

WASTEWATER REPORT

for
HAVEN VALLEY

El Paso County, Colorado

March 2021

Prepared for:

Richmond American Homes

4350 S. Monaco Street

Denver, CO 80237

Contact: Matthew Jenkins

(720) 977-3686

Prepared by:

Drexel, Barrell & Co.

3 South 7th Street

Colorado Springs, CO 80905

Contact: Tim McConnell, P.E.

(719) 260-0887

TABLE OF CONTENTS

1.0	PURPOSE	1
2.0	GENERAL LOCATION AND DESCRIPTION	1
3.0	WASTEWATER SERVICE	1
4.0	OPINION OF PROBABLE POPULATION AND QUALITY OF EFFLUENT	1
5.0	WASTEWATER DISPOSAL.....	2
6.0	WASTEWATER TREATMENT	2
7.0	PHASING/CONSTRUCTION/PERMITTING	2
8.0	SUMMARY.....	2
9.0	UTILITY CONTACT INFORMATION	3

APPENDICES

SECURITY WATER AND SANITATION DISTRICTS SERVICE MAP
VICINITY MAP
PRELIMINARY UTILITY PLAN
SECURITY WATER AND SANITATION DISTRICTS COMMITMENT LETTER

WASTEWATER REPORT

for

HAVEN VALLEY

El Paso County, Colorado

1.0 PURPOSE

This report is prepared by Drexel, Barrel & Co in support of the Haven Valley project. This report is used to confirm that the sanitary sewer lines are sized to carry the peak wastewater discharge.

2.0 GENERAL LOCATION AND DESCRIPTION

The site is within the northwest quarter of Section 12, Township 15 South, Range 66 West of the 6th Principle Meridian in El Paso County, Colorado. The site is located southwest of Cable Ln and west of Hunters Run.

The site is approximately 11.43 acres in size and slopes northeast to southwest. The site is bound on the west by Good Shepherd United Methodist Church, on the north by Security Church of Christ and Cable Ln, on the east by Hunters Run and Pheasant Run Ranch residential properties, and on the south by Pheasant Run Ranch residential properties.

The current owner of the property is Midco Investments, LLC.

The proposed concept plan will provide 98 single-family residences to be developed in one filing, residential roadways and one off-site water quality/detention pond.

3.0 WASTEWATER SERVICE

The owner/developer has already filed and been approved for inclusion within the Security Water and Sanitation Districts. See appendix for the District commitment letter.

Proposed sanitary lines for the project will include onsite 8" mains that are proposed to connect to the existing manhole to the southwest of the project site. An existing 8" main then leaves the manhole and flows to the south.

See the Preliminary Utility Plan in the appendix for proposed wastewater system layout.

4.0 OPINION OF PROBABLE POPULATION AND QUALITY OF EFFLUENT

The proposed development includes 98 single-family residential units. The opinion of probable population and quantity of effluent is as follows:

Population: Single-family Residences: 98 units x 2.5 persons/unit = 245 persons

Quantity of Effluent: Single-family Residents: 245 persons x 78.9 GPD/person = 19,342 GPD

The projected quantity of effluent is based upon industry standards as well as methodology used by other utility providers in the area. The actual population and flow could vary from these calculations.

5.0 WASTEWATER DISPOSAL

Effluent from the subdivision will be collected by standard 4 inch service lines and 8 inch mainlines. The proposed internal 8 inch mainlines will outfall the subdivision at a single location on the west side of the subdivision near the existing southwest manhole where an existing 8" gravity mainline stub is provided. A connection will be made to this stub for transport to the Security Water and Sanitation Districts treatment facility via other gravity mains and lift stations.

6.0 WASTEWATER TREATMENT

Security Water and Sanitation District's first constructed wastewater treatment infrastructure consisting of lagoons and mechanical treatment in 1954. The facility has been upgraded three times. The upgrades have enabled the District to remain compliant with the regulations that are imposed on wastewater facilities by the EPA and state regulators. The wastewater treatment plant has a capacity of 1.95 million gallons per day (MGD). The wastewater treatment plant is located at 6510 Southmoor Dr.

7.0 PHASING/CONSTRUCTION/PERMITTING

Grading is anticipated to begin in Fall 2021. The residential roadways, utility mains and the stormwater detention facility will be installed at and after this time.

8.0 SUMMARY

The Haven Valley development contains 11.43 acres, and is anticipated to generate a wastewater load of 19,342 gallons per day. Security Water and Sanitation Districts has confirmed that the existing sanitary sewer main stubbed to the southwest of the property is able to accommodate the additional flows.

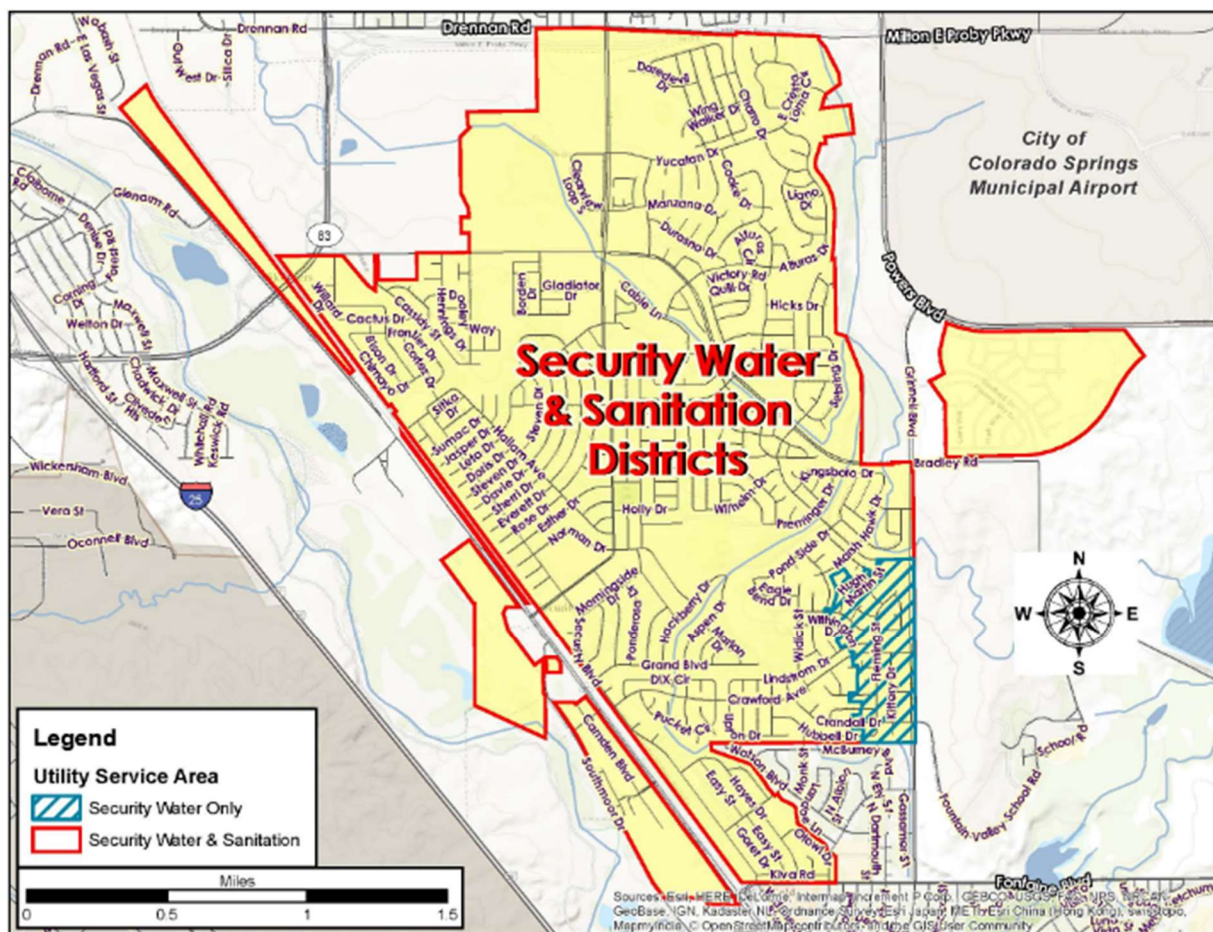
This report represents a preliminary analysis of the wastewater collection system for the Haven Valley project. The system will be analyzed in further detail during the design process and is subject to change due to final design considerations.

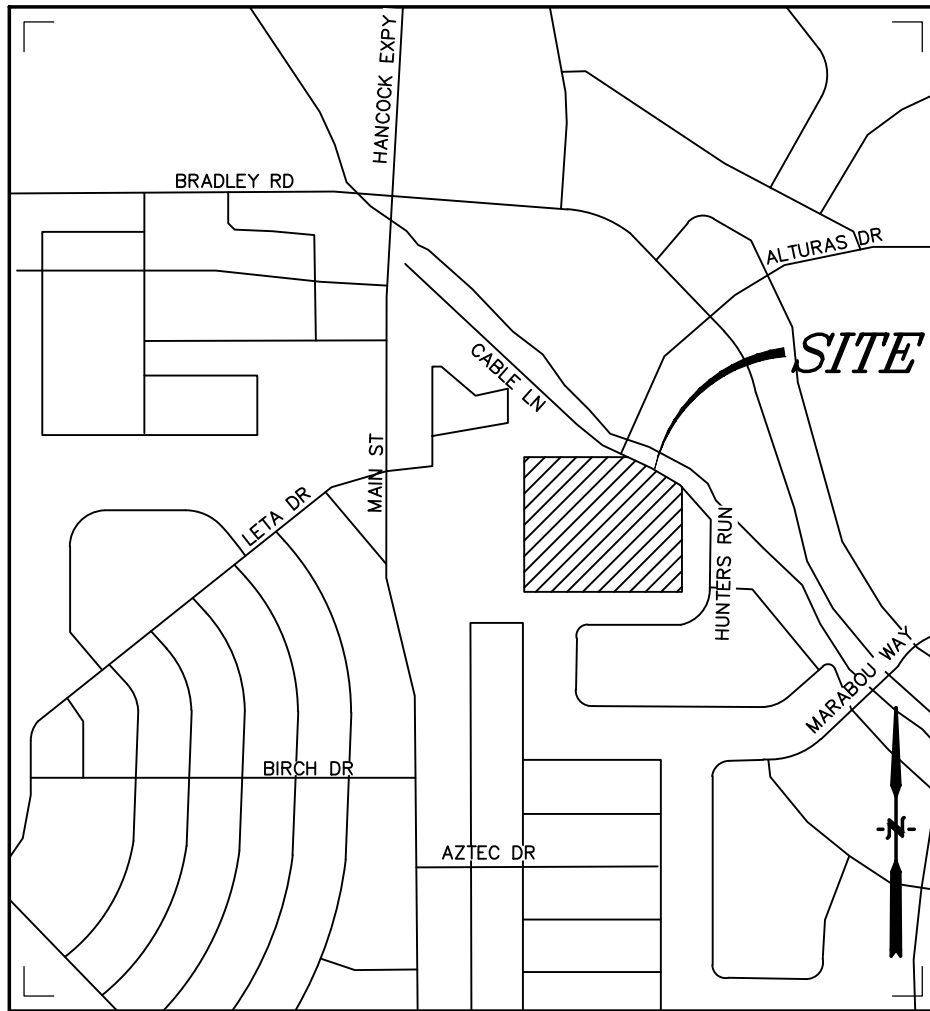
9.0 UTILITY CONTACT INFORMATION

Security Water and Sanitation Districts
Attn: Roy E. Heald, General Manager
231 Security Blvd.
Colorado Springs, CO 80911
Phone: (719) 392-3475

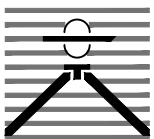
Drexel, Barrell & Co.
Attn: Tim McConnell, P.E.
3 South 7th Street
Colorado Springs, CO 80905
Phone: (719) 260-0887

Appendix





Vicinity Map
Not to scale



**HAVEN HILLS
COLORADO SPRINGS, CO
VICINITY MAP**

Drexel, Barrell & Co.
Engineers • Surveyors

DATE:

DWG. NO.

JOB NO:

21085-03CSCV

VMAP

SHEET 1 OF 1



Security Water and Sanitation Districts / Enterprises

231 SECURITY BLVD. • COLORADO SPRINGS, COLORADO 80911

TELEPHONE 719-392-3475 • FAX 719-390-7252

www.securitywsd.com

March 19, 2021

Mr. Matt Jenkins, Director, Land Acquisition
Richmond American Homes
4350 S. Monaco Street
Denver, CO 80237

Delivered via email to: Matthew.Jenkins@mdch.com

Dear Mr. Jenkins:

The 11.761 acre parcel of land currently known as Haven Valley, and previously known as Patriot Village, is within the boundaries of the Security Water District and the Security Sanitation District. It is entitled to service from each district in accordance with Colorado State law and the operating rules, regulations and conditions of each district, which are subject to change.

The residential water demand for this property is estimated to be a maximum of 49 annual acre feet of diversions based upon 98 single-family equivalents (sfe). In addition, the estimated demand for common landscape irrigation within this parcel is 3.16 annual acre feet of diversions. Consequently, the total water demand for this property is estimated to be 52.16 annual acre feet of diversions. Furthermore, the wastewater collection and treatment requirements for this property are estimated to be a maximum of 7.06 million gallons per year or 19,342 gallons per day based on 98 sfe. The districts' commitments to this property are limited to the preceding amounts.

The Security Water and Sanitation Districts currently have overall capacities that exceed current commitments. Upon the recording of the final plat for the subject property, the Security Water District agrees to commit sufficient water resources and the Security Sanitation District commits sufficient wastewater capacity to serve the property. This commitment may also be subject to determinations of sufficiency and reliability of water supply by El Paso County and the Colorado Division of Water Resources. Water and sewer service will be provided subject to rules, regulations and conditions of the districts and the payment of applicable fees at the time of requested connection.

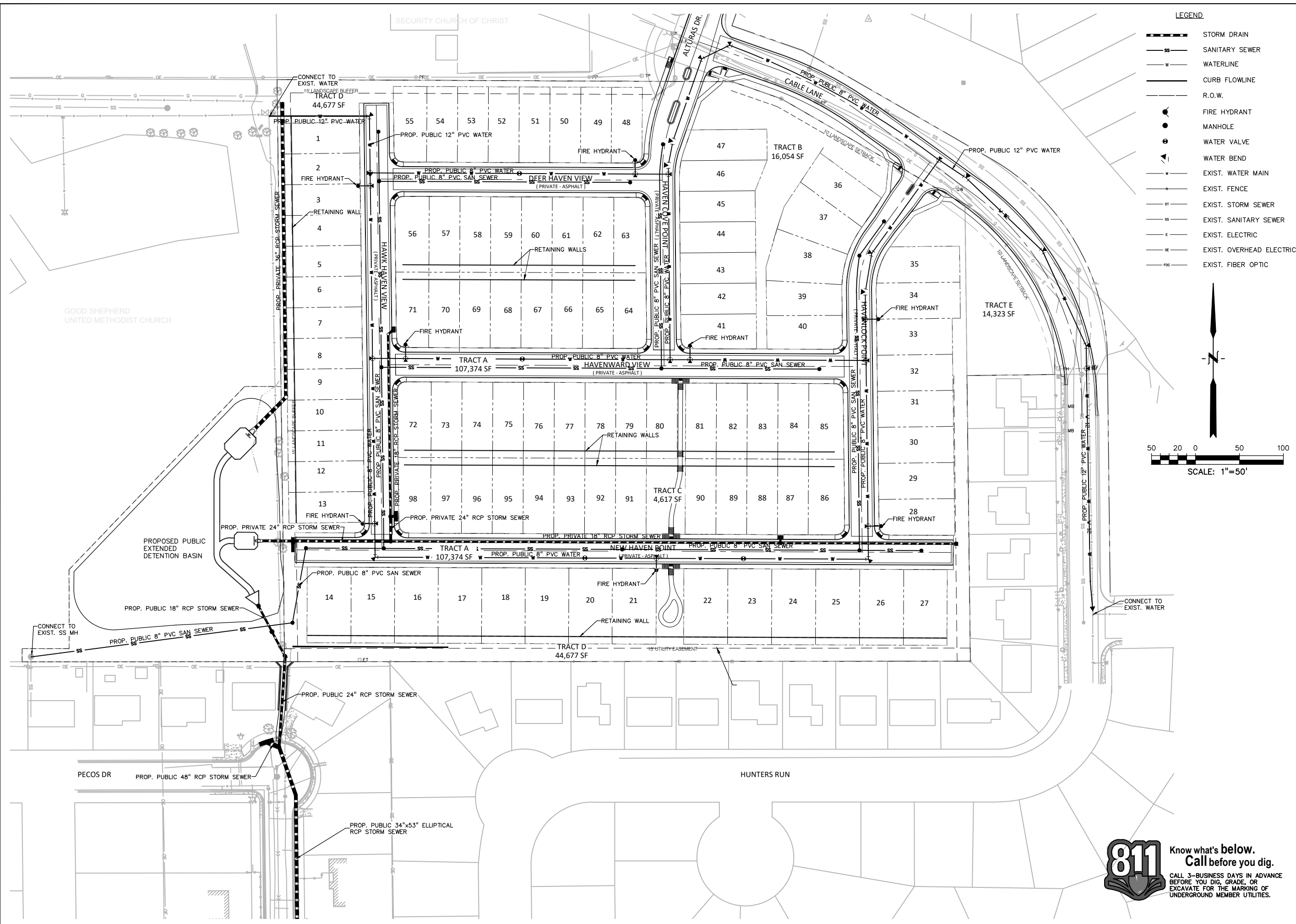
This service commitment supersedes any previous commitments that may have been provided for this property.

If you have any questions, please contact me.

Sincerely,

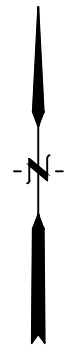


Roy E. Heald, General Manager



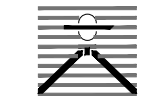
LEGEND

- STORM DRAIN
- SANITARY SEWER
- WATERLINE
- CURB FLOWLINE
- R.O.W.
- FIRE HYDRANT
- MANHOLE
- WATER VALVE
- WATER BEND
- EXIST. WATER MAIN
- EXIST. FENCE
- EXIST. STORM SEWER
- EXIST. SANITARY SEWER
- EXIST. ELECTRIC
- EXIST. OVERHEAD ELECTRIC
- EXIST. FIBER OPTIC



50 20 0 50 100
SCALE: 1"=50'

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers & Surveyors
3 SOUTH 7TH STREET
COLORADO SPGS, COLORADO 80905
CONTACT: TIM D. MCCONNELL, P.E.
(719)260-0887
BOULDER • COLORADO SPRINGS • GREELEY

CLIENT:



4350 S. MONACO ST.
DENVER, CO 80237
CONTACT: MATTHEW JENKINS
(720) 977-3686

CONSTRUCTION PLANS FOR:

HAVEN VALLEY

(LETA DR.) BRADLEY RD/ALTURAS DR.
SECURITY, EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	4/29/21
DESIGNED BY:	TDM
DRAWN BY:	SBN
CHECKED BY:	TDM
FILE NAME:	21085-03UT01

PREPARED UNDER MY DIRECT
SUPERVISION FOR AND ON BEHALF
OF DREXEL, BARRELL & CO.

DRAWING SCALE:
HORIZONTAL: 1" = 50'
VERTICAL: N/A

PRELIMINARY
UTILITY &
FACILITIES PLAN

PROJECT NO. 21085-03CSCV
DRAWING NO.

UT01

SHEET: 5 OF 9



Know what's below.
Call before you dig.
CALL 3-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES.