

Marion County Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave. Ocala, FL 34471 Phone: 352-671-8686 Fax: 352-671-8687

DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

	Date: 05-05-21 Parcel Number(s):	15391-002-02	Permit Number: 2021030101
	mm/dd/yyyy PROJECT INFORMATION: Fill in below	as applicable:	
A.	FROJECT INFORMATION. THE INCOME	as applicable.	
	Project Name: Slack Residence		Commercial or Residential
	Subdivision Name (if applicable): N/A		
	UnitBlockLot		
В.	PROPERTY OWNER'S AUTHORIZA' authorizing the applicant to act on the owner's beha		ne owner(s) or the owner(s) may sign below
	Property Owner's Name (print): Duane & Property Owner's Signature: Name (print): Duane & Property Owner's Mailing Address: 3801	ne Spred =	+ Tanan I Starl
	City: Ocala State:	FL Zip Code: 34475	Phone # <u>804-4887</u>
c.	APPLICANT INFORMATION: The applicant correspondence.	icant will be the point of contac	ct during this waiver process and will receive
	Firm Name (if applicable): Abshier Engineering	Inc. Contact	ct Name: Ed Abshier
	Mailing Address: P.O. Box 2770 Phone # 352-245-8592	City:Belleview	State: FL Zip Code: 34421
	Phone # 352-245-8592	Alternate Phone #	<u>#352-266-9555</u>
	Email address: ed@abshiereng.com		
D.	WAIVER INFORMATION:		
	Section & Title of Code:	2.21.	4(1) Major Site Plan
	Reason/Justification for Waiver Request: \(\)	Nith the addition of the	detached garage and paved D/W
	this site will exceed 9,000sf. The attack		
	DRA will mitigate the extra runoff creat	ted. Proposed det	ach garage is 60'x 40'
	(2400 SF) and the proposed	d driveway is	14.705 square feet
	EVELOPMENT REVIEW USE:		
	Received By: CG Date Processed:	5 5 21 Project # 3	2003 110019 AR # 26732
	ONING USE: Parcel of record: Yes \(\subseteq \) No Zoned: \(\subseteq \text{ESOZ} : \subseteq \text{P.O.N} \)	Л	pply for Family Division: Yes ☐ No ☐ Must Vacate Plat: Yes ☐ No ☐
	Land Use: Date:	Verified by	<u> </u>
Rev	vised 5/2017		

May 12, 2021

PROJECT NAME: SLACK PROPERTY, DUANE & TAMMY - WAIVER REQUEST

PROJECT NUMBER: 2003110019 APPLICATION: #26732

2.21.1.A - MAJOR SITE PLAN

1 DEPARTMENT: FRMSH - FIRE MARSHAL REVIEW

REMARKS: APPROVED

2 DEPARTMENT: LUCURR - LAND USE CURRENT REVIEW

REMARKS: Defer to OCE-Stormwater. [Site is zoned R-E. No measurements provided on the plan though improvements appear able to meet setbacks, but formal site/permit plans will need to provide full dimensions and meet setbacks.]

3 DEPARTMENT: ZONE - ZONING DEPARTMENT

REMARKS: Defer to OCE - Stormwater for runoff mitigation. Zoning approval contingent on setbacks being met for R-E zoning.

4 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REMARKS: **APPROVED** - Parcel lies within Marion County Utilities service area but outside connection distance to its closest water or sewer mains. The City of Ocala has water and sewer available along West Anthony Rd; if the detached garage will include any flows, connection to the City's utility (requiring future annexation in to the City of Ocala) may be required if availability and capacity exist. Parcel lies within the Silver Springs primary springs protection zone.

5 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION

REMARKS: N/A

6 DEPARTMENT: 911 - 911 MANAGEMENT

REMARKS: APPROVED

7 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH

REMARKS: N/A

8 DEPARTMENT: ENGTRF - TRAFFIC REVIEW

REMARKS: APPROVED

9 DEPARTMENT: ENGDRN - STORMWATER REVIEW

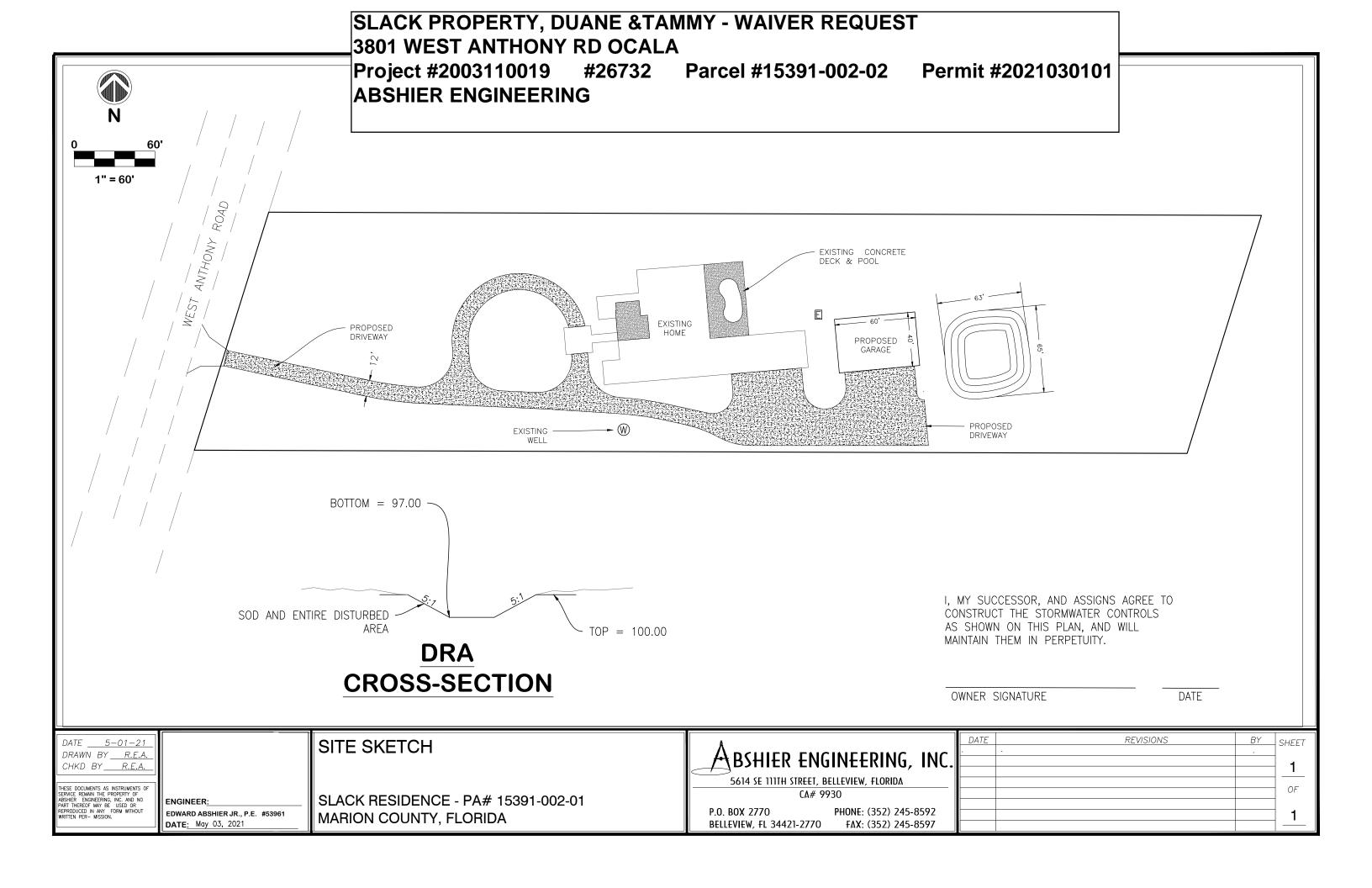
REMARKS: **CONDITIONAL APPROVAL**. Staff recommends approval subject to the following conditions: 1) a. The applicant must provide on-site stormwater control for the additional runoff from the new impervious areas. The plan by Ed Abshier, PE shows a portion of the new driveway (9,000sf) and new garage (2,400sf) will be constructed to drain to a new stormwater retention area. 2) A permit/inspection hold will be in effect until a sketch of the stormwater controls is provided to Stormwater and approved. 3) A Final Hold will be in effect until: a) Stormwater staff conducts a final inspection. Please note that all areas disturbed by construction must have vegetative cover established at time of final inspection. b) The applicant must provide a final sketch, noting the horizontal extents and volume capacity of the stormwater controls.

Note: The subject parcel is a 3-acre parcel (PID 15391-002-02) located off W Anthony Rd (County road). The existing impervious coverage is 9,359sf. The proposed driveway and garage is approximately 17,105sf for a total of 26,464sf. Staff recommends approval with conditions.

SLACK PROPERTY, DUANE &TAMMY - WAIVER REQUEST 3801 WEST ANTHONY RD OCALA

Project #2003110019 #26732 Parcel #15391-002-02 Permit #2021030101





Drainage Calculations

For

Slack Residence

Abshier Engineering Inc. P.O. Box 2770 Belleview, FL 34421-2770 (352) 245-8592



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY EDWARD ABSHIER, P.E., ON THE DATE IN THE DIGITAL SIGNATURE AJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Edward by Edward Abshier Date: 2021.05.05 14:51:07 -04'00'

Engineer:

Project Summary:

Attached are drainage calculations demonstrating the proposed "DRA" will mitigate for the increased runoff caused by the construction of the garage and the paved D/W. I used conservative values for the Type A soils the shown on the Soils Map for this area in the Calculations. Using the county topo it appears that there is a break in the water shed about the midpoint of the house, so only that area was used as the watershed area for the calculations. The topo for the area is very flat without much change in elevation.

Miscellaneous Calculations & Other Additional Information

Slack Overall CN

PRE-DEVELOPMENT

DESCRIPTION	AREAS				CURVE #
Open Space Type "A" Soils	121,316	FT^2	2.79	ACRES	39
Existing Buildings	8,283	FT^2	.19	ACRES	98
Existing Deck Around Pool	1,083	FT^2 FT^2	.02	ACRES ACRES	98
		FT^2	•	ACRES	
		FT^2	•	ACRES	
TOTAL AREA	130,682	FT^2	3.00	ACRES	
PRECIPITATION	11.0	INCHES			
COMPOSITE CURVE #	43.23				
S = (1000/CN)-10	13.13				
$Q = [P-(0.2)*(S)]^2/[P+(0.8)*(S)]$	3.26	INCHES			
PERMITTED DEVELOPMENT VOLUME	35,506	FT^3	0.815	ACRE-FT	
DESCRIPTION	AREAS				CURVE#
Existing Impervious	9,366	FT^2	0.22	ACRES	98
Proposed Building	2,400	FT^2	.06	ACRES	98
Proposed Driveway	14,705	FT^2	.34	ACRES	98
Open Space Type "A" Soils	104,211	FT^2	2.39	ACRES	39
		FT^2	•	ACRES	
	100.000	FT^2		ACRES	
TOTAL AREA	130,682	FT^2	3.00	ACRES	
PRECIPITATION	11.0	INCHES			
COMPOSITE CURVE #	50.95				
S = (1000/CN)-10	9.63				
$Q = [P-(0.2)*(S)]^2/[P+(0.8)*(S)]$	4.40	INCHES			
REVISED DEVELOPMENT VOLUME	47,952	FT^3	1.101	ACRE-FT	
PRE-POST VOLUME	12,446	FT^3	0.286	ACRE-FT	

Slack Residence - Area to DRA

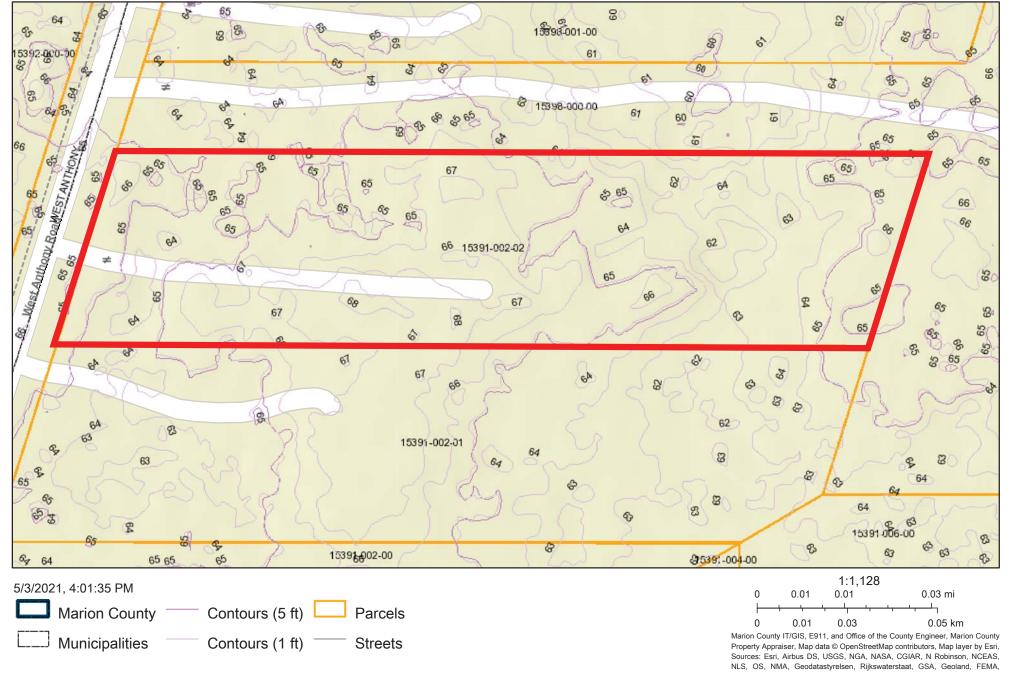
PRE-DEVELOPMENT

DESCRIPTION	AREAS				CURVE #
Open Space A Soils	67,599	FT^2	1.55	ACRES	39
Existing Impervious	5,661	FT^2	.13	ACRES	98
		FT^2		ACRES	
		FT^2		ACRES	
		FT^2	•	ACRES	
TOTAL ADEA	72.260	FT^2		ACRES	
TOTAL AREA	73,260	FT^2	1.68	ACRES	
PRECIPITATION	11.0	INCHES			
COMPOSITE CURVE #	43.56				
S = (1000/CN)-10	12.96				
$Q = [P-(0.2)*(S)]^2/[P+(0.8)*(S)]$	3.31	INCHES			
PRE-DEVELOPMENT VOLUME	20,203	FT^3	0.464	ACRE-FT	
DESCRIPTION	AREAS				CURVE #
Open Space A	59,739	FT^2	1.37	ACRES	39
Buildings	2,400	FT^2	.06	ACRES	98
Driveways	9,040	FT^2	0.21	ACRES	98
		FT^2	0.00	ACRES	
		FT^2	0.00	ACRES	
DRA	1,081	FT^2	0.02	ACRES	98
TOTAL AREA	72,260	FT^2	1.66	ACRES	
PRECIPITATION	11.0	INCHES			
COMPOSITE CURVE #	49.22				
S = (1000/CN)-10	10.32				
$Q = [P-(0.2)*(S)]^2/[P+(0.8)*(S)]$	4.15	INCHES			
POST-DEVELOPMENT VOLUME	24,978	FT^3	0.573	ACRE-FT	
PRE-POST VOLUME	4,774	FT^3	0.110	ACRE-FT	

Slack DRA Volume

				TOTAL			TOTAL
	ELEV.	FT^2	FT^3	FT^3	ACRES	ACRE-FT	ACRE-FT
1.	97.00	1,081			0.02		
			1,428			0.03	
2.	98.00	1,775		1,428	0.04		0.03
			2,351			0.05	
3.	99.00	2,927		3,779	0.07		0.09
			3,282			0.08	
4.	100.00	3,636		7,061	0.08		0.16
5							
TOTAL VOLUME		7,061	FT^3		0.1621	ACRE-FT	

Marion County Florida - Interactive Map





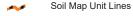
MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

36 Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill ۵

Lava Flow Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Severely Eroded Spot 0

Sinkhole

Slide or Slip

Sodic Spot

â

Δ

Stony Spot 0 Very Stony Spot

Spoil Area

Wet Spot Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails ---

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Marion County Area, Florida Survey Area Data: Version 18, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
9	Arredondo sand, 0 to 5 percent slopes	2.3	42.5%		
44	Kendrick loamy sand, 0 to 5 percent slopes	3.1	57.5%		
Totals for Area of Interest		5.4	100.0%		

PONDS Calculations

Project Data

Project Name: Slack Residence
Simulation Description: Storm Routing

Project Number:

Engineer : Edward Abshier, P.E.
Supervising Engineer: Edward Abshier, P.E.

Date: 05-03-2021

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	92.00
Water Table Elevation, [WT] (ft datum):	93.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	10.00
Fillable Porosity, [n] (%):	25.00
Unsaturated Vertical Infiltration Rate, [lv] (ft/day):	5.0
Maximum Area For Unsaturated Infiltration, [Av] (ft²):	3500.0

Geometry Data

Equivalent Pond Length, [L] (ft): 65.0

Equivalent Pond Width, [W] (ft): 60.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage	Area		
(ft datum)	(ft²)		
97.00	1081.0		
98.00	1775.0		
99.00	2957.0		
100.00	3636.0		

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Discharge Structures

Discharge Structure #1 is active as weir

Structure Parameters

Description: DRA Top

Weir elevation, (ft datum): 99.99
Weir coefficient: 2.861
Weir length, (ft): 130
Weir exponent: 1.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

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Scenario 1 :: 100YR - 24HR

Scenario Input Data

Hydrograph Type: Inline SCS

Modflow Routing: Routed with infiltration

Repetitions: 1

Basin Area (acres) 1.680
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 49.22
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323

Shape Factor UHG 323
Rainfall Distribution SCS Type II Florida Modified

Initial ground water level (ft datum) 93.00 (default)

| Time After
Storm Event
(days) |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 0.100 | 2.900 | 5.700 | 8.500 | 11.300 |
| 0.200 | 3.000 | 5.800 | 8.600 | 11.400 |
| 0.300 | 3.100 | 5.900 | 8.700 | 11.500 |
| 0.400 | 3.200 | 6.000 | 8.800 | 11.600 |
| 0.500 | 3.300 | 6.100 | 8.900 | 11.700 |
| 0.600 | 3.400 | 6.200 | 9.000 | 11.800 |
| 0.700 | 3.500 | 6.300 | 9.100 | 11.900 |
| 0.800 | 3.600 | 6.400 | 9.200 | 12.000 |
| 0.900 | 3.700 | 6.500 | 9.300 | 12.100 |
| 1.000 | 3.800 | 6.600 | 9.400 | 12.200 |
| 1.100 | 3.900 | 6.700 | 9.500 | 12.300 |
| 1.200 | 4.000 | 6.800 | 9.600 | 12.400 |
| 1.300 | 4.100 | 6.900 | 9.700 | 12.500 |
| 1.400 | 4.200 | 7.000 | 9.800 | 12.600 |
| 1.500 | 4.300 | 7.100 | 9.900 | 12.700 |
| 1.600 | 4.400 | 7.200 | 10.000 | 12.800 |
| 1.700 | 4.500 | 7.300 | 10.100 | 12.900 |
| 1.800 | 4.600 | 7.400 | 10.200 | 13.000 |
| 1.900 | 4.700 | 7.500 | 10.300 | 13.100 |
| 2.000 | 4.800 | 7.600 | 10.400 | 13.200 |
| 2.100 | 4.900 | 7.700 | 10.500 | 13.300 |
| 2.200 | 5.000 | 7.800 | 10.600 | 13.400 |
| 2.300 | 5.100 | 7.900 | 10.700 | 13.500 |
| 2.400 | 5.200 | 8.000 | 10.800 | 13.600 |
| 2.500 | 5.300 | 8.100 | 10.900 | 13.700 |
| 2.600 | 5.400 | 8.200 | 11.000 | 13.800 |
| 2.700 | 5.500 | 8.300 | 11.100 | 13.900 |
| 2.800 | 5.600 | 8.400 | 11.200 | 14.000 |

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Summary of Results :: Scenario 1 :: 100YR - 24HR

	Time (hours)	Stage (ft datum)	Rate (ft³/s)	Volume (ft³)
Stage Minimum Maximum	0.000 12.200	93.00 100.03		
Inflow Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	12.044 None 24.844 None 360.911		4.6371 None	25372.8 None 25372.8
Infiltration Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	17.556 None 116.111 None 360.911		0.4578 None	15367.8 None 15367.8
Combined Discharge Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	12.200 None 24.200 None 360.911		3.1627 None	10005.0 None 10005.0
Discharge Structure 1 - simple weir Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	12.200 None 24.200 None 360.911		3.1627 None	10005.0 None 10005.0
Discharge Structure 2 - inactive Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	disabled disabled disabled disabled disabled		disabled disabled	disabled disabled disabled
Discharge Structure 3 - inactive Rate - Maximum - Positive Rate - Maximum - Negative Cumulative Volume - Maximum Positive Cumulative Volume - Maximum Negative Cumulative Volume - End of Simulation	disabled disabled disabled disabled disabled		disabled disabled	disabled disabled disabled
Pollution Abatement: 36 Hour Stage and Infiltration Volume 72 Hour Stage and Infiltration Volume	N.A. N.A.	N.A. N.A.		N.A. N.A.

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