

L. Scott Tucker, Executive Director

August 25, 1975

Executive Committee:

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Adams County
John J. Nicholl

Arapahoe County
Wally Toevs
Boulder County
James J. Richey
City of Lakewood

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Engineer

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City of Boulder 1

Mr. Leonard Rice
President,
LEONARD RICE CONSULTING
WATER ENGINEERS, INC.
2785 North Speer Boulevard
Denver, Colorado 80211

Dear Lee:

This letter authorizes you to proceed with the flood damage documentation for the Niver Creek basin as outlined in your letter to me dated August 20, 1975 (copy enclosed). I would like to expand the scope of work to include a second storm which occurred on July 16, causing considerable damage in Federal Heights and some additional problems in Thornton and Adams County.

I would like you to work with a budget figure of \$800.00. Please let me know, as soon as possible, if it appears you will exceed that amount.

I have enclosed copies of information we have collected to date. As soon as your personnel scheduling permits, we should get together to discuss this effort in greater detail.

This is a pioneering effort for the District, and we look forward to working with you.

Sincerely

0'()

Bill DeGroot

Administrator, Flood Plain Management Program

WGD/bac

Enclosures



## Leonard Rice Consulting Water Engineers, Inc.

(303) 455-9589 / 2785 North Speer Boulevard / Denver, Colorado 80211

Leonard Rice Harold F. Bishop Marianne McGalliard

OFFICES IN Denver, Colorado Albuquerque, N.M.

August 20, 1975

Mr. Bill DeGroot Urban Drainage & Flood Control District 181 E. 56th Avenue Denver, Colorado 80216

## Dear Bill:

In accordance with our telephone conversation of August 19, 1975, we are prepared to provide engineering services in connection with collecting and analyzing data related to the nature and extent of flooding and resulting damages from the storm of July 14, 1975 in Thornton in Adams County, Colorado. Our work will involve contacting local officials such as Bob Fleming and Bill Wilson of Adams County, Jim Keller of Thornton, the U.S.G.S. and other that might have or know of information describing the amount of rainfall, extent of flooded areas, depth and discharge of stormwater runoff, and value of damages sustained. The data collected will be described and analyzed to the extent possible to relate damages to depth of flooding and to provide a description of the magnitude and effect of the storm. At the beginning of the study we will meet with you to clarify our assignment and discuss the data already collected by the District and others.

Our work will be performed on a time and material basis in accordance with the following schedule of costs:

Leonard Rice	•	\$34.00	per	hour
A 1-10 CAMPACT AND	:	32.00	,	11
Marianne McGalliard	:E	17.00	.11	17
Guy Leonard	:	21.00	11	"
Leslie Botham	:	21.00	**	99
Steve Abt	:	18.00	11	
Mike Boyd	:	13.00	**	17
Ron McElrath	:	16.00	17	99
Joan Bone	:	12.00	11	11
Expenses at cost +	10%			

To confirm our understanding of this assignment and authorize us to proceed, we would appreciate it if you would sign a copy of this letter and return it to us for our files.

Mr. Bill DeGroot UDFCD

August 20, 1975

We appreciate your considering our firm and look forward to working with you.

Very truly yours,

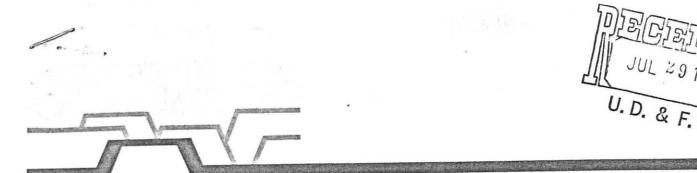
LEONARD RICE CONSULTING WATER ENGINEERS, INC.

Leonard Rice

LR/jb

Authorized Signature

Date



TOWNHALL, 2380 WEST 90TH AVENUE • FEDERAL HEIGHTS, COLORADO 80221 • TELEPHONE 428-3526

July 28, 1975

Mr. L. Scott Tucker
Executive Director
Urban Drainage and Flood Control District
Lucas Building
181 East 56th Avenue
Denver, CO 80216

Dear Mr. Tucker:

In a memorandum dated April 28, 1975, you requested comments regarding the Urban Drainage and Flood Control District Five-Year Capital Projects Plan. In a recent telephone conversation with Mr. Koldstad of your office, I was informed that the Board has not yet taken final action on the plan. In light of this, I would like to submit the following:

On July 16, 1975, Federal Heights experienced a storm and subsequent flood that may have been of 100-year intensity.\* The results of this storm, which are outlined in the enclosed memorandum and newspaper account, were somewhat severe and pointed out several inadequacies in the drainage provisions for the affected area.

The Town of Federal Heights, therefore, would like to request that tributary M of Niver Creek be given consideration in the Five-Year Capital Projects Construction Plan of the Urban Drainage and Flood Control District.

At present, the Town is in the position to make only temporary repairs to the area inundated. The Town would like to work on more long-term improvements of the drainage system to prevent this type of damage from reoccurring.

The Town realizes that flood control measures are best accomplished if coordinated on a regional basis. Therefore, we are asking the Urban Drainage and Flood Control District to offer the Town of Federal Heights any assistance it may be able to offer to help prevent further damage from occurring in this flood hazard area.

Mr. L. Scott Tucker July 28, 1975 PAGE 2

The Town is currently in the process of applying to HUD for participation in the National Flood Insurance Program, is revising its Land Use Regulations, including Flood Hazard Area Regulations, and is contracting with the Adams County Planning Department for assistance in producing a Comprehensive Plan for the Town.

We would appreciate any assistance the Urban Drainage and Flood Control District is able to offer.

Sincerely,

TOWN OF FEDERAL HEIGHTS

. J. Harris

Intern - Federal Heights

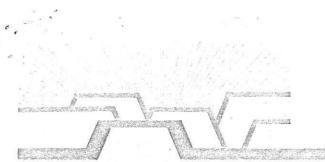
cc: R. Manka cc: D. Fischer

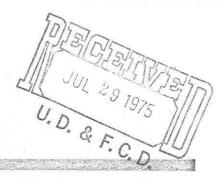
cc: A. A. Gonzales

Enclosures

July 18 Memo from Chief Gonzales Copy of July 24 Sentinel Articles (2 on 1 page) HUD Map showing Flood hazard area

\* Estimated rainfall 3.5" in one hour. Rain Gauge located at point shown on map I collected .6" in 10 minutes before it was damaged by the flood waters.





## FEDERAL HEIGHTS

TOWNHALL, 2380 WEST 90TH AVENUE • FEDERAL HEIGHTS, COLORADO 80221 • TELEPHONE 428-3526

July 18, 1975

Mr. Daniel P. Fischer and Board of Trustees Townhall Federal Heights, CO 80221

SUBJECT: HOLIDAY HILLS FLOOD - POLICE AND FIRE OPERATIONS

On Wednesday, 16 July 1975 at approximately 1645 hours, a storm of severe intensity struck the Town dropping approximately 312 inches of rain in less than one hours time. At 1700 hours, a severe flooding condition existed and all available Police and Fire Personnel were called in and emergency operations were initiated. Due to the severe flooding condition, all of the mobile units in the immediate flood area (as per attached map) were ordered evacuated. The Town Administrator was contacted and requested to set up an emergency flood evacuation center at the new Town Hall. Fire Personnel were assigned the task of sand bagging and debris removal to allow diversion of the flood waters around mobile homes. Eight firemen were assigned to assist police personnel in evacuating the effect dwelling units. The Park Clubhouse was not used as the evacuation point due to the fact that they were experiencing flooding conditions also. As documented in a report by Mr. Manka, city property damage was severe and was compounded by damage done during a previous storm on Monday 14, July 1975.

The evacuation effected 51 mobile home units and some resistance was experienced in getting people to leave their homes. It was felt, however, that due to the possibility of electrical shock and possible gas leak hazards, that evacuation was imperative until all utility connections could be checked and tested. Public Service Company was called in and after a consultation between Chief Martin, myself and Mr. Larry Egan of Public Service Co., it was felt that the evacuation order should stand until the following morning when all available repair crews could be sent in during daylight hours and after the water runoff had subsided to eliminate any possible shock hazard to personnel.



TOWNHALL, 2380 WEST 90TH AVENUE • FEDERAL HEIGHTS, COLORADO 80221 • TELEPHONE 428-3526

July 18, 1975 PAGE 2

On Thursday, 17 July, gas and electric service personnel checked all gas and electrical services for damage. Some loose and bent gas connections (5) were found but no gas leakage. One electrical service was found with a direct short due to a wire having been torn loose, which posed a shock hazard.

The City Electrical Inspector assisted in restoring electrical service and all residents were allowed to return to their residences by 12:00 noon.

An approximate estimate of damage to private property presently is \$25,000.00. This figure will be revised as insurance company information becomes available. This estimate includes the loss of 175' of concrete retaining wall, lost skirting, releveling mobile homes, washed out fences, damage to storm drains and mud damage to mobile units.

Response to the emergency included 24 firemen, (3 paid, 21 volunteers), 9 patrolmen, 3 public works personnel, 9 volunteers to man the evacuation center and feed personnel at the scene. (Firemen's and Department Heads wives).

The operation was coordinated by Chief Martin, Mr. Manka, Mr. Fischer and myself The dispatch office did an excellent job of handling the radio traffic that took place during the entire operation and are to be commended. The operations at the scene were secured at 2245 hours and all personnel returned to quarters.

The response to the situation was overwhelming on the part of the volunteers, their wives and police personnel. Everyone worked together as a team with very few problems. A revised damage estimate will be submitted as soon as accurate figures are available.

Respectfully submitted,

A. A. Gonzales Chief - Fire Department

AAG/sl