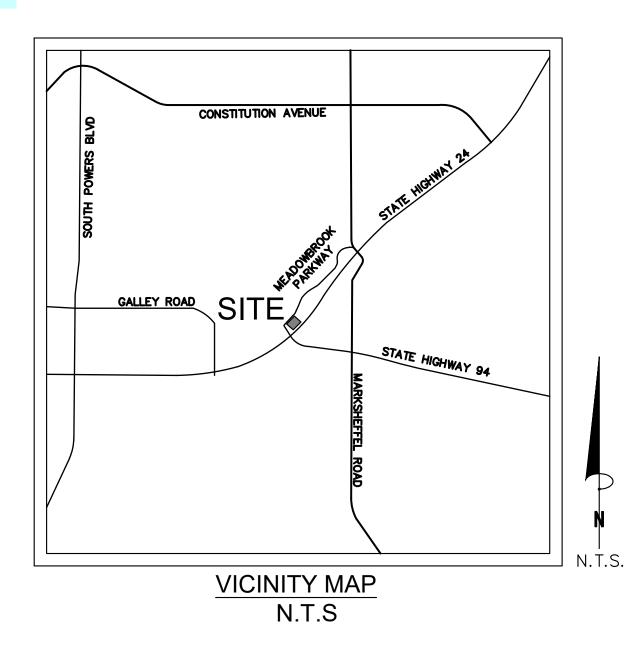
I	STANDARD NOTES FOR EL PASO COUNTY GRADING AND				
EROSION CONTROL PLANS:					
2.	STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE WATERS, INCLUDING WETLANDS. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED IN WRITING.				
	A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT 9ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS IN THE FIELD.				
	ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUES, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.				
	CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE. ALL TEMPORARY 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 DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.				
7.	TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.				
	FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70% OF PRE-DISTURBED LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT				
	STRUCTURES MUST BE APPROVED BE 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 DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE				
	FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S). ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER				
13.	AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK, OR STREAM. DURING DEWATERING OPERATIONS 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 DEWATERING PERMIT IS IN PLACE. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT				
18.	THE SITE. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.				
	THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS, AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE				
	STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS. 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. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE				
	SYSTEM OR OTHER FACILITIES. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.				
24.	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, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 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 MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.				
26. 27.	ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY RMG ENGINEERS 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 OF MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION, THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:				
	COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD — PERMITS 4300 CHERRY CREEK DRIVE SOUTH				
	DENVER, CO 80246-1530 ATTN: PERMITS UNIT				

Σ

MEADOWBROOK PARK **GRADING AND EROSION CONTROL PLANS** TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

PCD FILING NO.: PUDSP-20-08

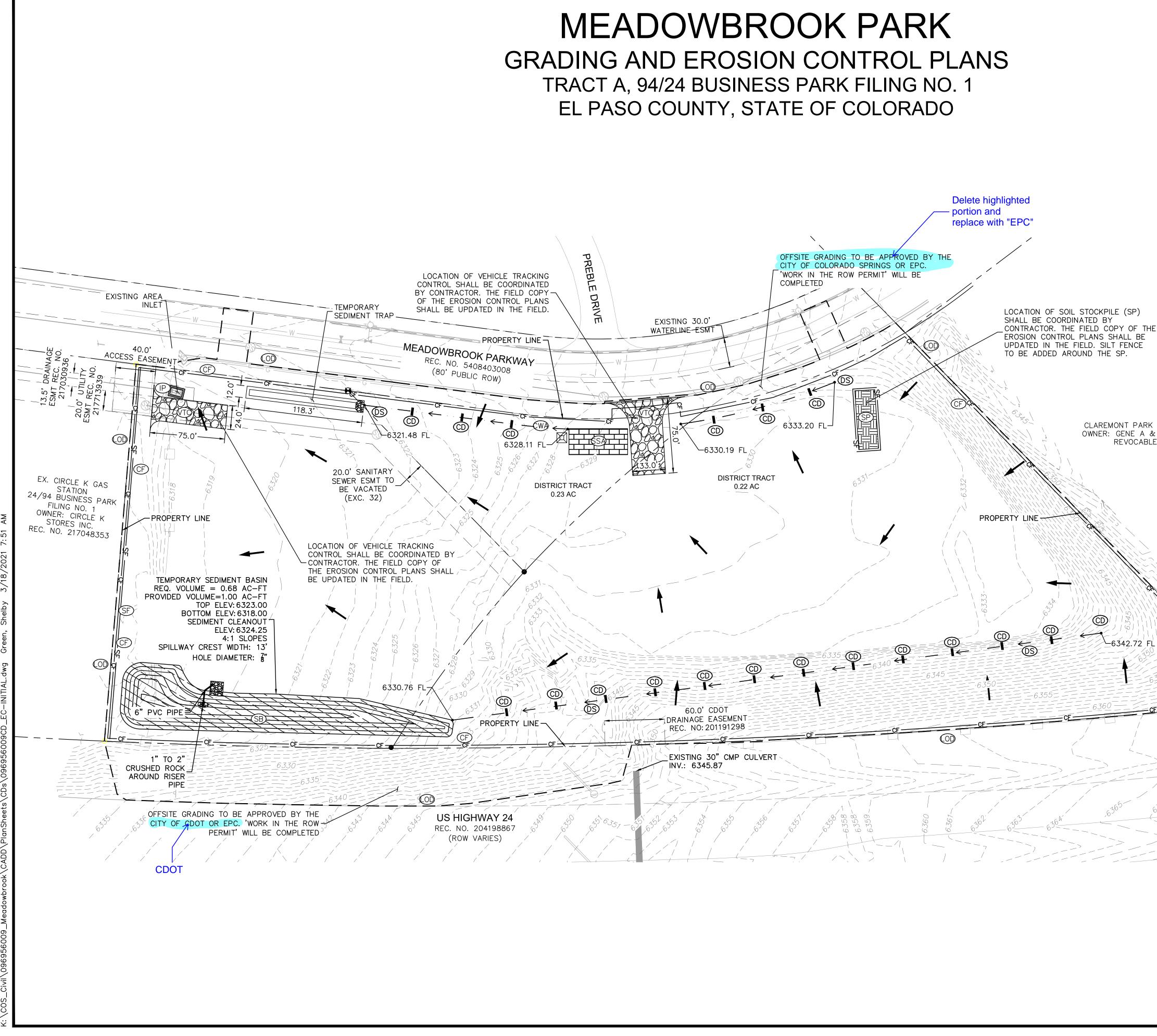
Revise the title to: Pre-development or Pre-subdivision Grading and Erosion Control Plan

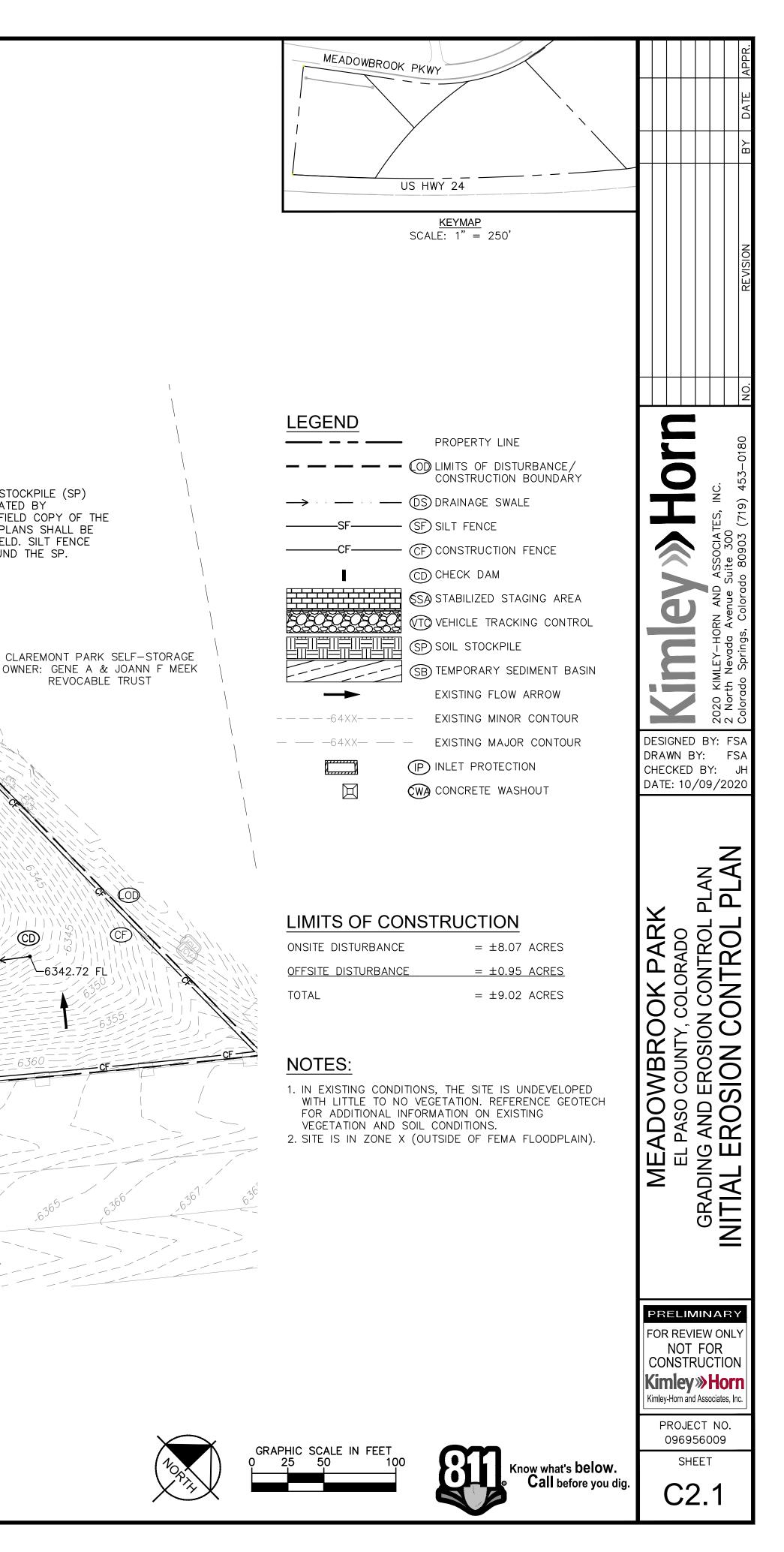


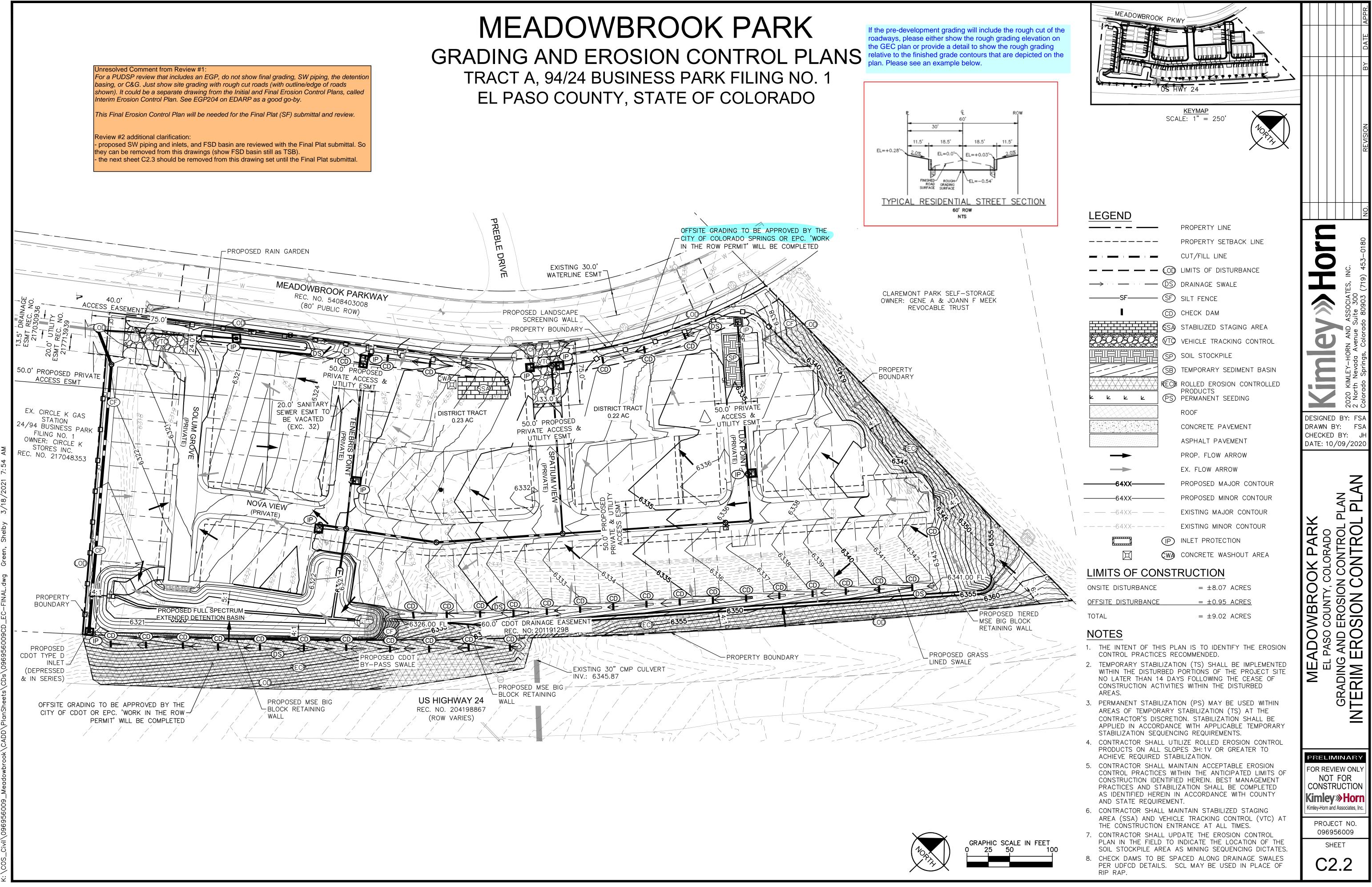


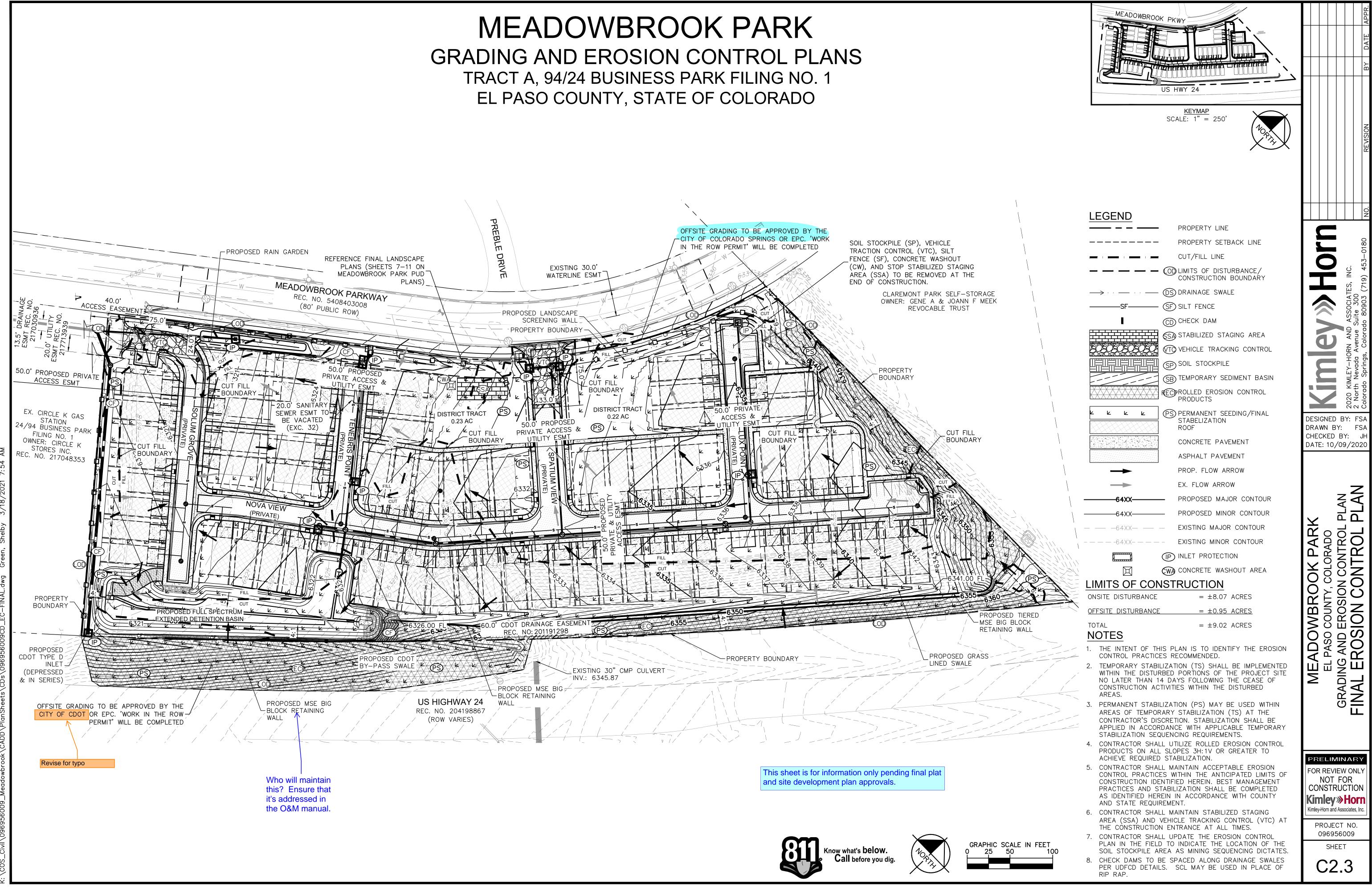
SHEET LIST TABLE		
SHEET NUMBER	SHEET TITLE	
C2.0	COVER SHEET	
C2.1	GENERAL NOTES	
C2.2	INITIAL EROSION CONTROL PLAN	
C2.3	INTERIM EROSION CONTROL PLAN	
C2.4	FINAL EROSION CONTROL PLAN	
C2.4	DETAILED GRADING PLAN	
C2.5	DETAILED GRADING PLAN	
C2.6	EROSION CONTROL DETAILS	
C2.7	EROSION CONTROL DETAILS	
C2.8	EROSION CONTROL DETAILS	
C2.9	EROSION CONTROL DETAILS	
C2.10	EROSION CONTOL DETAILS	
C2.11	EROSION CONTROL DETAILS	
C2.12	EROSION CONTROL DETAILS	
C2.13	EROSION CONTROL DETAILS	
C4.14	EROSION CONTROL DETAILS	

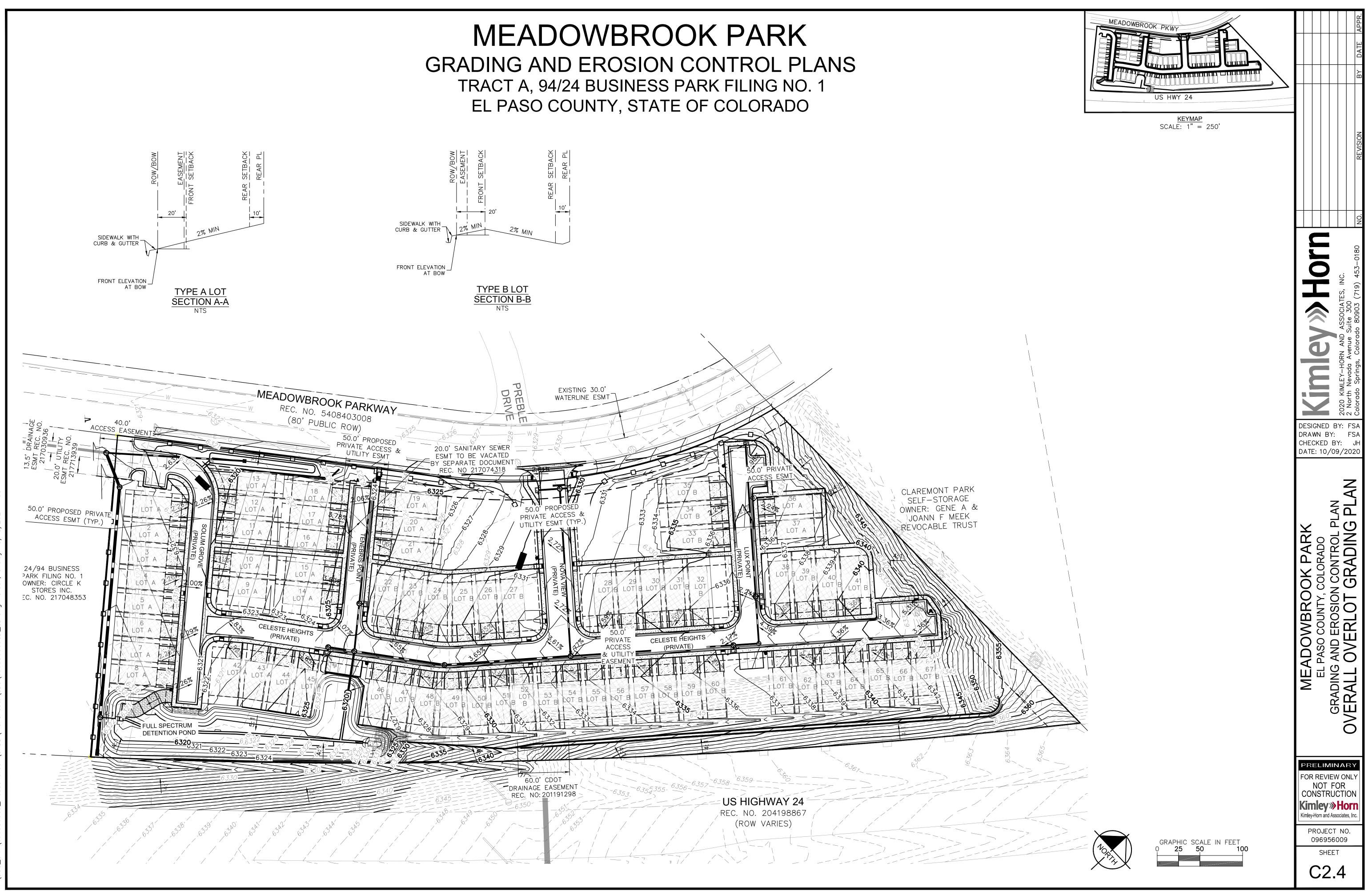
LAND AREA: 118,462 SQ. FT. OR 2.719 ACRES MORE OR LESS **BASIS OF BEARING:** MEASURED BETWEEN THE NW CORNER OF TRACT 1, 94/24 BUSINESS PARK FILING NO. 1, MONUMENTED WITH A NO. 4 REBAR WITH 1" RED PLASTIC CAP MARKED PLS 37928, AND THE SOUTHWEST CORNER OF LOT 1, MONUMENTED WITH A FOUND NO. 5 REBAR WITH BLUE PLASTIC CAP MARKED WITH PLS 32820, AS SHOW AND MEASURED TO BEAR N51°20'13"E. **BENCHMARK/ PROJECT CONTROL:** NORTHWEST CORNER OF TRACT A AND IS MONUMENTED AS A NO. 4 REBAR WITH RED PLASTIC CAP FLUSH WITH THE GROUND EL. 6321.70 LEGAL DESCRIPTION TRACT A, 94/24 BUSINESS PARK FILING NO. 1, EL PASO COUNTY, STATE OF COLORADO SOIL TYPE: THE SOIL ON SITE IS CLASSIFIED WITH THE USCS AS NATIVE SILTY TO CLAYEY SAND (SM-SC) AS HYDROLOGIC SOIL GROUP A. FLOOD ZONE DESIGNATION FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, MAP NUMBERS 08041C0752G EFFECTIVE DATE DECEMBER 7, 2018 INDICATES THIS PARCEL OF LAND IS LOCATED IN ZONE X AN AREA OF MINIMAL FLOOD HAZARD. TIMING AND SCHEDULING INITIAL GRADING TO BEGIN IN JUNE 2021 AND FINAL GRADING TO BE COMPLETED JUNE 2022. CONTACTS: O <u>owner:</u> Meadowbrook, llc ENGINEER: KIMLEY-HORN AND ASSOCIATES, INC. 90 S. NEVADA AVENUE 2 NEVADA NORTH AVE., SUITE 300 COLORADO SPRINGS, CO 80903 COLORADO SPRINGS, CO 80903 TEL: (719) 475-7621 TEL: (719) 453-0182 CONTÀCT: JOHN HEIBERGER, P.E. CONTÀCT: DANNY MIENTKA SURVEYOR: CLARK LAND SURVEYING, INC. EL PASO COUNTY: EL PASO COUNTY 177 S. TIFFANY DRIVE, UNIT 1 DEVELOPMENT SERVICES DEPARTMENT PUEBLO WEST, CO 81007 2880 INTERNATIONAL CIRCLE, SUITE 110 TEL: (719) 582-1270 COLORADO SPRINGS, CO 80910 CONTÀCT: STEWART L. MAPES JR., PLS PHONE: (719) 520-3600 **OWNER'S SIGNATURE BLOCK** Nor Nor ы М М I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN. DESIGNED BY: FSA DRAWN BY: FS. CHECKED BY: DATE: 10/09/202 NAM DATE ENGINEER'S SIGNATURE BLOCK THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING Ω THIS PLAN. /BROOK PARK DUNTY, COLORADO ROSION CONTROL F ER SHEET JOHN HEIBERGER, PE DATE KIMLEY-HORN AND ASSOCIATES, INC. ADOWBF PASO COUN AND EROS COVER EL PASO COUNTY REVIEW STATEMENT COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSION, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS NA N DOCUMENT ASSUMES NO RESPONIBILITY FOR COMPLETENESS AND/ OR ACCURACY OF GRADING THIS DOCUMENT. ШШ FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND Σ DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR A CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF THE CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION. PRELIMINARY FOR REVIEW ONL' NOT FOR JENNIFER IRVINE, COUNTY ENGINEER / ECM ADMINISTRATOR DATE CONSTRUCTION Kimley»Horn Kimley-Horn and Associates, Inc PROJECT NO. 096956009 SHEET C2.0

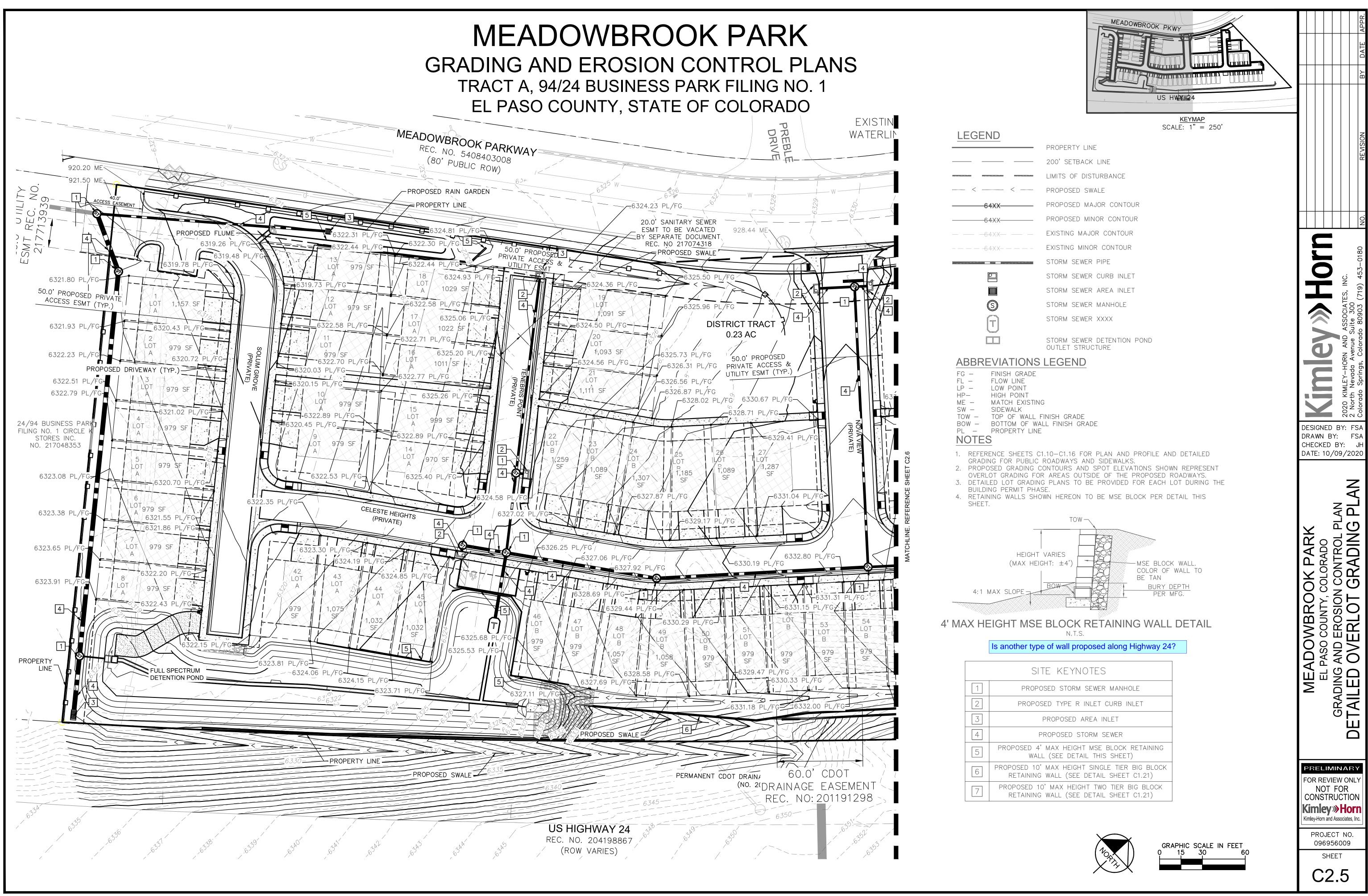


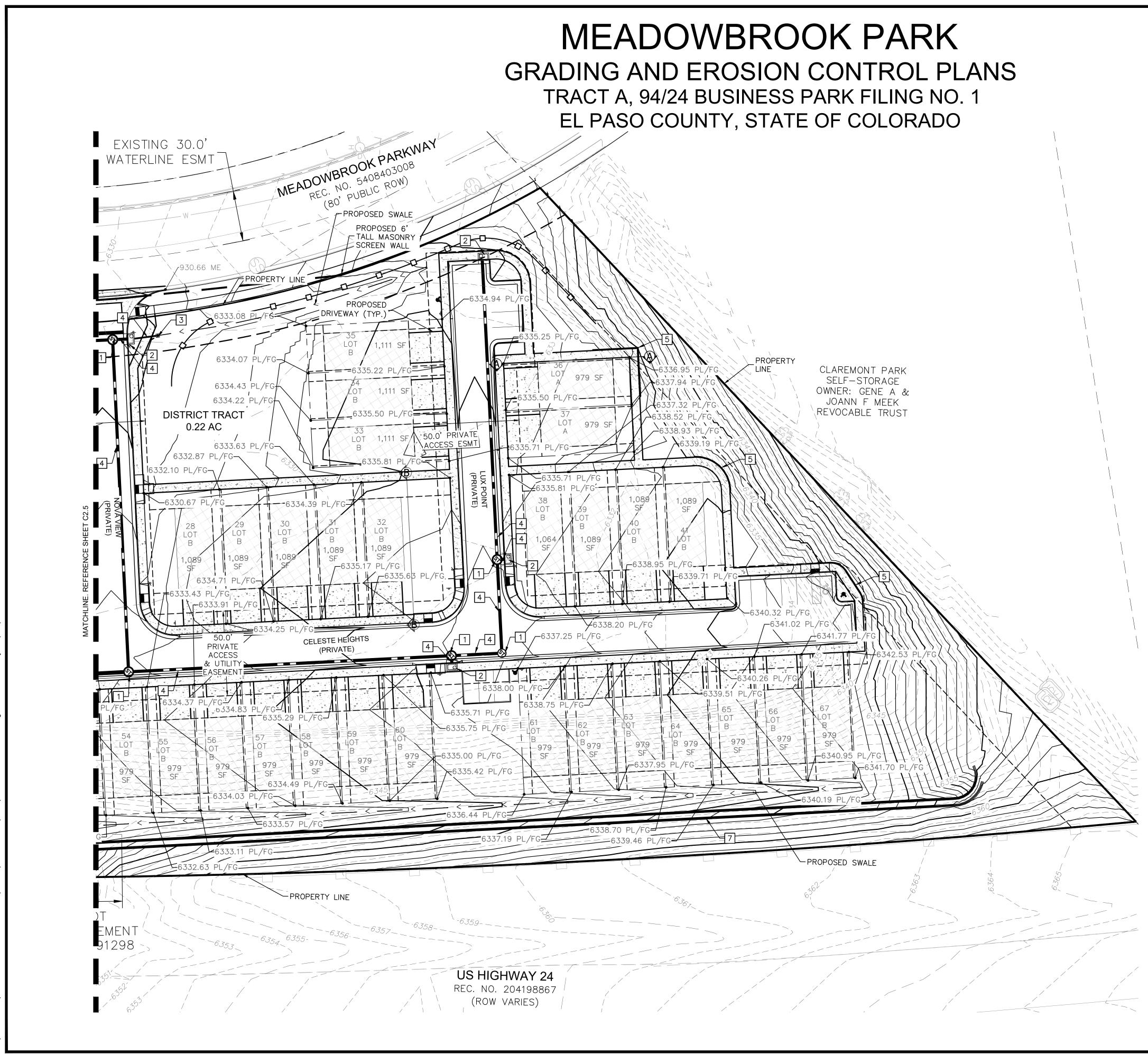


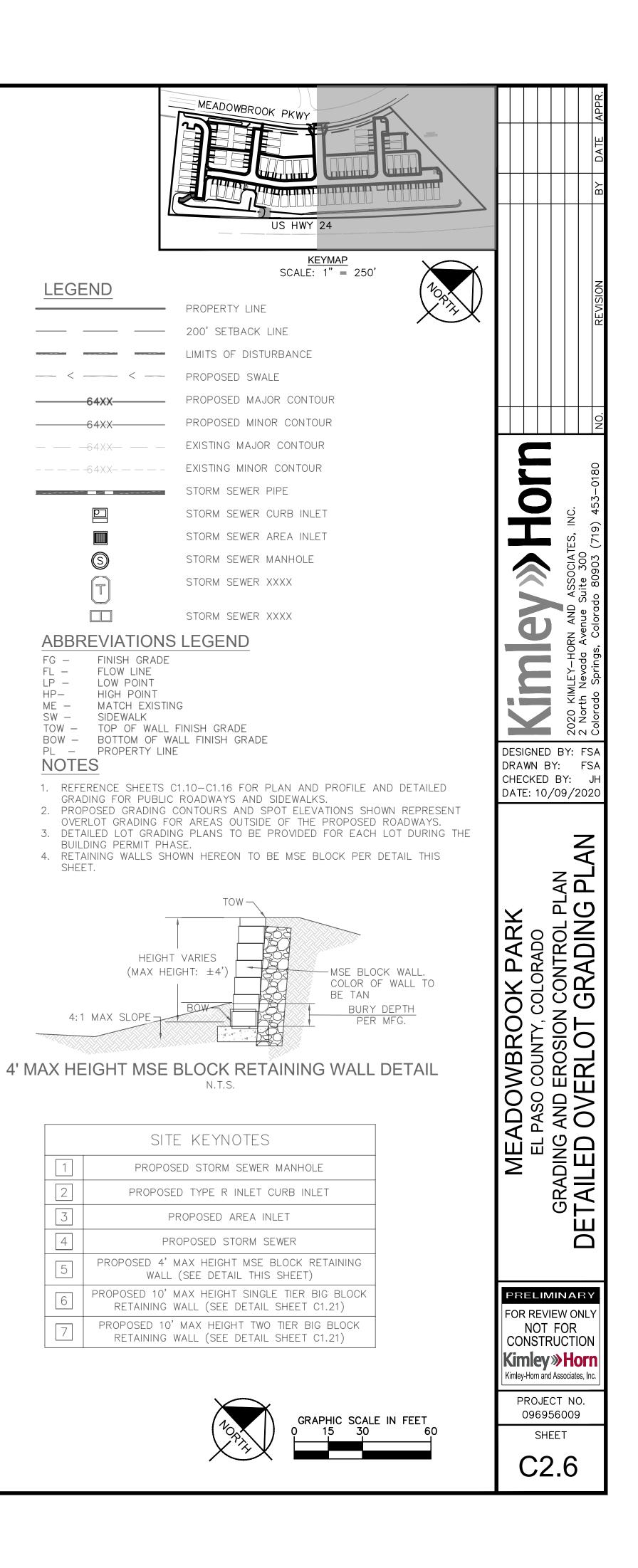


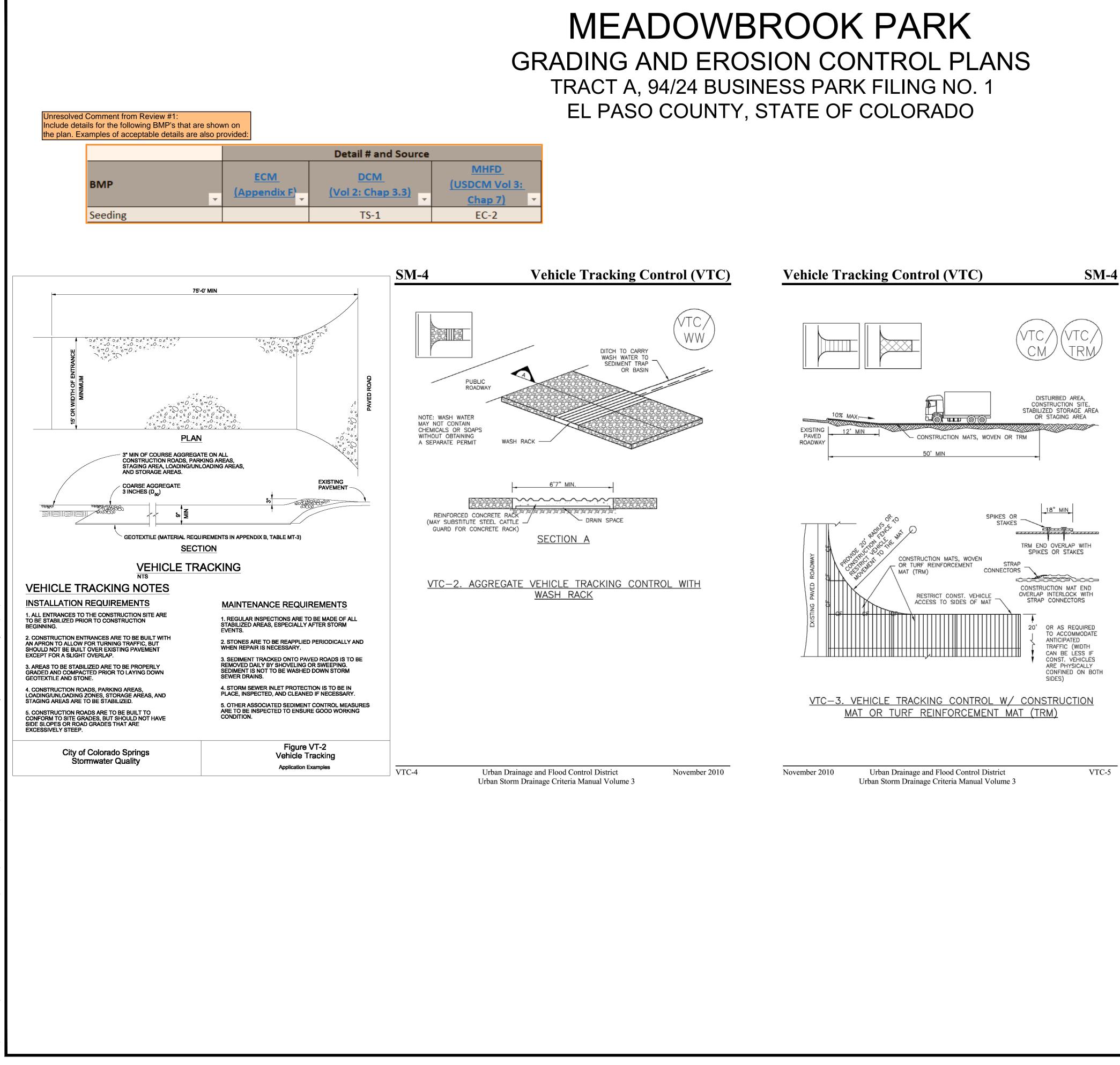












Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S). -TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK. STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

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.

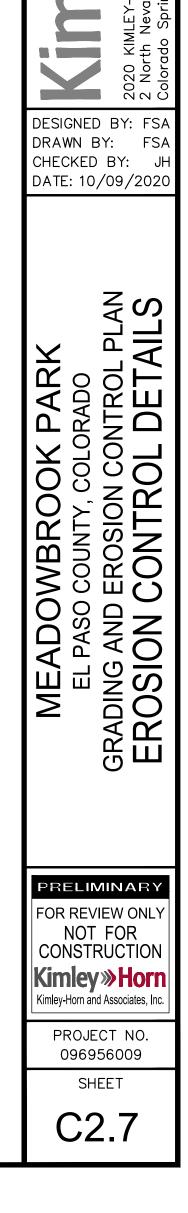
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

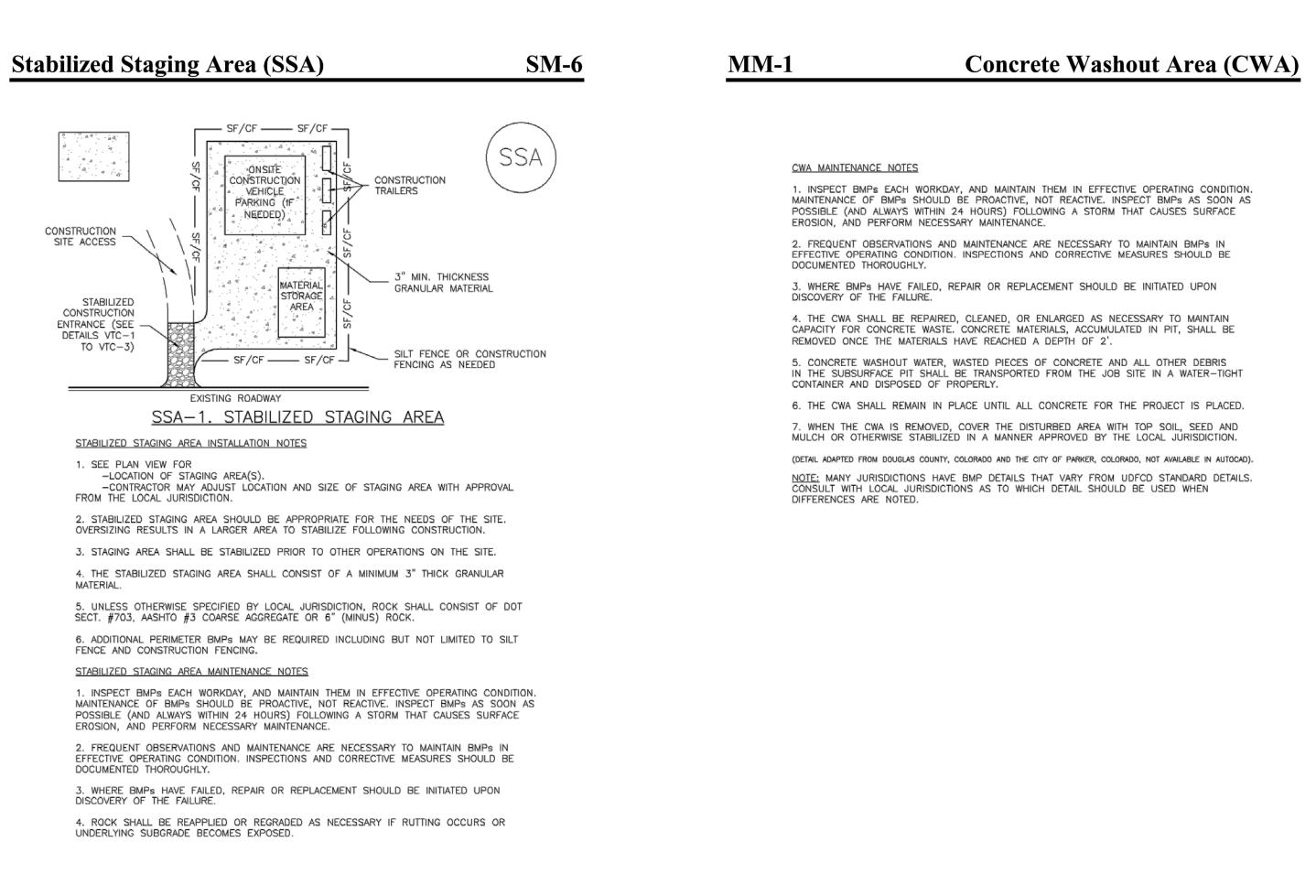
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED. (DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6

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



O



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

Σ

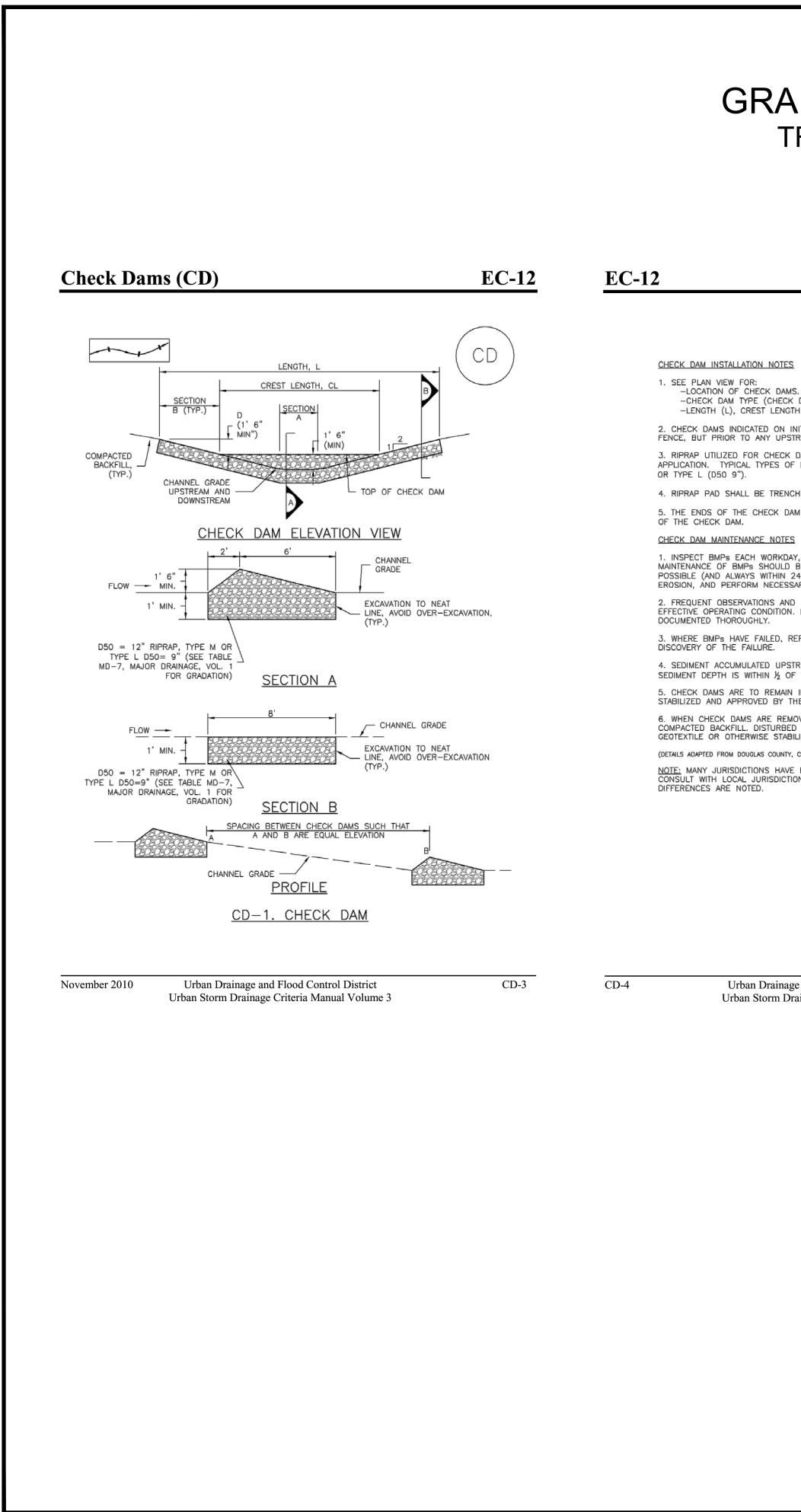
MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

SSA-3

CWA-4

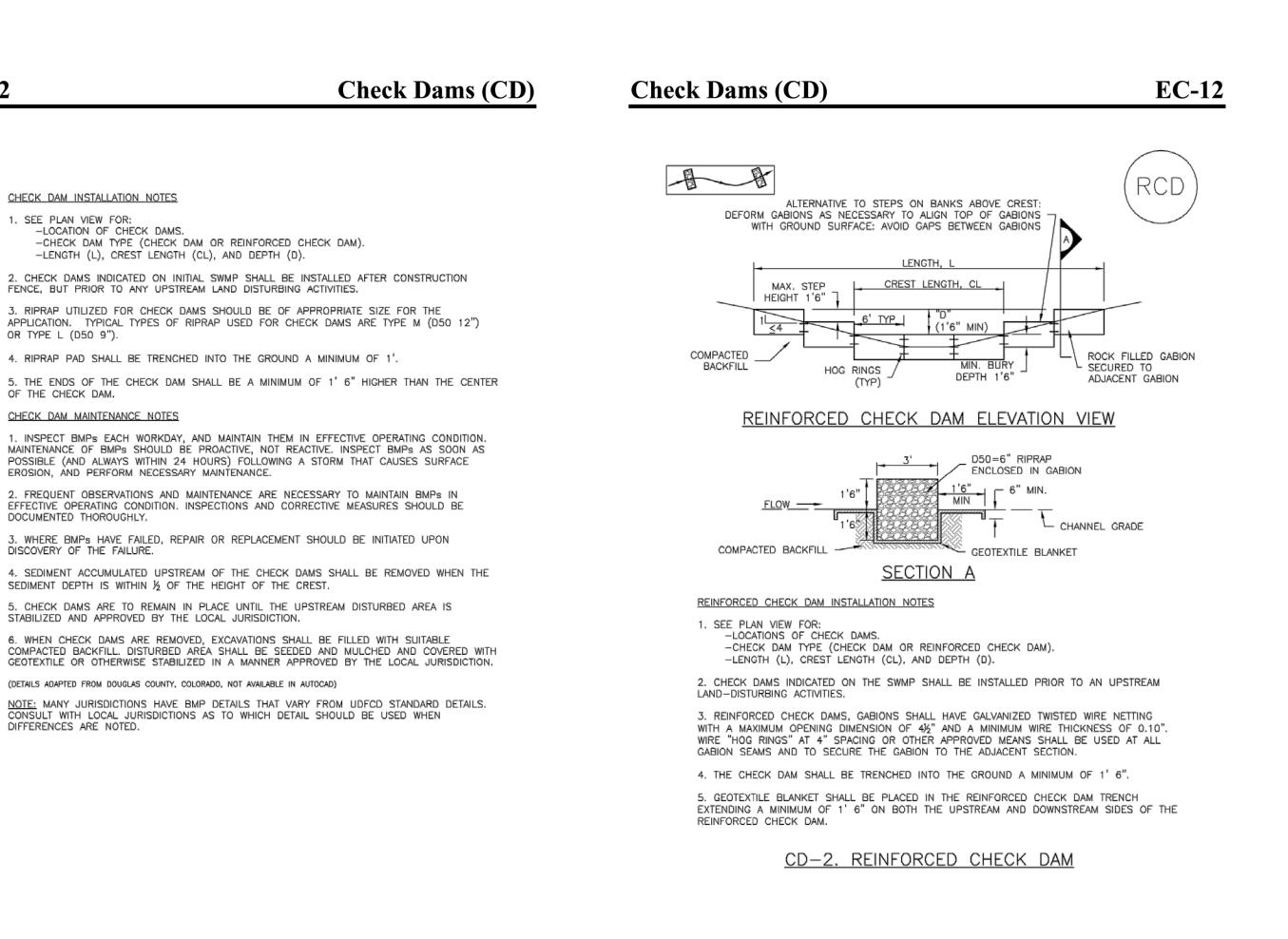
Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

BY DATE APPR.
REVISION
NON
DESIGNED BY: FSA Colorado Springs, Colorado 80903 (719) 453–0180
MEADOWBROOK PARK EL PASO COUNTY, COLORADO GRADING AND EROSION CONTROL PLAN EROSION CONTROL PLAN
PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION Kimley >> Horn Kimley-Horn and Associates, Inc. PROJECT NO. 096956009 SHEET C2.8



K: \COS_Civil\096956009_Meadowbrook\CADD\PlanSheets\CDs\096956009CD_EC_DT.dwg Green, Shelby 3/18/2021 8:

MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO



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

November 2010

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CD-5

Check Dams (CD)

 \bigcirc

 $\langle \rangle$

Nor Nor

йчи

DESIGNED BY: FSA

DRAWN BY: FS.

CHECKED BY:

DATE: 10/09/202

OWBROOK PARK SO COUNTY, COLORADO ID EROSION CONTROL PLAN I CONTROL DETAILS

MEADOV EL PASO (GRADING AND E EROSION C

PRELIMINARY

FOR REVIEW ONLY NOT FOR CONSTRUCTION Kimley Horn Kimley-Horn and Associates, Inc.

PROJECT NO. 096956009

SHEET

C2.9

REINFORCED CHECK DAM MAINTENANCE NOTES

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 UPSTREAM OF REINFORCED CHECK DAMS SHALL BE REMOVED AS NEEDED TO MAINTAIN THE EFFECTIVENESS OF BMP, TYPICALLY WHEN THE UPSTREAM SEDIMENT

DEPTH IS WITHIN ½ THE HEIGHT OF THE CREST. 5. REPAIR OR REPLACE REINFORCED CHECK DAMS WHEN THERE ARE SIGNS OF DAMAGE SUCH AS HOLES IN THE GABION OR UNDERCUTTING.

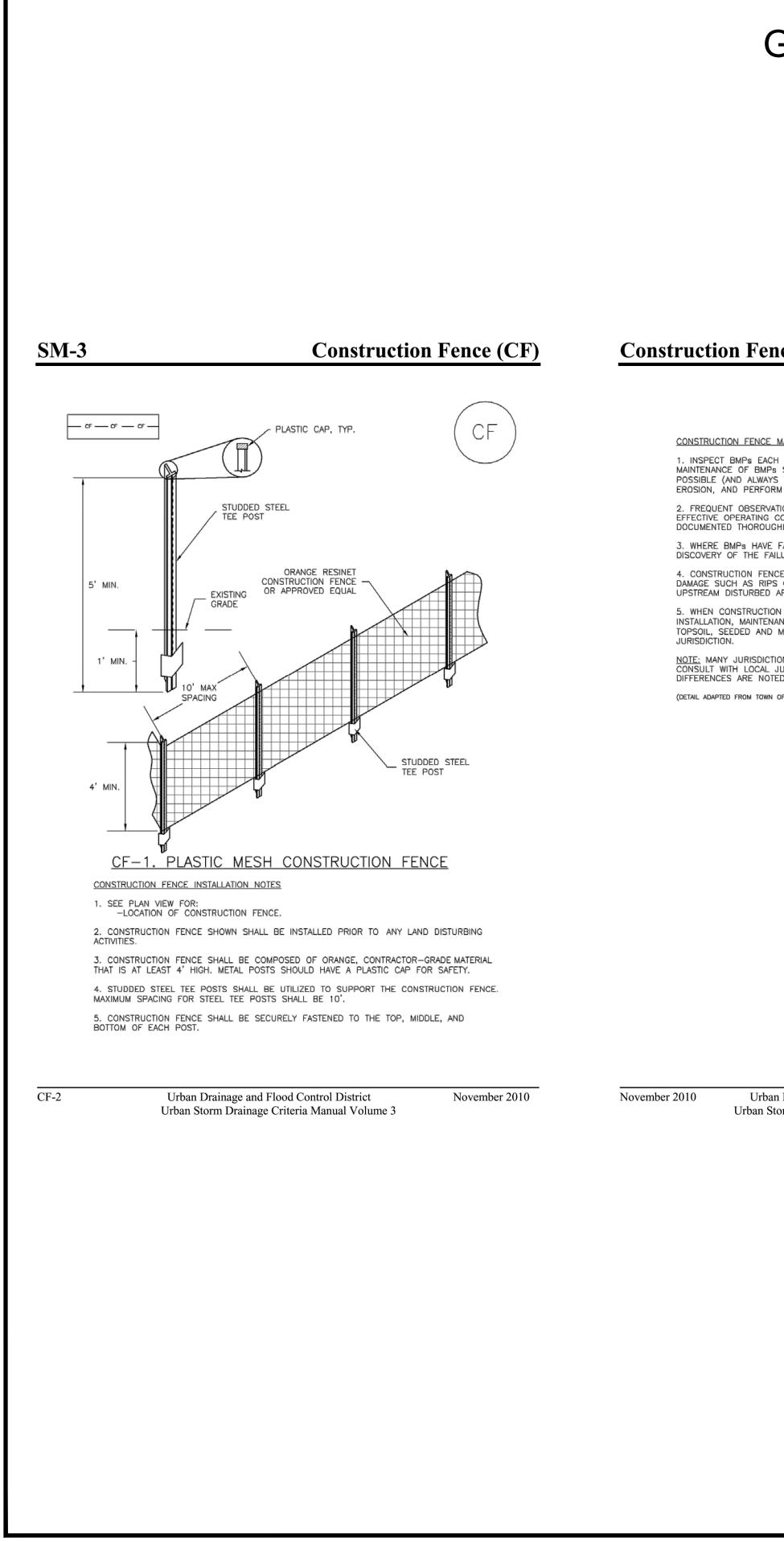
6. REINFORCED CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN REINFORCED CHECK DAMS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, AND COVERED WITH A GEOTEXTILE BLANKET, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION. (DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND CITY OF AURORA, COLORADO, 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.

CD-6

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



 \geq

MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

nce (CF) SM-3	Compost Blanket and Fi	lter Berm (CB) EC
MAINTENANCE NOTES		⊥ (CB)
CH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. Ps SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS YS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE ORM NECESSARY MAINTENANCE.		CLASS 1 COMPOST FILTER BERM
VATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE JGHLY.	PROPER SOIL PREPARATION AND SURFACE ROUGHENING	1" TO 3" THICK (2" TYP.) STA CERTIFIED CLASS 1 COMPOST BLANKET
E FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON AILURE.	WHEN APPROPRIATE	
NCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF PS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.	TABLE CB-	-1. CLASS 1 COMPOST
ION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE	PARAMETERS	CHARACTERISTIC
NANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL	MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
MOLONED, OK ONNEKWISE SINDLEZED AS AN HOVED BY ESOAL	SOLUBLE SALTS	MAXIMUM 5 mmhos/cm
TIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS.	РН	6.0 - 8.0
JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN ITED.	AG INDEX	> 10
N OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)	MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF GERMINATION/VIGOR	80+/80+
	MATURITY INDICATOR EXPRESSED AS AMMONIA N/ NITRATE N RATIO	< 4
	MATURITY INDEX AS CARBON TO NITROGEN RATIO	20:1
	TESTED FOR CLOPYRALID	YES/NEGATIVE RESULT
	MOISTURE CONTENT	30-60%
	ORGANIC MATTER CONTENT	25-45% OF DRY WEIGHT
	PARTICLE SIZE DISTRIBUTION	3" (75mm) 100% PASSING
	PRIMARY, SECONDARY NUTRIENTS; TRACE ELEMENTS	MUST BE REPORTED
	TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA + CLOPYRALID
	ORGANIC MATTER PER CUBIC YARD	MUST REPORT
	CHEMICAL CONTAMINANTS	COMPLY WITH US EPA CLASS A STANDARD, 40 CFR 503.1 TABLES 1 & 3 LEVELS
	MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
	RISK FACTOR RELATING TO PLANT GERMINATION AND HEALTH	LOW

CB-1. COMPOST BLANKET AND COMPOST FILTER BERM

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

November 2010

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

EC-5

Compost Blanket and Filter Berm (CB)

COMPOST FILTER BERM AND COMPOST BLANKET INSTALLATION NOTES 1. SEE PLAN VIEW FOR -LOCATION OF COMPOST FILTER BERM(S).

2. COMPOST BERMS AND BLANKETS MAY BE USED IN PLACE OF STRAW MULCH OR GEOTEXTILE FABRIC IN AREAS WHERE ACCESS TO LANDSCAPING IS DIFFICULT DUE TO LANDSCAPING OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TURF GRASS FINISH IS DESIRED.

3. FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR.

-LENGTH OF COMPOST FILTER BERM(S).

4. FILTER BERMS SHALL BE A MINIMUM OF 1 FEET HIGH AND 2 FEET WIDE.

5. FILTER BERMS SHALL BE APPLIED BY PNEUMATIC BLOWER OR BY HAND.

6. FILTER BERMS SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL AND NOT IN AREAS OF CONCENTRATED FLOW.

7. COMPOST BLANKETS SHALL BE APPLIED AT A DEPTH OF 1 -3 INCHES (TYPICALLY 2 INCHES). FOR AREAS WITH EXISTING VEGETATION THAT ARE TO BE SUPPLEMENTED BY COMPOST, A THIN 0.5-INCH LAYER MAY BE USED.

8. SEEDING SHALL BE PERFORMED PRIOR TO THE APPLICATION OF COMPOST. ALTERNATIVELY, SEED MAY BE COMBINED WITH COMPOST AND BLOWN WITH THE PNEUMATIC BLOWER. 9. WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO COMPOST APPLICATION.

10. COMPOST SHALL BE A CLASS 1 COMPOST AS DEFINED BY TABLE CB-1.

COMPOST FILTER BERM MAINTENANCE NOTES 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.

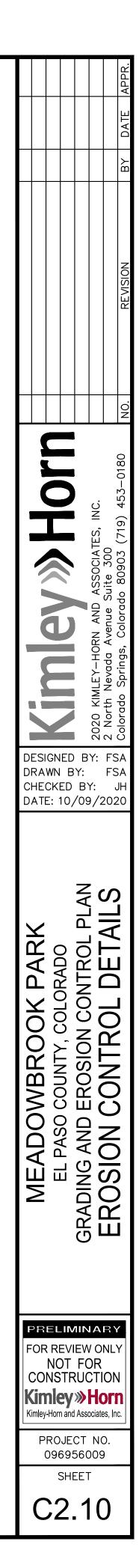
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

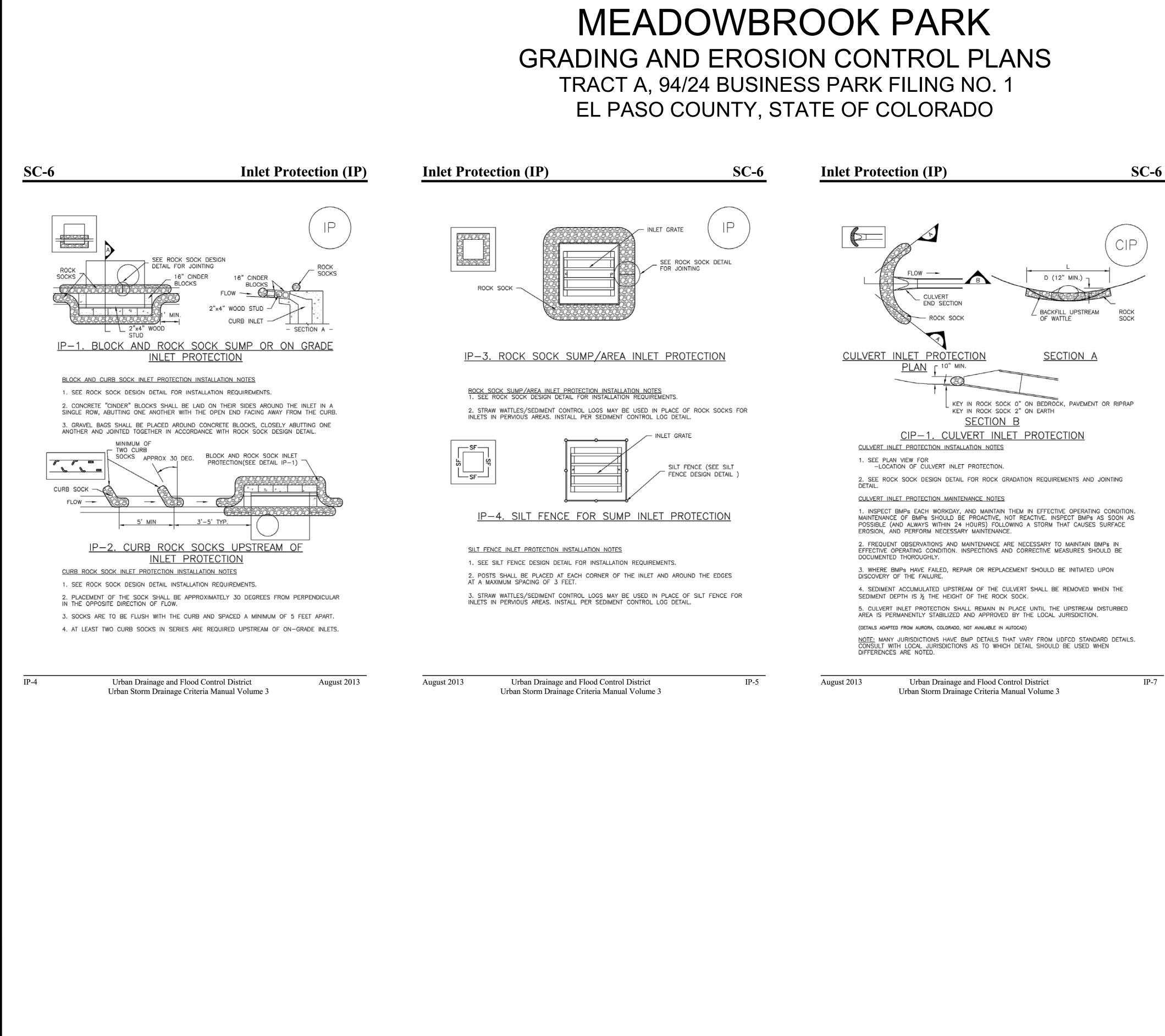
4. COMPOST BERMS AND BLANKETS SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RILLING IN THE COMPOST SURFACE OCCURS. (DETAILS ADAPTED FROM ARAPAHOE COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.

CB-4

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





Inlet Protection (IP)

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

-LOCATION OF INLET PROTECTION. -TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. 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.

INLET PROTECTION MAINTENANCE NOTES

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 UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/4 OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS. 6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE

COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. (DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

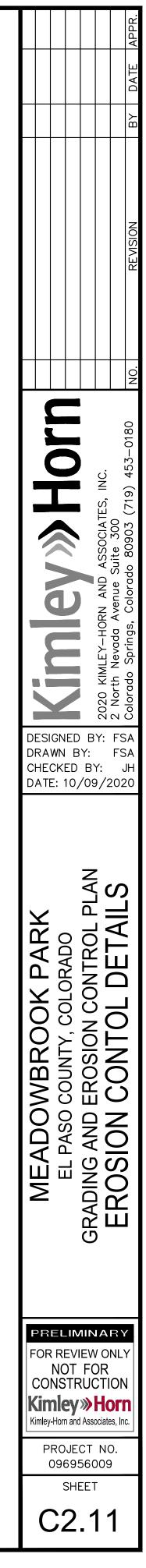
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

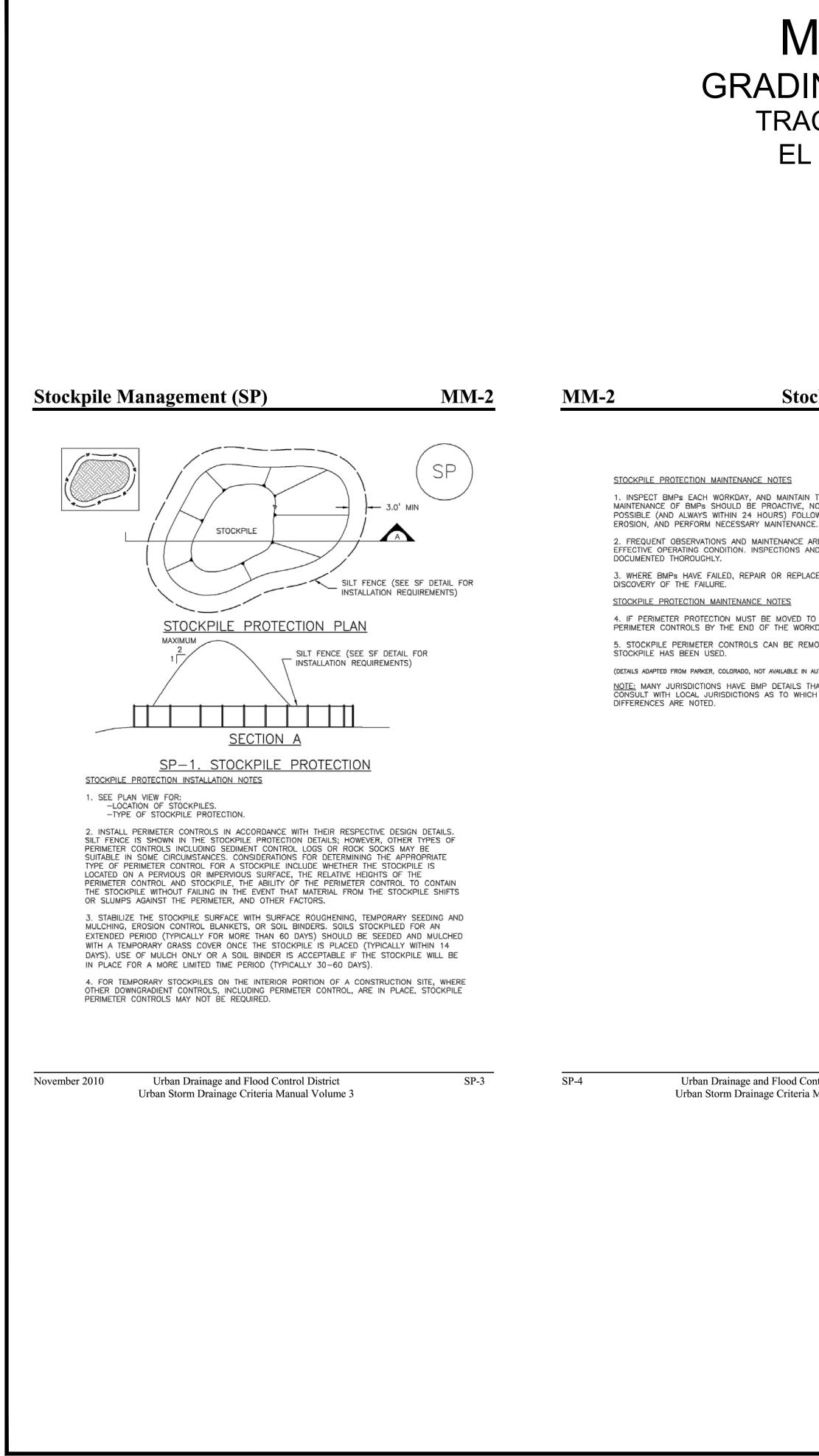
NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

IP-8

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 August 2013





MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

Stockpile Management (SM)

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

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

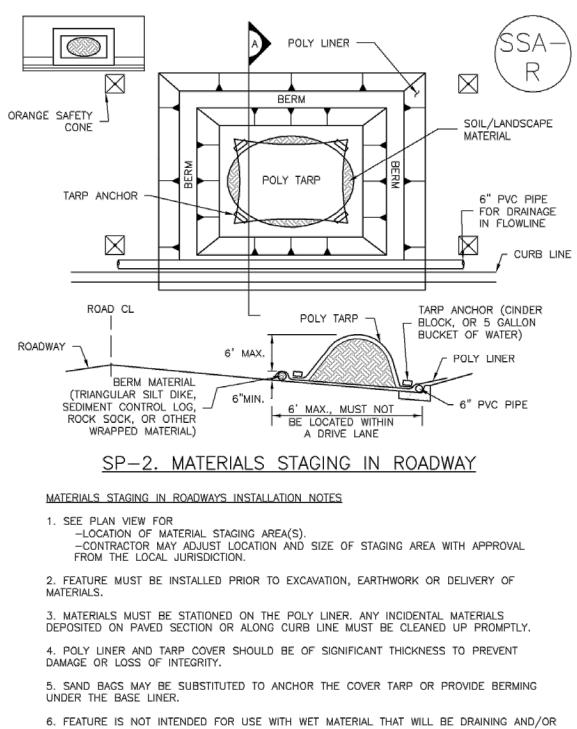
4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY. 5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE

(DETAILS ADAPTED FROM PARKER, COLORADO, 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

Stockpile Management (SP)

MM-2



SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS. 7. THIS FEATURE CAN BE USED FOR:

-UTILITY REPAIRS. -WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED. -OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

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

November 2010

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SP-5

SP-6

MM-2

Stockpile Management (SM)

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

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.

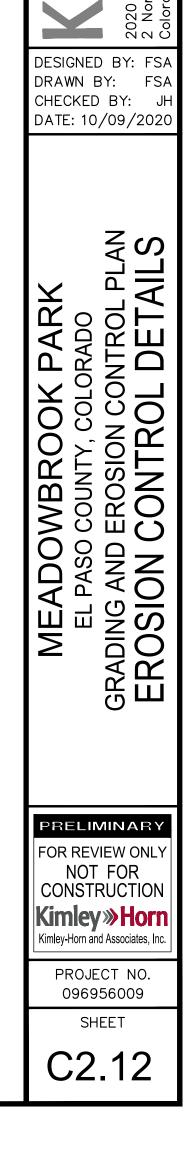
4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.

5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

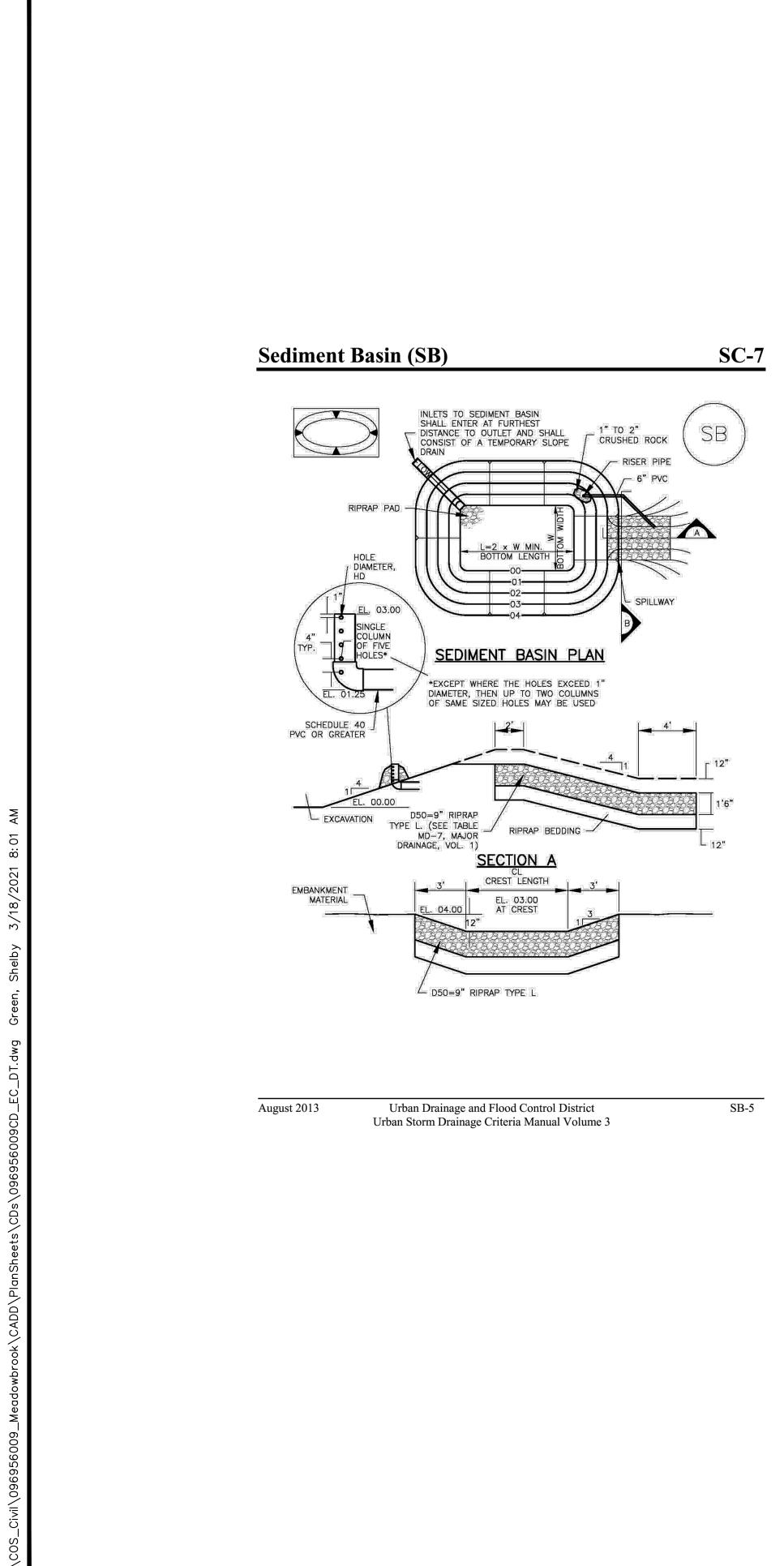
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM AURORA, COLORADO)

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



O



MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

Sediment Basin (SB)

Sediment Basin (SB)

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN				
Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	12 ½ 21 28 33 ½ 38 ½ 43 47 ¼ 51 55 58 ¼ 61 64 67 ½ 70 ½ 70 ½ 73 ¼	2 3 5 6 8 9 11 12 13 15 16 18 19 21 22	932 ¹ 376 12 96 2132 2332 2332 2332 2332 2332 2332 2332 2332 2332 1516 1 1 1 1 1 1 1 1 1 1 1 1 1	

SEDIMENT BASIN INSTALLATION NOTES

SEE PLAN VIEW FOR: —LOCATION OF SEDIMENT BASIN.

-TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN). -FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD. -FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE

DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL. 4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

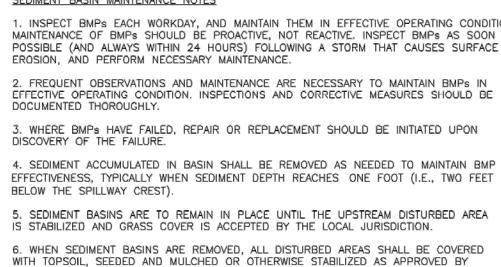
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698. 6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SB-6

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 August 2013

August 2013



LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

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.

SEDIMENT BASIN MAINTENANCE NOTES

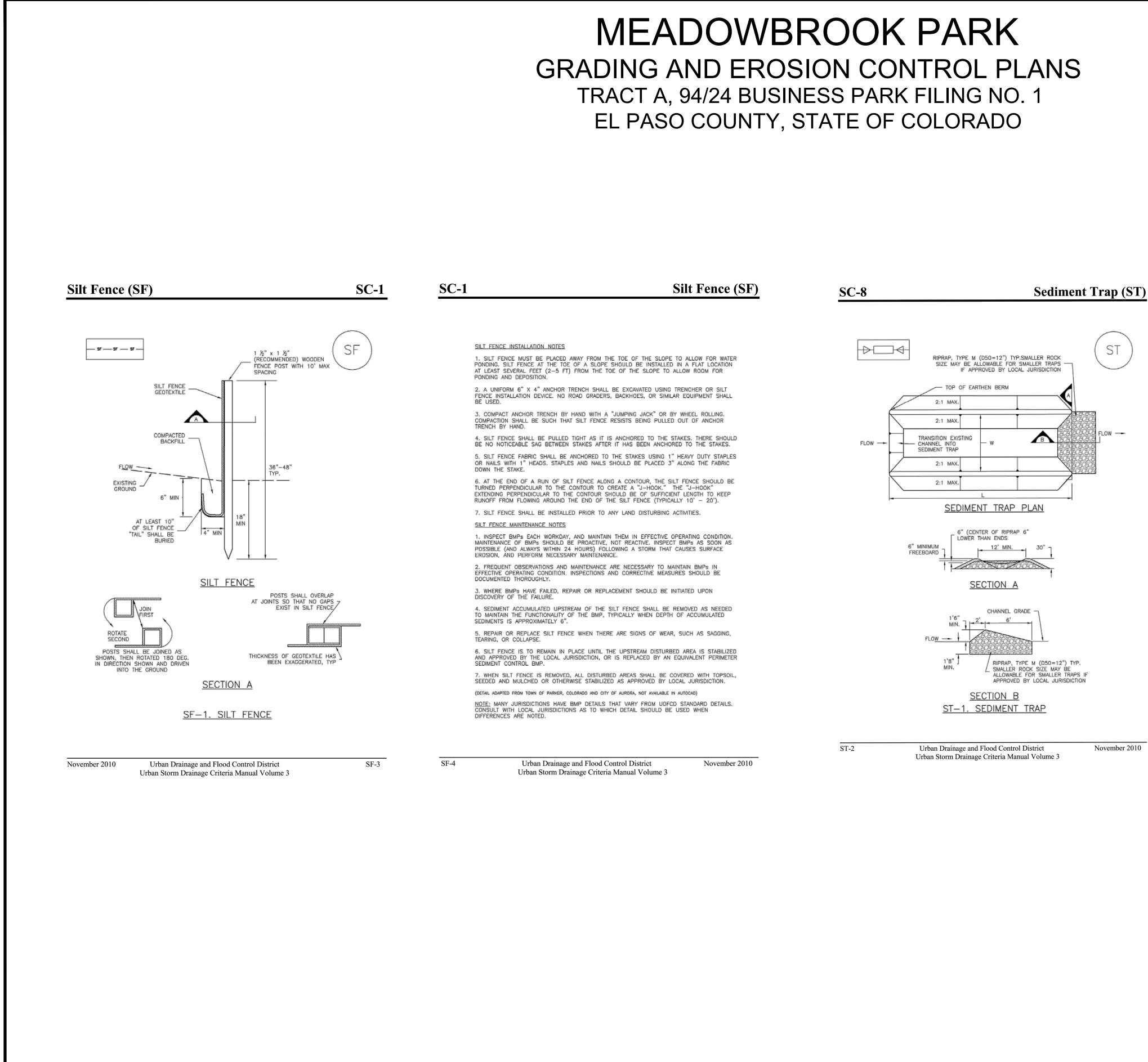
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

SB-7

SC-7

	BY DATE APPR.
	REVISION
DESIGNED BY DRAWN BY: CHECKED BY DATE: 10/09,	FSA : JH
MEADOWBROOK PARK EL PASO COUNTY, COLORADO GRADING AND EROSION CONTROL PLAN	EROSION CONTROL DETAILS
PRELIMIN FOR REVIEW NOT FO CONSTRUC Kimley »F Kimley-Horn and Assoc PROJECT I 09695600 SHEET C2.1	ONLY R TION Iorn iates, Inc.



Sediment Trap (ST)

SC-8

SEDIMENT TRAP INSTALLATION NOTES

DISCOVERY OF THE FAILURE.

1. SEE PLAN VIEW FOR: -LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.

2. ONLY USE FOR DRAINAGE AREAS LESS THAN 1 ACRE. 3. SEDIMENT TRAPS SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING

ACTIVITIES

4. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION, THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

5. SEDIMENT TRAP OUTLET TO BE CONSTRUCTED OF RIPRAP, TYPE M (D50=12") TYP.SMALLER ROCK SIZE MAY BE ALLOWABLE FOR SMALLER TRAPS IF APPROVED BY LOCAL JURISDICTION. 6. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE. 7. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN

THE CENTER OF THE OUTLET STRUCTURE. SEDIMENT TRAP MAINTENANCE NOTES 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.

 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

4. REMOVE SEDIMENT ACCUMULATED IN TRAP AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN THE SEDIMENT DEPTH REACHES ½ THE HEIGHT OF THE RIPRAP OUTLET.

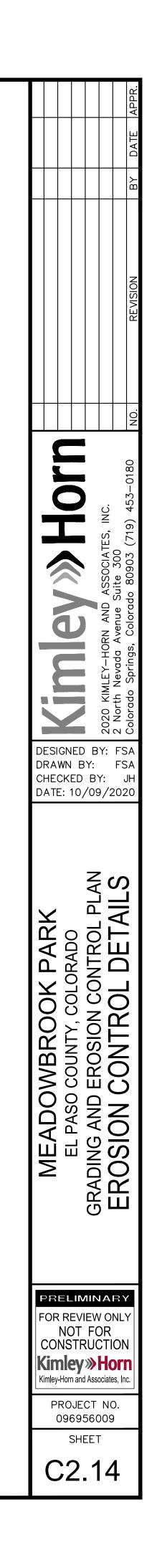
5. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

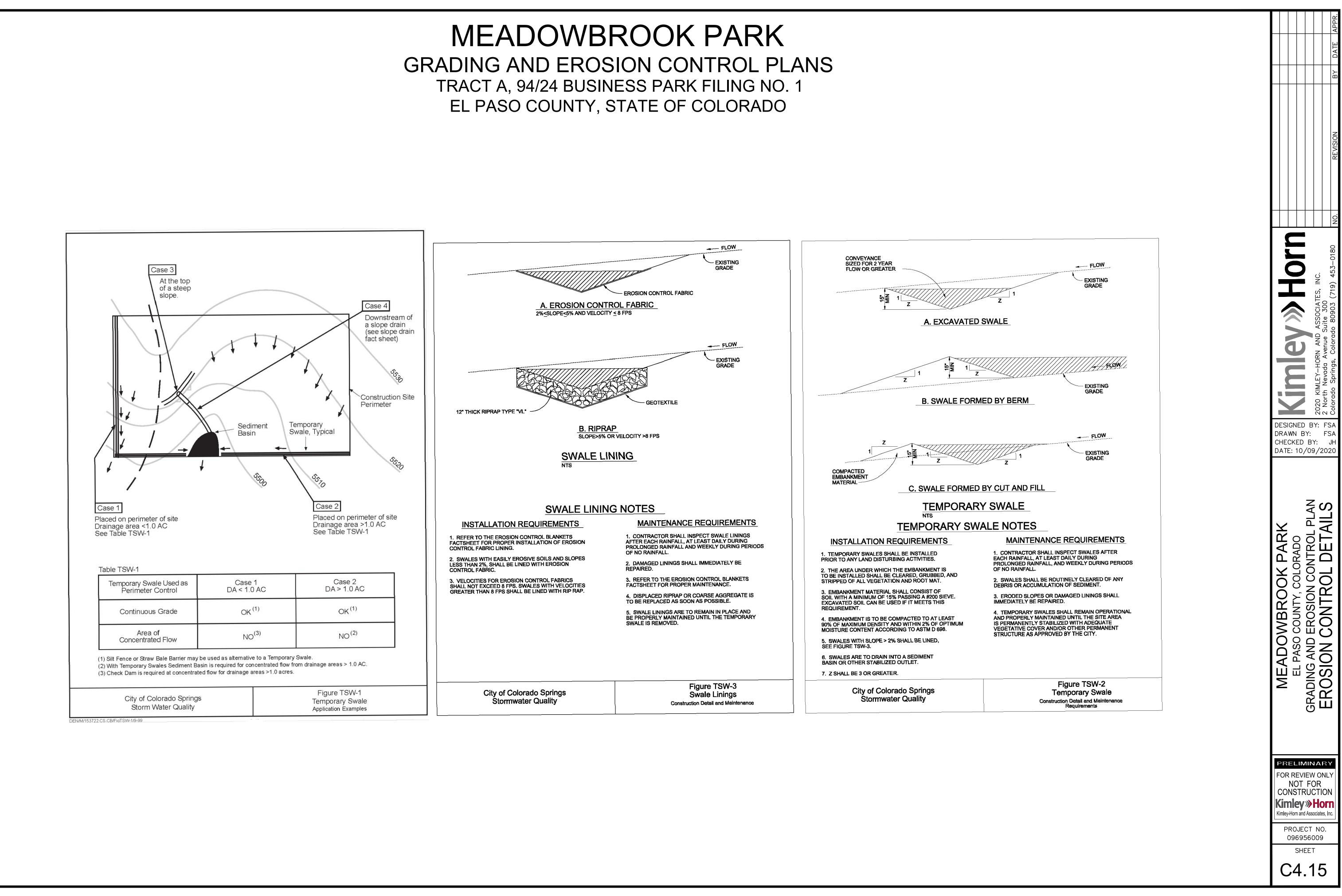
6. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

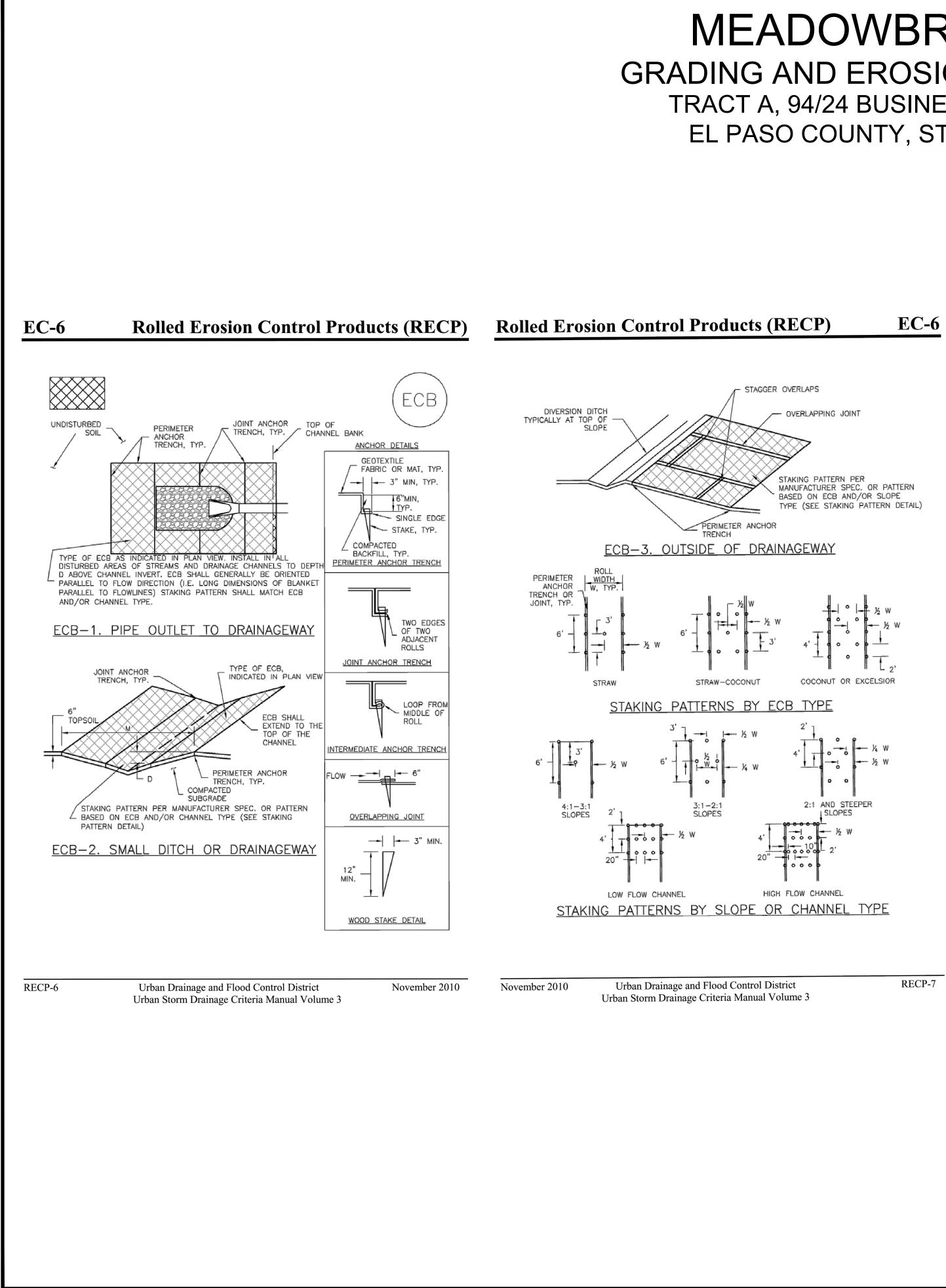
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

November 2010

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







 \geq

MEADOWBROOK PARK GRADING AND EROSION CONTROL PLANS TRACT A, 94/24 BUSINESS PARK FILING NO. 1 EL PASO COUNTY, STATE OF COLORADO

RECP-8

EC-6

EROSION CONTROL BLANKET INSTALLATION NOTES

AN OVERLAPPING JOINT.

1. SEE PLAN VIEW FOR: -LOCATION OF ECB.

-TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR). -AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPS, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

Rolled Erosion Control Products (RECP)

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH

FOR COCONUT AND EXCELSIOR ECBs. 7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.

8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TABLE ECB-1. ECB MATERIAL SPECIFICATIONS				
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	_	100%	_	DOUBLE/ NATURAL
STRAW- COCONUT	30% MIN	70% MAX	-	DOUBLE/ NATURAL
COCONUT	100%	-	-	DOUBLE/ NATURAL
EXCELSIOR	-	_	100%	DOUBLE/ NATURAL

*STRAW ECBS MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL. **ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

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

Rolled Erosion Control Products (RECP)

EC-6

O

EROSION CONTROL BLANKET MAINTENANCE NOTES

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.

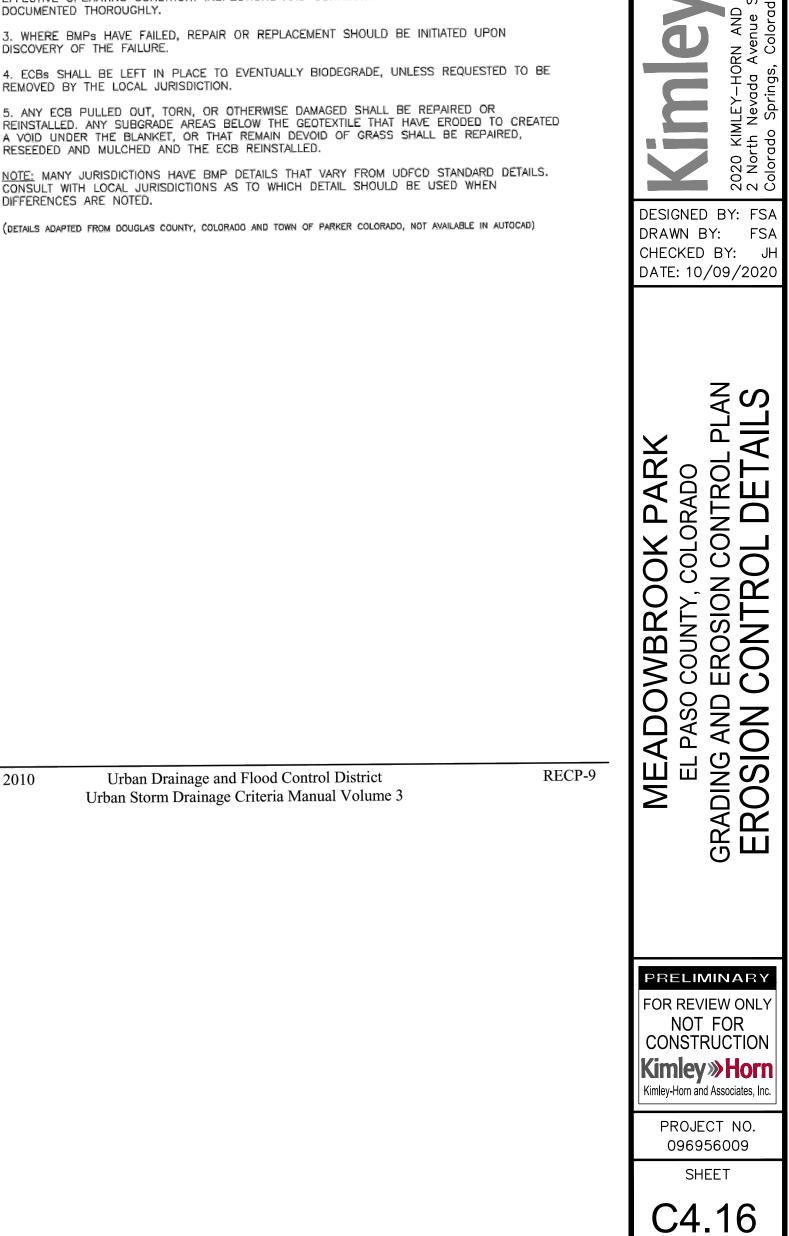
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

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

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

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.



November 2010

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

GEC Plan V_2 redlines.pdf Markup Summary 6-22-2021

dsdrice (13)		
When the montane the contraction of the contraction of a	Subject: Callout Page Label: [4] C2.3 FINAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 7:51:45 PM Status: Color: Layer: Space:	Who will maintain this? Ensure that it's addressed in the O&M manual.
STI PUER - STI PUER - STUDIES -	Subject: Callout Page Label: [1] C2.0 COVER SHEET Author: dsdrice Date: 5/15/2021 7:52:54 PM Status: Color: Layer: Space:	Revise the title to: Pre-development or Pre-subdivision Grading and Erosion Control Plan
AROUND RISER PIPE OFFSITE ORADNO TO BE APPF OFFSITE ORADNO TO BE APPF OFFSITE ORADNO TO BE APPF OFFSITE ORADNO TO BE APPF	Subject: Page Label: [2] C2.1 INITIAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:00:32 PM Status: Color: Layer: Space:	
OFFSITE GRADING TO OFFSITE GRADING TO CITY OF GDOT OR EI PERM	Subject: Callout Page Label: [2] C2.1 INITIAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:00:41 PM Status: Color: Layer: Space:	CDOT
	Subject: Page Label: [2] C2.1 INITIAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:01:10 PM Status: Color: Layer: Space:	
Delete high lighted petition and report in and report will be both will be	Subject: Callout Page Label: [2] C2.1 INITIAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:02:09 PM Status: Color: Layer: Space:	Delete highlighted portion and replace with "EPC"

ANS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Subject: Image Page Label: [3] C2.2 INTERIM EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:08:25 PM Status: Color: Layer: Space:	
In the mean strategies of the latter is up to a strategies of the	Subject: Text Box Page Label: [3] C2.2 INTERIM EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:08:25 PM Status: Color: Layer: Space:	If the pre-development grading will include the rough cut of the roadways, please either show the rough grading elevation on the GEC plan or provide a detail to show the rough grading relative to the finished grade contours that are depicted on the plan. Please see an example below.
TO BE AND A SHORE WE	Subject: Page Label: [4] C2.3 FINAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:09:53 PM Status: Color: Layer: Space:	
	Subject: Page Label: [3] C2.2 INTERIM EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:10:00 PM Status: Color: Layer: Space:	
In the target of the design of	Subject: Text Box Page Label: [4] C2.3 FINAL EROSION CONTROL PLAN Author: dsdrice Date: 5/15/2021 8:11:31 PM Status: Color: Layer: Space:	This sheet is for information only pending final plat and site development plan approvals.
A CARL AND	Subject: Text Box Page Label: [6] C2.5 DETAILED OVERLOT GRADING PLAN Author: dsdrice Date: 5/15/2021 8:14:34 PM Status: Color: Layer: Space:	Is another type of wall proposed along Highway 24?



Subject: EPC ENG Review Page Label: [1] C2.0 COVER SHEET Author: dsdrice Date: 5/15/2021 8:17:24 PM Status: Color: Layer: Space:

GReese (5)

OFFSITE GRADING CITY OF CDOT PEI BEI BUBJECT: SW - Rectangle Page Label: [4] C2.3 FINAL EROSION CONTROL PLAN Author: GReese Date: 4/19/2021 9:21:14 AM Status: Color: Layer: Space:



Subject: SW - Comment Page Label: [4] C2.3 FINAL EROSION CONTROL PLAN Author: GReese Date: 4/19/2021 9:21:23 AM Status: Color: ■ Layer: Space:



Subject: Image Page Label: [8] C2.7 EROSION CONTROL DETAILS Author: GReese Date: 4/19/2021 9:23:22 AM Status: Color: Layer: Space:

Unescived Connect for Review #1: rocide deals for the following BMPs that are shown on the plan: Examples of Acceptable deals are also provided Subject: SW - Text Box Page Label: [8] C2.7 EROSION CONTROL DETAILS Author: GReese Date: 4/19/2021 9:23:27 AM Status: Color: ■ Layer: Space:

Unresolved Comment from Review #1: Include details for the following BMP's that are shown on the plan. Examples of acceptable details are also provided:

Revise for typo

Space:



Subject: SW - Text Box Page Label: [3] C2.2 INTERIM EROSION CONTROL PLAN Author: GReese Date: 4/19/2021 9:32:03 AM Status: Color: 🔳 Layer:

Unresolved Comment from Review #1: For a PUDSP review that includes an EGP, do not show final grading, SW piping, the detention basing, or C&G. Just show site grading with rough cut roads (with outline/edge of roads shown). It could be a separate drawing from the Initial and Final Erosion Control Plans, called Interim Erosion Control Plan. See EGP204 on EDARP as a good go-by.

This Final Erosion Control Plan will be needed for the Final Plat (SF) submittal and review.

Review #2 additional clarification:

- proposed SW piping and inlets, and FSD basin are reviewed with the Final Plat submittal. So they can be removed from this drawings (show FSD basin still as TSB).

- the next sheet C2.3 should be removed from this drawing set until the Final Plat submittal.