

SCALE: 1" = 50'

EXISTING CONTOUR	(6060)
PROPOSED CONTOUR	6060
PHASE LINE	---
A LOT	"A"
B LOT	"B"
WALKOUT LOT	"W/O"
GARDEN LOT	"G"
TRANSITION LOT	"T"

PROPOSED FLOW	→
EXISTING FLOW	→
INLET PROTECTION	IP
SILT FENCE	SF
VEHICLE TRACKING CONTROL	VTC
(2) STRAW BALE CHECK DAM (BOTH SIDES OF ROADWAY)	SBB

48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811
UTILITY NOTIFICATION OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794 DATE

CLASSIC
CONSULTING ENGINEERS & SURVEYORS

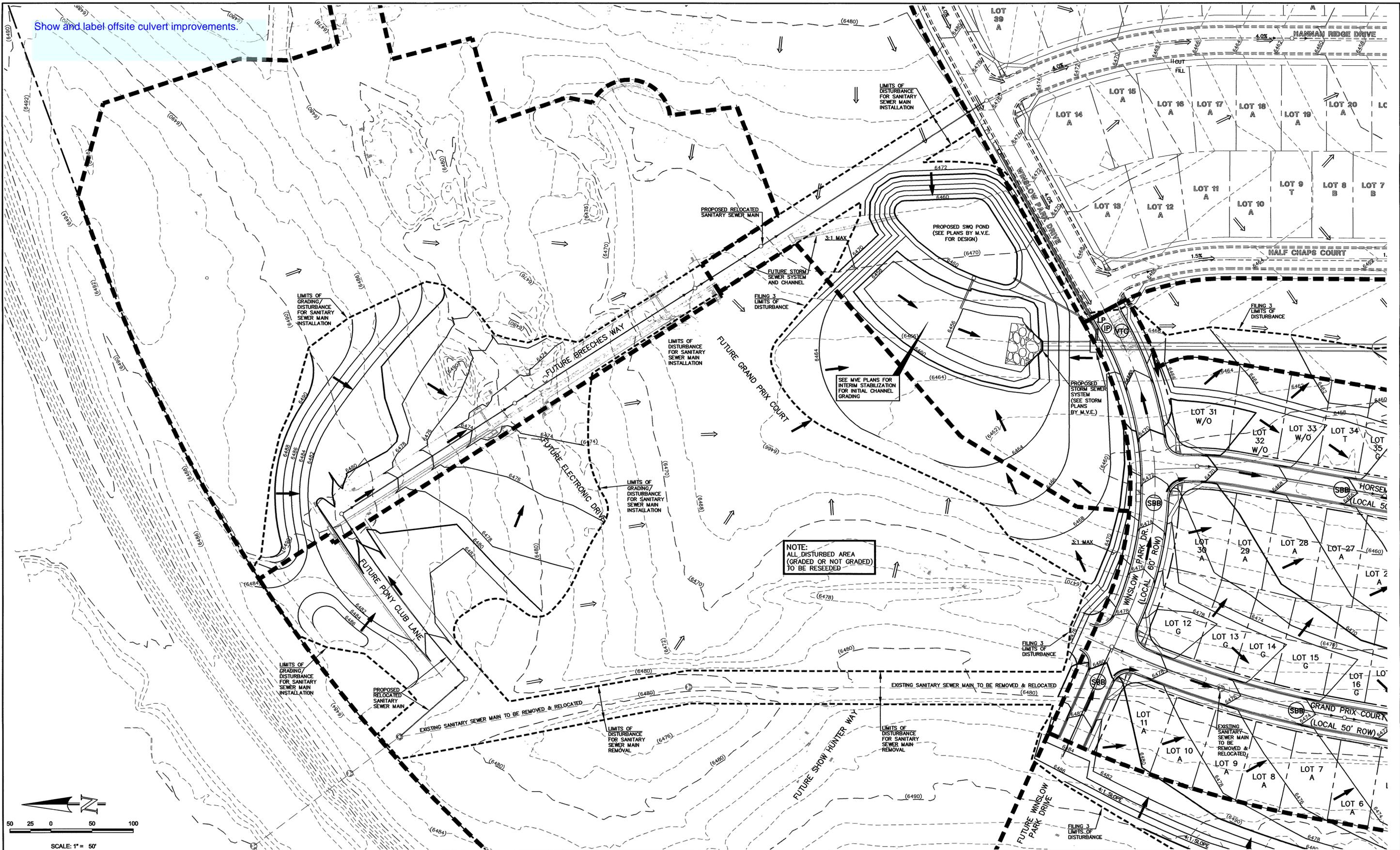
6385 Corporate Drive, Suite 101 (719)785-0790
Colorado Springs, Colorado 80919 (719)785-0799(Fax)

HANNAH RIDGE AT FEATHERGRASS		FILING NO. 3	
OVERLOT GRADING AND EROSION CONTROL PLAN			
DESIGNED BY	KRC	SCALE	DATE 04/11/17
DRAWN BY	MES	(H) 1" = 50'	SHEET 2 OF 4
CHECKED BY		(V) 1" = N/A	JOB NO. 1116 03

CLASSIC CONSULTING ENGINEERS & SURVEYORS

X:\111600\DRAWINGS\CONSTRUCTION\FILING 3\111600-FIL3-06-02.dwg, 7/21/2017 3:46:24 PM, CCESSonora.rvt, gcs

Show and label offsite culvert improvements.



LEGEND	
EXISTING CONTOUR	(6060)
PROPOSED CONTOUR	6060
PHASE LINE	-----
A LOT	"A"
B LOT	"B"
WALKOUT LOT	"W/O"
GARDEN LOT	"G"
TRANSITION LOT	"T"
PROPOSED FLOW	→
EXISTING FLOW	→
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Colorado Springs, Colorado 80919 (719)785-0799(Fax)

HANNAH RIDGE AT FEATHERGRASS
FILING NO. 3
OVERLOT GRADING AND EROSION CONTROL PLAN

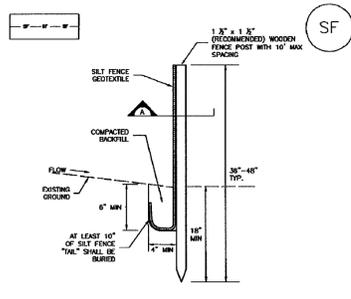
DESIGNED BY	KRC	SCALE	DATE	04/11/17
DRAWN BY	MES	(H) 1" = 50'	SHEET	3 OF 4
CHECKED BY	(V) 1" = N/A	JOB NO.	1116.03	

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Silt Fence (SF)

SC-1



SECTION A

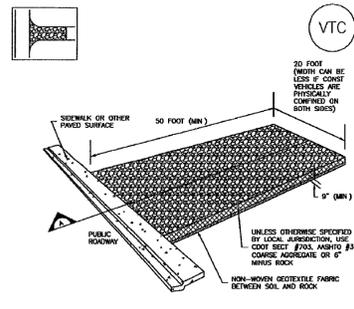
SILT FENCE

SF-1. SILT FENCE

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

Vehicle Tracking Control (VTC)

SM-4



SECTION A

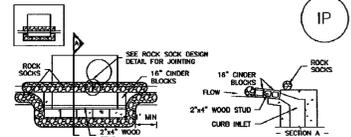
VTC

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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

SC-6

Inlet Protection (IP)



SECTION A

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

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS
2. CONCRETE "TONGER" BLOCKS SHALL BE Laid ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, BUTTING ONE ANOTHER WITH THE OPEN END FINISH AWAY FROM THE CURB.
3. CONCRETE BLOCKS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY BUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



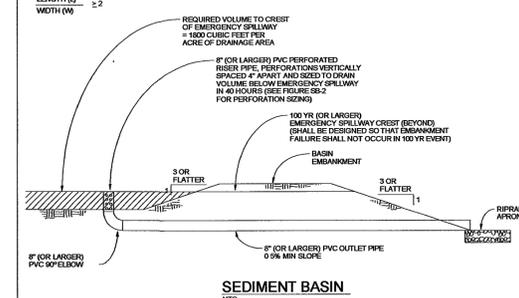
SECTION A

IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL, INSTALLATION REQUIREMENTS
2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART
4. 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



SEDIMENT BASIN

SEDIMENT BASIN NOTES

INSTALLATION REQUIREMENTS

1. SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING UNDER CONSTRUCTION.
2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 48 HOURS.
4. THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. Baffles MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
5. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 10% PASSING A #20 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND MINIMUM OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL, AND WEEKLY DURING PERIODS OF PROLONGED RAINFALL.
2. SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
3. SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ACCURATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality Figure SB-1 Sediment Basin Construction Detail and Maintenance Requirements

Required Area per Acre (sq ft)	Depth at Outlet (ft)							
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
1	15.04	7.71	5.10	3.76	2.95	2.41	2.02	1.73
2	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
3	5.01	2.57	1.70	1.25	0.99	0.81	0.68	0.58
4	3.76	1.91	1.27	0.94	0.75	0.63	0.53	0.45
5	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35
6	2.51	1.27	0.81	0.59	0.46	0.38	0.31	0.27
7	2.15	1.07	0.68	0.49	0.38	0.31	0.25	0.22
8	1.88	0.92	0.59	0.42	0.32	0.26	0.21	0.18
9	1.67	0.80	0.52	0.37	0.28	0.23	0.18	0.15
10	1.49	0.71	0.46	0.33	0.25	0.20	0.15	0.13
11	1.34	0.64	0.41	0.30	0.23	0.18	0.14	0.11
12	1.21	0.58	0.37	0.27	0.21	0.16	0.12	0.10
13	1.10	0.53	0.34	0.25	0.19	0.14	0.11	0.09
14	1.01	0.49	0.32	0.23	0.18	0.13	0.10	0.08
15	0.93	0.45	0.29	0.21	0.16	0.12	0.09	0.07
16	0.86	0.42	0.27	0.20	0.15	0.11	0.08	0.06
17	0.80	0.39	0.25	0.19	0.14	0.10	0.07	0.05
18	0.75	0.36	0.23	0.18	0.13	0.09	0.06	0.04
19	0.71	0.34	0.22	0.17	0.12	0.08	0.05	0.03
20	0.67	0.32	0.21	0.16	0.11	0.07	0.04	0.02
21	0.64	0.30	0.20	0.15	0.10	0.07	0.04	0.02
22	0.61	0.28	0.19	0.14	0.09	0.06	0.03	0.01
23	0.58	0.26	0.18	0.13	0.08	0.05	0.02	0.01
24	0.56	0.25	0.17	0.12	0.07	0.04	0.01	0.01
25	0.54	0.24	0.16	0.11	0.06	0.03	0.01	0.01

TABLE SB-1

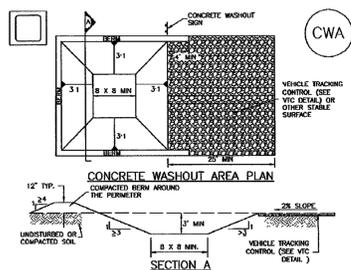
Circular Perforation Being	Hole Diameter (in)	Hole Spacing (in)	Area per Row (sq ft)	
			1' x 1'	1' x 3'
1/4"	0.25	0.65	0.10	0.15
3/8"	0.375	0.94	0.15	0.23
1/2"	0.5	1.25	0.20	0.30
5/8"	0.625	1.56	0.25	0.38
3/4"	0.75	1.88	0.30	0.45
7/8"	0.875	2.19	0.35	0.53
1"	1.0	2.5	0.40	0.61
1 1/8"	1.125	2.81	0.45	0.69
1 1/4"	1.25	3.13	0.50	0.77
1 3/8"	1.375	3.44	0.55	0.85
1 1/2"	1.5	3.75	0.60	0.94
1 5/8"	1.625	4.06	0.65	1.02
1 3/4"	1.75	4.38	0.70	1.11
1 7/8"	1.875	4.69	0.75	1.20
2"	2.0	5.0	0.80	1.29
2 1/8"	2.125	5.31	0.85	1.38
2 1/4"	2.25	5.63	0.90	1.47
2 3/8"	2.375	5.94	0.95	1.56
2 1/2"	2.5	6.25	1.00	1.65
2 5/8"	2.625	6.56	1.05	1.74
2 3/4"	2.75	6.88	1.10	1.83
2 7/8"	2.875	7.19	1.15	1.92
3"	3.0	7.5	1.20	2.02
3 1/8"	3.125	7.81	1.25	2.11
3 1/4"	3.25	8.13	1.30	2.20
3 3/8"	3.375	8.44	1.35	2.30
3 1/2"	3.5	8.75	1.40	2.39
3 5/8"	3.625	9.06	1.45	2.49
3 3/4"	3.75	9.38	1.50	2.58
3 7/8"	3.875	9.69	1.55	2.68
4"	4.0	10.0	1.60	2.77
4 1/8"	4.125	10.31	1.65	2.87
4 1/4"	4.25	10.63	1.70	2.96
4 3/8"	4.375	10.94	1.75	3.06
4 1/2"	4.5	11.25	1.80	3.15
4 5/8"	4.625	11.56	1.85	3.25
4 3/4"	4.75	11.88	1.90	3.34
4 7/8"	4.875	12.19	1.95	3.44
5"	5.0	12.5	2.00	3.54

TABLE SB-2

City of Colorado Springs Stormwater Quality Figure SB-2 Outlet Sizing Techniques and Maintenance Requirements

Concrete Washout Area (CWA)

MM-1



SECTION A

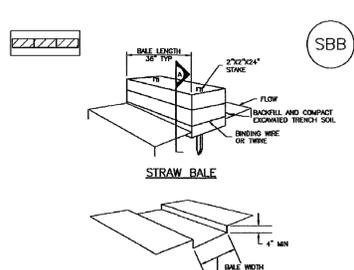
CWA

CWA-1. CONCRETE WASHOUT AREA

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

SC-3

Straw Bale Barrier (SBB)

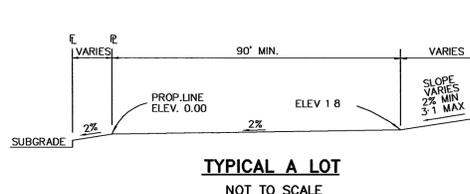


SECTION A

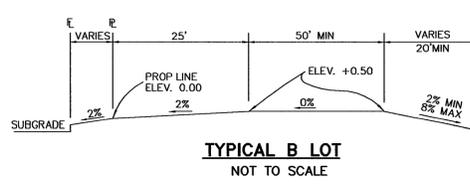
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SBB-1. STRAW BALE

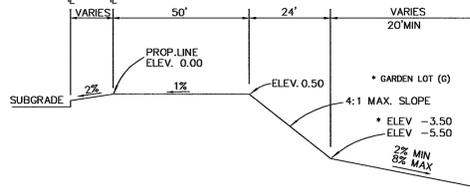
November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SBB-2



TYPICAL A LOT NOT TO SCALE



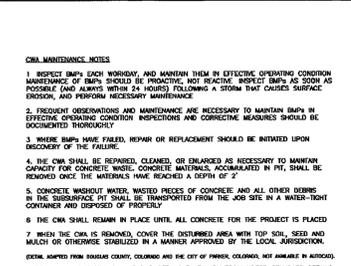
TYPICAL B LOT NOT TO SCALE



TYPICAL WALKOUT LOT (W/O) OR GARDEN (G) NOT TO SCALE

NOTE:
"T" LOTS OR "TRANSITION" LOTS OCCUR IN PLACES WHERE BOTH PROPERTY LINES CANNOT BE GRADED AS THE TYPICAL STANDARD LOT TEMPLATES SHOWN. THESE LOTS WILL STILL BE GRADED TO CREATE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE.

MM-1 Concrete Washout Area (CWA)



SECTION A

CWA

CWA-4

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HANNAH RIDGE AT FEATHERGRASS
FILE NO. 3
OVERLOT GRADING AND EROSION CONTROL PLAN
DETAILS
DESIGNED BY: KRC SCALE: DATE: 04/11/17
DRAWN BY: MES (H) 1"= N/A SHEET: 4 OF 4
CHECKED BY: (V) 1"= N/A JOB NO.: 1116 03

Markup Summary

dsdrice (4)



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Planning and Community Development



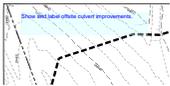
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Show and label offsite culvert improvements.