

## Supporting Document for Utilities Plan:

### General Statement

This document accompanies the **Utilities Plan** sheet and provides additional supporting details required for Sonoma County compliance. For specific technical drawings, utility routes, and dimensions, refer to the applicable Utilities Plan sheet.

### Scope of Utilities Plan

#### 1. Utility Routing and Trench Layout

##### o Trench Location and Depth:

- The trench will run along the **southern edge of the parcel**, maintaining a set-back of 2–3 feet from the property boundary.
- Minimum burial depths:
  - **Gas lines (propane):** 24 inches.
  - **Water lines:** 18 inches.
  - **Electrical conduits:** 18 inches.
  - **Communication lines (cable/internet):** 12 inches.

##### o Routing Details:

- The trench will extend under the **guest cottage** and continue beneath the walk-way connecting the **guest cottage and main house**, terminating at the **electrical control panel** on the main house.
- A secondary circuit in the same trench will provide **electrical and cable service** back to the guest cottage. Replacement water and propane lines can spur off and stub up directly into the guest cottage independently per the joint trench.
- For propane, the **main house is already set up with internal propane lines**, requiring only a connection from the **propane tank to the main house and guest cottage**.

#### 2. Water Meter Adjustment

- o Per the **water district's requirements**, the water district will raise the existing water meter to accommodate the planned **parking deck**. This adjustment will be handled by the water district directly to ensure compliance with municipal water systems.

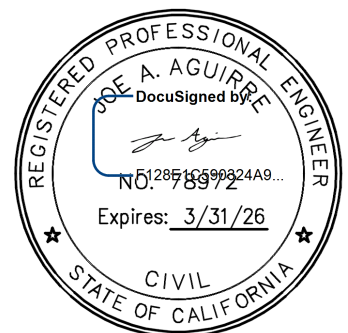
#### 3. Utility Box Installation for Sewer Connection

- o A **large concrete Jensen-type utility box** with a **drivable traffic-rated lid** will be installed at the **northeast corner of the parking deck** to provide secure and accessible entry to the sewer connection.
- o This box meets load-bearing specifications for areas subject to vehicle traffic.
- o The lid will be flush with the finished grade to ensure accessibility and durability.

#### 4. Encroachment Permit Requirements

- o An **encroachment permit** will be required to address **traffic control** and any **work or installations in the right-of-way**, including areas under **Caltrans jurisdiction**.
- o All work products, including trenching and utility installations within the right-of-way, will comply with applicable Caltrans standards and specifications.

### Separation and Safety



- Horizontal separation of at least 12 inches will be maintained between utilities (e.g., gas, water, and electrical).
- Protective measures include:
  - Electrical conduits and gas lines encased in PVC piping.
  - Tracer wires installed along gas lines for detection and maintenance.

### **Driveway and Walkway Crossings**

- The trench will pass beneath the **walkway between the guest cottage and main house**. Utilities under this section will be reinforced with concrete encasement or steel conduit as required to withstand surface loads.
- Trench reinforcement under the **driveway (egress side)** will meet Sonoma County standards for load-bearing utility installations.

### **Joint Trenching and Coordination**

- A **joint trench** will be used for electrical, gas, and communication lines to minimize excavation and optimize installation efficiency.
- Coordination with utility providers (PG&E, water district, propane supplier, and communication service) will ensure proper scheduling and compliance.

### **Fire Safety and Erosion Control**

- **Fire Safety:**
  - There are no planned plantings at utility junctions. However, if future landscaping includes plantings near junctions, they will comply with CalFire recommendations for fire-safe species and clearances.
- **Erosion Control:**
  - Retaining walls and terraces are incorporated along slopes to stabilize the terrain.
  - Ground cover plantings and temporary silt fencing will prevent sediment runoff during construction.

### **Permitting and Inspection**

- **Inspections:**
  - Pre-construction utility staking and trench layout.
  - Mid-phase trench depth and utility separation check.
  - Final inspection post-backfill, compaction, and grading.

This document ensures that all utility installations, including adjustments to the water meter, trench routing, and utility box installation, adhere to Sonoma County regulations. The plan prioritizes safety, accessibility, and environmental protection while maintaining compliance with all applicable standards. For further information, refer to the Utilities Plan drawing sheet.

**Propane:** See specialty supporting documents related to Propane compliance and specs.