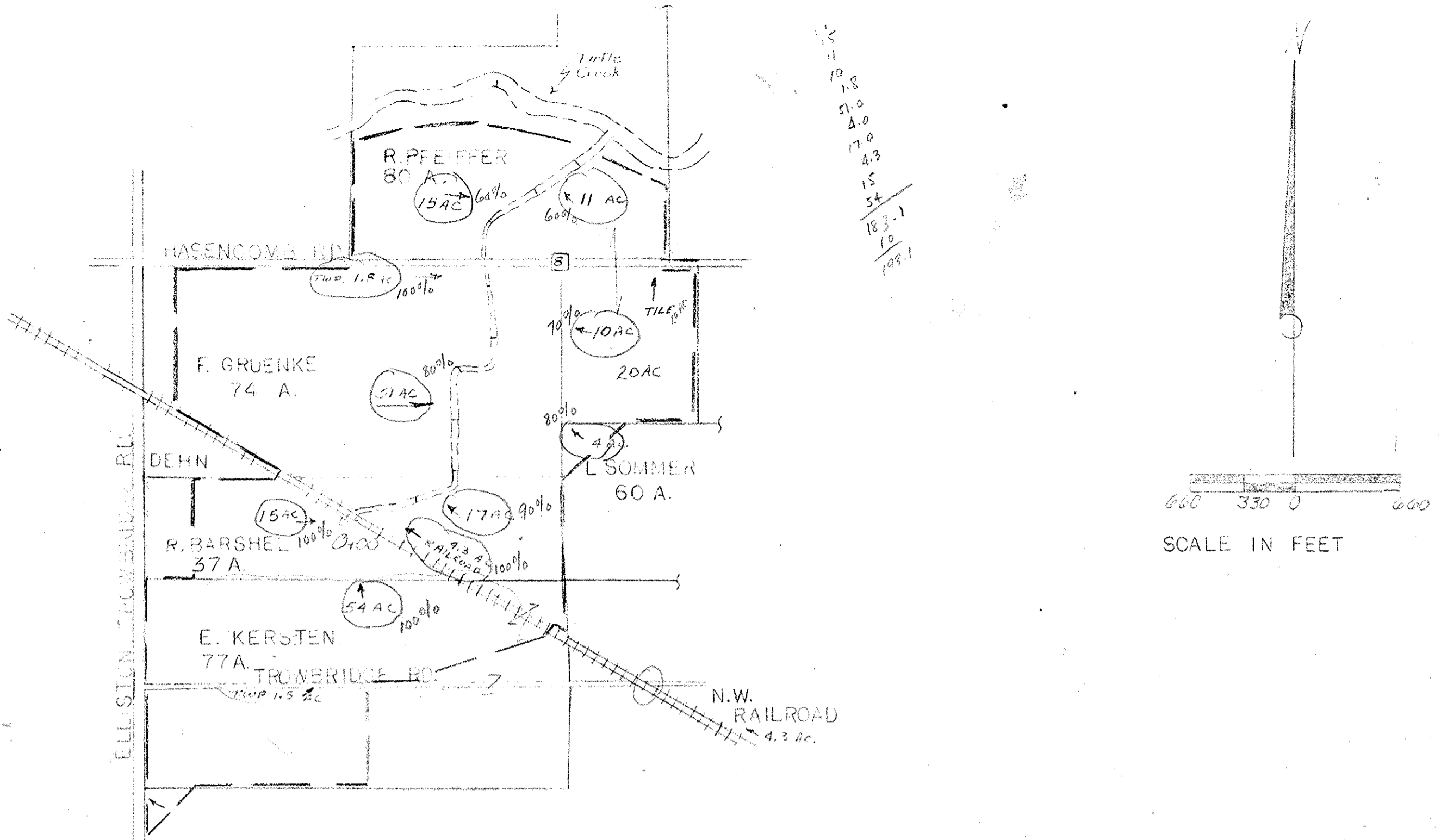


FILE COPY

BENCH MARK DESCRIPTIONS
 BM#1: TOP OF 24" CULVERT UNDER N.W. RAILROAD. M.S.L. -585.29
 BM#2: TOP OF SOUTH END OF 33" CULVERT UNDER HASENCOMB ROAD. M.S.L. -581.71
 BM#3: TOP OF SOUTH END OF 36" CAST IRON PIPE UNDER FARM LANE. M.S.L. -580.74



LEGEND

PROPOSED IMPROVEMENT	
HIGHWAYS	
PROPERTY LINE	
SECTION CENTER	
WATERSHED	
ACRES OWNED	
ACRES BENEFITED	
RAILROAD	

SUPPORTING DATA

DRAINAGE AREA	183 ACRES
DESIGN COEFFICIENT	0.8 CURVE
LAND USE	GENERAL CROPS
SOIL TYPES	TOLEDO - FULTON
LAND SLOPE	0.2 %
TYPE DRAINAGE	SURFACE & TILE

LOCATION & OWNERSHIP MAP

- I. EXCAVATION:
 - A. Bottom Width: The bottom width shall be THREE (3) feet between sta. 0+37 and sta. 3+160.
 - B. Bank Slopes: The ditch bank slopes are to be constructed to at least 2 foot horizontal to 1 foot vertical.
 - C. Alignment: The centerline of the improvement shall be approximately the centerline of the existing ditch unless otherwise indicated on the plan.
 - D. Total Excavation: The total excavation consists of 3453 cubic yards of earth over 3423 lineal feet of ditch from sta. 0+37 to sta. 3+160.
 - E. Excess Yardage: No extra compensation will be paid for such excavation in excess of yardage herein estimated. This estimate was made from cross-sections of the proposed ditch. The contractor should view the proposed work to his own satisfaction.
 - F. The contractor shall be given a right-of-way on each side of the ditch 50 feet from the bank of the ditch at all points.
- II. CLEARING:
 All trees and/or brush which would interfere with the excavation operation must be cleared from the ditch right-of-way ahead of the construction operation. Stumps on the berm shall be removed or cut as low as cutting tools permit. All stumps on the slopes shall be removed. Cleared debris should be disposed of by burning or removed from the right-of-way.
- III. BERM WIDTH:
 Unless otherwise noted the berms will have the following minimum widths: four (4) feet wide for ditches up to four (4) foot depth; six (6) feet wide for four to six foot depth; and ten (10) foot depth for ditches over six feet in depth.
- IV. SPOIL BANKS:
 Excavated material should be deposited and spread along one and/or both sides of the ditch, as determined, except where used for levees, and in overflow areas with timber or brush cover. Slope of the spoil after spreading should be at least 3:1 on the channel side and at least 4:1 on the field side. The height of the spoil should not exceed one foot above average ground level. Openings shall be provided for surface water to enter the ditch.
- V. TILE OUTLETS:
 Landowners shall protect their tile outlets with a section of continuous rigid pipe and flap-gates or grid to exclude rodents. For details of construction, see your Soil Conservation Service Technician.
- VI. SURFACE WATER OUTLETS:
 Whenever a lateral or a surface ditch enters the main ditch at a higher elevation, protection from erosion should be provided by: drop structures, pipe drops, other suitable structure or grassed waterway. For assistance on outlets, see your Soil Conservation Service Technician.
- VII. DITCH BANK SEEDING:
 The ditch banks will be seeded each day within 4 hours after the clearing and shaping is completed. The berms will be seeded after spoil is spread. Fertilizer will be applied at the time or within 24 hours after seeding. Seed will be covered by use of adjustable spike tooth harrow, if not seeded within the above time limit.
 Seeding rates per acre: Permanent seeding.
 40 pounds tall fescue - (Kentucky 31 or 41a)
 500 pounds 12-12-12 or equivalent fertilizer
 2 tons straw or hay per acre for mulch
 2 bushels oats seeded during spring or summer or 2 bushel wheat or rye seeded in the fall or winter may be used as a growing green mulch in place of straw mulch.
 Mow when grass reaches a height of 10 to 12 inches.
 A split seeding can be made after September 15 where weather conditions are good—with half the fescue applied in the fall or winter and the balance in the spring.
 The establishment of the seeding on the ditch bank and berm shall be the responsibility of the contractor. A minimum of 20 fescue plants per square foot will be considered adequate establishment.
- VIII. Existing culverts will be cleaned and the inverts (flow line) lowered if necessary to correspond to the proposed ditch grade as indicated on the plan. If necessary, culverts will be enlarged to meet drainage design.
- IX. ALL OF THE ABOVE SPECIFICATIONS ARE TO BE COMPLETED BEFORE PERFORMANCE IS CERTIFIED.

THIS PLAN HAS BEEN APPROVED BY:
John G. Pappan Oct 19 1974
 OTTAWA COUNTY ENGINEER DATE

Frank Grunke
 BENTON TWP. TRUSTEES 11/10/74 DATE

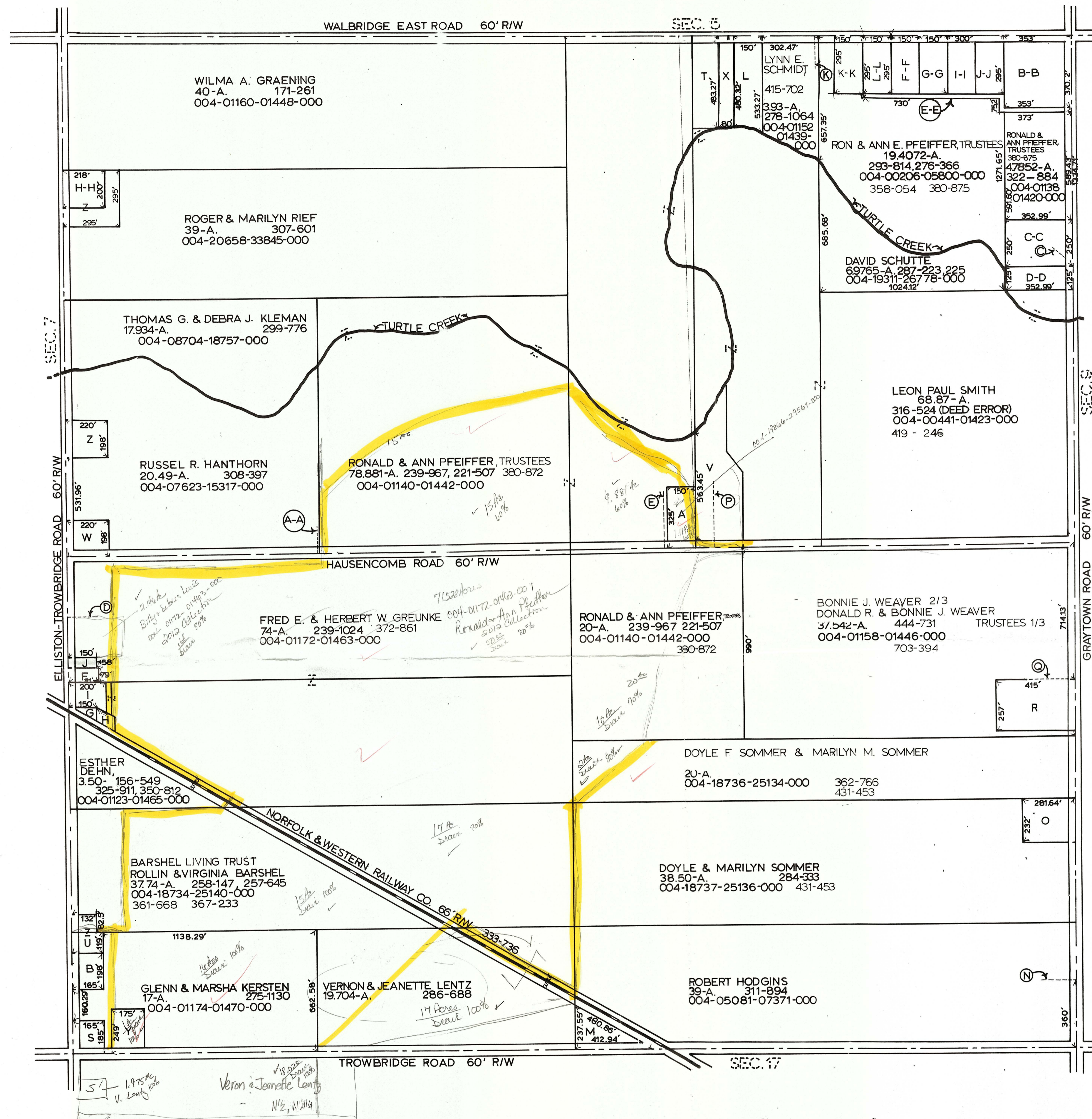
LOCATION - W. 1/2 OF SECTIONS 8, T7N R14E, BENTON TOWNSHIP OTTAWA COUNTY, OHIO.

SURVEYED 7/18/74

REFERENCE
 LOOSE LEAF NOTES IN S.W.C.D. GROUP FOLDER # 77

JOB CLASS V GROUP # 77

DESIGN SURVEY BARSHEL DITCH DITCH OUTLET IMPROVEMENT			
BENTON TWP. OTTAWA CO.			
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed.....	Date.....	Approved by.....	Title.....
Drawn <u>Treas. A</u>	<u>Aug 80</u>	<u>John G. Pappan</u>	<u>9-27-74</u>
Traced.....	Sheet.....	Drawing No.	
Checked <u>M. Acnae</u>	<u>2-74</u>	<u>39-01-383-75-23</u>	



PAR	PAR #	PROPERTY OWNERS	ACRES	VOL. & PG.
A	004-19866 29567-000	TIMOTHY & REBECCA TANK	1.119	288-361
B	004-19319 26927-000	JOHN L. & TAMMY L. MAZUR	1.0±	332-288 384-204
C		TOLEDO EDISON	65' EASE	284-072
D		TOLEDO EDISON	150' EASE	283-650
E		TOLEDO EDISON	272' EASE	280-007
F	004-19318 26926-000	CHARLES HARDER	0.26±	439-689 740-174
G	004-01120 01474-000	MICHAEL C. MULLINS	0.236±	352-108
H	004-01120 01459-000	MICHAEL C. MULLINS	0.151±	352-108

I	004-01120 01459-000	MICHAEL C. MULLINS	0.614±	352-108
J	004-05088 07372-000	CHARLES HARDER	0.20	439-689 740-174
K		TOLEDO EDISON	10' x 160' EASE	264-690
L	004-11224 26832-000	THOMAS R. SCHMIDT	1.7242	300-707 376-486
M	004-19088 02265-000	BENTON TOWNSHIP	1.13	263-207
N		TOLEDO EDISON	10' x 160' EASE	250-090
O	004-01155 01443-000	CLEO & ANZONNETTA MOMINEE	1.5	313-517
P		TOLEDO EDISON	10' x 326' EASE	240-482
Q		TOLEDO EDISON	5' x 245'	232-438

F-F	004-00206 05800-000	SCOTT & SAMANTHA PLATZKE	10158	388-54
G-G	004-00668 03845-001	MARK L. & GAYLE S. SHIFFERT	10158	432-601
H-H	004-20668 05800-004	RANDALL L. & KIMBERLY K. REIF	199	329-917 372-918
I-I	004-00006 05800-004	DONNA G. WOOD	1016	330-130
J-J	004-00206 05800-009	DONNA G. WOOD	1016	330-130
K-K		LISA M. & THOMAS H. HODGES	10158	705-648 737-203
L-L		CREED E., JR. & SHERRI B. ROLLINS	10158	403-15

R	004-01157 01445-000	DONALD & BONNIE WEAVER, TRUSTEES	2.488	423-343 228-1076
S	004-04174 01467-000	GLENN & MARSHA KERSTEN	0.70	188-187 713-7
T	004-00441 01425-000	LEON PAUL SMITH	1.50	316-324 419-246
U	004-01180 01475-000	DONNA F. ANDERSON	0.70	328-147 301-236
V	004-12461 27227-000	PHILLIP L. & MARCIA K. MILLER	3.10	332-251
W	004-01166 01455-000	DANIAL R. & SANDRA L. SONDERGELD	1.00	268-1076
X	004-01149 01436-000	HAZEL CONLEY	.88	307-17
Y	004-20667 34196-000	DAVID & LOIS KERSTEN	1.0003	361-123
Z	004-01163 01452-000	MARILYN MICHALAK	1.0	312-507
A-A		TOLEDO EDISON CO. (5' EASE)	2.999	423-278
B-B	004-01138 01420-000	ROBERT DELPHOUS	2.0259	439-47
C-C	004-01138 01420-000	DAVID A. & SHELLEY A. SCHUTTE	1.0129	323-654
D-D	004-01138 01420-003	DAVID A. SCHUTTE		
E-E		RONALD W. PFEIFFER (20' DRAINAGE EASE)		