



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 26, 1991

Mark Goodwin, P.E.
D. Mark Goodwin & Associates
Post Office Box 21307
Albuquerque, New Mexico 87154

RE: ENGINEER'S CERTIFICATION FOR 6739 ACADEMY, NE
THE A.S.I. BUILDING (E-19/D17C) ENGINEER'S CERTIFICATION
DATED APRIL 22, 1991

Dear Mr. Goodwin:

Based on the information provided on your submittal of April 22, 1991
Certification for the referenced site is acceptable.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

xc: Alan Martinez

BJM/bsj
(WP+2101)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

FILE COPY



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 15, 1990

Mark Goodwin, P.E.
D. Mark Goodwin & Associates
Post Office Box 21307
Albuquerque, New Mexico 87154

RE: DRAINAGE PLAN FOR 6739 ACADEMY, NE
(E-19/D17C) ENGINEER'S STAMP DATED JULY 30, 1990

Dear Mr. Goodwin:

Based on the information provided on your submittal of July 30, 1990, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

for Bernice J. Montoya
Fred J. Aguirre, P.E.
Hydrologist

BJM:FJA/bsj
(WP+2101)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

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D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

JOB 6739 Academy

SUBJECT Drainage

JOB NO. _____

SHEET 1 OF 7

BY MGA

DATE 7/26/90

CHECKED _____

DATE _____

Runoff from Parking Lot

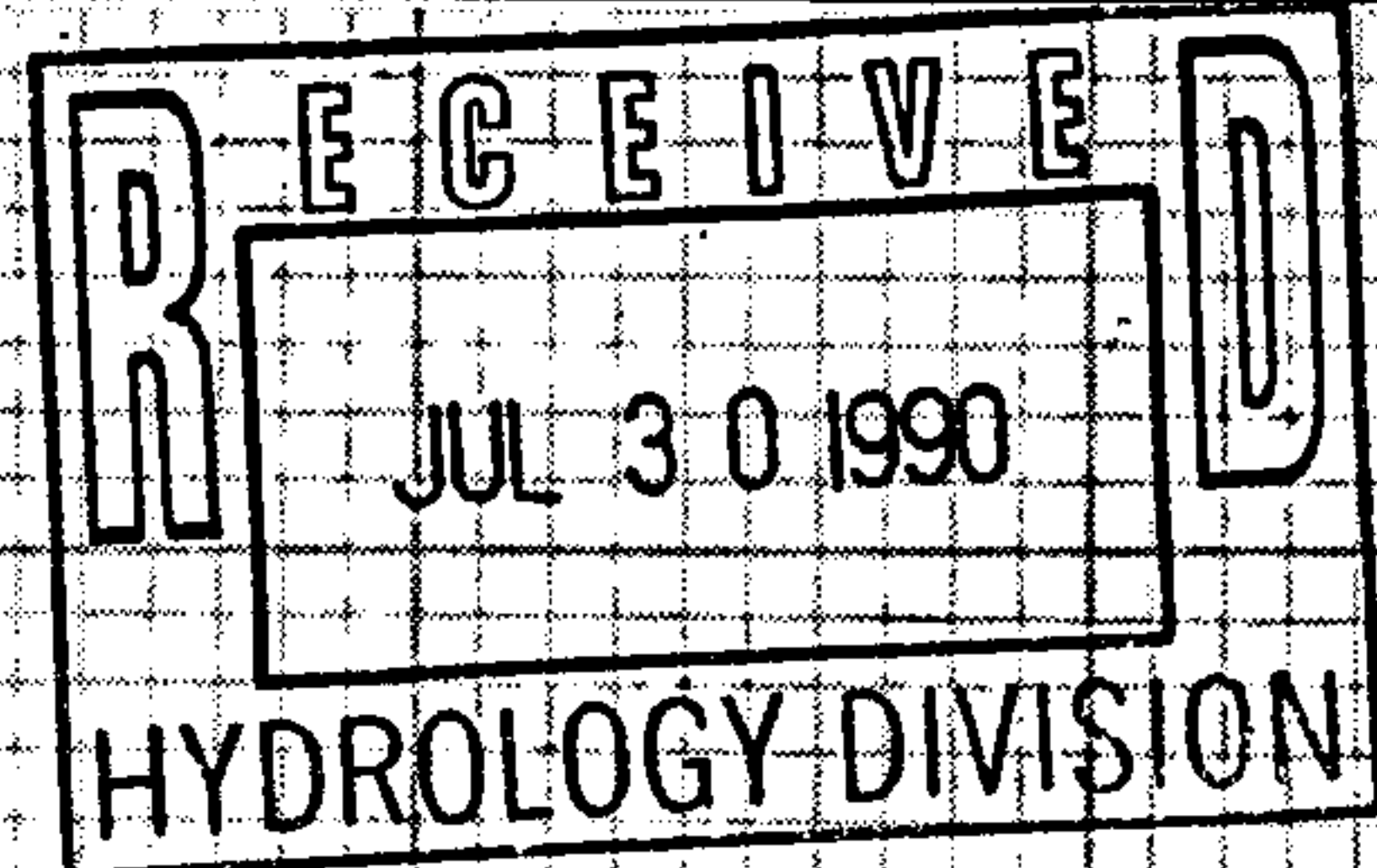
$$Area = 6300 \text{ sq. Ft.} = 0.14 \text{ Ac.}$$

$$T_c = 2 \text{ min.}$$

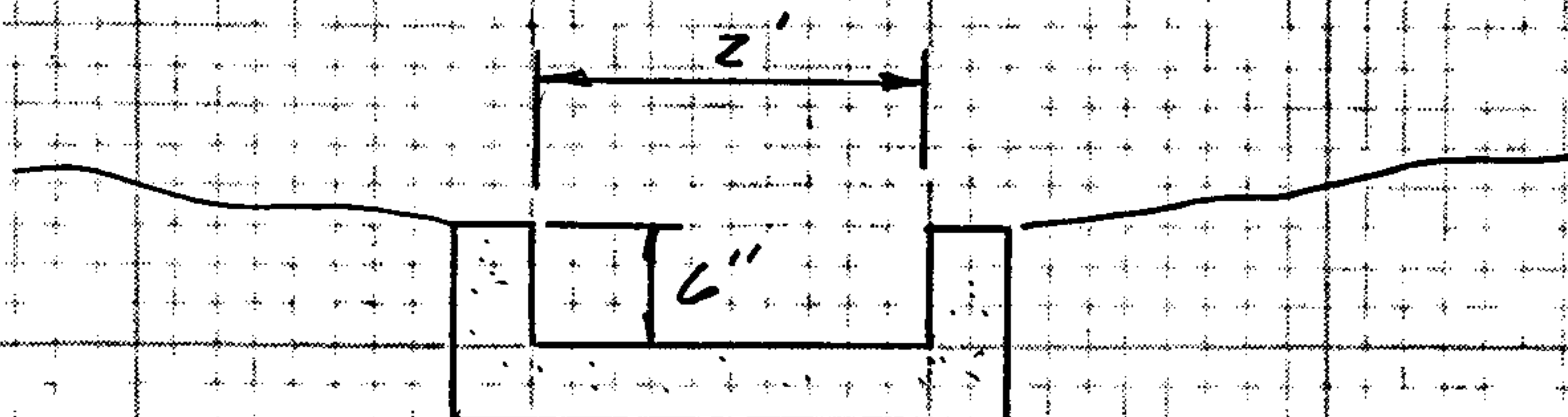
$$I_{100} = 10.81 \text{ in/hr.}$$

$$C = 0.95$$

$$Q = 1.5 \text{ cfs}$$



Capacity of Concrete Swale



$$n = 0.015 \quad S = 5\%$$

$$A = 1.5 \text{ sq. Ft.} \quad WP = 3 \text{ sq. Ft.}$$

$$V = \frac{1.486}{0.015} \left(\frac{1}{3} \right)^{4/3} (.05)^{1/2} = 11 \text{ fps}$$

$$Q = AV = 11 \text{ cfs} \gg 1.5 \text{ cfs} \quad \text{ok.}$$



D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

JOB 6739 Academy

SUBJECT Drainage

JOB NO. _____

SHEET 2 OF 2

BY MG

DATE 7/26/90

CHECKED _____

DATE _____

Peak Runoff to Swale N. of Bldg.

$$P = 2.3 \text{ in}$$

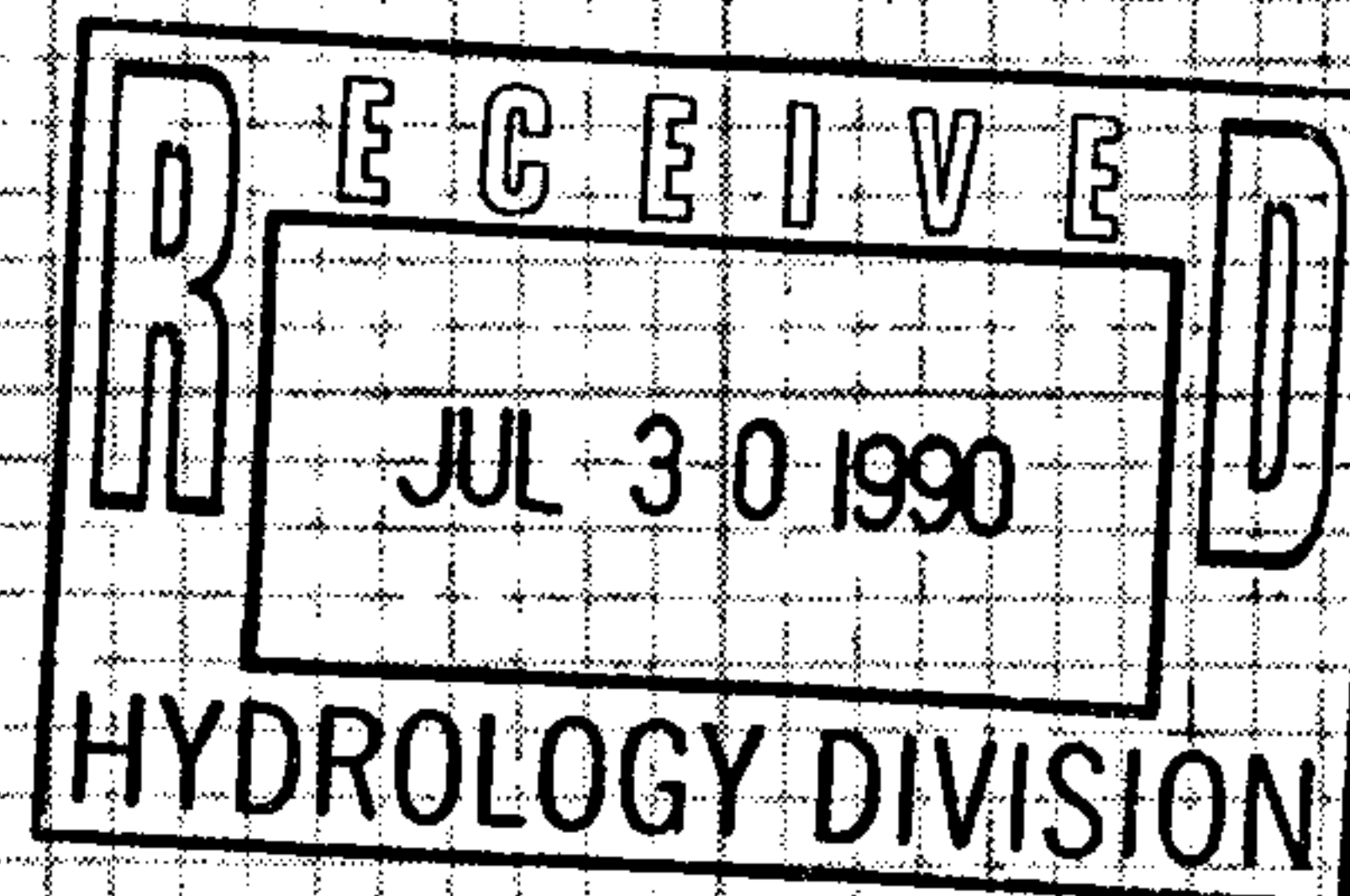
$$C = 0.60$$

$$T_c = 4.5 \text{ min.}$$

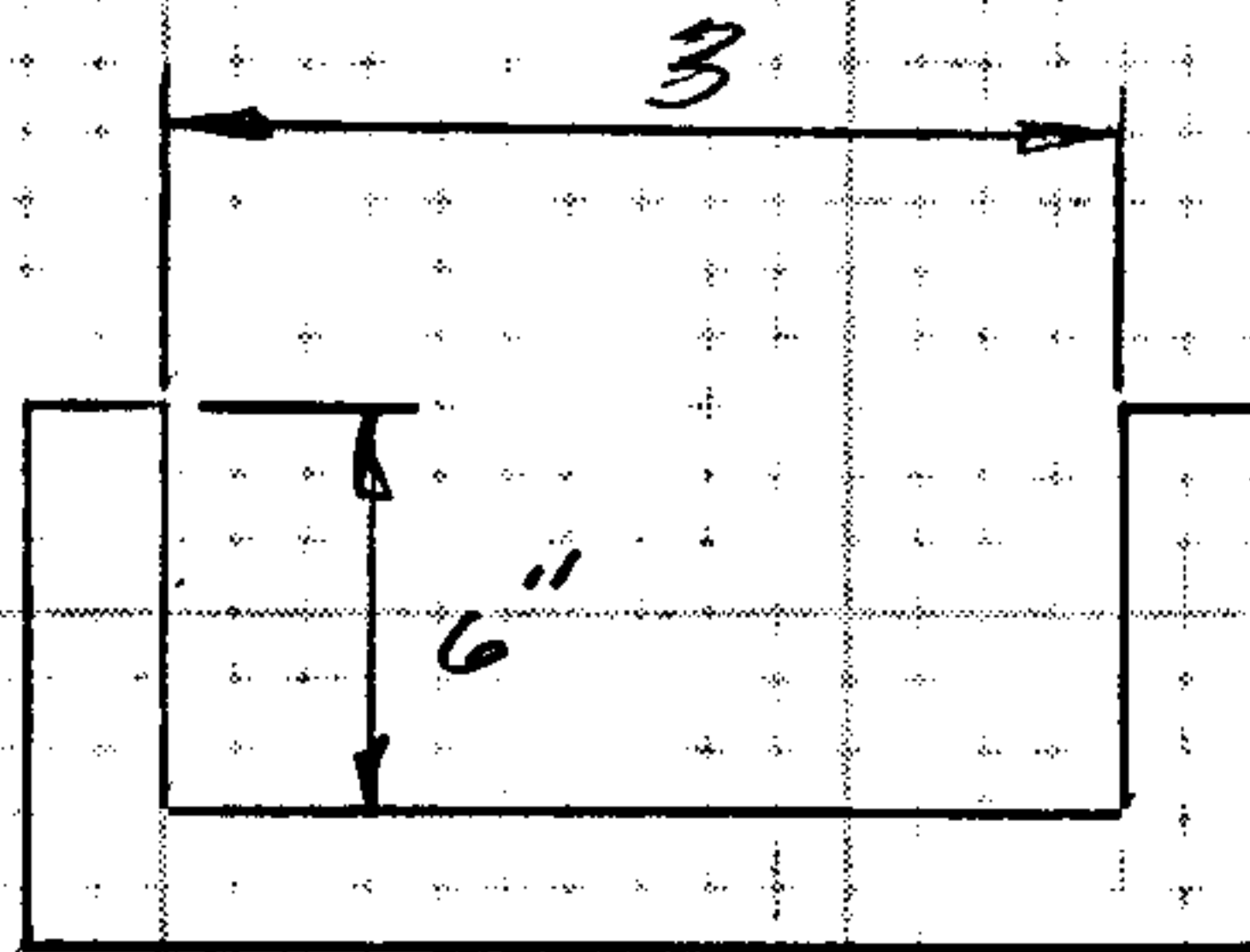
$$I_{100} = 7.31 \text{ in/hr}$$

$$A = 0.93 \text{ Ac.}$$

$$Q_{100} = 4 \text{ cfs}$$



CAPACITY of Swale



$$n = 0.015$$

$$S = 0.5\%$$

$$A = 1.5 \text{ ft}^2$$

$$WP = 4'$$

$$V = \frac{1.486}{0.015} \left(\frac{1.5}{A} \right)^{2/3} (.005)^{1/2} = 3.64 \text{ fps}$$

$$Q = 5.46 \text{ cfs} > 4 \text{ cfs} \quad \text{o.k.}$$