



CITY OF RICHLAND NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-101 & EA2020-105)

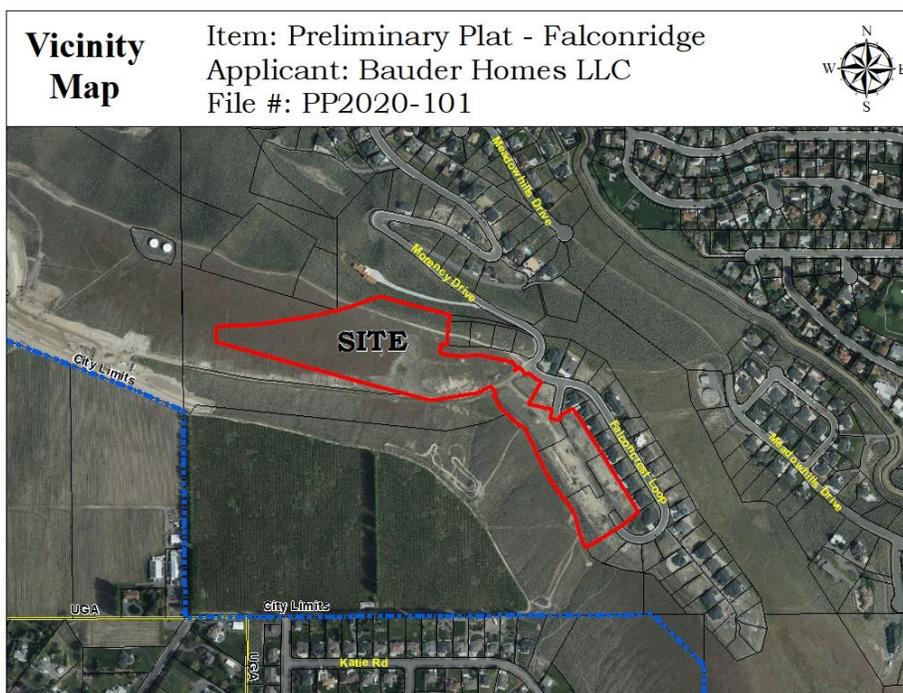
Notice is hereby given that Bauder Homes LLC (Scot Bauder) has filed a preliminary plat application to subdivide an approximately 19.56 acre site into 27 residential lots (Preliminary Plat of Falconridge). The project site is located near the intersection of Morency Drive and Falconcrest Loop upon Assessor's Parcel Numbers 135983000001048, 135983013342007 and 135983013341006. The proposed plat will have an average lot size of 17,769 square feet.

The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

Environmental Review: The proposal is subject to environmental review. The City of Richland is lead agency for the proposal under the State Environmental Policy Act (SEPA) and has reviewed the proposed project for probable adverse environmental impacts and expects to issue a determination of non-significance (DNS) for this project. The optional DNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed development. The environmental checklist and related file information are available to the public and can be viewed at www.ci.richland.wa.us.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Shane O'Neill, Senior Planner, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to soneill@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.





City of Richland
Development Services

625 Swift Blvd. MS-35
Richland, WA 99352
☎ (509) 942-7794
📠 (509) 942-7764

Preliminary Plat Application

Note: A Pre-Application meeting is required prior to submittal of an application.

| | | |
|--|--------|--|
| PROPERTY OWNER INFORMATION | | <input checked="" type="checkbox"/> Contact Person |
| Owner: Bauder Homes LLC | | |
| Address: 2472 Falconcrest Loop, Richland, WA 99352 | | |
| Phone: 509-727-8282 | Email: | |

| | | |
|--|--------|---|
| APPLICANT/CONTRACTOR INFORMATION (if different) | | <input type="checkbox"/> Contact Person |
| Company: | UBI# | |
| Contact: | | |
| Address: | | |
| Phone: | Email: | |

| | | |
|---|-------------------------------------|--|
| SURVEYOR INFORMATION | | |
| Contact: David Baalman, Rogers Surveying Inc. | | |
| Address: 1455 Columbia Park Trail, Suite 201, Richland WA 99352 | | |
| Phone: 509-783-4141 | Email: dbaalman@rogerssurveying.com | |

| | | |
|---|--------|--|
| ENGINEER INFORMATION | | |
| Contact: Steve Spink, Spink Engineering | | |
| Address: 1623 Terminal Drive, Richland WA 99352 | | |
| Phone: 509-946-1581 | Email: | |

| |
|----------------------------|
| PROJECT DESCRIPTION |
| Long Plat |

| | | |
|---|---|---------------------------------|
| PROPERTY INFORMATION | | |
| Parcel #: 1-3598-300-0001-048; 1-3598-301-3342-007; 1-3598-301-3341-006 | Zoning: R-1-10 | |
| Legal Description: See attached | | |
| Proposed Subdivision Name: Falconridge | | |
| Gross Plat Acreage: 19.56 AC | Number of Lots: 27 | Smallest Lot Size: 10,996 SQ FT |
| Net Lot Area Acreage: 11.01 | Avg Lot Size: 17,769 SQ FT | Largest Lot Size: 34,050 SQ FT |
| Domestic Water Supply: <input checked="" type="checkbox"/> City <input type="checkbox"/> Private Well | Sewage Disposal: <input checked="" type="checkbox"/> City <input type="checkbox"/> Septic | |
| Irrigation Source: <input type="checkbox"/> City <input type="checkbox"/> Private Well <input type="checkbox"/> Columbia Irrig District <input type="checkbox"/> Kennewick Irrig District | <input checked="" type="checkbox"/> BMID | |
| SEPA Checklist Submitted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Title Report (Subdivision Guarantee) Submitted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |

APPLICATION MUST INCLUDE

1. Completed Application and Filing Fee
2. 6- Full Size Copies & the .pdf file
3. 1 – 11" x 17" copy of proposed survey
4. Title Report showing ownership, easements, restrictions and accurate legal description of the property involved
5. SEPA Checklist
6. Other information as determined by the Administrator

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of the Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.

Applicant Printed Name: Scot Bowler

Applicant Signature:  Date 1/21/20



First American

First American Title Insurance Company

**8109 W Grandridge Blvd, Suite 110
Kennewick, WA 99336**

January 17, 2020

Dave Baalman
Rogers Surveying
1455 Columbia Park Trail, Suite 201
Richland, WA 99352

Phone: (509)783-4141
Fax:

| | |
|----------------|--------------------|
| Title Officer: | Kevin L. Howes |
| Phone: | (509)734-0771 |
| Fax No.: | (866)907-4468 |
| E-Mail: | Khowes@firstam.com |
| Order Number: | 3383602 |

Escrow Number: 3383602

| | |
|-----------|--|
| Owner: | Bauder Homes LLC and Bauder Estate LLC |
| Property: | NKA Falconcrest Loop Richland, Washington 99352 |

Attached please find the following item(s):

Guarantee

Thank You for your confidence and support. We at First American Title Insurance Company maintain the fundamental principle:

Customer First!



First American

Guarantee

Subdivision Guarantee

ISSUED BY
First American Title Insurance Company

GUARANTEE NUMBER
5003353-3383602

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE LIMITS OF LIABILITY AND THE CONDITIONS AND STIPULATIONS OF THIS GUARANTEE,

FIRST AMERICAN TITLE INSURANCE COMPANY
a Nebraska corporation, herein called the Company

GUARANTEES

the Assured named in Schedule A against actual monetary loss or damage not exceeding the liability stated in Schedule A, which the Assured shall sustain by reason of any incorrectness in the assurances set forth in Schedule A.

First American Title Insurance Company

Dennis J. Gilmore
President

Jeffrey S. Robinson
Secretary

This jacket was created electronically and constitutes an original document

SCHEDULE OF EXCLUSIONS FROM COVERAGE OF THIS GUARANTEE

1. Except to the extent that specific assurances are provided in Schedule A of this Guarantee, the Company assumes no liability for loss or damage by reason of the following:
 - (a) Defects, liens, encumbrances, adverse claims or other matters against the title, whether or not shown by the public records.
 - (b) (1) Taxes or assessments of any taxing authority that levies taxes or assessments on real property; or, (2) Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not the matters excluded under (1) or (2) are shown by the records of the taxing authority or by the public records.
 - (c) (1) Unpatented mining claims; (2) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (3) water rights, claims or title to water, whether or not the matters excluded under (1), (2) or (3) are shown by the public records.
2. Notwithstanding any specific assurances which are provided in Schedule A of this Guarantee, the Company assumes no liability for loss or damage by reason of the following:
 - (a) Defects, liens, encumbrances, adverse claims or other matters affecting the title to any property beyond the lines of the land expressly described in the description set forth in Schedule (A), (C) or in Part 2 of this Guarantee, or title to streets, roads, avenues, lanes, ways or waterways to which such land abuts, or the right to maintain therein vaults, tunnels, ramps or any structure or improvements; or any rights or easements therein, unless such property, rights or easements are expressly and specifically set forth in said description.
 - (b) Defects, liens, encumbrances, adverse claims or other matters, whether or not shown by the public records; (1) which are created, suffered, assumed or agreed to by one or more of the Assureds; (2) which result in no loss to the Assured; or (3) which do not result in the invalidity or potential invalidity of any judicial or non-judicial proceeding which is within the scope and purpose of the assurances provided.
 - (c) The identity of any party shown or referred to in Schedule A.
 - (d) The validity, legal effect or priority of any matter shown or referred to in this Guarantee.

GUARANTEE CONDITIONS AND STIPULATIONS

1. Definition of Terms.

The following terms when used in the Guarantee mean:

- (a) the "Assured": the party or parties named as the Assured in this Guarantee, or on a supplemental writing executed by the Company.
- (b) "land": the land described or referred to in Schedule (A)(C) or in Part 2, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule (A)(C) or in Part 2, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways.
- (c) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.
- (d) "public records": records established under state statutes at Date of Guarantee for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge.
- (e) "date": the effective date.

2. Notice of Claim to be Given by Assured Claimant.

An Assured shall notify the Company promptly in writing in case knowledge shall come to an Assured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as stated herein, and which might cause loss or damage for which the Company may be liable by virtue of this Guarantee. If prompt notice shall not be given to the Company, then all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any Assured unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

3. No Duty to Defend or Prosecute.

The Company shall have no duty to defend or prosecute any action or proceeding to which the Assured is a party, notwithstanding the nature of any allegation in such action or proceeding.

4. Company's Option to Defend or Prosecute Actions; Duty of Assured Claimant to Cooperate.

Even though the Company has no duty to defend or prosecute as set forth in Paragraph 3 above:

- (a) The Company shall have the right, at its sole option and cost, to institute and prosecute any action or proceeding, interpose a defense, as limited in (b), or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest as stated herein, or to establish the lien rights of the Assured, or to prevent or reduce loss or damage to the Assured. The Company may take any appropriate action under the terms of this Guarantee, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this Guarantee. If the Company shall exercise its rights under this paragraph, it shall do so diligently.
- (b) If the Company elects to exercise its options as stated in Paragraph 4(a) the Company shall have the right to select counsel of its choice (subject to the right of such Assured to object for reasonable cause) to represent the Assured and shall not be liable for and will not pay the fees of any other counsel, nor will the Company pay any fees, costs or expenses incurred by an Assured in the defense of those causes of action which allege matters not covered by this Guarantee.
- (c) Whenever the Company shall have brought an action or interposed a defense as permitted by the provisions of this Guarantee, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from an adverse judgment or order.
- (d) In all cases where this Guarantee permits the Company to prosecute or provide for the defense of any action or proceeding, an Assured shall secure to the Company the right to so prosecute or provide for the defense of any action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of such Assured for this purpose. Whenever requested by the Company, an Assured, at the Company's expense, shall give the Company all

GUARANTEE CONDITIONS AND STIPULATIONS (Continued)

reasonable aid in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as stated herein, or to establish the lien rights of the Assured. If the Company is prejudiced by the failure of the Assured to furnish the required cooperation, the Company's obligations to the Assured under the Guarantee shall terminate.

5. Proof of Loss or Damage.

In addition to and after the notices required under Section 2 of these Conditions and Stipulations have been provided to the Company, a proof of loss or damage signed and sworn to by the Assured shall be furnished to the Company within ninety (90) days after the Assured shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the matters covered by this Guarantee which constitute the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the Assured to provide the required proof of loss or damage, the Company's obligation to such assured under the Guarantee shall terminate. In addition, the Assured may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Guarantee, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Assured shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the Assured provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the Assured to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in the above paragraph, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this Guarantee to the Assured for that claim.

6. Options to Pay or Otherwise Settle Claims: Termination of Liability.

In case of a claim under this Guarantee, the Company shall have the following additional options:

- (a) To Pay or Tender Payment of the Amount of Liability or to Purchase the Indebtedness.
The Company shall have the option to pay or settle or compromise for or in the name of the Assured any claim which could result in loss to the Assured within the coverage of this Guarantee, or to pay the full amount of this Guarantee or, if this Guarantee is issued for the benefit of a holder of a mortgage or a lienholder, the Company shall have the option to purchase the

indebtedness secured by said mortgage or said lien for the amount owing thereon, together with any costs, reasonable attorneys' fees and expenses incurred by the Assured claimant which were authorized by the Company up to the time of purchase.

Such purchase, payment or tender of payment of the full amount of the Guarantee shall terminate all liability of the Company hereunder. In the event after notice of claim has been given to the Company by the Assured the Company offers to purchase said indebtedness, the owner of such indebtedness shall transfer and assign said indebtedness, together with any collateral security, to the Company upon payment of the purchase price.

Upon the exercise by the Company of the option provided for in Paragraph (a) the Company's obligation to the Assured under this Guarantee for the claimed loss or damage, other than to make the payment required in that paragraph, shall terminate, including any obligation to continue the defense or prosecution of any litigation for which the Company has exercised its options under Paragraph 4, and the Guarantee shall be surrendered to the Company for cancellation.

- (b) To Pay or Otherwise Settle With Parties Other Than the Assured or With the Assured Claimant.

To pay or otherwise settle with other parties for or in the name of an Assured claimant any claim assured against under this Guarantee, together with any costs, attorneys' fees and expenses incurred by the Assured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of the option provided for in Paragraph (b) the Company's obligation to the Assured under this Guarantee for the claimed loss or damage, other than to make the payment required in that paragraph, shall terminate, including any obligation to continue the defense or prosecution of any litigation for which the Company has exercised its options under Paragraph 4.

7. Determination and Extent of Liability.

This Guarantee is a contract of Indemnity against actual monetary loss or damage sustained or incurred by the Assured claimant who has suffered loss or damage by reason of reliance upon the assurances set forth in this Guarantee and only to the extent herein described, and subject to the Exclusions From Coverage of This Guarantee.

The liability of the Company under this Guarantee to the Assured shall not exceed the least of:

- (a) the amount of liability stated in Schedule A or in Part 2;
- (b) the amount of the unpaid principal indebtedness secured by the mortgage of an Assured mortgagee, as limited or provided under Section 6 of these Conditions and Stipulations or as reduced under Section 9 of these Conditions and Stipulations, at the time the loss or damage assured against by this Guarantee occurs, together with interest thereon; or
- (c) the difference between the value of the estate or interest covered hereby as stated herein and the value of the estate or interest subject to any defect, lien or encumbrance assured against by this Guarantee.

8. Limitation of Liability.

- (a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures any other matter assured against by this Guarantee in a reasonably diligent manner by

GUARANTEE CONDITIONS AND STIPULATIONS (Continued)

any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

- (b) In the event of any litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title, as stated herein.
- (c) The Company shall not be liable for loss or damage to any Assured for liability voluntarily assumed by the Assured in settling any claim or suit without the prior written consent of the Company.

9. Reduction of Liability or Termination of Liability.

All payments under this Guarantee, except payments made for costs, attorneys' fees and expenses pursuant to Paragraph 4 shall reduce the amount of liability pro tanto.

10. Payment of Loss.

- (a) No payment shall be made without producing this Guarantee for endorsement of the payment unless the Guarantee has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.
- (b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within thirty (30) days thereafter.

11. Subrogation Upon Payment or Settlement.

Whenever the Company shall have settled and paid a claim under this Guarantee, all right of subrogation shall vest in the Company unaffected by any act of the Assured claimant. The Company shall be subrogated to and be entitled to all rights and remedies which the Assured would have had against any person or property in respect to the claim had this Guarantee not been issued. If requested by the Company, the Assured shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The Assured shall permit the Company to sue, compromise or settle in the name of the Assured and to use the name of the Assured in any transaction or litigation involving these rights or remedies. If a payment on account of a claim does not fully cover the loss of the Assured the Company shall be subrogated to all rights and remedies of the Assured after the Assured shall have recovered its principal, interest, and costs of collection.

12. Arbitration.

Unless prohibited by applicable law, either the Company or the Assured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Land Title Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the Assured arising out of or relating to this Guarantee, any service of the Company in connection with its issuance or the breach of a Guarantee provision or other obligation. All arbitrable matters when the Amount of Liability is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Assured. All arbitrable matters when the amount of liability is in excess of \$2,000,000 shall be arbitrated only when agreed to by both the Company and the Assured. The Rules in effect at Date of Guarantee shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permits a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

13. Liability Limited to This Guarantee; Guarantee Entire Contract.

- (a) This Guarantee together with all endorsements, if any, attached hereto by the Company is the entire Guarantee and contract between the Assured and the Company. In interpreting any provision of this Guarantee, this Guarantee shall be construed as a whole.
- (b) Any claim of loss or damage, whether or not based on negligence, or any action asserting such claim, shall be restricted to this Guarantee.
- (c) No amendment of or endorsement to this Guarantee can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

14. Notices, Where Sent.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this Guarantee and shall be addressed to the Company at **First American Title Insurance Company, Attn: Claims National Intake Center, 1 First American Way, Santa Ana, California 92707** Claims.NIC@firstam.com Phone: 888-632-1642 Fax: 877-804-7606



First American Title



First American

Schedule A

Subdivision Guarantee

ISSUED BY

First American Title Insurance Company

GUARANTEE NUMBER

3383602

Order No.: 3383602

Liability: \$2,000.00

Fee: \$350.00

Tax: \$30.10

Name of Assured: Rogers Surveying and Benton County

Date of Guarantee: January 13, 2020 @ 8:00am

The assurances referred to on the face page hereof are:

1. Title is vested in:

Bauder Homes LLC, a Washington limited liability company, as to Parcel A and Bauder Estate LLC, a Washington limited liability company, as to Parcel B and C

2. That, according to the public records relative to the land described in Schedule C attached hereto (including those records maintained and indexed by name), there are no other documents affecting title to said land or any portion thereof, other than those shown under Record Matters in Schedule B.

3. The following matters are excluded from the coverage of this Guarantee

- A. Unpatented Mining Claims, reservations or exceptions in patents or in acts authorizing the issuance thereof.
- B. Water rights, claims or title to water.
- C. Tax Deeds to the State of Washington.
- D. Documents pertaining to mineral estates.

4. No guarantee is given nor liability assumed with respect to the validity, legal effect or priority of any matter shown herein.

5. This Guarantee is restricted to the use of the Assured for the purpose of providing title evidence as may be required when subdividing land pursuant to the provisions of Chapter 58.17, R.C.W., and the local regulations and ordinances adopted pursuant to said statute. It is not to be used as a basis for closing any transaction affecting title to said property.

6. Any sketch attached hereto is done so as a courtesy only and is not part of any title commitment, guarantee or policy. It is furnished solely for the purpose of assisting in locating the premises and First American expressly disclaims any liability which may result from reliance made upon it.



First American

Schedule B

Subdivision Guarantee

ISSUED BY
First American Title Insurance Company

GUARANTEE NUMBER
3383602

RECORD MATTERS

1. General taxes and assessments, if any, for the year 2020, in an amount not yet available.
Tax Account No.: 135983000001048

Assessed Land Value: \$ 166,060.00
Assessed Improvement Value: \$ 0.00

2. General taxes and assessments, if any, for the year 2020, in an amount not yet available.
Tax Account No.: 135983013342007
1st Half
Assessed Value of Land: \$ 135,350.00
Assessed Value of Improvement: \$ 0.00
2nd Half
Assessed Value of Land: \$ 135,350.00
Assessed Value of Improvement: \$ 0.00

3. General taxes and assessments, if any, for the year 2020, in an amount not yet available.
Tax Account No.: 135983013341006
1st Half
Assessed Value of Land: \$ 134,400.00
Assessed Value of Improvement: \$ 0.00
2nd Half
Assessed Value of Land: \$ 134,400.00
Assessed Value of Improvement: \$ 0.00

4. Liability to further assessment by Badger Mountain Irrigation District.

5. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records.

6. The terms and provisions contained in the document entitled "Patent"
Recorded: February 11, 1896
Recording No.: 3751

Excluding and excepting all mineral lands, should any such be found in the tracts aforesaid but this exclusion and exception according to the terms of statutes, "shall not be construed to include coal and Iron Lands".

NOTE: The mineral interest reserved or excepted above has not been examined and subsequent transactions affecting said interest or taxes levied against same are not reflected in this title evidence.

7. Easement, including terms and provisions contained therein:
Recording Information: 326884
In Favor of: United States of America
For: Right to enter upon and construct, operate and maintain pipeline, canals, or laterals, including the banks thereof and to dump waste materials, in connection therewith, together with the right of ingress and egress

8. The terms and provisions contained in the document entitled "Third Party Beneficiary Agreement"
Recorded: September 29, 1978
Recording No.: 771350

9. Easement, including terms and provisions contained therein:
Recording Information: 898901
In Favor of: All now owners and future owners
For: ingress-egress, utility and irrigation

10. Easement, including terms and provisions contained therein:
Recording Information: 2011-016687
In Favor of: All now and future owners
For: Ingress-egress and utility

11. Any and all offers of dedication, conditions, restrictions, easements, boundary discrepancies or encroachments, notes and/or provisions shown or disclosed by Short Plat No. 3341 recorded under recording number 2011-036221.

12. Any and all offers of dedication, conditions, restrictions, easements, boundary discrepancies or encroachments, notes and/or provisions shown or disclosed by Short Plat No. 3342 recorded under recording number 2011-036222.

13. Covenants, conditions, restrictions and/or easements; but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, family status, or national origin to the extent such covenants, conditions or restrictions violate Title 42, Section 3604(c), of the United States Codes:
Recording Information: 2012-017835, which replaced 2011-021030

Amendment thereto recorded under 2019-028237.

14. Easement, including terms and provisions contained therein:
Recording Information: 2012-034461
In Favor of: City of Richland
For: Secondary Emergency Access

15. Easement, including terms and provisions contained therein:
Recording Information: 2012-037724
In Favor of: Lots adjoining Bella Vista Lane
For: Private Drive

16. Easement, including terms and provisions contained therein:
 Recording Information: 2012-037725
 In Favor of: City of Richland
 For: Trail

Said instrument is a re-record of recording no(s). 2011-019372

17. Any and all offers of dedication, conditions, restrictions, easements, boundary discrepancies or encroachments, notes and/or provisions shown or disclosed by the Plat of Falconcrest Phase 1 recorded in Volume 15 of Plats, Page(s) 454.
18. Easement, including terms and provisions contained therein:
 Recording Information: 2013-025186
 In Favor of: City of Richland
 For: Waterline
19. Easement, including terms and provisions contained therein:
 Recording Information: 2014-032071
 In Favor of: Mark Bauder
 For: Utility and Access
20. Easement, including terms and provisions contained therein:
 Recording Information: 2016-035568
 In Favor of: City of Richland
 For: Utility
21. Easement, including terms and provisions contained therein:
 Recording Information: 2017-037507
 In Favor of: City of Richland
 For: Access & Utility
22. Any and all offers of dedication, conditions, restrictions, easements, boundary discrepancies or encroachments, notes and/or provisions shown or disclosed by Record Survey No. 5088 recorded under recording number 2018-033133.
23. Easement, including terms and provisions contained therein:
 Recording Information: 2019-002640
 In Favor of: City of Richland
 For: Temporary Construction
24. Easement, including terms and provisions contained therein:
 Recording Information: 2019-002641
 In Favor of: City of Richland
 For: Waterline

Informational Notes, if any

- A. General taxes for the year 2019, which have been paid.
 Tax Account No.: 135983000001048
 Amount: \$ 1,882.80
 Assessed Land Value: \$ 166,060.00
 Assessed Improvement Value: \$ 0.00
- B. General taxes for the year 2019, which have been paid.
 Tax Account No.: 135983013342007

Amount: \$ 1,536.86
Assessed Land Value: \$ 135,350.00
Assessed Improvement Value: \$ 0.00

C. General taxes for the year 2019, which have been paid.

Tax Account No.: 135983013341006
Amount: \$ 1,526.17
Assessed Land Value: \$ 134,400.00
Assessed Improvement Value: \$ 0.00

THESE NORTH 25°17'12" WEST 151.19 FEET; THENCE NORTH 52°39'38" WEST 84.48 FEET; THENCE NORTH 45°13'49" WEST 110.55 FEET; THENCE NORTH 27°35'28" WEST 74.85 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 357.00 FEET; THENCE NORTHEASTERLY 17.87 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°52'06" (THE LONG CHORD OF SAID CURVE BEARS NORTH 55°49'37" EAST 17.87 FEET); THENCE NORTH 35°36'25" WEST 54.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 303.00 FEET THE LONG CHORD OF SAID CURVE BEARS SOUTH 63°46'49" WEST 97.71 FEET); THENCE SOUTHWESTERLY 98.14 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°33'27"; THENCE SOUTH 80°53'57" WEST 262.27 FEET; THENCE NORTH 75°34'44" WEST 698.13 FEET; THENCE NORTH 73°47'03" WEST 587.86 FEET; THENCE NORTH 00°28'45" WEST 88.95 FEET; THENCE NORTH 87°04'04" EAST 194.01 FEET; THENCE NORTH 82°43'28" EAST 320.71 FEET; THENCE NORTH 77°03'54" EAST 166.28 FEET; THENCE NORTH 74°07'49" EAST 23.74 FEET; THENCE NORTH 72°28'39" EAST 263.93 FEET; THENCE SOUTH 75°08'14" EAST 405.57 FEET; THENCE SOUTH 84°08'19" EAST 210.66 FEET; THENCE SOUTH 74°14'07" EAST 201.24 FEET; THENCE SOUTH 65°22'23" EAST 52.56 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY MARGIN OF MORENCY DRIVE; THENCE SOUTH 56°55'35" EAST 34.02 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 82.00 FEET; THENCE SOUTHERLY 156.33 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 109°13'48"; THENCE SOUTH 52°18'13" WEST 89.21 FEET ALONG SAID RIGHT OF WAY MARGIN; THENCE SOUTH 37°41'48" EAST 54.00 FEET TO THE SOUTHWESTERLY RIGHT OF WAY MARGIN OF FALCONCREST LOOP, SAID POINT BEING THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 25.00 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 87°32'20" EAST 32.24 FEET); THENCE EASTERLY 35.04 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 80°18'54" TO THE BEGINNING OF A REVERSE CURVE HAVING A RADIUS OF 227.00 FEET; THENCE SOUTHERLY 73.62 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°34'55" TO THE NORTHERLY MOST CORNER OF LOT 27 OF FALCONCREST PHASE 1; THENCE SOUTH 29°54'40" WEST 147.84 FEET ALONG THE

RECORDS OF BENTON COUNTY; SHOWN AS "NEW PARCEL A" AND "NEW PARCEL B" ON RECORD SURVEY VOLUME 1 PAGE 4793, BEGINNING; THENCE THE FOLLOWING COURSES ALONG THE BOUNDARIES OF THOSE PARCELS IN VOLUME 1 OF SURVEYS, PAGE 4793, RECORDS OF BENTON COUNTY AND THE TRUE POINT OF SOUTHWEST CORNER OF THAT PARCEL SHOWN AS "NEW PARCEL B" ON RECORD SURVEY RECORDED NORTH 35°03'49" WEST 651.63 FEET; THENCE NORTH 25°17'12" WEST 141.29 FEET TO THE THENCE NORTH 40°19'46" WEST 320.69 FEET; THENCE NORTH 81°18'15" WEST 234.53 FEET; THENCE TRACTS 6, 5 AND 4 OF SAID RECORD SURVEY 4205; RECORDS OF BENTON COUNTY; THENCE THE FOLLOWING FOUR COURSES ALONG THE WEST LINE OF SHOWN AS TRACT 6 ON RECORD SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4205, BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 35; THENCE NORTH 89°36'32" EAST 251.93 FEET ALONG THE SOUTH LINE OF SAID SECTION 35 TO THE WEST LINE OF THAT PARCEL

EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS: THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28

PARCEL A

The land in the County of Benton, State of Washington, described as follows:

| | |
|--|---|
| <p>Subdivision Guarantee ISSUED BY First American Title Insurance Company GUARANTEE NUMBER 3383602</p> | <p>Schedule C First American </p> |
|--|---|

NORTHWESTERLY LINE OF SAID LOT 27;

THENCE SOUTH 75°35'19" EAST 139.09 FEET ALONG THE SOUTHWESTERLY LINE OF SAID LOT 27 TO THE NORTHWESTERLY RIGHT OF WAY MARGIN OF FALCONCREST LOOP; THENCE SOUTH 10°49'55" WEST 49.39 FEET ALONG SAID RIGHT OF WAY MARGIN; THENCE SOUTH 79°10'05" EAST 54.00 FEET TO THE SOUTHEASTERLY RIGHT OF WAY MARGIN OF FALCONCREST LOOP; THENCE NORTH 10°49'55" EAST 21.95 FEET ALONG SAID RIGHT OF WAY MARGIN FEET TO A POINT OF CUSP WITH A NON-TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 73.00 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 10°43'21" EAST 53.64 FEET); THENCE SOUTHERLY 54.92 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°06'31"; THENCE SOUTH 32°16'37" EAST 71.25 FEET; THENCE SOUTH 57°43'23" WEST 54.00 FEET; THENCE SOUTH 64°48'23" WEST 158.00 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THAT PORTION OF SAID SOUTHWEST QUARTER DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF FALCONCREST LOOP AND MORENCY DRIVE, AS SHOWN ON THE PLAT OF FALCONCREST PHASE 1, RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 46°59'00" EAST 43.10 FEET ALONG THE CENTERLINE OF SAID MORENCY DRIVE TO A POINT OF CURVATURE MONUMENT; THENCE NORTH 43°01'00" WEST 23.00 FEET TO THE NORTHWESTERLY RIGHT OF WAY MARGIN OF SAID MORENCY DRIVE AND THE TRUE POINT OF BEGINNING; THENCE SOUTH 52°18'13" WEST 43.31 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 125.00 FEET (THE LONG CHORD OF SAID CURVE BEARS NORTH 58°12'50" WEST 85.06 FEET); THENCE NORTHWESTERLY 86.79 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°46'57"; THENCE NORTH 78°06'19" WEST 158.51 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 300.00 FEET; THENCE WESTERLY 103.34 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 19°44'08"; THENCE SOUTH 82°09'33" WEST 12.27 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTH, HAVING A RADIUS OF 400.00 FEET; THENCE WESTERLY 118.82 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°01'12"; THENCE NORTH 05°06'33" EAST 159.24 FEET; THENCE NORTH 06°16'57" WEST 37.54 FEET TO A POINT ON THE BOUNDARY OF THAT PARCEL SHOWN AS "NEW PARCEL A" ON SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4793, RECORDS OF BENTON COUNTY; THENCE THE FOLLOWING COURSES ALONG SAID BOUNDARY:

THENCE SOUTH 84°08'19" EAST 210.66 FEET; THENCE SOUTH 74°14'07" EAST 201.24 FEET; THENCE SOUTH 65°22'23" EAST 52.56 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY MARGIN OF MORENCY DRIVE; THENCE SOUTH 56°55'35" EAST 34.02 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 82.00 FEET; THENCE SOUTHERLY 156.33 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 109°13'48" TO THE TRUE POINT OF BEGINNING.

(ALSO SHOWN AS NEW PARCEL F ON RECORD SURVEY NO. 5088 RECORDED ON NOVEMBER 7, 2018 UNDER AUDITOR'S FILE NO. 2018-033133)

PARCEL B

LOT 4, SHORT PLAT NO. 3342, ACCORDING TO THE SURVEY THEREOF RECORDED UNDER AUDITOR'S FILE NO. 2011-036222, RECORDS OF BENTON COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS;

PLAT OF FALCONCREST PHASE 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON.

PARCEL C

LOT 4, SHORT PLAT NO. 3341, ACCORDING TO THE SURVEY THEREOF RECORDED UNDER AUDITOR'S FILE NO. 2011-036221, RECORDS OF BENTON COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS;

PLAT OF FALCONCREST PHASE 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION DESCRIBED AS FOLLOWS;

REAL PROPERTY LOCATED IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON BEING A PORTION OF PARCEL "C" AS SHOWN ON RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4205, RECORDS OF BENTON AND COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF LOT 4, SHORT PLAT NO. 3341 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3341, RECORDS OF BENTON COUNTY; THENCE NORTH 35°03'49" WEST, 202.88 FEET ALONG THE LINE COMMON TO SAID LOT 4 AND SAID PARCEL "C"; THENCE LEAVING SAID COMMON LINE SOUTH 14°39'43" EAST, 99.48 FEET; THENCE SOUTH 19°07'53" EAST, 79.85 FEET; THENCE SOUTH 31°49'48" EAST, 28.98 FEET; THENCE NORTH 58°47'38" EAST, 58.36 FEET TO THE POINT OF BEGINNING.



AFFORDABLE GEOTECH SERVICES, LLC

3019 Duportail Street, Suite 174
Richland, WA 99352
(509) 948-1770 • (509) 890-8811

Mr. Milo Bauder
2495 Morency Avenue
Richland, WA 99352

January 22, 2018

Project Number 18003

RE: REPORT
Geotechnical Evaluation
Proposed Falconridge Residential Development
Richland, WA

Dear Milo,

Affordable Geotech Services (AGS) has completed our geotechnical evaluation for the proposed residences located at Falconridge Residential Development in Richland, Washington. The location of the project is shown on the attached Vicinity Map, Figure 1. The purpose of our evaluation was to explore and evaluate subsurface conditions at the site and to provide you with recommendations to assist with the design of the proposed development and residential structures. This report presents the results of our field evaluation, laboratory test results, conclusions and recommendations.

PROJECT UNDERSTANDING

We understand the project consists of the development of a 4-lot short plat and a 9-lot long plat in Richland according to the plans submitted to us by Spink Engineering titled "Falconridge Grading, Sheets 1 of 2 and 2 of 2" undated. The project site is located west of the intersection of Morency Drive and Falconcrest Loop. The project will include the construction of Falconridge Lane and associated stormwater disposal facilities. We anticipate that the proposed residential structures will likely be a one- to two-story, wood-framed structures. We anticipate that structural loads will be on the order of 1 to 2 kips per lineal foot of wall, and column loads, if any, on the order of 30 kips or less.

FIELD EXPLORATIONS

We evaluated subsurface conditions at the site by excavating seven test pits (TP-1 through TP-7) on January 9, 2018. The test pits were excavated at locations selected by us and located in the field by Spink Engineering. The test pit locations are shown on the attached Site and Exploration Plan, Figure 2. Infiltration testing was not conducted during our field explorations, as up to 16 feet of material is needed to be excavated from the proposed storm drainage retention pond before infiltration testing can be conducted.

The test pits were excavated to between approximately 2½ and 8 feet below existing site grade with a track-mounted excavator using a 3-foot-wide bucket provided by Mahaffey Enterprises, Inc. under subcontract to Mr. Bauder. All of the test pits were terminated due to refusal on basalt bedrock. An engineer from our firm continuously observed the excavation of the test pits, logged the subsurface conditions, and obtained representative soil samples. The soils encountered in the test pits were visually described and classified in general accordance with ASTM D-2488. Logs of the test pits are presented on the Test Pit Log sheets attached to this report. Soil samples obtained from the test pits were stored in watertight containers and transported to a laboratory for further visual examination and testing.

The test pits were backfilled at the completion of the field evaluation. The backfill was compacted to the degree possible with the bucket on the backhoe, but will settle with time. We recommend that the backfill be removed and replaced with structural fill as recommended herein.

LABORATORY TESTING

Laboratory testing was performed on a representative soil sample obtained from the test pits. The test performed consisted of particle size analysis testing (ASTM C 136). This test was used to assist in soil classification and in the evaluation and formulation of engineering recommendations. The results of the laboratory test performed are attached to this report.

SITE CONDITIONS

Location and Surface Conditions

The project site is located west of the intersection of Morency Drive and Falconcrest Loop. The site is situated atop the middle of Little Badger Mountain. Specifically, the property is located in the southwest quarter of Section 35, Township 9 North, Range 28 East, W.M. approximately as shown on the attached Vicinity Map Figure 1. The site is currently undeveloped and covered with grass and sagebrush. The site slopes down to the south at an approximate 4H:1V (horizontal to vertical) slope, and to the north at an approximate 2H:1V slope.

General Soil Conditions

The USDA Natural Resources Conservation Service (NRCS) has mapped the soils on and around the site in the Soil Survey of Benton County, Washington as Kiona very stony silt loam, 0 to 30 percent slopes (KnE) and 30 to 65 percent slopes (KnF), and Shano silt loam, 30 to 65 percent slopes (ShF).

The Kiona series consists of well-drained, very stony, medium-textured soils underlain by basalt rubble. These soils developed under bunch grasses in a mixture of windblown deposits and basalt residuum. Drainage is good, and permeability is moderate. Runoff is reported as very slow to very rapid, depending on the slope. The hazard of water erosion is reported as slight to very severe, also dependent on the slope.

The Shano series consists of well-drained, medium-textured soils that developed under bunch grasses in silty, windblown deposits. Drainage is good, and permeability is moderate. Runoff is reported as rapid to very rapid, and the hazard of water erosion is severe to very severe. The site soils are shown on the attached NRCS Soil Map, Figure 3.

Subsurface Conditions

We encountered generally similar subsurface conditions at each of the test pit locations. Beneath the surficial vegetation at test pits TP-1, TP-2, TP-3, TP-6 and TP-7, we encountered sandy silt (ML). The sandy silt had varying amounts of gravel in it. We described the sandy silt as being moist to dry, and medium dense. The sandy silt extended to depths ranging between 1 and 7 feet below grade, but generally extended to depths between 1 and 3 feet.

Beneath the sandy silt, and at the ground surface at TP-5, we encountered a silty gravel (GM). We generally described the silty gravel as fine to coarse grained with cobbles, dry and dense. The silty gravel general ranged from 1 to 2.5 feet in thickness. In TP-7, an approximate 1.5-foot layer of sandy silt was encountered within the silty gravel.

Underlying the silty gravel, and at the ground surface at TP-4, we encountered basalt bedrock. The basalt was encountered at depths ranging between about 2.5 to 8 feet below the ground surface. At TP-4, the surficial soils had been removed from atop the bedrock. We generally described the basalt bedrock as dark grey, moderately fractured, and slightly to moderately weathered. All of the test pits were terminated in the basalt bedrock.

Groundwater was not encountered in the test pits. Detailed descriptions of the soil and geologic conditions encountered in the test pits are presented on the test pit logs attached with this report. The Unified Soil Classification System chart is also included for reference.

Liquefaction

Liquefaction may occur in loose, saturated cohesionless soils when they are subjected to earthquake ground motions. Liquefaction potential at the site was evaluated using the DCP (N-value) based method outlined in Seed and Harden (1990) and using the subsurface information from the test pits. The site soils are generally comprised of sandy silt that is medium dense, and in our opinion, the groundwater table is well below the site to influence the soils during a seismic event. Additionally, the mapped maximum earthquake S_s is less than 0.5g, therefore no liquefaction analysis is required for the site. In our opinion, the chance of liquefaction occurring at the site is extremely unlikely.

Slope Stability

We developed a slope profile based on the proposed grading plan and soil information. We estimated the soil strength parameters based on our experience with similar soils. We based our slope profile on soil conditions and ground surface elevations as they currently exist with the residential improvements constructed. We evaluated the slope stability using the computer program STB2006. Over 100 critical failure areas were analyzed and reviewed. In general, geotechnical professionals consider a slope with a 1.5 or greater safety factor stable for long term conditions.

The results indicate the residential improvements have a safety factor greater than 1.5; therefore, the slope is considered stable for long term conditions. No indications of slope instability were observed during our field investigation. Based on our analysis, the placement of the structures on the property does not adversely impact the stability of the slope.

CONCLUSION AND RECOMMENDATIONS

General

Based on the results of our site explorations and general understanding of the proposed construction, it is our opinion that that the proposed residential development can generally be constructed as envisioned. Our conclusions and recommendations are based on our project understanding and experience with similar soil conditions. If soil conditions are encountered during construction that differ from those described in this report, we should be notified so that we may update our opinions and recommendations, if necessary. Specific recommendations for project design and construction are included in the following paragraphs of this report.

Pre-Wetting

Because of the dry soil conditions at the site, moisture conditioning will be necessary to facilitate the compaction of structural fill at the site and for dust control. We recommend pre-watering the areas to be excavated. By pre-watering, the moisture content of the soil can be brought to near optimum moisture content, thereby reducing the need to add water during the placement of the structural fill. Significant savings in time and effort during compaction can often be realized through pre-watering the excavation areas.

Site Preparation

Initial site preparation will include the removal of any existing vegetation from the site. We recommend that all vegetation and root zone be excavated and removed from the proposed construction area. After clearing and stripping operations are complete, we recommend that the exposed soil be scarified, moisture-conditioned, and compacted to at least 92 percent of the maximum dry density as determined by ASTM D 1557 (modified proctor) prior to construction or the placement of structural fill. Soft or pumping areas which cannot be adequately compacted should be over-excavated to firm soil or to a depth of 2 feet, whichever is less, and replaced with structural fill compacted to 95 percent of the modified proctor maximum dry density.

Structural Fill

Based on our explorations, it is our opinion that the native sandy silt and silty sand at the site are generally suitable for reuse as structural fill provided the materials are moisture conditioned for compaction and free of debris, organic material, and frozen soil. In our opinion, excavated basalt bedrock is also suitable for reuse as structural fill provided rock particles greater than about 10 inches in diameter are screened or graded out.

We recommend imported structural fill consist of granular material such as sands or gravels containing less than about 10 percent fines (material passing a No. 200 sieve). Imported structural fill should also be free of debris, organic material, frozen soil and rock particles greater than about 4 inches in diameter.

We recommend structural fill be moisture conditioned within about 2 percentage points of optimum moisture content and placed in horizontal lifts no thicker than 8 inches before compaction. We recommend structural fill be compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557 (modified proctor). For structural fill too coarse to permit density testing, greater than 30 percent retained on the $\frac{3}{4}$ -inch sieve (basalt shot rock), we recommend evaluation of compaction be accomplished through visual observation of proof-rolling. We recommend the proof-rolling be observed by a qualified geotechnical engineer to determine if the intent of the compaction specification has been achieved.

Non-structural fill should be placed in loose lifts not exceeding 12 inches in thickness and compacted to at least 85 percent of maximum dry density. Structural fill should not be placed on or over topsoil, non-structural fill, wet or frozen soils, or other unsuitable materials.

Temporary Excavations

Based on our subsurface explorations, it is our opinion the native soils can be excavated with standard soil excavation equipment. We characterized the soils encountered as Type C soils according to OSHA guidelines. We therefore recommend excavations greater than four feet deep be sloped no steeper than 1½H:1V (horizontal to vertical). Alternatively, deeper excavations may be shored or braced in accordance with OSHA specifications and local codes. We recommend excavations within fractured bedrock be sloped no steeper than ½H:1V. The project contractor will be responsible for ensuring that excavations are properly constructed for worker protection.

Slope Construction

Fill placed on slopes steeper than 5H:1V should be keyed and benched into the existing native soils or basalt bedrock. We recommend keyways be constructed 10 feet horizontally and a minimum of 5 feet vertically in locations where fill will be placed where it is greater than 5 feet in thickness. We recommend that benches be cut into the native slope a minimum of 10 feet horizontally and a minimum of 2 feet vertically. We recommend that the exposed soil of each bench be scarified, moisture-conditioned, and compacted to at least 92 percent of the maximum dry density prior to the placement of structural fill. If excavations for cut slopes expose basalt bedrock, the exposed surface should be proof-rolled as recommended above.

Fill slopes should be constructed with suitable structural fill prepared, placed and compacted as recommended above. We recommend that permanent cut and fill slopes be inclined no steeper than 2H:1V. Fill slopes should be overbuilt and then trimmed back to uniformly compacted material. The final slope surface should be track-walked or grid rolled to improve the slope's resistance to erosion. We recommend that surface drainage be directed away from all slope faces.

Slope Protection

The site soils are prone to erosion and will require protection and maintenance. Since the site soils are susceptible to wind and water erosion, it is strongly recommended that erosion control measures such as proper grading, erosion control blankets or fabrics, sprayed tackifiers, the rapid establishment of new vegetation or some combination of these, be utilized on all slopes comprised of the native soils within this project.

Foundations

Based on the data obtained from our field explorations and the test pit logs, it is our opinion that foundations for the proposed residential structures can be supported on compacted native soils, basalt bedrock, or structural fill placed on the compacted native soils or basalt bedrock. In order to reduce the potential for differential settlement, we do not recommend that foundations bear on a combination of native soils and basalt bedrock or basalt shot rock structural fill. We recommend that exterior foundations bear at least 24 inches below the exposed ground surface for frost protection or as required by local building codes.

We recommend that exposed foundation subgrades be compacted to 95 percent of the modified proctor maximum dry density. Foundation subgrades should be compacted to at least 12 inches horizontally beyond the footing perimeter. We recommend that foundation bearing surfaces be free of loose soil and debris. Foundations should not bear on topsoil, non-structural fill, or other unsuitable materials. We recommend that an experienced geotechnical engineer observe foundation subgrades to evaluate if suitable bearing soils are exposed and prepared as recommended prior to having the footing forms placed.

It is our opinion that foundations bearing on native soil prepared as recommended above may be designed using an allowable net soil bearing pressure of 1,500 pounds per square foot (psf). Foundations bearing on basalt bedrock or basalt shot rock structural fill may be designed using an allowable net bearing pressure of 4,000 psf. These bearing pressures may be increased by one-third for short-term wind and seismic conditions.

If the previous recommendations are implemented, it is our opinion that total settlement will be approximately 1 inch or less and that differential settlement will be less than ½ inch. We estimate that settlement of the native soil or structural fill occur rapidly with the application of loads during construction. If foundation subgrades become disturbed during construction and loose soil is not removed, settlements larger than those estimated may occur.

We recommend that all backfill placed on the exterior sides of the foundation walls be compacted to a minimum of 90 percent of the modified proctor maximum dry density. Beneath pads, slabs and steps, backfill should be compacted to a minimum of 95 percent of the modified proctor maximum dry density. Backfill should be brought up uniformly on both sides of foundation walls to minimize the potential for displacement.

Slope Setbacks

In accordance with IBC 2015 Section 1808.7.2 *Foundation Setback from Descending Slope Surface*, “Foundations on or adjacent to slope surfaces shall be founded in firm material with an embedment and setback from the slope surface sufficient to provide vertical and lateral support for the foundation without detrimental settlement. Where the slope is steeper than 1 unit vertical in 1 unit horizontal (100-percent slope), the required set back shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.” We recommend that the building footprint shall be setback from the top of the slope for a distance of a minimum of 10 feet and 10 feet from the bottom of the slope. The long term performance of the structure near slopes is dependent on the protection of slopes from erosion or over steepening by cutting into the toe of the slope. Lots should be maintained to prevent erosion or undermining the toe. If the slopes will be modified from their constructed configuration, we recommend properly designed retaining walls should be used.

Seismic Conditions

Based on our test pits and our review of well logs in the vicinity of the site, we interpret the site to be classified as Site Class D in accordance with Table 20.3-1 of Chapter 20 of ASCE 7. The spectral response accelerations for short periods (S_s) and a 1-second period (S_1) in the vicinity of the site were determined from Figures 1613.3.1(1) and 1613.3.1(2) of the 2015 IBC, respectively. The mapped S_s coefficient for the site is 0.424 and the mapped S_1 coefficient for the site is 0.163.

Lateral Foundation Resistance

Lateral foundation loads will be resisted by friction against the base of the foundation and the passive earth pressure acting against the sides of the foundation. For sliding resistance at the base of foundations, we recommend using a frictional coefficient of 0.4 for the contact between the foundation concrete and basalt bedrock or basalt shot rock structural fill. The passive earth pressure resulting from compacted soil backfill against the sides of foundations can be calculated as an equivalent fluid pressure using a fluid unit weight of 230 pounds per cubic foot (pcf). Both of the above values include a safety factor of about 1.5.

Concrete Slabs-On-Grade

We anticipate slab subgrades will consist of compacted native soils or structural fill. We recommend that slab subgrades be compacted to a minimum of 95 percent of the modified proctor maximum dry density. We recommend concrete slabs-on-grade be underlain by a minimum of 6 inches of crushed aggregate base. We recommend using Washington Department of Transportation (WSDOT) crushed surfacing below slabs (Standard Specification 9-03.9(3)). The crushed surfacing should be compacted to a minimum of 95 percent of the modified proctor maximum dry density.

EVALUATION LIMITATIONS

This report is for the exclusive use of Mr. Milo Bauder and his agents for use in design of the proposed project and preparation of construction documents. This report has been prepared to assist with the design and construction of the proposed Falconridge Residential Development in Richland, Washington. The information contained herein is not applicable to other sites. In the absence of our written approval, we make no representations and assume no responsibility to other parties regarding this report. The data, analyses, and recommendations presented may not be appropriate for other structures or purposes.

The analyses and recommendations submitted in this report are based on the data obtained from the test pits excavated at the locations indicated on the attached Site and Exploration Plan, Figure 2. It should be recognized that the explorations performed for this evaluation reveal subsurface conditions only at specific locations on the project site and that conditions in other areas could vary. Furthermore, the nature and extent of any such variations would not become evident until additional explorations are performed or until construction activities have begun. If significant variations are observed at that time, we may need to modify the conclusions and recommendations contained in this report to reflect the actual conditions encountered.

If there is a substantial lapse of time between the submission of this report and the start of work at the site, or if site conditions have changed due to natural causes or construction operations at or adjacent to the site, or if the basic project design is significantly modified from that assumed, we recommend that this report be reviewed to determine if the conclusions and recommendations contained herein are still applicable. Please see Important Information about Your Geotechnical Engineering Report attached to this report.

Our services consist of professional opinions and conclusions made in accordance with generally accepted geotechnical engineering principles and practices. This acknowledgement is in lieu of all warranties either expressed or implied.

We appreciate the opportunity to be of service. If you have any questions regarding this report or need additional information, please call us at (509) 890-8811.

Sincerely,

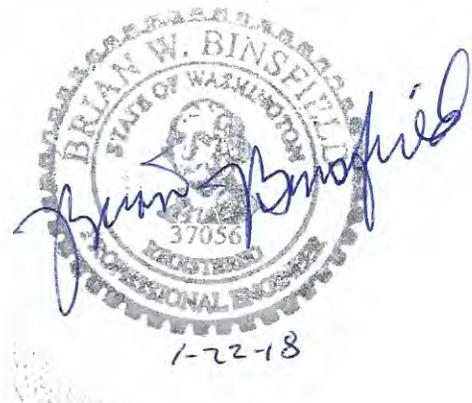
AFFORDABLE GEOTECH SERVICES, LLC



Brian W. Binsfield, P.E.
Principal Engineer

BWB/gsl

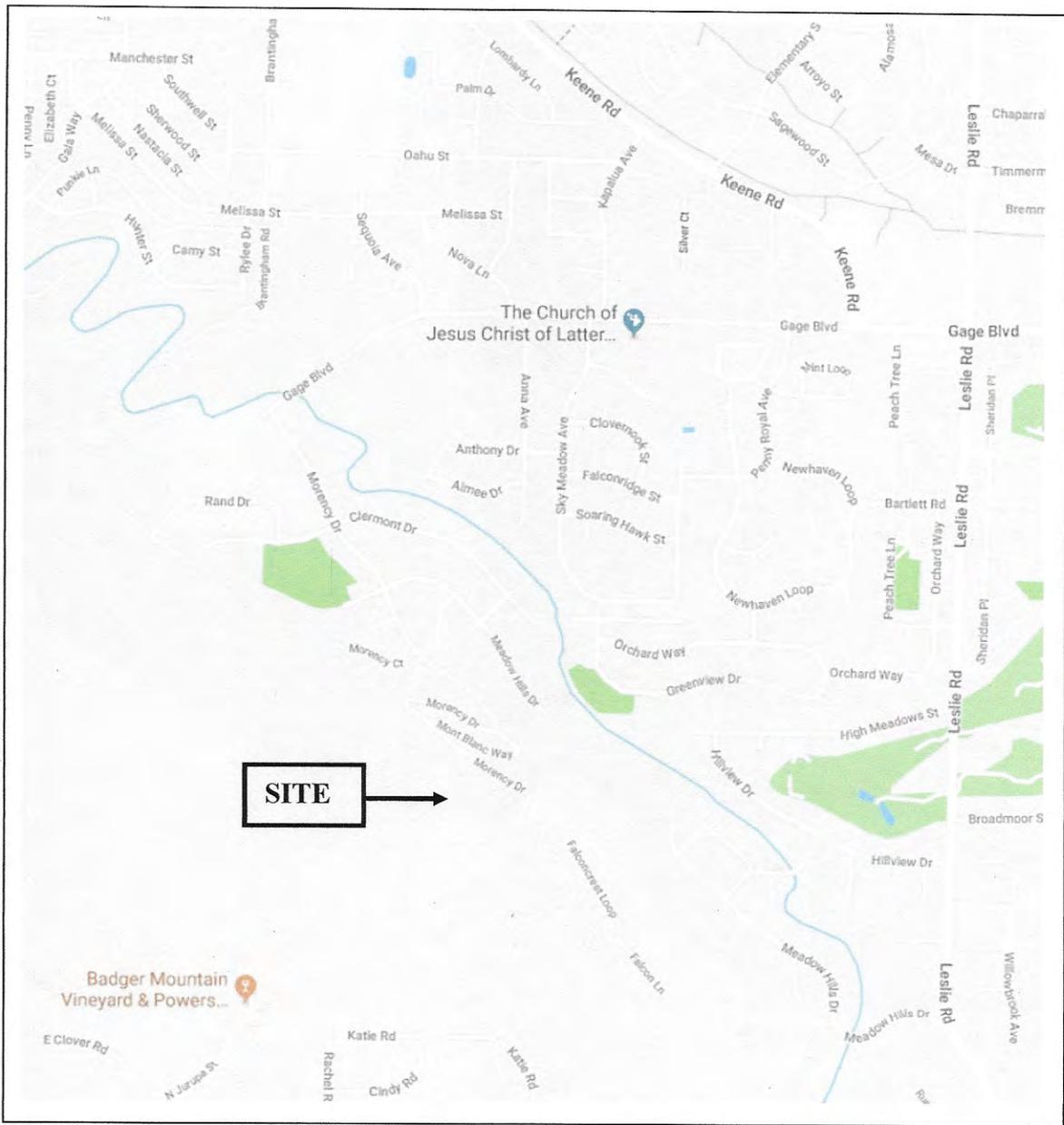
Addressee – MBauder2001@charter.net
scotbauder@gmail.com



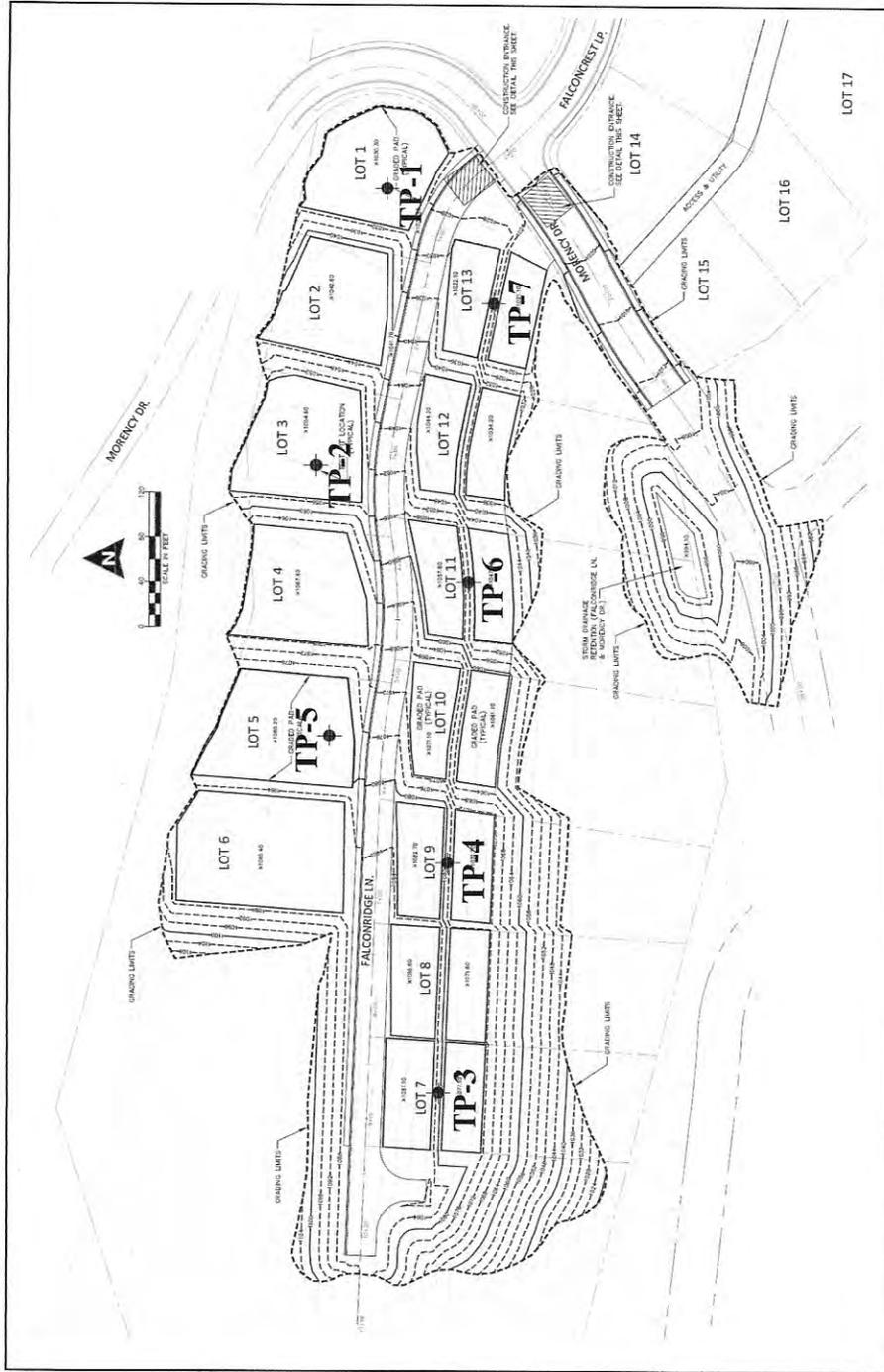
Affordable Geotech Services

• Geotechnical • Geological • Retaining Walls • Construction Observation •

Attachments: Figure 1, Vicinity Map
Figure 2, Site and Exploration Plan
Figure 3, NRCS Soil Map
Test Pit Logs (2)
Unified Soil Classification System
Sieve Analysis
Important Information About Your Geotechnical Engineering Report



| | | | |
|---|---|-------------------|-------------------------------|
|  | VICINITY MAP | | Figure 1 |
| | Falconridge Residential Development Richland, Washington | | |
| | January 2018 | Project No. 18003 | |



SITE AND EXPLORATION PLAN

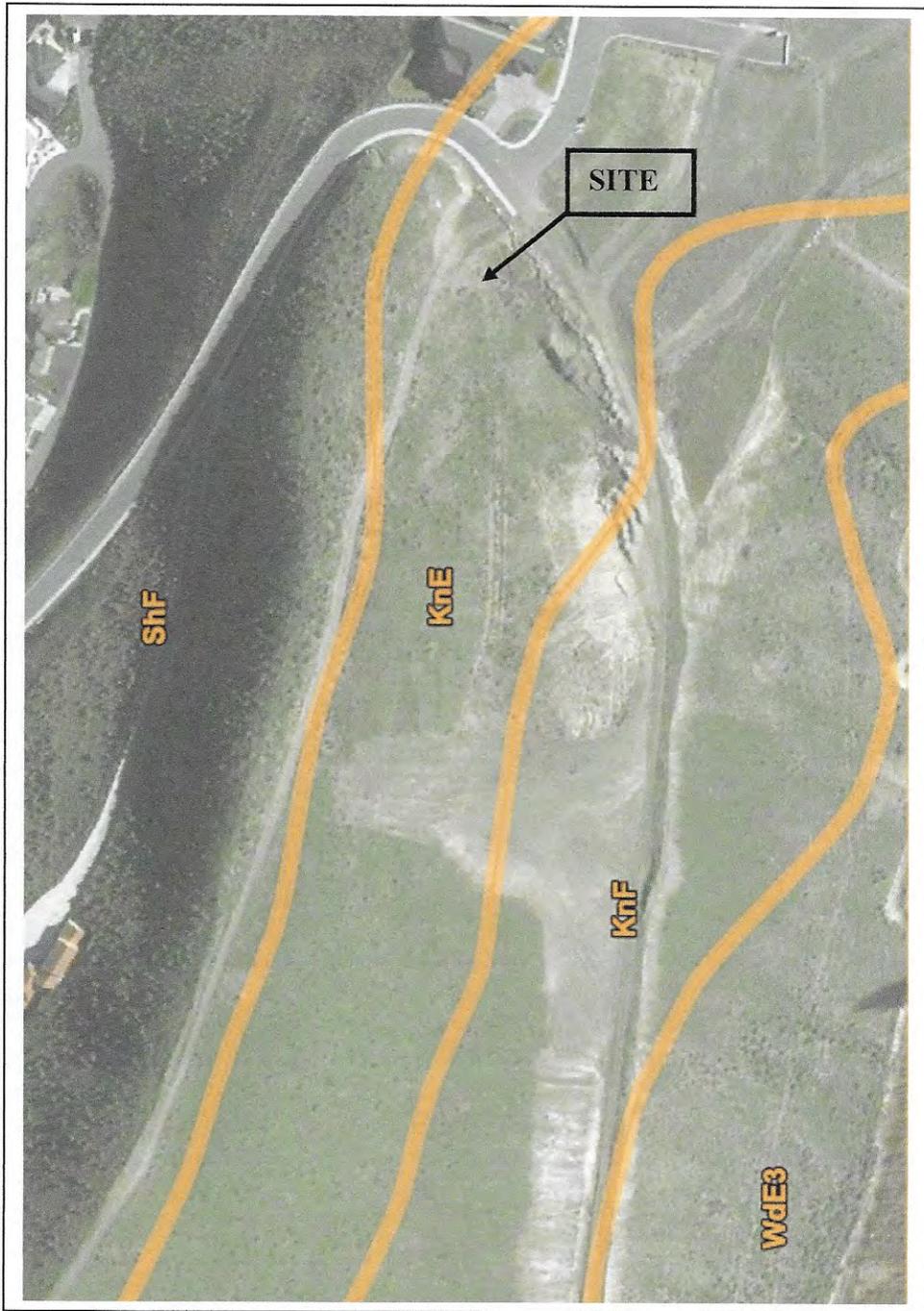
Falconridge Residential Development
 Richland, Washington

January 2018

Project No. 18003

Figure

2



NRCS SOIL MAP

Falconridge Residential Development
Richland, Washington

January 2018

Project No. 18003

Figure

3

TEST PIT LOGS

| <u>Depth (feet)</u> | <u>USCS Soil Classification</u> | <u>Location & Description</u> |
|--|-------------------------------------|--|
| <u>TP-1</u> | | |
| Lot 1, Ground Surface Elevation: 1,035.5 | | |
| 0.0 – 3.0 | ML | SANDY SILT w/ GRAVEL, lt. brown, moist to dry, medium dense |
| 3.0 – 4.0 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, dry, dense |
| 4.0 – 6.0 | Bedrock | BASALT, dk. grey, moderately fractured, moderately weathered |
| <p>Test pit terminated due to refusal at 6 feet depth on 01/09/18 No Groundwater observed No caving observed</p> | | |
| <u>TP-2</u> | | |
| Lot 3, Approximate Ground Surface Elevation: 1,060 | | |
| 0.0 – 1.5 | ML | SANDY SILT w/ GRAVEL, lt. brown, moist to dry, medium dense |
| 1.5 – 3.0 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense |
| 3.0 – 4.0 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, moist to dry, dense |
| 4.0 – 7.0 | Bedrock | BASALT, brown and grey, moderately fractured, moderately weathered |
| <p>Test pit terminated due to refusal at 7 feet on 01/09/18 No Groundwater observed No caving observed</p> | | |
| <u>TP-3</u> | | |
| Lot 7, Ground Surface Elevation: 1,070 | | |
| 0.0 – 1.5 | ML | SANDY SILT, some gravel, lt. brown, moist, medium dense |
| 1.5 – 2.5 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense |
| 2.5 – 2.7 | Bedrock | BASALT, dk. grey, moderately fractured, slightly weathered |
| <p>Test pit terminated due to refusal at 2.7 feet depth on 01/09/18 No Groundwater observed No caving observed</p> | | |
| <u>TP-4</u> | | |
| Lot 9, Approximate Ground Surface Elevation: 1,070 | | |
| 0.0 – 2.5 | Bedrock | BASALT, grey, moderately fractured, moderately weathered |
| <p>Test pit terminated due to refusal at 2.5 feet on 01/09/18 No Groundwater observed No caving observed</p> | | |

TEST PIT LOGS
 (continued)

| <u>Depth (feet)</u> | <u>USCS Soil Classification</u> | <u>Location & Description</u> |
|---|-------------------------------------|--|
| <u>TP-5</u> | | |
| Lot 5, Ground Surface Elevation: 1,086.5 | | |
| 0.0 – 2.3 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, brown, moist, dense |
| 2.3 – 2.5 | Bedrock | BASALT, dk. grey, slightly fractured, slightly weathered |
| Test pit terminated due to refusal at 2.5 feet depth on 01/09/18 No Groundwater observed No caving observed | | |
| <u>TP-6</u> | | |
| Lot 11, Ground Surface Elevation: 1,050 | | |
| 0.0 – 7.0 | ML | SANDY SILT, some gravel, lt. brown, moist to dry, medium dense |
| 7.0 – 8.0 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense |
| 8.0 – 8.5 | Bedrock | BASALT, dk. grey, moderately fractured, slightly weathered |
| Test pit terminated due to refusal at 8.5 feet depth on 01/09/18 No Groundwater observed No caving observed Bulk soil sample obtained at 2 feet depth (72.7% passing the #200 sieve) | | |
| <u>TP-7</u> | | |
| Lot 13, Ground Surface Elevation: 1,029.4 | | |
| 0.0 – 1.0 | ML | SANDY SILT, trace gravel, brown, moist, medium dense |
| 1.0 – 3.5 | GM | SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, dry, dense |
| 3.5 – 5.0 | ML | SANDY SILT, trace gravel, lt. brown, dry, loose to medium dense |
| 5.0 – 7.0 | GM | SILTY GRAVEL, fine to coarse grained, brownish white, dry, dense |
| 7.0 – 7.5 | Bedrock | BASALT, dk. grey, moderately fractured, slightly weathered |
| Test pit terminated due to refusal at 7.5 feet depth on 01/09/18 No Groundwater observed No caving observed Bulk soil sample obtained at 3½ feet depth | | |

UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2488

| MAJOR DIVISION | | GROUP SYMBOL | LETTER SYMBOL | GROUP NAME | |
|--|---|--------------------------------------|---------------|---|---|
| COARSE GRAINED SOILS CONTAINS MORE THAN 50% FINES | GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE | GRAVEL WITH * 5% FINES | | GW | Well-graded GRAVEL |
| | | | | GP | Poorly graded GRAVEL |
| | | GRAVEL WITH BETWEEN 5% AND 15% FINES | | GW-GM | Well-graded GRAVEL with silt |
| | | | | GW-GC | Well-graded GRAVEL with clay |
| | | | | GP-GM | Poorly graded GRAVEL with silt |
| | | | | GP-GC | Poorly graded GRAVEL with clay |
| | GRAVEL WITH ≥ 15% FINES | | GM | Silty GRAVEL | |
| | | | GC | Clayey GRAVEL | |
| | SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE | SAND WITH * 5% FINES | | SW | Well-graded SAND |
| | | | | SP | Poorly graded SAND |
| | | SAND WITH BETWEEN 5% AND 15% FINES | | SW-SM | Well-graded SAND with silt |
| | | | | SW-SC | Well-graded SAND with clay |
| | | | | SP-SM | Poorly graded SAND with silt |
| | | | | SP-SC | Poorly graded SAND with clay |
| SAND WITH ≥ 15% FINES | | | SM | Silty SAND | |
| | | | SC | Clayey SAND | |
| FINE GRAINED SOILS CONTAINS MORE THAN 50% FINES | SILT AND CLAY | LIQUID LIMIT LESS THAN 50 | | ML | Inorganic SILT with low plasticity |
| | | | | CL | Lean inorganic CLAY with low plasticity |
| | | | | OL | Organic SILT with low plasticity |
| | LIQUID LIMIT GREATER THAN 50 | | MH | Elastic inorganic SILT with moderate to high plasticity | |
| | | | CH | Fat inorganic CLAY with moderate to high plasticity | |
| | | | OH | Organic SILT or CLAY with moderate to high plasticity | |
| HIGHLY ORGANIC SOILS | | | PT | PEAT soils with high organic contents | |

NOTES:

- 1) Sample descriptions are based on visual field and laboratory observations using classification methods of ASTM D2488. Where laboratory data are available, classifications are in accordance with ASTM D2487.
- 2) Solid lines between soil descriptions indicate change in interpreted geologic unit. Dashed lines indicate stratigraphic change within the unit.
- 3) Fines are material passing the U.S. Std. #200 Sieve.

Affordable Geotech Services

• Geotechnical • Geological • Retaining Walls • Construction Observation •

Environmental Services
 Geotechnical Engineering
 Construction Materials Testing
 Special Inspections

Brian Binsfield
 Affordable Geotech Services, LLC
 3019 Duportail Street, Suite 174
 Richland, WA 99352

Phone: 509-948-1770
 Fax:
 Other: E-REPORTS ONLY

Project: Falcon Ridge Development- Lab Testing
Project Manager: Eric Howard
Lab Technician: David Taylor
Test Date: January 11, 2018

As requested MTI has performed sieve analysis testing on the sample referenced below. The testing was performed in accordance with current standards indicated below. The results obtained in our laboratory were as follows:

| | | | | | | | | |
|----------------------------------|-----------------------------|---|-------------|--|-------------|--|-------------|--|
| Source and Description: | TP-6 2-2 ½ Feet, Sandy Silt | | | | | | | |
| Date Obtained: | 01/09/2018 | | | | | | | |
| Sample ID: | 18-2001 | | | | | | | |
| Sampling and Preparation: | ASTM D75: | X | AASHTO T2: | | ASTM D421: | | AASHTO T87: | |
| Test Standard: | ASTM C117: | | AASHTO T11: | | ASTM D1140: | | ASTM D5444: | |
| | ASTM C136: | X | AASHTO T27: | | ASTM D422: | | AASHTO T88: | |

| Sieve Size | Percent Passing |
|------------|-----------------|
| 2" | |
| 1.5" | |
| 1" | |
| ¾" | |
| ½" | |
| 3/8" | |
| #4 | 100 |
| #8 | 99 |
| #10 | 99 |
| #16 | 98 |
| #30 | 94 |
| #40 | 92 |
| #50 | 90 |
| #100 | 85 |
| #200 | 72.7 |

If there are questions concerning this report (R180001L-011418=L=S-S182001.pdf), please contact the project manager at 971-217-3815.

Respectfully submitted,
MATERIALS TESTING & INSPECTION, INC.

Howard D Vitkus

Howard D. Vitkus, PE
 Technical Director - Portland

cc:

Important Information about Your Geotechnical Engineering Report

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.*

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not over rely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

Affordable Geotech Services

• Geotechnical • Geological • Retaining Walls • Construction Observation •

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having our geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Contactors are Responsible for Site Safety on their Own Construction Projects

Geotechnical engineers' recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and to adjacent properties.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

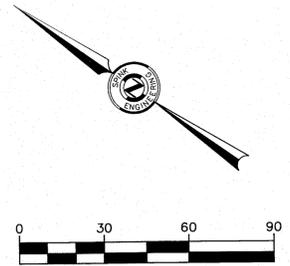
Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Affordable Geotech Services

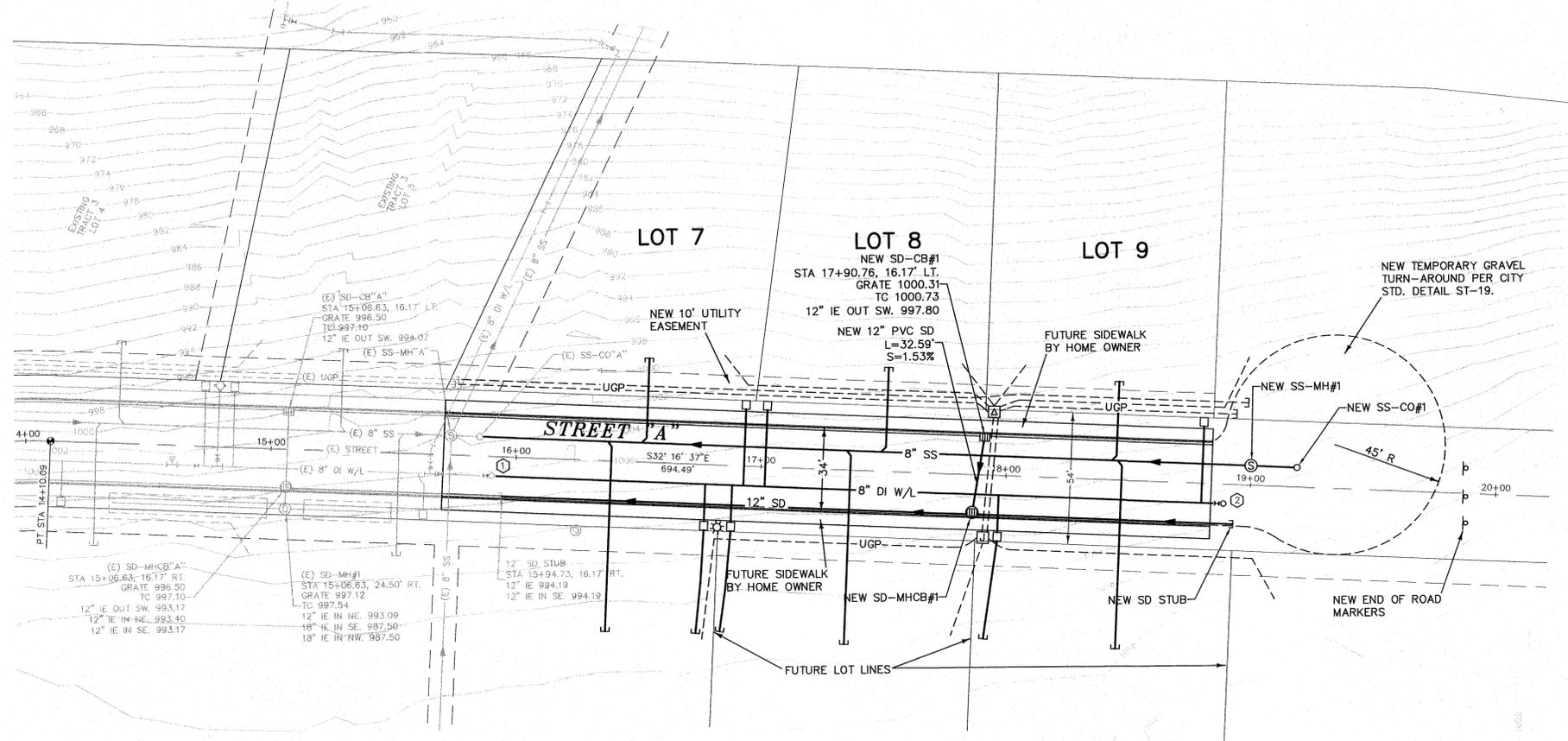
• Geotechnical • Geological • Retaining Walls • Construction Observation •

CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION



WATER FITTING SCHEDULE

- ① STA 15+90.30, 8.00' RT. REMOVE (E) 2" TEMP. BLOW-OFF ASSEMBLY. CONNECT TO (E) 8" W/L.
- ② STA 18+89.13, 8.00' RT. NEW 2" TEMP. BLOW-OFF ASSEMBLY. THRUST BLOCK.



LEGEND

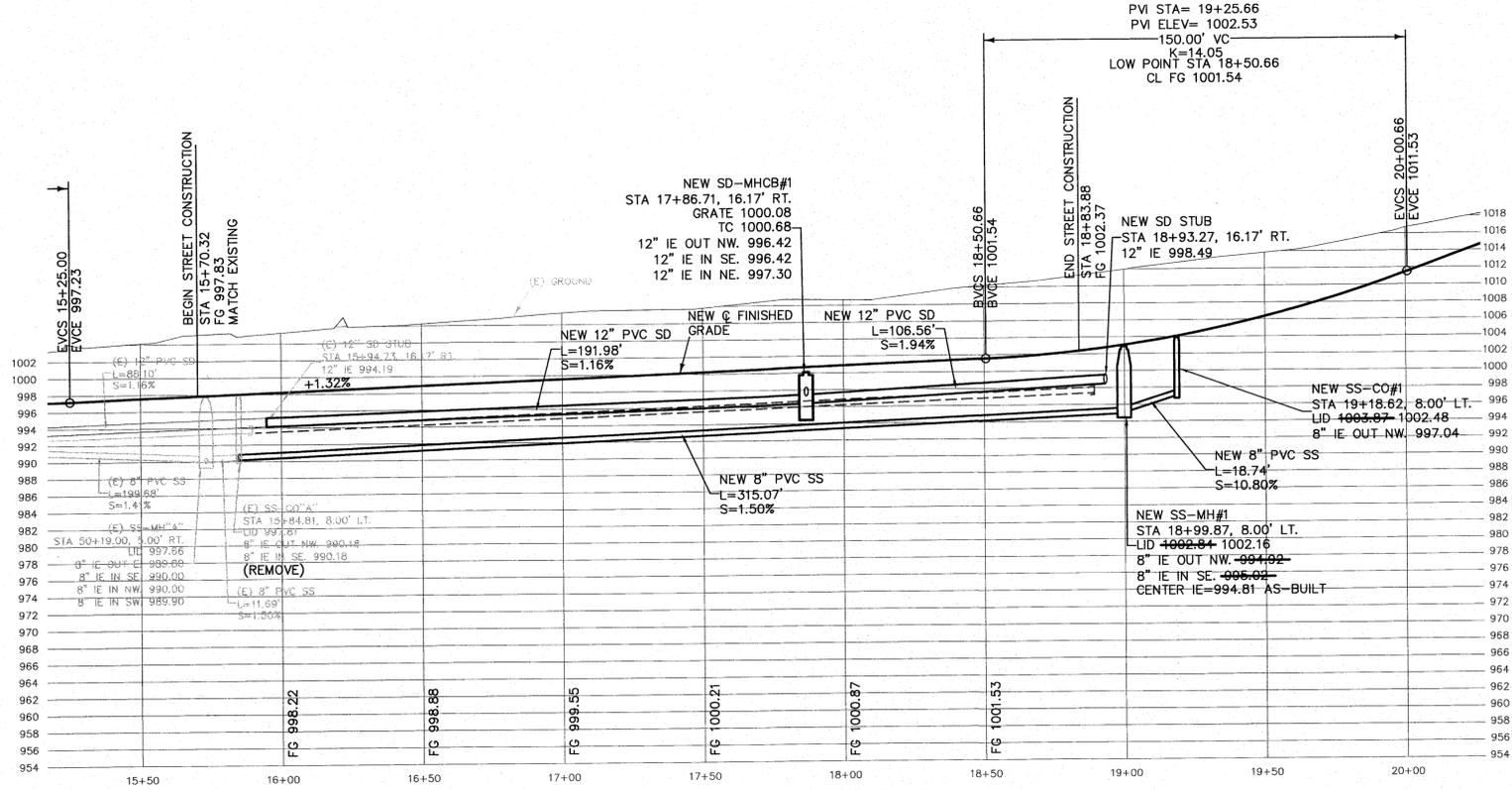
- ⊕ EXISTING FIRE HYDRANT
- ⊕ EXISTING VALVE
- ⊕ NEW VALVE
- ⊕ NEW FIRE HYDRANT
- ⊕ NEW WATER SERVICE
- ⊕ EXISTING SEWER MANHOLE
- ⊕ NEW SEWER MANHOLE
- ⊕ NEW SEWER SERVICE
- ⊕ NEW STORM DRAIN MANHOLE
- ⊕ NEW STORM DRAIN MANHOLE w/CATCH BASIN GRATE
- ⊕ NEW STORM DRAIN CATCH BASIN
- ⊕ NEW IRRIGATION SERVICE
- ⊕ NEW STREET LIGHT
- ⊕ NEW PIPE FLOW ARROW
- ⊕ NEW MONUMENT
- ⊕ NEW POWER TRANSFORMER
- ⊕ NEW POWER VAULT
- ⊕ NEW POWER JUNCTION BOX

CONSTRUCTION NOTES

1. CONTRACTOR SHALL MAINTAIN A MIN. OF 4 FEET OF COVER OVER NEW AND EXISTING WATER AND SEWER MAINS.
2. CONTRACTOR SHALL INSTALL MAIL BOX CLUSTER UNITS PER RICHLAND POST OFFICE STANDARDS. CONTRACTOR SHALL INSTALL 10 LF OF SIDEWALK IN FRONT OF MAIL BOX CLUSTER UNITS.
3. SANITARY WATER MAINS SHALL BE DUCTILE IRON CLASS 50 OR C900 PVC PIPE. SANITARY SEWER MAINS UP TO 15 FEET DEEP SHALL BE PVC SDR PIPE MEETING THE REQUIREMENTS OF ASTM D3034 AND D1869. SANITARY SEWER MAINS DEEPER THAN 15 FEET SHALL BE C900 PVC OR SDR 26 PVC, 115 PSI, MEETING THE REQUIREMENTS OF ASTM F679. STORM DRAIN LINES SHALL BE SDR 35 PVC OR CONCRETE AND SHALL MEET THE REQUIREMENTS OF ASTM D3034.
4. CONTRACTOR SHALL ADJUST NEW AND EXISTING VALVE BOXES TO GRADE AFTER PAVING.
5. LIVE WATERLINE TAPS OR CUT-IN TAPS TO EXISTING PUBLIC WATERLINES TO BE PERFORMED BY CITY CREWS AT THE DEVELOPER'S EXPENSE.
6. CONTRACTOR SHALL COORDINATE LOCATION AND CONSTRUCTION OF POWER, TELEPHONE, GAS AND TV CABLE LINES AND SERVICES WITH VARIOUS UTILITIES.
7. STORM DRAIN CATCH BASIN AND CATCH BASIN/MANHOLE STATION AND OFFSETS SHOWN ON THESE PLANS ARE TO CENTER OF GRATE.
8. PEDESTRIAN RAMPS SHALL BE TYPE 2A PER CITY OF RICHLAND STANDARD DETAIL ST-5. CONTRACTOR SHALL PROVIDE RAMP CURB CUTS ONLY, UNLESS SIDEWALK IS BEING CONSTRUCTED BY DEVELOPER.
9. ALL FIXTURES THAT REQUIRE ADJUSTMENT TO GRADE THAT ARE LOCATED OUTSIDE OF PAVED AREAS SHALL HAVE A 30"x 30"x 8" THICK CONCRETE COLLAR PER CITY STANDARDS.
10. ALL CURB RETURN RADII ARE 25 FEET TO FACE OF CURB.
11. WATER SERVICE LINES LONGER THAN 50 FEET SHALL BE UPSIZED TO 1-1/2" DIAMETER AND SHALL BE CONTINUOUS PIECES OF PIPE WITH NO COUPLINGS.
12. CONTRACTOR SHALL REMOVE AND WASTE ALL ON-SITE DEBRIS PRIOR TO CONSTRUCTION.

ABBREVIATIONS

- (E) EXISTING
- SS SANITARY SEWER
- SD STORM DRAIN
- MH MANHOLE
- CB CATCH BASIN
- W/L WATERLINE
- STA STATION
- IE INVERT ELEVATION
- L LENGTH
- R RADIUS
- S SLOPE
- VC VERTICAL CURVE
- BVCS BEGIN VERTICAL CURVE STATION
- EVCS END VERTICAL CURVE STATION
- IRR IRRIGATION
- UGP UNDERGROUND POWER
- ACP ASPHALT CONCRETE PAVEMENT
- FG FINISHED GRADE
- PR PEDESTRIAN RAMP
- HMA HOT MIXED ASPHALT
- LS LANDSCAPING
- R/W RIGHT-OF-WAY



STREET "A" PROFILE

SCALE: 1"=30' HORIZ.
1"=10' VERT.

AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.

CREST TRACT 4
 RICHLAND WASHINGTON

DESIGN FOR:
MILO BAUDER
 2495 MORENCY DR.
 RICHLAND, WA 99352
 (509) 521-1608

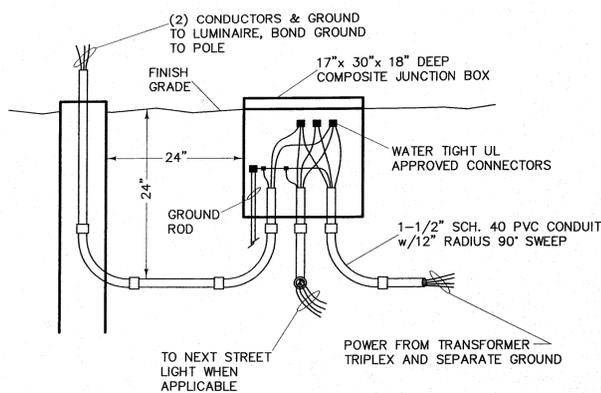
| REV# | DATE | DESCRIPTION | BY | APP'D |
|------|---------|--------------------------|-----|-------|
| 2 | 12/5/11 | RECORD DRAWING AS-BUILTS | SWS | RJS |
| 1 | 7/18/11 | REVISED PER CITY REVIEW | SWS | RJS |

SPINK ENGINEERING, LLC.
 1045 JADWIN AVE., SUITE E
 RICHLAND, WASHINGTON 99352
 (509) 946-1581

ST. "A" PLAN & PROFILE

| | |
|---------------|--------------|
| 10136-PH3.DWG | SHEET 2 OF 5 |
| DATE: 6/12/11 | JOB # 11-125 |
| DRAWN BY: SWS | |





STREET LIGHT JUNCTION BOX DETAIL

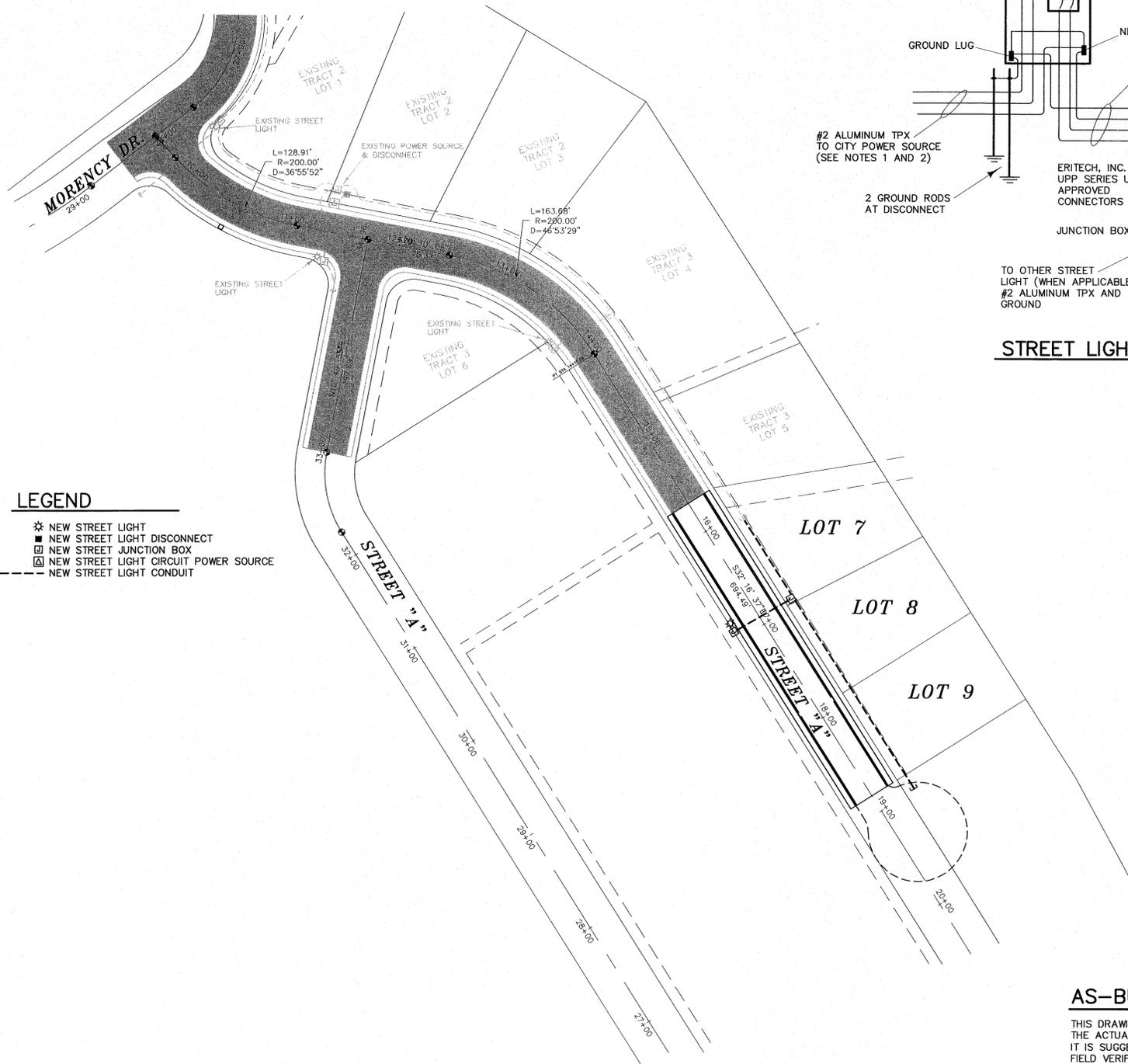
1. SET JUNCTION BOX IN THE PROPER LOCATION SUCH THAT IT IS AS LITTLE OVER 24" FROM STREET LIGHT FOUNDATION AS POSSIBLE. SOIL UNDER BOX SHALL BE RESTORED TO 95% COMPACTION. SET BOX AT AN ELEVATION SUCH THAT THE TOP OF THE BOX COVER IS APPROXIMATELY 2" ABOVE FINISHED GRADE UNLESS BOX IS TO BE SURROUNDED BY ASPHALT OR CONCRETE. SET BOX LEVEL WITH AND PARALLEL TO STREET.
2. SWEEP CONDUIT UP INTO JUNCTION BOX A MINIMUM OF 6". INSTALL BELL ENDS OR BUSHINGS ON ALL EXPOSED CONDUIT ENDS IN JUNCTION BOX.
3. ALLOW SUFFICIENT SLACK IN CONDUCTORS SUCH THAT SPLICES MAY BE REMOVED A MINIMUM 36" FROM SPLICE BOX.
4. JUNCTION BOXES SHALL BE COMPOSOLITE AS MANUFACTURED BY QUAZITE CORPORATION OR APPROVED EQUAL. BOXES SHALL BE CONCRETE GRAY COLOR IN APPEARANCE. COVER SHALL UTILIZE A PENTA-HEAD BOLT TO SECURE IT TO BOX. THE COVER SHALL HAVE THE LOGO "STREET LIGHTING" PERMANENTLY MARKED ON IT.

STREET LIGHTING NOTES

1. STREET LIGHT SYSTEM TO BE FURNISHED AND INSTALLED IN CONFORMANCE WITH CITY OF RICHLAND ENERGY SERVICES STANDARD SPECIFICATIONS REGARDING INSTALLATION AND MATERIALS.
2. CONTRACTOR TO OBTAIN AND HAVE ON-SITE TECHNICAL SPECIFICATIONS TS-STRLT AND MATERIAL SPECIFICATIONS MS-STRLT. COPIES ARE AVAILABLE AT THE CITY OF RICHLAND ENERGY SERVICES DEPARTMENT.
3. LUMINAIRE MOUNTING HEIGHT - 28'
LAMP WATTAGE - 100 WPS 120 V
4. THE INSTALLING ELECTRICIAN MUST GET A PERMIT FROM THE STATE DEPARTMENT OF LABOR AND INDUSTRIES AND HAVE THEIR APPROVAL OF THE SYSTEM PRIOR TO THE CITY HOOKING UP POWER.
5. AFTER CONSTRUCTION IS COMPLETED, THE FOLLOWING MUST BE PERFORMED PRIOR TO CITY HOOK-UP (ENERGIZATION).
 - A. ELECTRICIAN MUST PERFORM MEGGER TEST IN THE PRESENCE OF AN EMPLOYEE OF RICHLAND'S ELECTRICAL ENGINEERING DEPT.
 - B. ELECTRICIAN MUST PERFORM A FUNCTIONAL TEST OF THE LIGHTING SYSTEM IN THE PRESENCE OF AN EMPLOYEE OF RICHLAND'S ELECTRICAL ENGINEERING DEPT.
 - C. MYLAR AS-BUILT DRAWINGS MUST BE PROVIDED TO THE CITY. DRAWINGS ARE TO BE 24"x 36" MYLAR AND SUBMITTED TO CIVIL AND ENVIRONMENTAL ENGINEERING DEPARTMENT OF THE CITY. THE DRAWINGS MUST DENOTE EACH AND ALL (BUT NOT LIMITED TO) THE FOLLOWING: WIRE SIZE, CONDUIT SIZE, DISCONNECT(S), JUNCTION BOXES, POLE HEIGHTS AND POINT OF FEED, LIGHT SIZE AND TYPE MUST ALSO BE INCLUDED AS WELL AS MATERIAL CATALOG/PRODUCT NUMBERS.
6. CITY OF RICHLAND ELECTRICAL DEPARTMENT WILL PROVIDE ELECTRICAL SERVICE TO POINT OF CONNECTION OF LIGHTING SYSTEM. COST OF SERVICE IS TO BE PAID BY CONTRACTOR.
7. CONTRACTOR SHALL WARRANT, IN WRITING, THE LIGHTING SYSTEM FOR ONE YEAR AFTER ENERGIZATION OF THE SYSTEM.
8. CENTER OF STREET LIGHT POLES TO BE LOCATED 2' BEHIND THE BACK OF CURB.
9. CONTRACTOR TO ACQUIRE POLE NUMBER TAGS FROM WAREHOUSE AT CITY SHOPS AND ATTACH TAGS TO STREET SIDE OF POLES PER CITY OF RICHLAND SPECIFICATIONS. POLES TO BE NUMBERED AS SHOWN ON PLAN.

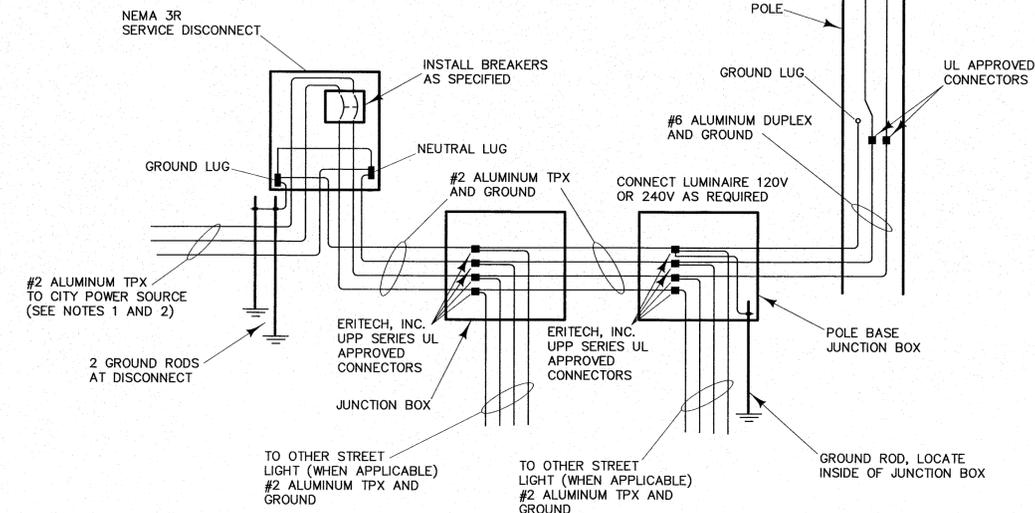
LEGEND

- ✱ NEW STREET LIGHT
- NEW STREET LIGHT DISCONNECT
- NEW STREET JUNCTION BOX
- ▣ NEW STREET LIGHT CIRCUIT POWER SOURCE
- NEW STREET LIGHT CONDUIT



NOTES

1. IF POWER SOURCE IS OVERHEAD POWER LINE, EXTEND CONDUIT TO WITHIN 1' OF CITY POLE AND LEAVE APPROXIMATELY 50' OF #2 ALUM. TPX HANGING OUT OF CONDUIT FOR CITY CONNECTION.
- IF POWER SOURCE IS PAD MOUNT TRANSFORMER OR UNDERGROUND JUNCTION BOX, EXTEND CONDUIT INTO VAULT OR JUNCTION BOX WITH CITY OVERSIGHT AND LEAVE 5' OF #2 ALUM. TPX FOR CITY CONNECTION.
2. CITY OF RICHLAND TO PROVIDE POWER SOURCE CONNECTIONS.



STREET LIGHT STANDARD WIRING DIAGRAM

AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.

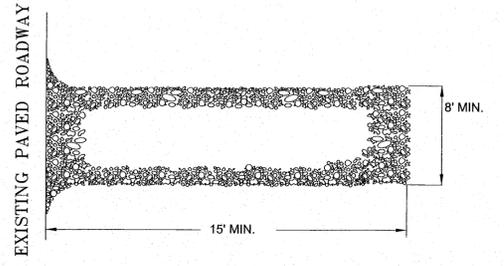
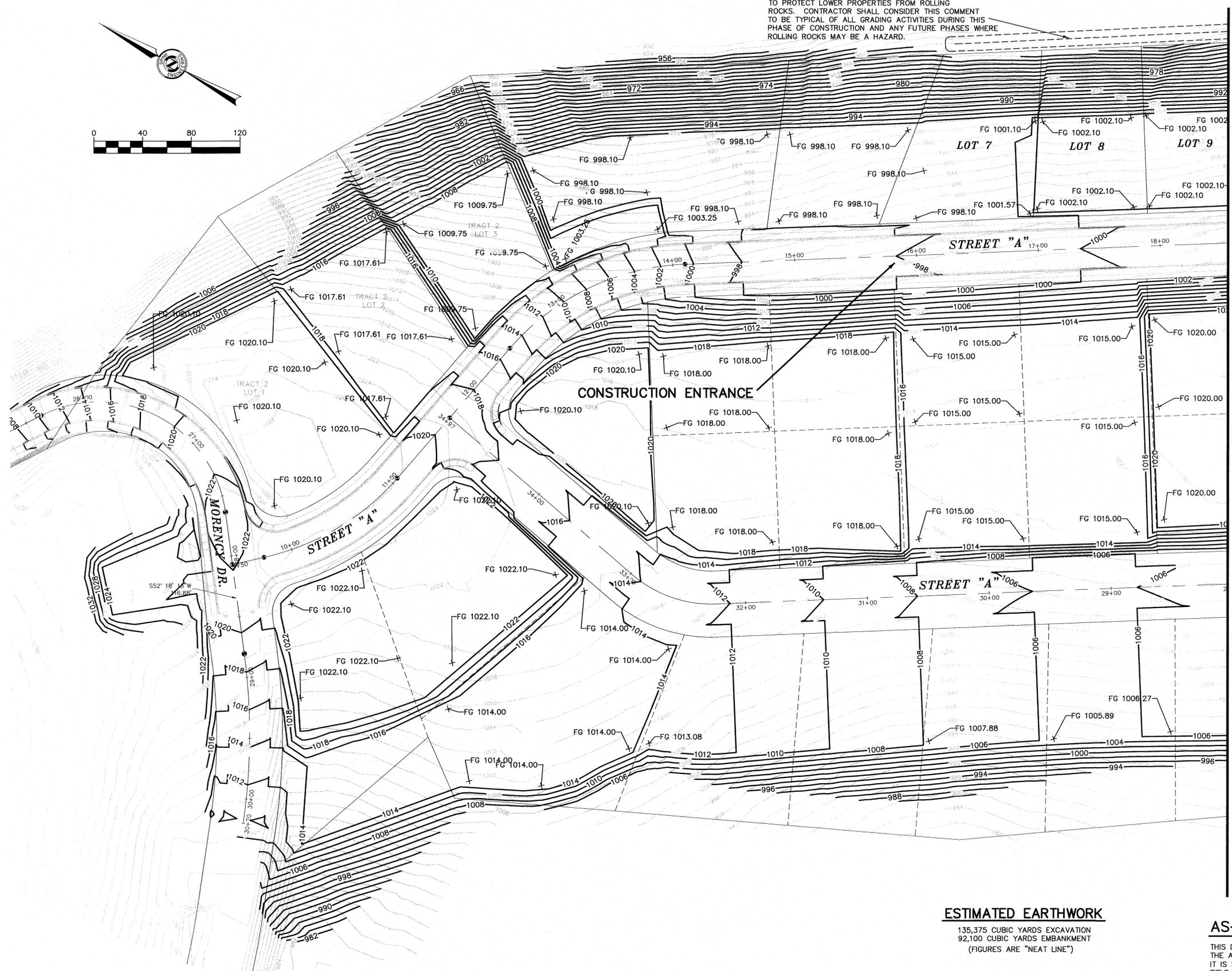
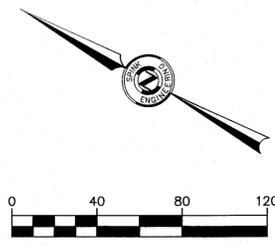


STREET LIGHT PLAN

| | | | | | | | | | |
|--|--|--|--|---|--|--|--|--|--|
| <p>CREST TRACT 4</p> <p>RICHLAND WASHINGTON</p> | | <p>DESIGN FOR:</p> <p>MILO BAUDER</p> <p>2495 MORENCY DR. RICHLAND, WA 99352 (509) 521-1608</p> | | <p>1 12/5/11 RECORD DRAWING AS-BUILTS SWS RJS</p> <p>REV. DATE DESCRIPTION BY APP'D</p> | | <p>SPINK ENGINEERING, LLC.</p> <p>1045 JADWIN AVE., SUITE E RICHLAND, WASHINGTON 99352 (509) 946-1581</p> | | <p>10136-PH3.DWG</p> <p>DATE: 6/12/11 SHEET 3 OF 5</p> <p>DRAWN BY: SWS JOB # 11-125</p> | |
|--|--|--|--|---|--|--|--|--|--|

CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

CONTRACTOR TO CONSTRUCT EARTH BERM TO PROTECT LOWER PROPERTIES FROM ROLLING ROCKS. CONTRACTOR SHALL CONSIDER THIS COMMENT TO BE TYPICAL OF ALL GRADING ACTIVITIES DURING THIS PHASE OF CONSTRUCTION AND ANY FUTURE PHASES WHERE ROLLING ROCKS MAY BE A HAZARD.



- NOTES:**
1. INSTALL AS SOON AS POSSIBLE, PRIOR TO BEGINNING CLEARING OR GRADING.
 2. USE 2-TO-3 INCH FRACTURED AGGREGATE STONE WITH MINIMAL FINES.
 3. ENTRANCE MUSE BE AT LEAST 8- FEET WIDE AND 15- FEET LONG.
 4. REPLACE AS NEEDED WHEN FULL OF SEDIMENT, AND TO MAINTAIN SIX- INCH DEPTH.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

EROSION/SEDIMENTATION CONTROL (ESC) NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE, AT ALL TIMES, DURING CONSTRUCTION FOR EROSION AND SEDIMENTATION CONTROL. THE CONTRACTOR SHALL INSTALL A SILT FENCE AND/OR STRAW BALES AROUND PERIMETER OF PROJECT SITE, IF NEEDED, TO PROTECT ADJACENT PROPERTIES FROM WIND BLOWN DUST & SAND AND FROM SEDIMENTATION TRANSPORTED BY WATER RUN-OFF.
2. THE ESC FACILITIES, IF NEEDED, MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
3. DURING THE CONSTRUCTION PERIOD ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
4. AT NO TIME SHALL MORE THAN 1 FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
5. ALL DISTURBED AREAS SHALL BE HYDRO- SEEDING AT THE COMPLETION OF THIS PROJECT.

GENERAL NOTES

1. CONTOURS SHOWN ON THIS PLAN ARE FINISHED GRADE.
2. GRADING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING EVALUATION PREPARED BY "ALLWEST MATERIALS TESTING," DATED DECEMBER 31, 2008, AND ALL ADDENDA.

ESTIMATED EARTHWORK

135,375 CUBIC YARDS EXCAVATION
92,100 CUBIC YARDS EMBANKMENT
(FIGURES ARE "NEAT LINE")

AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.



OVERALL GRADING PLAN

CREST TRACT 4
LOTS 7, 8, & 9
RICHLAND WASHINGTON

DESIGN FOR:
MILO BAUDER
2495 MORENCY DR.
RICHLAND, WA 99352
(509) 521-1608

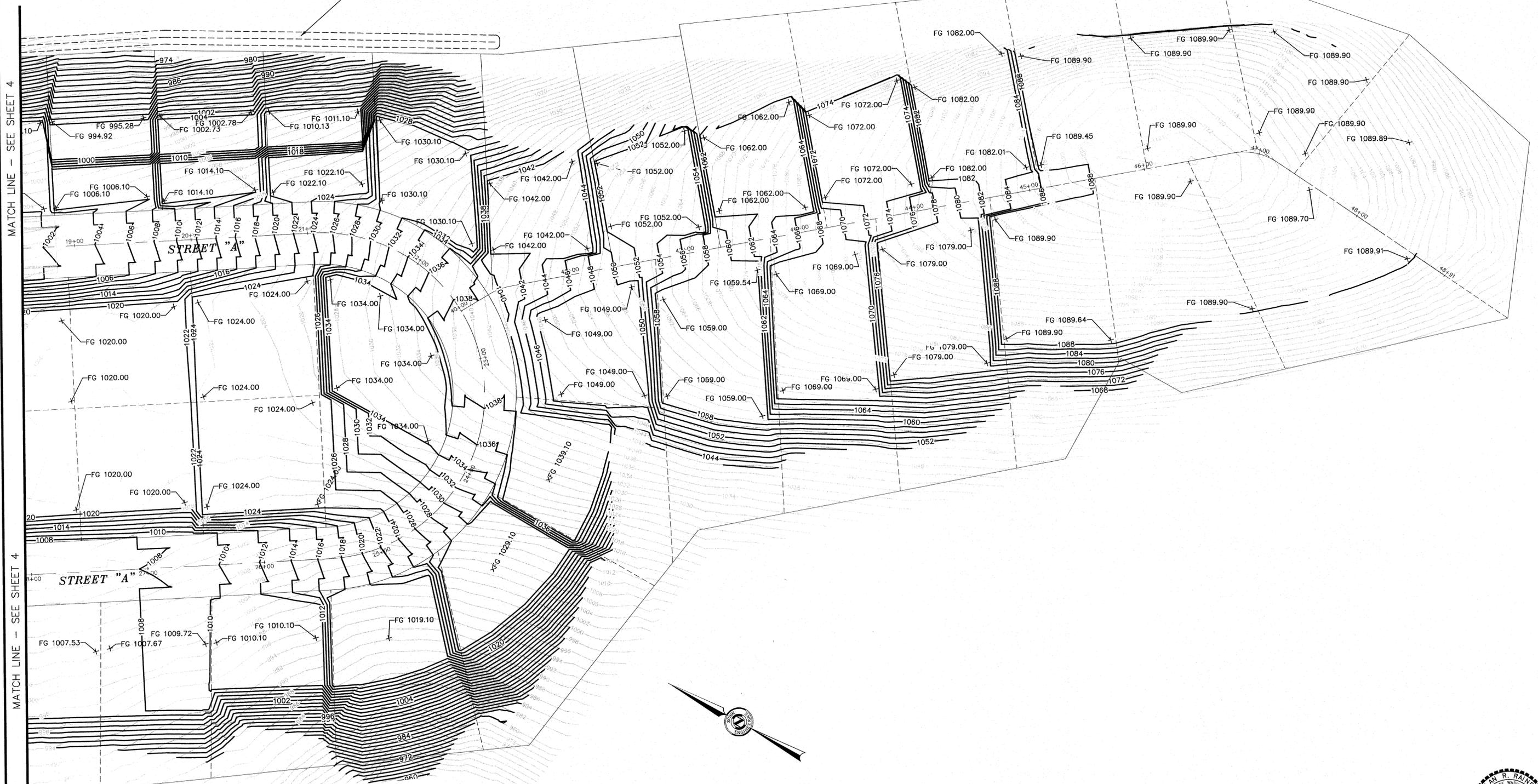
| REV. | DATE | DESCRIPTION | SWS | RJS | APP'D |
|------|---------|--------------------------|-----|-----|-------|
| 1 | 12/5/11 | RECORD DRAWING AS-BUILTS | | | |

SPINK ENGINEERING, LLC.
1045 JADWIN AVE., SUITE E
RICHLAND, WASHINGTON 99352
(509) 946-1581

| | | |
|---------------|---------------|--------------|
| 10136.DWG | DATE: 6/12/11 | SHEET 4 OF 5 |
| DRAWN BY: SWS | JOB # 11-125 | |

CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

CONTRACTOR TO CONSTRUCT EARTH BERM TO PROTECT LOWER PROPERTIES FROM ROLLING ROCKS. CONTRACTOR SHALL CONSIDER THIS COMMENT TO BE TYPICAL OF ALL GRADING ACTIVITIES DURING THIS PHASE OF CONSTRUCTION AND ANY FUTURE PHASES WHERE ROLLING ROCKS MAY BE A HAZARD.



MATCH LINE - SEE SHEET 4

MATCH LINE - SEE SHEET 4



AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.



OVERALL GRADING PLAN

| | | | | | | | | | |
|--|-------------------|--|--|--|--|---|---------------------|------------------|-----------------------------------|
| <p>CREST TRACT 4 LOTS 7, 8, & 9</p> | | <p>DESIGN FOR: MILO BAUDER 2495 MORENCY DR. RICHLAND, WA 99352 (509) 521-1608</p> | | <p>1 12/5/11 RECORD DRAWING AS-BUILTS SWS RJS REV. DATE DESCRIPTION BY APP'D</p> | | <p>SPINK ENGINEERING, LLC. 1045 JADWIN AVE., SUITE E RICHLAND, WASHINGTON 99352 (509) 946-1581</p> | | <p>10136.DWG</p> | <p>DATE: 6/12/11 SHEET 5 OF 5</p> |
| <p>RICHLAND</p> | <p>WASHINGTON</p> | | | | | <p>DRAWN BY: SWS</p> | <p>JOB # 11-125</p> | | |



State of Washington
Department of Fish and Wildlife
Habitat Program
2620 North Commercial Avenue, Pasco, WA 99301
Phone: (509) 543-3319, E-mail, Michael.Ritter@dfw.wa.gov

MWR-10-19

June 5, 2019

Spink Engineering
Steve Spink
Richland, WA 99352

Dear Mr. Spink,

Thank you for contacting the Washington Department of Fish and Wildlife (WDFW) regarding the plat submittal packages in the City of Richland for Skyline South and Falcon Ridge II.

WDFW appreciates the foresight by the City to have you contact us as an initial step to identify and address any issues related to Priority Habitats and Species (PHS), and other important natural resources.

Based on my review of the WDFW PHS database and Google Earth, there are no PHS issues such as shrub-steppe habitat or animal species occurrences associated with either preliminary plat.

While the PHS databases identifies that entire ridgeline and hill sides of Falcon Ridge II as priority shrub-steppe habitat, Google earth reveals that most if not all of the land are for Falcon Ridge II was previously disturbed.

Please contact me with any questions.

Sincerely,

Michael Ritter
Habitat Biologist

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

USE OF CHECKLIST FOR NONPROJECT PROPOSALS:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable: Plat of Falconridge
2. Name of applicant: Bauder Homes LLC
3. Address and phone number of applicant and contact person:
2742 Falconcrest Loop, Richland WA 99352
4. Date checklist prepared: 1-20-2020
5. Agency requesting checklist: City of Richland Planning Department
6. Proposed timing or schedule (including phasing, if applicable):
Summer 2020-Fall 2022 (tentative)
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
None
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No
10. List any government approvals or permits that will be needed for your proposal, if known.
Planning department approval of subdivision, Public Works department approval of construction plans
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
27 lot Long Plat

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Intersection of Falconcrest and Morency

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

25%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Gravel, rock, clay

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Minor grading for new roads & house pads (mostly completed already under prior permits)

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? 10%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Engineered storm drain system to be installed as part of road construction

2. AIR

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Minor dust during construction phase

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust control during construction including water trucks & sprinklers

3. WATER

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water only; flow will be to engineered storm drain system

2) Could waste materials enter ground or surface waters? If so, generally describe.

No

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Engineered storm drain system

4. PLANTS

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Minimal - site is mostly cleared & grubbed already

c. List threatened and endangered species known to be on or near the site.

None

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping around 27 single family homes

e. List all noxious weeds and invasive species known to be on or near the site.

None

5. ANIMALS

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

Songbirds

b. List any threatened and endangered species known to be on or near the site.

None

c. Is the site part of a migration route? If so, explain.

No

d. Proposed measures to preserve or enhance wildlife, if any:

None

e. List any invasive animal species known to be on or near the site.

None

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy efficient house design

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

None

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None

4) Describe special emergency services that might be required.

5) Proposed measures to reduce or control environmental health hazards, if any:

None

B. NOISE

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

None

3) Proposed measures to reduce or control noise impacts, if any:

None

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Site is currently vacant. Adjoining parcels are single family homes

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

R-1-10

f. What is the current comprehensive plan designation of the site?

g. If applicable, what is the current shoreline master program designation of the site?

NA

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

100

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None

9. HOUSING

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

27 middle income single family homes

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

- c. Proposed measures to reduce or control housing impacts, if any:

None

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

30'

- b. What views in the immediate vicinity would be altered or obstructed?

None

- c. Proposed measures to reduce or control aesthetic impacts, if any:

None

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Normal household lighting

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

- c. What existing off-site sources of light or glare may affect your proposal?

None

- d. Proposed measures to reduce or control light and glare impacts, if any:

None

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?

Hiking on Friends of Badger Mountain & City of Richland hiking trails

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

No

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

None

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

14. TRANSPORTATION

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Morency Dr; Falconcrest Loop. New roads will connect to existing

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, part of Ben Franklin Transit system. Nearest stop 1.5 miles

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Construction of new public roads

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

270 trips per day, mostly during peak use hours

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

- h. Proposed measures to reduce or control transportation impacts, if any:

None

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. UTILITIES

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

b. Describe the utilities that are proposed for the project, the utility providing the service,
and the general construction activities on the site or in the immediate vicinity which might
be needed.

Electricity, water, sewer, cable TV, telephone

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the
lead agency is relying on them to make its decision.

Signature: _____

Name of signee _____

Position and Agency/Organization _____

Date Submitted: _____