

GRADING, EROSION, AND SEDIMENT CONTROL PLAN

4480 S HOLLY STREET - SPORT COURT
LOT 7, CHARLOU PARK AMENDED
IN W1/2 OF NW 1/4 OF SECTION 8 TOWNSHIP 5S, RANGE 67,
WEST OF 6TH P.M., ARAPAHOE COUNTY, COLORADO.

UNCC

UTILITY NOTIFICATION
CENTER OF COLORADO

1-800-922-1987

CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

CONTRACTOR

DESIGNS BY SUNDOWN
6875 S. SANTA FE DR.
LITTLETON, CO. 80120

PROPERTY OWNER

KYLE MUSICK AND LACEY MUSICK
4480 S HOLLY ST.
CHERRY HILLS VILLAGE, CO 80111

SURVEYOR/ENGINEER

DAVID E. ARCHER & ASSOCIATES, INC.
105 WILCOX STREET
CASTLE ROCK CO 80104
PHONE: (303)-688-4642
FAX: (303)-688-4675

PROPERTY DESCRIPTION:
4480 S HOLLY ST.
CHERRY HILLS VILLAGE, CO 80111
LOT 7 CHARLOU PARK AMENDED
ARAPAHOE COUNTY, COLORADO.



Note:
This Grading, Erosion and Sediment Control (GESC) document has been placed in the file for this project and appears to fulfill the latest version of the Grading, Erosion and Sediment Control Manual. Additional grade, erosion and sediment control measures may be required of the owner or his/her agents, due to unforeseen erosion problems if the submitted plan does not function as intended. The requirements of this GESC document shall run with the land and be obligation of the landowner, or his/her designated representative(s) until such time as the gesc plan is properly completed, modified or voided.

I hereby attest that this Grading, Erosion, and Sediment Control (GESC) document for 4480 S Holly Street, has been prepared by me or under my direct supervision, and to the best of my knowledge and ability has been prepared in accordance with the latest version of the GESC Manual. The signature and stamp affixed hereon certifies that this GESC document was prepared in accordance with the required regulations and criteria; however, the stamp and signature does not certify or guarantee future performance of the execution of the plan by the Contractor. The Contractor is responsible for executing the construction work according to the information set forth in the plan and in accordance with all applicable requirements.

Registered Professional Engineer Zachary E. Thatcher
State of Colorado No. 64656

I hereby attest that this Grading, Erosion, and Sediment Control (GESC) measures for 4480 S Holly Street shall be constructed according to the design presented in this document. I understand that additional erosion control, sediment control and water quality enhancing measures may be required of the owner and his or her agent due to unforeseen pollutant discharges or if the submitted plan does not function as intended. The requirements of the plan shall be the obligation of the land owner and/or his successors or heirs; until such time as the plan is properly completed, modified or voided.

Owner or Authorized Agent _____

Authorized Signature _____ Date _____

VICINITY MAP

SCALE: 1"=500'

EARTH WORK VOLUMES
CUT: 1429 BANK CY
FILL: 236 BANK CY
NET: 1193 BANK CY EXCESS

SHEET INDEX

SHEET NO.

1 OF 4
2 OF 4
3 OF 4
4 OF 4

DESCRIPTION

COVER SHEET
INITIAL GESC PLAN
INTERIM GESC PLAN
FINAL GESC PLAN

ARAPAHOE COUNTY STANDARD NOTES AND DETAILS

SHEET 1
SHEET 2
SHEET 3
SHEET 4

GESC STANDARD NOTES AND DETAILS
GESC STANDARD NOTES AND DETAILS
GESC STANDARD NOTES AND DETAILS
GESC STANDARD NOTES AND DETAILS

ENGINEERING & COMMUNITY DEVELOPMENT

THESE PLANS HAVE BEEN REVIEWED BY CHERRY HILLS VILLAGE FOR
GRADING, EROSION AND SEDIMENT CONTROL IMPROVEMENTS ONLY

DAVID E.
ARCHER
& ASSOCIATES, INC.

LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST., CASTLE ROCK, COLORADO 80104

SHEET 1 OF 4
APRIL 2025
JOB NUMBER 20-0420

REVISIONS

Tue Jul 22 15:24:01 2025
C:\Drawings\2020\20-04-20\Drawings\20-04-20-Drp\KMLB01.dwg

SOUTH HOLLY STREET
60' PUBLIC R.O.W.

LOT 1

260.08' (M)
260.00' (P)

LOT 6

4480 S HOLLY STREET

LOT AREA: 2.08 ACRES

TOTAL DISTURBANCE AREA = 0.82 ACRES

CONTROL MEASURES (CM) PERTAIN TO EROSION AND SEDIMENT CONTROL. ARE APPROXIMATE IN SIZE AND LOCATION. THIS EROSION AND SEDIMENT CONTROL PLAN IS NOT TO BE UTILIZED AS A GRADING PLAN. IF GRADING ON SITE IS NECESSARY IT SHALL NOT ADVERSELY IMPACT ADJACENT PROPERTIES. FLOW ARROWS MAY NOT DEPICT ACTUAL FLOW PATTERNS IN THE FIELD.

PROPOSED STRUCTURES/IMPROVEMENTS SHOWN ARE APPROXIMATE IN SIZE AND LOCATION.

STABILIZED STAGING AREA (SSA), IF THIS OCCURS ON A VEGETATED SURFACE ADDITIONAL STABILIZATION WILL NEED TO OCCUR ONCE CONSTRUCTION IS COMPLETE. STREET SWEEPING (SS) OPERATIONS SHALL UTILIZE A VACUUM-TYPE STREET SWEEPER, A BRUSH STYLE SWEEPER, OR MANUALLY USING SHOVELS AND BROOMS. PAVEMENT SHALL NOT BE WASHED WITH WATER AT ANY TIME UNLESS ALL WATER IS CONTAINED AND COLLECTED AND IS NOT ALLOWED TO DRAIN INTO EXISTING STORM CONVEYANCES, ON OR OFF SITE.

LOCATE CONCRETE WASHOUT AREA (CWA) AWAY FROM ALL STORM CONVEYANCES.

A GROUT/MORTAR MIXING STATION (GMS) AREA IS CONTAINED AREA TO ISOLATE GROUT/MORTAR MIXING OPERATIONS. A (GMS) CONTROL MEASURE SHALL BE PROVIDED WHEN MASONRY WORK OF ANY SIZE OR DIMENSION IS TO BE PERFORMED.

TEMPORARY OUTDOOR PORTABLE TOILETS SHOULD BE PLACED ON A STABLE SURFACE AND SECURED TO PREVENT TIPPING.

CONTROL MEASURES (CM) MUST BE UTILIZED ON STOCKPILES (SP).

PROVIDE SEED & MULCH (SM) UNLESS PERMANENT LANDSCAPING (LS) IS PROVIDED IN FINAL PLAN.

REFER TO SEMSWA GESC MANUAL STANDARD NOTES AND DETAILS FEBRUARY 2023 LOCATED IN APPENDIX F FOR ADDITIONAL INFORMATION.

PRIOR TO THE IMPORT/EXPORT OF MATERIAL THE CONTRACTOR SHALL COORDINATE THE HAUL ROUTE, NUMBER OF TRUCKS, AND THE NUMBER OF TRIPS ETC. WITH THE SEMSWA STORMWATER INSPECTOR. THE BORROW/FILL SITE IF WITHIN SEMSWA BOUNDARIES, MAY REQUIRE ADDITIONAL APPROVED GESC PERMITS, PLANS, AND A REPORT.

UNCC

UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

INTERIM GESC NOTES:

- 1) APPROPRIATE CONTROL MEASURES MUST BE IMPLEMENTED PRIOR TO THE START OF ACTIVITY. MUST CONTROL POTENTIAL POLLUTANTS DURING EACH PHASE OF CONSTRUCTION, AND MUST BE CONTINUED THROUGH FINAL STABILIZATION. APPROPRIATE STRUCTURAL CONTROL MEASURES MUST BE MAINTAINED IN OPERATIONAL CONDITION.
- 2) SEE SEMSWA STANDARD NOTES AND DETAILS (SHEET 1 OF 4) FOR LEGEND OF NAMES AND SYMBOLS.
- 3) SHADED CONTROL MEASURES WERE INSTALLED IN THE INITIAL STAGE AND SHALL BE LEFT IN PLACE IN THE INTERIM STAGE UNLESS OTHERWISE NOTED.
- 4) CONTROL MEASURES, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED WITHIN 14 DAYS IF THE AREAS WILL REMAIN UNDISTURBED FOR A PERIOD GREATER THAN 30 DAYS.
- 5) ALL PROPOSED SLOPES ON THIS PLAN HAVE A MAXIMUM SLOPE OF 4:1. ANY SLOPES BETWEEN 3:1 AND 4:1 WILL REQUIRE THE USE OF EROSION CONTROL BLANKETS OR FLEXIBLE GROWTH MEDIUM, AS APPROVED BY SEMSWA INSPECTOR.
- 6) SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND INLET AND OUTLET PROTECTION.
- 7) IF SITE RUNOFF ENTERS THE POST-CONSTRUCTION PERMANENT CONTROL MEASURE(S), SEDIMENT CONTAMINATION OF THE MATERIALS MAY RESULT IN THE POST-CONSTRUCTION PERMANENT CONTROL MEASURE(S) HAVING TO BE RECONSTRUCTED IN ITS ENTIRETY. (WHERE APPLICABLE) REMOVAL OF SEDIMENT BASIN SITE SHALL ONLY OCCUR AFTER ALL AREAS TRIBUTARY TO THE SEDIMENT BASIN HAVE BEEN STABILIZED. REMOVAL MUST BE APPROVED BY SEMSWA.
- 8) PRIOR TO THE IMPORT/EXPORT OF MATERIAL THE CONTRACTOR MUST COORDINATE WITH THE SEMSWA STORMWATER INSPECTOR. THE BORROW/FILL SITE IF WITHIN SEMSWA BOUNDARIES MAY REQUIRE AN ADDITIONAL APPROVED GESC PERMIT, PLANS, AND/OR REPORT. ADDITIONALLY THE HAUL ROUTE, AMOUNT OF TRUCKS, AND NUMBER OF TRIPS WILL NEED TO BE COORDINATED WITH THE SEMSWA STORMWATER INSPECTOR.
- 9) ASPHALT AND CONCRETE "TAILINGS" FROM SAWCUT OPERATIONS SHALL BE CLEANED USING A VACUUM-TYPE STREET SWEEPER, A BRUSH STYLE STREET SWEEPER, OR MANUALLY USING SHOVELS AND BROOMS. PAVEMENT SHALL NOT BE WASHED WITH WATER AT ANY TIME UNLESS ALL WATER IS CONTAINED AND COLLECTED AND IS NOT ALLOWED TO DRAIN INTO EXISTING STORM CONVEYANCES, ON OR OFF SITE.

EARTH WORK VOLUMES
CUT: 1429 BANK CY
FILL: 236 BANK CY
NET: 1193 BANK CY EXCESS

LEGEND

- SPA = STOCKPILE AREA
- CWA = CONCRETE WASHOUT
- SF = SILT FENCE
- SSA = STABILIZED STAGING AREA
- VTC = VEHICLE TRACKING CONTROL
- LOC = LIMITS OF CONSTRUCTION
- IP = INLET PROTECTION
- CD = CHECK DAM
- SCL = SEDIMENT CONTROL LOG
- SB = SEDIMENT BASIN
- DD = DIVERSION DITCH
- RRB = ROCK BERM
- ECB = EROSION CONTROL BLANKET
- SM = SEEDING AND MULCHING
- 1000 = EXISTING CONTOUR (1' INTERVAL)
- 1000 = PROPOSED CONTOUR (1' INTERVAL)
- ↖ = DRAINAGE DIRECTION
- 1234-XX = SPOT ELEVATION
- FG = FINISH GRADE
FL = FLOW LINE
SAND = TOP OF SAND FILTER
BERM = TOP OF BERM
- = DRAINAGE EASEMENT (RECORDED SEPARATELY)

INTERIM GESC PLAN

SCALE: 1"=20'

GRAPHIC SCALE

0 20 40 60

NOTE:
SEE CONSTRUCTION PLANS
FOR DETAILS ON PERMANENT
DRAINAGE FACILITIES

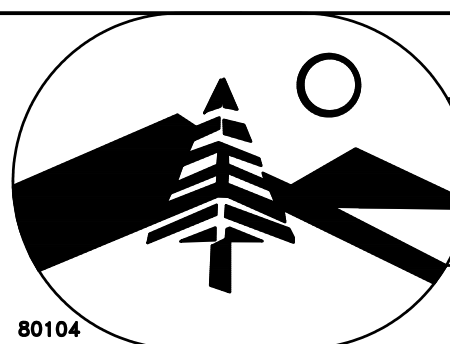
APPROX. LIMITS OF FLOODWAY
PER FIRM MAP NO. 08005C0168K
DATED DECEMBER 17, 2010

I HEREBY AFFIRM THAT THESE GRADING EROSION AND SEDIMENT CONTROL PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE CHERRY HILLS VILLAGE AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY, AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

ZACHARY E THATCHER PE NO. 64656

REVISIONS

DAVID E.
ARCHER
& ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLORADO 80104



INTERIM GESC PLAN
4480 South Holly
In Sec. 8, Township 5 South, Range 67 West,
6th P.M., Arapahoe County, Colorado.

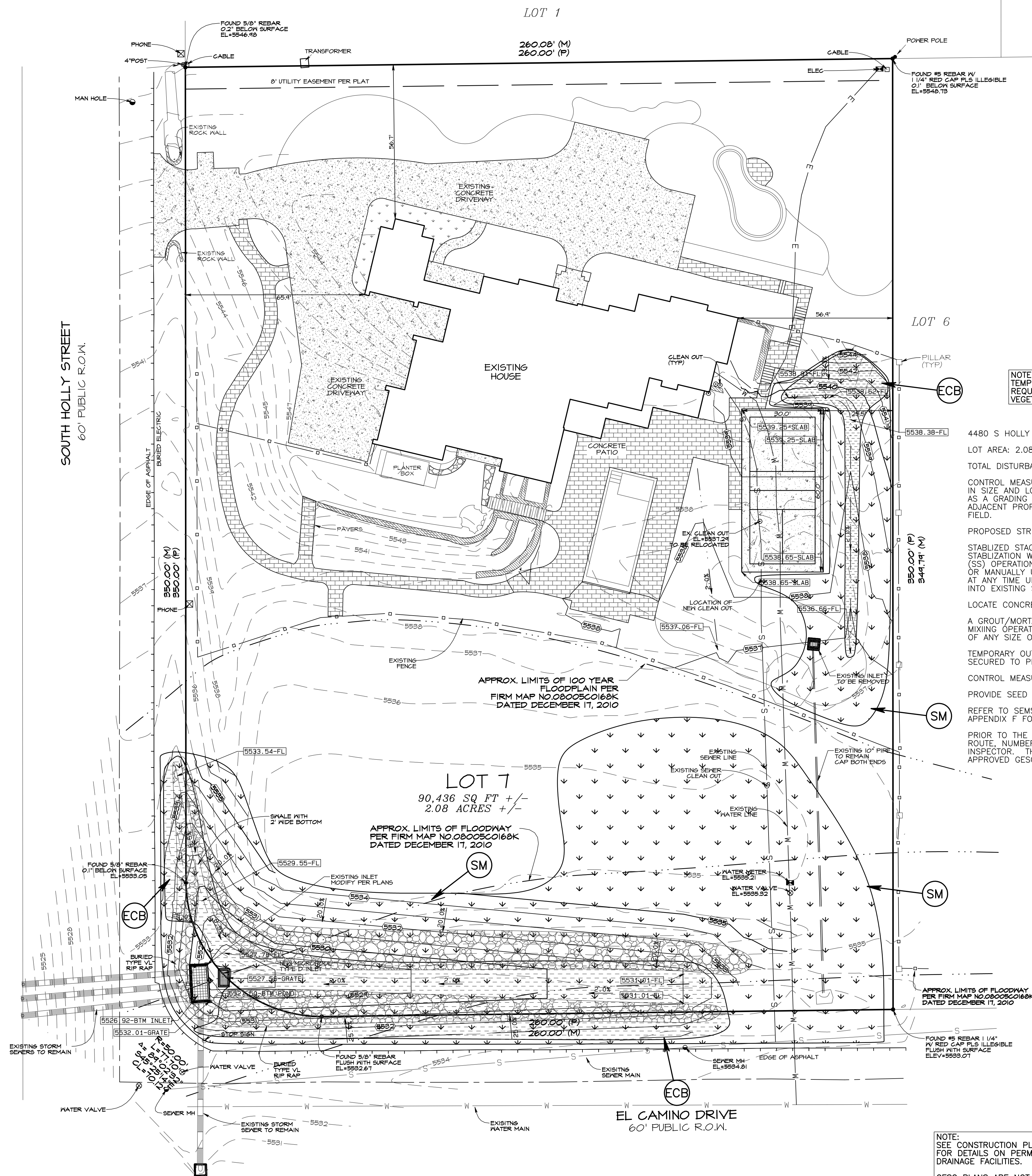
SCALE 1"=30'
DATE 04/02/25
DRN. ZET
APVD.

CUSTOMER
Designs By Sundown

SHEET 3 OF 4
JOB NUMBER
24-0902

NOTES:
ALL DREGED MATERIALS ARE TO BE TAKEN TO A LOCATION APPROVED
BY WASTE MANAGEMENT REGULATIONS.
NO CONSTRUCTION MATERIALS SHALL BE STORED WITHIN THE FLOW AREA.
ADDITIONAL MEASURES TO REDUCE EROSION/POLLUTION DURING
CONSTRUCTION MAY BE NECESSARY AS DETERMINED BY THE INSPECTOR.

Tue Jul 22 15:24:20 2025



FINAL GSC NOTES:

- 1) APPROPRIATE CONTROL MEASURES MUST BE IMPLEMENTED PRIOR TO THE START OF ACTIVITY, MUST CONTROL POTENTIAL POLLUTANTS DURING WHICH CONSTRUCTION OF THE FACILITY WILL BE CONTINUED THROUGH FINAL STABILIZATION, APPROPRIATE STRUCTURAL CONTROL MEASURES MUST BE MAINTAINED IN OPERATIONAL CONDITION.
- 2) SEE SEMSWA STANDARD NOTES AND DETAILS (SHEET 1 OF 4) FOR LEGEND OF CONTROL MEASURE NAMES AND SYMBOLS.
- 3) SLOTTED CONTROL MEASURES WE INSTALLED AT INITIAL OR INTERIM GSC PLAN AND, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL APPROVED BY SEMSWA.
- 4) ALL INTERIM CONTROL MEASURES, INCLUDING SEEDING AND MULCHING OF DISTURBED AREAS, MUST BE COMPLETED WITHIN 14 DAYS IF THE AREAS WILL REMAIN UNDISTURBED FOR A PERIOD GREATER THAN 30 DAYS.
- 5) ALL PROPOSED SLOPES ON THIS PLAN HAVE A MAXIMUM SLOPE OF 4:1. ANY SLOPES BETWEEN 3:1 AND 4:1 WILL REQUIRE THE USE OF EROSION CONTROL BLANKETS OR FLEXIBLE GROWTH MEDIUM, AS APPROVED BY SEMSWA INSPECTOR.
- 6) SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND CATCHMENT PROTECTION.
- 7) LIFE OF THE POST-CONSTRUCTION PERMANENT CONTROL MEASURES WILL NOT OCCUR UNTIL ALL TRIBUTARY AREAS TO THE PERMANENT CONTROL MEASURES ARE FINAL STABILIZED.

SEEDING & MULCHING: 26,330 SF
EROSION CONTROL BLANKET: 7,450 SF

EARTH WORK VOLUMES CUT: 1429 BANK CY FILL: 236 BANK CY NET: 1193 BANK CY EXCESS
--

4480 S HOLLY STREET
LOT AREA: 2.08 ACRES
TOTAL DISTURBANCE AREA = 0.82 ACRES

CONTROL MEASURES (CM) PERTAIN TO EROSION AND SEDIMENT CONTROL ARE APPROXIMATE IN SIZE AND LOCATION. THIS EROSION AND SEDIMENT CONTROL PLAN IS NOT TO BE UTILIZED AS A GRADING PLAN. IF GRADING ON SITE IS NECESSARY IT SHALL NOT ADVERSELY IMPACT ADJACENT PROPERTIES. FLOW ARROWS MAY NOT DEPICT ACTUAL FLOW PATTERNS IN THE

PROPOSED STRUCTURES/IMPROVEMENTS SHOWN ARE APPROXIMATE IN SIZE AND LOCATION.

STABILIZED STAGING AREA (SSA), IF THIS OCCURS ON A VEGETATED SURFACE ADDITIONAL STABILIZATION WILL NEED TO OCCUR ONCE CONSTRUCTION IS COMPLETE. STREET SWEEPING (SS) OPERATIONS SHALL UTILIZE A VACUUM-TYPE STREET SWEEPER, A BRUSH STYLE SWEEPER, OR MANUALLY USING SHOVELS AND BROOMS. PAVEMENT SHALL NOT BE WASHED WITH WATER AT ANY TIME UNLESS ALL WATER IS CONTAINED AND COLLECTED AND IS NOT ALLOWED TO DRAIN INTO EXISTING STORM CONVEYANCES, ON OR OFF SITE.

LOCATE CONCRETE WASHOUT AREA (CWA) AWAY FROM ALL STORM CONVEYANCES.

A GROUT/MORTAR MIXING STATION (GMS) AREA IS CONTAINED AREA TO ISOLATE GROUT/MORTAR MIXING OPERATIONS. A (GMS) CONTROL MEASURE SHALL BE PROVIDED WHEN MASONRY WORK OF ANY SIZE OR DIMENSION IS TO BE PERFORMED.

TEMPORARY OUTDOOR PORTABLE TOILETS SHOULD BE PLACED ON A STABLE SURFACE AND SECURED TO PREVENT TIPPING.

CONTROL MEASURES (CM) MUST BE UTILIZED ON STOCKPILES (SP).

PROVIDE SEED & MULCH (SM) UNLESS PERMANENT LANDSCAPING (LS) IS PROVIDED IN FINAL PLAN.

REFER TO SEMSWA GESC MANUAL STANDARD NOTES AND DETAILS FEBRUARY 2023 LOCATED IN APPENDIX F FOR ADDITIONAL INFORMATION.

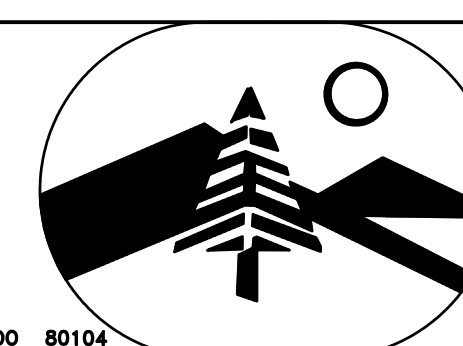
PRIOR TO THE IMPORT/EXPORT OF MATERIAL THE CONTRACTOR SHALL COORDINATE THE HAUL ROUTE, NUMBER OF TRUCKS, AND THE NUMBER OF TRIPS ETC. WITH THE SEMSWA STORMWATER INSPECTOR. THE BORROW/FILL SITE IF WITHIN SEMSWA BOUNDARIES, MAY REQUIRE ADDITIONAL APPROVED GESC PERMITS, PLANS, AND A REPORT.

NOTE:
SEE CONSTRUCTION PLANS
FOR DETAILS ON PERMANENT
DRAINAGE FACILITIES.

GESC PLANS ARE NOT COMPLETE
WITHOUT THE GESC REPORT

[illegible]

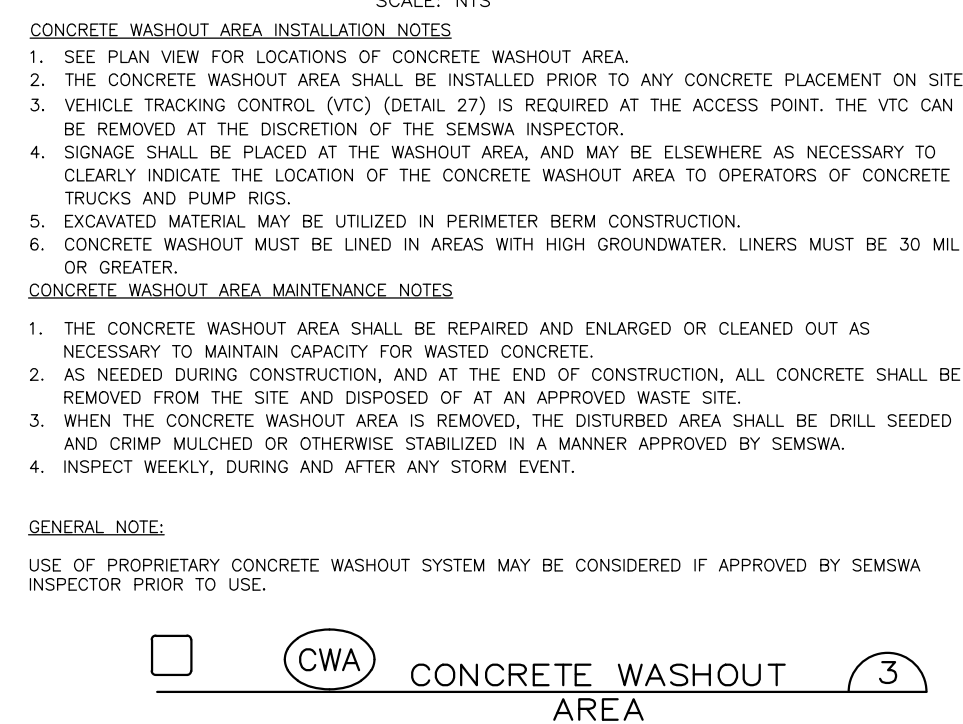
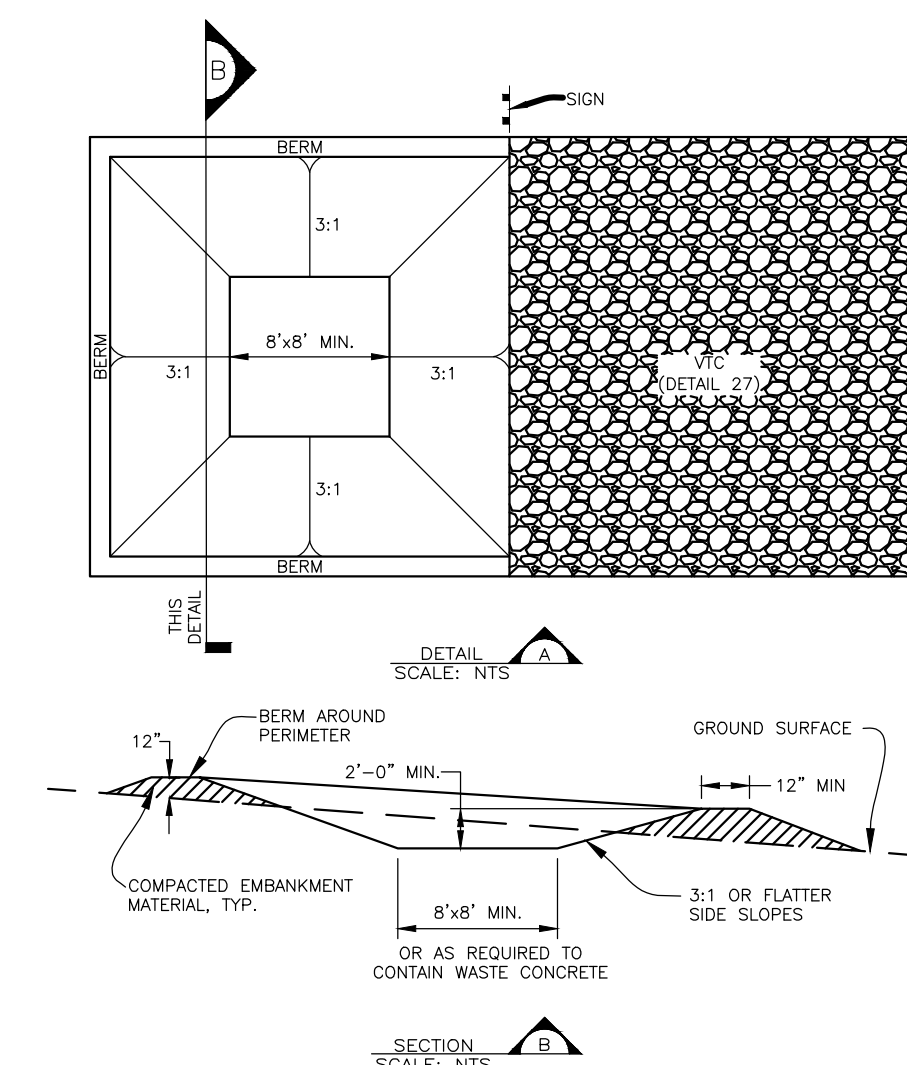
 **DAVID E.**
ARCHER
& ASSOCIATES, INC.
LAND DEVELOPMENT CONSULTING
SURVEYING & ENGINEERING
PHONE (303) 688-4642
105 WILCOX ST. CASTLE ROCK, COLOR.



SCALE 1"=20'		TITLE FINAL GESC PLAN	
DATE 04/02/25		4480 South Holly In Sec. 8, Township 5 South, Range 6T West, 6th P.M., Arapahoe County, Colorado.	
DRN. ZET AP'VD.		CLIENT Designs By Sundown	
CHKD.		JOB NUMBER 24-0902	
		Sheet 4 of 4	

- GRADING, EROSION, AND SEDIMENT CONTROL (GESC) GENERAL NOTES
- THE SOUTHEAST METRO STORMWATER AUTHORITY (SEMSWA) LAND DEVELOPMENT REVIEW MANAGER SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES SEMSWA HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL COMPLIANCE WITH THE GRADING, EROSION, AND SEDIMENT CONTROL (GESC) MANUAL. THE LAND DEVELOPMENT REVIEW MANAGER THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY (OTHER THAN AS STATED ABOVE) FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS.
 - THE ADEQUACY OF THIS GESC PLAN LIES WITH THE ORIGINAL DESIGN ENGINEER. CHANGES TO DESIGN INTENT THAT MEET THE DEFINITION OF MAJOR MODIFICATIONS MUST GO THROUGH ORIGINAL DESIGN ENGINEER.
 - THE GESC PLAN SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF ACCEPTANCE BY SEMSWA, AFTER WHICH TIME THE PLAN SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY SEMSWA. PLANS MUST CONFORM TO CURRENT REQUIREMENTS.
 - ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY SEMSWA'S INSPECTION DIVISION. SEMSWA RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE GESC MANUAL, GESC PLAN OR GESC PERMIT.
 - THE PLACEMENT OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE ACCEPTED GESC PLAN AND THE SEMSWA GESC MANUAL.
 - ANY VARIATION IN MATERIAL, TYPE OR LOCATION OF EROSION AND SEDIMENT CONTROL MEASURES FROM THE SEMSWA - ACCEPTED GESC PLAN WILL REQUIRE APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF SEMSWA.
 - UPON RECEIVING THE APPROVED, SIGNED AND STAMPED GESC PLANS AND REPORT, THE CONTRACTOR MAY INSTALL THE NON-EARTH DISTURBING INITIAL-STAGE EROSION AND SEDIMENT CONTROL MEASURES INDICATED ON THE ACCEPTED GESC PLAN.
 - AFTER INSTALLATION OF THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL CALL THE INSPECTION DIVISION TO SCHEDULE A PRECONSTRUCTION MEETING AT THE PROJECT SITE. THE REQUEST SHALL BE MADE NO LESS THAN 24 HOURS PRIOR TO THE REQUESTED MEETING TIME. NO CONSTRUCTION ACTIVITIES SHALL BE PLANNED WITHIN 24 HOURS AFTER THE PRECONSTRUCTION MEETING.
 - IN ADDITION TO THE SEMSWA INSPECTOR AND GESC MANAGER, THE FOLLOWING REPRESENTATIVES SHOULD ATTEND: GENERAL CONTRACTOR, OWNER, OR OWNER'S REPRESENTATIVE AND GRADING SUBCONTRACTOR. IF ANY OF THE REQUIRED PARTICIPANTS FAIL TO ATTEND THE PRECONSTRUCTION MEETING, OR IF THE INSTALLATION OF THE INITIAL CONTROL MEASURES ARE NOT APPROVED BY THE SEMSWA INSPECTOR, THE APPLICANT WILL HAVE TO PAY A RESCRIPTION FEE, ADDRESS ANY PROBLEMS WITH CONTROL MEASURE INSTALLATION, AND CALL TO RESCHEDULE THE MEETING, WITH A CORRESPONDING DELAY IN THE START OF CONSTRUCTION.
 - CONSTRUCTION SHALL NOT BEGIN UNTIL THE SEMSWA INSPECTOR APPROVES THE INSTALLATION OF THE INITIAL CONTROL MEASURES AND THE APPROVED GESC PERMIT HAS BEEN ISSUED BY SEMSWA AND IS IN-HAND ON THE SITE. THE COMPLETED PERMIT WILL GENERALLY BE FIELD ISSUED OR ISSUED VIA EMAIL AFTER THE INSTALLATION OF THE INITIAL CONTROL MEASURES ARE APPROVED.
 - THE GESC MANAGER SHALL STRICTLY ADHERE TO THE SEMSWA APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE SEMSWA INSPECTION DIVISION MUST APPROVE ANY CHANGES TO THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE INSPECTION DIVISION, ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED IN ANY ADDITIONAL AREAS OF CONSTRUCTION/DISTURBANCE ARE NEEDED.
 - THE MAXIMUM AREA OF CONSTRUCTION SHALL BE LIMITED TO 40 ACRES (70 ACRES IF APPROVED FOR SOIL MITIGATION OPERATIONS) TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME. LARGER SITES SHALL BE DIVIDED INTO PHASES THAT ARE EACH 40 (OR 70) ACRES OR LESS IN SIZE. THESE PROJECTS SHALL CONDUCT GRADING ACTIVITIES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN. CONTROL MEASURE INSTALLATION AND APPROVAL BY SEMSWA AT THE START AND COMPLETION OF EACH PHASE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE GESC MANUAL.
 - NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
 - THE GESC PERMIT SHALL BE VALID FOR A PERIOD OF TWO (2) YEARS.
 - A COPY OF THE GESC PERMIT AND APPROVED GESC PLANS SHALL BE ON SITE OR MADE AVAILABLE UPON REQUEST.
 - THE GESC MANAGER SHALL BE RESPONSIBLE PARTY FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE GESC PERMIT AND SHALL BE THE PERMITTEE'S CONTACT PERSON WITH SEMSWA FOR ALL MATTERS PERTAINING TO THE GESC PERMIT. THE GESC MANAGER SHALL BE ON THE SITE AS NECESSARY TO ENSURE THE GESC REQUIREMENTS ARE BEING IMPLEMENTED, AND (ALONG WITH THE ALTERNATE GESC MANAGER) SHALL PROVIDE SEMSWA WITH A 24-HOUR EMERGENCY CONTACT NUMBER. IN THE EVENT THAT THE CONTRACTOR'S GESC MANAGER IS NOT ON SITE AND CANNOT BE REACHED DURING A VIOLATION, THE ALTERNATE GESC MANAGER SHALL BE CONTACTED. IF NEITHER THE GESC MANAGER NOR ALTERNATE GESC MANAGER CAN BE CONTACTED DURING ANY VIOLATION, WITHIN 24 HOURS, VIOLATION MAY BE ISSUED TO THE PERMITTEE(S).
 - ALL CONSTRUCTION TRAFFIC MUST EXIT THE SITE THROUGH THE SEMSWA-APPROVED ACCESS POINT. A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL EXIT POINTS ON THE SITE. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH AUTHORIZATION FROM THE SEMSWA INSPECTION DIVISION.
 - THE GESC MANAGER IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED onto ADJACENT PAVED AREAS. PAVED AREAS INCLUDING STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD-OUT AND SHALL BE CLEANED, WITH A STREET SWEEPER OR SIMILAR DEVICE, AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE SEMSWA GESC INSPECTOR. STREET WASHING IS NOT ALLOWED. SEMSWA RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
 - APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE GESC MANAGER SHALL INSPECT ALL CONTROL MEASURES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN AND GESC MANUAL. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN 48 HOURS. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED.
 - STRAW BALES ARE NOT A SEMSWA GESC-ACCEPTED SEDIMENT CONTROL MEASURE.
 - TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN THE LOCATION SHOWN ON THE ACCEPTED GESC PLAN. THE TOPSOIL STOCKPILE(S) SHALL FOLLOW ALL STOCKPILING CRITERIA DESCRIBED IN THE GESC MANUAL. TOPSOIL SHALL BE REPLACED AT A MINIMUM DEPTH OF 6 INCHES. IF A MINIMUM DEPTH OF 6 INCHES CAN NOT BE OBTAINED, ADDITIONAL TOPSOIL AND/OR APPROVED SOIL AMENDMENTS WILL BE REQUIRED TO BE PLACED PRIOR TO SEEDING AND MULCHING.
 - THE ACCEPTED GESC PLAN MAY REQUIRE CHANGES OR ALTERNATIONS AFTER APPROVAL TO MEET CHANGING SITE OR PROJECT CONDITIONS OR TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION. THE GESC MANAGER SHALL OBTAIN PRIOR APPROVAL FOR MAJOR MODIFICATIONS FROM THE DESIGN ENGINEER AND SEMSWA FOR ANY PROPOSED CHANGES.
 - LINING OF TEMPORARY SWALES AND DITCHES SHALL BE IN ACCORDANCE WITH THE GESC MANUAL.
 - ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE GESC MANAGER. THE GESC MANAGER SHALL BE HELD RESPONSIBLE FOR OBTAINING ACCESS RIGHTS TO ADJACENT PROPERTY, IF NEEDED, AND REMEDIATING ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
 - A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
 - SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE SEEDED AND MULCHED WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. NO STOCKPILES SHALL BE PLACED WITHIN ONE HUNDRED (100) FEET OF A DRAINAGE WAY UNLESS APPROVED BY SEMSWA.
 - ALL CHEMICAL OR HAZARDOUS MATERIAL SPILLS WHICH MAY ENTER WATERS OF THE STATE OF COLORADO, WHICH INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUND WATER AND DRY GULLIES OR STORM SEWER LEADING TO SURFACE WATER, SHALL BE IMMEDIATELY REPORTED TO THE CDPIE PER CRS 25-8-601, AND SEMSWA. RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE CDPIE. CONTACT INFORMATION FOR CDPIE, SEMSWA AND THE NATIONAL RESPONSE CENTER CAN BE FOUND IN APPENDIX A. SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE SHALL BE REPORTED TO 911. FAILURE TO REPORT AND CLEAN UP ANY SPILL SHALL RESULT IN ISSUANCE OF A STOP WORK ORDER. TO REPORT SPILLS TO SEMSWA CALL 303-858-8844.
 - ALL WORK ON SITE SHALL STAY A MINIMUM OF ONE HUNDRED (100) FEET AWAY FROM ANY DRAINAGE WAY, WETLAND, ETC. UNLESS OTHERWISE NOTED ON AN ACCEPTED SEMSWA GESC PLAN.
 - THE USE OF REBAR, STEEL STAKES, STAPLES, OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF ANY EROSION OR SEDIMENT CONTROL MEASURE IS PROHIBITED (EXCEPT STEEL TEE-POSTS FOR USE IN SUPPORTING CONSTRUCTION FENCE).
 - THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED CONCRETE WASH OUT LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED AT AN APPROPRIATE LOCATION.
 - ALL DEWATERING ON SITE SHALL BE COORDINATED WITH A SEMSWA GESC INSPECTOR AND BE FREE OF SEDIMENT IN ACCORDANCE WITH THE GESC MANUAL, AND STATE OF COLORADO DEWATERING PERMIT.
 - ALL PERMANENT INSTALLATIONS OF PIPES FOR STORM SEWERS, SLOPE DRAINS, AND CULVERTS, TOGETHER WITH RIPRAP APRONS OR OTHER INLET AND OUTLET PROTECTION, REQUIRE INSPECTION BY SEMSWA (SEPARATE FROM GESC INSPECTIONS).
 - ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE GESC MANUAL WITHIN 14 DAYS OF SUBSTANTIAL COMPLETION OF GRADING, INCLUDING AREAS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
 - HYDRAULIC SEEDING IS NOT AN ACCEPTABLE METHOD OF SEEDING WITHIN THE SEMSWA SERVICE AREA.
 - HYDRO-MULCH MAY BE USED FOR LIMITED APPLICATIONS AS APPROVED BY SEMSWA.
 - UTILITY LINE INSTALLATION SHALL COMPLY WITH THE FOLLOWING CRITERIA:
 - ALL UTILITY WORK WITHIN A RIGHT-OF-WAY SHALL BE REQUIRED TO OBTAIN A RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT IN ACCORDANCE WITH THE APPROPRIATE STANDARDS.
 - PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROLS.
 - AT THE END OF A WORK DAY, NO TRENCH SHALL BE LEFT OPEN AND BACKFILL MUST BE COMPLETED TO GRADE.
 - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - AT NO TIME SHALL EXCAVATED MATERIAL BE PLACED ON THE STREET.
 - TRENCH DEWATERING DEVICES MUST DISCHARGE IN A MANNER THAT WILL NOT EFFECT STREAMS, WETLANDS, DRAINAGE SYSTEMS, OR OFF-SITE PROPERTY. DISCHARGE FROM TRENCH SHALL BE FREE OF ANY SEDIMENT. A RIPRAP PAD SHALL BE PLACED AT THE DISCHARGE END OF THE HOSE TO PREVENT ANY ADDITIONAL EROSION.
 - STORM SEWER INLET PROTECTION SHALL BE PROVIDED WHENEVER SOIL EROSION FROM THE EXCAVATED AREA HAS POTENTIAL OF ENTERING THE STORM DRAINAGE SYSTEM.
 - ALL DISTURBED AREAS SHALL BE DRILL SEEDDED AND CRIMP MULCHED WITHIN FIVE DAYS AFTER UTILITY INSTALLATION IS COMPLETED.
 - ALL OTHER APPLICABLE CRITERIA AS OUTLINED IN THE GESC MANUAL.
 - ALL SINGLE-FAMILY RESIDENTIAL DEVELOPMENT PROJECTS SHALL COMPLY WITH THE GESC CRITERIA AS PRESENTED IN THE GESC MANUAL.
 - NO RECYCLED ASPHALT SHALL BE USED AS A CONTROL MEASURE. RECYCLED CONCRETE MUST BE APPROVED BY SEMSWA.
 - SEMSWA MAY ALLOW THE INSTALLATION OF ALTERNATIVE CONTROL MEASURES OTHER THAN THE GESC PLAN STANDARD NOTES AND DETAILS, IF ALTERNATIVE EROSION AND SEDIMENT CONTROL MEASURES WILL BE USED, OUT SHEETS MUST BE SUBMITTED TO THE SEMSWA INSPECTOR.
 - IF YOU ARE EXPORTING EXCESS DIRT WITHIN THE SEMSWA SERVICE AREA, YOU WILL BE REQUIRED TO OBTAIN A GESC PERMIT FOR THE SECONDARY SITE.

		LEGEND	
1	①		CBC CUT BACK CURB
2	①		CD CHECK DAM
3	①		CWA CONCRETE WASHOUT AREA
4	①		CF CONSTRUCTION FENCE
5	①		CM CONSTRUCTION MARKERS
6	①		CS CURB SOCK
7	①		DW DEWATERING
8	①		DD DIVERSION DITCH
9	②		ECB EROSION CONTROL BLANKET
10	②		FGM FLEXIBLE GROWTH MEDIUM
11	②		GMS GROUT MIXING STATION
12	②		IP INLET PROTECTION
13	②		RCD REINFORCED CHECK DAM
14	②		RRB REINFORCED ROCK BERM
15	②		RRB RRB FOR CULVERT PROTECTION
16	③		SB SEDIMENT BASIN
17	③		SCL SEDIMENT CONTROL LOG
18	③		ST SEDIMENT TRAP
19	③		SM SEEDING AND MULCHING
20	③		SF SILT FENCE
21	③		SFR SILT FENCE REINFORCED
22	④		SID SLOPE INTERCEPT DITCH
23	④		SSA STABILIZED STAGING AREA
24	④		SR SURFACE ROUGHENING
25	④		TSD TEMPORARY SLOPE DRAIN
26	④		TSC TEMPORARY STREAM CROSSING
27	④		VTC VEHICLE TRACKING CONTROL
28	④		VTC VTC WITH WHEEL WASH
			LOC LIMITS OF CONSTRUCTION
			*EG MAY MEET MAJOR MODIFICATION REQUIREMENTS



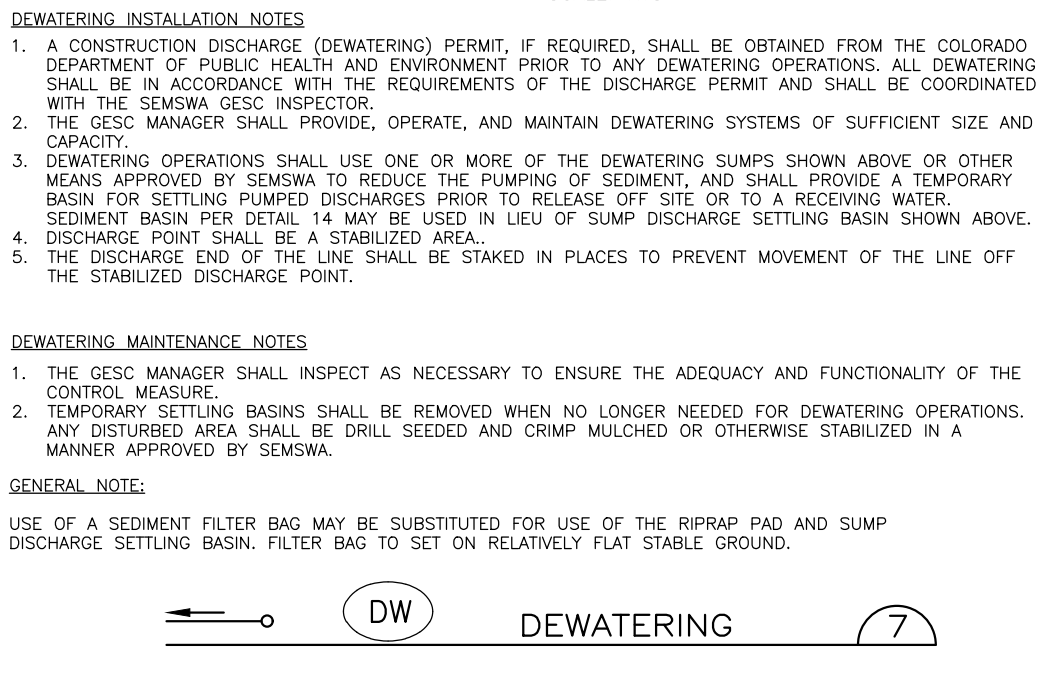
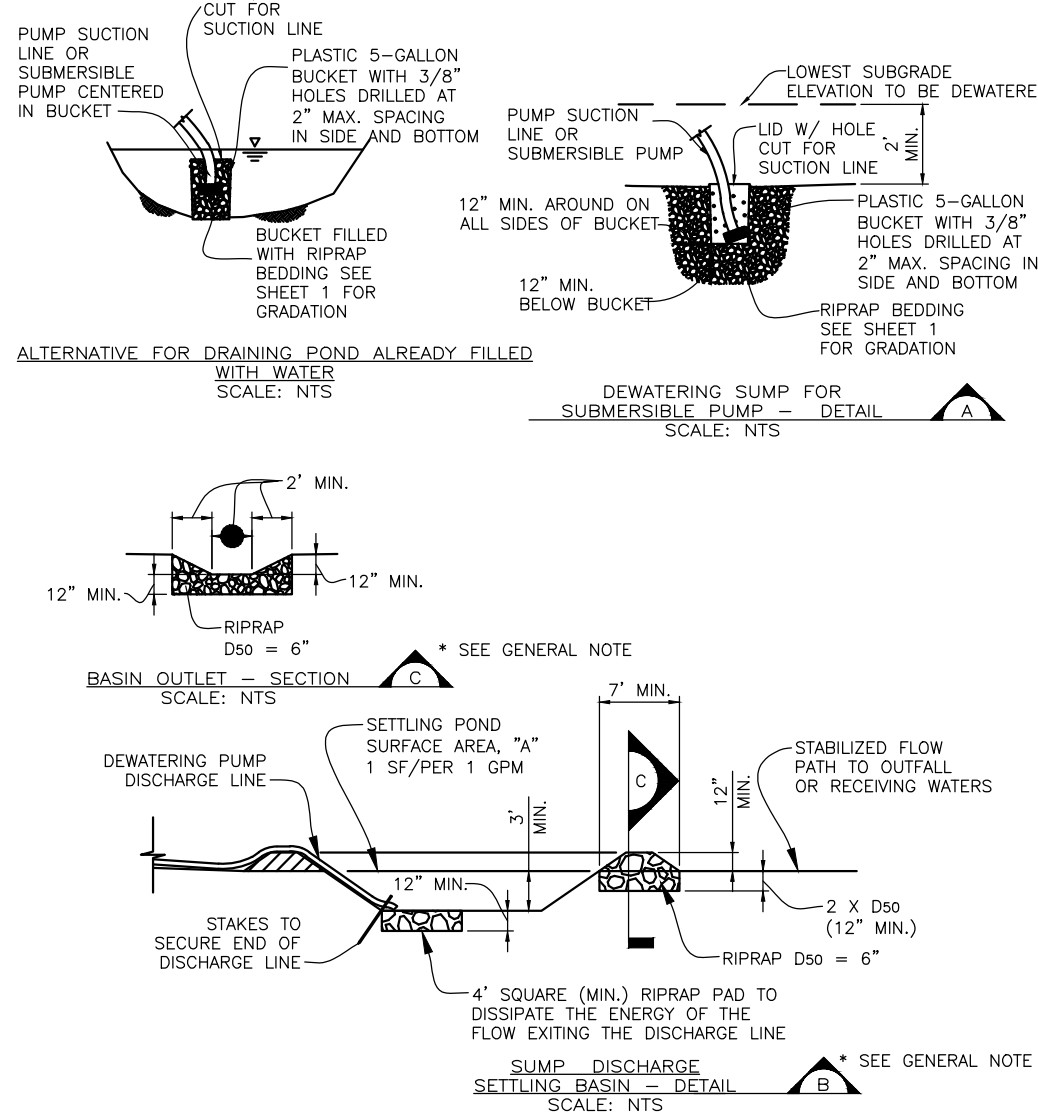
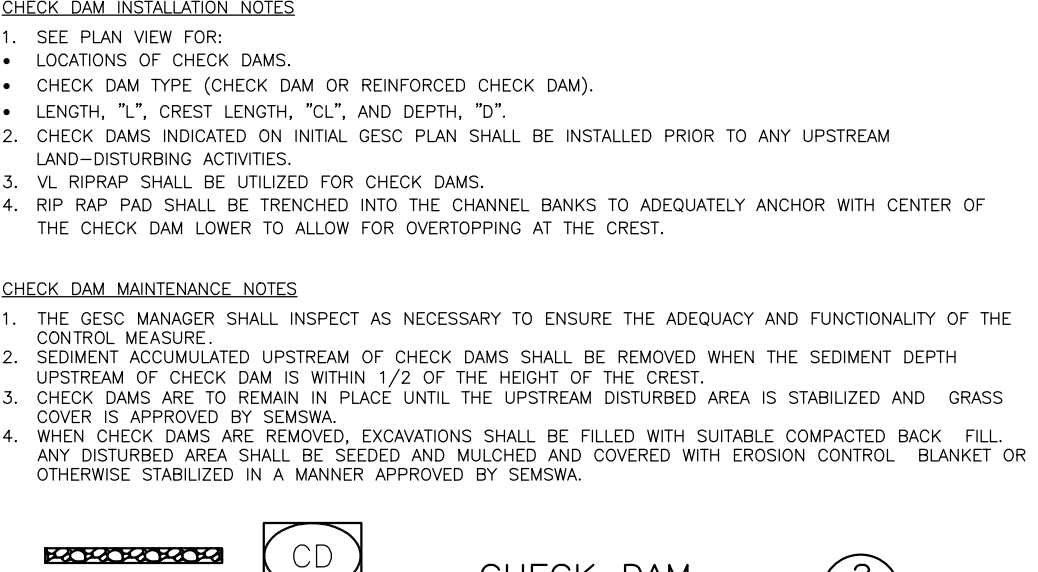
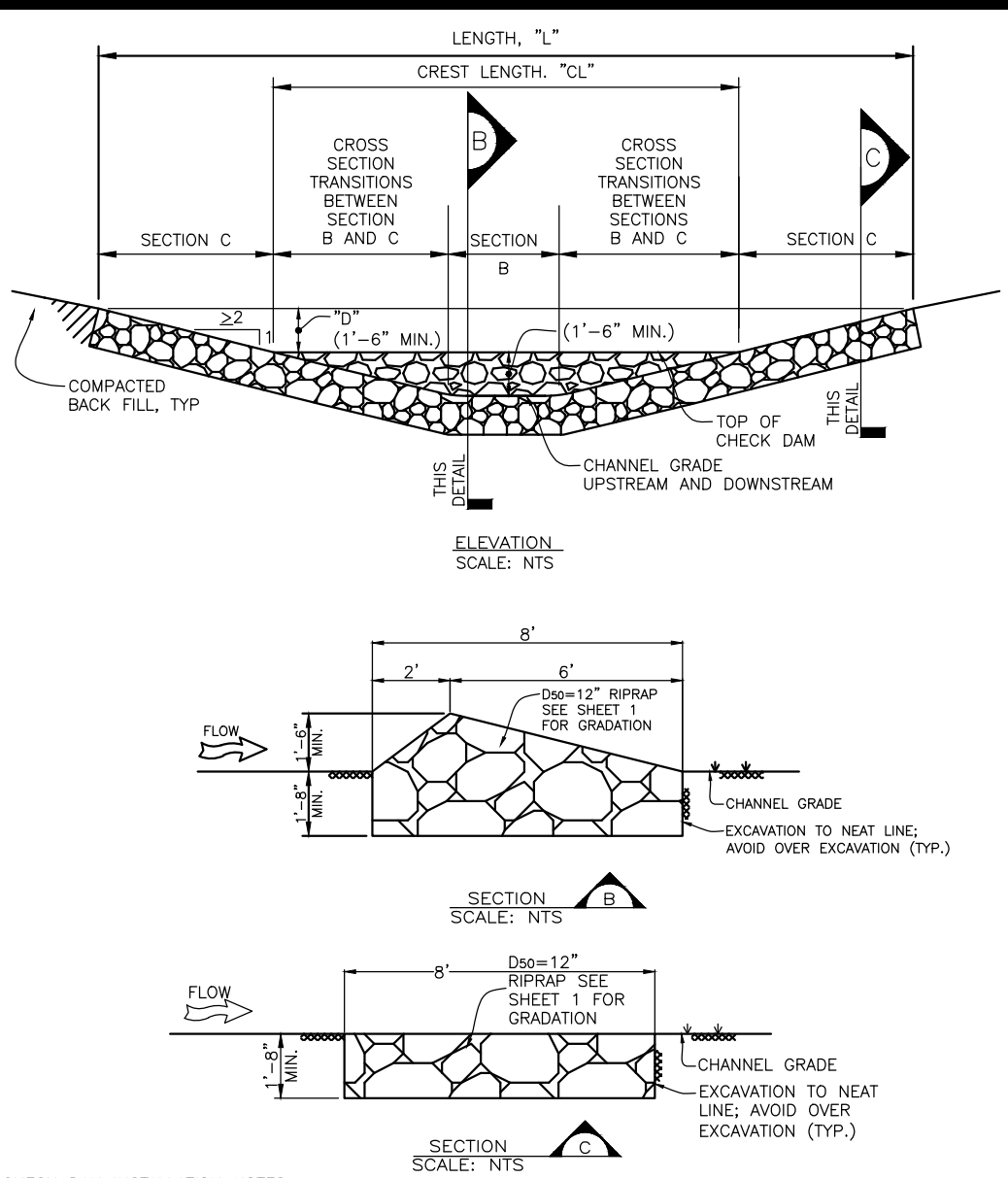
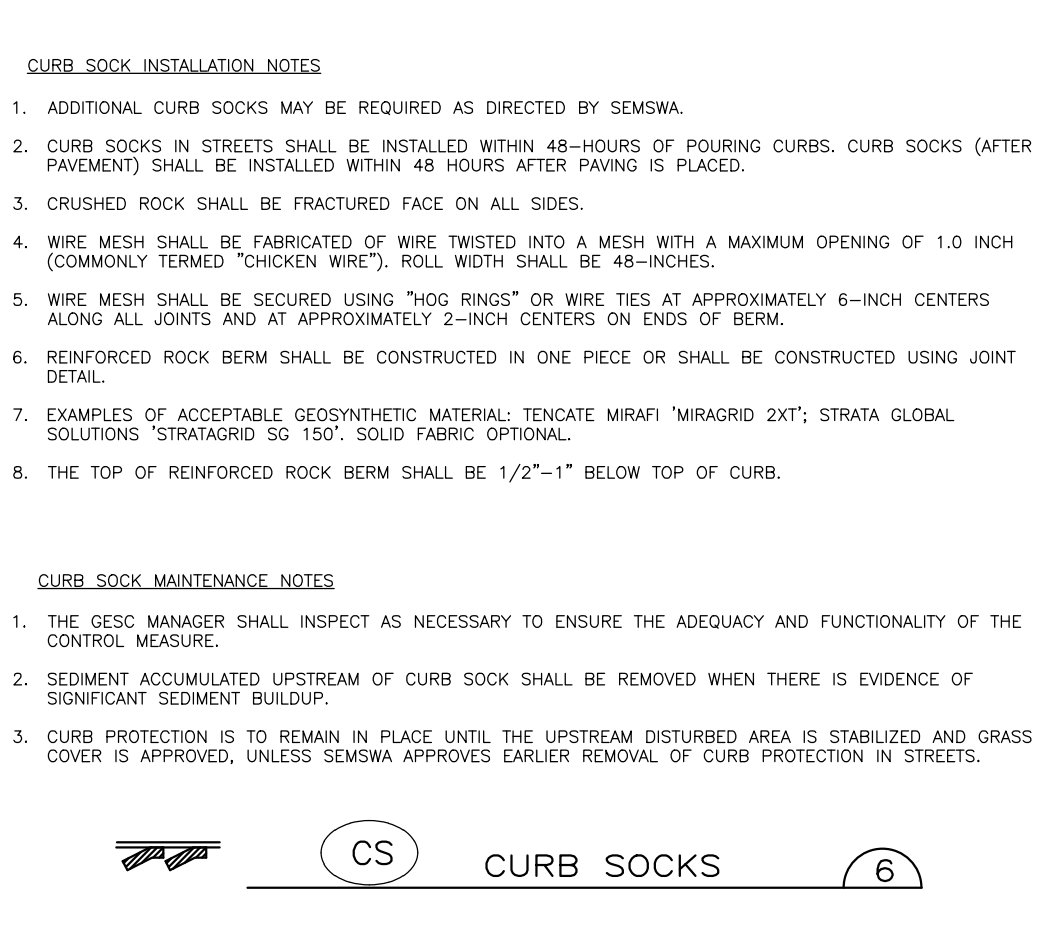
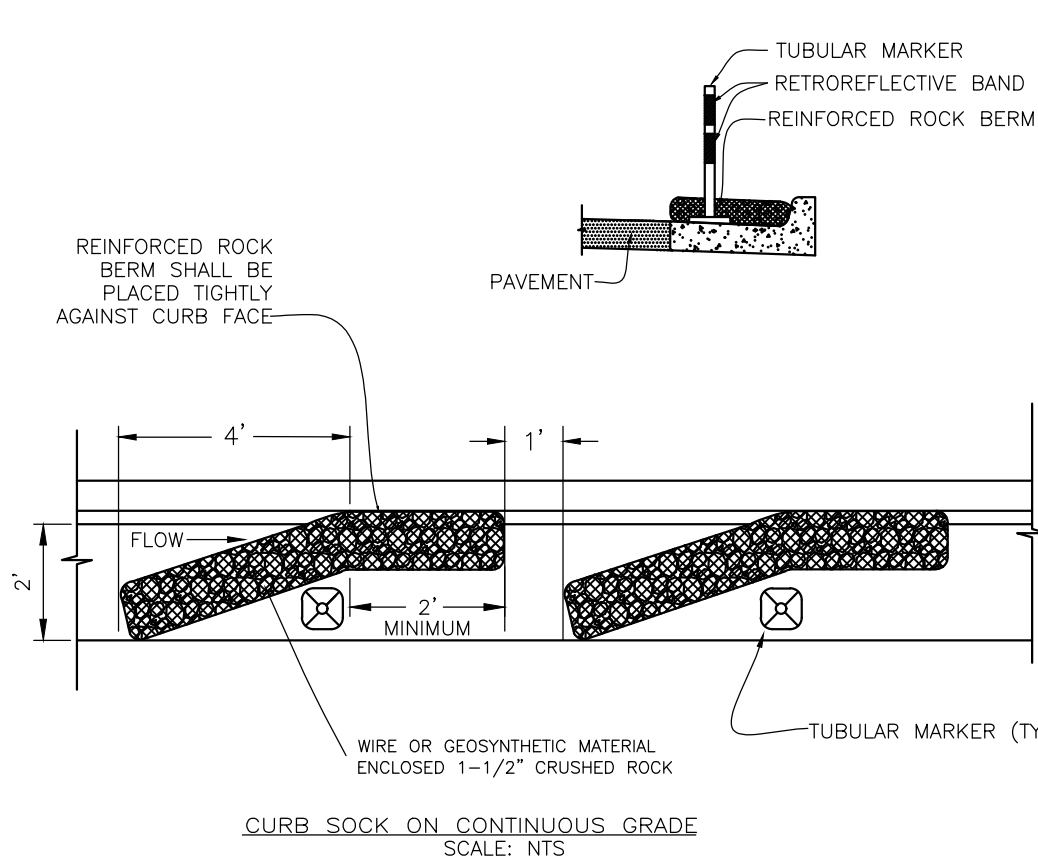
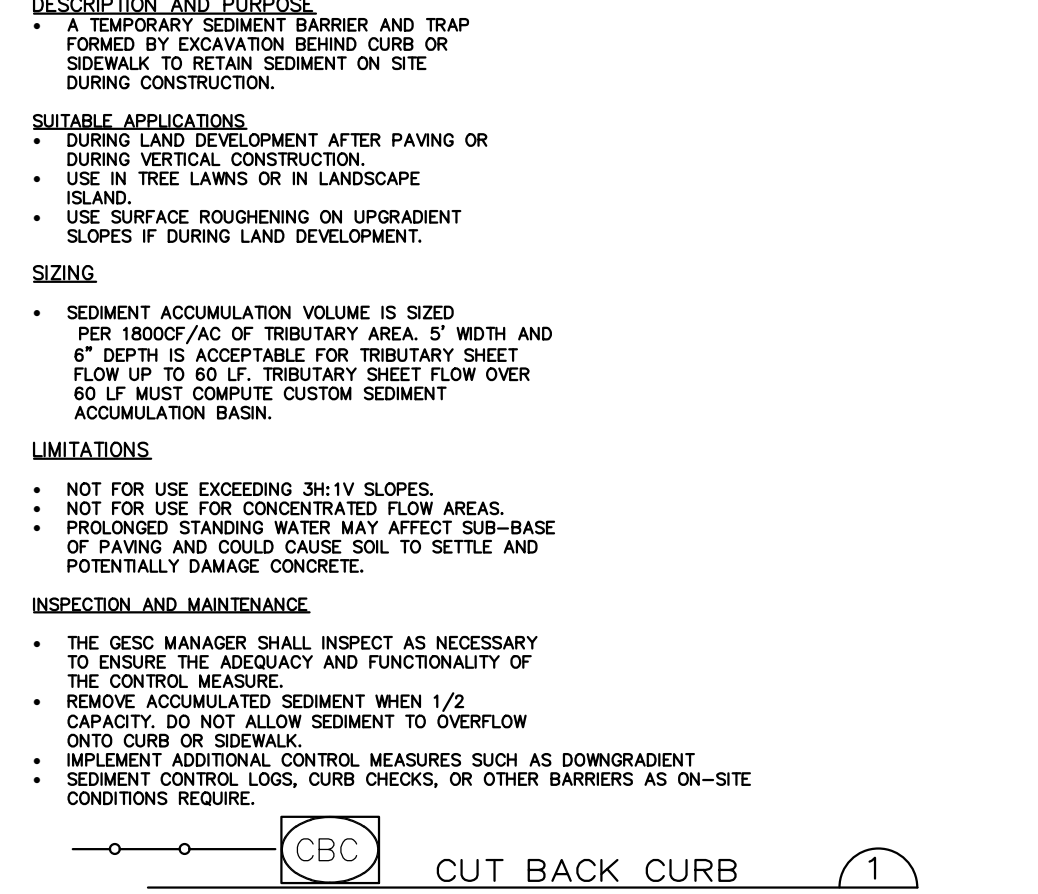
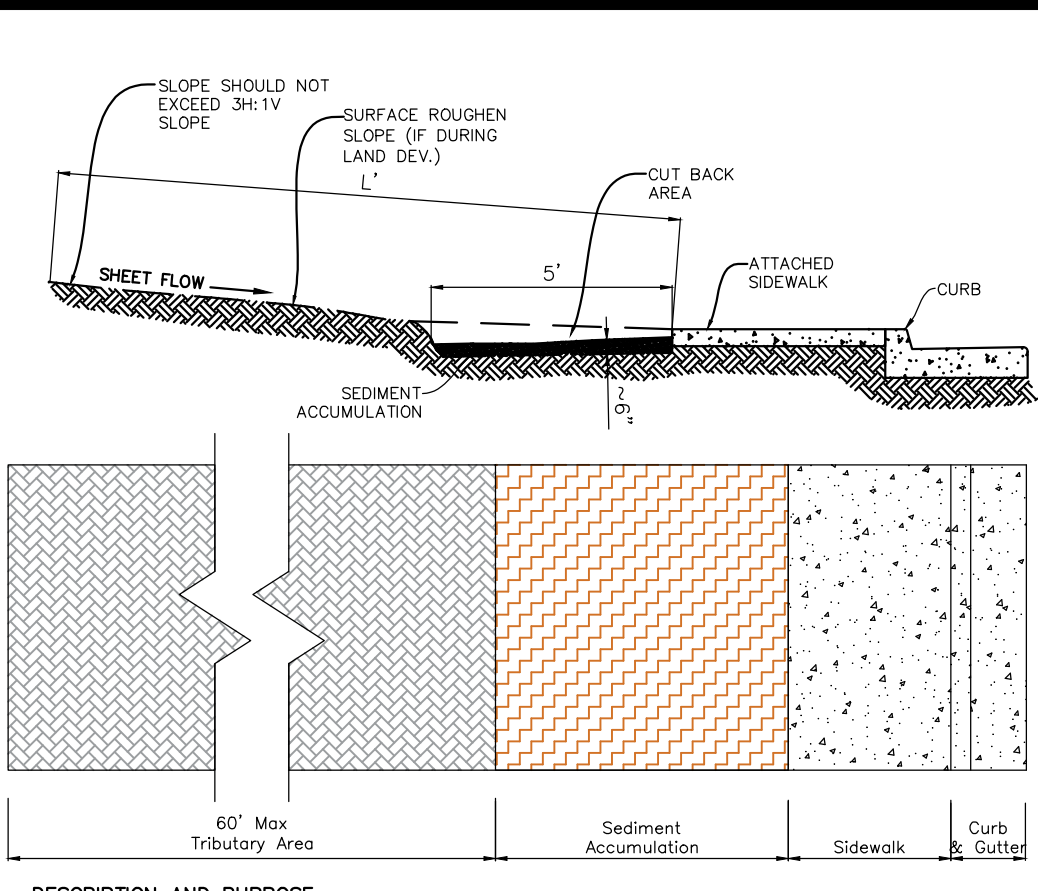
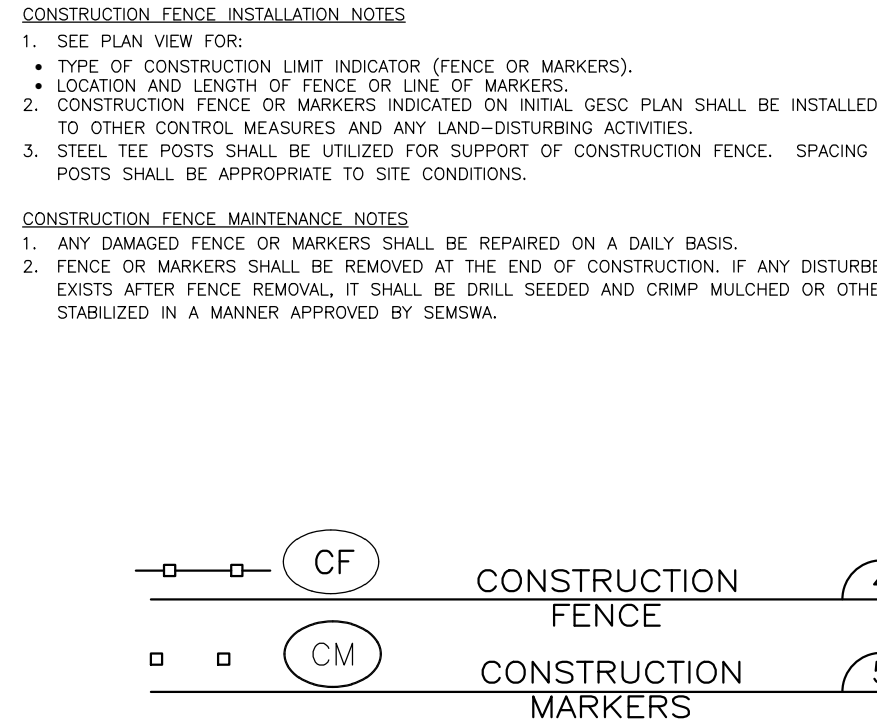
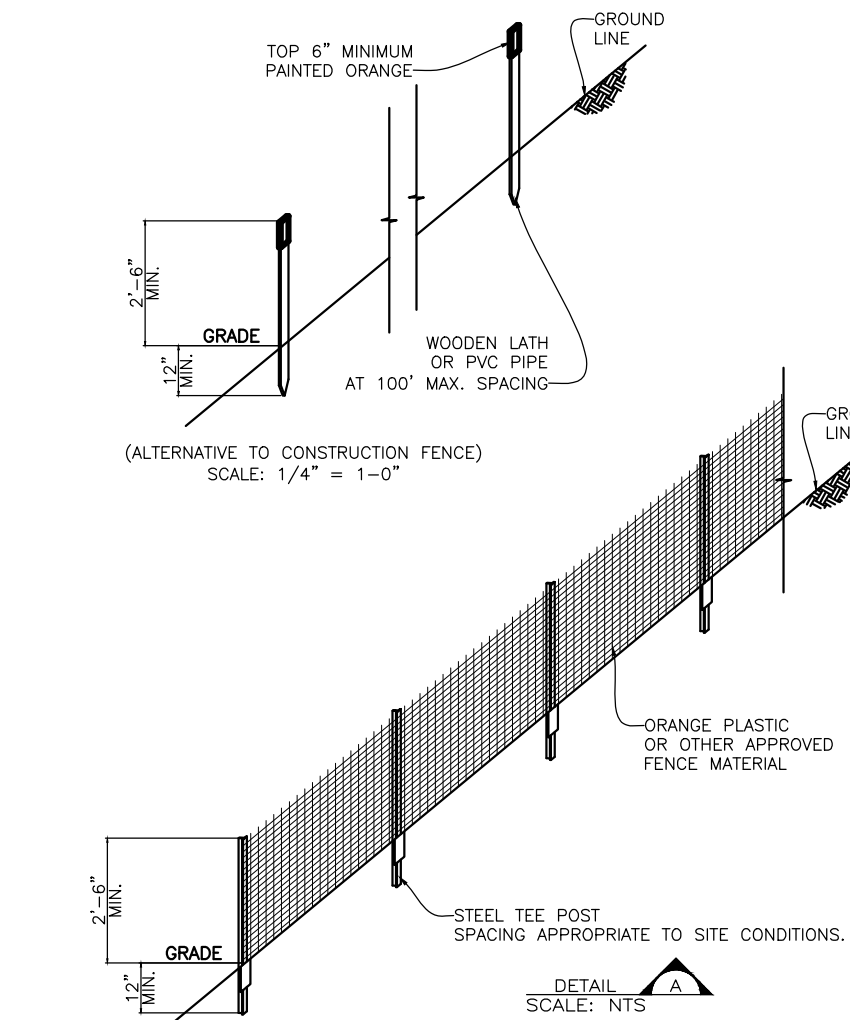
ROCK AND RIPRAP GRADATIONS

TABLE 1. RIPRAP GRADATIONS			
D50 MEDIAN STONE SIZE (INCHES)	% OF MATERIAL SMALLER THAN TYPICAL STONE	TYPICAL STONE EQUIVALENT DIAMETER (INCHES)	TYPICAL STONE WEIGHT (POUNDS)
6	70 - 100 50 - 70 35 - 50 2 - 10	12 9 6 2	85 30 10 0.4
9	70 - 100 50 - 70 35 - 50 2 - 10	15 12 9 3	160 85 35 1.3
12	70 - 100 50 - 70 35 - 50 2 - 10	21 18 12 4	440 275 120 3
18	100 50 - 70 35 - 50 2 - 10	30 24 18 6	1280 650 275 10
24	100 50 - 70 35 - 50 2 - 10	42 33 24 9	3500 1700 650 35

TABLE 2. RIPRAP BEDDING

SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES	
	CLASS A	
3"	100	
1 1/2"	20 - 90	
NO. 4	0 - 20	
NO. 200	0 - 3	

MATCHES SPECIFICATIONS FOR COOT CLASS A FILTER MATERIAL, AND LOFT TYPE 1 BEDDING. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.



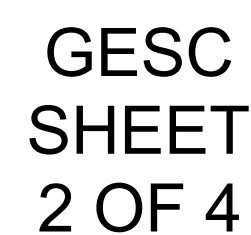
UTILITY NOTIFICATION CENTER
OF COLORADO
CALL BEFORE YOU DIG
811
Call 2 days prior to any digging, grading or
excavating for the marking of underground
member utilities

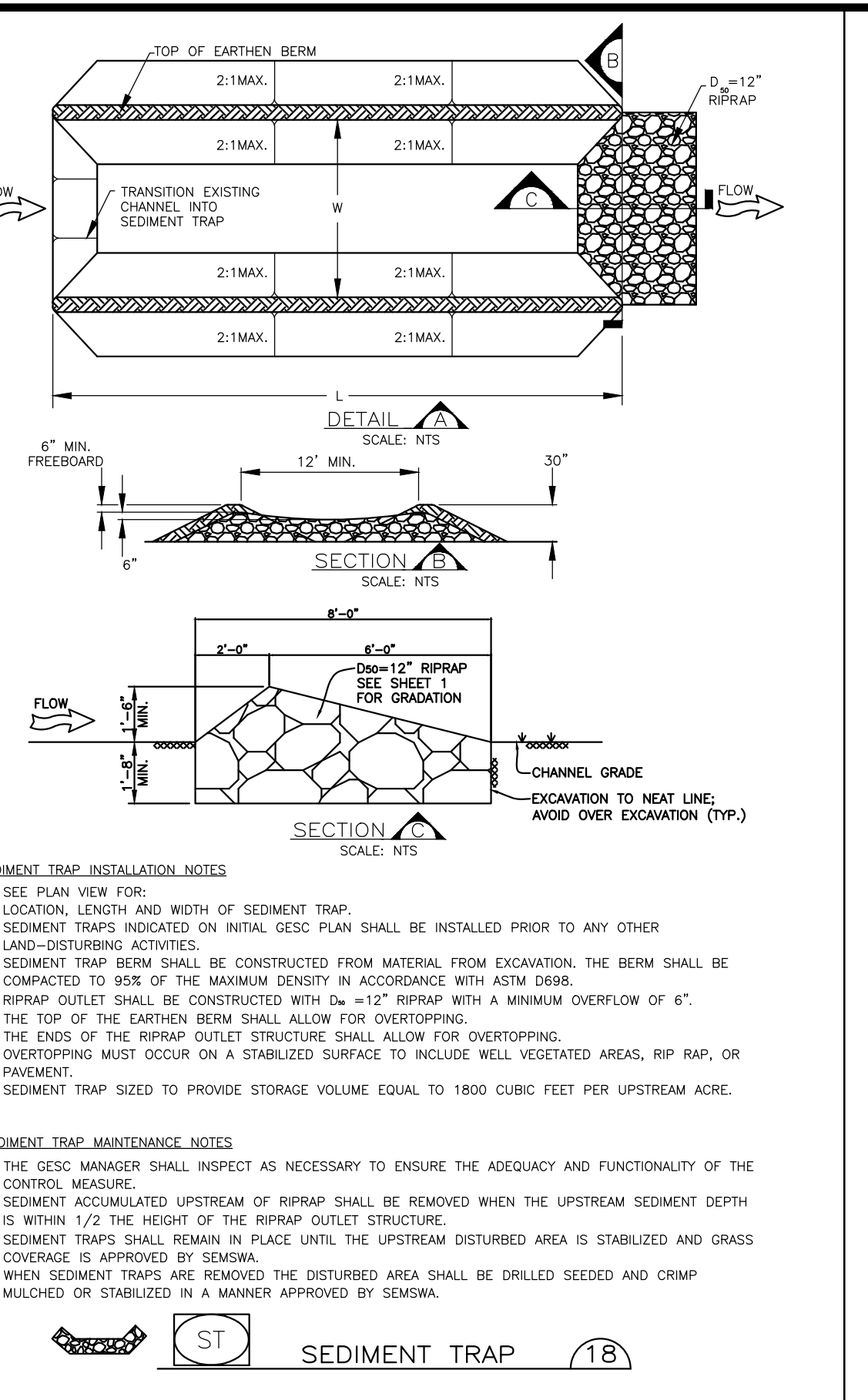
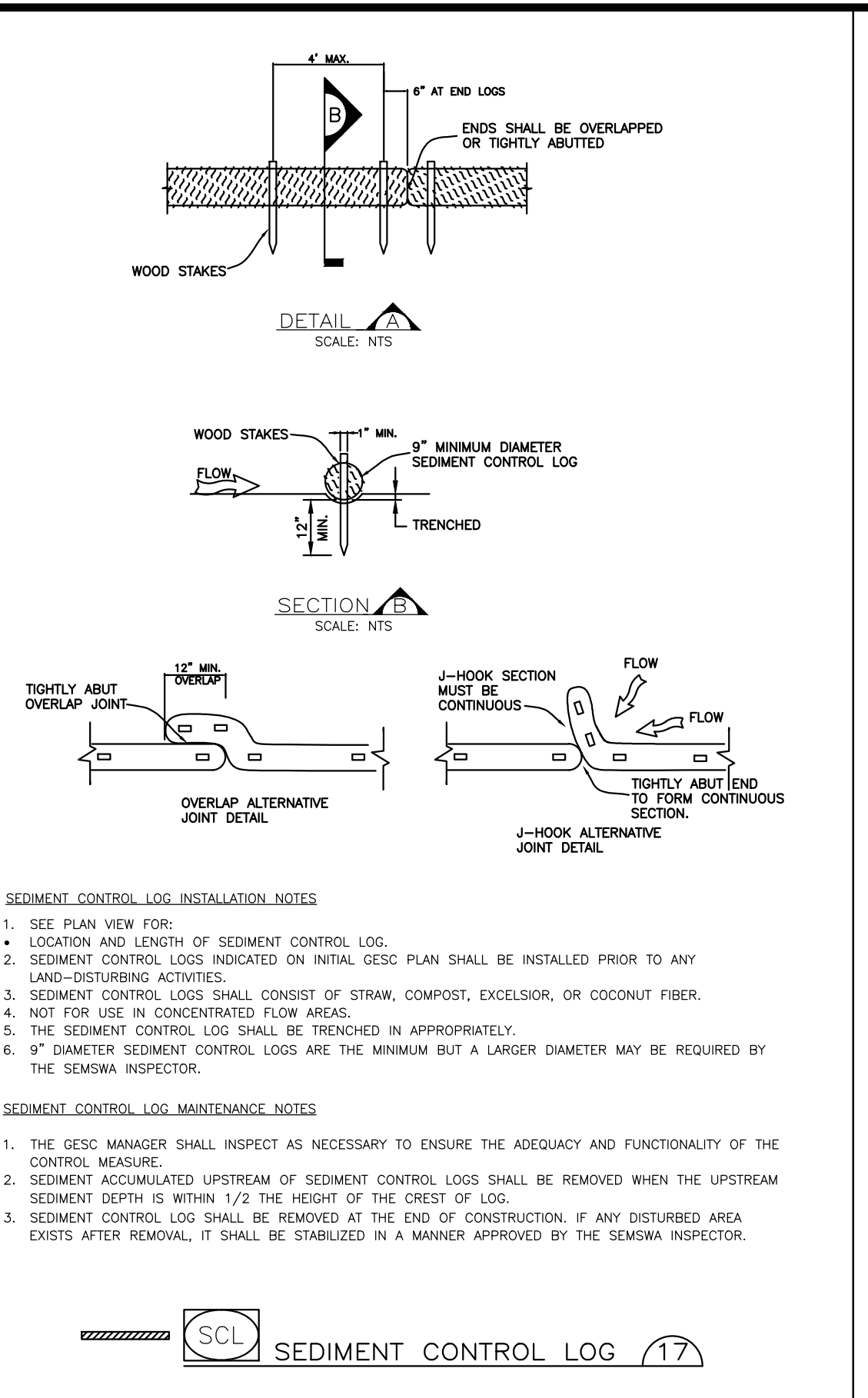
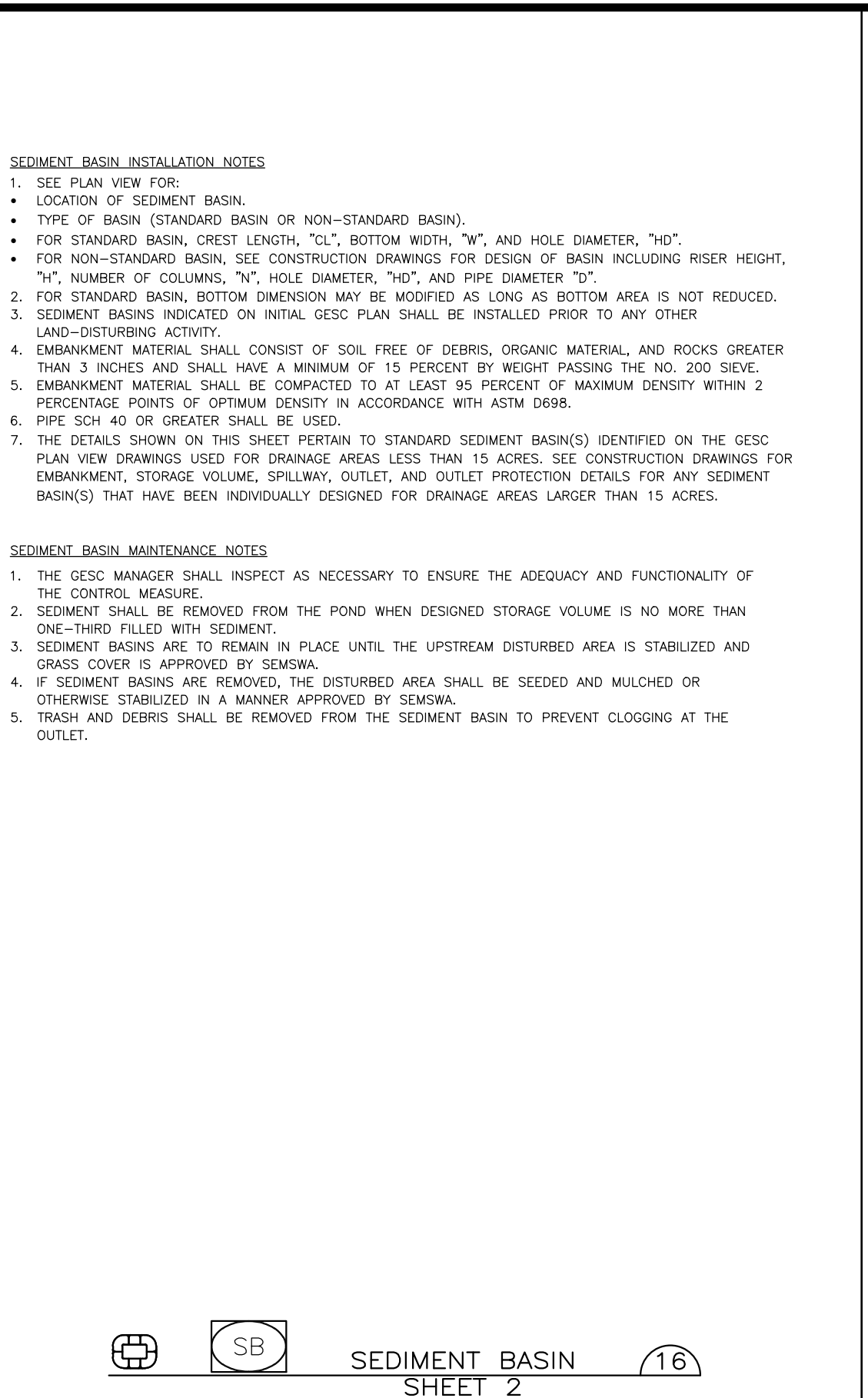
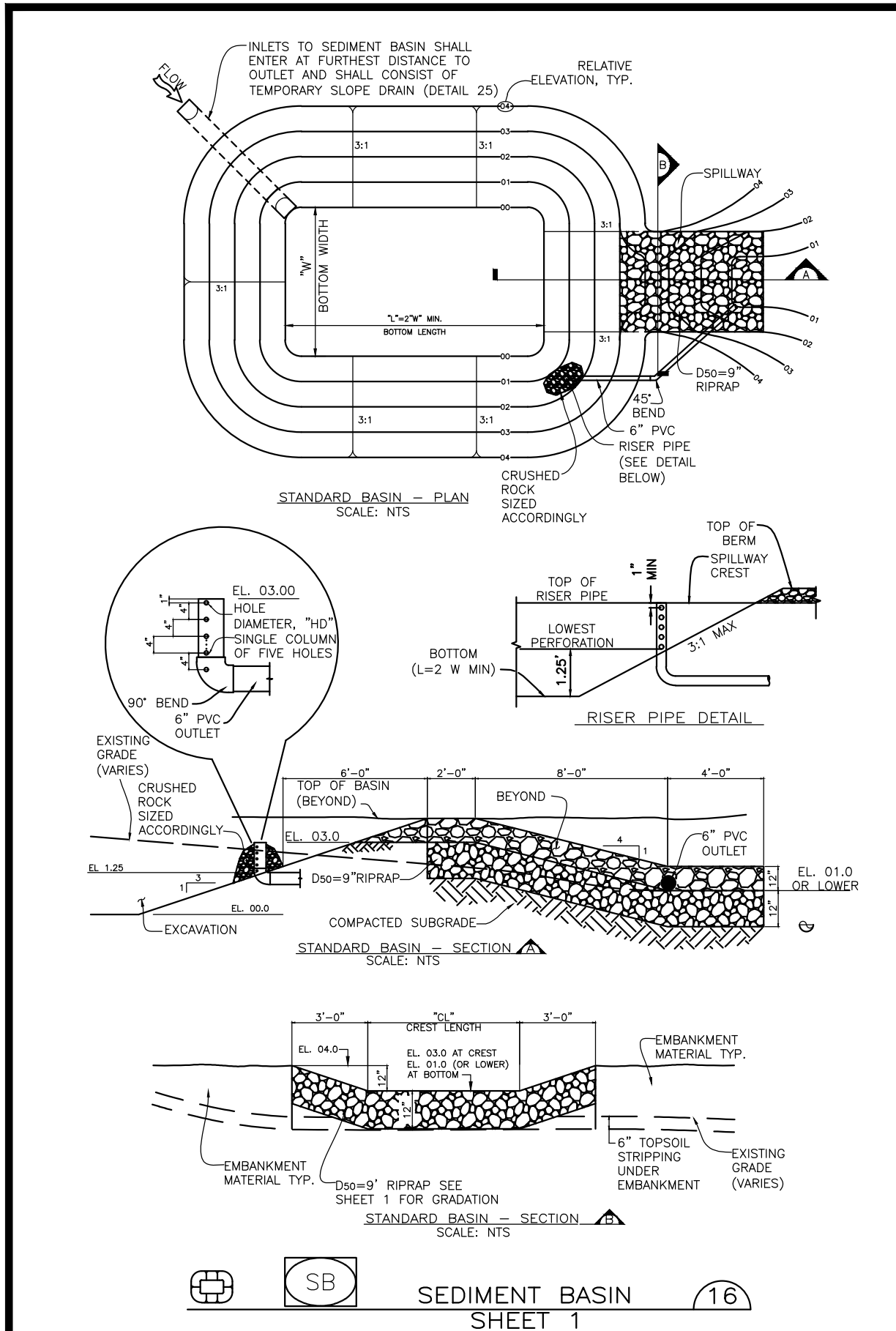
SOUTHEAST METRO STORMWATER AUTHORITY
7437 SOUTH FAIRPLAY STREET
CENTENNIAL COLORADO
80112-4486
(303) 858-8844 - INSPECTION DIVISION



GRADING EROSION AND SEDIMENT CONTROL
STANDARD NOTES AND DETAILS
REVISED FEBRUARY 2023

GESC
SHEET
1 OF 4





TEMPORARY DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
SMOOTH BROMEGRASS	LINCOLN	PICS	30	3.9
INTERMEDIATE WHEATGRASS	OWHE	PICS	30	4.5
PURBESCENT WHEATGRASS	LUNA	PICS	30	4.2
ANNUAL RYEGRASS	N/A	ACOB	10	0.8
TOTAL			100	13.4

NOTES: P=PERENNIAL
A=ANNUAL
W=INTRODUCED
C=COOL SEASON
F=FORMER
B=BUNCHGRASS

PERMANENT DRILL SEEDING – WETLAND SEED MIX¹

SPECIES	SCIENTIFIC NAME	SEASON	% IN MIX	SEEDS/LB.	LBS PLS ² /AC
SLOUGH GRASS	BECKMANNIA SYZIGACHNE	COOL	20	1,150,000	0.5
CANADIAN REED GRASS	CALAMAGROSTIS CANADENSIS	COOL	20	2,270,000	0.2
TUFTED HAIR GRASS	DESCHAMPSIA CESPIITOSA	COOL	10	2,500,000	0.1
COMMON SPIKE RUSH	ELEOCHARIS PALUSTRIS	COOL	15	620,000	0.6
BALTIC RUSH	JUNCUS BALTICUS	COOL	15	10,900,000	0.4
KNOTTED RUSH	JUNCUS NODOSUS	COOL	10	12,300,000	0.1
TORREY'S RUSH	JUNCUS TORREY	COOL	10	12,300,000	0.1
TOTAL			100		2 LBS PLS ² /AC

¹ TO BE INSTALLED AT APPROXIMATELY 0" TO 6" ABOVE WATER LINE.
² PLS = PURE LIVE SEED PER POUND BASED 60 SEEDS PER SQUARE FOOT. IF BROADCAST SEEDING, DOUBLE THE RATE APPLIED.

PERMANENT DRILL SEEDING³ – TRANSITION SEED MIX – WITHOUT FORBS

SPECIES	SCIENTIFIC NAME	SEASON	% IN MIX	SEEDS/LB.	LBS PLS ² /AC
CANADA WILDRYE	ELYMUS CANADENSIS	COOL	15	115,000	3.4
STREAMBANK WHEATGRASS	ELYMUS LANCEOLATUS SPP. PSAMMOPHILUS	COOL	15	156,000	2.5
SLENDER WHEAT GRASS	ELYMUS TRACHYCAULUS	WARM	10	159,000	1.6
BALTIC RUSH	JUNCUS BALTICUS	COOL	15	10,900,000	0.1
SWITCHGRASS	PANICUM VIRGATUM	WARM	15	389,000	1.0
WESTERN WHEATGRASS	PASCOPYRUM SMITHI	COOL	15	110,000	3.6
SAND DROPSOED	SPOROBOLUS AIROIDES	WARM	15	1,758,000	0.2
TOTAL			100		12.4 LBS PLS ² /AC

¹ TO BE INSTALLED AT APPROXIMATELY 6" TO 24" ABOVE WATER LINE.
² PLS = PURE LIVE SEED PER POUND BASED 60 SEEDS PER SQUARE FOOT. IF BROADCAST SEEDING, DOUBLE THE RATE APPLIED.
³ IF DESIRED, SHRUBS FROM THE WILLOW SHRUBLAND PLANT COMPOSITION SCHEDULE CAN BE INSTALLED IN THIS ZONE.

PERMANENT DRILL SEEDING³ – TRANSITION SEED MIX – WITH FORBS

SPECIES	SCIENTIFIC NAME	SEASON	% IN MIX	SEEDS/LB.	LBS PLS ² /AC
CANADA WILDRYE	ELYMUS CANADENSIS	COOL	15	115,000	3.4
STREAMBANK WHEATGRASS	ELYMUS LANCEOLATUS SPP. PSAMMOPHILUS	COOL	15	156,000	2.5
SLENDER WHEAT GRASS	ELYMUS TRACHYCAULUS	WARM	10	159,000	1.6
BALTIC RUSH	JUNCUS BALTICUS	COOL	15	10,900,000	0.1
SWITCHGRASS	PANICUM VIRGATUM	WARM	15	389,000	1.0
WESTERN WHEATGRASS	PASCOPYRUM SMITHI	COOL	15	110,000	3.6
SAND DROPSOED	SPOROBOLUS AIROIDES	WARM	15	1,758,000	0.2
TOTAL			100		15.5 LBS PLS ² /AC

¹ TO BE INSTALLED AT APPROXIMATELY 24" ABOVE WATER LINE.
² PLS = PURE LIVE SEED PER POUND BASED 60 SEEDS PER SQUARE FOOT. IF BROADCAST SEEDING, DOUBLE THE RATE APPLIED.
³ IF DESIRED, TREES AND SHRUBS FROM THE COTTONWOOD SHRUB WOODLAND COMPOSITION SCHEDULE CAN BE INSTALLED IN THIS ZONE.

PERMANENT DRILL SEEDING³ – TRANSITION SEED MIX – WITH FORBS

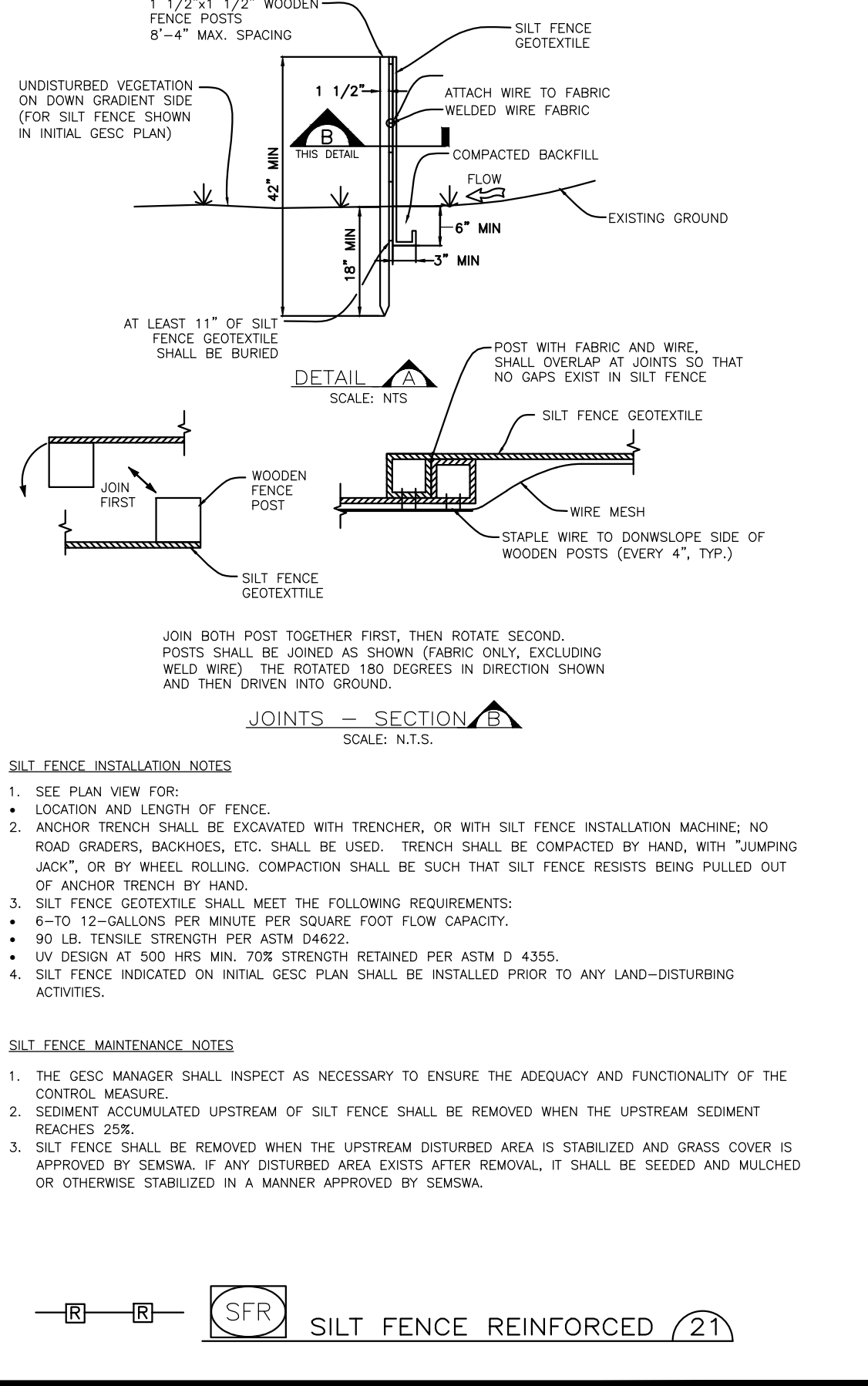
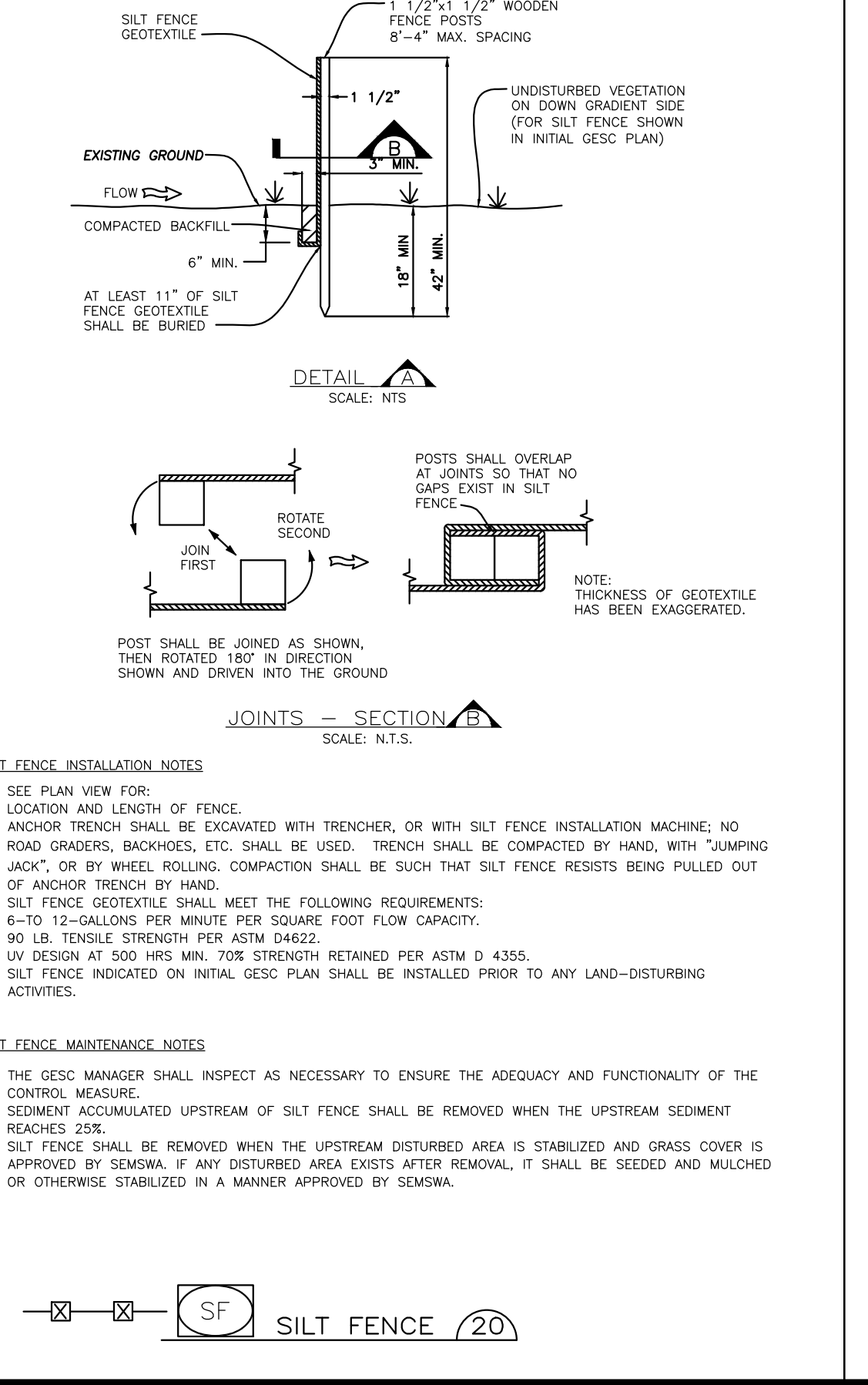
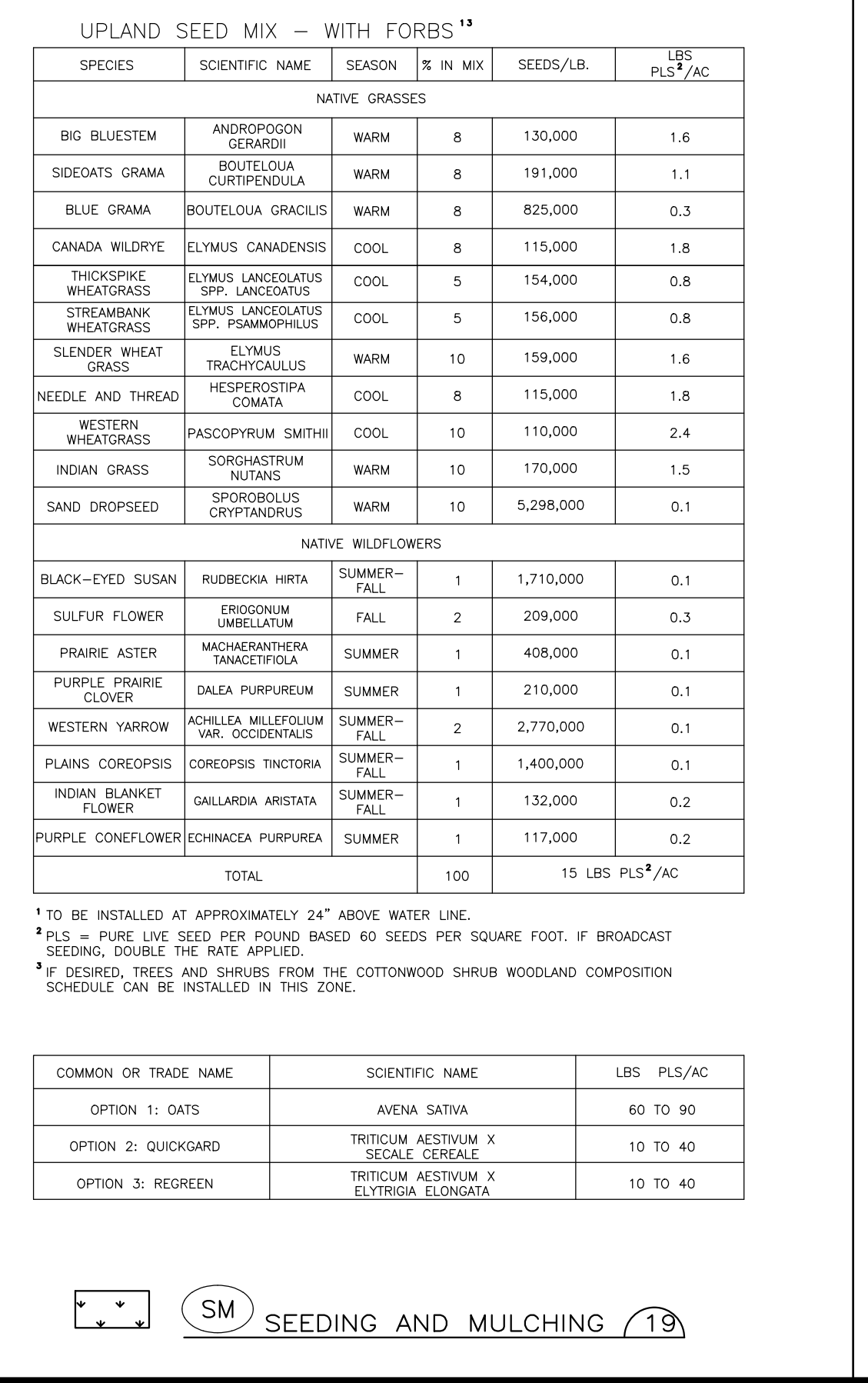
SPECIES	SCIENTIFIC NAME	SEASON	% IN MIX	SEEDS/LB.	LBS PLS ² /AC
INDIAN BLANKET FLOWER	GALLARDIA ARISTATA	SUMMER-FALL	1	132,000	0.2
ROCKY MOUNTAIN IRIS	IRIS MISSOURIENSIS	SPRING-SUMMER	2	368,000	0.1
EVENING PRIMROSE	GENETHEIRA ELATA	SUMMER	2	1,300,000	0.1
GOLDEN BANNER	THERMOPSIS MONTANA	SPRING	2	15,000	3.5
MEXICAN HAT	RATIBIDA COLUMNIFERA	SUMMER-FALL	1	1,230,000	0.1
SAND DROPSOED	SPOROBOLUS AIROIDES	WARM	15	1,758,000	0.2
TOTAL			100		14.4 LBS PLS ² /AC

¹ TO BE INSTALLED AT APPROXIMATELY 6" TO 24" ABOVE WATER LINE.
² PLS = PURE LIVE SEED PER POUND BASED 60 SEEDS PER SQUARE FOOT. IF BROADCAST SEEDING, DOUBLE THE RATE APPLIED.
³ IF DESIRED, SHRUBS FROM THE WILLOW SHRUBLAND PLANT COMPOSITION SCHEDULE CAN BE INSTALLED IN THIS ZONE.

PERMANENT DRILL SEEDING – UPLAND SEED³ MIX – WITHOUT FORBS

SPECIES	SCIENTIFIC NAME	SEASON	% IN MIX	SEEDS/LB.	LBS PLS ² /AC
BIG BLUESTEM	ANDROPOGON GERARDI	WARM	10	130,000	2.0
SIDEOLTS GRAMA	BOUTELOUA CURTIPENDULA	WARM	10	191,000	1.4
BLUE GRAMA	BOUTELOUA GRACILIS	WARM	8	825,000	0.3
CANADA WILDRYE	ELYMUS CANADENSIS	COOL	8	115,000	1.8
THICKSPIKE WHEATGRASS	ELYMUS LANCEOLATUS SPP. LANCEOLATUS	COOL	5	154,000	0.8
STREAMBANK WHEATGRASS	ELYMUS LANCEOLATUS SPP. PSAMMOPHILUS	COOL	5	156,000	0.8
SLENDER WHEAT GRASS	ELYMUS TRACHYCAULUS	WARM	10	159,000	1.6
NEEDLE AND THREAD	HESPEROSTIPHA COMATA	COOL	8	115,000	1.8
WESTERN WHEATGRASS	PASCOPYRUM SMITHI	COOL	10	110,000	2.4
INDIAN GRASS	SORGHASTRUM NUTANS	WARM	10	170,000	1.5
SAND DROPSOED	SPOROBOLUS CRYPTANDRUS	WARM	10	5,298,000	0.1
TOTAL			100		15 LBS PLS ² /AC

¹ TO BE INSTALLED AT APPROXIMATELY 24" ABOVE WATER LINE.
² PLS = PURE LIVE SEED PER POUND BASED 60 SEEDS PER SQUARE FOOT. IF BROADCAST SEEDING, DOUBLE THE RATE APPLIED.
³ IF DESIRED, TREES AND SHRUBS FROM THE COTTONWOOD SHRUB WOODLAND COMPOSITION SCHEDULE CAN BE INSTALLED IN THIS ZONE.



UTILITY NOTIFICATION CENTER
OF COLORADO
CALL BEFORE YOU DIG
811
Call 2 days prior to any digging, grading or
excavating for the marking of underground
member utilities

SOUTHEAST METRO STORMWATER AUTHORITY
7437 SOUTH FAIRPLAY STREET
CENTENNIAL COLORADO
80112-4486
(303) 858-8844 - INSPECTION DIVISION



**GRADING EROSION AND SEDIMENT CONTROL
STANDARD NOTES AND DETAILS
REVISED FEBRUARY 2023**

**GESC
SHEET
3 OF 4**

