

ORG 2200	COLORADO GEOLOGICAL SURVEY 1801 19th Street Golden, CO 80401 PHONE (303)384-2655	INVOICE # 18-144
TYPE CT	INVOICE	INVOICE DATE 07-Feb-18

El Paso County
Attn: Raimere Fitzpatrick
2880 International Circle, Suite 110
Colorado Springs, CO 80910



RE: Forest Lakes Phase II PUD Kevin McCoy 11.5 hours at \$85.73 per hour. Colorado Geological Survey review at the request of El Paso County	EP-18-0046	\$985.90
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EXPLANATION OF CGS INVOICE FOR LAND USE REVIEWS:

UNDER C.R.S. 30-28-101, ET SEQ. (SENATE BILL 35 OF 1972) COUNTIES ARE REQUIRED TO SUBMIT PROPOSED LAND USE APPLICATIONS AND SUPPORTING TECHNICAL REPORTS TO THE COLORADO GEOLOGICAL SURVEY (CGS) "FOR AN EVALUATION OF THOSE GEOLOGIC FACTORS WHICH WOULD HAVE A SIGNIFICANT IMPACT ON THE PROPOSED USE OF THE LAND." MUNICIPALITIES SUBMIT PROPOSED LAND USE APPLICATIONS AT THEIR DISCRETION (C.R.S. 29-20-101) AND BOTH COUNTIES AND MUNICIPALITIES CAN SUBMIT REFERRALS TO CGS UNDER HB 1041 (C.R.S. 24-65.1-101). CGS IS OBLIGATED TO REVIEW SUCH APPLICATIONS. CGS HAS PERFORMED SUCH REVIEWS SINCE 1972 AND SINCE 1983 HAS BEEN REQUIRED BY LAW TO RECOVER THE FULL DIRECT COST OF SUCH REVIEWS MAKING THIS A TOTALLY CASH-FUNDED ACTIVITY OF CGS. SCHOOL SITE REVIEWS ARE REQUIRED UNDER H.B.1045 (1984).

NEARLY ALL COUNTIES AND MUNICIPALITIES HAVE ELECTED TO PASS THROUGH THE REVIEW FEE TO THE LAND USE APPLICANT. SOME JURISDICTIONS REQUIRE A CHECK "UP FRONT" FOR THE FEE TO CGS. OTHER JURISDICTIONS PREFER THAT WE INVOICE THE APPLICANT DIRECTLY AS IN YOUR CASE. SUBSEQUENT REVIEWS OF REVISED OR ADDITIONAL MATERIAL TO THE SAME APPLICANT ARE BILLED ON AN HOURLY BASIS.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL JILL CARLSON, LAND USE REVIEW ADMINISTRATOR AT (303) 384-2643.

TOTAL \$985.90

TERMS: NET 30 DAYS

PLEASE SHOW INVOICE NUMBER ON PAYMENT

COLLECTION FEES WILL BE ADDED TO ACCOUNT BALANCE IF FULL PAYMENT IS NOT RECEIVED WITHIN 30 DAYS

COLORADO GEOLOGICAL SURVEY

1801 19th Street
Golden, Colorado 80401



Karen Berry
State Geologist

February 6, 2018

Raimere Fitzpatrick
Project Manager
El Paso County Development Services Dept.
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Location:
SW of Sec. 28 / SE of Sec. 29,
T11S, R67W of the 6th PM
39.060, -104.8562

Subject: Forest Lakes Phase II PUD Amendment/Preliminary Plan
El Paso County, CO File No. PUDSP181; CGS Unique No. EP-18-0046

Dear Mr. Fitzpatrick:

The Colorado Geological Survey has reviewed the Forest Lakes Phase II PUD Amendment referral. We understand that the applicant proposes to amend the Forest Lakes PUD/Preliminary plan to increase the number of lots from 131 to 231 and reconfigure the internal subdivision layout. For this referral, we reviewed the following documents:

- Letter of Intent (N.E.S. Inc., December 2017), Legal Description: Phase 2 PUD/DA (Classic Consulting Engineers & Surveyors, August 17, 2017),
- Forest Lakes PUD Development Plan and Preliminary Plan for Phase 2 (N.E.S. Inc., December 20, 2017 – 15 sheets), and
- Master Plan Level Geologic Hazards Evaluation and Preliminary Geotechnical Investigation, Forest Lakes Master Development Plan (CTL/Thompson, Inc., August 15, 2001).

The CTL/Thompson report identified the following potential geologic hazards, engineering constraints, and natural hazards that may affect development in the Phase II area:

- Debris flows and hyperconcentrated flooding
- Expansive soils and bedrock
- Potentially Unstable Slopes
- Shallow Groundwater
- Rockfall
- Consolidation
- Erosion
- Seismicity
- Flooding
- Disturbed areas and potentially uncontrolled fill

CGS agrees that these hazards and constraints are present and may adversely affect development within the Phase II development area. The currently proposed Phase II amendment significantly increases development density in areas where CTL/Thompson identified potential hazards/constraints, or where the subsurface investigation information is relatively sparse. CGS cannot recommend approval of the proposed development until an updated geologic hazards and geotechnical investigation report is prepared that addresses debris flow/debris flood (hyperconcentrated flood), shallow groundwater, collapsible soils (consolidation), potentially unstable slopes, and erosion hazards to the reconfigured Phase II lots. Specifically, CGS recommends the

Reimere Fitzpatrick
February 6, 2018
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Thank you for the opportunity to review and comment on this project. If you have questions, please contact me by phone at 303-384-2632 or e-mail kemccoy@mines.edu.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin McCoy". The signature is fluid and cursive, with the first name "Kevin" and the last name "McCoy" clearly distinguishable.

Kevin McCoy
Engineering Geologist