BackCountry FAMILY DENTAL, PC and STAFF HOUSING

850 BLUE RIVER PARKWAY
RETREAT ON THE BLUE, PARCEL 1
SILVERTHORNE, COLORADO

PROJECT DIRECTORY

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GEOTECHNICAL ENGINEER
TBD

Backcountry Structural Engineering
Engineering for the High Country
Backcountry Structural Engineering
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BACKCOUNTRY FAMILY DENTAL OFFICE + STAFF HOUSING
850 BLUE RIVER PARKWAY, RETREAT ON THE BLUE - PARCEL 1
SILVERTHORNE, COLORADO

TITLE:
COVER SHEET

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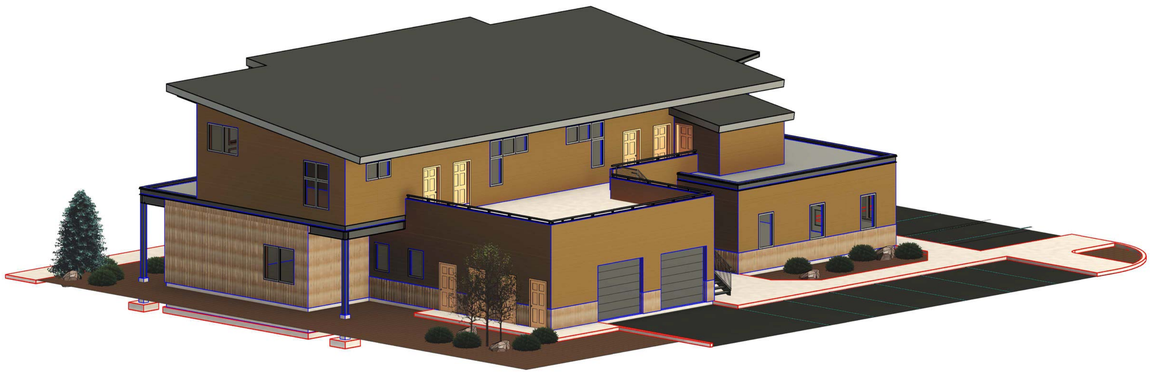
ISSUE	DATE
PLANNING ISSUE	04.14.2021

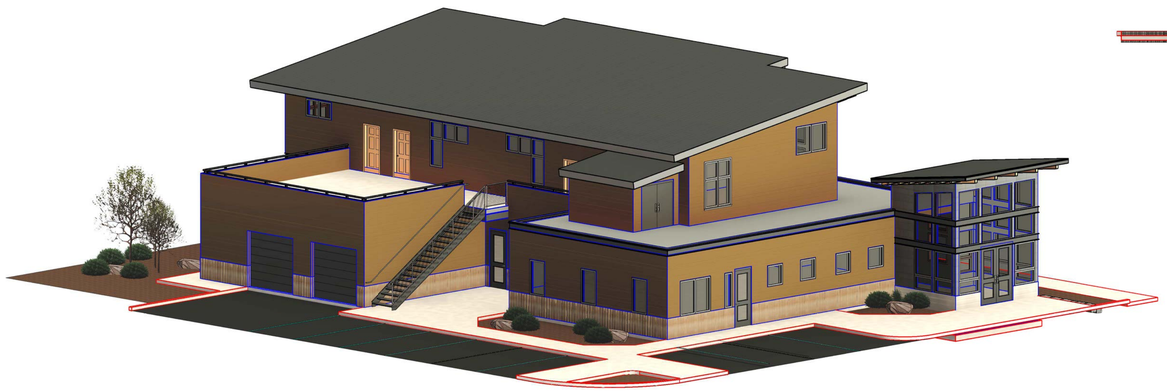
PROJECT NUMBER: A0673

A1.0

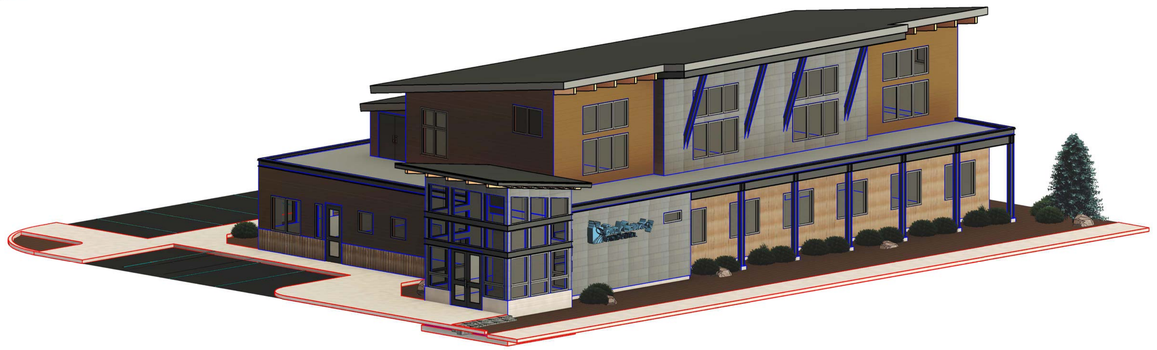
6 SOUTH - WEST ELEVATION



5 SOUTH - EAST ELEVATION

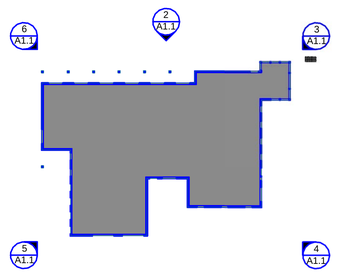


4 NORTH - EAST ELEVATION



3 NORTH - WEST ELEVATION

2 WEST ELEVATION



1 KEY PLAN
1" = 30'-0"

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BACKCOUNTRY FAMILY DENTAL OFFICE + STAFF HOUSING

850 BLUE RIVER PARKWAY, RETREAT ON THE BLUE - PARCEL 1
SILVERTHORNE, COLORADO

TITLE:
3D ELEVATION VIEWS

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ISSUE	DATE
PLANNING ISSUE	04.14.2021

PROJECT NUMBER: A0673

A1.1

Site Data :

Parcel 1 Area : 12,677 sq ft = .291 acres
Parcel 2 Area : 13,197 sq ft = .303 acres

Total Project Area : 25,874 sq ft = .594 acres (+/-)

Planning Zone Design Criteria :

Riverfront Zone District

Lot Coverage : 60% = 15,524 sq ft
Parcel 1 : 7,606 sq ft
Parcel 2 : 7,918 sq ft

Front Building Setback : 50% = 0.0' / 50% = 5.0'
Side Building Setback : 5.0'
River Building Setback : 25.0' from upper bank of Blue River

Maximum Allowable Density : 15 per acre = 9 units
Maximum Allowable Building Height : 35.0'

Lot Coverage Calculations :

Definition : lot coverage means that area of the lot which may be occupied by buildings

Parcel 1 : 5,097 sq ft building on 12,677 sq ft = 40.21 %
Parcel 2 : 0 sq ft building on 13,197 sq ft = 0%

Total Lot Coverage : 5,097 sq ft building on 25,874 sq ft = 19.70%

HOA Design Criteria :

per the approved Fourth Amendment with Exhibits

* Building Height Limit : see building elevations
* Parcel 2 minimum 5,062 sq ft community wide snow storage easement
* Maximum number of housing units = 4
* Maximum net floor area of building = 6,400 square feet

Building Data :

Backcountry Family Dental Office : 3,570 sq ft
Office 4 Rent : 484 sq ft

Mechanical Room 1 : 139 sq ft
Garage : 310 sq ft
Dumpster : 106 sq ft

Unit 201 : 537 sq ft
Unit 202 : 576 sq ft
Unit 203 : 576 sq ft
Unit 204 : 537 sq ft

Mechanical Room 2 : 99 sq ft

Storage 201 : 33 sq ft
Storage 202 : 32 sq ft
Storage 203 : 32 sq ft
Storage 204 : 33 sq ft

New Usable Floor Area : 6,280 sq ft
Building Accessory Floor Area : 784 sq ft

Parking Requirements :

Definition : gross floor area (GFA) means the entire area of a structure measured to exterior walls including basements, lofts and other areas with floors

Gross Floor Area Businesses : 5,162 sq ft
Number of Dwelling Units : 4

Location	Formula	Quantity
Businesses :	1/350 GFA :	15
Dwelling Units :	1.5 per dwelling unit :	6
Visitor :	1 per 5 units :	0
Total Required :		21

Total Provided Parcel 1: 11 (1 tandem)
Total Provided Parcel 2 : 20

Total Provided : 31

Additional : Accessible Requirements

Accessible Parking 1 : 1 (8.0' + 5.0' = 13.0' - Parcel 1)
Accessible Parking 2 : 1 (8.0' + 8.0' = 16.0' - Parcel 1)

Snow Storage :

Definition : 44-6-10.4.o : minimum 25% of total paved surface area

Location	Area of Paving	Snow Storage Required
1 :	28,123 sq ft	7,031 sq ft
2 :	2,574 sq ft	644 sq ft
3 :	541 sq ft	135 sq ft
4 :	636 sq ft	159 sq ft
5 :	5,879 sq ft	1,470 sq ft
Total :	37,753 sq ft	9,439 sq ft

Location	Area of Snow Storage Proposed
A :	844 sq ft
B :	1,166 sq ft
C :	2,209 sq ft
D :	5,219 sq ft (5,062 sq ft req'd per HOA Amendment 4)
E :	813 sq ft
Total :	10,251 sq ft

Landscaping Requirements :

Mixed Use Criteria required 20% of lot area

Lot Area : 25,874 sq ft
Landscaping Area Requirement : 5,175 sq ft = 20% of lot area
Tree Requirement : 2,070 sq ft = 40% of landscaping area)
Shrub Requirement : 518 sq ft = 10% of landscaping area

Tree and Shrub Requirement

Total trees at 1/120 sq ft of 2,070 sq ft : 17 (50% coniferous / 50% deciduous)
Total shrubs at 1/20 sq ft of 518 sq ft : 26

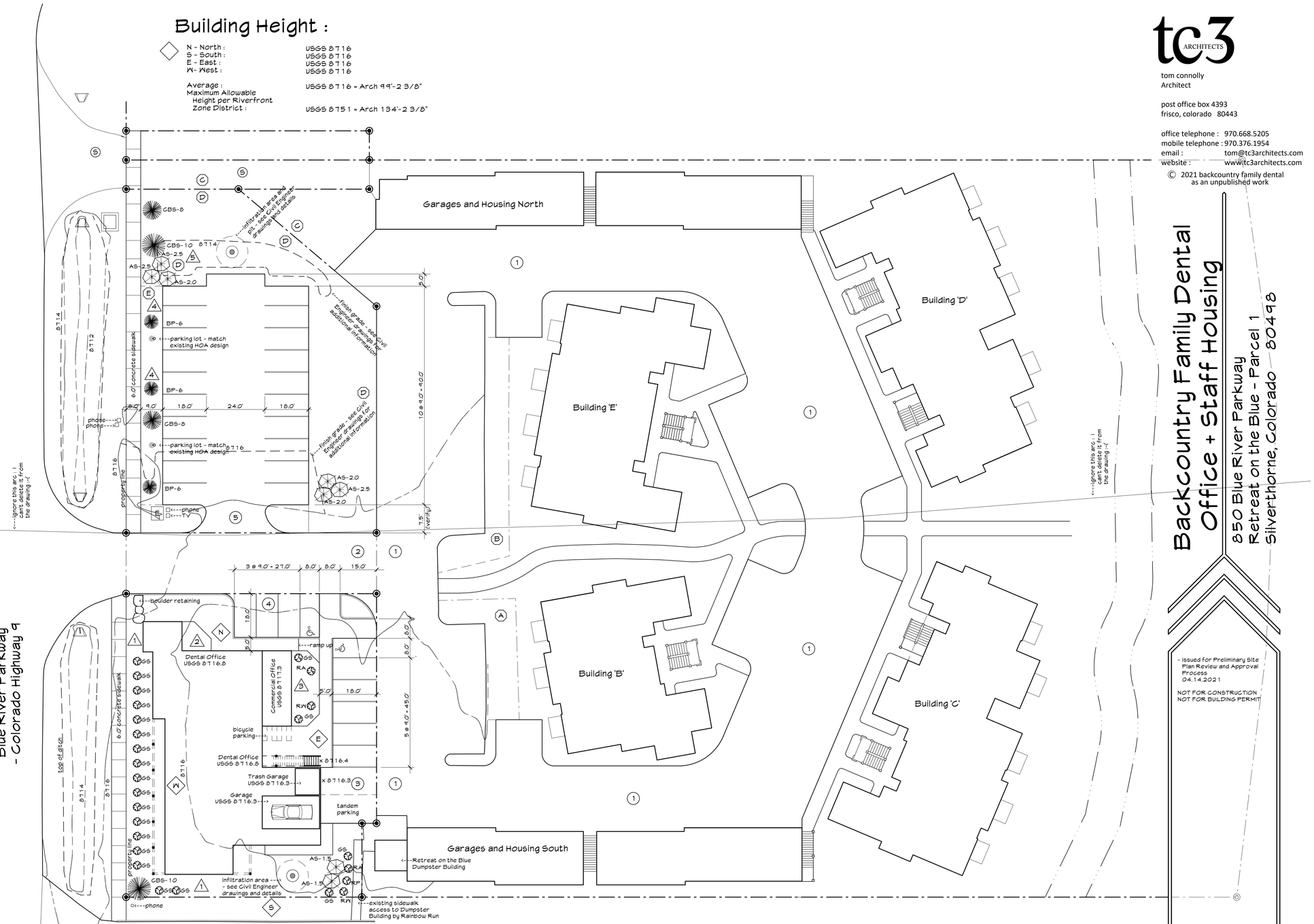
Exceptions : up to 10% of the required number of trees may be substituted for alternative forms of landscaping and decoratvie elements, including benches, picnic tables, gazebos, art forms, sculptures, larger boulders and planeter boxes

Total Exception requested = 2 (10% of 17)
3 large boulders in front of building = 1 tree / picnic table on Public Deck above Garage = 1 tree

Revised total trees required = 15 / 8 deciduous and 7 coniferous trees

Building Height :

N - North :	USGS 8716
S - South :	USGS 8716
E - East :	USGS 8716
W- West :	USGS 8716
Average :	USGS 8716 = Arch 99'-2 3/8"
Maximum Allowable Height per Riverfront Zone District :	USGS 8751 = Arch 134'-2 3/8"



Site Plan

scale : 1" = 20.0'

Landscaping Requirements (continued) :

Size Requirements :

Deciduous Trees = 8 trees
34% @ 2 1/2" caliper = 3
33% @ 2" caliper = 3
33% @ 1 1/2" = 2

Coniferous Trees = 7
34% @ 10.0' height = 2
33% @ 8.0' height = 2
33% @ 6.0' height = 3

Ground Cover :

75% of landscaped area = 3,881 sq ft - living plant material, including but not limited to native or no-mow grasses, wildflowers and other recognized ground covering plant materials

25% of landscaped area = 1,294 sq ft - bark, wood chips, wood shavings, rock, stones or as approved during approval process

Total Required Area = 5,175 sq ft
Total Available Area = 8,519 sq ft

1 :	1,949 sq ft
2 :	120 sq ft
3 :	331 sq ft
4 :	812 sq ft
5 :	5,218 sq ft
Total :	8,430 sq ft

Landscaping Legend

Category	Common Name	Botanical Name	Total Quantity
Coniferous	Colorado Blue Spruce Bristlecone Pine	Picea Pungens	1 @ 10.0' (CBS-10) / 1 @ 8.0' (CBS-8) / 1 @ 6.0' (CBS-6) 1 @ 10.0' (BP-10) / 1 @ 8.0' (BP-8) / 266.0' (BP-6)
Deciduous	Quaking Aspen	Populus Tremuloides	3 @ 2.5" caliper (AS-2.5) / 3 @ 2" caliper (AS-2.0) / 2 @ 1.5" caliper (AS- 1.5)
Shrubberry	Thimbleberry	Rubus Deliciosus	2 (RD) : minimum 1.5' height / 5 gallon container
	Pixwell Gooseberry	Ribes Pixwell	1 (RP) : minimum 1.5" height / 5 gallon container
	Woods Rose	Rosa Woodsii	2 (RW) : minimum 1.5' height / 5 gallon container
	Globe Spruce	Picea Pungens Globosa	21 (GS) : minimum 1.5' height / 5 gallon containers

- Install minimum 3' wide cobble on grade adjacent to foundation : verify/with Owner and per Soils Engineer design
- Drip irrigation, controlled by the use of a timer system is to be used for all plantings. Owner, General Contractor and Landscape Contractor to determine which planting(s) can have a temporary drip system until vegetation is established.

Aspen
Colorado Blue Spruce / Bristlecone Pine
Shrubbery

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Backcountry Family Dental Office + Staff Housing

850 Blue River Parkway
Retreat on the Blue - Parcel 1
Silverthorne, Colorado 80498

- Issued for Preliminary Site Plan Review and Approval Process 04.14.2021

NOT FOR CONSTRUCTION
NOT FOR BUILDING PERMIT

Job No. : 22104
File No. : 22104sp4.vwf
Date : 04.14.2021

Drawn By : tc3
Checked By : tc3

A 1.2

property line - east edge of sidewalk

64'-0" | 27'-6 1/2" | 12'-5 1/2" | 11'-0" | 7'-0"

7'-0" | 4'-0" | 5'-0" | 26'-0"

frontyard building setback

vestibule

reception

property line

16'-0"

Operatory 6 | Operatory 5 | Operatory 4 | Operatory 3 | Operatory 2 | Operatory 1

Reception

Lobby

Vestibule
Arch - 100'-0"
USGS 8716.8

bypass barn door track above

Storage Closet 2

Storage Closet 1

X-Ray Room

Consultation Room

Lab Room

Sterilization Room

Waiting Room

Operatory 7

Operatory 8

Covered Utility Wall

beam / wall above

Office

Break Room

IT Closet

washer | dryer

Laundry Center

Staff Restroom

Patient Restroom

dark sky rated light fixutre

45'-0"

Staff Lockers

Restroom

Office 4 Rent
Arch - 100'-6"
USGS 8717.3

1-hour insul wall

Arch - 99'-6"
USGS 8716.3

Arch - 100'-0"
USGS 8716.8

Storage Unit 4

Storage Unit 3

Storage Unit 2

Storage Unit 1

dark sky rated light fixutre

Mechanical Room

Bicycle Parking

cobble area below stairway

concrete walkway

24'-0"

26'-0"

the Garage

Trash Garage

12 risers @ 7" ea. = 84" up

operatory 7

waiting room

ramp up

vestibule

12'-0"

Arch - 99'-7 1/4"
USGS 8716.4

12'-0" | 32'-0" | 17'-0" | 31'-0" | 12'-0" | 11'-0"

Plan North

Survey North

Main-Lower Level Floor Plan

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

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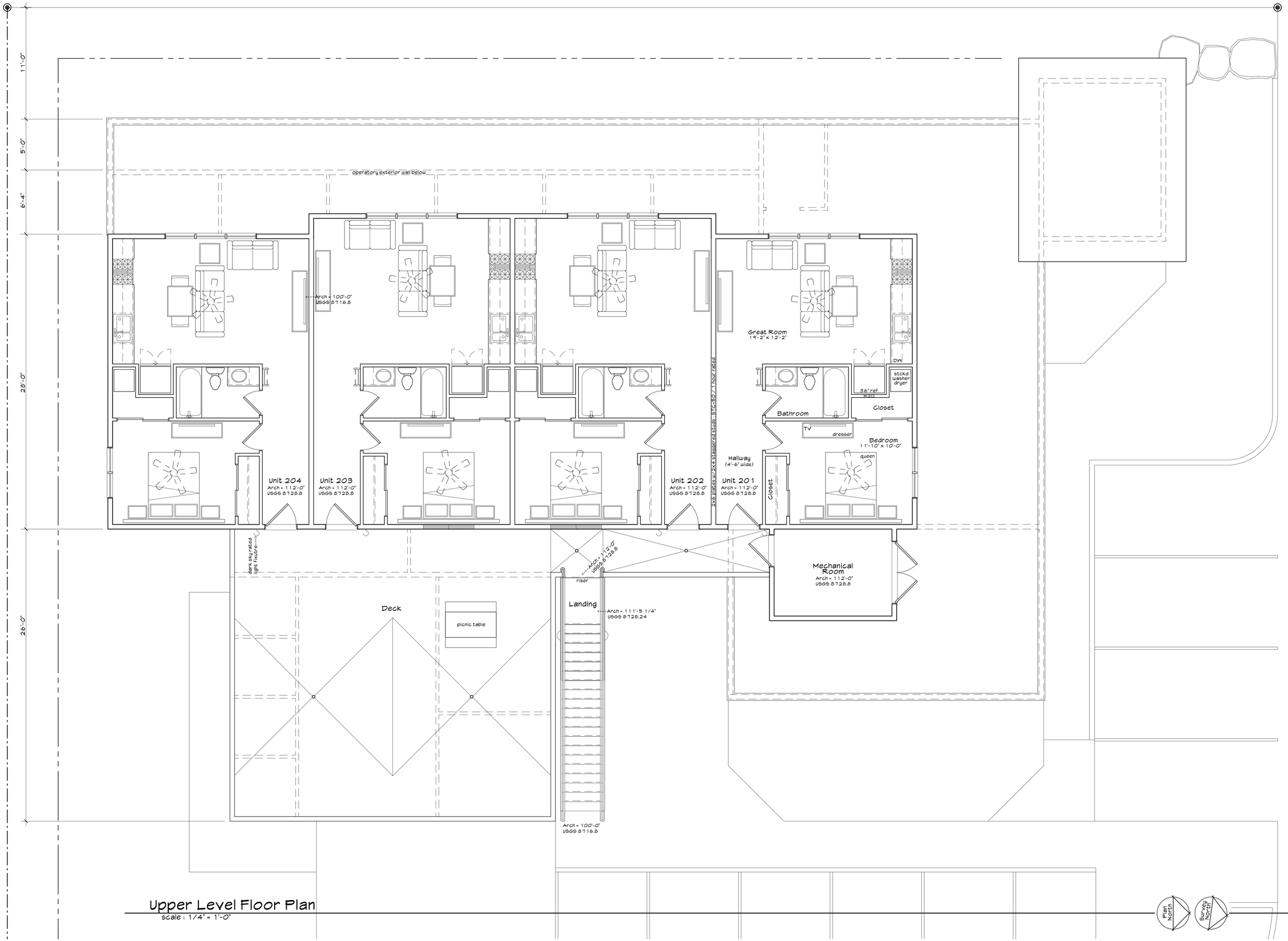
Job No. :	22104
File No. :	22104f10.vwf
Date :	04.14.2021
Drawn By :	tc3
Checked By :	tc3

A2.1



Upper Level Floor Plan
scale : 1/4" = 1'-0"

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A2.2

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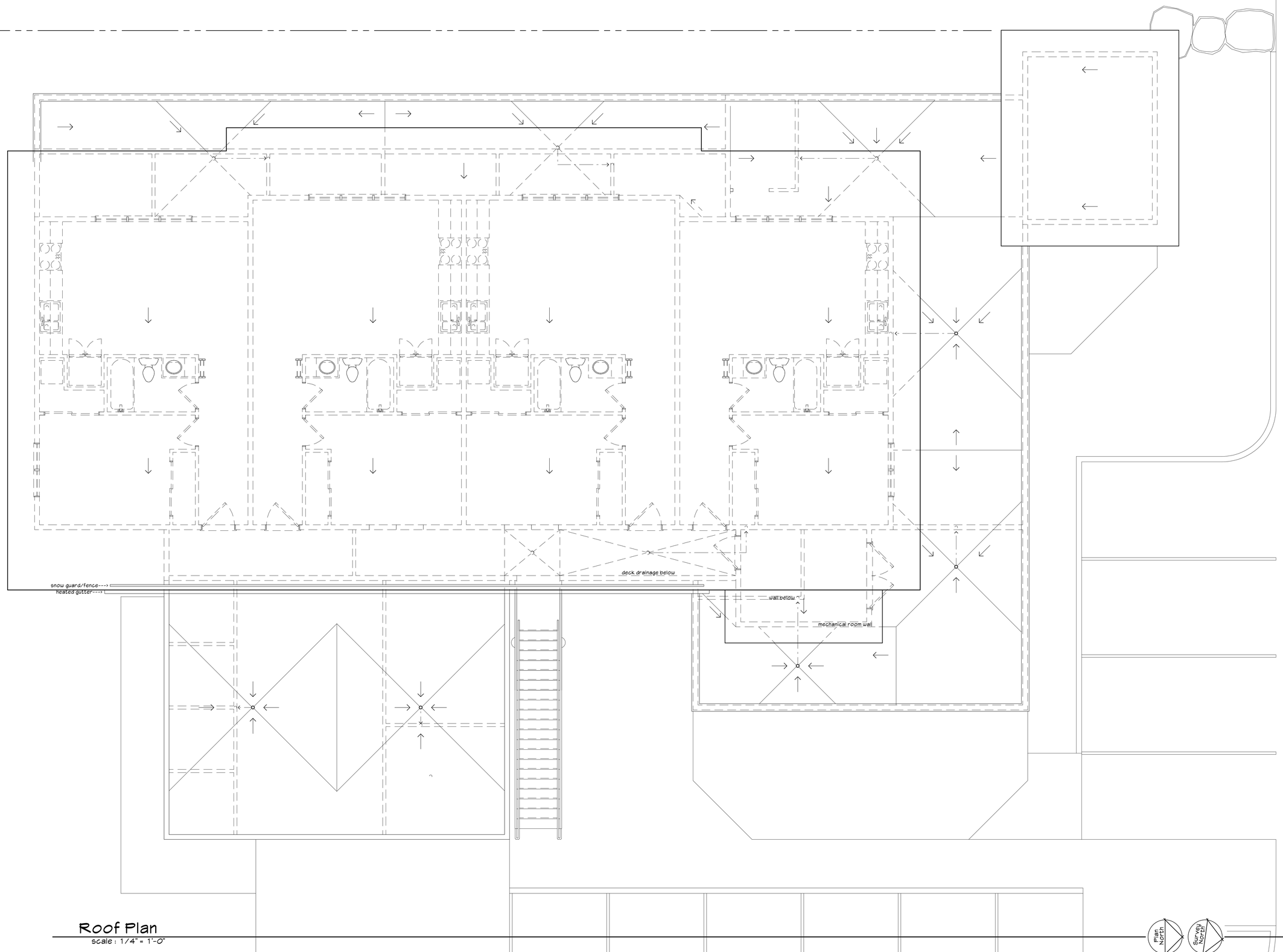


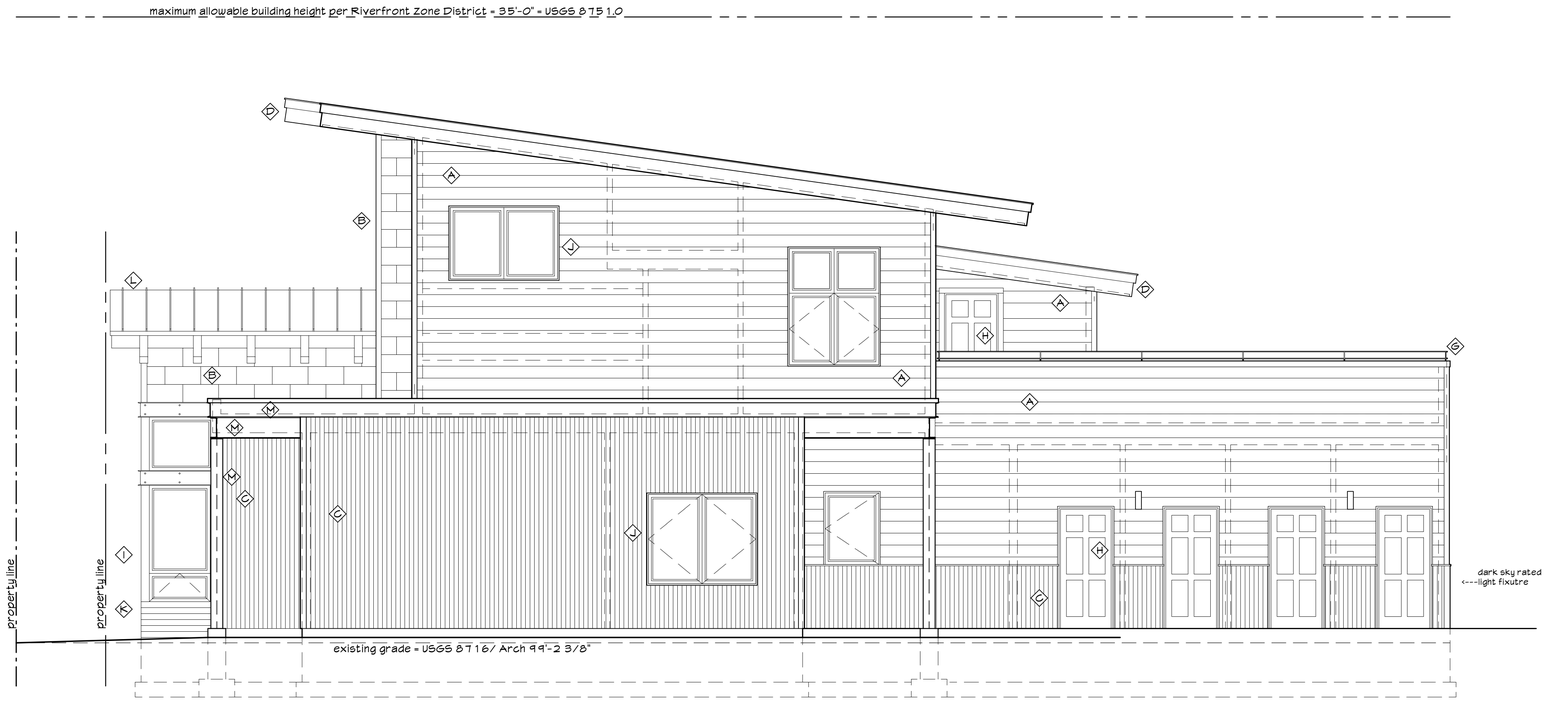
Roof Plan
scale : 1/4" = 1'-0"

Job No. :	22104
File No. :	22104f10.vwf
Date :	04.14.2021
Drawn By :	tc3
Checked By :	tc3

A2.3

Materials and Finishes Legend

- A - Woodstone Rustic Series lap siding
  Allura 8" exposure fiber cement siding
  Finish : Aspen Ridge
- B - Metal Siding Panel
  12x24 panel : staggered
  Finish : Midnight Bronze
- C - Recla
  RGM Gor 4
  Siding - Vertical corrugated metal
- D - aluminum fascia drip edge
  and soffit
  Finish : Midnight Bronze
- E - vestibule exposed glulam
  beams and decking
  Finish : match Aspen Ridge
  siding
- F - Woodstone Rustic Series
  6-8" Allura fiber cement board
  Finish : Aspen Ridge
- G - Guardrail
  powder coat
  Finish : match Midnight Bronze
- H - metal insulated panel door
  Finish : Midnight Bronze
- I - Kawneer Aluminum Storefront
  Finish : Dark Bronze
- J - Sierra Pacific Windows
  aluminum wood clad
  Finish : Dark Bronze
- K - Vestibule Foundation
  board form concrete
  Finish : concrete grey
  clear sealed
- L - Roof
  standing seam w/ 1-2" rib
  Midnight Bronze
- M - Steel Beams, Channels and Columns
  Finish : Dark Grey



South Elevation - Rainbow Run View

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

West Elevation - Blue River Parkway View

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

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A3.1

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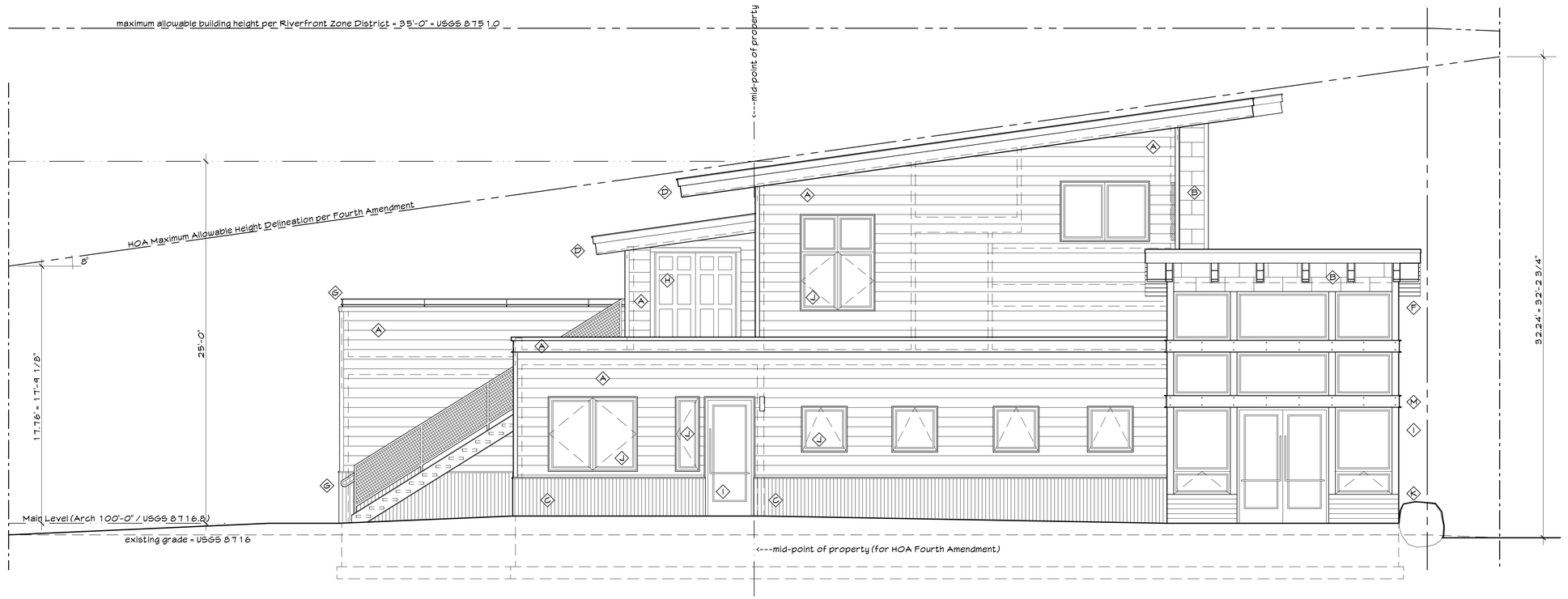
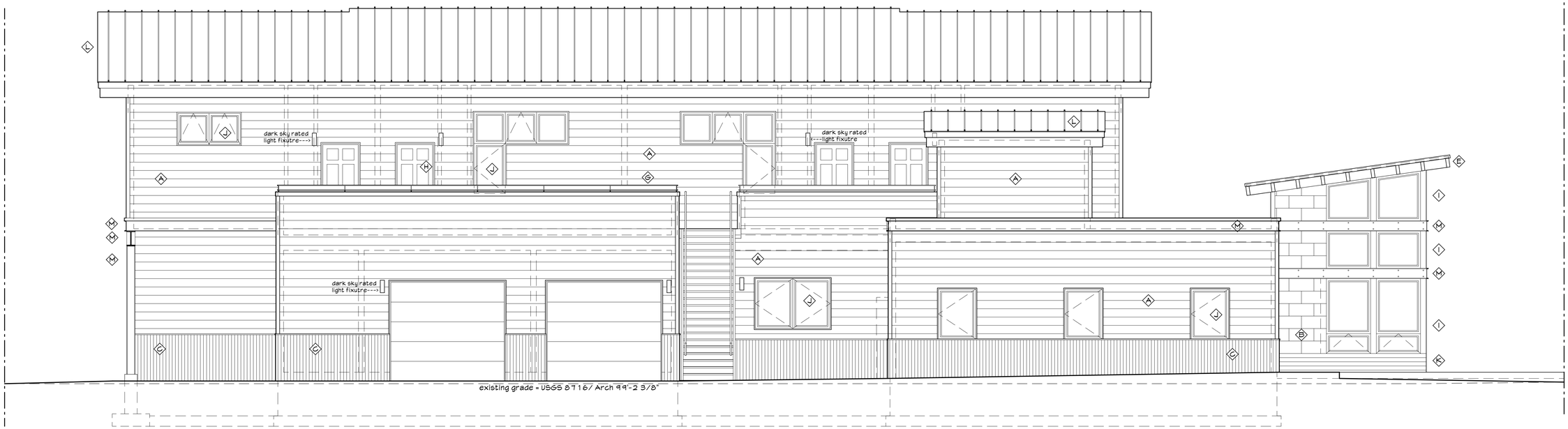


North South Elevation

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



East Elevation - Retreat on the Blue View

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

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Date :	04.14.2021
Drawn By :	tc3
Checked By :	tc3

A3.2

BACKCOUNTRY DENTAL OFFICE AND STAFF HOUSING

PRELIMINARY SITE PLAN AND PLAT DOCUMENTS

RETREAT ON THE BLUE
PARCELS 1 AND 2

A PORTION OF SECTION 36, T4S, R 78W OF THE 6TH PM
TOWN OF SILVERTHORNE, COUNTY OF SUMMIT,
STATE OF COLORADO

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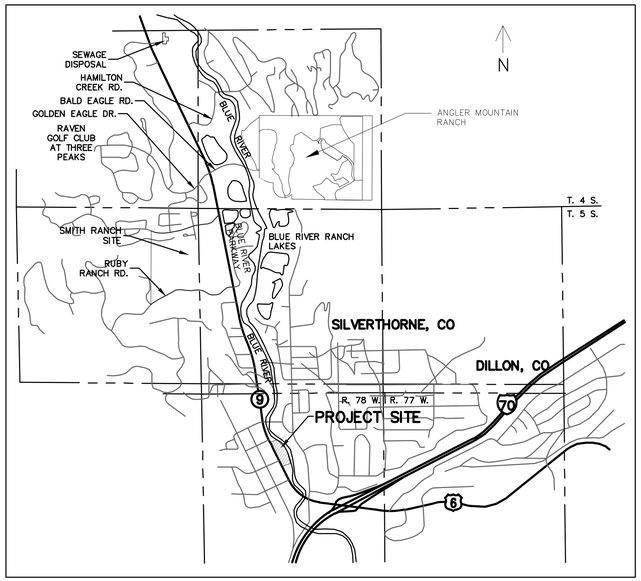


VICINITY MAP
N.T.S.

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
01	COVER SHEET
02	GENERAL NOTES
03	SITE AND EASEMENT PLAN
04	EROSION CONTROL & CONSTRUCTION MANAGEMENT PLAN
05	EROSION CONTROL DETAILS
06	GRADING PLAN
07	OVERALL UTILITY PLAN
08	STREET DETAILS
09	WATER DETAILS

4/14/2021 – PRELIMINARY SITE PLAN AND PLAT SUBMITTAL

FOR AND BEHALF OF TEN MILE ENGINEERING, INC.

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

ROADWAY GENERAL NOTES:

1. EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH GEOTECHNICAL REPORT BY CTL THOMPSON, INC.

2. PAVING SHALL NOT START UNTIL SUBGRADE COMPACTING TESTS ARE TAKEN AND MEET THE REQUIREMENTS OF THE PLANS AND SPECS AND FINAL PAVEMENT DESIGN BY CTL THOMPSON, INC AND/OR TOWN OF SILVERTHORNE STANDARDS, WHICHEVER ARE MORE STRINGENT. THE PAVEMENT SECTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THS PROJECT. THE MINIMUM DEPTH OF ASPHALT SHALL BE 4 INCHES ON TOWN ROADS AND 3 INCHES ON PRIVATE DRIVEWAYS.

3. THE CONTRACTOR SHALL SAW-CUT ALL EXISTING PAVEMENT WHERE MATCH LINES WITH EXISTING EDGE OF PAVEMENT OCCUR.

4. PORTLAND CEMENT CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:
   A. COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS OF CURE TIME;
   B. AIR CONTENT OF 6.5% ± 1.5%;
   C. MAXIMUM SLUMP OF 3";
   D. "FIBER MESH" FIBERS SHALL BE ADDED TO CONCRETE FOR STRENGTH, AT A RATE OF 1.5 POUNDS OF FIBER PER CUBIC YARD OF CONCRETE.

5. ROADWAY RETAINING WALL VERTICAL AND HORIZONTAL INFORMATION HAVE BEEN ESTABLISHED AS PART OF THESE ROADWAY PLANS. STRUCTURAL, GEOTECHNICAL, AND DRAINAGE ENGINEERING FOR THE WALLS IS BY OTHERS (SEE SEPARATE DESIGN DOCUMENTS).

6. COMPACTION TESTING FOR THE BASE COURSE IN THE ROADWAY SHALL MEET 95% OF MODIFIED PROCTOR (ASTM D-1557) THE MATERIAL BEING WITHIN 2.0 PERCENT OF OPTIMUM MOISTURE. EACH LIFT OF ASPHALT SHALL MEET THE MINIMUM DENSITY OF 92-96 PERCENT MAXIMUM THEORETICAL DENSITY AS DETERMINED BY THE RICE DENSITY METHOD (ASTM D-2041). TESTS SHALL BE MADE AT A FREQUENCY OF EVERY 200 LINEAR FEET AND AT EVERY 12" COMPACTED LIFT OF FILL PLACED, AND FOR EVERY LIFT OF ASPHALT PLACED OR ROLLED. ASPHALT DENSITY TESTING SHALL BE PERFORMED ON EACH LIFT AT INTERVALS OF ONE TEST PER EVERY 250 LINEAR FEET PER LANE. TEST LOCATIONS ON EACH LIFT AND EACH LANE SHALL BE STAGGERED.

7. 6" VERTICAL CURB SHALL BE CURB AND GUTTER TYPE 2 (SECTION IIB) CDOT M-6091.

8. TYPE I DELINEATORS PER CDOT S-612-1.

9. DURING EARTHWORK OPERATION GEOTECHNICAL ENGINEER SHALL ASSESS ACTUAL SUB-SURFACE CONDITIONS AND REQUEST ADDITIONAL REQUIREMENTS IF NECESSARY. SUBJECT TO TOWN CONSULTANT REVIEW AND CONCURRENCE.

STORM SEWER GENERAL NOTES

1. LOCATION AND ELEVATION OF EXISTING STORM SEWER AND CULVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DIFFERENCES FROM DESIGN PLAN SHALL BE REPORTED TO DESIGN ENGINEER.

2. STORM SEWER SHALL BE HDPE (HIGH DENSITY POLYETHYLENE).

3. ALL CULVERTS SHALL HAVE END SECTIONS ON BOTH THE UPSTREAM AND DOWNSTREAM ENDS OF THE PIPE UNLESS OTHERWISE NOTED ON THE PLANS AND SHALL EXTEND 1 TO 3 FEET BEYOND EACH EDGE OF SHOULDERED PAVED DRIVE. OUTLET PROTECTION (RIP-RAP) SHALL BE INSTALLED AT THE OUTLET OF ALL CULVERTS.

4. STORM SEWER BEDDING AND PIPE ZONE BACKFILL SHALL BE 3/4" TO 1" ROAD BASE OR TOWN OF SILVERTHORNE APPROVED ALTERNATE.

5. PIPE LENGTHS FOR STORM SEWER ARE APPROXIMATE HORIZONTAL DISTANCES FROM END SECTION TO END SECTION. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND COULD VARY. END SECTIONS ARE INCLUDED IN THE PIPE LENGTH SHOWN ON THE PLANS. FINAL LENGTH OF STORM SEWER SHALL BE SUFFICIENT TO PROVIDE THE ROAD SHOULDERS AND SIDE SLOPES TO NOT BE STEEPER THAN SHOWN ON THE TYPICAL ROAD SECTION.

6. REFER TO THE GEOTECHNICAL REPORT FOR PAVEMENT THICKNESS DESIGN RECOMMENDATIONS BY CTL THOMPSON, INC. AND THE STORM SEWER DETAILS FOR TRENCH STABILIZATION, BACKFILL PLACEMENT, COMPACTION, AND MOISTURE REQUIREMENTS.

7. INLETS SHALL BE TYPE C, CDOT M-604-10, TYPE D, CDOT M-604-11, OR TYPE R, CDOT M-604-12.

WATER GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE TOWN OF SILVERTHORNE WATER SYSTEMS CRITERIA DATED 2019. WATER SYSTEM SPECIFICATIONS AND TESTING PROCEDURES SHALL BE IN CONFORMANCE WITH TOWN OF SILVERTHORNE WATER ENGINEERING STANDARDS, AS OUTLINED HEREIN.

2. ALL WATER LINE IS TO BE EITHER CLASS 52 DUCTILE IRON PIPE OR C900 PVC PRESSURE WATER PIPE. ALL FITTINGS ARE TO BE DUCTILE IRON. ALL DUCTILE IRON IS TO BE WRAPPED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH ANSI A21.5/A C105. IF C900 IS USED FOR FIRE HYDRANT LATERALS, STAINLESS STEEL OR CORTEN RODDING AND PVC APPROPRIATE MEGA-LUGS ARE REQUIRED FOR RESTRAINT. ALL BURIED METAL TO BE WRAPPED IN PE.

3. SERVICE LINES SHALL BE HDPE PURE-CORE SDR 9 CTS PIPE. SERVICE LINE MATERIAL SHALL BE CRESLINE HD CE BLUE TM, ALL SERVICE LINES SHALL HAVE A BACKFLOW PREVENTION DEVICE INSTALLED UPSTREAM OF THE WATER METER CONSISTING OF A DOUBLE CHECK VALVE ASSEMBLY SIMILAR OR EQUAL TO A WATTS REGULATOR NO.7.

4. MINIMUM COVER WITHIN STREETS IS 8.0 FEET AND 7.0 FEET IN UNPAVED LOCATIONS. MAXIMUM DEPTH SHALL BE 12' UNLESS APPROVED BY TOWN OF SILVERTHORNE. SEE DETAIL FOR INSULATION REQUIREMENTS. SEE INSULATION DETAILS AND THE NOTES BELOW.

5. VALVES SHALL BE RESILIENT SEAT NRS GATE VALVES AND SHALL OPEN-LEFT (MUELLER, US, WATEROUS OR CLOW BRAND RESILIENT WEDGE VALVES ONLY). CHECK WITH WATER SUPT. FOR VERIFICATION OF SPECIFIC MODEL NUMBERS.

6. VALVE BOXES SHALL BE OVAL BASE BOTTOM TYPE. CHECK WITH WATER SUPT. FOR VERIFICATION OF SPECIFIC MODEL NUMBERS.

7. ALL FIRE HYDRANTS SHALL BE WATEROUS "PACER" WITH 34-INCH MOUNTAIN STANDARD FLANGE MEETING THE FOLLOWING REQUIREMENTS:

NOZZLE	5-1/4 INCH
INLET	6 INCH FOR MECHANICAL JOINT
DEPTH OF BURY	9'-6" OR 8'-6" (AS REQUIRED TO MEET THE WATERLINE COVER)
OPERATING NUT1	1 INCH PENTAGON
OPEN	LEFT(CCW)
OUTLETS	TWO 2-1/2 INCH, ONE 5-1/4 INCH PUMPER NOZZLE (THREADS TO MATCH EXISTING)
THREADS	NATIONAL STANDARD
CAPS	CAP WITH PENTAGON NUT
COLOR	RED (ALL ABOVE GROUND PARTS)
THRUST RESTRAINT	BOTTOM THRUST BLOCK AND 2-3/4" TIE RODS FROM MAIN TEE TO HYDRANT BOTTOM.
ELEVATION OF NOZZLE	42" ± 3" OPERATING NUT ABOVE FINISHED GROUND SURFACE AT TRAFFIC FLANGE

ALL HYDRANTS TO BE SHOP PRIMED AND PAINTED RED. BOLLARDS AS SPECIFIED BY TOWN.

8. WATER METER KIT WILL BE PROVIDED BY TOWN. THE CHARGE FOR THE WATER METER KIT WILL BE PAID BY THE DEVELOPER AT THE TIME OF THE BUILDING PERMIT ISSUANCE. THE METER KIT WILL HAVE A REMOTE READOUT TRANSPONDER.

9. AIR RELEASE VALVES (ARV'S) SHALL BE APCO MODEL NO. 143 C COMBINATION AIR/VACUUM VALVE OR APPROVED EQUAL BY TOWN OF SILVERTHORNE..
10. MECHANICAL JOINT RESTRAINT DEVICES SHALL BE:

FOR DUCTILE IRON PIPE:	FOR C900 PVC PIPE:
MEGALUG 1700 SERIES	IBEE IRON INC. SERIES 1500
ROMAL ROM GRIP	
UNI-FLANGE 1400 SERIES	
STAR GRIP 3000 SERIES	
SIGMA-LOCK	

11. PIPE JOINT RESTRAINT DEVICES, TIE RODS AND THRUST BLOCKS SHALL BE INSTALLED PER DETAILS. ALL RESTRAINT RODS AND HARDWARE ARE TO BE STAINLESS STEEL OR CORTEN.

WATER GENERAL NOTES (CONTINUED):

12. CHLORINATION

ALL MAIN EXTENSIONS AND PRIVATE PIPE EXTENSIONS SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA C651.

THE CHLORINATION OF THE FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING. BEFORE FILLING THE PIPE WITH WATER, THE PIPE SHALL BE CLEAN AND FREE OF DEBRIS TO THE SATISFACTION OF THE TOWN. TOS WILL NOT PROVIDE LABOR OR MATERIAL FOR DISINFECTION TO APPLICANT'S INSTALLING MAINS UNDER PRIVATE CONTRACT.

CHLORINE TABLETS MAY BE USED FOR DISINFECTION IN 12-INCH AND SMALLER PIPE. CHLORINE TABLETS SHALL BE ATTACHED TO THE INSIDE TOP OF THE PIPE WITH AN APPROVED ADHESIVE CERTIFIED TO NSF STANDARD 61 PRIOR TO THE PIPE INSTALLATION IN THE TRENCH. AN APPROVED ADHESIVE IS DOW CORNING 732 MULTI-PURPOSE SEALANT.

NUMBER OF HYPOCHLORITE TABLETS OF 5 GRAM STRENGTH
REQUIRED FOR A DOSE OF 50 MILLIGRAMS/LITER*

PIPE LENGTH (FEET)	PIPE DIAMETER (INCHES) 6	8	12
13 OR LESS	2	2	5
18	2	3	6
20	2	3	7

*BASED ON 3 3/4" GRAM AVAILABLE CHLORINE PER TABLET

AFTER THE PIPE IS FILLED WITH WATER AND CHLORINE, THE CHLORINATED WATER SHALL BE HELD IN CONTACT WITH THE PIPE FOR 24 HOURS. AT THE END OF THE 24 HOUR PERIOD, THE WATER IN THE PIPELINE SHALL BE TESTED BY THE TOWN OF SILVERTHORNE TO INSURE A RESIDUAL CHLORINE CONTENT OF NOT LESS THAN 25 MILLIGRAMS PER LITTER. THE PIPE LINE THEN SHALL BE THOROUGHLY FLUSHED TO REMOVE THE HEAVILY CHLORINATED WATER. THE CONTRACTOR SHALL TAKE CARE IN FLUSHING THE PIPELINE TO PREVENT PROPERTY, ENVIRONMENTAL OR DANGER TO THE PUBLIC.

SAMPLES OF WATER WILL BE COLLECTED FOR BACTERIOLOGICAL EXAMINATION AND RESIDUAL CHLORINE CONTENT TESTING BEFORE THE PIPE IS PUT INTO SERVICE. TESTING OF RESIDUAL CHLORINE AND SAMPLING WILL BE DONE BY THE LOCAL HEALTH AUTHORITY OR THEIR DESIGNATED REPRESENTATIVE.

13. HYDROSTATIC TESTING

NO HYDROSTATIC TESTS SHALL BE MADE ON ANY PORTION OF THE PIPELINE UNTIL FIELD PLACED CONCRETE HAS HAD ADEQUATE CURING TIME, DEFINED AS FOLLOWS:

CONCRETE SHALL BE CURED BY A METHOD RECOMMENDED BY ACI 308. WHEN THE DAILY MEAN AMBIENT TEMPERATURE IS ABOVE 40°F, THE FINISHED CONCRETE SHALL BE CURED CONTINUOUSLY FOR A MINIMUM OF 7 DAYS OR FOR THE TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED COMPRESSIVE STRENGTH, WHICHEVER PERIOD IS LESS. WHEN THE MEAN DAILY AMBIENT TEMPERATURE IS 40°F OR LOWER, THE FINISHED CONCRETE SHALL BE CONTINUALLY CURED AT A MINIMUM TEMPERATURE OF 55° F FOR THE PERIOD RECOMMENDED BY ACI 306 TO PREVENT DAMAGE FROM EARLY-AGE FREEZING AND PROVIDE THE SERVICE CATEGORY STRENGTHS REQUIRED FOR EACH PLACEMENT.

TOS SHALL BE NOTIFIED TWO BUSINESS DAYS IN ADVANCE OF TESTING. ALL TESTING SHALL BE MADE IN THE PRESENCE OF TOS THE TOS ONLY OBSERVES THE TESTING, CONTRACTOR RESPONSIBLE FOR PROVIDING ALL MANPOWER AND EQUIPMENT TO PERFORM THE TEST. CONTACT CHRIS SHELDON, TOS WATER SUPERINTENDENT AT 970 513 4870 TO SCHEDULE TESTING.

ONLY THE FOLLOWING METHODS ARE ACCEPTABLE FOR SUPPLYING POTABLE WATER FOR HYDROSTATIC TESTING:

1. WATER MAY BE TAKEN FROM A NEARBY PRESSURIZED WATER SOURCE WHICH HAS BEEN PREVIOUSLY CHLORINATED, TESTED AND ACCEPTED, SUCH AS A FIRE HYDRANT.

2. WATER MAY BE DELIVERED TO THE SITE IN A CHLORINATED WATER TRUCK HAVING A MINIMUM CAPACITY OF 300 GALLONS. THE WATER TRUCK SHALL BE USED EXCLUSIVELY FOR THE TRANSPORTATION OF POTABLE WATER. THE USE OF A LARGE DRUM/BARREL IS ALSO ACCEPTABLE IF DISINFECTED IMMEDIATELY PRIOR TO USE. TOWN STAFF NEED TO BE PRESENT DURING DISINFECTION.

3. ANY PREVIOUSLY TESTED, CHLORINATED AND ACCEPTED WATER MAIN, WHICH IS PRESSURIZED AND IS TO SERVE THE NEW MAIN EXTENSION, MAY BE TAPPED ON THE PRESSURIZED SIDE OF THE CLOSED VALVE.

IN ANY EVENT, THE METHOD OF SUPPLYING WATER AS WELL AS THE SOURCE OF WATER FOR HYDROSTATIC TESTING MUST BE CERTIFIED AND APPROVED BY TOS. USE OF BARRELS, SANITARY OR OTHERWISE, TO SUPPLY WATER FOR HYDROSTATIC TESTING IS STRICTLY PROHIBITED.

TOS WILL FURNISH ONLY THE CALIBRATED METER BUT NOT THE PUMP FOR TESTING. THE PIPELINE SHALL BE PROPERLY BACKFILLED AND SHALL BE IN A STATE OF READINESS FOR TESTING. ALL BULKHEADS, PUMPS, TAPS, AND APPURTENANCES NECESSARY TO FILL THE PIPELINE AND MAINTAIN THE REQUIRED PRESSURE SHALL BE IN PLACE. THE PIPELINE SHALL BE FILLED WITH WATER AND THE TEST PRESSURE OF 150 POUNDS PER SQUARE INCH OR LESS SHALL BE APPLIED TO THE PIPELINE BY MEANS OF A CONTINUOUSLY OPERATING PUMP, EQUIPPED WITH A BYPASS VALVE FOR REGULATING PRESSURE. WHEN FILLING THE PIPELINE, IT SHALL BE FILLED AT A RATE, WHICH WILL NOT CAUSE ANY SURGES, NOR WILL IT EXCEED THE RATE AT WHICH THE AIR CAN BE RELEASED.

ALL AIR IN THE LINE SHALL BE PROPERLY PURGED. WHERE BLOWOFFS OR HYDRANTS ARE NOT AVAILABLE OR ARE NOT EFFECTIVE IN PURGING AIR FROM THE LINE, TOS SHALL REQUIRE A TAP TO PURGE THE LINE. THE LOCATION AND SIZE OF TAP SHALL BE AT TOS'S DISCRETION.

WHILE THE TEST PRESSURE IS MAINTAINED, AN EXAMINATION SHALL BE MADE OF THE PIPELINE IN GENERAL, AND ANY LEAKS SHALL BE REPAIRED. ANY PIPE OR FITTING FOUND TO BE FAULTY SHALL BE REMOVED AND REPLACED. NO LEAKAGE IS ALLOWED THROUGH THE BONNET OF THE LINE VALVE. ANY VALVE LEAKING THROUGH THE BONNET SHALL BE REPAIRED IN PLACE OR REMOVED AND REPLACED. CUTTING AND REPLACING PAVEMENT, EXCAVATING, AND BACKFILLING MAY ALL BE NECESSARY PARTS OF LOCATING AND REPAIRING LEAKS DISCOVERED BY PRESSURE TESTING OF PIPE.

AFTER ALL VISIBLE LEAKS HAVE BEEN STOPPED, THE FULL TEST-PRESSURE SHALL BE MAINTAINED FOR 2 CONTINUOUS HOURS. ALLOWABLE LEAKAGE FOR EACH SECTION BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING LEAKAGE RATES FOR 4-INCH THROUGH 20-INCH DISTRIBUTION AND TRANSMISSION MAINS:

PIPE SIZE (INCHES)	ALLOWABLE LEAKAGE PER 1,000 FEET OF PIPE (GALLONS PER HOUR) DIP
6	.55
8	.74
12	1.10

SHOULD TESTING SHOW A LEAKAGE RATE IN EXCESS OF THE RATES SHOWN, THE PIPELINE SHALL NOT BE ACCEPTED. THE PIPELINE SHALL BE REPAIRED, RECHLORINATED AS DESCRIBED IN NOTE 12, AND RETESTED UNTIL IT MEETS THE TEST REQUIREMENTS.

14. THE CONTRACTOR IS RESPONSIBLE FOR:

A. NOTIFYING ALL CUSTOMERS POSSIBLY AFFECTED BY OUTAGE OF WATER DURING CONSTRUCTION.

B. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL APPLICABLE LICENSES, PERMITS, BONDS, ETC. REQUIRED FOR THE MAIN INSTALLATION/SYSTEM MODIFICATION.

C. CONTACTING TOWN OF SILVERTHORNE FOR PRE-CONSTRUCTION MEETING AND INSPECTION, 970-513-4870, AT LEAST BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION.

D. IN CASE OF AN EMERGENCY AFTER WORKING HOURS, CALL TOWN OF SILVERTHORNE AT 970-513-4870 (CHRIS SHELDON)

NOTE: BE ADVISED THAT OCCASIONALLY VALVES IN TOWN SYSTEM MAY BE INOPERABLE. ON SUCH OCCASIONS IT MAY BECOME NECESSARY TO BACK UP AN ADDITIONAL BLOCK FOR THE SHUT OUT. IT WILL THEN BE NECESSARY TO MAKE THE ADDITIONAL NOTIFICATIONS TO GIVE THE AFFECTED CUSTOMERS THE MANDATORY 24 HOURS ADVANCE NOTICE. ALSO BE ADVISED THAT WHEN VALVE MAINTENANCE IS REQUIRED, A DELAY OF SEVERAL DAYS SHOULD BE EXPECTED.

15. WATER TRENCH BEDDING AND PIPE ZONE BACKFILL SHALL BE GRADED AS FOLLOWS:

SIEVE SIZE	TOTAL PASSING BY SIZE (% BY WEIGHT)
3/8" to 1 1/2"	100
NO. 200	0-3

OR TOWN OF SILVERTHORNE APPROVED CONTRACTOR ALTERNATE.

16. IRRIGATION VAULT TO BE CONSTRUCTED PER TOWN OF SILVERTHORNE DETAILS.

17. ALL WATER LINE WORK SHALL BE INSPECTED BY TOWN STAFF DURING CONSTRUCTION PER TOWN OF SILVERTHORNE REQUIREMENTS

18. AS BUILT DRAWINGS SHALL BE PROVIDED PER TOWN OF SILVERTHORNE REQUIREMENTS

19. CLAY CHECK DAMS OR NON PERMEABLE FILL WILL BE REQUIRED IF GROUNDWATER IS ENCOUNTERED. SEE UTILITY PLANS FOR LOCATIONS OF CHECK DAMS

20. WATERLINES ARE TO BE INSTALLED WITH A MINIMUM COVER OF 8 FT. ANY DEPTH LESS THAN 7 FT. MUST BE APPROVED THE TOWN OF SILVERTHORNE PRIOR TO INSTALLATION. IF APPROVED, INSULATION MAY BE REQUIRED. HI-100 HIGH DENSITY INSULATION WILL BE REQUIRED UNDER ALL ROADWAYS AND DRIVES.

SANITARY SEWER GENERAL NOTES:

1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO SILVERTHORNE SEWER SYSTEM CRITERIA DATED 2019.

2. ALL SEWER MAINS AND SERVICES SHALL BE SDR 26.

3. ALL MANHOLE RIMS WITHIN THE 100-YEAR FLOOD PLAIN SHALL BE SET AT OR ABOVE THE 100 YEAR FLOOD PLAIN ELEVATION AND SHALL HAVE GASKETED BOLT DOWN LIDS.

4. MANHOLES SHALL BE WRAPPED WITH BITUTHENE.

5. SANITARY SEWER BEDDING AND PIPE ZONE BACKFILL SHALL BE 3/4" TO 1" SCREENED ROCK OR TOWN OF SILVERTHORNE APPROVED ALTERNATE.

6. PIPELINE FLUSHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A CLEANING COMPANY THAT WILL HIGH-PRESSURE JET CLEAN THE LINES TO INSURE THAT SAND, ROCKS, OR OTHER FOREIGN MATERIAL ARE NOT LEFT IN ANY OF THE PIPELINES. WHEN FLUSHING, CARE SHOULD BE TAKEN TO PREVENT DAMAGE TO PROPERTY OR ROADWAYS OR EROSION OF SURROUNDING SOILS. FLUSHING WATER AND FLUSHED DEBRIS SHALL NOT BE ALLOWED TO ENTER THE EXISTING SEWER SYSTEM. ALL FLUSHING SHALL BE PERFORMED TO TOWN CODE.

7. SEWER LINE ALIGNMENT, AND GRADE VERIFICATION. ONCE THE SEWER PIPELINES HAVE BEEN FLUSHED, THE SEWER PIPELINES SHALL BE INSPECTED BY MEANS OF CLOSED CIRCUIT TELEVISION (CCTV). DOCUMENTATION SHALL CONSIST OF A COLOR, DIGITAL FORMAT VIDEOTAPE, LOG SHEETS, AND A WRITTEN REPORT DETAILING THE CONDITION OF THE PIPELINE AND LATERAL CONNECTIONS/OPENINGS. THE REPORT SHALL NOTE THE TIME AND DATE OF VIDEO INSPECTION, STREET NAME, UPSTREAM AND DOWNSTREAM MANHOLE, DIRECTION OF VIEW, DIRECTION OF FLOW, SURFACE MATERIAL, PIPELINE LENGTH, PIPE SECTION LENGTH, PIPE SIZE, PIPE MATERIAL, LATERAL CONNECTIONS, VIDEO TAPE NUMBER, COUNTER NUMBER, AND A DETAILED LOGGING OF DEFECTS ENCOUNTERED. ANY REJECTED WORK SHALL BE REPAIRED, THEN RE-TELEVISED.

8. LEAKAGE. ALL PIPELINES SHALL BE TESTED FOR LEAKAGE BY MEANS OF AN VACUUM TEST. THE TEST SHALL BE PERFORMED AS FOLLOWS:

A. PREPARATION FOR TESTS: FLUSH AND CLEAN THE PIPELINE PRIOR TO TESTING IN ORDER TO WET THE PIPE SURFACES AND PRODUCE MORE CONSISTENT RESULTS. PLUG AND BRACE ALL OPENINGS IN THE PIPELINE AND THE UPPER CONNECTIONS. CHECK ALL PIPE PLUGS WITH A SOAP SOLUTION TO DETECT ANY AIR LEAKAGE.

B. CARE SHALL BE TAKEN TO EFFECT A SEAL BETWEEN THE VACUUM BASE AND THE MANHOLE RIM. PIPE PLUGS SHALL BE SECURED TO PREVENT MOVEMENT WHILE THE VACUUM IS DRAWN.

C. A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN. THE TIME FOR THE VACUUM TO DROP TO 9 INCHES OF MERCURY SHALL BE RECORDED.

D. ACCEPTANCE SHALL BE DEFINED AS WHEN THE TIME TO DROP TO 9 INCHES MEETS OR EXCEEDS THE FOLLOWING:

DIA	TIME TO DROP 1" HG
4 FT.	120 SECONDS
5 FT.	120 SECONDS
6 FT.	120 SECONDS

E. IF THE PIPE FAILS THE TEST, MAKE NECESSARY REPAIRS. REPAIRS AND REPAIR PROCEDURES MUST BE ACCEPTABLE TO TOWN.

F. IF PREFORMED PLASTIC GASKETS ARE PULLED OUT DURING THE VACUUM TEST, THE MANHOLE SHALL BE DISASSEMBLED AND THE GASKETS SHALL BE REPLACED.

9. MANHOLE VISUAL EXAMINATION. THE ENGINEER OR THEIR REPRESENTITIVE SHALL VISUALLY CHECK THE MANHOLE BOTH EXTERIOR AND INTERIOR, FOR FLAWS, CRACKS, HOLES, OR OTHER INADEQUACIES, WHICH MIGHT AFFECT THE OPERATION OR WATERTIGHT INTEGRITY OF THE MANHOLE. SHOULD ANY INADEQUACIES BE FOUND, THE CONTRACTOR, AT ITS OWN EXPENSE, SHALL MAKE ANY REPAIRS OR REPLACE AS DEEMED NECESSARY BY THE ENGINEER AND/OR TOWN. CONTRACTOR TO NOTIFY INSPECTOR AND TOWN 48 HOURS PRIOR TO INSTALLATION OF MANHOLES.

10. MANHOLE LEAKAGE TEST (VACUUM). ALL MANHOLES SHALL BE TESTED FOR LEAKAGE AND ALL TESTS SHALL BE WITNESSED BY TOWN STAFF. THE TOWN DOES NOT PROVIDE ANY EQUIPMENT FOR TESTING. THE TOWN ONLY OBSERVES THE TESTS AND SAMPLE COLLECTION.

CONTACT TOWN OF SILVERTHORNE PERSONAL AT LEAST TWO BUSINESS DAYS PRIOR TO TESTING.

THE LEAKAGE TEST SHALL BE CONDUCTED AFTER BACK-FILLING AROUND THE MANHOLE AND AND SHALL BE CARRIED OUT IN THE FOLLOWING MANNER:

A. MANHOLES SHALL BE VACUUM TESTED AFTER ASSEMBLY AND BACKFILLING.
B. CARE SHALL BE TAKEN TO EFFECT A SEAL BETWEEN THE VACUUM BASE AND THE MANHOLE RIM. PIPE PLUGS SHALL BE SECURED TO PREVENT MOVEMENT WHILE THE VACUUM IS DRAWN.
C. A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN. THE TIME FOR THE VACUUM TO DROP TO 9 INCHES OF MERCURY SHALL BE RECORDED.
D. ACCEPTANCE SHALL BE DEFINED AS WHEN THE TIME TO DROP TO 9 INCHES MEETS OR EXCEEDS THE FOLLOWING:

DIA	TIME TO DROP 1" HG
4 FT.	120 SECONDS
5 FT.	120 SECONDS
6 FT.	120 SECONDS

E. IF THE MANHOLE FAILS THE TEST, MAKE NECESSARY REPAIRS. REPAIRS AND REPAIR PROCEDURES MUST BE ACCEPTABLE TO TOWN.

F. IF PREFORMED PLASTIC GASKETS ARE PULLED OUT DURING THE VACUUM TEST, THE MANHOLE SHALL BE DISASSEMBLED AND THE GASKETS SHALL BE REPLACED.

11. ALL SEWER LINE WORK SHALL BE INSPECTED BY ENGINEER DURING CONSTRUCTION PER TOWN OF SILVERTHORNE REQUIREMENTS
12. AS BUILT DRAWINGS SHALL BE PROVIDED PER TOWN OF SILVERTHORNE REQUIREMENTS
13. CLAY CHECK DAMS WILL BE REQUIRED IF GROUNDWATER IS ENCOUNTERED.
14. ALL SEWER SERVICES ARE TO BE INSTALLED AT A MINIMUM 2% AND PROVIDE SERVICE SLOPE TABLE.
15. SEWER LINES ARE TO BE INSTALLED WITH A MINIMUM COVER OF 8 FT. ANY DEPTH LESS THAN 8 FT., ONE SHEET OF INSULATION WILL BE REQUIRED. FOR DEPTHS BELOW 7' BOX INSULATION WILL BE REQUIRED. HI-100 HIGH DENSITY INSULATION WILL BE REQUIRED UNDER ALL ROADWAYS AND DRIVES.
16. MAXIMUM COVER ON SEWER MAIN SHALL BE 12' UNLESS OTHERWISE APPROVED BY TOWN OF SILVERTHORNE.

OVERALL GENERAL NOTES:

1. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.

2. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED.

3. ALL STREET STATIONING IS ALONG THE CENTERLINE OF THE ROADWAY UNLESS OTHERWISE NOTED. FOR SEPARATE WATER & SANITARY SEWER PLANS THE STATIONING IS ALONG THE CENTERLINE OF THE PIPE.

4. THE PROFILE GRADE ON THE PLANS IS ALONG THE ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL HAVE ON HIS POSSESSION AT THE SITE A COPY OF THE APPROVED CONSTRUCTION PLANS AND SWMP AT ALL TIMES.
6. LIMITS OF WORK: NO AREAS SHALL BE DISTURBED OUTSIDE OF THE TEMPORARY CONSTRUCTION EASEMENTS AND THE ROADWAY DISTURBANCE LIMITS.
7. ALL CONSTRUCTION SHALL CONFORM TO THE TOWN OF SILVERTHORNE STANDARDS AND SPECIFICATIONS AS APPLICABLE. ALL WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE ENGINEER, TOWN OF SILVERTHORNE, OR THEIR REPRESENTATIVES. ONE OR ALL OF THE PARTIES HAS THE RIGHT TO REJECT MATERIALS AND WORKMANSHIP WHICH DO NOT CONFORM TO SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY THE TOWN OF SILVERTHORNE AND THE PUBLIC UTILITY COMPANIES PRIOR TO PROCEEDING WITH ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
9. CONTRACTOR SHALL GIVE TWO BUSINESS DAY NOTICE TO TOWN PERSONNEL TO PERFORM REQUIRED TESTING AND INSPECTIONS AND PRIOR TO ANY CONSTRUCTION ON THIS SITE. CONTACT TOWN OF SILVERTHORNE PERSONNEL AT (970) 262-7340. NOTIFY TOWN OF ANY ROAD OR LANE CLOSURES AT 970 319 8951.
10. ALL EXCAVATION SHALL COMPLY WITH OSHA SAFETY REGULATIONS.
11. MATERIALS SHALL BE INSPECTED AND ACCEPTED BY THE TOWN'S INSPECTOR UPON DELIVERY AND WHERE POSSIBLE, PRIOR TO INSTALLATION.
12. A STAMPED FINAL FOR CONSTRUCTION PLAN SHALL BE GIVEN TO THE TOWN OF SILVERTHORNE AT LEAST 10 DAYS PRIOR TO START OF CONSTRUCTION.
13. ANY RETAINING WALL OVER 4' MUST BE ENGINEERED AT A LETTER STAMPED BY A CIVIL ENGINEER LICENSED IN THE STATE OF COLORADO STATING THE WALL WAS CONSTRUCTED PER THE ENGINEERED DESIGN IS REQUIRED.
14. ALL THE DEFENSIBLE SPACE (CLEARING AND GRUBBING) MUST HAVE APPROVAL BY THE FIRE MARSHALL PRIOR TO ANY CO'S ON ANY STRUCTURE.

STANDARD EROSION AND SEDIMENT CONTROL NOTES:

1. The contractor must notify Town of Silverthorne at least 48 hours prior to starting construction.
2. All grading, erosion, and sediment control must conform with approved plans. Revisions to disturbance areas, slopes, and/or erosion and sediment control measures are not permitted without prior approval from the Town of Silverthorne.
3. The landowner is responsible for obtaining a permit for Storm water Discharges Associated with Construction Activity from the Colorado Department of Public Health and Environment, at least 10 days prior to the start of construction activities for land disturbance areas of one acre or greater. The permit must be kept current throughout the construction duration.
4. Erosion control measures must be installed prior to grading activities.
5. All temporary and permanent soil erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function. For example, erosion control blankets, straw bale dikes or silt fences may require periodic replacement. Sediment traps and basins will require periodic sediment removal.
6. All topsoil, where physically practicable, must be salvaged and not topsoil shall be removed from the site except as set forth in the approved plans. Topsoil and overburden must be segregated and stockpiled separately. Topsoil and overburden must be redistributed within the graded area after rough grading to provide a suitable base for areas, which must be seeded and planted. Runoff from the stockpiled area must be controlled to prevent erosion and resultant sedimentation of receiving water.
7. The landowner and/or contractor must immediately take all necessary steps to control increased sediment discharge.
8. The landowner and/or contractor is responsible for clean up and removal of all sediment and debris from all drainage infrastructure and other public facilities.
9. The landowner and/or contractor must take reasonable precautions to ensure that vehicles don not track or spill earth materials on to streets/roads and must immediately remove such material if this occurs.
10. The landowner and/or contractor is responsible for controlling waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste, as applicable. In addition, spill prevention and containment BMP's for construction materials, waste and fuel must be provided, as applicable.
11. If it is necessary to move material in excess of 300 cubic yards and/or 10,000 square feet of land disturbance area to or from another unincorporated Town of Silverthorne site, a grading permit is necessary for the off-site property. If the material is moved to a property located within another jurisdiction, evidence is required that the local government has approved the grading operation.
12. The storm water volume capacity of detention ponds must be restored and storm sewer lines will be cleaned upon completion of the project.
13. Soil stabilization measures must be applied within 30 days to the disturbed areas that may not be at final grade, but will be left dormant for longer than 60 days.
14. Fugitive dust emissions resulting from grading activities and/or wind shall be controlled using the best available control technology, as defined by the Colorado Department of Public Health and Environment, at the time of grading.
15. The erosion and sediment control plan may be modified by the Town of Silverthorne, or its authorized representative, as field conditions warrant.

DISTURBED AREA SEEDING NOTES:

1. All areas to be seeded will be properly prepared to provide a friable soil surface in the upper 6 inches, minimum.
2. Areas to be seeded will be drill seeded with the appropriate mix (Table 2 or 3) at the rates specified. Seed may be broadcast or hydroseeded on steep slopes. The specified seeding rate will be doubled for broadcast seeding or increased by 50 percent for hydroseeding.
3. seeded areas will be mulched at a rate of at least two tons per acre of certified, weed-free straw mulch, or one ton per acre of wood cellulose, if hydromulching is completed. Hydromulching will be completed as a separate step after seeding.
4. Straw mulch will be secured by use of m-binder tackifier at a rate of 3 pounds/1,000 square feet on slopes flatter than 2:1. Mulch will be secured with netting on slopes steeper than 3:1.

SEED MIX TYPE I

COMMON NAME	SCIENTIFIC NAME	% MIX	POUNDS PLS/ACRE
IDAHO FESCUE	FESTUCA IDAHOENSIS	20	3.9
ALPINE BLUEGRASS	POA ALPINA	20	1.7
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	20	15.8
JUNE GRASS	KOELERIA CRISTATA	15	0.6
ARIZONA FESCUE	FESTUCA ARIZONICA	20	3.2
WHITE YARROW	ACHILLEA MILLEFOLIUM	5	0.2
TOTAL			25.4

1. Mix should be drill seeded, except on steep slopes where broadcast or hydroseeding are acceptable at 200 and 150 percent of rate shown, respectively.

TOWN OF SILVERTHORNE

CONSTRUCTION MANAGEMENT, DRAINAGE & EROSION CONTROL EXPECTATIONS

DRAINAGE AND EROSION CONTROL MATTERS- SILVERTHORNE IS HOME TO THE BLUE RIVER, WHICH ARE DESIGNATED AS "GOLD MEDAL" WATERS BY THE COLORADO WILDLIFE COMMISSION. TO ENSURE THAT THE TOWN'S WATER RESOURCES REMAIN IN PRISTINE CONDITION RESPONSIBLE CONSTRUCTION MANAGEMENT TECHNIQUES MUST BE PRACTICED ON ALL CONSTRUCTION SITES. STORMWATER MUST BE MANAGED IN CONJUNCTION WITH AREA DISTURBED BY CONSTRUCTION.

TOWN OF SILVERTHORNE EXPECTATIONS FOR ALL CONSTRUCTION SITES:
1. OBTAIN AN EXCAVATION PERMIT OR PERMISSION FROM A TOWN EMPLOYEE TO EXCAVATE, MOVE, OR DISTURB EARTH.
2. STAKE YOUR AREA OF DISTURBANCE/THIS SHOULD BE WITHIN YOUR BUILDING ENVELOPE- DO NOT DISTURB ANY AREA OUTSIDE YOUR APPROVED DISTURBANCE AREA.
3. ALL CONSTRUCTION PARKING SHOULD BE ON YOUR CONSTRUCTION SITE- OBTAIN A RIGHT OF WAY (ROW) PERMIT FROM THE POLICE DEPARTMENT FOR ANY PARKING IN THE ROW.
4. ON PRIVATE PROPERTY YOU MUST GET WRITTEN PERMISSION FORM THE PROPERTY OWNER.
5. NO STORAGE OF SOILS IN THE ROW.
6. IF YOU HAVE SEDIMENT ON A TOWN ROAD OR IN A TOWN ROW YOU MUST CLEAN THAT AREA PRIOR TO THE END OF EACH DAY- SWEEPING IS A GREAT PRACTICE FOR ALL SMALL PROJECTS.
7. MATERIALS MUST BE PLACED IN A TIDY MANNER AND IF STORED ON PRIVATE PROPERTY YOU MUST HAVE PERMISSION FROM THE PROPERTY OWNER.
8. CONTRACTORS MUST MAINTAIN EMERGENCY ACCESS ON AND AROUND THE SITE, INCLUDING BUT NOT LIMITED TO POLICE, FIRE, AND AMBULANCE SERVICES.
9. BE NEIGHBORLY- NOTIFY THE NEIGHBORS OF ONGOING CONSTRUCTION ON YOUR SITE.
10. HOURS OF CONSTRUCTION IN THE TOWN OF SILVERTHORNE ARE 7AM-7PM MONDAY THROUGH SATURDAY. NO CONSTRUCTION IS PERMITTED ON SUNDAYS OR FEDERALLY DESIGNATED HOLIDAYS.
11. ALL CONSTRUCTION STAGING MUST OCCUR WITHIN THE BUILDING ENVELOPE.
12. COUNTY PERSONNEL MAY LIMIT PROJECT STAGING LOCATIONS, NUMBER OF TRUCKS AND DURATION OF OPERATION DEPENDING ON PROJECT LOCATION, SITE SURROUNDINGS AND NEGATIVE IMPACTS TO THE COMMUNITY AND ROW.
13. CONSTRUCTION TRAILER, JOB MATERIALS STORAGE, PORTABLE RESTROOMS (ATTACHED TO THE GROUND), WASTE MANAGEMENT AND RECYCLING CONTAINERS SHALL BE WITHIN THE BUILDING ENVELOPE.
14. A CONCRETE WASHOUT SHALL BE USED FOR ALL CONCRETE WORK.
15. A CONSTRUCTION MANAGEMENT PLAN MUST BE SUBMITTED WITH EVERY BUILDING, ACCESS AND/OR EXCAVATION PERMIT. THIS PLAN MUST INCLUDE SUFFICIENT BMPs TO CONTROL STORMWATER ON THE SITE.
16. DUST MUST BE CONTROLLED ON ALL CONSTRUCTION SITES- LIGHTLY WATERING DURING THE SUMMER IS A GOOD PRACTICE TO CONTROL DUST.
17. STREET MUST REMAIN FREE FROM SEDIMENT- A TRACKING PAD IS A GOOD MANAGEMENT TOOL FOR MUDDY TIRES.
18. FOR LARGER PROJECTS- USE GOOD TRAFFIC CONTROL TECHNIQUES SUCH AS FLAGGERS FOR ALL DELIVERIES OR HEAVY EQUIPMENT USAGE.
19. ANY ABANDONED AND/OR DISTURBED AREAS MUST BE RECLAIMED.
20. SLOPES OF 30% OR GREATER MUST BE REVEGETATED WITH STRAW MATTING AND DURING CONSTRUCTION A THE EROSION CONTROL DEVICES ON 30% SLOPES MUST MEET THE REQUIREMENTS OF CDPHE.

COLORADO REGISTERED PROFESSIONAL ENGINEER
JOSEPH E. MAGLICIC
33789

No.	Revision/Issue	Date
1	PRELIM PLAT AND SITE PLAN	4/14/21

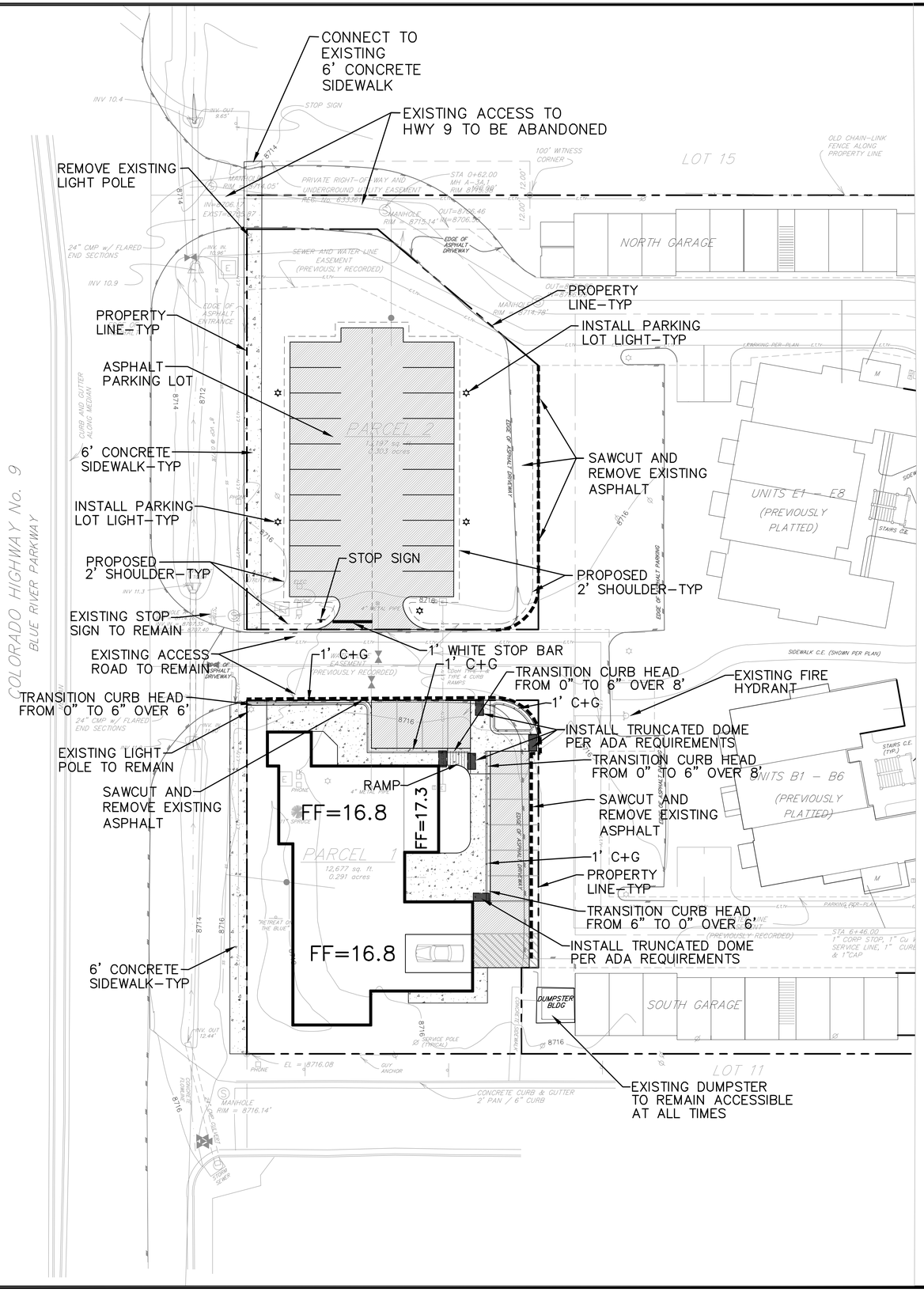
Description: PRELIM PLAT AND SITE PLAN SUBMITTAL

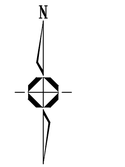
TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY GENERAL NOTES

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: NTS
Sheet: C2





0 10 20 40

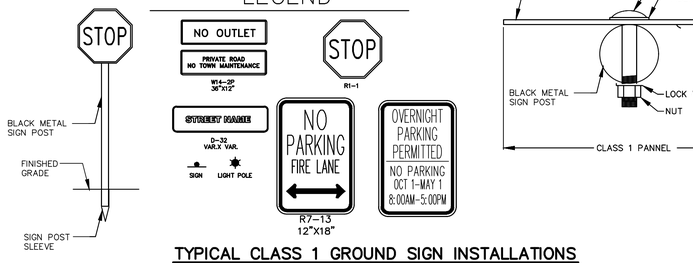
SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

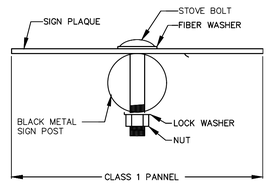
LEGEND

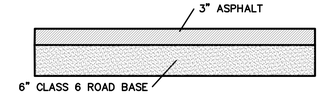
8650	PROPOSED 2' AND 10' CONTOUR
8652	
8650	EXISTING 2' AND 10' CONTOUR
8652	
	PROPOSED STORM SEWER W/ FES
G	EXISTING GAS WITH METER AND VALVE
WM	EXISTING WATER WITH METER AND VALVE
	EXISTING FIRE HYDRANT
	EXISTING WATER MANHOLE
S	EXISTING SANITARY WITH MANHOLE
	EXISTING CLEAN OUT
	EXISTING STORM SEWER MANHOLE
T	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE MANHOLE
	EXISTING SIGN
E	EXISTING ELECTRIC LINE
FL	FLOWLINE ELEVATION
LP	LOW POINT ELEVATION
HP	HIGH POINT ELEVATION
TBC	TOP BACK OF CURB
EOA	EDGE OF ASPHALT
TOW	TOP OF WALL
GEF	GROUND ELEVATION AT FACE OF WALL
	EXISTING WETLANDS
	EXISTING WETLANDS SETBACK
	LIMITS OF EXCAVATION
	PROPOSED RETAINING WALL
	FLOW ARROW

LEGEND



TYPICAL CLASS 1 GROUND SIGN INSTALLATIONS





PAVEMENT SECTION SHALL BE
3" ASPHALT ON 6" OF ROAD BASE
SEE GEOTECHNICAL RECOMMENDATIONS
FOR COMPACTION REQUIREMENTS
SECTION TO BE FIELD VERIFIED BY
GEOTECHINICAL ENGINEER

TYPICAL DRIVEWAY AND PARKING SECTION
NO SCALE

COLORADO REGISTERED
JOSEPH E. MAGLOTHIN
33789
PROFESSIONAL ENGINEER

No.	Description	Date
1	PRELIM PLAT AND SITE PLAN	4/14/21
	Revision/Issue	
	PRELIM PLAT AND SITE PLAN SUBMITTAL	

TEN MILE ENGINEERING, INC.
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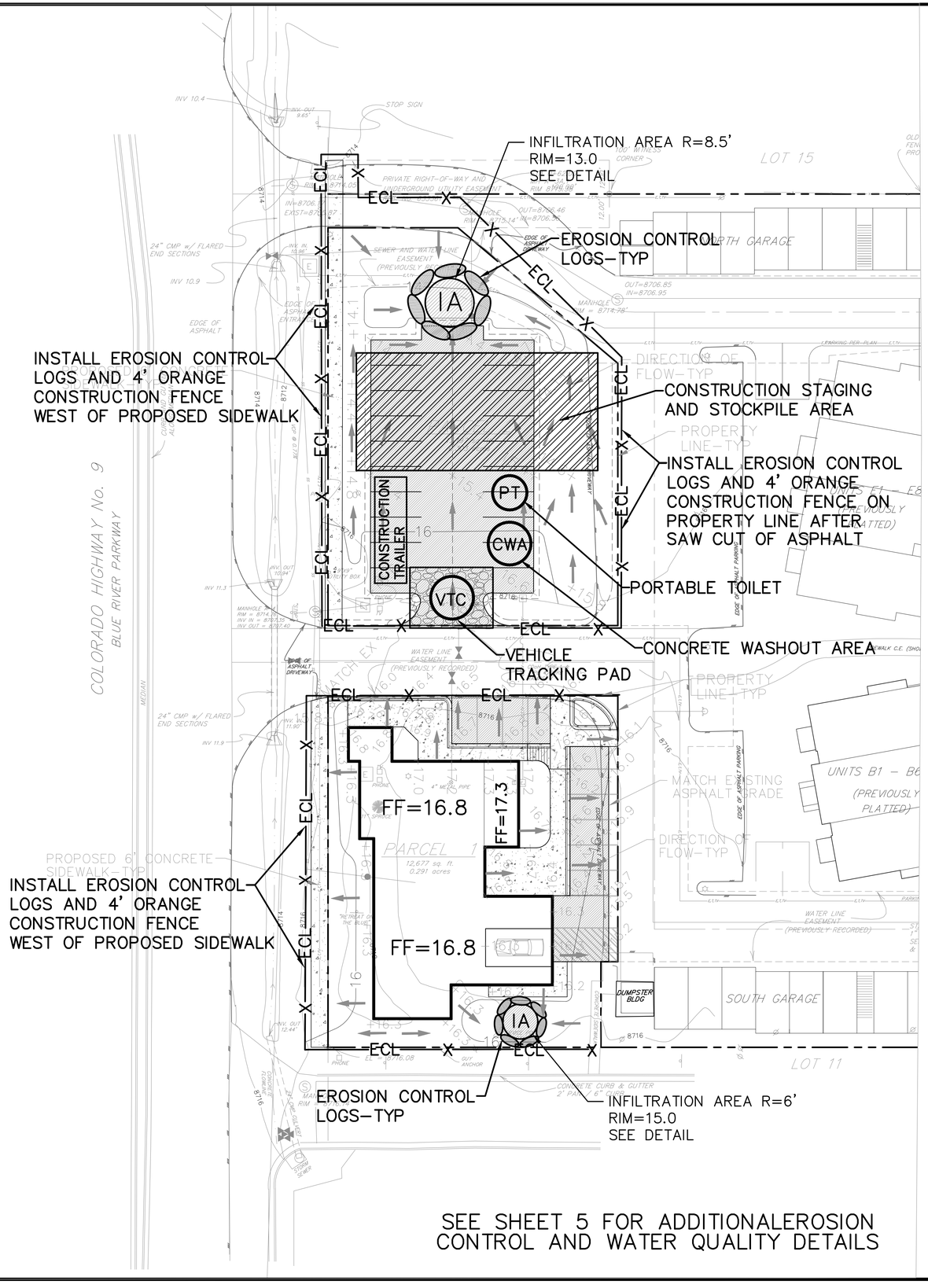
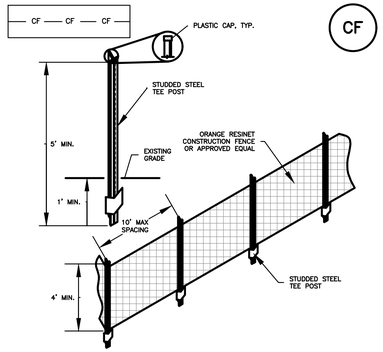
BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY
SITE AND EASEMENT PLAN

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: 1"=20'
Sheet: C3





CF

CONSTRUCTION FENCE INSTALLATION NOTES

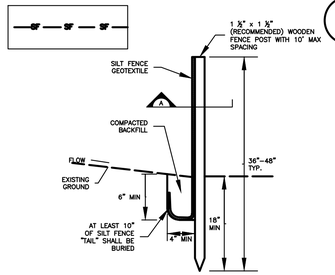
1. SEE PLAN VIEW FOR:
   –LOCATION OF CONSTRUCTION FENCE.
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.
4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.
5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
6. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CF–1. PLASTIC MESH CONSTRUCTION FENCE



SF

SILT FENCE

SECTION A

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').
7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SF–1. SILT FENCE

NOTES

1. ADDITIONAL PRACTICES TO BE EMPLOYED AS NECESSARY TO MEET WATER QUALITY OBJECTIVES AND SUIT THE CURRENT WEATHER, SITE CONDITIONS, AND UNFORESEEN NEEDS.
2. CONTRACTOR RESPONSIBLE FOR ENSURING ALL PRACTICABLE SEDIMENT AND EROSION CONTROL SOLUTIONS ARE EMPLOYED TO MEET WATER QUALITY OBJECTIVES.

EROSION CONTROL NARRATIVE – PHASE 1 AND PHASE 2

1. The intent of the Phase 1 erosion and sediment control plan is to fulfill water quality objectives during the roadway rough grading phase of the project. During this phase, it is anticipated that the maximum amount of disturbed area will be created. In order of occurrence, the following measures should be implemented.
2. A silt fence should be installed as shown on the plan.
3. Diversion dikes should be constructed as shown on the plan to redirect runoff water to stabilized outflow points. These diversion dikes shall be kept in the second phase, as the construction dictates, as part of finished grading for the lots. The dikes break up the slope length and reduce the potential for rill and gully erosion within the property boundary. At the downstream end of each of the diversion dikes, a silt trap should be installed and relocated as construction dictatates, to capture sediments eroded from the partitioned areas.
4. Immediately after road grading is completed, temporary seeding with mulch cover is recommended for all the exposed slopes to stabilize the disturbed areas. Permanent seeding with a temporary mulch cover should be applied to the large areas as designated.
5. Once the Phase 1 rough grading and earth moving is completed, Phase 2 will commence. Phase 2 includes fine grading, home construction, utility construction and street construction. Erosion and control practices outlined include inlet protection and sandbags upstream of inlets, (curb socks).
6. It is extremely important that each of the measures be maintained on a regular basis and inspected by a qualified erosion–control specialist to achieve the required water quality control.
7. Should the utility and street construction not begin within 90 days of completion of the rough grading work, the contractor shall install Rough–Cut Street control in the street areas. It is suggested that during the 90 day period and during construction, division dikes should be used in lieu of the Rough–Cut Street control in the same general location and shape as the shown on the plans. (RCS)

N

0 10 20 40
SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO REGISTERED JOSEPH E. MAGLOTHIN 33789 PROFESSIONAL ENGINEER

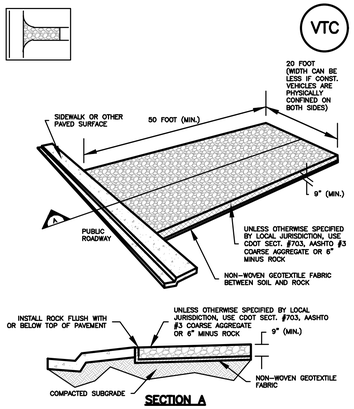
No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

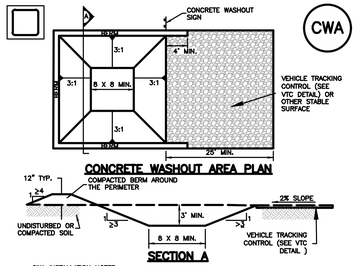
BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY EROSION CONTROL AND WATER QUALITY PLAN

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: 1"=20'
Sheet: C4



VTC–1. AGGREGATE VEHICLE TRACKING CONTROL



CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

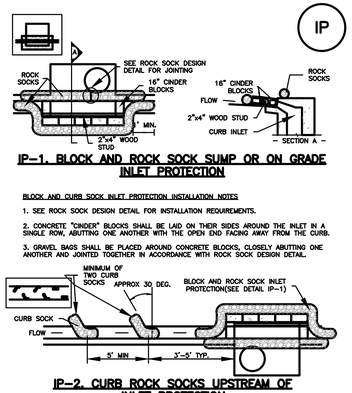
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA–1. CONCRETE WASHOUT AREA



BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

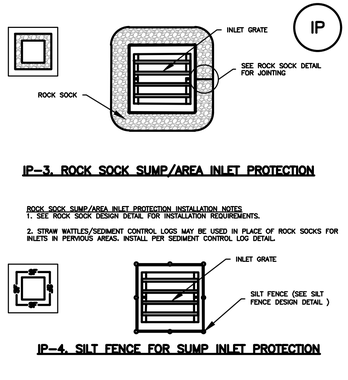
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF INLET PROTECTION.
–TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

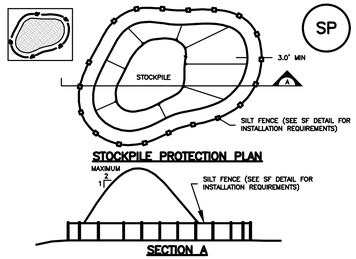
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTIONS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

IP– INLET PROTECTION



STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
–LOCATION OF STOCKPILES.
–TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

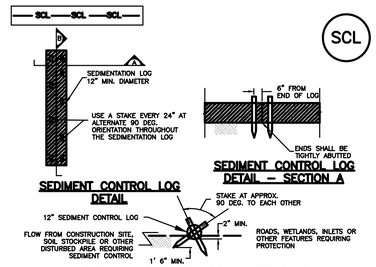
STOCKPILE PROTECTION MAINTENANCE NOTES

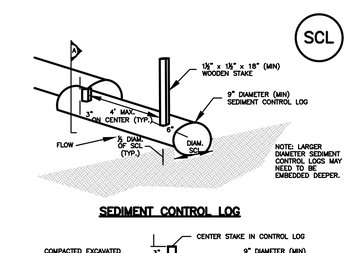
4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SP–1. STOCKPILE PROTECTION





SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

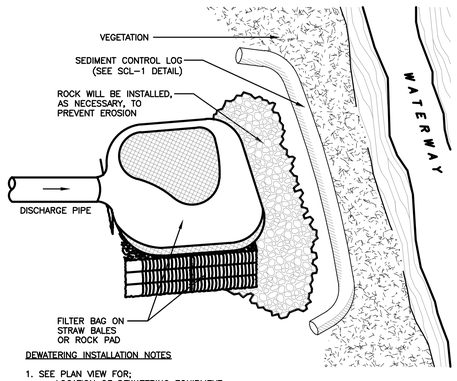
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SCL–1. SEDIMENT CONTROL LOG



DEWATERING INSTALLATION NOTES

1. SEE PLAN VIEW FOR;
–LOCATION OF DEWATERING EQUIPMENT.
–TYPE OF DEWATERING OPERATION (DW–1 TO DW–4).

2. THE OWNER OR CONTRACTOR SHALL OBTAIN A CONSTRUCTION DISCHARGE (DEWATERING) PERMIT FROM THE STATE PRIOR TO ANY DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT.

3. THE OWNER OR OPERATOR SHALL PROVIDE, OPERATE, AND MAINTAIN DEWATERING SYSTEMS OF SUFFICIENT SIZE AND CAPACITY TO PERMIT EXCAVATION AND SUBSEQUENT CONSTRUCTION IN DRY CONDITIONS AND TO LOWER AND MAINTAIN THE GROUNDWATER LEVEL A MINIMUM OF 2–FEET BELOW THE LOWEST POINT OF EXCAVATION AND CONTINUOUSLY MAINTAIN EXCAVATIONS FREE OF WATER UNTIL BACK–FILLED TO FINAL GRADE.

DEWATERING INSTALLATION NOTES

4. DEWATERING OPERATIONS SHALL USE ONE OR MORE OF THE DEWATERING SUMPS SHOWN ABOVE, WELL POINTS, OR OTHER MEANS APPROVED BY THE LOCAL JURISDICTION TO REDUCE THE PUMPING OF SEDIMENT, AND SHALL PROVIDE A TEMPORARY SEDIMENT BASIN OR FILTRATION BMP TO REDUCE SEDIMENT TO ALLOWABLE LEVELS PRIOR TO RELEASE OFF SITE OR TO A RECEIVING WATER. A SEDIMENT BASIN MAY BE USED IN LIEU OF SUMP DISCHARGE SETTLING BASIN SHOWN ABOVE IF A 4–FOOT–SQUARE RIPRAP PAD IS PLACED AT THE DISCHARGE POINT AND THE DISCHARGE END OF THE LINE IS STAKED IN PLACE TO PREVENT MOVEMENT OF THE LINE.

5. DEWATERING OPERATIONS MAY REQUIRE A LOCAL PERMIT IN ADDITION TO STATE REQUIREMENTS.

DEWATERING MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

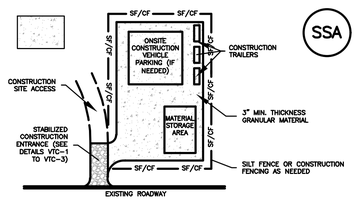
4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS.

5. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

DW–4. DEWATERING FILTER BAG



STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
–LOCATION OF STAGING AREA(S).
–CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SSA–1. STABILIZED STAGING AREA

COLORADO REGISTERED JOSEPH E. MAGLIONE 33789 PROFESSIONAL ENGINEER

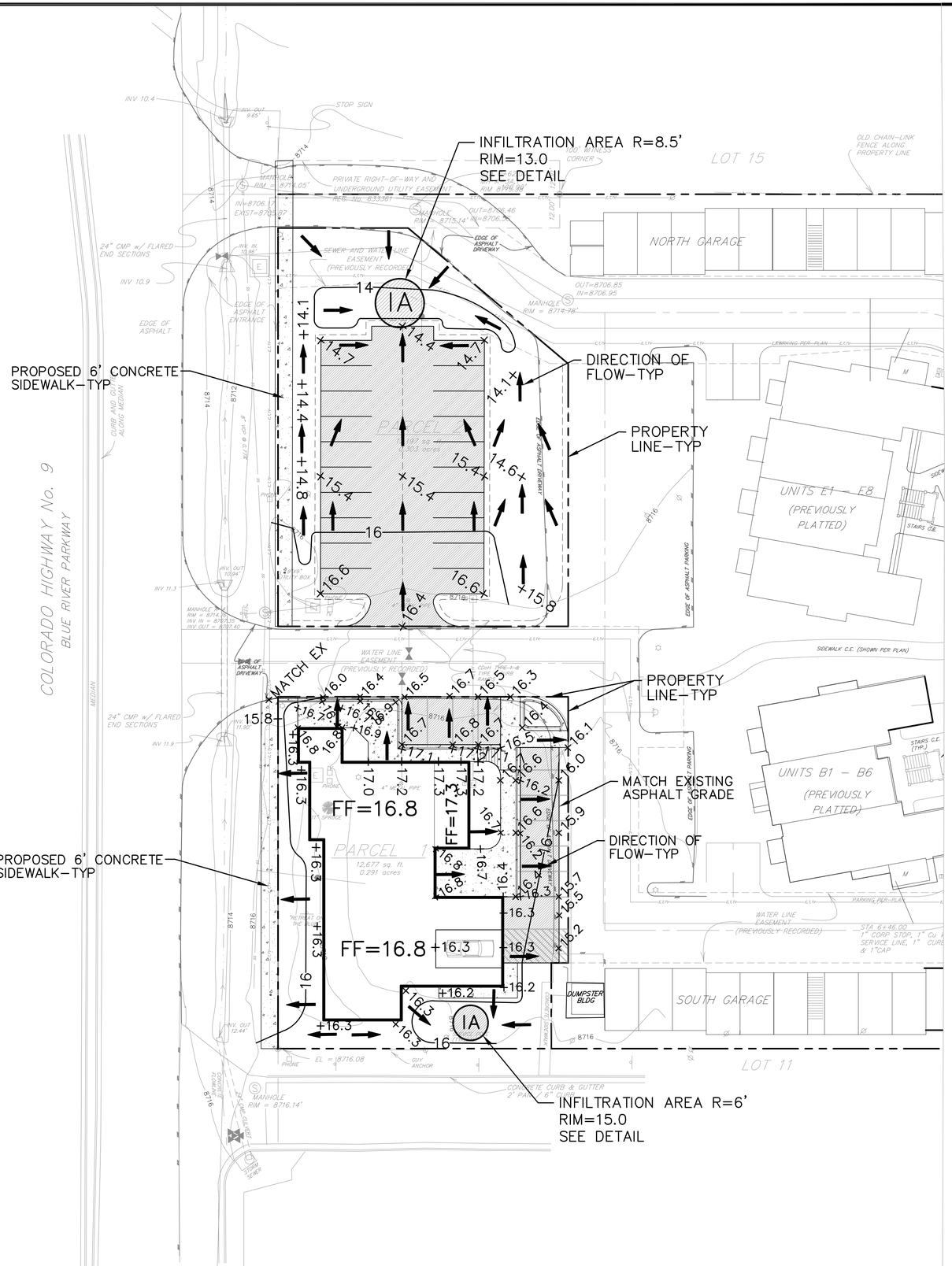
No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

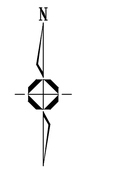
TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY
EROSION CONTROL DETAILS

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: NTS
Sheet: C5





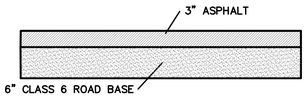
0 10 20 40

SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

LEGEND

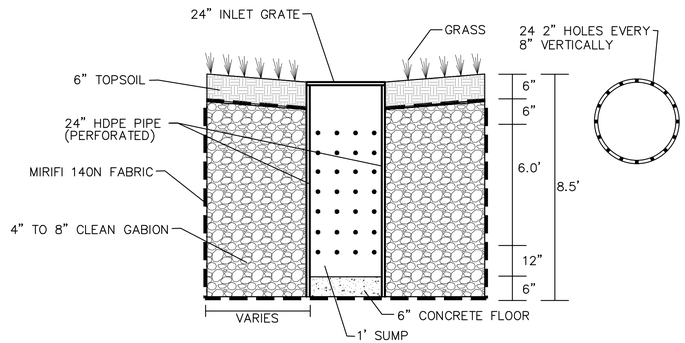
8650	PROPOSED 2' AND 10' CONTOUR
8652	
8650	EXISTING 2' AND 10' CONTOUR
8652	
	PROPOSED STORM SEWER W/ FES
G	EXISTING GAS WITH METER AND VALVE
WM	EXISTING WATER WITH METER AND VALVE
	EXISTING FIRE HYDRANT
	EXISTING WATER MANHOLE
S	EXISTING SANITARY WITH MANHOLE
	EXISTING CLEAN OUT
	EXISTING STORM SEWER MANHOLE
T	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE MANHOLE
	EXISTING SIGN
E	EXISTING ELECTRIC LINE
FL	FLOWLINE ELEVATION
LP	LOW POINT ELEVATION
HP	HIGH POINT ELEVATION
TBC	TOP BACK OF CURB
EOA	EDGE OF ASPHALT
TOW	TOP OF WALL
GEF	GROUND ELEVATION AT FACE OF WALL
	EXISTING WETLANDS
	EXISTING WETLANDS SETBACK
	LIMITS OF EXCAVATION
	PROPOSED RETAINING WALL
	FLOW ARROW



PAVEMENT SECTION SHALL BE
3" ASPHALT ON 6" OF ROAD BASE
SEE GEOTECHNICAL RECOMMENDATIONS
FOR COMPACTION REQUIREMENTS
SECTION TO BE FIELD VERIFIED BY
GEOTECHINICAL ENGINEER

TYPICAL DRIVEWAY AND PARKING SECTION

NO SCALE



ALL INFILTRATION GALLERIES TO BE MAINTAINED BY PROPERTY OWNER. SEDIMENT SHALL BE REMOVED FROM SUMP VIA VACUUM TRUCK ONCE SEDIMENT HAS FILLED SUMP 2/3 FULL.

TYPICAL INFILTRATION AREA DETAIL

NTS

COLORADO REGISTERED
JOSEPH E. MAGLOTH
33789
PROFESSIONAL ENGINEER

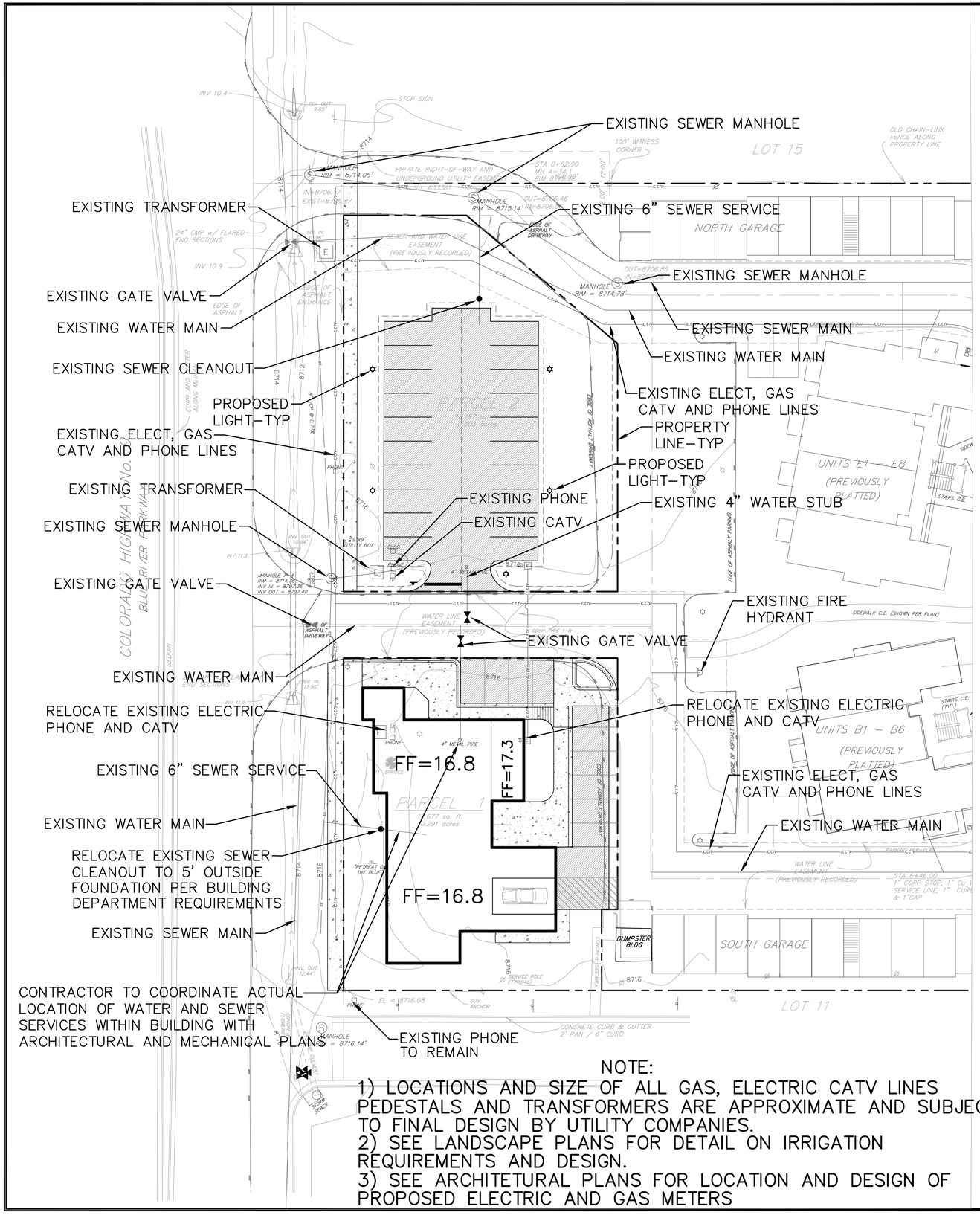
No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

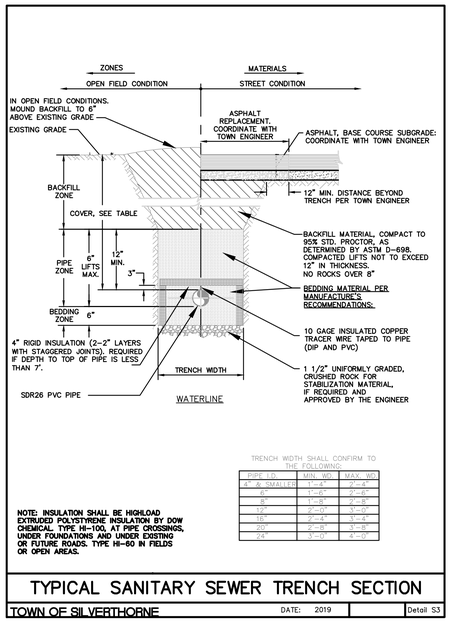
PRELIMINARY
GRADING AND DRAINAGE PLAN

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: 1"=20'
Sheet: C6



NOTE:

1) LOCATIONS AND SIZE OF ALL GAS, ELECTRIC CATV LINES PEDESTALS AND TRANSFORMERS ARE APPROXIMATE AND SUBJECT TO FINAL DESIGN BY UTILITY COMPANIES.
2) SEE LANDSCAPE PLANS FOR DETAIL ON IRRIGATION REQUIREMENTS AND DESIGN.
3) SEE ARCHITETURAL PLANS FOR LOCATION AND DESIGN OF PROPOSED ELECTRIC AND GAS METERS



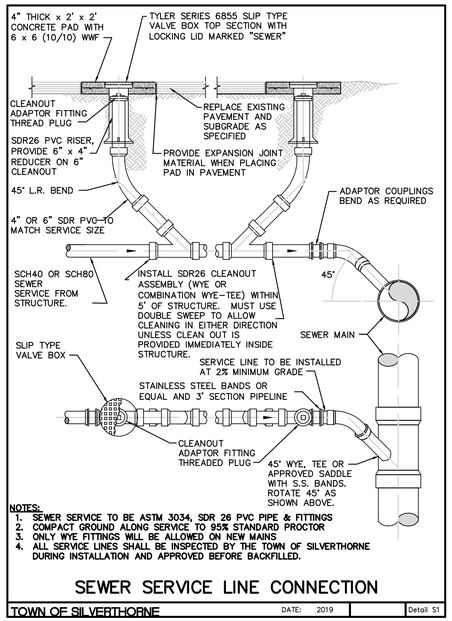
TRENCH WIDTH SHALL CONFIRM TO THE FOLLOWING:

PIPE I.D.	MIN. WD.	MAX. WD.
4" & SMALLER	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
10"	2'-0"	3'-0"
15"	2'-4"	3'-4"
18"	2'-8"	3'-8"
24"	3'-0"	4'-0"

NOTE: INSULATION SHALL BE HIGHLOAD EXTRUDED POLYSTYRENE INSULATION BY DOW CHEMICAL TYPE HI-100, AT PIPE CROSSINGS, UNDER FOUNDATIONS AND UNDER EXISTING OR FUTURE ROADS. TYPE HI-60 IN FIELDS OR OPEN AREAS.

TYPICAL SANITARY SEWER TRENCH SECTION

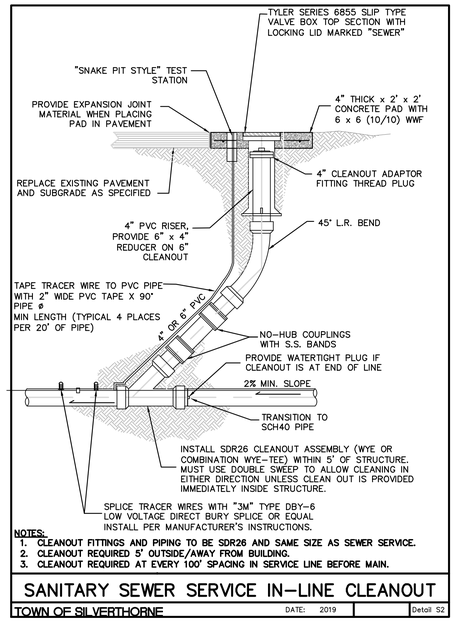
TOWN OF SILVERTHORNE | DATE: 2019 | Detail S3



NOTES:
1. SEWER SERVICE TO BE ASTM 3034, SDR 26 PVC PIPE & FITTINGS
2. COMPACT GROUND ALONG SERVICE TO 95% STANDARD PROCTOR
3. ONLY WYE FITTINGS WILL BE ALLOWED ON NEW MAINS
4. ALL SERVICE LINES SHALL BE INSPECTED BY THE TOWN OF SILVERTHORNE DURING INSTALLATION AND APPROVED BEFORE BACKFILLED.

SEWER SERVICE LINE CONNECTION

TOWN OF SILVERTHORNE | DATE: 2019 | Detail S1



NOTES:
1. CLEANOUT FITTINGS AND PIPING TO BE SDR26 AND SAME SIZE AS SEWER SERVICE.
2. CLEANOUT REQUIRED 5' OUTSIDE/AWAY FROM BUILDING.
3. CLEANOUT REQUIRED AT EVERY 100' SPACING IN SERVICE LINE BEFORE MAIN.

SANITARY SEWER SERVICE IN-LINE CLEANOUT

TOWN OF SILVERTHORNE | DATE: 2019 | Detail S2

LEGEND

8650	PROPOSED 2' AND 10' CONTOUR
8652	
8650	EXISTING 2' AND 10' CONTOUR
8652	
	PROPOSED STORM SEWER W/ FES
G	EXISTING GAS WITH METER AND VALVE
WM	EXISTING WATER WITH METER AND VALVE
	EXISTING FIRE HYDRANT
	EXISTING WATER MANHOLE
S	EXISTING SANITARY WITH MANHOLE
	EXISTING CLEAN OUT
	EXISTING STORM SEWER MANHOLE
	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE MANHOLE
	EXISTING SIGN
E	EXISTING ELECTRIC LINE
FL	FLOWLINE ELEVATION
LP	LOW POINT ELEVATION
HP	HIGH POINT ELEVATION
TBC	TOP BACK OF CURB
EOA	EDGE OF ASPHALT
TOW	TOP OF WALL
GEF	GROUND ELEVATION AT FACE OF WALL
	EXISTING WETLANDS
	EXISTING WETLANDS SETBACK
	LIMITS OF EXCAVATION
	PROPOSED RETAINING WALL
	FLOW ARROW

N

0 10 20 40

SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

CALL UTILITY NOTIFICATION CENTER OF COLORADO

811

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO REGISTERED JOSEPH E. MAGLOTH 33789 PROFESSIONAL ENGINEER

No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

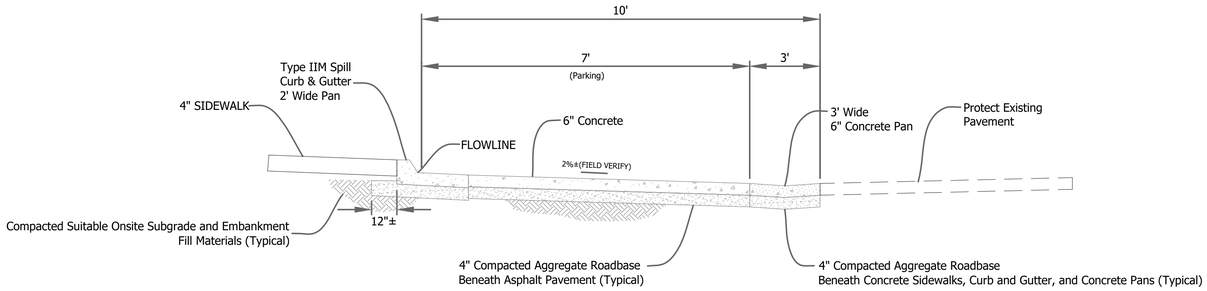
TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING

PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

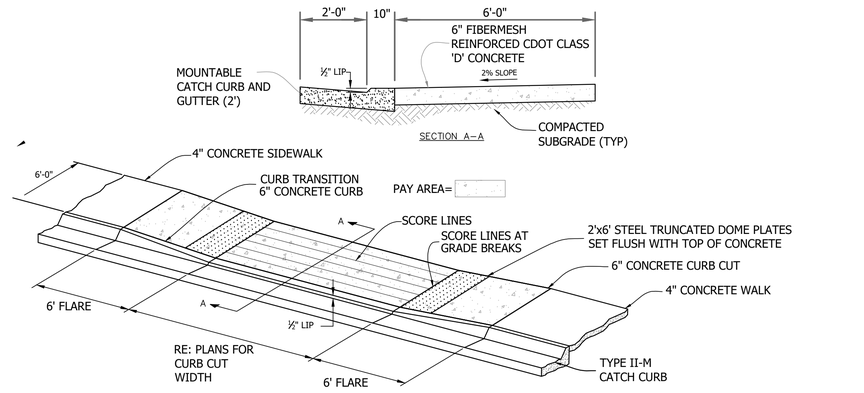
PRELIMINARY OVERALL UTILITY PLAN AND DETAILS

Project: BACKCOUNTRY DENTAL
Date: 4/12/21
Scale: 1"=20'
Sheet: C7



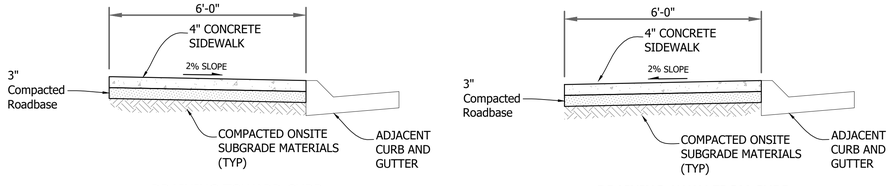
Note: Maximum cross slope shall not exceed 2.0%

A/1 CONCRETE PARKING AREA
NO SCALE



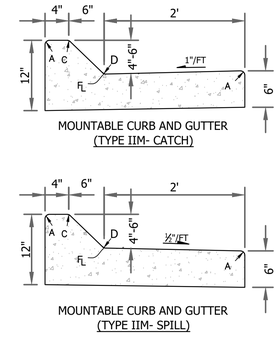
Note: Maximum cross slope shall not exceed 2.0%

B/2 CONCRETE CURB CUT DETAIL
NO SCALE



Note: Maximum cross slope shall not exceed 2.0%

C/3 SIDEWALK DETAILS
NO SCALE



CURB AND GUTTER NOTES:

1) ALL WORK SHALL CONFORM TO TOWN OF DILLON STANDARDS
2) CONTRACTION JOINTS SHALL BE DUMMY JOINTS 1/8" WIDE BY 1" DEEP AT 10' CENTERS.
3) ALL CONCRETE SHALL BE REINFORCED WITH FIBERMESH.

RADII LEGEND
A= ⅛" TO ¼"
B=1"
C=1 ½"
D= 1 ½" TO 2"

4/D CONCRETE CURB AND GUTTER DETAILS
NO SCALE

COLORADO REGISTERED
JOSEPH E. MAGLISCO
33789
PROFESSIONAL ENGINEER

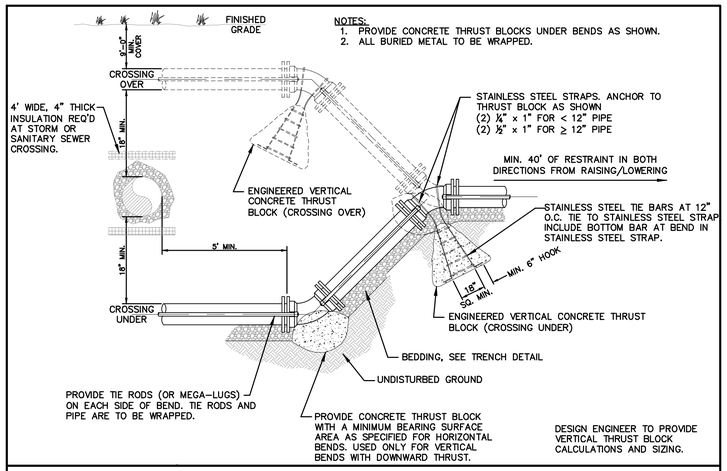
No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY
ROAD DETAILS

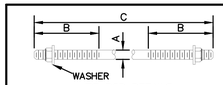
Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: NTS
Sheet: C8



NOTES:
1. PROVIDE CONCRETE THRUST BLOCKS UNDER BENDS AS SHOWN.
2. ALL BURIED METAL TO BE WRAPPED.

RESTRAINED JOINTS AND THRUST BLOCKS AT VERTICAL BENDS

TOWN OF SILVERTHORNE | DATE: 2019 | | Detail W9



TIE ROD DETAILS
NOT TO SCALE

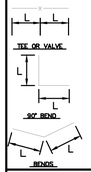
WASHER DETAIL
NOT TO SCALE

1. SEE TIED JOINTS ROD DIMENSIONS THIS SHEET.
2. SEE CLAMP DETAILS AND DIMENSION (SHEET 24, DENVER WATER DEPARTMENT STANDARDS) FOR PROPER PLACEMENT OF WASHERS.
3. RODS, NUTS, COUPLING NUTS & WASHERS ARE 304 OR 316 STAINLESS STEEL.

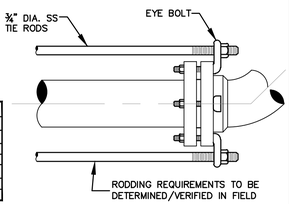
TIE RODS		
A	B	C
ROD DIAMETER	THREAD LENGTH	ROD LENGTH
3/4" – 1"	6"	1' – 11" & 20'
3/4" – 1-1/2"	ALL THREAD	1' – 11" & 20'

WASHERS		
D	E	G
WIDTH	HOLE DIAMETER	THICKNESS
5"	1/8" LARGER THAN ROD ø	1/2"
6"	1/8" LARGER THAN ROD ø	5/8"

RESTRAINT JOINT																							
PIPE SIZE	4"			6"			8"			12"			16"			20"			24"				
FITTING	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G	D	L	G		
90° BEND, TEE, PLUG OR VALVE	3/4"	20"	S.S.	3/4"	45"	S.S.	3/4"	60"	S.S.	3/4"	88"	S.S.	1"	108"	S.S.	1 1/4"	132"	S.S.	1½"	150"	S.S.		
45° BEND	3/4"	8"	S.S.	3/4"	13"	S.S.	3/4"	18"	S.S.	3/4"	25"	S.S.	1"	33"	S.S.	3/4"	39"	S.S.	1"	45"	S.S.		
22-1/2° BEND	3/4"	1.0'	S.S.	3/4"	4'	S.S.	3/4"	5'	S.S.	3/4"	7'	S.S.	3/4"	8'	S.S.	3/4"	10'	S.S.	1"	12'	S.S.		
11-1/4° BEND	–	–	–	–	–	–	3/4"	1.0'	S.S.	3/4"	2'	S.S.	3/4"	2'	S.S.	3/4"	3'	S.S.	1"	3'	S.S.		



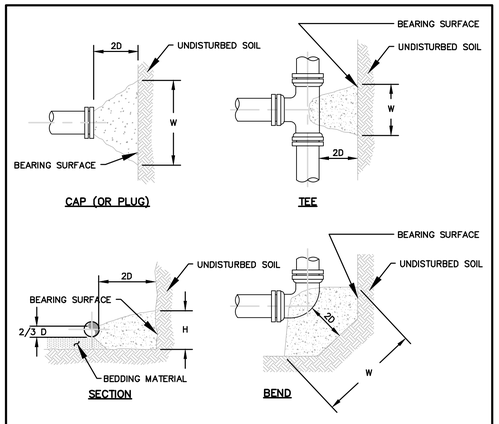
1. LENGTH OF TIED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
2. D=DIAMETER, L=LENGTH, G=GRADE, S.S.=STAINLESS STEEL
3. BASED ON 150 PSI INTERNAL PRESSURE, FOR L AND PRESSURES LISTED SEE TIE ROD & WASHER DETAIL.
4. S.S. MEANS STAINLESS STEEK ROD A.S.T.M. STANDARD DESIGNATION A304.
5. NUTS SHALL BE A.S.T.M. STANDARD DESIGNATION A-304 GRADE A OR B HEXAGON HEAVY SERIES.
6. SEE TIE ROD DETAIL DRAWING ALSO TIE ROD COUPLING DETAILS, CLAMP DETAILS AND SET CLAMP DETAILS.
7. LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE TIED TOGETHER AND IS NOT NECESSARILY THE LENGTH OF THE RODS.
8. LENGTH OF TIED PIPE CHART IS ALSO FOR THE LENGTH OF JOINT RESTRAINT FOR MEGALUGS.
9. CROSSES MUST BE RESTRAINED IN ALL APPLICABLE DIRECTIONS.
10. 12" AND SMALLER IN LINE VALVES AND TEES SHALL HAVE A MECHANICAL JOINT RESTRAINT DEVICE ON EACH SIDE OF THE FITTING OR VALVE WHERE SPECIFICALLY REQUESTED BY THE ENGINEER, MECHANICAL JOINT RESTRAINT DEVICE SHALL BE MEGALUG 1100 SERIES MANUFACTURED BY EBBA IRON, INC
11. ALL FITTINGS MUST BE RESTRAINED WITH TWO (2) OF THE FOLLOWING METHODS: MEGALUGS (OR EQUAL), TIE RODS, OR THRUST BLOCKS.
12. A SECOND VALVE WILL BE REQUIRED TO BE CLOSED WHEN EXCAVATING NEXT TO A EXISTING VALVE.
13. TR FLEX OR EQUAL ACCEPTABLE ALSO.
14. ALL BURIED METAL TO BE WRAPPED.



TYPICAL RESTRAINED JOINT
NOT TO SCALE

TIE ROD AND WASHER DETAIL WITH LENGTH OF RESTRAINED PIPE

TOWN OF SILVERTHORNE | DATE: 2019 | | Detail W8

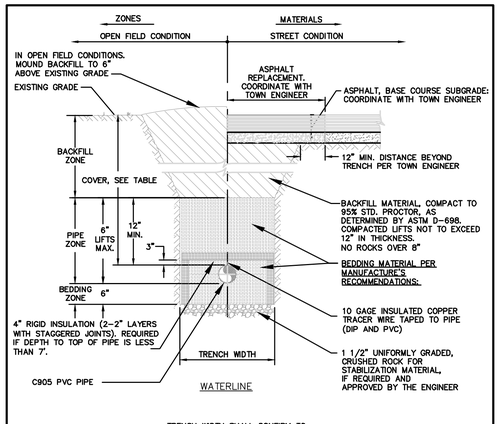


MIN. THRUST AREA REQUIRED – SQUARE FEET						
SIZE	11-1/4° BEND	22-1/2° BEND	45° BEND	90° BEND	TEE (BRANCH SIZE OR CAP)	
4"	0.5	1.0	1.5	2.5	2.0	
6"	1.0	1.5	3.0	5.5	4.0	
8"	1.5	2.5	5.0	9.0	6.5	
12"	3.0	5.5	10.5	19.5	14.0	
16"	5.0	9.5	18.5	34.0	24.0	

NOTES:
1. D = PIPE DIAMETER
2. AREA = H x W
3. DO NOT COVER FITTING BOLTS WITH CONCRETE.
4. PLACE CONCRETE AGAINST UNDISTURBED SOIL.
5. ALL FITTINGS ARE TO BE WRAPPED IN 8 MIL POLYETHYLENE SHEETING.
6. USE BOND BREAKER BETWEEN THRUST BLOCK AND FITTING. (TYP.)
7. PROVIDE MINIMUM 3,000 PSI CONCRETE.
8. SIZES SHOWN FOR 1,500 PSF SOIL BEARING PRESSURE AND AN INTERNAL TEST PRESSURE OF 150 PSI.
9. DO NOT COVER THRUST BLOCK FOR MINIMUM OF 24 HOURS.
10. ALL BURIED METAL TO BE WRAPPED.

THRUST BLOCK

TOWN OF SILVERTHORNE | DATE: 2019 | | Detail W7



TRENCH WIDTH SHALL CONFIRM TO THE FOLLOWING:

PIPE I.D.	MIN. WD.	MAX. WD.
4" & SMALLER	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"
20"	2'-8"	3'-8"
24"	3'-0"	4'-0"

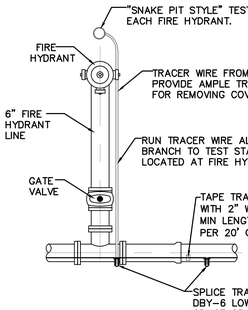
NOTE: INSULATION SHALL BE HIGHLOAD EXTRUDED POLYSTYRENE INSULATION BY DOW CHEMICAL TYPE HI-100, AT PIPE CROSSINGS, UNDER FOUNDATIONS AND UNDER EXISTING OR FUTURE ROADS. TYPE HI-60 IN FIELDS OR OPEN AREAS.

INSULATION REQUIRMENTS:

PIPE COVER	REQUIRED
>8'-0"	NO INSULATION
>7'-0" TO 8'-0"	TOP INSULATION
5'-0" TO 7'-0"	TOP AND SIDES

TYPICAL WATER TRENCH SECTION

TOWN OF SILVERTHORNE | DATE: 2019 | | Detail W3



PLAN

NOTE:
1. ALL BURIED METAL TO BE WRAPPED.

TRACER WIRE INSTALLATION

TOWN OF SILVERTHORNE | DATE: 2019 | | Detail W11

COLORADO REGISTERED STEVEN E. MACLEOD 33789 PROFESSIONAL ENGINEER

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

No.	Revision/Issue	Date	Description
1	PRELIM PLAT AND SITE PLAN	4/14/21	PRELIM PLAT AND SITE PLAN SUBMITTAL

BACKCOUNTRY FAMILY DENTAL AND STAFF HOUSING
PARCELS 1 AND 2 RETREAT ON THE BLUE
TOWN OF SILVERTHORNE, COLORADO

PRELIMINARY WATER DETAILS

Project: BACKCOUNTRY DENTAL
Date: 4/14/21
Scale: NTS
Sheet: C9

A TOPOGRAPHIC MAP OF
RETREAT ON THE BLUE
PARCEL 1 AND 2
TOWN OF SILVERTHORNE, SUMMIT COUNTY, COLORADO

NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE OF FIELD SURVEY: 11/17/2020
CONTOUR INTERVAL=2 FEET

LEGEND

- FOUND No. 4 REBAR & YELLOW PLASTIC CAP (PLS 26292)
- FOUND No. 4 REBAR
- FOUND No. 4 REBAR & ALUMINUM CAP (PLS 15242)
- SEWER MANHOLE
- WATER VALVE
- CURB STOP (WATER SERVICE)
- UTILITY PEDESTAL
- LIGHT POLE
- E TRANSFORMER
- 8" TREE WITH TRUNK DIAMETER

COLORADO HIGHWAY No. 9
BLUE RIVER PARKWAY
(NORTH BOUND)
(SOUTH BOUND)
MEDIAN
CURB AND GUTTER ALONG MEDIAN

INV. OUT 9.65'
MANHOLE RIM = 8714.05'
PRIVATE RIGHT-OF-WAY AND UNDERGROUND UTILITY EASEMENT REC. No. 633361
100' WITNESS CORNER
LOT 15
N 82°02'00" E 458.91'
{TO WITNESS COR.} (N 82°01'03" E 406.48' meas.)
WITNESS CORNER EL = 8711.31
(52.43') 53.71'
LOT 64
S 15°55'42" E 102.21'
N 82°02'00" E 46.21'
MANHOLE RIM = 8715.14'
EDGE OF ASPHALT DRIVEWAY
SEWER AND WATER LINE EASEMENT (PREVIOUSLY RECORDED)
INV. IN 10.96'
S 57°37'09" E
MANHOLE RIM = 8714.78'
40' WITNESS CORNER
NORTH GARAGE
& AFFORDABLE HOUSING UNITS
UNITS NG-2 & NG-4
(PREVIOUSLY PLATTED)
RETREAT ON THE BLUE
SEWER AND WATER LINE EASEMENT (PREVIOUSLY RECORDED)
COMMON ELEMENT
BLDG. D
UNITS D1-D9
(PREVIOUSLY PLATTED)
LOWER PATIOS AND UPPER DECKS ARE L.C.E. FOR ATTACHED UNIT. (TYP.)
PROPERTY LINE EXTENDS TO CENTERLINE OF BLUE RIVER. (TYPICAL)
R=2100' L=18.49' R=228.00'
N 00°11'11" W 100.00'
61.58'
N 03°49'33" W 41.88'
PARKING PER-PLAN
PARKING C.E. (TYP.)
SIDEWALK C.E.
STAIRS C.E.
BLDG. E
UNITS E1 - E8
(PREVIOUSLY PLATTED)
SEWER AND WATER LINE EASEMENT (PREVIOUSLY RECORDED)
S 20°01'24" W
PARCEL 2
13,197 sq. ft.
0.303 acres
FUTURE DEVELOPMENT
303.34'
141.45'
S 07°58'00" E 93.23'
TOE OF ROADWAY EMBANKMENT
EDGE OF ASPHALT PARKING
SIDEWALK C.E. (SHOWN PER PLAN)
BLDG. B
UNITS B1 - B6
(PREVIOUSLY PLATTED)
N 71°50'17" E
LOWER PATIOS AND UPPER DECKS ARE L.C.E. FOR ATTACHED UNIT. (TYP.)
PARKING C.E.
DRIVEWAY COMMON ELEMENT
BLDG. C
UNITS C1 - C9
(PREVIOUSLY PLATTED)
S 75°03'29" E
N 03°29'29" E 29.95'
N 17°32'06" E 35.23'
R=40.00' L=20.25'
R=38.00' L=28.52'
TOWN OF SILVERTHORNE 15' RIVERFRONT PATH EASEMENT (AS SHOWN ON THE FIRST AMENDMENT TO A CONDOMINIUM MAP OF RETREAT ON THE BLUE)
APPROX. CENTERLINE BLUE RIVER FROM AERIAL MAPPING
BLUE RIVER
S 05°29'51" E 101.31'
S 01°01'16" E 101.61'
LOT 63
LOT 62
BLUE RIVER MESA SUB. FIL. NO. 2
PARCEL 1
12,677 sq. ft.
0.291 acres
FUTURE DEVELOPMENT
N 07°58'00" W 124.89'
"RETREAT ON THE BLUE"
11" SPRUCE
4" METAL PIPE
PHONE
ELEC
9"19" UTILITY BOX
INV. OUT 10.94'
MANHOLE RIM = 8714.82'
INV. IN 11.90'
INV. OUT 12.44'
EDGE OF ASPHALT DRIVEWAY
S 82°02'00" W 102.97'
N 82°02'00" E 102.97'
WATER LINE EASEMENT (PREVIOUSLY RECORDED)
DRIVEWAY COMMON ELEMENT
S 07°58'00" E 94.50'
S 82°02'00" W 6.00'
S 07°58'00" E 30.39'
SOUTH GARAGE
& AFFORDABLE HOUSING UNITS
UNITS SG-2 & SG-4
(PREVIOUSLY PLATTED)
1.3.1' DUMPSTER BLDG
12.6'
ENCROACHED
TOE OF BERM
96.97'
EL = 8716.08
S 82°02'00" W 456.68'
LOT 11
(N 82°01'31" E 399.66' meas.) {TO WITNESS COR.}
WITNESS CORNER EL = 8714.01
70.44' (57.02')
CONCRETE CURB & GUTTER 2' PAN / 6" CURB
MANHOLE RIM = 8716.14'
24" CMP CULVERT
STORM SEWER

NOTES:

1.) C.E. INDICATES COMMON ELEMENT. L.C.E. INDICATES LIMITED COMMON ELEMENT.
2.) ELEVATIONS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.
3.) UNIT BOUNDARIES ARE TO THE FACE OF UNFINISHED WALLS.
4.) ALL AREAS OF THE PROPERTY OUTSIDE OF THE BUILDINGS WHICH ARE NOT DESIGNATED AS L.C.E. ARE COMMON ELEMENTS (C.E.).
5.) THE DECLARATION INCLUDES A PROVISION CREATING A BLANKET UTILITY EASEMENT ACROSS THE COMMON ELEMENTS SHOWN ON THIS MAP FOR UTILITIES SERVICING THE PROJECT.

NOTES (CONT.):

6.) THE PROPERTY IS SUBJECT TO DEED RESTRICTIONS FOR AFFORDABLE HOUSING UNITS RECORDED ON MARCH 29, 2002, AT RECEPTION NO. 679980.
7.) THE PROPERTY IS SUBJECT TO THE "SITE WATER AND SEWER INFRASTRUCTURE IMPROVEMENTS AGREEMENT FOR THE RETREAT ON THE BLUE PROJECT" BETWEEN THE TOWN OF SILVERTHORNE AND RETREAT ON THE BLUE, L.L.C., RECORDED ON JUNE 22, 2001, AT RECEPTION NO. 655434.

NOTE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

COLORADO REGISTERED ROBERT J. JAMES 26292 PROFESSIONAL LAND SURVEYOR

Drawn GW/TB/RJ/JJK	Dwg 16233TP2	Project 16233
Checked RRJ	Date 11/23/2020	Sheet 1 of 1

RANGE WEST INC.
ENGINEERS & SURVEYORS
P.O. Box 589
Silverthorne, CO 80498 970-468-6281

R:\RRJ\P\16233\dwg\16233TP2.dwg, 1/9/2006 10:14:07 PM, RRJ