PLANNING & NEIGHBORHOOD SERVICES – Land Use Review / Non-Use Variance Request – NVAR-24-0007

Updated Request effective 9/30 from City of Colorado Springs Land Use/Hillside Development Team:

The residents of 1220 Eagle Rock Rd, Colorado Springs CO 80918; John & Jami Fernandez request a nonuse variance allowing a 9 foot high wall where a maximum of 4 feet in height for retaining walls within 7.2.6 Overlay Districts, 7.2.610 Section D Hillside Development Plan. This request includes the ability locate the wall along the north property boundary to be within two feet of the property line.

Original Request:

The residents of 1220 Eagle Rock Rd, Colorado Springs CO 80918; John & Jami Fernandez request a nonuse variance of allowing a 9 foot high wall within the side yard setback where a 7 foot wall is allowed per City Code 7.4.910.

Colorado Springs Planning Commission,

The 9 ft high single-wall design is required to safely retain and reconstitute our (Fernandez's) property boundary line from an encroaching "shockrete" structure constructed by the residents of 1210 Eagle Rock Rd. The encroachment has caused an approximately 75' long x 15' wide x 5-12' high excavated area within our building envelope (Picture 1). The encroached area is approximately 6% of our building envelope rendering it physically unusable for any purposes until reconstituted. Pikes Peak Regional Building Department (PPRBD) Deputy Building Official – Plans, Jay Eenhuis PE, confirmed via email (Sept 2024, NVAR-24-007 inclusion) correspondence that unfortunately there is no documentation or approved permits to properly assess the original design, construction, and structural soundness for future remediation incorporation. In addition, we have consulted and received guidance from Colorado Springs Land Use Review team Daniel Sexton, Kerri Schott, and Drew Foxx (May 2024, NVAR-24-007 inclusion) that existing conditions do not currently meet City of Colorado Springs and Hillside Overlay Requirements, nor did they meet requirements at the time of construction.

This nonuse variance request is a culmination of over 8 months of detailed planning, design, evaluation, and requirements review with the City of Colorado Springs Land Use, City Engineering, Storm Water Management, private industry professional geological/structural engineers, and Pikes Peak Regional Building Department officials all with the goal to remediate the area and comply with city code. We have spent over $3,000 dollars on professional engineers to assess and develop the best suited design to reconstitute this damaged area of our property.

The ideal solution to remediate the area is a single-wall retaining system that removes and incorporates as much of the existing structure while minimizing any additional land disturbance. Austin

Nisokhoff, PE of Entech Engineering professionally designed (Apr 2024, NVAR-24-007 inclusion) a single retaining wall that accomplishes this goal. In support of the design, the City of Colorado Springs City Engineering team (Joel Dagnaillo, Sep 2024 – NVAR-24-007 inclusion, COS Geologic Hazards Study Application) has approved an addendum to existing State of Colorado Geological Hazard Report codifying that the designed wall is best suited for this area. In further support of the design, the City of Colorado Springs Land Use team has approved an addendum (May 2024, NVAR-24-007 inclusion) to the professional engineered stamped (Logan Langford, PE, Entech Engineering) existing Soils Report codifying that the designed wall is best suited for this area. Finally, a formal Site Plan/Grading Erosion Control Plan (Apr 2024, NVAR-24-007 inclusion) was professionally engineered and stamped by Kevin Archer, PE of Archer Engineering in support of the wall design. The formal Grading Erosion Control plan not only complies with Hillside Overlay code but also validates that the single retaining wall design is a necessity for water erosion control as a previous plan for this specific area is not in existence.

Hillside Overlay 7.2.610 Objectives Review

PURPOSE: THE PURPOSE OF THE HS-O DISTRICT IS TO ENSURE THAT HILLSIDE AREAS RETAIN THEIR UNIQUE CHARACTER, TO SAFEGUARD THE NATURAL HERITAGE OF THE CITY, AND TO PROTECT THE PUBLIC HEALTH, WELFARE, AND SAFETY. REVIEW OF DEVELOPMENT PROPOSALS FOR PROPERTY WITHIN THE OVERLAY SHOULD RECOGNIZE THE VARIOUS CITY CODE REQUIREMENTS AND THE NEED TO BALANCE THEIR APPLICATION WITH THE PHYSICAL ATTRIBUTES OF THE PROPERTY. THE HS-O DISTRICT MAY BE USED WITH ANY ZONE DISTRICT IN THE CITY TO MEET THE FOLLOWING OBJECTIVES:

Objective 1: Conserve the unique natural features and aesthetic qualities of the hillside areas

1) This project's goal is to retain as many unique-natural features/aesthetic qualities while remediating the unnatural structure to comply with City of Colorado Springs Hillside Code – Grading, Erosion, Control Plan - Pikes Peak Regional Building Department engineering standards.

Objective 2: Provide safe and convenient access to hillside areas

1) This project's goal is to remediate the area with an engineered and City Colorado Springs/Pike Peak Regional Building Department approved design that meets all safety and engineering standards. The current unnatural area does not provide safe management and access, as it does not meet Hillside Overlay requirements.

Objective 3: Minimize water runoff and soil erosion problems incurred in adjustment of the terrain to meet development needs

1) This project limits terrain disturbance with a design that minimizes cut/fill. The "staggered/stair step" design retains natural landforms, including compatible cut/fill stabilization measures and drainage. This design makes every effort to limit the retaining wall height (varying height design) and to meet Hillside Overlay requirements while also reconstituting identified damaged area from non-permitted "shotcrete" structure.

2) The ability to remediate this area with a City of Colorado Springs/Pike Peak Regional Building Department compliant Grading, Erosion, Soil Control plan is imperative to "minimize water runoff and soil erosion problems" as a previous/current plan does not exist for this area.

3) The staggered/stair step retaining wall design retains as much vegetation as possible, preserving existing scrub oak, native juniper/pine trees in the drainage area. There is no vegetation in the “shockrete” structure area, and the majority of the area is "dead" air space due to the structure.

4) Visual impacts were assessed. This retaining wall design preserves the ridgeline and backdrop views, and does not alter, impact, or change any existing visibility in off-site areas. The new proposed retaining wall will visually match existing 1220 Eagle Rock City of Colorado Springs compliant retaining wall with veneer stone.

Objective 4: To ensure that new development is compatible with the natural systems, the terrain, and the geologic character of hillside areas

1) This design strives to blend in with the natural environment both by being faced with veneer stone and by minimizing wall height to retain the mountainside. In contrast, the existing unnatural and un-permitted “shockrete” in the project area is incompatible with the geological character of the hillside area.

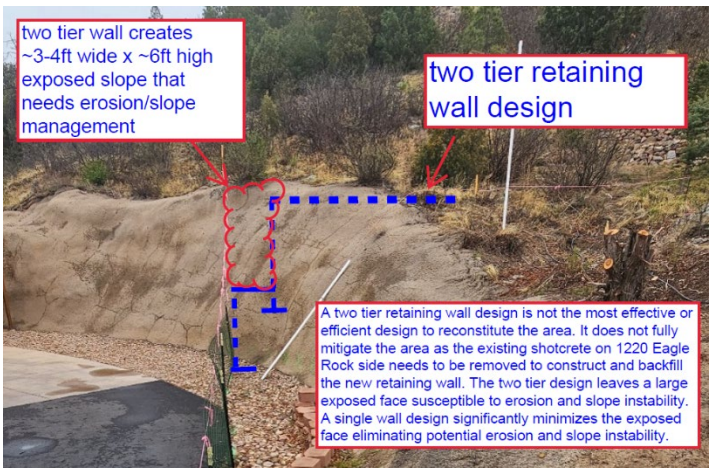
Objective 5: To encourage innovative design solutions that meet the purpose of the HS-O district; and to preserve wildlife habitat and wetland areas that provide wildlife migration corridors

1) This single-wall design is the most innovative design solution to remediate the area and to meet the purposes/intent of the Hillside Overlay. There is minimum wildlife habitat in the defined area as it is predominantly an unnatural landscape feature/shotcrete wall.

Hillside Overlay and Alternative Designs

Throughout the 8 month design process, we conducted a comprehensive review of the Hillside Design Guide and Overlay requirements in consultation with professional engineers to ensure this design is the most effective and meets all requirements. While a two-tiered wall design satisfactorily meets all Hillside and City code requirements, this project’s proposed single-wall design more effectively meets objective 3 of Hillside Overlay by better minimizing water runoff and soil erosion problems incurred in adjustment of the terrain to meet development needs. Because we must remediate the area disturbed by 1210 Eagle Rock residents, a two-tiered wall design makes minimizing water runoff and soil erosion more difficult. **Entech Engineering has provided professional engineering assessment (Sep 24, attachment) that the single-wall design “will provide the most structurally sound and economical earth retention system in this area to support the existing conditions” (Entech Engineering, 19 Sep 2024)**

1) A TWO-TIERED WALL DESIGN CREATES A LARGER THAN NECESSARY EXPOSED FACE ON THE MOUNTAIN SIDE CREATING AN AREA PRONE TO EROSION AND UNSTABLE SOILS

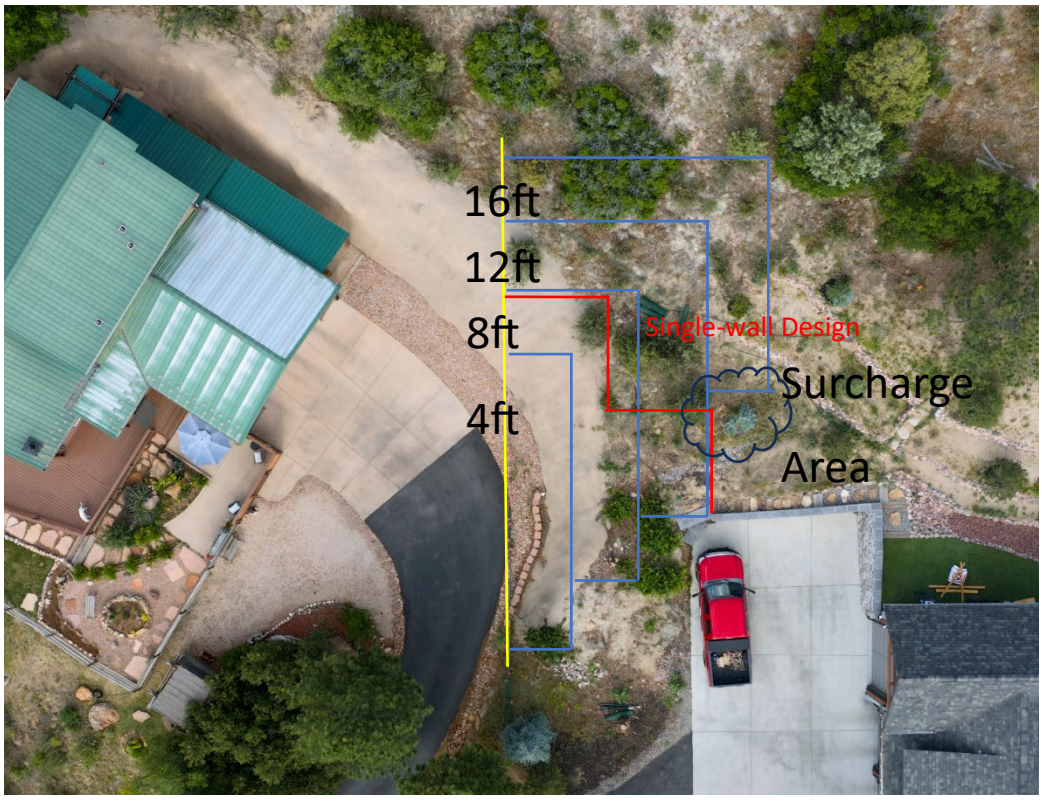


2) A two-tiered wall design requires additional cut & fill disturbance in native/undisturbed areas of the property. There is a potential that a two-tiered wall system disturbs preservation area.

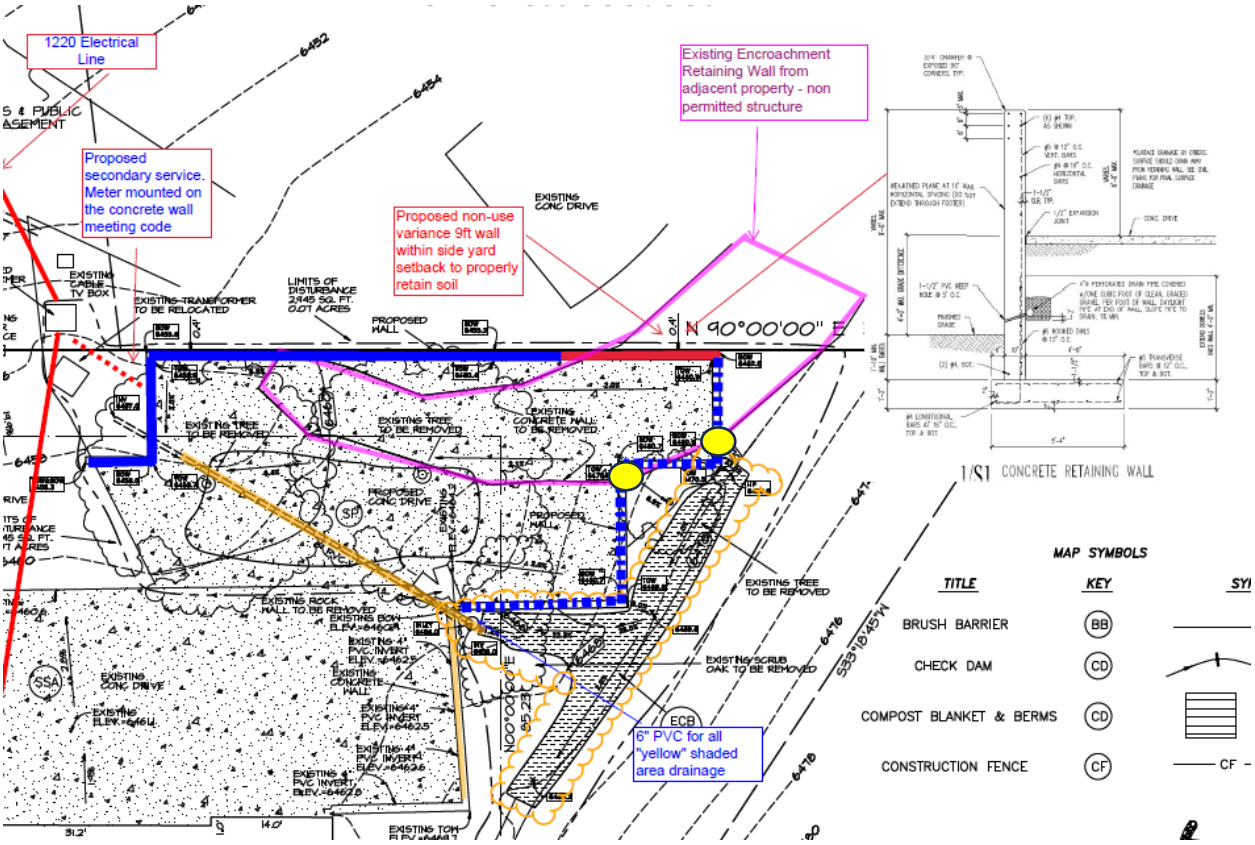
3) A two-tiered wall design requires unnecessary removal of additional native vegetation and trees.

4) A TWO-TIERED WALL DESIGN REQUIRES ADDITIONAL EROSION AND SOIL CONTROL FEATURES AS THE NATURAL GRADE IS COMPROMISED TO DIRECT THE FLOW OF WATER.

5) A TWO-TIERED WALL DESIGN CREATES A HYDROSTATIC SURCHARGE AGAINST THE RETAINING WALLS DUE TO THE THE INABILITY TO TIE INTO THE EXISTING "SHOCKRETE" STRUCTURE.



In support of Hillside Overlay Requirement 7.2.610, the single-wall design minimizes height by allowing a variation (4.5' - 6.5') and what is minimally required during excavation to maintain proper drainage flow and reconstitute the area from the existing structure (dashed blue line). The height variation allowance is necessary to remediate the area in the specific corner areas (yellow circles) as the encroaching structure is greater than 4' in these areas (12'). A 4.5' - 6.5' wall is required to maintain proper drainage per outlined area (yellow) and hillside overlay requirements (6" PVC outlet) with the height of the existing "shockrete" structure on the property (pink). At a max height of 9' only in the corner common to the north side of the property this height in this specific area successfully remediates the property (red).



Hillside Development Plan Review Criteria

In reviewing and meeting Hillside Overlay Requirements per Hillside Overlay 7.2.610 – Hillside Development Plan Review Criteria, the professional engineering staff (Entech Engineering & Archer Engineering) provided the following review and assessments via the previously identified approved documents (Entech Engineering Wall Design, Entech Engineering Geological Hazard Report Addendum, Entech Engineering Soils Report Addendum, and Archer Engineering Grading Erosion Control Plan/Site Plan).

1) The plan is consistent with the spirit and intent of the Hillside Design Manual

a. This single-wall design and all supporting documents strive to meet Hillside Design requirements. In addition, the project will remediate a known area that currently does not meet Hillside Overlay requirements.

2) *The streetscape will retain a hillside character after the street is constructed, including but not limited to retaining existing vegetation and rock features*
    a. The retaining wall will be faced with veneer stone to retain hillside character and rock features. The single-wall design maximizes vegetation preservation and minimizes earth disturbance.
    b. Mr. Patrick Dosh, City of Colorado Springs Hillside Inspector, inspected the project area on-site in June 2024 and confirmed that no disturbance, grading or significant natural feature/vegetation removal will occur beyond the limit of disturbance boundary.
3) *Disturbance of the existing terrain is minimized*
    a. A single-wall design is the most structurally sound and efficient design to minimize cut & fill requirements and minimize soil disturbance.
4) *The visual impacts upon offsite areas been reduced or mitigated*
    a. The visual impacts upon offsite areas are close to equal with either a two-wall design or single-wall design. However, a two-wall design will disturb more of the natural vegetation in the northeast corner of the project area than will a single-wall design, thus the single-wall design best reduces visual impacts to offsite areas.
5) *Significant ridgelines and other prominent sites within the City have been preserved*
    a. There is no disturbance to the defined preservation area or ridgelines/prominent sites.
6) *Additional measures to mitigate environmental and visual impacts of the development have been included as necessary, based on the nature and location of the development.*
    a. The current “shotcrete” structure in the development area does not have an approved Hillside Overlay approval and was not permitted or approved by the City of Colorado Springs as required. Therefore it is difficult to determine if the City of Colorado Springs determines the existing structure as “visually” suitable for the area.
    b. The single biggest impact of the single-wall design is its ability to maintain and manage erosion. As it is, the current area does not have a documented Grading, Erosion, Soil Control Plan. Therefore, unmanaged erosion is mitigated by remediating the area.
    c. The visual impacts upon offsite areas are close to equal with either a two-wall design or single-wall design. However, a two-wall design will disturb more of the natural vegetation in the northeast corner of the project area than will a single-wall design, thus the single-wall design best reduces visual impacts to offsite areas.
    d. Mr. Patrick Dosh, City of Colorado Springs Hillside Inspector, inspected the project area on-site in June 2024 and confirmed that no disturbance, grading or significant natural feature/vegetation removal will occur beyond the limit of disturbance boundary. The limit of disturbance boundary and any trees to be retained within the limit of disturbance shall be delineated with a 4’ tall construction fence. The preservation easement area shall be delineated with 4’ tall stakes with rope connecting the stakes or a 4’ tall construction fence.
7) *Significant natural features and the significant vegetation been places in the preservation area easements and any impacts of necessary utility easements through the preservation areas been mitigated to the maximum extend feasible. Because of the terrain in hillside areas, it is recognized that utilities and some drainage improvements may have to be located within an easement. The review will consider the necessity of locating these facilities within the preservation area easement with the least amount of disturbance and impact.*

a. The defined preservation area will remain undisturbed. The preservation easement area will be delineated with 4' tall stakes with rope connecting the stakes or a 4' tall construction fence.
b. All residential utilities are located outside of the defined remediation area.

8) *Geologic, soil and other natural hazards been identified and mitigated to the maximum extent feasible.*
    a. Unfortunately, the current geological and soil hazards caused by the unapproved and unpermitted "shockrete" structure in the development area are not natural. This plan remediates the area and mitigates the current hazards and poor erosion and soil retainment management caused by the unnatural construction.
9) *The results of any geologic hazards study required by Part 7.4.5 (Geologic Hazards) have been reflected in the plan through avoidance of, or mitigation of impacts related to, those hazards*
    a. A Geological Study was completed and addendum approved in April 2024 for the impacted area.

Hillside Site and Grading Plan

THE HILLSIDE SITE AND GRADING PLAN SHALL CONTAIN THE CONTENT REQUIRED BY THE HILLSIDE DESIGN MANUAL AND THE APPROVED DEVELOPMENT PLAN SHALL BE CONSISTENT WITH HE FOLLOWING SITE DESIGN REVIEW CRITERIA:

1) *The Plan complies with the development standards of the applicable zone district or Development Plan*
    a. The 1.64 acre property is zoned R-E/HS (Single Family - Estate with Hillside Overlay). The plan complies with the development standards of this zone district and the requirements and intent for Hillside criteria.
2) *Terrain disturbance has been minimized by minimizing cut and fill, retaining natural land forms, including visually compatible cut and fill stabilization measures, and the incorporation of existing sloped and rock formations into the site design, to the maximum extent feasible. If cut and fill occurs, make every effort to limit the retaining walls to four (4) feet in height with four (4) feet horizontal separation.*
    a. Given the existence of an unnatural land form ("shotcrete" structure) on the property in the development area, the most efficient and effective design to minimize 1) terrain disturbance, 2) cut and fill requirements, and 3) management of existing sloped areas, a single-wall design at a maximum of 9' is necessary.
    b. By contrast, a two-tiered wall design with two 4-feet high walls with 4 feet of separation increases cut and fill, and makes minimizing water runoff and soil erosion more difficult.
3) *Natural vegetation has been persevered and incorporated into the project design, with particular emphasis on preserving healthy and significant stands of scrub oak and pine trees and in front yard areas.*
    a. Natural vegetation along the limit of disturbance will be preserved to the maximum extent. The single retaining wall design best preserves existing vegetation, as it minimizes cut and fill requirements.
    b. No disturbance, grading or significant natural feature/vegetation removal will occur beyond the limit of disturbance boundary. The limit of disturbance boundary and all trees to be

retained within the limit of disturbance will be delineated with a 4' tall construction fence. The preservation easement area will be delineated with 4' tall stakes with rope connecting the stakes or a 4' tall construction fence.

4) *Visual impacts upon off-site areas been avoided or reasonably mitigated by location structures to avoid ridgelines and preserve a mountain or hillside backdrop, and by preserving existing vegetation and/or incorporating supplementary native landscaping to soften the structural mass of buildings located in highly visible areas.*
    a. All mountain/hillside backdrop is preserved and unobstructed. The retaining wall will be faced with veneer stone to incorporate natural rock features and soften the structural mass of the visible area.
    b. The visual impacts upon offsite areas are close to equal with either a two-wall design or single-wall design. However, a two-wall design will disturb more of the natural vegetation in the northeast corner of the project area than will a single-wall design, thus the single-wall design best reduces visual impacts to offsite areas.

In review of 7.5.526.E Nonuse Variance Review Criteria, we provide the following assessment:

1. THE APPLICATION COMPLIES WITH ANY STANDARDS FOR THE USE IN PART 7.3.3 (USE-SPECIFIC STANDARDS)

1) The application complies with Part 7.3.304: Accessory Uses

2. THE PROPERTY HAS EXTRAORDINARY PHYSICAL CONDITIONS THAT DO NOT GENERALLY EXIST IN NEARBY PROPERTIES IN THE SAME ZONE DISTRICT.

1) The geological/physical damage to the property was not our fault, was not caused by us, and was not constructed due to any negligence on our part. It is considered extraordinary given that the physical conditions are measured at 75' long x 15' wide x 5-12' high. The area is zoned and governed under City of Colorado Springs Hillside Overlay code, and the "shockrete" structure does not meet that code (either the current code or the city code in place when the "shockrete" structure was constructed, making it an extraordinary geological feature. This project's end goal is to safely reconstitute the damaged area while minimizing disturbance to Hillside features to create safe and usable conditions that meet all city code requirements.

3. THAT THE EXTRAORDINARY OR EXCEPTIONAL PHYSICAL CONDITION OF THE PROPERTY WILL NOT ALLOW A REASONABLE USE OF THE PROPERTY IN THE CURRENT ZONE IN THE ABSENCE OF RELIEF.

1) The extraordinary "shockrete" geological/physical damage to the building envelope portion of our property prohibits any reasonable current use of the area in its existing state.
2) The "shotcrete" structure in the development area has no approved Pikes Peak Regional Building Department permit, City of Colorado Springs Hillside Overlay site plan, or design as part of Residential Certificate of Occupancy documenting the structural soundness or construction of the structure. We would like to safely remove and remediate the area with an approved and documented site plan so that we can restore reasonable use of the damaged area.

3) There is an unknown safety, maintenance, and reliability risk we inherit by the continued existence of the structure on our property.

4. That the granting of the Non-Use Variance will not have an adverse impact upon surrounding properties.

1) The non-use variance will positively impact the surrounding properties by correcting a known non-compliant code issue with an a design and Hillside Overlay plan that meets Pikes Peak Regional Building Department & City of Colorado Springs requirements.
2) The visual impacts upon offsite areas are close to equal with either a two-wall design or single-wall design. However, a two-wall design will disturb more of the natural vegetation in the northeast corner of the project area than will a single-wall design, thus the single-wall design best reduces visual impacts to offsite areas.
3) Per the El Paso County Land Manager, Ms. Melissa Combs (melissacombs@elpasoco.com), from the El Paso County Assessor's Office, in her email dated August 15th, 2024, the land value of 1210 Eagle Rock "will not change" with this design. Ms. Combs further assessed that "the properties in this area are all valued the same and minor changes in topography and/or lot side do not affect that value." *Note: this project design DOES NOT change any property boundary lines with the surrounding property.*

City Engineering Statement

Note to Colorado Springs City Engineering Development Review (Joel Dagnillo):

"The private retaining wall system shall be designed by a Colorado registered professional engineer and the responsibility of the construction and maintenance lies with the developer and property owner. The City of Colorado Springs has not reviewed or approved the design, and the Owner(s) hereby releases and forever discharges, and agrees to indemnify, defend and hold harmless, the City of Colorado Springs, its officers, employees, administrators, representatives, agents, successors and assigns, from any and all damages, injuries or accidents which might arise from the retaining wall system or the Project after issuance of a Building Permit."

"This property is subject to the findings, summary and conclusions of a geologic hazard report prepared by Entech Engineering, dated October 22, 2018, and a geologic hazard validation letter, dated August 28, 2024, which identified the following specific hazards: expansive soils, potentially unstable slopes, rockfall hazards and erosion. A copy of said report and validation has been placed within file NVAR-24-0007, or within the subdivision file of the City of Colorado Springs Planning and Development Team. Contact the Planning and Development Team, 30 South Nevada Ave., Suite 701, Colorado Springs, CO, if you would like to review said report and validation."

PlanCOS Leading The Way To Our Future Review / Goals & Policies Review:

In review of the PlanCOS, the "Pulpit Rock" area where 1220 Eagle Rock Rd is located is considered an Established Suburban Neighborhood (Page 45) with the goals:

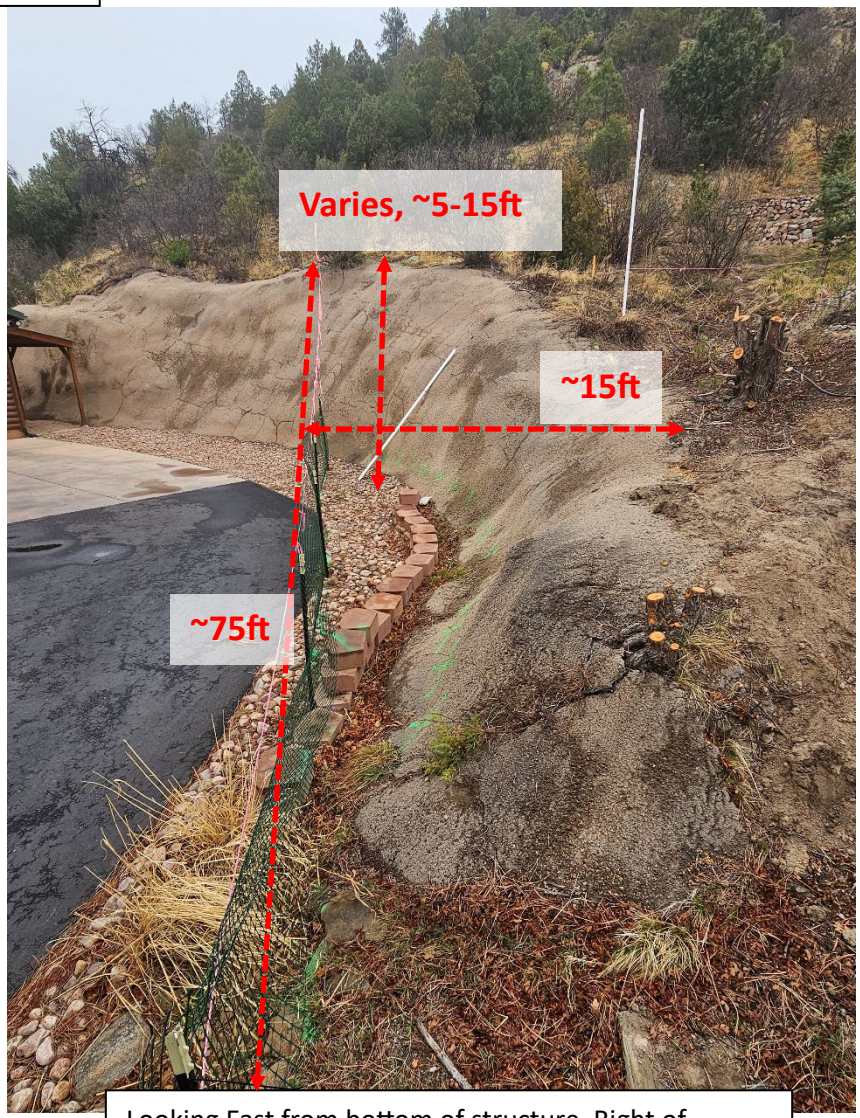
"Suburban Neighborhoods includes those that developed with a suburban pattern, including curvilinear streets with cul-de-sacs. These neighborhoods have matured to the point where they are not actively being developed and no longer have actively managed privately initiated master plans, and ordinarily do not yet have public initiated master plans. These neighborhoods have a high value in maintain the privacy of homes and safe streets for families. New development should focus on safe connections into and within these neighborhoods (Page 40)".

1220 Eagle Rock Rd Non-Use Variance Assessment in review of PlanCOS:

1) Proposed non-use variance design request directly aligns with the fact that there is no existing or planned master plan for Pulpit Rock neighborhood, and that individual homeowners are responsible for complying with existing County/City requirements by the submission of this request.
2) The current "shockrete" structure encroachment in the development area does not align with goal of "maintaining the privacy of homes and safe streets for families".
    a. With this design, the encroaching "shockrete" structure will be reconstituted in such a way that maintains the privacy of homeowners.
    b. While the development area does not include any neighborhood streets, the encroaching "shockcrete" wall and consequently damaged area needs to be properly and safely remediated to meet City of Colorado Springs and Piked Peak Regional Building Department code. The encroaching structure is unsafe for existing residents and anyone accessing the property, as it was constructed without a permit and its structure directly against city code for safety.
3) The "new development" proposed in this Non-Use Variance request aligns with the PlanCOS focus on providing "safe connections into and within these neighborhoods," as the request will reconstitute a known safety issue and will be City of Colorado Springs/Pikes Peak Regional Building Department Compliant.

Picture 1

Looking West from on top of structure. Left of rope/fence property line is 1220 Eagle Rock (Fernandez) property



Looking East from bottom of structure. Right of rope/fence property line is 1220 Eagle Rock (Fernandez) property

ENTECH
ENGINEERING, INC.
505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
PHONE (719) 531-5599

September 19, 2024

John Fernandez
1220 Eagle Rock Road
Colorado Springs, Colorado 80918

Attn: John Fernandez

Re: Additional Recommendations
Site Cast-in-Place Concrete Retaining Wall
1220 Eagle Rock Road
Colorado Springs, Colorado
Entech Job No. 240426

Dear Mr. Fernandez:

This letter is in response to a request from the client to provide additional retaining wall recommendations for the proposed site walls at the address referenced above.

Records Research

Entech Engineering, Inc. performed a Subsurface Soils Investigation for the property in our report dated January 6, 2017, Entech Job No. 162484. An update letter was also written dated May 16, 2024. Overexcavation of expansive site soils and replacement with granular structural fill was recommended.

Entech Engineering, Inc. also performed a geologic hazard study at the above-referenced address, which is presented in our Geologic Hazard Investigation dated August 8, 2018, Entech Job No. 162484. A Geologic Hazard Validation letter was also provided, dated August 28, 2024. The study recommended overexcavation of expansive soils, as well as rockfall mitigation for the site.

Retaining Wall Recommendations

It is our understanding that a cast-in-place retaining wall is proposed on the north end of the site to mitigate existing conditions associated with an existing cementitious stabilized slope on the property at the address referenced above. It is the opinion of Entech Engineering, Inc. that a single tiered cast-in-place concrete wall will provide the most structurally sound and economical earth retention system in this area to support the existing conditions and anticipated driveway expansion.

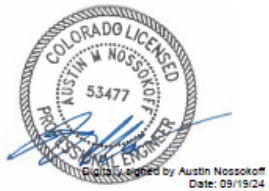
The retaining wall should be designed in accordance with the 2023 Pikes Peak Regional Building Code and constructed by a qualified contractor.

ENTECH
ENGINEERING, INC.

We trust this has provided you with the information you required. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.



Austin M. Nossokoff, P.E.
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Entech Job No. 240246
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