

BLUE RIVER WATERSHED

BLUE RIVER HABITAT RESTORATION PROJECT

JULY, 2026

60 PERCENT DESIGN
NOT FOR CONSTRUCTION

NON-EMERGENCY UTILITY OWNER CONTACTS

CALL COLORADO 811 SYSTEM BEFORE DIGGING FOR UNDERGROUND UTILITY LOCATES

PROJECT LOCATION:

LATITUDE: 39° 37' 43.3" N
LONGITUDE: 106° 04' 20.2" W

SUMMIT COUNTY



VICINITY MAP

SCALE: 1"=500' (FOR 22X34" SHEETS)



Sheet List Table

SHEET NUMBER	SHEET TITLE
01	COVER & TOC
02	GENERAL NOTES
03	EXISTING OVERALL
04	EXISTING
05	OVERALL SHEET KEY
06	UPSTREAM REACH 1
07	UPSTREAM REACH 2
08	UPSTREAM REACH 3
09	UPSTREAM REACH 4
10	UPSTREAM REACH 5
11	WILDERNEST PROFILE
12	TYP SECTION PROFILE DETAILS
13	TYP PROFILE DETAILS
14	TYP SECTIONS DETAILS
15	TYP DEFLECTOR DETAILS
16	TYPICAL WATER CONTROL DETAILS
17	BMPS TYPICAL DETAILS

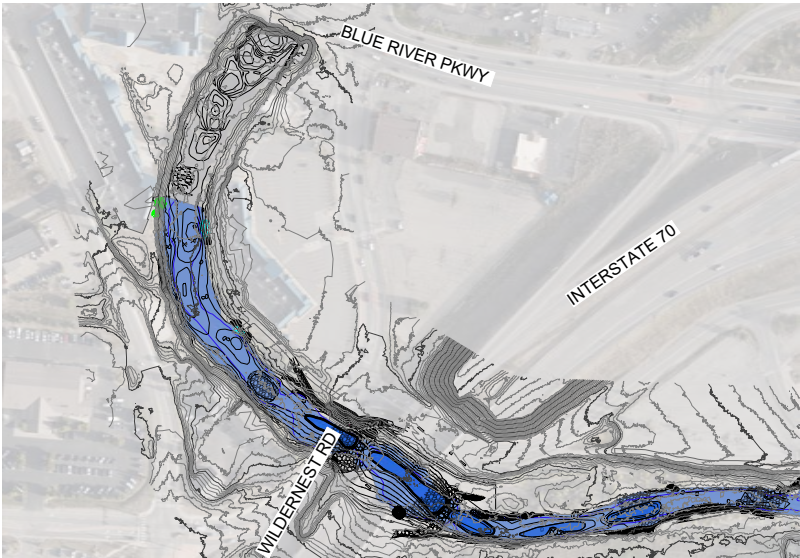
SURVEY NOTES:

- ALL CONTOURS AND ELEVATIONS SHOWN BASED ON TERRAIN DATA PROVIDED BY VERDANTAS & TETRA TECH.
- HORIZONTAL COORDINATE SYSTEM: NAD83 COLORADO STATE PLANES, CENTRAL ZONE, US FOOT
- ELEVATIONS REFERENCE VERTICAL DATUM NAVD88

PROJECT OWNER:

BLUE RIVER WATERSHED GROUP

POST OFFICE BOX 867
SILVERTHORNE, CO 80498



SITE PLAN

SCALE: 1"=200' (FOR 22X34" SHEETS)



LEGEND:

EXISTING CONTOURS	
PROPOSED CONTOURS	
BOULDER TERRACING	
NEW CONCRETE	
STONE RIPRAP	

ABBREVIATIONS:

AVG	AVERAGE
CONC	CONCRETE
DTL	DETAIL
E	EAST
ELEV	ELEVATION
FT	FEET
IN	INCHES
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NTS	NOT TO SCALE
OC	ON CENTER
OHWM	ORDINARY HIGH WATER MARK
SHT	SHEET
STA	STATION
STD	STANDARD
TEMP	TEMPORARY
TYP	TYPICAL



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BOULDER, CO 80302
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PROJECT OWNER:

BLUE RIVER WATERSHED
BLUE RIVER WATERSHED
Silverthorne, CO

BLUE RIVER HABITAT RESTORATION PROJECT

BLUE RIVER SILVERTHORNE, CO

60% DESIGN PLAN

COVER & TOC

REVISIONS:

NO.	DATE
DESIGNED: GL	DRAFTED: WA
CHECKED: RG	
PLOT DATE:	7/24/2026

DRAWING NO.

01

SHEET 01 OF 17

GENERAL NOTES:

GENERAL PROJECT NOTES

- CONSTRUCTION ACTIVITIES MUST COMPLY WITH PERMITTING AGENCY CONDITIONS. SEE PERMIT XXX-000 FOR DETAILS.
- PERMIT CONDITIONS MAY REQUIRE ADDITIONAL DIRECTIVES NOT OUTLINED IN THESE NOTES & SPECIFICATIONS.
- AFTER CONSTRUCTION OF STRUCTURE AND BEFORE DEMOBILIZATION, CONTRACTOR MUST ALLOW WATER TO FLOW THROUGH STRUCTURE(S) WITH REP REPRESENTATIVE PRESENT FOR OBSERVATION AND TESTING.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AT LEAST ONE WEEK NOTICE FOR OBSERVATIONS PERFORMED BY THE ENGINEERS NOTED ABOVE DURING KEY PORTIONS OF EACH STRUCTURE. KEY PORTIONS ARE DEFINED AS CONSTRUCTION OF THE SUBGRADE, TOE ANCHOR PLACEMENT, CONCRETE FORMING FOR CENTERLINE AREAS OF EACH STRUCTURE PLUS THE WING AREA INTERFACING WITH THE CENTERLINE CONCRETE.

ENGINEERS OVERSIGHT

- REP STAFF SHALL BE PRESENT FOR THE CONSTRUCTION OF KEY ASPECTS OF THIS PROJECT AND SUFFICIENT NOTICE MUST BE PROVIDED BY CONTRACTOR IN ORDER TO MAKE TRAVEL ARRANGEMENTS.
- THE CONTRACTOR SHALL PROVIDE REPRESENTATIVES OF THE PROJECT OWNER, ENGINEER, ANY SUB-CONTRACTORS, AND RELEVANT AGENCIES NOTED IN THE PERMITS, TWO WEEKS NOTICE BEFORE CONSTRUCTION COMMENCES.
- ALL CONSTRUCTION SHALL CONFORM TO CITY AND COUNTY STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- WHENEVER THE INCLUDED DRAWINGS ARE FOUND TO BE INCONSISTENT WITH ANY OTHER RESOLUTION, ORDINANCE, CODE, REGULATION, OR OTHER STANDARDS REFERENCED, THE ENACTMENT IMPOSING THE MORE RESTRICTIVE STANDARDS OR REQUIREMENTS SHALL CONTROL.
- THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT CONSTRUCTION PLAN APPROVAL BY ALL RELEVANT AGENCIES. A COPY OF THE APPROVED PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS.
- THE ENGINEER IS TO BE NOTIFIED PRIOR TO ANY PLAN CHANGES OR ON-SITE DESIGN MODIFICATIONS. ALL PLAN CHANGES MUST BE APPROVED BY THE ENGINEER.
- ALL EXISTING TOPOGRAPHIC AND SITE SURVEY DATA SHOWN ON THESE PLANS HAS BEEN OBTAINED AND CERTIFIED BY OTHERS. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS TOPOGRAPHIC INFORMATION, AND MAKES NO REPRESENTATION PERTAINING THERETO AND THEREFORE ASSUMES NO RESPONSIBILITY OR LIABILITY.
- THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE CONSTRUCTION LIMITS OF THE PROJECT AND IN NO WAY SHALL ENCROACHMENT OCCUR ONTO ADJACENT PROPERTIES UNLESS LEGAL EASEMENTS ARE OBTAINED. ALL FILL AND CUT SLOPES SHALL BE SETBACK FROM THE PROPERTY LINE IN ACCORDANCE WITH CHAPTER 70 OF THE UNIFORM BUILDING CODE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY AGREEMENTS NECESSARY OR DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING UTILITIES.

UTILITY NOTES

- THE CONTRACTOR SHALL LOCATE ALL UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION.
- IF UTILITIES ARE IDENTIFIED WITHIN THE PROJECT AREA, A MINIMUM BUFFER OF NO DISTURBANCE, APPROVED BY THE ENGINEER OR OWNER, IS TO BE MAINTAINED ON ALL UTILITY CROSSINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES AND SHOULD NOT RELY SOLELY ON THESE CONSTRUCTION PLANS FOR UTILITY LOCATIONS. CONTRACTOR MUST COMPLETE ALL UTILITY LOCATES PRIOR TO CONSTRUCTION. DAMAGE TO ANY EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL ENVIRONMENTAL

- WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL AGENCIES' LAWS, RULES, REGULATIONS, AND PERMITS. ALL WORK SHALL BE SUBJECT TO INSPECTIONS AND SITE INVESTIGATION BY REGULATORY AGENCIES. FAILURE TO COMPLY WITH THESE REGULATIONS IS SUBJECT TO LEGAL ENFORCEMENT ACTION.
- COPIES OF PERMITS OBTAINED BY THE OWNER WILL BE PROVIDED TO THE CONTRACTOR. CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS ON THE SITE AT ALL TIMES. THESE MAY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: CLEAN WATER ACT SECTION 404 PERMIT FROM THE U.S. ARMY CORPS OF ENGINEERS, SECTION 401 WATER QUALITY CERTIFICATION, FLOODPLAIN DEVELOPMENT PERMIT, ANY APPROPRIATE LAND USE PERMITS, AND ANY RELEVANT CONSTRUCTION STORM WATER PERMITS.
- ON-SITE CONSTRUCTION REVIEWS SHALL BE CONDUCTED TO IDENTIFY MAINTENANCE NEEDS AND CHRONIC PROBLEMS THAT MAY BE OCCURRING. APPROPRIATE REMEDIAL ACTIONS SHALL BE IMPLEMENTED IN A TIMELY MANNER.
- STEPS SHALL BE EMPLOYED THROUGHOUT THE COURSE OF THE PROJECT TO AVOID THE CREATION OF EXCESSIVE TURBIDITY WHICH MAY DEGRADE WATER QUALITY OR ADVERSELY AFFECT AQUATIC LIFE.
- TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES, ALL EQUIPMENT BROUGHT ON SITE SHALL BE THOROUGHLY WASHED TO REMOVE DIRT, SEEDS, AND PLANT PARTS. ANY EQUIPMENT THAT HAS BEEN IN ANY BODY OF WATER WITHIN THE PAST THIRTY (30) DAYS SHALL BE THOROUGHLY CLEANED WITH HOT WATER GREATER THAN 140 DEGREES FAHRENHEIT (TYPICALLY THE TEMPERATURE FOUND AT COMMERCIAL TRUCK WASHES) AND DRIED FOR A MINIMUM OF FIVE (5)

DAYS BEFORE BEING USED AT THIS PROJECT SIRE. IN ADDITION, PRIOR TO TRANSPORTING EQUIPMENT FROM THE PROJECT SITE, ALL VISIBLE MUD, PLANTS, AND FISH/ANIMALS SHALL BE REMOVED, ALL WATER SHALL BE ELIMINATED, AND THE EQUIPMENT SHALL BE THOROUGHLY CLEANED. ANYTHING THAT WAS EXPOSED TO WATER SHALL BE CLEANED AND DRIED FOLLOWING THE ABOVE PROCEDURE.

- IF PREVIOUSLY UNKNOWN ARCHEOLOGICAL MATERIALS ARE DISCOVERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL STOP IMMEDIATELY AND THE ENGINEER AND OWNER SHALL BE CONTACTED. THE STATE HISTORIC PRESERVATION OFFICE WILL THEN BE CONTACTED BY THE ENGINEER OR OWNER FOR CONSULTATION.

SEDIMENT AND POLLUTION CONTROL

- ALL APPROPRIATE SEDIMENT AND POLLUTION CONTROL MEASURES, AND BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE TO MINIMIZE SEDIMENTATION AND RIVERBED IMPACTS PRIOR TO INITIATING IN-RIVER / RIVERBANK WORK.
- CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR THE DESIGN, IMPLEMENTATION, AND MAINTENANCE OF SEDIMENT AND EROSION CONTROLS IN CONFORMANCE WITH CONSTRUCTION STANDARDS AND THE REQUIREMENTS OF REGULATORY AGENCIES THROUGHOUT THE CONSTRUCTION PERIOD. THE ENGINEER WILL NOT BE ON-SITE TO APPROVE, REVIEW, OR MAINTAIN THE CONTROLS. STORMWATER MEASURES MAY BE REQUIRED TO BE INSTALLED AT ANY TIME DURING CONSTRUCTION AT THE DIRECTION OF THE ENGINEER OR OWNER.
- SPOIL PILES SHALL BE COVERED OR OTHERWISE MANAGED TO REDUCE SEDIMENTATION. ALL MATERIAL WHICH IS TO BE PLACED AT UPLAND SITE SHALL BE DISPOSED OF IN SUCH A WAY THAT SEDIMENT RUNOFF IS CONTROLLED AND MINIMIZED.
- CONTRACTOR SHALL NOT STORE EQUIPMENT BELOW THE ORDINARY HIGH-WATER LINE, AND TAKES FULL RESPONSIBILITY FOR ANY MATERIALS DAMAGED, BROKEN, OR LOST AS A RESULT OF RIVER EVENTS.
- ALL FUELING OPERATIONS, LUBRICATING, HYDRAULIC TOPPING OFF, FUEL TANK PURGING, AND EQUIPMENT MAINTENANCE/REPAIRS SHALL BE PERFORMED AT AN UPLAND SITE OUTSIDE OF THE BANKS OF ANY SITE WATERWAYS. THESE ACTIVITIES SHALL TAKE PLACE ON AN APPROVED PAD WITH SPILL CONTROL/ COLLECTION DEVICES IN PLACE.
- ALL CONSTRUCTION EQUIPMENT SHALL BE INSPECTED DAILY FOR HYDRAULIC AND FUEL LEAKS. LEAKS SHALL BE REPAIRED PRIOR TO OPERATION WITHIN THE 100-YEAR FLOODPLAIN. WHEN NOT IN USE, FUEL AND HYDRAULIC FLUIDS SHALL BE STORED AT AN UPLAND SITE OUTSIDE OF THE 100-YEAR FLOODPLAIN. EMERGENCY SPILL RESPONSE DEVICES SHALL BE ON-SITE AT ALL TIMES DURING CONSTRUCTION IN WATERWAYS AND FLOODPLAINS AND SHALL BE READY TO DEPLOY IN THE EVENT OF A SPILL.
- NO CHEMICALS, FUELS, LUBRICANTS, BRUSH, ETC. SHALL BE DISCHARGED OR DISPOSED OF INTO OR ALONGSIDE ANY STREAM, WATERCOURSE, OR FLOODPLAIN UNDER ANY CIRCUMSTANCES.
- LITTER AND CONSTRUCTION DEBRIS SHALL BE CONTAINED DAILY. ALL CONSTRUCTION DEBRIS AND LITTER SHALL BE COMPLETELY REMOVED OFFSITE AND DISPOSED OF PROPERLY UPON PROJECT COMPLETION.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS NECESSARY TO PROVIDE ACCESS TO CONSTRUCTION AREAS FROM ALL EXISTING ROADWAYS AND PATHS TO MINIMIZE GROUND DISTURBANCE AND SEDIMENT TRACKING FROM VEHICLE TIRES. ADJACENT ROADWAYS AND PATHS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT SEDIMENT IS NOT BEING CARRIED OFF-SITE. IF SEDIMENT IS BEING CARRIED OFF-SITE, THE ADJACENT ROADWAYS AND PATHS SHALL BE SWEEPED CLEAN DAILY.
- BMP'S PLUS TEMPORARY SEDIMENT AND EROSION CONTROLS SHALL BE MAINTAINED TO BE FUNCTIONAL UNTIL THE SITE HAS REACHED FINAL STABILIZATION.

BEST MANAGEMENT PRACTICES (BMP'S)

- BMP'S SUCH AS DRAINAGE CHANNELS, PERIMETER FENCING, DETENTION BASINS, AND VEHICLE TRACKING CONTROLS MUST BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES. EFFECTIVE EROSION CONTROL REQUIRES ADAPTATION AND CHANGES DURING CONSTRUCTION THAT CANNOT BE DESIGNED OR ANTICIPATED PRIOR TO CONSTRUCTION. A QUALIFIED SUPERVISOR SHOULD CHECK ALL BMP'S REGULARLY AND NOTIFY THE ENGINEER IF THERE ARE QUESTIONS OR CONCERNS.
- THE CONTRACTOR SHALL IMPLEMENT THE NECESSARY SITE EROSION CONTROL MEASURES FOR INHIBITING DUST, WIND, AND AIR SEDIMENT MOVEMENT OFFSITE DURING ALL PHASES OR STAGES OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE TO THE SURROUNDING NEIGHBORHOOD. ALL DEBRIS SHALL BE CONTAINED IN SUCH A MANNER THAT WILL PREVENT SCATTERING. ALL DEBRIS, INCLUDING TREES AND UNDERGROWTH SHALL BE DISPOSED OF PROPERLY. ALL DEBRIS SHALL BE REMOVED FROM THE SITE PRIOR TO FINAL SITE INSPECTION.
- CONTRACTOR SHALL LIMIT THE AREAS OF DISTURBANCE AND COMPLETE CONSTRUCTION WITH PHASES IN MIND.
- SILT FENCING LOCATED ON THE PERIMETER OF DISTURBED AREAS SHOULD BE CHECK ON A DAILY BASIS OR FOLLOWING SIGNIFICANT STORM EVENTS TO ENSURE IT IS WORKING PROPERLY.
- INLET PROTECTION MUST BE INCLUDED AT ALL STORM, SEWER, AND CULVERT LINKS. APPROPRIATE BMP'S INCLUDE ROCK SOCKS, SEDIMENT CONTROL LOGS, OR SIMILAR.

TEMPORARY WATER CONTROL

- NO WORK SHALL OCCUR IN CHANNEL UNTIL APPROPRIATE WATER CONTROL MEASURES ARE IN PLACE. CONTRACTOR SHALL PREPARE A DEWATERING PLAN TO BE APPROVED BY THE ENGINEER AND OWNER PRIOR TO COMMENCEMENT OF ANY DEWATERING ACTIVITIES.

SPILL REMEDIATION PRACTICES

- ALL CONSTRUCTION SITE PERSONNEL MUST FOLLOW SPILL PREVENTION AND CONTROL PRACTICES AS FOLLOWS:
 - THE SENIOR SAFETY MANAGER, DESIGNATED COORDINATORS, AND THE WATER QUALITY OFFICER WILL BE CONTACTED IMMEDIATELY FOLLOWING ANY SPILL. THE SENIOR SAFETY MANAGER (OR DESIGNEE) MUST IN TURN REPORT THE SPILL TO THE APPROPRIATE FEDERAL, STATE, OR LOCAL AGENCIES IN ACCORDANCE WITH APPLICABLE REGULATIONS.
 - PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE EQUIPMENT.
 - THERE MUST BE A DESIGNATED INDIVIDUAL ON THE SITE TRAINED IN THE APPROPRIATE CLEANUP PROCEDURES FOR VARIOUS TYPES OF CHEMICALS AND THE LOCATION OF INFORMATION AND CLEANUP SUPPLIES.
 - SPILL KITS MUST BE LOCATED ON-SITE. SUBCONTRACTORS MUST BE NOTIFIED OF THEIR LOCATION AND INSTRUCTED HOW TO USE THEM WHEN NECESSARY.
 - SPILLS MUST BE CLEANED UP PROMPTLY AFTER DISCOVERY, AND MATERIALS USED FOR CLEANUP MUST BE DISPOSED OF OFF-SITE AT AN APPROVED FACILITY

MATERIAL HANDLING

- A LIST OF ALL POTENTIALLY TOXIC OR HAZARDOUS CHEMICALS THAT WILL BE USED OR STORED ON-SITE SHALL BE MAINTAINED WITH THE EROSION CONTROL SUPERVISOR. WARNING LABELS MUST BE ATTACHED. MATERIAL SAFETY DATA SHEETS (MSDS) AND OTHER SAFETY INFORMATION FOR A POTENTIALLY TOXIC OR HAZARDOUS SUBSTANCE MUST BE ON THE SITE WHILE THE SUBSTANCE IS USED OR STORED.
- THE FOLLOWING MATERIALS MANAGEMENT PRACTICES MUST BE FOLLOWED:
 - THE QUANTITY OF FUEL AND LUBRICANT AT THE CONSTRUCTION SITE MUST BE MINIMIZED.
 - STRICT STORAGE PRACTICES (I.E. OFF-SITE STORAGE) ARE PREFERABLE. FUEL, HYDRAULIC OIL, AND FORM OIL MUST BE STORED OFFSITE.
 - MATERIALS STORED AT THE CONSTRUCTION SITE MUST BE PROPERLY PROTECTED FROM THE ELEMENTS.
 - MATERIALS MUST BE HANDLED IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS AND MANUFACTURERS' INSTRUCTIONS.
 - CHEMICALS REGULATED UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) WILL BE DOCUMENTED.

WORK LIMITS AND LAYDOWN

- WORK LIMITS, ACCESS, STAGING, LAYDOWN, AND STOCKPILE AREAS SHALL BE LOCATED AS APPROVED BY THE ENGINEER OR OWNER.
- ALL CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN CURRENTLY DISTURBED AREAS TO THE EXTENT POSSIBLE.
- DISTURBED/ EXPOSED RIVERBANKS AND STAGING AND PROJECT ACCESS AREAS SHALL BE PROPERLY STABILIZED (SEEDED, MULCHED, OR OTHERWISE) WITH NATIVE VEGETATION IMMEDIATELY AFTER GRADING TO PREVENT EROSION AND ESTABLISHMENT OF INVASIVE PLANT SPECIES.
- CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO VEGETATION OR PROPERTY OUTSIDE THE WORK LIMITS RESULTING FROM CONSTRUCTION OPERATIONS.
- ALL AREAS TEMPORARILY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, SLOPES, AND ELEVATIONS, UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS.

DISPOSAL OF EXCESS AND WASTE MATERIALS

- EXCESS EXCAVATED MATERIAL, SUITABLE FOR USE AS FILL, SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR TO THE LIMITS OF SUCH MATERIAL AVAILABLE.
- UNACCEPTABLE EXCAVATED MATERIAL, TRASH, DEBRIS AND WASTE MATERIALS SHALL BE REMOVED FROM OWNER'S PROPERTY AND DISPOSED OF. EXCESS EXCAVATED MATERIAL CONSISTING OF NATIVE ALLUVIUM CAN BE PLACED WITHIN WORK AREA.



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PROJECT OWNER:
BLUE RIVER WATERSHED
PO BOX 867
SILVERTHORNE, CO 80498

BLUE RIVER
SILVERTHORNE, CO

60% DESIGN PLAN

GENERAL NOTES

REVISIONS:

NO.	DATE

DESIGNED: GL

DRAFTED: WA

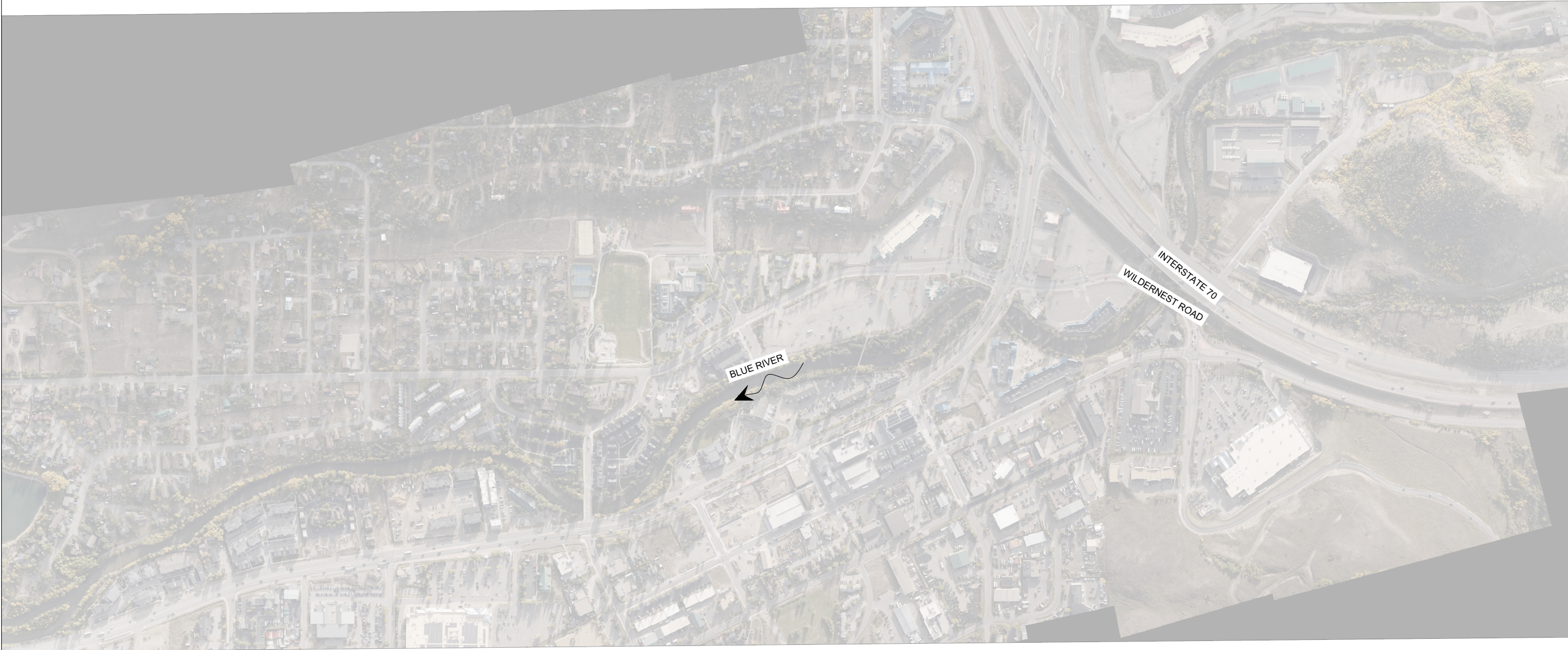
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PLOT DATE: 7/24/2026

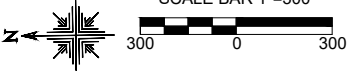
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02

SHEET 02 OF 17



EXISTING CONDITIONS OVERALL



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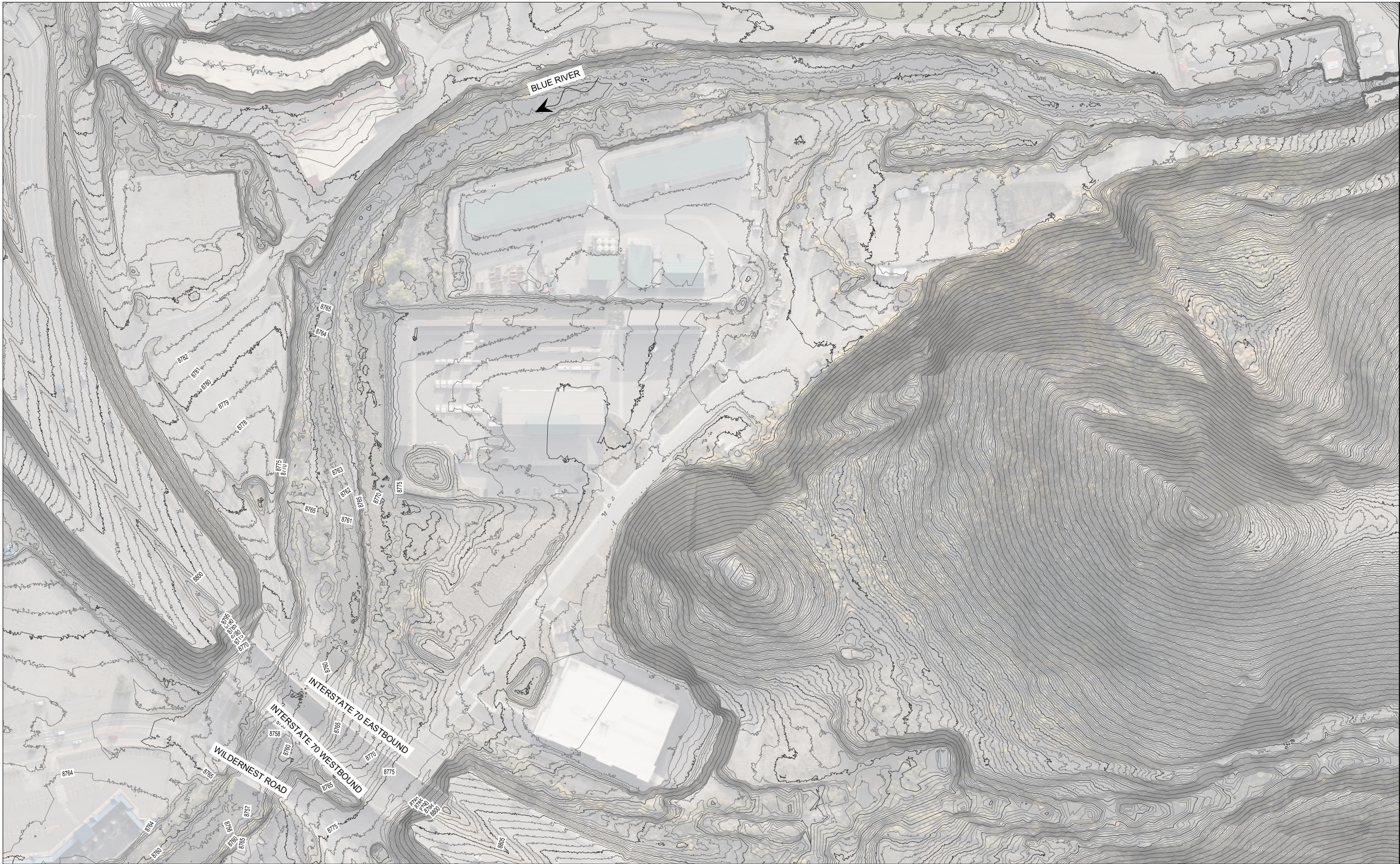
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BLUE RIVER SILVERTHORNE, CO
60% DESIGN PLAN
EXISTING OVERALL

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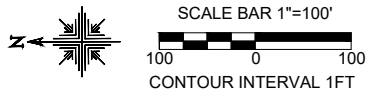
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03

SHEET 03 OF 17



EXISTING CONDITIONS



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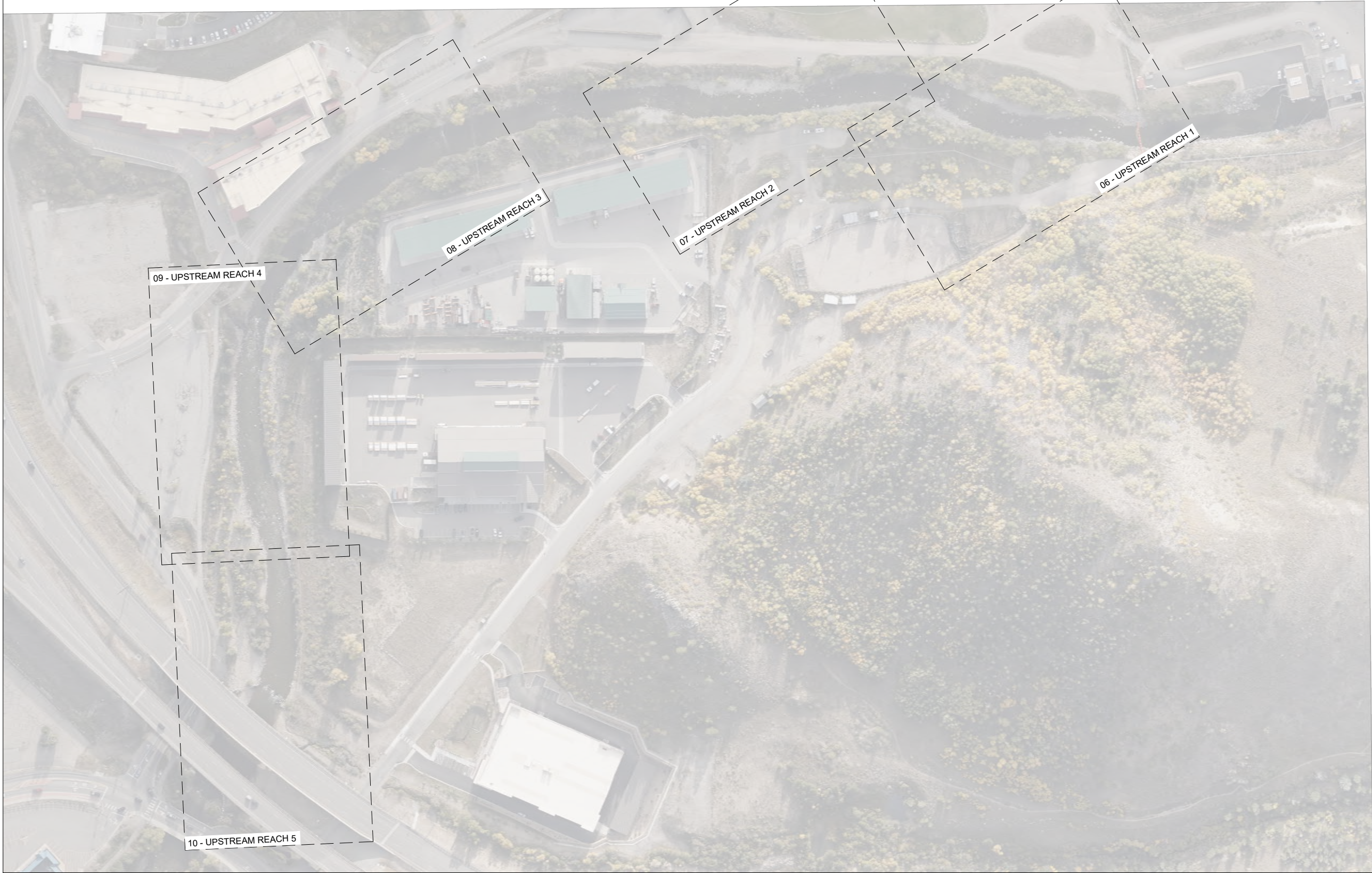
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BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER SILVERTHORNE, CO
60% DESIGN PLAN
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04



OVERALL SHEET KEY



SCALE BAR 1"=100'
100 0 100



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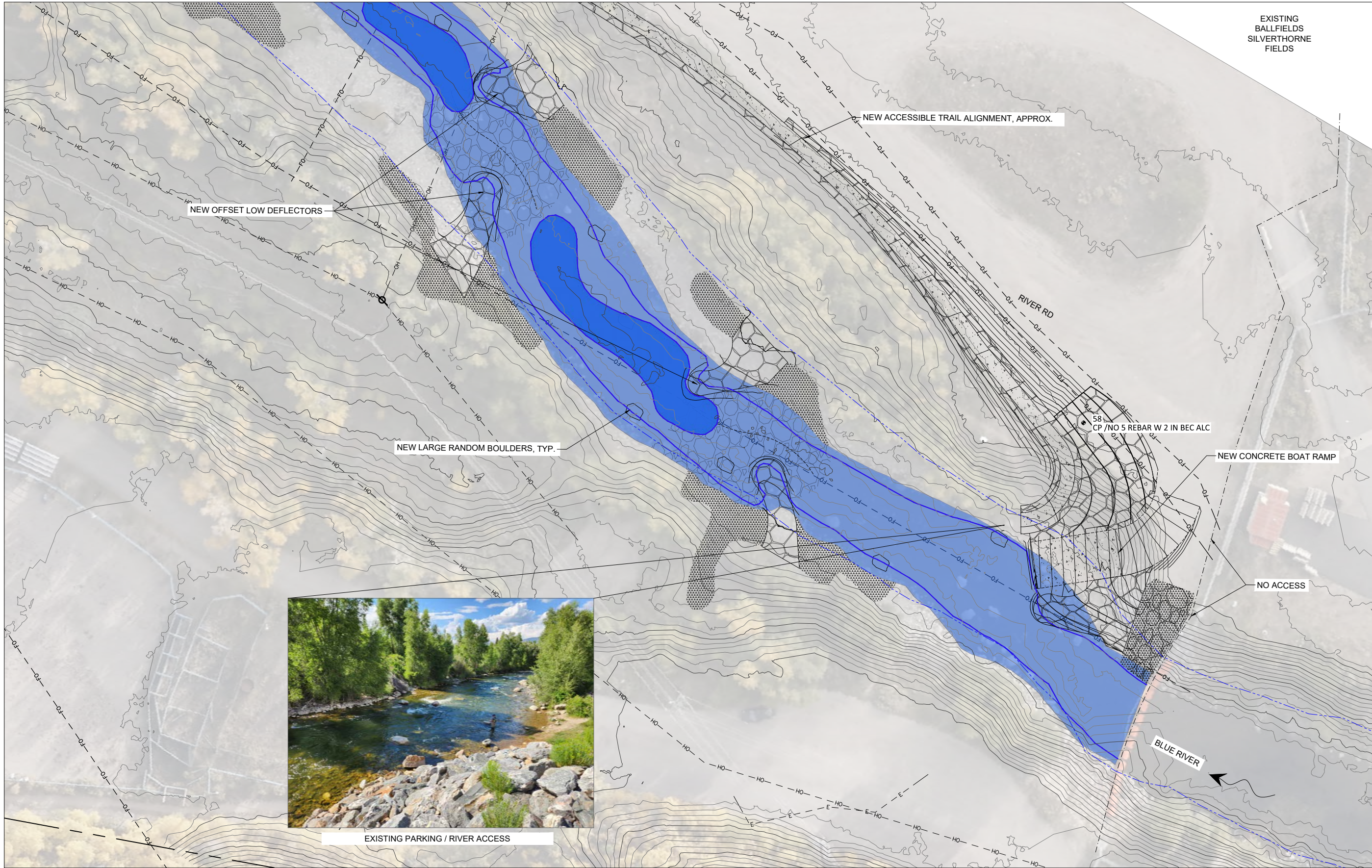
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60% DESIGN PLAN
OVERALL SHEET KEY

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05

SHEET 05 OF 17



UPSTREAM REACH 1

- ALLUVIUM/STONE
- LARGE STONE TERRACING
- RIPARIAN PLANTINGS
- HIGH WATER SURFACE EXTENTS APPROXIMATE
- LOW WATER SURFACE EXTENTS APPROXIMATE



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BLUE RIVER HABITAT RESTORATION PROJECT

BLUE RIVER SILVERTHORNE, CO

60% DESIGN PLAN

UPPER REACH BLUE RIVER

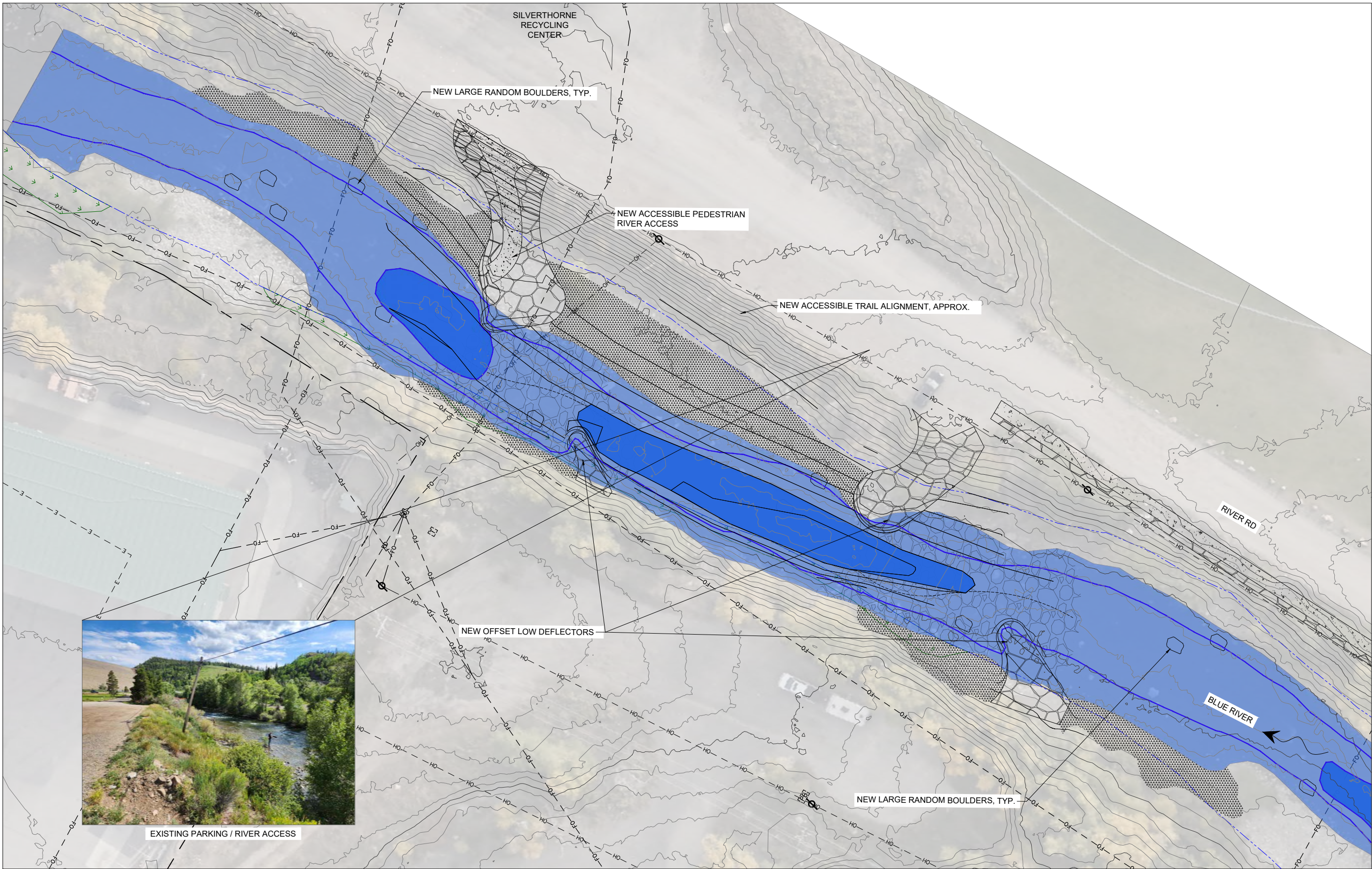
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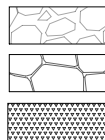
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06

SHEET 06 OF 17



UPSTREAM REACH 2



ALLUVIUM/STONE

LARGE STONE TERRACING

RIPIARIAN PLANTINGS

HIGH WATER SURFACE
EXTENTS APPROXIMATE

LOW WATER SURFACE
EXTENTS APPROXIMATE



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UPPER REACH BLUE RIVER

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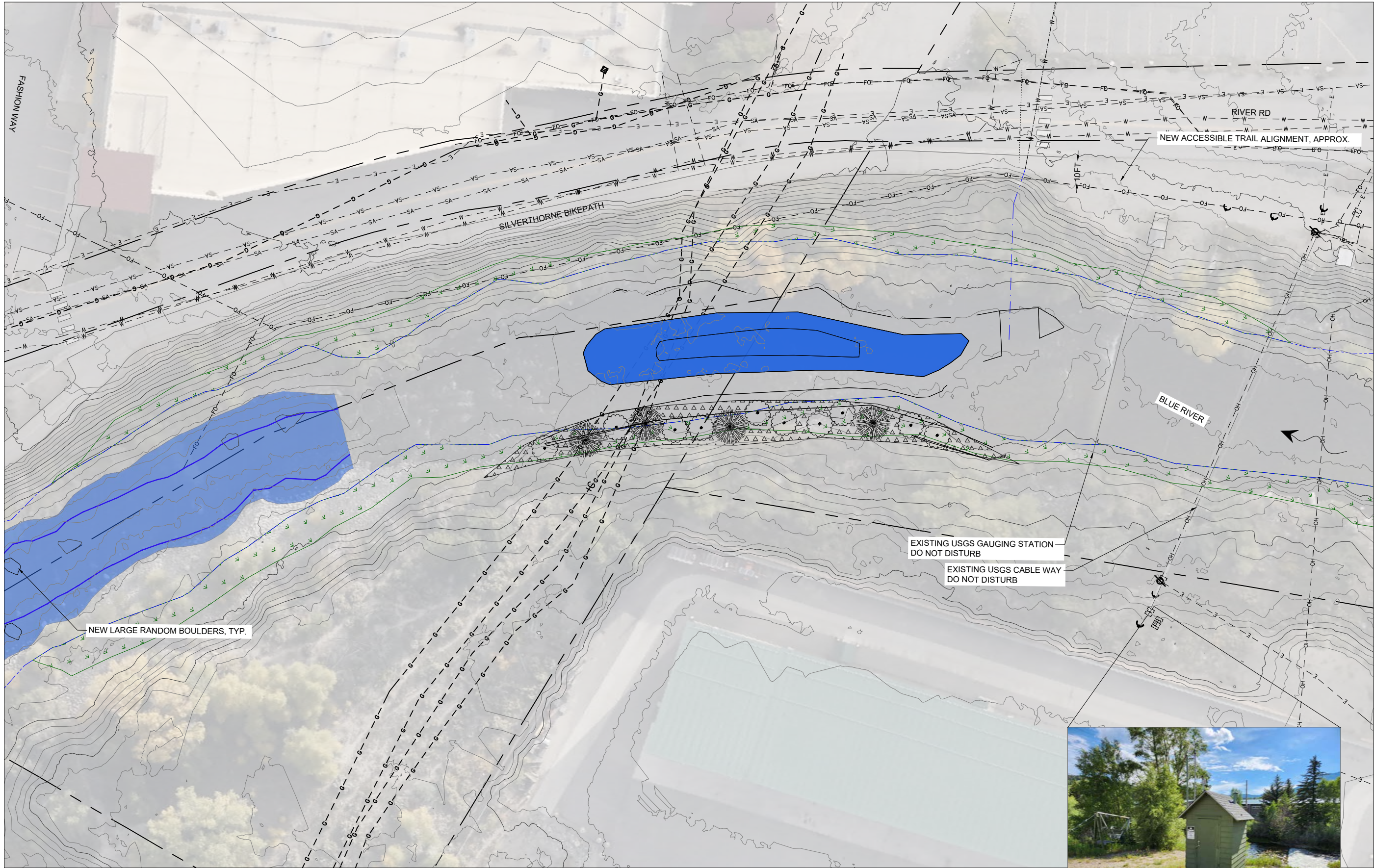
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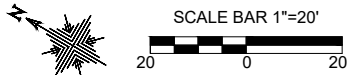
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07

SHEET 07 OF 17



UPSTREAM REACH 3



- ALLUVIUM/STONE
- LARGE STONE TERRACING
- RIPARIAN PLANTINGS
- HIGH WATER SURFACE EXTENTS APPROXIMATE
- LOW WATER SURFACE EXTENTS APPROXIMATE



EXISTING USGS STREAM GAGING STATION



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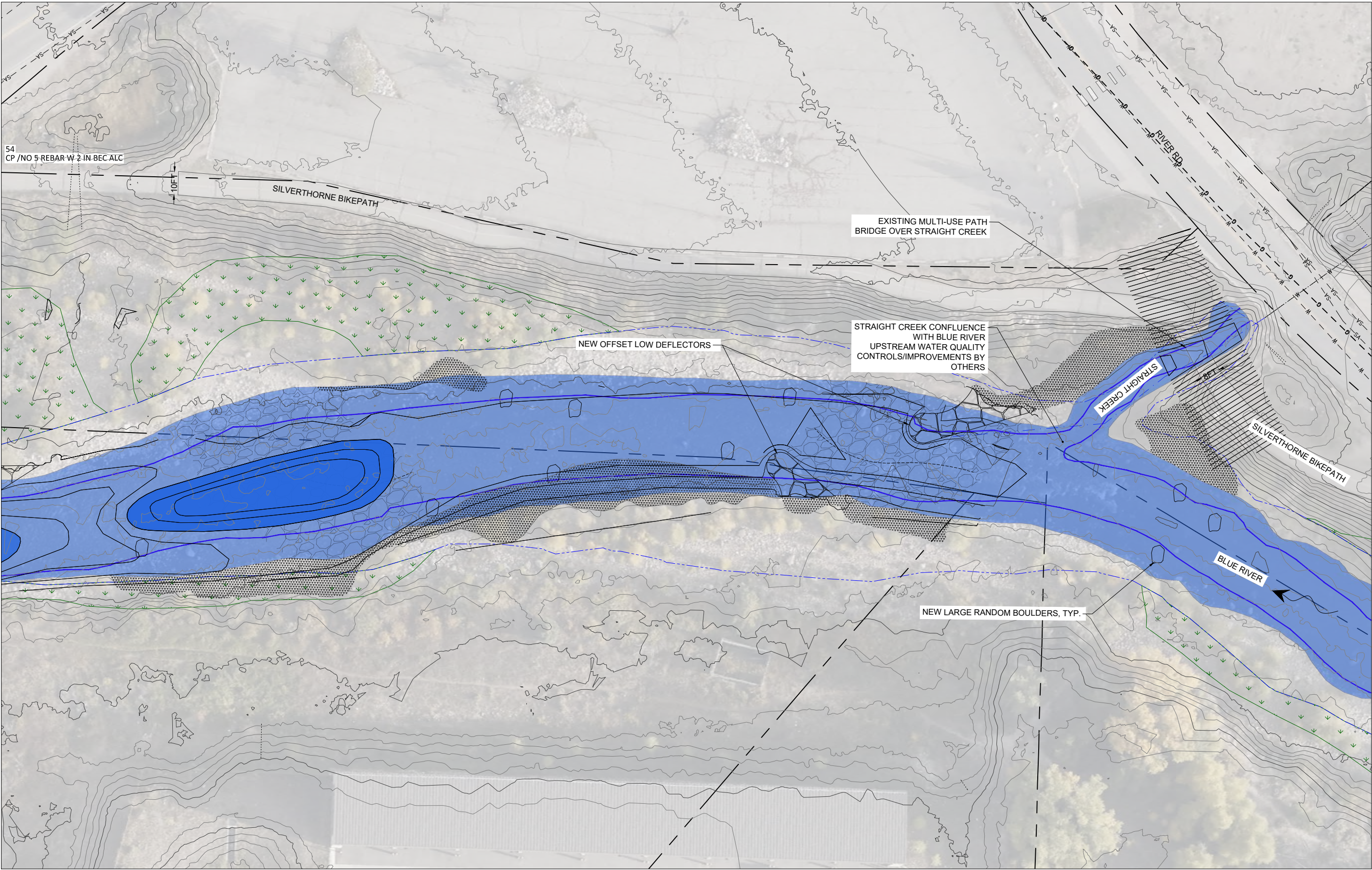
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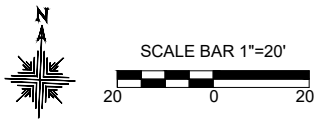
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08
SHEET 08 OF 17



UPSTREAM REACH 4



- | | | | |
|--|-----------------------|--|---|
| | ALLUVIUM/STONE | | HIGH WATER SURFACE
EXTENTS APPROXIMATE |
| | LARGE STONE TERRACING | | LOW WATER SURFACE
EXTENTS APPROXIMATE |
| | RIPARIAN PLANTINGS | | |



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PROJECT OWNER:
BLUE RIVER WATERSHED
GROUP
PO BOX 867
SILVERTHORNE, CO 80498

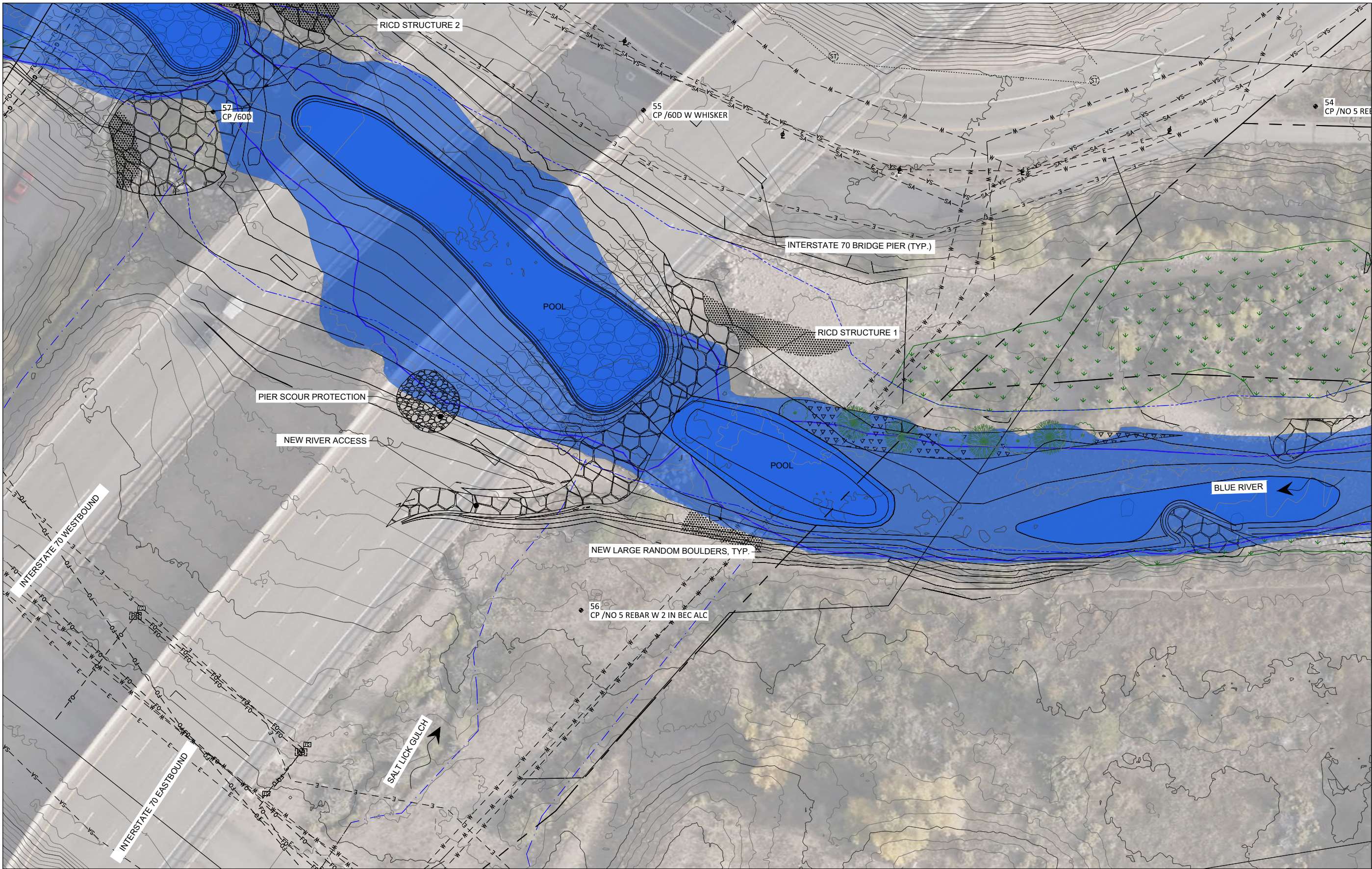
BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER SILVERTHORNE, CO
60% DESIGN PLAN
UPPER REACH BLUE RIVER

REVISIONS:	
NO.	DATE
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CHECKED: RG	
PLOT DATE: 7/24/2026	

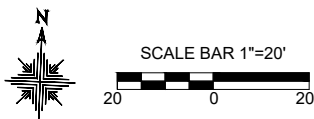
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09

SHEET 09 OF 17



TOWN OF SILVERTHORNE - WILDERNEST ROAD - CDOT SITE



- | | | | |
|--|-----------------------|--|---|
| | ALLUVIUM/STONE | | HIGH WATER SURFACE
EXTENTS APPROXIMATE |
| | LARGE STONE TERRACING | | LOW WATER SURFACE
EXTENTS APPROXIMATE |
| | RIPIARIAN PLANTINGS | | |



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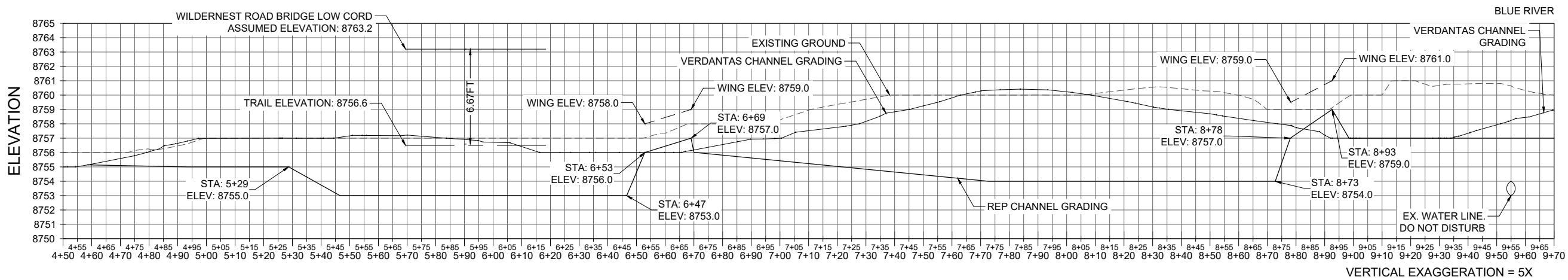
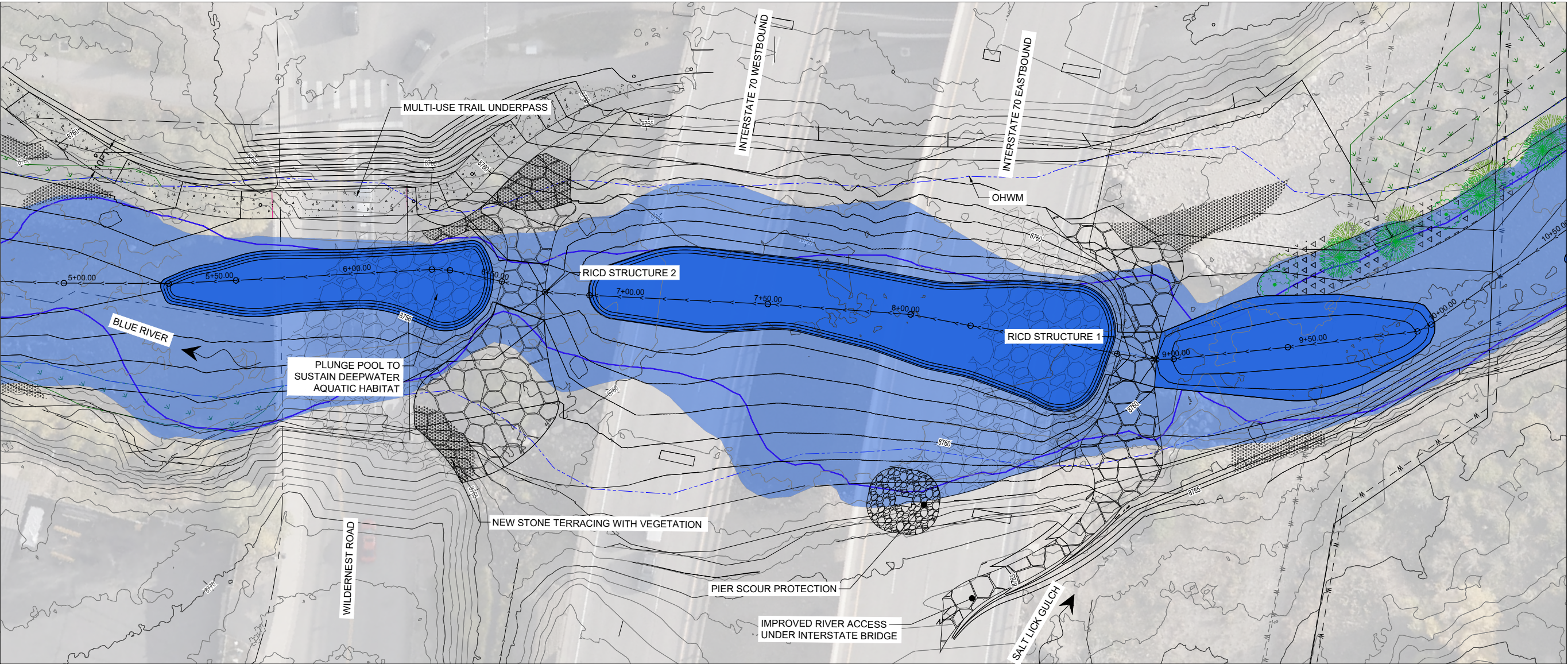
BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER
SILVERTHORNE, CO
60% DESIGN PLAN
UPPER REACH BLUE RIVER

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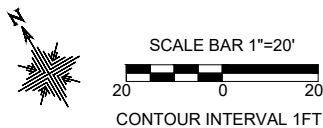
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10

SHEET 10 OF 17



TOWN OF SILVERTHORNE - WILDERNEST ROAD - CDOT SITE
RICD STRUCTURES SITE LAYOUT & PROFILE



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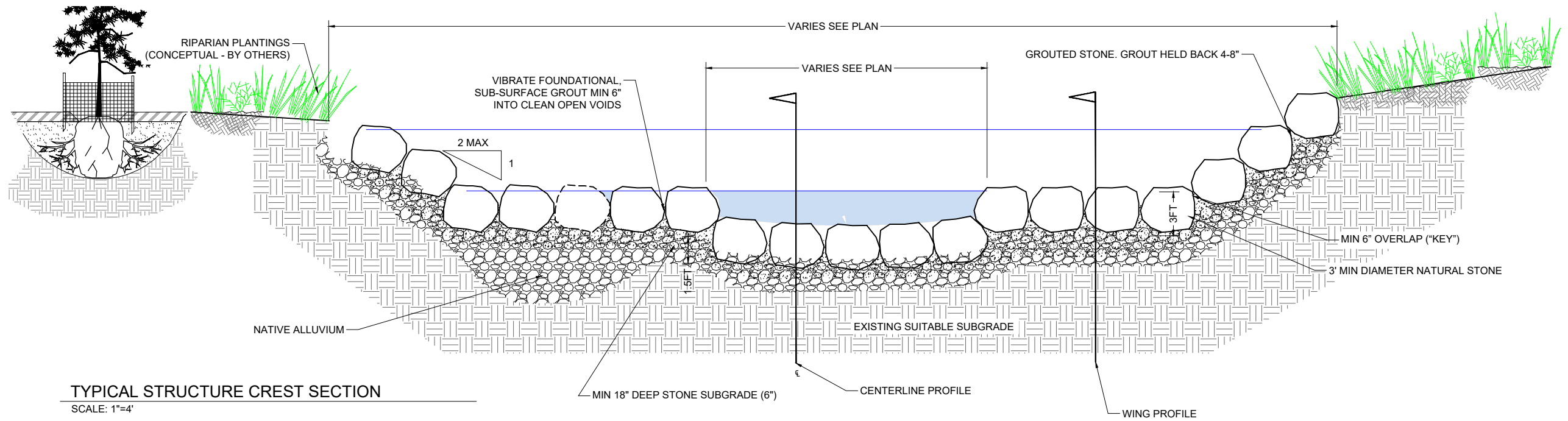
BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER
SILVERTHORNE, CO
60% DESIGN PLAN
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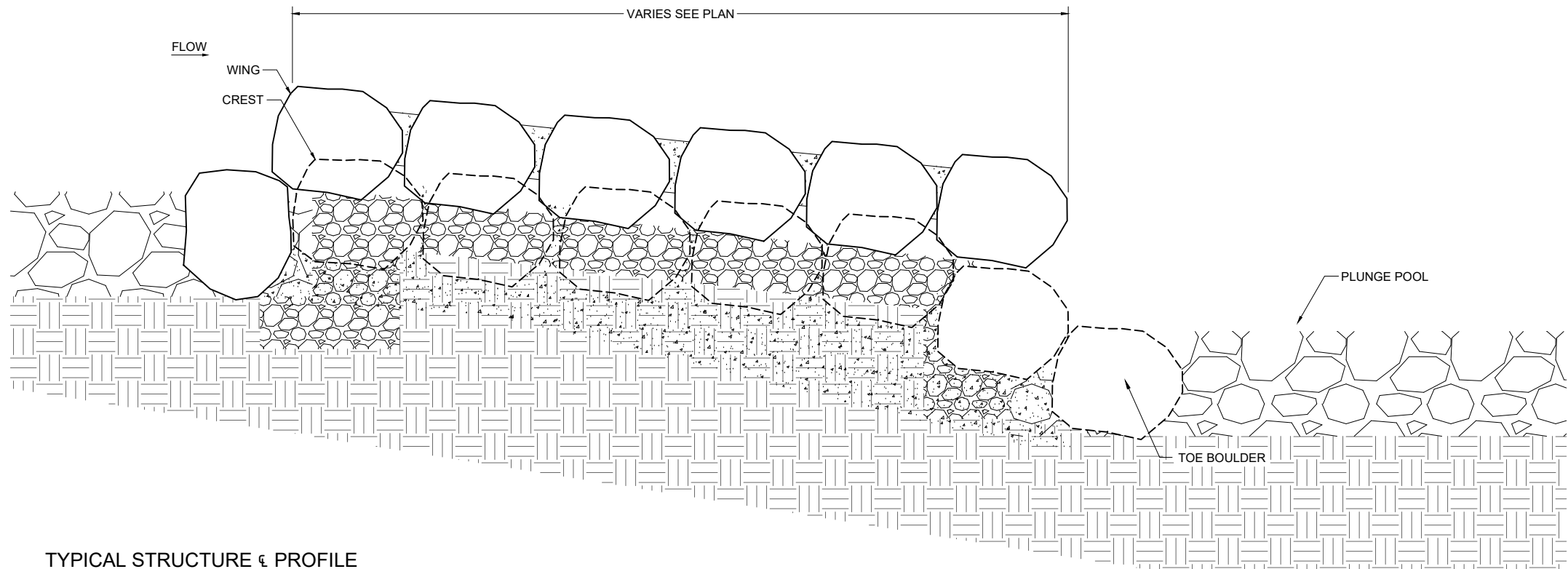
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11

SHEET 11 OF 17



TYPICAL STRUCTURE CREST SECTION
SCALE: 1"=4'



TYPICAL STRUCTURE & PROFILE
SCALE: 1"=2'



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BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER SILVERTHORNE, CO
60% DESIGN PLAN
TYP SECTION PROFILE DETAILS

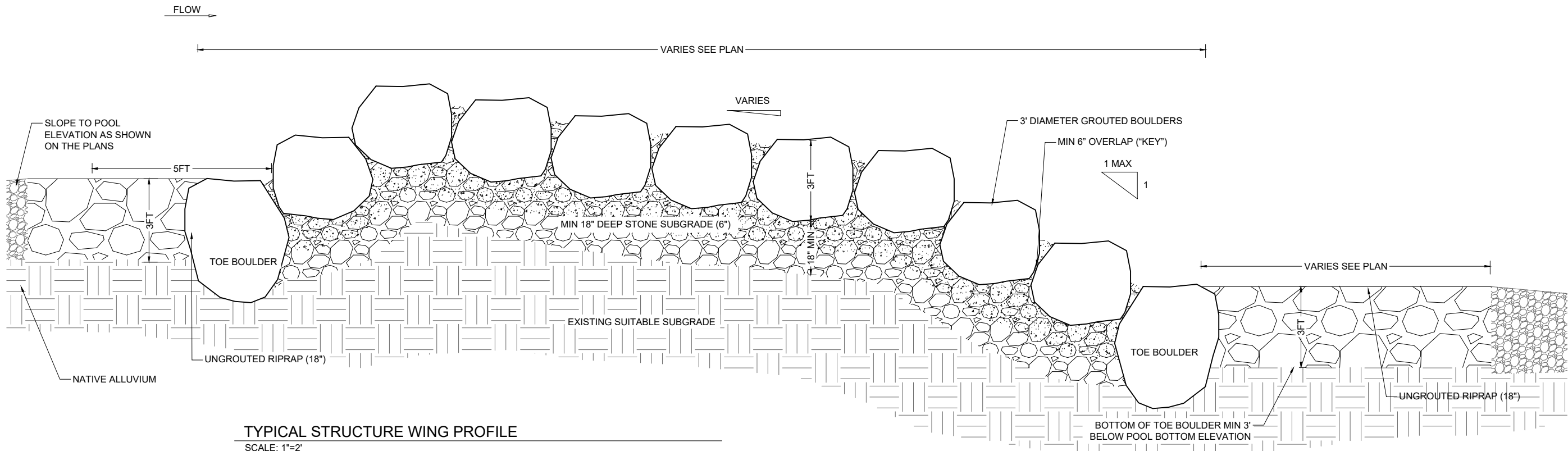
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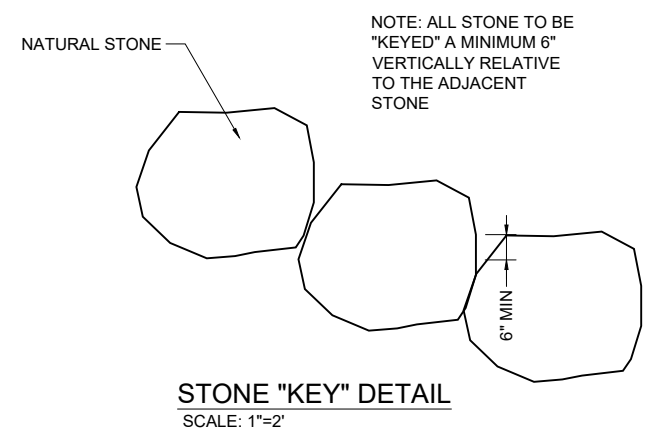
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12

SHEET 12 OF 17



TYPICAL STRUCTURE WING PROFILE
SCALE: 1"=2'



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BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER
SILVERTHORNE, CO
PRELIMINARY - NOT FOR CONSTRUCTION
TYP PROFILE DETAILS

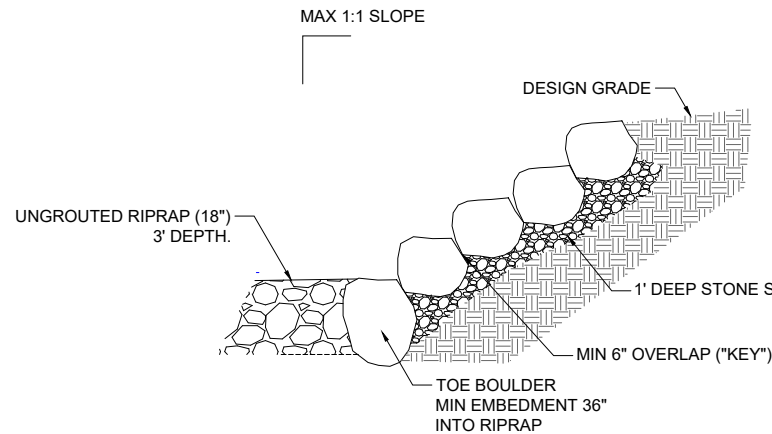
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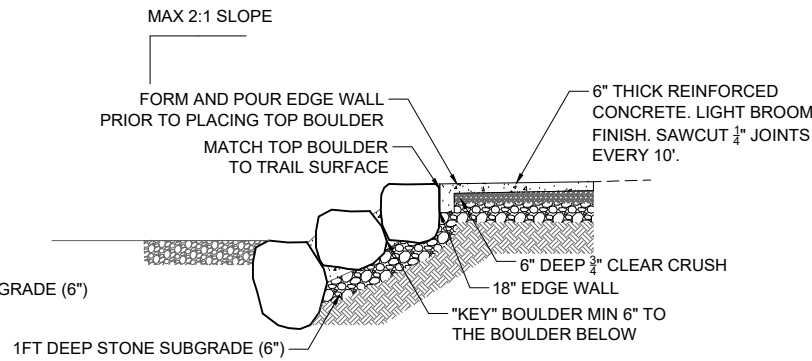
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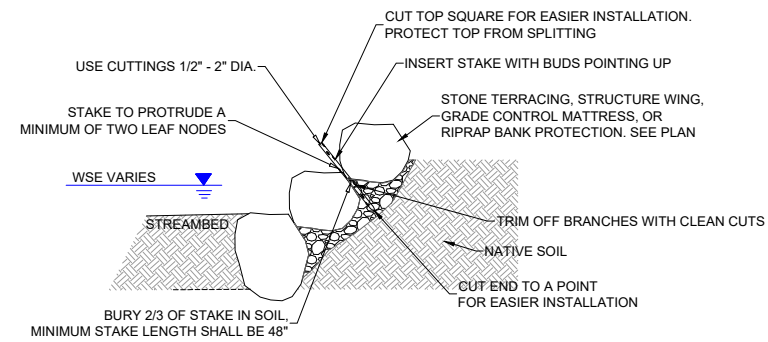
SHEET 13 OF 17



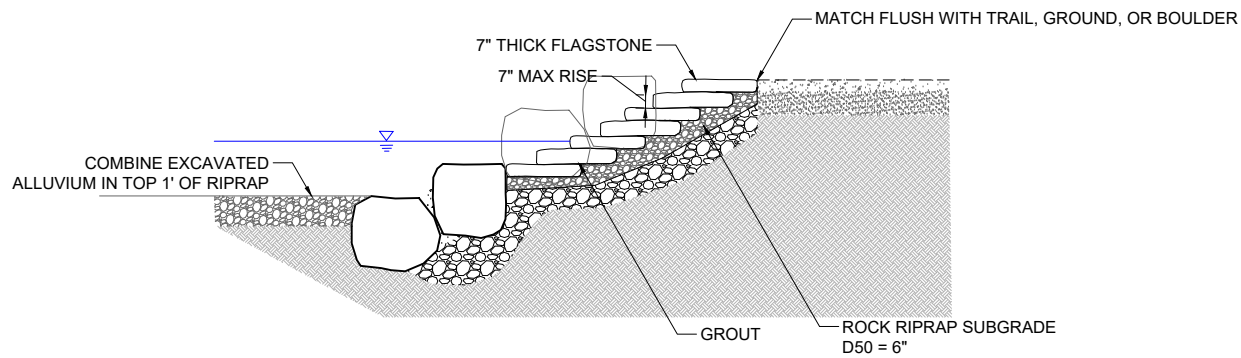
BOULDER TERRACING DETAIL
SCALE: 1"=4'



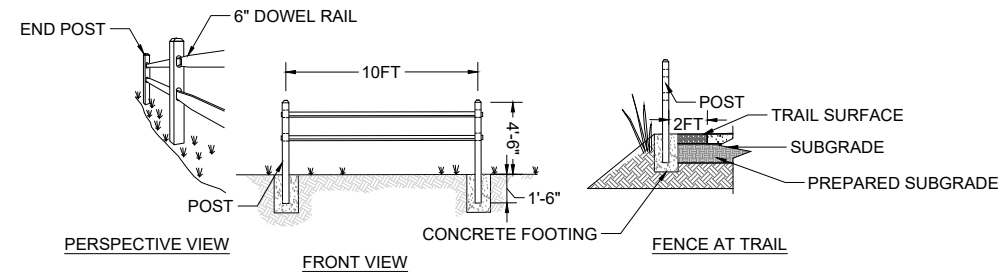
STONE TERRACING INTERFACE W/ CONCRETE PATH DETAIL
SCALE: 1"=4'



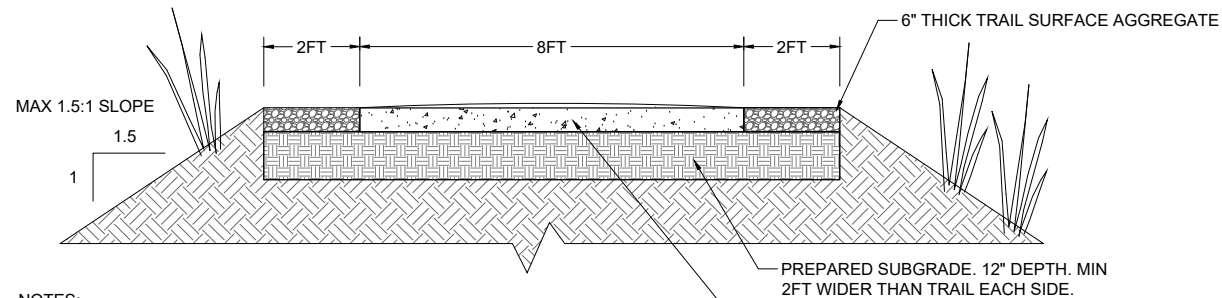
WILLOWS STABBED BOULDERS DETAIL
SCALE: 1"=4'



FLAGSTONE STEP ACCESS DETAIL
SCALE: 1"=4'

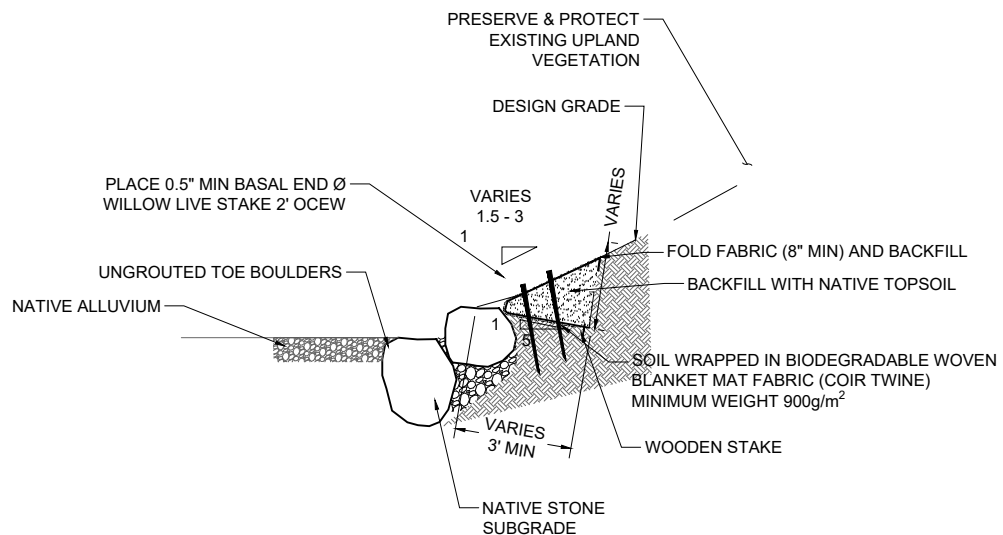


SPLIT RAIL VEGETATION PROTECTION DETAIL
SCALE: 1"=4'



- NOTES:
1. COMPACTED IN LIFTS, SUITABLE FILL MATERIAL, SEE SPECS.
 2. 1.5% CROSS SLOPE ON TRAIL TOWARDS RIVER
 3. CENTERLINE TRAIL CROWN IF GROUND LOWER THAN TRAIL ON BOTH SIDES
 4. REVEGETATE ALL FILL SLOPES

UPLAND TRAIL SECTION
SCALE: 1"=2'



VEGETATED BOULDERS DETAIL
SCALE: 1"=4'



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GROUP
PO BOX 867
SILVERTHORNE, CO 80498

BLUE RIVER HABITAT RESTORATION PROJECT
BLUE RIVER
SILVERTHORNE, CO
60% DESIGN PLAN
TYP SECTIONS DETAILS

REVISIONS:

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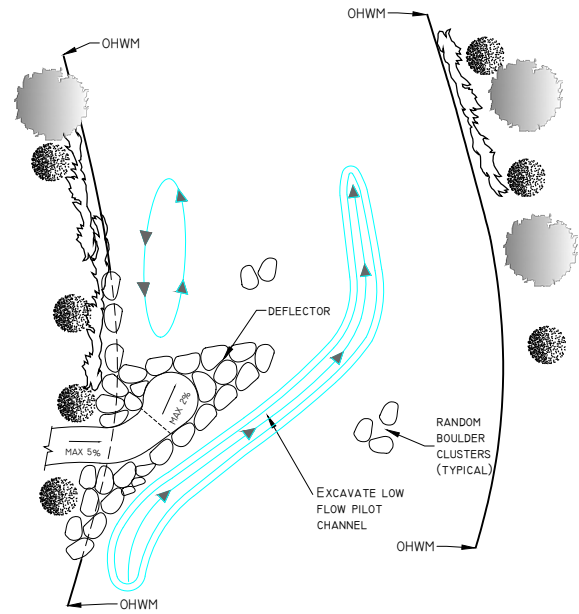
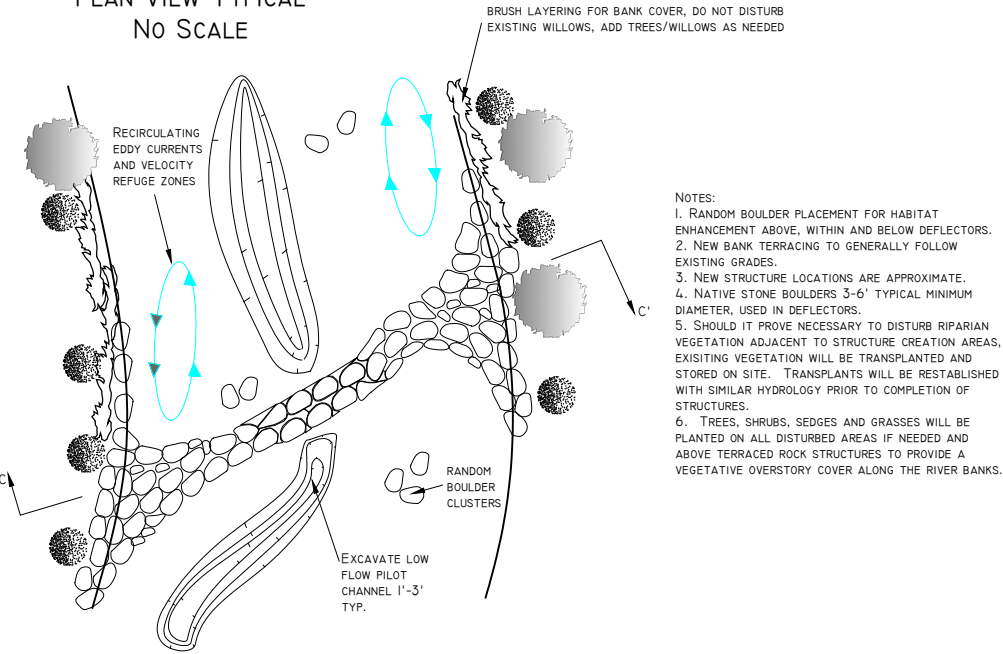
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PLOT DATE: 7/24/2026

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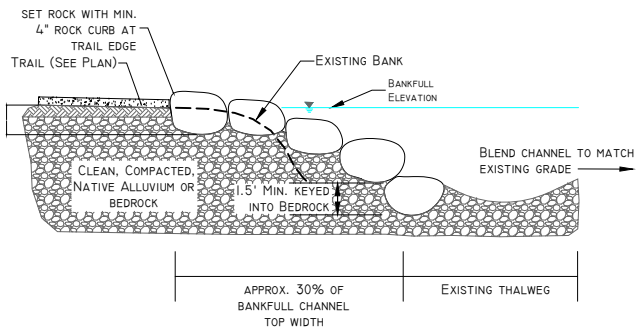
14

SHEET 14 OF 17

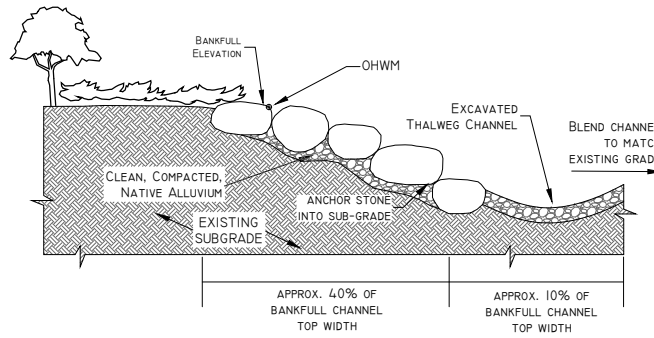
CONNECTED OFFSET DEFLECTORS
PLAN VIEW-TYPICAL
NO SCALE



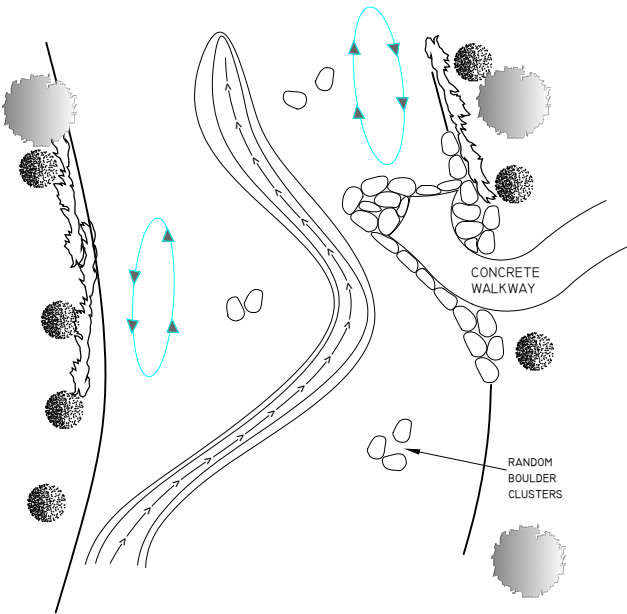
TYPICAL OFFSET CURRENT DEFLECTOR
WITH "PUT IN"
PLAN VIEW



CURRENT DEFLECTOR CROSS SECTION VIEW
TYPICAL DETAIL - N.T.S

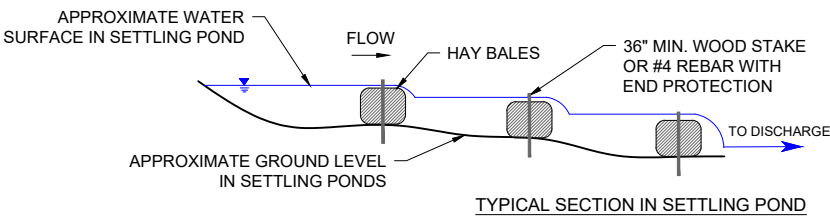


CURRENT DEFLECTOR CROSS SECTION VIEW



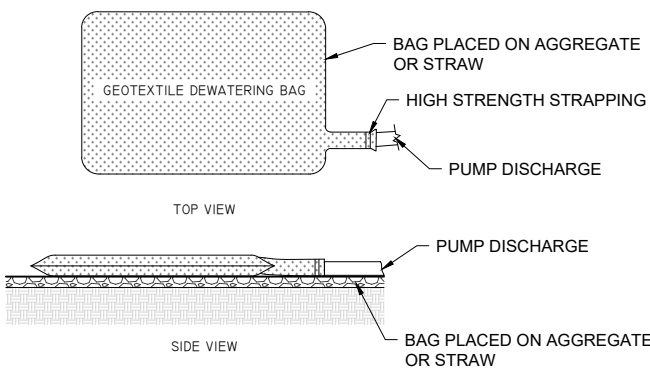
TYPICAL CURRENT DEFLECTOR AT PUT-IN
PLAN VIEW N.T.S

CARE OF PUMPED WATER OPTIONS



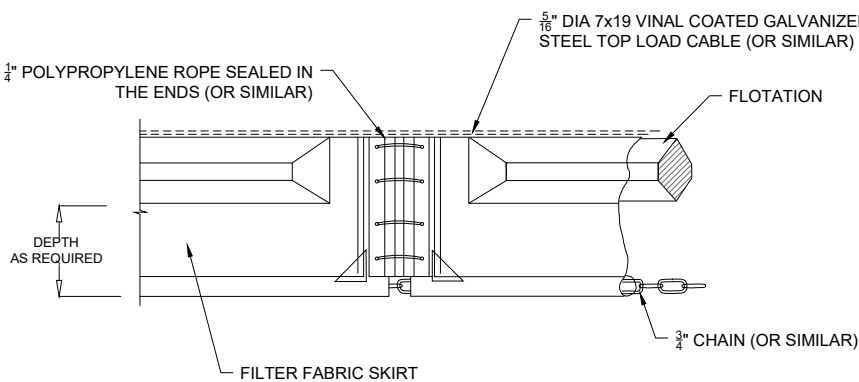
NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

SETTLING POND OPTION



NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT AND BAG SIZING TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

GEOTEXTILE BAG OPTION

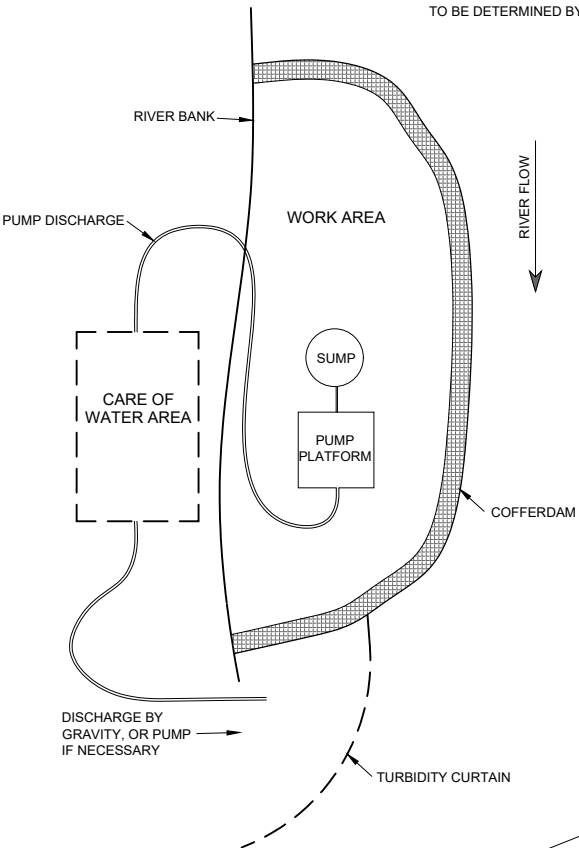


NOTE: SCHEMATIC DETAIL TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL DETAIL AND SIZING TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

TURBIDITY CURTAIN OPTION

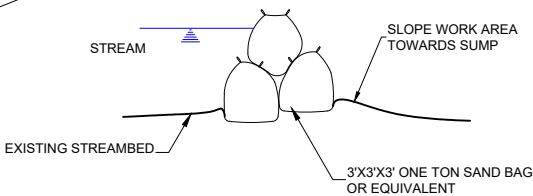
TYPICAL LAYOUT DEWATERING AREA

NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT TO BE DETERMINED BY QUALIFIED CONTRACTOR, PER PERMIT CONDITIONS.

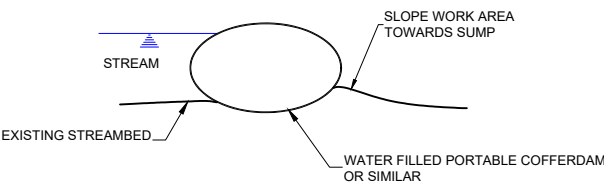


- DEWATERING NOTES:**
1. SUMPS CAN BE MADE FROM DIGGING A HOLE AND INSERTING A PERFORATED PIPE AND BACKFILLING WITH CLEAN DRAIN ROCK OR OTHER APPROVED METHOD.
 2. CARE OF PUMPED WATER SHALL BE BASED UPON SITE SPECIFICS AND QUALITY OF WATER. METHODS OF TURBIDITY CONTROL SHALL BE DETERMINED BY THE CONTRACTOR. SCHEMATIC ALTERNATIVES ARE IDENTIFIED BELOW. THE CONTRACTOR SHALL REDUCE THE TURBIDITY OF DISCHARGED WATER TO THE MAXIMUM EXTENT PRACTICABLE.
 3. UPON COMPLETION, GEOTEXTILE BAGS, VISQUENE, SETTLED FINES, AND ANY OTHER CARE OF WATER MATERIALS SHALL BE REMOVED AND DISPOSED OF OFFSITE BY THE CONTRACTOR.
 4. PUMP STATION SHALL BE ELEVATED. FUEL CONTAINMENT BMP'S SHALL BE ONSITE AT ALL TIMES.
 5. PUMP REMAINING WATER IN CONSTRUCTION AREA AS NECESSARY TO MANAGE GROUNDWATER AND LEAKAGE. ALL DISCHARGED WATER MUST BE ROUTED TO THE CARE OF WATER AREA AS NECESSARY PER PERMIT CONDITIONS.
 6. CONTRACTOR IS RESPONSIBLE FOR OWN SECURITY DURING CONSTRUCTION. ANY VANDALISM WILL BE CORRECTED AT CONTRACTOR'S OWN EXPENSE.
 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARE OF ALL WATER DURING CONSTRUCTION INCLUDING MAINTENANCE OF ALL DITCHES, COFFERDAMS, LEVEES, DIVERSIONS AND PUMPS TO KEEP THE WORK AREA FREE FROM WATER.
 8. DEWATERING PLAN DETAILS SHOWN HERE ARE ILLUSTRATIVE. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS TO COMPLETE AND SUBMIT A DEWATERING PLAN APPLICABLE TO THIS PROJECT.
 9. CONTRACTOR IS RESPONSIBLE FOR LAYOUT AND DESIGN OF COFFERDAM. CONTRACTOR SHALL SUBMIT A PLAN FOR COFFERDAM INSTALLATION, RIVER DIVERSION AND EROSION CONTROL INCLUDING LOCATION, SIZE, HEIGHT, SEQUENCING AND TIMING OF EACH COMPONENT.
 10. ALTERNATE COFFER DAM METHODS PRESENTED TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL METHOD TO BE DETERMINED BY QUALIFIED CONTRACTOR, PER PERMIT CONDITIONS, IN ORDER TO ACHIEVE DRY WORK AREA.
 11. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DEWATERING AND COFFERDAMS DURING CONSTRUCTION. REPAIRS AND REPLACEMENTS DUE TO NATURAL CAUSES ARE AT THE SOLE EXPENSE OF THE CONTRACTOR.
 12. AFTER COMPLETION OF CONSTRUCTION, COFFERDAMS MUST BE COMPLETELY REMOVED AND RIVER BANK AREAS STABILIZED AND RESTORED.

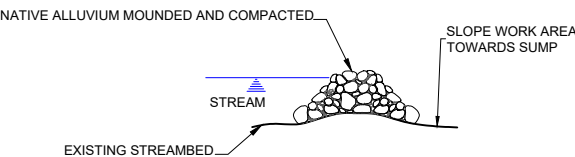
COFFERDAM OPTIONS



SUPERSACK OPTION

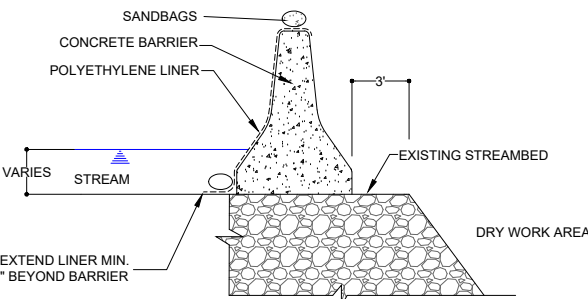


WATER FILLED OPTION

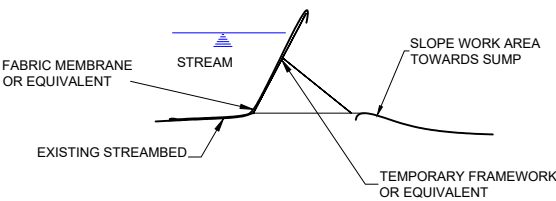


TYPICAL COFFER DAM CROSS SECTION

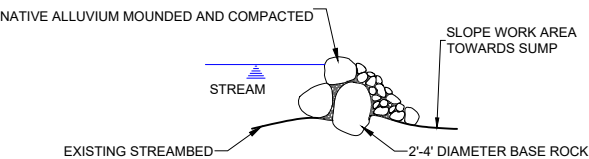
CONCRETE BARRIER OPTION



CONCRETE BARRIER OPTION



"PORTADAM" OPTION



TYPICAL COFFER DAM CROSS SECTION



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BLUE RIVER HABITAT RESTORATION PROJECT

BLUE RIVER SILVERTHORNE, CO

60% DESIGN PLAN

TYPICAL WATER CONTROL DETAILS

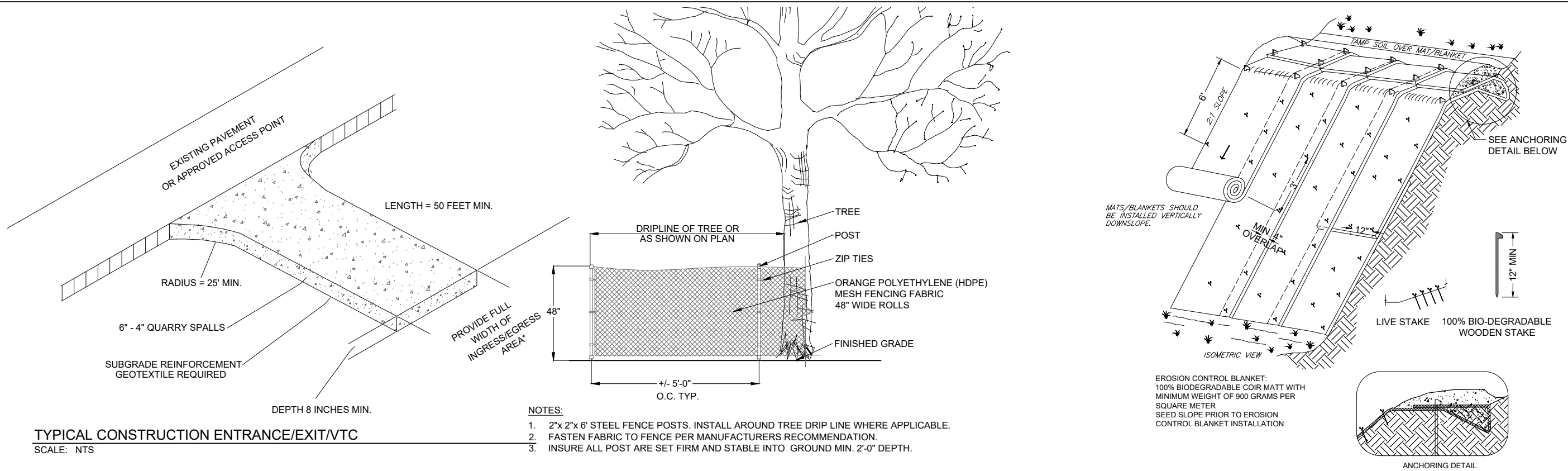
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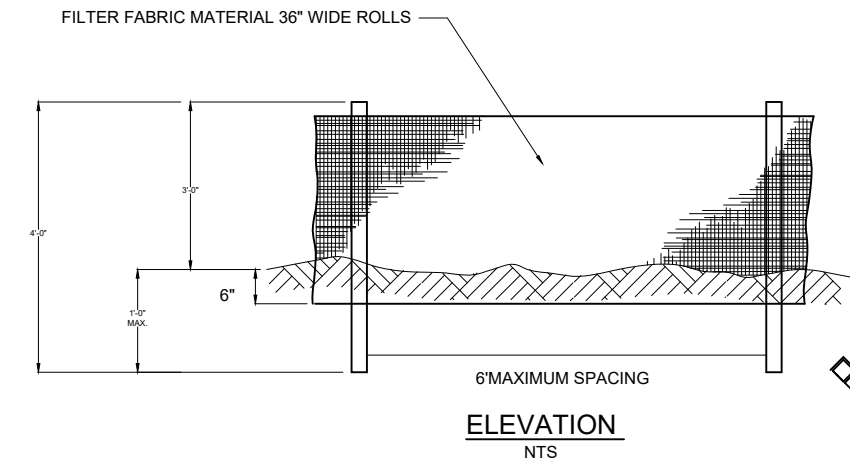
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16

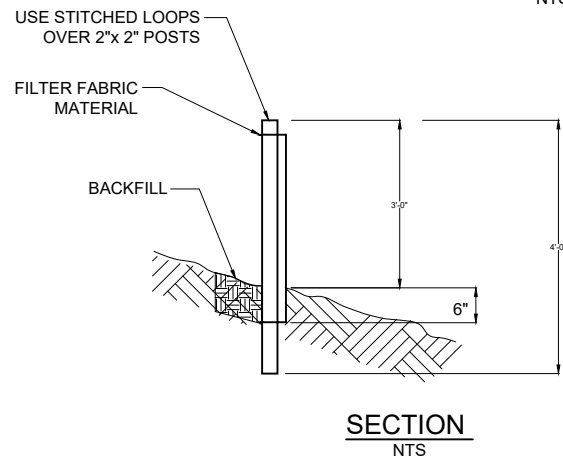
SHEET 16 OF 17



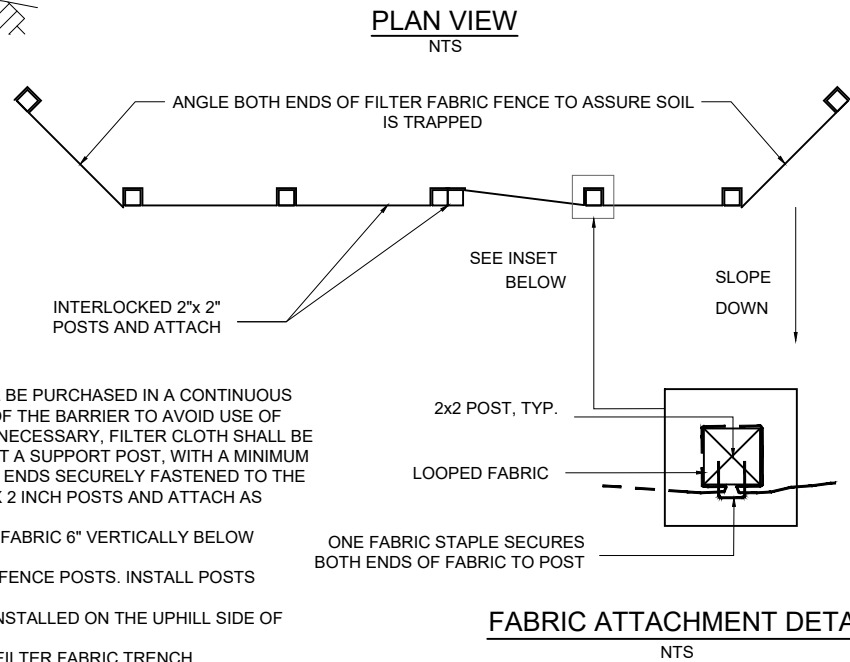
TYPICAL CONSTRUCTION ENTRANCE/EXIT/VTc
SCALE: NTS



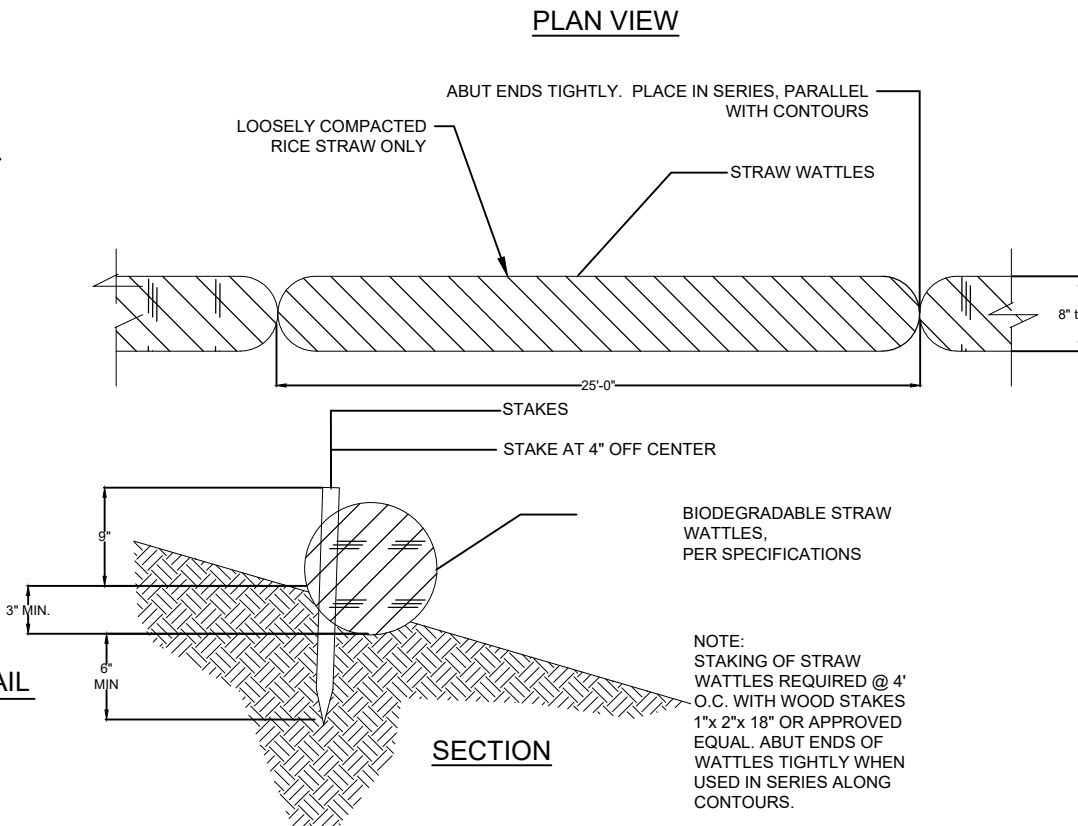
TYPICAL EROSION & SEDIMENT CONTROL
SCALE: NTS



- NOTES:
1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2 INCH X 2 INCH POSTS AND ATTACH AS SHOWN.
 2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
 3. 2"x 2" FIR, PINE OR STEEL FENCE POSTS. INSTALL POSTS UPHILL OF FILTER FABRIC.
 4. STITCHED LOOPS TO BE INSTALLED ON THE UPHILL SIDE OF FABRIC.
 5. COMPACT ALL AREAS OF FILTER FABRIC TRENCH.
 6. FILTER FABRIC FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.



FABRIC ATTACHMENT DETAIL
NTS



SECTION



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SILVERTHORNE, CO 80498

BLUE RIVER
SILVERTHORNE, CO

60% DESIGN PLAN

BMPS TYPICAL DETAILS

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17

SHEET 17 OF 17