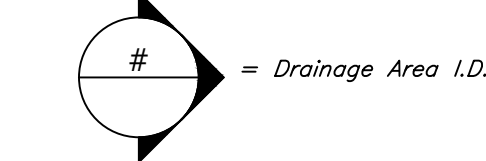


PROPOSED STORM SEWER RUNOFF TABLE

I.D.	TO STRUCTURE NO.	Total Area (ac.)	Impervious Area (ac.)	Pervious Area (ac.)	15Yr./20Min. Composite PI Factor (cfs/ac.)	15Yr./20Min. Total Q (cfs)	100Yr./20Min. Composite PI Factor (cfs/ac.)	100Yr./20Min. Total Q (cfs)
A	CI 2-5	0.12	0.12	0.000	3.850	0.462	6.080	0.730
B	MH 2-2	0.13	0.13	0.000	3.850	0.501	6.080	0.790
C	CI 2-4	0.54	0.44	0.100	3.483	1.881	5.500	2.970
D	CI 2-3	0.22	0.15	0.070	3.220	0.708	5.084	1.119
E	GI 1-2	0.24	0.00	0.240	1.870	0.449	2.950	0.708
F	CI 2-5	0.25	0.23	0.020	3.692	0.923	5.830	1.457
G	CI 2-6	0.18	0.11	0.070	3.080	0.554	4.863	0.875
H	CI 2-7	0.32	0.23	0.090	3.293	1.054	5.200	1.664
I	CI 2-8	0.13	0.09	0.040	3.241	0.421	5.117	0.665

(See Stormwater Management Facilities Report for Calculations)
NOTE: IMPERVIOUS AREAS FOR FUTURE PARKING BUILDOUT INCLUDED IN RUNOFF.



DESIGN STORM

15 YEAR FREQUENCY / 20 MINUTE DURATION
 "PI" Factor (5% Impervious) = 1.87 cfs/acre
 "PI" Factor (100% Impervious) = 3.85 cfs/acre

100 YEAR FREQUENCY / 20 MINUTE DURATION
 "PI" Factor (5% Impervious) = 2.95 cfs/acre
 "PI" Factor (100% Impervious) = 6.08 cfs/acre

EXISTING RUNOFF CALCULATIONS:

TOTAL SITE AREA = 3.18 Acres
 IMPERVIOUS: 1.66 Ac. x 3.85 = 6.39 c.f.s.
 PERVIOUS: 1.52 Ac. x 1.87 = 2.84 c.f.s.
 EXISTING 15yr./20min. RUNOFF: 9.23 c.f.s.

PROPOSED RUNOFF CALCULATIONS:

TOTAL SITE AREA = 3.18 Acres
 IMPERVIOUS: 1.62 Ac. x 3.85 = 6.24 c.f.s.
 PERVIOUS: 1.56 Ac. x 1.87 = 2.92 c.f.s.
 PROPOSED 15yr./20min. RUNOFF: 9.16 c.f.s.

DIFFERENTIAL RUNOFF CALCULATIONS:

TOTAL SITE AREA = 3.18 Acres
 DIFFERENTIAL=PROPOSED-EXISTING=9.16-9.23=-0.07
 NET DECREASE = 0.07 c.f.s.
 SITE HAS EXISTING DETENTION.



PROJECT NO.: 161105
 NAME: MICHAEL J. VELLOFF
 LICENSE NUMBER: E-2000161862
 DISCIPLINE: CIVIL
 CORPORATION AUTHORITY NUMBER: 001194

THE SEAL OF MICHAEL J. VELLOFF ON THIS DRAWING APPLIES ONLY TO THE CIVIL/SITE ENGINEERING SHOWN. IT DOES NOT APPLY, NOR IS ANY RESPONSIBILITY TAKEN FOR ENVIRONMENTAL, GEOTECHNICAL (INCLUDING BUT NOT LIMITED TO SLOPE STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

QuikTrip No. 0662
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QT

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PROTOTYPE:	P-94-01
DIVISION:	06
VERSION:	001
DESIGNED BY:	RKF
DRAWN BY:	RKF
REVIEWED BY:	MJV

REV	DATE	DESCRIPTION

SHEET TITLE:
 POST-DEVELOPED DRAINAGE MAP

SHEET NUMBER:
C401

FILE LOCATION: \\161105 - QuikTrip #662 - Bryan Road and Veterans Memorial Parkway\Civil\06-0662\Civil.dwg TAB NAME: C401 Post Dev Map USER: rkrkyer SAVED: 6/12/2018 11:52 AM PLOTTED: 6/12/2018 12:40 PM