

**COUNTY OF SAN MATEO  
PLANNING AND BUILDING DEPARTMENT**

**DATE:** March 26, 2025

**TO:** Planning Commission

**FROM:** Planning Staff

**SUBJECT:** Consideration of a Coastal Development Permit (CDP), pursuant to Zoning Regulations Section 6328.4, and an Architectural Review Permit Exemption pursuant to the California Streets and Highways Code, to allow for the drilling of one agricultural well on a 186.15-acre parcel located at 1 Meyn Road in the unincorporated San Gregorio area of San Mateo County. The project is located in the Cabrillo Highway State Scenic Corridor and the CDP is appealable to the California Coastal Commission.

County File Number: PLN2023-00088 (Reichel)

**PROPOSAL**

The applicant is proposing to construct a new agricultural well to support livestock grazing operations on a 186-acre parcel located west of Cabrillo Highway/Highway 1 in San Gregorio. The applicant will drill up to three test wells and develop one test bore that is the most viable water source. The test well locations are on flat, disturbed land that supports an existing cattle grazing operation. The location of the well would be approximately 400 feet away from Lobitos Creek and 370 feet from the coastal bluff.



Figure 1-Test Well Locations

## **RECOMMENDATION**

That the Planning Commission approve the Coastal Development Permit and Architectural Review Permit Exemption, County File Number PLN2023-00088, by adopting the required findings and conditions of approval in Attachment A.

## **BACKGROUND**

Report Prepared By: Kanoa Kelley, Project Planner, [kkelley@smcgov.org](mailto:kkelley@smcgov.org)

Applicant: Chuck Reichel

Owner: Seahawk Ranch Corporation

Public Notification: Ten (10) day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing was posted in a newspaper (San Mateo Times) of general public circulation on March 15, 2025.

Location: 1 Meyn Road, North San Gregorio

APN: 066-310-220

Parcel Size: 186.15 acres

Existing Zoning: Planned Agricultural District/Coastal Development (PAD/CD)

General Plan Designation: Agriculture

Local Coastal Plan Designation: Agriculture

Sphere-of-Influence: N/A

Williamson Act: Not contracted.

Existing Land Use: Agriculture

Water Supply: There is no municipal water service available in this area. The approval of this CDP will permit the installation of a well to ensure the parcel has access to a water supply for grazing animals to supplement a pond that stores surface water.

Sewage Disposal: There is no municipal sewer service available in this area. The site has an existing septic system that serves an existing radio maintenance trailer, no changes to the existing sewage disposal system are proposed.

Flood Zone: Flood Zone X (Minimal Flood Hazard), FEMA FIRM Panel 06081C0268F, effective August 02, 2017.

Environmental Evaluation: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15303(e) for the construction of new small accessory structures. The project is located in a State Scenic Corridor, however, due to the small footprint of the well and minimal at-grade height no impact to visual resources will occur. The site of the well is not in an environmentally sensitive area as the project is located on land that has been disturbed with cattle grazing activities and is 370 feet from the bluff and 400 feet from Lobitos Creek.

Setting: The property at 1 Meyn Road is located approximately 6.6 miles south of Half Moon Bay. The parcel is located west of Highway 1 on a relatively flat parcel and is bound on the north and south by other large agricultural parcels. Lobitos Creek runs along the southern property line. The rural lot is the site of ongoing animal grazing activities with accessory structures for a radio station and a barn for the storage of hay and other agriculturally related materials.

## **DISCUSSION**

### A. KEY ISSUES

Planning staff has reviewed this proposal and has concluded the following:

#### 1. Conformance with the General Plan

Staff has reviewed the project and found it to be in conformance with the applicable General Plan policies as follows:

##### a. Vegetative, Water, Fish, and Wildlife Resources

Policies 1.25 (*Protect Vegetative Resources*) seeks to ensure development will minimize removal of scenic trees or other vegetation that enhances the local environment. Additionally, Policy 1.28 (*Regulate Development to Protect Sensitive Habitats*) and Policy 1.29 (*Establish Buffer Zones*) seek to regulate development activities within or adjacent to sensitive habitats to protect endangered plants and animals and establish necessary buffer zones to protect these areas from the encroachment of development.

Pursuant to the Sensitive Habitats Component of the County's Local Coastal Program, a minimum buffer zone of 50 feet from riparian habitat and 100 feet from wetlands located on the property must be maintained. The project is located approximately 400 feet from Lobitos Creek and 370 feet from the bluff, and 2,000 feet from an onsite pond. The site of the well is located on existing grassland regularly disturbed by grazing activity. See staff's discussion on Local Coastal Program (LCP) Policy 7.11 and 7.18 below.

b. Soil Resources

Policy 2.20 (*Regulate Location and Design of Development in Areas with Productive Soil Resources*) regulates the location and design of development in a manner which is most protective of productive soil resources.

The site contains class 2 prime soils; however, the location of the well is not within any of the prime soil areas, therefore no prime soils will be converted.

c. Visual Quality

Policy 4.15 (*Appearance of New Development*) and Policy 4.22 (*Scenic Corridors*) seek to regulate development to promote good design, site relationships, and to protect and enhance the visual quality of development within designated scenic corridors.

State Route 1 from the southern limits of Half Moon Bay to Santa Cruz County is designated a scenic corridor. The project lies within this State Scenic Corridor. The well construction will result in a 6-foot diameter well pad at-grade and only a 12-inch steel plate that will be 18 inches above grade will be visible. The site of the well is approximately 1,000 feet away from State Route 1. Due to the small footprint of the well, its limited visibility from Cabrillo Highway due to its proximity and existing vegetation, the well will not impact the visual quality of this scenic corridor.

d. Rural Land Use

Policy 9.23 (*Land Use Compatibility in Rural Lands*) and Policy 9.28 (*Encourage Existing and Potential Agricultural Activities*) encourage compatibility of land uses in order to promote the health, safety, and economy of rural lands, seek to maintain the scenic and harmonious nature of rural lands, and encourage the continuance of existing agricultural and agriculturally-related activities.

No development other than the agricultural well is proposed. The placement of the well is determined by the location of the water source and will provide water for an existing agricultural operation. See discussion in Section A.2.b for impacts to agricultural resources.

e. Water Supply

Policy 10.15 (*Water Suppliers in Rural Areas*) and Policy 10.20 (*Well Location and Construction*) support the use of wells in rural areas and require wells to be located an adequate distance away from the normal watercourse of a stream in order to minimize impacts upon downstream surface water supplies.

There is no municipal service available in this rural location. The farm's sole water source is a pond that collects surface water. The pond does not provide enough water for the livestock especially during the warmer months. The well will provide a new reliable water source to supplement the pond. The well meets the minimum locational standards of Environmental Health Services as the proposed well will be located over 400 feet from any nearby creek, where 100 feet is the minimum required.

2. Conformance with Local Coastal Program (LCP) Policies

Staff has determined that the proposed development conforms to all applicable LCP Policies, specifically:

a. Locating and Planning New Development

Policy 1.8 (*Land Uses and Development Densities in Rural Areas*) states that new development in rural areas shall not: (1) have significant adverse impacts, either individually or cumulatively on coastal resources, or (2) diminish the ability to keep all prime agricultural land and other lands suitable for agriculture in agricultural production.

The proposed agricultural well will support agricultural operations and no prime soils will be impacted. There will be minimal visual impacts to the rural area due to the limited development footprint for a well. The well will ensure there is water for grazing livestock, particularly during the dry months of May through September.

b. Agriculture

Policy 5.3 (*Definition of Lands Suitable for Agriculture*), Policy 5.6 (*Permitted Uses on Lands Suitable for Agriculture Designated as Agriculture*), and Policy 5.21 (*Water Supply*) seek to define lands suitable for agriculture as lands with existing or potential agricultural use such as dry farming and animal grazing; permit agricultural and agriculturally related development on lands suitable for agriculture

including agricultural water wells; and encourage increasing agricultural water supplies without endangering sensitive habitats.

According to the General Plan Agricultural Lands Map, the project area is designated Lands Suitable for Agriculture. The property is used for cattle grazing and the proposed well is a permitted agricultural use that will support continued grazing on the land. The well is proposed in a disturbed grazing field and will not have any impacts to sensitive habitats.

c. Sensitive Habitats Component

Policy 7.1 (*Definition of Sensitive Habitats*) defines sensitive habitats as “habitats containing or supporting rare and endangered species as defined by the State Fish and Game Commission”; this habitat includes riparian corridors and wetlands. Policy 7.11 (*Establishment of Buffer Zones*) requires a 50-foot buffer zone from the limit of riparian vegetation.

The site plan shows the proposed test well locations are outside habitat for species of special concern or endangered plant and animal species. The project site and the area within a 100-foot radius is disturbed grassland that supports livestock grazing. The well will not be located near streams, riparian, or marshland.

d. Visual Resources

Policy 8.5 (*Location of Development*) requires that new development on rural lands be located where it is least visible from scenic roads, is least likely to impact views from public viewpoints and is consistent with all other LCP requirements. Policy 8.6 (*Streams, Wetlands and Estuaries*) seeks to retain wetlands intact except for public accessways designed to respect the visual and ecological fragility of the area and adjacent land, in accordance with the Sensitive Habitats Component policies.

The location of the closest test well will be approximately 1,000 feet from Cabrillo Highway. Due to existing vegetation the low profile of the well will not be visible from the public roadway.

All sensitive habitat will be avoided. See Section A.2.c of the staff report for compliance with LCP policies for biological resources.

e. Shoreline Access

Policy 10.1 (*Permit Conditions for Shoreline Access*) requires some provision for shoreline access for development permits between the sea and the nearest road, except as exempted by Policy 10.2 (*Definition of Development*).

The project site is located between the sea and the nearest road being Cabrillo Highway. However, pursuant to LCP Policy 10.2.c(5)(a), wells for agricultural purposes are exempted from the provisions for shoreline access.

3. Conformance with Planned Agricultural District (PAD) Regulations:

Section 6352.B of the PAD regulations state that agriculture, which includes grazing, is a permitted use in the PAD. Furthermore, Section 6352.B.2 includes development that is accessory to agriculture, such as wells, as permitted uses in the PAD. Therefore, a PAD permit is not required for this project.

4. Architectural Review Exemption.

The project is consistent with the General Plan Policies for Architectural Design Standards for Rural Scenic Corridors and Standards for Architectural and Site Control within the Cabrillo Highway State Scenic Corridor along with Scenic Corridor policies of the Local Coastal Program which seek to minimize visual quality impacts of rural scenic areas.

This project is found to be exempt from the Architectural Review requirement. Photos from Cabrillo Highway show that the site is obscured by natural vegetation around Lobitos Creek. The proposed well will be minimal in size and located in an area that will not result in the removal of vegetation.



*Figure 2. View from Cabrillo Highway at Verde Road*

**B. ENVIRONMENTAL REVIEW**

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15303(e) for the construction of new small accessory structures. The project is located in a State Scenic Corridor, however, due to the small footprint of the well and minimal at-grade height no impact to visual resources will occur. The site of the well is not in an environmentally sensitive area as the project is located on land that has been disturbed with cattle grazing activities and is 370 feet from the bluff and 400 feet from Lobitos Creek.

**C. REVIEWING AGENCIES**

California Coastal Commission  
San Mateo County Environmental Health Services

**ATTACHMENTS**

- A. Recommended Findings and Conditions of Approval
- B. Location Map
- C. Water Evaluation
- D. Project Plans

County of San Mateo  
Planning and Building Department

**RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL**

Permit or Project File Number: PLN 2023-00088

Hearing Date: March 26, 2026

Prepared By: Kanoa Kelley, Project Planner For Adoption By: Planning Commission

**RECOMMENDED FINDINGS**

Regarding the Environmental Review, Find:

1. That the project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15303(e) for the construction of new small accessory structures. The project is located in a State Scenic Corridor, however, due to the small footprint of the well and at-grade height no impact to visual resources will occur. The site of the well is not in an environmentally sensitive area as the project is located on land that has been disturbed with cattle grazing activities and is 370 feet from the bluff and 400 feet from Lobitos Creek.

Regarding the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by Section 6328.7, and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements, and standards of the San Mateo County LCP, specifically with regard to Locating and Planning New Development, Agriculture, Sensitive Habitats, and Visual Resources Components of the LCP. The project will not impact any coastal resources and no vegetation is proposed for removal. No prime soils will be converted, and the well will allow ongoing agricultural use of the parcel. Visual impacts will be minimized due the small footprint of the well and the location, which is 1,000 feet from the Cabrillo Highway, further obscured by natural vegetation.
3. That the project is subject to the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) since the project is located between the nearest public road and the sea. The proposed project is limited in size and will not change shoreline or bluff access in the area. The Shoreline Access component of the LCP does not require agricultural well development to provide shoreline access. Any future development would be subject to compliance with all applicable LCP

Policies, including those for shoreline access at that time.

For the Architectural Review, Find:

4. That the project is consistent with the General Plan Policies for Architectural Design Standards for Rural Scenic Corridors and Standards for Architectural and Site Control within the Cabrillo Highway State Scenic Corridor along with Scenic Corridor policies of the Local Coastal Program. Due to the small scope of the project, which is approximately 7 sq. ft. in size, the project will not be visible from the scenic corridor as it will be screened by natural topography and existing vegetation allowing the well to blend in with the natural environment.

**RECOMMENDED CONDITIONS OF APPROVAL**

Current Planning Section

1. The approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on March 26, 2025. Any changes or revisions to the approved plans shall be submitted to the Director of Planning and Building for review and approval prior to implementation. The Director of Planning and Building may approve minor revisions or modifications to the project if they are found to be consistent with the intent of and in substantial conformance with this approval.
2. The permits shall be valid for one (1) year from the date of final approval by the Planning Commission, in which time a well permit shall be issued by Environmental Health Services. Any extension of these permits shall require submittal of an application for permit extension and payment of applicable extension fees sixty (60) days prior to the expiration date.
3. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo County Ordinance Code Section 4.88.360).
4. During the installation of the test wells, erosion and sediment control measures shall be installed and maintained according to a plan prepared and signed by the engineer of record and approved by the Planning and Building Department. Revisions to the approved erosion and sediment control plan shall be prepared and signed by the engineer and must be reviewed and approved by the Planning and Building Department.

5. It shall be the responsibility of the engineer of record to regularly inspect the erosion control measures for the duration of all grading and construction activities, especially after major storm events, and determine that they are functioning as designed and that proper maintenance is being performed. Deficiencies shall be immediately corrected, as determined by and implemented under the observation of the engineer of record.
6. Any future development on this property will be subject to compliance with the zoning regulations and all applicable policies of the County's LCP, including those for Shoreline Access.
7. The property owner, or designee, shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:
  - a. Delineation with field markers of clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.
  - b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
  - c. Performing clearing and earthmoving activities only during dry weather.
  - d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30.
  - e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.
  - f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses
  - g. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.
  - h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
  - i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff.

- j. Limiting construction access routes and stabilization of designated access points.
- k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
- l. Training and providing instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- m. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving the site shall be clear and running slowly at all times.
- n. Failure to install or maintain these measures will result in stoppage of construction until the corrections have been made and fees paid for staff enforcement time.

#### Environmental Health Services

- 8. The applicant shall submit an application, appropriate fees, plans, and the approved Coastal Development Permit for the project directly to Environmental Health Services to obtain a well drilling permit.

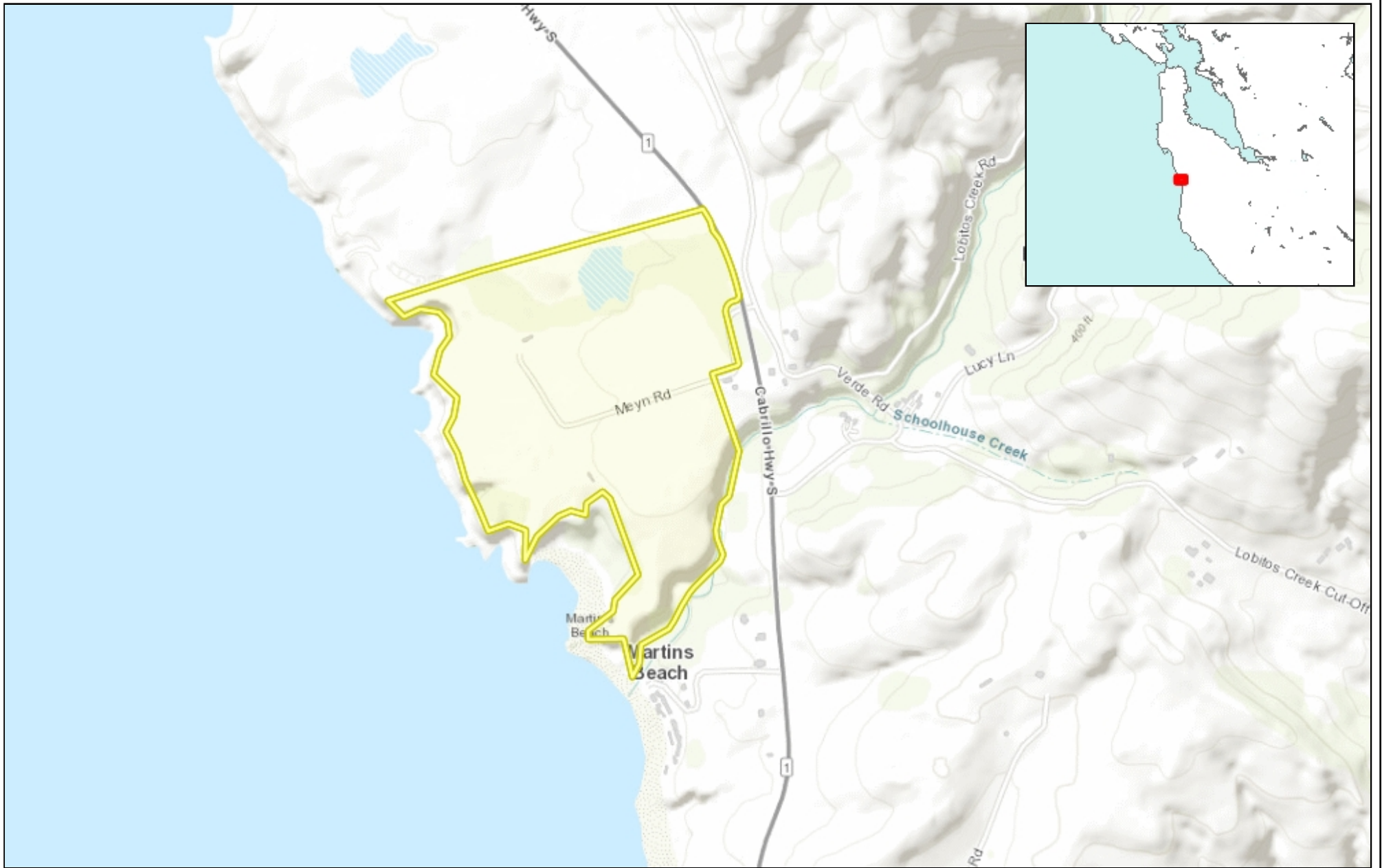
#### Building Inspection Section

- 9. A building permit is required for the proposed project.



**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

# **ATTACHMENT B**



0.60 0 0.30 0.60 Miles

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
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1: 19,163



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**THIS MAP IS NOT TO BE USED FOR NAVIGATION**



0.60 0 0.30 0.60 Miles

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
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1: 19,163



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0.28 0 0.14 0.28 Miles

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**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

# **ATTACHMENT C**



**Date:** March 1, 2023 (revised 8/16/23)  
**Subject:** Scope of Work – Well Drilling Permit

**Job Site:** 1 Meyn Road  
Half Moon Bay, CA, 94019

APN: 066-310-220

**Water Use:** Agricultural – Watering of livestock

**Topic:** Scope of Work

**To:** San Mateo County Planning Department and Environment Health Services

Water Solutions has prepared the following Scope of Work in connection with our application for a permit for the drilling of up to three (3) test bores with the intended purpose of fully developing one (1) test bore into a groundwater well for agricultural purposes located on the property noted above.

Should you have any questions regarding this document and the project, please do not hesitate to contact us.

## Contact Information

### **Applicant (on behalf of Property/Well Owner)**

Chuck Reichel, Project Manager  
Glenn Reynolds, Principal  
Water Solutions, Inc.  
355 Princeton Ave  
Half Moon Bay, CA 94019  
P: (650) 204-9596  
C: (408) 623-9407  
Email: creichel@h2osolutions.com

### **Property/Well Owner**

Seahawk Ranch Corporation  
22401 Cabrillo Highway  
Half Moon Bay, CA 94019  
Attn: Amber Hicks, Administrator  
P: (360) 324-0208

### **Well Drilling Contractor**

Pitcher Services, LLC  
218 Demeter Street  
East Palo Alto, CA 93303  
Attn: Terry Shewchuk  
P: (650) 328-8910  
Email: tshewchuk@pitcherservicesllc.com

## Scope of Work

This project entails the drilling of up to three (3) test bores with the intended purpose of fully developing one (1) of the test bores into a groundwater well for agricultural purposes. The methods used and the coordinates of the well locations are listed below.

### Drilling Methods & Construction

- Drilling/Boring Method: Air/Mud Rotary
- Drilling/Boring Depth: 250 feet
- Boring Diameter: 12 inches
- Casing Diameter: 5 inches

### Well Location/Coordinates

- N37° 22' 51.2", W122° 24' 29.2"

Alternate locations:

- Alt #1: N37° 22' 51.6", W122° 24' 30.2"
- Alt #2: N37° 22' 50.1", W122° 24' 29.1"

### Specific Intended Use of Well Water

The property owner has stated that the intended purpose for the groundwater is for agricultural purposes – providing water for livestock on the property.

### Hydrogeologic Study – Land Subsidence

In August 2022, Geoconsultants, Inc. (San Jose, CA) performed a hydrogeologic study for groundwater development at 1 Meyn Road. The focus of the study was to assess subsurface hydrogeologic conditions and estimate the potential of groundwater at selected sites around the property. In brief, the findings of their electrotelluric sounding study concluded that two zones (areas) on the property showed a potential for development of a small diameter irrigation well. The study indicates that the potential water bearing lenses are less than one meter thick and are not subject to dewatering compaction which precludes any ground subsidence. Furthermore, the aquifer for the property is in the unconsolidated to semi-consolidated alluvial materials and marine terrace deposits overlying the Lobitos Mudstone Member bedrock unit of the Purisima Formation. The San Gregorio Sandstone Member may underlie the terrace deposits which may contain a thin saturated section of ground water stored above the underlying bedrock. As such, the potential for subsidence is geologically rare to non-existent. Geoconsultants' full report has been included in the California Coastal Commission Development application packet and is submitted along with this application and Scope of Work.

### Interference with Neighboring Wells

Well construction data from the San Mateo Plain Groundwater Basin Assessment Project (<https://smcmaps.maps.arcgis.com/apps/webappviewer/index.html?id=8621d563c0634d6caec1145aebfdedb1>) shows that the nearest wells to be over 4,900 feet away.

To assess the impact to the neighboring wells, Geoconsultants and WSI used the same Ground Water Assessment formulas and tables for fractured bedrock the California State Water Board uses to evaluate new public supply well permits.

**Equation**

Porous Media Aquifers

$$R_r = \sqrt{\frac{QT}{\pi\eta H}}$$

$R_r$  = Radius (in feet) of zone for Time of Travel  $T$

$T$  = Time of Travel (years) (2, 5, or 10 years)

$Q$  = Pumping capacity of well (in ft<sup>3</sup>/year)  
(ft<sup>3</sup>/year = gpm x 70,267)

Fractured Rock Aquifers

$$R_r = 1.5 \times \sqrt{\frac{QT}{\pi\eta H}}$$

$\pi = 3.1416$

$\eta$  = Aquifer effective porosity (default = 0.2)

$H$  = Well screened interval (in feet) (10' min.)

Fractured Rock Aquifer (Increase size of zones by 50%)

Zone	TOT (years)	Equation	Use one or the other		Minimum	Value
			Calculated Radius	Table 3 Radius		
A	2	$709\sqrt{Q_{gpm}/H_{ft}}$		1228	600	1228
B5	5	$1122\sqrt{Q_{gpm}/H_{ft}}$		1943	1,000	1943
B10	10	$1586\sqrt{Q_{gpm}/H_{ft}}$		2747	1,500	2747

**FRACTURED ROCK AQUIFERS**

**TABLE 3**

Q	H (feet) (default minimum)	Radius Zone A (feet)	Radius Zone B5 (feet)	Radius Zone B10 (feet)
< 10 gpm	10	900	1,500	2,250
10 to 20 gpm	10	1,003	1,587	2,250
21 to 30 gpm	10	1,228	1,943	2,747
31 to 40 gpm	10	1,418	2,244	3,172
41 to 50 gpm	10	1,585	2,509	3,546
51 to 60 gpm	10	1,737	2,748	3,885
61 to 70 gpm	10	1,876	2,968	4,196
71 to 80 gpm	10	2,005	3,173	4,486
81 to 90 gpm	10	2,127	3,366	4,758
91 to 100 gpm	10	2,242	3,548	5,015

“Q” for each well is expected to be < 5 GPM with a screen height of 10 feet. Using the data from the top row of Table 3, the 2-, 5-, and 10-year safety zones are 900, 1500, and 2250 feet respectively. Accordingly, the influence on the neighboring wells would be relatively small due to the low transmissivity.

**Estimated Well Production/Yield**

Adequately evaluating the water-yielding potential of a well requires test drilling to a target depth. During the test drilling, down-hole geophysical logs, such as resistivity, spontaneous potential and gamma ray shall be completed to confirm the subsurface materials and depth of water-bearing zones and shall assist in the evaluation of anticipated water quantity and quality. Without test drilling, it is extremely difficult to estimate a well’s potential yield. However, WSI’s experience using electrotelluric sounding methods such as those used by Geoconsultants who performed the hydrogeologic study, it is anticipated that the well shall have a maximum yield of 2 – 4 gallons of water per minute (GPM). Based on this assumption, the maximum annual yield for the well is calculated by the following formula:

$$GPM \times 1,440 \text{ min/day} \times 365 \text{ days}$$

Therefore, the range for the maximum yield for the well is:

$$\text{Annual Yield: } 1,051,200 - 2,102,400 \text{ gal. (3.22 - 6.45-acre feet*)}$$

\*1 acre foot = 326,000 gallons

**Estimated Water Consumption (CA Executive Order N-7-22)**

As mentioned before, the owner’s stated use of the groundwater is for agricultural purposes. Water is intended for irrigation and livestock. Peak demand shall occur during the dry months, May through September. Irrigation water needs shall decline during the colder wetter months, October through April. During the peak demand months, the owner estimates a daily watering need to be 1,600 gallons of water.

$$\text{Maximum Daily Water Demand: } 1,600 \text{ gal}$$

Applied to a full calendar year, the annual production of the well is calculated by multiplying the daily production by 365.

$$1,600 \times 365 = 584,000 \text{ gallons}$$

Converting to acre-feet ...

$$584,000 \div 326,000 = 1.8 \text{ acre-feet}$$

It is Water Solutions' opinion that production from the new well shall remain below the 2 acre-foot limitation established in CA Executive Order N-7-22.

### **Sustainable Yield Evaluation**

If a well's production exceeds expectations, a hydrogeologic aquifer study will be performed to determine the well's sustainable yield and the aquifer's recharge rate. To perform such a test, the well drilling and installation must be completed. WSI's protocol calls for a 7-day continuous pump test. During the test, a high-precision data logging system will be used to collect data and monitor field conditions. At the conclusion of the active pumping phase of the test, the natural well recovery will be monitored to establish both the recharge rate and transmissivity impressions of the well. Collected data will then be processed using a proprietary computer software model. Test results will then be analyzed to further the development of the well and pumping equipment.

## **Schedule of Work**

Work is scheduled to begin Fall 2023. The project is expected to run for two (2) continuous weeks.

## **Site Map Description**

### **Sheet 1: Title Page**

- Aerial Views of property
- Drawing list

### **Sheet 2: Topographical Overview of Property**

- Adjacent properties
- Assessor's Map (County of San Mateo, CA; #66-31)

### **Sheet 3: Job Site Images**

- Images of the well locations

### **Sheet 4: Site Plan**

- Property dimensions
- Setbacks
- Well locations
- Existing structures and site improvements
- Vicinity Map

### **Sheets 5: Well Construction/Elevation**

- Well construction drawing



Respectfully,

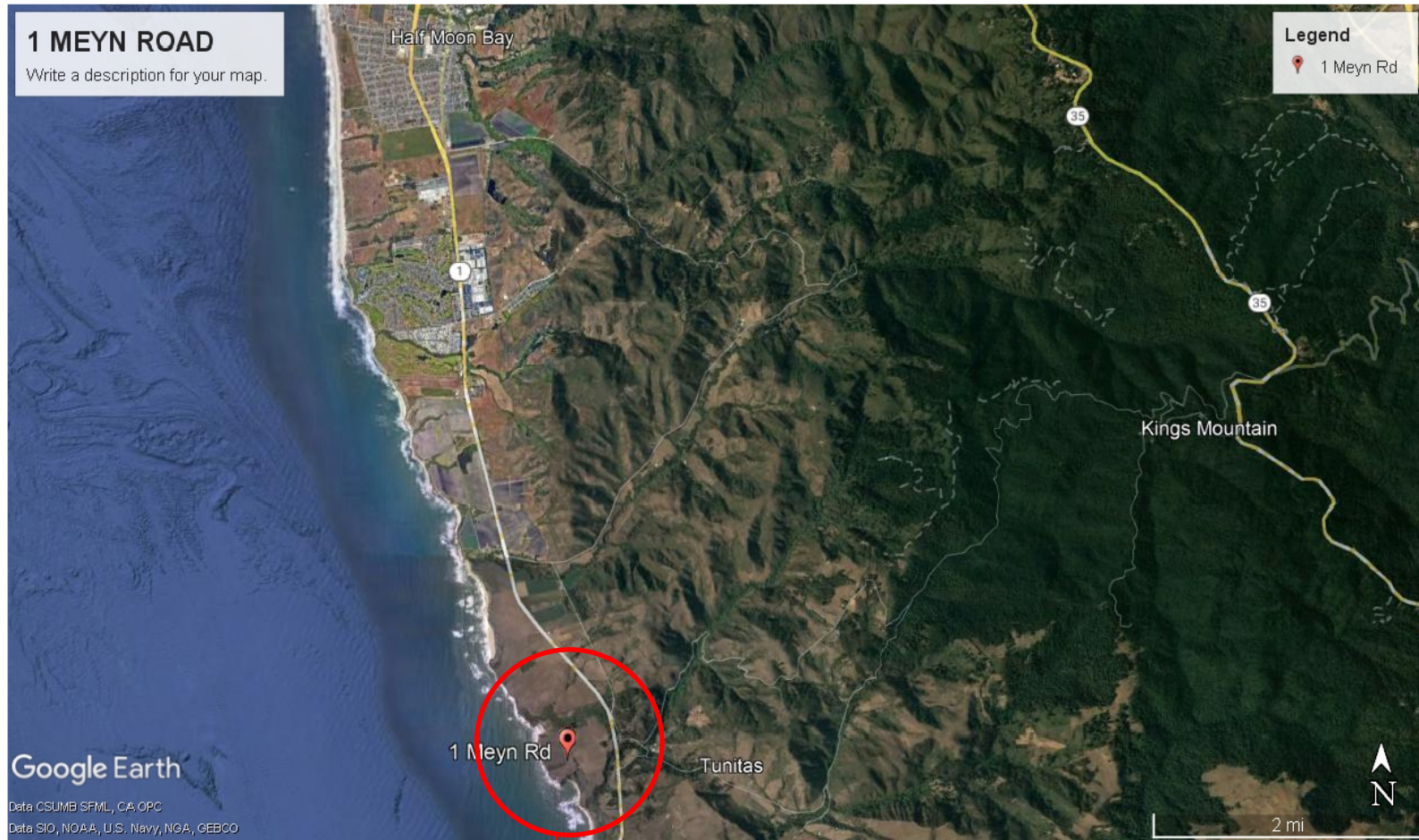
Chuck Reichel  
Project Manager  
Water Solutions, Inc.



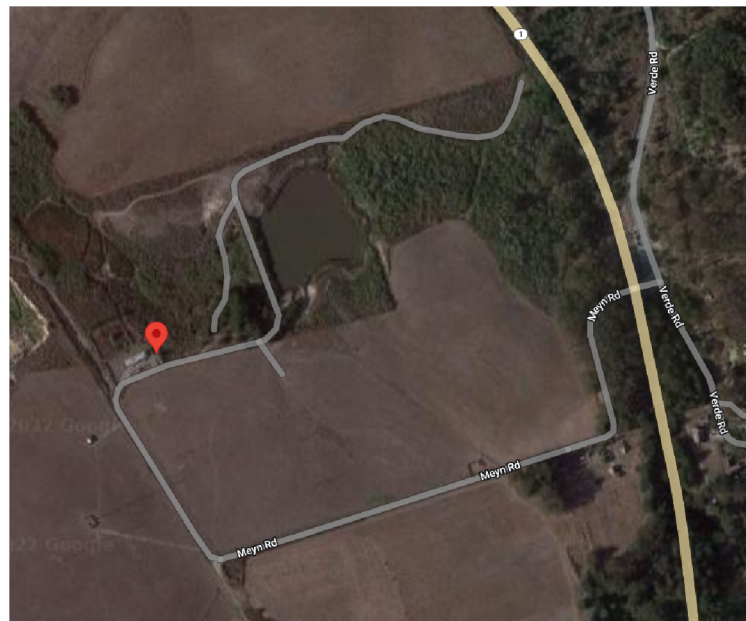
**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

**ATTACHMENT D**

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



HALF MOON BAY AND LOCAL SAN MATEO COUNTY



1 MEYN ROAD AERIAL VIEW



**1 MEYN ROAD  
HALF MOON BAY, CALIFORNIA  
LOCATION MAPS**

**DOCUMENT LIST**

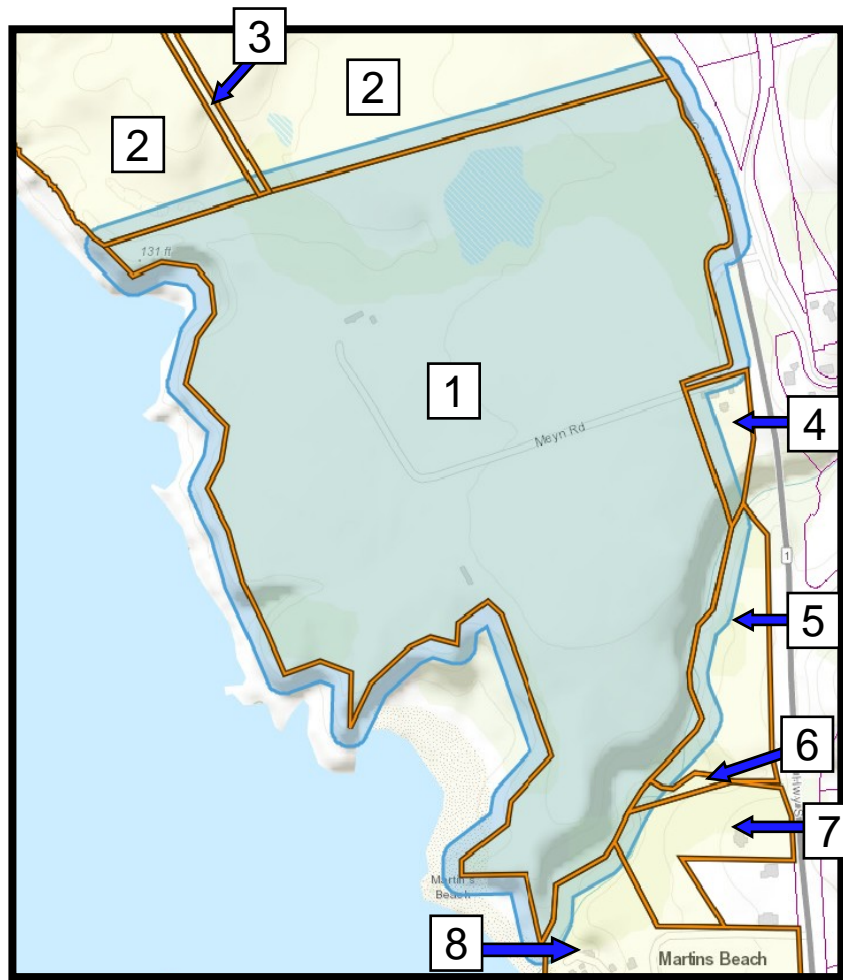
- SHEET #1 TITLE PAGE-VICINITY MAP
- SHEET #2 ASSESSORS MAP & ADJACENT PARCELS
- SHEET #3 SITE PLAN & WELL LOCATION IMAGES
- SHEET #4 WELL DETAILS

PROJECT NO.		DATE:	03/17/2023
DRAWING		SCALE:	NTS
SHEET		DRAWN BY:	E. REYNOLDS
SHEET 1 OF 4		DESIGNED BY:	C. REICHEL
		CHECKED BY:	C. REICHEL
		NO.	
		DESCRIPTION	
		ENGR. BY:	
		INIT.	
		COUNTY:	
		APPROVED	
		DATE	



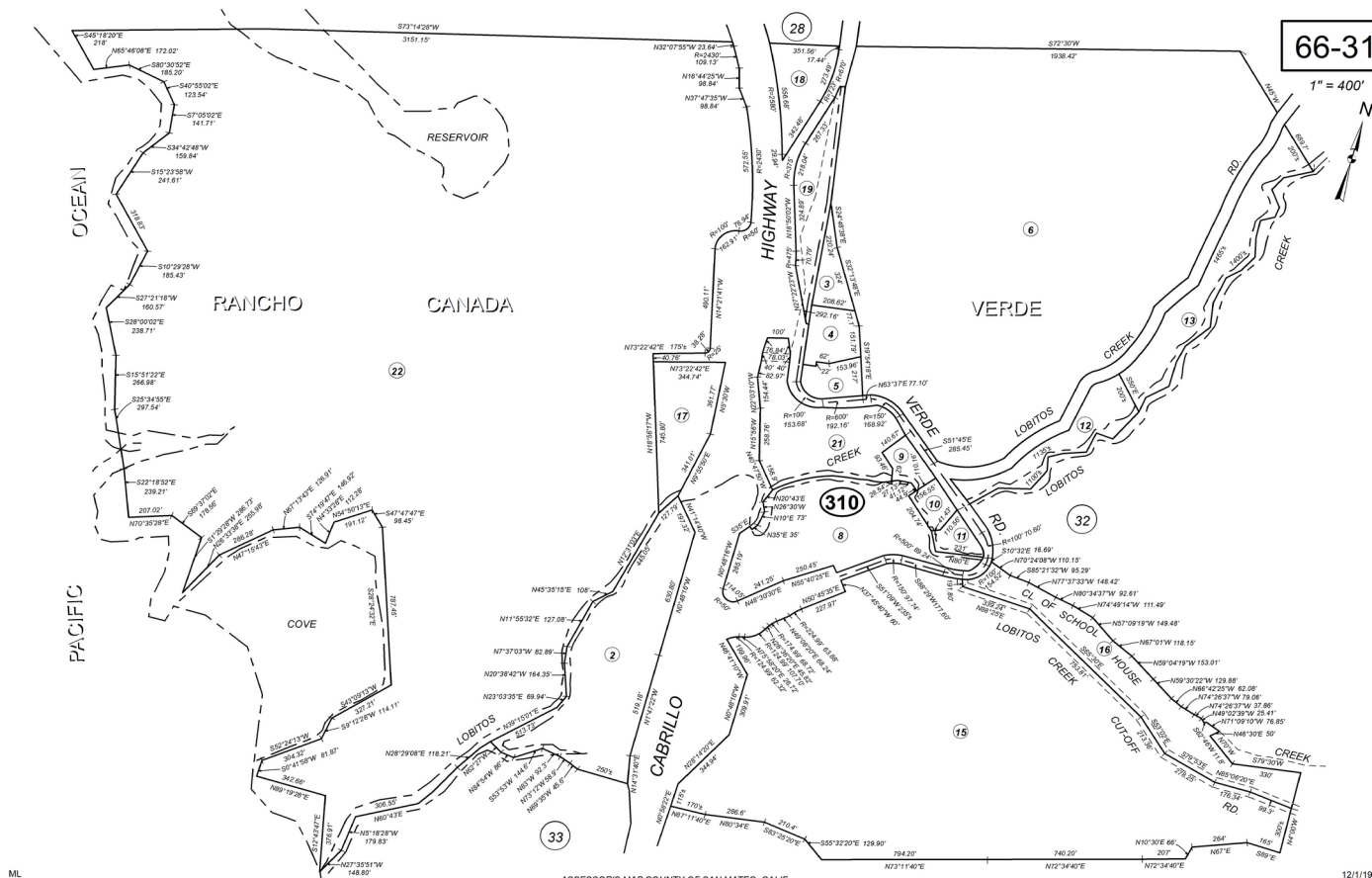
**SKYHAWK RANCH**  
1 Meyen Road,  
Half Moon Bay, CA 94019  
**TITLE PAGE**

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Parcel	APN	Owner's Name	Address
1	066-310-220	Seahawk Ranch Corp.	22495 Cabrillo Highway Half Moon Bay, CA 94019
2	066-280-010	Mid-peninsula Regional Open Space District	330 Distel Circle Los Altos, CA 94022
3	066-280-020	Mid-peninsula Regional Open Space District	330 Distel Circle Los Altos, CA 94022
4	066-310-170	Western General Corporation Attn: Amber Hicks	2510 North Pines Road, Suite 308 Spokane Valley, WA 99206
5	066-310-120	Lobitos Land Company Attn: Dawn Worthen	1104 Country Hills Drive, Suite 760 Ogden, UT 84403
6	066-330-200	Western General Corp. Attn: Amber Hicks	2510 North Pines Road, Suite 308 Spokane Valley, WA 99206
7	066-330-190	KimKen Trust Attn: Lori Burmeister	333 Omaha Street, Suite 5 Rapid City, SD 57701
8	066-330-230	Martins Beach 1 LLC	1760 The Alameda, Suite 300 San Jose, CA 95126

PARCEL MAP APN# 066310220  
1 MEYN ROAD  
HALF MOON BAY, CA

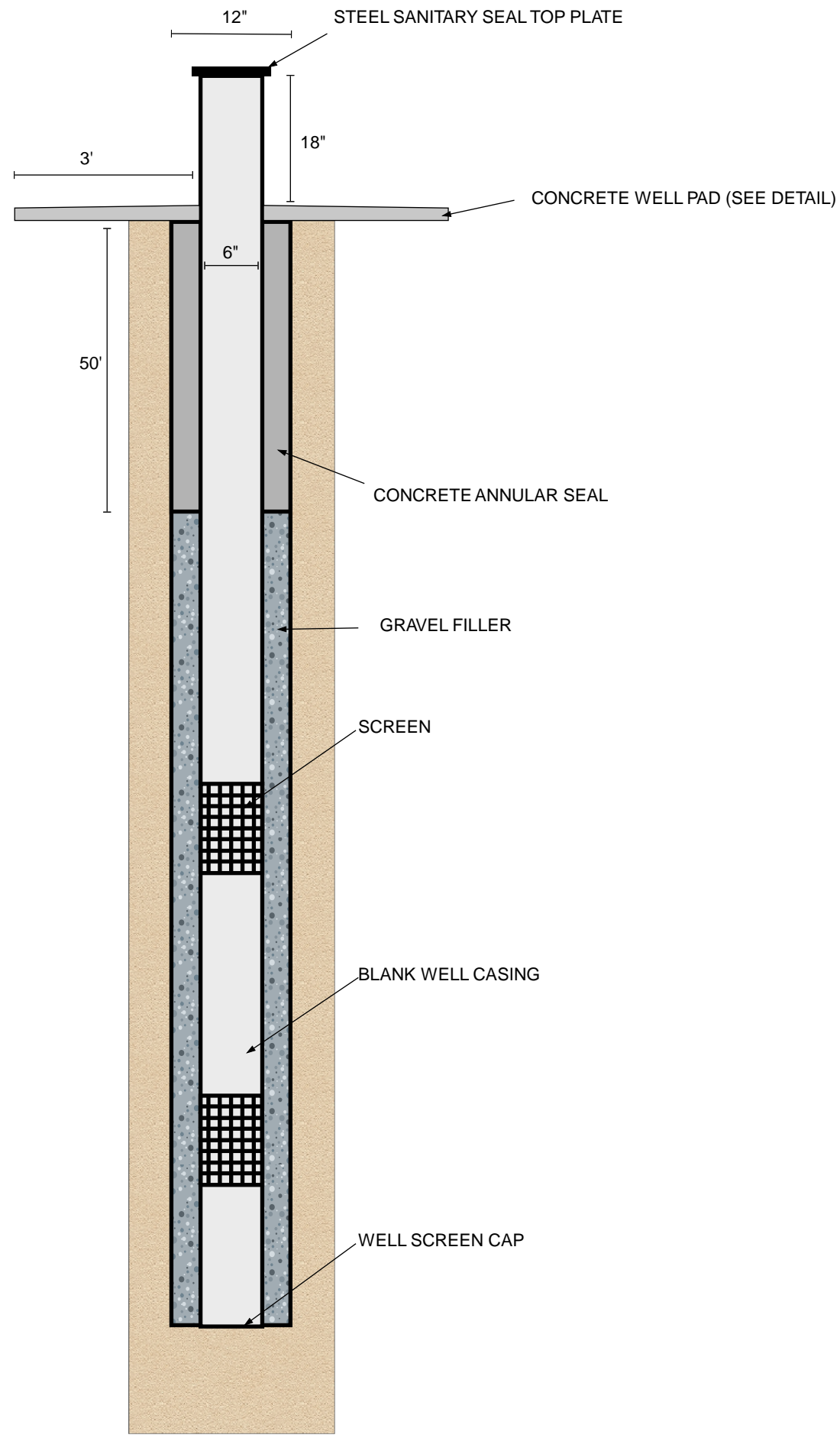


SAN MATEO COUNTY  
ASSESSORS MAP 66-31

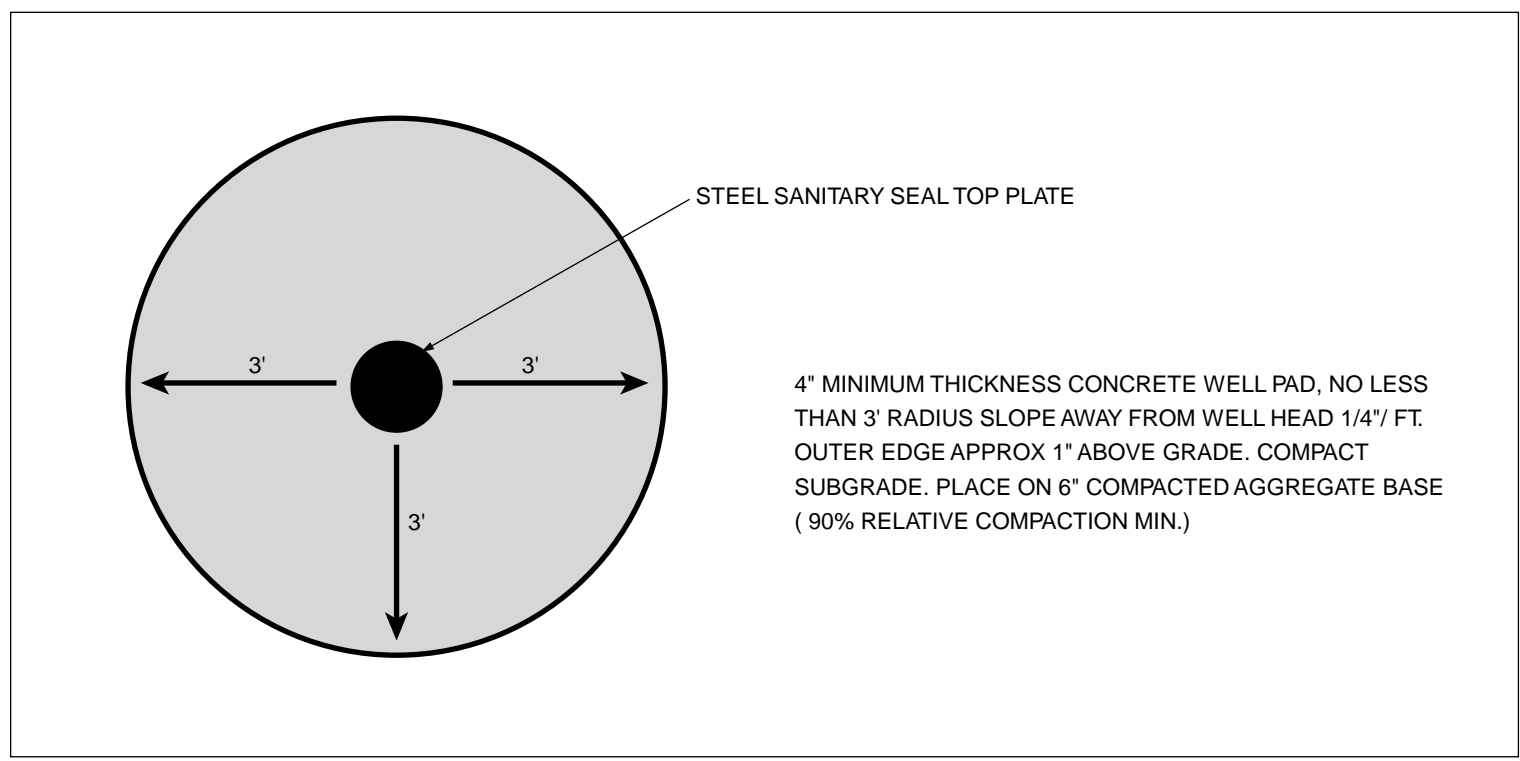
PROJECT NO. DRAWING SHEET	<p style="text-align: center;"><b>SKYHAWK RANCH</b> 1 Meyn Road, Half Moon Bay, CA 94019</p> <p style="text-align: center;"><b>PARCEL &amp; ASSESSORS MAPS</b></p>	DATE: 03/17/2023 SCALE: NTS DRAWN BY: E. REYNOLDS DESIGNED BY: C. REICHEL CHECKED BY: C. REICHEL
SHEET 2 OF 4	 <b>WATER SOLUTIONS</b> <small>Engineering Quality Water</small>	© WATER SOLUTIONS, Inc. 355 Princeton Ave. Half Moon Bay, CA 94019 (650) 204-9596
	NO. DESCRIPTION ENGR. BY COUNTY APPROVED	



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CONCRETE WELL PAD DETAIL



PROJECT NO.		DATE:	03/17/2023
DRAWING		SCALE:	NTS
SHEET		DRAWN BY:	E. REYNOLDS
		DESIGNED BY:	C. REICHEL
		CHECKED BY:	C. REICHEL
		NO.	
		DESCRIPTION	
		ENGR. INIT.	
		BY	
		COUNTY	
		APPROVED	

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355 Princeton Ave.  
Half Moon Bay, CA 94019  
(650) 204-9596



**SKYHAWK RANCH**  
1 Meyen Road,  
Half Moon Bay, CA 94019  
**WELL DETAILS**