

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF
TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE
HELD IN THE DISTRICT OFFICE IN FORT WORTH, TEXAS,
ON THE 21ST DAY OF DECEMBER, 1949, AT 11:00 A.M.

The call of the roll disclosed the presence of Directors,
as follows:

PRESENT

Joe B. Hogsett
Houston Hill
Dan H. Priest
Gaylord J. Stone
W. L. Pier

Also present were Sidney L. Samuels, General Attorney, and C. L.
McNair, General Manager.

Director Hogsett acted in his capacity as President, and
Director Priest acted in his capacity as Secretary, whereupon
proceedings were had and done as follows:

1.

Attached to these Minutes as Exhibit "A" is a statement of
the financial condition of this District to which reference is
made. Exhibit "A" shows that interim voucher-checks #1098 to
#1122, inclusive, for the total sum \$3,925.46 had been issued
since the last meeting; also proposed voucher-checks #1123 to
#1166, inclusive, for the total sum \$5,126.71. There was full
consideration of the proposed voucher-checks and the data to
support same, whereupon Director Priest moved, seconded by Dir-
ector Hill, that the issued voucher-checks above listed be confirmed
and that the accounts payable be approved as covered by the pro-
posed voucher-checks and that such checks be issued and delivered

to the respective persons entitled to receive them. It was so ordered, subject to the usual audit.

2.

The monthly report of the Auditors, Pitner & Adams, for the months of October and November, 1949, were received, presented and ordered filed.

3.

The monthly report dated December 21, 1949, of C. L. McNair, General Manager of the District, for the month of November, 1949, was received, presented and ordered filed as Exhibit "B" to these minutes.

4.

Following the foregoing proceedings, there was placed before the Board and read to them, a communication from the Engineering Firm of Freese and Nichols, acting through Mr. Marvin C. Nichols, which letter or report is dated November 25, 1949, and is supplemental to the General Inspection Report of Eagle Mountain Dam dated July 12, 1949.

On motion of Director Hill, seconded by Director Stone, the said letter or report of Mr. Nichols was directed to be attached to these Minutes and made a part hereof and that Mr. McNair, the General Manager of the District, be authorized to proceed to carry out such instructions in said letter contained regarding maintenance of the dam. The motion having been put to the board, all the Directors voted "aye" thereon, and the motion as thus made, was accordingly adopted.

5.

It was suggested by the President, Mr. Joe B. Hogsett, that moneys be taken out of the Interest and Sinking Fund for the pur-

chase of \$100,000.00 United States 2½% Series "G" Savings Bonds, and that such bonds be placed in the Interest and Sinking Fund as part of such fund in lieu of the moneys taken for the investment purchase. Thereupon Director Pier moved, seconded by Director Priest, that the President, Mr. Joe B. Hogsett, proceed to make the purchase for the benefit of the District's Interest and Sinking Fund of \$100,000.00 United States Savings Bonds, Series "G"; said bonds to be registered in the name of the District. Further, that the registered bonds be placed with the Fort Worth National Bank of Fort Worth, Texas, and that Trust Receipt from said bank be obtained and filed among the archives of the District.

The motion was unanimously carried, all the Directors voting "aye" thereon.

6.

Mr. McNair presented certain proposals for lease of District's lands for the year 1950, which he recommended for approval, as follows:

<u>PROPOSAL OF</u>	<u>APPROX. ACRES</u>	<u>TOTAL CONSIDERATION</u>
James V. Anderson	192.40	\$ 150.00
Mrs. Selma Courtney	109.86	200.00
W.R. Courtney	72.11	75.00
L. E. Dollar	108.51	400.00
B. W. Eason	185.84	250.00
A. C. Fawcett	2.00	150.00
Kenneth Garrett	27.94	200.00
L. M. Holt	86.00	225.00
R. L. Lowdon	69.38	150.00
C. L. McNair	240.52	180.00

<u>PROPOSAL OF</u>	<u>APPROX. ACRES</u>	<u>TOTAL CONSIDERATION</u>
T. C. Mabra	30.00	\$ 70.00
Frank Macias	.20	25.00
W. A. Nelson	1,117.41	550.00
W. B. Reed, Jr.,	106.68	125.00
W. F. Sessions & J. E. Reynolds	176.86	325.00
E. L. Smith	448.43	700.00
Jack Smith, Jr.,	0.50	30.00
R. H. (Bob) Smith	15.00	150.00
W.B. Whitaker	99.54	135.00

Upon consideration of each of the above lease proposals, Director Pier moved, seconded by Director Priest, that the said proposals be approved and closed in the usual manner, subject to the payment of the agreed rentals and execution of written contracts in the form required by the District. It was so ordered.

7.

The General Manager, Mr. C. L. McNair, having recommended the matter, it was ordered by the Board that there be leased by the District to W. R. Willis, a certain four-acre tract of land with a house thereon, being part of the land formerly leased to C. C. Stanford, and that such lease be made on a month to month basis, and that the said Willis pay therefor in advance, at the office of the District, the amount of \$30.00 per month on the second day of each and every month, beginning January 2, 1950.

8.

It appearing to the Board that it had previously orally authorized Mr. McNair, the General Manager of the District, to pur-

chase a four-cylinder 1950 Willys Model 4WD Pickup Truck equipped with heater, at and for a price of \$1,992.50, and from this purchase price there was deducted a Federal Tax of \$71.00; discount of \$192.00, and allowance for the old 1946 Dodge WC Express Pickup Truck amounting to \$417.00, which amounts deducted from the total of the purchase price left a net balance of \$1,312.50 to be paid by the District in the acquisition of the new Willys Model Pickup; and voucher-check No. 1122, dated November 30, 1949, having been issued for said amount \$1,312.50, and it having been reported to the Board that such truck had been purchased in conformity with oral instructions from the Board, thereupon, Director Priest moved, seconded by Director Hill, that the action of Mr. McNair in making such purchase and the issuance of said voucher-check, be hereby confirmed and ratified, all the directors voting "aye" thereon.

9.

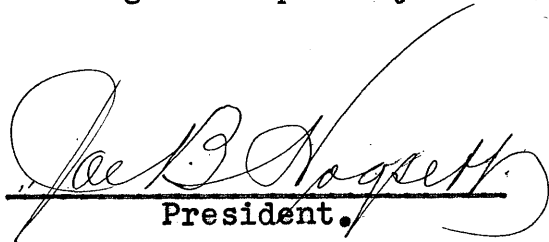
There was presented to the Board for action an application by Texas Power and Light Company of Dallas, Texas, for an easement for an electric transmission or distribution line consisting of wires, towers, frames or poles over properties of the District in Wise County, Texas, which request or application is in writing, and the matter having been considered by the Board, on motion of Director Hill, seconded by Director Stone, it was ordered that the easement should be granted and should be executed by the President of the Board on behalf of

the District.

The motion having been placed before the meeting, the same was unanimously passed, all the directors voting "aye" thereon.

10.

There being no further business before the Board, the meeting thereupon adjourned.



President.



Secretary.

EXHIBIT "A" TO MINUTES OF DECEMBER 21, 1949.
at 11:00 A.M.
TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE
VOUCHER-CHECKS ISSUED NOVEMBER 30, 1949, #1098 TO #1122, INCL.

<u>NO.</u>	<u>I S S U E D</u>	<u>T O</u>	<u>C O V E R I N G</u>	<u>A M O U N T</u>
1098	VOID		VOID	\$ VOID
1099	C. L. McNair		(Salary, November, 1949 \$600.00) (Less: Withholding Tax <u>51.10</u>)	548.90
1100	E. B. Cheatham		(Salary, Nov. 1949 \$350.00) (Less: Withholding <u>27.10</u>)	322.90
1101	Myrtle Hartmeister		(Salary, Nov. 1949 \$185.00) (Less: Withholding Tax <u>19.50</u>)	165.50
1102	B. W. Bintliff		(Salary, Nov. 1949 \$225.00) (Less: Withholding Tax <u>17.20</u>)	207.80
1103	Will Massingill		(Salary, Nov. 1949 \$165.00) (Less: Withholding Tax <u>None</u>)	165.00
1104	W. H. Hutcheson		(Salary, Nov. 1949 \$175.00) (Less: Withholding Tax <u>9.40</u>)	165.60
1105	Southwestern Bell Tel. Co.		(Phone Service: FO-2848 from) (11-1-49 to 11-30-49 \$12.23) (E. M. Phone 6-3398:) (11-16-49 to 12-16-49 <u>18.95</u>)	31.18
1106	The Southwestern States Tel. Co.	Phone Service--Bridgeport Dam		6.70
1107	Tri-County Elec. Cooperative, Inc.		(Electric Service for Eagle) (Mountain Range Lights from) (10-20-49 to 11-20-49.)	8.58
1108	Joe B. Hogsett		Director's Fees, November, 1949	10.00
1109	Houston Hill		Director's Fees, November, 1949	10.00
1110	Dan H. Priest		Director's Fees, November, 1949	10.00
1111	Gaylord J. Stone		Director's Fees, November, 1949	10.00
1112	W. L. Pier		Director's Fees, November, 1949	10.00
1113	Charles Lamance		(Labor at E. M. Nov. 1949) (192 hrs. @ 75¢ per hr. \$144.00) (Less: Withholding Tax <u>None</u>)	144.00
1114	J. W. Lamance		(Labor at E. M. Nov. 1949) (200 Hrs. @ 75¢ per hr. \$150.00) (Less: Withholding Tax <u>None</u>)	150.00
1115	Sidney L. Samuels		(Legal Services as General) (Attorney, Nov. 1949.)	300.00
1116	Bennie Paul Starnes		(Labor at B.P. Nov. 1949) (188 hrs. @ 75¢ per hr. \$141.00) (Less: Withholding Tax <u>8.40</u>)	132.60
1117	Harve Morrow		(Labor at B.P. Nov. 1949) (68 hrs. @ 75¢ per hr. \$ 51.00) (Less: Withholding Tax <u>2.70</u>)	48.30
1118	I. V. Robinson		(Labor at B. P. Nov. 1949) (24 Hrs. @ 75¢ per hr. \$18.00) (Less: Withholding Tax <u>1.95</u>)	16.05
1119	J. B. Boulware		(Labor and material changing) (over Electric line for water) (pump at Bridgeport.)	8.00
1120	Roy Raven		(Electric wiring for well house) (at Bridgeport.) (3 hours at \$1.50 per hour)	4.50

Continued.

TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE
VOUCHER-CHECKS ISSUED NOVEMBER 30, 1949, #1098 TO #1122, INCL.

<u>NO.</u>	<u>I S S U E D</u>	<u>T O</u>	<u>C O V E R I N G</u>	<u>AMOUNT</u>
1121	Continental National Bank	Fort Worth, Texas.	Withholding Taxes	\$ 137.35
1122	Fort Worth Willys-Overland	Company	(One 4-Cylinder 1950 Willys) (Model 4WD Pickup, Engine) (Number 4T 44113. . \$1,955.00) (Heater. 37.50) (\$1,992.50) (Less: Federal Tax 71.00) (\$1,921.50) (Less: Discount 192.00) (\$1,729.50) (Less: Allowance for (1946 Dodge W.C. Ex- (press Motor #T112- (124919 (Serial #81158273 417.00)	1,312.50
T O T A L				\$ 3,925.46

DISTRIBUTION OF VOUCHER-CHECKS #1098 TO #1122, INCL.

Directors	\$ 50.00
General Manager	600.00
Office	547.23
Legal	300.00

EAGLE MOUNTAIN LAKE:

Custodian's Salary	\$ 225.00	
Assistant Custodian's Salary	165.00	
Phone Service	18.95	
Electric Service: Range Lights	8.58	
Labor	294.00	711.53

LAKE BRIDGEPORT:

Custodian's Salary	\$ 175.00	
Phone Service	6.70	
Labor	222.50	
(One 4-Cylinder 1950 Willys		
(Model 4WD Pickup	1,312.50	1,716.70

T O T A L \$ 3,925.46

TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE

VOUCHER-CHECKS #1123 TO #1166, INCLUSIVE.

<u>I S S U E D</u>	<u>T O</u>	<u>C O V E R I N G</u>	<u>A M O U N T</u>
Danciger Building		Office Rent December, 1949	\$ 260.00
Trammell's		(14 Joints (3/4 In. Pipe)) (294 ft. @ 13 1/4 foot)	39.69
Fort Worth Office Supply		(One #3376 Alum. C 525) (G. F. Chair \$51.64) (Misc. Office) (Supplies. . . . 8.45)	60.09
Owen T. Funk		(Engineering Services 11-1-49) (to 11-30-49, incl.) (187 hrs. @ \$2.50 per hr. \$467.50) (Overhead & Contingency 55.18) (Auto mileage:) (691 Mi. @ 7¢ per mi. 48.37) (Labor 156.50)	727.55
Magnolia Petroleum Company		(Oil & Gas. E. M.) (Boats. . . \$ 28.05) (Trucks. . 21.42)	49.47
Johnnie Johnson Tire Company		(Repairs for Ford Pickup Truck) (at Eagle Mountain.)	1.00
Gary-Nees Company		Misc. Works Supplies, B. P.	19.44
Rex H. Bird Motor Company		(1 Carburetor Kit \$ 4.09) (1 qt. Oil .40)BP (3 gal. Anti freeze 9.00)	13.49
A.T. Holt Plumbing Shop		(13' Orangeburg Pipe \$4.55) (One 1 1/4 Union .50)BP	5.05
Jones Hardware		(General Maintenance) (Supplies, B. P.)	3.85
Azle Tile Company		(Cement Blocks:) (419 x 12 @ 8 1/4¢ \$35.61) (52 x 10 @ 8 1/4¢ 4.42) (13 x 1/2 @ 6 1/4¢ .84)	40.87
Wagner Paint Company		(Paint & Supplies) (used on Parrish lease.)	43.35
Morrison Supply Company		(84' 4" - 1 1/4 Galv.) (Pipe T&C @ \$22.40 C')	18.89
VOID		void	VOID
Continental Oil Company		Oil and Gas Dist. Chevrolet Sedan	12.46
Warren Donaldson		(One 300 gal. Septic Tank \$32.50) (100 ft. 4" Drain Tile 10.00) (36 ft. 4' Sewer Pipe 4.32) (14 x 4 Sewer Y .80)	47.62
Maxwell Steel Company		(2 Monorail Units as per drawing) (by Fræse & Nichols for E. M.) (and B. P. Dams.)	175.00
Marion Herring Boat Works		(Expense Eagle Mountain) (Patrol Boats.)	99.46
Banner Garage & Service Sta.		(Oil and Gas and Parking Dis-) (trict's Chevrolet Sedan during) (the month of Nov. 1949.)	36.56

Continued.

TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE.

VOUCHER-CHECKS #1123, TO #1166, INCL.

<u>I S S U E D</u>	<u>T O</u>	<u>C O V E R I N G</u>	<u>A M O U N T</u>
Roberts & Rhea		(Additional Premium on Centennial Policy #F 42 R 4592, (vacancy clause from 11-22-49 to 2-22-50.)	\$ 3.60
Glen Walker, Collett & Rigg		(On 1946 Dodge Express Truck (Prem. should have been \$20.25) (we were billed for 18.90) (Balance due. \$ 1.35) (12-5-49 by endorsement (substitution of 1950 Willys Pickup, instead of 1946 Dodge Express Truck. 15.90))	17.25
Wall Machinery & Supply Co.		(One 3/8x12 Star Drill Top \$2.33) (Misc. pipe fittings for (installing water line (to house on Parrish Tr. 6.00))	8.33
Trinity Lumber Corp.		(Material for building well) (house on Parrish lease.)	26.04
Butram Appliance Company		(1½ Sq. ft. Gaskett material) (at 90¢ sq. ft. B.P.)	1.35
Texas Power & Light Company		(Elec. Service to Custodian's (Residence B. P. \$10.83) (Camp House B.P. 2.83)	13.66
Maxwell Steel Company		(125 Eighty Rod Reels Heavy) (Barb Wire @ \$6.51 \$813.75) (13 Twenty Rod Rolls) (wolf Proof Fence) (at 7.10. 92.30) (2 Kegs Galv. Fence) (Staples @ \$9.29 Cwt. 18.58) (\$ 924.63) (Less: Discount. . . 4.62))	920.01
Vernon Law Book Company		(1949 p.p. for Vol. 21.) (Vernon's Annotated Tex. Statute))	2.00
The Southwestern States Tel.Co.		Phone Service B. P. Dam	3.35
Fort Worth Typewriter Exchange		(1 Box 8½x13 Carbon Paper) (1 Ribbon for Typewriter)	4.75
Frank Kent Motor Company		(Wash & Lubricate \$ 2.00) (Grease .55) (Parts 6.30) (E.M. Ford Pickup)	8.85
C. L. McNair		(Reimbursement for money expended for account of the District, 11-19-49 to Dec. 20, 1949, inclusive.)	3.86
Horace H. Bennett		(Road repair and tank) (Bulldozer work) (13 hr. @ \$8.00 per hour)	104.00
S. Wallace Brady, Tax Collector		(Payment for license tax (Dec. 1, 1949 to Mar. 31, 1950) (on District's 1950 Willys (one ton Pickup.) (Motor # 4 T 44113.)	7.07

Continued.

TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE

VOUCHER-CHECKS #1123, TO #1166, INCL.

<u>I S S U E D</u>	<u>T O</u>	<u>C O V E R I N G</u>	<u>A M O U N T</u>
J. Wallace Brady, Tax Collector		(Payment in lieu of school) (taxes for the year 1949)	\$ 266.10
Fred Chilton, Tax Collector Bridgeport Independent School District.		(Payment in lieu of school) (taxes for the year 1949.)	95.90
Reed Stewart, Tax Collector		(Payment in lieu of school) (Taxes for the year 1949.)	84.00
Luther G. Prunty, Tax Collector Jack County, Texas.		(Payment in lieu of school) (taxes for the year 1949.)	27.05
Sidney L. Samuels		(Legal Services as General) (Attorney, December, 1949.)	300.00
C. L. McNair		(Salary, December, 1949 \$600.00) (Less Withholding Tax 51.10)	548.90
E. B. Cheatham		(Salary, December, 1949 \$350.00) (Less: Withholding Tax 27.10)	322.90
Myrtle Hartmeister		(Salary, December, 1949 \$185.00) (Less: Withholding Tax 19.50)	165.50
B.W. Bintliff		(Salary, December 1949 \$225.00) (Less: Withholding Tax 17.20)	207.80
Will Massingill		(Salary, December, 1949 \$165.00) (Less: Withholding Tax None)	165.00
W. H. Hutcheson		(Salary, December, 1949 \$175.00) (Less: Withholding Tax 9.40)	165.60

A L \$ 5,126.71

TARRANT COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE

DISTRIBUTION OF VOUCHER-CHECKS #1123 TO #1166, INCL.

General Manager	\$ 601.78
Office	813.24
Engineering	727.55
Insurance	20.85
Legal	302.00

LAND DEPARTMENT:

Repairs at Parrish Tract	\$ 182.77	
Bulldozer work on Bridgeport land	104.00	
Fencing Material, B. P. and E. M. Land	920.01	
3/4 Inch Pipe Material	39.69	
School Taxes	<u>473.05</u>	1,719.52

EAGLE MOUNTAIN LAKE:

<u>Oil and Gas:</u>		
Boats	\$50.66	
Trucks	<u>21.42</u>	\$ 72.08
Repairs to Ford Pickup	9.85	
Monorail Units	87.50	
Repairs, parts & Labor on Patrol Boat	76.85	
Misc. Supplies	2.33	
Custodian's Salary	207.80	
Assostant Custodian's Salary	<u>165.00</u>	621.41

BRIDGEPORT LAKE:

Misc. Supplies	\$ 24.64	
Phone Service	3.35	
Repairs to Dodge Pickup	13.49	
Custodian's Res. Repairs	5.05	
Monorail Units	87.50	
<u>Elec. Service:</u>		
Custodian's Residence	\$10.83	
Camp House	<u>2.83</u>	13.66
License tax on 1950 Willys Pickup	7.07	
Custodian's Salary	<u>165.60</u>	<u>320.36</u>

T O T A L \$ 5,126.71

CONDITION OF FUNDS

	<u>MAINTENANCE FUND</u>	<u>INTEREST AND SINKING FUND</u>
BOOK BALANCE: Nov. 21, 1949 Cash	\$ 68,103.12	\$ 69,247.84
Receipts: Taxes, Penalty & Int.	48,516.55	173,273.37
Land Rentals	287.50	---
Duck Blind Licenses	5.00	---
Oil Royalty	44.87	---
Interest on Securities Owned	<u>---</u>	<u>1,250.00</u>
	\$ 116,957.04	\$ 243,771.21
Less: Disbursed by Vo-cks.		
#1098 to #1122, Incl.	<u>3,925.46</u>	<u>---</u>
	\$ 113,031.58	\$ 243,771.21
Less: Disbursed by vo-cks.		
#1123 to #1166, Incl.	<u>5,126.71</u>	<u>---</u>
BOOK BALANCE: December 21, 1949	\$ 107,904.87	\$ 243,771.21

NOTE: The Interest and Sinking Fund now owns \$350,000.00 par value United States Government Securities.

The Maintenance Fund now owns \$200,000.00 par value United States Government Securities.

BOARD OF DIRECTORS

JOE B. HOGSETT, PRES.
HOUSTON HILL, VICE-PRES.
DAN H. PRIEST, Sec'y
GAYLORD J. STONE
W. L. PIER

TARRANT COUNTY WATER CONTROL AND
IMPROVEMENT DISTRICT NUMBER ONE

DANCIGER BUILDING - COR. 5TH AND THROCKMORTON STS.

PHONE 3-2848

SIDNEY L. SAMUELS,
GENERAL ATTORNEY

C. L. MCNAIR, GENERAL MANAGER

ED. B. CHEATHAM,
OFFICE MANAGER

FORT WORTH 2, TEXAS.

DEC 21 1949

Exhibit "B" to Minutes
of December 21, 1949.
AT 11:00 A.M.

To: The Board of Directors,
Tarrant County Water Control and
Improvement District Number One.

REPORT FOR NOVEMBER, 1949.

Gentlemen:

During the month of November, 138 acres of land belonging to the District was planted to vetch, for soil improvement, on the following tracts: City of Fort Worth #355, Tom Parrish #329, J. C. Garlitz #339 and J. A. Culver #320.

Engineer Owen Funk, has surveyed and permanently referenced the property lines of the following tracts of District lands in Wise County:

<u>Tract No.</u>	<u>Purchased from</u>
23	A. Breckenridge
24	J. F. Clark
26	E.A. Blount
33	W.F. Goodrich
28	N. B. Sparks
22	C. W. Stevens
31	Henry Exall
63	H. J. Lisenby
29	E. H. Baumgaertner
30	P. T. Gribble

I made an inspection of the West Fork of the Trinity River in the vicinity of New River. The earthen plug placed in the channel of New River last year was out. It probably washed out during the heavy rains on October 24th. Attorney William Brown advised that the District was under no liability to rebuild the plug in New River--the Gasperson Case having settled that matter. The channel of the Old River has widened and deepened since 1948.

The monorail with trolley for hoisting and electric lighting has been installed in the valve-house at the Bridgeport Dam.

To: The Board of Directors,
Tarrant County Water Control and
Improvement District Number One.

11-2/-1949

#2.

C O N D I T I O N O F L A K E S

<u>RESERVOIR</u>	<u>LAKE LEVEL Ft.</u>	<u>DATE</u>	<u>CAPACITY ACRE FEET</u>
Bridgeport	811.6	11- 1-1949	163,200
Bridgeport	<u>811.3</u>	12- 1-1949	<u>161,100</u>
Loss	000.3		2,100
Eagle Mountain	649.56	11- 1-1949	218,320
Eagle Mountain	<u>647.86</u>	12- 1-1949	<u>202,740</u>
Loss	001.70		15,580

5,320 acre feet of water (quantity above spillway) was discharged from Eagle Mountain as surplus, but was also of beneficial use in dilution of sewage.

10,260 acre feet was discharged for municipal use and sewage dilution by request of the City of Fort Worth.

Respectfully,

C. L. McMain
General Manager.

CLM;mh

FREESE AND NICHOLS
CONSULTING ENGINEERS
407-410 DANCIGER BUILDING
TELEPHONE 3-5431
FORT WORTH, TEXAS

November 25, 1949

TO BE ATTACHED TO AND
MADE PART OF MINUTES OF
DECEMBER 21, 1949, at
11:00 A.M.

Mr. Joe B. Hogsett, Chairman
Tarrant County Water Control &
Improvement District No. 1
502 Danciger Building
Fort Worth, Texas

Supplemental
Inspection Eagle Mountain Dam.

Dear Mr. Hogsett:

This report is supplemental to the General Inspection Report of Eagle Mountain Dam dated July 12, 1949. The following is quoted from the Report dated July 12, 1949:

"When the main dam was constructed, a large borrow pit was excavated just south of the dam. This pit is now covered by the ponds of the fish hatchery. Since completion of the dam and filling of the reservoir, it has been known that seeps were present in the bottom of this borrow pit. As the ponds are now filled with water, no examination could be made of these seeps. It is our opinion that these seeps are through the underlying water bearing sands which are in situ throughout this entire area. It is not believed that the seepage is either through the dam or directly underneath the dam. It is our understanding that the principal seeps are in Ponds No. 1 and No. 3. We are advised that the ponds will be drained in September or October. When the ponds are drained, we recommend that a careful examination and study be made of this seepage.

We do not consider this borrow pit seepage to affect the stability or safety of the dam."

At the request of Mr. McNair, I have today made an examination of the borrow pit area now used as a fish hatchery by the State immediately below the dam. The following report is made pursuant to this examination:

1. General:

Inspection was made by Marvin C. Nichols, B.W. Bintliff, C.L. McNair and Ben Stone. Mr. Stone has been in charge of the Fish Hatchery for the State since 1942. Ponds 1, 2, 3 and 4 had been drained. The lake elevation was 648.1, being .9 feet below spillway.

2. General Description of Ponds:

The ponds are situated immediately south of the fence enclosing the Main Dam, and are just below the lowest berm of the dam. The Ponds are numbered 1, 2, 3 and 4 with No. 1 being adjacent to the road leading to the Caretaker's House, and No. 4 being the most easterly pond. Mr. Stone furnished the following general information, which is only approximate:

	<u>Area When Full</u>	<u>Average Depth</u>
Pond No. 1	4.3 acres	3'
Pond No. 2	3.0 acres	3'
Pond No. 3	11.75 acres	3 1/2'
Pond No. 4	15.0 acres	4'

Pond No. 1 drains into No. 2; No. 2 into No. 3; No. 3 into No. 4; No. 4 into the river.

3. Method of Draining:

We were advised by Mr. Stone that he had taken about two weeks to drain all four ponds. Ponds are drained slowly in order that fish can be recovered and moved to Lake Worth and Lake Eagle Mountain. Pond No. 4, being the lowest pond, is drained first. Drainage channels are worked out by hand to permit complete drainage to the outlet on the south side of this pond into the river. Ponds No. 3, 2 and 1 are then drained out in the same manner as No. 4.

4. Observations:

Pond No. 1.

This pond is just east of the road leading to the Caretaker's house. It is at the highest elevation of any of the ponds. This pond had been drained for only a day or two. No evidence of piping or of boils was observed. At the northwest corner of this pond is a marshy area near the contact with the natural slope of the hillside. Seepage water in limited amount collected in the drainage ditches and flowed into the main ditch through Pond No. 2. There was no evidence of the seepy areas being under a positive hydrostatic pressure.

Pond No. 2.

Pond No. 2 is a narrow pond situated between No. 1 and No. 3. The long axis is east and west. No piping or boils were observed. Some seeps were seen on the south side of the main drainage ditch. As the area south of the pond contains considerable sand and gravel, in original formation, it is likely part of the seepage comes from the south into the pond. Very little, if any seepage, could be observed on the

north side of this pond immediately adjacent to the low, wide berm of the dam. There was no evidence of the seeps being under a positive hydrostatic pressure.

Pond No. 3.

Pond No. 3 is a rather large pond square or rectangular in shape, situated between No. 2 and No. 4. No piping or boils were observed. The south side of this pond shows some little seepage, with the south and southwestern edges of the pond being somewhat marshy. These sides are flanked by sand and gravelly deposits and most of the seepage comes from these sides. The side of the pond on the north side adjacent to the berm of the dam showed very little in the way of seeps. There was no evidence of the seeps being under a positive hydrostatic pressure.

Pond No. 4.

Pond No. 4 is the lowest and largest pond. The area occupied by this pond was not disturbed at the time the dam was constructed. Since the completion of the dam, this area has been cleared of timber. The pond is formed by embankments on the east and south sides. No piping or boils were observed. The principal seepage areas were on the west side and in all probability was seepage primarily from Pond No. 3. There was practically no seepage on the north side of the pond adjacent to the low, wide berm of the dam. There was no evidence of the seeps being under a positive hydrostatic pressures.

5. Seepage Measurements:

Facilities were not immediately available for accurate measurements for the seepage flow. It was not considered necessary to measure the seepage flow accurately. However, some rough measurements and estimates were made.

(a). Total flow from Ponds 1, 2 and 3 as estimated at the outlet structure between Pond No. 3 and No. 4 was one to one and one-half million gallons (1 to 1 1/2) per day. This was accumulated from an approximate total area in the three ponds of 19 acres. Measurement was made by an approximate cross-section at the outlet structure and measuring the surface velocity.

(b). Total flow from Ponds 1, 2, 3 and 4 as estimated visually by the discharge through a 12" outlet pipe from Pond No. 4 to the river was one (1) million gallons per day.

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(c). Mr. Stone stated that he had observed over a number of years that it required 8 days for the seepage from Ponds 1, 2 and 3 to fill Pond No. 3. Ponds 1 and 2 will not fill from seepage. They require fill-up water from the lake. This indicates normal ground water level at or near the surface of Pond No. 3 when full.

Capacity of Pond No. 3

$$11.75 \text{ (ac)} \times 3 \frac{1}{2} \text{ (ft)} \times 327,000 = 13 \frac{1}{2} \text{ million gallons.}$$

$$\frac{13.5}{8} = 1.7 \text{ million gallons per day}$$

This is the seepage from Ponds 1, 2 and 3 of 19 acres.

(d). Mr. Stone stated that Pond No. 4 would not fill from seepage. He fills No. 4 from the overflow from Pond No. 3. This ordinarily requires 42 days.

Capacity of Pond No. 4

$$15.0 \text{ (ac)} \times 4 \text{ (ft)} \times 327,000 = 19.6 \text{ million gallons}$$

$$\frac{19.6}{42} = \frac{1}{2} \text{ million gallons per day.}$$

(e). Due to the somewhat crude basis of the above calculations, it would not be expected that the results would check one with the other. It is quite probable that Pond No. 4 has leakage through its floor and embankments to the river - this would account for the measured and estimated seepage from Ponds 1, 2, 3 and 4 to be less than from Ponds 1, 2 and 3. Mr. Stone stated that he believed the seepage was now less than in earlier years.

6. Conclusions:

1. The total seepage under conditions obtaining at the time of the inspection is of the order of 1 1/2 million gallons per day.
2. The principal seepage appears to be from the south and west from material in its original position.
3. Very little, if any, of the seepage is around or under the dam.
4. The seepage is not considered excessive and in no way affects the stability or safety of the dam.

Mr. Joe B. Hogsett

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7. Recommendations:

1. Similar inspections should be made each year at the time the ponds are regularly drained.

2. At such times as the elevation of the lake is 652 (3' above spillway) or higher, inspections should be made of the ponds to determine if the ponds are responding in any way to the higher lake elevation.

3. Determine the elevation of the pond surfaces for the records of the Board.

Respectfully submitted,

FREESE AND NICHOLS

By 
Marvin C. Nichols

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