

WOODMEN HILLS

METROPOLITAN DISTRICT



WASTEWATER DISPOSAL REPORT

for

FALCON HIGHLANDS FILING #3 PUD/PRELIMINARY PLAN

April 2022

Prepared By:



WOODMEN HILLS METROPOLITAN DISTRICT

FALCON HIGHLANDS FILING #3

PUD/PRELIMINARY PLAN

WASTEWATER DISPOSAL REPORT

April 2022

Prepared for:

**Woodmen Hills Metropolitan District
8046 Eastonville Road
Peyton, CO 80831**

Prepared by:

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1.0 INTRODUCTION

The purpose of this report is to provide an update to prior Wastewater Disposal Reports for the Falcon Highlands Metropolitan District (FHMD, the District) and address specific needs of the proposed Falcon Highlands Filing #3 PUD/Preliminary Plan in Falcon, CO. **Please note that this report supersedes prior reports for this filing and should not be counted as an addition to the prior Sketch Plan Amendment for this filing.**

2.0 PROJECTED LAND USES

2.1 Projected Land Uses

The lands proposed for the Falcon Highlands Filing #3 Sketch Plan Amendment are included within the FHMD boundary, but wastewater services are provided by Woodmen Hills Metropolitan District (WHMD) via an inter-governmental agreement (IGA). The IGA allows for up to 750 single-family equivalents (SFEs) to be developed within the FHMD boundary, which will be exceeded by the proposed PUD/Preliminary Plan.

This will require an amendment to that IGA, and the developer has reached out to WHMD in order to initiate those discussions.

Lands within the subject area were previously planned for 157 single-family homes on 114.1 acres of land. The proposed PUD/Preliminary Plan calls for 380 single-family lots in four (4) phases:

- Phase 1 – 55 Lots
- Phase 2 – 188 Lots
- Phase 3 – 113 Lots
- Phase 4 – 24 Lots

Are these going to be different filings within the PUDSP boundary? The purpose of the phasing is not clear.

Please refer to the *Land Use Exhibit* in **Appendix A**.

2.2 Projected Points of Tie-In

The locations for system tie-ins will be near the existing lift station as shown in **Appendix B**.

3.0 WASTEWATER PROJECTIONS

3.1 Projected Wastewater Loads

Wastewater flows for WHMD are based on an established benchmark of average daily flow (ADF) of 163 gallons per day (GPD) per SFE and 172 GPD/SFE for average daily-maximum month flow (ADMMF). The 380 SFEs projected in the PUD/Preliminary Plan will result in the exceedance of the contracted 750 SFEs. The developer has initiated discussions with WHMD on possible amendments to the IGA.

There are 450 existing SFEs in Falcon Highlands currently connected to the WHMD system, leaving 300 SFEs available under the current terms of the IGA. Therefore, the proposed PUD/Preliminary Plan will result in exceedance of the contractual amount.

3.2 *Treatment Facilities*

Woodmen Hills recently constructed a new regional wastewater treatment facility which was brought online in the spring of 2019. The new plant is an advanced wastewater treatment plant with a hydraulic capacity of 1.3 million gallons per day (MGD). The facility is in compliance with its current discharge permit and has adequate capacity for the additional flows proposed in this PUD/Preliminary Plan.

3.3 *Collection and Pumping Facilities*

This development will be required to install gravity sewer infrastructure in accordance with WHMD standards and approvals. Said infrastructure will connect to existing collection systems owned and operated by WHMD.

Most of the existing infrastructure was installed in 2005 and/or later, meaning the elements are well within their typical design lives of 50 years and longer.

The points of connection will be at or near the existing lift station depicted in

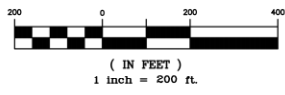
~~Appendix B.~~

As mentioned above, this development will require upgrades to the existing lift station, as well as force main modifications – both will trigger an amendment to the existing IGA.

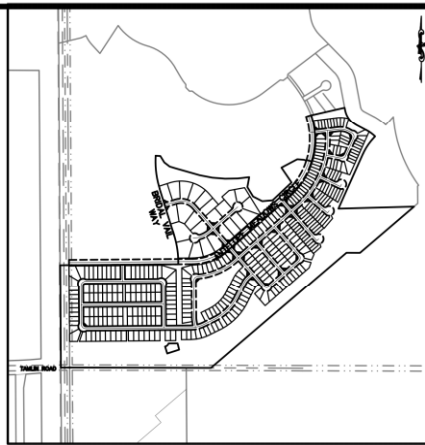
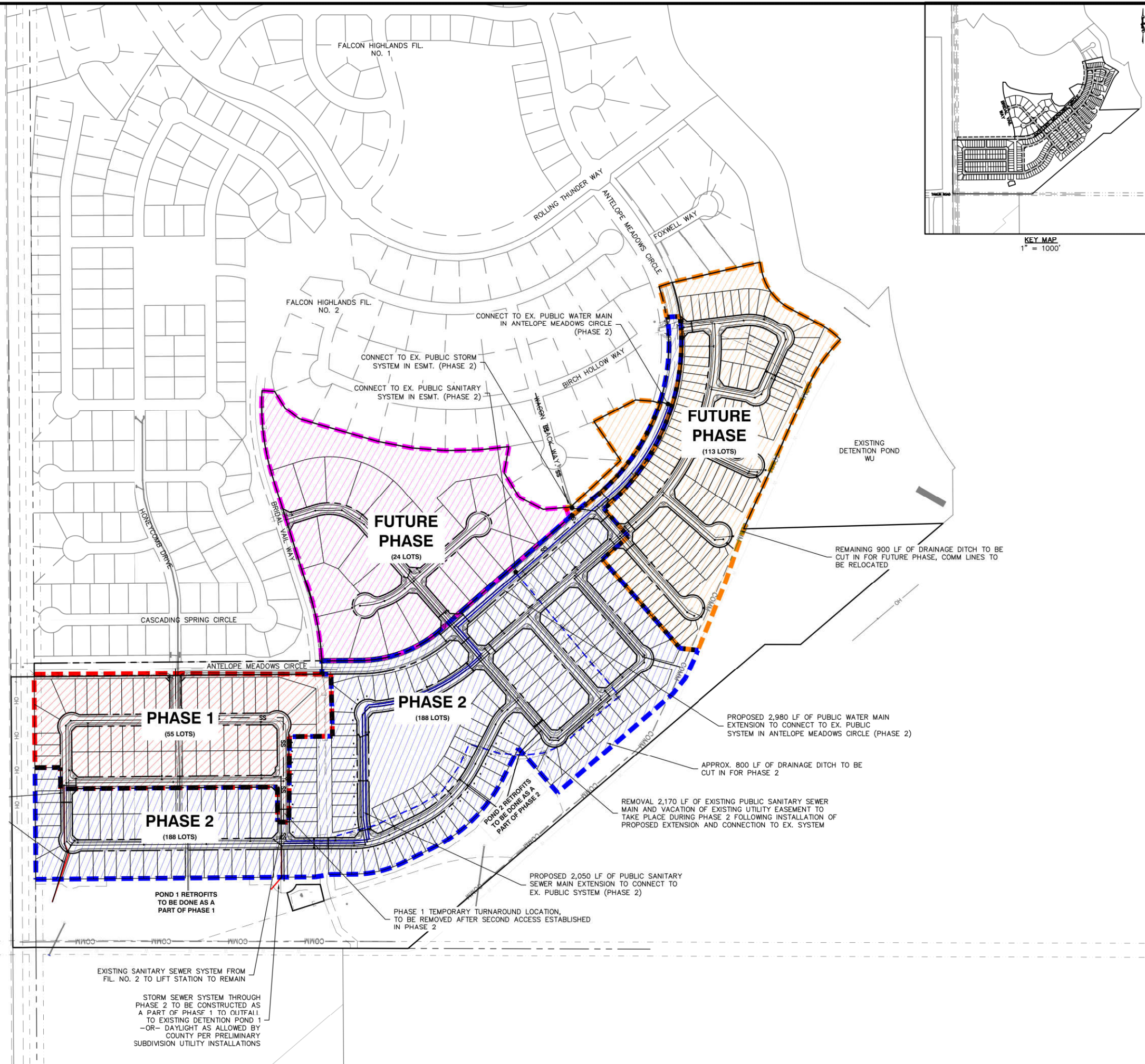
The lift station is permitted for 64,000 GPD and is currently seeing flows of about 38,000 GPD. This leaves roughly 26,000 GPD available. At 172 GPD/SFE, there is theoretically enough capacity for an additional 151 SFEs.

Please identify specifically how many units can be built before these improvements are triggered. It appears that 300 units can be added to the current system but it is not clear why or which improvement will trigger the amendment to IGA first. This will need to be a condition of approval for the PUDSP and will need to be worked out prior to public hearing.

Appendix A
Land Use Exhibits



- LEGEND:**
- - - - PHASE 1
 - - - - PHASE 2
 - - - - FUTURE PHASE
 - - - - FUTURE PHASE



811
Know what's below.
Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OR THE WORK OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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CHALLENGER HOMES
FALCON HIGHLANDS, FILING NO. 3
EL PASO COUNTY, COLORADO
PHASING PLANS
UTILITY PHASING PLAN

CLIENT: CHALLENGER HOMES

DATE: 01/25/2022

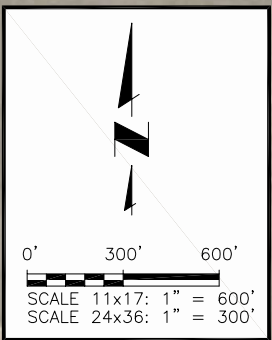
NO.	REVISIONS

DR. AMC | CH. RDL
P.M. RDL
JOB 21005234
SHEET NO. 13

CAD FILE: 21005234_PHASEING.DWG

Appendix B
Projected Points of Tie-In

J:\JDS-Hydro\Project Files\310 Falcon Highlands Metro District\310.01 General District Engineering Drawings\Exhibits\31001_Appendix_B.dwg 2021/10/26 3:27 PM By: Shelby Gatlin



LEGEND	
	WATER CONNECTIONS
	SEWER CONNECTIONS



VICINITY MAP
N.T.S.

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DISCLAIMER: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO JDS-HYDRO CONSULTANTS, INC. JDS-HYDRO ASSUMES NO LIABILITY FOR UNAUTHORIZED CHANGES AND/OR REVISIONS MADE TO PLANS.

FALCON HIGHLANDS METROPOLITAN DISTRICT
 APPENDIX B
 VICINITY MAP & POINTS OF TIE-IN

NO.	DESCRIPTION	BY	APP.	DATE
1				
2				
3				
4				
5				
6				
7				

EXHIBIT	
B	
Project No.:	310.01
Date:	10/26/21
Design:	JPM
Drawn:	SKG
Check:	JPM