

QUANTITIES:

SANITARY SEWER		
10" PIPE	1,837 LF	
6" PIPE	1,750 LF	
MANHOLE	12 EA	
STORM SEWER		
10" PVC, SDR 26	11 LF	
12" C76 IV	2,527 LF	
12" C76 IV	342 LF	
15" C76 IV	181 LF	
18" C76 IR	1,450 LF	
21" C76 IR	60 LF	
24" C76 V	105 LF	
4" DIA. MANHOLE	7 EA	
4" DIA. CATCH BASIN	27 EA	
2" DIA. INLET	5 EA	
3" SUMP PIPE	400 LF	
WATER MAIN		
8" CL 54 D.I. PIPE	2,428 LF	
6" W/V	4 EA	
8" TSV&W	1 EA	
HYDRANT ASSEMBLY	4 EA	
PAVEMENT		
BITUMINOUS PAVEMENT (SAVAGE ROAD)	317 SYD	
BITUMINOUS PAVEMENT (APPROACH)	191 SYD	
BITUMINOUS PAVEMENT (ARLENE LANE)	6,139 SYD	
4" MOUNTABLE CONC. CURB & GUTTER	3,829 LF	
REVERSE CONC. CURB & GUTTER	1,532 LF	
MOOT 1-30-75 CONC. CURB & GUTTER	123 LF	
GRADING		
LUMP SUM		
SOIL EROSION CONTROL		
LUMP SUM		

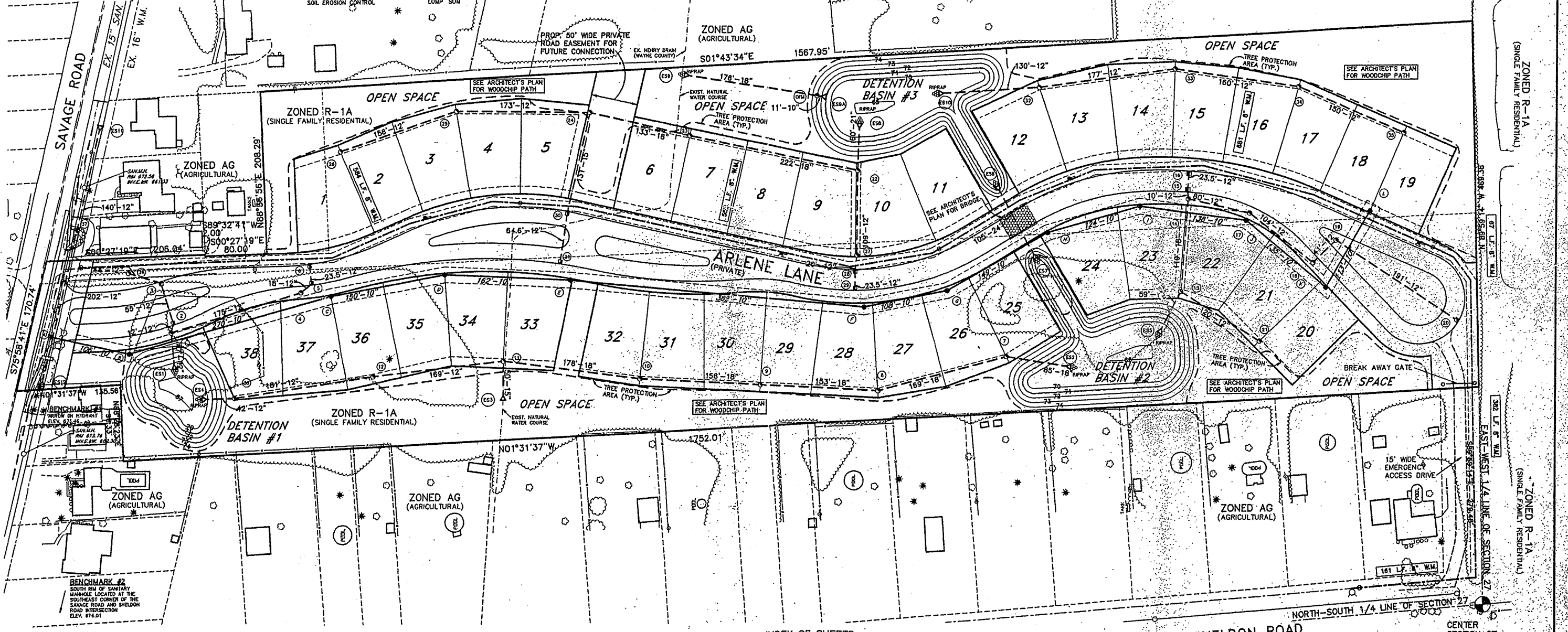
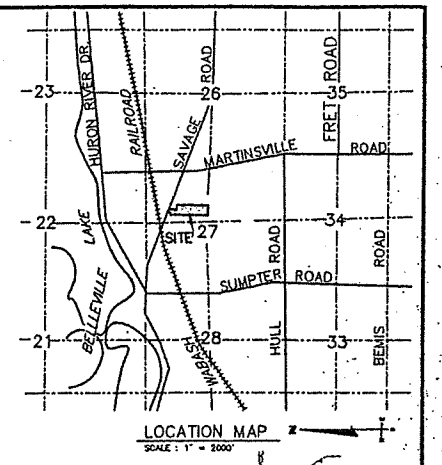
LEGAL DESCRIPTION
 PART OF THE N.E. 1/4 OF SECTION 27, T.3S., R.8E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN DESCRIBED AS FOLLOWS:
 COMMENCING AT THE CENTER OF SECTION 27, T.3S., R.8E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN; THENCE ALONG THE EAST-WEST 1/4 LINE OF SAID SECTION 27, S.89°59'14"E., 279.48' TO THE POINT OF BEGINNING OF THE PARCEL HEREIN DESCRIBED; THENCE N.01°31'37"W., 1752.01'; THENCE N.88°28'23"E., 98.33'; THENCE N.01°31'37"W., TO A POINT ON THE CENTERLINE OF SAVAGE ROAD (66.00' WIDE), 135.56'; THENCE, ALONG THE SAID CENTERLINE OF SAVAGE ROAD S.75°58'41"E., 170.74'; THENCE S.00°27'19"E., 206.04'; THENCE S.89°32'41"W., 2.00'; THENCE S.00°27'19"E., 80.00'; THENCE N.88°38'56"E., 208.29'; THENCE S.01°43'34"E., TO A POINT ON THE EAST WEST 1/4 LINE, 1567.95'; THENCE, ALONG THE SAID EAST-WEST 1/4 LINE N.89°59'14"W., 469.38'; TO THE POINT OF BEGINNING, CONTAINING 18.3153 ACRES SUBJECT TO THE RIGHTS OF THE PUBLIC IN THE NORTHERLY 33.00' (SAVAGE ROAD), AND ALL EASEMENTS AND RESTRICTIONS OF RECORD.

SITE CALCULATION
 Area of Project: 797,813.78 Sq. Ft.
 Less: 20% - Roads: 159,562.76
 638,251.02 Sq. Ft.
 Number of allowable Sites: 1.3 sites for each 20,000 Sq. Ft.
 31.91 x 1.3 = 41.49
 41 sites allowed.
 38 sites proposed.

OPEN SPACE CALCULATION
 797,813.78 x 30% = 239,344.13 sq. ft.
 239,344.13 sq. ft. = 5.49 acres required per architect.
 Proposed open space area = 6.44 acres

LEGEND

PROPOSED	DESCRIPTION	EXISTING
○	DRAINAGE STRUCTURE	○
□	DRAINAGE STRUCTURE	□
●	SANITARY SEWER MANHOLE	○
○	GATE WELL	○
⊕	HYDRANT	⊕
⊕	POWER POLE	⊕
---	SANITARY SEWER	---
---	STORM SEWER	---
---	WATER MAIN	---
---	GAS MAIN	---
---	FENCE LINE	---
---	CONTOURS	---
---	SPOT ELEVATIONS	---
---	WOODS	---
---	TREE PROTECTION AREA	---



W.C.D.P.S. NOTES:

- ALL WORK WITHIN WAYNE COUNTY ROAD RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS, INCLUDING SOIL EROSION AND SEDIMENTATION CONTROL, OF THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES.
- THESE PLANS ARE NOT VALID WITHOUT ATTACHMENT OF THE WAYNE COUNTY PERMIT SPECIFICATIONS FOR CONSTRUCTION WITHIN ROAD RIGHT-OF-WAY, PARKS, DRAIN EASEMENTS OR SANITARY SEWER EASEMENTS UNDER THE JURISDICTION OF WAYNE COUNTY (07/01/93) REVISED 10-1-93.
- ALL BACKFILL UNDER OR WITHIN 3' OF PROPOSED OR EXISTING PAVEMENT, SIDEWALK OR CURB SHALL CONFORM TO W.C.D.P.S. REQUIREMENTS FOR TRENCH "B" (PORUS BACKFILL, GRADE "D").
- RESTORE R/W W/3" TOPSOIL AND CLASS "A" HYDROSEED SLOPES STEEPER THAN 1:3 SHALL BE RESTORED WITH SOD.

SANITARY SEWER - NOTES

- NO CONNECTION RECEIVING STORM WATER, SURFACE WATER, OR GROUND WATER SHALL BE MADE TO SANITARY SEWERS.
- INFILTRATION FOR ANY SECTION OF SEWERS BETWEEN MANHOLES SHALL NOT EXCEED 200 GALS./INCH DIA./MILE/24 HOURS.
- ALL ELEVATIONS ARE BASED ON WAYNE COUNTY DATUM, (USCGS).
- NO FOOTING DRAINS SHALL BE CONNECTED TO THE BUILDING SEWER.
- DIFFERENTIAL OF EXCAVATION AROUND EXISTING MANHOLES SHALL NOT EXCEED 6 FEET.
- CONTRACTOR SHALL NOTIFY WAYNE COUNTY 48 HOURS PRIOR TO START OF CONSTRUCTION, CONTACT: FIELD ENGINEERING OFFICE ASSISTANT DIVISION CONSTRUCTION ENGINEER - TELEPHONE: (313) 595-6507

SITE DATA:
 SOWELL NO. 5
 83-105-99-0072-000
 83-105-99-0073-000
 83-105-99-0095-001
 ZONED R-1A
 NUMBER OF LOTS: 38

PROPRIETOR:
 ALLEN GOTTLIEB,
 30160 ORCHARD LAKE ROAD, SUITE 110
 FARMINGTON HILLS, MI 48334

INDEX OF SHEETS

- DEVELOPMENT PLAN
- W.C.D.P.S. ATTACHMENT
- ARLENE LANE 0+00-12+00
- ARLENE LANE 12+00-19+00
- SAVAGE ROAD AND ROAD DETAILS
- INTERSECTION DETAILS
- GRADING PLAN
- SOIL EROSION & SEDIMENTATION CONTROL PLAN
- DRAINAGE CALCULATION PLAN

DETAILS
 VAN BUREN TOWNSHIP STANDARDS
 STORM SEWER - W.C.D.P.S. DETAILS A & B
 PAVEMENT - W.C.D.P.S. DETAILS C & D
 STREET SIGNS - W.C.D.P.S. DETAIL E

M.D.P.H. WATER PERMIT No.:
I.D.N.R. SANITARY SEWER PERMIT No.:
W.C.D.P.S. No.:
D.M.W.S. No.: C-

BASIS OF DESIGN FOR SANITARY SEWER
 SINGLE FAMILY LOTS: 38 LOTS X 3.5 PERSONS/LOT = 133 PERSONS
 133 PERSONS X 100 GPD/PERSON = 13,300 GPD
 PEAK FACTOR 1.8 + 0.133 = 4.21
 4 + 0.133 = 4.21
 DESIGN FLOW 4.21 x 13,300 GPD = 55,993 GPD = 0.087 CFS
 CAPACITY OF 10" @ 0.30% = 1.42 CFS (TRUSS PIPE - n = 0.011)

DEVELOPMENT PLAN
ARLENE ARBORS
 PART OF THE N.E. 1/4 OF SECTION 27, T.3 S., R.8 E., VAN BUREN TWP., WAYNE COUNTY, MICHIGAN

DATE: SEPTEMBER 9, 1999

REVISED PER WCDPS	10/26/99
REVISED PER TOWNSHIP	10/26/99
REVISED PER WCDPS	11/23/99
REVISED PER TOWNSHIP	12/3/99
REVISED PER WCDPS	12/21/99

AS BUILT

SCALE: 1" = 60'

DATUM: U.S.C. & G.S.

WARNER, CANTRELL & PADMOS, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 20780 Orchard Lake Road
 Farmington Hills, MI 48334
 (313) 448-4834

JOB NO. 971001
 PLAN FILE VAN BUREN.TWP.
 SHEET 1 OF 9



01002 - Acad Dwg197001 - 14ENGINEERING197001.dwg Hen Jan 03 11:50:46 2000 RL