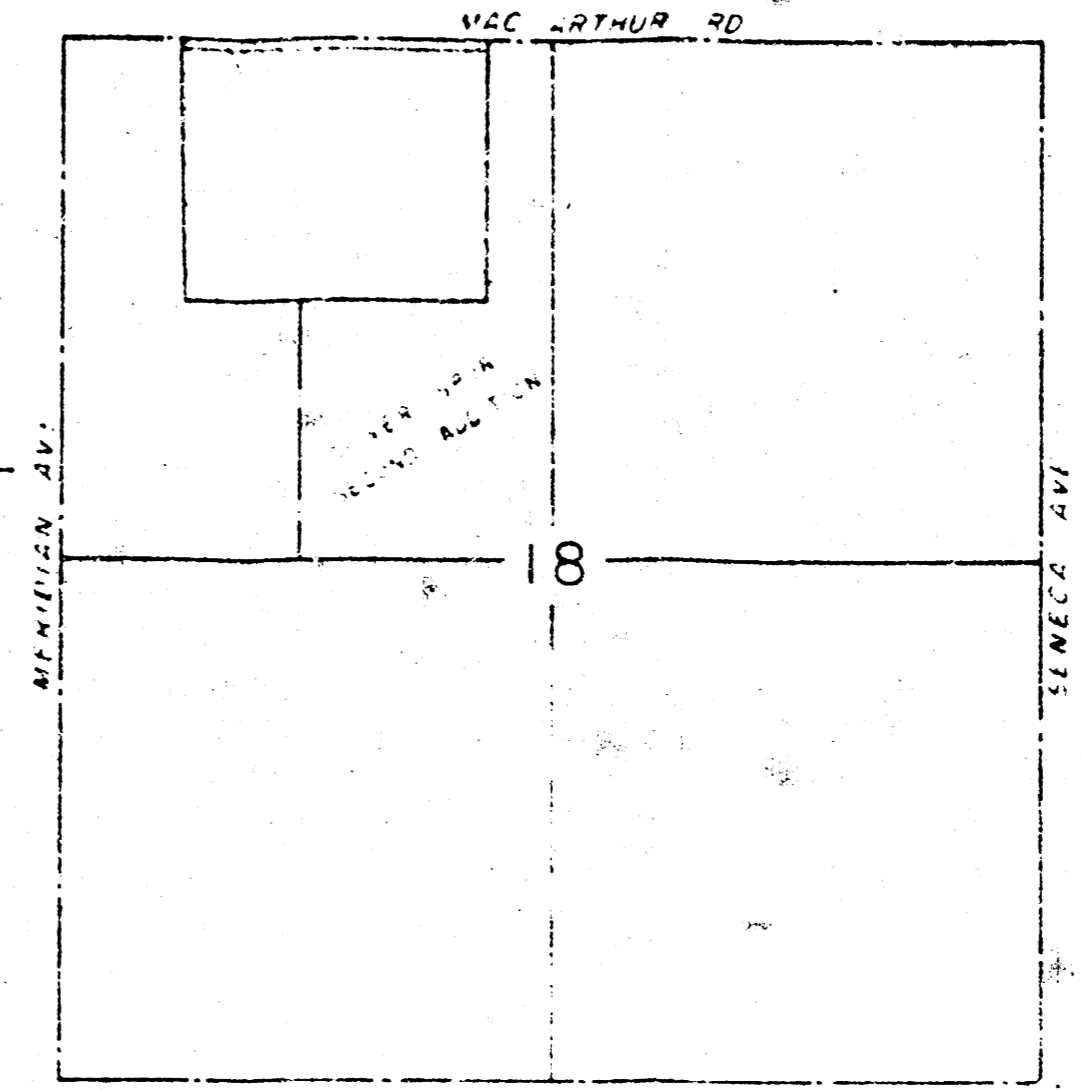


MOBILE MANOR ADD

MAC ARTHUR RD



VICINITY MAP 1" = 1000'

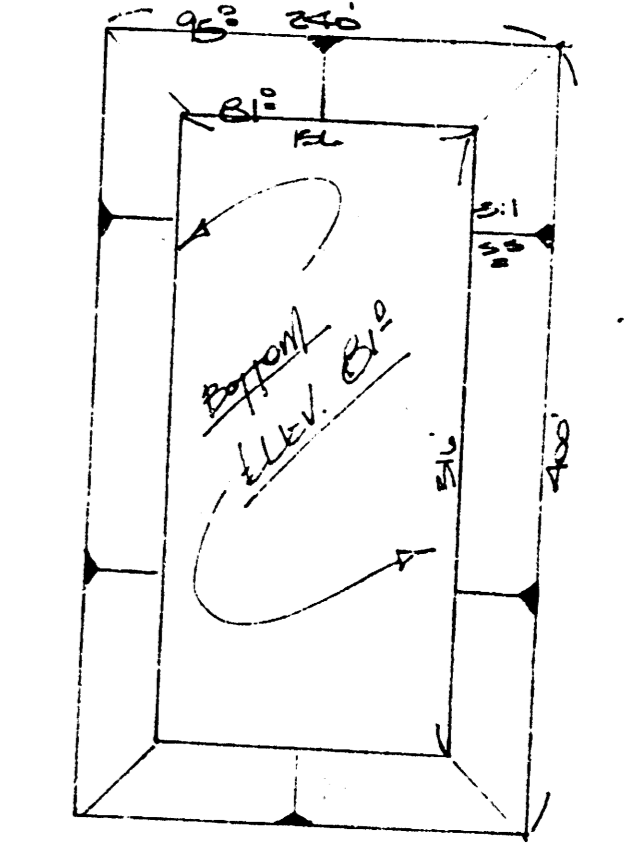
BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING

PROJECT: Mobile Manor Addition TO: Chris Breitenstein FROM: Brent Mooton REFERENCE: Drainage Plan Addendum

CONFIRMATION MEMO

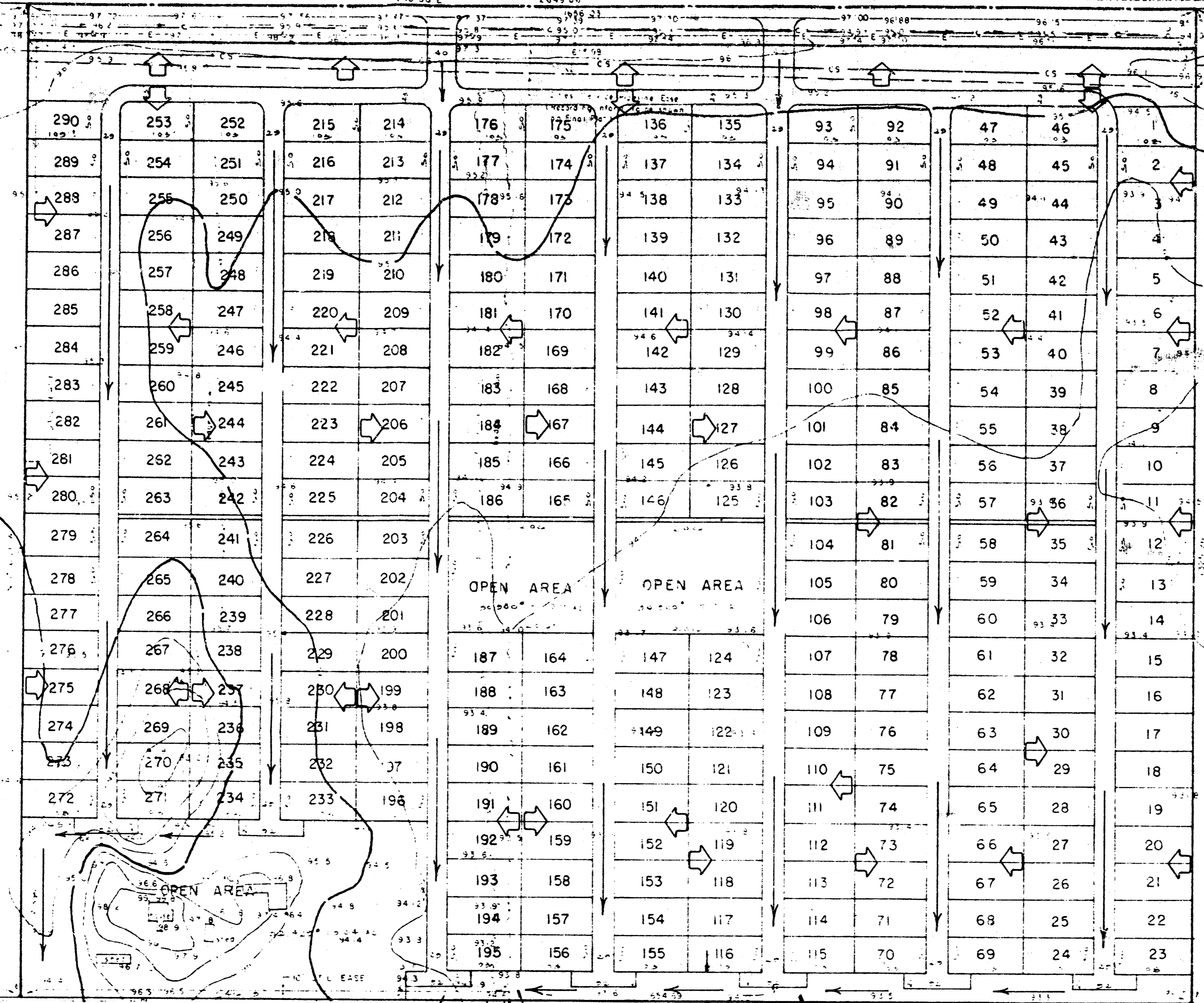
DATE: June 26, 1983

The Required Storage Volume for this site is 82 ac-ft for the major storm discharge. Proposed pond site dimensions for the retention pond are indicated below.



3:1 side slopes Top = 95 ELEV. Water Level = 84 ELEV. Total Pond Depth = 2 Feet

drainage plan



MOBILE MANOR SOUTH

FOR B A RUEDEBUSCH 3200 S.E. BLVD WICHITA, KANSAS

TOPO MADE JANUARY, 1983

BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING

PROJECT: JOB NO. DATE: COPIES TO: TO: FROM: REFERENCE:

CONFIRMATION MEMO

EXISTING GROUND ELEVATION AT THE SITE = 95.0. EXISTING WATER LEVEL GROUND WATER = 84.0. PROPOSED BOTTOM OF POND SITE = 81.0 OR THREE FEET BELOW GROUND WATER. PROPOSED FREEBOARD FOR SITE = TWO FEET WIDTH OF REQUIRED ONE FOOT. POND CAPACITY CONSIDERED ONLY FROM ELEVATION OF 84 TO 93. AVAILABLE CAPACITY = 13.1 ACFT. THE COEFFICIENT OF PERMEABILITY A/q FOR THE SITE AT THE ELEVATION OF 84 IS 24.45 IN./DAY. FLOW FROM THE SITE VERTICALLY INTO THE WATER TABLE WOULD BE CALCULATED FROM Q = K(h)A/Nb. h = 9 FOOT TOTAL A/q HEAD = 45 FT. A/q = BOTTOM OF PIT AT ELEV. 84. = 25116 CF. Nb = THICKNESS OF SAND LAYER APPLYING FLOW = 3 FT. K = FROM PAGE 2.

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PROJECT: DATE: TO: FROM: REFERENCE:

(VERTICAL FLOW) = 45(F)(1.002 F/IN)(25116 FT^2)/3 FT. Q = 114 F^3/MIN. SINCE THERE IS SUCH A SMALL AMOUNT OF SIDE SLOPE AREA TO CONSIDER WE WILL NOT WASTE ANY LATERAL FLOW AND CONSIDER ONLY THE VERTICAL FLOW. BY CRITERIA OF DESIGN THE POND IS TO BE DISCHARGED IN FOUR DAYS TIME. W/FLOW AMOUNT = 82 ACFT. = 57492 CF. IN A RATE OF DISCHARGE OF 114 F^3/MIN. TOTAL TIME = 57492/114 = 3305 MIN. = 55 HOURS OR 2.3 DAYS. SO W/OUT ANY LATERAL FLOW...

BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING

PROJECT: DATE: TO: FROM: REFERENCE:

NOTE - SIDE SLOPES AND TOP AREA OF RETENTION SITE SHOULD BE SEEDED AND MULCHED. THE POND IS A RETENTION POND DESIGN WITH NO SLOW RELEASE OR PUMP STATION SYSTEM TO ULTIMATELY DISCHARGE OTHER THAN DESIGN VERTICAL FLOW INTO THE WATER TABLE LEVELS. THEREFORE IT IS STRONGLY RECOMMENDED THAT SOME MAINTENANCE PRACTICE OR ULTIMATELY BE ESTABLISHED TO INSURE THAT THE POND WILL IN FACT REMAIN AS A FUNCTIONABLE PART OF THIS DEVELOPMENT.

SUPERVISING ENGINEER: WALTER A. GEE, GREENWOOD #1, MEMBER OF P.E.T., LICENSED GEOLOGIST, COLORADO, CIVIL ENGINEER, LEWIS & CLARK UNIVERSITY, WICHITA, KANSAS

15 June 1983

Mr. B. A. Ruedebusch 3200 S.E. Boulevard Wichita, Kansas 67216

Re: Falling Head Permeability Tests A/L File No. 50-83016-1530

COPY

Sir: We have completed the referenced falling head permeability tests on samples delivered to the laboratory. Results of the tests are as follows: 1. East Side Coefficient of permeability "k" = 1.07 x 10^-3 cm/sec = 36.3 in/day 2. West Side Coefficient of permeability "k" = 9.57 x 10^-4 cm/sec = 32.6 in/day All tests were conducted in accordance with Chapter VI of Lambe's "Soil Testing for Engineers". If there are any questions concerning this data, please call at your convenience. Respectfully submitted, JOHN B. MCANTSEL, JR. Manager, Geotest Division

