SOUTH
TECHNICAL
SERVICE
CENTER

TECHNICAL NOTE

Subject: **ECONOMICS**

Series No.: **605**

Reference: **Urban Flood Damages - URB-1 Computer Program**

Date: **October 1978**

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USDA-SCS-FORT WORTH, TEXAS 1978

SOIL CONSERVATION SERVICE
U. S. DEPARTMENT OF AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
South Regional Technical Service Center
Engineering and Watershed Planning Unit
Fort Worth, Texas

April 4, 1975

EWP TECHNICAL GUIDE NO. 43

Re: WS and RC&D - Economics - Urban Flood Damages - URB-1 Computer Program

TSC Advisory Mgt FW-4 transmitting the program description for the URB-1 computer program states that "since stationing for each alternate must be along a common base line, tributaries should not be included with the mainstem within an alternate." We have found that tributaries can be included with the mainstem by handling each tributary as a separate reach and adjusting the stationing along the tributary to have a sequential numbering starting with the station on the main channel at the tributary junction.

The evaluation should start along the main channel going upstream using the measured stations. The main floodplain may be one reach or divided into several reaches. To evaluate damages on tributaries along with the main floodplain, change the station numbering on the tributaries. For example, 50,000 feet may be added to the station on the main and that number added to each station on the tributary. If the station on the main channel is 2000 feet, this, as far as the tributary is concerned, may be changed to 52,000. The 52,000 would be added to the stations along the tributary. Tributary stations 100, 200, 300 etc., would be changed to 52,100, 52,200, 52,300, etc. See the attached map and Reach Data input data sheet for illustrated examples.

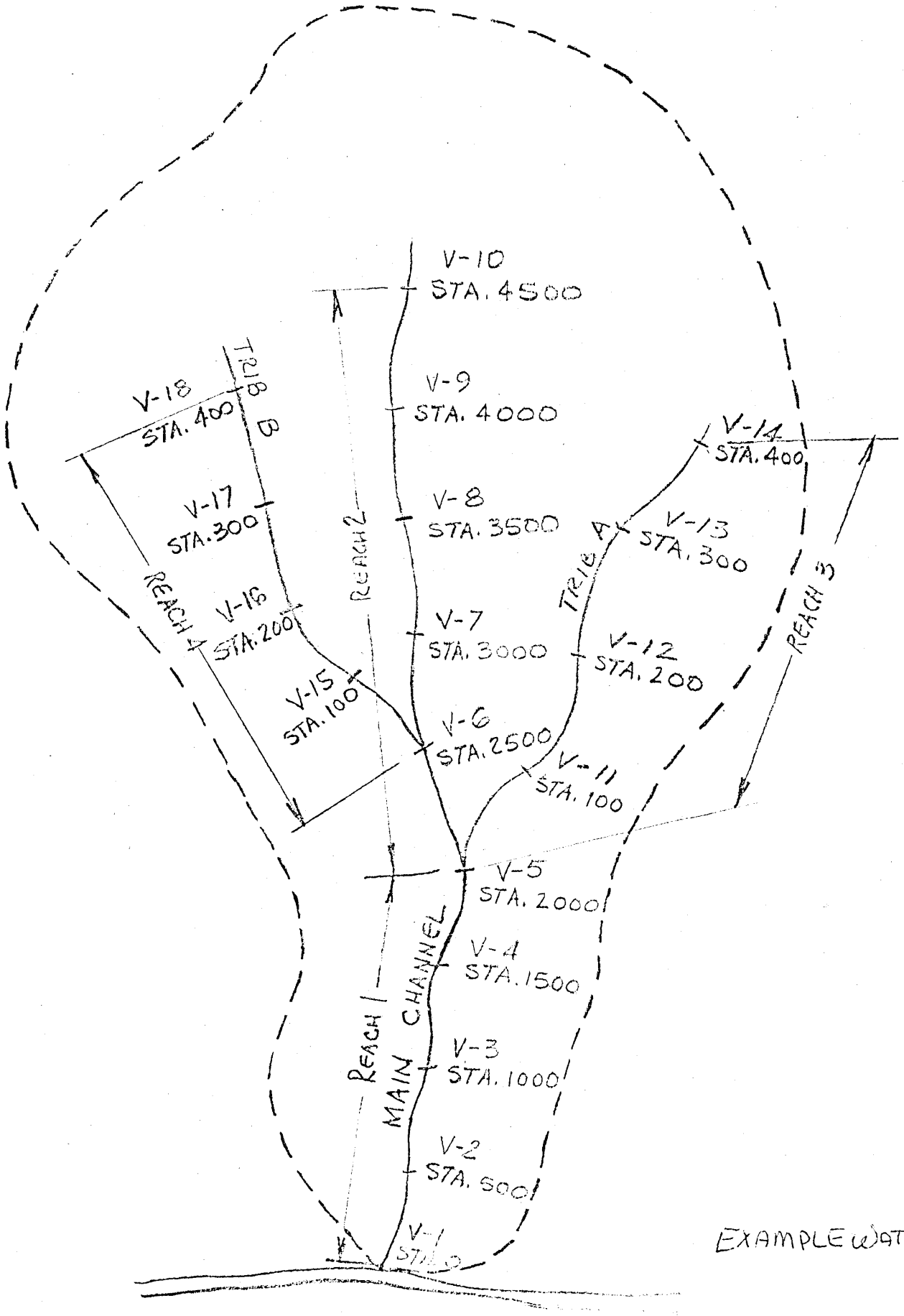
Stationing for the residences along the tributary will also need the same adjustments. In such cases we will not be changing the distances; only fooling the computer so we can make one evaluation run for the watershed for each alternate.

Thomas C. Hodges
Agricultural Economist

Jack Alair
Head, E&WP Unit

Attachments

DIR (TSC)
WO - DIR: ENG, WP, RB, MGT DIVS.



EXAMPLE WATERSHED

SCS-MGT-1
REV. 1-72

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URB1 EVALUATION REACH DATA

EXAMPLE WATERSHED (JOB OR PROJECT) BY TH CHECKED RFR DATE 4-4-75

1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80
Control Word	Name	Section Name	Section Name	Section Name	Section Name	Section Name	Card Ident.
REACH	1	1	2	3	4	5	
END TABLE							
REACH	2	5	6	7	8	9	
		10					
END TABLE							
REACH	3	5A	11	12	13	14	
END TABLE							
REACH	4	6A	15	16	17	18	
END TABLE							
REACH							
END TABLE							

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URB1 UPDATE HEADER CARD
CROSS SECTION DATA

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EXAMPLE WATERSHED BY TH CHECKED RFR DATE 4-4-75
(JOB OR PROJECT)

1-10	11-20		21-30	31-40	41-50	51-60	61-70	71-80
Control Word	Name		Elev. Damage Begins			Valley Stationing	Percent Sample	Card Ident.
CRØSS	1					0		
CRØSS	2					500		
CRØSS	3					1000		
CRØSS	4					1500		
CRØSS	5					2000		
CRØSS	6					2500		
CRØSS	7					3000		
CRØSS	8					3500		
CRØSS	9					4000		
CRØSS	10					4500		
CRØSS	5A					52000		
CRØSS	11					52100		
CRØSS	12					52200		
CRØSS	13					52300		
CRØSS	14					52400		
CRØSS	6A					62500		
CRØSS	15					62600		
CRØSS	16					62700		
CRØSS	17					62800		
CRØSS	19					62900		
CRØSS								
CRØSS								
CRØSS								

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