

EPC STORMWATER REVIEW COMMENTS
IN ORANGE BOXES WITH BLACK TEXT

GUNTZELMAN PORCELAIN PINES SUBDIVISION

GRADING AND EROSION CONTROL PLAN

COUNTY OF EL PASO, STATE OF COLORADO
FEBRUARY 2023

SMH
CONSULTANTS

www.smhconsultants.com
Civil Engineering • Land Surveying
Landscape Architecture
Manhattan, KS - HQ
(785) 776-0541
Dodge City, KS
(620) 255-1952
Overland Park, KS
(913) 444-9615
Colorado Springs, CO
(719) 465-2145

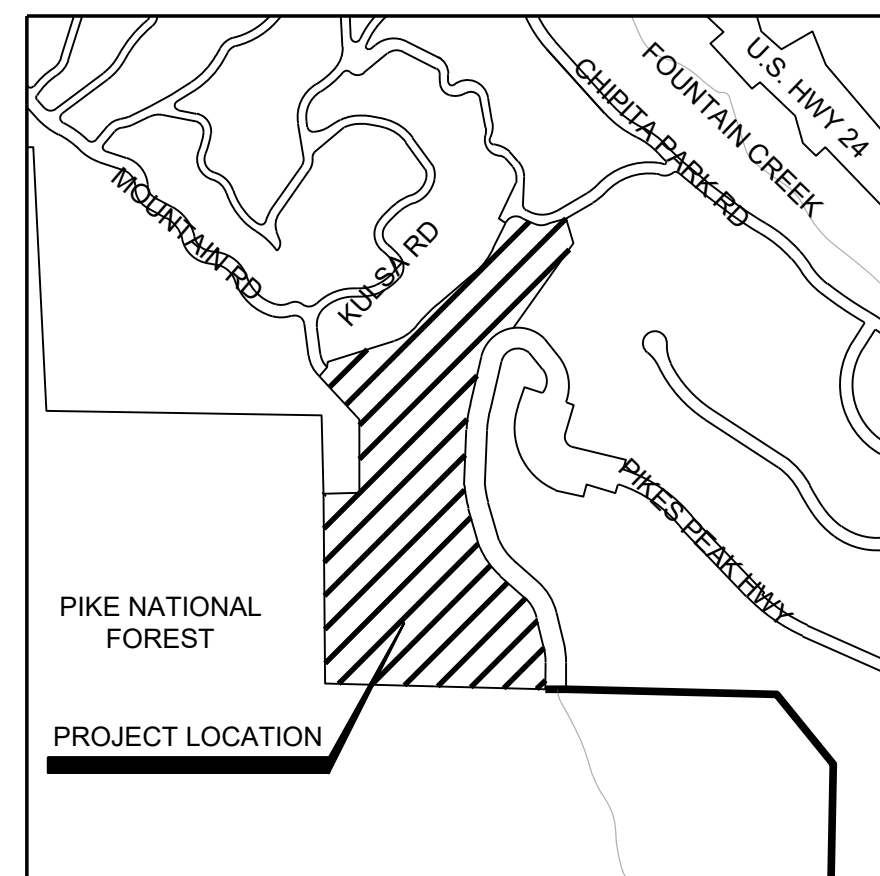
GUNTZELMAN PORCELAIN PINES

PRELIMINARY DOCUMENTS NOT FOR CONSTRUCTION

EL PASO COUNTY, COLORADO

GRADING & EROSION CONTROL COVER SHEET

REVISION DESCRIPTION
(DESCRIPTION)
000000
REVISION DATE
02/15/2023
NORTH
200' 100' 0' 200'
SCALE: 1" = 200'
PROJECT #: 2107-0307
CHECKED BY: BML
DRAWN BY: JAM
DATE: 02/15/2023
SHEET #
1
TOTAL SHEETS 5



VICINITY MAP
(NOT TO SCALE)

If these plans are to include all of the GEC design information and the road design information these should be CDs with the GEC plans inserted into them. Or the GEC's can be kept separate and the design information for the road and all required details need to be added to the CDs (which currently only show the waterline).

EROSION CONTROL COST ESTIMATE				
ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
PERMANENT/TEMPORARY SEEDING	0.63	AC	\$600.00	\$378.00
PERMANENT/TEMPORARY MULCHING	0.63	AC	\$500.00	\$315.00
PERMANENT/TEMPORARY EROSION CONTROL BLANKET	3058	SY	\$6.00	\$18,348.00
VEHICLE TRACKING CONTROL	1	EA	\$2,250.00	\$2,250.00
SILT FENCE	1639	LF	\$2.50	\$4,097.50
ROCK CHECK DAM	1	EA	\$500.00	\$500.00
CULVERT INLET PROTECTION	1	EA	\$150.00	\$150.00
CONCRETE WASHOUT	1	EA	\$760.00	\$760.00
STABILIZED STAGING AREA	1	EA	\$5,900.00	\$5,900.00
SUB-TOTAL				\$32,698.50
MAINTENANCE (35% OF CONSTRUCTION)				\$11,444.48
TOTAL				\$44,142.98

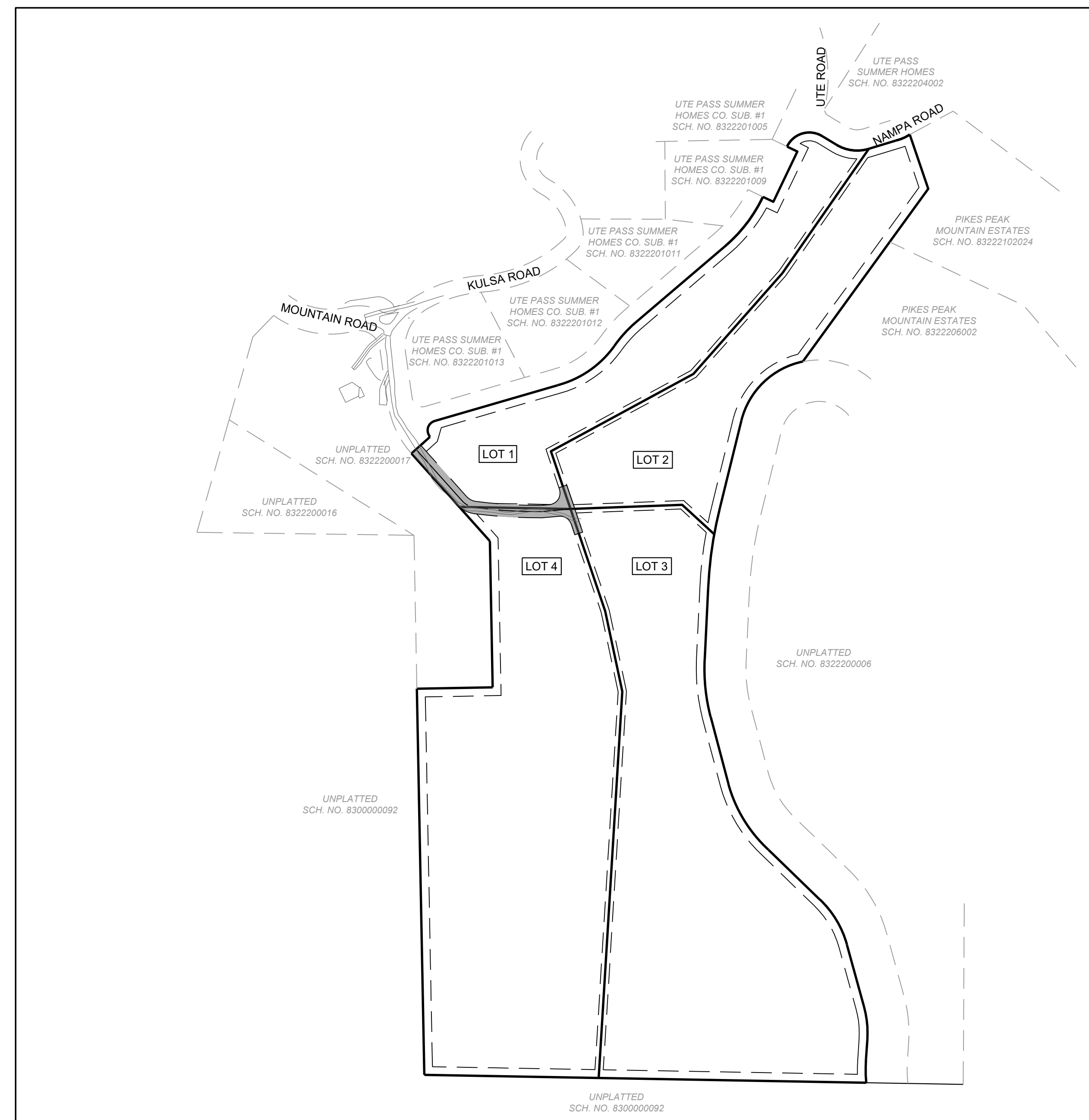
SMH CONSULTANTS DOES NOT GUARANTEE THAT THE CONSTRUCTION COSTS WILL NOT VARY FROM THIS CONSTRUCTION COST OPINION.

GENERAL NOTES:

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ADJACENT TO THE SITE. THE OMISSION FROM, OR INCLUSION OF, UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NON-EXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES, BUILDINGS, FENCES, AND ROADWAYS FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE ABOVE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR. GRADINGS SHALL BE COMPLETED TO A SUBGRADE TOLERANCE OF PLUS OR MINUS 0.2'.
- CONTRACTOR SHALL OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND THEY SHALL BE KEPT ONSITE DURING ALL EARTHWORK.
- THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE, OR AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ONLY APPLICABLE IN PREVIOUSLY UNDISTURBED AREAS. AREA OF PROPOSED DETAILED GRADING HAS ALREADY BEEN DISTURBED.
- MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 2:1.
- DUST CONTROL SHALL BE SUPPLIED BY THE GRADING CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT PER THE COUNTY HEALTH DEPARTMENT SPECIFICATIONS.

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - CDOT M & S STANDARDS
- 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPES SHALL BE CLASS B OR CLASS III UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SITE TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS, INCLUDING WORK WITH THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING OR CONSTRUCTION.



SITE MAP
SCALE: 1" = 200'

AGENCIES

OWNER/DEVELOPER:
KRISTIAN & CHRISTA GUNTZELMAN
5381 SUGAR CAMP ROAD
MILFORD, OH 45150
(513) 722-4343

CIVIL ENGINEER:
BRETT LOUK
SMH CONSULTANTS, P.A.
411 SOUTH TEJON STREET, SUITE 1
COLORADO SPRINGS, CO 80903
(719) 465-2145

SURVEYOR:
TIM SLOAN
SMH CONSULTANTS, P.A.
411 S TEJON STREET, SUITE 1
COLORADO SPRINGS, CO 80903
465-2145

GAS:
BOB SWATEK
BLACK HILLS ENERGY
198 COUNTY LINE ROAD
PALMER LAKE, CO 80133
(719) 332-5856

ELECTRIC:
COLORADO SPRINGS UTILITIES
1521 HANCOCK EXPRESSWAY
COLORADO SPRINGS, CO 80903
(719) 668-8262

FIRE DISTRICT:
KAREN BODINE
CASCADE FIRE PROTECTION DISTRICT
8015 SEVERY AVE, PO BOX 366
CASCADE, CO 80809
(719) 684-9549

COUNTY ENGINEERING:

LUPE PACKMAN
EL PASO COUNTY PLANNING AND
COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
(719) 520-7550

INDEX OF SHEETS

1	GEC COVER
2	GEC PLAN
3	GEC NOTES AND GEC DETAILS
4 - 5	GEC DETAILS

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.

BRETT LOUK, COLORADO P.E. # _____ DATE: _____

OWNER'S/DEVELOPER'S STATEMENT

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

KRISTIAN GUNTZELMAN _____ DATE: _____

CHRISTA GUNTZELMAN _____ 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.

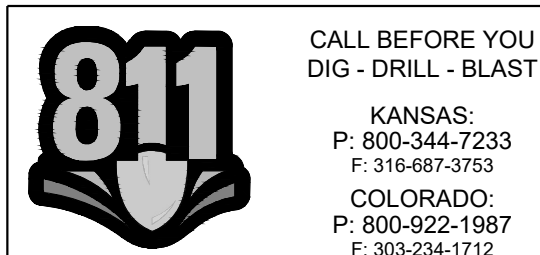
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

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, COUNTY ENGINEER _____ DATE: _____

BASIS OF BEARINGS:

BASIS OF BEARINGS IS THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWNSHIP 13 SOUTH, RANGE 68 WEST MONUMENTED AT THE CENTER 1/4 CORNER BY A 1" IRON PIPE WITH A 2-1/2" BRASS CAP STAMPED "1938 U.S. GENERAL LAND OFFICE SURVEY", 0.5' ABOVE GRADE AND AT THE WEST 1/16 CENTER CORNER BY A 1" IRON PIPE WITH A 2-1/2" BRASS CAP STAMPED "1938 U.S. GENERAL LAND OFFICE SURVEY AND ASSUMED TO BEAR NORTH 88 DEGREES 58 MINUTES 46 SECONDS WEST, 1301.48 FEET.



CALL BEFORE YOU
DIG - DRILL - BLAST
KANSAS:
P: 800-344-7233
F: 316-897-3753
COLORADO:
P: 800-922-1987
F: 303-234-1712

CAUTION - NOTICE TO CONTRACTORS:

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

The utilities as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the client/contractor responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.

Consider expanding the limits of disturbance:

1. Applicant has provided all of the required documents for an ESQCP.
2. The shared driveway is not considered a roadway and can therefore be included with the 2.5 acre lot exclusion (revised from our original comment under filing SP225).

If Applicant expands the LOD to address some slope concerns and stockpile locations, EPC would only require an ESQCP for this work, with which Applicant has already submitted the required documents for EPC review.

Provide CDs for proposed roadway work (including providing radii, riprap details, culvert details etc.) separate from the GECs. The CDs for the roadway work can be in the same set of plans.

GEC Checklist Item V. Label all proposed temporary construction BMPs by phase of implementation (initial, interim, final).

LEGEND

- PROPOSED PRIVATE DRIVE/DRIVEWAY
- VTC VEHICLE TRACKING CONTROL
- PS PERMANENT SEEDING
- TS TEMPORARY SEEDING
- SF SILTY FENCE
- SP STOCKPILE PROTECTION
- SSA STABILIZED STAGING AREA
- CWA CONCRETE WASHOUT AREA
- CIP CULVERT INLET PROTECTION
- SR SURFACE ROUGHENING
- CF CONSTRUCTION FENCE
- POST SITE (CONTACTS AND PERMITS) AND WASHOUT POSTING
- DW DRAINAGE WAY
- SS STEEP SLOPES
- PROPOSED STORM SEWER
- LOT LINE
- LIMITS OF CONSTRUCTION/DISTURBANCE
- FLOW DIRECTION ARROW
- EXISTING CONTOUR
- PROPOSED CONTOUR

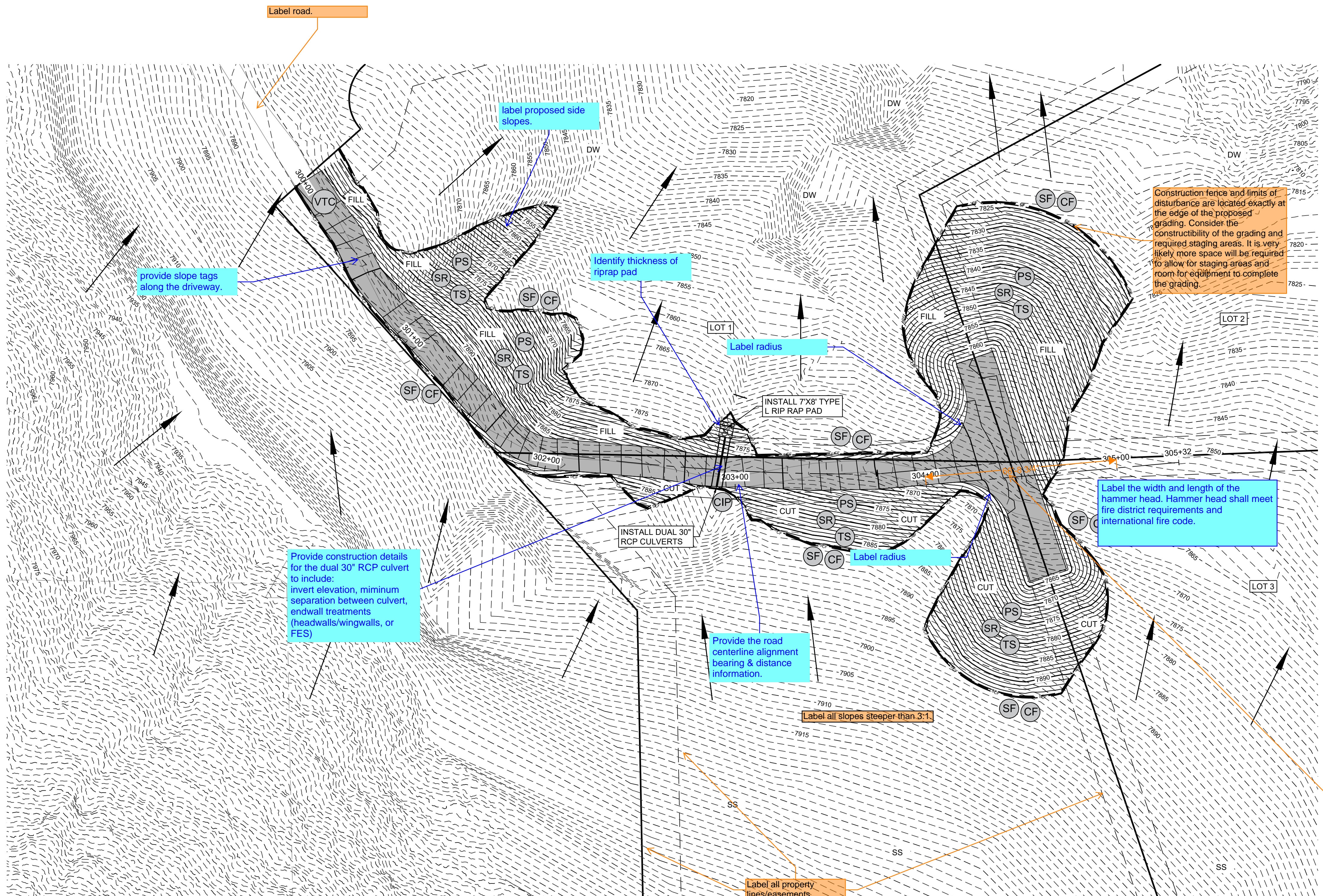
Provide shapes on the plans so the limits of the BMPs are clear

Put linestyle in the legend.

Provide ECB for slopes steeper than 3:1 and add to legend per SWMP.

Construction fence and limits of disturbance are located exactly at the edge of the proposed grading. Consider the constructibility of the grading and required staging areas. It is very likely more space will be required to allow for staging areas and room for equipment to complete the grading.

Provide a typical cross section of the driveway. Include the surface material type and thickness.



provide slope tags along the driveway.

Identify thickness of riprap pad

Label radius

INSTALL 7'x8' TYPE L RIP RAP PAD

INSTALL DUAL 30" RCP CULVERTS

Label radius

Label the width and length of the hammer head. Hammer head shall meet fire district requirements and international fire code.

Provide construction details for the dual 30" RCP culvert to include: invert elevation, minimum separation between culvert, endwall treatments (headwalls/wingwalls, or FES)

Provide the road centerline alignment bearing & distance information.

Label all slopes steeper than 3:1.

Label all property lines/easements.

Because the limits of construction/disturbance shown on the plans do not have any space between the limit and the proposed improvements, there is little room for the contractor to have a stockpile area, CWA, disposal areas, or staging areas. Whether or not the contractor will determine the exact location, that disturbance needs to be accounted for prior to the start of construction.

- NOTES:
1. FUTURE LOT OWNERS SHALL PROVIDE AN ENGINEERED SITE PLAN AT TIME OF BUILDING PERMIT. ENGINEERED SITE PLAN SHALL INDICATE ANY REQUIRED CULVERTS FOR EACH INDIVIDUAL LOT. LOT OWNERS WILL BE RESPONSIBLE FOR INSTALLATION OF CULVERTS REQUIRED FOR THEIR DRIVEWAY AND SITE LAYOUT.
 2. THE SITE IS CURRENTLY UNDEVELOPED AND HEAVILY FORESTED. SOIL DATA FOR THE PROPERTY WAS OBTAINED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY. SOILS WITHIN THE SITE ARE LEGALT-ROCK OUTCROP, HYDROLOGIC SOIL GROUP D, AND TECOLOTE, HYDROLOGIC SOIL GROUP B.
 3. PRIVATE DRIVE/DRIVEWAY CONSTRUCTION PER GEOTECH REPORT AND CASCADE FIRE DEPARTMENT SPECIFICATIONS.
 4. STOCKPILE LOCATION FOR THIS PROJECT TO BE LOCATED BY CONTRACTOR AND ADDED TO THE SWMP/GEC UPON DETERMINATION.
 5. LOCATION OF STORAGE FOR MAINTENANCE EQUIPMENT, CONCRETE WASHOUT, AND TEMPORARY DISPOSAL AREAS WILL BE ADDED TO THE GEC/SWMP BY CONTRACTOR.
 6. ALL NON-STRUCTURAL CONTROL MEASURES SUCH AS STREET SWEEPING, GOOD HOUSEKEEPING, AND ETC. SHALL BE EMPLOYED BY THE CONTRACTOR AS NECESSARY AND AS OUTLINED IN THE SWMP.
 7. MAXIMUM CUT FILL SLOPES SHALL NOT EXCEED 2:1.
 8. ALL FILL MATERIAL SHALL BE APPROVED BY A LICENSED ENGINEER.
 9. ALL STRIPPED TOPSOIL SHALL BE STOCKPILED FOR RE-USE IF POSSIBLE.
 10. LOCATION OF PORTABLE TOILET, STABILIZED STAGING AREA, AND SITE (CONTACTS AND PERMITS) AND WASHOUT POSTING TO BE ADDED TO THIS PLAN AND SWMP BY CONTRACTOR.
 11. CONSTRUCTION FENCE AND SILTY FENCE OFFSET FOR CLARITY. CONTRACTOR TO ENSURE CCM'S ARE PLACED DOWNSTREAM OF DISTURBED AREAS TO PREVENT SEDIMENT FROM LEAVING SITE.

Per geotechnical report, slopes shall not exceed 3:1 slopes. Update grading where slopes are shallowing than 3:1.

To comply with the SWMP Checklist Item 17f, please add a note stating no batch plants will be utilized onsite.

Verify scale is correct. When measuring the plans using this scale I did not get the correct dimensions (station line should be 100'). Is the scale supposed to be 1"=30'?

SMH CONSULTANTS
 www.smhconsultants.com
 Civil Engineering • Land Surveying
 Landscape Architecture
 Manhattan, KS - HQ (785) 775-0541
 Dodge City, KS (620) 255-1952
 Overland Park, KS (913) 444-9615
 Colorado Springs, CO (719) 465-2145

GUNTZELMAN PORCELAIN PINES
 PRELIMINARY DOCUMENTS NOT FOR CONSTRUCTION
 EL PASO COUNTY, COLORADO

GRADING & EROSION CONTROL PLAN

REVISION DATE	REVISION DESCRIPTION (DESCRIPTION)
00/00/00	

NORTH

SCALE: 1" = 20'

PROJECT #: 2107-0307
 CHECKED BY: BML
 DRAWN BY: JAM

DATE: 02/15/2023

SHEET # **2**

TOTAL SHEETS 5

VERTICAL SCALE: 1" = 5'

expand to fill white space so that notes are legible when printed.

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

- 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.
- 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 (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.
- 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.
- 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 IN THE STORMWATER MANAGEMENT PLAN.
- TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS 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.
- 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 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 LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNATED 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 TO THE 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 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 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.
- BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAMINATION PROTECTION TO CONTAIN ALL SPILLS ON-SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, AND 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.
- 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.
- 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 - ROCKY MOUNTAIN GROUP AND SHALL BE CONSIDERED PART OF THESE PLANS.
- 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 ANY 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 MORE 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

CAUTION - NOTICE TO CONTRACTORS:

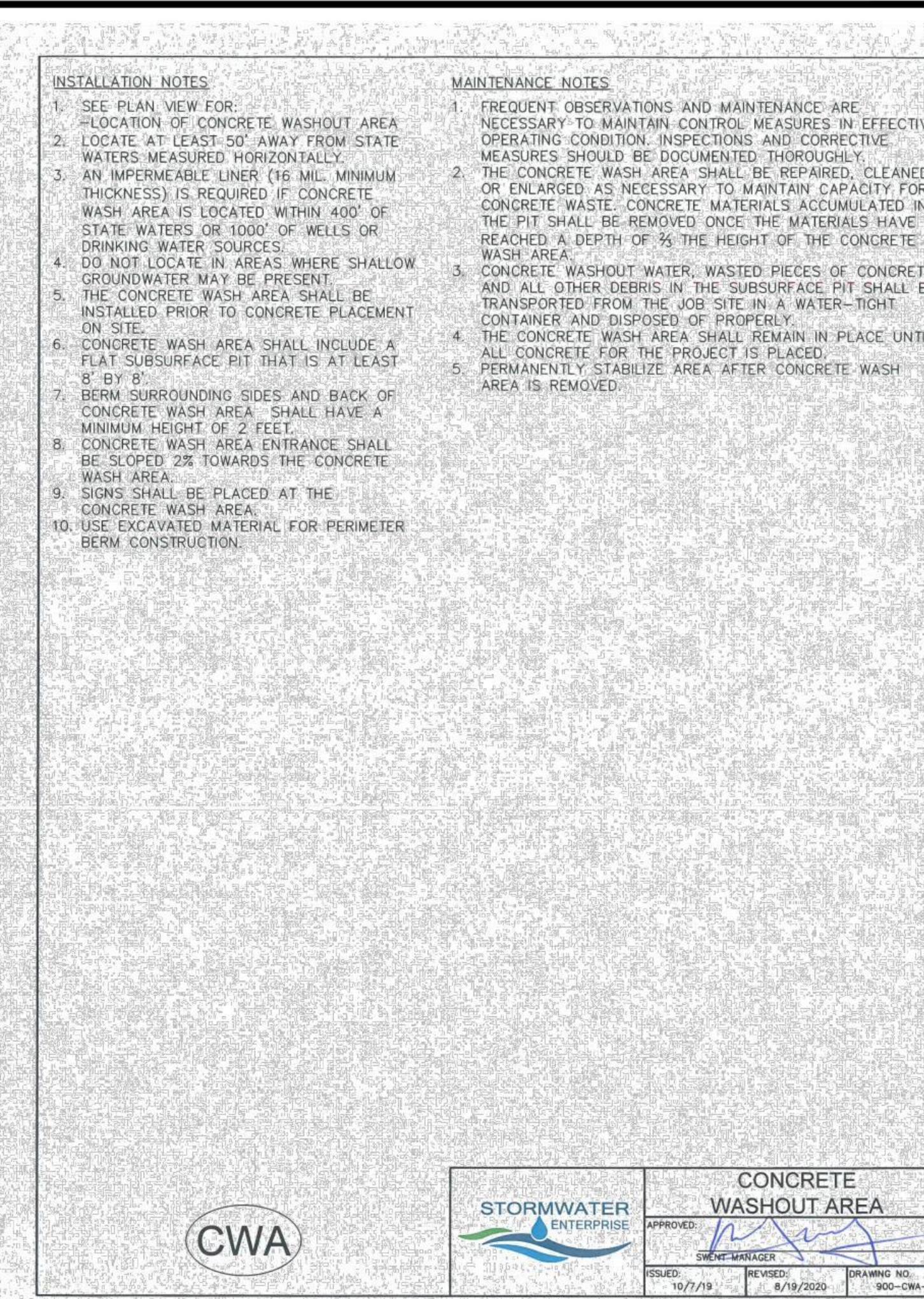
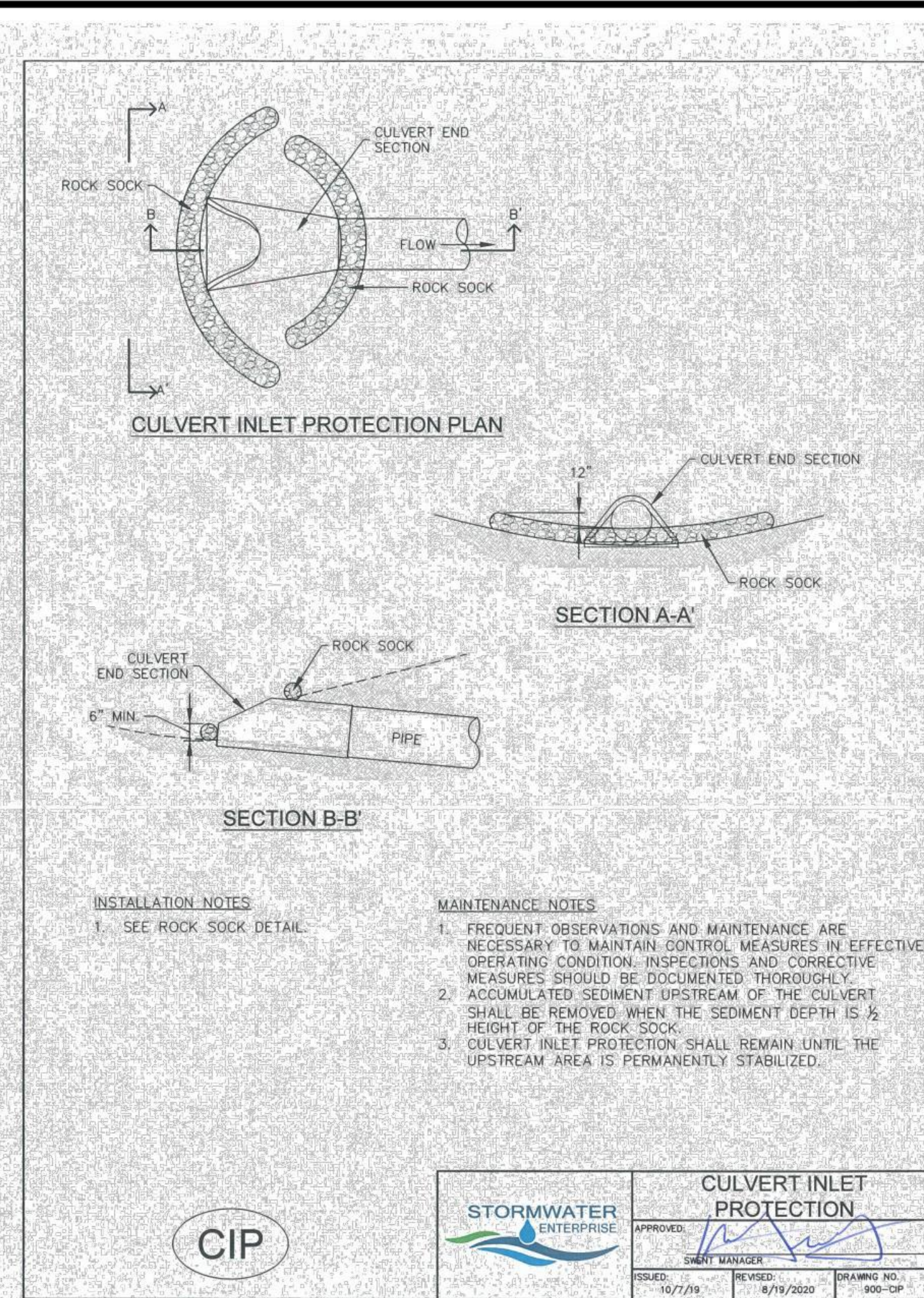
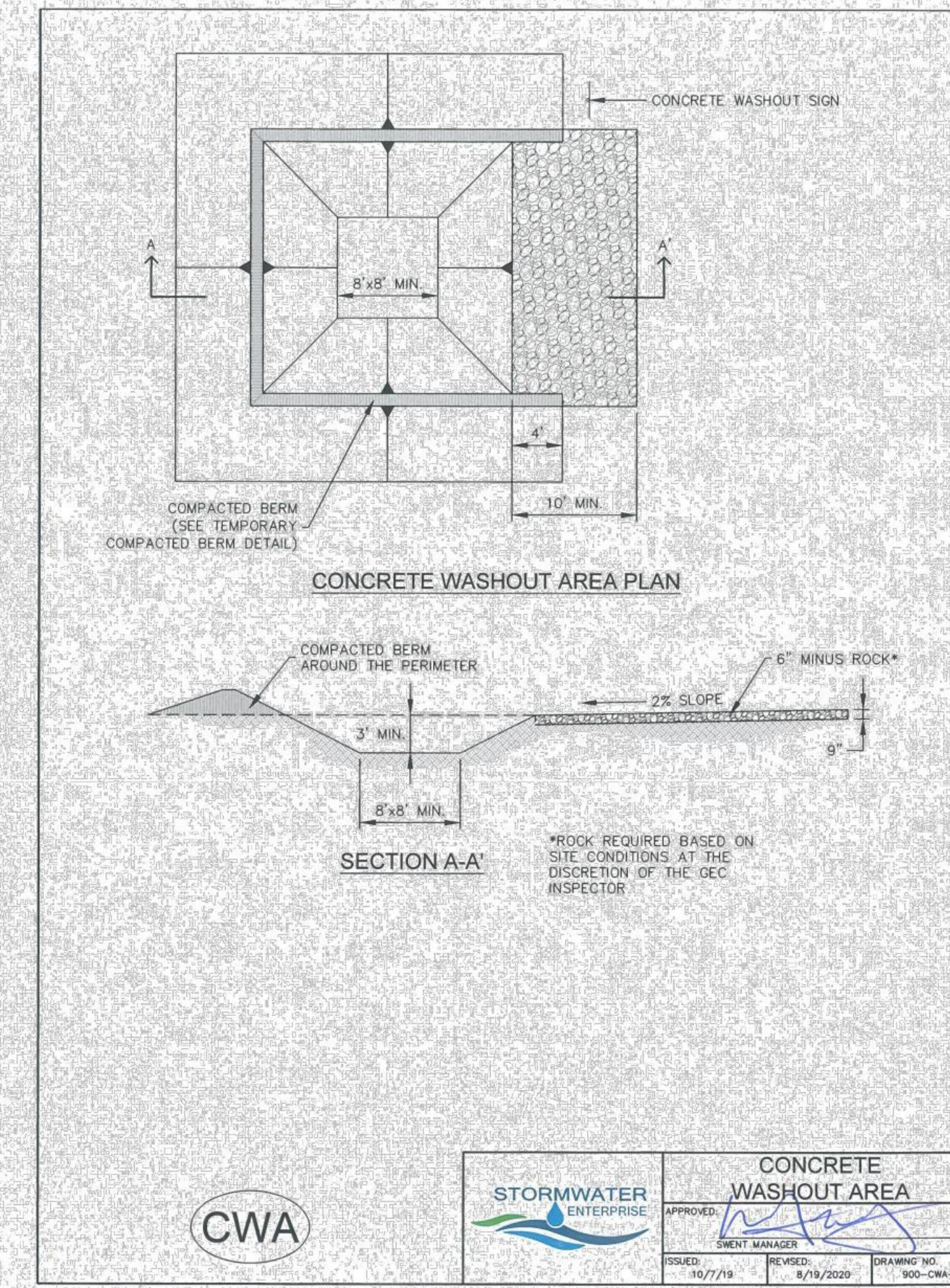
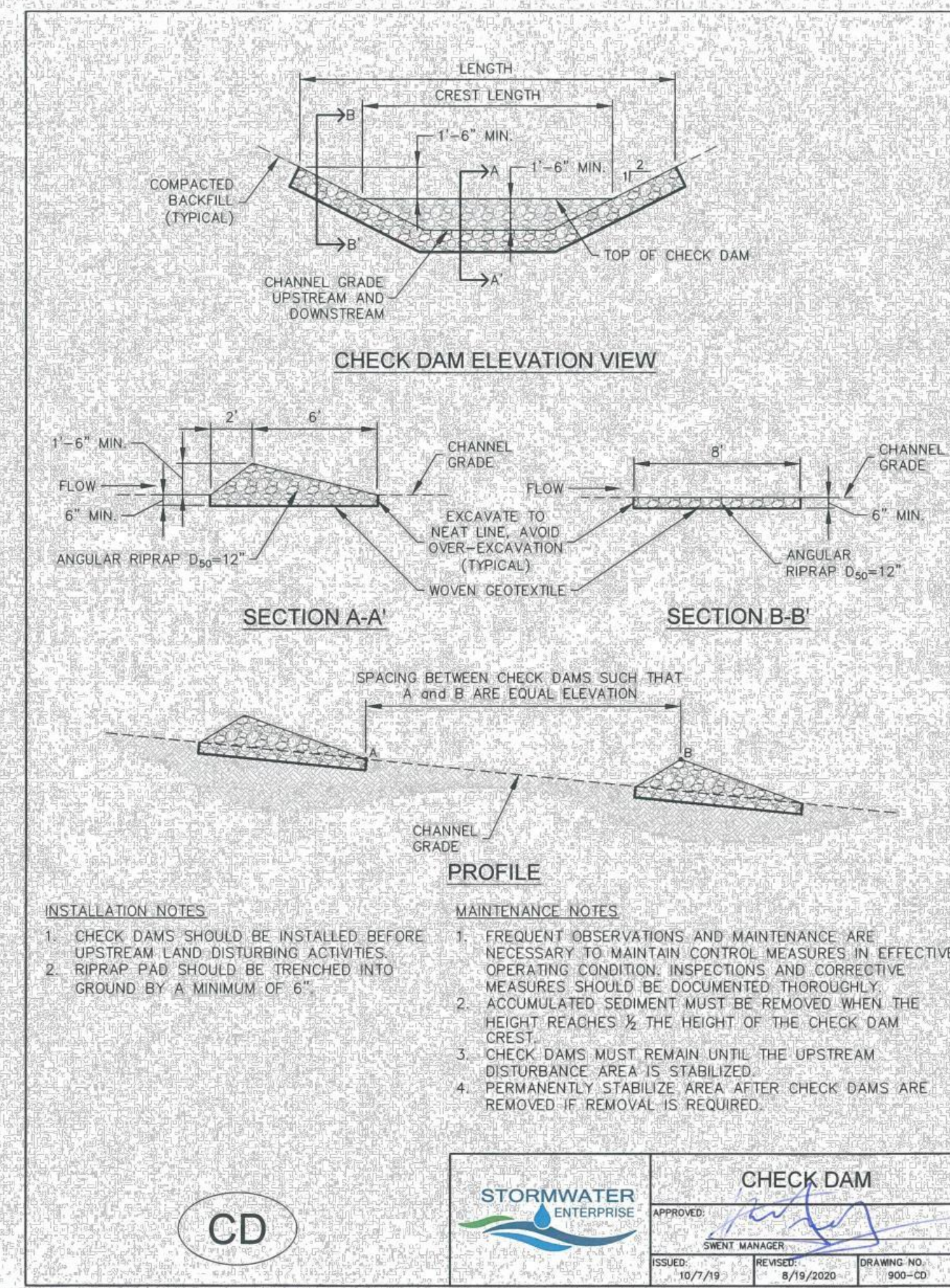
- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

811 CALL BEFORE YOU DIG - DRILL - BLAST

KANSAS:
P: 800-344-7233
F: 316-687-3753

COLORADO:
P: 800-922-1987
F: 303-234-1712

The utilities as shown on this drawing were surveyed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the client's responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.



SMH CONSULTANTS

www.smhconsultants.com
Civil Engineering • Land Surveying
Landscape Architecture

Manhattan, KS • HQ
(785) 776-0544

Dodge City, KS
(620) 255-1952

Overland Park, KS
(913) 444-9615

Colorado Springs, CO
(719) 465-2145

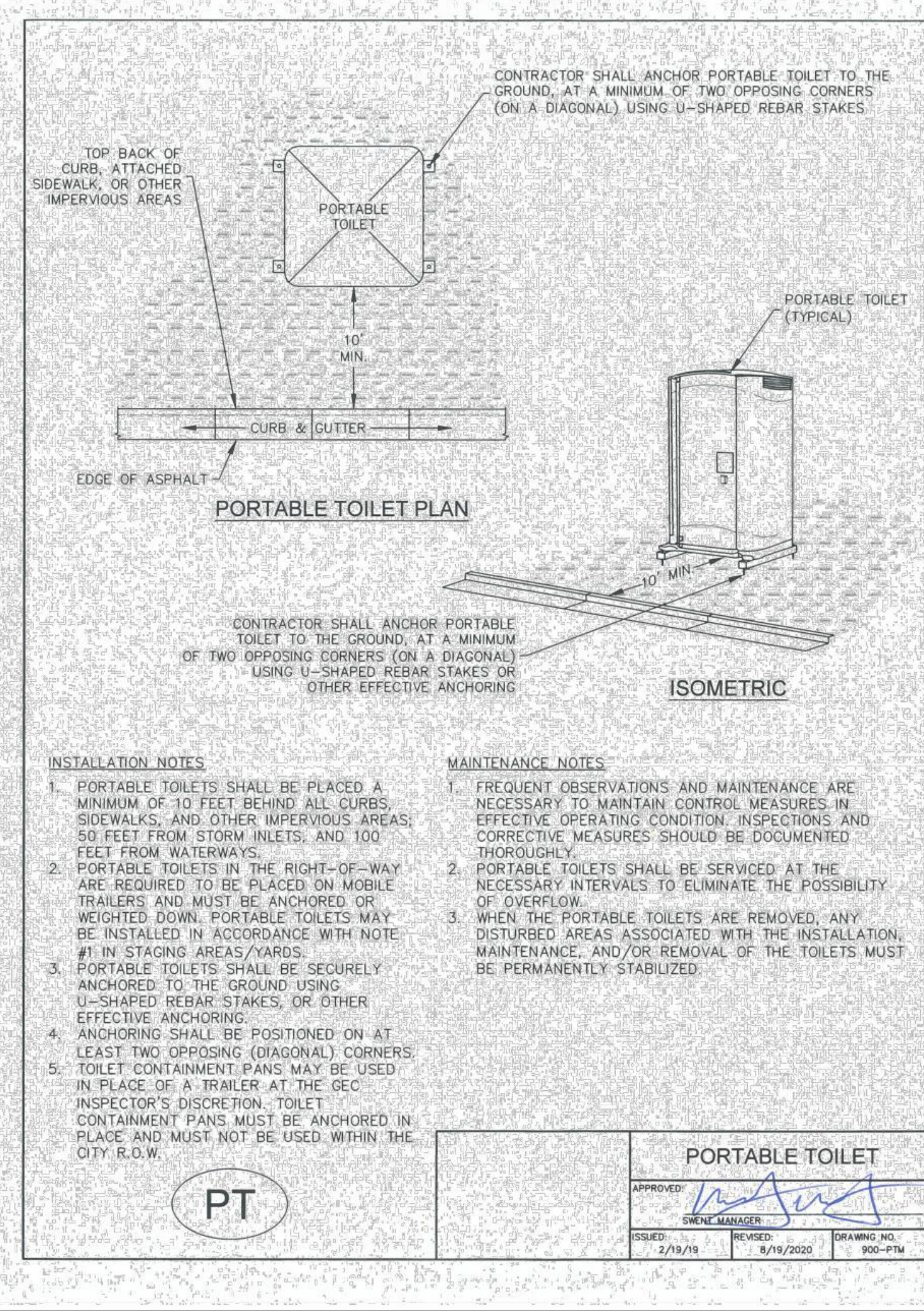
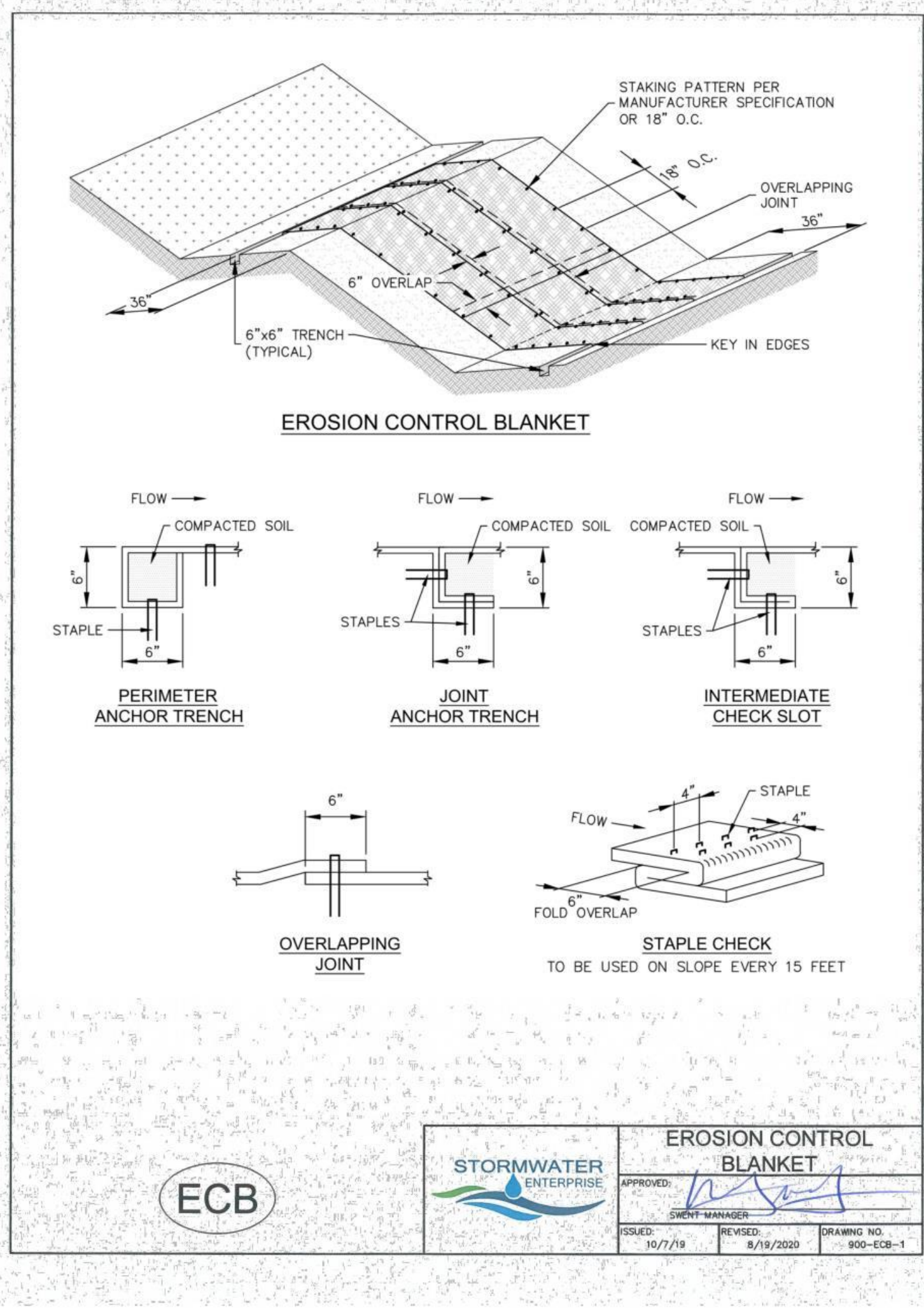
GUNTZELMAN PORCELAIN PINES

PRELIMINARY DOCUMENTS NOT FOR CONSTRUCTION

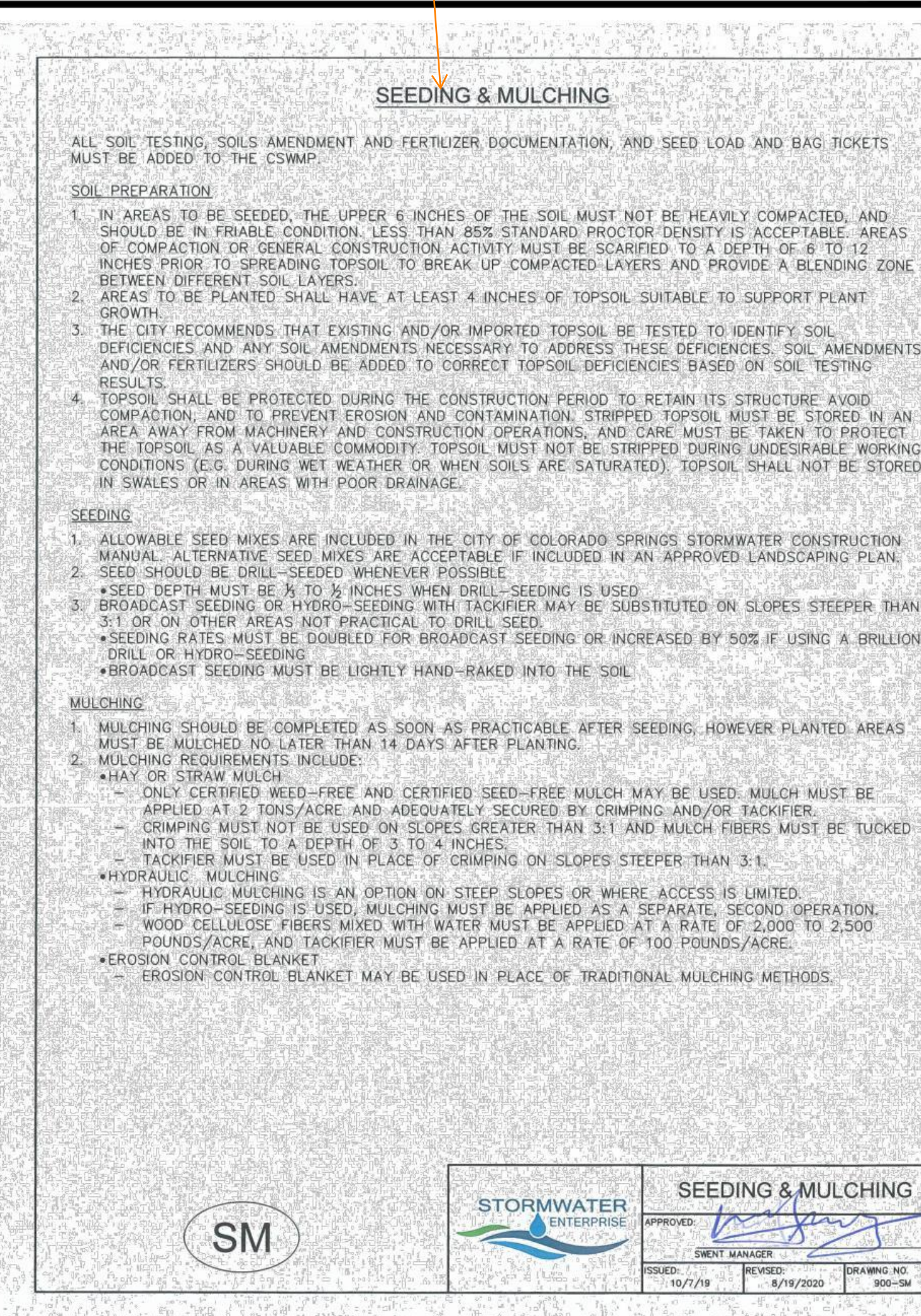
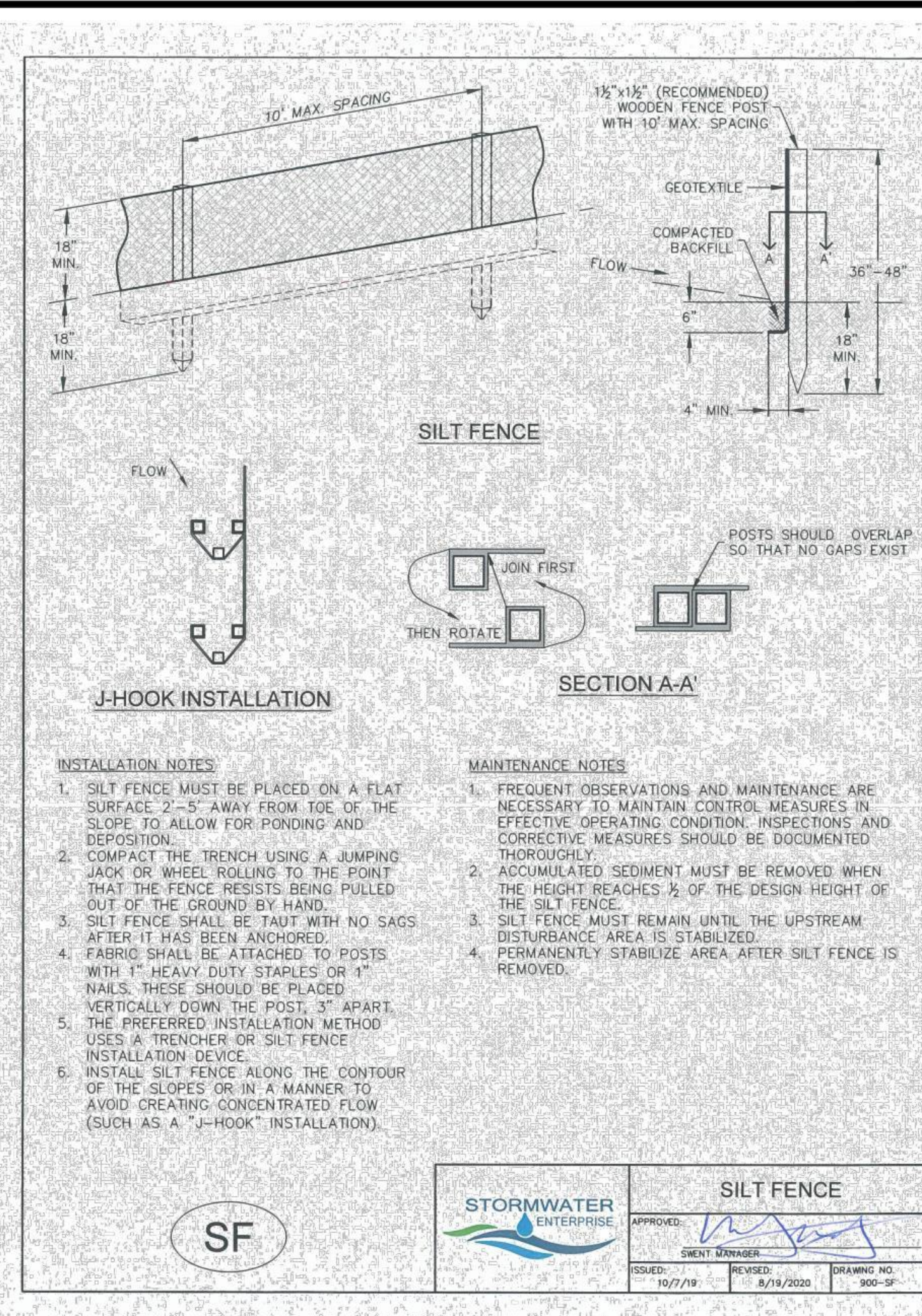
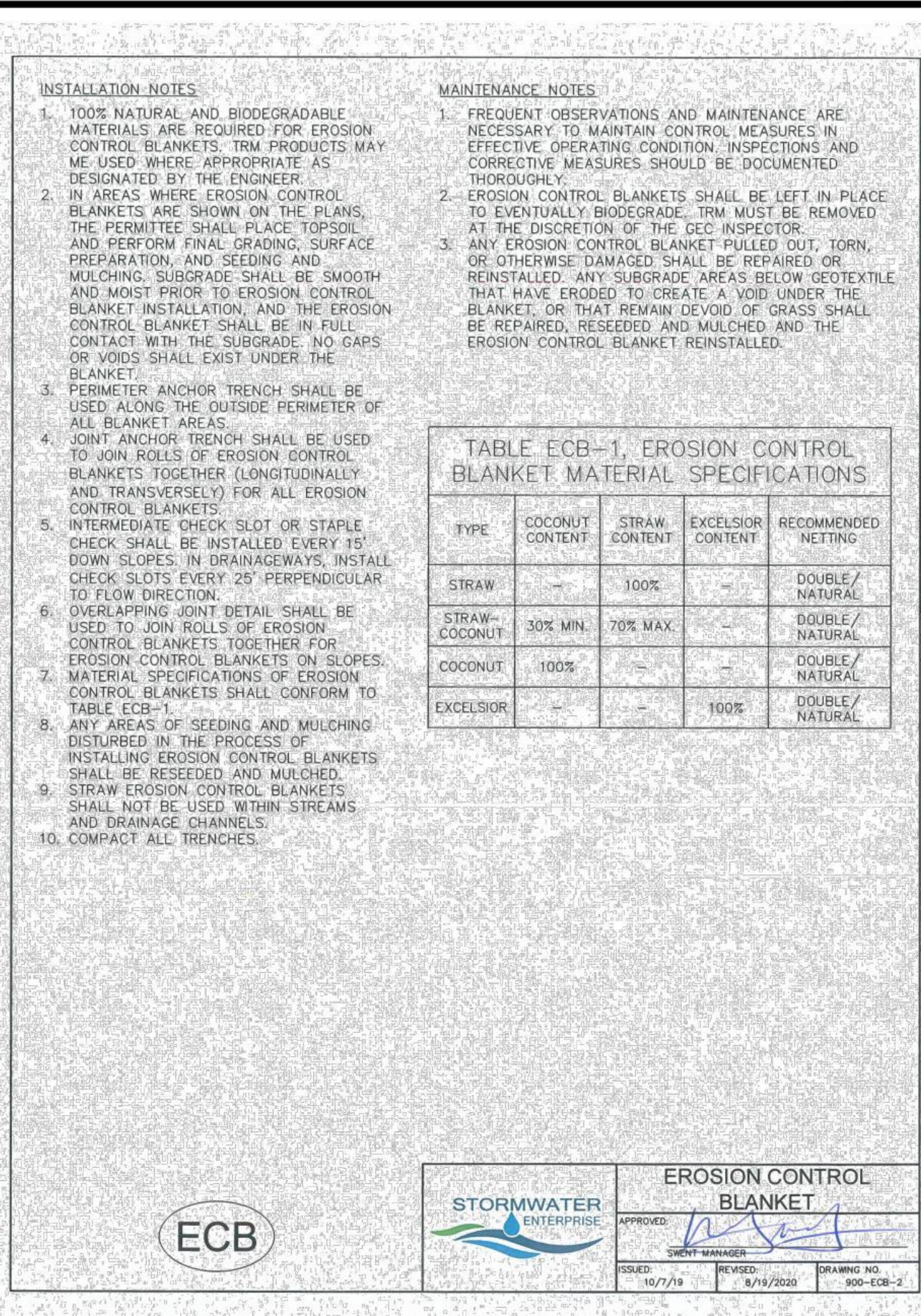
EL PASO COUNTY, COLORADO

REVISION DESCRIPTION	(DESCRIPTION)
REVISION DATE	
000000	
NORTH	
SCALE: NOT TO SCALE	
PROJECT #: 2107-0307	
CHECKED BY: BML	
DRAWN BY: JAM	
DATE:	02/15/2023
SHEET #	3
TOTAL SHEETS	5

Provide a detail for construction fence.



Provide seed mix to be used for erosion control.



CAUTION - NOTICE TO CONTRACTORS:

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

811 CALL BEFORE YOU DIG - DRILL - BLAST

KANSAS: P: 800-344-7233 F: 316-687-3753

COLORADO: P: 800-922-1987 F: 303-234-1712

The utilities as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the client's/contractor's responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.

STORMWATER ENTERPRISE

EROSION CONTROL BLANKET

APPROVED: [Signature]

ISSUED: 10/7/19

REVISION: 8/18/2020

DRAWING NO. 900-ECB-2

SMH CONSULTANTS

www.smhconsultants.com
Civil Engineering • Land Surveying
Landscape Architecture

Manhattan, KS - HQ
(785) 776-0541

Dodge City, KS
(620) 255-1952

Overland Park, KS
(913) 444-9615

Colorado Springs, CO
(719) 465-2145

GUNTZELMAN PORCELAIN PINES

PRELIMINARY DOCUMENTS NOT FOR CONSTRUCTION

EL PASO COUNTY, COLORADO

REVISION	DATE	DESCRIPTION
1	08/08/20	
2		
3		
4		
5		
6		
7		
8		
9		
10		

EROSION CONTROL DETAILS

SCALE: NOT TO SCALE

PROJECT #: 2107-0307
CHECKED BY: BML
DRAWN BY: JAM

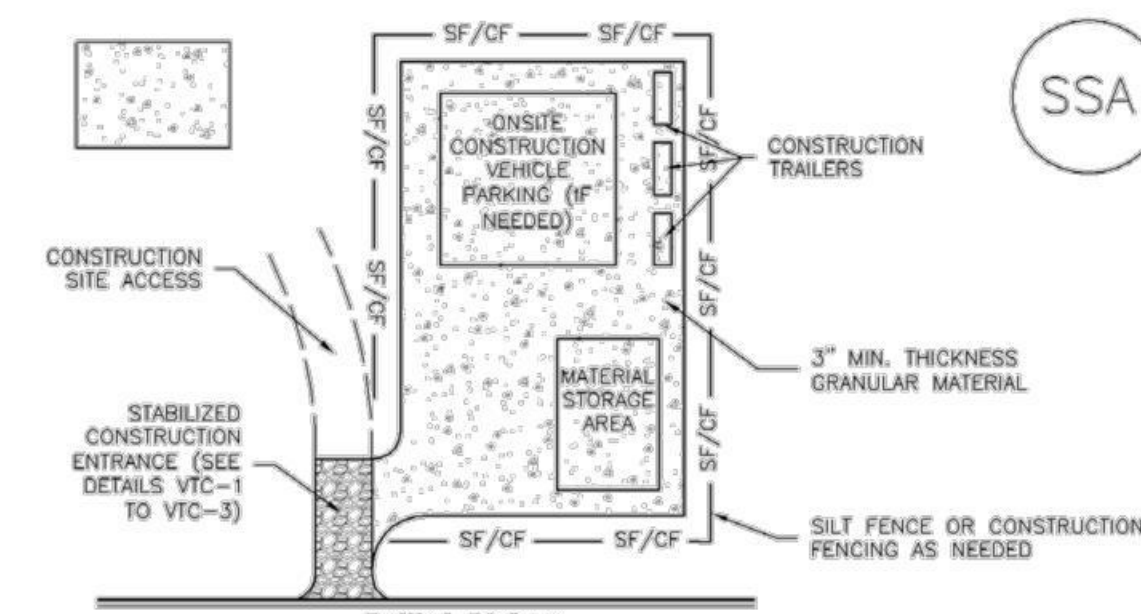
DATE: 02/15/2023

SHEET # **4**

TOTAL SHEETS 5

Stabilized Staging Area (SSA)

SM-6



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.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

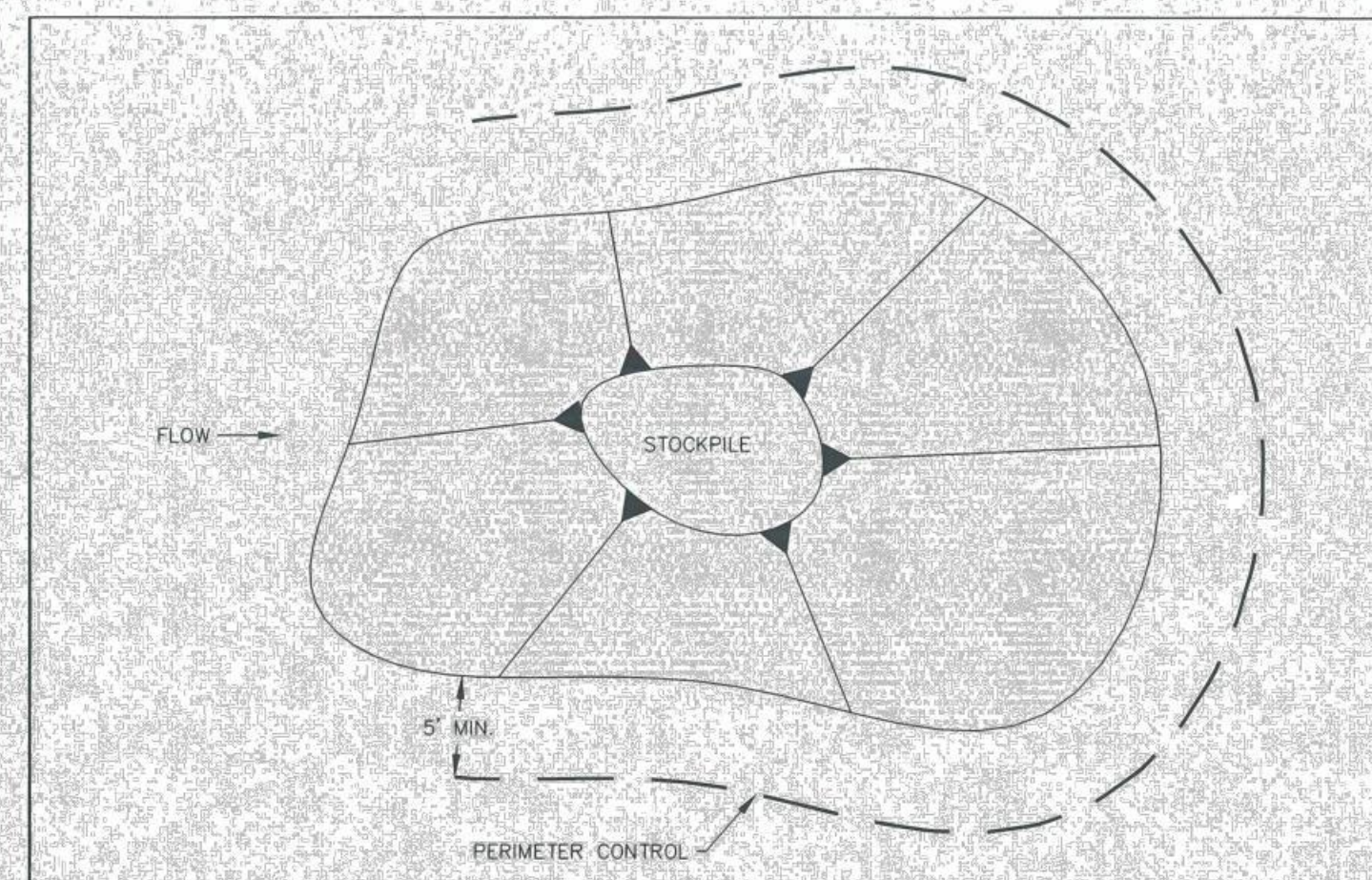
STABILIZED STAGING AREA MAINTENANCE NOTES

- 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 CHUSES 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.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

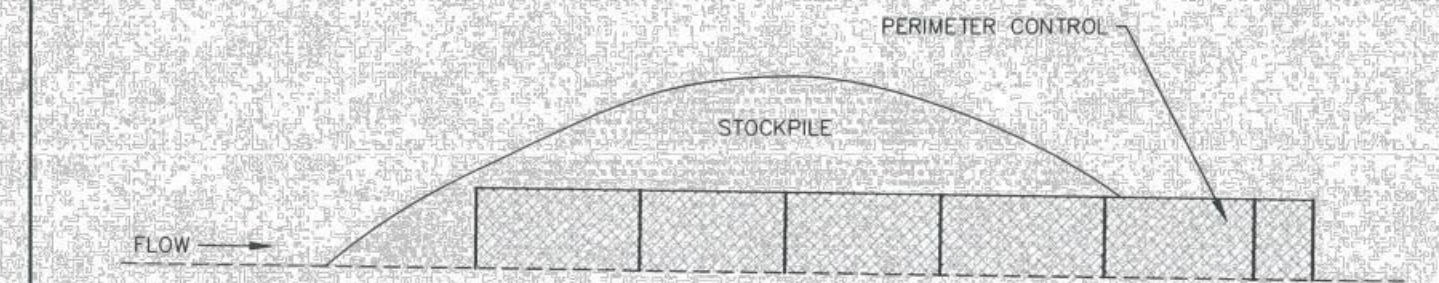
November 2010

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

SSA-3



STOCKPILE PROTECTION PLAN



STOCKPILE PROTECTION ELEVATION

INSTALLATION NOTES

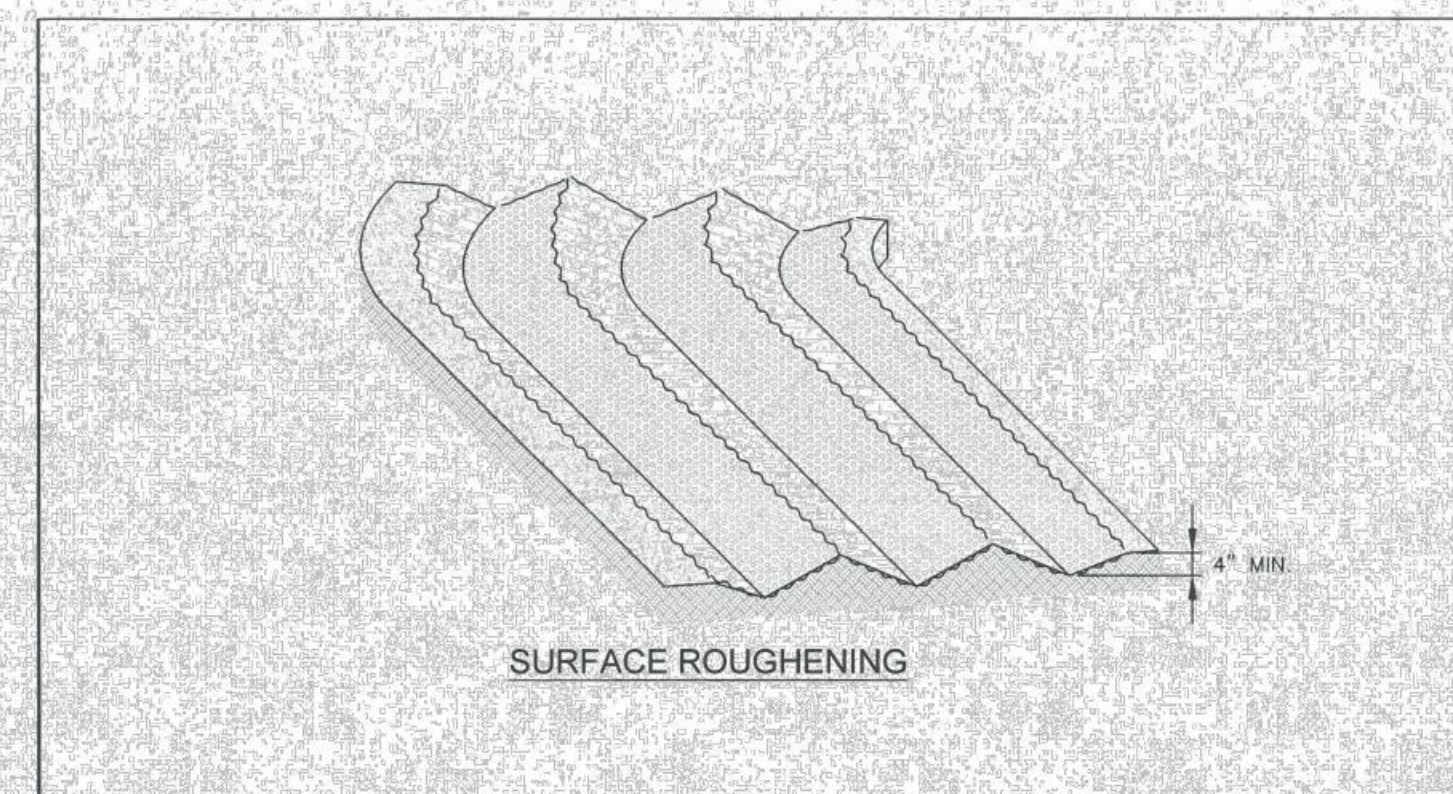
- INSTALL PERIMETER CONTROL AROUND STOCKPILE ON DOWNGRADIENT SIDE. PERIMETER CONTROL MUST BE SUITABLE TO SITE CONDITIONS AND INSTALLED ACCORDING TO THE RELEVANT DETAIL.
- FOR STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS INCLUDING PERIMETER CONTROL ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- IF PERIMETER CONTROLS MUST BE MOVED TO ACCESS STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORK DAY.
- ACCUMULATED SEDIMENT MUST BE REMOVED ACCORDING TO PERIMETER CONTROL DETAIL.

SP

STORMWATER ENTERPRISE
APPROVED: [Signature]
ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO. 900-SP



SURFACE ROUGHENING

INSTALLATION NOTES

- SURFACE ROUGHENING MAY BE USED IN AREAS FLATTER THAN 3:1. INSTALL FURROWS ALONG CONTOUR TO INTERCEPT SHEET FLOW.
- SURFACE ROUGHENING MAY BE ACCOMPLISHED BY FURROWING, SCARIFYING, RIPPING OR DISKING THE SOIL.
- FURROWS MUST BE A MINIMUM OF 4" IN DEPTH.
- SURFACE ROUGHENING SHALL NOT BE USED ON EXTREMELY SANDY OR ROCKY SOILS.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.

SR

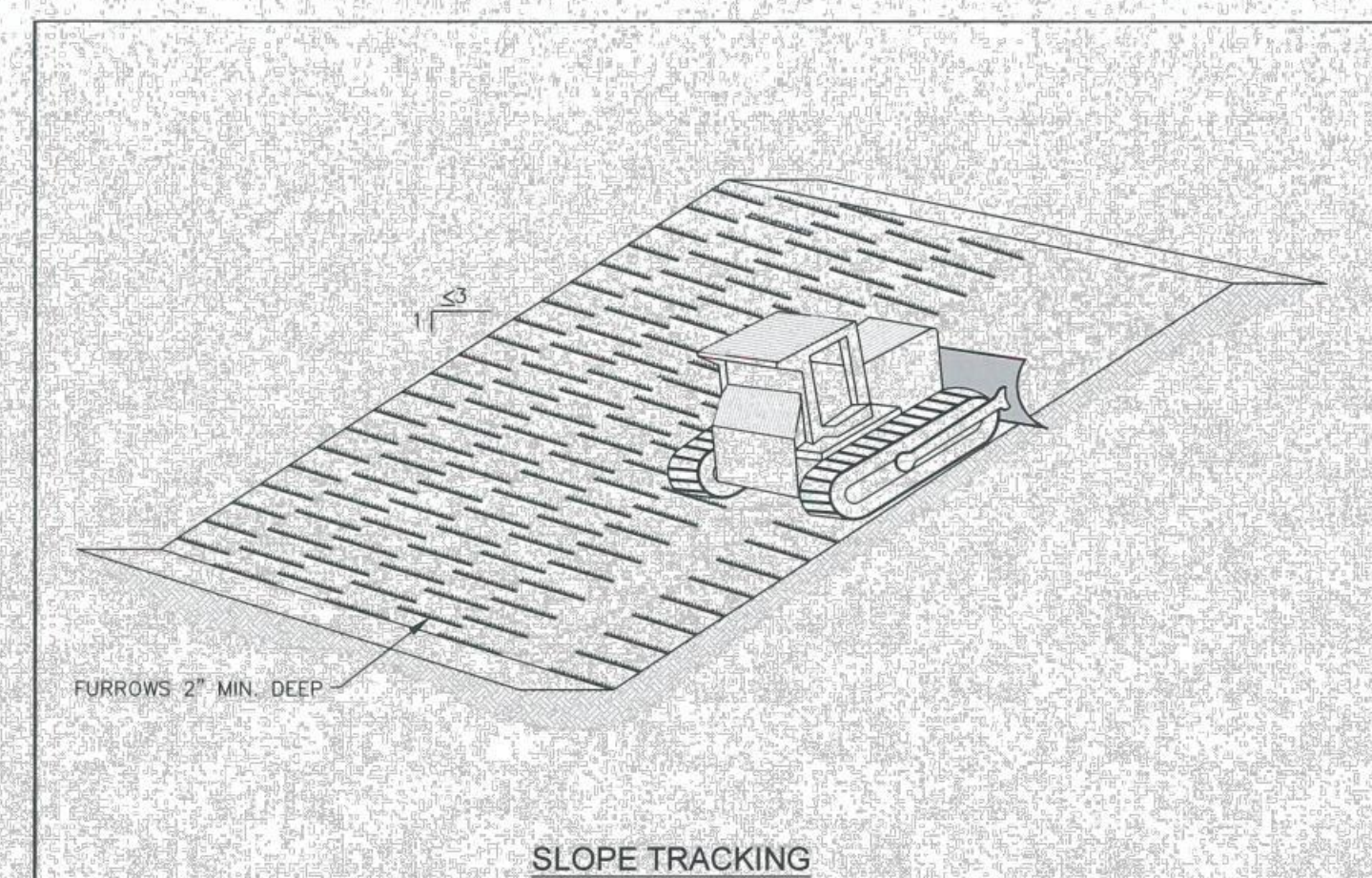
STORMWATER ENTERPRISE
APPROVED: [Signature]
ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO. 900-SR

CAUTION - NOTICE TO CONTRACTORS:

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



The utilities as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of utilities in this area. It is the client's/contractor's responsibility to verify the location of all utilities (whether shown or not) and protect said utilities from any damage.



SLOPE TRACKING

INSTALLATION NOTES

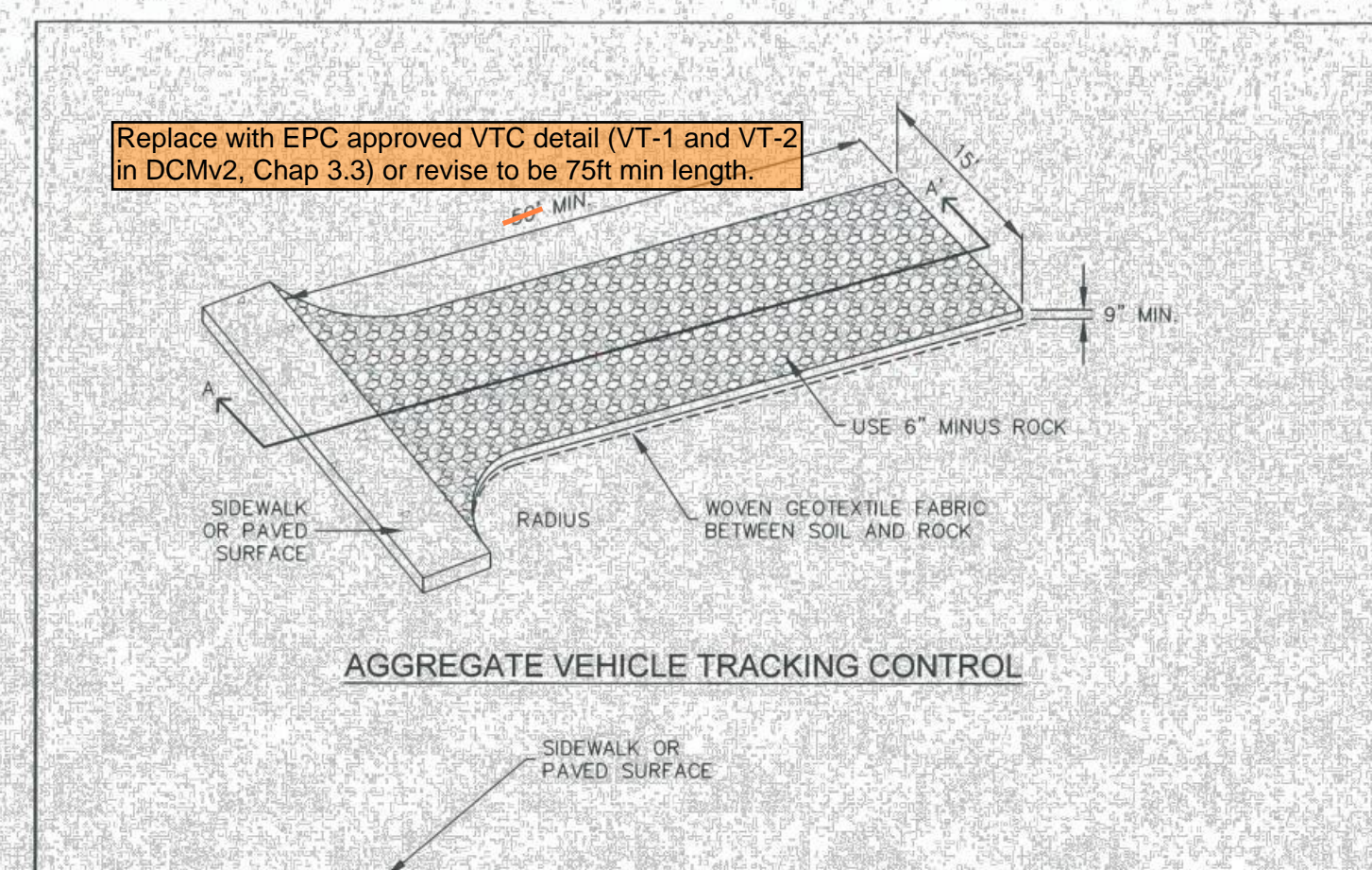
- SLOPE TRACKING MAY BE USED ON SLOPES 3:1 OR STEEPER.
- TRACKING GROOVES SHALL BE PERPENDICULAR TO THE SLOPE.
- SLOPE TRACKING SHALL NOT BE USED ON EXTREMELY SANDY OR ROCKY SOILS.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SLOPE TRACKED.

ST

STORMWATER ENTERPRISE
APPROVED: [Signature]
ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO. 900-ST



AGGREGATE VEHICLE TRACKING CONTROL

INSTALLATION NOTES

- A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHOULD BE LOCATED AT ALL POINTS WHERE VEHICLES EXIT THE CONSTRUCTION SITE TO ADJACENT ROADWAY.
- STABILIZED CONSTRUCTION ENTRANCE/EXITS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- RADIUS MUST BE ADEQUATE FOR INTENDED CONSTRUCTION VEHICLE TURNING.
- ROCK SHOULD CONSIST OF 6" MINUS ROCK.
- INSTALL CONSTRUCTION FENCE ON BOTH SIDES OF VEHICLE TRACKING CONTROL PAD WHEN NEEDED OR REQUIRED BY INSPECTOR.

MAINTENANCE NOTES

- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- SEDIMENT TRACKED ONTO THE ADJACENT ROAD SHALL BE REMOVED DAILY BY SWEEPING OR SHOVELING, AND NEVER WASHED DOWN STORM DRAINS.
- ROUGHEN, REPLACE AND/OR ADD ROCK AS NEEDED TO MAINTAIN CONSISTENT DEPTH AND TO PREVENT SEDIMENT TRACKING ONTO ADJACENT STREET.
- PERMANENTLY STABILIZE AREA AFTER VEHICLE TRACKING CONTROL IS REMOVED.

VTC

STORMWATER ENTERPRISE
APPROVED: [Signature]
ISSUED: 10/7/19 REVISED: 8/19/2020 DRAWING NO. 900-VTC

SM-6

Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

- STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
- THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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)

SSA-4

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

November 2010

REVISION DATE	REVISION DESCRIPTION
000000	(DESCRIPTION)

NORTH

SCALE: NOT TO SCALE

PROJECT #: 2107-0307
CHECKED BY: BML
DRAWN BY: JAM

DATE: 02/15/2023

SHEET #

5

TOTAL SHEETS 5