	Table 2.1																
Durine Linear Linear (1)         Durine frame         Durine frame         Durine View         Durine<	Elevation Storage Discharge - John Street Gravity Pond Option 1 John Street Feasibility Design Analysis Report																
$ \frac{1}{10} $	Elevation	Depth							3rd Row of Ports	4th Row of Ports	Principal Spillway Grate	Principal Spillway Outfall Pipe	Spillway / Outfall Pipe	Spillway		Comment	
int         opp         opp<         o			Orfice Diamet	er (inches)					6	0	3'-8" x 3'-8"	12				_	
$\frac{1}{10}  1  0  0  0  0  0  0  0  0  0$			-	-			-	-	-	0	1	1					
effection       0       00			(sq ft)	(cu ft)	(ac-ft)	(ac-ft)									(cfs)		
etc.       0       0.0       0.0       0.0       0.0       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       1.3       0.0       1.3       0.0       0.1       1.3       0.0       0.1       1.3       0.0       0		•	50	0	0.0000	0.00									0.0	Dringing Chillwood Invest/Dand Invest/1st your of a site	
eta-cols       1.0       647       0.0589       0.0	-					_										Principal Splilway Invert/Pond Invert/ 1st row of ports	
444.00       20       101       5647       1982       0.27       0.7       6.6       0.0       0.0       0.0       4.6       4.6       number of the set of the	-											-				2nd row of ports	
494-00       3.0       1547       13840       2383       6.77       6.0       0.0       0.0       5.9       5.3       0.0       7.0       7.0       0.0       7.0	-																
444.60       4.61       2730       10909       6.155       0.9       9.5       9.7       0.0       0.0       7.0       7.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0	-											-					
494-70       6.0       6.0       8543       2074       0.756       207       11.6       12.5       7.3       0.0       0.0       0.7       0.7       0.0       0.8.7       Tory Principal Spillway Conte         494-80.0       6.0       20333       3096       0.738       34.3       13.4       14.3       11.2       0.0       10.2       10.0       10.2       10.0       10.0       10.0       10.0       10.0<	-		20730												7.0	3rd row of ports	
$ \frac{494,0}{494,0} 0, 0, 0, 0, 3739  2005  0, 144  0, 721  12, 13, 13, 1, 1, 1, 0, 0, 10, 1$	4946.00	5.0				1.49			5.6	0.0	0.0	7.9		0.0	7.9		
949.00       80       328.93       1009       0.7.19       3.42       13.4       14.8       11.2       0.0       90.2       10.2       10.2       0.0       10.3         949.00       10.0       389.95       373.22       0.884.4       6.57       15.5       11.5       10.5       10.8       10.8       10.8       10.8       10.8       0.0       11.5       11.5       0.0       11.5       11.5       0.0       11.5       11.5       0.0       11.5       11.5       0.0       11.5       11.5       0.0       11.5       11.5       0.0       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5       11.5	4947.00	6.0														Top of Principal Spillway Grate	
499:00       0.0       937:99       92:14       0.754       4.21       1.42       158       12.5       0.0       10.8       10.8       10.8       0.0 <th0.0< th=""> <th0.0< t<="" td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th0.0<></th0.0<>	-																
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-																
4952.00       11.0       4222       4052.4       0.932.6       5.0       15.7       17.6       14.8       0.0       12.0       13.7       13.7       0.0       13.1       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0       13.0	-																
495.00       12.0       49581       49591       10.082       7.01       16.4       15.5       6.0       15.2       12.6       0.0       12.6         495.00       13.0       4997       10.082       7.01       17.7       20.1       17.7       0.0       13.1       1.0       0.0       13.1       1.0       0.0       13.1       1.0       0.0       13.1       1.0       10.0       13.1       1.0       10.0       13.1       1.0       10.0       13.1       1.0       13.0       1.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       1	-																
$\frac{4964,0}{956,0} \frac{13,0}{14,0} \frac{4967}{9724} \frac{10653}{1657} \frac{10,0}{12,7} \frac{11}{19,3} \frac{16,7}{17} \frac{0,0}{17,7} \frac{10,1}{17,6} \frac{10,0}{10,1} \frac{13,1}{17,6} \frac{10,0}{13,7} \frac{13,1}{13,1} \frac{10,0}{13,7} \frac{13,1}{13,7} \frac{11,1}{13,7} \frac$	-																
49500       14.0       52416       5092       11837       9.28       17.7       20.1       17.8       0.0       18.7       10.0       13.7       13.7       0.0       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7       13.7 <td>-</td> <td></td>	-																
496.00       15.0       55833       54155       1.2.42       10.51       11.3       20.9       16.5       0.0       191.3       14.2       10.0       14.2       Emergency Spillway         4956.20       15.2       65833       54155       11.249       0.2582       11.75       15.2       10.0       18.7       0.0       193.4       14.3       14.3       14.3       14.3       14.4       42.8       77.1         4956.40       15.6       5007       11531       0.2647       11.25       11.6       11.6       14.5       14.5       120.9       13.5.5       93.0       13.5.5       93.0       13.5.5       13.6       93.0       13.5.5       14.4       14.4       42.8       10.7       10.5       10.7       10.5       12.6       10.5       12.6       12.5	-		-														
$\frac{496 20}{496 20} \frac{15.2}{15.4} \frac{56368}{573.0} \frac{11724}{12.6} \frac{0.2562}{10.2} \frac{10.76}{18.6} \frac{18.5}{21.0} \frac{21.0}{18.7} \frac{10.7}{0.0} \frac{19.4}{19.4} \frac{14.3}{14.3} \frac{14.3}{15.1} \frac{15.1}{29.4} \frac{29.4}{11.10} \frac{11.00}{11.00} \frac{11.00}{11.00$	-													0.0		Emergency Spillway	
44956.0015.650007115310.264711.2918.721.319.00.0197.614.514.572.593.04956.0015.8587121116720.2260011.5618.821.519.20.0199.614.514.5120.9135.54957.0016.059417111310.271211.8318.921.619.30.0197.614.6168.0183.6Top of Pond (artificial)NOTE:(a) Orifice equation and coefficient were obtained from Equation 4-10 and Table 4-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976. $Q = Ca \sqrt{2gh}$ C = 0.590g-32.2 ff/see*2, a-arase (ag ft) h=hed (ft)Weir equation and "C° coefficients were obtained from Equation 5-10 and Table 5-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976. $a = \pi D^2/4$ (full area formula of a oricle)Image: Squattion Parameters1.4.8Concrete0.0130.005Manning's Equation (equation 15.12b) and "K' value (page 19-4) were obtained from "FE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E, 2019Flow depth increments, wetted perimeter and flow area of pipe were computed based on the following data used in the wire equationCo-2 Co L = 6Energency Spillway flows were computed based on the following data used in the wire equationCo-2 Loo L = 65Energency Spillway flows were computed based on the following data used in the wire indico on the form (H, H = head ft) <td c<="" td=""><td>-</td><td></td><td>56598</td><td>11249</td><td>0.2582</td><td>10.76</td><td>18.5</td><td>21.0</td><td>18.7</td><td>0.0</td><td>193.4</td><td>14.3</td><td>14.3</td><td>15.1</td><td>29.4</td><td></td></td>	<td>-</td> <td></td> <td>56598</td> <td>11249</td> <td>0.2582</td> <td>10.76</td> <td>18.5</td> <td>21.0</td> <td>18.7</td> <td>0.0</td> <td>193.4</td> <td>14.3</td> <td>14.3</td> <td>15.1</td> <td>29.4</td> <td></td>	-		56598	11249	0.2582	10.76	18.5	21.0	18.7	0.0	193.4	14.3	14.3	15.1	29.4	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	4956.40	15.4	57303			11.02	18.6	21.2		0.0							
4957 00       16.0       59417       11813       0.2712       11.83       18.9       21.6       19.3       0.0       201.7       14.6       14.6       180.0       183.6       Top of Pond (artificial)         NOTES:       (a) Orifice equation and coefficient were obtained from Equation 4-10 and Table 4-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976. $\overline{\mathcal{Q}} = Ca\sqrt{2gh}$ $C = 0.590$ $g = 32.2$ (Hysec'2, $a = area (sq. ft)$ h=head (ft) $Wei requation and "C" coefficients were obtained from Equation 5-10 and Table 5-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976.       \overline{a} = \pi D^2/4       (full area formula of a circle)         (b) Manning's Equation Parameters       1.486       Concrete       0.013       0.005         Manning's Equation 19.12(b)) and "K value (page 19-4) were obtained from TPE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E, 2019       Flow depth increments, wetted parimeters and flow area of pipe were computed using Bentey FlowMaster.         (c)/Emergency Spillway flows were computed based on the following data used in the weir equation a - Cu + 1.5       C = discharge coefficient. L = gillway legith pert, to flow (ft), th = head (ft)         Emergency Spillway C       2       0.0       L       65       Emergency Spillway Elevation =       4956.00         Length assumed along top of pond embankment and elevations extended above emergency spillway to allow for rating curve to function if flow spills overt top of emergenc$	-		-														
NOTES:         (a) Orifice equation and coefficient were obtained from Equation 4-10 and Table 4-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976. $Q = Ca\sqrt{2gh}$ C = 0.590       g=32.2 ft/sec^2, a=area (sq ft) h=head (ft)         Weir equation and "C" coefficients were obtained from Equation 5-10 and Table 5-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976. $a = \pi D^2/4$ (full area formula of a circle)         k       Material       "n"         Slope (ft/ft)       (b) Manning's Equation Parameters       1.486         Oncorret       0.013       0.005         Manning's Equation (equation 19.12(b)) and "k value (page 19-4) were obtained from TPE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E. 2019         Prov depth Increments, wetted perimeter and flow area of pipe were computed using Bentley FlowMaster.         (c)Emergency Spillway flows were computed based on the following data used in the weir equation         Q = C.H*1.5       C = discharge coefficient, L = 965         Emergency Spillway flows awere computed based on the following data used in the weir equation         Emergency Spillway flows awere computed based on the following data used in the weir equation         Q = C.H*1.5       C = discharge coefficient, L = 965         Emergency Spillway flows awere computed based on the following data used in the weir equation         Horight assumed along top of pond embankment and elevati	-															The structure of the structure	
(a) Orlifice equation and coefficient were obtained from Equation 4-10 and Table 4-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976.         Q = Ca√2gh       C = 0.590       g=32.2 ft/sec <sup>+</sup> 2, s=area (sq ft) h=head (ft)         Weir equation and "C" coefficients were obtained from Equation 5-10 and Table 5-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976.         a = πD <sup>2</sup> /4       (full area formula of a circle)         b) Manning's Equation Parameters       1.486       Concrete       0.013       0.005         Manning's Equation [9.12(b)] and "k" value (page 19-4) were obtained from from "PE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E, 2019       Flow depth increments, wetted perimeter and flow area of pipe were computed using Berliep FlowMaster.         (c)Emergency Spillway Flows were computed based on the following data used in the weir equation       0 = CL+1.5       C = dicharge coefficient, L: spillway length per p. to flow (ft), H = head (ft)         Emergency Spillway Flows were computed based on the following data used in the weir equation       0 = CL+1.5       C = dicharge coefficient, L: spillway length per p. to flow (ft), H = head (ft)         Emergency Spillway Coefficient C = application estended above emergency spillway to allow for rating curve to function if flow spills over top of emergency spillway.       4956.00         (d) Data Source : Contours generated from DEMs provided by 2018 MRCOG.       Use State S		16.0	59417	11813	0.2712	11.83	18.9	21.6	19.3	0.0	201.7	14.6	14.6	169.0	183.6	l op of Pond (artificial)	
(b) Manning's Equation Parameters       1.486       Concrete       0.013       0.005         Manning's Equation (equation 19.12(b)) and "k" value (page 19-4) were obtained from from "PE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E, 2019         Flow depth increments, wetted perimeter and flow area of pipe were computed using Bentley FlowMaster.         (c)Emergency Spillway flows were computed based on the following data used in the weir equation         Q = CLH^ 1.5       C = discharge coefficient, L = spillway length perp. to flow (ft), H = head (ft)         Emergency Spillway C =       2.60       L =       65       Emergency Spillway Elevation =       4956.00         Length assumed along top of pond embankment and elevations extended above emergency spillway to allow for rating curve to function if flow spills over top of emergency spillway.       4956.00         (d) Data Source : Contours generated from DEMs provided by 2018 MRCOG.       V18 MRCOG.       V18 MRCOG.	Q = Ca√2gh       C = 0.590 g=32.2 ft/sec^2, a=area (sq ft) h=head (ft)         Weir equation and "C" coefficients were obtained from Equation 5-10 and Table 5-3 from "Handbook of Hydraulics" Sixth Edition, by Brater & King, 1976.																
Emergency Spillway C =       2.60       L =       65       Emergency Spillway Elevation =       4956.00         Length assumed along top of pond embankment and elevations extended above emergency spillway to allow for rating curve to function if flow spills over top of emergency spillway.       4956.00         (d) Data Source : Contours generated from DEMs provided by 2018 MRCOG.       Emergency Spillway Elevation =       4956.00	(b) Manning's Equation Parameters 1.486 Concrete 0.013 0.005 Manning's Equation (equation 19.12(b)) and "k" value (page 19-4) were obtained from from "PE Civil Reference Manual" 16th edition, by Michael R. Lindeburg P.E, 2019 Flow depth increments, wetted perimeter and flow area of pipe were computed using Bentley FlowMaster. (c)Emergency Spillway flows were computed based on the following data used in the weir equation																
Length assumed along top of pond embankment and elevations extended above emergency spillway to allow for rating curve to function if flow spills over top of emergency spillway. (d) Data Source : Contours generated from DEMs provided by 2018 MRCOG.		-					Emer	gency Spillwav Ele	vation =		4956.00						
(d) Data Source : Contours generated from DEMs provided by 2018 MRCOG.	•									top of emergency s							
(e) The combined discharge of the reverse incline ports and the grate (A), will govern the discharge until the principal spillway outfall pipe becomes fully submerged. When the sum of (A)s is greater than outfall pipe capacity then outfall pipe capacity governs the discharge.	(d) Data Source : (e) The combined	Contours gen I discharge of	erated from DE the reverse inc	Ms provided by 2 line ports and th	2018 MRCOG.							reater than outfall	pipe capacity then o	utfall pipe capac	ity governs the dis	charge.	

Elevation NAVD 1988         Depth 0         Area         Volume         Volume         Volume         Out Dis           1988         Principal Spillway Diameter (inches) Number of Openings         Principal Spillway Diameter (inches) Number of Openings         (ac-ft)         (ac-ft)         (ac-ft)           (ft)         (sq ft)         (cu ft)         (ac-ft)         (ac-ft)         (ac-ft)           (d)         0         0         0         0.0000         0.000           4931.00         0         0         0         0.00967         0.10           4933.00         2.0         9871         9147         0.2100         0.31           4934.00         3.0         10599         10235         0.2350         0.54           4935.00         4.0         11342         10971         0.2518         0.79           4936.00         5.0         12102         11722         0.2691         1.06           4937.00         6.0         12878         12490         0.2867         1.35           4938.00         7.0         13670         13274         0.3047         1.65           4939.00         8.0         14478         14074         0.3231         1.98           4940.0	al Spillway       Spillway         all Pipe       F         charge       Disc         48       (         1       (         (a,b)       (         0.0       (         (6.7       1         (1.1       (         (3.1       1         19.0       1         33.0       1         45.7       1         57.4       1	Principal ay / Outfall Pipe scharge (cfs) (e) 0.0 16.7 61.1 84.1 103.1 119.0 133.0 145.7	Emergency Spillway Discharge (cfs) (c) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Total Discharge Rating Curve (cfs) 0.0 16.7 61.1 84.1 103.1 119.0	Wet Well Invert Invert of Storm Drain Inlet
Number of Openings           (ft)         (sq ft)         (cu ft)         (ac-ft)         (ac-ft)           (d)         0         0         0         0.0000         0.00           4931.00         0         0         0         0.0000         0.00           4932.00         1.0         8422         4211         0.0967         0.10           4933.00         2.0         9871         9147         0.2100         0.31           4934.00         3.0         10599         10235         0.2350         0.54           4935.00         4.0         11342         10971         0.2518         0.79         1           4937.00         6.0         12878         12490         0.2867         1.35         1           4938.00         7.0         13670         13274         0.3047         1.65         1           4939.00         8.0         14478         14074         0.3231         1.98         1           4940.00         9.0         15302         14890         0.3418         2.32         1           4941.00         10.0         16142         15722         0.3609         2.68         1           4942.00	1     ()       a,b)     ()       0.0     ()       16.7     1       51.1     6       34.1     8       03.1     1       19.0     1       33.0     1       45.7     1       57.4     1	(e) 0.0 16.7 61.1 84.1 103.1 119.0 133.0 145.7	(c) 0.0 0.0 0.0 0.0 0.0 0.0	0.0 16.7 61.1 84.1 103.1	
(ft)         (sq ft)         (cu ft)         (ac-ft)         (ac-ft)           (d)         0         0         0         0.0000         0.00           4931.00         0         0         0         0.0000         0.00           4932.00         1.0         8422         4211         0.0967         0.10           4933.00         2.0         9871         9147         0.2100         0.31           4934.00         3.0         10599         10235         0.2350         0.54           4935.00         4.0         11342         10971         0.2518         0.79         1           4936.00         5.0         12102         11722         0.2691         1.06         1           4937.00         6.0         12878         12490         0.2867         1.35         1           4938.00         7.0         13670         13274         0.3047         1.65         1           4939.00         8.0         14478         14074         0.3231         1.98         1           4940.00         9.0         15302         14890         0.3418         2.32         1           4941.00         10.0         16142 <td< td=""><td>( a,b) ( 0.0 16.7 51.1 64.1 63.1 19.0 11 33.0 11 33.0 11 57.4 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (</td><td>(e) 0.0 16.7 61.1 84.1 103.1 119.0 133.0 145.7</td><td>(c) 0.0 0.0 0.0 0.0 0.0 0.0</td><td>0.0 16.7 61.1 84.1 103.1</td><td></td></td<>	( a,b) ( 0.0 16.7 51.1 64.1 63.1 19.0 11 33.0 11 33.0 11 57.4 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	(e) 0.0 16.7 61.1 84.1 103.1 119.0 133.0 145.7	(c) 0.0 0.0 0.0 0.0 0.0 0.0	0.0 16.7 61.1 84.1 103.1	
(d) $0$ $0$ $0$ $0$ $0$ $0.0000$ $0.00$ 4931.00 $0$ $0$ $0$ $0.0000$ $0.00$ 4932.00 $1.0$ $8422$ $4211$ $0.0967$ $0.10$ 4933.00 $2.0$ $9871$ $9147$ $0.2100$ $0.31$ 4934.00 $3.0$ $10599$ $10235$ $0.2350$ $0.54$ 4935.00 $4.0$ $11342$ $10971$ $0.2518$ $0.79$ 4936.00 $5.0$ $12102$ $11722$ $0.2691$ $1.06$ 4937.00 $6.0$ $12878$ $12490$ $0.2867$ $1.35$ 4938.00 $7.0$ $13670$ $13274$ $0.3047$ $1.65$ 4939.00 $8.0$ $14478$ $14074$ $0.3231$ $1.98$ 4940.00 $9.0$ $15302$ $14890$ $0.3418$ $2.32$ $14941.00$ 10.0 $16142$ $15722$ $0.3609$ $2.68$ $14942.00$	a,b) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	(e) 0.0 16.7 61.1 84.1 103.1 119.0 133.0 145.7	(c) 0.0 0.0 0.0 0.0 0.0 0.0	0.0 16.7 61.1 84.1 103.1	
4931.00         0         0         0.0000         0.00           4932.00         1.0         8422         4211         0.0967         0.10           4933.00         2.0         9871         9147         0.2100         0.31           4934.00         3.0         10599         10235         0.2350         0.54           4935.00         4.0         11342         10971         0.2518         0.79         1           4936.00         5.0         12102         11722         0.2691         1.06         1           4937.00         6.0         12878         12490         0.2867         1.35         1           4938.00         7.0         13670         13274         0.3047         1.65         1           4939.00         8.0         14478         14074         0.3231         1.98         1           4940.00         9.0         15302         14890         0.3418         2.32         1           4941.00         10.0         16142         15722         0.3609         2.68         1           4942.00         11.0         16999         16571         0.3804         3.06         1	0.0	0.0       16.7       61.1       84.1       103.1       119.0       133.0       145.7	0.0 0.0 0.0 0.0 0.0 0.0	16.7 61.1 84.1 103.1	
4932.001.0842242110.09670.104933.002.0987191470.21000.314934.003.010599102350.23500.544935.004.011342109710.25180.794936.005.012102117220.26911.064937.006.012878124900.28671.354938.007.013670132740.30471.654939.008.014478140740.32311.984940.009.015302148900.34182.3214942.0011.016999165710.38043.061	16.7     1       \$1.1     6       \$4.1     8       \$3.1     1       \$19.0     1       \$3.0     1       \$45.7     1       \$57.4     1	16.7         61.1         84.1         103.1         119.0         133.0         145.7	0.0 0.0 0.0 0.0 0.0	16.7 61.1 84.1 103.1	
4933.002.0987191470.21000.314934.003.010599102350.23500.544935.004.011342109710.25180.794936.005.012102117220.26911.064937.006.012878124900.28671.354938.007.013670132740.30471.654939.008.014478140740.32311.984940.009.015302148900.34182.324941.0010.016142157220.36092.684942.0011.016999165710.38043.06	61.1     6       64.1     6       03.1     1       19.0     1       33.0     1       45.7     1       57.4     1	61.1 84.1 103.1 119.0 133.0 145.7	0.0 0.0 0.0 0.0	61.1 84.1 103.1	Invert of Storm Drain Inlet
4934.003.010599102350.23500.544935.004.011342109710.25180.7914936.005.012102117220.26911.0614937.006.012878124900.28671.3514938.007.013670132740.30471.6514939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	44.1     E       03.1     1       19.0     1       33.0     1       45.7     1       57.4     1	84.1 103.1 119.0 133.0 145.7	0.0 0.0 0.0	84.1 103.1	
4935.004.011342109710.25180.7914936.005.012102117220.26911.0614937.006.012878124900.28671.3514938.007.013670132740.30471.6514939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	03.1         1           19.0         1           33.0         1           45.7         1           57.4         1	103.1 119.0 133.0 145.7	0.0	103.1	
4936.005.012102117220.26911.0614937.006.012878124900.28671.3514938.007.013670132740.30471.6514939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	19.0         1           33.0         1           45.7         1           57.4         1	119.0 133.0 145.7	0.0		
4937.006.012878124900.28671.3514938.007.013670132740.30471.6514939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	33.0         1:           45.7         1:           57.4         1:	133.0 145.7		119.0	
4938.007.013670132740.30471.6514939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	45.7 14 57.4 1	145.7	0.0		
4939.008.014478140740.32311.9814940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061	57.4 1			133.0	
4940.009.015302148900.34182.3214941.0010.016142157220.36092.6814942.0011.016999165710.38043.061			0.0	145.7	
4941.00         10.0         16142         15722         0.3609         2.68         1           4942.00         11.0         16999         16571         0.3804         3.06         1	68.3 1	157.4	0.0	157.4	
4942.00 11.0 16999 16571 0.3804 3.06 1		168.3	0.0	168.3	
	78.5 1	178.5	0.0	178.5	
4943.00 12.0 17871 17435 0.4003 3.46 1	88.2 1	188.2	0.0	188.2	
	97.3 1	197.3	0.0	197.3	
4944.00 13.0 18760 18316 0.4205 3.88 2	06.1 2	206.1	0.0	206.1	
4945.00 14.0 19663 19212 0.4410 4.32 2	14.5 2	214.5	0.0	214.5	
	22.6 2	222.6	0.0	222.6	Top of Wet Well
Orifice equation and coefficient were obtained from Equation 4-10 and Table 4-3 from "Handbook of H $Q = Ca\sqrt{2gh}$ C = 0.590 g=32.2 ft/sec^2, a=area (sq ft) h=head (ft) Weir equation and "C" coefficients were obtained fr		·		draulics" Sixth Editio	n hvBrater&King 1976.
Weir equation and "C" coefficients were obtained fr $a = \pi D^2 / 4$ (full area formula of a circle)	om Equation 5-10 and	d Table 5-3 from	"Handbook of Hy	draulics" Sixth Editio	n, by Brater & King, 1976.
k Material "n" Sloj	e (ft/ft)				
Manning's Equation Parameters 1.486 PVC 0.010 0	.004				
nning's Equation (equation 19.12(b)) and "k" value (page 19-4) were obtained from from "PE Civil Refer	ence Manual" 16th edi	dition, by Michae	el R. Lindeburg P.E	E, 2019	
w depth increments, wetted perimeter and flow area of pipe were computed using Bentley FlowMaster.					

Comment	