

**Application for Golf Course Renovation and Club House Solar Array Installation
Project Description**

The Sharon Heights Golf and Country Club

UPDATED February 15, 2023

A. Introduction

The Sharon Heights Golf and Country Club (the Club) is a membership club that has dining, golf, tennis, pickleball, gym and swimming facilities for its members and guests. The Club has been in existence since 1961 and is a large part of the Menlo Park community with 136 households out of 450 proprietary members who live in Menlo Park. The Club is proposing to renovate the existing golf course by replacing the irrigation system, installing drainage with a sand cap, re-grassing, de-mucking the irrigation lake, removing and adding certain trees, building new tees and greens and relining bunkers. The project will also reduce the amount of cart paths currently on the course and reduce the total amount of turf/grass area for water conservation.

The golf course lies on approximately 95.8 acres of the Club's 110.8-acre property and is zoned Open Space and Conservation (OSC). The property also includes a man-made irrigation lake as discussed further below. Existing plant species within the golf course include non-sensitive live oak woodland and trees, non-native annual grasses, and various native and non-native ornamental plants. Vegetation within the man-made irrigation lake is comprised of various ruderal and ornamental species.

The main purpose of the project is to update the existing infrastructure only, as there are no plans to add any buildings, modify any buildings or make any alterations to the existing golf course routing (i.e. no change or intensification in use).

In addition to the golf course renovations, the Club proposes to install a new photovoltaic solar array system at the Club House and Club House Parking Lot. The proposed project consists of three carport-style solar panel arrays to be installed along the south side of the Club House parking lot, two pergola-style solar panel arrays to be installed within the pool complex patio area, and six small panel arrays on the roof of the pool complex buildings. These solar arrays are being proposed to further the Club's sustainability goals by reducing its carbon footprint. The proposed project is estimated to produce 826,000 kWh (kilowatt hours) in its first year, which has been calculated to offset 585 metric tons of Carbon Dioxide, which is equivalent to carbon sequestered by 693 acres of U.S. forests in one year or 647,661 pounds of coal burned in one year.

The Sharon Heights Golf and Country Club looks forward to working with the City and all interested departments, commissions and committees and their respective staffs to obtain the requisite approvals and permits in order to undertake the proposed projects as expeditiously as possible. As discussed further below, while our membership has also authorized moving forward with a new operations center, at this time we have decided to indefinitely postpone that project in order to focus on the Golf Course Renovation and the solar array improvements.

B. Background

The Club's golf course opened in 1962. The development of the golf course was a collaborative effort with the City of Menlo Park to create green space areas between the proposed residential areas and commercial areas proposed for the Sand Hill Road area. Since its opening, the golf course has been modified several times with the most significant of those modifications occurring in the early 1990s.

In 2019-2020, The Club, in a public/private partnership with the West Bay Sanitary District developed a Recycled Water Treatment Plant (RCWP) on the Club's property. This treatment plant was brought online in 2020. The building of this RCWP is part of the Club's overall long-term strategy regarding sustainability and doing what we can to help preserve the environment. The RCWP has the capacity to produce up to 500,000 gallons per day of recycled water for the golf course, essentially placing back into the Hetch Hetchy and Menlo Park water district/system 500,000 gallons of potable water for use. As an adjunct and part of our sustainability strategic plan, we are now in need of installing a new golf course irrigation system to improve the delivery of recycled water to our golf course which will allow us to further reduce the water use and provide even more benefit to the community by using less recycled water. The new irrigation system and new disease resistant turf will also allow us to significantly reduce the amount of chemicals and fertilizer used on the golf course, furthering our sustainability goal of being good stewards of this property.

As of the date of this application, many of the critical golf course infrastructure systems (drainage, irrigation, cart paths, and turf grass) are more than 25 years old and are all beyond their recommended/useful life. Given the need to update these systems, The Club plans to update the entire golf course infrastructure including a new state of the art irrigation system, increase and improve our lake (to store more recycled water), install new turf for the fairways, greens and tee boxes and install new sand bunkers. All of this work is infrastructure and will greatly enhance not only the playability of the golf course but will continue our focus on sustainability and reduced water usage.

It may be important to note that over the past few years, both Menlo Country Club in Woodside and Palo Alto Hills Golf and Country Club in Palo Alto have both gone through golf course renovation projects with a focus on reducing water use, improving their infrastructure and sustainability with great success.

C. Application Materials

This application contains the information specifically related to the golf course renovation work. The plans provided are typical for a golf course renovation project. The application materials consist of the following.

1. Plan Package - Golf Course:

a. Golf Course Architectural Plans: Plans prepared by Origins Golf Design lay out the existing golf course and provide information relating to the renovation. In addition, the plans clarify grass and cart path demolition and replacement needs for the project limits. Due to the fact that project is just focused on infrastructure, and no golf holes are being re-routed, the grading portion of the project will be focused on installation of the new irrigation system, a minimal movement of dirt on each hole, the re-building of new tees and greens (primarily where they are located now) and adding sand to the soil for better drainage and turf management. Therefore, proposed grading will not be extensive.

b. Golf Course Landscape Plans: Plans prepared by Pinnacle Golf are detailed planting and irrigation plans associated with the golf course limits of work.

c. Civil Engineering Plans: The Civil Plans provide detailed information on how the contractor is to modify, remove or expand the existing drainage system to the renovated and golf course features. All main line drainage systems through the existing golf course are to be saved and used in the renovated golf course. Minor storm water collection systems are to be re-routed to accommodate the golf course feature modifications. As part of the drainage improvements, the golf course fairways, approximately 36 acres, are to be "sand capped". General "sand capping" details and construction specifications are provided within the plans. In addition to the drainage improvements, the Civil Plans provide information for Erosion & Sediment Control, Construction Staging and Routing, and Tree Protections. As noted above, project scope does not propose significant grading to the existing golf course surface elevations and there will be no import or export of fill.

d. Irrigation Plans: Brent Harvey Consulting has prepared a detailed set of plans to reflect the proposed new irrigation system to be installed as part of the renovation project. As noted above, the updated irrigation system has been proposed because the existing system is past its typical life cycle and to accommodate the recently completed recycled water plant. In addition, this system will result in water efficiencies reducing water consumption by as much as 25%.

e. Lake Enhancement Plans (a.k.a. Irrigation Pond 8th Tee): Waterscapers, Water Feature Engineering, has prepared the detailed lake plans. The plans have incorporated the expansion and depth as required by the recently completed RCWP to increase our holding capacity and include a liner in the lake to further conserve water.

2. Plan Package – Club House Solar Array: Plans prepared by Spreck Design layout the proposed solar array placements. In addition, the plans provide details and elevations for the proposed installation.

3. SFPUC Property (a.k.a. Hetch Hetchy Right of Way): The Sharon Heights Golf Course property is separated in several locations by the lands owned by the San Francisco Public Utility Commission (SFPUC). The golf course is subject to conditions by the SFPUC to be on the SFPUC property. As part of the design process, we will be permitting the proposed renovation work with the SFPUC. This permitting will be concurrent with the City's permit process.

4. Arborist Report – The attached arborist reports have been prepared by California Tree and Landscape Consulting, Inc. for both the Golf Course Improvements and the Club House Solar Array projects. The Club and Gordon Mann have submitted a "Heritage Tree Removal Permits" with the City of Menlo Park, for the required Tree Removals and Tree Replacements associated with both the proposed golf course renovation and Club House Solar Array projects (HTR2022-00067, Golf Course Renovation and HTR2022-00075, Club House Solar Array). The proposed tree removals and replacements are critical to the health of the remaining trees and the renovation process to ensure vigorous grass growth and good grass health for the golf course for years to come, which ties in with our focus on sustainability and water conservation.

5. Geotechnical Soils Report – We have contracted with a local soils engineer to review the two projects and provide a geotechnical analysis report to ensure that the proposed projects will not disrupt soil stability or result in any potentially adverse impacts which is attached for the City's review.

6. Biological Resources Technical Report - WRA Environmental Consultants prepared a Biological Resources Technical Report to implement Mitigation Measure BIO-1 from the ConnectMenlo Mitigation Monitoring and Reporting Program which evaluates the potential for sensitive species to be present on the site as well as recommended avoidance and minimization measures which will be implemented as part of the project. The report concluded that there are no sensitive land cover types and no special-status plant species with moderate or high potential to occur, and therefore no additional surveys for special-status plants and/or sensitive land cover types are recommended. Two special-status mammals, one special-status bird, one special-status amphibian, and two special-status reptiles, as well as non-status birds and bats, including the California red-legged frog, San Francisco garter snake, San Francisco dusky-footed woodrat, and Western pond turtle, were determined to have moderate potential to occur on-site. The Report includes recommended avoidance and minimization measures to address the moderate potential for these species in the event they are encountered, and those measures will be implemented as part of the project consistent with Mitigation Measure BIO-1.

D. Project Information

The following is an overview of the critical aspects of the proposed golf course renovation project.

1. **Golf Course Improvements**. The major components of the renovation project are as follows:

- *Site Preparation*. Eradicate and turn existing fairway grasses.
- *Grading*. Cut and fill (3-4' max for some specific features); shape greens, bunkers, tee boxes and fairways, approximately 20 acres and 12,000 cubic yards (balanced site, no off-haul or import).
- *Sand Capping*. Koro proposed fairways 5-inches, approximately 35.5 acres and 24,000 cubic yards (balanced site, no off-haul or import)
- *Drainage*. Trench and install new drain lines for golf course features and connect to existing main drain lines.
- *Irrigation*. Trench and install new irrigation system.
- *Shaping*. shape all fairways, greens, tee boxes and bunkers, approximately 60 acres.
- *Irrigation Lake Improvements*. Repair and maintenance; expand surface and extend depth of the existing irrigation lake.

2. **Tree removal and replacement (separate permits)**. The removal and replacement of trees is being processed through the City, on separate permits. All trees proposed for removal in the golf course project are growing on the golf course, within the proposed limits of disturbance. No trees on adjacent properties are anticipated on being impacted by the proposed renovation project. The trees being removed for the solar project are along the southern edge of the property, next to the parking lot where the panels will be installed. The arborist inspection evaluated the trees on health and the needs of the renovation, golfers' safety, air movement, irrigation with reclaimed water and long-term playability of the golf course or solar generation in the case of the solar project. The golf course project is requesting the removal of 351 (330 Heritage size, 78 of which are in poor health) trees and proposes to replace with 208 trees of various sizes at a greater value. The solar project proposes removing 24 Heritage size trees, 17 of which are in poor health. These will be replaced with 40 trees of various sizes at greater value.

3. **Infrastructure Upgrades/Changes**. As indicated in the Background section, one of the primary reasons for undertaking this renovation project is the need to upgrade and modernize the critical infrastructure systems that are the backbone of a course. The infrastructure systems to be upgraded are:

a. ***Irrigation***. The irrigation system (including main lines, lateral lines, heads and computerized control system) will be replaced and modernized. It is estimated that the new system will produce water savings on the order of 20 - 25%.

b. ***Drainage***. The intended plan for the course drainage system is a combination of the existing drainage mains, existing drainage collector systems and replacement collector drainage systems. Though there are proposed improvements, there will be a decrease in impervious surfaces (i.e., reduced cart path area) and improved grass growth areas, thus there is no anticipated increase in runoff for the project improvements.

c. **Sand Capping.** The project scope includes the placement of 5-inches of sand in the fairway areas. This work includes the installation of a perforated drainage system beneath the sand areas to collect and control the water in the playing areas. The sand helps filter and retain irrigated water to promote healthy grass growth and better control the irrigation required to grow the grass.

d. **Cart paths.** Each hole of the existing course is accessed by concrete paths. Many of these paths have shown signs of deterioration and need to be replaced. The project scope proposes to remove 191,263 square feet of existing cart path and replace with 114,941 square feet of concrete cart path. This is a 76,322 square feet reduction of impervious surface on the golf course.

e. **Course improvements (i.e., features).** As indicated in the Background section above, central to the overall project will be the renovation of the turf grass areas, existing tees, greens and sand bunkers.

4. **Irrigation Lake.** Currently there is a small man-made lake adjacent to the 8th tees. The lake has an approximate surface area of 37,400 sq. ft. The new plan calls for the expansion of the lake limits of 15,700 sq. ft. (i.e., increasing the surface area of the lake to approximately 53,100 sq. ft.) and increasing the depth of the lake by 3-5 feet for a future capacity of 2 million gallons from its current 1.7 million gallons. The Lake will be lined with PVC to retain the stored water and be enhanced with aquatic plant materials.

Currently the Club Maintenance Staff does routine vegetation trimming and removal around the lake edge on a bi-monthly basis. This maintenance practice will be the same after the improvements are completed.

5. **Landscaping.** The re-designed course will be landscaped in the same style as the current course. Drought and diseased tolerant native plants and grasses will be used to the maximum extent possible, consistent with the overall landscaping theme of the existing course and overall parcel. Existing species on-site are as identified in the WRA Report.

6. **Construction Staging.** Most of the construction activity, staging and material storage will be within the existing limits of the golf course. A small portion of the existing Club House parking lot will be used for the construction trailer and construction parking and access to the golf course. Approximately 20 stalls will be occupied for construction staging for 9 months during the construction process (inclusive of two months of wind-down after the golf course renovation work is complete, but the construction trailer and other staging is still on-site).

In consultation with the City, construction access will be provided through three different access points. We have discussed the access locations with the City engineering and traffic departments, and will provide traffic control plans and obtain encroachment permits from the City as required in order to utilize the proposed access points for the project.

E. **Water Quality**

The proposed project will be subjected to a NOI (Notice of Intent) and the preparation of a SWPPP (Storm Water Pollution Prevention Plan) with the State Regional Water Quality Control Board. We are aware of this requirement and will be taking the appropriate steps to obtain State permits.

The proposed project includes "sand capping," which improves the filtering characteristics of the grass surfaces and will improve the water quality of the water collected throughout the golf course.

F. Neighborhood Outreach

For over 60 years, Sharon Heights Golf and Country Club has been a proud and privileged member of the Menlo Park community. The Club's current membership includes 157 Menlo Park households and 314 residents. In an effort to ensure that our neighbors understand the scope of the restoration project and the benefits it will provide in terms of furthering the Club's sustainability goals, the Club has conducted extensive outreach to the surrounding community.

We held in-person information sessions at the Club on Sunday October 23, 2022, and Saturday October 29, 2022. All residents within 300 feet of the project (and other interested parties) were invited to attend. Over 100 neighbors and interested parties were in attendance. Those in attendance were provided with a detailed overview of the project, including an estimated construction timeline. They were also able to view renderings and architectural drawings and learn more about the Club's long-term goals with regard to sustainability. The session concluded with an opportunity for the audience to ask questions, and they were provided contact information to follow up with additional questions.

Our efforts also included several meetings with the various homeowners' associations in and around the property to inform them about the scope of work, including detailed information about tree removal and replacement. Representatives of the Club also met with several individuals/homeowners to discuss specific trees which informed changes to our tree removal plan in response to their feedback. The homeowners' associations support the project as confirmed in the attached emails.

Finally, Club representatives met with both Audubon International and the Sierra Club's Loma Prieta Chapter to discuss the project. Both organizations support the project as confirmed in the attached letters.

Club representatives will continue to communicate with neighbors and any community member(s) to answer questions and explain the value of the Club's long-term goals with regard to sustainability and the golf course renovation project.

G. Time Line

The Club's membership has approved the renovation of the course as proposed and the Club has determined to accomplish the renovation in one phase (i.e., 18 holes at once). The one-phase approach will require complete course closure for approximately 12 months. The first 7 months will involve installing the new irrigation system, tree remediation, and building new tees, greens and bunkers. The following 5 months the grass will need to grow in which when completed will allow for re-opening of the golf course. The timing of this project is critical as work will need to begin no later than April 1, 2023, to allow the work to be completed before the rains and to allow the 5 month "grow in period". If we lost the window, we would be forced to delay the project for 1 year and we will lose contractors we have in place and jeopardize the entire project.

The Club also has contracted with a solar installation company that is ready to install the proposed array as soon as permits can be processed for building permit. We hope to commence this work concurrently with the Golf Course Renovation component on April 1, 2023. Construction is estimated to take 3-4 months. The Club has discussed parking impacts with the contractor and the contractor anticipates limited impacts and loss of parking during the construction process; given the closure of the golf course during the construction period which will significantly reduce parking demand, there will be no operational parking shortfall during the construction period.

The proposed Lake Enhancement work will begin approximately four weeks after commencement of the renovations to the golf course and solar arrays and is estimated to take four months to complete (i.e. May 1st through the end of August).

It is the Club's hope that the project review needs, and staff's availability will align, resulting in a highly efficient and smooth permit process. Should the City need any further information or need access to the property, to review any aspect of the project, please contact Mr. Clifford Bechtel, the Club's Process Manager. Mr. Bechtel has been provided authorization from the Club to assist the City in any way, to help make this process as quick as possible.

Thank you for your time and efforts on this application.

Respectfully submitted,

The Sharon Heights Country Club
February 15, 2023



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September 9, 2022

Chad Twaddle
Golf Course Superintendent
Sharon Heights Golf & Country Club
2900 Sand Hill Road
Menlo Park, CA 94025

RE: Sharon Heights Golf & Country Club Renovation

Dear Chad:

Thank you providing California Tree and Landscape Consulting, Inc.'s Arborist Report, Tree Inventory, Construction Impact Assessment and Tree Protection Plan. As you know, Audubon International, the global leader in environmental sustainability certifications, offers a Signature Sanctuary Certification which ensures environmentally sustainable design and long-term management of golf courses, resorts and communities. Sharon Heights is in the process of becoming a Signature Sanctuary member with the goal of becoming certified after the completion of the renovation throughout which Audubon International will verify the sustainable design, construction and long-term management of the 18-hole golf course.

Based on the information that you provided about the renovation; it appears it includes the removal of 383 trees including: Coast redwoods (overplanted approximately 50 years ago), Monterey pines, Ash species, Eucalyptus species, Monterey cypress, Incense cedar, Arizona cypress, Lombardia poplar, and Canary Island pine. We were pleased to see that according to California Tree and Landscape Consulting Inc.'s report, there are 209 trees currently proposed to be planted as mitigation for the removal of 383 said trees. The report also states that the existing redwoods to be removed were overplanted by members of Sharon Heights Golf & Country Club approximately 50 years ago. Based on this information, it appears the removal of these trees is consistent with upholding sustainable management, improving water conservation and preserving the health of the trees that remain and those that will be planted.

In an effort to continuously evolve as a sustainable golf course, Sharon Heights Golf & Country Club appears to have and continues to reduce their need for potable water. In an effort to do so, based on the information provided, the course will use reclaimed water for irrigation purposes. The tree mitigation plan set forth will not only expand the biodiversity on site but will

also include species that are more tolerant of reclaimed water and require less irrigation in general. We were also pleased to see that more than 70% of the existing tree inventory will remain on the golf course property. Typically, any environmental concerns that Sharon Heights Golf & Country Club faces for this project will be identified and addressed through the Signature Sanctuary Certification process.

Should you have any questions or would like additional information regarding the Signature Sanctuary Certification, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Katherine Welch". The signature is written in a cursive style with a large, stylized 'K' and 'W'.

Katherine Welch
Director of Signature Sanctuary Certification
Audubon International