

November 26, 2024

Colorado Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

Attention: Patrick Lennberg

Re: Request for Release of Permit No. M-2018-020

Patrick,

This letter is intended to clarify the happenings at the Yocam Borrow Pit (Permit No. M-2018-020) in the last several months and to request the release of the permit. CRCC was issued a permit to mine the Yocam pit on May 15th, 2018, and actively mined through October of 2018 and reclaimed in November 2018. Since that point CRCC has conducted the required Stormwater inspections in compliance with our permit as well as annual inspection with DRMS. Mr. Yocum placed this section of land in an Colorado Open Lands Conservation Easement, following the completion of mining. We have treated weeds and reseeded the pit several times in an attempt to establish adequate growth. In 2020 John Yocum sold the property to Robin Hayes, CRCC was aware the property had sold but was unable to contact Mr. Yocum or Mr. Hayes.

In August 2024 I stopped by the Yocum Pit to ensure the sign and corner posts were in place assuming we would have an upcoming inspection with DRMS. Both the sign and corner posts were intact, and I noticed nothing out of the ordinary. CRCC was hoping to gain approval this fall for the current growth on the property.

On November 14th, 2024, Patrick Lennberg (DRMS) visited the site for our scheduled inspection and notified CRCC that it seemed the site was being actively mined. Following more investigation Mr Lennberg provided CRCC with Contacts for Frontier Environmental who were actively placing fill material in the depression left by the Yocum Pit. Since the 14th CRCC has gathered more information regarding the work being completed by Frontier Environmental at the Yocum Pit.

Frontier Environmental is performing a wetland restoration project for SCP Conservation LLC on property owned by the Colorado State Land Board. This project entails removing approximately 300,000 CY of soil from the South Platte River drainage Northeast of the Yocum Pit and placing it in the existing depression in the hillside that was created by the mining of the Yocum Pit. CRCC's lease with Mr. Yocum did contain a survivability clause but Mr. Hayes was unaware of his remaining obligation to allow CRCC to close the open Mining Permit. There is a current lease agreement between SCP and Mr. Hayes which includes a 5-year restoration period requiring reseeding and invasive species treatment at a minimum of once per year until adequate growth is achieved. They also have an open 404 Clean Water Act permit and a Discharge Storm Water permit through the Colorado Department of Public Health and Environment. To Date Frontier Environmental has placed approximately 150,000 CY of soil in the Yocum Pit.

Based on the above listed circumstances and the permitting through other State and Federal Agencies for the Frontier Environmental Project, CRCC is requesting that permit M-2018-020 be released by the Colorado Division of Reclamation, Mining and Safety. I have attached exhibits containing the final configuration of the grading planned by Frontier Environmental, as well as copies of their stormwater discharge permit and their lease with Mr. Robin Hayes.

Thank you for your consideration of this request and please let me know if you have any questions or concerns.

Thank you,

Travis Bell General Superintendent

Exhibit 1: Planned Grading of Yocum Pit by Frontier Environmental

Exhibit 2: Storm Water Discharge Permit by Frontier Environmental

Exhibit 3: Frontier Environmental Spoil Site Lease Agreement

Exhibit 4: Colorado Open Lands Approval Letter

Exhibit 5: Frontier Environmental Revegetation Plans

Exhibit 1: Planned Grading of Yocum Pit by Frontier Environmental



Exhibit 2: Storm Water Discharge Permit by Frontier Environmental



CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COR400000 STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

Certification Number: COR422703

This Certification to Discharge specifically authorizes:

Owner Ecosystem Investment Partners Operator FRONTIER ENVIRONMENTAL SERVICES LLC to discharge stormwater from the facility identified as

South Platte Mitigation Bank

To the waters of the State of Colorado, including, but not limited to:

South Platte River

NonStructural

Facility Activity :

Disturbed Acres: 115.9 acres

Facility Located at:

State Highway 144 @ County Road 42.5 Wiggins 80654 Morgan County Latitude 40.304907 Longitude -104.131403

Specific Information (if applicable):

The project is located directly on the South Platte River within Section 16, 4N Township, 60W Range,

Certification is issued: 4/3/2024 Certification is effective: 4/1/2024 Expiration date of general permit: 3/31/2029

This certification under the general permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the COR400000 permit.

This certification was approved by: Andrew Sayers-Fay Permits Section Manager Clean Water Program Water Quality Control Division



Exhibit 3: Frontier Enviromental Spoil Site Lease Agreement

ACCESS AND USE AGREEMENT

THIS ACCESS AND USE AGREEMENT ("Agreement") by and between SCP CONSERVATION, LLC, a Colorado limited liability company ("SCPC") and Robin Hayes having an address of <u>1844 Hwy. 144 Orchard, CO 80649</u> ("Landowner") is made effective as of the date that both the Landowner and SCPC have signed the Agreement ("Effective Date"). Landowner and SCPC may be referred to herein individually as a "Party" or collectively as the "Parties."

RECITALS:

WHEREAS, SCPC is the lessee and project developer with respect to that certain parcel of land ("Project Parcel") located at <u>Section 16</u>, <u>Township 4N</u>, and <u>Range 60W</u> in Morgan County, CO owned by the Colorado State Land Board;

WHEREAS, Robin Hayes owns that certain parcel of land at <u>21056 CO Rd 1 in</u> <u>Orchard, CO</u> (Morgan County tax id #104517000001) ("Hayes Parcel") that is immediately adjacent to the Project Parcel; and

WHEREAS, SCPC expects to generate excess fill dirt ("Excess Fill") resulting from its work on Project Parcel and Landowner desires to grant SCPC access to the Hayes Parcel such that SCPC can cause the Excess Fill to be moved to the Hayes Parcel subject to the terms and conditions herein.

NOW, THEREFORE, for and in consideration of the mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, the Parties hereby agree as follows:

1. <u>RECITALS.</u> The Recitals above are hereby incorporated herein by this reference and made a part of this Agreement.

2. <u>TERMS.</u> Subject to the terms and conditions set forth herein, Landowner hereby agrees to accept the Excess Fill and to grant SCPC (including its agents, consultants, and contractors) access to the Hayes Parcel to (a) place the Excess Fill on the Hayes Parcel in the designated deposit area and the established access road as both are depicted on attached Exhibit A Access Agreement Map incorporated herein by reference ("Deposit Areas") and (b) conduct SCPC's activities described in Paragraph 4 below. In exchange for such access and the acceptance of the Excess Fill on the Hayes Parcel's Deposit Areas, SCPC will pay Landowner Fifty Thousand Dollars (\$50,000) ("Access Payment") prior to any delivery of the Excess Fill to the Hayes Parcel. SCPC will place the Excess Fill in the Deposit Areas as specified by Landowner.

3. <u>REPRESENTATIONS AND WARRANTIES.</u> Landowner represents and warrants that (a) Landowner is the sole owner of the Hayes Parcel and has full authority to execute this Agreement and agree to its terms and conditions and (b) there are no agreements or other matters that could prevent the access and disposition of the Excess Fill on the Hayes Property's Deposit Areas contemplated by this Agreement. SCPC represents and warrants that (a) SCPC has full authority to execute this Agreement and agree to its terms and conditions and (b) there are no agreements or other matters that could prevent the sole of the Excess Fill on the Hayes Property's Deposit Areas contemplated by this Agreement. SCPC represents and warrants that (a) SCPC has full authority to execute this Agreement and agree to its terms and conditions and (b) there are no agreements or other matters that could prevent SCPC to fulfill its obligations hereunder.

4. INDEMNIFICATION. Except to the extent caused by the willful misconduct of Landowner,

its employees, agents, contractors, or invitees, SCPC shall indemnify, defend, and hold harmless Landowner, its successors and assigns, for, from, and against all claims, suits, actions, and proceedings whatsoever for all losses, liabilities, judgments, settlements, costs, penalties, damages, and expenses relating thereto, including but not limited to attorneys' fees and other costs of defending against, investigation, and settling claims to persons or property resulting from SCPC's use, occupancy, of the Hayes Parcel or the activities associated with the Excess Fill and the transactions and activities described in this Agreement including but not limited to those related to any Hazardous Materials (as defined in Section 5 hererin) being introduced to the Hayes Parcel as a result of the Excess Fill.

5. <u>HAZARDOUS MATERIAL</u>. SCPC has no knowledge of any past, present or pending violation of, any federal, state or local law, ordinance or regulation relating to the Excess Fill, and has no knowledge of any presence of any substance, material or waste in the Excess Fill that is now or hereafter classified by federal, state or local law, ordinance or regulation as hazardous or toxic ("Hazardous Materials").

6. <u>OTHER TERMS.</u> SCPC agrees that all Excess Fill moving activities contemplated herein will adhere to Colorado sediment and erosion control regulations, including necessary watering of the Access Road and Depositor Areas to minimize dust. Excess Fill moving activities are not expected to take longer than a 6-month window. When all Excess Fill moving activities are complete, SCPC will cause a native upland seed mix to be planted and hydro mulch sprayed over the Deposit Areas that do not include the access road. Plant monitoring, reseeding, and invasive species treatment in the Deposit Areas will take place intermittently (once or twice a year) if/as needed over a 5-year window following the completion of the Excess Fill delivery. All commercially reasonable efforts will be made to use established access road as is. Landowner agrees that improvements may be made to the Access Road as needed in order to facilitate and optimize Excess Fill delivery. Any road improvements will be restored to like preconstruction conditions, unless agreed by owner to leave improvements in place.

7. <u>DEFAULT</u>. If either party defaults in the performance of its obligations hereunder, then the non- defaulting party at its option may either (a) terminate this Agreement or (b) pursue the legal remedy of specific performance of this Agreement or (c) elect to take other actions including those at law or equity.

8. <u>LEGAL VENUE: ATTORNEY'S FEES</u>. This Agreement will be construed, and the rights and obligations of SCPC and Landowner hereunder will be determined, in accordance with the laws of the State of Colorado. In the event any action, suit, or other proceeding at law or in equity is brought to enforce the covenants and agreements contained in this Agreement or to obtain monetary damages for breach thereof, and such action results in an award judgment for monetary damages, or the granting of any equitable relief in favor of any party hereto, all expenses, including reasonable attorney's fees, of the successful party in such action, suit, or other proceeding shall, upon demand of such party, be paid by the other party.

9. <u>NOTICES</u>. Any notices required or permitted hereunder shall be sufficiently given if delivered by overnight courier or by electronic mail to the parties hereto as follows:

SCPC:

SCP Conservation, LLC Attn: M. Gray Stevens Email: gstevens@sandycp.com Phone: (847) 404-7509

With a copy to: Rocky Mountain Mitigation Attn: Stephen Decker Email: Decker@RockyMountainMitigation.com Phone: (303) 351-1530

LANDOWNER: <u>Robin Hayes</u> <u>1844 Hwy. 144 Orchard, CO</u> 80649 <u>970-645-9897</u>

10. <u>PRIOR AGREEMENTS</u>. This Agreement supersedes any prior understandings and agreements between the parties hereto, whether written or oral, with respect to the subject matter hereof and may be amended only by a written document stating the specifics of such amendment, executed by both SCPC and Landowner.

11. <u>SUCCESSORS AND ASSIGNS.</u> This Agreement shall inure to the benefit of and be binding upon the successors and assigns of SCPC and Landowner and their respective successors and assigns.

12. <u>OTHER PROVISIONS</u>. No provision of this Agreement will be construed by any court or other judicial authority against any party hereto by reason of such party being deemed to have drafted or structured such provisions. If any one or more of the provisions of this Agreement will for any reason be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability will not affect any other provision. Failure of a Party to exercise any right under this Agreement or to insist upon strict compliance with regard to any term, condition or covenants specified herein will not constitute a waiver of that right nor of strict compliance by the other party with any term, condition or covenant under this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a relationship of principal and agent, partnership, or joint venture between the Parties. Each of the persons signing below on behalf of a party hereto represents and warrants that they are signing with full and complete authority to bind the party on whose behalf they are signing, to each and every term of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year shown below.

SCPC:

SCP Conservation, LLC

By: Manager M. pray Stevens, Manager	Date:	10.23.23
LANDOWNER:	_Date: _	10-20-23-

EXHIBIT A SITE MAP



Addendum 1 to ACCESS AND USE AGREEMENT between SCP CONSERVATION, LLC and

Robin Hayes executed on 10/23/2023.

On December 11. 2023 EIP IV CO Portfolio, LLC (EIP) acquired the South Platte Mitigation Bank and associated contracts from the SCP CONSERVATION, LLC.

As part of acquiring the Section 404 Clean Water Act permit to construct the project, EIP was required to perform a Section 106 Archaeological investigation of the construction site and existing road. The investigation identified artifacts within the existing road. To avoid disruption of the artifacts, a new road alignment (Modified Access Agreement Map) is necessary. To compensate for the additional land use, parties have agreed to increase "Access Payment" from \$50,000 to \$55,000.

EIP IV Portfolio, LLC

By: David Urban

_____ Date: _____

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Landowner:

Mitin Abre Date: 6-14-24

Modified Agreement Access Map 6.1.2024



Ammended Dirt Disposal Access Agreement 6.1.2024 Executed

Final Audit Report

2024-06-17

Created:	2024-06-14
By:	Kyle Graham (kyle@ecosystempartners.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAATt9kFdMdPvSz117pGKmKPJr2tOxjbmLx

"Ammended Dirt Disposal Access Agreement 6.1.2024 Execute d" History

- Document created by Kyle Graham (kyle@ecosystempartners.com) 2024-06-14 - 6:36:14 PM GMT
- Document emailed to David Urban (david@ecosystempartners.com) for signature 2024-06-14 - 6:36:47 PM GMT
- Email viewed by David Urban (david@ecosystempartners.com) 2024-06-15 - 2:52:36 PM GMT
- Document e-signed by David Urban (david@ecosystempartners.com) Signature Date: 2024-06-17 - 12:40:03 PM GMT - Time Source: server
- Agreement completed. 2024-06-17 - 12:40:03 PM GMT

Exhibit 4: Colorado Open Lands Approval Letter

February 26th, 2024



Robin Hayes 1844 Hwy. 144 Orchard, CO 80649

Dear Robin,

The purpose of this letter is to respond to your request to allow SCP Conservation LLC (SCP) to transfer excess fill dirt from an adjacent property to the Yocam Property. The purpose of transferring the fill dirt to your property is to restore an area that was disturbed from work conducted approximately 5 years ago by the Colorado Department of Transportation (CDOT).

Section 6 (6.2): Surface Disturbance of the conservation easement states that, "Any alteration of the surface of the land, including without limitation the movement, excavation, extraction or removal of soil, sand, gravel, rock, peat or sod, is prohibited, unless such alteration is associated with permitted acts on and uses of the Property and is consistent with the Purpose."

We have reviewed the documentation you provided, including the plans from SCP. Based on our review, we have determined that the proposed restoration project is consistent with the purposes of the conservation easement including Relatively Natural Habitat, Open Space, Scenic Enjoyment, and Agriculture and can therefore be approved.

This determination is based on the fact that the project benefits the scenic, ecological and agricultural aspects of the property by restoring a pasture that was disturbed by the CDOT activities. The CDOT activities resulted in unnatural contouring, a reduction in soil and pasture grasses dominated by weeds.

We approve your request provided that SCP is required to: 1) install and maintain temporary fencing for the duration of the restoration project in order to keep cattle off the restoration area, 2) SCP vehicles will stay on the existing designated access road as depicted on the map provided, 3) dust resulting from any vehicle activities must be mitigated only using water, 4) all conditions of the contract between you and SCP are met and there are no amendments to the contract without Colorado Open Lands approval.

Please be advised that this approval is only for the activities for which plans were provided and this letter does not preclude our responsibility or ability to enforce the terms of the conservation easement.

Please don't hesitate to contact me if you have any questions regarding this proposal or other easement issues you would like to discuss.

Sincerely,

Chergl Cufre

Cheryl Cufre Director of Land Stewardship 303-988-2373 x219 ccufre@coloradoopenlands.org



Exhibit 5: Frontier Environmental Revegetation Plans

GENERAL NOTES

1. NO CONSTRUCTION ACTIVITIES (EITHER TEMPORARY OR PERMANENT) OTHER THAN THE ACTIVITIES AUTHORIZED IN THE SECTION 404 PERMIT WILL OCCUR IN WETLANDS. ALL ADDITIONAL ACTIVITIES NEED TO BE AUTHORIZED BY THE U.S. ARMY CORPS OF ENGINEERS IN WRITING BEFORE CONSTRUCTION. NO MATERIALS WILL BE STOCKPILED IN THE WETLANDS.

2. CONTACT THE U.S. FISH AND WILDLIFE SERVICE, OFFICE OF MIGRATORY BIRDS, AT (303) 236-8171, FOR PERMITTING REQUIREMENTS PRIOR TO THE REMOVAL OR DESTRUCTION OF ANY BIRD NEST.

3. IF HEAVY EQUIPMENT IS ACQUIRED THAT WAS PREVIOUSLY WORKING IN ANOTHER STREAM, RIVER, LAKE, POND, OR WETLAND, ONE OF THE FOLLOWING DISINFECTION PRACTICES IS NECESSARY PRIOR TO BRINGING ON-SITE TO PREVENT THE SPREAD OF NEW ZEALAND MUD SNAILS AND OTHER AQUATIC HITCHHIKERS INTO THIS DRAINAGEWAY. THESE PRACTICES ARE ALSO NECESSARY AFTER PROJECT COMPLETION, PRIOR TO THIS EQUIPMENT BEING USED IN ANOTHER STREAM, RIVER, LAKE, POND, OR WETLAND, FOR THE SAME PURPOSE:

REMOVE ALL MUD AND DEBRIS FROM EQUIPMENT (TRACKS, TURRETS, BUCKETS, DRAGS, TEETH, ETC.) AND PAY/SOAK EQUIPMENT WITH A 1:15 SOLUTION OF DISINFECTION SOLUTION CONTAINING THE FOLLOWING INGREDIENTS:

- A. DIALKYL DIMETHYL AMMONIUM CHLORIDE (5-10% BY WEIGHT);
- B. ALKYL DIEMETHYL BENZYL AMMONIUM CHLORIDE (5-10% BY WEIGHT);
- C. NONYL PHENOL ETHOXYLATE (5-10% BY WEIGHT);
- D. SODIUM SESQUICARBONATE (1-5%) AND,
- E. TETRASODIUM ETHYLENE DIAMINETETRAACETATE (1-15%)

THE EQUIPMENT SHOULD BE KEPT MOIST FOR AT LEAST 10 MINUTES, AND RINSATE SHOULD BE MANAGED AS A SOLID WASTE IN ACCORDANCE WITH LOCAL, COUNTY, STATE, OR FEDERAL **REGULATIONS.**

SMALL EQUIPMENT, HAND TOOLS, BOOTS AND ANY OTHER EQUIPMENT THAT WAS PREVIOUSLY USED IN A RIVER, STREAM, LAKE, POND, OR WETLAND PRIOR TO MOVING THE EQUIPMENT TO ANOTHER WATER BODY MAY BE DISINFECTED USING THE FOLLOWING METHODS:

- A. SPRAY/SOAK EQUIPMENT WITH WATER GREATER THAN 140 DEGREES FAHRENHEIT FOR AT LEAST 10 MINUTES.
- B. SANITIZE WATER SUCTION HOSES AND WATER TRANSPORTATION TANKS (USING METHODS DESCRIBED ABOVE) AND DISCARD RINSE WATER AT AN APPROPRIATELY PERMITTED DISPOSAL FACILITY.

4. WHERE THE PLANTING PLANS AND NOTES DIFFER FROM THE SPECIFICATIONS, THE PLANTING PLANS AND NOTES GOVERN.

- 5. FINAL ELEVATIONS IN THE WETLAND AREAS SHALL BE APPROVED BY THE PROJECT ECOLOGIST. THE CONTRACTOR SHALL SEEK REVIEW AND OBSERVATION OF THE SUBGRADE ELEVATIONS FROM THE ECOLOGIST AND ENGINEER PRIOR TO TOPSOIL APPLICATION.
- 6. THE PLANT MATERIAL LISTED IN THE PLANTING QUANTITIES TABLE SHALL BE PLANTED IN THE AREAS SHOWN ON THE PLANTING PLANS.
- 7. NO SUBSTITUTIONS OF PLANT MATERIAL OR AMENDMENTS WILL BE PERMITTED WITHOUT APPROVAL OF ECOLOGIST AND ENGINEER. NO SUBSTITITIONS SHALL BE MADE UNLESS SPECIFIED PLANT MATERIALS ARE UNAVAILABLE. CONTRACTOR MUST NOTIFY ECOLOGIST AND ENGINEER IF MATERIALS ARE UNAVAILABLE, AND LIST PROPOSED SUBSTITUTIONS. ECOLOGIST AND ENGINEER MUST APPROVE ALL SUBSTITITIONS.
- 8. ECOLOGIST SHALL INSPECT SEED LOT ANALYSIS BEFORE SEED IS PURCHASED TO CHECK FOR UNDESIRABLE SPECIES AND WHETHER THE SEED HAS BEEN TESTED WITHIN 6 MONTHS OF PROJECT INITIATION.
- 9. ALL PLANT MATERIAL SHALL BE REVIEWED BY THE ECOLOGIST PRIOR TO INSTALLATION. ECOLOGIST MAY REJECT PLANT MATERIAL DEEMED TO BE OF INSUFFICIENT QUALITY AT ANY TIME DURING THE PLANTING PROCESS. PLANTS WITH DRY, BROKEN, OR CRUMBLING ROOTS SHALL NOT BE ACCEPTED FOR PLANTING.

10. PLANTING OPERATIONS WILL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS.

- 11. THE PLANTING LOCATIONS SHOWN ON THE PLANTING PLANS ARE APPROXIMATE AND SHOULD BE FIELD STAKED BY THE CONTRACTOR FOR APPROVAL BY THE ECOLOGIST PRIOR TO DIGGING PLANTING PITS. THE CONTRACTOR WILL NOTIFY THE ECOLOGIST WHEN THE PLANTING LOCATIONS HAVE BEEN STAKED AND NO LESS THAN 72 HOURS BEFORE DIGGING PLANTING PITS AND PLANTING. THE CONTRACTOR SHALL RELOCATE ANY PLANT AS DIRECTED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING AT NO ADDITIONAL COST TO THE OWNER.
- 12. THE CONTRACTOR WILL REVIEW THE SEEDING LIMITS AND OVERLAP WITH THE ECOLOGIST PRIOR TO SEEDING.
- 13. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE CONSTRUCTION LIMITS SHOWN INCLUDING SEEDING, PLANTING, AND MULCHING.
- 14. ANY AREAS OUTSIDE THE CONSTRUCTION LIMITS DISTURBED BY CONSTRUCTION OPERATIONS NOT DIRECTED BY AN OWNER'S REPRESENTATIVE. SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 15. ALL MATERIALS AND METHODS TO BE SUBMITTED FOR APPROVAL BY THE OWNER'S REPRESENTATIVES PRIOR TO CONSTRUCTION.

TOPSOIL MANAGEMENT

1. TOPSOIL DEPTHS AND SALVAGE AREAS SHALL BE IDENTIFIED BY THE ENGINEER AND ECOLOGIST.

- 2. TESTING WILL BE REQUIRED OF ON-SITE SOILS PLACED INTO STOCKPILES TO BE USED AS SEED BED OR IMPORTED SOILS TO BE USED AS SEED BED PRIOR TO IMPORT OR APPLICATION. CURRENT STANDARD NUTRIENT TESTS AND USDA TEXTURE ANALYSIS ARE REQUIRED FOR EACH SOIL FRACTION, PILE, OR SOURCE. TESTS SHALL BE CONDUCTED BY THE ECOLOGIST.
- 3. SOIL AMENDMENT RATES WILL BE BASED ON THE RESULTS OF THE STANDARD NUTRIENT TESTS OF SOIL STOCKPILES. ECOLOGIST SHALL ADJUST AMENDMENT AND FERTILIZER RATES AND METHODS TO MEET DESIRED CHEMICAL AND PHYSICAL MAKEUP. ANY ADJUSTMENTS SHALL BE NEGOTIATED AND MUTUALLY AGREED UPON BY THE CONTRACTOR AND OWNER.
- 4. SOIL AMENDMENTS AND FERTILIZERS SHALL BE APPLIED TO AREAS STAKED OUT BY THE ECOLOGIST. NO OR LITTLE FERTILIZERS OR AMENDMENTS WILL BE APPLIED TO AREAS LESS THAN 12" ABOVE THE NORMAL HIGH WATER ELEVATION. GRANULAR AMENDMENTS SHALLED BE INCORPORATED INTO TOPSOIL TO A DEPTH OF 1".
- 5. ALL SUBSOIL AREAS MUST BE RIPPED TO DECOMPACT AND ROUGHEN PRIOR TO TOPSOIL APPLICATION. TRUCKS AND HEAVY EQUIPMENT SHALL NOT DRIVE ON THE DECOMPACTED SUBSOIL AREAS OR TOPSOILED AREAS AFTER DECOMPACTION OR APPLICATION OF TOPSOIL. ANY AREAS RE-COMPACTED FOLLOWING PLACEMENT SHALL BE DECOMPACTED.
- 6. ALL HEAVILY COMPACTED AREAS SUCH AS, BUT NOT LIMITED TO, CONSTRUCTION ACCESS CORRIDORS AND STAGING AREAS SHALL BE RIPPED TO AT LEAST A DEPTH OF 18" PRIOR TO TOPSOIL APPLICATION. ECOLOGIST AND ENGINEER SHALL INSPECT DECOMPACTED AREAS PRIOR TO TOPSOIL PLACEMENT.
- 7. SOILS SHALL NOT BE WORKED WHEN FROZEN, SNOW COVERED, WET, OR MUDDY,

SEEDING AND MULCHING

- MIXTURE, AND ALL SCIENTIFIC NAMES OF SPECIES.
- IN STORAGE WILL NOT BE ACCEPTABLE.

PLS - PURE LIVE SEED IS THE AMOUNT OF SEED EXPECTED TO GROW BASED ON THE PURITY AND GERMINATION RATE OF THE BULK SEED. THE FORMULA USED FOR DETERMINING THE QUALITY OF PURE LIVE SEED (PLS) SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS)

- CONTROL INSPECTOR.
- THE TOPSOIL SURFACE BE SMOOTH AND COMPACTED.
- SEEDING, THE SEEDBED SHALL BE RE-PREPARED.
- NECESSARY TO ACHIEVE 5' OVERLAP.
- HOURS PRIOR TO ANTICIPATED PRECIPITATION.
- USED.
- NEGLIENCE, SHALL BE REPAIRED AND REMULCHED AS DESCRIBED ABOVE, AT THE THIS ORDERED CORRECTIVE WORK SHALL BE AT THE CONTRACT PRICES.

TREE AND SHRUB PLANTING

- 1. TREES AND SHRUBS MUST BE INSPECTED FOR HEALTH, SIZE, AND SPECIES PRIOR TO INSPECTION.
- BE WATERED UPON ARRIVAL.
- ADJUSTED BY THE ECOLOGIST, IF NECESSARY, PRIOR TO INSTALLATION.

WETLAND PLUG. WILLOW STAKE, AND WILLOW THICKET NOTES:

- 1. WETLAND PLUGS SHALL BE PLANTED AT 18" to 24" O.C. TRIANGULAR SPACING IN WETLAND AREAS. ARFA
- SHALL BE FILLED AND ½ TO 2" OF NATIVE SOIL PLACED AROUND SURFACE OF PLUG SOIL.
- DRAINAGE OR AS DIRECTED BY THE ECOLOGIST.
- WITH NATIVE SOILS AND LIGHTLY TAMPED TO PREVENT AIR POCKETS.
- DRAWINGS

1. ALL SEED BAGS SHALL BE LABELED AT ALL TIMES AND SHALL BE PROVIDED TO THE ECOLOGIST FOR REVIEW AND DOCUMENTATION. SEED TAGS MUST SHOW JOB NAME, TOTAL POUNDS OF

2. ALL SEED FURNISHED SHALL BE WEED FREE. ECOLOGIST SHALL INSPECT SEED LOT ANALYSIS BEFORE SEED IS PURCHASED TO CHECK FOR UNDESIRABLE WEEDS AND OTHER SPECIES. THE CONTRACTOR SHALL FURNISH TO THE ECOLOGIST A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. ANY WEEDS PRESENT SHALL BE REPORTED TO AND PRE-APPROVED BY ECOLOGIST PRIOR TO PURCHASE. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR

3. SEED MIX SHALL BE PLANTED BY BROADCAST AND/OR DRILLSEED METHOD. BROADCAST SEEDING CAN BE DONE BY DRIBBLING SEED FROM A MECHANICAL DRILL (LARGE AREAS) AND BY USING A WHIRLYBIRD TYPE SEEDER OR BY HAND (FOR SMALL AREAS). SEED SHALL NOT BE APPLIED WITH A HYDROSEEDER AS THIS MAY DAMAGE THE SEED. BROADCAST SEED SHALL BE HARROWED OR RAKED LIGHTLY TO COVER SEED. WETLAND SEED SHALL BE BROADCAST ON MOIST CHANNEL BOTTOM AREAS BUT SHALL NOT BE BROADCAST INTO AREAS OF STANDING WATER. IT MAY NOT BE NECESSARY TO HARROW OR RAKE TO COVER SEED IN AREAS WHERE SOIL IS CONSISTENTLY WET. THIS WILL BE DETERMINED BY THE ECOLOGIST AND ENGINEER.

4. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO ECOLOGIST AND ENGINEER AND FORWARDED TO THE DOUGLAS COUNTY EROSION

5. ALL BLANKETED AREAS SHALL BE DECOMPACTED AND A LOOSE, RAKED SEEDBED PREPARED PRIOR TO SEEDING. ALL CLODS, ROCKS, DEPRESSIONS OR LUMPS OVER 2" SHALL BE PULVERIZED AND RAKED OUT OF ALL DISTURBED AREAS TO BE SEEDED. UNDER NO CIRCUMSTANCES SHALL

6. SEED SHALL BE APPLIED AT THE SPECIFIED RATES WITHIN 48 HOURS OF TOPSOIL PLACEMENT. IF A RAIN EVENT OCCURS THAT COMPACTS OR ERODES THE SEEDBED PRIOR TO PERFORMING

7. ADJACENT SEED MIXES SHALL OVERLAP BY FIVE FEET. SEEDING AREAS SHOWN ON PLANS DO NOT INCLUDE OVERLAP. CONTRACTOR SHALL CALCULATE AND APPLY SEED QUANTITIES

8. SEEDING, SOIL PREPARATION, BLANKETING, OR MULCHING SHALL NOT OCCUR WHEN THE SOIL IS WET, SNOW COVERED OR FROZEN. IF THE PROJECT CALLS FOR HYDRAULIC MULCHING, IT SHALL NOT BE DONE IN THE PRESENCE OF FREE SURFACE WATER AND SHALL BE APPIED 48

9. ALL AREAS DISTURBED IN CONSTRUCTION AND COVERED WITH COIR EROSION CONTROL MAT SHALL BE MULCHED WITH STRAW IN ACCORDANCE WITH THE SPECIFICATIONS. 75% OF STRAW SHALL BE OVER 10 INCHES IN LENGTH AND CERTIFIED WEED FREE. MULCH SHALL BE APPLIED NO MORE THAN 24 HOURS AFTER SEEDING. MULCH SHALL NOT BE APPLIED IF A COVER CROP IS

10. AREAS NOT PROPERLY MULCHED, OR AREAS DAMAGED DUE TO THE CONTRACTOR'S CONTRACTOR'S EXPENSE. MULCH MAY BE REMOVE BY CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL SHALL BE REPAIRED AND REMULCHED AS ORDERD. PAYMENT FOR

INSTALLATION. NOTIFY THE ECOLOGIST AT LEAST 48 HOURS PRIOR TO INSTALLATION AT SITE. NURSERY INSPECTION OF PLANTS MAY BE ARRANGED PRIOR TO DELIVERY TO SITE, IF A LOCAL NURSERY IS USED. NOTIFY THE ECOLOGIST AT LEAST 1 WEEK PRIOR TO DELIVERY FOR NURSERY

2. ALL TREES AND SHRUBS SHALL BE WATERED AND COVERED FOR DELIVERY TO SITE AND SHALL

3. ALL PLANTING LOCATIONS SHALL BE APPROVED IN THE FIELD ON THE DAY OF PLANTING AND

2. CUTTINGS AND WETLAND PLUGS SHALL BE FIELD LOCATED AND STAKED BY THE ECOLOGIST PRIOR TO INSTALLATION AND ECOLOGIST SHALL BE PRESENT TO APPROVE WETLAND PLUG AND WILLOW STAKE QUALITY AND INSTALLATION IN THE PROJECT

3. WETLAND PLUGS SHALL BE WET UPON TRANSFER TO THE SITE AND SHOULD BE PLANTED ON THE SAME DAY. PLUGS SHALL BE PLANTED IN GENEROUS HOLES TO ACCOMMODATE ROOTS WITHOUT BENDING ROOTS INTO A "J" SHAPE. AIR POCKETS IN HOLES

4. LIVE SANDBAR AND BLUE WILLOW (S. EXIGUA AND S. IRRORATA) CUTTINGS MUST BE COLLECTED AND INSTALLED IN DORMANT CONDITION (USUALLY BEFORE APRIL 15). WILLOWS SHOULD BE HARVESTED FROM A NEARBY LOCATION WITHIN THE SAME

5. WILLOW CUTTINGS WILL BE A MINIMUM OF 3 TO 4 FEET LONG AND WILL BE ½" TO 1" IN DIAMETER WITH SMOOTH UNDAMAGED BARK. STAKES SHALL BE PLANTED IN A VERTICAL HOLE THAT IS SATURATED AT THE BOTTOM THROUGHOUT THE GROWING SEASON. APPROXIMATELY 2/3 OF THE STAKE SHALL BE INSERTED INTO THE HOLE AND HOLE WILL BE BACKFILLED

6. WILLOW STAKES SHALL BE PLANTED AT A SPACING OF 2' O.C IN TRIANGULAR SPACING IN AREAS CALLED OUT IN THE LANDSCAPE

HYDRIC PLANTS LIST

Seed Mix				
Scientific Name	Common Name	Lb/ac (PLS)	Variety	
Nassella viridula	Green needle grass	0.75	Cucharas	
Sporobolus airoides	Alkali sacaton	0.10		
Puccinellia airoides	Nuttal alkaligrass	0.10		
Beckmannia syzigachne	American sloughgrass	0.10		
Bolboschoenus maritimus	Alkali bulrush	1.00		
Carex pellita	Woolly sedge	1.50		
Carex nebrascensis	Nebraska sedge	1.00		
Distichlis spicata	Inland saltgrass	0.75		
Asclepias incarnata	Swamp milkweed	2.00		
Eleocharis palustris	Creeping spikerush	1.00		
Panicum virgatum	Switchgrass	1.50	Blackwell	
Spartina pectinata	Prairie cordgrass	3.00	Red River	
Verbena hastata	Blue verbena	0.10		
Juncus torreyi	Torrey's rush	0.03		
Helianthus nuttallii	Nuttall's sunflower	1.00		
Juncus arcticus	Mountain rush	0.05		
Elymus trachycaulus	Slender wheatgrass	0.50	San Luis	
Schoenoplectus americanus	Olney's threesquare bulrus	1.50		
Schoenoplectus tabernaemontani	Softstem bulrush	0.50		
Total		16.48		

Wetland Plugs

Total

Scientific Name	Common Name	Number	Size
Carex pellita	Wooley sedge	5000	10-cc tubelings
Carex nebrascensis	Nebraska sedge	4000	10-cc tubelings
Juncus arcticus	Baltic Rush	4000	10-cc tubelings
Scirpus pallidus	Cloaked bulrush	1000	10-cc tubelings
Panicum virgatum	Switchgrass	5000	10-cc tubelings
Spartina pectinata	Prairie cordgrass	2000	10-cc tubelings
Carex praegracilis	Clustered field sedge	2000	10-cc tubelings
Eleocharis palustris	Common spikerush	4000	10-cc tubelings
Schoenoplectus pungens	Common threesquare	3000	10-cc tubelings
Juncus confusus	Colorado rush	1000	10-cc tubelings
Distichlis spicata	Inland saltgrass	4000	10-cc tubelings
Total	*assume 3' spacing	35000	
Willow Stakes		7	
Total	6000		
Tree Plantings			
Common Name	Scientific Name	Number	Size
Plains cottonwood	Populus deltoides	25	Pole
Peachleaf willow	Salix amygdaloides	100	5 gallon

125

MESIC PLANTS LIST

Seed Mix				
Scientific Name	Common Name	Lb/ac (PLS)	Variety	
Nassella viridula	Green needle grass	1.00	Cucharas	
Pascopyrum smithii	Western wheatgrass	2.00	Arriba	
Sporobolus airoides	Alkali sacaton	0.10		
Poa palustris	Fowl bluegrass	0.05		
Beckmannia syzigachne	American sloughgrass	0.25		
Bolboschoenus maritimus	Alkali bulrush	0.75		
Carex pellita	Woolly sedge	1.70		
Carex nebrascensis	Nebraska sedge	0.50		
Distichlis spicata	Inland saltgrass	0.25		
Eleocharis palustris	Creeping spikerush	1.00		
Panicum virgatum	Switchgrass	1.50	Blackwell	
Spartina pectinata	Prairie cordgrass	3.00	Red River	
Juncus torreyi	Torrey's rush	0.03		
Helianthus nuttallii	Nuttall's sunflower	1.00		
Juncus arcticus	Mountain rush	0.10		
Elymus trachycaulus	Slender wheatgrass	1.00	San Luis	
Schoenoplectus americanus	Olney's threesquare bulrush	1.00		
Total		15.23		

Wetland Plugs

Scientific Name	Common Name	Number	Size
Juncus arcticus	Baltic rush	2,000	10-cc tubelings
Panicum virgatum	Switchgrass	3,000	10-cc tubelings
Spartina pectinata	Prairie cordgrass	2,000	10-cc tubelings
Carex emoryi	Emory's sedge	3,000	10-cc tubelings
Carex praegracilis	Clustered field sedge	1,000	10-cc tubelings
Distichilis spicata	Inland saltgrass	1,000	10-cc tubelings
Total	2.0' spacing	12,000	

Willow Stakes

Total

Tree Plantings				
Common Name	Scientific Name	Number	Size	
Peachleaf willow	Salix amygdaloides	50	5 gallon	
Total		50		

10,000

UPLAND PLANTS LIST

Scientific Name	Common Name	Lb/ac (PLS)	Variety
Bouteloua gracilis	Blue grama	0.75	Hachita
Bouteloua curtipendifolia	Sideoats grama	3	Vaughn
Sporobolus cryptandrus	Sand dropseed	0.1	
Hesperostipa comata	Needle and thread	4	
Nassella viridula	Green needle grass	3	Cucharas
Pascopyrum smithii	Western wheatgrass	5	Arriba
Achnatherum hymenoides	Indian ricegrass	2	Paloma
Panicum virgatum	Switchgrass	0.5	Blackwell
Schizachyrium scoparium	Little bluestem	2	Cimarron
Artemisia frigida	Fringed sage	0.05	
Dalea purpurea	Purple prairie clover	0.5	Kaneb
Galliardia aristata	Blanket flower	0.5	
Heterotheca villosa	Hairy goldenaster	0.25	
Sphaeralcea coccinea	Scarlet globemallow	0.25	
Elymus trachycaulus	Slender wheatgrass	1	San Luis
Hilaria jamesii	Galleta grass	1	Viva
Linum lewisii	Lewis flax	0.5	Maple Grove
Total		24.4	

Shrub Plantings

Common Name	Scientific Name	Number	Size
Three-leaf sumac	Rhus trilobata	30	2 gallon
Rubber rabbitbrush	Ericameria nauseosus	30	5 gallon
Total		60	

SOUTH PLATTE WETLAND RESTORATION			
AS BUILT DATE	PLAN	ITING NOTES	DRAWING NO.
DRAWN BY JE CHECKED BY BB	EIP IV CREDIT CO. 5550 NEWBURY STREET, SUITE B BALTIMORE, MD 21209		10
A&E FILE NO. DATE 060CT2023	BEAVER CREEK HYDROLOGY	BEAVER CREEK HYDRO 2516 SANDERSVILLE R LEXINGTON, KY 4057	OAD



