

WOODMEN HILLS

METROPOLITAN DISTRICT



WASTEWATER DISPOSAL REPORT

for

FALCON HIGHLANDS FILING #3 SKETCH PLAN AMENDMENT

Original: October 2021

Revised: February 2022

Prepared By:

JDS-HYDRO

CONSULTANTS, INC.
A Division of RESPEC Company, LLC

WOODMEN HILLS METROPOLITAN DISTRICT

FALCON HIGHLANDS FILING #3

SKETCH PLAN AMENDMENT

WASTEWATER DISPOSAL REPORT

Original: October 2021

Revised: February 2022

Prepared for:

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

Prepared by:

JDS-Hydro Consultants, a Division of RESPEC
5540 Tech Center Drive, Suite 100
Colorado Springs, CO 80919

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1.0 INTRODUCTION

The purpose of this report is to provide an update of prior Wastewater Feasibility for the Falcon Highlands Filing #3 Sketch plan Amendment in Falcon, CO.

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 Falcon Highlands District boundary but are served wastewater services by Woodmen Hills Metropolitan District (WHMD) via an Intergovernmental Agreement (IGA). The IGA allows for up to 750 SFEs to be developed within the FHMD boundary, which may be exceeded by the proposed sketch plan amendment.

This will potentially require an amendment to that IGA. The developer has reached out to WHMD in order to initiate those discussions. As this proposed development proceeds to Preliminary Plan stage, and actual single family equivalents (SFEs) can be projected, additional detailed planning may take place.

Lands within the subject area were previously planned for 158 Single Family homes on 114.1 acres of land. This proposal anticipates increasing density to:

- 1 to 3 units /acre over 19.8 acres, and
- 3 to 6 units/acre for the remaining 95.1 acres

No specific plan provides a finite land use allocation, so no exact wastewater definition is possible. Please refer to the Land Use Exhibit in **Appendix A** depicting the range of densities listed above. The stated values might suggest that the quantity of SFEs would be on the order of 467, but without any further level of planning this number is uncertain. Because only a range has been provided, no actual figure is available

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/day per SFE and 172 gallons/day per SFE for average daily-maximum month flow (ADMMF). It is likely that the change in Sketch Plan Amendment 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 451 existing SFEs connected to the WHMD system, leaving roughly 299 SFEs available under the current terms of the IGA. Therefore, it is likely that the amendment would result in exceedance of the contractual amount. Prior to completion of the Preliminary Plan when an actual SFE numbers are available, this should be resolved with Woodmen Hills.

3.2 *Treatment Facilities*

Woodmen Hills has 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 Sketch Plan.

Since land use is only presented as a range of densities, no projection of actual flow is possible. However, if the average density range applies, about 467 SFE could be expected.

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.

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

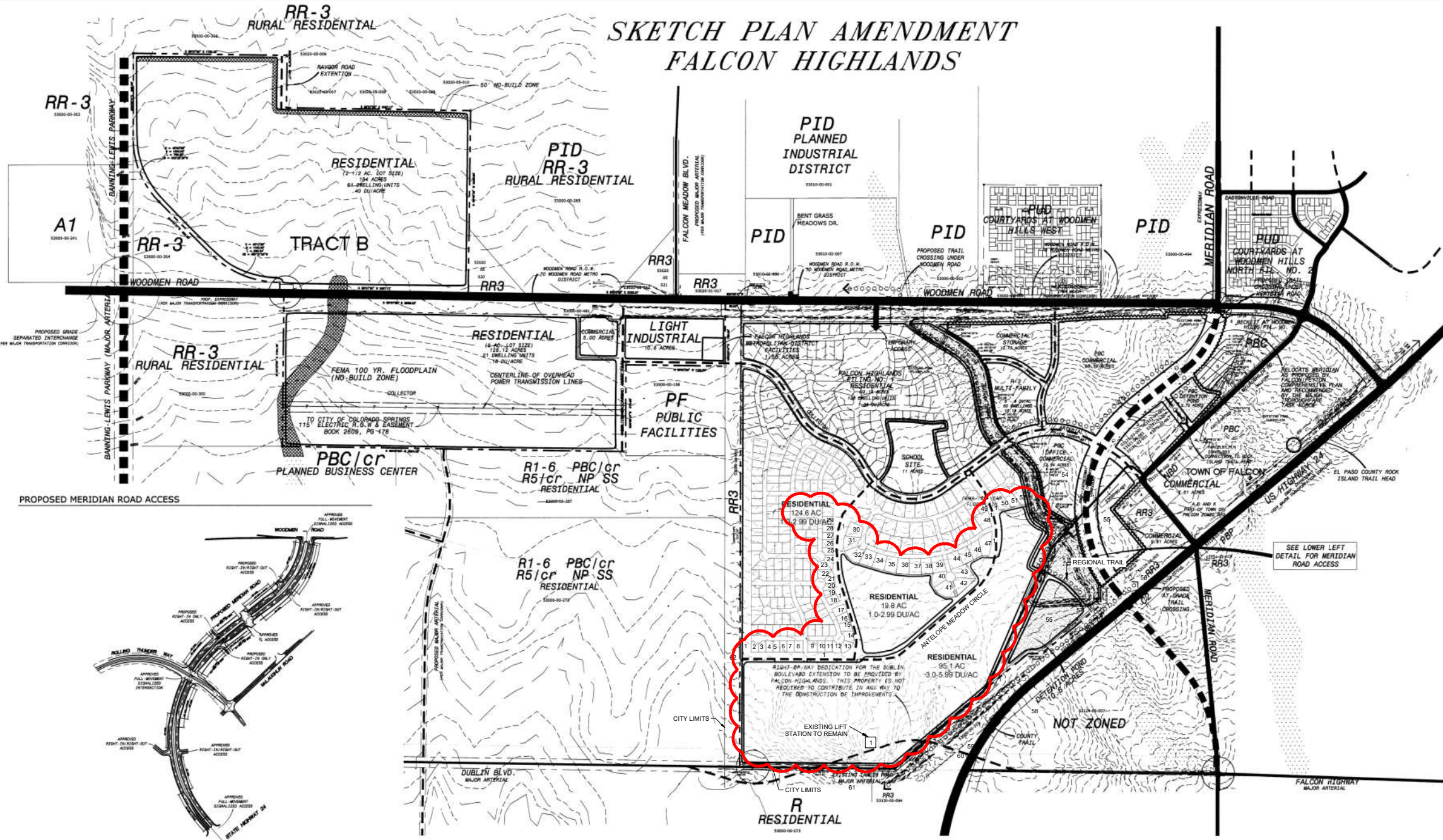
It would be expected that if the sketch plan results in SFE in the range anticipated that the lift station will require expansion and force main modifications if the existing IGA is amended.

Most of the existing infrastructure has been installed since 2005 and later, making it well within typical design lives of 50 years and longer. In order to support the additional development proposed in this Sketch Plan Amendment, the existing lift station will need to be upgraded/replaced to handle the additional flow.

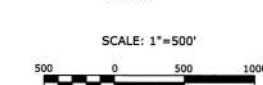
The lift station is permitted for 64,000 gallons per day (GPD) and is currently seeing flows of about 38,000 GPD. This leaves roughly 26,000 GPD available. At 172 GPD/SFE, there is theoretically enough capacity for an additional 151 SFEs.

Appendix A
Land Use Exhibits

SKETCH PLAN AMENDMENT FALCON HIGHLANDS



VICINITY MAP
N.T.S.



LEGEND

PROPOSED R.O.W	---
EXISTING R.O.W	---
FUTURE R.O.W	---
PROPERTY LINE	---
PROPOSED RW CL	---
FUTURE RW CL	---
NO-BUILD ZONE	▨
EXISTING FEMA FLOODPLAIN	▨
EASEMENT	---
OPEN SPACE	---
PARK / TRAIL	---
ZONING	R1-6
PARCEL NO.	---
EXIST. MAJOR CONTOUR	---
EXIST. MINOR CONTOUR	---
PR. PROPERTY ACCESS	→
AREA BOUNDARY	---
PR./FUTURE ROADWAY	▬
EXIST. ROADWAY	▬
COUNTY TRAIL	○
AMENDED SKETCH PLAN AREA	~

LEGAL DESCRIPTION

A PORTION OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, MONUMENTED AT THE SOUTH END BY A 2x4" ALUMINUM CAP STAMPED "ATEC CONSULTANTS PLS 38254" AND AT THE NORTH END BY A FOUND 3/4" ALUMINUM CAP STAMPED "PLS 4847". SAID WEST LINE BEARS NORTH 0°23'31" WEST, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 12;

THENCE SOUTH 89°36'22" WEST 100.00 FEET TO THE WEST LINE OF THE EAST 100 FEET OF SECTION 11, TOWNSHIP 13 SOUTH, RANGE 65 WEST;

THENCE ALONG SAID WEST LINE NORTH 0°23'31" WEST 116.39 FEET TO THE SOUTHWEST CORNER OF FALCON HIGHLANDS FIGING NO. 2 AS SHOWN ON THE PLAT RECORDED AT RECEPTION NO. 20672369, EL PASO COUNTY RECORDS;

THENCE ALONG THE SOUTHERLY BOUNDARY OF SAID FALCON HIGHLANDS FIGING NO. 2 THE FOLLOWING THIRTY-SIX (36) COURSES:

- NORTH 89°36'24" EAST 134.41 FEET;
- NORTH 0°23'31" WEST 23.99 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 1025.00 FEET;
- 302.80 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 16°55'34";
- NORTH 17°24'20" WEST 54.86 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 3030.00 FEET;
- SOUTH 21°51'00" EAST 85.27 FEET;
- SOUTH 88°13'54" EAST 54.48 FEET;
- SOUTH 52°36'41" EAST 76.95 FEET;
- SOUTH 72°19'02" EAST 65.73 FEET;
- NORTH 89°36'18" EAST 291.13 FEET;
- SOUTH 79°13'17" EAST 145.07 FEET;
- SOUTH 89°32'13" EAST 145.17 FEET;
- NORTH 88°52'41" EAST 145.19 FEET;
- NORTH 89°36'18" EAST 131.74 FEET;
- SOUTH 10°35'23" WEST 134.54 FEET;
- SOUTH 33°38'08" EAST 124.93 FEET;
- NORTH 88°48'18" EAST 119.23 FEET;
- NORTH 34°36'03" WEST 203.48 FEET;
- NORTH 62°18'11" EAST 203.47 FEET;
- SOUTH 89°35'18" EAST 75.24 FEET;
- SOUTH 72°16'09" EAST 30.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 810.00 FEET AND A CENTER WHICH BEARS NORTH 72°30' WEST;
- 7.53 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 0°31'58";
- SOUTH 72°48'14" EAST 60.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 870.00 FEET AND A CENTER WHICH BEARS NORTH 72°42'54" WEST;
- 540.58 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 35°36'03";
- NORTH 70°41'11" EAST 391.37 FEET;
- SOUTH 10°42'58" EAST 32.97 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 240.00 FEET;

215.59 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 51°28'06";

SOUTH 62°11'05" EAST 35.79 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 410.00 FEET;

105.19 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°24'22";

SOUTH 47°29'03" EAST 15.72 FEET;

SOUTH 42°12'30" WEST 60.00 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 630.00 FEET;

197.16 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°55'11";

SOUTH 24°18'39" WEST 68.63 FEET;

NORTH 88°25'54" EAST 861.83 FEET TO THE NORTHWESTLY RIGHT-OF-WAY LINE OF THE CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY;

THENCE ALONG SAID NORTHWESTLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) COURSES:

- SOUTH 49°35'24" WEST 808.48 FEET;
- NORTH 89°54'42" WEST 124.05 FEET;
- SOUTH 49°35'24" WEST 207.79 FEET TO THE SOUTH LINE OF SAID SOUTHWEST QUARTER;

THENCE ALONG SAID SOUTH LINE NORTH 89°50'23" WEST 1610.14 FEET TO THE POINT OF BEGINNING;

EXCEPT THAT TRACT OF LAND CONVEYED TO FALCON HIGHLANDS METROPOLITAN DISTRICT IN WARRANTY DEED RECORDED AT RECEPTION NO. 20605583, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A TRACT OF LAND SITUATED IN THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 12;

THENCE NORTH 80°11'23" EAST 1127.58 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 17°27'11" WEST 81.74 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 55.00 FEET AND A CENTER WHICH BEARS NORTH 12°43'13" WEST;

THENCE 55.12 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 57°25'06";

THENCE NORTH 89°30'24" EAST 103.43 FEET;

THENCE SOUTH 72°19'33" WEST 142.43 FEET TO THE POINT OF BEGINNING;

SAID TRACT OF LAND CONTAINS 12,727 SQUARE FEET, OR 0.29 ACRES, MORE OR LESS.

ALSO EXCEPT THAT TRACT OF LAND...

NEED RESEARCH INTO THE OWNERSHIP AND DESCRIPTION OF THE TRIANGULAR PIECE OF LAND TO THE EAST OF THE SUBJECT PROPERTY ALONG THE WELY ROW OF THE RAILROAD.

SCHEDULE NO. 531240002
OWNER: NEXTOP HOLDINGS LLC (PER ASSESSOR)
AREA: 1.19 ACRES

ASSESSOR (AND CURRENT TITLE) HAS AN INACCURATE DESCRIPTION FOR THIS PARCEL.

ADJACENT PROPERTY OWNERS

NAME	ADDRESS
1. FALCON HIGHLANDS METRO DISTRICT	111 S TEJON ST STE 705 COLORADO SPRINGS CO, 80803
2. JEFFERY BONNER	10807 CASCADING SPRING CIR PEYTON CO, 80831
3. LUIS RAUL ESTRADA AGUILAR	10821 CASCADING SPRING CIR PEYTON CO, 80831
4. PAMELA JOHNSON	10835 CASCADING SPRING CIR PEYTON CO, 80831
5. JACOB PAST	PO BOX 15884 COLORADO SPRINGS CO, 80916
6. PATRICK LYNCH	10863 CASCADING SPRING CIR PEYTON CO, 80831
7. JOSE MUIJICA	10877 CASCADING SPRING CIR PEYTON CO, 80831
8. SEAN HILES	10891 CASCADING SPRING CIR PEYTON CO, 80831
9. 10905 CASCADING SPRING CIRCLE LAND TRUST	10905 CASCADING SPRING CIR PEYTON CO, 80831
10. FERNANDO JAQUEZ	10919 CASCADING SPRING CIR PEYTON CO, 80831
11. NGU BANG	10933 CASCADING SPRING CIR PEYTON CO, 80831
12. DONALD KLINGSICK	10947 CASCADING SPRING CIR PEYTON CO, 80831
13. JOSEPH HOUTSON HINTON	10961 CASCADING SPRING CIR PEYTON CO, 80831
14. JOSEPH MUELLER	6807 HIDDEN HAVEN WAY PEYTON CO, 80831
15. DALE KINTZ	6819 HIDDEN HAVEN WAY PEYTON CO, 80831
16. EDWARD SCHMIDT	6831 HIDDEN HAVEN WAY PEYTON CO, 80831
17. DAVID HOPP	6843 HIDDEN HAVEN WAY PEYTON CO, 80831
18. JANINE LAHEY	6855 HIDDEN HAVEN WAY PEYTON CO, 80831
19. HPA A BORROWER 2020-2 LLC	120 S RIVERSIDE PLAZA STE 2000 CHICAGO IL, 60606
20. JOSHUA JEREMY GORDON	6879 HIDDEN HAVEN WAY PEYTON CO, 80831
21. JEFFERY CHAD RICE	6891 HIDDEN HAVEN WAY PEYTON CO, 80831
22. KORY KENNEDY	10966 HIDDEN HAVEN WAY PEYTON CO, 80831
23. JERRY BRUCE CARLSON	10985 BONNEBELLE CIR PEYTON CO, 80831
24. ELLI LOUIS OLIVETO	7061 MITCHELLVILLE WAY PEYTON CO, 80831
25. MICKY SEEBERGER	7073 MITCHELLVILLE WAY PEYTON CO, 80831
26. JOEL SMITH	7085 MITCHELLVILLE WAY PEYTON CO, 80831
27. BILLY FROST	7097 MITCHELLVILLE WAY PEYTON CO, 80831
28. TRETT SMITH	7109 MITCHELLVILLE WAY PEYTON CO, 80831
29. THOMAS MARTINEZ	7121 MITCHELLVILLE WAY PEYTON CO, 80831
30. TIMOTHY HUNTER	7032 NILATO CIR PEYTON CO, 80831
31. TRETTON DENMAN	7012 NILATO CIR PEYTON CO, 80831
32. DAVID KIRSCHMAN	11005 BIRCH HOLLOW WAY PEYTON CO, 80831
33. THOMAS MALEWITZ	11017 BIRCH HOLLOW WAY PEYTON CO, 80831
34. JOHN SPADARO	11029 BIRCH HOLLOW WAY PEYTON CO, 80831
35. GEORGE LLOYD JR	11041 BIRCH HOLLOW WAY PEYTON CO, 80831
36. THOMAS RUSH	3015 FANTALLON DR OWENS CROSS RDS AL, 35763
37. ANTHONY RAY SMITH	11065 BIRCH HOLLOW WAY PEYTON CO, 80831
38. ROBERT CHASE	1077 BIRCH HOLLOW WAY PEYTON CO, 80831
39. JONATHAN CESER	5050 BLACK QUARTZ RD LAS CRUCES NM, 80111
40. BLANE HALES	6968 WAGON TRACK WAY PEYTON CO, 80831
41. LAWRENCE RAPHHAEL	6948 WAGON TRACK WAY PEYTON CO, 80831
42. ROLAN JOHN	6947 WAGON TRACK WAY PEYTON CO, 80831
43. JOEL FONTANA	6967 WAGON TRACK WAY PEYTON CO, 80831
44. WANDA WINSTEAD	11101 BIRCH HOLLOW WAY PEYTON CO, 80831
45. RONALD KELLY	11113 BIRCH HOLLOW WAY PEYTON CO, 80831
46. DAVID SALVETTI	11125 BIRCH HOLLOW WAY PEYTON CO, 80831

OWNER/DEVELOPER

CHALLENGER COMMUNITIES
8605 EXPLORER DR SUITE 250
COLORADO SPRINGS, CO 80920

ENGINEER

ATWELL LLC
6200 S SYRACUSE WAY SUITE 470
GREENWOOD VILLAGE, CO 80111

PLANNER

MATRIX DESIGN GROUP INC
2435 RESEARCH PARKWAY SUITE 300
COLORADO SPRINGS, CO 80920

LAND USE TABLE

LAND USE PARCEL	PARCEL ACREAGE	TOTAL DWELLING UNITS	NON-RESIDENTIAL SF	EMPLOYEES
COMMERCIAL	36.19 ACRES	--	246,000 SF	410
OFFICE - COMMERCIAL	12.54 ACRES	--	62,000 SF	137
COMMERCIAL	9.81 ACRES	--	63,000 SF	103
COMMERCIAL	7.81 ACRES	--	50,000 SF	83
COMMERCIAL	5 ACRES	--	32,700 SF	55
COMMERCIAL STORAGE	12.75 ACRES	--	83,000 SF	138
LIGHT INDUSTRIAL	10.8 ACRES	--	71,000 SF	118
SCHOOL	11 ACRES	--	--	430
DEFENTION POND	3.72 ACRES	--	--	--
DEFENTION POND	10.06 ACRES	--	--	--
OPEN SPACE	20.75 ACRES	--	--	--
R.O.W.	85.31 ACRES	--	--	--
F.H. METRO DISTRICT FAC.	1.5 ACRES	--	--	1
MULTIFAMILY	40.18 ACRES	60 DWELLING UNITS	--	--
RESIDENTIAL	95.1 ACRES	126 DWELLING UNITS	--	--
RESIDENTIAL	92.18 ACRES	126 DWELLING UNITS	--	--
RESIDENTIAL	124.6 ACRES	236 DWELLING UNITS	--	--
RESIDENTIAL	19.8 ACRES	24 DWELLING UNITS	--	--

GENERAL NOTES:

- THE EXACT DESIGN AND LOCATION OF THE CROSSING OF THE ROCK ISLAND AMERICAN DISCOVERY TRAIL WITH MERIDIAN ROAD AT OR NEAR ITS INTERSECTION WITH U.S. 24 AND THE DETERMINATION WHETHER THIS CROSSING WILL BE AT GRADE OR GRADE-SEPARATED, WILL BE MADE BASED ON AN EVALUATION OF THE FINAL DESIGN OR MERIDIAN OR THE FINAL PLAN FOR THE EFFECTED PROPERTY, WHICHEVER IS SUBMITTED FIRST. SUCH DETERMINATION SHALL INCLUDE THE INPUT OF THE OWNER/DEVELOPER, THE DEVELOPMENT SERVICES DEPARTMENT, COUNTY PARKS DEPARTMENT, CDOT AND SHALL BE SUBJECT TO INPUT FROM APPROPRIATE LEGAL COUNSEL.
- TRAILS AND DETENTION PONDS ARE TO BE DEDICATED TO EL PASO COUNTY WITH MAINTENANCE VESTED IN THEM.

REFERENCE DRAWINGS

X-PR-SITE
X-PR-EMPHASIS
X-EX-BASE
X-MODS444

REV#	DATE	DESCRIPTION	INT#	BY

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21_1208.001 Falcon Highlands\100 Darg\104 Plan Set\Sketch Plan\SP01.dwg
C7B FILE: Matrix(Dwg).c7b
PLT DATE: August 15, 2021 8:22:05 AM
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE

SHEET KEY

NO.	DATE	DESCRIPTION	INT#	BY

PREPARED BY: **Matrix DESIGN GROUP**

FOR AND ON BEHALF OF: **MATRIX DESIGN GROUP, INC.**
PROJECT NO: PROJ NO

DESIGNED BY: _____
CHECKED BY: _____

SCALE: _____
SHEET: _____

DATE ISSUED: _____
DATE: _____

DRAWING NO: **21.1208.001**

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

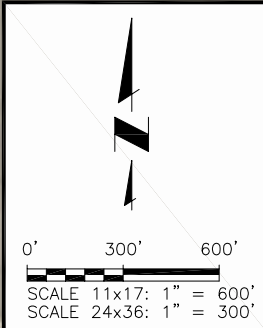
EL PASO COUNTY COLORADO

SKETCH PLAN AMENDMENT

SKETCH PLAN

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.

JDS-HYDRO CONSULTANTS, INC.
 5540 TECH CENTER DR., SUITE 100
 COLORADO SPRINGS, COLORADO 80919
 (719) 227-0072
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

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