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LEGEND - EXISTING

-----	Subject Boundary
-----	Eliminated Boundary
-----	Adjoiners Lot Line
-----	Centerline Right-of-Way
-----	City of Ketchum Right-of-Way (U.S.F.S. Easement Area)
-----	City of Ketchum City Limits
-----	Public Utility Easement*
-----	5' Major Contour
-----	1' Minor Contour
-----	10' Major Contour (2023 Idaho LIDAR Consortium)
-----	2' Minor Contour (2023 Idaho LIDAR Consortium)
-----	Edge of Asphalt Roadway
-----	Edge of Paved Roadway/Driveway
-----	Edge of Gravel Roadway
-----	Approximate Existing Structure
-----	Wooden Fence
-----	Existing Walking Trail
-----	Existing Edge of Concrete Hot-Water Vault/Path
-----	Existing Hot-Water Pipe Concrete Footing
-----	Existing Hot-Water Pipe
-----	Existing Lift-Tower Hot-Water Pipe
-----	Future Hot-Water Pipe
-----	Dripeline of Trees/Edge of Vegetation
-----	Existing Wetlands (SEC, July 2023)
-----	25' Wetlands Setback
-----	Red Avalanche Hazard Zone (Alpine 2023)
-----	Blue Avalanche Hazard Zone (Alpine 2023)
-----	MHW = Mean High Water
-----	25' Riparian Setback
-----	Base Flood Elevation (FEMA-Effective)
-----	Floodway (FEMA-Effective)
-----	100-Yr Floodplain (FEMA-Effective)
-----	500-Yr Floodplain (FEMA-Effective)
-----	Existing Hot-Water Main
-----	8" Water Main
-----	6" Water Main
-----	Water Service
-----	8" Sewer Main
-----	Sewer Service
-----	Overhead Power (Idaho Power)
-----	Underground Fiber-Optic Mainline (CentryLink)
-----	Underground Phone Line (CentryLink)
-----	Underground Gas Mainline (Intermountain Gas Co.)
-----	Blaine County G.I.S. Tie
-----	Survey Control
-----	Found Brass Cap
-----	Found Aluminum Cap
-----	Found Iron Pipe
-----	Found 5/8" Rebar
-----	Found 1/2" Rebar
-----	Found Bearing Tree
-----	Power Box
-----	Power Pole
-----	Power Pole Guy Wire
-----	Power Meter/Hook-Up
-----	Well
-----	Water Meter
-----	Water Valve
-----	Fire Hydrant
-----	Irrigation Control Box
-----	Sewer Manhole
-----	CA/TV Box
-----	Phone Box
-----	Fiber-Optic Vault
-----	Street Sign
-----	Conifer Tree
-----	Deciduous Tree
-----	Existing Grade
-----	[] Record Bearing & Distance
-----	Inst. No. 207484, 281786, & 282914
-----	* per Inst. No. 281786 & 422377

LEGEND - PROPOSED

-----	Block Boundary
-----	Lot Line
-----	Building Envelope
-----	Road Centerline/Alignment
-----	Access Road (Details 3 & 5, C4.10)
-----	Gravel Shoulder (Detail 7, C4.10)
-----	5' Major Contour
-----	1' Minor Contour
-----	10' Wide Public Utility Easement (Preliminary Plat Note 5)
-----	18' Wide Landscape & Berm Easement (Preliminary Plat Note 6)
-----	10' Wide Fisherman's Easement
-----	30' Wide Fire Access Turnaround Easement
-----	Drainage Flowline
-----	12" Water Main
-----	8" Water Main
-----	8" Sewer Main
-----	2" Water Service Connection (Detail 3, C4.30)
-----	4" Sewer Service Connection (Detail 5, C4.30)
-----	Storm Drain
-----	Underground Power
-----	L.O.D. Construction Fence with Screening
-----	L.O.D. Construction Silt Fence
-----	SWPPP BMP (Per Plan)
-----	5/8" Rebar (To Be Set PL57048)
-----	1/2" Rebar (To Be Set PL57048)
-----	Water Meter (Detail 3, C4.30)
-----	Water Valve (Detail 2, C4.30)
-----	Fire Hydrant (Detail 1, C4.30)
-----	Water Main Connection Fittings (Detail 7, C4.20)
-----	Catch Basin (Detail 2, C4.10)
-----	Dry Well (Detail 1, C4.10)
-----	Landscape Dry Well (Detail 8, C4.10)
-----	Sewer Manhole (Detail 4, C4.30)
-----	Power Box
-----	Fire Apparatus Access Road (Detail 3, C4.20)
-----	Conifer Tree (To Be Removed)
-----	Deciduous Tree (To Be Removed)
-----	Saw Cut Asphalt & Repair (Detail 1, C4.20)
-----	Landscape Restoration

NOTES

- 1) Basis of Bearings is Idaho State Plane Coordinate System, NAD83, Central Zone, at Grid in US Survey Feet. Vertical Datum is NAVD1988.
- 2) Boundary Information is from the following documents:
 - Plat, Inst. No. 275580;
 - Plat, Inst. No. 275657;
 - Plat, Inst. No. 281786;
 - Plat, Inst. No. 284426;
 - Plat, Inst. No. 285657;
 - Plat, Inst. No. 422377;
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 - Record of Survey, Inst. No. 705669;
 - Quiet Title Judgment, Inst. No. 711213;Records of Blaine County, Idaho.

The original surveys of:

- Mineral Survey No. 28, Imperial Millite, Lot No. 388, Index No. 190;
- Amended Mineral Survey No. 28, Imperial Millite, Lot No. 388, Index No. 208;
- Mineral Survey No. 58, Keystone Millite, Lot No. 418, Index No. 264;
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- Mineral Survey No. 5258, Carbon Hill Millite, Lot No. 748, Index No. 442;
- Mineral Survey No. 1090, Hot Springs Lode, Index No. 979;
- General Land Office Records, Bureau of Land Management.

- 3) A title policy provided by Stewart Title Guaranty Company, File No. 245665, Date of Guarantee: July 1st, 2021, lists exceptions that affect the property. All of said exceptions are NOT shown hereon and said title policy should be reviewed.

- 4) The Subject Property is within the City of Ketchum General Tourist District 4000 (T-4000), General Tourist District 3000 (T-3000), and the Agricultural Forestry District (AF). Please refer to City of Ketchum Code of Ordinances for more information about these zones.

- 5) Effective Flood Information, as of September 2nd, 2021, is from the November 26th, 2010 FEMA Study; NFIP FIRM Panel No. 0441, Map No. 16013C0441E; City of Ketchum Community Number 160023; Blaine County Community No. 165167.

- 6) Draft Flood Information, if shown, as of September 13th, 2022, is from the Blaine County Draft Flood Maps.

- 7) Please refer to the City of Ketchum Code of Ordinance: Title 17, Chapter 88, Floodplain Management Overlay Zoning District (FP).

- 8) The Subject Property is within the Blaine County Elk Winter Range Zone.

- 9) Avalanche Zoning is from a 2025 Study conducted by Alpine Enterprises Inc. This study is site specific; it should not be applied to adjacent lands.

- 10) Utility Locations shown are based on visual surface evidence, a Digline locate, City maps, and should be verified before any excavation.

- 11) Not all trees and vegetation are shown, some locations are approximate.

- 12) Aerial Imagery, if shown, is from Nearmap 2024.

- 13) Owner of Record: Carbon Hill Hot Springs Inc. PO Box 4500, Hailey, ID 83333

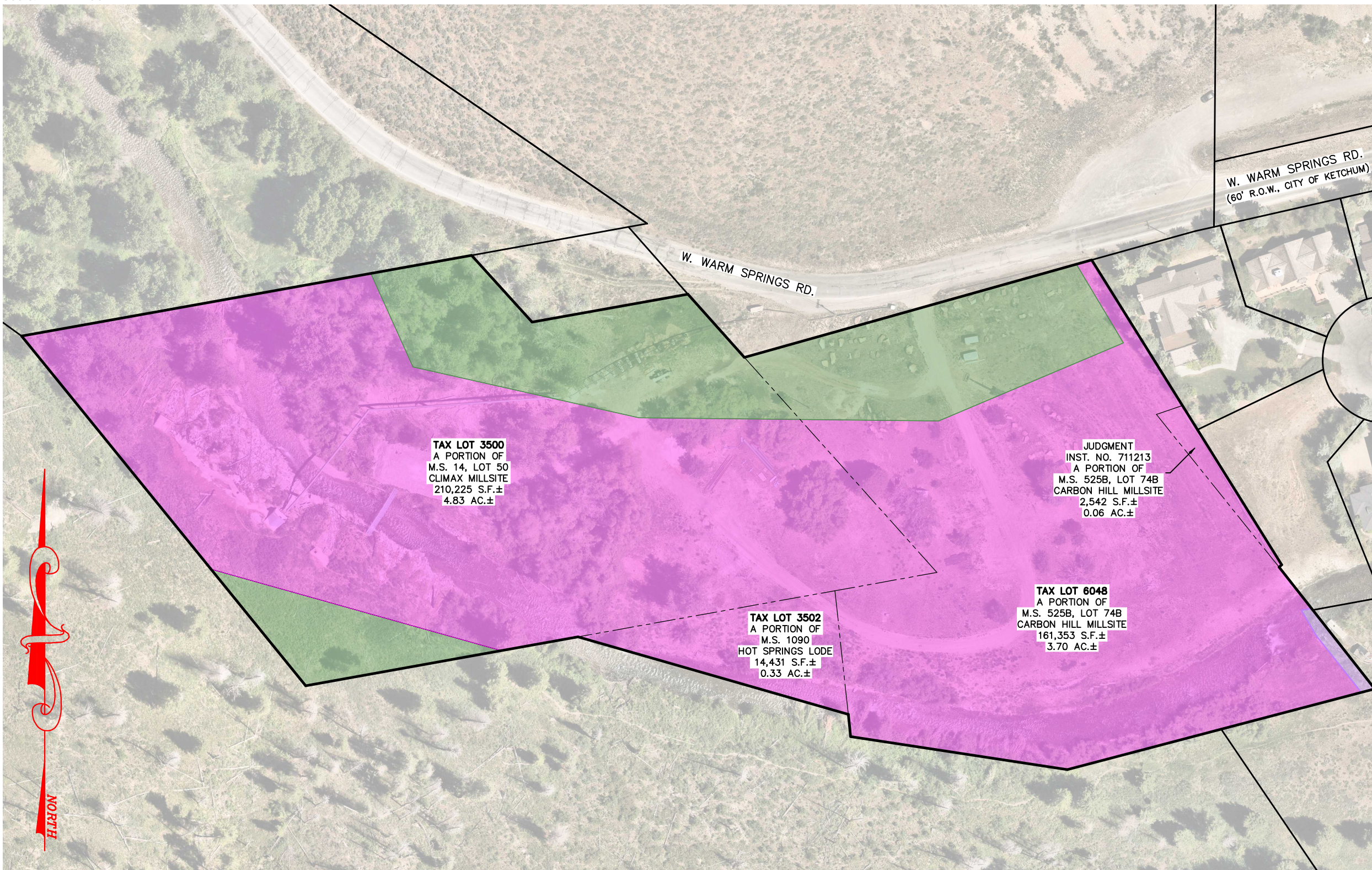
PRELIMINARY PLAT NOTES

- 1) An access easement is hereby granted across Lot 6, Block 1, Guyer Hot Springs Subdivision, Phase I, for the benefit of Blocks 2 and 3, Guyer Hot Springs Subdivision. This easement shall encompass the constructed road surfaces located within Lot 6. The Owner(s) of Lot 6 shall be responsible for maintaining the easement to ensure continuous ingress and egress to Blocks 2 and 3.
- 2) The entirety of Block 2, Guyer Hot Springs Subdivision, is subject to an access, maintenance, and utility easement (including the right to construct, operate, maintain, repair, and replace hot water pipelines) for the benefit of Block 3, Guyer Hot Springs Subdivision. The Owner(s) of Block 2 shall be responsible for maintaining this easement and shall not obstruct or impair access or utility service for Block 3.
- 3) Any future subdivision or development of Block 2 shall preserve both legal and physical access to Block 3. Any reconfiguration of the access, maintenance, and utility easements shall be defined and recorded through a subdivision plat and shall include provisions for continued maintenance and use. No such reconfiguration shall be effective without the prior written consent of the Owner(s) of Block 3, which shall not be unreasonably withheld, conditioned, or delayed.
- 4) Block 3, Guyer Hot Springs Subdivision, is hereby subject to and benefitted by a geothermal easement as shown hereon, for the use, operation, maintenance, repair, replacement, and continuation of geothermal resources, systems, and associated improvements. The Owner(s) of Block 3 shall have the exclusive right to utilize and control such geothermal resources and related infrastructure within Block 3. No use or activity shall be permitted that interferes with or impairs these rights.
- 5) Refer to the Guyer Hot Springs Subdivision Rezone & Development Agreement recorded as Instrument Number _____, Records of Blaine County, Idaho.
- 6) Lot 6, Block 1, as shown hereon, is hereby dedicated as a Public Utility Easement, a Private Access Easement, and a Snow Storage Easement for the benefit of the Guyer Hot Springs Subdivision. No permanent structures shall be placed within said easement areas that would interfere with their intended purposes.
- 7) A Public Utility Easement ten (10) feet in width, centered on interior lot lines and adjoining exterior lot lines, is hereby dedicated across Lots 1-5, Block 1, Guyer Hot Springs Subdivision.
- 8) A Landscape & Berm Easement eighteen (18) feet in width within Lot 1, Block 1 to benefit Guyer Hot Springs Subdivision is granted as shown hereon.
- 9) Ordinary High Water delineation per Alpine Enterprises Inc., July 2024. Permits may be required from local, state, or federal agencies prior to construction, excavation, or fill activities.
- 10) A Fisherman's/Sportman's and Nature Study Easement, ten (10) feet in width, is hereby dedicated along the mean (ordinary) high water mark of Warm Springs Creek within the subject property and shall be open to the public after sunrise and before sunset in accordance with applicable regulations of the Idaho Department of Fish & Game. Location of said easement shall shift in accordance with the location of the mean high water mark.
- 11) A Scenic Easement and Riparian Setback, twenty-five (25) feet in width, measured horizontally from the mean (ordinary) high water mark of Warm Springs Creek, is granted as shown hereon. No permanent structures, development, formal landscaping, or hardscape improvements shall be permitted within this easement in order to protect natural vegetation and wildlife along the riverbank and to reduce the risk of damage to structures from riverbank erosion, unless expressly permitted by the City of Ketchum zoning regulations. Location of said easement shall shift in accordance with the location of the mean high water mark.
- 12) Floodplain: The 1% Chance of Annual Flood Line (FP), as designated on this map is considered reasonable for regulatory purposes. However, Alpine Enterprises Inc. does not represent, guarantee, warrant, nor imply that areas outside the designated floodplain are safe and free from floods or flood danger. Flood Zones are subject to change by FEMA and all lands within the Special Flood Hazard Area are regulated by City of Ketchum Municipal Code.
- Effective Flood Information is from the November 26th, 2010 FEMA Study; NFIP FIRM Panel No. 0441, Map No. 16013C0441E; City of Ketchum Community Number 160023; Blaine County Community No. 165167.
- 13) Floodplain Lines, Ordinary High Water, and their associated setbacks are subject to change with updated flood studies conducted by FEMA and changes in course of the waterway over time. This Plat reflects the current conditions, but should not be relied upon as the definitive source for this information.
- 14) Flood Warning: Sheet Flooding can and will occur on the property shown hereon, and flooding may extend beyond the Floodway and Floodplain boundary lines identified.
- 15) The riparian zone identified within the Subdivision shall be designated as an easement governed and managed by an Owners Association (HOA) to ensure future modifications to the riparian zone and stream bank do not occur individually, but rather in a comprehensive and coordinated manner. Prior to any modification to the riparian zone or stream bank, an overall plan shall be developed and approved by the City of Ketchum. Ketchum shall not unreasonably withhold, condition, or delay approval of such plan. Any riparian and streambank alterations shall conform to the approved plan. The HOA shall be responsible for coordination, review, and oversight of all such work and shall determine responsibility for the costs of any improvements or modifications.

EXISTING CITY OF KETCHUM ZONING DISTRICTS

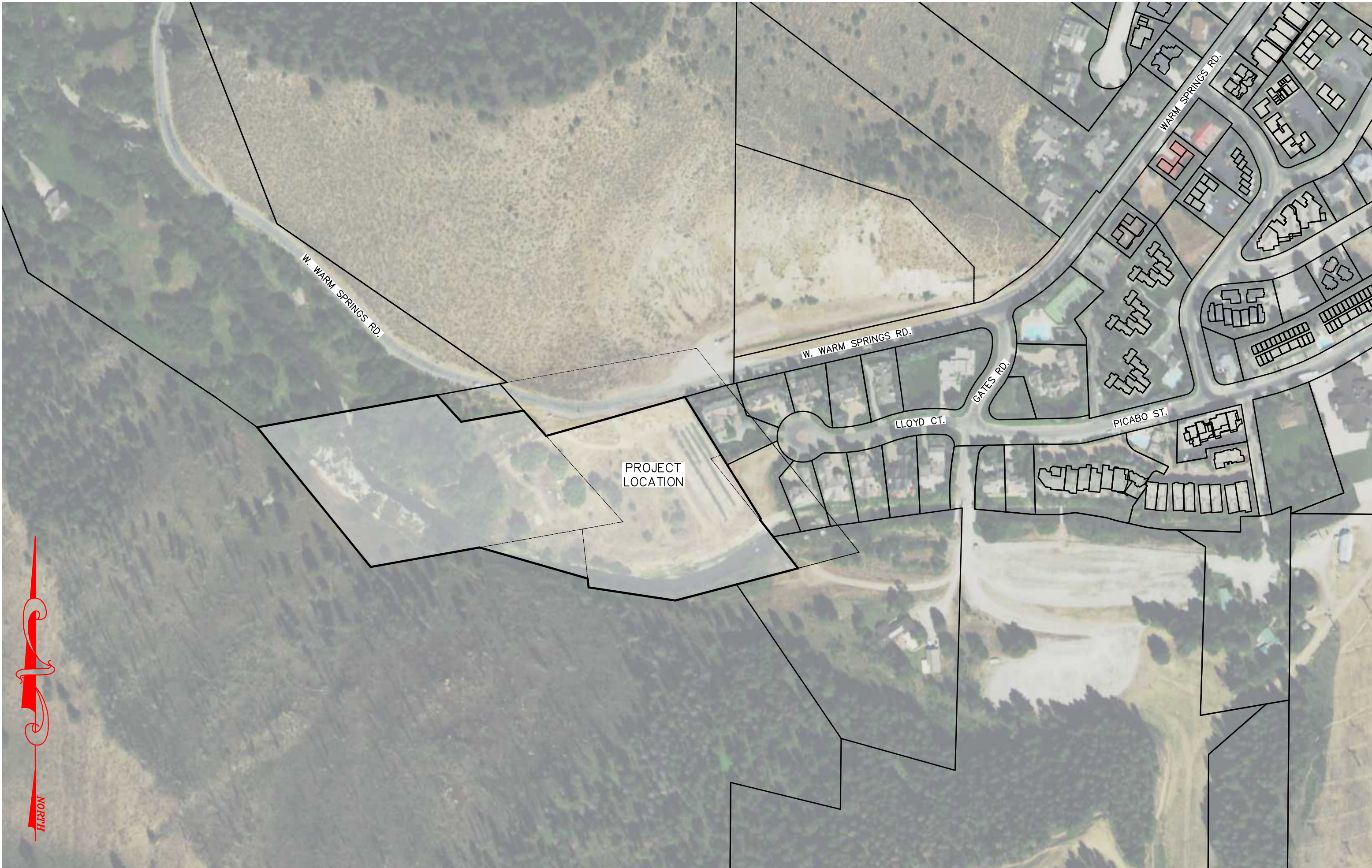
- General Tourist District 4000 (T-4000)
- General Tourist District 3000 (T-3000)
- Agricultural Forestry District (AF)

Scale: 1" = 100'



VICINITY MAP

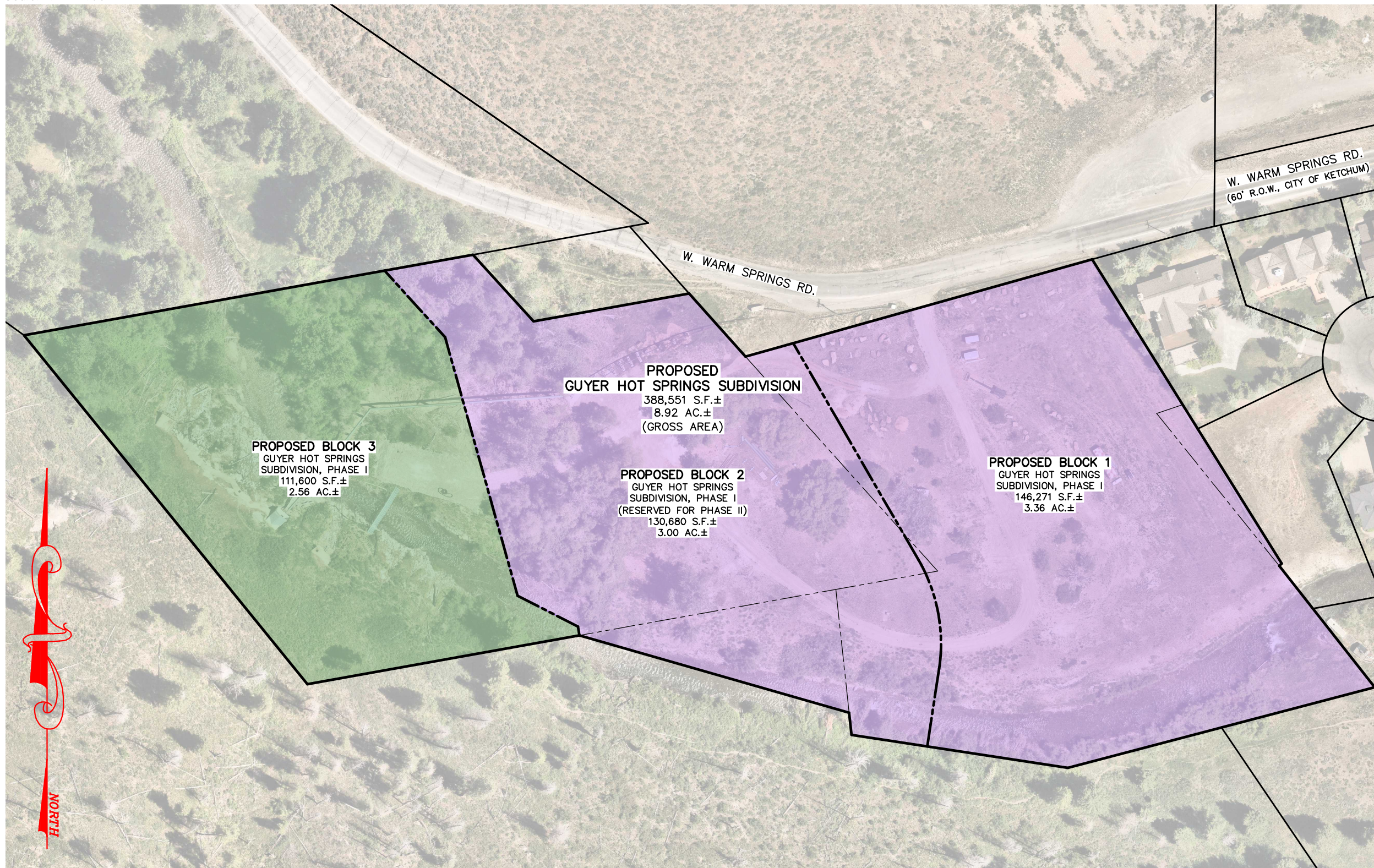
Scale: 1" = 200'



PROPOSED CITY OF KETCHUM ZONING DISTRICTS

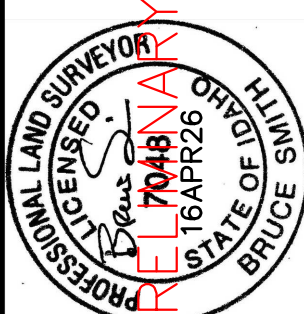
- General Tourist District 4000 (T-4000)
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Scale: 1" = 100'



PROJECT PATH AND PRINT DATE U:\LandProjects2004\1844_CarbonHill-Climax\dwg\1844_CS_CarbonHill-PrePlat2025_Rev2.dwg 04/16/2026 02:20:08 PM MDT

Alpine Enterprises Inc.
Surveying, Mapping, Civil Engineering,
and Natural Hazards Consulting
660 Bell Dr., Unit 1 83340 USA
P.O. Box 2037, Ketchum, ID 83340
(208) 727-1188 FAX 208/727-1967 fax
email: bamt@alpineenterprisesinc.com



PRELIMINARY:	NO	DATE	BY
NOT FOR CONSTRUCTION	1	04NOV25	AHN
DESIGN REVIEW SUBMISSION	2	18APR26	AHN
REVISED: PLANNING REVIEW COMMENTS, ROUND 1			

C0.10

COVER SHEET
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

LEGEND

- Subject Boundary
Eliminated Boundary
Adjoiners Lot Line
Centerline Right-of-Way
Approximate Centerline of Asphalt Roadway
30' Offset From Centerline of Asphalt Roadway
60' Offset From Subject Boundary
Ketchum City Limits
Public Utility Easement*
5' Major Contour
1' Minor Contour
10' Major Contour (2017 Idaho LIDAR Consortium)
2' Minor Contour (2017 Idaho LIDAR Consortium)
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Existing Edge of Concrete Hot-Water Vault/Path
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25' Wetlands Setback
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8" Water Main
6" Water Main
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Sewer Service
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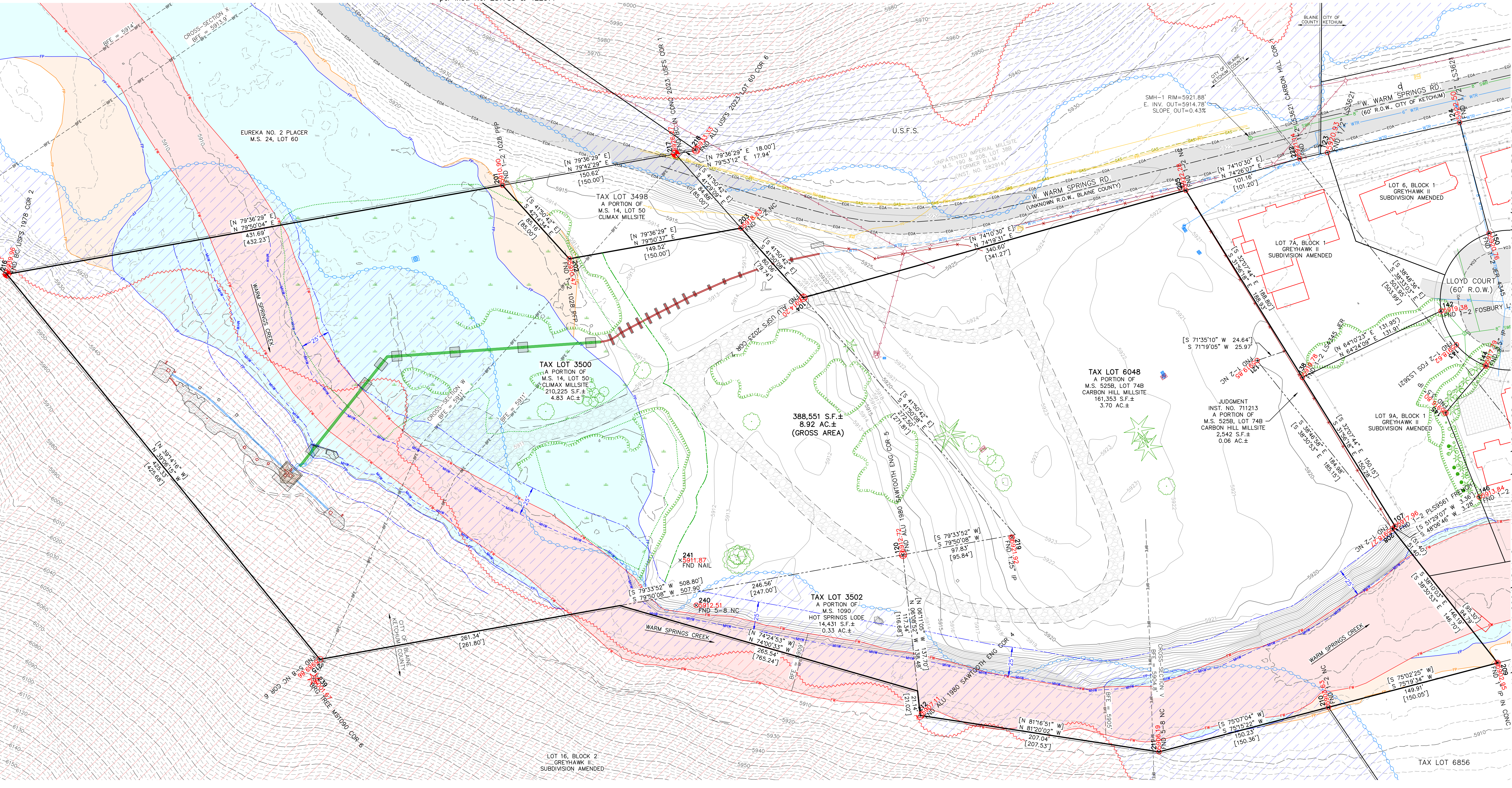
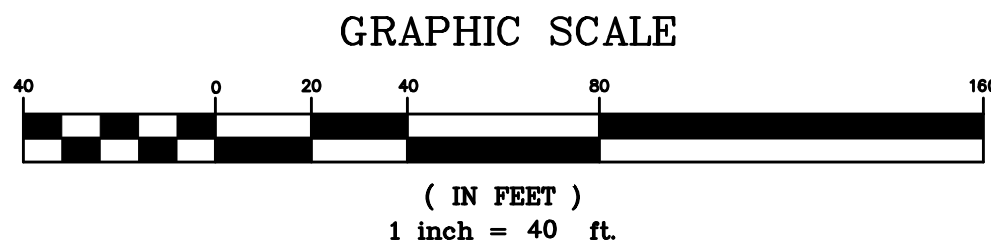
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USFS United States Forest Service
COR Corner
TOP Top of Slope
GB Gate
[] Record Bearing & Distance
Inst. Nos. 207484, 281786, & 282914
() Record Bearing & Distance
Inst. No. 422377
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- Survey Control
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Found Aluminum Cap
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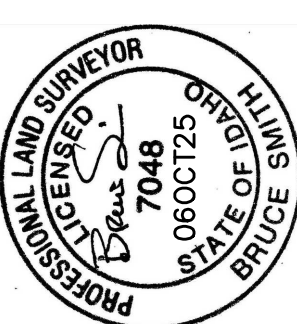
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- Record of Survey, Inst. No. 705669;
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- The original surveys of:
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- Mineral Survey No. 525B, Carbon Hill Millsite, Lot No. 74B, Index No. 442;
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General Land Office Records, Bureau of Land Management.
- 3) Except as stated or shown on this map, this Survey does not intend to reflect any of the following which may be applicable to Subject Real Property: Natural Hazards, Encroachments, Wetlands, Ditches, Easements other than those shown or listed herein, Building Setbacks, Restrictive Covenants, Subdivision Restrictions, Zoning Restrictions, Land-Use Regulations, or Deed Restrictions and Exceptions contained within a current Title Policy.
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A SITE SURVEY SHOWING PORTIONS OF
M.S. 14, LOT 50, CLIMAX MILLSITE, M.S. 525B, LOT 74B,
CARBON HILL MILLSITE, & M.S.1090 HOT SPRINGS LODE
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

Alpine Enterprises Inc.
Surveying, Mapping, Civil Engineering,
and Natural Hazards Consulting
660 Bell Dr., Unit 1 83340 USA
P.O. Box 2037 Ketchum, ID 83340 USA
(208) 727-1800
email: bantitt@alpineenterprisesinc.com



NO	DATE	BY
1	25JUL24	AHN
SITE SURVEY CONDUCTED		
EFFECTIVE FEMA FLOOD STUDY		

LEGEND

- Subject Boundary
Eliminated Boundary
Adjoiners Lot Line
Centerline Right-of-Way
Approximate Centerline of Asphalt Roadway
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60' Offset From Subject Boundary
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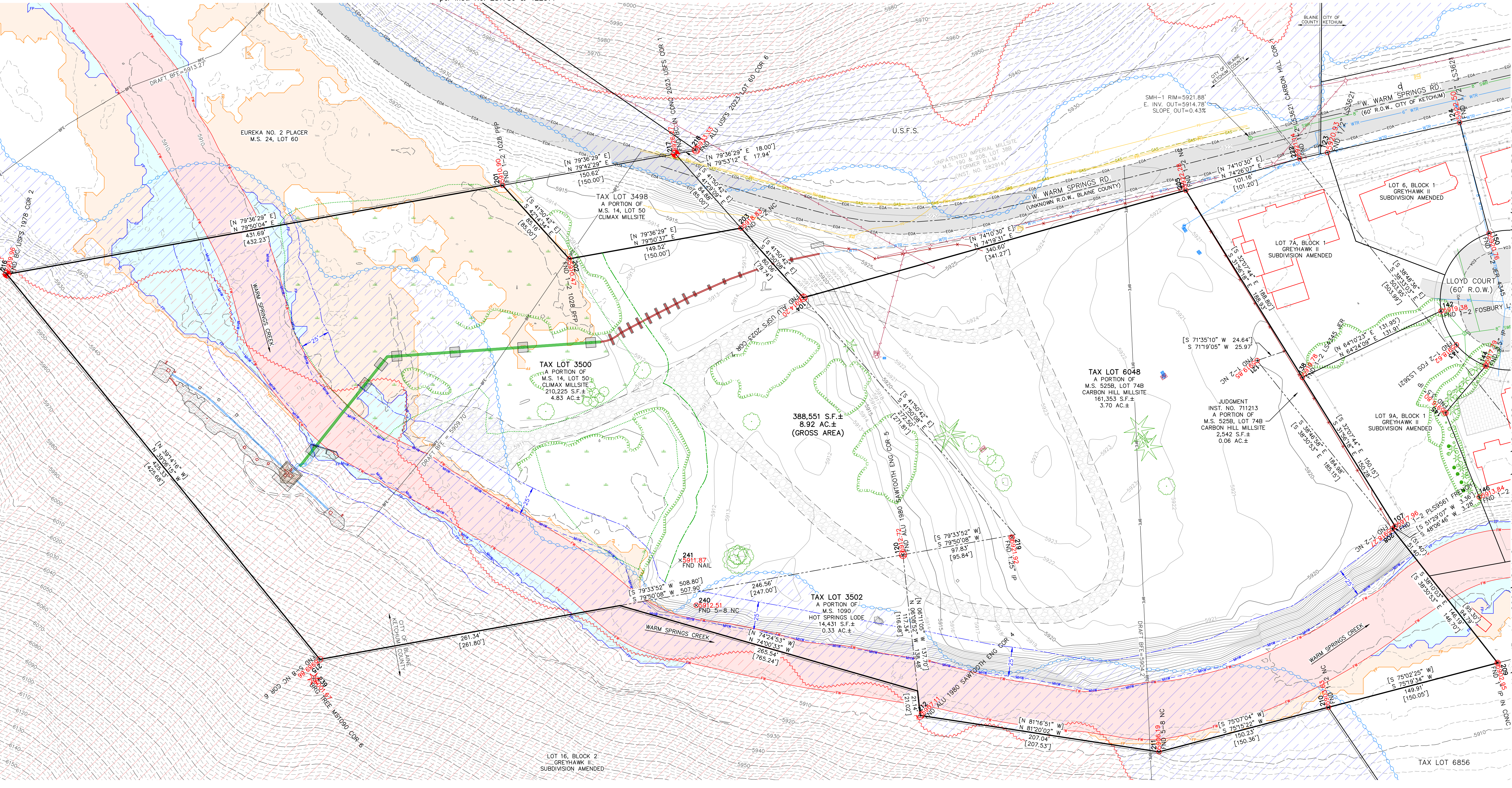
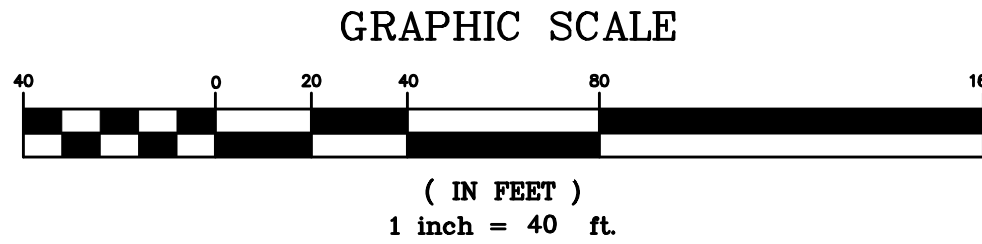
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Fire Hydrant
Irrigation Control Box
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CA/TV Box
Phone Box
Gate
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Street Sign
Conifer Tree
Deciduous Tree

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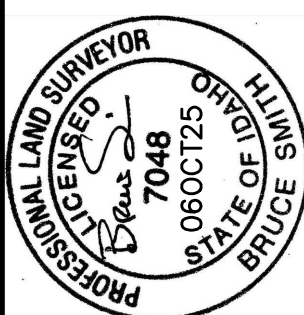
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- 7) Please refer to the City of Ketchum Code of Ordinance: Title 17, Chapter 88, Floodplain Management Overlay Zoning District (FP).
- 8) The Subject Property is within the Blaine County Elk Winter Range Zone.
- 9) Avalanche Zoning is from a 2025 Study conducted by Alpine Enterprises Inc. This study is site specific; it should not be applied to adjacent lands.
- 10) Utility Locations shown are based on visual surface evidence, a Digline locate, City maps, and should be verified before any excavation.
- 11) Not all trees and vegetation are shown, some locations are approximate.
- 12) Aerial Imagery, if shown, is from Nearmap 2024.



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Alpine Enterprises Inc.
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P.O. Box 2037 Ketchum, ID 83340 USA
(208) 727-1800
email: bamt@alpineenterprisesinc.com



NO	DATE	BY
1	25JUL24	AHN
SITE SURVEY CONDUCTED		
DRAFT FEMA FLOOD STUDY		

C1.10

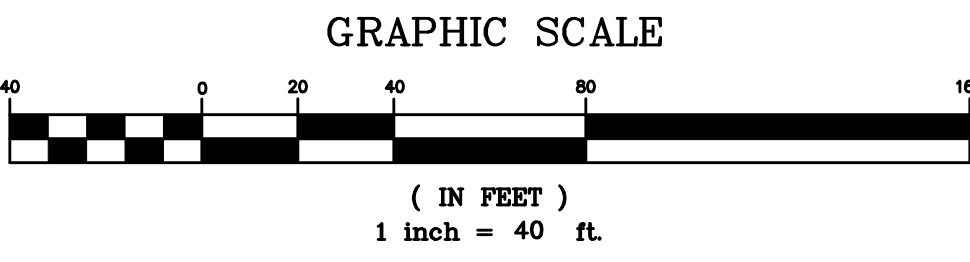
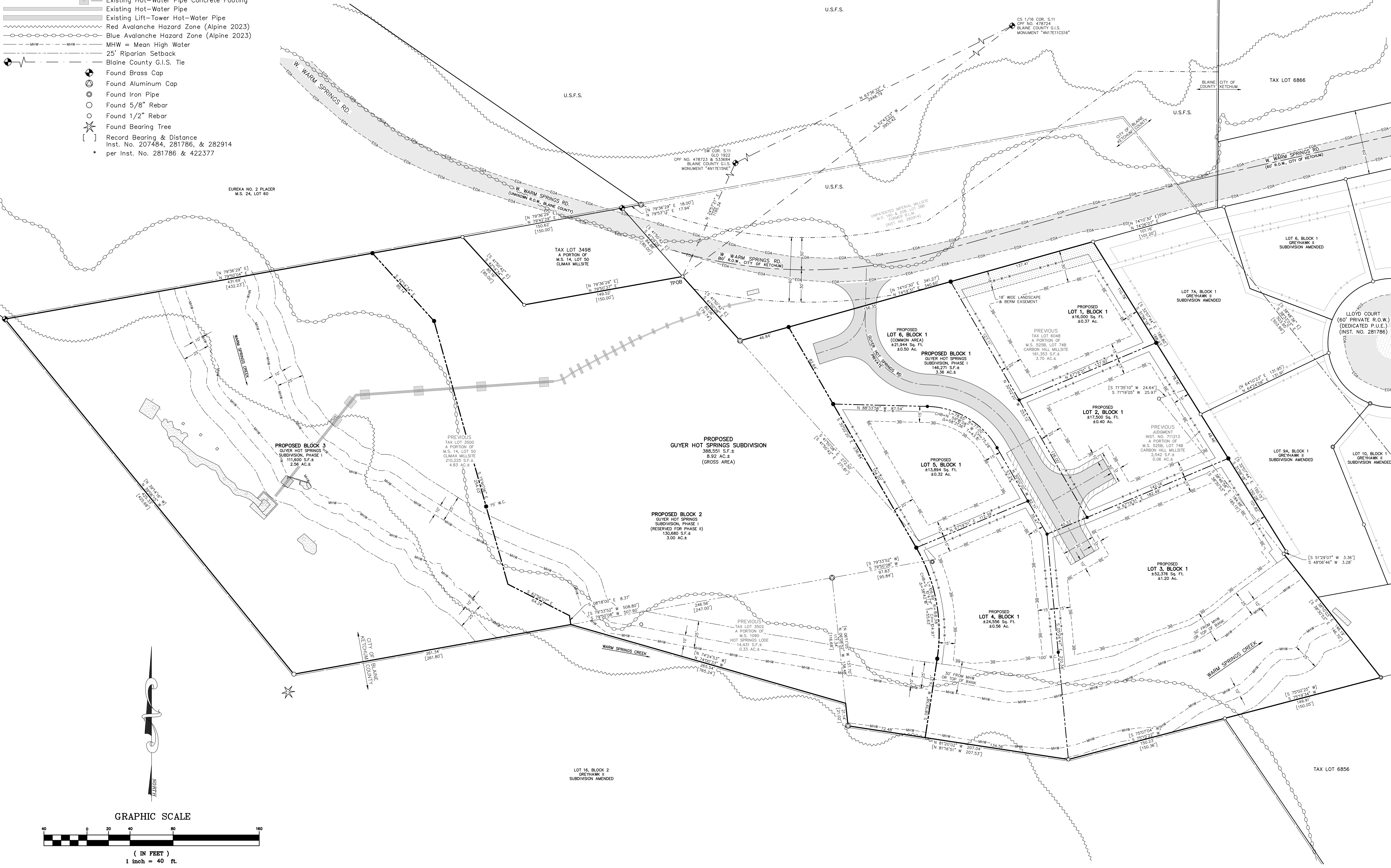
A SITE SURVEY SHOWING PORTIONS OF
M.S. 14, LOT 50, CLIMAX MILLSITE, M.S. 525B, LOT 74B,
CARBON HILL MILLSITE, & M.S.1090 HOT SPRINGS LODE
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

LEGEND - EXISTING

- Subject Boundary
- Eliminated Boundary
- Adjoiners Lot Line
- Centerline Right-of-Way
- City of Ketchum R.O.W. U.S.F.S. Easement Area
- Ketchum City Limits
- Public Utility Easement*
- Edge of Asphalt Roadway
- Edge of Gravel Roadway
- Existing Edge of Concrete Hot-Water Vault/Path
- Existing Hot-Water Pipe Concrete Footing
- Existing Hot-Water Pipe
- Existing Lift-Tower Hot-Water Pipe
- Red Avalanche Hazard Zone (Alpine 2023)
- Blue Avalanche Hazard Zone (Alpine 2023)
- MHW = Mean High Water
- 25' Riparian Setback
- Blaine County G.I.S. Tie
- Found Brass Cap
- Found Aluminum Cap
- Found Iron Pipe
- Found 5/8" Rebar
- Found 1/2" Rebar
- Found Bearing Tree
- [] Record Bearing & Distance
- Inst. No. 207484, 281786, & 282914
- per Inst. No. 281786 & 422377

LEGEND - PROPOSED

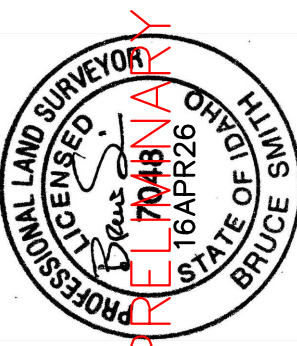
- Block Boundary
- Lot Line
- Building Envelope
- Road Centerline/Alignment
- Access Road
- 10' Wide Public Utility Easement (See Note 5)
- 10' Wide Fisherman's Easement
- 40' Wide Fire Access Turnaround Easement
- 5/8" Rebar, To Be Set (PLS7048)
- 1/2" Rebar, To Be Set (PLS7048)



PROJECT PATH AND PRINT DATE U:\LandProjects2004\1844_CarbonHill-Climax_PrefPlat2025_Rev2.dwg 04/16/2026 02:20:08 PM MDT

A PRELIMINARY PLAT SHOWING THE PROPOSED
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WHEREIN PORTIONS OF M.S. 14, LOT 50, CLIMAX MILLSITE, M.S. 525B, LOT 74B, CARBON HILL
MILLSITE, & M.S.1090 HOT SPRINGS LOBE ARE SUBDIVIDED AS SHOWN HEREON
WITHIN S14 & S15, T4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

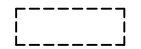
Alpine Enterprises Inc.
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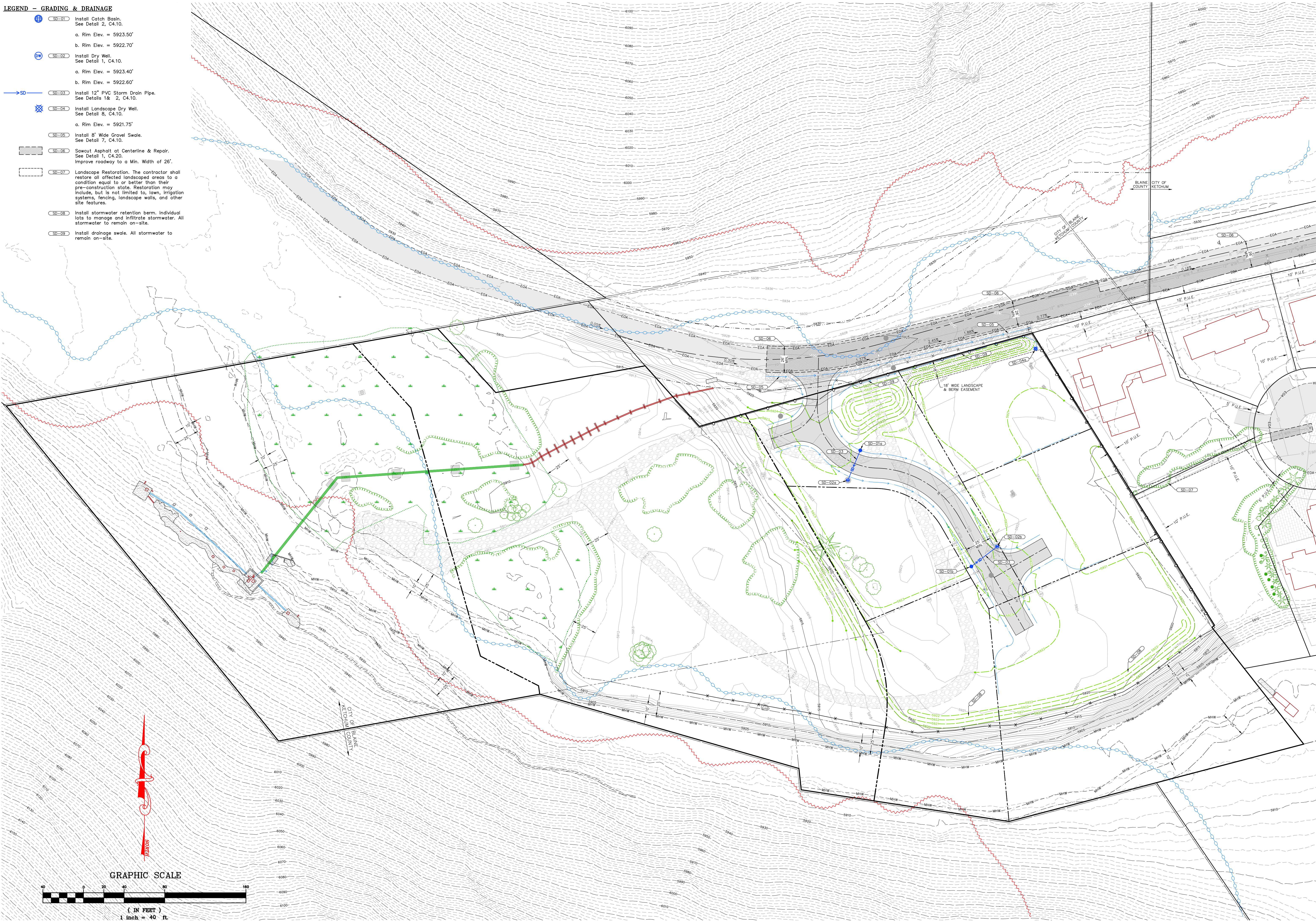


NO	DATE	BY
1	04NOV25	AHN
2	18APR26	AHN
PRELIMINARY: NOT FOR CONSTRUCTION		
DESIGN REVIEW SUBMISSION		
REVISED: PLANNING REVIEW COMMENTS, ROUND 1		

C2.00

LEGEND - GRADING & DRAINAGE

-  SD-01 Install Catch Basin.
See Detail 2, C4.10.
a. Rim Elev. = 5923.50'
b. Rim Elev. = 5922.70'
-  SD-02 Install Dry Well.
See Detail 1, C4.10.
a. Rim Elev. = 5923.40'
b. Rim Elev. = 5922.60'
-  SD-03 Install 12" PVC Storm Drain Pipe.
See Details 1 & 2, C4.10.
-  SD-04 Install Landscape Dry Well.
See Detail 8, C4.10.
a. Rim Elev. = 5921.75'
-  SD-05 Install 8' Wide Gravel Swale.
See Detail 7, C4.10.
-  SD-06 Sawcut Asphalt at Centerline & Repair.
See Detail 1, C4.20.
Improve roadway to a Min. Width of 26'.
-  SD-07 Landscape Restoration. The contractor shall restore all affected landscaped areas to a condition equal to or better than their pre-construction state. Restoration may include, but is not limited to, lawn, irrigation systems, fencing, landscape walls, and other site features.
-  SD-08 Install stormwater retention berm. Individual lots to manage and infiltrate stormwater. All stormwater to remain on-site.
-  SD-09 Install drainage swale. All stormwater to remain on-site.



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Alpine Enterprises Inc.

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DESIGN REVIEW SUBMISSION		
REVISED: PLANNING REVIEW COMMENTS, ROUND 1		

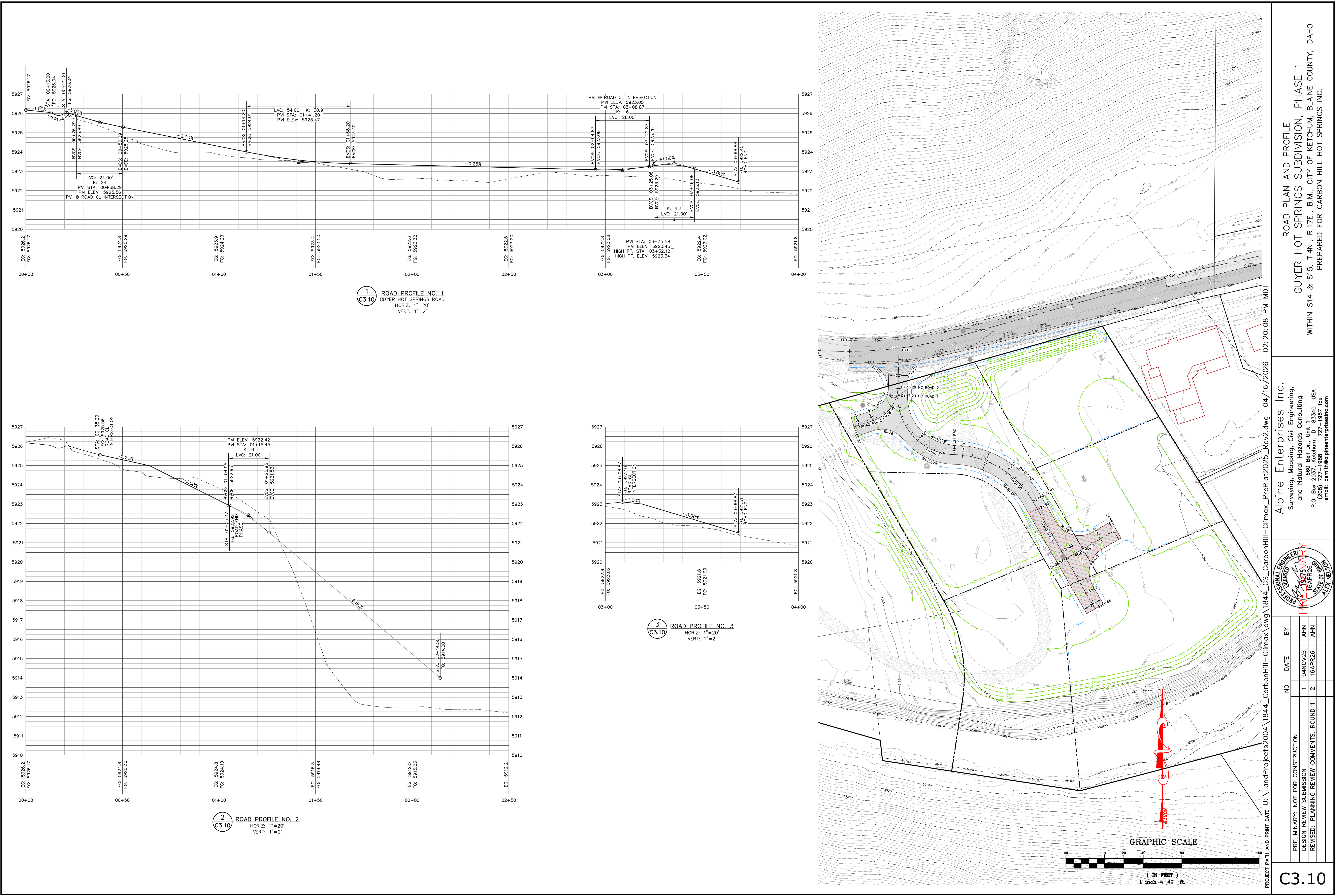
C3.00

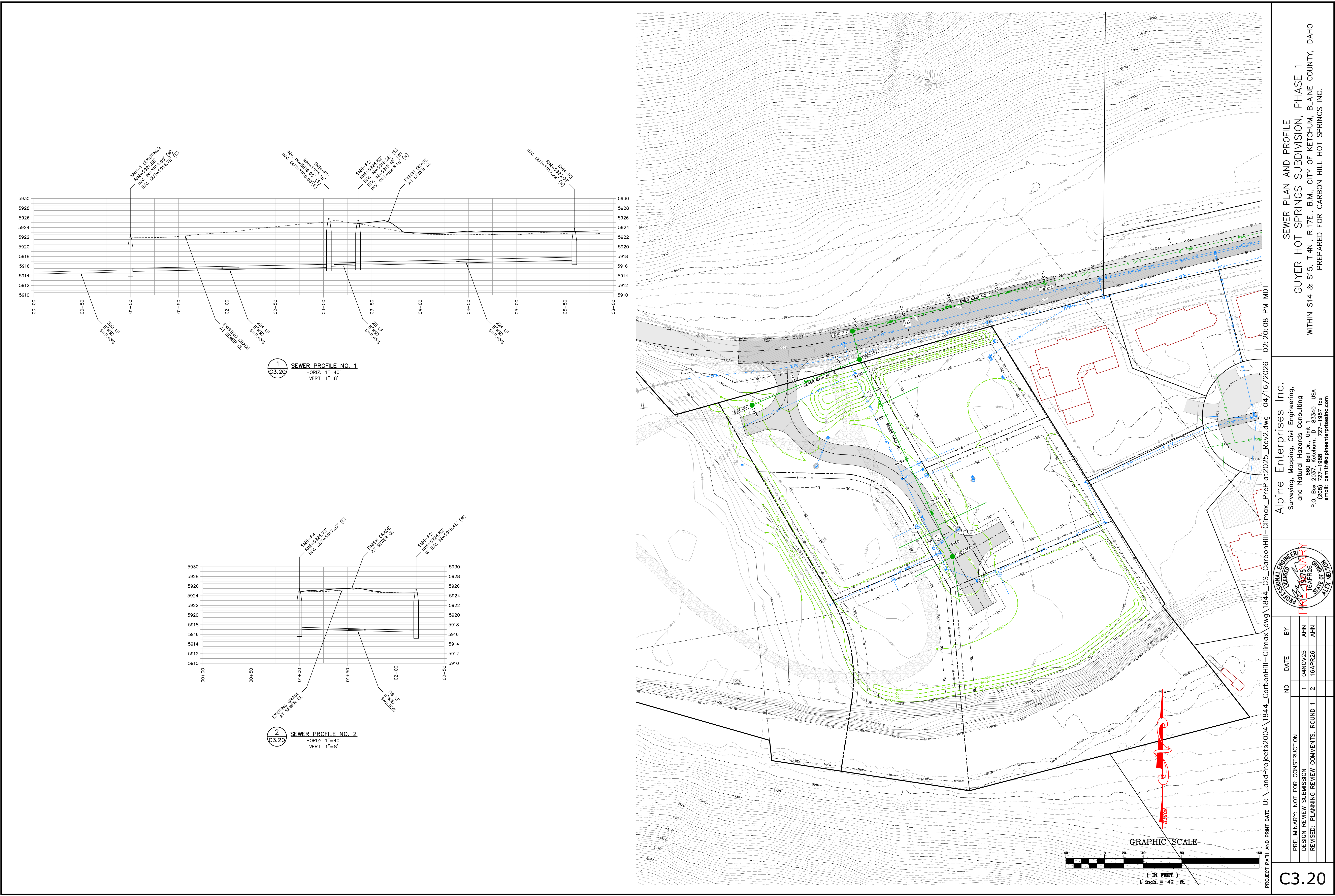
GRADING & DRAINAGE PLAN

GUYER HOT SPRINGS SUBDIVISION, PHASE 1

WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PREPARED FOR CARBON HILL HOT SPRINGS INC.





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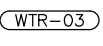
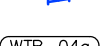
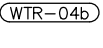
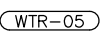
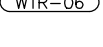
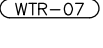
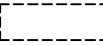


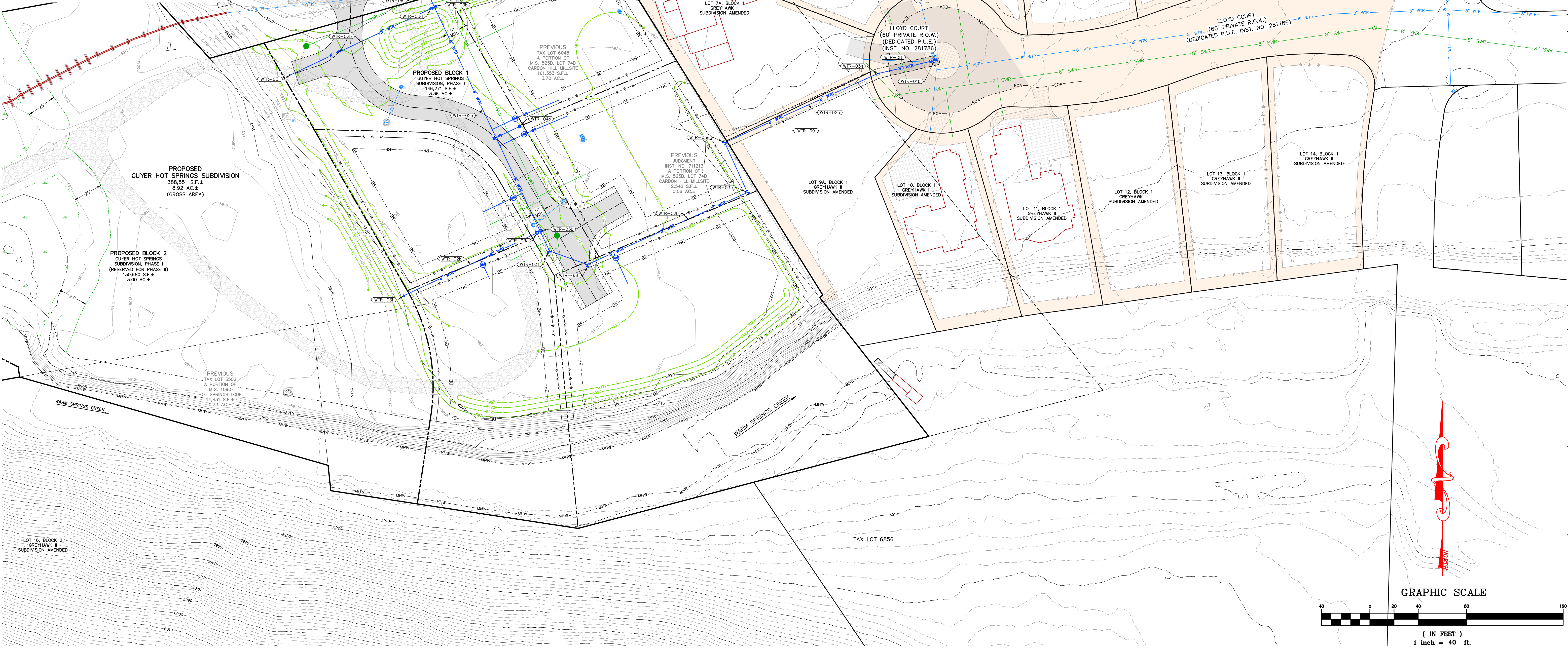
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2	16APR26	AHN
REVISD: PLANNING REVIEW COMMENTS, ROUND 1		
PRELIMINARY: NOT FOR CONSTRUCTION		
DESIGN REVIEW SUBMISSION		

C3.20

SEWER PLAN AND PROFILE
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

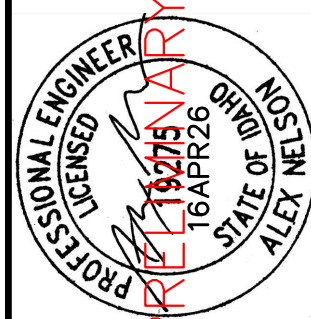
LEGEND - WATER MAIN

-  **WTR-01a** Point of water connection. Coordinate activity with the City. Cut existing 12" Water Main. Install 12"x12"x12" D.I. Tee, 12" Gate Valve, with Thrust Blocks. See Detail 7, C4.20, for Thrust Protection.
-  **WTR-01b** Point of water connection. Coordinate activity with the City. Cut existing 8" Water Main. Install 8"x8"x8" D.I. Tee, 8" Gate Valve, with Thrust Blocks. See Detail 7, C4.20, for Thrust Protection.
-  **12" WTR** **WTR-02a** Install 12" PVC C-900 Water Main. See Detail 2, C4.20, for Trenching Detail.
-  **8" WTR** **WTR-02b** Install 8" PVC C-900 Water Main. See Detail 2, C4.20, for Trenching Detail.
-  **WTR-03** Install Ductile Iron fittings with Thrust Block. See Detail 7, C4.20, for Thrust Protection.
-  a. 12"x12"x12" Tee
-  b. 8"x8"x8" Tee
-  c. 12" Gate Valve
-  d. 8" Gate Valve
-  e. 8" 90° Bend
-  f. 8" 45° Bend
-  g. 8" 11.25° Bend
-  h. 12" Plug
-  i. 8" Plug
-  j. 12"x8" Reducer
-  **WTR-04a** Remove connection of Fire Hydrant from existing 6" main. Connect Fire Hydrant to new 12" main.
-  **WTR-04b** Install new Fire Hydrant Assembly. 8"x8"x8" D.I. Tee, 6" Gate Valve, 6" PVC C-900 Pipe, with Thrust Blocks. See Detail 1, C4.30.
-  **WTR-05** Abandon existing 6" Water Main in place.
-  **WTR-06** Potable/Non-Potable Crossing. See Detail 5, C4.20.
-  **WTR-07** Connect to existing Water Main. Install 12"x12"x12" D.I. Tee and 12"x8" D.I. Reducer.
-  **WTR-08** Sawcut Asphalt at Centerline & Repair. Improve roadway to a Min. Width of 26'.
-  **WTR-09** Landscape Restoration. The contractor shall restore all affected landscaped areas to a condition equal to or better than their pre-construction state. Restoration may include, but is not limited to, lawn, irrigation systems, fencing, landscape walls, and other site features.



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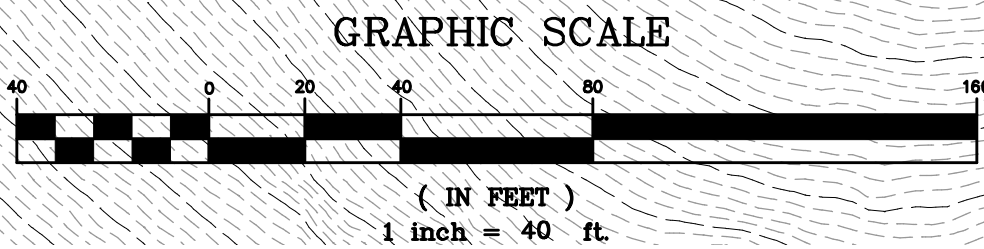
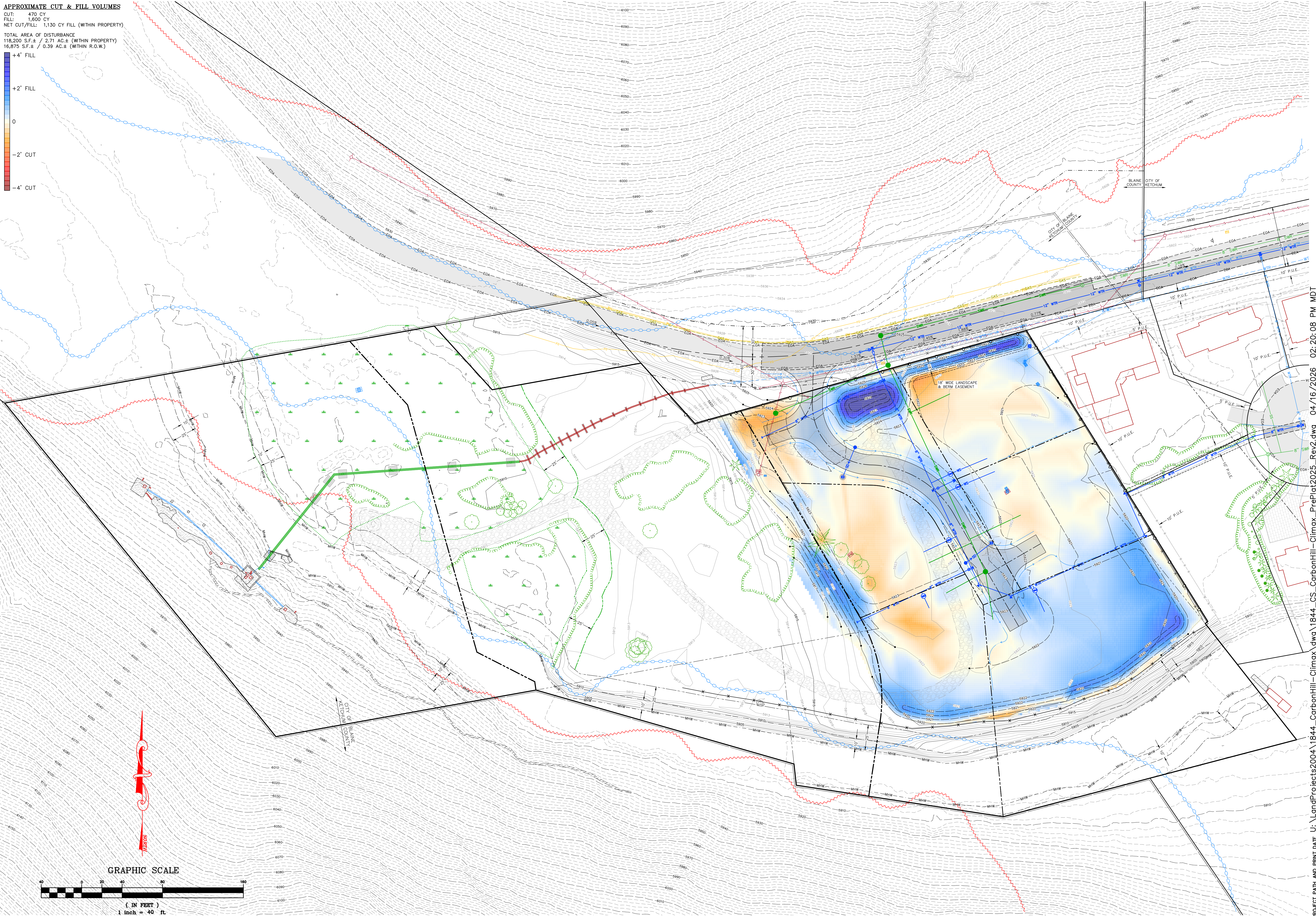
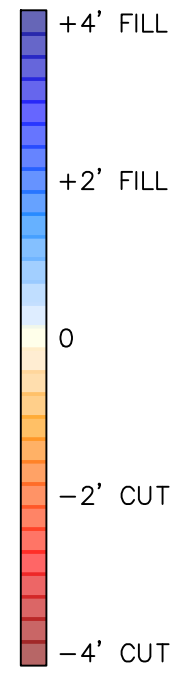


NO	DATE	BY
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2	18APR26	AHN
REVISD: PLANNING REVIEW COMMENTS, ROUND 1		
PRELIMINARY: NOT FOR CONSTRUCTION		
DESIGN REVIEW SUBMISSION		

C3.30

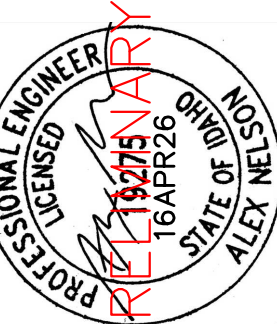
WATER MAIN PLAN
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

APPROXIMATE CUT & FILL VOLUMES
CUT: 470 CY
FILL: 1,600 CY
NET CUT/FILL: 1,130 CY FILL (WITHIN PROPERTY)
TOTAL AREA OF DISTURBANCE
118,200 S.F.± / 2.71 AC.± (WITHIN PROPERTY)
16,875 S.F.± / 0.39 AC.± (WITHIN R.O.W.)



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A CUT & FILL EXHIBIT MAP SHOWING
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

C3.40

-
- The location of existing underground utilities shown on plans are approximate. The contractor shall be responsible for locating the existing utilities prior to and during construction. The contractor agrees to be fully responsible for any and all damages which result from his failure to accurately locate and preserve any and all underground utilities. Contractor shall call DigLine Inc. to locate all existing utilities a minimum of 48-hours before excavation.
- 2) See the plans from BYLA for the remainder of the design.
- 3) All construction shall be in accordance with the most current edition of the Idaho Standards for Public Works Construction (ISPCW), the Idaho Department of Environmental Quality (DEQ) Public Drinking Water Standards and Wastewater Collection Standards, and the City of Ketchum, Idaho, Codes and Standards. The contractor shall be responsible for obtaining and keeping a copy of these Codes and Standards on site during construction.
- 4) The contractor shall be required to obtain all the necessary permits prior to construction and shall check with the City of Ketchum for permits the owner may have already obtained.
- 5) Per Idaho Code, 55-1613, the contractor shall retain and protect all monuments, accessories to corners, benchmarks, and points set in control surveys. All monuments, accessories to corners, benchmarks, and points set in control surveys that are lost or disturbed by construction shall be reestablished and re-monumented, at the expense of the agency or person causing their loss or disturbance under the direction of a professional land surveyor.
- 6) The contractor shall clean up the site after construction so that it is in a condition equal to or better than that which existed prior to construction, to include any and all landscape irrigation, vegetation, structures, and fixtures.
- 7) Contractor shall be responsible for dust control during construction of all items herein. Dust control shall be continuous during construction, 24 hours per day 7 days per week. The contractor shall follow the requirements of the Storm Water Pollution Prevention Plan at all times until permanent erosion control is established.
- 8) Existing topsoil shall be retained with vegetation and stockpiled for use in reestablishing revegetated areas.
- 9) All clearing and grubbing shall conform to ISPCW Section 201 and City of Ketchum standards of excavation and backfill.
- 10) All excavation and embankment shall conform to ISPCW Section 202 and City of Ketchum standards for excavation and backfill. Subgrade shall be excavated and shaped to line, grade, and cross-section shown on the plans. Excavated subgrade shall be compacted and all unsuitable Sections removed and replaced with structural fill as determined by the engineer per ISPCW Section 204. Minimum compaction of placed material shall be 95% of maximum laboratory density as determined by ASTM D-698, AASHTO T-99, or IDT T-91. The contractor shall water or aerate subgrade as necessary to obtain optimum moisture content. In-lieu of density measurements, the subgrade may be proof-rolled to the approval of the engineer.
 - Proof-Rolling: After excavation to the subgrade elevation and prior to placing course gravel, the contractor shall proof roll the subgrade with a 5-ton smooth drum roller, loaded water truck, or loaded dump truck, as accepted by the engineer. The contractor shall immediately notify the engineer of unsuitable subgrade material areas, and/or areas not capable of compaction according to these specifications. Unsuitable or damaged subgrade is when the soil moves, pumps and/or displaces under any type of pressure including foot traffic loads.
 - If, in the opinion of the engineer, the contractors operations result in damage to, or protection of, the subgrade, the contractor shall, at his own expense, repair the damaged subgrade by over-excavation of unsuitable material to firm subsoil, line excavation with geotextile fabric, and backfill with pit run gravel.
- 11) All 2" minus aggregate shall be placed in conformance with ISPCW Section 802. It shall be compacted per ISPCW Section 202 and the City of Ketchum standards. 2" minus crushed aggregate material shall conform to ISPCW Section 802 Type II and to the City of Ketchum specifications. Minimum compaction of placed material shall be 95% of maximum laboratory density as determined by AASHTO T-99 or IDT T-91.
- 12) All 3/4" minus aggregate shall be placed in conformance with ISPCW Section 802. It shall be compacted per ISPCW Section 202 and the City of Ketchum standards. 3/4" minus crushed aggregate for leveling course shall conform to ISPCW Table 802 Type I and to the City of Ketchum specifications. Minimum compaction of placed material shall be 95% of maximum laboratory density as determined by AASHTO T-99 or IDT T-91.
- 13) All asphaltic concrete pavement work shall conform to ISPCW Section(s) 805, 810, and 811 for Class II pavement and to the City of Ketchum standards. Asphalt aggregate shall be 1/2" nominal size conforming to Table 803b in ISPCW Section 803. Asphalt binder shall be pg 58-28 conforming to Table A-1 in ISPCW Section 805.
- 14) All concrete work shall conform to ISPCW Sections 701 and 703. All concrete shall be 3,000 psi minimum. 28 day, as defined in ISPCW Section 703, Table 1.C.
- 15) Asphalt saw cuts shall be as indicated on the drawings, or 24" inches from edge of existing asphalt, if not indicated otherwise so as to provide a clean pavement edge for matching. No wheel cutting shall be allowed.
- 16) The contractor shall be responsible for hiring a materials testing company during construction to verify all City of Ketchum construction Standards and Specifications are met.
- 17) Contractor shall assure positive drainage towards catch basins and dry wells.
- 18) All drainage is to be retained on-site.
- 19) The contractor shall be responsible for providing traffic control per the current edition of the US Department of Transportation Manual of Uniform Traffic Control Devices (MUTCD).
- 20) All instructions and special conditions contained on this plan set shall be strictly adhered to. Alpine Enterprises Inc. is not responsible for any deviation from these plans, unless such changes have been authorized in writing.
- 21) All existing signage to be protected and retained during construction. Any signs that are damaged shall be repaired or replaced.
- 22) All right-of-way improvements per sheets C3.00 and C3.10 must be completed prior to issuance of a temporary or final Certificate of Occupancy unless otherwise agreed upon in writing by the City.

- 2) Water main and service construction shall be in conformance with the City of Ketchum standards. No water main or services shall be backfilled until they have been inspected and approved by the City.
- 3) All 4" and larger water mains shall be constructed with AWWA C-900, Class 235 PVC pipe. All water mains shall be pressure tested in conformance with ISPOWC Section 401.3.6 and the City of Ketchum standards. Tracer wire shall be No. 12 gauge copper locating wire insulated per ISPOWC Section 401 and the City of Ketchum specifications.
- 4) See flushing and disinfection requirements, Sheet C4.00. All bacteria test results shall be submitted to the engineer and the City of Ketchum Water and Sewer Department for final approval and acceptance prior to activation of the water main and services.
- 5) All water distribution and water service installation materials and chemicals used to disinfect potable water components must be compliant with ANSI/NSF Standard 60/61. All materials must be compliant with the low lead rule (<0.25%pb by weight).
- 6) All tees, plugs, caps and bends shall be secured and anchored by suitable thrust blocking (mechanical restraints are not allowed). Thrust blocks shall conform to ISPOWC SD-403 and the City of Ketchum standards.
- 7) All valves shall be gate valves with non-rising stem, "o" ring seals, and two-inch operating nuts meeting AWWA standards per ISPOWC Section 402. All gate valves located in pavement shall be fitted with cast iron valve boxes with concrete collars per ISPOWC SD-406 and the City of Ketchum specifications.
- 8) All water main fittings shall be ductile iron conforming to the requirements of AWWA C-110 for 250 psi working pressure. Joints on buried valves shall be mechanical joints unless otherwise noted. Flanged joints should in general be avoided underground.
- 9) All tapping saddles shall be constructed from t-304 stainless steel with ANSI/AWWA C-207 Class 150 flanges. All welds shall conform to ASTM A-380. The test outlet shall be 3/4" NPT with 3/4" NPT plug.
- 10) Potable/non-potable crossings shall comply with ISPOWC Standard Drawings SD-407 and IDAPA section 58.01.08.542.07. All mains and services shall comply with IDAPA 58.01.08.542.07.a and IDAPA 58.01.08.542.07.b which address the requirements for separation distances between potable water lines (including mains and service lines) with non-potable lines. In addition, water services shall be constructed with at least 25 feet horizontal separation from infiltration trenches and dry wells.
- 11) All water services shall be in compliance with ISPOWC Section 404 and the City of Ketchum standards. A USC EC approved reduced pressure backflow assembly (RPBA) shall be installed on primary service connections (including fire suppression services, if applicable) in accordance with the City of Ketchum Water Department, Fire Marshal, Plumbing Bureau, and State of Idaho backflow prevention requirements. In areas where multiple water service lines are in same trench, separate lines by 6".
- 12) The contractor shall keep the existing water distribution system live, to the greatest extent possible, while installing the new water main and services, minimizing disruption to existing water system users. The new water main and services shall be installed, backfilled, pressure tested, disinfected, and flushed prior to connecting the new main to the existing main. The maximum allowable service outage for any shutdown is 4 hours.
- 13) The contractor shall be responsible for promptly removing and disposing of water entering the trench during the time the trench is being prepared for installation of the utility, including completion of backfill of the pipe zone, at no additional cost to the owner. The contractor shall dispose of the water in a suitable manner without causing damage to property.
- 14) Extra fittings may be necessary in addition to those shown hereon to control elevation and avoid underground conflicts.
- 15) The contractor shall be responsible for initiating, maintaining, supervising, and complying with all federal safety and health regulations as determined by the State of Idaho and Bureau of Reclamation health and safety requirements. The contractor shall be required to comply with all regulations and requirements of local codes and ordinances.
- 16) The City Water Department requires a looped system for Phase I. The Phase II, Block 2 water system shall be reviewed by the City Water Department separately.
- 17) All existing signage to be protected and retained during construction. Any signs that are damaged shall be repaired or replaced.

- 1) The contractor shall pressure test all sewer mains and sewer service connections in accordance with the ISPWC standards and the City of Ketchum standards. No sewer main or service shall be backfilled until they have been inspected and approved by the city and engineer. The contractor shall provide a minimum of twenty-four (24) hours notice to the city and engineer prior to testing.
- 2) All sewer mains shall be constructed of PVC pipe conforming to ASTM D-3034 SDR 35. Minimum pipe diameter for gravity sewer mains shall be 8-inches. Minimum slope for 8-inch sewer main shall be 0.4%. Install pipe at slopes indicated on plans.
- 3) Manholes shall be constructed in accordance with ISPWC SD-501. Minimum diameter shall be 48 inches, at all pipe intersection, changes in alignment, changes in grade, and at terminal ends.
- 4) Sewer service lines shall be placed at a slope of 2%, with markers per ISPWC. Cleanouts are required at changes in alignment, grade, and minimum 150' length.
- 5) All pipe shall be bedded with (ISPWC) Type I bedding material.
- 6) Trenches shall be backfilled and compacted to a minimum of 95% of maximum density as determined by AASHTO T-99.

A. Flushing prior to disinfection.

1. Before chlorination, flush the mains thoroughly after the pressure and leakage test are complete.
2. Use a minimum flushing velocity in the main of 2.5 feet/second.
3. If no hydrant is installed at the end of the main, provide a tap of the size sufficient to produce a velocity in the main of at least 2.5 feet/second.
4. Table 1 shows the rates of flow required to produce a velocity of 2.5 feet/second in various size pipes.
5. Exercise extreme care and conduct a thorough inspection during the water main laying to prevent and detect small stones, pieces of concrete, particles of material, or other foreign material that may have entered the mains.
6. Clean large material by flushing and inspecting all hydrants on the lines to ensure that the entire valve operating mechanism of each hydrant is in good condition.

B. Disinfection of water pipes.

1. General.
 - a. Comply with NSI/AWWA C 651: Disinfecting Water Mains, these specifications, and engineer's direction.
 - b. Keep the interior of all pipe, fittings and appurtenances free from dirt, heavy and foreign particles.
 - c. Disinfect all water pipes and appurtenances prior to placing them in service.
2. Form of chlorine used to be pre-approved by the engineer.
 - a. Liquid Chlorine.
 1. Form: Liquid containing 100% available chlorine under pressure in steel containers.
 2. Standard: ANSI/AWWA B 301.
 3. Execution: Used only by trained personnel with appropriate gas-flow chlorinators and ejectors.
 4. Authorization: Only with written authorization of the engineer.
 - b. Sodium Hypochlorite.
 1. Form: Liquid containing approximately 5% to 15% available chlorine.
 2. Standard: ANSI/AWWA B 300.
 - c. Calcium Hypochlorite.
 1. Form: Granular or in 5g tablets containing approximately 65% available chlorine by weight.
 2. Standard: ANSI/AWWA B 300.
3. Methods of chlorination used to be pre-approved by the engineer.
 - A. Tablet or Granule method.
 - a. Solution Strength: 25 mg/l minimum.
 - b. Use: Only if the pipes and appurtenances are kept clean and dry during construction. Do not use solvent welded plastic or screwed joint steel pipe.
 - c. Placement When Using Granules: During construction, place calcium hypochlorite granules at the upstream end of each branch main, and at 500-foot intervals.
 - d. Granular Quantity: Refer to Table 2.
 - e. Placement When Using Tablets: During construction, place 5g calcium hypochlorite tablets in each section of pipe and also place one tablet in each hydrant, hydrant branch and other appurtenances. Attach tablets to the inside of the pipe using an adhesive such as Permatex No. 2 or approved substitution. Assure no adhesive is on the tablet except on the broad side attached to the surface of the pipe. Attach all the tablets at the inside tip of the main, with approximately equal numbers of tablets at each end of a given pipe length. If the tablets are attached before the pipe section is placed in the trench, mark their position on the section so it can be readily determined that the pipe is installed with the tablets at the top.
 - f. Tablet Quantity: Refer to Table 3.
 - Adjust for pipe length other than 18 feet.
 - Based on 3.25g available chlorine per tablet.
 - g. Filling Procedure: When granule or tablet installation has been completed, fill the main with clean water at a velocity not exceeding 1 fps. Take precautions to assure that air pockets are eliminated. Leave this water in the pipe for at least 24 hours. If the water temperature is less than 41° f, leave the water in the pipe for at least 48 hours. Position valve so that the chlorine solution in the main being treated will not flow into water mains in active service.
 - B. Continuous Feed Method.
 - a. Solution Strength: Dose at 25 mg/l for 4 hours.
 - b. Residual: 10 mg/l at 24 hours.
 - c. Dosing Methods:
 1. Liquid Chlorine: Solution feed vacuum-operated chlorinator in combination with a booster pump.
 2. Direct Feed: Not allowed.
 3. Hypochlorite Solution: Chemical feed pump designed for feeding chlorine solutions.
 4. Calcium Hypochlorite Granules: Refer to previous section.
 - d. Filling Procedure: Use approved source to flow clean water at a constant, measured rate into the newly laid water main. Fill at a point not more than 10 feet downstream from the beginning of the new main. Measure the chlorine concentration at regular intervals and ensure a 25 mg/l dose. Position valves so that the chlorine solution in the main being treated does not flow into water mains in active service. Do not stop chlorine application until the entire main is filled with chlorinated water. Retain the chlorinated water in the main for at least 4 hours, operating all valves and hydrants in the section treated. At the end of the 24 hour period, verify the treated water in all portions of the main has residual of 10 mg/l free chlorine.
 - C. Slug Method.
 - a. Solution Strength: 100 mg/l
 - b. Dosing Methods: Per engineer's direction.
 - c. Filling Procedure: Use approved source to flow clean water at a constant, measured rate into the newly laid water main. Fill at a point not more than 10 feet downstream from the beginning of the new main. Measure concentration at regular intervals to ensure 100 mg/l dose apply the chlorine continuously and for the time required to develop a solid column or "slug" of chlorinated water that will, as it moves through the main, expose all interior surfaces to a 100 mg/l for at least 3 hours. Measure the chlorine residual in the slug as it moves through the main. If at any time it drops below 50 mg/l, stop flow and relocate chlorination equipment at the head of the slug, and as flow is resumed, add chlorine to restore the free chlorine in the slug to not less than 100 mg/l. As the chlorinated water flows past fittings and valves, operate valves and hydrants to disinfect appurtenances and pipe branches.

C. Final Flushing.

1. After the retention period, flush the chlorinated water from the main until chlorine measurements show that the concentration in the water leaving the main is no higher than that in the system, or is acceptable for domestic use.
2. Disposal of flushing water to be done in a manner so that it does not:
 - a. Reach surface waters or waters of the state.
 - b. Damage surrounding properties.
 - c. Take place during periods when the ambient temperature is above 85°f without prior approval of the engineer.
3. If water cannot be retained on site and if it is not allowed to enter the sanitary sewer collection system, water shall be dechlorinated to have a maximum available chlorine concentration of 0.13 mg/l and the appropriate private, federal and state discharge and disposal approvals shall be acquired prior to commencement of flushing activities. Should there be a potential for the groundwater rule to be violated as a result of a chlorinated discharge the engineer shall coordinate disposal with regional DEQ staff prior to flushing.

D. Bacteriological tests.

1. After final flushing and before the water main is placed in service, test samples collected from the main(s) for coliform bacteria. Take 2 samples from each location at least 24 hours apart.
2. Unless otherwise directed by the engineer, collect samples from each 1,200 feet on the new main and one from each branch.

E. Re-disinfection.

1. If the initial disinfection fails to produce approved bacteriological samples, re-flush and resample the main.
2. If check samples show bacterial contamination, re-chlorinate the main until approved results are obtained.

F. Swabbing.

1. If connections are not disinfected along with the newly installed main, swab or spray the interior of all pipes and fittings used in making the connections with a 1% hypochlorite solution before installation.

Pipe Diam. (inch)	Flow Required to Produce 2.5 fps (approx)	Size of Tap (inch) (1) (1-1/2) (2)	Hydrant Outlets	
	Velocity in Main, (Gpm)	Number of taps on pipe (2)	Number	Size in (inch)
4	100	1	1	2-1/2
6	220	1	1	2-1/2
8	400	2	1	2-1/2
10	600	3	2	2-1/2
12	900	2	2	2-1/2
16	1600	4	2	2-1/2

1) With a 40 psi pressure in the main with the hydrant flowing to atmosphere, a 2- 1/2 inch hydrant outlet will discharge approximately 1,000 gpm and a 4-1/2 inch hydrant will discharge approximately 2500 gpm.

2) Number of taps on pipe based on discharge through 5 feet of galvanized iron (GI) pipe with one 90° elbow.

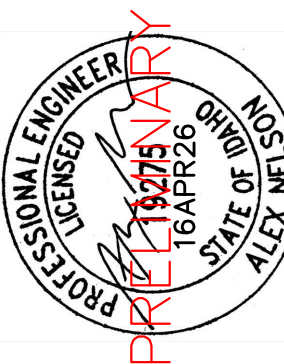
Pipe Diameter (inches)	Amount (ounces)
4	1.7
6	3.8
8	6.7
10	10.5
12	15.1
16	26.8
18	34.0
20	41.9
24	60.4

Pipe Diameter (inches)	Number of 5g Tablets (2)
4	1
6	1
8	2
10	3
12	4
16	6
18	7
20	9
24	13

PROJECT PATH AND PRINT DATE	04/16/2026	02:20:08 PM	MDT
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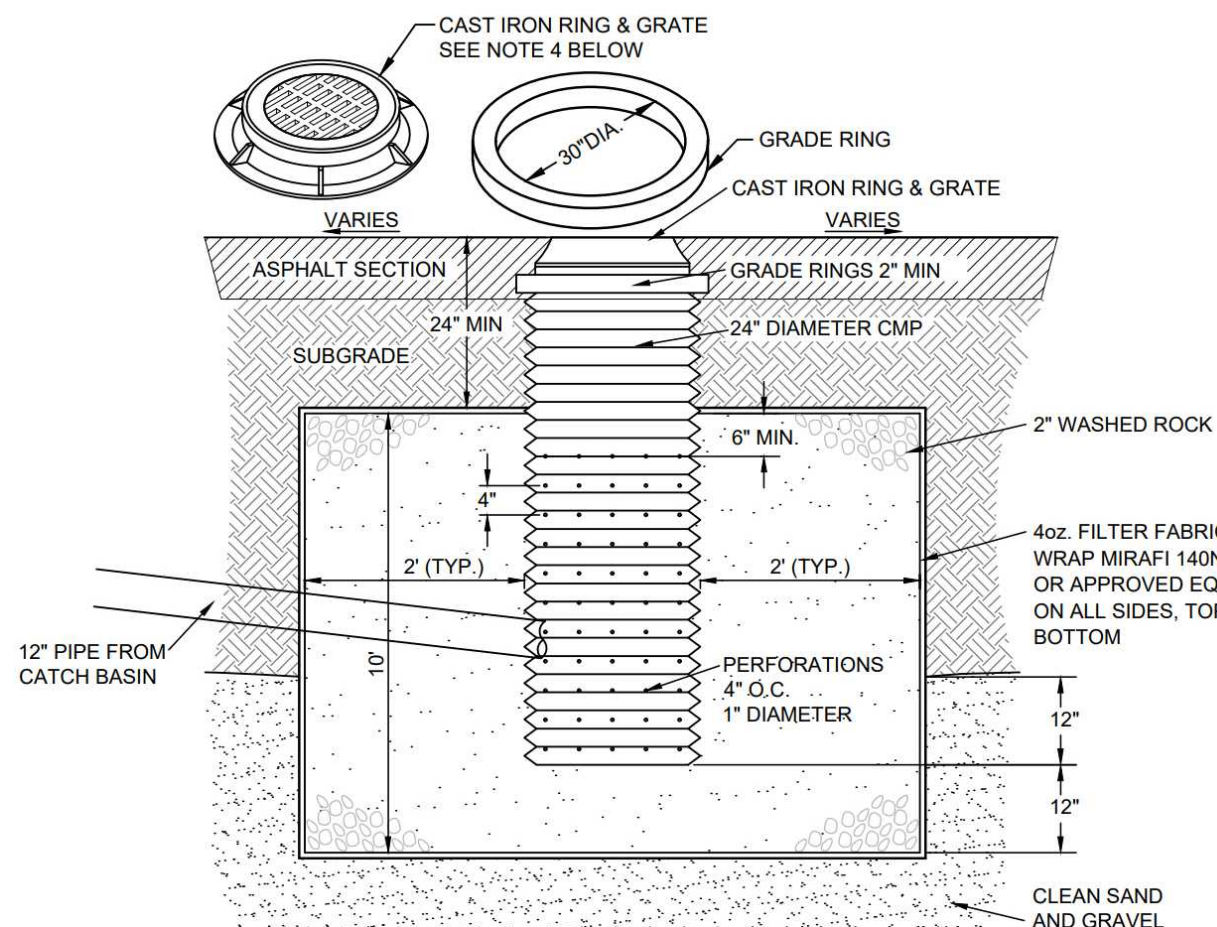
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

DETAILS

DETAILS
GUYER HOT SPRINGS SUBDIVISION, PHASE 1

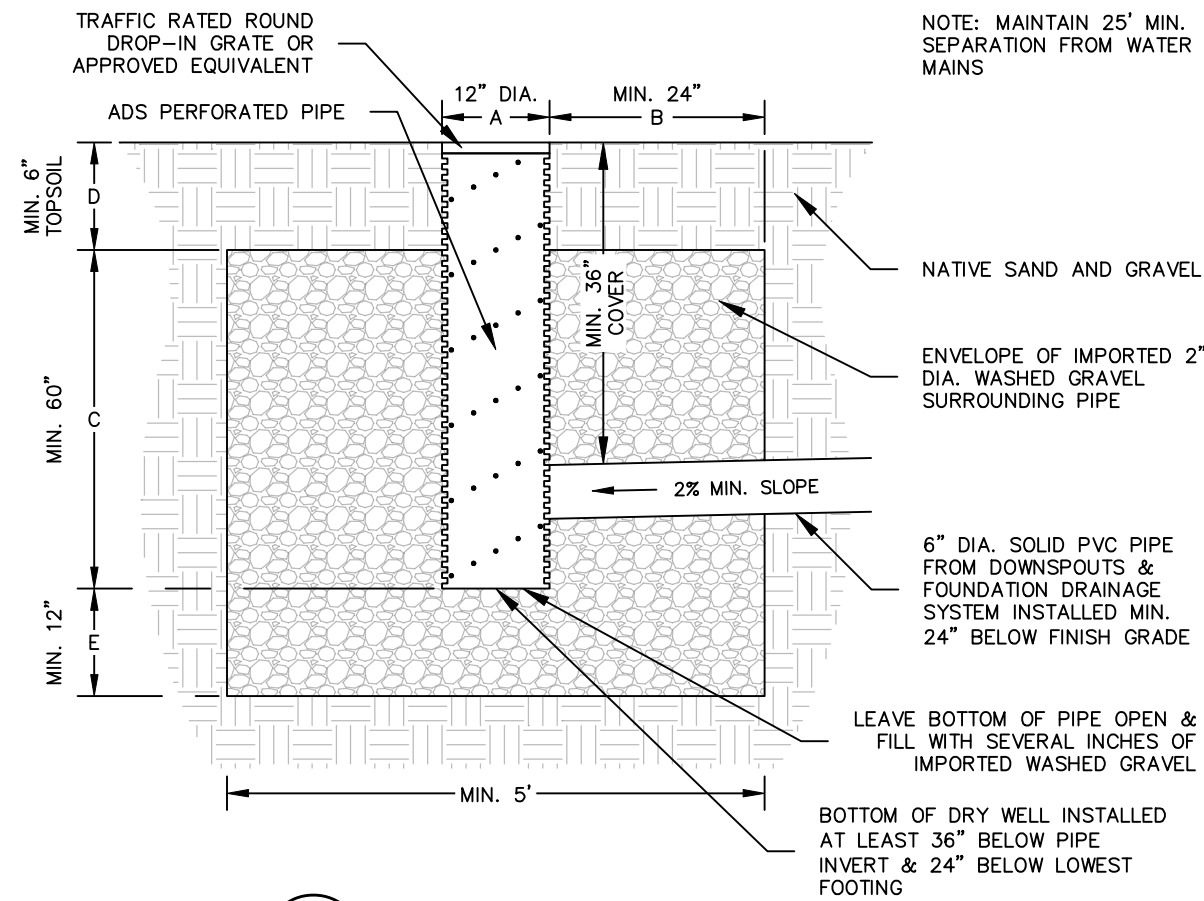
STATE OF IDAHO
ALEX NEILSON

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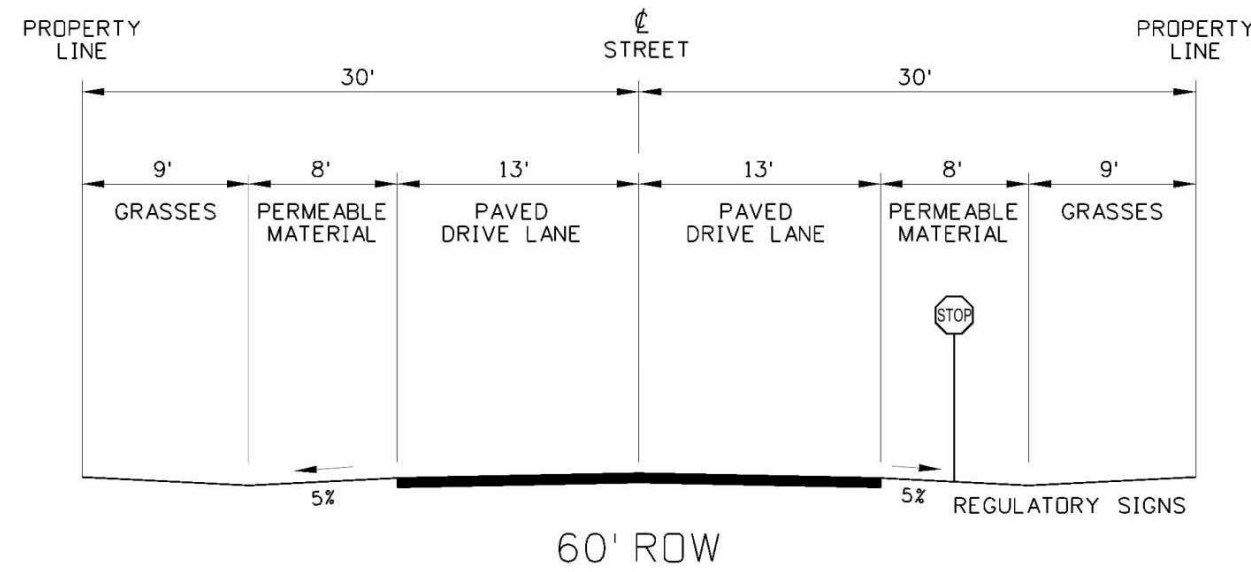


- NOTE:**
1. THE BED SHALL BE EXCAVATED A MINIMUM OF 24" INTO CLEAN SAND AND GRAVEL.
 2. MAXIMUM DEPTH SHALL NOT EXCEED 12 FEET.
 3. IF CLEAN SAND AND GRAVEL IS NOT ENCOUNTERED WITHIN 12 FEET, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER.
 4. GRATE OR SOLID LID AS APPROVED BY CITY OF KETCHUM.
 5. STORMWATER PRETREATMENT REQUIRED BEFORE DISCHARGING TO A DRYWELL.
 6. 10' MINIMUM SEPERATION DISTANCE BETWEEN DRYWELL AND MUNICIPAL WATER LINES.

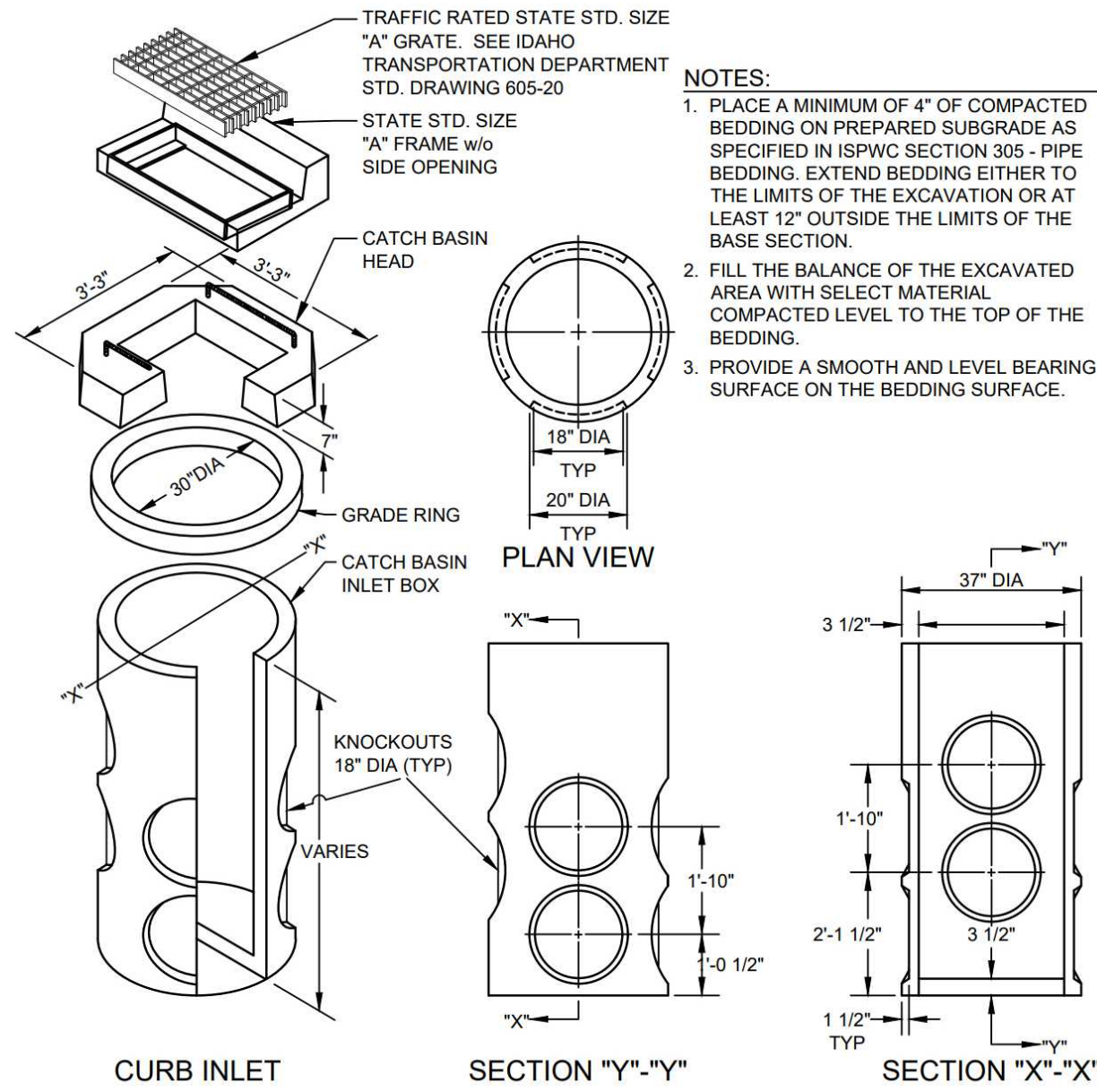
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C4.10 **TYPICAL DRY WELL (6' Ø)**
CITY OF KETCHUM – SD-10
NOT TO SCALE



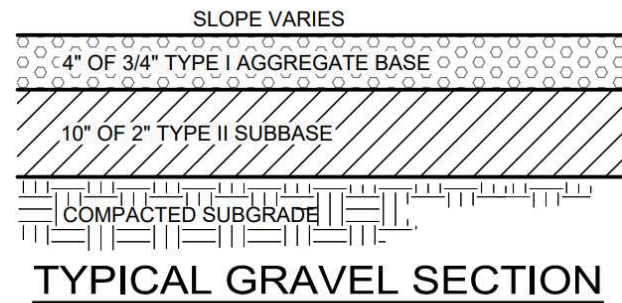
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C4.10 **TYPICAL LANDSCAPE DRY WELL**
NOT TO SCALE



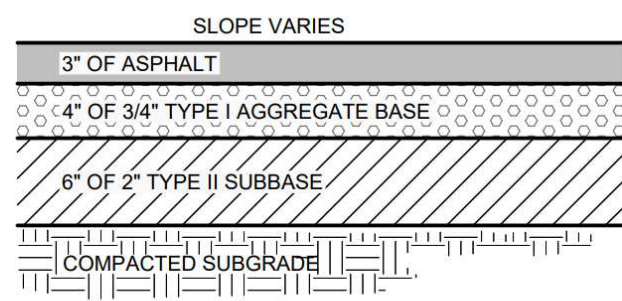
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C4.10 **60' ROW RESIDENTIAL ROAD DETAIL**
CITY OF KETCHUM – SD-22
NOT TO SCALE



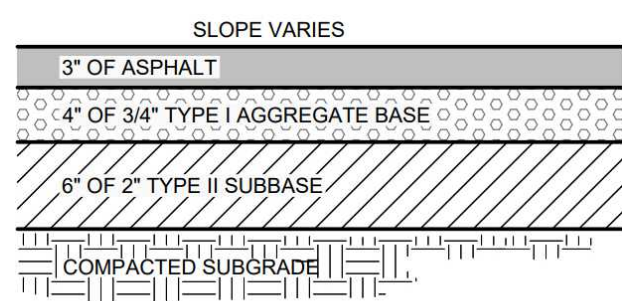
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C4.10 **TYPICAL CATCH BASIN**
CITY OF KETCHUM – SD-11
NOT TO SCALE



TYPICAL GRAVEL SECTION



TYPICAL STREET ASPHALT SECTION



TYPICAL ALLEY ASPHALT SECTION

- NOTES:**
1. SUBBASE CAN BE 2" TYPE II OR 3/4" TYPE I CRUSHED AGGREGATE BASE COURSE.
 2. MATERIALS SHALL CONFORM WITH CURRENT ISPMC STANDARDS, DIVISION 600 AGGREGATES AND ASPHALT.
 3. PAVEMENT SECTION MAY BE MODIFIED IF A PROJECT SPECIFIC GEOTECHNICAL REPORT, STAMPED BY A LICENSED ENGINEER, IS PROVIDED.

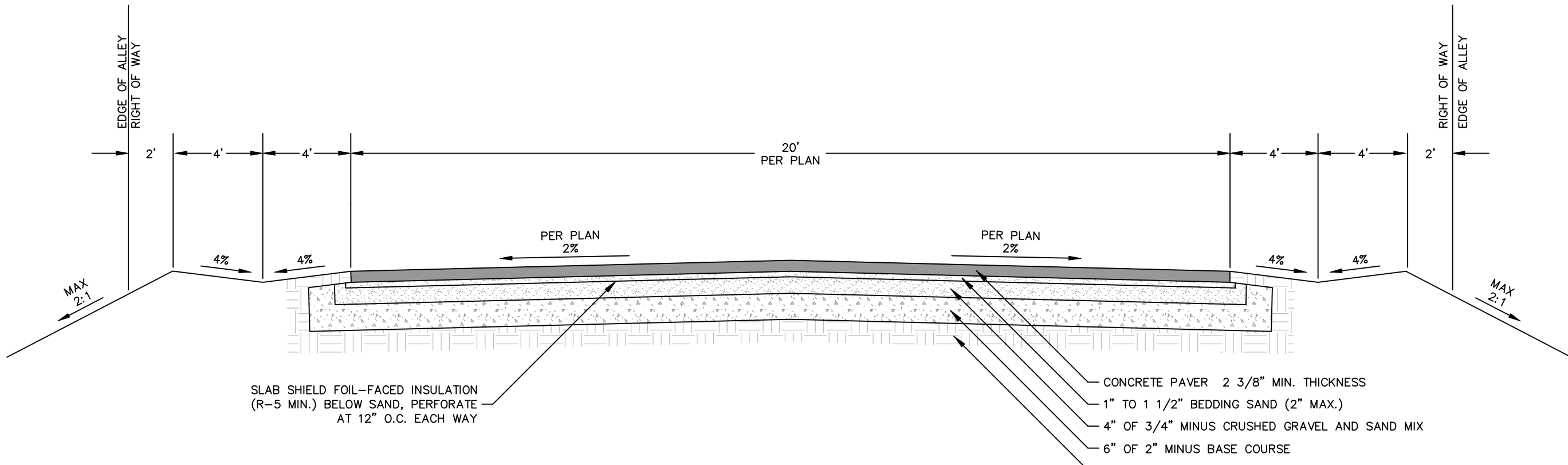
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C4.10 **TYPICAL ROAD SECTIONS**
CITY OF KETCHUM – SD-3
NOT TO SCALE

- NOTES:**
1. PLACE A MINIMUM OF 4" OF COMPACTED BEDDING ON PREPARED SUBGRADE AS SPECIFIED IN ISPMC SECTION 305 - PIPE BEDDING. EXTEND BEDDING EITHER TO THE LIMITS OF THE EXCAVATION OR AT LEAST 12" OUTSIDE THE LIMITS OF THE BASE SECTION.
 2. FILL THE BALANCE OF THE EXCAVATED AREA WITH SELECT MATERIAL COMPACTED LEVEL TO THE TOP OF THE BEDDING.
 3. PROVIDE A SMOOTH AND LEVEL BEARING SURFACE ON THE BEDDING SURFACE.

PLAN VIEW

SECTION "Y"- "Y"

SECTION "X"- "X"



3
C4.10 **TYPICAL PRIVATE ROAD SECTION**
GUYER HOT SPRINGS ROAD
NOT TO SCALE

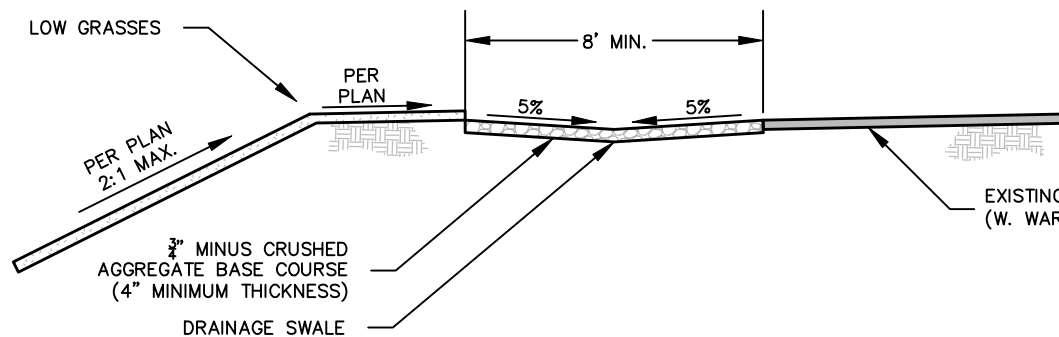
CITY TESTING REQUIREMENTS PER CODE SECTION 12.04.040	
SUBGRADE TEST SPECIFICATION	1 PER 1000 SQ YD
CONCRETE TESTING SPECIFICATION	1 PER PROJECT AND 1 ADDITIONAL TEST FOR EACH 25 YARDS
SUBBASE TEST SPECIFICATION	1 PER 1000 SQ YD
BASE TEST SPECIFICATION	1 PER 1000 SQ YD
ASPHALT TEST SPECIFICATION (ISPMC)	1 PER 100 LF FT

CITY GRADATION REQUIREMENTS PER CODE SECTION 12.04.040	
BASE GRADATION SPECIFICATION	1 PER 500 TON
CONCRETE MIX DESIGN (TITAN)	PER PROJECT
ASPHALT GRADATIONS SPECIFICATIONS	MIN 1 PER PROJECT

CITY WALL REQUESTS PER CODE SECTION 12.04.040	
WALL CONSTRUCTION OBSERVATION REPORTS	1 PER PROJECT

- NOTES:**
1. THESE ARE MINIMUM TESTING REQUIREMENTS.
 2. REQUIREMENTS MAY BE WAIVED AT THE CITY ENGINEER DESCRESSION.

6
C4.10 **R.O.W. TESTING REQUIREMENTS**
CITY OF KETCHUM – SD-16
NOT TO SCALE



7
C4.10 **CROSS-SECTION: ROADSIDE SWALE**
R.O.W. WEST WARM SPRINGS ROAD
NOT TO SCALE

- NOTES**
- A) Material shall be pervious/permeable to allow drainage.
 - B) Surface must allow for vehicle parking and be consistent along the entire property frontage.
 - C) Material within the first eight (8) feet from edge of asphalt (Street) shall be distinct from driveway and rest of property in order to visually appear available for parking.
 - D) Grading and drainage improvements as required by City Engineer – Minimum 5% slope.
 - E) No obstructions, such as boulders or berms shall be permitted within the public right-of-way.
 - F) No buried irrigation systems within the first eight (8) feet the edge of asphalt (Street). Sub-Surface irrigation lines are permitted beyond the first eight (8) feet, however pop-up heads are not permitted anywhere in the public right-of-way.
 - G) No live plant material within the first eight (8) feet from edge of asphalt (Street). Low ground cover plant material, such as turf grass, is permitted beyond the first eight (8) feet. Drought-tolerant species are preferred.
 - H) No snow-melt systems permitted within public right-of-way, unless prior approval from the City is acquired.

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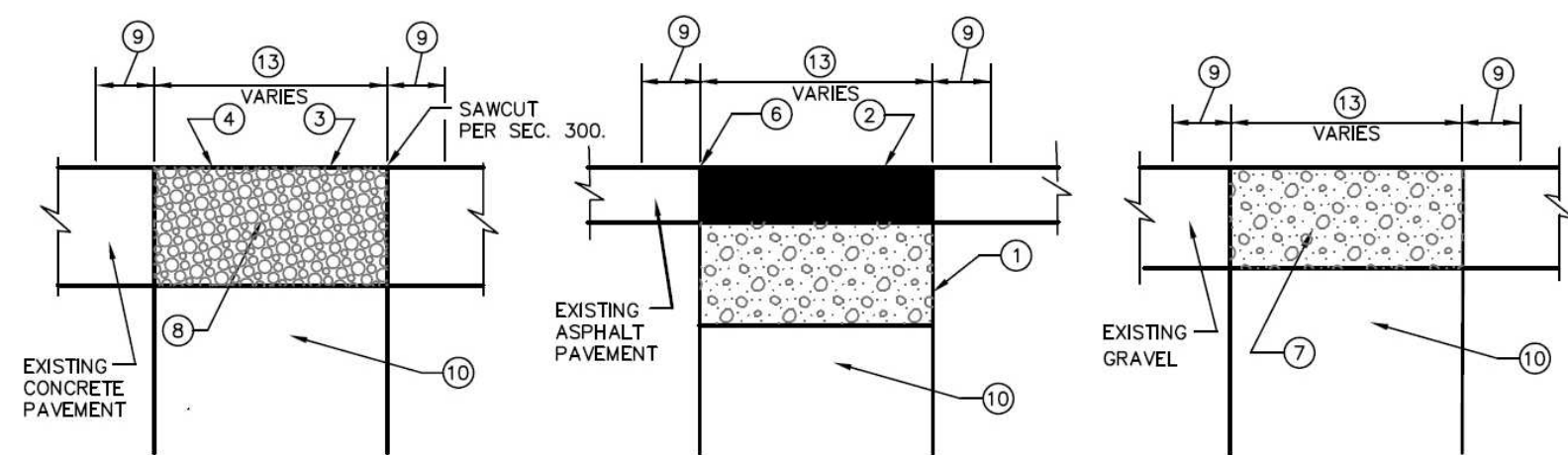
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email: bamt@alpineenterprisesinc.com



NO	DATE	BY
1	04NOV25	AHN
2	16APR26	AHN
REVISD: PLANNING REVIEW COMMENTS, ROUND 1		
PRELIMINARY: NOT FOR CONSTRUCTION		
DESIGN REVIEW SUBMISSION		

C4.10

DETAILS
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T.4N., R.17E., B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

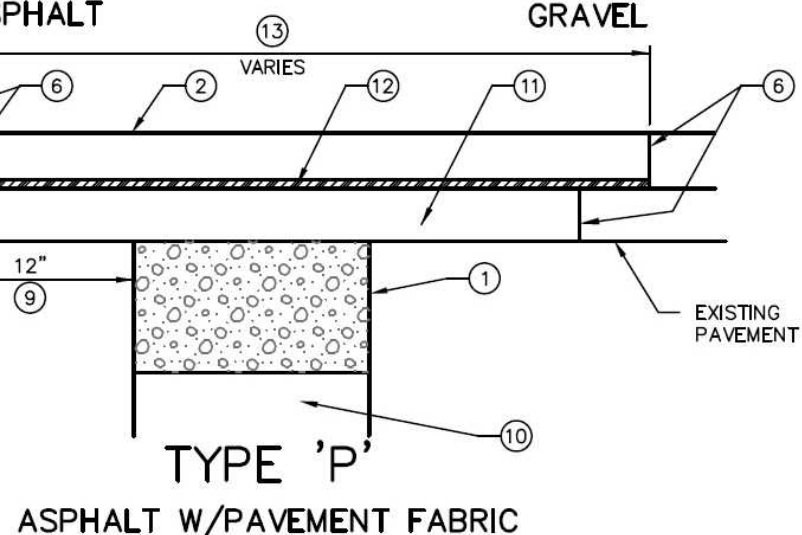


TYPE "B"
CONCRETE

TYPE "P"
ASPHALT

TYPE "C"
GRAVEL

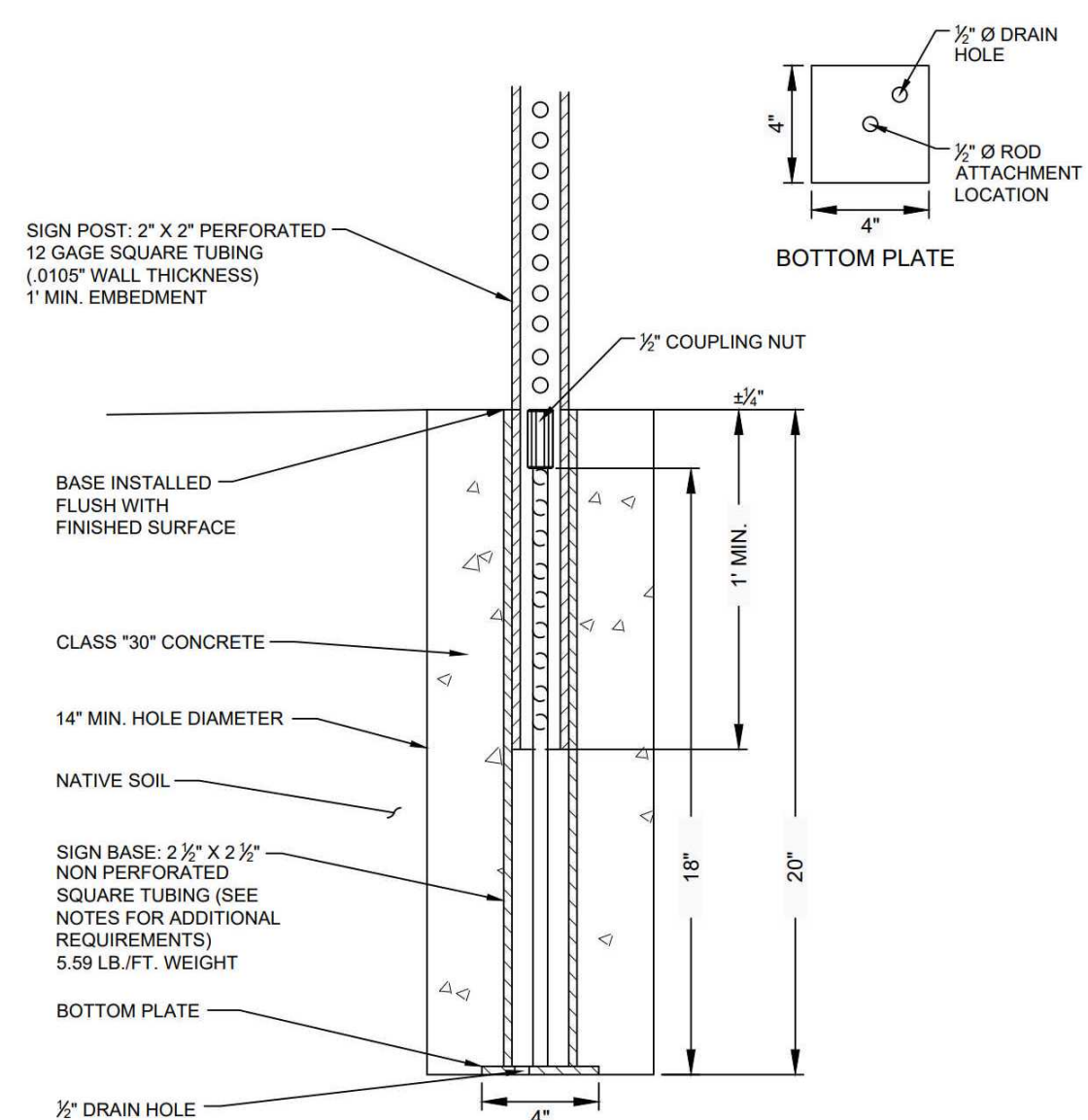
- NOTES:**
- A. REFER TO SECTION-307 FOR MATERIALS AND WORKMANSHIP REQUIREMENTS.
- B. ALL STREET CUTS WILL REQUIRE RESURFACING BY A PAVING MACHINE OR SPREADER BOX. PATCH WIDTHS ARE NEVER TO BE LESS THAN 4' IN WIDTH. LOCATE THE MATCH OF THE NEW TO EXISTING PAVEMENT OUT OF THE VEHICLE WHEEL PATH OF THE STREET.
- C. WHERE THE STREET SURFACE INCLUDES AN OVERLAY WITH FABRIC, TAKE THE FOLLOWING ADDITIONAL STEPS:
A. OVERLAY ABOVE FABRIC AN ADDITIONAL 4" ON EACH SIDE TO EXPOSE EXISTING FABRIC.
B. INSTALL NEW ASPHALT TO GRADE FABRIC.
C. INSTALL NEW FABRIC FULL WIDTH OF CUT, IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS.
D. OVERLAY FABRIC WITH ASPHALT TO FINISH GRADE OF STREET.
- D. TACK ALL COLD JOINT SURFACES WITH EMULSION WHICH HAS BEEN "BROKEN" PRIOR TO PATCHING.



TYPE "P"
ASPHALT W/PAVEMENT FABRIC

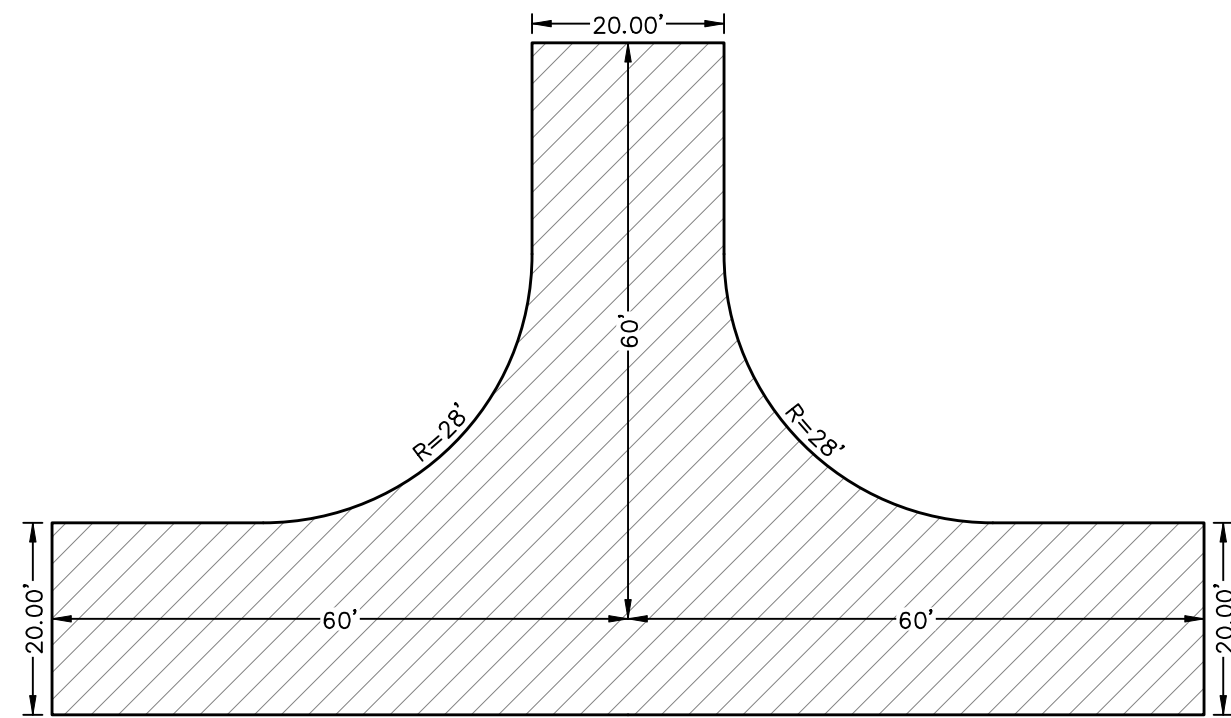
LEGEND

- 8" OF 3/4" MINUS CRUSHED AGGREGATE BASE (MIN.) UNLESS A GREATER DEPTH IS OTHERWISE SPECIFIED.
- MATCH EXISTING PAVEMENT DEPTH TO 6" UNLESS A GREATER DEPTH IS OTHERWISE SPECIFIED. USE A 2 1/2" (MIN.) MAT ON RESIDENTIAL STREETS AND 3" (MIN.) MAT ON COLLECTORS AND ARTERIALS.
- PORTLAND CEMENT CONCRETE SHALL BE CLASS 3000 psi EARLY STRENGTH, AND COMPLY WITH SECTION-706. CUT ASPHALT MAT IN NEAT STRAIGHT LINE.
- KEEP TRAFFIC OFF 72 HOURS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- MINIMUM DISTANCES 4 OVERLAP APPLIES WHERE FABRIC IS BETWEEN ASPHALT LAYERS.
- CUT ASPHALT IN NEAT STRAIGHT LINE.
- 3/4" MINUS AGGREGATE SURFACE COURSE (6") OR THICKNESS OF EXISTING GRAVEL, WHICHEVER IS GREATER.
- THICKNESS EQUALS EXISTING PAVEMENT DEPTH PLUS 2" OF CONCRETE OR PAVEMENT.
- LOCAL CUTBACK, ONLY IF REQUIRED.
- COMPACTED TRENCH BACKFILL AS PER SD-301 AND SECTION-306 OF THESE SPECIFICATIONS.
- ASPHALT TO EXISTING SHELVE (MIN 2" THICK).
- PLACE NEW PAVEMENT FABRIC FULL WIDTH OF ASPHALT PATCH.
- 4' MINIMUM WIDTH FOR SURFACE RESTORATION.

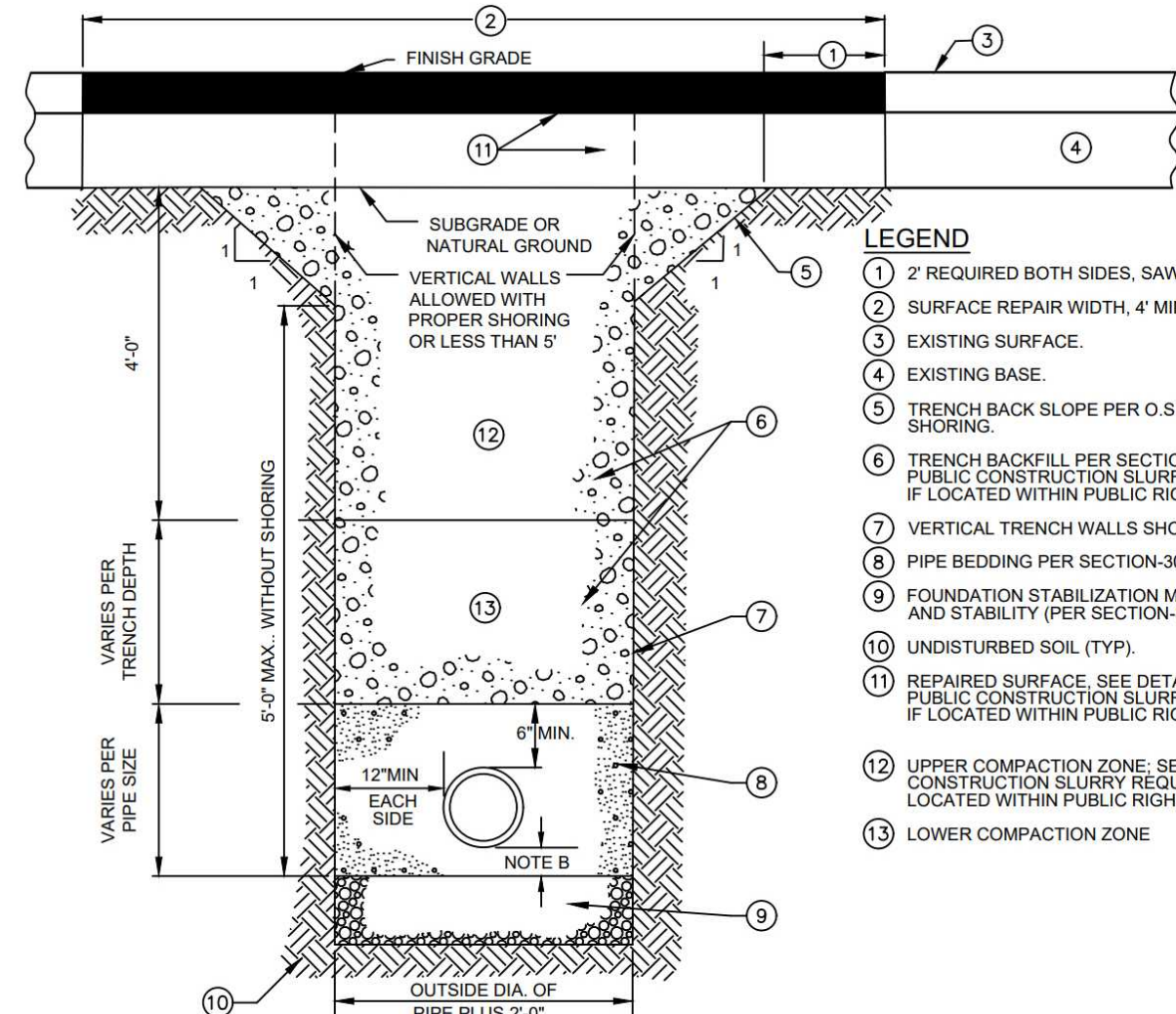


- NOTES:**
- BASES SHALL BE INSTALLED TO BE FLUSH WITH SURFACE.
 - ALL INSTALLATIONS SHALL HAVE 14" Ø MINIMUM FOUNDATION OR GROUTED INTO SOLID ROCK.
 - ALL STREET SIGNS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE MUTCD.
 - SIGN PLACEMENT SHALL BE APPROVED BY THE CITY OF KETCHUM.
 - CITY TO PROVIDE BASES.

SIGN BASE MATERIAL & DIMENSION REQUIREMENTS
2 1/2" OUTSIDE TUBE STEEL (20' LENGTH)
2 1/2" INSIDE TUBE STEEL
INTERNAL ROD MATERIAL & DIMENSION REQUIREMENTS
3/4" THICK
1/2" COLD ROLLED ROD (18' LENGTH)
1/2" COUPLING NUTS
BOTTOM PLATE MATERIAL & DIMENSION REQUIREMENTS
4" X 4" X 1/2" STEEL STRAP



120-FOOT HAMMERHEAD FIRE APPARATUS ACCESS ROAD DETAIL
IFC - APPENDIX D



- LEGEND**
- 2' REQUIRED BOTH SIDES, SAWCUT REQUIRED.
 - SURFACE REPAIR WIDTH, 4' MINIMUM. SEE NOTE 5.
 - EXISTING SURFACE.
 - EXISTING BASE.
 - TRENCH BACK SLOPE PER O.S.H.A. OR SUITABLE SHORING.
 - TRENCH BACKFILL PER SECTION-306, OR SEE "KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT" BELOW IF LOCATED WITHIN PUBLIC RIGHT-OF-WAY.
 - VERTICAL TRENCH WALLS SHORING PER O.S.H.A.
 - PIPE BEDDING PER SECTION-305 (SEE SD-302).
 - FOUNDATION STABILIZATION MAY VARY PER SOIL TYPE AND STABILITY (PER SECTION-304).
 - UNDISTURBED SOIL (TYP).
 - REPAIRED SURFACE. SEE DETAIL 5, SEE "KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT" BELOW IF LOCATED WITHIN PUBLIC RIGHT-OF-WAY.
 - UPPER COMPACTION ZONE: SEE "KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT" BELOW IF LOCATED WITHIN PUBLIC RIGHT-OF-WAY.
 - LOWER COMPACTION ZONE.

KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT

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

COARSE AGGREGATE (3/4" MINUS) : 2,600 LBS
SAND : 800 LBS
PORTLAND CEMENT : 94 LBS
WATER : 11 GAL (MAX.)

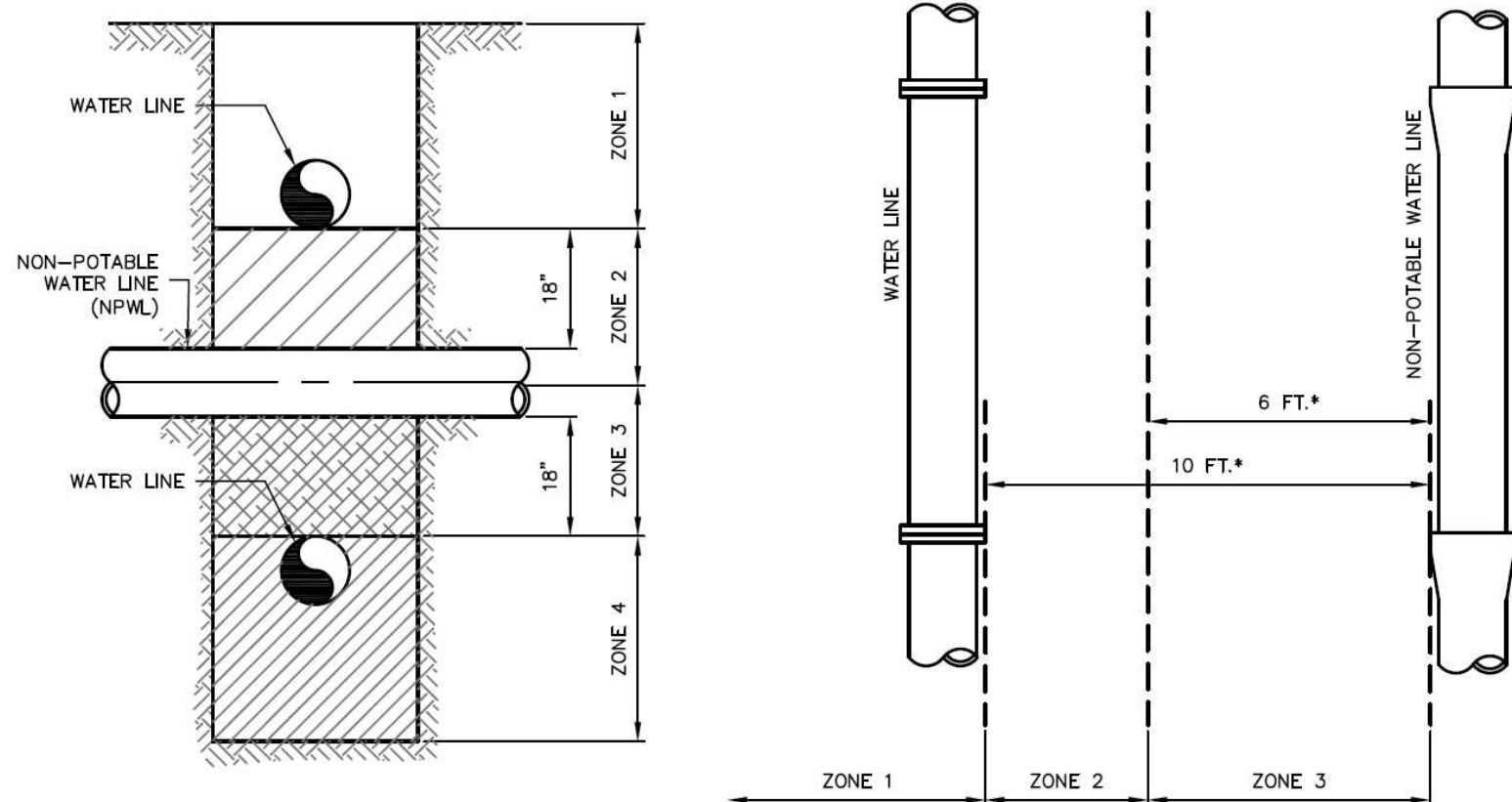
WATER CONTENT IS MAXIMUM AND MAY BE REDUCED DOWNWARD, CARE SHALL BE TAKEN TO ASSURE THAT EXCESS WATER IS NOT PRESENT IN THE MIXING DRYUM PRIOR TO CHARGING THE MIXER WITH MATERIALS. THOROUGH MIXING WILL BE REQUIRED PRIOR TO DISCHARGE.

NO COMPACTION, VIBRATION, OR FINISHING IS REQUIRED. THE LEAN CONCRETE MIX SHALL BE STRUCK OFF AT OR BELOW THE ELEVATION OF THE PLANT MIX SURFACING WITH A SQUARE-NOSE SHOVEL OR SIMILAR HAND TOOL. THE BACKFILL MIX SHALL BE ALLOWED TO SET FOR A MINIMUM OF 2 HOURS BEFORE THE PERMANENT PLANT MIX SURFACING IS PLACED TO COMPLETE THE TRENCH. TEMPORARY PLACEMENT OF ASPHALT COLD MIX SURFACING MAY BE NECESSARY TO ACCOMMODATE TRAFFIC WITHIN THE FIRST 2 HOURS OF BACKFILL PRIOR TO COMPLETING THE PERMANENT REPAIR.

NOTES:

- TRENCH EXCAVATION PER SECTION-301.
- PIPE BEDDING PER SECTION-305.
- BACKFILL AND COMPACTION PER SECTION-306.
- SURFACE REPAIR AND BASE PER DETAIL 3.
- ASPHALT PAVEMENT FOR SURFACE REPAIR SHALL BE IN ACCORDANCE WITH PLANS AND ISPCW SECTIONS 805, 810, AND 811 FOR CLASS II PAVEMENT. ASPHALT AGGREGATE SHALL BE 1/2" (13MM) NOMINAL SIZE CONFORMING TO TABLE 803B IN ISPCW SECTION 803. ASPHALT BINDER SHALL BE PG 58-28 CONFORMING TO TABLE A-1 IN ISPCW SECTION 805.
- IF TRENCH IMPACTS CROWN OF ROADWAY, CROWN MUST BE MAINTAINED AND POSITIVE DRAINAGE PROVIDED.

TYPICAL TRENCH
CITY OF KETCHUM - SD-12
NOT TO SCALE

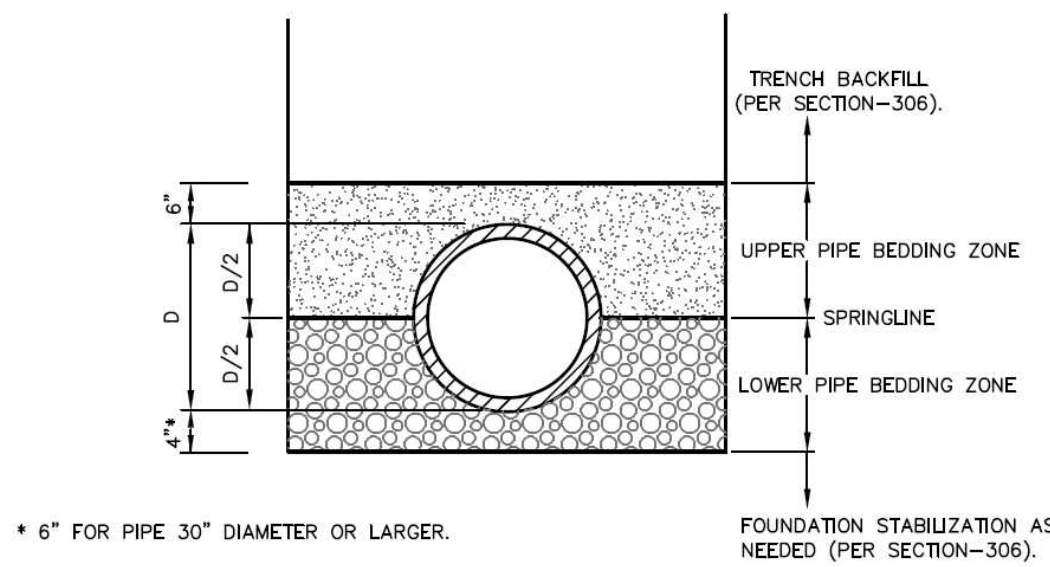


VERTICAL SEPARATION REQUIREMENTS

- ZONE 1: A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST 18" AND B) ONE FULL UNCUT LENGTH OF BOTH PNL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- ZONE 2: A) ONE FULL UNCUT LENGTH OF BOTH PNL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- AND EITHER B) NPWL MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF CROSSING.
- OR C) EITHER THE NPWL OR WATER LINE OR BOTH MUST BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEO FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING.
- ZONE 3: SAME REQUIREMENTS AS ZONE 2 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.
- ZONE 4: SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.

HORIZONTAL SEPARATION REQUIREMENTS

- ZONE 1: A) NO SPECIAL REQUIREMENTS.
- ZONE 2: A) NO SPECIAL REQUIREMENTS FOR POTABLE OR NON-POTABLE SERVICES.
B) WATER AND NPWL SEPARATED BY AT LEAST 6 FEET AT OUTSIDE WALLS.
AND C) WATER AT LEAST 18 INCHES HIGHER IN ELEVATION THAN THE NPWL.
- AND EITHER D) NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS.
OR E) SITE SPECIFIC REQUIREMENTS APPROVED BY DEO.
- ZONE 3: NOT ALLOWED WITHOUT DEO WAIVER.
- NOTE: SANITARY SEWER FORCE MAINS MUST HAVE MIN. 10" HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION. ZONE 2 AND ZONE 3 PLACEMENTS ARE NOT ALLOWED WITHOUT A WAIVER GRANTED BY DEO.



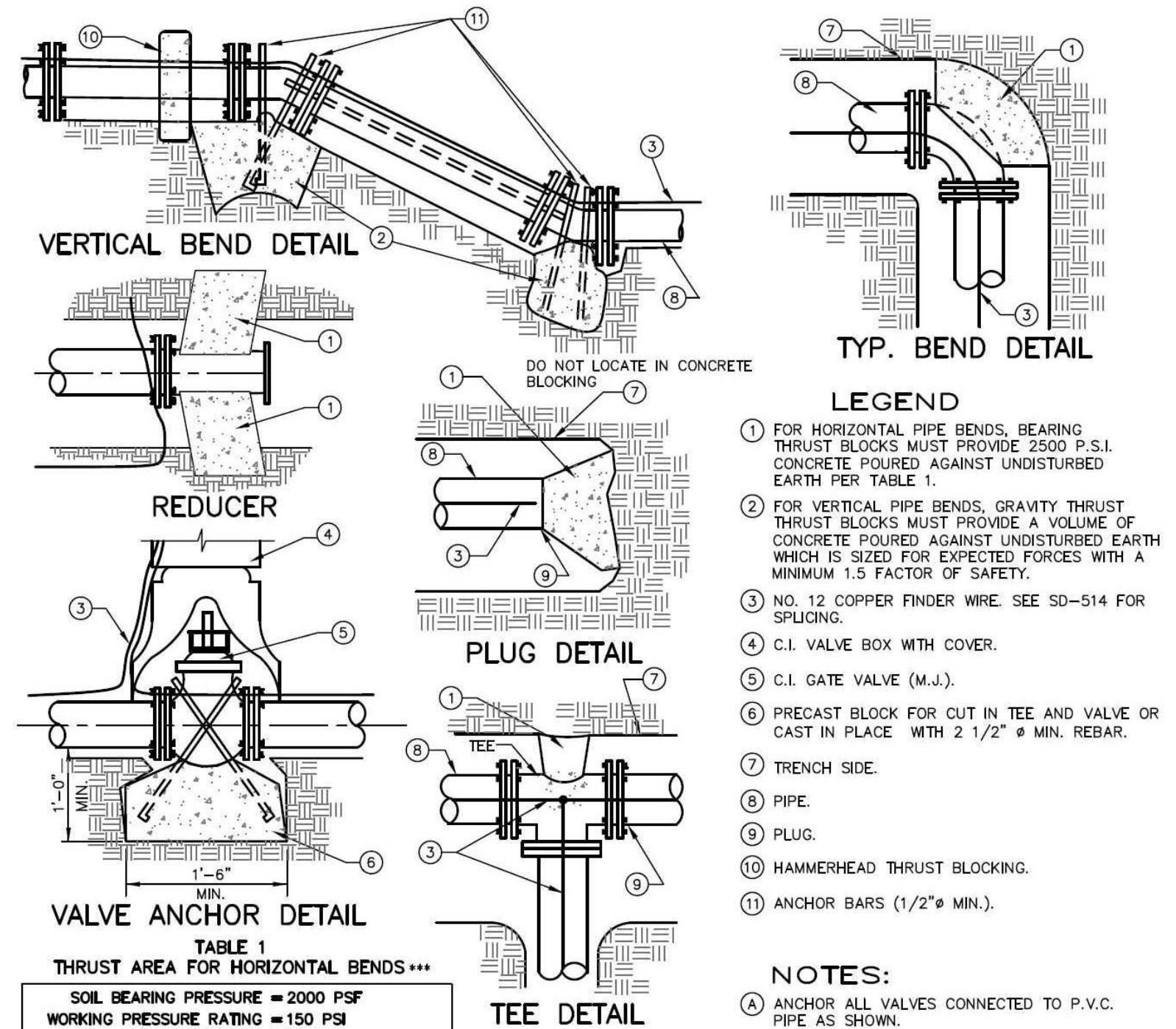
TYPICAL PIPE BEDDING SECTION

BEDDING SYSTEM	BEDDING MATERIAL	
	LOWER BEDDING ZONE	UPPER BEDDING ZONE
CLASS A-1	TYPE I	TYPE I
CLASS A-2	TYPE I	TYPE II OR TYPE III
CLASS B-1	TYPE II	TYPE II
CLASS B-2	TYPE III	TYPE III
CLASS C-1 (CONCRETE CAP)	TYPE I	TYPE IV
CLASS C-2 (CONCRETE CRADLE)	TYPE IV	TYPE I
CLASS C-3 (CONCRETE ENCASEMENT)	TYPE IV	TYPE IV

NOTE

- A. REFER TO SECTION-305 FOR MATERIAL AND COMPACTION REQUIREMENTS.

TYPICAL PIPE BEDDING SECTION
ISPCW - SD-302
NOT TO SCALE



LEGEND

- FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCKS MUST PROVIDE 2500 P.S.I. CONCRETE POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
- FOR VERTICAL PIPE BENDS, GRAVITY THRUST THRUST BLOCKS MUST PROVIDE A VOLUME OF CONCRETE POURED AGAINST UNDISTURBED EARTH WHICH IS SIZED FOR EXPECTED FORCES WITH A MINIMUM 1.5 FACTOR OF SAFETY.
- NO. 12 COPPER FINDER WIRE. SEE SD-514 FOR SPLICING.
- C.I. VALVE BOX WITH COVER.
- C.I. GATE VALVE (M.J.).
- PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH 2 1/2" Ø MIN. REBAR.
- TRENCH SIDE.
- PIPE.
- PLUG.
- HAMMERHEAD THRUST BLOCKING.
- ANCHOR BARS (1/2" Ø MIN.).

NOTES:

- ANCHOR ALL VALVES CONNECTED TO P.V.C. PIPE AS SHOWN.
- COVER BOLTS AND FLANGES WITH PLASTIC TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
- SEE CHART FOR MIN THRUST BLOCKS BEARING AREAS.
- ALL CONCRETE TO BE 2500 P.S.I. STRENGTH POURED AGAINST UNDISTURBED EARTH.
- PROVIDE 6 MIL. POLYPROPYLENE BETWEEN FITTINGS AND CONCRETE.
- NOTIFY ENGINEER FOR ANY CONDITION OR PIPE SIZE NOT INDICATED.
- ALL BLOCKS TO BE CENTERED AROUND PIPE SPRING LINE.

TABLE 1
THRUST AREA FOR HORIZONTAL BENDS***

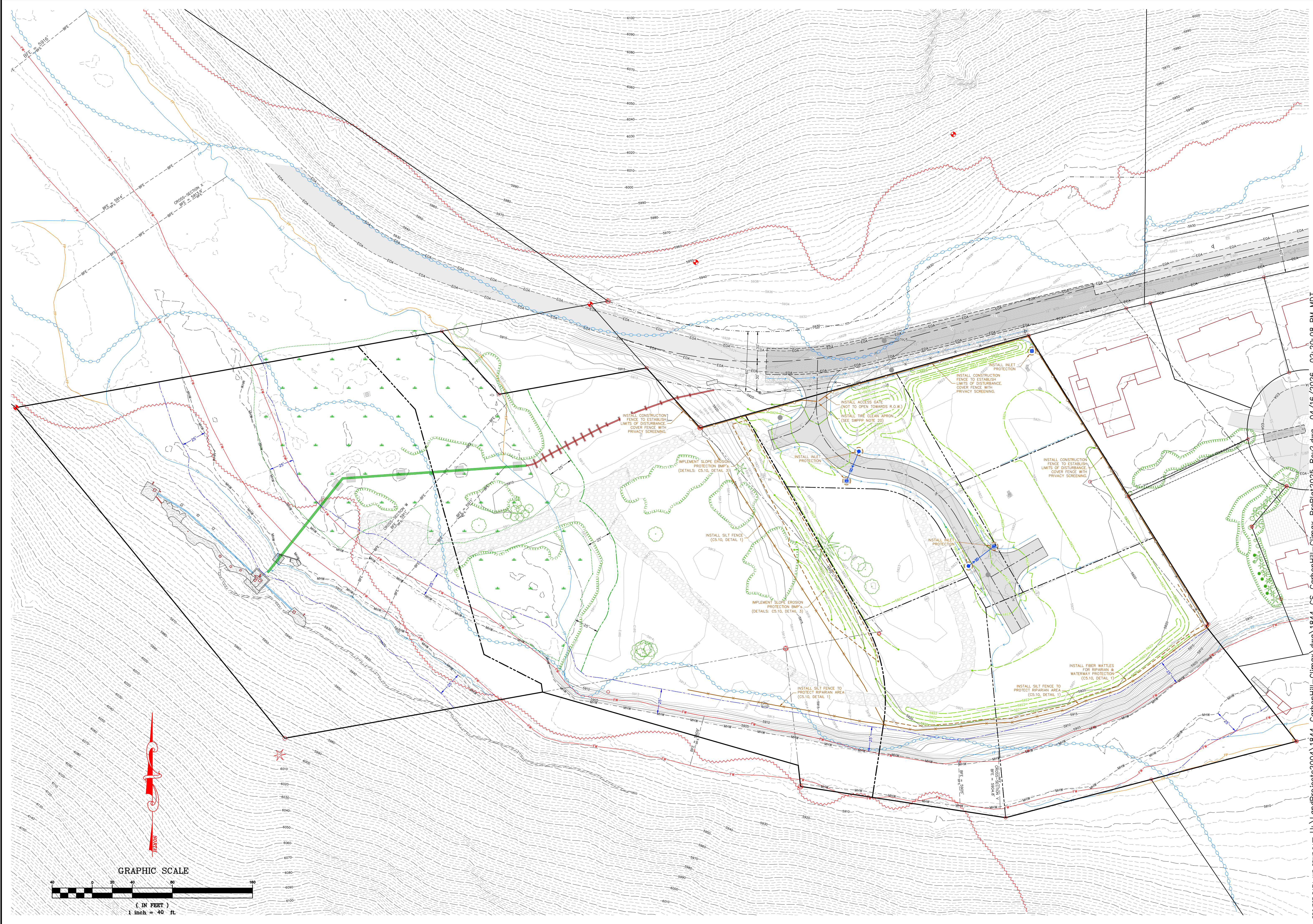
PIPE SIZE	TEE, PLUG OR VALVE	90° BEND**	45° BEND	22.5°, 11.25° BENDS OR REDUCER
3	0.8	1.1	0.6	0.3
4	1.4	2.0	1.1	0.6
6	3.2	4.5	2.4	1.2
8	5.7	8.0	4.3	2.2
10	8.8	12.5	6.8	3.4
12	12.7	18.0	9.7	5.0
14	17.3	24.5	13.3	6.8
16	22.6	32.0	17.3	8.8
18	28.6	40.5	21.9	11.2

*** MUST BE INCREASED BASED ON DIFFERENT CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH).
** OR TEE ACTING AS A 90° BEND.

*** THRUST BLOCK DEPTH TO BE A MINIMUM OF 12" FOR PIPE SIZES 3"-8" AND 18" FOR PIPE SIZES 10"-18" OR THE SQUARE ROOT OF THE REQUIRED REPAIR AREA, WHICHEVER IS GREATER.

THRUST BLOCK & ANCHOR DETAILS
ISPCW - SD-403
NOT TO SCALE

POTABLE AND NON-POTABLE WATER LINE (NPWL) SEPARATION
ISPCW - SD-407
NOT TO SCALE



PROJECT PATH AND PRINT DATE U:\LandProjects2004\1844_CarbonHill-Climax\dwg\1844_CarbonHill-Climax_PrePlat2025_Rev2.dwg 04/16/2026 02:20:08 PM MDT

ALPINE ENTERPRISES INC.
SURVEYING, MAPPING, CIVIL ENGINEERING,
AND NATURAL HAZARDS CONSULTING
660 Bell Dr., Unit 1
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(208) 727-1886
email: bamt@alpineenterprisesinc.com

PROFESSIONAL LAND SURVEYOR
STATE OF IDAHO
164PR26
BRUCE SWIN

NO	DATE	BY
1	04NOV25	AHN
2	18APR26	AHN

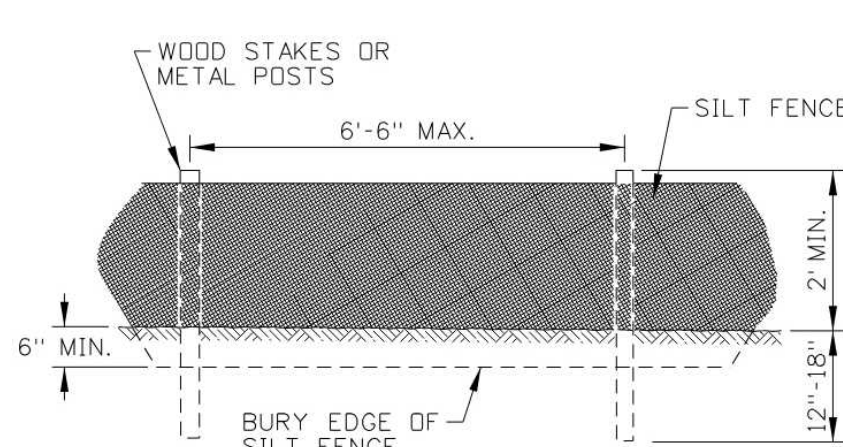
PRELIMINARY: NOT FOR CONSTRUCTION
DESIGN REVIEW SUBMISSION
REVISED: PLANNING REVIEW COMMENTS, ROUND 1

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
GUYER HOT SPRINGS SUBDIVISION, PHASE 1
WITHIN S14 & S15, T4N, R17E, B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR CARBON HILL HOT SPRINGS INC.

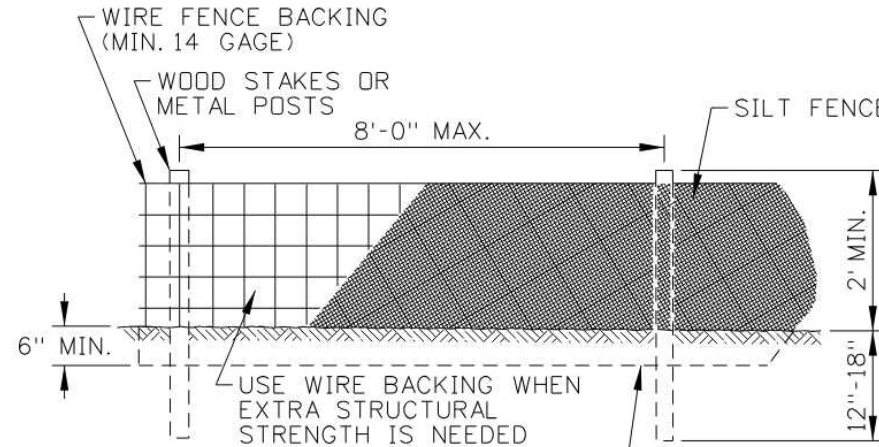
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SWPPP CONSTRUCTION NOTES

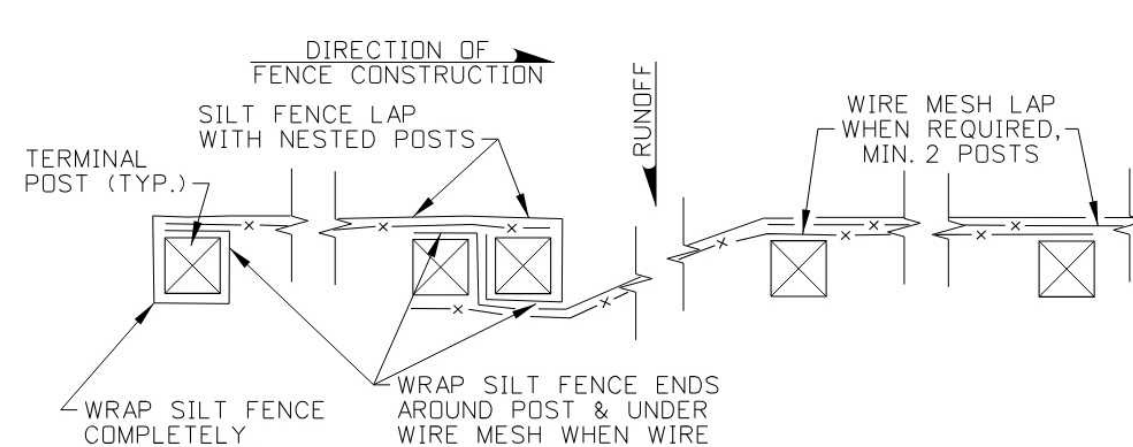
- 1) The implementation of this Stormwater Pollution Prevention Plan (SWPPP) and the construction, maintenance, replacement, and upgrading of these SWPPP BMP's is the responsibility of the contractor until all construction is completed and approved permanent stabilization is established.
- 2) The boundaries of the clearing limits shown on this Plan shall be clearly flagged in the field prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the Responsible Party for the duration of construction. Exceeding the approved limits of disturbance may result in additional permitting requirements, permit revisions, stop work orders, or other enforcement actions.
- 3) The SWPPP BMP's shown on this plan must be constructed per City and State standards and made functional prior to ground-disturbing activities, and in such a manner as to ensure that sediment and sediment-laden water do not enter the drainage system, roadways, or violate applicable water standards.
- 4) The SWPPP BMP's shown on this Plan are the minimum requirements for anticipated site conditions. During the construction period, these SWPPP BMP's shall be upgraded as needed for unexpected storm events or site conditions and to ensure that sediment and sediment-laden water do not leave the site. Addition and removal of BMP's should be documented in the daily inspection log and, in cases of SWPPP revision, on the revised SWPPP.
- 5) Fuels, oils, solvents, hazardous chemicals, and other toxic materials shall be stored in accordance with their listing and are not to contaminate soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system, nor be allowed to settle or infiltrate into soil.
- 6) Offsite release of fuel, oils, solvents, hazardous chemicals, sediment, trash, debris, or other substances resulting from construction activities is not allowed. All spills in excess of reportable quantities shall be reported.
- 7) Between May 1 and September 30, temporary erosion and sediment control BMP's to reduce dust and sediment transport shall be applied as soon as practicable, but in no case more than 7 days after ground-disturbing activity occurs.
- 8) The SWPPP BMP's on active sites shall be inspected daily by the Onsite Erosion and Sediment Control Manager, and the erosion, sediment, and pollutant control BMP's shall be maintained, adjusted, repaired, and replaced as necessary, to ensure that the BMP's are functioning properly.
- 9) The SWPPP BMP's on inactive sites shall be inspected at least once a month and within 24 hours following a storm event, and erosion, sediment, and pollutant control BMP's shall be maintained, adjusted, repaired, and replaced as necessary, to ensure that the BMP's are functioning properly.
- 10) Temporary stabilization BMP's shall be maintained until permanent stabilization BMP's are established.
- 11) All inspections conducted by the Onsite Erosion and Sediment Control Manager shall be noted in an inspection log indicating the date and time of the inspection. The inspection log shall be made available to applicable parties upon request.
- 12) Contractor shall be responsible for maintaining temporary drainage swales downstream of all disturbed areas that flow into the sediment trap.
- 13) Contractor shall be responsible for design and maintenance of all dewatering operations for any groundwater encountered during construction. All groundwater to be discharged into a dewatering system prior to discharge. The dewatering operations are to be discharged to a vegetative buffer.
- 14) No concentrated site flows to channelize and flow downhill. All concentrated flows from the sediment traps, dewatering operations, or temporary drainage swales to be redirected into a level spreader or other sheet flow dissipation BMP.
- 15) Contractor shall minimize disturbances to the greatest extent possible.
- 16) Wattles to be installed downstream of all staging and stock pile areas, and adjacent to all riparian areas. Multiple rows of wattles to be installed in areas of greater flows or steeper slopes per detail. Silt fences shall be installed in locations where wattles are not effective.
- 17) Silt fences may be installed in lieu of wattles or as an added sediment boundary but must be installed and maintained per manufacturer recommendation. Contractor shall be responsible for fence removal following construction completion.
- 18) All disturbed surfaces to be mulched and reseeded with approved seed mix.
- 19) Contractor shall be responsible for dust control during construction of all items hereon. Dust control shall be continuous during construction, 24 hours per day 7 days per week. Effective BMP's to prevent or reduce fugitive dust include temporary surface/soil stabilization, temporary vegetation, plastic covers, gravel and mulch cover, wind barriers, and surface watering.
- 20) Dust, mud, sand, and gravel shall not be deposited onto City streets. Contractor shall insure implements are in place to stop sediment tracking from vehicular traffic. Vehicle track pads and wash stations have been shown to be effective BMP's.
- 21) Alpine Enterprises Inc. is not responsible for any deviation from these plans, unless such changes have been authorized in writing.



SILT FENCE (NO WIRE BACKING)



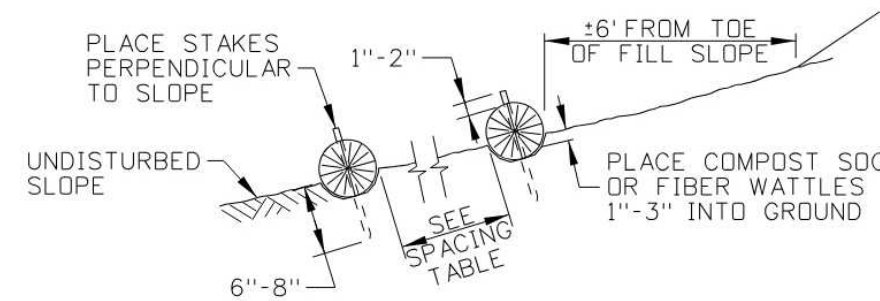
SILT FENCE (WIRE BACKING)



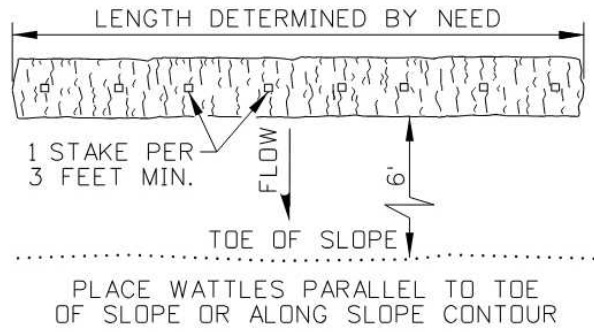
SILT FENCE LAP DETAIL

SLOPE	FIBER WATTLE & COMPOST SOCK SPACING TABLE			
	WATTLE SIZE			
	6"	9"	12"	20"
1:1	5 FT	10 FT	15 FT	20 FT
2:1	10 FT	20 FT	30 FT	40 FT
3:1	15 FT	30 FT	45 FT	60 FT
4:1 OR FLATTER	20 FT	40 FT	60 FT	80 FT

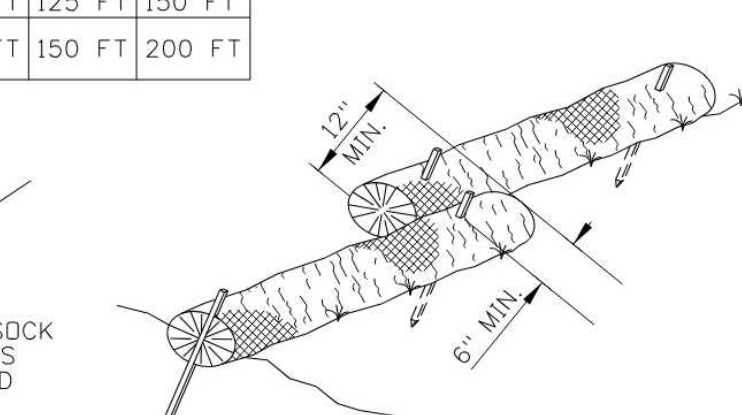
SLOPE	SILT FENCE SPACING TABLE		
	SOIL TYPE		
	SILTY	CLAYS	SANDY
1:1	50 FT	75 FT	100 FT
2:1	75 FT	100 FT	125 FT
4:1	100 FT	125 FT	150 FT
10:1 OR FLATTER	125 FT	150 FT	200 FT



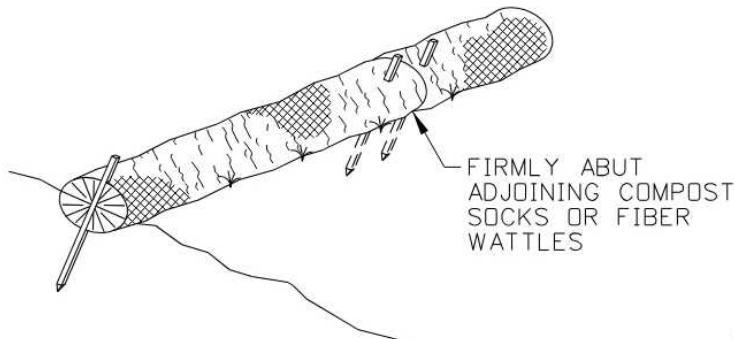
COMPOST SOCK AND FIBER WATTLE
SIDE VIEW



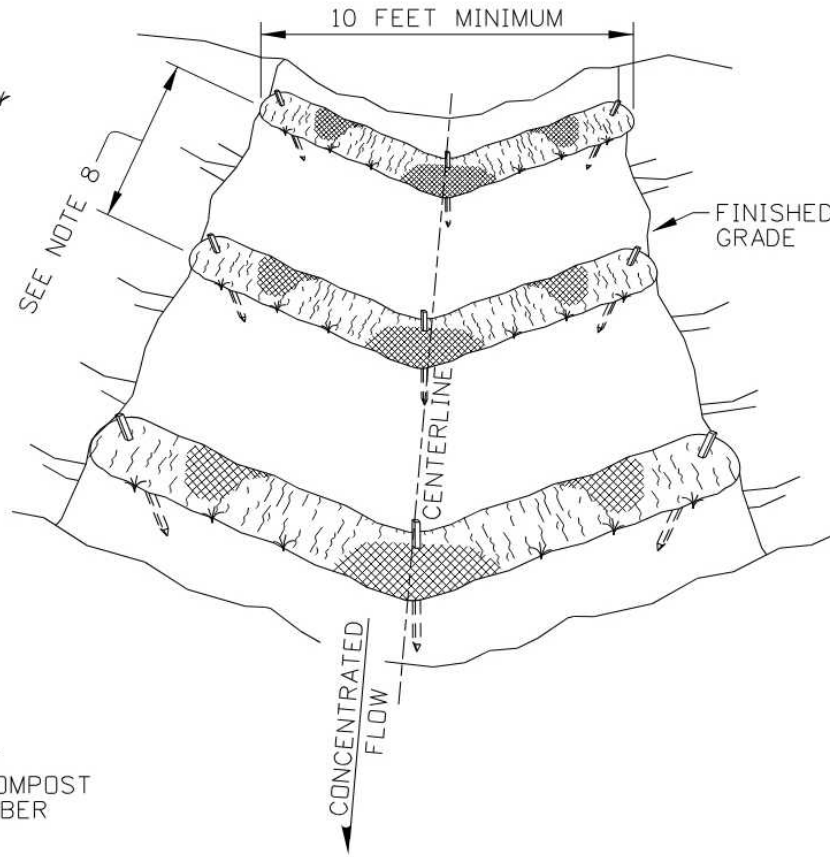
COMPOST SOCK AND FIBER WATTLE
PLAN VIEW



COMPOST SOCK AND FIBER WATTLE
OVERLAPPING DETAIL



COMPOST SOCK AND FIBER WATTLE
ABUTTING DETAIL

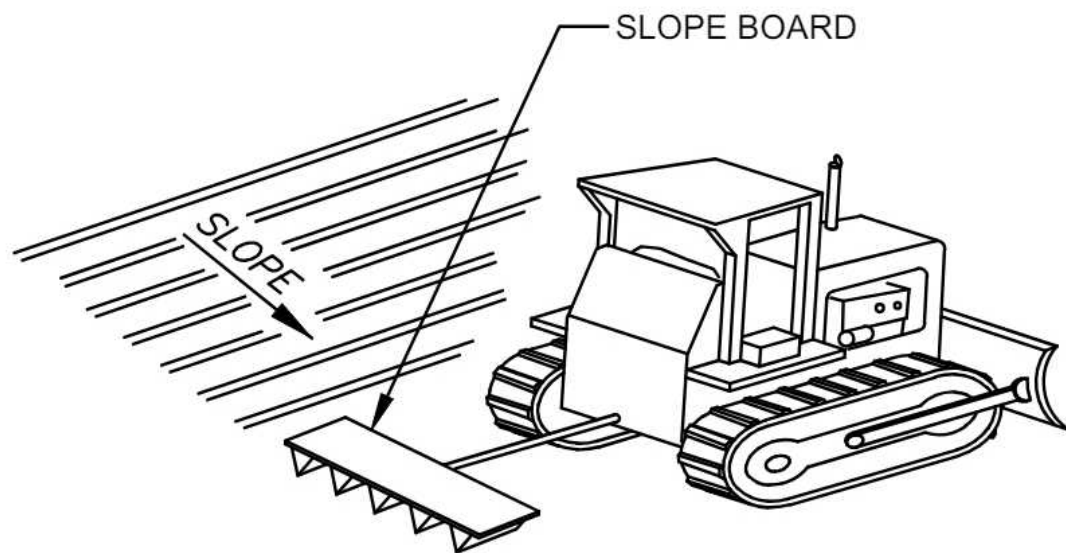


COMPOST SOCK AND FIBER WATTLE
TEMPORARY CHECK DAM DETAIL

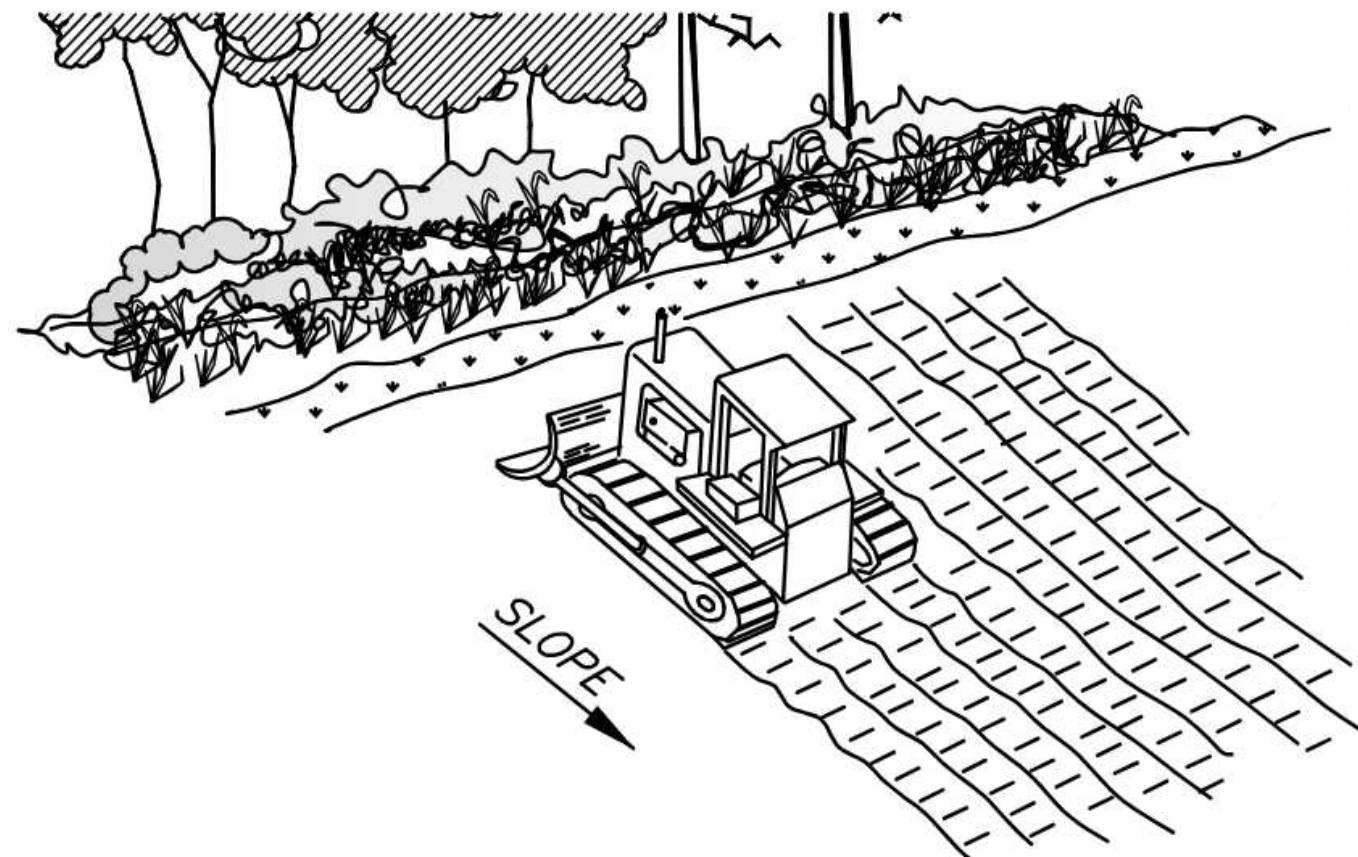
1
C5.10 SILT FENCE, FIBER WATTLE, & COMPOST SOCK
NOT TO SCALE

NOTES

- GROOVE BY CUTTING ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH STORMWATER, SEED, MULCH, AND FERTILIZER.
- ENSURE EQUIPMENT TRACKS CREATE GROOVES THAT ARE PERPENDICULAR TO THE SLOPE.
- BROADCAST SEED AND FERTILIZER ON ROUGHENED SLOPE.
- SPREAD STRAW MULCH 3 INCHES THICK. (2 1/2 TONS PER ACRE)
- PUNCH STRAW MULCH INTO SLOPE BY RUNNING EQUIPMENT UP AND DOWN SLOPE.



2
C5.10 SURFACE ROUGHENING/SEED MULCH ANCHORING
NOT TO SCALE



NOTES

- THE NEED FOR TEMPORARY SEDIMENT CONTROL DEVICES ARE DETERMINED BY SITE DESIGN. SPACE SILT FENCES, COMPOST STOCKS, AND FIBER SPATTLES IN ACCORDANCE WITH THE SILT FENCE SPACING TABLE AND FIBER WATTLE & COMPOST STOCK SPACING TABLE.
- INSTALL TEMPORARY SEDIMENT CONTROL BARRIERS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS. THE DIMENSIONS SHOWN ARE GENERAL GUIDELINES.
- PLACE SEDIMENT BARRIERS TO FOLLOW THE SLOPE CONTOURS, USE EITHER METAL POSTS OR WOOD STAKES.
- ENSURE RUNOFF PASSES THROUGH THE THE SILT FENCE AND NOT AROUND THE FENCE.
- EXTEND OR JOIN SILT FENCE USING SILT FENCE LAP WITH NESTED POSTS.
- SPACE CHECK DAMS ACCORDING TO THE HEIGHT OF THE DAM AND THE SLOPE OF THE CHANNEL SO THE BACKWATER FROM THE DOWNSTREAM DAM REACHES THE TOE OF THE UPSTREAM DAM.
- ON SLOPES, TURN THE ENDS OF EACH ROW OF COMPOST STOCKS AND FIBER WATTLES UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE STOCK OR WATTLE.
- REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF SILT FENCES, COMPOST STOCKS, AND FIBER WATTLES WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE BARRIER.

NO	DATE	BY
1	04NOV25	AHN
2	18APR26	AHN
PRELIMINARY: NOT FOR CONSTRUCTION		
DESIGN REVIEW SUBMISSION		
REVISED: PLANNING REVIEW COMMENTS, ROUND 1		

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SWPPP DETAILS
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