City of Ketchum
Planning & Building

STAFF REPORT
KETCHUM PLANNING AND ZONING COMMISSION
MEETING OF FEBRUARY 9, 2021

| | |
|---|---|
| PROJECT: | Westcliff Townhomes Pre-Application Design Review |
| FILE NUMBER: | P21-007 |
| APPLICATION TYPE: | Pre-Application Design Review |
| REPRESENTATIVE: | Peter & Kristin Anderson, Anderson Architecture, P.A. |
| PROPERTY OWNER: | PB Investments |
| REQUEST: | Pre-Application Design Review for the development of four new detached townhome units and associated site improvements located at the southwest corner of Rember Street and Bird Drive. |
| LOCATION: | 106 & 110 Rember Street (Bavarian Village Subdivision: Lots 3A & 4A) |
| ZONING: | General Residential (GR-L) High Density |
| OVERLAY: | None |

## NEW DETACHED TOWNHOME DEVELOPMENT

The Westcliff Townhomes is a new four-unit, multi-family residential development located at 106 and 110 Rember Street within the General Residential High Density (GR-H) Zoning District. The development is comprised of four identical detached townhome units and associated site improvements.

Pre-Application Design Review is required for all new multi-family residential development of five or more units (Ketchum Municipal Code §17.96.010.C1). While not required for this project, the applicant has chosen to submit a Pre-Application to receive feedback from the Planning & Zoning Commission. The Pre-Application is an iterative and collaborative process between the Planning & Zoning Commission, developers and their design teams, and the community. This preliminary review allows the Commission to identify design issues, offer constructive advice, and highlight opportunities to improve project. The Commission's feedback helps developers produce high-quality buildings and projects that enhance the character of Ketchum.

The Westcliff Townhomes project requires both Design Review for the development of multi-family residential dwellings (Ketchum Municipal Code §17.96.010.A3) and a Townhouse Subdivision Preliminary Plat to create the townhouse sublots (Ketchum Municipal Code §16.04.080). Additionally, the developer plans to offer units for sale individually as construction is completed and will submit a

Phased Development Plan and Agreement for review concurrently with the Subdivision Preliminary Plat application (Ketchum Municipal Code §16.04.110).

## PROJECT LOCATION

The project is located on Lots 3A and 4A of Bavarian Village Subdivision. The Ketchum City Council approved Lot Line Shift Application P20-089 to vacate the common boundary line separating Lot 3A and 4A of Bavarian Village Subdivision to create amended Lot 3B on November 16th, 2020. This development parcel is the last undeveloped property within Bavarian Village Subdivision. The Bavarian Village Townhomes, a two-unit multi-family project, is currently under construction on lot 2 to the west of the subject property. The West Ketchum Residences, a ten-unit duplex development, is currently under construction on the four lots south of the subject development site.

## ANALYSIS

The General Residential High Density (GR-H) District's purpose (Ketchum Municipal Code §17.18.060) is to accommodate the need for high density residential land use alternatives within a district generally limited to residential uses while still maintaining neighborhood amenities and favorable aesthetic surroundings. Dimensional requirements in this zone are designed to complement and enhance neighborhoods and to encourage articulation and quality design in new buildings.

The project plans for the Westcliff Townhomes development are attached as Exhibit A to the Staff Report. The three-level townhome units have identical floor plans (Project Plans: Sheets A3 & A4). Each townhome unit has a total floor area of 3,737 square feet. The total gross floor area of the townhome development is 14,948 gross square feet. The applicant's FAR calculations on Sheet A1 of the project plans include a 2,800-square-foot parking credit for groundwater issues. The project site's groundwater issues must be verified by an Idaho-licensed engineer (Ketchum Municipal Code §17.124.040.B.2b). The applicant has submitted a geotechnical report for the subject property (Exhibit A). If the city determines that the site conditions preclude underground parking, 350-square-feet per required parking space may be subtracted from the project's total square footage. The project's proposed FAR with the parking credit for groundwater issues is .67. The permitted FAR in the GR-H Zone is 0.5. The Planning & Zoning Commission may allow an increased FAR subject to Design Review (Ketchum Municipal Code §17.124.040.B). Ketchum Municipal Code does not guarantee 1.4 as the allowed FAR. New developments may be permitted an increased FAR above 0.5 at the Commission's discretion through Design Review. To receive more floor area, new buildings must complement the scale and character of the surrounding neighborhood.

The circulation design includes four driveways—two along Rember Street and two along Bird Drive. Pursuant to Ketchum Municipal Code §17.125.030.H, a maximum of 35% of the linear footage of any street frontage may be devoted to access off-street parking. Corner lots may select either or both streets as access but shall still not devote more than 35% of the total linear footage of street frontage to access off-street parking. 33% of the property's street frontage along Rember Street and 25% of the street frontage along Bird Drive will be dedicated to off-street parking access. 29% of the corner lot's street frontage is dedicated to the development's four driveways. The paver driveways will be heated with a snowmelt system. The driveway to access the interior townhome unit (building 1/sublot 1) at the southwest corner of the development site is 150 feet in length. This driveway spans the entire length of the rear property line. The applicant has proposed a 6-foot tall privacy fence to screen this driveway. The privacy screen is comprised of a stained concrete base with steel posts and cedar boards. An elevation of the privacy screen is provided on Sheet L-2.0 of the project plans.

The project's exterior materials include metal panels, stone veneer, and horizontal cedar siding. Each façade incorporates both metal panels and cedar siding with rectangular window openings. This material differential creates visual interest. The interior vertical circulation corridor is distinguished at the front façade by columns of stone veneer and rectangular windows. The townhomes include balconies and decks that move the vertical wall planes in and out. The building mass is broken up further by alterations in the height of the flat roof.

The site plan indicates a new transformer located at the northeast corner of the property. The applicant commented (Exhibit B) that the transformer must be visible for service access from the street with no obstructions within 10 feet on one side and 2 feet on the other side. Pursuant to Ketchum Municipal Code §17.96.060.D2, utilities shall be located underground and all utility, power, and communication lines within the development site shall be concealed from public view. All utilities, including transformers, must be concealed from public view. The location of the new transformer as approved by Idaho Power and the screening required by Ketchum Municipal Code §17.96.060.D2 must be shown on the project plans submitted with the Design Review application.

## STAFF RECOMMENDATION

After considering the project plans, Staff's analysis, the applicant's presentation, and public comment, Staff recommends the Commission provide feedback to the applicant regarding the project plans.

## EXHIBITS:

A. Westcliff Townhomes Pre-Application Design Review Submittal
B. Planning Review #1 Comments and Applicant Response

# Exhibit A:

# Westcliff Townhomes

# Pre-Application Design Review Submittal

City of Ketchum
Planning & Building

| OFFICIAL USE ONLY |
|---|
| File Number: P21-007 |
| Date Received: 1-19-21 |
| By: MP |
| Pre-Application Fee Paid: 1100.00 |
| Design Review Fee Paid: |
| Approved Date: |
| Denied Date: |
| By: |
| ADRE: Yes ☐ No ☐ |

pre-

# Design Review Application

| APPLICANT INFORMATION | |
|---|---|
| Project Name: Westcliff Townhomes | Phone: 207-720-2897 |
| Owner: Westcliff LLC | Mailing Address: P.O. Box 1906. Twin Falls, Idaho |
| Email: wroth13@gmail.com | |
| Architect/Representative: Anderson Architecture, P.A. | Phone: 208-726-6054 |
| Email: pete@andersonarc.com | Mailing Address: P.O. Box 1306, Ketchum Idaho 83340 |
| Architect License Number: AR-2272 | |
| Engineer of Record: Butler Associates, Inc | Phone: 208-720-6432 |
| Email: svgeotech@gmail.com | Mailing Address: P.O. Box 1034, Ketchum Idaho 83340 |
| Engineer License Number: 9392 | |

*All design review plans and drawings for public commercial projects, residential buildings containing more than four (4) dwelling units and development projects containing more than four (4) dwelling units shall be prepared by an Idaho licensed architect or an Idaho licensed engineer.*

| PROJECT INFORMATION | | | | |
|---|---|---|---|---|
| Legal Land Description: Lots 3A and 4A, Bavarian Village Sub, Ketchum Idaho | | | | |
| Street Address: 106 Rember Street, Ketchum Idaho 83340 | | | | |
| Lot Area (Square Feet): 18,129.1 SF | | | RPK 04200000 04A | |
| Zoning District: GR-H | | | | |
| Overlay District: | ☐Floodplain | ☐ Avalanche | ☐Mountain | |
| Type of Construction: | ■New | ☐Addition | ☐Remodel | ☐Other |
| Anticipated Use: | | | Number of Residential Units: | |

| TOTAL FLOOR AREA | Proposed | Existing |
|---|---|---|
| Basements | Sq. Ft. | Sq. Ft. |
| 1st Floor | 1618 Sq. Ft. | Sq. Ft. |
| 2nd Floor | 1483 Sq. Ft. | Sq. Ft. |
| 3rd Floor | 636 Sq. Ft. | Sq. Ft. |
| Mezzanine | Sq. Ft. | Sq. Ft. |
| Total | 3737 Sq. Ft. | Sq. Ft. |

| FLOOR AREA RATIO | | |
|---|---|---|
| Community Core: | Tourist: | General Residential-High: .67 |

| BUILDING COVERAGE/OPEN SPACE |
|---|
| Percent of Building Coverage: 41% building coverage, 59% open space |

| DIMENSIONAL STANDARDS/PROPOSED SETBACKS | | | |
|---|---|---|---|
| Front: 15' | Side: 12' | Side: 12' | Rear: 18'-7" |
| Building Height: 34'-7 3/8", 34'-8 1/4", 34'-9 3/8", 34'-10 3/8"- measured highest point above lowest grade | | | |

| OFF STREET PARKING |
|---|
| Parking Spaces Provided: 8 enclosed, 4 two car garages |
| Curb Cut: 74 Lin Ft Sq. Ft. 29 % |

| WATER SYSTEM | |
|---|---|
| ■ Municipal Service | ☐ Ketchum Spring Water |

The Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Design Review Application in which the city of Ketchum is the prevailing party, to pay the reasonable attorney fees, including attorney fees on appeal and expenses of the city of Ketchum. I, the undersigned, certify that all information submitted with and upon this application form is true and accurate to the best of my knowledge and belief.

1.15.2021

Signature of Owner/Representative Date

## DESIGN REVIEW EVALUATION STANDARDS

**(May not apply to Administrative Design Review):**

### 17.96.060: IMPROVEMENTS AND STANDARDS FOR ALL PROJECTS

A. Streets:
   1. The applicant shall be responsible for all costs associated with providing a connection from an existing city streets to their development.
   2. All streets designs shall be in conformance with the right-of-way standards and approved by the Public Works Director.

B. Sidewalks:
   1. All projects under 17.96.010(A) that qualify as a "Substantial Improvement" shall install sidewalks in conformance with the right-of-way standards. Sidewalk improvements may be waived for projects that qualify as a "Substantial Improvement" which comprise additions of less than 250 square feet of conditioned space.
   2. The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.
   3. New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.
   4. The city may approve and accept voluntary cash contributions in-lieu of the above described improvements, which contributions must be segregated by the city and not used for any purpose other than the provision of these improvements. The contribution amount shall be one hundred ten percent (110%) of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the Public Works Director. Any approved in-lieu contribution shall be paid before the city issues a certificate of occupancy.

C. Drainage:
   1. All storm water shall be retained on site.
   2. Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.
   3. The Public Works Director may require additional drainage improvements as necessary, depending on the unique characteristics of a site.

# WESTCLIFF TOWNHOMES

## PROJECT TEAM:

**ARCHITECT:**

ANDERSON ARCHITECTURE, P.A.
P.O. BOX 1306
371 N. MAIN STREET, SUITE 202
KETCHUM, IDAHO 83340

PHONE: (208) 726-6054

**OWNER:**

Westcliff LLC
134 3rd Ave E.
PO Box 1906
Twin Falls,, ID 83303

**GENERAL CONTRACTOR:**

WAYNE ROTH CONSTRUCTION
P.O. BOX 2040
SUN VALLEY, IDAHO 83353

PHONE: 208-720-2987

**STRUCTURAL ENGINEER:**

MORELL ENGINEERING
MATT MORELL
220 East Ave
KETCHUM, IDAHO 83340

PHONE: (208) 726-2844

**LANDSCAPE ARCHITECT**

LANDWORK STUDIO LLC
ROB KING
110 5th St W
KETCHUM, IDAHO 83340

PHONE: 208—726-5331

**CIVIL ENGINEER/SURVEYOR:**

BENCHMARK AND ASSOCIATES
100 BELL DRIVE
KETCHUM, IDAHO 83340

PHONE: 208-726-9512

## INDEX OF DRAWINGS:


| | |
|---|---|
| A1 | COVER SHEET |
| C | PRELIMINARY PLAT |
| C | SURVEY |
| C1 | GRADING AND DRAINAGE PLAN |
| C2 | UTILITY PLAN |
| C3 | DETAILS |
| L1 | SITE PLAN |
| L2 | GRADING PLAN |
| L3 | GRADING PLAN |
| L4 | CONSTRUCTION MANAGEMENT PLAN |
| A2 | COLOR PERSPECTIVES |
| A3 | FLOOR PLANS |
| A4 | FLOOR / ROOF PLANS |
| A5 | BUILDING ELEVATIONS |
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| A7 | BUILDING SECTIONS |
| A8 | COLOR BOARD |


## BUILDING DATA:

| | |
|---|---|
| PROJECT NAME: | WESTCLIFF TOWNHOMES |
| LEGAL DESCRIPTION: | LOTS 3A AND 4A, BAVARIAN VILLAGE SUB, KETCHUM, IDAHO |
| PHYSICAL ADDRESS: | 106 REMBER STREET KETCHUM IDAHO 83340 |
| ZONING DISTRICT: | GR-H |
| PARCEL NUMBER: | RPK0420000003A,RPK0420000004A |
| LOT SIZE: | .42 ACRE |

INDIVIDUAL BUILDING AREA:

| | |
|---|---|
| FIRST LEVEL LIVING: | 996.0 S.F. |
| SECOND LEVEL LIVING: | 1,483.0 S.F. |
| THIRD LEVEL LIVING: | 636.0 S.F. |
| TOTAL LIVING: | 3,115.0 S.F. |
| GARAGE/MECHANICAL: | 622.0 S.F. |
| GRAND TOTAL: | 3,737.0 S.F. |

| | |
|---|---|
| CONST. TYPE: | V-B |
| OCCUPANCY TYPE: | GROUP R-3, SINGLE FAMILY RESIDENCE |
| MUNICIPALITIES: | KETCHUM, IDAHO |

CODE:

The following international codes as amended herein are adopted by reference by the city of Ketchum, Idaho:

A. The international building code, 2012 edition, including appendices A, B, C, E, G, I and J, excluding section 101.4.3;
B. The international residential code, 2012 edition, parts I through IV and part IX including appendices D, E, F, G, H, J, K and M;
C. The international energy conservation code, 2012 edition, including the appendix;
D. The international existing building code, 2012 edition; and
E. The international property maintenance code, 2012 edition.

15.04.020: AMENDMENTS:

A. Amendments To The International Building Code:
Section 101.1 Insert: [city of Ketchum, Idaho]
Section 1612.3 Insert: [city of Ketchum, Idaho] [June 5, 1978]
Section 3412.2 Insert: [January 1, 1975]
Section 104.10.1 of said code is amended to read as follows:
104.10.1 Flood Hazard Areas.
The building official shall not grant modifications to any provision required in flood hazard areas as established by section 1612.3 unless a variance has been approved by the planning and zoning commission.

FLOOR AREA RATIO CALCULATIONS:

| | |
|---|---|
| TOTAL SQUARE FOOTAGE (FOUR BUILDINGS): | 14,948.0 S.F. |
| PARKING BONUS FOR GROUND WATER: | -2,800.0 S.F. |
| TOTAL: | 12,148.0 S.F. |
| DIVIDE BY LOT AREA: | 18,129.1 S.F. |
| FLOOR AREA RATIO: | .67 FAR |

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ARCHITECTURE

DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES
106 REMBER STREET KETCHUM IDAHO 83340
COVER SHEET

REVISIONS:
8-11-20 INITIAL SCHEME
9-12-20- SCHEMATIC
11-10-20- SCHEME TWO
11-24-20- SCHEME THREE
12-15-20- DR PROGRESS SET
12-17-20- DR PROGRESS SET
12-31-20- DR PROGRESS SET
1-15-2021- DESIGN REVIEW SET
1-18-2021- DESIGN REVIEW SET

COVER SHEET

ISSUE:
1-18-2021

2004

A1


Model View- Bird's Eye (1)
SCALE: 1" = 5'

0 2' 5' 10'

Model View Overall (2)
SCALE: 1" = 5'

0 2' 5' 10'

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DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES
106 REMBER STREET KETCHUM IDAHO 83340
COLOR PERSPECTIVES

REVISIONS:
8-11-20 INITIAL SCHEME
9-12-20- SCHEMATIC
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1-15-2021- DESIGN REVIEW SET
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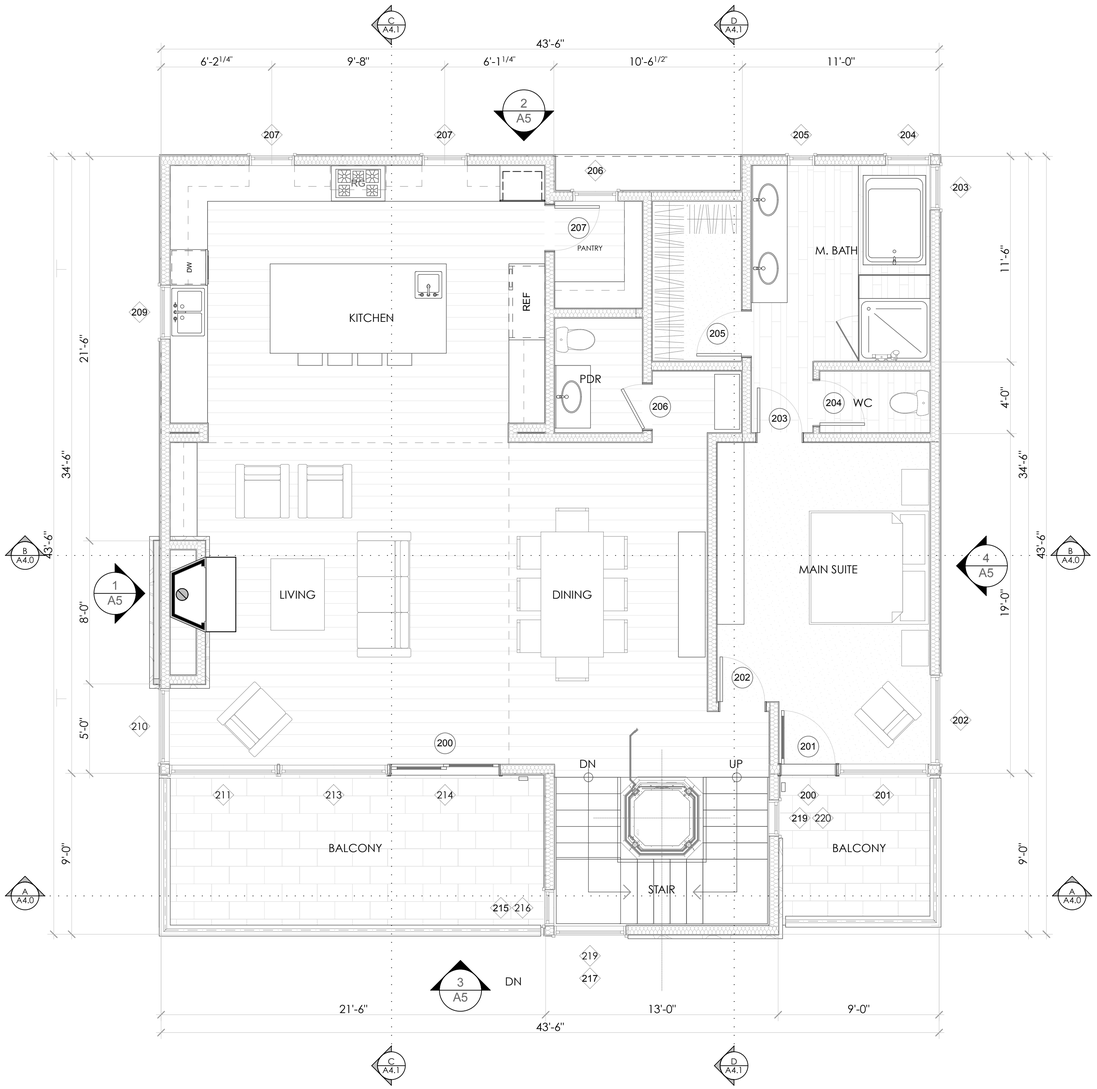
COLOR PERSPECTIVES

ISSUE:
1-18-2021

2004

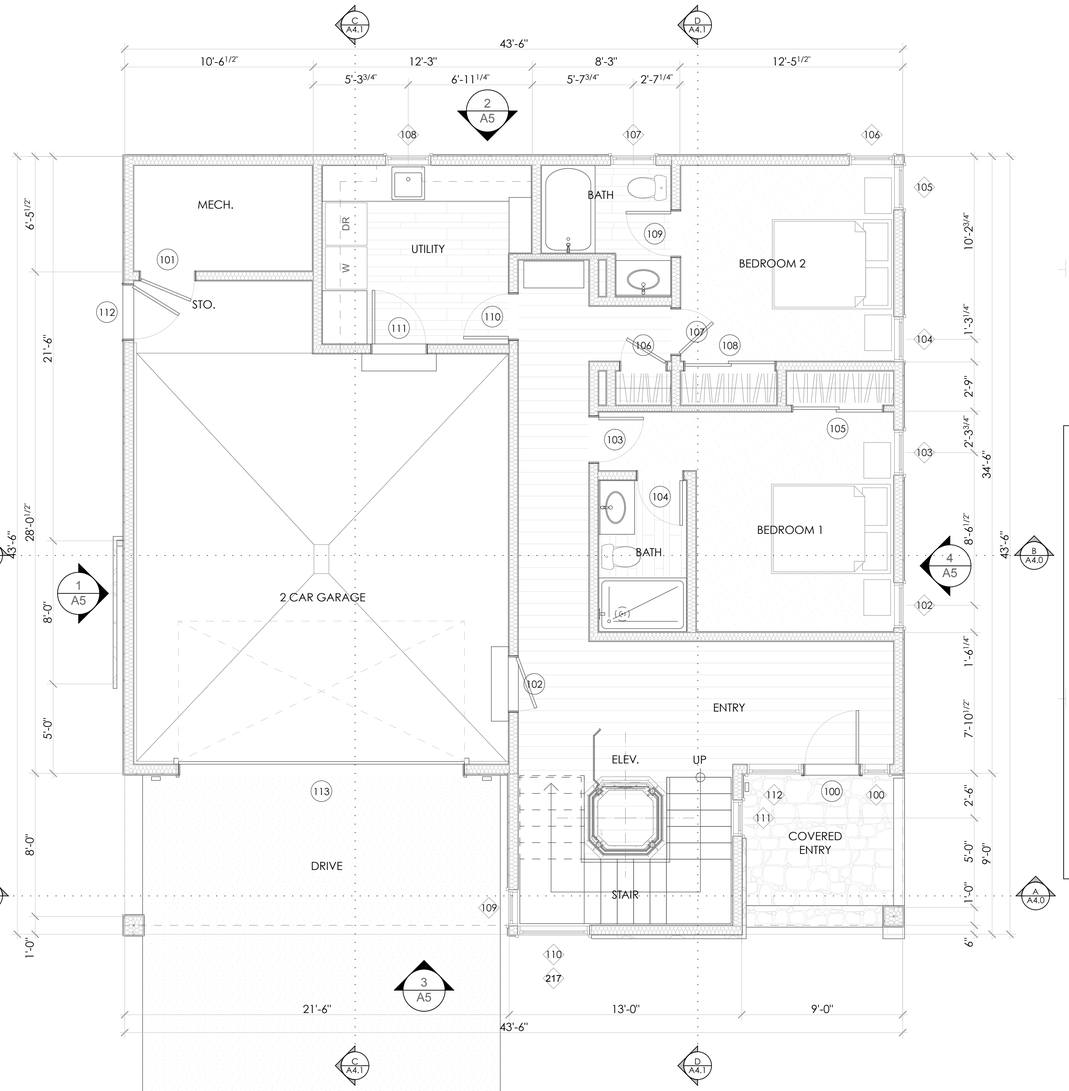
A2




SECOND LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0"

2




FIRST LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0"

1

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DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES

106 REMBER STREET KETCHUM IDAHO 83340

FLOOR PLANS

REVISIONS:

8-11-20 INITIAL SCHEME
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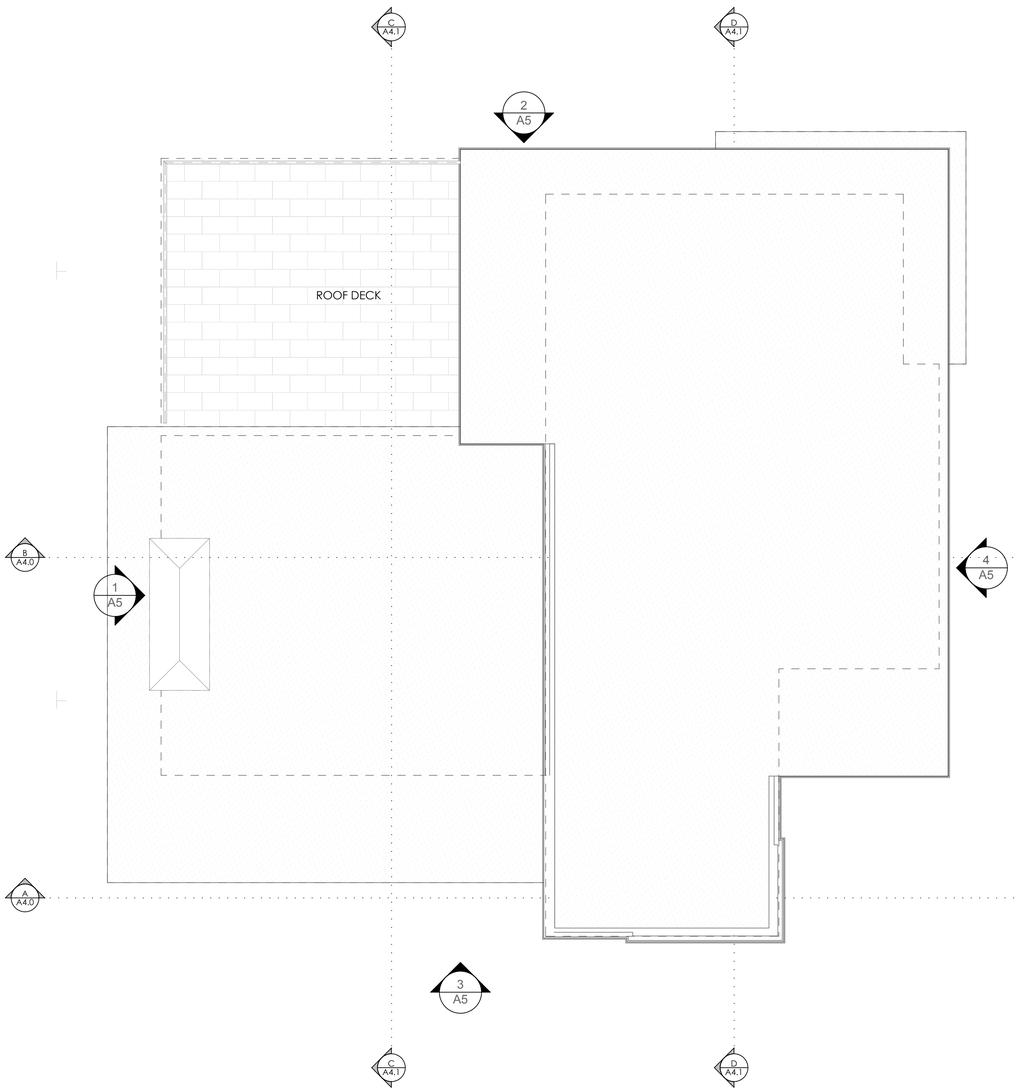
12-31-20- DR PROGRESS SET
1-15-2021- DESIGN REVIEW SET
1-18-2021- DESIGN REVIEW SET

FLOOR PLANS

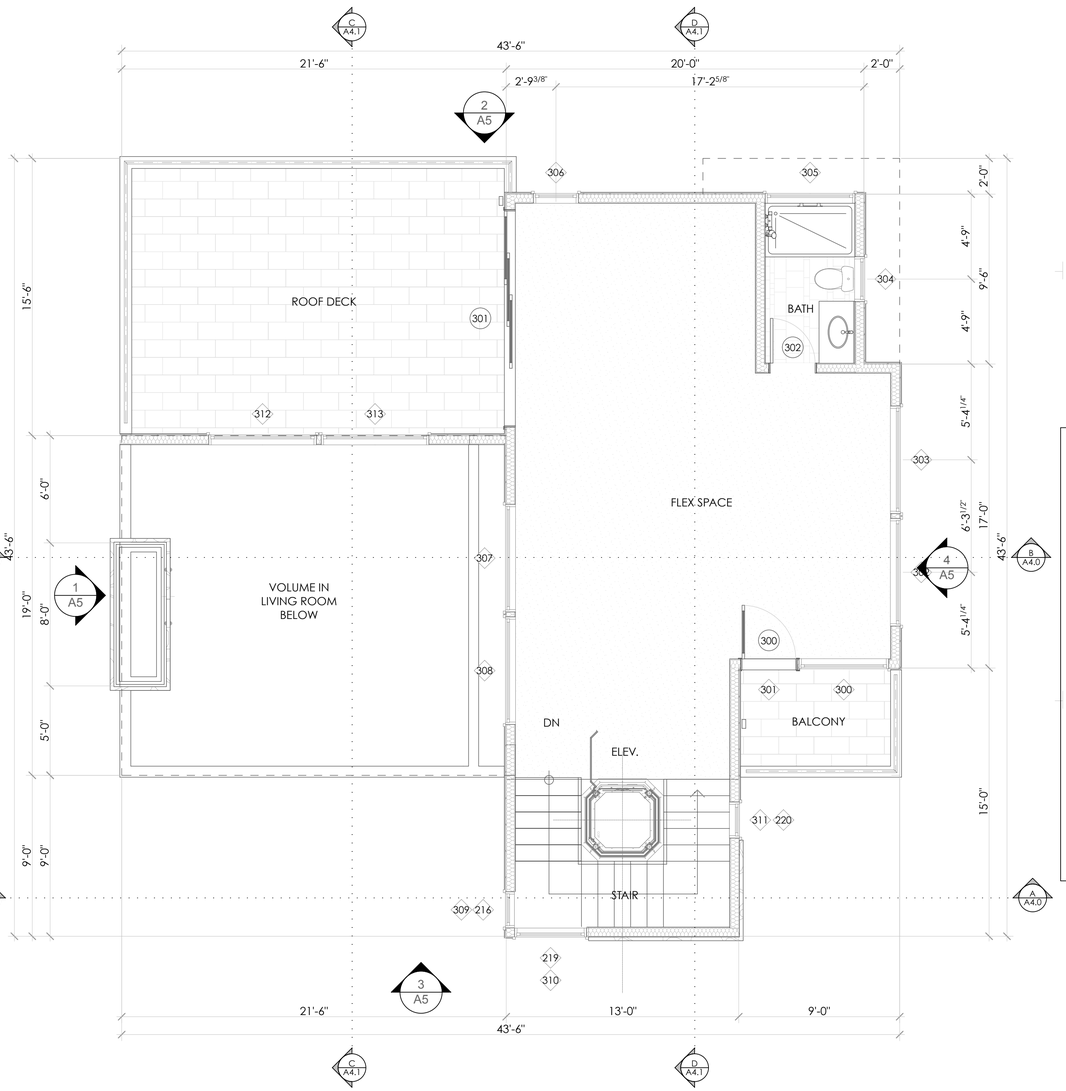
ISSUE:
1-18-2021

2004

A3




ROOF PLAN
SCALE: 1/4" = 1'-0"
2




THIRD LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"
1

DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES
106 REMBER STREET KETCHUM IDAHO 83340
FLOOR / ROOF PLANS

REVISIONS:
8-11-20 INITIAL SCHEME
9-12-20- SCHEMATIC
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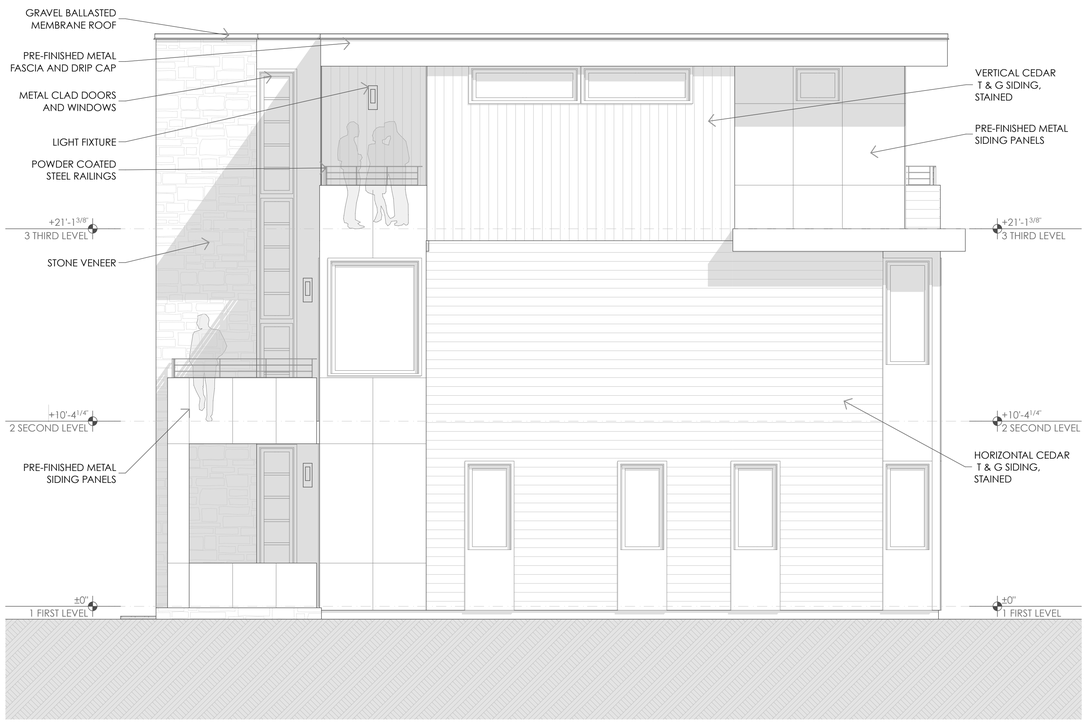
1-18-2021- DESIGN REVIEW SET

FLOOR / ROOF PLANS

ISSUE:
1-18-2021

2004

A4




RIGHT ELEVATION 4

SCALE: 1/4" = 1'-0"


REAR ELEVATION 2

SCALE: 1/4" = 1'-0"


LEFT ELEVATION 1

SCALE: 1/4" = 1'-0"


FRONT ELEVATION 3

SCALE: 1/4" = 1'-0"

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DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES

106 REMBER STREET KETCHUM IDAHO 83340

BUILDING ELEVATIONS

REVISIONS:
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BUILDING ELEVATIONS

ISSUE:
1-18-2021

2004

A5

NORTH ELEVATION OVERALL (REMBER) 1
SCALE: 1/8" = 1'-0"

EAST ELEVATION OVERALL (BIRD) 2
SCALE: 1/8" = 1'-0"

SOUTH ELEVATION OVERALL 3
SCALE: 1/8" = 1'-0"

WEST ELEVATION OVERALL 4
SCALE: 1/8" = 1'-0"

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DESIGN REVIEW SET (1/18/21)

# WESTCLIFF TOWNHOMES

106 REMBER STREET KETCHUM IDAHO 83340

BUILDING ELEVATIONS

REVISIONS:
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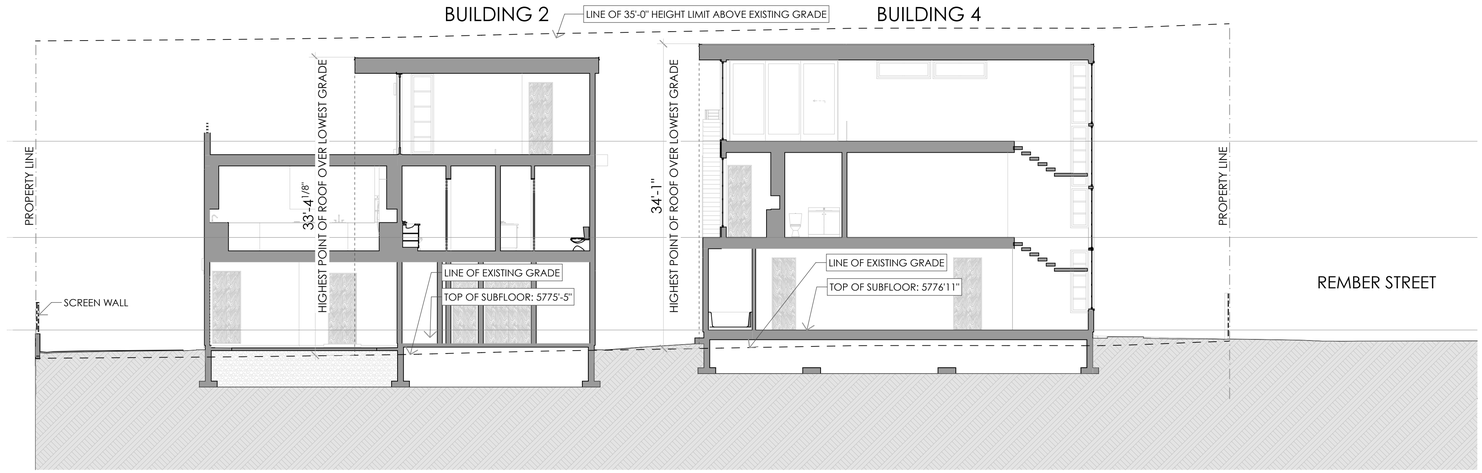
1-15-2021- DESIGN REVIEW SET
1-18-2021- DESIGN REVIEW SET

BUILDING ELEVATIONS

ISSUE:
1-18-2021

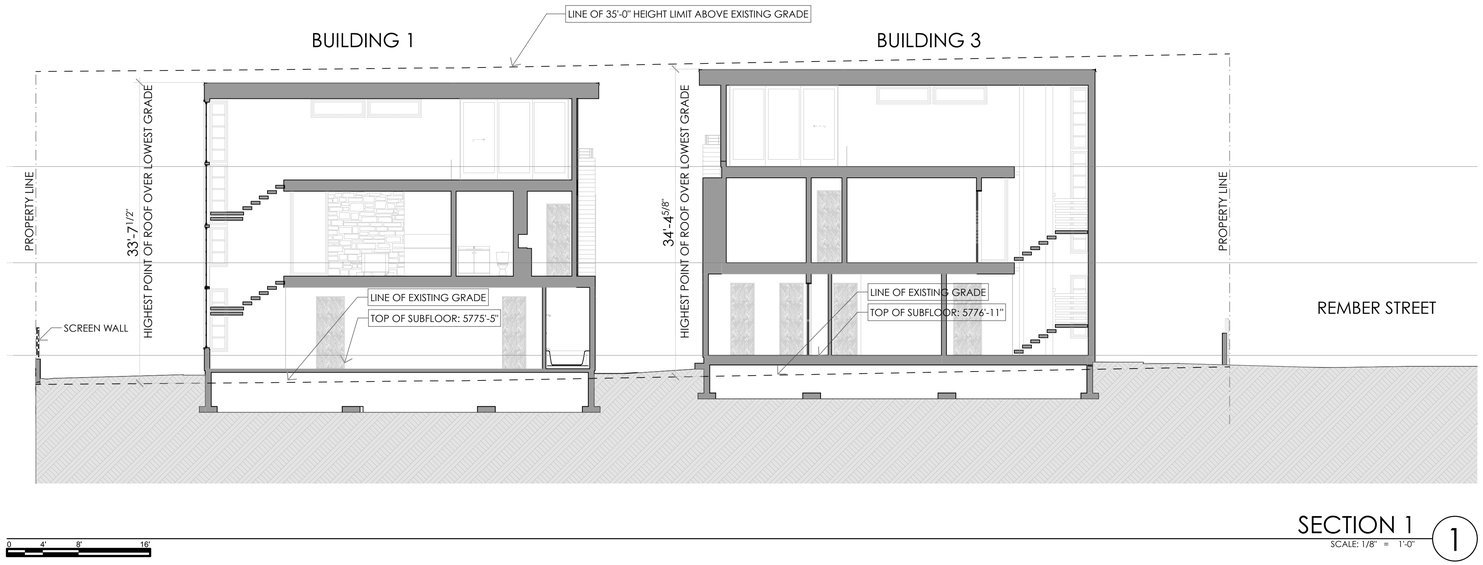
2004

A6




SECTION 2
SCALE: 1/8" = 1'-0"

2




SECTION 1
SCALE: 1/8" = 1'-0"

1

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DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES
106 REMBER STREET KETCHUM IDAHO 83340

BUILDING SECTIONS

REVISIONS:
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BUILDING SECTIONS

ISSUE:
1-18-2021

2004

A7

**Hinkley 1648SK-LED**
**Atlantis LED 16 inch Satin Black Outdoor Wall Mount, Medium**

Atlantis features a minimalist design for the ultimate in urban sophistication. Constructed of solid aluminum and Dark Sky compliant, Atlantis provides a chic solution to eco-conscious homeowners.

**Brand Information**

- Brand: Hinkley
- Collection: Atlantis
- SKU: 1648SK-LED
- UPC: 00640665164879

**Dimensions and Weight**

- Length: 3.50 in.
- Width: 6.00 in.
- Height: 16.00 in.
- Extension/Depth: 3.50 in.
- Backplate/Canopy Width: 4.50 in.
- Backplate/Canopy Length: 4.50 in.
- Height from Center of Wall Opening: 13.75 in.
- Weight: 4.00 lb.

**Other Specifications**

- Ships Via: Ground ( FREE SHIPPING )
- Warranty: General Hinkley Warranty Statement, LED components - Integrated, Outdoor - Finish

**Additional Details**

- Install Sloped Ceiling: NO
- Diffuser: NO
- Combo Mount: NO
- Heavy Fixture: NO

**Design Information**

- Category: Outdoor Wall Lights
- Finish: Satin Black
- Glass: Etched Glass Lens
- Material: Extruded Aluminum

**Bulb Information**

- Bulbs Included: Yes
- Bulb Category: LED
- Primary Bulb(s): x 11.00 watts
- Color Temperature: 3000K
- Color Rendering Index: 96.0000
- Total Lumens: 900
- Additional Bulb Details: Incandescent Equivlancy: 1-35w & 1-50w

**Product Rating**

- Voltage: 120V
- Outdoor Rating: Suitable for Damp Locations
- Safety Rating: C-US Wet Rated
- Dark-Sky Approved
- ADA Approved
- Title 24 Approved

**Documents**

- Spec Sheet: 1648SK-LED.pdf
- Install Sheet: 1648LED.pdf
- Hinkley Lighting Limited Warranty: Hinkley Lighting Warranty.pdf

EXTERIOR SURFACE MOUNT LIGHT FIXTURE

**WINDOW CLADDING, FLASHING, METAL PANEL SIDING-**
DARK BRONZE

**CEDAR WOOD SIDING STAIN:**
CABBOT -THRUSH, SEMI TRANS

**STONE VENEER-**
TUMBLED CHIEF CLIFF

PROJECT MATERIALS COLOR BOARD

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ARCHITECTURE

DESIGN REVIEW SET (1/18/21)

WESTCLIFF TOWNHOMES
106 REMBER STREET KETCHUM IDAHO 83340
COLOR BOARD

REVISIONS:
8-11-20 INITIAL SCHEME
9-12-20- SCHEMATIC
11-10-20- SCHEME TWO
11-24-20- SCHEME THREE
12-15-20- DR PROGRESS SET
12-17-20- DR PROGRESS SET
12-31-20- DR PROGRESS SET
1-15-2021- DESIGN REVIEW SET
1-18-2021- DESIGN REVIEW SET

COLOR BOARD

ISSUE:
1-18-2021

2004

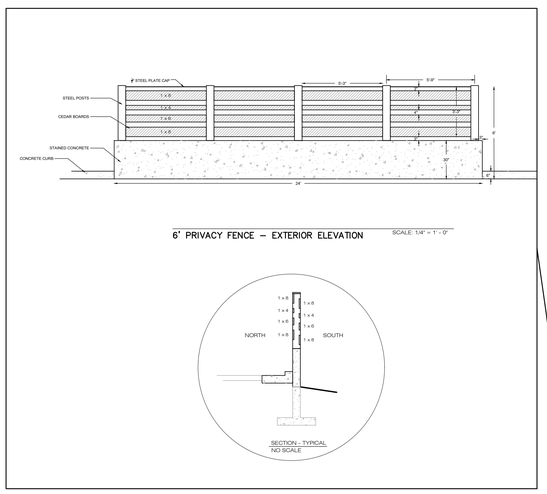
A8

## GRADING + DRAINAGE LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- 5774.4 — SPOT ELEVATION - EXISTING GRADE
- FF 00.00 — FINISH FLOOR ELEVATION
- GS 00.00 — GARAGE SLAB ELEVATION
- +00.00 — SPOT ELEVATION - FINISH GRADE
- TW 00.00 — TOP OF WALL ELEVATION
- BW 00.00 — BOTTOM OF WALL ELEVATION
- DIRECTION OF DRAINAGE
- DRYWELL - 4 @ 24"
  Refer to Geotech/Civil plans and specifications
- CB — CATCHBASIN - 2 @ 24"
  Tie into drywells or foundation drainage system
  Refer to Geotech/Civil plans and specifications
- 4" ADS DRAINLINES
  Connect to catch basins/drywells or foundation drainage system.
- CHANNEL DRAIN
  NDS CHANNEL TRENCH DRAIN
  IRON AGE DESIGNS DECORATIVE GRATE
  REGULAR JOE' 6" x 12"
- CONCRETE VALLEY GUTTER
  Direct to catch basins/drywells.

## HARDSCAPES

- CONCRETE SITE WALLS
  Architectural Concrete - Color TBD
- STEEL EDGING AND GRAVEL APRON
  ¼" Plate Steel - Dimensions Vary
- UPPER TERRACE PAVERS (not shown)
  ABBOTSFORD TEXADA CHARCOAL
  12X24 STACKED BOND - PEDESTAL SET
- DRIVEWAY PAVERS
  ABBOTSFORD CLASSIC STANDARD CALIFORNIA CHARCOAL
  6X12 RUNNING BOND PATTERN - SAND SET



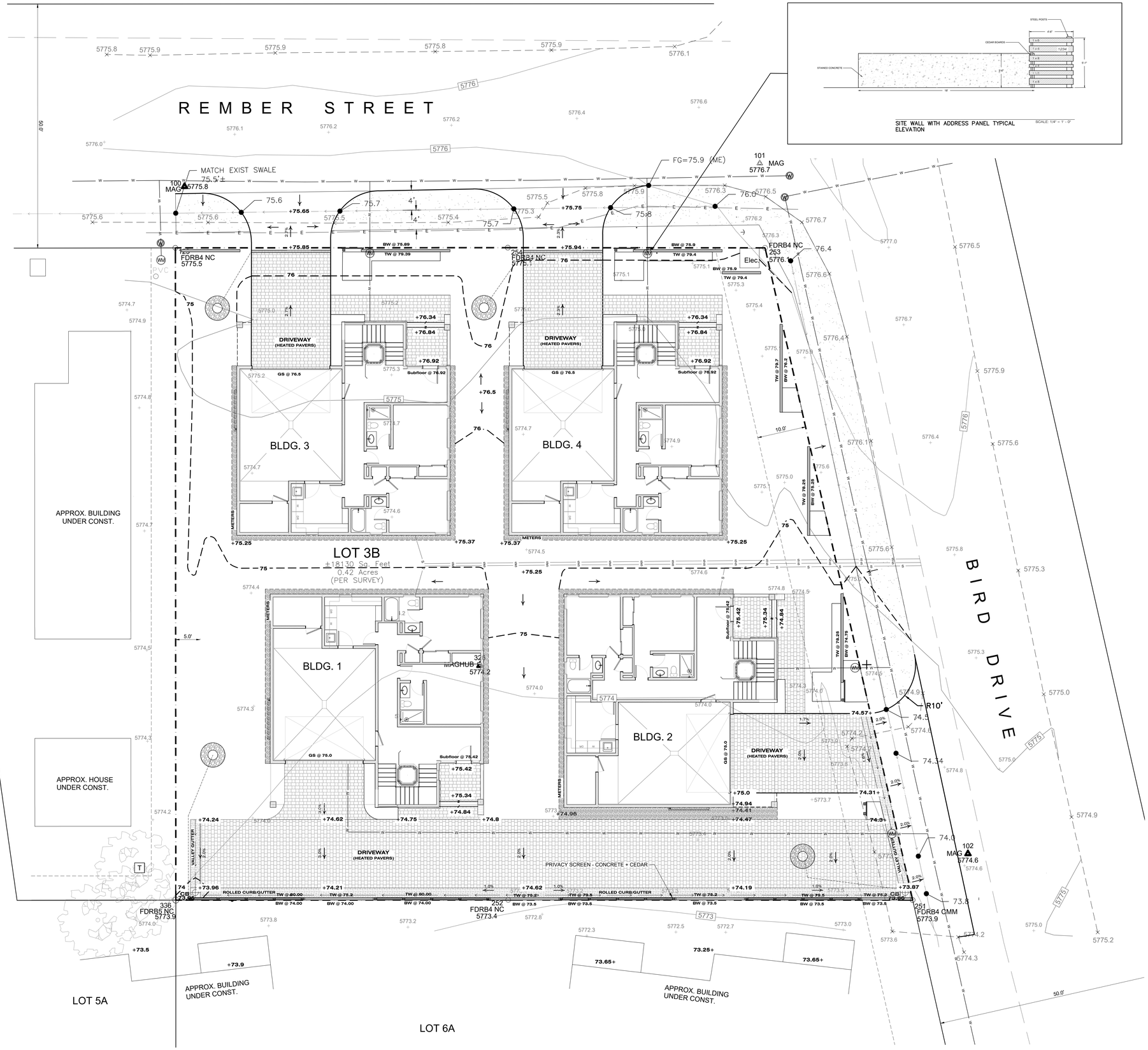

6' PRIVACY FENCE – EXTERIOR ELEVATION SCALE: 1/4" = 1' - 0"




SECTION - TYPICAL
NO SCALE




SITE WALL WITH ADDRESS PANEL TYPICAL ELEVATION SCALE: 1/4" = 1' - 0"




## GRADING + DRAINAGE NOTES:

1. ALL SITE INFORMATION IS APPROXIMATE ONLY. REFER TO CIVIL ENGINEERING DRAWINGS FOR ADDITIONAL INFORMATION. ALL ELEVATIONS TO BE FIELD VERIFIED ACCORDINGLY.
2. REFER TO GEOTECH REPORT FOR INFORMATION REGARDING SOIL AND SUB-SURFACE CONDITIONS. UNFORSEEN SOIL OR SUB-SURFACE CONDITIONS (INCLUDING BEDROCK, POOR SOIL STRUCTURE, SUB-SURFACE WATER, UTILITIES, ETC.) MAY REQUIRE FIELD ADJUSTMENTS TO THE PROPOSED DESIGN INCLUDING GRADING AND DRAINAGE SYSTEMS.
3. PROPOSED WORK TO INCORPORATE ALL APPLICABLE BEST MANAGEMENT PRACTICES (BMP'S) TO PROTECT RESOURCE VALUES AND TO ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATORY REQUIREMENTS AND WATER QUALITY STANDARDS.
4. SILT FENCE TO BE INSTALLED ALONG MHW AND RIPARIAN SETBACK PRIOR TO EXCAVATION WORK.
5. UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE LOCATED AND VERIFIED IN THE FIELD PRIOR TO ANY EXCAVATION WORK.
6. ALL PLANTING AREAS TO BE AERATED AFTER CONSTRUCTION AND PRIOR TO INSTALLATION OF PLANT MATERIALS.
7. FINISH GRADE TO SLOPE AWAY FROM BUILDING IN ALL CASES, AND DIRECTED TO DRAINAGE PATTERNS OR SYSTEMS AS SHOWN.
8. ALL DRAINAGE WITHIN THE PROJECT BOUNDARIES TO BE COLLECTED ON-SITE OR DIRECTED TO EXISTING DRAINAGE PATTERNS AS DEPICTED ON THE GRADING PLAN AND/OR CIVIL ENGINEERING DRAWINGS. NO ADDITIONAL DRAINAGE TO BE DIRECTED ONTO NEIGHBORING PROPERTIES.

# GRADING PLAN

SCALE: 1/8" = 1' -0"

NORTH

4' 0 8' 16'

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208.726.5533 WWW.LANDWORKSTUDIO.COM

STATE OF IDAHO — SCOTT A. KING — LA-876 — LANDSCAPE ARCHITECT

# WESTCLIFF TOWNHOMES

BAVARIAN VILLAGE LOTS 3A + 4A
BIRD DRIVE + REMBER STREET
KETCHUM, IDAHO

DATE: 1/15/2021
DESIGN REVIEW

GRADING PLAN
**L-2.0**

## PLANT LEGEND

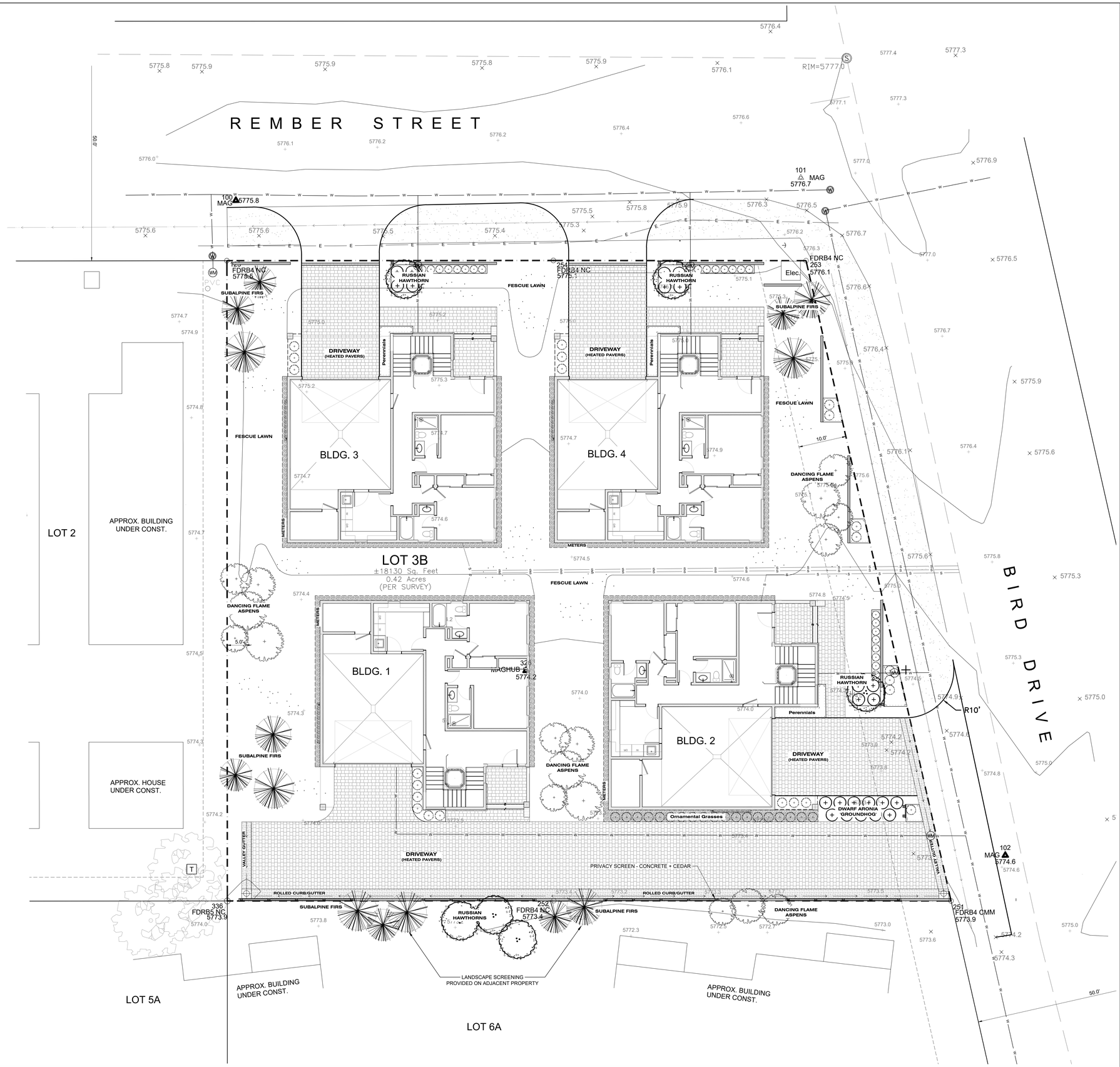
| | | |
|---|---|---|
| | 14 | **EVERGREEN TREES** |
| | 2 @ 10' | SUBALPINE FIR, Abies lasiocarpa |
| | 4 @ 12' | |
| | 5 @ 14' | |
| | 3 @ 16' | |
| | 23 | **DECIDUOUS TREES** |
| | 6 @ B+B | RUSSIAN HAWTHORN, Crataegus ambigua |
| | 6 @ 2" | QUAKING ASPEN 'DANCING FLAME', Populous tremuloides |
| | 6 @ 3" | |
| | 5 @ 4" | |
| | 25 | **SHRUBS** |
| | 13 @ 5 GAL. | DWARF CHOKEBERRY, Aronia melanocarpa 'Groundhog' |
| | 12 @ 5 GAL. | PAWNEE BUTTES CHERRY, Prunus besseyi 'Pawnee Buttes' |
| | 66 | **ORNAMENTAL GRASSES** |
| | 66 @ 1 GAL. | VARIETIES TBD |
| | 5,700 SF | **LAWN - FESCUE SOD** |
| | | FINE FESCUE MIX (OR EQUIVALENT) |
| | 140 sf | **PLANTING BEDS** |
| | 1 gal @ 18" O.C. | PERENNIALS + GROUNDCOVERS |
| | | Beds Prepared with Planting Mix Consisting of 50% Compost/50% Top-Soil, and APEX Fertilizer or similar - Per Manufacturer's Specificied Application Rates. |

## SNOW REMOVAL/STORAGE

1. DRIVEWAYS AND ENTRY WALKS TO BE SNOWMELTED.

## LANDSCAPE + PLANTING NOTES

1. LOCATIONS OF PROPOSED PLANT MATERIALS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO INSTALLATION.
2. UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE LOCATED AND VERIFIED IN THE FIELD PRIOR TO ANY EXCAVATION WORK INCLUDING INSTALLATION OF PLANT MATERIALS.
3. ALL PLANTING AREAS TO BE AERATED AFTER CONSTRUCTION AND PRIOR TO INSTALLATION OF PLANT MATERIALS.
4. ALL PLANT MATERIALS TO COMPLY WITH THE AMERICAN ASSOCIATON OF NURSERYMEN STANDARDS.
5. ALL EXSITING PLANTS THAT ARE IDENTIFIED TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES AS NECESSARY TO PROTECT AGAINST COMPACTION OF ROOT ZONES, SOIL CONTAMINANTS, AND INJURY TO BRANCHES.
6. REFER TO IRRIGATION PERFORMANCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.




# LANDSCAPE PLAN

SCALE: 1/8" = 1' -0"

NORTH

4' 0 8' 16'

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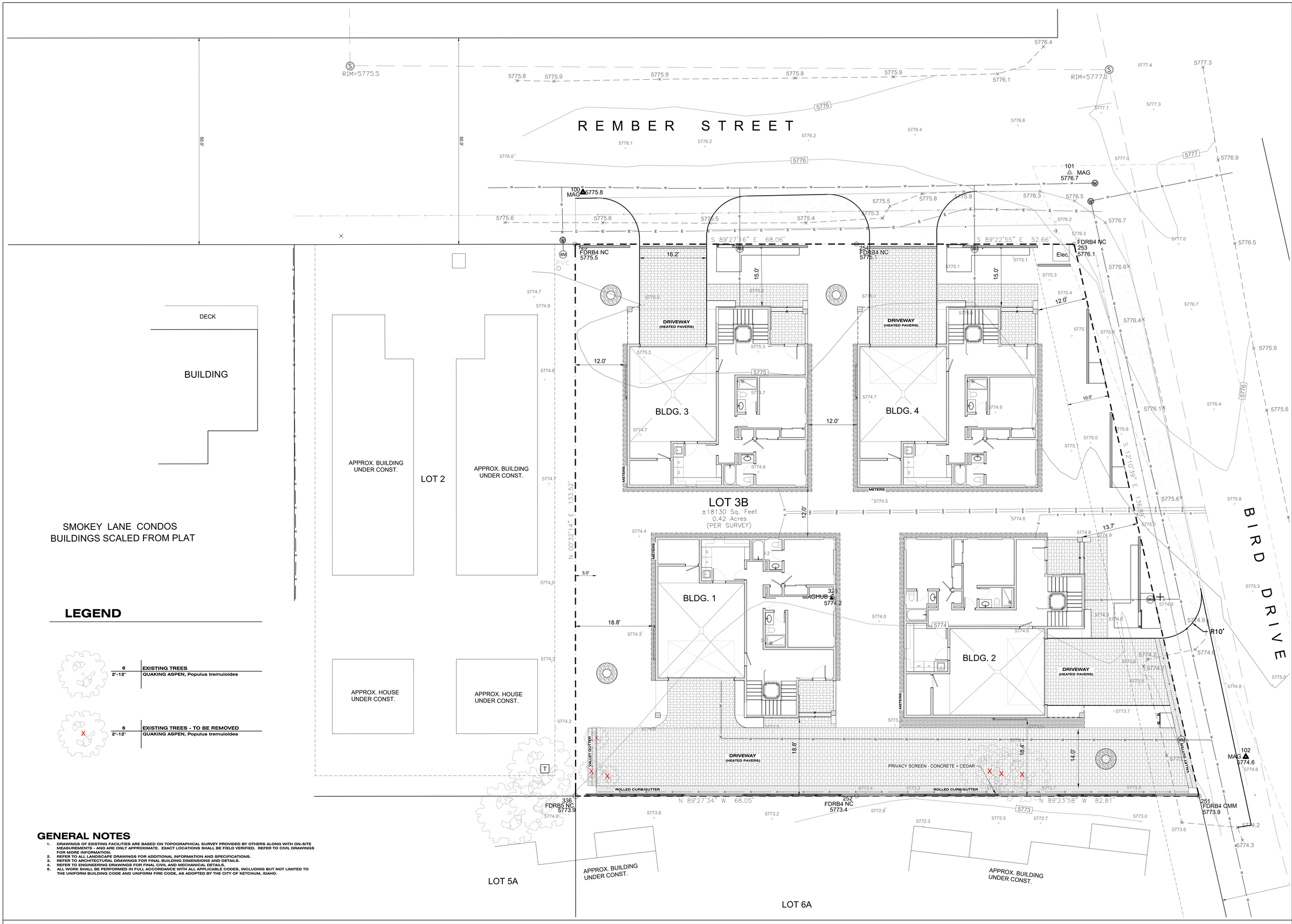
# WESTCLIFF TOWNHOMES

BAVARIAN VILLAGE LOTS 3A + 4A
BIRD DRIVE + REMBER STREET
KETCHUM, IDAHO

DATE: 1/15/2020
DESIGN REVIEW

LANDSCAPE PLAN

**L-3.0**




## LEGEND

| | | |
|---|---|---|
| 6<br>2"-12' | EXISTING TREES<br>QUAKING ASPEN, Populus tremuloides | |
| 6<br>2"-12' | EXISTING TREES - TO BE REMOVED<br>QUAKING ASPEN, Populus tremuloides | X |

## GENERAL NOTES

1. DRAWINGS OF EXISTING FACILITIES ARE BASED ON TOPOGRAPHICAL SURVEY PROVIDED BY OTHERS ALONG WITH ON-SITE MEASUREMENTS - AND ARE ONLY APPROXIMATE. EXACT LOCATIONS SHALL BE FIELD VERIFIED. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION.
2. REFER TO ALL LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION AND SPECIFICATIONS.
3. REFER TO ARCHITECTURAL DRAWINGS FOR FINAL BUILDING DIMENSIONS AND DETAILS.
4. REFER TO ENGINEERING DRAWINGS FOR FINAL CIVIL AND MECHANICAL DETAILS.
5. ALL WORK SHALL BE PERFORMED IN FULL ACCORDANCE WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO THE UNIFORM BUILDING CODE AND UNIFORM FIRE CODE, AS ADOPTED BY THE CITY OF KETCHUM, IDAHO.

# SITE PLAN

SCALE: 1/8" = 1' -0"

NORTH

4' 0 8' 16'

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ROBERT A. KING
IDAHO
LA-976
LANDSCAPE ARCHITECT

# WESTCLIFF TOWNHOMES

BAVARIAN VILLAGE LOTS 3A + 4A
BIRD DRIVE + REMBER STREET
KETCHUM, IDAHO

DATE: 01/15/2021
DESIGN REVIEW

SITE PLAN
L-1.0

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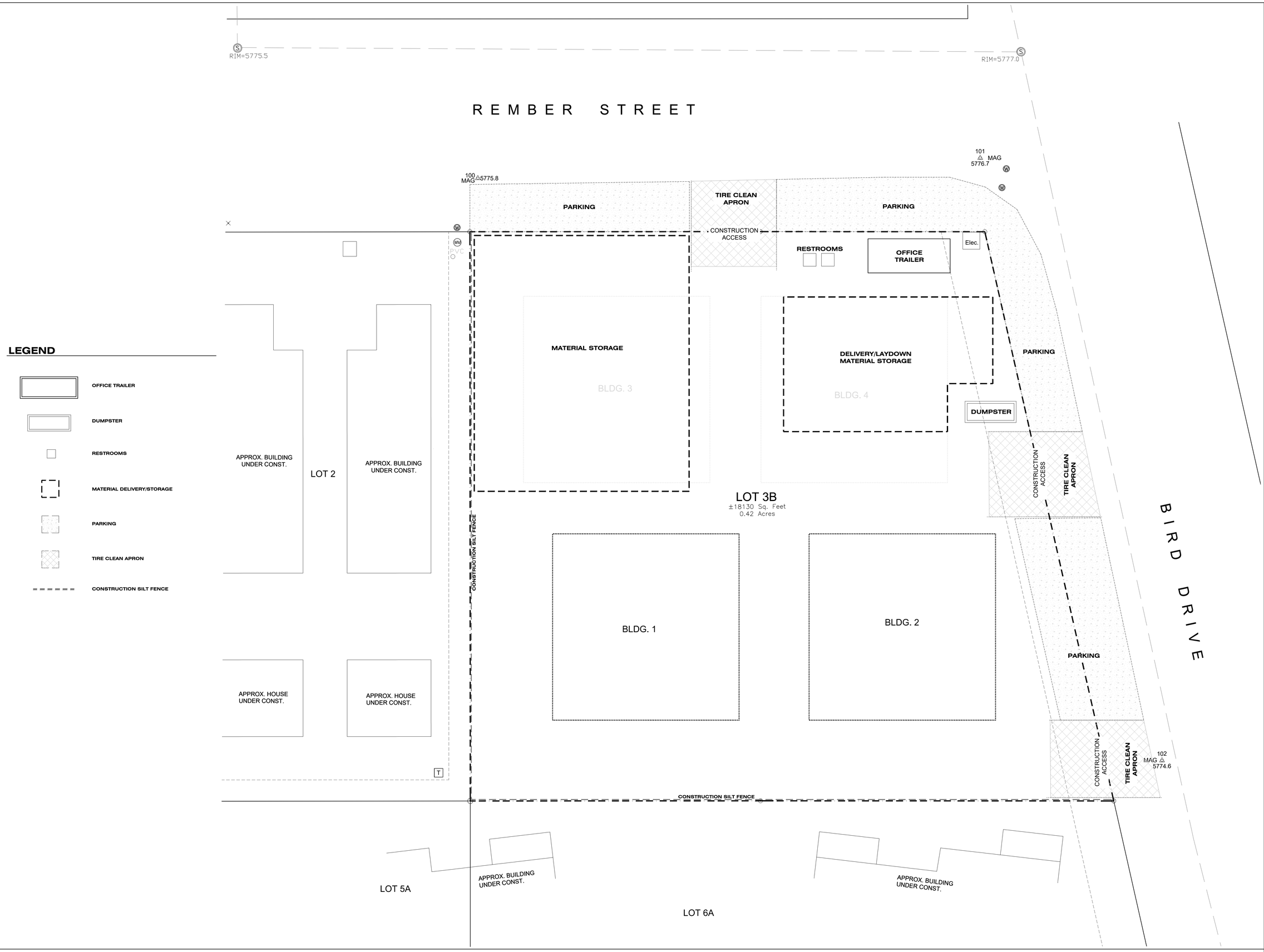


# CONSTRUCTION MANAGEMENT PLAN - PHASE 1

SCALE: 1/8" = 1' -0"

OWNERSHIP OF DOCUMENTS:THIS ELECTRONIC DOCUMENT AND THE CONTENTS CONTAINED THEREON (I.E. DESIGNS, CONCEPTS, AND GRAPHIC SYMBOLS) ARE THE PROPERTY OF LANDWORK STUDIO LLC, AND SHALL NOT BE USED IN WHOLE OR IN PART, BY ANY OTHER PERSON OR PERSONS WITHOUT THE WRITTEN AUTHORIZATION OF LANDWORK STUDIO LLC.

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STATE OF IDAHO ROBERT A. KNOX LA-978 LANDSCAPE ARCHITECT

**WESTCLIFF TOWNHOMES**

BAVARIAN VILLAGE LOTS 3A + 4A
BIRD DRIVE + REMBER STREET
KETCHUM, IDAHO

DATE: 01/18/2020
DESIGN REVIEW

CONSTR. MGMT PLAN

**L-4.0**

REMBER STREET

RIM=5775.5

RIM=5777.0

50.0'

S 89°27'16" E 68.06'

S 89°22'55" E 52.66'

POWER POLE

GUY WIRE

ELEC METER

SIGN

100 MAG 5775.8

101 MAG 5776.7

102 MAG 5774.6

123 FDRB4 NC 5775.5

254 FDRB4 NC 5775.1

253 FDRB4 NC 5776.1

251 FDRB4 CMM 5773.9

252 FDRB4 NC 5773.4

326 FDRB5 NC 5773.9

MAGHUB 326 5774.2

5' UTILITY AND DRAINAGE EASEMENT (PER CC&RS)

10' UTILITY EASEMENTS INSTRUMENT NUMBERS 660804, AND 661178

10.0'

5.0'

N 00°32'14" E 133.52'

N 00°32'39" E 133.51'

N 12°10'39" E 136.86'

N 89°27'34" W 68.05'

N 89°23'58" W 82.81'

LOT 2

LOT 3A
±9086.2 Sq. Feet
0.21 Acres
(PER SURVEY)

LOT 4A
±9042.9 Sq. Feet
0.21 Acres
(PER SURVEY)

LOT 5A

LOT 6A

APPROX. BUILDING UNDER CONST.

APPROX. BUILDING UNDER CONST.

APPROX. HOUSE UNDER CONST.

APPROX. HOUSE UNDER CONST.

APPROX. BUILDING UNDER CONST.

APPROX. BUILDING UNDER CONST.

BIRD DRIVE

50.0'

LEGEND:

- PROPERTY LINE
- EASEMENT LINE AS SHOWN
- EDGE PAVEMENT
- G — PAINTED GAS LINE
- W — PAINTED WATER LINE (SEE NOTE 11)
- E — PAINTED ELECTRIC LINE
- CATV — PAINTED CATV LINE
- S — PAINTED SEWER LINE (SEE NOTE 11)
- OHP — OVERHEAD POWER LINES
- E — ELECTRIC BOX
- G — GAS MARKER
- S — SEWER MANHOLE
- T — TELECOM BOX
- W — WATER VALVE
- WM — WATER METER
- TV — CATV BOX
- DECIDUOUS TREE

N

W E

S

0 10 20 30

# NOTES

GENERAL RESTRICTIONS & TITLE INFORMATION:

1. THE PURPOSE OF THIS MAP IS TO SHOW 1' CONTOUR LINES, EDGE PAVEMENT, MARKED AND VISIBLE UTILITIES IN RELATION TO THE PLATTED LOT LINES AND EASEMENTS.
2. THIS MAP WAS PREPARED FOR THE EXPRESS USE OF THE CLIENT AND IS NOT TRANSFERABLE TO OTHERS WITHOUT WRITTEN CONSENT
3. A TITLE POLICY HAS NOT BEEN SUBMITTED TO BENCHMARK ASSOCIATES, NOR HAS A TITLE SEARCH BEEN REQUESTED. CERTAIN INFORMATION CONTAINED WITHIN SAID POLICY MAY NOT APPEAR ON THIS MAP OR MAY AFFECT ITEMS SHOWN ON THIS MAP.
4. ELECTRONIC DATA: BENCHMARK ASSOCIATES ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR THE REUSE, DISTRIBUTION OR ACCURACY OF DATA CONTAINED ON ELECTRONIC COPIES OF THIS DRAWING. THE STAMPED HARD COPY OF THIS DRAWING IS THE FINAL PRODUCT.
5. THIS DRAWING IS VOID AFTER 2 YEARS AND NO FURTHER COPIES OR DIGITAL FILES WILL BE TRANSMITTED.

EASEMENTS, ENCUMBRANCES AND RESTRICTIONS:

6. BUILDING AREA: THE ORIGINAL PLAT DOES NOT SHOW BUILDING ENVELOPES.SETBACK AND FOOTPRINT REQUIREMENTS PER CURRENT CITY OF KETCHUM ORDINANCES MAY VARY FROM PLAT. IT IS RECOMMENDED THAT SAID ORDINANCES BE REVIEWED PRIOR TO DESIGN.
7. GENERAL RESTRICTIONS : EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS MAP, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY APPLICABLE TO THE SUBJECT OF REAL ESTATE: EASEMENTS, OTHER THAN THOSE SHOWN OR LISTED HEREON, BUILDING SETBACK LINES, RESTRICTIVE COVENANTS, SUBDIVISION RESTRICTIONS, ZONING, WETLANDS, AVALANCHE, ANY OTHER LAND-USE REGULATIONS OR HAZARDS.
8. STORM WATER PLAN: IF SOIL DISTURBANCE, CLEARING, GRADING AND/OR EXCAVATION OF ONE (1) ACRE OR MORE IS TO TAKE PLACE A FEDERAL GENERAL CONSTRUCTION PERMIT, INCLUDING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), MUST BE PREPARED AND SUBMITTED TO AND APPROVED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY PRIOR TO ANY SITE DISTURBANCE.

SURVEY AND SITE FEATURES:

9. BASIS OF BEARINGS IS IDAHO STATE PLANE COORDINATE SYSTEM, NAD83, CENTRAL ZONE AS DERIVED BY GPS OBSERVATIONS. BOUNDARY LINES AND CERTAIN EASEMENTS SHOWN HEREON ARE PER PLAT. REFER TO PLAT & CC&R'S FOR CONDITIONS AND/OR RESTRICTIONS REGARDING THIS PROPERTY. ALL DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET.
10. ELEVATIONS BASED ON ASSUMED DATUM.
11. UTILITIES AND DRAIN PIPES IF SHOWN HEREON ARE PER SURFACE EVIDENCE ONLY. OTHER UNDERGROUND UTILITIES MAY EXIST. LOCATION OF UNDERGROUND UTILITIES AND SERVICES SHOULD BE CONFIRMED PRIOR TO EXCAVATION OR DESIGN. WATER AND SEWER LINES ARE PER FOUND VALVES AND MANHOLES AND RECORD MAPS.
12. BUILDING WALLS IF SHOWN HEREON ARE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
13. SPRINKLER HEADS AND IRRIGATION LINES ARE NOT SHOWN HEREON.
14. TREE LOCATIONS AND DRIP LINES IF SHOWN HEREON ARE APPROXIMATE.
15. ORTHOPHOTOGRAPHY: PHOTO RECTIFIED AT GROUND LEVEL ONLY. IMAGES OF OBJECTS ABOVE GROUND LEVEL (TREES, BUILDINGS, POWER POLES, ETC.,) MAY BE DISPLACED. DATE OF PHOTOGRAPHY: JUNE 2017
16. CONTOUR INTERVAL: 1' - CONTOURS IN AREAS OF DENSE VEGETATION MAY DEVIATE FROM TRUE ELEVATION BY ONE HALF THE HEIGHT OF THE VEGETATION.
17. MAP SCALE: DUE TO ELECTRONIC MAP DELIVERY AND ALTERNATE PRINTING METHODS, PLEASE USE BAR SCALE TO DETERMINE ACTUAL PRINTED SCALE.
18. FEATURES OBSCURED BY DEBRIS, SNOW OR VEHICLES AT THE TIME OF SURVEY, DO NOT APPEAR ON THIS MAP.


PREPARED BY :
BENCHMARK ASSOCIATES, P.A.
P.O. BOX 733 - 100 BELL DRIVE, KETCHUM, IDAHO, 83340
PHONE (208)726-9512 FAX (208)726-9514
WEB: http://benchmark-associates.com/


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SEE PRINTED HARD COPY FOR SURVEYORS STAMP AND SEAL

BENCHMARK ASSOCIATES

# BAVARIAN VILLAGE
## LOTS 3A & 4A

LOCATED WITHIN
SECTION 13, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M.,
CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PREPARED FOR : PB INVESTMENTS

| | | | |
|---|---|---|---|
| PROJECT NO. 20097 | DWG BY: DWS | CRD: 20097.CRD | 20097 TOPO.DWG |
| A TOPOGRAPHIC MAP | DATE OF SURVEY: 7/31/2020 | | SHEET: 1 OF 1 |

G:\BMA\B\bavarian village subdivision\LOTS 3A & 4A\20097 TOPO.dwg, 8/24/2020 3:31:32 PM

DRAFT—NOT FOR CONSTRUCTION


VICINITY MAP
NOT TO SCALE

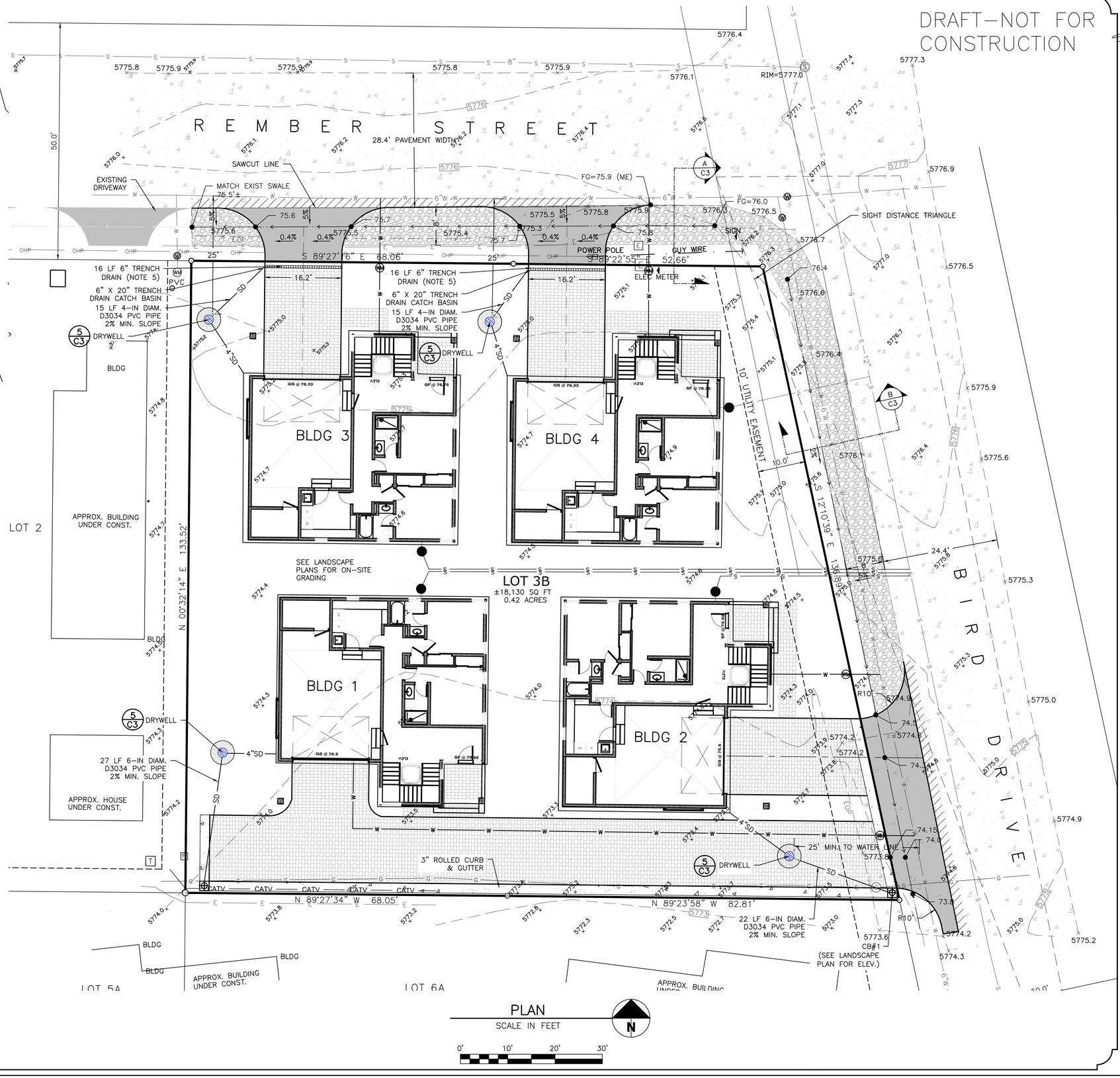
**GENERAL NOTES**

1. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. CONTRACTOR SHALL NOTIFY DIGLINE (1–800–342–1585) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE CONSTRUCTION OF ALL ITEMS HEREON. DUST CONTROL SHALL BE CONTINUOUS DURING CONSTRUCTION, 24 HOURS PER DAY 7 DAYS PER WEEK.
4. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE HOUSE.
5. TRENCH DRAIN SHALL BE A 6" WIDE HDPE CHANNEL WITH A 0.75 BUILT IN CHANNEL SLOPE (ZURN FLO–THRU MODEL Z886 OR EQUIVALENT). GRATE SHALL BE DUCTILE IRON WITH A SLOTTED PATTERN. CATCH BASIN SHALL BE 6" WIDE X 20" LONG X 20" DEEP AND SHALL BE MADE OF HDPE. OUTLET PIPE SHALL BE 4" DIAMETER. (FLO–THRU MODEL Z887 OR EQUIVALENT). ALL COMPONENTS SHALL BE RATED FOR H20 LOADING.
6. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO CITY OF KETCHUM STANDARDS.

**LEGEND**

| | EXISTING | PROPOSED |
|---|---|---|
| PROPERTY LINE | | |
| ADJOINING PROPERTY LINE | | |
| CENTERLINE | | |
| FENCE | x | |
| SEWER | S | S |
| SEWER MANHOLE | Ⓢ | |
| SEWER CLEANOUT | | ● |
| WATER | W | W |
| WATER METER | | Ⓦ |
| GAS | G | |
| POWER | E | |
| OVERHEAD POWER | OHP | |
| TELEPHONE | | |
| CABLE TV LINE | TV | |
| ELEVATION CONTOUR | 5775 | |
| SAWCUT LINE | | |
| FLOW LINE | | |
| DRYWELL | ◎ | |
| STORM DRAIN PIPE | 4"SD | |
| DOWN SPOUT | DS○ | |
| ASPHALT PAVEMENT | | |
| PAVERS | | |
| GRAVEL | | |

| | |
|---|---|
| FG | FINISHED GRADE |
| EG | EXISTING GROUND |
| GB | GRADE BREAK |
| ME | MATCH EXISTING |




PLAN
SCALE IN FEET
0' 10' 20' 30'

PROFESSIONAL ENGINEER
LICENSED
17661
STATE OF IDAHO
PHOEBE JOHANNESSEN
01/15/21

| No. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| – | | | |

REVISIONS


PREPARED BY:
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MAIL: WWW.BMA5B.COM


# GRADING & DRAINAGE PLAN

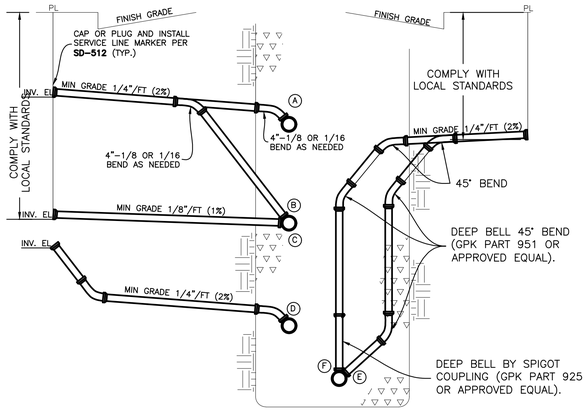
WESTCLIFF TOWNHOMES
T4N, R17E, SEC 13, B.M., KETCHUM, IDAHO

PREPARED FOR: PB INVESTMENTS

| | |
|---|---|
| DRAWN BY: | PLJ |
| DESIGNED BY: | PLJ |
| CHECKED BY: | SB |
| DATE: | 1/15/2021 |
| PROJECT NO.: | 20261 |

DRAWING NO.

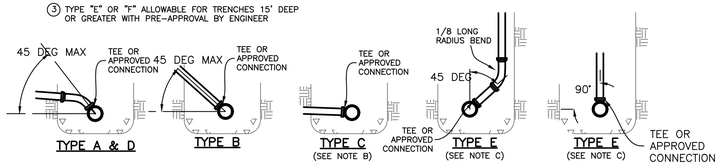
C1




ELEVATIONS

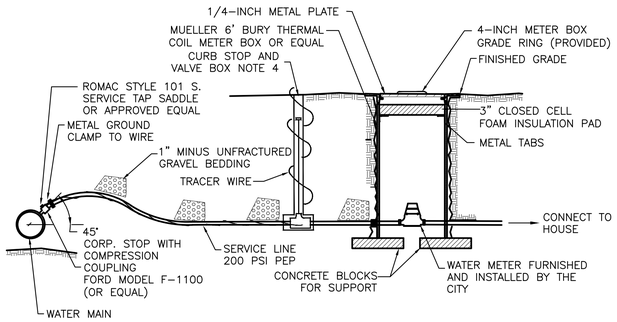
**NOTES**

1. ALL SERVICE LINES TO BE 4" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
2. TYPE "C" CONNECTION WILL ONLY BE ALLOWED IF SHOWN ON THE PLANS OR OTHERWISE APPROVED BY THE ENGINEER
3. TYPE "E" OR "F" ALLOWABLE FOR TRENCHES 15' DEEP OR GREATER WITH PRE-APPROVAL BY ENGINEER




CONNECTION DETAILS

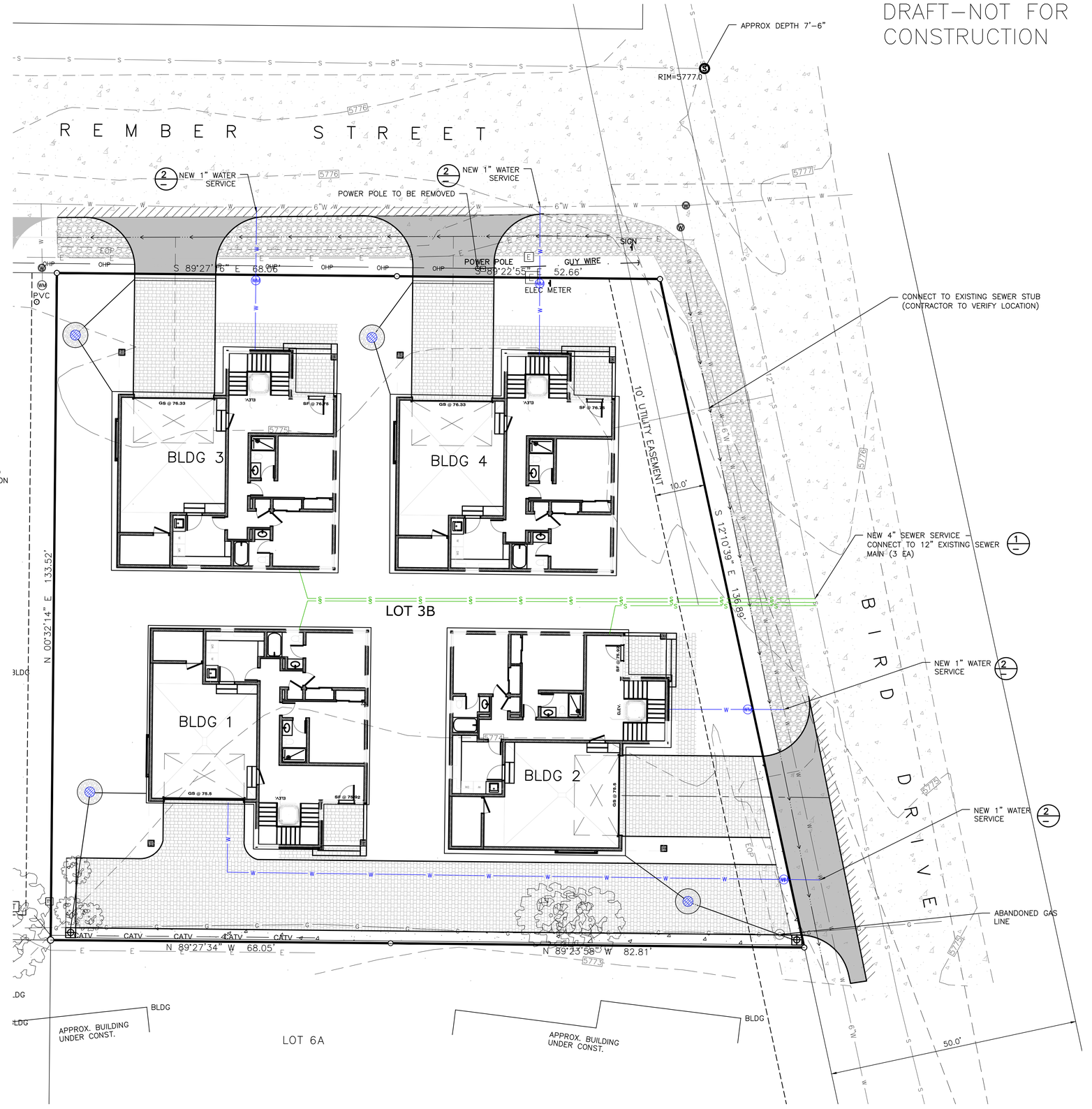
1 — STANDARD SEWER SERVICE LINES
SCALE: NONE




**NOTES**

1. WATER SERVICE LINE SHALL HAVE A 6' MIN. BURY DEPTH
2. SERVICE LINE SHALL BE 1" DIAMETER POLYETHYLENE PIPE UNLESS OTHERWISE SPECIFIED.
3. WATER SERVICE LINES SHALL BE BEDDED WITH 1" MINUS UNFRACTURED GRAVEL. BEDDING SHALL BE INSTALLED 4" UNDER THE PIPE AND 6" OVER THE PIPE.
4. FORD MODEL B-111 RESILIENT SEAT, CURB BALL VALVE (OR EQUAL). FORD EXTENSION CURB BOX WITH ARCHED BASE, 1-INCH UPPER SECTION, AND 2 HOLE "ERIE" PATTERN LID.

2 — WATER SERVICE AND METER CONNECTION
SCALE: N.T.S.




PROFESSIONAL ENGINEER
LICENSED
17661
STATE OF IDAHO
PHOEBE JOHANNESSEN
01/15/21

| No. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| – | | | |

REVISIONS


PREPARED BY:
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# UTILITY PLAN

WESTCLIFF TOWNHOMES
T4N, R17E, SEC 13, B.M., KETCHUM, IDAHO

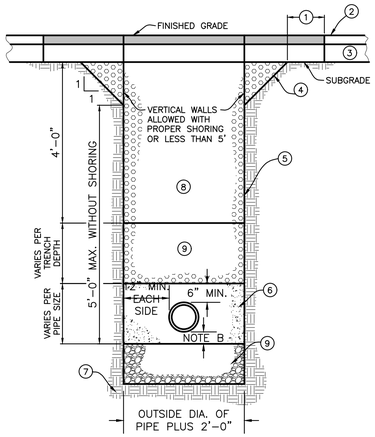
PREPARED FOR: PB INVESTMENTS

DRAWN BY: PLJ
DESIGNED BY: PLJ
CHECKED BY:
DATE: 01/15/2021
PROJECT NO.: 20261

DRAWING NO.

C2

DRAFT—NOT FOR CONSTRUCTION




## LEGEND

1. 6" MIN. REQUIRED BOTH SIDES & SHALL BE SAWCUT.
2. EXISTING SURFACE. (REPAIR ASPHALT TO MATCH EXISTING. (3" MINIMUM COMPACTED)
3. EXISTING BASE.
4. TRENCH BACK SLOPE
5. VERTICAL TRENCH WALLS, SHORING PER O.S.H.A.
6. PIPE BEDDING PER ISPWC SECTION–305 (SEE **SD–302**).
7. UNDISTURBED SOIL
8. LEAN CONCRETE
9. LOWER COMPACTION ZONE

## NOTES

A. TRENCH EXCAVATION PER ISPWC SECTION–301.

B. BACKFILL AND COMPACTION PER ISPWC SECTION–306.

DESCRIPTION AND CONSTRUCTION REQUIREMENTS:

IN AREAS WHERE IT IS NECESSARY TO CUT THE ASPHALT PAVEMENT AND DIG A TRENCH FOR BURIAL OF CONDUIT CABLE OR OTHER CITY UTILITY, THE TRENCH SHALL BE BACKFILLED WITH A LEAN CONCRETE MIX WITH THE FOLLOWING PROPORTIONS OF MATERIALS –

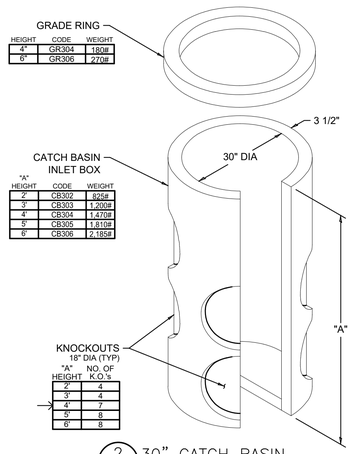
| | |
|---|---|
| COARSE AGGREGATE (⅜" MINUS) | 2,600 LBS |
| SAND | 800 LBS |
| PORTLAND CEMENT | 94 LBS |
| WATER | 11 GAL (MAX.) |

WATER CONTENT IS MAXIMUM AND MAY BE REDUCED. CARE SHALL BE TAKEN TO ASSURE THAT EXCESS WATER IS NOT PRESENT IN THE MIXING DRUM PRIOR TO CHARGING THE MIXER WITH MATERIALS. THOROUGH MIXING WILL BE REQUIRED PRIOR TO DISCHARGE.

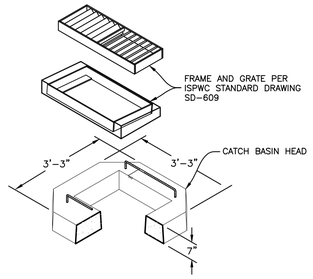
NO COMPACTION, VIBRATION OR FINISHING IS REQUIRED. THE LEAN CONCRETE MIX SHALL BE STRUCK OFF AT OR BELOW THE ELEVATION OF THE PLANT MIX SURFACING WITH A SQUARE–NOSE SHOVEL OR SIMILAR HAND TOOL. THE BACKFILL MIX SHALL BE ALLOWED TO SET FOR A MINIMUM OF 2 HOURS BEFORE THE PERMANENT PLANTMIX SURFACING IS PLACED TO COMPLETE THE TRENCH REPAIR.

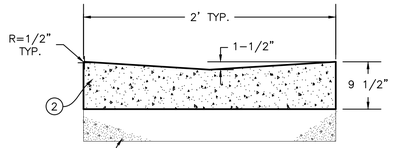
TEMPORARY PLACEMENT OF ASPHALT COLD MIX SURFACING MAY BE NECESSARY TO ACCOMMODATE TRAFFIC WITHIN THE FIRST 2 HOURS OF BACKFILL PLACEMENT PRIOR TO COMPLETING THE PERMANENT REPAIR.

1/C2 TRENCH REPAIR IN CITY STREET
SCALE: NONE




2/C1 30" CATCH BASIN
SCALE: N.T.S.




1/C1 TYPICAL SECTION

## LEGEND

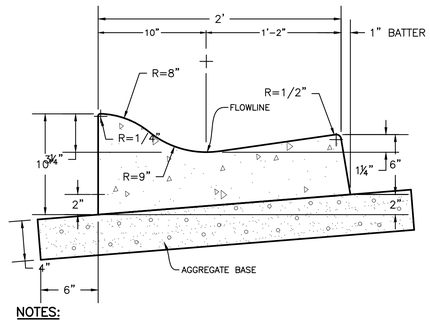
1. 6–INCH AGGREGATE BASE
2. CONCRETE

## NOTES:

A. GRADE OF GUTTER MINIMUM 0.5%.

B. EXPANSION JOINT 1/2–INCH PREFORMED JOINT MATERIAL (AASHTO M 213.)

3/C1 CONCRETE VALLEY GUTTER
SCALE: N.T.S.




## NOTES:

A. GRADE AND ALIGNMENT TO BE ESTABLISHED OR APPROVED BY THE ENGINEER AND THE PUBLIC AGENCY HAVING JURISDICTION.

B. BASE: 4–INCH COMPACTED DEPTH OF 3/4–INCH MINUS CRUSHED AGGREGATE BASE MATERIAL, PLACE AS SPECIFIED AND PAID UNDER ISPWC SECTION–802; COMPACTED TO EXCEED 95% OF STANDARD PROCTOR.

C. 1/2–INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.

D. CONTINUOUS PLACEMENT PREFERRED, SCORE INTERVALS 10–FEET MAXIMUM SPACING (OR CONSISTENT WITH 2X SIDEWALK WIDTH FOR SCORE PATTERN).

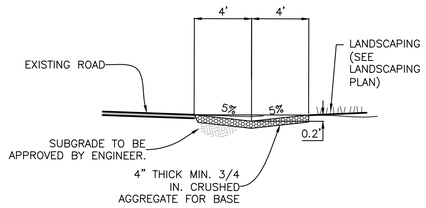
E. MATERIALS AND CONSTRUCTION IN COMPLIANCE WITH ISPWC SPECIFICATIONS.

F. BACKFILL AS PER SECTION–706.

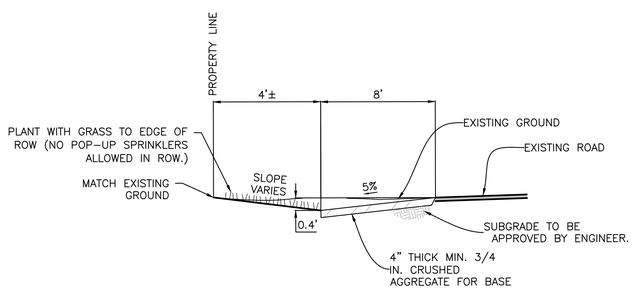
G. SECURE RIGHT–OF–WAY PERMIT BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT–OF–WAY.

H. USE ROLL CURB IN RESIDENTIAL AREAS, WHEN LOCAL JURISDICTION REQUIRES VERTICAL CURB AT INTERSECTIONS VERTICAL CURB LENGTH TO BE FULL RADIUS PLUS 5 FEET AT EACH END. TRANSITION LENGTH FROM ROLLED CURB TO VERTICAL CURB 2 FEET.

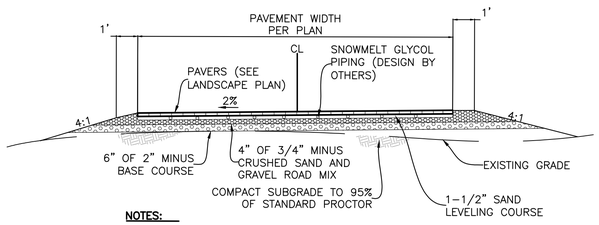
4/C1 3" ROLLED CURB AND GUTTER DETAIL
SCALE: NONE




A/C1 ROAD SHOULDER SECTION (NORTH SIDE)
SCALE: NONE



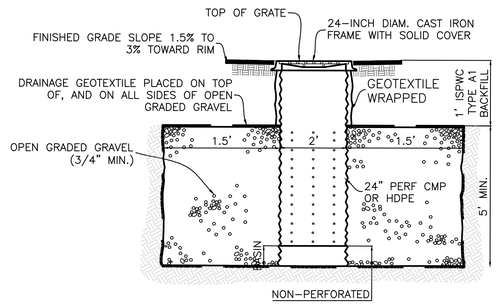

B/C1 ROAD SHOULDER SECTION (EAST SIDE)
SCALE: NONE




NOTES:

1. COMPACT DRIVEWAY SUBGRADE AND ALL STRUCTURAL FILL MATERIAL TO AT LEAST 95% OF THE MAXIMUM DENSITY OF EACH MATERIAL ACCORDING TO STANDARD PROCTOR ASTM D–698.

C/C1 DRIVEWAY SECTION
SCALE: NONE




NOTES:

1. ALL PRODUCTS AS NOTED OR APPROVED SUBSTITUTION.

5/C1 DRIVEWAY DRYWELL DETAIL
SCALE: NONE

REVISIONS

| No. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | | | |

PROFESSIONAL ENGINEER LICENSED PHOEBE JOHANNESSEN 17661 STATE OF IDAHO

01/15/21

BENCHMARK ASSOCIATES


PREPARED BY:
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DETAILS

WESTCLIFF TOWNHOMES
T4N, R17E, SEC 13, B.M., KETCHUM, IDAHO

PREPARED FOR: PB INVESTMENTS

DRAWN BY: PLJ
DESIGNED BY: PLJ
CHECKED BY: DP
DATE: 01/15/2021
PROJECT NO.: 20261

DRAWING NO.

C3

# WESTCLIFF TOWNHOMES

LOCATED WITHIN: SECTION 13, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO

A TOWNHOUSE SUBDIVISION OF BAVARIAN VILLAGE SUBDIVISION, LOT 3B.

## JANUARY 2021
## PRELIMINARY PLAT

N

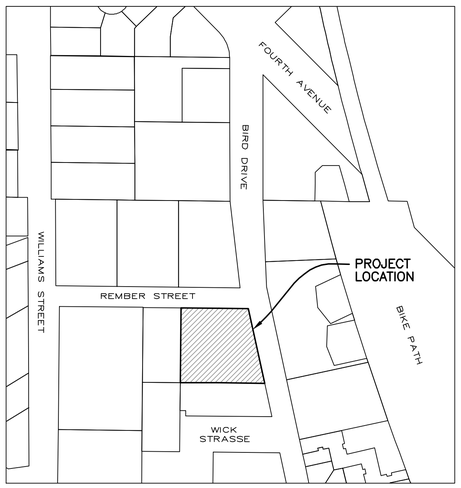
W BENCHMARK ASSOCIATES E

S

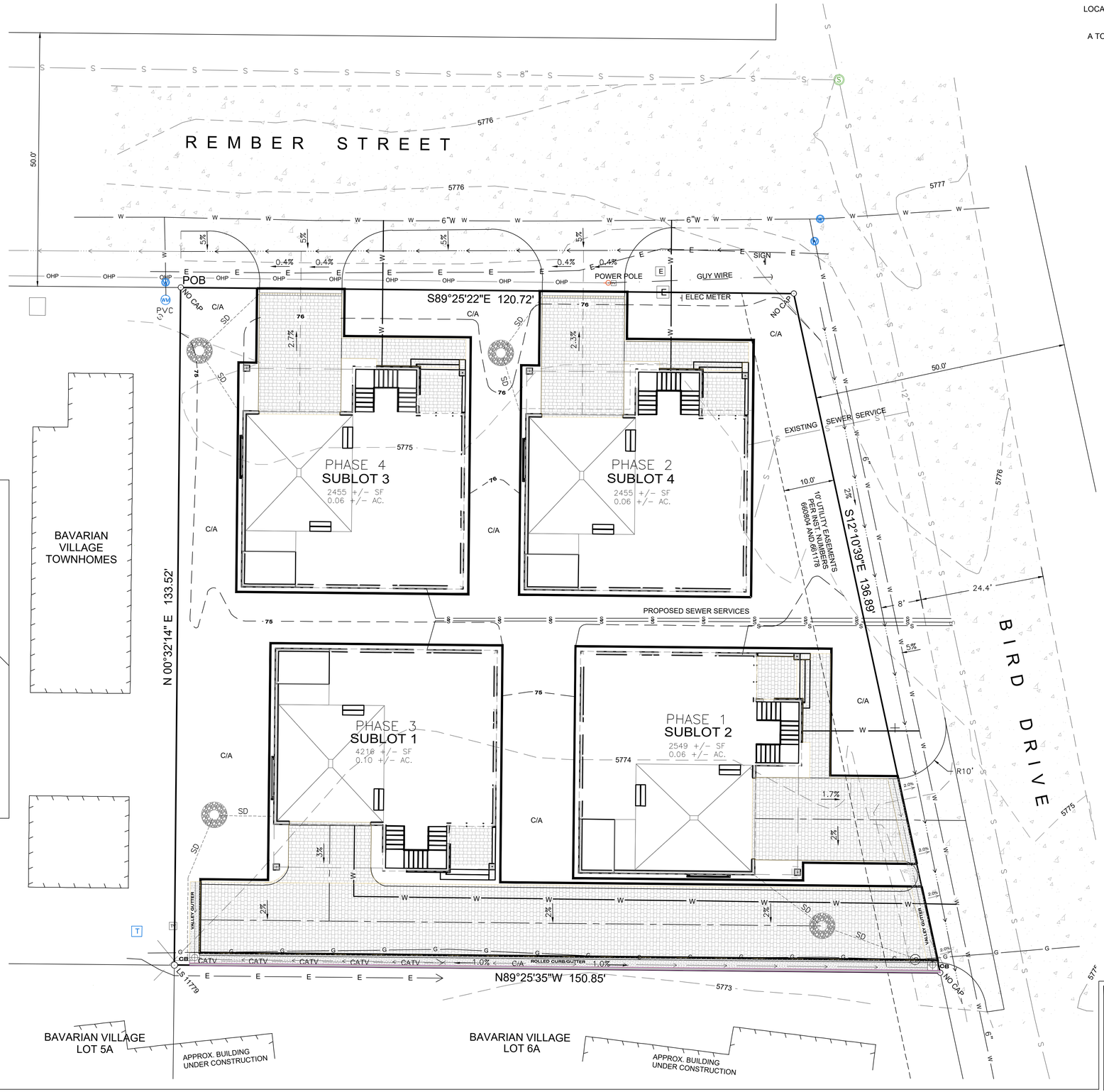
0 10 20 30

## LEGEND:

- PROPERTY BOUNDARY
- SUBLOT BOUNDARY
- EASEMENT LINE AS SHOWN
- EDGE PAVEMENT
- CENTERLINE
- W — EXISTING WATER LINE
- W — PROPOSED WATER SERVICE
- S — EXISTING SEWER LINE
- S — PROPOSED SEWER SERVICE
- G — EXISTING GAS LINE
- E — EXISTING ELECTRIC LINE
- CATV — EXISTING CABLE TV LINE
- OHP — EXISTING OVERHEAD POWER LINE
- 5775 — EXISTING CONTOUR
- 5775 — PROPOSED CONTOUR
- FLOWLINE
- E — ELECTRIC BOX
- G — GAS MARKER
- S — SEWER MANHOLE
- T — TELECOM BOX
- W — WATER VALVE
- WM — WATER METER
- TV — CATV BOX
- FOUND 5/8" REBAR
- FOUND 1/2" REBAR
- SD — STORM DRAIN
- C/A — COMMON AREA
- PROPOSED DRYWELL
- CB — PROPOSED CATCH BASIN




VICINITY MAP
NOT TO SCALE




## SURVEYOR'S NARRATIVE:

1. THE PURPOSE OF THIS PLAT IS TO CREATE FOUR SUBLOTS WITHIN LOT 3B OF BAVARIAN VILLAGE SUBDIVISION. FOUND MONUMENTS WERE ACCEPTED AS EITHER ORIGINAL OR REPLACEMENTS OF ORIGINAL CORNERS.
2. DIMENSIONS SHOWN HEREON ARE MEASURED. FOR RECORD DIMENSIONS, SEE REFERENCED SURVEYS.
3. DOCUMENTS USED IN THE COURSE OF THIS SURVEY:
   - A. ORIGINAL PLAT OF "BAVARIAN VILLAGE SUBDIVISION", INST. NO. 139821.
   - B. PLAT OF "BAVARIAN VILLAGE SUBDIVISION: LOTS 3A, 4A, 5A, 6A, 7A & 8A.", INST. NO. 631181.
   - C. PLAT OF "BAVARIAN VILLAGE SUBDIVISION: LOT 3B", INST. NO. _____ .

## NOTES:

1. REFER TO THE ORIGINAL PLAT OF BAVARIAN VILLAGE SUBDIVISION, INST. NO. 139821, TO THE PLAT OF BAVARIAN VILLAGE SUBDIVISION: LOTS 3A, 4A, 5A, 6A, 7A & 8A, INST. NO. 631181 AND TO THE PLAT OF BAVARIAN VILLAGE SUBDIVISION: LOT 3B, INST. NO. _____ FOR CONDITIONS, RESTRICTIONS AND PLAT NOTES GOVERNING THIS PROPERTY.
2. THE TOWNHOME DECLARATION AND PARTY WALL AGREEMENT FOR WESTCLIFF TOWNHOMES ARE RECORDED AS INST. NO. _____ , RECORDS OF BLAINE COUNTY, IDAHO.
3. ALL TOWNOUSE OWNERS SHALL HAVE MUTUAL RECIPROCAL EASEMENTS FOR EXISTING AND FUTURE PUBLIC AND PRIVATE UTILITIES INCLUDING, BUT NOT LIMITED TO, WATER, CABLE TV, SEWER, NATURAL GAS, TELEPHONE, AND ELECTRIC LINES OVER, UNDER AND ACROSS THEIR TOWNHOUSE SUBLOTS AND COMMON AREA FOR THE REPAIR, MAINTENANCE AND REPLACEMENT THEREOF.
4. THE CURRENT ZONING IS GENERAL RESIDENTIAL HIGH DENSITY (GR-H). REFER TO THE CITY OF KETCHUM ZONING CODE FOR MORE INFORMATION ABOUT THIS ZONE.
5. UTILITIES ARE PER SURFACE EVIDENCE ONLY. OTHER UNDERGROUND UTILITIES MAY EXIST. LOCATION OF UNDERGROUND UTILITIES AND SERVICES SHOULD BE CONFIRMED PRIOR TO EXCAVATION OR DESIGN. WATER AND SEWER LINES ARE PER FOUND VALVES, MANHOLES AND RECORD MAPS.
6. VERTICAL DATUM: ELEVATIONS BASED ON NAVD 88 (GEIOD03) DATUM UTILIZING SMARTNET CORS STATION IDKM.

## HEALTH CERTIFICATE

Sanitary restrictions as required by Idaho Code Title 50, Chapter 13, have been satisfied. Sanitary restrictions may be reimposed, in accordance with Idaho Code Title 50, Chapter 13, Section 50-1326, by the issuance of a certificate of disapproval.

_____
South Central Public Health District, REHS

Dated: _____.

PROFESSIONAL LAND SURVEYOR LICENSED 13764 01-15-21 STATE OF IDAHO LARRY JONES

W BENCHMARK ASSOCIATES E

# WESTCLIFF TOWNHOMES

LOCATED WITHIN
SECTION 13, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PREPARED FOR: WESTCLIFF, LLC

| | | |
|---|---|---|
| PROJECT NO. 20261 | DWG BY: DWS/CPL | 20261PRE.DWG |
| PRELIMINARY PLAT | DATE: 01/15/2021 | SHEET: 1 OF 1 |

G:\BMA\B\bavarian village subdivision\LOTS 3A & 4A\20261 - Westcliff Townhomes\townhouse plat\20261PRE.dwg, 1/15/2021 2:43:28 PM, DWG To PDF.pc3

BUTLER ASSOCIATES, INC.
GEOTECHNICAL & CIVIL ENGINEERING & CONSULTING

**P.O.B. 1034**
**Ketchum, Idaho 83340**
**Phone: 208.720.6432**
**Email: svgeotech@gmail.com**

August 13, 2020

Evan Robertson and Gary Slette
c/o PB Investments
134 3rd Ave. E.
Twin Falls, ID 83303
E: wroth13@gmail.com
C: (208) 720-2987

**RE: GEOTECHNICAL REPORT**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

Dear Evan and Gary,

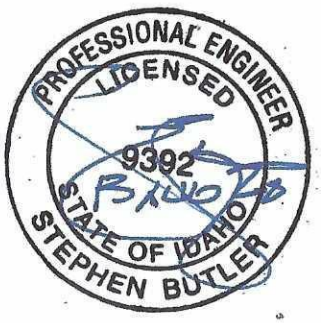
I have completed the authorized geotechnical investigation and report for the proposed Rember Street Residences on Lots 3A & 4A, Bavarian Village Subdivision located at 110 & 106 Rember Street. The work was authorized with the signed proposal dated July 20, 2020.

This report summarizes the results of my field and laboratory testing and presents my geotechnical engineering opinions and recommendations. **It is my opinion that the site is suitable for the proposed residences and garages supported by continuous and spread footings and slab-on-grade foundations constructed on an approved structural fill foundation building pad and/or approved native subgrade underlying the uncontrolled fill.** I am providing the recommendations in this report for the preparation of the subgrade, structural fill building pad, foundation design, foundation drainage system, surface grading and drainage and general radon venting concepts. Groundwater was encountered at approximately 6.0 feet below existing grade in all the test pits so I do not recommend below grade structures.

I recommend that this office be retained to provide observations for the construction of the structural fill foundation building pad, foundation drainage system, structural backfill to support exterior hardscapes and any other recommendations presented in this report that are incorporated into the project design. This work will be performed on a time and material basis and is not included in this scope of services. A copy of this geotechnical report should be incorporated into the project construction documents.

I appreciate this opportunity of working with you on this project. Please call me if you have any questions or comments.
Sincerely,

Steve Butler, P.E.



# GEOTECHNICAL REPORT

Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

Butler Associates, Inc.
P.O. Box 1034
Ketchum, Idaho 83340
August 13, 2020

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## INTRODUCTION

This report represents the results of the soil and foundation engineering evaluation for the proposed Rember Street Residences on Lots 3A & 4A, Bavarian Village Subdivision located at 110 & 106 Rember Street in Ketchum, Idaho. The *Vicinity Map* shows the general location of the proposed project site.

The purpose of this evaluation was to assess the surface and subsurface soil and water conditions to prepare geotechnical engineering opinions and recommendations for the construction of the proposed Rember Street Residences. Before the subsurface investigation I reviewed the geotechnical reports for the projects directly to the west and south of the site and geologic data pertinent to the site and general area. I performed a subsurface investigation by excavating six test pits at the site using a track mounted excavator. The soils encountered in the test pits were visually identified and logged by a geotechnical engineer according to the Unified Soil Classification System and used to prepare this final report.

## PROPOSED PROJECT

I understand that the proposed project will consist of a four, two story, concrete, steel and wood frame single family townhome residences with attached garages supported by continuous and spread footings and slab-on-grade construction. The garages will be supported by slab-on-grade construction and accessed from the new driveways commencing at Rember Street and/or Bird Drive. The project will be served with water and sewer by the Ketchum Utility Department.

The primary views from the site are the Griffin Butte and Wood River Valley to the north, Pioneer Mountains and Dollar Mountain to the east, the Wood River Valley and Bald Mountain to the south and Bald Mountain to the west.

According to the Blaine County Parcel Information Map the property is generally "square shaped" and totals approximately 0.42 acres in size. Rember Street borders the site to the north, Bird Drive to the east, Lot 6A Bavarian Village Subdivision to the south and Lot 2, Bavarian Village Subdivision to the west.

## FIELD EXPLORATION

Six test pits were excavated and observed at the site on July 24, 2020 using a track-mounted excavator. The test pits were excavated up to 7.9 feet below existing grade. The *Test Pit Site Plan* shows the property lines, existing contours and test pit locations.

The soils in each test pit were evaluated and the soil profiles logged in the field by a geotechnical engineer in accordance with the Unified Soil Classification System (*USCS*). The *Test Pit Site Plan Photos*, *Test Pit Site Plan* and *Test Pit Logs* are presented on pages 10-12, 13, and 14-19, respectively. The *USCS* chart on page 20 should be used to interpret the terms on the test pit logs in this report. No test pits were excavated to design the septic system drainfield since the project will be served by the Ketchum Utility Department.

At the conclusion of the subsurface evaluation, the test pits were loosely backfilled to match the existing ground surface. Any of the test pits located beneath areas proposed for foundations, terraces, walkways or driveways will need to excavated and backfilled with structural fill in accordance with the *Site Preparation* section of this report.

## SUBSURFACE CONDITIONS

The general soil profiles encountered in the test pits revealed up to 4.0 feet of silty fine sand and gravel with trace gravel, roots & debris (topsoil/uncontrolled fill) overlying native, brown, sand, gravel, cobble and boulders with trace silt up to 7.9 feet below existing grade. The test pits were terminated after reaching several feet below typical footing elevations and due to consistency of the soil between the test pits. Groundwater was encountered in all of the test pits at approximately 6.0 feet below existing grade. Following the completion of the subsurface investigation the test pits were loosely backfilled and graded close to existing grade.

The geology of this area is mapped on the "Geologic Map of the Hailey Quadrangle" as alluvial soils consisting of sand, gravel, silt and clay deposited by the Big Wood River. The uncontrolled fill is the result of grading the site level after demolishing the existing structures.

## OPINIONS AND RECOMMENDATIONS

### General

**It is the opinion of this office that the site is suitable from a geotechnical standpoint for the proposed development of the four single family townhome residences with attached garages supported by an approved native sand and gravel subgrade underlying the surficial fine grain soils and uncontrolled fill or a free-draining structural fill foundation building pad constructed or an approved native subgrade. Due to encountering groundwater at approximately 6 feet below existing grade I do not recommend below existing grade structures unless they are designed to resist groundwater buoyancy forces and waterproofed.**

All structural fill to be placed for the foundation building pad, exterior terraces, walkways and driveways should be approved on-site or imported sand and gravel soils. The surficial uncontrolled fill could be moisture sensitive, contains organics and debris and should be stockpiled to use as non-structural landscaping fill or exported. All structural fill should be placed as outlined in the *Structural Fill* section of this report.

The recommendations contained in this report reflect my understanding of the existing surface and below grade conditions and reflect a straight-line interpolation and extrapolation of the subsurface conditions between and beyond test pit locations. However, the soil conditions may vary at the proposed site. The various soil conditions will not be known until the foundation excavation is complete and may cause changes to construction plans and/or costs.

### Subgrade Preparation & Structural Fill Foundation Building Pad

Following are site preparation recommendations to be completed prior to approving the subgrade

for footings and the construction of the structural fill foundation building pad to support the foundation:

1. All test pits should be accurately located in the field prior to commencing with the excavation. Any test pit that is located beneath a proposed footing, slab-on-grade, terrace or walkway adjacent to the structure should be excavated and backfilled with structural fill in accordance with this report. This procedure should help reduce local settlement. The approximate test pit locations are shown on the *Test Pit Site Plan.*

2. The building footprints, exterior terraces, walkways and limits of disturbance should be stripped of disturbed soils, uncontrolled fill, debris and silty fine sand topsoil sand and organics to expose the underlying undisturbed native free-draining sand and gravel soils. The excavated fine grain soils should be stockpiled as used for non-structural landscaping or exported.

3. The excavation to bottom of the footing should be completed to expose undisturbed native sand and gravel soils. If pockets of silty fine sand and/or organics are exposed in the foundation subgrade I recommend removing the material and backfilling with on-site or imported sand and gravel soils. The native sand and gravel soils are not moisture sensitive and should not be compromised from precipitation during construction and construction traffic.

4. The exposed subgrade should be scarified at least 6" below bottom of footing, watered and compacted with a multiple passes of a 5-ton smooth roller to at least 95% of the maximum dry density of the material according to ASTM D- 698 and observed by this office. Any unsuitable soils or soft areas should be excavated to expose a competent subgrade and backfilled with structural fill as outlined in the *Structural Fill* is section.

5. After this office has observed the compacted subgrade to be free of unsuitable soils it will be approved for footings. See the *Crawlspace Foundation Wall Drainage Profile*.

**Structural Fill**

Structural fill for the foundation building pad, retaining walls, walkways, exterior terraces and the driveway shall meet the following recommendations:

1. Structural fill should consist of approved washed fractured or rounded gravel, crushed sand and gravel (roadmix), on-site native sand and gravel soils or imported pitrun sand and gravel classified as GW, GM, GP, SW, SM, or SP as described in the Unified Soil Classification System chart presented after the test pit logs.

2. If fine grain soils are used as non-structural fill against the foundation walls imported 1"-2" dia. washed gravel should be installed from bottom of footing to the top of footing and covered with a layer of 4.0 oz., non-woven filter fabric to assist in subsurface runoff in reaching the footing drain and being directed to a drywell as shown on the *Crawlspace Foundation Wall Drainage Profile.*

3. Granular structural fill should have no more than 10% passing the No. 200 sieve and a cobble size of no larger than 8 inches.

4. Structural fill should be placed in uniform, maximum 10-inch deep, loose lifts and compacted to a minimum of 95% of the maximum dry density of the soil, as determined by ASTM D 698 (Standard Proctor). This assumes that heavy compaction equipment such as smooth-drum, vibratory rollers with a minimum drum weight of 5 tons is used. The depth of each lift could be adjusted in the field based on the material and size of compaction equipment.

5. The maximum loose lift thickness should be reduced to 6 inches where smaller and/or lighter compaction equipment is used (i.e. WACKER jumping jack). A vibrating plate tamper can be used to compact 10" lifts of washed rock but should not be used to compact native sand and gravel.

6. ¾" minus crushed sand and gravel roadmix should be placed in 6" loose lifts, watered and compacting with a jumping jack tamper, vibrating plate tamper or smooth drum roller.

7. The general contractor should contact this office several days before the foundation excavation commences to minimize any delays in excavation, placement of structural fill, approval of imported structural fill, construction observations and reports to the building inspector by a stamped by an engineer.

**Foundations**

The approved native sand and gravel subgrade or imported sand and gravel structural fill foundation building pad will support continuous footings, spread footings and slab-on-grade construction based on the following parameters:

1. The allowable bearing pressure of the approved sand and gravel soils is 3,500 pounds per square foot (psf).

2. Exterior footings should be at least 32 inches below finish grade to minimize the potential for frost heave.

3. Total and differential settlement is estimated to be less than one inch and ¾ ", respectively, for the approved sand and gravel foundation subgrade or structural fill building pad.

4. The recommended friction factor is 0.6 for the sand and gravel subgrade.

5. The floor joists and sub-floor should be in-place prior to backfilling against the foundation walls unless directed otherwise by the structural engineer.

6. All footings should be constructed so that a line drawn from the edge of footings at a slope of 0.5' horizontal to 1.0 foot vertical so the undisturbed subgrade soil is not intercepted by non-structural fill or an open slope.

7. Crawlspace foundations can be waterproofed with several coats of asphalt emulsion or a waterproofing membrane i.e. bituthane membrane. If a membrane is installed it should be protected with a synthetic drainage matt or a cheaper protection board to minimize any

penetrations from rocks in the backfill.

8. All footings should be constructed so that a line drawn from the edge of footings at a slope of 0.5 foot horizontal to 1.0 foot vertical to the undisturbed subgrade soil is not intercepted by non-structural fill or an open slope. See *Structural Fill/Foundation Subgrade Concepts Profile* for details. See the *Slab-on-grade Profile*.

**Soil Classification for Septic Design**

The residence will be served by the Ketchum Utility Department so no test pit was excavated for a private septic system design.

**Surface Grading and Drainage**

I have not reviewed the completed grading and drainage plan at the time this report was completed. The drainage plan should incorporate the following grading and drainage concepts based on the soils encountered in the test pits.

1. I recommend that the finish surface be sloped at a minimum of 2% to direct runoff away from the foundations, walkways, terraces and driveways.

2. All roof down spouts, foundation drains, landscape catch basins and surface runoff should be directed to the drywells terminated at least 10 feet from and 3 feet below the lowest footing.

3. Roof down spouts should **not** be allowed to drain adjacent to foundation. A 4" solid pipe should be installed in top of the footing and sloped at a min. of 1% with stub-outs for connecting the downspouts. The pipe should be terminated in the drywells located at least 10 feet from the foundation. See the *Retaining Wall Drainage Profile* for concepts.

4. The native sand and gravel soils underlying the surficial silty fine sand soils has an infiltration rate of approximately 2.0"/minute. This office can recommend the size and number of drywells. See the *Landscape Drywell Profile*.

5. All drain lines terminated in drywells should be sloped at a min. 2% and covered with at least 24" of soil to minimize freezing.

**Driveway, Terraces and Walkways**

I recommend the following section for asphalt driveways, terraces and walkways of either pavers or exterior concrete slabs to minimize frost action and settlement. The driveway section is designed to allow for an exposed gravel driving surface during construction before the final asphalt driving surface is installed:

1. The hardscape areas should be excavated to remove all roots, organics, uncontrolled fill, disturbed native soils and dark brown topsoil. The underlying undisturbed native soils should be

scarified to a 6" depth, watered and compacted with a 5-ton smooth drum roller and proof rolled with a 5-ton smooth drum roller to locate any soft areas.

2. Any soft areas exposed in the compacted subgrade should be excavated to expose competent soils and replaced with compacted structural fill as outlined in the *Site Preparation* section.

3. All parking areas, terraces and walkways should be constructed so that a line drawn from the edge of walkways or driveways at a slope of 0.5 foot horizontal to 1.0 foot vertical to the undisturbed subgrade soil is not intercepted by non-structural fill or an open slope. See the *Structural Fill-Foundation Subgrade Concepts Profile*.

4. 6 inches of on-site or imported pitrun sand and gravel or 2" minus crushed sand and gravel roadmix sub-base watered and compacted with multiple passes of a smooth drum roller to at least 95% of the maximum dry density of the soil as determined by ASTM Test D-698 (Standard Proctor). On-site sand and gravel soils can be used for the sub-base layer.

5. 4 inches of ¾" minus, crushed sand and gravel roadmix compacted to at least 95% of the maximum dry density of the soil as determined by ASTM Test D-698 (Standard Proctor).

6. Typically, the driveway is constructed at the commencement of the project to include the roadmix to provide a driving surface that can be plowed during construction. Prior to placing pavers or asphalt the surface should be cleared of mud and debris and several inches of roadmix is added to create the finish grading.

7. Pavers, asphalt or concrete.

8. Driveway and surface runoff should not be allowed to drain onto Rember Street or Bird Drive. I recommend that a drywell with a cast iron ring and grate be installed near the end of the driveway and parking area in the asphalt. Having drywells located in the asphalt will allow them to be kept clear of snow and ice when the areas are plowed. Drywells located along the edge of the driveway or parking areas can be buried under plowed snow and become ineffective. See the *Storm Water Drywell Profile* for details.

A minimum of 4 inches of ¾", well graded, crushed sand and gravel (road mix) base course should be placed between the pit-run sub-base and the finish walking surface. This will provide a leveling course and distribute point loads. If the sub-base for the driveway, terraces, and walkways are completed before the finish surface is constructed any structural fill should be compacted if the surfaces are exposed over a winter since the material will experience frost heave and reach a loose state.

**Seismicity**

The general subsurface soil conditions are consistent with Design Code Reference IBC-2015 for Site Class C-Very Dense Soil and Soft Rock. The latitude and longitude of the project site are 43.68°N and 114.37° W, respectively.

Seismic Design Category : C
Risk Category: I/II/III
Ss = 0.591 g
S1= 0.171 g
Sms = 0.688 g
Sm1 = 0.276 g

**Radon Venting**

Blaine County has a history of radon gas collecting in crawlspaces and under slab-on-grades. Radon gas is a byproduct of the natural breakdown of uranium that accumulates in improperly sealed basements and crawl spaces. These radon levels can exceed safety standards as set by the EPA. According to the State Radon Contact the most accurate testing results are gathered in the structure after construction.

This office is not qualified to complete a radon venting system design so the following venting concepts are guidelines. The radon system should be designed or reviewed by a radon venting contractor to ensure the proper spacing of the perforated pipes and vertical vent pipes.
Typical radon system designs consist of the following:

1. Install a 4-inch dia. perforated pipes on the footing subgrade within the crawlspace or slab-on-grade foundation.

2. I recommend installing sleeves through interior footings to allow the perforated radon pipe to remain below top of footing.

3. Place imported washed gravel to top of footing to protect radon piping and create level crawlspace surface. A typical footing depth of 8" would provide 4" of gravel over the 4" perforated pipes.

4. Install vapor barrier over top of gravel and seal to top of footing. A white vapor barrier i.e. Dura Skrim enhances lighting in the crawlspace.

5. Connect radon piping to vertical vent pipes. The horizontal length of radon piping per vent pipe and number and location of vent pipes should be determined by radon system contractor.

6. Power should be provided adjacent to the vertical vent pipe in case a low-voltage fan is required to vacate radon.

It is important to create an airtight seal between all concrete slabs and adjacent walls. Consulting an experienced contractor or radon-venting specialist can ensure an adequate system is installed during construction compared to potentially expensive remedial measures. See *Radon System Concepts Plan* for general design concepts.

I would anticipate that groundwater will rise to at least the BFE (5791') during a high snowpack spring runoff even though the site is located outside of the floodplain. If the bottom of the crawlspace

will be at or below the BFE then the radon system should be designed to allow groundwater to temporarily flood the crawlspace and then drain without compromising the vapor barrier or the vapor barrier seal to the foundation.

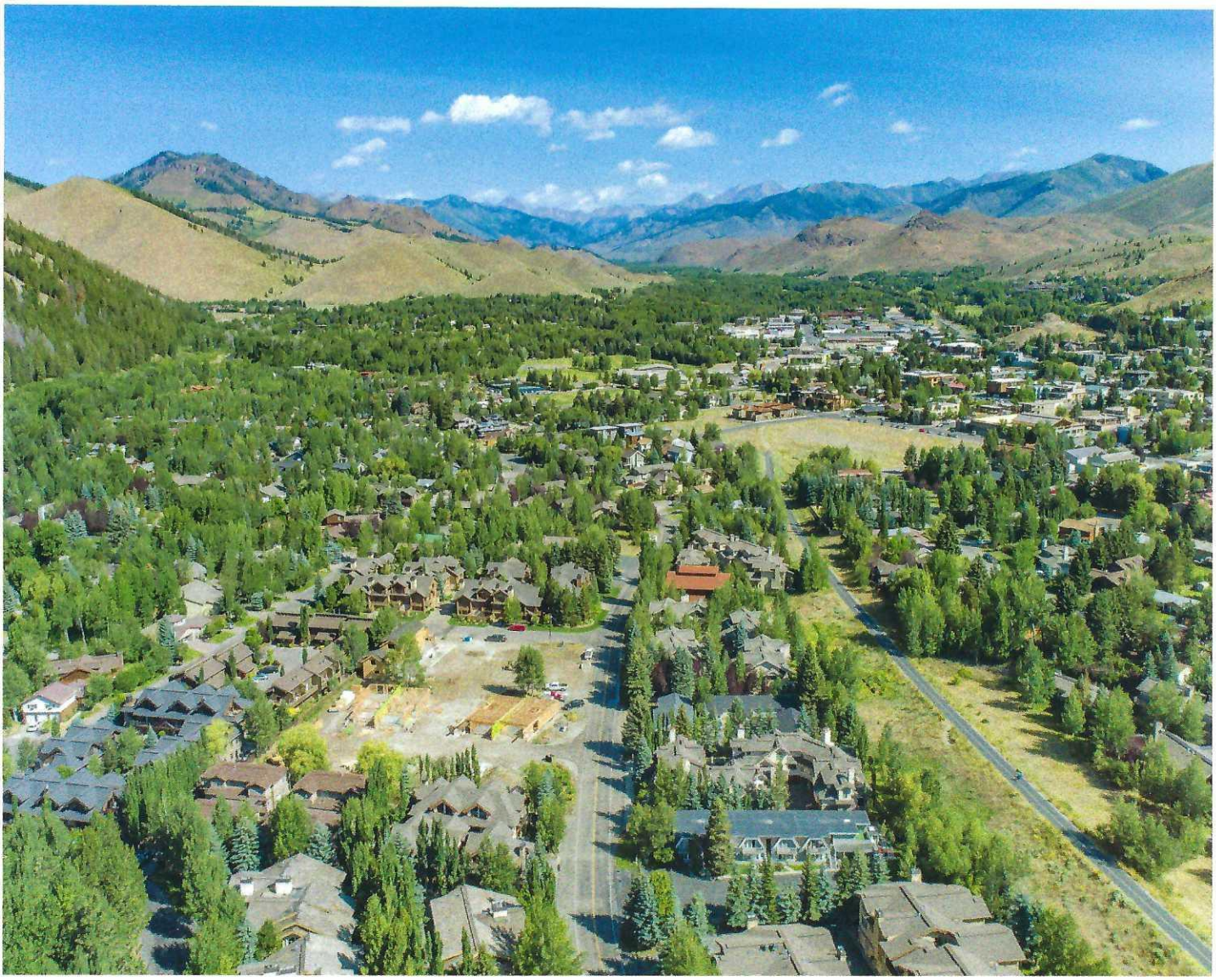
**CONSTRUCTION OBSERVATION AND MONITORING**

This report provides opinions and recommendations that are generally accepted geotechnical engineering principle and practices. I recommend that this office provide construction monitoring and observation services to ensure that the recommendations outlined in this report are followed and that the structural fill foundation building pad, foundation drainage system and grading and drainage details are constructed properly. If this office is not retained to perform the recommended services, I cannot be responsible for soil engineering construction errors or omissions. The costs for the recommended services are not included with this report and would be incurred on a time and expense basis.

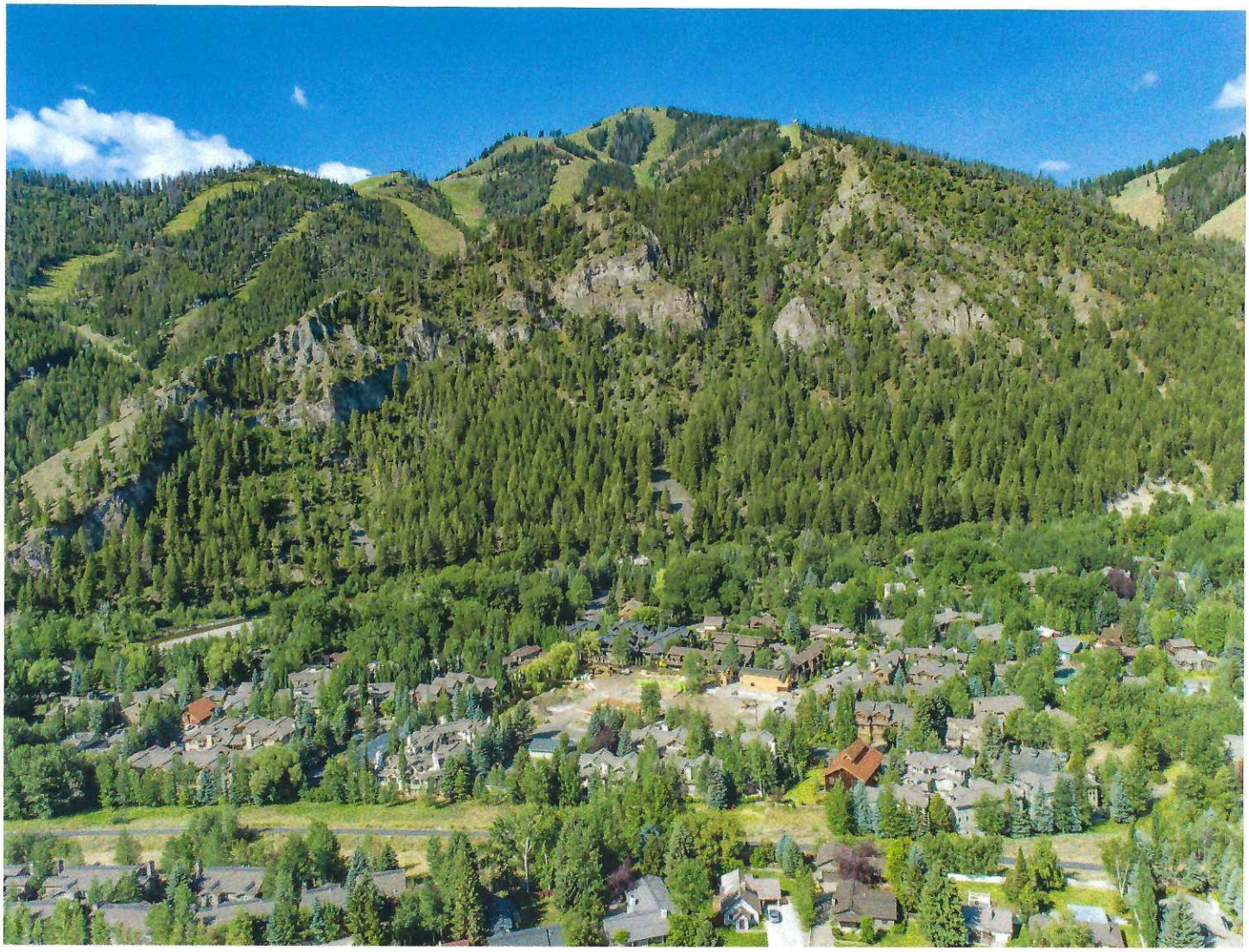

**VICINITY MAP**

Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340
43º 47' 34" 114º 22' 12"

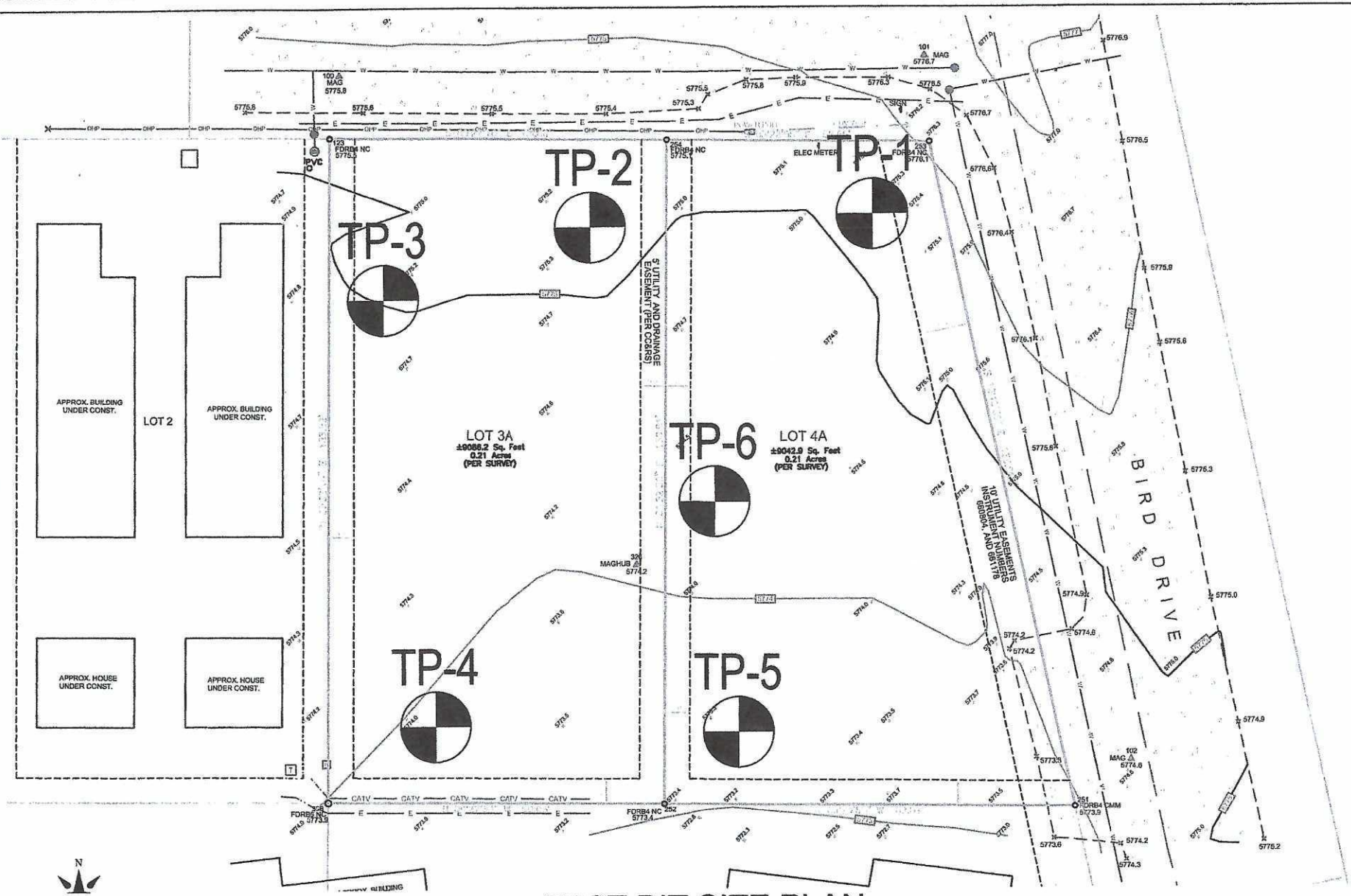

**TEST PIT SITE PLAN PHOTO 1**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340
Image captured on July 24, 2020



**TEST PIT SITE PLAN PHOTO 2**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340
Image captured on July 24, 2020



**TEST PIT SITE PLAN PHOTO 2**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340
Image captured on July 24, 2020




# TEST PIT SITE PLAN

Rember Street Residences
Lots 3A & 4A, Bavarian Subdivision
Ketchum, Idaho

Butler Associates, Inc.
Test pits excavated
on July 24, 2020

August 2020
Not to scale

**EXPLORATORY TEST PIT #1**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-up to 4.0' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 4.0'-7.5' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5775.0 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 6.0 feet below grade.
Test pit terminated at 7.5 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

**EXPLORATORY TEST PIT #2**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-2.5' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 2.5'-7.6' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5775.0 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 6.0 feet below grade.
Test pit terminated at 7.6 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

**EXPLORATORY TEST PIT #3**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-up to 2.8' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 2.8'-7.9' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5775.0 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 6.0 feet below grade.
Test pit terminated at 7.9 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

**EXPLORATORY TEST PIT #4**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-2.0' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 2.0'-7.0' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5774.0 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 5.5 feet below grade.
Test pit terminated at 7.0 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

**EXPLORATORY TEST PIT #5**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-2.8' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 2.8'-6.9' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5773.3 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 5.7 feet below grade.
Test pit terminated at 6.9 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

**EXPLORATORY TEST PIT #6**
Proposed Rember Street Residences
Lots 3A & 4A, Bavarian Village Subdivision
110 & 106 Rember Street
Ketchum, ID 83340

| DEPTH (Feet) | USCS SOIL CLASS | SOIL DESCRIPTION |
|---|---|---|
| 0.0'-3.0' | GM | Silty fine SAND, GRAVEL & COBBLE, trace Roots & Debris (FILL) Brown, loose, dry-damp. |
| 3.0'-7.1' | GW | SAND, GRAVEL, COBBLE & BOULDER (NATIVE) Brown, compact-dense, damp. |

Test Pit completed on July 24, 2020.
See *Test Pit Site Plan* for test pit location.
The test pit surface elevation is approximately 5774.5 feet based on the topographic survey by Benchmark Associates, Inc.
Groundwater encountered at 6.0 feet below grade.
Test pit terminated at 7.1 feet below existing grade after reaching several feet below typical crawlspace footings and due to the consistency of the soil type between the test pits.
No soil sample retrieved.
Sloughing of test pit walls in native sand and gravel soils.
Excavation equipment: DEERE track-mounted excavator.

# SOILS
# CLASSIFICATION / LEGEND

## RELATIVE DENSITY OR CONSISTENCY
### UTILIZING STANDARD PENETRATION TEST VALUES

| COHESIONLESS SOILS (a) | | | COHESIVE SOILS (b) | | |
|---|---|---|---|---|---|
| Density (c) | N. blows/ft. (c) | Relative Density (%) | Consistency | N. blows/ft. (c) | Undrained (d) Shear Strenth(psf) |
| Very loose | 0 to 4 | 0 - 15 | very soft | 0 to 2 | <250 |
| Loose | 4 to 10 | 15 - 35 | soft | 2 to 4 | 250-500 |
| Compact | 10 to 30 | 35 - 65 | firm | 4 to 8 | 500-1000 |
| Dense | 30 to 50 | 65 - 85 | stiff | 8 to 15 | 1000-2000 |
| Very Dense | over 50 | >85 | very stiff | 15 to 30 | 2000-4000 |
| | | | Hard | over 30 | >4000 |

(a) Soils consisting of gravel, sand, and silt, either separately or in combination, possessing no characteristics of plasticity and exhibiting drained behavior.
(b) Soils possessing the characteristics of plasticity and exhibiting undrained behavoir.
(c) Refer to text of ASTM D 1586-84 for a definition of N; in normally consolidated cohesionless soils Relative Densiy terms are based on N. values corrected for overburden pressures.
(d) Undrained shear strength = 1/2 unconfined compression strength.

## COMPONENT DEFINITINS BY GRADATION

| COMPONENT | SIZE RANGE |
|---|---|
| Boulders | Above 12 inches |
| Cobbles | 3 inches to 12 inches |
| Gravel | 3 inches to No. 4 (4.76 mm) |
| Coarse gravel | 3 inches to 3/4 inch |
| Fine gravel | 3/4 inch to No 4 (4.76mm) |
| Sand | No. 4 (4.76mm) to No. 200 (0.074mm) |
| Coarse sand | No. 4 (4.76) to No. 10. (2.0mm) |
| Medium sand | No. 10 (2.0mm) to No. 40 (0.42mm) |
| Fine sand | No. 40 (0.42) to No. 200 (0.074mm) |
| Silt & Clay | Smaller than No. 200 (0.074mm) |

## SILT & CLAY DESCRIPTIONS

| DESCRIPTIONS | TYPICAL UNIFIED DESIGNATION |
|---|---|
| Silt | ML (non-plastic) |
| Clayey Silt | CL-ML (low plasticity) |
| Silty Clay | CL |
| Clay | CH |
| Plastic Silt | MH |
| Organic Soils | OL, OH, Pt |

## LABORATORY TESTS

| TEST | DESIGNATION |
|---|---|
| Moisture | (1) |
| Density | D |
| Grain Size | G |
| Hydrometer | H |
| Atterberg Limits | (1) |
| Consolidation | C |
| Unconsifined | U |
| UU Triax | UU |
| CU Triax | CU |
| CD Triax | CD |
| Permeability | P |

(1) Moisture & Atterberg Limits

## SAMPLES

SS SPT Samplers
HD Heavy Duty Split Spoons
SH Shelby Tube
P Pitcher Sampler
B Bulk
C Cord

Unless otherwise noted, drive samples advanced with 140 lb. Hammer with 30 inch drop.

## COMPONENT PROPORTIONS

| DESCRIPTIONS | RANGE OF PROPORTION |
|---|---|
| Trace | 0 - 5% |
| Little | 5 - 12% |
| Some or Adjective (a) | 12 - 30% |
| And | 30 - 50% |

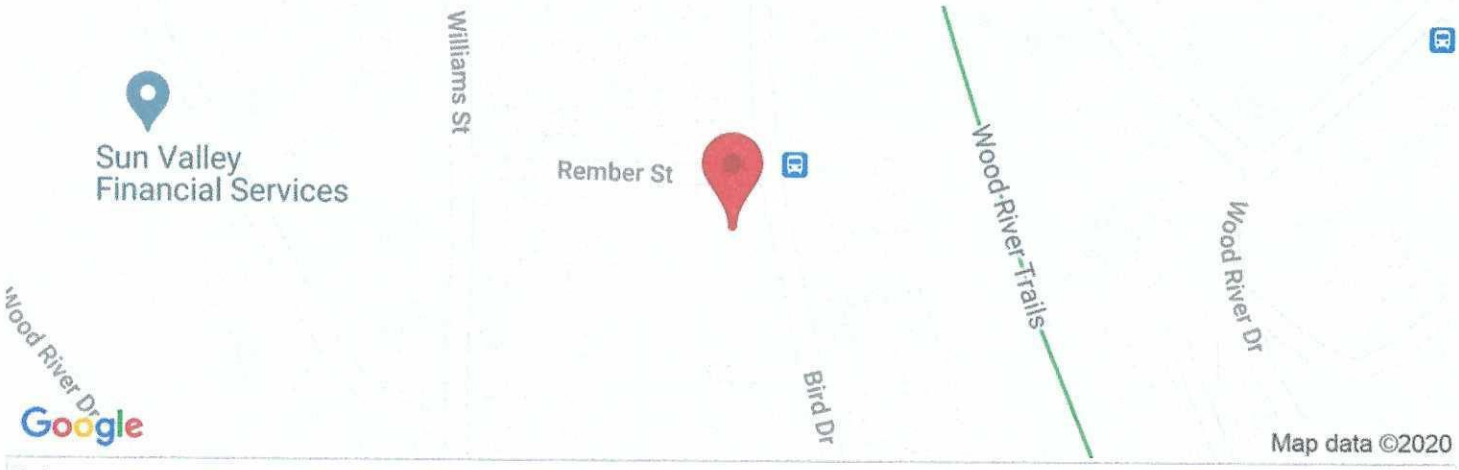
(a) Use Gravelly, Sandy or Silty as appropriate.

## UNIFIED SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | | SYMBOL | TYPICAL NAMES |
|---|---|---|---|---|
| COARSE GRAINED SOILS more than 50% retained on No. 200 Sieve | GRAVELS More than 50% of coarse fraction retained on No. 4 Sieve | CLEAN GRAVELS | GW | Well-Graded gravel |
| | | | GP | Poorly-graded gravels |
| | | GRAVELS WITH FINES | GM | Gravel and Silt Mixtures |
| | | | GC | Gravel and Clay Mixtures |
| | SANDS 50% or more of coarse fraction passes No. 4 Sieve | CLEAN SANDS | SW | Well-graded Sands |
| | | | SP | Poorly-graded Sands |
| | | SANDS WITH FINES more than 12% fines | SM | Sand and Silt Mixtures |
| | | | SC | Sand and Clay Mixtures |
| FINE GRAINED SOILS 50% or more passes the No. 200 Sieve | SILTS & CLAYS Liquid limit less than 50 | INORGANIC | CL | Low-plasticity Clays |
| | | | ML | Non-plastic and Low-plasticity Silts |
| | | ORGANIC | OL | Organic Silt and Clay of Low plasticity. |
| | SILTS & CLAYS Liquid limit less than 50 | INORGANIC | CH | High Plasticity Clays |
| | | | MH | High Plasticity Silts |
| | | ORGANIC | OH | High-plasticity-Organic Clays High-plasticity-Organic Silts |
| HIGHLY ORGANIC SOILS | | | PT | Peat, Muck and Other Highly Organic Soils |

# Rember Street Residences

**Latitude, Longitude: 43.67601142, -114.36987484**




| | |
|---|---|
| **Date** | 8/12/2020, 4:53:50 PM |
| **Design Code Reference Document** | IBC-2015 |
| **Risk Category** | II |
| **Site Class** | C - Very Dense Soil and Soft Rock |

| Type | Value | Description |
|---|---|---|
| $S_S$ | 0.591 | $MCE_R$ ground motion. (for 0.2 second period) |
| $S_1$ | 0.171 | $MCE_R$ ground motion. (for 1.0s period) |
| $S_{MS}$ | 0.688 | Site-modified spectral acceleration value |
| $S_{M1}$ | 0.278 | Site-modified spectral acceleration value |
| $S_{DS}$ | 0.459 | Numeric seismic design value at 0.2 second SA |
| $S_{D1}$ | 0.185 | Numeric seismic design value at 1.0 second SA |

| Type | Value | Description |
|---|---|---|
| SDC | C | Seismic design category |
| $F_a$ | 1.164 | Site amplification factor at 0.2 second |
| $F_v$ | 1.629 | Site amplification factor at 1.0 second |
| PGA | 0.238 | $MCE_G$ peak ground acceleration |
| $F_{PGA}$ | 1.162 | Site amplification factor at PGA |
| $PGA_M$ | 0.277 | Site modified peak ground acceleration |
| $T_L$ | 6 | Long-period transition period in seconds |
| SsRT | 0.591 | Probabilistic risk-targeted ground motion. (0.2 second) |
| SsUH | 0.639 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration |
| SsD | 1.5 | Factored deterministic acceleration value. (0.2 second) |
| S1RT | 0.171 | Probabilistic risk-targeted ground motion. (1.0 second) |
| S1UH | 0.18 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration. |
| S1D | 0.6 | Factored deterministic acceleration value. (1.0 second) |
| PGAd | 0.6 | Factored deterministic acceleration value. (Peak Ground Acceleration) |
| $C_{RS}$ | 0.925 | Mapped value of the risk coefficient at short periods |
| $C_{R1}$ | 0.948 | Mapped value of the risk coefficient at a period of 1 s |

# Parcel Information Map

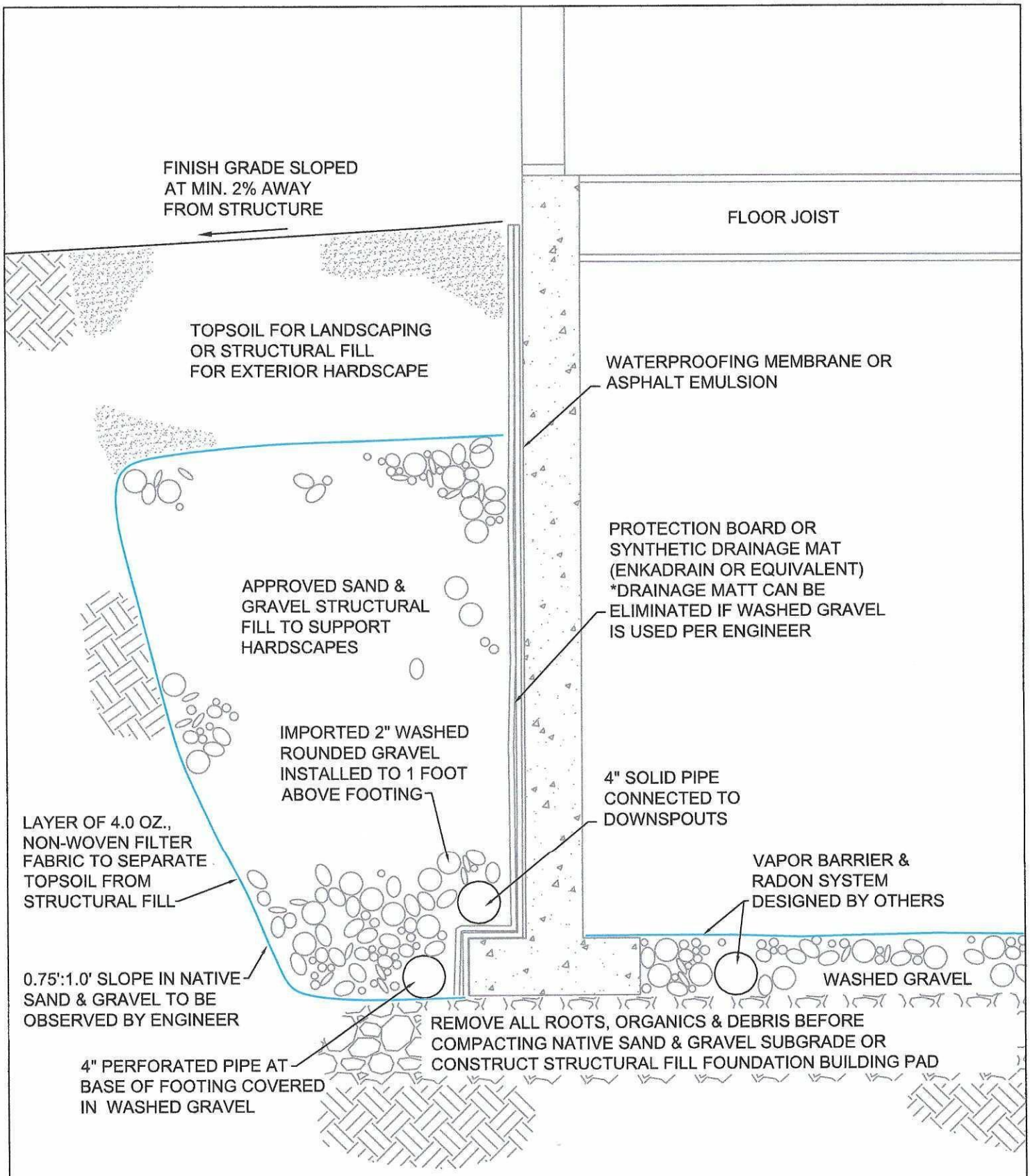

July 24, 2020

1:851

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

Made by: Blaine County GIS



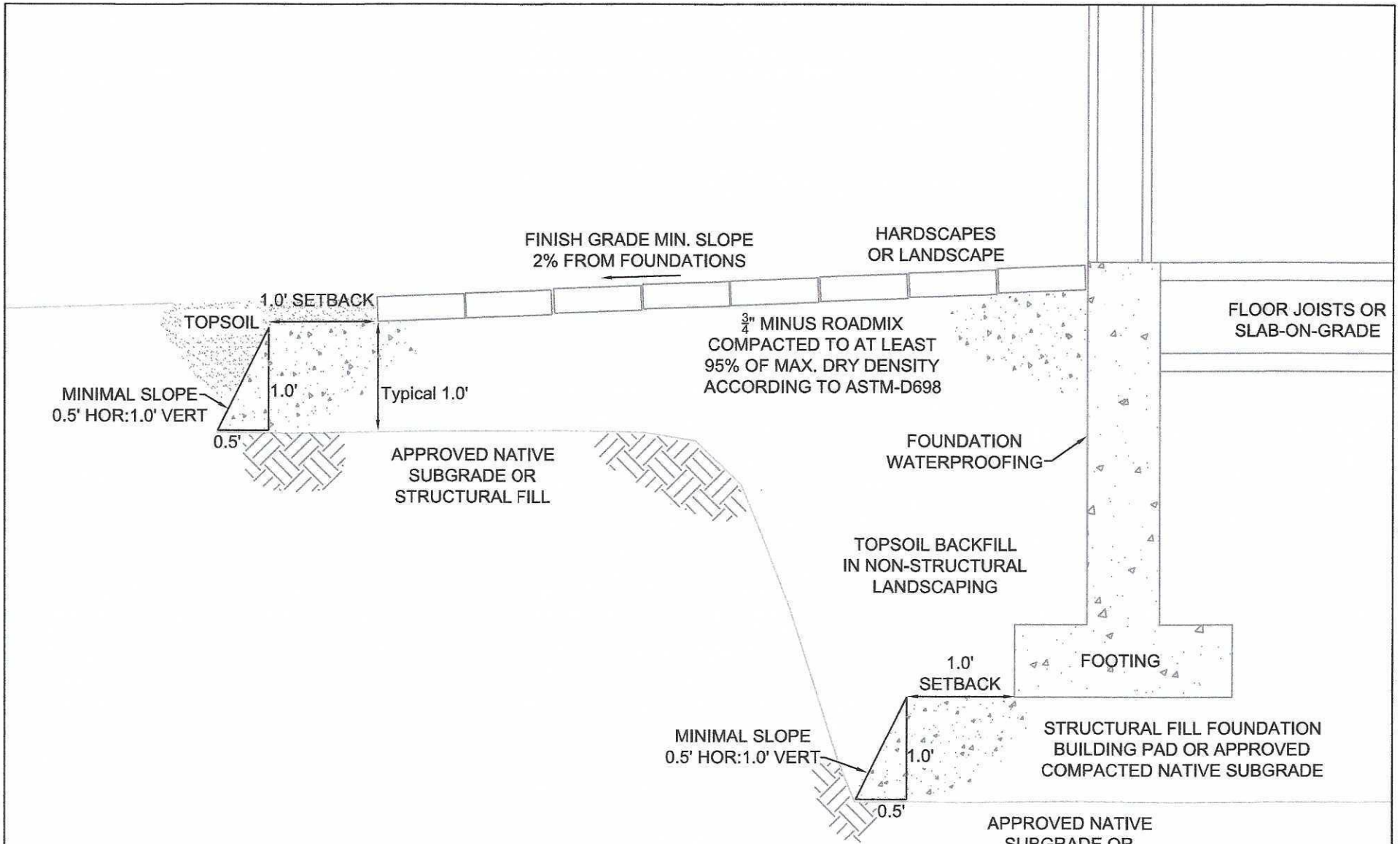

# CRAWLSPACE FOUNDATION WALL DRAINAGE PROFILE

Proposed Lot 10 Residence
Lots 3A & 4A, Block 1, Bavarian Village Subdivision
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
208.720.6432
svgeotech@gmail.com

8-12-20

Not To Scale



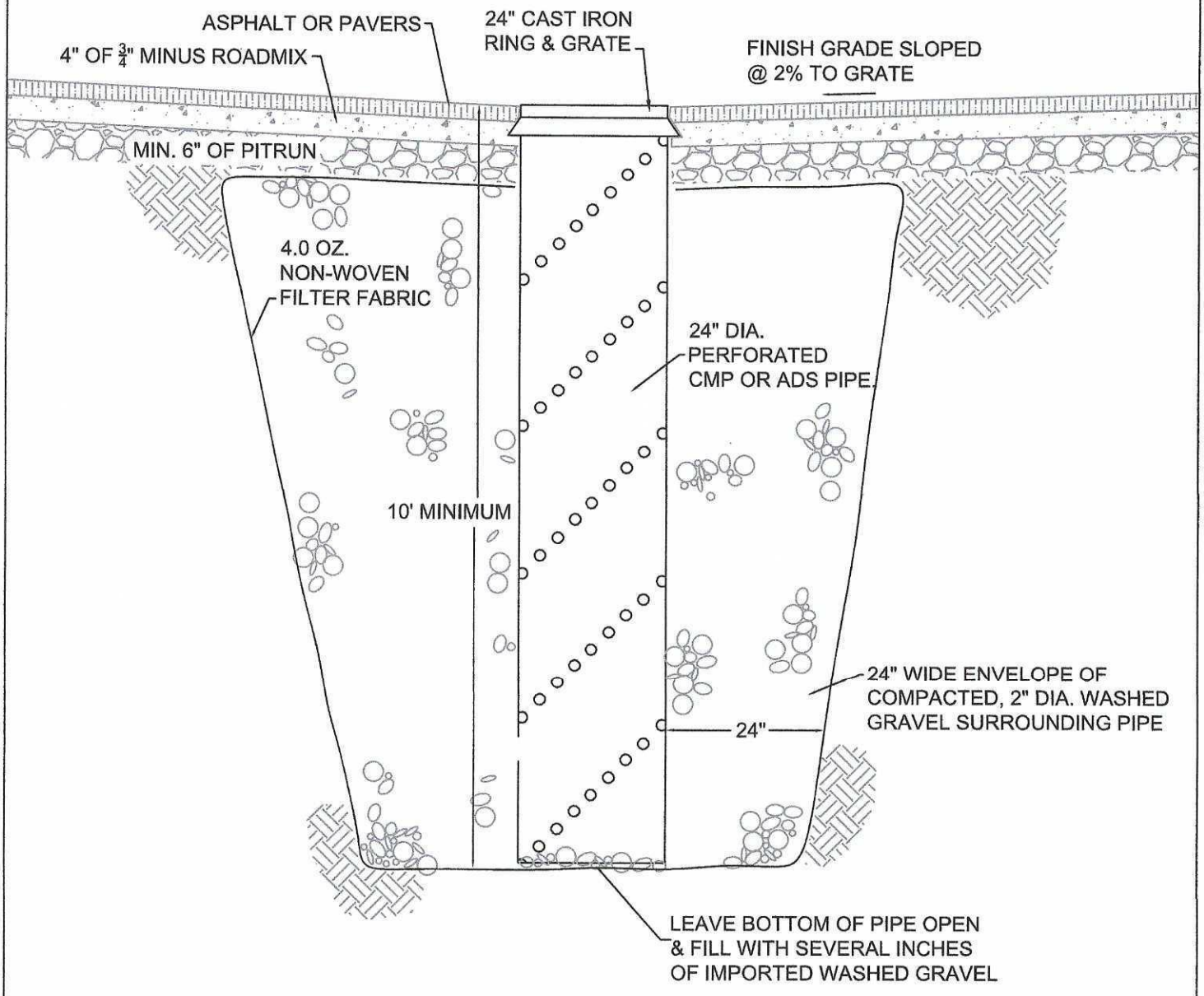

# STRUCTURAL FILL /FOUNDATION SUBGRADE CONCEPTS PROFILE

Proposed Lot 10 Residence
Lots 3A & 4A, Block 1, Bavarian Village Subdivision
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
208.720.6432
svgeotech@gmail.com

8-12-20

Not To Scale



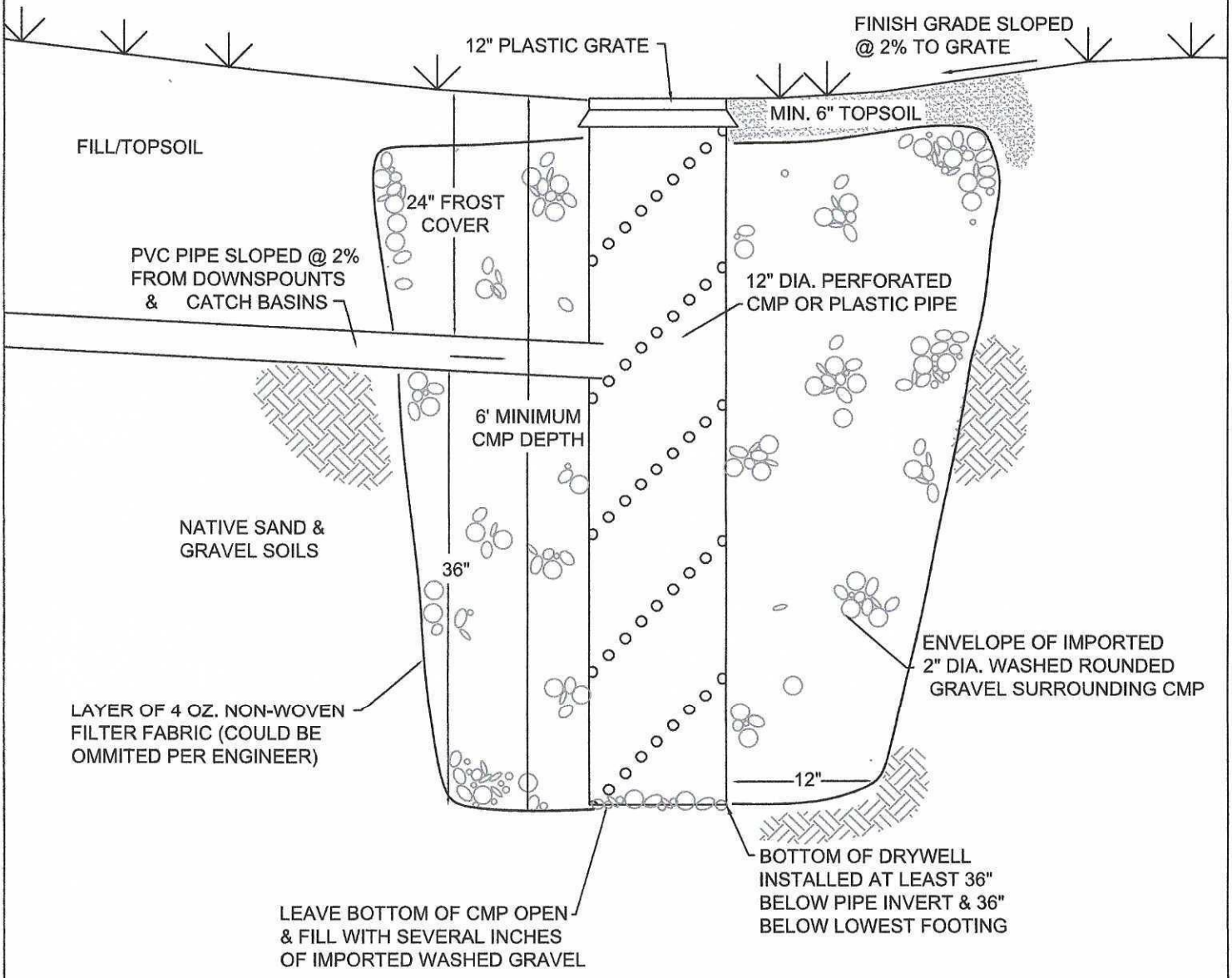

# STORMWATER DRYWELL PROFILE

Proposed Lot 10 Residence
Lots 3A & 4A, Block 1, Bavarian Village Subdivision
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
208.720.6432
svgeotech@gmail.com

8-12-20

Not To Scale




# LANDSCAPE DRYWELL PROFILE

Proposed Lot 10 Residence
Lots 3A & 4A, Block 1, Bavarian Village Subdivision
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
208.720.6432
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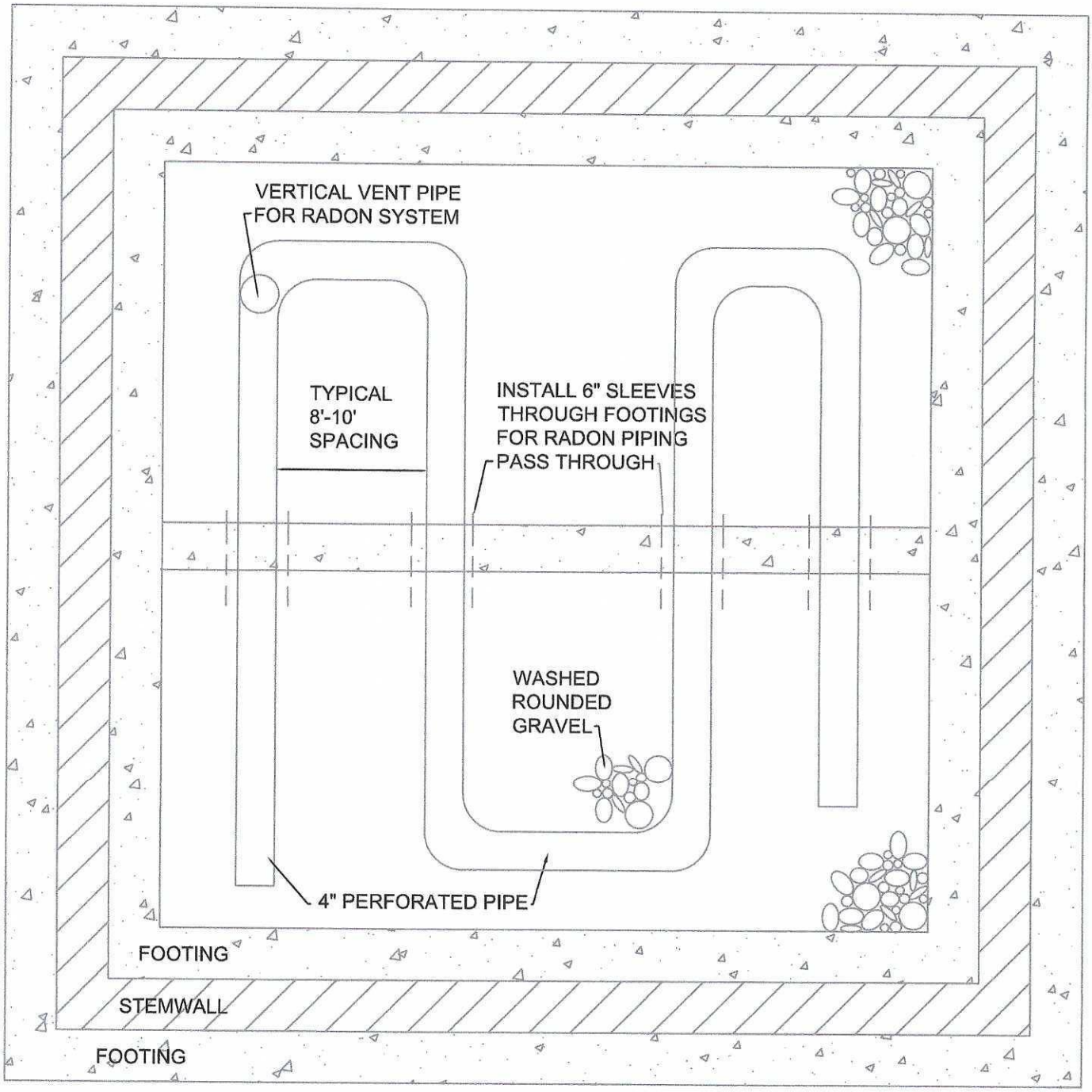
8-12-20

Not To Scale

*TYPICALLY WASHED GRAVEL PLACED OVER PERFORATED PIPE TO TOP OF FOOTING AND COVERED WITH VAPOR BARRIER THAT IS SEALED TO TOP OF FOOTING




**RADON SYSTEM DESIGNED BY OTHERS

# RADON SYSTEM CONCEPTS PLAN

Proposed Lot 10 Residence
Lots 3A & 4A, Block 1, Bavarian Village Subdivision
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
208.720.6432
svgeotech@gmail.com

8-12-20

Not To Scale

# Exhibit B:

# Planning Review #1 Comments and Applicant Response

# PLANNING REVIEW (Ketchum Municipal Code Title 17 Zoning Regulations)

**Project:** Westcliff Townhomes Pre-Application Design Review
**Location:** 106 & 110 Rember Street (Bavarian Village Subdivision: Lots 3A and 4A)
**Zoning District:** General Residential High Density (GR-H) Zoning District
**Overlay**: None
**Use**: Multi-Family Residential Dwelling Units

**Pre-Application Number:** P21-007
**Associated Applications:** Lot Line Shift P20-089 & Townhouse Subdivision Preliminary Plat P21-008
**Review Date:** January 28, 2021
**Review Cycle:** #1

**Scope of Work:** The Westcliff Townhomes development is comprised of four new detached townhome units and associated site improvements located at the southwest corner of Rember Street and Bird Drive.

| Item # | Sheet Title | Planning Review Comment<br>Review #1<br>January 27, 2021 | *Applicant Response and Description of Correction to Plans* |
|---|---|---|---|
| 1 | A1 | The permitted FAR in the General Residential High Density (GR-H) Zoning District is 0.5. The Planning & Zoning Commission may allow an increased FAR subject to Design Review (Ketchum Municipal Code §17.124.040.B). Ketchum Municipal Code does not guarantee 1.4 as the allowed FAR. New developments may be permitted an increased FAR above 0.5 at the Commission's discretion through Design Review. To receive more floor area, new buildings must complement the scale and character of the surrounding neighborhood.<br><br>Your FAR calculations include a 2,800-square-foot parking credit for groundwater issues. The project site's groundwater issues must be verified by an Idaho-licensed engineer (Ketchum Municipal Code §17.124.040.B.2b). If the city determines that the site conditions preclude underground parking, 350-square-feet per required parking space may be subtracted from the project's total square footage. | *Project proposed FAR is .67 including the 2800 S.F. parking credit for ground water issues.*<br>*Butler Associates, our local Idaho-licensed Geotechnical Engineer has detailed the ground water issues in his report, which will be part of the application package. Butler recommends that there be no underground structures on the property due to high water table found in test pits dug in August of 2020.* |
| 2 | A1 | The project plans should note the total open space proposed for the multi-family residential development. The minimum required open space area in the GR-H Zone is 35% (Ketchum Municipal Code §17.12030). | *The proposed open space for the project is 35.7%, lot area to total building footprint. This is now noted on the cover sheet A1 under Building Data.* |
| 3 | A1 & C (Survey) | The legal description on Sheet A1 and the Survey indicate the development is located on Lots 3A and 4A of Bavarian Village Subdivision. The Ketchum City Council approved | *The legal description noted on Sheet A1 has been corrected to reflect the lot line* |

| | | | |
|---|---|---|---|
| | | Lot Line Shift Application P20-089 to vacate the common boundary line separating Lot 3A and 4A of Bavarian Village Subdivision to create amended Lot 3B on November 16, 2020. This amended plat map must be recorded prior to action on the proposed Townhouse Subdivision Preliminary Plat. | *vacation to create amended Lot 3B.* |
| 4 | C (Preliminary Plat) | The preliminary plat map is missing the building envelope that is required for corner lots (Ketchum Municipal Code §16.04.040.F2). | *The plat map and landscape plans now show the building envelope.* |
| 5 | L-1.0 Site Plan | The site plan indicates a new transformer located at the northeast corner of the property. Pursuant to Ketchum Municipal Code §17.96.060.D2, utilities shall be located underground and all utility, power, and communication lines within the development site shall be concealed from public view. The location of the new transformer as approved by Idaho Power and the screening required by Ketchum Municipal Code §17.96.060.D2 must be shown on the project plans. | *All utility lines are underground. Please clarify any additional screening requirement.*<br><br>*[The transformer/J-box has to be visible for service access from the street with no obstructions within 10' on one side and 2' on others.]* |
| 6 | L-1.0 Site Plan | The site plan only specifies the width of the driveway to access townhome unit 3. Please indicate the widths of all driveways within the development. Pursuant to Ketchum Municipal Code §17.125.030.H, a maximum of 35% of the linear footage of any street frontage may be devoted to access off-street parking. | *Dimensions and Calculations Added to L-1.0*<br><br>*Total Street Frontage = 267.61 lf*<br><br>*Total Driveway/Off Street Parking = 64.9 lf / 24%* |
| 7 | L-1.0 Site Plan | Please specify the distance from the driveway entrances accessing units 2 and 4 to the intersection of Rember Street and Bird Drive as measured along the property line adjacent to the right-of-way. Ketchum Municipal Code §17.96.060.G4 requires that curb cuts and driveway entrances shall be no closer than 20 feet to the nearest intersection of 2 or more streets as measured along the property line adjacent to the right-of-way. The City Engineer may increase minimum distance requirements due to site conditions or projected traffic levels or speed. | *Dimensions Added to L-1.0*<br><br>*Distance of Driveway Entrances to Intersection:*<br><br>*Unit 2 = 33.2'*<br><br>*Unit 4 = 97.7'* |
| 8 | L-2.0 Grading Plan | The site wall elevation as shown on Sheet L-2.0 indicates that the address panels will be 5 feet tall. Ketchum Municipal Code §17.124.130 specifies that fences, hedges, and walls shall not exceed 4 feet in height when located less than 30 feet from the | *The proposed Address Panels are only 4'-6" wide, which we feel would not usually be considered to be a fence, hedge or wall.* |

| | | | |
|---|---|---|---|
| | | front lot line and shall not exceed 6 feet in height when located more than 30 feet from the front lot line. | *Given that Fire Code (bottom of numbers have to be min. 48" above finish grade), address markers have to be taller than 4'. Please advise. We welcome additional discussions.* |
| 9 | A3 Floor Plans | Indicate the parking stall dimensions within the 2-car garage on the first-level floor plan. Parking spaces must meet the minimum dimensions specified in Ketchum Municipal Code §17.125.030. | *Parking Stall Dimensions have been added to the floor plans on sheet A3* |
| 10 | A4 Roof Plan | The roof plan should specify proposed drainage for the gravel-ballasted membrane roof system. Pursuant to KMC §17.96.060.C1, all storm-water drainage shall be retained on site, including water from any roof drains. | *Roof drains have been noted on the roof plan, sheet A4, and will be internal drains hard piped to drywells noted on the Civil and Landscape Plans* |
| 11 | A5 Building Elevations | Sheet A5 indicates the elevations of the finished floors at the first level, second level, and third level. The elevations should also indicate the maximum height of each townhome unit. | *Overall building height from finish grade has been added to the building elevations on sheet A5, and the highest point of roof over lowest grade height is called out for each building on the building sections on page A7* |
| 12 | A8 Color Board | The color and material sample board must show all exterior material used on the façade of the structure (Ketchum Municipal Code §17.96.040.C.2i), including the balcony's steel railings and garage doors. | *The color board now lists the railings and garage doors as well as the other materials for the building.* |

**Reviewed by:** **Date:** 1/27/2021

Abigail Rivin

Abby Rivin, AICP
Associate Planner
City of Ketchum Department of Planning and Building