Panorama Ranches Homeowners Association
Water System Manual
June 2021

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Introduction & Purpose

The purpose of this manual is to provide the Panorama Ranches Subdivision Board of Directors and owners in the subdivision an overview of the water system, review of the water system history, infrastructure outline, basic operating procedures and other material relevant to the water system and operations. This manual is not intended to substitute for proper training and experience required to run the water system or to maintain compliance with Colorado Department of Public Health and Environment (CDPHE) requirements and legal status of system operations. The Operations and Maintenance Plan on file with CDPHE is referenced in this document. The latest version can be requested through the HOA.

History

The Final Plat for the 415-acre Panorama Ranches 53-Homestead Subdivision was approved by the Garfield County Commissioners on October 10, 1979. The original subdivision covenants included a notation that "Homestead 53 may be re-subdivided into no more than four single-family dwelling sites as designated on the final plat, providing an application for said re-subdivision is approved by the Board of Commissioners of Garfield County." This language gave notice that the original developer, Mr. John Wix - Colorado Country Panorama Estates (CCPE), intended to submit a future re-subdivision application to create additional Homesteads. The original 53 Homesteads were to be served by the proposed central water system supplied by two groundwater wells pumping to a 100,000-gallon water storage tank.

In August 1980, a minor subdivision application was submitted to Garfield County to re-subdivide Homestead 53 into four Homesteads - 53 A, 53 B, 53 C and 53D. On January 10 1982, the Garfield County Commissioners approved the Panorama Ranches Minor Subdivision Exemption of Homestead 53 Final Plat, thereby creating three new Homesteads and the remainder original Homestead 53. This approval increased the number of Homesteads served by the Panorama Ranches water system from 53 to 56 Homesteads. However, CCPE never applied for additional augmentation or well water to serve the three new Homesteads. Therefore, these parcels could not legally be served by the Panorama Ranches water system.

In May 1985, CCPE and the Panorama Ranches Homeowners Association signed an agreement conveying "the declarant's rights, responsibilities and obligations under the protective covenants to the Association". This agreement was subsequently recorded with the Garfield County Clerk and Recorder's Office in Book 689 on Page 824. The agreement conveyed the existing water system infrastructure, 56 acres of open space, assignment of the water augmentation agreement with the Basalt Conservancy District, and 81 shares of Missouri Heights Irrigation Company stock to the Association. The agreement required that CCPE complete an engineering assessment of the water system and repair any associated system defects or leaks. That assessment was completed by Flood and Flood Engineers and documented in a May 29, 1985 report delivered to the Association. All water system repairs were completed by September 15, 1985. Three quitclaim deeds were delivered to the Association to transfer ownership rights to the Association.

1. **Quit Claim Deed dated May 29, 1985 (no recordation information on deed) -** "The water system for Panorama Ranches, a rural community, including fire hydrant, water lines, water tank, pumps, wells, well housed, electrical equipment, and all water rights pertaining thereto; the plat for Panorama Ranches is recorded as reception number 298382 in the records of the Clerk and Recorder of Garfield County, Colorado. This conveyance is subject to the contractual right granted to James Salter, Walter Pozen, and Saul Bellow to three (3) ¾" household water taps to said system."
2. **Quit Claim Deed dated May 29, 1985 recorded in Book 689, Page 822 - Reception No. 371812 -** "Open space Lot 1 and open space Lot 2 in Panorama Ranches, a rural community, in accordance with the plat thereof."
3. **Quit Claim Deed dated May 29, 1985 recorded in book 689, page 823 - Reception No. 371813 -** "All minerals and mineral rights in, on, and under our associated with that certain property known as Panorama Ranches, a rural community, situated in Twp. 7 South, 6 Range 87 West of the 6th Principal Meridian, Garfield, Colorado according to the official plat thereof, reception number 298382 in the offices of the Clerk and Recorder of Garfield County, Colorado with all its appurtenances."

Despite the lack of available legal water supply to serve Homesteads 53 A, 53 B, 53 C and 53D and subsequent to conveyance of the water system to the Association, CCPE contracted to install water lines, construct a pump house and connect the pump house to electrical power to serve those Homesteads. This work was initiated and completed without notice to or inspection by the Association. Later, the Association required CCPE to perform a qualified pressure test on the installed water lines. The test was observed by the Association after which the Association Board of Directors accepted the pipelines and the pump house building, but not the electrical controls, pressure tanks, pumps or the operating costs of the separate system as part of the Panorama water system. This infrastructure is to remain the responsibility of the benefiting Homestead owner(s). Later, in a separate action described under water rights, the Association filed an amended decree with the Water Court requesting additional water rights for the three Minor Subdivision Exemption Homesteads (53 B, 53 C, and 53 D).

Water Rights.

CCPE filed an application (Case No. W-3404) for water rights (underground or well) with the District Court - Water Division No. 5 on June 20, 1977. Subsequently, an amended application for water right (Case No. W-3404) was filed on August 18, 1977 restating the original application to provide for use of water for fire protection. The original and amended applications were combined as Case No. W-3404. Another application for a plan for augmentation (Case No. W-3926) was filed by CCPE on October 31, 1978. Statements of opposition were filed by the Colorado River Water Conservation District, Needham Ditch Company, Missouri Heights Irrigation Company and the Union Oil Company of California. Later, the statements of opposition from the Colorado River Water Conservation District and the Union oil Company of California were withdrawn.

The augmentation application W-3926 was to serve 53 single-family Homesteads from three wells drilled in the Pleistocene Basalt formation in the following locations:

1. **Well No 1:** Southwest quarter of the northwest quarter of Section 16, Township 7 South, Range 87 West of the 6 P.M., Garfield County, Colorado. Abandoned and sealed.
2. **Well No 2:** Southeast quarter of the northeast corner of Section 17, Township 7 South, Range 87 West of the Sixth P.M., Garfield County, Colorado.
3. **Well No 3:** Northeast quarter of the southeast quarter of Section 17, Township 7 South, Range 87 West of the sixth P.M., Garfield County, Colorado.
4. **Well No 1-R:** Southwest one quarter, Northwest one quarter, section 16, Township seven South, Range 87 West of the 6 P.M., Garfield County, Colorado. Permit Number 47397-F, issued 11/8/2011. This well is a replacement of Well No 1 which was abandoned and sealed.

The application was for a conditional water right located in the watershed of the Roaring Fork River for a 50 gallon per minute well or the actual yield of the aquifer whichever was less for each well. The maximum annual water appropriation was 48 acre-feet per year for all three wells. Water use was restricted to in-house domestic and fire protection only and outside irrigation was prohibited. Three well permits were issued to CCPE.

1. 22437-F Well #1 (subsequently replaced by 037219-F, replaced by 043580-F)
2. Well #1 was abandoned because the well casing was crooked. It was replaced by Well #1R Permit # 47397-F-R issued 11/8/2011.
3. 22439-F Well #2 (subsequently replaced by 037220-F, replaced by 043581-F)
4. 22438-F Well #3 (subsequently replaced by 036777-M). Well #3 was never drilled or used by the subdivision.

The maximum average diversion through the wells was projected to be approximately 15.8 acre-feet annually with a consumptive use estimated at 10% or 1.58 acre-feet.

The decree required restrictive covenants and deed restrictions limiting use of water for in-house domestic and fire protection purposes with no outside irrigation. The Needham Ditch Company and the Missouri Heights Irrigation Company were named as third-party beneficiaries with all legal and equitable rights to enforce these restrictions. The State Engineer made a determination that the wells were not tributary to Cattle Creek. The decree required acquisition of three shares of stock in the Missouri Heights Irrigation Company to compensate for depletions. Each share was calculated to represent .65 acre-feet of water per year in storage. Also, and importantly, the use of water represented by stock in the Missouri Heights Irrigation Company did not constitute an abandonment of the water or water rights under the decree. The date of initiation of the appropriation in the water right decree is March 31, 1997. The amount of water allocated was 50 gallons per minute or the actual yield of the aquifer, whichever is less, for each well with a combined annual maximum appropriation of 48 acre-feet of water per year for all three wells. The State Engineer granted a conditional water right that required periodic reporting to perfect the right.

The conditional water right awarded was to remain in effect until May 1983. As noted above, the conditional right required a quadrennial finding of reasonable diligence to be filed before May 1983 to establish the water right as absolute water right thereby completing the appropriation.

CCPE signed an agreement dated April 24, 1979 with the Colorado River Water Conservation District to satisfy their objection to the augmentation plan. The agreement required that Panorama acquire a perpetual water allotment equal to the depletions specified in the final water court decrees for the wells in case Nos. W-3404 and W-3926. This water is to be supplied to Panorama by the Basalt District, the River District or both. To fulfill this requirement, CCPE applied to and received approval from the Basalt Conservancy District for a water allotment contract number 3.35.5 consisting of 2.0 acre-feet for domestic use. This contract is required to remain in effect in perpetuity.

In 1996, the Panorama Ranches Homeowners Association Board of Directors with the consent of the Association membership filed an application for an amended decree to provide for limited outside irrigation. Four objectors filed statements of opposition to this application - the Needham Ditch Company, the Missouri Heights Irrigation Company, Sarah McNulty and Elizabeth Penfield. Additionally, a protest was filed by the Water Referee. In order to satisfy the objectors, Panorama agreed to the following stipulations.

1. An amendment to the water allotment contract with the Basalt Water Conservancy District for additional water.
2. An agreement to lease water from the Carbondale Land Development Company (CLDC) in perpetuity.
3. An agreement to amend the protective covenants.

On June 13, 1996, a request for a decree in Case Number 93 CW 130 was submitted by attorney Glenn D. Chadwick representing the Panorama Ranches Homeowners Association. The following stipulations and agreements were recorded in conjunction with this case.

1. Between the applicant and the State Engineer dated April 29, 1996.
2. Between the applicant and the Missouri Heights irrigation Company, dated May 31, 1996.
3. Between the applicant and the Needham Ditch Company, dated May 31, 1996.
4. Between the applicant and Elizabeth F. Penfield, dated June 12, 1996.
5. Between the applicant and Gary McNulty and Sarah McNulty, dated June 12, 1996.

The amended decree described the source of water as:

- **Panorama Ranches Well No. 1 First Enlargement** 350 feet deep with an appropriation date of January 26, 1993 and maximum pumping rate of 50 gallons per minute with a combined annual diversion from both wells not to exceed 13.378 acre-feet per year for in-house domestic use for three

single-family dwellings and irrigation of up to 5.79 acres, livestock watering and fire protection.

- **Panorama Ranches Well No. 2 First Enlargement** 350 feet deep with an appropriation date of January 26, 1993 and maximum pumping rate of 50 gallons per minute with a combined annual diversion from both wells not to exceed 13.378 acre-feet per year for in-house domestic use for three single-family dwellings and irrigation of up to 5.79 acres, livestock watering and fire protection.

The new decree included a revised statement from the State Engineer that the wells were now tributary to the both Roaring Fork River and Cattle Creek. Further, it was determined that the water rights to be used for augmentation of the wells would be as follows:

1. Carbondale Land Development Company (CLDC) perpetual lease of 6.7-acre feet of water per year for augmentation of Cattle Creek from CLDC Decree No. 79 CW 097.
2. Ruedi Reservoir, by contract through the Basalt Water Conservancy District for augmentation of the Roaring Fork River and the Colorado River, in the amount of 4.0 acre-feet.

Water Supply

The Panorama Ranches water system is supplied by two deep groundwater wells drilled into the Pleistocene Basalt formation. The primary source of groundwater recharge is annual precipitation falling on the relatively small basin bounded on the east by Basalt Mountain and Red Table Mountain and the Cattle Creek drainage. The Spring Park Reservoir and agricultural flood irrigation are also important contributors to groundwater recharge. The wells were permitted as Well No 1 #043581-F (replaced expired permit 37219-F) Well No 2 #043580-F (replaced expired permit 37220-F). Well No. 2 is located in the pump house on Homestead 24 near the west end of Basalt Mountain Drive. Well No. 1 was abandoned and replaced by Well No. 1-R in August 2012. The replacement well is located on the south end of Homestead 21 near the east end of Basalt Mountain Drive and is within approximately 20 feet of the abandoned Well No 1.

Well No. 2 is approximately 350 feet deep and Well No. 1-R is 425 feet deep. Each well has a 7.5 HP submersible pump (Model Goulds 45GS75) that is controlled using VFDs. Water from both wells is independently delivered to the pump house on Basalt Mountain Drive on Homestead 24. Each well has the ability to deliver water at 50 GPM to the pump house on Homestead 24. Under typical operations, each well runs simultaneously at 25 GPM to deliver a total of 50 GPM to the system.

Well No. 1-R located on Homestead 21 pumps water through a dedicated 2” PVC line on the south side of and paralleling Basalt Mt. Drive to pump house. Well #2 located in the pump house on Homestead 24 and delivers water through a 2” galvanized line. Water from both wells enters the well house where it is chlorinated, metered and then combined in a 2” galvanized line. After the water combines, it flows through a 12” serpentine pipe system to achieve required chlorine contact time. Water from the serpentine pipe outlet

is delivered to the distribution system and storage tank. The storage tank delivers water via gravity to the distribution system.

Well No. 1-R, VFD and Electrical Controls on Homestead 21

System Infrastructure

View of Well 1R, Meters and 2” Pipe Manifolds in Pump House 1

Water Treatment

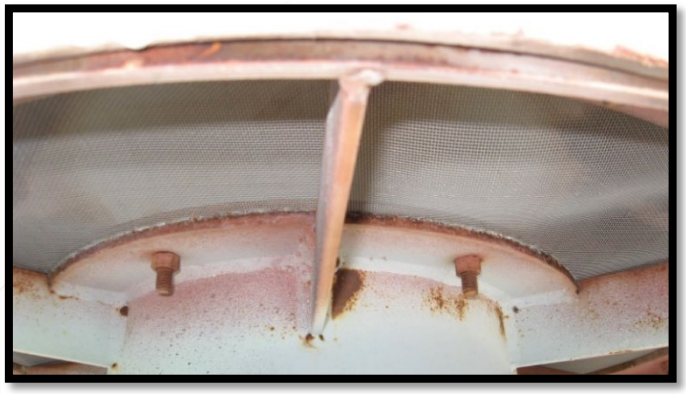
Water disinfection is provided through injection of diluted sodium hypochlorite (liquid bleach) from a 100-gallon storage tank in the pump house. Sodium hypochlorite is injected by a metering pump in the manifold into each well inlet line just before the two sources combine in the pump house. The chlorinated water is delivered to a 12” C900 DR-18 serpentine pipe system. There are three 45 ft long runs, with an individual length to diameter ratio (L/D) of 45, and overall L/D of 110. This design results in a baffling factor (BF) of 0.7 in accordance with CDPHE Baffling Factor Guidance Manual. For more detailed information see the posted 2019 Basis of Design Report (BDR). Water discharges to the distribution system and storage tank, which is comprised of 6” plastic pipe. There is not a dedicated delivery pipe from the serpentine system to the main storage tank.

Sodium Hypochlorite Injection Pumps

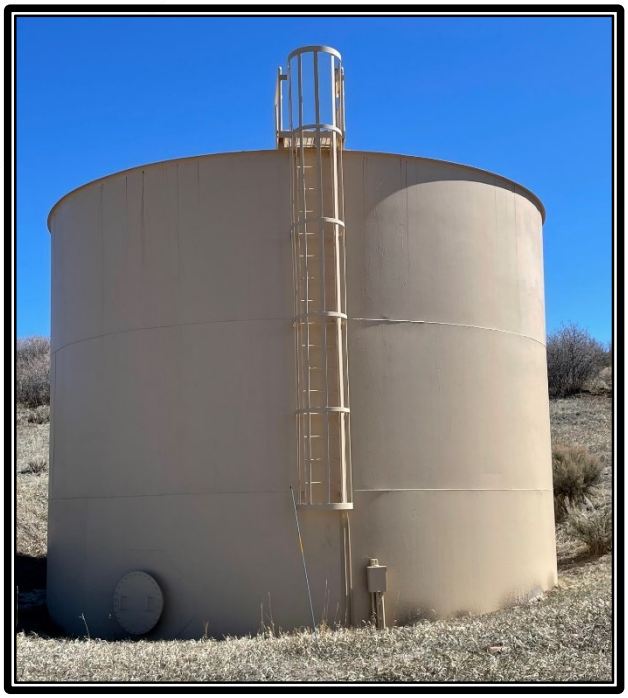
Water Storage

The 100,000-gallon steel water storage tank is located at the high point in the water system at an elevation of 7,527.5 feet above sea level. The water tank provides both potable and fire protection water storage. The tank has a combined 6" inlet-outlet near its center. A second 6" tank drain outlet is located offset from the tank center and is used only for draining the tank. The drain valve is located approximately 30'from the south side of the tank. The tank drain outlet pipe daylights from the south bank of Buck Point Drive across the road. A screened vent on the tank roof serves to equalize tank pressure. The screened opening keeps out birds, insects, small animals and other sources of contamination. A 250,000 Lumen warning strobe is installed on the top of the tank near the hatchway. This strobe gives off a bright white light in the event of a high or low tank condition. Additionally, there is a warning buzzer horn that also sounds when there is a high or low tank water condition.

Water Tank Vent & Image of Screen on Underside



100,000 Gallon Water Storage Tank



Standard access to the tank is afforded by a caged ladder to the top of the tank where there is an access hatch secured with combination lock.

The tank has a low and high-water level warning strobe light and buzzer alarm that sounds when the tank level falls approximately 3' below the maximum fill level. The tank has an overflow pipe that functions in the event that the tank overfills. In-tank controls consist of several transducer pressure switches that turn the Basalt Mt. Drive high lift pump on and off and also activate the low/high tank level warning strobe and horn. A bolted cover at the tank bottom provides secondary access for tank maintenance. This cover can only be removed when the tank is empty.

Water Tank Hatch with Seal, Warning Strobe & Warning Buzzer

Distribution System

The 6” tank inlet-outlet connects to the water distribution system to supply water to all of the lots (including Homestead 53 A, B, C and D) as well as the fire hydrants. There are approximately 14,916 feet of water distribution mains in the system. The following table shows the length of water main on each section of the system.

	Length	Area Cu Ft	Gallons
Basalt Mt Dr.	1,100	215.98	1,615.56
Tank Line	2,000	392.70	2,937.39
Buck Point Road	4,952	972.32	7,272.98
Panorama Drive Loop to Elk Range Rd.	2,640	518.36	3,877.35
Elk Range Road	2,112	414.69	3,101.88
Sunlight Drive	1,320	259.18	1,938.68
Panorama Drive Dead End Stub	792	155.51	1,163.21
Totals	**14,916**	**2,928.75**	**21,907.05**

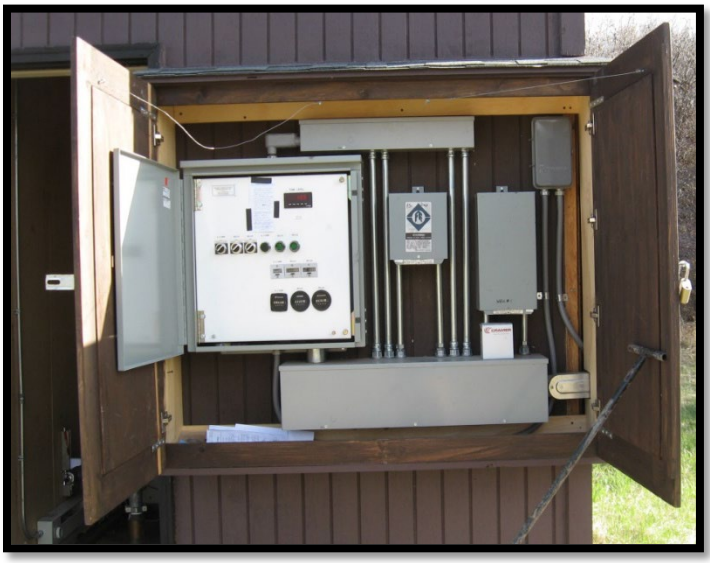
All water mains are PVC SDR 26 with a 160-psi pressure rating. The system has isolation gate valves on the mains at all water main intersections. The map shown as in the Drinking Water Monitoring Plan depicts the water system layout and shows general line locations, the water tank, hydrants, hydrant pressure, some (but not all) curb stops (shutoffs for each house), well locations and the pump house. Not all houses have curb stops. Some homes were connected directly to the main with a tapping saddle.

Electrical Systems and Controls

The primary water system electrical controls are located in locked cabinets on the outside of the pump house on Basalt Mountain Drive on Homestead 24, and in the interior. This is also the location of Well 2.

Electrical controls consist of a breaker panel and well pump switches for Well 1-R and Well 2. An operation indicator light is located under each well switch. The panel includes a cycle and hour meter for each of the two pumps, Well 1R and Well 2. Each pump is controlled by a VFD and is set at a specified speed to ramp up to pump 25 gpm from each well simultaneously. An inline pressure transducer located at the well house communicates to the pumps to turn on at a specified distribution system pressure. The pumps are wired to turn on at a pressure that

corresponds to an actual tank level of 18 ft, and turn off at 21.3 ft. The low-level alarm is set to 14 ft, and high-level alarm is set to 21.5 ft.



Compliance Requirements

The Panorama Ranches water system is classified as a "D" system and requires an operator with a "D" Operators License and a Level 1 Distribution License. All sampling and monitoring requirements are detailed in the CDPHE filed Drinking Water Monitoring Plan.

Annual Consumer Confidence Reports (CCRs) are mailed to all owners in Panorama and the report is posted on the Panorama website www.Smprop.com. Sanitary Surveys of the system are performed once every 3 years by CDPHE. The State and Federal water regulations are constantly evolving and become more stringent over time. Water Operator training is required on an ongoing basis to maintain licensing by the State Water Operators Board.

Each home in the subdivision is required to be metered before the first point of use. Every home must have an approved backflow preventer before the first point of use and each homeowner is required to have the backflow preventer tested annually in accordance with CDPHE BPCCC Program. The Association is to be provided copies of annual test results upon request. All outside irrigation systems are also required the have approved backflow prevention devices. Exhibit B shows a standard detail for water meters and backflow preventers.

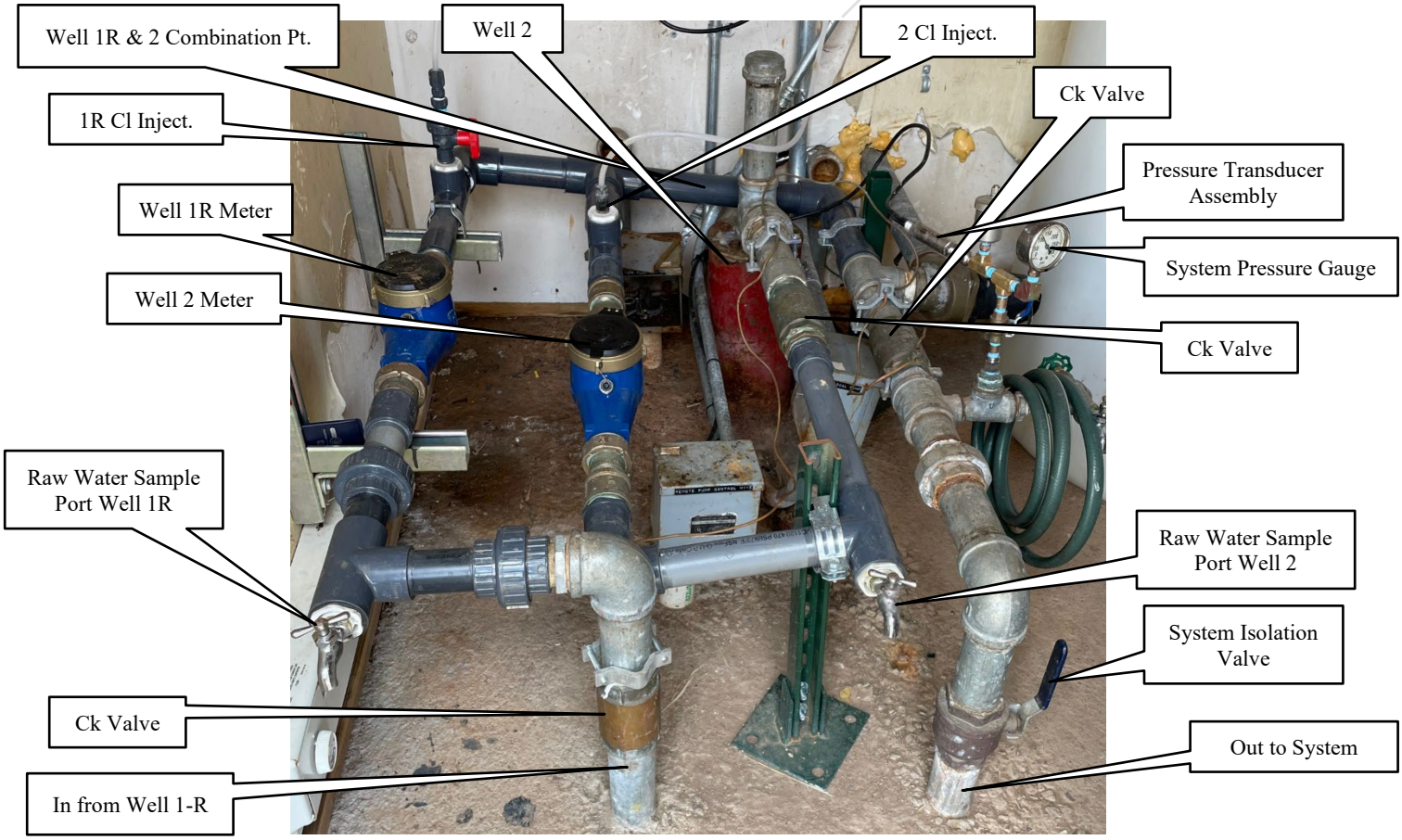
Water System Operations.

Monthly bacteriological tests are taken at approved sites in the subdivision in conformance with the Panorama Drinking Water Monitoring Plan. Test samples are mailed to a CDPHE approved laboratory and the results are maintained with the water system records by the Association. Other periodic testing is performed by the water operator in compliance with the requirements of the CDPHE, and described in the Panorama Drinking Water Monitoring Plan.

A minimum chlorine residual of 0.2 mg/l is maintained at the extremities of the water system. The chlorine injector tank is regularly refilled with the dilute sodium hypochlorite mixture.

Periodic inspections inside the water tank are made to observe water levels, to ensure ice formation does not inhibit float controls, detect overflow conditions or any other storage tank related problems. Comprehensive water tank inspections and identified repairs are made approximately every five years by utilizing an in-tank diver that videos tank condition, vacuums out accumulated sediment and makes minor repairs to the interior tank paint coating. Periodic and comprehensive tank inspections are completed in accordance with the Storage Tank Finished Water Inspection Plan on file with CDPHE. A CD or DVD is delivered to the Association after each inspection for documentation purposes.

Valves on the water main are exercised annually to ensure their operation and to flush the valve seats. Opening and closing of valves on the water mains must be done very slowly to avoid damage to pipes or valves due to excessive water pressure (water hammer) that occurs on a water main during flow conditions. The well and booster pumps are turned off during valve exercising. This is particularly important when the water tank isolation valve is exercised. Valve locations are identified on the water system map (Exhibit C).



Well House Configuration

Fire hydrants are flushed and exercised once per year to ensure proper operation and to clean the hydrant barrels. Each fire hydrant has a nearby shutoff valve so that the hydrant can be isolated from the system for replacement or repair. Each hydrant in the system is numbered with a total of 11 Dresser fire hydrants on the main water system. The hydrants in the system are pressurized by the elevation difference of the water tank above each hydrant. Individual hydrant pressures are shown on map of the distribution system in the CDPHE Monitoring Plan. One additional hydrant (Hydrant 12) has been installed adjacent to the water tank on the hill. This is a low-pressure hydrant because it is located at the same base elevation as the water tank and does not meet the pressure or flow requirements of the National Fire Protection Association (NFPA). It can be used as an emergency source of the fire protection water.

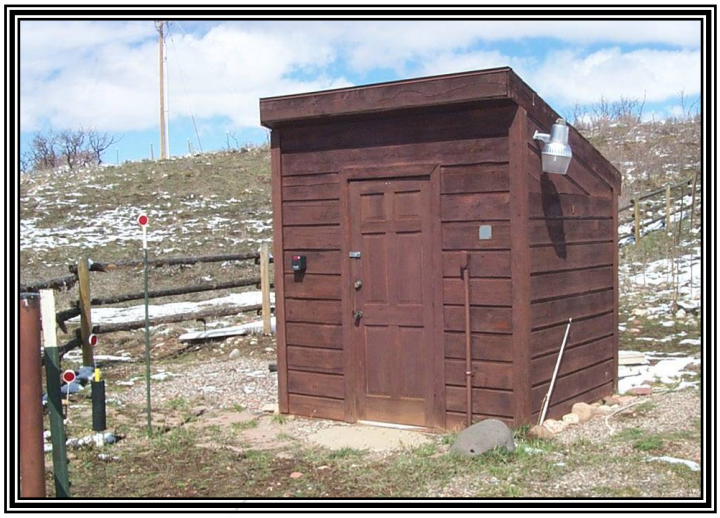
Breaker Box. VFD & Controls for Well 1-R and Hydrant for Raw Water Test Samples from Well

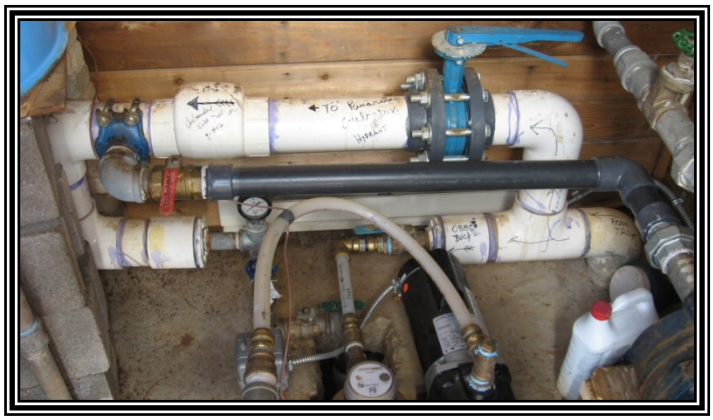
Periodic inspections are made of each well head to ensure that all fittings are tight, screen integrity is maintained and there are no obvious sources of well contamination. Herbicides and pesticides should never be applied within close proximity to the wells.

Individual water meters are read and billed quarterly. Bills are mailed to each Homestead owner by the Association management. Monthly or more frequent readings are taken from the pump house master meter and the cycle/hour meters for each pump. These readings are recorded in a spreadsheet and analyzed for excessive pumping, pump failure, or other characteristics of operation.

A second pump house that serves the four Homesteads (53 A, 53 B, 53 C & 53 D) in the Panorama Ranches Minor Subdivision Exemption is located on the top of the hill in general proximity to the water tank. The pump house building and the water lines serving the previously mentioned Homesteads are owned and maintained by the Panorama Ranches Homeowners Association. The electronic controls, pumps, pressure tanks and other equipment in the pump house are the responsibility of one or more of the homeowners of the aforementioned Homesteads. In addition, a low-pressure fire hydrant was installed by the owners of Homestead 53C and operations/maintenance of that hydrant are the responsibility of that homestead owner.

Pump House near Water Tank & Interior Piping.





Equipment & plumbing in the pump house is <u>not</u> the responsibility of the HOA.

Water Rates & Budget.

Periodically, the Panorama Ranches Board of Directors reviews and adopts water rates for the water system. The Association water rates are designed as an increasing block rate structure, which means that water gets more expensive as use increases. The first two tiers of water rates are based upon in-house and outside irrigation of up to 4,500 sq. ft. and are less expensive than the second two tiers. The fourth water tier is a very high rate intended to be a disincentive for excessive water use. The water system rates in effect as of 2018 are posted on the HOA website and listed in Exhibit B. Meters are read and billed quarterly.

The Association Board of Directors is responsible for submitting an annual budget to the owners at the annual meeting. The association membership votes on the proposed budget to adopt as presented or amend it for adoption.

Responsibilities - Board of Directors, Water Operator.

The Panorama Ranches Homeowners Association Board of Directors is responsible for the general affairs of the Association. The responsibilities are spelled out in the adopted and recorded Association Bylaws. The Board retains the services of an outside management company that is responsible for meeting minutes, payment of bills, water system billing and compliance with the directives of the Board. Members of the Board are elected at the annual Association meeting when their respective terms expire or they leave office.

The Water Operator is required to maintain a Class D Operators License and a Level 1 Distribution License to run the system. System operations can only be performed under the auspices of the water operator. Water system operations include routine water system operations check, maintenance and operation of the chlorine injection system, well pump operations, inspections of new service line installations, exercising fire hydrants, exercising main system valves, water testing in compliance with CDPHE requirements, mailing of annual Consumer Confidence Reports, overseeing and coordinating repairs/maintenance and general water system operations. The Water Operator reports to the Association Board of Directors on a monthly basis to provide system information as well as respond to Board directives.

A list of key contacts is included in the CDPHE Operations and Maintenance Plan.

EXHIBIT– A Panorama Ranches Subdivision

Pit Meter and Backflow Preventer Typical Installations

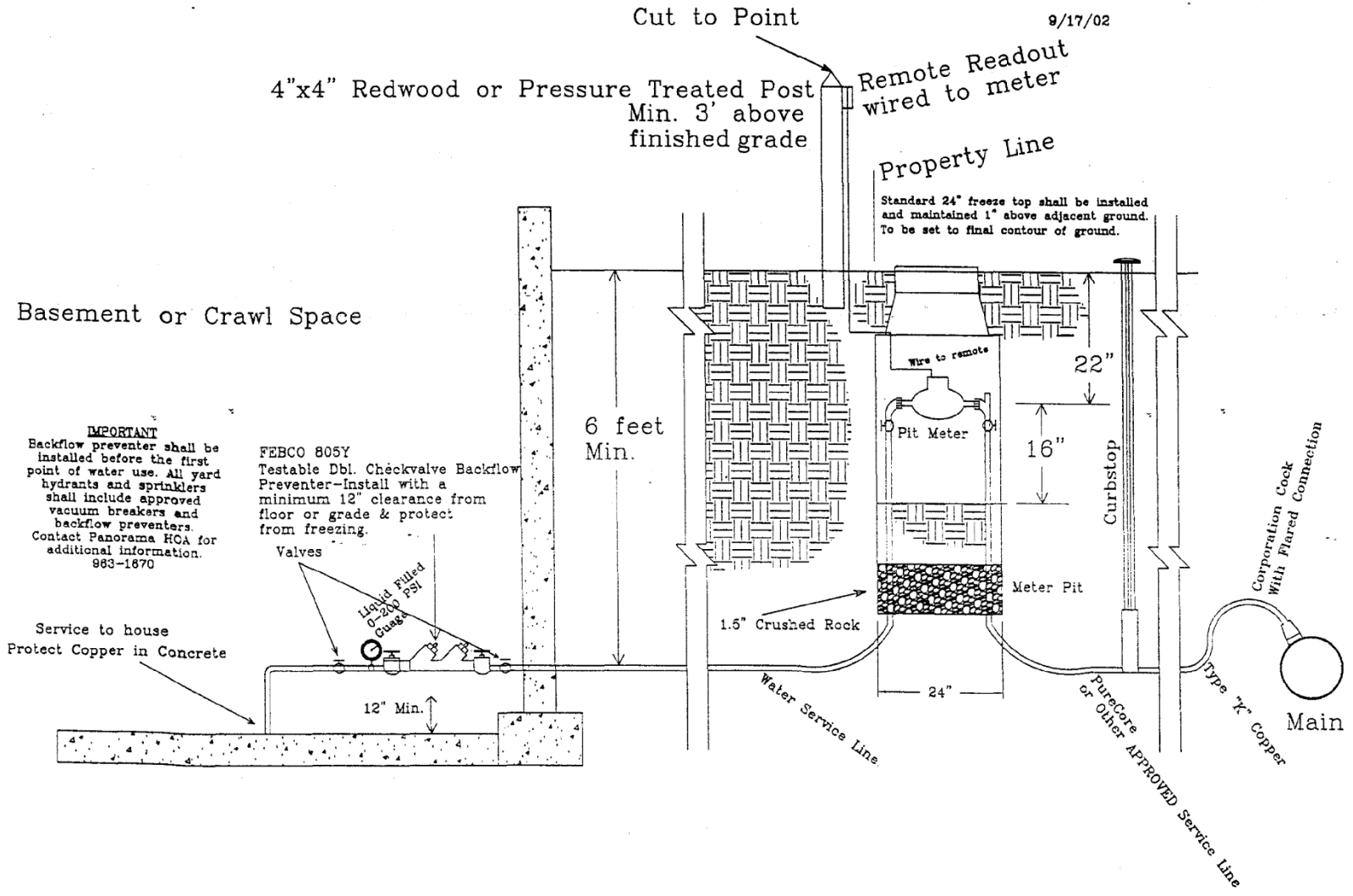


Exhibit B

Panorama Ranches Homeowners Association Water Requirements and Usage Rates 2018

MAXIMUM IRRIGATED AREA - The maximum irrigated area for any Homestead in the subdivision is 4,500 sq. ft.

MAXIMUM WATER CONSUMPTION - WINTER MONTHS - The maximum amount of water consumption per month allowed for any single Homestead in Panorama is 10,000 gallons/month during November, December, January, February, March and April.

MAXIMUM WATER CONSUMPTION - SUMMER MONTHS - The maximum amount of water consumption per month allowed for any single Homestead in Panorama is 30,000 gallons per month during the months of May, June, July, August, September and October.

TERMINATION OF WATER FOR EXCESSIVE USE - Use in excess of these amounts during these periods is considered "excessive use of water" by the association and the water decree. The Panorama Ranches Subdivision Board of Directors has the right to terminate water service for "waste or excessive use". The Board shall give 14 days written notice by First-Class Mail Certified Return Receipt Requested (except in the case of an emergency) prior to termination of water service.

WATER RATES - The following water consumption ranges and rates per thousand gallons are based upon usage and billing per quarter year. Water meters are read at the end (or close to) of each quarter as follows: End of March, End of June, End of September, and End of December.

Tier	Gallons/Quarter	Charge/1,000 Gallons	Cost for Maximum Use in Tier	Total Cumulative Cost at Top of Tier
1	0 - 30,000	$3.58	$107.40	$107.40
2	30,001 – 50,000	$4.08	$81.60	$189.00
3	50,001 – 70,000	$7.16	$143.20	$332.20
4	>70,001	$35.80	Yikes!	

Exhibit C: Panorama Water System Layout Map

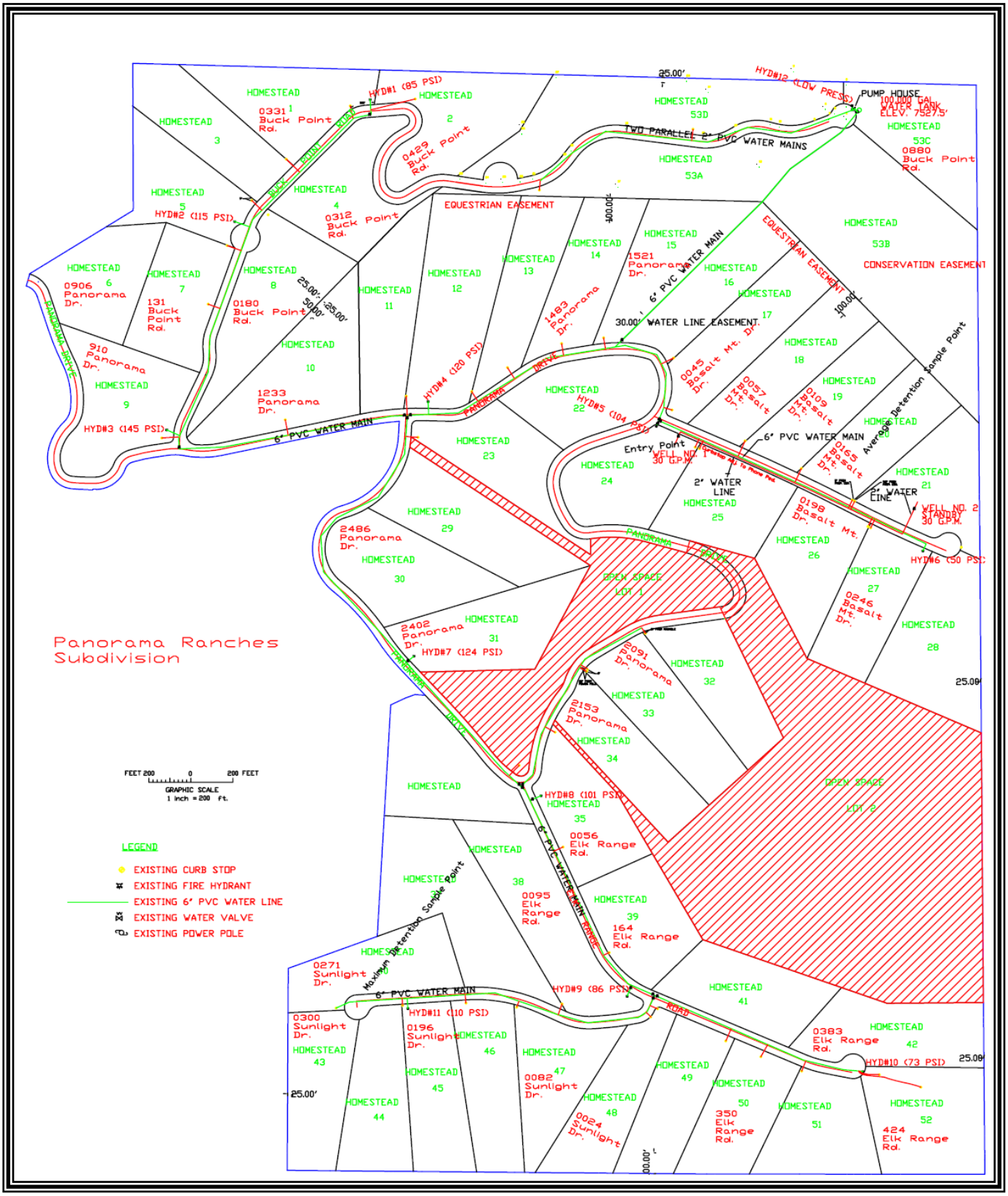


Exhibit D: Panorama Water System