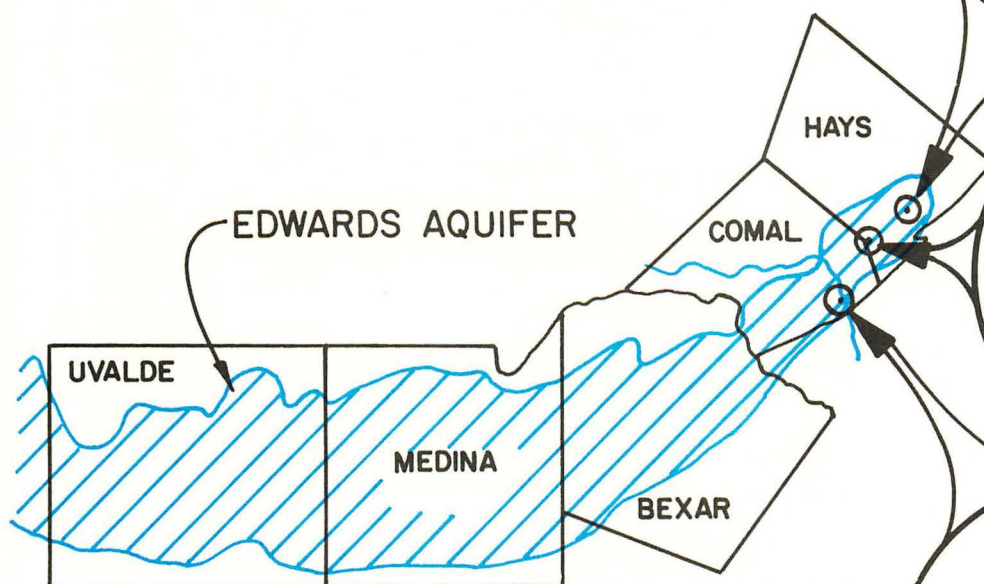


NEW BRAUNFELS • San Marcos CRYSTAL CLEAR



A JOINT VENTURE INVESTMENT
FOR OUR FUTURE



EDWARDS UNDERGROUND
WATER DISTRICT

**San
Marcos**

**CRYSTAL
CLEAR**

NBU

SURFACE WATER DEVELOPMENT

**A
RESOURCE
FOR THE
FUTURE**

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I. THE SUMMARY AND REQUEST

ENCLOSED IS A FIRST-PHASE REPORT ON THE NEW BRAUNFELS-SAN MARCOS-CRYSTAL CLEAR SURFACE WATER TREATMENT FACILITY. OUR COMMUNITIES ARE IN COOPERATIVE SUPPORT IN THE DESIGN, CONSTRUCTION AND DELIVERY OF AN EDWARDS AQUIFER ALTERNATIVE FOR OUR FUTURE WATER RESOURCE.

WE REALIZE THE EVER-PRESSING DEMANDS BEING MADE BY THOSE UTILIZING THE EDWARDS, AND THE IMPLICATIONS IMPOSED TO THAT LIMITED SUPPLY ON OUR PRESENT AND FUTURE NEEDS.

WE ALSO KNOW OUR POTENTIAL EXPOSURE TO POLLUTION OF OUR EDWARDS THROUGH CHEMICALS, FUELS, OR GENERAL UNCONCERN.

THIS REGIONAL APPROACH TO A SURFACE WATER SUPPLY WILL UTILIZE CANYON LAKE CONSERVATION WATER COURSED DOWN THE GUADALUPE RIVER TO A TREATMENT SITE (ALREADY PURCHASED), TREATED, THEN DISTRIBUTED ALONG INTERSTATE #35 TO SAN MARCOS, CRYSTAL CLEAR AND NEW BRAUNFELS, SUPPLYING BASE LOADED QUANTITIES OF WATER TO EACH COMMUNITY.

ADDITIONAL WATER REQUIREMENTS WILL BE SUPPLIED FROM OUR EXISTING EDWARDS WELLS.

IT IS A COMPLEX PROCEDURE. THERE IS THE TEXAS WATER COMMISSION AND WATER RIGHTS; THE GUADALUPE-BLANCO RIVER AUTHORITY AND WATER PURCHASE; COMMUNITY POLITICAL AND FINANCIAL SUPPORT; AND CERTAINLY SUPPORT, AND WE WOULD HOPE AN "INVESTING SUPPORT" BY THE EDWARDS UNDERGROUND WATER DISTRICT IN THIS THE FIRST SIGNIFICANT APPROACH TO PRESERVING THE EDWARDS.

WHAT OUR CUSTOMERS ARE COMMITTING TO IS NOT ONLY THE INITIAL CAPITAL EXPENSE TO BUILD THE PLANT, BUT AN ACCEPTANCE OF LONG-TERM INCREASED WATER COST FOR ITS CONTINUED USE.

NOT AS A PART OF OUR DECISION - OUR DECISION IS MADE, BUT AS A STRONG INDICATION OF SUPPORT, WE WOULD NOW ASK THE EDWARDS BOARD TO FINANCIALLY HELP US.

AS IS INDICATED IN THE REPORT, FIRST-PHASE COSTS WILL EXCEED \$7 MILLION WITH AN ADDITIONAL \$10-11 MILLION NEEDED FOR ITS SECOND ADDITION. WE WOULD ASK YOUR SUPPORT FOR AT LEAST \$5 MILLION AND TO ESTABLISH WITH THIS GRANT A PRECEDENT FOR ALL TO SEE THAT THE EUWD IN COOPERATION WITH THOSE DEDICATED COMMUNITIES, CAN MAKE A DIFFERENCE.

II. THE PROJECT

THE PROJECT IS A SURFACE WATER TREATMENT FACILITY PLANNED TO SERVE CUSTOMERS IN COMAL, HAYS, AND GUADALUPE COUNTIES.

PRESENTLY, THE WATER CUSTOMERS OF THE NEW BRAUNFELS UTILITIES, THE CITY OF SAN MARCOS, AND CRYSTAL CLEAR WATER SUPPLY CORPORATION RECEIVE ALL THEIR WATER FROM THE EDWARDS UNDERGROUND AQUIFER. IT IS OUR COLLECTIVE OBJECTIVE TO DEVELOP AND USE AN ALTERNATE SOURCE OF WATER FOR OUR RESPECTIVE CUSTOMERS FOR THREE BASIC REASONS:

1. TO HELP PRESERVE THE COMAL AND SAN MARCOS SPRINGS.
2. TO BE ASSURED OF BASIC MINIMUM WATER NEEDS DURING SEVERE DROUGHT.
3. TO MAINTAIN AN ALTERNATE SOURCE OF GOOD WATER IN THE EVENT OF ANY TEMPORARY POLLUTION OR DEGRADATION OF THE EDWARDS.

THE TREATMENT FACILITY IS PLANNED FOR THREE INCREMENTS OF DEVELOPMENT, EACH AT 8 MILLION GALLONS PER DAY CAPACITY. IT WILL BE LOCATED IN NEW BRAUNFELS ABOVE THE CONFLUENCE OF THE COMAL AND GUADALUPE RIVERS, CLOSE TO THE GUADALUPE RIVER.

INITIALLY MOST OF THE WATER THROUGH THE PLANT WILL BE PURCHASED FROM THE GUADALUPE-BLANCO RIVER AUTHORITY (GBRA), BY EACH PARTICIPATING ENTITY, DELIVERED FROM CANYON LAKE. NEW BRAUNFELS WILL HOWEVER SUPPLEMENT THEIR PURCHASE OF 6 MILLION GALLONS PLUS PER DAY (6720 ACRE FEET PER YEAR) WITH 2 MILLION GALLONS PER DAY (2240 ACRE FEET PER YEAR) FROM GUADALUPE RIVER WATER RIGHTS, TEXAS WATER COMMISSION CF 135, FOR A TOTAL OF 8 MILLION GALLONS PLUS PER DAY. IT IS ANTICIPATED THAT SAN MARCOS AND CRYSTAL CLEAR WATER SUPPLY WILL PURCHASE ALL OF THEIR PRESENT AND FUTURE NEEDS FROM GBRA OUT OF CANYON LAKE.

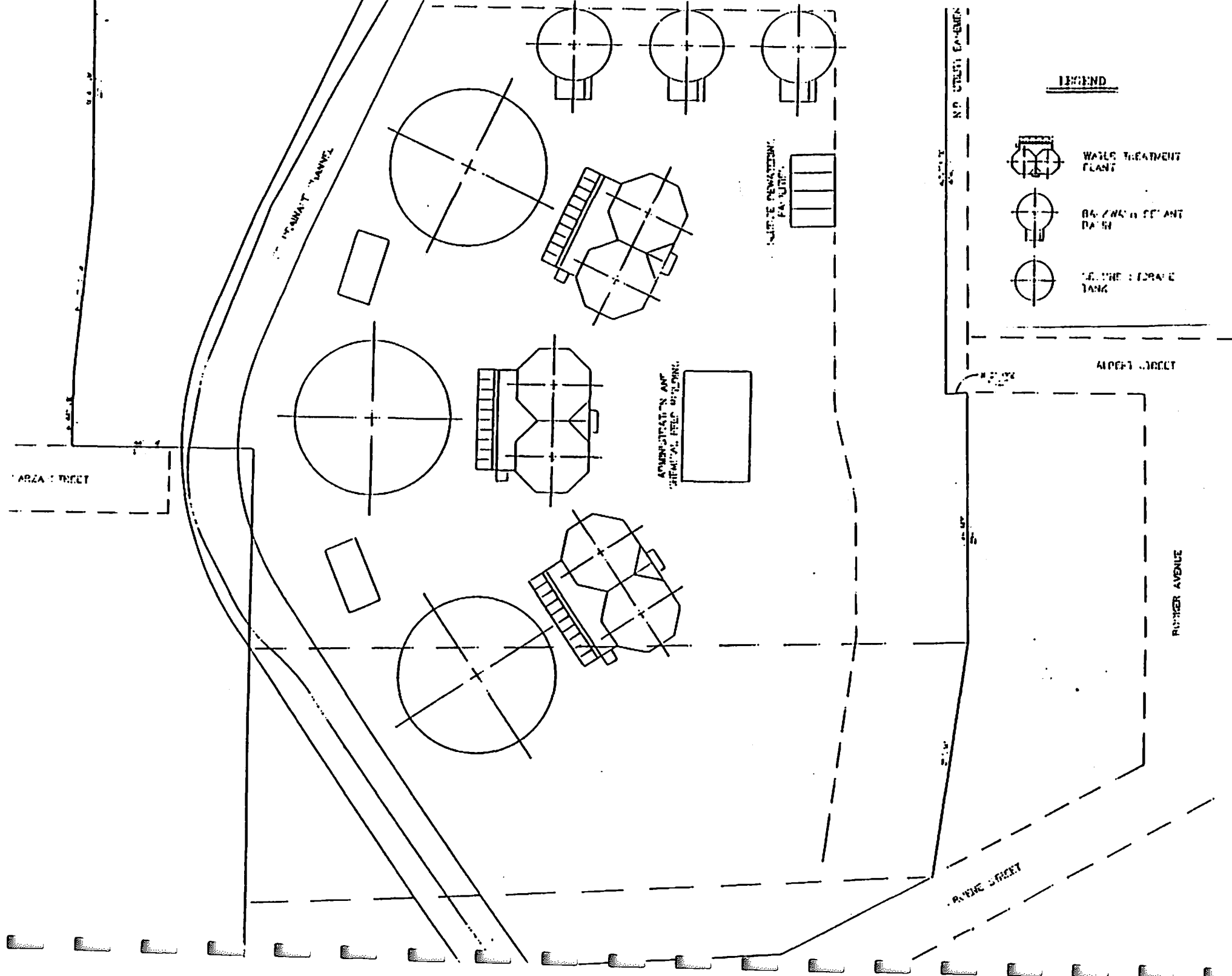
THE TECHNICAL DEVELOPMENT OF THE PLANT WILL BE IN THREE DISTINCT PHASES.

PHASE I - NEW BRAUNFELS AND CRYSTAL CLEAR CONSTRUCTED FOR 8.25 MILLION GALLONS PER DAY; ESTIMATED COMPLETION IN EARLY 1990.

PHASE II - SAN MARCOS PLANNING FOR 5.34 MILLION GALLONS PER DAY WITH ESTIMATED COMPLETION IN 1994.

PHASE III - A FUTURE 8 MILLION GALLONS PER DAY INCREMENT FOR USE BY NEW BRAUNFELS, SAN MARCOS, OR CRYSTAL CLEAR AS NEED DEVELOPS AND AS ADDITIONAL SURFACE WATER IS MADE AVAILABLE.

TYPICAL PLAN AND CROSS-SECTION VIEWS OF THE PLANT ARE AS FOLLOWS:



LEGEND



WATER TREATMENT PLANT



BACKWASH EFFLUENT BASIN



SEDIMENT STORAGE TANK

ADMINISTRATION AND MECHANICAL REPAIR BUILDING

WASTE REMEDIATION FACILITY

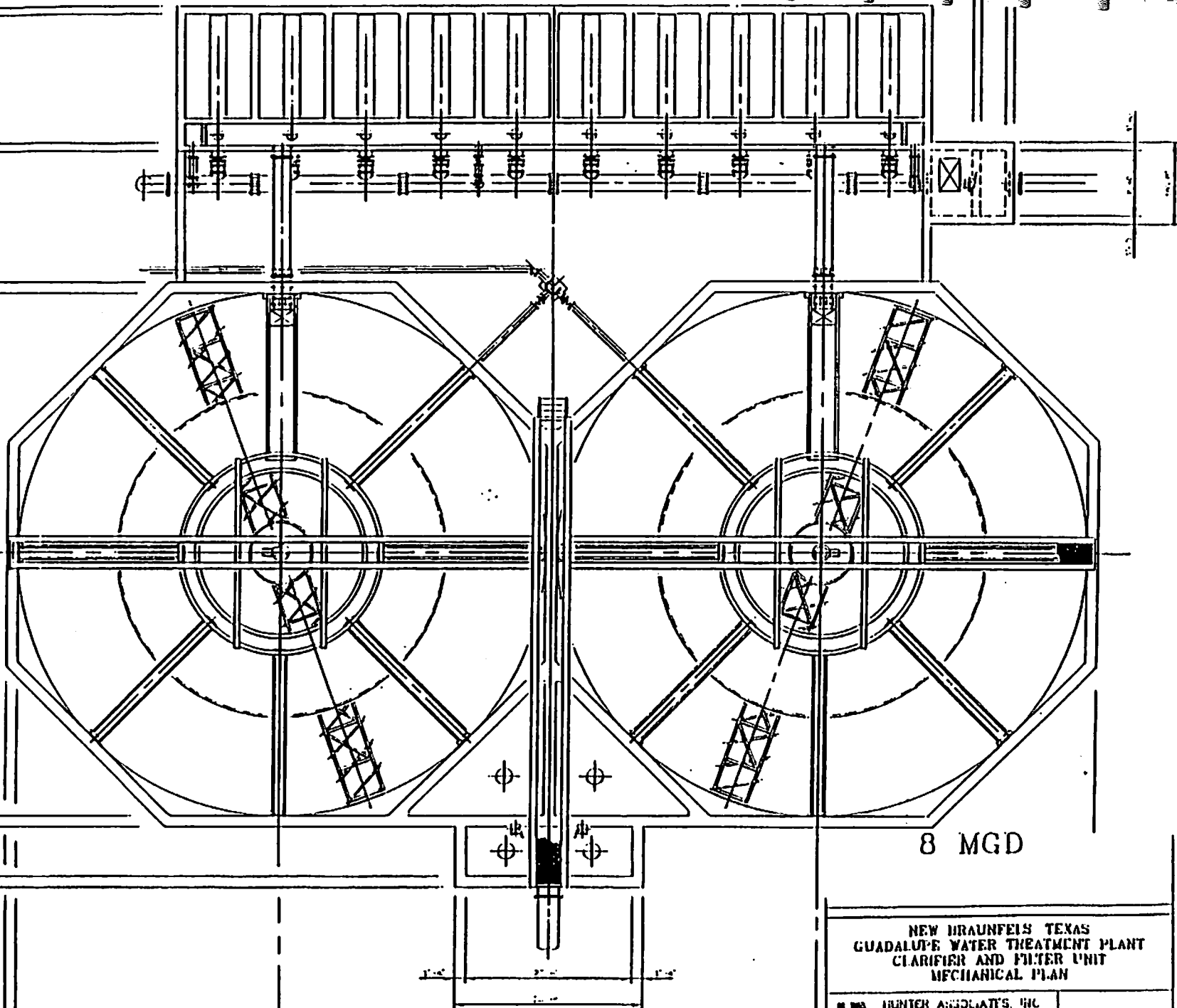
PARK STREET

PARKWAY AVENUE

ALBERT STREET

RUTHER AVENUE

RAILROAD AVENUE



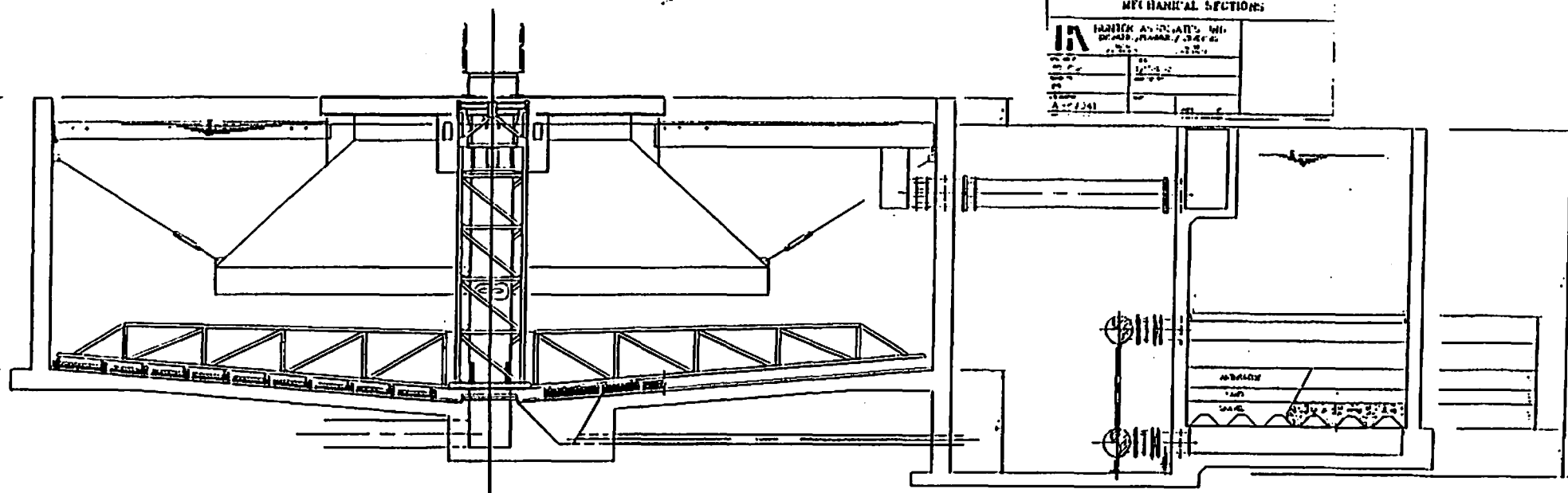
NEW BRAUNFELS TEXAS
GUADALUPE WATER TREATMENT PLANT
CLARIFIER AND FILTER UNIT
MECHANICAL PLAN



HUNTER ASSOCIATES, INC.
DESIGN, PLANS & ERECT

DATE	1/2/71
BY	J. H. HUNTER
CHECKED	J. H. HUNTER
APPROVED	J. H. HUNTER
SCALE	AS SHOWN

8 MGD



NEW DRAUPEIN TEXAS QUADALTE WATER TREATMENT PLANT CLARIFIER AND FILTER UNIT MECHANICAL SECTIONS	
HATCHER ASSOCIATES, INC. DESIGN, PLANS, & CONSTRUCTION	
DATE: 10/1/71	BY: J. H. HATCHER
SCALE: 1/4" = 1'-0"	CHECKED: J. H. HATCHER
PROJECT: A-117241	DATE: 10/1/71

SECTION "A-A"

III. THE WATER TREATMENT PROCESS

A. WATER QUALITY

THE QUALITY OF THE WATER IN THE GUADALUPE RIVER IS GENERALLY VERY GOOD. MINIMAL TREATMENT WOULD BE REQUIRED FOR THIS WATER; THE ONLY REQUIREMENTS WOULD BE TREATMENT FACILITIES TO ALLOW FOR THE REMOVAL OF TURBIDITY (SILT AND COLLOIDAL ORGANIC MATERIALS), CONTROL OF TASTE AND ODOR, AND DISINFECTION.

IN GENERAL, THE CHEMICAL QUALITY OF THE GUADALUPE RIVER WATER IS VERY SIMILAR TO THE EDWARDS AQUIFER WATER AT THE COMAL SPRINGS. BOTH WATERS HAVE A RELATIVELY HIGH HARDNESS, AND THE UTILITIES MAY WANT TO CONSIDER CONVERTING TO A SOFTENING PROCESS TO DECREASE THE HARDNESS CONTENT OF THE CITY WATER. THE RELATIVE CHEMICAL CHARACTERISTICS OF THE TWO WATERS ARE AS FOLLOWS:

<u>CHEMICAL CONSTITUENT</u>	<u>GUADALUPE RIVER</u>	<u>COMAL SPRINGS</u>
IRON (Fe)	----	0.02-0.03
CALCIUM (Ca)	40--80	65--80
MAGNESIUM (Mg)	10--14	15--20
SODIUM (Na)	3---8	6---8
POTASSIUM (K)	1---3	0.5- 3

CARBONATE (CO ₃)	----	----
BICARBONATE (HCO ₃)	170-280	260-290
SULFATE (SO ₄)	11--18	20--30
CHLORIDE (Cl)	6--14	9--14
TOTAL DISSOLVED SOLIDS	180-290	260-300
HARDNESS AS CaCO ₃	160-260	240-280
pH	7.3-7.5	6.8-7.8

B. PROPOSED TREATMENT FACILITIES

IT IS PRESENTLY ANTICIPATED THAT THE FIRST PHASE OF THE NBU WATER TREATMENT PLANT SHOULD BE SIZED TO ADEQUATELY TREAT 8 MGD OF WATER FROM THE GUADALUPE RIVER, FOR STORAGE AND DISTRIBUTION IN THE NBU SYSTEM. HOWEVER, DUE TO THE POTENTIAL FOR GROWTH IN NEW BRAUNFELS, AND THE PARTICIPATION OF OTHER WATER SUPPLY AND DISTRIBUTION ENTITIES, THE COMPONENTS OF THE SYSTEM WILL BE DESIGNED TO ACCOMMODATE THOSE NEEDS. THE TREATMENT PROCESS PROPOSED FOR THIS PROJECT WOULD BE COMPOSED OF THE FOLLOWING FACILITIES:

1. RAW WATER INTAKE AND PUMP STATION: FOR PUMPING WATER FROM THE GUADALUPE RIVER TO THE SITE OF THE SURFACE WATER TREATMENT FACILITIES.

a) RAW WATER INTAKE STRUCTURE - TO BE DESIGNED FOR SCREENING OF LARGE SOLIDS, SUCH AS TREE LIMBS, ETC., AND SIZED TO ACCOMMODATE A FUTURE MAXIMUM INTAKE CAPACITY OF APPROXIMATELY 20 MGD.

b) PUMP STATION FACILITIES - TO BE DESIGNED TO PUMP 8 MGD AT PRESENT WITH ONE (1) ADDITIONAL PUMP AS A STAND-BY UNIT; PUMP STATION TO BE DESIGNED TO ACCOMMODATE ADDITIONAL PUMPS AND/OR LARGER PUMPS, AS NEEDED TO MATCH FUTURE DEMANDS.

2. PHASE I - WATER TREATMENT UNIT

TO BE DESIGNED TO TREAT PLUS 8 MGD (5,600 GPM) OF RAW WATER; FACILITIES TO BE DESIGNED FOR REMOVAL OF TURBIDITY, ADJUSTMENT OF pH, CONTROL OF TASTES AND ODORS, AND DISINFECTION; AND TO ACCOMMODATE THE FUTURE CONVERSION TO A LIME OR LIME/SODA SOFTENING PROCESS IF AND WHEN DESIRED BY NBU. THE TREATMENT WILL INCLUDE:

a) INLET RAPID MIX BASIN - FOR MIXING CHEMICALS WITH THE WATER FOR REMOVAL OF THE SILT AND ORGANIC MATERIALS.

b) FLOCCULATION BASINS (2 each) - FOR PROVIDING REACTION TIME TO BUILD THE SIZE OF THE PARTICLES AND PARTICULATE MATTER FOR SUBSEQUENT SETTLING.

- c) SETTLING BASINS (2 each) - FOR SETTLING OF THE FLOCCULATED PARTICULATE MATTER.
- d) FILTER UNIT (10 Filter Cells) - FOR FILTERING OF ANY RESIDUAL FINE ORGANIC OR COLLOIDAL-TYPE PARTICULATE MATERIALS. TO BE DESIGNED AS DUAL MEDIA (sand and anthracite) FOR HIGH RATE FILTERING WITH AIR/WATER GRAVITY BACKWASHING.

3. CLEARWELL STORAGE AND HIGH-SERVICE PUMPING FACILITIES

- a) CLEARWELL STORAGE TANK - COVERED GROUND LEVEL STORAGE SITUATED TO FILL BY GRAVITY FROM THE TREATMENT UNIT; TO BE SIZED FOR 1.5-2.0 MG TOTAL STORAGE CAPACITY (4.5-6.0 HOURS OF PLANT PRODUCTION.)
- b) HIGH SERVICE PUMP STATION - TO PUMP FINISHED WATER FOR STORAGE AND DISTRIBUTION IN THE EASTERN END OF NEW BRAUNFELS.
- c) LOW SERVICE PUMP STATION - TO TRANSFER FINISHED WATER TO THE EXISTING GROUND STORAGE TANKS AT THE WATER PLANT AND WELL #5 LOCATIONS, FOR SUBSEQUENT PUMPING INTO HIGH SERVICE FOR THE CENTRAL AND WEST PORTIONS OF THE CITY.

4. BACKWASH DECANT BASIN/SLUDGE THICKENER

FOR SEPARATING THE FILTERED AND SETTLED MATERIALS FOR THICKENING AND REMOVAL OF WATER FROM THE SLUDGE WITH FACILITIES TO RECYCLE THE WATER PORTION BACK TO THE HEAD END OF THE TREATMENT PLANT.

5. SLUDGE DE-WATERING FACILITIES

FOR DE-WATERING THE SLUDGE TO CONSISTENCY OF APPROXIMATELY 12% TO 15% SLUDGE TO BE SUBSEQUENTLY REMOVED TO THE LANDFILL.

6. CHEMICAL STORAGE AND FEEDING FACILITIES

FOR FEEDING ALUM AND/OR POLYELECTROLYTE FOR FLOCCULATION, AND SODA ASH FOR pH ADJUSTMENT OF THE WATER, CHLORINE FOR DISINFECTION, AND HYDROFLUOSILICIC ACID FOR FLUORIDATION.

7. PLANT ADMINISTRATION, LABORATORY AND CONTROL BUILDING

TO PROVIDE PLANT ADMINISTRATIVE OFFICES, PLANT CONTROL LABORATORY FACILITIES, AND PRIMARY MOTOR CONTROLS NECESSARY FOR PLANT OPERATION.

C. INCREMENTAL FACILITY SIZING

AS PREVIOUSLY DISCUSSED, WE FEEL THAT THE FIRST PHASE WATER TREATMENT FACILITIES SHOULD BE SIZED TO TREAT 8.0 MGD (5,600 GPM), AS THIS CAPACITY SHOULD PROVIDE FOR THE PROJECTED BASE DEMAND FOR THE YEAR 1995. THE SIZING OF SUBSEQUENT INCREMENTS WOULD DEPEND UPON FUTURE PROJECTIONS OF WATER DEMANDS FOR NEW BRAUNFELS, AND FOR ANY AND ALL OTHER ENTITIES WHICH MAY PARTICIPATE IN FUTURE ADDITIONS. CONSIDERING THE WATER RIGHTS PRESENTLY HELD BY THE NEW BRAUNFELS UTILITIES PLUS THE VOLUME OF WATER AVAILABLE THROUGH THE GBRA FROM STORAGE AT CANYON RESERVOIR, WE FEEL THAT ULTIMATELY THIS PLANT COULD BE REQUIRED TO TREAT AS MUCH AS 20-24 MGD. THUS WE HAVE INCLUDED A PRELIMINARY SITE PLAN OF THE PROPOSED PLANT SITE, WHICH FOLLOWS, SHOWING THREE (3) INCREMENTALLY SIZED 8.0 MGD TREATMENT UNITS, THUS INDICATING THE CAPACITY OF THE SITE TO ACCOMMODATE SUCH AN OVERALL PLAN.

IV. THE COST

THE NEW BRAUNFELS UTILITIES (NBU), THE CITY OF SAN MARCOS (SM), AND THE CRYSTAL CLEAR WATER SUPPLY CORPORATION (CCWSC) WILL FINANCIALLY SUPPORT THE PLANNING, DEVELOPMENT, AND CONSTRUCTION COSTS ON A PRO RATA BASIS AS ESTABLISHED BY ACTUAL PLANT OUTPUT DESIGNED CAPABILITIES.

NBU, SM, AND CCWSC WILL EACH CONTRACT FOR PURCHASED WATER WITH THE GUADALUPE-BLANCO RIVER AUTHORITY (GBRA) THROUGH LONG-TERM PURCHASE COMMITMENTS. NBU WILL MANAGE AND OPERATE THE PLANT WITH ALL PRODUCTION COSTS BEING ASSIGNED TO A UNIFORM PER 1000 GALLON LEVEL TO EACH NBU, SM AND CCWSC.

OVERALL PROJECT COST ESTIMATES FOR THE CONSTRUCTION OF AN 8.0 MGD SURFACE WATER PLANT FOLLOWS BELOW. THE ESTIMATED COSTS SHOWN INCLUDE ITEMIZED COSTS FOR THE VARIOUS PHASES OF CONSTRUCTION REQUIRED TO FURNISH THE COMPLETE SYSTEM CAPABLE OF DELIVERING TREATED WATER TO THE EXISTING DISTRIBUTION SYSTEM AS DISCUSSED HEREIN. SOME OF THE COSTS SHOWN REFLECT A SLIGHT INCREASE OVER THE COSTS ESTIMATED IN THE PREVIOUS REPORTS, WHICH IS GENERALLY ATTRIBUTABLE TO TWO FACTORS:

A. SITE REQUIREMENTS - NOW THAT THE PLANT AND INTAKE SITES HAVE BEEN LOCATED, A MORE ACCURATE ESTIMATE CAN BE MADE.

B. UNIT COMPONENT OVERSIZING - TO ALLOW FOR THE FUTURE INCLUSION
OF ADDITIONAL FACILITIES.

<u>ITEM</u>	<u>COST</u>
RAW WATER INTAKE/PUMP STATION	\$ 500,000
RAW WATER PIPING	100,000
WATER TREATMENT FACILITIES	3,500,000
SLUDGE HANDLING/DEWATERING FACILITY	700,000
CLEARWELL STORAGE & HIGH SERVICE PUMP	650,000
TREATED WATER TRANSMISSION PIPING	<u>650,000</u>
SUB-TOTAL FOR CONSTRUCTION	\$ 6,100,000
CONTINGENCIES (10%)	610,000
ENGINEERING, SURVEYING & INSPECTION (10%)	610,000
LAND AND EASEMENTS	310,000
LEGAL FEES - WATER RIGHTS	50,000
ADMINISTRATION	<u>20,000</u>
	\$ 7,700,000
ANNUAL DEBT SERVICE (20 YEARS @ 8%)	
(WITHOUT GRANT)	\$ 779,170
ANNUAL DEBT SERVICE (20 YEARS @ 8%)	
(WITH GRANT)	\$ 530,000

V. FINANCING

THE FIRST PHASE COSTS OF PLANNING AND CONSTRUCTION AS DETAILED IN SECTION IV WILL BE FINANCED FROM SEVERAL SOURCES AS FOLLOWS:

NEW BRAUNFELS UTILITIES

85B REVENUE BONDS	\$ 316,082
87C REVENUE BONDS	3,765,819
WATER RESOURCE DEVELOPMENT	800,000
CENTRAL FACILITIES - WATER	100,000
1989-1990 REVENUES	218,099
EUWD 1/2 GRANT	<u>2,500,000</u>
TOTAL COST	\$7,700,000

CRYSTAL CLEAR CAPITAL COST PARTICIPATION IS INCLUDED IN ABOVE FUND SOURCES TO PROVIDE THEM 250,000 GPD.

SAN MARCOS FUNDING WILL BE INCLUDED IN PHASE II OF CONSTRUCTION AND SHOULD BE SIMILAR IN REQUIREMENTS OF COSTING, ETC. THEIR DEVELOPMENT OF FUNDING SOURCES WILL BE AS DETERMINED IN THE FUTURE.

ONE HALF OF OUR REQUESTED GRANT OF \$5,000,000 IS SHOWN ABOVE FOR COMPLETION OF THE FIRST PHASE.

VI. WATER PRODUCTION COSTS

BASED ON INFORMATION OBTAINED FROM NEW BRAUNFELS UTILITIES PERSONNEL, THE CURRENT COST ATTRIBUTABLE TO PRODUCTION OF POTABLE WATER FROM THE EDWARDS AQUIFER WELLS AVERAGES 19.1 CENTS PER THOUSAND GALLONS.

OBVIOUSLY THIS COST IS SIGNIFICANTLY LESS THAN THE COST OF PRODUCING TREATED SURFACE WATER, DUE TO THE TREATMENT FACILITIES REQUIRED. FOR PURPOSES OF OVERALL ANALYSIS, THIS FIGURE HAS BEEN USED TO COMPARE THE TOTAL COST OF PRODUCTION FOR A BLENDED MIXTURE OF TREATED SURFACE WATER AND EDWARDS AQUIFER WATER.

THE FOLLOWING OUTLINE OF SURFACE WATER ANNUAL PRODUCTION COSTS DOES INDICATE A SUBSTANTIAL INCREASE IN WATER COST ABOVE A 100% SUPPLY FROM GROUND WATER.

IN CONSIDERATION OF INCREASED COSTS OUR CUSTOMERS WILL BE ADVISED TO PROTECT AND CONSERVE OUR WATER RESOURCES.

THE FOLLOWING TABLE REFLECTS THE ANNUAL COST OF OPERATION AND MAINTENANCE OF THE FACILITY FOR THE YEARS 1991, 1993, AND 1995. INITIALLY THE 8.0 MGD PLANT WILL BE OPERATED 100% OF THE TIME DURING THE SUMMER MONTHS. HOWEVER, DURING THE WINTER MONTHS, THE AVERAGE MONTHLY DEMAND IS LESS THAN 8.0 MGD, SO THE PLANT WILL BE OPERATED TO MEET THE LESSER DEMAND, YIELDING A PLANT EFFICIENCY OF APPROXIMATELY 83%.

IT IS ESTIMATED THAT BY 1995 THE MONTHLY BASE DEMAND WILL APPROACH 8.0 MGD AND THE PLANT EFFICIENCY WILL THEN REACH 100%, LESS 5% FOR MAINTENANCE DOWN TIME AND DAILY PEAK DEMAND FACTORS.

THIS TABLE ALSO SHOWS THE UNIT PRODUCTION COST; AND WHEN COUPLED WITH THE PURCHASE COST OF WATER FROM CANYON LAKE, THE TOTAL FINISHED WATER PRODUCTION COST WITHOUT THE GRANT IS:

<u>ITEM DESCRIPTION</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>
ANNUAL DEBT SERVICE FOR SUP-			
PLY & TREATMENT FACILITIES	\$ 780,000	\$ 780,000	\$ 780,000
OPERATION & MAINTENANCE	160,000	175,000	190,000
GENERAL AND ADMINISTRATIVE	35,000	35,000	35,000
ELECTRICAL POWER	<u>235,000</u>	<u>260,000</u>	<u>295,000</u>
TOTAL ANNUAL COST	\$1,210,000	\$1,250,000	\$1,300,000
ESTIMATED PLANT OPERATION	83%	89%	95%
ESTIMATED TOTAL ANNUAL PRO.(M.G.)	2,420	2,600	2,775
UNIT PRODUCTION COST (PER 1,000)	\$0.50	\$0.48	\$0.47
WATER PURCHASE COST (PER 1,000)	\$0.14	\$0.14	\$0.14
TOTAL FINISHED WATER PRODUCTION			
COST	\$0.64	\$0.62	\$0.61

ESTIMATED PRODUCTION COSTS

(WITH GRANT)

<u>ITEM DESCRIPTION</u>	<u>1991</u>	<u>1993</u>	<u>1995</u>
ANNUAL DEBT SERVICE FOR SUPPLY AND TREATMENT FACILITIES	\$ 530,000	\$ 530,000	\$ 530,000
OPERATION AND MAINTENANCE	160,000	175,000	190,000
GENERAL & ADMINISTRATIVE	35,000	35,000	35,000
ELECTRICAL POWER	<u>235,000</u>	<u>260,000</u>	<u>295,000</u>
TOTAL ANNUAL COST	\$ 960,000	\$1,000,000	\$1,050,000
ESTIMATED PLANT OPERATION EFF.	83%	89%	95%
ESTIMATED TOTAL ANNUAL PRO. (M.G.)	2,420	2,600	2,775
UNIT PRODUCTION COST (PER 1,000)	\$0.40	\$0.38	\$0.37
WATER PURCHASE COST (PER 1,000 GAL)	\$0.14	\$0.14	\$0.14
TOTAL FINISHED WATER PRODUCTION COST	\$0.54	\$0.52	\$0.51

VII. COMMUNITY IMPACT AND PERCEPTIONS

THE COMPLETION OF A SURFACE WATER TREATMENT FACILITY IN NEW BRAUNFELS WILL MARK A TIME OF WATER RESOURCE ASSURANCE FOR THE FUTURE. OUR GROWTH AND ECONOMIC EXPANSION WILL NOT BE SUBJECT TO AN UNKNOWN SUPPLY OF WATER. WE CAN CONFIDENTLY SPEAK TO ADEQUATE WATER SUPPLY FOR NOT ONLY FUTURE INDUSTRIAL OR COMMERCIAL GROWTH BUT ALSO FOR OUR RESIDENTIAL DEVELOPMENTS.

THIS STORY HAS BEEN TOLD MANY TIMES TO SERVICE CLUBS, RADIO COMMENT PROGRAMS, CITY COUNCIL MEETINGS, AND BOARD OF TRUSTEES MEETINGS. IT WOULD SEEM THAT CITIZENS AND CUSTOMERS REALIZE THE IMPORTANCE OF OUR FUTURE WATER RESOURCES AND WHOLE-HEARTEDLY SUPPORT THIS REGIONAL EFFORT.

APPENDIX

- A. HUNTER ASSOCIATES ENGINEERING REPORT
ON PAST AND FUTURE WATER DEMANDS FOR
NEW BRAUNFELS
- B. NEW BRAUNFELS WATER RIGHTS
- C. NEW BRAUNFELS DISTRIBUTION SYSTEM OPERATION PLAN
- D. MOODY'S BOND RATING STATEMENT - NBU
- E. 1987-1988 AUDIT - NEW BRAUNFELS UTILITIES

PAST AND FUTURE WATER DEMANDS

HISTORICALLY, TOTAL WATER DEMANDS WITHIN THE NEW BRAUNFELS UTILITIES SERVICE AREA HAVE INCREASED AT AN AVERAGE RATE OF 3 - 4% PER YEAR, WITH SIGNIFICANT VARIATIONS DUE TO SEASONAL PRECIPITATION AND TEMPERATURE VARIATIONS. DURING THE PERIOD OF JANUARY, 1984 THROUGH DECEMBER 1987, THE TOTAL NUMBER OF WATER CUSTOMERS SERVED BY THE NBU INCREASED FROM 9,100 TO 10,366, FOR AN AVERAGE ANNUAL INCREASE OF 3.48%. TABLE I WHICH FOLLOWS HEREIN, SHOWS THE PROJECTED WATER DEMANDS FOR NEW BRAUNFELS, FROM 1987 THROUGH 2020, BASED ON A PROJECTED AVERAGE ANNUAL INCREASE OF 3.5% PER YEAR. FIGURE 1, WHICH ALSO FOLLOWS HEREIN, SHOWS A GRAPHICAL REPRESENTATION OF THE HISTORICAL AND PROJECTED WATER DEMANDS FOR THE FOLLOWING CONDITIONS:

- A. MINIMUM MONTHLY AVERAGE DEMAND
- B. ANNUAL AVERAGE DAILY DEMAND
- C. MAXIMUM MONTHLY AVERAGE DEMAND
- D. PEAK DAILY DEMAND

BASED ON THE HISTORICAL AND PROJECTED WATER DEMANDS FOR NEW BRAUNFELS WE HAVE RECOMMENDED THAT A 6 MGD PLANT SHOULD BE CONSIDERED AS THE LEAST CAPACITY REQUIRED TO PROVIDE FOR BASE-LOAD DEMAND FOR 1990, WHICH WOULD BE THE EARLIEST THAT A NEW FACILITY COULD BE PLACED IN SERVICE. HOWEVER, IN ORDER TO MEET A REASONABLE FUTURE PROJECTION OF 5-7 YEARS

BEYOND THE COMPLETION OF PLANT FACILITIES, A PLANT CAPACITY OF 8 MGD WOULD MOST CLOSELY MATCH THE PROJECTED BASE DEMAND. THEREFORE, BOTH ALTERNATIVES WILL BE CONSIDERED, THOUGH THE NBU HAS AGREED THAT THE 8 MGD ALTERNATIVE APPEARS TO BE MOST ADVANTAGEOUS.

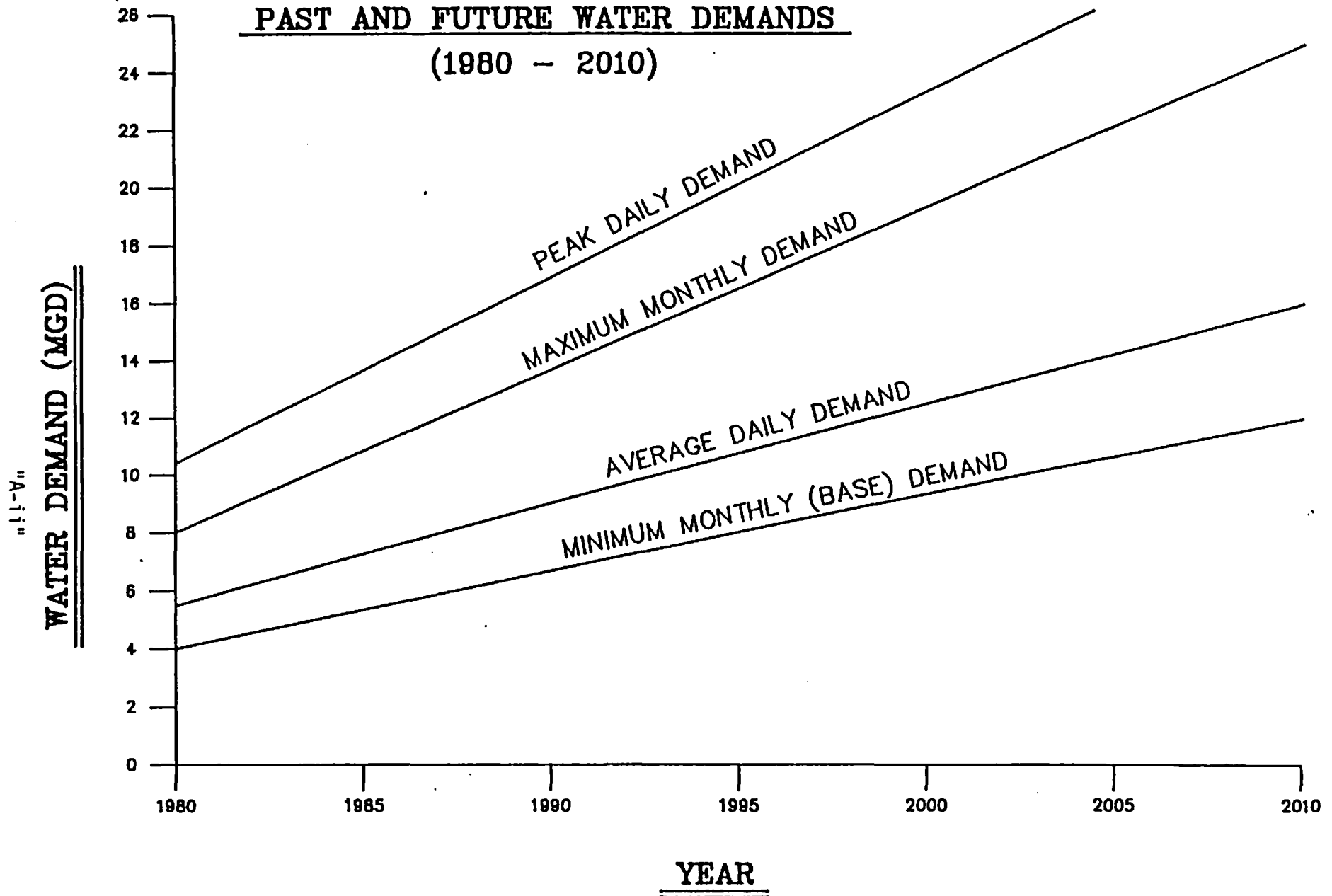
PROJECTED WATER DEMANDS

<u>YEAR</u>	<u>TOTAL ANNUAL</u>	<u>AVERAGE MONTHLY</u>	<u>MINIMUM MONTHLY</u>
1987	2,438	6.68	5.35
1990	2,703	7.41	5.93
1995	3,210	8.80	7.05
2000	3,813	10.45	8.37
2005	4,529	12.41	9.94
2010	5,379	14.73	11.80
2015	6,388	17.50	14.02
2020	7,587	20.80	16.00

NEW BRAUNFELS, TEXAS

PAST AND FUTURE WATER DEMANDS

(1980 - 2010)



NEW BRAUNFELS WATER RIGHTS

THE FOLLOWING TABLE INDICATES WATER RIGHTS HELD BY THE NEW BRAUNFELS UTILITIES AND THE CITY OF NEW BRAUNFELS ON THE COMAL RIVER. CERTIFIED FILING NO. 135, IN THE AMOUNT OF 5,658 ACRE FEET PER YEAR EQUALS THE AVERAGE OF 5.04 MILLION GALLONS PER DAY. IT IS DESIRED THAT THESE RIGHTS BE TRANSFERRED TO THE GUADALUPE RIVER TO BE WITHDRAWN AT THE SITE OF THE WATER PLANT FOR USE IN THE NBU SYSTEM. THESE RIGHTS WOULD BE AVAILABLE AS LONG AS THE COMAL RIVER IS DISCHARGING THIS AMOUNT INTO THE GUADALUPE. SHOULD THE COMAL RIVER CEASE TO FLOW, THERE WOULD BE NO RIGHTS FOR THE NBU FROM THE GUADALUPE.

SHOULD THIS SEVERE DROUGHT OCCUR, THE ONLY SOURCE OF SUPPLY FOR THE WATER TREATMENT PLANT WOULD BE FROM STORAGE IN CANYON LAKE. THEREFORE, CONSIDERATION SHOULD BE GIVEN FOR THE BASE LOADED PLANT TO RELY ENTIRELY ON CANYON LAKE WATER AND PURCHASED FROM THE GUADALUPE-BLANCO RIVER AUTHORITY.

THE CERTIFIED FILING 411 HELD BY THE CITY OF NEW BRAUNFELS, IN THE AMOUNT OF 1,289 ACRE FEET PER YEAR EQUALS 1.15 MGD AND WOULD CONTINUE TO BE HELD BY THE CITY OF NEW BRAUNFELS FOR IRRIGATION OF THE MUNICIPAL GOLF COURSE.

(Preliminary)
Major Guadalupe-Blanco River Basin
Water Rights

(Use of 5,000 acre feet or more per annum)

Listed by Priority Date

NOTE: Information shown is not based on results of adjudication proceedings
except for New Braunfels Utilities and City of New Braunfels

Water Right No.	County	River Order No.	Appropriator	Stream	Purpose	Amount Authorized (a.f./yr.)	Priority Date
A21	Guadalupe	642500	G-B R A TP1	Guad.	Hydro.	941,161	4/01/14
A21	Guadalupe	623500	G-B R A TP3	Guad.	Hydro.	941,161	4/01/14
A21	Guadalupe	610000	G-B R A TP4	Guad.	Hydro.	941,161	4/01/14
A21	Guadalupe	582500	G-B R A TP5	Guad.	Hydro.	941,161	4/01/14
* CF135	Comal	702500	New Braunfels Utilities	Comal	Ind.	141,438(5658)	6/01/14
					Hydro.	124,870	6/01/14
					Irr.	200	6/01/14
CF571 A	Gonzales	320000	City of Gonzales	Guad.	Hydro.	796,363	6/16/14
CF802 B	Guadalupe	600500	Seguin Municipal Utilities	Guad.	Hydro.	300,448	6/24/14
CF803 B	Guadalupe	597500	Seguin Municipal Utilities	Guad.	Mun.-Dom.	7,000	6/24/14
* CF411	Comal	715000	City of New Braunfels	Comal	Mun.-Dom.	1,289	6/27/14
* CF294	Comal	700000	City of New Braunfels	Comal	Rec.	-0-	6/29/14

"B-1"

Water Right No.	County	River Order No.	Appropriator	Stream	Purpose	Amount Authorized (a.f./yr.)	Priority Date
* (CF326 A ((and (Comal	685000	West Point Pepperell, Inc. et al. and	Guad.	Ind.	3,388(339)	6/29/14
* (A2050 A (Comal	685000	New Braunfels Utilities	Guad.	Ind.	5	6/29/14
CF324	Comal	687500	Camp Warnecke, Inc.	Comal	Hydro.	144,794	6/30/14
A1163	Gonzales	520000	G-B R A (H-5)	Guad.	Hydro.	941,200	9/10/28
A1163	Gonzales	537500	G-B R A (H-4)	Guad.	Hydro.	941,200	9/10/28
A1163	Gonzales	537900	G-B R A (H-3)	Guad.	Hydro.	941,200	9/10/28
A1163	Guadalupe	538200	G-B R A (H-2)	Guad.	Hydro.	941,200	9/10/28
A1163	Guadalupe	548500	G-B R A (H-1)	Guad.	Hydro.	941,200	9/10/28
A1469	Calhoun	100000	Union Carbide, et al.	Guad.	Irr.	42,615	5/14/45
A1469 G	Calhoun	007500	Union Carbide, et al.	Guad.	Irr.	8,632	1/26/48
A1578 B	Victoria	150000	E I DuPont De Nemours	Guad.	Ind.	198,000	10/05/48
A1713	Calhoun	070530	West Side Calhoun N D	Guad.	Irr.	9,944	6/21/51
A1723	Victoria	170000	Central Power & Light Co.	Guad.	Ind.	209,189	8/15/51
A1736 E	Calhoun	115000	Union Carbide, et al.	Guad.	Ind.	12,600	1/7/52

DISTRIBUTION SYSTEM OPERATION PLAN

A. EXISTING SYSTEM

THE NEW BRAUNFELS WATER SYSTEM IS SUPPLIED BY SIX WELLS LOCATED GENERALLY ALONG THE BALCONES FAULT. WELLS 1, 2 AND 3 ARE LOCATED AT THE WATER PLANT ON CENTRAL AVENUE; WELL #5 IS LOCATED IN LANDA PARK; WELL #4 IS NEAR STATE HIGHWAY 46 ON LAUREL LANE; WELL #6 IS ON MOSS ROCK DRIVE NEAR WALD ROAD. THESE RELATIVELY HIGH CAPACITY WELLS PROVIDE THE SYSTEM WITH GOOD QUALITY WATER FROM THE EDWARDS AQUIFER AT VARYING CAPACITIES.

ALL OF THE WELLS, EXCEPT WELL #6, PUMP DIRECTLY INTO GROUND STORAGE RESERVOIRS NEAR THE WELLS, THEN HIGH-SERVICE BOOSTER PUMPS PUMP FROM THE GROUND STORAGE RESERVOIRS, THROUGH THE PIPING NETWORK AND INTO ELEVATED STORAGE RESERVOIRS AT VARIOUS LOCATIONS THROUGHOUT THE CITY. THE WATER LEVEL IN THESE ELEVATED RESERVOIRS IS MAINTAINED AT AN ELEVATION TO SUPPLY THE CITY WITH WATER OF SUFFICIENT QUANTITY AND ADEQUATE PRESSURE.

DUE TO THE VARIATION IN GROUND ELEVATION IN THE CITY, THE WATER SYSTEM HAS BEEN DIVIDED INTO FIVE PRESSURE ZONES. THE MAJORITY OF THE CITY OF NEW BRAUNFELS IS LOCATED IN PRESSURE ZONE 2-3 AT AN ELEVATION OF 795. PRESSURE ZONES 1, 4 AND 5 SERVE THE CUSTOMERS WHO LIVE IN THE HIGHER

ELEVATIONS OF THE CITY, WHICH IS LOCATED ABOVE THE EDWARDS AQUIFER RECHARGE ZONE. A NEW PRESSURE ZONE IS BEING ESTABLISHED IN THE NORTHERLY AREA OF THE CITY TO SERVE THE INDUSTRIAL AREA ALONG IH-35, TO BE REFERRED TO AS PRESSURE ZONE #6 AT ELEVATION 900.

ALL OF THE HIGHER ZONES ARE BEING SUPPLIED BY HIGH SERVICE BOOSTER PUMPS FROM THE STORAGE TANKS IN PRESSURE ZONE 2-3. EACH OF THESE HIGHER PRESSURE ZONES IS SUPPLIED FROM AT LEAST TWO SOURCES OF WATER FROM PRESSURE ZONE 2-3.

B. PROPOSED SYSTEM PLAN

WHEN THE SURFACE WATER TREATMENT PLANT IS COMPLETED, IT WILL SUPPLY THE CITY OF NEW BRAUNFELS WITH EIGHT (8) MILLION GALLONS OF WATER DAILY. THE FOLLOWING MAP INDICATES THE PROPOSED IMPROVEMENTS NECESSARY TO SUPPLY THE DISTRIBUTION SYSTEM WITH THIS ALTERNATE WATER SUPPLY.

THE RAW WATER INTAKE STRUCTURE (1) WILL BE LOCATED ON A TRACT OF LAND OWNED BY THE CITY OF NEW BRAUNFELS, NORTH OF THE COMAL COUNTY FAIR GROUNDS. THE WATER LEVEL IN THE GUADALUPE RIVER AT THIS LOCATION IS RELATIVELY CONSTANT DUE TO THE SMALL CONCRETE DAM LOCATED JUST UPSTREAM AT COMMON STREET.

RAW WATER FROM THE INTAKE STRUCTURE WILL BE PUMPED THROUGH A RAW WATER PIPELINE (2) TO THE WATER TREATMENT PLANT (3), WHICH WILL BE LOCATED AT THE SELECTED SITE. TREATED WATER WILL THEN BE STORED IN A GROUND STORAGE RESERVOIR (4) AND PUMPED INTO THE DISTRIBUTION SYSTEM BY BOOSTER PUMPS.

THE MAJORITY OF THE WATER USED IN THE DISTRIBUTION SYSTEM IS PROVIDED FROM THE MAIN WATER PLANT AND THE PLANT IN LANDA PARK. AT EACH OF THESE LOCATIONS THERE IS A 1/2 MILLION GALLON STORAGE RESERVOIR, WITH HIGH SERVICE BOOSTER PUMPS THAT DELIVER WATER TO THE DISTRIBUTION SYSTEM.

THE EIGHT MILLION GALLONS OF SURFACE WATER WILL BE DIVIDED INTO THREE SYSTEMS, AS FOLLOWS:

1. TWO MILLION GALLONS TO BE DELIVERED TO THE EXISTING 18" PIPELINE IN TORREY STREET THROUGH A 12" HIGH PRESSURE MAIN (5) THIS WATER WILL BE TRANSMITTED ACROSS THE GUADALUPE RIVER TO THE NORTHEASTERLY AREA OF THE CITY AND THE NEWLY DEVELOPED PRESSURE ZONE #6.
2. A TWENTY-FOUR INCH (24") PIPELINE (6) WILL BE INSTALLED FROM THE TREATMENT PLANT ALONG TORREY STREET TO ELIZABETH STREET. SIX (6) MILLION GALLONS WILL BE PUMPED BY BOOSTER PUMPS THROUGH THE 24" PIPE AT A LOW PRESSURE.
3. FROM THE 24" PIPELINE, FOURTEEN INCH (14") LOW PRESSURE

PIPELINES (7) WILL BE INSTALLED TO DELIVER THREE (3) MILLION GALLONS OF WATER TO EACH OF THE STORAGE TANKS AT THE WATER PLANT AND IN LANDA PARK. THE EXISTING HIGH SERVICE BOOSTER PUMPS WILL THEN PUMP THIS SIX MILLION GALLONS PER DAY INTO THE DISTRIBUTION SYSTEM.

THIS PLAN WILL REDUCE THE USE OF WELLS 1, 2, 3, AND 5, WHICH NOW PUMP WATER FROM THE EDWARDS AQUIFER.

DURING PEAK DEMANDS, GROUND WATER FROM THE EDWARDS WILL BE PUMPED FROM WELLS 4 AND 6 AND DELIVERED INTO THE DISTRIBUTION SYSTEM TO SUPPLEMENT THE SURFACE WATER.

IN FUTURE YEARS, AS THE DEMAND FOR SURFACE WATER BECOMES GREATER, THIS PLAN CAN BE EXTENDED TO ASSIST IN REDUCING THE DEMAND ON THE EDWARDS AQUIFER FROM WELLS 4 AND 6. THE FUTURE EXPANSION WOULD CONSIST OF THE FOLLOWING:

1. PREVIOUS DEVELOPMENT PLANS FOR THE NEW BRAUNFELS UTILITIES INCLUDED A GROUND STORAGE WATER RESERVOIR AND HIGH SERVICE PUMPS TO BE INSTALLED ON THE PROPERTY OF THE OLD LCRA POWER PLANT (8), NOW CONTROLLED BY NBU.
2. A TWENTY INCH (20") PIPELINE (8a) AT LOW PRESSURE WOULD BE INSTALLED FROM THE 24" PIPELINE AT ELIZABETH STREET TO FURNISH

SURFACE WATER TO THE STORAGE RESERVOIR.

3. THE HIGH SERVICE PUMPS WOULD DELIVER WATER INTO THE WESTERLY DISTRIBUTION SYSTEM THROUGH TWO SEPARATE TWELVE INCH (12") MAINS (8c), ALONG WALD ROAD TO WELL #6, AND THE OTHER ALONG A ROUTE TO THE COLL STREET STANDPIPE.

THIS OVERALL PLAN WILL PROVIDE THE NEW BRAUNFELS UTILITIES AN ALTERNATE SOURCE OF A WATER SUPPLY AND AID IN THE PROTECTION OF THE EDWARDS AQUIFER.

- HA HUNTER ASSOCIATES, INC.**
ENGINEERS/PLANNERS/SURVEYORS
DALLAS AUSTIN
214-369-9171 512-434-0710

Moody's **Municipal** Credit Report

NEW BRAUNFELS

SEP 8 1987

UTILITIES

New Braunfels, Texas

September 1, 1987

	New Issue	Revenue
sale:	\$9,400,000	Utility System Revenue Bonds, Series C
date:	For bids September 1	

Moody's rating: A1
Utility System Revenue Bonds, Junior Lien

opinion:	Satisfactory historical financial results and comfortable debt service coverage continues. Phased rate increases will aid revenues to provide	for the ambitious borrowing program and expanded system.
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key facts:	Type System: Electric distribution; water supply, treatment, distribution; wastewater collection, treatment; purchases power from Lower Colorado River Authority, rated A; electric component 88.5% of 1986 operating revenue. Service Area: City of New Braunfels and surrounding areas in Comal County.	Fiscal Year Ended July 31, 1986; Operating Ratio: 85.7%, \square 82.6% Median: 87.3% Debt Service Coverage: 4.21x, \square 3.84x Median: 2.99x Debt Ratio: 22.6%, \square 21.8% Median: 27.0% Gross Revenue Allocations: O & M: 83.3% General Fund: 2.9% Debt Service: 4.0% Moody's Rating, Utility System Senior Lien Revenue Bonds: Aa
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\square Fiscal year ended July 31, 1987 based on 10 months actual, two months estimated.

analysis: The growth in the Austin/San Antonio corridor, of which New Braunfels is part, has contributed to economic growth with an accompanying need for expansion of the utility system. The capital program is being addressed from current funds as well as proceeds from bond issues. The current bonds, the first issue since the fall of 1985, will increase bonded debt by about 85% and increase the debt ratio (pro-forma) to 34.9%, but present net

revenues for current periods cover estimated peak debt service on all old and new bonds by about 2.50 times or better. Current offering will provide about two-thirds of funds for various water and wastewater expansions. The largest capital item in this program is for a treatment plant for additional surface water; the development of further surface supply relates not only to diversification of water sources but also to a concern for the long-term



New Braunfels, Texas

integrity of the underground aquifers in this area. Other identified capital projects of about \$10 million reportedly can be accommodated from system revenues without the need for issuance of additional bonds over the next several years.

Satisfactory financial results have been supported by customer growth and rate increases. Key ratios are characteristic of an electric distribution system. Largest expense component is purchased power from Lower Colorado River Authority (LCRA). General Fund transfers are made in accordance with a formula; the transfers do not represent a burden on system gross revenues, and these transfers account for about 12% of the city's General Fund revenues. Balance sheet data disclose the recent borrowing and the build-up from revenues of the debt service reserve.

Rates have been increased this year, and there are plans for additional annual increases over the next few years. Officials plan to raise both water and wastewater rates so that the systems will pay their own way and eliminate subsidization from the electric system. New Braunfels additionally will

pass through to its customers increases in LCRA base rates approved by the Public Utilities Commission.

New Braunfels' utility system will have additional financial obligation to the Guadalupe-Blanco River Authority (GBRA) for permanent financing that GBRA plans to complete within the next 90 days for a hydro generating unit to be installed in an existing dam on the Guadalupe River. Estimated construction costs are \$13.8 million, and debt service on the authority's bonds will be an O&M expense of the New Braunfels system. Hydro output will provide about 5% of system needs, and New Braunfels considers these future power purchases advantageous, assuming future LCRA increases. GBRA has received certain approvals for the project; however, there are challenges and petitions for rehearing pending. New Braunfels has indicated that its electric rates will not have to be adjusted for this new obligation.

At this time, we have also reviewed and confirmed the Aa rating on the utility system senior lien revenue bonds.

New Braunfels, Texas

details of bond sale:

Legal Name of Issuer: City of New Braunfels, Texas.

Security: Parity with outstanding junior lien revenue bonds from utility system net revenues, after debt service on prior lien bonds.

Date of Bonds: September 1, 1987.

Denomination: \$5,000.

Annual Maturities 7/1 (\$ 000)

Year	Amount	Year	Amount
1988	\$100	2000	\$ 250
1989	50	2001	285
1990	55	2002	320
1991	75	2003	350
1992	80	2004	600
1993	100	2005	650
1994	125	2006	700
1995	150	2007	750
1996	165	2008	1,000
1997	190	2009	1,425
1998	210	2010	1,545
1999	225		

Interest Rate: To be determined.

Average Life of Issue: 17.6908 years.

Interest Payable: January 1, 1988 and semi-annually thereafter.

Call Features: (optional) beginning July 1, 1997 at par.

Registrar: The Frost National Bank of San Antonio.

Paying Agent: The Frost National Bank of San Antonio.

Delivery: On or about October 1, 1987.

Bond Counsel: Fulbright & Jaworski, Dallas.

Financial Officer: Robert H. Sohn, P.E., General Manager.

Advisors: M.E. Allison, San Antonio.

Auditor: Reed & Company, New Braunfels (FY 1986).

details of last comparable sale:

Date of Sale: November 12, 1985.

Amount: \$4,785,000.

Interest Range:

8.00%-9.50%

rating history:Utility Revenue, Prior Lien,
January 1970:
February 1980:A1
AaJunior Lien:
November 1982:A1
A1

analyst: C. Atwater

M Moody's Investors Service, Inc. has used due care and caution in the preparation of this publication. The information herein has been obtained from sources believed to be accurate and reliable, but because of the possibility of human and mechanical error, its accuracy or completeness is not guaranteed. Moody's ratings are opinions, not recommendations to buy or sell, and their accuracy is not guaranteed. A rating should be weighed solely as one factor in an investment decision, and you should make your own study and evaluation of any issuer whose securities or debt obligations you consider buying or selling. Most issuers of corporate bonds, municipal bonds and notes, preferred stock, and commercial paper which are rated by Moody's Investors Service, Inc. have, prior to receiving the rating, agreed to pay a fee to Moody's for the appraisal and rating services. The fee ranges from \$1,000 to \$125,000.

New Braunfels, Texas

debt factors: Debt Statement (\$ 000) as of 7/1/87:

	Rating	Amount Issued	Amount Outstanding		Fin Maturity
			Before Delivery	After Delivery	
Utility Revenue, Senior Lien, Series 1970-1980	Aa	\$5,000	\$3,425	\$3,425	198
Junior Lien, Series 1982 and 1985	A1	8,985	7,625	7,625	2008
Subtotal		\$13,985	\$11,050	\$11,050	
Junior Lien, Series 1987 (current offering)	A1	9,400	-	9,400	2010
Total		\$22,385	\$11,050	\$20,450	

For additional information please refer to Moody's 1987 Municipal and Government Manual, page 5484.

Selected Debt Service Requirements (\$ 000)

	Outstanding Debt	Current Issue		Tot
		Principal	Interest	
First Year 1988	\$1,305	\$ 100	\$711	\$2,016
Peak Year 1989	1,256	50	725	2,031
Final Year 2010	-	1,545	120	1,665

Assumes 7.80% on the current offering as provided by financial advisor.

Rate of Retirement (\$ 000)

Principal Amount Due	Total Debt (Incl. new issue)	
In 5 years	\$2,205	10.8
In 10 years	7,280	33.5

Debt Service Coverage (\$ 000)

	Last 3-Year Average	FY Ended 7/31/86	FY Ended 7/31/87
Net revenues	\$4,758	\$4,990	\$5,000
Estimated peak requirements: Principal and interest (\$2,031 in 1989) (x)	2.34	2.47	2.74

security
provisions:

Bond Security: Ordinances provide first lien on net revenues to senior bonds, second lien to junior bonds.

Flow of Funds: Standard, open loop. System Fund to O & M; debt service, reserve, contingencies funds for priority bonds; junior lien bonds; any lawful purpose including General Fund transfers.

Rate Covenant: Acceptable, sums sufficient.

Reserve Requirement: Adequate, typical in Texas. Average annual debt service to be built-up over five years. Previous issue requirement fully funded.

Additional Indebtedness: Relatively strong for state. Historical net to equal 1.40 times average annual debt service on all outstanding and the new bonds. Senior lien is closed.

Authorized Investments: Strong, direct U.S. government obligations, unconditionally-guaranteed U.S. obligations, U.S. Treasury obligations in book-entry form.

New Braunfels, Texas

**system
description:**

System approved extension of wholesale power agreement with LCRA from 1999 to 2016. Water obtained from Edwards Aquifer, also from Canyon Lake on Guadalupe River. Additional surface water rights are to be obtained. Secondary wastewater treatment including 3 MGD plant completed in 1985. Steady customer growth achieved. Peak load to date in 1987 was 130 MW, 8.3% above 1986. Energy sales in fiscal year 1986 were 595 gWh, 8.7% above 1985. sales revenue per kWh was 4.30 cents in 1986, 5.09 cents in 1985.

decline due to the lower LCRA fuel costs. Two largest electric customers are cement plants, both accounting each for over 15% of sales.

Rates: Approval by trustees and city council. Rates for all three components increased in 1987, further increases planned in 1987-90 years, water and sewer increases to eliminate electric subsidy. New Braunfels will pass through its power cost adjustment LCRA base-rate increases following PUC approval. Electric residential rates among lowest in Texas.

**administrative
factors:**

Governing Body: Board of trustees elected by city council, mayor ex-officio trustee. Staff headed by general manager; present general manager on duty since May 1980. Board-council agreement since January 1981 specifies General Fund transfer of 1.5 mills per kWh sold in previous fiscal year.

Public Employees: 176 employees. Pensions provided through Texas Municipal Retirement System. Unfunded liability of \$710,260 at December 31, 1985 being funded over a 25-year period since 1982.

**economic
factors:****Population and Housing Characteristics: New Braunfels**

	City 1980	Norms ② 1980	U. S. 1980
Population:			
Median age	32.2	29.1	30.0
% school age	21.0	22.0	20.9
% working age	55.5	58.1	60.7
% 65 and over	15.9	11.3	11.3
No. persons/household	2.8	2.9	2.75
Income:			
Median family income	\$17,758	\$19,549	\$19,908
% below poverty level	10.6	14.0	12.5
Per capita income	\$6,790	\$6,877	\$7,313
Housing:			
% owner occupied	70.2	69.3	64.4
% built before 1939	18.8	14.2	26.1
% built since last census	29.1	32.1	25.9
Owner occupied median value	\$34,700	\$38,828	\$47,300
Median gross rent	① \$243	\$234	\$243

Source: U.S. Census Bureau.

① Based on population of 17,839 in 1970 and 22,402 in 1980. 1987 estimated population, 26,900.

② Norms for all cities with population 10,000-20,000 in Southwest Region.

New Braunfels, Texas

financial
factors:

Financial Performance (fiscal years ended 7/31 \$000):

	Historical			Projected	
	1984	1985	1986	① 1987	② 1988
Electric	\$30,244	\$28,379	\$25,732	24,159	\$27,076
Water	1,609	1,823	1,988	2,207	2,571
Sewer	779	1,175	1,369	1,489	1,758
Operating revenues	32,632	31,378	29,089	27,854	31,407
Gross revenue and income	33,312	32,008	29,921	28,582	32,421
Electric-power purchased	24,372	22,925	19,868	17,635	19,671
Other electric	2,188	2,500	2,678	2,792	
Water	1,250	1,380	1,282	1,368	
Sewer	636	784	1,002	1,214	
Total O & M expenses	28,446	27,590	24,931	23,009	25,355
Net revenues	4,866	4,418	4,990	5,573	7,065
Interest	631	607	934	1,115	1,571
Principal and interest	861	847	1,184	1,450	2,041
General Fund transfers	835	808	877	901	939

① Based on ten months actual, two months projected. Fiscal year 1987 revised budgeted revenues were \$28,743,000, budgeted O & M expense \$22,769,000, net \$5,974,000.

② Utility system budget. O & M expense components not strictly comparable with historical presentation.

Key Ratios:

	① Median	1984	1985	1986	② 1987	② 1988
Operating ratio (%)	87.3	87.2	87.9	85.7	82.6	80.7
Net take-down (%)	14.7	14.6	13.8	16.8	19.5	21.3
Interest coverage (x)	5.52	7.71	7.28	5.34	5.00	4.73
Debt service coverage (x)	2.99	5.65	5.22	4.21	3.84	3.46
Debt service safety margin (%)	11.6	12.0	11.6	12.7	14.4	17.5
Debt ratio (%)	27.0	19.0	15.6	22.6	21.8	21.8

① Electric distribution.

② 1987 based on months actual, two months projected; 1988 budgeted.

Balance Sheet Data (fiscal years ended 7/31 \$000):

	1984	1985	1986	- % Change -		② As of
				1985	1986	6/30/87
Gross fixed assets	\$44,407	\$53,272	\$57,919	20.0	8.7	\$61,265
Net fixed assets	26,557	33,661	36,195	26.7	7.5	38,114
Net working capital	6,807	4,441	8,741	-34.8	96.8	8,556
Long-term debt	7,275	6,978	11,402	-4.1	63.4	11,192
Debt Service Reserve and Debt Service Funds ①	946	1,038	1,242	9.8	19.7	1,316
Net funded debt	6,329	5,940	10,160	-6.2	71.0	10,146

① Unaudited, from utility system reports.

Standard & Poor's Corporation

25 Broadway, New York, New York 10004 212/208-1002



NEW BRAUNFELS

Debt Rating Services
Municipal Bond Department

SEP 8 1987

September 1, 1987

UTILITIES

Mr. Floyd R. Westerman
Executive Vice President
M.E. Allison & Co.
1615 National Bank of Commerce Building
San Antonio, Texas 78205

Re: \$9,400,000 New Braunfels, Texas, Utility System Revenue
Bonds, Series 1987C, dated: September 1, 1987

Dear Mr. Westerman:

Pursuant to request for a Standard & Poor's rating on the above debt obligations, we have reviewed the information furnished to us and, subject to the terms and conditions of the MEMORANDUM OF AGREEMENT on the reverse side hereof, have assigned a rating of "A" to the obligations.

Please note that the information referred to in the third paragraph of the MEMORANDUM OF AGREEMENT includes annual audits and budgets and, for revenue bond ratings in connection with construction financing, progress reports, not less often than quarterly, covering the project being financed.

In the event that you decide to include this rating in an Official Statement, prospectus or other offering literature, we request that you include S&P's definition of the rating together with a statement that the rating may be changed, suspended or withdrawn as a result of changes in, or unavailability of, information.

We are pleased to have been of service to you. Our bill will be sent in due course. If you have any questions, please contact us.

Very truly yours,

Vickie A. Tillman
Managing Director

/ed

cc: Mr. Robert H. Sohn
General Manager
New Braunfels Utilities
263 Main Plaza
P.O. Box 289
New Braunfels, Texas 78131-0289

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

FINANCIAL STATEMENTS
July 31, 1987

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

BALANCE SHEET
July 31, 1987

ASSETS

CURRENT ASSETS:

Cash in Banks - Schedule No. 10	\$ 2,346,480	
Accounts Receivable - Customers (Note 1)	2,324,321	
Accounts Receivable - Unbilled Services (Note 1)	618,384	
Accounts Receivable - Other	51,186	
Accrued Interest Receivable	140,504	
Inventory - Materials and Supplies (Note 1)		
Electrical Department	684,628	
Waterworks Department	120,956	
Prepaid Insurance	5,900	
Total Current Assets		\$ 6,292,359

INVESTMENTS OF RESTRICTED FUNDS (Note 2):

Interest and Sinking-Prior Lien	298,987	
Interest and Sinking -Junior Lien	111,372	
Reserve Fund-Prior Lien	475,017	
Reserve Fund -Junior Lien	637,674	
Contingencies Fund - Prior Lien	150,007	
Contingencies Fund - System	903,500	
Bond Fund - 1985-B Unexpended Funds	2,785,000	
Water Resource Development Fund	590,770	
Central Facilities Funds	217,554	
Total Investments of Restricted Funds - Schedule No. 5		6,169,881

UTILITY PLANT:

Electrical Operating Plant	23,295,040	
Electrical General Plant	3,996,203	
Less: Accumulated Depreciation	(11,730,644)	
Net Electrical Plant	15,560,599	
Waterworks Distribution Plant	15,559,932	
Waterworks General Plant	1,354,920	
Less: Accumulated Depreciation	(7,071,177)	
Net Waterworks Plant	9,843,675	
Sewer Plant	17,603,022	
Less: Accumulated Depreciation	(4,679,572)	
Net Sewer Plant	12,923,450	

Construction Work in Progress - Schedule No. 11	491,590	
---	---------	--

 Total Utility Plant - Net 38,819,314

TOTAL ASSETS \$51,281,554
=====

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

BALANCE SHEET
July 31, 1987

LIABILITIES AND EQUITY

CURRENT LIABILITIES:

Accounts Payable	\$ 2,083,850	
Fuel Cost Rebate Payable	3,613	
Accrued Payroll	97,013	
Accrued Vacation/Sick Leave Payable (Note 9)	91,777	
Sales Tax Payable	29,322	
Accrued Interest Payable	119,284	
Consumer Deposits	231,058	
Bonds Due Within One Year	365,000	
Obligations Under Capital Leases (Note 7)	<u>16,543</u>	
Total Current Liabilities		\$ 3,037,460

LONG-TERM DEBT:

Revenue Bonds Payable (Note 3)	11,050,000	
Less: Bonds Due Within One Year	(365,000)	
Unamortized Discount on Bonds	<u>(78,264)</u>	
Total Long-Term Debt		<u>10,606,736</u>

TOTAL LIABILITIES

13,644,196

EQUITY:

Reserved For Restricted Assets	6,209,290	
Reserved For Transfer To City of New Braunfels (Note 6)	911,031	
Contributions in Aid of Construction	8,594,450	
Capital Contributed by Municipality	2,425,534	
Unreserved Retained Earnings	<u>19,497,053</u>	

TOTAL EQUITY (Note 6)

37,637,358

TOTAL LIABILITIES AND EQUITY

\$51,281,554
=====

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE CONDENSED BALANCE SHEET
July 31, 1987 and 1986

ASSETS

	<u>July 31, 1987</u>	<u>July 31, 1986</u>
<u>CURRENT ASSETS:</u>		
Cash in Banks	\$ 2,346,480	\$ 2,130,742
Accounts Receivable (Note 1)	2,993,891	2,652,100
Interest Receivable	140,504	130,737
Inventories (Note 1)	805,584	1,038,714
Prepayments	5,900	10,560
Total Current Assets	<u>6,292,359</u>	<u>5,962,853</u>
 <u>INVESTMENTS OF</u>		
<u>RESTRICTED FUNDS</u> (Note 2)	<u>6,169,881</u>	<u>7,206,855</u>
 <u>UTILITY PLANT IN SERVICE:</u>		
Electrical Plant - net	15,560,599	13,602,632
Waterworks Plant - net	9,843,675	9,222,785
Sewer Plant - net	12,923,450	12,862,242
Construction in Progress	491,590	507,739
Total Utility Plant in Service	<u>38,819,314</u>	<u>36,195,398</u>
 TOTAL ASSETS	 \$ 51,281,554 =====	 \$ 49,365,106 =====

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE CONDENSED BALANCE SHEET
July 31, 1987 and 1986

LIABILITIES AND EQUITY

	<u>July 31, 1987</u>	<u>July 31, 1986</u>
<u>CURRENT LIABILITIES:</u>		
Accounts Payable	\$ 2,087,463	\$ 2,622,398
Accrued Payables - Other (Note 9)	218,112	157,596
Accrued Interest Payable	119,284	124,215
Consumer Deposits	231,058	218,221
Bonds Due Within One Year	365,000	335,000
Obligations Under Capital Lease (Note 7)	<u>16,543</u>	<u>62,329</u>
Total Current Liabilities	<u>3,037,460</u>	<u>3,519,759</u>
<u>LONG-TERM DEBT:</u>		
Revenue Bonds Payable (Note 3)	11,050,000	11,385,000
Less: Bonds Due Within One Year	(365,000)	(335,000)
Unamortized Discount on Bonds	(78,264)	(89,351)
Obligations Under Capital Lease (Note 7)	<u>-0-</u>	<u>16,543</u>
Total Long Term Debt	<u>10,606,736</u>	<u>10,977,192</u>
<u>EQUITY:</u>		
Reserved For Restricted Assets	6,209,290	7,227,515
Reserved For Transfer to City of New Braunfels (Note 6)	911,031	877,475
Contribution in Aid of Construction	8,594,450	8,239,037
Capital Contributed by Municipality	2,425,534	2,425,534
Unreserved Retained Earnings	<u>19,497,053</u>	<u>16,098,594</u>
Total Equity (Note 6)	<u>37,637,358</u>	<u>34,868,155</u>
<u>TOTAL LIABILITIES AND EQUITY</u>	<u>\$ 51,281,554</u>	<u>\$ 49,365,106</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

STATEMENT OF CHANGES IN EQUITY
For the Year Ended July 31, 1987

	<u>Balance</u> <u>7-31-86</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance</u> <u>7-31-87</u>
<u>RESERVE FOR RESTRICTED ASSETS</u>	\$ 7,227,515	\$ _____	\$1,018,225	\$ 6,209,290
<u>RESERVE FOR TRANSFER TO CITY OF NEW BRAUNFELS (Note 6)</u>	<u>877,475</u>	<u>33,556</u>	_____	<u>911,031</u>
<u>CONTRIBUTION IN AID OF CONSTRUCTION</u>	<u>8,239,037</u>	<u>775,883</u>	<u>420,470</u>	<u>8,594,450</u>
<u>CAPITAL CONTRIBUTED BY MUNICIPALITY</u>	<u>2,425,534</u>	_____	_____	<u>2,425,534</u>
<u>UNRESERVED RETAINED EARNINGS:</u>				
Balance Beginning of Year	16,098,594			16,098,594
Transfer From Contribution In Aid of Construction (Note 1)		420,470		420,470
Transfer From Reserve For Restricted Assets		1,018,225		1,018,225
Net Income for Period	_____	<u>1,959,764</u>	_____	<u>1,959,764</u>
<u>TOTAL</u>	<u>16,098,594</u>	<u>3,398,459</u>	<u>-0-</u>	<u>19,497,053</u>
<u>TOTAL EQUITY (Note 6)</u>	<u>\$34,868,155</u>	<u>\$4,207,898</u>	<u>\$1,438,695</u>	<u>\$37,637,358</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

Exhibit "D"

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>SERVICE REVENUE:</u>		
Electrical - Schedule No. 1	\$ 24,124,899	\$ 25,577,657
Waterworks - Schedule No. 2	2,117,432	1,885,334
Sewer - Schedule No. 3	<u>1,382,002</u>	<u>1,318,783</u>
TOTAL SERVICE REVENUE	27,624,333	28,781,774
<u>COST OF ELECTRICAL POWER:</u>	<u>(17,821,599)</u>	<u>(19,868,381)</u>
GROSS PROFIT	9,802,734	8,913,393
<u>OTHER OPERATING REVENUE:</u>		
Electrical - Schedule No. 1	139,063	148,435
Waterworks - Schedule No. 2	82,536	85,370
Sewer - Schedule No. 3	<u>17,620</u>	<u>22,155</u>
TOTAL OTHER OPERATING REVENUE	239,219	255,960
TOTAL DEPARTMENTAL REVENUE	<u>10,041,953</u>	<u>9,169,353</u>
<u>OPERATING EXPENSES:</u>		
Electrical - Schedule No. 1	3,663,812	3,865,698
Waterworks - Schedule No. 2	1,842,298	1,869,426
Sewer - Schedule No. 3	<u>1,677,327</u>	<u>1,456,327</u>
TOTAL OPERATING EXPENSES	<u>(7,183,437)</u>	<u>(7,191,451)</u>
OPERATING INCOME	2,858,516	1,977,902
<u>OTHER REVENUE:</u>		
Interest Earned - Schedule No. 9	699,535	771,708
Non-Operating Revenue	103,246	38,049
Valero Settlement (Note 4)	-0-	5,629
Revenue from Leased Property	23,872	22,172
Central Facility Charges (Note 2)	<u>164,667</u>	<u>45,453</u>
TOTAL OTHER REVENUE	991,320	883,011
INCOME BEFORE INTEREST ON LONG-TERM DEBT	<u>3,849,836</u>	<u>2,860,913</u>
<u>INTEREST ON LONG-TERM DEBT:</u>		
Electrical Department	399,087	374,302
Waterworks Department	307,602	303,447
Sewer Department	<u>272,353</u>	<u>256,722</u>
TOTAL OTHER EXPENSES/LOSSES	<u>(979,042)</u>	<u>(934,471)</u>
INCOME BEFORE OPERATING TRANSFERS	2,870,794	1,926,442
<u>TRANSFER TO CITY OF NEW BRAUNFELS (Note 6)</u>	<u>(911,030)</u>	<u>(877,475)</u>
INCOME BEFORE CUMULATIVE EFFECT OF CHANGE IN ACCOUNTING PRINCIPLES	<u>1,959,764</u>	<u>1,048,967</u>
<u>CUMULATIVE EFFECT OF CHANGE IN ACCOUNTING PRINCIPLES (Note 12)</u>	<u>-0-</u>	<u>332,521</u>
NET INCOME	\$ 1,959,764 =====	\$ 1,381,488 =====

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE STATEMENTS OF CHANGES IN FINANCIAL POSITION
For the Years Ended July 31, 1987 and 1986

	<u>Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>SOURCES OF WORKING CAPITAL:</u>		
Net Income	\$ 1,959,764	\$ 1,381,488
Items Not Requiring Working Capital: Depreciation	1,786,471	2,128,681
Amortization of Discount	11,087	4,463
Net Decrease in Restricted Assets	1,036,974	-0-
Increase in Reserve for Transfer to - City of New Braunfels	33,556	69,142
Increase in Long-Term Debt	<u>-0-</u>	<u>4,248,320</u>
	<u>\$ 4,827,852</u>	<u>\$ 7,832,094</u>
	=====	=====
<u>USES OF WORKING CAPITAL:</u>		
Additions to Utility Plant and Construction in Progress	\$ 4,410,387	\$ 4,646,582
Less: Contributions in Aid of Construction	(775,883)	(1,255,038)
Increase in Restricted Assets	-0-	3,590,068
Decrease in Long-Term Debt	381,543	-0-
Net Increase (Decrease) in Working Capital	<u>811,805</u>	<u>850,482</u>
	<u>\$ 4,827,852</u>	<u>\$ 7,832,094</u>
	=====	=====
<u>ELEMENTS OF NET INCREASE (DECREASE) IN WORKING CAPITAL:</u>		
Current Assets:		
Cash	\$ 215,738	\$ 1,439,647
Accounts Receivable	341,791	36,167
Accrued Interest Receivable	9,767	29,986
Inventories	(233,130)	(33,838)
Prepayments	<u>(4,660)</u>	<u>(44,644)</u>
TOTAL INCREASE (DECREASE) IN CURRENT ASSETS	<u>329,506</u>	<u>1,427,318</u>
Current Liabilities:		
Accounts Payable	(534,935)	277,782
Accrued Payables - Other	55,585	117,053
Consumer Deposits	12,837	91,277
Bonds Due Within One Year	30,000	85,000
Obligations Under Capital Lease	<u>(45,786)</u>	<u>5,724</u>
TOTAL INCREASE (DECREASE) IN CURRENT LIABILITIES	<u>(482,299)</u>	<u>576,836</u>
NET INCREASE (DECREASE) IN WORKING CAPITAL	<u>\$ 811,805</u>	<u>\$ 850,482</u>
	=====	=====

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE STATEMENT OF REVENUE AND EXPENSES - ELECTRICAL DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended</u>	
	<u>July 31, 1987</u>	<u>July 31, 1986</u>
<u>ELECTRICAL SERVICE REVENUE:</u>		
Residential	\$ 4,628,050	\$ 3,941,744
Commercial	3,052,676	2,801,491
Industrial - VLP	5,074,211	5,240,228
Street Lights	35,928	42,712
Public Authorities	444,466	352,712
Inter-Departmental	234,302	203,125
Customer Forfeited Discounts	189,122	192,404
Fuel Cost Recovery	10,466,144	12,803,241
TOTAL ELECTRIC SERVICE REVENUE	<u>24,124,899</u>	<u>25,577,657</u>
Less: Cost of Power Purchased	<u>(17,821,599)</u>	<u>(19,868,381)</u>
GROSS PROFIT	<u>6,303,300</u>	<u>5,709,276</u>
<u>OTHER OPERATING REVENUE:</u>		
Jobbing Revenue	55,070	87,146
Less: Cost of Jobbing	(59,110)	(70,887)
Merchandise Sales	9,313	20,582
Less: Cost of Merchandise Services	(2,463)	(6,276)
	<u>136,253</u>	<u>117,870</u>
TOTAL OTHER OPERATING REVENUE	<u>139,063</u>	<u>148,435</u>
TOTAL ELECTRIC REVENUE	<u>6,442,363</u>	<u>5,857,711</u>
<u>OPERATING EXPENSES:</u>		
(Schedule No. 1A)		
Hydro Plant Expense	77,342	75,900
Transmission Expense	165,010	127,539
Distribution Expense	1,086,157	976,385
Customer Accounts	228,467	232,886
Administrative and General	1,270,216	1,266,113
Depreciation	836,620	1,186,875
TOTAL OPERATING EXPENSES	<u>(3,663,812)</u>	<u>(3,865,698)</u>
OPERATING INCOME	<u>2,778,551</u>	<u>1,992,013</u>
<u>OTHER REVENUE:</u>		
Valero Settlement (Note 4)	-0-	5,629
Interest - Unexpended Bond Fund	53,920	155,083
TOTAL OTHER REVENUE	<u>53,920</u>	<u>160,712</u>
<u>OTHER EXPENSES:</u>		
Interest on Long-Term Debt (Note 5)	399,087	374,302
INCOME BEFORE TRANSFERS	<u>2,433,384</u>	<u>1,778,423</u>
<u>TRANSFER TO CITY OF NEW BRAUNFELS: (Note 6)</u>	<u>(911,030)</u>	<u>(877,475)</u>
NET INCOME - ELECTRICAL DEPARTMENT	<u>\$ 1,522,354</u>	<u>\$ 900,948</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE SCHEDULE OF OPERATING EXPENSES - ELECTRICAL DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>HYDRO PLANT:</u>		
Operating:		
Supervision and Engineering	\$ 2,473	\$ 4,700
Labor and Materials	52,516	48,568
Rents	5,835	7,500
Maintenance:		
Supervision and Engineering	-0-	830
Structures	162	-0-
Dams, Waterways, Reservoirs	6,866	3,064
Labor and Materials	<u>9,490</u>	<u>11,238</u>
Total	<u>77,342</u>	<u>75,900</u>
<u>TRANSMISSION:</u>		
Operating:		
Supervision and Engineering	515	39
Sub-Stations	52,889	33,307
Maintenance:		
Supervision and Engineering	570	-0-
Structures	7	-0-
Sub-Stations	111,029	94,047
Overhead Lines	<u>-0-</u>	<u>146</u>
Total	<u>165,010</u>	<u>127,539</u>
<u>DISTRIBUTION:</u>		
Operating:		
Supervision and Engineering	63,938	54,124
Load Dispatching	18,727	16,691
Sub-Stations	1,898	1,771
Overhead Lines	226,208	203,553
Street Light System	57	52
Remove and Reset Meters	13,776	11,669
Customer Premises	11,303	11,075
Miscellaneous Distribution Plant	26,704	20,354
Maintenance:		
Supervision and Engineering	28,738	30,635
Station Equipment	2,358	3,478
Overhead Lines	487,646	506,740
Underground System	77,292	71,727
Line Transformers	6,785	5,020
Mercury Vapor Street Lights	22,032	21,221
IH 35 Street Lights	8,964	2,604
Meters	14,659	15,671
Loss on Sale/Writedown of Inventory	<u>75,072</u>	
Total	<u>1,086,157</u>	<u>976,385</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE SCHEDULE OF OPERATING EXPENSES - ELECTRICAL DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>OTHER EXPENSES:</u>		
Customer Accounts - Schedule No. 8	\$ 228,467	\$ 232,886
Administrative and General - Schedule No. 8	1,270,216	1,266,113
Depreciation - Schedule No. 4	<u>836,620</u>	<u>1,186,875</u>
Total	<u>2,335,303</u>	<u>2,685,874</u>
 TOTAL OPERATING EXPENSES	 <u>\$3,663,812</u> <u>=====</u>	 <u>\$3,865,698</u> <u>=====</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE STATEMENT OF REVENUE AND EXPENSES - WATERWORKS DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended</u>	
	<u>July 31, 1987</u>	<u>July 31, 1986</u>
<u>WATER SERVICE REVENUE:</u>		
Residential	\$ 1,406,503	\$ 1,279,846
Commercial	687,565	581,786
Discounts Taken and Other Sales	6,190	6,679
Customer Forfeited Discounts	<u>17,174</u>	<u>17,023</u>
TOTAL WATER SERVICE REVENUE	<u>2,117,432</u>	<u>1,885,334</u>
<u>OTHER OPERATING REVENUE:</u>		
Jobbing Revenue	7,819	11,638
Less: Cost of Jobbing	(9,580)	(10,576)
Merchandise Sales	62	373
Less: Cost of Merchandise Services	(54)	(24)
	<u>84,289</u>	<u>83,959</u>
TOTAL OTHER OPERATING REVENUE	<u>82,536</u>	<u>85,370</u>
TOTAL WATER REVENUE	<u>2,199,968</u>	<u>1,970,704</u>
<u>OPERATING EXPENSES:</u> (Schedule No. 2A)		
Source Expense	35,415	38,040
Pumping Expense	229,319	228,963
Treatment Expense	86,470	88,937
Transmission Expense	338,085	300,732
Customer Accounts Expense	115,722	117,750
Administrative and General Expense	562,070	607,485
Depreciation Expense	<u>475,217</u>	<u>487,519</u>
TOTAL OPERATING EXPENSES	<u>(1,842,298)</u>	<u>(1,869,426)</u>
OPERATING INCOME (LOSS)	<u>357,670</u>	<u>101,278</u>
<u>OTHER REVENUE:</u>		
Interest - Unexpended Bond Funds	72,095	62,719
Central Facility Charges	<u>60,370</u>	<u>17,378</u>
TOTAL OTHER REVENUE	<u>132,465</u>	<u>80,097</u>
<u>OTHER EXPENSES:</u>		
Interest on Long-Term Debt (Note 5)	<u>307,602</u>	<u>303,447</u>
NET INCOME (LOSS) - WATERWORKS DEPARTMENT	\$ 182,533 =====	\$ (122,072) =====

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE SCHEDULE OF OPERATING EXPENSES - WATERWORKS DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>SOURCES:</u>		
Operating:		
Supervision and Engineering	\$ 2,646	\$ 2,850
Labor and Materials	4,063	15,334
Rents - LCRA Well	1,200	1,200
Maintenance:		
Supervision and Engineering	2,685	2,826
Structures	18,567	10,067
Wells	<u>6,254</u>	<u>5,763</u>
Total	<u>35,415</u>	<u>38,040</u>
<u>PUMPING:</u>		
Operating:		
Supervision and Engineering	2,966	2,879
Electrical Power	186,784	199,980
Labor and Materials	9,554	5,569
Maintenance:		
Supervision and Engineering	2,616	2,664
Pumping Equipment	<u>27,399</u>	<u>17,871</u>
Total	<u>229,319</u>	<u>228,963</u>
<u>TREATMENT:</u>		
Operating:		
Supervision and Engineering	2,655	2,838
Chemicals	8,449	4,201
Laboratory	44,405	45,752
Labor and Materials	12,157	17,423
Maintenance:		
Supervision and Engineering	3,007	2,966
Treatment Equipment	<u>15,797</u>	<u>15,757</u>
Total	<u>86,470</u>	<u>88,937</u>
<u>TRANSMISSION:</u>		
Operating:		
Supervision and Engineering	2,683	2,794
Labor and Materials	57,554	54,361
Remove and Reset Meters	26,763	30,909
Service Customer Premises	1,737	1,602
Maintenance:		
Supervision and Engineering	2,944	2,677
Mains	114,268	117,146
Services	72,489	53,980
Meters	34,418	37,263
Loss on Writedown of Inventory	<u>25,229</u>	
Total	<u>338,085</u>	<u>300,732</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE SCHEDULE OF OPERATING EXPENSES - WATERWORKS DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>OTHER EXPENSES:</u>		
Customer Accounts - Schedule No. 8	\$ 115,722	\$ 126,398
Administrative and General - Schedule No. 8	562,070	617,612
Depreciation - Schedule No. 4	<u>475,217</u>	<u>427,113</u>
Total	<u>1,153,009</u>	<u>1,171,123</u>
 TOTAL OPERATING EXPENSES	 \$1,842,298 =====	 \$1,807,881 =====

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE STATEMENT OF REVENUE AND EXPENSES - SEWER DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended</u>	
	<u>July 31, 1987</u>	<u>July 31, 1986</u>
<u>SEWER SERVICE REVENUE:</u>		
Residential	\$ 873,287	\$ 811,361
Commercial	499,268	498,136
Other Sewer Sales	860	775
Customer's Forfeited Discounts	<u>8,587</u>	<u>8,511</u>
TOTAL SEWER SERVICE REVENUE	<u>1,382,002</u>	<u>1,318,783</u>
<u>OTHER OPERATING REVENUE:</u>		
Services	<u>17,620</u>	<u>22,155</u>
TOTAL SEWER REVENUE	<u>1,399,622</u>	<u>1,340,938</u>
<u>OPERATING EXPENSES:</u>		
(Schedule No. 3A)		
Pumping Expense	70,203	72,119
Treating Expense	429,584	394,441
Transmission Expense	129,382	95,373
Customer Accounts Expense	73,988	53,907
Administrative Expense	499,536	386,200
Depreciation Expense	<u>474,634</u>	<u>454,287</u>
TOTAL OPERATING EXPENSES	<u>(1,677,327)</u>	<u>(1,456,327)</u>
OPERATING INCOME (LOSS)	<u>(277,705)</u>	<u>(115,389)</u>
<u>OTHER REVENUE:</u>		
Interest - Unexpended Bond Funds	142,025	109,283
Central Facility Charges	<u>104,297</u>	<u>28,075</u>
TOTAL OTHER REVENUE	<u>246,322</u>	<u>137,358</u>
<u>OTHER EXPENSES:</u>		
Interest on Long-Term Debt	<u>272,353</u>	<u>256,722</u>
NET INCOME (LOSS) - SEWER DEPARTMENT	<u>\$ (303,736)</u>	<u>\$ (234,753)</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

COMPARATIVE SCHEDULE OF OPERATING EXPENSES - SEWER DEPARTMENT
For The Years Ended July 31, 1987 and 1986

	<u>The Year ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>PUMPING:</u>		
Operating:		
Supervision and Engineering	\$ 17,585	\$ 18,673
Electrical Power	12,521	13,193
Labor and Materials	16,631	18,596
Maintenance:		
Supervision and Engineering	17,927	13,739
Structures	11	230
Pumping Equipment	<u>5,528</u>	<u>7,688</u>
Total	<u>70,203</u>	<u>72,119</u>
<u>TREATMENT:</u>		
Operating:		
Supervision and Engineering	27,756	23,985
Chemicals	8,924	7,002
Labor and Materials	136,361	133,686
Electric Power	126,100	120,852
Laboratory	74,829	62,663
Maintenance:		
Supervision and Engineering	7,594	8,491
Treatment Equipment	<u>48,020</u>	<u>37,762</u>
Total	<u>429,584</u>	<u>394,441</u>
<u>TRANSMISSION:</u>		
Operating:		
Supervision and Engineering	2,893	2,742
Labor and Materials	7,130	6,147
Maintenance:		
Supervision and Engineering	2,732	2,713
Mains	79,921	52,028
Service	36,231	31,743
Loss on Writedown of Inventory	<u>475</u>	
Total	<u>129,382</u>	<u>95,373</u>
<u>OTHER EXPENSES:</u>		
Customer Accounts - Schedule No. 8	73,988	53,907
Administrative and General -		
Schedule No. 8	499,536	386,200
Depreciation - Schedule No. 4	<u>474,634</u>	<u>454,287</u>
Total	<u>1,048,158</u>	<u>894,394</u>
TOTAL OPERATING EXPENSES	<u>\$1,677,327</u>	<u>\$1,456,327</u>

The accompanying notes to financial statements are an integral part of this statement.

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

UTILITY PLANT IN SERVICE AND ACCUMULATED DEPRECIATION
July 31, 1987

	ASSETS			
	Balance 7-31-86	Additions	Retirements	Balance 7-31-87
OPERATING PLANT				
<u>ELECTRIC DEPARTMENT</u>				
Hydro-Plant:				
Land	\$ 856	\$	\$	\$ 856
Structures	67,917	259		68,176
Dams, Flood Gates	22,129	102		22,231
Water Wheels, Generators	243,177	2,867		246,044
Accessory Equipment	29,466	2,992		32,458
Transmission:				
Land	271,471	2,546		274,017
Structures	1,502,907	265,644		1,768,551
Station Equipment	2,818,951	1,129,649		3,948,600
Towers and Fixtures	266,472			266,472
Poles and Fixtures	887,481			887,481
Overhead Conductors	758,557	10,489		769,046
Roads and Trails	70,224	3,728		73,952
Distribution:				
Land	112,854	21,397		134,251
Structures	353,853			353,853
Station Equipment	1,616,069	69		1,616,138
Poles, Towers, Fixtures	2,279,696	285,638		2,565,334
Overhead Conductors and Devices	1,732,336	92,400		1,824,736
Underground Conduit	1,045,366	134,437		1,179,803
Underground Conductor and Devices	803,811	71,543		875,354
Line Transformers	3,413,684	265,214	(13,875)	3,665,023
Services	1,015,341	69,637		1,084,978
Meters	1,097,141	83,882	(490)	1,180,533
Street Light Fixtures	442,918	14,235		457,153
TOTAL OPERATING PLANT	20,852,677	2,456,728	(14,365)	23,295,040
<u>GENERAL PLANT</u>				
<u>ELECTRIC DEPARTMENT</u>				
Land - General Office	80,857			80,857
Structures	976,264	40,174		1,016,438
Office Equipment	726,997	39,329		766,326
Transportation Equipment	904,970	172,855		1,077,825
Stores Equipment	36,309	2,584		38,893
Tools, Shop & Garage Equip.	188,361	24,850		213,211
Laboratory Equip.	5,412	5,223		10,635
Power Operated Equipment	203,003	19,456		222,459
Communications	154,972	19,655		174,627
Other Tangible Property	210,934	1,308		212,242
Miscellaneous	182,689			182,689
TOTAL GENERAL PLANT	3,670,768	325,434	-0-	3,996,202
TOTAL ELECTRIC PLANT IN SERVICE AND ACCUMULATED DEPRECIATION	24,523,445	2,782,162	(14,365)	27,291,242

Schedule No.4

DEPRECIATION

(Life Years)	Balance 7/31/86	Additions	Retirements	Balance 7-31-87
	\$	\$	\$	\$
33	18,159	2,215		20,374
20	5,317	1,138		6,455
20	73,185	13,002		86,187
14	13,977	2,466		16,443
33	275,198	50,763		325,961
29	1,019,999	106,481		1,126,480
33	35,874	8,431		44,305
25	242,798	37,759		280,557
33	137,669	24,281		161,950
33	19,020	2,193		21,213
33	87,183	14,115		101,298
29	714,406	58,799		773,205
20	1,130,310	64,710		1,195,020
33	1,228,850	12,388		1,241,238
25	102,078	45,821		147,899
29	160,126	28,514		188,640
25	2,015,261	73,318	(26,299)	2,062,280
20	773,233	8,572		781,805
17	785,022	20,851	(490)	805,383
13	442,918	326		443,244
	<u>9,280,583</u>	<u>576,143</u>	<u>(26,789)</u>	<u>9,829,937</u>
	2,870			2,870
33	195,839	31,509		227,348
10	431,684	35,757		467,441
5	649,668	95,501		745,169
10	8,944	4,280		13,224
10	31,864	20,118		51,982
10	5,412	261		5,673
10	101,122	20,441		121,563
10	76,018	10,321		86,339
10	32,747	21,531		54,278
10	<u>104,062</u>	<u>20,758</u>		<u>124,820</u>
	<u>1,640,230</u>	<u>260,477</u>		<u>1,900,707</u>
	<u>10,920,813</u>	<u>836,620</u>	<u>(26,789)</u>	<u>11,730,644</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

UTILITY PLANT IN SERVICE AND ACCUMULATED DEPRECIATION
July 31, 1987

	ASSETS			
	Balance 7-31-86	Additions	Retirements	Balance 7-31-87
<u>DISTRIBUTION</u>				
<u>WATERWORKS DEPARTMENT</u>				
Land	\$ 91,467	\$ 14,208	\$	\$ 105,675
Structures	1,429,683	294,860		1,724,543
Wells and Springs	459,078	40,879		499,957
Pumping Equipment	219,426	31,419		250,845
Land and Land Right	11,865			11,865
Mains, Gates Valves, Boxes and Services	10,349,214	535,669		10,884,883
Meter Boxes and Connections	1,606,982	79,528	(3,230)	1,683,280
Fire Hydrants	377,865	21,019		398,884
	<u>14,545,580</u>	<u>1,017,582</u>	<u>(3,230)</u>	<u>15,559,932</u>
<u>GENERAL PLANT</u>				
<u>WATERWORKS DEPARTMENT</u>				
Structures	446,498	13,537		460,035
Office Furniture and Equipment	174,205	11,480		185,685
Transportation Equipment	146,847	23,383		170,230
Stores and Lab Equipment	20,807	1,152		21,959
Tools, Shop and Equipment	109,367	8,651		118,018
Power Operated Equipment	202,773	11,210		213,983
Miscellaneous	175,898	9,112		185,010
	<u>1,276,395</u>	<u>78,525</u>		<u>1,354,920</u>
TOTAL WATERWORKS PLANT IN SERVICE AND ACCUMULATED DEPRECIATION	<u>15,821,975</u>	<u>1,096,107</u>	<u>(3,230)</u>	<u>16,914,852</u>
<u>SEWER DEPARTMENT</u>				
Land	165,619	15,683		181,302
Structures and Improvements	6,335,342	40,743		6,376,085
Treatment Equipment	7,301			7,301
Mains and Laterals	9,761,308	384,193		10,145,501
Services	245,881	4,673		250,554
Office Equipment	109,505	21,133		130,638
Transportation Equipment	103,050	27,663		130,713
Stores Equipment	13,068	1,925		14,993
Tools, Shop and Garage Equipment	42,708	7,721		50,429
Laboratory Equipment	57,867	5,903		63,770
Power Operated Equipment	103,412	13,384		116,796
Miscellaneous Equipment	122,119	12,821		134,940
TOTAL SEWER PLANT IN SERVICE AND ACCUMULATED DEPRECIATION	<u>17,067,180</u>	<u>535,842</u>		<u>17,603,022</u>
<u>GRAND TOTAL</u>				
<u>ALL DEPARTMENTS</u>	<u>\$57,412,600</u>	<u>\$4,414,111</u>	<u>\$ (17,595)</u>	<u>\$61,809,116</u>

DEPRECIATION

(Life Years)	Balance 7-31-86	Additions	Retirements	Balance 7-31-87
	\$	\$	\$	\$
33	669,264	50,763		720,027
40	182,508	14,153		196,661
33	150,109	7,013		157,122
40	3,812,930	266,857		4,079,787
25	1,107,821	62,914	(3,230)	1,167,505
50	105,669	7,952		113,621
	<u>6,028,301</u>	<u>409,652</u>	<u>(3,230)</u>	<u>6,434,723</u>
50	41,725	6,753		48,478
10	66,265	15,869		82,134
5	113,907	16,718		130,625
10	5,763	2,247		8,010
10	107,251	1,624		108,875
10	172,043	4,762		176,805
10	63,935	17,592		81,527
	<u>570,889</u>	<u>65,565</u>		<u>636,454</u>
	<u>6,599,190</u>	<u>475,217</u>	<u>(3,230)</u>	<u>7,071,177</u>
40	890,513	160,884		1,051,397
40	412	228		640
40	3,002,247	249,525		3,251,772
40	68,333	6,580		74,913
10	27,100	11,386		38,486
5	51,724	17,382		69,106
10	2,689	1,294		3,983
10	32,237	759		32,996
10	17,437	6,312		23,749
10	71,040	6,737		77,777
10	<u>41,206</u>	<u>13,547</u>		<u>54,753</u>
	<u>4,204,938</u>	<u>474,634</u>		<u>4,679,572</u>
	<u>\$21,724,941</u>	<u>\$1,786,471</u>	<u>\$(30,019)</u>	<u>\$23,481,393</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF INVESTMENTS OF RESTRICTED FUNDS
July 31, 1987

	<u>Account or Certificate Number</u>	<u>Face Value</u>
<u>INTEREST AND SINKING FUND PRIOR LIEN BONDS:</u>		
(All Frost National Bank, San Antonio)		
U.S. Treasury Bills		\$ 265,000
Cash Balance		
Government Prime A Investment		
Total Interest and Sinking Fund		
 <u>RESERVE FUND PRIOR LIEN BONDS:</u>		
(All Frost National Bank, San Antonio)		
U.S. Treasury Notes		465,000
U.S. Treasury Notes		10,000
Cash Balance		
Total Reserve Fund		
 <u>CONTINGENCY FUND (SYSTEM):</u>		
MBank, New Braunfels	CD 8761	
MBank, New Braunfels	MMA 911-887	
Total Contingency Fund (System)		

<u>Cost</u>	<u>Purchased</u>	<u>Maturity Date</u>	<u>Interest Rate</u>
\$ 258,406	various	10/29/87	variable
1,281			variable
<u>39,300</u>			variable
<u>298,987</u>			
464,419	3/28/85	5/15/90	11.375
10,022	9/03/85	11/15/90	9.65
<u>577</u>			variable
<u>475,018</u>			
781,834	2/02/87	8/11/87	6.64
<u>121,666</u>	Money Market Account		variable
<u>903,500</u>			

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF INVESTMENTS OF RESTRICTED FUNDS
July 31, 1987

	<u>Account or Certificate Number</u>	<u>Face Value</u>
<u>CONTINGENCIES FUND PRIOR LIEN BONDS:</u>		
(All Frost National Bank, San Antonio)		
U.S. Treasury Notes		\$150,000.00
Cash Balance		
Total Contingencies Fund		
<u>WATER RESOURCE DEVELOPMENT:</u>		
MBank, New Braunfels	MMA 902-594	
MBank, New Braunfels	CD 8764	
MBank, New Braunfels	CD 8842	
MBank, New Braunfels	CD 8923	
Total Water Resource Development		
<u>RESERVE FUND JUNIOR LIEN BONDS:</u>		
MBank, New Braunfels	MMA 902-198	
MBank, New Braunfels	CD 8766	
MBank, New Braunfels	CD 8841	
MBank, New Braunfels	CD 8922	
Total Reserve Fund		
<u>INTEREST AND SINKING JUNIOR LIEN BONDS:</u>		
MBank, New Braunfels	MMA 902-292	
MBank, New Braunfels	CD 9257	
Total Interest and Sinking		
<u>BOND FUNDS: (1985-B Series)</u>		
MBank, New Braunfels	CD 8773	
MBank, New Braunfels	CD 8889	
MBank, New Braunfels	CD 8977	
MBank, New Braunfels	CD 9069	
MBank, New Braunfels	CD 9147	
MBank, New Braunfels	CD 9218	
Total 85-B Bond Fund		
<u>CENTRAL FACILITIES FUND:</u>		
MBank, New Braunfels	CD 9264	
MBank, New Braunfels	MMA 911-925	
Total Central Facilities		
GRAND TOTAL		

<u>Cost</u>	<u>Purchased</u>	<u>Maturity Date</u>	<u>Interest Rate</u>
\$ 149,813	3-28-85	5-15-90	11.375
194			variable
<u>150,007</u>			
32,437	Money Market Account		variable
545,927	2-02-87	8-11-87	6.64
6,640	2-24-87	8-11-87	6.00
5,765	2-24-87	8-11-87	6.00
<u>590,769</u>			
31,980	Money Market Account		variable
589,842	2-02-87	8-11-87	6.64
7,926	2-24-87	8-11-87	6.00
7,926	3-24-87	8-11-87	6.00
<u>637,674</u>			
10,372	Money Market Account		variable
101,000	7-28-87	12-31-87	6.56
<u>111,372</u>			
625,000	2-02-87	8-11-87	6.64
585,000	3-11-87	9-11-87	6.64
300,000	4-13-87	10-13-87	6.64
400,000	5-11-87	11-12-87	6.64
375,000	6-11-87	12-11-87	6.64
500,000	7-13-87	1-11-88	6.64
<u>2,785,000</u>			
206,000	7-29-87	1-28-88	6.64
11,554	Money Market Account		variable
<u>217,554</u>			
<u>\$ 6,169,881</u>			

NEW BRAUNFELS UTILITIES

New Braunfels, Texas

SCHEDULE OF INSURANCE IN FORCE JULY 31, 1987

<u>Company</u>	<u>Policy No.</u>	<u>Agent</u>	<u>Type of Coverage</u>
St. Paul Property & Liability Insurance	393ZD8502	Kunkel	Contractors Equipment
TML	C00168		Multiple Coverages, Including Automobile, General, and Error and Omission Liability, Computer Equipment, Accounts Receivable, Real and Personal Property, Automobile Catastrophe, etc.
American Motorists	3FM641559	Johnson & Higgins	Public Officials and Employees Blanket Bond
American Motorists	3FM641568	Johnson & Higgins	3-D
TML	A 0168		Workmen's Compensation
American Credit Co.	D-228,622-6	Ferguson	Utility Service Credit Insurance
LCRA	399141	Arkwright- Boston	Sub and Switch-Stations

<u>Amount Of Coverage</u>	<u>Policy From</u>	<u>Period To</u>	<u>Total Premiums</u>	<u>Months Unexpired</u>	<u>Premiums Unexpired</u>
\$ 853,335	Various	1-01-88	\$ 14,382	5	\$ 2,252
Various	10-1-87	10-1-88	Monthly	-	-0-
100,000	3-25-87	3-25-88	840	7	490
25K/25K/10K	3-25-87	3-25-88	414	7	241
100,000	10-1-87	10-1-88	Monthly	-	-0-
825,000	1-01-87	12-31-87	7,000	5	2,917
5,942,000	10-1-84	10-1-87	Monthly	-	<u>-0-</u>
				TOTAL	\$ 5,900 =====

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF BONDS PAYABLE
July 31, 1987

<u>Bond Number</u>	<u>Number Issued</u>	<u>Bond Denom.</u>	<u>Date Issued</u>	<u>Maturity Date</u>	<u>Amount of Issue</u>
Series 1970	1	\$5,000	5-1-70	11-1-71	\$ 5,000
	2	5,000		11-1-72	5,000
	3- 5	5,000		11-1-73	15,000
	6- 10	5,000		11-1-74	25,000
	11- 15	5,000		11-1-75	25,000
	16- 20	5,000		11-1-76	25,000
	21- 26	5,000		11-1-77	30,000
	27- 32	5,000		11-1-78	30,000
	33- 38	5,000		11-1-79	30,000
	39- 45	5,000		11-1-80	35,000
	46- 52	5,000		11-1-81	35,000
	53- 59	5,000		11-1-82	35,000
	60- 67	5,000		11-1-83	40,000
	68- 75	5,000		11-1-84	40,000
	76- 85	10		11-1-85	50,000
	86- 95	10		11-1-86	50,000
	96-100	5		11-1-87	25,000
					<u>500,000</u>
Series 1974	1- 5	5	11-1-74	11-1-74	25,000
	6- 10	5		11-1-76	25,000
	11- 15	5		11-1-77	25,000
	16- 20	5		11-1-78	25,000
	21- 25	5		11-1-79	25,000
	26- 30	5		11-1-80	25,000
	31- 35	5		11-1-81	25,000
	36- 40	5		11-1-82	25,000
	41- 45	5		11-1-83	25,000
	46- 50	5		11-1-84	25,000
	51- 55	5		11-1-85	25,000
	56- 60	5		11-1-86	25,000
	61- 65	5		11-1-87	25,000
	66- 70	5		11-1-88	25,000
	71- 75	5		11-1-89	25,000
	76- 80	5		11-1-90	25,000
	81- 85	5		11-1-91	25,000
	86- 90	5		11-1-92	25,000
	91- 95	5		11-1-93	25,000
	96-100	5		11-1-94	25,000
					<u>500,000</u>

<u>Retired</u>	<u>Balance 7-31-87</u>	<u>Interest Rate</u>	<u>Payable Within One Year</u>		<u>Long-Term Principal</u>
			<u>Principal</u>	<u>Interest</u>	
\$ 5,000	\$		\$	\$	\$
5,000					
15,000					
25,000					
25,000					
25,000					
30,000					
30,000					
30,000					
35,000					
35,000					
35,000					
40,000					
40,000					
50,000					
50,000					
	<u>25,000</u>	6.50	<u>25,000</u>	<u>812.50</u>	
<u>475,000</u>	<u>25,000</u>		<u>25,000</u>	<u>812.50</u>	<u>-0-</u>
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
25,000					
	25,000	5.90	25,000	737.50	
	25,000	5.90		1,475.00	25,000
	25,000	5.90		1,475.00	25,000
	25,000	5.90		1,475.00	25,000
	25,000	6.00		1,500.00	25,000
	25,000	6.10		1,525.00	25,000
	25,000	6.20		1,550.00	25,000
	<u>25,000</u>	6.20		<u>1,550.00</u>	<u>25,000</u>
<u>300,000</u>	<u>200,000</u>		<u>25,000</u>	<u>11,287.50</u>	<u>175,000</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF BONDS PAYABLE
July 31, 1987

<u>Bond Number</u>		<u>Number Issued</u>	<u>Bond Denom.</u>	<u>Date Issued</u>	<u>Maturity Date</u>	<u>Amount of Issue</u>
Series 1980	1- 15	15	\$5,000	1-1-80	11-1-80	\$ 75,000
	16- 30	15	5,000		11-1-81	75,000
	31- 45	15	5,000		11-1-82	75,000
	46- 60	15	5,000		11-1-83	75,000
	61- 75	15	5,000		11-1-84	75,000
	76- 90	15	5,000		11-1-85	75,000
	91-105	15	5,000		11-1-86	75,000
	106-121	16	5,000		11-1-87	80,000
	122-138	17	5,000		11-1-88	85,000
	139-155	17	5,000		11-1-89	85,000
	156-172	17	5,000		11-1-90	85,000
	173-189	17	5,000		11-1-91	85,000
	190-206	17	5,000		11-1-92	85,000
	207-223	17	5,000		11-1-93	85,000
	224-240	17	5,000		11-1-94	85,000
	241-260	20	5,000		11-1-95	100,000
	261-280	20	5,000		11-1-96	100,000
	281-300	20	5,000		11-1-97	100,000
	301-320	20	5,000		11-1-98	100,000
	321-340	20	5,000		11-1-99	100,000
	341-360	20	5,000		11-1-2000	100,000
	361-380	20	5,000		11-1-2001	100,000
	381-400	20	5,000		11-1-2002	<u>100,000</u>
						<u>2,000,000</u>
Series 1980-A	1- 5	5	5,000	8-1-80	11-1-81	25,000
	6- 12	7	5,000		11-1-82	35,000
	13- 20	8	5,000		11-1-83	40,000
	21- 30	10	5,000		11-1-84	50,000
	31- 40	10	5,000		11-1-85	50,000
	41- 55	15	5,000		11-1-86	75,000
	56- 75	20	5,000		11-1-87	100,000
	76- 95	20	5,000		11-1-88	100,000
	96-115	20	5,000		11-1-89	100,000
	116-135	20	5,000		11-1-90	100,000
	136-155	20	5,000		11-1-91	100,000
	156-175	20	5,000		11-1-92	100,000
	176-195	20	5,000		11-1-93	100,000
	195-215	20	5,000		11-1-94	100,000

Schedule No. 7 (Cont.)

<u>Retired</u>	<u>Balance 7-31-87</u>	<u>Interest Rate</u>	<u>Payable Within One Year</u>		<u>Long-Term Principal</u>
			<u>Principal</u>	<u>Interest</u>	
\$ 75,000	\$		\$	\$	\$
75,000					
75,000					
75,000					
75,000					
75,000					
75,000					
	80,000	7.20	80,000	2,880.00	
	85,000	7.20		6,120.00	85,000
	85,000	7.00		5,950.00	85,000
	85,000	6.20		5,270.00	85,000
	85,000	6.25		5,312.50	85,000
	85,000	6.30		5,355.00	85,000
	85,000	6.40		5,440.00	85,000
	85,000	6.50		5,525.00	85,000
	100,000	6.60		6,600.00	100,000
	100,000	6.70		6,700.00	100,000
	100,000	6.85		6,850.00	100,000
	100,000	7.00		7,000.00	100,000
	100,000	7.10		7,100.00	100,000
	100,000	7.20		7,200.00	100,000
	100,000	7.20		7,200.00	100,000
	100,000	7.20		7,200.00	100,000
<u>525,000</u>	<u>1,475,000</u>		<u>80,000</u>	<u>97,702.50</u>	<u>1,395,000</u>
25,000					
35,000					
40,000					
50,000					
50,000					
75,000					
	100,000	7.80	100,000	3,900.00	
	100,000	6.30		6,300.00	100,000
	100,000	6.45		6,450.00	100,000
	100,000	6.60		6,600.00	100,000
	100,000	6.80		6,800.00	100,000
	100,000	6.90		6,900.00	100,000
	100,000	7.00		7,000.00	100,000
	100,000	7.15		7,150.00	100,000

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF BONDS PAYABLE
July 31, 1987

<u>Bond Number</u>	<u>Number Issued</u>	<u>Bond Denom.</u>	<u>Date Issued</u>	<u>Maturity Date</u>	<u>Amount of Issue</u>
Series 1980-A 216-235	20	\$5,000	8-1-80	11-1-95	\$ 100,000
236-255	20	5,000		11-1-96	100,000
256-275	20	5,000		11-1-97	100,000
276-300	25	5,000		11-1-98	125,000
301-325	25	5,000		11-1-99	125,000
326-350	25	5,000		11-1-2000	125,000
351-375	25	5,000		11-1-2001	125,000
376-400	25	5,000		11-1-2002	125,000
					<u>2,000,000</u>
Series 1982-A 1- 10	10	5,000	12-1-82	7-1-83	50,000
11- 20	10	5,000		7-1-84	50,000
21- 30	10	5,000		7-1-85	50,000
31- 40	10	5,000		7-1-86	50,000
41- 50	10	5,000		7-1-87	50,000
51- 65	15	5,000		7-1-88	75,000
66- 80	15	5,000		7-1-89	75,000
81- 95	15	5,000		7-1-90	75,000
96-110	15	5,000		7-1-91	75,000
111-130	20	5,000		7-1-92	100,000
131-150	20	5,000		7-1-93	100,000
151-170	20	5,000		7-1-94	100,000
171-190	20	5,000		7-1-95	100,000
191-215	25	5,000		7-1-96	125,000
216-240	25	5,000		7-1-97	125,000
241-265	25	5,000		7-1-98	125,000
266-295	30	5,000		7-1-99	150,000
296-325	30	5,000		7-1-2000	150,000
326-355	30	5,000		7-1-2001	150,000
356-390	35	5,000		7-1-2002	175,000
391-425	35	5,000		7-1-2003	175,000
426-465	40	5,000		7-1-2004	200,000
466-515	50	5,000		7-1-2005	250,000
516-575	60	5,000		7-1-2006	300,000
576-640	65	5,000		7-1-2007	325,000
					<u>3,200,000</u>

Schedule No. 7 (Cont.)

<u>Retired</u>	<u>Balance 7-31-87</u>	<u>Interest Rate</u>	<u>Payable Within One Year</u>		<u>Long-Term Principal</u>
			<u>Principal</u>	<u>Interest</u>	
\$	\$ 100,000	7.30	\$	\$ 7,300.00	\$ 100,000
	100,000	7.50		7,500.00	100,000
	100,000	7.70		7,700.00	100,000
	125,000	7.90		9,875.00	125,000
	125,000	8.00		10,000.00	125,000
	125,000	8.00		10,000.00	125,000
	125,000	8.00		10,000.00	125,000
	125,000	8.00		10,000.00	125,000
	<u>125,000</u>		<u>100,000</u>	<u>123,475.00</u>	<u>1,625,000</u>
<u>275,000</u>	<u>1,725,000</u>				
50,000					
50,000					
50,000					
50,000					
50,000					
	75,000	11.10	75,000	8,325.00	
	75,000	11.10		8,325.00	75,000
	75,000	11.10		8,325.00	75,000
	75,000	11.10		8,325.00	75,000
	100,000	11.00		11,000.00	100,000
	100,000	9.20		9,200.00	100,000
	100,000	9.40		9,400.00	100,000
	100,000	9.60		9,600.00	100,000
	125,000	9.80		12,250.00	125,000
	125,000	10.00		12,500.00	125,000
	125,000	10.00		12,500.00	125,000
	150,000	10.00		15,000.00	150,000
	150,000	10.10		15,150.00	150,000
	150,000	10.10		15,150.00	150,000
	175,000	10.10		17,675.00	175,000
	175,000	10.10		17,675.00	175,000
	200,000	10.20		20,400.00	200,000
	250,000	10.20		25,500.00	250,000
	300,000	10.20		30,600.00	300,000
	<u>325,000</u>	<u>10.20</u>	<u>75,000</u>	<u>33,150.00</u>	<u>325,000</u>
<u>250,000</u>	<u>2,950,000</u>		<u>75,000</u>	<u>300,050.00</u>	<u>2,875,000</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF BONDS PAYABLE
July 31, 1987

<u>Bond Number</u>		<u>Number Issued</u>	<u>Bond Demon.</u>	<u>Date Issued</u>	<u>Maturity Date</u>	<u>Amount of Issue</u>
Series 1985-B	1- 10	10	\$5,000	10-1-85	7-1-86	\$ 50,000
	11- 22	12	5,000		7-1-87	60,000
	23- 34	12	5,000		7-1-88	60,000
	35- 46	12	5,000		7-1-89	60,000
	47- 61	15	5,000		7-1-90	75,000
	62- 79	18	5,000		7-1-91	90,000
	80- 97	18	5,000		7-1-92	90,000
	98-117	20	5,000		7-1-93	100,000
	118-141	24	5,000		7-1-94	120,000
	142-169	28	5,000		7-1-95	140,000
	170-197	28	5,000		7-1-96	140,000
	198-230	33	5,000		7-1-97	165,000
	231-270	40	5,000		7-1-98	200,000
	271-310	40	5,000		7-1-99	200,000
	311-357	47	5,000		7-1-2000	235,000
	358-411	54	5,000		7-1-2001	270,000
	412-469	58	5,000		7-1-2002	290,000
	470-536	67	5,000		7-1-2003	335,000
	537-608	72	5,000		7-1-2004	360,000
	609-680	72	5,000		7-1-2005	360,000
	681-755	75	5,000		7-1-2006	375,000
	756-837	82	5,000		7-1-2007	410,000
	838-957	120	5,000		7-1-2008	600,000
						<u>4,785,000</u>
Grand Total						<u>\$12,985,000</u> =====

Schedule No.7 (Cont.)

<u>Retired</u>	<u>Balance 7-31-87</u>	<u>Interest Rate</u>	<u>Payable Within One Year</u>		<u>Long-Term Principal</u>
			<u>Principal</u>	<u>Interest</u>	
\$ 50,000	\$		\$	\$	\$
60,000					
	60,000	9.50	60,000	5,700.00	
	60,000	9.50		5,700.00	60,000
	75,000	9.50		7,125.00	75,000
	90,000	9.50		8,550.00	90,000
	90,000	9.50		8,550.00	90,000
	100,000	9.50		9,500.00	100,000
	120,000	9.50		11,400.00	120,000
	140,000	9.50		13,300.00	140,000
	140,000	9.50		13,300.00	140,000
	165,000	9.50		15,675.00	165,000
	200,000	9.20		18,400.00	200,000
	200,000	8.50		17,000.00	200,000
	235,000	8.50		19,975.00	235,000
	270,000	8.70		23,490.00	270,000
	290,000	8.70		25,230.00	290,000
	335,000	8.80		29,480.00	335,000
	360,000	8.80		31,680.00	360,000
	360,000	8.80		31,680.00	360,000
	375,000	8.00		30,000.00	375,000
	410,000	8.00		32,800.00	410,000
	600,000	8.00		48,000.00	600,000
<u>110,000</u>	<u>4,675,000</u>		<u>60,000</u>	<u>406,535.00</u>	<u>4,615,000</u>
<u>\$1,935,000</u>	<u>\$11,050,000</u>		<u>\$ 365,000</u>	<u>\$939,862.50</u>	<u>\$10,685,000</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF OVERHEAD EXPENSES
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>CUSTOMER ACCOUNTS:</u>		
Supervision	\$ 14,056	\$ 11,507
Meter Reading	88,198	84,222
Customer Records and Collections	287,137	264,708
Uncollectible Accounts	25,636	34,366
Miscellaneous	<u>3,150</u>	<u>9,740</u>
Total	\$ <u>418,177</u>	\$ <u>404,543</u>
Allocated To:		
Electric Department	\$ 228,467	\$ 232,886
Water Department	115,722	117,750
Sewer Department	<u>73,988</u>	<u>53,907</u>
<u>ADMINISTRATIVE AND GENERAL:</u>		
Administrative Salaries	776,346	750,420
Office Expenses	221,991	231,964
Special Services	145,815	211,182
Legal Services	17,204	28,442
Insurance	299,452	205,767
Employee Benefits	299,837	272,894
Miscellaneous	17,666	13,940
Memberships	10,131	1,138
General Maintenance	284,923	297,832
Social Security	<u>258,457</u>	<u>246,219</u>
Total	\$ <u>2,331,822</u>	\$ <u>2,259,798</u>
Allocated To:		
Electric Department	\$1,270,216	\$1,266,113
Water Department	562,070	607,485
Sewer Department	<u>499,536</u>	<u>386,200</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF INVESTMENT INCOME
For The Years Ended July 31, 1987 and 1986

	<u>The Year Ended July 31,</u>	
	<u>1987</u>	<u>1986</u>
<u>INTEREST EARNED</u>		
Temporary Investments - General Fund	\$ 135,724	\$ 122,965
Consumer Deposits	18,519	16,099
Sinking Fund	32,182	31,193
Reserve Fund	105,709	104,524
Contingency Fund	84,330	129,001
Central Facilities	7,250	297
Bond Fund	268,040	327,085
Water Resource Development Fund	<u>47,781</u>	<u>40,544</u>
 TOTAL INTEREST EARNED	 \$ 699,535 <u>=====</u>	 \$ 771,708 <u>=====</u>

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF CASH IN BANKS
July 31, 1987

Cash - General Operating	\$ 168,008
Petty Cash and Bad Checks Funds	4,400
Temporary Cash Investments	1,922,035
Consumer Deposits	231,058
Payroll Account	10,000
Community Council Fund	500
Equipment Replacement Fund	<u>10,479</u>
TOTAL CASH IN BANKS	<u>\$2,346,480</u> =====

NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE OF WORK IN PROGRESS
July 31, 1987

ELECTRIC DEPARTMENT:

Hydro Plant:	
Water Wheels, Turbines, Generator	\$ 113
Transmission Plant:	
Station Equipment	17,777
Overhead Conductors	4,465
Distribution Plant:	
Land and Land Rights	64,670
Poles, Towers, Fixtures	40,377
Overhead Conductors	479
Underground Conduit	529
Underground Conductors	6,392
Line Transformers	142
Structures	787
Stores Equipment	<u>136</u>
Total Electric Department	<u>\$135,867</u>

WATER DEPARTMENT:

Services:	
Land	\$ 200
Structures	1,784
Wells and Springs	1,809
Electric Pumping Equipment	8,788
Treatment:	
Land	5,585
Structures	4,131
Transmission:	
Mains	90,876
Meters, Boxes, Connectors	16,318
Fire Hydrants	29,355
Structures	553
Office and Stores Equipment	<u>1,834</u>
Total Water Department	<u>\$161,233</u>

SEWER DEPARTMENT:

Structures	\$ 40,687
Mains, Gate Valves, Boxes	146,474
Land	695
Stores Equipment	136
Meters	<u>6,498</u>
Total Sewer Department	<u>\$194,490</u>

TOTAL ALL DEPARTMENTS	<u>\$491,590</u> =====
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NEW BRAUNFELS UTILITIES
New Braunfels, Texas

SCHEDULE COMPUTING DEBT SERVICE COVERAGE - COMPARATIVE
For The Years Ended July 31, 1984, 1985, 1986, and 1987

	For The Year Ended July 31,			
	1984	1985	1986	1987
REVENUE:				
Electric Department	\$30,244,471	\$28,379,135	\$25,731,721	\$24,263,962
Water Department	1,609,330	1,823,470	1,988,082	2,260,338
Sewer Department	778,832	1,175,793	1,369,013	1,503,919
Investment and Other Revenue	679,184	629,879	831,929	826,653
TOTAL REVENUE	33,311,817	32,008,277	29,920,745	28,854,872
EXPENSES - ADJUSTED (Note)				
Electric Department:				
Power Purchased	24,372,626	22,925,172	19,868,381	17,821,599
Other	2,187,123	2,500,338	2,678,823	2,827,192
Water Department	1,250,565	1,380,768	1,381,907	1,367,081
Sewer Department	635,650	784,084	1,002,040	1,202,693
TOTAL EXPENSES - ADJUSTED (Note)	28,445,964	27,590,362	24,931,151	23,218,565
BALANCE AVAILABLE FOR DEBT SERVICE	\$ 4,865,853	\$ 4,417,915	\$ 4,989,594	\$ 5,636,307
LESS MAXIMUM DEBT SERVICE OF CLOSED LIEN PRIORITY UTILITY SYSTEM REVENUE BONDS (1987)	474,595	474,595	474,595	474,595
BALANCE AVAILABLE FOR UTILITY SYSTEM REVENUE BONDS, SERIES 1982-A AND 1985-B	\$ 4,391,258	\$ 3,943,320	\$ 4,514,999	\$ 5,161,712
AVERAGE ANNUAL DEBT SERVICE REQUIREMENT* OF UTILITY SYSTEM REVENUE BONDS, SERIES 1982-A AND 1985-B	\$ 825,989	\$ 825,989	\$ 825,989	\$ 825,989
COVERAGE	5.32 x	4.77 x	5.47 x	6.25 x
MAXIMUM DEBT SERVICE - (2006)	\$ 849,550	\$ 849,550	\$ 849,550	\$ 849,550
COVERAGE	5.17 x	4.64 x	5.31 x	6.08 x

Note - Expenses are adjusted to exclude depreciation, contribution to the City of New Braunfels, and interest on long-term debt.

* Based on 22 year period from 1987-2008.