

**WATER/WASTEWATER RESOURCES REPORT**

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**SPACE VILLAGE FILING NO. 3, LOTS 1, 2 & 3**

**6809 SPACE VILLAGE AVENUE**

**EL PASO COUNTY, COLORADO**

**PREPARED FOR:**

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Colorado Springs, CO 80903  
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**August 22, 2018**

**Olsson Associates Project No. 017-1754**



**Table of Contents**

1.0 Purpose ..... 1  
2.0 Summary of Proposed Subdivision ..... 1  
3.0 Sufficient Quantity, Quality & Dependability of Water ..... 1  
    3.1 Calculation of Water and Sewer Demand ..... 1  
    3.2 Water Supply, Resources and Quality ..... 2  
4.0 Conclusions ..... 2

**List of Figures**

Figure 1. Vicinity Map..... 1

**List of Tables**

Table 1. Domestic Water Demand ..... 2  
Table 2. Irrigation Demands ..... 2  
Table 3. Sewer Demands..... 2

## 1.0 PURPOSE

This document is intended to serve as the Water Resources Report for Lots 1, 2 and 3, Space Village Filing No. 3. The purpose of this document is to satisfy the requirements of section 8.4.7.B.1.b of the El Paso County Land Development Code.

## 2.0 SUMMARY OF PROPOSED SUBDIVISION

The proposed subdivision will consist of three commercial lots. Cherokee Metro District is already serving Lot 2, but demand calculations have been included in this report to satisfy the criteria of the county. Demand for Lot 2 is based off the current site conditions. The use of Lot 1 and Lot 3 has yet to be determined, but for the sake of providing a demand, Lot 1 will be assumed to be a 5,600 SF Convenience Store, and Lot 3 will be assumed to be a 1,500 SF commercial building. See Vicinity Map below for a general location of the proposed development.

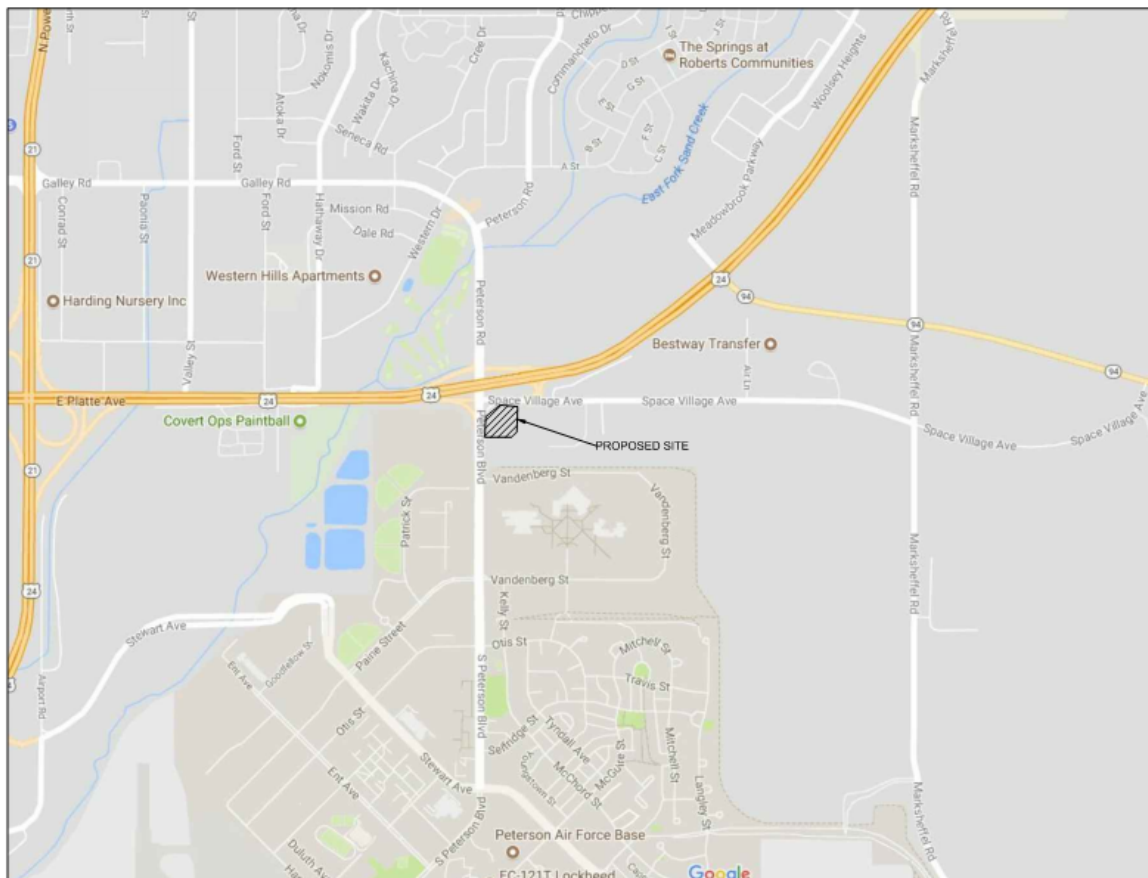


Figure 1. Vicinity Map

## 3.0 SUFFICIENT QUANTITY, QUALITY & DEPENDABILITY OF WATER

### 3.1 Calculation of Water and Sewer Demand

Water and Irrigation Demands were calculated using the El Paso County Development Code Chapter 8.4.7.B.7.d. See Table 1 and Table 2 for detailed calculations. Lot 1 and Lot 3 were assumed to have 10% of the overall lot area to be landscaped.

LOT	USE	LOT AREA (SF)	BUILDING AREA (SQ FT)	UNIT DOMESTIC DEMAND (0.1 GPD PER SF OF BUILDING)	ACTUAL DOMESTIC WATER DEMAND (GPD)	ACTUAL DOMESTIC WATER DEMAND (AC-FT/YR)
1	Commercial	77,077	5,600	0.1	560	0.63
2	Commercial	85,635	18,000	0.1	1800	2.02
3	Commercial	17,316	1,500	0.1	150	0.17
Total					2510	2.81

Table 1. Domestic Water Demand

LOT	USE	IRRIGATED AREA (SQ FT)	IRRIGATION UNIT DEMAND (AC-FT/1000 SF LANDSCAPED)	ACTUAL IRRIGATION DEMAND (AC-FT/YR)
1	Commercial	7,708	0.0566	0.44
2	Commercial	1,436	0.0566	0.08
3	Commercial	1,732	0.0566	0.10
Total				0.62

Table 2. Irrigation Demands

Sanitary sewer demand was calculated using Table 2.8.F.1 of the Colorado Springs Utilities Wastewater LESS. See Table 3 for detailed calculations.

LOT	USE	LOT AREA (ACRE)	UNIT SEWER DEMAND (GALLONS PER ACRE PER DAY)	SEWER DEMAND (GPD)
1	Commercial	1.77	1,300	2300
2	Commercial	1.97	1,300	2556
3	Commercial	0.40	1,300	517
Total				5373

Table 3. Sewer Demands

### 3.2 Water Supply, Resources and Quality

The proposed development will be served by Cherokee Metropolitan District. The District owns and maintains an 8" water main, and an 8" sanitary sewer main that run through the development. Future services for Lots 1 & 3 will be pulled from these main lines, while Lot 2 is already being served by these mains. The layout of the proposed services will be determined when an end user develops the site.

### 4.0 CONCLUSIONS

Based on the aforementioned land uses, the existing retail on Lot 2 combined with the future development of Lots 1 and 3 will create the following demands on Cherokee Metro District's infrastructure:

- Domestic Water = 2.81 ac-ft/yr
- Irrigation Water = 0.62 ac-ft/yr
- Sanitary Sewer = 5,373 gpd



# APPENDICES

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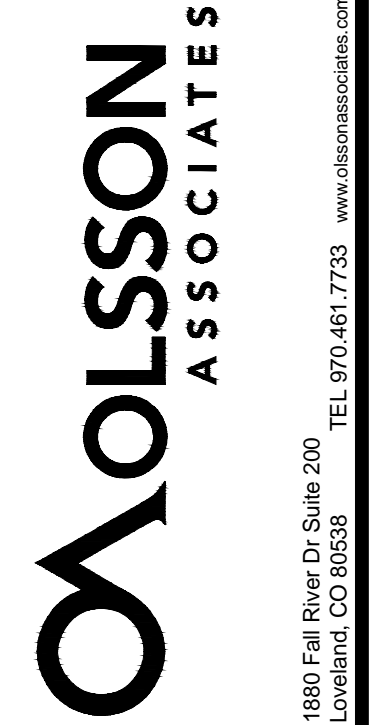
ENGINEER:  
OLSSON ASSOCIATES  
1880 FALL RIVER DRIVE, SUITE 200  
LOVELAND, CO 80538  
CONTACT: JOSH ERRAMOUSPE  
PH: (970)461.7733  
E: JERRAMOUSPE@OLSSONASSOCIATES.COM

OWNER/SUBDIVIDER:  
SPACE VILLAGE RETAIL LLC  
90 SOUTH CASCADE AVE, SUITE 1500  
COLORADO SPRINGS, CO 80903  
CONTACT: DANNY MIENKA  
PH: (719)448.4034  
E: DANNY@THEEQUITYGROUP.NET

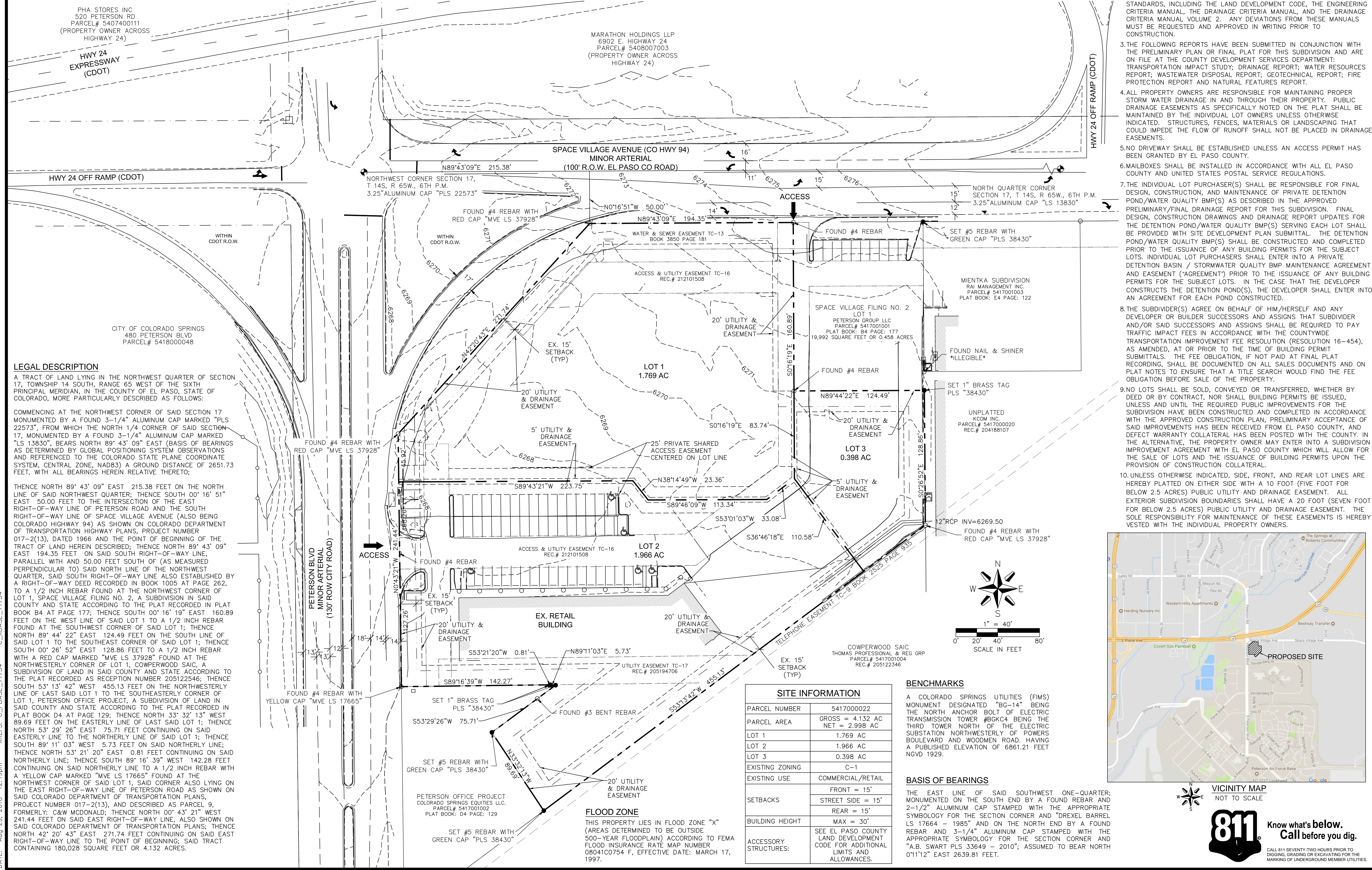
# SPACE VILLAGE FILING No. 3 PRELIMINARY PLAN

A COMMERCIAL SUBDIVISION LOCATED IN THE NORTHWEST QUARTER OF SECTION 17, TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO

- ### GENERAL NOTES
- ALL (FUTURE) STRUCTURAL FOUNDATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO. FOUNDATION DESIGN SHALL ADHERE TO THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT PREPARED BY OLSSON ASSOCIATES (PROJECT 017-1754, DATED 9/13/2017).
  - ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM THESE MANUALS MUST BE REQUESTED AND APPROVED IN WRITING PRIOR TO CONSTRUCTION.
  - THE FOLLOWING REPORTS HAVE BEEN SUBMITTED IN CONJUNCTION WITH THE PRELIMINARY PLAN OR FINAL PLAT FOR THIS SUBDIVISION AND ARE ON FILE AT THE COUNTY DEVELOPMENT SERVICES DEPARTMENT: TRANSPORTATION IMPACT STUDY; DRAINAGE REPORT; WATER RESOURCES REPORT; WASTEWATER DISPOSAL REPORT; GEOTECHNICAL REPORT; FIRE PROTECTION REPORT AND NATURAL FEATURES REPORT.
  - ALL PROPERTY OWNERS ARE RESPONSIBLE FOR MAINTAINING PROPER STORM WATER DRAINAGE IN AND THROUGH THEIR PROPERTY. PUBLIC DRAINAGE EASEMENTS AS SPECIFICALLY NOTED ON THE PLAT SHALL BE MAINTAINED BY THE INDIVIDUAL LOT OWNERS UNLESS OTHERWISE INDICATED. STRUCTURES, FENCES, MATERIALS OR LANDSCAPING THAT COULD IMPEDE THE FLOW OF RUNOFF SHALL NOT BE PLACED IN DRAINAGE EASEMENTS.
  - NO DRIVEWAY SHALL BE ESTABLISHED UNLESS AN ACCESS PERMIT HAS BEEN GRANTED BY EL PASO COUNTY.
  - MAILBOXES SHALL BE INSTALLED IN ACCORDANCE WITH ALL EL PASO COUNTY AND UNITED STATES POSTAL SERVICE REGULATIONS.
  - THE INDIVIDUAL LOT PURCHASER(S) SHALL BE RESPONSIBLE FOR FINAL DESIGN, CONSTRUCTION, AND MAINTENANCE OF PRIVATE DETENTION POND/WATER QUALITY BMP(S) AS DESCRIBED IN THE APPROVED PRELIMINARY/FINAL DRAINAGE REPORT FOR THIS SUBDIVISION. FINAL DESIGN, CONSTRUCTION DRAWINGS AND DRAINAGE REPORT UPDATES FOR THE DETENTION POND/WATER QUALITY BMP(S) SERVING EACH LOT SHALL BE PROVIDED WITH SITE DEVELOPMENT PLAN SUBMITTAL. THE DETENTION POND/WATER QUALITY BMP(S) SHALL BE CONSTRUCTED AND COMPLETED PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS FOR THE SUBJECT LOTS. INDIVIDUAL LOT PURCHASERS SHALL ENTER INTO A PRIVATE DETENTION BASIN / STORMWATER QUALITY BMP MAINTENANCE AGREEMENT AND EASEMENT ("AGREEMENT") PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS FOR THE SUBJECT LOTS. IN THE CASE THAT THE DEVELOPER CONSTRUCTS THE DETENTION POND(S), THE DEVELOPER SHALL ENTER INTO AN AGREEMENT FOR EACH POND CONSTRUCTED.
  - THE SUBDIVIDER(S) AGREE ON BEHALF OF HIM/HERSELF AND ANY DEVELOPER OR BUILDER SUCCESSORS AND ASSIGNS THAT SUBDIVIDER AND/OR SAID SUCCESSORS AND ASSIGNS SHALL BE REQUIRED TO PAY TRAFFIC IMPACT FEES IN ACCORDANCE WITH THE COUNTYWIDE TRANSPORTATION IMPROVEMENT FEE RESOLUTION (RESOLUTION 16-454), AS AMENDED, AT OR PRIOR TO THE TIME OF BUILDING PERMIT SUBMITTALS. THE FEE OBLIGATION, IF NOT PAID AT FINAL PLAT RECORDING, SHALL BE DOCUMENTED ON ALL SALES DOCUMENTS AND ON PLAT NOTES TO ENSURE THAT A TITLE SEARCH WOULD FIND THE FEE OBLIGATION BEFORE SALE OF THE PROPERTY.
  - NO LOTS SHALL BE SOLD, CONVEYED OR TRANSFERRED, WHETHER BY DEED OR BY CONTRACT, NOR SHALL BUILDING PERMITS BE ISSUED, UNLESS AND UNTIL THE REQUIRED PUBLIC IMPROVEMENTS FOR THE SUBDIVISION HAVE BEEN CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLAN, PRELIMINARY ACCEPTANCE OF SAID IMPROVEMENTS HAS BEEN RECEIVED FROM EL PASO COUNTY, AND DEFECT WARRANTY COLLATERAL HAS BEEN POSTED WITH THE COUNTY. IN THE ALTERNATIVE, THE PROPERTY OWNER MAY ENTER INTO A SUBDIVISION IMPROVEMENT AGREEMENT WITH EL PASO COUNTY WHICH WILL ALLOW FOR THE SALE OF LOTS AND THE ISSUANCE OF BUILDING PERMITS UPON THE PROVISION OF CONSTRUCTION COLLATERAL.
  - UNLESS OTHERWISE INDICATED, SIDE, FRONT, AND REAR LOT LINES ARE HEREBY PLATTED ON EITHER SIDE WITH A 10 FOOT (FIVE FOOT FOR BELOW 2.5 ACRES) PUBLIC UTILITY AND DRAINAGE EASEMENT. ALL EXTERIOR SUBDIVISION BOUNDARIES SHALL HAVE A 20 FOOT (SEVEN FOOT FOR BELOW 2.5 ACRES) PUBLIC UTILITY AND DRAINAGE EASEMENT. THE SOLE RESPONSIBILITY FOR MAINTENANCE OF THESE EASEMENTS IS HEREBY VESTED WITH THE INDIVIDUAL PROPERTY OWNERS.



PRELIMINARY  
NOT FOR  
CONSTRUCTION



### LEGAL DESCRIPTION

A TRACT OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 17, TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN THE COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 17 MONUMENTED BY A FOUND 3-1/4" ALUMINUM CAP MARKED "PLS 22573", FROM WHICH THE NORTH 1/4 CORNER OF SAID SECTION 17, MONUMENTED BY A FOUND 3-1/4" ALUMINUM CAP MARKED "LS 13830", BEARS NORTH 89° 43' 09" EAST (BASIS OF BEARINGS AS DETERMINED BY GLOBAL POSITIONING SYSTEM OBSERVATIONS AND REFERENCED TO THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD83) A GROUND DISTANCE OF 2651.73 FEET, WITH ALL BEARINGS HEREIN RELATIVE THERETO;

THENCE NORTH 89° 43' 09" EAST 215.38 FEET ON THE NORTH LINE OF SAID NORTHWEST QUARTER; THENCE SOUTH 00° 16' 51" EAST 50.00 FEET TO THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF PETERSON ROAD AND THE SOUTH RIGHT-OF-WAY LINE OF SPACE VILLAGE AVENUE (ALSO BEING COLORADO HIGHWAY 94) AS SHOWN ON COLORADO DEPARTMENT OF TRANSPORTATION HIGHWAY PLANS, PROJECT NUMBER 017-2(13), DATED 1966 AND THE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 89° 43' 09" EAST 194.35 FEET ON SAID SOUTH RIGHT-OF-WAY LINE, PARALLEL WITH AND 50.00 FEET SOUTH OF (AS MEASURED PERPENDICULAR TO) SAID NORTH LINE OF THE NORTHWEST QUARTER, SAID SOUTH RIGHT-OF-WAY LINE ALSO ESTABLISHED BY A RIGHT-OF-WAY DEED RECORDED IN BOOK 1005 AT PAGE 262, TO A 1/2 INCH REBAR FOUND AT THE NORTHWEST CORNER OF LOT 1, SPACE VILLAGE FILING NO. 2, A SUBDIVISION IN SAID COUNTY AND STATE ACCORDING TO THE PLAT RECORDED IN PLAT BOOK B4 AT PAGE 177; THENCE SOUTH 00° 16' 19" EAST 160.89 FEET ON THE WEST LINE OF SAID LOT 1 TO A 1/2 INCH REBAR FOUND AT THE SOUTHWEST CORNER OF SAID LOT 1; THENCE NORTH 89° 44' 22" EAST 124.49 FEET ON THE SOUTH LINE OF SAID LOT 1 TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE SOUTH 00° 26' 52" EAST 128.86 FEET TO A 1/2 INCH REBAR WITH A RED CAP MARKED "MVE LS 37928" FOUND AT THE NORTHWESTERLY CORNER OF LOT 1, COWPERWOOD SAIC, A SUBDIVISION OF LAND IN SAID COUNTY AND STATE ACCORDING TO THE PLAT RECORDED AS RECEPTION NUMBER 205122546; THENCE SOUTH 53° 13' 42" WEST 455.13 FEET ON THE NORTHWESTERLY LINE OF SAID LOT 1 TO THE SOUTHEASTERLY CORNER OF LOT 1, PETERSON OFFICE PROJECT, A SUBDIVISION OF LAND IN SAID COUNTY AND STATE ACCORDING TO THE PLAT RECORDED IN PLAT BOOK D4 AT PAGE 129; THENCE NORTH 33° 32' 13" WEST 89.69 FEET ON THE EASTERLY LINE OF SAID LOT 1; THENCE NORTH 53° 29' 26" EAST 75.71 FEET CONTINUING ON SAID EASTERLY LINE TO THE NORTHERLY LINE OF SAID LOT 1; THENCE SOUTH 89° 11' 03" WEST 5.73 FEET ON SAID NORTHERLY LINE; THENCE NORTH 53° 21' 20" EAST 0.81 FEET CONTINUING ON SAID NORTHERLY LINE; THENCE SOUTH 89° 16' 39" WEST 142.28 FEET CONTINUING ON SAID NORTHERLY LINE TO A 1/2 INCH REBAR WITH A YELLOW CAP MARKED "MVE LS 17665" FOUND AT THE NORTHWEST CORNER OF SAID LOT 1, SAID CORNER ALSO LYING ON THE EAST RIGHT-OF-WAY LINE OF PETERSON ROAD AS SHOWN ON SAID COLORADO DEPARTMENT OF TRANSPORTATION PLANS, PROJECT NUMBER 017-2(13), AND DESCRIBED AS PARCEL 9, FORMERLY: C&W MCDONALD; THENCE NORTH 00° 43' 21" WEST 241.44 FEET ON SAID EAST RIGHT-OF-WAY LINE, ALSO SHOWN ON SAID COLORADO DEPARTMENT OF TRANSPORTATION PLANS; THENCE NORTH 42° 20' 43" EAST 271.74 FEET CONTINUING ON SAID EAST RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING; SAID TRACT CONTAINING 180,028 SQUARE FEET OR 4.132 ACRES.

### SITE INFORMATION

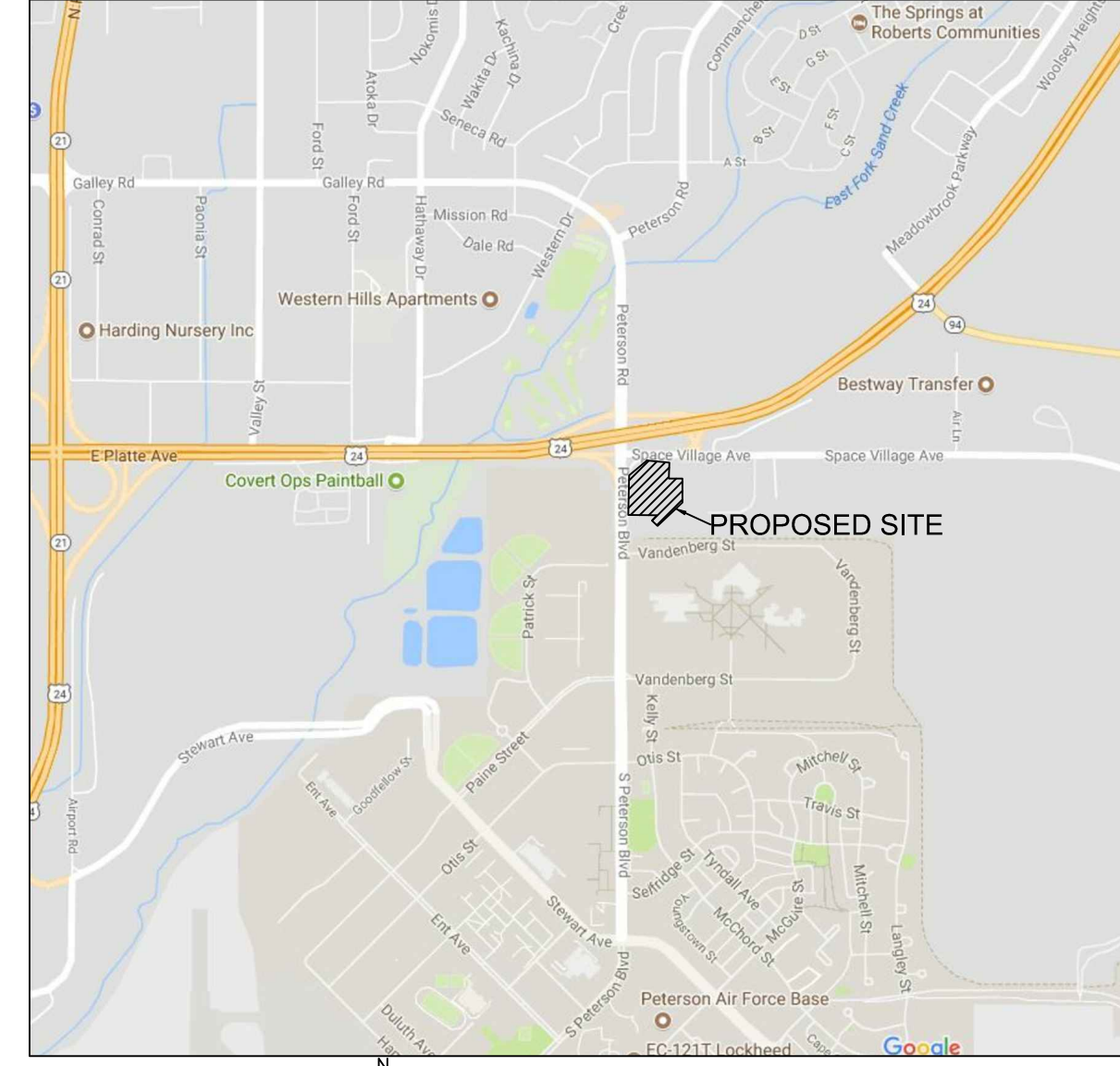
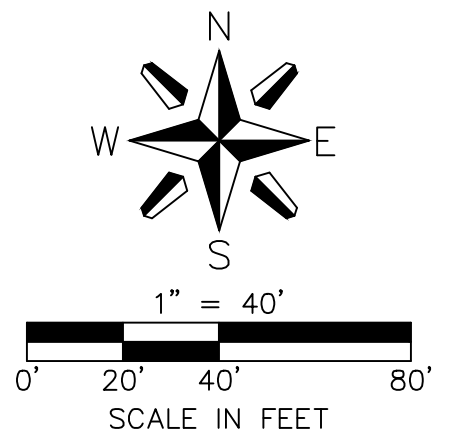
PARCEL NUMBER	5417000022
PARCEL AREA	GROSS = 4.132 AC NET = 2.998 AC
LOT 1	1.769 AC
LOT 2	1.966 AC
LOT 3	0.398 AC
EXISTING ZONING	C-1
EXISTING USE	COMMERCIAL/RETAIL
SETBACKS	FRONT = 15' STREET SIDE = 15' REAR = 15'
BUILDING HEIGHT	MAX = 30'
ACCESSORY STRUCTURES:	SEE EL PASO COUNTY LAND DEVELOPMENT CODE FOR ADDITIONAL LIMITS AND ALLOWANCES.

### BENCHMARKS

A COLORADO SPRINGS UTILITIES (FIMS) MONUMENT DESIGNATED "BG-14" BEING THE NORTH ANCHOR BOLT OF ELECTRIC TRANSMISSION TOWER #BGK4 BEING THE THIRD TOWER NORTH OF THE ELECTRIC SUBSTATION NORTHWESTERLY OF POWERS BOULEVARD AND WOODMEN ROAD, HAVING A PUBLISHED ELEVATION OF 6861.21 FEET NGVD 1929.

### BASIS OF BEARINGS

THE EAST LINE OF SAID SOUTHWEST ONE-QUARTER; MONUMENTED ON THE SOUTH END BY A FOUND REBAR AND 2-1/2" ALUMINUM CAP STAMPED WITH THE APPROPRIATE SYMBOLOLOGY FOR THE SECTION CORNER AND "DREXEL BARREL LS 17664 - 1985" AND ON THE NORTH END BY A FOUND REBAR AND 3-1/4" ALUMINUM CAP STAMPED WITH THE APPROPRIATE SYMBOLOLOGY FOR THE SECTION CORNER AND "A.B. SWART PLS 33649 - 2010"; ASSUMED TO BEAR NORTH 0°11'12" EAST 2639.81 FEET.



SPACE VILLAGE FILING No. 3  
PETERSON BOULEVARD & SPACE VILLAGE AVENUE  
PRELIMINARY PLAN

REVISION DESCRIPTION	DATE

DATE: 08/28/2018  
SHEET NUMBER: 1 OF 1  
SP-17-009

## CHEROKEE MD 2018 Drinking Water Quality Report For Calendar Year 2017

*Public Water System ID:* CO0121125

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact JONATHON SMITH at 719-597-5080 with any questions or for public participation opportunities that may affect water quality.

### General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### **Lead in Drinking Water**

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### **Source Water Assessment and Protection (SWAP)**

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [www.colorado.gov/cdphe/ccr](http://www.colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121125, CHEROKEE MD, or by contacting JONATHON SMITH at 719-597-5080. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

### **Our Water Sources**

<b><u>Source</u></b>	<b><u>Source Type</u></b>	<b><u>Water Type</u></b>	<b><u>Potential Source(s) of Contamination</u></b>
WELLS 1 THROUGH 13	Well	Groundwater	Row crops, fallow, small grains, pasture/hay, septic systems, road miles
WELLS 15 THROUGH 20	Well	Groundwater	
WELL 21 AR-1	Well	Groundwater	
WELL 22 DN-4	Well	Groundwater	



## Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## Detected Contaminants

CHEROKEE MD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2017 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b>						
<b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <i><b>OR</b></i> If sample size is less than 40 no more than 1 sample is below 0.2 ppm						
<b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	01/01/2017 to 12/31/2017	<u>Lowest period</u> percentage of samples meeting TT requirement: 96%	0	255	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	06/13/2017 to 06/15/2017	0.42	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/13/2017 to 06/15/2017	4	30	ppb	15	2	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System										
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	Highest Compliance Value	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2017	4.46	0 to 8.5	16	ppb	60	N/A	8.5	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	19.03	5.6 to 34.5	16	ppb	80	N/A	34.5	No	Byproduct of drinking water disinfection
Radionuclides Sampled at the Entry Point to the Distribution System										
Typical Sources	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation		
Gross Alpha	2017	1.1	1.1 to 1.1	1	pCi/L	15	0	No	Erosion of natural deposits	
Combined Radium	2017	3.4	3.4 to 3.4	1	pCi/L	5	0	No	Erosion of natural deposits	
Gross Beta Particle Activity	2016	0.1	0.1 to 0.1	1	pCi/L*	50	0	No	Decay of natural and man-made deposits	
*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern for Gross Beta Particle Activity.										

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Arsenic	2017	0.33	0 to 2	6	ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2017	0.06	0.04 to 0.07	6	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2017	0.74	0.31 to 1.6	3	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2017	6.94	0 to 9.3	9	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2017	4.33	0 to 8	6	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

**Nitrate:** *Nitrate in drinking water at levels above 10 ppm* is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2017	49.82	21.1 to 73.2	6	ppm	N/A
Total Dissolved Solids	2017	337.7	248 - 472	16	ppm	500

**Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions**

Violations					
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION/BACKFLOW REQUIREMENTS - HEALTH-BASED	01/01/2017 - 06/12/2017	May pose a risk to public health.	N/A	N/A
Additional Violation Information					
<p>*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*</p> <p>Explanation of the violation(s), the steps taken to resolve them, and the anticipated resolved date:</p>					

Backflow and Cross-Connection
<p>Cherokee Metropolitan District had an inadequate backflow prevention and cross-connection control program in 2016 and failed to meet the specified percentage of backflow device testing required by the Colorado Department of Public Health and Environment. The District is currently in compliance with the Cross Connection Rule. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water.</p>



## **CHEROKEE METROPOLITAN DISTRICT**

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

**Telephone: (719) 597-5080 Fax: (719) 597-5145**

August 29, 2018

Danny Mientka  
c/o The Equity Group  
90 South Cascade Avenue  
Suite 1500  
Colorado Springs, CO 80903

Re: Commercial Development – Space Village Filing #3 Lots #1, #2, #3  
Commitment Letter #2018-11 (Revision of Commitment Letter #2017-02)

Dear Mr. Mientka,

As requested, this letter is being provided as a revised formal Letter of Commitment by the Cherokee Metropolitan District (District) to provide municipal water and sewer service for the above-mentioned development. Since the development has been revised from one lot to three lots, this commitment letter is a revision of Commitment Letter #2017-02 that was issued on September 8, 2017 by Kurt Schlegel. The parcels of land are located within the District's service boundary and, therefore, the District stands ready and willing to provide water and sewer service for the specific properties and uses detailed herein.

As of October 2015, the State Engineer's Office has given the District a favorable opinion on the District's quantification of water supplies available for new residential and commercial developments. The State Engineer confirmed that the District had a surplus of 453 acre feet per year of water available for new developments as of May 18, 2016. Since that time, the District has issued 105.157 acre feet per year of water commitments leaving a balance of 347.843 acre feet per year of water for future developments. The Space Village Filing #3 Lots #1, #2, #3 development requires 3.440 acre feet per year of water, which includes water for irrigation purposes, leaving the District with a water balance of 344.403 acre feet per year for future developments.

Regarding the wastewater capacity, the District's Water Reclamation Facility (WRF) has the required capacity to meet the sewer demand for this development. The WRF is rated for 4.8 million gallons per day (MGD), of which 2.6 MGD is owned by the District and reserved for District's customers. The District's current contribution to the WRF is 1.560 MGD, therefore, there is an excess of 1.040 MGD of treatment capacity available and 0.964 MGD of available capacity for future commitments. Based

on the information received in the "Water/Wastewater Resources Report" dated August 22, 2018 by Olsson Associates, this development is estimated to discharge 5,373 gallons of wastewater per day which equates to 0.56% of the available capacity of the WRF leaving 0.959 MGD of capacity available for future developments.

This water commitment is hereby made exclusively for this specific development project at this site, within the District, and must achieve appropriate zoning and a final plat land use entitlement from El Paso County Development Services within 12 months from the date of this letter; otherwise, the District may use this allocation for other developments requesting a water commitment for growth that stands ready to develop.

I trust that you find this letter adequate for your needs and land use applications. If I may be of further assistance, please contact me at your convenience.

Best Regards,



Jonathon Smith  
Water & Wastewater Collections Manager

Encl: Water/Wastewater Resources Report  
Commitment Letter #2017-02 for Kum & Go  
Water Balance and Water Commitments

Ec: Brian Beaudette, Interim General Manager, Cherokee Metropolitan District  
Jeremy Goetsch, Assistant Engineer, Olsson Associates  
Josh Erramouspe, Professional Engineer, Olson Associates

## Water Balance and Water Commitments (Cherokee Metropolitan District)

Development	Business Name	Address	Commitment Letter		
			Letter #	Date	
SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue	2015-01	Expired	-4,460
Windermere Filing #1	Windermere Subdivision Filing #1	NEC Anteloper Ridge Drive and N. Carefree Circle	2015-02	Expired	-22,210
Constitution Apartment Complex	Constitution Apartments	6855 Constitution Avenue	2016-01	Expired	-19,000
Meadowbrook Crossing Subdivision	Meadowbrook Crossing	Meadowbrook Parkway and Highway 24	2017-01	5/4/2017	36,270
Kum & Go Store #692	Kum & Go	6809 Space Village Avenue	2017-02	9/8/2017	2,072
Kum & Go Store #692	Kum & Go	6809 Space Village Avenue	2017-02	Revised	-2,072
Freedom Springs Apartment Complex	Freedom Springs	734 Western Drive	2018-01	2/22/2018	14,500
Covert Ops Paintball	Covert Ops Paintball	6425 E. Platte Avenue	2018-02	3/22/2018	0,150
Mule Deer Villas Subdivision	Mule Deer Villas	SEC Akers Drive and N. Carefree Circle	2018-03	4/20/2018	36,250
Mule Deer Villas Subdivision	Mule Deer Villas	SEC Akers Drive and N. Carefree Circle	2018-03	Revised	-36,250
Appaloosa Highway 24 Subdivision Filing #2	Appaloosa Highway 24 Subdivision Filing #2	SEC Amelia Street & Terminal Avenue	2018-04	6/13/2018	1,247
SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue Phase #2	SEC Marksheffel Road and Constitution Avenue	2018-05	7/6/2018	4,460
Windermere Subdivision	Windermere	NEC Anteloper Ridge Drive and N. Carefree Circle	2018-06	7/6/2018	70,800
Gardens at North Carefree Subdivision (Mule Deer Villas)	Gardens at North Carefree	SEC Akers Drive and N. Carefree Circle	2018-07	8/3/2018	22,010
Hannah Ridge at Feathergrass Filing #5 (LLC Water)	Hannah Ridge Filing #5	NWC Akers Drive and Constitution Avenue	2018-08	8/17/2018	25,690
Hannah Ridge at Feathergrass Filing #6 (LLC Water)	Hannah Ridge Filing #6	NWC Akers Drive and Constitution Avenue	2018-09	8/17/2018	17,680
Hannah Ridge at Feathergrass Filing #7 (LLC Water & CVID Water)	Hannah Ridge Filing #7	NWC Akers Drive and Constitution Avenue	2018-10	8/17/2018	34,020
Space Village Filing #3 Lots #1, #2, #3	Space Village Filing #3 Lots #1, #2, #3	6809 Space Village Avenue	2018-11	8/29/2018	3,440

**Water Balance Beginning as of May 18, 2016 (AFY) 453,000**

**Water Committed since May 18, 2016 (AFY) 108,597**

**Water Balance Remaining for Future Commitments (AFY) 344,403**