

***WATER RESOURCES REPORT***

*for*

***SMH Consultants  
Ivilo Heights Subdivision***

***EPC Parcel #: 5206000107***

**December 2023**

**Prepared By:**



SMH Consultants  
Ivilo Heights Subdivision  
6225 Vessey Road  
Colorado Springs, CO 80908  
EPC Parcel # 5206000107

## WATER RESOURCES REPORT

December 2023

Prepared for:

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Prepared by:

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**1.0 INTRODUCTION AND EXECUTIVE SUMMARY**

The purpose of this report is to address the specific water needs of a proposed subdivision of Parcel # 520600017 in El Paso County, CO.

**EXECUTIVE SUMMARY:** The water rights and augmentation plan in place for the existing parcel are adequate to meet the needs of two (2) lots proposed for the subdivision on a 300-year basis.

**2.0 PROJECTED LAND USES**

*2.1 Projected Land Uses*

This report pertains to the existing 5.83-acre parcel that is proposed to be divided into two (2) lots, with Lot 1 described as 2.88 acres and Lot 2 at 2.95 acres. Please refer to the *Land Use Exhibit* in **Appendix A**.

**3.0 WATER NEEDS AND PROJECTED DEMANDS**

*3.1 Water Demand Summary*

It is anticipated that the proposed two residential lots (one consisting of approximately 2.88 acres and one consisting of 2.95 acres) will use approximately 0.52 AF/year of water total for indoor household uses and a total of 1.32 AF/year of water combined water uses for the entire subdivision. This estimate is based upon information from the *Findings of Fact* contained in Division 2 Court Case 2022CW3087 located in **Appendix C** as well as the El Paso County Land Development Code Chapter 8.4.7 Section B.7.d. Water demands and wastewater loads are shown Table 3-1 below:

**Table 3-1: Summary of Expected Water Demands & Wastewater Loads**

Water						Wastewater
# of SFE's	Annual Indoor Use 0.26 (AF/YR/SFE)	Average Daily Indoor Use (GPD)	Irrigation 0.0566 (AF/1,000 SF)	Domestic Watering 0.011 (AF/Horse/Year)	Total Indoor, Watering, & Irrigation (AF)	ADF (@ 90% Indoor Use) (GPD)
2	<i>Note 1</i> 0.520	464	<i>Note 2</i> 0.623	<i>Note 3</i> 0.176	1.32	418

*Note 1: Per 8.4.7(B)(7)(d) of the EPC Land Development Code*

*Note 2: Per 8.4.7(B)(7)(d) of the EPC Land Development Code, assuming 5,500 ft<sup>2</sup> of irrigation per lot*

*Note 3: Assuming 8 horses per lot*

3.2 *Unit Water User Characteristics*

Unit water user characteristics are counted on a *single-family equivalent (SFE)* basis. All single-family homes are counted as one SFE, and user characteristics were based on information provided in the *El Paso County Land Development Code*, Chapter 8.

3.3 *Demand versus Supply*

An overall demand of 1.32 acre-feet for the proposed subdivision is less than the amount of supply listed in the decrees, determinations, and *Findings of Fact* (provided in **Appendix C**) and is further discussed in Section 4.0 of this report.

**4.0 WATER RIGHTS AND SUPPLY**

4.1 *Water Rights*

Water rights, determinations, and replacement plan have been applied for as shown in **Appendix C**. Table 4-1 below summarizes the information from said water rights and pending determinations.

**Table 4-1: Water Rights Summary**

***Ivilo Heights Subdivision***  
Overall Water Supply Inventory

Land Formation/ Aquifer	Determination	Tributary Status	Area  (Acres)	Decreed Water 100- Year  (AF)	Annual Allocation 100-Year  (AF/Year)	Annual Allocation 300-Year  (AF/Year)
<b>Dawson</b>	<b>22CW3087</b>	<b>NNT</b>	<b>5.83</b>	<b>480</b>	<b>4.80</b>	<b>1.60</b>
Denver	22CW3087	NNT	5.83	510	5.10	1.70
Arapahoe	22CW3087	NT	5.83	235	2.35	0.78
Laramie-Fox Hills	22CW3087	NT	5.83	171	1.71	0.57
<b>Total Legal Supply</b>					<b>13.96</b>	<b>4.65</b>
					<i>100-Year</i>	<i>300-Year</i>

**Beneficial Uses:** *Domestic Indoor*  
*Lawn & Garden Irrigation*  
*Watering for horses or equivalent livestock*

According to the *Findings of Fact* contained in Division 2 Court Case No. 22CW3087 located in **Appendix C**, the following conditions are allowed for the subject property:

- Type of use to which the Dawson water pumped must be used for domestic indoor use, indoor and outdoor irrigation, commercial, industrial, livestock, fire protection, recreation, fish and wildlife, augmentation, and storage, pursuant to the augmentation plan.

#### 4.2 *Adequacy of Water Rights*

Current water rights are adequate for buildout demands of two (2) lots to meet 2040 and 2060 buildout projections on a 300-year basis.

According to the Groundwater Rights found in Division 2 Court Case 22CW3087 the entire 5.83-acre property has appropriated water rights located in the Dawson, Denver, Arapahoe, and Laramie Fox-Hills confined aquifers. Of these formations, only the Laramie Fox-Hills and Arapahoe aquifers are considered nontributary, while the Dawson and Denver aquifers are considered not non-tributary. Of note, the Denver Aquifer is considered to be a 4% not-nontributary formation. The applicant has rights to consume water from all four formations, though use from the Dawson, Denver, and Arapahoe requires an augmentation and replacement plan for all uses. The associated determinations and approved augmentation plan are shown in the court cases included in **Appendix C**:

- The annual allocation on a 300-year plan for the Dawson Aquifer is 1.60 AF/yr, which is greater than the estimated annual demand of 1.32 AF-year for both lots to be served by Dawson wells.
- Assuming a 0.26 AF/yr domestic use per residence (which meets the minimum demand requirement of El Paso County Land Development Code Chapter 8) with 90% return flows through the septic system per resident, this results in a 0.234 AF/yr replacement flow back through the septic system per resident, or 0.468 AF/year total for the two residences
- Per approved decree 22CW3087, pumping from the Dawson Aquifer will result in an estimated 22.40% depletion to the alluvium by the 300<sup>th</sup> year of pumping, which results in a depletion of 0.296 AF to the alluvium. Of note, the maximum depletion to the alluvium occurs in year 320 after the first year of pumping (or 20 years after pumping is complete in year 300). The maximum depletion to the alluvium is 22.7% of 1.32 AF/year of pumping, or 0.300 AF/year. Conservatively estimated return flows through the septic system total 0.468 AF/yr, which is in excess of required replacement water for alluvial depletions due to not-nontributary pumping from the Dawson Aquifer (in both year 300 and 320).

*Conclusion:*

*The current water rights and augmentation plan in place are adequate to meet the estimated overall demand and resulting alluvial depletions of 0.300 acre-feet for two (2) lots.*

#### 4.3 *Description of Current Water Rights*

The subject area's current water rights involve non-renewable supplies in the Denver Basin, further discussed below.

##### Non-Renewable Denver Basin Supply

The Denver Basin is a vast, deep-rock aquifer that stretches from southeast of Colorado Springs to Greeley, and from the base of the front range to the eastern end of Elbert County. Rights granted in the Denver basin are based on the ownership of the surface property – the larger the parcel, the larger the allocation. This water is much deeper than typical residential wells, ranging up to 2,650 feet deep.

Denver Basin water is considered finite and therefore non-renewable. In the subject area, there are four main formations that make up the Denver Basin: Dawson, Denver, Arapahoe, and Laramie-Fox Hills (LFH), described from shallowest to deepest.

The subject property was granted water rights in the four Denver Basin formations as shown in **Table 4-1** above.

### 5.0 **WATER SYSTEM FACILITIES AND PHYSICAL SUPPLY**

#### 5.1 *Source of Supply*

Supply for the two (2) lots will be met with future or existing wells completed in the Dawson aquifer (known as Vessey Wells Nos. 1na d 2 in Court Case 22CW3087). Any new wells will be drilled, screened, test-pumped, and completed in accordance with the Colorado Division of Water Resources rules and regulations.

#### 5.2 *Water Treatment*

Water in an existing well adjacent to the proposed Ivilo Heights Subdivision was tested on July 22, 2021 for constituents required by El Paso County regulations for a confined aquifer. Any desired treatment of existing and future wells will rely on the individual homeowners as this is not considered a *Community System* by the Colorado Department of Public Health and Environment.

#### 5.3 *Water Storage*

Water storage (other than potential individual cisterns) will not be constructed. Therefore, a central water system with treatment and fire-flow capabilities will not be provided. The residents of each subdivided lot will be made aware of this since it will be included on the subdivision plat.

#### 5.4 *Distribution, Pumping, and Transmission Lines*

Since there is no central water system proposed for this subdivision, no distribution, pumping, or transmission lines will be constructed.

## 5.5 Water Quality

The water quality in the Dawson aquifer in this area has typically been suitable for residential potable use. Water samples were obtained from an existing well (well permit #82898-F) constructed via an exterior water tap serving an adjacent residence (6385 Vessey Road). The adjacent residence located at 6385 Vessey Road is within 1,000 feet of the proposed Ivilo Heights Subdivision, located at 6225 Vessey Road. Water samples were obtained from this tap on July 22, 2021, with water quality testing performed by Colorado Analytical Laboratories and ACZ Laboratories, per the El Paso County Land Development Code section 8.4.7(B). Final results from this water quality testing were received on September 10th, 2021, and can be found in **Appendix D**. The only results of concern were for total coliform, Langelier Index, and aluminum.

**Total Coliform** - The water sampled at this location was tested and found to have a presence of total coliform. The presence of total coliform may be due to the overgrown lot in and around the hose bib sample port. Also, the existing well in which the samples were obtained from had not been run in quite a long time prior to the sampling event. Prior to sampling, the well was run through the spigot for a total of 25 minutes. In addition, the test for E. Coli was found to be negative (not present). It is the opinion of the engineer that the presence of total coliform was a result of operator error or residual present on the sample well. It is highly doubtful that there is coliform present in the source Dawson Aquifer.

**Langelier Index** – The documented sample results indicated a Langelier Index of -1.98. Negative Langelier Index results generally indicate a low level of calcium carbonate in the water. This would identify the water as generally corrosive in nature. The engineer would recommend as a result of the corrosive nature of the water that the homeowners employ plastic or Pex pipe for its plumbing piping rather than traditional copper or galvanized pipe.

**Aluminum** – As shown in **Appendix D**, the aluminum levels were reported at 0.264 mg/L, which is well above the Secondary MCL of 0.05 mg/L. Because aluminum is considered to be a secondary contaminant, the Colorado Department of Public Health and Environment (CDPHE) does not consider aluminum to be a public risk. While there is no documentation of acute aluminum toxicity, there can be risk of chronic and prolonged exposure to elevated levels of aluminum. The engineer would recommend that each residence employ a point of use reverse osmosis filter in the basement of each home, which could remove as much as 98% of the encountered aluminum.



## 6.0 EL PASO COUNTY MASTER PLANNING ELEMENTS

### 6.1 *County Water Master Plan 2040 and 2060 Projections*

The subject property lies within the El Paso County Water Master Planning area, Region #2.

### 6.2 *Buildout (Including 2040 and 2060 Buildout):*

Expected buildout of the subject property are two (2) total lots. Demands for the entire subdivision are listed in Section 3.0 of this report, which include a total demand of 1.32 AF/year as based on Division 2 Court Case 22CW3087 and El Paso County Land Development Code Chapter 8.4. Section B.7.d.

### 6.3 *Description of Long-Term Planning and Future Sources of Supply*

Per El Paso County criteria, the 300-year supply of water for the subject property appears to be more than adequate for full buildout, which would include both the 2040 and 2060 scenarios.

If needed beyond the 300-year supply, the subdivision has nontributary water rights in the Arapahoe and Laramie-Fox Hills formation. Please refer to the *Plan for Augmentation* in **Appendix C**.

### 6.4 *Water System Interconnects*

The closest source for a potential interconnect is the Town of Black Forest's Park Forest Water District (for water only) – approximately 1.0 miles to the south. The next closest interconnect for both water and sewer is Colorado Springs Utilities, located 3.65 miles to the southwest.

It is not anticipated (and neither Park Forrest nor Colorado Springs Utilities has been contacted) that an interconnect is needed or warranted. While the Park Forrest Water District might be a viable option, the cost for tap fees probably exceeds the cost of drilling three new Dawson wells.

## 7.0 CONCLUSION

**The subject property has adequate water supply and water quality to meet the needs of the proposed subdivision on a 300-year basis.**

# *Appendix A*

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, 6225 Vessey LLC, a Colorado limited liability company, being the owner of the following described tract of land:

TO WIT:

That portion of the Northwest quarter of Section 6 in Township 12 South, Range 65 West of the 6th P.M., described as follows:

Commencing at a point on the West line of said Section 6 that is 3979.50 feet North on said West line from the Southwest corner of said Section 6; thence South 88°52'30" East 1954 feet to the point of beginning of the tract to be described hereby; Thence continue South 88°52'30" East 495 feet, being on the center line of said Vessey Road; thence South 160 feet parallel with the West line of said Northwest quarter; thence South 88°52'30" East 165 feet; then South 320 feet, parallel with the West line of said Northwest quarter; thence North 88°52'30" West 634 feet to a point on the East line of the records of El Paso County, Colorado, under Reception No. 117850, that is 10 feet North on said East line from the Southeast corner thereof; thence North 00°7'30" West 320 feet; thence North 88°52'30" West 26 feet; thence North 00°7'30" East 160 feet to the point of beginning, except the Northernly 30 feet and the Easternly 15 feet thereof, in El Paso County, Colorado, with all its appurtenances and warrant the title to the same.

County of El Paso and State of Colorado.

DEDICATION:

The undersigned, being all the Owners, Mortgages, Beneficiaries of Deeds of Trust and holders of other interests in the land described herein, have laid out, subdivided, and platted said lands into lots, and easements as shown hereon under the name and subdivision of "VILO HEIGHTS SUBDIVISION". All public improvements so platted are hereby dedicated to public use and said Owner does hereby covenant and agree that the public improvements will be constructed to El Paso County standards and that proper drainage and erosion control for same will be provided at said Owner's expense, all to the satisfaction of the Board of County Commissioners of El Paso County, Colorado. Upon acceptance by resolution, all public improvements so dedicated will become matters of maintenance by El Paso County, Colorado. The utility easements shown hereon are hereby dedicated for public utilities and communication systems and other purposes as shown hereon. The entities responsible for providing the services for which the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintenance, and replacement of utility lines and related facilities.

IN WITNESS WHEREOF:

The aforementioned 6225 Vessey LLC, a Colorado limited liability company, has executed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 2024 A.D.

Pawel Posorski, Manager

NOTARIAL:

STATE OF COLORADO )
COUNTY OF EL PASO ) SS

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2024 A.D. by Pawel Posorski, Manager, 6225 Vessey LLC, a Colorado limited liability company.

Witness my hand and seal \_\_\_\_\_

Address \_\_\_\_\_

My Commission expires \_\_\_\_\_

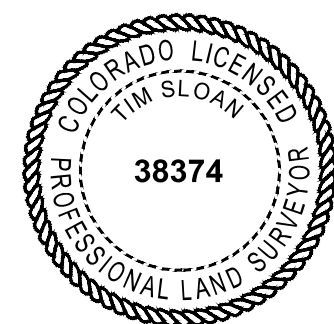
SURVEYOR'S CERTIFICATE:

I, Tim Sloan, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on December 6, 2023, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:10,000; and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivision, or surveying of land and all applicable provisions of the El Paso County Land Development Code.

I attest on this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

Tim Sloan, Professional Land Surveyor Date \_\_\_\_\_

Colorado Registered PLS # \_\_\_\_\_



BOARD OF COUNTY COMMISSIONERS CERTIFICATE:

This Plat VILO HEIGHTS SUBDIVISION was approved for filing by the El Paso County, Colorado Board of County Commissioners on the \_\_\_\_\_ day of \_\_\_\_\_, 2024, subject to any notes specified hereon and any conditions included in the resolution of approval. The dedications of land to the public easements are accepted, but public improvements thereon will not become the maintenance responsibility of El Paso County until preliminary acceptance of the public improvements in accordance with the requirements of the Land Development Code and Engineering Criteria Manual, and the Subdivision Improvements Agreement.

Chair, Board of County Commissioners Date \_\_\_\_\_

Director, Planning and Community Development Department Date \_\_\_\_\_

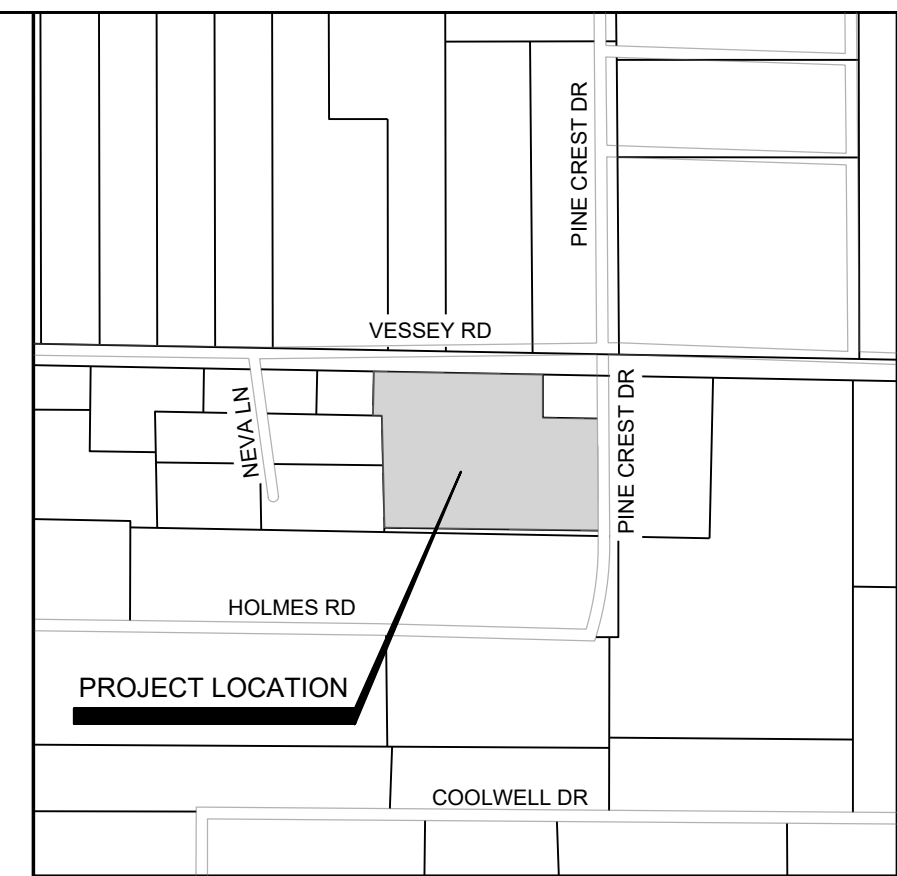
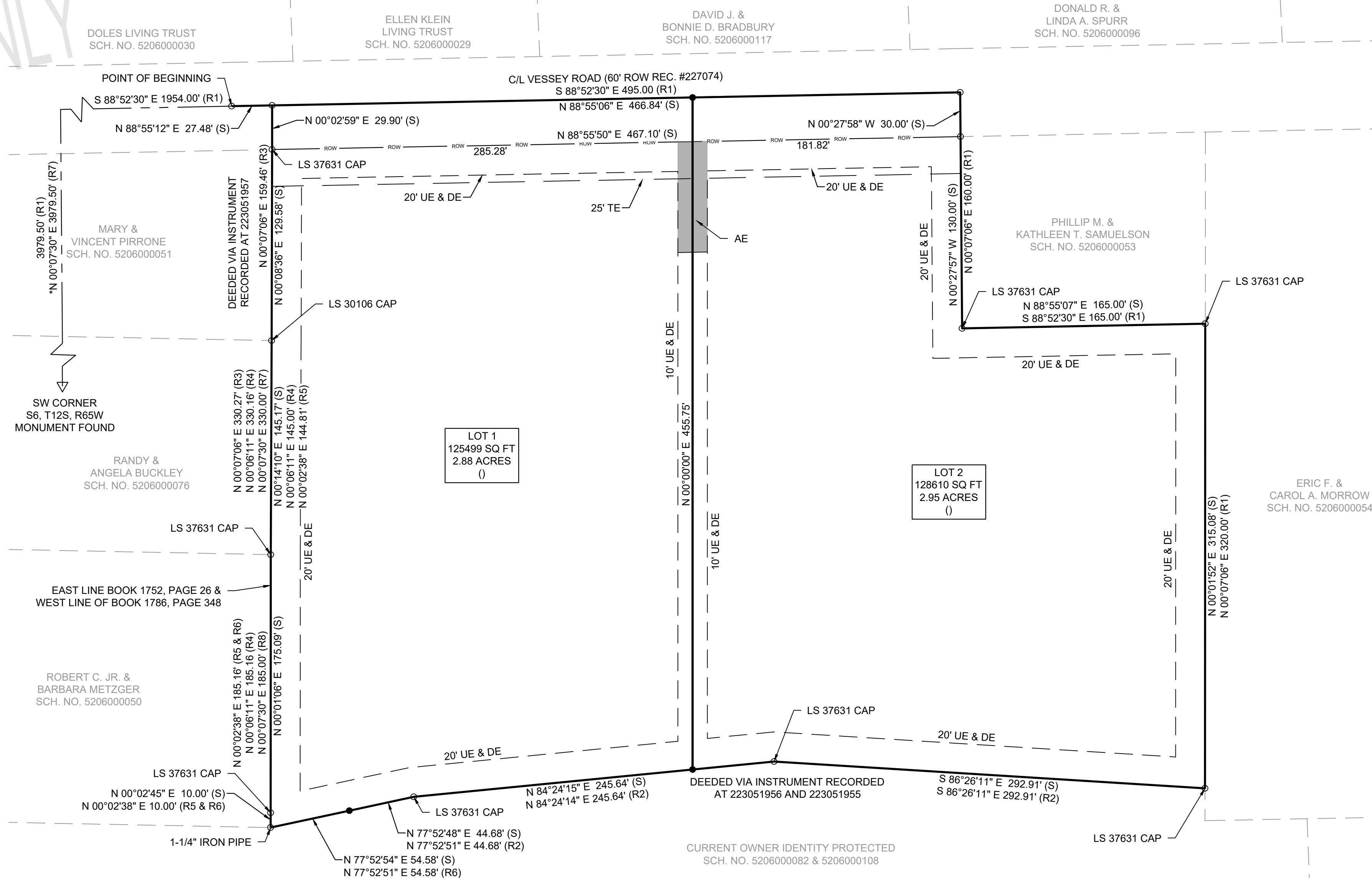
RECORDINGS:

STATE OF COLORADO )
COUNTY OF EL PASO ) SS

I hereby certify that this instrument was filed for record in my office at \_\_\_\_\_ o'clock \_\_\_\_\_ M. this \_\_\_\_\_ day of \_\_\_\_\_, 2024 A.D., and is duly recorded under Reception Number \_\_\_\_\_ of the records of El Paso County, State of Colorado.

By: \_\_\_\_\_ Date \_\_\_\_\_
El Paso County Clerk & Recorder

Final Plat
VILO HEIGHTS SUBDIVISION
PART OF THE NORTHWEST 1/4, SECTION 6, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO



VICINITY MAP (NOT TO SCALE)

ENVIRONMENTAL:

DEVELOPER SHALL COMPLY WITH FEDERAL AND STATE LAWS, REGULATIONS, ORDINANCES, REVIEW AND PERMIT REQUIREMENTS, AND OTHER AGENCY REQUIREMENTS, IF ANY, OF APPLICABLE AGENCIES, INCLUDING, BUT NOT LIMITED TO, THE COLORADO DIVISION OF WILDLIFE, COLORADO DEPARTMENT OF TRANSPORTATION, U.S. ARMY CORPS OF ENGINEERS, AND THE U.S. FISH & WILDLIFE SERVICE REGARDING THE ENDANGERED SPECIES ACT, PARTICULARLY AS IT RELATES TO THE LISTED SPECIES (E.G. PREBLE'S MEADOW JUMPING MOUSE).

FLOODPLAIN NOTE:

FLOOD INSURANCE RATE MAP, MAP NUMBER 08041C0315G EFFECTIVE DATE DECEMBER 7, 2018, INDICATES THAT THE AREA WITHIN THE SURVEYED PROPERTY TO BE LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN).

EASEMENTS:

UNLESS OTHERWISE INDICATED, ALL SIDE, FRONT, AND REAR LOT LINES ARE HEREBY PLATTED ON EITHER SIDE WITH A 10 FEET PUBLIC UTILITY AND DRAINAGE EASEMENT UNLESS OTHERWISE INDICATED. ALL EXTERIOR SUBDIVISION BOUNDARIES ARE HEREBY PLATTED WITH A 20 FEET PUBLIC UTILITY AND DRAINAGE EASEMENT. THE SOLE RESPONSIBILITY FOR THE MAINTENANCE OF THESE EASEMENTS IS HEREBY VESTED WITH THE INDIVIDUAL PROPERTY OWNERS.

UTILITY NOTES:

ANY UTILITY COMPANY THAT LOCATES FACILITIES IN ANY EASEMENT SHALL HAVE THE RIGHT TO PRUNE, REMOVE, ERADICATE, CUT AND CLEAR AWAY ANY TREES, LIMBS, VINES, AND BRUSH ON THE UTILITY EASEMENT NOW OR AT ANY FUTURE TIME AND PRUNE AND CLEAR AWAY ANY TREE LIMBS, VINES, AND BRUSH ON LANDS ADJACENT TO THE UTILITY EASEMENT WHENEVER, IN THE UTILITY COMPANIES JUDGMENT, SUCH MAY INTERFERE WITH OR ENDANGER THE CONSTRUCTION, OPERATION, OR MAINTENANCE OF ITS FACILITIES, TOGETHER WITH THE RIGHT OF INGRESS TO AND EGRESS FROM THE UTILITY EASEMENT AND CONTIGUOUS LAND SUBJECT TO THIS PLAT FOR THE PURPOSE OF SURVEYING, ERECTING, CONSTRUCTING, MAINTAINING, INSPECTING, REBUILDING, REPLACING, AND WITH OR ENDANGERING THE CONSTRUCTION, OPERATION OR MAINTENANCE OF SAID FACILITIES.

NOTICE:

ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.

GEOLOGIC HAZARD NOTE:

THE FOLLOWING LOTS HAVE BEEN FOUND TO BE IMPACTED BY GEOLOGIC HAZARDS. MITIGATION MEASURES AND A MAP OF THE HAZARD AREA CAN BE FOUND IN THE SOILS & GEOLOGY REPORT BY ROCKY MOUNTAIN GROUP (RMG), DATED SEPTEMBER 22, 2021 IN FILE \_\_\_\_\_ AVAILABLE AT THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT:

- \*DOWNSLOPE CREEP;
\*ROCKFALL SOURCE;
\*ROCKFALL RUNOUT ZONE;
\*POTENTIALLY SEASONALLY HIGH GROUNDWATER;
\*OTHER HAZARD: ARTIFICIAL FILL AREA.

IN AREAS OF HIGH GROUNDWATER:

DUE TO HIGH GROUNDWATER IN THE AREA, ALL FOUNDATIONS SHALL INCORPORATE AN UNDERGROUND DRAINAGE SYSTEM.

NOTES:

- 1. NO GAPS OR OVERLAPS EXIST.
2. THERE ARE NO LINES OF POSSESSION THAT AFFECT THIS SURVEY.
3. PARENT TRACT IS RECORDED AS INSTRUMENT #222090101, CLERK & RECORDER'S OFFICE, EL PASO COUNTY, COLORADO.
4. ALL BUILDING SETBACK REQUIREMENTS SHALL BE DETERMINED BY THE ZONING DISTRICT, UNLESS OTHERWISE NOTED.
5. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SMH CONSULTANTS, TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD. FOR INFORMATION REGARDING EASEMENTS, AND RIGHT OF WAY, SMH CONSULTANTS RELIED UPON THE TITLE POLICY PREPARED BY FIDELITY NATIONAL TITLE, DATED JUNE 16, 2022.
6. BASIS OF BEARINGS IS THE WEST LINE OF SECTION 6, TOWNSHIP 12 SOUTH, RANGE 65 WEST, MONUMENTED AS SHOWN AND ASSUMED TO BEAR N 00°07'30" E, 3979.50 FEET.
7. SEWAGE TREATMENT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PROPERTY OWNER. THE EL PASO COUNTY PUBLIC HEALTH DEPARTMENT MUST APPROVE EACH SYSTEM AND, IN SOME CASES, THE DEPARTMENT MAY REQUIRE AN ENGINEER-DESIGNED SYSTEM PRIOR TO PERMITTING APPROVAL.
8. INDIVIDUAL WELLS ARE THE RESPONSIBILITY OF EACH PROPERTY OWNER. PERMITS FOR INDIVIDUAL WELLS MUST BE OBTAINED FROM THE STATE ENGINEER WHO BY LAW HAS THE AUTHORITY TO SET CONDITIONS FOR THE ISSUANCE OF THESE PERMITS.
9. WATER IN THE DENVER WATER BASIN AQUIFERS IS ALLOCATED BASED ON A 100-YEAR AQUIFER LIFE; HOWEVER, FOR EL PASO COUNTY PLANNING PURPOSES, WATER IN THE DENVER BASIN AQUIFERS IS ELEVATED BASED ON A 300-YEAR AQUIFER LIFE. APPLICANTS, THE HOME OWNERS ASSOCIATION, AND ALL FUTURE OWNERS IN THE SUBDIVISION SHOULD BE AWARE THAT THE ECONOMIC LIFE OF A WATER SUPPLY BASED ON WELLS IN A GIVEN DENVER BASIN AQUIFER MAY BE LESS THAN EITHER THE 100 YEARS OR 300 YEARS INDICATED DUE TO ANTICIPATED WATER LEVEL DECLINES. FURTHERMORE, THE WATER SUPPLY PLAN SHOULD NOT RELY SOLELY UPON NON-RENEWABLE AQUIFERS. ALTERNATIVE RENEWABLE WATER RESOURCES SHOULD BE ACQUIRED AND INCORPORATED IN A PERMANENT WATER SUPPLY PLAN THAT PROVIDES UTILITY GENERATIONS WITH A WATER SUPPLY.
10. THE OWNER, ITS SUCCESSORS AND ASSIGNS SHALL ADVISE THE FUTURE OWNERS OF THESE LOTS OF ALL APPLICABLE REQUIREMENTS OF THE DETERMINATION OF WATER RIGHT 2022CW3087 RECORDED AT RECEPTION NO. 223028216.
11. ALL PROPERTY OWNERS ARE RESPONSIBLE FOR MAINTAINING PROPER STORMWATER 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 IMPERE THE FLOW OF RUNOFF SHALL NOT BE PLACED IN DRAINAGE EASEMENTS.
12. DUE TO WILDFIRE CONCERNS, THE PROPERTY OWNER IS ENCOURAGED TO INCORPORATE WILDFIRE FUEL BREAK PROVISIONS AS RECOMMENDED BY THE COLORADO STATE FOREST SERVICE AND ILLUSTRATED THROUGH PUBLICATIONS AVAILABLE THROUGH THE STATE FOREST SERVICE.
13. ACCESS TO LOTS 1 & 2 SHALL BE THROUGH THE SHOWN ACCESS EASEMENT. THE RESPONSIBILITY AND MAINTENANCE OF SAID EASEMENT IS SUBJECT TO THE MAINTENANCE AGREEMENT AND ALL COVENANTS AND RESTRICTIONS CONTAINED THEREIN, AS RECORDED AT RECEPTION NO. \_\_\_\_\_ OF THE RECORDS OF EL PASO COUNTY CLERK AND RECORDER.
14. NO DRIVEWAY SHALL BE ESTABLISHED UNLESS AN ACCESS PERMIT HAS BEEN GRANTED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT. INDIVIDUAL LOT PURCHASERS ARE RESPONSIBLE FOR CONSTRUCTING DRIVEWAYS, INCLUDING NECESSARY DRAINAGE CULVERTS FROM VESSEY ROAD PER LAND DEVELOPMENT CODE SECTION 6.3.3.C.2 AND 6.3.3.C.3.
15. DUE TO THEIR LENGTH, SOME OF THE DRIVEWAYS WILL NEED TO BE SPECIFICALLY APPROVED BY THE BLACK FOREST FIRE PROTECTION DISTRICT.
16. NO STRUCTURES OR MAJOR MATERIAL STORAGE ACTIVITIES ARE PERMITTED WITHIN THE DESIGNATED DRAINAGE EASEMENTS, EXCEPT FENCES. FENCES SHALL NOT IMPERE RUNOFF FROM REACHING DRAINAGE SWALES.
17. THE SUBDIVIDER(S) AGREES ON BEHALF OF HIM/HERSELF AND ANY DEVELOPER OR BUILDER SUCCESSORS AND ASSIGNEES THAT SUBDIVIDER AND/OR SAID SUCCESSORS AND ASSIGNS SHALL BE REQUIRED TO PAY TRAFFIC IMPACT FEES IN ACCORDANCE WITH EL PASO COUNTY ROAD IMPACT FEE PROGRAM RESOLUTION (RESOLUTION NO. 19-471), OR ANY AMENDMENTS THERETO, 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 PLAT NOTES TO ENSURE THAT A TITLE SEARCH WOULD FIND THE FEE OBLIGATION BEFORE SALE OF THE PROPERTY.
18. MAILBOXES SHALL BE INSTALLED IN ACCORDANCE WITH ALL EL PASO COUNTY DEPARTMENT OF TRANSPORTATION AND THE UNITED STATES POSTAL SERVICE REGULATIONS.
19. THE FOLLOWING REPORTS HAVE BEEN SUBMITTED IN ASSOCIATION WITH THE FINAL PLAT FOR THIS SUBDIVISION AND ARE ON FILE AT EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT: DRAINAGE REPORT, WATER RESOURCES REPORT, WASTEWATER DISPOSAL REPORT, GEOLOGY AND SOILS REPORT, AND FIRE PROTECTION REPORT.
20. THE ADDRESSES EXHIBED ON THIS PLAT ARE FOR INFORMATIONAL PURPOSES ONLY. THEY ARE NOT THE LEGAL DESCRIPTION AND ARE SUBJECT TO CHANGE.
21. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY COMMITTS A CLASS TWO (2) MISDEMEANOR PURSUANT TO C.R.S. § 18-4-508.

LEGEND

- Monument Found (1/2" Rebar), Origin unknown unless otherwise noted
● 1/2"x24" Rebar w/PLS38374 Cap Set
△ Section Corner. NOTE: All section corner monument origins are unknown unless otherwise noted.
+ Assumed Bearing
(S) Surveyed Dimension
(R1) Recorded Dimension - Special Warranty Deed dated June 22, 2022 under Rec. #222090101
(R2) Recorded Dimension - Quit Claim Deed dated June 20, 2023 under Rec. #223051956
(R3) Recorded Dimension - Quit Claim Deed dated June 20, 2023 under Reception #223051957
(R4) Recorded Dimension - Land Survey Plat by Marr Land Surveying dated December 2, 2021 under Reception #222900009
(R5) Recorded Dimension - Land Survey Plat by Crossed Paths Surveying Services, Inc. dated June 28, 2022 under Reception #222900156
(R6) Recorded Dimension - Quit Claim Deed dated June 20, 2023 under Reception #223051955
(R7) Recorded Dimension - Warranty Deed dated June 29, 1959 under Book 1752, Page 76
(R8) Recorded Dimension - Warranty Deed dated June 3, 1968 under Book 2238, Page 40
DE Drainage Easement
UE Public Utility Easement
TE Trail Easement
AE Private Access Easement
Private Access Easement Hatch

LINETYPE LEGEND

- ADJACENT PROPERTY LINE
--- PROPERTY LINE
--- SECTION LINE
--- TRAIL EASEMENT LINE
--- PUBLIC UTILITY & DRAINAGE EASEMENT LINE
--- RIGHT OF WAY

TOTAL ACREAGE:
LOT 1 = 2.88 ACRES
LOT 2 = 2.95 ACRES
TOTAL ROW = 0.32 ACRES
TOTAL = 6.15 ACRES

SERVICE PROVIDERS:
BLACK FOREST FIRE PROTECTION DISTRICT
MOUNTAIN VIEW ELECTRIC ASSOC.
BLACK HILLS ENERGY
DOMESTIC WELLS
INDIVIDUAL SEWAGE DISPOSAL SYSTEMS

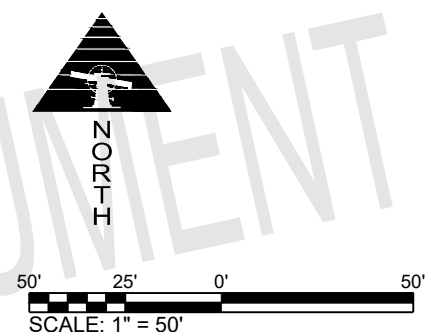
FEES:
PARK FEE:
SCHOOL FEE:
DRAINAGE FEE:
BRIDGE FEE:

OWNER & PETITIONER:
6225 VESSEY LLC
PAWEL POSORSKI
3515 N CHESTNUT ST., STE. 100
COLORADO SPRINGS, CO 80907
630-302-7308

SURVEYOR:
TIM SLOAN, VICE-PRESIDENT
SMH CONSULTANTS, P.A.
620 NORTH TEJON STREET, SUITE 201
COLORADO SPRINGS, CO 80903
719-465-2145

ENGINEER:
BRETT LOUK, P.E.
SMH CONSULTANTS, P.A.
620 NORTH TEJON STREET, SUITE 201
COLORADO SPRINGS, CO 80903
719-465-2145

Table with columns for DATE SUBMITTED, REVISIONS, and a revision record.



Manhattan, KS - HQ P: (785) 776-0541 • Dodge City, KS P: (620) 255-1952
Overland Park, KS P: (913) 444-9615 • Colorado Springs, CO P: (719) 465-2145

Survey Prepared December 6, 2023
Drawn By: JAM Project #2209-0355 TDS # PCD FILE #

DECEMBER 2023

# *Appendix B*

## WATER SUPPLY INFORMATION SUMMARY

Section 30-28-133(d), C.R.S. requires that the applicant submit to the County, "Adequate evidence that a Water supply that is sufficient in terms of quantity, quality, and dependability will be available to ensure an adequate supply of water"

1. NAME OF DEVELOPMENT AS PROPOSED		<u>Ivilo Heights Subdivision</u>	
2. LAND USE ACTION		<u>Minor Subdivision</u>	
3. NAME OF EXISTING PARCEL AS RECORDED		<u>6225 Vessey Road</u>	
SUBDIVISION <u>See Above</u>		FILING <u>N/A</u>	BLOCK <u>N/A</u> Lot <u>N/A</u>
4. TOTAL ACERAGE	<u>5.83</u>	5. NUMBER OF LOTS PROPOSED	<u>2</u> PLAT MAPS ENCLOSED <input checked="" type="checkbox"/>
6. PARCEL HISTORY - Please attach copies of deeds, plats, or other evidence or documentation. (In submittal package)			
A. Was parcel recorded with county prior to June 1, 1972?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
B. Has the parcel ever been part of a division of land action since June 1, 1972?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If yes, describe the previous action			
7. LOCATION OF PARCEL - Include a map delineating the project area and tie to a section corner. (In submittal)			
NW <u>14</u> OF SECTION 6		TOWNSHIP <u>12</u>	<input type="checkbox"/> N <input checked="" type="checkbox"/> S RANGE <u>65</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W
PRINCIPAL MERIDIAN: <input checked="" type="checkbox"/> 6TH <input type="checkbox"/> N.M. <input checked="" type="checkbox"/> UTE <input type="checkbox"/> COSTILLA			
8. PLAT - Location of all wells on property must be plotted and permit numbers provided.			
Surveyors plat <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		If not, scaled hand-drawn sketch Y <input type="checkbox"/> NO	
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year		10. WATER SUPPLY SOURCE	
HOUSEHOLD USE # <sup>1</sup>	<u>2</u> of units <u>0.260</u> AF/SFE/YR <u>0.520</u> AF	<input type="checkbox"/> EXISTING <input type="checkbox"/> DEVELOPED <input checked="" type="checkbox"/> NEW WELLS	Proposed Aquifers - (Check One) <input type="checkbox"/> Alluvial <input type="checkbox"/> Upper Arapahoe <input checked="" type="checkbox"/> Upper Dawson <input type="checkbox"/> Lower Arapahoe <input type="checkbox"/> Lower Dawson <input type="checkbox"/> Laramie Fox Hills <input type="checkbox"/> Denver <input type="checkbox"/> Dakota <input type="checkbox"/> Other
COMMERCIAL USE #	<u>0</u> SF <u>-</u> GPD <u>-</u> AF	WELLS SPRING WELL PERMIT NUMBERS _____ _____	
IRRIGATION # <sup>2</sup>	<u>0.0566</u> AF/1000SF <u>556</u> GPD <u>0.623</u> AF	<input type="checkbox"/> MUNICIPAL	WATER COURT DECREE CASE NUMBERS  <u>Determination Case No.: 22CW3087</u>
ANIMAL WATERING # <sup>3</sup>	<u>16</u> Horses <u>0.011</u> AF/Horse/Year <u>0.176</u> AF	<input type="checkbox"/> ASSOCIATION	
TOTAL	<u>1,177</u> GPD <u>1.32</u> AF *	<input type="checkbox"/> COMPANY	
1) Per 8.4.7 (B)(7)(d) of the EPC Land Development Code (LDC) 2) Per 8.4.7.(B)(7)(d) of the EPC-LDC @ 5,500 ft <sup>2</sup> of irrigatable land per residence 3) Assuming 8 horses per lot at 0.011 AF/year per horse		<input type="checkbox"/> DISTRICT	
11. ENGINEER'S WATER SUPPLY REPORT		NAME: <u>N/A</u> LETTER OF COMMITMENT FOR SERVICE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		If yes, please forward with this form. (This may be required before our review is completed)	
12. TYPE OF SEWAGE DISPOSAL SYSTEM			
<input checked="" type="checkbox"/> SEPTIC TANK/LEACH FIELD		<input type="checkbox"/> CENTRAL SYSTEM - DISTRICT NAME: _____	
<input type="checkbox"/> LAGOON		<input type="checkbox"/> VAULT - LOCATION SEWAGE HAULED TO: _____	
<input type="checkbox"/> ENGINEERED SYSTEM (Attach a copy of engineering design)		<input type="checkbox"/> OTHER: _____	

# *Appendix C*

# *Appendix D*