

CITY OF COLORADO SPRINGS

INTEROFFICE MEMORANDUM

DATE: July 23, 2020

TO: Peter Wysocki, Director of Planning

FROM: Sarah Johnson, City Clerk

SUBJECT: Notice of Appeal

AR NV 19-00783

An appeal has been filed by Michael Lowery regarding the Planning Commission's action of July 16, 2020.

I am scheduling the public hearing on this appeal for the City Council meeting of August 25, 2020. Please provide me a vicinity map.

CC: Lonna Thelen
Elena Lobato

Michael Lowery
6745 Twelve Oaks Blvd
Tampa FL 22634



THE PLANNING & DEVELOPMENT DEPARTMENT APPEAL TO CITY COUNCIL

Complete this form if you are appealing **City Planning Commission's, Downtown Review Board's or the Historic Preservation Board's** decision to City Council.

APPELLANT CONTACT INFORMATION:

Appellants Name: Michael Lowery Telephone: (719) 650-1445
Address: 6745 Twelve Oaks Blvd. City Tampa
State: FL Zip Code: 22634 E-mail: mlowery1445@gmail.com

PROJECT INFORMATION:

Project Name: 506 Hawthorne Place Site Plan
Site Address: 506 Hawthorne Place, Colorado Springs, CO 80906
Type of Application being appealed: Administrative Decision Rejecting Site Plan without Geohazard Report
Include all file numbers associated with application: City File# AR NV 19-00783 Tax Schedule # 7425406012
Project Planner's Name: Lonna Thelen
Hearing Date: _____ Item Number on Agenda: _____

CITY CLERK'S OFFICE
2020 JUL 23 A 10:23

YOUR APPEAL SUBMITTAL SHOULD INCLUDE:

1. Completed Application
2. \$176 check payable to the City of Colorado Springs
3. Appeal Statement
 - See page 2 for appeal statement requirements. Your appeal statement should include the criteria listed under "Option 1" or "Option 2".

Submit all 3 items above to the **City Clerk's office (30 S Nevada, Suite 101, Colorado Springs, CO 80903)**. Appeals are accepted for 10 days after a decision has been made. Submittals must be received no later than 5pm on the due date of the appeal. Incomplete submittals, submittals received after 5pm or outside of the 10 day window will not be accepted. If the due date for the submittal falls on a weekend or federal holiday, the deadline is extended to the following business day.

If you would like additional assistance with this application, please contact the Land Use Review offices at 385-5905.

APPELLANT AUTHORIZATION:

The signature(s) below certifies that I (we) is(are) the authorized appellant and that the information provided on this form is in all respects true and accurate to the best of my (our) knowledge and belief. I(we) familiarized myself(ourselves) with the rules, regulations and procedures with respect to preparing and filing this petition. I agree that if this request is approved, it is issued on the representations made in this submittal, and any approval or subsequently issued building permit(s) or other type of permit(s) may be revoked without notice if there is a breach of representations or conditions of approval.

Michael Lowery _____
Signature of Appellant Date 7/19/2020

THE APPEAL STATEMENT SHOULD INCLUDE THE FOLLOWING

- **OPTION 1:** If you are appealing a decision made by City Planning Commission, Downtown Review Board, or the Historic Preservation Board that was **originally** an administrative decision the following should be included in your appeal statement:
 1. Verbiage that includes justification of City Code 7.5.906.A.4
 - i. Identify the explicit ordinance provisions which are in dispute.
 - ii. Show that the administrative decision is incorrect because of one or more of the following:
 1. It was against the express language of this zoning ordinance, or
 2. It was against the express intent of this zoning ordinance, or
 3. It is unreasonable, or
 4. It is erroneous, or
 5. It is clearly contrary to law.
 - iii. Identify the benefits and adverse impacts created by the decision, describe the distribution of the benefits and impacts between the community and the appellant, and show that the burdens placed on the appellant outweigh the benefits accrued by the community.

- **OPTION 2:** If the appeal is an appeal of a City Planning Commission, Form Based Zoning Downtown Review Board, or Historic Preservation Board decision that was **not made administratively initially**, the appeal statement must identify the explicit ordinance provision(s) which are in dispute and provide justification to indicate how these sections were not met, see City Code 7.5.906.B. For example if this is an appeal of a development plan, the development plan review criteria must be reviewed.

CITY AUTHORIZATION:

Payment: \$ _____

Date Application Accepted: _____

Receipt No: _____

Appeal Statement: _____

Intake Staff: _____

Completed Form: _____

Assigned to: _____

Appeal of a City Planning Commission Decision upholding the Rejection of a Site Plan Due to the lack of a Geohazard Report or a Geohazard Waiver under Section 7.5.302.C for a Single Family Residence.

Location: 506 Hawthorne Place, Colorado Springs, Colorado, 80906. LOT 9 BLK G RESUB OF BLKS B, D & E FRANTZHURST REFIL – Parcel #74254-06-012. Tax Schedule # 7425406012. City File# AR NV 19-00783.

Title: Appealed under City Code Section 7.5.904.A.2.B, Rejection of Site Plan Submittal

Appellant: Michael Lowery, owner/developer, owner of adjoining property at 121 Alsace Way, owner of 506 Hawthorne since 2000, property taxes paid since that time. Intends to build a modest single-family residence (2200 SF) in a neighborhood of similar residences. It is an infill and the lot is zoned R1-6. The lot is located between Cheyenne Road and Lake at the bottom of the Alsace Way hill.

Background: The owner, Michael Lowery, a veteran of more than 15 years of construction projects for the Federal government, bought this vacant lot in 2000 with the intent to build a house. He was delayed until 2007 by the lack of water pressure in fire hydrants until the Broadmoor water system was rebuilt in 2007, and delayed further until water and gas lines were extended on Hawthorne Place. The Appellant has been involved with City Planning, City Engineering, and two leading geo-engineering firms (RMG and Entech) for several months regarding the necessity to submit a Geohazard Report on the site. The Appellant considered the cost and necessity for a GH report and concluded it was unreasonable and far too expensive. The City Planning Commission ruled against his appeal on July 16.

1.0 The Landslide Ordinance The Colorado Springs City Council passed a Landslide Ordinance, and City Engineering, along with private-sector engineers, implemented a methodology and required a Geohazard Report (GHR) or a Geohazard Waiver in a Landslide Susceptibility Zone, (LSZ) which is essentially every construction project with a foundation west of I-25. The Applicant's project is in that zone, marginally. The Applicant will show, in addition to the high cost of a GH report or waiver, there are a lot of problems with the legislation that was passed by Council and recommend some changes.

2.0 The lot is triangular and not easily accessed from Hawthorne Place. Water and gas have not been accessible until recently when utilities were extended on Hawthorne Place. The sewer line must cross the Appellant's lot at 121 Alsace Way, which has been approved by Utilities. The Appellant filed for and was granted a variance to build the house higher on the lot to get the proper slope for sewer drainage. His site plan submittal was approved in May. (Exhibit 1)

With an approved site plan, he contacted two geotechnical firms for the foundation design, one of which immediately contact City Planning concerning the GHR. The Appellant was directed back through the Pre-Approval Application Process and is now held up with the requirement for a geohazard report. Are geotechnical firms acting as agents for the City Planners or working for the clients that are paying them? The Appellant has an approved site plan in his possession,

jumped through a lot of hoops to get it, and believes it is valid. Errors and omissions by the City cannot be held against the Appellant.

3.0 These issues undermine the GHR legislation and show up in the Appellant's project:

- The methodology behind the Landscape Susceptibility Zone was never intended to be an overlay for a hard-and-fast rule about the potential for soil instability.
- The LSZ methodology doesn't include any of the mitigating factors, the main being water diversion and absorption in mature neighborhoods, sites where historical evidence provides more than enough guidance regarding landslide potential and soil instability, where a simple soil test will suffice, where a GHR simply adds to the cost of construction with no new knowledge.
- The geotechnical firms themselves don't have the equipment to test in large parts of the LSZ and can't reasonably test in the Appellant's lot.
- The legislation passed by City Council has inadvertently created a cartel where geotechnical firms can charge whatever they want, define their specifications and methodology whether needed or not, specify equipment, needed or not, design whatever foundation they want, in conjunction with City engineers who are not incentivized regarding the cost of potential testing, thus an expensive administrative circularity.
- There is a huge relative difference in a GHR cost for a large-multi-family project vs a single-family house or bedroom addition. The GH is feasible for million-dollar houses with million-dollar views, but it is prejudicial to the middle class with small projects. Council can expect a crisis moving forward.
- The GH Waiver is even more expensive (in many cases) than the GH report itself. The cartel determines the methodology and fixes the price. It is arguably the most circular and poorly-conceived item in the City Code.
- City Council should not be holding community meetings with city planners, city department officials, planning professionals where a lot of hand-wringing about the high cost of housing, then at the next Council meeting, add \$10,000 or the like to the cost of a house.

4.0 Specifics Regarding Appeal of the City Planning Commission Decision

4.1 Benefits to Local Governments:

506 Hawthorne is an *infill* project, utilizing all existing utilities, roads, and services, include the Appellant will be paying nearly \$10,000 in "infrastructure fees" without requiring any new infrastructure. The geohazard report cost and foundation design cost are in opposition to other City initiatives, including utilization of existing utilities, fire, police, east-west traffic issues, infrastructure optimization, City Council's desire to reduce the cost of housing, utilization of new District 12 education resources, the upgrading of neighborhoods with modern energy-efficient, radon-remediated and fire-resistant structures. A completed house will bring

substantively higher property taxes, a new Utilities customer, an additional family for the sales tax base, all net positives for the City.

Benefits to City - Financial				
Property Tax over 10 Years	10	\$	2,500	\$ 25,000
Sales taxes paid by typical family	10	\$	3,700	\$ 37,000
Sales taxes on construction materials				\$ 7,500
Construction crew wages in local economy				\$ 28,000
Parking Meter income				\$ 1,400
City Utilities revenue	10	\$	3,000	\$ 30,000
Parking tickets & speeding fines				\$ 1,500
Water Development Fee				\$ 10,197
Residential water connection 3/4"				\$ 9,292
Wastewater 3/4"				\$ 1,868
Wastewater Permit & tap fees				\$ 380
Electric			No load data form Req'd	N/C
Gas			Stub install Fee	\$ 1,466
Plan Review fee(% of Sq. Ft.)				\$ 3,500
Net 10 Year Benefits to City				\$ 157,103

Benefits to City - Council Initiatives	
Infill Project	Yes
Existing Utilities	Yes
Existing Fire	Yes
Existing Police	Yes
Existing Schools	Yes
Energy Efficient House	Yes
Radon Remediated	Yes
Latest fire code	Yes
Addition to housing stock	Yes
Near Downtown	Yes
East-West traffic problem	No

4.2 Geohazard Report/Waiver Cost

Under the current permitting process, any site plan west of I-25 is required to submit a geohazard report. The cost of the geohazard report as quoted to the Appellant by leading geotechnical firm is:

Subsurface Soil Investigation		\$1,465
Geologic Hazard Study		\$2,960
Slope Stability Analysis		\$2,530
Consultation and Professional Fees	\$650-\$1,250	\$650
		<u>\$7,605</u>

Including the cost of an architect and the requirement by the geohazard firm to access the site, here are the development costs before the permit filing for what is intended to be a \$450,000 home at appraisal:

Pre-Permit Estimates		
Water Development Fee		\$ 10,197
Residential water connection 3/4"		\$ 9,292
Wastewater 3/4"		\$ 1,868
Wastewater Permit & tap fees		\$ 380
Variance		\$ 802
3 lot signs and postage	est	\$ 245
Gas Stub install Fee		\$ 1,466
Gas Fee (submit usage plan)	est	\$ 350
Soil Test at Curb Repair	est	\$ 1,250
Design of Curb Repair in ROW	est	\$ 2,200
Permit for Curb Repair in ROW	est	\$ 250
Soil Test at Front Door Landing	est	\$ 1,250
Design of Front Door Landing in ROW	est	\$ 2,200
Temporary Driveway Engineering	est	\$ 2,500
Temporary Driveway Permit	est	\$ 250
Temporary Driveway Construction	est	\$ 12,000
Geohazard Report		\$ 7,200
Foundation Engineering prior to permit	est	\$ 2,400
Structural Engineering prior to permit	est	\$ 7,000
Electrical Stamp prior to permit	est	\$ 2,200
HVAC review & stamp prior to permit	est	\$ 2,200
Architect		\$ 25,000
Plan Review fee(% of Sq. Ft.)		\$ 3,500
		\$ 96,000

Considering the geotechnical firm's access requirement, here is the costs of the GHR alone:

GHR Estimate		
Temporary Driveway Engineering	est	\$ 2,500
Temporary Driveway Permit	est	\$ 250
Temporary Driveway Construction	est	\$ 12,000
Geohazard Report		\$ 7,200
		<u>\$ 21,950</u>

4.3 GR Waiver Applying for a geohazard report Waiver, as noted, requires similar drilling tests, perhaps less so, and according to a second leading geotechnical firm. Neither firm would discuss a geohazard waiver. The process for a report or waiver review is noted below. It is an additional expense since it cost nearly the same as a report, (says Entech) there is no point having that option. Please take a moment to read the Waiver administrative process: “This site does need to comply with 7.4.5 – Geologic Hazard studies because it is west of 1-25. In this case, per 7.4.502.B you are required to submit a geologic hazard study. There is an ability to request an exemption or waiver from the requirement per 7.4.503. The waiver does need to meet 5 criteria and be prepared by a geotechnical engineer. Once you have made a decision of which report you want to submit (a full geologic hazard report or a geologic hazard waiver), you will submit that report and then DRE, City Engineering and Colorado Geologic Survey will review the report. If you do not agree with the decision then you can appeal to a consultant review/analysis panel per 7.4.506.C. You will be responsible for paying the panel for their time during the review of your application. Once their decision is made, if you do not agree with that decision, you can appeal to the City Planning Commission.”

The prospective homeowner and his mortgage are at the mercy of the cartel. The procedure hides the resulting cost and complexity at the geotechnical firms. When a government runs up the administrative cost of private property such that the cost prohibits development, this is known as a “taking.”

4.4 Geohazard Testing & Accessibility

Exhibit 2 is a topographical map of the site. Note that there is no driveway to the site, and the geohazard triggers are on the Hawthorne Road embankment, not on the lot proper.

Proposals from both leading geo-engineering firms state that their drilling rigs are two-wheel drive and thus cannot traverse more than a 15-degree slope.

“Ingress and egress to the site for a two-wheel drive, truck-mounted drill rig. Access is the responsibility of the client. Access requirements include a 12' wide and 12' high path to the drill site, completely free of trees, scrub oak or stumps, as well as an area of 20' high, 20' diameter zone free of trees, snow, wires and other obstructions at the drill location itself. We can drill on terrain with up to a 15% grade. Removal of obstructions such as fences, boulders or trees must occur before driller arrives on site.” - RMG proposal

Thus the geotechnical firm requires the Appellant to build a temporary driveway into the site and excavate it more-or-less flat just for the GH testing. A temporary road into the lot has its requirements, including a separate permit, inspections, water containment from the downhill slope of Hawthorne place.

Why doesn't the Applicant put a temporary driveway where he intends to put the finished driveway? Because the finished driveway is a complex curve with a steeper slope that cannot be

accomplished without retaining walls, and at any rate, the final location of the driveway cannot be predicted until the soil test question is settled and the house designed.

Big methodology changes: A departure of the previous two-man onsite testing is the dedicated truck-mounted rig, probably as a result of the LSZ methodology that went down to a solid shale layer. But that deep capability is not necessary for a bedroom or garage addition, in a mature neighborhood, many soft-soil foundation designs will suffice. Yet Council and the cartel doesn't allow for that, it is knock down fences and remove trees and boulders or nothing. Suppose the client decides, looking at the engineer's foundation, the project is too expensive. Who replaces the fences, trees, and boulders? A Google of soil testing equipment will show all that is not necessary. Of course, deep is necessary for million-dollar homes on steep slopes with a million-dollar view, but as you read above, the trucks can't drive on that grade. If a developer is building a multi-million dollar housing project, such detail and precision is warranted.

You will see complex algorithms in the research cited below, but soil instability is due to the water content, any soil will slide with enough water, thus water management becomes more important than any other aspect with retaining walls and foundation design. But the current approach is to gather reams of data to run through the algorithms because the resulting graphs and charts imply a higher level of precision.

It can be argued the administrative load to this point can be considered a "taking."

5.0 Major Faults in the GH Ordinance Leading to this Appeal

5.1 Problems with The Landscape Susceptibility Zone (LSZ) methodology

The LSZ map was published in 2003 by the Colorado Geographical Survey. According to a paper published by the Survey: "These areas were delineated using historic landslide data, geomorphic features, bedrock geology as shown in the basic geologic mapping, slope, and aspect. Landslide-prone areas exist on slopes with grades greater than 12%, underlain by weak, clay-bearing formations such as the Cretaceous Pierre Shale. *The main purpose of the landslide susceptibility map is disclosure.*" (emphasis by Appellant) (1)

A definitive paper on the Southwest Colorado Springs LSZ states:

"In 2003 the CGS published Map Series 42: "Potential Areas of Landslide Susceptibility in Colorado Springs, El Paso County, Colorado". These maps are based on site conditions that are similar to areas where landslides have previously occurred and are intended to show areas that have geologic, topographic, and geomorphic characteristics that indicate potential landslide susceptibility. *However, no levels of hazard assessment such as high, medium, or low were made within the susceptibility zone.* The outer boundary of this susceptibility zone closely follows the outermost boundary of inventoried landslides." (page 17) The paper goes on to note in 3.6 Slope Stability Analyses: "The selection of slope stability analysis methods is frequently a difficult task." (page 36) Page 3 states that there are 3 Tiers of landslide susceptibility, showing a map of Tier 1 but no other tiers. (emphasis by the Appellant)

The discussion of the analysis of slope stability (Section 3.6) is relevant in that several different methodologies are proposed, none of which can be deemed superior, and in every case, the primary variable is water content. The Appellant can show that in the 100-year flood event in 2015, there was no soil instability on his project, and protected by a City street. (Exhibit 4)

The study consisted of “230 boreholes” presumably to find bedrock, and “historic landslides.” *There is no consideration of the many water remediating features including roads, gutters, stormwater drainage, foundations on the current slope, retaining walls on the current slope, rooftop channeling of rainwater into available channels, number of successful, non-landslided residences on the current slope, improvements to prevent landslides and analysis of the current neighborhood.* Thus the LSZ, predicting critical water flow, is a theoretical construct using old maps, disregarding stability added by improvements, to which a complex and unproven theoretical analysis has been applied. (see Section 3.6) Thus, 30%, 50%, 70%, 90% of the landslide risk may have been remediated by water channeling, stabilized by house foundations, stormwater improvements.

Three tiers of hazard are identified in the paper, yet, not very helpfully, they are not shown on the LSZ map and not spelled out in the requirements for a geohazard report. Thus, it can be assumed by overlaying the LSX on “everything west of I-25,” the most expensive remediation applies to the least problematic tier.

5.2 Aspen, Colorado on the Front Range

Construction Analytics 2020 reports: “Residential construction inflation in 2019 was only 3.6%. However, the average inflation for six years from 2013 to 2018 was 5.5%. It peaked at 8% in 2013 but dropped to 4.3% in 2018 and only 3.6% in 2019. Forecast residential inflation for the next three years is level at 3.8%.” (3) Homebuilding costs are rising, on average, more than twice the rate of inflation. Part of this escalation is due to professionals, trades, and their associations (cartels) pushing ever new technology, process, submittals, and inspections through the regulatory process, regardless of cost, without input from the mortgage-strapped homeowner and renter. When new home prices rise, existing home prices rise right along with them. The cartels are successful because they are incentive by profit (completely justified) but the regulatory process has no incentive to hold down costs. When real estate prices skyrocket, local governments are a big winner via the property tax. It is for Council to investigate and intervene.

5.4 Protecting the Public: When you add \$10,000 of life-safety features to the cost of a house, the risk doesn’t get remediated. It just changes form and goes over to the mortgage, where over 30 years it adds another \$20,000 to the cost of the house. While the family has a slightly decreased risk of a fire or landslide, at the next recession the homeowner or renter may well be out on the street. Protecting the public can take many forms.

It can be seen from many pictures of the distressed houses that triggered the Landslide Zone Ordinance that the proposed single-family residence site does not share any features with the numerous houses that were bailed out. (Exhibit 4) There is zero risk of this house sliding

precipitously down a hill because there isn't a hill of any consequence. There is zero risk of a taxpayer bailout because there is no hill to slide down.

6.0 Appellant Ready to Proceed:

- He is already in possession of an approved site plan (Exhibit 1)
- The cost and flaws of the GHR process constitute a "taking."
- He has a soil test in hand that is sufficient to proceed with foundation design and would be built by now except for fire and utilities which were not available. (Exhibit 2)
- The water issues critical to soil instability in the neighborhood are well known and easily remediated. (Exhibit 3)
- No evidence of soil instability, subtracting substandard 1950's engineering in the nearby Hillside Zone. (Exhibit 4)
- The neighborhood is 70 years old, water flow issues are long remediated.
- His project is perfectly protected from landslides by Hawthorne Place. (Exhibit 4)
- His plan shores up the Hawthorne Place road in the worst places. (Exhibit 5)
- His proposed foundation designs are 5x more capable than anything in the neighborhood. (Exhibit 6)
- Criticisms by public comment will be shown to be 1. In the Hillside Zone, thus not applicable or 2. substandard engineering from the 1950s, where soil conditions were unknown and unanticipated, or 3. next-door neighbors that would be inconvenienced by a new house.

In sum, the requirement for a Geohazard Report under City Code Section 7.5.904.A.2.B is unreasonable.

List of Exhibits:

- | | |
|-----------|---|
| Exhibit 1 | Approved Site Plan |
| Exhibit 2 | 506 Hawthorne Soil Test Narrative |
| Exhibit 3 | Neighborhood Water Remediation |
| Exhibit 4 | 506 Hawthorne Proof of lot soil stability |
| Exhibit 5 | Hawthorne Place Road Stabilization |
| Exhibit 6 | Alternative foundation designs |

A review of the Exhibits will show the Appellant has shown a requirement for a geohazard report or waiver for a permit for his project at 506 Hawthorne is unreasonable in all aspects and asks

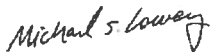
the City Council to agree. There is nothing about the proposed house at 506 Hawthorne that in any way warrants a geohazard report.

Having examined the City Code, the LSZ methodology, the geotechnical firm proposals, their capabilities, the costs, and the Colorado Springs construction environment (since 1974) the Appellant respectfully proposes these changes to the GHR Code:

1. The LSZ overlay should be eliminated in favor of a neighborhood map, prepared in collaboration with City, County, and geotechnical firms, Colorado Springs utilities, City parks, homebuilders, to establish current threat potential as derived from experiences in the past two decades. Problem areas are well known. Neighborhood associations would have six months to comment and could appeal their designation to the City Planning Commission and Council, presenting alternative maps. Future events would improve the maps.
2. Neighborhoods with mature trees, landscaping, stormwater control, rooftop gutters, road diversion would be eliminated unless engineers could cite multiple examples of directly observed soil instability. Wet basements common from the '50s are not evidence of soil instability. Substandard retaining walls from the '50s are not evidence.
3. Individual projects could apply for a waiver in low-risk map interior areas (flat spots) by hiring a geotechnical firm willing to report those remediating factors for a decision by City Engineering at a cost not to exceed \$500 and not to run more than two pages. If the waiver report exceeds \$500 an explanation must be provided. To include all items in 7.4.501 "Purpose" accounted for.
4. Any geotechnical firm wishing to be licensed to do GHR testing must show the ability to test on any and all slopes in the LSZ (or preferably the neighborhood map) where a project would be reasonable, without causing a lot of environmental damage as a result. An explanation of the cost of the GHR must accompany every report.
5. The GGS should be excluded from the waiver process as it is one more administrative busyness with no value to add to the analysis.

As a former owner of a technical construction company working on steeply sloped and high altitude sites, I urge the Council to amend the GH process to eliminate the steep and unnecessary testing requirements that were inadvertently created in the legislation.

Respectfully Submitted,



Michael S. Lowery
Applicant/ Owner
506 Hawthorne Place
CS/CO 80906

(719) 650-1445
Mlowery1445@gmail.com

Sources

1. David C. Noe, Jonathan L. White, and T.C. Wait. Colorado Geological Survey, "MAPPING AREAS OF LANDSLIDE SUSCEPTIBILITY IN COLORADO SPRINGS, COLORADO" Undated
<https://www.americangeosciences.org/sites/default/files/Environment-colorado1.pdf>
2. Garrett, Jordan. "GIS-BASED LANDSLIDE SUSCEPTIBILITY ANALYSIS OF SOUTHWESTERN COLORADO SPRINGS, EL PASO COUNTY, COLORADO," undated.
https://mountainscholar.org/bitstream/handle/11124/79381/Garrett_mines_0052N_10210.pdf
3. Construction Analytics 2020. <https://edzarenski.com/2020/01/28/construction-inflation-2020/>

Figure 4

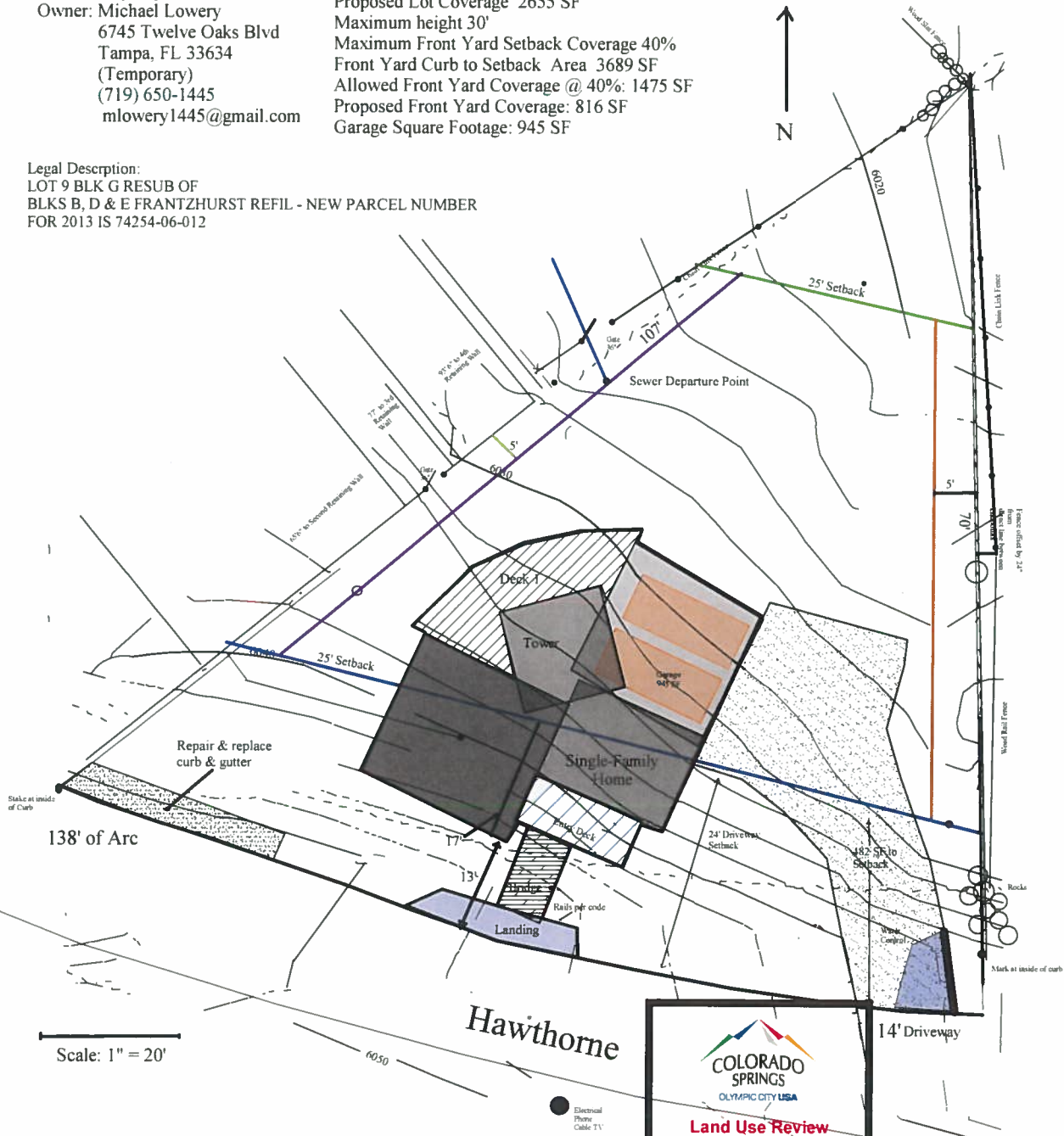
Exhibit 1

**Proposed Site Plan
With Front Setback
Non-Use Variance**

506 Hawthorne Place
Colorado Springs, CO 80906
Owner: Michael Lowery
6745 Twelve Oaks Blvd
Tampa, FL 33634
(Temporary)
(719) 650-1445
mlowery1445@gmail.com

Site Data:
R-1 6000
Lot: 9198 sf
Maximum Lot Coverage 30%
Allowed Maximum Lot Coverage 2945 SF
Proposed Lot Coverage 2655 SF
Maximum height 30'
Maximum Front Yard Setback Coverage 40%
Front Yard Curb to Setback Area 3689 SF
Allowed Front Yard Coverage @ 40%: 1475 SF
Proposed Front Yard Coverage: 816 SF
Garage Square Footage: 945 SF

Legal Description:
LOT 9 BLK G RESUB OF
BLKS B, D & E FRANTZHURST REFIL - NEW PARCEL NUMBER
FOR 2013 IS 74254-06-012



Scale: 1" = 20'

Note 1. AR NV 19-00783 was approved to allow a 13 foot front yard setback where 25 feet is required.


**Land Use Review
Approved**
01/20/2020

File Number AR NV 19-00783

Exhibit 2

506 Hawthorne Soil Test

"Owing to the highly expansive nature of the on-site clay soil, a shallow foundation system would not be expected to perform adequately if it was to rest on the clay soils in their in-situ condition. We, therefore, recommend that a minimum of 3 feet of the expansive clay soils be removed from beneath all foundation components, being replaced with a suitable non-expansive, coarse grained granular backfill approved by the Geotechnical Engineer. The zone of overexcavation should include the entire building footprint and extend a minimum of 3 feet beyond the building perimeter. The backfill soils should be compacted in lifts not to exceed 6 inches after compaction, while maintaining a minimum of 90% of its maximum Proctor dry density, ASTM D-1557. The soils should be placed at a moisture content conducive to adequate compaction (usually about $\pm 2\%$ of Proctor optimum moisture content). To ensure the quality of the compacted soil, frequent density tests should be taken. The overexcavated site should be inspected by a representative of the Geotechnical Engineer prior to fill placement and the first density test should be conducted when 18 inches of fill have been placed.

The following recommendations assume that the backfill soils will be non-expansive and coarse grained and that when compacted as recommended, will have an allowable bearing capacity of at least 2600 to 3000 psf. The actual bearing capacity will be determined during fill placement control. If a fine grained structural fill is used, a footing/stemwall configuration may be required, even at this bearing value."

Job No. 27085

May 6, 1996

Pinon Construction
1308 W. Colorado, Suite B
Colorado Springs, CO 80904

Re: Subsurface Soil Investigation
506 Hawthorne Place
Lot 9, Block G
Resub of Blocks B, D, & E
Planthurst Subdivision
Colorado Springs, CO

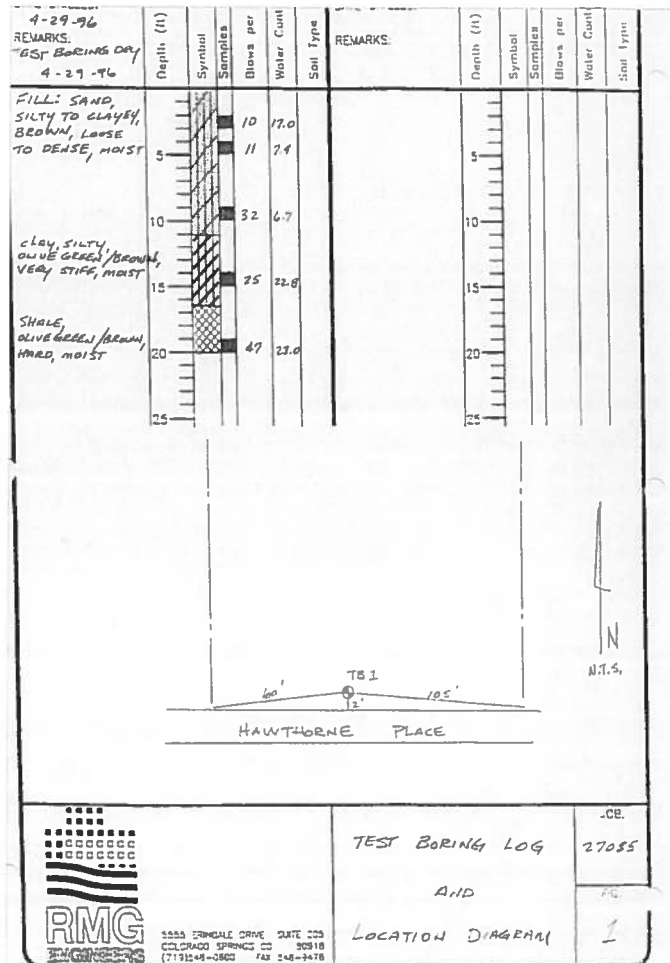


Exhibit 3

Neighborhood Water Remediation



Water characteristics that influence soil instability are well known in the neighborhood from Cresta to Alsace to Safeway on South Nevada. Rainfall is either diverted by roads, gutters, stormwater improvement or absorbed by trees and landscaping. No measurable landslides have occurred in 70 years.

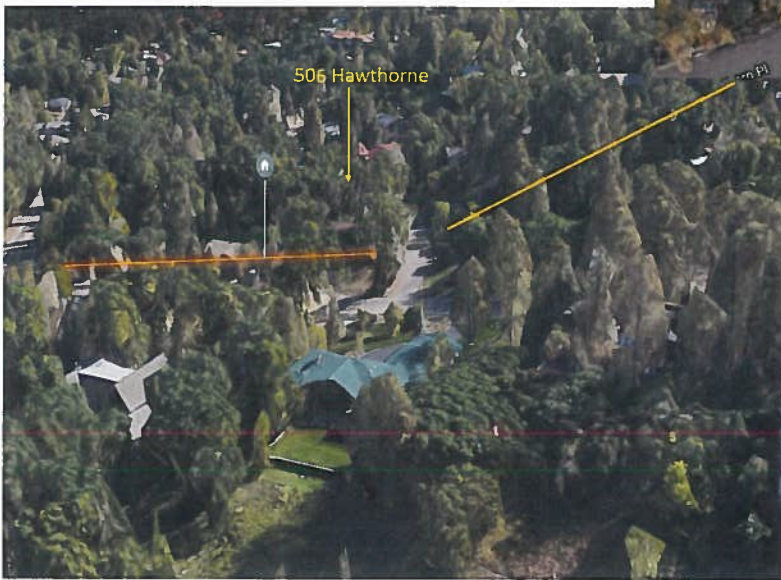
Long rain events soak down to a layer of shale, then flows out along the side of the hill. The flow lasts for about 48 hours. The flow into the Appellant's basement at 121 Alsace Way is 40 gallons per day, pumped out of his French drain. There is no flow at the 506 lot, but he is prepared to remediate 300 gallons per day. Most of the soil south of Cheyenne Road is mixed clay, stem wall foundations with floating slabs will rise with the clay expansion, cracking plaster. The Appellant won't be doing that. Many residents have fixed the problem with French drains.



Exhibit 4

506 Lot Soil Stability

The site is fully protected from landslides by Hawthorne. There is nothing that a GHR would tell us about that.



506 isn't in a Hillside Zone and other than the Hawthorne road embankment, the slope doesn't meet the LSZ criteria. A robust foundation is more than adequate.

Here is a 100 year old irrigation ditch at the top of the lot that shows there is no soil instability.



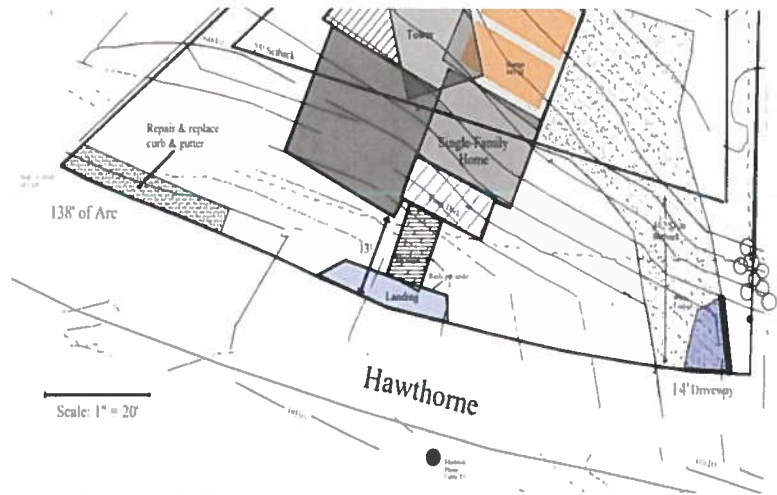
The site has nothing in common with the million dollar houses with million dollar views that triggered the Landslide Ordinance.



Exhibit 5

Proposed Hawthorne Road Stabilization

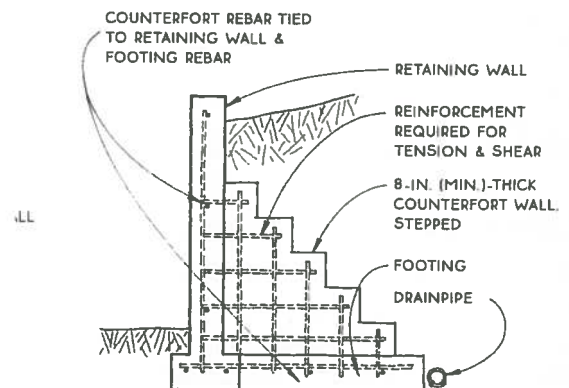
The big slope issue is the slope of the Hawthorne road embankment. The Appellant's site plan will repair and shore up Hawthorne until the City gets around to fixing it.



This curb has been reported to streets department for two decades.

A professionally-engineering retaining wall will be submitted along with a robust foundation design.

NOTE
COUNTERFORT MUST BE
PROFESSIONALLY ENGINEERED.



NOTE
FOOTING IS LARGE AND REINFORCED BECAUSE COUNTERFORT USES ITS OWN WEIGHT PLUS WEIGHT OF SOIL ABOVE FOOTING TO RESIST THE HORIZONTAL FORCE ON THE WALL.

