



State of Wisconsin

Department of Agriculture, Trade & Consumer Protection

Alan T. Tracy
Secretary

0 1 3 4

801 West Badger Road
PO Box 8911
Madison, WI 53708-8911

RECEIVED

May 30, 1991

JUN 6 1991

**WINNEBAGO COUNTY
PLANNING DEPT.**

PERMANENT FILE NO. 17619

Mr. David D. Eisele
MARTENSON & EISELE, INC.
1919 American Court
Neenah, Wisconsin 54956

Subject: PHEASANT CREEK FARM
NE 1/4 S 29 T18N R16E
City of Oshkosh
Winnebago County

Dear Mr. Eisele:

We have examined PHEASANT CREEK FARM and do not object to this final plat. Today we were notified by the Winnebago County Planning & Zoning Committee that they do not object to this plat. Therefore, the original drawing has been certified as complying with the requirements of: s. 236.15, s. 236.16, s. 236.20, and s. 236.21 (1) and (2), Wis. Stats.; and, the Winnebago County Planning & Zoning Committee.

The following changes or corrections must be made to satisfy the conditional certification. Underlining indicates corrected or added information that must be shown. Any variances with these conditions will require written notification to and verification by this office prior to plat approval.

- s. 236.20 (3) (d & e) North of 9th Avenue, the subdivision and Quail Run Drive boundaries for "PROPOSED QUAIL RUN FARM" must be drawn in dashed lines in their proper location and proposed subdivision and street names shown and underscored in dashed lines and right-of-way widths delineated.
- s. 236.21 (2) (a) In the Owner's Certificate, the "Winnebago County Planning & Zoning Committee" must also be listed as a review authority.
- s. 236.21 (3) We note that the Treasurer's Certificate is not in the required form, and we are not sure that it is acceptable for recording.
- s. 236.21 (1) A revision date, "Revised this _____ day of _____, 19____.", must be placed near the land surveyor's seal and signature on the revised sheets of the plat.

Page 2

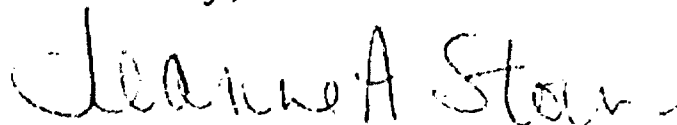
Mr. David D. Eisele
PHEASANT CREEK FARM
May 30, 1991

After all conditions of the certifications of no objection have been met, the plat may be submitted to the local governing bodies for approval. Local government units, during their review of the plat, will resolve when applicable that the plat:

- complies with local master plans, official map or subdivision control ordinances;
- conforms with areawide water quality management regulations;
- complies with Wisconsin shoreland management regulations;
- resolves possible problems with storm water runoff;
- fits the design to the topography;
- displays well designed lot and street layout;
- includes service or is serviceable by necessary utilities.

Any changes to the plat involving details checked by this Department or the Winnebago County Planning & Zoning Committee will require submission of the plat to the Department for recertification before the plat is eligible for recording. Such changes can be found by comparing the original drawing with the copy of this plat we furnish the letter recipients listed.

Sincerely,



Jeanne A. Storm, Supervisor
Plat Review Unit
Phone: 888/266-3200

JAS:dpb

Enc: Muslin-backed Drawing, Original, Marked Print, Closure and Curve Comps.

cc: Algoma Capital Group Limited, Owner
Clerk, City of Oshkosh
Clerk, Town of Algoma
Winnebago County Planning & Zoning Committee
Register of Deeds
ECWRPC

ORIGINAL DRAWING RECEIVED FROM THE SURVEYOR ON 4/10/91; REVIEWED BY DATCP ON 5/28/91

PHEASANT CREEK FARM

PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 18 NORTH, RANGE 18 EAST, CITY OF OAKCREEK, MINNESOTA COUNTY, WISCONSIN

SURVEYOR'S CERTIFICATE

I, David D. Eisele, Registered Land Surveyor, hereby certify that I have surveyed, divided, and mapped PHEASANT CREEK FARM, located in the Northwest 1/4 of Section 29, Township 18 North, Range 18 East, City of Oakcreek, Minnesota County, Wisconsin.

That I have made such land division and plat by the direction of said owners of the lands herein described:

Commencing at the north 1/4 corner of said Section 29; thence South 89 degrees 18 minutes 22 seconds East, along the North line of the Northwest 1/4 of said Section 29, a distance of 850.02 feet; thence South 00 degrees 43 minutes 31 seconds West, 23.00 feet to the point of beginning; thence South 89 degrees 18 minutes 22 seconds East, 310.00 feet; thence South 00 degrees 43 minutes 31 seconds West, 107.00 feet; thence South 89 degrees 18 minutes 22 seconds East, 103.00 feet; thence North 00 degrees 43 minutes 31 seconds East, 107.00 feet; thence South 00 degrees 43 minutes 31 seconds East, 202.24 feet; thence South 89 degrees 18 minutes 22 seconds East, 207.00 feet; thence South 00 degrees 43 minutes 31 seconds West, 40.03 feet; thence along the arc of a curve to the right 25.00 feet, which has a radius of 70.00 feet and a chord of 24.87 feet that bears South 11 degrees 34 minutes 28 seconds West; thence South 04 degrees 18 minutes 22 seconds East, 43.57 feet; thence South 00 degrees 43 minutes 31 seconds East, 140.00 feet; thence South 00 degrees 43 minutes 31 seconds West, 110.00 feet; thence South 00 degrees 43 minutes 31 seconds East, 200.00 feet; thence South 07 degrees 13 minutes 47 seconds East, 82.44 feet; thence North 00 degrees 43 minutes 31 seconds East, 81.52 feet; thence South 00 degrees 43 minutes 31 seconds West, 80.00 feet; thence North 00 degrees 43 minutes 31 seconds East, 125.00 feet; thence North 00 degrees 43 minutes 31 seconds East, 222.00 feet to the point of beginning.

That such plat is a correct representation of all exterior boundaries of the land surveyed and the subdivision thereof made.

That I have fully complied with the provisions of Chapter 230 of the Wisconsin Statutes, and the subdivision regulations of Minnesota County and the City of Oakcreek in surveying, dividing and mapping the same.

Given under my hand this 8th day of April, 1991.

David D. Eisele
David D. Eisele, Wisconsin Registered Land Surveyor No. 9-974

RESTRICTION FOR PUBLIC BENEFIT - MINNESOTA COUNTY

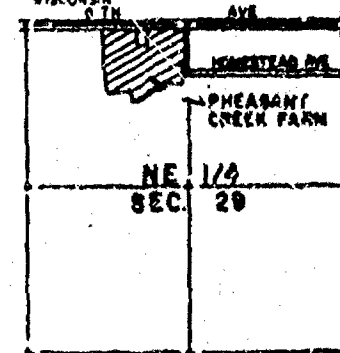
Pursuant to section 18.06 of the Minnesota County Land Division Ordinance, upon final grading, the developer and/or owner shall comply with the surface water drainage plan as approved by the Minnesota County Land and Water Conservation and Planning and Zoning Departments.

PLAT COVENANTS

- \$100 per lot shall be paid to the City of Oakcreek in lieu of parkland dedication.
- A storm drainage and grading plan for this plat heretofore approved by the City of Oakcreek shall be complied with by all owners.
- Improvements, maintenance and repair of the common areas, streets and boulevards shall be the obligation of the PHEASANT CREEK FARM HOMEOWNERS ASSOCIATION, INC. If the Homeowners Association fails to fulfill its obligation, the City of Oakcreek may provide such services on said common areas, streets and boulevards as necessary and release the Homeowners Association said costs.

LOCATION MAP

THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 18 NORTH, RANGE 18 EAST, CITY OF OAKCREEK, MINNESOTA COUNTY, WISCONSIN



SCALE = 1" = 1000'

OWNER'S CERTIFICATE OF DEDICATION

DAVID D. EISELE, Registered Land Surveyor, hereby certify that I have surveyed, divided, and mapped PHEASANT CREEK FARM, located in the Northwest 1/4 of Section 29, Township 18 North, Range 18 East, City of Oakcreek, Minnesota County, Wisconsin. I also certify that this plat is required by S. 230.10 or S. 230.12 to be submitted to the following for approval or objection:

City of Oakcreek
Minnesota Department of Agriculture, Trade and Consumer Protection

WITNESS the hand and seal of said owner this 8th day of April, 1991.

Richard M. Halverson - Limited Partner

State of Wisconsin)
County of Minnesota)

Personally came before me this 8th day of April, 1991, the above named person to be known to be the person who executed the foregoing instrument and acknowledged the same.

My commission expires _____

Notary Public

COUNCIL RESOLUTION

Resolved, that the plat of PHEASANT CREEK FARM, in the City of Oakcreek, is hereby approved by the Common Council of the City of Oakcreek.

Date: _____ Approved: _____
Mayor

Date: _____ Signed: _____
Mayor

I hereby certify that the foregoing is a copy of a resolution adopted by the Common Council of the City of Oakcreek.

Date: _____ City Clerk

CERTIFICATE OF CITY TREASURER

I, _____, being the duly elected (appointed) qualified and acting City Treasurer of the City of Oakcreek, do hereby certify that in accordance with the records in my office, there are no delinquent taxes or delinquent special assessments as of _____ on any of the lands included in the plat of PHEASANT CREEK FARM.

City Treasurer: _____

COUNTY TREASURER'S CERTIFICATE

State of Wisconsin)
Minnesota County)

I, _____, being the duly elected, qualified and acting treasurer of the County of Minnesota, do hereby certify that the records in my office show no unrecorded tax sales and no delinquent taxes or delinquent special assessments as of _____ affecting the lands included in the plat of PHEASANT CREEK FARM.

Date: _____ County Treasurer

ACCESS RESTRICTION CLAUSE

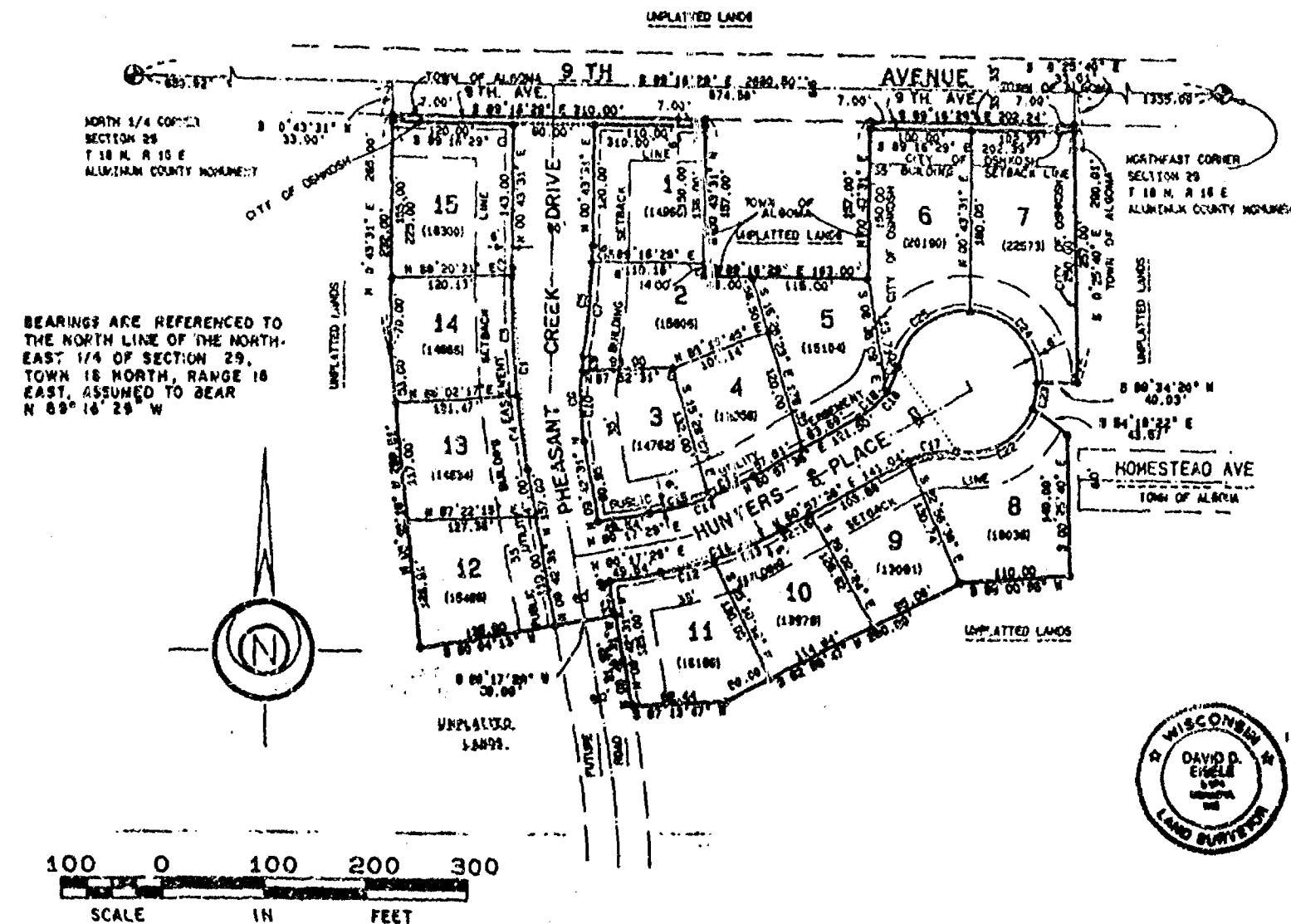
As owners we hereby restrict all lots, in that no owner, possessor, user, nor licensee, nor other person shall have any right of direct vehicular ingress or egress with 9th Avenue, as shown on the plat; it being expressly intended that this restriction shall constitute a restriction for the benefit of the public according to Section 230.200, Wisconsin Statutes, and shall be enforceable by the City of Oakcreek.

Signed: _____ Notary

WATSON & EISELE, INC.
SURVEYING ENGINEERING & LAND SURVEYING
1100 AMERICAN COURT
MINNEAPOLIS, MN 55404

THIS INSTRUMENT PREPARED BY: DAVID D. EISELE

MINNESOTA NO. 431-0-04
SHEET 1 OF 1



Curve No.	Radius	Delta	Length	Tan Brg In:	Chord	Tan Brg Out:	
1	1100.00	010 26 02.0	200.32	N 89 42 31.0 W	8 42 29 30.0 E	200.04	N 0 43 31.0 E
2	1100.00	000 21 03.0	7.00	N 0 21 29.0 E	8 0 23 34.0 W	7.00	N 0 43 31.0 E
3	1100.00	006 13 01.0	120.00	N 0 03 23.0 W	8 24 48 22.0 E	119.94	N 0 21 29.0 E
4	1100.00	003 49 03.0	73.32	N 0 42 31.0 W	8 7 47 03.0 E	73.30	N 0 53 23.0 W
5	800.00	007 59 40.0	151.39	N 0 43 31.0 W	8 42 51.0 E	151.30	N 0 42 11.0 W
6	800.00	001 08 46.0	18.00	N 0 43 31.0 W	8 1 17 54.0 E	18.00	N 1 02 17.0 W
7	800.00	008 49 54.0	85.39	N 1 02 17.0 W	8 5 17 14.0 E	85.33	N 0 42 11.0 W
8	260.00	018 24 42.0	03.55	N 8 42 31.0 W	8 0 30 10.0 E	83.19	N 0 42 11.0 E
9	260.00	003 11 43.0	14.80	N 8 30 28.0 E	8 7 06 18.0 W	14.80	N 8 42 11.0 E
10	260.00	018 12 09.0	68.05	N 8 42 31.0 W	8 2 06 01.0 E	68.05	N 8 30 28.0 E
11	365.00	010 19 53.0	129.90	N 8 07 35.0 W	8 70 37 33.0 E	129.28	N 8 07 29.0 W
12	385.00	008 15 34.0	55.50	N 72 01 53.0 W	8 76 09 42.0 E	55.45	N 8 07 29.0 W
13	385.00	011 04 19.0	74.40	N 60 07 35.0 W	8 68 29 45.0 E	74.28	N 72 01 53.0 W
14	325.00	019 10 53.0	109.65	N 80 07 35.0 W	8 70 37 32.0 E	109.13	N 8 07 29.0 W
15	325.00	011 00 41.0	62.48	N 89 16 48.0 W	8 74 47 03.0 E	62.38	N 8 07 29.0 W
16	325.00	008 19 12.0	47.19	N 80 07 35.0 W	8 63 07 12.0 E	47.15	N 59 16 48.0 W
17	60.00	036 02 12.0	51.78	N 60 27 38.0 E	8 79 23 42.0 W	50.60	N 62 10 12.0 E
18	75.00	049 04 02.0	64.23	N 11 53 34.0 W	8 38 23 35.0 E	62.28	N 60 07 36.0 W
19	75.00	027 44 20.0	26.31	N 11 33 16.0 W	8 47 00 26.0 E	26.28	N 60 07 36.0 W
20	75.00	031 19 42.0	27.92	N 11 53 34.0 W	8 22 32 05.0 E	27.78	N 33 13 16.0 W
21	70.00	285 05 14.0	324.90	N 11 53 34.0 E	8 35 08 19.0 W	102.44	N 82 10 12.0 W
22	70.00	078 01 26.0	82.84	N 11 48 22.0 W	8 89 49 05.0 E	88.22	N 82 10 12.0 W
23	70.00	020 27 46.0	25.00	N 1 20 38.0 W	8 11 34 29.0 E	24.87	N 21 48 22.0 W
24	70.00	068 29 06.0	109.10	N 81 08 30.0 E	8 42 53 07.0 W	97.68	N 1 20 36.0 W
25	70.00	080 07 59.0	98.92	N 11 53 34.0 E	8 52 28 32.0 W	90.89	N 87 08 30.0 E

LEGEND

- 1-1/4" DIA. ROUND STEEL REINFORCING BAR SET, 30" LONG, WEIGHING 4.503 LBS. PER LINEAL FOOT.
- 1" DIA. IRON PIPE SET, 24" LONG, WEIGHING 1.130 LBS. PER LINEAL FOOT.
- LOT AREA IN SQUARE FEET

UTILITY EASEMENT SHOWN THUS
UNLESS SHOWN OTHERWISE

NOTES

- ALL LINEAR MEASUREMENTS HAVE BEEN MADE TO THE NEAREST ONE HUNDREDTH OF A FOOT.
- ALL ANGULAR MEASUREMENTS HAVE BEEN MADE TO THE NEAREST 20 SECONDS AND COMPUTED TO THE NEAREST SECOND.

There are no objections to this plat with respect to Secs. 230.15, 230.16, 230.20 and 230.21 (1) and (2), Minn. Stat., or by the County Planning Agency.

Certified this 30th day of May, 1991.

Chase A. Starn
Department of Agriculture, Trade & Consumer Protection

Rock



Martenson & Eisele, Inc.

Consulting Engineering and Land Surveying

Stanley C. Martenson, P.E.
David D. Eisele, P.L.S.

John R. Davel, P.E.
James E. Smith, P.L.S.
Jeffrey W. Schultz, E.I.T.
David Kohala, P.L.S.
Daniel W. Hoel, P.L.S.
Jeffrey T. Rustick, P.L.S.

RECEIVED

MAR 19 1991

March 15, 1991

**WINNEBAGO COUNTY
PLANNING DEPT.**

Mr. Ed. Potema, City Engineer
City of Oshkosh
215 Church Avenue
Oshkosh, WI 54901

Re: PRE-POST DRAINAGE ANALYSIS FOR PHEASANT CREEK FARMS, in the City of
Oshkosh, WI

I am submitting the runoff calculations for the above mentioned project. Pheasant Creek Farms is 80 acres of an approximately 212 acre sub drainage basin in the City of Oshkosh and the Town of Algoma. Land use has been agricultural, currently cut corn. The proposed use is residential, 1/3 acre lots. The runoff analysis using U.S.D.A. Soil Conservation Service's Technical Release 55 (TR55) indicates that there will be no increase in runoff from the subbasin after the development of Pheasant Creek Farms, in fact there will be a slight decrease. Therefore no detention facilities should be required. Also an analysis was run under the assumption that the existing east west drainage swale would be improved. This analysis showed no significant increase in runoff. However, if it is decided to improve the drainage swale, extreme care should be taken to control erosion during and after construction.

If you need any more information or have any questions or comments, please feel free to contact me.

Sincerely,

MARTENSON & EISELE, INC.

Mike Siewert, E.I.T.
Project Engineer

MS/nc

cc Dave Schmidt, Director of Planning & Zoning

TR-55 TABULAR DISCHARGE METHOD

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-91

County : Winnebago

State: Wi

Checked: _____

Date: _____

Subtitle: Existing Condition

Total watershed area: 0.330 sq mi Rainfall type: II Frequency: 10 years

----- Subareas -----

	Total
Area(sq mi)	0.33*
Rainfall(in)	3.9
Curve number	83*
Runoff(in)	2.20
Tc (hrs)	1.36
(Used)	1.25
TimeToOutlet	0.00
Ia/P	0.11

Time (hr)	Total Flow	Subarea Contribution to Total Flow (cfs)
		Total
11.0	7	7
11.3	9	9
11.6	13	13
11.9	17	17
12.0	20	20
12.1	27	27
12.2	39	39
12.3	58	58
12.4	84	84
12.5	117	117
12.6	153	153
12.7	185	185
12.8	205	205
13.0	225P	225P
13.2	193	193
13.4	154	154
13.6	118	118
13.8	94	94
14.0	76	76
14.3	57	57
14.6	44	44
15.0	34	34
15.5	27	27
16.0	23	23
16.5	20	20
17.0	17	17
17.5	16	16

17.0	13	13
20.0	12	12
22.0	9	9
26.0	1	1

P - Peak Flow * - value(s) provided from TR-55 system routines

TR-55 Tc and Tt THRU SUBAREA COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-91

County : Winnebago

State: Wi

Checked: _____

Date: _____

Subtitle: Existing Condition

Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	Subarea #1 n	Total Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	2.6	300	.004	d					0.918
Shallow Concent'd		1000	.004	u					0.272
Open Channel		3000	.004			.02590.7	60.1		0.168

Time of Concentration = 1.36

=====

--- Sheet Flow Surface Codes ---

A Smooth Surface

B Fallow (No Res.)

C Cultivated < 20 % Res.

D Cultivated > 20 % Res.

E Grass-Range, Short

F Grass, Dense

G Grass, Bermuda

H Woods, Light

I Woods, Dense

--- Shallow Concentrated ---

--- Surface Codes ---

P Paved

U Unpaved

TR-55 CURVE NUMBER COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms User: MSS Date: 03-14-91
 County : Winnebago State: WI Checked: _____ Date: _____
 Subtitle: Existing Condition
 Subarea : Total

COVER DESCRIPTION	Hydrologic Soil Group			
	A	B	C	D
	Acres (CN)			
CULTIVATED AGRICULTURAL LANDS				
Row crops SR + Crop residue good	-	2(75)	169(82)	40.5(85)
Total Area (by Hydrologic Soil Group)		2	169	40.5
		=====	=====	=====

SUBAREA: Total TOTAL DRAINAGE AREA: 211.5 Acres WEIGHTED CURVE NUMBER: 83

TR-55 TABULAR DISCHARGE METHOD

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-91

County : Winnebago

State: Wi

Checked: _____

Date: _____

Subtitle: Proposed Developed Condition

Total watershed area: 0.330 sq mi Rainfall type: II Frequency: 10 years

	A1	A2
Area(sq mi)	0.18*	0.15*
Rainfall(in)	3.9	3.9
Curve number	82*	83*
Runoff(in)	2.12	2.20
Tc (hrs)	1.48*	1.38*
(Used)	1.50	1.50
TimeToOutlet	0.00	0.00
Ia/P	0.11	0.11

Subareas

Time (hr)	Total Flow	Subarea Contribution to Total Flow (cfs)	
		A1	A2
11.0	6	3	3
11.3	8	4	4
11.6	10	5	5
11.9	14	8	6
12.0	17	9	8
12.1	21	11	10
12.2	28	15	13
12.3	39	21	18
12.4	57	31	26
12.5	78	42	36
12.6	102	55	47
12.7	128	69	59
12.8	151	82	69
13.0	179	97	82
13.2	195	105P	89P
13.4	167	91	76
13.6	140	76	64
13.8	114	62	52
14.0	92	50	42
14.3	70	38	32
14.6	55	30	25
15.0	40	22	18
15.5	31	17	14
16.0	25	14	11
16.5	22	12	10
17.0	18	10	8
17.5	16	9	7
18.0	16	9	7
19.0	13	7	6
20.0	12	7	5
22.0	9	5	4
26.0	0	0	0

P - Peak Flow

* - value(s) provided from TR-55 system routines

TR-55 Tc and Tt THRU SUBAREA COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms
 County : Winnebago State: Wi
 Subtitle: Proposed Developed Condition

User: MSS
 Checked: _____

Date: 03-14-91
 Date: _____

Subarea #1 - A1									
Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	n ^{avg}	Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	2.6	300	.004	d					0.918
Shallow Concent'd		1000	.004	u					0.272
Open Channel		2580	.003			.013.785	3.14		0.288
Time of Concentration = 1.48*									=====

Subarea #2 - A2									
Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	n	Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	2.6	300	.004	d					0.918
Shallow Concent'd		1500	.004	u					0.408
Open Channel		900	.004			.02590	60.1		0.051
Time of Concentration = 1.38*									=====
Open Channel		800	.004			.02590	60.1		0.045
Travel Time = 0.05*									=====

--- Sheet Flow Surface Codes ---

A Smooth Surface
 B Fallow (No Res.)
 C Cultivated < 20 % Res.
 D Cultivated > 20 % Res.
 E Grass-Range, Short
 F Grass, Dense
 G Grass, Bermuda
 H Woods, Light
 I Woods, Dense

--- Shallow Concentrated ---
 --- Surface Codes ---
 P Paved
 U Unpaved

* - Generated for use by TABULAR method

TR-55 CURVE NUMBER COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms
County : Winnebago State: Wi
Subtitle: Proposed Developed Condition
Subarea : A2

User: MSS
Checked: _____

Date: 03-14-91
Date: _____

COVER DESCRIPTION

Hydrologic Soil Group
A B C D
Acres (CN)

CULTIVATED AGRICULTURAL LANDS

Row crops SR + Crop residue good 2(75) 69.2(82) 23.2(85)

Total Area (by Hydrologic Soil Group)

2 69.2 23.2
====

SUBAREA: A2 TOTAL DRAINAGE AREA: 94.4 Acres WEIGHTED CURVE NUMBER: 83

TR-55 CURVE NUMBER COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms
County : Winnebago State: WI
Subtitle: Proposed Developed Condition
Subarea : A1

User: MSS Date: 03-14-91
Checked: _____ Date: _____

COVER DESCRIPTION	Hydrologic Soil Group			
	A	B	C	D
	Acres (CN)			
FULLY DEVELOPED URBAN AREAS (Veg Estab.)				
Residential districts Avg % imperv				
(by average lot size)				
1/3 acre 30	-	-	69.2(81)	10.2(86)
CULTIVATED AGRICULTURAL LANDS				
Row crops SR + Crop residue good	-	-	24.7(82)	13(85)
Total Area (by Hydrologic Soil Group)			93.0	23.2
			=====	=====

SUBAREA: A1 TOTAL DRAINAGE AREA: 117.1 Acres WEIGHTED CURVE NUMBER: 82

TR-55 TABULAR DISCHARGE METHOD

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-91

County : Winnebago

State: WI

Checked: _____

Date: _____

Subtitle: Proposed Developed Condition *UNDER THE ASSUMPTION THAT THE EAST WEST SWALE IS IMPROVED*

Total watershed area: 0.330 sq mi Rainfall type: II Frequency: 10 years

	A1	A2
Area(sq mi)	0.18*	0.15*
Rainfall(in)	3.9	3.9
Curve number	82*	83*
Runoff(in)	2.12	2.20
Tc (hrs)	1.48*	1.38*
(Used)	1.50	1.50
TimeToOutlet	0.00	0.00
Ia/P	0.11	0.11

Time (hr)	Total Flow	Subarea Contribution to Total Flow (cfs)	
		A1	A2
11.0	6	3	3
11.3	8	4	4
11.6	10	5	5
11.9	14	8	6
12.0	17	9	8
12.1	21	11	10
12.2	28	15	13
12.3	39	21	18
12.4	57	31	26
12.5	78	42	36
12.6	102	55	47
12.7	128	69	59
12.8	151	82	69
13.0	179	97	82
13.2	194P	105P	89P
13.4	167	91	76
13.6	140	76	64
13.8	114	62	52
14.0	92	50	42
14.3	70	38	32
14.6	55	30	25
15.0	40	22	18
15.5	31	17	14
16.0	25	14	11
16.5	22	12	10
17.0	18	10	8
17.5	16	9	7
18.0	16	9	7
19.0	13	7	6
20.0	12	7	5
22.0	7	5	4
26.0	0	0	0

P - Peak Flow

* - value(s) provided from TR-55 system routines

TR-55 Tc and Tt THRU SUBAREA COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms
 County : Winnebago State: Wi
 Subtitle: Proposed Developed Condition

User: MSS
 Checked: _____

Date: 03-14-71
 Date: _____

----- Subarea #1 - A1 -----

Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	n	Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	2.6	300	.004	d					0.918
Shallow Concent'd		1000	.004	u					0.272
Open Channel		2500	.003			.013.785	3.14		0.208
Time of Concentration = 1.48*									

----- Subarea #2 - A2 -----

Flow Type	2 year rain	Length (ft)	Slope (ft/ft)	Surface code	n	Area (sq/ft)	Wp (ft)	Velocity (ft/sec)	Time (hr)
Sheet	2.6	300	.004	d					0.918
Shallow Concent'd		1500	.004	u					0.408
Open Channel		900	.004			.02590	60.1		0.051
Time of Concentration = 1.38*									
Open Channel		800	.004			.02016	8.25		0.030
Travel Time = 0.03*									

----- Sheet Flow Surface Codes -----

A Smooth Surface	F Grass, Dense	----- Shallow Concentrated -----
B Fallow (No Res.)	G Grass, Bermuda	----- Surface Codes -----
C Cultivated < 20 % Res.	H Woods, Light	P Paved
D Cultivated > 20 % Res.	I Woods, Dense	U Unpaved
E Grass-Range, Short		

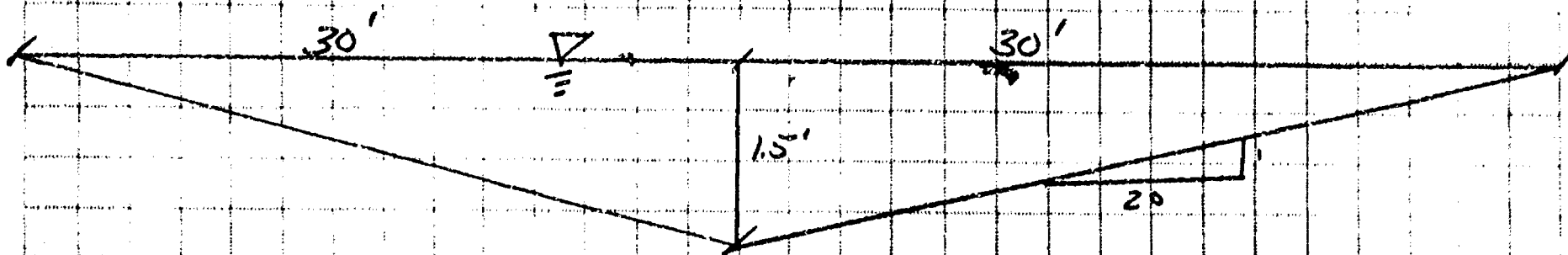
* - Generated for use by TABULAR method



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1818 American Court
Neenah, Wisconsin 54956
Telephone 414-731-0381

ASSUMED DITCH SECTIONS FOR PLEASANT CREEK FARMS [DEVELOPED CONDITION]

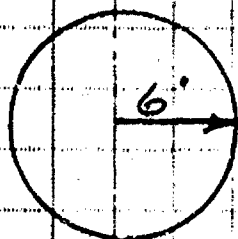
EAST WEST DITCH FLOWING THRU OUTLOTS
EASTERLY



$$A = 60 \times 1.5 = 90 \text{ SF}$$
$$W_p = \left[\frac{30^2 + 1.5^2}{2} \right] \times 2 = 60.1 \text{ FT}$$
$$N = 0.25$$

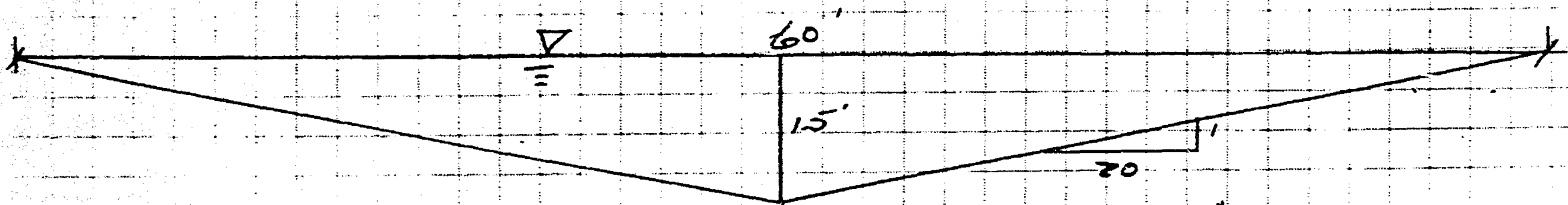
ASSUMED STORM SEWER WOULD BE
USED WITHIN THE PLEASANT CREEK FARMS
DEVELOPMENT

$$A = \pi \cdot 5^2 = 78.5$$
$$W_p = 2 \pi \cdot 5 = 31.4$$



$$A = \pi \cdot 5^2 = 78.5$$
$$W_p = 2 \pi \cdot 5 = 31.4$$

ASSUMED DITCH SECTION FOR
PHOENIX CREEK FARMS [EXISTING CONDITION]



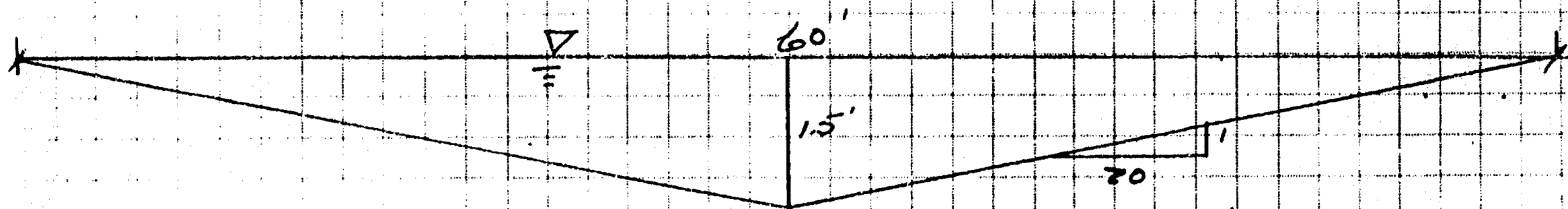
$$A = 60 \times 1.5 = 90 \text{ SF}$$

$$W_p = \left[30^2 + 1.5^2 \right] \times 2 = 60.1 \text{ FT}$$



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ASSUMED DITCH SECTION FOR PHASANT CREEK FARMS [EXISTING CONDITION]

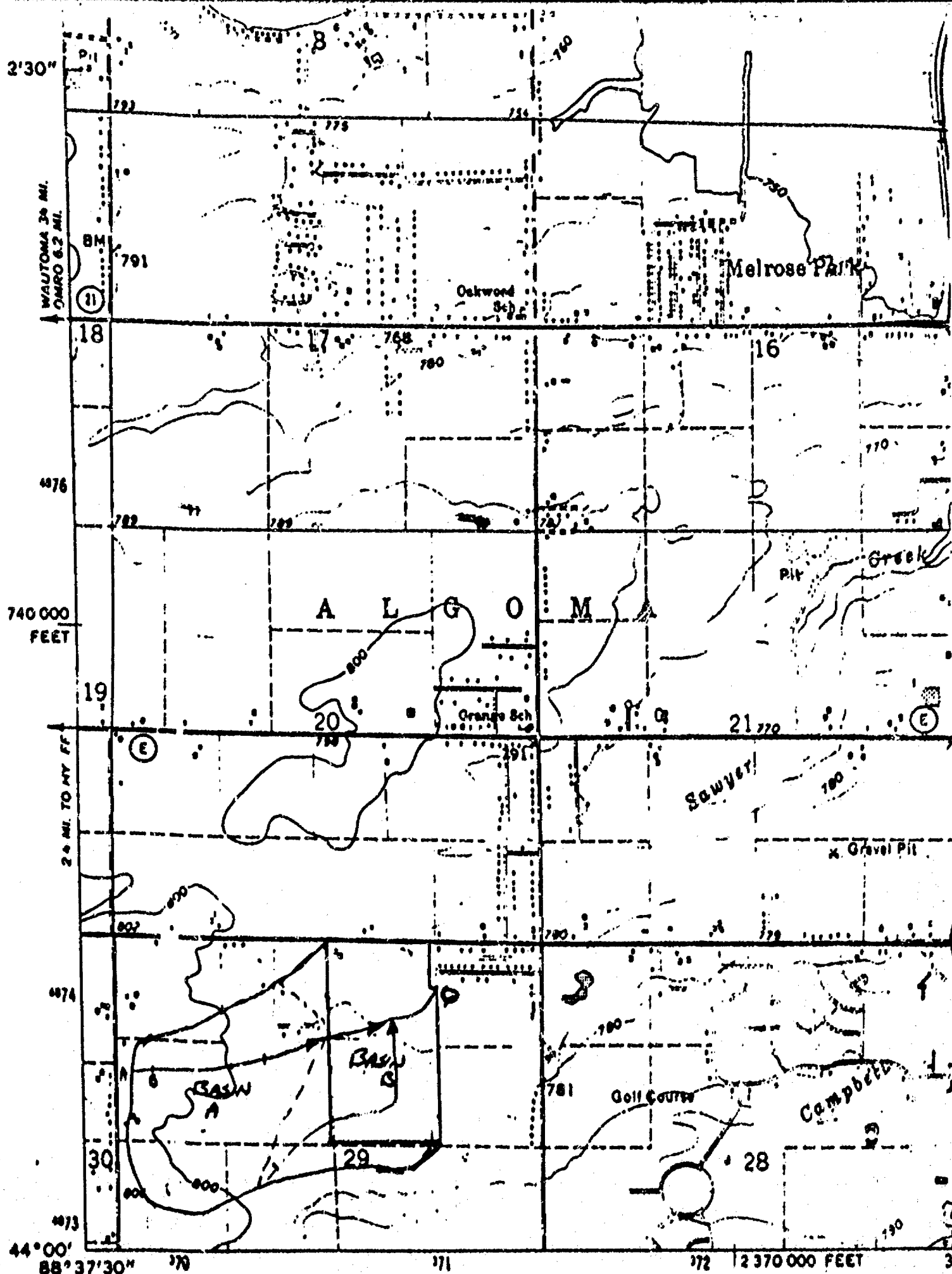


$$A = 60 \times 1.5 = 90 \text{ SF}$$

$$W_p = \left[\sqrt{30^2 + 1.5^2} \right] \times 2 = 60.1 \text{ FT}$$

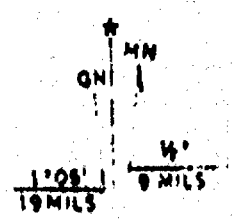


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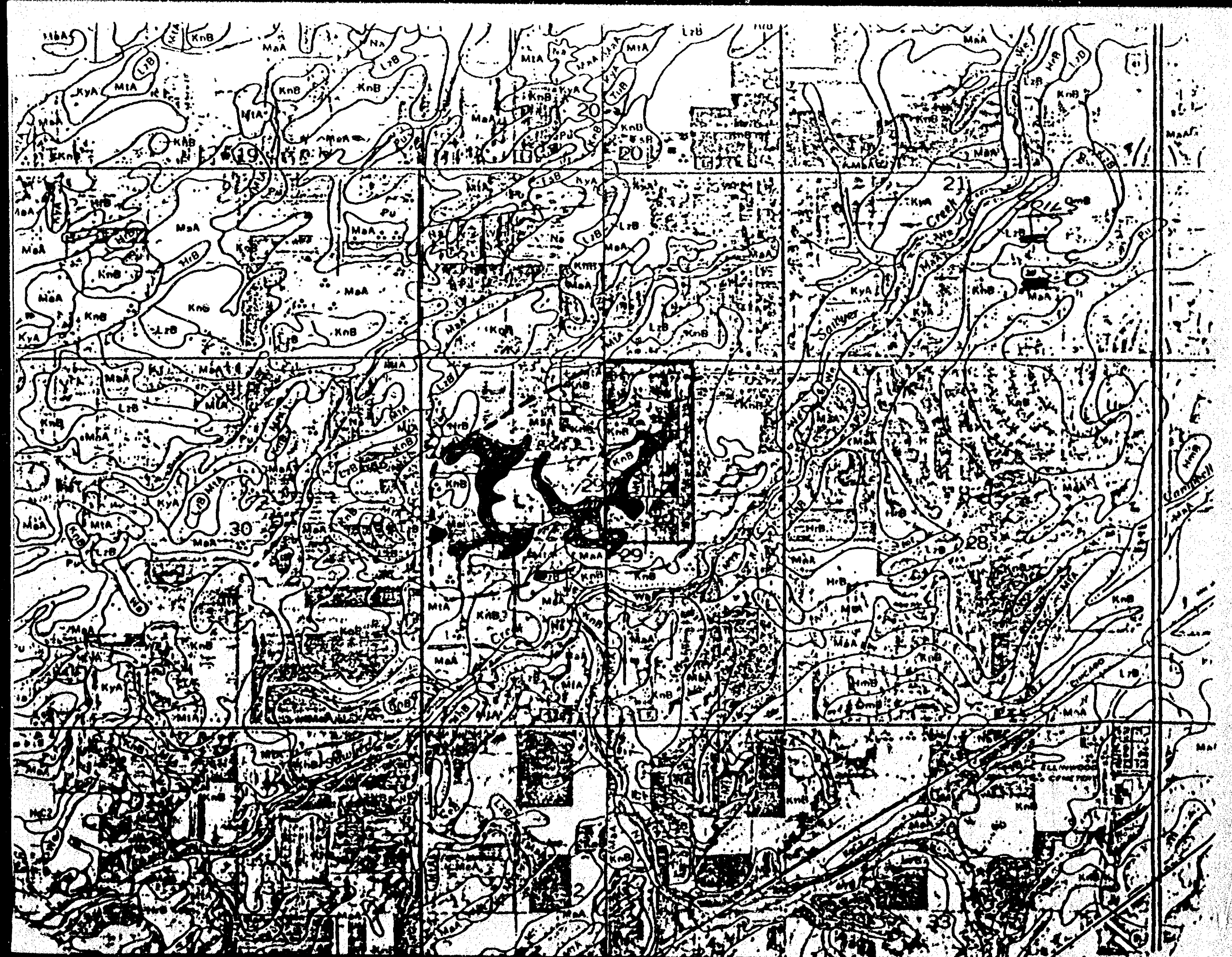


ROSENDALE 1:62,500
3271

Mapped, edited, and published by the Geological Survey
in cooperation with State of Wisconsin agencies
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial
photographs taken 1960. Field checked 1961
Selected hydrographic data compiled from U. S. Lake Survey
chart 726 (1960). This information is not intended
for navigational purposes
Polyconic projection. 1927 North American datum
10,000-foot grid based on Wisconsin coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks,
zone 16, shown in blue
Red tint: areas in which only landmark buildings are shown
Fine red outlined lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked



1975 MAGNETIC DECLINATION AT CENTER OF SHEET



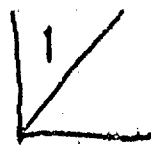


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SOIL TYPES WITHIN DEVELOPMENT PHEASANT CREEK FARMS



MzA	=	MOSEL SILT LOAM	0-3%	=	C
KnB	=	KEWAUNEE SILT LOAM	2-6%		C
MaA	=	MANAWA SILTY CLAY LOAM	0-3%		C
Pu	=	POYBAN SILTY CLAY LOAM	0%		D
Na	=	NAVAN SILT LOAM	0%		D
LzB	=	LORENZO VARITAN LOAM	2 TO 8%		B



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BASIN AREAS

A_1	= TOTAL AREA OF BASIN #1	= 119.18 ACRES
A_2	= TOTAL AREA OF BASIN #2	= 94.43 ACRES
A_3	= AREA OF TYPE 'D' SOILS IN BASIN #1	= 16.94 ACRES
A_4	= AREA OF TYPE 'D' SOILS IN BASIN #2	= 23.24 ACRES
A_5	= AREA OF TYPE 'D' IN DEVELOPMENT	= 10.21 ACRES
A_6	= AREA OF DEVELOPMENT	= 81.44 ACRES
A_7	= AREA OF TYPE 'B' SOILS IN BASIN #2	= 1.79 ACRES
A_8	= AREA OF TYPE 'B' SOILS IN BASIN #1	= 0.0 ACRES

$$\text{AREA OF TYPE 'C' SOILS IN DEVELOPMENT} = A_6 - A_5 = 71.23 \text{ ACRES}$$

$$\text{AREA OF TYPE 'D' SOILS IN BASIN #1 BUT OUTSIDE OF DEVELOPMENT} = A_4 - A_5 = 13.03 \text{ ACRES}$$

$$\text{AREA OF TYPE 'C' SOILS IN BASIN #1 BUT OUTSIDE OF DEVELOPMENT} = A_1 - 71.23 - A_5 - 13.03 = 24.73 \text{ ACRES}$$

$$\text{AREA OF TYPE 'C' SOILS IN BASIN #2} = A_2 - A_7 - A_4 = 69.19 \text{ ACRES}$$

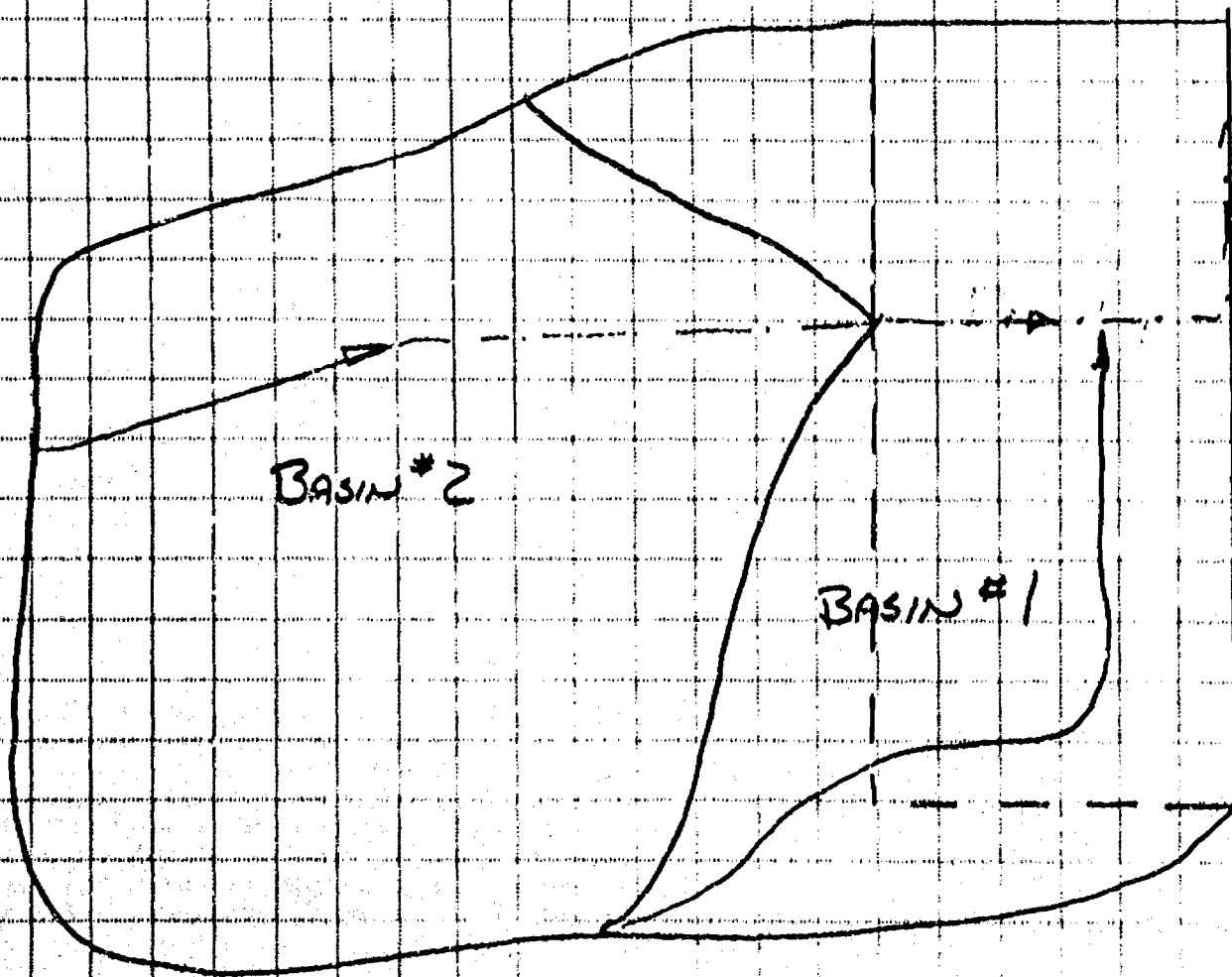


Table 2-2h.—Runoff curve numbers for cultivated agricultural lands¹

Cover description			Curve numbers for hydrologic soil group—			
Cover type	Treatment ²	Hydrologic condition ³	A	B	C	D
Fallow	Bare soil	—	77	86	91	94
	Crop residue cover (CR)	Poor	76	85	90	93
		Good	74	83	88	90
Row crops	Straight row (SR)	Poor	72	81	88	91
		Good	67	78	85	89
	SR + CR	Poor	71	80	87	90
		Good	64	75	82	85
	Contoured (C)	Poor	70	79	84	88
		Good	65	76	82	86
	C + CR	Poor	69	78	83	87
		Good	64	74	81	85
	Contoured & terraced (C&T)	Poor	66	74	80	82
		Good	62	71	78	81
	C&T + CR	Poor	65	73	79	81
		Good	61	70	77	80
Small grain	SR	Poor	65	76	84	88
		Good	63	75	83	87
	SR + CR	Poor	64	75	83	86
		Good	60	72	80	84
	C	Poor	63	74	82	85
		Good	61	73	81	84
	C + CR	Poor	62	73	81	84
		Good	60	72	80	83
	C&T	Poor	61	72	79	82
		Good	59	70	78	81
	C&T + CR	Poor	60	71	78	81
		Good	58	69	77	80
Close-seeded or broadcast legumes or rotation meadow	SR	Poor	66	77	85	89
		Good	58	72	81	85
	C	Poor	64	75	83	86
		Good	58	69	78	83
	C&T	Poor	63	73	80	83
		Good	51	67	76	80

¹ Average runoff condition, and $I_a = 0.25$.² Crop residue cover applies only if residue is on at least 1/4 of the surface throughout the year.³ Hydrologic condition is based on combination of factors that affect infiltration and runoff, including (a) density and canopy of vegetative areas, (b) amount of year-round cover, (c) amount of grass or close-seeded legumes in rotations, (d) percent of residue cover on the land surface (see Table 2-2a), and (e) degree of surface roughness.

Good: Factors increase infiltration and tend to increase runoff.

Poor: Factors encourage average and better than average infiltration and tend to decrease runoff.

Table 2-2a.—Runoff curve numbers for urban areas¹

Cover description		Curve numbers for hydrologic soil group—			
Cover type and hydrologic condition	Average percent impervious area ²	A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.):					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		93	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only)*...		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation)*					
Idle lands (CN's are determined using cover types similar to those in table 2-2c).		77	86	91	94

¹Average runoff condition, and $I_a = 0.25$.²The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system; impervious areas have a CN of 100, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 100) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4, based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

TABLE #1 (Continued)

A-2

URBAN AREAS - DEVELOPMENT UNDER WAY, NO VEGETATION ESTABLISHED

Description	Hydrologic Soil Group			
	A	B	C	D
Newly Graded Area	81	89	93	95
Row Houses, Town Houses, and Residential with Lot Sizes 1/8 Acre or Less	93	96	97	98
<u>Residential</u>				
Lot sizes of 1/4 acre	88	93	95	97
Lot sizes of 1/2 acre	85	91	94	96
Lot sizes of 1 acre	82	90	93	95
Lot sizes of 2 acres	81	89	92	94

TABLE #2 Mannings Coefficients (n)

Surface	Best	Good	Fair	Bad
Vitrified sewer pipe.....	{ 0.010 0.011 }	0.013*	0.015*	0.017
Common-clay drainage tiles.....	0.011	0.012*	0.014*	0.017
Glassed brickwork.....	0.011	0.012	0.015*	0.018
Brick in cement mortar; brick sewers.....	0.012	0.013	0.016*	0.017
Neat cement surfaces.....	0.010	0.011	0.012	0.013
Cement mortar surfaces.....	0.011	0.012	0.013*	0.015
Concrete pipe.....	0.012	0.013	0.015*	0.016
Wood-stave pipe.....	0.010	0.011	0.012	0.013
Plank flumes:				
Planed.....	0.010	0.012*	0.013	0.014
Unplaned.....	0.011	0.013*	0.014	0.015
With battens.....	0.012	0.015*	0.016	
Concrete-lined channels.....	0.012	0.014*	0.016*	0.018
Cement-rubble surface.....	0.017	0.020	0.025	0.030
Dry-rubble surface.....	0.025	0.030	0.033	0.035
Dressed-ashlar surface.....	0.013	0.014	0.015	0.017
Semicircular metal flumes, smooth.....	0.011	0.012	0.013	0.015
corrugated.....	0.0235	0.025	0.0275	0.030
Canals and ditches:				
Earth, straight and uniform.....	0.017	0.020	0.0225*	0.025
Rock cuts, smooth and uniform.....	0.025	0.030	0.033*	0.035
jagged and irregular.....	0.035	0.040	0.045	
Winding sluggish canals.....	0.0225	0.025*	0.0275	0.030
Dredged earth channels.....	0.025	0.0275*	0.030	0.033
Canals with rough stony beds, weeds on earth banks.....	0.025	0.030	0.035*	0.040
Earth bottom, rubble sides.....	0.028	0.030*	0.033*	0.035
Natural stream channels:				
1. Clean, straight bank, full stage, no rifts or deep pools.....	0.025	0.0275	0.030	0.033
2. Same as 1, but some weeds and stones.....	0.030	0.033	0.035	0.040
3. Winding, some pools and shoals, clean.....	0.033	0.035	0.040	0.045
4. Same as 3, lower stage, more ineffective slope and sections.....	0.040	0.045	0.050	0.055
5. Same as 3, some weeds and stones.....	0.035	0.040	0.045	0.050
6. Same as 4, stony sections.....	0.045	0.050	0.055	0.060
7. Sluggish river reaches, rather weedy or with very deep pools.....	0.050	0.060	0.070	0.080
8. Very weedy reaches.....	0.075	0.100	0.125	0.150

ALGOMA

T.18N.-

Teavette Diakoff has concerns about drainage out of Pleasant creek farms. If drainage is planned through a ditch near Kenneth's Pt. she feels it won't handle it. Teavette thinks a detention basin is needed before flow goes into Sawyer creek.

LAKE BUTTE DES MORTS

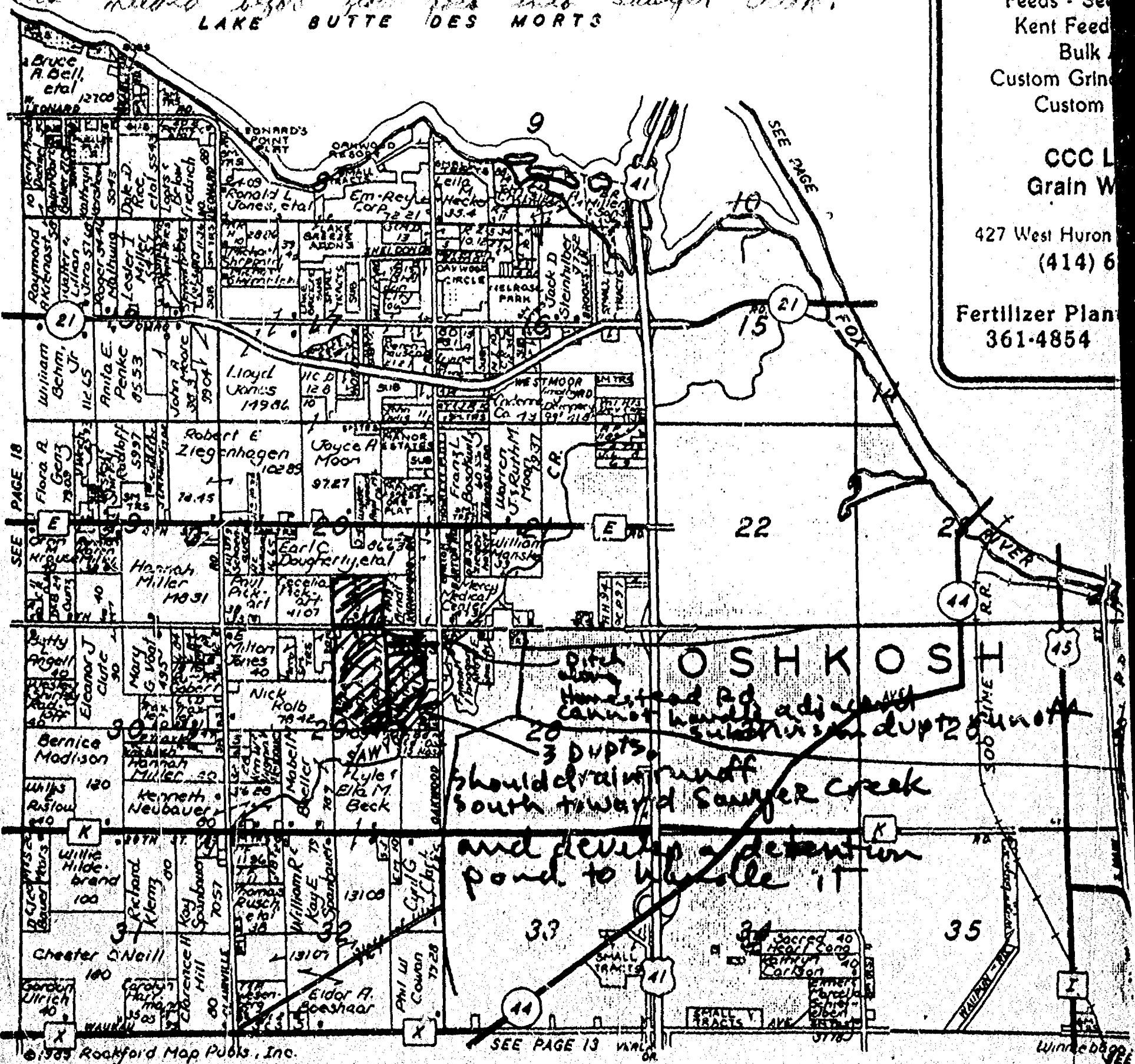
Olsen

Feeds - See
Kent Feed
Bulk
Custom Grind
Custom

CCC L
Grain W

427 West Huron
(414) 6

Fertilizer Plan
361-4854



PHONE:
Oshkosh 235-7580