

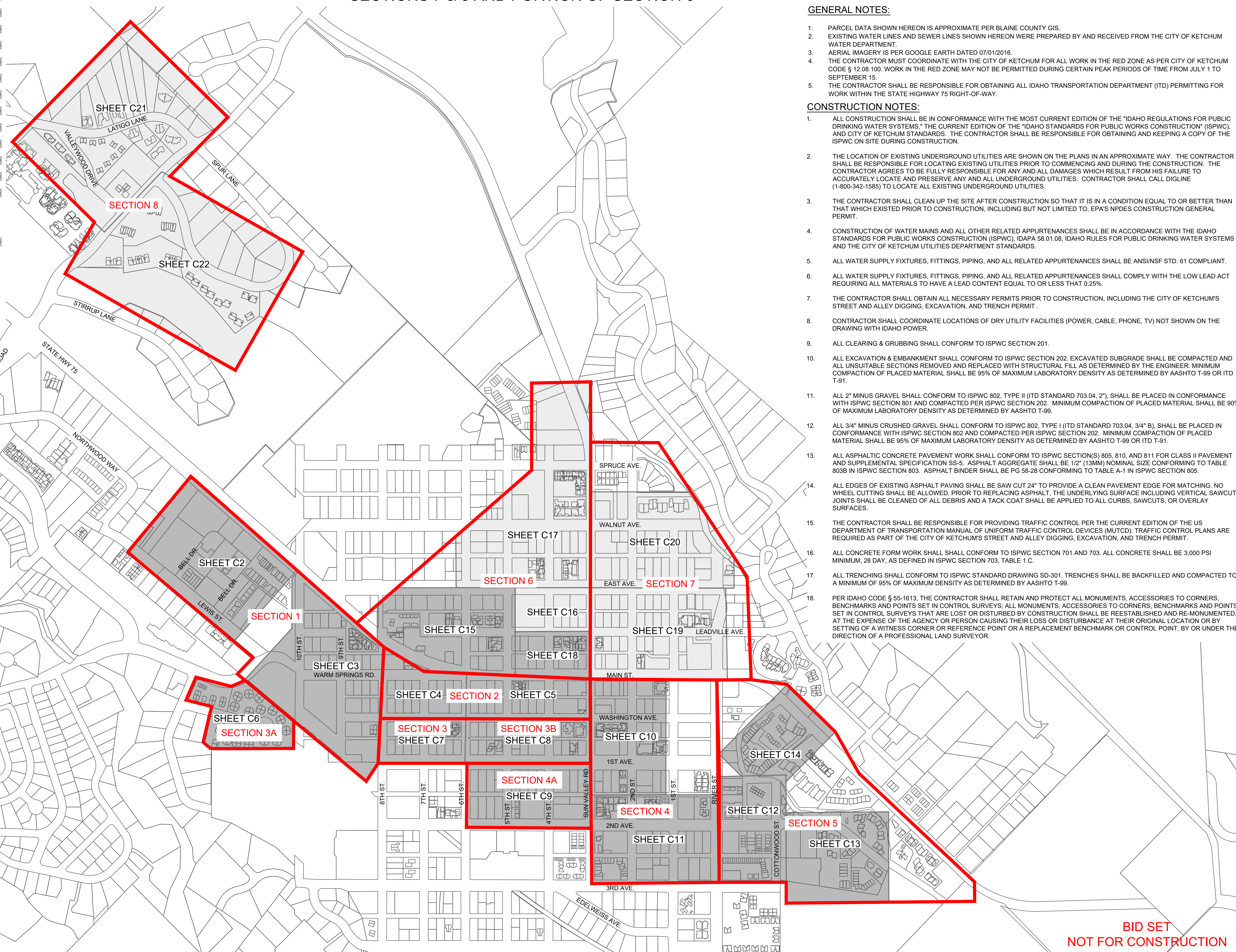
KETCHUM SPRING WATER LINE CONVERSION

SUMMER 2021

SECTIONS 7 & 8 AND PORTION OF SECTION 6

SHEET LIST:

C1	COVER SHEET, KEY PLAN	
C2	SECTION 1 NORTH	(COMPLETED- NOT INCLUDED)
C3	SECTION 1 SOUTH	(COMPLETED- NOT INCLUDED)
C4	SECTION 2 NORTH	(COMPLETED- NOT INCLUDED)
C5	SECTION 2 SOUTH	(COMPLETED- NOT INCLUDED)
C6	SECTION 3A	(COMPLETED- NOT INCLUDED)
C7	SECTION 3 NORTH	(COMPLETED- NOT INCLUDED)
C8	SECTION 3B	(COMPLETED- NOT INCLUDED)
C9	SECTION 4A	(COMPLETED- NOT INCLUDED)
C10	SECTION 4 NORTHEAST	(COMPLETED- NOT INCLUDED)
C11	SECTION 4 SOUTHWEST	(COMPLETED- NOT INCLUDED)
C12	SECTION 5 NORTHWEST	(COMPLETED- NOT INCLUDED)
C13	SECTION 5 SOUTHEAST	(COMPLETED- NOT INCLUDED)
C14	SECTION 5 EAST	(COMPLETED- NOT INCLUDED)
C15	SECTION 6 NORTHWEST	(COMPLETED- NOT INCLUDED)
C16	SECTION 6 SOUTHWEST	(COMPLETED- NOT INCLUDED)
C17	SECTION 6 SOUTHEAST	
C18	SECTION 6 SOUTHWEST	(COMPLETED- NOT INCLUDED)
C19	SECTION 7 WEST	
C20	SECTION 7 EAST	
C21	SECTION 8 NORTH	
C22	SECTION 8 SOUTH	
C23	DETAILS	

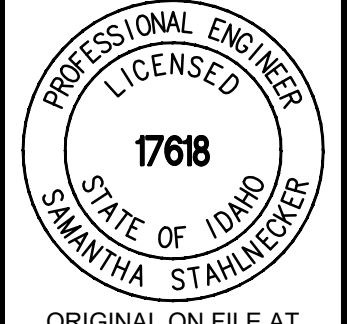


- GENERAL NOTES:**
- PARCEL DATA SHOWN HEREON IS APPROXIMATE PER BLAINE COUNTY GIS.
 - EXISTING WATER LINES AND SEWER LINES SHOWN HEREON WERE PREPARED BY AND RECEIVED FROM THE CITY OF KETCHUM WATER DEPARTMENT.
 - AERIAL IMAGERY IS PER GOOGLE EARTH DATED 07/01/2016.
 - THE CONTRACTOR MUST COORDINATE WITH THE CITY OF KETCHUM FOR ALL WORK IN THE RED ZONE AS PER CITY OF KETCHUM CODE § 12.08.100. WORK IN THE RED ZONE MAY NOT BE PERMITTED DURING CERTAIN PEAK PERIODS OF TIME FROM JULY 1 TO SEPTEMBER 15.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL IDAHO TRANSPORTATION DEPARTMENT (ITD) PERMITTING FOR WORK WITHIN THE STATE HIGHWAY 75 RIGHT-OF-WAY.

- CONSTRUCTION NOTES:**
- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE "IDAHO REGULATIONS FOR PUBLIC DRINKING WATER SYSTEMS," THE CURRENT EDITION OF THE "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION" (ISPMC), AND CITY OF KETCHUM STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND KEEPING A COPY OF THE ISPMC ON SITE DURING CONSTRUCTION.
 - THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS IN AN APPROXIMATE WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES PRIOR TO COMMENCING AND DURING THE 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 (1-800-342-1585) TO LOCATE ALL EXISTING UNDERGROUND UTILITIES.
 - 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, INCLUDING BUT NOT LIMITED TO, EPA'S NPDES CONSTRUCTION GENERAL PERMIT.
 - CONSTRUCTION OF WATER MAINS AND ALL OTHER RELATED APPURTENANCES SHALL BE IN ACCORDANCE WITH THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPMC), IDAPA 58.01.08, IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS AND THE CITY OF KETCHUM UTILITIES DEPARTMENT STANDARDS.
 - ALL WATER SUPPLY FIXTURES, FITTINGS, PIPING, AND ALL RELATED APPURTENANCES SHALL BE ANSI/NSF STD. 61 COMPLIANT.
 - ALL WATER SUPPLY FIXTURES, FITTINGS, PIPING, AND ALL RELATED APPURTENANCES SHALL COMPLY WITH THE LOW LEAD ACT REQUIRING ALL MATERIALS TO HAVE A LEAD CONTENT EQUAL TO OR LESS THAN 0.25%.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING THE CITY OF KETCHUM'S STREET AND ALLEY DIGGING, EXCAVATION, AND TRENCH PERMIT.
 - CONTRACTOR SHALL COORDINATE LOCATIONS OF DRY UTILITY FACILITIES (POWER, CABLE, PHONE, TV) NOT SHOWN ON THE DRAWING WITH IDAHO POWER.
 - ALL CLEARING & GRUBBING SHALL CONFORM TO ISPMC SECTION 201.
 - ALL EXCAVATION & EMBANKMENT SHALL CONFORM TO ISPMC SECTION 202. EXCAVATED SUBGRADE SHALL BE COMPACTED AND ALL UNSUITABLE SECTIONS REMOVED AND REPLACED WITH STRUCTURAL FILL AS DETERMINED BY THE ENGINEER. MINIMUM COMPACTION OF PLACED MATERIAL SHALL BE 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 OR ITD T-91.
 - ALL 2" MINUS GRAVEL SHALL CONFORM TO ISPMC 802, TYPE II (ITD STANDARD 703.04, 2"), SHALL BE PLACED IN CONFORMANCE WITH ISPMC SECTION 801 AND COMPACTED PER ISPMC SECTION 202. MINIMUM COMPACTION OF PLACED MATERIAL SHALL BE 90% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99.
 - ALL 3/4" MINUS CRUSHED GRAVEL SHALL CONFORM TO ISPMC 802, TYPE I (ITD STANDARD 703.04, 3/4" B), SHALL BE PLACED IN CONFORMANCE WITH ISPMC SECTION 802 AND COMPACTED PER ISPMC SECTION 202. MINIMUM COMPACTION OF PLACED MATERIAL SHALL BE 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 OR ITD T-91.
 - ALL ASPHALTIC CONCRETE PAVEMENT WORK SHALL CONFORM TO ISPMC SECTION(S) 805, 810, AND 811 FOR CLASS II PAVEMENT AND SUPPLEMENTAL SPECIFICATION SS-5. ASPHALT AGGREGATE SHALL BE 1/2" (13MM) NOMINAL SIZE CONFORMING TO TABLE 803B IN ISPMC SECTION 803. ASPHALT BINDER SHALL BE PG 58-28 CONFORMING TO TABLE A-1 IN ISPMC SECTION 805.
 - ALL EDGES OF EXISTING ASPHALT PAVING SHALL BE SAW CUT 24" TO PROVIDE A CLEAN PAVEMENT EDGE FOR MATCHING. NO WHEEL CUTTING SHALL BE ALLOWED. PRIOR TO REPLACING ASPHALT, THE UNDERLYING SURFACE INCLUDING VERTICAL SAWCUT JOINTS SHALL BE CLEANED OF ALL DEBRIS AND A TACK COAT SHALL BE APPLIED TO ALL CURBS, SAWCUTS, OR OVERLAY SURFACES.
 - 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), TRAFFIC CONTROL PLANS ARE REQUIRED AS PART OF THE CITY OF KETCHUM'S STREET AND ALLEY DIGGING, EXCAVATION, AND TRENCH PERMIT.
 - ALL CONCRETE FORM WORK SHALL CONFORM TO ISPMC SECTION 701 AND 703. ALL CONCRETE SHALL BE 3,000 PSI MINIMUM, 28 DAY, AS DEFINED IN ISPMC SECTION 703, TABLE 1.C.
 - ALL TRENCHING SHALL CONFORM TO ISPMC STANDARD DRAWING SD-301. TRENCHES SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
 - 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 AT THEIR ORIGINAL LOCATION OR BY SETTING OF A WITNESS CORNER OR REFERENCE POINT OR A REPLACEMENT BENCHMARK OR CONTROL POINT, BY OR UNDER THE DIRECTION OF A PROFESSIONAL LAND SURVEYOR.



KETCHUM SPRING WATER LINE CONVERSION
COVER SHEET, KEY PLAN
 LOCATED WITHIN SECTION 12 & 13, T.4 N., R.17 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
 PREPARED FOR THE CITY OF KETCHUM

ORIGINAL SIGNED BY
 SAMANTHA STAHLNECKER
 DATE ORIGINAL SIGNED:
 02/05/2021

 ORIGINAL ON FILE AT
 OFFICE OF GALENA
 ENGINEERING
 (HAILEY, ID)

SKS
 DESIGNED BY
 FRM
 DRAWN BY
 SCS
 CHECKED BY
GALENA ENGINEERING, INC.
 Civil Engineers & Land Surveyors
 317 N. River Street
 Hailey, Idaho 83433
 (208) 788-1705
 email: galena@galena-engineering.com

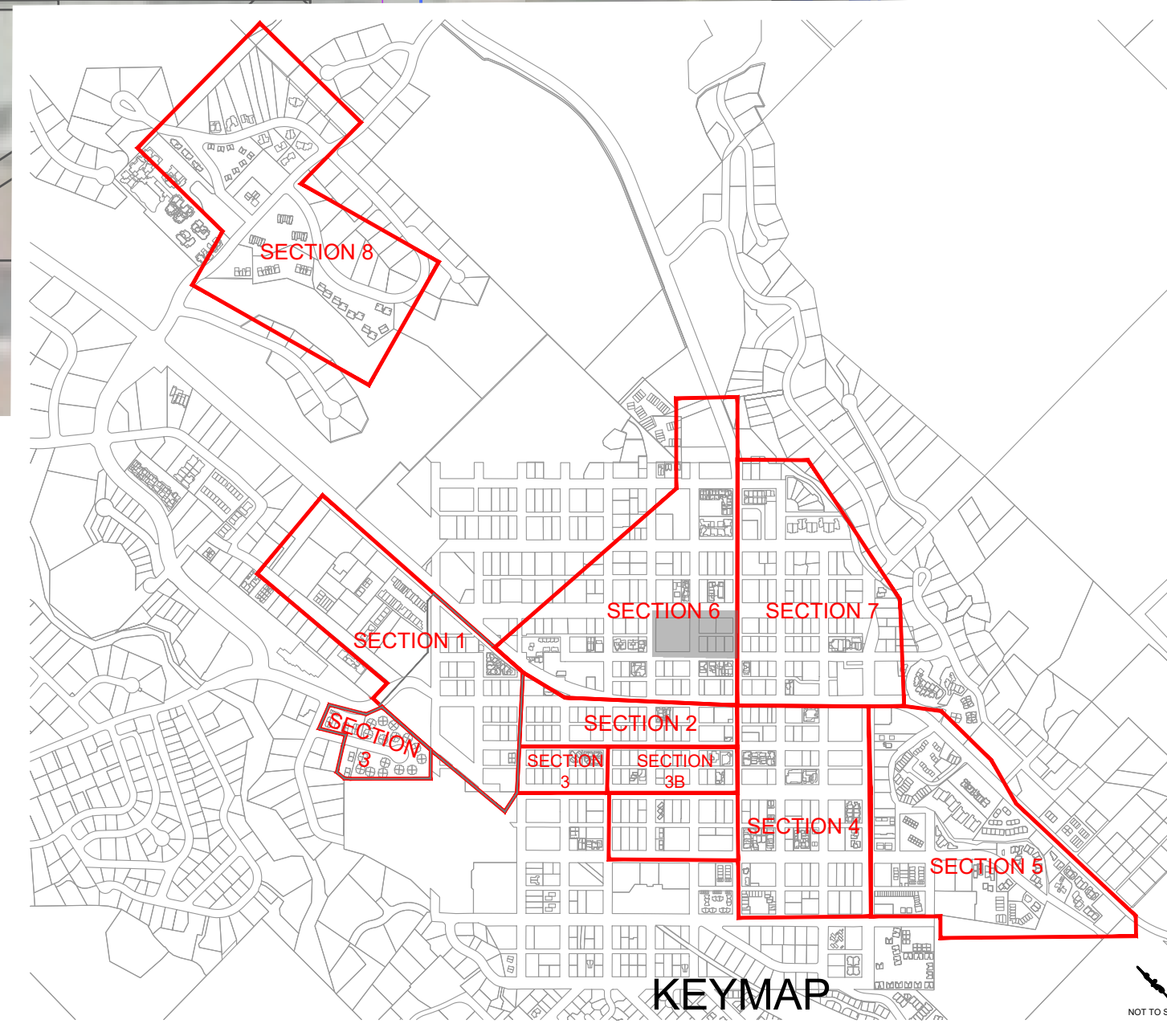
PURPOSE: ISSUE FOR BID (02/05/21)

NO.	DATE	BY	REVISIONS

C01

**BID SET
NOT FOR CONSTRUCTION**

- LEGEND:**
- K.S.L. PROPERTY CONVERTED TO K.C.W.
 - K.S.L. PROPERTY TO BE CONVERTED
 - KCW** EXISTING K.C. WATER MAIN
 - EXISTING K.C. WATER SERVICE
 - PROPOSED K.C. WATER SERVICE
 - PROPOSED BORED SERVICE LINE
 - PROPOSED EXCAVATED SERVICE LINE
 - KSW** EXISTING K.S.L. WATER MAIN
 - EXISTING K.S.L. WATER SERVICE
 - ABANDONED K.S.L. WATER MAIN/ SERVICE
 - EXISTING FIRE HYDRANT
 - EXISTING WATER VALVE
 - PROPOSED WATER METER WITH VAULT
 - PROPOSED INTERIOR WATER METER
 - PROPOSED MULTI-WATER METER WITH PRECAST CONCRETE VAULT OR 3" OR 4" PRECAST CONCRETE VAULT
 - S** EXISTING SEWER MAIN
 - PROPOSED ASPHALT REPAIR
 - PROPOSED CONCRETE SIDEWALK REPAIR
 - PROPOSED LANDSCAPE REPAIR



**BID SET
NOT FOR CONSTRUCTION**

**KETCHUM SPRING WATER LINE CONVERSION
SECTION 6 SOUTHWEST**

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR THE CITY OF KETCHUM

PROJECT INFORMATION
P:\askap\1318-187\ketch spring\nechg\Construction\1318-187_SPRING LINE MASTER PLAN.dwg 02/05/21 10:15:10 AM

ORIGINAL SIGNED BY
SAMANTHA STAHLNECKER
DATE ORIGINAL SIGNED:
02/05/2021

ORIGINAL ON FILE AT
OFFICE OF GALENA
ENGINEERING
(HAILEY, ID)

SKS DESIGNED BY

FRM DRAWN BY

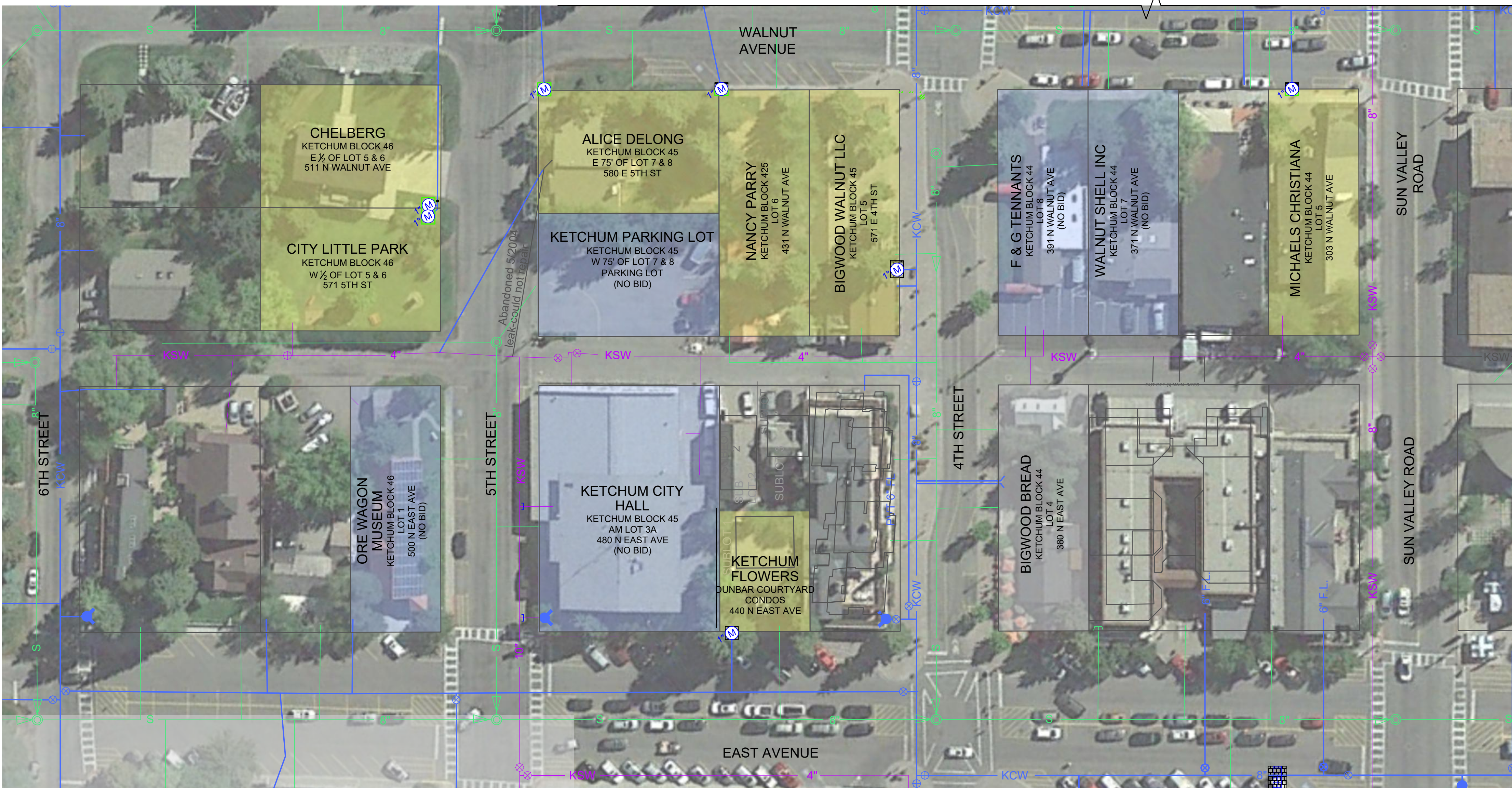
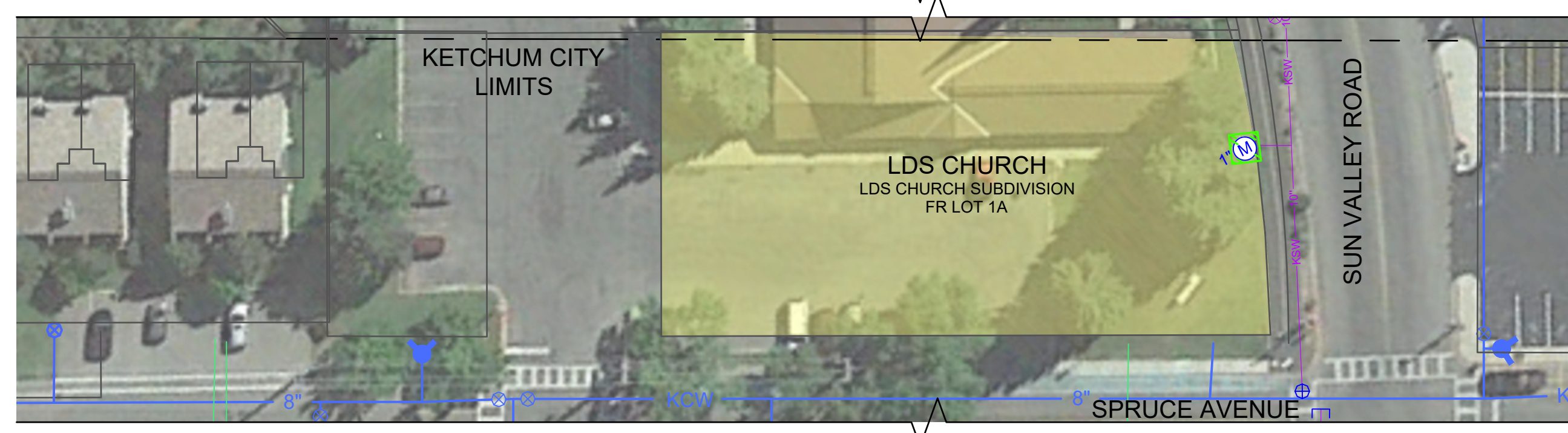
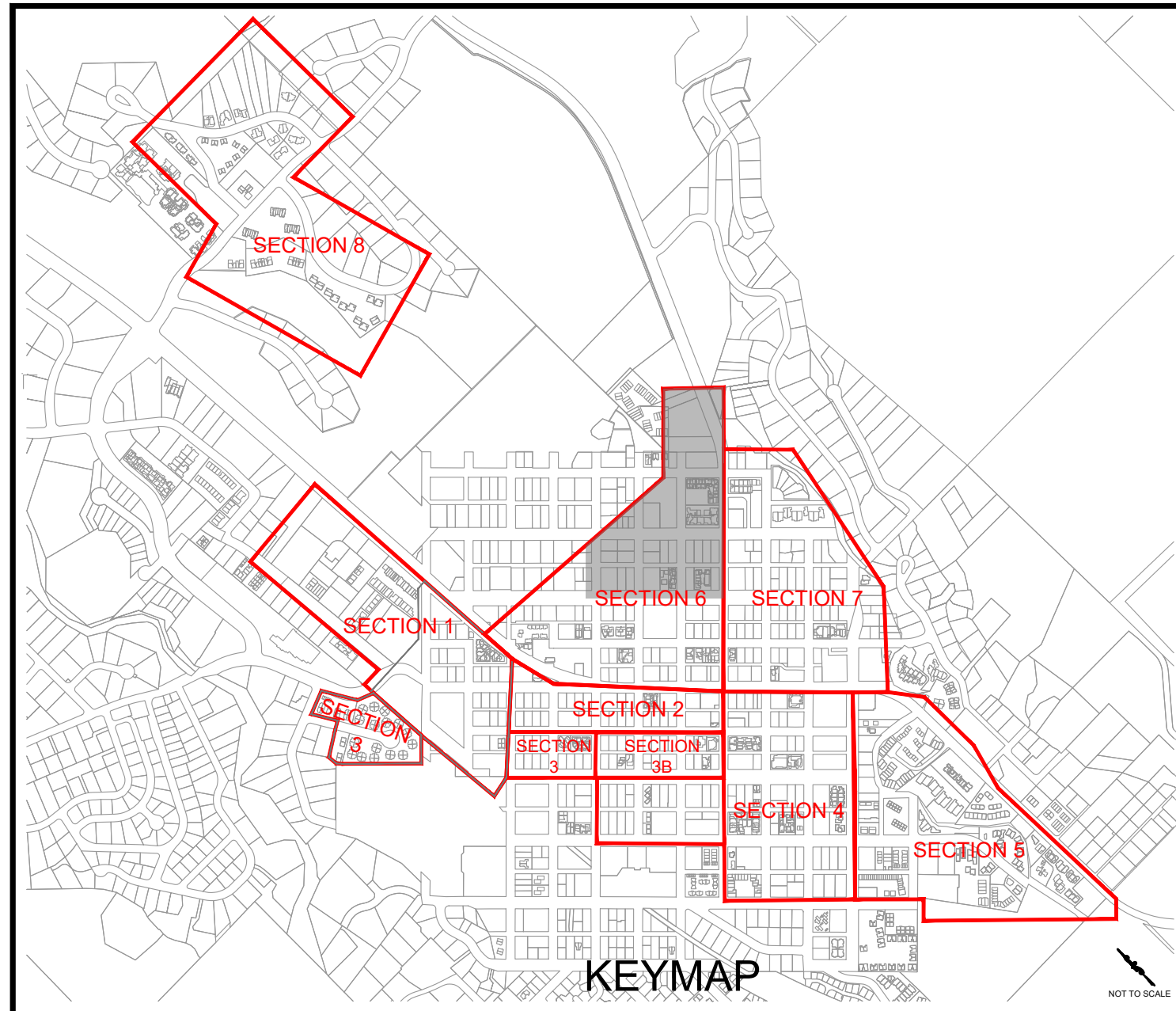
SKS CHECKED BY

GALENA ENGINEERING, INC.
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83433
(208) 788-1705
email galena@galena-engineering.com

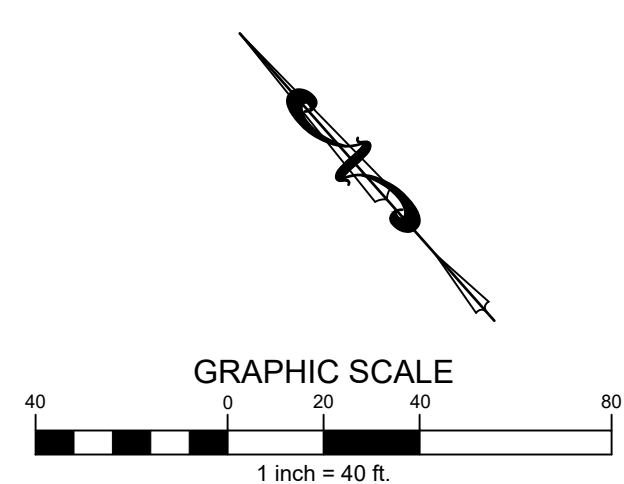
PURPOSE: ISSUE FOR BID (02/05/21)

NO	DATE	BY	REVISIONS

C16



- LEGEND:**
- K.S.L. PROPERTY CONVERTED TO K.C.W.
 - K.S.L. PROPERTY TO BE CONVERTED PRIVATELY (NO BID REQUIRED)
 - K.S.L. PROPERTY TO BE CONVERTED
 - KCW EXISTING K.C. WATER MAIN
 - EXISTING K.C. WATER SERVICE
 - PROPOSED K.C. WATER SERVICE
 - PROPOSED BORED SERVICE LINE
 - PROPOSED EXCAVATED SERVICE LINE
 - KSW EXISTING K.S.L. WATER MAIN
 - EXISTING K.S.L. WATER SERVICE
 - ABANDONED K.S.L. WATER MAIN/ SERVICE
 - EXISTING FIRE HYDRANT
 - EXISTING WATER VALVE
 - ⊗ PROPOSED EXTERIOR WATER METER WITH VAULT
 - ⊗ PROPOSED INTERIOR WATER METER
 - ⊗ PROPOSED MULTI-WATER METER WITH PRECAST CONCRETE VAULT
 - S EXISTING SEWER MAIN
 - PROPOSED ASPHALT REPAIR
 - PROPOSED CONCRETE SIDEWALK REPAIR
 - PROPOSED LANDSCAPE REPAIR



**BID SET
NOT FOR CONSTRUCTION**

REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any Project or extensions of this Project except by agreement in writing with Galena Engineering, Inc.

**KETCHUM SPRING WATER LINE CONVERSION
SECTION 6 SOUTHEAST**

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR THE CITY OF KETCHUM

ORIGINAL SIGNED BY
SAMANTHA STAHLNECKER
DATE ORIGINAL SIGNED:
02/05/2021

PROFESSIONAL ENGINEER
LICENSED
17618
STATE OF IDAHO
SAMANTHA STAHLNECKER

ORIGINAL ON FILE AT
OFFICE OF GALENA
ENGINEERING
(HAILEY, ID)

SKS
DESIGNED BY
FRM
DRAWN BY
SKS
CHECKED BY

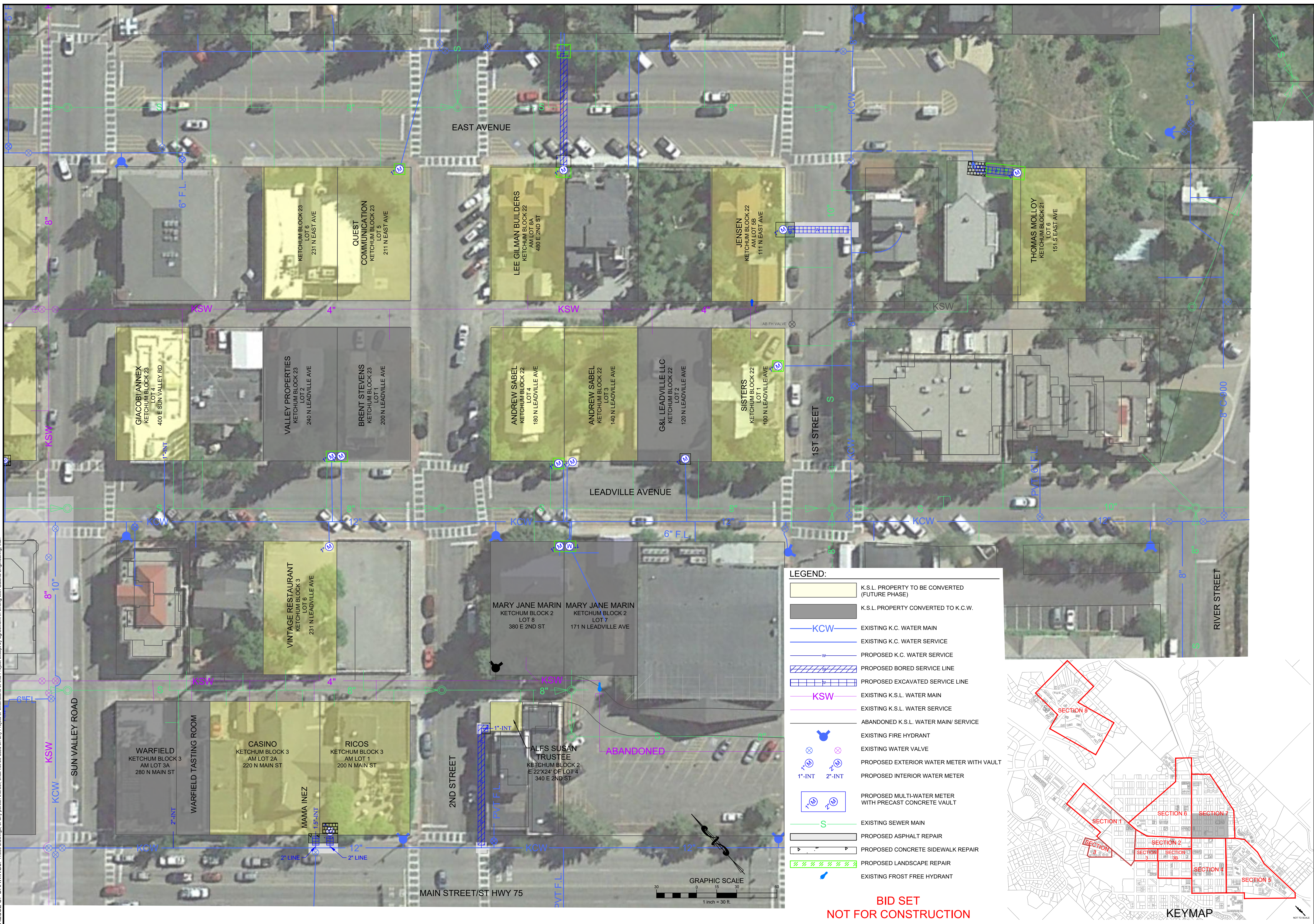
**GALENA
ENGINEERING, INC.**
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83433
(208) 788-1705
email: galena@galena-engineering.com

PURPOSE: ISSUE FOR BID (02/05/21)

NO.	DATE	BY	REVISIONS

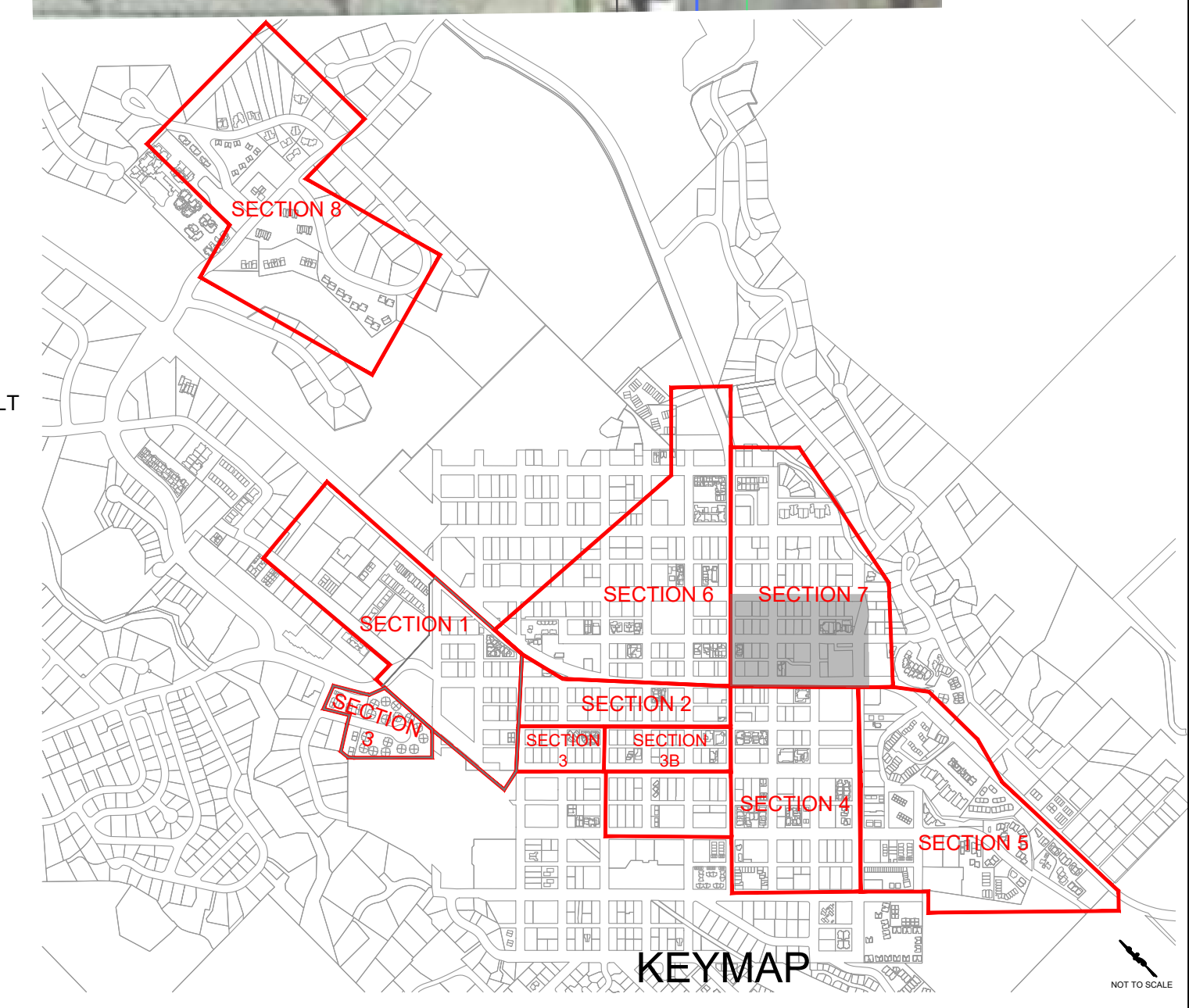
C17

REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any project or extensions of this project except by agreement with Galena Engineering, Inc.



LEGEND:

- K.S.L. PROPERTY TO BE CONVERTED (FUTURE PHASE)
- K.S.L. PROPERTY CONVERTED TO K.C.W.
- EXISTING K.C. WATER MAIN
- EXISTING K.C. WATER SERVICE
- PROPOSED K.C. WATER SERVICE
- PROPOSED BORED SERVICE LINE
- PROPOSED EXCAVATED SERVICE LINE
- EXISTING K.S.L. WATER MAIN
- EXISTING K.S.L. WATER SERVICE
- ABANDONED K.S.L. WATER MAIN/ SERVICE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED EXTERIOR WATER METER WITH VAULT
- PROPOSED INTERIOR WATER METER
- PROPOSED MULTI-WATER METER WITH PRECAST CONCRETE VAULT
- EXISTING SEWER MAIN
- PROPOSED ASPHALT REPAIR
- PROPOSED CONCRETE SIDEWALK REPAIR
- PROPOSED LANDSCAPE REPAIR
- EXISTING FROST FREE HYDRANT



**BID SET
NOT FOR CONSTRUCTION**

**KETCHUM SPRING WATER LINE CONVERSION
SECTION 7 WEST - BID ALT. #2**

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR THE CITY OF KETCHUM

PROJECT INFORMATION
PROJECT: 1318-167ketch_springline2/Construction/1318-167_SPRING LINE MASTER PLAN.dwg 02/05/21 10:15:10 AM

ORIGINAL SIGNED BY SAMANTHA STAHLNECKER
DATE ORIGINAL SIGNED: 02/05/2021

**PROFESSIONAL ENGINEER
LICENSED
STATE OF IDAHO
1768
SAMANTHA STAHLNECKER**

ORIGINAL ON FILE AT OFFICE OF GALENA ENGINEERING (HAILEY, ID)

SKS DESIGNED BY _____
FRM DRAWN BY _____
SKS CHECKED BY _____

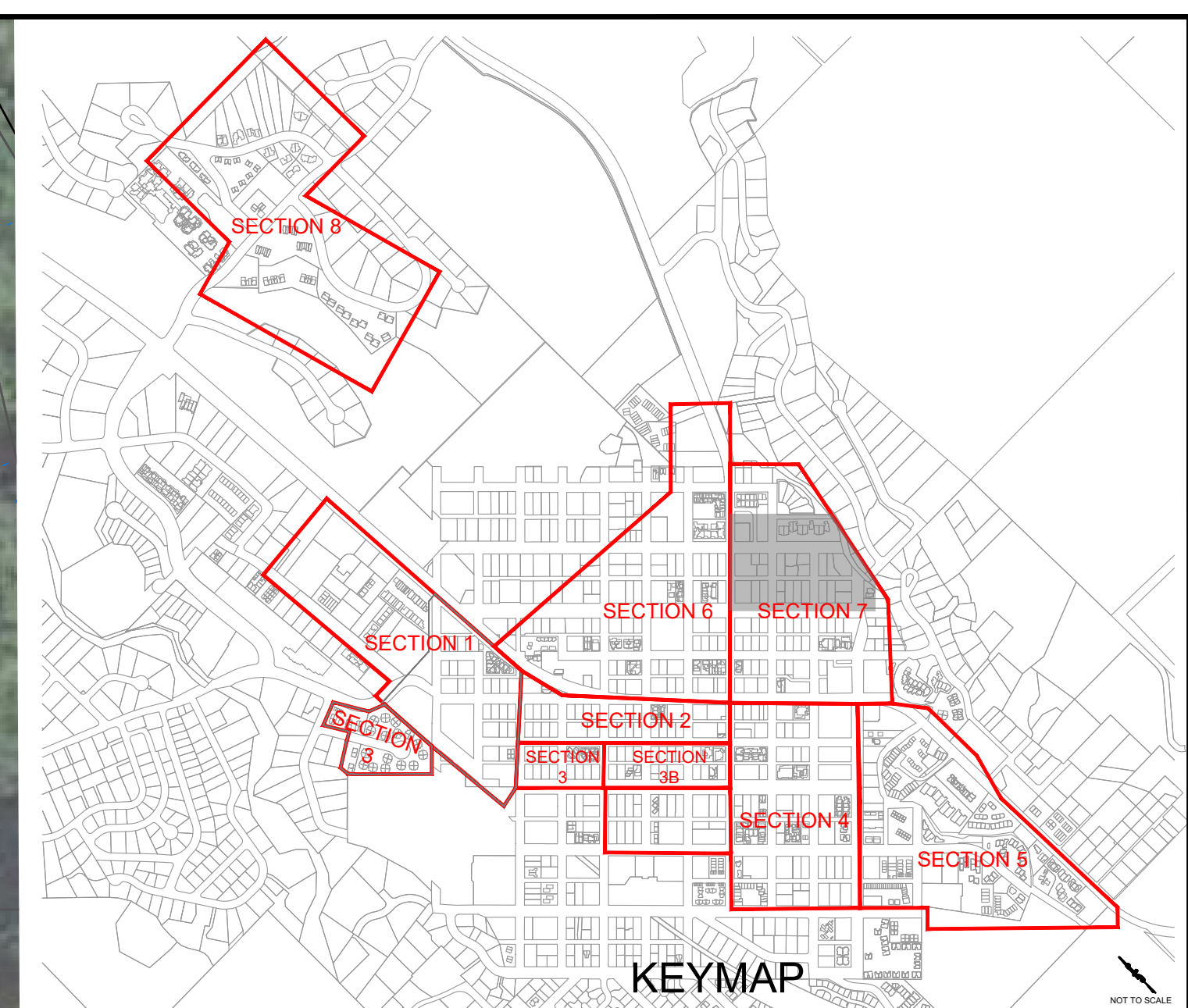
GALENA ENGINEERING, INC.
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83433
(208) 788-1705
email: galena@galena-engineering.com

NO.	DATE	BY	REVISIONS

PURPOSE: ISSUE FOR BID (02/05/21)

C19

REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any Project or extensions of this Project except by agreement with Galena Engineering, Inc.



LEGEND:

	K.S.L. PROPERTY TO BE CONVERTED (FUTURE PHASE)
	K.S.L. PROPERTY CONVERTED TO K.C.W.
	EXISTING K.C. WATER MAIN
	EXISTING K.C. WATER SERVICE
	PROPOSED K.C. WATER SERVICE
	PROPOSED BORED SERVICE LINE
	PROPOSED EXCAVATED SERVICE LINE
	EXISTING K.S.L. WATER MAIN
	EXISTING K.S.L. WATER SERVICE
	ABANDONED K.S.L. WATER MAIN/ SERVICE
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	PROPOSED EXTERIOR WATER METER WITH VAULT
	PROPOSED INTERIOR WATER METER
	PROPOSED MULTI-WATER METER WITH PRECAST CONCRETE VAULT
	EXISTING SEWER MAIN
	PROPOSED ASPHALT REPAIR
	PROPOSED CONCRETE SIDEWALK REPAIR
	PROPOSED LANDSCAPE REPAIR

KETCHUM SPRING WATER LINE CONVERSION
SECTION 7 EAST

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR THE CITY OF KETCHUM

PROJECT INFORMATION
P:\askaprog1318-187\ketch_spring\dwg\Construction\1318-187_SPRING LINE MASTER PLAN.dwg 02/05/2021 10:15:10 AM

ORIGINAL SIGNED BY SAMANTHA STAHLNECKER
DATE ORIGINAL SIGNED: 02/05/2021

PROFESSIONAL ENGINEER
LICENSED
17618
STATE OF IDAHO
SAMANTHA STAHLNECKER

ORIGINAL ON FILE AT OFFICE OF GALENA ENGINEERING (HAILEY, ID)

SKS DESIGNED BY _____
FRM DRAWN BY _____
SKS CHECKED BY _____

GALENA ENGINEERING, INC.
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83433
(208) 788-1705
email galena@galena-engineering.com

NO.	DATE	BY	REVISIONS

PURPOSE: ISSUE FOR BID (02/05/21)

BID SET
NOT FOR CONSTRUCTION

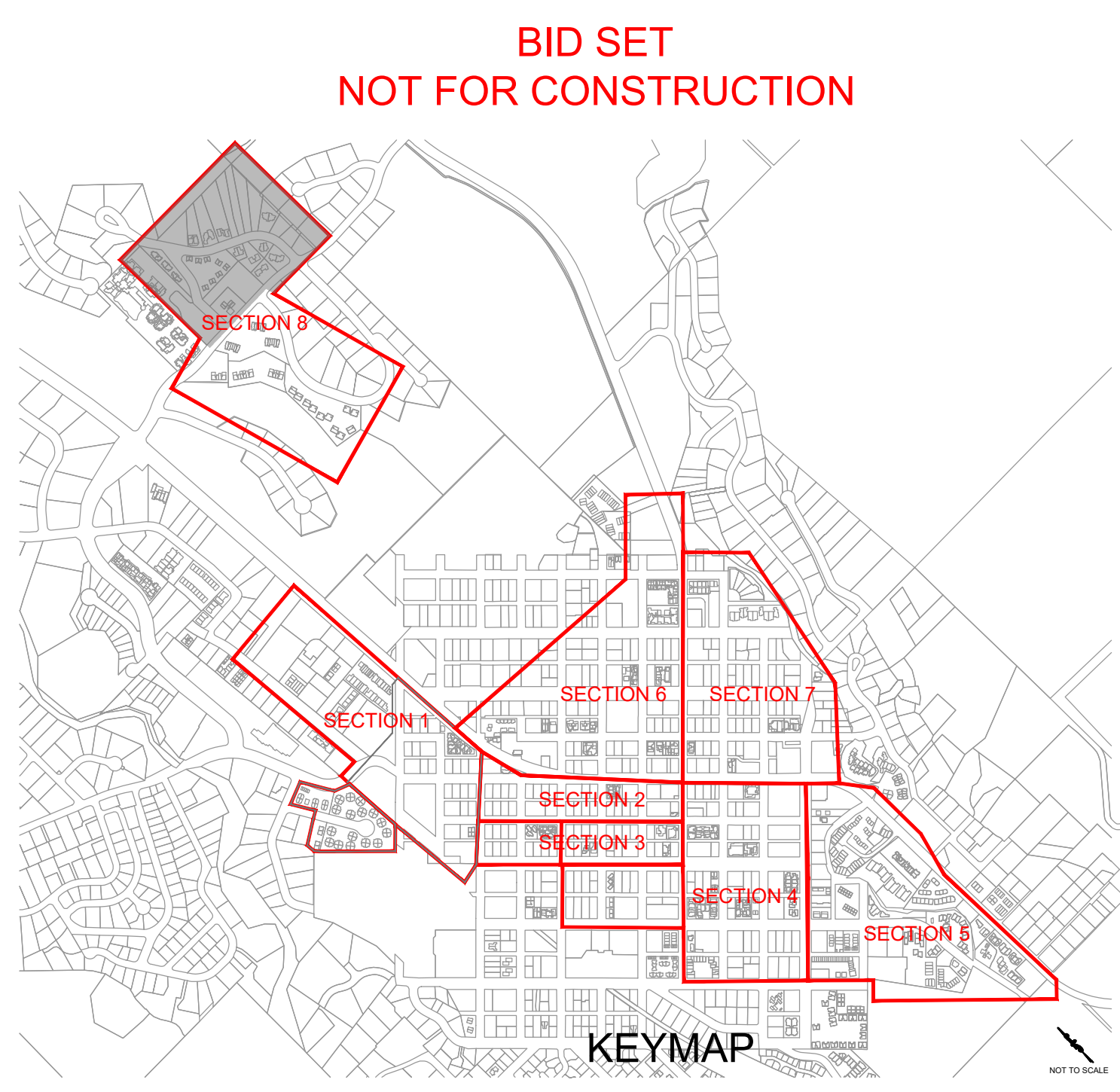
GRAPHIC SCALE
1 inch = 30 ft.

C20

REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any Project or extensions of this Project except by agreement in writing with Galena Engineering, Inc.



- LEGEND:**
- K.S.L. PROPERTY TO BE CONVERTED
 - EXISTING K.C. WATER MAIN
 - EXISTING K.C. WATER SERVICE
 - PROPOSED K.C. WATER SERVICE
 - PROPOSED BORED SERVICE LINE
 - PROPOSED EXCAVATED SERVICE LINE
 - EXISTING K.S.L. WATER MAIN
 - EXISTING K.S.L. WATER SERVICE
 - ABANDONED K.S.L. WATER MAIN/ SERVICE
 - EXISTING FIRE HYDRANT
 - EXISTING WATER VALVE
 - PROPOSED WATER METER WITH VAULT
 - PROPOSED INTERIOR WATER METER
 - PROPOSED 6" METER WITH PRECAST CONCRETE VAULT
 - EXISTING SEWER MAIN
 - PROPOSED ASPHALT REPAIR
 - PROPOSED CONCRETE SIDEWALK REPAIR
 - PROPOSED LANDSCAPE REPAIR (SS-5)



**KETCHUM SPRING WATER LINE CONVERSION
SECTION 8 NORTH**

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
PREPARED FOR THE CITY OF KETCHUM

ORIGINAL SIGNED BY
SAMANTHA STAHLNECKER
DATE ORIGINAL SIGNED:
02/05/2021

ORIGINAL ON FILE AT
OFFICE OF GALENA
ENGINEERING
(HAILEY, ID)

SKS
DESIGNED BY
FRM
DRAWN BY
SKS
CHECKED BY

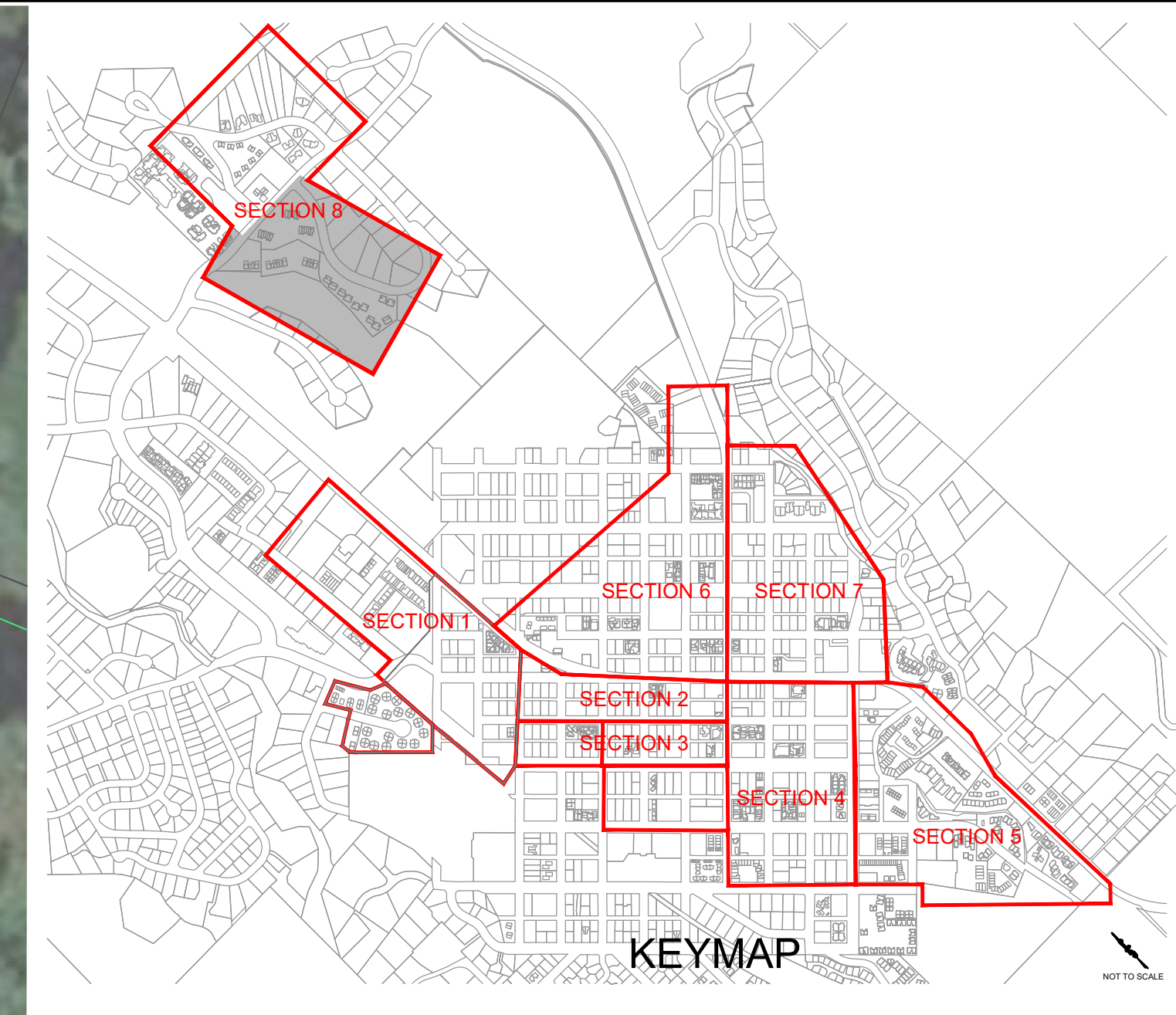
GALENA
ENGINEERING, INC.
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83333
(208) 788-1705
email galena@galena-engineering.com

PURPOSE: ISSUE FOR BID (02/05/21)

NO.	DATE	BY	REVISIONS

C21

REUSE OF DRAWINGS: These drawings, or any portion thereof, shall not be used on any project or extensions of this project except by agreement in writing with Galena Engineering, Inc.



LEGEND:

	K.S.L. PROPERTY TO BE CONVERTED
	EXISTING K.C. WATER MAIN
	EXISTING K.C. WATER SERVICE
	PROPOSED K.C. WATER SERVICE
	PROPOSED BORED SERVICE LINE
	PROPOSED EXCAVATED SERVICE LINE
	EXISTING K.S.L. WATER MAIN
	EXISTING K.S.L. WATER SERVICE
	ABANDONED K.S.L. WATER MAIN/ SERVICE
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	PROPOSED WATER METER WITH VAULT
	PROPOSED INTERIOR WATER METER
	PROPOSED 6" METER WITH PRECAST CONCRETE VAULT
	EXISTING SEWER MAIN
	PROPOSED ASPHALT REPAIR
	PROPOSED CONCRETE SIDEWALK REPAIR
	PROPOSED LANDSCAPE REPAIR (SS-5)

**BID SET
NOT FOR CONSTRUCTION**

**KETCHUM SPRING WATER LINE CONVERSION
SECTION 8 SOUTH**
 LOCATED WITHIN SECTION 13, T.4 N., R.17 E., & SECTION 18, T.4 N., R. 18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO
 PREPARED FOR THE CITY OF KETCHUM

ORIGINAL SIGNED BY
 SAMANTHA STAHLNECKER
 DATE ORIGINAL SIGNED:
 02/05/2021

PROFESSIONAL ENGINEER
 LICENSED
 17618
 STATE OF IDAHO
 SAMANTHA STAHLNECKER

ORIGINAL ON FILE AT
 OFFICE OF GALENA
 ENGINEERING
 (HAILEY, ID)

SKS
 DESIGNED BY
 FRM
 DRAWN BY
 SKS
 CHECKED BY

**GALENA
ENGINEERING, INC.**
 Civil Engineers & Land Surveyors
 317 N. River Street
 Hailey, Idaho 83333
 (208) 788-1705
 email: galena@galena-engineering.com

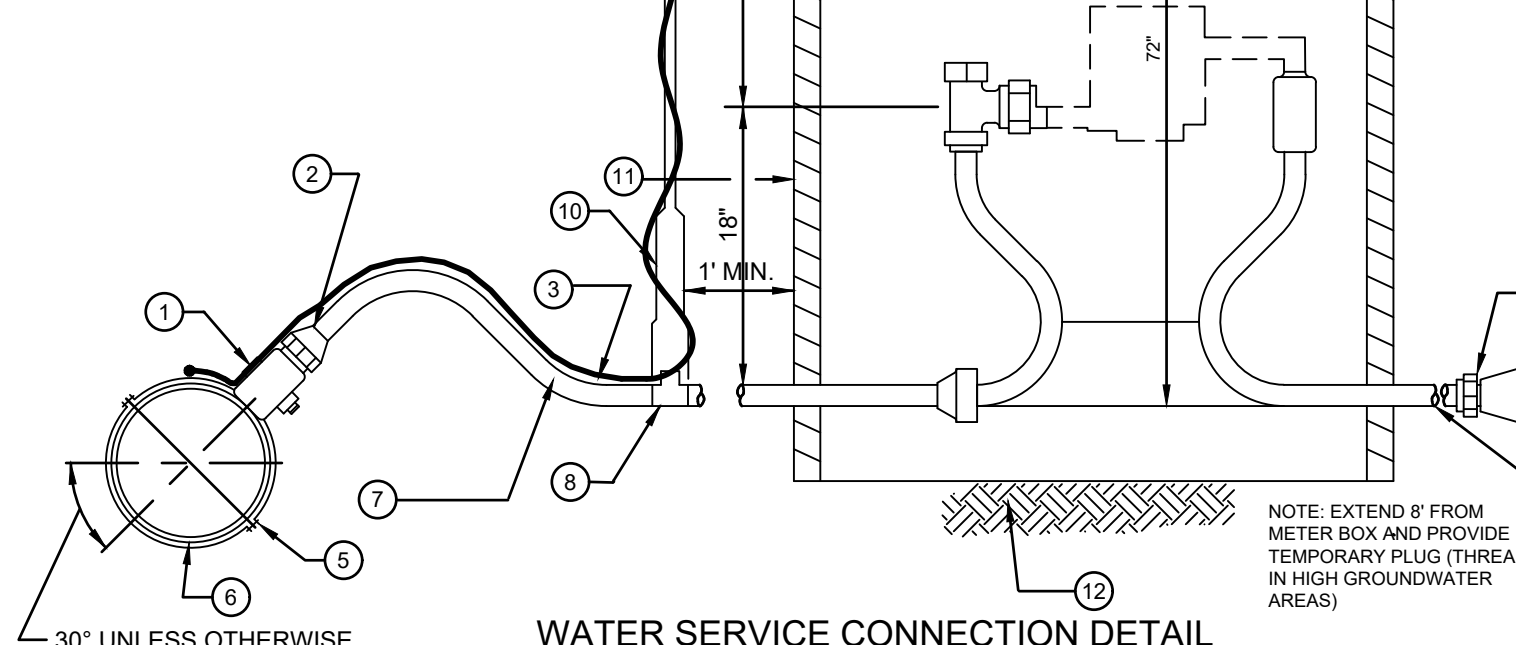
PURPOSE: ISSUE FOR BID (02/05/21)

NO.	DATE	BY	REVISIONS

C22

NOTES:

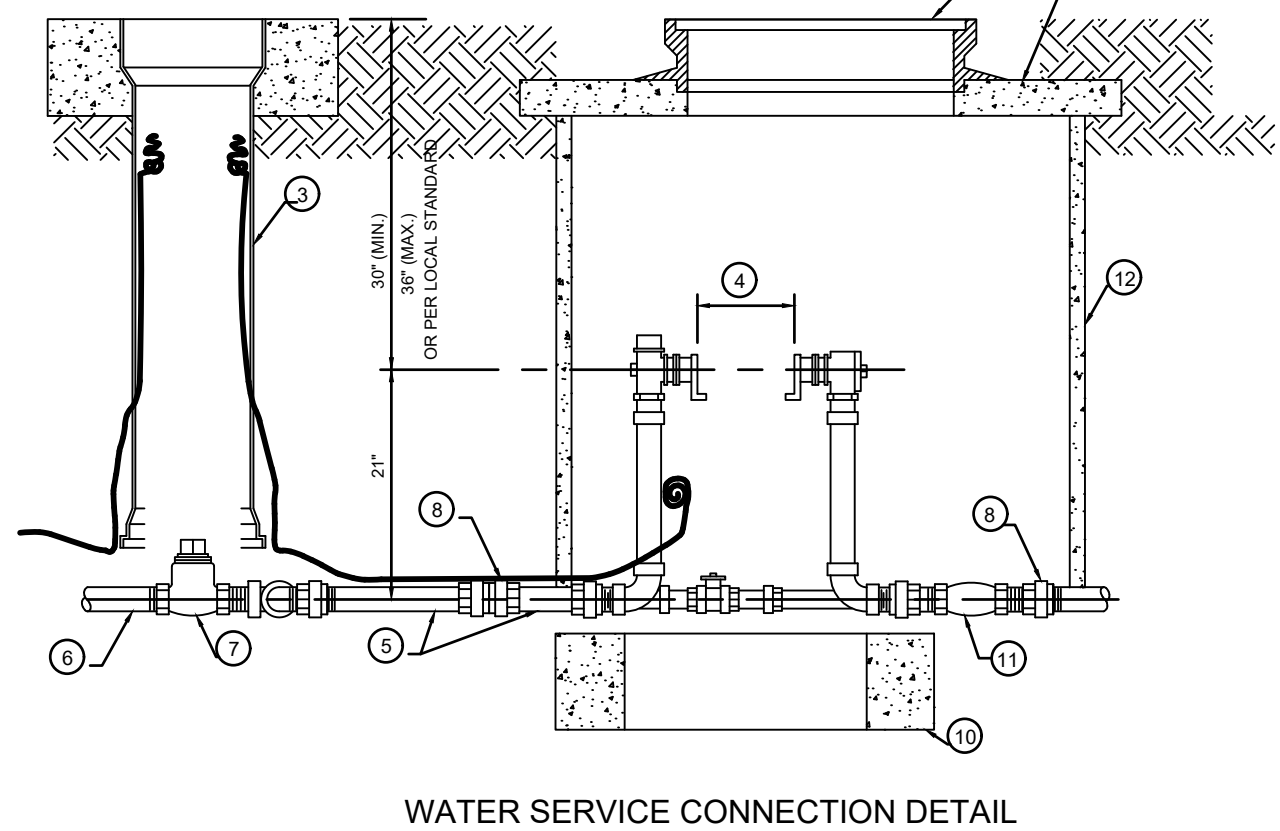
- 1 ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS.
- 2 NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED.
- 3 SERVICE PIPE: ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE PIPE (SD-4) CLASS 200 IN IRON PIPE SIZE (DRISCO PIPE 8000 ULTRA LINE) 1".
- 4 SADDLE COUPLINGS: USED FOR CONNECTION OF ALL SERVICE LINES TO P.V.C. MAIN. SERVICE SADDLES: EPOXY COATED STEEL WITH STAINLESS STEEL BAND AND MUELLER THREADS, TYPE IPS.
- 5 NO SERVICE CONNECTIONS WITHIN 18 INCHES OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF 18 INCHES OR 2.5X PIPE Ø. MAXIMUM TWO (2) SERVICE CONNECTIONS PER STICK OF PIPE.
- 6 ELEVATION SET OF METER LID PER LOCAL REQUIREMENTS.



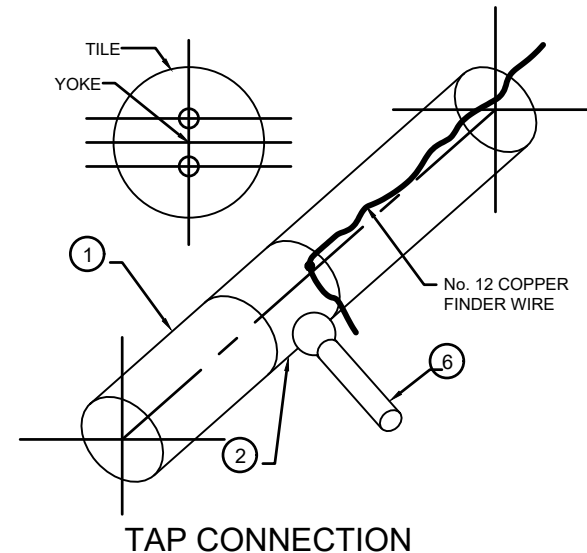
LEGEND

- 1 CORP STOP WITH COMPRESSION COUPLING FORD MODEL F-1102 OR APPROVED EQUAL.
- 2 MUELLER H-15072.
- 3 NO. 12 COPPER FINDER WIRE. SEE SD-514 FOR SPLICING.
- 4 MUELLER 18" DIA OPENING LID OR APPROVED EQUAL.
- 5 2" DIA HOLE IN LID FOR RADIO READ UNIT. LIDS AND FRAMES LOCATED IN PAVED OR GRAVEL AREAS WHICH WILL RECEIVE VEHICULAR TRAFFIC SHALL BE #20 RATED. DAL SUPPLY D4016 RING WITH SOLID LID OR APPROVED EQUAL.
- 6 STAINLESS STEEL SADDLE.
- 7 WATER MAIN.
- 8 1" SERVICE LINE, 200 PSI POLY PIPE WITH INSERTS (TYP.) NO SPLICING IS ALLOWED.
- 9 FORD MODEL B-111 RESILIENT SEAT CURB BALL VALVE OR APPROVED EQUAL.
- 10 DOUBLE PURPOSE COUPLING.
- 11 STANDARD KETCHUM STYLE VALVE BOX WITH ERIE STYLE LID AND ATTACHED ROD.
- 12 NO. 12 COPPER FINDER WIRE COIL, METER VAULT OR APPROVED EQUAL NOTCH FOR SERVICE LATERALS.
- 13 FIRM UNDISTURBED EARTH (SET TILE ON 2" X 2" DIAMETER PRECAST CONCRETE BLOCK IF OVER EXCAVATION OCCURS).
- 14 PROVIDE TEMPORARY PLUG (THREADED IN HIGH WATER AREAS).

1 WATER SERVICE CONNECTION (1")
N.T.S.



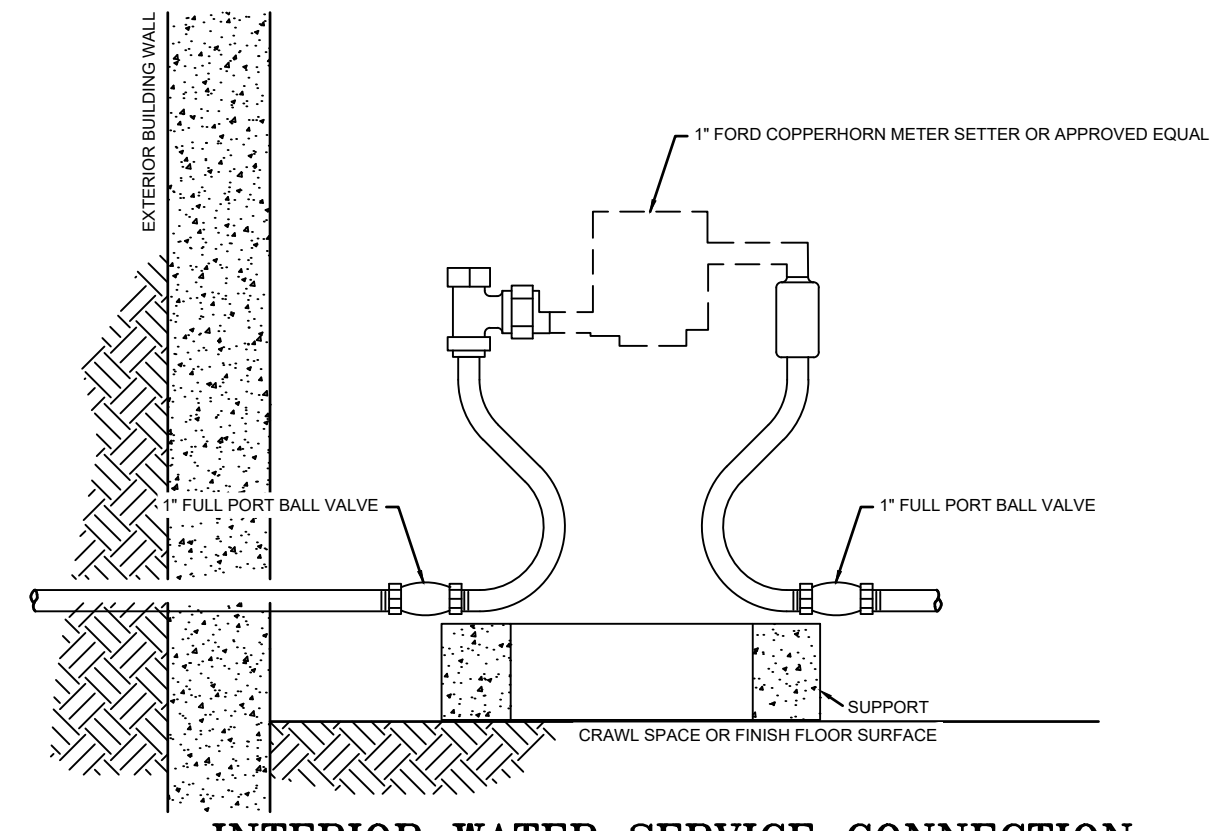
2 WATER SERVICE CONNECTION (1-1/2", 2", 3", 4" & 6")
N.T.S.



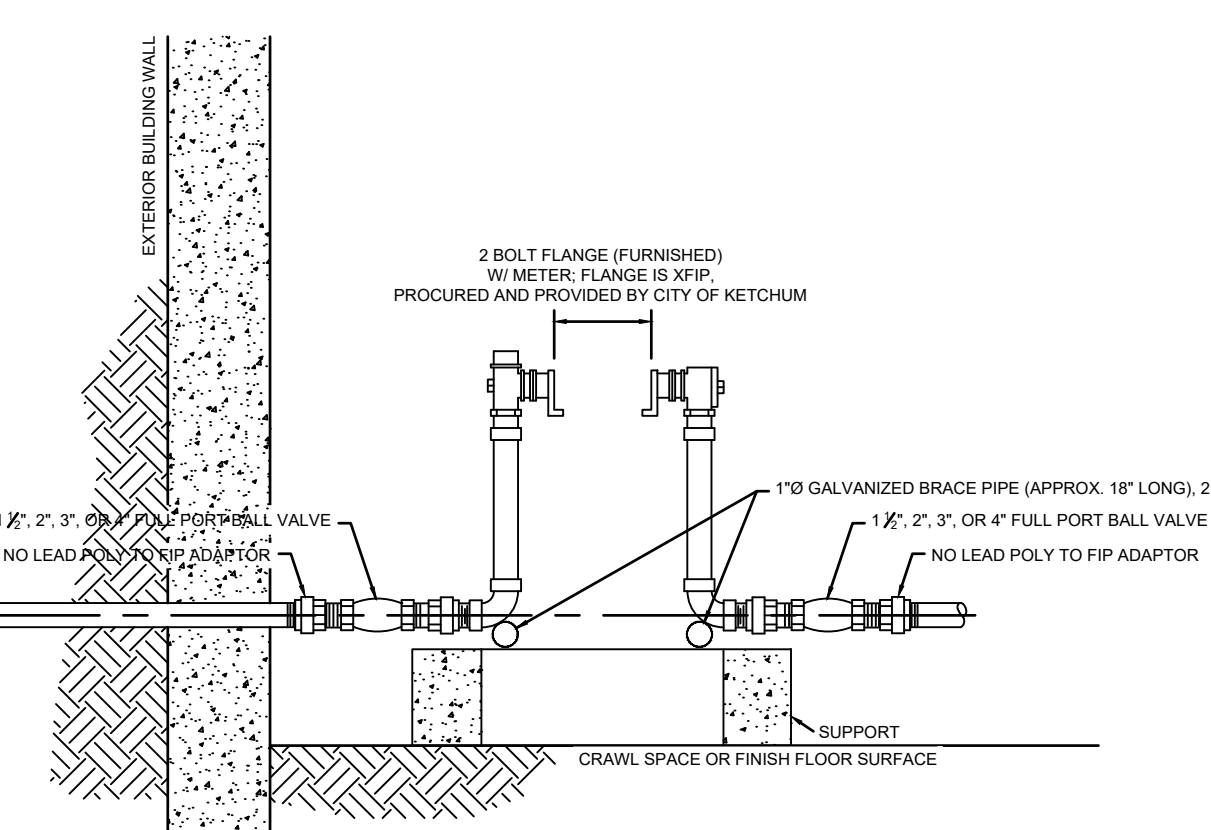
NOTES:

- A ALL PRODUCTS AS NOTED OR APPROVED SUBSTITUTION.
- B THE DIAMETER (1-1/2" OR 2") OF EACH APPURTENANCE SHOWN HEREON IS THE SAME AS THE METER SIZE.
- C NO BY-PASS ALLOWED ON METER SETTERS FOR LANDSCAPE OR PRESSURIZED IRRIGATION SYSTEM.
- D NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS.
- E NO TAPS WITHIN ONE FOOT OF THE PIPE ENDS.

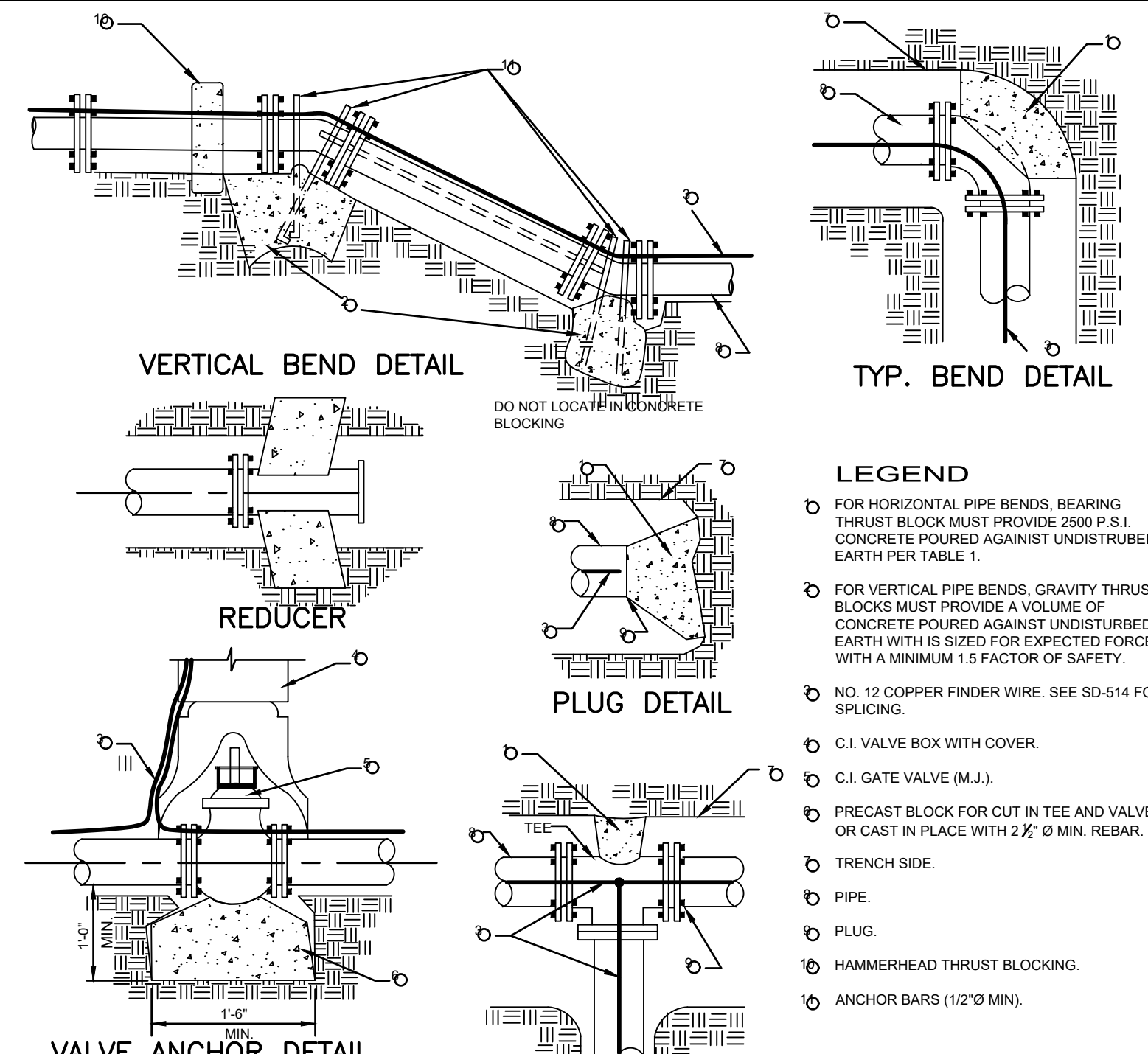
3 WATER SERVICE CONNECTION (1-1/2", 2", 3", 4" & 6")
N.T.S.



4 INTERIOR WATER SERVICE CONNECTION (1")
N.T.S.



5 INTERIOR WATER SERVICE CONNECTION (1-1/2", 2", 3", & 4")
N.T.S.



LEGEND

- 1 FOR HORIZONTAL PIPE BENDS, BEARING THRUST BLOCK MUST PROVIDE 2500 P.S.I. CONCRETE POURED AGAINST UNDISTURBED EARTH PER TABLE 1.
- 2 FOR VERTICAL PIPE BENDS, GRAVITY 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.
- 3 NO. 12 COPPER FINDER WIRE. SEE SD-514 FOR SPLICING.
- 4 C.I. VALVE BOX WITH COVER.
- 5 C.I. GATE VALVE (M.J.).
- 6 PRECAST BLOCK FOR CUT IN TEE AND VALVE OR CAST IN PLACE WITH 2" X 2" MIN. REBAR.
- 7 TRENCH SIDE.
- 8 PIPE.
- 9 HAMMERHEAD THRUST BLOCKING.
- 10 ANCHOR BARS (1/2" X 18").

NOTES:

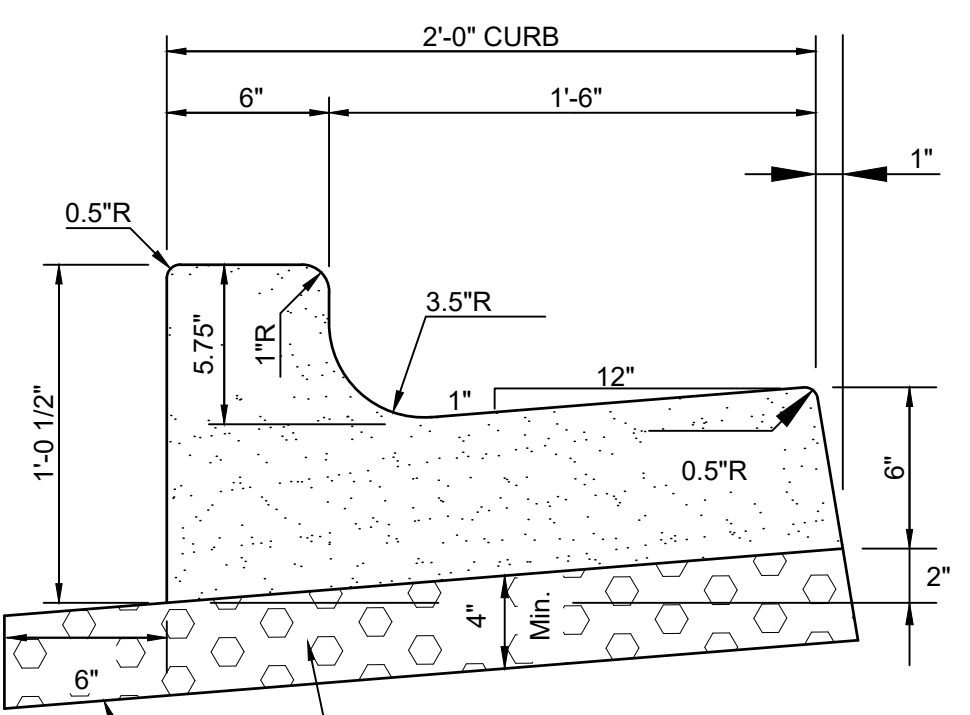
- 1 ANCHOR ALL VALVES CONNECTED TO P.V.C. PIPE AS SHOWN.
- 2 COVER BOLTS AND FLANGES WITH PLASTIC TO PROTECT FROM CONCRETE ADHERENCE DURING CONSTRUCTION OF THRUST BLOCKS.
- 3 SEE CHART FOR MIN THRUST BLOCKS BEARING AREAS.
- 4 ALL CONCRETE TO BE 2500 P.S.I. STRENGTH POURED AGAINST UNDISTURBED EARTH.
-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

SOIL BEARING PRESSURE = 2000 PSF
WORKING PRESSURE RATING = 150 PSF
SAFETY FACTOR = 1.5

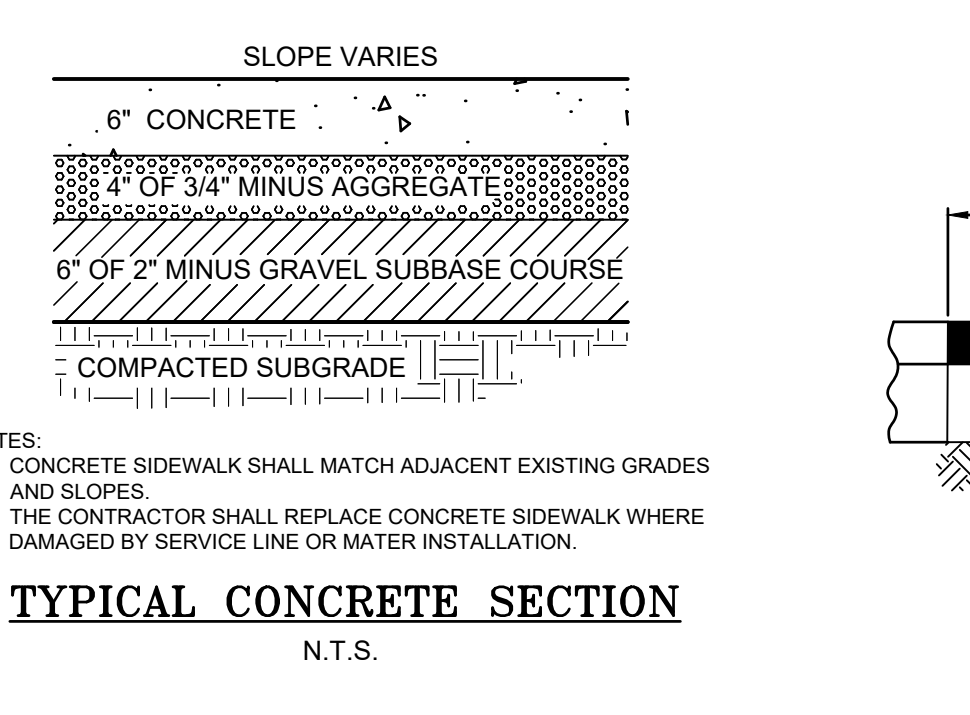
PIPE SIZE	TEE, PLUG OR VALVE	90°	45°	22.5°, 11.25° OR REDUCER
3"	0.8	1.1	0.6	0.3
4"	1.4	2.0	1.1	0.6
6"	3.2	4.5	2.4	1.2
8"	5.7	8.0	4.3	2.2
10"	8.8	12.5	6.8	3.4
12"	12.7	18.0	9.7	5.0
14"	17.3	24.5	13.3	6.8
16"	22.6	32.0	17.3	8.8
18"	28.6	40.5	21.9	11.2

- * MUST BE INCREASED BASED ON DIFFERENCE CONDITIONS (HIGHER WORKING PRESSURE OR LOWER SOIL BEARING STRENGTH).
- ** OR 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 BEARING AREA, WHICHEVER IS GREATER.

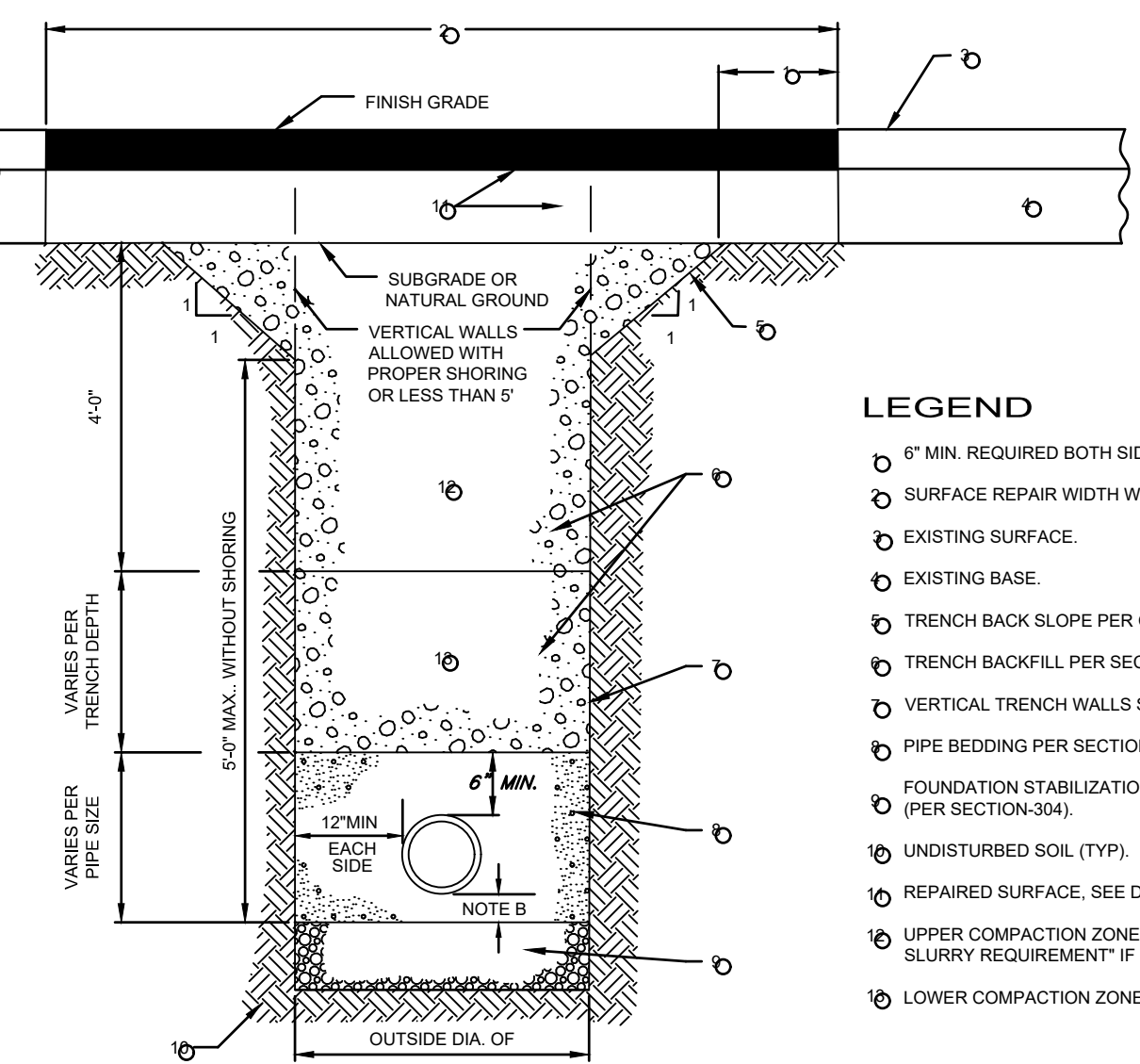
6 THRUST BLOCK AND ANCHOR DETAILS (ISPC SD-403)
N.T.S.



8 TYPICAL ASPHALT SECTION
N.T.S.



9 TYPICAL CONCRETE SECTION
N.T.S.



LEGEND

- 1 6" MIN. REQUIRED BOTH SIDES, SAWCUT REQUIRED.
- 2 SURFACE REPAIR WIDTH WIDTH, 4" MINIMUM.
- 3 EXISTING SURFACE.
- 4 EXISTING BASE.
- 5 TRENCH BACK SLOPE PER O.S.H.A. OR SUITABLE SHORING.
- 6 TRENCH BACKFILL PER SECTION-306.
- 7 VERTICAL TRENCH WALLS SHORING PER O.S.H.A.
- 8 PIPE BEDDING PER SECTION-305 (SEE SD-302).
- 9 FOUNDATION STABILIZATION MAY VARY PER SOIL TYPE AND STABILITY (PER SECTION-304).
- 10 UNDISTURBED SOIL (TYP.).
- 11 REPAIRED SURFACE, SEE DETAILS 3 AND 4.
- 12 UPPER COMPACTION ZONE: SEE "KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT" IF LOCATED WITHIN PUBLIC RIGHT-OF-WAY.
- 13 LOWER COMPACTION ZONE.

NOTES

- 1 TRENCH EXCAVATION PER SECTION-301.
- 2 PIPE BEDDING PER SECTION-305.
- 3 BACKFILL AND COMPACTION PER SECTION-306.
- 4 SURFACE REPAIR AND BASE PER DETAIL 3/C20.

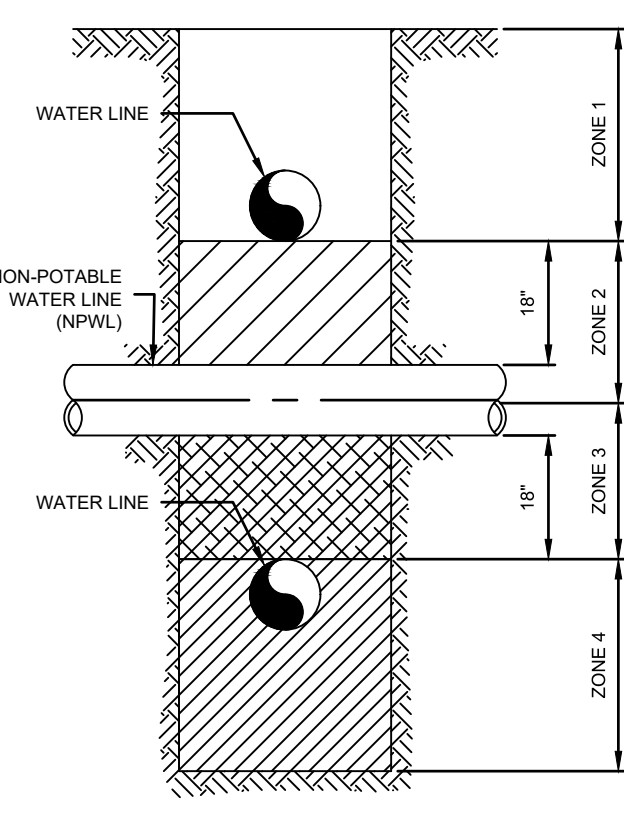
KETCHUM PUBLIC CONSTRUCTION SLURRY REQUIREMENT

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 WITH THE FOLLOWING PROPORTIONS OF MATERIALS:

COARSE AGGREGATE (6" MINUS)
SAND
PORTLAND CEMENT
WATER

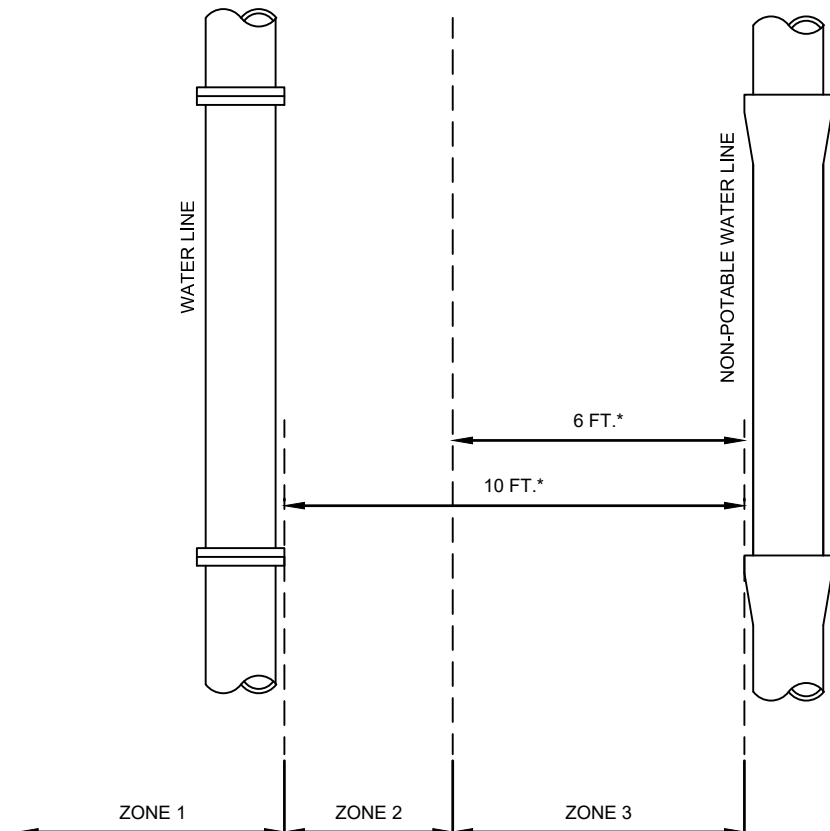
WATER CONTENT IS MAXIMUM AND MAY BE REDUCING DOWNWARD. CARES SHALL BE TAKEN TO ASSURE THAT EXCESS WATER IS NOT PRESENT IN THE MIXING DRUM PRIOR TO CHARGING THE MIXER WITH MATERIALS. THOROUGH MIXING WILL BE REQUIRED PRIOR TO DISCHARGE.

NO COMPACTION, VIBRATION OR FINISHING IS REQUIRED. THE LEAN CONCRETE MIX SHALL BE STRUCK OFF AT OR BELOW THE ELEVATION OF THE PLANT MIX SURFACING WITH A SQUARE-NOSE SHOVEL OR SIMILAR HAND TOOL. THE BACKFILL MIX SHALL BE ALLOWED TO SET FOR A MINIMUM OF 72 HOURS BEFORE THE PERMANENT PLANT MIX SURFACING IS PLACED TO COMPLETE THE TRENCH REPAIR. TEMPORARY PLACEMENT OF ASPHALT COLD MIX SURFACING MAY BE NECESSARY TO ACCOMMODATE TRAFFIC WITHIN THE FIRST 2 HOURS OF BACKFILL PLACEMENT PRIOR TO COMPLETING THE PERMANENT REPAIR.



VERTICAL SEPARATION REQUIREMENTS

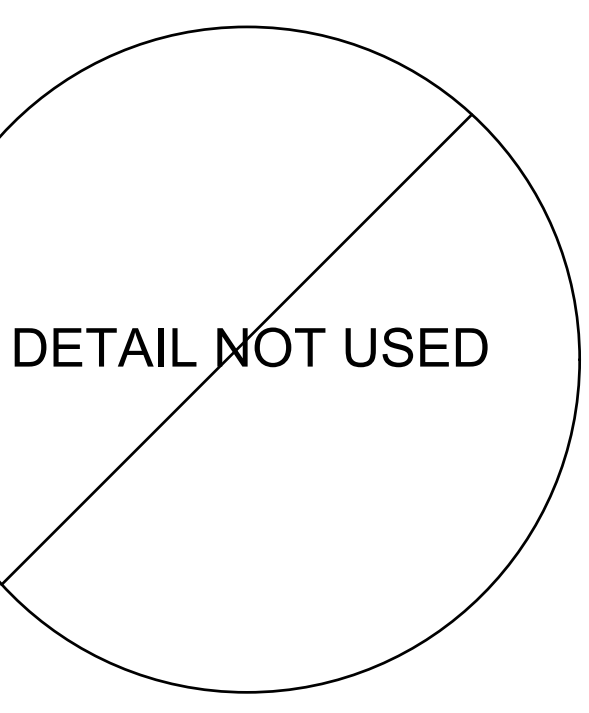
- ZONE 1: A) WATER AND NPWL MUST BE SEPARATED BY AT LEAST 18 INCHES.
- AND B) ONE FULL UNCLUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING.
- ZONE 2: A) ONE FULL UNCLUT LENGTH OF BOTH PWL AND NPWL PIPE MUST BE CENTERED ON 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 DEQ 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.



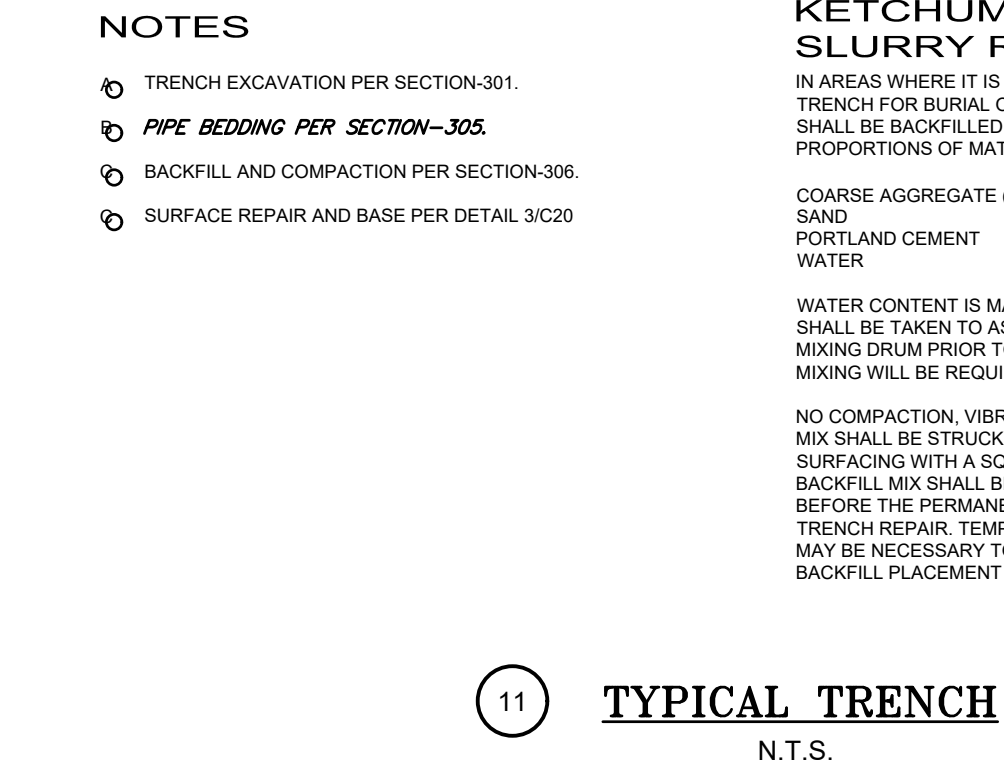
HORIZONTAL SEPARATION REQUIREMENTS

- 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 DEQ.
- ZONE 3: NOT ALLOWED.
- 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 DEQ.

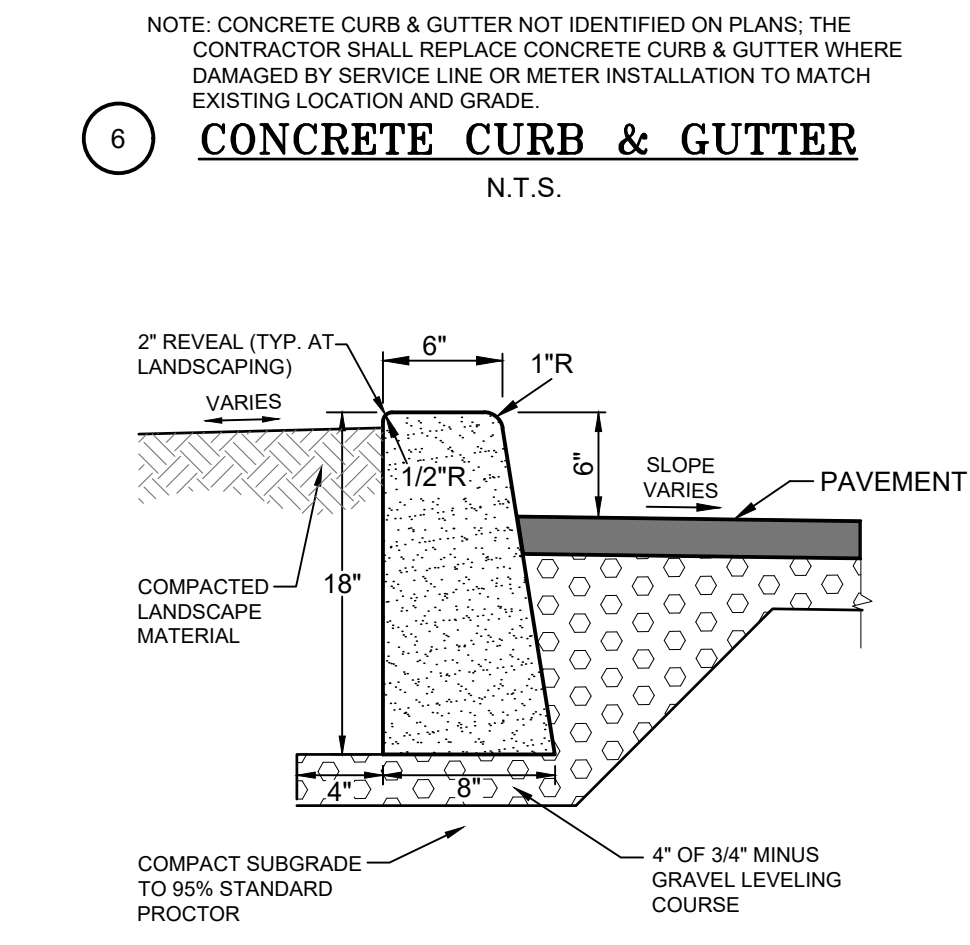
12 NON-POTABLE WATER LINE SEPARATION (ISPC SD-407)
N.T.S.



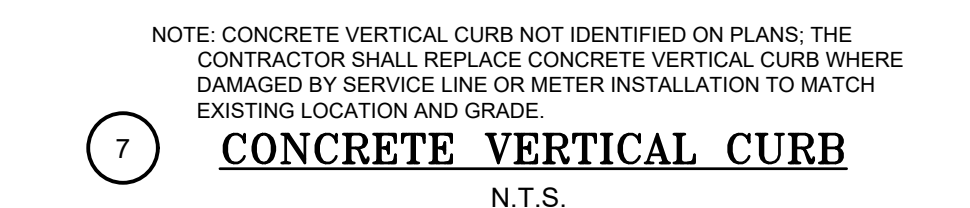
10 NOT USED
N.T.S.



11 TYPICAL TRENCH
N.T.S.



6 CONCRETE CURB & GUTTER
N.T.S.



7 CONCRETE VERTICAL CURB
N.T.S.

KETCHUM SPRING WATER LINE CONVERSION DETAILS

LOCATED WITHIN SECTION 13, T-4 N., R-17 E. & SECTION 18, T-4 N., R-18 E., CITY OF KETCHUM, BLAINE COUNTY, IDAHO

ORIGINAL SIGNED AND SEALED BY SAMANTHA STAHLNECKER DATE ORIGINAL SIGNED: 02/05/2021

PROJECT INFORMATION: P:\askaprog\1318-18\ketch spring\cwg\Construction\1318-18-SPRING LINE MASTER PLAN.dwg 02/09/21 10:15:10 AM

REGISTERED PROFESSIONAL ENGINEER
STATE OF IDAHO
17618
SAMANTHA STAHLNECKER

ORIGINAL ON FILE AT OFFICE OF GALENA ENGINEERING (HAILEY, ID)

SKS DESIGNED BY
FRM DRAWN BY
SKS CHECKED BY

GALENA ENGINEERING, INC.
Civil Engineers & Land Surveyors
317 N. River Street
Hailey, Idaho 83433
(209) 788-1705
email galena@galena-engineering.com

PURPOSE: ISSUE FOR BID (02/05/21)

NO. DATE BY

REVISIONS

BID SET NOT FOR CONSTRUCTION

C23