FEASIBILITY STUDY

SERVING SUNRISE SUBDIVISION
BOONE COUNTY

Prepared By

Engineering Surveys and Services
1113 Fay Street
Columbia, Missouri 65201

applicant Exhibit No. 4
Date 3/19/79 Case No. SA-79-89
Reporter [illegible]

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LOCATION

The subject site is located in central Boone County approximately 3 miles east of Columbia, Missouri and south of Highway I-70. It encompasses part of a minor watershed which is tributary to the North Fork of Grindstone Creek.

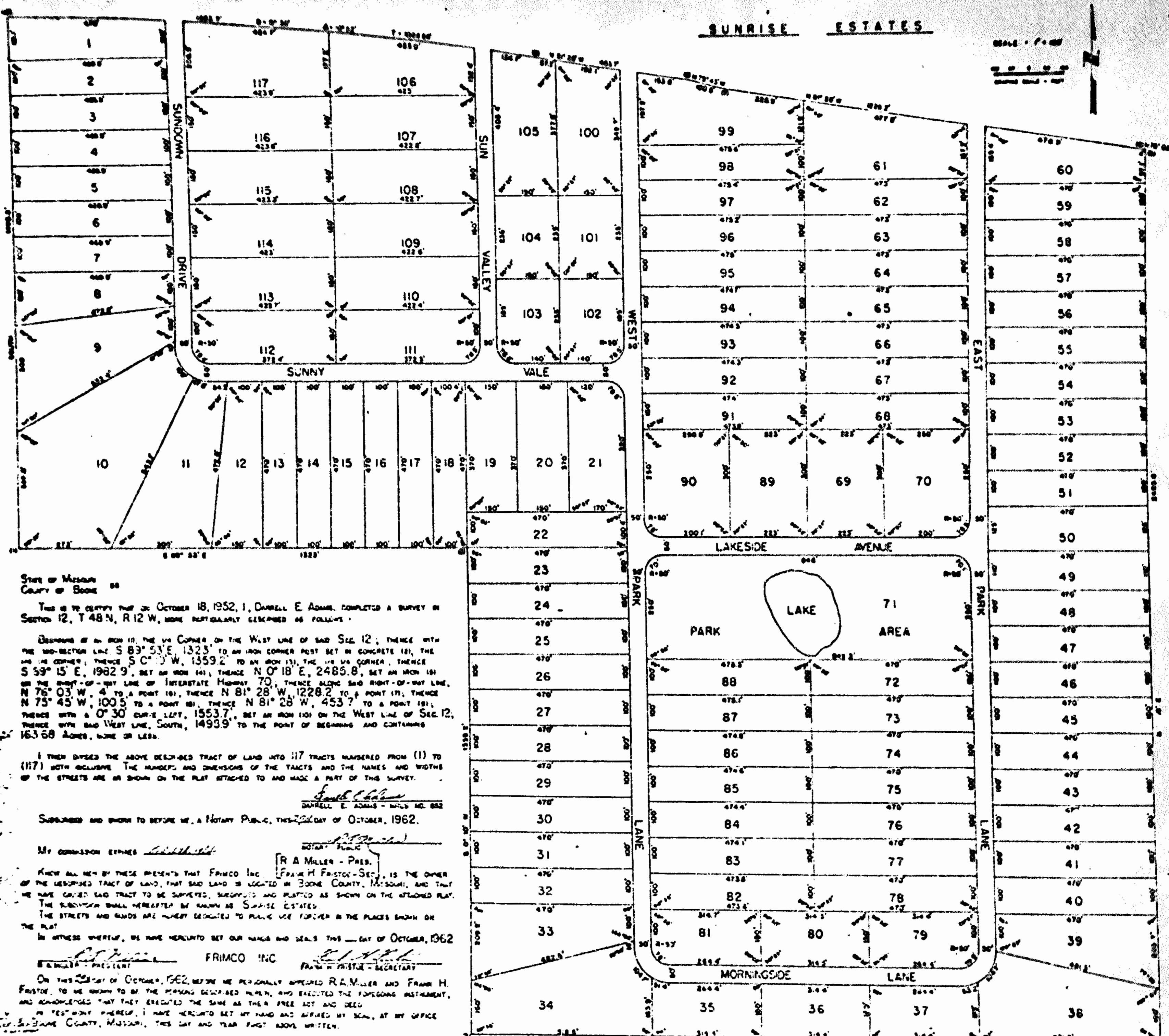
The site to be served is part of Section 12, T48N, R12W and being the following described tracts; Sunrise Estates Subdivision, recorded in Plat Book 7 Page 10, Replat of Sunrise Estates Subdivision, recorded in Plat Book 7, Page 46, Sunrise Estates Subdivision Block II recorded in Plat Book 10, Page 195, and that land described by Warranty Deed recorded in Book 346 Page 562, all of the Boone County Records.

A map of the site and descriptions are shown on pages 2 to 5.

NEED FOR SEWER SERVICE

The site is not within any area currently served by a sewer company. It is not within the corporate limits of any city or town. This site is within the boundaries of the Boone County Regional Sewer District, currently the district is not operating or maintaining any facilities. Sewer service is not available from government agencies within a reasonable time.

PART OF SECTION 12,
TOWNSHIP 48 NORTH, RANGE 12 WEST
BOONE COUNTY



State of Missouri
County of Boone ss

This is to certify that on October 18, 1952, I, Darrell E. Adams, completed a survey in Section 12, T 48 N, R 12 W, more particularly described as follows:

Beginning at an iron (1), the 1/4 Corner on the West line of said Sec. 12; thence with the mid-section line S 83° 53' E, 1323' to an iron corner post set in concrete (2), the ... corner; thence S 0° [illegible]' W, 1359.2' to an iron (3), the 1/4 1/4 corner, thence S 59° 15' E, 1982.9', set an iron (4); thence N 0° 18' E, 2485.8', set an iron (5) on the right-of-way line of Interstate Highway 70; thence along said right-of-way line, N 76° 03' W, 4' to a point (6), thence N 81° 28' W, 1228.2' to a point (7); thence N 75° 45' W, 100.5' to a point (8), thence N 81° 28' W, 453.7' to a point (9); thence with a 0° 30' curve left, 1553.7', set an iron (10) on the West line of Sec. 12, thence with said West line, South, 1493.9' to the point of beginning and containing 163.68 Acres, more or less.

I then divided the above described tract of land into 117 tracts numbered from (1) to (117) both inclusive. The numbers and dimensions of the tracts and the names and widths of the streets are as shown on the plat attached to and made a part of this survey.

Darrell E. Adams – M.R.L.S. No. 882

Subscribed and sworn to before me, a Notary Public, this 22nd day of October, 1962.

Notary Public

My commission expires [illegible]

Know all men by these presents that Frimco Inc. [R. A. Miller - Pres., Frank H. Fristoe - Sec.], is the owner of the described tract of land, that said land is located in Boone County, Missouri, and that we have caused said tract to be surveyed, subdivided and platted as shown on the attached plat.

The subdivision shall hereafter be known as Sunrise Estates.

The streets and roads are hereby dedicated to public use forever in the places shown on the plat.

In witness whereof, we have hereunto set our hands and seals this ___ day of October, 1962

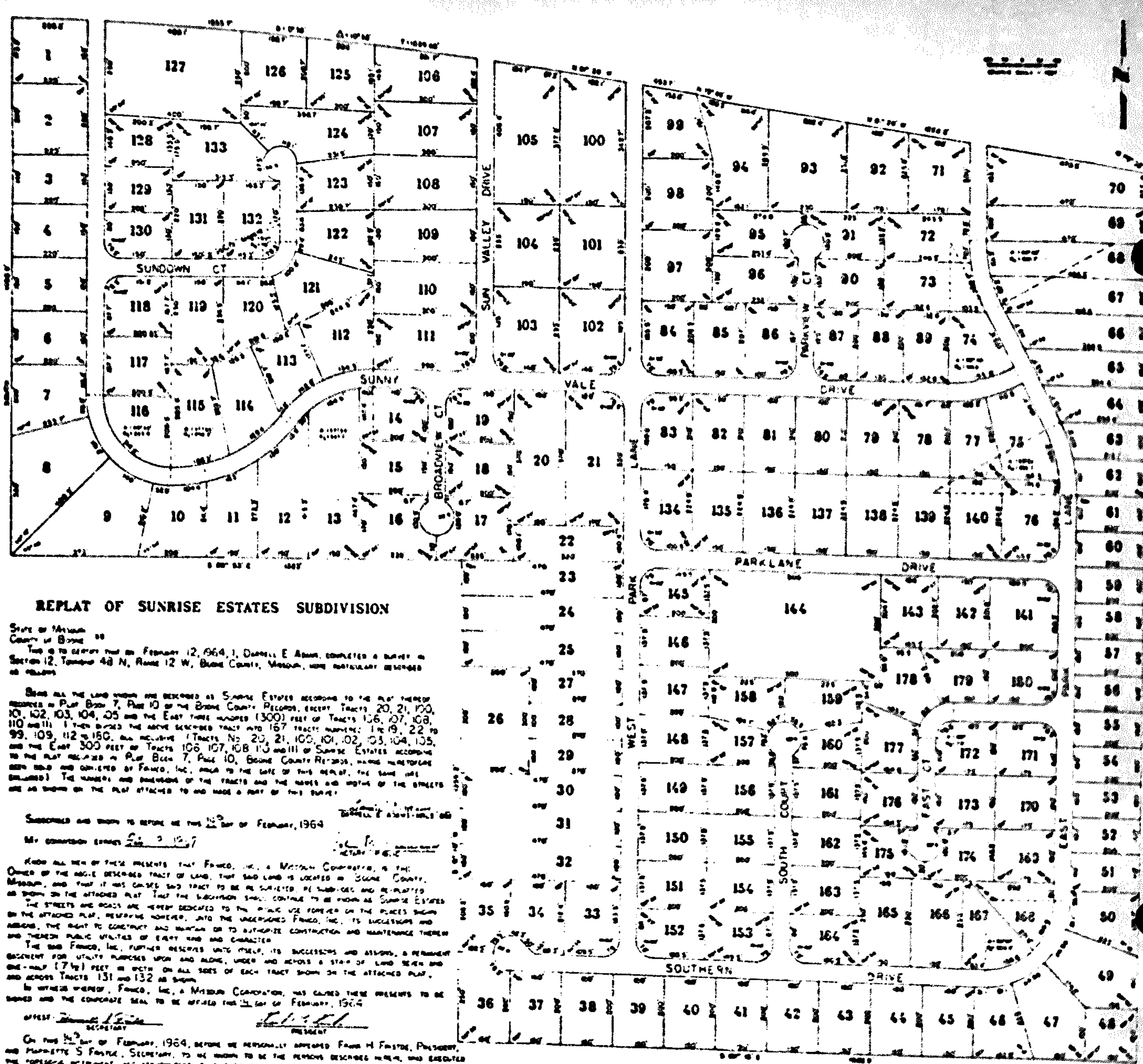
R. A. Miller - President FRIMCO INC. Frank H. Fristoe - Secretary

On this 22nd day of October, 1962, before me personally appeared R. A. Miller and Frank H. Fristoe, to me known to be the persons described herein, and executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

In testimony whereof, I have hereunto set my hand and affixed my seal, at my office in Boone County, Missouri, this day and year first above written.

My commission expires [illegible]

Notary Public



REPLAT OF SUNRISE ESTATES SUBDIVISION

State of Missouri
County of Boone ss

This is to certify that on February 12, 1964, I, Darrell E Adams, completed a survey in Section 12, Township 48 N, Range 12 W, Boone County, Missouri, more particularly described as follows

Being all the land known and described as Sunrise Estates according to the plat thereof recorded in Plat Book 7, Page 10 of the Boone County Records, except Tracts 20, 21, 100, 101, 102, 103, 104, 105 and the East three hundred (300) feet of Tracts 106, 107, 108, 110 and 111. I then divided the above described tract into 167 tracts numbered 1 to 19, 22 to 99, 109, 112 to 180, all inclusive (Tracts No 20, 21, 100, 101, 102, 103, 104, 105, and the East 300 feet of Tracts 106, 107, 108, 110 and 111 of Sunrise Estates according to the plat recorded in Plat Book 7, Page 10, Boone County Records, having heretofore been sold and conveyed by Frinco, Inc., prior to the date of this replat, the same are excluded) The numbers and dimensions of the tracts and the names and widths of the streets are as shown on the plat attached to and made a part of this survey.

Darrell E Adams [illegible]

Subscribed and sworn to before me this 12th day of February, 1964

My commission expires Feb 3 1967

[illegible]
Notary Public

Know all men by these presents that Frinco, Inc., a Missouri Corporation, is the Owner of the above described tract of land, that said land is located in Boone County, Missouri, and that it has caused said tract to be re-surveyed, re-subdivided and re-platted as shown on the attached plat. That the subdivision shall continue to be known as Sunrise Estates.

The streets and roads are hereby dedicated to the public use forever in the places shown on the attached plat, reserving however, unto the undersigned Frinco, Inc., its successors and assigns, the right to construct and maintain or to authorize construction and maintenance therein and thereon public utilities of every kind and character.

The said Frinco, Inc., further reserves unto itself, its successors and assigns, a permanent easement for utility purposes upon and along, under and across a strip of land seven and one-half (7½) feet in width on all sides of each tract shown on the attached plat, and across Tracts 131 and 132 as shown.

In witness whereof, Frinco, Inc., a Missouri Corporation, has caused these presents to be signed and the corporate seal to be affixed this 12 day of February, 1964

Attest [signature]
Secretary

[signature]
President

On this 12th day of February, 1964, before me personally appeared Frank H Fristoe, President, and Harriette S Fristoe, Secretary, to me known to be the persons described herein, who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my notarial seal in my office in Columbia, Missouri, the day and year above written.

My commission expires [illegible]

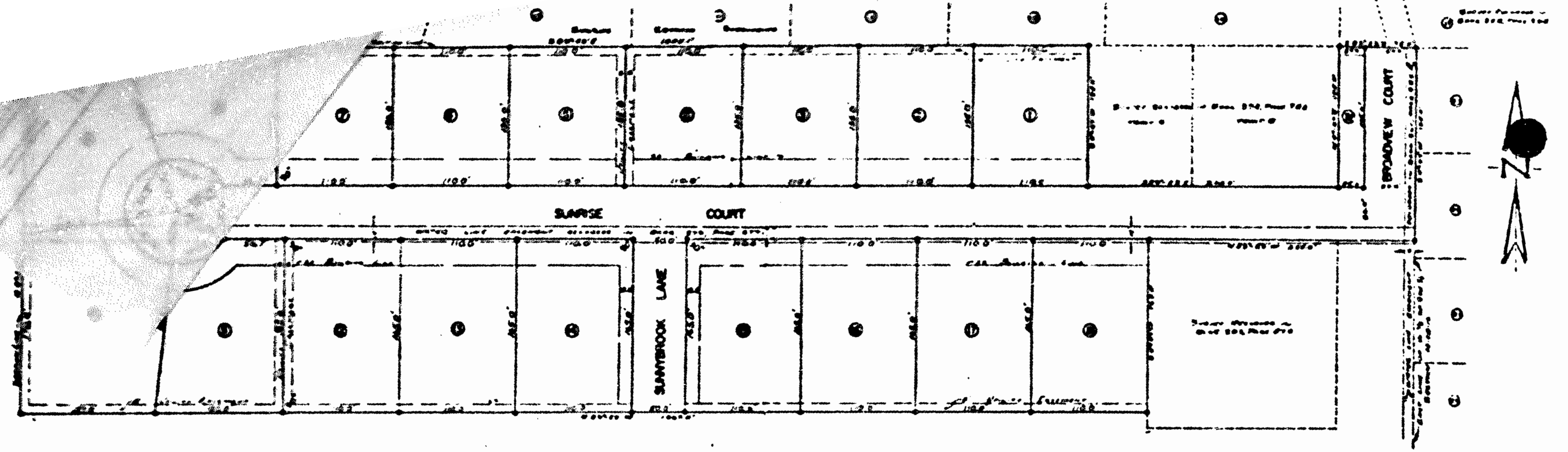
[signature]
Notary Public

Filed of record in Plat Book 7, Page 46, Records of Boone County, Missouri, at 2:32 o'clock P.M., the 12 day of February, 1964

[signature]
[illegible], Recorder

By [signature]
Deputy

PLAT BOOK 7 PAGE 46



SUNRISE ESTATES SUBDIVISION

BLOCK II

SCALE: 1" = 50'

JULY 6, 1972

A SUBDIVISION, LOCATED IN THE NORTH PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 12, T48N, R12W AND MORE PARTICULARLY DESCRIBED AS FOLLOWS

BEGINNING AT THE W 1/4 SECTION CORNER OF SECTION 12-48-12, ALSO BEING THE SOUTHWEST CORNER OF LOT 9 REPLAT OF SUNRISE ESTATES SUBDIVISION; THENCE S 89°-53' E, ALONG THE CENTER SECTION LINE AND THE SOUTH LINE OF REPLAT OF SUNRISE ESTATES SUBDIVISION, 1005.1 FEET TO THE NW CORNER OF A SURVEY RECORDED IN BOOK 392, PAGE 762, THENCE, FOLLOWING SAID SURVEY, S 0°-07' W 135.0 FEET; THENCE S 89°-53' E 240.0 FEET; THENCE N 0°-07' E 135.0 FEET TO THE NE CORNER THEREOF AND BEING ON THE CENTER SECTION LINE, THENCE, ALONG SAID LINE, S 89°-53' E 75.0 FEET TO THE WEST LINE OF REPLAT OF SUNRISE ESTATES SUBDIVISION AND BEING THE EAST LINE OF THE W 1/2 OF THE SW 1/4 OF SECTION 12-48-12; THENCE, ALONG SAID LINE, S 0°-07' W 180.0 FEET; THENCE N 89°-53' W, ALONG THE NORTH LINE OF A SURVEY RECORDED IN BOOK 383, PAGE 878, 255.0 FEET TO THE NW CORNER THEREOF; THENCE S 0°-07' W, ALONG SAID SURVEY 150.0 FEET, THENCE N 89°-53' W 1067.0 FEET TO THE WEST LINE OF SECTION 12-48-12; THENCE N 0°-24' E, ALONG SAID SECTION LINE, 350.0 FEET TO THE BEGINNING AND CONTAINING 8.50 ACRES.

IRONS ARE LOCATED WHERE INDICATED ON THE PLAT.

SURVEY & PLAT BY
ENGINEERING SURVEYS & SERVICES

James S Reid
JAMES S REID
REGISTERED LAND SURVEYOR
L.S. 98

SUBSCRIBED AND SWORN TO BEFORE ME, A NOTARY PUBLIC IN AND FOR BOONE COUNTY, MISSOURI, THIS 12 DAY OF June, 1972.
MY COMMISSION EXPIRES ____

William D Powell Jr
WILLIAM D POWELL, JR
NOTARY PUBLIC

FILED FOR RECORD ON Aug 23, 1972 10:40 O'CLOCK A. M. IN BOONE COUNTY, MISSOURI DOCUMENT NO 15720 RECORDED IN BOOK ____ PAGE ____ BETTY SAUNDERS, RECORDER OF DEEDS

KNOW ALL MEN BY THESE PRESENTS:

WE, COLUMBIA SUNRISE ESTATES, INC., BEING THE SOLE OWNERS OF THE ABOVE DESCRIBED TRACT, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO 19 LOTS AS SHOWN ON THE PLAT.

THE STREETS DESIGNATED AS BROADVIEW COURT, SUNRISE COURT AND SUNNYBROOK LANE, AND EASEMENTS AS SHOWN ON THE PLAT ARE HEREBY DEDICATED TO PUBLIC USE FOREVER.

COLUMBIA SUNRISE ESTATES, INC.

Vergil Sapp
VERGIL SAPP, VICE PRESIDENT

L C Maddox
L.C. MADDOX, SECRETARY

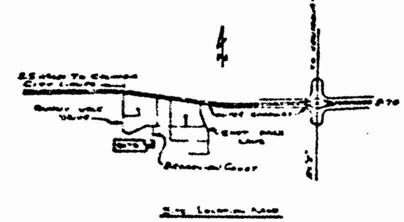
STATE OF MISSOURI }
COUNTY OF BOONE } SS

ON THIS 12 DAY OF June 1972 BEFORE ME APPEARED VERGIL SAPP, VICE PRESIDENT, AND L C MADDOX, SECRETARY, TO ME PERSONALLY KNOWN, WHO BY ME DULY SWORN DID SAY THAT THEY ARE THE RESPECTIVE OFFICERS, AS STATED ABOVE, OF COLUMBIA SUNRISE ESTATES, INC AND THAT SEAL AFFIXED TO THE FOREGOING INSTRUMENT IS THE CORPORATE SEAL OF SAID CORPORATION AND THAT SAID INSTRUMENT WAS SIGNED AND SEALED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF ITS BOARD OF DIRECTORS AND SAID VERGIL SAPP AND L.C. MADDOX ACKNOWLEDGED SAID INSTRUMENT TO BE THE FREE ACT OF SAID CORPORATION.

IN WITNESS WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL AT MY OFFICE IN SAID COUNTY THE DAY AND YEAR FIRST ABOVE WRITTEN.

MY COMMISSION EXPIRES Feb 16, 1974

William D Powell Jr
WILLIAM D POWELL, JR
NOTARY PUBLIC



STATE OF MISSOURI }
COUNTY OF BOONE } SS

I, THE UNDERSIGNED RECORDER OF DEEDS FOR SAID COUNTY AND STATE, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WAS FILED FOR RECORD IN MY OFFICE ON THE ____ DAY OF ____ A.D. 19__ AT ____ O'CLOCK AND ____ MINUTES __M AND IS TRULY RECORDED IN BOOK ____, PAGE ____.

WITNESS MY HAND AND OFFICIAL SEAL ON THE DAY AND YEAR AFORESAID.

____ RECORDER

BY ____ DEPUTY

PLAT BOOK 10 PAGE 195

POSSIBLE FUTURE EXPANSION OF SERVICE AREA

It may be possible in the future to serve some areas adjacent to the site. The needs of these areas are not included in this study but are mentioned in recognition of the fact that a possibility of future expansion exists.

EXISTING SYSTEM

The existing sewer system consists of sanitary sewer lines, manholes, and appurtanences that serve the existing lots in Sunrise Subdivision and Sunrise Subdivision Block II. Approximately 123 residences are served at the current time. Wastewater treatment is provided by three existing one cell lagoons. The remaining land is planned to be developed into residental homes. Development is projected to proceed at the rate of approximately 30 homes per year. Additional treatment will be needed to serve this area.

PLANNED EXPANSION

The wastewater treatment facilities are planned to be improved. The initial improvements would be construction of an aerated lagoon of sufficient capacity to provide treatment for the remaining property to be developed in addition to the existing lots already served in the southwest area. The existing northeast lagoon would be converted to an aerated lagoon system. In the future an additional aerator would be added to the southwest lagoon when necessary. The northwest lagoon would be converted to an aerated lagoon system.

BILLING AND COLLECTION

Billing is to be on a monthly basis issued on the first day of the month for the monthly period. Bills are due within ten days of receipt. Should non payment continue in excess of 30 days then the sewer company will take action to disconnect the facility from the companies lines. A reconnection charge of $200.00 will be required to reconnect the facility to the companies' lines.

OPERATION AND MAINTENANCE

The company intends to provide operation and maintenance and conformance to the rules and regulation of the Missouri Department of Natural Resources, the state and local laws. A point designated for receiving complaints will be established. Maintenance work will be handled by employees or contracting for the necessary services.

FINANCIAL PROJECTION

The financial projection given on page 8 shows the anticipated future costs and customer service charge.

SUNRISE SANITATION SYSTEM INC

YEAR	1	2	3	4	5	6	7	8	9	10	
UNITS	210	250	280	310	350	390	410	410	410	410	
INCOME SERVICE											
@ 9%/MO	22,680	27,000	30,240	33,480	37,800	42,120	44,280	44,280	44,280	44,280	370440
TAP FEES	16,000	12 000	12 000	16 000	16,000	8 000					80 000
OPERATING EXPENSE											
LAND LEASE	2000	2500	2500	2500	2500	2500	2500	2500	2500	2500	24,500
POWER	1,000	2,430	3,880	4,270	4,700	5,170	5,680	6,260	6,870	7,570	47,830
OFFICE	1,200	1,200	1,275	1,350	1,425	1500	1,575	1,650	1,725	1,800	14,700
ACCT & COLLECT	1,100	1,400	1,695	1,990	2,290	2,590	2,890	3,060	3,230	3,400	23,695
OPER. LABOR	4,800	5,760	6,325	6,850	7,375	7,900	8,425	8,950	9,475	10,000	75,860
SUPPLIES	500	590	675	760	850	940	1,020	1,080	1,140	1,200	8,755
MAINT	1,100	1,200	1,400	1,600	1,680	1,760	1,840	1920	2,000	2,080	16,580
INTEREST	825	2749	4591	5993	6928	6653	5278	3877	2640	1705	41239
SUBTOTAL	12525	17829	22341	25313	27748	29013	29208	29297	29580	30255	253109
10% CONTINGENCY	1253	1783	2234	2531	2775	2901	2921	2930	2958	3026	25312
T OPER. EXPENSE	13778	19612	24575	27844	30523	31914	32129	32227	32538	33281	278421
INCOME TAX (.494)	11641	7440	5489	7111	7865	5360	2369	2321	2167	1900	53563
INVESTMENT CREDIT	<1300>	<1450>	<1600>	<1750>	—	—	—	—	—	—	<6100>
CASH INCOME	14561	13398	13776	16275	15412	12846	9782	9732	9575	9199	124556
CAPITOL EXPENDITURE & PAYMENTS											
PURCHASE PRESENT 2 CELL BLK III	25,000	—	—	—	—	—	—	—	—	—	25 000
AERATE BLK I & II (NEW)	—	28,000	—	—	—	—	—	—	—	—	28,000
AERATE BLK III	—	—	7,500	—	—	—	—	—	—	—	7,500
IMPROVE ALL 3	4,000	—	—	—	—	—	—	—	—	—	4000
ADDITIONAL LINES	15,000	14,500	16,000	17,500							61 000
LOAN PAYMENT	13000	10 000	16 700	21 800	25 200	24 200	19 200	14 100	9 600	6 200	150 000
TOTAL CAPITOL EXPENDITURE	45 000	52500	40 200	39 300	25200	24 200	19 200	14 100	9600	6200	275 500
TOTAL CASH FLOW IN (OUT)	(30 439)	(39 102)	(26424)	(23025)	(9788)	(11 354)	(9418)	(4368)	(25)	2999	(150 944)
CAPITOL & RECIEPTS											
STOCK	500	—	—	—	—	—	—	—	—	—	500
NOTE	30,000	40,000	27,000	24 000	10 000	10 000	10 000	6000			157 000
							—	—	—		
NET CASH FLOW IN (OUT)	61	898	576	975	212	(1354)	582	1632	(25)	2999	6556
DEPRECIATION	1837	4326	6553	7241	7355	7355	7355	7355	7355	7355	7355

NOTE: APPROXIMATE PRINCIPAL OF LOANS NOT RETIRED AFTER 10 YEARS $7000.

GENERAL CONSTRUCTION SPECIFICATIONS

All piping shall be vitrified clay pipe, ASTM C 200 with factory molded joints ASTM C 425, or cast iron pipe USAS A 21.6 or A 21.8; 18/40; AWWA 150, class 22 or approved equal.

INSTALLATION

All piping shall be installed in accordance with the manufactures recommendations.. Infiltration or exfiltration shall not exceed 200 gallons per inch pipe diameter per mile per day.

SEWER MANHOLES

Manholes shall be constructed from concrete, brick, concrete block or precast sections. Minimum inside diameter is 42 inches. Constructio will be in a manner to keep leakage and infiltration at a minimum. Manhole is considered the same as piping and infiltration is not to exceed 200 gallons per inch pipe diameter per mile per day. Manhole covers are to be Neenah R-1726 or approved equal.

CONNECTIONS

Connections for sewer lines are to be tee or wye assemblies placed in the line during construction if at all possible. Additional connection will be made by permission only using a saddle. All construction will be under the supervision and inspection of the owner's representative.