

LOCATION AND OWNERSHIP MAP

NOTICE TO LANDOWNERS OR CONTRACTORS
 PRIOR TO START OF CONSTRUCTION THE OWNER OF THE PIPELINE OR OTHER IMPROVEMENT LINE MUST BE NOTIFIED OF THE PENDING CONSTRUCTION, GIVING THE DATE AND TIME SUCH WORK IS SCHEDULED TO BEGIN. THE PROPERTY OWNER OR THE CONTRACTOR IS RESPONSIBLE FOR GIVING THIS NOTICE.

DRAINAGE AREA --- 385 ACRES
 LAND USE --- GENERAL FARMING
 SOIL TYPE --- TOLEDO, FULTON HOYTVILLE
 LAND SLOPE --- 0 - 2 %
 TYPE DRAINAGE --- SURFACE & TILE
 DESIGN COEFFICIENT --- Q₆ CURVE

LEGEND Done

PROPOSED DRAINAGE ---
 HIGHWAYS ---
 ACRES IN WATERSHED --- 00 A.
 PIPE LINE ---
 WATERSHED BOUNDARIES ---
 SECTION LOCATION --- 0|0
 0|0

HYDRAULIC CALCULATION

CHANNEL FLOW $V = \frac{1.485}{N} R^{2/3} S^{1/2}$

REACH	STA. TO STA.	11+80	25+00	0+00
DRAINAGE AREA (AC)		385	303	243
Q ₆ FLOW (CFS)		59	49	39
"N"		.04	.04	.04
SLOPE - S (F/FT)		.0008	.0005	.0008
S - 1/2		.0283	.0224	.0283
Q/S ^{1/2} = KD		2085	2135	1378
KD VALUE USED		2172	2293	1421
SIDE SLOPE		1 1/2 : 1	1 1/2 : 1	1 1/2 : 1
BOTTOM WIDTH (FT)		3'	3.0'	3.0'
DEPTH (FT)		4.0	4.1	3.3
AREA (SQ. FT)		36.00	37.53	26.25
VELOCITY = Q/A (FPS)		1.64	1.31	1.49

CULVERTS

HEAD LOSS IN FEET $H = \frac{V^2}{2g} (1 + KE + KPL)$

STATION	11+14	44+56
DRAINAGE AREA (AC)	110	303
Q ₆ FLOW (CFS)	18.5	49
DIAMETER (IN.)	30"	36"
TYPE	C.I.P.	C.I.P.
"N"	.013	.013
LENGTH (FT)	26'	24'
X - SECTIONAL AREA (SQ. FT)	4.91	7.07
KP	.0092	.0072
KPL	.2392	.1730
KE	.5	.5
VELOCITY (FPS)	3.76	6.94
HEAD LOSS	0.38	1.25

- BM^{#1} - TOP OF N. END OF 8" TILE AT BEGINNING OF DITCH STA. 0+00
M.S.L. ELEV. 595.9
- BM^{#2} - TOP OF SPIKE IN E. TAP ROOT OF 18" TREE ON S. LINE OF E. PAULE FARM W. SIDE OF DITCH STA. 6+20
M.S.L. ELEV. 599.93
- BM^{#3} - TOP OF N. END OF 30" CAST IRON SEWER USED FOR FARM DRIVE E. PAULE STA. 11+40
M.S.L. ELEV. 596.91
- BM^{#4} - TOP OF N. END OF 4" IRON CASING S. SIDE OF DITCH 30' W. OF F. BENCH FARM STA. 18+17
M.S.L. ELEV. 595.83
- BM^{#5} - TOP OF N. END OF 10" TILE S. SIDE OF DITCH 1420' W. OF LICKERT HARDER RD. STA. 30+31
M.S.L. ELEV. 594.22
- BM^{#6} - CHISELED N.W. CORNER OF W. HEAD WALL OF 3' CULVERT UNDER LICKERT HARDER RD. STA. 44+52
M.S.L. ELEV. 596.40
- BM^{#7} - TOP OF 6" IRON PIPE S. SIDE OF DITCH 600' E. OF LICKERT HARDER RD. STA. 50+91
M.S.L. ELEV. 592.88
- BM^{#8} - TOP OF SPIKE IN S.E. TAP ROOT OF TREE OF N.W. CORNER OF TURN OF DITCH OF POMRENKE & PETER FARMS STA. 65+00
M.S.L. 594.28

THIS DITCH PLAN HAS BEEN APPROVED BY

John G. Papcum 8/25/66
 OTTAWA COUNTY ENGINEER DATE

SPECIFICATIONS

I EXCAVATION	A. BOTTOM WIDTH: THE BOTTOM WIDTH SHALL BE THREE (3') FEET BETWEEN STA. 0+00 AND STA. 68+51.	V TILE OUTLETS:	OPENINGS SHALL BE PROVIDED FOR SURFACE WATER INLETS.	LOCATION - S. 1/2 OF SEC. 2 S.W. 1/4 SEC. 1 R 14 E. T 7N. HARRIS TOWNSHIP. OTTAWA COUNTY, OHIO.
	B. BANK SLOPES: THE DITCH BANKS ARE TO BE CONSTRUCTED TO AT LEAST 1 1/2 FOOT HORIZONTAL TO 1 FOOT VERTICAL.	VI SURFACE WATER OUTLETS:	LAND OWNERS SHALL PROTECT THEIR TILE OUTLETS WITH A SECTION OF CONTINUOUS RIGID PIPE AND RODENT GUARD.	
	C. ALIGNMENT: THE CENTERLINE OF THE IMPROVEMENT SHALL BE APPROXIMATELY THE CENTERLINE OF THE EXISTING DITCH.	VII DITCH BANK SEEDING	WHEREVER A LATERAL OR SURFACE DITCH ENTERS THE MAIN DITCH AT A HIGHER ELEVATION PROTECTION FROM EROSION SHOULD BE PROVIDED.	SURVEYED - D. SOMMER D. OPPER 3-2-66
	D. TOTAL EXCAVATION: TOTAL EXCAVATION CONSISTS OF 4428 CUBIC YARDS OF EARTH OVER 6851 LINEAL FEET OF DITCH.	VIII CULVERTS AND BRIDGES	THE DITCH BANKS WILL BE SEEDD IMMEDIATELY AFTER EACH DAYS WORK TO TALL FESCUE (KENTUCKY 31 OR ALTA) AT THE RATE OF 25 LBS. PER ACRE. A MINIMUM OF 500 LBS. OF 10-10-10 FERTILIZER OR EQUIVALENT WILL BE APPLIED. 3 ACRES OF DITCH BANK SEEDING WILL BE REQUIRED.	REFERENCE - NOTES ON FILE IN OTTAWA SOIL/WATER CONSERVATION OFFICE. JOB CLASS "II"
	E. EXCESS YARDAGE: NO EXTRA COMPENSATION WILL BE PAID FOR SUCH EXCAVATION IN EXCESS OF YARDAGE HEREIN ESTIMATED.		EXISTING CULVERTS AND BRIDGES WILL BE CLEANED AND THE INVERTS (FLOWLINE) LOWERED TO CORRESPOND TO THE PROPOSED DITCH GRADE. STA. 11+14 STA. 44+56 (SHALL BE REPLACED WITH A LARGER CULVERT TO PROVIDE GOOD AGRICULTURAL DRAINAGE. 48" REINFORCED CONCRETE)	
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 DRAGLINE OPERATION			
III BERM WIDTHS:	FOUR (4) FEET WIDE FOR DITCH UP TO FOUR (4) FOOT DEPTH SIX (6) FEET WIDE FOR FOUR (4) TO SIX (6) FOOT DEPTH TEN (10) FEET FOR DITCH OVER SIX (6) FOOT DEPTH.			
IV SPOIL BANKS:	EXCAVATED MATERIALS SHOULD BE DEPOSITED AND SPREAD ALONG ONE OR BOTH SIDES OF THE DITCH AS DETERMINED. 3:1 ON CHANNEL SIDE AND 4:1 ON FIELD SIDE NOT TO EXCEED ONE FOOT ABOVE AVERAGE GROUND			

**DITCH IMPROVEMENT
 SCHLEGEL DITCH
 OTTAWA COUNTY, OHIO.**

**U.S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE**

Designed by *H. Fiedmaier* 6/66
 Drawn *Donald Opper* 5/25/66
 Traced *R. Nagel* 6/66

Approved by *Richard R. Nagel*
 Title *Civil Engineer*

Checked *R. Nagel* 6/66
 Sheet No. 1 of 5
 Drawing No. OH-1-83-66-8

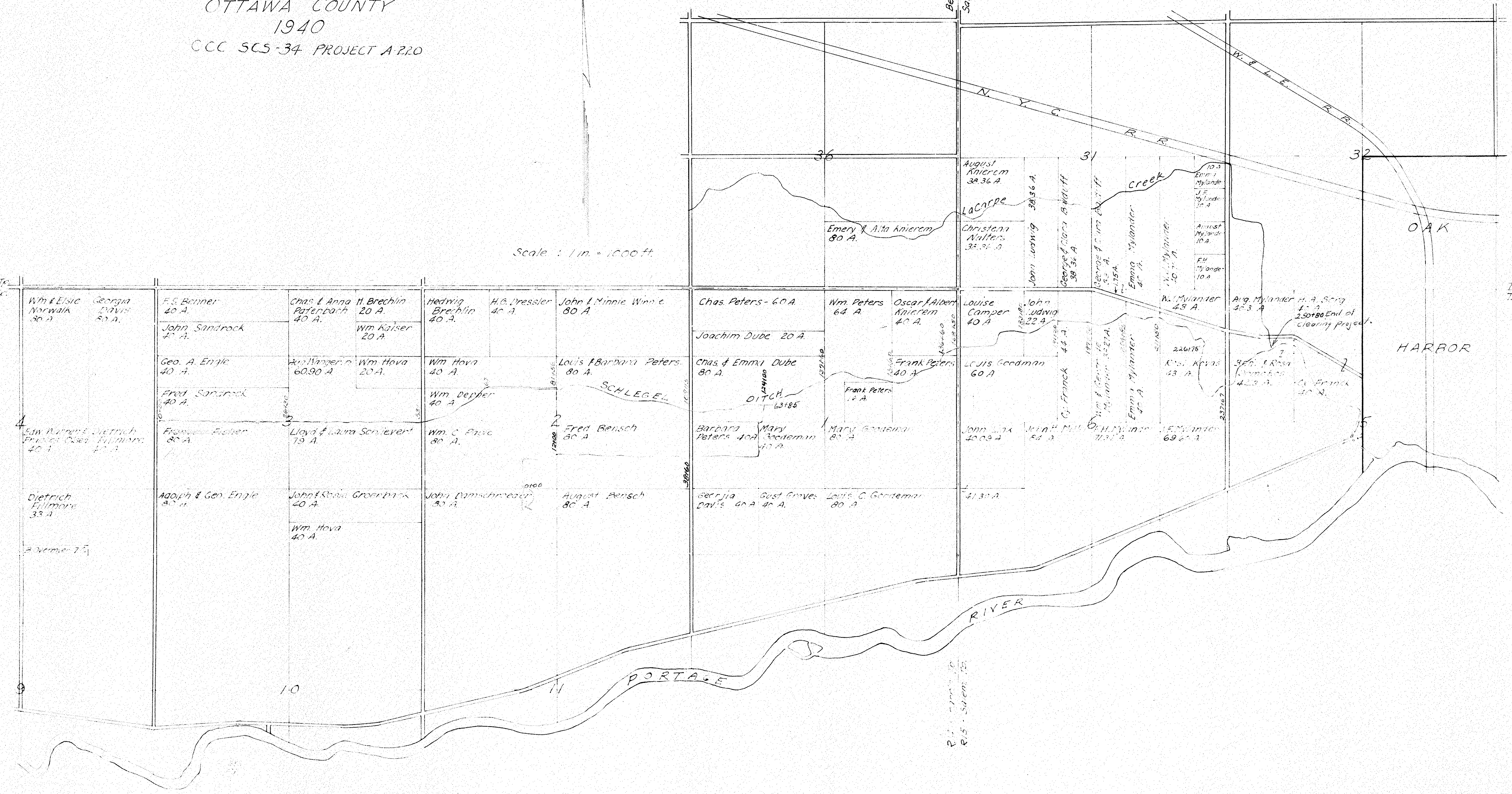
PLAT OF DRAINAGE AREA
 SCHLEGEL DITCH
 HARRIS, SALEM & BENTON TPS.
 OTTAWA COUNTY
 1940
 CCC SCS-34 PROJECT A-220



Scale: 1 in. = 1000 ft.

Benton Tp - R14
 Salem Tp - R15

Benton Tp
 Harris Tp



HWY 14 to CCC SCS 34
 SAND BEACH SIDE CAMP
 10 MILES FROM OULET OF DITCH

T. 7
 R. 15

R. 15 - 1/2 mile to
 R. 15 - Salem Tp.