City of Ketchum
Planning & Building

OFFICIAL USE ONLY	
File Number:	P23-052
Date Received:	6/5/23
By:	HLN
Fee Paid:	$1400
Approved Date:	
Denied Date:	
By:	

Mountain Overlay Design Review Application

OWNER INFORMATION			
Project Name: WALNUT RESIDENCE			
Owner Name: BREYMAN PROPERTIES LLC			
Mailing Address: 12045 BREYMAN AVE, PORTLAND, OR 97219			
Phone: 208-726-4031			
Email: JANET@JARVIS-GROUP.COM			
PROJECT INFORMATION			
Architect/Representative: THE JARVIS GROUP			
Phone: 208-726-4031			
Mailing Address: PO Box 626, Ketchum, ID 83340			
Email: JANET@JARVIS-GROUP.COM			
Engineer of Record: GALENA BENCHMARK ASSOCIATES			
Engineer Email: PHOEBE@BMA5B.COM			
Legal Land Description: KETCHUM LOT 3 & 4, BLOCK 91			
Project Address: LOT 3 & 4, BLOCK 91			
Lot Area: LOT 3 = 8262 SF, LOT 4 = 8261 SF TOTAL COMBINED = 16,523 SF			
Zoning District: LR			
Anticipated Use: HOME			
Number of Residential Units: 1			
TYPE OF CONSTRUCTION			
☒ New	☐ Remodel	☐ Addition	☐ Other, please explain:

TOTAL FLOOR AREA	Proposed	Existing
Basement: Garage | Mechanical:	1,367	N/A
1st Floor: LIVING	835	N/A
2nd Floor:	1,808	N/A
3rd Floor:	1,156	N/A
Decks:	500	N/A
Mezzanine:	N/A	N/A
Total:	6,167	N/A
Building Coverage: SF / %	24.8 %	Curb Cut: SF / %

PROPOSED SETBACKS			
Front: 15', 19' - 2" proposed	Side: 10', 12' - 6" proposed	Side: 10', 22' - 1" proposed	Rear: 5', 8' - 3" proposed

ADDITIONAL INFORMATION	
Building Height: SEE ELEVATIONS A3's	Parking Spaces Provided: 2
Will Fill or Excavation Be Required? (Yes) / No	
If Yes, Amount in Cubic Yards: Fill: 199	Excavation: 3,053
Will Existing Trees or Vegetation Be Removed? (Yes) / No	

Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Mountain Overlay Design Review Application, in which the City of Ketchum is the prevailing party, to pay 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.

Signature of Owner/Representative — Date: 5.26.2023

Once your application has been received, we will review it and contact you with next steps. No further action is required at this time.

WALNUT RESIDENCE

PROJECT TEAM

ARCHITECT
THE JARVIS GROUP ARCHITECTS, AIA, PLLC
511 SUN VALLEY ROAD, SUITE 202
KETCHUM, IDAHO 83340
PO BOX 626
PHONE: (208) 726-4031

SURVEYOR
GALENA-BENCHMARK ASSOCIATES
P.O. BOX 733
100 BELL DRIVE
KETCHUM, ID 83340
PHONE: (208) 726-8514

LANDSCAPE ARCHITECT
BYLA LANDSCAPE ARCHITECTS
323 LEWIS ST,
KETCHUM, ID 83340
PHONE: (208) 726-5907

GEOTECHNICAL ENGINEER
BUTLER ASSOCIATES, INC.
P.O. BOX 1034
208 SPRUCE AVENUE N.
KETCHUM, ID 83340
PHONE: (208) 720-6432

PROJECT TABULATIONS

SQUARE FOOTAGE CALCULATIONS

FIRST FLOOR LIVING AREA:	797 SF
SECOND FLOOR LIVING AREA:	1,644 SF
THIRD FLOOR LIVING AREA:	2,125 SF
TOTAL LIVING AREA:	**4,566 SF**
GARAGE:	865 SF
MECHANICAL :	374 SF
TOTAL :	**5,805 SF**

LOT COVERAGE CALCULATION

TOTAL SITE AREA	16,583 SF
PROPOSED ARCHITECTURAL FOOTPRINT	4,188 SF
LOT COVERAGE %	**25.3% SF**

VICINITY MAP

GENERAL NOTES

1. THIS PROJECT SHALL COMPLY WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO-FAMILY DWELLINGS, CITY OF KETCHUM.
2. CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS BY CITY OF KETCHUM, FIRE DEPARTMENTS, STATE ELECTRICAL INSPECTOR OR OTHER GOVERNING AUTHORITIES, AS NECESSARY.
3. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL TEMPORARY UTILITIES, INCLUDING ELECTRICITY NECESSARY FOR CONSTRUCTION. A JOB PHONE MUST BE MAINTAINED ON SITE FOR THE DURATION OF CONSTRUCTION AND THE PHONE NUMBER WILL BE MADE AVAILABLE TO THE ARCHITECT.
4. ALL CONSTRUCTION DEBRIS IS TO BE STOCKPILED NEATLY ON SITE UNTIL DISPOSAL. WHICH SHALL BE DONE AT THE COUNTY LANDFILL OR RECYCLING FACILITY ONLY. THE JOB SITE SHALL REMAIN CLEAN OF TRASH.
5. EXCEPT AT INTERIOR ELEVATIONS, AND UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE GIVEN TO FACE OF ROUGH FRAMING, CENTERLINE OF COLUMNS, OR FACE OF CONCRETE AND C.M.U. WALL. GIVEN DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR SHALL TAKE EXTRA CAUTION TO COORDINATE DIMENSIONS OF STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. VERIFY ANY DISCREPANCIES WITH ARCHITECT.
6. CONTRACTOR SHALL PROVIDE STORAGE FOR ALL BUILDING MATERIALS IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
7. ALL SUBSTITUTIONS ARE TO BE APPROVED BY ARCHITECT. ALONG WITH WRITTEN REQUESTS, CONTRACTOR SHALL PROVIDE ALL INFORMATION REGARDING THE SUBSTITUTION IN QUESTION, INCLUDING AVAILABILITY AND REASON FOR SUBSTITUTION.
8. SOLID WOOD BLOCKING, INSULATION OR OTHER FIRE STOP MATERIAL IS TO BE PROVIDED BETWEEN STORIES, BETWEEN TOP STORY AND ROOF SPACE, BETWEEN STAIR STRINGERS AT TOP AND BOTTOM, BETWEEN STUDS ALONG STAIR RUNS AND AT ALL OTHER PLACES THAT COULD AFFORD THE PASSAGE OF FLAME. FIRE STOPS BETWEEN CHIMNEY AND WOOD FRAME SHALL BE NON-COMBUSTIBLE.
9. CONTRACTOR SHALL PROVIDE SAMPLES OF ALL FINISHES AND STAIN COLORS FOR APPROVAL BY OWNER / ARCHITECT. THIS INCLUDES INTERIOR AND EXTERIOR STAINS, INTERIOR PAINT, SHEETROCK TEXTURES, CHEMICALLY APPLIED METAL PATINAS, ETC.
10. CONTRACTOR SHALL PROVIDE RADON MITIGATION AS PER THE 2018 INTERNATIONAL RESIDENTIAL CODE, APPENDIX F, RADON CONTROL METHODS.
11. REFER TO THE LANDSCAPE PLAN FOR FINISH GRADING, PLANTINGS, AND HARDSCAPES.
12. ALL UTILITIES SHALL BE UNDERGROUND.
13. SMOKE AND CARBON DETECTORS MUST BE INTERCONNECTED WITH A POWER SOURCE FROM THE BUILDING WIRING, AND SHALL BE EQUIPPED WITH BATTERY BACKUP
14. ALL EXTERIOR LIGHTING TO BE DARK SKY COMPLIANT
15. OSB OR PARTICAL BOARD IS **NOT** AN ACCEPTABLE MATERIAL, IN ANY APPLICATION. ALL ENGINEERED SHEATHING AND SUBFLOORING SHALL BE PLYWOOD.

LEGAL DESCRIPTION

KETCHUM LOT 3 BLOCK 91, PARCELNUMBER: RPK00000910030 AND
KETCHUM LOT 4 BLOCK 91, PARCEL NUMBER: RPK0000091004A
CITY OF KETCHUM, BLAIN COUNTY, IDAHO, 83340

SHEET INDEX

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

511 SUN VALLEY ROAD
POSTAL BOX 626
KETCHUM, IDAHO 83340

PHONE 208.726.4031 ♦ FAX 208.726.4097

WALNUT RESIDENCE
LOT 3 & 4 BLOCK 91
KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITECT JAN 1233
JANET JARVIS
STATE OF IDAHO

ENGINEER

DRAWN **MCCREREY**
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	08.16.2023	UPDATE PLANTING AND DISTURBANCE

PRINT DATE: Wednesday, August 16, 2023

COVERSHEET

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1 PLAN: SITE PLAN
SCALE: 1" = 10'

N
W E
S
PROJECT NORTH

SITE PLAN

THE JARVIS GROUP
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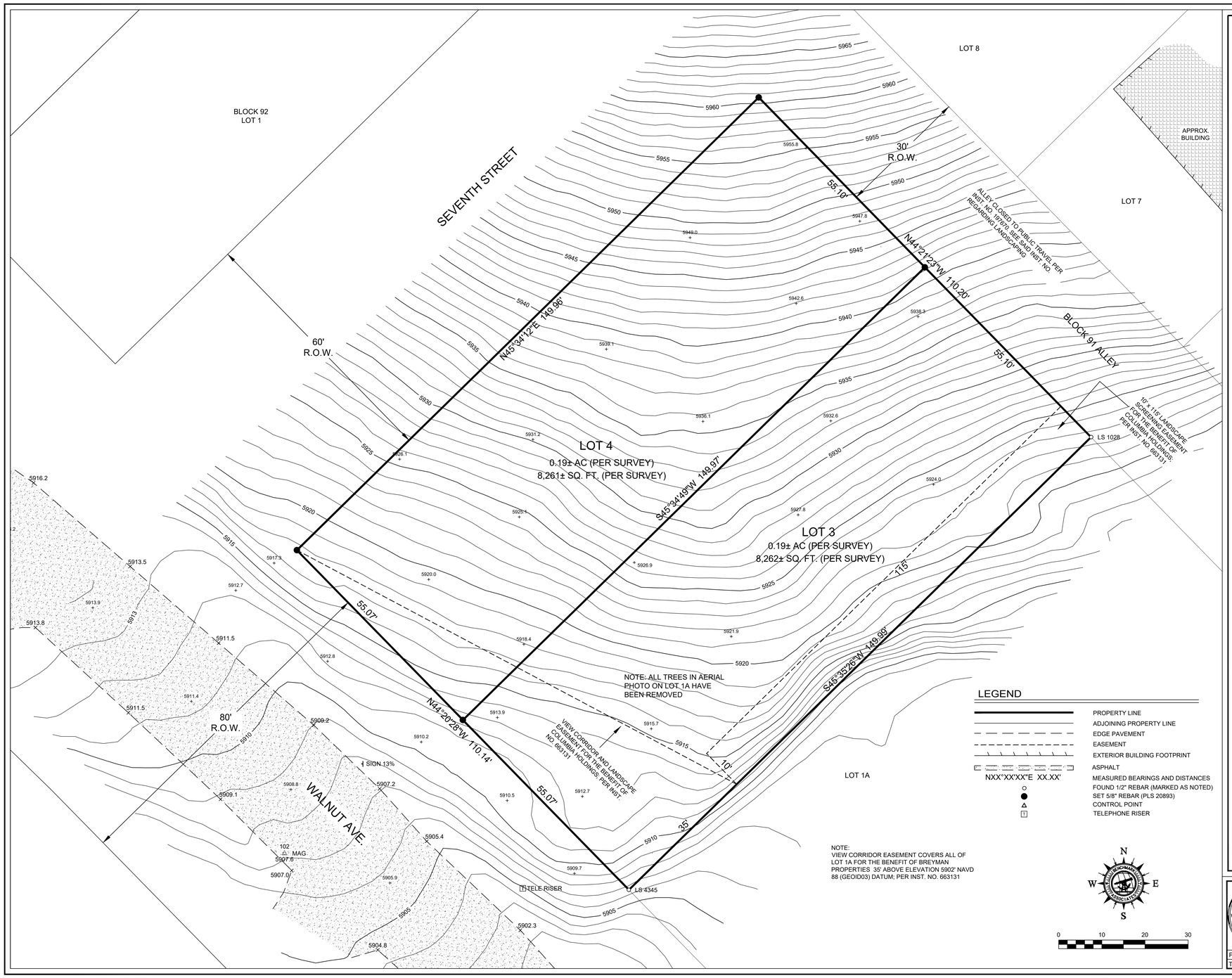

NOTES

SURVEY NARRATIVE:

1. THE PURPOSE OF THIS MAP IS TO SHOW LIMITED SITE INFORMATION AS IT EXISTED ON THE DATE THE FIELD SURVEY WAS PERFORMED IN RELATION TO PLATTED LOT LINES. CHANGES MAY HAVE OCCURRED TO SITE CONDITIONS SINCE SURVEY DATE. LOT LINES ARE BASED ON FOUND MONUMENTS. ALL FOUND MONUMENTS WERE ACCEPTED AS EITHER ORIGINAL CORNERS, OR REPLACEMENTS OF ORIGINAL CORNERS. SET MONUMENTS WERE ESTABLISHED USING PROPORTIONED DISTANCES AND BEARINGS ADJUSTED TO BLAINE COUNTY GIS.
2. REFERENCED SURVEYS: PLAT OF VILLAGE OF KETCHUM: INST. NO. 302967; RECORD OF SURVEY OF KETCHUM TOWNSITE: BLOCK 91, LOTS 1 & 2, INST. NO. 626556; PLAT OF KETCHUM TOWNSITE: BLOCK 91, LOT 1A; INST NO. 652564; RECORD OF SURVEY OF KETCHUM TOWNSITE: BLOCK 91, LOTS 7 & 8; INST. NO. 665488; CITY OF KETCHUM ORDINANCE NO. 173, INST. NO. 197670; RECIPROCAL VIEW CORRIDOR AND LANDSCAPE EASEMENT AGREEMENT, INST. NO. 663131.
3. BOUNDARY DIMENSIONS SHOWN HEREON ARE MEASURED. FOR RECORD DIMENSIONS, SEE REFERENCED SURVEYS. VERTICAL DATUM: ELEVATIONS BASED ON NAVD 88 (GEOID03) DATUM UTILIZING SMARTNET CORS STATION IDWM.
4. UNDERGROUND UTILITIES WERE NOT LOCATED AND ARE NOT SHOWN HEREON.
5. THIS MAP WAS PREPARED FOR THE EXPRESS USE OF THE CLIENT AND IS NOT TRANSFERABLE TO OTHERS WITHOUT WRITTEN CONSENT.
7. TITLE POLICY BY STEWART TITLE GUARANTY COMPANY, FILE NO. 22455152, GUARANTEE NO. G-000036746363638, DATED JUNE 2, 2022. CERTAIN INFORMATION CONTAINED WITHIN SAID POLICY MAY NOT APPEAR ON THIS MAP OR MAY AFFECT ITEMS SHOWN ON THIS MAP.
8. 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.
9. THIS DRAWING IS VOID AFTER 2 YEARS AND NO FURTHER COPIES OR DIGITAL FILES WILL BE TRANSMITTED.

EASEMENTS, ENCUMBRANCES AND RESTRICTIONS:

10. BUILDING AREA: BUILDING ENVELOPE IF SHOWN, IS PER PLAT. SETBACK AND FOOTPRINT REQUIREMENTS PER CURRENT CITY/COUNTY ORDINANCES MAY VARY FROM PLAT. IT IS RECOMMENDED THAT SAID ORDINANCES BE REVIEWED PRIOR TO DESIGN.
11. 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 OR ANY OTHER LAND-USE REGULATIONS OR HAZARDS.

SURVEY AND SITE FEATURES:

12. BASIS OF BEARINGS IS IDAHO STATE PLANE COORDINATE SYSTEM, NAD83, CENTRAL ZONE AS DERIVED BY GPS OBSERVATIONS. ALL DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET.
13. BOUNDARY LINES AND CERTAIN EASEMENTS SHOWN HEREON ARE PER PLAT. REFER TO PLAT & CC&R'S FOR CONDITIONS AND/OR RESTRICTIONS REGARDING THIS PROPERTY.
14. 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.
15. BUILDING WALLS IF SHOWN HEREON ARE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
16. SPRINKLER HEADS AND IRRIGATION LINES ARE NOT SHOWN HEREON.
17. TREE LOCATIONS AND DRIP LINES IF SHOWN HEREON ARE APPROXIMATE.
18. ORTHOPHOTOGRAPHY: PHOTO RECTIFIED AT GROUND LEVEL ONLY. IMAGES OF OBJECTS ABOVE GROUND LEVEL (TREES, BUILDINGS, POWER POLES, ETC.,) MAY BE DISPLACED. DATE OF PHOTOGRAPHY: MAY 2017.
19. CONTOUR INTERVAL: 1' - CONTOURS IN AREAS OF DENSE VEGETATION MAY DEVIATE FROM TRUE ELEVATION BY ONE HALF THE HEIGHT OF THE VEGETATION. DATE OF LIDAR FLIGHT FOR CONTOURS: 2017.
20. MAP SCALE: DUE TO ELECTRONIC MAP DELIVERY AND ALTERNATE PRINTING METHODS, PLEASE USE BAR SCALE TO DETERMINE ACTUAL PRINTED SCALE.
21. FEATURES OBSCURED FROM VIEW BY DEBRIS, SNOW, VEGETATION OR VEHICLES AT THE TIME OF SURVEY, DO NOT APPEAR ON THIS MAP.

LEGEND

- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EDGE PAVEMENT
- EASEMENT
- EXTERIOR BUILDING FOOTPRINT
- ASPHALT
- NXX°XX'XX"E XX.XX' — MEASURED BEARINGS AND DISTANCES
- FOUND 1/2" REBAR (MARKED AS NOTED)
- SET 5/8" REBAR (PLS 20893)
- CONTROL POINT
- TELEPHONE RISER

NOTE:
VIEW CORRIDOR EASEMENT COVERS ALL OF LOT 1A FOR THE BENEFIT OF BREYMAN PROPERTIES 35' ABOVE ELEVATION 5902' NAVD 88 (GEOID03) DATUM; PER INST. NO. 663131

N W E S

0 10 20 30

SEE PRINTED HARD COPY FOR SURVEYORS STAMP AND SEAL

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

KETCHUM VILLAGE
BLOCK 91, LOTS 3 & 4

LOCATED WITHIN
SECTION 18, TOWNSHIP 4 NORTH, RANGE 18 EAST, B.M.,
CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PREPARED FOR : JARVIS GROUP

PROJECT NO. 22061	DWG BY: HDB	CRD: 22061	22061_TOPO.DWG
TOPOGRAPHIC SURVEY	DATE OF SURVEY: 6/6/2022		SHEET: 1 OF 1

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

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WALNUT RESIDENCE
LOT 3 & 4 BLOCK 91
KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITEC AR 1233 JANET JARVIS STATE OF IDAHO

ENGINEER

DRAWN MCCREREY
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FILE
REVISIONS

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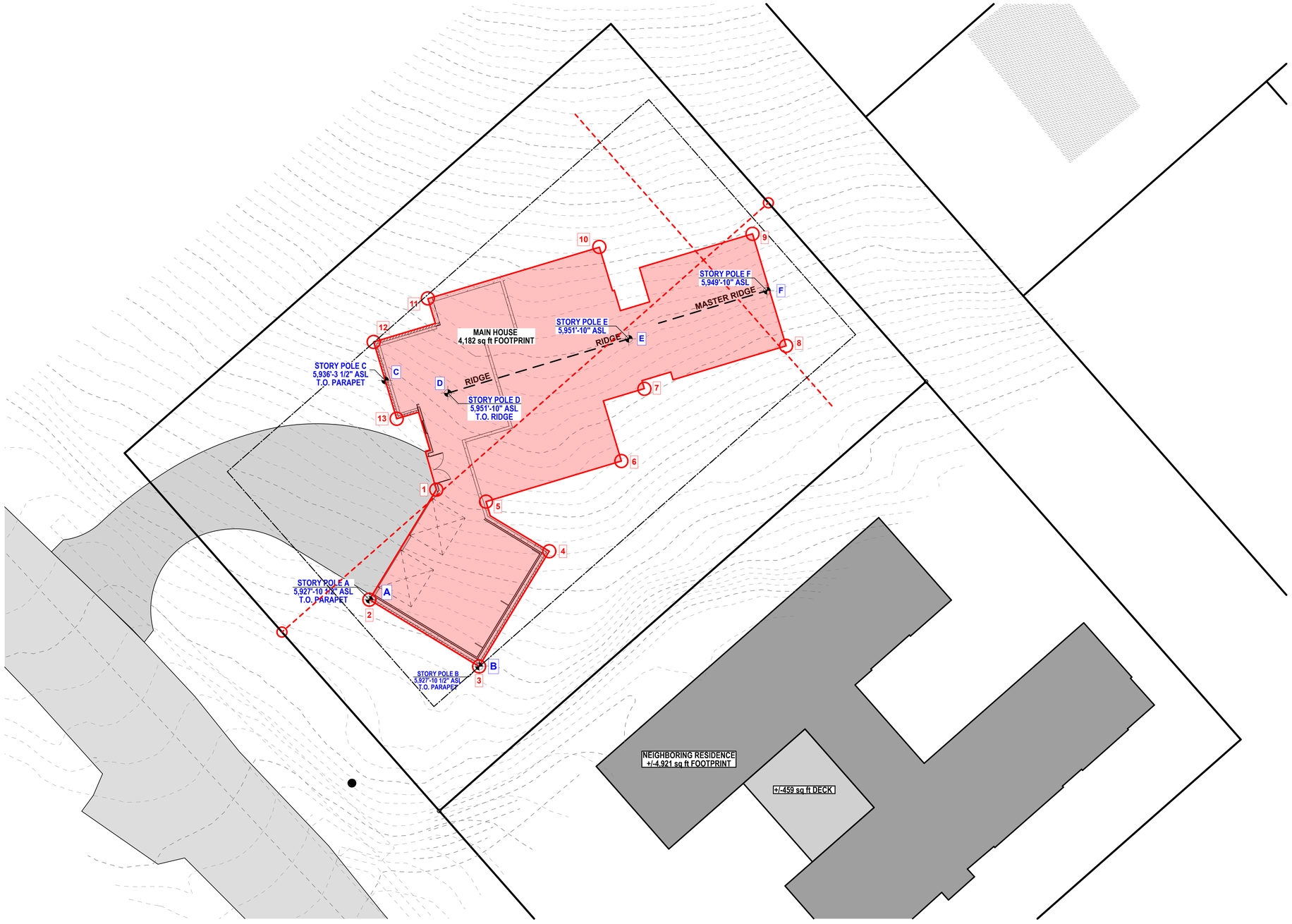
PRINT DATE: Thursday, May 25, 2023

SITE SURVEY

A1.1



1 PLAN: STAKING AND STORY POLE PLAN
SCALE: 1" = 10'

N
W E
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PROJECT NORTH

STAKING AND STORY POLE PLAN

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

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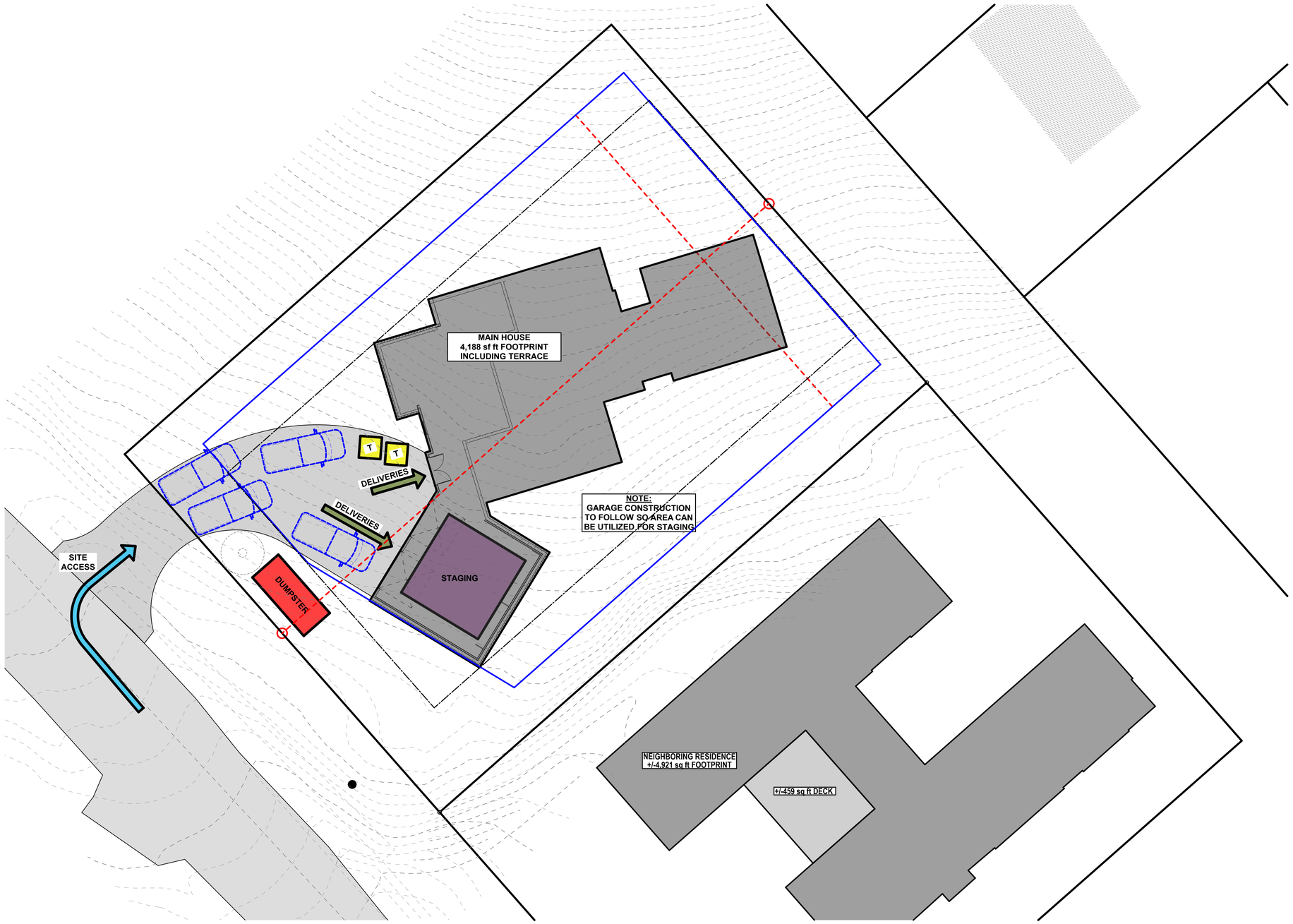
A1.2



1 PLAN: CONSTRUCTION MANAGEMENT
SCALE: 1" = 10'

N
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PROJECT NORTH

CONSTRUCTION MANAGEMENT PLAN

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A1.3

EXHIBIT A: FROM NEIGHBORING DRIVEWAY

EXHIBIT B: FROM NEIGHBORING DRIVEWAY - CLOSER VANTAGE

EXHIBIT C: FROM WALNUT INTERSECTION

EXHIBIT D: FROM TOWN SQUARE - STARBUCKS

EXHIBIT E: FROM TOWN SQUARE - ICE CREAM SHED

EXHIBIT F: FROM 6TH STREET GRAVEL BIKE PATH CONNECTOR

EXHIBIT G: FROM BIKE PATH NEAR 6TH STREET

EXHIBIT G: FROM BIKE PATH NEAR 6TH STREET - FURTHER VANTAGE

EXHIBIT G: FROM RIVER RUN PARKING LOT

PHOTOGRAPHY EXHIBIT

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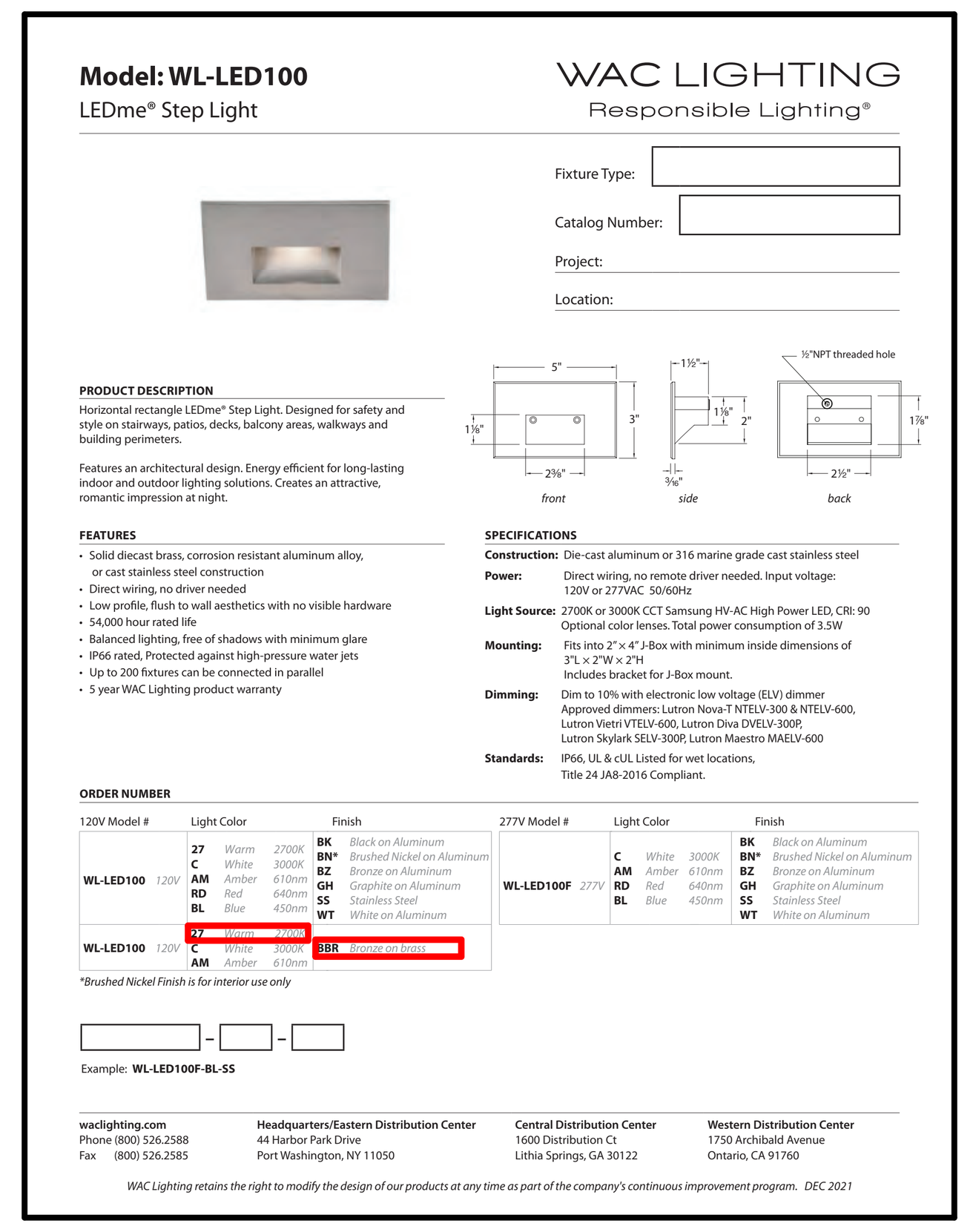
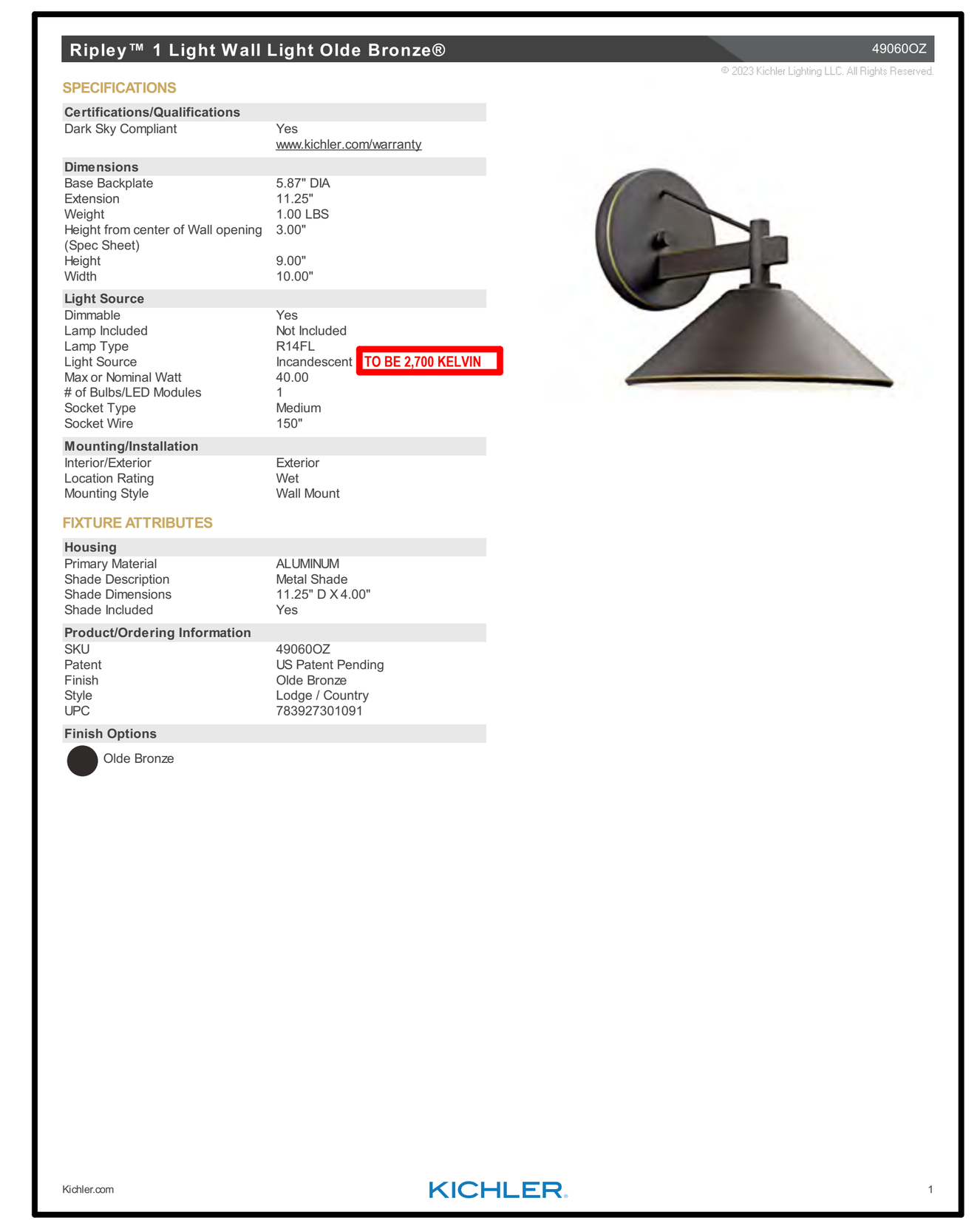
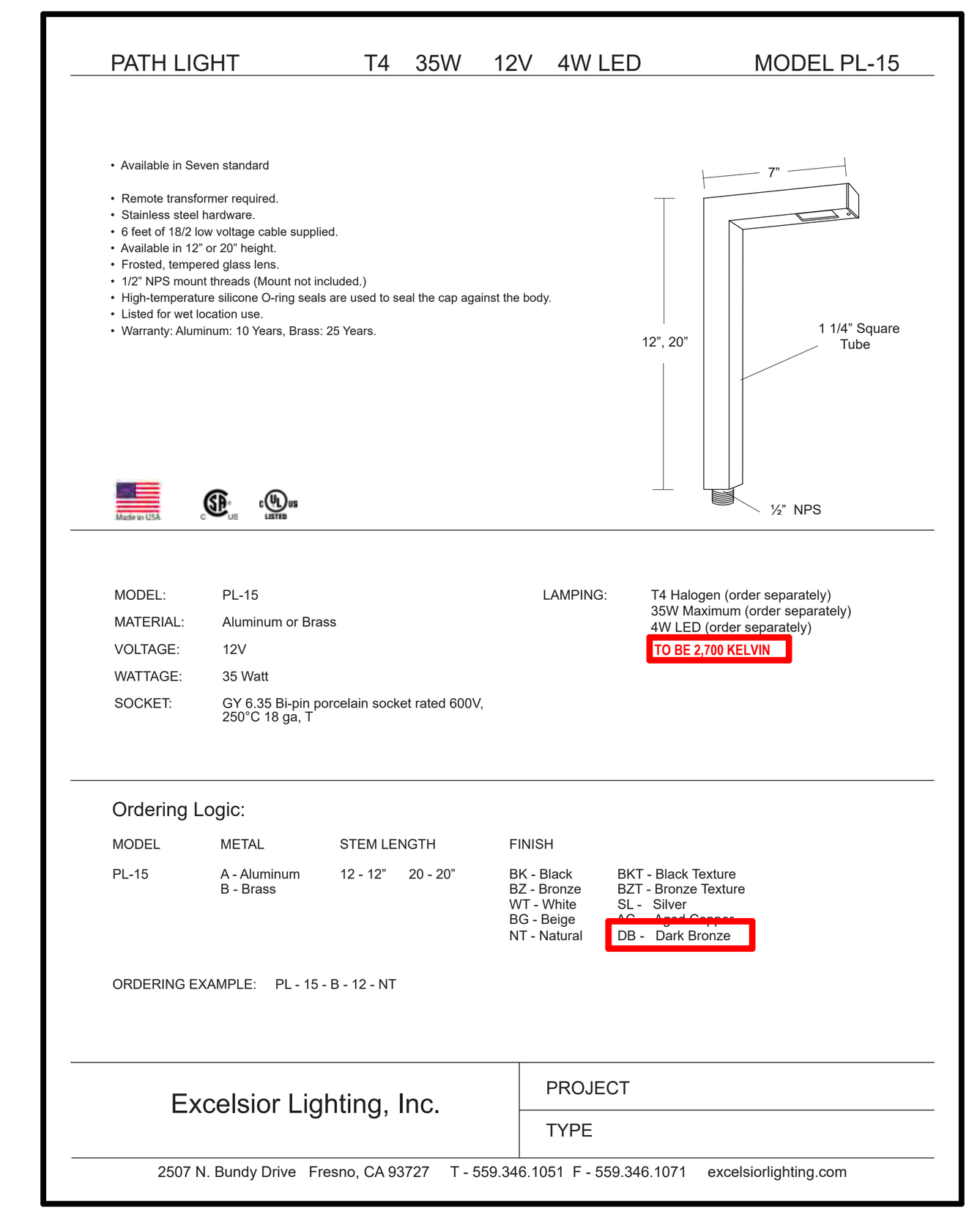
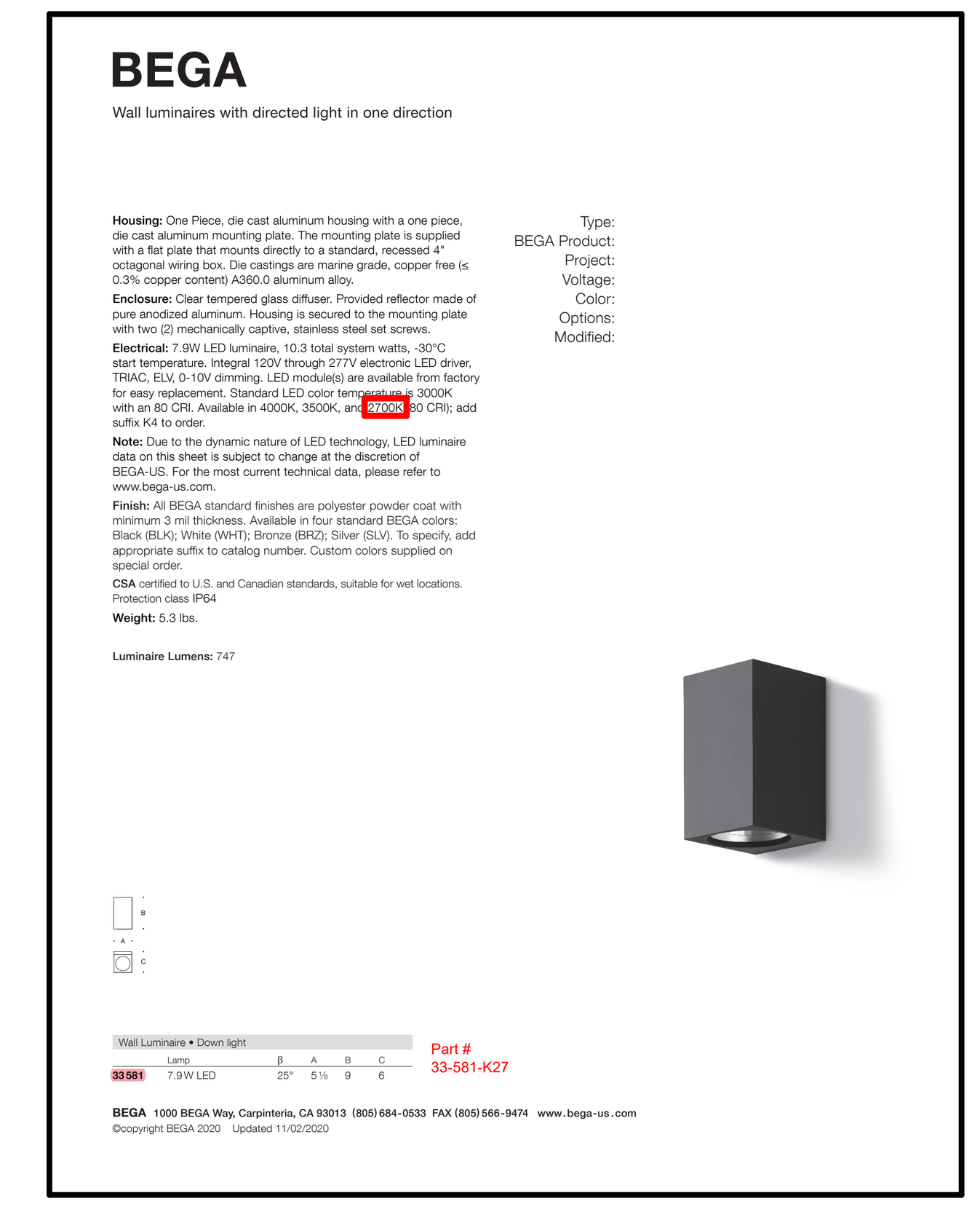


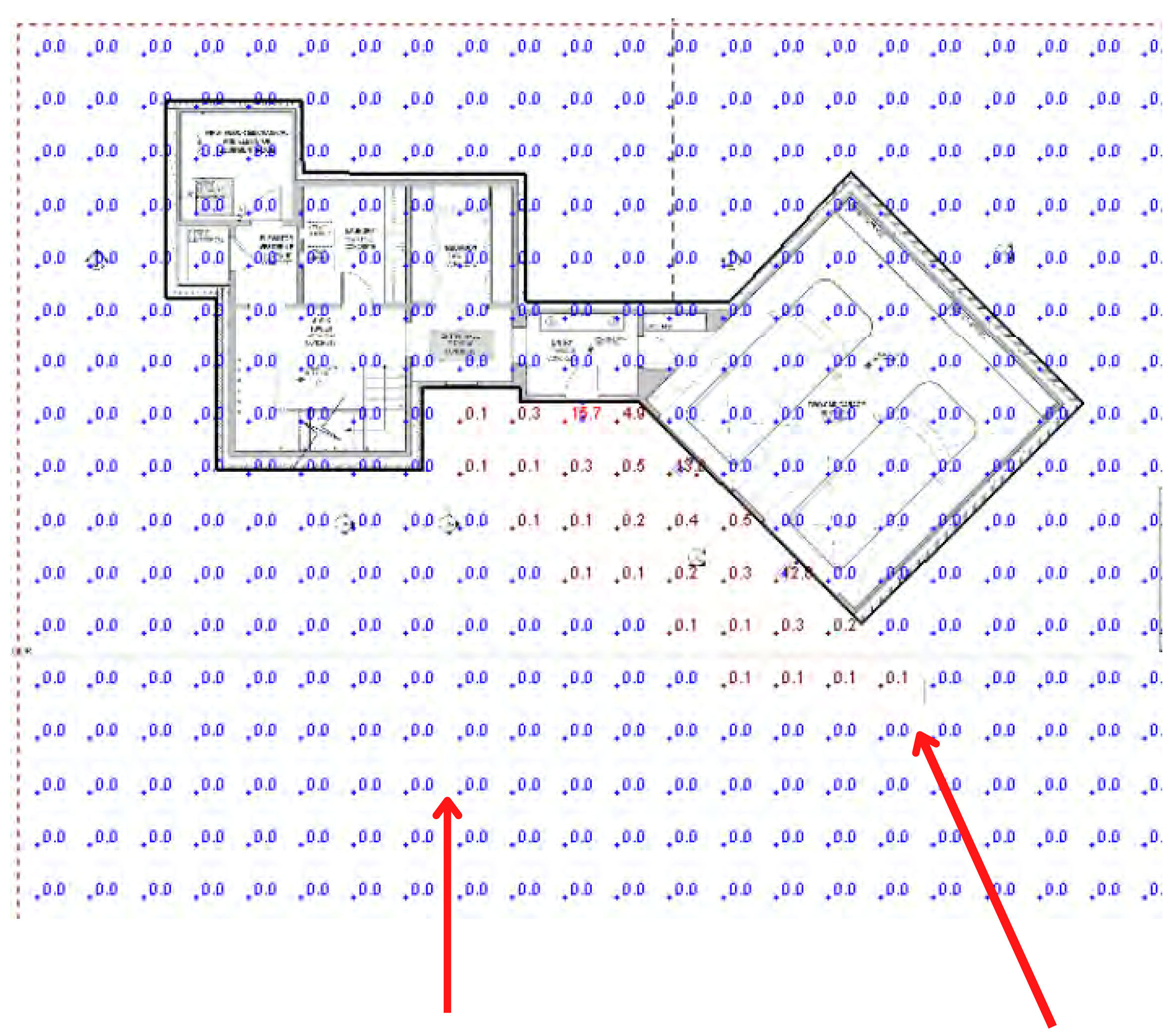






PHOTOMETRIC LIGHTING STUDIES

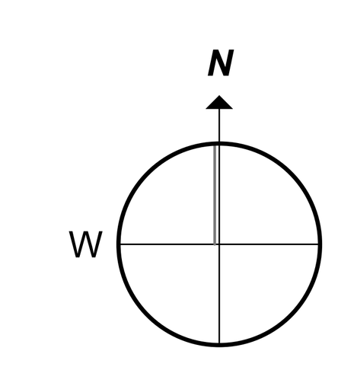
LEVEL 1 PHOTOMETRIC STUDY



Blue numbers represent 0 Foot-candles measured

Red numbers represent more than 0 Foot-candles measured

LEVEL 3 PHOTOMETRIC STUDY



PROJECT NORTH

THE JARVIS GROUP
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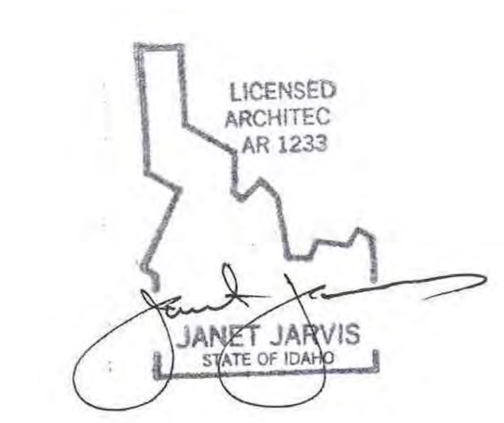

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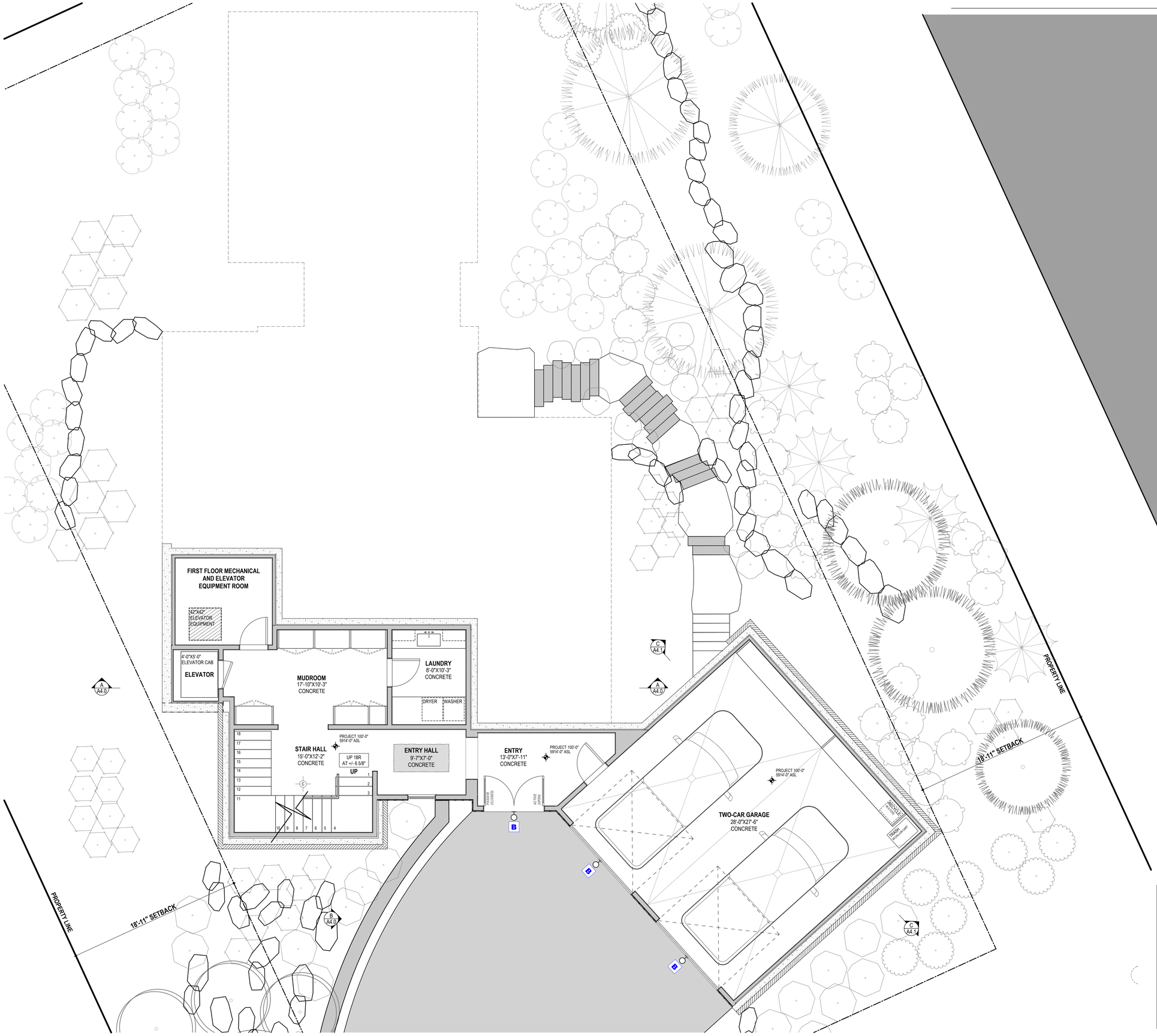
A1.5



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

A - *SCONCE*
BEGA WALL LUMINAIRE

B - *SCONCE*
RIPLEY COLLECTION DARK SKY

C - *STEP*
WAC LED100 STEP LIGHT

D- *PATH*
EXCELSIOR LIGHTING PL-15

PLAN NOTES

OSB AND PARTICAL BOARD IS **NOT** AN ACCEPTABLE BUILDING MATERIAL, IN ANY APPLICATION.

ALL VENTING AND EXHAUST LOCATIONS WILL BE FIELD VERIFIED AND APPROVED BY ARCHITECT PRIOR TO PERFOMING THE WORK

ALL FLOORING MATERIAL GOES UNDERNEITH CABINETS

FLOORING PATTERN IS NOT REPRESENTATIVE OF FINAL LAYOUT. FIELD VERIFY LAYOUT WITH ARCHITECT.

LOW VOC FINISHES THROUGHOUT

ARCHITECT PROVIDES OUTLINE SPECIFICATIONS, SUBMITTAL PROCEDURES, AND SPECIFIC INSTALLATION REQUIREMENTS. **ALL TRADES** SHALL REVIEW THESE THOROUGHLY.

ELECTRIC SHADE

FIRST FLOOR PLAN

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

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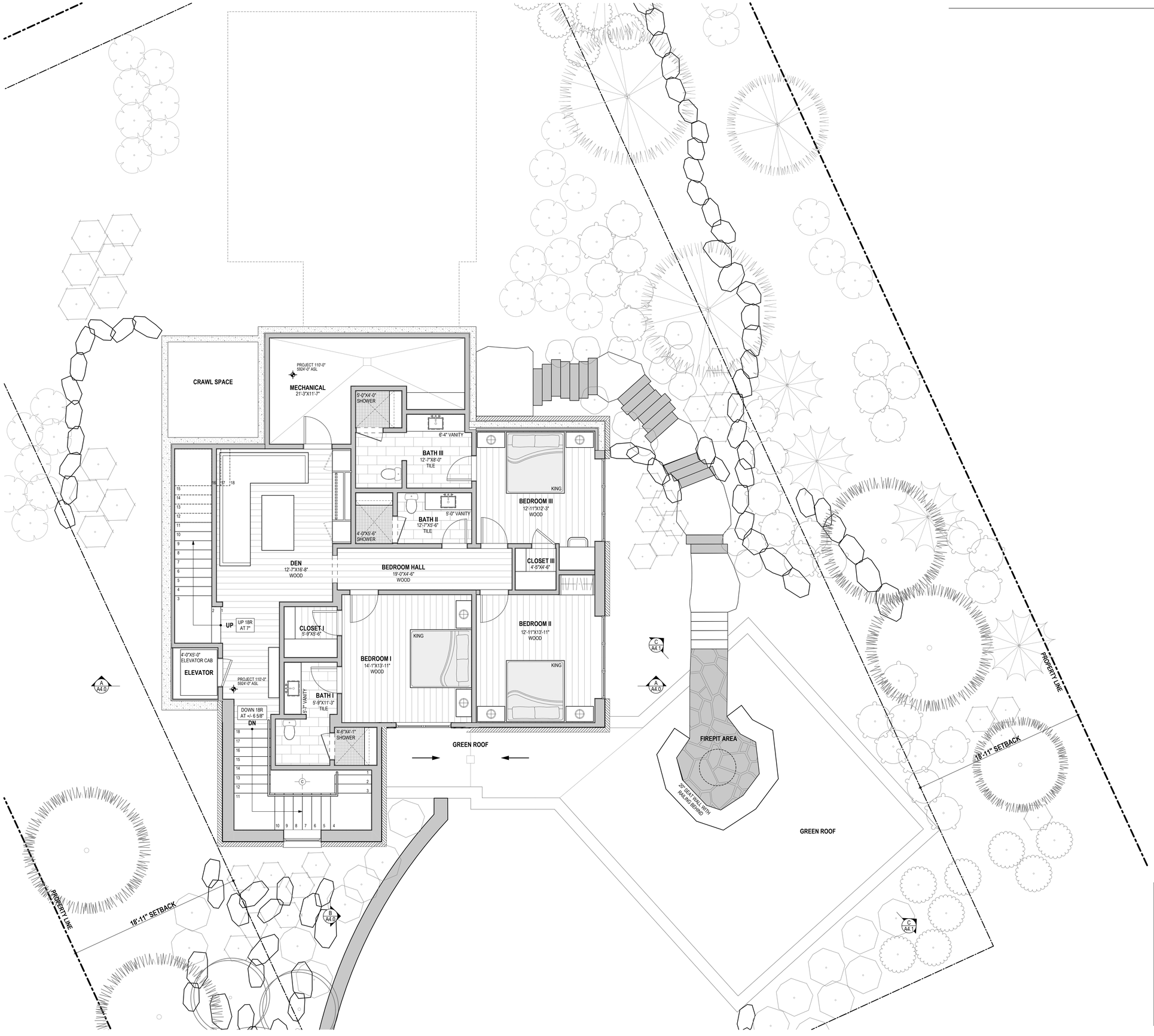
A2.0



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EXCELSIOR LIGHTING PL-15

PLAN NOTES

OSB AND PARTICAL BOARD IS **NOT** AN ACCEPTABLE BUILDING MATERIAL, IN ANY APPLICATION.

ALL VENTING AND EXHAUST LOCATIONS WILL BE FIELD VERIFIED AND APPROVED BY ARCHITECT PRIOR TO PERFOMING THE WORK

ALL FLOORING MATERIAL GOES UNDERNEITH CABINETS

FLOORING PATTERN IS NOT REPRESENTATIVE OF FINAL LAYOUT. FIELD VERIFY LAYOUT WITH ARCHITECT.

LOW VOC FINISHES THROUGHOUT

ARCHITECT PROVIDES OUTLINE SPECIFICATIONS, SUBMITTAL PROCEDURES, AND SPECIFIC INSTALLATION REQUIREMENTS. **ALL TRADES** SHALL REVIEW THESE THOROUGHLY.

ELECTRIC SHADE

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

SECOND FLOOR PLAN

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

511 SUN VALLEY ROAD
POSTAL BOX 626
KETCHUM, IDAHO 83340

PHONE 208.726.4031 ♦ FAX 208.726.4097

WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITEC AR 1233
JANET JARVIS
STATE OF IDAHO

ENGINEER

DRAWN MCCREREY

DATE

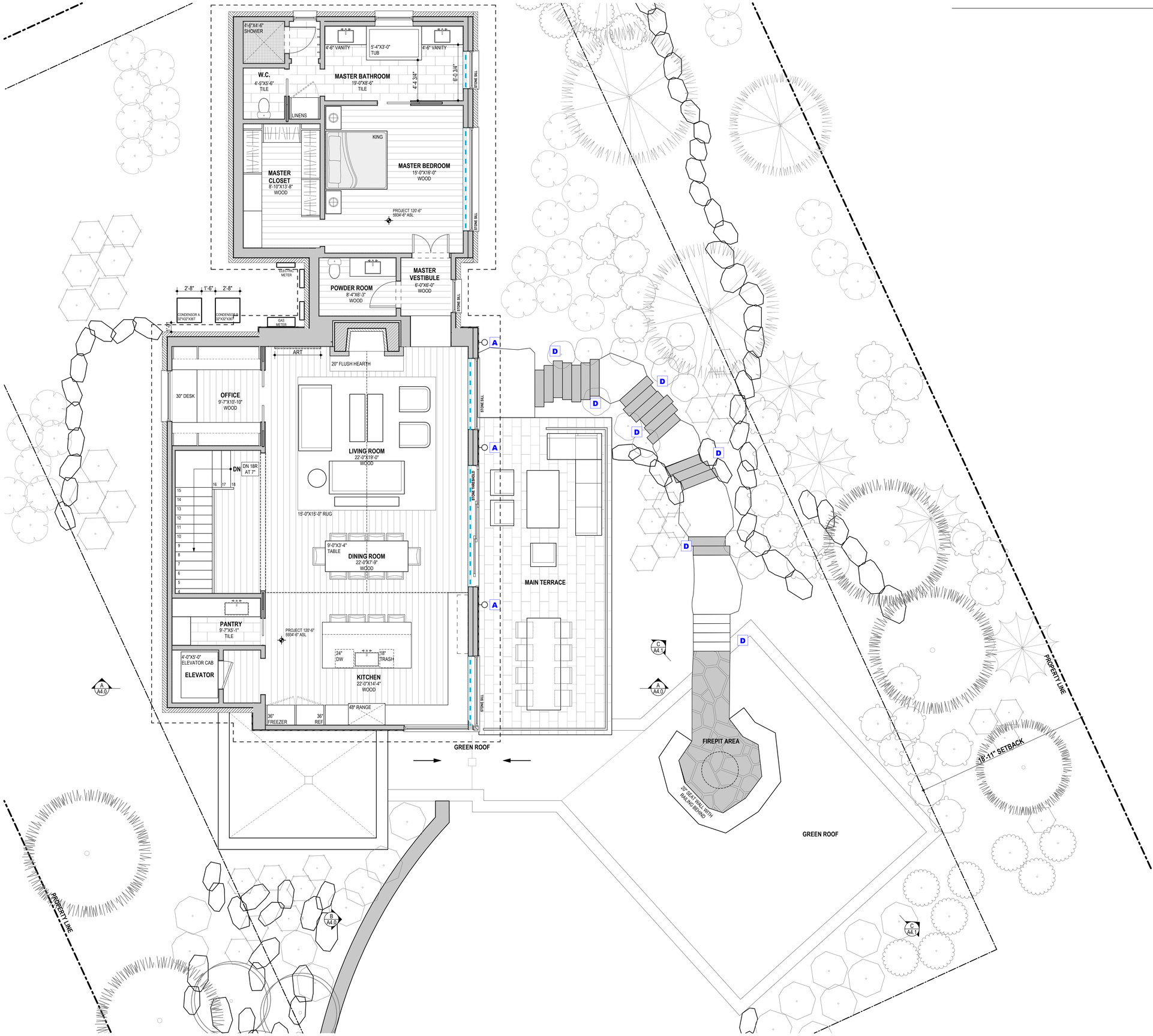
FILE

REVISIONS

NO.	DATE	DESCRIPTION
	05.26.2023	CITY OF KETCHUM DESIGN REVIEW
	07.11.2023	UPDATES PER D.R. COMMENTS
	07.26.2023	UPDATE PER SETBACK
	08.16.2023	UPDATE PLANTING AND DISTURBANCE

PRINT DATE: Wednesday, August 16, 2023

A2.1



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

THIRD FLOOR PLAN

A - SCONCE
BEGA WALL LUMINAIRE

B - SCONCE
RIPLEY COLLECTION DARK SKY

C - STEP
WAC LED100 STEP LIGHT

D- PATH
EXCELSIOR LIGHTING PL-15

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ELECTRIC SHADE

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LICENSED ARCHITEC AR 1233
JANET JARVIS STATE OF IDAHO

ENGINEER

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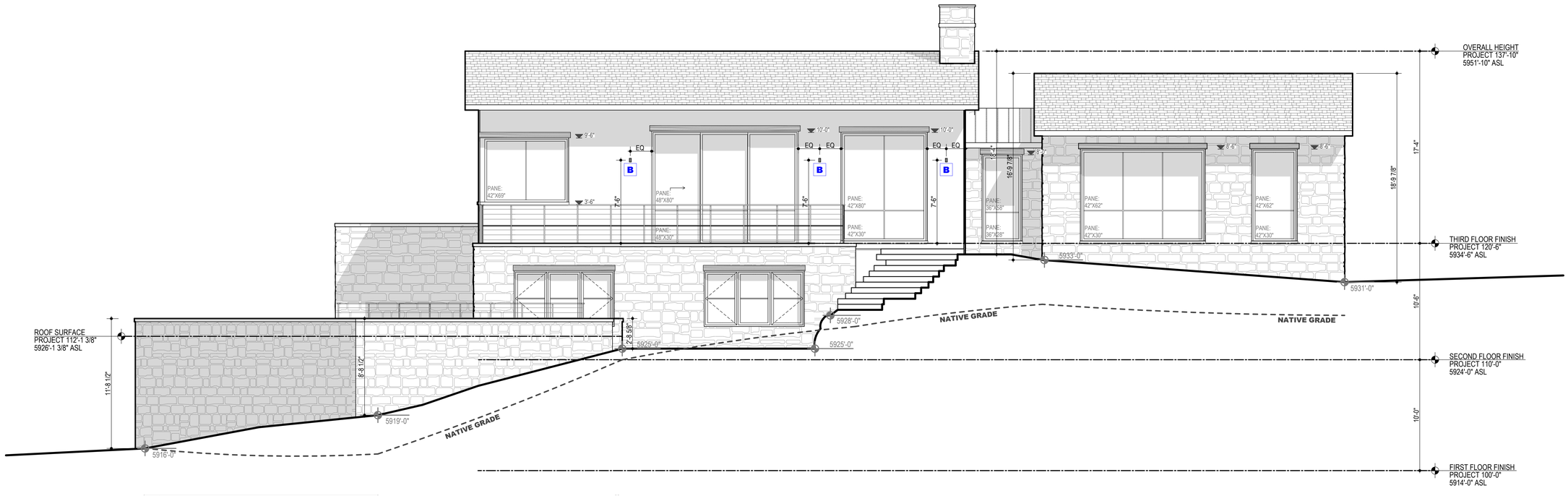
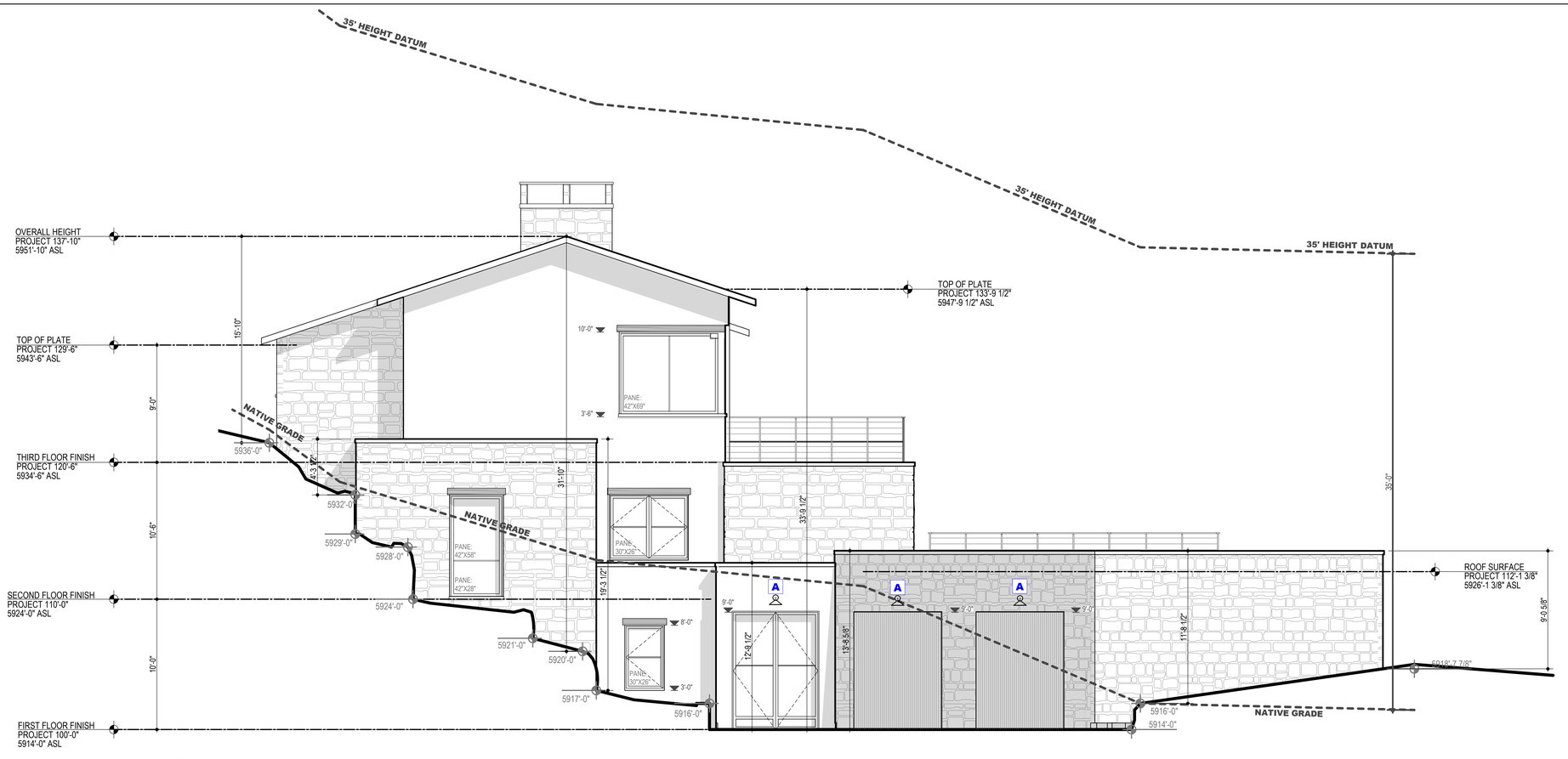
A2.2



1 ELEVATION: SOUTH

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



2 ELEVATION: WEST

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

ELEVATONS

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

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WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITECT AR 1233
JANET JARVIS
STATE OF IDAHO

ENGINEER

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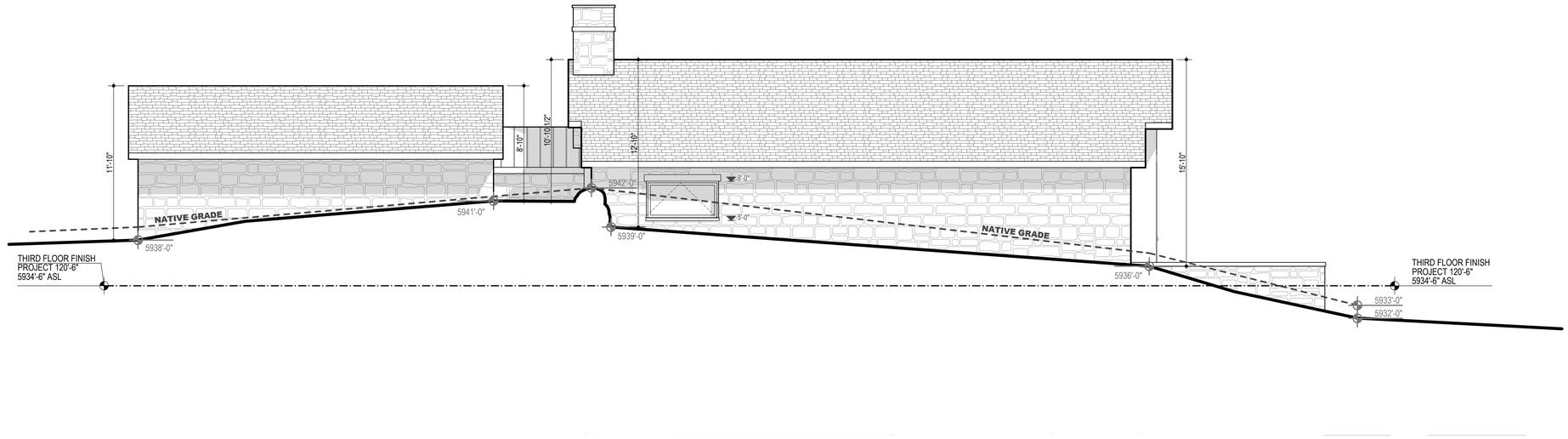
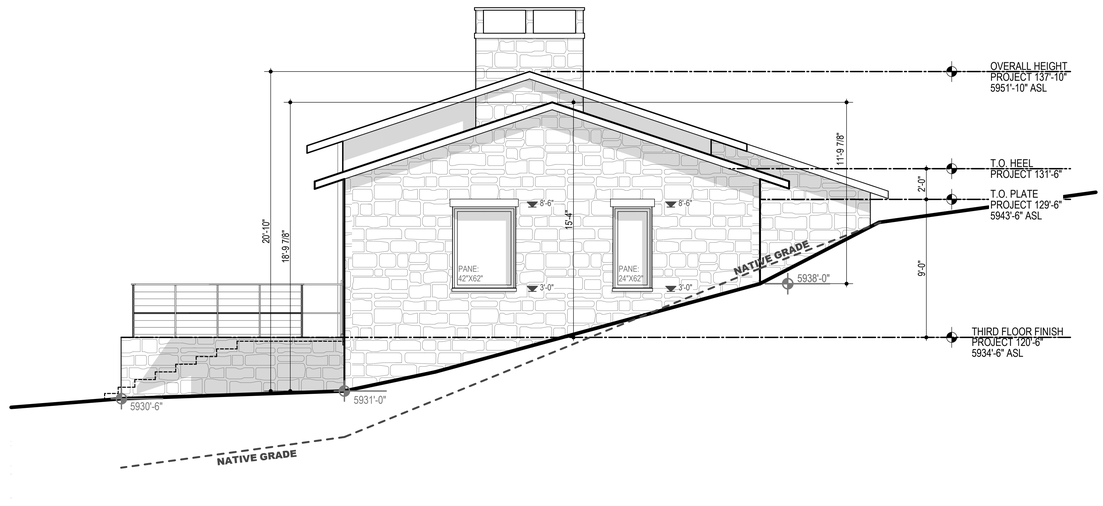
A3.0



1 ELEVATION: NORTH

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



2 ELEVATION: EAST

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

ELEVATONS

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

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WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITECT AR 1233 JANET JARVIS STATE OF IDAHO

ENGINEER

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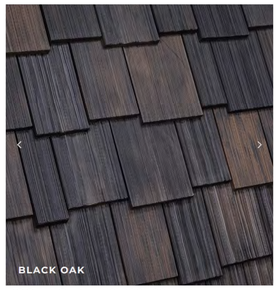
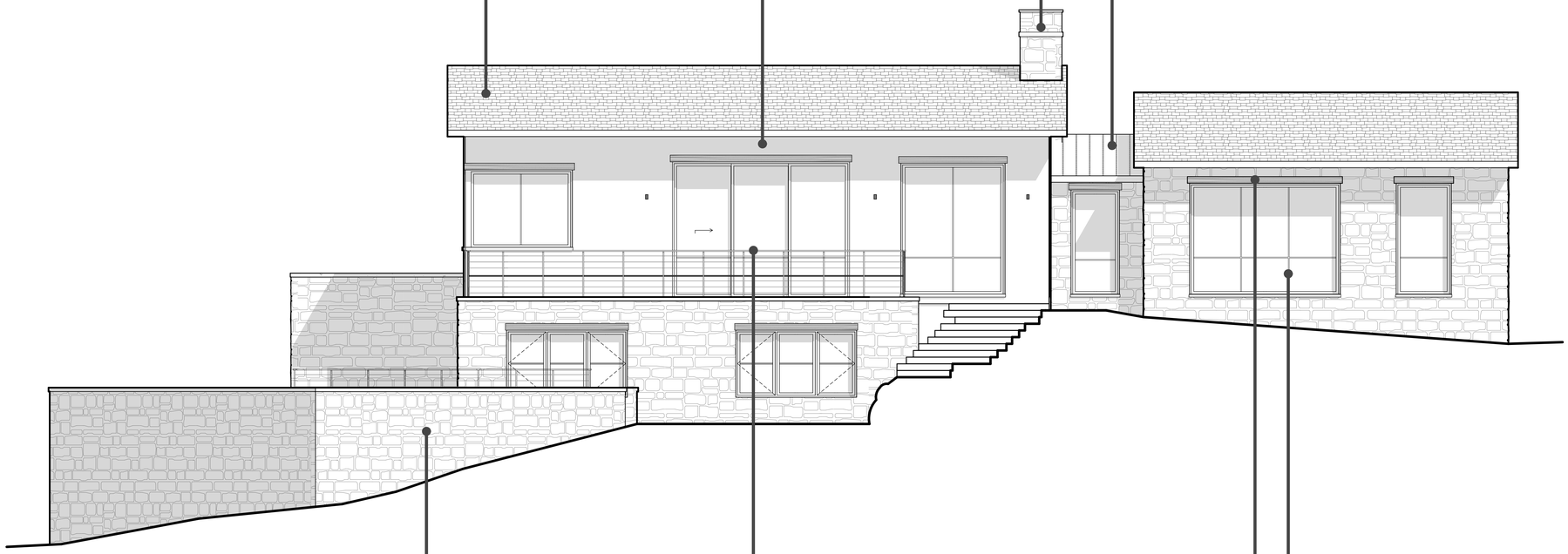


ROOFING: DA VINCI ROOF SCAPES
BLACK OAK COMPOSITE SHAKES

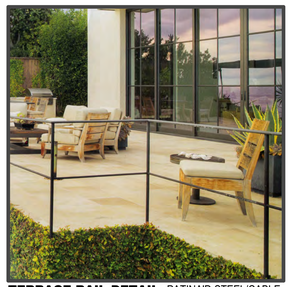
STUCCO: NEUTRAL TONED - HAND TROWLED. FINAL FINISH CONFIMED VIA SAMPLING PROCESS

CHIMNEY CAP DETAIL

ROOFING: WESTERN STATES STANDING SEAM-
BLACK ZINC MATTE



EXTERIOR STONE: RECALIMED GRANITE CURSTONE, FULL BED



TERRACE RAIL DETAIL: PATINA'D STEEL/CABLE

WINDOW HEADER DETAIL:
NEUTRAL TONED, HAND HEWN TIMBERS

WOOD CLAD WINDOWS: QUANATUM WINDOWS
WHITE OAK - MIDNIGHT

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

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WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITECT AR 1239
JANET JARVIS
STATE OF IDAHO

ENGINEER

DRAWN MCCREREY

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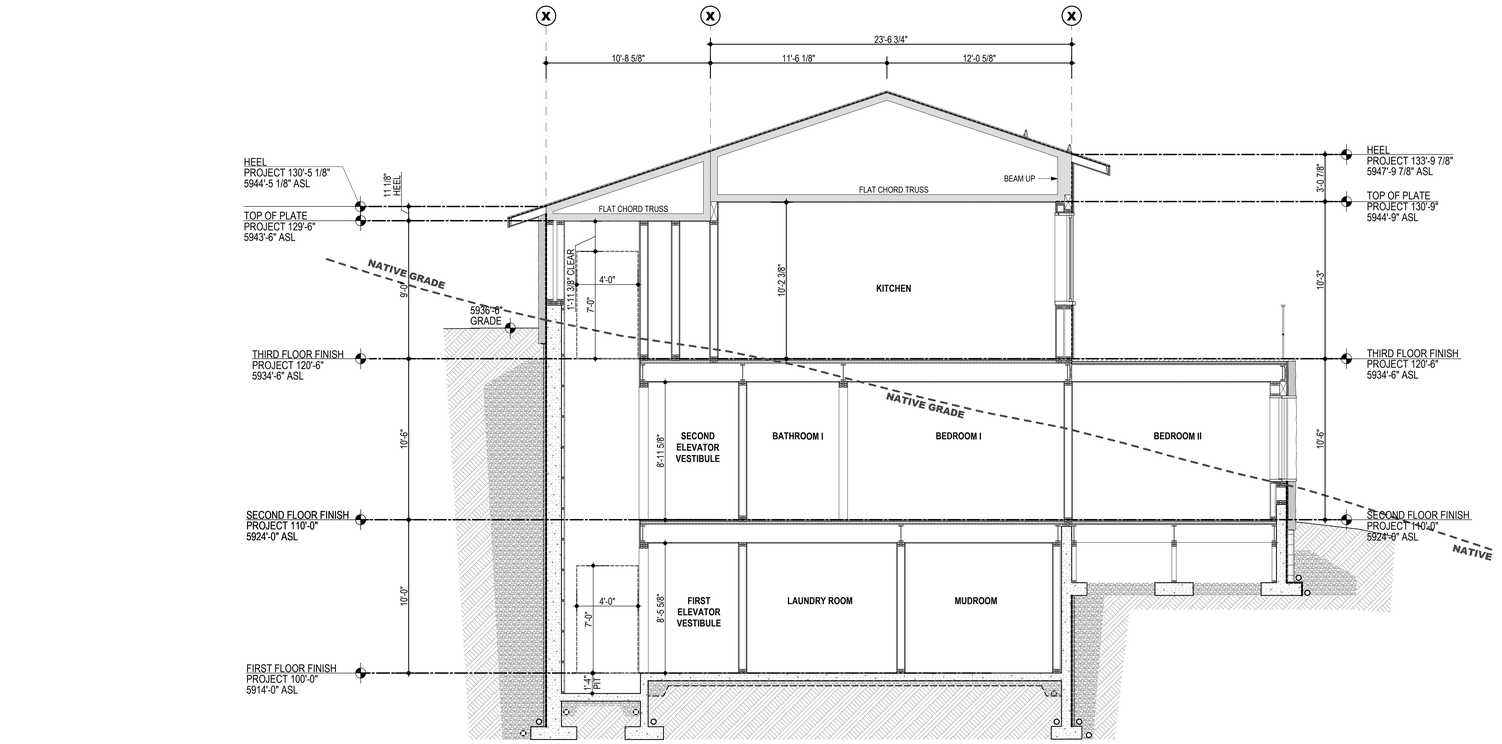
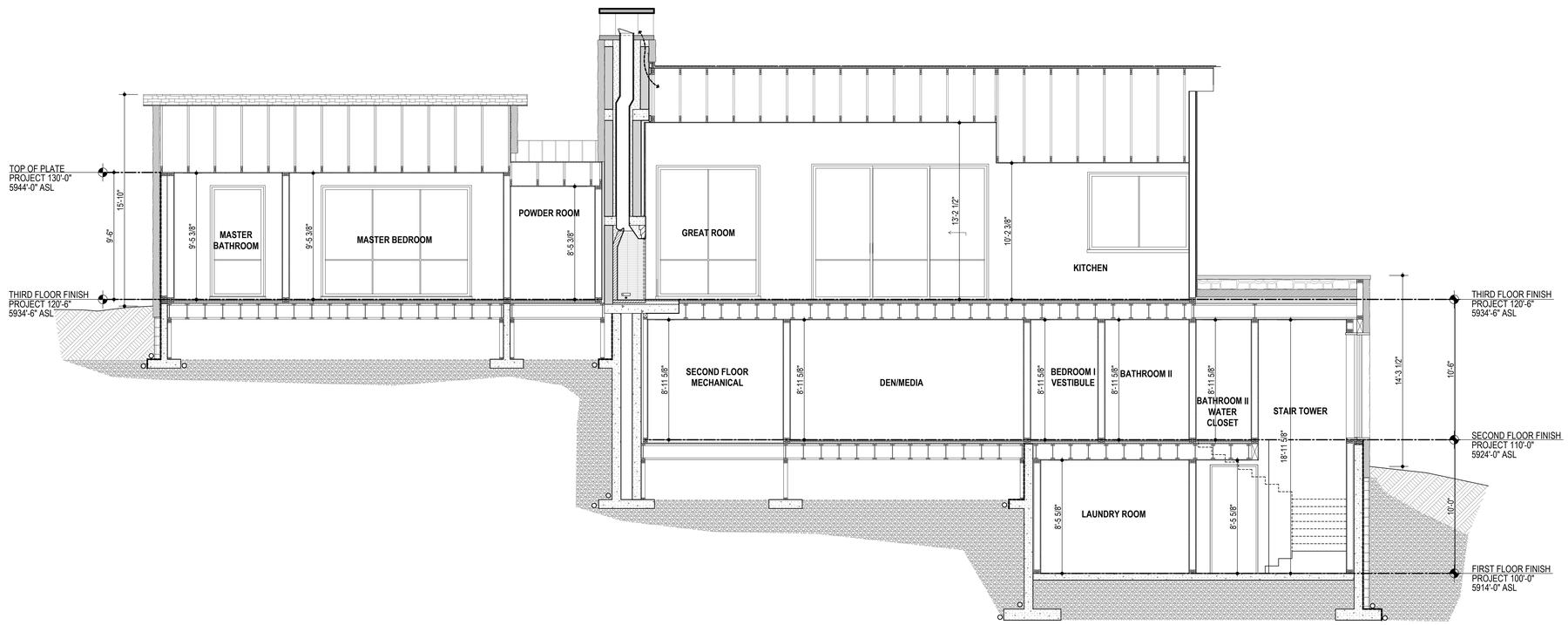
MATERIAL PALETTE

A3.2



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



2 SECTION: B
SCALE: 1/4" = 1'-0"

SECTIONS

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

511 SUN VALLEY ROAD
POSTAL BOX 626
KETCHUM, IDAHO 83340

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WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

KETCHUM IDAHO

ARCHITECT

LICENSED ARCHITECT AR 1233
JANET JARVIS
STATE OF IDAHO

ENGINEER

DRAWN MCCRERY
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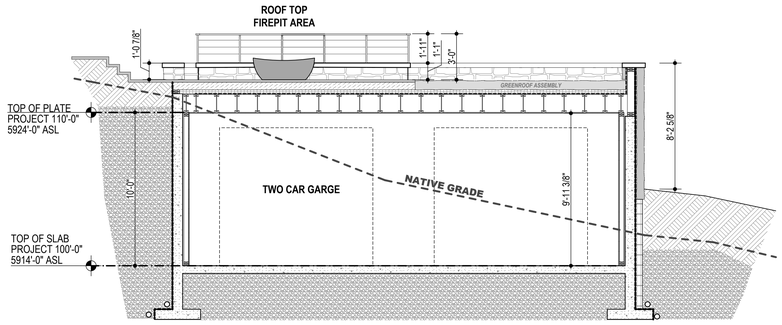
A4.0



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

SECTIONS

THE JARVIS GROUP
ARCHITECTS, AIA PLLC

J

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WALNUT RESIDENCE

LOT 3 & 4 BLOCK 91

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STATE OF IDAHO

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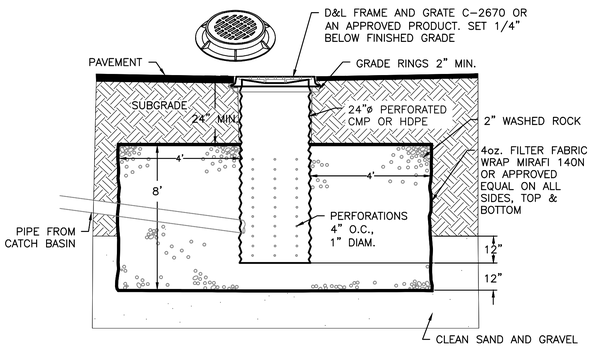
A4.1

GENERAL NOTES

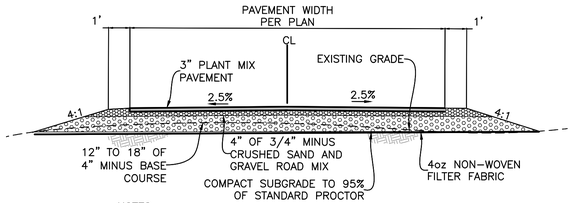
1. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. CONTRACTOR SHALL NOTIFY DIGLINE (1-800-342-1585) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE 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. GRATE OF DRYWELL SHALL BE A MINIMUM OF 1 FOOT BELOW THE LOWEST FOOTING.
7. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO CITY OF KETCHUM STANDARDS.
8. REFER TO PROJECT GEOTECHNICAL REPORT FOR FOUNDATION CUT-OFF TRENCH AND FOOTING DRAIN DETAILS.
9. ALL STORM DRAINS SHALL MAINTAIN A 2% SLOPE MIN.



NOTES:

1. TERMINATE DRYWELL 1 FOOT BELOW THE GROUND WATER LEVEL.

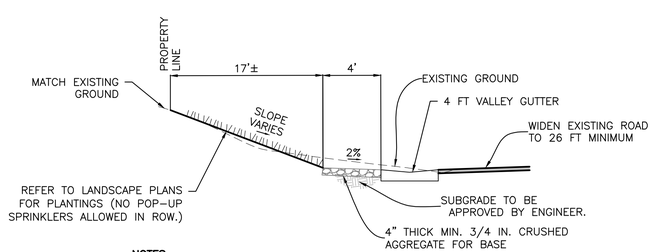
1 — TYPICAL DRYWELL DETAIL
SCALE: NONE



NOTES:

1. EXCAVATE 18" BELOW EXISTING GRADE TO REMOVE TOPSOIL AND ORGANICS. 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.

A — DRIVEWAY TYPICAL SECTION
SCALE: NTS



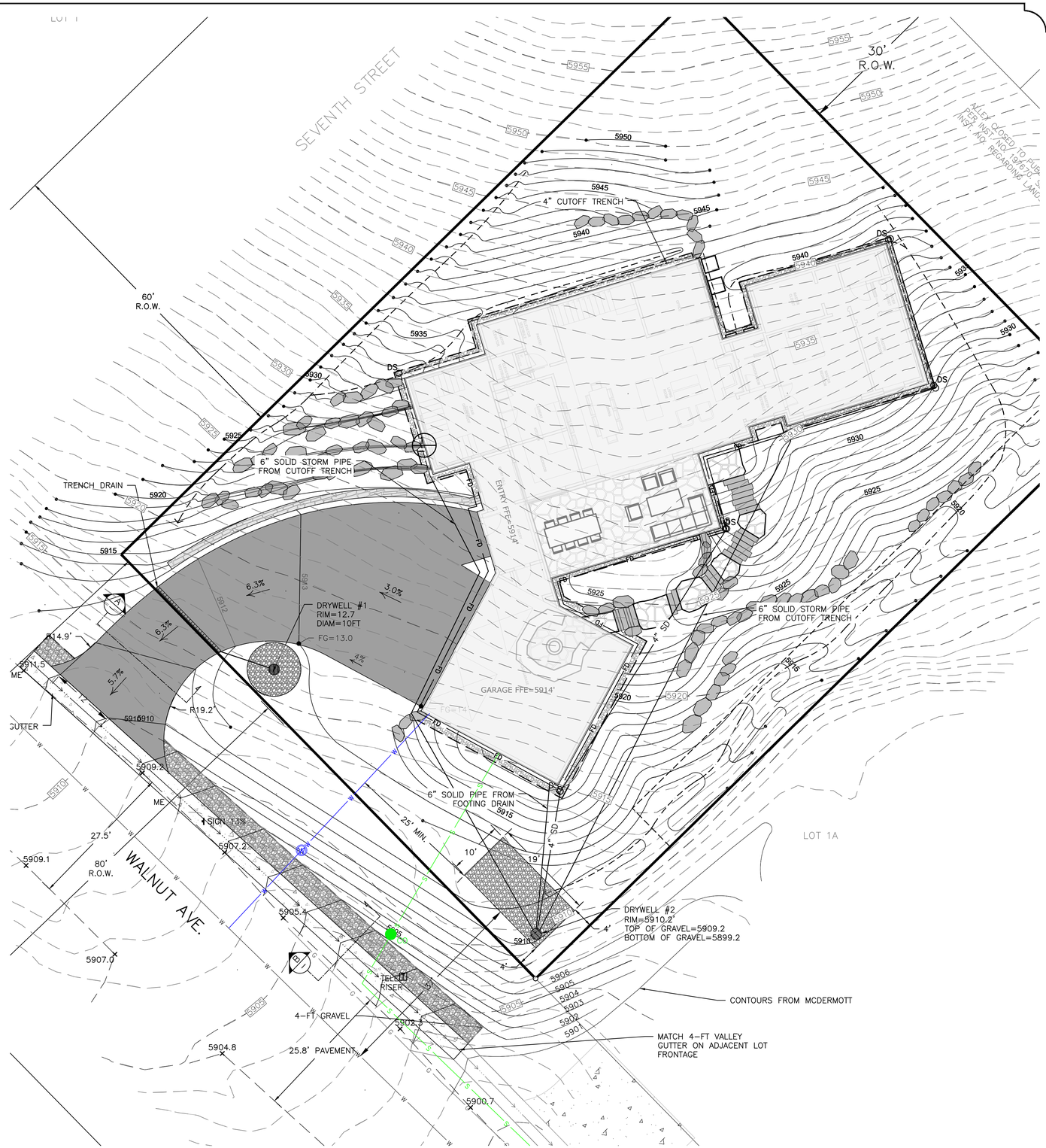
NOTES:

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

B — WALNUT RIGHT OF WAY SECTION
SCALE: NTS

LEGEND

PROPERTY LINE	
ADJOINING PROPERTY LINE	
CENTERLINE	
EDGE OF PAVEMENT	
EASEMENT	
SEWER	S
SEWER MANHOLE (MH)	
WATER	W
WATER GATE VALVE	
WATER METER (WM)	
HYDRANT	
GAS	G
POWER	E
OVERHEAD POWER	OHP
TELEPHONE	T
CABLE TV LINE	TV
ELEVATION CONTOUR	5775
PROPOSED ELEV CONTOUR	
SAWCUT LINE	
FLOW LINE	
CUT-OFF TRENCH	
FOOTING DRAIN	FD
STORM DRAIN PIPE	
DOWN SPOUT	DS
CATCH BASIN	
AREA DRAIN	
DRYWELL	
LANDSCAPE DRYWELL	
ASPHALT PAVEMENT	
PAVERS	
GRAVEL	
CONCRETE	
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
7/11/23

REVISIONS			
No.	DESCRIPTION	DATE	BY
1			

BENCHMARK ASSOCIATES
PREPARED BY:
BENCHMARK ASSOCIATES, P.A.
P.O. BOX 733 100 BELL DRIVE
KETCHUM, IDAHO 83340
(208) 726-9512
FAX 726-9514
WEB: WWW.BMA5B.COM
MAIL: WWW.BMA5B.COM

GRADING & DRAINAGE PLAN

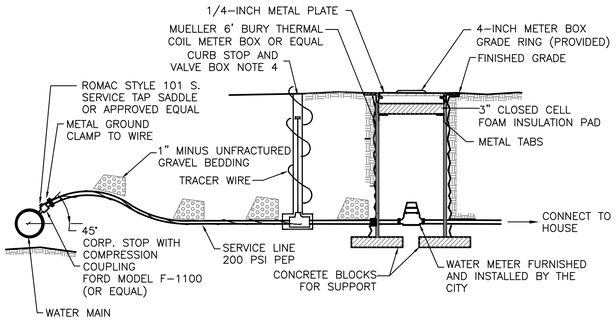
KETCHUM VILLAGE BL 91, LOTS 3&4
T2N, R18E, SEC 10, B.M., BLAINE COUNTY, IDAHO

PREPARED FOR: BYLA

DRAWN BY:	PLJ
DESIGNED BY:	PLJ
CHECKED BY:	
DATE:	07/11/2023
PROJECT NO.:	23020

DRAWING NO.

C-1



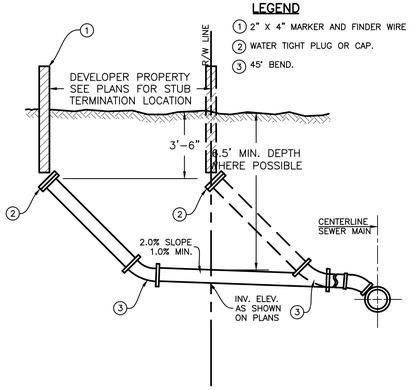
NOTES

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.

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

LEGEND

1. 2" X 4" MARKER AND FINDER WIRE PER **SD–512**.
2. WATER TIGHT PLUG OR CAP.
3. 45° BEND.



PROFILE

NOTES

1. INSULATION REQUIRED WHERE SEWER LINE BURY DEPTH IS LESS THAN 5'.

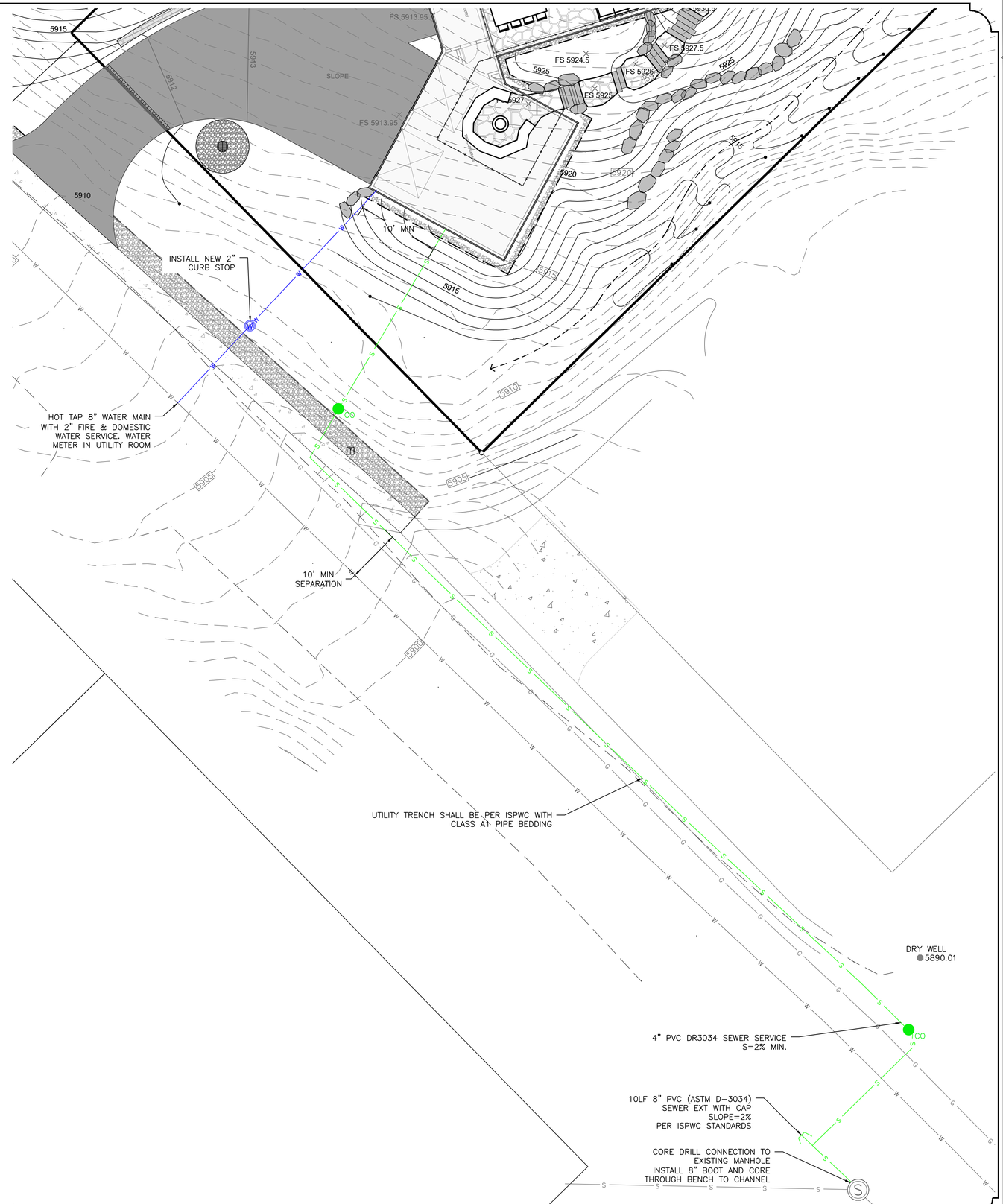
2 — STANDARD SEWER SERVICE CONNECTION DETAIL
SCALE: NONE

UTILITY LEGEND

SEWER PROPOSED	S
SEWER MH EXISTING	
SEWER CLEANOUT	CO
SEWER CAP	
WATER PROPOSED	W
WATER GATE VALVE	
WATER FITTINGS	
HYDRANT	
CURB STOP	
WATER METER PROPOSED	
WATER CAP	
UTILITY TRENCH	UT

UTILITY GENERAL NOTES

1. UTILITIES SHALL BE CONSTRUCTED PER THE CITY OF KETCHUM'S STANDARDS; THE MOST CURRENT VERSION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC); AND DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) STANDARDS.
2. WATER LINES SHALL HAVE A MINIMUM OF 10 FEET OF HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION FROM SEWER LINES AND STORM DRAIN PIPES, MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
3. CONTRACTOR SHALL EXTEND THE 8" SEWER MAIN NORTH TO ALLOW CONNECTION OF NEW SEWER SERVICE LINE.
4. UTILITY TRENCHES IN CITY R.O.W. SHALL BE CONSTRUCTED THE ISPWC AND CITY REQUIREMENTS. TRENCHES SHALL BE BACKFILLED WITH IMPORTED STRUCTURAL BACKFILL.
5. CONTRACTOR SHALL CONTACT CITY OF KETCHUM WATER AND SEWER PRIOR TO ANY WATER AND SEWER SERVICE CONSTRUCTION.



PROFESSIONAL ENGINEER
LICENSED
17661
STATE OF IDAHO
PHOEBE JOHANNESSEN
7/11/23

REVISIONS

No.	DESCRIPTION	DATE	BY
1			

BENCHMARK ASSOCIATES

PREPARED BY:
BENCHMARK ASSOCIATES, P.A.
P.O. BOX 733 100 BELL DRIVE
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MAIL: WWW.BMA5B.COM

UTILITY PLAN

KETCHUM VILLAGE BL 91, LOTS 3&4
T2N, R18E, SEC 10, B.M., BLAINE COUNTY, IDAHO

PREPARED FOR: BYLA

DRAWN BY: PLJ
DESIGNED BY: PLJ
CHECKED BY:
DATE: 07/11/2023
PROJECT NO.: 23020

DRAWING NO.

C-2

N

0 10 20

SCALE: 1" = 10'-0"

SHEET LEGEND	
SYMBOL	DESCRIPTION
————	Property Line
—— BE ——	Building Envelope
— — — — —	Setbacks / Easements
(XXXX) (XXXX)	Existing Contours
XXXX XXXX	Proposed Contours
— — · —	Limit of Disturbance (L.O.D.)

LOT CALCULATIONS

LOT COVERAGE

LOT SIZE = +/- 16,583 (0.38 ACRES)
COVERAGE BY PRIMARY RESIDENCE = 4,115 SF
COVERAGE BY MOTORCOURT / PARKING = 1,600 SF

TOTAL = 5,715 SF

PERCENTAGE COVERAGE BY BLDGS AND APPLICABLE EXTERIOR IMPROVEMENTS
(5,715 SF / 16,583 SF) = +/- 34.4%

SNOW STORAGE

DRIVEWAY + MOTORCOURT
1,900 SF X .3 = 570 SF (REQUIRED PER CODE)

SNOW STORAGE PER PLAN
= 660 SF

BYLA
LANDSCAPE ARCHITECTS
323 Lewis | Ketchum, ID
(208) 726 5907 • (208) 720 0215
www.byla.us

ISSUE
1 05/26/23 MTN. OVERLAY DISTRICT SUBMITTAL
2 06/14/23 MOD SUBMITTAL UPDATES
3 07/26/23 MOD SUBMITTAL UPDATES REV 2
4 08/14/23 MOD SUBMITTAL UPDATES REV 3

REVISIONS

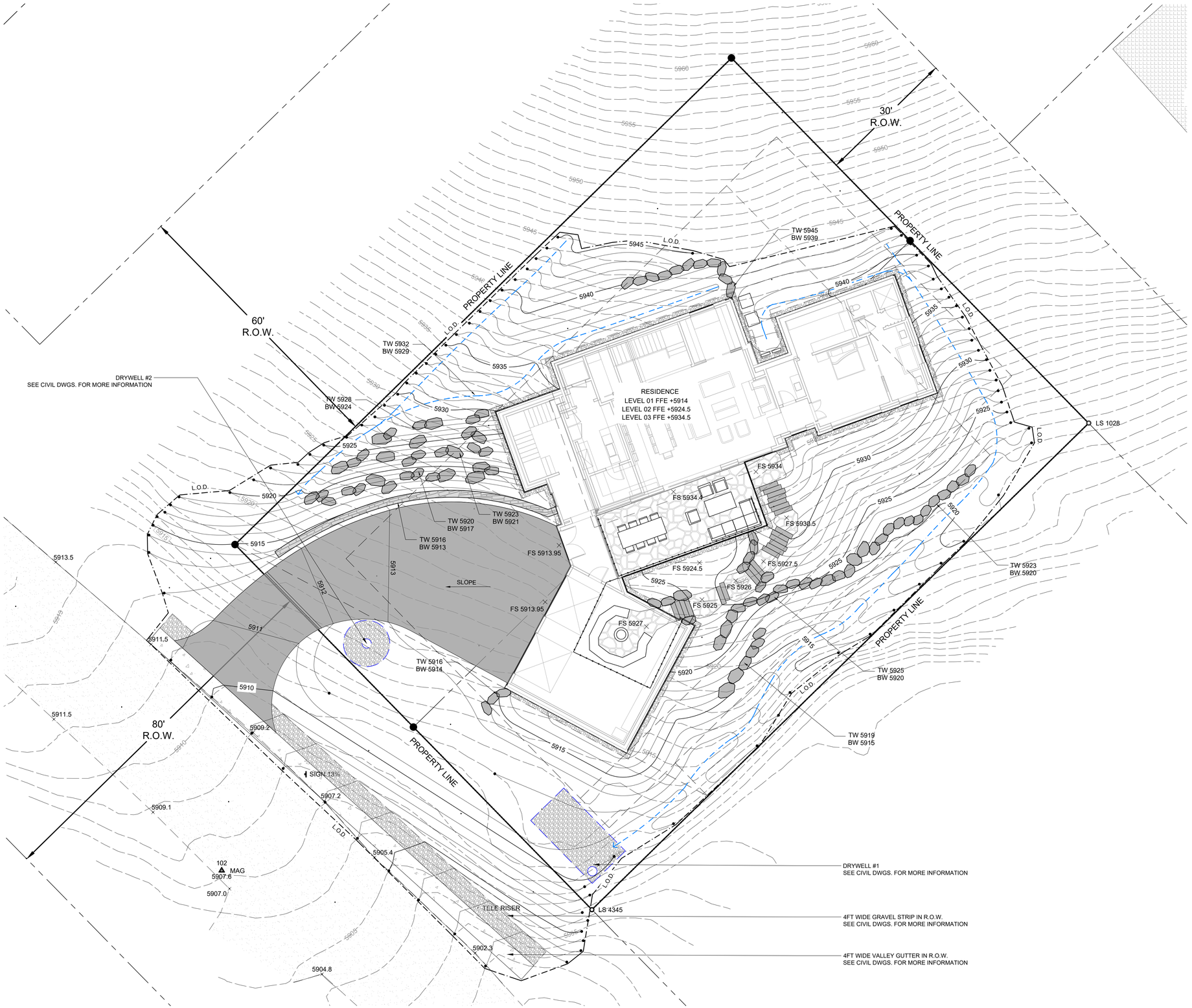
WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

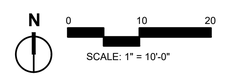
FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:
ISSUE DATE: 08/14/23

OVERALL SITE PLAN

SHEET NO.

L-1.00





SHEET LEGEND	
SYMBOL	DESCRIPTION
———	Property Line
BE	Building Envelope
	Setbacks / Easements
(XXXX) (XXXX)	Existing Contours
XXXX XXXX	Proposed Contours
	Limit of Disturbance (L.O.D.)

GRADING + DRAINAGE LEGEND	
SYMBOL	DESCRIPTION
⊞	Catch Basin
●	Dry Well
X.X%	Grade Pitch
	Drainage Swale
+H.P.S	High Point of Swale
FFE	Finish Floor Elevation
10.5000	Spot Elevation
FG	Finished Grade
FS	Finished Surface
TS	Top of Step
BS	Bottom of Step
TW	Top of Wall
BW	Bottom of Wall
TC	Top of Coping
TB	Top of Boulder
LP	Low Point
HP	High Point

NOTES

1. SEE CIVIL PLAN FOR ALL UTILITY LOCATIONS; CONTRACTOR TO VERIFY SITE UTILITIES AND INFRASTRUCTURE LOCATIONS PER CIVIL ENGINEER AS-BUILT DRAWINGS PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO VERIFY TOP OF WALL ELEVATIONS WITH LANDSCAPE ARCHITECT PRIOR TO STARTING CONSTRUCTION.
3. REFER TO ARCHITECTURAL AND STRUCTURAL ENGINEERING PLANS FOR ALL FINISHED FLOOR ELEVATIONS (FEE).
4. GRADING SHOWN ON PLAN IS CONCEPTUAL AS SHOWN FOR DESIGN PURPOSED ONLY. LANDSCAPE ARCHITECT TO VERIFY FINAL GRADING ONSITE WITH CONTRACTOR.
5. CONTRACTOR SHALL UTILIZE 'BEST MANAGEMENT PRACTICES' (BMP) TO CONTROL EROSION AND SEDIMENTATION BEFORE AND DURING CONSTRUCTION.
6. CATCH BASINS AND DRYWELLS TO BE INSTALLED PER GEO-TECHNICAL ENGINEER RECOMMENDATIONS.
7. ALL GRADING AND TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES TO BE DONE BY HAND WITH CARE TAKEN NOT TO CUT OR DAMAGE ROOTS OVER 1-INCH DIAMETER. TREES TO REMAIN SHALL BE FENCED WITH TEMPORARY FENCING, SUCH AS STEEL STAKES (MAX. 5 FEET O.C.) WITH WIRE MESH FABRICS (6X6 OPEN), CHAINLINK OR SIMILAR - HEIGHT TO BE 5-FEET MINIMUM. TEMPORARY IRRIGATION IS REQUIRED TO ALL EXISTING TREES TO REMAIN DURING CONSTRUCTION.
8. EXCAVATION CONTRACTOR TO LEAVE ALL REGIONS OF DISTURBED NATIVE AREA WITHIN 4" OF FINISHED GRADE. LANDSCAPER TO SUPPLY 4" OF TOP SOIL THROUGHOUT NATIVE PLANTING AND REHABILITATION AREA.
9. ALL RECLAIMED SLOPES GREATER THAN 3:1 MUST UTILIZE BIODEGRADABLE EROSION CONTROL MAT.

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REVISIONS

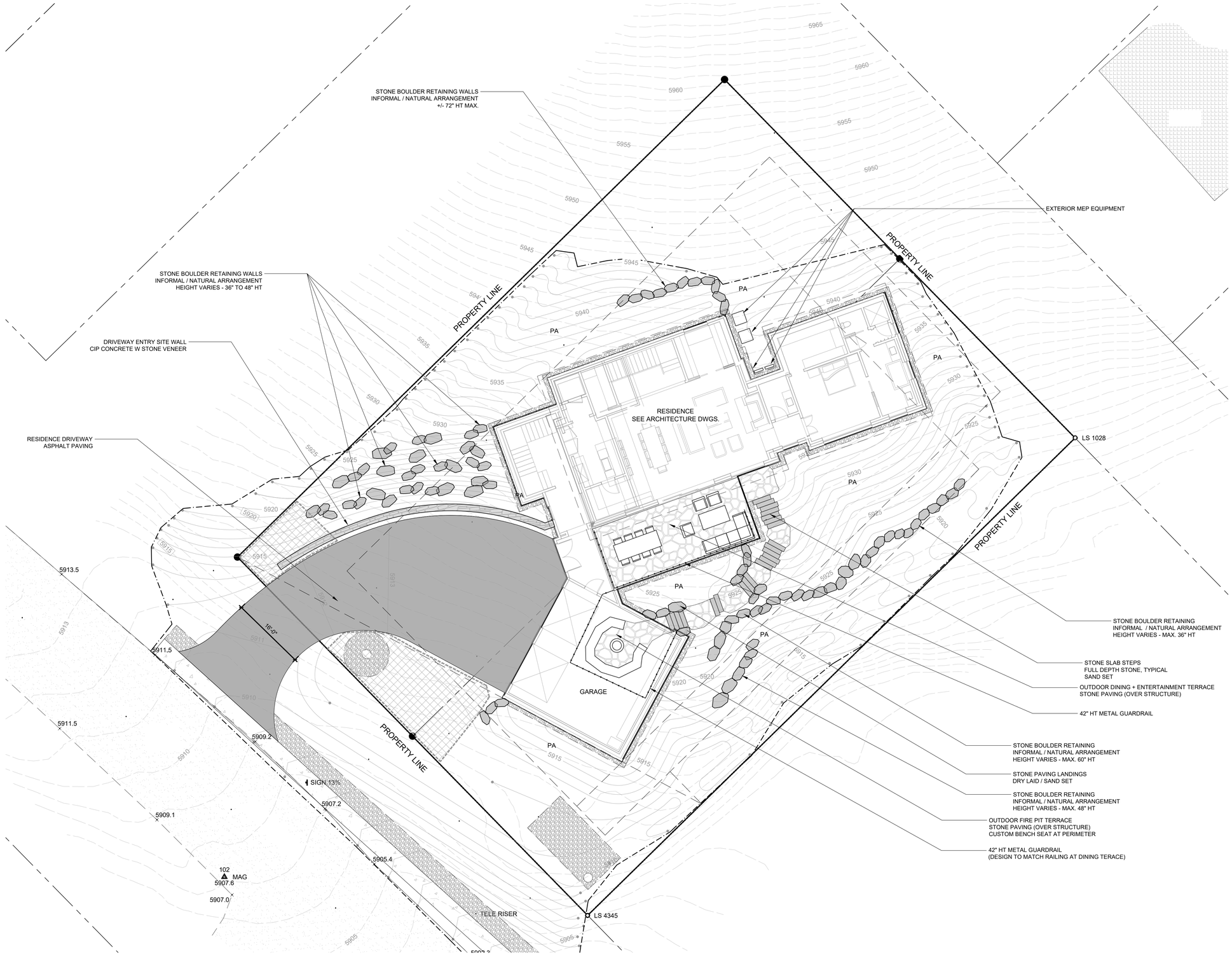
RESIDENCE
WALNUT AVE. RES
LOTS 3 & 4
KETCHUM VILLAGE, LO
KETCHUM, ID

FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:
ISSUE DATE: 08/14/23

SITE GRADING + DRAINAGE PLAN

SHEET NO.

L-2.00



SHEET LEGEND

SYMBOL	DESCRIPTION
	Asphalt Paving
	Stone Paving - Flagstone
	Crusher Fines / Decomposed Granite
	Landscape Boulder Site Wall
	Stone Slab Steps
	Site Retaining Wall - Full Depth Stone Veneer
	Metal Guardrail
PA	Planted Area

N

0 10 20

SCALE: 1" = 10'-0"

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WALNUT AVE. RESIDENCE

KETCHUM VILLAGE, LOTS 3 & 4

KETCHUM, ID

FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:
ISSUE DATE: 08/14/23

SITE MATERIALS PLAN

SHEET NO.

L-3.00

1 3D MODEL IMAGE - BIRD'S EYE VIEW LOOKING SOUTH

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REVISIONS:

WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:
ISSUE DATE: 08/14/23

3D MODEL IMAGES

SHEET NO.

L-4.00

1 3D MODEL IMAGE - BIRD'S EYE VIEW LOOKING EAST

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REVISIONS:

WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

FILENAME: -
PROJECT MANAGER: EM
DRAWN BY:

ISSUE DATE: 08/14/23

3D MODEL IMAGES

SHEET NO.

L-4.01

1 3D MODEL IMAGE - BIRD'S EYE VIEW LOOKING NORTH

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REVISIONS:

WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:

ISSUE DATE: 08/14/23

3D MODEL IMAGES

SHEET NO.

L-4.02

PLANTING NOTES:

1. ALL SOIL PREPARATION AND PLANTING OPERATIONS SHALL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS ONLY. SOIL SHALL NOT BE WORKED WHEN EXCESSIVELY DRY OR WET, AND THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO STOP ANY WORK TAKING PLACE DURING A PERIOD WHEN CONDITIONS ARE CONSIDERED DETRIMENTAL TO SOIL STRUCTURE OR PLANT GROWTH.
2. MULCH: INSTALL A MIN 3" LAYER OF MULCH AROUND ALL TREES AND SHRUBS AND IN ALL PLANTING AREAS UNLESS OTHERWISE NOTED CREATE A NATURAL SPADED EDGE WHERE PLANTING BEDS MEET TURF AREAS.
3. FINISH GRADE VERIFICATION: FINISH GRADE TO BE 1" BELOW FINISH PAVING SURFACE IN LAWN AREAS AND 2" BELOW IN PLANTING AREAS. VERIFY PLANTING AREAS ARE GRADED AT +/- 0.2 FOOT TO FINISH GRADE, PRIOR TO LANDSCAPE INSTALLATION.
4. PLANT MATERIAL AND ACQUISITION: PROVIDE SINGLE TRUNK STANDARD TREES UNLESS NOTED OTHERWISE. NOTIFY THE OWNER'S REPRESENTATIVE AT THE TIME OF DELIVERY OF ANY PLANT MATERIAL THAT IS DAMAGED OR IN POOR CONDITION. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT ALL PLANT MATERIALS BEFORE PLANTING. MATERIAL MAY BE REJECTED AT ANY TIME DUE TO CONDITION, FORM OR DAMAGE BEFORE OR AFTER PLANTING. PROVIDE IDENTIFICATION TAG FROM THE SUPPLYING NURSERY SHOWING COMMON AND BOTANICAL PLANT NAMES FOR AT LEAST ONE PLANT OF EACH SPECIES DELIVERED TO THE SITE. PROTECT ALL PLANTS AGAINST HEAT, SUN, WIND AND FROST DURING TRANSPORTATION TO THE SITE AND WHILE BEING HELD AT THE SITE. DO NOT STORE PLANTS IN TOTAL DARKNESS MORE THAN ONE DAY. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIALS ON-SITE DURING CONSTRUCTION.
5. PLANT PACKAGING: ALL CONTAINERS/PACKAGING SHALL REMAIN IN PLACE UNTIL IMMEDIATELY PRIOR TO PLANTING. ANY STOCK IN CONTAINERS SHALL BE REMOVED FROM CONTAINERS AND THE CONTAINER BALL SHALL BE CUT VERTICALLY AS NECESSARY TO LOOSEN ROOTS. REMOVE ALL PLANT TAGS, TYING MATERIAL AND MARKING TAPES AT THE TIME OF PLANTING.
6. PLANT QUALITY: ALL PLANT MATERIAL SHALL BE SELECTED AT NURSERY BY OWNER'S REPRESENTATIVE. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT AND REJECT PLANT MATERIAL AT ANY POINT FROM DELIVERY THROUGH WARRANTY PERIOD, CONTRACTOR TO REPLACE MATERIAL DURING CURRENT PLANTING WINDOW. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
7. PLANT QUANTITIES: THE PLANT SCHEDULE IS PROVIDED AS AN AID ONLY. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
PLANTING DETAILS: REFER TO PLANTING DETAILS AND OR SPECIFICATIONS FOR PLANT INSTALLATION REQUIREMENTS.
8. PLANTING LAYOUT: THE PLANTING PLANS ARE DIAGRAMMATIC. SITE PLANT MATERIALS APPROXIMATELY AS SHOWN ON THE LANDSCAPE DRAWING AND NOTIFY OWNER'S REPRESENTATIVE FOR REVIEW, PRIOR TO PLANTING. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST PLANTS TO EXACT LOCATION IN FIELD.
9. INITIAL PRUNING: PRUNE ONLY DEAD OR DAMAGED LIMBS, OR AS DIRECTED BY LANDSCAPE ARCHITECT.
10. STAKING: TREE STAKING SHALL BE AT THE CONTRACTOR'S DISCRETION, BUT CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE, AND OR REPLACEMENT/REPLANTING NECESSARY DUE TO WIND DISPLACEMENT OF PLANT MATERIALS.
11. WATERING REQUIREMENTS: ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED AS NECESSARY, DURING THE FIRST GROWING SEASON.
12. WORK ORDER: ALL SUBSURFACE WORK, INCLUDING UTILITY AND IRRIGATION SHALL BE INSTALLED AND FUNCTIONAL, PRIOR TO THE INSTALLATION OF ANY PROPOSED LANDSCAPING. STAKE LOCATION OF ALL TREES, HEDGE LINES AND PLANTING BEDS AND NOTIFY OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO PLANTING. TREES AND SHRUBS MUST BE INSTALLED PRIOR TO PERENNIALS AND GRASSES TO ESTABLISH PROPER LAYOUT AND TO AVOID DAMAGE TO SMALLER PLANTINGS.

SOIL PREPARATION NOTES:

1. BED PREPARATION: PREPARE SOILS IN PLANTING AREAS BY ROTO-TILLING AMENDMENT AND TOPSOIL TO A DEPTH OF 8" BELOW FINISHED SOIL SURFACE IN ALL PLANTED AREAS. TREES WILL REQUIRE OVER-EXCAVATION AND BACKFILL WITH AMENDED SOIL.
2. DE-COMPACTION: SUBSOILING IN PLANTING AREAS SHOULD BE PERFORMED AS REQUIRED, AT A DEPTH OF 12-24 INCHES IN SUCH A MANNER AS WILL FRACTURE COMPACTED SOIL WITHOUT ADVERSELY DISPLACING SURFACE SOIL, OR DISTURBING PLANT LIFE, TOPSOIL AND SURFACE RESIDUE. MULTIPLE PASSES AT VARYING ANGLES ARE REQUIRED TO ENSURE SUITABILITY FOR GROWTH. WHEN USING DISC OR RIPPING EQUIPMENT, IT IS REQUIRED THAT THE FINAL PASSES OVER THE AREA BE MADE WITH A ROTO-TILLER TO BREAK UP ANY LARGE CLUMPS TO MAKE FINAL GRADING EASIER. PROPER EQUIPMENT, AND METHOD ARE CRITICAL.
LANDSCAPE CONSTRUCTION COMPACTION MITIGATION: COMPACTION DURING CONSTRUCTION SHOULD BE MINIMIZED AS POSSIBLE AND REMEDIATED AS REQUIRED TO LESS THAN 80% USING METHODS DESCRIBED, PRIOR TO PLANT INSTALLATION.
3. THE LANDSCAPE CONTRACTOR SHALL COMPLETE THE FOLLOWING. STRIP EXISTING TOPSOIL AND STOCKPILE ON SITE FOR LATER USE. CONDUCT A SOIL EVALUATION AND PROVIDE WRITTEN LAB REPORT TO DETERMINE THE EXISTING SOIL'S:
   COMPOSITION, COMPACTION RATE, NUTRIENT QUALITIES, ORGANIC CONTENT, PH LEVELS, AND WATER HOLDING CAPABILITIES
4. THE IDEAL PARTICLE SOIL MIX FOR THIS PROJECT IS APPROXIMATELY 45% SAND, 40% SILT, 10% CLAY AND 5% ORGANIC MATERIAL WITH A PH LEVEL NEAR SEVEN. PRIOR TO THE INSTALLATION OF THE LANDSCAPE AND IRRIGATION SYSTEM, CONTRACTOR TO PREPARE SOIL TO ENSURE A PROPER ENVIRONMENT FOR PLANT ROOT DEVELOPMENT.
SOIL AMENDMENT: AFTER INITIAL SOIL DE-COMPACTION PROCEDURES ARE PERFORMED, SOIL AMENDMENTS SHOULD BE ADDED. THE ADDITION OF SOIL AMENDMENTS IS DETERMINED FROM SOIL TESTS CONDUCTED PRIOR TO WORK COMMENCING. SOIL AMENDMENT MAY INCLUDE INORGANIC MATERIAL SUCH AS SAND, SILT OR CLAY, WHICH HELP IMPROVE SOIL TEXTURE. ORGANIC MATERIAL SUCH AS COMPOST, MANURE, AND PEAT MOSS MAY ALSO BE USED AND HELP IMPROVE SOIL STRUCTURE. OTHER AMENDMENTS SHALL BE ADDED AS SPECIFIED IN REQUIRED SOILS REPORT. ALL AMENDMENTS SHOULD BE MIXED THOROUGHLY WITH EXISTING SOIL AND AN ADDITIONAL SOIL TEST WILL BE TAKEN TO ENSURE PROPER SOIL CONDITIONS PRIOR TO PLANTING.
5. SUPPLEMENTAL TOPSOIL: IF NECESSARY, PROVIDE NEW TOPSOIL THAT IS FERTILE, FRIABLE AND NATURAL LOAM SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY, CLAY LUMPS, BRUSH WEEDS, AND OTHER LITTER AND FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIMENSION AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT NECESSARY FOR VIGOROUS GROWTH OF SPECIFIED PLANTINGS. OBTAIN TOPSOIL THAT OCCURS IN A DEPTH OF NOT LESS THAN 6". DO NOT OBTAIN SOIL FROM BOGS OR MARSHES.

IRRIGATION NOTES:

1. CODES: IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND MANUFACTURER'S SPECIFICATIONS. NOTIFY LANDSCAPE ARCHITECT BY TELEPHONE AND IN WRITING OF ANY CONFLICTS PRIOR TO INSTALLATION.
2. SEEDED & REVEGETATED AREAS: SHALL BE IRRIGATED BY TEMPORARY OVERHEAD SPRAY WITH AN AUTOMATIC SYSTEM. THIS SYSTEM MAY BE ABANDONED WHEN PLANTINGS HAVE BEEN CLEARLY ESTABLISHED AFTER A MINIMUM OF TWO GROWING SEASONS
3. SHRUB, TREE, AND GROUNDCOVER AREAS: SHALL BE DRIP IRRIGATED WITH A PERMANENT AUTOMATIC SYSTEM.
4. DRIP TO BE ON SEPARATE ZONE, COORDINATE ALL SLEEVING WITH APPROPRIATE CONTRACTORS.
5. SLEEVING: TO BE INSTALLED BY LANDSCAPE CONTRACTOR PRIOR TO IRRIGATION WORK - CONTRACTOR SHALL ADEQUATELY SIZE ALL SLEEVES SHOWN ON PLAN. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVING SHALL EXTEND 1'-0" FROM EDGE OF PAVEMENT INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE.
6. SYSTEM DAMAGE: SHOULD THE MAINLINE OR OTHER COMPONENTS BREAK OR BE SHUT OFF FOR ANY REASON DURING THE COURSE OF CONSTRUCTION THAT CONTRACTOR SHALL HANDWATER ANY INSTALLED PLANTS. THE CONTRACTOR SHALL CONTINUE TO DO SO UNTIL THE IRRIGATION SYSTEM IS OPERABLE.
7. UTILITIES: CONTRACTOR SHALL VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

PLANTING SCHEDULE

TREES

SYMBOL	CODE	PROPOSED SPECIES:	QUANTITY / SIZE	SPACING
	JS	ROCKY MOUNTAIN JUNIPER *JUNIPEROUS SCOPULORUM*	5 TOTAL AT 8' HT.	PER PLAN
	PL	LODGEPOLE PINE *PINUS CONTORTA LATIFOLIA*	2 TOTAL AT 14' HT. 1 TOTAL AT 10' HT.	PER PLAN
	PT	QUAKING ASPEN *POPULUS TREMULOIDES*	2 TOTAL AT 4" CAL. 4 TOTAL AT 2" CAL.	PER PLAN
	PM	DOUGLAS FIR *PSEUDOTSUGA MENZIESII*	2 TOTAL AT 14' HT. 3 TOTAL AT 12' HT. 1 TOTAL AT 8' HT.	PER PLAN

SHRUBS

SYMBOL	CODE	PROPOSED SPECIES:	QUANTITY / SIZE	SPACING
	AR	REGENT SERVICEBERRY *AMELANCHIER ALNIFOLIA 'REGENT'*	29 TOTAL 5 GAL.	PER PLAN
	MR	CREEPING OREGON GRAPE *MAHONIA REPENS*	19 TOTAL 5 GAL.	PER PLAN
	PA	ABBOTSWOOD BUSH CINQUEFOIL *POTENTIILLA FRUTICOSA 'ABBOTSWOOD'*	44 TOTAL 2 GAL.	PER PLAN
	RA	ALPINE CURRANT *RIBES ALPINUM*	32 TOTAL 5 GAL.	PER PLAN
	RC	GOLDEN CURRANT *RIBES AUREUM*	22 TOTAL 5 GAL.	PER PLAN
	SA	COMMON WHITE SNOWBERRY *SYMPHORIOCARPOS ALBUS*	28 TOTAL 2 GAL.	PER PLAN

GROUNDCOVER

SYMBOL	ZONE	SEED MIX / RATE		AREA
	NATIVE REVEGETATION	COMMON NAME	RATE (LBS OF PLS / ACRE)	7,533 SF
		SEED SHEEP FESCUE IDAHO FESCUE BLUEBUNCH WHEATGRASS BLUE FLAX SILVER LUPINE ARROWLEAF BALSAMROOT CONTAINER - 1 GAL. BASIN WILDRYE MOUNTAIN BIG SAGEBRUSH		
	GREEN ROOF	NATIVE WILDFLOWER + GRASSES ROOFTOP MIX		1,030 SF

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REVISIONS:

WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

FILENAME: --
PROJECT MANAGER: EM
DRAWN BY:

ISSUE DATE: 08/14/23

SITE PLANTING NOTES + SCHEDULE

SHEET NO.

L-5.00

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REVISIONS:

WALNUT AVE. RESIDENCE
KETCHUM VILLAGE, LOTS 3 & 4
KETCHUM, ID

FILENAME: –
PROJECT MANAGER: EM
DRAWN BY:
ISSUE DATE: 08/14/23

SITE PLANTING PLAN

SHEET NO.

L-5.01

THE JARVIS GROUP
ARCHITECTS, AIA, PLLC

Project: Walnut Residence

Subject: City of Ketchum and Design Review Narrative

Date: Friday, May 26th, 2023

Introduction + Existing Site Conditions

The proposed residence and site development on Lots 3 +4, Block 91, within the Ketchum Village aims to harmoniously blend the built with the natural surroundings while providing a center of respite and refuge for the property owner. The site is bound by the unimproved Seventh Street to the north, undeveloped Block 91 Alley to the east, a residence on Lot 1A (under construction) to the south, and Walnut Avenue to the west. On the southwest corner of the site there is an existing view corridor easement, for the benefit of adjacent Lot 1A, which restricts the development + placement of any vertical element(s). The topography of the existing site rises approximately 65' from the Southwest corner (low) to the Northeast corner (high). Along Walnut Avenue, where vehicle access into the site occurs, there is an approximately 5ft elevation difference between road surface and western property boundary, presenting constraints to vehicular access. The existing vegetation on site features largely native sagebrush steepe plant species, and there are no existing trees of note present. Similarly there are no existing rock outcroppings within the property boundaries.

Vehicle Access + Building Siting

Initial site and architectural studies by the design team focused on 1) providing safe and efficient access into the site from Walnut Ave and 2) integrating the built structure within sloping hillside. Access into the site is constrained by the existing topography, positioning Walnut Ave approximately 5ft below western access / property line. Additionally, there is the aforementioned view corridor easement, which placed constraints on the final location of the proposed garage. The design team realized that providing vehicle access into the site was best accomplished by entering the site as high on Walnut Ave. as possible. This allowed for the most direct approach, while satisfying fire access code standards. This approach also allowed for the garage structure itself to be oriented so that the garage doors are not presented to those passing by on Walnut Avenue.

Concurrent to identifying the ideal vehicle access approach and surface elevation, the team worked on integrating the built forms and volumes of the structures into the existing hillside, while still achieving the owners spatial and programmatic architectural goals. As described in the site conditions, the existing site topography slopes from northeast (high) to southwest (low). Building upon the information learned from the ideal vehicle access approach and resulting garage location, the design team examined stepping the architectural volumes up the hillside, thus allowing the finish floor elevations to step up in harmony with the existing site topography. This strategy allowed for the existing grades wrap and blend around the structure(s), revegetate more of the site in a manner that presents naturalized, and minimize the visual impact of buildings with respects to offsite views.

In keeping with the spirit and requirements of the MOD, the design team has erected architectural story poles on site and subsequently viewed and photographed the site from designated public vantage points within the City of Ketchum. The findings from this study are that the story poles are not visible from these public vantage points. Ensuring the design met this criteria was a very high priority of the design team with respects to the MOD purposes and goals.

Site Grading, Drainage + Utilities

The integration of the architecture with the existing topography allowed for the proposed exterior improvements and grading + drainage to replicate the current flow patterns and systems on site. All proposed grading and drainage was designed and engineered to be fully controlled and maintained on subject property and not impact adjacent lots. Site retaining walls are minimized, and when necessary, the team will use natural stone boulders in organic / natural alignments to blend into the site and visually recede into hillside vegetation.

All utilities are proposed to be underground and exterior MEP equipment has been located on site in areas that cannot be viewed from public or private view corridors.

The stepping of the architecture volumes and finish floor elevations with the existing topography also allowed for the team to reduce the amount of cut + excavation on site necessary for the implementation of the design.

Revegetation

All areas on site impacted by the proposed development are proposed to be revegetated with a plant palette that is either native and / or compatible with the existing sagebrush steppe plant community. The layout of the new plantings will appear natural by mimicking the patterns and arrangements the surrounding landscape. The goal of the design team is to visually blend the improvements with the native landscape, thus presenting no discernible boundary between these two delineations.

Trees and shrubs have been placed with attention on preserving / maintaining views, providing comfortable living conditions, and appropriately screening the residence. The efforts of the design team described relative to building siting and stepping of the architectural volumes, combined with a strict revegetation palette, will allow the architecture to blend into the site in a relevant timeframe.

BUTLER ASSOCIATES, INC.
GEOTECHNICAL & CIVIL ENGINEERING & CONSULTING

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

Steve and Melissa Babson
C/o Breyman Properties, LLC
12045 Breyman Avenue
Portland, OR 97219-0000
C/o The Jarvis Group-lucas@jarvis-group.com

January 6, 2023

RE: GEOTECHNICAL REPORT
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Lot 3-RPK00000910030
0.189 acres
Lot 4-RPK0000091004A
0.189 acres
Ketchum, Idaho

Dear Steve and Melissa,

I have completed the authorized geotechnical investigation and report for your proposed residence on Lots 3 and 4, Block 91, Ketchum Townsite located on Walnut Avenue in Ketchum, Idaho. The work was authorized by the signed proposal dated December 11, 2022.

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 residence excavated into the existing slope supported by continuous and spread footings, retaining walls and slab-on-grade foundations constructed on an approved structural fill foundation building pad constructed on an approved native subgrade excavated into the existing slope.** I am providing the recommendations in this report for the preparation of the subgrade, structural fill building pad, foundation design, lateral loading, foundation drainage system, surface grading and drainage and general radon venting concepts.

I recommend that this office be retained to provide observations for the construction of the structural fill foundation building pad, slab-on-grade construction, 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 Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

Butler Associates, Inc.
P.O. Box 1034
Ketchum, Idaho 83340
January 6, 2023

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INTRODUCTION

This report represents the results of the soil and foundation engineering evaluation for the proposed Babson residence on Lots 3 and 4, Block 91, Ketchum Townsite located on Walnut Avenue 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 Babson residence. Before the subsurface investigation I reviewed the geotechnical reports for several projects located just west and east of the project 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 soil and rock 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 probably consist of a two story single family, concrete, steel and wood frame single family residence with an attached garage excavated into the existing slope supported by continuous and spread footings, retaining walls and slab-on-grade construction. The garage will be supported by slab-on-grade construction and accessed from a new driveway commencing at Walnut Avenue. The residence will be served by the Ketchum Utility Department.

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

According to the Blaine County Parcel Information Map the property is generally “rectangular shaped” and totals approximately 0.378 acre in size. Lots 7 & 8, Block 91, Ketchum Townsite borders the site to the north, Lot 1A, Block 91, Ketchum Townsite to the east, Walnut Avenue to the south and Lot 1, Block 92, Ketchum Townsite to the west.

FIELD EXPLORATION

Six test pits were excavated and observed at the site on January 3 using a track-mounted excavator. The test pits were excavated up to 5.8 feet below existing grade and terminated after meeting refusal in bedrock. The *Test Pit Site Plan Photo 1* shows the existing site conditions 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* and *Test Pit Logs* are presented on pages 12-14 and 15-20, respectively. The *USCS* chart on page 21 should be used to interpret the terms on the test pit logs in this report.

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 be 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 4.8 feet of native silty clay, trace-little sand, gravel and roots (topsoil) overlying native, brown, weathered, fractured andesite bedrock up to 5.8 feet below existing grade. The test pits were terminated after reaching refusal in the native bedrock and due to consistency of the rock between the test pits and the consistency of the bedrock with the deep excavation on the project directly to the east of the site. Groundwater was not encountered in any of the test pits although I do anticipate subsurface runoff at the soil/bedrock interface during the spring snowmelt. 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 Tla Latite and hornblende andesite bedrock. The native surficial silty clay soil is the result of the overlying bedrock slopes weathering and the resultant soils being gravity deposited downslope.

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 single family residence attached garage excavated into the existing slope supported by an approved weathered bedrock subgrade or a free-draining structural fill foundation building pad constructed on an approved native subgrade. Due to the potential for surface and subsurface flows from the overlying slope impacting the foundation I recommend a groundwater cutoff trench foundation system be installed to intercept subsurface runoff and direct it downslope of the structure before it impacts the foundations.

All structural fill to be placed for the foundation building pad, exterior terraces, walkways and driveways should be approved native or imported sand and gravel soils. The excavated pulverized bedrock could possibly be used for structural or non-structural backfill depending on the gradation of the material and the percentage of fines.

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 location. 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 test pit locations are shown on the *Test Pit*

Site Plan Photo 1.

2. The building footprint, exterior terraces, walkways and limits of disturbance should be stripped of the surficial silty clay to expose the native undisturbed bedrock. The excavated fine grain soils should be stockpiled as used for non-structural landscaping.

3. The excavation to bottom of the footing should be completed to expose an undisturbed weathered bedrock subgrade. Any isolated areas of silty clay exposed at the footing elevation should be over-excavated and backfilled with approved imported structural fill.

4. To create a level foundation building pad the native fractured andesite bedrock subgrade should be over-excavated several inches and backfilled with imported 1" fractured washed gravel. The gravel will also enhance the foundation drainage system and minimize using extra concrete to fill any voids in the fractured bedrock. All structural fill should be placed as outlined in the *Structural Fill* is section.

5. After this office has approved the native bedrock subgrade and/or imported gravel structural fill building pad it will approved for footings.

6. Prior to installing the free-draining structural fill foundation building pad the cutoff trench foundation system should be installed as described in the next section.

Cutoff Trench Foundation Drainage System

To intercept subsurface runoff that could impact the crawlspace or slab-on-grade foundations I recommend installing a cutoff trench foundation drainage system outside the upslope side of all footings to intercept and direct groundwater by gravity to drywells located downslope of the structure. The following are construction details of the cutoff trench drainage system:

1. A 12" wide trench should be excavated outside the upslope edge of the upslope footings.

2. The trench should be horizontally offset from edge of the footing by at least 12".

3. The high point of the trench should be a min. 6" below the bottom of footing at the midpoint of the foundation length and be sloped at min. 1% around each side of the building.

4. The trench should be lined with a 4.0 oz., non-woven filter fabric before installing a 4" perforated pipe and backfilled with imported, washed 2" rounded drain rock. See the *Cutoff Trench/Building Pad Drainage System Profile* and *Cutoff Trench Drainage System Concept Plan* for details.

5. Once the trenches reach the downslope end of the structure the 4" perforated pipes should be connected to a 6" solid PVC pipe that is terminated in drywells located downslope of the structure. Runoff from downspouts and catch basins can also be connected to the solid 6" pipe downslope of the cutoff trench. **Do not connect downspouts to the perforated pipe in the cutoff trenches.**

6. Footing drains are not required for footings adjacent to cutoff trenches when installing washed fractured or rounded drainrock over the trench from bottom of footing to the top of footing.

7. This office will work with the general contractor to determine the cutoff trench alignments once the excavation is completed to bottom of footing.

8. The drywell locations that the cutoff trenches terminate in should be coordinated with the landscape architect.

9. It is important that the elevation of the drywell cast iron grate is at least 1 foot below the lowest footing to minimize the chance of groundwater back-flowing into the foundations.

10. A surface swale should be created from the drywell grates to the borrow ditch in case the drywell overflows.

11. Two drywells should be installed (one on each side of the residence) for the cutoff trench system to terminate in. This will provide a back-up drywell in case one of the solid drainlines from the cutoff trench to the drywells gets crushed or clogged.

12. See *Storm Water Drywell Profile* for details. The size of the drywell can be calculated by this office at your request.

13. The cutoff trench should be **mutually exclusive** of the radon system piping.

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 imported washed fractured or rounded gravel, crushed sand and gravel (roadmix) or 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 *Cutoff Trench/Building Pad Drainage System 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 fractured andesite bedrock.

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 fractured andesite bedrock subgrade or a free-draining structural fill foundation building pad constructed on an approved native subgrade will support continuous footings, spread footings and slab-on-grade construction based on the following parameters:

1. The allowable bearing pressure of the approved weathered bedrock subgrade or an imported washed gravel structural fill building pad constructed on an approved native subgrade is 4,000 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 structural fill building pad on an approved native subgrade.

4. The recommended friction factor is 0.60 for the approved native fractured andesite bedrock subgrade or imported washed gravel building pad.

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 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.

Retaining Walls

The following design parameters assume that proper drainage will maintain a fully drained environment behind the walls for the life of the structure with a level backfill at least 10 feet behind the structure:

1. The recommended equivalent active lateral earth pressure is 35 pounds per cubic foot (pcf) equivalent fluid pressure (efp). Active pressure design is based on the top of the wall moving.

2. The recommended equivalent at-rest lateral earth pressure is 55 pounds per cubic foot (pcf) equivalent fluid pressure (efp). Active pressure design is based on the top of the wall moving.

3. The recommended equivalent passive lateral earth pressure is 400 pcf, efp.

4. The recommended friction factor is 0.60 for the approved native fractured andesite bedrock or imported washed gravel foundation building pad.

5. The floor joists and sub-floor should be in-place prior to backfilling against the retaining walls or as directed by the structural engineer.

6. Footings adjacent to retaining walls should be structurally connected to the retaining walls.

All retaining walls should be waterproofed as follows:

1. Retaining walls should be covered with a waterproof membrane and a synthetic drainage mat that is installed to the bottom of footing and over the footing drain or cutoff trench. The drainage mat will both direct groundwater to the footing drain and/or cutoff trench and will also protect the waterproofing membrane.

2. If washed, free-draining gravel is used as backfill against retaining walls then the drainage mat can be omitted and replaced with an inexpensive protection board that will protect the waterproofing membrane as the free-draining gravel is installed.

3. A synthetic drainage mat is not necessary if free-draining gravel is used exclusively as backfill against the retaining walls since the gravel will allow groundwater to reach the cutoff trench drainage system to relive hydrostatic pressures.

4. See the *Cutoff Trench/Building Pad Drainage System Profile* for waterproofing and drainage design details.

If the groundwater rises above the base of the footings then the hydrostatic pressures will increase the lateral earth pressures by 62 pcf per vertical foot of wall.

All backfill should be placed as directed in the *Structural Fill* section.

1" to 2", rounded or fractured, washed drain rock has several advantages if used as structural fill against retaining walls. The lateral pressures against the retaining wall from smaller compaction equipment (i.e. vibrating plate tamper) used for compacting the washed gravel will be less than that of a hoe-pack or smaller smooth steel drum roller that should be used for compacting pitrun sand and gravel soils. The drain rock also provides an excellent free draining medium and eliminates the need (and cost) for a geo-composite drainage matt. The washed gravel is not self-compacting and should be placed in 12-inch loose lifts and compacted with a vibrating plate tamper.

Structural fill for footings adjacent to retaining walls should be placed to provide an envelope under footings, patios and walkways so that a line drawn from the edge of footings or walkways at a slope of 1.0 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.*

Soil Classification for Septic Design

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

Surface Grading and Drainage

I have not reviewed the preliminary 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 downslope of the structure and driveway. The rim of the drywell should be at least 10 feet from and 1 foot 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 and downslope of the foundation. See the *Cutoff Trench/Building Pad Drainage System Profile* for concepts.

4. The native fractured andesite bedrock has an infiltration rate of less than 0.1"/minute. A storm water drywell should be constructed downslope of the structure and surrounded by a min. 36" envelope of 2" rounded washed gravel. The civil engineer creating the grading and drainage plan should work with the City Planning Department to provide an overflow into the City right-of-way in case the on-site drywells overflow. See the *Storm Water 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.

6. Due to the low permeability of the native fractured andesite bedrock smaller landscape drywells could be slow draining and ineffective. I recommend that all surface runoff be piped to a large drywell located downslope of the structure.

7. All drywells proposed on the grading plan located upslope of the structure and in the driveway should be converted to catch basins that pipe runoff to large drywells located downslope of the structure.

8. A prominent surface swale should be constructed above the structure to capture surface runoff from the overlying slopes and direct runoff to drywells downslope of the structure. The volume of surface runoff could be quite large in the spring when a warm rain could melt any remaining snow, the ground is frozen preventing any infiltration and the resulting runoff is directed towards the structure.

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 cut to at least 12" below finish grade and/or to remove all roots, organics, uncontrolled fill, disturbed native soils and dark brown topsoil. The underlying undisturbed native soils should be scarified to a 12" 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. All native silty clay and organics expose in the driveway and parking areas subgrade should be removed to expose the underlying native fractured bedrock.

5. A minimum of 6 inches of 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.

6. 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).

7. 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.

8. Pavers, asphalt or concrete.

9. Surface driveway runoff should not be allowed to run down the driveway surface and drain onto Walnut Avenue. I recommend that surface runoff near the residence be directed to a catch basin that terminates in a drywell downslope of the structure. The catch basin should incorporate a cast iron ring and grate that can be kept clear of snow and ice wen the driveway is plowed. Catch basins or drywells located along the edge of the driveway 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 ASCE 7-16 for Site Class B- Rock. The latitude and longitude of the project site are 43.68°N and 114.36° W, respectively.

Seismic Design Category (SDC): C
Risk Category: II
Ss = 0.625 g
S1= 0.193 g
Sms = 0.563 g
Sm1 = 0.154 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.

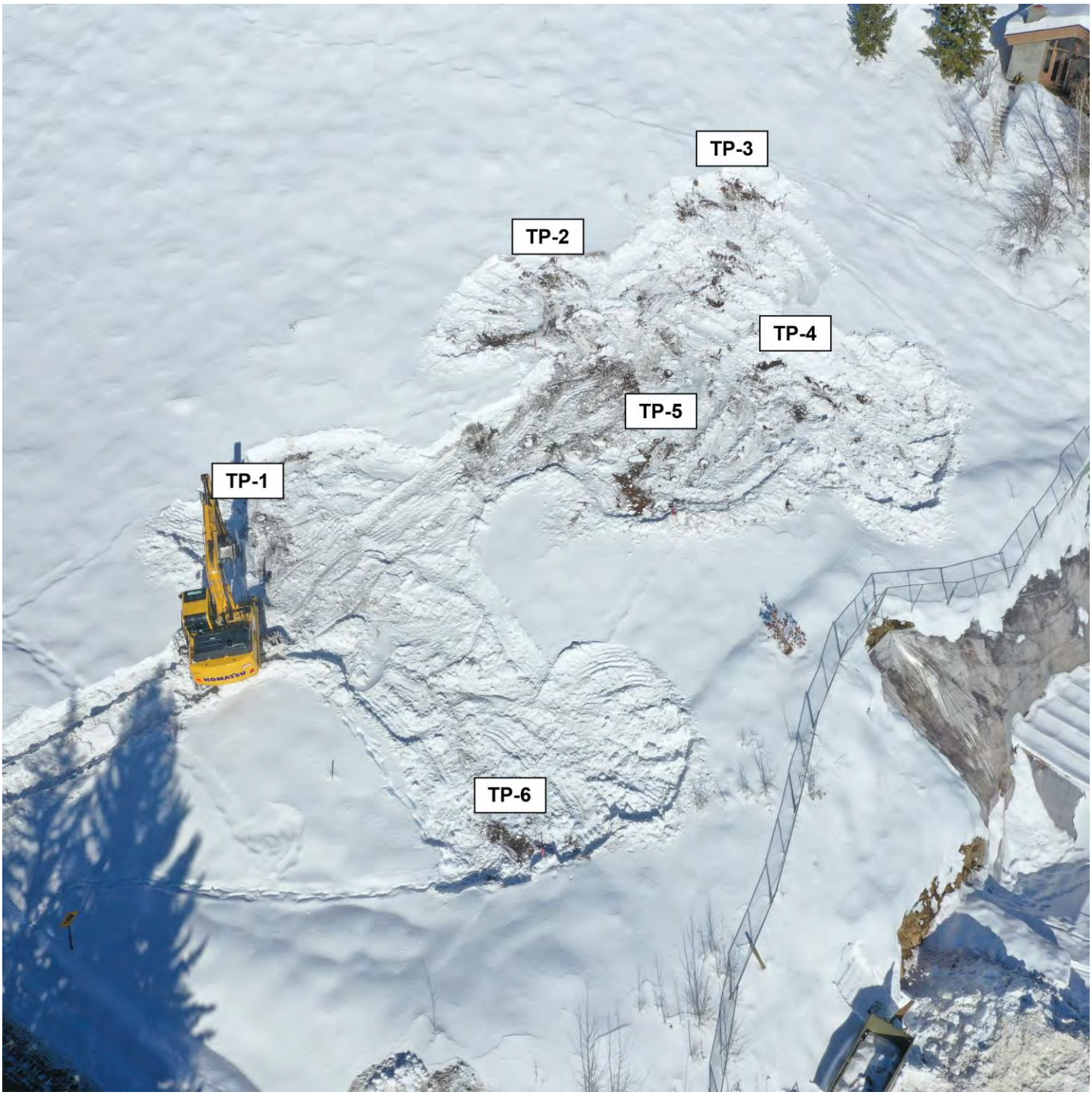
It is important to create an airtight seal between all concrete slabs and adjacent walls. Consulting an experienced contractor or radon-venting specialist can ensure an adequate system is installed during construction compared to potentially expensive remedial measures. See *Radon System Concepts Plan*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

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 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 Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho
43.68ºN 114.36ºW



TEST PIT SITE PLAN PHOTO 1
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho
Image captured on January 3, 2023

TEST PIT SITE PLAN PHOTO 2
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho
Image captured on January 3, 2023

TEST PIT SITE PLAN PHOTO 3
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho
Image captured on January 3, 2023

EXPLORATORY TEST PIT #1
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-2.4'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
2.4'-4.3'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5924 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 4.3 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

EXPLORATORY TEST PIT #2
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-4.8'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
4.8'-5.8'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5940 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 5.8 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

EXPLORATORY TEST PIT #3
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-3.3'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
3.3'-5.4'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5950 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 5.4 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

EXPLORATORY TEST PIT #4
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-2.7'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
2.7'-4.7'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5932 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 4.7 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

EXPLORATORY TEST PIT #5
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-1.5'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
1.5'-2.8'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5930 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 2.8 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

EXPLORATORY TEST PIT #6
Proposed Babson Residence
Lots 3 and 4, Block 91, Ketchum Townsite
Located on Walnut Ave
Ketchum, Idaho

DEPTH (Feet)	USCS SOIL CLASS	SOIL DESCRIPTION
0.0'-2.0'	CL	Silty CLAY, trace-little Sand, Gravel & Roots (NATIVE) Dark brown, soft-stiff, damp.
2.0'-3.6'	RX	Weathered, fractured ANDESITE BEDROCK (NATIVE) Brown, hard, dry.

Test Pit completed on January 3, 2023.
See *Test Pit Site Plan Photo 1* for test pit location.
The test pit surface elevation is approximately 5916 feet based on the Blaine County Land Use Information Map.
No groundwater encountered.
Test pit terminated at 3.6 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.
Minor sloughing of test pit walls in native andesite bedrock soil.
Excavation equipment: DEERE track-mounted excavator.

SOIL 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 (1%)	Consistency	N, blows/ft (c)	Undrained (d) Shear Strength(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
Compost	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 behavior.
(c) Refer to text of ASTM D 1586-84 for a definition of N; in normally consolidated cohesionless soils Relative Density terms are based on N. values corrected for overburden pressures.
(d) Undrained shear strength = ½ unconfined compression strength.

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			SYMBOL	TYPICAL NAMES
COURSE 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

COMPONENT DEFINITIONS BY GRADATION

COMPONENT	SIZE RANGE
Boulders	Above 12 inches
Cobbles	3 inches to 12 inches
Gravel	3 inches to No. 4 (4.76mm)
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)
Course sand	No. 4 (4.76mm) 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
Unconfined	U
UU Triax	UU
CU Triax	CU
CD Triax	CD
Permeability	P

(1) Moisture & Atterberg Limits

SAMPLES

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

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

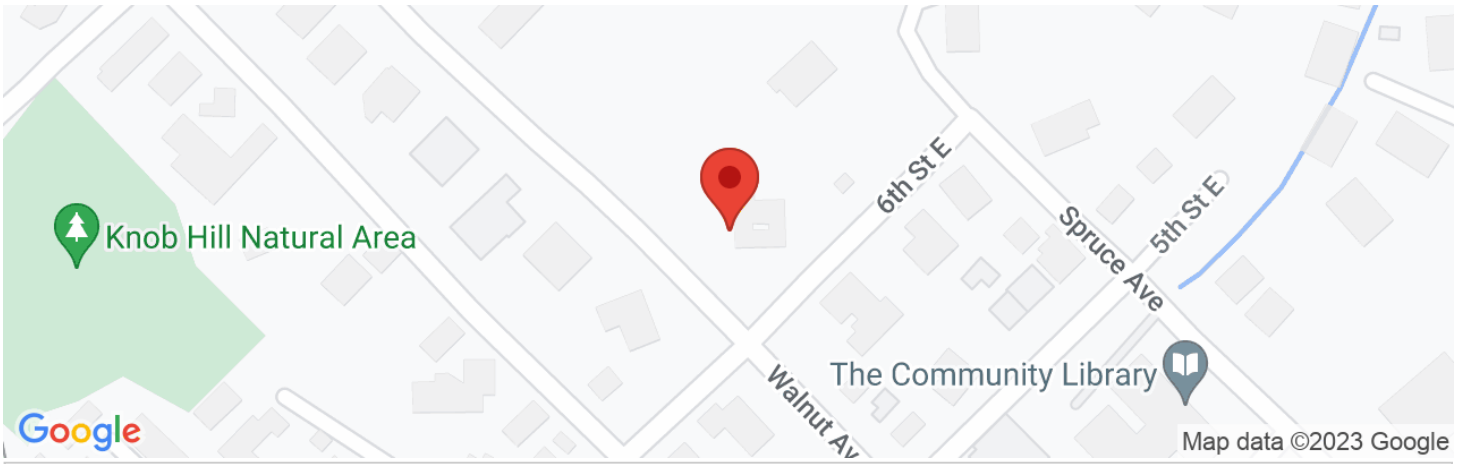
COMPONENT PROPORTIONS

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.

Babson residence

Latitude, Longitude: 43.68459445, -114.36379919

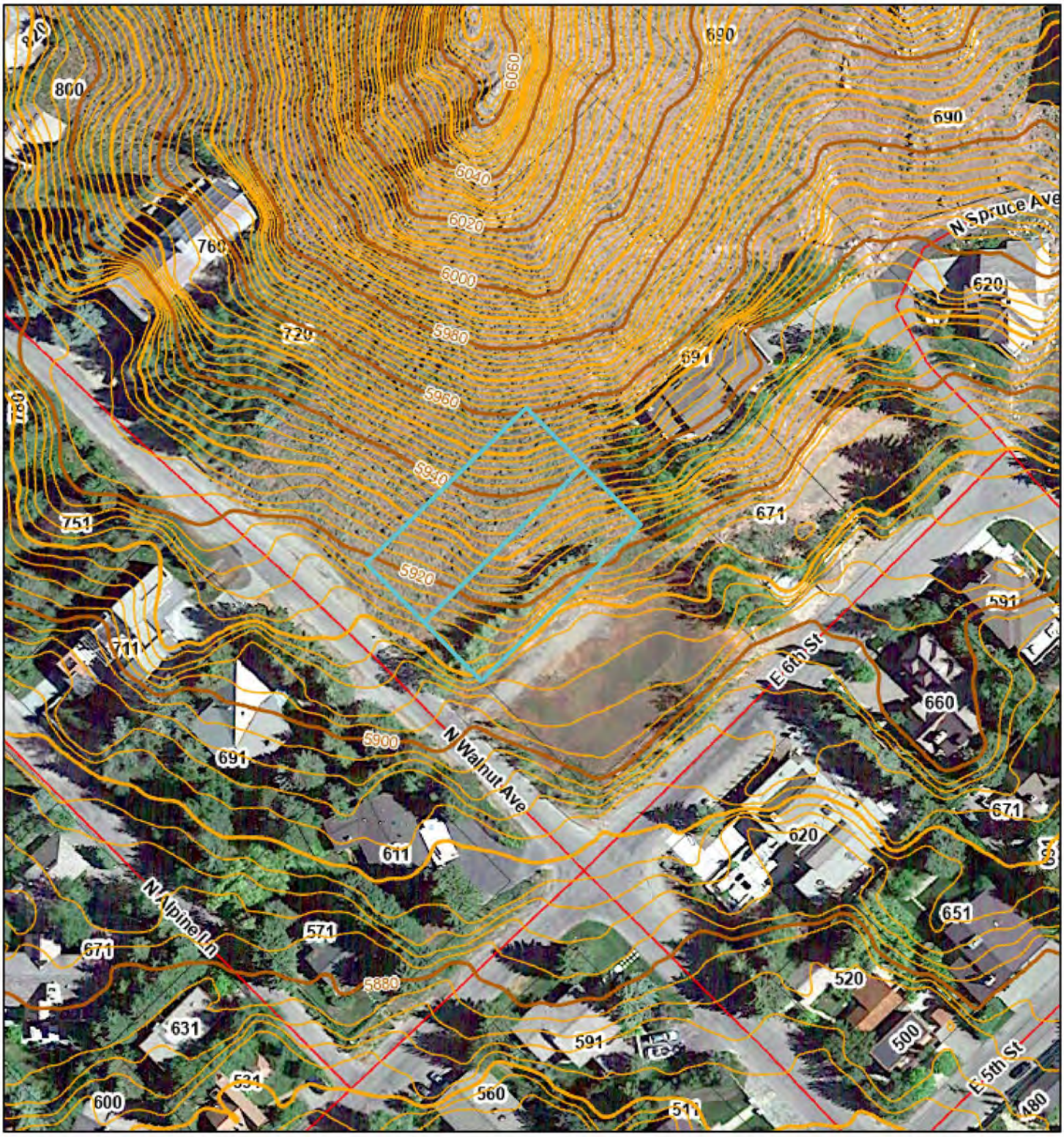


Date	1/6/2023, 4:13:01 PM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	B - Rock

Type	Value	Description
S_S	0.625	MCE_R ground motion. (for 0.2 second period)
S_1	0.193	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.563	Site-modified spectral acceleration value
S_{M1}	0.154	Site-modified spectral acceleration value
S_{DS}	0.375	Numeric seismic design value at 0.2 second SA
S_{D1}	0.103	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	C	Seismic design category
F_a	0.9	Site amplification factor at 0.2 second
F_v	0.8	Site amplification factor at 1.0 second
PGA	0.278	MCE_G peak ground acceleration
F_{PGA}	0.9	Site amplification factor at PGA
PGA_M	0.25	Site modified peak ground acceleration
T_L	6	Long-period transition period in seconds
SsRT	0.625	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.701	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.193	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.212	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.278	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.893	Mapped value of the risk coefficient at short periods
C_{R1}	0.908	Mapped value of the risk coefficient at a period of 1 s
C_V	0.9	Vertical coefficient

Proposed Babson Residence



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1:1,135

0 0.01 0.01 0.03 mi

0 0.01 0.03 0.06 km

2ft Contours 2017

20ft Contours

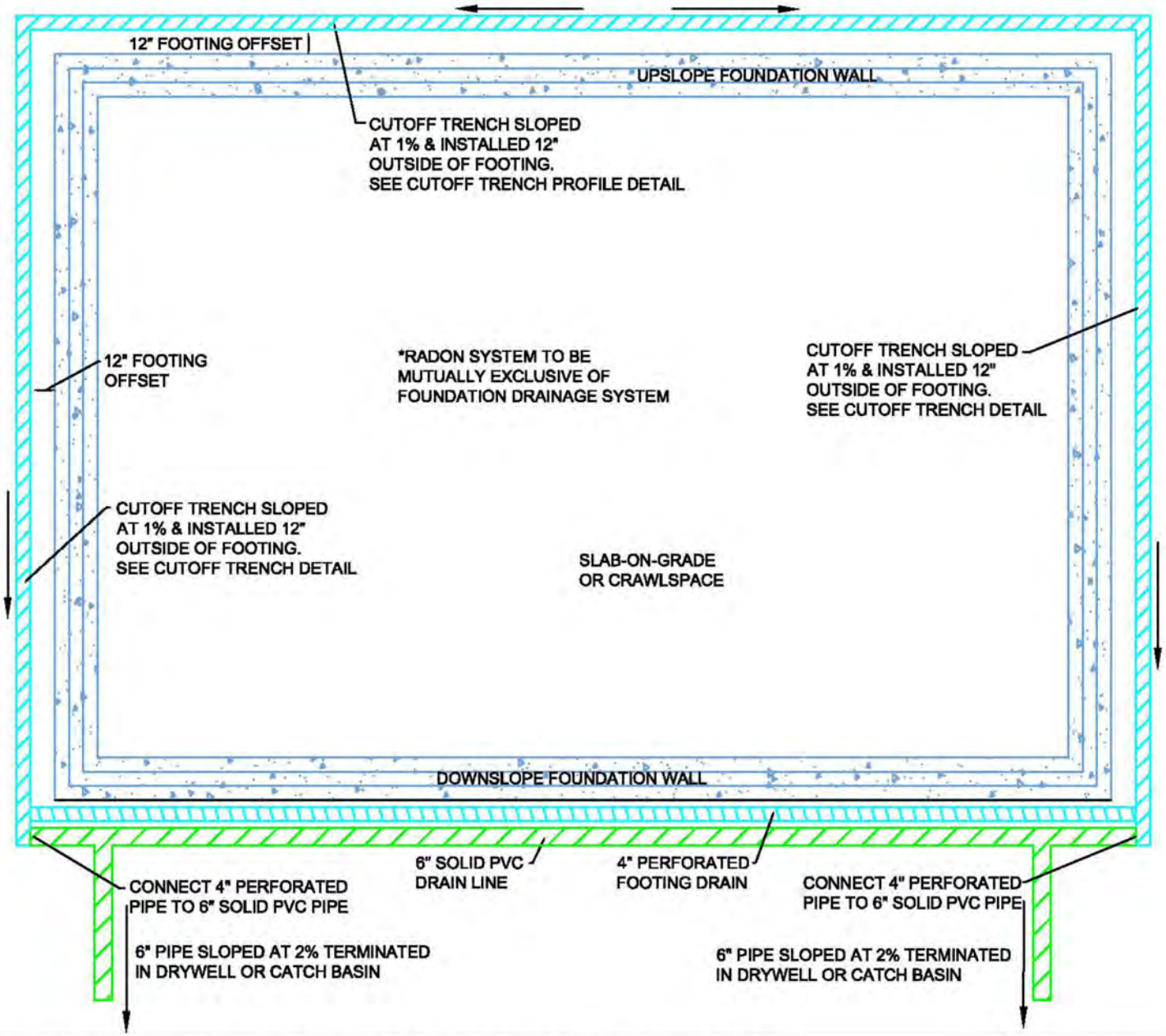
10ft Contours

2ft Contours

Parcels

Roads

Blaine County GIS



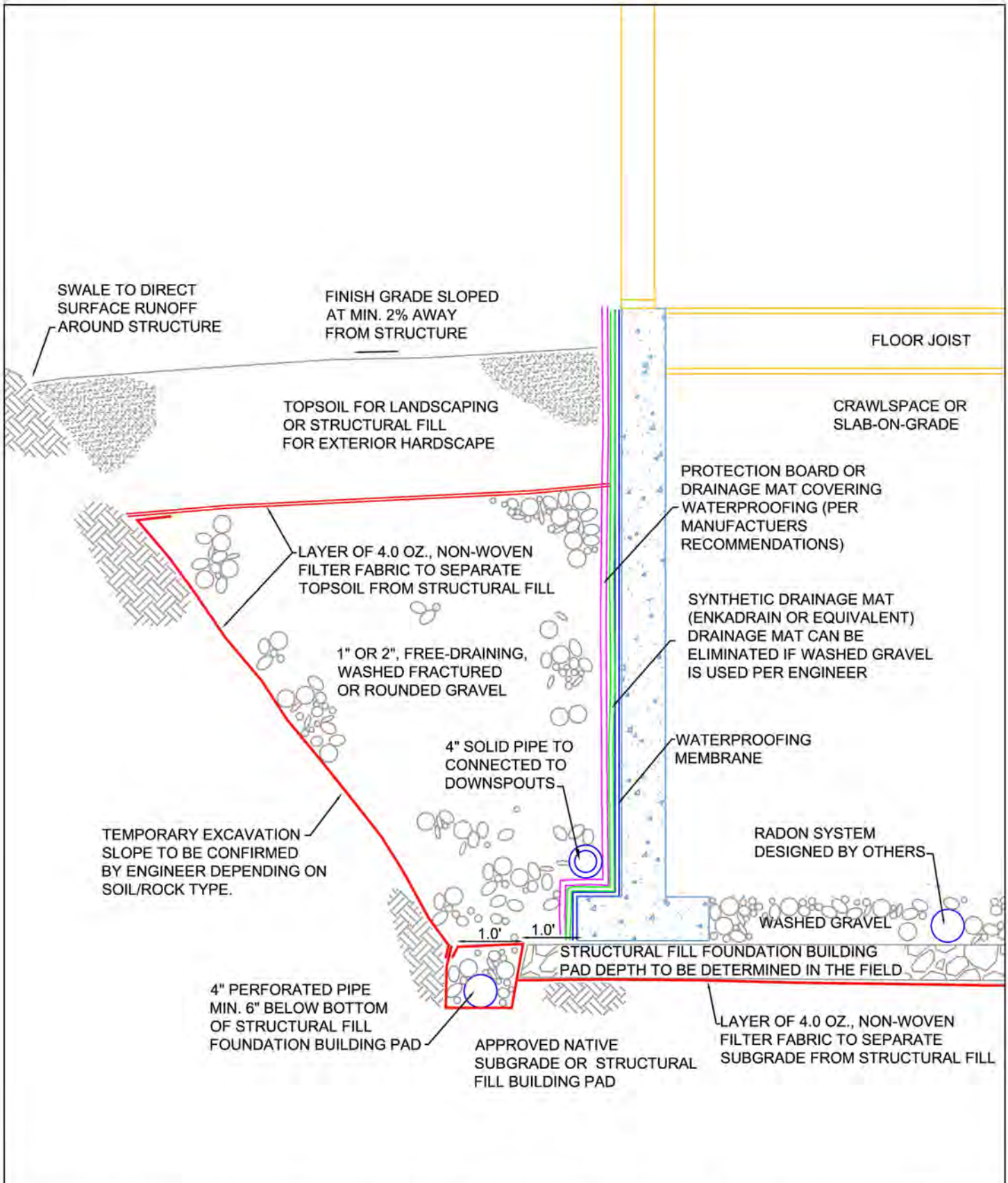
CUTOFF TRENCH FOUNDATION DRAINAGE SYSTEM PLAN

Proposed Babson Residence
Located on Walnut Ave
Ketchum, Idaho

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

01-06-23

Not To Scale



CUTOFF TRENCH FOUNDATION DRAINAGE SYSTEM PROFILE

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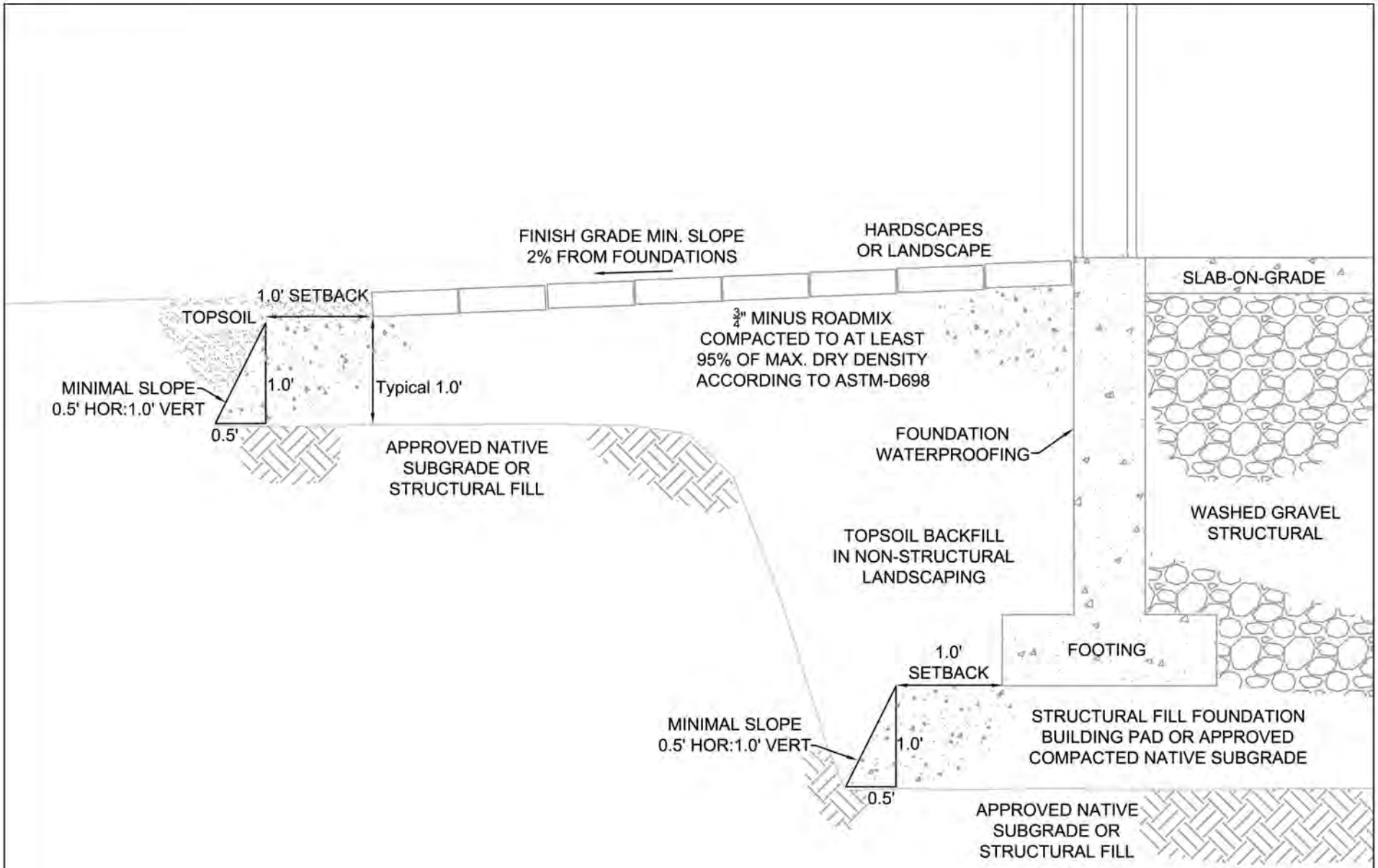

STRUCTURAL FILL /FOUNDATION SUBGRADE CONCEPTS PROFILE

Proposed Babson Residence
Located on Walnut Ave
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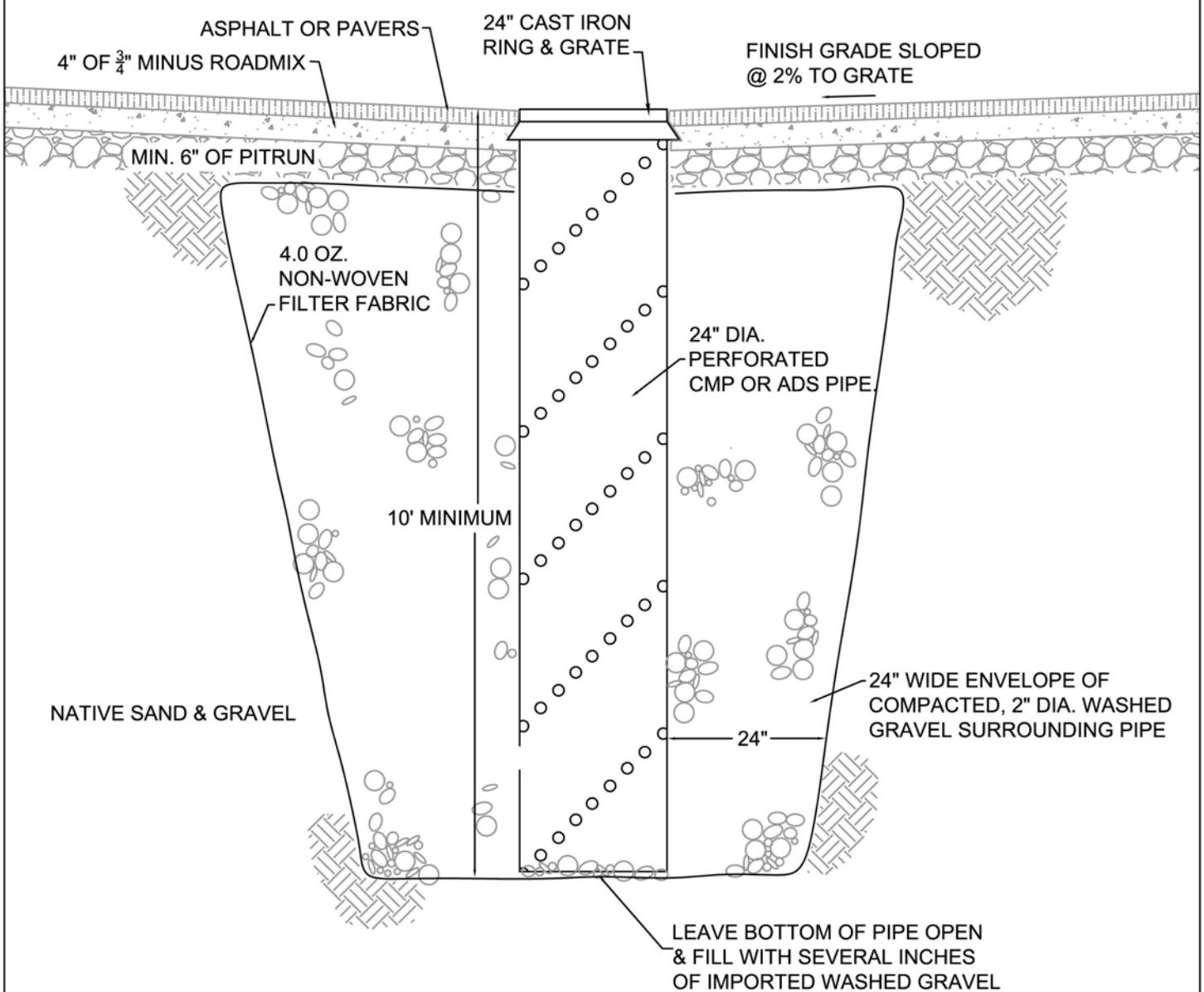

STORMWATER DRYWELL PROFILE

Proposed Babson Residence
Located on Walnut Ave
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Butler Associates, Inc.
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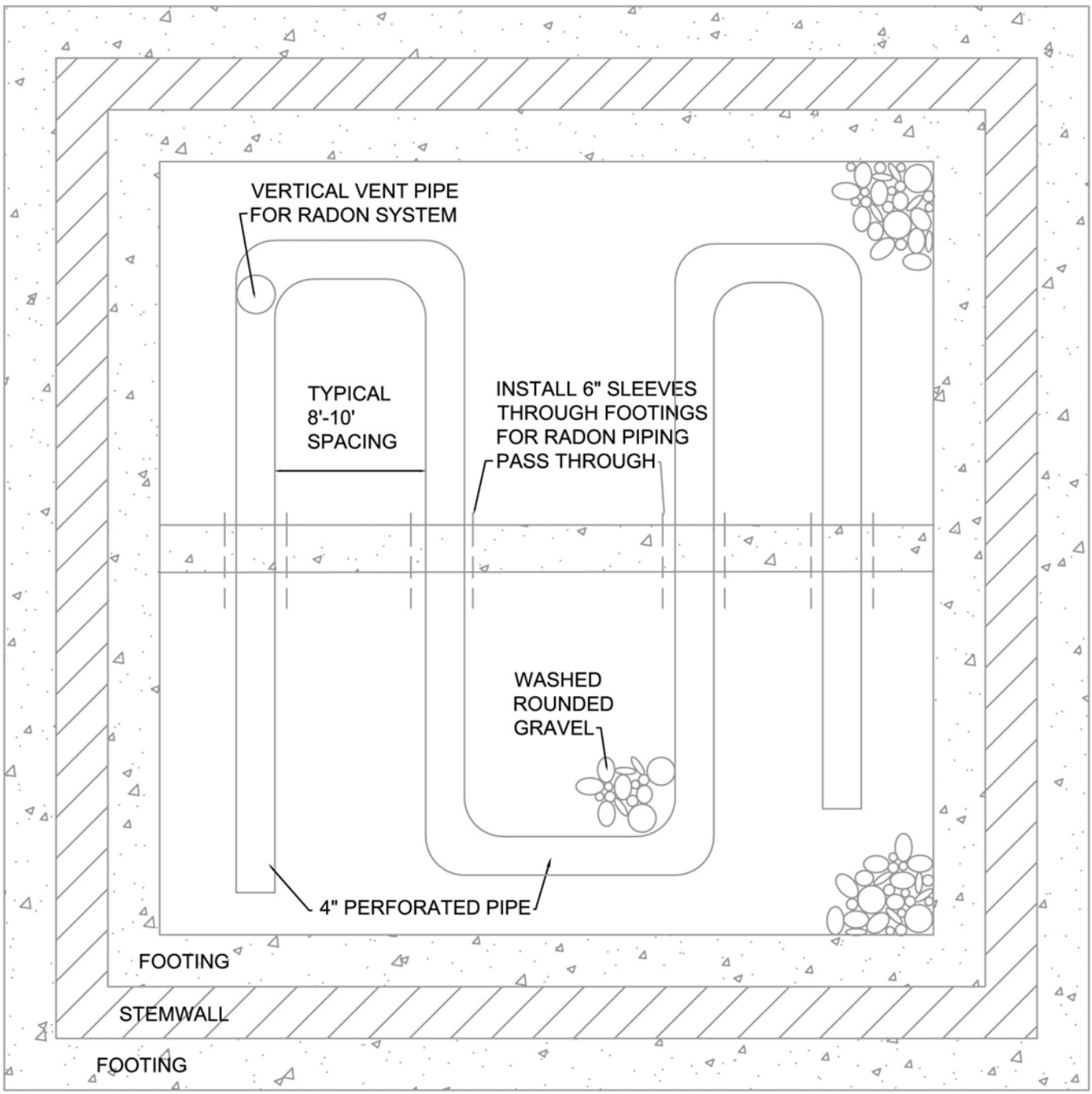
01-06-23

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 Babson Residence
Located on Walnut Ave
Ketchum, Idaho

Butler Associates, Inc.
P.O.B. 1034
Ketchum, ID 83340
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01-06-23

Not To Scale

BUILDING CODE SECTION 1804.4 REQUIRES GRADE SLOPE AWAY FROM BUILDING FOR MINIMUM 10'. EXCAVATION FOR FOOTINGS AND GENERAL CONSTRUCTION LOGISTICS WOULD REQUIRE AT LEAST THIS AMOUNT OF DISTURBANCE

UNDISTURBED AREA
523 SQUARE FEET

PROPOSED DEVELOPMENT 1,955 SF
(3.7x MORE UNDISTURBED AREA)

55'-1"

55'-1"

10'-0"

15'-0"

25'-1"

15'-0"

15'-0"

25'-1"

15'-0"

DEVELOPMENT WOULD REQUIRE 100% DISTRUBANCE BETWEEN HOME AND ADJACENT NEIGHBOR FOR CONSTRUCTION ACTIVITY, DRAINAGE, AND LANDSCAPING

HOUSE B
2,890 SF
35% FAR

HOUSE A
2,630 SF
32% FAR

30 SECOND FINISH FLOOR

19.5 FIRST FINISH FLOOR

9.5 GARAGE

33 SECOND FINISH FLOOR

22.5 FIRST FINISH FLOOR

12.5 GARAGE

PRIVATE EASEMENT

6,327 S.F. TOTAL COVERAGE

5,715 S.F. TOTAL COVERAGE PROPOSED (10% LESS)

DRIVEWAY B

DRIVEWAY A

DEVELOPMENT WOULD REQUIRE 100% DISTRUBANCE TO NORTH PROPERTY LINE FOR REGRADING

DEVELOPMENT WOULD REQUIRE 100% DISTRUBANCE BETWEEN TWO HOUSES FOR CONSTRUCTION ACTIVITY, DRAINAGE, AND LANDSCAPING