



J·R ENGINEERING
A Westrian Company

August 25, 2017

County of El Paso
Engineering Division
2880 International Circle, Suite 110
Colorado Springs, Colorado 80910

flows northwest, ultimately
outfalling to a detention
pond west of Struthers Road
approx. 1,200 feet northwest
of the site.

Re: Academy Village Filing Number 3- Drainage Addendum Letter

To Whom It May Concern:

This letter is an addendum to the “Final Drainage Report for Academy Village” dated April 1999, prepared by HMS Group, LLC. This addendum will address the reconfiguration of the drainage pattern within basin 1a of the approved report. The purpose of this addendum is to quantify the changes to the drainage condition due to site variations from the approved report.

The site was originally intended to drain to a CDOT Type D Catch Basin located at the north end of the site. The Type D catch basin can be seen within the approved “Drainage Map – Developed Academy Village” located in Appendix B. The existing site currently drains to two locations. The first site outfall is a 24” RCP with a flared end section located at where the Type D Catch Basin was originally planned to the northeast. The second site outfall is at a 24” RCP with a flared end section located northeast of the existing bank parking lot. Both 24” RCPs connect to an existing 54” RCP storm drain that ultimately outfalls to the south of Gleneagle Drive.

Hydrology

The proposed improvements have been designed with the intent to maintain the hydrology of the approved report. The approved report conveyed the generated runoff untreated to the existing 54” RCP. The proposed drainage condition for Academy village will ultimately convey the generated runoff to an on-site water quality pond before ultimately outfalling to the same 54” RCP as in the approved report. The drainage plan for Academy Village is located in Appendix B. Runoff from Basin A will be routed via curb and gutter and natural swales to a water quality capture pond at the northern end of the site. The water quality pond is sized to treat 0.013 ac-ft and release the treated runoff to the existing 54” RCP. The Runoff from Basin B will be collected in a natural grass swale that runs along the southeast edge of the site. Flows from basin B will go to an existing 24” RCP that ties into a 54” RCP to the south of the site. All basin calculations can be found in Appendix A.

Table 1 – Basin Summary

Tributary Sub-basin	Area (acres)	Percent Impervious	C ₅	C ₁₀₀	t _c (min)	Q ₅ (cfs)	Q ₁₀₀ (cfs)
A	0.46	86%	0.65	0.79	6.9	1.4	2.8
B	0.22	50%	0.12	0.38	9.9	0.1	0.6

Therefore, the total inflows as determined in the approved Final Drainage Report are still valid and no revisions to the existing storm sewer are necessary.

Water Quality

In accordance with the El Paso County Drainage Criteria Manual, Volume 2 this site has implemented the four step process to minimize adverse impacts of urbanization. The four step process includes reducing runoff volumes, treating the water quality capture volume (WQCV), stabilizing drainageways, and implementing long-term source controls. In order to reduce runoff volume the new impervious area for the site was minimized. The WQCV is treated through an on-site water quality pond located at the northeast portion of the site. There are no proposed major drainageways for the site that would need to be stabilized. Some site specific source control BMPs that will be implemented include, but are not limited to, silt fencing placed around downstream areas of disturbance, construction vehicle tracking pads at the entrances, designated concrete truck washout basin, designated vehicle fueling areas, covered storage areas, spill containment and control, etc. The RFI calculations were performed and can be found attached within Appendix A.

Conclusion

The proposed changes to the hydrologic configuration and drainage calculations including storm sewer and water quality pond pose no significant changes to the concepts presented within the approved Final Drainage Report. This addendum is in conformance with the originally intended design and meets the latest criteria requirements.

If you have any questions regarding any of the above comments please do not hesitate to contact me at (719)-593-2593.

Sincerely,
JR Engineering, LLC

Mark Heine, P.E.

describe type of pond (PLD/rain garden), provide details, etc. Reference ECM Figure I-3. Provide UD-Detention spreadsheet calculations.

Engineer's Statement

This letter and plan for the drainage addendum to the "Final Drainage Report for Academy Village" dated April 1999, was prepared by me (or under my direct supervision) and is correct to the best of my knowledge and belief. Said letter and plan has been prepared in accordance with the El Paso County Drainage Criteria Manual Volume 2 and is in conformity with the master plan of the drainage basin. I understand that the County of El Paso does not and will not assume liability for drainage facilities designed by others. I accept responsibility for any liability caused by any negligent acts, error or omissions on my part in preparing this letter.

Mark Edward Heine, Colorado P.E. # 28953
For and On Behalf of JR Engineering, LLC

Date:

Provide standard signature blocks (see comment letter).

Appendix A

COMPOSITE % IMPERVIOUS CALCULATIONS

Subdivision: Academy Village Filing Number 3
 Location: El Paso County, CO

Project Name: Struthers Road
 Project No.: 25123.00
 Calculated By: AJH
 Checked By: _____
 Date: 8/28/17

Basin ID	Total Area (ac)	Paved Roads & Walks			Roofs			Lawns			Basins Total Weighted % Imp.
		% Imp.	Area (ac)	Weighted % Imp.	% Imp.	Area (ac)	Weighted % Imp.	% Imp.	Area (ac)	Weighted % Imp.	
A	0.46	100%	0.25	55.0%	90%	0.09	17.0%	48%	0.14	14.0%	86.0%
B	0.22	100%	0.01	5.0%	90%	0.00	0.0%	48%	0.21	45.0%	50.0%
TOTAL	0.69										74.2%

COMPOSITE % RUNOFF COEFFICIENT CALCULATIONS

Subdivision: Academy Village Filing Number 3
 Location: El Paso County, CO

Project Name: Struthers Road
 Project No.: 25123.00
 Calculated By: AJH
 Checked By: _____
 Date: 8/28/17

Basin ID	Total Area (ac)	Paved Roads & Walks			Roofs			Lawns			Basins Total Runoff Coeff.
		C	Area (ac)	Weighted C	C	Area (ac)	Weighted C	C	Area (ac)	Weighted C	
5 year, HSG A											
A	0.46	0.90	0.25	0.49	0.73	0.09	0.14	0.08	0.14	0.02	0.65
B	0.22	0.90	0.01	0.04	0.73	0.00	0.00	0.08	0.21	0.08	0.12
TOTAL	0.69										0.48
100 year, HSG A											
A	0.46	0.96	0.25	0.53	0.81	0.09	0.15	0.35	0.14	0.11	0.79
B	0.22	0.96	0.01	0.05	0.81	0.00	0.00	0.35	0.21	0.33	0.38
TOTAL	0.69										0.66

STANDARD FORM SF-2 TIME OF CONCENTRATION

Subdivision: Academy Village Filing Number 3
 Location: El Paso County , CO

Project Name: Struthers Road
 Project No.: 25123.00
 Calculated By: AJH
 Checked By: _____
 Date: 8/28/17

SUB-BASIN						INITIAL/OVERLAND			TRAVEL TIME					t _c CHECK			FINAL
DATA						(T _i)			(T _t)					(URBANIZED BASINS)			
BASIN ID	D.A. (ac)	Hydrologic Soils Group	Impervious (%)	C ₅	C ₁₀₀	L (ft)	S _o (%)	t _i (min)	L _t (ft)	S _o (%)	K	VEL. (ft/s)	t _t (min)	COMP. t _c (min)	TOTAL LENGTH (ft)	Urbanized t _c (min)	
A	0.46	B	86%	0.65	0.79	45	1.8%	4.5	226	0.6%	20.0	1.5	2.4	6.9	271.0	6.9	6.9
B	0.22	B	50%	0.12	0.38	49	8.0%	6.2	326	0.5%	21.0	1.5	3.7	9.9	375.0	14.2	9.9

NOTES:

$t_c = t_i + t_t$ (Equation 6-2)

$t_i = (0.395 * (1.1 - C_5) * L^{0.5}) / (S_o^{0.33})$ (Equation 6-3)

t_i = overland (initial) flow time (minutes)

S = Average Slope along the overland flow path, ft/ft

$t_t = L / (60K * S_o^{0.5})$ (Equation 6-4)

t_t = channelized flow time (minutes)

S = waterway slope, ft/ft

V_t = travel time velocity (ft/sec) = $K * S_o^{0.5}$

First Design Point Time of Concentration:

$t_c = (18 - 15 * i) + L / (60 * (24 * i + 12) * S_o^{0.5})$ (Equation 6-5)

i = imperviousness (expressed as a decimal)

t_c is lesser of Equation 6-2 and Equation 6-5.

For Urbanized basins a minimum t_c of 5.0 minutes is required.

For non-urbanized basins a minimum t_c of 10.0 minutes is required.

Table 6-2. NRCS Conveyance Factors, K

Type of Land Surface	K
Heavy Meadow	2.5
Tillage/field	5
Short pasture and lawns	7
Nearly bare ground	10
Grassed waterway	15
Paved areas and shallow paved swales	20

STANDARD FORM SF-3
 STORM DRAINAGE SYSTEM DESIGN
 (RATIONAL METHOD PROCEDURE)

Subdivision: Academy Village Filing Number 3
 Location: El Paso County , CO
 Design Storm: 5-Year

Project Name: Struthers Road
 Project No.: 25123.00
 Calculated By: AJH
 Checked By: _____
 Date: 8/28/17

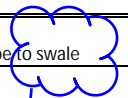
STREET	Design Point	DIRECT RUNOFF							TOTAL RUNOFF				Street/Swale		PIPE			TRAVEL TIME			REMARKS
		Basin ID	Area (Ac)	Runoff Coeff.	t _c (min)	C*A (Ac)	I (in/hr)	Q (cfs)	t _c (min)	C*A (Ac)	I (in/hr)	Q (cfs)	Slope (%)	Flow (cfs)	Design Flow (cfs)	Slope (%)	Pipe Size (inches)	Length (ft)	Velocity (fps)	t _t (min)	
	1	A	0.46	0.65	6.9	0.30	4.7	1.4													Flow to pond through pipe to swale
	2	B	0.22	0.12	9.9	0.03	4.1	0.1													Flow through Swale

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

Subdivision: Academy Village Filing Number 3
 Location: El Paso County, CO
 Design Storm: 100-Year

Project Name: Struthers Road
 Project No.: 25123.00
 Calculated By: AJH
 Checked By: _____
 Date: 8/28/17

STREET	Design Point	DIRECT RUNOFF							TOTAL RUNOFF				Street/Swale		PIPE			TRAVEL TIME			REMARKS
		Basin ID	Area (Ac)	Runoff Coeff.	t _c (min)	C* A (Ac)	II (in/hr)	Q (cfs)	t _c (min)	C* A (Ac)	II (in/hr)	Q (cfs)	Slope (%)	Flow (cfs)	Design Flow (cfs)	Slope (%)	Pipe Size (inches)	Length (ft)	Velocity (fps)	t _t (min)	
	1	A	0.46	0.79	6.9	0.36	7.87	2.8							2.8	1.0	18	56	5.0	0.2	Flow to pond through pipe to swale
	2	B	0.22	0.38	9.9	0.09	6.96	0.6													Flow through Swale



54" pipe?

WQCV

Subdivision: <u>Academy Village Filing Number 3</u> Location: <u>El Paso County, CO</u>	Project Name: <u>Struthers Road</u> Project No.: <u>25123.00</u> Calculated By: <u>AJH</u> Checked By: _____ Date: <u>8/28/17</u>
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Water Quality Pond		
Basin	Area (ac)	% Imp.
A	0.46	86.0%
B	0.22	50.0%
Total	0.69	70.0%

WQCV Drain Time (hr):	12
Coefficient, a (Table 3-2):	0.8
WQCV (in):	0.220
WQCV (ac-ft):	0.0126

POND VOLUME CALCULATIONS

Subdivision: Academy Village Filing Number 3
 Location: El Paso County, CO

Project Name: Struthers Road
 Project No.: 25123.00
 By: AJH
 Checked By: _____
 Date: 8/28/17

Volume = $\frac{1}{3} \times \text{Depth} \times (A+B+(A*B)^{0.5})$
 A - Upper Surface
 B - Lower Surface

Water Quality Pond

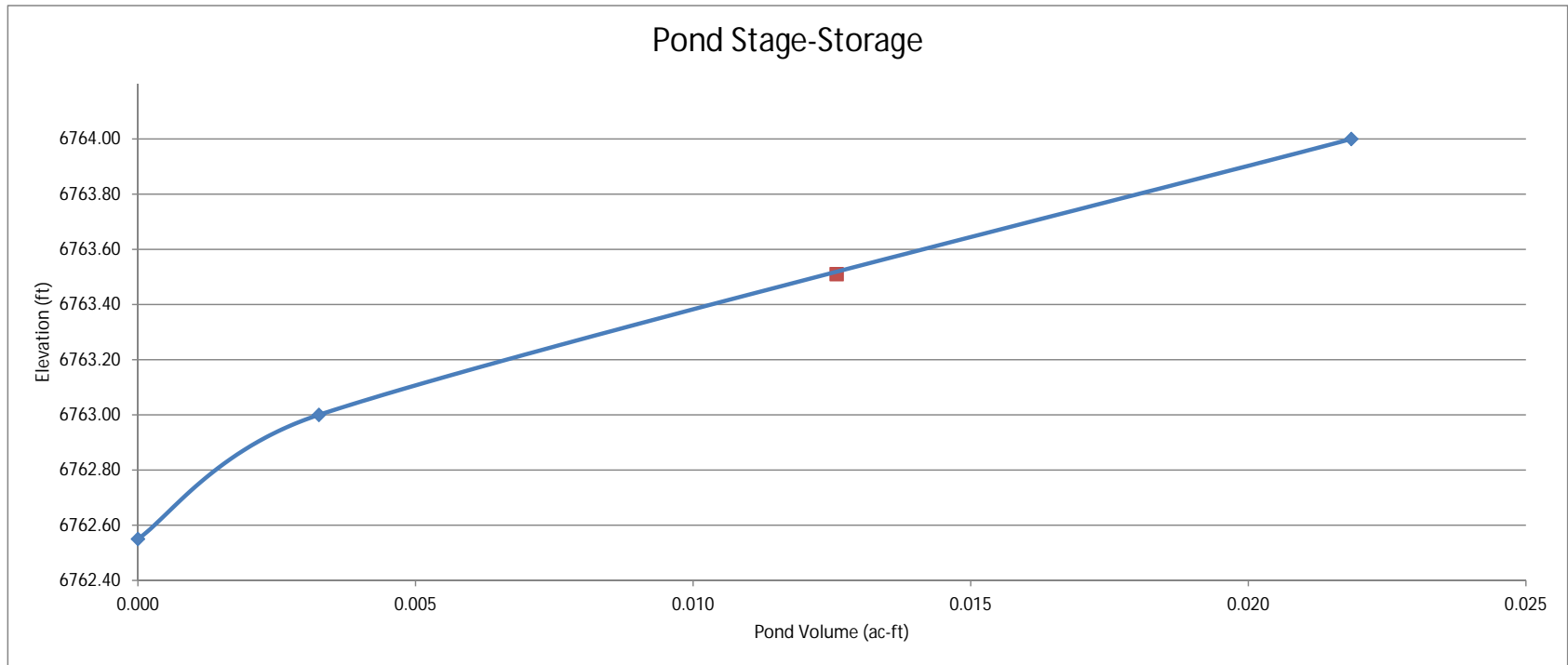
Stage	Stage Elevation	Stage Surface Area (square feet)	Stage Volume (cubic feet)	Cumulative Volume (cubic feet)	Cumulative Volume (acre feet)
0.00	6762.55	203	0	0	0.00
0.45	6763.00	444	142	142	0.00
1.45	6764.00	1,244	810	952	0.02

Volume (acre feet)	Volume	Water Surface Elevation	Stage
Water Quality	0.013	6763.51	0.96

POND VOLUME CALCULATIONS

Subdivision: Academy Village Filing Number 3
Location: El Paso County

Project Name: Struthers Road
Project No. 25123.00
By: AJH
Checked By: 0
Date: 8/28/17



Site-Level Low Impact Development (LID) Design Effective Impervious Calculator LID Credit by Impervious Reduction Factor (IRF) Method

UD-BMP (Version 3.06, November 2016)

User Input		
Calculated cells		
---Design Storm: 1-Hour Rain Depth	WQCV Event	0.22 inches
---Minor Storm: 1-Hour Rain Depth	10-Year Event	1.75 inches
---Major Storm: 1-Hour Rain Depth	100-Year Event	2.52 inches
Optional User Defined Storm	CUHP	
(CUHP) NOAA 1 Hour Rainfall Depth and Frequency for User Defined Storm	100-Year Event	2.52
Max Intensity for Optional User Defined Storm	2.51496	

Designer: AJH
Company: JR ENGINEERING
Date: August 28, 2017
Project: ACADEMY VILLAGE FILING NUMBER 3
Location: EL PASO COUNTY, CO

SITE INFORMATION (USER-INPUT)

Sub-basin Identifier	A	B																		
Receiving Pervious Area Soil Type	Loamy Sand	Loamy Sand																		
Total Area (ac., Sum of DCIA, UIA, RPA, & SPA)	0.460	0.220																		
Directly Connected Impervious Area (DCIA, acres)	0.000	0.000																		
Unconnected Impervious Area (UIA, acres)	0.320	0.010																		
Receiving Pervious Area (RPA, acres)	0.001	0.000																		
Separate Pervious Area (SPA, acres)	0.139	0.210																		
RPA Treatment Type: Conveyance (C), Volume (V), or Permeable Pavement (PP)	V	V																		

CALCULATED RESULTS (OUTPUT)

Total Calculated Area (ac, check against input)	0	0.220																		
Directly Connected Impervious Area (DCIA, %)	0.0%	0.0%																		
Unconnected Impervious Area (UIA, %)	69.6%	4.5%																		
Receiving Pervious Area (RPA, %)	0.1%	0.0%																		
Separate Pervious Area (SPA, %)	30.3%	95.5%																		
A _u (RPA / UIA)	0.002	0.000																		
I _u Check	1.000	1.000																		
f / I for WQCV Event:	8.7	8.7																		
f / I for 10-Year Event:	0.5	0.5																		
f / I for 100-Year Event:	0.4	0.4																		
f / I for Optional User Defined Storm CUHP:	0.39	0.39																		
IRF for WQCV Event:	0.00	0.00																		
IRF for 10-Year Event:	1.00	1.00																		
IRF for 100-Year Event:	1.00	1.00																		
IRF for Optional User Defined Storm CUHP:	1.00	1.00																		
Total Site Imperviousness: I _{total}	69.6%	4.5%																		
Effective Imperviousness for WQCV Event:	0.0%	0.0%																		
Effective Imperviousness for 10-Year Event:	69.6%	4.5%																		
Effective Imperviousness for 100-Year Event:	69.6%	4.5%																		
Effective Imperviousness for Optional User Defined Storm CUHP:	69.6%	4.5%																		

LID / EFFECTIVE IMPERVIOUSNESS CREDITS

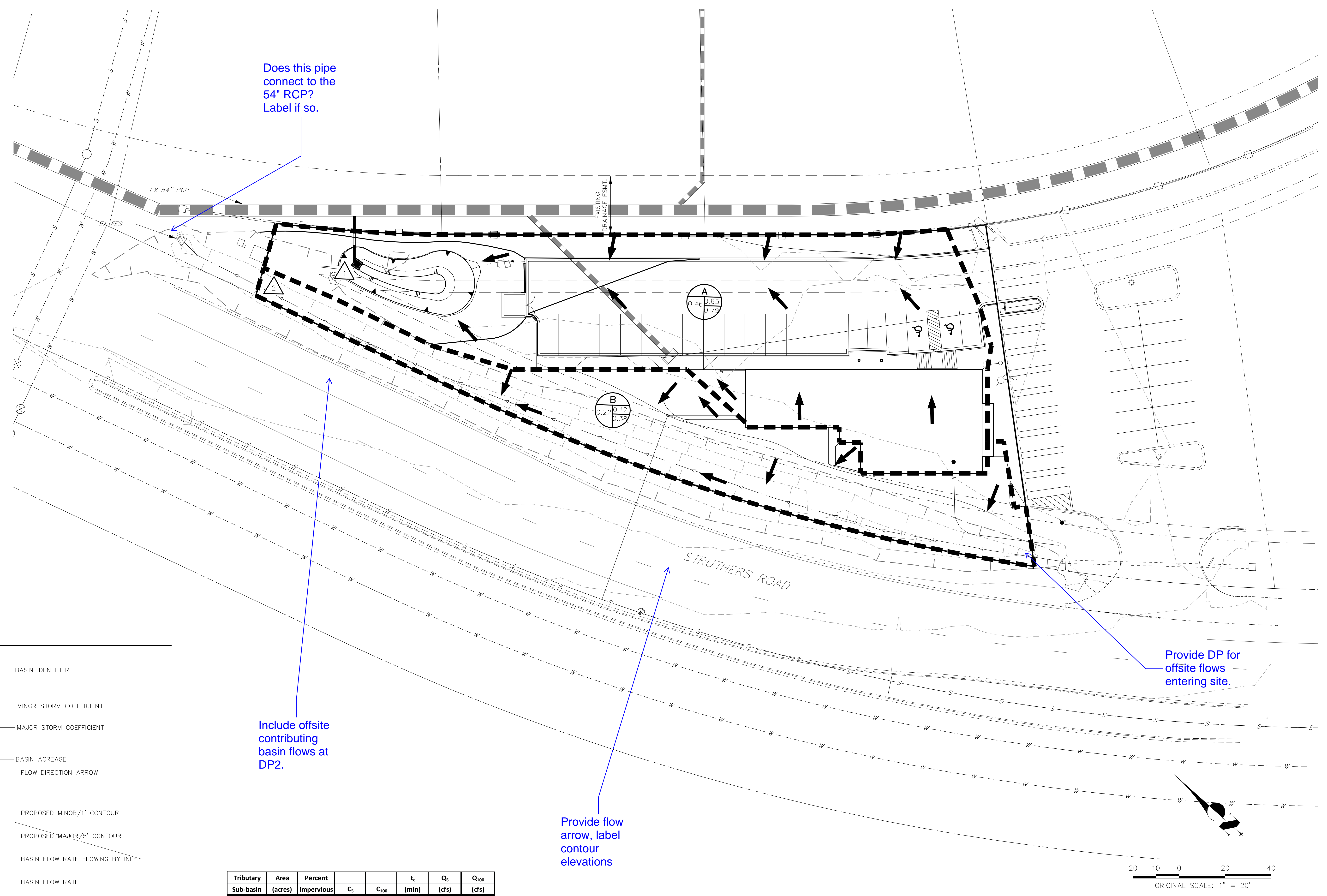
WQCV Event CREDIT: Reduce Detention By:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10-Year Event CREDIT**: Reduce Detention By:	0.0%	6.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100-Year Event CREDIT**: Reduce Detention By:	0.0%	4.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
User Defined CUHP CREDIT: Reduce Detention By:	0.0%	0.0%																		

Total Site Imperviousness:	48.5%
Total Site Effective Imperviousness for WQCV Event:	0.0%
Total Site Effective Imperviousness for 10-Year Event:	48.5%
Total Site Effective Imperviousness for 100-Year Event:	48.5%
Total Site Effective Imperviousness for Optional User Defined Storm CUHP:	48.5%

Notes:

- * Use Green-Ampt average infiltration rate values from Table 3-3.
- ** Flood control detention volume credits based on empirical equations from Storage Chapter of USDCM.
- *** Method assumes that 1-hour rainfall depth is equivalent to 1-hour intensity for calculation purposes

Appendix B



LEGEND

- BASIN IDENTIFIER
- MINOR STORM COEFFICIENT
- MAJOR STORM COEFFICIENT
- BASIN ACREAGE
- FLOW DIRECTION ARROW
- PROPOSED MINOR/1' CONTOUR
- PROPOSED MAJOR/5' CONTOUR
- XX.XXCFSB BASIN FLOW RATE FLOWING BY INLET
- XX.XXCFS BASIN FLOW RATE
- BASIN DELINEATION LINE
- DESIGN POINT

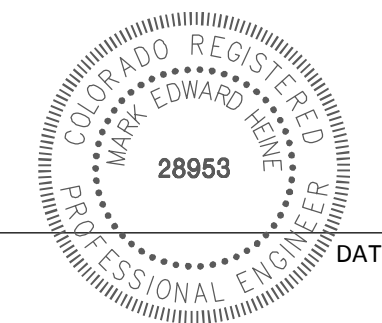
Tributary Sub-basin	Area (acres)	Percent Impervious	C _s	C ₁₀₀	t _c (min)	Q _s (cfs)	Q ₁₀₀ (cfs)
A	0.46	86%	0.65	0.79	6.9	1.4	2.8
B	0.22	50%	0.12	0.38	9.9	0.1	0.6

THE LOCATIONS OF EXISTING ABOVE GROUND AND 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 ABOVE GROUND AND UNDERGROUND UTILITIES.



CIVIL ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF JR ENGINEERING



MARK HEINE DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
RON COVINGTON HOMES
 13725 STRUTHERS ROAD, SUITE 200
 COLORADO SPRINGS, CO 80920
 RON COVINGTON
 719-491-1220
 RCOVINGTON@COVINGTONHOME.COM

J.R. ENGINEERING
 A Westman Company

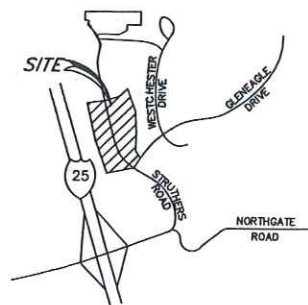
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	REVISION	
						No.	DATE
1"=40'	1"=8'	8/25/17	AUH	AUH			

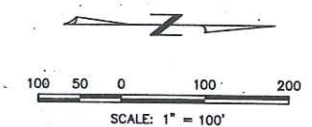
ACADEMY VILLAGE
 DRAINAGE PLAN

Provide Sheets 1 and 2

AIR FORCE ACADEMY



VICINITY MAP
NOT TO SCALE



PROPOSED POND LOCATION
 $Q(5)/Q(100) = 116/288$ c.f.s. (DEV.)
 $Q(5)/Q(100) = 70/198$ c.f.s. (HS.)
REQUIRED DETENTION VOLUMES
 5-yr. EVENT - 1.87 Acre-feet
 100-yr. EVENT - 3.93 Acre-feet

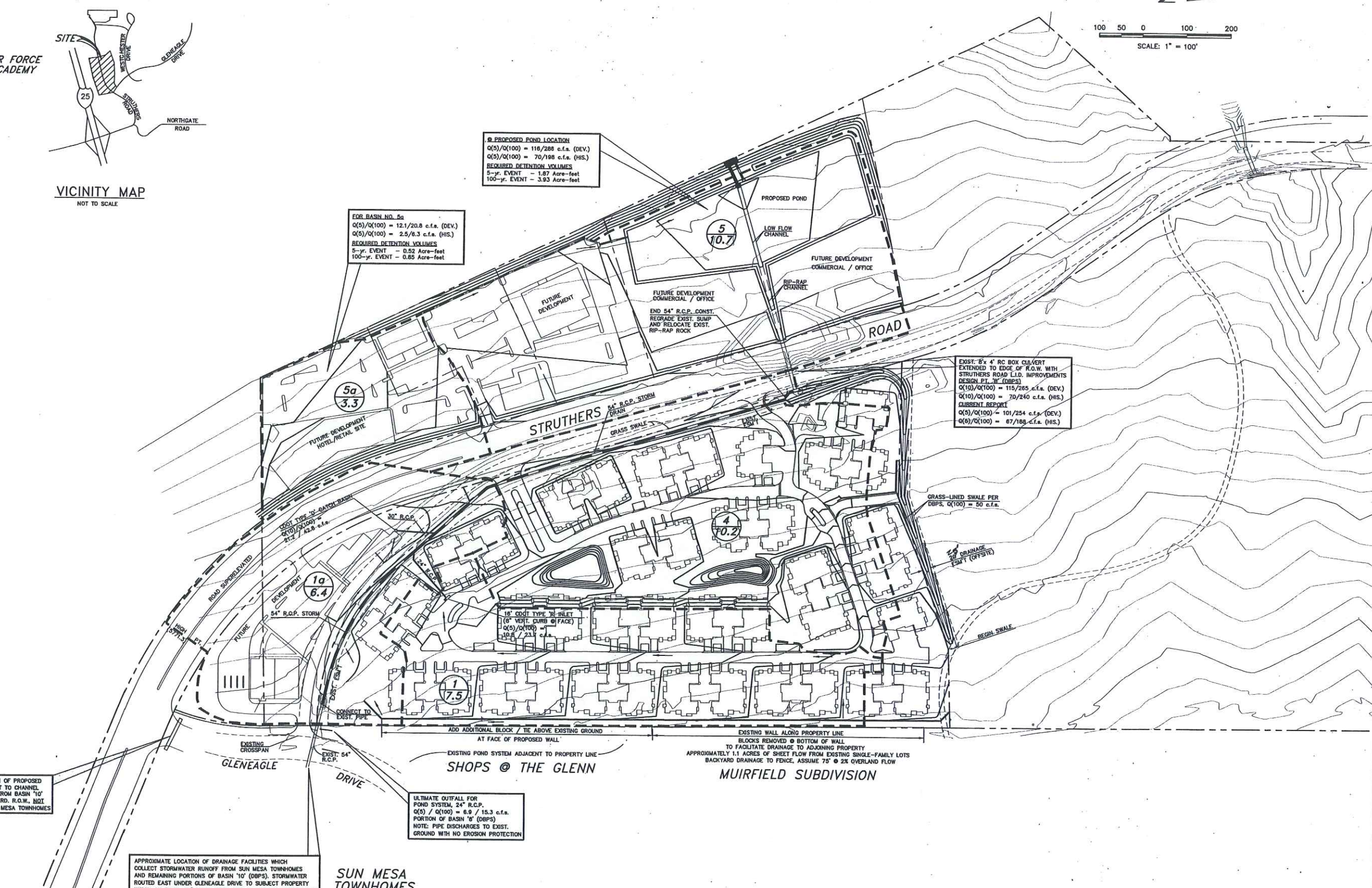
FOR BASIN NO. 5a
 $Q(5)/Q(100) = 12.1/20.6$ c.f.s. (DEV.)
 $Q(5)/Q(100) = 2.5/8.3$ c.f.s. (HS.)
REQUIRED DETENTION VOLUMES
 5-yr. EVENT - 0.52 Acre-feet
 100-yr. EVENT - 0.85 Acre-feet

EXIST. 8" x 4" RC BOX CULVERT
 EXTENDED TO EDGE OF R.O.W. WITH
 STRUTHERS ROAD L.I.D. IMPROVEMENTS
 DESIGN FILE # 24 (DBPS)
 $Q(10)/Q(100) = 115/265$ c.f.s. (DEV.)
 $Q(10)/Q(100) = 70/240$ c.f.s. (HS.)
CURRENT REPORT
 $Q(5)/Q(100) = 101/254$ c.f.s. (DEV.)
 $Q(6)/Q(100) = 67/188$ c.f.s. (HS.)

ULTIMATE OUTFALL FOR POND SYSTEM, 24" R.C.P.
 $Q(5) / Q(100) = 6.9 / 15.3$ c.f.s.
 PORTION OF BASIN '6' (DBPS)
 NOTE: PIPE DISCHARGES TO EXIST. GROUND WITH NO EROSION PROTECTION

APPROXIMATE LOCATION OF DRAINAGE FACILITIES WHICH COLLECT STORMWATER RUNOFF FROM SUN MESA TOWNHOMES AND REMAINING PORTIONS OF BASIN '10' (DBPS). STORMWATER ROUTED EAST UNDER GLENEAGLE DRIVE TO SUBJECT PROPERTY WITHIN AN EXIST. 54" R.C.P. NOTE: END OF PIPE IS CONSTRUCTED @ ELEV. 66.2, WHICH IS APPROXIMATELY 8' BELOW EXIST. GRADE. NO ONSITE DETENTION OF DEVELOPED FLOWS.
 DEVELOPED FLOWS (PREVIOUS REPORT) - $Q(100) = 127.4$ c.f.s.
 DEVELOPED FLOWS (D.B.P.S.) $Q(100) = 140$ c.f.s.

APPROXIMATE LOCATION OF PROPOSED 6" x 3" RC BOX CULVERT TO CHANNEL STORMWATER RUNOFF FROM BASIN '10' (DBPS) TO STRUTHERS RD. R.O.W., NOT CONSTRUCTED W/ SUN MESA TOWNHOMES



DATE	03/16/99	ADD BASINS 2 & 3 TO BASIN 4, RECALC DEV. FLOWS AND REQ'D DETENTION.
REVISION		
JOB NUMBER	056779	
DWG. NAME	DRAINAGE	
DWG. SCALE	1"=100'	
DATE	12/16/98	
PREPARED BY:		
CHECKED BY:		

HMS Group, LLC
 Civil Engineering & Design
 2835 DOWNHILL DRIVE, COLORADO SPRINGS, COLORADO 80918
 (719) 528-8554 (Office) (719) 528-8562 (Fax)

DRAINAGE MAP - DEVELOPED ACADEMY VILLAGE EL PASO COUNTY, COLORADO

PREPARED FOR:
 EAGLE FLIGHT, LLC
 TWO STEELE STREET, STE. 201, DENVER, CO 80206

SHEET
 1
 OF
 1

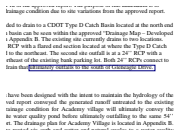
Markup Summary

dsdrice (10)



Subject: Callout
Page Label: 1
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 11:55:57 AM
Color: ■

flows northwest, ultimately outfalling to a detention pond west of Struthers Road approx. 1,200 feet northwest of the site.



Subject: Rectangle
Page Label: 1
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 11:56:51 AM
Color: ■

revise



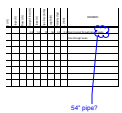
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Status:
Checkmark: Unchecked
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Date: 12/11/2017 10:31:09 AM
Color: ■

describe type of pond (PLD/rain garden), provide details, etc. Reference ECM Figure I-3. Provide UD-Detention spreadsheet calculations.



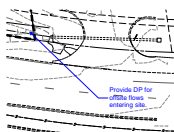
Subject: Text Box
Page Label: 3
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 12:09:09 PM
Color: ■

Provide standard signature blocks (see comment letter).



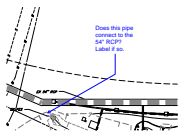
Subject: Cloud+
Page Label: 9
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/11/2017 10:10:58 AM
Color: ■

54" pipe?



Subject: Callout
Page Label: 15
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 12:42:03 PM
Color: ■

Provide DP for offsite flows entering site.



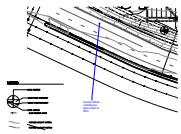
Subject: Callout
Page Label: 15
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 12:04:53 PM
Color: ■

Does this pipe connect to the 54" RCP? Label if so.



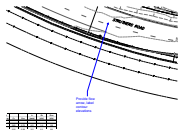
Subject: Callout
Page Label: 15
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/8/2017 12:05:57 PM
Color: ■

Provide Sheets 1 and 2



Subject: Callout
Page Label: 15
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/11/2017 9:56:33 AM
Color: ■

Include offsite contributing basin flows at DP2.



Subject: Callout
Page Label: 15
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 12/11/2017 9:59:18 AM
Color: ■

Provide flow arrow, label contour elevations