# FALCON AREA WATER AND WASTEWATER AUTHORITY - WATER TREATMENT PLANT

COUNTY OF EL PASO, STATE OF COLORADO

**GRADING & EROSION CONTORL PLAN** 

#### GENERAL CONSTRUCTION NOTES:

ALL CONSTRUCTION WITHIN EL PASO COUNTY PUBLIC RIGHT-WAYS SHALL BE IN ACCORDANCE WITH MOST CURRENT STANDARDS AND SPECIFICATIONS OF EL PASO COUNTY.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OWNSIGN FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NOMENSTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.

BEFORE COMMENCING ANY EXCAVATION, CALL 811 FOR EXISTING UTILITY LOCATIONS.

THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE OSSERPTION, WILL BE SETTLED BY THE CONTRACTOR.

ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.

ALL BACKFILL, SUB-BASE AND/OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED TO THE SOILS ENGINEER'S RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES BENDIERERING DIVISION.

ALL STATIONING IS CENTERLINE UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE INDICATED.

ALL DISTURBED PAYEMENT EDGES SHALL BE OUT TO NEAT LINES REPAIR SHALL CONFORM TO THE EDG FOM APPENDIX K = 1.20

9. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES.

). ALL CULVERT AND STORM DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDPE), REINFORCED CONCRETE PIPE (RCP), ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNER'S GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPE CEV SECTION 3.72 — CULVERTS.

ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED) FOR ROADS SHALL BE PER DESIGN REPORT BY OWNER'S GEOTECHNICAL ENGINEER. OWNER'S GEOTECHNICAL ENGINEER.

12. TYPE M RIP-RAP WITH 4" OF TYPE II GRANULAR BEDDING AND MIRAFI 180N OR EQUAL MAY BE SUBSTITUTED WHERE TYPE L RIP-RAP WITH MIRAFI FW 700 OR EQUAL IS SPECIFIED.

13. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH ANY AND ALL APPLICABLE EL PASO COUNTY STANDARDS.

14. CONTRACTOR IS RESPONSBLE FOR PROVIDING DETAILED AS-BUILTS OF ALL WATER MAIN, STORM SEW AND SAN. SEW. MAIN INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, VALVES, FITTINGS, MANNICES AND LOCATIONS OF WATER AND SEWER SERVICES.

#### EL PASO COUNTY GRADING AND EROSION CONTROL NOTES:

STORWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THEATEN TO CAUSE POPULATION, CONTAINATION, OR DEGRADATION OF STATE WATERS, ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MARKET HATA MINIMIZES POLLUTION OF ANY CON-SITE OF OFF-SITE WORKET, INCLUDING WESTLANDS.

NOTWITHSTANDING ANYTHING DEPICITED 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 BL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE. THE ENONEREMIC GRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVAITONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.

A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SHAMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTIOR. THE SEMPS SHALL BE LECTED ON STEAT ALL TIMES DURING CONSTRUCTION AND STALE BE REPORT OF DO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.

ONCE THE ESCOP IS APPROVED AND A NOTICE TO PROCEED' HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GC: A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGNEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO CORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFT.

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 SEDIMENT 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 PERSONS ENGAGED IN LAND DISTURBERANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE STIE AND DENTITY IF CHANGES TO THOSE CONTROL MEASURES ARE REFEOT TO ENSURE THE CONTINUE DETROTHE 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 ETHER 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 STORWWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORWWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.

EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE ENSINED, 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 SEDMENTATION 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 WUST BE LOGISENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).

ANY TEMPORARY OR PERMANENT FACULTY DESIGNED AND CONSTRUCTED FOR THE CONVEXANCE OF ST. STRMMATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MININGE EROSON AND THE DISCHARGE OF SEDMENT OFF STE.

CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWAP, NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUSSURFACE STORM DRAINAGE SYSTEM OF REQUINES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN SO FEET OF A SURFACE WATER DODY, CREEK OR STREAM.

14. DURING DEMATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEMATRIANG PERMIT IS IN PLACE.

15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.

16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REQULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.

17. 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 DIRECTIONS.

18. 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 APPURITMANCES AS A RESULT OF SITE DEVELOPMENT.

20. THE QUARITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUARITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-STE SHALL BE STORED IN A REAT, GRORETY MANNER, IN THEIR ORIGINAL MONIFACTURET'S LABELS.

21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE 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.

22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEWICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTOR TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FAC

23. 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 CONTROL ACT: (TITLE 25, ARTICLE 8, CRS), AND THE CLEAN WATER ACT: (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DOW VOLUME II AND THE ECW APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAN, 404, FUGITIVE DUST, ETC.), IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MUST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

25. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.

26. 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.

27. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

28. THE SOLS REPORT FOR THIS SITE HAS BEEN PREPARED BY WIND ENGINEERING GROUP, TITLED "GEOTECHNICAL EVALUATION REPORT - PROPOSED FALCON AREA WATER TANK AND TREATMENT FACULTY", DATED FEBRUARY 28, 2023, AND SHALL BE CONSIDERED A PART OF THESE PLANS.

29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) 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 EROSON CONTROL PLAN MAY BE A PART. INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTINCO DIVISION A 2500 CHEEN'S CREEK PRIVE SOUTH DERVER, CO. 80746-150.

MARCH 2023



#### SHEET INDEX

#### EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL. VOLUMES 1 AND 2. AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNICC).

NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSIS CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND EVELOPMENT CODE; THE ENDINEERING CRITERIA MANUAL, THE DEPAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVARIORS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECEIFY.

5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH OWNSTE AND OFFSIE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTRIFFLY THE DEVILOPER'S RESPONSIBILITY TO RECIPITY.

6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY DEVELOPMENT SERVICES DEPARTMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION

IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORWANTER QUALITY CONTROL PERMIT (ESCCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS—ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FLORITHE DUST PERMIT DESTRUCTIONS OF THE CONTROL PROPERTY OF THE PROPERTY OF THE

CONTRACTOR SHALL NOT DEWATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER WINDOWN DISCOVERY OF ANY SPROES OR INCONSISTENCIES.

10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAYEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND CUTTER AND PAYEMENT.

12. SIGHT VISBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION. 48 HOURS BEFORE YOU DIG. O. REVISION REVIEW:

DEVELOPER:

FIRE DISTRICT:

ELECTRIC COMPANY:

TELEPHONE COMPANY

AGENCIES:

2138 FLYING HORSE CLUB DR COLORADO SPRINGS, CO 80921

LOREN MORELAND (719) 785-3270

CLASSIC CONSULTING ENGINEERS & SURVEYORS 619 N. CASCADE AVENUE, SUITE 200 COLORADO SPRINGS, CO 80903

MR. KYLE R. CAMPBELL, P.E. (719) 785-0790

PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, COLORADO 80910 MR. JEFF RICE, P.E. (719) 520-7877 COUNTY ENGINEERING:

WATER & SANITATION DISTRICT:

F.A.W.W.A. 2138 FLYING HORSE CLUB DR COLORADO SPRINGS, CO 80921 LOREN MORELAND (719) 785-3270

FALCON FIRE PROTECTION DISTRICT

7030 N. MERIDIAN RD. FALCON, COLORADO 80831 CHIEF HARWIG (719) 495-4050

MOUNTAIN VIEW ELECTRIC P.O. BOX 1600 LIMON, COLORADO 80828

MR. LES ULFERS, (719) 495-2283

CENTURY LINK COMMUNICATIONS 308 E. PIKES PEAK AVENUE COLORADO SPRINCS, COLORADO 80903 MS. MELISSA SPENCER (719) 636–4748 MELISSA.SPENCER@CENTURYLINK.COM

EARTHWORKS CONTRACTOR: CORNELLA BROTHERS, INC.,

3740 SILICA DRIVE COLORADO SPRINGS, COLORADO 80910

MR. MIKE CORNELLA, (719) 390-1122 STORMWATER MANAGER:

2138 FLYING HORSE CLUB DR COLORADO SPRINGS, CO 80921 LOREN MORELAND (719) 785-3270

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: SPRING/SUMMER 2023 EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: SPRING 2024

AREAS:
TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: 0.94 ACRES RECEIVING WATERS:

NAME OF RECEIVING WATERS: SAND CREEK DRAINAGE BASIN

### APPROVALS:

### ENGINEER'S STATEMENT:

CRADING AND EROSION CONTROL PLANS WITHIN CD'S ENCINEER'S STATEMENT.

THESE DETAILED PLANS AND SECONDATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERMSON, SAID PLANS AND

SECULICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERY THE COUNTY FOR DETAILED

ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SECONDATIONS, AND SAID PLANS AND SECONDATIONS

ARE IN CONFORMITY WITH APPLICABLE MASTEE DRAINAGE PLANS AND MASTEE TRANSPORTATION PLANS AND PLANS AND

SECONDATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACULTIONS

ARE CORRECT TO THE-SECTION-BY KNOWLEDGE AND BELLEF I ACCEPT RESPONSIBILITY FOR ANY LIBRITY CAUSED BY

ANY NEGLIGENT AGIS CROPPS OR MISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND

SECCINEATIONS OF THE PLANS AND

101923 E 10/19/23 KYLE R. CAMPBELL COLORADO BE \$129794 FOR AND ON THE BEHALT OF CHESIC CONS

### OWNER/DEVELOPER STATEMENT:

I, THE OWNER / DEVELOPER HAVE READ AND WAL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFICATIONS.



16/19/2023

#### EL PASO COUNTY:

COUNTY FLAN 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 REEVATIONS 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 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 COLINITY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN HOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.



FALCON AREA WATER AND WASTEWATER

AUTHORITY - WATER TREATMENT PLANT GRADING AND FROSION CONTROL PLAN TLE SHEET

JDP (H) 1"= N/A SHEET 1 OF 4 ECKED BY KRC (V) 1"= N/A JOB NO.

PPR-2314

UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW

CALL UTILITY LOCATORS

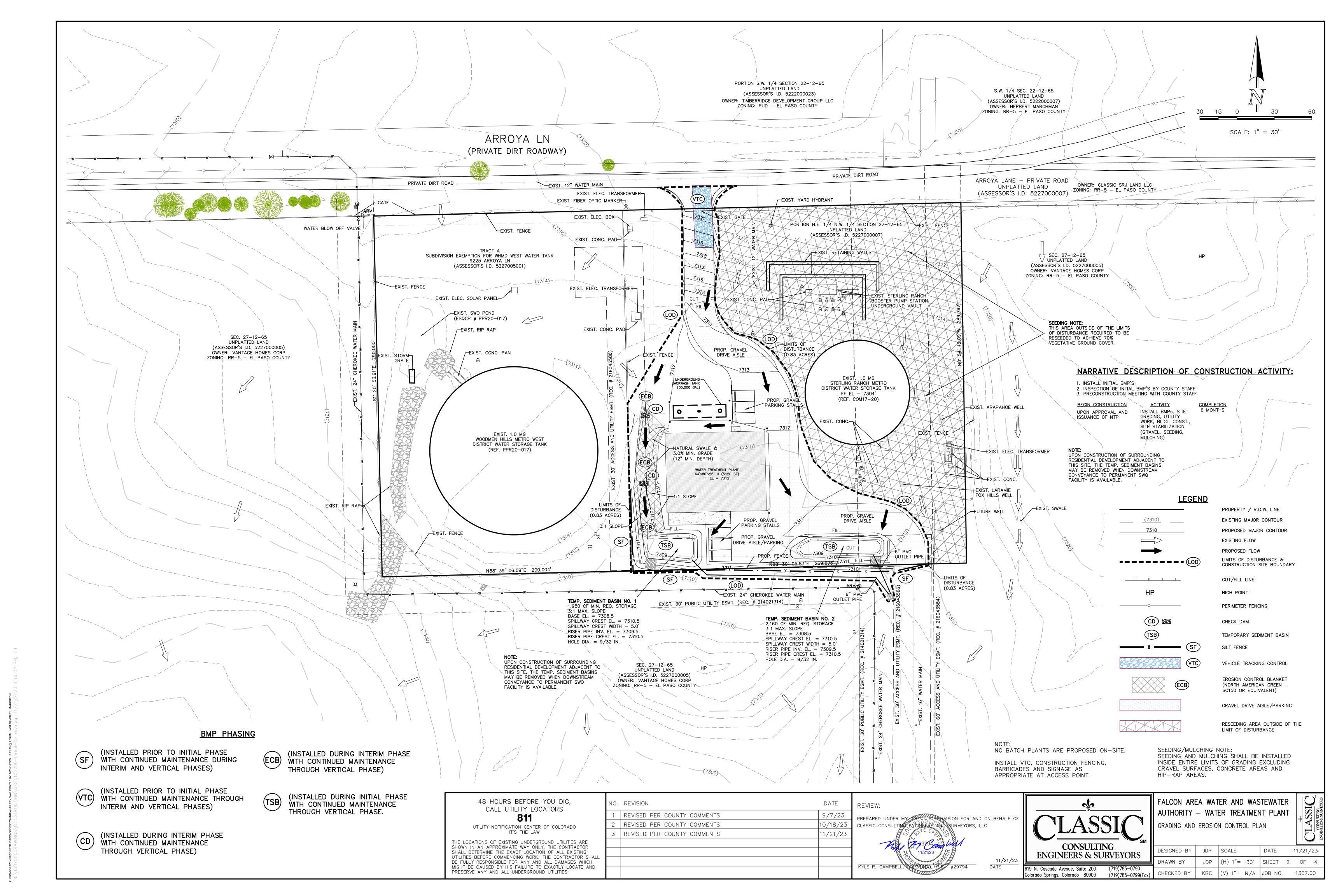
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE, ANY AND ALL UTILITIES.

REVISED PER COUNTY COMMENTS 8/7/23

PREFARED UNDER MY SET THE MISSION FOR AND ON BEHALF C 101923 E

CONSULTING ENGINEERS & SURVEYORS

RAWN BY



Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

DOWN THE STAKE.

SILT FENCE MAINTENANCE NOTES

SEDIMENTS IS APPROXIMATELY 6".

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J—HOOK." THE "J—HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

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

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

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

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

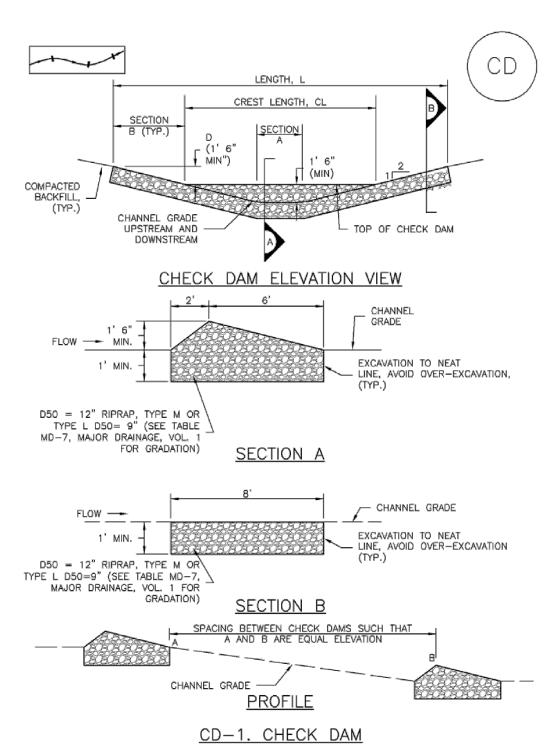
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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

SF-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

# **EC-12 Check Dams (CD)**



Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

Revegetation

Chapter 14

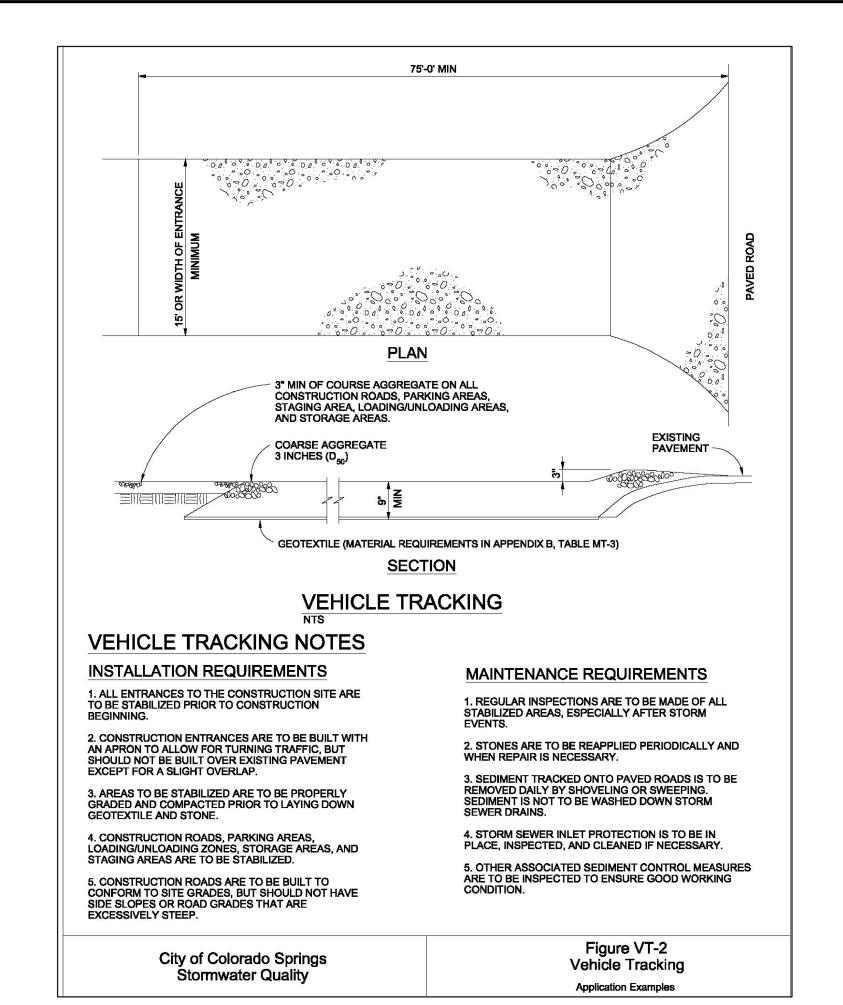
Table 14-12. Recommended Seed Mix for all other Soils in Upland Areas

Common Name (Variety)	Scientific Name	Growth Season	Growth Form	Seeds/Lb	Lbs PLS/ Acre Drilled	Lbs PLS/Acre Broadcast or Hydroseeded
Sheep fescue	Festuca ovina	Cool	Bunch	680,000	0.6	1.2
Canby bluegrass	Poa canbyi	Cool	Bunch	926,000	0.5	1.0
Thickspike wheatgrass (Critana)	Elymus lanceolatus	Cool	Bunch	154,000	5.7	11.4
Western wheatgrass (Arriba)	Pascopyrum smithii	Cool	Sod	110,000	7.9	15.8
Blue grama (Hachita)	Chondrosum gracile	Warm	Sod	825,000	1.1	2.2
Switchgrass (Pathfinder)	Panicum virgatum	Warm	Sod/ Brush	389,000	1.0	2.0
Side-oats grama (Butte)	Boutelou curtipendula	Warm	Sod	191,000	2.0	4.0
Annual rye	Lolium multiflorum	Cool	Cover crop	227,000	10.0	20.0
				TOTAL	<u>28.8</u>	<u>57.6</u>
Wildflowers						
Blanket flower	Faillardia aristata			132,000	0.25	0.50
Prairie coneflower	Ratibida columnaris			1,230,000	0.20	0.40
Purple prairie clover	Petalostemum purpurea			210,000	0.20	0.40
Gayfeather	Liatris punctata			138,000	0.06	0.12
Flax	Linum lewisii			293,000	0.20	0.40
Penstemon	Penstemon strictus			592,000	0.20	0.40
Yarrow	Achillea millefolium			2,770,000	0.03	0.06
				TOTAL	1.14	2.28

The seed mixes in Tables 14-9 through 14-12 include recommended wildflowers that can be sown at the same time or after the grass seed mix. Table 14-13 includes a general wildflower seed mix that can be used in sunny locations. This mix includes more drought tolerant, native perennials and can also be sown at the same time as a grass seed mix, or after. When more wildflowers are desired, the mix in Table 14-13 is recommended instead of the species shown in Tables 14-9 through 14-12. Wildflowers are only included for visual quality as directed by the City of Colorado Springs Landscape Code and Policy Manual. Wildflowers are not intended for erosion control.

14-24 City of Colorado Springs Drainage Criteria Manual, Volume 1

May 2014



PPR-2314

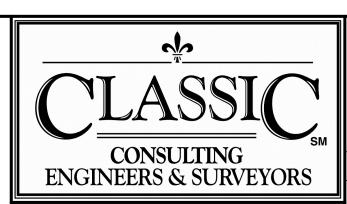
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS

UTILITY NOTIFICATION CENTER OF COLORADO

IT'S THE LAW THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO. REVISION DATE

REVIEW: PREPARED UNDER MY SPREAT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC 619 N. Cascade Avenue, Suite 200

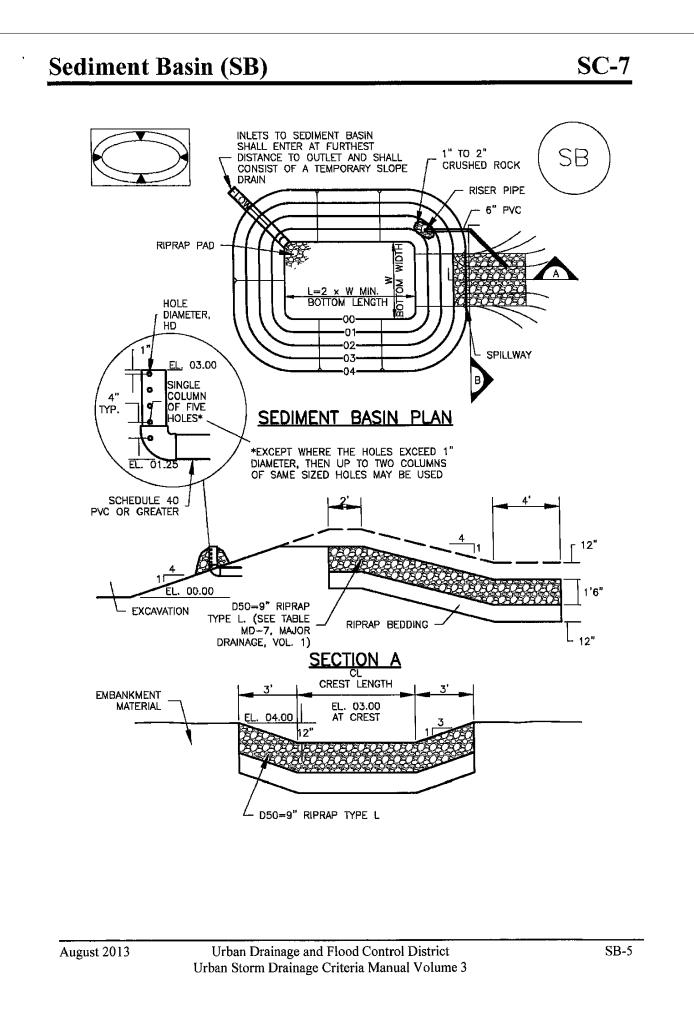


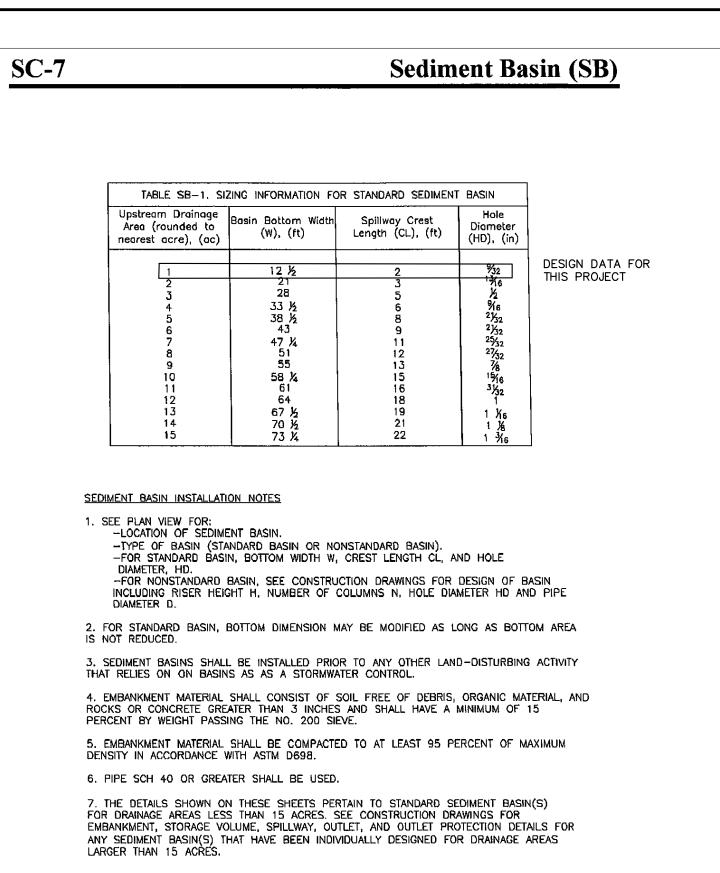
(719)785-0799(Fax)

Colorado Springs, Colorado 80903

FALCON AREA WATER AND WASTEWATER AUTHORITY - WATER TREATMENT PLANT GRADING AND EROSION CONTROL PLAN

CONSTRUCTION CONTROL MEASURES DESIGNED BY JDP | SCALE 9/11/23 DATE JDP | (H) 1"= N/A | SHEET 3 OF 4 DRAWN BY CHECKED BY KRC (V) 1"= N/A JOB NO.





Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

August 2013

SB-6

# **Sediment Basin (SB)**

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

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

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

4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA

IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION. 6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED

WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

## (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

SEDIMENT BASIN MAINTENANCE NOTES

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

## NOTES:

NO PHASING PLAN PROPOSED FOR THIS PROJECT. GRADING WITHIN THIS PROJECT WILL BE FULLY DEVELOPED FOLLOWING HOME BUILDING OPERATIONS. INITIAL TEMPORARY CONSTRUCTION CONTROL METHODS TO INCLUDE VTC, INLET PROTECTION AND SILT FENCING. INTERIM TEMPORARY CONSTRUCTION CONTROL METHODS TO INLCUDE VEHICLE TRACKING, ROADWAY STRAW BALE BARRIERS AND TEMPORARY SEDIMENT BASINS. FINAL METHODS TO INCLUDE PERMANENT STORMWATER QUALITY PONDS AND CONTINUAL MAINTENANCE OF INITIAL AND INTERIM METHODS AS WELL AS EROSION CONTROL BLANKETING AND FINAL RE-SEEDING ESTABLISHMENT THROUGHOUT HOME BUILDING AT ULTIMATE DEVELOPMENT.

THE AVERAGE SOIL CONDITION REFLECTS HYDROLOGIC GROUP B PRING COARSE SANDY LOAMY AS DETERMINED BY THE "SOIL SURVEY OF EL PASO COUNTY AREA" PREPARED BY THE SOIL CONSERVATION SERVICE.

NO PORTION OF THIS SITE IS LOCATED WITHIN A FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAPS (F.I.R.M.) MAP NUMBER 08041C0535G, EFFECTIVE DATE, DECEMBER 7, 2018.

STOCKPILE LOCATION, STORAGE OF MAINTENANCE EQUIPMENT AND TEMPORARY DISPOSAL AREAS (CONCRETE WASHOUT) ARE LOCATED OFF SITE. CONCRETE WASHOUT FOR DEVELOPMENT TO BE TEMPORARILY LOCATED BY CONTRACTOR AND UPDATED ON THIS PLAN. LOCATION OF STAGING AREAS, STORAGE FOR MAINTENANCE EQUIPMENT, TEMPORARY DISPOSAL AREAS AND SPILL PREVENTION AND RESPONSE PLAN PROCEDURES WILL BE ADDED TO THIS PLAN BY SWMP ADMINISTRATOR UPON COORDINATION WITH SELECTED CONTRACTOR AND SHALL BE WITHIN CONSTRUCTION SITE BOUNDARIES AS SHOWN.

NO VEGETATION EXISTS ON THIS SITE. NEW DISTURBED AREAS TO BE RESEEDED AFTER WORK IS COMPLETED.

LIMITS OF DISTURBANCE FOR THIS PLAN INCLUDE UTILITY INSTALLATION AND PRIVATE DRIVE AISLE CONSTRUCTION AND DETAILED GRADING FOR THE WATER TREATMENT PLANT CONSTRUCTION.

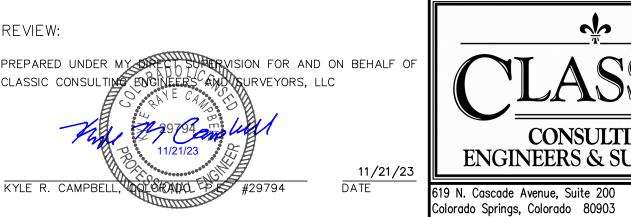
LIMITS OF DISTURBANCE FOR THIS PLAN INCLUDE DETAILED GRADING FOR DEVELOPMENT AND UTILITY INSTALLATION AND ROADWAY CONSTRUCTION WITHIN THE R.O.W., AND OVERLOT GRADING FOR DEVELOPMENT THEN INDIVIDUAL LOTS FOR HOMEBUILDING ONCE CONSTRUCTION OF THE HOME BEGINS.

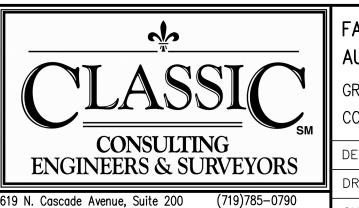
NO STREAMS CROSS THIS PROJECT. NO OFFSITE GRADING PROPOSED WITH THIS PROJECT.

ALL DISTURBED AREAS ARE TO BE RE-SEEDED. RESEED ALL AREAS AS NEEDED TO PREVENT EROSION AND SEDIMENT RUNOFF ONTO CONSTRUCTION ACTIVITIES.

PPR-2314

48 HOURS BEFORE YOU DIG, NO. REVISION DATE CALL UTILITY LOCATORS UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.





FALCON AREA WATER AND WASTEWATER AUTHORITY - WATER TREATMENT PLANT GRADING AND EROSION CONTROL PLAN

CONSTRUCTION CONTROL MEASURES DESIGNED BY | JDP | SCALE DATE 11/21/23 JDP | (H) 1"= N/A | SHEET 4 OF 4 CHECKED BY  $\mid$  KRC  $\mid$  (V) 1"= N/A  $\mid$  JOB NO. 1307.00