

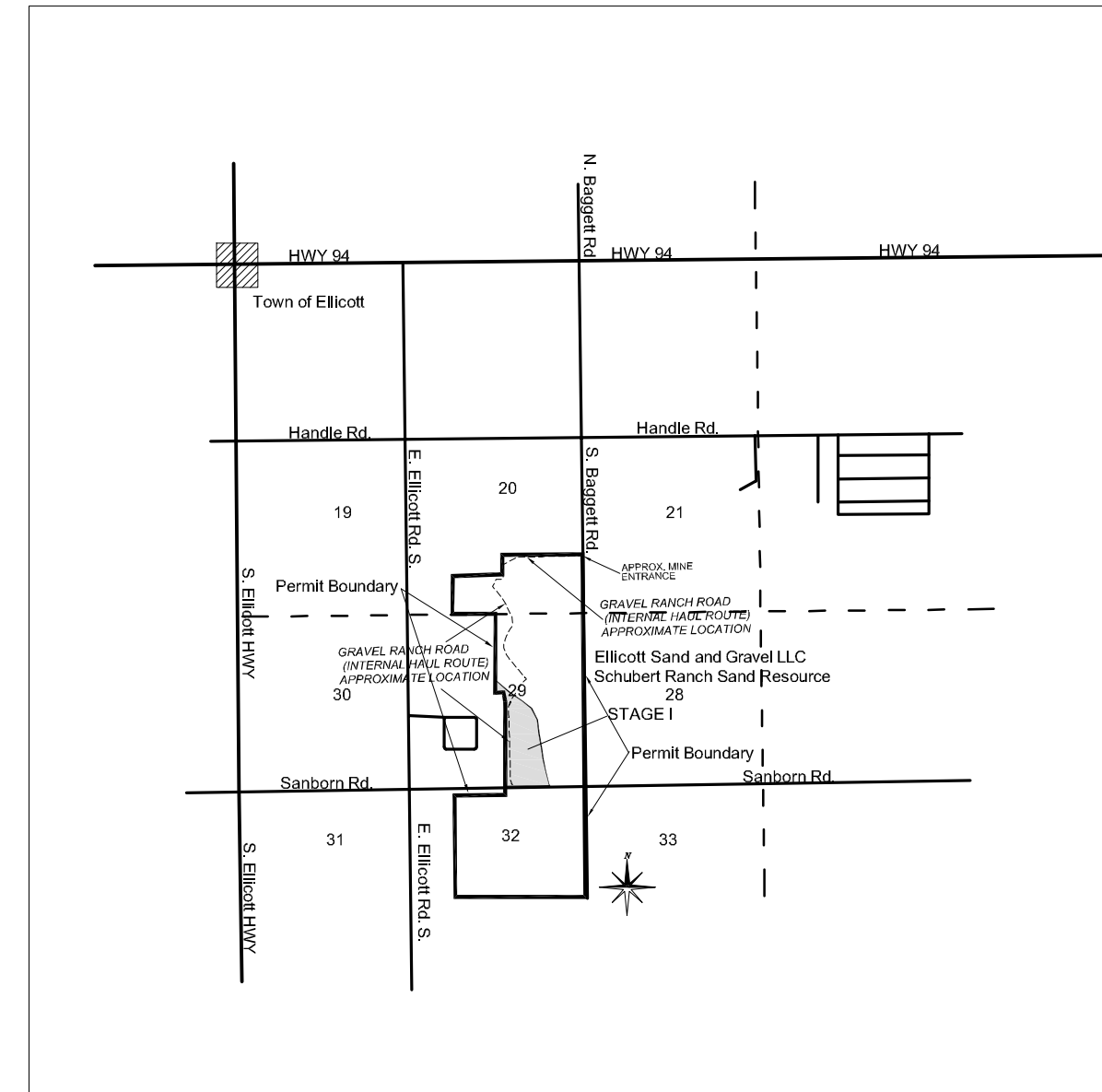
ELLCOTT SAND AND GRAVEL LLC - SITE DEVELOPMENT PLAN

Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado. - Containing 66.1 acres more or less.

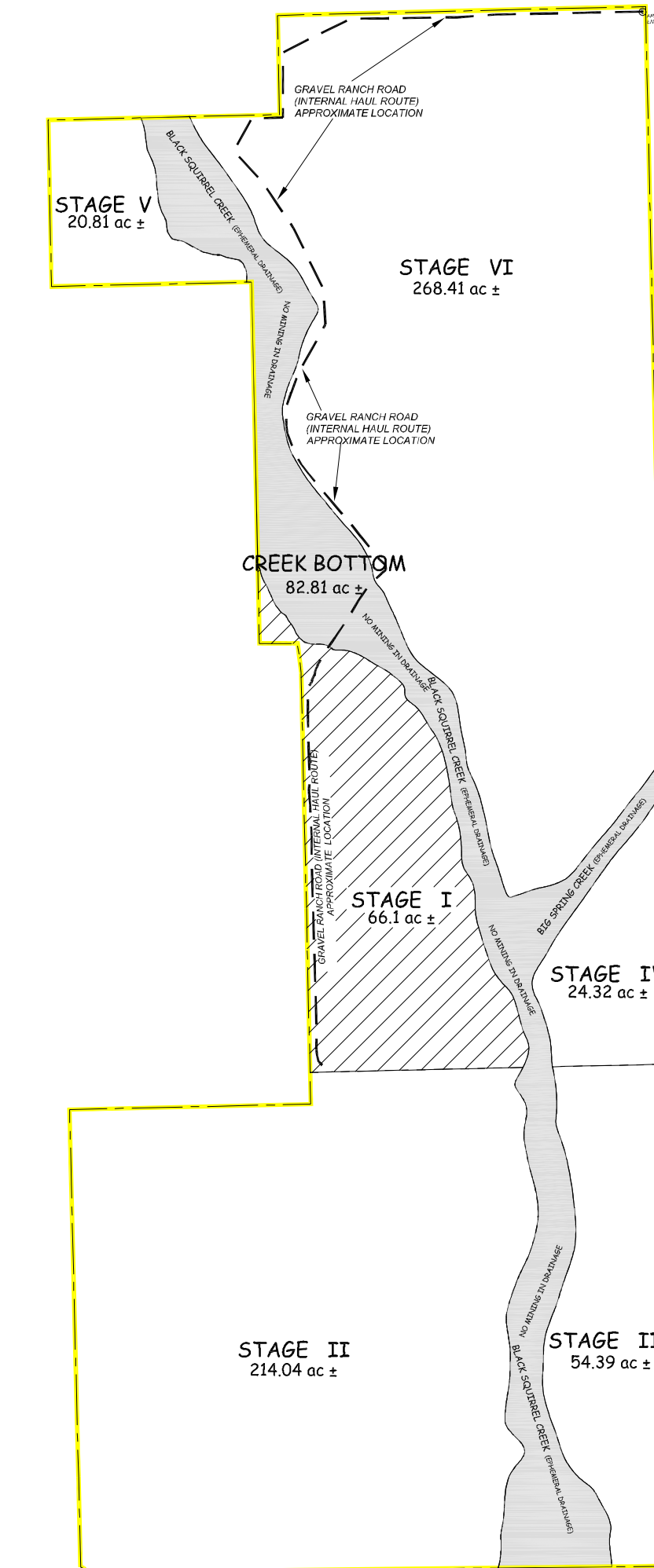
STAGE I OF 6 - GRADING AND EROSION CONTROL PLANS

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- Stormwater discharges from sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
- Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual (Volume 2. Any deviation from regulations
- A separate Stormwater Management Plan (SWMP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction Management of the SWMP during construction is the responsibility of the designated Qualified Stormwater Manager or Certified Erosion Control Inspector. The SWMP shall be located on-site at all times during construction and shall be kept up to date with work progress and changes in the field.
- Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial sage erosion and sediment control measures as indicated on the approved DEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting and place with County staff.
- Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater. Control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.
- All temporary and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All person engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures are needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.
- Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days.
- Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.
- All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that effect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
- Earth disturbance shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state unless shown to be infeasible and specifically requested and approved.
- Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).
- Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off-site.
- Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.
- During dewatering operations, uncontaminated groundwater may be discharged on-site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.
- Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.
 - No final slopes will be steeper than 3H:1V.
 - During mining, interior slopes will be steeper than 3H:1V. However, all stormwater runoff will be interior to the site. Runoff will infiltrate into the sandy substrate.
- Contractor shall be responsible for the removal of all wastes from the construction site for disposal in accordance with local and State regulatory requirements. No construction debris, tree slash, building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
- Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. Control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
- Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
- The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of the site development.
- The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.
 - This is a mining operation *is not a construction site*. Therefore, this "Standard Condition" is not applicable.
- No chemical(s) having the potential to be released in stormwater are to be stored or used on-site unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
- Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills on-site and to prevent any spilled materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.
 - We have an SPCC plan to deal with any spilled petroleum products, in reportable quantities
- No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.
- Owner/developer and their agents shall comply with the "Colorado Water Quality Act" (Title 24, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), in addition to the requirements of the Land Development Code, DCM Volume 11 and the ECM Appendix 1. All appropriate permits must be obtained by the contractor prior to construction (1041, MPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirement and other laws, rules, or regulations of other Federal, State, local, or County agencies the most restrictive laws, rules, or regulations shall apply.
- All construction traffic must enter/exit the site only at approved construction access points.
- Prior to construction the permittee shall verify the location of existing utilities.
- A water source shall be available on-site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.
 - A commercial water provider will supply water for operational needs. Unresolved previous comment: fill this in once a soils report is completed.
- The soils report for this site has been prepared by [Company Name, Date of Report] and shall be considered a part of these plans. delete this bullet now that a Soils Report has been completed and provided.
- Based on our November 30th meeting with County Staff, a soils report is not required since no permanent structures are planned.
- At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (s) acre or more the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this Grading and Erosion Control Plan may be a part.
 - A stormwater management plan is part of this submittal packet.
 - The stormwater permit, permit number is COG500000.
 - The stormwater permit certification number is COG502203



VICINITY MAP
SCALE 1"=1 MILE



NO SCALE
SCHUBERT RANCH SAND RESOURCE
SPECIAL USE PERMIT AREA CASE # AL2014
Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado.
and parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29 and the E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ and parts of the NW $\frac{1}{4}$ NE $\frac{1}{4}$ & NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 32, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado.
Containing 733.7 acres more or less.

CONTACTS:

OWNER - Parcel No. 2400000276
Schubert Ranches Inc.
1555 S. Baggett Rd.
Calhan, CO 80808
Phone: (719) 683-2262
Email: grasstogo@aol.com

APPLICANT
Ellicott Sand and Gravel LLC
Christine Wilson, Manager
235 Franceville Coal Mine Road,
Colorado Springs, CO 80929
(719) 568-3164
ellicottsandgravel@gmail.com

ENGINEER
Mr. G. Thomas Hastings, PE
Loveland, CO 80538
ghastings@gmail.com

PLANNERS
Consultants:
Environment, Inc.
Mr. Steve O'Brian - President
7985 Vance Dr., #205A, Arvada, CO 80003
(303) 423-7297
Environment-inc@outdrsn.net

Regulatory Permits Management, Inc
Mr. H. Bruce Humphries - President
25049 E. Alder Dr., Aurora, CO 80016
(303) 854-7499
hlhumphries2@comcast.net

SHEET INDEX

- COVER SHEET
- GRADING & EROSION CONTROL - INITIAL CONDITIONS
- GRADING & EROSION CONTROL - INTERIM PHASE
- GRADING & EROSION CONTROL - FINAL PHASE
- GRADING & EROSION CONTROL - DETAILS & CROSS SECTIONS

EL PASO COUNTY STATEMENT:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E. DATE _____
COUNTY ENGINEER/ECM ADMINISTRATOR

ENGINEER'S STATEMENT:
THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ENGINEER OF RECORD SIGNATURE _____ DATE _____
G. Thomas Hastings, PE
COLORADO P.E. _____

PREPARED UNDER THE DIRECT SUPERVISION OF:
FOR AND ON BEHALF OF ELLICOTT SAND AND GRAVEL, LLC

PPR 234

OWNER'S STATEMENT:
I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNERS SIGNATURE _____ DATE _____
George Schubert, Manager
SCHUBERT RANCH LLC,
1555 S. Baggett Road
Calhan, CO 80808-7808

EL PASO COUNTY SITE DEVELOPMENT PLAN COVER SHEET FOR SCHUBERT RANCH SAND RESOURCE ELLCOTT, COLORADO

REVISIONS:	DATE:
SPECIAL USE PERMIT APPROVAL - BCC	08-02-2022

ELLCOTT SAND AND GRAVEL LLC

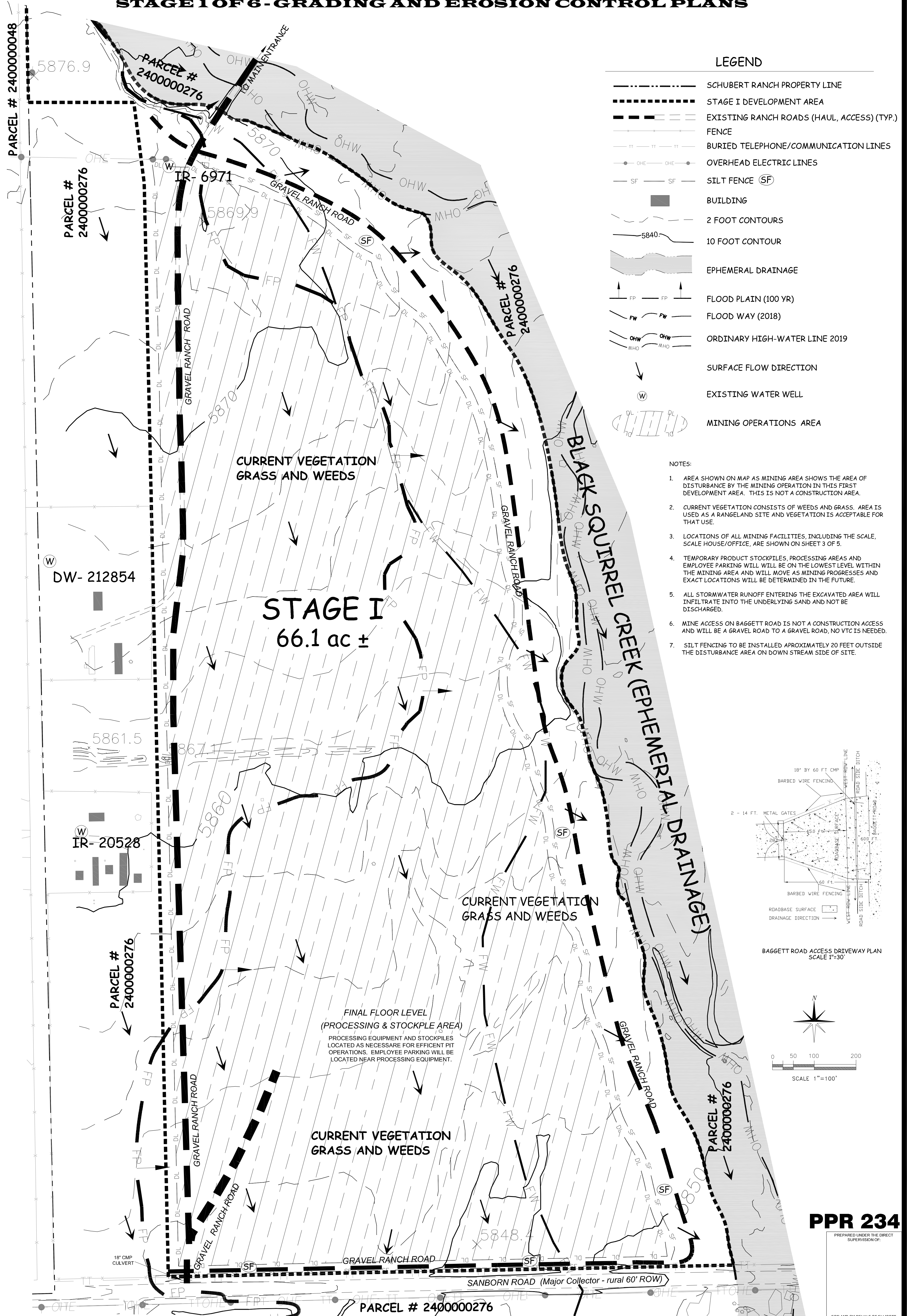
235 Franceville Coal Mine Road | Colorado Springs Co 80929
phone: (602) 558-0846

PROJECT #	ESG-COUNTY
DATE:	01/05/2023
FILE NAME:	ESQ-DP-GRADING
SCALE:	NA
DRAWN BY:	ENV/SH
CHECKED BY:	GTH
1	SHEET 1 of 5

ELLICOTT SAND AND GRAVEL LLC - SITE DEVELOPMENT PLAN

Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado. - Containing 66.1 acres more or less.

STAGE 1 OF 6 - GRADING AND EROSION CONTROL PLANS

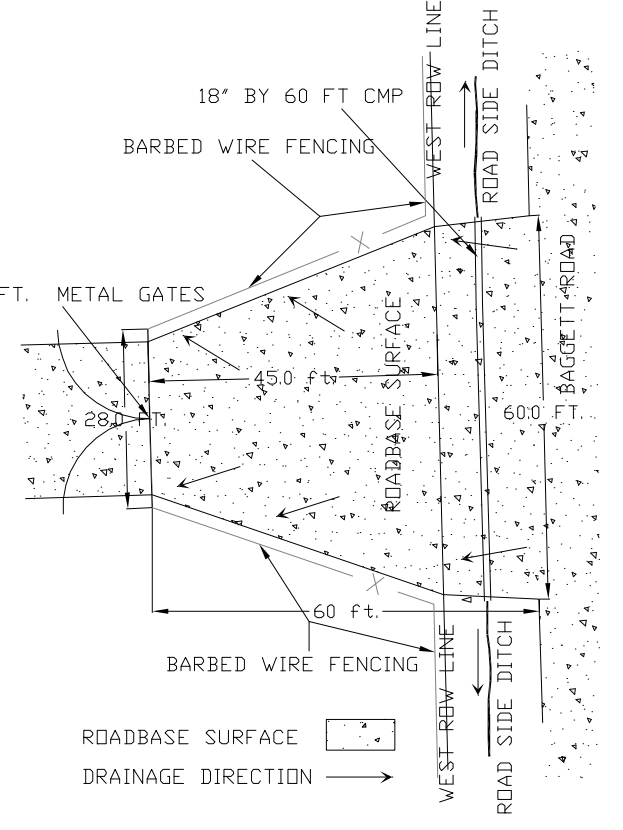


LEGEND

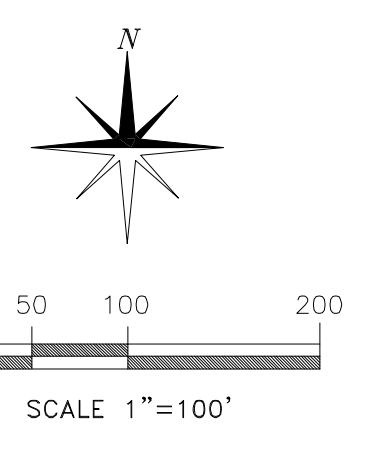
- SCHUBERT RANCH PROPERTY LINE
- STAGE I DEVELOPMENT AREA
- EXISTING RANCH ROADS (HAUL, ACCESS) (TYP.)
- FENCE
- BURIED TELEPHONE/COMMUNICATION LINES
- OVERHEAD ELECTRIC LINES
- SILT FENCE (SF)
- BUILDING
- 2 FOOT CONTOURS
- 10 FOOT CONTOUR
- EPHEMERAL DRAINAGE
- FLOOD PLAIN (100 YR)
- FLOOD WAY (2018)
- ORDINARY HIGH-WATER LINE 2019
- SURFACE FLOW DIRECTION
- EXISTING WATER WELL
- MINING OPERATIONS AREA

NOTES:

1. AREA SHOWN ON MAP AS MINING AREA SHOWS THE AREA OF DISTURBANCE BY THE MINING OPERATION IN THIS FIRST DEVELOPMENT AREA. THIS IS NOT A CONSTRUCTION AREA.
2. CURRENT VEGETATION CONSISTS OF WEEDS AND GRASS. AREAS USED AS A RANGELAND SITE AND VEGETATION IS ACCEPTABLE FOR THAT USE.
3. LOCATIONS OF ALL MINING FACILITIES, INCLUDING THE SCALE, SCALE HOUSE/OFFICE, ARE SHOWN ON SHEET 3 OF 5.
4. TEMPORARY PRODUCT STOCKPILES, PROCESSING AREAS AND EMPLOYEE PARKING WILL BE ON THE LOWEST LEVEL WITHIN THE MINING AREA AND WILL MOVE AS MINING PROGRESSES AND EXACT LOCATIONS WILL BE DETERMINED IN THE FUTURE.
5. ALL STORMWATER RUNOFF ENTERING THE EXCAVATED AREA WILL INFILTRATE INTO THE UNDERLYING SAND AND NOT BE DISCHARGED.
6. MINE ACCESS ON BAGGETT ROAD IS NOT A CONSTRUCTION ACCESS AND WILL BE A GRAVEL ROAD TO A GRAVEL ROAD, NO VTC IS NEEDED.
7. SILT FENCING TO BE INSTALLED APPROXIMATELY 20 FEET OUTSIDE THE DISTURBANCE AREA ON DOWN STREAM SIDE OF SITE.



BAGGETT ROAD ACCESS DRIVEWAY PLAN
SCALE 1"=30'



PPR 234

PREPARED UNDER THE DIRECT SUPERVISION OF:

FOR AND ON BEHALF OF ELLICOTT SAND AND GRAVEL LLC

2	PROJECT # ESG-COUNTY	EL PASO COUNTY DEVELOPMENT PLAN INITIAL CONDITIONS FOR SCHUBERT RANCH SAND RESOURCE ELLICOTT, COLORADO		REVISIONS: SPECIAL USE PERMIT APPROVAL - BCC	DATE: 08-02-2022	ELLICOTT SAND AND GRAVEL LLC 235 Franceville Coal Mine Road Colorado Springs Co 80929 phone: (602) 558-0846	DATE: 01/05/2023	FILE NAME: ESG-DP GRADING 2	SCALE: AS NOTED	DRAWN BY: EM/MS	CHECKED BY: RBH

EL LICOTT SAND AND GRAVEL LLC - SITE DEVELOPMENT PLAN

Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado. - Containing 66.1 acres more or less.

STAGE 1 OF 6 - GRADING AND EROSION CONTROL PLANS

LEGEND

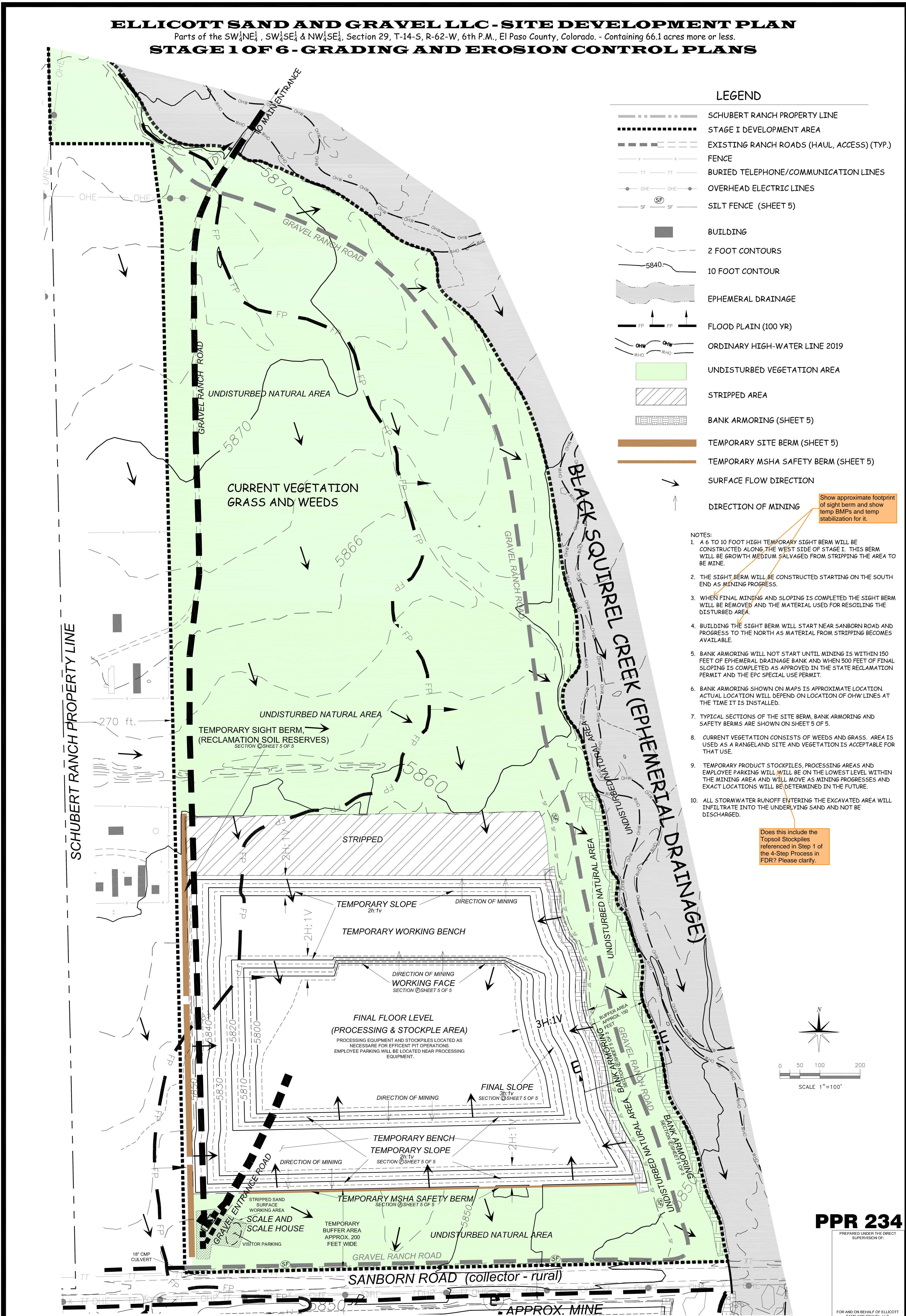
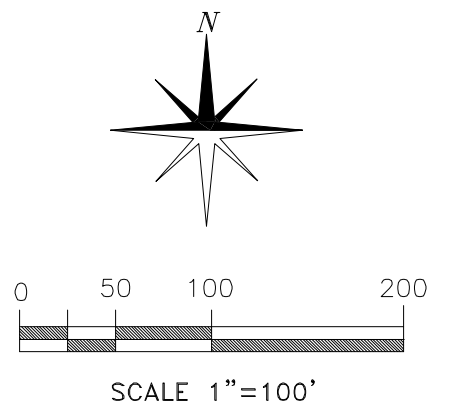
- SCHUBERT RANCH PROPERTY LINE
- STAGE I DEVELOPMENT AREA
- EXISTING RANCH ROADS (HAUL, ACCESS) (TYP.)
- FENCE
- BURIED TELEPHONE/COMMUNICATION LINES
- OVERHEAD ELECTRIC LINES
- SILT FENCE (SHEET 5)
- BUILDING
- 2 FOOT CONTOURS
- 10 FOOT CONTOUR
- EPHEMERAL DRAINAGE
- FLOOD PLAIN (100 YR)
- ORDINARY HIGH-WATER LINE 2019
- UNDISTURBED VEGETATION AREA
- STRIPPED AREA
- BANK ARMORING (SHEET 5)
- TEMPORARY SITE BERM (SHEET 5)
- TEMPORARY MSHA SAFETY BERM (SHEET 5)
- SURFACE FLOW DIRECTION
- DIRECTION OF MINING

Show approximate footprint of sight berm and show temp BMPs and temp stabilization for it.

NOTES:

1. A 6 TO 10 FOOT HIGH TEMPORARY SIGHT BERM WILL BE CONSTRUCTED ALONG THE WEST SIDE OF STAGE I. THIS BERM WILL BE GROWTH MEDIUM SALVAGED FROM STRIPPING THE AREA TO BE MINE.
2. THE SIGHT BERM WILL BE CONSTRUCTED STARTING ON THE SOUTH END AS MINING PROGRESS.
3. WHEN FINAL MINING AND SLOPING IS COMPLETED THE SIGHT BERM WILL BE REMOVED AND THE MATERIAL USED FOR RESOILING THE DISTURBED AREA.
4. BUILDING THE SIGHT BERM WILL START NEAR SANBORN ROAD AND PROGRESS TO THE NORTH AS MATERIAL FROM STRIPPING BECOMES AVAILABLE.
5. BANK ARMORING WILL NOT START UNTIL MINING IS WITHIN 150 FEET OF EPHEMERAL DRAINAGE BANK AND WHEN 500 FEET OF FINAL SLOPING IS COMPLETED AS APPROVED IN THE STATE RECLAMATION PERMIT AND THE EPC SPECIAL USE PERMIT.
6. BANK ARMORING SHOWN ON MAPS IS APPROXIMATE LOCATION. ACTUAL LOCATION WILL DEPEND ON LOCATION OF OHW LINES AT THE TIME IT IS INSTALLED.
7. TYPICAL SECTIONS OF THE SITE BERM, BANK ARMORING AND SAFETY BERMS ARE SHOWN ON SHEET 5 OF 5.
8. CURRENT VEGETATION CONSISTS OF WEEDS AND GRASS. AREA IS USED AS A RANGELAND SITE AND VEGETATION IS ACCEPTABLE FOR THAT USE.
9. TEMPORARY PRODUCT STOCKPILES, PROCESSING AREAS AND EMPLOYEE PARKING WILL BE ON THE LOWEST LEVEL WITHIN THE MINING AREA AND WILL MOVE AS MINING PROGRESSES AND EXACT LOCATIONS WILL BE DETERMINED IN THE FUTURE.
10. ALL STORMWATER RUNOFF ENTERING THE EXCAVATED AREA WILL INFILTRATE INTO THE UNDERLYING SAND AND NOT BE DISCHARGED.

Does this include the Topsoil Stockpiles referenced in Step 1 of the 4-Step Process in FDR? Please clarify.



PPR 234

PREPARED UNDER THE DIRECT SUPERVISION OF:
 FOR AND ON BEHALF OF EL LICOTT SAND AND GRAVEL, LLC

3	EL PASO COUNTY DEVELOPMENT PLAN INTERIM PHASE FOR SCHUBERT RANCH SAND RESOURCE EL LICOTT, COLORADO	REVISIONS:	DATE:	EL LICOTT SAND AND GRAVEL LLC	235 Franceville Coal Mine Road Colorado Springs Co 80929 phone: (602) 558-0846	DESIGNED BY:	DATE:
		SPECIAL USE PERMIT APPROVAL - BCC	08-02-2022			AS NOTED	01/05/2023
SHEET 3 of 5	PROJECT #: ESG-COUNTY	CHECKED BY: GTH	SCALE: AS NOTED	FILE NAME: ESG-DP GRADING 3		DRAWN BY: EM/MS	

EL LICOTT SAND AND GRAVEL LLC - SITE DEVELOPMENT PLAN

Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado. - Containing 66.1 acres more or less.

STAGE 1 OF 6 - GRADING AND EROSION CONTROL PLANS

On previous sheet, this Gravel Road area is shown as undisturbed. But on this sheet it is shown as needed to be revegetated. Please revise to remove discrepancy.

LEGEND

- SCHUBERT RANCH PROPERTY LINE
- STAGE I DEVELOPMENT AREA
- RANCH ROADS (TYP.)
- FENCE
- BURIED TELEPHONE/COMMUNICATION LINES
- OVERHEAD ELECTRIC LINES
- BUILDING
- 2 FOOT CONTOURS
- 5 FOOT CONTOURS
- TOPO CONTOUR
- EPHEMERAL DRAINAGE
- FLOOD PLAIN (100 YR)
- ORDINARY HIGH-WATER LINE 2019
- REVEGETATED AREA
- BANK ARMORING (Sheet 5)
- FLOW DIRECTION

Provide a detail for permanent seeding. Examples provided:

BMP	DCM (Vol 2, Chap 3.3)	MHFO (USDCM Vol 3, Chap 7)	COS - Stormwater Construction Manual (App 8)
Seeding	TS-1	EC-2	X

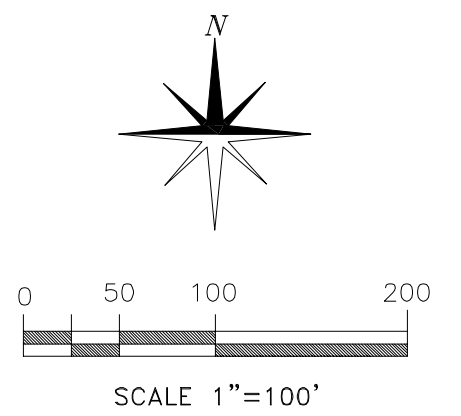
NOTES:

1. THE AREA TO BE REVEGETATED SHOWN ON MAP WILL BE RECLAIMED ACCORDING TO THE APPROVED MLRB PERMIT AS PASTURE.
2. SEEDING AND MULCHING WILL FOLLOW NRCS RECOMMENDATIONS USING THEIR SEED MIX AND APPLICATION OF 4000 POUNDS/AC. OF CLEAN STRAW MULCH.
3. ALL SLOPES CREATED IN THE EXCAVATED AREA WILL BE GRADED 3H TO 1V OR FLATTER AS SHOWN ON MAP.
4. THE MINED AREAS AND ARMORED BANKS WILL BE COVERED WITH GROWTH MEDIUM AND REVEGETATED WITH APPROVED SEED MIX.
5. NO STORMWATER WILL ACCUMULATE IN MINED AREA. THE STATE ENGINEER PROVIDED COMMENTS ON 2/21-2019 TO THE DRMS. ESG COMMITTED TO NOT EXPOSING GROUND WATER, AND NOT ALLOWING STORMWATER TO ACCUMULATE IN THE MINE FOR MORE THEN 72 HOURS.
6. WATER IMPLTRATION RATES FOR THE SOILS ON THIS SITE ARE IN EXCESS OF 4 INCHES/HOUR (SOURCE - COLORADO WATER CIRCULAR #32, PUBLISHED BY THE COLORADO WATER CONSERVATION BOARD IN 1976. (FROM THE UPPER BLACK SQUIRREL CREEK BASIN AQUIFER RECHARGE AND STORAGE EVALUATION, RALF TOPPER, CPG, DECEMBER 2008, PAGE 1)
7. THE PROPOSED GRADING AND EROSION CONTROL PLAN SUBMITTED TO AND APPROVED BY THE STATE OF COLORADO - DIVISION OF RECLAMATION, MINING AND SAFETY (CDRMS) WILL BE STABLE, AND NOT RESULT IN OFFSITE IMPACTS TO THE SURROUNDING PUBLIC OR PRIVATE STRUCTURES AND FACILITIES. THE STATE REGULATIONS REQUIRE THAT ALL SLOPES BE RECLAIMED TO A MINIMUM 2H:1V TO ASSURE STABILITY. THE PROPOSED 3H:1V FOR ALL MINED SLOPES ARE FLATTER THEN REQUIRED BY THE STATE. THE POTENTIAL FOR OFFSITE IMPACTS DUE TO A SLOPE FAILURE ARE NOT SIGNIFICANT OR LIKELY.

STAGE I
66.1 ac ±

Final bank armoring typical cross section (E) shown on sheet 5 of 5

Final slope typical cross section (F) shown on sheet 5 of 5



PPR 234

PREPARED UNDER THE DIRECT SUPERVISION OF:

FOR AND ON BEHALF OF EL LICOTT SAND AND GRAVEL, LLC

4

SHEET 4 of 5

PROJECT #:
EL PASO COUNTY

EL PASO COUNTY DEVELOPMENT PLAN
FINAL PHASE
FOR
SCHUBERT RANCH SAND RESOURCE
EL LICOTT, COLORADO

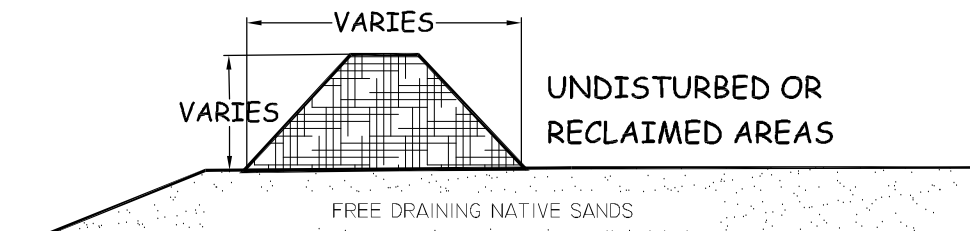
REVISIONS:	DATE:
SPECIAL USE PERMIT APPROVAL - BCC	08-02-2022

EL LICOTT SAND AND GRAVEL LLC

235 Franceville Coal Mine Road | Colorado Springs Co 80929
phone: (602) 558-0846

DATE:	FILE NAME:
01/05/2023	ESG_DP_GRADING

ELLICOTT SAND AND GRAVEL LLC - SITE DEVELOPMENT PLAN
 Parts of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 29, T-14-S, R-62-W, 6th P.M., El Paso County, Colorado. - Containing 66.1 acres more or less.
STAGE 1 OF 6 - GRADING AND EROSION CONTROL PLANS

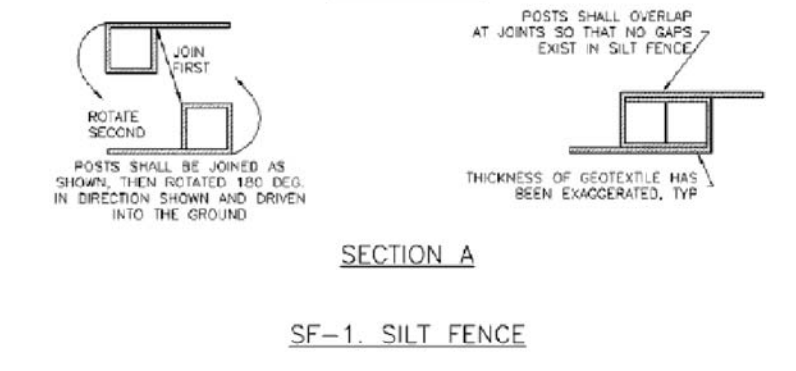
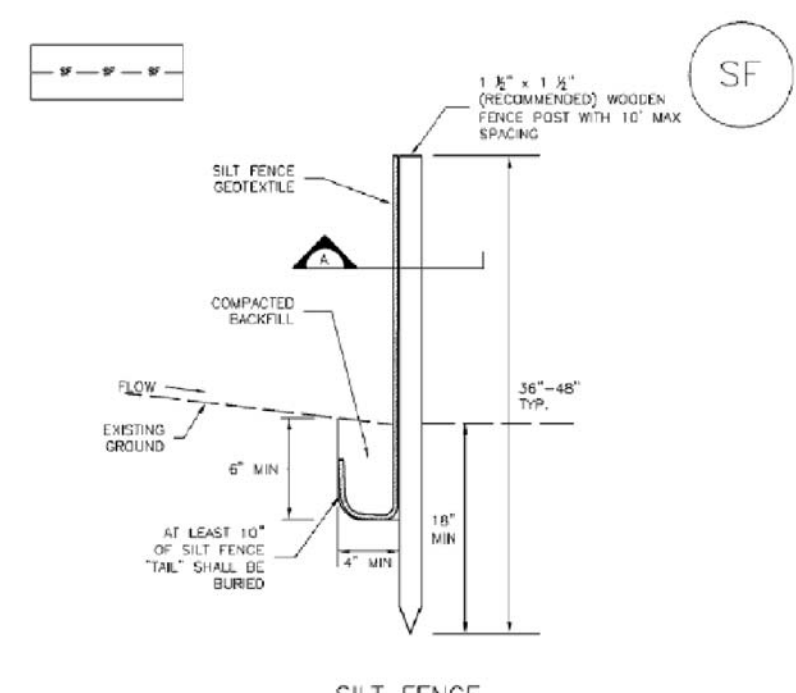


(A) STAGE 1 OF 6 - TYPICAL TEMPORARY MSHA SAFETY BERM
NO SCALE

TEMPORARY SAFETY BERMS

- 1) WILL BE CONSTRUCTED TO MINE HEALTH & SAFETY ADMINISTRATION STANDARDS (MSHA) TO PREVENT VEHICLES FROM ENTERING THE HAZARDOUS AREAS.
- 2) WILL HAVE STEEP SIDES AND ADEQUATE HEIGHT TO PREVENT HEAVY EQUIPMENT FROM CROSSING.
- 3) LOCATION OF SAFETY BERMS WILL CHANGE AND MAINTAINED AS NEEDED DURING THE LIFE OF THE MINE.
- 4) WILL BE REMOVED DURING RECLAMATION OF ADJOINING SLOPES, OR WHEN DETERMINED TO BE NO LONGER NEEDED FOR SAFE OPERATIONS.

Silt Fence (SF) SC-1



November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SF-3

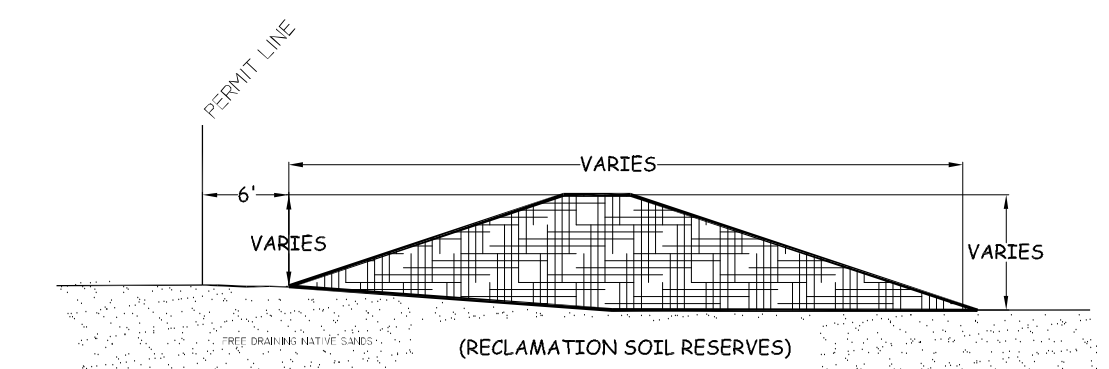
SC-1 Silt Fence (SF)

- SILT FENCE INSTALLATION NOTES**
1. SILT FENCE SHALL BE INSTALLED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR MINOR POSSIBLE SILT FENCE TOE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST 10 FEET (3-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR POUNDING AND DEPOSITION.
 2. A UNIFORM 6" x 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO MORE UNIFORM, SPACED, OR SHARP EQUIPMENT SHALL BE USED.
 3. CONTACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHIRL ROLLING. EQUIPMENT 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 GAPS 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 1" 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 BLASTOFF FROM FLOWING MEDIA THE END OF THE SILT FENCE (TYPICALLY 10' - 100').
 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- SILT FENCE MAINTENANCE NOTES**
1. INSPECT EACH WEEKLY AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BERM SHOULD BE PROACTIVE, NOT REACTIVE. REPAIR BERM 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 BERMS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. THESE BERMS WHEN FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON KNOWLEDGE OF THE FAILURE.
 4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE EFFECTIVENESS OF THE BERM. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENT IS APPROXIMATELY 4".
 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 PERMEABLE SEGMENT CONTROL BARRIERS.
 7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDS AND MULCH OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (MULCH HEIGHT FROM TOP OF FINDER, CHANNEL AND DIV OF MIN. NOT APPLICABLE IN URBAN)
- NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM LOCAL STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SF-4 Urban Storm Drainage Criteria Manual Volume 3 November 2010

Review 2 comment: As stated in this mile high flood district document, the guidelines are intended as minimum requirements for mining operations within their District. Analysis shall be provided to show that the proposed armoring is sufficient and adequate for this floodplain that is outside of the District. Provide the analysis in a drainage report by a licensed engineer.

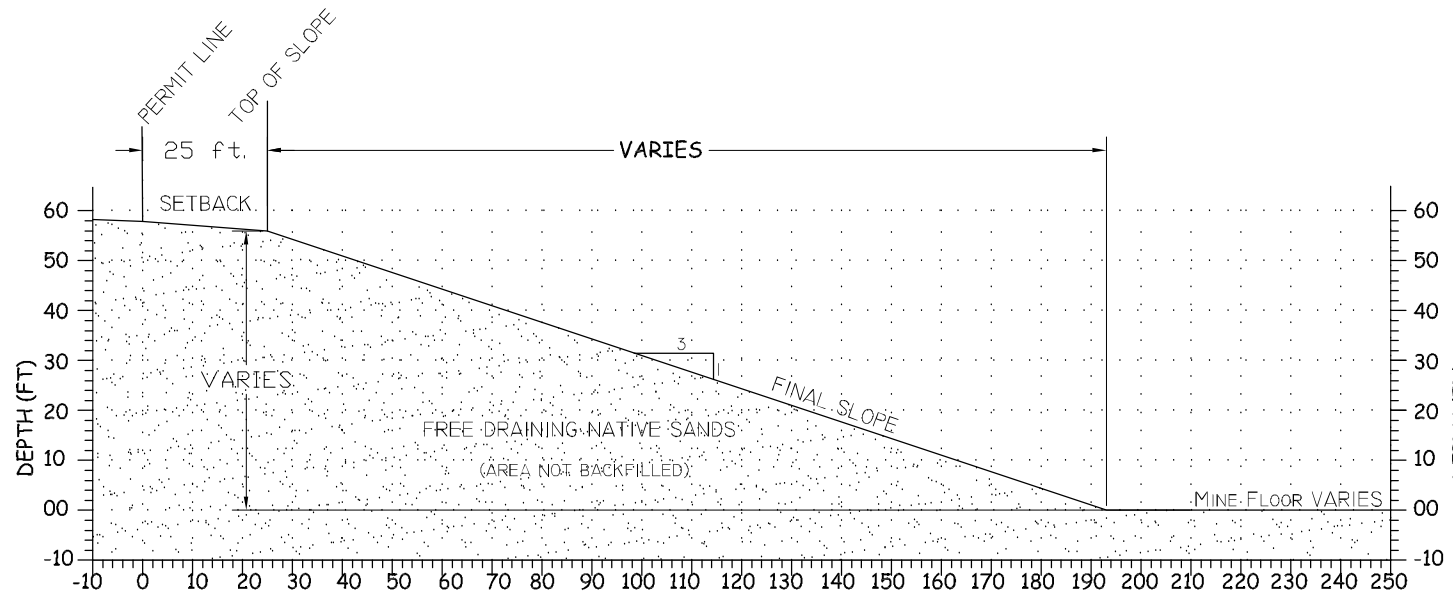
Review 3: please address the above comment in the drainage report. Comments have also been provided on the drainage report



(C) STAGE 1 OF 6 - TYPICAL TEMPORARY SIGHT BERM, (3H:1V slopes)
NO SCALE

TEMPORARY SIGHT BERMS

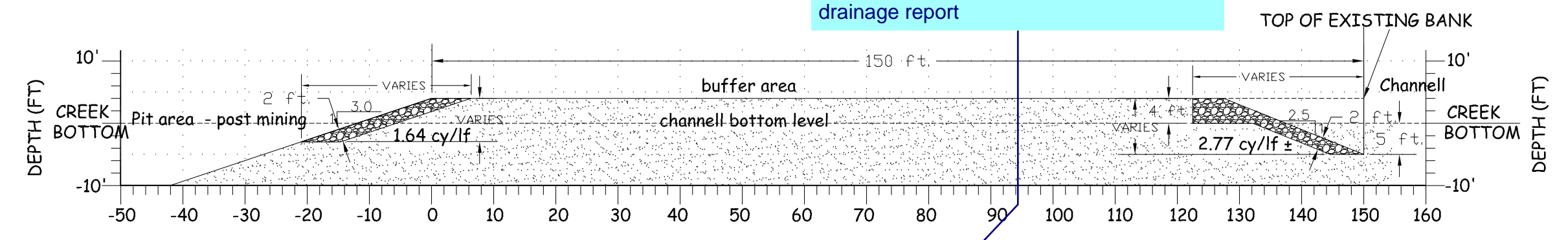
- 1) TEMPORARY SIGHT BERM WILL BE INSTALLED AS MINING PROGRESS ALONG THE WEST SIDE OF STAGE 1 USING THE SALVAGED GROWTH MEDIUM. THE MATERIAL WILL LATER BE USED DURING RECLAMATION.
- 2) THE HEIGHT OF THE BERMS WILL BE 6 TO 10 FEET HIGH TO LIMIT VISUAL IMPACTS TO RESIDENCES NORTH OF SANBORN ROAD.
- 3) WILL BE BUILT IN 300 TO 400 FEET LONG SEGMENTS.
- 4) SIDE SLOPE OF EACH SEGMENT WILL BE GRADED 3H:1V AND SEEDED WITH THE APPROVED SEED MIX AS SOON AS PRACTICAL.
- 5) BERM DEVELOPMENT WILL PROGRESS WITH MINING.
- 6) BERM WILL BE REMOVED DURING RECLAMATION OF ADJOINING SLOPES.



(B) STAGE 1 OF 6 - TYPICAL RECLAIMED SIDE SLOPE
NO SCALE

FINAL SLOPE GRADING

- 1) ALL EXTERIOR SLOPES WILL BE GRADED INTO THE MINED AREA AND RECLAIMED PER THE DIVISION OF RECLAMATION, MINING AND SAFETY APPROVED RECLAMATION PLAN.
- 2) RECLAMATION WILL RUN CONCURRENT WITH MINING. MEANING AS MINING PROGRESS WHEN THE FINAL SLOPING AND RESOILED IS COMPLETE AND THE AREA WILL NOT BE REDISTURBED IT WILL BE SEEDING TO REDUCE THE AMOUNT OF SITE DISTURBANCE AT ONE TIME.
- 3) SLOPES FROM THE SURFACE TO THE FLOOR WILL BE GRADED 3H:1V OR FLATTER.
- 4) GROWTH MEDIUM STORED IN THE SIGHT BERMS WILL BE RESPREAD OVER THE AREA TO BE SEEDING.
- 5) THE MINED AREA WILL BE REVEGETATED WHEN RESOILING IS COMPLETE. IT WILL BE DONE DURING THE RECOMMENDED SEASON FOR DRYLAND SEEDING.
- 6) INFORMATION PROVIDED ON THIS SECTION MAY CHANGE AS MINING PROGRESSES DUE TO VARIATIONS IN THE MATERIAL DEPTH, THE DEPTH TO THE WATER TABLE AND LOCATION IN MINING AREA.



(E) STAGE 1 OF 6 - TYPICAL BANK ARMORING SECTION
NO SCALE

Ellcott Sand & Gravel LLC M-2018-063
 Schubert Ranch Sand Resource August 26, 2019 (Revised Oct 31, 2019)

EPHEMERAL DRAINAGE BANK AND MINED BANK PROTECTION PLAN

This bank protection plan is presented to explain the bank armoring on both side of the Black Squirrel Creek and the tops of the excavated slope that run parallel to the channel. This armoring is being proposed to keep the Black Squirrel Creek within in the historic banks so the excavated area will not capture if an epic flood event were to occur after reclamation is complete. The minimum width of the top of the armored banks will be 150 feet.

We have followed the 2013 Urban Drainage and Flood Control District (UDFCD) Publication guideline document for planning and design of the armoring on the mining side bank and the bank armoring on the creek channel side. Ellcott Sand & Gravel LLC has no way or predict is or when a storm event could occur that would cause flooding outside the historic channel. The armor is intended to define the channel and protect the banks should a 100 year event occur after an area has been mined. All armoring done in or along the dry channel will be done outside the Ordinary Highwater Line (OHW) to avoid needing a U.S. Army Corps of Engineers permit. The existing OHW is shown on all map exhibits in the permit packet as an orange line. If this changes a mining advances around the permit area the armoring locations will change to meet the conditions at that time. The armoring will be covered with a 6 inch layer of growth medium and seeded with the approved seed mix

We have no information on the flow velocities or volume of flows for a 100 year event in this stretch of Black Squirrel Creek. Black Squirrel Creek is a true ephemeral drainage where the only water that travels down the drainage is during isolated storm events that create mini floods. In most cases the OHW is 10 feet or less across. The 100-year Floodplain information provided by El Paso County has been added to all of the Map Exhibits in the Reclamation Packet and is shown as a blue line.

There are general items that will be common to both armoring areas. In general, all armoring material will be recycled concrete fragments with surface rebar removed that meets the definition of Inert Materials, there will be no exposed rebar in the concrete and it will be sized 12 to 24 inches with a few larger pieces and fines mixed in to fill voids. The toe of the armoring will be a minimum of 3 feet below the existing creek channel thalweg as described below. ESG will keep enough material stored on the mine to complete armoring needed on an area as it is mined and ready for armoring. At a minimum, 850 cubic yards will be stockpiled on the mine for use in armoring. This is enough to armor a minimum of 500 feet of excavation bank. The stockpile of armoring material will be placed parallel to the water flow so it will not interfere with flows in the flood plain if flooding occurs and within the 150 foot setback so it is close to the area where it will be placed.

The attached Figure 1 shows the cross section of the areas discussed below and details of the armoring to protect the banks along Black Squirrel Creek and Big Spring Creek. Map Exhibit F - Reclamation Plan Map has been revised to show the location of the areas to be armored in the mine.

Channel Bank Armoring.

Along the banks of Black Squirrel Creek and Big Springs Creek bank armoring will be placed wherever mining will take place within 400 feet of the bank. The armoring will be done as mining advances in each stage so that if mining ended along the channels before mining reached the 400 foot line no armoring would need to be done. As mining approaches the 400 foot limit the channel adjacent to mining area will be armored following the UDFCD Guidelines.

Bank armoring will be done, using the concrete recycle material described above. The armored face of the bank will extend to 5 feet below the thalweg of the dry channel to the top of the existing bank and will be a minimum of 2 feet thick. This will leave an armored face along the surface that is 29 feet wide. On average this will require 2.77 cu-yds per linear foot. The armoring will not take place in the OHW but rather along the historic bank of the creeks. The face of the armoring will be sloped 2.5h to 1v per the guidelines.

Excavation Bank Armoring.

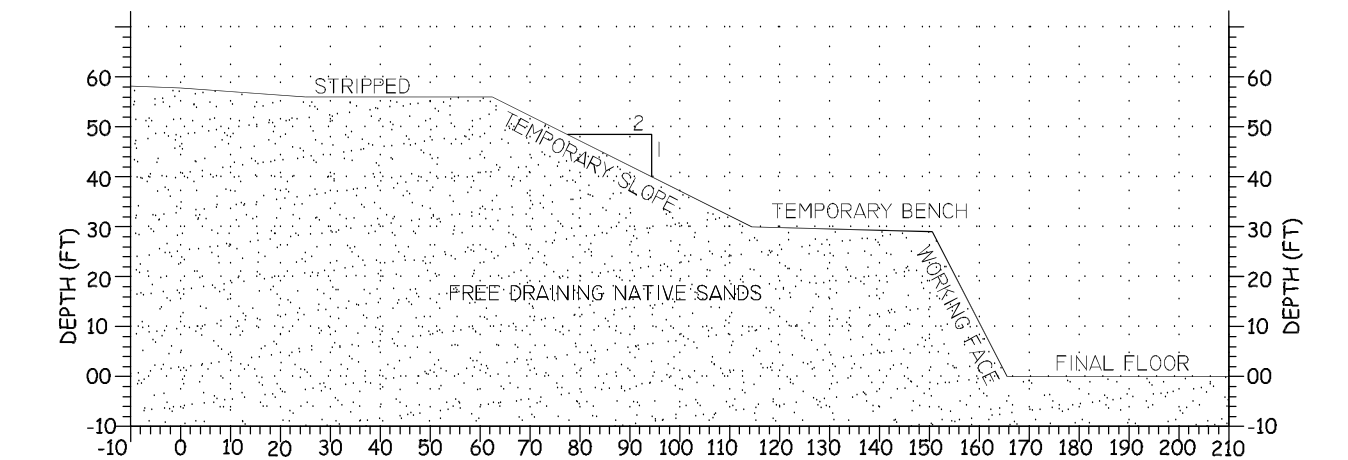
On the inside of the mined area adjacent to the creek channels the armoring will be placed from the existing elevation so the toe of the armoring will be a minimum of 3 feet below the creek thalweg and will be 2 feet or more thick. This is approximately 1.64 cyd/ft along the excavation bank slopes. The armoring will cover the bank slopes from the original ground surface to a depth of 3 feet below the channel thalweg and parallel to the channel. Once sloping begins the armoring will be installed on 500 foot sections until completed. This will leave an armored face along the surface that is 27 feet wide.

Supplied supporting documents

Figure 1 - Bank Protection Plan cross section (Revised 10-30-19)

THIS ARMORING PLAN HAS BEEN REVIEWED AND APPROVED BY THE COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY (CDRMS) AND BONDED FOR COMPLETION.

DESIGN IS BASED ON MILE HIGH FLOOD DISTRICT (AKA URBAN DRAINAGE) AND IS BASED ON RECOMMENDED TECHNICAL REVIEW GUIDELINES FOR GRAVEL MINING AND WATER STORAGE ACTIVITIES WITHIN OR ADJACENT TO 100-YEAR FLOODPLAINS (JANUARY 2013)



(F) STAGE 1 OF 6 - TYPICAL WORKING FACE
NO SCALE

MINING AREA GRADING

- 1) WHEN MINING COMMENCE S, THE TOP 8 TO 12 INCHES OF GROWTH MEDIUM WILL BE REMOVED LEAVING A SHALLOW HOLE WHERE MINING WILL TAKE PLACE. GROWTH MEDIUM WILL BE PLACED IN THE SIGHT BERMS.
- 2) WHEN STRIPPING STARTS, ALL DISTURBED AREA WILL BE SLOPED TO DRAIN INTO THE DISTURBED AREA, SO ALL STORMWATER WILL BE RETAINED ON SITE TO EITHER SOAK INTO THE GROUND OR EVAPORATE.
- 3) ALL FINAL SLOPES WILL BE GRADED 3H:1V. TEMPORARY SLOPE S WILL BE GRADED 2H:1V FOR SAFETY REASONS AND ACTIVE WORKING FACES WILL BE MINED NEAR VERTICAL. TEMPORARY AND WORKING FACE SLOPES ALL DRAIN INTO THE MINE SO NO OFF-SITE DRAINAGE PROTECTION IS NEEDED.
- 4) INFORMATION PROVIDED ON THIS SECTION MAY CHANGE AS MINING PROGRESSES DUE TO VARIATIONS IN THE MATERIAL DEPTH, THE DEPTH TO THE WATER TABLE AND LOCATION IN MINING AREA.

PREPARED UNDER THE DIRECT SUPERVISION OF:

FOR AND ON BEHALF OF ELLICOTT SAND AND GRAVEL LLC

PPR 234

PROJECT #: EL PASO COUNTY	EL PASO COUNTY SITE DEVELOPMENT PLAN CROSS SECTION DETAILS FOR SCHUBERT RANCH SAND RESOURCE ELLICOTT, COLORADO		REVISIONS: SPECIAL USE PERMIT APPROVAL - BCC	DATE: 08-02-2022	ELLICOTT SAND AND GRAVEL LLC 235 Franceville Coal Mine Road Colorado Springs Co 80929 phone: (602) 558-0846	FILE NAME: ESG-DF-GRADING	DATE: 01/05/2023	DRAWN BY: ENVISIO	SCALE: NA	CHECKED BY: GTH	SHEET 5 of 5
	<p align="right">REVISED APR 6, 2023 - 11:35</p>										