

2019 Annual Water Source Capacity Analysis

Prepared for:
Garberville Sanitary District
Board of Directors
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HISTORY OF WATER SOURCES

In 2004 the Garberville Sanitary District (GSD) purchased the Garberville Water Company (GWC) from the Hurlbutt family. The GWC had a number of historical water sources which included:

- South Fork Eel River (SFER) Diversion
- Tobin Well
- Miller Well
- Unnamed Stream

In addition to these GWC water sources, GSD had the right to use water from an unnamed creek on Brisbin's property for the wastewater treatment plant. The right to this water source was relinquished as part of the lot line adjustment agreement for the acquisition of the new primary pond at the wastewater plant.

When the purchase of GWC was completed, only the South Fork Eel River diversion, Tobin well, and Miller well was transferred to GSD.

In recent history the GSD has used the water from the SFER and Tobin well. Some effort has been made to clean out the well casing on the Miller Street Well, but no water has been pumped from this well in the past 10 years.

INFRASTRUCTURE OF WATER SOURCES

The **South Fork of the Eel River Infiltration Gallery** provides collection of the main water source. It was originally installed in 1940. The water flows through a collection chamber into a corrugated metal pipe that is 4 feet in diameter by 55 feet in high. There are two 25 HP submersible pumps that supply up to 350 GPM to the system. The pump discharges to a 6" raw water pipeline that transports the raw water to the new surface water treatment plant (SWTP) on Tooby Ranch Road.

The **SWTP** consists of flocculation, direct filtration, chlorination, and finished water pumping system. The water treatment plant utilizes Catfloc L Polymer as a coagulant and filter aid. The polymer is injected into the raw water line prior to entering the flocculation basin located upstream of the filters. The baffled flocculation tank is 5,500 gallons, 8 feet in diameter and 14 feet straight shell length, 150 psi pressure tank.

The filtration system is a duplex Loprest model and generally consists of two 108" diameter x 72" straight shell length, 150 psi pressure tanks with 18" filter sand and 12" anthracite with two grades media support gravel and associated piping, valves, controls, and accessories. The filtrations system requires occasional backwash of the filter medium. The spent backwash water is stored in a 35,000 gallon, 18 feet diameter by 18 feet side water depth with overall height of 22 feet, steel welded storage tank. The clearwater from the backwash storage tank will be recycled back into the treatment plant system and the sediment will periodically be pumped from the tank and disposed of by the pumping company. The backwash recycling pump allows the clearwater from the storage tank to be pumped back into the treatment plant.

The water is chlorinated using liquid sodium hypochlorite. The liquid sodium hypochlorite can be injected prior to flocculation and after the water has been filtered. After the sodium

hypochlorite is injected, the chlorination detention time must be satisfied prior to the water being used. Originally the SWTP was constructed with an underground chlorine contact chamber of 30" serpentine pipe. That pipe failed in Nov. 2017 and had to be replaced. The construction of an above ground steel baffled pressure vessel was completed in 2018 to replace the underground chamber.

The finished water is pumped up Sprowel Creek Road, through town, and to the existing main storage tank on APN 032-211-012. These pumps are a duplex pumping system. The SWTP has a permanently mounted, diesel, 60 kW generator with a tank that will allow for 72 hours of continuous operation. This generator can power the entire SWTP facility during power outages.

Tobin Well is a groundwater source with a duplex pumping system with chlorination. From the January 25, 2013, report by SHN Engineers & Geologists entitled *Tobin Well Supplemental Project Report*, "The existing Tobin Well is located at 510 Pine Lane in Garberville, CA. The property is approximately 75 feet along Pine Lane and 150 feet deep. The well house is located along the front of the property with a storage building located at the rear of the property. The well is currently used to provide a backup water supply to the district during high turbidity events in the Eel River. The existing well produces approximately 45 GPM providing approximately 65,000 gallons per day. The well is housed in a 12-foot x 15-foot pump house. The existing pressure tank is functional but shows heavy signs of corrosion. The well is a 5 foot diameter well approximately 45 feet in depth with a concrete landing approximately 24 feet below the existing ground surface. The concrete landing has a 24 inch square access hatch. It appears the well draws water from an unconfined aquifer. Disinfection is provided through a chlorine drip into the well to provide a .5 to 1.0 mg/1 dose of sodium hypochlorite. The District's operations staff has conducted drawdown tests with the existing 45 gpm pump. After 12 hours of continuous pumping, the well stabilized at a depth of 36.4 with a drawdown of approximately 6 feet. The well reached a 95 percent recovery five hours after the pumps were turned off."

In 2014 the District installed duplex variable speed pumps sized to pump up to 100 gallons per minute (gpm) with level control. The specifics on the pumps are: Goulds model 95L07, 6" diameter, 5-stage submersible pump rated approximately 100 GPM @ 173' TDH, driven by a 7.5 HP, 3/60/230 volt motor. Pump has a 3" NPT discharge. The pumps can be controlled by the water level in the well and can vary the pump's output to maintain a preset water surface. The controller is a Goulds model CPC20311 Aquavar variable speed controller, 30.8 amp output with a Goulds model 9K396 submersible pressure transducer, 7.5 PSI with 100' cable. Most times this automation is not used since the cycle times for automated pumping are too short.

Miller Well is a groundwater source with no pumping system and is not currently operational. The Miller Street well is thirty-two feet deep with a water depth of fifteen feet. The well is 48" in diameter. In March of 2015 the water was tested and is safe for human consumption.

The existing system has adequate production, treatment, and storage capacities for the average peak daily demand. The maximum daily demand is 427,780 gpd recorded during the month of July in 1999. The total storage capacity for the system is approximately 500,000 gallons which is the sum of the four storage tanks in the system. This is sufficient to meet the average dry day water demand. The water treatment facility produces water that meets or exceeds the State regulations for drinking water and the Surface Water Treatment Regulations. The turbidity and residual free chlorine levels comply with the maximum allowable levels. The existing system provides four pressure zones with adequate pressure throughout the District.

EXCERPTS FROM SWRCB AND CDFG AFFECTING DIVERSION

The District holds a water diversion permit from the State Water Resources Control Board for appropriation of water from the South Fork of the Eel River. The permit is number 20789. This permit allows the District to divert a maximum of 0.595 cubic feet per second (267 gpm) from the river, year round. The District also has a fixed license that allows the District to divert an additional 0.155 cfs. The total maximum instantaneous diversion allowed is 0.75 cfs (336 gpm). This would equate to a maximum daily diversion of approximately 484,700 gallons and 177 million gallons per year. Both documents were amended as of October 11, 2013, and can be found in Appendix A. In September 2019 the District submitted a Petition for Change In Place of Use to add portions of the Southern Humboldt Community Park property. This petition is in the process for approval at the State Water Resources Control Board. In addition, GSD executed a Lake and Streambed Alteration Agreement with the California Department of Fish and Game dated June 26, 2012. This document can be found in Appendix B.

Some specific terms of the License are:

*#5. The water appropriated under this right shall be limited to the quantity which can be beneficially used and shall not exceed **0.155 cubic foot per second** by direct diversion to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this right shall not exceed **112.2 acre-feet per year**.*

*#6. The total quantity of water diverted under this right and the right pursuant to Application 29981 shall not exceed **542.2 acre-feet per year**.*

*#7. The maximum simultaneous rate of diversion under this right and the right pursuant to Application 29981 shall not exceed **0.75 cubic foot per second**.*

Some specific terms of the Permit are:

*#5. The water appropriated under this right shall be limited to the quantity which can be beneficially used and shall not exceed **0.595 cubic foot per second** by direct diversion to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this right shall not exceed **430 acre-feet per year**.*

#8. Construction work and complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 1999.

Some of the terms of the DFG Agreement for the diversion are:

2.15 The Permittee shall not divert more than 0.75 cfs or 10% of the streamflow as measured at the USGS Gauge Station No. 11476500 at Miranda.

This Agreement shall expire five years from execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

So in summary, GSD is allowed to divert at a rate up to **336 GPM** (0.75 cfs) with a maximum of up to 176 million gallons per year (442.2 acre-feet per year) limited to the maximum amount diverted during the 5-year construction period ending December 31, 1999; which was **80 million gallons** in one year.

For assessment of the amount allowable under the SFER diversion, we use this 80 million gallons per year maximum annual diversion at a rate of up to 336 GPM. The new SWTP is capable of treating 350 GPM.

In November 2019 the SWRCB Division of Drinking Water issued a replacement Domestic Water Supply Permit. It is included in Appendix D.

DIVERSION TRENDS AND WATER SALES

To follow are two graphs summarizing the District’s water diversions, metered customer sales, and bulk water sales. **Graph 1** depicts the annual diversions from the South Fork of the Eel River as reported to the SWRCB for the license plus the permit from 1977 to 2019. The average from 1977 to 2019 was **61,288,233** gallons per year. The average over the past 20 years was **62,967,191**. The average over the past 10 years was **57,692,657**. This 10-year average is lower than previous years in part because GSD implemented a new rate structure from 2009 - 2014 that increased rates and the District replaced the leaking Alderpoint Road Tank in 2014.

Graph 2 depicts the 2010 - 2019 diversions, metered customer sales, and bulk water sales.

Table 1. Type and Number of Water Customer Accounts

Customer Type	Number of Accounts
Residential	282
Commercial	110
Other (master meters and GSD premises)	8
Irrigation	5
Multi-family/Mixed Use	43
Discontinued	3
Vacant/Inactive	5
Total	456

PROJECTS APPROVED AND CONNECTED IN 2019

The following table lists various projects that have been approved by GSD within the last few years and were connected to the system during 2019. It details the type of development and the annual water consumed by those customers in 2019. These consumption amounts are already included in the total water sold and diverted for 2019. These project locations are illustrated in dark blue on Figure 1A and 1B in Attachment 1.

Table 2. Approved and Connected Projects

APN	Description	Actual 2019 Water Consumption (Gallon/year)	Conn Fee Paid?	In IS/MND?
032-012-012	Emerald Holdings - Ag Processing	32,912	N/A	Existing
223-191-006	2nd Dwelling Unit	53,108	Y (easement)	Existing
222-156-016	Commercial Ag - not cultivation	22,440	N.A	Y
222-091-011	SFR	58,344	N/A	Y
223-171-001	Ag Meter - Jamra	201,960	Yes	Existing
223-171-003	Ag Meter - Mohr	0	Yes	Existing
223-181-026	Permit Existing Construction	split	No	Existing
	Total for Section	368,764		

BULK WATER SALES

In December of 2012, the District received a Cease and Desist Order from the State Water Resources Control Board (see appendix F). The CDO in part required that the District “*cease and desist the bulk sale and delivery of water under its permit and license to areas outside the authorized place of use, unless the water is needed for emergency domestic water supply*”.

In an email from John O’Hagan, Manager of the SWRCB DWR Enforcement Unit dated Dec 03, 2012, responding to District staff inquiry on the definition of an “emergency domestic water supply” criteria, he states “*Our intent in providing an exception allowing for bulk water sales for Emergency Domestic Use is a limited and narrow exception available only in temporary circumstances where such deliveries are required for essential health and safety uses. State Water Board staff does not agree with your proposal to use the definition of Domestic use provided by section 660 of Title 23, California Code of Regulations to interpret the draft CDO. This section is the definition used by the State Water Board for a domestic beneficial uses of water when an applicant files for a water right permit. When referring to “emergency domestic”, the draft CDO was intentionally narrowing this broad definition of Domestic use down to the essential uses necessary to sustain human and animal life, and for the water necessary for sanitation. Uses for outside irrigation of lawns, gardens and landscaping, even if within ½ acre, would not be an emergency need of water.*”

In 2015, bulk water was sold to CalFIRE to fill water tender type trucks out of the fire hydrant near their complex on Alderpoint Road to fight the Buck Fire on Alderpoint Road. This water was used directly on the fire and for the personnel housed as the Eel River Fire Base Camp just outside of our POU. We deemed this to be an emergency that met the criteria of the CDO.

In 2017, we sold bulk water for several emergency projects. In April 2017 a large slide covered all lanes of Hwy 101 and closed the road to southern Humboldt County. Caltrans issued an emergency contract for the work with Mendocino Construction Services as a subcontractor. MCS needed water for the work to be done at the site. We also sold bulk water to Cox & Cox and Mercer Frasier for the work on the Garberville Airport.

In 2018 a complaint was filed, the District supplied the requested documents, and the SWRCB notified the District that bulk water sales for construction were a violation of the CDO. The District issued a notice that all bulk water sales outside of the Place of Use would cease. For bulk water sales the applicant must show that the water will be beneficially used within the POU.

In November 2019, Ed Voice and Jessie Jeffries filed complaints with the SWRCB-DWR that the County of Humboldt was trucking water from their road maintenance yard facility’s existing long-standing commercial water account to an emergency road project on Old Briceland Road. The SWRCB is investigating the circumstances and determining what the District’s responsibility is to monitor the transport of water sold via standard water meter service within the POU.

Graph 3 shows water uses by calendar year including the amount of “lost” water within our water system by year. Lost water exists within every water system, although the magnitude of the loss varies with the age of the system. This lost water was reduced with the replacement of the Alderpoint Road Tank.

WATER LOSS

From US EPA, Office of Water. 2013. Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress. EPA 816-R-13-006, "The US EPA's fifth national assessment of public water system infrastructure needs documents a 20-year capital improvement need of over \$384 billion between 2011 and 2030." They also state, "Lost water from aging infrastructure is also costing local governments and utilities lost revenue or unrecovered costs of production. Thus, taxpayer and ratepayer dollars are being wasted along with the commodity itself. A positive return on investment is almost certain for many systems, and tools are available for determining the economic level of loss for an individual water supply system - the level at which the cost of investing in water loss management is less than the value of the lost water."

EPA's Document No EPA 816-F-13-002, dated July 2013, entitled "WATER AUDITS AND WATER LOSS CONTROL FOR PUBLIC WATER SYSTEMS" provides instructions and ideas for ways to identify unauthorized water consumption, leakage, by conducting a water audit of the system.

Some of the likely sources of the District's lost water are:

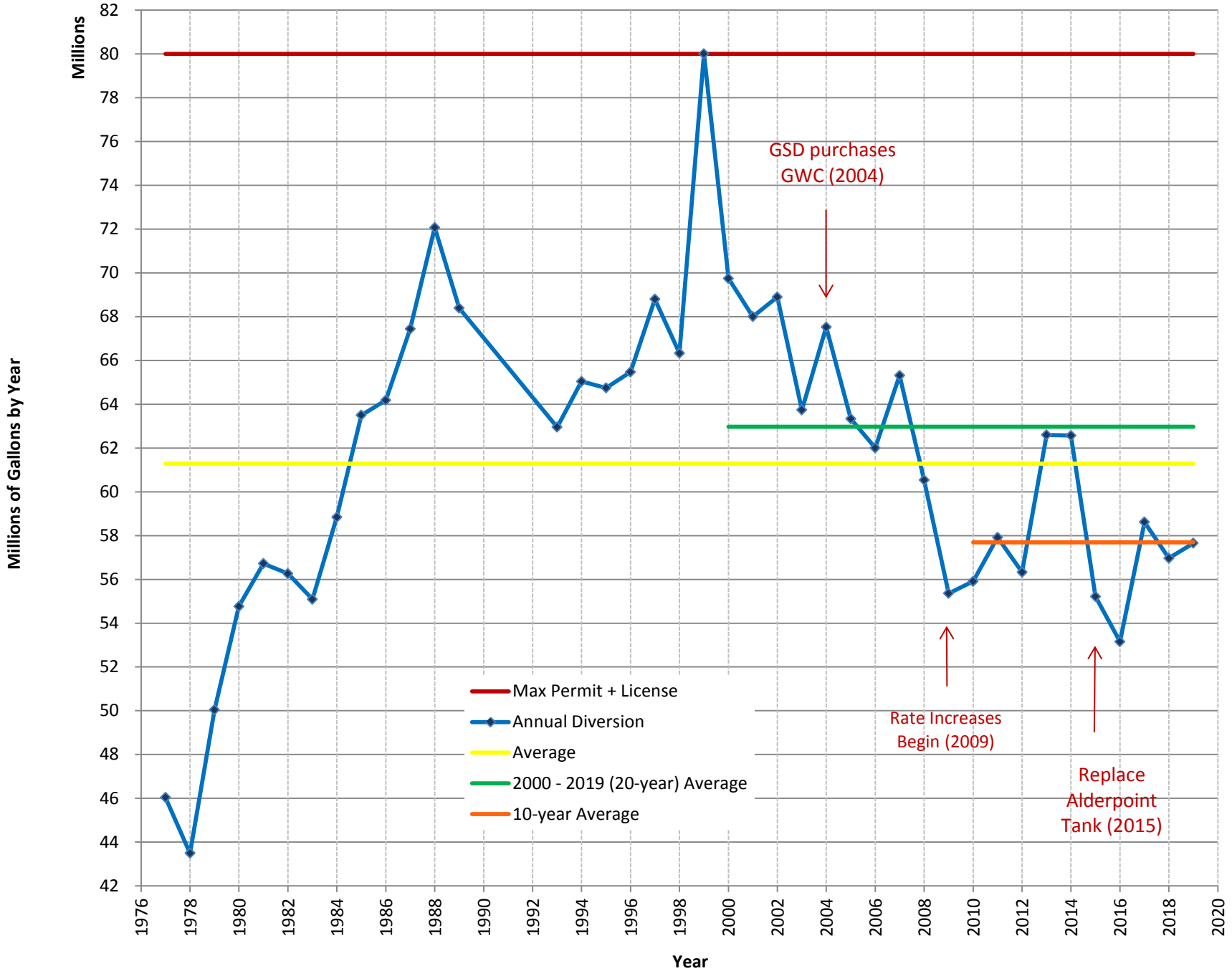
- Inaccurate (old) meters that do not record the total water actually coming through the meter
- Leaking waterlines (from old joints) and broken waterlines (cracks/holes in the waterline itself) especially with the amount of old clay and transite waterlines in the District's system
- Leakage from fire hydrants and valves
- Leakage and overflows from storage tanks
- Leakage from service connections (laterals) or service meters
- Unauthorized consumption (theft)
- systematic data handling errors in the meter reading and billing processes

The District has many miles of old waterline and replacement of this quantity of waterline for a small system is a massive undertaking. The District replaces sections as part of larger infrastructure projects. There are three older tanks in the system; one redwood tank and two in-ground concrete tanks. The District plans for eventual replacement of the three older tanks subject to funding availability.

Since last year's report, funding applications have been prepared and submitted for the replacement of the Wallan Road Tank and the Robertson Tank as well as rerouting the waterline over Bear Canyon. The State is processing these applications. As a temporary measure, the District has been operating the Wallan Road Tank at a lower level to minimize the amount of water that leaks from the redwood tank.

During 2019, the District has replaced approximately 500 lineal feet of waterline and 11 leaking valves at Church Street, Redwood Drive, Locust, and Maple. 17 Meters were replaced. Recordkeeping for unmetered water used was started. Examples include waterline breaks, fires, fire hydrant exercising, WWTP water use, etc.

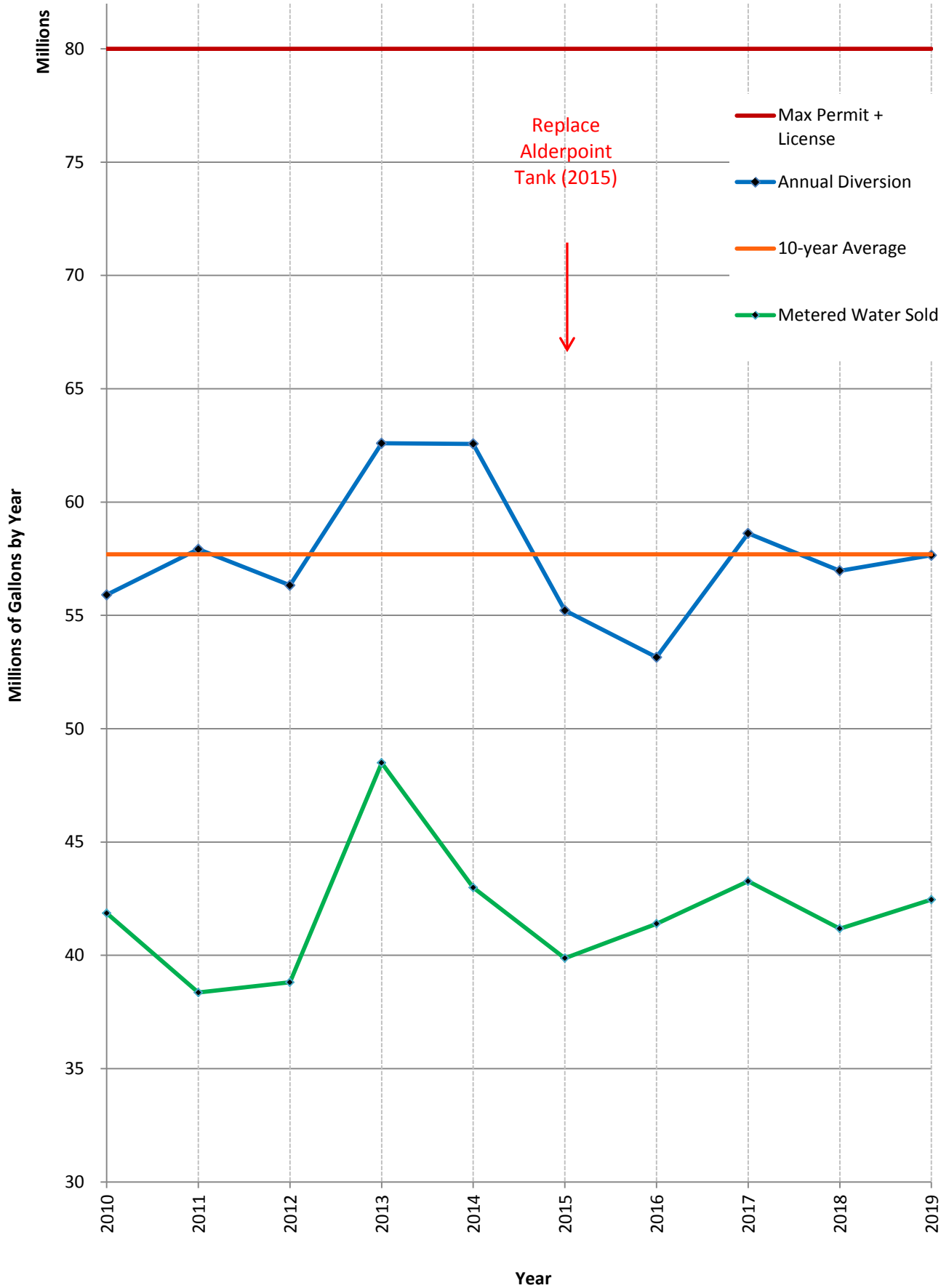
Summary by Year of Water Diversion Reported



Graph 1

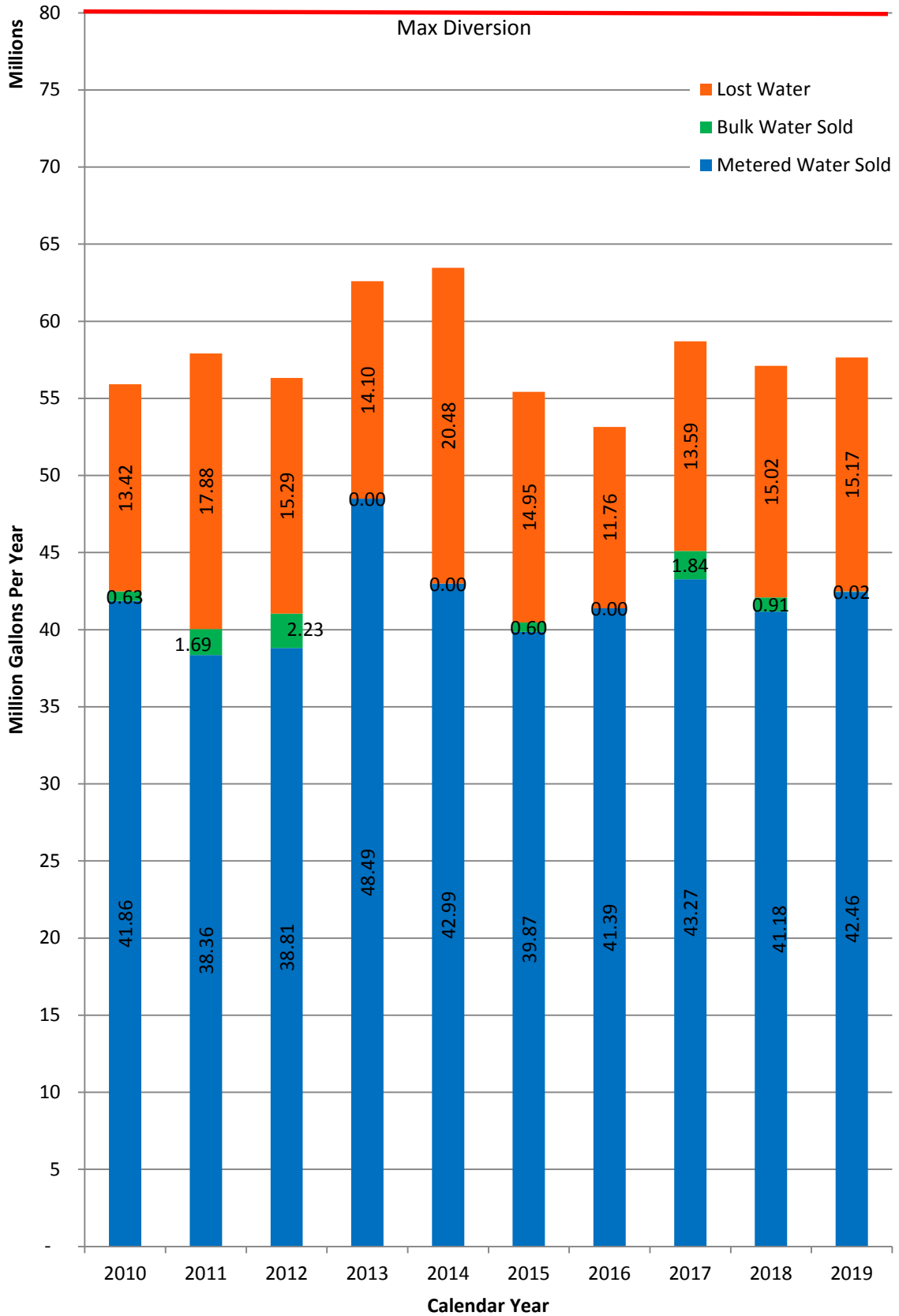
Summary by Year of Water Diversion Reported

Graph 2



Water Uses by Calendar Year

Graph 3



PROJECTS REVIEWED BY THE DISTRICT IN 2019

For all planning and building projects within the GSD place of use, Humboldt County is responsible for sending GSD a project referral asking for our input on whether the project will be served with GSD water and or sewer. As part of this referral process, GSD can and should enumerate any conditions that will be placed upon the applicant to receive or expand their service. When projects are at the planning stage, many applicants do not know exactly how much water and sewer capacity they will need. Staff works with the applicants to supply general information on our infrastructure and any concerns we have about connection so that the applicant can proceed with designing their project and eventually apply for new water or sewer services using our application. Future applicants can also contact GSD directly prior to applying for water or sewer service to receive information on possible service at a particular parcel. Projects that are commercial in nature or include four or more single family residential units will be reviewed by the Board prior to approval.

GSD receives numerous County referrals each year. Many do not include new water service. They are electrical, mechanical, roofing, or other non-expansion building permits. Some are planning actions that do not have a specific water service component. The table below lists the projects that do or could have an effect on the water consumption. They have been approved by the District but have yet to be connected to the District's water system. These project locations are illustrated in medium blue on Figure 1A and 1B in Attachment 1.

Table 3. Projects Approved by District with potential water use increase - unconnected as of 12/31/19

APN	Potential Development Description	Estimated Future Water Consumption (gallon/year)	Conn Fee Paid?	In IS/MND?
032-011-010	Cannabis + SFR	177,500	No	
032-011-029	Humboldt County Mini-Complex	No Change	N/A	Existing
032-012-007	Rehabilitate apartments	193,358	No	Existing
032-034-001	Remodel kitchen for new restaurant	89,012	N/A	Existing
032-044-007	Church Rebuild + 2843 Sq Ft Expansion	17,952	N/A	Existing
032-044-008 & -009	Bank Remodel - 2 commercial units, office space, 2 studio apartments; + 3 connections	211,500	Partial	Existing
222-156-018	Ag meter - Diem	Unknown	Yes	Y
223-191-002	Ag meter - Alban	59,840	PART	Existing
223-191-008	Ag meter - Clary (Lost Coast)	Split existing use between 2 accounts	Yes	Existing
	Total for Section	749,162		

PROJECTS BEING PROCESSES - UNAPPROVED AND UNCONNECTED

The following table lists some projects that are still in the planning phases for their total development type, needed off-site infrastructure, and associated water consumption estimates. Some are still in the preliminary stages of development so the specific amount of water consumption is not listed in the table if it has yet to be determined. These projects have yet to be approved with a specific water consumption amount from GSD. These project locations are illustrated in light blue on Figure 1A and 1B in Attachment 1.

Table 4. Projects Under Consideration

APN	Potential Development Description	Estimated Future Water Consumption (gallon/year)	Conn Fee Paid?	In IS/MND?
032-051-032	Emerald Triangle Group	24,000	No	Existing
222-091-015	SHCP	180,000	N/A	Y/Add
032-091-014	New Hospital at CR site Phase 1	Project Under Review	No	Existing
032-141-010	SoHum Inn: 17 Unit Hotel with Cannibas Dispensary	Requested	No	Y
032-171-027	HOZ/Second Dwellings (Schaible)	65,465	N	Y
223-183-007&008	Ag Meter - Cohn (Exist)	57,596	No	Existing
Total for Section		327,061		

Southern Humboldt Community Park.

In the area known as the SHCP, GSD & GWC water service has been previously provided to two residences and outbuildings, but they do not currently consume water. The Final IS/MND prepared for the Annexation Project (State Clearinghouse No. 2012032025) identifies the history of the water service and lists conditions for future approval. As part of the impact analysis to determine sufficient water supplies, the CEQA document accounts for a future consumption quantity of up to 2,000 cubic feet per month (approximately 180,000 gallons per year) for APNs 222-091-014 and 222-241-009. (these have recently been combined to be APN 222-091-015)

In June 2019, the SHCP came to the District Board of Directors to request that reestablishment of their water service be processed by the District through the Humboldt Local Agency Formation Commission (HLFACo) and the State Water Resource Control Board Division of Water Rights (SWRCB-DWR). The Board adopted Resolution 19-02 to begin the process. The District completed the application to HLAFCo for an Out of Agency Service Extension.

HLFACo reviewed the CEQA documents submitted and determined that an Addendum to the 2013 IS/MND would be necessary. They prepared the Addendum, circulated it for public comments, and held a public hearing in September 2019. During the September 2019 HLFACo meeting the Commission adopted RESOLUTION NO. 19-04: ADOPTING THE ADDENDUM TO THE GARBERVILLE SANITARY DISTRICT ANNEXATION PROJECT: CHANGE IN JURISDICTIONAL BOUNDARY AND PLACE OF USE FINAL RECIRCULATED INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION and RESOLUTION NO. 19-05:

AUTHORIZING THE GARBERVILLE SANITARY DISTRICT TO PROVIDE WATER SERVICES OUTSIDE THE DISTRICT BOUNDARY TO APN 222-091-015 (SOUTHERN HUMBOLDT COMMUNITY PARK). HLAFCo also filed a Notice of Determination for the Addendum dated September 23, 2019.

The District then Petitioned the SWRCB-DWR to Change the Place of Use for the District's Permit and License. The Petition was noticed and four protests were received. The District has responded to the Protestants and is awaiting receipt of the Protestant's protest dismissal conditions for each remaining issue. At the expiration of the 180-day period, June 2020, the SWRCB-DWR will determine if anything further needs to be done to dismiss the Protests should the Petitioner and Protestant not come to a resolution amongst themselves. The 2,000 cubic feet per month allocation has been included in Table 4 above.

DEVELOPMENT POTENTIAL WITHIN PLACE OF USE

As stated in the Annexation IS/MND, in addition to the existing consumption, there are vacant APNs and/or APNs that are not GSD customers and are not consuming water within the existing permit and license POUs. For the purposes of determining potential water consumption within the existing license and permit POUs, the following table document (by APN) the potential water consumption in areas within the license POU and permit POU that may be realized in the future if the parcels not currently consuming water become GSD customers.

The potential water consumption in the table is based upon the customer type and zoning, then estimates the anticipated future consumption associated with each APN. The GSD customers' billing data was separated by billing code into two categories: residential and commercial /industrial. This separated data was then averaged. The average annual demand of the GSD commercial customers is 177,500 gallons or 237 units per year. This average has been applied to the properties that are commercially or industrially zoned. The average demand of the GSD residential customers is 70,500 gallons or 94 units per year, and this average has been applied to parcels that are residentially zoned. Agricultural meters can vary widely in the amount of water used.

There could be additional development as a result of "Housing Opportunity Zones" and second dwelling units, but this is considered unlikely due to the previous development history that does not include second dwelling units in the Garberville area. There are 14 APNs within "Housing Opportunity Zones," and 10 APNs that are allowed second dwelling units (these are all within the "Housing Opportunity Zones)," and one APN with Agriculture Exclusive zoning that allows 4 single detached dwelling units. One unit exists and was connected to the system in 2019. For planning purposes, water supplies were identified to include potential second dwelling units. Assuming that most second dwellings units are equivalent to an apartment type user, Metcalf & Eddy's estimates that apartment flows are approximately 93% of the average residential house. Using this ratio, the equivalent consumption per second dwelling unit would be 65,465 gallons per year. These locations are shown in yellow on both Figure 2A and 2B in Attachment 1.

When the parcel is unconnected **and** has an HOZ/second dwelling unit possibility, both turquoise and yellow are applied and they appear green.

The table below lists those APNs and estimates the future potential water consumption for each parcel and a brief description of the type of development anticipated on the parcel. None of these parcels have any indication that this potential development will actually occur in the near

future, or ever, but the water is allocated so that their right to develop in this manner and have water service is generally reserved.

Figure 2A and 2B (in Attachment 1) illustrate in turquoise, the APNs within the Place of Use that are not consuming water as of 2019.

Table 5. Potential Future Development within POU - Unconnected as of 12/31/19

APN	Potential Development Description	Estimated Future Water Consumption (gallon/year)	Conn Fee Paid?	In IS/MND?
032-042-017	Commercial	177,500	N	Y
032-102-028	SFR	70,500	N	Y
032-121-019	Commercial	177,500	N	Y
032-121-020	Commercial	177,500	N	Y
032-171-022	SFR	70,500	N	Y
032-171-023	SFR	70,500	N	Y
032-171-024	SFR	70,500	N	Y
032-211-003	HOZ/Second Dwellings	65,465	N	Y
032-211-010	HOZ/Second Dwellings	65,465	N	Y
032-211-012	HOZ/Second Dwellings	65,465	N	Y
032-211-034	SFR + HOZ/Second Dwellings	135,965	N	Y
032-211-015	HOZ/Second Dwellings	65,465	N	Y
032-211-018	SFR + HOZ/Second Dwellings	135,965	N	Y
032-211-021	SFR + HOZ/Second Dwellings	135,965	N	Y
032-231-016	RESIDENTIAL	70,500	N	Y
032-231-028	RESIDENTIAL	70,500	N	Y
032-231-043	RESIDENTIAL	70,500	N	Y
032-231-045	Has Shops	177,500	N	Y
032-231-053	RESIDENTIAL	70,500	N	Y
032-231-054	RESIDENTIAL	70,500	N	Y
032-231-056	RESIDENTIAL	70,500	N	Y
222-091-011	3 SFR (the 4 th connected in 2019)	211,500	N	Y
032-111-019	Burn Down; 821 Locust St.	70,500	N/A	Existing
222-156-014	SFR	70,500	N	Y
222-156-015	SFR	70,500	N	Y
222-156-019	Con Crk using alt source	70,500	N	Y
223-061-025	SFR (was APN 222-156-012)	70,500	N	Y
223-061-034	HOZ/Second Dwellings	65,465	N	Y
223-171-002	COMMERCIAL	177,500	N	Y
223-171-007	COMMERCIAL	177,500	N	Y
223-181-012	RESIDENTIAL	70,500	N	Y
223-181-017	RESIDENTIAL	70,500	N	Y

APN	Potential Development Description	Estimated Future Water Consumption (gallon/year)	Conn Fee Paid?	In IS/MND?
223-181-020	RESIDENTIAL	70,500	N	Y
223-181-031	HOZ/Second Dwellings	65,465	N	Y
223-181-043	HOZ/Second Dwellings	65,465	N	Y
223-181-044	HOZ/Second Dwellings	65,465	N	Y
223-183-010	RESIDENTIAL	70,500	N	Y
	Total for Section	3,547,615		

ANALYSIS OF DIVERSIONS AND DEVELOPMENT POTENTIAL

Using 1977 - 2018 average of 61,381,523. Then adding the estimated water consumption for the potential development in Table 1 for undeveloped and under-developed parcels plus future water consumption for recent county referral projects from Table 3, the total estimated average annual water diversion would be 66,190,430. See Table 5 below for details.

Table 5. Total Estimated Annual Water Diversion Needs

DESCRIPTION	AMOUNT Gallons per Year
1977 - 2019 average water diversion	61,288,233
Undeveloped and under-developed (Table 4)	3,547,615
Approved Projects unconnected as of 12/31/19 (Table 3)	749,162
Total estimated annual water diversion needed	65,585,010

This water diversion needed can be collected from any combination of the South Fork Eel River diversion and/or the Tobin Well. The total estimated annual water diversion needed can be easily diverted from the river with the Tobin well remaining as a backup water supply when river water quality is poorer than desirable for treatment at the new SWTP.

Projects under consideration could total 14,414,990 gallons per year and still stay under the 80 million gallon annual maximum. Some cushion needs to be maintained as this analysis is based upon AVERAGE annual flows. Conservatively keeping 5 million gallons per year as a buffer would still leave 9.4M gallons of available water capacity for future projects.

FINAL SUMMARY

After evaluating the capacity of each water source, the water diversions over the past 40 years, the future development potential within the place of use, and the projects both approved and under consideration, there are adequate water sources to serve all these purposes as well as possible additional development within the POU or future annexations to the POU and jurisdictional boundary.

ATTACHMENT 1

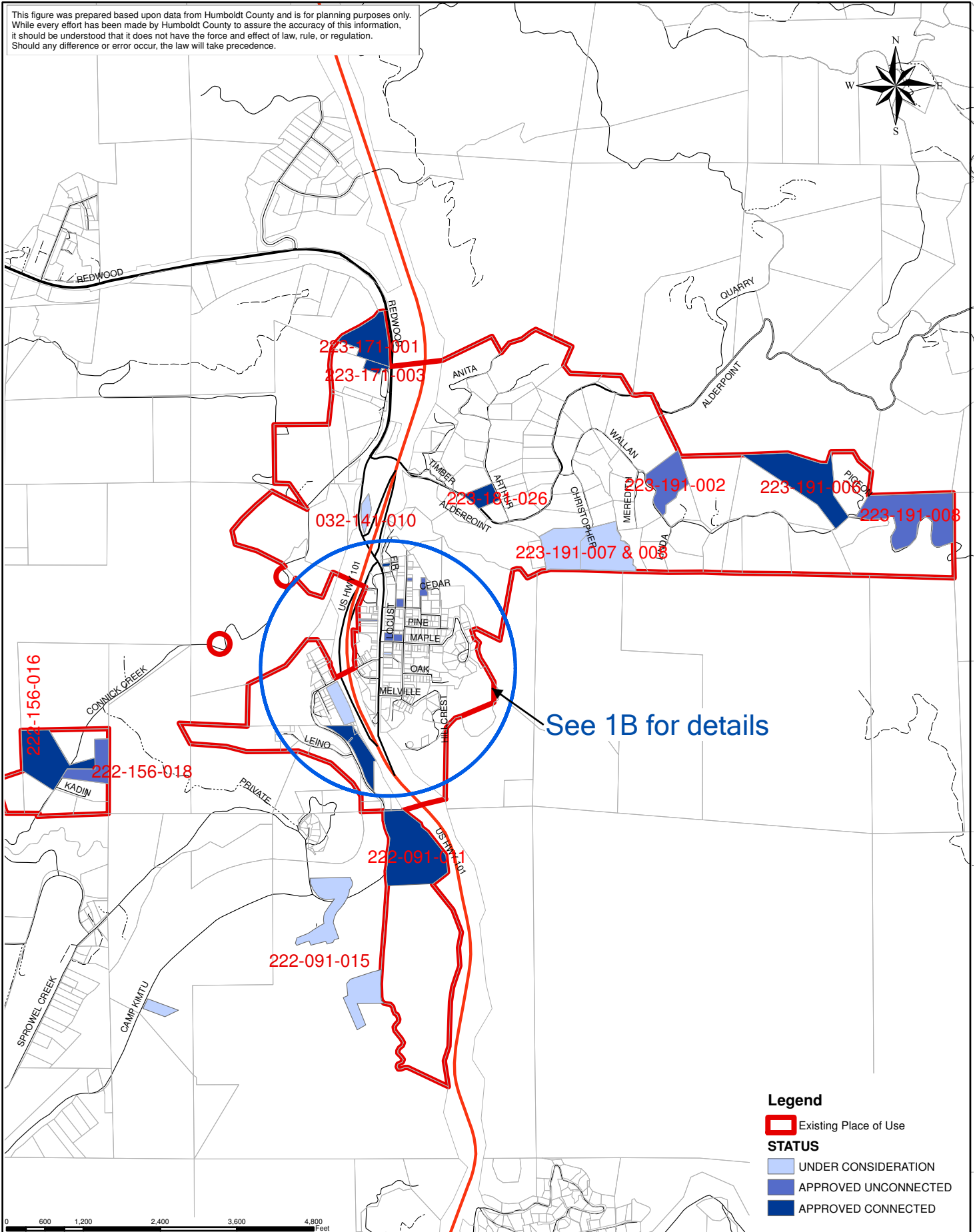
Figure 1A. Status of Projects as of 12/31/19 - Overview

Figure 1B. Status of Projects as of 12/31/19 - Downtown

Figure 2A. Undeveloped or Under-developed Parcels - Overview

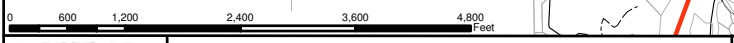
Figure 2B. Undeveloped or Under-developed Parcels - Downtown

This figure was prepared based upon data from Humboldt County and is for planning purposes only. While every effort has been made by Humboldt County to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.



Legend

- Existing Place of Use
- STATUS**
- UNDER CONSIDERATION
- APPROVED UNCONNECTED
- APPROVED CONNECTED

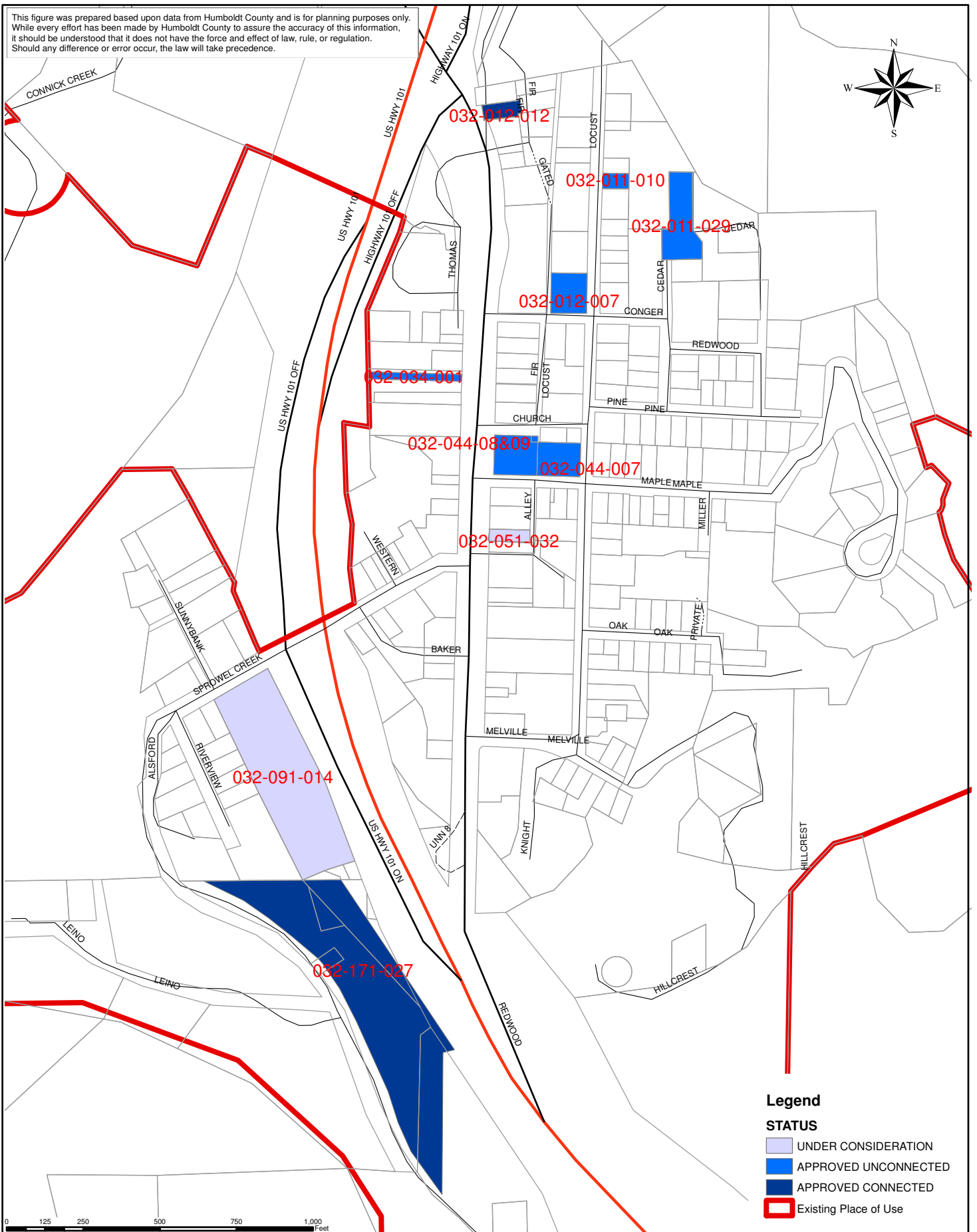
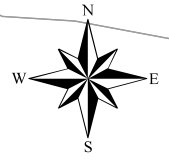


Water Capacity Report
 Garberville Sanitary District (707) 923-9566

PROJECT STATUS AS OF 12/31/19
 SCALE: 1:24,000 DRAWN BY: J. SHORT DATE: 03/18/2020

Figure
1A

This figure was prepared based upon data from Humboldt County and is for planning purposes only. While every effort has been made by Humboldt County to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.



Legend

STATUS

- UNDER CONSIDERATION
- APPROVED UNCONNECTED
- APPROVED CONNECTED
- Existing Place of Use

0 125 250 500 750 1,000 Feet

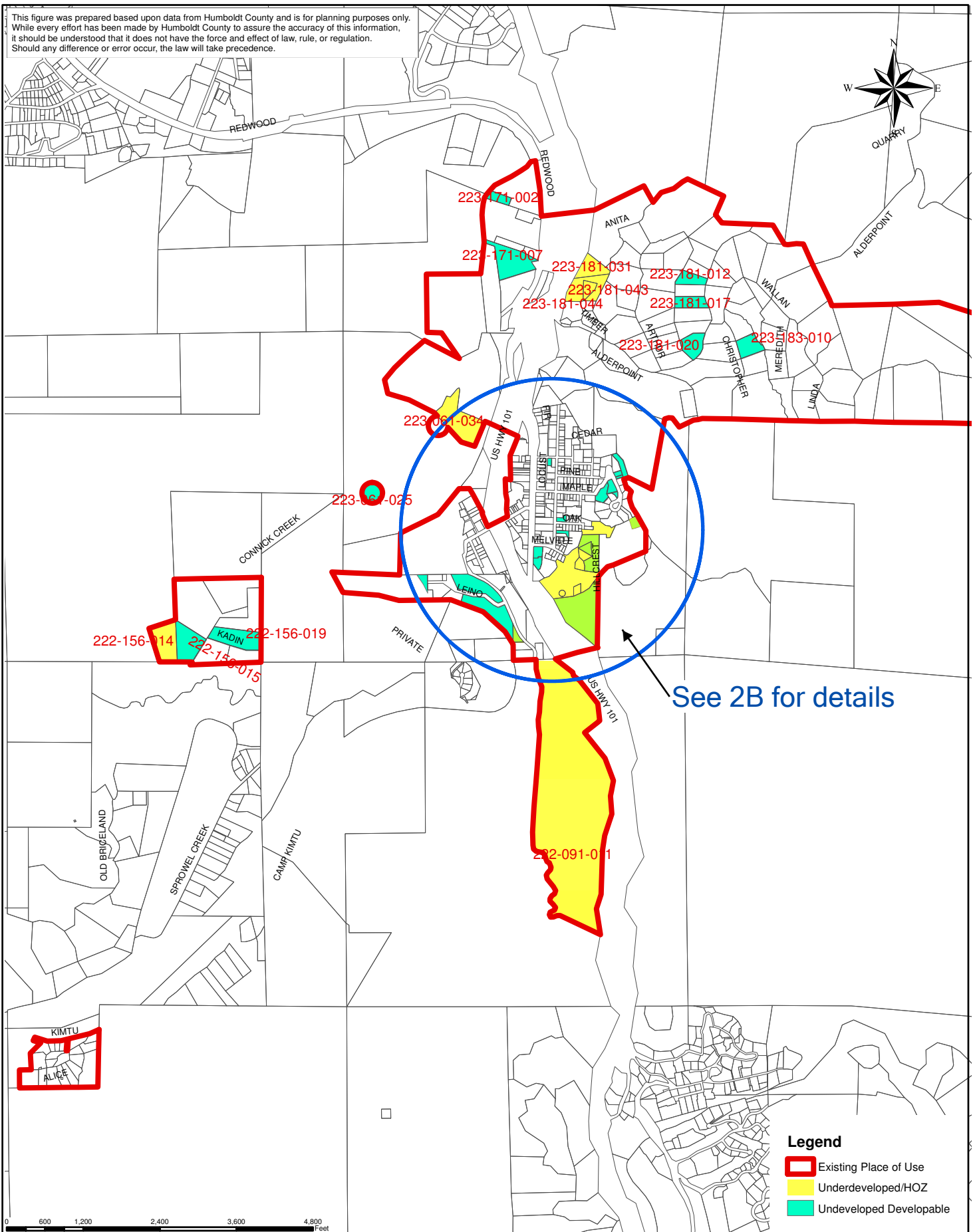


Water Capacity Report
 Garberville Sanitary District (707) 923-9566

PROJECT STATUS AS OF 12/31/19
 SCALE: 1:5,000
 DRAWN BY: J. SHORT
 DATE: 03/18/2020

Figure
1B

This figure was prepared based upon data from Humboldt County and is for planning purposes only. While every effort has been made by Humboldt County to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.



- Legend**
- Existing Place of Use
 - Underdeveloped/HOZ
 - Undeveloped Developable

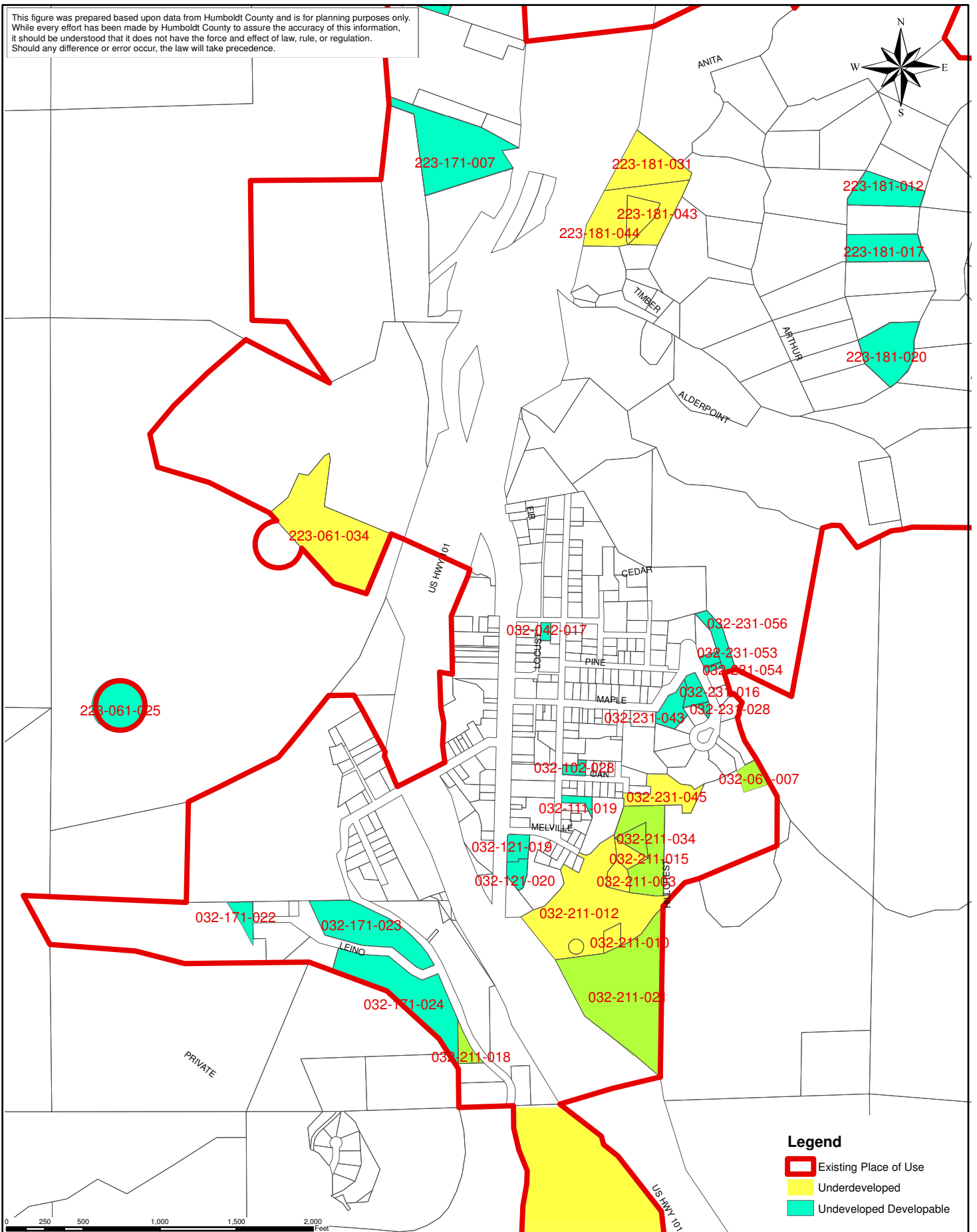
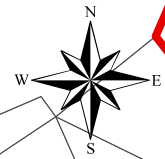


Water Capacity Report
 Garberville Sanitary District (707) 923-9566

Undeveloped or Under-developed Parcels
 SCALE: 1:24,000
 DRAWN BY: J. SHORT
 DATE: 03/18/2020

Figure
2A

This figure was prepared based upon data from Humboldt County and is for planning purposes only. While every effort has been made by Humboldt County to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.



Legend

- Existing Place of Use
- Underdeveloped
- Undeveloped Developable



Water Capacity Report
 Garberville Sanitary District (707) 923-9566

Undeveloped or Under-developed Parcels
 SCALE: 1:10,000
 DRAWN BY: J. SHORT
 DATE: 03/18/2020

Figure
2B

Path: C:\Users\vennie\Documents\ArcGIS Data\Projects\WaterCapacity\WaterCap_Fig2B_UN-UNDERDEVELOPED.mxd Date: 3/19/2020

Attachment 2

Documents for Projects Under Consideration

Emerald Triangle Group

SHCP

New Hospital at CR site Phase 1

SoHum Inn: 17 Unit Hotel with cannabis Dispensary

Schaible - SFR add to Exist Cannabis

Ag Meter - Cohn (Exist)



Garberville Sanitary District
PO Box 211
919 Redwood Dr.
Garberville, CA. 95542
Office(707)923-9566 Fax(707)923-3130

CONDITIONAL WILL SERVE AGREEMENT
FOR AGRICULTURAL WATER USE

DATE: 8-19-19

CUSTOMER NAME: Emerald Triangle Group

CONTACT INFORMATION:

PHYSICAL ADDRESS: 825, 827 Redwood Dr

MAILING ADDRESS: PO Box 262 Alderpoint CA 95511

Email: coach@thehumboldtcare.com

Phone #(Home) 707 951 4427 (Business) 707 951 7185

Cell Phone# _____

Do you prefer calls or texts? texts

EMERGENCY CONTACT PERSON: Leeana Schultz

Phone # 707 616 3778

DESCRIBE COMMERCIAL ACTIVITY

BUSINESS NAME: Emerald Triangle Group

BUSINESS ADDRESS: 825, 827 Redwood Dr

PRODUCTS TO BE CULTIVATED, MANUFACTURED OR DISPENSED:

Floor, Bubble bath, tape, PPS

TOTAL SQUARE FOOTAGE OF "IRRIGABLE" LAND UNDER CULTIVATION:

2,000

ESTIMATED WATER USE DEMANDS IN GALLONS PER MONTH AND YEAR:

10,000 - 20,000

GARBERVILLE SANITARY DISTRICT AGREEMENT

Garberville Sanitary District agrees to provide water/sewer service for commercial agricultural, manufacturing, research or distribution at

(ADDRESS) 825, 827 Redwood Dr

(APN#) _____ as long as water is monitored monthly through a separate Garberville Sanitary District approved water meter.

REQUIREMENTS NOW AND IN THE FUTURE:

1. Customer pays a new \$8,000 connection fee for agricultural water meter.
2. Install an agricultural water meter approved by GSD Manager or designee.
3. Provide a site plan.
4. Provide an operational plan.
5. Provide a copy of your County application or permit.
6. Fill out annual GSD application for reporting and monitoring.
7. Include \$150 with annual application for handling and site visit from GSD management.
8. Comply with all water ordinance conditions and requirements now and in the future.
9. Provide annual reconciliation report for water use efficiency.
10. Notify Garberville Sanitary District of any changes in agreement or water use demands.
11. Customer to pay \$8,000 connection fee for sewer service if required by GSD staff.
12. Customer to install an approved backflow device if required by GSD staff.
13. Lab testing of sewer collection waste must meet GSD requirements prior to acceptance into the sewer collection system.
14. A storage tank must be installed to hold wastewater until lab results have been approved by GSD staff.
15. All chemicals used and the process of cultivation or manufacturing must be provided.
16. The approved cannabis permit must be provided to GSD once received.
17. Water usage must be provided so GSD can determine what upgrades must be made with all expenses paid by applicant.

If the above requirements and conditions are not met, this “Will Serve” letter will be revoked and the commercial agricultural water meter will be turned off and locked out until compliance is achieved and approved by the General Manager or designee.

CHECK EVERY BOX THAT APPLIES:

- I am providing accurate information.
- I will only use GSD water as stated in this agreement.
- I have read this agreement and agree to the terms, conditions and requirements.
- I understand that violation of this agreement will result in termination of water service.
- I have a County approved permit or have a permit pending.

****Please contact Garberville Sanitary District for questions or clarification****

GSD Board Requirements:

1. Sewer line shall be installed independent of other businesses or buildings
2. An approved GSD valve will be added to the waste discharge tank prior to entering the collection system.
3. GSD will do all sampling of waste discharged from the storage tank
4. ~~Two~~ ^{one} additional water meters with ~~\$16,000~~ ^{8,000} total connection fees must be received prior to construction. *RE*
5. ~~Two~~ ^{one} sewer connection fees of ~~\$16,000~~ ^{8,000} total must be received prior to construction. *RE*

APPROVED BY:

Ralph Emerson

Ralph Emerson

Date 9/19/19

General Manager

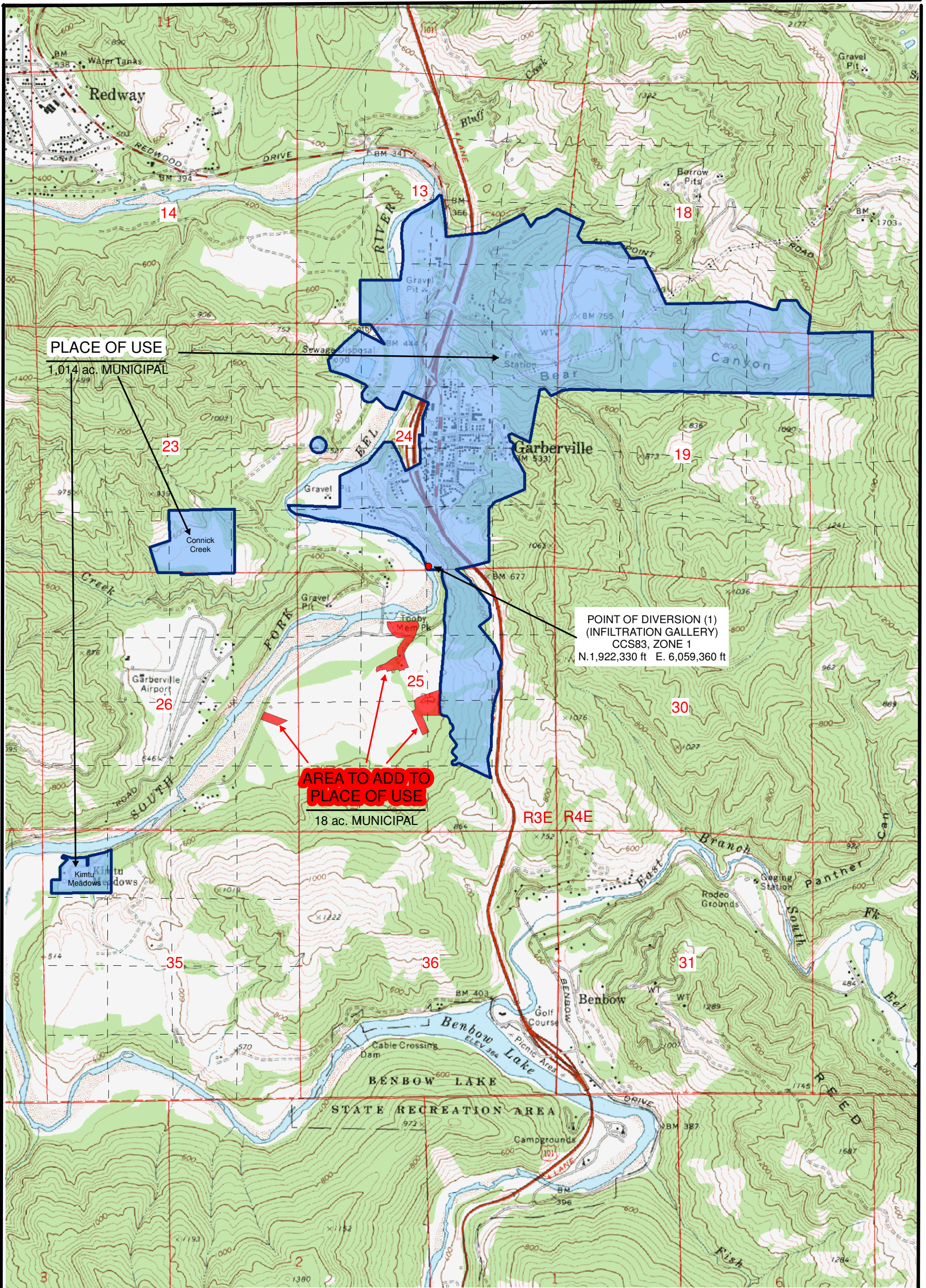
Garberville Sanitary District

Owner-Applicant Signature:

[Signature]

Date:

9-19-19



OWNER	GARBERVILLE SANITARY DISTRICT		STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY	
SOURCE	SOUTH FORK EEL RIVER		STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS	
POINT OF DIVERSION	SW 1/4 OF SE 1/4 OF PROJECTED SECTION 24, T4S, R3E, HB&M		APPLICATION NO.	9686 29981
WITHIN	SW 1/4 OF SE 1/4 OF PROJECTED SECTION 24, T4S, R3E, HB&M		PERMIT NO.	5487 20789
COUNTY OF	HUMBOLDT		LICENSE NO.	3404
U.S.G.S. QUAD:	GARBERVILLE	DATE:	1970	SCALE: 1:24,000
		DATE:	07-31-2019	DRAWN: JENNIE SHORT
				CHECKED:

DRAFT

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.



March 11, 2019

8609.03

Garberville Sanitary District
P.O. Box 211
Garberville, California 95542

Attention: Ralph Emerson, General Manager

Subject: Preliminary Water and Wastewater Usage Estimates
Facility Expansion Project
Southern Humboldt Community Healthcare District (SHCHD)
286 Sprowl Creek Road, Garberville, Humboldt County, California
Assessor's Parcel Numbers (APNs) 032-091-014, 032-091-016, 032-091-018,
and 032-091-019

Dear Mr. Emerson:

The Southern Humboldt Community Health District (SHCHD) is proposing to build a new 15-bed hospital and medical clinic facility at the properties identified as Assessor's Parcel Numbers (APNs) 032-091-014, 032-091-016, 032-091-018, and 032-091-019, located at 286 Sprowl Creek Road in the unincorporated community of Garberville in Humboldt County, California (Site; see Figure 1). The properties, totaling approximately 3.25 acres in size, are located adjacent to Highway 101. The proposed facility, to replace the existing Jerold Phelps Community Hospital and Southern Humboldt Community Clinic, currently located at 733 Cedar Street (APNs 032-011-027 and 032-133-003) in Garberville, will contain 15 overnight hospital beds, along with specialized facilities for women's health, radiology, fluoroscopy, ultrasound, quarantine, two operating rooms, and an emergency department (see Figure 2).

LACO Associates (LACO), on behalf of SHCHD, submitted a "will-serve" request to the Garberville Sanitary District (GSD or District) on August 28, 2018, to determine if GSD has sufficient water and wastewater capacity to support the proposed project. On September 18, 2018, a response was received from GSD, in which additional information on the proposed project's anticipated water and wastewater needs was requested. In order to provide appropriate information to the District, SHCHD has retained LACO to develop estimates for drinking water demand and wastewater production at the new facility.

Estimation Methods

LACO used the Equivalent Dwelling Unit (EDU) estimation method for water and wastewater flows at the Site. The most recent set of facility plans were analyzed for usage types, and converted to either area-based (square footage) or unit-based wastewater production estimates. The draft Garberville Sanitary District EDU table, provided by the District on December 13, 2018 (see Appendix 1), was used for this conversion.

According to industry convention, a drinking water estimate was created using the "90 Percent Rule", wherein wastewater is assumed to account for approximately 90 percent of drinking water usage, allowing for an estimate of water usage based on wastewater production.

The EDU table provided by GSD includes distinct estimates of usage for hospitals, doctor's offices, meeting rooms, other office space, and dining/vending areas. As this is a multi-use facility, using a conventional

21 W. Fourth Street Eureka, CA 95501 707 443-5054 - Fax 707 443-0553	776 S. State Street, Suite 102A Ukiah, CA 95482 707 462-0222 - Fax 707 462-0223	3450 Regional Parkway, Suite B Santa Rosa, CA 95403 707 525-1222 - Fax 707 545-7821	932 B W. Eighth Avenue Chico, CA 95926 530 801-6170 - Fax 707 462-0223
--	---	---	--

calculation based on one or two factors alone (i.e. number of hospital beds) may be a significant underestimate of actual usage. To this end, both a conservative (high) estimate and a conventional (low) estimate are provided below.

All calculations were performed within a Microsoft Excel® spreadsheet and will be provided in electronic format as needed.

Assumptions, Conventions, and Exclusions

The following assumptions were made in the process of calculating these estimates:

- "Warm shell" space will be used as general office space in the future
- Water usage for irrigation at the site is based on location and an estimate of irrigable area using the University of California Center for Landscape & Urban Horticulture Landscape Water Use Calculator
- Food will be prepared outside the hospital facility, and in the accessory building, and no formal cafeteria will exist (beyond vending machines)
- All space in the accessory (existing) 10,000 square foot building external to the approximately 2800 sf kitchen prep area will be used as office space or similar
- As a convention, all multipliers are rounded up if based on fractional components
- Each office space is considered separately for the conservative estimate, leading to a higher expected usage

Calculations

An example calculation is provided below to show methodology used:

For office space, measured in square feet, the consumption factor is calculated based on a minimum/base amount for the first 1,000 sf, and then incrementally increasing thereafter at a rate of 0.5 per 1,000 square feet. Related to the proposed project, the office space is 1,188 square feet, which is between 1,000 and 2,000 square feet, so a consumption factor of 1.5 is applied. With an EDU estimate of 200 gallons per day, this produces an estimated 300 gallons of wastewater per day, as shown in Table 1, below.

Table 1. Calculation Method Example

Description	Type	Total	Unit	Consumption Factor	Note/unit	Consumption Strength Multiplier	EDUs	Waste (gpd)
Upper Floor Office (Lab office, central/registration office, IT office)	Office	1,188	square feet (sf)	1.5	1 for first 1,000 sf, 0.5 for each 1,000 sf following	1	1.5	<u>300</u>

This wastewater estimate is then converted to a drinking water demand using the 90 Percent Rule:

$$\text{Water Demand (gpd)} = \text{Wastewater Produced (gpd)} / 0.9$$

$$\text{Water Demand} = 300 / 0.9 = \underline{333 \text{ gallons per day}}$$

Water and Wastewater Usage Estimates

Accessory Building and Other Uses Estimate

In addition to the new clinic and hospital buildings, an existing building will be renovated on-site to accommodate a kitchen for the hospital, administration offices, and education and other community services offices. The uses within this building were estimated based on the estimated size of the kitchen (approx. 2,800 square feet, according to the conceptual site plan) and the existing building square footage (10,000 square feet).

These estimates most likely reflect current demand at the Site and would be important in the case that only one service line will feed the Site, which will be upgraded from the existing line.

Irrigation demand is also considered as an accessory estimate due to the fact that planned landscaping around the new building will cover less area than is currently existing on the parcel and may be negligible

Table 2, below, provides the project's accessory uses and estimated wastewater production and potable water demand, in gallons per day (gpd).

Table 2. Accessory Uses Estimate

Accessory Area	Wastewater Production (gpd)	Potable Water Demand (gpd)
Kitchen	750	830
Office spaces	900	1000
Irrigation	-	730
Total	1,650	2,560

Conservative Estimate

As described above, the conservative estimate is intended to provide a likely high estimate for water use and wastewater production at the Site. The conservative estimate for the proposed project is provided in Table 3, below.

Table 3. Conservative Estimate

Description	Wastewater Production (gpd)	Potable Water Demand (gpd)
Conservative Estimate for Hospital and Clinic	11,100	12,300
Conservative Estimate including Accessory Uses	12,800	14,900

Conventional Estimate

As described above, the conventional estimate, provided in Table 4, below, is intended to provide a likely low estimate for water use and wastewater production at the Site. This estimate is based entirely off the number of hospital beds (hospital) and expected number of doctors (clinic), and assumes all other facilities are included in these EDUs.

Table 4. Conventional Estimate

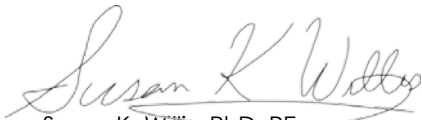
Description	Wastewater Production (gpd)	Potable Water Demand (gpd)
Conventional Estimate for Hospital and Clinic	7,700	8,600
Conventional Estimate including Accessory Uses	9,400	11,200

Conclusion

Based on LACO's calculations, the proposed project is anticipated to generate between 9,400 and 12,800 gpd of wastewater and require between 11,200 and 14,900 gpd of potable water. The wastewater usage and water demand estimate calculation tables are included in Appendix 2 of this letter.

Please do not hesitate to contact me at (707) 525-1222 or willis@lacoassociates.com, should you have any questions or require further information.

Sincerely,
LACO Associates



Susan K. Willis, PhD, PE
Civil Engineering Department Manager

Enclosures

Cc: Kent Scown, COO, Southern Humboldt Community Healthcare District

FIGURES

Figure 1: Location Map

**Figure 2: Draft Site Plan, Plausible Layout, and Size
Estimates**

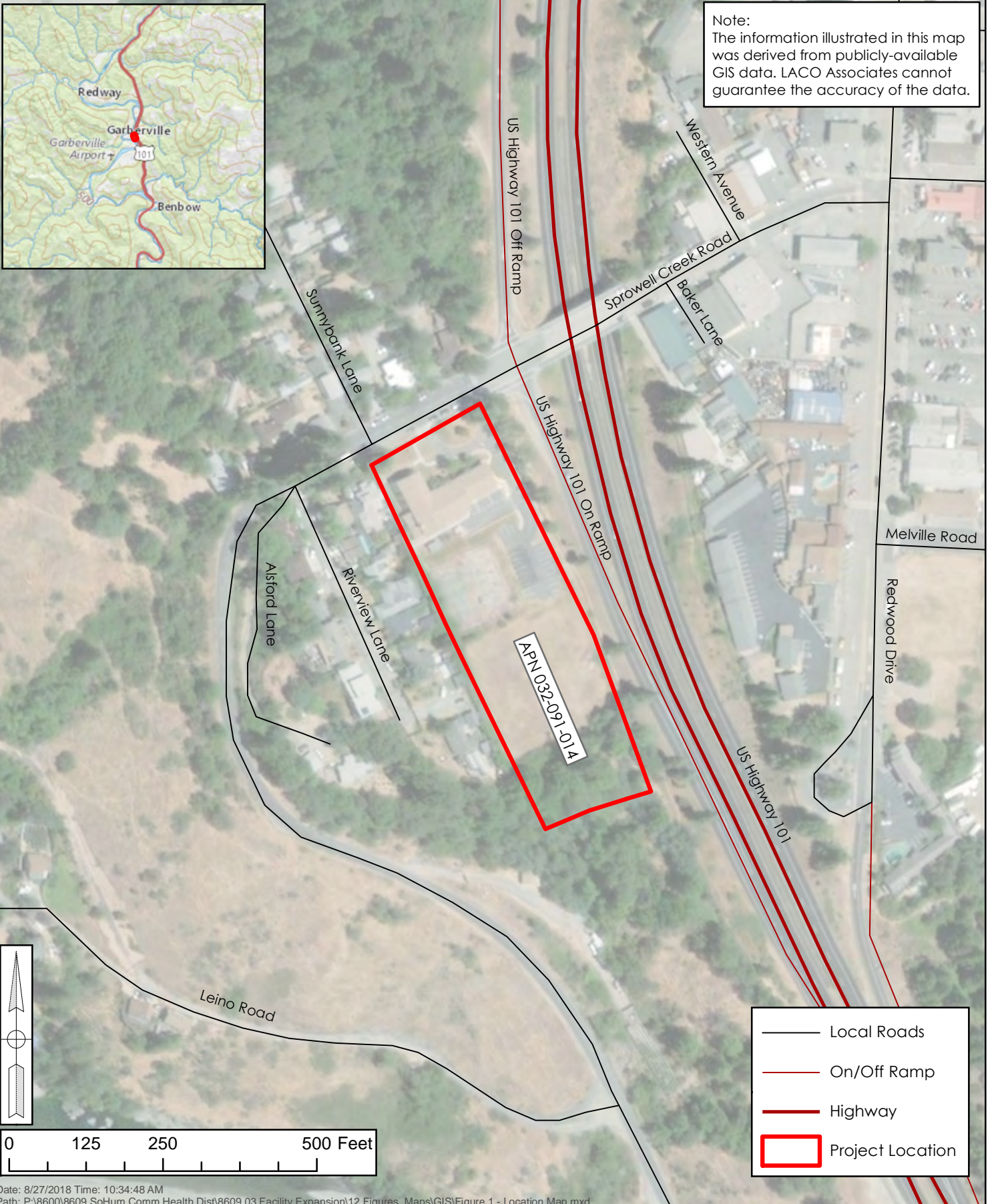
LACO

EUREKA • UKIAH • SANTA ROSA

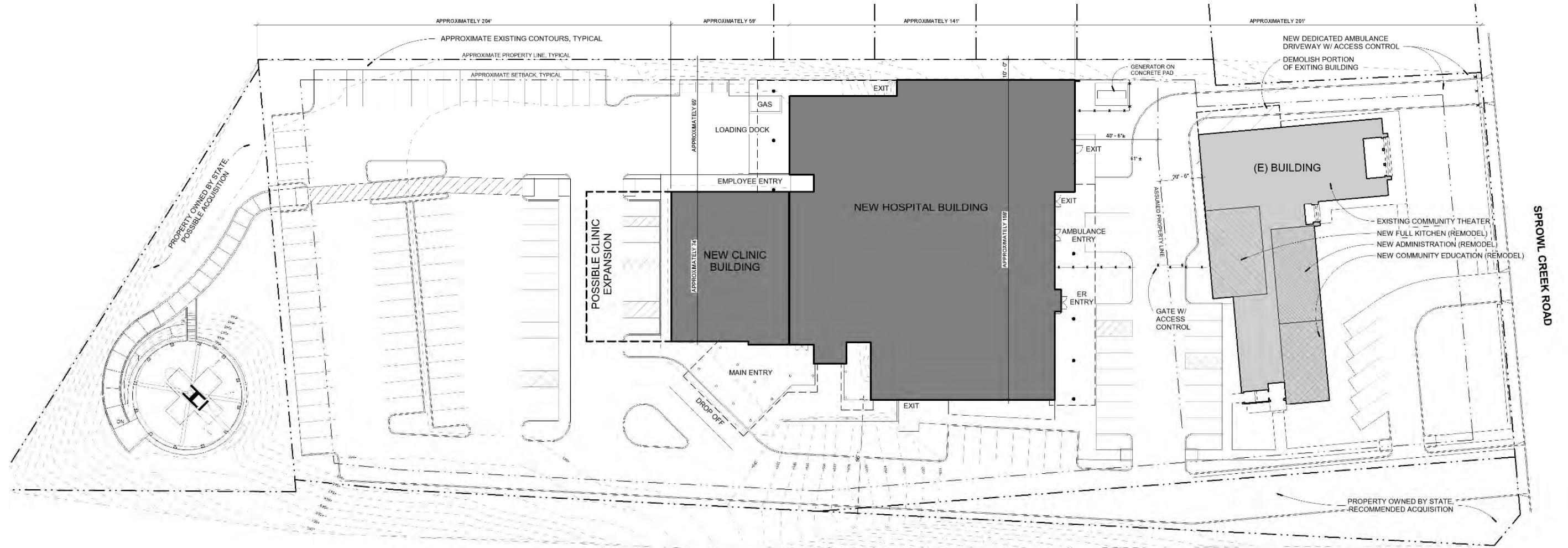
1-800-515-5054 www.lacoassociates.com

PROJECT	SHCHD FACILITY EXPANSION	BY	IMH/CMB	FIGURE	1
CLIENT	SO. HUM. COMMUNITY HEALTHCARE DISTRICT	CHECK	MMM	JOB NO.	8609.03
LOCATION	286 SPROWL CREEK ROAD, GARBERVILLE, CA	DATE	8/27/2018		
LOCATION MAP					

REUSE OF DOCUMENTS: This document and the ideas and design incorporated herein, as an instrument of professional service, is the property of LACO Associates and shall not be reused in whole or part for any other project without LACO Associates express written authorization.



Conceptual Site Plan - 286 Sprowl Creek Rd, Garberville CA, Humboldt County

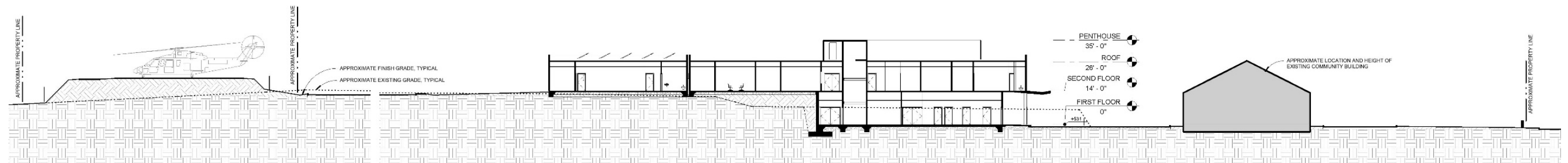


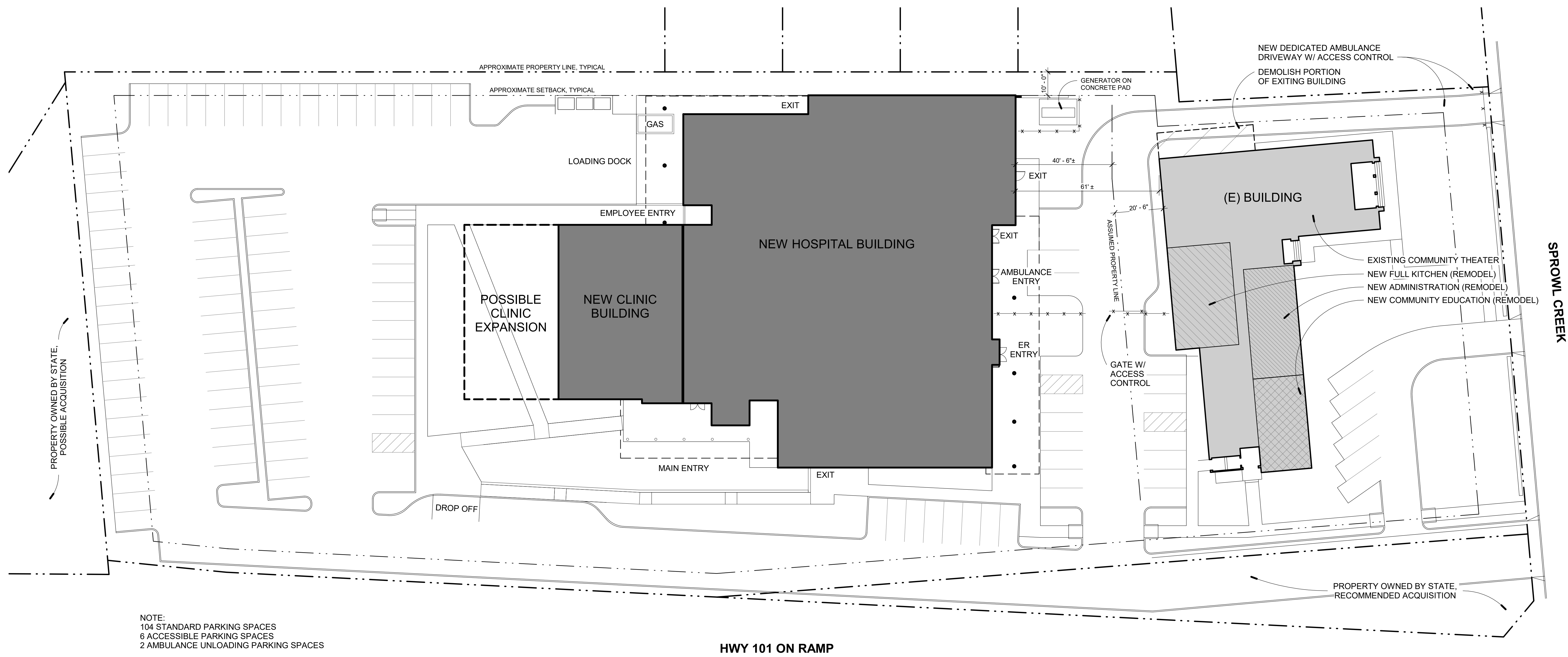
NOTE:
 100± STANDARD PARKING SPACES
 6 ACCESSIBLE PARKING SPACES
 2 AMBULANCE UNLOADING PARKING SPACES

CONCEPTUAL MATERIALS:
 ROOF: CLASS 'A' FIRE RESISTIVE SBS WITH GRANULATED CAP SHEET (BUILT UP ROOF) OR SINGLE PLY MEMBRANE ROOF
 EXTERIOR WALLS: CEMENT PLASTER, METAL PANELS, OR WOOD OVER FIRE RATED GYPSUM BOARD WITH TEMPERED GLAZING TO MEET WILDLAND FIRE INTERFACE REQUIREMENTS AND ONE-HOUR FIRE RESISTANCE RATING.

HWY 101 ON RAMP

Conceptual Site Section





NOTE:
 104 STANDARD PARKING SPACES
 6 ACCESSIBLE PARKING SPACES
 2 AMBULANCE UNLOADING PARKING SPACES

SITE PLAN
 1" = 20'-0"



2024 HOSPITAL BUILDING AND CLINIC

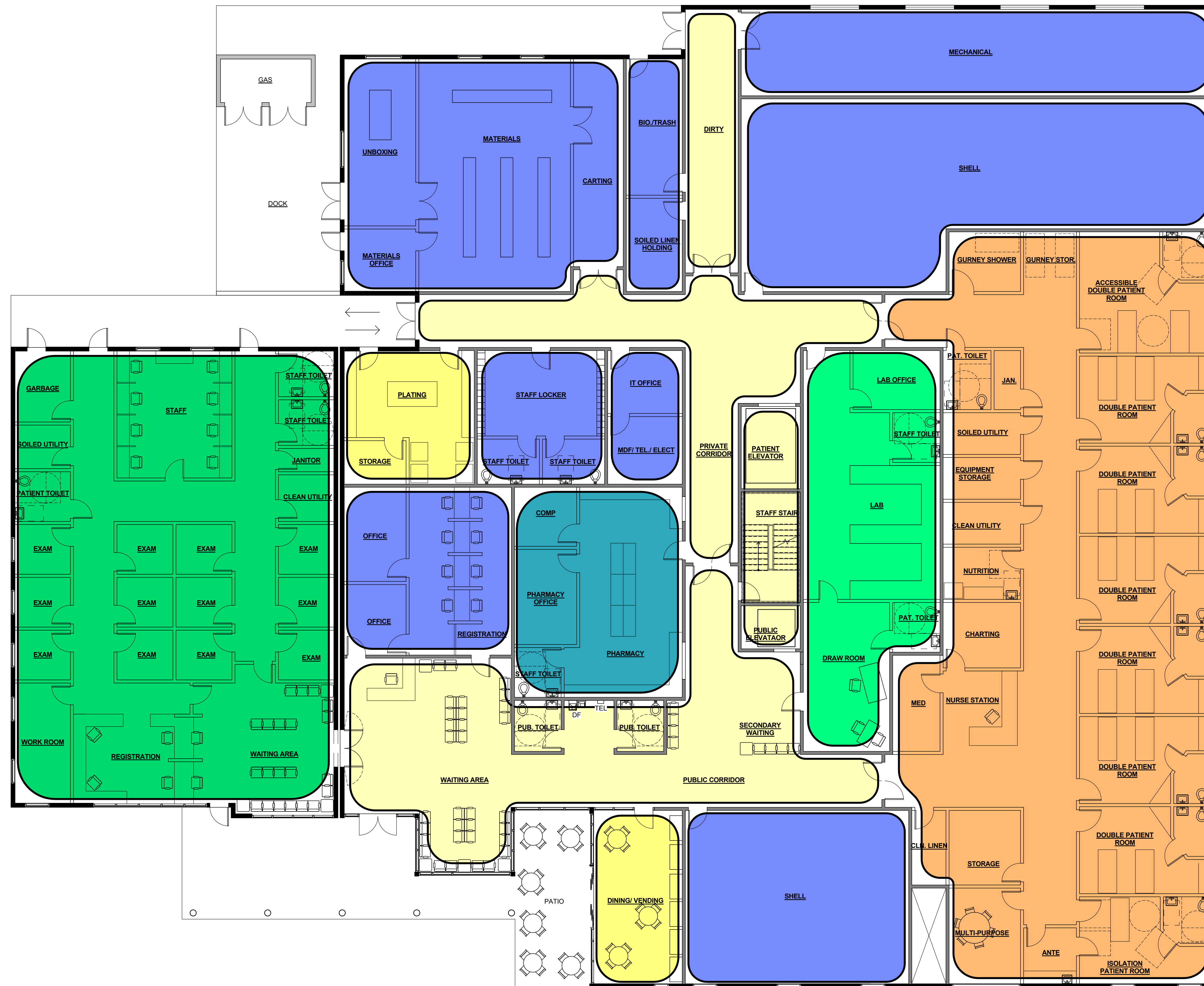
286 SPROWL CREEK ROAD

PLAUSIBLE SITE LAYOUT

GARBERVILLE, CALIFORNIA



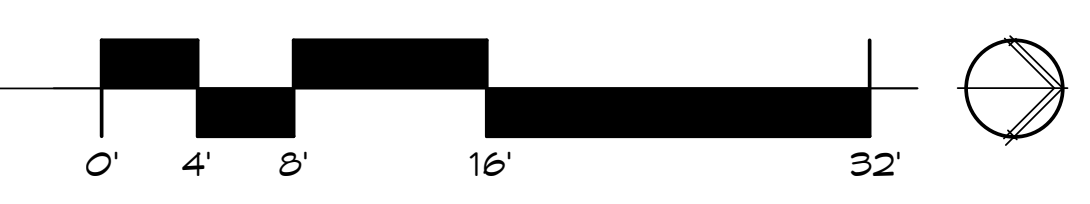
FEBRUARY 16th, 2017



- EGRESS
- NURSING
- OR
- ANESTHESIA
- RADIOLOGICAL
- LAB
- PHARMACEUTICAL
- DIETETIC
- SUPPORT
- EMERGENCY DEPARTMENT

AREA:
 CLINIC = 3,900±
 HOSPITAL = 32, 600SF± (INCLUDING 2,900± SF OF WARM SHELL SPACE)
 UPPER = 20,000±
 LOWER = 12,600±

UPPER FLOOR PLAN
 1/8" = 1'-0"



2024 HOSPITAL BUILDING AND CLINIC

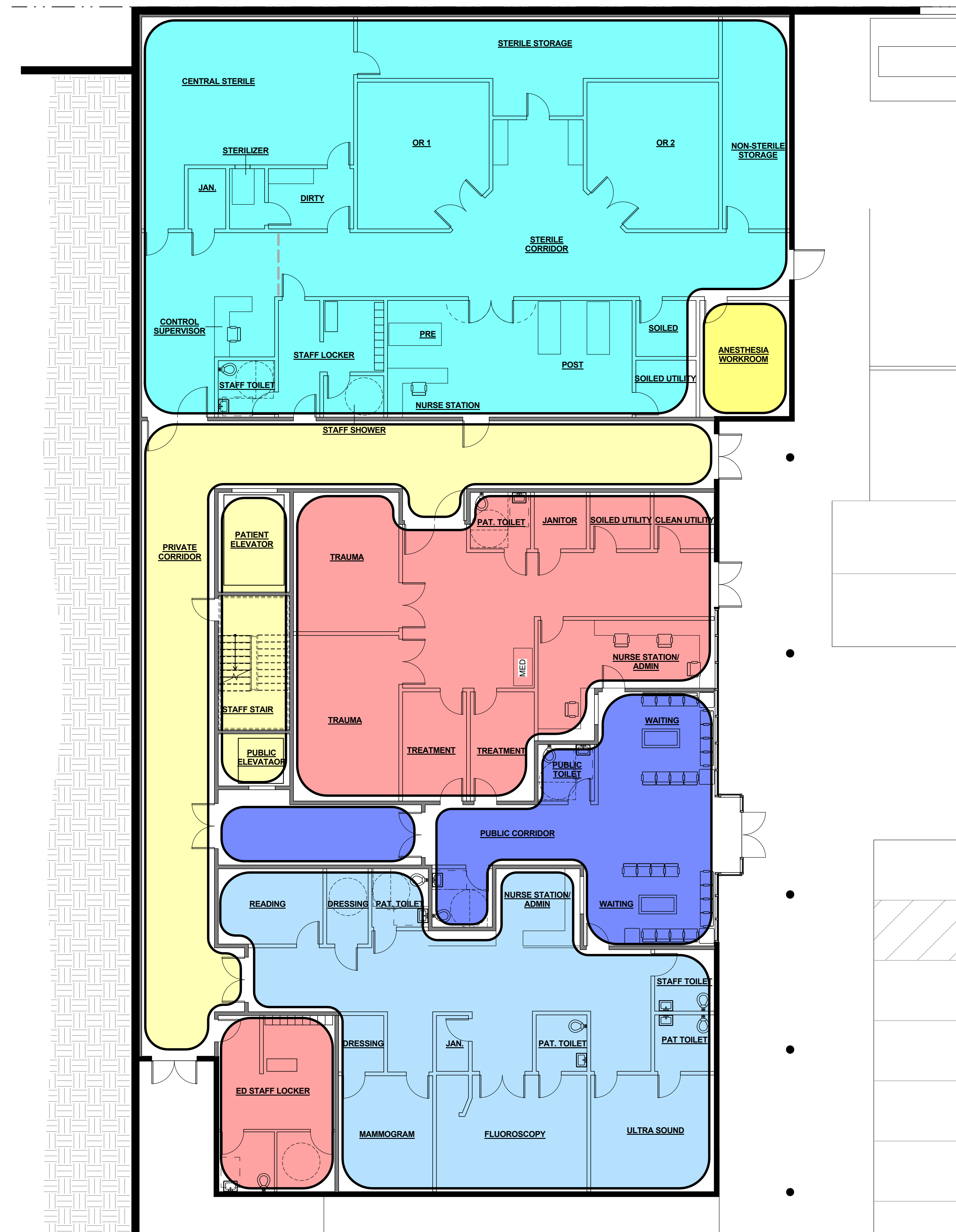
286 SPROWL CREEK ROAD

PLAUSIBLE FLOOR PLAN LAYOUT

GARBERVILLE, CALIFORNIA

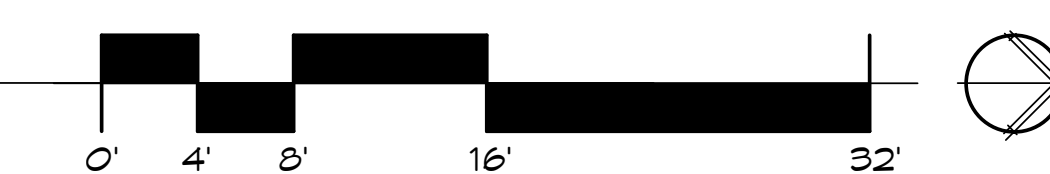


FEBRUARY 16th, 2017



- EGRESS
- NURSING
- OR
- ANESTHESIA
- RADIOLOGICAL
- LAB
- PHARACEUTICAL
- DIETETIC
- SUPPORT
- EMERGENCY DEPARTMENT

LOWER FLOOR PLAN
1/8" = 1'-0"



2024 HOSPITAL BUILDING AND CLINIC

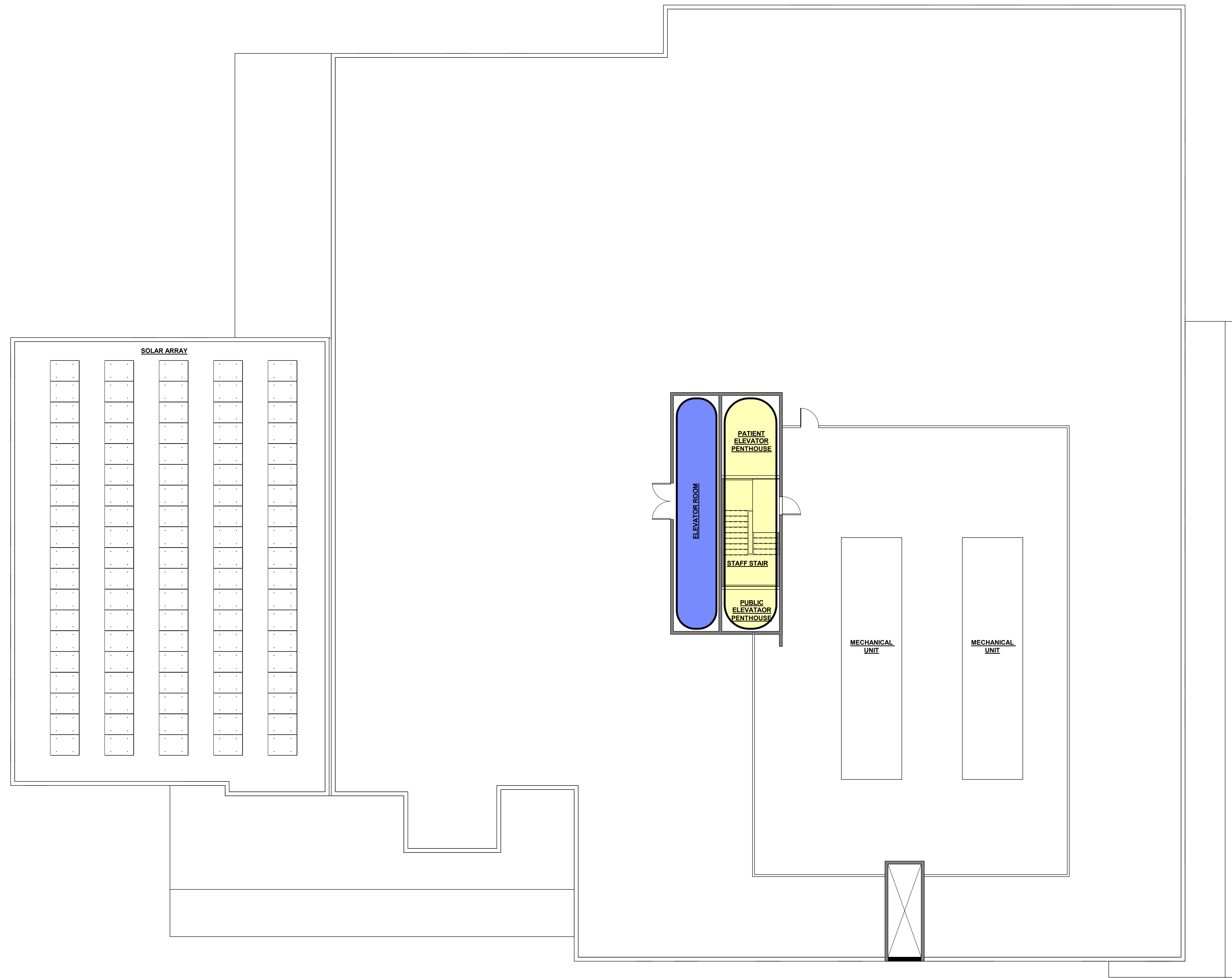
286 SPROWL CREEK ROAD

GARBERVILLE, CALIFORNIA

PLAUSIBLE FLOOR PLAN LAYOUT

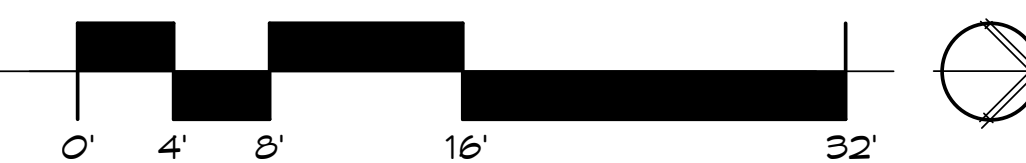


FEBRUARY 16th, 2017



- EGRESS
- NURSING
- OR
- ANESTHESIA
- RADIOLOGICAL
- LAB
- PHARACEUTICAL
- DIETETIC
- SUPPORT
- EMERGENCY DEPARTMENT

ROOF PLAN
1/8" = 1'-0"



2024 HOSPITAL BUILDING AND CLINIC

286 SPROWL CREEK ROAD

PLAUSIBLE ROOF LAYOUT

GARBERVILLE, CALIFORNIA



FEBRUARY 16th, 2017

Jerold Phelps Community Hospital

New Hospital

Owners Program
Required
Elective
Not Required/ Not Provided

TOTAL SPACE PROGRAM:		32,805 ± SF
Multiplicative Load factor	Load Factor	
Function Totals		25,430 ± SF
Miscellaneous	5%	1,272 ± SF
Exterior Enclosure	4%	1,017 ± SF
Circulation	20%	5,086 ± SF

x			
x			
	x		
	x		
	x		
	x		
		x	
	x		
	x		
	x		
	x		
	x		
	x		
	x		
	x		
		x	
	x		
			x

1. Nursing Service Space	Quantity	Room SF	4,139 ± SF
Patient Rooms/Patient Toilets/Patient Showers	7	300 ± SF	2,100 ± SF
Negative pressure isolation room/Ante-room/Patient Toilet/Patient Shower	1	300 ± SF	300 ± SF
Isolation Anteroom	1	75 ± SF	75 ± SF
Nurse Station/CPR Cart Alcove	1	175 ± SF	175 ± SF
Supervisor Office/Charting	1	130 ± SF	130 ± SF
Staff Toilets M/F (Program Flex)	-	- ± SF	- ± SF
Multi Purpose Room	1	175 ± SF	175 ± SF
Exam room	0	0 ± SF	- ± SF
Clean Utility Workroom	1	80 ± SF	80 ± SF
Soiled Workroom	1	80 ± SF	80 ± SF
Medication Room/Area/Station	1	120 ± SF	120 ± SF
Clean Linen Storage (area)	1	70 ± SF	70 ± SF
Nourishment/ Ice Machine	1	100 ± SF	100 ± SF
Equipment Storage	1	80 ± SF	80 ± SF
Gurney and Wheelchair Storage	1	80 ± SF	80 ± SF
Gurney Shower	1	150 ± SF	150 ± SF
Patient Toilet	1	75 ± SF	75 ± SF
Emergency Equipment Storage (area)	1	20 ± SF	20 ± SF
Housekeeping	1	40 ± SF	40 ± SF
Protective Environment room	0	0 ± SF	- ± SF

x			
	x		
	x		
	x		
	x		
	x		
	x		
	x		
	x		
	x		

2. Surgical Service Space	Quantity	Room SF	2,766 ± SF
OR	2	400 ± SF	800 ± SF
Clean Utility	1	0 ± SF	- ± SF
Pre-op Patient Holding	1	120 ± SF	120 ± SF
Control/Supervisor Office	1	65 ± SF	65 ± SF
Sterile Area	1	650 ± SF	650 ± SF
Medication Station	1	20 ± SF	20 ± SF
Scrub Alcove	1	125 ± SF	125 ± SF
Soiled Workroom	1	60 ± SF	60 ± SF
Non-Sterile Storage	1	250 ± SF	250 ± SF

	X		
	X		
	X		
	X		
	X		

Anesthesia Workroom	1	180 ± SF	180 ± SF
Equipment Storage Room	1	50 ± SF	50 ± SF
Staff Changing/Staff Toilets/ Staff Showers, (Program Flex for single occ.)	1	260 ± SF	260 ± SF
Housekeeping	1	40 ± SF	40 ± SF
Dirty	1	40 ± SF	40 ± SF

3. Anesthesia Service Space **879 ± SF**

X			
	X		
	X		
	X		
	X		
	X		
	X		

Post Op(PACU)	1	300 ± SF	300 ± SF
Soiled Utility	1	60 ± SF	60 ± SF
Nurse Station	1	100 ± SF	100 ± SF
ice machine/ Gurney storage	1	20 ± SF	20 ± SF
Staff toilet	1	65 ± SF	65 ± SF
Waiting area	1	200 ± SF	200 ± SF
Patient changing	1	100 ± SF	100 ± SF

4. Laboratory Service Space **1,269 ± SF**

X			
	X		
		X	
		X	
		X	

Lab (Urinalysis, Blood Count, et al)	1	600 ± SF	600 ± SF
Staff Toilet	1	65 ± SF	65 ± SF
Patient Toilet	1	65 ± SF	65 ± SF
Lab Office	1	140 ± SF	140 ± SF
Draw Room	1	350 ± SF	350 ± SF

5. Radiological Imaging **1,947 ± SF**

	X		
	X		
X			
X			
X			
	X		
	X		
	X		
	X		
	X		
	X		
	X		
	X		
	X		
	X		

Nurse Station/Admin	1	140 ± SF	140 ± SF
Housekeeping	1	40 ± SF	40 ± SF
Fluoroscopy	1	300 ± SF	300 ± SF
Ultrasound/ Toilet	1	250 ± SF	250 ± SF
Mammo/ Toilet/ Dressing	1	325 ± SF	325 ± SF
Reading	1	140 ± SF	140 ± SF
Processing	1	137 ± SF	137 ± SF
Storage	1	100 ± SF	100 ± SF
Dressing	1	55 ± SF	55 ± SF
Patient toilet	2	65 ± SF	130 ± SF
Staff toilet	1	65 ± SF	65 ± SF
Waiting area	1	190 ± SF	190 ± SF

6. Pharmaceutical Service Space **884 ± SF**

X			
	X		
	X		

Pharmacy Office	1	150 ± SF	150 ± SF
Pharmacy/ staff toilet	1	600 ± SF	600 ± SF
Compounding room	1	100 ± SF	100 ± SF

7. Dietetic Service Space **1,009 ± SF**

			X
X			
	X		
	X		

Kitchen/Food Prep/Assembly and Distribution, (Program Flex)	0	0 ± SF	- ± SF
Plating Kitchen	1	225 ± SF	225 ± SF
Receiving/Control	0	0 ± SF	- ± SF
Food Storage	1	70 ± SF	70 ± SF

		X		Food service carts area	1	80 ± SF	80 ± SF	
	X			Waste Storage	1	80 ± SF	80 ± SF	
	X			Cleaning Supplies Storage	1	20 ± SF	20 ± SF	
	X			Dining	1	350 ± SF	350 ± SF	
		X		Vending	1	100 ± SF	100 ± SF	
	X			Office	1	50 ± SF	50 ± SF	
	X			Toilet/Lockers	2	75 ± SF	150 ± SF	
	X			Housekeeping	1	70 ± SF	70 ± SF	
8. Support Services								12,537 ± SF
X				Administrative Office Space/Records	1	700 ± SF	700 ± SF	
	X			Public Toilet	2	60 ± SF	120 ± SF	
	X			Waiting Area	1	525 ± SF	525 ± SF	
X				Central Sterile Supply	1	600 ± SF	600 ± SF	
	X			Soiled Work	1	90 ± SF	90 ± SF	
	X			Clean Work	1	90 ± SF	90 ± SF	
	X			Sterile Storage	1	450 ± SF	450 ± SF	
Storage								
	X			General Storage	1	900 ± SF	900 ± SF	
	X			Clean Linen Storage	1	140 ± SF	140 ± SF	
	X			Soiled Linen Storage	1	80 ± SF	80 ± SF	
	X			Supply Storage	1	60 ± SF	60 ± SF	
	X			Wheelchair Storage Area	1	50 ± SF	50 ± SF	
X				Employee Dressing and Lockers	1	280 ± SF	280 ± SF	
	X			Housekeeping (one per department and nursing service space)	1	140 ± SF	140 ± SF	
	X			Soiled Holding	1	135 ± SF	135 ± SF	
	X			Clean Receiving	1	192 ± SF	192 ± SF	
	X			Clean Storage	1	115 ± SF	115 ± SF	
X				IT room	1	125 ± SF	125 ± SF	
	X			Electrical Room	1	130 ± SF	130 ± SF	
X				Lobby	1	100 ± SF	100 ± SF	
Standby Emergency								
X				Treatment Room	2	123 ± SF	246 ± SF	
	X			Clean Utility	1	60 ± SF	60 ± SF	
	X			Soiled Utility	1	60 ± SF	60 ± SF	
		X		Trauma	2	0 ± SF	567 ± SF	
	X			Storage	1	80 ± SF	80 ± SF	
	X			Lobby with public toilets and phone	1	640 ± SF	640 ± SF	
	X			Patient Toilet	1	60 ± SF	60 ± SF	
			X	EMS Radio Room	1	20 ± SF	20 ± SF	
	X			Nurse Station/ Admin	1	250 ± SF	250 ± SF	

	X		
--	---	--	--

Housekeeping	1	50 ± SF	50 ± SF
---------------------	---	---------	---------

		X	
X			
		X	

Materials Handling, Receiving Control	1	1,500 ± SF	1,500 ± SF
Staff Locker w/ final to.zt	0	0 ± SF	- ± SF
Warm Shell Space	1	2,000 ± SF	2,000 ± SF

Jerold Phelps Community Hospital

New Clinic

				TOTAL SPACE PROGRAM:	4,322 ± SF
				Multiplicative Load factor	Load Factor
Owners Program Required Elective Not Required/ Not Provided	Function Totals				3,250 ± SF
	Miscellaneous			4%	130 ± SF
	Exterior Enclosure			4%	130 ± SF
	Circulation			25%	812 ± SF
1. Primary Care Clinics				Quantity	Room SF
Exam Room				12	80 ± SF
Treatment room				0	0 ± SF
Oral Surgery				0	0 ± SF
2. Support Services					578 ± SF
Administrative Space/ nurse station/ Medication				1	300 ± SF
Medication				0	0 ± SF
Clean utility				1	75 ± SF
Soiled Work/ Soiled Lin				1	75 ± SF
Consultation room				1	100 ± SF
Sterilization (Program Flex)				0	0 ± SF
Lab (Program Flex)				0	0 ± SF
3. Patient Support Services					65 ± SF
Patient toilet				1	65 ± SF
Specimen Collection (Program Flex)				0	0 ± SF
4. General Support Services					150 ± SF
Garbage				1	100 ± SF
Housekeeping				1	50 ± SF
5. Admin					1,292 ± SF
Public					
Reception (See admin above)				0	0 ± SF
Waiting Room				1	400 ± SF
Public toilet/ Phone/ Drinking fountain				2	65 ± SF
Admin					
Records (electronic) (Program Flex, Hospital EMR)				0	0 ± SF
Equipment Storage				1	100 ± SF
Provider Office				1	600 ± SF
6. Staff Support					147 ± SF
Staff toilet				2	65 ± SF
Staff storage				1	10 ± SF

APPENDIX 1

GSD Draft Wastewater Equivalent Residential Unit Determination Table

WASTEWATER EQUIVALENT RESIDENTIAL UNIT DETERMINATION

Information presented below is subject to revision based upon passage, revision or amendment to any applicable GSD ordinance or resolution. The District will, by ordinance or resolution, specify the current wastewater capital charge per Equivalent Residential Unit (E.R.U.) and the wastewater base rate monthly charge per ERU. For the purpose of calculating and imposing the wastewater capital charge, and for the purpose of calculating the consumption charge for commercial wastewater service, the ERU factor and consumption strength factor for any particular connection shall be calculated and imposed in the following manner:

Establishment	Unit	ERU Factor	Consumption Strength Multiplier
Single Family Residence (includes manufactured homes and mobile homes that are on private lots)	Per Dwelling Unit	1.000	N/A
Multifamily - (0-2 bedrooms per unit) Multifamily - (3 or more bedrooms per unit)	Per Individual Living Unit	0.800 1.000	1.0
Apartments, Condominiums, or accessory units without separate meters	Per Individual Living Unit	0.800	1.0
Mobile home and trailer parks (Any accessory facilities such as laundry, dining, residences, etc. shall be considered separately in addition to trailer spaces as per this table.)			
Mobile home or trailer park	Space	0.500	1.0
Recreational Vehicle Park (occupied or not)	Space	0.500	1.4
Hotel, Motel, lodging house, boarding house, or other multiple dwelling designed for sleeping accommodations for one or more individuals (not including food service, dining, meeting rooms, or laundries for boarder's use)			
Without Cooking Facilities (can include in room fridge)	Room	0.600	1.2
With Cooking Facilities (i.e. stove, microwave, and refrigerator)	Room	1.000	1.4
Churches, theaters, and Auditoriums (does not include office spaces, school rooms, day care facilities, food prep areas, etc.) See other sections in table to add for those uses.	Seat	0.017	1.0
Barber/Beauty Salon	Opr. Station	0.300	2.0
Theater	Per Seat	0.010	1.0
Theater (Dinner)	Per Seat	0.067	1.4

Establishment	Unit	Factor	Consumption Strength Multiplier
Food Service: Base plus add for: Restaurant/Cafeteria Restaurant (24 hours) Restaurant ("fast food") Bar/Cocktail Lounge	Base Seat Seat Seat Seat	2.500 0.011 0.167 0.050 0.067	1.4
Industrial Building (not including food service; not including industrial waste flows): Without Showers With Showers	Employee Employee	0.050 0.117	1.0
Laundry/Self-Service	Per Machine	1.333	2.0
Office Building (add food service and retail space)	First 1,000 Sq Ft Each addit. 1,000 sq. ft.	1.000 0.500	1.0
Dentist Office	Per Dentist Per Wet Chair	0.833 0.667	1.4
Doctor Office	Per Doctor	0.833	1.4
Veterinarian Office	Per Veterinarian Per Operating Room	0.833 0.667	1.4
Hospital	Per Bed	0.833	1.4
Nursing Home, extended care facilities, other similar uses	Per Bed	0.500	1.4
Warehouse space excluding office space, etc.	Per 1,000 sq. ft.	0.334	1.0
Meeting and/or Banquet Rooms (total sq. ft./15 sq. ft./person x .017 x # of seats)	Per Seat	0.017	1.0
Grocery Store with Deli	Per 1,000 sq. ft.	1.000	1.4
Town Square Vendors	Per Trailer?	1.000	1.4
Bowling Alley	Lane	0.333	1.4
Automotive Repair & Maintenance	Per Bay	0.250	2.0
Service Station Add: Add:	Per Bay Per Wash Bay Per Toilet Room	1.000 3.200 1.000	2.0
Retail Store with Self Service Gas Pumps & Restroom	Per Restroom	1.000	1.4
Convenience Store without Gas Pump or Restrooms With Restrooms	Per 1,000 sq. ft. Per Toilet Room	1.000 1.000	1.0 1.4

Establishment	Unit	Factor	Consumption Strength Multiplier
Retail Store without Restrooms	Per 1,000 sq. ft.	1.000	1.0
With Restrooms	Per Toilet Room	1.000	1.4
Cannibas	Dependent upon Specific Use		2.0
Schools, Middle & High	Per Student	0.050	1.4
Schools, Elementary & Nursery including day care facilities	Per Student	0.025	1.4

GENERAL NOTES

1. ONE (1) equivalent residential unit (ERU) shall, for the purposes of this Section, have an assigned value of 1.000. One (1) ERU is hereby established and determined to be equal to a flow of **two hundred (200) gallons per day (GPD)**. The "total equivalent residential unit value" for an establishment shall be calculated by multiplying the ERU factor listed above times the number of units. A developer may request a calculation in lieu of selecting directly from the list. The District may at it's discretion require additional information as it deems necessary to support any calculations provided.

2. The General Manager shall be responsible for determining the number of equivalent residential units for various building, structures or uses in accordance with the provisions of this section. For proposed new construction, the General Manager shall review the building plans and ascertain the use of the proposed structure and then determine the number of equivalent dwelling units required by an application of the tables listed above. For an existing structure and use, the General Manager shall apply this table to that structure and use. For the alteration, remodeling or expansion of an existing structure or use, the General Manager shall determine the number of equivalent dwelling units being used by the existing structure or use by applying this section. The General Manager shall then determine, in the same manner as new construction, the number of equivalent dwelling units required after completion of the alteration, remodeling or expansion. The equivalent dwelling units in such cases shall be the amount of the increase in such units, if any. The general manager's determinations under this section may be appealed to the board of directors, whose decision shall be final.

3. During initial implementation of this ordinance, the General Manager shall use historical data on actual flows for each commercial customer to determine the initial ERU calculation. Each commercial customer shall be informed of the ERU determined for their property and shall be provided with this table. Each customer may choose to provide to the General Manager data sufficient to recalculate the appropriate ERU for their property. If no data is supplied, then the account will be billed based upon the initial ERU until such time as there is sufficient data to revise the initial ERU calculation.

4. In no event shall the total ERU for any separate establishment be less than 1.000.

5. The Strength Consumption Factor shall be used by multiplying by the commercial sewer unit price to determine the monthly sewer consumption rate.

Example: (Unit price) X (Consumption Strength Multiplier) X (Units Consumed) = Monthly Charge
 \$5.00 X 1.4 X 15 = \$105

Water and Wastewater Usage Estimates
286 Sprowl Creek Road, Garberville
SHCHD; LACO Project No. 8609.03
March 11, 2019

APPENDIX 2

Estimate Calculation Spreadsheets

CONVENTIONAL ESTIMATE

From Provided EDU (Equivalent Dwelling Unit) Table from Garberville Services District
 1.00 ERU = 200 gal/day

Hospital	Unit	ERU	Strength Multiplier	Total Wastewater Production Per Day
	Patient beds/ 25 treatment areas	0.833	1.4	5831 gal
Clinic	8 Doctors	0.833	1.4	1866 gal

Summary: Low-end Estimate for Hospital and Clinic		
Wastewater Production Estimate for Hospital and Clinic	7700	Gallons per day
Drinking Water Demand Estimate for Hospital and Clinic	8600	Gallons per day

Summary: Accessory Uses (see Accessory Uses Tab)		
Wastewater Production Estimate for Accessory Uses	1700	Gallons per day
Water Demand Estimate for Accessory Uses	2600	Gallons per day

SUMMARY: ALL USES (CONVENTIONAL)		
Wastewater	9400	Gallons per day
Drinking Water	11200	Gallons per day

6.5 GPM
 7.8 GPM

Notes:

- Hospital and Clinical uses are the only uses assumed in this calculation; all other space (vending/dining, labs pace, exam rooms, meeting rooms, etc.) assumed to be included with EDU estimates for hospital/clinic
- Hospital beds calculated by patient rooms (15) and ER/OR (10 beds)

CONSERVATIVE ESTIMATE

Wastewater production is assumed to be 90% of water usage, per common estimates. Here, calculations are produced based on draft wastewater EDUs provided by GSD.

Description	Type	Total	Unit	Consumption		Consumption Strength		Usage (gpd)
				Factor	Note/unit	Multiplier	EDUs	
Hospital								
Upper Floor Waiting Area (with bathrooms and secondary area, not corridor)	Office	1488	sq ft	1.5	1 for first 1000sq ft, 0.5 for each 1000ft following	1	1.5	300
Waiting area (bottom floor, incl. restrooms)	Office	896	sq ft	1.5	1 for first 1000sq ft, 0.5 for each 1000ft following	1	1.5	300
Pharmacy	Retail w/out bathrooms	952	sq ft	1	1 per 1000sq ft	1	1	200
Upper Floor Office (Lab office, central (registration) office, IT office)	Office	1188	sq ft	1.5	1 for first 1000sq ft, 0.5 for each 1000ft following	1	1.5	300
Warm Shell	Office	3008	sq ft	2	1 for first 1000sq ft, 0.5 for each 1000ft following	1	2	400
Upper floor hospital (beds)	Hospital	15	beds	12.50	0.833 per bed	1.4	17.49	3498.6
Lower floor hospital: ER/Trauma/Treatment, OR	Hospital	9	beds	7.50	0.833 per bed	1.4	10.50	2099.2
lower floor treatment rooms: Mammogram/Fluoroscopy/Ultrasonid	Doctor Office	3	beds/Docto rs	2.50	0.833 per doctor	1.4	3.50	699.7
Lower floor storage	Warehouse	1496	sq ft	0.51	0.334 per 1000 sq ft	1	0.51	102.9
Dining area/ Vending	Cafeteria	12	seats	2.63	2.5 base + 0.011 per seat	1.4	3.68	737

*hospital sq ft estimated from plans

8637 gal per day

CONSERVATIVE ESTIMATE CONTINUED

Description	Type	Total	Unit	Consumption		Consumption	Usage (gpd)	
				Factor	Note/unit	Strength Multiplier		EDUs
Upper floor clinic/office	Other Dr office	8	Doctor	6.664	0.833 per doctor	1.4	9.33	1865.9
Upper floor clinic waiting room	Office	465	sq ft	1	1 for first 1000sq ft, 0.5 for each 1000ft following	1	1	200
Other office space in clinic	Office	1605	sq ft	1.5	1 for first 1000sq ft, 0.5 for each 1000ft following	1	1.5	300
							2366	gal per day

*clinic sq ft estimated from Plausible Space Use Report

Summary: Conservative (High) Estimate For Hospital and Clinic		
Wastewater Production Estimate for Hospital and Clinic	11100	Gallons per day
Water Demand Estimate for Hospital and Clinic	12300	Gallons per day

Summary: Accessory Uses (see Accessory Uses Tab)		
Wastewater Production Estimate for Accessory Uses	1700	Gallons per day
Water Demand Estimate for Accessory Uses	2600	Gallons per day

SUMMARY: ALL USES (CONSERVATIVE)		
Wastewater	12800	Gallons per day
Drinking Water	14900	Gallons per day

8.9 GPM
10.3 GPM

6580 558 1300 942

- Hospital plans do not include kitchen areas for food preparation and vending area is limited; may indicate an over-estimate of usage
- Each office area is considered separately for calculation purposes; summing all office space into one unit per level leads to a reduction of ~950 gpd wastewater

ACCESSORY USE ESTIMATES

Drinking Water Demand

Description	Type	Consumption				Consumption		Usage (gpd)
		Total	Unit	Factor	Note/unit	Strength Multiplier	EDUs	
Irrigation	Lawn and green l	0.25	acres	0.75	in/week		5091	727 ¹
Renovated Kitchen Space	See "wastewater" section							829
Renovated Office Space	See "wastewater" section							1000

¹ Utilizing University of California Center for Landscape and Urban Horticulture Estimates for nearest location

Accessory Drinking Water Demand	2600 gpd
---------------------------------	----------

Wastewater Production

Description	Type	Consumption				Consumption		Usage (gpd)
		Total	Unit	Factor	Note/unit	Strength Multiplier	EDUs	
Renovation of accessory building to serve hospital	Foodservice-Kitchen/Restaurant	1	Base	2.5	2.5 base	1.4	3.5	700 ²
		15	Seats	0.165	0.011 per seat	1.4	0.231	46.2 ³
Renovation of accessory building to offices/ community space	Office	7200	sq ft	4.5	1 for first 1000sq ft, 0.5 for each 1000ft following	1	4.5	900

² Base kitchen area plus 15 "seats" (hospital patients)

³ Approximately 2800 sq ft of 10000 sq ft existing building

Accessory Wastewater Production	1700 gpd
---------------------------------	----------

BUILDING SQ FT SUMMARY

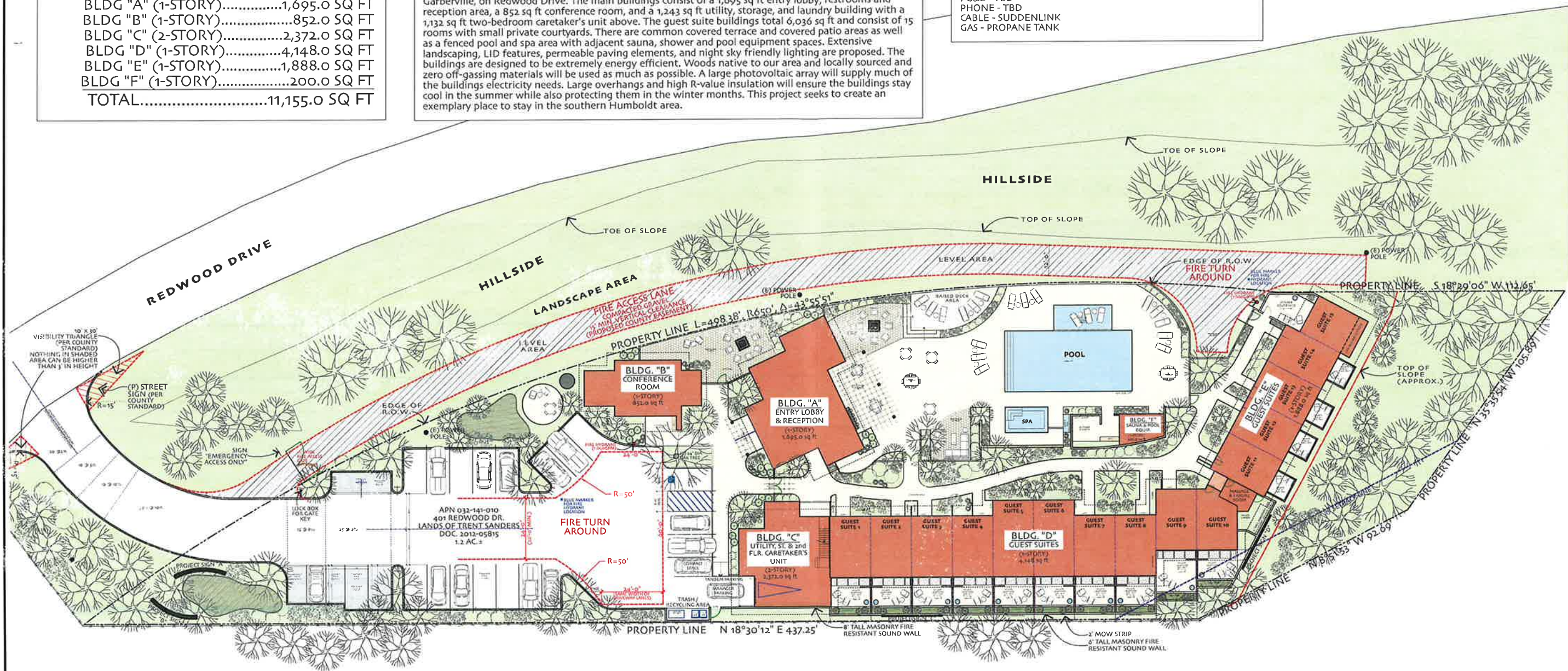
BLDG "A" (1-STORY).....	1,695.0 SQ FT
BLDG "B" (1-STORY).....	852.0 SQ FT
BLDG "C" (2-STORY).....	2,372.0 SQ FT
BLDG "D" (1-STORY).....	4,148.0 SQ FT
BLDG "E" (1-STORY).....	1,888.0 SQ FT
BLDG "F" (1-STORY).....	200.0 SQ FT
TOTAL.....	11,155.0 SQ FT

PROJECT DESCRIPTION

The "SoHum" is a new high quality inn located on a vacant 1.2 acre site just north of downtown Garberville, on Redwood Drive. The main buildings consist of a 1,695 sq ft entry lobby, restrooms and reception area, a 852 sq ft conference room, and a 1,243 sq ft utility, storage, and laundry building with a 1,132 sq ft two-bedroom caretaker's unit above. The guest suite buildings total 6,036 sq ft and consist of 15 rooms with small private courtyards. There are common covered terrace and covered patio areas as well as a fenced pool and spa area with adjacent sauna, shower and pool equipment spaces. Extensive landscaping, LID features, permeable paving elements, and night sky friendly lighting are proposed. The buildings are designed to be extremely energy efficient. Woods native to our area and locally sourced and zero off-gassing materials will be used as much as possible. A large photovoltaic array will supply much of the buildings electricity needs. Large overhangs and high R-value insulation will ensure the buildings stay cool in the summer while also protecting them in the winter months. This project seeks to create an exemplary place to stay in the southern Humboldt area.

UTILITY CONNECTIONS:

- COMMUNITY WATER - NEW 8" WATER LINE SUPPLY
- PUBLIC SEWER - NEW 6" LINE (UNDER CAL TRANS OFF RAMP)
- PG&E - TBD
- PHONE - TBD
- CABLE - SUDDENLINK
- GAS - PROPANE TANK



PARKING SUMMARY

PARKING REQUIREMENTS:

- 1 SPACE PER GUEST SUITE (15 SPACES REQUIRED)
- 2 MANAGERS SPACES (2 SPACES REQUIRED)
- COMMERCIAL USES, OFFICE (CONFERENCE ROOM) = 1 SPACE/300 SQ FT (WITH MIN. OF 4 SPACES) + 1 SPACE PER EMPLOYEE (5 SPACES REQUIRED)

ADA PARKING:

- 18'W X 18' LONG VAN PARKING SPACE
- 1 ADA VAN SPACE WITH UNLOADING ON PASSENGER SIDE (ONE ADA SPACE FOR EACH 25 SPACES)

ADA PARKING:

- 25% CAN BE COMPACT (7.5'W X 16' LONG) WITH COMPACT SIGNAGE (MAX. 6 COMPACT SPACES)

22 TOTAL SPACES REQUIRED (INCLUDING 1 ADA VAN SPACE)

27 TOTAL SPACES PROPOSED (INCLUDING 1 ADA VAN SPACE, 2 TANDEM SPACES & 5 COMPACT SPACES)



PROPOSED SITE PLAN
the SoHum

SCALE: 1" = 20'-0" (22" X34" PAPER SIZE)
1" = 40'-0" (11" X17" PAPER SIZE)

SITE PLAN BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY BY POINTS WEST SURVEYING CO. APRIL 2016

GRAPHIC SCALE BAR MEASURES 1 INCH ON FULL SIZE PLANS

REVISIONS:

JULIAN BERG DESIGNS
ARCHITECTURE & PLANNING
846 A STREET
ARCATA, CALIFORNIA, 95521
TEL: (707) 447-8690
julianbergdesigns.com



PROJECT TITLE: THE SOHUM, NEW INN, GARBERVILLE, CA
TRENT SANDERS • P.O. BOX 1126 • REDWAY, CA 95560 • TEL: (707) 986-7068

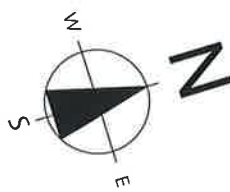
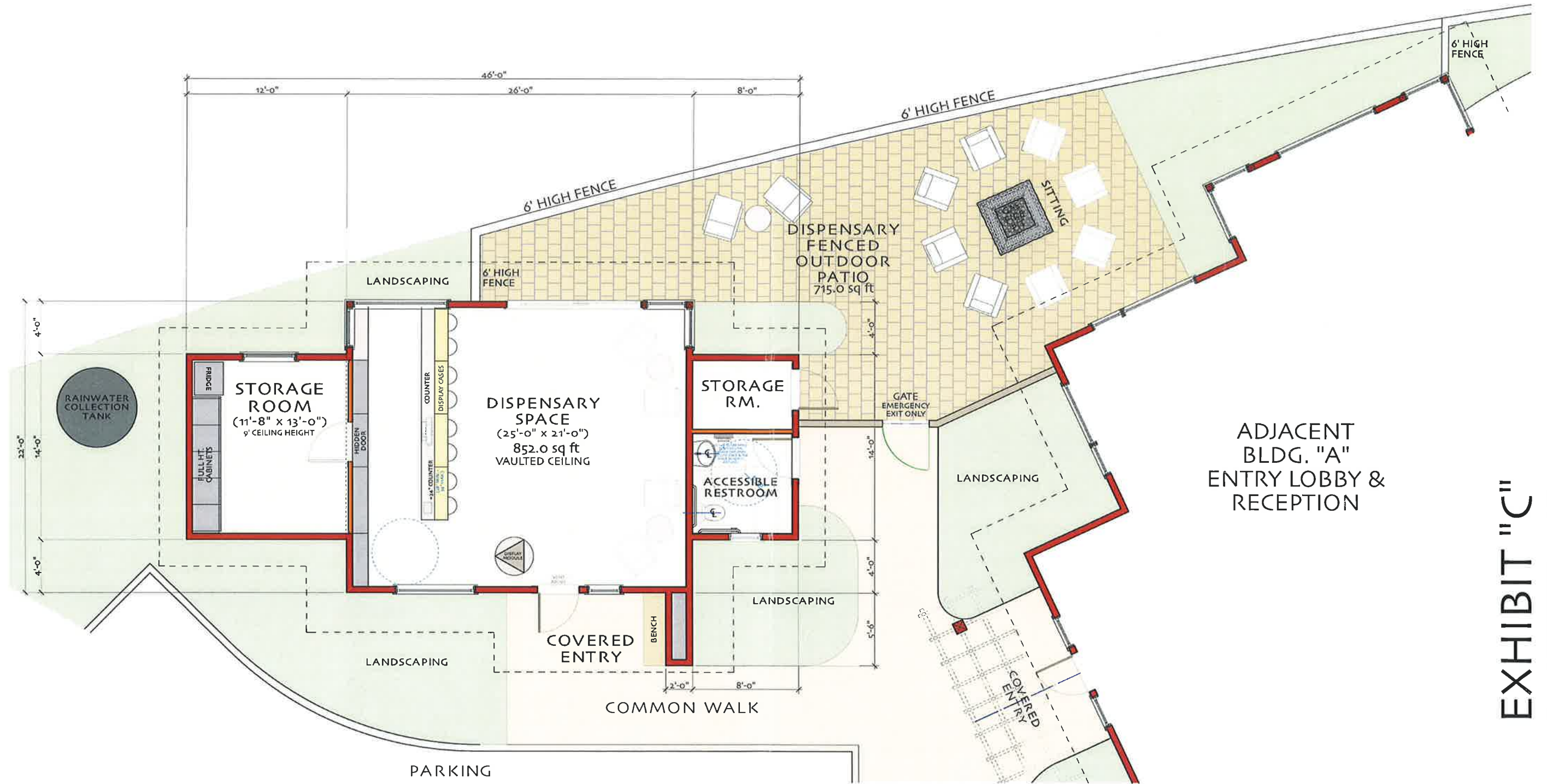
SHEET TITLE: PROPOSED SITE PLAN
ASSESSOR'S PARCEL NUMBER: 032-141-010

PROJECT NO.: G1-1630
DRAWN BY: JAB
DATE: 3/1/2017

SHEET #:

A-1

DESIGN REVIEW SET
NOT FOR CONSTRUCTION



BLDG. "B" - DISPENSARY
PROPOSED FLOOR PLAN

SCALE: 1/4" = 1'-0" (22"X34" PAPER SIZE)
SCALE: 1/8" = 1'-0" (11"X17" PAPER SIZE)

WALL LEGEND

	(N) 2x4 WALL (STUDS 16" O.C.)
	(N) 2x6 WALL (STUDS 16" O.C.)
	(N) CONCRETE GARDEN/SOUND WALL

ADJACENT
BLDG. "A"
ENTRY LOBBY &
RECEPTION

EXHIBIT "C"

COUNTY REVIEW SET

REVISIONS:

JULIAN BERG DESIGNS
ARCHITECTURE & PLANNING
846 A STREET
ARCATA, CALIFORNIA, 95521
TEL: (707) 467-8890
julianbergdesigns.com



PROJECT TITLE: NEW DISPENSARY, GARBERVILLE, CA
TRISTEN OATES • P.O. BOX 1126 • REDWAY, CA 95560 • TEL: (707) 986-7068
SHEET TITLE: PROPOSED FLOOR PLAN
ASSESSOR'S PARCEL NUMBER: 032-141-010

PROJECT NO.: G1-1630
DRAWN BY: JAB
DATE: 12/21/2016

SHEET # :
A-3

Dear Garberville Sanitary District (GSD) Board of Directors,

I would like to request permission to install a sewer pumping system on my property located at 1041 Sprowel Creek Rd. in Garberville 95542 APN: 032-171-027

Because of the poor soil drainage and limited space, it has been suggested to me that the best way to install a septic system would be to pump it from a holding tank up to Riverview rd. or the closest public sewer location.

SHN engineering has assigned an engineer to design the system. It would include a storage tank with a pump designed to grind up the waste and push it up the 2-inch pipe to the service location. Greg Williston, (707) 441-8855 gwilliston@shn-engr.com

This will be a low usage system located within a 1200 sf Shop with one toilet and one sink.

Thank you for your consideration,

Marcus Schaible

707 601 8291

marcusschaible@gmail.com



Garberville Sanitary District
PO Box 211
919 Redwood DR.
Garberville, CA. 95542
Office(707)923-9566 Fax(707)923-3130

REQUEST FOR WATER AND SEWER SERVICE

Marcus Schaible
1041 Sprowel Creek Road
Garberville, CA. 95542

January 28, 2020

APN #032-171-027

Mr. Schaible,

The Garberville Sanitary District Board of Directors met and approved your request for water and sewer service at 1041 Sprowel Creek Drive if you comply with specific requirements of the Board and comply with GSD Ordinances.

- 1. Provide a plan for installing the sewer and water service line with the sewer pipe in a casing and dual check valves to ensure no sewer leaks.**
- 2. Include pipe and pump sizes along with type of pipe.**
- 3. Complete a GSD cannabis water usage application**
- 4. Pay the required water and sewer connection fees \$8,000 water and \$8,000 sewer.**
- 5. Provide copy of building permit issued by County**
- 6. Annual inspection of sewer pump system**

Contact me with any questions and how we can assist you with your project.

Respectively,

Ralph Emerson

General Manager
Garberville Sanitary District

Application Requirements Cannabis 2.0

Applicant Name: <u>WALTER COHN</u>	Permit #:
APN: <u>223-123-007, -008</u>	Permit Type(s): <u>SP</u>
AA Meeting Planner: <u>MJA</u>	AA Meeting Date: <u>DEC. 17, 2019</u>
Receiving CPOD:	Date Items Received:

X - Indicates item is Required for application submittal
 * Indicates item must be prepared by a licensed engineer or similarly licensed professional
 ** Indicates item must be prepared by a qualified biologist

General

- Application Form
- Signed and Dated Fee Schedule
- Copy Of Current Deed To Property, and Lease If Applicable
- Site Plan
- Indemnification and Hold Harmless Agreement
- Proof Of Cultivation Prior To 1/1/2016 (Pre-Existing Sites Only)
- Application Fees Paid

Operations Plan

- Cultivation Plan
- Water Source, Storage Plan, Irrigation Plan, and Estimated Use (Monthly and Annually; in Gallons)
- Summary Of Specific Measures For Compliance With SWRCB Order (New and Pre-Existing Unpermitted Sites)
- Stormwater Management Plan
- Invasive Species Control Plan
- Materials Management Plan
- Hazardous Waste Statement/Site Assessments
- Sewage Disposal Plan WILL SEND LTR
- Soils Management Plan
- Processing Plan
- Parking Plan
- Energy Plan
- Security Plan
- Noise Source Assessments and Mitigation Plan
- Light Pollution Control Plan

Water

- SWRCB/RWQCB Cannabis General Order Enrollment Filing Info (Only Req'd For Permitted Pre-Existing Sites Seeking Expansion)
- Water Source Documentation
- Small Parcel Well Testing Information

Services

- Onsite Wastewater Treatment System Information and Documentation
- Will Serve Letter From Water/Wastewater Service Provider

Biological

- **Biological Reconnaissance Survey For Special Status Species and Sensitive Habitat (FOR NEW CULT)
- ** Restoration/Remediation/Biological Resource Protection Plan
- Restoration Cost Estimate & Financial Assurance Mechanism
- RRR Plan

Roads

- Road System Assessment (may need to be prepared by engineer)
- *Draft list of improvements - Functional Capacity
- *Road System Assessment - Private Roads-Water Quality
- Road Maintenance Association Information (RMA)

Other

- \$30 Check(S) Or Money Order(S) To Bear River Band THPO, Wiyot Tribe, Blue Lake Rancheria
- Business Entity Documents Filed With the Secretary Of State
- Notarized Consent For Commercial Cannabis Activity From Property Owner
- DHHS - Division Of Environmental Health Worksheet
- Timberland Conversion Assessment Prepared By Registered Forester
- On-site Reconfiguration Plan

PROJECT INFORMATION CHECKLIST

Project: (777) 496-9512
WALTER COHN

Assessor Parcel No.(s): 223-183-007

192
191 CHRISTOPHER LN.
GARDENVILLE

Case No.(s): _____

Old APNs: ✓

OFF OF AIRPORT RD
OFF OF WALLAN RD.
240 ST
TO CHRISTOPHER LN

Old Case No.(s): _____

Violations: 19 CEU-73 RESOLVED/CLOSED
PAUL B. BOWEN 12/17/19

CANNA. OPOR. BILL
9100 ST TO PARCEL
/VIO. 19-283 PROCESSED

Zone: AE-B-0

DRAFT GPU = AG B5(20)

General Plan Designation: RA 5-20

Plan Document: CRPAP

Density: 1 DU PER 5-20 PERES

Fire Safe: YES NO

CDF Region - GARDENVILLE
FPD

Fire Hazard Rating: VERY High Med. Low

Flood: 060060 1835

Effective Date: _____

Zone: A B (C)

Coastal Jurisdiction (circle): Inland CZ - State County Appeal Notes: _____

Slope Stability Rating: High Med Low Relatively Stable Notes - <15% TO >50%

Biological Resources: 100'S MA @ BEAR CANYON

Cultural/Historic Resource Protection: BEAR RIVER

SINKYONE

Applicable Plan Policies: _____

Airport: _____

FAR 77 = C (ONLY @ SMALL SW
CORNER)

Alquist-Priolo: ✓

Issues/Notes: _____

LIS Notes: 8.25 ACRES PER

PARCEL CREATION = LOT 22 OF BK 16 RM, PG. 116

SEWER
WATER = GARDENVILLE SANITARY DISTRICT

WANTS 2500 SF ML (EX = 684 x 3 = 2052)