

V1_Final Drainage Report_COMMENTS.pdf Markup Summary

MirandaBenson2 (1)

No Planning Department comments.

Community Dev

Subject: Planner
Page Label: 1
Author: MirandaBenson2
Date: 8/25/2026 2:41:53 PM
Status:
Color: ■
Layer:
Space:

No Planning Department comments.

Mikayla Hartford (2)

EROSION CONTROL PLAN
The erosion control plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval.

5.0 EROSION CONTROL PLAN
No grading is proposed within the new lot, the

Subject: SW - Rectangle
Page Label: 4
Author: Mikayla Hartford
Date: 8/25/2026 4:20:34 PM
Status:
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EROSION CONTROL PLAN
The erosion control plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval.

Subject: SW - Textbox
Page Label: 4
Author: Mikayla Hartford
Date: 8/26/2026 8:55:07 AM
Status:
Color: ■
Layer:
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Identify specifically that less than 1 ac of land disturbance is anticipated and therefore an ESQCP and PCM will not be required. Will no grading will occur at this time, the land will be developed so the drainage report should consider future development that will occur as part of this subdivision.

Bret Dilts - DPW Engineering (12)

DRAINAGE LETTER
[PCD File VR264](#)

Subject: Engineer
Page Label: 1
Author: Bret Dilts - DPW Engineering
Date: 8/25/2026 10:24:28 AM
Status:
Color: ■
Layer:
Space:

PCD File VR264

EROSION CONTROL PLAN
The erosion control plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval. The plan shall be submitted to the Planning Department for review and approval.

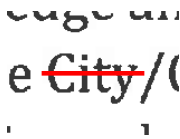
Subject: Drainage Report - County
Page Label: 2
Author: Bret Dilts - DPW Engineering
Date: 8/21/2026 10:00:28 AM
Status:
Color: ■
Layer:
Space:

El Paso County:

Filed in accordance with the requirements of the Drainage Criteria Manual, Volumes 1 and 2, El Paso County Engineering Criteria Manual and Land Development Code as amended.

Joshua J. Palmer, P.E.
Date
County Engineer / ECM Administrator

Conditions:



Subject: Line
Page Label: 2
Author: Bret Dilts - DPW Engineering
Date: 8/25/2026 10:27:44 AM
Status:
Color: ■
Layer:
Space:

Includes an existing private gravel drive and a 2792 of home
ry with the remainder of the 10 acres remaining natural. This 1
8 cfs for the 5-year storm and 16.7 cfs for the 100-year storm
an OS1 at DP1 to produce total flows of 2.9 cfs for the 5-year
and 16.7 cfs for the 100-year storm. These flows are to be
Please include the area of imperviousness
that is proposed to be added to the new lot.

Subject: Engineer
Page Label: 4
Author: Bret Dilts - DPW Engineering
Date: 8/21/2026 2:01:34 PM
Status:
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Please include the area of imperviousness that is
proposed to be added to the new lot.

10 acres
15.7 c
total flows

Subject: Engineer
Page Label: 4
Author: Bret Dilts - DPW Engineering
Date: 8/24/2026 9:53:12 AM
Status:
Color: ■
Layer:
Space:

the 5-year storm and 1.6 cfs for the 100-year
Sub-Basin OS1 are intercepted by a ditch along
yond the property.
15.8 per calc table
avoid dyes and a 2792 of home with a new
acres remaining natural. This Sub-Basin includ
15.7 cfs for the 100-year storm. These flows
flows of 2.9 cfs for the 5-year storm and 16.7
s of the Willow Springs Estates.

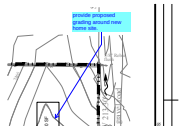
Subject: Engineer
Page Label: 4
Author: Bret Dilts - DPW Engineering
Date: 8/24/2026 9:53:35 AM
Status:
Color: ■
Layer:
Space:

15.8 per calc table

are an impervious surface along the gravel drive on the private drive and
ry.
Includes an existing private gravel drive, a 2792 of home with the remainder
part includes 10.0 acres and produces flows of 2.9 cfs for the 5-year
storm and 16.7 cfs for the 100-year storm. These flows are to be
Please include the area of imperviousness
that is proposed to be added to the new lot.

Subject: Engineer
Page Label: 4
Author: Bret Dilts - DPW Engineering
Date: 8/25/2026 12:00:02 PM
Status:
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Space:

please include a description of major flow paths
across the property. the contours indicate a
primary drainage way exists, running to the north



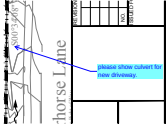
Subject: Engineer
Page Label: 12
Author: Bret Dilts - DPW Engineering
Date: 8/24/2026 10:23:50 AM
Status:
Color: ■
Layer:
Space:

provide proposed grading around new home site.

Please include flow arrows and/or flow path on both site maps

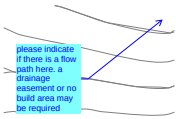
Subject: Engineer
Page Label: 12
Author: Bret Dilts - DPW Engineering
Date: 8/24/2026 10:26:43 AM
Status:
Color: ■
Layer:
Space:

Please include flow arrows and/or flow path on both site maps



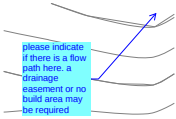
Subject: Engineer
Page Label: 12
Author: Bret Dilts - DPW Engineering
Date: 8/24/2026 10:27:40 AM
Status:
Color: ■
Layer:
Space:

please show culvert for new driveway.



Subject: Engineer
Page Label: 12
Author: Bret Dilts - DPW Engineering
Date: 8/25/2026 12:01:25 PM
Status:
Color: ■
Layer:
Space:

please indicate if there is a flow path here. a drainage easement or no build area may be required



Subject: Engineer
Page Label: 12
Author: Bret Dilts - DPW Engineering
Date: 8/25/2026 12:01:38 PM
Status:
Color: ■
Layer:
Space:

please indicate if there is a flow path here. a drainage easement or no build area may be required

Community Design Solutions

WILLOW SPRINGS ESTATES SUBDIVISION FIL 2

DRAINAGE LETTER

PCD File VR264

Prepared by

Michael A. Bartusek, P.E.
CDS, LLC
5085 List Dr., Suite 150
Colorado Springs, CO 80919

Prepared For

Shawn Shaffer
710 S Blaney Rd
Colorado Springs, CO 809296

JULY 2026

Project Number 0552603

Community Design Solutions

ENGINEER'S STATEMENT:

The attached drainage plan and report were prepared under my direction and supervision and are correct to the best of my knowledge and belief. Said drainage report has been prepared according to the criteria established by the ~~City~~/County for drainage reports, and said report is in conformity with the master plan of the drainage basin. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Michael A. Bartusek, P.E. #23329

DEVELOPER'S STATEMENT:

I, the Developer, have read and will comply with all of the requirements specified in this drainage report and plan.

Home Run Restorations, Inc.

By: 

Shawn Shafer

Title: Owner

Address: Home Run Restorations, Inc.
710 Blaney Road
Peyton, CO 80926

El Paso County:

Filed in accordance with the requirements of the Drainage Criteria Manual, Volumes 1 and 2, El Paso County Engineering Criteria Manual and Land Development Code as amended.

Joshua J. Palmer, P.E.
County Engineer / ECM Administrator

Date

Conditions:

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FINAL DRAINAGE LETTER FOR WILLOW SPRINGS ESTATES FIL 2

1.0 INTRODUCTION

This site at 18050 Quarterhorse Ln. is currently a platted Lot within the Willow Springs Estates Fil 1 Lot6 Blk 1 encompassing 10 acres containing a single-family residence. This drainage letter is for the replatting of the lot into two 5 acre lots. Since this lot replatting is considered a large lot subdivision only a Drainage Letter is required.

2.0 SITE DESCRIPTION

This drainage letter is for the replatting of the previously platted lot into two lots. This project is located along the west side of Quarterhorse Ln., southwest of Table Rock Rd. The project is bound on the south and west by unplatted tracts., on the east by Quarter Horse Ln. It is further described as being in a portion of Section 15, Township 11 South, Range 65 West of the 6th PM in the City of Colorado Springs, El Paso County, CO. The lot is located at 18050 Quarterhorse Ln.

According to the El Paso County Area Soil Survey, the soil on the site is classified as Peyton-Pring Complex and has a hydrologic classification as B soil. The entire site is located within the East Cherry Creek Basin.

3.0 EXISTING DRAINAGE CONDITIONS

There are flows from two basins encompassing this area. Sub-Basin OS1 drains a small area south of the site and includes a private gravel drive and natural ground to the property line. This Sub-Basin includes 0.38 acres and produces flows of 0.6 cfs for the 5-year storm and 1.6 cfs for the 100-year storm. These flow travel north into Sub-Basin Aex. The area south of Sub-Basin OS1 are intercepted by a ditch along the south side of the private drive and transported east and west beyond the property.

Sub-Basin Aex drains the entire site and includes an existing private gravel drive, a 2792 sf home with the remainder of the 10 acres remaining natural. This Sub-Basin includes 10.00 acres and produces flows of 2.3 cfs for the 5-year storm and 15.7 cfs for the 100-year storm. These flows combine with the flows from Sub-Basin OS1 at DP1 to produce total flows of 2.7 cfs for the 5-year storm and 16.6 cfs for the 100-year storm. These flow travel north into the existing Lot 5 of the Willow Springs Estates.

please include a description of major flow paths across the property. the contours indicate a primary drainage way exists, running to the north

4.0 PROPOSED DRAINAGE CONDITIONS

Sub-Basin OS1 remains the same and produces flows of 0.6 cfs for the 5-year storm and 1.6 cfs for the 100-year storm. These flows travel north into Sub-Basin A. The area south of Sub-Basin OS1 are intercepted by a ditch along the south side of the private drive and transported east and west beyond the property.

Sub-Basin A drains the entire site and includes an existing private gravel drive and a 2792 sf home with a new proposed 3,000 sf home and driveway with the remainder of the 10 acres remaining natural. This Sub-Basin includes 10.00 acres and produces flows of 2.6 cfs for the 5-year storm and 15.7 cfs for the 100-year storm. These flows combine with the flows from Sub-Basin OS1 at DP1 to produce total flows of 2.9 cfs for the 5-year storm and 16.7 cfs for the 100-year storm. These flow travel north into the existing Lot 5 of the Willow Springs Estates.

15.8 per calc table

Please include the area of imperviousness that is proposed to be added to the new lot.

5.0 EROSION CONTROL PLAN

No grading is proposed within the new lot, therefore, a Grading and Erosion Control Plan is not required.

Identify specifically that less than 1 ac of land disturbance is anticipated and therefore an ESQCP and PCM will not be required. Will no grading will occur at this time, the land will be developed so the drainage report should consider future development that will occur as part of this subdivision.

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6.0 FLOODPLAIN STATEMENT

No portion of this site is located within a FEMA flood hazard (Zone X) as designated on Map No. 08041C0310G, dated December 7, 2018.

7.0 DRAINAGE AND BRIDGE FEES

There are no Drainage or Bridge Fees required within the East Cherry Creek Basin.

8.0 CONCLUSIONS

Since the overall change to the site runoff is minimal, there will be no adverse effect to the downstream and surrounding developments. No previous drainage report was found for this site.

9.0 REFERENCES

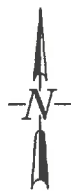
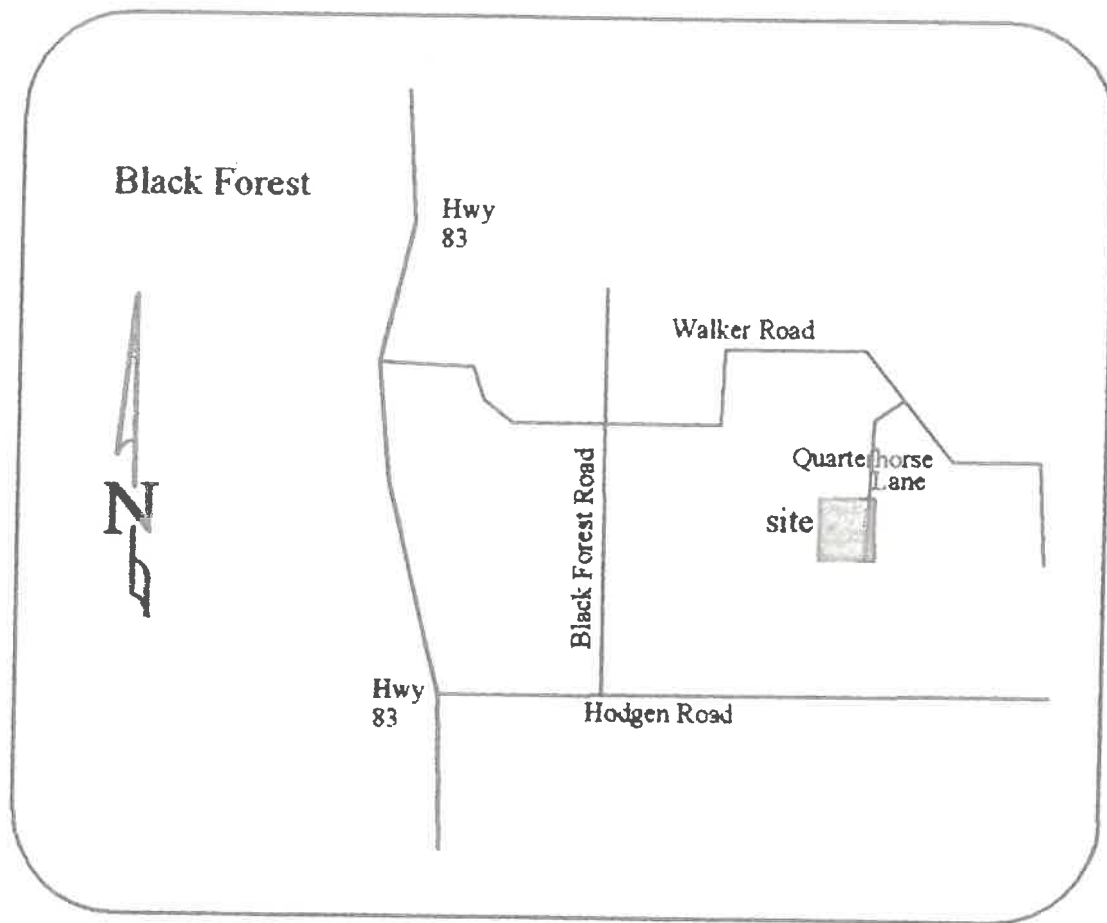
Drainage Criteria Manual, Volumes 1 and 2, The City of Colorado Springs, Revised May 2014, Volume 1 revised January of 2021, and Volume 2 revised in December of 2020.

Flood Insurance Rate Map Number 08041C0310G, Federal Emergency Management Agency Floodplain Data, revised December 7, 2018.

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APPENDIX A
MAPS

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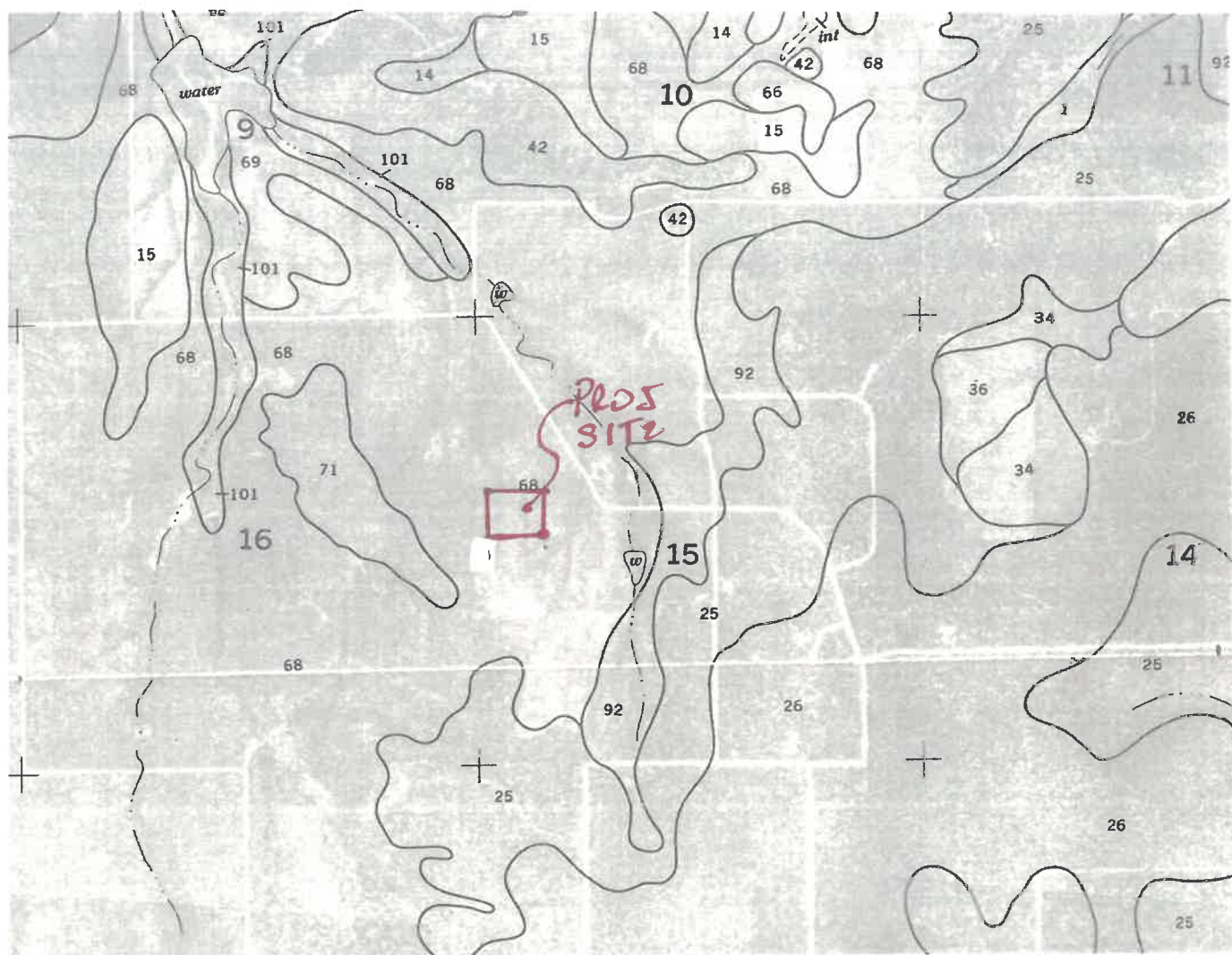
VICINITY MAP

N.T.S.

Community Design Solutions

5085 List Dr., Suite 200 Colorado Springs, CO 80919

Phone: (719) 640-8057



SOILS MAP

N.T.S.

Community Design Solutions

5085 List Dr., Suite 200 Colorado Springs, CO 80919

Phone: (719) 640-8057

National Flood Hazard Layer FIRMette



104°39'59"W 39°55'1"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°39'21"W 39°5'23"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIRM REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, AE
- With BFE or Depth Zone AE, AO, AH, VE, X
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee, See Notes, Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS

- NO SCREEN
- Area of Minimal Flood Hazard Zone X
- Effective LONR
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transact
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transact Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps. It is not valid as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/7/2026 at 3:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, continuity identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

WILLOW SPRINGS ESTATES SUB FIL 2

PROJ. #0552603

DRAINAGE CALCULATION SHEET

07/07/26

AREA DESIG.	AREA (acre)	C5 (5 yr)	C100 (100 yr)	C5 X A	C100 X A	Initial Tci			Travel Time				Tt (min)	TC (min)	I5 (in/hr)	I100 (in/hr)	Q5 (cfs)	Q100 (cfs)	AREA DESIG.
						L (ft)	Slope (%)	ti (min)	L (ft)	Slope (%)	V (fps)								
EXISTING CONDITIONS																			
OS1	0.38	0.32	0.52	0.12	0.20	25	2.00	5.80	0	3.50	1.30		0.00	5.80	4.95	8.30	0.6	1.6	OS1
Aex	10.000	0.09	0.36	0.90	3.60	200	2.00	21.25	500	3.50	1.30		6.41	27.66	2.60	4.37	2.3	15.7	Aex
DP1	10.379			1.021	3.797									27.66	2.60	4.37	2.7	16.6	DP1
DEVELOPED CONDITIONS																			
OS1	0.38	0.32	0.52	0.12	0.20	25	2.00	5.80	0	3.50	1.30		0.00	5.80	4.95	8.30	0.6	1.6	OS1
A	10.000	0.10	0.36	1.00	3.60	200	2.00	21.04	500	3.50	1.30		6.41	27.45	2.61	4.39	2.6	15.8	A
DP1	10.379			1.121	3.797									27.45	2.61	4.39	2.9	16.7	DP1
IMPERVIOUS AREA CALC - TYPE A/B SOILS - Truckton Sandy Loam																			
Description		5YR	100YR	Imperv %															
UNDEV		0.08	0.35	0															
GRAVEL		0.59	0.70	80															
PAVING & S/W		0.90	0.96	90															
BUILDINGS		0.73	0.81	100															
EXISTING CONDITIONS																			
				Imperious Area Description				CALCULATED C				Total							
Subbasin	Area	Landscape	Building	Asphalt/Concrete	Gravel	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR
Aex	10.000	9.819	0.064	0.000	0.117	0.09	0.36	1.58	0.09	0.36	1.58	0.36	0.36	1.58	0.36	0.36	1.58	0.36	0.36
OS1	0.380	0.200	0.000	0.000	0.180	0.32	0.52	37.89	0.32	0.52	37.89	0.52	0.52	37.89	0.52	0.52	37.89	0.52	0.52
DEVELOPED CONDITIONS																			
				Imperious Area Description				CALCULATED C				Total							
Subbasin	Area	Landscape	Building	Asphalt/Paving	Gravel	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR	Imperv	5YR	100YR
A	10.000	9.688	0.133	0.000	0.179	0.10	0.36	2.76	0.10	0.36	2.76	0.36	0.36	2.76	0.36	0.36	2.76	0.36	0.36
OS1	0.380	0.200	0.000	0.000	0.180	0.32	0.52	37.89	0.32	0.52	37.89	0.52	0.52	37.89	0.52	0.52	37.89	0.52	0.52

[illegible]

SHAWN SHAFFER

please show culvert for
new driveway.

WILLOW SPRINGS
ESTATES FIL NO. 2

EXISTING & PROPOSED DRAINAGE CONDITIONS

SHEET TITLE:

0552602

SHEET NO.