





Recreation Department
1401 Westward Drive
Miami Springs, FL 33166-5289
Phone: (305) 805-5075

Agenda Item No. 9C

City Council Meeting of:

02-25-2013 

Omar Luna, Rec. and Golf Director

TO: Ron Gorland, City Manager 
FROM: Omar Luna, Recreation and Golf Director
SUBJECT: Pool Renovation/Repairs Discussion
DATE: February 20, 2013

As we described previously, the pool renovation/repair project has become much more complicated than what we initially anticipated. Originally, it was the City's intention to hire a contractor via an RFP process to re-marcite the pools (Built in 1955- over 58 years old) interior surface with Diamond Brite.

McGrath Property Services (our long time pool maintenance company) conducted an underwater inspection and provided a report of the existing conditions of the pool surface (Pool leaks, surface coating leaks, rust extrusions, voids, etc.) in their report they indentified (42) areas where we have steel rust extrusions and also recorded (194) surface coating voids (**Attachment "A"**).

At our mandatory pre-bid meeting held on November 6, 2012, 6 potential contractors attended (**Attachment "B"**). At such time we presented to the Contractors the revision to the scope of work to include the repairs to the voids and erosion issues within the pool floor and walls (report from McGrath (**Attachment "A"**)). The majority of contractors strongly advised that it would be in the best interest of the City to hire a professional concrete structural engineer to develop plans and a detailed scope of work for the repairs rather than just marcing as planned.

The contractors provided us with several leads from engineering services, concrete restoration repair contractors as well as qualified special inspectors for the job.

Since that time, Tammy Romero (Professional Services Supervisor) and I have met with 10 different firms/individuals to discuss the project at length (**Attachment "C"**).

After further review, we have determined that there are 3 possible options to approach the pool issues. Below I have described these options in detail and we are asking for Councils direction:

Option 1- Re-marcite with Diamond Brite ** as originally planned:

Re-marcite the pool with the Diamond Brite aggregate, as an "as-is" project, resurfacing over cracks and stains that we have no control as to how long the pool may or may not remain stain free, crackless and most importantly intact. This option is only recommended as a "Buying Time" approach to work towards building up revenue for a new pool facility.

Warranty- None

Pool closure- Approx. 2 months

Overall Project timeline- 3 to 6 months (including bidding process)

Cost- Approx. \$250,000.00

Pro's- Minimal pool downtime

Con's- Could be potentially throwing away 250K into a 58 year old pool

**Please be advised that this doesn't repair any of the pool leaks, surface coating leaks, rust extrusions, voids, etc. The reality is that we can Remarcite the pool with Diamond Brite aggregate and within a couple of months the integrity of the structure of the pool can still be an issue so therefore at this point would not be a good idea. Re-marciting the pool with Diamond Brite is the least of our worries.

Option 2- Structure and Surface Repair:

- Hire an engineer and negotiate costs for services, based on qualifications to provide us with a solution for repairing the pool leaks, surface coating leaks, rust extrusions, voids, etc.
- Advertise an RFP for pool restoration concrete repairs (repairing only voids, cracks and stains visible at that time)
- Coordinate, advertise, and monitor a second RFP for re-marciting the pool.
- Coordinate special inspections, over see project with engineer and 2 contracted companies.

Warranty- 5 years for marcite materials only, contractors would not guarantee that the pool will not have additional settling and cracking. The pool restoration contractor will repair the visual areas although there is no guarantee that additional rust and cracks will not appear after marciting work is complete.

Pool closure- 9 months to 1 year

Overall Project timeline- 1 year ±

Cost- Approx. \$600-800K (really unknown depending on condition of pool once emptied)

Pro's- **could be** less expensive way to **possibly** get 5-10 years from existing facility

Con's- Possibly never reopen the pool due to conditions the Health Dept. may find. Issues such as, bringing the pool to current standards which may require additional unknown cost., potentially loose 75-80K in pool revenues for closing pool, we won't know the exact costs until we have drained the pool and the contractor has identified all areas that need repairs.

In theory, Option 2 was a good idea. However, due to the fact that the pool has a series of unknown structural damages this project could easily range from \$600,000 to \$1,000,000 all depending on when the Contractor finally empties the pool and identifies all the areas that need to be repaired. We also have to consider the additional Health Department Codes that we are currently grandfathered into.

Option 3- Replacement Water Park/Aquatic Facility approach:

Benefits of a brand new state of the art design built Water Park/ Aquatic facility.

Warranty- All new warranties

Pool closure- unknown (City will do its best to keep the current pool open as long as it can)

Overall Project timeline- 18-24 months

Cost- Approx. \$2-4 million (Financing is 2.4% for 15 years annual payments \$278,000)

Pro's- New state of art facility, good for another 50+ years, financing costs can be spread over 20 years

Con's- \$2-4 million in costs

Current Action:

We are trying to locate an engineering firm that has a non-invasive method of determining the structural integrity of our pool because the advised method (discussed in Option2) could result in a "no choice" situation requiring a new facility as quickly as possible.



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A Division of McGrath Pools, Inc.

MEMORANDUM

TO : Omar L. Luna, Recreation Director (City of Miami Springs)
 FROM: Thomas M. McGrath *T.M.*
 RE : City of Miami Springs Swimming Pool
 SUBJ : Report of Existing Pool Surface Conditions [including: a) Pool leak status; b) Number of surface coating voids; c) Number of steel rust extrusions; d) Light fixture status; e) Recommendations]
 DATE : July 5, 2012

The goal of this report is to 1) Evaluate the current interior pool surface conditions; 2) Quantify the extent of visual structural coating voids and extruding steel damage; 3) Determine the basic preparation required to prepare for ideal coating conditions; 4) Recommend if partial-pool coating or total-pool coating is now appropriate for swimming pool interior restoration.

REPORT: During June and the early part of July, 2012, a series of inspections, observations and testing procedures have been performed and indicated the following:

POOL LEAK STATUS: All surfaces of the pool interior were dye tested (including around inlet/outlet fittings, light niche housings and expansion joints). There were no indications of water and/or dye loss during this testing process.

NUMBER OF SURFACE COATING VOIDS: All surface areas of the pool interior (including wall & floor areas) were closely inspected (by experienced pool scuba divers) and the total number of voids (i.e., sections of the concrete pool shell that are exposed) recorded was one hundred ninety-four (194).

NUMBER OF STEEL RUST EXTRUSIONS: All surface areas of the pool interior (including wall & floor areas) were closely inspected (by experienced pool scuba divers) and the total number of steel rust extrusions (i.e. rusting and/or oxidizing pool reinforcement steel that is extruding through the pool shell concrete interior surface) recorded & verified was forty-two (42).

LIGHT FIXTURE STATUS: All twenty (20) pool light fixtures were removed, disassembled and inspected. Six (6) of the light fixtures have major water damage to the sockets and do not currently function. The other fourteen (14) light fixtures were tested, transformer wiring checked and serviced (e.g., new bulbs and lens gaskets installed).

RECOMMENDATIONS: 1) Install six (6) new pool light fixtures to replace existing defective ones (to allow for safe evening swimming activities); 2) When current swimming season is over, schedule repair of the **deteriorating** rust extrusion problem ASAP to avoid additional damage to the swimming pool shell structure (due to exposed reinforcement steel being continually & directly corroded by chemically-treated pool water); 3) Completely repair all pool shell structural voids, cracks and fractures; 4) Apply bond-coating membrane to all interior structural shell surfaces (prior to installing new coating surface); 5) Due to the extent of current deterioration to the pool surface structure (e.g., 194 voids and 42 areas of exposed reinforcement steel), it would be prudent to **completely** restore the pool surface instead of considering a partial or sectional restoration; 5) Restore existing pool floor racing lane tiles instead of replacing them, as a cost-saving option.

SWIMMING POOLS • THERAPY SPAS • PATIO GARDENS • FOUNTAINS • WATERFALLS

1. Douglas Ramirez- Engineer
Atkins
305-514-3306
2001 Northwest 107 Avenue
Miami, Fl. 33172
Douglas.ramirez@atkinglobal.com
 - City's current Engineer
 - **Provided Scope of Services**

2. Kenny Pfeiffer- Designs and Plans
786-235-2435
786-235-2494 fax
8754 SW 206 Lane
Miami, Fl. 33189
farkelpe@gmail.com
 - Referred by Skip Reed
 - Does not perform "**Destructive Testing**" which would be required for this project.
 - Recommends Snapp Industries for concrete restoration repairs

3. Joe Sheingold- Structural Engineer/ Special Inspections
305-378-1244
305-986-7002 Cell.
12420 SW 75 Avenue
Miami, Fl. 33156
jsheing@yahoo.com
 - Referred by Skip Reed
 - Does not specialize in pools
 - Recommends Kenny Pfeiffer for the job
 - Does qualify for providing "**Special Inspections**"

4. John Wahler-
AquaDynamics
305-772-8975
305-667-8975
 - Referred by Edwin Green and Beach Resorts, Inc.
 - Does not do restorative concrete work
 - Recommends: Snapp Industries (#1 choose); Don Shackelford (2nd choose); John Pistorino & Alam (expensive although knowledgeable)

5. Don Shackelford-
305-606-4169 Cell.
305-271-8040 Wk.
6731 SW 63 Court
Miami, Fl. 33143
engineer@40year.com
 - Referred by John Wahler (AquaDynamics)

6. Brandon Snapp- (Eugene Miller- Project Manager)
Snapp Industries
305-635-0687
2902 NW 22 Street
Miami, Fl. 33142
snappind@bellsouth.net
 - Referred by John Wahler (AquaDynamics)
 - Referred by Kenny Pheiffer
 - Specializes in Concrete restoration repairs for pools

7. John Pistorino-
Pistorino & Alam
305-669-2700
7171 SW 62 Avenue
4th floor
Miami, Fl. 33143
info@pamiami.com
 - Referred by John Wahler (AquaDynamics)
 - Never returned phone calls or emails to set up a meeting

8. Bill McCain- Engineer
772-473-6417
William@wfmccain.com
 - Referred by Adam Frenz (Southern Pools)
 - **Provided Scope of Services**

9. James Belliveau & Assoc., Inc. – Engineer
305-362-2252
consultingengineer@comcast.net
 - Pending Scope of work

10. Douglas Wood & Assoc., Inc.- Engineer
305-461-3450
Sandro@douglaswood.biz
 - Pending Scope of work