

COLORADO SPRINGS AIRPORT  
A PORTION OF FILING 1F LOT 7  
INTEGRATION PHASE 4  
GRADING AND EROSION CONTROL PLAN FINAL PHASE  
LOCATED IN A PORTION OF SECTIONS 4, 5, & 6, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPLE MERIDIAN,  
LOCATED IN THE CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO.

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. IF SUCH WORK IS PERFORMED IN ACCORDANCE WITH THE GRADING AND EROSION CONTROL PLAN, THE WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY, OR ADVERSELY AFFECT THE SAFETY, USE, OR STABILITY OF A PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY.

PRINTED NAME: JEFFREY M. MOHR DATE: \_\_\_\_\_  
PHONE NUMBER: (720) 502-6668

SEAL:

AIRPORT ENTERPRISE FUND MANAGER'S STATEMENT

THE AIRPORT ENTERPRISE WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN INCLUDING CONSTRUCTION CONTROL MEASURE INSPECTION REQUIREMENTS AND FINAL STABILIZATION REQUIREMENTS ACCORDING TO THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. I FURTHER UNDERSTAND THAT FIELD CHANGES MUST BE REVIEWED BY THE SWENT REVIEW ENGINEER TO ENSURE CONFORMANCE WITH THE ORIGINAL DESIGN INTENT. I ACKNOWLEDGE THE RESPONSIBILITY TO DETERMINE WHETHER THE CONSTRUCTION ACTIVITIES ON THESE PLANS REQUIRE COLORADO DISCHARGE PERMIT SYSTEM (CDPS) PERMITTING FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

OWNER SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
NAME OF OWNER: TROY STOVER PHONE: (719) 550-1967  
TITLE: ASSISTANT DIRECTOR OF AVIATION EMAIL: TSTOVER@SPRINGSGOV.COM  
DBA: COLORADO SPRINGS AIRPORT

CITY OF COLORADO SPRINGS GRADING AND EROSION CONTROL REVIEW

THIS GRADING AND EROSION CONTROL PLAN IS FILED IN ACCORDANCE WITH CITY CODE. THIS PLAN IS REVIEWED IN ACCORDANCE WITH THE STORMWATER CONSTRUCTION MANUAL, LATEST REVISIONS.

FOR THE SWENT MANAGER DATE: \_\_\_\_\_  
NOTES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT INTENT

THIS GRADING AND EROSIONAL CONTROL PLAN IS INTENDED SUPPORT CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE INSTALLATION OF POND 705 AND CORRESPONDING DRAINAGE AND UTILITY INFRASTRUCTURE. THE LIMITS OF CONSTRUCTION AND DISTURBANCE CONSISTS OF APPROXIMATELY 44.3 ACRES.

LIST OF ABBREVIATIONS

COSA = COLORADO SPRINGS AIRPORT  
EX = EXISTING  
GEC = GRADING AND EROSION CONTROL  
PR = PROPOSED  
PVMT = PAVEMENT  
SA = SERVICE AREA  
STM = STORM  
TYP = TYPICAL

SITE SOILS

PER THE NATURAL RESOURCES CONSERVATION SERVICES (NRCS) SOIL REPORT, SITE SOILS ARE CLASSIFIED AS A &B SOILS. SEE THE NRCS SOILS REPORT INCLUDED IN THE CITY STORMWATER MANAGEMENT PLAN.

ANTICIPATED CONSTRUCTION/LAND DISTURBANCE SCHEDULE

GRADINF AND EROSION CONTROL SCHEDULE WILL BE INCLUDED FOLLOWING FIRST SUBMITTAL AND REVIEW.

RECIEIVING WATERS

FOUNTAIN CREEK

LEGAL DESCRIPTION

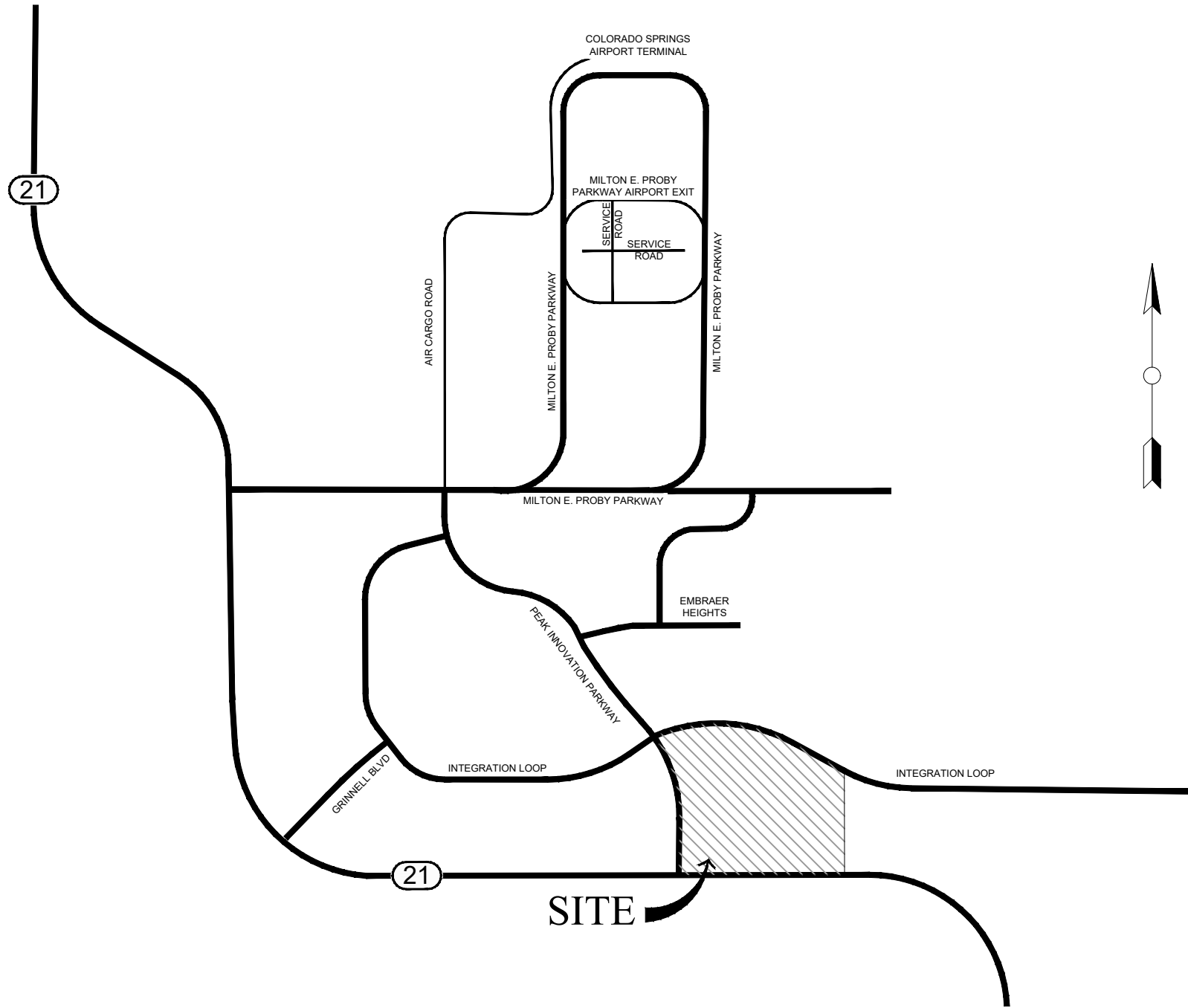
A PORTION OF LOT 7 COLORADO SPRINGS AIRPORT FILING 1D, LOCATED IN THE NORTH 1/4 OF SECTIONS 5 AND 6, TOWNSHIP 14 SOUTH AND A PORTION OF LOT 1, COLORADO SPRINGS AIRPORT AND INDUSTRIAL PARK FILING NO. 1, LOCATED IN THE SOUTH 1/4 OF SECTIONS 31 AND 32, TOWNSHIP 15 SOUTH, ALL OF RANGE 65 WEST, 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO.

BENCHMARK

#5 REBAR LOCATED APPROXIMATELY 75' SOUTHEAST OF THE SOUTHEAST CORNER OF THE LIFT STATION BUILDING MARKED WITH 4' CROSS LATH.

NORTHING: 62654.52  
EASTING: 29107.44  
ELEVATION: 5924.01

DATUM: NAVD 88



VICINITY MAP

SCALE 1" = 2000'

INITIAL & INTERIM PHASE NOTE:

1. THIS APPROVAL IS FOR INITIAL AND INTERIM PHASES ONLY. FINAL PHASE GEC PLAN TO FOLLOW UNDER SEPARATE COVER. NO FINAL PHASE WORK MAY COMMENCE UNTIL FINAL PHASE GEC PLAN APPROVAL.

GENERAL PLAN NOTES

1. NO CLEARING, GRADING, EXCAVATION, OR OTHER LAND DISTURBING ACTIVITIES SHALL BE ALLOWED (EXCEPT FOR WORK DIRECTLY RELATED TO THE INSTALLATION OF INITIAL CONTROL MEASURES) UNTIL A CITY GEC PERMIT HAS BEEN ISSUED.
2. ALL LAND DISTURBING ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE APPROVED GEC PLAN AND CSWMP.
3. INITIAL CONTROL MEASURES SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES TAKING PLACE. AN INITIAL SITE INSPECTION WILL NOT BE SCHEDULED UNTIL A CITY GEC PERMIT HAS BEEN "CONDITIONALLY APPROVED". CALL CITY STORMWATER INSPECTIONS, 385-5980, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO SCHEDULE AN INITIAL INSPECTION AND OBTAIN FULL PERMIT APPROVAL.
4. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS) AND THE "CLEAN WATER ACT" (33 USC 1344), INCLUDING REGULATIONS PROMULGATED AND CERTIFICATIONS OR PERMITS ISSUED, IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE CITY'S MS4 PERMIT, STORMWATER CONSTRUCTION MANUAL. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND WATER QUALITY CONTROL LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL OR STATE AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
5. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS.
6. ALL CONSTRUCTION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION MEASURES ARE IMPLEMENTED. TEMPORARY CONSTRUCTION CONTROL MEASURES MUST BE REMOVED PRIOR TO PERMIT CLOSEOUT.
7. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS OR ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
8. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. CONSTRUCTION CONTROL MEASURES MAY BE REQUIRED BY THE GEC INSPECTOR IF DEEMED NECESSARY BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES (E.G., ESTIMATED TIME OF EXPOSURE, SEASON OF THE YEAR, ETC.).
9. ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
10. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES.
11. 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. MATERIALS SHALL NOT BE STORED IN A LOCATION WHERE THEY MAY BE CARRIED BY STORMWATER RUNOFF INTO THE STORM SEWER SYSTEM AT ANY TIME.
12. SPILL PREVENTION AND CONTAINMENT MEASURES SHALL BE USED AT ALL STORAGE, EQUIPMENT FUELING, AND EQUIPMENT SERVICING AREAS SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING THE MS4, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITY. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE SECONDARY CONTAINMENT OR EQUIVALENT ADEQUATE PROTECTION. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE FOLLOWED, ALONG WITH PROPER DISPOSAL METHODS.
13. SEDIMENT (MUD AND DIRT) TRANSPORTED ONTO A PUBLIC ROAD, REGARDLESS OF THE SIZE OF THE SITE, SHALL BE CLEANED AS SOON AS POSSIBLE AFTER DISCOVERY.
14. NO CHEMICALS ARE TO BE ADDED TO THE DISCHARGE UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED BY THE STATE. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
15. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN FOURTEEN (14) CALENDAR DAYS AFTER FINAL GRADING OR FINAL LAND DISTURBANCE HAS BEEN COMPLETED. DISTURBED AREAS WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN (14) DAYS SHALL BE ROUGHENED, MULCHED, TACKIFIED, OR STABILIZED WITH TARPS WITHIN FOURTEEN (14) DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN SIXTY (60) DAYS SHALL ALSO BE SEEDED, UNLESS AN ALTERNATIVE STABILIZATION MEASURE IS ACCEPTED AT THE INSPECTOR'S DISCRETION. ALL TEMPORARY CONSTRUCTION CONTROL MEASURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION IS ACHIEVED.
16. THE GEC PLAN WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE STORMWATER ENTERPRISE SHOULD ANY OF THE FOLLOWING OCCUR: GRADING DOES NOT COMMENCE WITHIN TWELVE (12) MONTHS OF THE CITY'S ACCEPTANCE OF THE PLAN, THE CONSTRUCTION SITE IS IDLE FOR TWELVE (12) CONSECUTIVE MONTHS, A CHANGE IN PROPERTY OWNERSHIP OCCURS, THE PLANNED DEVELOPMENT CHANGES, OR ANY OTHER MAJOR MODIFICATIONS ARE PROPOSED AS DEFINED IN THE STORMWATER CONSTRUCTION MANUAL.
17. IT IS NOT PERMISSIBLE FOR ANY PERSON TO MODIFY THE GRADE OF THE EARTH ON ANY UTILITY EASEMENT OR UTILITY RIGHT-OF-WAY WITHOUT WRITTEN APPROVAL FROM THE UTILITY OWNER. CITY ACCEPTANCE OF THE GEC PLAN AND CSWMP DOES NOT SATISFY THIS REQUIREMENT. THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO EXISTING UTILITY FACILITIES TO ACCOMMODATE THE PLAN MUST BE APPROVED BY THE AFFECTED UTILITY OWNER PRIOR TO IMPLEMENTING THE PLAN. THE COST TO RELOCATE OR PROTECT EXISTING UTILITIES OR TO PROVIDE INTERIM ACCESS SHALL BE AT THE APPLICANT'S EXPENSE.
18. APPLICANT REPRESENTS AND WARRANTS THAT THEY HAVE THE LEGAL AUTHORITY TO GRADE AND/OR CONSTRUCT IMPROVEMENTS ON ADJACENT PROPERTY. THE CITY HAS NOT REVIEWED THE DEVELOPER'S AUTHORITY TO MODIFY ADJACENT PROPERTY. AN APPROVED GEC PERMIT DOES NOT PROVIDE APPROVAL FOR THE APPLICANT TO PERFORM WORK ON ADJACENT PROPERTY.
19. NONSTRUCTURAL CONTROL MEASURES TO BE USED WILL BE STREET SWEEPING AROUND THE SITE AS NEEDED.
20. THERE ARE NO NO-BUILD AREAS PRESENT ON THE SITE.
21. THERE ARE NO ASPHALT, CONCRETE BATCH PLANTS, OR MASONRY MIX STATIONS PROPOSED WITH THIS PROJECT.
22. THERE ARE NO PRESERVATION EASEMENTS LOCATED ON THE SITE.

GEC UTILITY NOTE

1. ALL UTILITY INSTALLATIONS WITHIN THE LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE COVERED UNDER THIS PLAN. LOCATIONS OF UTILITIES WITHIN THE LIMITS OF DISTURBANCE MAY BE MODIFIED AFTER PLAN APPROVAL AS A FIELD CHANGE. UTILITY INSTALLATIONS RELATED TO THE PRIVATE DEVELOPMENT THAT EXTEND BEYOND THE LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE CONSIDERED TO BE PART OF THE LARGER DEVELOPMENT, AND THEREFORE REQUIRE A PLAN MODIFICATION OR SEPARATE PLAN FOR THE ADDITIONAL DISTURBANCE AREA.
2. ALL NON-STRUCTURAL CCMS WILL CONFORM TO THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL WITH SPECIFIC LOCATION AND SCHEDULING NOTATED IN CSWMP.

PROJECT TEAM

OWNER  
COLORADO SPRINGS AIRPORT  
7770 MILTON E. PROBY PARKWAY, SUITE 550  
COLORADO SPRINGS, CO 80916  
CONTACT: TROY STOVER  
(719) 550-1967

ENGINEER  
ENERTIA CONSULTING GROUP, LLC  
1515 MARKET STREET  
DENVER, CO 80202  
CONTACT: JEFF MOHR, PE  
(720) 250-8305

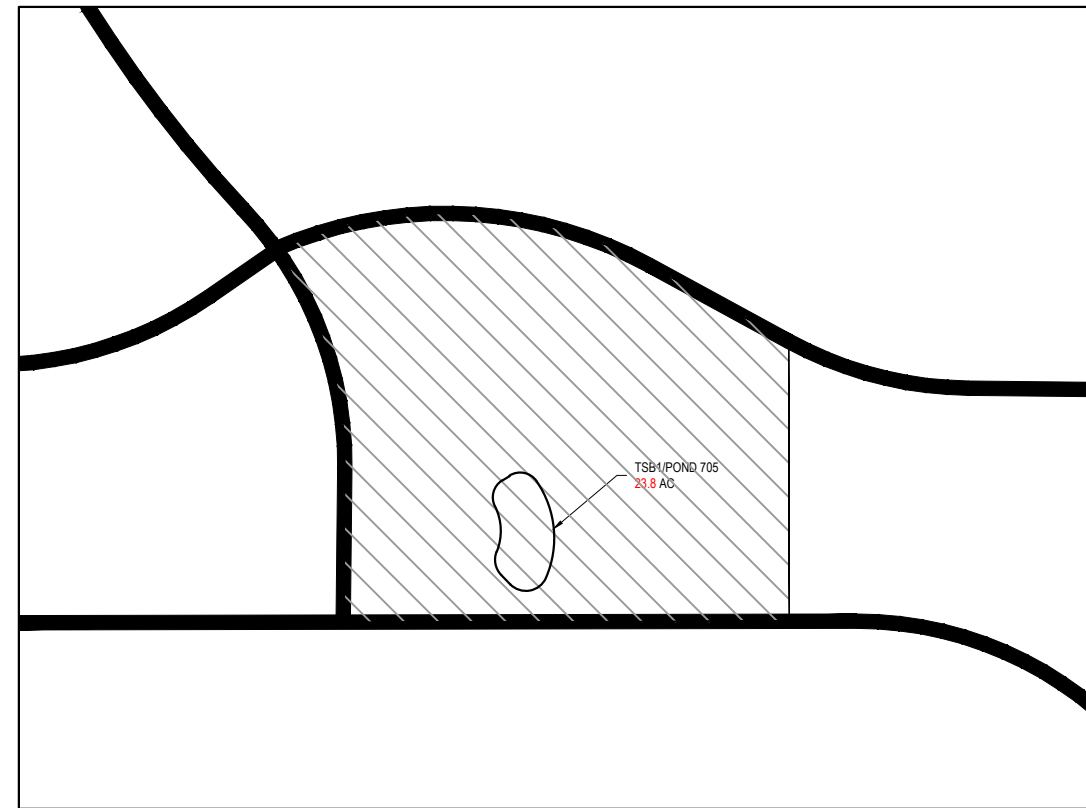
DEVELOPER  
URBAN FRONTIER  
1515 MARKET STREET  
DENVER, CO 80202  
CONTACT: GARRETT BAUM  
(303) 884-7300

SURVEYOR  
POLARIS SURVEYING, INC.  
1903 LELARAY STREET, SUITE 102  
COLORADO SPRINGS, CO 80909  
CONTACT: RANDALL HENCY, PLS  
(719) 448-0844

SHEET INDEX

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	FINAL PHASE (1)
3	FINAL PHASE (2)
4	FINAL PHASE (3)
5	FINAL PHASE (4)
6	GEC DETAILS

SEDIMENT BASIN KEY MAP



GRADING AND EROSION CONTROL (GEC) COST ESTIMATE

GRADINF AND EROSION CONTROL COST ESTIMATE WILL BE INCLUDED FOLLOWING FIRST SUBMITTAL AND REVIEW.

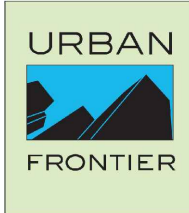
**811**

FOR BURIED UTILITY INFORMATION  
**THREE (3) BUSINESS DAYS  
BEFORE YOU DIG**  
CALL 811  
(OR 1-800-922-1987)  
UTILITY NOTIFICATION  
CENTER OF COLORADO (UNCC)  
WWW.UNCC.ORG

AMENDMENT

DATE

NO.



COLORADO SPRINGS AIRPORT  
INTEGRATION PHASE 4  
GRADING AND EROSION CONTROL PLAN FINAL  
PHASE  
COLORADO SPRINGS, COLORADO

COVER SHEET

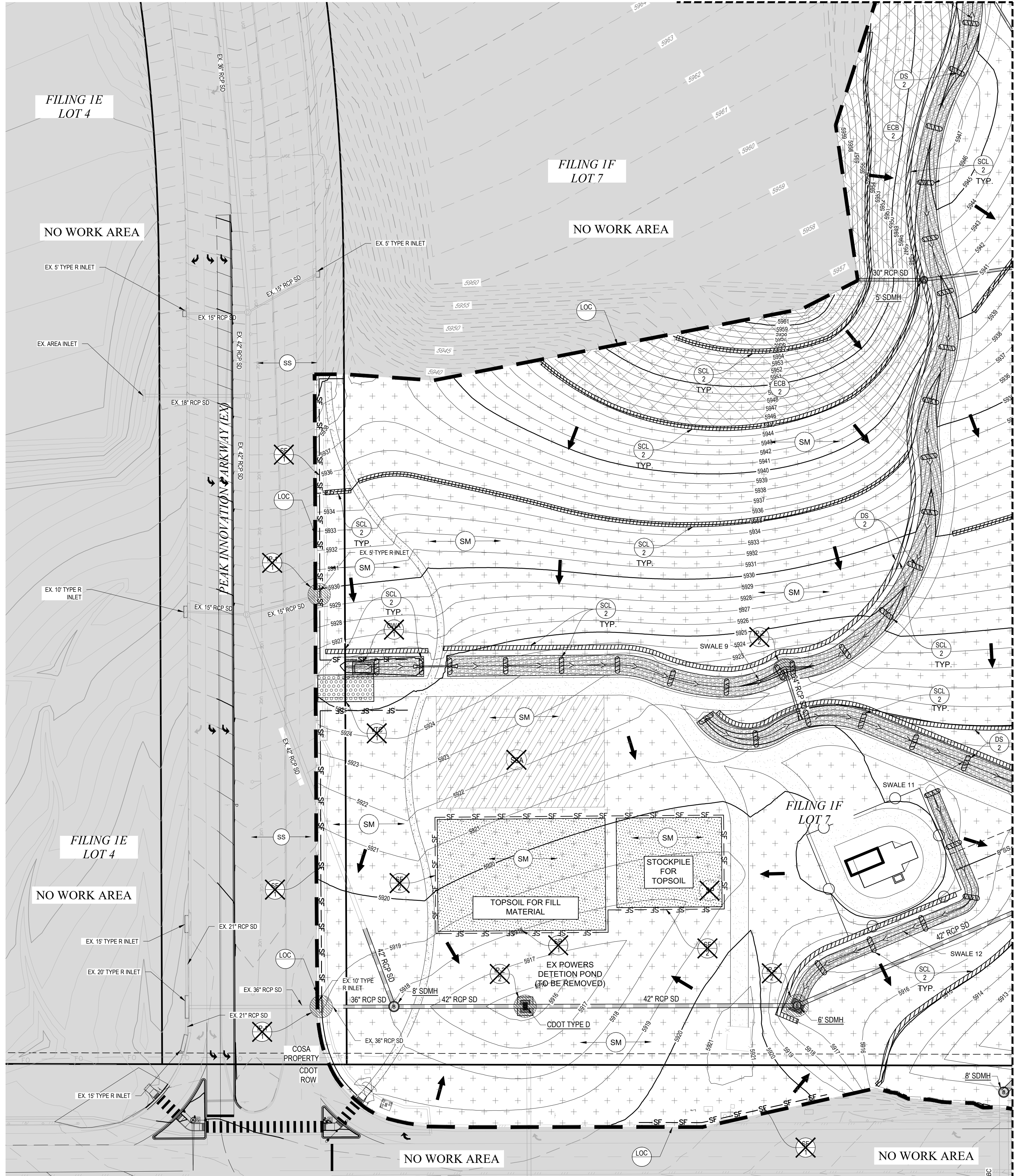
VERIFY SCALE  
BAR IS ONE INCH ON  
ORIGINAL DRAWING  
0 1" 2"

DATE: OCTOBER 28, 2022  
SHEET

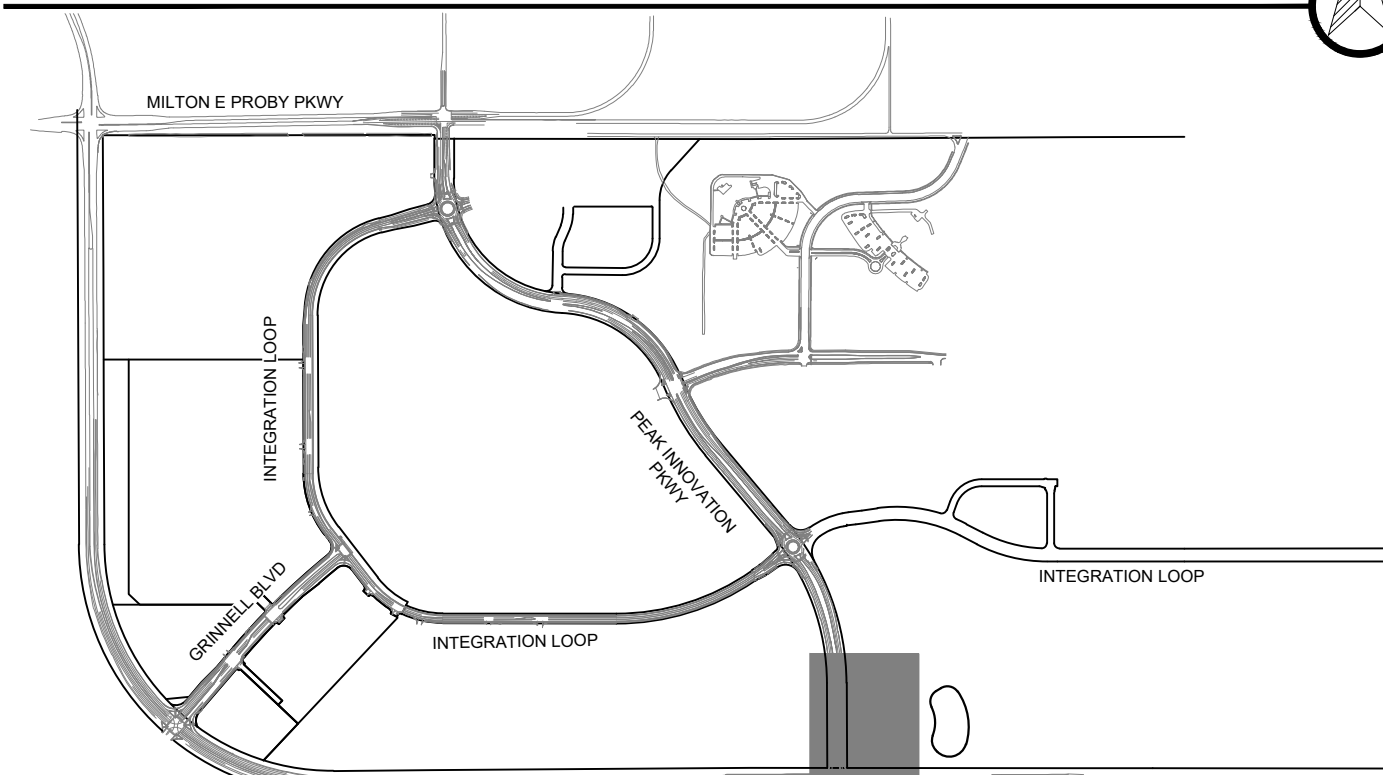
1 OF 6



SEE SHEET 4  
FINAL PHASE (3)



KEY MAP



GENERAL LEGEND

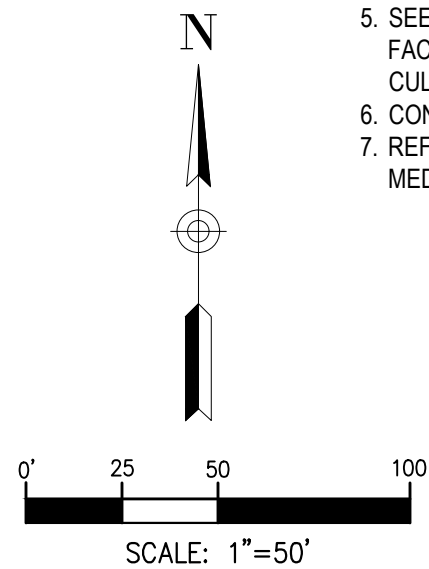
	LIMIT OF CONSTRUCTION / DISTURBANCE
	PROPERTY BOUNDARY
	FLOW DIRECTION ARROW
	CCM ID
	PHASE ID
	1=INITIAL
	2=INTERIM
	3=FINAL

CCM LEGEND - FINAL PHASE

SILT FENCE	SF	
SEDIMENT CONTROL LOGS	SCL	
VEHICLE TRACKING CONTROL	VTC	
CONCRETE WASHOUT AREA	CWA	
INLET PROTECTION	IP	
STOCKPILE MANAGEMENT WITH PROTECTION	SP	
STABILIZED STAGING AREA	SSA	
STREET SWEEPING & VACUUMING	SS	
TEMPORARY SEDIMENT BASIN	TSB	
DRAINAGE SWALE	DS	
EROSION CONTROL BLANKET	ECB	
SURFACE ROUGHENING	SR	
ROCK SOCK	RS	
SEED & MULCH	SM	
INITIAL & INTERIM CCM TO BE REMOVED AT THE FINAL PHASE		

FINAL PHASE NOTES

1. THE FINAL PHASE REPRESENTS THE FINISHED STATE OF THE SITE. AT THIS STAGE ALL TEMPORARY CCMs SHALL BE REMOVED AND FINAL VEGETATION SHALL BE COMPLETED IN ACCORDANCE WITH THE LANDSCAPE PLAN.
- 1.1. POND 1200 SHALL BE IN ITS COMPLETED STATE BEFORE TEMPORARY CCMs ARE REMOVED. REFER TO THE PERMANENT BMP PLANS.
- 1.2. PERIMETER SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL 70 PERCENT OF THE VEGETATION IS ESTABLISHED FOR ALL OF THE DISTURBED AREAS.
2. SHADED CCMs WERE INSTALLED IN INITIAL OR INTERIM GEC PHASES AND, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT IS APPROVED BY THE CITY.
3. ALL INTERIM CCMs, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED WITHIN 14 DAYS IF THE AREAS WILL REMAIN UNDISTURBED FOR A PERIOD GREATER THAN 30 DAYS.
4. ALL PROPOSED SLOPES ON THIS PLAN HAVE A MAXIMUM SLOPE OF 4:1. ANY SLOPES BETWEEN 3:1 AND 6:1 WILL REQUIRE THE USE OF EROSION CONTROL BLANKETS OR FLEXIBLE GROWTH MEDIUM.
5. SEE PCM PLANS AND STORM DRAIN CDS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND OUTLET PROTECTION.
6. CONTRACTOR SHALL NOT PERFORM THE ROADWAY GRADING PER THIS PLAN.
7. REFER TO APPROVED LANDSCAPE PLANS PREPARED BY OUTSIDE LA FOR STREET, MEDIAN, AND OPEN SPACE LANDSCAPING.



FOR BURIED UTILITY INFORMATION  
**THREE (3) BUSINESS DAYS  
BEFORE YOU DIG**  
**CALL 811**  
(OR 1-800-922-1987)  
UTILITY NOTIFICATION  
CENTER OF COLORADO (UNCC)  
WWW.UNCC.ORG



AMENDMENT

NO. DATE



COLORADO SPRINGS AIRPORT  
INTEGRATION PHASE 4  
GRADING AND EROSION CONTROL PLAN FINAL  
PHASE  
COLORADO SPRINGS, COLORADO

FINAL PHASE (1)

VERIFY SCALE  
BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
DATE: OCTOBER 28, 2022  
SHEET

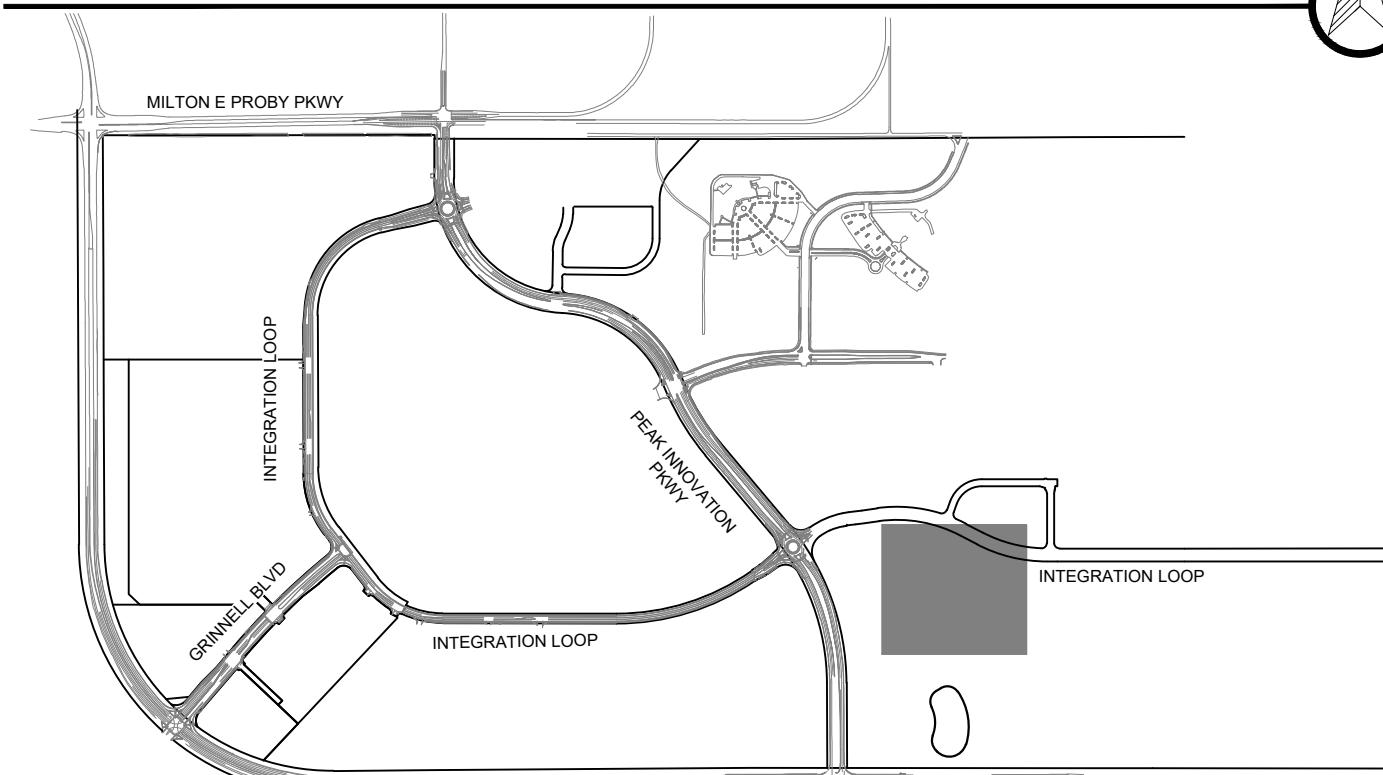








KEY MAP



GENERAL LEGEND

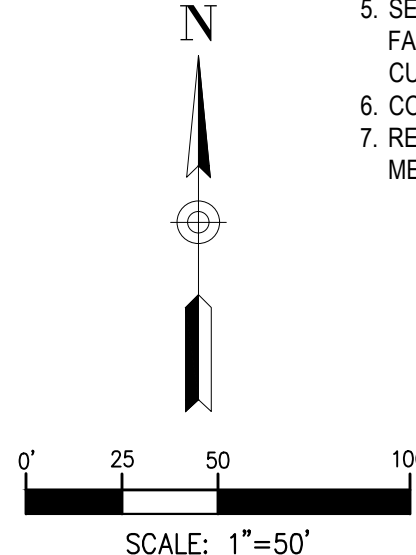
- LIMIT OF CONSTRUCTION / DISTURBANCE
- PROPERTY BOUNDARY
- FLOW DIRECTION ARROW
- CCM ID PHASE ID
- PHASE ID:  
1=INITIAL  
2=INTERIM  
3=FINAL

CCM LEGEND - FINAL PHASE

SILT FENCE	SF	SF
SEDIMENT CONTROL LOGS	SCL	SCL
VEHICLE TRACKING CONTROL	VTC	VTC
CONCRETE WASHOUT AREA	CWA	CWA
INLET PROTECTION	IP	IP
STOCKPILE MANAGEMENT WITH PROTECTION	SP	SP
STABILIZED STAGING AREA	SSA	SSA
STREET SWEEPING & VACUUMING	SS	SS
TEMPORARY SEDIMENT BASIN	TSB	TSB
DRAINAGE SWALE	DS	DS
EROSION CONTROL BLANKET	ECB	ECB
SURFACE ROUGHENING	SR	SR
ROCK SOCK	RS	RS
SEED & MULCH	SM	SM
INITIAL & INTERIM CCM TO BE REMOVED AT THE FINAL PHASE		


FINAL PHASE NOTES

1. THE FINAL PHASE REPRESENTS THE FINISHED STATE OF THE SITE. AT THIS STAGE ALL TEMPORARY CCMs SHALL BE REMOVED AND FINAL VEGETATION SHALL BE COMPLETED IN ACCORDANCE WITH THE LANDSCAPE PLAN.
- 1.1. POND 1200 SHALL BE IN ITS COMPLETED STATE BEFORE TEMPORARY CCMs ARE REMOVED. REFER TO THE PERMANENT BMP PLANS.
- 1.2. PERIMETER SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL 70 PERCENT OF THE VEGETATION IS ESTABLISHED FOR ALL OF THE DISTURBED AREAS.
2. SHADED CCMs WERE INSTALLED IN INITIAL OR INTERIM GEC PHASES AND, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT IS APPROVED BY THE CITY.
3. ALL INTERIM CCMs, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED WITHIN 14 DAYS IF THE AREAS WILL REMAIN UNDISTURBED FOR A PERIOD GREATER THAN 30 DAYS.
4. ALL PROPOSED SLOPES ON THIS PLAN HAVE A MAXIMUM SLOPE OF 4:1. ANY SLOPES BETWEEN 3:1 AND 6:1 WILL REQUIRE THE USE OF EROSION CONTROL BLANKETS OR FLEXIBLE GROWTH MEDIUM.
5. SEE PCM PLANS AND STORM DRAIN CDS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND OUTLET PROTECTION.
6. CONTRACTOR SHALL NOT PERFORM THE ROADWAY GRADING PER THIS PLAN.
7. REFER TO APPROVED LANDSCAPE PLANS PREPARED BY OUTSIDE LA FOR STREET, MEDIAN, AND OPEN SPACE LANDSCAPING.





FOR BURIED UTILITY INFORMATION  
**THREE (3) BUSINESS DAYS  
BEFORE YOU DIG**  
CALL 811  
(OR 1-800-922-1987)  
UTILITY NOTIFICATION  
CENTER OF COLORADO (UNCC)  
WWW.UNCC.ORG



AMENDMENT		NO.		DATE	



COLORADO SPRINGS AIRPORT  
INTEGRATION PHASE 4  
GRADING AND EROSION CONTROL PLAN FINAL  
PHASE  
COLORADO SPRINGS, COLORADO  
FINAL PHASE (3)

VERIFY SCALE  
BAR IS ONE INCH ON  
ORIGINAL DRAWING: 1"  
DATE: OCTOBER 28, 2022  
SHEET







Street Sweeping and Vacuuming (SS) SM-7

Description

Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.

Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.



Photograph SS-1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes

November 2010 Urban Drainage and Flood Control District SS-1  
Urban Storm Drainage Criteria Manual Volume 3

SEEDING & MULCHING

ALL SOIL TESTING, SOILS AMENDMENT AND FERTILIZER DOCUMENTATION, AND SEED LOAD AND BAG TICKETS MUST BE ADDED TO THE CSWMP.

SOIL PREPARATION

- IN AREAS TO BE SEEDDED, THE UPPER 6 INCHES OF THE SOIL MUST NOT BE HEAVILY COMPACTED, AND SHOULD BE IN FRIABLE CONDITION. LESS THAN 85% STANDARD PROCTOR DENSITY IS ACCEPTABLE. AREAS OF COMPACTION OR GENERAL CONSTRUCTION ACTIVITY MUST BE SCARIFIED TO A DEPTH OF 6 TO 12 INCHES PRIOR TO SPREADING TOPSOIL TO BREAK UP COMPACTED LAYERS AND PROVIDE A BLENDING ZONE BETWEEN DIFFERENT SOIL LAYERS.
- AREAS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.
- THE CITY RECOMMENDS THAT EXISTING AND/OR IMPORTED TOPSOIL BE TESTED TO IDENTIFY SOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDED TO CORRECT TOPSOIL DEFICIENCIES BASED ON SOIL TESTING RESULTS.
- TOPSOIL SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD TO RETAIN ITS STRUCTURE, AVOID COMPACTION, AND TO PREVENT EROSION AND CONTAMINATION. STRIPPED TOPSOIL MUST BE STORED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TAKEN TO PROTECT THE TOPSOIL AS A VALUABLE COMMODITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESIRABLE WORKING CONDITIONS (E.G. DURING WET WEATHER OR WHEN SOILS ARE SATURATED). TOPSOIL SHALL NOT BE STORED IN SWALES OR IN AREAS WITH POOR DRAINAGE.

SEEDING

- ALLOWABLE SEED MIXES ARE INCLUDED IN THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION MANUAL. ALTERNATIVE SEED MIXES ARE ACCEPTABLE IF INCLUDED IN AN APPROVED LANDSCAPING PLAN.
- SEED SHOULD BE DRILL-SEED WHENEVER POSSIBLE.
- SEED DEPTH MUST BE ½ TO ¾ INCHES WHEN DRILL-SEEDING IS USED.
- BROADCAST SEEDING OR HYDRO-SEEDING WITH TACKIFIER MAY BE SUBSTITUTED ON SLOPES STEEPER THAN 3:1 OR ON OTHER AREAS NOT PRACTICAL TO DRILL SEED.
- SEEDING RATES MUST BE DOUBLED FOR BROADCAST SEEDING OR INCREASED BY 50% IF USING A BRILLION DRILL OR HYDRO-SEEDING.
- BROADCAST SEEDING MUST BE LIGHTLY HAND-RAKED INTO THE SOIL.

MULCHING

- MULCHING SHOULD BE COMPLETED AS SOON AS PRACTICABLE AFTER SEEDING, HOWEVER PLANTED AREAS MUST BE MULCHED NO LATER THAN 14 DAYS AFTER PLANTING.
- MULCHING REQUIREMENTS INCLUDE:
  - HAY OR STRAW MULCH
    - ONLY CERTIFIED WEED-FREE AND CERTIFIED SEED-FREE MULCH MAY BE USED. MULCH MUST BE APPLIED AT 2 TONS/ACRE AND ADEQUATELY SECURED BY CRIMPING AND/OR TACKIFIER.
    - CRIMPING MUST NOT BE USED ON SLOPES GREATER THAN 3:1 AND MULCH FIBERS MUST BE TUCKED INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES.
    - TACKIFIER MUST BE USED IN PLACE OF CRIMPING ON SLOPES STEEPER THAN 3:1.
  - HYDRAULIC MULCHING
    - HYDRAULIC MULCHING IS AN OPTION ON STEEP SLOPES OR WHERE ACCESS IS LIMITED.
    - IF HYDRO-SEEDING IS USED, MULCHING MUST BE APPLIED AS A SEPARATE, SECOND OPERATION.
    - WOOD CELLULOSE FIBERS MIXED WITH WATER MUST BE APPLIED AT A RATE OF 2,000 TO 2,500 POUNDS/ACRE, AND TACKIFIER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE.
  - EROSION CONTROL BLANKET
    - EROSION CONTROL BLANKET MAY BE USED IN PLACE OF TRADITIONAL MULCHING METHODS.

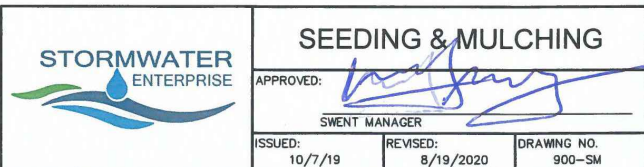


Table 5-1. El Paso County Conservation District All-Purpose Mix for Upland, Transition and Permanent Control Measure Areas

Common Name	Scientific Name	Growth Season / Form	% of Mix	Pounds PLS		
				• Irrigated broadcast • Irrigated hydroseeded	• Non-irrigated broadcast • Non-irrigated hydroseeded • Irrigated drilled	• Non-irrigated drilled
				80 seeds/sq ft	40 seeds/sq ft	20 seeds/sq ft
Bluestem, big	<i>Andropogon gerardii</i>	Warm, sod	20	4.4	2.2	1.1
Gramma, blue	<i>Bouteloua gracilis</i>	Warm, bunch	10	0.5	0.25	0.13
Green needlegrass <sup>2</sup>	<i>Nassella viridula</i>	Cool, bunch	10	2	1	0.5
Wheatgrass, western <sup>2</sup>	<i>Pascopyrum smithii</i>	Cool, sod	20	6.4	3.2	1.6
Gramma, sideoats	<i>Bouteloua curtipendula</i>	Warm, bunch	10	2	1	0.5
Switchgrass <sup>2</sup>	<i>Panicum virgatum</i>	Warm, bunch/sod	10	0.8	0.4	0.2
Prairie sandreed	<i>Calamovilfa longifolia</i>	Warm, sod	10	1.2	0.6	0.3
Yellow indiagrass <sup>2</sup>	<i>Sorghastrum nutans</i>	Warm, sod	10	2	1	0.5
Seed rate (lbs PLS/acre)				19.3	9.7	4.8

2 - SPECIES THAT WILL DO WELL IN THE BOTTOM OF POND AREAS.


AMENDMENT

DATE


NO.



COLORADO SPRINGS AIRPORT  
INTEGRATION PHASE 4  
GRADING AND EROSION CONTROL PLAN FINAL  
PHASE  
COLORADO SPRINGS, COLORADO  
GEC DETAILS



FOR BURIED UTILITY INFORMATION  
**THREE (3) BUSINESS DAYS  
BEFORE YOU DIG**  
**CALL 811**  
(OR 1-800-922-1987)  
UTILITY NOTIFICATION  
CENTER OF COLORADO (UNCC)  
[WWW.UNCC.ORG](http://WWW.UNCC.ORG)



VERIFY SCALE  
BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
DATE OCTOBER 28, 2022  
SHEET  
6 OF 6