STERLING RANCH MDDP AMENDMENT NO. 2 & PRELIMINARY DRAINAGE REPORT
FOR
STERLING RANCH EAST
PRELIMINARY PLAN NO. 1

Prepared for:
CLASSIC SRJ LAND, LLC
2138 FLYING HORSE CLUB DRIVE
COLORADO SPRINGS CO 80921
(719) 592-9333

CCES Responses

Prepared by:
CLASSIC CONSULTING
619 N. CASCADE AVE SUITE 200
COLORADO SPRINGS CO 80903
(719) 785-0790

Job No. 1183.22

PCD Project No.
SKP-22-004 / SP-22-004

CLASSIC CONSULTING ℠

ClassicConsulting.net

Basin SC-1 (Q_5 = 2 cfs, Q_{100} = 6 cfs) is a small basin due west of the elementary school site that consists of mainly the eastern slope of the Sand Creek channel. No impervious development is proposed other than the required maintenance access road/trail as presented on the Sand Creek channel plans. At this time, this area is not anticipated to be captured and routed to a formal stormwater quality facility. However, given the minimal unconnected impervious area and sizeable receiving pervious are within this basin, the WQCV reduction = 100% with 0 untreated WQCV. (See Appendix)

After development of the Sterling Ranch East Preliminary Plan No. 1, the majority of the upstream tributary area of Basins EX-9, EX-9A and EX-10A is routed to proposed treatment facilities (Pond FSD-14A, Pond FSD-14B and FSD- 11B). The remaining portion of **Basin EX-9 (Q_5 = 2 cfs, Q_{100} = 6 cfs)** is a small basin of 6.0 ac. that will remain undeveloped and continue to sheet flow in a southerly direction and exit along the south boundary at Design Point 6. These minor flows will combine with the previously described release from Pond FSD-14B through a proposed level spreader structure. The final design and construction timing of this facility will be detailed in a future Final Drainage Report for this area.

[handwritten annotation: 8]

[handwritten annotation: Corrected]

[handwritten annotation: Flow does not match summary table]

[handwritten annotation: 16]

The remaining portion of **Basin EX-9A (Q_5 = 4 cfs, Q_{100} = 11 cfs)** is a basin of 12.7 ac. that will remain undeveloped and continue to sheet flow in a southerly direction and exit along the south boundary at Design Point 6A. The pre-development flow at this location **Design Point 6A (Q_5 = 7 cfs, Q_{100} = 19 cfs).** Thus, the downstream corridor will continue to adequately handle these off-site flows.

The remaining portion of **Basin EX-10A (Q_5 = 18 cfs, Q_{100} = 50 cfs)** is a basin of 60.4 ac. that will remain undeveloped and continue to sheet flow in a southerly direction and exit along the south boundary at Design Point 7. The pre-development flow at this location **Design Point 7 (Q_5 = 110 cfs, Q_{100} = 249 cfs).** Thus, the downstream corridor will continue to adequately handle these off-site flows.

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Flow Comparison along South Boundary

Design Point (South Bndy.)	This Report (SWMM 5.1) Pre-Dev. Conditions		This Report (SWMM 5.1) Developed Conditions		2018 SR MDDP (HEC-HMS) Pre-Dev. Conditions	
	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
4	46	105	0.5	3.5	21.5	107.4
4A	1	5	0.5	3.5		
5	5	23	4	10	1.7	20.5
5A	2	9	2	7		
6	59	122	2.0	48.9	23.9	125.2
6A	7	19	4	11		
7	110	249	18	50	57.1	277.9
56	60	160	60	160	42.5	202.9

> Include discussion on DP's where developed 5-year flow is large than 2018 MDDP 5-year flows

> Added additional language to narrative at bottom of page 35 and top of 36.

FLOODPLAIN STATEMENT

Portions of this site are located within a floodplain as determined by the Flood Insurance Rate Maps (F.I.R.M.) Map Numbers 08041C 0533G and 08041C 0535G with effective dates of December 7, 2018 and the previously mentioned LOMR 08-08-0541P with an effective date of July 23, 2009. (See Appendix). JR Engineering, LLC is coordinating a CLOMR/LOMR for this stretch of Sand Creek that is adjacent to the site and defined as Reach SC-8 (south of Briargate Pkwy.) and SC-9 north of Briargate Pkwy.)

DRAINAGE AND BRIDGE FEES

This site lies entirely within the Sand Creek Drainage Basin boundaries.

Fees are calculated using the following impervious acreage method approved by El Paso County. The final fee estimate will be included in the Final Drainage Report(s), however, the following represent fee estimates based on the Sterling Ranch East Preliminary Plan No. 1 submittal with a total area of 321.37 acres with the following different land uses proposed:
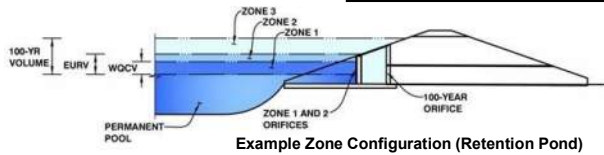
CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)

Project: STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Basin ID: POND FSD-14B

Example Zone Configuration (Retention Pond)

	Estimated Stage (ft)	Estimated Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	2.87	1.242	Orifice Plate
Zone 2 (EURV)	5.31	3.352	Orifice Plate
Zone 3 (100-year)	6.74	2.380	Weir&Pipe (Restrict)
Total (all zones)		6.974	

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

			Calculated Parameters for Underdrain		
Underdrain Orifice Invert Depth =	N/A	ft (distance below the filtration media surface)	Underdrain Orifice Area =	N/A	ft²
Underdrain Orifice Diameter =	N/A	inches	Underdrain Orifice Centroid =	N/A	feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

			Calculated Parameters for Plate		
Centroid of Lowest Orifice =	0.00	ft (relative to basin bottom at Stage = 0 ft)	WQ Orifice Area per Row =	N/A	ft²
Depth at top of Zone using Orifice Plate =	5.50	ft (relative to basin bottom at Stage = 0 ft)	Elliptical Half-Width =	N/A	feet
Orifice Plate: Orifice Vertical Spacing =	16.50	inches	Elliptical Slot Centroid =	N/A	feet
Orifice Plate: Orifice Area per Row =	N/A	sq. inches	Elliptical Slot Area =	N/A	ft²

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	1.40	2.80	4.20				
Orifice Area (sq. inches)	5.00	5.00	16.00	16.00				

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Not Selected	Not Selected		Calculated Parameters for Vertical Orifice	Not Selected	Not Selected	
Invert of Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Area =	N/A	N/A	ft²
Depth at top of Zone using Vertical Orifice =	N/A	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Centroid =	N/A	N/A	feet
Vertical Orifice Diameter =	N/A	N/A	inches				

User Input: Overflow Weir (Dropbox with Flat or Sloped Grate and Outlet Pipe OR Rectangular/Trapezoidal Weir and No Outlet Pipe)

	Zone 3 Weir	Not Selected		Calculated Parameters for Overflow Weir	Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	5.50	N/A	ft (relative to basin bottom at Stage = 0 ft)	Height of Grate Upper Edge, Hₜ =	5.50	N/A	feet
Overflow Weir Front Edge Length =	12.00	N/A	feet	Overflow Weir Slope Length =	4.00	N/A	feet
Overflow Weir Grate Slope =	0.00	N/A	H:V	Grate Open Area / 100-yr Orifice Area =	6.11	N/A	
Horiz. Length of Weir Sides =	4.00	N/A	feet	Overflow Grate Open Area w/o Debris =	33.41	N/A	ft²
Overflow Grate Type =	Type C Grate	N/A		Overflow Grate Open Area w/ Debris =	16.70	N/A	ft²
Debris Clogging % =	50%	N/A	%				

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

	Zone 3 Restrictor	Not Selected		Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate	Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	2.50	N/A	ft (distance below basin bottom at Stage = 0 ft)	Outlet Orifice Area =	5.47	N/A	ft²
Outlet Pipe Diameter =	36.00	N/A	inches	Outlet Orifice Centroid =	1.20	N/A	feet
Restrictor Plate Height Above Pipe Invert =	26.00		inches	Half-Central Angle of Restrictor Plate on Pipe =	2.03	N/A	radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

			Calculated Parameters for Spillway		
Spillway Invert Stage=	6.50	ft (relative to basin bottom at Stage = 0 ft)	Spillway Design Flow Depth=	0.90	feet
Spillway Crest Length =	70.00	feet	Stage at Top of Freeboard =	8.40	feet
Spillway End Slopes =	3.00	H:V	Basin Area at Top of Freeboard =	1.92	acres
Freeboard above Max Water Surface =	1.00	feet	Basin Volume at Top of Freeboard =	10.01	acre-ft

Routed Hydrograph Results

The user can override the default CUHP hydrographs and runoff volumes by entering new values in the Inflow Hydrographs table (Columns W through AF).

Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	N/A	N/A	1.19	1.50	1.75	2.00	2.25	2.52	3.48
CUHP Runoff Volume (acre-ft) =	1.242	4.594	3.357	4.422	5.279	6.449	7.604	9.024	13.911
Inflow Hydrograph Volume (acre-ft) =	N/A	N/A	3.357	4.422	5.279	6.449	7.604	9.024	13.911
CUHP Predevelopment Peak Q (cfs) =	N/A	N/A	0.6	1.2	1.6	15.1	29.9	48.9	110.3
OPTIONAL Override Predevelopment Peak Q (cfs) =	N/A	N/A							
Predevelopment Unit Peak Flow, q (cfs/acre) =	N/A	N/A	0.01	0.02	0.03	0.24	0.47	0.78	1.75
Peak Inflow Q (cfs) =	N/A	N/A	62.8	82.7	97.1	125.5	151.1	186.4	287.4
Peak Outflow Q (cfs) =	0.6	2.1	1.5	2.0	2.6	12.3	25.1	48.9	148.6
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	1.7	1.6	0.8	0.8	1.0	1.3
Structure Controlling Flow =	Plate	Plate	Plate	Plate	Overflow Weir 1	Overflow Weir 1	Overflow Weir 1	Overflow Weir 1	Spillway
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	N/A	0.0	0.3		1.4	2.2
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	48	72	68	72	75	73		68	61
Time to Drain 99% of Inflow Volume (hours) =	51	79	73	79	83	83		81	77
Maximum Ponding Depth (ft) =	2.87	5.31	4.38	5.03	5.54	5.83	6.08	6.43	6.99
Area at Maximum Ponding Depth (acres) =	0.96	1.59	1.49	1.56	1.61	1.64	1.67	1.70	1.76
Maximum Volume Stored (acre-ft) =	1.242	4.599	3.151	4.143	4.951	5.439	5.836	6.443	7.396

Adjusted and added note

Outflow ratio needs to be closer to 1.0

or fill these in based on 139 Ac. historic contributing area. Add a note to this sheet either way.

LEGEND

DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
BASIN BOUNDARY	
EAST FORK BASIN BOUNDARY	
DESIGN POINT	⑮
BASIN IDENTIFIER / AREA IN ACRES	88 / 10.6
EXISTING DIRECTION OF FLOW	
PROPOSED DIRECTION OF FLOW	
PROPOSED STORM SEWER	
PROPOSED STORM SEWER PER JR ENG. PLANS	
PROPOSED POND OUTFALL PER JR ENG. PLANS	
STERLING RANCH EAST PRELIMINARY PLAN NO. 1 AREA	

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
EF-A	8.2	15%	7	20
EX10A +	60.4	5%	18	50
EX-9 +	6.0	5%	4	16
EX-9A +	12.7	5%	4	16
P1-A	12.7	8%	6	19
P1-A1	5.0	45%	11	21
P1-A2	6.4	45%	12	23
P1-A3	1.8	50%	5	10
P1-A4	2.0	50%	5	10
P1-A5	5.7	45%	13	25
P1-A6	2.8	50%	7	14
P1-B (Dev.)	35.5	38%	55	108
P1-B (Un-dev.)	35.5	5%	10	23
P1-C	8.9	50%	23	46
P1-D	31.4	38%	53	102
P1-E1	30.4	35%	50	97
P1-E2	21.8	40%	41	80
P1-F (Dev.)	76.7	30%	111	215
P1-F (Un-dev.)	76.7	5%	22	59
P2-A	24.4	10%	15	43
P2-A1	57.8	38%	88	173
P2-B	2.5	50%	7	13
P2-B10	1.7	50%	5	10
P2-B2	1.9	50%	5	10
P2-B3	2.8	45%	7	13
P2-B4	1.6	50%	4	8
P2-B5	1.9	45%	5	9
P2-B6	1.1	50%	3	6
P2-B7	2.5	50%	6	12
P2-B8	1.2	50%	3	6
P2-B9	2.0	50%	5	11
P2-S1	35.6	40%	68	133
P3-A	52.6	40%	85	166
P3-C	1.7	11%	1	5
P3-S2	11.9	40%	25	50
P4-A	25.8	35%	41	80
P4-B	37.3	35%	63	123
SC-1 +	3.6	8%	2	6
SC-2 +	10.8	8%	6	20
SC-3 +	27.2	8%	12	26
SC-4 +	16.4	8%	8	27
TR-V	2.1	19%	2	7
TR-W	1.4	38%	3	5

+ Basin not changed from pre-development conditions

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-14A Tributary Area

Subcatchment	Area (Ac.)	Avg. Lot size (AC)	Effective Imperv. (%)
P1-A1	5.0	N/A	70%
P1-A2	6.4	N/A	70%
P1-A3	1.8	N/A	70%
P1-A4	2.0	N/A	70%
P1-E1	5.7	N/A	70%
P1-A6	2.8	N/A	70%
P2-S1	35.6	School	7%
P2-A	24.4	Park	7%
P2-B	57.8	7,000	60%
P2-B1	2.5	N/A	70%
P2-B2	1.9	N/A	70%
P2-B3	2.8	N/A	70%
P2-B4	1.6	N/A	70%
P2-B5	1.9	N/A	70%
P2-B6	1.1	N/A	30%
P2-B7	2.5	N/A	30%
P2-B8	1.2	N/A	70%
TOTAL	157.0		49%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Developed Surface Routing

Design Point (On-Site)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
DP-1	112	219
DP-2	53	103
DP-3	41	80
DP-4	218	379
DP-5	53	102
DP-6	55	108
DP-7	20	39
DP-8	68	133
DP-9	88	173
DP-10	223	441
DP-11	11	21
DP-12	63	123
DP-13	41	80
DP-14	97	189
DP-15	85	166
DP-16	34	69
Pond FSD-11B	115	227
Pond FSD-14A	234	486
Pond FSD-14B	97	189
Pond FSD-16 (Ultimate)	323	499
Pond FSD-16 (Interim)	197	410

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-16 Tributary Area
(Full Build Out)

Subcatchment	Area (Ac.)	Avg. Lot size (AC)	Effective Imperv. (%)
P1-A	12.7	7,500	15%
P1-B	35.5	7,500	55%
P1-C	8.9	N/A	70%
P1-D	31.4	6,500	60%
P1-E1	30.4	8,500	50%
P1-E2	21.8	7,500	55%
P1-F	76.7	12,500	35%
TR-V	2.1	17,500	27%
TR-W	1.4	13,500	32%
TOTAL	220.9		46%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-16 Tributary Area
(Prelim. Plan 1 & Foursquare PUD Only)

Subcatchment	Area (Ac.)	Avg. Lot size (AC)	Effective Imperv. (%)
P1-A	12.7	N/A	15%
P1-B	35.5	Un-dev.	2%
P1-C	8.9	N/A	70%
P1-D	31.4	6,500	60%
P1-E1	30.4	8,500	50%
P1-E2	21.8	7,500	55%
P1-F	76.7	Un-dev.	2%
TR-V	2.1	17,500	27%
TR-W	1.4	13,500	32%
TOTAL	220.9		26%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
EX-10	265.9	7%	105	222
EX10A	153.5	5%	46	103
EX-11 *	214.3	4%	54	129
EX-13 *	94.8	6%	36	85
EX-4A	44.2	8%	19	50
EX-5	26.2	8%	12	32
EX-7	152.8	5%	46	105
EX-7A	2.4	2%	1	5
EX-8	32.2	2%	5	23
EX-8A	6.6	2%	1	7
EX-9	139.3	8%	59	122
EX-9A	21.8	5%	7	19
TR-12 *	4.7	5%	2	9
TR-20 *	23.2	7%	10	32
TR-4 *	4.4	5%	2	9
TR-5 *	13.7	5%	5	17
TR-6 *	1.5	5%	1	4
TR-7 *	2.6	5%	1	5

* Basins with no change upon developed condition

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-14B Tributary Area

Subcatchment	Area (Ac.)	Avg. Lot size (AC)	Effective Imperv. (%)
P4-A	37.3	6,500	60%
P4-B	25.8	6,500	60%
TOTAL	63.1		60%

POND FSD-14A (EDB)
TRIB. AREA = 157.0 AC.
WQCV = 2.66 AC.-FT.
EURV = 6.10 AC.-FT.
100 YR. = 5.37 AC.-FT.
TOTAL = 14.13 AC.-FT.
INFLOW: (SWMM MODEL)
Q5 = 234 CFS
Q100 = 486 CFS
OUTFLOW: (MHFD-DETENTION)
Q5 = 3.3 CFS
Q100 = 116.8 CFS

POND FSD-14B (EDB)
TRIB. AREA = 63.1 AC.
WQCV = 1.24 AC.-FT.
EURV = 3.35 AC.-FT.
100 YR. = 2.38 AC.-FT.
TOTAL = 6.97 AC.-FT.
INFLOW: (SWMM MODEL)
Q5 = 97 CFS
Q100 = 189 CFS
OUTFLOW: (MHFD-DETENTION)
Q5 = 2.0 CFS
Q100 = 48.9 CFS

POND FSD-16 (EDB)
(FULL BUILD-OUT)
TRIB. AREA = 220.9 AC.
WQCV = 3.60 AC.-FT.
EURV = 7.68 AC.-FT.
100 YR. = 7.54 AC.-FT.
TOTAL = 18.82 AC.-FT.
INFLOW: (SWMM MODEL)
Q5 = 323 CFS
Q100 = 499 CFS
OUTFLOW: (MHFD-DETENTION)
Q5 = 3.6 CFS
Q100 = 117.4 CFS

POND FSD-16 (EDB)
(PRELIM. PLAN 1 & FOURSQUARE PUD DEVELOPMENTS ONLY, BASINS P1-B & P1-F UNDEVELOPED)
TRIB. AREA = 220.9 AC.
WQCV = 2.55 AC.-FT.
EURV = 3.04 AC.-FT.
100 YR. = 5.92 AC.-FT.
TOTAL = 11.51 AC.-FT.
INFLOW: (SWMM MODEL)
Q5 = 197 CFS
Q100 = 410 CFS
OUTFLOW: (MHFD-DETENTION)
Q5 = 2.5 CFS
Q100 = 66.0 CFS

Label this sub-basin. Is this in the model? — Added

Provide flow arrow — Added

Total flows into FSD-16 include DP4, DP5, DP6 and Basin P1-A.

Could not determine how 5 yr flow was determined. DP 4 (218 cfs), DP 5 (53 cfs) & Basin P1-A (6 cfs) is only 277 cfs

TEMPORARY SEDIMENT BASIN PRIOR TO FUTURE DEVELOPMENT IN THIS AREA. EXACT LOCATION AND SIZING WITH FINAL DRAINAGE REPORTS.

POND FSD-16 WILL OUTFALL DIRECTLY INTO 48" RCP PIPE SYSTEM CONSTRUCTED WITH BRIARGATE PKWY. EXTENSION. (REFERENCE JR ENG. STREET/STORM PLANS FOR BRIARGATE PKWY. AND STERLING RANCH RD. FOR OUTFALL DESIGN)

48"-54" RCP STORM OUTFALL SYSTEM FOR BASINS P1-E AND P1-F

60"-66" RCP STORM OUTFALL SYSTEM FOR BASINS P1-C, P1-E1 AND P1-F

42" RCP STORM OUTFALL SYSTEM FOR BASIN P1-D

42"-48" RCP STORM OUTFALL SYSTEM FOR FUTURE BASIN P1-B

48" RCP STORM OUTFALL SYSTEM FOR FSD-16 POND (PER BRIARGATE PKWY. PLANS)

42" RCP STORM OUTFALL SYSTEM FOR BRIARGATE PKWY. BASINS P1-A1 THRU P1-A6.

60" RCP STORM OUTFALL SYSTEM INCL. BASINS P2-S1 AND STERLING RANCH RD.

48" RCP STORM OUTFALL SYSTEM FOR FSD-14B POND (PER BRIARGATE PKWY. PLANS)

48" RCP STORM OUTFALL SYSTEM FOR BASIN P4-B

72" RCP STORM OUTFALL SYSTEM INCL. BASIN P2-B AND STERLING RANCH RD.

20" TYPE R AT-GRADE INLETS (PER BRIARGATE PKWY. PLANS)

15" TYPE R AT-GRADE INLETS (PER BRIARGATE PKWY. PLANS)

30" RCP STORM SYSTEM (PER BRIARGATE PKWY. PLANS)

10" TYPE R AT-GRADE INLETS (PER STERLING RANCH RD. PLANS)

5' TYPE R AT-GRADE INLETS (PER STERLING RANCH RD. PLANS)

REFERENCE SAND CREEK CHANNEL IMPROVEMENTS PROPOSED WITH HOMESTEAD NORTH AT STERLING RANCH FIL. NO. 1 PREPARED BY JR ENG. (PCD NO. SF-22-013)

REFERENCE CDR-2113 FOR BRIARGATE PARKWAY BRIDGE CROSSING PLANS PREPARED BY KIOWA ENG.

FOURSQUARE AT STERLING RANCH EAST PUD (REFERENCE SEPARATE PDR PCD NO. PUDSP-227)

VILLAGES AT STERLING RANCH EAST PUD (REFERENCE SEPARATE PDR PCD NO. PUDSP-226)

POND FSD-14A WILL OUTFALL DIRECTLY INTO SAND CREEK AND POND W3. REFERENCE JR ENG. CHANNEL IMP. PLANS FOR OUTFALL DESIGN.

EX. STOCK POND

BRANDING IRON AT STERLING RANCH FILING NO. 2

HOMESTEAD AT STERLING RANCH FILING NO. 2

PROPOSED HOMESTEAD NORTH AT STERLING RANCH FILING NO. 2

RETREAT AT TIMBERRIDGE FILING NO. 1 POND 3

EXIST. SEDIMENT POND TO BE REMOVED

UNPLATTED (FUTURE STERLING RANCH RESIDENTIAL USE NOT PART OF THIS PLAN)

NO DEVELOPMENT PROPOSED IN THIS BASIN AT THIS TIME

INDIAN WELLS SUBD. FILING NO. 1

BOW VALLEY SUBD.

STAPLETON ROAD

BUFORD BENNETT

UNPLATTED ELITE PROPERTIES OF AMERICA, INC. (CLASSIC HOMES)

OVERALL STERLING RANCH PROPERTY BOUNDARY

TOMAHAWK TRAIL

SCALE: 1" = 200'
200 100 0 200 400

N

CLASSIC
CONSULTING ENGINEERS & SURVEYORS
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799 (Fax)

STERLING RANCH EAST
PRELIMINARY PLAN NO. 1
PRELIMINARY DRAINAGE REPORT
DEVELOPED DRAINAGE MAP

DESIGNED BY	MAW	SCALE	DATE	4-1-22
DRAWN BY	MAW	(H) 1"= 200'	SHEET	5 OF 6
CHECKED BY		(V) 1"= N/A	JOB NO.	1183.22