SHEET No. 01

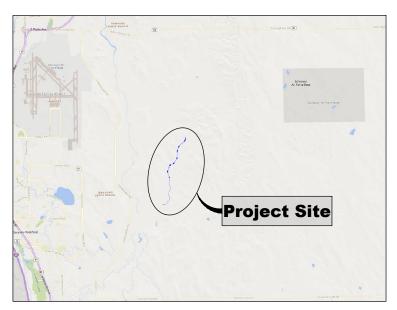
ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN

60% DESIGN GEC PLANS

THE LANDHUIS COMPANY

MODIFICATION GRADING AND EROSION CONTROL PLAN **MARCH 2023**

MATRIX PROJECT No. 21.1129.009



VICINITY MAP N.T.S.

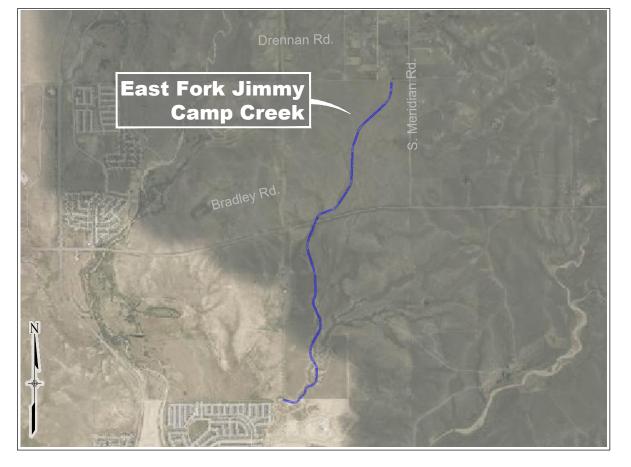
VERTICAL DATUM: THE ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

HORIZONTAL DATUM: THE COORDINATES FOR THIS PROJECT ARE NAD83/2011 COLORADO STATE PLANE CENTRAL ZONE GRID COORDINATES.

AERIAL PHOTO: PROVIDED BY AERIAL MAPPING SERVICES

BENCHMARK STATEMENT: THE BENCHMARK USED FOR THIS SURVEY IS FIMS MONUMENT NUMBER 202. A U.S. GEOLOGICAL SURVEY BRASS CAP STAMPED '11 HA 1947' IN A CONCRETE PAD, LOCATED ALONG DRENNAN ROAD, APPROXIMATELY 0.5 MILES EAST OF MARKSHEFFEL ROAD, APPROXIMATELY 200 FEET EAST OF A BRIDGE. THE MARK IS 32 FEET NORTH OF THE PAVEMENT, 23 FEET EAST OF A NORTH TO SOUTH FENCE LINE, AND 2 FEET NORTHEAST OF A POWER POLE."

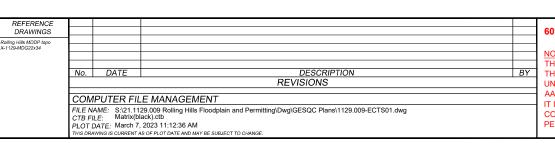
PROPERTY INFORMATION: PARCEL LINES AND PROPERTY OWNERSHIP INFORMATION SHOWN WERE PROVIDED BY AN ALTA SURVEY



LOCATION MAP SCALE: 1" = 4,000'

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PRELIMINARY BEEN APPROVED BY GOVERNING AGENCIES AND

ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN MODIFICATION GRADING AND EROSION CONTROL PLAN

TITLE SHEET

THE LANDHUIS COMPANY

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

60% DESIGN PLANS

THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERUN PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES

CITY OF COLORADO SPRINGS OWNER'S STATEMENT **ENGINEER'S STATEMENT** THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN 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 INCLUDING CONSTRUCTION CONTROL MEASURE INSPECTION REQUIREMENTS AND FINAL STABILIZATION REQUIREMENTS ACCORDING TO THE CITY OF COLORADO SPRINGS STORMWATER CONSTRUCTION HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY, OR ADVERSELY AFFECT THE SAFETY, USE, OR STABILITY OF A PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY. MANUAL. 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 PRINTED NAME: OWNER'S SIGNATURE:_____ PHONE NUMBER: PHONE: NAME OF OWNER:_____ TITLE:___ CONTRACTOR'S STATEMENT CITY OF COLORADO SPRINGS GRADING AND EROSION CONTROL REVIEW I WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN/CSWMP THIS GRADING AND EROSION CONTROL PLAN IS FILED IN ACCORDANCE WITH CITY CODE. THIS PLAN IS INCLUDING CONSTRUCTION CONTROL MEASURE INSPECTION REQUIREMENTS AND FINAL STABILIZATION REVIEWED IN ACCORDANCE WITH THE STORMWATER CONSTRUCTION MANUAL; LATEST REVISIONS. REQUIREMENTS. 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 NAME OF CONTRACTOR: _____ DATE: AUTHORIZED SIGNATURE:______ DATE: ___ PHONE NUMBER:__ ADDRESS:

EL PASO COUNTY

ENGINEER'S STATEMENT

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

ENGINEER OF RECORD SIGNATURE

DATE

OWNER'S STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN

THE LANDHUIS COMPANY 212 N WAHSACH AVE, SUITE 301 COLORADO SPRINGS, CO 80903 DATE

EL PASO COUNTY

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

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

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

JOSHUA PALMER, PE
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

No. DATE REVISIONS COMPUTER FILE MANAGEMENT

FILE NAME: \$\infty\!21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\GESQC Plans\1129.009-ECTS01.dwg CTB FILE: Matrix(black).ctb LOT DATE: March 7, 2023 11:13:24 AM

EMAIL ADDRESS:__

60% DESIGN PLANS

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Excellence by Design

PRELIMINARY

BEEN APPROVED BY GOVERNING AGENCIES AND ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN MODIFICATION GRADING AND EROSION CONTROL PLAN

THE LANDHUIS COMPANY

SIGNATURE PAGE

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.	DESIGNED BY:	TKM FAI			DATE ISSUED:	MARCH 2023	DRAWING No.
PROJECT No. 21.1129.009	DRAWN BY: CHECKED BY:		HORIZ. VERT.	N/A N/A	SHEET	02 OF 22	TS02

- 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 AND 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 M54 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.
- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS.
- ALL CONSTRUCTION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION MEASURES ARE IMPLEMENTED. TEMPORARY CONSTRUCTION CONTROL MEASURES MUST BE REMOVED PRIOR TO PERMIT CLOSFOLIT
- 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 MANUFACTURERS 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 LINTIL 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.

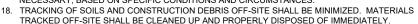
STANDARD GEC PLAN NOTES - EL PASO COUNTY

- 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 OR
 OFF-SITE WATERS, INCLUDING WETLANDS.
- 2. 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.
- 3. 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 SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- I. ONCE THE ESQCP 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 GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING 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.
- 6. 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.
- 8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. 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.
- 11. 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).
- 12. ANY TEMPORARY OR PERMANÉNT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF-SITE.
- 13. 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 SUFFACE 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.
- 14. DURING DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER MAY BE DISCHARGED ON-SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE
- 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 REGULATORY

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

7. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, 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.



- 19. 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.
- 20. 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.
- 21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON-SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON-SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- 23. 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
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- 26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. 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.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY [COMPANY NAME, DATE OF REPORT] 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 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

REFERENCE DRAWINGS

INDICATE DESCRIPTION BY

NO. DATE DESCRIPTION BY

REVISIONS

COMPUTER FILE MANAGEMENT

FILE NAME: \$\(\frac{1}{2}\)1.1129.009 Rolling Hills Floodplain and Permitting\(\frac{1}{2}\)Dwg\(\frac{1}{2}\)GESQC Plans\(\frac{1}{2}\)1.09-GN01.dwg

CTB FILE: Matrix\(\frac{1}{2}\)AM

THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

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FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

LANDHUIS COMPANY

ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN MODIFICATION GRADING AND EROSION CONTROL PLAN

SHEET No. 03

Know what's below.

Call before you dig.

GENERAL NOTES

BY: JDH SCALE DATE ISSUED: MARCH 2023 DRAWING NO.
TKM HORIZ. N/A DIFFER 100 OF 100 CN/O1

- CONSTRUCTION VEHICLES SHOULD BE KEPT OUT OF A WATERWAY TO THE MAXIMUM EXTENT PRACTICABLE.
- WHERE IN-CHANNEL WORK IS NECESSARY, STEPS SUCH AS TEMPORARY CHANNEL DIVERSIONS MUST BE TAKEN TO STABILIZE THE WORK AREA AND CONTROL EROSION DURING CONSTRUCTION.
- WHERE AN ACTIVELY-FLOWING WATERCOURSE MUST BE CROSSED REGULARLY BY CONSTRUCTION VEHICLES. A TEMPORARY CROSSING SHOULD BE PROVIDED. THREE PRIMARY METHODS ARE AVAILABLE: (1) A CULVERT CROSSING, (2) TEMPORARY BRIDGE, AND (3) A STREAM FORD. SEE THE TEMPORARY STREAM CROSSING FACT SHEETS.
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- A PERMIT IS REQUIRED FOR PLACEMENT OF FILL IN A WATERWAY UNDER SECTION 404 OF THE CLEAN WATER ACT. THE LOCAL OFFICE OF THE USACE SHOULD BE CONTACTED CONCERNING THE REQUIREMENTS FOR OBTAINING A 404 PERMIT. IN ADDITION, A PERMIT FROM USFWS MAY BE NEEDED IF THREATENED OR ENDANGERED SPECIES ARE OF CONCERN IN THE WORK AREA. TYPICALLY, THE USFWS ISSUES ARE ADDRESSED IN CONJUNCTION WITH THE 404 PERMIT IF ONE IS REQUIRED A FLOODPLAIN DEVELOPMENT PERMIT AND OTHER LOCAL PERMITS MAY ALSO BE REQUIRED.
- WHEN WORK TAKES PLACE WITHIN A CHANNEL. A TEMPORARY WATER DIVERSION TO BYPASS THE WORK AREA IS TYPICALLY REQUIRED. SEE THE DIVERSION CHANNEL/DITCH BMP FACT SHEET FOR CRITERIA AND DESIGN DETAILS.
- TO THE EXTENT PRACTICAL, CONSTRUCTION IN A WATERWAY SHOULD BE SEQUENCED TO BEGIN AT THE MOST DOWNSTREAM POINT AND WORK PROGRESSIVELY UPSTREAM INSTALLING REQUIRED CHANNEL AND GRADE CONTROL
- COMPLETE WORK IN SMALL SEGMENTS, EXPOSING AS LITTLE OF THE CHANNEL AT A TIME AS PRACTICAL. KEEP EQUIPMENT OPERATORS CONTAINED IN IMMEDIATE WORK AREA AND AVOID EXCESSIVE COMPACTING OF THE SOIL SURFACE BECAUSE IT INHIBITS REVEGETATION.
- WHERE FEASIBLE, IT IS BEST TO PERFORM IN-CHANNEL WORK BETWEEN OCTOBER 1 AND MARCH 31 IN COLORADO. THIS IS THE PERIOD WHEN THE CHANCES OF FLASH FLOODS AND FLOWS HIGHER THAN THE 2-YEAR FLOOD PEAK FLOWS ARE LESS LIKELY.
- DURING THE PROCESS OF CUT AND FILL, AVOID LETTING SIDE-CAST OR WASTE MATERIAL ENTER WATERWAYS OR PLACING IT ON UNSTABLE AREAS. INSTEAD, EFFICIENTLY MOVE EXCAVATED MATERIAL TO AREAS NEEDING FILL OR TO A STOCKPILE. FOR STREAM RESTORATION/STABILIZATION PROJECTS, CONSULTING WITH A FLUVIAL GEOMORPHOLOGIST ON STREAM STABILITY ISSUES MAY BE PRUDENT.

GRADING NOTES:

- 1. FINISH GRADES: FINISHED GRADE ELEVATION SHALL BE ESTABLISHED FROM THE PROPOSED CONTOURS SHOWN ON THE GRADING PLANS. DEPTHS AND DIMENSIONS SHOWN ON THE PLAN, SECTIONS, AND PROFILES SUPERSEDE PROPOSED CONTOURS SHOWN ON THE GRADING PLANS. ACCEPTABLE GRADING TOLERANCES ARE +/- 0.20 FEET OUTSIDE OF THE BANKFULL CHANNEL AND +/-0.10 FEET WITHIN THE BANKFULL CHANNEL.
- 2. FILL MATERIAL: MATERIALS USED FOR FILL OR EMBANKMENT CONSTRUCTION SHALL CONSIST OF APPROVED GRANULAR SOIL MATERIAL ACQUIRED FROM PROJECT EXCAVATIONS OR FROM OFF-SITE SOURCES. EXCAVATED WEATHERED AND UNWEATHERED BED ROCK MATERIALS SHALL NOT BE USED AS FILL MATERIAL UNLESS OTHERWISE APPROVED. FROZEN MATERIALS SHALL NOT BE USED IN CONSTRUCTION OF EMBANKMENTS. EXCESS EXCAVATED NATIVE SOILS WHICH ARE NOT USED AS EMBANKMENT OR BACKFILL SHALL BE STOCKPILED AS DIRECTED BY THE OWNER
 - SUITABLE ON-SITE AND IMPORTED FILL MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

Standard Sieve	Percent P	assing
Size Size	Embankment Fill Material	Channel Fill Material
3 inch	100	100
No. 200	5-20	5-20
Liquid Limit	30 or less	Not Plastic
Plasticity Index	10 or less	Not Plastic

b. IN-PLACE MOISTURE DENSITY TESTS WILL BE PERFORMED TO ENSURE THAT FILL COMPLIES WITH CITY OF COLORADO SPRINGS STANDARDS.

GENERAL GEC PLAN NOTES:

- PROPERTY LINES, PARCEL NUMBERS, AND PROPERTY OWNERSHIP SHOWN IN DESIGN PLANS ON SHEET EX01-02
- EXISTING VEGETATION IS NO NOTABLE SPECIES (GRASSES AND WEEDS).
- PROPOSED REVEGETATION AND EROSION CONTROL FABRIC EXTENTS PROVIDED IN THE DESIGN PLANS.
- EXISTING AND PROPOSED FEMA 100-YEAR FLOODPLAINS ARE SHOWN ON EX01-02 AND DR01-02, RESPECTIVELY
- PROJECT STAGING WILL BE NOTED IN LATER DESIGN PLANS. FULL PROJECT BUILD OUT SHOWN FOR 60% SUBMITTAL

RECEIVING WATERS:

EAST FORK JIMMY CAMP CREEK IS A TRIBUTARY OF JIMMY CAMP CREEK, PART OF THE LARGER FOUNTAIN CREEK WATERSHED.

THIS WORK IS NOT LOCATED WITHIN THE CITY OF COLORADO SPRINGS STREAMSIDE OR HILLSIDE OVERLAY.

EXISTING 100-YEAR FEMA FLOODPLAIN SHOWN IN THE DESIGN PLANS.

THE EROSION CONTROL PLAN PRESENTED IN THESE DRAWINGS SERVES AS A MINIMUM FOR THE REQUIREMENTS OF EROSION CONTROL DURING CONSTRUCTION. THE CONTRACTOR HAS THE ULTIMATE RESPONSIBILITY FOR DEVELOPING AN ADEQUATE EROSION CONTROL PLAN THAT IS COMPATIBLE WITH THEIR PLAN FOR EXECUTING THE WORK AND FOR PROVIDING ADEQUATE EROSION CONTROL AND WATER QUALITY THROUGHOUT THE DURATION OF THE PROJECT. THEREFORE, IF THE PROVIDED PLAN IS NOT WORKING SUFFICIENTLY TO PROTECT THE PROJECT AREAS, THEN THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES AS REQUIRED TO OBTAIN THE REQUIRED PROTECTION.

DEWATERING / FLOW DIVERSION IS NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS REGARDING DEWATERING / FLOW DIVERSION MEANS AND METHODS.

TEMPORARY SEDIMENT PONDS NOT SHOWN. IF REQUIRED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS REGARDING SEDIMENT PONDS MEANS AND METHODS.

IF ADDITIONAL STAGING AREAS, STOCKPILES, OR CONCRETE WASHOUT AREAS ARE REQUIRED. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE REGULATIONS. ADDITIONAL AREAS MUST NOT RESULT IN ADDITIONAL LAND DISTURBANCE.

NON-STRUCTURAL CONTROL MEASURES INCLUDE:

- SEASONAL PLANNING CONSIDERATIONS
- LIMITING OF DISTURBED AREAS

TOTAL LIMITS OF DISTURBANCE: 159.2 AC. ANTICIPATED CONSTRUCTION: WINTER 2023 ANTICIPATED FINAL STABILIZATION: 2024

NOTE:

THE FOLLOWING ITEMS ARE NOT APPLICABLE TO THESE PLANS:

- NO BUILD AREAS
- ASPHALT, CONCRETE BATCH PLANTS, AND/OR MASONARY MIX STATIONS
- PRESERVATION EASEMENTS

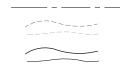
OPINION OF PROBABLE EROSION CONTROL COST

1.	VEHICLE TRACKING CONTROL (3) EACH AT \$1,325.00)	\$	3,975.00
2.	EROSION CONTROL BLANKET, COCONUT (500,354) S	SY AT \$6.00	\$3,0	002,124.00
3.	EROSION CONTROL BLANKET, KOIR (66,832) ST AT \$	20.00	\$1,3	336,640.00
4.	SILT FENCE (1,423) LF AT \$2.50		\$	3,557.50
5.	CONCRETE WASHOUT AREA (4) EACH AT \$1,535.00		\$	6,140.00
6.	CHECK DAM (3) EACH AT \$386.00		\$	1,158.00
		SUB TOTAL	\$4,3	353,594.50
MA	INTENANCE CONTINGENCY (40%)	\$1,7	741,437.80	



SHEET No. 04

STANDARD SYMBOLS

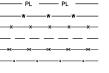


CENTER LINE

EXISTING CONTOURS

PROPOSED CONTOURS

LEGEND



EXISTING PROPERTY LINE EXISTING WATER LINE EXISTING FENCE LINE EXISTING EASEMENT EXISTING OVERHEAD ELECTRIC LINE



PROPOSED SOIL RIPRAP

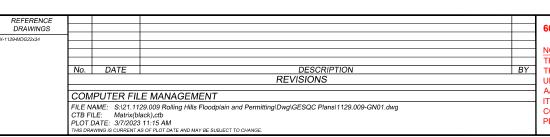
EXISTING GAS LINE



PROPOSED SCULPTED CONCRETE DROP STRUCTURE



FLOW DIRECTION



60% DESIGN PLANS

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW JNDER THE AUTHORITY OF AARON SUTHERUN PE T IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES



TOTAL

\$6 095 032 30



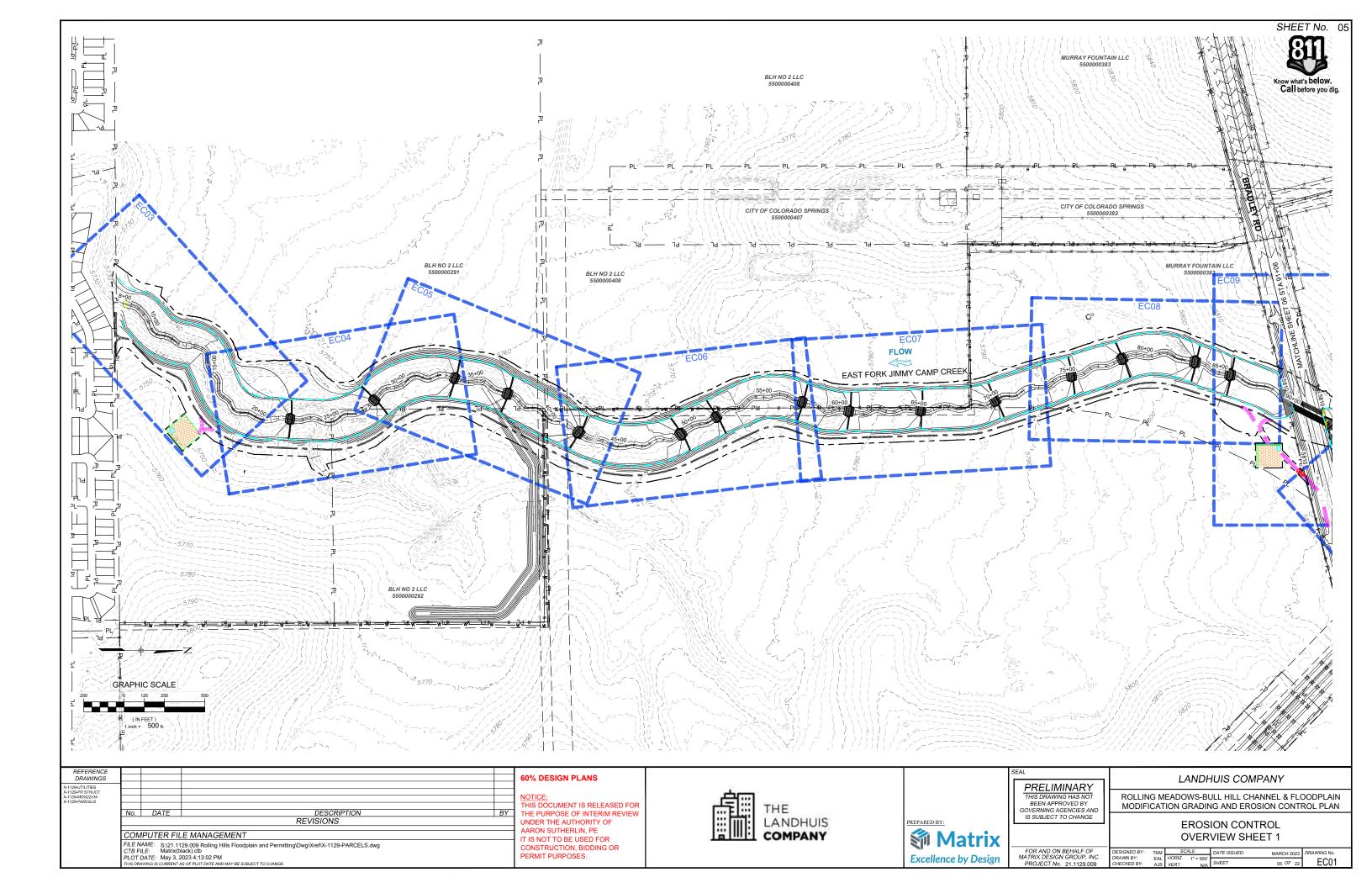
Excellence by Design

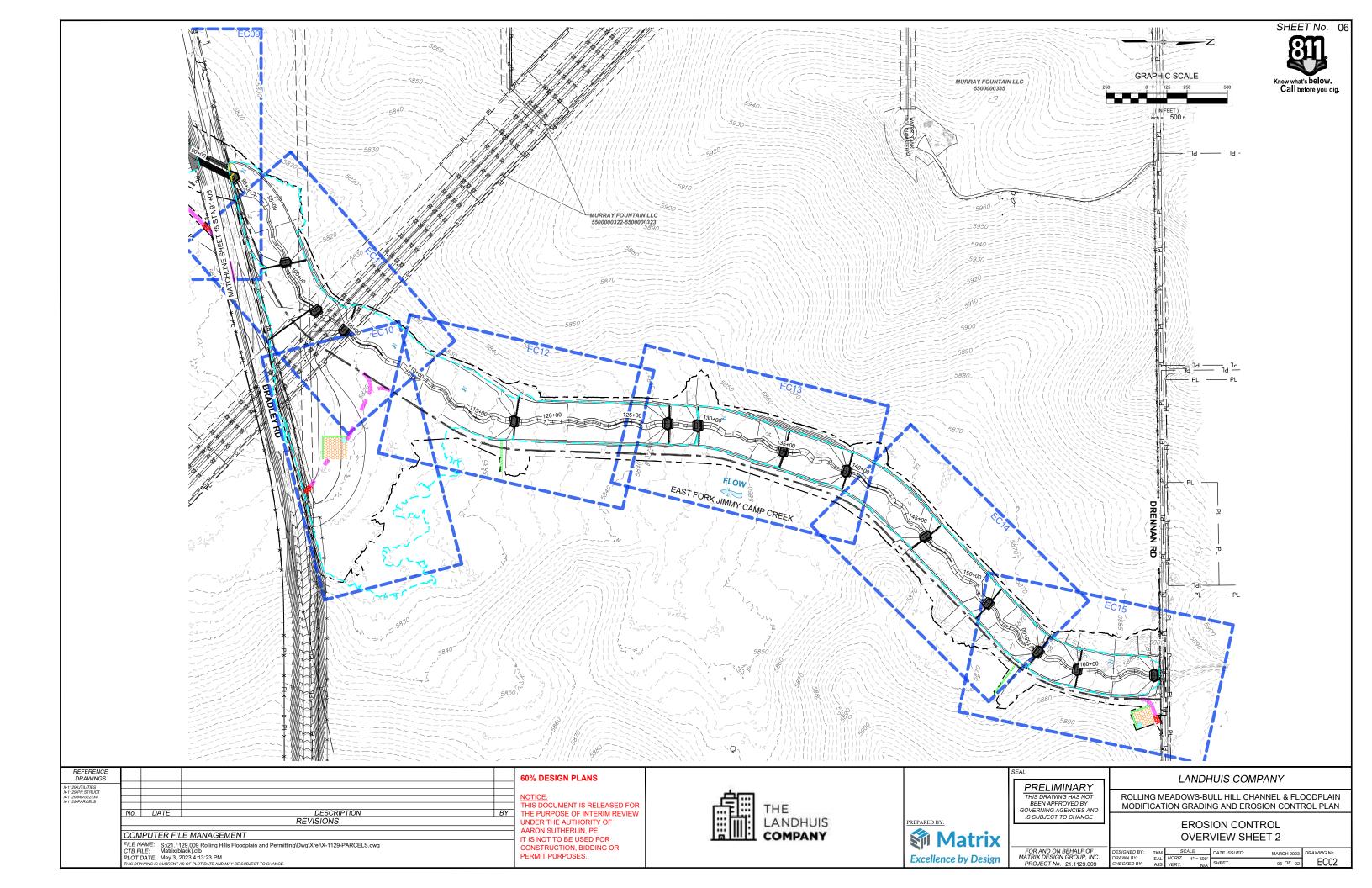
PRELIMINARY BEEN APPROVED BY GOVERNING AGENCIES AND

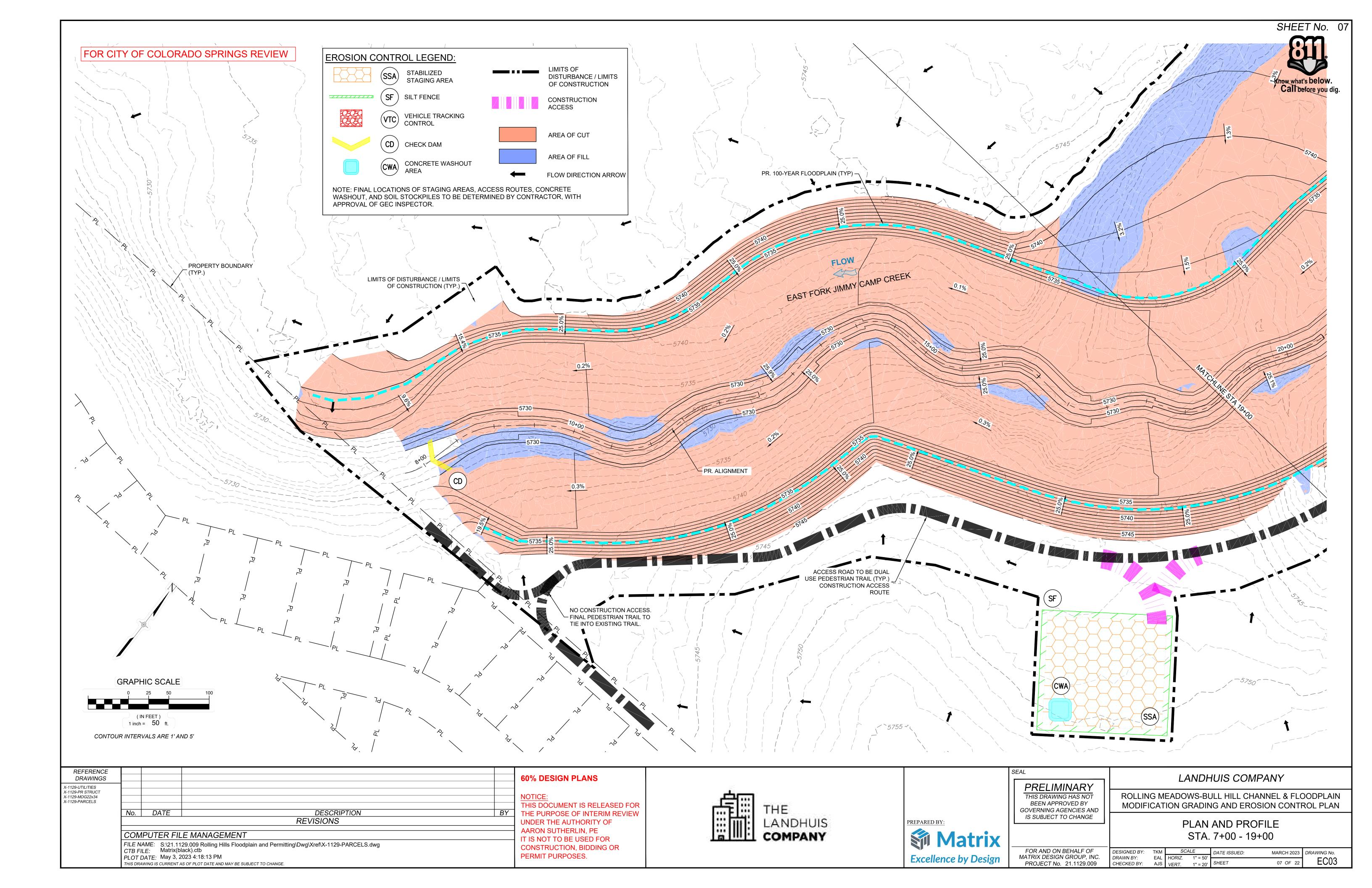
ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN MODIFICATION GRADING AND EROSION CONTROL PLAN

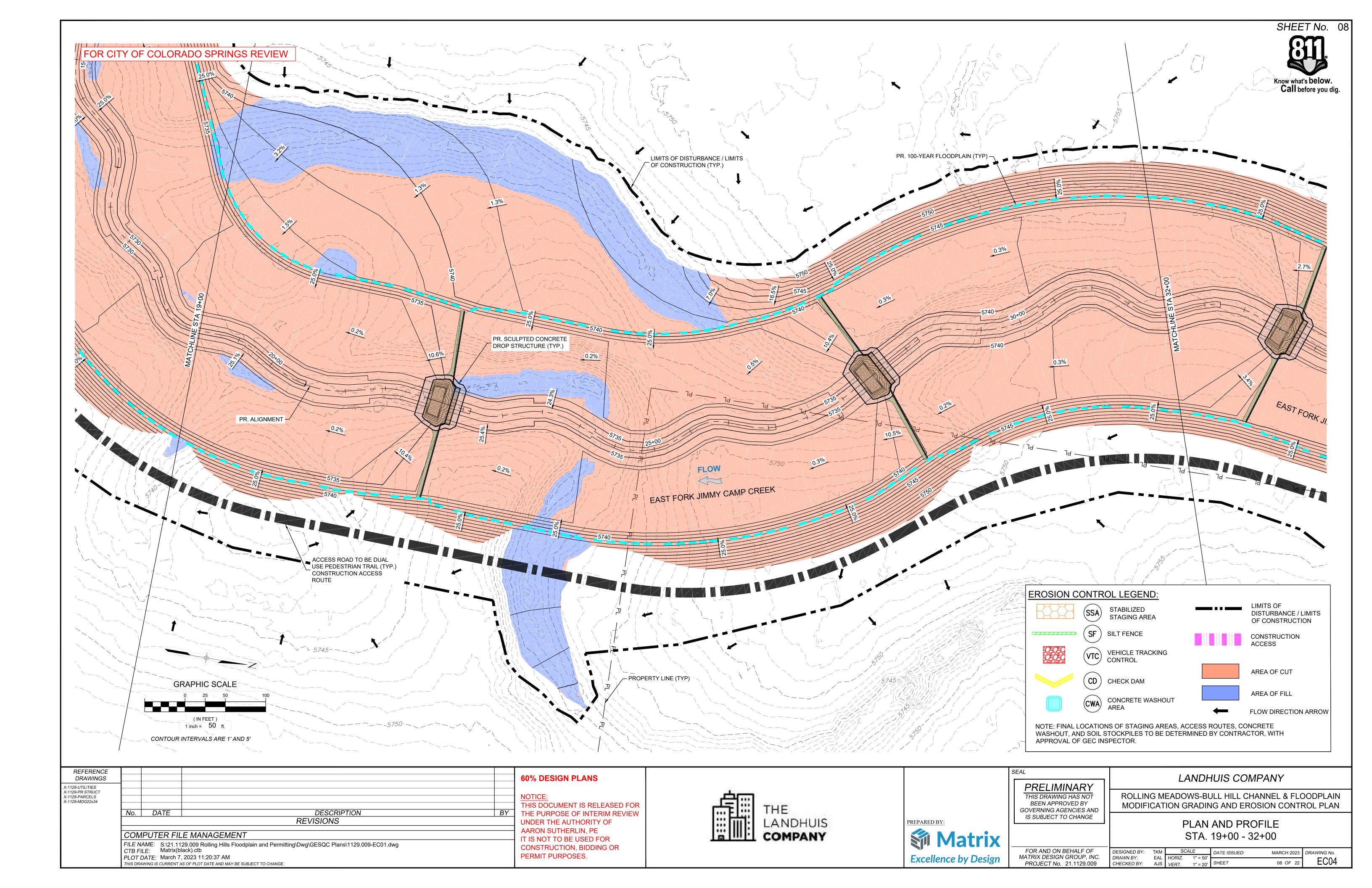
GENERAL NOTES

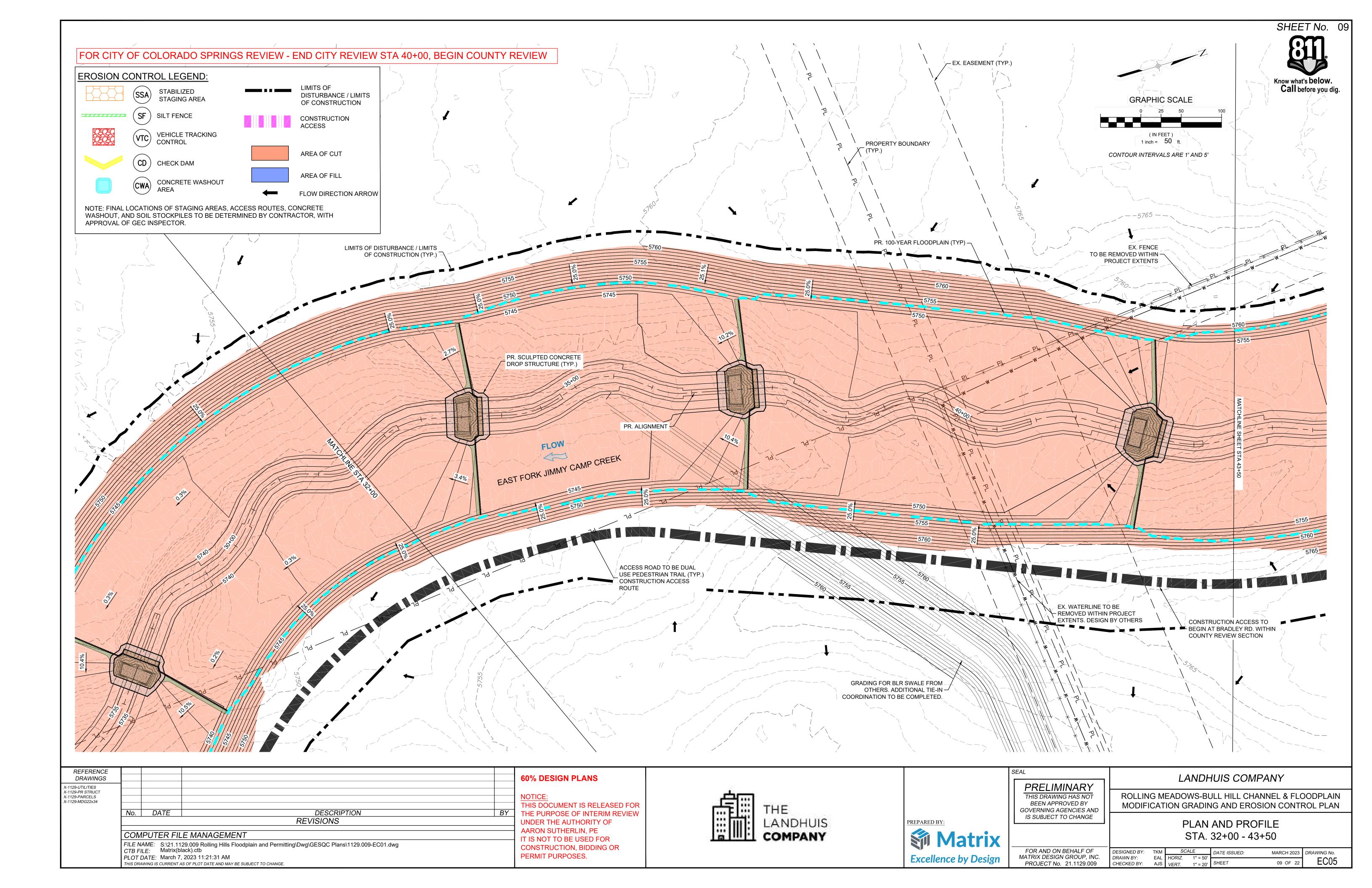
LANDHUIS COMPANY

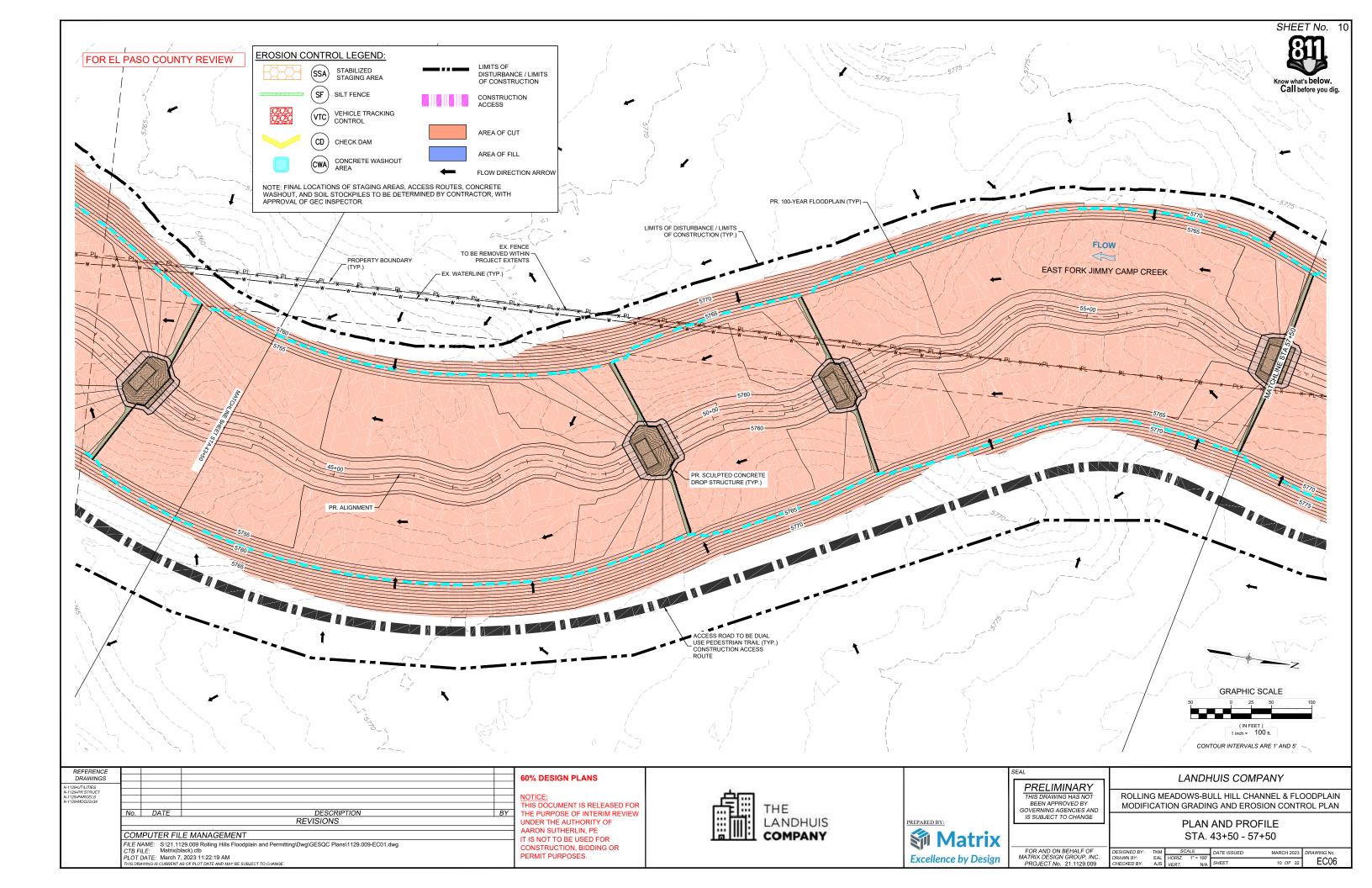


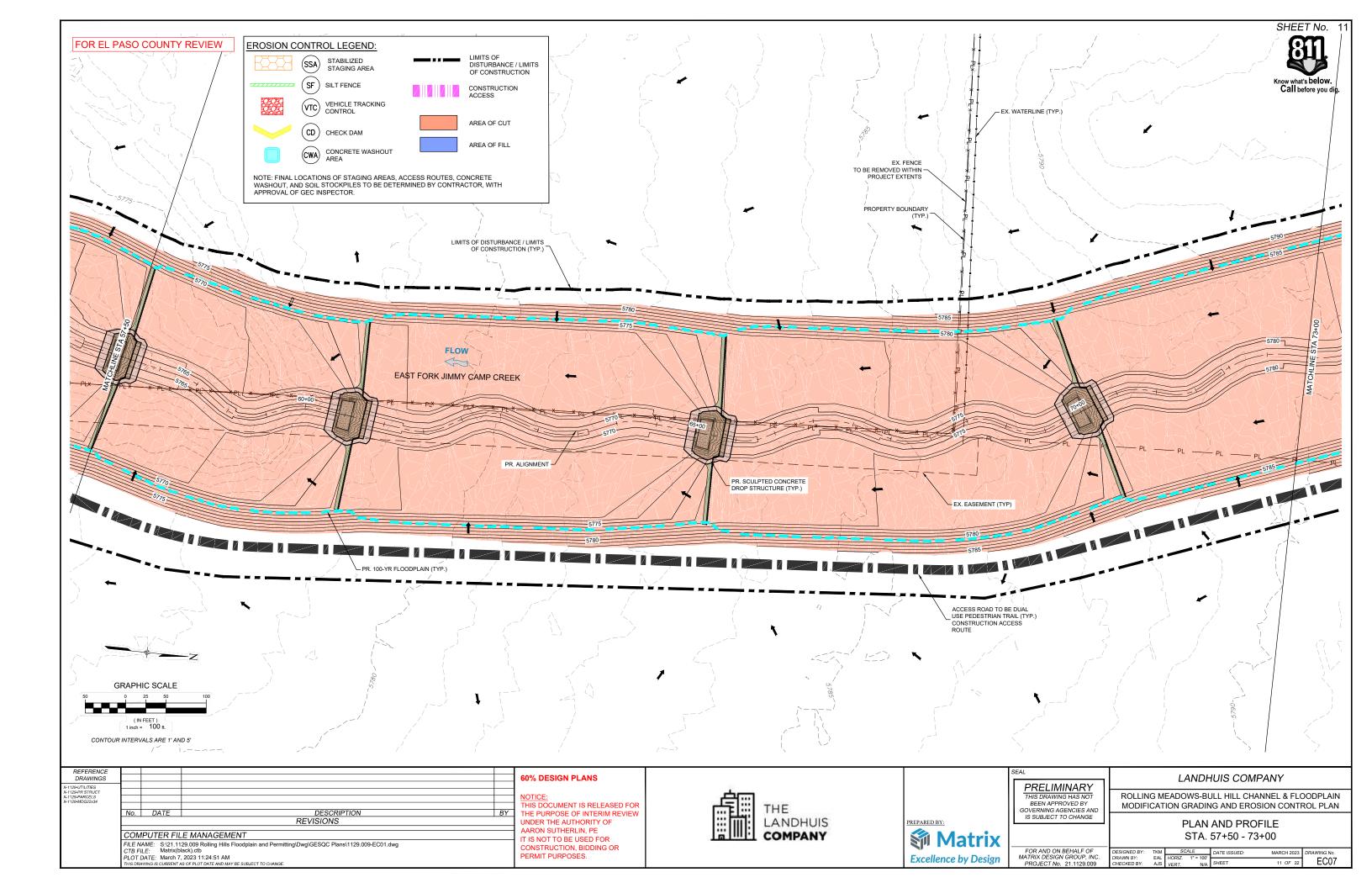


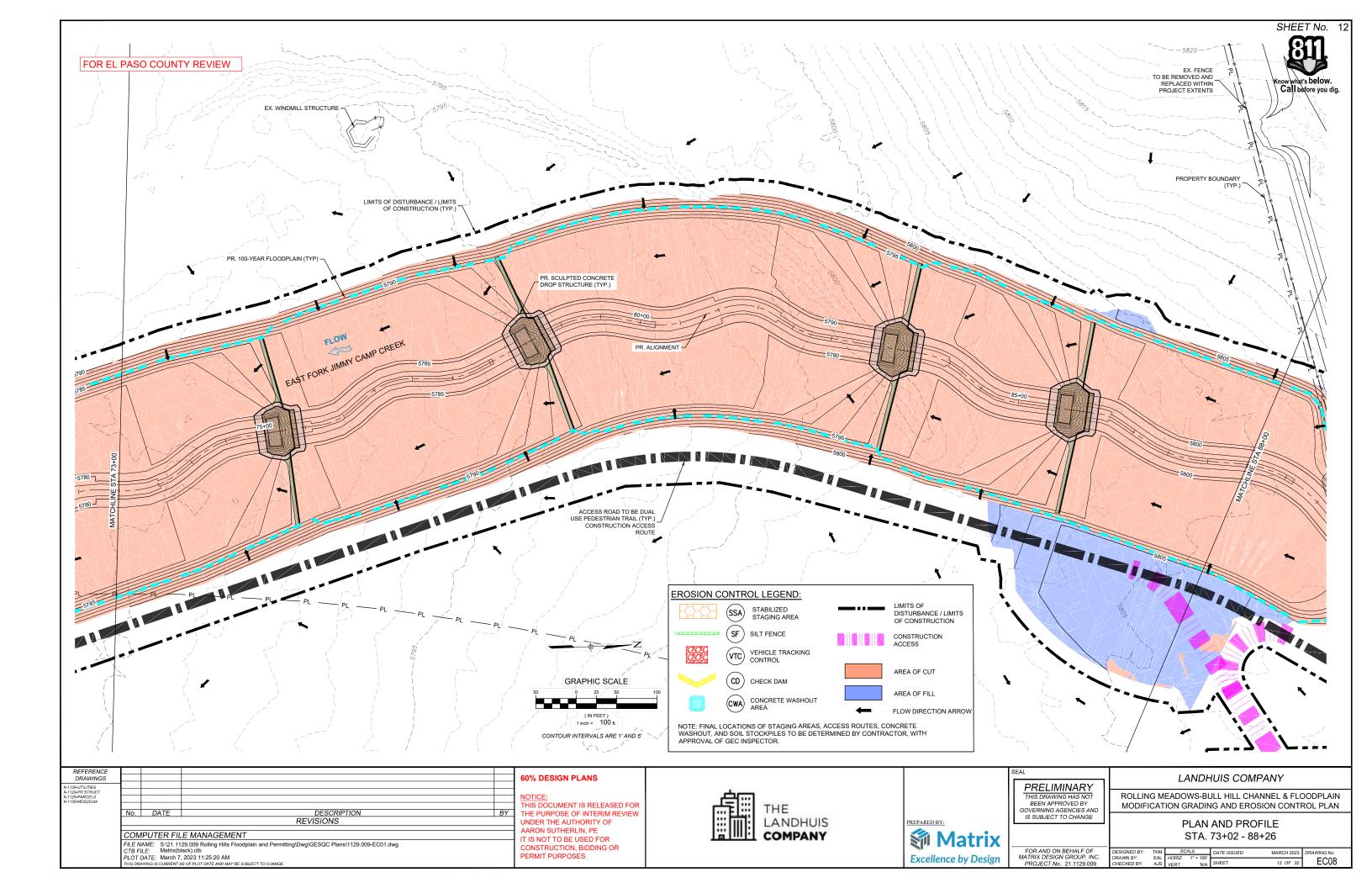


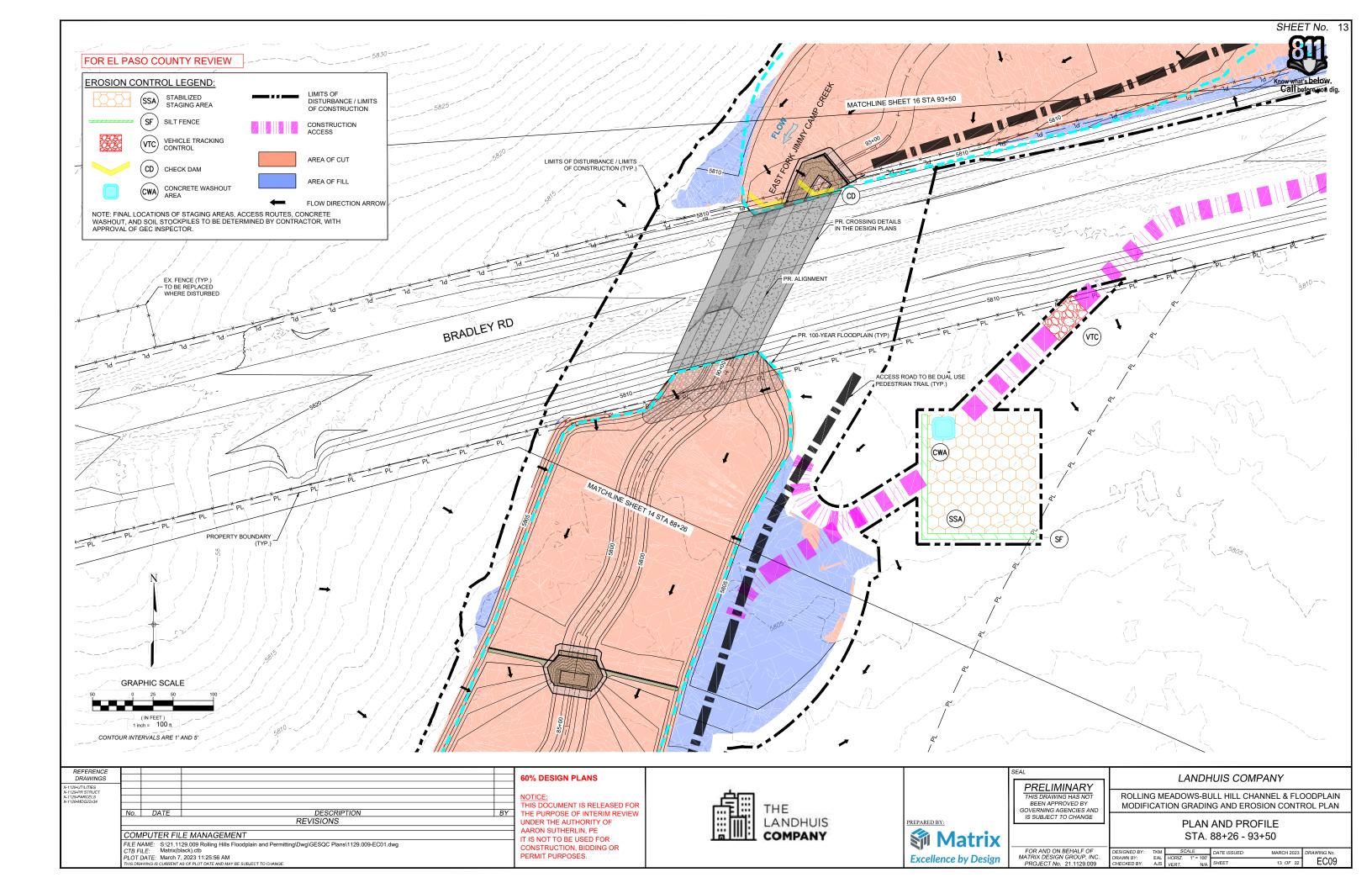


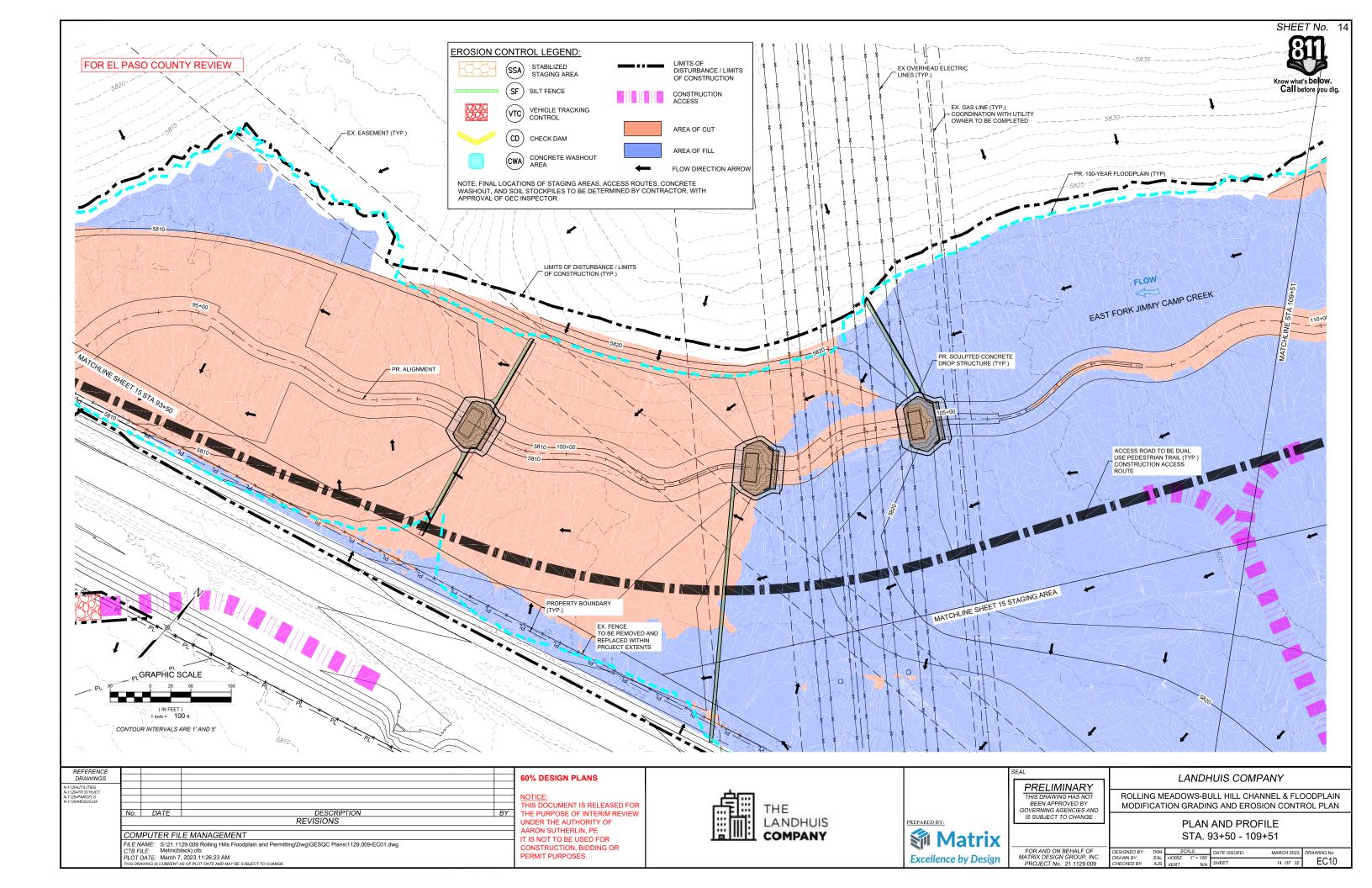


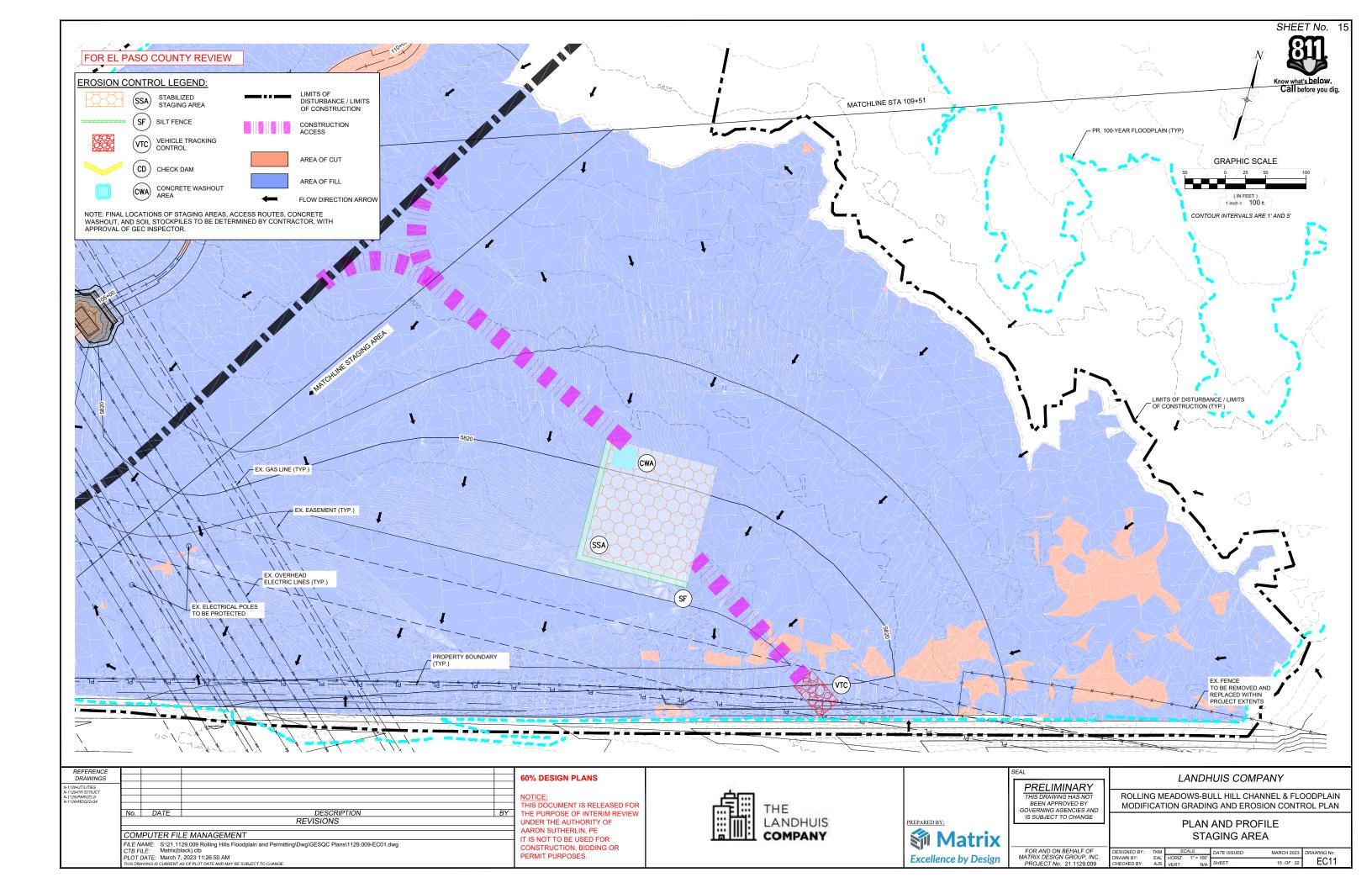


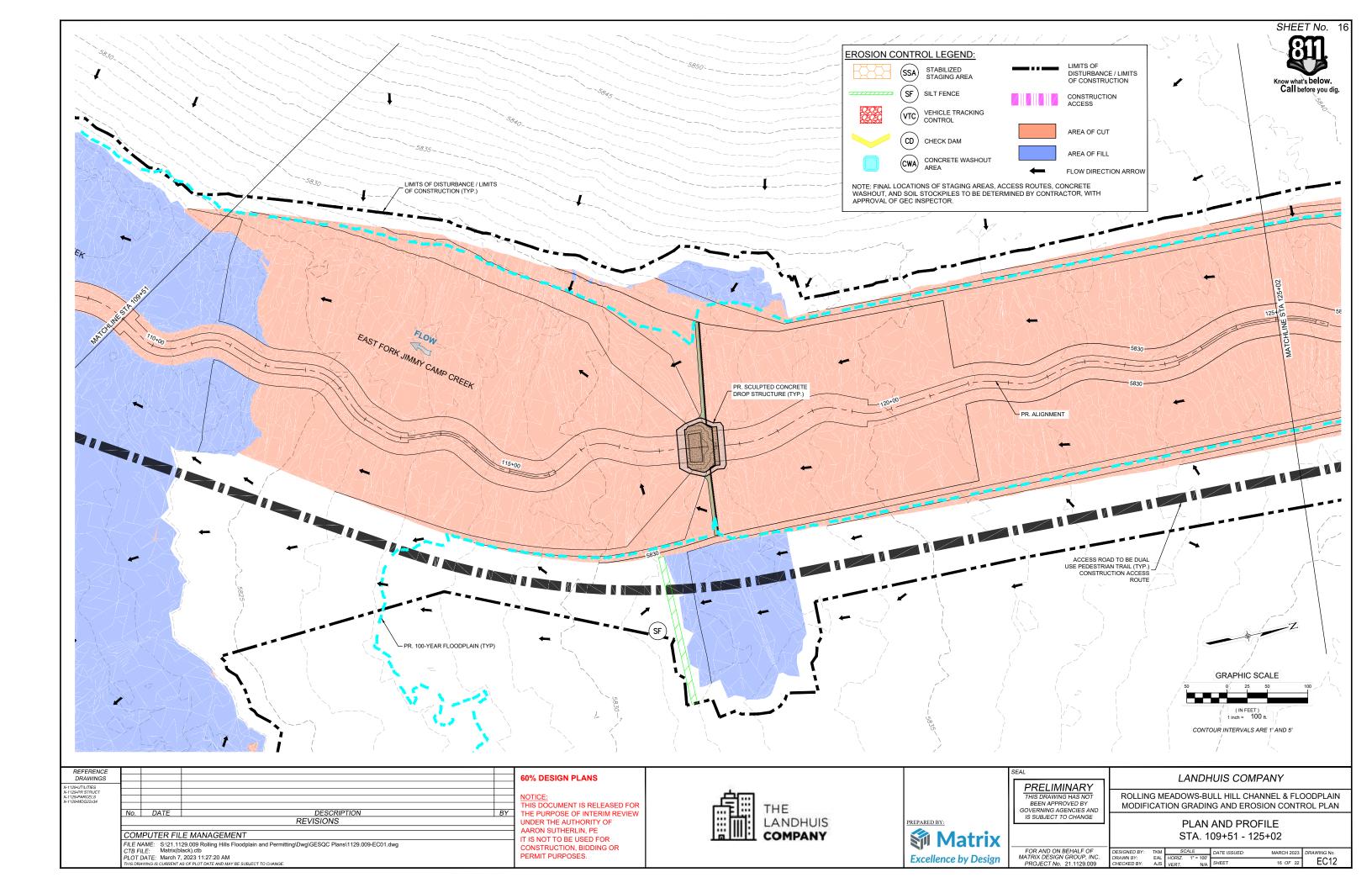


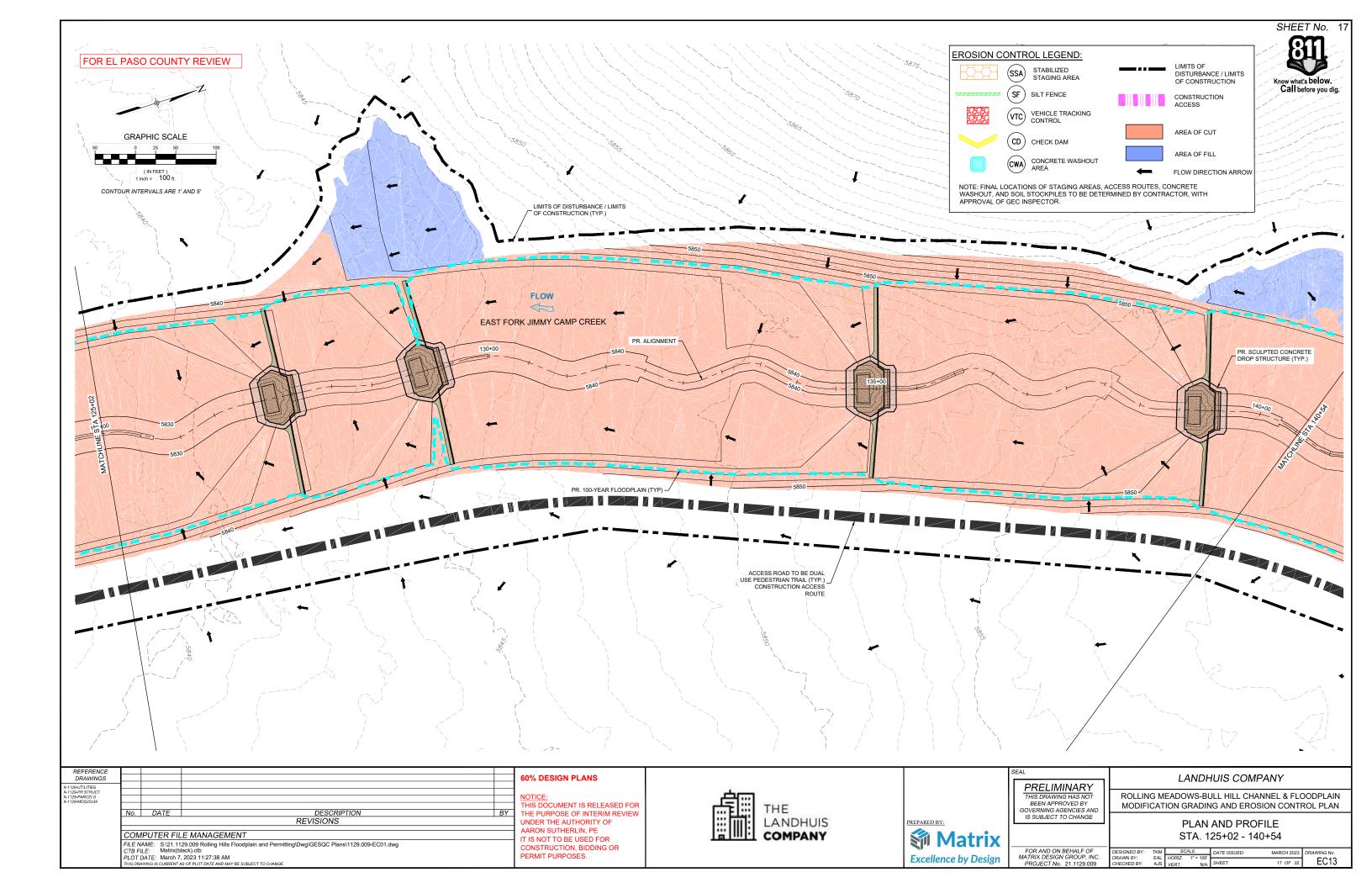


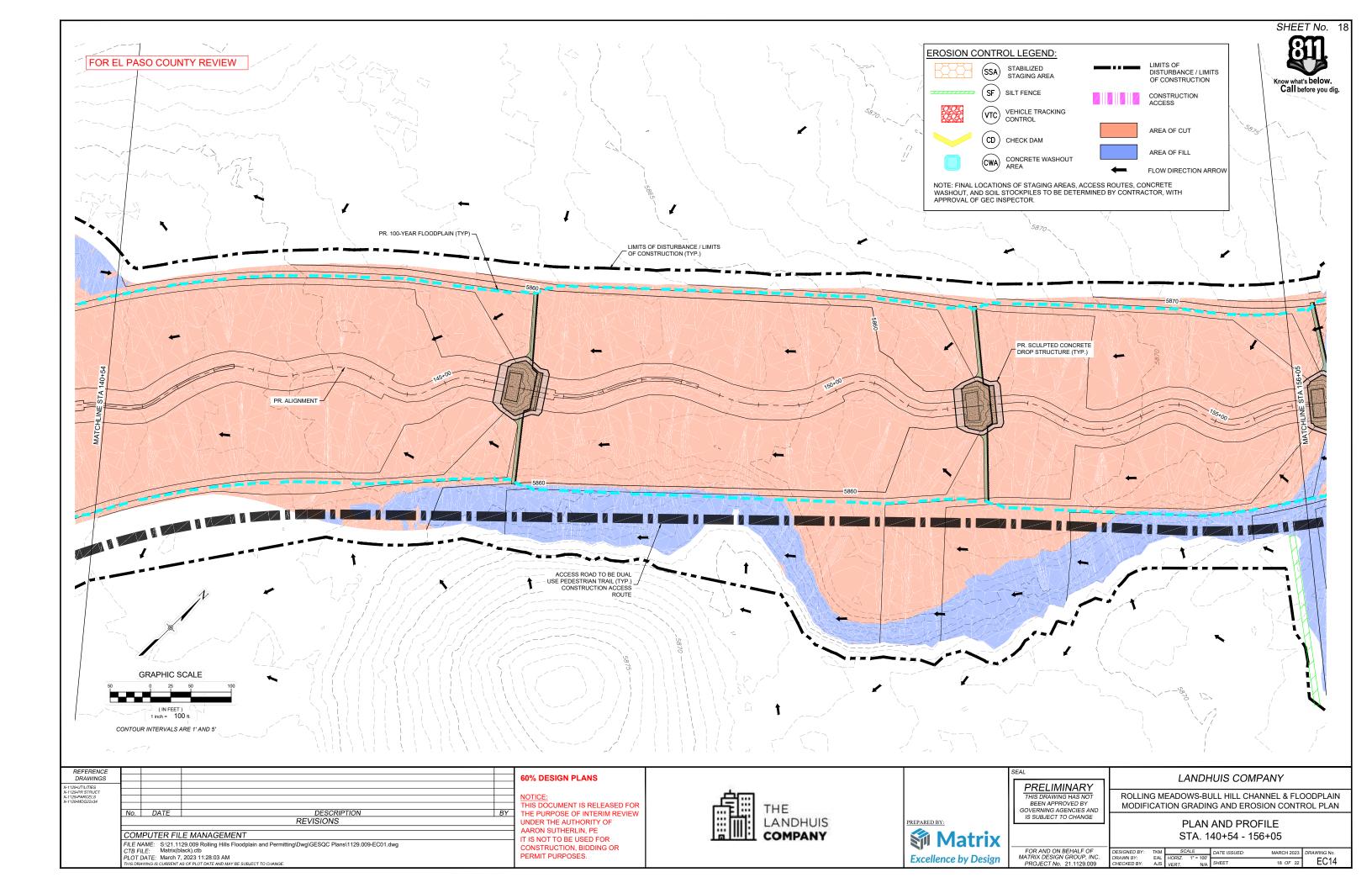


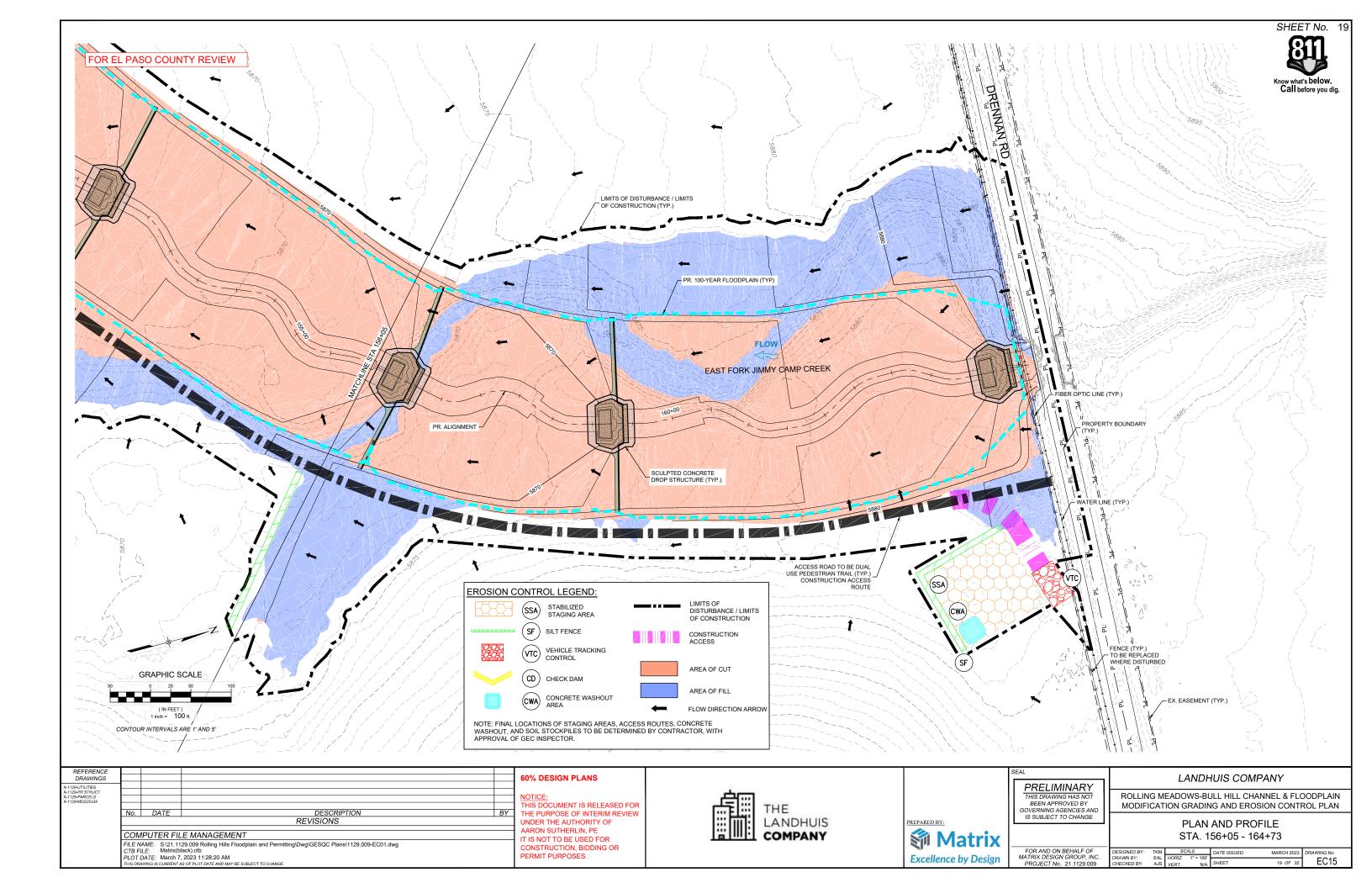


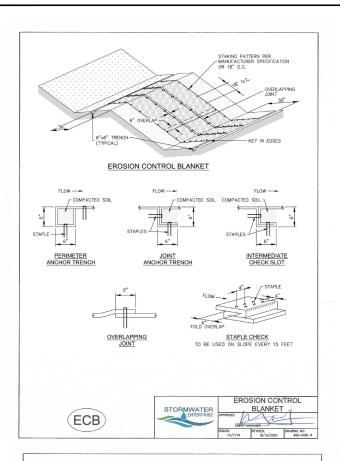














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(ECB)

MAINTENANCE NOTES

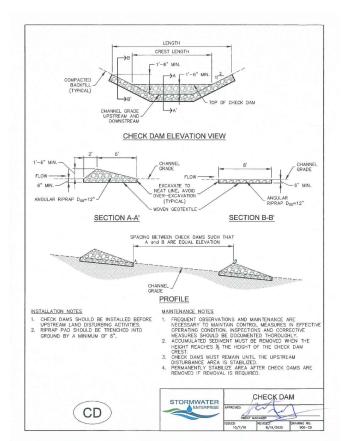
- AMITEMANCE NOTES.

 **REQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN PERFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED CORRECTIVE MEASURES SHOULD BE DOCUMENTED TO EVENTUALLY BIODGERADE, IRM MUST BE REMOVED AT THE DISCRETION OF THE GOE INSPECTION.

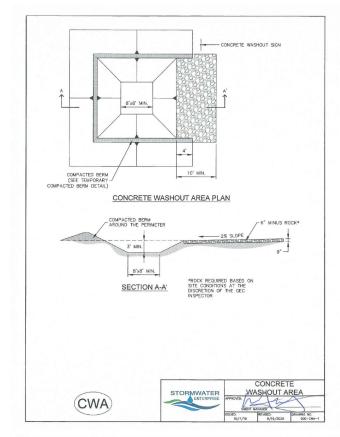
 **ANY EROSION CONTROL BLANNET PULLED OUT, TORN, OR OTHERWAYS, DAWAGD BLANKET, POLICE OF THE MEASURE OF T

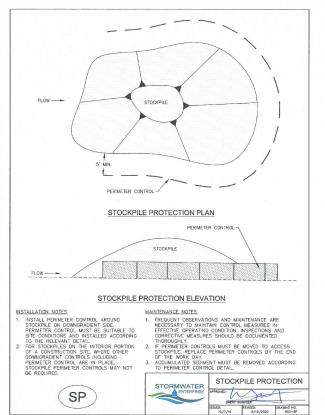
DEAM	VE I WIN	ILINIAL	JI LOII	CATIONS
TYPE	COCONUT	STRAW	EXCELSIOR CONTENT	RECOMMENDED NETTING
STRAW	-	100%	-	DOUBLE/ NATURAL
STRAW- COCONUT	30% MIN.	70% MAX.		DOUBLE/ NATURAL
COCONUT	100%	_	-	DOUBLE/ NATURAL
EXCELSIOR	-	-	100%	DOUBLE/ NATURAL





EROSION CONTROL BLANKET NOT FOR USE IN CREEK INVERT.



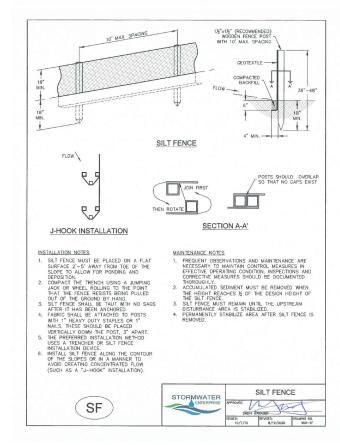


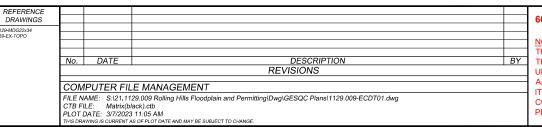
INSTALLATION NOTES



SHEET No. 20

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60% DESIGN PLANS

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THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.





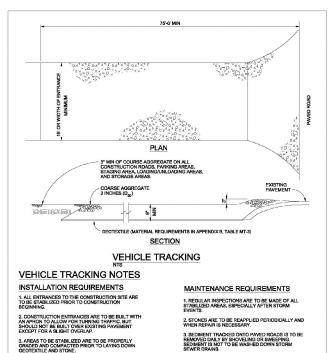
SEAL

EAL	LANDHUIS COMPANY
	ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN
	60% - MODIFICATION GRADING AND EROSION CONTROL PLAN

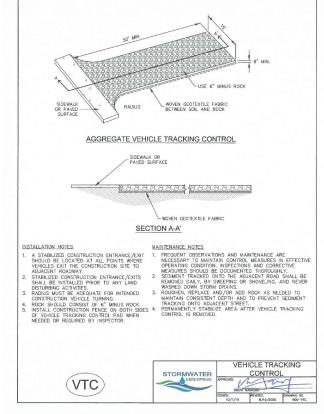
TYPICAL EROSION CONTROL DETAILS

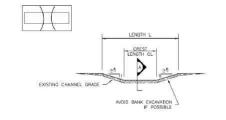
FOR AND ON BEHALF OF	DESIGNED BY:	TKM	SCALE		DATE ISSUED:	JANUARY 2023	DRAWING No.
MATRIX DESIGN GROUP, INC.	DRAWN BY:	EAL	HORIZ.	N/A			E040
PROJECT No. 21.1129.009	CHECKED BY:	AJS	VERT.	N/A	SHEET	20 OF 22	EC16

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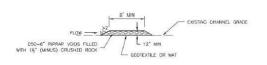
City of Colorado Springs





FORD CROSSING SECTION

Temporary Stream Crossing (TSC)



SECTION A

TEMPORARY STREAM CROSSING INSTALLATION NOTES

1. SEE PLAN YIEW FOR:

-ICOATIONS OF ISMFORARY STREAM CROSSINGS
-STREAM GROSSING THE FORD, CLLYSTF, OR FILME).

-FOR FORD CROSSING LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).

-FOR QUUERT CROSSING LENGTH (L), CREST LENGTH (CL), CROSSING HEIGHT (H),
DEPTH (D), CULVERT DAMETER (CD), AND NUMBER, TYPE AND CLASS OR GAUGE OF
OULKERTS.

TEMPORARY STREAM CROSSING DIMENSIONS, D50, AND NUMBER OF CULYERTS INDICATED (FOR CULYERT CROSSING) SHALL BE CONSIDERED MINIMUM DIMENSIONS, ENGINEER MAY ELECT TO INSTALL LARGER FACILITIES, ANY DAMAGE TO STREAM CROSSING OR EXISTING STREAM CHANNEL DURING BASERLOW OF RLOOD EVENTS SHALL BE PROMPTLY REPARED.

3. SEE MAJOR DRAINAGE CHAPTER FOR RIPRAP GRADATIONS.

4, WHERE FAILURE OF A STREAM CROSSING CAN RESULT IN SIGNIFICANT DAMAGE OR HARM IT MUST BE DESIGNED BY A STRUCTURAL ENGINEER.

TEMPORARY STREAM CROSSING MAINTENANCE NOTES

IMSPECT BMP» EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION
MAINTENANCE OF BMP® SHOULD BE PROACTIVE, NOT PECATIVE. INSPECT BMP® AS SOON AS
POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FORMAC 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 THOROUGHY.

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

4. REMOVE SEDIMENT ACCUMULATED UPSTREAM OF CROSSING AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE CROSSING.

5. STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED AND SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.

6. WHEN STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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.

TSC-2. FORD CROSSING

TSC-4

SM-10

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volus

SM-6

SM-6

June 2012

5. STABILIZED STASING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

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.

STABILIZED STAGING AREA MAINTENANCE NOTES

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

Urban Drainage and Flood Control District

Stabilized Staging Area (SSA)

SEEDING & MULCHING

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

SOIL PREPARATION

Figure VT-2 Vehicle Tracking

4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY. 5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION

SOIL PREPARATION

1. IN AREAS TO BE SEEDED, 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 COBLERAL CONSTRUCTION ACTIVITY MUST BE SCARRIED TO A DEPTH OF 8 TO 12 DETECTION OF COBLERAL CONSTRUCTION ACTIVITY MUST BE SCARRIED TO A DEPTH OF 8 TO 12 DETECTION OF COBLERAL CONSTRUCTION ACTIVITY MUST BE SCARRIED TO A DEPTH OF 8 TO 12 DETECTION OF SERVICE AS TO BE PLANTED SHALL HAVE AT LEAST 4 INCHES OF TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.

3. THE CITY RECOMMENDS THAT EMISTING AND/OR IMPORTED TOPSOIL SUITABLE TO SUPPORT PLANT GROWTH.

3. THE CITY RECOMMENDS THAT EMISTING AND/OR IMPORTED TOPSOIL BETISTED TO IDENTIFY SOIL ADDRESS SHOULD BE ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND/OR FERTILIZERS SHOULD BE ADDRESS TO CORRECT TOPSOIL DEFICIENCIES AND ANY SOIL AMENDMENTS NECESSARY TO ADDRESS THESE DEFICIENCIES. SOIL AMENDMENTS AND CONTROLLED WITH A STANDARD AND CONTROLLED AND COMPACTION. AND TO PREVENT ENGISION AND CONTROLLED REPORTED TOPSOIL MUST BE STRONGED IN AN AREA AWAY FROM MACHINERY AND CONSTRUCTION OPERATIONS, AND CARE MUST BE TESTED TO PROTECT THE TOPSOIL. AS A VALUABLE COMMONITY. TOPSOIL MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WE WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS (CE. DURING WEATHER WEATHER OWEN MUST NOT BE STRIPPED DURING UNDESTRABLE WORKING CONDITIONS.

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-SECED WHENEVER POSSIBLE *

*SEED DEPTH MUST BE & TO & INCHES WHEN DRILL-SEEDING IS USED BY BOOKED SEED OF THE SEEDING OF HYDRO-SEEDING WITH TACKFIER 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

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 CRETPIED MELD-FREE AND CERTIFIED SEED-FREE MULCH MAY BE USED. MULC MUST BE ONLY CRETPIED MELD-FREE AND CERTIFIED SEED-FREE AND ADDITIONATED SEED-FREE MULCH MAY BE USED. MULCH MUST BE ONLY OR SEPHEN AND ADDITIONATED SEED AND ADDITIONATED SEED SEED AND ADDITIONATED MUST BE APPLIED AS A SEPARATE SECOND OPERATION.

WOOD CELLULOSE FIREES MUSED WITH MUST BE APPLIED AS A SEPARATE SECOND OPERATION.

WOOD CELLULOSE FIREES MUSED WITH MUST BE APPLIED AT A RATE OF 2,000 TO 2,500 POUNDS/ACRE, AND TACKIFER MUST BE APPLIED AT A RATE OF 100 POUNDS/ACRE.

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.

SEEDING & MULCHING SM

Stabilized Staging Area (SSA)

SSA CONSTRUCTION .

SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

SEE PLAN VIEW FOR
 LOCATION OF STAGING AREA(S).
 CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE. 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

INSPECT BMP8 EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BMP8 SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP8 AS SOON AS
POSSIBLE, (AND ALWAYS WITHIN 24 HOURS) FORMING 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 DISCOVERY OF THE FAILURE

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

SSA-4

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REFERENCE DESCRIPTION REVISIONS No. DATE COMPUTER FILE MANAGEMENT FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\GESQC Plans\1129.009-ECDT01.dwg CTB FILE: Matrix(black).ctb
PLOT DATE: 3/7/2023 11:07 AM PERMIT PURPOSES.

60% DESIGN PLANS

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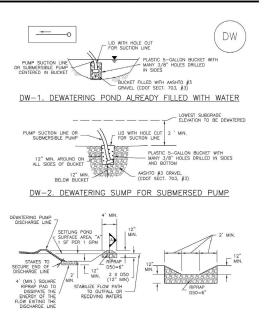
ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN 60% - MODIFICATION GRADING AND EROSION CONTROL PLAN

TYPICAL EROSION CONTROL DETAILS

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

SM-9

SHEET No. 22



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

TDM-12

DW-4. DEWATERING FILTER BAG

DEWATERING INSTALLATION NOTES

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

DEWATERING INSTALLATION NOTES

DEWATERING MAINTENANCE NOTES

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN FFFECTIVE OPERATING CONDITION, INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE NOCIMENTED TRANSPOLICIES.

3, WHERE $\mbox{BMP8}$ HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

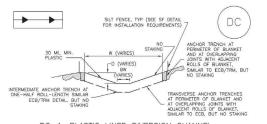
4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS.

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 DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

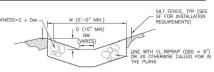
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SM-8 Temporary Diversion Methods (TDM)



DC-1. PLASTIC LINED DIVERSION CHANNEL

DC-2. GEOTEXTILE OR MAT LINED DIVERSION CHANNEL



DC-3. RIPRAP LINED DIVERSION CHANNEL

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

June 2012

Temporary Diversion Methods (TDM)

SM-8

CHANNEL DIVERSION INSTALLATION NOTES

LEGISLA MANUSCATA CANADA (NEW FOR.

-LOCATION OF DURRISON CHANNEL
-TYPE OF CHANNEL (UNINED, GEOTEXTILE OR NAT LINED, PLASTIC LINE, OR RIPRAP
LINED),
-LEGISLA OF EACH TYPE OF CHANNEL
-LEGISLA ON WORTH, M. AND BOTTOM WORTH, BW
-FOR RIPRAP LINED CHANNEL, SIZE OF RIPRAP, DSO, SHALL BE SHOWN ON PLANS.

2. SEE DRAINAGE PLANS FOR DETAILS OF PERMANENT CONVEYANCE FACILITIES. 3. DIVERSION CHANNELS INDICATED ON THE SWMP PLAN SHALL BE INSTALLED PRIOR TO WORK IN DOWNGRADIENT AREAS OR NATURAL CHANNELS.

4. FOR GEOTEXTILE OR MAT LINED CHANNELS, INSTALLATION OF GEOTEXTILE OR MAT SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB, FOR PLASTIC LINED CHANNELS, INSTALLATION OF ANCHOR TRENCHES SHALL CONFORM TO THE REQUIREMENTS OF DETAIL ECB.

5. WHERE CONSTRUCTION TRAFFIC MUST CROSS A DIVERSION CHANNEL, THE PERMITTEE SHALL INSTALL A TEMPORARY STREAM CROSSING CONFORMING TO THE REQUIREMENTS OF DETAIL

DIVERSION CHANNEL MAINTENANCE NOTES

1. INSPECT BMP8 EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.
MAINTENANCE OF BMP8 SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP8 AS SOON AS
POSSIBLE (AND ALMAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE
EROSION, AND PERFORM NECESSARY MAINTENANCE.

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

3. WHERE BMP5 HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

5. IF DIVERSION CHANNELS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

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

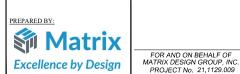
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TDM-13

REFERENCE DRAWINGS					60% DESIGN PLANS
	FILE NA CTB FII PLOT D	AME: S:\21.112 LE: Matrix(bla DATE: 3/7/2023	REVISIONS E MANAGEMENT 19.009 Rolling Hills Floodplain and Permitting\Dwg\GESQC Plans\1129.009-ECDT01.dwg 10.000 rolling Hills Floodplain and Permitting\Dwg\GESQC Plans\1129.009-ECDT01.dwg	BY	NOTICE: THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.





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ROLLING MEADOWS-BULL HILL CHANNEL & FLOODPLAIN 60% - MODIFICATION GRADING AND EROSION CONTROL PLAN

TYPICAL EROSION CONTROL DETAILS

DESIGNED BY:	TKM	SCALE		DATE ISSUED:	JANUARY 2023	DRAWING No.
DRAWN BY:	EAL	HORIZ.	N/A			EC10
CHECKED BY:	AJS	VEDT	N/A	SHEET	22 OF 22	EU 10