

WATER RESOURCE AND WASTEWATER REPORT

for

WOODMEN HILLS
METROPOLITAN DISTRICT



BENT GRASS RESIDENTIAL FILING NO. 2

JULY 2019

Prepared By:



WOODMEN HILLS METROPOLITAN DISTRICT

BENT GRASS RESIDENTIAL FILING #2

WATER RESOURCES & WASTEWATER REPORT

July 2019

Prepared for:

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

Prepared by:

JDS-Hydro Consultants, Inc.
5540 Tech Center Drive, Suite 100
Colorado Springs, CO 80919

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The water wastewater comt is for 121 lots. 177 as indicated in the application form, the LOI states 181 lots; The plat numbering is so confusing - its unknown how many lots are proposed

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4.0 WASTEWATER REPORT

4.1 *Projected Wastewater Loads:* Wastewater flows for WHMD are based on an established benchmark of Average Daily Flow of 163 gallons/day per SFE and 172 gallons/day per SFE for Average Daily-Maximum Month Flow. These are summarized as follows

4.2 *Treatment Facilities:* The WHMD has constructed a new regional wastewater treatment facility which was placed on line in the spring of 2019. The new plant is an advanced wastewater treatment plant with a hydraulic capacity of 1.3 MGD. WHMD is;

- A) In compliance with its discharge permit
- B) Has adequate capacity for the additional flows.

Current loading at startup is roughly 50% and adequate capacity exists to handle the additional flows proposed from Bent Grass Residential Filing No. 2.

The expected loads from this development represent about 1.5% of WHMD's current permitted treatment plant capacity of 1,300,000 gal/day.

Table 5.1
Summary of Expected Wastewater Loads

SFE	Average Daily Flows (Gal/Day)	Average Daily- Max Month Flow (Gal/Day)
121	19,723 (GPD)	20,812 (GPD)

4.3 *Collection and Pumping Facilities:* This development will be required to install gravity sewer facilities in accordance with WHMD standards and approvals. Said gravity sewer facilities will connect to existing collection systems owned and operated by WHMD.

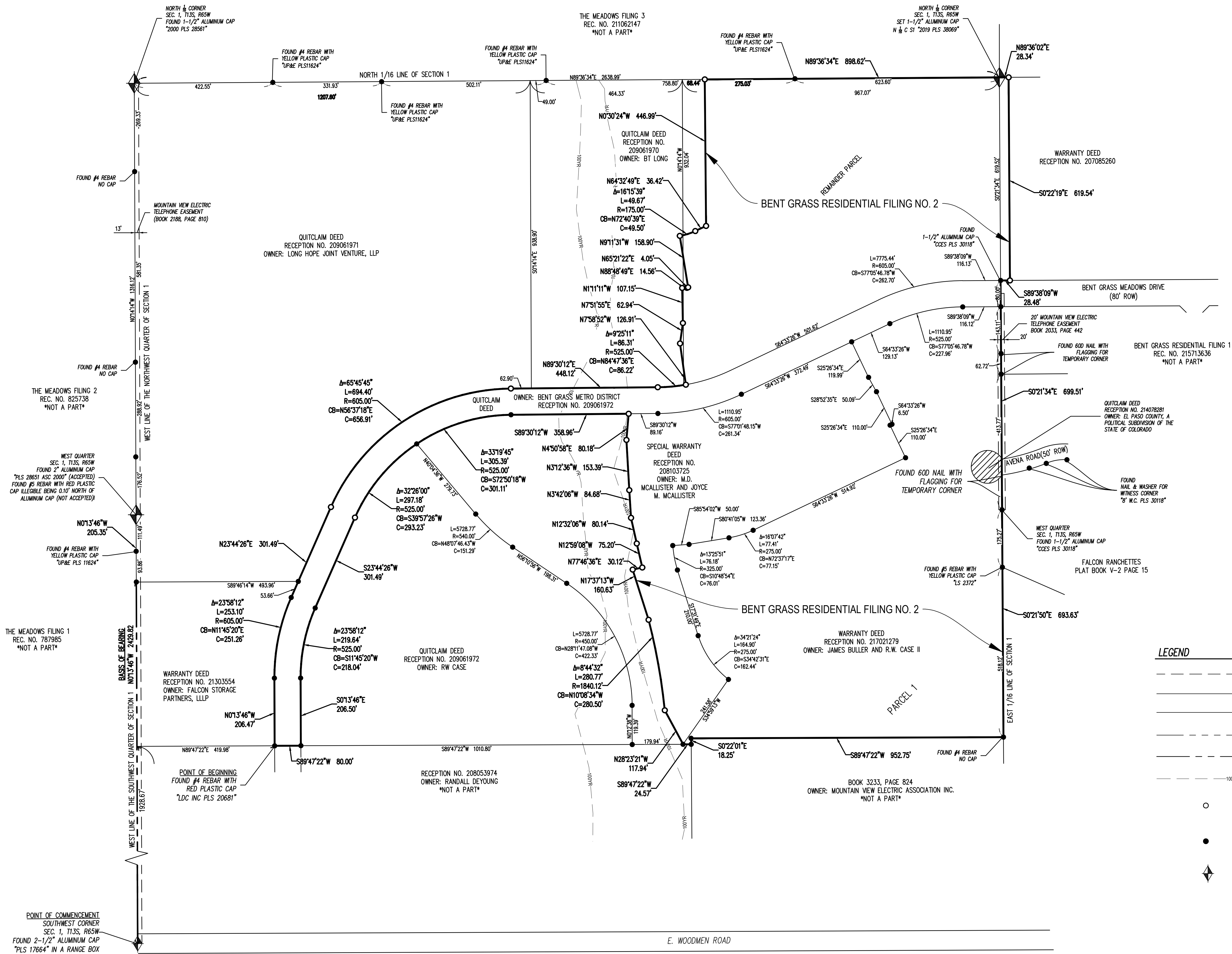
Wastewater pumping facilities are not necessary to serve Bent Grass Residential Filing #2.

Appendix A

BENT GRASS RESIDENTIAL FILING NO. 2

LOCATED IN THE NORTHWEST QUARTER AND SOUTHWEST QUARTER OF
SECTION 1 T13S R65W OF THE 6TH PRINCIPAL MERIDIAN
COUNTY OF EL PASO, STATE OF COLORADO

OVERALL BOUNDARY & EASEMENTS MAP



LEGEND

---	P.U.D.E (PUBLIC UTILITY & DRAINAGE EASEMENT)
---	LOT LINE
---	PROPERTY BOUNDARY
---	ROAD CENTERLINE
---	SECTION LINE
---	100-YEAR FLOODPLAIN LINE
○	SET, NO. 5 REBAR W/ ORANGE PLASTIC CAP, "PLS 38069", UNLESS OTHERWISE NOTED
●	FOUND, NO. 4 REBAR W/ RED PLASTIC CAP, "LDC INC PLS 20681", UNLESS OTHERWISE NOTED
◆	ALIQUOT CORNER (AS DESCRIBED)

SHEET INDEX	
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SHEET 3-5	LOT CONFIGURATION
SHEET 6	CURVE TABLE

Galloway

1755 Teletar Drive, Suite 107
Colorado Springs, CO 80920
719.900.7220
GallowayUS.com



FINAL PLAT
BENT GRASS RESIDENTIAL FILING NO. 2
LOCATED IN THE NORTHWEST QUARTER AND SOUTHWEST QUARTER OF
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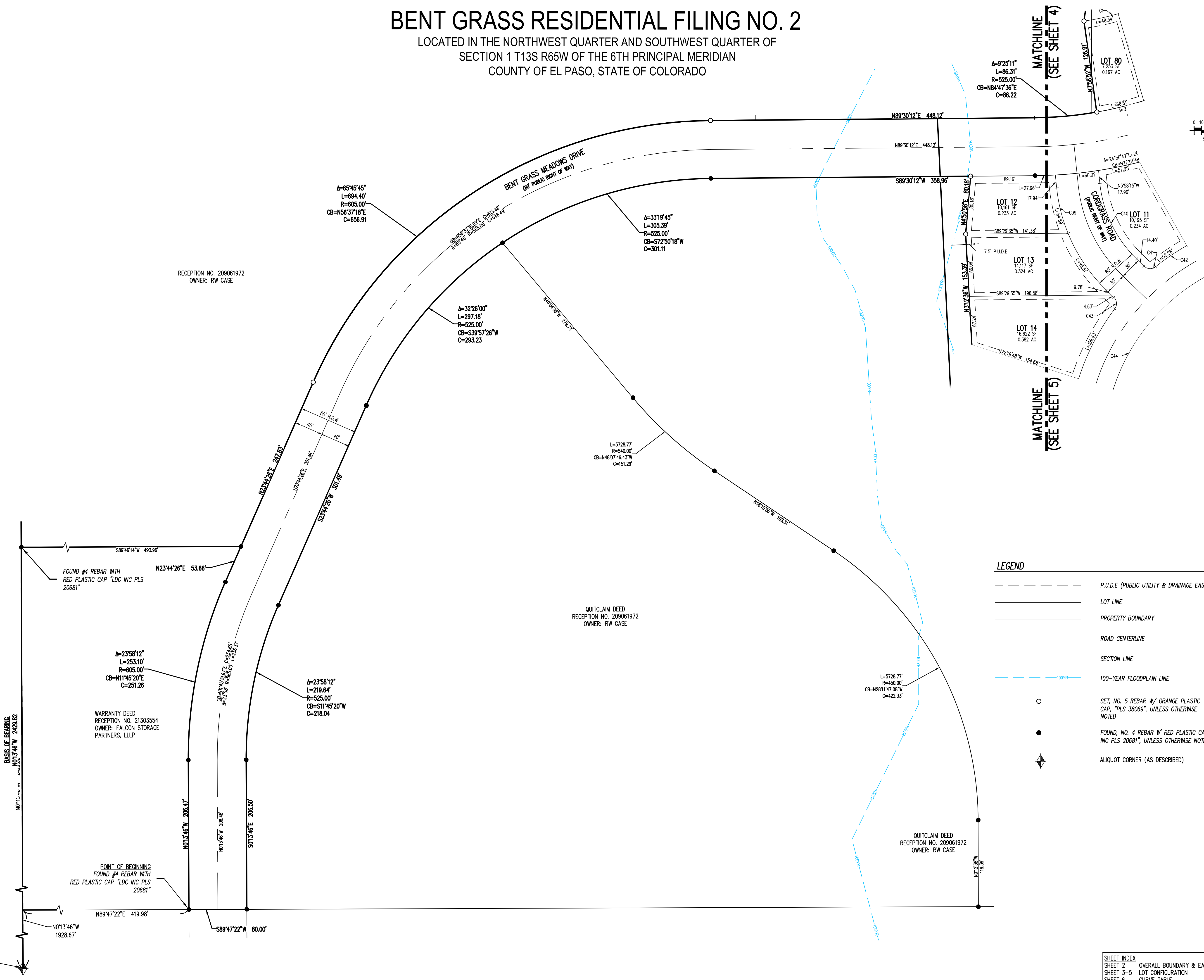
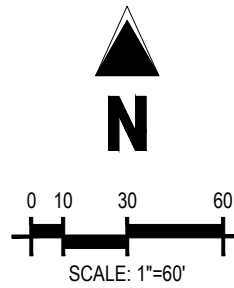
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Drawn By:	AAY
Checked By:	BJD
	5/14/2019

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FINAL PLAT

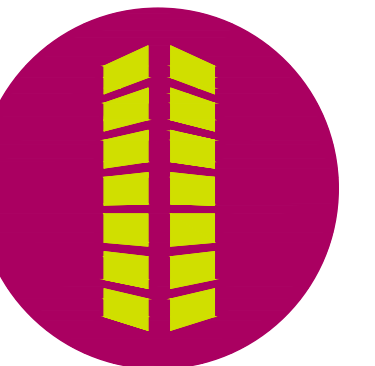
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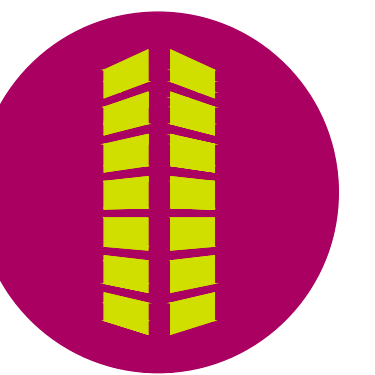
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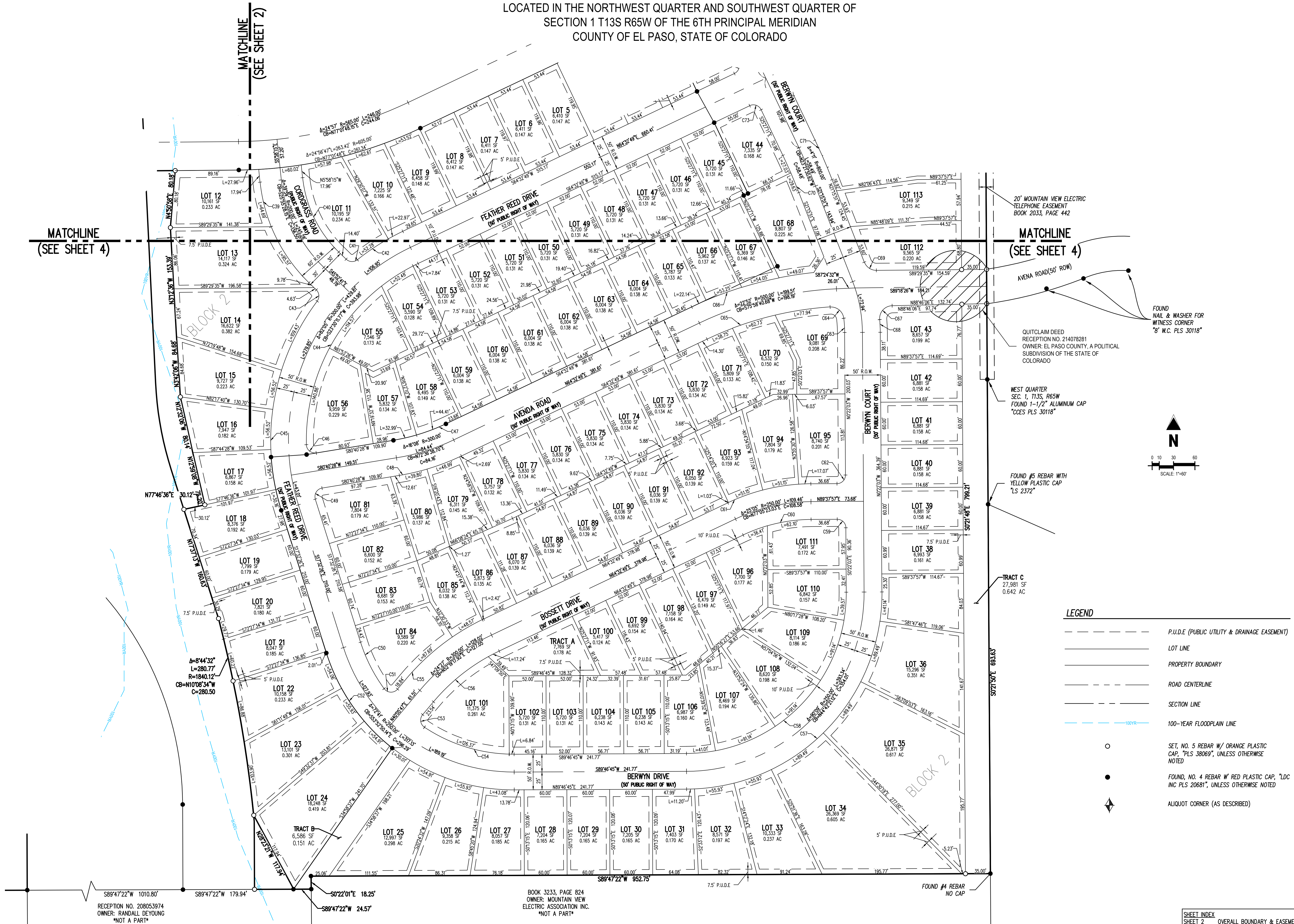
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COUNTY OF EL PASO, STATE OF COLORADO

CURVE TABLE

PARCEL CURVE SEGMENT TABLE					
CURVE TAG #	DELTA	LENGTH (FT)	RADIUS (FT)	CHORD BEARING	CHORD LENGTH (FT)
C1	17°28'21"	100.63	330.00	S73°17'00"W	100.25
C2	13°49'23"	65.14	270.00	S71°27'31"W	64.98
C3	90°00'00"	18.85	12.00	S19°32'42"W	16.97
C4	86°47'51"	18.18	122.00	S59°06'41"E	16.49
C5	12°36'34"	50.83	225.00	N7°10'10"E	50.72
C6	12°36'34"	62.12	275.00	S71°00'06"W	61.99
C7	85°18'00"	17.87	12.00	N34°50'23"E	16.26
C8	6°28'57"	59.40	525.00	S4°34'09"E	59.37
C9	44°24'55"	38.76	50.00	N22°42'52"W	37.80
C10	268°49'50"	258.06	55.00	S89°29'35"W	78.57
C11	44°24'55"	38.76	50.00	S21°42'03"W	37.80
C12	24°56'46"	206.81	475.00	S12°58'48"E	205.18
C13	90°00'00"	18.85	12.00	N70°27'11"W	16.97
C14	24°56'46"	100.14	230.00	S77°01'12"W	99.35
C15	90°00'00"	18.85	12.00	N44°29'35"E	16.97
C16	44°24'55"	38.76	50.00	N22°42'52"W	37.80
C17	268°49'50"	258.06	55.00	S89°29'35"W	78.57
C18	44°24'55"	38.76	50.00	S21°42'03"W	37.80
C19	88°11'13"	18.47	12.00	S44°36'01"E	16.70
C20	25°24'01"	99.75	225.00	N75°59'37"W	98.93

PARCEL CURVE SEGMENT TABLE					
CURVE TAG #	DELTA	LENGTH (FT)	RADIUS (FT)	CHORD BEARING	CHORD LENGTH (FT)
C21	26°22'14"	80.54	175.00	S76°28'44"E	79.84
C22	90°58'30"	19.05	12.00	N44°50'54"E	17.11
C23	4°30'31"	41.47	527.00	S1°36'54"W	41.46
C24	4°30'31"	37.22	473.00	S1°36'54"W	37.21
C25	46°27'28"	28.38	35.00	N19°21'34"W	27.61
C26	27°25'54"6"	261.98	55.00	N86°07'50"W	75.78
C27	46°27'28"	28.38	35.00	S27°05'54"W	27.61
C28	89°49'07"	18.81	12.00	S45°28'33"E	16.94
C29	44°24'55"	38.76	50.00	N67°24'26"E	37.80
C30	268°49'50"	258.06	55.00	N02°30'07"W	78.57
C31	44°24'55"	38.76	50.00	N68°10'36"W	37.80
C32	27°06'12"	106.43	225.00	S76°50'43"E	105.45
C33	24°34'36"	75.07	175.00	N75°45'55"W	74.49
C34	92°38'11"	19.40	12.00	S45°48'41"W	17.36
C35	24°56'46"	76.19	175.00	S12°58'48"E	75.59
C36	24°56'46"	74.02	170.00	S17°10'12"W	73.43
C37	83°06'42"	17.41	12.00	N48°57°03"W	15.92
C38	18°03'29"	70.91	225.00	N16°25'26"W	70.62
C39	39°54'27"	160.20	230.00	S25°55'28"E	156.98
C40	39°54'27"	118.41	170.00	N25°55'28"W	116.03

CURVE TAG #	DELTA	LENGTH (FT)	RADIUS (FT)	CHORD BEARING	CHORD LENGTH (FT)
C41	82°50'26"	17.35	12.00	N87°17'55"W	15.88
C42	131°55'57"	75.25	325.00	S57°54'51"W	75.08
C43	82°50'26"	17.35	12.00	S42°27'28"E	15.88
C44	64°09'09"	307.91	275.00	S30°50'18"W	292.08
C45	54°30'11"	309.16	325.00	S9°42'40"W	297.63
C46	98°05'15"	20.54	12.00	S50°16'54"E	18.13
C47	16°07'39"	77.41	275.00	S72°36'39"W	77.15
C48	15°39'11"	88.79	325.00	S72°50'52"W	88.51
C49	98°12'54"	20.57	12.00	S31°34'01"W	18.14
C50	18°42'42"	73.48	225.00	S26°53'47"E	73.15
C51	103°39'06"	21.71	12.00	S88°04'41"E	18.87
C52	72°40'49"	348.84	275.00	S33°52'50"E	325.92
C53	96°23'46"	20.19	12.00	N8°06'06"W	17.89
C54	33°55'15"	133.21	225.00	N73°15'37"W	131.27
C55	24°27'03"	138.69	325.00	S52°49'18"W	137.64
C56	20°51'31"	100.11	275.00	N50°31'32"E	99.56
C57	90°08'49"	432.67	275.00	N44°42'21"E	389.41
C58	90°08'49"	354.01	225.00	S44°42'21"W	318.61
C59	90°00'00"	18.85	12.00	S45°22'03"E	16.97
O60	25°05'07"	98.51	225.00	N77°05'23"E	97.73

PARCEL CURVE SEGMENT TABLE					
CURVE TAG #	DELTA	LENGTH (FT)	RADIUS (FT)	CHORD BEARING	CHORD LENGTH (FT)
C61	25'05'07"	120.40	275.00	S77'05'23"W	119.44
C62	90'00'00"	18.85	12.00	N44'37'57"E	16.97
C63	6'34'03"	20.06	175.00	N3'39'05"W	20.05
C64	86'52'34"	27.29	18.00	N50'02'23"W	24.75
C65	21'38'31"	179.42	475.00	S75'02'05"W	178.35
C66	19'28'54"	178.51	525.00	S74'17'17"W	177.65
C67	93'39'51"	29.43	18.00	N41'56'11"E	26.26
C68	4'31'42"	17.78	225.00	N23'7'54"W	17.78
C69	69'14'34"	21.75	18.00	N55'53'08"W	20.45
C70	41'1'20"	56.66	775.00	N23'21'31"W	56.65
C71	41'1'20"	60.32	825.00	N23'21'31"W	60.30
C72	90'00'00"	18.85	12.00	N19'32'49"E	16.97
C73	90'00'00"	18.85	12.00	N70'27'11"W	16.97
C74	90'00'00"	18.85	12.00	S19'32'49"W	16.97
C75	90'00'00"	18.85	12.00	N70'27'11"W	16.97
C76	40'37'48"	24.82	35.00	S44'13'55"W	24.30
C77	33'00'44"	31.68	55.00	N37'02'11"W	31.24
C78	51'46'05"	31.62	35.00	S89'34'08"E	30.56

<u>SHEET INDEX</u>	
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FINAL PLAT

SECTION 1 T13S R65W OF THE 6TH PRINCIPAL MERIDIAN

COUNTY OF EL PASO, STATE OF COLORADO

[illegible]

Project No:	CLH014.20
Drawn By:	AAY
Checked By:	BJD
Date:	5/14/2019

Markup Summary 9-18-2019

dsdparsons (1)

INTENTS
The water wastewater comt is for 121 lots. 177 as indicated in the application form, the LOI states 181 lots. The plat numbering is so confusing - its unknown how many lots are proposed

Subject: Callout
Page Label: 3
Author: dsdparsons
Date: 9/17/2019 12:34:21 PM
Color: ■

The water wastewater comt is for 121 lots. 177 as indicated in the application form, the LOI states 181 lots; The plat numbering is so confusing - its unknown how many lots are proposed