

Tract A. However, after reviewing the new preliminary grading plan County Parks has concerns about a proposed storm drain and site grading located within Tract A near Lot 26. The provided grading plan shows a 36" RCP storm pipe, 15-foot access road, and grading within Tract A to create a swale and stormwater detention. These stormwater improvements are shown encompassing the entire width of Tract A between lots 25 and 30, making the construction of a regional trail impossible for over 800 feet. Due to this conflict, County Parks requests the applicant remove the stormwater improvements from Tract A so that the regional trail can be constructed. Alternatively, the landowner could provide a trail easement within lots 24 through 30 to bypass the stormwater improvements and allow for the construction of the regional trail.

**Recommended Motion (Preliminary Plan):**

The Park Advisory Board recommends that the Planning Commission and the Board of County Commissioners include the following conditions when considering and/or approving the Paint Brush Hills Filing No. 14 Final Plat: (1) Provide to El Paso County a 25-foot trail easement along the northern boundary of Paint Brush Hills Filing No. 14 Final Plat, within Tract A, that allows for the construction, maintenance, and public access of the Arroya Lane Primary Regional Trail, and dedicate the aforementioned easement to El Paso County prior to the recording of the Final Plat; (2) The developer will relocate the proposed storm facility from Tract A to allow the trail to be constructed on the trail easement or provide the trail easement through lots 24-30.

(3) require fees in lieu of land dedication for regional park purposes in the amount of \$130,293 and urban park fees in the amount of \$82,305. A Park Lands Agreement may be an acceptable alternative to urban park fees, provided the agreement is approved by the County and executed prior to recording the Final Plat.

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.
9. 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 LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT 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 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.
14. 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.
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 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.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
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 ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
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 TERRACON. #23055071 MAY 30, 2006 AND SHALL BE CONSIDERED A PART OF THESE PLANS WITH AN UPDATED LETTER JUNE 17, 2020.
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  
WOOD - PERMITS  
4300 CHERRY CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

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THE ENGINEERING  
FROM

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CONSTRUCTION IS  
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PERSONS  
NTIFY IF  
NTROL MEASURES.  
TER MANAGEMENT

Please address Parks  
comments in plat and  
prelim submittal.

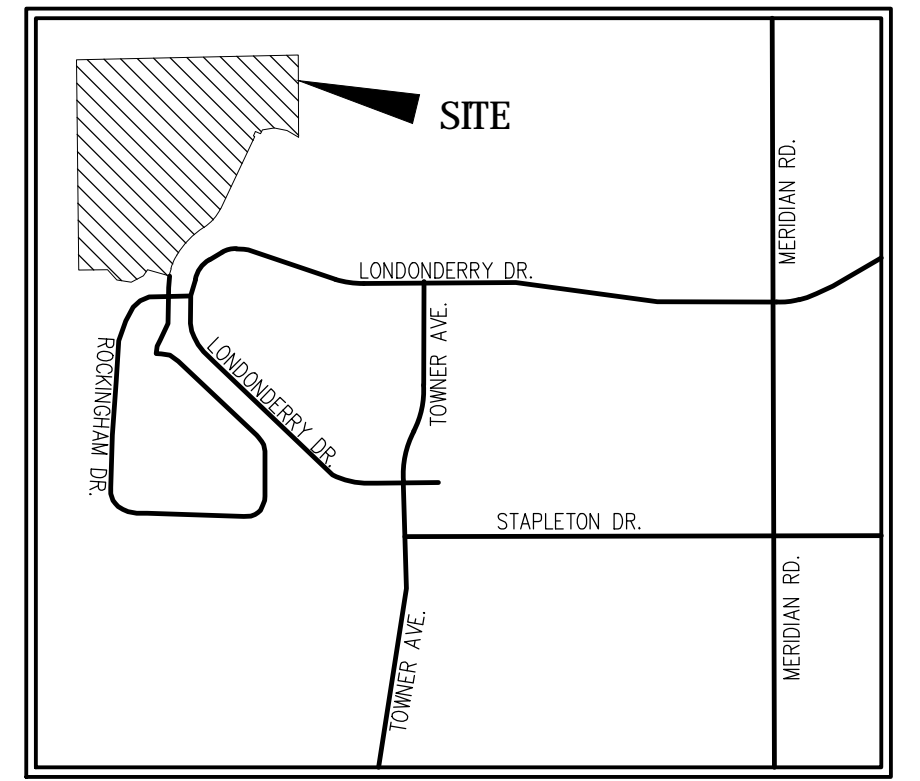
is there an agreement  
in the works?

# PAINT BRUSH HILLS FILING NO. 14

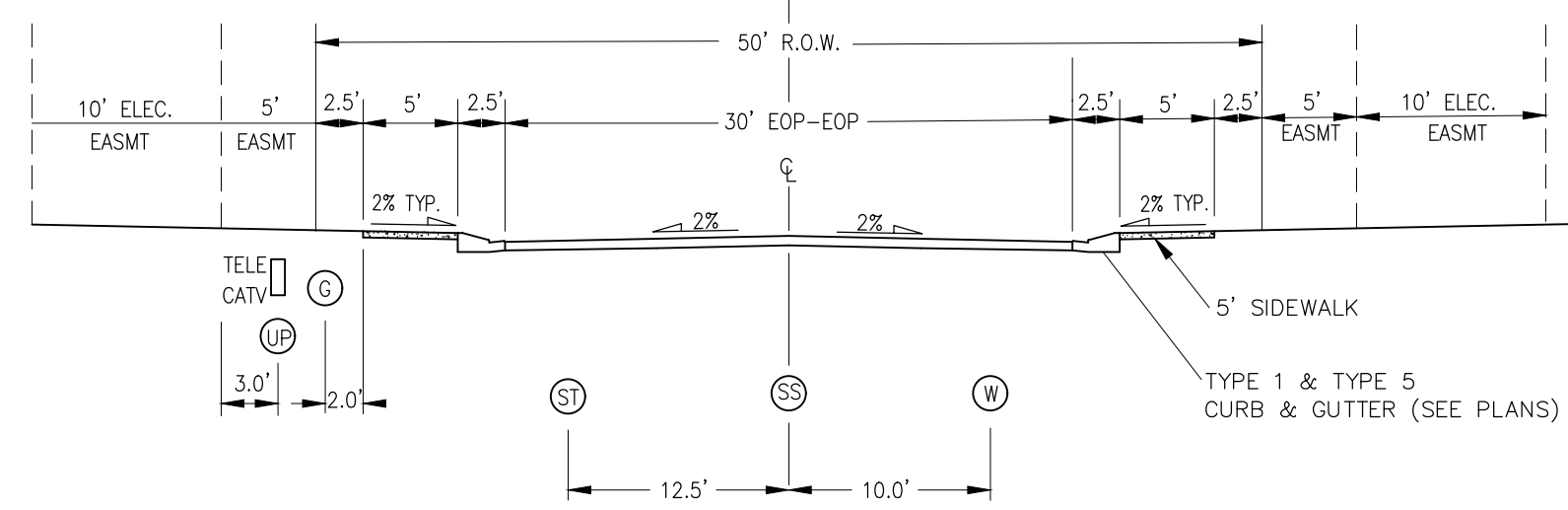
## COUNTY OF EL PASO, STATE OF COLORADO

# GRADING AND EROSION CONTROL PLANS

JANUARY 2021



VICINITY MAP  
N.T.S.



URBAN LOCAL CROSS SECTION  
SCALE: NTS

**ADDITIONAL NOTES:**

STAGING AREA TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.

THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.

TEMPORARY SEDIMENT TRAP LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.

THERE ARE NO BATCH PLANTS ON SITE.

AREAS LEFT OPEN FOR 21 DAYS OR MORE, OTHER THAN FOR UTILITY AND DRAINAGE CONSTRUCTION SHALL BE SEEDED AND/OR MULCHED.

NO PORTION OF THIS PROPERTY IS LOCATED WITHIN A DESIGNATED F.E.M.A. FLOODPLAIN AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 08041C0535G, EFFECTIVE DATE DECEMBER 7, 2018.

**EXISTING VEGETATION:**

VEGETATION IS SPARSE, CONSISTING OF NATIVE GRASSES WITH NO TREES ONSITE. THE SITE HAS NOT EXPERIENCED ANY OVERLOT GRADING ACTIVITIES. EXISTING SITE TERRAIN GENERALLY SLOPES FROM NORTH TO SOUTH AT GRADE RATES THAT VARY BETWEEN 1.0% AND 4.0%.

**BENCHMARKS**

1. SOUTH 1/4 CORNER OF SECTION 26, TOP OF 2 1/2" ALUMINUM CAP.  
ELEV. = 7140.91  
VERTICAL DATUM = NGVD 1929
2. SOUTHWEST CORNER OF SECTION 25, TOP OF 3 1/2" ALUMINUM CAP.  
ELEV. = 7136.34  
VERTICAL DATUM = NGVD 1929

**BASIS OF BEARINGS:**

THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AT THE EAST BY A 3.25" ALUMINUM CAP STAMPED P.L.S. 12103, PRINCIPAL MERIDIAN AND AT THE WEST END BY A NO. 6 REBAR WITH 2.5" ALUMINUM CAP STAMPED P.L.S. 4842, ASSUMED TO BEAR N89°02'00"W, A DISTANCE OF 2614.11 FEET AS SHOWN ON A LAND SURVEY PLAT BY W. K CLARK AND ASSOCIATES, DATED AUGUST 13, 1999.



**DESIGN 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 NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

VIRGIL A. SANCHEZ, COLORADO P.E. #37160 DATE  
FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

**OWNER/DEVELOPER'S STATEMENT:**

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

HAMMERS CONSTRUCTION, INC DATE  
ADDRESS: 1411 WOOLSEY HEIGHTS, COLORADO SPRINGS, CO 80915

**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.

JENNIFER IRVINE, P.E. DATE  
COUNTY ENGINEER / ECM ADMINISTRATOR

TIMING: May 2021  
ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: September 2022  
EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED:

AREAS: 72.18 AC  
TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED:

RECEIVING WATERS: CHICO CREEK (WITHIN FALCON DRAINAGE BASIN)

**SHEET INDEX**

- SHEET 1 TITLE SHEET
- SHEET 2 GRADING AND EROSION CONTROL PLAN
- SHEET 3 GRADING AND EROSION CONTROL PLAN
- SHEET 4 GRADING AND EROSION CONTROL DETAILS
- SHEET 5 GRADING AND EROSION CONTROL DETAILS

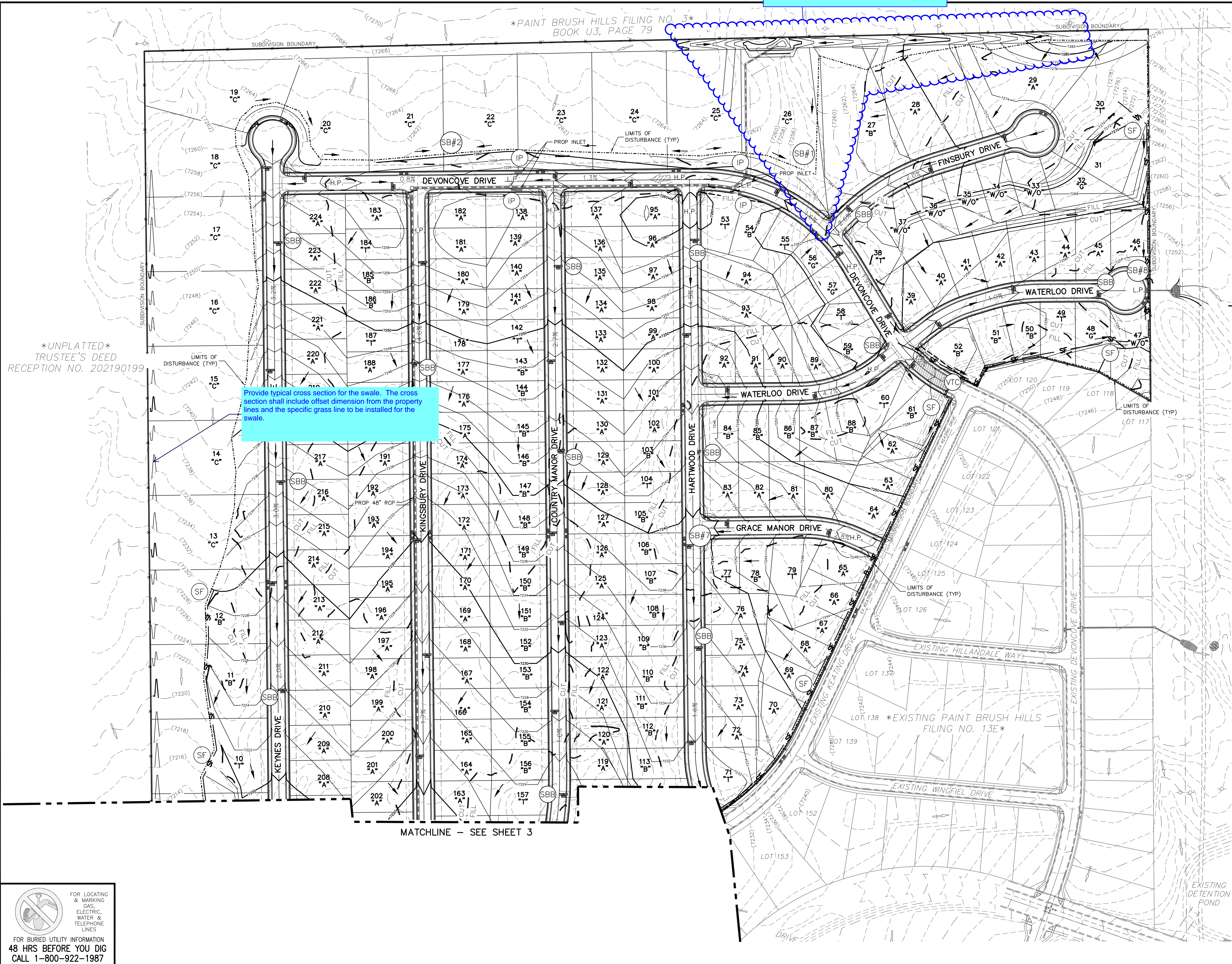


212 N. WAHSATCH AVE., STE 305  
COLORADO SPRINGS, CO 80903  
PHONE: 719.955.5485

EL PASO COUNTY FILE NO. SF-20-024

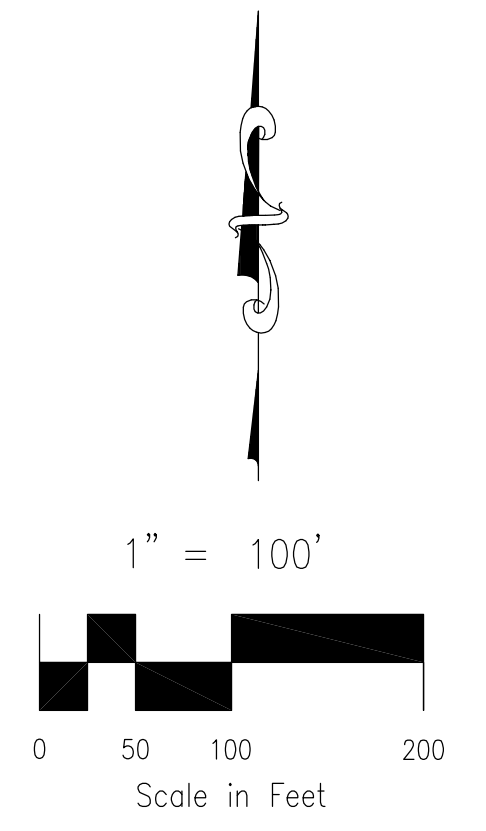
GRADING & EROSION CONTROL COVER SHEET  
PAINT BRUSH HILLS FILING NO. 14  
JOB NO. 10-014  
DATE PREPARED: JANUARY 22, 2021  
DATE REVISED:

Will be reviewed on the resubmittal. Per Parks comments and discussion with the design engineer on 2/24/11 this area will be redesigned.



LEGEND

- (7260) EXISTING MAJOR CONTOUR
- (7262) EXISTING MINOR CONTOUR
- 7260 PROPOSED MAJOR CONTOUR
- 7262 PROPOSED MINOR CONTOUR
- FILING BOUNDARY LINE
- CONST BOUNDARY/LIMITS OF DISTURBANCE
- PROPOSED STORM SEWER PIPE
- PROPOSED INLET
- L.P./H.P. LOW POINT/HIGH POINT
- (2.0)% FLOW DIRECTION & SLOPE
- FLOW DIRECTION ARROW/ EMERGENCY OVERFLOW
- EXISTING FLOW DIRECTION ARROW
- EMERGENCY OVERFLOW DIRECTION
- ⊥ SBB STRAW BALE DITCH CHECK
- ▨ VTC VEHICLE TRACKING CONTROL
- SB#1 TEMPORARY SEDIMENT BASIN
- SF SILT FENCE
- IP INLET PROTECTION
- "A" A LOT
- "B" B LOT
- "C" C LOT - CUSTOM "NATURAL" LOT
- "G" GARDEN LOT
- "T" TRANSITION LOT
- "W/O" WALKOUT LOT



EL PASO COUNTY FILE NO. SF-20-024

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 COLORADO SPRINGS, CO 80903  
 PHONE: 719.955.5485

CIVIL CONSULTANTS, INC.

\*UNPLATTED\* TRUSTEE'S DEED RECEPTION NO. 202190199

Provide typical cross section for the swale. The cross section shall include offset dimension from the property lines and the specific grass line to be installed for the swale.

\*PAINT BRUSH HILLS FILING NO. BOOK U3, PAGE 79

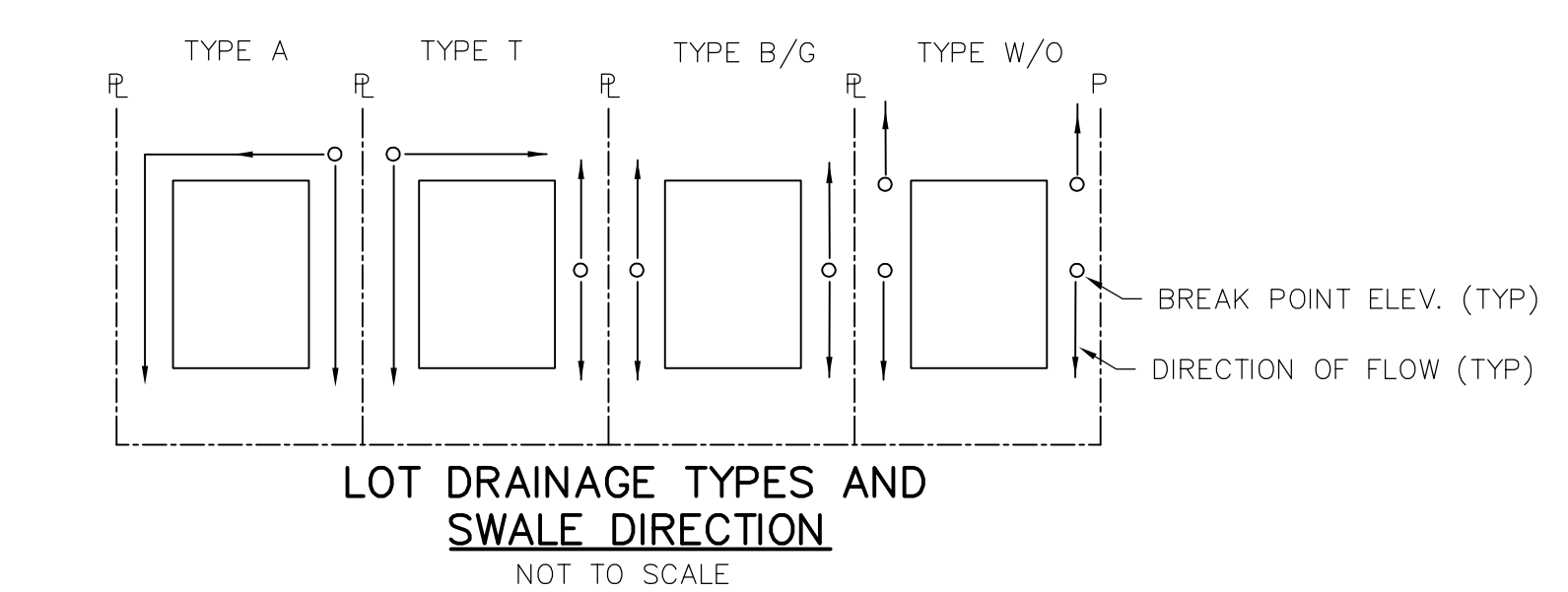
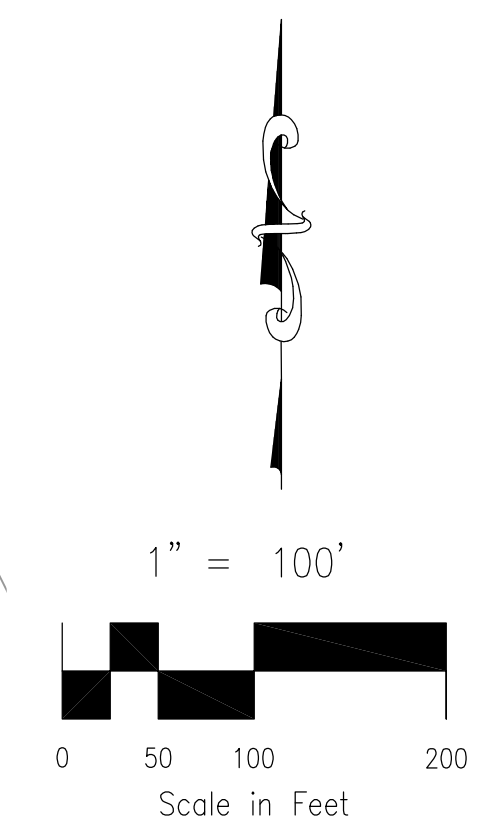
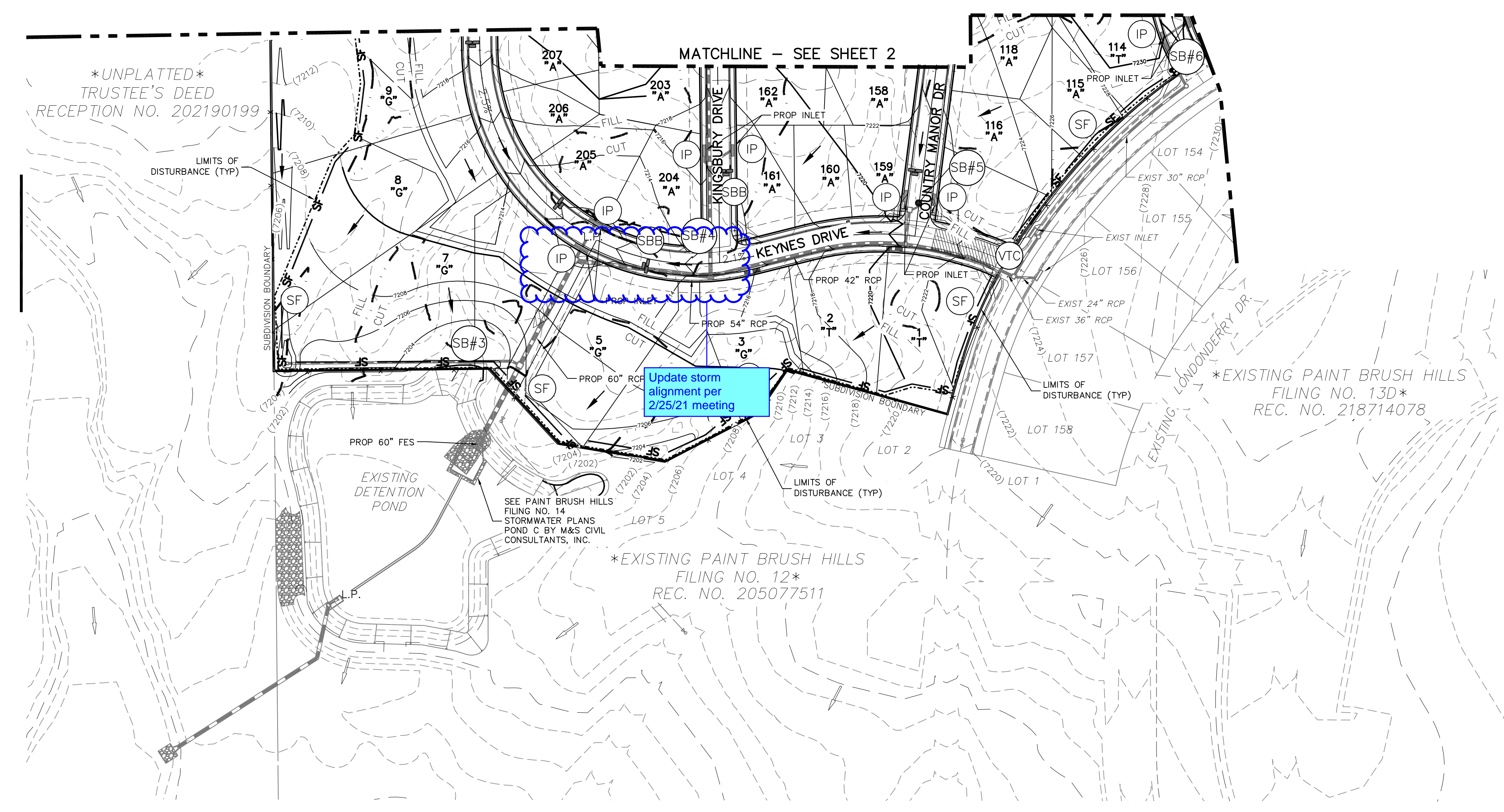
MATCHLINE - SEE SHEET 3

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

**LEGEND**

- (7260)--- EXISTING MAJOR CONTOUR
- (7262)--- EXISTING MINOR CONTOUR
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- "G" --- GARDEN LOT
- "T" --- TRANSITION LOT
- "W/O" --- WALKOUT LOT



**EROSION CONTROL MEASURES PHASE LIST**  
 INSTALLATIONS OF BMPs ARE STAGED IN ORDER TO MINIMIZE THE POTENTIAL FOR POLLUTANTS IN THE STORMWATER DISCHARGE. THE FOLLOWING STAGES WILL BE USED: ESTABLISHMENT OF PERIMETER CONTROLS, INSTALLATION OF TEMPORARY BMPs DURING SOIL DISTURBANCE AND THEN FINALLY INSTALLATION OF PERMANENT CONTROLS. DESCRIPTIONS OF SOME OF THE AVAILABLE BMPs ARE LISTED IN BELOW STAGES:

**PRE-DEVELOPMENT EARLY GRADING**  
 ONLY CLEARING NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS SHOULD BE EMPLOYED IN THE FIRST STAGE OF TEMPORARY BMPs INSTALLATION. SILT FENCE, VEHICLE TRACKING, STRAW BALES, TEMPORARY SEDIMENT BASIN(S) SHOULD BE INSTALLED AS SHOWN ON THE PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN. AT THIS TIME, THE EL PASO COUNTY INSPECTOR SHOULD BE NOTIFIED TO SCHEDULE AN INITIAL INSPECTION. ROUGH GRADING OF THE SITE WILL PRECEDE CONSTRUCTION OF PROPOSED UNDERGROUND UTILITIES.

**INTERIM**  
 ONCE UTILITIES AND STORM DRAIN INFRASTRUCTURE HAVE BEEN CONSTRUCTED, INSTALLATION OF TEMPORARY BMPs WILL COMMENCE. TEMPORARY BMPs FOR THIS SITE CONSIST OF INLET PROTECTION(S). LOCATIONS FOR A CONCRETE WASHOUT AREA AND TEMPORARY STOCKPILE LOCATION WILL ALSO BE ESTABLISHED. THESE LOCATIONS ARE LIKELY TO BE DIFFERENT THAN WHAT IS SHOWN ON THE PRE-DEVELOPMENT GRADING AND EROSION CONTROL PLAN THAT ACCOMPANIES THIS REPORT. ONCE THESE LOCATIONS HAVE BEEN ESTABLISHED, THEY SHOULD BE ADDED AND DENOTED ON THE COPY OF THE PLAN THAT WILL BE KEPT WITH THE SITE ADMINISTRATOR.

**FINAL**  
 THE FINAL STAGE IS THE INSTALLATION OF PERMANENT BMPs WHERE NO FURTHER DISTURBANCE IS ANTICIPATED. UPON COMPLETION OF THE PERMANENT BMPs AND ALL GRADING ACTIVITIES ARE COMPLETED, ALL DISTURBED AREAS NOT SODDED OR DEVELOPED WILL BE MULCHED AND RESEEDED WITH NATIVE SEED MIX AND MAY BE WATERED UNTIL VEGETATIVE COVER HAS BEEN FULLY RE-INSTATED. AT THIS POINT, THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE CAN BEGIN TO ADDRESS REQUIREMENTS FOR FINAL STABILIZATION. SEE CONSTRUCTION DETAILS FOR INSTALLATION AND MAINTENANCE.

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| SEDIMENT BASIN NO. | TRIBUTARY AREA (AC) | REQ'D VOLUME C.F. | BASIN WIDTH FT. | BASIN LENGTH FT. | ANTIC. MAX WATER HT FT. | SPILLWAY LENGTH FT. | HOLE DIA. IN. | COLUMNS OF HOLES IN STANDPIPE |
|--------------------|---------------------|-------------------|-----------------|------------------|-------------------------|---------------------|---------------|-------------------------------|
| 1                  | 22.04               | 7,500             | 30.0            | 60.0             | 4                       | 6                   | 9/16          | 1                             |
| 2                  | 18.44               | 7,500             | 30.0            | 60.0             | 4                       | 6                   | 9/16          | 1                             |
| 3                  | 16.14               | 57,600            | 74.0            | 148.0            | 4                       | 22                  | 1 3/16        | 1                             |
| 4                  | 16.06               | 57,600            | 74.0            | 148.0            | 4                       | 22                  | 1 3/16        | 1                             |
| 5                  | 12.31               | 43,200            | 64.0            | 128.0            | 4                       | 18                  | 1             | 1                             |
| 6                  | 5.68                | 21,600            | 43.0            | 86.0             | 4                       | 9                   | 21/32         | 1                             |
| 7                  | 12.61               | 46,800            | 68.0            | 136.0            | 4                       | 19                  | 1 1/16        | 1                             |
| 8                  | 6.36                | 21,600            | 43.0            | 86.0             | 4                       | 9                   | 21/32         | 1                             |

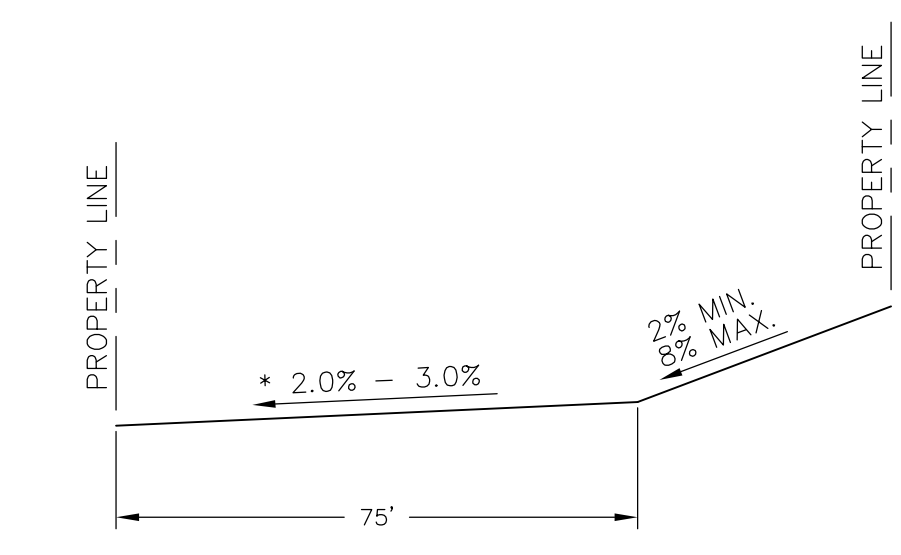
**ADDITIONAL NOTES:**  
 STAGING, STORAGE AND STOCKPILE AREAS TO BE DETERMINED BY CONTRACTOR IN THE FIELD. THE LOCATIONS SHALL BE DELINEATED ON THIS PLAN BY THE CONTRACTOR.

THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTOR.  
 ALL TEMPORARY OR PERMANENT GRADING DISTURBANCES SHALL BE RE-SEEDED AND MULCHED PER EL PASO COUNTY CRITERIA AND SPECIFICATIONS.

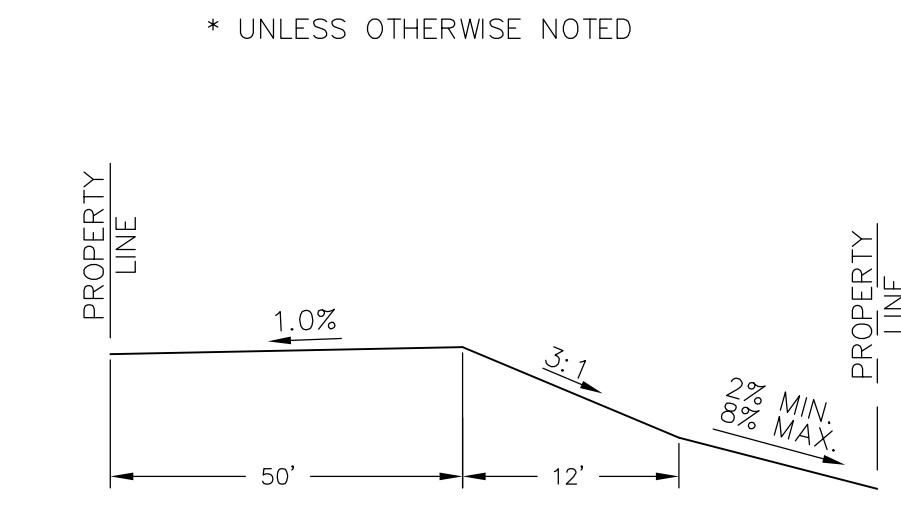
PROPOSED SLOPES SHALL BE 3:1 OR LESS.  
 THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL ENGINEERING REPORT AND KEEP A COPY ONSITE DURING ALL EARTHWORK OPERATIONS

NO OFFSITE GRADING IS TO OCCUR.

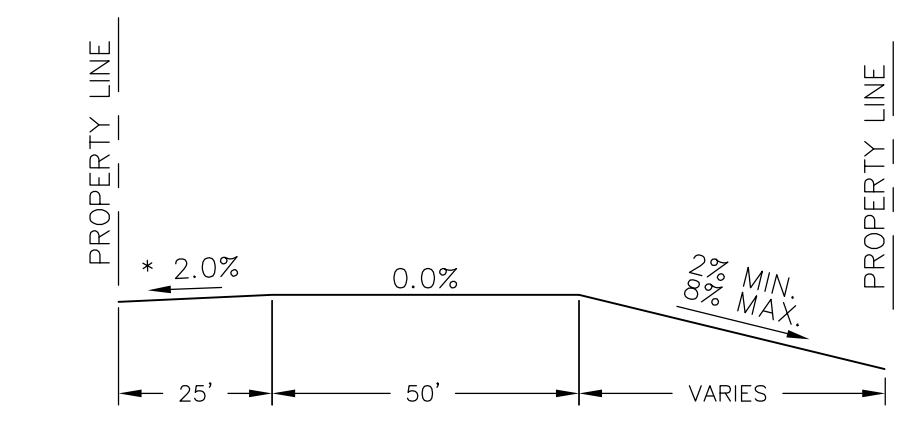
THE CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF THE CONSTRUCTION LIMITS WITH SILT FENCE OR OTHER METHOD TO PROTECT UNDISTURBED AREAS FROM EROSION.



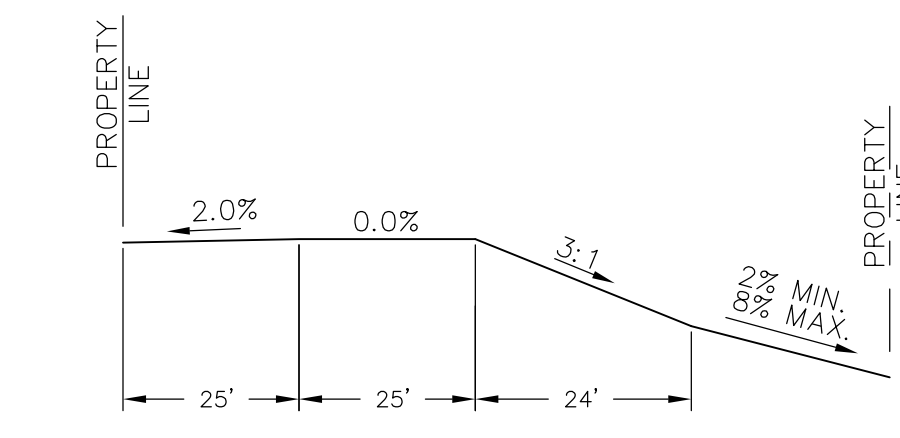
**LOT TEMPLATE (A)**  
 NOT TO SCALE



**LOT TEMPLATE (C)**  
 NOT TO SCALE



**LOT TEMPLATE (B)**  
 NOT TO SCALE



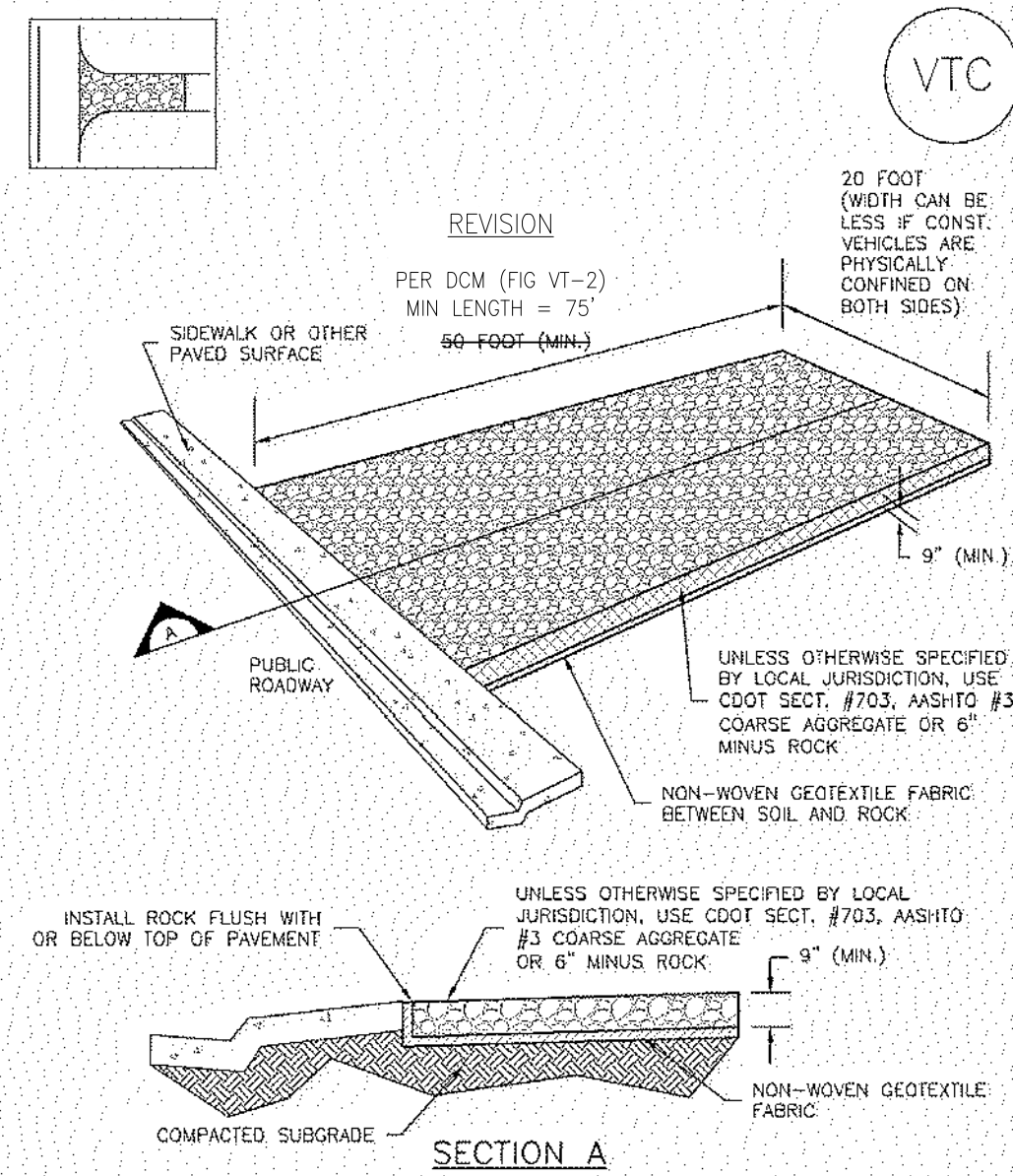
**LOT TEMPLATE (W/O)**  
 NOT TO SCALE

**EL PASO COUNTY FILE NO. SF-20-024**

GRADING & EROSION CONTROL COVER SHEET  
 PAINT BRUSH HILLS FILING NO. 14  
 JOB NO. 10-014  
 DATE PREPARED: JANUARY 22, 2021  
 DATE REVISED:



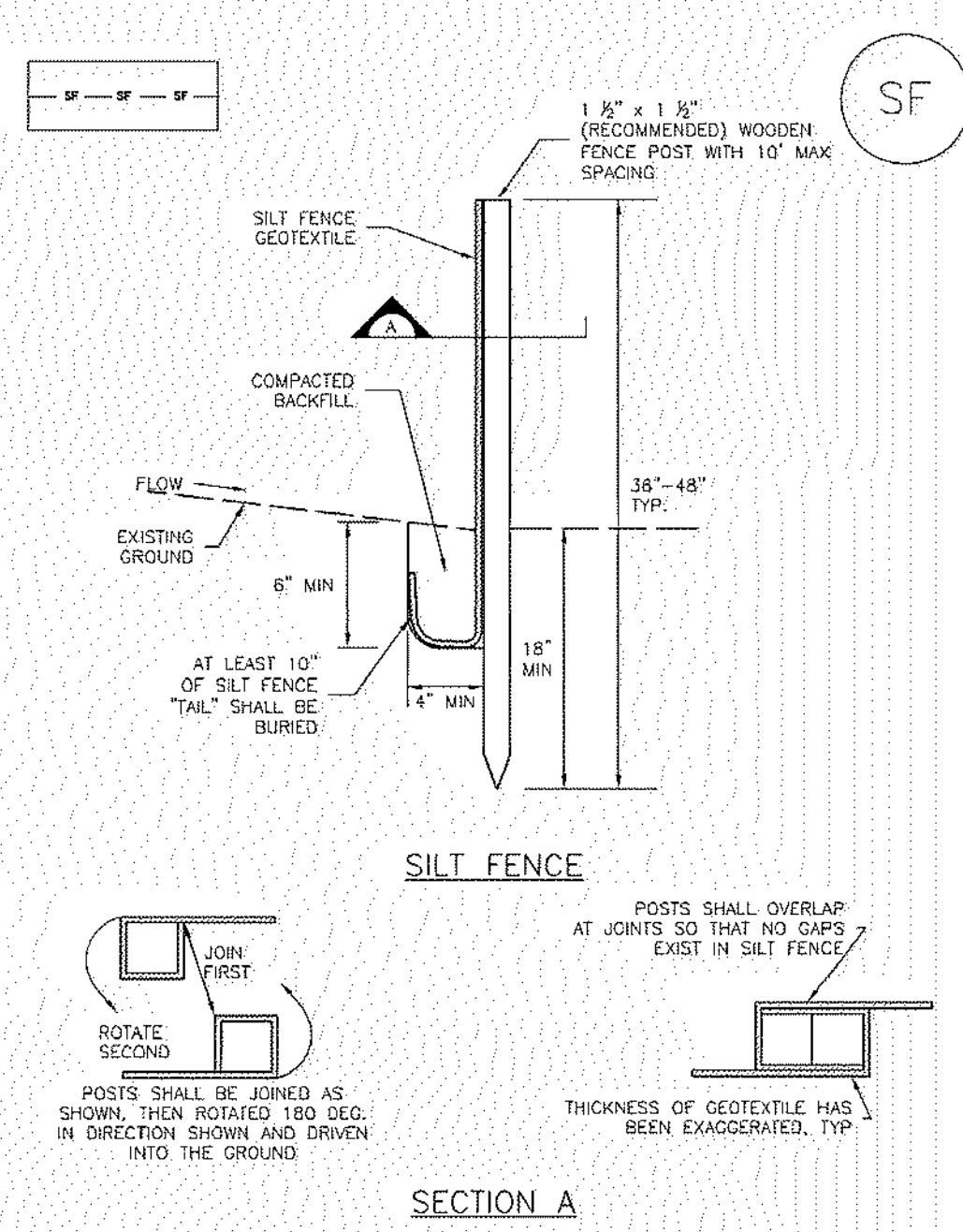
**Vehicle Tracking Control (VTC) SM-4**



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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

**Silt Fence (SF) SC-1**



SF-1. SILT FENCE

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

**Straw Bale Barrier (SBB) SC-3**

**Description**

A straw bale barrier is a linear wall of straw bales designed to intercept sheet flow and trap sediment before runoff exits a disturbed area.

**Appropriate Uses**

Appropriate uses of properly installed straw bale barriers may include:

- As a perimeter control for a site or soil stockpile.
- As a sediment control at the toe of an erodible slope.
- Along the edge of a stream or drainage pathway to reduce sediment laden runoff from entering the waterway.
- As part of an inlet protection design in sump conditions (See Inlet Protection BMP).

Do not use straw bale barriers in areas of concentrated flow or in areas where ponding is not desirable. Straw bales tend to degrade quickly, so they should generally not be used in areas where longer term disturbance is expected.

Due to a history of inappropriate placement, poor installation, and short effective lifespan, the use of straw bales is discouraged or prohibited by some communities.

**Design and Installation**

The maximum recommended tributary drainage area per 100 lineal feet of straw bale barrier is 0.25 acres with a disturbed slope length of up to 150 feet and a tributary slope gradient no steeper than 3:1; longer and steeper slopes require additional measures. Design details with notes are provided in Detail SBB-1. To be effective, bales must be installed in accordance with the design details with proper trenching, staking, and binding. Jute and cotton string must not be used to bind the straw bale. The bales should be certified weed-free prior to use.

**Maintenance and Removal**

Check bales for rotting and replace as necessary. Straw bales degrade, and rotting bales require replacement on a regular basis (as often as every three months) depending on environmental conditions. Check for undercutting, bypassed flows, and displacement. Repair by properly re-installing the straw bale barrier and repairing washouts around the bales. Remove sediment accumulated behind the bale when it reaches one-quarter of the bale height. Remove and properly dispose of the straw bale once the upstream area has been stabilized. Areas of disturbance beneath the bale should be seeded and mulched when the bale is removed.

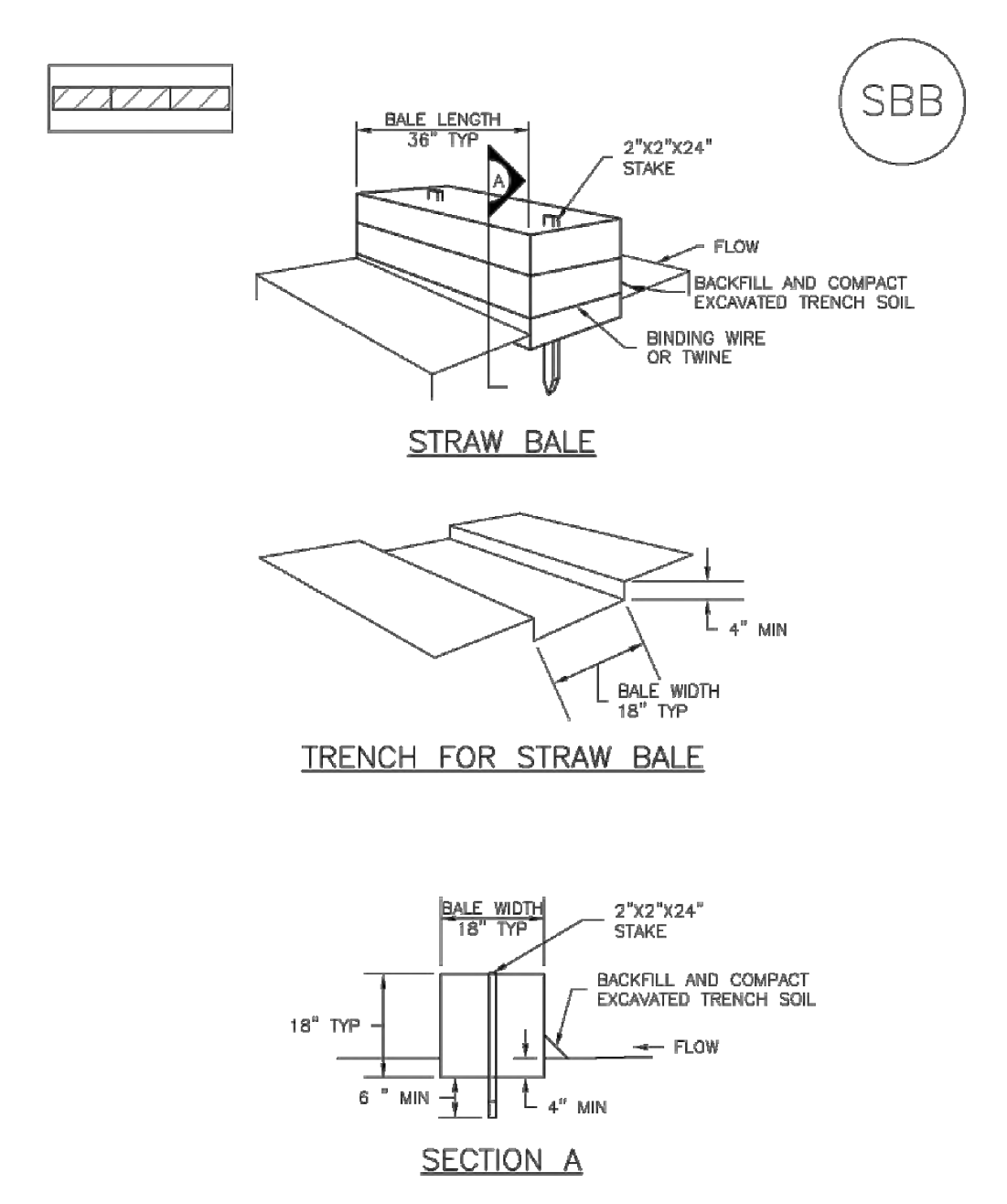


Photograph SBB-1. Straw bale barrier used for perimeter control. Photo courtesy of Tom Gore.

| Straw Bale Barrier       |          |
|--------------------------|----------|
| Functions                |          |
| Erosion Control          | No       |
| Sediment Control         | Moderate |
| Site/Material Management | No       |

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SBB-1

**SC-3 Straw Bale Barrier (SBB)**



SBB-2 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

**EC-2 Temporary and Permanent Seeding (TS/PS)**

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses

| Common Name                           | Botanical Name              | Growth Season | Growth Form | Seeds/Pound | Pounds of PLS/acre |
|---------------------------------------|-----------------------------|---------------|-------------|-------------|--------------------|
| <b>Alkali Soil Seed Mix</b>           |                             |               |             |             |                    |
| Alkali seaton                         | <i>Sporobolus airoides</i>  | Cool          | Bunch       | 1,750,000   | 0.23               |
| Basin wildrye                         | <i>Elymus cinereus</i>      | Cool          | Bunch       | 145,000     | 2.5                |
| Sodar streambank wheatgrass           | <i>Agropyron repens</i>     | Cool          | Sod         | 170,000     | 2.5                |
| Iron tall wheatgrass                  | <i>Agropyron elongatum</i>  | Cool          | Bunch       | 79,900      | 7.0                |
| Arriba western wheatgrass             | <i>Agropyron smithii</i>    | Cool          | Sod         | 110,000     | 5.5                |
| <b>Total</b>                          |                             |               |             |             | <b>17.75</b>       |
| <b>Fertile Loamy Soil Seed Mix</b>    |                             |               |             |             |                    |
| Ephraim crested wheatgrass            | <i>Agropyron cristatum</i>  | Cool          | Sod         | 175,000     | 2.0                |
| Dural hard fescue                     | <i>Festuca ovina</i>        | Cool          | Bunch       | 565,000     | 1.0                |
| Lincoln smooth brome                  | <i>Bromus inermis</i>       | Cool          | Sod         | 130,000     | 3.0                |
| Sodar streambank wheatgrass           | <i>Agropyron repens</i>     | Cool          | Sod         | 170,000     | 2.5                |
| Arriba western wheatgrass             | <i>Agropyron smithii</i>    | Cool          | Sod         | 110,000     | 7.0                |
| <b>Total</b>                          |                             |               |             |             | <b>15.5</b>        |
| <b>High Water Table Soil Seed Mix</b> |                             |               |             |             |                    |
| Meadow foxtail                        | <i>Alopecurus pratensis</i> | Cool          | Sod         | 900,000     | 0.5                |
| Reedtop                               | <i>Agrostis alba</i>        | Warm          | Open sod    | 5,000,000   | 0.25               |
| Reed canarygrass                      | <i>Phalaris arundinacea</i> | Cool          | Sod         | 68,000      | 0.5                |
| Lincoln smooth brome                  | <i>Bromus inermis</i>       | Cool          | Sod         | 130,000     | 3.0                |
| Palfinder switchgrass                 | <i>Panicum virgatum</i>     | Warm          | Sod         | 389,000     | 1.0                |
| Alkar tall wheatgrass                 | <i>Agropyron elongatum</i>  | Cool          | Bunch       | 79,900      | 5.5                |
| <b>Total</b>                          |                             |               |             |             | <b>10.75</b>       |
| <b>Transition Turf Seed Mix</b>       |                             |               |             |             |                    |
| Ruchess Canadian bluegrass            | <i>Poa compressa</i>        | Cool          | Sod         | 2,500,000   | 0.5                |
| Dural hard fescue                     | <i>Festuca ovina</i>        | Cool          | Bunch       | 565,000     | 1.0                |
| Citation perennial ryegrass           | <i>Lolium perenne</i>       | Cool          | Sod         | 247,000     | 3.0                |
| Lincoln smooth brome                  | <i>Bromus inermis</i>       | Cool          | Sod         | 130,000     | 3.0                |
| <b>Total</b>                          |                             |               |             |             | <b>7.5</b>         |

TS/PS-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 June 2012

**Temporary and Permanent Seeding (TS/PS) EC-2**

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses (cont.)

| Common Name                                | Botanical Name                  | Growth Season | Growth Form            | Seeds/Pound | Pounds of PLS/acre |
|--|---------------------------------|---------------|------------------------|-------------|--------------------|
| <b>Sandy Soil Seed Mix</b>                 |                                 |               |                        |             |                    |
| Blue grama                                 | <i>Bouteloua gracilis</i>       | Warm          | Sod-forming bunchgrass | 825,000     | 0.5                |
| Camper little bluestem                     | <i>Schizachyrium scoparium</i>  | Warm          | Bunch                  | 240,000     | 1.0                |
| Prairie sandhead                           | <i>Calamagrostis longifolia</i> | Warm          | Open sod               | 274,000     | 1.0                |
| Sand dropseed                              | <i>Sporobolus cryptandrus</i>   | Cool          | Bunch                  | 5,298,000   | 0.25               |
| Vaughn sidcoats grama                      | <i>Bouteloua curtipendula</i>   | Warm          | Sod                    | 191,000     | 2.0                |
| Arriba western wheatgrass                  | <i>Agropyron smithii</i>        | Cool          | Sod                    | 110,000     | 5.5                |
| <b>Total</b>                               |                                 |               |                        |             | <b>10.25</b>       |
| <b>Heavy Clay, Rocky Footfall Seed Mix</b> |                                 |               |                        |             |                    |
| Ephraim crested wheatgrass                 | <i>Agropyron cristatum</i>      | Cool          | Sod                    | 175,000     | 1.5                |
| Oahe intermediate wheatgrass               | <i>Agropyron intermedium</i>    | Cool          | Sod                    | 115,000     | 5.5                |
| Vaughn sidcoats grama                      | <i>Bouteloua curtipendula</i>   | Warm          | Sod                    | 191,000     | 2.0                |
| Lincoln smooth brome                       | <i>Bromus inermis</i>           | Cool          | Sod                    | 130,000     | 3.0                |
| Arriba western wheatgrass                  | <i>Agropyron smithii</i>        | Cool          | Sod                    | 110,000     | 5.5                |
| <b>Total</b>                               |                                 |               |                        |             | <b>17.5</b>        |

\* All of the above seeding mixes and rates are based on drill seeding followed by crimped straw mulch. These rates should be doubled if seed is broadcast and should be increased by 50 percent if the seeding is done using a Bullhorn Drill or is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching should be done as a separate operation.

† See Table TS/PS-3 for seeding dates.

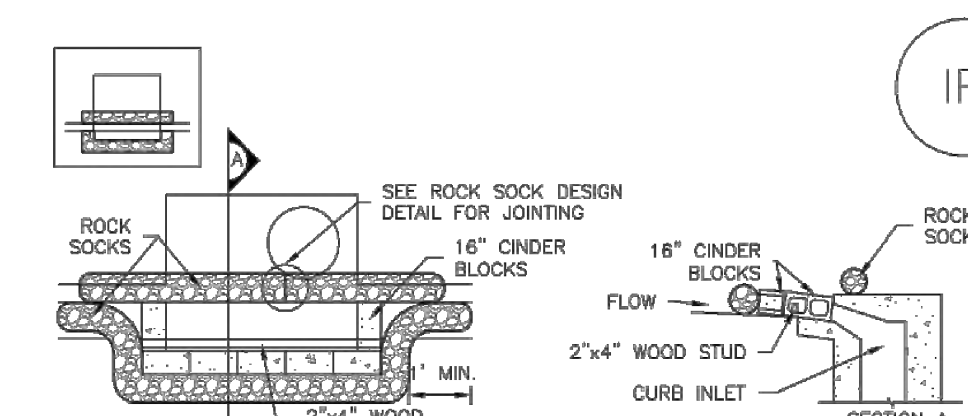
‡ If site is to be irrigated, the transition turf seed rates should be doubled.

§ Crested wheatgrass should not be used on slopes steeper than 6:1 to 1:1.

¶ Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sidcoats grama.

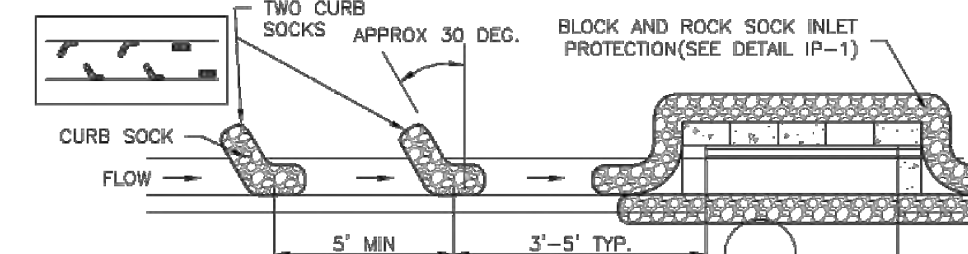
June 2012 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 TS/PS-5

**SC-6 Inlet Protection (IP)**



**IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION**

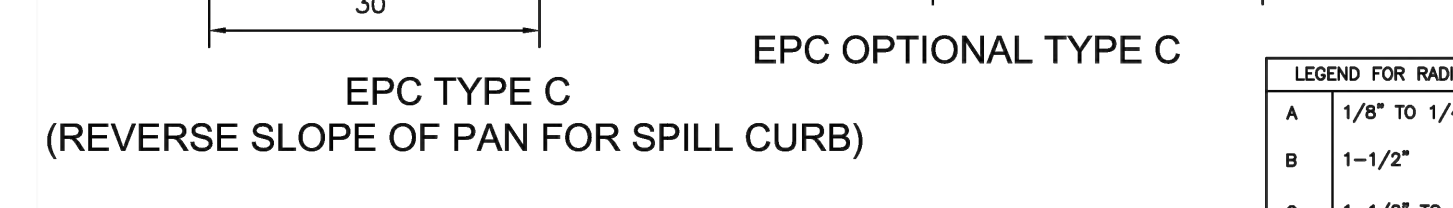
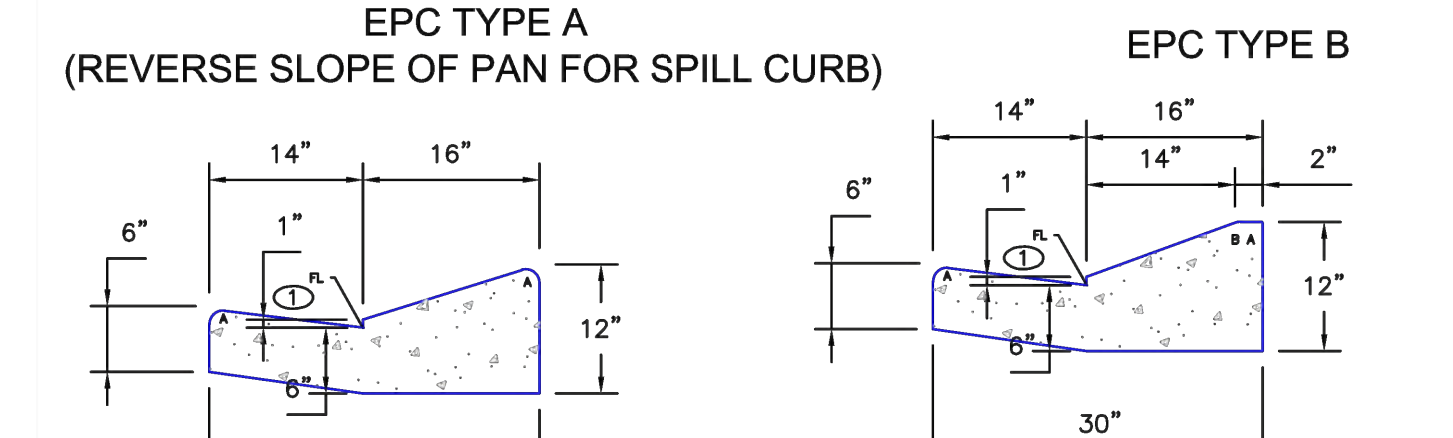
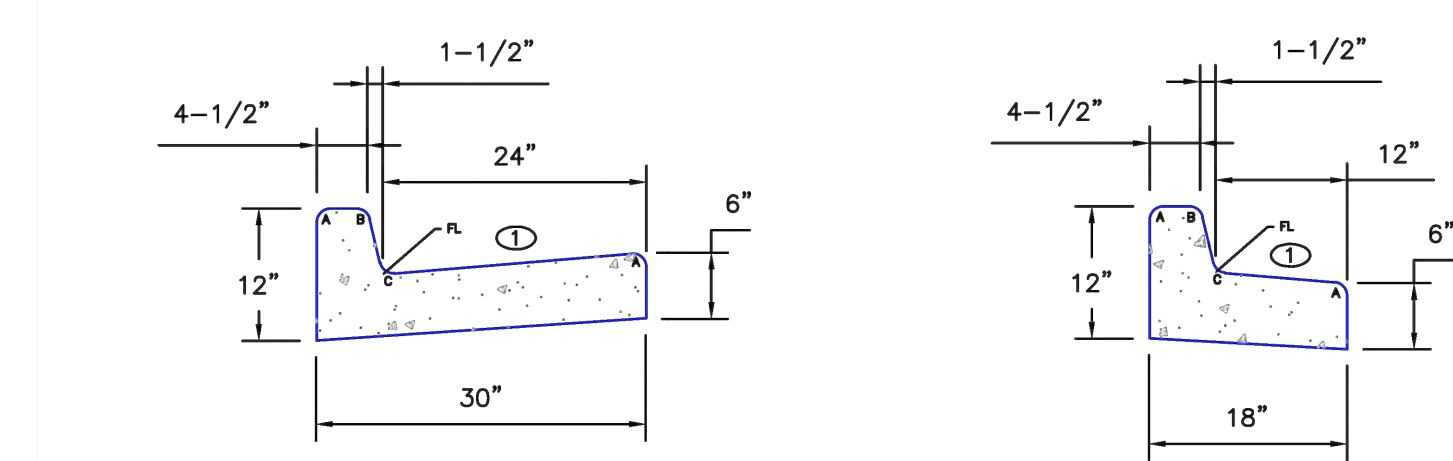
- BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
  - GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



**IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION**

- CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
  - PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
  - SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
  - AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

IP-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 August 2013



LEGEND FOR RADII

|   |              |
|---|--------------|
| A | 1/8" TO 1/4" |
| B | 1-1/2"       |
| C | 1-1/2" TO 2" |

⊙ - GUTTER CROSS SLOPES SHALL BE 1/2 IN./FT. WHEN DRAINING AWAY FROM CURB AND 1 IN./FT. WHEN DRAINING TOWARD CURB.

EPC TYPE D (6" RAMP CURB)

EPC TYPE E (6" RAMP CURB)

EL PASO COUNTY FILE NO. SF-20-024

GRADING & EROSION CONTROL COVER SHEET  
PAINT BRUSH HILLS FILING NO. 14  
JOB NO. 10-014  
DATE PREPARED: JANUARY 22, 2021  
DATE REVISED:

212 N. WAHSATCH AVE., STE 305  
COLORADO SPRINGS, CO 80903  
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Description

A sediment basin is a temporary pond built on a construction site to capture eroded or disturbed soil transported in storm runoff prior to discharge from the site. Sediment basins are designed to capture site runoff and slowly release it to allow time for settling of sediment prior to discharge. Sediment basins are often constructed in locations that will later be modified to serve as post-construction stormwater basins.



Photograph SB-1. Sediment basin at the toe of a slope. Photo courtesy of WVE.

Appropriate Uses

Most large construction sites (typically greater than 2 acres) will require one or more sediment basins for effective management of construction site runoff. On linear construction projects, sediment basins may be impractical; instead, sediment traps or other combinations of BMPs may be more appropriate.

Sediment basins should not be used as stand-alone sediment controls. Erosion and other sediment controls should also be implemented upstream.

When feasible, the sediment basin should be installed in the same location where a permanent post-construction detention pond will be located.

Design and Installation

The design procedure for a sediment basin includes these steps:

- Basin Storage Volume:** Provide a storage volume of at least 3,600 cubic feet per acre of drainage area. To the extent practical, undisturbed and/or off-site areas should be diverted around sediment basins to prevent "clean" runoff from mixing with runoff from disturbed areas. For undisturbed areas (both on-site and off-site) that cannot be diverted around the sediment basin, provide a minimum of 500 ft<sup>3</sup>/acre of storage for undeveloped (but stable) off-site areas in addition to the 3,600 ft<sup>3</sup>/acre for disturbed areas. For stable, developed areas that cannot be diverted around the sediment basin, storage volume requirements are summarized in Table SB-1.
- Basin Geometry:** Design basin with a minimum length-to-width ratio of 2:1 (L:W). If this cannot be achieved because of site space constraints, baffling may be required to extend the effective distance between the inflow point(s) and the outlet to minimize short-circuiting.
- Dam Embankment:** It is recommended that embankment slopes be 4:1 (H:V) or flatter and no steeper than 3:1 (H:V) in any location.

| Sediment Basins          |     |
|--------------------------|-----|
| Functions                |     |
| Erosion Control          | No  |
| Sediment Control         | Yes |
| Site/Material Management | No  |

- Inflow Structure:** For concentrated flow entering the basin, provide energy dissipation at the point of inflow.

Table SB-1. Additional Volume Requirements for Undisturbed and Developed Tributary Areas Draining through Sediment Basins

| Imperviousness (%) | Additional Storage Volume (ft <sup>3</sup> ) Per Acre of Tributary Area |
|--------------------|---|
| Undeveloped        | 500   |
| 10                 | 800   |
| 20                 | 1230  |
| 30                 | 1600  |
| 40                 | 2030  |
| 50                 | 2470  |
| 60                 | 2980  |
| 70                 | 3560  |
| 80                 | 4360  |
| 90                 | 5300  |
| 100                | 6460  |

- Outlet Works:** The outlet pipe shall extend through the embankment at a minimum slope of 0.5 percent. Outlet works can be designed using one of the following approaches:
  - Riser Pipe (Simplified Detail):** Detail SB-1 provides a simplified design for basins treating no more than 15 acres.
  - Orifice Plate or Riser Pipe:** Follow the design criteria for Full Spectrum Detention outlets in the EDB Fact Sheet provided in Chapter 4 of this manual for sizing of outlet perforations with an emptying time of approximately 72 hours. In lieu of the trash rack, pack uniformly sized 1 1/2 - to 2-inch gravel in front of the plate or surrounding the riser pipe. This gravel will need to be cleaned out frequently during the construction period as sediment accumulates within it. The gravel pack will need to be removed and disposed of following construction to reclaim the basin for use as a permanent detention facility. If the basin will be used as a permanent extended detention basin for the site, a trash rack will need to be installed once contributing drainage areas have been stabilized and the gravel pack and accumulated sediment have been removed.
  - Floating Skimmer:** If a floating skimmer is used, install it using manufacturer's recommendations. Illustration SB-1 provides an illustration of a Faircloth Skimmer Floating Outlet™, one of the more commonly used floating skimmer outlets. A skimmer should be designed to release the design volume in no less than 48 hours. The use of a floating skimmer outlet can increase the sediment capture efficiency of a basin significantly. A floating outlet continually decants cleanest water off the surface of the pond and releases cleaner water than would discharge from a perforated riser pipe or plate.

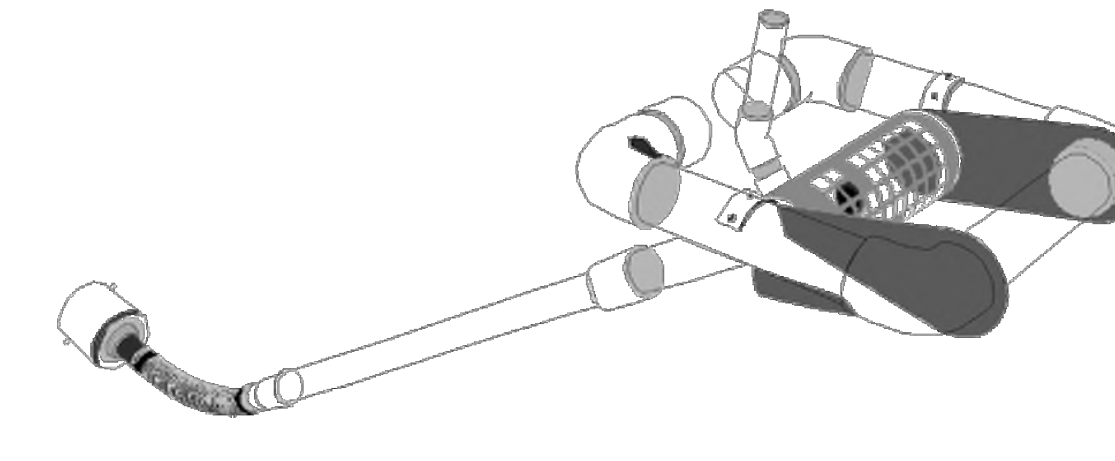


Illustration SB-1. Outlet structure for a temporary sediment basin - Faircloth Skimmer Floating Outlet. Illustration courtesy of J. W. Faircloth & Sons, Inc., FairclothSkimmer.com.

- Outlet Protection and Spillway:** Consider all flow paths for runoff leaving the basin, including protection at the typical point of discharge as well as overtopping.
  - Outlet Protection:** Outlet protection should be provided where the velocity of flow will exceed the maximum permissible velocity of the material of the waterway into which discharge occurs. This may require the use of a riprap apron at the outlet location and/or other measures to keep the waterway from eroding.
  - Emergency Spillway:** Provide a stabilized emergency overflow spillway for rainstorms that exceed the capacity of the sediment basin volume and its outlet. Protect basin embankments from erosion and overtopping. If the sediment basin will be converted to a permanent detention basin, design and construct the emergency spillway(s) as required for the permanent facility. If the sediment basin will not become a permanent detention basin, it may be possible to substitute a heavy polyvinyl membrane or properly bedded rock cover to line the spillway and downstream embankment, depending on the height, slope, and width of the embankments.

Maintenance and Removal

Maintenance activities include the following:

- Dredge sediment from the basin, as needed to maintain BMP effectiveness, typically when the design storage volume is no more than one-third filled with sediment.
- Inspect the sediment basin embankments for stability and seepage.
- Inspect the inlet and outlet of the basin, repair damage, and remove debris. Remove, clean and replace the gravel around the outlet on a regular basis to remove the accumulated sediment within it and keep the outlet functioning.
- Be aware that removal of a sediment basin may require dewatering and associated permit requirements.
- Do not remove a sediment basin until the upstream area has been stabilized with vegetation.

Final disposition of the sediment basin depends on whether the basin will be converted to a permanent post-construction stormwater basin or whether the basin area will be returned to grade. For basins being converted to permanent detention basins, remove accumulated sediment and reconfigure the basin and outlet to meet the requirements of the final design for the detention facility. If the sediment basin is not to be used as a permanent detention facility, fill the excavated area with soil and stabilize with vegetation.

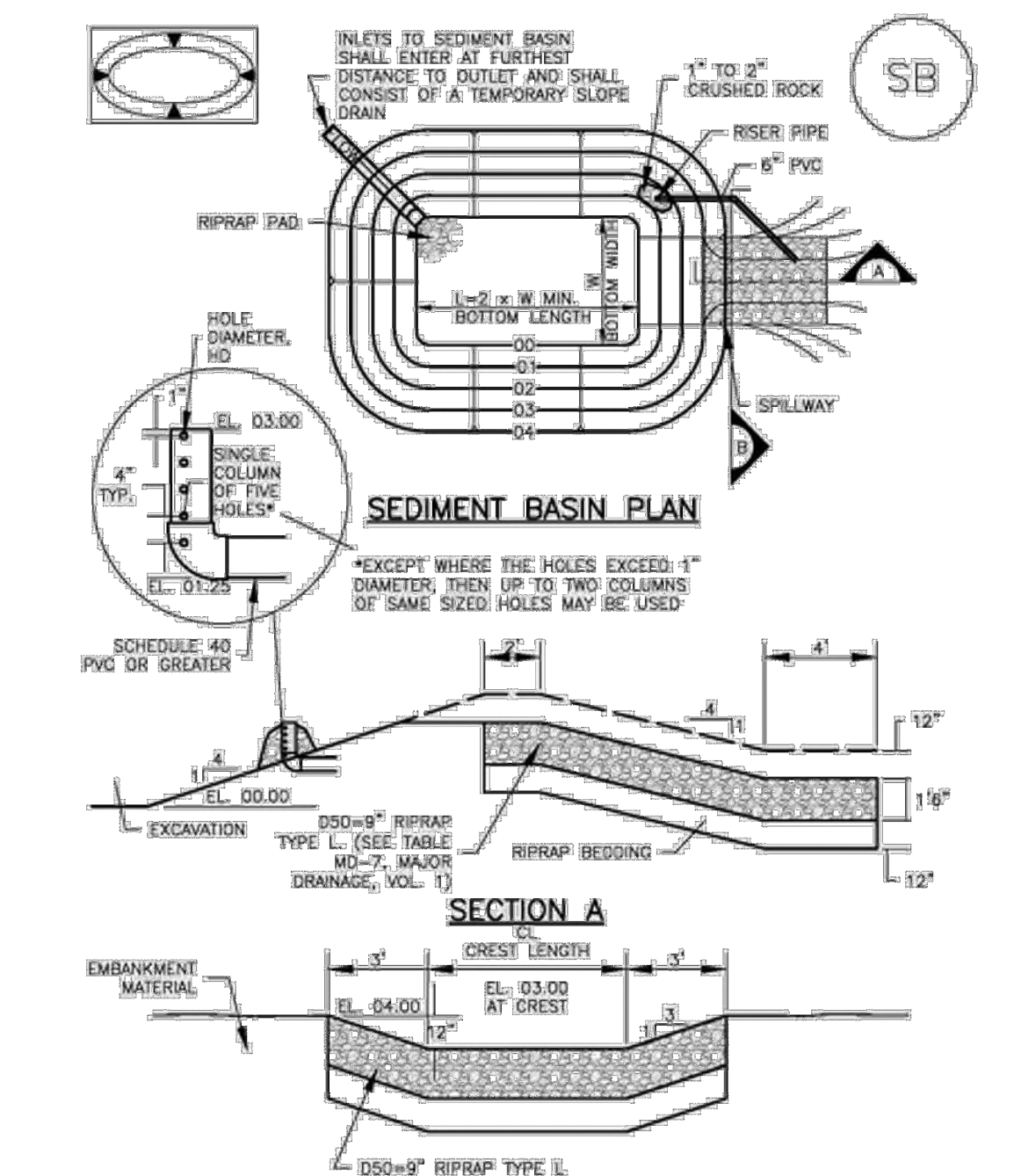
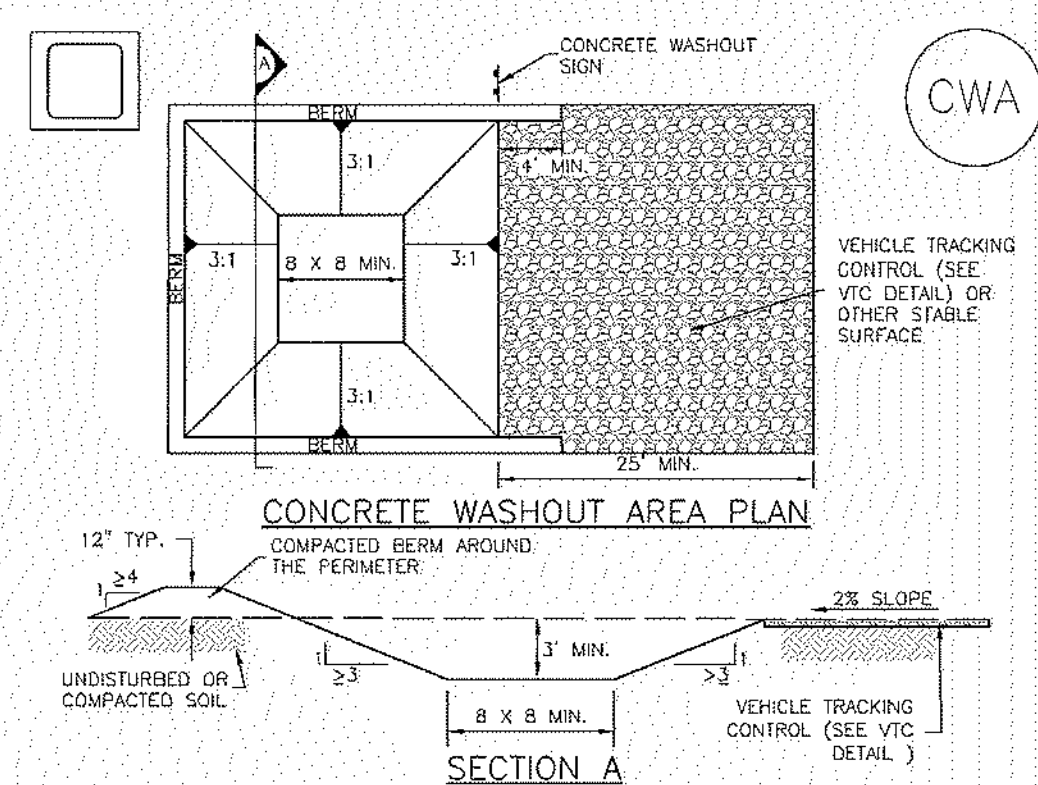


TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

| Upstream Drainage Area (rounded to nearest acre), (ac) | Basin Bottom Width (W), (ft) | Spillway Crest Length (CL), (ft) | Hole Diameter (HD), (in) |
|--|------------------------------|----------------------------------|--------------------------|
| 1  | 12 1/2                       | 2                                | 3/2                      |
| 2  | 21                           | 3                                | 1 1/4                    |
| 3  | 28                           | 5                                | 1 1/2                    |
| 4  | 33 1/2                       | 6                                | 1 3/4                    |
| 5  | 39 1/2                       | 8                                | 1 3/4                    |
| 6  | 43 1/2                       | 9                                | 1 3/4                    |
| 7  | 47 1/2                       | 11                               | 1 3/4                    |
| 8  | 51                           | 12                               | 1 3/4                    |
| 9  | 55                           | 13                               | 1 3/4                    |
| 10   | 58 1/2                       | 15                               | 1 3/4                    |
| 11   | 61                           | 16                               | 1 3/4                    |
| 12   | 64                           | 18                               | 1 3/4                    |
| 13   | 67 1/2                       | 19                               | 1 3/4                    |
| 14   | 70 1/2                       | 21                               | 1 3/4                    |
| 15   | 73 1/2                       | 22                               | 1 3/4                    |

SEDIMENT BASIN INSTALLATION NOTES

- SEE PLAN VIEW FOR:
  - LOCATION OF SEDIMENT BASIN.
  - TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
  - FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
  - FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
- FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON BASINS AS A STORMWATER CONTROL.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
- EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- PIPE SCH 40 OR GREATER SHALL BE USED.
- THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.



CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
  - CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFESIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8" BY 8" SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.



EL PASO COUNTY FILE NO. SF-20-024

GRADING & EROSION CONTROL COVER SHEET  
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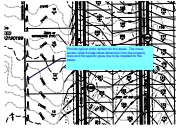


# Grading & Erosion Control Plan\_V2.pdf Markup Summary

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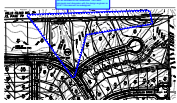
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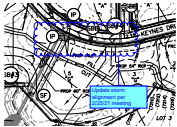
Provide typical cross section for the swale. The cross section shall include offset dimension from the property lines and the specific grass line to be installed for the swale.



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Will be reviewed on the resubmittal. Per Parks comments and discussion with the design engineer on 2/24/11 this area will be redesigned.



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**Space:**

Update storm alignment per 2/25/21 meeting

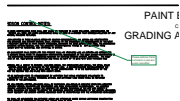
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dsdparsons (3)

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**Subject:** Image  
**Page Label:** [1] GEC-1  
**Lock:** Unlocked  
**Author:** dsdparsons  
**Date:** 2/25/2021 9:41:33 AM  
**Status:**  
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**Subject:** Callout  
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**Author:** dsdparsons  
**Date:** 2/25/2021 9:41:55 AM  
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**Space:**

Please address Parks comments in plat and prelim submittal.



**Subject:** Callout  
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**Date:** 2/25/2021 9:42:38 AM  
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is there an agreement in the works?