

Drainage Conformance Letter For Hillside/Arbors Site Development Plan

June 14, 2022

Prepared For:



BLVD Builders, LLC.
600 Grant Street, Suite 404
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Contact: Lee Merritt
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Prepared By:



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June 14, 2022

Larry Hearold
Plan Review Project Coordinator
Town of Castle Rock
Development Services Department
Tel: 720-733-3579

Re: Drainage Conformance to Phase III Drainage Report for Hillside at Castle Rock Phase 1 & 2

EES is pleased to provide a drainage conformance letter for the Hillside/Arbors Site Development Plan. The Hillside/Arbors Site Development Plan was approved in November of 2016. The Phase III Drainage Report for Hillside at Castle Rock Phase 1 & 2, approved December 9, 2021, outlined the overall drainage design for the Hillside/Arbors development. The owner of the development, BLVD Builders, decided to change the housing product to be constructed by the development and revised overlot grading for Lots 1-11 of Phase I to reduce retaining wall height. The change facilitated a need for a site plan amendment and revisions to meet new Town development criteria, namely landscape requirements. The intention of this letter is to certify that the site revisions i.e. change of housing product type, revised overlot grading for Lots 1-11 of Phase I, and landscaping revisions DO NOT bring the site out of compliance with the approved Phase III report. The change of housing product does not affect hydrologic or hydraulic calculations because basin areas and runoff coefficients remain unchanged and slopes/grades in streets/storm sewers remain unchanged. Revisions to the overlot grading for Lots 1-11 of Phase I did not change the drainage patterns/slopes within the Sub Basin B2. Changes to the landscaping plantings do not change site hydrology and hydraulics because the basin runoff coefficients remain the same.

The approved Phase III rational calculations and Overall Drainage Map are provided with this letter.

Respectfully submitted,
Entitlement and Engineering Solutions, Inc

Jeffrey M. Killingsworth, PE
Colorado PE License #41217



PHASE III DRAINAGE REPORT
Hillside at Castle Rock Phase 1 & 2
Castle Rock, Colorado
CD 21-0022

October 18, 2021

PREPARED FOR:

*BLVD Way Communities
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(303) 200-0742*

PREPARED BY:

*PARAGON ENGINEERING CONSULTANTS, INC.
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Paragon Project No. 15-005

“I affirm that this report and plan for the Phase III drainage design of Hillside at Castle Rock Phase 1 & 2 was prepared by me (or under my direct supervision) in accordance with the provisions of the Town of Castle Rock Drainage Design and Technical Criteria for the owners thereof. I understand that the Town of Castle Rock does not and will not assume liability for drainage facilities designed by others.”

SIGNATURE: _____

Registered Professional Engineer State
Of Colorado No. 40660



BLVD Way Communities hereby certifies that the drainage facilities for Hillside at Castle Rock Phase 1 & 2 shall be constructed according to the design presented in this report. I understand that the Town of Castle Rock does not and will not assume liability of the drainage facilities designed and/or certified by my engineer and that the Town of Castle Rock reviews drainage plans pursuant to the Municipal Code; but cannot, on behalf of BLVD Way Communities, guarantee that final drainage design review will absolve BLVD Way Communities and/or their successors and/or assigns of future liability for improper design.

BLVD Way Communities

A handwritten signature in blue ink, appearing to read "L Merritt".

Lee Merritt, Vice President of Land Development



DEVELOPMENT SERVICES
APPROVED

by Larry Hearold

on 12/09/2021

**Approved CD21-0022 Phase III Drainage
Report.pdf
Record Document on File**



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RUNOFF COEFFICIENTS - DEVELOPED

FOR REFERENCE ONLY

**FOR REFERENCE ONLY
 HILLSIDE PHASE II DRAINAGE
 REPORT UPDATE**

PROJECT NAME: Hillside at Castle Rock - Phase II
 PROJECT NUMBER: 15-005
 CALCULATED BY: TWD
 CHECKED BY: TWD

DATE: April 3, 2019

Land Use	Type D Soils		Type B Soils		Type B Soil					
	Historic / Open Space	M.F. Detached	Tract / Open Space	M.F. Attached	Streets					
Area	Area	Area	Area	Area	Area					
2-Yr Coeff.	0.01	0.46	0.01	0.60	0.84					
5-YEAR Coeff.	0.05	0.49	0.01	0.63	0.86					
100-YEAR Coeff.	0.49	0.71	0.44	0.78	0.89					
Impervious	2%	60%	2%	75%	100%					

Note: Runoff coefficients shown were obtained from UDFCD Table 6-3 and 6-5

Design Basin	Design Point	Historic / Open Space Area (AC)	M.F. Detached Area (AC)	Tract / Open Space Area (AC)	M.F. Attached Area (AC)	Streets Area (AC)	Area (AC)	CC ₂	CC ₅	CC ₁₀₀	% Imp.
A1	1		4.76				4.76	0.46	0.49	0.71	60%
A2	4		3.60				3.60	0.46	0.49	0.71	60%
SUBTOTAL FOR BASIN A		0.00	8.36	1.83	0.00	0.00	8.36	0.46	0.49	0.81	60%
		0.0%	100.0%	21.9%	0.0%	0.0%	122%				
B1	8		4.42	1.83			6.25	0.33	0.35	0.63	43%
B2	7		3.42				3.42	0.46	0.49	0.71	60%
B3	9		1.03				1.03	0.46	0.49	0.71	60%
B4	6		0.41	0.33			0.74	0.26	0.28	0.59	34%
B5	20		0.70	0.38			1.08	0.30	0.32	0.61	39%
B6				2.88			2.88	0.01	0.01	0.44	2%
SUBTOTAL FOR BASIN B		0.00	9.97	5.43	0.00	0.00	15.40	0.30	0.32	0.61	40%
		0.0%	64.7%	35.3%	0.0%	0.0%	100%				
C1	10				1.83		1.83	0.60	0.63	0.78	75%
C2	11				1.04		1.04	0.60	0.63	0.78	75%
C3	12			1.53			1.53	0.01	0.01	0.44	2%
C4	13			0.30		0.15	0.45	0.29	0.30	0.59	35%
SUBTOTAL FOR BASIN C		0.00	0.00	1.83	2.87	0.15	4.85	0.39	0.40	0.66	48%
		0.0%	0.0%	37.7%	59.1%	3.2%	100%				
D1	14		0.45	1.04		0.11	1.61	0.20	0.21	0.55	25%
D2	15			1.09		0.25	1.34	0.17	0.17	0.53	21%
D3	16			0.20		0.14	0.34	0.35	0.35	0.62	42%
D4	17					0.12	0.12	0.84	0.86	0.89	100%
D5	18			1.30		0.52	1.82	0.25	0.25	0.57	30%
SUBTOTAL FOR BASIN C		0.00	0.45	3.63	0.00	1.15	2.95	0.41	0.42	1.00	51%
		0.0%	15.4%	123.0%	0.0%	38.9%	177%				
OS-1	5	6.25					6.25	0.01	0.05	0.49	2%
OS-2	3	15.28					15.28	0.01	0.05	0.49	2%
OS-3	19	5.64					5.64	0.01	0.05	0.49	2%
SUBTOTAL FOR BASIN OS		27.17	0.00	0.00	0.00	0.00	27.17	0.01	0.05	0.49	2%
		100.0%	0.0%	0.0%	0.0%	0.0%	100%				
TOTAL STUDY AREA		27.17	18.79	12.72	2.87	1.30	58.73	0.20	0.23	0.61	26.4%
		46.3%	32.0%	21.7%	4.9%	2.2%	100.0%				

West Pond SD B		6.25	8.53	2.42	0.00	0.14	17.34	0.24	0.27	0.59	31%
West Pond SD A		15.28	9.80	0.33	0.00	0.00	25.41	0.18	0.22	0.57	24%
West Pond Total		21.53	18.33	5.63	0.00	0.14	45.63	0.19	0.22	0.57	26%



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STANDARD FORM SF-2 - DEVELOPED
Time of Concentration

FOR REFERENCE ONLY

PROJECT NAME: Hillside at Castle Rock - Phase II
 PROJECT NUMBER: 15-005
 CALCULATED BY: TWD
 CHECKED BY: TWD

FOR REFERENCE ONLY HILLSIDE PHASE II
 DRAINAGE REPORT UPDATE

DATE: April 3, 2019

SUB-BASIN DATA			INITIAL TIME (T _i)			TRAVEL TIME (T _t)						t _c CHECK (URBANIZED BASINS)			FINAL t _c		
DESIGN BASIN (1)	AREA Ac (2)	C _s (3)	LENGTH Ft (4)	SLOPE % (5)	T _i Min. (6)	LENGTH Ft. (7)	SLOPE % (8)	C _v (9)	Land Surface (10)	VEL fps (11)	T _t Min. (12)	COMP. t _c (13)	TOTAL LENGTH (14)	t _c =(L/180)+10 Min. (15)	Min. (16)	C10 (17)	C100 (18)
A1	4.76	0.49	100	2.0%	8.9	1,350	6.0%	20.0	Paved Areas	4.9	4.6	13.5	1450	18.1	13.5	0.49	0.71
A2	3.60	0.49	100	2.0%	8.9	1,410	6.0%	20.0	Paved Areas	4.9	4.8	13.7	1510	18.4	13.7	0.49	0.71
A3	#N/A	#N/A	18	2.0%	#N/A	1,291	6.0%	20.0	Paved Areas	4.9	4.4	#N/A	1309	17.3	#N/A	#N/A	#N/A
B1	6.25	0.35	100	2.0%	10.9	1,395	6.0%	20.0	Paved Areas	4.9	4.7	15.7	1495	18.3	15.7	0.35	0.63
B2	3.42	0.49	102	32.4%	3.5	1,472	5.3%	20.0	Paved Areas	4.6	5.3	8.9	1574	18.7	8.9	0.49	0.71
B3	1.03	0.49	156	10.9%	6.3	563	3.9%	20.0	Paved Areas	4.0	2.4	8.7	719	14.0	8.7	0.49	0.71
B4	0.74	0.28	79	36.7%	4.0	12	20.8%	20.0	Paved Areas	9.1	0.0	4.1	91	10.5	5.0	0.28	0.59
B5	1.08	0.32	50	2.0%	8.0	591	16.0%	20.0	Paved Areas	8.0	1.2	9.3	641	13.6	9.3	0.32	0.61
B6	2.88	0.01	220	19.1%	11.1	254	1.1%	20.0	Paved Areas	2.1	2.0	13.1	474	12.6	12.6	0.01	0.44
C1	1.83	0.63	25	2.0%	3.4	570	6.0%	20.0	Paved Areas	4.9	1.9	5.4	595	13.3	5.4	0.63	0.78
C2	1.04	0.63	90	2.0%	6.5	570	6.0%	20.0	Paved Areas	4.9	1.9	8.4	660	13.7	8.4	0.63	0.78
C3	1.53	0.01	50	25.0%	4.8	150	2.0%	20.0	Paved Areas	2.8	0.9	5.7	200	11.1	5.7	0.01	0.44
C4	0.45	0.30	50	25.0%	3.6	1,100	4.0%	20.0	Paved Areas	4.0	4.6	8.1	1150	16.4	8.1	0.30	0.59
D1	1.61	0.21	50	10.0%	5.4	212	4.0%	7.0	Short Pasture/Lawn	1.4	2.5	7.9	262	11.5	7.9	0.21	0.55
D2	1.34	0.17	50	10.0%	5.6	415	4.0%	7.0	Short Pasture/Lawn	1.4	4.9	10.5	465	12.6	10.5	0.17	0.53
D3	0.34	0.35	50	10.0%	4.5	150	4.0%	7.0	Short Pasture/Lawn	1.4	1.8	6.3	200	11.1	6.3	0.35	0.62
D4	0.12	0.86	20	2.0%	1.6	50	4.0%	20.0	Paved Areas	4.0	0.2	1.8	70	10.4	5.0	0.86	0.89
D5	1.82	0.25	170	16.0%	8.0	591	1.7%	7.0	Short Pasture/Lawn	0.9	10.8	18.9	761	14.2	14.2	0.25	0.57
OS-1	6.25	0.05	500	39.6%	12.6	503	33.8%	5.0	Tillage/Field	2.9	2.9	15.5		N/A	15.5	0.05	0.49
OS-2	15.28	0.05	500	39.6%	12.6	1,863	8.1%	5.0	Tillage/Field	1.4	21.9	34.5		N/A	34.5	0.05	0.49
OS-3	5.64	0.05	500	39.6%	12.6	877	17.1%	5.0	Tillage/Field	2.1	7.1	19.7		N/A	19.7	0.05	0.49

$$T_i = \frac{0.395(1.1-C)L^{1/2}}{S^{1/3}}$$

$$T_t = \frac{L}{60V}$$

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



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RUNOFF COEFFICIENTS - DEVELOPED

PHASE III DRAINAGE REPORT FOR HILLSIDE PHASE 1 AND 2 CONSTRUCTION

PROJECT NAME: Hillside at Castle Rock - Phase 1 & 2
 PROJECT NUMBER: 15-005
 CALCULATED BY: TWD
 CHECKED BY: TWD

DATE: April 2, 2019

Land Use	Type D Soils		Type B Soils		Type B Soil	Type D Soil
	Historic / Open Space	M.F. Detached	Tract / Open Space	M.F. Attached	Streets	Streets
2-Yr Coeff.	0.01	0.46	0.01	0.60	0.84	0.83
5-YEAR Coeff.	0.05	0.49	0.01	0.63	0.86	0.85
100-YEAR Coeff.	0.49	0.71	0.44	0.78	0.89	0.89
Impervious	2%	60%	2%	75%	100%	100%

Note: Runoff coefficients shown were obtained from UDFCD Table 6-3 and 6-5

Design Basin	Design Point	Historic / Open Space Area (AC)	M.F. Detached Area (AC)	Tract / Open Space Area (AC)	M.F. Attached Area (AC)	Streets Area (AC)	Streets Area (AC)	Area (AC)	CC ₂	CC ₅	CC ₁₀₀	% Imp.
B1	8		4.42	1.83				6.25	0.33	0.35	0.63	43%
B2	7		3.42					3.42	0.46	0.49	0.71	60%
B3	9		0.33					0.33	0.46	0.49	0.71	60%
B4	10		0.10	0.33				0.43	0.11	0.15	0.52	15%
B5	20		0.70	0.38				1.08	0.30	0.32	0.62	40%
B6	11			2.58				2.58	0.01	0.01	0.44	2%
SUBTOTAL FOR BASIN B		0.00	8.97	5.12	0.00	0.00	0.00	14.09	0.30	0.32	0.61	39%
		0.0%	63.6%	36.4%	0.0%	0.0%	0.0%	100%				
D1	14		0.45	1.04		0.11		1.61	0.20	0.21	0.55	25%
D2	15			1.09		0.25		1.34	0.17	0.17	0.53	21%
D3	16			0.20		0.14		0.34	0.35	0.35	0.62	42%
D4	17					0.12		0.12	0.84	0.86	0.89	100%
D5	18			0.74		0.26		1.00	0.23	0.23	0.56	28%
SUBTOTAL FOR BASIN D		0.00	0.45	3.07	0.00	0.89	0.00	4.41	0.22	0.23	0.56	28%
		0.0%	10.3%	69.5%	0.0%	20.2%	0.0%	100%				
OS-1	5	6.25						6.25	0.01	0.05	0.49	2%
OS-1 WQ		6.12						6.14	0.01	0.05	0.49	1.99%
OS-2	3	19.77						19.77	0.01	0.05	0.49	2%
OS-3	19	16.05						16.05	0.01	0.05	0.49	2%
SUBTOTAL FOR BASIN OS		16.05	0.00	0.00	0.00	0.00	0.00	48.21	0.00	0.02	0.16	1%
		33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	33%				
TOTAL STUDY AREA		16.05	9.42	8.19	0.00	0.89	0.00	66.71	0.08	0.09	0.28	10.5%
		24.1%	14.1%	12.3%	0.0%	1.3%	0.0%	51.8%				



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STANDARD FORM SF-2 - DEVELOPED
Time of Concentration

PHASE III DRAINAGE REPORT FOR HILLSIDE
PHASE 1 AND 2 CONSTRUCTION

PROJECT NAME: Hillside at Castle Rock - Phase 1 & 2
 PROJECT NUMBER: 15-005
 CALCULATED BY: TWD
 CHECKED BY: TWD

DATE: April 2, 2019

SUB-BASIN DATA			INITIAL TIME (T _i)			TRAVEL TIME (T _t)						t _c CHECK (URBANIZED BASINS)			FINAL t _c		
DESIGN BASIN (1)	AREA Ac (2)	C _s (3)	LENGTH Ft (4)	SLOPE % (5)	T _i Min. (6)	LENGTH Ft (7)	SLOPE % (8)	C _v (9)	Land Surface (10)	VEL fps (11)	T _t Min. (12)	COMP. t _c (13)	TOTAL LENGTH (14)	t _c =(L/180)+10 Min. (15)	Min.	C10	C100
B1	6.25	0.35	100	2.0%	10.9	1,395	6.0%	20.0	Paved Areas	4.9	4.7	15.7	1495	18.3	15.7	0.35	0.63
B2	3.42	0.49	102	32.4%	3.5	1,472	5.3%	20.0	Paved Areas	4.6	5.3	8.9	1574	18.7	8.9	0.49	0.71
B3	0.33	0.49	35	2.0%	5.3	563	3.9%	20.0	Paved Areas	4.0	2.4	7.6	598	13.3	7.6	0.49	0.71
B4	0.43	0.15	79	33.3%	4.8	12	20.8%	20.0	Paved Areas	9.1	0.0	4.8	91	10.5	5.0	0.15	0.52
B5	1.08	0.32	50	2.0%	8.0	591	16.0%	20.0	Paved Areas	8.0	1.2	9.2	641	13.6	9.2	0.32	0.62
B6	2.58	0.01	220	19.1%	11.1	254	1.1%	20.0	Paved Areas	2.1	2.0	13.1	474	12.6	12.6	0.01	0.44
D1	1.61	0.21	50	10.0%	5.4	212	4.0%	7.0	Short Pasture/Lawn	1.4	2.5	7.9	262	11.5	7.9	0.21	0.55
D2	1.34	0.17	50	10.0%	5.6	415	4.0%	7.0	Short Pasture/Lawn	1.4	4.9	10.5	465	12.6	10.5	0.17	0.53
D3	0.34	0.35	50	10.0%	4.5	150	4.0%	7.0	Short Pasture/Lawn	1.4	1.8	6.3	200	11.1	6.3	0.35	0.62
D4	0.12	0.86	20	2.0%	1.6	50	4.0%	20.0	Paved Areas	4.0	0.2	1.8	70	10.4	5.0	0.86	0.89
D5	1.00	0.23	93	4.0%	9.6	613	5.0%	15.0	Grassed Waterway	3.4	3.0	12.7	706	13.9	12.7	0.23	0.56
OS-1	6.25	0.05	500	39.6%	12.6	503	33.8%	5.0	Tillage/Field	2.9	2.9	15.5		N/A	15.5	0.05	0.49
OS-2	19.77	0.05	500	39.6%	12.6	1,863	8.1%	5.0	Tillage/Field	1.4	21.9	34.5		N/A	34.5	0.05	0.49
OS-3	16.05	0.05	500	39.6%	12.6	877	17.1%	5.0	Tillage/Field	2.1	7.1	19.7		N/A	19.7	0.05	0.49

$$T_i = \frac{0.395(1.1-C)L^{1/2}}{S^{1/3}}$$

$$T_t = \frac{L}{60V}$$



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STANDARD FORM SF-3 - DEVELOPED
STORM DRAINAGE DESIGN - RATIONAL METHOD 5-YEAR EVENT

PHASE III DRAINAGE REPORT FOR HILLSIDE PHASE 1 AND 2
 CONSTRUCTION

PROJECT NAME: Hillside at Castle Rock - Phase 1 & 2

DATE: April 2, 2019

PROJECT NUMBER: 15-005

P_1 (1-Hour Rainfall) = 1.43

CALCULATED BY: TWD

CHECKED BY: TWD

STORM LINE	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME		REMARKS	
		DESIGN BASIN	AREA (AC)	RUNOFF COEFF C _s	t _c (min)	C*A(ac)	I (in/hr)	Q (cfs)	t _c (min)	Σ(C*A) (ac)	I (in/hr)	Q (cfs)	SLOPE (%)	STREET FLOW(cfs)	DESIGN FLOW(cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)		t _t (min)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	1	OS-2	19.77	0.05	34.5	0.99	2.06	2.04	34.5	1.30	2.06	2.7									
	5	OS-1	6.25	0.05	15.5	0.31	3.19	1.00													
Inlet B1	7	B1	6.25	0.35	15.7	2.18	3.18	6.94													
B1+B5+D3	7	B1	6.25	0.35	15.7	2.18	3.18	6.94	15.7	2.65	3.18	8.4									
B1+B2+B5+D3	8	B2	3.42	0.49	8.9	1.68	4.05	6.79	15.7	4.32	3.18	13.7									
	9	B3	0.33	0.49	7.6	0.16	4.27	0.69													
		B4	0.43	0.15	5.0	0.06	4.85	0.31	7.6	0.23	4.27	1.0									
D3+B5	20	B5	1.08	0.32	9.2	0.35	3.99	1.38	9.2	0.47	3.99	1.9									West Pond
		B6	2.58	0.01	12.6	0.03	3.51	0.09													
	19	OS-3	16.05	0.05	19.7	0.80	2.84	2.28													
	14	D1	1.61	0.21	7.9	0.33	4.22	1.40													
	15	D2	1.34	0.17	10.5	0.23	3.79	0.87													
	16	D3	0.34	0.35	6.3	0.12	4.55	0.55													Discharge offsite
	17	D4	0.12	0.86	5.0	0.10	4.85	0.50													Discharge offsite
	18	D5	1.00	0.23	12.7	0.23	3.50	0.82													To inlet then to Pond A Discharge offsite



Paragon Engineering Consultants
 7852 S. Elati Street, Suite 106
 Littleton, CO 80120
 Office (303) 794-8604

STANDARD FORM SF-3 - DEVELOPED
STORM DRAINAGE DESIGN - RATIONAL METHOD 100-YEAR EVENT

PHASE III DRAINAGE REPORT FOR HILLSIDE PHASE 1 AND 2 CONSTRUCTION

PROJECT NAME: Hillside at Castle Rock - Phase 1 & 2
 PROJECT NUMBER: 15-005
 CALCULATED BY: TWD
 CHECKED BY: TWD

P₁ (1-Hour Rainfall) = 2.60

DATE: April 2, 2019

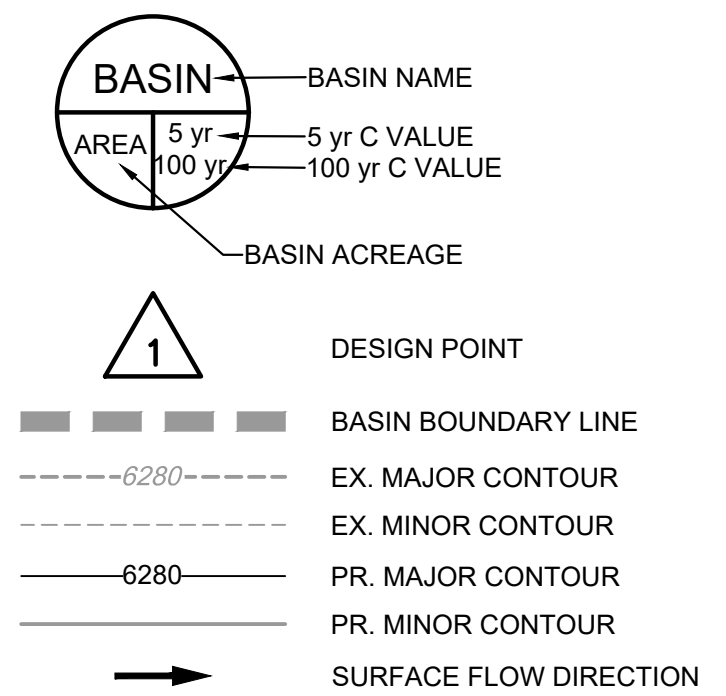
STORM LINE	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		DESIGN BASIN	AREA (AC)	RUNOFF COEFF C ₁₀₀	t _c (min)	C*A(ac)	I (in/hr)	Q (cfs)	t _c (min)	Σ(C*A) (ac)	I (in/hr)	Q (cfs)	SLOPE (%)	STREET FLOW(cfs)	DESIGN FLOW(cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	t _t (min)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	1	OS-2	19.77	0.49	34.5	9.69	3.75	36.33	34.5	12.75	3.75	47.8									
	5	OS-1	6.25	0.49	15.5	3.06	5.81	17.79													
Inlet B1	8	B1	6.25	0.63	15.7	3.94	5.78	22.79													
Pipe B1+B5+D3	8	B1	6.25	0.63	15.7	3.94	5.78	22.79	15.7	4.82	5.78	27.8									
Pipe B1+B2+B5+D3	7	B2	3.42	0.71	8.9	2.43	7.36	17.88	15.7	7.25	5.78	41.9									
	9	B3	0.33	0.71	7.6	0.23	7.77	1.82													
B3+B4		B4	0.43	0.52	5.0	0.22	8.82	1.97	7.6	0.46	7.77	3.6									
Pipe D3+B5	20	B5	1.08	0.62	9.2	0.66	7.25	4.82	9.2	0.88	7.25	6.3									
		B6	2.58	0.44	12.6	1.14	6.38	7.25													
	19	OS-3	16.05	0.49	19.7	7.86	5.16	40.54													
	14	D1	1.61	0.55	7.9	0.88	7.67	6.77													
	15	D2	1.34	0.53	10.5	0.70	6.89	4.85													
	16	D3	0.34	0.62	6.3	0.21	8.27	1.75													Discharge offsite
	17	D4	0.12	0.89	5.0	0.11	8.82	0.94													Discharge offsite
	18	D5	1.00	0.56	12.7	0.56	6.37	3.56													To inlet then to Pond A Discharge offsite

REVIEWER NOTES:

1. THIS OVERALL DRAINAGE MAP IS TO PROVIDE GENERAL LOCATIONS AND INFORMATION FOR STORM CONVEYANCE AND STORAGE FACILITIES, RETAINING WALLS, AS WELL AS CONSTRUCTION PHASING ONLY. FOR MORE DETAILS REFER TO PROPOSED DRAINAGE PLAN 1 & 2 AND CONSTRUCTION PLANS.
2. ALL TRICKLE AND DRAINAGE/ROCK MITIGATION CHANNELS' DETAILS ARE DESIGNED AND SHOWN IN CONSTRUCTION PLANS.
3. FOR LOT TYPE CONFIGURATIONS REFER TO CONSTRUCTION PLANS FOR LOT DRAINAGE DETAILS.
4. PROPOSED GRADING CONTOURS SHOWN ARE OVERLOT GRADING WITH FINISHED STREET GRADING. FOR FINAL AREA GRADING FOR LOT, REFER TO LOT TYPE CONFIGURATION IN CONSTRUCTION PLANS.
5. PHASE LINES ARE FOR INFORMATION ONLY.
6. ALL STORM CONVEYANCE AND STORAGE FACILITIES WITHIN THE PROJECT BOUNDARY ARE PRIVATE UNLESS OTHERWISE NOTED.

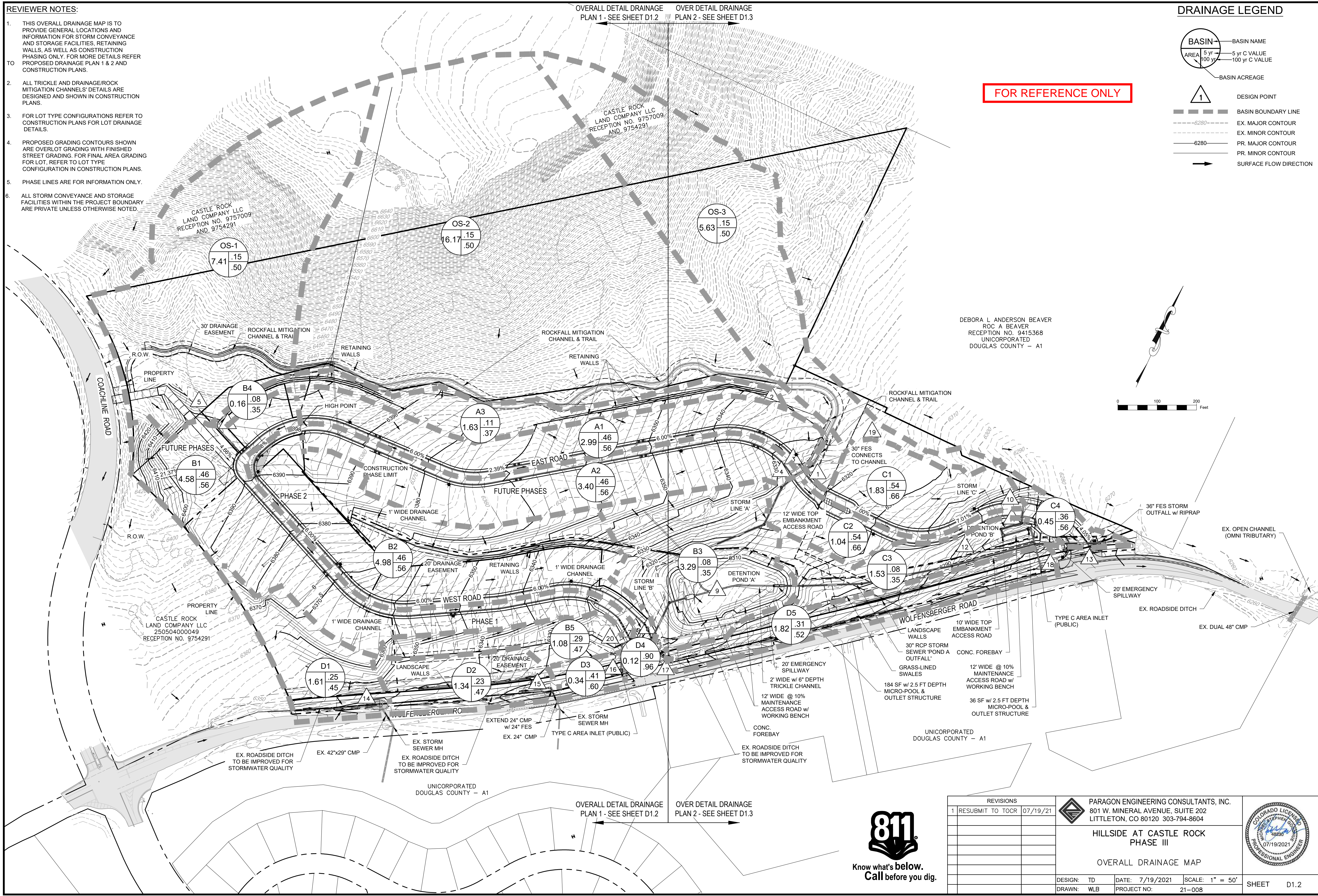
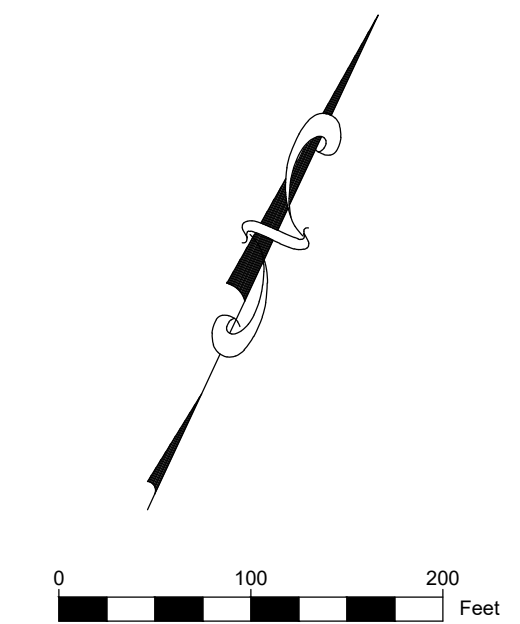
OVERALL DETAIL DRAINAGE PLAN 1 - SEE SHEET D1.2
 OVER DETAIL DRAINAGE PLAN 2 - SEE SHEET D1.3

DRAINAGE LEGEND



FOR REFERENCE ONLY

DEBORA L ANDERSON BEAVER
 ROC A BEAVER
 RECEPTION NO. 9415368
 UNINCORPORATED
 DOUGLAS COUNTY - A1



OVERALL DETAIL DRAINAGE PLAN 1 - SEE SHEET D1.2
 OVER DETAIL DRAINAGE PLAN 2 - SEE SHEET D1.3



REVISIONS		PARAGON ENGINEERING CONSULTANTS, INC. 801 W. MINERAL AVENUE, SUITE 202 LITTLETON, CO 80120 303-794-8604	COLORADO LICENSED PROFESSIONAL ENGINEER
1	RESUBMIT TO TOCR 07/19/21		
DESIGN:	TD	DATE: 7/19/2021	SCALE: 1" = 50'
DRAWN:	WLB	PROJECT NO:	21-008