

**DYMAR**

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***APPENDIX C – TECHNICAL WORKSHEETS  
AND REFERENCE MATERIALS***

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C-Factor Calculation

Thu Apr 8 10:26:00 2021

Project: Little Pitch  
Location: DA A  
Present

By: S.A.L.  
Checked:

Date: 04/08/2  
Date:

C-factor (CF)

Cover description	CF	Area (Acre)
Drives and Walks	0.800	0.061
Unimproved Areas	0.200	2.399

CF (weighted): 0.215  
Total Area: 2.460 Acre

C-Factor Calculation

Thu Apr 8 10:26:45 2021

Project: Little Pitch  
Location: DA B  
Present

By: S.A.L.  
Checked:

Date: 04/08/2  
Date:

C-factor (CF)

Cover description	CF	Area (Acre)
Roofs	0.850	0.005
Drives and Walks	0.800	0.080
Unimproved Areas	0.200	1.200

CF (weighted): 0.240  
Total Area: 1.285 Acre

C-Factor Calculation

Thu May 6 09:29:02 2021

Project: Little Pitch  
Location: DA A1  
Developed

By: S.A>L>  
Checked:

Date: 05/06/2  
Date:

C-factor (CF)

Cover description	CF	Area (Acre)
Lawns, Sandy Soil, Average, 2-7%	0.130	0.202
Roofs	0.850	0.056
Streets, Concrete	0.880	0.012
Unimproved Areas	0.200	2.157

CF (weighted): 0.213  
Total Area: 2.427 Acre

C-Factor Calculation

Thu May 6 09:39:50 2021

Project: Little Pitch  
Location: DA A2  
Developed

By: S.A.L.  
Checked:

Date: 05/06/2  
Date:

C-factor (CF)

Cover description  
Roofs

CF	Area (Acre)
0.850	0.056

CF (weighted): 0.850  
Total Area: 0.056 Acre

C-Factor Calculation

Thu May 6 09:35:43 2021

Project: Little Pitch  
Location: DA B1  
Developed

By: S.A.L.  
Checked:

Date: 05/06/2  
Date:

C-factor (CF)

Cover description	CF	Area (Acre)
Lawns, Sandy Soil, Average, 2-7%	0.130	0.230
Streets, Concrete	0.880	0.008
Unimproved Areas	0.200	0.729

CF (weighted): 0.189  
Total Area: 0.967 Acre

C-Factor Calculation

Thu May 6 09:37:17 2021

Project: Little Pitch  
Location: DA B2  
Developed

By: S.A.L.  
Checked:

Date: 05/06/2  
Date:

C-factor (CF)

Cover description

Lawns, Sandy Soil, Average, 2-7%

Roofs

Streets, Concrete

CF Area (Acre)

0.130 0.006

0.850 0.023

0.880 0.057

CF (weighted): 0.820

Total Area: 0.086 Acre

C-Factor Calculation

Thu May 6 09:38:00 2021

Project: Little Pitch  
Location: DA B3  
Developed

By: S.A.L.  
Checked:

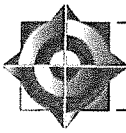
Date: 05/06/2  
Date:

C-factor (CF)

Cover description	CF	Area (Acre)
Lawns, Sandy Soil, Average, 2-7%	0.130	0.085
Streets, Concrete	0.880	0.170
Unimproved Areas	0.200	0.011

CF (weighted): 0.612  
Total Area: 0.266 Acre





# DYMAR

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ENGINEERING • PLANNING • ENVIRONMENTAL • SURVEYING SERVICES

PROJECT: Little Pond

PAGE: 1

CLIENT: Green

JOB #: 1039

SUBJECT: Dredging Comp.

DATE: 4/8/21

DONE BY: SL

CHECKED BY:

Time of travel (Start for the 1st Pass commencing)

D.A. 'A' (Based on 100% material)

TOTAL LENGTH 705 FT.

Subsidiary Flow:  $n = 0.40$ ,  $L = 150'$ ,  $P2 = 3.5$   
 $S = \frac{973 - 946}{150} = 0.17 \text{ ft/ft}$

$$T_T = \frac{0.007 (0.40 \times 150)^{0.5}}{(3.5)^{0.5} (0.17)^{0.4}} = 0.20 \text{ hrs} \approx 12 \text{ min}$$

Shallow Center Flow:

$$T_T = \frac{L}{V \times 60}$$

@  $L = 102'$

$$@ S = \frac{946 - 931}{102} = 0.17 \text{ ft/ft}$$

$$T_T = \frac{102}{7.3 \times 60}$$

$$V = 7.3 \text{ fps}$$

$$T_T = 0.23 \text{ min}$$

Channel Flow

$$V = \frac{1.486}{n} R^{2/3} \sqrt{S}$$

@  $n = 0.025$

$$V = \frac{1.486}{0.025} \times (0.91)^{2/3} \sqrt{0.0176}$$

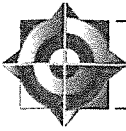
$$R = \frac{1 \times 20}{22} = 0.91$$

$$S = \frac{931 - 923}{454} = 0.0176$$

$$V = 5.3 \text{ fps}$$

$$T_T = \frac{454}{5.3 \times 60} = 1.42 \text{ min}$$

$$\Sigma T_T = 12 + 0.23 + 1.42 = 13.65 \text{ min} \rightarrow 14 \text{ min}$$



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PROJECT: <u>LITTLE PITCH</u>	PAGE: <u>2</u>
CLIENT: <u>Green</u>	JOB #: <u>1039</u>
SUBJECT: <u>Damish Camps</u>	DATE: <u>4/8/21</u>
DONE BY: <u>SAL</u>	CHECKED BY:

Time at Canal Court.

D.A. 'B'

$$\text{TOTAL LENGTH} = 421'$$

Sublet Flow @ A = 2.180, L = 150, P<sub>2</sub> = 3.50

$$S = \frac{973 - 967}{150} = 0.04 \text{ ft/ft}$$

$$T_T = \frac{0.007 (421 \times 150)^{0.8}}{(3.5)^{0.5} (0.04)^{0.14}}$$

$$= 0.35 \text{ hrs.} \approx 21.52 \text{ min.}$$

Shallow conc flow

$$T_T = \frac{L}{V \times 60} \quad @ L = 271$$

$$S = \frac{967 - 952}{271} = 0.055 \text{ ft/ft}$$

$$V = 3.35 \text{ ft/s}$$

$$T_T = \frac{271}{3.35 \times 60}$$

$$= 1.17 \text{ min}$$

No Channel Flow.

$$\Sigma T_T = 21.52 \text{ min} + 1.17 \text{ min}$$

$$= 22.69 \rightarrow 23 \text{ min.}$$