RESOLUTION NO. _____, Series of 2025

RESOLUTION ADOPTING THE 13th AMENDMENT TO THE FREMONT COUNTY SUBDIVISION RESOLUTION FOR FREMONT COUNTY, COLORADO

WHEREAS, on March 14th, 2000, the Fremont County Board of County Commissioners adopted Resolution No. 15, Series of 2000, which readopted the Fremont County Subdivision Resolution and incorporated all amendments since the initial adoption on September 9, 1994; and

WHEREAS, the 2000 Fremont County Subdivision Resolution remains in full force and effect, together with twelve amendments to date; and

WHEREAS, on February 27, 2024, the Fremont County Board of County Commissioners considered a 13th Amendment to the Subdivision Resolution, which recommended certain changes, additions and deletions to the regulations and provisions regarding SECTION XXIII A. DRAINAGE PLAN AND REPORT, attached hereto as Exhibit A and incorporated herein by reference;

WHEREAS, the Board of Commissioners held a Public Hearing on the proposed 13th Amendment on February 27, 2024, and considered all public input regarding the proposed 13th Amendment; and

WHEREAS, the Board is persuaded that the proposed 13th Amendment is reasonable and will promote the health, safety and welfare of the citizens of Fremont County and should be approved and adopted.

NOW, THEREFORE, BE IT RESOLVED that Exhibit A, will delete FREMONT COUNTY SUBDIVISION RESOLUTION SECTION XXIII, A. DRAINGAGE PLAN AND REPORT to become the new FREMONT COUNTY SUBDIVISION RESOLUTION SECTION XXIII, A. DRAINGAGE PLAN AND REPORT, the 13th Amendment to the Fremont County Subdivision Resolution, is hereby approved and adopted, and shall be incorporated into the Fremont County Subdivision Regulations, to be effective as of February 11, 2025 and continuing in full force and effect until amended, deleted or superseded by subsequent action of the Fremont County Board of County Commissioners

Commissioner Bell moved for the adoption of the foregoing Resolution, seconded by Commissioner Grantham and approved by roll call vote as follows:

Commissioner Grantham Aye Commissioner Bell: Aye Commissioner McFall: Aye

The Resolution was declared to be duly adopted by	y unanimous consent.	
Date: July 22, 2025, nunc pro tunc, February 27	<u>, 2024</u> .	
BOARD OF COUNTY COMMISSIONERS OF FREMONT COUNTY	ATTEST:	
By:	By:	
Chairman	Clerk to the Board	

EXHIBIT A

FREMONT COUNTY SUBDIVISION RESOLUTION 13TH AMENDMENT

SECTION XXIII GENERAL REQUIREMENTS

A. DRAINAGE PLAN AND REPORT

- 1. The owner, applicant and / or developer shall provide a drainage plan and report that shall include necessary drainage facilities to control the surface water entering into the site, within the site, and exiting the site. The drainage plan and report shall contain and address at a minimum the following:
- 2. The drainage plan and report shall be prepared, signed, and sealed by a professional engineer licensed to practice in the State of Colorado, unless otherwise authorized in this section. The drainage report shall be acknowledged by the engineer in a statement in the report similar to the following:

"I hereby state that this Drainage Report for the (Name of Development) was prepared by me (or under my direct supervision) in accordance with the provisions of the Fremont County Subdivision Regulations for the owners thereof. I understand that Fremont County does not, and will not, assume liability for drainage facilities designed by others."

Name
Licensed Professional Engineer
State of Colorado No
(Affix Seal)

- 3. The peak flow exiting the developed site for the ten (10) year and one-hundred (100) year storm events shall not exceed the respective historic (undeveloped) peak flow of the same storm event.
 - a. The Board may require such drainage facilities as necessary to retain, detain, or infiltrate any flows of surface runoff above the historic flows during a storm event.
 - b. Off-site upstream and on-site storm water runoff shall be considered in the design of all storm water facilities. The storm water facilities within the site shall be designed large enough to handle potential storm water runoff from the entire upstream drainage area and on-site runoff.
 - c. Any drainage facility designed to detain storm water shall not release storm water at a rate higher than the historic rate.
 - d. A statement by the designing engineer supported by detention facility calculations shall be included in the report to show that 97% of the 5-year or smaller event drain within 72 hours and that 99% of the 100-year event drain within 120 hours per Colorado Water Law. Facilities that do not drain within these time periods require water rights, including plans for augmentation to replace evaporative losses, and should be avoided. Detention facilities must undergo a notification process with the Colorado State Engineers Office (SEO) in conformance with CRS §37-92-602(8), as may be amended, and present documentation that drain times conform with the requirements of this statute. Any drainage facility designed to retain storm water, such as by creating a basin without a permanently open drain, shall obtain written approval from the Colorado State Engineer's Office prior to submitting the drainage plan and report to Fremont County.
- 4. Where a public storm sewer is available within 500 feet, the applicant shall connect to the storm sewer facilities. If there are no physically or legally accessible storm sewers within five hundred (500) feet, or

- 5. if the cost of the connection to the storm sewer exceeds 10% of the project construction cost, other acceptable provisions shall be considered for the disposal of storm water runoff. Written approval from the owner of the storm sewer must be obtained. Such written approval must include assurance from the storm sewer owner that the system has adequate capacity to handle the proposed flow.
- 6. The Board may require the owner, applicant and/or developer to carry away by pipe or open ditch, any spring or surface water that may exist previous to or as a result of the proposals in the application.
- 7. Any Federal Emergency Management Agency (F.E.M.A.) 100-year Special Flood Hazard Area shall be analyzed for impact in accordance with F.E.M.A. regulations. All FEMA designated Special Flood Hazard Areas should be noted on the final plan.
 - a. A copy of the F.E.M.A. Flood Insurance Rate Map or FIRMette of the general area of the subject property shall be provided with the site location indicated on it.
- 8. A determination of the presence of wetlands on the property must be completed and a statement of findings included in the drainage report. Wetlands located on-site or near the property should be noted with locations shown. Proper wetlands permitting must be completed if applicable.
- 9. All improvements and drainage facilities shall be designed to convey runoff from the one-hundred (100) year design frequency storm, without damage to permanent facilities and structures.
 - a. Site grading shall be shown on the plan drawings and grading shall be accomplished in such a way that surface drainage from rainstorms, snow melt, or groundwater is directed away from buildings and is controlled in a manner that eliminates or minimizes impact on adjacent properties.
 - b. Refer to the County adopted building code for minimum slopes surrounding structures.
- 10. All improvements and drainage facilities shall be designed using the precipitation values provided by the U.S. Department of Commerce National Oceanographic and Atmospheric Administration (NOAA) Precipitation Frequency Atlas, or approved equivalent.
- 11. All drainageways, watercourses, channels, or streams that traverse the site shall be designated as a drainage easement or drainage right-of-way. The easement or right-of-way shall conform to the width of construction plus sufficient additional width to facilitate maintenance and replacement or the width of the drainageway, watercourse, channel, irrigation ditch or stream, whichever is adequate.
- 12. An operation and maintenance (O&M) plan for all drainage facilities and easements/rights-of-way shall be included by the engineer in the final drainage report. The O&M plan should also be transmitted to the property owner who is responsible for operations and maintenance of the drainage facilities and to subsequent owners upon sale of the property. The O&M plan should include instructions for the property owner on safe and correct operations, repair and maintenance of all installed equipment and facilities, and recommended inspection schedules. Maintenance for stormwater storage facilities should follow the recommendations in the (Urban Storm Drainage Criteria Manual (USDCM) Volume 3 Chapter 6, (or the newest version of the USDCM) unless otherwise specified by the design engineer. Areas designated for stormwater drainage, detention, or stormwater infiltration, are not to be used for materials storage, building, or parking, and should not be modified without approval from Fremont County. Access also must be provided to the drainage facilities for long-term maintenance.
- 13. Hydrologic methods used:
 - a. For catchment areas less than twenty (20) acres, the Rationale Method or Modified Rational Method shall be used:

b. For catchment areas greater than twenty (20) acres, the U.S.D.A. Natural Resources Conservation Service publication "Technical Release 55" (TR-55), published in June, 1986, or successor publication, shall be used unless otherwise justified by a Colorado Registered Professional Engineer.

I. Drainage Map

The site drainage map shall contain at a minimum the following:

- a. A drainage basin map that indicates the subject property site location, site perimeter boundary, and off-site contributing drainage areas;
- b. Appropriate title, North Arrow, and indication of scale;
- c. The location of any irrigation ditches, natural water courses or dry gulches;
- d. The location and size, by dimension, of any existing and proposed improvements on the property to remain after development;
- e. The location and size, by dimension, of any existing and proposed drainage easements on the property;
- f. The location and size, by dimension, of any existing and proposed drainage structures on the property;
- g. The direction of on-site drainage flows (grading plan) that indicates location and directions of flow patterns of storm water flow by means of arrows and elevation contour lines that direct flows to existing or proposed stormwater management features;
- h. The cumulative on-site drainage peak flows including clear numerical indications of the quantity of storm water flow at key locations on the property, in cubic feet per second, for the ten (10) year and one-hundred (100) year design frequency storms;
- i. The location, surface area in acres or square feet, the volume in cubic feet, and the inlet, discharge, and spillway flow rate in cubic feet per second for each detention, infiltration, or retention facility for the ten (10) year and one-hundred (100) year design frequency storms;
- j. The slope, size, type of pipe, details of the pipe inlet and outlet, orifice size and location, and riprap or headwall details for all detention, infiltration, and retention facilities;
- k. A clear numerical indication of the quantity of storm water flow leaving the property, in cubic feet per second, at the appropriate site discharge locations for the ten (10) year and one-hundred (100) year design frequency storms;

II. Drainage Report

The project or site drainage report shall contain at a minimum the following:

a. General Information – Provide general project description, names of adjacent subdivisions or developments, area affected by the development in acres, types of soil and ground cover correlated to National Resources Conservation Service (NRCS) types, description of major drainage ways that impact or are impacted by the development, existing utilities that may impact or may be impacted by proposed drainage facilities, general topography, erosion characteristics, F.E.M.A. floodplain, and obstructions.

- b. Drainage Areas—Discuss major drainage areas and sub-area drainage characteristics that affect the proposed development.
- c. Upstream Drainage Conditions Discuss upstream drainage patterns and their impact on the proposed development. Provide detailed hydrologic analysis using both the ten (10) year design frequency storm and the one-hundred (100) year design frequency. Conclusions must describe the appropriate site entry locations for the ten (10) year and one-hundred (100) year design frequency storms.
- d. On-site Drainage Considerations Discuss existing and proposed drainage patterns within the development site, and how upstream drainage entering the site will be conveyed through the site. Demonstrate through detailed hydrologic and hydraulic analysis that sufficient right-of-way or easement is provided to convey all drainage through the development. Provide detailed engineering calculations and copies of all design charts, tables and figures used in the design of streets, inlets, culverts, storm sewers, channels, detention, infiltration, and retention facilities, and other facilities to be constructed in the development. Discuss maintenance and maintenance responsibilities for drainage facilities, including right-of-way and easement requirements. Discuss floodplain management, wetlands, and channel erosion issues.
- e. Detention, Infiltration, and Retention Facilities Discuss the location, surface area in acres or square feet, the volume in cubic feet, and the inlet, discharge, and spillway flow rate in cubic feet per second for each detention, infiltration, or retention facility for the ten (10) year and one-hundred (100) year design frequency storms. Discuss the slope, size, type of pipe, details of the pipe inlet and outlet, orifice size and location, and rip-rap or headwall requirements for all detention and retention facilities. Show supporting design calculations.
- f. Downstream Drainage Considerations Identify locations and peak flow rates of drainage leaving the site, and discuss their impact on downstream facilities and properties. Provide recommended mitigation measures needed to adequately protect downstream receiving facilities. Include a clear numerical indication of the quantity of storm water flow leaving the property, in cubic feet per second, at the appropriate site discharge locations for the ten (10) year and one-hundred (100) year design frequency storms.
- g. Conclusions and Recommendations Provide a clear synopsis of significant drainage facility requirements, including lengths and sizes of pipelines and channels, location and volume of detention, infiltration, and retention facilities, and flow rates of storm water entering and leaving the property. Clearly state the historical flow rate in cubic feet per second at each site discharge point. Computer generated printouts provided with the drainage report must be accompanied by clearly identified descriptions of procedures, data input values, data sources, relationship of printout sheets to drainage basins, and applicability of answers provided.

III. Deferments & Waiver Requests

A deferment/waiver from requirements of this section XXIII of this resolution may be authorized by the Board for minor residential subdivision developments if any one of these conditions exist:

- a. lots over 4.5 acres in size
- b. lots between 2.0 and 4.5 acres in size and proposed imperviousness of 4,500 square feet or less per lot
- c. lots less than or equal to 2.0 acres in size and proposed imperviousness of 5% or less per lot

d. where the change in use does not increase the imperviousness of the site

IV. Drainage Facilities

Any proposed drainage facilities and / or structures shall be designed by a professional engineer licensed to practice in the State of Colorado, and such design plans submitted, unless otherwise authorized in this section.

- a. The location, placement and construction shall be in accordance with and approved by the engineer who designed the drainage facilities and / or structures.
- b. A written final inspection report and as-built or record drawings for all drainage improvements are to be submitted to Fremont County Planning and Zoning, the department will forward to the Fremont County Engineer for acceptance. Submission shall include an electronic copy in pdf format including the engineer's statement, engineer or surveyor's stamp, signature, and date. A professional engineer or land surveyor registered in the State of Colorado shall undertake such investigation as may be necessary to determine or confirm the as-built detention basin contours, volume, and surface area; outlet structure size and elevations; emergency spillway size and elevations; riprap area and elevations; pipe sizes and invert elevations at inlets and discharge locations; representative open channel cross-sections; and dimensions of all drainage structures. The engineer or surveyor shall verify and state in writing that the pond as-built volume meets the design volume requirements. All appurtenances and related features will be located horizontally and vertically.

"As-built" surveys must include a "red-line" design set that verifies the as-constructed project matches the intent of the original design drawings and which indicates any changes which were made to the original design drawings during construction. If the improvements for a project are constructed in phases, as-built drawings may be required at the completion of each phase. Drawings shall be properly scaled and sized to clearly show the work that was done through construction.

Acknowledgment of the record drawings is required as follows:

"To the best of my knowledge, belief, and opinion, the drainage facilities were constructed in accordance with the design intent of the approved
drainage report and plan sheet(s)."
Name

Name
Licensed Professional Engineer or Land Surveyor
State of Colorado No
(Affix Seal)

- 1. All drainage plans and related reports shall be reviewed and approved by the Fremont County Engineer.
- 2. The County Engineer, the Department, the Commission or the Board may require any other information necessary to adequately assess the impacts of drainage by the proposed development.