Multnomah County
Land Use & Transportation
1600 SE 190th Ave, Ste 116
Portland OR 97233
Ph: 503-988-3043 Fax: 503-988-3389
multco.us/landuse

HILLSIDE DEVELOPMENT PERMIT APPLICATION:
GEOTECHNICAL RECONNAISSANCE AND STABILITY PRELIMINARY STUDY

Note: Response to each question below must be completed or verified by a Certified Engineering Geologist or Geotechnical Engineer, including a State of Oregon Registration Stamp and Number in the space provided on page four. The HDP form 1 addresses Multnomah County Code Section .5515(A)(3), Hillside Development Permits.

Site Address: 13221 NW McNamee Road, Portland, OR 97231

Legal Description: Tax Map 2N1W32B Tax Lot 702

Property Owner's Name: Katie Miranda & Ahmed Al Ali

Firm Preparing Report: GeoPacific Engineering, Inc.

Address: 14835 SW 72nd Avenue, Portland, OR 97224

Preparer's Name: Beth Rapp, C.E.G.

Phone Number: (971)246-0009

GENERAL PROPERTY INFORMATION

1. a. Maximum Slope on Property: 60% grade Area in which it is located: Fill slope area adjacent to proposed driveway.
   Average Slope of Property: ~6-10% grade in vicinity of proposed home

   b. Are there any wetlands or streambeds on the property? (Please Circle) Yes (No)
   If yes, please show on topographical survey or sketch.

   c. Volume of soil or earth material disturbed, stored, disposed of or used as fill: 118 cubic yards or less (as provided by NW Engineers, LLC.)

   d. Total area of proposed ground disturbance:
   22,300 (square feet) 0.51 (acres) or less as provided by NW Engineers, LLC.)

Were building plans considered when completing this form? (Please Circle) (Yes) No
If yes, please note the author and date the plans were prepared.

NW Engineers, LLC. dated February 16 and March 4, 2021

2. What is the general topography of the property? Please attach a topographic survey or sketch with pertinent notes.

The proposed driveway easement traverses a broad ridgeline, sideslope, and the edge of a fill slope. The area of the proposed home is gently to moderately sloping to the southeast at grades of approximately 6 to 10%.

3. Are there any visible signs of instability or other potentially adverse site features (Landslides, slumps, mud flow, creep, ravines, fills, cuts, seeps, springs, ponds, etc.) within the surrounding area for a minimum distance of 100 feet beyond the subject property boundaries? Describe and indicate on attached topographic survey or sketch.

No visible sign of deep seated slope instability within 100 feet of the property. Some small and shallow erosional features were observed along the existing fill slope, likely caused by uncontrolled stormwater runoff.

4. Is any earthwork proposed in connection with site development?

(Please Circle) (Yes) No

If yes, please indicate depth and extent of cuts/fills; describe fill types.

Proposed cuts up to 2 feet (4 cubic yards or less) and fill up to 2 feet (114 cubic yards or less). Fill will likely partially consist of on-site material from cuts. Some import fill will be necessary.

5. In your opinion, will the proposed earthwork cause potential stability problems for the subject and/or adjacent properties?

(Please Circle) (Yes) No

IF YES, EXPRESS PROBABILITY:

(Please Circle) Very Probable Possibly (Possible, but remote)

If Very Probable or Possibly, please explain.

The engineered fill slope in the vicinity of the proposed driveway may be susceptible to shallow instability due to changes in groundwater and/or stormwater runoff conditions. Collection of stormwater will likely improve slope stability adjacent to the proposed driveway.

6. In your opinion, will the proposed development (structures, foundations, parking area, streets, etc.) create potential stability problems for the subject and/or adjacent properties?

(Please Circle) (Yes) No

IF YES, EXPRESS PROBABILITY:

(Please Circle) Very Probable Possibly (Possible, but remote)

If Very Probable or Possibly, please explain.

7. In your opinion would the subsurface disposal of sewage effluent on the site (i.e., drain fields) have an adverse affect on stability of the site or adjacent area?

(Please Circle) Yes (No)

IF YES, EXPRESS PROBABILITY:

(Please Circle) Very Probable Possibly Possible, but remote

If Very Probable or Possibly, please explain.

8. If answer is Very Probable or Possibly to questions 4 or 5, is it your opinion, on the basis of a visual evaluation, that adequate stability might be achieved by preferred siting of the development, alternative foundation support, earthwork, drainage, etc.?

(Please Circle) Yes No

If yes, please explain.

9. Do you recommend additional geotechnical studies (i.e., mapping, testing pits or borings, stability analysis, etc.) prior to site development?

(Please Circle) Yes (No)

If yes, please explain.

We recommend testing and observation during grading. Proper test frequency and earthwork documentation usually requires observation and testing during stripping, rough grading, and placement of engineered fill. Engineered fill should be periodically observed and tested by the project geotechnical engineer or his representative.

By signing and affixing the required stamp below, the Certifying Engineering Geologist or Geotechnical Engineer certifies that the site is suitable for the proposed development.

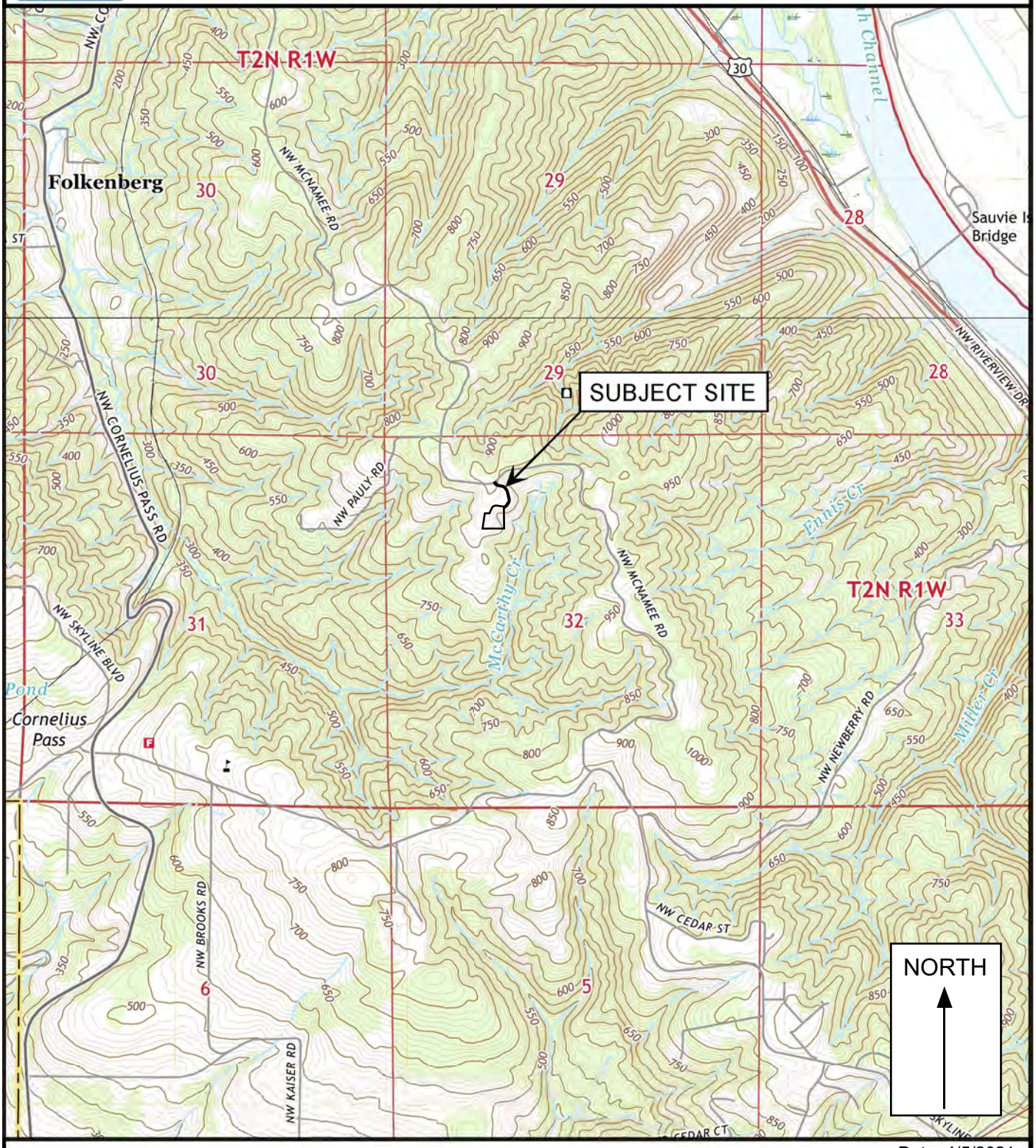
Signature _____

Date 4/5/2021

Affix Seal Here

GEOPACIFIC
14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445 Fax: (503) 941-9281

VICINITY MAP



Legend

Approximate Scale 1 in = 2,000 feet

Date: 4/5/2021
Drawn by: EKR

Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Linnton, Oregon Quadrangle, 2020 and Sauvie Island, Oregon Quadrangle, 2020.

Project: 13221 NW McNamee Road Homesite Multnomah County, Oregon	Project No. 20-5645	FIGURE 1

14835 SW 72nd Avenue
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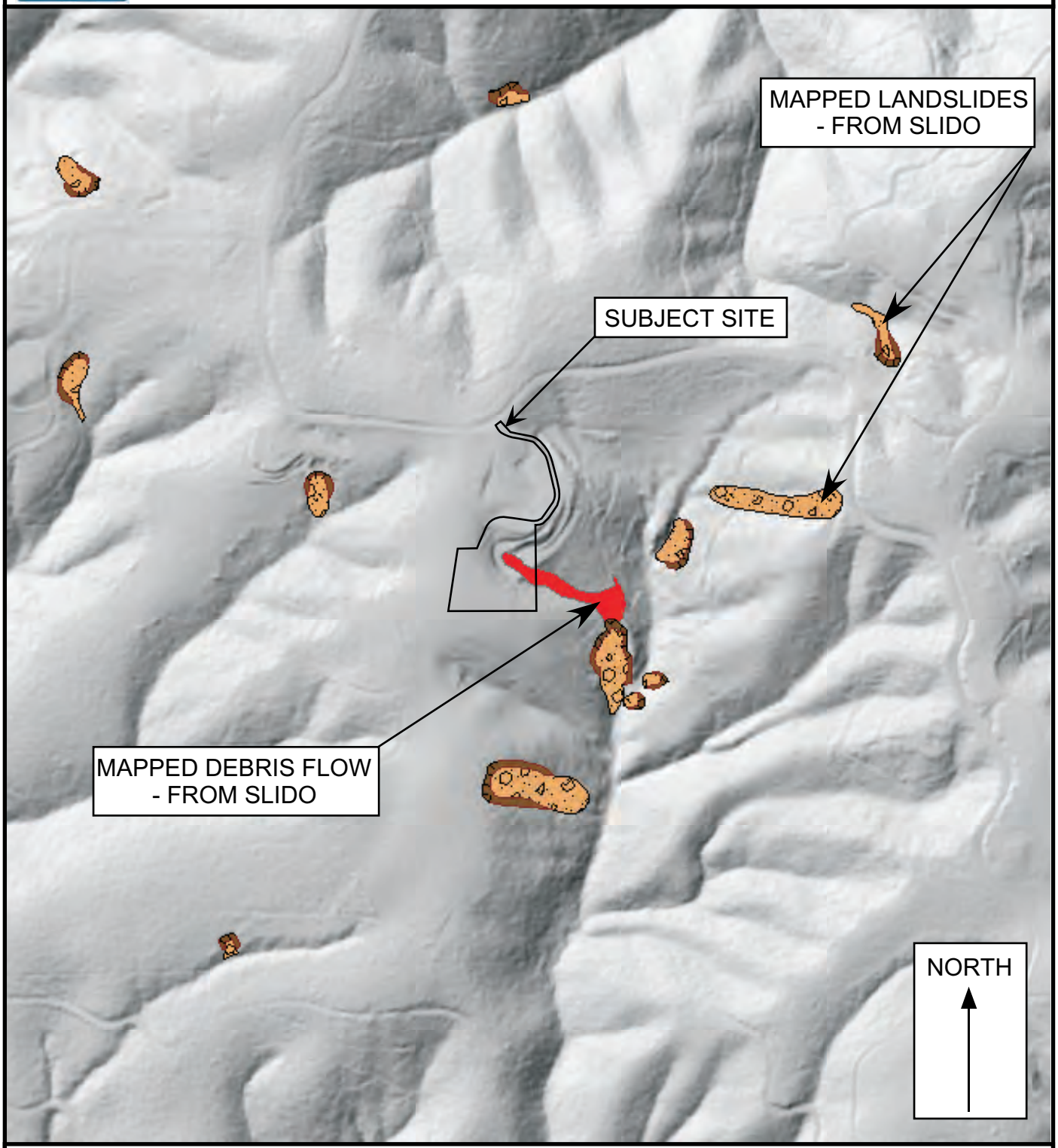
LIDAR BASED VICINITY MAP - WITH MAPPED LANDSLIDES



Legend

Approximate Scale 1 in = 500 ft

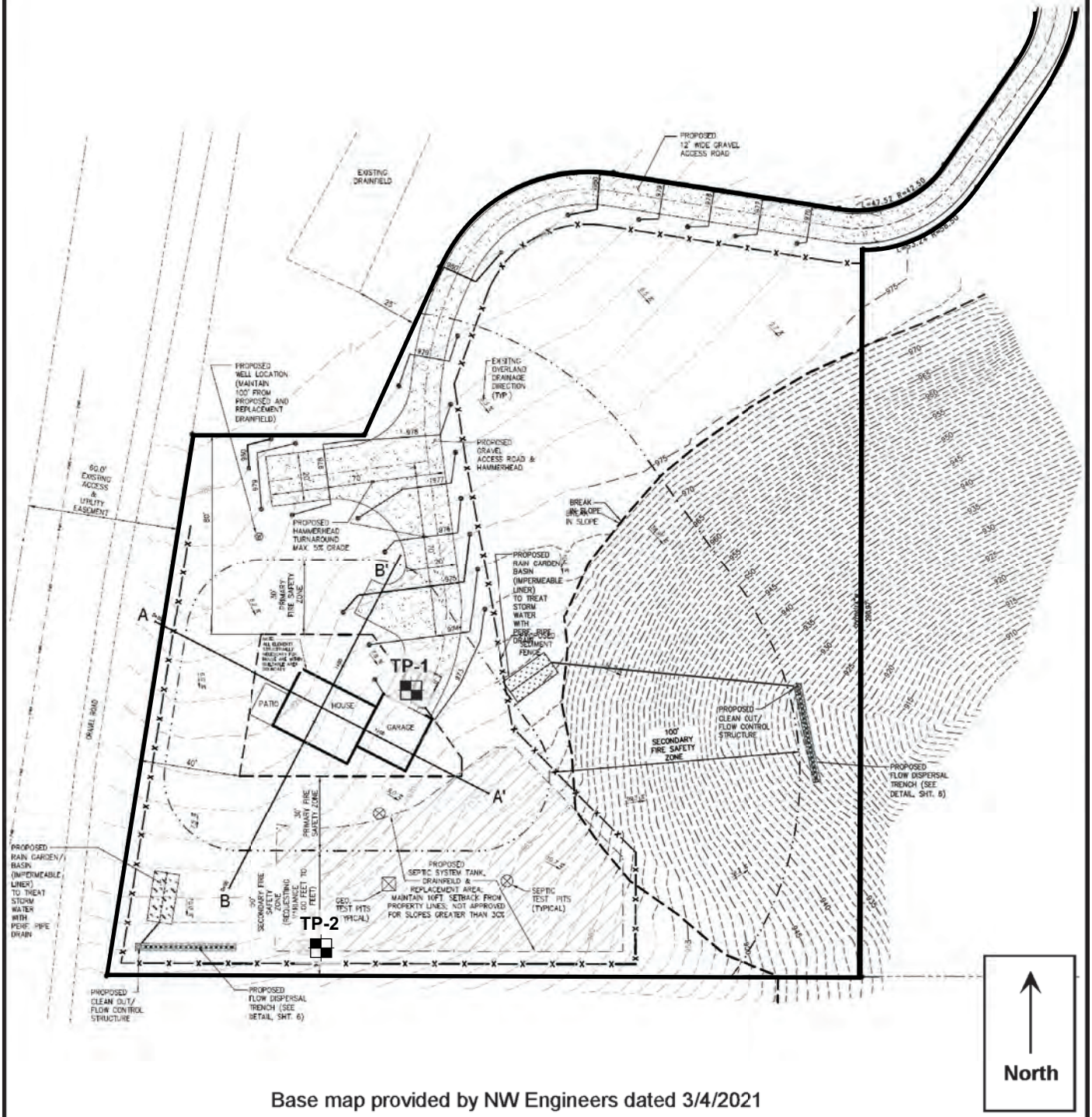
Date: 4/5/2021
Drawn by: EKR

Base map: Oregon Department of Geology and Mineral Industries, 2021, Statewide Landslide Information Database for Oregon (SLIDO): https://gis.dogami.oregon.gov/maps/slido/

Project: 13221 NW McNamee Road Homesite Multnomah County, Oregon	Project No. 20-5645	FIGURE 2

GEOPACIFIC
14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

SITE PLAN AND EXPLORATION LOCATIONS



Base map provided by NW Engineers dated 3/4/2021

Legend

TP-1 Test Pit Designation and Approximate Location

0 60'

APPROXIMATE SCALE 1"=60'

Date: 4/5/2021
Drawn by: EKR

Project: 13221 NW McNamee Road Homesite Multnomah County, Oregon	Project No. 20-5645	FIGURE 3