

SUPPLEMENTAL WATERSHED WORK PLAN AGREEMENT NUMBER III

between the

Denton-Wise Soil and Water Conservation District  
(Local Organization)

Upper Elm-Red Soil and Water Conservation District  
(Local Organization)

Dalworth Soil and Water Conservation District  
(Local Organization)

Upper West Fork Soil and Water Conservation District  
(Local Organization)

City of Decatur, Texas  
(Local Organization)

Montague County Commissioners Court  
(Local Organization)

Wise County Commissioners Court  
(Local Organization)

Denton County Commissioners Court  
(Local Organization)

STATE OF Texas  
(hereinafter referred to as the local organization)

and the

SOIL CONSERVATION SERVICE  
UNITED STATES DEPARTMENT OF AGRICULTURE  
(hereinafter referred to as the Service)

Whereas, the Watershed Work Plan Agreement for Denton Creek Watershed, State of Texas, executed by the Sponsoring Local Organization named herein and the Service, became effective on the 18th day of October, 1956; and

Whereas, the Supplemental Watershed Work Plan Agreement Number I executed by the Sponsoring Local Organization named herein and the Service, became effective on the 5th day of July, 1966; and the Supplemental Watershed Work Plan Agreement Number II executed by the Sponsoring Local Organization named herein and the Service, became effective on the 1st day of December, 1969; and

Whereas, in order to carry out the watershed work plan for said watershed, it has become necessary to modify said Watershed Work Plan Agreement to provide for installation, operation, and maintenance of works of improvement; and

Whereas, it was found necessary to modify the work plan to add 1.16 miles of stream channel improvement; and

Whereas, a Supplemental Watershed Work Plan which modifies the Watershed Work Plan dated June 1956, as supplemented, for said watershed has been developed through the cooperative efforts of the Sponsoring Local Organization and the Service, which plan is annexed to and made a part of this agreement; and

Whereas, the County will benefit from installation of works of improvement through reduction of damages to property, including county roads and bridges located in the flood plain of the watershed. Therefore, the Wise County Commissioners Court agrees to obtain necessary land rights and operate and maintain the structural measures included in this supplement.

Now, therefore, in view of the foregoing considerations, the Sponsoring Local Organization and the Secretary of Agriculture, through the Service, hereby agree on the Supplemental Work Plan Number III, and further agree that the works of improvement as set forth in said plan can be installed in the remaining 6 years of the installation period.

It is mutually agreed that in installing and operating and maintaining the works of improvement substantially in accordance with the terms, conditions, and stipulations provided for in the Supplemental Watershed Work Plan Number III:

1. The Sponsoring Local Organization will acquire such land rights as will be needed in connection with works of improvement. (Estimated cost \$16,100)

The percentages of this cost to be borne by the Sponsoring Local Organization and the Service, as provided in the attached work plan, are as follows:

<u>Works of Improvement</u>	<u>Sponsoring Local Organization</u> (percent)	<u>Service</u> (percent)	<u>Estimated Cost</u> (dollars)
1.16 Miles of Stream Channel Improvement	100.00	0	16,100 <u>1/</u>

1/ Includes \$200 legal fees.

2. The Sponsoring Local Organization in accordance with the Supplemental Watershed Work Plan will acquire or provide assurance that landowners or water users have acquired such water rights pursuant to State law as may be needed in the installation and operations of works of improvement.

3. The percentages of construction costs of structural measures to be paid by the Sponsoring Local Organization and by the Service are as follows:

<u>Works of Improvement</u>	<u>Sponsoring Local Organization</u> (percent)	<u>Service</u> (percent)	<u>Estimated Construction Cost</u> (dollars)
1.16 Miles of Stream Channel Improvement	0	100.00	118,400

4. The percentages of cost for engineering services and project administration borne by the Sponsoring Local Organization and the Service are as follows:

<u>Works of Improvement</u>	<u>Sponsoring Local Organization</u> (percent)	<u>Service</u> (percent)	<u>Estimated Engineering Services and Project Administration Cost</u> (dollars)
1.16 Miles of Stream Channel Improvement	0	100.00	28,240

5. The Service will award and administer the contracts covering construction of all structural works of improvement.

The Sponsoring Local Organization and the Service further agree to all other terms, conditions, and stipulations of said Watershed Work Plan Agreement not modified herein.

Denton-Wise Soil and Water Conservation District

Local Organization

By *Bob Kuckas*

Title *Chairman*

Date *6-2-70*

The signing of this agreement was authorized by a resolution of the governing body of the Denton-Wise Soil and Water Conservation District

Local Organization

adopted at a meeting held on *June 2, 1970*

*Leonard W. Harper*  
(Secretary, Local Organization)

Date *June 2, 1970*

Upper Elm-Red Soil and Water Conservation District

Local Organization

By *Harold Stagg*

Title *Chairman*

Date *June 11, 1970*

The signing of this agreement was authorized by a resolution of the governing body of the Upper Elm-Red Soil and Water Conservation District

Local Organization

adopted at a meeting held on *June 11, 1970*

*Ruthie Kempkin*  
(Secretary, Local Organization)

Date *June 11, 1970*

Dalworth Soil and Water Conservation District  
Local Organization

By Tav C. Rupton  
Title Chairman  
Date 5-19-70

The signing of this agreement was authorized by a resolution of the governing body of the Dalworth Soil and Water Conservation District  
Local Organization

adopted at a meeting held on 5-19-70

5-19-70  
(Secretary, Local Organization)  
Date D. H. Skinner

Montague County Commissioners Court  
Local Organization

By E. G. Jones  
Title County Judge  
Date May 22, 1970

The signing of this agreement was authorized by a resolution of the governing body of the Montague County Commissioners Court  
Local Organization

adopted at a meeting held on May 22, 1970

Glen Pribble  
(Secretary, Local Organization)  
Date 5-22-70

Upper West Fork Soil and Water Conservation District  
Local Organization

By Ellis Zandauer  
Title Chairman  
Date 6/14/70

The signing of this agreement was authorized by a resolution of the governing body of the Upper West Fork Soil and Water Conservation District  
Local Organization

adopted at a meeting held on \_\_\_\_\_

Tom Clippard  
(Secretary, Local Organization)

Date 6-14-70

City of Decatur, Texas  
Local Organization

By Michael L. Stone  
Title Mayor Pro Tem  
Date 6-1-70

The signing of this agreement was authorized by a resolution of the governing body of the City of Decatur, Texas  
Local Organization

adopted at a meeting held on 6-1-70

Sam W. Rouben  
(Secretary, Local Organization)

Date 6/1/70

Wise County Commissioners Court

Local Organization

By John A. Kandler  
Title Wise County Judge  
Date May 26, 1970

The signing of this agreement was authorized by a resolution of the governing body of the Wise County Commissioners Court  
Local Organization

adopted at a meeting held on 5-26-70

Patricia Jordan  
(Secretary, Local Organization)

Date 5-26-70

Denton County Commissioners Court

Local Organization

By Paul L. Hill  
Title County Judge  
Date 6-8-70

The signing of this agreement was authorized by a resolution of the governing body of the Denton County Commissioners Court  
Local Organization

adopted at a meeting held on June 8, 1970

Shirley Parker  
(Secretary, Local Organization)

Date 6-8-70

Soil Conservation Service  
United States Department of Agriculture

By Clyde W. Johnson  
Date 6-18-70

SUPPLEMENTAL

WATERSHED WORK PLAN NUMBER III

DENTON CREEK WATERSHED  
of the Trinity River Watershed  
Montague, Wise, Denton, Cooke, and Tarrant Counties, Texas

May 1970

INTRODUCTION

Authority

The Denton Creek Watershed Flood Prevention Project will be carried out under the authority of the Soil Conservation Act of 1935 (Public Law No. 46, 74th Congress), the Flood Control Act of 1936 (Public Law No. 738, 74th Congress), and the Flood Control Act of 1944 (Public Law No. 534, 78th Congress), as amended and supplemented.

Purpose

The purpose of this supplement is to modify the 1956 work plan as revised and supplemented to add to the planned stream channel improvement on the main stem.

Change in Major Features

This supplement will extend the planned stream channel improvement on the main stem approximately 1.16 miles downstream resulting in a total of 44.42 miles for the watershed (see figures 2 and 2A). This constitutes the only change in planned structural measures.

### BASIS FOR PROJECT FORMULATION

Construction experience and detailed surveys in the watershed have shown that a more suitable outlet is needed for the stream channel improvement than that provided in the 1965 Supplemental Work Plan. Therefore, the sponsors of the Denton Creek watershed project have requested that the planned stream channel improvement on the main stem be extended downstream to a more suitable outlet.

### WORKS OF IMPROVEMENT TO BE INSTALLED

#### Land Treatment Measures

Land treatment is being carried out as provided under the 1956 work plan as supplemented.

#### Structural Measures

The planned stream channel improvement on the main stem will be extended approximately 1.16 miles downstream.

With the extension, the improved channel will outlet just above and on grade with an outcrop of hard durable limestone which will preclude or minimize degradation of the channel upstream.

The estimated cost of the extension of the stream channel improvement is \$162,740. Details on quantities, cost, and design features are shown in tables 2 and 3A.

### EXPLANATION OF INSTALLATION COSTS

The local cost for the channel extension is estimated to be \$16,800, which consists of \$15,900 for land rights, \$200 for legal fees, and \$700 for project administration.

Construction costs for the channel extension are estimated to be \$118,400, which includes the engineer's estimate and a 10 percent allowance for contingencies. The cost of engineering services is estimated to be \$7,100 and project administration \$20,440. The total construction, engineering services, and project administration is \$145,940.

The total cost of the channel extension is \$162,740.

#### COMPARISON OF BENEFITS AND COSTS

Total benefits accruing to the structural measures included in the entire Denton Creek project consist of damage reductions, more intensive land use, incidental recreation, and secondary benefits. These average annual benefits of \$633,065 as compared to the annual cost of \$463,900, which includes operation and maintenance, gives a benefit-cost ratio of 1.36:1.

The 1.36:1 benefit-cost ratio for the watershed is maintained because the benefits accruing to the channel extension offset the increased costs.

#### PROJECT INSTALLATION

The Soil Conservation Service will <sup>contract</sup> ~~contract~~ prior to July 1, 1970, for the construction of six miles of stream channel improvement which includes the 1.16 mile extension. This six mile segment of channel improvement is expected to be constructed during fiscal year 1971.

#### PROVISIONS FOR OPERATION AND MAINTENANCE

##### Structural Measures

The Wise County Commissioners Court will be responsible for operation and maintenance of the additional 1.16 miles of channel improvement.

TABLE 2  
 ESTIMATED STRUCTURAL COST DISTRIBUTION  
 CHANNEL EXTENSION  
 Denton Creek Watershed, Texas  
 (Trinity River Watershed)

Item	Installation Cost - Federal Funds			Installation Cost - Other Funds			Total Installation Cost
	Construction	Engineering	Land	Construction	Engineering	Land	
Subtotal 1965 Supplement As Revised and Supplement							
No. II, Oliver Creek	7,746,580	852,120	96,940	8,695,640	182,220	9,110	562,100
Project Administration	-	-	-	1,070,890	-	-	53,540
Total	7,746,580	852,120	96,940	9,766,530	182,220	9,110	562,100
Channel Improvement Extension	118,400	7,100	-	125,500	-	-	16,100
Project Administration	-	-	-	20,440	-	-	700
Total	118,400	7,100	-	145,940	-	-	16,100
Total Installation Cost	7,864,980	859,220	96,940	8,821,140	182,220	9,110	578,200
Total Project Administration	-	-	-	1,091,330	-	-	54,240
Grand Total	7,864,980	859,220	96,940	9,12,470	182,220	9,110	578,200

Annual Cost 1/ - \$463,900  
 Annual Benefits - \$633,065  
 Benefit-Cost Ratio - 1.36:1

1/ Annual cost includes \$36,370 for operation and maintenance.

TABLE 3A  
STRUCTURE DATA  
CHANNEL

Denton Creek Watershed, Texas.  
(Trinity River Watershed)

Channel: (No. or: Sta. or: Reach : Req'd: Design: (ft/ft) : Bottom(ft): Depth(ft): Side Slopes: Aged : As Built: Aged : As Built: Cu.Yds.: ment	Capacity cfs	Hydraulic: Gradient :	Channel Dimensions l/	"n" Value	Velocities	Excava-:Type of tion : Improve-			
Denton 1362+40 To 1376+05	6390	0.00086	34	1.5:1	.030	.025	6.35	7.65	C & S
To 1423+50			26	2:1					CE
			26	2:1					243

1/ Where excavation is not planned, show cross sectional area and wetted perimeter below hydraulic grade line.  
2/ C & S-Clearing and Snagging  
CE-Channel Enlargement

May 1970

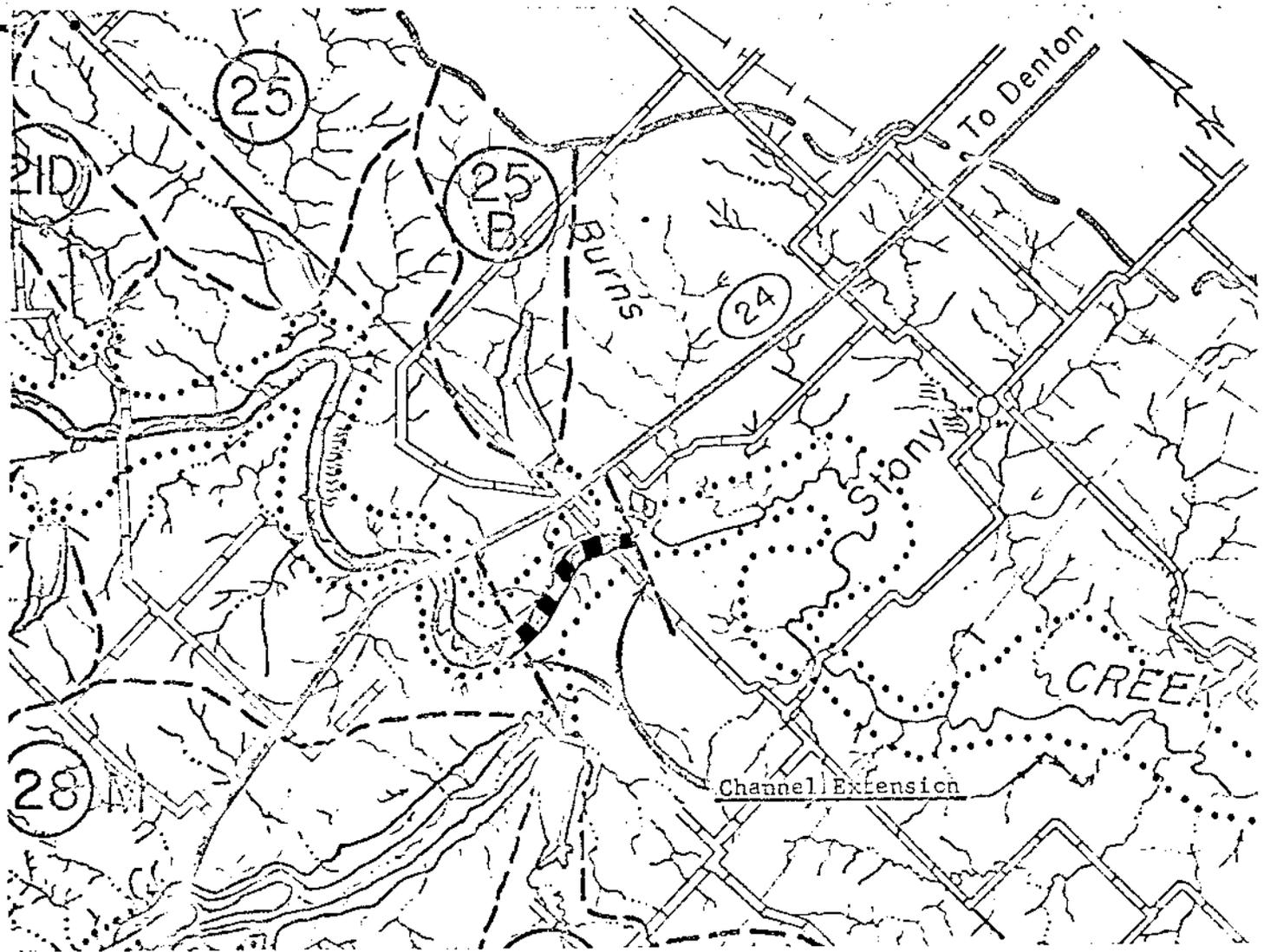


Figure 2A

Project Map  
Showing Channel Extension  
Denton Creek Watershed  
of the  
Trinity River Watershed

May 1970