ENVIRONMENTAL QUALITY COMMISSION MEETING AGENDA

Wednesday, March 26 at 6:30 p.m.
City Administration Building
701 Laurel Street, Menlo Park

CALL TO ORDER

ROLL CALL: Allan Bedwell, Chris DeCardy (Chair), Kristin Kuntz-Duriseti, Scott Marshall (Vice Chair), Deborah Martin, Mitchel Slomiak, Christina Smolke

A. PUBLIC COMMENT (Limited to 30 minutes)
Under "Public Comment", the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

B. REGULAR BUSINESS

B1. Approve February 26, 2014 Minutes *Attachment*

B2. Issue a Determination on a Heritage Tree Appeal at 1860 Oakdell Avenue *Attachment*

B3. Discuss the Environmental Quality Commission's Previous Recommendation to City Council Regarding the Construction of a Potential Well on City Property that Could Provide Irrigation to the Sharon Heights Golf Course, City Parks, and a School *Attachment*

B4. Discuss Environmental Quality Awards and Select Winners *Attachment*

B5. Update and Report on Arbor Day Tree Planting Event

C. COMMISSION REPORTS AND ANNOUNCEMENTS

C1. Staff Update on Environmental Policies to be Considered by City Council

C2. Commission Subcommittee Reports and Announcements

C3. Discuss Future Agenda Items

D. ADJOURNMENT

Agendas are posted in accordance with Government Code Section 54954.2(a) or Section 54956. Members of the public can view electronic agendas and staff reports by accessing the City website at http://www.menlopark.org and can receive e-mail notification of agenda and staff report postings by subscribing to the "Home Delivery" service on the City's homepage. Agendas and staff reports may also be obtained by contacting Rebecca Fotu at (650) 330-6740 (Posted: 3/20/2014)

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

Any writing that is distributed to a majority of the Commission by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available for inspection at Engineering/Environmental Division 701 Laurel Street, Menlo Park, CA 94025 during regular business hours.

Persons with disabilities, who require auxiliary aids or services in attending or participating in Commission meetings, may call the City Clerk's Office at (650) 330-6620.

ENVIRONMENTAL QUALITY COMMISSION MEETING MINUTES

Wednesday, February 26, 2014 at 6:30 p.m.
City Administration Building
701 Laurel Street, Menlo Park

The meeting was called to order by Chair Chris DeCardy at 6:35 p.m.

ROLL CALL:

Present: Allen Bedwell, Chris DeCardy (Chair), Kristin Kuntz-Duriseti, Deborah Martin, Mitchel Slomiak

Absent: Scott Marshall (Vice Chair), Christina Smolke

A. PUBLIC COMMENT: None

B. REGULAR BUSINESS

B1. Approve January 22, 2014 Minutes (Attachment)

ACTION: Motion and Second (Bedwell/Martin) to approve the January 22, 2013 minutes passes (4-0-3), (Absent: Marshall, Smolke, Abstain: Kuntz-Duriseti,)

B2. Review Staff Report to the Planning Commission and Discuss Environmental Quality Commission's Previous Recommendation Regarding a Request to Remove 42 Heritage Trees Associated With the Construction of a New Recreation Center Building, New Leasing Office, and Comprehensive Landscaping and Site Improvements Located at 350 Sharon Park Drive (Attachment)

Staff reported that the item is tentatively scheduled to be brought before City Council on March 4th. The Environmental Quality Commission (EQC) discussed that the intent for the property was to eventually have no fewer heritage trees than currently exist on the property, and that the trees be maintained well and in perpetuity. The planning staff report stated that the EQC's recommendation would not allow any trees to be removed. The commission commented that their recommendation was either misinterpreted or clearly ignored by the applicant and planning staff, which was unfortunate because the EQC believes there was consensus among the applicant, planning staff, the commission, and the public that the intent was to maintain the same number of heritage trees over the long term, allowing existing younger trees that are near heritage tree size to grow to heritage tree size in a number of years.

Public Comment

- Aruni Nanayakkara stated that the EQC's recommendation in regards to the baseline was misinterpreted by the applicant, planning staff, and Planning Commission.

- Uzi Bar-Gadda stated that the baseline should be the existing number of trees with the intention that the site will always have no less than the baseline number of trees going forward.

- Amy Poon also stated that she feels that the applicant misinterpreted the EQC's recommendation in regards to the baseline number of trees.

ACTION: Motion and Second (Slomiak/Bedwell) for the EQC to reaffirm its December 18th recommendation as stated below and to designate Commissioner Bedwell, with Commissioner Kuntz-Duriseti as his alternate, to speak on behalf of the EQC regarding this recommendation and its context when the item is brought before City Council passes (5-0-2), (Absent: Marshall, Smolke).

1. The applicant reconsider trees that will be removed for building construction by submitting structure designs that preserve trees; and

2. As a condition of the development permit, the project and existing/future property owners must ensure that there are "N" number of heritage trees on the whole property at all times going forward. The number "N" should be determined to be no less than the current total of heritage trees on the entire site, but also could be set at a higher level or set to increase in future years. A certified arborist must confirm and document the total number and locations of heritage trees on the property and then annually certify that the number of healthy and well maintained heritage trees is equal to or greater than "N." Any new trees planted on the site must be from the City approved List of Tree Replacements moving forward. Particular magnificent specimens should be identified and singled out for special protection. In addition, the development permit should include the following:

    a) Property owner should pay for its own oversight and city oversight of this permit requirement; and
    b) Ensure this permit standard holds when the property is sold; and
    c) Failure to maintain the required number of trees or proper maintenance to keep trees healthy shall result in a 4-to-1 tree replacement in addition to a significant financial penalty (which EQC recommends be used to further the city's heritage tree protection and maintenance program)

Out of respect to owners' concerns of high cost of planting heritage trees, the EQC further clarifies the recommendation as follows:

1. The long-term minimum number of heritage trees on the property is to have no fewer than 228 heritage trees, which is the current number on the property, five years from now (maximum) or sooner (not 186 trees after the applicant removes 42 heritage trees); and

2. Within 30 days or sooner of project approval by the City Council, an arborist selected by the city and paid for by the applicant, submit a report to the planning department, city arborist, and environmental program manager to confirm the number of existing trees that are nearly heritage tree size, and estimating how long it will likely take for them to become heritage trees in order to get to the 228 tree minimum as quickly as possible. This information will be added to the development permit to be enforced and monitored; and

3. The EQC supports the Planning Commission's recommendation that ongoing city inspections to confirm the quantity and maintenance standard of trees be at the expense of applicant; and

4. The EQC further clarifies that support of the total number of tree replacements currently planned as a minimum number of replacements.

B3. Consider a Recommendation to the Planning Commission and City Council on a Request to Remove 22 Heritage Trees and Retain one Heritage Tree on property located at 151 Commonwealth Drive and 164 Jefferson Drive (Attachment)

David Hogan, a consultant from the City's Planning Department, gave a presentation to the Commission, and the project's applicant and architects were present to answer the Commission's questions. There was a consensus among the commission that the project will pose a significant improvement to the existing landscape and urban forest.

ACTION: Motion and Second (Slomiak/Bedwell) to support the applicant's request to remove the twenty two heritage trees and retain the coast live Oak on the basis that the proposed ratio of trees planned for installation be maintained, passes (5-0-2), (Absent: Marshall, Smolke).

B4. Discuss and Consider a Recommendation to City Council to Implement a Property Assessed Clean Energy (PACE) Financing Program in Menlo Park. (Attachment)

Rebecca Fotu, Environmental Program Manager, gave a presentation to the Commission and John Law, Director for Municipal Development for HERO (at Renovate America), was present to answer the commission's questions.

ACTION: Motion and Second (DeCardy/Slomiak) to recommend that staff proceed with exploring the JPA option on the basis that the program be supported with realistic expectations, that it have an effective marketing and implementation plan in place, and that its performance be evaluated over a three year period. The Commission also acknowledges that by implementing the PACE program, current Climate Action Plan initiatives will be delayed. In addition, the Commission designates Commissioner Kuntz-Duriseti, with Commissioner Bedwell as her alternate, to speak on behalf of the EQC when the item is brought before the City Council passes (5-0-2), (Absent: Marshall, Smolke).

B5. Discuss March Meeting Schedule

There was consensus among the commission to proceed with the March meeting as scheduled.

B6. Receive Update on Arbor Day Event

Commissioner Bedwell updated the commission on the status of the Arbor Day tree planting event and stated that it will take place on Thursday, April 3rd at the Bell Haven Community Center.

B7. Receive Update on Environmental Quality Awards

Commissioner Martin updated the commission on the applications received and discussed potential areas of improvement with the awards planning and application submittal process.

C. REPORTS AND ANNOUNCEMENTS

The following updates were received by commission:

C1. Staff Update on Environmental Policies to be Considered by City Council

C2. Commission Subcommittee Reports and Announcements

C3. Discuss Future Agenda Items

The meeting was adjourned at 9:28 p.m.

Meeting minutes prepared by Vanessa Marcadejas, Environmental Programs Specialist.

ENVIRONMENTAL QUALITY COMMISSION

March 26, 2014

Staff Report
Agenda Item B2

REGULAR BUSINESS: Issue Determination on Appeal of Staff's Denial of a Heritage Tree Removal Permit for 1860 Oakdell Drive

RECOMMENDATION

Staff recommends the Environmental Quality Commission (EQC) deny the appeal and uphold staff's decision to deny the heritage tree removal permit application at 1860 Oakdell Drive.

BACKGROUND

On January 23, 2014, Mara Young, the landscape architect for Laurie Burmeister, property owner of 1860 Oakdell Drive applied for heritage tree removal permits to remove one red oak and one spruce tree (Attachment A). The red oak was approved for removal. The permit application for the spruce was accompanied by an Arborist report that stated the tree represented a hazard for the following reasons:

- Insect damage and basal rot
- Exposed surface roots with damage
- Girdling roots and conk on trunk

The City Arborist reviewed the application, inspected the spruce tree (Attachment B), and completed the City Arborist's Evaluation Form (Attachment C). The City Arborist denied the application based on the following:

- The main stem appears structurally sound with one central leader
- Well-balanced canopy with good foliage retention and distribution
- Girdling surface root is visible

A letter was mailed to the applicant outlining the denial of the heritage tree removal application (Attachment D).

On February 18, 2014, Laurie Burmeister filed a heritage tree appeal to the EQC (Attachment E) to remove the spruce tree and stated the following reasons for removal:

- The tree is diseased and causing major damage to the lawn

Mrs. Burmeister then filed an addendum to the appeal and also submitted a new landscape plan (Attachment F) providing the following information:

- There is sap on the trunk
- There is insect activity
- Exposed roots are causing major damage to the lawn
- Girdling root
- Tree is leaning towards the street
- Roots may impact the gas line

ANALYSIS

Section 13.24.040, of Menlo Park's Heritage Tree Ordinance (Municipal Code), requires staff and the EQC to consider the following eight factors when determining whether there is good cause for permitting removal of a heritage tree:

(1) The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;

(2) The necessity to remove the tree or trees in order to construct proposed improvements to the property;

(3) The topography of the land and the effect of the removal of the tree on erosion, soil retention and diversion or increased flow of surface waters;

(4) The long-term value of the species under consideration, particularly lifespan and growth rate;

(5) The ecological value of the tree or group of trees, such as food, nesting, habitat, protection and shade for wildlife or other plant species;

(6) The number, size, species, age distribution and location of existing trees in the area and the effect the removal would have upon shade, privacy impact and scenic beauty;

(7) The number of trees the particular parcel can adequately support according to good arboricultural practices;

(8) The availability of reasonable and feasible alternatives that would allow for the preservation of the tree(s).

Staff's decision to deny the removal permit was based on criteria one and eight of the Heritage Tree Ordinance.

With respect to criteria one, concerns related to the condition of the tree with respect to disease and danger of falling were assessed;

- The spruce tree does not show symptoms of disease. The sap flow on the trunk is likely the result of pitch mass borer (*Synanthedon pini*). Pitch mass borer does not kill trees and the problem can be addressed by opening the pitch mass and

removing the pupae/larva. The presence of other common spruce pests (spruce spider mite, aphids, sawflies and Cooley spruce gall adelgids) would be evident in the foliage and were not found at notables levels.

- The tree is not leaning towards the street, but has *grown* towards the street. The lower half of the trunk grows at an angle toward the street, and straightens upward. This growth pattern does not alone create a hazardous situation.

With respect to criteria eight, two alternatives to removal exist.

- To address the girdling root at the base of the tree, the top few inches of soil should be carefully removed to further expose the problematic root. The girdling root can be cleanly cut to improve the tree's overall structure and health.
- In respect to the damage caused to the lawn, landscape maintenance practices can be altered or the lawn in problematic areas can be replaced by other materials, such as groundcover.

Staff recommends the Environmental Quality Commission (EQC) deny the appeal and uphold staff's decision to deny the heritage tree removal permit application based on these findings.

Signature on File
Brian Henry
City Arborist

Signature on File
Vanessa Marcadejas
Environmental Programs Specialist

PUBLIC NOTICE: Public Notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting.

ATTACHMENTS:

A. Heritage Tree Removal Application
B. Photograph of the Heritage Tree
C. City Arborist Evaluation Form
D. Heritage Tree Removal Application Denial Letter
E. Applicant's Appeal of the Removal Denial
F. Applicant's Addendum to the Appeal and Landscape Plan

THIS PAGE INTENTIONALLY LEFT BLANK

Heritage Tree Removal Permit Application

This application must be submitted with the Arborist Form

Submit application forms to 701 Laurel Street, Menlo Park, CA 94025

Application No. _____

Purpose of application: Removal ☒ **Pruning of more than 25%** ☐

Permit Fee: $135.00 (each tree, up to 3 trees); $90 each additional tree (separate forms required for each tree)

PLEASE PRINT CLEARLY

Site Address: 1860 Oakdell Drive

Name of Applicant: Mara Young Phone 327-2644 FAX _____

Mailing Address: 1860 Oakdell Drive Email: marayoung@gmail.com

I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City, including but not limited to, all cost in the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to the proposed tree removal.

Signature of property owner authorizing access and inspection of tree in his/her absence:

Laura Burmeister Date: 1.23.14 PAID

JAN 23 2014

CITY OF MENLO PARK

Type of Tree: SPRUCE Location on property: FRONT YARD TO LEFT OF FRONT WALKWAY

Reasons for Request:

POOR CONDITION. WILL BE REPLACING TREE WITH A MORE SUITABLE LAWN TREE

IF TREE IS DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING DAMAGE.

Are you considering any construction on your property in the next 12 months? Yes ☐ No ☒
If yes, please submit additional information describing what type of construction is planned and a site plan.

- **Tree may not be removed (or pruned over 25%) unless and until the applicant has received final permission from the City as indicated below.**
- **The signed permit approval form must be on site and available for inspection while the tree work is being performed.**
- **A suitable replacement tree, 15 gallon size or larger with a mature height of 30 feet or more, is to be installed in the time frame indicated below.**

PLEASE DO NOT WRITE BELOW THIS LINE

PERMIT APPROVED ☐ **PERMIT DENIED** ☒

TIMING OF REMOVAL

☐ Upon receipt of this approved permit
☐ After applying for a Building Permit for associated construction

TIMING OF REPLANTING

☐ Within 30 days of Heritage Tree removal
☐ Prior to final building inspection of associated construction

Staff Signature: _____ **Date:** 1.31.14

Print name and title: RYAN HENRY, CITY ARBORIST

Tree #1

Arborist Form

Please complete one form for each tree. Mark each tree with colored ribbon or tape prior to our inspection.

Site Address: 1860 Oakdell Drive, Menlo Park, CA 94025

ARBORIST INFORMATION:

Name of Certified Arborist: Helen E. Winkler

ISA or ASCA number: WE8672A Menlo Park Business License number:

Company: HELEN E. WINKLER, MS, ACCN Pro. ID # 04128

Address: Certified Arborist ID # WE8672A, 448 Angus Ave E.

Phone: San Bruno, CA 94066, (650) 583-2383 FAX: Email: Helenacea@gmail.com

TREE INFORMATION:

Date of Inspection: 1/13/2014

Common Name: Spruce. Botanical Name: Picea spp

Location of Tree: Front yard, SW corner to left of tree #2 Height of Tree: 60'

Diameter of tree at 54 inches above natural grade: 24"

Circumference of tree at 54 inches above natural grade 76"

Condition of Tree:

POOR - Insect damage & basal rot seen, exposed surface roots with damage & girdling roots seen. Conk on main trunk.

If recommending removal or pruning, please list all reasons:

Recommend - Removal - decay seen on surface roots. Tree represents a hazard

Suggested Replacement Tree:

Red Maple (Acer rubrum)

Signature of Arborist: Helen E Winkler **Date:** 1/13/14

THIS PAGE INTENTIONALLY LEFT BLANK

City Arborist Evaluation Form

Address: 1860 OAKDELL DRIVE **Permit #** HTR2014-00012

Type of tree: SPRUCE

Private property Yes ☒ No ☐ Residential ☒ Commercial ☐

Structure GOOD Approximate Height 60'

Health FAIR/GOOD Diameter (at 4 feet) 24"

Overall GOOD

Observations:

Mainstem (s) MAINSTEM APPEARS STRUCTURALLY SOUND. STRONG CENTRAL LEADER.

Other branches WELL BALANCED CANOPY. GOOD FOLIAGE RETENTION & DISTRIBUTION.

Roots SURFACE ROOTS VISIBLE. GIRDLING ROOTS AGAINST ROOT FLARE.

Cavities NO VISIBLE CAVITIES.

Decay SAP DRIPPING ALONG LOWER PORTION OF TRUNK.

Growth NORMAL GROWTH HABIT FOR SPECIES.

Conditions around tree IRRIGATED FRONT LAWN.

Other heritage trees nearby RED OAK

Other comments

Category (check one):

- ☐ Structural problem
- ☐ Possibly hazardous
- ☐ Diseased
- ☐ Dead (or nearly dead)
- ☐ Property Damage
- ☐ Construction related
- ☐ Emergency
- ☐ Other

Conclusions:

- ☐ Permit Approved
- ☒ No Permit decision at this time. Further evaluation by the City is recommended.

Signed _____ City Arborist. Date 1/31/14

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF MENLO PARK

Public Works Department

February 4, 2014

Mara Young
1860 Oakdell Drive
Menlo Park, CA

Subject: Application to remove two Heritage Trees at 1860 Oakdell Drive

Dear Mara Young,

This letter is to inform you that the City has received and reviewed the application you submitted for the removal of two Heritage Trees at 1860 Oakdell Drive. The removal of the red oak tree is approved and the permit can be issued once the 15-day appeal period expires on February 16, 2014. The removal of the spruce tree is denied because the tree can be preserved through proper tree management and regular maintenance.

You may appeal this decision to the Environmental Quality Commission by submitting a request in writing, within 15 days of the date of this letter. A fee of $200 per tree shall be due at the time of appeal. For further information regarding the City's action on this Heritage Tree removal request or the appeal process, please feel free to contact the Environmental Programs Specialist, Vanessa Marcadejas at (650) 330-6768.

Sincerely,

Brian Henry
City Arborist
Public Works Department

Cc: Vanessa Marcadejas, Environmental Programs Specialist

701 Laurel Street - Menlo Park, CA 94025
Phone: (650) 330-6740 - Fax: (650) 327-5497

THIS PAGE INTENTIONALLY LEFT BLANK

Feb. 18, 2014

Subject: Appeal of Denial of Heritage Tree Removal

Address: 1860 Oakdell Drive

To Whom It May Concern:

The tree in question is diseased and causing major damage to our front lawn.

Thank you for your time and attention to this matter.

Sincerely,
Laurie Burmeister
650.619.1953

THIS PAGE INTENTIONALLY LEFT BLANK

Subject: Addendum to Appeal & Heritage Tree Removal

Address: 1860 Oakdell Drive

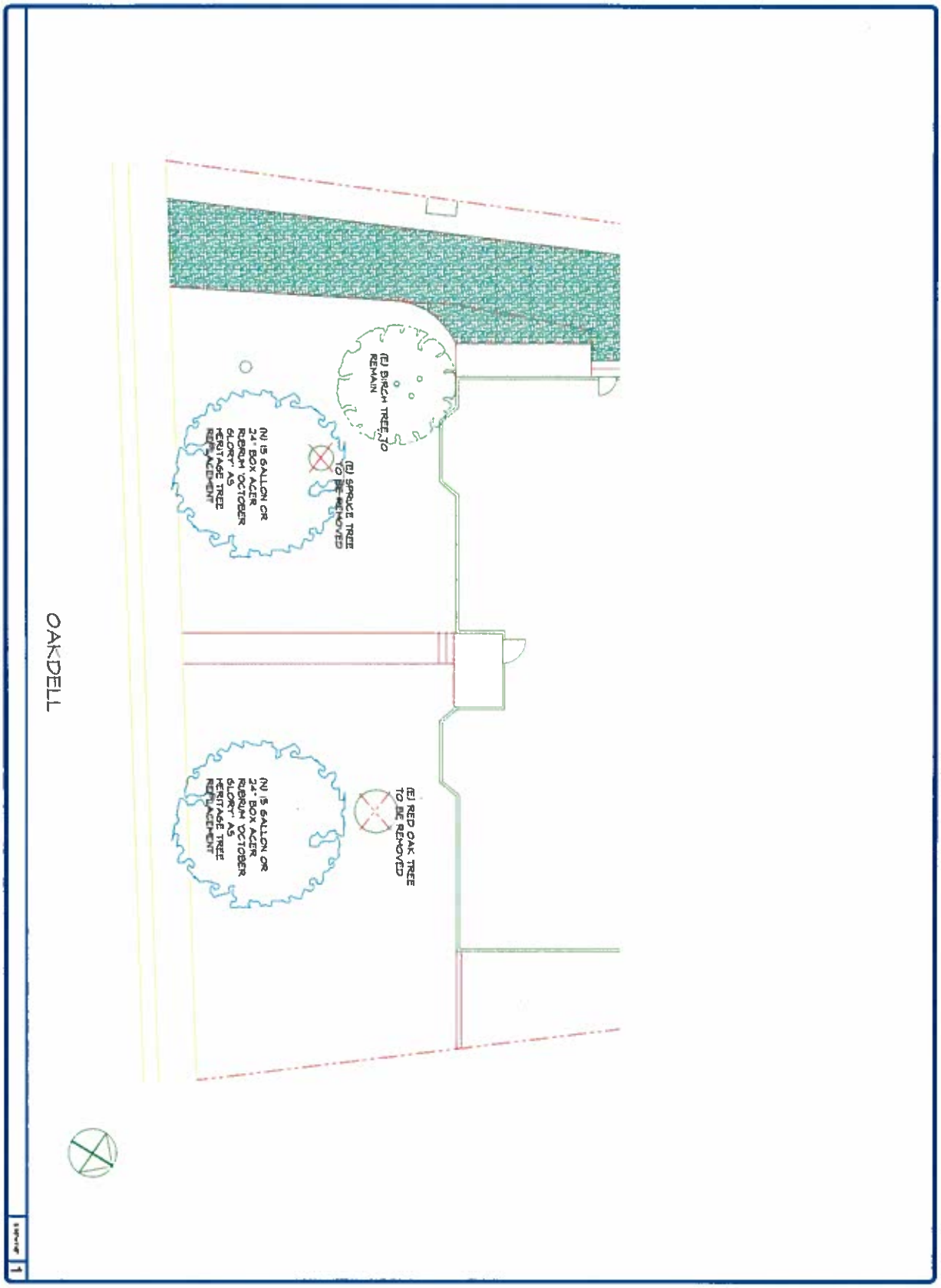
To Whom It May Concern:

Here is additional information on the tree in question

- There is sap flow on the trunk that indicates disease and/or decay
- There is insect activity
- There are exposed roots which are causing major damage to our lawn
- There is a gurgling root twisting around the tree
- There is a lean to the tree towards the street
- Roots may be invasive to the gas line.

Once again, thank you for your consideration and attention to this matter.

Laurie Burmeister



L-1

BURMEISTER RESIDENCE
1860 OAKDELL DRIVE
MENLO PARK, CA 94025

LANDSCAPE PLAN

MARA YOUNG
LANDSCAPE ARCHITECT

PUBLIC WORKS DEPARTMENT
701 Laurel Street / Menlo Park, CA 94025-3483
(650) 330-6740 / Fax (650) 327-5497

MEMORANDUM

DATE:	March 26, 2014
TO:	Environmental Quality Commission
PREPARED BY:	Pam Lowe, Associate Civil Engineer
APPROVED BY:	Ruben Nino, Assistant Public Works Director
SUBJECT:	Potential Irrigation Well

The Sharon Heights Golf & Country Club (Golf Club) and City staff have been discussing the feasibility of constructing a well at a City park which could potentially provide irrigation water to the Golf Club, three City parks (Nealon Park, Jack Lyle Park, and Sharon Park), and La Entrada School. The Golf Club has proposed to finance the cost of the well development and piping infrastructure, and that the Water District would maintain the well and delivery system while passing any prorated and related overhead costs on to the Golf Club. In October 2010, the City Council authorized staff to proceed forward with public outreach and staff held three community meetings to obtain feedback on this potential project. City staff also presented the potential project to the Parks & Recreation Commission in December 2011 and to the EQC in February 2012.

At the February 1, 2012 EQC meeting (Attachment A), the following statement passed with a 6-0-1 vote.

"The EQC recommends to City Council that any specific proposals for groundwater use, including the cost, siting, or the like should be considered after:

1. *A city grey water plan is developed; and*
2. *The city engages with the San Mateo County to clarify long term water rights for the San Francisquito Creek Aquifer."*

On April 24, 2013, the EQC requested that this item be placed on a future meeting agenda in order to refine the recommendations to City Council.

Since that meeting, staff has compiled additional information (see Attachment B).

A. Water supply agreements
B. Current Water District water use (consumption)
C. Golf Course background, historical water use, and water conservation
D. Parks & Recreation Commission recommendation

E. 2010 Financial Feasibility Study results
F. Public outreach update
G. Updated estimates for San Francisquito Creek Groundwater Subbasin
H. Groundwater management in San Mateo County and Santa Clara County
I. Groundwater management methods
J. Recycled water options and costs
K. Agency support and interest from others

Steps for Project Consideration

It is important to note that this potential project has not been approved by Council, so it hasn't been prioritized into the current staff work plan. This has complicated staff's ability to fully investigate details of how a public/partnership could work with the Golf Club and, in turn, share that information with the community.

Below are steps that must occur in order for this potential project to be considered. Following this meeting, staff will bring this item to the City Council for discussion (step #1 below).

1. Staff would need direction from the City Council to approve or deny proceeding forward with details of a public/private partnership regarding this potential project.
2. The City and the Golf Club would need to draft a MOU (Memorandum of Understanding) Agreement.
3. The Parks & Recreation Commission and the EQC would have the opportunity to review the draft MOU and provide input to the City Council.
4. Council would need to discuss MOU terms and they would be able to add/remove items.
5. Council would need to approve an agreement
6. The Golf Club would need to approve the MOU Agreement
7. The City would proceed forward with the CEQA environmental review process, detailed plans, and construction costs and timelines.

PUBLIC WORKS DEPARTMENT

January 26, 2012

To: Environmental Quality Commission

From: Matt Oscamou, Engineering Services Manager
Pam Lowe, Associate Civil Engineer

Subject: Discuss a Recommendation to the City Council to Allow Further Consideration for a Groundwater Irrigation Well, Pending Environmental Review and Approval Through the CEQA Process, as an Alternative Water Supply to Reduce the City's Use of Hetch Hetchy Water

---

RECOMMENDATION

Staff recommends that the Environmental Quality Commission recommend to the City Council to further consider a groundwater irrigation well, pending environmental review through the CEQA process, as an alternative water supply to reduce the City's use of Hetch Hetchy water.

BACKGROUND

The City's Menlo Park Municipal Water District (MPMWD) serves approximately 14,000 residents through two service areas; the eastern service area and the western service area (see Figure 1). Combined, the two areas have approximately 4,000 total service connections, while the remaining portions of the City are primarily served by California Water Service (Cal Water). MPMWD purchases 100% of its water from the San Francisco Public Utilities Commission (SFPUC), which pipes water to the peninsula from the Hetch Hetchy reservoir in Yosemite National Park.

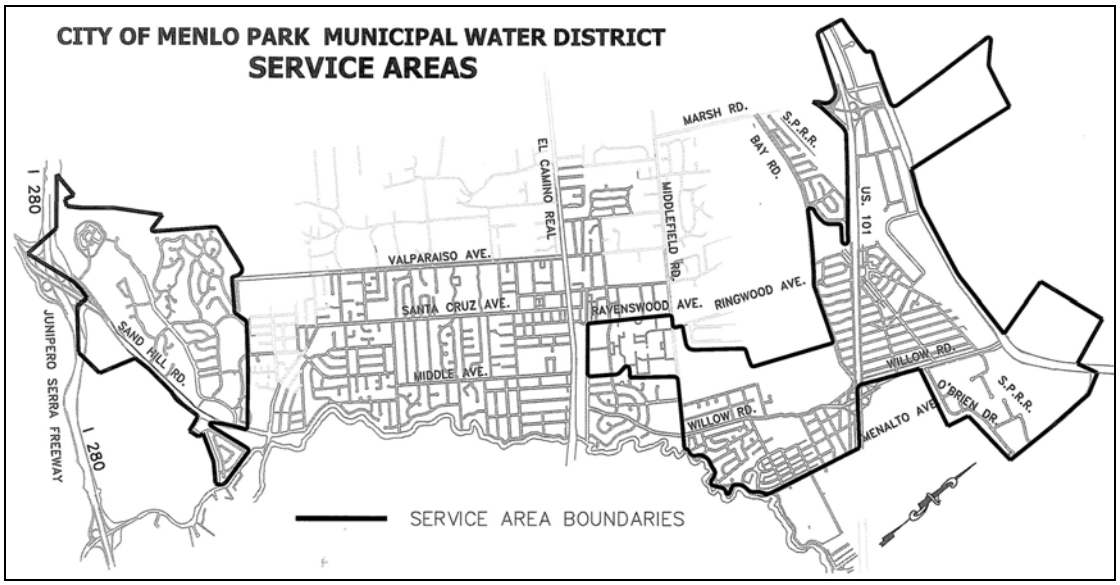


Figure 1

In October 2010 the City Council authorized staff to proceed with public outreach for a proposed irrigation well project that would offset approximately 60 million gallons per year (MGY) of Hetch Hetchy water used for irrigation at the Sharon Heights Golf and Country Club (SHGCC), along with an additional 13 MGY at three City parks and a school.

Staff held two community meetings in August and November 2011 that focused on potential irrigation well locations at Nealon Park and Jack Lyle Park. The community's main concerns were using parkland for a non-recreational use, partnering with SHGCC, depleting the aquifer with additional use, potential financial impacts to the City, construction and noise impacts, and a belief that the project would not conserve water. To address many of the questions and concerns that arose, staff developed a list of Frequently Asked Questions, which is attached for your reference.

In December 2011, the Parks and Recreation Commission discussed using up to 300 square feet of park facilities land for an irrigation well, pending environmental review and City Council approval. The following statement was approved with a 4-2 vote:

> *With significant reservations, the Parks and Rec Commission supports further consideration of the use of up to 300 square feet of park space for an irrigation well with the following stipulations: the well is not seen or heard; a remote location is selected so as not to impact future park uses; at least one other location besides Nealon and Jack Lyle Parks is considered - including an additional east side location; and the final proposal is brought back to the Commission for review following the release of the EIR.*

This potential irrigation well project is separate from the City's Emergency Water Supply Project, which is currently in an exploratory drilling phase to determine viability of constructing emergency potable wells at a City-owned Willow Rd. site and at the City Corporation Yard.

Staff is bringing the potential irrigation well project in front of the Environmental Quality Commission, as requested by members of the City Council, in order to receive input on the merits of utilizing untreated groundwater to offset approximately 73 MGY of Hetch Hetchy water.

ANALYSIS

Staff is investigating the feasibility of an alternative water supply (a groundwater irrigation well) to reduce the use of Hetch Hetchy (SFPUC) water at SHGCC, three City parks, and a school. SHGCC has proposed to pay the full cost of design and construction for the proposed project, as well as paying the City for ongoing operations and maintenance of the well, pipeline and water delivery. The preliminary construction cost estimate is approximately $4 million, according to SHGCC.

The project is currently in the preliminary investigation phase and neither design nor environmental review has occurred. If the City Council decides to further investigate the project, staff would then begin a process of detailed analysis and negotiations with SHGCC, along with the completion of the CEQA environmental review process. If Council decides to proceed with a negotiated agreement with SHGCC, the agreement would, at a minimum, be cost neutral to the City.

Staff believes that developing an alternate groundwater supply to offset Hetch Hetchy water use is an environmentally sustainable practice to preserve future water supplies which is in line with the Environmental Quality Commission's mission statement to "*advise City Council on programs and policies related to protection of natural areas, recycling and waste reduction, environmentally sustainable practices, air and water pollution prevention, climate protection, and water and energy conservation*." As the state continues to experience growth, more pressure may be placed on the Hetch Hetchy water system, and by using a diverse portfolio of water sources, the City can alleviate regional pressure while still securing adequate water supplies for residents and businesses.

SHARON HEIGHTS GOLF & COUNTRY CLUB (SHGCC)

SHGCC currently uses more than 60 MGY of water and is one of the largest individual water customers of MPMWD. They have incorporated many conservation measures over the years such as installing drought resistant grass, spot watering, capturing and redirecting drainage, and installing automated sprinklers. SHGCC has actively researched alternative water supplies such as creating recycled water onsite, trucking in water, sharing water from Stanford-owned lakes, and drilling wells in other locations.

POTENTIAL IRRIGATION WELL

The proposed irrigation well would require the use of up to 300 SF of park land, depending on location and configuration, in order to accommodate the well head and its enclosure. From the well site, a non-potable, irrigation pipeline (purple pipe) would be aligned and constructed from the park site to SHGCC, passing near three City parks and an elementary school, which would all be able to utilize water from the proposed system. This irrigation mainline, would allow for a future non-potable, recycled water system to extend from the El Camino corridor to western Menlo Park, in the event that Redwood City or Palo Alto extend their recycled water system to our area. With a pipeline already in place, a future recycled water system could be utilized by many residents and businesses along the alignment once the connections are made. The potential use of this infrastructure for recycled water would further allow the City to add sustainable diversity to our water sources.

IDENTIFYING POSSIBLE WELL LOCATIONS

Staff identified several City-owned properties that could be suitable for an irrigation well, factoring in available groundwater, ability to be screened, impact on recreational and business use, and available space. Through this process, staff determined that Nealon Park or Jack Lyle Park (see Figure 2) would be the best locations to accommodate a well because both parks are larger and a well could easily be blended in with the existing surroundings.

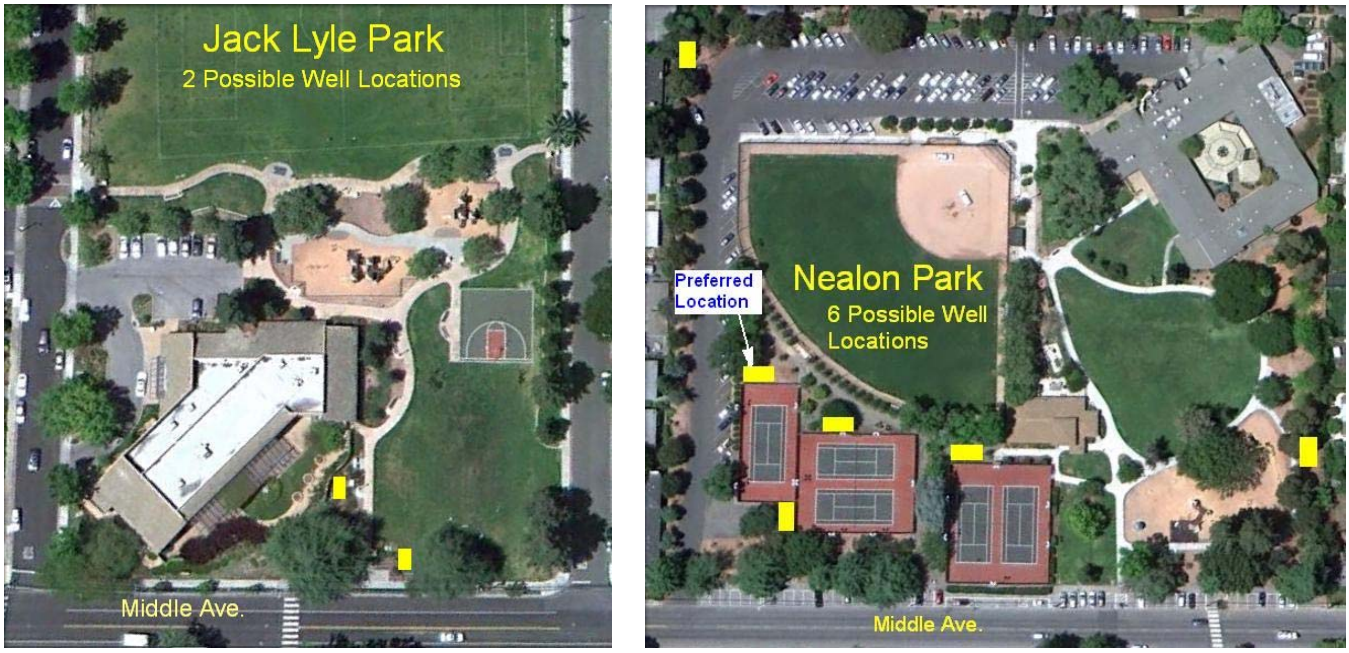


Figure 2

JACK LYLE PARK

Staff considered two possible well sites at Jack Lyle Park, one that is clustered with other irrigation and electrical equipment, and a second behind the sign fronting Middle Avenue. While screening could be accommodated at these two locations to blend the well into the surroundings, community feedback received at the November 2011 outreach meeting expressed concern that both locations were too near existing residents on the south side of Middle Avenue. Jack Lyle Park is located within the Public Facilities District, which permits public facilities used and operated for government purposes by the City. As a result, a well within this park would be considered a permissible use, and no additional use permits would be required.

NEALON PARK

Staff considered six possible well sites at Nealon Park, ranging from locations near the perimeter of the park to minimally used areas adjacent to the tennis courts. These six locations were presented at the November, 2011 outreach meeting, where the community expressed concern that several of the locations were too close to existing residents, either adjacent to Nealon Park or across the street on Middle Avenue. Considering this feedback, staff recommends the site adjacent to the west parking area, between the tennis courts and the softball field. This location provides easy access for construction, operation and maintenance, and the ability to blend the well fencing and landscaping with the existing tennis courts so that it would not be visible to residents located on Middle Ave. Because of the advantages of this particular site against all others, staff recommends that this location be the preferred site for a potential irrigation well.

Nealon Park is located within the Open Space and Conservation District, which would require a conditional use permit to install and operate the well.

SAN FRANCISCQUITO CREEK AQUIFER

The potential project is located in the San Francisquito Creek Sub-Basin (Aquifer). San Mateo County has not adopted an ordinance that limits the use of groundwater in the Aquifer. Therefore, there are no specific water rights that are owned by any one individual, agency, or corporation.

The Aquifer flows from west to east, following the alignment of the San Francisquito Creek. The groundwater flows along bedrock until ultimately it reaches San Francisco Bay and the Pacific Ocean. Based on a study conducted for the City in 2005, the Aquifer recharge rate ranges from 1.303 to 2.606 billion gallons per year (BGY) depending on annual rainfall, and had an estimated use of 358 MGY which includes municipal use, private wells, and Stanford University. Figure 3 shows an approximate cross section of the Aquifer, from the SHGCC to the Bay. This graphic indicates groundwater availability at locations in the Aquifer, where the depth of the layer identified as D-L represents available groundwater supply, and the darker shaded area on the bottom left side represents bedrock.

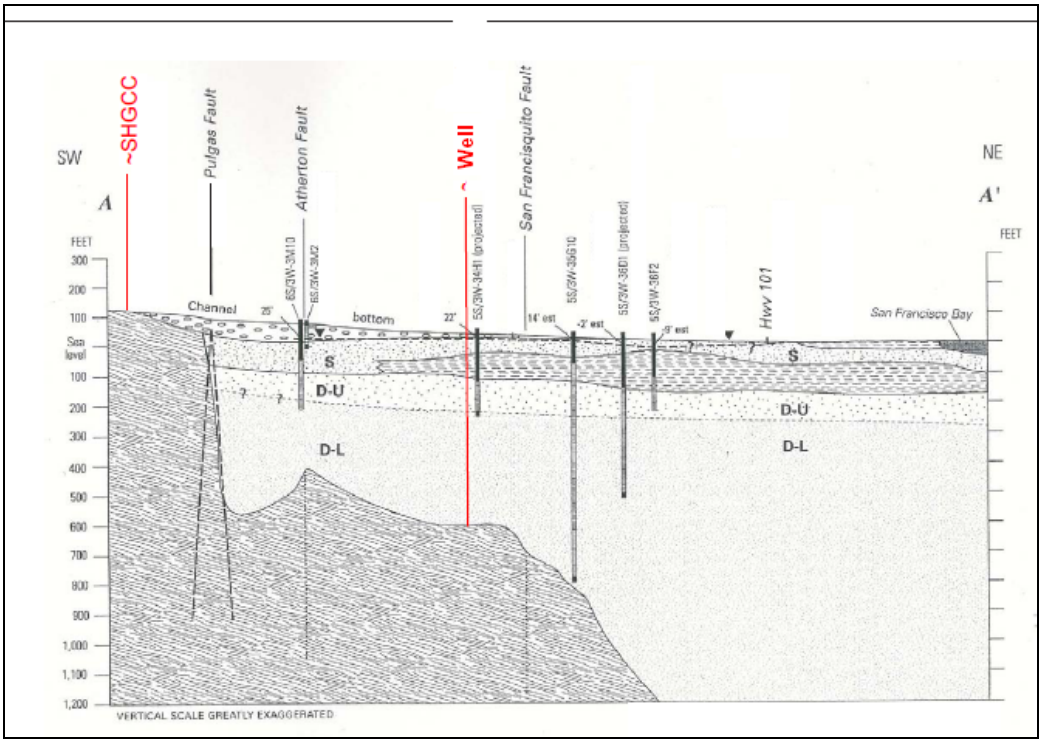


Figure 3

SFPUC'S SUPPLY ASSURANCE & CURRENT WATER USE

The 2009 Water Supply Agreement between MPMWD and SFPUC (which expires in 2034) provides the City with a supply assurance of 1.626 billion gallons per year (BGY), of which approximately 1.161 BGY is used by current customers. However, in the event of a drought, the City's Supply Assurance could be reduced by 17% (total assurance of 1.349 BGY) for a single dry year or by 28% (total assurance of 1.171 BGY) for multiple dry years. The agreement with SFPUC includes a clause stating:

> *San Francisco and each Wholesale Customer agree that they will diligently apply their best efforts to use both surface water and groundwater sources located within their respective service areas and available recycled water to the maximum feasible extent.*

Table 1 shows the City's SFPUC's Supply Assurance for a normal year, a single dry year, and multiple dry years, and compares the Supply Assurance to current water demands. If demands were to remain the same, and the City was experiencing a multiple dry year drought in the future, that would equate to 99% of the Supply Assurance. It is possible that additional reductions could be required by SFPUC in the event of prolonged drought, and therefore, creating an alternative groundwater supply for irrigation purposes would help to offset future demands.

Table 1

	NON-DROUGHT YEAR	SINGLE DRY YEAR	MULTIPLE DRY YEAR
SFPUC SUPPLY ASSURANCE (SA)	**1.626 BGY**	**1.349 BGY**	**1.171 BGY**
CURRENT WATER DEMANDS[1]	**1.161 BGY 71% of SA**	**1.161 BGY 86% of SA**	**1.161 BGY 99% of SA**

1: Updated in January 2012

The City's adopted 2010 Urban Water Management Plan, which evaluates whether the City can meet projected water demands of its customers over a 20-25 year planning horizon and under a range of water supply scenarios, included the following statement in Section 5.4.2 [Supply and Demand Comparisons]:

> *MPMWD could experience slight shortages in multiple dry years. However if MPMWD successfully meets its gpcd [gallons per capita per day] targets and growth patterns are as expected, water conservation could go a long way to mitigating these shortages. Local groundwater could help alleviate these shortages.*

In addition, MPMWD is a member of the Bay Area Water Supply & Conservation Agency (BAWSCA), an organization representing the 24 cities/water districts and two private utilities that purchase water wholesale from SFPUC. As a member agency of BAWSCA, MPMWD has adopted BAWSCA's Water Conservation Implementation Plan, which requires reduction of Hetch Hetchy water use and encourages recycling and groundwater projects.

Developing a groundwater supply would help the City stay below its Supply Assurance, especially in multiple dry years, and help comply with SFPUC's 2009 Water Supply Agreement and BAWSCA's objectives. Meeting these regional goals are critical elements of developing sustainable water sources to serve the MPMWD and preserve our potable water supply.

PROJECT BENEFITS

- Creates a groundwater supply for irrigation purposes that will reduce the use of Hetch Hetchy water.
- Opportunity to meet SFPUC and BAWSCA requirements at no cost to the City.
- Installation of a non potable water main between the El Camino corridor and Sharon Heights that provides an opportunity to connect to a future recycled water system.
- Develops an environmentally sustainable practice which is in line with the Environmental Quality Commission's mission statement.
- Increases available water for other MPMWD users during drought years.
- Reduces City expenditures on Hetch Hetchy water for three City parks by approximately $68,000 per year.

- MPMWD could save an estimated $13,000 per year in Hetch Hetchy purchases.

NEXT STEPS

In Spring 2012, staff will seek City Council authorization to begin negotiations with SHGCC and initiate the CEQA review process. If approved, staff will return to the City Council in summer 2012 to review and potentially approve the proposed agreement with SGHCC and the CEQA documents. If Council approves those items, the project will move into the detailed design and construction phase, which could begin in 2013.

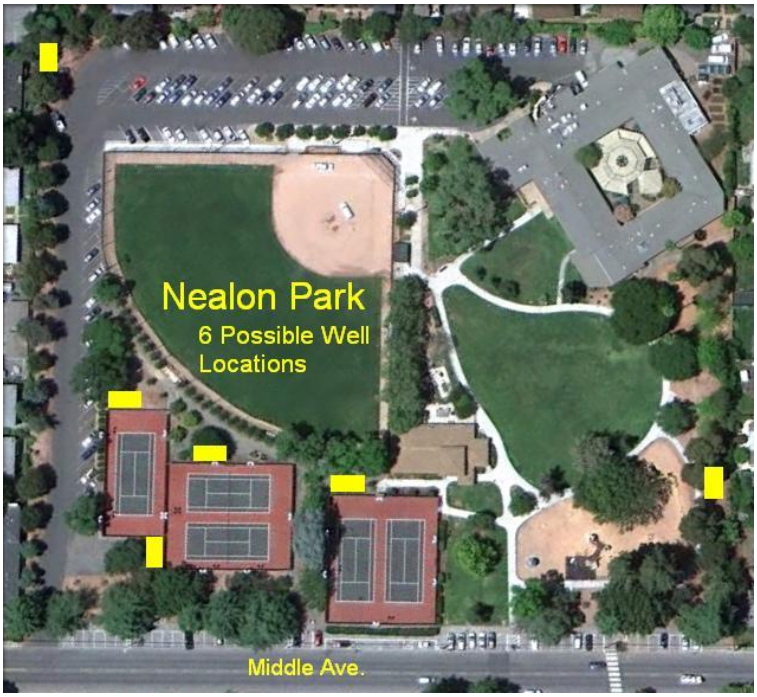
Attachment: Frequently Asked Questions (FAQs)

POTENTIAL IRRIGATION WELL
FREQUENTLY ASKED QUESTIONS (FAQS)
DECEMBER 9, 2011

The City of Menlo Park is considering a potential irrigation well project to reduce the use of Hetch-Hetchy (SFPUC) water at the Sharron Heights Golf and Country Club, two City Parks and school, within the City of Menlo Park. The project is currently in the preliminary investigation phase and neither design, nor environmental review, have taken place at this time.

On August 24, 2011 the City held a community meeting to obtain feedback for a potential irrigation well at Nealon Park located adjacent to the tennis courts on Middle Avenue near the driveway entrance to the park. Based on community feedback, the City is considering other feasible locations at both Nealon Park and Jack Lyle Park that would be located further away from residents' homes and be more acceptable to the community.

On November 3, 2011, the City held a second Community Meeting to obtain feedback on the eight possible locations (six at Nealon Park, two at Jack Lyle Park) for an irrigation well, and to determine which of the sites is preferred.



What happens after the November Community Meeting?
After obtaining community feedback, staff anticipates presenting the potential project to the Parks & Recreation Commission for their feedback and to get a recommendation on the project to take back to the City Council. Following these meetings, staff will return to City Council to get direction on whether or not to begin negotiations with Sharron Heights Golf and Country Club (SHGCC) and to fully investigate the project.

Dec 2011	Parks & Recreation Commission
Jan/Feb 2012	City Council

How was Nealon Park and Jack Lyle Park chosen as possible well locations?
Both Nealon Park and Jack Lyle Park are located where it is believed the aquifer can provide the targeted 500 gpm flow to provide irrigation water for SHGCC, three City parks, and a school along the alignment.

Sharon Heights Golf & Country Club (SHGCC)

Where is Sharon Heights Golf and Country Club (SHGCC) located?
SHGCC is located at 2900 Sand Hill Road on the east side of Highway 280 just north of Sand Hill Road.

Who currently provides water to SHGCC?
The City's Menlo Park Municipal Water District currently provides potable water to SHGCC which they use for the clubhouse and restrooms, and for irrigating the golf course. Prior to using the Hetch Hetchy water system, SHGCC owned and used groundwater wells near Hillview School.

Why does SHGCC want to construct a groundwater irrigation well?
SHGCC currently uses more than 60 million gallons of water per year, and it is one of the largest individual water customers of the Menlo Park Municipal Water District (MPMWD). Prior to becoming a customer of the MPMWD, SHGCC owned groundwater wells near Hillview School that were used to irrigate their golf course.

SHGCC has stated three motivating reasons to switch back to ground water for irrigation:
1. Having a reliable source of irrigation water during drought years, as it did prior to joining the MPMWD.
2. Ability to better manage the increasing cost of water.
3. Help support the request of SFPUC, Bay Area Water Supply and Conservation Agency (BAWSCA), the City of Menlo Park and other Hetch Hetchy water conservation agencies to seek alternative sources of irrigation water whenever possible.

Why hasn't more information (constsruction cost, pipeline alignment, agreement terms between the City and SHGCC) been made available to the public?
Detailed information has not been determined since the City Council has not authorized staff to negotiate with SHGCC or to fully investigate the project. If authorized by the City Council in Jan/Feb, staff will begin negotiating agreement terms with SHGCC, and SHGCC can proceed forward to complete an environmental review (CEQA), develop detailed plans, construction costs, and construction timelines.

What conservation measures has SHGCC implemented?

SHGCC has incorporated many conservation measures over the course of many years. SHGCC employs water conservation techniques, such as drought resistant grass, spot watering, capturing and redirecting drainage, and automated sprinklers where feasible and has reduced water consumption.

What other alternative water sources has SHGCC investigated?
SHGCC has considered several alternative water sources.

- Creating Recycled Water On-Site - SHGGC considered creating recycled water on-site but there was insufficient effluent in the sewer system to support watering needs. SHGCC generates very little run-off and the three "pick points" on the property could not provide any significant source of water.
- Stanford Lakes - SHGCC discussed sharing water from Stanford owned lakes, but Stanford was unsure of the quality of their lake water for golf course irrigation purposes and wanted to maintain sole access for their own internal requirements.
- Other Well Locations – The water quality and/or volume was questionable at Holy Cross Cemetery and Hillview School. Test wells indicated the aquifer below the SHGCC golf course was not productive. SHGCC initially proposed drilling the well at a public park closer to the golf course; however, SHGCC and the City concluded that a groundwater well at Nealon Park would provide the best value for the City and the SHGCC.

Has SHGCC considered recycled water for their golf course?
SHGCC met with neighboring cities (Redwood City and Palo Alto) that have a recycled water system, however, neither agency has immediate plans to provide recycled water pipelines to Menlo Park. SHGCC considered trucking water in from the City of Palo Alto, but cost and traffic impacts (an estimated 27 trucks/day) made this option infeasible. SHGCC also spoke with the City of Redwood City regarding trucking water, but Redwood City does not have facilities to provide trucked, recycled water.

How much Hetch Hetchy water could be conserved if SHGCC switched to irrigation well water?
Approximately 60 million gallons per year of potable Hetch Hetchy water could be conserved if SHGCC switched to irrigation well water. The SFPUC has stated that by the year 2018 demand for Hetch Hetchy water will exceed supply by 22 million gallons per day. As such, all users are requested to use alternative sources of water whenever possible.

Would SHGCC continue to purchase water from the Water District after the irrigation well is constructed?
SHGCC would continue to purchase potable water from the Water District for use for its clubhouse facilities and as backup to the groundwater irrigation system.

Groundwater Aquifer

What are groundwater irrigation wells?
Groundwater irrigation wells draw water from beneath the earth's surface for landscaping purposes.

Who has water rights to the groundwater aquifer beneath Menlo Park?
San Mateo County has not adopted an ordinance that limits the use of groundwater in the San Francisquito Creek Aquifer. Therefore, there are no specific water rights that are owned by any one land owner. Unlike surface water (creeks, rivers, lakes, etc.) the State of California does not regulate

the use of groundwater at the state level, rather, the State leaves groundwater management to the local jurisdictions.

Who can drill a well in San Mateo County?
There are no limitations on who can drill a well in San Mateo County, as long as the proper permits are obtained from the County to ensure that the well conforms to the California Well Standards.

Does the City have an ordinance that prohibits well drilling?
No

How much water is available in the aquifer?
Groundwater in the aquifer is constantly flowing and refreshing itself. The subbasin recharge rate, per a 2005 City Feasibility Study, ranges from 4,000 to 8,000 acre-feet per year (AFY). Current groundwater well use in the basin is about 1,000 AFY. Sharon Heights Golf & Country Club (SHGCC), the 3 City parks, and a school would add approximately 224 acre-feet per year (AFY), which is less than 3% of an 8,000 AFY recharge rate or less than 8% of a 4,000 AFY recharge rate.

Is the aquifer water potable?
Generally, the groundwater from the aquifer is acceptable for both potable and irrigation uses. Groundwater in the San Francisquito Subbasin tends to be somewhat hard (i.e. high in calcium carbonate – $CaCO_3$) with elevated concentrations of chloride, iron, manganese, specific conductance, and total dissolved solids (TDS) that exceed secondary maximum contaminant levels (MCLs). Elevated concentrations of these constituents make groundwater undesirable for potable use due to aesthetic rather than health reasons.

If the water in the aquifer has not been tested, do you plan to test it?
Since the water will be used for irrigation purposes only, San Mateo County of Environmental Health does not require testing for water quality in order to receive a permit.

Will subsidence be a problem?
Based on a 2005 City Feasibility Study, subsidence from a well would be highly unlikely. The aquifer's natural recharge rate currently fluctuates between 4,000 AFY – 8,000 AFY without producing identifiable subsidence at the surface. The small amount of flow anticipated from this well would not significantly change the aquifer dynamics.

Potential Project Benefits

Was a preliminary financial feasibility study completed for this potential project?
Yes, the City hired a consultant (paid for by SHGCC) to develop a preliminary financial feasibility study and water rate analysis for a potential groundwater-sourced irrigation system in the City. The report shows that there appears to be significant potential savings to both the City and SHGCC under several scenarios.

How would the City benefit from this potential project?
1. SHGCC would pay for the environmental study, design, and construction of the new well facilities and pipelines.
2. The City will be able to use the groundwater to irrigate parks along the alignment. .
3. During future droughts, the City parks along the potential pipeline alignment could remain available for community use.

4. The City's Menlo Park Municipal Water District, who currently provides water to SHGCC, Sharon Park, and a school, would purchase less wholesale water from SFPUC.
5. The City would purchase less water from Cal Water, who currently provides water to Nealon Park and Jack Lyle Park.
6. The new pipelines would create a mainline network for a recycled water system between central Menlo Park and Sharon Heights, should recycled water become available in the future.
7. With reduced demand, the Water District could stay well below their SFPUC Supply Assurance of4,993 acre-feet per year (AFY). In the event of a drought this amount can be reduced by SFPUC by 17% for a single-dry year (4,144 AFY) and 28% for multiple-dry years (3,595 AFY).

	Acre-Feet per Year (AFY)	Notes
SFPUC Supply Assurance	4,993	No expiration. Will not change.
Single-Dry Year Supply Assurance	4,144	17% reduction
Multiple-Dry Years Supply Assurance	3,595	28% reduction
Water Purchased Fiscal Year (FY) 2010-11	3,479	70% of Supply Assurance 84% of Single-Dry Year **97% of Multiple-Dry Years**
Actual Water Use FY 2010-11 (SHGCC, Sharon Park, and a school)	198	4% more available of Supply Assurance 5% more available of Single-Dry Year 6% more available of Multiple-Dry Years

Who else could receive the groundwater irrigation water?
Nealon Park, Jack Lyle Park, Sharon Park, and La Entrada School could receive groundwater irrigation water with this system. Currently, California Water Service (Cal Water) provides water to both Nealon Park and Jack Lyle Park, and the Menlo Park Municipal Water District (MPMWD) provides water to Sharon Park, SHGCC, and La Entrada School.

How much can the City save in water costs by irrigating three City parks with groundwater?
Both Cal Water and the City's Menlo Park Municipal Water District purchase wholesale water from SFPUC. SFPUC's current 2011-12 wholesale rate is $2.63 per 100 cubic feet (ccf), compared to their 2010-11 wholesale rate of $1.90/ccf, a 38.3% increase. SFPUC estimates their wholesale rates will continually increase reaching $5.03/ccf in 2020-21, which averages to a 10% annual rate increase each year.

In 2010-11, Nealon Park irrigation use was 10.5 acre-feet (AF) and Jack Lyle Park irrigation use was 6.9 AF. The City paid approximately $31,000 for this water. Over the last two years, Cal Water's water rates have increased 17.6% each year. It is unknown if Cal Water will increase water rates in the future, however, assuming that it would follow SFPUC's estimated average annual 10% rate increase and similar water use for the next 3 years, by 2014-15 the City's annual water costs would increase to $48,400, a 56% increase since 2010-11.

In 2010-11, Sharon Park irrigation use was 7.6 AF. The Menlo Park Municipal Water District's (MPMWD) water costs were approximately $11,300. City Council approved an annual 16.5% water

rate increase through 2014-15, so assuming similar water use for the next 3 years, by 2014-15 water costs would increase to approximately $20,000, a 75% increase since 2010-11.

By FY 2014-15 the City could potentially save $68,000 per year to irrigate three parks. In addition, for Sharon Park, the MPMWD would save approximately $13,000 in water purchases.

Menlo Park Municipal Water District (MPMWD)

What is the Menlo Park Municipal Water District? To whom do they provide water?
The City's Menlo Park Municipal Water District purchases 100% of its water from the San Francisco Public Utilities Commission's Hetch Hetchy System and delivers it to more than 14,000 residents and businesses located east of El Camino Real and in the Sharon Heights area. The City operates and maintains the water system which includes pipelines, valves, fire hydrants, a pump station, and a reservoir in addition to testing the water to ensure all safe drinking water standards are met. For more information about the Water District and water quality, view the City's 2010 Water Quality Report.

Does the Menlo Park Municipal Water District provide water to Nealon Park and Jack Lyle Park and the surrounding residents and businesses?
No. California Water Service Bear Gulch System (Cal Water) provides water to the area of Menlo Park located between El Camino Real and the Sharon Heights area. The City currently purchases water from Cal Water for potable and irrigation uses at Nealon Park and Jack Lyle Park.

Permits & Licenses

What permits are required for an irrigation non-potable well?
A permit from the County of San Mateo Environmental Health Division is required for all groundwater wells, in order to ensure compliance with the California Well Standards.

Do you expect to file an Environmental Impact Report?
If the project moves forward, the City and SHGCC will submit all necessary documents to meet CEQA requirements. An environmental study has not been completed at this time.

Do you plan to apply for a conditional use permit for this potential project?
Yes, if required to meet the conditional uses for an Open Space & Conservation District zoned parcel (Nealon Park). A conditional use permit will not be required for a Public Facilities zoned parcel (Jack Lyle Park).

Well Construction

Who would pay for construction of the irrigation well and the piping?
SHGCC would pay all costs associated with the environmental review, design and construction of the well and piping infrastructure.

Who would pay for operation and maintenance of this new water system after construction is completed?

SHGCC proposes that the City would maintain the well and the delivery system while passing any prorated and related overhead costs on to them in the form of an annual maintenance agreement or similar TBD arrangement. It would be cost neutral for the City.

How much space would the well take up?
The minimum footprint of the well site would be 15 feet wide by 10 feet deep and the maximum foreseeable size would be 10 feet wide by 30 feet deep. However, the final potential site layout would be designed to best fit into the surroundings and minimize the impact to the surroundings.

Does the well need to be fenced?
The well will need to be fenced for security purposes. Landscaping can be added to beautify and blend it in with the surroundings.

How extensive will be the noise be once the well is constructed?
There will be no noise from the well pump and motor as both will be placed several hundred feet below ground and underwater. There will be very low to no noise attributed to the electrical panel as the pump will be constant speed and a "soft start" feature will be used for the motor starter which will have negligible noise and only briefly when the pump motor starts. The City would require contractors to follow noise reduction practices and to meet the City's noise ordinance. Temporary noise barriers would also be constructed around the drill site. If a transformer is necessary, it would be provided by PG&E and a sound enclosure could be added. (Transformers have a humming noise of about 50 decibels at 10 feet that gets reduced to 30 decibels at 100 feet, whereas 30 decibels is considered "faint.")

What does the construction phase consist of and how long would construction take?
The construction phase would consist of well drilling and construction of the wellhead facilities, access, and site landscaping, and construction of the pipelines along the potential alignment from SHGCC to the park. The total duration of construction is up to 6 months pending no complications or weather impacts. The well construction would take 3-4 weeks which consists of drilling for 24 hours/day for about a week and the remainder of the well phase would need to comply with the City's noise ordinance.

How would construction affect traffic?
Depending on the location of the well, infrequent, traffic delays may occur as equipment enters/exits the site. Heavy trucks would be used to deliver equipment, materials, and supplies to the site, in addition to workers' personal vehicles. Heavy equipment would remain on the site until no longer needed. The construction work force would not be large, probably no more than 4-5 workers.

Once constructed, how often would trucks need to access the site for inspection and maintenance?
Normal operation and maintenance would not require truck access, however, truck access must be available if a pump needs to be pulled for repair or if major pipe repairs are required. Both of these activities would occur very infrequently (10+ years).

How much energy will be used to obtain water from a Nealon Park well and pump it up the hill?
SHGCC and the City estimate the well pump will have a 45 kilowatt motor and the well would produce 300 gpm. The pumping requirements for the summer might be 16hrs/day on peak days during the 4 summer months and less than half that for most of the rest of the year. Over 55% of water demand happens during 4 summer months. These numbers would vary depending on what other facility demands are added to the system. Pumping will typically be used to fill SHGCC reservoirs.

Miscellaneous

Will the City proceed with the Emergency Water Supply Project to construct approximately 2-3 groundwater wells? What is the status of this effort?

Yes, the City is proceeding with the Emergency Water Supply Project to construct approximately 2-3 potable groundwater wells in the Menlo Park Municipal Water District's eastern service area (i.e. east of El Camino Real). This project will construct wells only. For more information, visit the project webpage at www.menlopark.org/projects/wellsproject.htm.

Who can I contact at the City to provide comments or obtain more information?

Contact Pam Lowe, Associate Civil Engineer, at phlowe@menlopark.org or 650-330-6740.

THIS PAGE INTENTIONALLY LEFT BLANK

Additional Information

- **Water Supply Agreements**
  In June 2009, the City entered into an agreement with the San Francisco Public Utilities Commission (SFPUC) to purchase wholesale water. As part of that agreement, SFPUC's Water Shortage Allocation Plan implements a method for allocating water among Menlo Park and the other individual wholesale agencies (184 mgd, million gallons per day). The Tier 1 Plan describes how SFPUC allocates water between its users and the wholesale customers collectively. The Tier 2 Drought Implementation Plan (DRIP) describes how the allocation for Menlo Park and the other wholesale agencies collectively is determined for each individual wholesale agency, which would apply if SFPUC declares a system-wide water shortage of 20% or less. The DRIP takes into consideration each agency's 3-year average winter use and their respective SFPUC supply assurance (for Menlo Park that equates to 4.46 mgd, or 4993 AFY, acre-feet per year) in order to determine each agency's allotment.

  The Bay Area Water Supply & Conservation Agency (BAWSCA) represents Menlo Park and other wholesale agencies that purchase water wholesale from SFPUC. BAWSCA manages the DRIP, and they have developed a model to calculate allotments for each agency in the event that SFPUC declares a water-shortage. In the latest draft calculations for a system-wide shortage of 20%, Menlo Park's allotment is estimated at 2.39 mgd (2134 AFY). Should the SFPUC declare such a shortage, the actual amount of water available to Menlo Park and the other wholesale customers would be determined at that time based upon (1) projected demands and (2) the total amount of water available system-wide.

- **Current Water District Water Use (Consumption)**
  In 2013, the District's total water use was 3.26 mgd (3650 AFY), where 14% of that use (0.46 mgd, or 512 AFY) was used for irrigation purposes.

  Comparing actual 2013 water use to the latest BAWSCA DRIP calculations of 2.39 mgd (2134 AFY), it is evident that there is not sufficient water to meet current demands (a shortage of almost 27%).

- **Golf Course Background, Historical Water Use, and Water Conservation**
  The Sharon Heights Golf & Country Club (Golf Club) was established in 1961 and designated as Open Space. Until the mid-1960s, the Golf Club's water source came from 4 to 5 wells located in an undeveloped area in central Menlo Park (where Hillview School on Santa Cruz Avenue currently resides). SFPUC's new Hetch Hetchy System came online in the mid-1960s and they began seeking new customers. The District approached the Golf Club, and in 1966, the Golf Club

switched from well water to SFPUC water. Subsequently, in 1966 they abandoned their wells.

In 1987, the Golf Club used an average of 0.18 mgd (162 AFY). In 1992, the Golf Club considered returning to well use, but they did not pursue it because the project entailed extensive rehabilitation of the previously-used wells and construction of new pipelines, and the area where the wells/pipelines were located was already developed and deemed unfeasible for use. In addition, drilling a well at the Golf Club was not an option since the Sharon Heights area sits directly on bedrock.

The Golf Club is currently the largest irrigation water user within the District (with City irrigation water use coming in second). In 2009, the Golf Club's 4-year average irrigation water use was 0.16 mgd (179 AFY). In 2013, this 4-year average decreased 19% to 0.13 mgd (146 AFY). Staff believes this decrease attributes to the Golf Club's diligence in incorporating many conservation measures over the last 5 years and consistently monitoring water usage. In 2013, the Golf Club's irrigation water use was 0.14 mgd (157 AFY), which equates to 31% of all District irrigation water use and 4.4% of all District water use (domestic + irrigation).

Over the last 5 years, in order to conserve water, the Golf Club has proactively incorporated many conservation measures including installing drought resistant grass, spot watering, capturing and redirecting drainage, and installing automated sprinklers. They have also actively investigated other possibilities for alternative water sources for irrigation purposes such as creating recycled water on-site, utilizing Stanford Lakes, constructing recycled water pipelines, and trucking in recycled water. Unfortunately, none of these options were feasible.

- **Parks & Recreation Commission Recommendation**
  On December 14, 2011, staff made a presentation to the Parks & Recreation Commission (PRC) to seek their input on using park facilities for a groundwater irrigation well. The following statement below passed 4-2-1 with Jim Tooley and Catherine Carlton against and Nick Naclerio absent.

  "With significant reservations, the Parks and Recreation Commission supports further consideration of the use of up to 300 square feet of park space for an irrigation well with the following stipulations: the well is not seen or heard; a remote location is selected so as not to impact future park uses; at least one other location besides Nealon and Jack Lyle Parks is considered - including an additional east side location; and the final proposal is brought back to the Commission for review following the release of the EIR."

- **2010 Financial Feasibility Study Results**
  In order to determine the feasibility of pursuing a partnership with the Golf Club, in April 2010, the City completed a detailed financial feasibility analysis to determine the costs, benefits, and potential payback of a groundwater-based system. The City selected the consultant and the Golf Club funded the analysis. The analysis studied

5 scenarios depicting various customers (mixture of Golf Club, City parks, school, and other irrigation users) that could potentially receive the well water for irrigation. The analysis found that, for example over a 10-year period, there appears to be significant potential savings to the City ($488,000), La Entrada School ($380,000), and the Golf Club ($3.46 million) by providing well water.

Based on the feasibility analysis, staff felt it necessary to complete a public outreach process to better understand any community concerns before progressing further. On October 5, 2010, the City Council approved public outreach and staff held its first community meeting in August 2011.

- **Public Outreach Update**
  Since the last EQC meeting in February 2012, staff held a third Community Meeting in March 2012 which focused on a potential irrigation well at Jack Lyle Park.

- **Updated Estimates for San Francisquito Creek Groundwater Subbasin**
  In November 2012, the City of East Palo Alto completed its *Gloria Way Water Well Production Alternatives Analysis & East Palo Alto Water Security Feasibility Study* (by Todd Engineers, Kennedy/Jenks Consultants, and ESA). The report recommended several next steps, with one recommendation to develop a Groundwater Monitoring Plan and a Groundwater Management Plan to protect and develop the resource to ensure the continued highest beneficial use.

  The report found that the annual recharge of the San Francisquito Creek Groundwater Subbasin is estimated between 4.46 mgd and 8.93 mgd (5,000 and 10,000 AFY), current annual groundwater pumping is about 2.05 mgd (2300 AFY), and estimated annual groundwater discharge (groundwater pumping plus aquifer subsurface outflows) is 2.60 mgd (2914 AFY). Based on this information, additional groundwater could be extracted through wells for irrigation and potable supply.

  A summary of the report can be found in Attachment B.

- **Groundwater Management in San Mateo County and Santa Clara County**
  The San Francisquito Groundwater Subbasin overlies portions of both Santa Clara County and San Mateo County. In Santa Clara County, the Santa Clara Valley Water District (SCVWD) manages groundwater use, permits wells, and requires well owners to pay a wellhead fee. Thus, any well drilled in Santa Clara County, including City of Palo Alto's wells, are regulated by SCVWD for groundwater extracted.

  In southern San Mateo County, where the City of Menlo Park is located, there is currently no regional groundwater management and no maintenance of a centralized database of groundwater elevation measurements by either the County of San Mateo or local municipalities. Because groundwater extraction is unregulated, there are no specific water rights, no fee to extract groundwater, and no groundwater monitoring. According to the County of San Mateo Environmental Health Division

that permits new wells, they have no plans to develop an ordinance in the future to manage groundwater. Therefore, anyone can drill a well and extract water in San Mateo County once the County issues a well permit, and several District water customers have done so.

- **Groundwater Management Methods**
  In California, there are three methods for groundwater management: 1) agreements and ordinances, 2) adjudication, and 3) local management under authority granted by state statute.

  Agreements and Ordinances
  Groundwater ordinances have been adopted by some cities and by 27 counties, mostly with the specific intent to limit or prohibit exporting groundwater. Local governments implementing this type of groundwater management utilize their police power, land use authority and general plan provisions to regulate groundwater pumping in their jurisdiction. Such ordinances typically are narrow – focused solely on regulating groundwater use – and do not support flexible management. Neither San Mateo nor Santa Clara counties has such ordinances.

  Adjudication
  Adjudication is a management method for groundwater basins that have typically experienced overdraft for a sustained period. It is a judicial process to quantify each producer's water rights, and it appoints a watermaster to oversee court judgement. There are 22 groundwater basin adjudications in California, mostly in southern California. The 3 adjudicated basins in northern California are Seaside Basin in Monterey County, Scott River Stream System near the Oregon border, and the San Gregorio Creek Watershed near Half Moon Bay. The adjudication process is time consuming, expensive, and complex.

  Local Management under Authority Granted by State Statute
  Many local water agencies are authorized by statue to implement some form of groundwater management. These include a variety of water districts, but not municipalities. The Santa Clara Valley Water District is a special act district with expanded broad responsibility for groundwater management. With its groundwater management authority, they have prepared a Groundwater Management Plan.

  In 1992, the State Legislature passed Assembly Bill (AB) 3030 to provide local agencies with increased authority to develop a groundwater management plan. The Department of Water Resources developed a groundwater management model ordinance (*California's Groundwater Bulletin 118*, March 2003) to provide a systematic procedure to develop a groundwater management plan. Required elements include:

  - Written public notification to participate in developing a plan
  - Basin management objectives

- Monitoring and managing groundwater levels, groundwater quality, land subsidence, and changes in surface flow and quality linked to groundwater levels or pumping
- A plan to coordinate with other agencies overlying the basin to work cooperatively
- Monitoring protocols
- Groundwater basin map

- **Recycled Water Options and Costs**
  Reclaimed, or recycled, water is former wastewater that is treated and then used in landscaping irrigation or to recharge groundwater aquifers. There are two recycled water facilities that could potentially provide recycled water to the City of Menlo Park in the future, however, the costs are prohibitive.

  Palo Alto's Recycled Water Facility
  The City of Palo Alto's Recycled Water Facility has a maximum capacity of 38 mgd. The current average flow is about 22 mgd so the plant can support additional capacity. Their Recycled Water Facility Plan, dated December 2008, describes the City's plans to expand their recycled water system to Stanford Research Area (known as Phase 3) in the near future, and to Stanford University (known as Phase 4) which would bring the recycled water line closer to Menlo Park, however, they have not identified a timeline for completion. The connection to Menlo Park would be over 3 miles long and it would be cost prohibitive (estimated at $18 million).

  Redwood City's Recycled Water Facility
  The South Bayside System Authority (SBSA) is owned by four jurisdictions: West Bay Sanitary District and the Cities of Belmont, San Carlos, and Redwood City. SBSA has a maximum capacity of 71 mgd, and the City of Redwood City has capacity rights of 30.5 mgd (43%). In 2010, they used 8.4 mgd and they anticipate using 9.4 mgd by 2030. The SBSA has the capacity to grow but the existing facility may need modifications and expansions in order to do so. The connection to Menlo Park would be over 3 miles long and it would be cost prohibitive (estimated at $20 million).

- **Agency Support and Interest from Others**
  There are several agencies and one hotel that have expressed interest in this potential project. They include:

  1. San Francisco Public Utilities Commission (SFPUC)
  2. Bay Area Water Supply & Conservation Agency (BAWSCA)
  3. Las Lomitas School District (for La Entrada School)
  4. Rosewood Sand Hill Hotel

Updated Estimates for San Francisquito Creek Groundwater Subbasin

The following data was taken from the City of East Palo Alto report titled *Gloria Way Water Well Production Alternatives Analysis & East Palo Alto Water Security Feasibility Study*, dated November 2012 (by Todd Engineers, Kennedy/Jenks Consultants, and ESA).

Wells in the SF Subbasin

- Municipal/University/Industrial Wells
  - Palo Alto Park Mutual Water Company currently provides about 0.47 mgd (523 AGY) of groundwater from five wells located in East Palo Alto.
  - The O'Connor Tract Cooperative Water Company operates two wells in Menlo Park providing 0.07 mgd (84 AFY) to about 300 homes and apartments, assuming each connection uses 250 gpd.
  - Stanford University uses groundwater for irrigation totaling 0.3 gpd (342 AFY).
  - In Menlo Park, the Veteran's Hospital, St. Patrick's Seminary, Menlo College, and USGS operate larger capacity wells for irrigation, domestic, or industrial uses. The volume of water pumped from these wells is unknown but estimated at 0.45 mgd (500 AFY).
- Industrial Wells
  - Three industrial wells have been identified in Redwood City, however their status is unknown.
- Domestic/Irrigation Wells
  - The USGS performed a comprehensive survey for the City of Atherton and identified at least 278 likely active wells as of 1993-1995 with total pumping estimated at 0.63 mgd (710 AFY). Based on this data, the USGS was able to estimate that the 100 domestic and irrigation wells installed since 1962 in the other cities would yield approximately 0.17 mgd (190 AFY).
- Potential Future Municipal Wells (Emergency and Long-Term Supply)
  - The City of East Palo Alto's Gloria Well could produce between 0.50 mgd and 0.66 mgd (564 AFY to 735 AFY), and the City would like to develop additional groundwater supplies to yield 1.00 mgd (1120 AFY).
  - The City of Palo Alto currently maintains seven wells for emergency standby supply and is planning to drill up to three additional wells. It is estimated that the wells could produce 0.45 mgd (500 AFY) on a continuous basis or 1.34 mgd (1500 AFY) on an intermittent basis without causing excessive declines in groundwater levels..
  - The City of Menlo Park is currently designing the first of three or four wells as an emergency supply to provide up to 3,000 gpm, or 4.32 mgd (4839 AFY).
  - The City of Redwood City is located in an area where groundwater development is less economically feasible due to thinner and more fine-grained alluvial deposits, thus, they are not planning on implementing groundwater development.

Report findings for the SF Subbasin

- The annual recharge is estimated between 4.46 mgd (5000 AFY) and 8.93 mgd (10,000 AFY).
- Total current groundwater use is estimated at 2.05 mgd (2300 AFY), which equates to 23% at the upper recharge rate and 46% at the lower recharge rate.
- The estimated annual groundwater discharge, which equals groundwater pumping plus subsurface outflow, is 2.60 mgd (2914 AFY).
- Based on current groundwater use and estimated annual groundwater discharge, it is apparent that additional groundwater could be extracted through wells for irrigation and potable supply.
- Projected future groundwater pumping, which includes supplemental emergency groundwater developed by Menlo Park and East Palo Alto, is estimated between 4.0 mgd (4500 AFY) and 4.4 mgd (4900 AFY), which equates to 45%-49% at the upper recharge rate and 90%-98% at the lower recharge rate.
- As additional groundwater is developed, basin management is recommended to monitor and manage groundwater conditions; to minimize potential impacts on other wells, streams, and associated habitat; and to avoid subsidence and saline water intrusion.

City of Menlo Park Environmental Quality Commission

2014 ENVIRONMENTAL QUALITY AWARDS APPLICATION

Submit by Tuesday, February 18, 2014

The City of Menlo Park is proud to announce that we are now accepting applications and nominations for the 20th annual Environmental Quality Awards. Awards are given to people, projects, initiatives or property designs that contribute to the environmental quality improvement in Menlo Park. Members of the community can either apply individually for an award or nominate another individual or group. Applications will be reviewed by the Environmental Quality Commission and winners will be notified once selections have been made.

Application Deadline: Tuesday, February 18th: Please return this form and any supporting documentation and photos to Vanessa Marcadejas, Environmental Programs Specialist. 701 Laurel Street, Menlo Park, CA 94025 or email them to recycle@menlopark.org. Electronic submissions are encouraged. To submit this application electronically, please populate all fields, save the form on your local hard drive, and then submit it via email as an attachment. If you have questions, or need assistance on filling out or submitting this form, please call (650) 330-6720.

Application Date: Feb 26, 2014

Applicant Information

Contact information for Project, Effort, or Property:

Name: Carolee Hazard

Address: 8 Greenwood Place

Phone number: 650-324-8019

Email address: caroleehazard@gmail.com

Contact information for person nominating:

Name: Deb Martin

Address:

Phone number:

Email address: debbusermartin@gmail.com

Award Categories

PLEASE CHECK ONE AWARD CATEGORY BELOW for which you are applying for or nominating.

☐	**Climate Action:** A project or initiative that substantially reduces greenhouse gas emissions from original conditions.
☐	**Educational:** A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.
☐	**Heritage Tree:** For proper care and preservation efforts of a heritage tree**. This includes tree size, conditions and aesthetics.
☐	**Landscape or Native Habitat:** Project that promotes water conservation and incorporates drought-resistant, and/or native plans and/or materials.
☐	**Resource Conservation:** Project or program that conserves resources, reduces pollution, reduces litter and improves environmental quality.
☐	**Sustainable Building*:** New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.
☒	**Sustainable Lifestyle:** Individual and/or family demonstrating exemplary actions in reducing use of resources over the past year in the community.

*The property owner or business manager is only allowed to receive an award when a contractor has done green work on site. The Environmental Quality Award will be given to the person or organization that made the financial investment.

Project, Effort, Property Information

Please enter the address or location of the project, effort, or property below.

8 Greenwood Pl., Menlo Park

DESCRIBE the activity in the field below. Application narratives must include information on the action's impact, including the time frame, measures and results, community impacts and the key environmental significance or benefit. Please limit narrative to no more than 2 pages of text (approximately 10,400 characters).Please submit supporting documentation and photos as necessary.

Note: If preferred, narratives can also be submitted in a separate word document stapled to this application, or sent as an attachment electronically by email.

I am submitting a nomination for Carolee Hazard in the category for "sustainable living". Carolee is award-worthy not only for the personal efforts she makes to lead a sustainable lifestyle, but for the many ways she has influenced the members of her community to follow in her footsteps. She is truly a change agent and demonstrates the type of behavior and influence that we wish to see more of in the City of Menlo Park. Below are the examples of her leadership that illustrate he commitment to sustainability.

1) Leader of the Suburban Park Green Core Initiative (https://sites.google.com/site/spgreencore) Feb 2009-Aug 2009
Green Core initial aim was to help Suburban Park participants reduce their home's carbon footprint over 5 months by focusing on a different carbon emitting aspect of the home each month, such as transportation, water usage, "things you plug in", heat/light and one's consumer footprint. Each month, the participant commits to making at least one change (some are habits and some a onetime change) and happily many made several changes. The list of changes also serves to educate and raise awareness about energy consumption in the home. Carolee signed up 61 families to participate and changes made over just 2 months of the program resulted in 30 ton reduction of CO2 over the following year (and this was with less that 50% of participants completing the survey!). The secondary aim of Green Core was to provide a central place for all Suburban Park residents to communicate and learn about home greening; a place to ask about solar panel vendors/installers or green builder recommendations or to post articles on local sustainability issues. A place for residents to tap into what each other know, to act as each other's resources!

2) Host of Suburban Park CSA (2009- Present)
Carolee is the site host for Live Earth Farm (http://www.liveearthfarm.net/) which is just north of Watsonville. They deliver ~30 boxes of produce once a week from April-Nov and about 15 boxes from Dec-Feb for neighbors in Suburban Park and the surrounding area. Carolee has introduced about 20 families to this way of purchasing local produce with a total of 35 families participating to date. By hosting this program, Carolee helps our neighborhood to buy local produce and to also save on green house gas emissions that would result from driving to and from the grocery store. In doing so, she also helps to strengthen a sense of community.

3) Encinal School Kids "Green Club"
Carolee also shows her leadership in our schools and has helped to establish a small team to support a lunch recycle/compost program for the students. It was both an effort to reduce garbage going to the landfill and to educate the kids so they could bring their knowledge home and initiate chance in their own homes. Additionally, she helped run the kids "green" club which supplied and managed a "party box" for each classroom so that disposable cup, plates and silverware would be eliminated (each box had a full set of plastic cups, plates and fork/knives/spoons for use during classroom parties). The kids helped decide what they needed to buy and checked the boxes each quarter for missing items. Again the point was both to reduce waste, but also to educate the kids in an effort to encourage less waste at home! By supplying these reusable dishes to all classrooms, Encinal has cut down on a tremendous amount of waste that would have been generated from countless classroom parties year over year. This program has been in place for the past 5 years.

4) Sustainable Daily Living
I have observed Carolee over the years and continue to be amazed by her leadership and ability to affect change. This desire to inspire others to be more sustainable starts with a personal practice. When I asked Carolee to describe in her own words how she incorporates sustainability into her daily live, she responded with the following. "I was raised to not waste - that wasting was selfish & lazy. This basis value is deeply engrained in my own house. We recycle & compost. We turn off lights and use CFLst. We eat local, organic and in season produce and try to have 3 dinners a week be vegetarian and meat is no longer the "focus" of a meal. We support our local book, toy, pet and sports store. We take navy showers and water the roses with the "rinse bucket" in our sink. Out-grown clothes become hand-me-downs to another family or go to the shelter. Creams & shampoos are checked for parabens and phthalates. We buy in bulk, looking for minimal packaging. We shun zip lock bags for school lunches. We drink tap water and avoid plastics. We play musical cars - carpooling with the minivan and driving a Prius for errands (and plan to swap in the minivan soon for a Volt!!). Our windows are double paned, our thermostat is down, we wear extra sweaters and drink hot tea on cold days. We run full loads of laundry on cold. Basically - don't waste!

Previous Award Recipients:

Climate Action: A project or initiative that substantially reduces greenhouse gas emissions from original conditions.

In 2013 Facebook was awarded for their LEED commercial interior renovations, drought-tolerant landscaping, and greenhouse gas reducing transportation demand management program.

Educational: A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.

Carolyn Dorsch was awarded for her work in educating the public on the benefits of composting by leading workshops at schools, libraries, and the Annual Summer street fair, demonstrating that composting reduces waste, saves money on garbage bills, and is good for the local environment.

Heritage Tree: For the proper care and preservation effort of a heritage tree (tree size, condition and aesthetics of tree variables of consideration).

Sharon Park Homeowners Association was awarded in 2010 for the exceptional stewardship, care and preservation of more than 200 heritage trees.

Landscape or Native Habitat: For a project or place (either manmade landscape or natural habitat) that promote water conservation and incorporate drought-resistant, and/or native plants and/or materials.

In 2010, Bobbie and Joseph Carcione Jr. were awarded for sustainable architectural and landscaping improvements which removed hardscape, and returned the property to a natural setting with a community garden.

Resource Conservation: Project or program that conserves energy, water or natural resources. This award recognizes environmental preservation efforts such as air or water pollution reduction and litter reduction.

Pacific BioSciences was awarded in 2013 for their reduction of waste through a targeted "Zero-Waste" initiative by implementing an aggressive recycling and composting program that reduced solid waste by 66% while saving $45,000 in annual operating costs.

Sustainable Building: New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.

Hillview Middle School was awarded last year for their environmentally-sustainable building design that incorporated the use of sustainable building materials such as recycled carpet, sustainable furniture, installation of solar panels, drought-tolerant landscaping, and electric car charging stations.

THIS PAGE INTENTIONALLY LEFT BLANK

City of Menlo Park Environmental Quality Commission

2014 ENVIRONMENTAL QUALITY AWARDS APPLICATION

Submit by Tuesday, February 18, 2014

The City of Menlo Park is proud to announce that we are now accepting applications and nominations for the 20th annual Environmental Quality Awards. Awards are given to people, projects, initiatives or property designs that contribute to the environmental quality improvement in Menlo Park. Members of the community can either apply individually for an award or nominate another individual or group. Applications will be reviewed by the Environmental Quality Commission and winners will be notified once selections have been made.

Application Deadline: Tuesday, February 18th: Please return this form and any supporting documentation and photos to Vanessa Marcadejas, Environmental Programs Specialist. 701 Laurel Street, Menlo Park, CA 94025 or email them to recycle@menlopark.org. Electronic submissions are encouraged. To submit this application electronically, please populate all fields, save the form on your local hard drive, and then submit it via email as an attachment. If you have questions, or need assistance on filling out or submitting this form, please call (650) 330-6720.

Application Date: Feb 26, 2014

Applicant Information

Contact information for Project, Effort, or Property:

Name: Tom Arnold (CEO)/Gridium

Address: 405 El Camino Real #301, Menlo Park

Phone number: 215-694-8667

Email address: Adam@gridium.com

Contact information for person nominating:

Name: Deb Martin

Address:

Phone number:

Email address: debbusermartin@gmail.com

Award Categories

PLEASE CHECK ONE AWARD CATEGORY BELOW for which you are applying for or nominating.

☒	**Climate Action:** A project or initiative that substantially reduces greenhouse gas emissions from original conditions.
☐	**Educational:** A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.
☐	**Heritage Tree:** For proper care and preservation efforts of a heritage tree**. This includes tree size, conditions and aesthetics.
☐	**Landscape or Native Habitat:** Project that promotes water conservation and incorporates drought-resistant, and/or native plans and/or materials.
☐	**Resource Conservation:** Project or program that conserves resources, reduces pollution, reduces litter and improves environmental quality.
☐	**Sustainable Building*:** New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.
☐	**Sustainable Lifestyle:** Individual and/or family demonstrating exemplary actions in reducing use of resources over the past year in the community.

*The property owner or business manager is only allowed to receive an award when a contractor has done green work on site. The Environmental Quality Award will be given to the person or organization that made the financial investment.

Project, Effort, Property Information

Please enter the address or location of the project, effort, or property below.

405 El Camino Real #301

DESCRIBE the activity in the field below. Application narratives must include information on the action's impact, including the time frame, measures and results, community impacts and the key environmental significance or benefit. Please limit narrative to no more than 2 pages of text (approximately 10,400 characters).Please submit supporting documentation and photos as necessary.

Note: If preferred, narratives can also be submitted in a separate word document stapled to this application, or sent as an attachment electronically by email.

Gridium is a Menlo Park business that provides innovative products and services designed to help companies track, manage, and optimize energy use in a user friendly, cost effective manner. Griduim's mission is to help companies manage energy use more effectively by delivering insights that allow them to reduce energy use, cut costs, save time, improve equipment upkeep, and increase their property value. Gridium provides software tools that are simple to use by integrating their solutions with your existing meters. Gridium services hundreds of clients representing over 1M square feet of space resulting in significant energy reductions.

Gridum products include:

- Snap meters- Demand forecasting and fault detection. Save money through improved operational management.
- Bill cast- Cost forecasting and variance analysis. Plan and diagnose cost drivers with ease.
- Portfolio Management- Key metrics across all your buildings. Track performance at a glance.
- Measure and Verification- True savings calculations. Understand the precise operational impact of your efficiency projects.

Innovation:
Energy demand in your building is driven by weather, occupancy, and other predictable factors. Using your smart meter data, Snapmeter creates a highly accurate statistical model of your building's behavior. Gridium's demand forecasting service then gives you advanced warning of peak demand days. By reducing load on those days, you can trim your demand charges. Reducing demand can be as easy as adjusting your temperature set points, reducing lighting, or executing a curtailment sequence in your BMS. The costs are minimal and the payback immediate.

Achievements:

- Customers: We now service well over 100 million square feet and in each one of those buildings someone took a chance on a new technology from a new company that might help them save money. We're very grateful for your support!
- The Cloud: At Gridium, we never have to touch any hardware. Our analytics run in the cloud, where we can always provision more capacity at a moment's notice to meet our customers' needs. This is technically nifty, and it means is that we can hit radically low price points by building a supercomputer on the cheap. It's great for our customers, and it's a game changer for energy efficiency.
- Open energy data: Gridium would not be possible without the trend of open energy data. Just a few years ago, your energy data was stuck; today utilities like PG&E are leading the way to let you easily access your energy data and help vendors like Gridium flourish.

Links:
http://www.gridium.com/
http://blog.gridium.com/1446/gridium-named-one-of-the-global-cleantech-100/
http://blog.gridium.com/1502/gridium-is-thankful-for/
http://www.gridium.com/resources/presentations/

Previous Award Recipients:

Climate Action: A project or initiative that substantially reduces greenhouse gas emissions from original conditions.

In 2013 Facebook was awarded for their LEED commercial interior renovations, drought-tolerant landscaping, and greenhouse gas reducing transportation demand management program.

Educational: A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.

Carolyn Dorsch was awarded for her work in educating the public on the benefits of composting by leading workshops at schools, libraries, and the Annual Summer street fair, demonstrating that composting reduces waste, saves money on garbage bills, and is good for the local environment.

Heritage Tree: For the proper care and preservation effort of a heritage tree (tree size, condition and aesthetics of tree variables of consideration).

Sharon Park Homeowners Association was awarded in 2010 for the exceptional stewardship, care and preservation of more than 200 heritage trees.

Landscape or Native Habitat: For a project or place (either manmade landscape or natural habitat) that promote water conservation and incorporate drought-resistant, and/or native plants and/or materials.

In 2010, Bobbie and Joseph Carcione Jr. were awarded for sustainable architectural and landscaping improvements which removed hardscape, and returned the property to a natural setting with a community garden.

Resource Conservation: Project or program that conserves energy, water or natural resources. This award recognizes environmental preservation efforts such as air or water pollution reduction and litter reduction.

Pacific BioSciences was awarded in 2013 for their reduction of waste through a targeted "Zero-Waste" initiative by implementing an aggressive recycling and composting program that reduced solid waste by 66% while saving $45,000 in annual operating costs.

Sustainable Building: New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.

Hillview Middle School was awarded last year for their environmentally-sustainable building design that incorporated the use of sustainable building materials such as recycled carpet, sustainable furniture, installation of solar panels, drought-tolerant landscaping, and electric car charging stations.

THIS PAGE INTENTIONALLY LEFT BLANK

City of Menlo Park Environmental Quality Commission

2014 ENVIRONMENTAL QUALITY AWARDS APPLICATION

Submit by Tuesday, February 18, 2014

The City of Menlo Park is proud to announce that we are now accepting applications and nominations for the 20th annual Environmental Quality Awards. Awards are given to people, projects, initiatives or property designs that contribute to the environmental quality improvement in Menlo Park. Members of the community can either apply individually for an award or nominate another individual or group. Applications will be reviewed by the Environmental Quality Commission and winners will be notified once selections have been made.

Application Deadline: Tuesday, February 18th: Please return this form and any supporting documentation and photos to Vanessa Marcadejas, Environmental Programs Specialist. 701 Laurel Street, Menlo Park, CA 94025 or email them to recycle@menlopark.org. Electronic submissions are encouraged. To submit this application electronically, please populate all fields, save the form on your local hard drive, and then submit it via email as an attachment. If you have questions, or need assistance on filling out or submitting this form, please call (650) 330-6720.

Application Date: Feb 14, 2014

Applicant Information

Contact information for Project, Effort, or Property:

Name:

Address: 52, 56, 59, 60 & 61 Willow Road

Phone number:

Email address:

Contact information for person nominating:

Name: Scott Marshall

Address: 124 O'Connor

Phone number: 650-207-6851

Email address: Marshall.construction@yahoo.com

Award Categories

PLEASE CHECK ONE AWARD CATEGORY BELOW for which you are applying for or nominating.

- ☐ **Climate Action:** A project or initiative that substantially reduces greenhouse gas emissions from original conditions.
- ☐ **Educational:** A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.
- ☐ **Heritage Tree:** For proper care and preservation efforts of a heritage tree**. This includes tree size, conditions and aesthetics.
- ☒ **Landscape or Native Habitat:** Project that promotes water conservation and incorporates drought-resistant, and/or native plans and/or materials.
- ☐ **Resource Conservation:** Project or program that conserves resources, reduces pollution, reduces litter and improves environmental quality.
- ☐ **Sustainable Building*:** New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.
- ☐ **Sustainable Lifestyle:** Individual and/or family demonstrating exemplary actions in reducing use of resources over the past year in the community.

*The property owner or business manager is only allowed to receive an award when a contractor has done green work on site. The Environmental Quality Award will be given to the person or organization that made the financial investment.

Project, Effort, Property Information

Please enter the address or location of the project, effort, or property below.

52,56,59,60,61 Willow Road

DESCRIBE the activity in the field below. Application narratives must include information on the action's impact, including the time frame, measures and results, community impacts and the key environmental significance or benefit. Please limit narrative to no more than 2 pages of text (approximately 10,400 characters).Please submit supporting documentation and photos as necessary.

Note: If preferred, narratives can also be submitted in a separate word document stapled to this application, or sent as an attachment electronically by email.

The five neighbors on the 100 block of Willow Road have recently removed existing water wasting lawns and replaced these areas with drought tolerant landscaping, and/or covered the previous lawn area with on-site derived mulch.

These actions were not decided on as a neighborhood group but instead it appears that one re-landscaping project led to others following.

Unfortunately, all of these projects have either been completed this past summer or they were completed by new home owners who never watered the original lawns. Consequently, there is no comparative data in which to judge the owners' water savings.

I feel this type of unplanned neighborhood action by following one example is just what the EQC needs to acknowledge so that other home owners who are on the fence about re-landscaping can see that the city is encouraging this type of change. If this is not deserving of an EQA maybe there is an "Honorable Mention" worthy of a line in a newspaper.

The photos of the five houses with their personal alternative to high maintance lawns.

60 Willow Road - Owners - Arron Griley & Richard Dvora
On site mulching & drought tolerent plants

61 Willow Road
Drought tolerent srubs & plants

59 Willow Road - Owner - Alasop
Relandscaped with perinial grass that does not require moving, needs less water becuse its roots can grow more then 10 feet to reach the water table

56 Willow Road - Owner- John & Elsia Nimno
On site mulching, drough tolerent landscaping

52 Willow road - Owner - micheal@rose-ca.com
Landscaping with drought torerent plants

Previous Award Recipients:

Climate Action: A project or initiative that substantially reduces greenhouse gas emissions from original conditions.

In 2013 Facebook was awarded for their LEED commercial interior renovations, drought-tolerant landscaping, and greenhouse gas reducing transportation demand management program.

Educational: A project or program that educates the community on the environment including climate protection and/or environmental improvement at a school.

Carolyn Dorsch was awarded for her work in educating the public on the benefits of composting by leading workshops at schools, libraries, and the Annual Summer street fair, demonstrating that composting reduces waste, saves money on garbage bills, and is good for the local environment.

Heritage Tree: For the proper care and preservation effort of a heritage tree (tree size, condition and aesthetics of tree variables of consideration).

Sharon Park Homeowners Association was awarded in 2010 for the exceptional stewardship, care and preservation of more than 200 heritage trees.

Landscape or Native Habitat: For a project or place (either manmade landscape or natural habitat) that promote water conservation and incorporate drought-resistant, and/or native plants and/or materials.

In 2010, Bobbie and Joseph Carcione Jr. were awarded for sustainable architectural and landscaping improvements which removed hardscape, and returned the property to a natural setting with a community garden.

Resource Conservation: Project or program that conserves energy, water or natural resources. This award recognizes environmental preservation efforts such as air or water pollution reduction and litter reduction.

Pacific BioSciences was awarded in 2013 for their reduction of waste through a targeted "Zero-Waste" initiative by implementing an aggressive recycling and composting program that reduced solid waste by 66% while saving $45,000 in annual operating costs.

Sustainable Building: New, renovated or remodeled residence or commercial building that exhibits exemplary design in environmental sustainability.

Hillview Middle School was awarded last year for their environmentally-sustainable building design that incorporated the use of sustainable building materials such as recycled carpet, sustainable furniture, installation of solar panels, drought-tolerant landscaping, and electric car charging stations.

THIS PAGE INTENTIONALLY LEFT BLANK