water resources report has not identified the need for these individual properties. We require calculation of quantity for the proposed development per LDC 8.4.7.

please see LDC-19-007 available at this link...

https://planningdevelopment.elpasoco.com/recent-amendments-land-development-code/

for the required information in the Water Resources Repo

(c) Prepared by Qualified Professional.

The water resources report shall be prepared by a qualified hydrogeologist, hydrologist, licensed civil engineer, qualified groundwater geologist, or other qualified professional with appropriate experience.

(d) Document Adequate Water Supply.

The Water Resources Report shall include adequate documentation that the proposed water supply is sufficient in terms of quantity, dependability, and quality for the proposed subdivision.

(c) Final Plat and Replat Report.

The water resource report submitted with the final plat shall include all of the data needed to determine whether the proposed water supply is sufficient in terms of quality, quantity and dependability for the type of subdivision proposed. The report shall be based on engineering calculations and site-specific data and shall include a detailed discussion of the water demand, supply, quality, dependability, and supply facilities for the proposed subdivision.

A water resources report is not required if the BoCC made a finding that the proposed water supply plan of the preliminary plan was sufficient in terms of quantity, quality and dependability. However, an amended water resources report is required if there is a substantial change in either the water supply or the estimated water demand.

Include the name of the proposed development as Mt. States Pipe and Supply rather than Electric Drive Self Storage.

The commercial use square footage currently under review shows 74,698 square feet total of bldg total. There is not comment on water demand for irrigation. The estimate also shows heads of cattle. include the known information in the water resources report.

we require a water quality report so that we can make a finding on sufficiency... per LDC and sate statute.

CHEROKEE METROPOLITAN DISTRICT

6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842

Telephone: (71

(a) Summary of the Proposed Subdivision.

The water resource report shall include a summary of the proposed subdivision with the following information:

- A location map including roads, Township and Range, a copy of all maps required with sketch and preliminary plan and final plat submittals, and legal description; and
- A description of subdivision including acreage of each proposed land use, number of dwelling units, etc. For phased projects the description shall clearly describe the acreages, land uses and number of units of each phase. The location of each proposed land use shall be shown on appropriate maps.

(b) Information Regarding Sufficient Quantity of Water.

(i) Calculation of Water Demand. The water resource report shall include water demand calculations in separate calculations for the type, number and annual water requirements of existing, proposed and potential maximum uses of the subject property and a general timetable when the demands are expected. Acceptable methods of determining water demand are described in this Section.

(ii) Calculation of Quantity of Water Available. The water resource report shall identify and describe each source of water including: (1) a map showing the location of any off-site water to be used and the location of major water transmission lines, reservoirs, etc.; (2) calculations of the quantity of water available from each source (on-site and off-site sources shall be determined separately); and (3) a description of groundwater sources.

(iii) Groundwater Source Information. The water resource report shall list each aquifer to be used. Each aquifer shall be identified as tributary, non-tributary, not non-tributary or from a designated basin, and as either renewable or non-renewable aquifers. The report shall discuss the need for and the status of any augmentation plans required to use the proposed supply. The report shall also describe the annual and the 300-year quantity of water available from each proposed aquifer.

(iv) Production Wells Information. The water resource report shall discuss location, construction and production details of existing and proposed production wells. The following shall be included: (1) estimated number, size and short- and long-term yields of wells necessary to serve the proposed subdivision; (2) estimated life expectancy of wells; (3) estimated short and long-term well development schedule indicating probable timing of bringing additional wells on line; (4) a map showing locations of wells to be used during the first 5 years of the subdivision and probable locations of wells in the following years; (5) well drilling logs and well completion reports; and (6) pumping test data and analysis, including data and analysis of constant rate and step drawdown tests.

(v) Surface Water Sources. The water resource report shall list each surface water supply to be used. The report shall discuss the need for and the status of any augmentation plans required to use the proposed supply. In addition, the report shall describe the annual and the 300-year quantity of water available from each proposed surface water supply, and calculate the number of years of water supply. For phased projects, the calculation shall delineate the years of water available for each phase.

This document has been prepared to satisfy the requirements of El Paso County for a Water Provider's Report in support of **Electronic Drive Self Storage** at **7765 Electronic Drive**.

Introduction

Cherokee Metropolitan District (CMD) is a Title 32 special District which provides water and wastewater to an 800-acre enclave of unincorporated El Paso county surrounded by the City of Colorado Springs. Currently CMD serves approximately 7000 residential taps and 600 commercial taps in addition to bulk users in eastern El Paso County including Schriever Air Force Base and several small developments located along State Highway 94.

CMD water is sourced entirely from groundwater in two regions. The majority is recovered from the alluvial Upper Black Squirrel (UBS) Aquifer in eastern El Paso County through 20 wells. The remainder is sourced from two wells in deep bedrock aquifers in the northern part of the county on the "Sundance Ranch" property. Water from eight of the 20 wells in the eastern part of the county can only be used to serve a fixed list of customers. Water for the main service area of CMD comes only from the remaining 12 wells in UBS along with the two wells in Black Forest.

Calculation of Anticipated water Demand

Limited information was available at the time of application for a water commitment for this development. Based on the preliminary landscape plan and an early estimate of fixture counts a provisional use value of one Single Family Equivalent (SFE) was assigned to the development. The development is expected to have fewer fixtures and a smaller irrigated landscape area than the average single family home in Cherokee Metropolitan District. In the absence of a more detailed plumbing plan, a presumptive use value of 0.31 Acre-Feet per Year (AFY) was assigned to the development corresponding to CMD's current presumptive use value per SFE.

Water Supplies

Cherokee has eight wells that are restricted to serving a maximum of 653 Acre-Feet per Year (AFY) to specified in-basin customers. Excess allocation for these wells is unavailable for new developments, even if they are inside the Basin, so this water is tracked separately from CMD's general supply portfolio. CMD's other alluvial wells are exported for use outside the UBS basin. The total annual volume available to CMD from these exportable supplies is 3,985 AFY (Table 1). The physical yield of these wells is significantly higher than their annual appropriation, allowing for flexibility in satisfying summer peak demand.

Table 1: Water rights and tributary status of Exportable Wells

Well Number	Water Right (AFY)	2019 Use (AFY)	Permit Number	Aquifer	Aquifer Status
Well 9	176	132	14145-FP-R	UBS Alluvium	Tributary
Well 10	176	108	14146-FP-R	UBS Alluvium	Tributary
Well 11	244	161	6821-FP-R	UBS Alluvium	Tributary
Well 12	244	149	11198-FP	UBS Alluvium	Tributary
Well 13	1268	975	49988-F	UBS Alluvium	Tributary
Well 14	0	0	52429-F	UBS Alluvium	Tributary
Well 15	281	145	54070-F	UBS Alluvium	Tributary
Well 16	219	123	54069-F	UBS Alluvium	Tributary
Well 17	175	151	63094-F	UBS Alluvium	Tributary
Well 18	225	138	16253-RFP-R	UBS Alluvium	Tributary
Well 19	95	79	20567-RFP-R	UBS Alluvium	Tributary
Well 20	400	38	4332-RFP	UBS Alluvium	Tributary
Well 21	290	0	81782-F	UBS Alluvium	Tributary
DN-4*	110	110	78315-F	Denver Aquifer	Non-Tributary
AR-1**	147.7	155	75881-F	Arapahoe Aquifer	Non-Tributary
Total	**3984.7**	**2464**			

*CMD holds additional water rights in the Denver Aquifer associated with the Sundance Ranch property but this particular well has a maximum annual recorded yield of 110 AFY

**As of December 2019 AR-1 has 2040 AF of banked water which allows actual pumping to exceed allocation on a limited basis

CMD is developing owned water supplies to increase available water and improve flexibility in provision of summer flows. By the end of 2020, these new wells will contribute 458 AFY of capacity to the CMD system (Table 2) for a total of 4,443.0 AFY. Since 2011, actual demand from CMD customers has fallen 30-35% below commitments, partially due to some committed developments being incomplete but largely due to water saving measures taken by CMD customers.

Table 2: New water supplies slated for completion in 2020

Well Number	Water Right (AFY)	Permit Number	Aquifer	Aquifer Status
Albrecht Well	153.5	27571-FP	UBS Alluvium	Tributary
DA-1	40.3	83604-F	Dawson	Not Non-Tributary
DA-4	64.5	83603-F	Dawson	Not Non-Tributary
AR-1 Expansion	200	75881-F	Arapahoe	Non-Tributary
Total	**458.3**			

By the end of 2020, CMD will have at total of 4,443 AFY of exportable water supplies sourced from alluvial and deep bedrock aquifers. Further development in the Denver Basin is not planned at this time and instead CMD is focusing on acquiring new renewable supplies proximate to existing infrastructure.

Water Commitments

CMD's water commitments stand at 4,033 AFY before the addition of the proposed development. These commitments are broken down below in Table 3. The Tipton and Kane commitments are related to an arrangement from the mid-2000's where developers reserved commitments on two new wells. The water from these wells is considered fully committed to these developers even if they have not yet begun the projects associated with the reserved commitments. Due to a complex legal history, the "Kane" water right was not tied to a specific physical water well but instead operates as a commitment served from CMD's general supply portfolio. The "Tipton" water right corresponds to CMD's Well 18.

Table 3: CMD Commitments before addition of new development

Commitments	AFY
In-District (2015)	2693
Committed Since 2015	328
Schriever Air Force Base	537
Kane	200
Tipton	225
Construction	25
Parks	25
Total	**4033**

Water Balance

With 4,443.0 AFY of exportable supply and 4,033 AFY of commitments, CMD has a water balance of 410.0 AFY before the subject development. After commitment of 0.31 AFY to this development, the District will have 410.7 AFY remaining for additional commitments.

Table 4: Water balance with new development

Water Balance Before New Commitment	410.0 AFY
New Commitment: Electronic Dr. Self Storage	0.31
Water Balance Remaining	**409.7 AFY**

Other Relevant District Information

Recent Water Acquisitions/Losses

CMD has not acquired any new water rights since 2015 but has been developing owned water rights into productive wells. CMD has not engaged in any water trades nor lost any water rights in the last year. The District is not currently under contract to purchase new water rights although CMD is investigating purchases of renewable water rights proximate to its existing infrastructure on an ongoing basis.

New Augmentation Plans

CMD is currently pursuing a replacement plan in partnership with Meridian Service Metropolitan District (MSMD) in order to maximize the efficiency of its water supplies.

Major System Capital Improvements

CMD has been actualizing owned water by drilling wells and beginning production on several well sites. In February of 2020 CMD brought the Sweetwater 5 well (81782-F) online after a year of planning and construction. In the next 6 months it is expected that the "Albrecht Well" (27554-FP) will be brought online providing an additional 153.5 AFY of water.

CMD is currently preparing to increase pump capacity in well AR-1 (75881-F), its only well in the Arapahoe aquifer, and to install pumps in two existing wells in the Dawson Aquifer (83603-F & 83604-F). Beyond these projects, additional well construction in the Denver Basin is not anticipated at this time, although CMD has a substantial amount of undeveloped water rights in the Denver Basin Aquifers.

Existing CMD wells have had a series of upgrades to improve quality and efficiency within in the last year. The screen and pump on Well 11 (6821-FP-R) were replaced to improve water flow and several in-district potable water tanks have been cleaned and rehabilitated. More incremental improvements in the distribution system to improve reliability and resiliency include deeper computer integration, upgrades to treatment systems, and emergency generator refurbishment.