

CGS Unique No. EP-27-0026_1 Blue Springs Meadow Minor Final Plat

El Paso File No. SF2624

Location: SW¼ Section 8, T12S, R63W, 6th P.M.
39.0177, -104.4716

With this referral, we received the final plat (Rocky Mountain Land Services, August 28, 2026), letter of intent (Terra Nova Engineering, Inc., August 2026), construction drawings (Terra Nova Engineering, Inc. August 15, 2026), soils and geology study (Rocky Mountain Group (RMG), March 27, 2026), wastewater study (RMG, March 27, 2026), and other documents. RMG's characterization of the geology and geological hazards within the site is valid.

We understand this final plat referral consists of a 7-lot subdivision on approximately 38 acres. The site does not contain any unusual geologic hazards or geotechnical constraints that would preclude the proposed 7-lot subdivision. As noted on page 18 of RMG's report, *"Geologic hazards (as described in section 8 of this report) found to be present at this site include faults, seismicity and radon. Geologic conditions (as described in section 8 of this report) found to be present at this site include potentially expansive and compressible soils, seasonally wet areas, shallow fluctuating groundwater, and uncontrolled/undocumented fill."* We offer the following comments and recommendations:

1. Note 16 of the final plat should be updated to reference RMG's report and include all geologic hazards and constraints. Mitigation measures should also be included as appropriate.
2. RMG states (page 10) that *"groundwater was encountered at the time of drilling on February 12, 2026 in two of the test borings at depths ranging from 4 to 25 feet,"* and *"in follow-up groundwater checks performed on March 9, 2026 in the same two borings at depths ranging from 3.5 to 23.5 feet."* CGS agrees with RMG that *"basement construction should be restricted except where one of the following conditions apply:*
 - *A year-long groundwater monitoring study is undertaken, and the results indicate that groundwater is sufficiently deep to allow basement construction;*
 - *The proposed construction will result in at least 15 feet of separation between the proposed ground surface and the groundwater elevation. Where groundwater encroaches shallower than 15 feet, the ground surface may be modified (raised) to increase the separation to meet these criteria."*

It must be demonstrated that at least 15 feet of separation between groundwater and the basement slab is achievable. This is typically accomplished by conducting a groundwater observation/monitoring program. To be effective, however, this monitoring should include measurements/observations through fall, winter, and spring and not merely during site-specific building investigations.

3. RMG encountered groundwater in TB-1 at 3.5 feet when measured after drilling; however, this area is not located within the mapped potential seasonally wet area (psw) on FIG-10 of RMG's report. CGS recommends that RMG review this area on their engineering and geology map. This area is proposed as a possible location for OWTS in RMG's wastewater report.
4. CGS agrees with RMG (page 18), *"A site-specific subsurface soil investigation will be required for all proposed structures including (but not limited to) residences, detached structures, and any proposed retaining walls, etc."* Prior to the building permit application, site-specific soil and foundation investigations for the proposed structure(s) should be conducted.

Submitted 10/5/2026 by Amy Crandall, Engineering Geologist, Colorado Geological Survey (303-384-2632 or acrandall@mines.edu)