



April 11, 2022

Mr. Gilbert LaForce
El Paso County
2880 International Cir., Suite 110
Colorado Springs, CO 80910

Dear Gilbert:

DRAINAGE LETTER – JUDGE ORR ROAD RV PARK & STORAGE

THIS DRAINAGE LETTER is to Certify that the Approved Final Drainage Report for the Judge Orr Road RV Park & Storage Development prepared by Associated Design Professionals, Inc. included the area involved in the extension of Range Flower Way. The area included in the Range Flower Way drainage area was delineated as Sub-basin A2A and contained 2.58 acres. The flows from this basin produced 5.7 cfs for the 5-year storm and 12.0 cfs for the 100-year storm. These flows will be intercepted by two 5' D10R inlets which connect to the 24" RCP which flows east to the approved detention basin.

I hereby Certify that there are no changes to these flows from the date of the approved report to the development of the roadway improvement plans.

Please call me if you have questions.

Sincerely,

Michael A. Bartusek, PE
Project Engineer

W3925.-Judge Orr Rd RV Park & Storage

121 S. TEJON ST.
SUITE 1110
COLORADO SPRINGS, CO 80903
719.283-7671



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 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.

By: _____

Teddy McDonald

Title: Owner

Address: McDonald Paving & Chip Sealing

3507 N. El Paso St.

Colorado Springs, CO 80907

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

Jennifer Irvine, County Engineer/ECM Administrator

Date

Conditions:

JUDGE ORR ROAD RV PARK & STORAGE DEVELOPMENT							
C FACTOR CALCULATION SHEET							
RUNOFF COEFICIENT							
TYPE A/B SOILS							
LAND USE			5 YR	100 YR	IMPERV .		
					%		
UNDEV			0.08	0.35	0		
LOOSE GRAVEL			0.59	0.7	80		
GRAVEL ROADS			0.59	0.7	80		
GRAVEL RV PARKING PAD			0.59	0.7	80		
PAVED ROADS/BUILDINGS			0.9	0.96	100		
Historic Conditions							
	TOTAL	SURFACE CONDITION AREAS				CALCULATED C	
AREA	AREA	GRASSED	LOOSE	GRAVEL	BUILDINGS	5	100
		SURFACE	GRAVEL	ROADS	OR PAVED		
DESIG.	(acre)				ROADS	YR	YR
A1	11.75	11.75	0.00	0.00	0.00	0.08	0.35
A2	20.75	20.60	0.00	0.10	0.05	0.08	0.35
A3	4.36	3.91	0.00	0.35	0.10	0.14	0.39
	36.86	36.26	0.00	0.45	0.15	0.09	0.36
% Impervious		0%	80%	80%	100%		
Imp x A		0	0	0.36	0.15		
Total I x A	0.51						
Total Imp	0.51/36.86 = 1.4%						
B	0.87	0.87	0.00	0.00	0.00	0.08	0.35
OS1	7.81	7.19	0.00	0.00	0.62	0.15	0.40
OS2	36.41	35.96	0.00	0.00	0.45	0.09	0.36
OS3	27.21	From Heagler DBPS				0.30	0.60
OS4	13.73	12.37	0.00	0.00	1.36	0.16	0.41
OS5	0.71	0.42	0.00	0.00	0.29	0.41	0.60

Developed Conditions							
AREA	TOTAL AREA	SURFACE CONDITION AREAS				CALCULATED C	
		GRASSED SURFACE	LOOSE GRAVEL	GRAVEL RV	PAVED ROADS	5	100
DESIG.	(acre)			PARKING		YR	YR
A1	8.30	0.61	7.69	0.00	0.00	0.55	0.67
A2A	2.58	0.86	0.00	0.00	1.72	0.63	0.76
A3	6.85	3.88	0.00	1.15	1.82	0.38	0.57
A4	11.92	9.18	0.00	1.49	1.25	0.23	0.46
Total @Pond	29.65	14.53	7.69	2.64	4.79	0.39	0.57
A2B	0.70	0.16	0.00	0.00	0.54	0.71	0.82
A5	1.80	1.72	0.00	0.00	0.08	0.08	0.38
% Impervious		0%	80%	80%	100%		
Imp x A		0	6.15	2.11	4.79		
Total I x A	13.05						
Total Imp	13.05/29.65 = 44.0%						
B	0.87	0.87	0.00	0.00	0.00	0.08	0.35
OS1	7.81	7.19	0.00	0.00	0.62	0.15	0.40
OS2	42.70	19.20	0.00	0.00	23.50	0.53	0.69
OS3	27.21	From Heagler DBPS				0.30	0.60
OS4	4.18	2.82	0.00	0.00	1.36	0.35	0.55
OS5	0.70	0.42	0.00	0.00	0.28	0.41	0.59
Pond 1							
% Impervious							
	TOTAL AREA	GRASSED SURFACE	NEIGHBORHOOD COMMERCIAL				
OS1	7.81	7.81					
OS2	42.70	1.65	41.05				
	50.51	9.46	41.05				
% Impervious		0%	70%				
Imp x A		0	28.74				
Total I x A	28.74						
Total Imp	28.74/50.51 = 56.9%						

JUDGE ORR ROAD RV PARK & STORAGE DEVELOPMENT																				
PROJ. #160301																				
DRAINAGE CALCULATION SHEET																				
file:judge orr rvl dr																				
07/17/19																				
AREA DESIG.	AREA (acre)	C5 (5 yr)	C100 (100 yr)	C5 X A	C100 X A	L (ft)	Initial Tci		Travel Time		Tt	TC	I5	I100	Q5	Q100	length L	vel. V	t	A3EA (min) DSIG.
							Slope (%)	ti (min)	Slope (%)	V (fps)	(min)	(min)	(in/hr)	(in/hr)	(cfs)	(cfs)	(feet)	(fps)	(min)	
EXISTING CONDITIONS																				
A1	11.75	0.08	0.35	0.94	4.11	200	2.00	21.46	1.90	2.10	9.13	30.59	2.29	4.00	2.15	16.47				A1
OS1	7.81	0.15	0.40	1.17	3.12	150	2.00	17.31	1.18	2.35	4.26	21.56	2.80	4.89	3.28	15.27	450	4.50	1.67	OS1
OS2	22.10	0.09	0.36	1.99	7.96	150	2.00	18.40	1.20	1.20	19.44	37.85	2.01	3.52	4.00	27.97				OS2
DP1	29.91			3.16	11.08							37.85	2.01	3.52	6.36	38.95	1250	2.10	9.92	DP1
A2	17.47	0.08	0.35	1.40	6.11	250	3.20	20.55	1.90	2.10	11.11	31.66	2.25	3.92	3.14	23.98				A2
DP2	47.38			4.56	17.19							47.77	1.73	3.03	7.91	52.10				DP2
OS3	27.21	0.30	0.60	8.16	16.33	250	2.00	18.82	2.90	1.80	14.54	33.35	2.18	3.80	17.76	62.04	1800	4.00	7.50	OS3
OS4	25.14	0.16	0.41	4.02	10.31	250	2.00	22.11	1.00	2.00	15.00	37.11	2.04	3.56	8.20	36.68				OS4
DP3	52.35			12.19	26.63							37.11	2.04	3.56	24.83	94.79	1050	2.25	7.78	DP3
A3	2.80	0.14	0.39	0.39	1.09	100	2.00	14.28	1.23	2.25	7.78	22.06	2.76	4.83	1.08	5.27				A3
OS5	0.82	0.41	0.60	0.34	0.49	10	2.00	3.25	1.23	2.25	7.78	11.02	3.89	6.79	1.31	3.34				OS5
DP4	55.97			12.91	28.22							44.89	1.81	3.15	23.32	89.02				DP4
DP5	115.10			18.41	49.52							44.89	1.81	3.15	33.25	156.23				DP5
B	0.87	0.08	0.35	0.07	0.30	80	2.00	13.57	1.30	2.30	4.71	18.28	3.05	5.34	0.21	1.62				B
DEVELOPED CONDITIONS																				
OS1	7.81	0.15	0.40	1.17	3.12	150	2.00	17.31	1.18	2.35	4.26	21.56	2.80	4.89	3.28	15.27	450	4.50	1.67	OS1
OS2	22.10	0.09	0.36	1.99	7.96	150	2.00	18.40	1.20	1.20	19.44	37.85	2.01	3.52	4.00	27.97				OS2
DP1	29.91			3.16	11.08							37.85	2.01	3.52	6.36	38.95	1594	10.00	2.66	DP1
A1	8.30	0.56	0.68	4.65	5.64	100	2.00	8.03	1.50	1.20	15.97	24.01	2.64	4.61	12.26	26.00	650	1.20	9.03	A1
A2A	2.58	0.63	0.76	1.63	1.96	35	2.00	4.14	1.50	1.20	9.72	13.86	3.50	6.12	5.69	12.00	675	1.20	9.38	A2A
A3	6.85	0.38	0.57	2.60	3.90	100	2.00	10.71	1.50	1.20	13.19	23.91	2.64	4.62	6.88	18.03				A3
DP2	9.43			4.23	5.87							23.91	2.64	4.62	11.18	27.08	230	1.20	3.19	DP2
A4	11.92	0.39	0.57	4.65	6.79	100	2.00	10.56	1.50	1.20	15.28	25.84	2.53	4.42	11.76	30.02				A4
DP3	29.65			13.53	18.30		*Adjusted C Factor for Detention Basin					33.03	2.19	3.82	29.60	69.97	150	5.00	0.50	DP3
DPD2	29.65			0.23	8.93							33.03	2.19	3.82	0.50	33.70				DPD2
DP4	59.56			3.39	20.01							40.50	1.93	3.37	6.54	67.41				DP4
OS3	27.21	0.30	0.60	8.16	16.33	250	2.00	18.82	2.90	1.80	14.54	33.35	2.18	3.80	17.76	62.04	1800	4.00	7.50	OS3
OS4	25.14	0.16	0.41	4.02	10.31	250	2.00	22.11	1.00	2.00	15.00	37.11	2.04	3.56	8.20	36.68				OS4

[illegible]

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

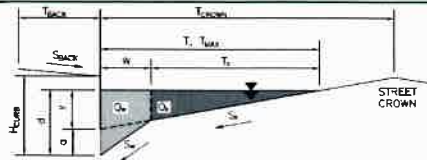
(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project:

Judge Orr Rd RV & Storage

Inlet ID:

Inlet 1

**Gutter Geometry (Enter data in the blue cells)**

Maximum Allowable Width for Spread Behind Curb

Side Slope Behind Curb (leave blank for no conveyance credit behind curb)

Manning's Roughness Behind Curb (typically between 0.012 and 0.020)

Height of Curb at Gutter Flow Line

Distance from Curb Face to Street Crown

Gutter Width

Street Transverse Slope

Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)

Street Longitudinal Slope - Enter 0 for sump condition

Manning's Roughness for Street Section (typically between 0.012 and 0.020)

$T_{BACK} = 5.0$ ft
 $S_{BACK} = 0.020$ ft/ft
 $n_{BACK} = 0.015$

$H_{CURB} = 6.00$ inches
 $T_{CROWN} = 40.0$ ft
 $W = 2.00$ ft
 $S_X = 0.020$ ft/ft
 $S_W = 0.100$ ft/ft
 $S_L = 0.000$ ft/ft
 $n_{STREET} = 0.015$

Max. Allowable Spread for Minor & Major Storm

Warning 02

Max. Allowable Depth at Gutter Flowline for Minor & Major Storm

Check boxes are not applicable in SUMP conditions

	Minor Storm	Major Storm
$T_{MAX} =$	18.0	18.0
$d_{MAX} =$	12.0	12.0

Maximum Capacity for 1/2 Street based On Allowable Spread

Water Depth without Gutter Depression (Eq. ST-2)

Vertical Depth between Gutter Lip and Gutter Flowline (usually 2")

Gutter Depression ($d_c = (W \cdot S_X \cdot 12)$)

Water Depth at Gutter Flowline

Allowable Spread for Discharge outside the Gutter Section W ($T - W$)

Gutter Flow to Design Flow Ratio by FHWA HEC-22 method (Eq. ST-7)

Discharge outside the Gutter Section W, carried in Section T_X Discharge within the Gutter Section W ($Q_T - Q_X$)

Discharge Behind the Curb (e.g., sidewalk, driveways, & lawns)

Maximum Flow Based On Allowable Spread

Flow Velocity within the Gutter Section

 $V \cdot d$ Product: Flow Velocity times Gutter Flowline Depth

	Minor Storm	Major Storm
$y =$	4.32	4.32
$d_c =$	2.4	2.4
$a =$	1.92	1.92
$d =$	6.24	6.24
$T_X =$	16.0	16.0
$E_C =$	0.346	0.346
$Q_X =$	0.0	0.0
$Q_W =$	0.0	0.0
$Q_{BACK} =$	0.0	0.0
$Q_T =$	SUMP	SUMP
$V =$	0.0	0.0
$V \cdot d =$	0.0	0.0

Maximum Capacity for 1/2 Street based on Allowable Depth

Theoretical Water Spread

Theoretical Spread for Discharge outside the Gutter Section W ($T - W$)

Gutter Flow to Design Flow Ratio by FHWA HEC-22 method (Eq. ST-7)

Theoretical Discharge outside the Gutter Section W, carried in Section T_{XTH} Actual Discharge outside the Gutter Section W, (limited by distance T_{CROWN})Discharge within the Gutter Section W ($Q_d - Q_X$)

Discharge Behind the Curb (e.g., sidewalk, driveways, & lawns)

Total Discharge for Major & Minor Storm (Pre-Safety Factor)

Average Flow Velocity Within the Gutter Section

 $V \cdot d$ Product: Flow Velocity Times Gutter Flowline DepthSlope-Based Depth Safety Reduction Factor for Major & Minor ($d \geq 6"$) Storm**Max Flow Based on Allowable Depth (Safety Factor Applied)**

Resultant Flow Depth at Gutter Flowline (Safety Factor Applied)

Resultant Flow Depth at Street Crown (Safety Factor Applied)

	Minor Storm	Major Storm
$T_{TH} =$	42.0	42.0
$T_{XTH} =$	40.0	40.0
$E_C =$	0.140	0.140
$Q_{XTH} =$	0.0	0.0
$Q_X =$	0.0	0.0
$Q_W =$	0.0	0.0
$Q_{BACK} =$	0.0	0.0
$Q =$	0.0	0.0
$V =$	0.0	0.0
$V \cdot d =$	0.0	0.0
$R =$	SUMP	SUMP
$Q_d =$	SUMP	SUMP
$d =$		
$d_{CROWN} =$		

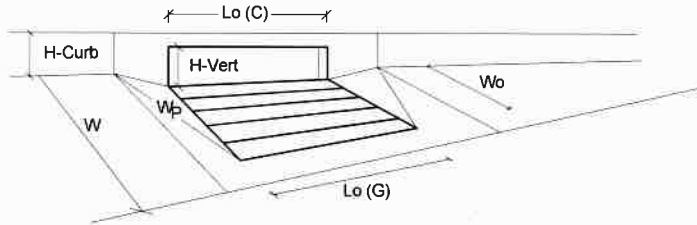
	Minor Storm	Major Storm
$Q_{allow} =$	SUMP	SUMP

MINOR STORM Allowable Capacity is based on Depth Criterion

MAJOR STORM Allowable Capacity is based on Depth Criterion

INLET IN A SUMP OR SAG LOCATION

Version 4.05 Released March 2017



Design Information (Input)		MINOR		MAJOR	
Type of Inlet	Colorado Springs D-10-R				
Local Depression (additional to continuous gutter depression 'a' from above)					
Number of Unit Inlets (Grate or Curb Opening)					
Water Depth at Flowline (outside of local depression)					
Grate Information					
Length of a Unit Grate					
Width of a Unit Grate					
Area Opening Ratio for a Grate (typical values 0.15-0.90)					
Clogging Factor for a Single Grate (typical value 0.50 - 0.70)					
Grate Weir Coefficient (typical value 2.15 - 3.60)					
Grate Orifice Coefficient (typical value 0.60 - 0.80)					
Curb Opening Information					
Length of a Unit Curb Opening					
Height of Vertical Curb Opening in Inches					
Height of Curb Orifice Throat in Inches					
Angle of Throat (see USDCM Figure ST-5)					
Side Width for Depression Pan (typically the gutter width of 2 feet)					
Clogging Factor for a Single Curb Opening (typical value 0.10)					
Curb Opening Weir Coefficient (typical value 2.3-3.7)					
Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)					
Grate Flow Analysis (Calculated)					
Clogging Coefficient for Multiple Units					
Clogging Factor for Multiple Units					
Grate Capacity as a Weir (based on Modified HEC22 Method)					
Interception without Clogging					
Interception with Clogging					
Grate Capacity as an Orifice (based on Modified HEC22 Method)					
Interception without Clogging					
Interception with Clogging					
Grate Capacity as Mixed Flow					
Interception without Clogging					
Interception with Clogging					
Resulting Grate Capacity (assumes clogged condition)					
Curb Opening Flow Analysis (Calculated)					
Clogging Coefficient for Multiple Units					
Clogging Factor for Multiple Units					
Curb Opening as a Weir (based on Modified HEC22 Method)					
Interception without Clogging					
Interception with Clogging					
Curb Opening as an Orifice (based on Modified HEC22 Method)					
Interception without Clogging					
Interception with Clogging					
Curb Opening Capacity as Mixed Flow					
Interception without Clogging					
Interception with Clogging					
Resulting Curb Opening Capacity (assumes clogged condition)					
Resultant Street Conditions					
Total Inlet Length					
Resultant Street Flow Spread (based on street geometry from above)					
Resultant Flow Depth at Street Crown					
Low Head Performance Reduction (Calculated)					
Depth for Grate Midwidth					
Depth for Curb Opening Weir Equation					
Combination Inlet Performance Reduction Factor for Long Inlets					
Curb Opening Performance Reduction Factor for Long Inlets					
Grated Inlet Performance Reduction Factor for Long Inlets					
Total Inlet Interception Capacity (assumes clogged condition)					
Inlet Capacity IS GOOD for Minor and Major Storms(>Q PEAK)					

Warning 1: Dimension entered is not a typical dimension for inlet type specified.

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

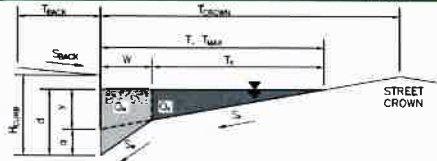
(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project:

Judge Orr Rd RV & Storage

Inlet ID:

Inlet 2

**Gutter Geometry (Enter data in the blue cells)**

Maximum Allowable Width for Spread Behind Curb

Side Slope Behind Curb (leave blank for no conveyance credit behind curb)

Warning 01 Manning's Roughness Behind Curb (typically between 0.012 and 0.020)

 $T_{BACK} = 18.0$ ft $S_{BACK} = 0.020$ ft/ft $n_{BACK} = 0.035$

Height of Curb at Gutter Flow Line

Distance from Curb Face to Street Crown

 $H_{CURB} = 6.00$ inches $T_{CROWN} = 18.0$ ft

Gutter Width

 $W = 2.00$ ft

Street Transverse Slope

 $S_x = 0.020$ ft/ft

Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)

 $S_w = 0.083$ ft/ft

Street Longitudinal Slope - Enter 0 for sump condition

 $S_o = 0.000$ ft/ft

Manning's Roughness for Street Section (typically between 0.012 and 0.020)

 $n_{STREET} = 0.015$

Max. Allowable Spread for Minor & Major Storm

Warning 02 Max. Allowable Depth at Gutter Flowline for Minor & Major Storm

Check boxes are not applicable in SUMP conditions

	Minor Storm	Major Storm	
$T_{MAX} =$	18.0	18.0	ft
$d_{MAX} =$	12.0	12.0	inches

MINOR STORM Allowable Capacity is based on Depth Criterion

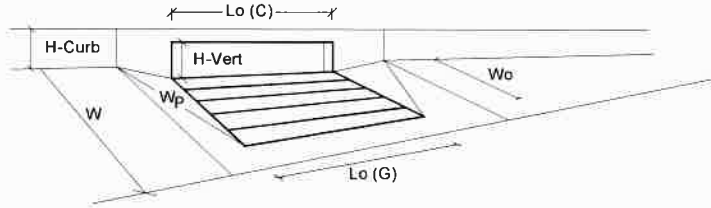
MAJOR STORM Allowable Capacity is based on Depth Criterion

	Minor Storm	Major Storm	
$Q_{allow} =$	SUMP	SUMP	cfs

Warning 01: Manning's n-value does not meet the USDCM recommended design range.

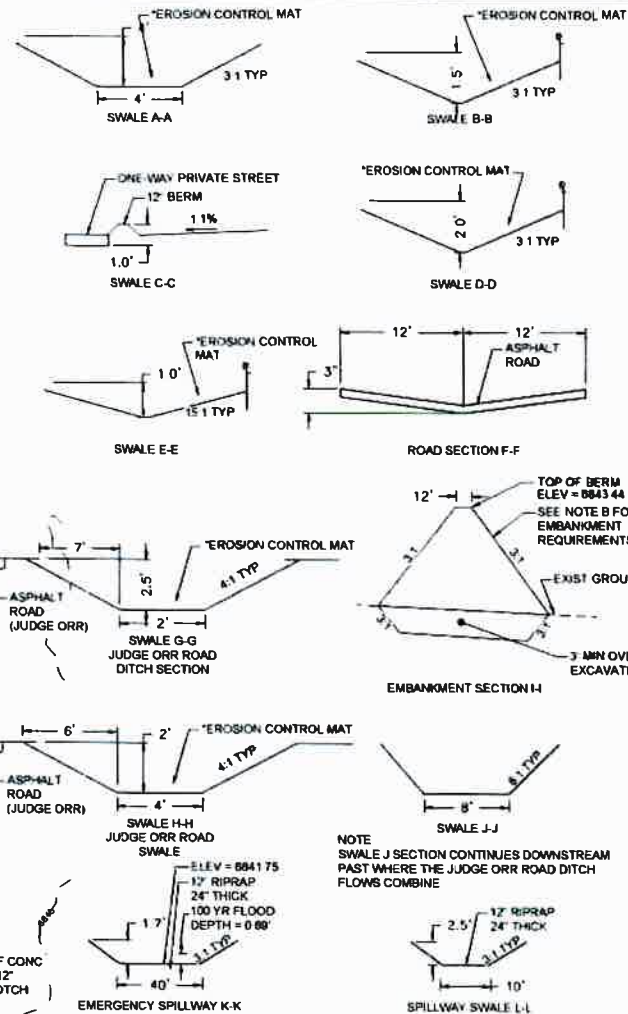
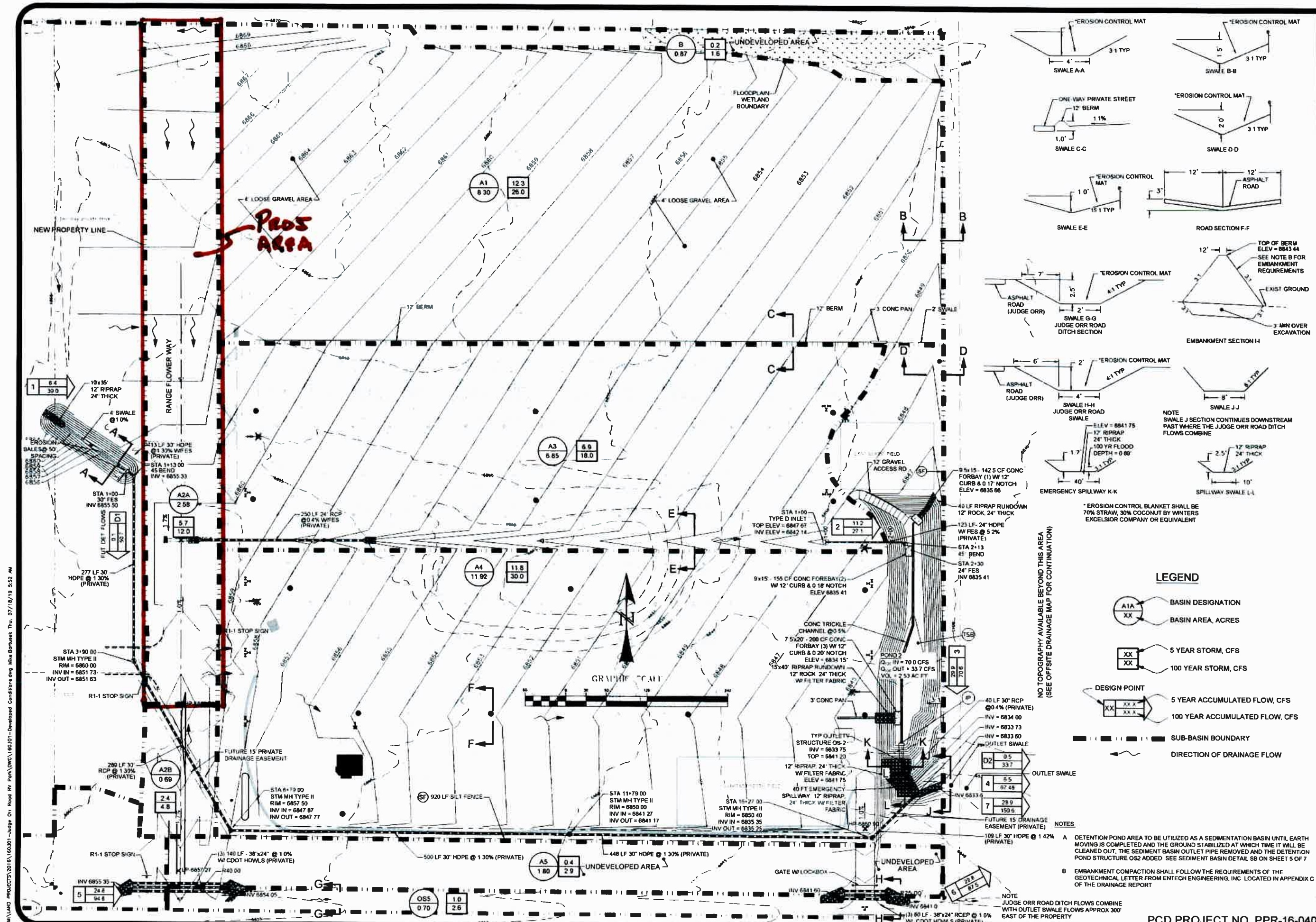
INLET IN A SUMP OR SAG LOCATION

Version 4.05 Released March 2017



Design Information (Input)	Colorado Springs D-10-R	MINOR	MAJOR	
Type of Inlet		Colorado Springs D-10-R		
Local Depression (additional to continuous gutter depression 'a' from above)		$a_{local} =$	4.00	4.00 inches
Number of Unit Inlets (Grate or Curb Opening)		$N_o =$	1	1
Water Depth at Flowline (outside of local depression)		Ponding Depth =	8.0	8.0 inches
Grate Information		MINOR	MAJOR	<input checked="" type="checkbox"/> Override Depths
Length of a Unit Grate		$L_o (G) =$	N/A	N/A feet
Width of a Unit Grate		$W_o =$	N/A	N/A feet
Area Opening Ratio for a Grate (typical values 0.15 - 0.90)		$A_{ratio} =$	N/A	N/A
Clogging Factor for a Single Grate (typical value 0.50 - 0.70)		$C_r (G) =$	N/A	N/A
Grate Weir Coefficient (typical value 2.15 - 3.60)		$C_w (G) =$	N/A	N/A
Grate Orifice Coefficient (typical value 0.60 - 0.80)		$C_o (G) =$	N/A	N/A
Curb Opening Information		MINOR	MAJOR	
Length of a Unit Curb Opening		$L_o (C) =$	5.00	5.00 feet
Height of Vertical Curb Opening in Inches		$H_{vert} =$	8.00	8.00 inches
Height of Curb Orifice Throat in Inches		$H_{throat} =$	8.00	8.00 inches
Angle of Throat (see USDCM Figure ST-5)		Theta =	81.00	81.00 degrees
Side Width for Depression Pan (typically the gutter width of 2 feet)		$W_p =$	2.00	2.00 feet
Clogging Factor for a Single Curb Opening (typical value 0.10)		$C_r (C) =$	0.10	0.10
Curb Opening Weir Coefficient (typical value 2.3 - 3.7)		$C_w (C) =$	3.60	3.60
Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)		$C_o (C) =$	0.67	0.67
Low Head Performance Reduction (Calculated)		MINOR	MAJOR	
Depth for Grate Midwidth		$d_{Grate} =$	N/A	N/A ft
Depth for Curb Opening Weir Equation		$d_{Curb} =$	0.50	0.50 ft
Combination Inlet Performance Reduction Factor for Long Inlets		$RF_{Combination} =$	1.00	1.00
Curb Opening Performance Reduction Factor for Long Inlets		$RF_{Curb} =$	1.00	1.00
Grated Inlet Performance Reduction Factor for Long Inlets		$RF_{Grate} =$	N/A	N/A
Total Inlet Interception Capacity (assumes clogged condition)		MINOR	MAJOR	
Inlet Capacity IS GOOD for Minor and Major Storms(>Q PEAK)		$Q_a =$	9.9	9.9 cfs
		$Q_{PEAK REQUIRED} =$	2.9	6.0 cfs

M:\LAND PROJECTS\320145\160101-Judge Orr Road RV Park\DWG\160101-Developed Conditions.dwg Mike Burkhardt Thu, 07/18/19 5:52 AM



LEGEND

- BASIN DESIGNATION
- BASIN AREA, ACRES
- 5 YEAR STORM, CFS
- 100 YEAR STORM, CFS
- DESIGN POINT
- 5 YEAR ACCUMULATED FLOW, CFS
- 100 YEAR ACCUMULATED FLOW, CFS
- SUB-BASIN BOUNDARY
- DIRECTION OF DRAINAGE FLOW

NO TOPOGRAPHY AVAILABLE BEYOND THIS AREA
(SEE OFFSITE DRAINAGE MAP FOR CONTINUATION)

- NOTES**
- A DETENTION POND AREA TO BE UTILIZED AS A SEDIMENTATION BASIN UNTIL EARTH MOVING IS COMPLETED AND THE GROUND STABILIZED AT WHICH TIME IT WILL BE CLEANED OUT, THE SEDIMENT BASIN OUTLET PIPE REMOVED AND THE DETENTION POND STRUCTURE OS2 ADDED. SEE SEDIMENT BASIN DETAIL SB ON SHEET 5 OF 7.
- B EMBANKMENT COMPACTION SHALL FOLLOW THE REQUIREMENTS OF THE GEOTECHNICAL LETTER FROM ENTECH ENGINEERING, INC. LOCATED IN APPENDIX C OF THE DRAINAGE REPORT.

JUDGE ORR ROAD RV PARK & STORAGE

COLORADO SPRINGS, COLORADO

DRAINAGE - DEVELOPED CONDITIONS

DESIGNED BY	PROJECT ENGINEER	PROJECT MANAGER	SCALE	DATE
MAS	MAS	MAS	1" = 67'	
DATE	DATE	DATE	DATE	DATE
REVISION	NO	DATE	NO	DATE
BY				
NO				