



**MEMORANDUM**

Public Works and Community Services Departments

**DATE:** September 9, 2020

**TO:** Parks and Recreation Commission and Urban Forestry Board

**FROM:** David O. Printy, Senior Project Manager  
Lisa Au, Principal Civil Engineer  
Kristine Crosby, Recreation Manager

**SUBJECT:** **Rengstorff Park Aquatics Center Replacement, Design, Project 18-38 – Schematic Design**

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**RECOMMENDATION**

Review the Schematic Design for Rengstorff Park Aquatics Center Replacement, Project 18-38, and forward a recommendation to City Council to:

1. Approve the schematic design and authorize detailed design to commence;
2. Approve the staff-recommended mitigation for removal of up to 4 Heritage trees with 2-to-1 tree replacements and planting 24" box trees; and
3. Commit \$1,600,000 from the Park Land Dedication Fund (Park Land Dedication In-Lieu Fees from October 2018) as shown in Attachment 3.

**BACKGROUND**

The Rengstorff Park Aquatics Center (hereinafter referred to as the "pool" or "Rengstorff Park Pool") is located on the northeast side of Rengstorff Park, accessible from Crisanto Avenue, and has been open to the public for aquatics services since fall 1959. In the fall of 2018, the City engaged the services of the architectural design firm ELS Architecture and Urban Design, Inc. (ELS) to verify the project program and provide comprehensive design services.

The project site is currently occupied by the existing single-story, 5,200 square foot aquatics center building with two pools and a parking lot in Rengstorff Park. The proposed project includes demolition of the existing building, pools, and site improvements, and construction of a replacement facility designed to become a year-round aquatics center for the City of Mountain View. On June 30, 2020,

Council reviewed three conceptual site/floor plan options, and approved the Option A conceptual design. On July 15, the City’s Development Review Committee reviewed and commented on the project’s exterior architecture and site design.

## ANALYSIS

After selection and approval of the preferred project conceptual design, ELS began the schematic design phase. During this multi-disciplinary effort, the project program and concept design are developed into schematic technical drawings that will form the basis for the detailed design of the facility. This process allows the design team to evaluate the technical, building code, and physical requirements of the project, and helps confirm baseline assumptions of how the building, pools, and site will be designed and engineered together. This phase is also used to generate documents with sufficient quantitative and qualitative information so that a comprehensive construction cost estimate can be done. Upon completion, the schematic design documents typically represent approximately 25 percent to 30 percent completion of design.

In addition to furthering the technical, regulatory, and financial goals of the project, the Schematic Design phase allows further refinements to achieve the goals and principles of the conceptual design.

### Design Goals:

Some of the organizing principles and influences of the project’s design:

*Location influences:* The proposed design for the project takes design cues from surrounding streets, public access to the proposed center, its proximate location to the recently renovated and expanded Community Center and the beautiful and robustly used Rengstorff Park.

*Site Design:* The design suggests that Rengstorff Park is home to a “campus” of park buildings and amenities, thus establishing a hub of community recreation activity as viewed from Rengstorff and Crisanto Avenues. The proposed aquatics building is sited to arrange a “dialogue” with the Community Center by aligning itself to create a promenade connection between each building’s entry point. The pools and decks, which require the biggest land area, are located to maximize their solar exposure, minimize existing tree loss, and limit loss of park area beyond the aquatics center’s perimeter fence.

*Building Design:* The proposed building is simple in form and reflects its two distinct purposes: to provide basic and functional municipal pool programming and to offer the local residents a gateway to aquatic fun. The design concept also refers to the sloping roof of the Community Center through its angled parapets. While the buildings in Rengstorff Park should relate to one another, the aquatics building also needs to have an identity of its own. The new, approximately 8,000 square foot aquatics building, for public and staff, contains restrooms, showers, changing rooms, as well as mechanical/plumbing support spaces, and features a multi-purpose room accessible to the pool deck.

*Material Options:* The overall form and materials were inspired by its park location, a building “growing from the park.” Thus, the building shell is principally proposed to be clad in a wood composite to fit among the many mature and stately trees. The building’s simple geometric form is clad in four primary materials: composite wood siding, metal panels, stucco, and storefront window systems.

#### Development Review Committee:

The above guiding design principles for the project were further tested and refined after the project’s review by the City’s Development Review Committee (DRC). At the July 15, 2020 meeting, the DRC reviewed the proposed architecture and site design of the project and provided comments. The DRC was generally supportive and complimentary of the proposed building and site design, and provided feedback on several of the project’s design elements.

The following list summarizes the key comments and input from the DRC:

1. Prioritize more active public areas for incorporation of public art;
2. Perimeter and site fencing should be visually open;
3. Provide centrally located ramps to the lap pool for wheelchair access;
4. Exterior “wood” finishes should be selected for durability as well as provide as natural a look as feasible;
5. Further develop exterior canopy design to convey “folding” or “origami” concept;
6. Further explore use of exterior wall accent lighting to enhance identification of building entrance;

7. Further develop front window systems to break up modulation and provide visual cues to the building entrance; and
8. Use proposed accent colors as visual cues for wayfinding.

ELS reviewed and incorporated these comments and suggestions in the final schematic design while also addressing necessary changes and scope adjustments to address cost considerations.

Schematic Design Estimate and Value Engineering:

The schematic design drawings were reviewed by a professional estimator and the resulting estimate exceeds the project’s target construction budget of \$16.4 million by approximately \$1.3 million. The design team identified multiple project elements that contributed to this increase as well as several cost-saving (or “value engineering”) measures to bring the projected cost significantly closer to target levels. The design team focused on the project elements that could either be eliminated, reduced, or modified without sacrificing the core objectives of the City’s aquatics program or the overall quality of the end project. The following table represents the list of recommended project scope reductions, and are represented in the schematic design presented here today.

**Table 1.0: Project Scope Reductions:**

<b>Project Element</b>	<b>Cost Reduction</b>
1. <i>Building:</i> Building height reduced by average of 2.5’	\$140,000
2. <i>Pool:</i> Sunken Pool feature was eliminated.	250,000
3. <i>Site:</i> Refresh instead of replacing front parking lot	350,000
4. <i>Equipment:</i> Security Camera System equipment deferred	100,000
<b>Total estimated savings:</b>	
	<b>\$840,000</b>

1. *Building height reduction:* This change modifies the parapet height of the building by an average of 2.5’ while maintaining the sloping angles and general character of the conceptual design. This reduces the surface area of the exterior walls by over 900 square feet. This, in turn, reduces the structural and finish material costs to construct the building’s exterior.

2. *Raising of “Sunken Pool”*: This change raises the lap pool to the same level as the rest of the pool deck. In doing so, there are significant savings in excavation and construction costs associated with the steps and access ramps. By eliminating the ramps, this change also addresses the accessibility issue raised by the DRC. Long concrete benches were added back into the design to provide event seating and separation of the leisure and lap swim pools. This change also has the added benefit of eliminating the need for stormwater treatment areas or “bio-retention basins” at the front of the parking area, and for the stormwater systems to primarily use surface conveyance from the rear to the front of the pool areas.
3. *Front Parking Lot*: This change has the most significant savings potential as it eliminates large areas of demolition and rebuilding of the asphalt parking lot in the front of the facility. This option is made possible by the raising of the sunken pool and elimination of an associated large bio-swale for stormwater treatment. It has the added benefit of preventing the need to remove 11 trees in the middle of the parking lot. The proposed design calls for restriping of the existing lot to add two spaces as well as designating an existing, rarely used maintenance ramp area as overflow parking to add 4 more for a net gain of 6 parking spaces.
4. *Security Camera Equipment*: The project will continue to include conduit and pathways for future addition of this equipment. As with the Community Center, once technical and operational standards for security systems are established Citywide, a camera system can be readily installed in the future.

As noted in Table 1.0, the cumulative savings of these scope reductions is approximately \$0.8 million. While these measures do not bring the estimated cost all the way to the target budget level of \$16.4 million, they do provide significant savings without sacrificing the overall project and aquatics goals of the City.

#### Rengstorff Park Open Space:

At the May 27, 2020 PRC meeting, there was a general discussion amongst the Commission about preserving park open space and its interface with new park amenities. In general, the PRC requested that new projects should seek to minimize additional encroachments into the Rengstorff Park open spaces.

The existing aquatics facility (*including the building, parking lot, pedestrian and maintenance access paths and perimeter fence*), utilizes approximately 1.9 acres within Rengstorff Park. The Conceptual Design recommended by the PRC and approved by Council was estimated to require approximately 2.4 acres. The proposed

schematic design took the PRC's prior comments into consideration and reduced the proposed project's footprint by 0.2 acre for a total project size of approximately 2.2 acres – inclusive of the parking lot and associated access paths.

The majority of the project's open space encroachment is utilized for open green areas within the aquatics center boundaries. The size and arrangement of these green spaces are designed to enhance the public's ability to relax and recreate around the new pools and deck. This green space also allows incorporation of at least two majestic Heritage oak trees and their generous shade canopies for the use and enjoyment by aquatics patrons.

The proposed design provides the maximum benefit to the public while retaining the openness of the park and a green buffer between the adjacent park paths and the aquatics center's perimeter fence.

Representative plans and illustrations of the schematic design can be found in Attachment 1 – "Schematic Design."

### Tree Impacts and Proposed Mitigation

The new building, pools, and site development have been designed to maximize integration into the existing park and its many mature Heritage trees. At least 19 Heritage trees will be retained and preserved within and immediately adjacent to the project boundaries. The existing mature trees fronting on Crisanto Avenue and in the parking lot median will remain as will the mature oak trees to the east of the planned facility. However, with the demolition and replacement of the existing aquatics center, up to 25 trees will need to be removed, 4 of which are Heritage trees. As the design and engineering progress, one additional Heritage tree (Tag No. 23698) may be retained. However, this tree's proximity to planned grading and construction required by the design put it at risk and, therefore, permission for its removal is requested at this time. The dimensions and type of the Heritage trees proposed for removal are summarized in Table 2.0.

It should be noted that the current schematic plans require removal of 11 fewer trees (*5 less Heritage and 6 less non-Heritage trees*) than the original conceptual plan (*Option A*) due to the retention of the existing parking lot and its median island.

The site plan found in Attachment 2 illustrates the locations of the Heritage trees planned for removal with large Red "X"s and the non-Heritage trees planned for removal have smaller blue "x"s.

**Table 2.0: Heritage Tree Impacts**

<u>#</u>	<u>Tree Tag No.</u>	<u>Tree Diameter @ 54" Above Grade</u>	<u>Type</u>
1	23684	14"	Chinese Tallow
2	23698	18"	Callery Pear
3	23717	14"	Queen Palm
4	23728	24"	London Plane

As mitigation for removal of up to 4 Heritage trees, staff recommends replanting at a 2-to-1 ratio for a total of 8 new 24" box trees. Non-Heritage trees will be replaced at a 1-to-1 ratio with 21 new 24" box trees. Staff will work with the landscape architect on species selection appropriate for the park.

The Urban Forestry Board’s recommendation for mitigation will be forwarded to the City Council with approval of the project’s schematic design in October 2020.

Staff Recommendation:

After comprehensive review of the proposed schematic design and associated refinements to the approved conceptual design, staff requests that the PRC forward its recommendation to the City Council for approving the project to advance to the detailed design phases. The building and site design maintains all the operational and programmatic elements needed to provide the citizens of Mountain View a quality aquatics facility that will be enjoyed for generations. The aesthetic refinements of building geometries and materials choices represented in the schematic design improve on the project’s strong conceptual foundation and respond well to the valuable input received by the DRC and PRC. Furthermore, the proposed schematic design reduces the project’s impacts on Heritage trees and provides an opportunity for the project to potentially award some add-alternates should the bidding climate allow.

**FISCAL IMPACT**

As noted in prior PRC and Council reports, the project is estimated to require supplemental funding over current levels for the “Design” phase of the project and increases to the five-year CIP budget for the “Construction” phase as well. As noted earlier in this report, the amount of additional funding needed has increased

further due to the more detailed schematic design and associated estimate. This project is expected to be funded entirely from the Park Land Dedication Fund.

Scope Increase:

The overall increases to the design and construction project estimates are due in part to their expansion of scope over the original baseline project. While larger than the approved Conceptual Design (a.k.a. Option A), the site area has been reduced somewhat, but the cost savings from that change are not significant. The below table outlines the physical changes from the baseline.

**Table 3.0: Rengstorff Park Aquatics Center Replacement – Scope**

	<b>Building*</b>	<b>Pool*</b>	<b>Site</b>
<b>Baseline Scope</b>	6,400 sf	6,235 sf	1.9 acres
<b>Conceptual Design**</b>	8,000 sf	9,600 sf	2.4 acres
<b>Schematic Design</b>	8,063 sf	9,600 sf	2.2 acres

\* "sf" = square feet

\*\* Conceptual Option A'

Budget Adjustment:

Based on the estimates presented in this report, there is adequate funding to cover the costs of project from Park Land Dedication In-Lieu fees already received in the San Antonio Planning Area without impacting anticipated future projects.

*Design Project Budget:* The estimated increase in overall costs for the project for the Design Project (18-38) is \$700,000 over the current budget. Staff is requesting that an additional \$900,000 be budgeted forward from the Construction Project (22-xx) to cover a pending agreement for Construction Management (CM) services. The CM firm, once hired, will perform numerous preconstruction services and aid the design team in constructability reviews, additional value engineering, estimating, and code compliance reviews. After the construction contract is awarded, the CM firm will provide full-time on-site management of the construction phase. The PRC is requested to recommend to Council that the Design Project (18-43) be fully funded with an additional \$1,600,000 at this time. Please see Attachment 3 – Project Commitments for the recommended funding action.



*Construction Budget:* The Construction Project (22-xx) is estimated to require an additional \$6.6 million over the current budget level of \$15.3 million. Staff will return to the PRC to commit the funds for construction in the spring as part of the usual Park Land Fund and Capital Improvement Program process. At that time, the PRC will be asked to forward a recommendation to commit Park Land Funds as part of the Capital Improvement Program (CIP) budget process for Fiscal Year 2021-22.

**Table 4.0: Rengstorff Park Aquatics Center Replacement**

	<b>Design 18-38</b>	<b>Construction 22-xx</b>
Current Budget	\$2,800,000	\$15,300,000
Conceptual Design	\$3,500,000	\$21,200,000
Schematic Design	\$4,400,000*	\$21,900,000 **

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\* This includes a requested \$0.9 million from the Construction Project budget for a CM services agreement.

\*\* This number is preliminary; no dedication of Parkland Trust funds at this time.

**NEXT STEPS**

Staff will forward the PRC’s recommendation for conceptual design to Council on October 27, 2020, and return to PRC and Council in the spring for commitment of funds for construction. Staff expects to complete design in summer 2021 with construction commencing approximately six months later.

**PUBLIC NOTICING**

In addition to the standard agenda posting, all neighborhood associations and property owners and residents within 750’ of the Community Center received notices of the PRC meeting in English and Spanish. Lawn signs advertising the meeting were placed on-site at the project location, and a notice was listed on Express MV (*Mountain View Voice*) on [NextDoor.com](http://NextDoor.com), and the City’s website. Staff sent notifications to LAMVAC, Mountain View Masters, lap swim users, and registrants from aquatics programs from 2017 to present.

- Attachments:
1. Schematic Design Plans, Materials, and Illustrations
  2. Heritage Tree Impact Map and Tree Mitigation Plan
  3. Project Commitments

cc: Clarence Mamuyac, President, ELS Architecture and Urban Design

CSD, POSM, FRM, PWD, APWD – Arango, PCE – Au, SPM – Printy, Project File (all w/a)