Roads and Grounds Committee evaluated planting aquatic plants to prevent bank erosion due to run-off and wave action. Michelle Atkinson from the Horticulture and Water Conservation Department at the University of Florida's Institute of Food and Agricultural Sciences made a presentation to the committee. A delegation from the committee made a field trip to Lakewood Ranch where they inspected several ponds and various example of plants, especially those of mid height. In its July 2017 report, the committee recommended to the LRF Board (Appendix 2), that a trial be conducted. In November 2017, the LRF Board authorized funds for testing the effect of using aquatic plants to prevent erosion. This was not implemented at the time but postponed so that it could be evaluated by the PWG.

In December 2018, the PWG considered, in conjunction with Eco-Logic Services, a trial of aquatic plants. Pete Nabor indicated that native herbaceous plants are beneficial for a stormwater retention pond. They stabilize the shoreline against erosion. Plants also prevent algal blooms by reducing nutrient runoff into ponds. Additionally, they provide habitat for pond life (shore birds, fish, and turtles).

It was recommended that carefully chosen noninvasive aquatic plants be planted at 5 sites. Rebar stakes were to be installed as markers to measure erosion over time and the effect that the plants may have on this. Pete Nabor of Eco-Logics indicated that installation of stakes would be inexpensive and provide worthwhile data. This is an ongoing project. No rebar has yet been installed. In April 2019, Eco-logics subcontractor Aquatic Consulting installed plants (Arrowhead, Spikerush, and Pickerel weed) at sites on Ponds 3, 11, and 12. However, the pond contractor mistakenly applied herbicide to the latter two sites. The plants became established at the site on the north end of Pond 3 near the path connecting Kariba Lake Terrace and MacKay Terrace. Note this site is at the end of a long fetch and may be subject to wave erosion. These plants are doing well. As planned, the plants are noninvasive and have not spread. See photos in Appendix 8. Note that the plants appear to be retaining silt preventing it entering the pond. Additionally, it has been observed that the area has attracted shore birds including Great White Egrets, Great Blue Herons, Little Blue Herons and Ibises which apparently hunt for small fish among the plants. It is recommended that this test be fully implemented, that rebar stakes be installed, and 5 sites be tested. At least 2 of these should be at no cost to LRF because the contractor's error damaged two sites. Additionally, it may be worthwhile to expand the successful site of Lake 3 that is at the end of a long fetch.

V. Summary of Recommendations

After studying the ponds, as well as the community's historical problems, the PWG was able to identify areas where a minimal outlay today for monitoring should avoid problems emerging in the future that could be quite costly to remedy. The PWG recommends that responsibility for

monitoring as well as formulating future recommendations be assigned by the LRF Board to the Roads and Ground Committee or other such committee/group as the Board decides. Monitoring of ponds should include a systematic approach on a defined schedule. Specific items that should be monitored are detailed below. Funds for this monitoring and other monitoring should be appropriated.

A. Downspouts added to Sandstone residences should drain into a buried pipe that empties directly into the pond. Adopted by LRF Board.

B. Periodic monitoring of Pond 5 weir should be undertaken.

C. Pond depth and bank erosion should be monitored by periodic measurement.

D. Settling of soil at repair site at 4162 Cascade should be monitored.

E. Installation of rebar stakes and aquatic plants should be completed. Results of this test should be evaluated. Aquatic Consulting should be engaged for this work. Funds should be appropriated.

F. Drainage erosion around Pond 11, especially the south bank should be monitored.

G. The PWG was not able to recommend a simple solution for the current problem sites with eroding banks. Specifically, runoff across berms and backyards with heavily concentrated flows of rain runoff. Burying newly installed downspouts should help, but will not mitigate existing conditions for the most part. Rip rapping may be a part of the solution, but we do not have a current test site. It may be also useful to revisit the no-mow approach. These or other solutions should be considered in the future.

Appendices

Appendix 1. Abbreviations

LRF Pond Ridge Falls
PWG Long Range Pond Working Group
SWFWMD Southwest Florida Water Management District

Appendix 2. Roads and Grounds Committee Report on Pond Survey Observations

Appendix 3. Pond nomenclature

<u>Number</u>	<u>Old Number</u>	<u>Pond Name</u>
1	1	MacKay
2	2	Kariba
3	3	Big
4	4	West
5	6	Stirling
6	7	Victoria
7	B	B
8	8	Club
9	14	Ashford
10	9	Irrigation
11	13	Reynolds
12	12	Cascade
13	10	Bowen
14	5	Tuttle
15	11	Bridal
16	15	Brosche
A*		Walmart*

* in watershed, but not on LRF property

Appendix 4. Figures showing ponds and drainage plan

Appendix 5. Engineering permit

Appendix 6. Water use permit

Appendix 7. Report to the PWG on the no mow trial at the Meadows

Appendix 8. Photos of site on Pond 3 planted with aquatic plants

Appendix 9. Inspection for Proper Operation and Maintenance

Appendix 2

Roads and Grounds Committee Report on Pond Survey

PRELIMINARY REPORT ON THE LAKERIDGE FALLS RETENTION PONDS

ROADS AND GROUNDS COMMITTEE

JULY 2017

At the 23 March committee meeting, member Corey Smith gave a Power Point presentation regarding the benefits of installing aquatic plants in the community's 15 stormwater retention ponds. It was suggested that the committee invite a professional from academia to present a perspective on the environmental benefits of adding aquatic plantings to our ponds.

Ms. Michelle Atkinson from the Horticulture & Water Conservation Department of the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) provided the committee with an overview of retention ponds and aquascaping at the 6 April meeting. Ms. Atkinson listed the benefits of installing aquatic plants;

- reduction of water pollution (nitrogen, hydrocarbons, pet waste) into the ponds and ultimately into the water bodies outside the community, as well as the underlying aquifer;
- providing shade and thus reducing algae;
- creating a favorable habitat for fish and wildlife;
- and foremost, assisting in the minimization of bank erosion (plant root systems are better than turf grass in stabilizing the pond's banks).

The committee discussed the cost benefits of adding aquatic plants. While the cost to the community was unknown, it was agreed that the addition of said plantings would be less costly than the ongoing repairs to the shorelines over time due to heavy run-off during extreme rain events and wave action. There would also be annual costs associated with routine maintenance and replacement of dead plants. The committee identified negative aspects of aquatic plantings; mainly the fact that some residents may find them unappealing (i.e. "too tall") and the fact they may be expensive. Nevertheless, there was a majority consensus that the positives outweigh the negatives.

Ms. Atkinson agreed to lead the committee on a field trip to Lakewood Ranch (conducted on 19 May) for the purpose of observing a variety of aquatic plantings that would be suitable to our community. Five committee members and one board member met at the LWR municipal building where we inspected several ponds and various examples of plants, concentrating on those which were minimal in height. We noted that the LWR ponds were under the same drought conditions as ours with thriving plantings along the shorelines. Ms. Atkinson opined that there may be grant money available for the community to fund an aquascaping project from the Sarasota Bay Estuary Program, Bay Partners Grant Program <https://sarasotabay.org/get-involved/bay-partners-grant-program/>. Note that the application period for 2017 grants has closed and 2018 applications will be available in Jan 2018.

During the 13 June committee meeting, five plants were chosen as desirable in the event the community decides to implement an aquascape program:

- Duck Potato (Sagittaria)
- Spikerush
- Blue flag Iris
- Pickerelweed

- Swamp lily

(These are included in a list of plants desirable for aquascaping from "Stormwater Systems in Your Neighborhood", Southwest Florida Water Management District.)

Following our discussion, a motion was made and approved recommending to the Board of Directors to perform three small trail runs on three different locations: the south side of Lake Reynolds-13, the north-east section of Lake Cascade-12, and on the north side of Lake Big-3, using Duck Potato, Spike rush, and Pickerelweed. We estimated the cost of aquascaping these three test cases at \$400 with the plants to be provided by our pond maintenance vendor – Cardno Entrix.

Also at the 13 June committee meeting, an email from Cardno to the then Lakeridge Falls president (Subject: Status of "Lakes" in Lakeridge Falls, dated Dec 5, 2014) was read and discussed. At that time, "the Board was considering the 'clean-up' of Bowen Lake-10 when the experiment ran amok and the plantings therein covered almost the entire lake and made it unsightly. Ultimately the clean was completed in late 2015". (from Fuad Nuwaysir).

Highlights of the Dec 2014 memo are as follows:

- Our "lakes" are not natural but are actually stormwater retention ponds and are designed and engineered to retain stormwater and settle out undesirable pollutants and sediment;
- Low-growing native plants are very beneficial for a variety of reasons (discussed above);
- Many residents have expressed concern that these plants will completely fill the lakes, but Cardno opined that this is unlikely;
- If invasive or non-native species are seen, Cardno would remove them;
- The SWFWMD regulates permitting regarding stormwater retention ponds; and
- Cardno's professional recommendation was to leave the existing plants alone since the ponds are much healthier systems with plants than without.

In summary, our retention ponds should be considered by the Board as an important issue and the Roads & Grounds Committee will continue to take on this project for the remainder of the year. Going forward, I will ask Cardno to calculate the total length of shoreline of the 15 ponds (probably several miles). Obviously, it would be cost prohibitive to "plant" the entire perimeter of all of the ponds; however, we should continue to monitor the areas of erosion and take corrective action to mitigate these areas, conduct test plantings with a select variety of plant species, pursue agency funding and grants, and design a process to aquascape each of the ponds, where needed, in a phased approach over time.

Respectfully submitted,

Tony Scacifero, Chairman

Roads & Grounds Committee

Attached photos

T. Scarfano
2/10/18

POND DRAWINGS

PONDS = 39.54 acres

4:1 slope

NWL = normal water level

DHWL = ^{Discharge} Design high water level

TDB = top of bank

SH GWL = seasonal high GW Level

<u>LAKE</u>	<u>NWL</u>	<u>DHWL</u>	<u>TDB</u>
1	30.50	32.25	33.30
2	"	32.24	33.3
3	"	"	"
4	"	31.73	32.7
5	"	32.05	33.1
6	"	31.95	33.0
7	"	32.28	33.3
8	"	32.28	33.3
9	"	32.28	33.3
10	"	32.50	33.5
11	"	32.38	33.4
12	"	32.49	33.5
13	"	32.48	33.5
14	"	32.37	33.4
15	"	32.14	33.1
LAKE "B"	27.50	29.0	33.0
Wetland "A"	30.50	31.49	

OB = 33.3

DHWL = 32.24

NWL = 30.5



Summary of LRF Pond Survey Observations Made in November 2017

All the lakes surveyed suffer from some bank erosion due to seasonal variations in levels and the wind/wave action causing undercutting of the banks. The result is that over time, the lakes are getting larger and shallower. This is a natural evolution and there is no practical way to stop it. It can however, be mitigated to some extent by the use of selected aquatic plants near the banks. As proof of the lake enlargement due to this effect, two trees that were lost to Irma on the south bank of Lake 6 (Victoria) are at the very edge of the lake. One tree was a Weeping Willow and the other a Cypress. According to resident John Doyle these trees were planted about a year after the development was completed and at the time of planting were placed about 6 feet from the bank. the distance may be off but clearly they were not planted at water's edge.

In driving around the ponds with the aid of a golf cart, we encountered some erosional depressions stemming from roof gutter downspouts at the rear of the buildings, which ran perpendicular towards the ponds. In these areas, the grass was lush and the depressions were not obvious but you could feel them when you drove over them and in at least one case, the depth of the depression was about knee-high. Two particularly deep and obvious areas were on the South side of Lake 8 (Club) behind addresses 4265 and 4269 Cascade Falls Drive and on the East side of Lake 14 (Ashford behind 8216 and 8222 Ashford Falls Court. In addition, there are many swales graded by the developer located between the homes that appear to be designed to drain surface water away from the buildings towards the ponds. In some cases we could feel some depression when driving across these areas. The most severe of these swales occurs between the building at the Northwestern corner of Lake 13 (Reynolds). This area has previously been repaired with plastic landscaping mesh and rock rip-rap; however the repair has failed to mitigate the erosion and the affected area appears to have enlarged. The erosion at the South end of Lake 13 (Reynolds) has also been repaired but the erosion has continued. The erosion in this area is occurring due to the steep slope from the community's perimeter wall and the parallel sidewalk. All the fixes that have been tried were Band Aid fixes and not based upon any specific approach. (Note that these areas at Lake 13 (Reynolds) are the subject of the 2 proposals the HOA received from 2 contractors in July).

All of the retention ponds North of LRF Blvd. are in much better shape with many of the ponds on the North side of the community exhibited no or only slight bank erosion. Two areas of noticeable bank erosion were observed on the East end of Lake 10 (Bowen) and between the first two homes at the Southeastern corner of LRF Blvd. and Stirling Falls Circle (8231 and 8227 Stirling Falls Circle)

The committee recommends that the Board consult with a landscape contractor or engineer for their experience and suggestions on how to best remedy the erosion areas. We believe one simple fix to the erosion occurring in the back yards due to runoff from the gutters is to merely fill in these areas with a graded gravel (compacted) and topsoil up to grade and resodding. This fix may be permanent or last several years. In any event, the cost to the community would be minimal (a few hundred \$ per area).

Credit goes to Faud Nuwaysir for calculating the lake area acreage and total feet of pond shoreline (see attached). There are approximately 4.5 miles of lake shoreline within our community.

Respectfully submitted by:

Chuck Wilson and Tony Scacifero

Roads & Grounds Committee

Nov. 9, 2017

An Estimation of LRF Lake Perimeters & Areas and Road Lengths					
Lake WaterLine Perimeters & Areas As of 2/4/2016				Road Length c. to c. of intersection	
Lake #	Lake Name	Water Line Perimeter Ft	Lake Area Acres	Street Name	Length c-c Ft
1	MacKay	1,344	1.81	Ashford Falls Court	354
2	Kariba	1,254	2.01	Bowen Falls Place	475
3	Big	5,500	10.73	Cascade Falls Drive	3,539
4	West	740	0.82	Kariba Lake Terrace	2,108
5	Tuttle	3,657	5.92	LakeRidge Blvd	3,136
6	Stirling	1,324	1.62	MacKay Fall Terrace	1,563
7	Victoria	943	1.24	Reynolds Falls Court	372
8	Club	1,469	2.65	Simpson Falls Court	296
9	Irrigation	961	1.18	Stirling Falls Circle	3,130
10	Bowen	880	0.98	Victoria Falls Circle	1,580
11	Bridal	1,292	1.53	Broeche Lane	453
12	Cascades	1,443	2.69	Toatal Lenth - Feet	17,006
13	Reynolds	1,429	2.20	Toatal Lenth - Miles	3.22
14	Ashford	941	1.29		
15	Broeche	824	0.74		
	Total Feet	24,001	37.41		
	Total Miles	4.55			
16	Back Gate	347	0.13		
Preserve		1,859	4.08		
Woods		3,277	9.90		
The above was estimated from Google Earth maps					
The most recent published maps for our community bear the date of 2/4/2016.					
The water level at that time was used for the evaluations of the lake surface.					
February is one of our dryer months - and the above may not reflect the high-water values.					
The same maps were used for the lengths of our roads, evaluated at the centerline of the road and measured from center to center of intersections.					
In my estimation there could be an error of 10% or more because of undefined water levels, vegetaion , and tree shadows around the perimeter.					
10/5/2017 F. S. Nuwaysir					

pool 110,000 gal

ROADS AND GROUNDS COMMITTEE

DETENTION POND SURVEY NOTES

5-4-17 (Manzi, Scacifero)

Pond levels down 3.5-4 feet and 10 ft. receded from banks.

Lake 8 (Club) – erosion gullies between buildings and from downspouts

Lake 14 (Ashford) – bad erosion around rocks

Lake 9 (Irrigation) – water lilies? Bank vegetation around weir

Lake 10 (Bowen) – cypress knee roots at water line south side. Erosion gully on east end.

Lake 13 (Reynolds) – rip rap and plastic mesh fix at NWC; bad erosion extending to south and east. Bank erosion along sidewalk on south side. Sidewalk is undercut.

Lake 15 (Brosche) – outside of wall; no noticeable erosion issues.

Lake 11 (Bridal) – water lilies; no noticeable erosion; outfall pipe behind water fall retaining wall.

Lake 12 (Cascade) – erosion gullies on east side.

10-4-17 (Nuwaysir, Manzi, Wilson, Scacifero)

Pond 13 – So. Side erosion along sidewalk; E side conc slab undercut at least 2 ft. NEC erosion; NWC severe erosion

Pond 8 – behind 4267 & 4269 undercut bank

Pond 9 – e side between 8216 & 8220 2 down spouts deep hole in bank; SEC riprap around pipe.

Pond 13 – E side erosion swale.

10-12-17 (Wilson, Manzi, Scacifero)

Lake 7 (Victoria) – So side 2 willows? Cut down stumps in water. Mo major bank erosion. Shallow swales primarily between bldgs.

Lake 2 (Kariba) – no noticeable erosion issues

Lake 3 (Big) – 2nd house in from SWC of lake- shallow rut at SEC of house. No sign erosion issues.

10-12-17 (Scacifero, Manzi)

Lake 1 (Mackay) – hydrilla? No sign. Erosion issues

Lake 4 (West) – significant pond plantings (see photo); no noticeable erosion issues

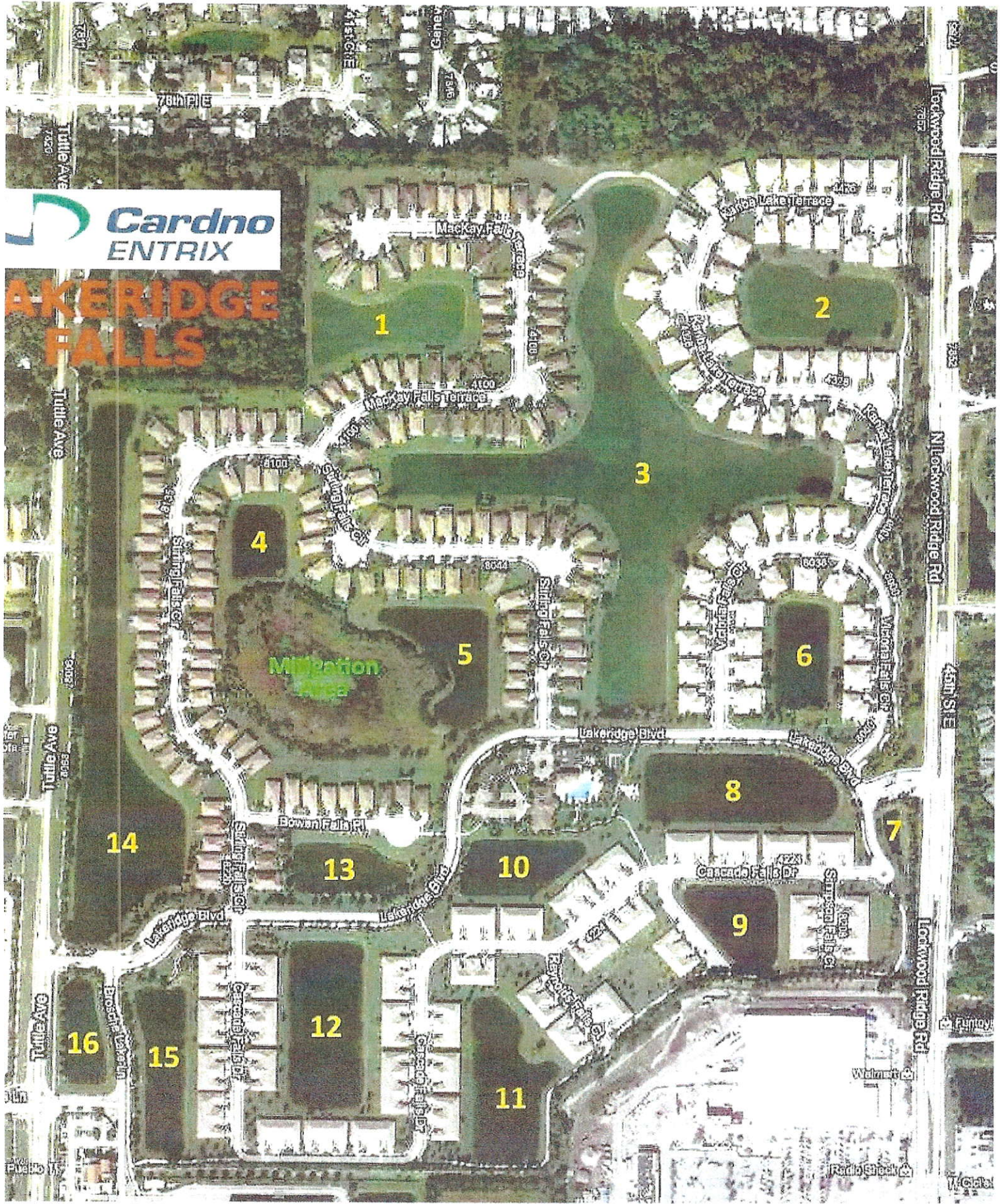
Lake 5 (Tuttle) – east side along wall-steep but no noticeable erosion; 1st & 2nd houses at SEC of lake (Rhoda) 2 black flexible drainage pipes from downspouts connecting underground and discharge into pond above waterline; cost \$400 stated Rhoda. Dick Dorn stated buried discharge pipe extends from preserve and runs under road and across Tuttle, Sand delta in lake behind his house.

Appendix 4

Figures Showing Ponds and Drainage Plan

☆ = Rebar ○ = Rebar + Aquatic Plants





LAKERIDGE FALLS

LAKE RIDGE FALLS LAKES

Lake numbers as set by Lakereidge Falls Developer
(Oct 2016)

Woods

2-Kariba

1-MacKay

3-Big

4-West

7-Victoria

6-Stirling

Preserve

8-Club

5-Tuttle

10-Bowen

9-Irrigation

14-Asford

15-Broeshe

11-Bridal

12-Cascade

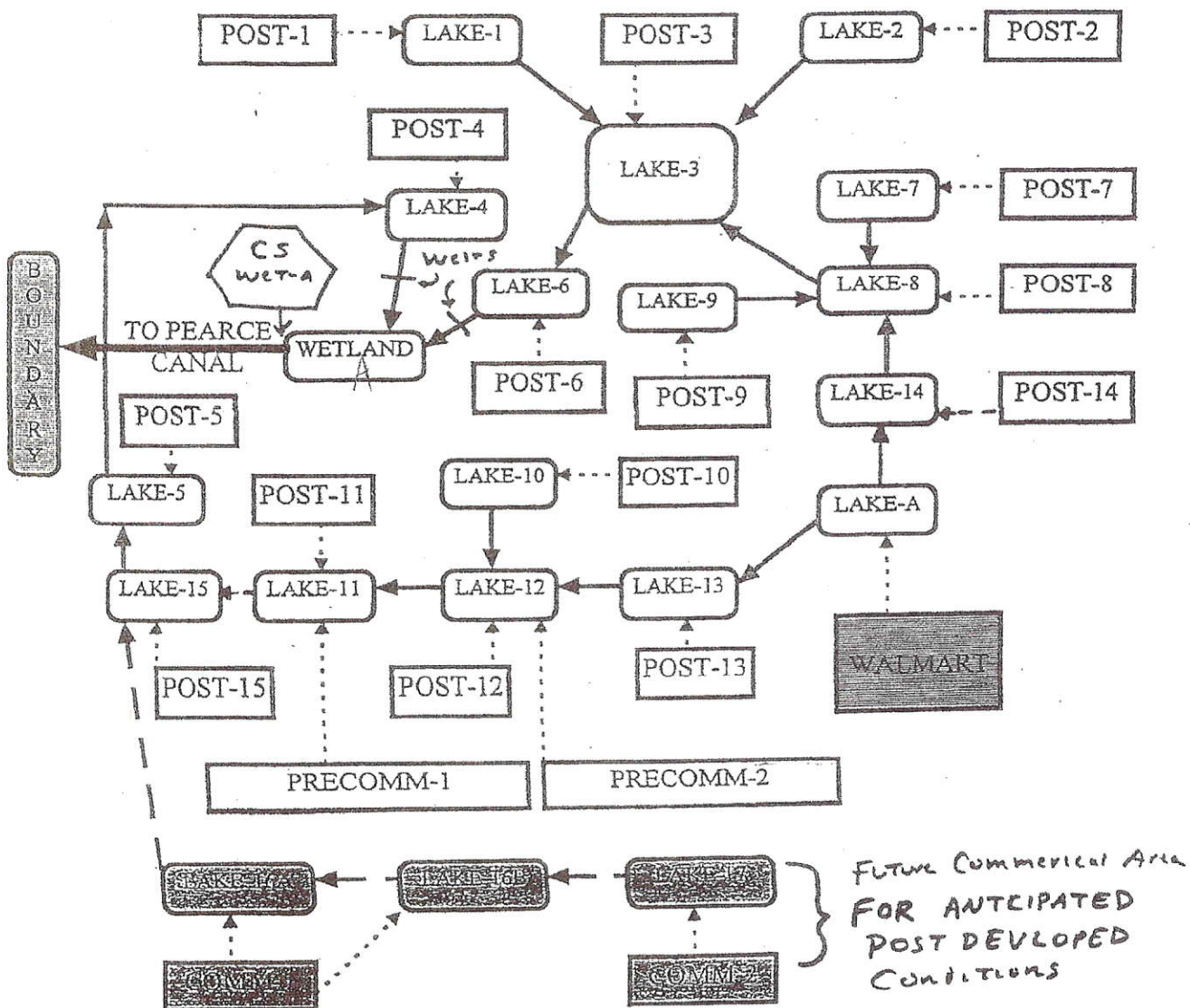
13-Reynolds



LINK - NODE DIAGRAM

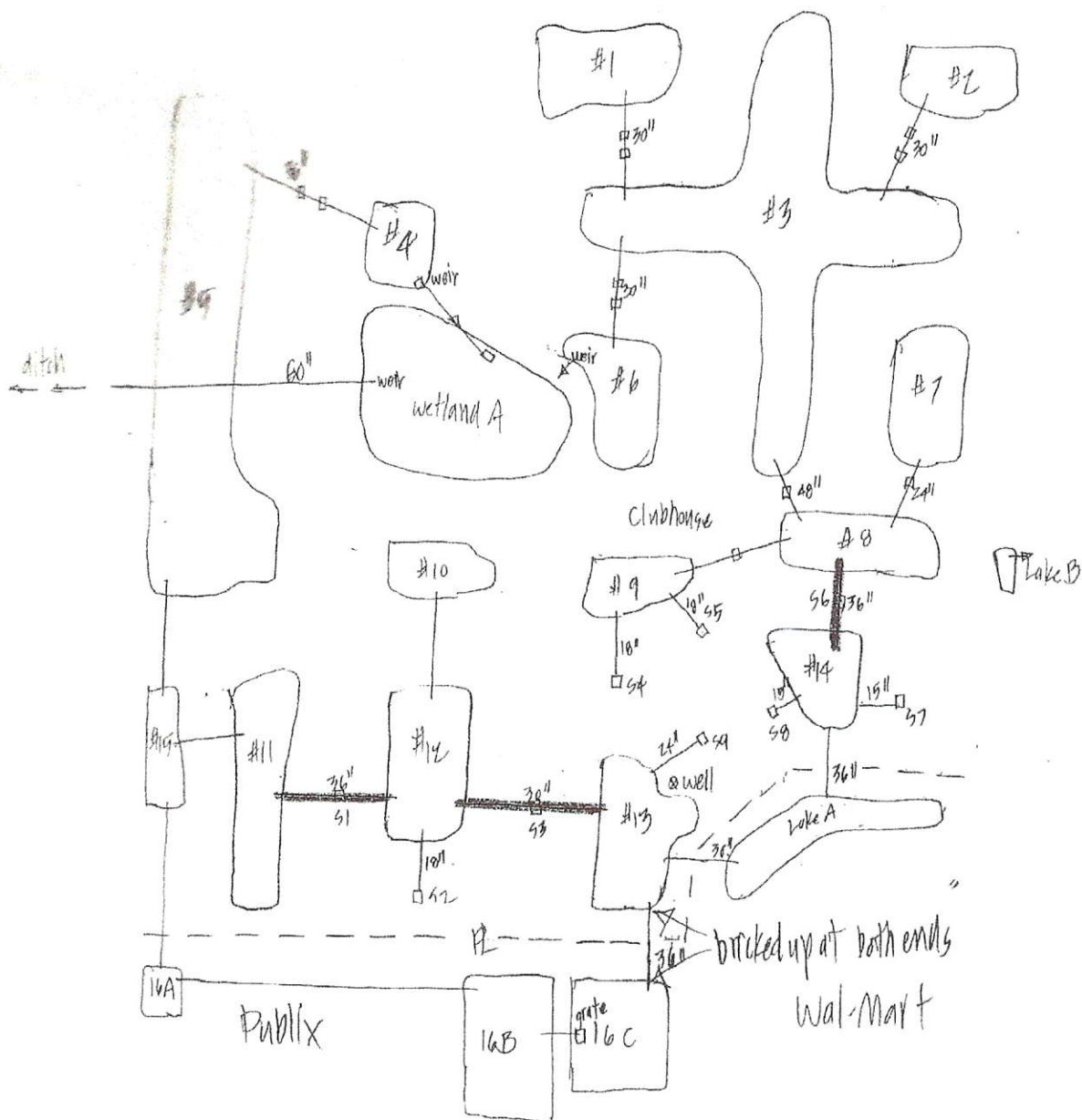
UNIVERSITY COMMONS

ICPR ROUTING

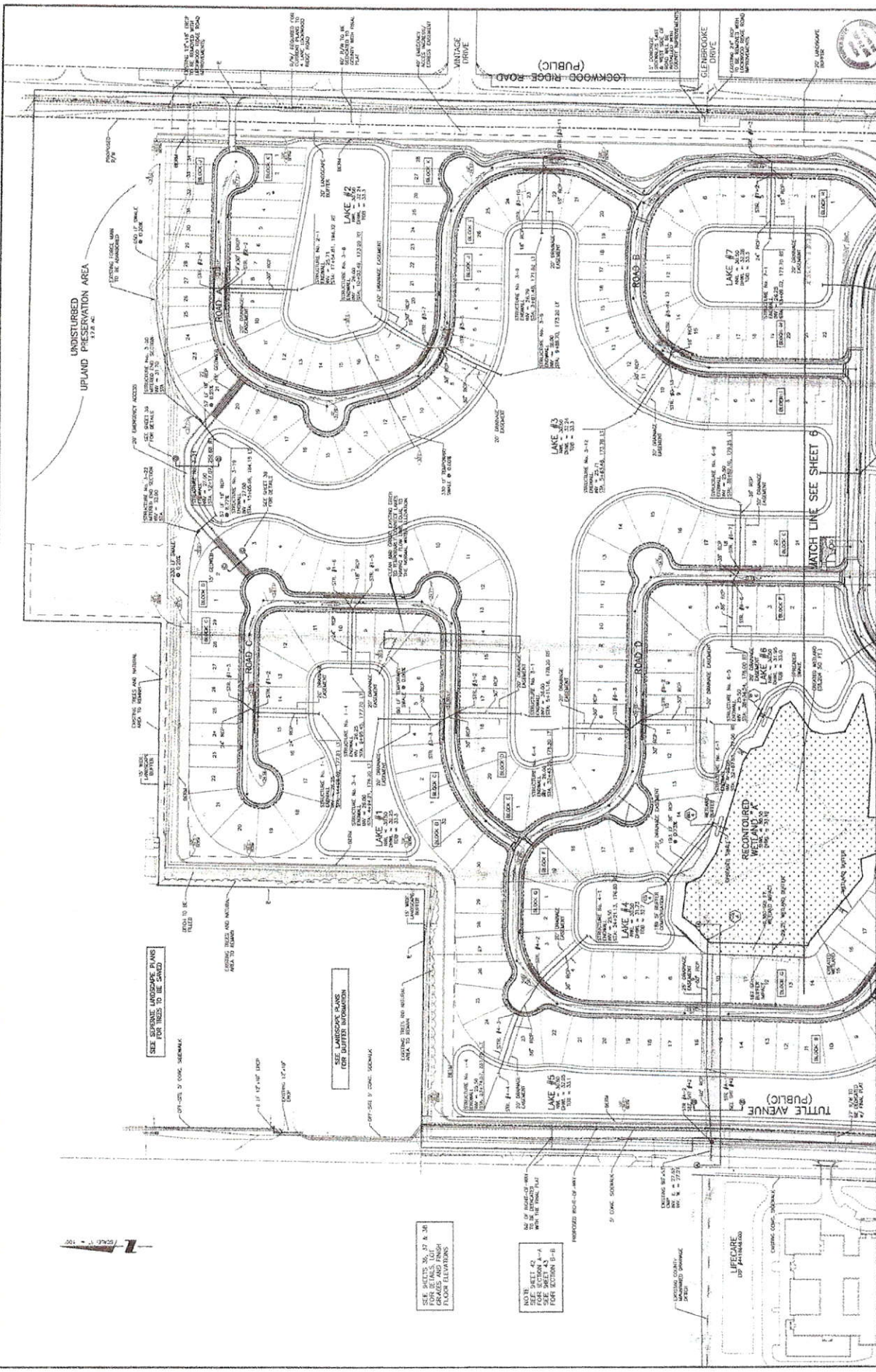


LRF Lakes

1/10/09 BWL



— submerged connection



WILSON MILLER ENGINEERS, ARCHITECTS, PLANNERS 10000 13th Avenue, Suite 100 Lakewood, CO 80226 (303) 440-1000 www.wilsonmiller.com		CLIENT: CENTEX HOMES PROJECT: LAKERIDGE FALLS SHEET: 5794-201-001
DATE: 10/1/03 DRAWN BY: J. H. HARRIS CHECKED BY: J. H. HARRIS IN CHARGE: J. H. HARRIS	SCALE: AS SHOWN TITLE: MASTER PAVING AND GRADING PLAN	PROJECT NO.: 5794-201-001 SHEET NO.: 5794-201-001 TOTAL SHEETS: 5794-201-001

Appendix 5

Engineering Permit



An Equal
Opportunity
Employer

Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)
SUNCOM 531-6900

Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131
SUNCOM 667-3271

Ronnie E. Duncan
Chair, Pinellas

Thomas G. Dabney, II
Vice Chair, Sarasota

Janet D. Kovach
Secretary, Hillsborough

Watson L. Haynes, II
Treasurer, Pinellas

Edward W. Chance
Manatee

Monroe "Al" Coogler
Citrus

Maggie N. Dominguez
Hillsborough

Pamela L. Fentress
Highlands

Ronald C. Johnson
Polk

Heidi B. McCree
Hillsborough

John K. Renke, III
Pasco

E. D. "Sonny" Vergara
Executive Director

Gene A. Heath
Assistant Executive Director

William S. Bilenky
General Counsel

April 8, 2002

Mr. Michael J. Belmont, Division President
Centex Homes, A Nevada General Partnership
301 North Cattlemen Road, Suite 108
Sarasota, FL 34232

Subject: Notice of Final Agency Action for Approval
ERP Standard General Construction
Permit No: 44011732.008
Project Name: Lakeridge Falls, Phase 1C
County: Manatee
Sec/Twp/Rge: 33/35S/18E

Dear Mr. Belmont:

This letter constitutes notice of Final Agency Action for **approval** of the permit application referenced above. Final approval is contingent upon no objection to the District's action being received by the District within the time frames described below.

You or any person whose substantial interests are affected by the District's action regarding a permit may request an administrative hearing in accordance with Sections 120.569 and 120.57, F.S., and Chapter 28-106, Florida Administrative Code (F.A.C.), of the Uniform Rules of Procedure. A request for hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's action, or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no disputed facts, and (3) otherwise comply with Chapter 28-106, F.A.C. Copies of Sections 28-106.201 and 28-106.301, F.A.C. are enclosed for your reference. A request for hearing must be filed with (received by) the Agency Clerk of the District at the District's Brooksville address within 21 days of receipt of this notice. Receipt is deemed to be the fifth day after the date on which this notice is deposited in the United States mail. Failure to file a request for hearing within this time period shall constitute a waiver of any right you or such person may have to request a hearing under Sections 120.569 and 120.57, F.S. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding the District's action in this matter is not available prior to the filing of a request for hearing.

Enclosed is a "Noticing Packet" that provides information regarding the District Rule 40D-1.1010, F.A.C., which addresses the notification of persons whose substantial interests may be affected by the District's action in this matter. The packet contains guidelines on how to provide notice of the District's action, and a notice that you may use.

The enclosed approved construction plans are part of the permit, and construction must be in accordance with these plans.

FILE OF RECORD
PERMIT NO. _____

FILED ON 5/31/02 BY [Signature]

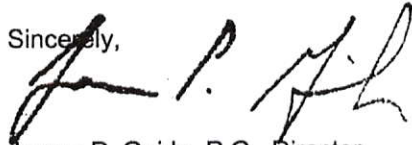
Centex Homes, A Nevada General Partnership

Page 2

April 8, 2002

If you have questions concerning the permit, please contact Tanase S. Bude, E.I., at the Sarasota Service Office, extension 6550. For assistance with environmental concerns, please contact Robert S. Soklaski, extension 6505.

Sincerely,



James P. Guida, P.G., Director
Sarasota Regulation Department

JPG:TSB:RSS:bxm

Enclosures: Approved Permit w/Conditions Attached
Approved Construction Drawings
Statement of Completion
Notice of Authorization to Commence Construction
Noticing Packet (42.00-039)
Sections 28-106.201 and 28-106.301, F.A.C.

cc/enc: **File of Record 44011732.008**
Harry T. Weaver, P.E., Dufresne-Henry, Inc.
Mr. Jeff Murray, Assistant Land Development Manager, Centex Homes

FILE OF RECORD
PERMIT NO. _____

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
STANDARD GENERAL CONSTRUCTION MODIFICATION
PERMIT NO. 44011732.008

EXPIRATION DATE: April 8, 2007

PERMIT ISSUE DATE: April 8, 2002

This permit issued under the provisions of Chapter 373, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.), Rule 40D-40, authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Lakeridge Falls, Phase 1C

GRANTED TO: Centex Homes, A Nevada General Partnership
301 North Cattlemen Road, Suite 108
Sarasota, FL 34232

ABSTRACT: This permit authorizes the construction of a surface water management system designed to serve a 40.29 acre residential project in Manatee County, entitled Lakeridge Falls, Phase 1C. The infrastructure of this project includes 138 residential multifamily lots, roadways, detention ponds, a potable water system, a waste water collection system, and an internal drainage piping system. The ponds were previously excavated under Permit No. 43011732.003. This permit is a modification of Permit No. 4311732.003, resulting in one less residential unit, .017 acre less impervious area, and the modification of piping inverts for the interconnected lake system. There are no wetlands or other unique hydrological features located within the project area. This permit modification does not alter the environmental acreage previously authorized by Environmental Resource Permit (ERP) No. 43011732.003. All other conditions of ERP Permit No. 40311732.003, dated July 25, 2000, remain in effect.

OP. & MAINT. ENTITY: Centex Homes
PROPERTY LOCATION: Manatee County
SEC/TWP/RGE: 33/35S/18E
**TOTAL ACRES OWNED
OR UNDER CONTROL:** 170.39
PROJECT SIZE: 40.29 Acres
LAND USE: Single-Family Residential
DATE APPLICATION FILED: February 11, 2002
AMENDED DATE: N/A

FILED ON

5/31/02

BY

SPM

Permit No. 44011732.008
Project Name: Lakeridge Falls, Phase 1C
Page 2

I. Water Quantity/Quality

No ponds are being constructed.

Mixing Zone required: YES () NO (X)

Variance required: YES () NO (X)

II. 100-Year Floodplain

N/A

III. Environmental Considerations

No wetlands or other surface waters exist within the project area.

Watershed name(s): South Coastal Drainage

A regulatory conservation easement is not required.

A proprietary conservation easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The discharges from this system shall meet state water quality standards as set forth in Chapter 62-302 and Section 62-4.242, F.A.C., for class waters equivalent to the receiving waters.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Sarasota Regulation Department
Southwest Florida Water Management District
6750 Fruitville Road
Sarasota, FL 34240-9711

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.
4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Sarasota Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required

Permit No. 44011732.008
Project Name: Lakeridge Falls, Phase 1C
Page 3

Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.

6. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.
7. Refer to **GENERAL CONDITION** No. 15 herein.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature

EXHIBIT "A"

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and a pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
4. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the District as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.
5. District staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the District as a permit prior to the dewatering event as a permit modification. A water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.
6. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.
7. Off-site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the District.
8. The permittee shall complete construction of all aspects of the surface water management system, including wetland compensation (grading, mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.

9. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:
 - a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
 - b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
 - c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.
10. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.
11. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a written notification of commencement indicating the actual start date and the expected completion date.
12. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.
13. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C. Additionally, if deviation from the approved drawings are discovered during the certification process the certification must be accompanied by a copy of the approved permit drawings with deviations noted.
14. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the District, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.
15. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the District until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the District, if different from the permittee. Until a transfer is approved by the District, the permittee shall be liable for compliance with the terms of the permit.
16. Should any other regulatory agency require changes to the permitted system, the District shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.
17. This permit does not eliminate the necessity to obtain any required federal, state, local and special District authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.

ERP General Conditions

Individual (Construction, Conceptual, Mitigation Banks), Standard General, Minor Systems

Page 2 of 3

41.00-023 (Rev 03/02)

14

18. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.
19. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.
20. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
21. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40D-4.351, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.
22. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with District rules, regulations and conditions of the permits.
23. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District and the Florida Department of State, Division of Historical Resources.
24. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

Appendix 6

Water Use Permit



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

December 13, 2011

Lakeridge Falls Community Association
4200 Lakeridge Boulevard
Sarasota, FL 34243

Subject: **Final Agency Action Transmittal Letter**
General Water Use Permit
Permit No.: 20 012290.002
Project Name: Lakeridge Falls
County: Manatee

Dear Permittee(s):

Your Water Use Permit has been approved. Final approval is contingent upon no objection to the District's action being received by the District within the time frames described in the enclosed Notice of Rights.

The information received by the District will be kept on file to support the District's determination regarding your application. This information is available for viewing or downloading through the District's Application and Permit Search Tools located at www.WaterMatters.org/permits.

The District's action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notice of agency action, as well as a noticing form that can be used is available from the District's website at www.WaterMatters.org/permits/noticing. If you publish notice of agency action, a copy of the affidavit of publishing provided by the newspaper should be sent to the District Regulation Department that reviewed your permit or other agency action, for retention in the File of Record for this agency action.

Please be advised that the Governing Board has formulated a water shortage plan referenced in a Standard Water Use Permit Condition (Exhibit A) of your permit, and will implement such a plan during periods of water shortage. You will be notified during a declared water shortage of any change in the conditions of your Permit or any suspension of your Permit, or of any restriction on your use of water for the duration of any declared water shortage. Please further note that water conservation is a condition of your Permit and should be practiced at all times.

The ID tags for your withdrawals shall be installed by a District representative. This representative will attempt to contact you within 30 days to discuss placement of your tags. If you have any questions or concerns regarding your tags, please contact Cheryl Johnson at extension 6518, in the Sarasota Regulation Department. If you have any questions or concerns regarding your permit or any other information, please contact the Sarasota Regulation Department and ask to speak to someone in the Water Use Regulation Section.

Sincerely,

Claire E. Muirhead, P.G.

Sarasota Regulation Department

Enclosures: Approved Permit
Notice of Rights

STANDARD CONDITIONS:

The Permittee shall comply with the Standard Conditions attached hereto, incorporated herein by reference as Exhibit A and made a part hereof.

SPECIAL CONDITIONS:

1. The Permittee shall evaluate the feasibility of improving the efficiency of the current irrigation system or converting to a more efficient system. This condition includes implementation of the improvement(s) or conversion when determined to be operationally and economically feasible.(296)
2. The Permittee shall implement a leak detection and repair program as an element of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per year.(309)
3. The Permittee shall incorporate best water management practices, specifically including but not limited to irrigation practices, as recommended for the permitted activities in reports and publications by the IFAS.(312)
4. The Permittee shall limit daytime irrigation to the greatest extent practicable to reduce losses from evaporation. Daytime irrigation for purposes of system maintenance, control of heat stress, crop protection, plant establishment, or for other reasons which require daytime irrigation are permissible; but should be limited to the minimum amount necessary as indicated by best management practices. (331)
5. Permittee shall not exceed the quantity determined by multiplying the total irrigated acres by the total allocated acre-inches per irrigated acre per season for each crop type. For all crops except Citrus, an irrigated acre, hereafter referred to as "acre," is defined as the gross acreage under cultivation, including areas used for water conveyance such as ditches, but excluding uncultivated areas such as wetlands, retention ponds, and perimeter drainage ditches. For Citrus, an irrigated acre is based on 74% shaded area, equivalent to 89.4% of the gross acreage minus uncultivated areas such as wetlands, retention ponds, and perimeter drainage ditches.

An applicant or permittee within the Southern Water Use Caution Area may obtain the total allocated acre-inches per acre per season for their crops, plants, soil types, planting dates, and length of growing season by completing the "Irrigation Water Allotment Form" and submitting it to the District. The District will complete and return the form with the calculated total allocated acre-inches and water conserving credit per acre per season per crop, if applicable, based on the information provided. The "Irrigation Water Allotment Form" is available upon request. (427)

6. All reports and data required by condition(s) of the permit shall be submitted to the District according to the due date(s) contained in the specific condition. If the condition specifies that a District-supplied form is to be used, the Permittee should use that form in order for their submission to be acknowledged in a timely manner. The only alternative to this requirement is to use the District Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the District website on how to register to set up an account to do so. If the report or data is received on or before the tenth day of the month following data collection, it shall be deemed as a timely submittal.

All mailed reports and data are to be sent to:
Southwest Florida Water Management District
Sarasota Regulation Department, Water Use Regulation
6750 Fruitville Road
Sarasota, Florida 34240-9711

Submission of plans and reports: Unless submitted online or otherwise indicated in the special condition, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, per capita annual reports, etc. are required.

Submission of data: Unless otherwise indicated in the special condition, an original (no copies) is required for data submittals such as crop report forms, meter readings and/or pumpage, rainfall, water

**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
WATER USE PERMIT
GENERAL
PERMIT NO. 20 012290.002**

PERMIT ISSUE DATE: December 13, 2011

EXPIRATION DATE: December 13, 2021

The Permittee is responsible for submitting an application to renew this permit no sooner than one year prior to the expiration date, and no later than the end of the last business day before the expiration date, whether or not the Permittee receives prior notification by mail. Failure to submit a renewal application prior to the expiration date and continuing to withdraw water after the expiration date is a violation of Chapter 373, Florida Statutes, and Chapter 40D-2, Florida Administrative Code, and may result in a monetary penalty and/or loss of the right to use the water. Issuance of a renewal of this permit is contingent upon District approval.

TYPE OF APPLICATION: Renewal

GRANTED TO: Lakeridge Falls Community Association
4200 Lakeridge Boulevard
Sarasota, FL 34243

PROJECT NAME: Lakeridge Falls

WATER USE CAUTION AREA: SOUTHERN WATER USE CAUTION AREA, MOST IMPACTED AREA

COUNTY: Manatee

TOTAL QUANTITIES AUTHORIZED UNDER THIS PERMIT (in gallons per day)

ANNUAL AVERAGE	132,600 gpd
PEAK MONTH ¹	434,200 gpd
DROUGHT ANNUAL AVERAGE ²	153,500 gpd

1. Peak Month: Average daily use during the highest water use month.
2. Drought Annual Average: Annual average limit when less than historical average rainfall if sufficient Water Conservation credits exist in the Permittee's account.

ABSTRACT:

This is a renewal of an existing recreational / aesthetic water use permit for the irrigation of 68 acres of lawn and landscape using ground water and surface water. Irrigation quantities are allocated by AGMOD. The authorized quantities shown above are increased from those previously permitted due to an AGMOD adjustment. The standard annual average daily quantity is increased from 123,300 gallons per day (gpd) to 132,600 gpd, the drought annual average daily quantity is increased from 148,300 gpd to 153,500 gpd and the peak month daily quantity is increased from 421,700 gpd to 434,200 gpd. Information regarding the water use and special conditions is contained within the tables and comments below.

Special Conditions include those that require the Permittee to report pumpage and meter readings, provide annual crop reports, maintain the water level control device in the augmented lake and evaluate the feasibility of using reclaimed water.

WATER USE TABLE (in gpd)

<u>USE</u>	<u>ANNUAL AVERAGE</u>	<u>PEAK MONTH</u>	<u>DROUGHT ANNUAL AVERAGE</u>
Recreation/Aesthetic	132,600	434,200	153,500

IRRIGATION ALLOCATION RATE TABLE

<u>CROP/USE TYPE</u>	<u>IRRIGATED ACRES</u>	<u>IRRIGATION METHOD</u>	<u>STANDARD IRRIGATION RATE</u>	<u>DROUGHT IRRIGATION RATE</u>
Lawn & Landscape Irrigation	68.00	Sprinkler Under Tree	26.20"/yr.	30.34"/yr.

WITHDRAWAL POINT QUANTITY TABLE

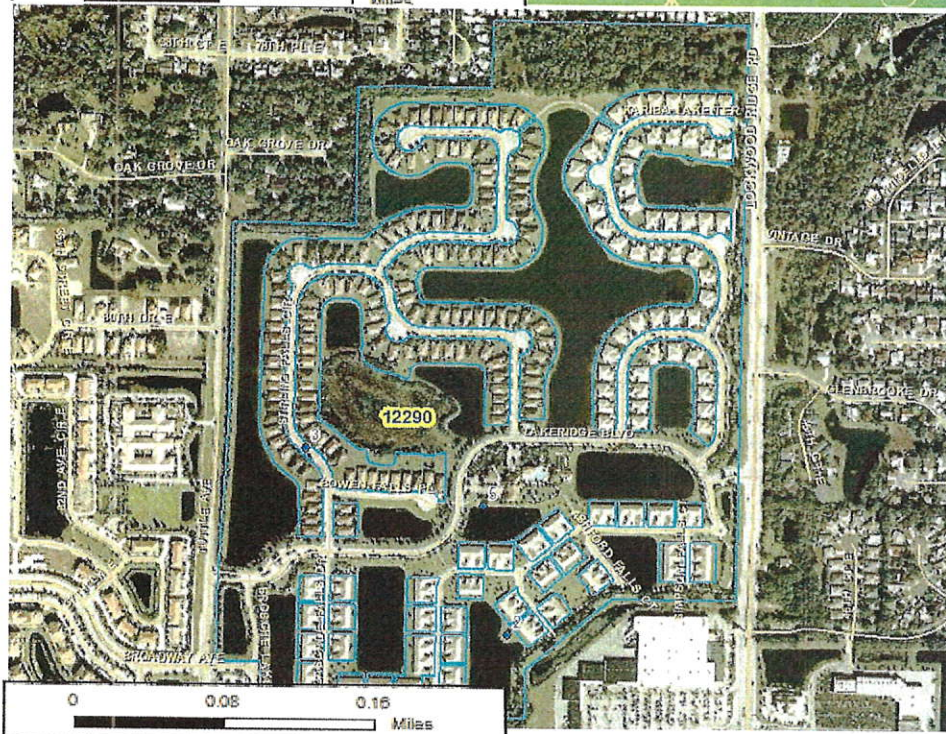
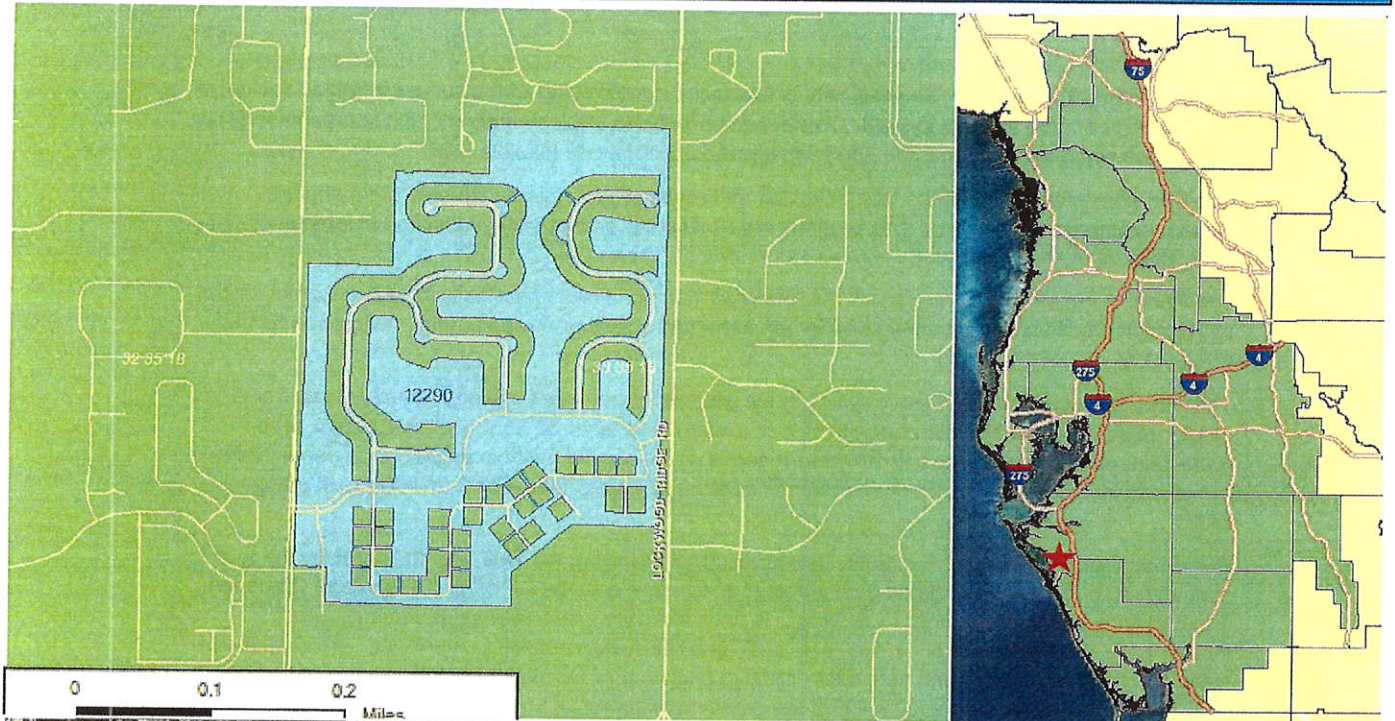
Water use from these withdrawal points are restricted to the quantities given below:

<u>I.D. NO. PERMITTEE/ DISTRICT</u>	<u>DIAM (IN.)</u>	<u>DEPTH TTL./CSD.FT. (feet bls)</u>	<u>USE DESCRIPTION</u>	<u>AVERAGE (gpd)</u>	<u>PEAK MONTH (gpd)</u>
2 / 2	8	660 / 364	Augmentation	132,600	434,200
5 / 5	12	N/A / N/A	Re-Pump	132,600	434,200

WITHDRAWAL POINT LOCATION TABLE

<u>DISTRICT I.D. NO.</u>	<u>LATITUDE/LONGITUDE</u>
2	27° 23' 32.70"/82° 30' 33.20"
5	27° 23' 39.00"/82° 30' 34.60"

Location Map
Lakeridge Falls Community Association
WUP No. 20 012290.002



Legend

- DIDs
- WUP Boundary

2010 Natural Color Imagery

MANATEE COUNTY

Southwest Florida
 Water Management District

level evapotranspiration, or water quality data.
(499)

7. Within 90 days of the replacement of withdrawal quantities from ground water or surface water bodies with an Alternative Water Supply, the Permittee shall apply to modify this permit to place equal quantities of permitted withdrawals from the ground and/or surface water resource on standby. The standby quantities can be used in the event that some or all of the alternative source is not available.
(363)

8. The Permittee shall investigate the feasibility of using reclaimed water as a water source and submit a report describing the feasibility to the Permit Data Section, Performance Management Office, by December 1, 2016. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to the Permittee's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. Infeasibility shall be supported with a detailed explanation. If the use of reclaimed water is determined to be feasible by the Permittee or by the District, then the Permittee shall submit an application to modify this water use permit to include reclaimed water as a source of water. The modification application shall include a date when the reclaimed water will be available and shall indicate a proposed reduction in permitted quantities. If the permit application is not submitted by the Permittee, the District may reduce, following notice to the Permittee, the quantities authorized with this permit to account for the availability of reclaimed water.
(458)

9. The permittee shall record the following information on the Irrigation Water Use Form that is supplied by the District for recreation/aesthetic/golf irrigation use for each permitted irrigation withdrawal point, District ID. No(s). 2, Permittee ID No(s). 2:

1. Irrigated plant type,
2. Total Acres per plant type,
3. Acres shrubs and/or trees,
4. Number of acres of tees and greens, and
5. Dominant soil type or acres by dominant soil type.

This information shall be submitted by March 1 of each year documenting irrigation for the previous calendar year.

(475)

10. The total withdrawal from District ID No. 2, Permittee ID No. 2, 8 inch well, for augmenting the irrigation lake shall not exceed the total withdrawal from District ID No. 5, Permittee ID No. 5, from the water body for irrigation during any month.(546)

11. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.(568)
12. This Permit is located within the Southern Water Use Caution Area (SWUCA). Pursuant to Section 373.0421, Florida Statutes, the SWUCA is subject to a minimum flows and levels recovery strategy, which became effective on January 1, 2007. The Governing Board may amend the recovery strategy, including amending applicable water use permitting rules based on an annual assessment of water resource criteria, cumulative water withdrawal impacts, and on a recurring five-year evaluation of the status of the recovery strategy up to the year 2025 as described in Chapter 40D-80, Florida Administrative Code. This Permit is subject to modification to comply with new rules.(652)
13. The following withdrawal facilities shall continue to be maintained and operated with existing, non-resettable, totalizing flow meter(s) or other measuring device(s) as approved by the Regulation Department Director: District ID No(s). 2 and 5, Permittee ID No(s). 2 and 5. Meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with instructions in Exhibit B, Metering Instructions, attached to and made part of this permit.(719)
14. Augmentation to and withdrawal of water from irrigation lake that is authorized under this Water Use Permit, shall be conducted so as not to impair the function of the Surface Water Management System.
(670)
15. The Permittee shall install and maintain a shut-off switch, subject to District approval, in the irrigation lake which receives augmentation. The shut-off switch shall be installed in such a manner that augmentation from District Withdrawal No. 2 automatically ceases when the water level reaches an elevation of 0.5 feet below the lake control elevation. No augmentation shall occur when the water level

in the irrigation lake is at or above the lake control elevation.

The Permittee shall install and maintain a back-flow prevention system on District Withdrawal No. 2 preventing water in the irrigation lake from entering the wells.

The Permittee shall maximize the use of surface waters before utilizing ground water for augmentation of the irrigation lake. Augmentation for aesthetic purposes only is strictly prohibited.
(990)

40D-2
Exhibit A

WATER USE PERMIT STANDARD CONDITIONS

1. The Permittee shall provide access to an authorized District representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. The Permittee shall either accompany District staff onto the property or make provision for access onto the property.
2. When necessary to analyze impacts to the water resource or existing users, the District shall require the Permittee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District.
3. The District shall collect water samples from any withdrawal point listed in the permit or shall require the permittee to submit water samples when the District determines there is a potential for adverse impacts to water quality.
4. A District identification tag shall be prominently displayed at each withdrawal point that is required by the District to be metered or for which withdrawal quantities are required to be reported to the District, by permanently affixing the tag to the withdrawal facility.
5. The Permittee shall mitigate to the satisfaction of the District any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:
 - A. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
 - B. Damage to crops and other vegetation causing financial harm to the owner; and
 - C. Damage to the habitat of endangered or threatened species.
6. The Permittee shall mitigate, to the satisfaction of the District, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:
 - A. A reduction in water levels which impairs the ability of a well to produce water;
 - B. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
 - C. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.
7. Notwithstanding the provisions of Rule 40D-1.6105, F.A.C., persons who wish to continue the water use permitted herein and who have acquired ownership or legal control of permitted water withdrawal facilities or the land on which the facilities are located must apply to transfer the permit to themselves within 45 days of acquiring ownership or legal control of the water withdrawal facilities or the land.
8. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if the Permittee fails to comply with all of the provisions of Chapter 373, Florida Statutes (F.S.), Chapter 40D, Florida Administrative Code (F.A.C.), or the conditions set forth herein, the Governing Board shall revoke this permit in accordance with Rule 40D-2.341, F.A.C., following notice and hearing.
9. Issuance of this permit does not exempt the Permittee from any other District permitting requirements.
10. The Permittee shall cease or reduce surface water withdrawal as directed by the District if water levels in lakes fall below the applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.
11. The Permittee shall cease or reduce withdrawal as directed by the District if water levels in aquifers fall below the minimum levels established by the Governing Board.
12. The Permittee shall not deviate from any of the terms or conditions of this permit without written approval by the District.

13. The Permittee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for the Permittee's water use classification, this permit shall be subject to those requirements upon notice and after a reasonable period for compliance.
14. The District may establish special regulations for Water-Use Caution Areas. At such time as the Governing Board adopts such provisions, this permit shall be subject to them upon notice and after a reasonable period for compliance.
15. In the event the District declares that a Water Shortage exists pursuant to Chapter 40D-21, F.A.C., the District shall alter, modify, or declare inactive all or parts of this permit as necessary to address the water shortage.
16. This permit is issued based on information provided by the Permittee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of the permit, it is determined by the District that the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the Governing Board shall modify this permit or shall revoke this permit following notice and hearing.
17. Within the SWUCA, if the District determines that significant water quantity or quality changes, impacts to existing legal uses, or adverse environmental impacts are occurring, the permittee shall be provided with a statement of facts upon which the District based its determination and an opportunity to address the change or impact prior to a reconsideration by the Board of the quantities permitted or other conditions of the permit.
18. All permits issued pursuant to these Rules are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located.

Exhibit B
Instructions

METERING INSTRUCTIONS

The Permittee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Permit Data Section, Performance Management Office on or before the tenth day of the following month. The Permittee shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on District supplied scanning forms unless another arrangement for submission of this data has been approved by the District. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the Performance Management Office in Brooksville (352-796-7211) if difficulty is encountered.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meter(s) shall be non-resettable, totalizing flow meter(s) that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Regulation Department Director.
2. The Permittee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.
3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the District indicating the same meter reading as was submitted the previous month.
4. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within five percent of the actual flow as installed.
5. Meter accuracy testing requirements:
 - A. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
 - B. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions in this Exhibit B, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy test requirement for existing meters.
 - C. The testing frequency will be decreased if the Permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.
 - D. The test will be accepted by the District only if performed by a person knowledgeable in the testing equipment used.
 - E. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.
6. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.
7. Broken or malfunctioning meter:
 - A. If the meter or other flow measuring device malfunctions or breaks, the Permittee shall notify the District within 15 days of discovering the malfunction or breakage.
 - B. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.
 - C. If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

8. While the meter is not functioning correctly, the Permittee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.
9. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

FLOW METER ACCURACY TEST INSTRUCTIONS

1. **Accuracy Test Due Date** - The Permittee is to schedule their accuracy test according to the following schedule:
 - A. For existing metered withdrawal points, add five years to the previous test year, and make the test in the month assigned to your county.
 - B. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in the month assigned to your county.
 - C. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in the month assigned to your county.
 - D. For the Permittee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, the Permittee can submit a request in writing to the Permitting Department Director for one specific year to be assigned as the due date year for meter testing. Permittees with many meters to test may also request the tests to be grouped into one year or spread out evenly over two to three years.
 - E. The months for accuracy testing of meters are assigned by county. The Permittee is requested but not required to have their testing done in the month assigned to their county. This is to have sufficient District staff available for assistance.

January	Hillsborough
February	Manatee, Pasco
March	Polk (for odd numbered permits)*
April	Polk (for even numbered permits)*
May	Highlands
June	Hardee, Charlotte
July	None or Special Request
August	None or Special Request
September	Desoto, Sarasota
October	Citrus, Levy, Lake
November	Hernando, Sumter, Marion
December	Pinellas

* The permittee may request their multiple permits be tested in the same month.

2. **Accuracy Test Requirements:** The Permittee shall test the accuracy of flow meters on permitted withdrawal points as follows:

- A. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.
- B. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.
- C. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.
- D. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

3. **Accuracy Test Report:** The Permittees shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test.
- A. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 (07/08) for each flow meter tested. This form can be obtained from the District's website (www.watermatters.org) under "ePermitting and Rules" for Water Use Permits.
 - B. A printout of data that was input into the test equipment, if the test equipment is capable of creating such a printout;
 - C. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;
 - D. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.
 - E. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.
 - F. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items. with a notation of distances to these items.

Claire E. Muirhead, P.G.

Authorized Signature

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

This permit, issued under the provision of Chapter 373, Florida Statutes and Florida Administrative Code 40D-2, authorizes the Permittee to withdraw the quantities outlined above, and may require various activities to be performed by the Permittee as described in the permit, including the Special Conditions. The permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the Permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

Notice of Rights

ADMINISTRATIVE HEARING

1. You or any person whose substantial interests are or may be affected by the District's action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
2. Pursuant to Subsection 373.427(2)(c), F.S., for notices of agency action on a consolidated application for an environmental resource permit and use of sovereignty submerged lands concurrently reviewed by the District, a petition for administrative hearing must be filed with (received by) the District within 14 days of receipt of written notice.
3. Pursuant to Rule 62-532.430, F.A.C., for notices of intent to deny a well construction permit, a petition for administrative hearing must be filed with (received by) the District within 30 days of receipt of written notice of intent to deny.
4. Any person who receives written notice of an agency decision and who fails to file a written request for a hearing within 21 days of receipt or other period as required by law waives the right to request a hearing on such matters.
5. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding District action is not available prior to the filing of a petition for hearing.
6. A request or petition for administrative hearing must comply with the requirements set forth in Chapter 28.106, F.A.C. A request or petition for a hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's action or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no material facts in dispute, and (3) otherwise comply with Rules 28-106.201 and 28-106.301, F.A.C. Chapter 28-106, F.A.C. can be viewed at www.flrules.org or at the District's website at www.WaterMatters.org/permits/rules.
7. A petition for administrative hearing is deemed filed upon receipt of the complete petition by the District Agency Clerk at the District's Brooksville headquarters during normal business hours, which are 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding District holidays. Filings with the District Agency Clerk may be made by mail, hand-delivery or facsimile transfer (fax). The District does not accept petitions for administrative hearing by electronic mail. Mailed filings must be addressed to, and hand-delivered filings must be delivered to, the Agency Clerk, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, FL 34604-6899. Faxed filings must be transmitted to the District Agency Clerk at (352) 754-6874. Any petition not received during normal business hours shall be filed as of 8:00 a.m. on the next business day. The District's acceptance of faxed petitions for filing is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation, available for viewing at www.WaterMatters.org/about.

JUDICIAL REVIEW

1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by final District action may seek judicial review of the District's final action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law .
2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.

Lakeridge Falls Community Association
4200 Lakeridge Boulevard
Sarasota, FL 34243

Appendix 7

Report to the PWG on the No Mow Trial at the Meadows

Report to Ponds Committee: Status of Meadows

Spring Lake Community in the Meadows. Information from Mary Walker, President.

Observed erosion of 3 to 4 feet at culverts. See arrow on first photo.



Started using a 3 ft no mow zone 5 years ago. Allowed grass to reach 18 inches. No problem with browning. Pond surrounded by Silver Lake Association and 3 private residences. Two of three private residences have adopted this practice as well. Silver Lake maintains the perimeter. The Meadows maintains the ponds. According to Ms. Walker, The Meadows reports using much less herbicide in the pond since no mow was adapted. Photo below of same culvert after adopting no mow. Photos provided by Silver Lake.

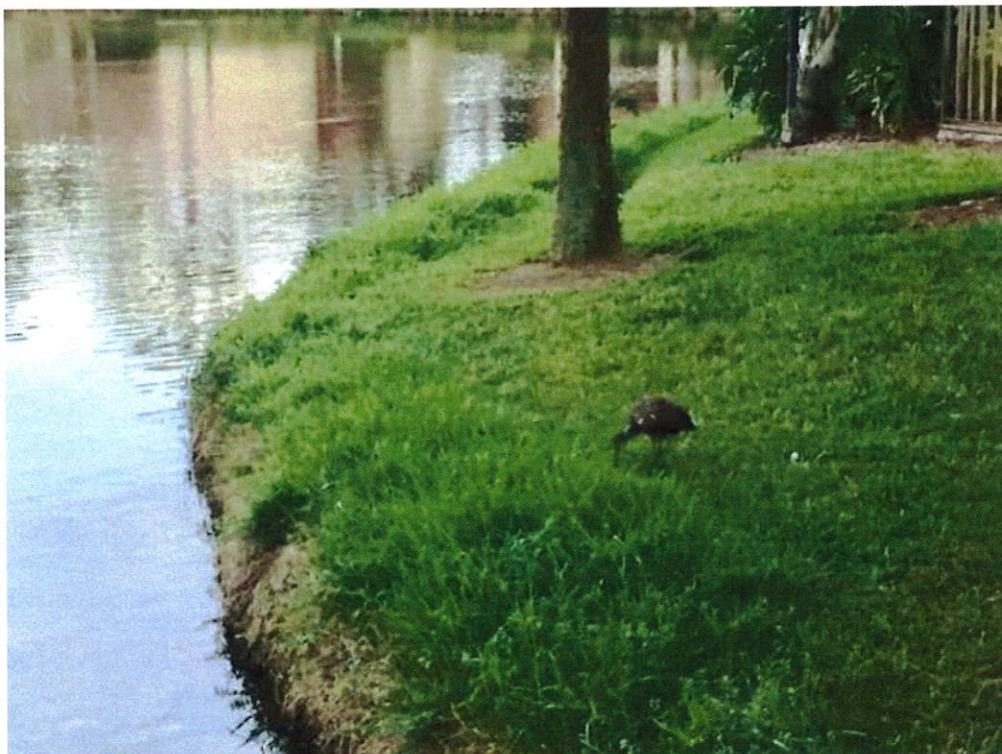


Photos of Silver Lake taken by M. L. Collins in February.





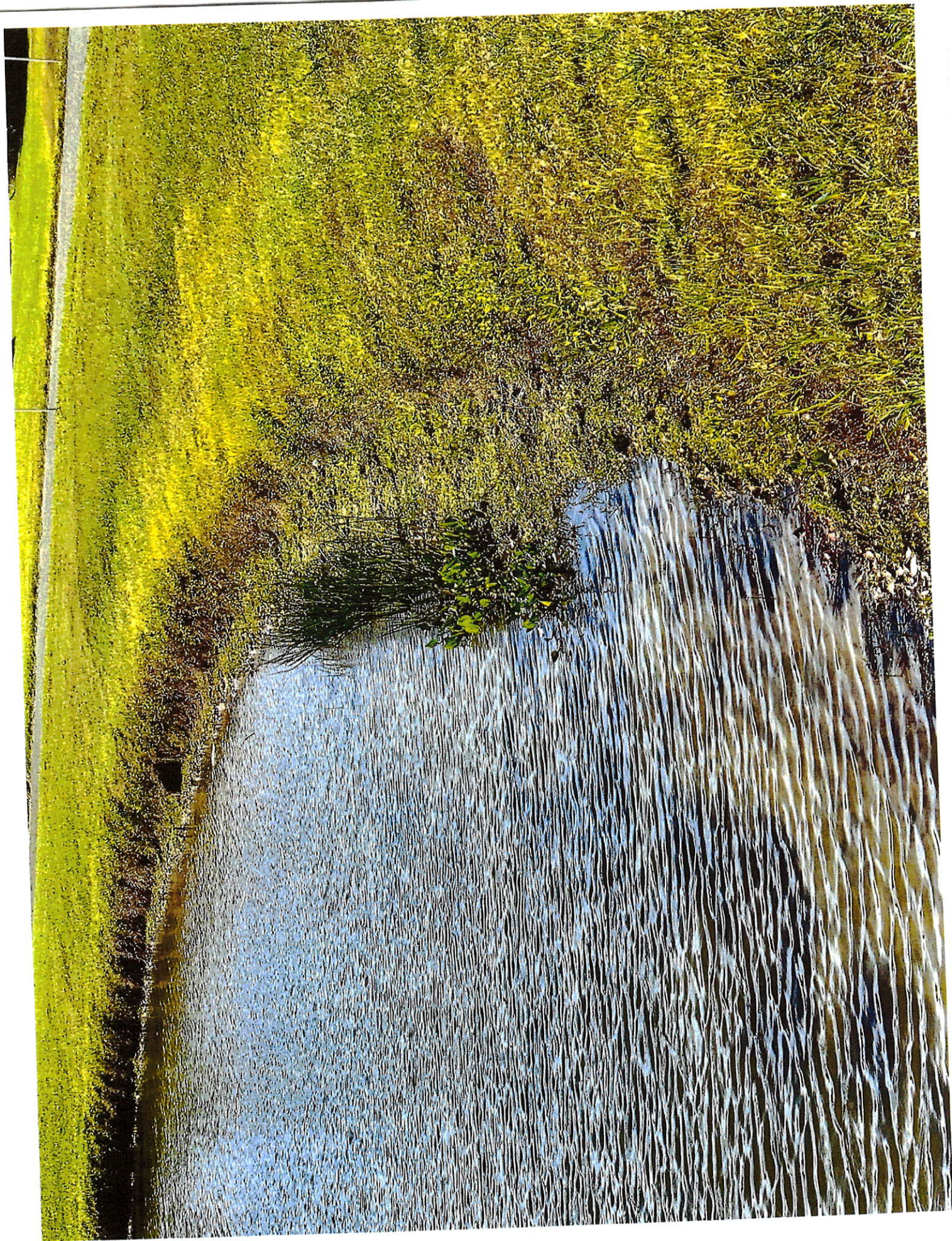
Photos of Windrush Bourne in the Meadows taken by M. L. Collins in December. Windrush Bourne adopted no mow in April. Adjacent condominium association on the same pond is adopting this practice. Growth is restricted to 12 inches.





Appendix 8

Photos of Site on Pond 3 Planted With Aquatic Plants





Appendix 9

Inspection for Proper Operation and Maintenance

CREST ENGINEERING OF SARASOTA, LLC

3402 Magic Oak Lane
Sarasota, Florida 34232
Ph. (941) 377-8811

Civil Engineering and
Land Development Consulting

INVOICE

Invoice No.: **1490**
Date: **Mar. 24, 2020**

Lakeridge Falls Community Association, Inc.
4200 Lakeridge Boulevard
Sarasota, Florida 34243

Name of Project	Job Number
Lakeridge Falls S.W.F.W.M.D. Permit Compliance Inspection	S0345
Description	Amount
Inspect drainage system for permits 11732.003 & 11732.008 and certify statement of proper operation & maintenance to the S.W.F.W.M.D.:	\$ 1,600.00
Expenses:	
Total Due This Invoice	\$ 1,600.00

Notes:

1. Make checks payable to "Crest Engineering" and include the **invoice number on your check**.
2. This invoice is due and payable upon receipt. Invoices are considered past due if payment is not received within 25 days of the invoice date. Overdue accounts will be charged a 1.5% monthly service charge until paid in full. Any required collection expenses or attorney's fees necessary to obtain payment will be charged to this account.
3. Contact us immediately if there are any disputes with these charges.

THANK YOU FOR YOUR BUSINESS!



STATEMENT OF INSPECTION FOR PROPER OPERATION AND MAINTENANCE

SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT

2379 BROAD STREET • BROOKSVILLE, FL 34604-6899
(352) 796-7211 OR FLORIDA WATS 1 (800) 423-1476

Within 30 days after completion of the inspection for proper operation and maintenance, the operation and maintenance entity or its authorized agent must SEND THE ORIGINAL PLUS ONE COPY OF THIS FORM to the Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34604-6899. Upon receipt, the District will review this statement and may inspect the system for compliance with the approved permit and as-built drawings.

(1) SURFACE WATER MANAGEMENT SYSTEM INFORMATION:

Permit No. 11732.003 County: Manatee
Project Name: University Commons Residential - Phase 1
Permittee: Lakeridge Falls Community Association, Inc.
Address: 4200 Lakeridge Falls Boulevard
City Sarasota State FL Zip 34231
Telephone: (941) 360-1046

(2) I hereby certify that an inspection of the above-referenced system was performed on March 9, 2020 and further certify based on my observations that all above-ground facilities are being operated and maintained as authorized by the Southwest Florida Water Management District. I further state that it is my opinion based on my observations, knowledge, experience and any other available information that the below-ground facilities are being operated and maintained as authorized.

This item has been digitally signed and sealed by Michael L. Shannon, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

By: [Signature] Michael Shannon 67896
Signature of Engineer Name (Please Type) FL P.E. No.



MAR 24 2020

Crest Engineering (Cert of Auth No. 28100)

Company Name

3402 Magic Oak Lane

Company Address

Sarasota, FL 34232

City, State, Zip

Phone: (941) 377-8811 Date: MAR 24 2020



STATEMENT OF INSPECTION FOR PROPER OPERATION AND MAINTENANCE

SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT

2379 BROAD STREET • BROOKSVILLE, FL 34604-6899
(352) 796-7211 OR FLORIDA WATS 1 (800) 423-1476

Within 30 days after completion of the inspection for proper operation and maintenance, the operation and maintenance entity or its authorized agent must SEND THE ORIGINAL PLUS ONE COPY OF THIS FORM to the Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34604-6899. Upon receipt, the District will review this statement and may inspect the system for compliance with the approved permit and as-built drawings.

(1) SURFACE WATER MANAGEMENT SYSTEM INFORMATION:

Permit No. 11732.8 County: Manatee
Project Name: Lakeridge Falls Phase 1C
Permittee: Lakeridge Falls Community Association Inc.
Address: 4200 Lakeridge Falls Boulevard
City Sarasota State FL Zip 34243
Telephone: (941) 360-1046

(2) I hereby certify that an inspection of the above-referenced system was performed on 03/09/2020 and further certify based on my observations that all above-ground facilities are being operated and maintained as authorized by the Southwest Florida Water Management District. I further state that it is my opinion based on my observations, knowledge, experience and any other available information that the below-ground facilities are being operated and maintained as authorized. This item has been digitally signed and sealed by Michael L. Shannon, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

By: [Signature] Michael L. Shannon, P.E. 67896
Signature of Engineer Name (Please Type) FL P.E. No.



MAR 24 2020

Crest Engineering
Company Name
3402 Magic Oak Lane
Company Address
Sarasota, FL 34232
City, State, Zip
Phone: (941) 377-8811 Date: 3-24-2020