

City of Oshkosh

Pleasant Creek

Meeting

12-3-91

9:00 AM

Public Works

(City Hall)

Attendants - Jerry Conrad (Director of Public Works)
Ed Potempa (City engineer)
Richard Malmgren (Developer)
Rick Hoeft (Zoning dept. - drainage inspector - Co.)

Reason for Meeting - Pleasant Creek Farm Subdivision

Final Drainage plan phase I.

Storm sewer outlet west of Jack Hogan property and drainage of ditch where pipe outlets. Poor drainage and concerns of damage to adjacent properties.

Results and Conclusion - Action before winter freeze up.

The city will excavate the N-S ditch at least from the outlet pipe and through Jack Hogans property to allow more capacity for the flow in this area. The city will also put an elbow on the pipe to redirect water flow to the north. The silt fence will be taken out to help water flow.

Jack Hogan and neighbor are to get verbal permission to allow the city employees on the properties behind Homestead road to survey the drainage system. The survey will help the engineers design

and evaluate the whole drainage system for hopefull solution to the problems in the Homestead Rd. area. The future plan is to study and correct the drainage problem, do it once and do it right and complete.

An on site meeting was planned for
Dec. 4 9:00 AM.

Pleasant Creek Farm Subdivision
on site meeting 12-4-91

Ed Potempa, Richard Malmgren, 2
construction people, Jack Hogan,
Landowner next to Jack Hogan, Rick Hoeft.

We viewed the whole drainage situation
and agreed to excavate the ditch
behind Jack Hogans ~~and~~ ^{to} clean out
the cattails and widen the channel.
The north-south ditch through the corner
from the outlet pipe will be cleaned out
this winter to help the situation in the
spring. A few trees will be chopped out
that are in the way of excavation this
winter. The survey and study planned
for this winter will determine what will
be done in the future to help the overall
drainage problem and proceed with phase II
of the Pleasant Creek Subdivision.

I asked the contractor to contact me
when ~~excavation~~ ^{excavation} of the ditch clean out
is to take place, he said he would.

Rick Hoeft



WINNEBAGO COUNTY - LAND and WATER CONSERVATION DEPARTMENT

500 EAST SUNNYVIEW ROAD
OSHKOSH, WI 54901-9774
(414) 424-0044 or 727-2880

RECEIVED

May 15, 1991

MAY 16 1991

**WINNEBAGO COUNTY
PLANNING DEPT.**

To: Jerry Bougie
Principal Planner

From: Pete Van Airsdale *P.A.S.*
County Conservationist

Subject: Drainage Plan for Pheasant Creek Farm - Phase I

I have reviewed the revised drainage plan submitted by Mike Siewert, Martenson & Eisele, Inc., for Pheasant Creek Farm, located in part of the W.1/2, N.E. 1/4, Sec. 29 T.18N.-R. 16E., in the City of Oshkosh. My comments are as follows:

1. The drainage plan for the first development phase of Pheasant Creek Farm indicates there should be no increase in the rate of surface water flow from the site after development (15 cfs peak flow), versus what it has been, under agricultural land use conditions (15 cfs peak flow). Based on the runoff calculations submitted, I agree with the analysis.
2. The storm sewer system for this section of the development is designed to carry only about 1/3 of the peak flow from the site. As a result, the plan shows that between 7,500 and 8,700 cu. ft. of surface water runoff will be detained in portions of the street abutting lots 3 thru 11. Additional detention is planned to occur in the side lot swales. This temporary detention should provide additional assurance that the rate of runoff will not be increased.
3. Recently you received a letter from Mr. Gary Galow and his neighbors who reside in the Homestead Drive area. The information provided describes flooding problems on Homestead Drive and concerns that the proposed Pheasant Creek development will add to the flooding.
While I do not believe this particular section of the proposed Pheasant Creek development will increase the rate of surface water flow into the Homestead Drive area, I believe the storm sewer may create a base flow condition leading to total saturation in the vicinity of the back lot lines of those lots that border 9th St. and Homestead Ave. (north side). This would contribute to expanded cattail growth and obstruction to surface water flow. At present, the drainage ditch, swale in the back lot line area north of Homestead Drive, lacks capacity to carry surface water runoff from the upstream drainage basin. Any amount of obstruction to flow in this area will only aggravate the situation.
4. After comparing 1964, 1971 and 1981 aerial photos, I believe that flooding in the vicinity of Homestead Drive has also been a direct result of changes in the surface drainage in the immediate area of Homestead Drive and the Gunning farm. It appears that surface drainage was re-routed from a more natural course of flow to one that better fit straight lines associated with both agricultural and urban

(Pheasant Creek Farm, pg.2)

type developments. It also appears that the re-routing work within the Homestead Drive area did not provide adequate capacity to carry the peak flow from the upstream drainage basin.

Recommendations

Construction site erosion control should be an important component of urban development projects. This plan identifies only three relatively small areas where stone rip-rap, fabric filter fencing, or straw bales are to be installed for erosion control. At a minimum, I would recommend that fabric filter fencing and/or straw bales be installed at the front and back of each lot, with particular emphasis on preventing sediment deposition in the streets and the existing drainage way bordered by lots 7, 8, 9, 10, 11, and 12.

If no other sources of information are available, the developer(s) may wish to refer to the Wisconsin Department of Natural Resources publication WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK for details on the installation and maintenance of various erosion control measures. All lot owners and applicable contractors should receive a detailed set of specifications for the installation and maintenance of the erosion control measures to be used.

With regards to ways to help alleviate the flooding problems discussed herein and still provide for development as proposed, I would recommend the following alternatives be considered. Please note that these recommendations go beyond the scope of this phase of the proposed Pheasant Creek Farm development, but the flooding problem is one that all development projects in the drainage basin will most likely contribute to in varying degrees.

- 1) Deepen the previously described back lot line ditch or install a closed pipe to provide capacity to carry flow from the drainage basin down to Oakwood Road. A closed system (storm sewer), although by far the most expensive, would be the most effective solution. A provision for overland surface flow to accommodate shallow runoff from the adjacent lots should also be provided with this method. In addition, the culvert flow capacity through Oakwood Road would need to be increased accordingly.
- 2) Modify the large drainage ditch on the Pheasant Creek development property to prevent out-of-bank flow, particularly where the flow is now able to spill across to flood out Homestead Creek. This may require a combination of channel enlargement, channel relocation, and construction of a rip-rapped berm to prevent the flow from leaving the channel.
- 3) As an alternative to the above, circumvent the Homestead Drive development altogether by establishing an entirely different flow route and outlet for the upstream drainage basin. I don't know if this is a viable alternative in terms of available, undeveloped lands in the area but it is one worth investigating.

(Pheasant Creek Farm, pg.3)

- 4) Assuming that future development storm sewer systems will not be designed to carry peak flows from 10 or 25 yr. storm events, effective, temporary detention can be planned for and identified throughout the drainage basin. It is possible that the existing peak flow from "undeveloped" conditions could be reduced enough from this type of detention to help reduce the extent and frequency of flooding downstream.
- 5) Identify and establish large, natural detention basins throughout the drainage basin. Again, this would depend on the availability of lands, however, it would probably be the most practical, cost effective method of flood prevention to be implemented. This method is one that should be pursued in all drainage basins, large and small. It is being used extensively in other parts of the mid-west and east coast. In fact, many of these basins have been designed to form permanent pools that add to the aesthetics and value of the development projects. A local example of this is the permanent pool or "lake" in the Honey Creek subdivision, Town of Algoma.

#

cc Jeanette Diakoff
Gary Galow
✓ Rick Hoeft
Ed Potempa
Mike Siewert



Martenson & Eisele, Inc.

Consulting Engineering and Land Surveying

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

RECEIVED

APR 30 1991

WINNEBAGO COUNTY
PLANNING DEPT.

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

Ms. Jeannie Storm,
Director, Plat Review
Department of Agriculture,
Trade and Consumer Protection
P.O. Box 8911
Madison, Wi. 53708

April 29, 1991

Dear Jeannie:

Winnebago County has requested an extension of time for them to complete their review. They would like the extension to be effective to the 29 th. of May. I hereby grant you an extension to complete the review of the final plats of Pheasant Creek Farm and Quail Run Farm in the City of Oshkosh as needed to meet the counties time table.

If you have any questions or need additional information please contact me.

Sincerely
Martenson & Eisele, Inc.

David D. Eisele
David. D. Eisele, PLS.

cc. Winnebago County ✓
Public Works Dept. Oshkosh
Mr. Richard Malmgren
Mr. Mike Zweiger

May 6, 1991

Jerry Bougie
Winnebago County Planner
415 Jackson Street
Oshkosh WI 54901

Re: Pheasant Creek Plat

Dear Mr. Bougie:

It has come to our attention that a new addition to the City of Oshkosh known as Pheasant Creek Plat is slated to be approved in the near future. It has also been brought to our attention that the plat is to have storm sewers incorporated in it with the discharge to be somewhere in the vicinity of the west end of Homestead Drive.

This discharge of water is of great concern to us. In the past, we have had flooding problems on Homestead Drive. (See the enclosed photos showing past conditions.) If this plat is to be developed, there has to be further consideration given to the water runoff. I (Gary Galow) have been a resident of Homestead Drive for 25 years and have seen this problem only get worse since ditching was done on the Gunning farm some years back.

We fear this will become a bigger problem if these storm sewers are allowed to discharge anywhere in the vicinity of the west end of Homestead Drive. We, the undersigned residents of the affected vicinity, strongly urge that this development be denied until this problem is corrected.

cc: Jeanetta Diakoff, Chrmn., Town of Algoma
Pete VanAiredale, Winnebago Cty. Water Conservation
Ed Potempa, City of Oshkosh Planning
Jerry Conrad, City of Oshkosh Planning
Don Pressley, City of Oshkosh Councilman

May 6, 1991

Signature	Address	Date
<i>[Signature]</i>	2943 HOMESTEAD DR. OSH.	5/6/91
<i>[Signature]</i>	2943 HOMESTEAD DR., OSHKOSH	5-6-91
Kay Nelson	2958 Homestead Dr. Oshkosh	5-6-91
Pierre H. Hilson	2958 Homestead Dr. Oshkosh	5-6-91
<i>[Signature]</i>	2976 Homestead Dr. Oshkosh	5/6/91
<i>[Signature]</i>	2976 Homestead Dr. Oshkosh	5-6-91
John J. Vogen	2990 Homestead Dr. Oshkosh	5-6-91
Gorene Vogen	" " " "	5-6-91
Lorraine Pfeffer	2891 Homestead Dr.	5-6-91
Alice J. Kuzynski	2878 Homestead Dr.	5-6-91
Shelby J. Ludwig	2862 Homestead Dr.	5-6-91
Donald Hoto	2863 Homestead Dr.	5-6-91
Judy Giot	2863 Homestead Dr.	5-6-91
Charles L. Nelson	2849 Homestead Dr.	5-6-91
Joanne Wilson	2849 Homestead Dr.	5-6-91
Jim Wall	2835 Homestead Dr.	5-6-91
Paula Hall	2835 Homestead Dr.	5-6-91
Scott Dehne	2834 Homestead Dr.	5-6-91
Susan E. Dehne	2834 Homestead Dr.	5-6-91
Charles J. Hayes	961 S Oakwood Rd	5-6-91
Ken Hayes	961 S Oakwood Rd.	5-6-91
Charles W. Hayes	961 S Oakwood Rd	5-6-91
Maia Becker	2850 Homestead Dr.	5-6-91
Jojo Becker	2850 Homestead Dr.	5-6-91
Richard W. [Signature]	2878 Homestead Dr.	5-6-91
Kenneth W. Ludwig	2862 HOMESTEAD DR.	5-7-91
Doris Wiegman	2896 Homestead Dr.	5-7-91
Darlene C. Wiegman	2896 Homestead Dr.	5-7-91

May 6, 1991

Signature	Address	Date
David C. Wigham	2896 Homestead	5-7-91
Judy Felix	2912 Homestead	5-7-91
Matt Felix	2912 " "	"
David C. Wigham	2912 Homestead DR.	5-7-91
Ronald H. Schmiedel	2923 W 9th Ave.	5-7-91
Arlene Schmiedel	2923 W 9th Ave.	5-7-91
Jean Neubauer	2865 W. 9th Ave.	5-7-91
Margie B. Meitzner	2833 W. 9TH AVE	5/7/91
R. David Krause	2881 W. 9th ST. RD	5/7/91
Barbara Krause	2821 W. 9th St. Rd.	5/7/91
Donald Rading	2985 W 9th	5/7/91
Lise Rading	2985 W. 9th	5/7/91
Grace Rading	2734 Clairville Rd	5/7/91
Thomas O. Rading	2734 Clairville Rd.	5/7/91
W. O. Rading	607 Fieldcrest Dr	5/7/91
Helen M. Kamin	2818 Homestead Dr.	5/7/91
Don Paulus	2924 Homestead	5/7/91
Edna Springstark	2905 Homestead	5/7/91
Harold Springstark	2905 Homestead	5/7/91
Barbara Springer	2831 Homestead	5/7/91
John J. Rading	2940 Homestead Dr.	5/7/91
Brenda Hassler	2940 Homestead Dr.	5/7/91

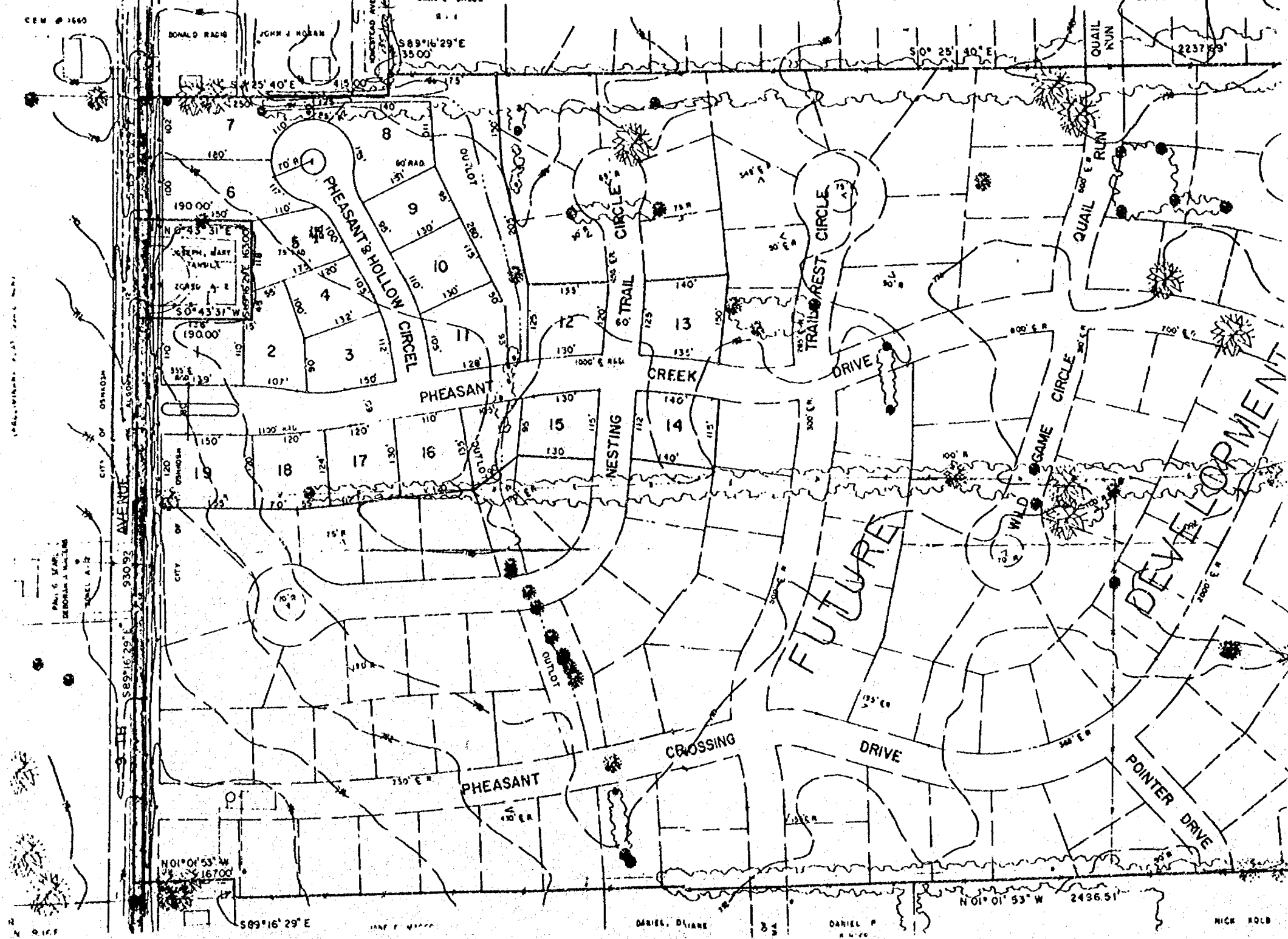
FORWARD DEVELOPMENT
OSHRON

CEM # 1660

ZONED R-1

GARY E. SALOW
R-1

PRELIMINARY PLAT FIRST ADDITION TO JEREBEIGH P
ZONED R-1



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Water, water everywhere

Residents on Homestead Drive, located west of Oshkosh, became owners of "lakefront property" as rain saturated

their lawns on Sunday and flowed out of the ditches onto the road. As of 7 Monday morning, Oshkosh's rainfall total for the

Northwestern photo by Carl Plotz

1987

month of September was 9.9 inches. This makes it the wettest September on record since 1938.







10/25/91

2" RAIN

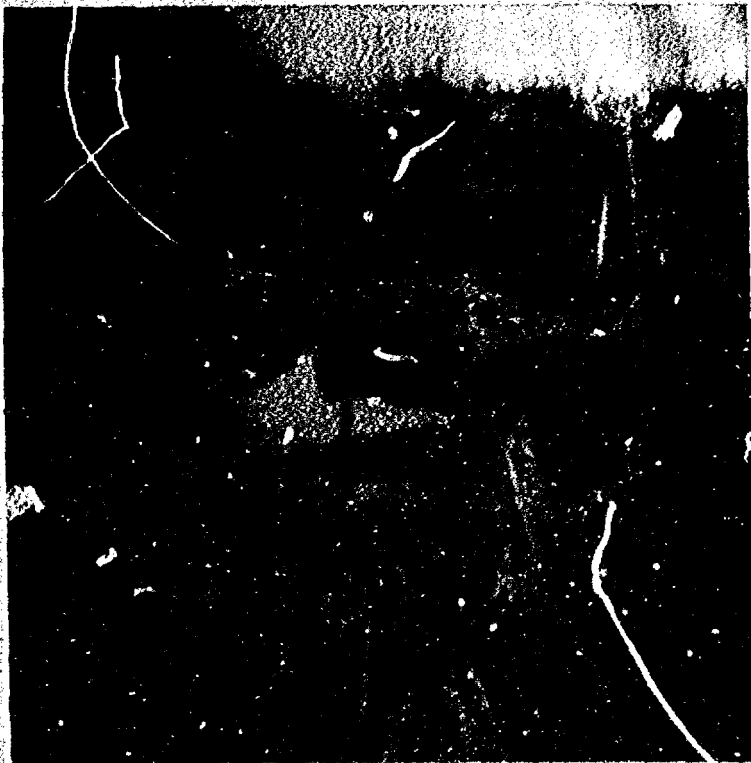
10/24 PM -

1:15 PM

10/25 AM

SW

W



10/25/91

1:15 PM

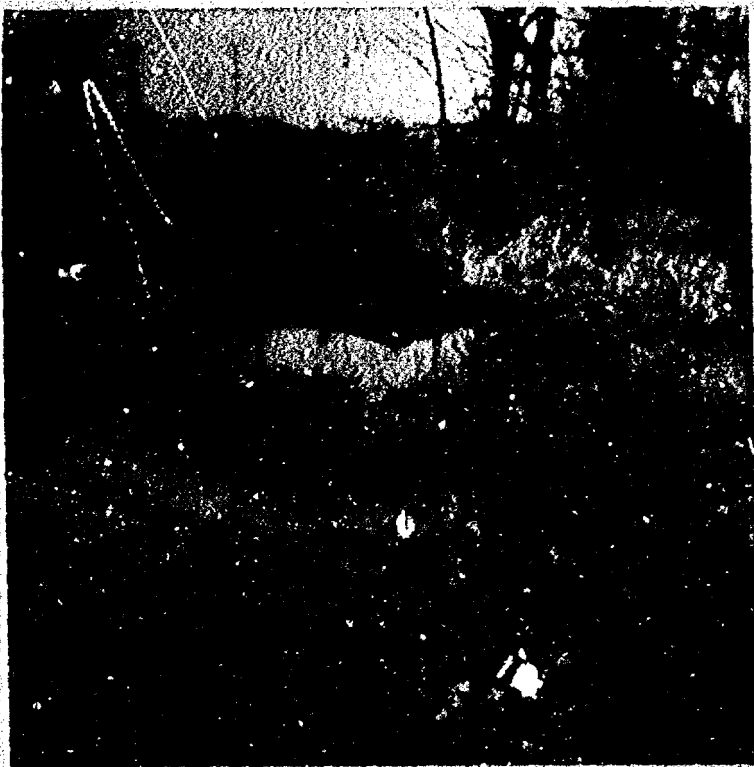
1.2" RAIN

10/24 PM - 10/25 AM

W

NW

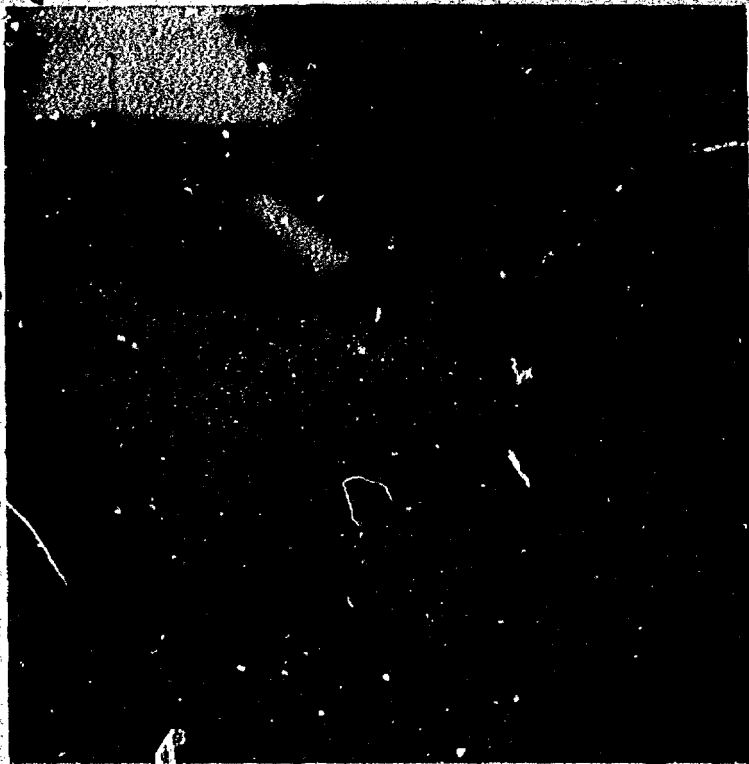
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10/25/91

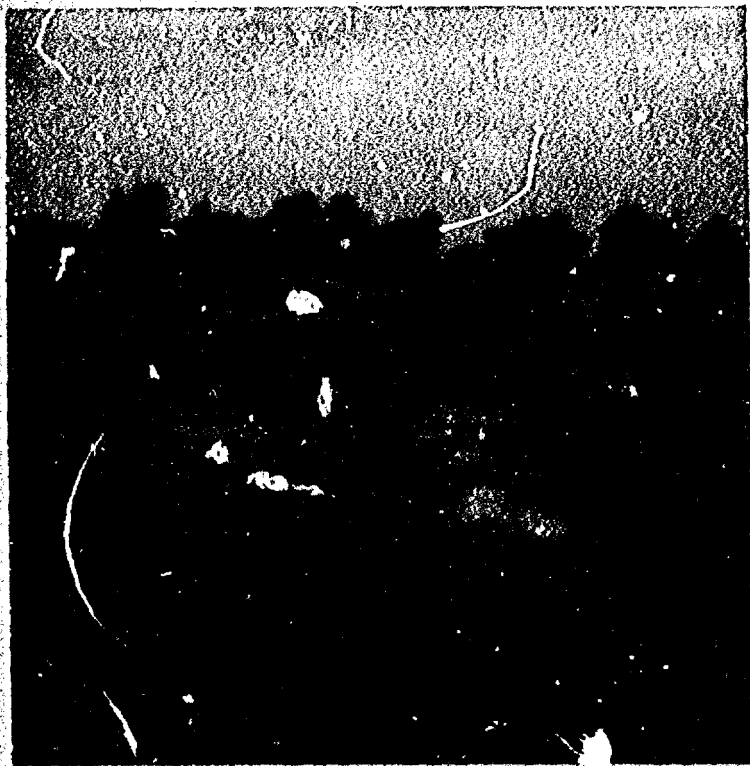
1:15 PM

12" RAIN 10/24 PM - 10/25 AM





W



E



Sept. 23, 1991

Drainage Issue - Pleasant Creek Farm
Plot

- * Oshkosh verbally agreed to redirect storm sewer pipe so it more directly ~~moves~~ moves water down drainage ditch on North side of Homestead

This should be a short term solution

Oshkosh also agreed to look at comprehensive drainage ~~for~~ solution this winter

Developer of Pleasant Creek Farm has agreed to not develop anything more until city/town/county evaluate drainage basin

DAVID E. SCHMIDT
Director



Winnebago County
Planning and Zoning Department

The Wave of the Future

May 29, 1991

Dept. of Ag. Trade & Consumer Protection
c/o Jeanne A. Storm
801 W. Badger Rd.
P.O. Box 8911
Madison, WI 53708

Re: Pheasant Creek Farm (Final Plat)
City of Oshkosh

Dear Jeanne:

The Winnebago County Planning Department has finished its review of the aboved-named final plat. Winnebago County certifies this final plat as nonobjectionable. However, the developer should be alerted to the potential for future significant drainage/flooding problems in this area of Winnebago County.

Erosion control measures are recommended during grading and construction to alleviate potential erosion problems.

Please refer to the attached memo from the Winnebago County Land and Water Conservation Department, dated May 15, 1991, regarding drainage and erosion control measures to be implemented for this development.

Also, please refer to the attached preliminary plat transmittal letter dated February 18, 1991 regarding items 3, 4, and 5. These are important items to be addressed for this development.

If you have any questions, please contact me. Thank you.

Sincerely,

Jerry L. Bougie
Jerry L. Bougie
County Planner

cc: David Schmidt, Planning Director
Dave Eiselo, M & E
Carol Owens, Planning & Zoning Chair
Pete Van Airsdale, County LWCD
Ed Potempa, C. of Oshkosh Public Works
Gary Galow, Homestead Ave. resident

enclosure

NONOBJECTIONABLE

WINNEBAGO COUNTY PLANNING & ZONING COMMITTEE

OSHKOSH (111) 236-1840
FOX CITIES (414) 727-2880
FAX (111) 236-1700

County Planner

DATE 5/29/91

DAVID E. SCHMIDT
Director



Winnebago County
Planning and Zoning Department

The Wave of the Future

OSHKOSH (414) 236-4840
FOX CITIES (414) 727-2880
FAX (414) 236-4799

May 29, 1991

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c/o Jeanne A. Storm
801 W. Badger Rd.
P.O. Box 8911
Madison, WI 53708

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Gary Galow, Homestead Ave. resident

enclosure

NONOBJECTIONABLE

WINNEBAGO COUNTY PLANNING & ZONING COMMITTEE

County Planner

DATE 5/29/91



WINNEBAGO COUNTY - LAND and WATER CONSERVATION DEPARTMENT

500 EAST SUNNYVIEW ROAD
OSHKOSH, WI 54901-9774
(414) 424-0044 or 727-2880

RECEIVED

May 15, 1991

MAY 16 1991

To: Jerry Bougie
Principal Planner

WINNEBAGO COUNTY
PLANNING DEPT.

From: Pete Van Airsdale *P.A.S.*
County Conservationist

Subject: Drainage Plan for Pheasant Creek Farm - Phase I

I have reviewed the revised drainage plan submitted by Mike Siewert, Martenson & Eisele, Inc., for Pheasant Creek Farm, located in part of the W.1/2, N.E. 1/4, Sec. 29 T.18N.-R. 16E., in the City of Oshkosh. My comments are as follows:

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(Pheasant Creek Farm, pg.2)

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Recommendations

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- 1) Deepen the previously described back lot line ditch or install a closed pipe to provide capacity to carry flow from the drainage basin down to Oakwood Road. A closed system (storm sewer), although by far the most expensive, would be the most effective solution. A provision for overland surface flow to accommodate shallow runoff from the adjacent lots should also be provided with this method. In addition, the culvert flow capacity through Oakwood Road would need to be increased accordingly.
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(Pheasant Creek Farm, pg.3)

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#

cc Jeanette Diakoff
Gary Galow
Rick Hoeft
Ed Potempa
Mike Siewert



Winnebago County Planning and Zoning Department

The Wave of the Future

February 18, 1991

Jeanne Storm, DAT&CP
Plat Review Unit
801 West Badger Road
P.O. Box 8911
Madison, WI 53708-8911

Re: PHEASANT CREEK
Preliminary Plat,
City of Oshkosh

Dear Jeanne:

The Winnebago County Planning Department has reviewed the aboved-named preliminary plat. The County certifies this plat as nonobjectionable. However, before final plat approval the following items shall be addressed:

1. The following "Restriction for Public Benefit shall be placed on the final plat:

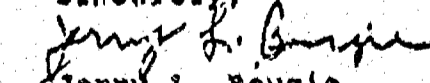
RESTRICTION FOR PUBLIC BENEFIT - WINNEBAGO COUNTY

Pursuant to section 18.38 of the Winnebago County Land Division Ordinance, upon final grading, the developer and/or owner shall comply with the surface water drainage plan as approved by the Winnebago County Land and Water Conservation and Planning and Zoning Departments.

2. The drainage plan, as required by section 18.56 Winnebago County Land Division Ordinance, shall be submitted simultaneously with the final plat or before final plat submittal.
3. Any easements required for drainage purposes shall be shown on the face of the final plat and recorded as a separate document against the respective lot(s).
4. Shoreland provisions, section 17.20 Winnebago County Zoning Ordinance, shall apply to this plat. Some lots are within 300 feet of the ordinary high water mark of Sawyer Creek. Question of navigability shall be addressed to the DNR. Decision of non-navigability shall be presented to the County and City of Oshkosh. (Note: see attachment.)
5. The City of Oshkosh shall administer County shoreland requirements, per sections 59.97(7) & 59.971(7), Wis. Stats.

If you have any questions please call or write. Thank you.

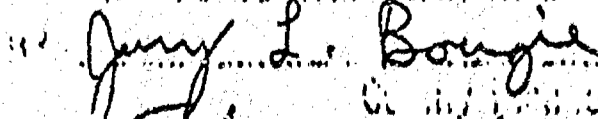
Sincerely,


Jerry L. Bougie
County Principal Planner

cc: Dave Schmidt, County
Planning Director
Carol Owens, County P&Z
Chairperson
Dave Elisele, M & E

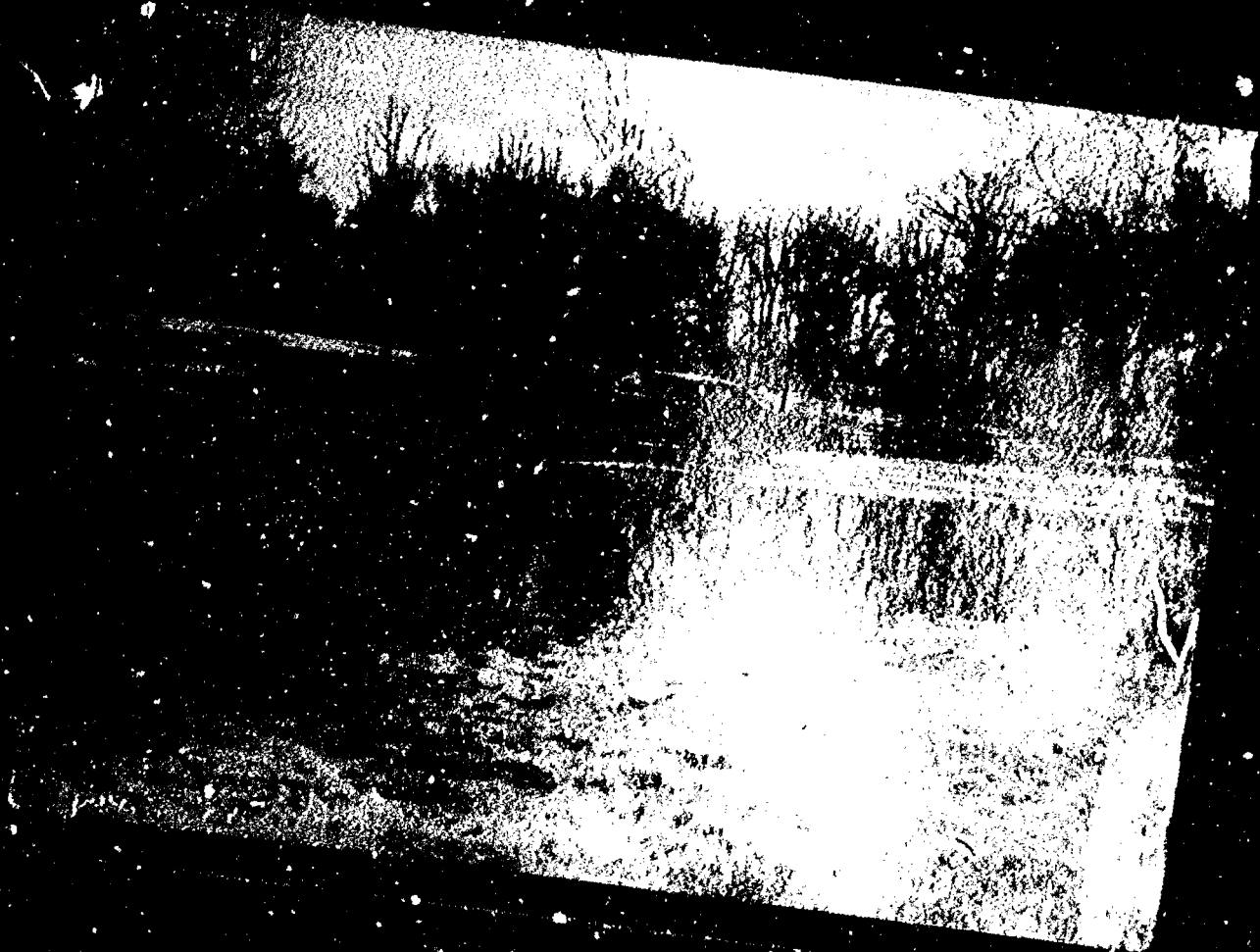
NONOBJECTIONABLE

WINNEBAGO COUNTY PLANNING & ZONING COMMISSION


February 18, 1991

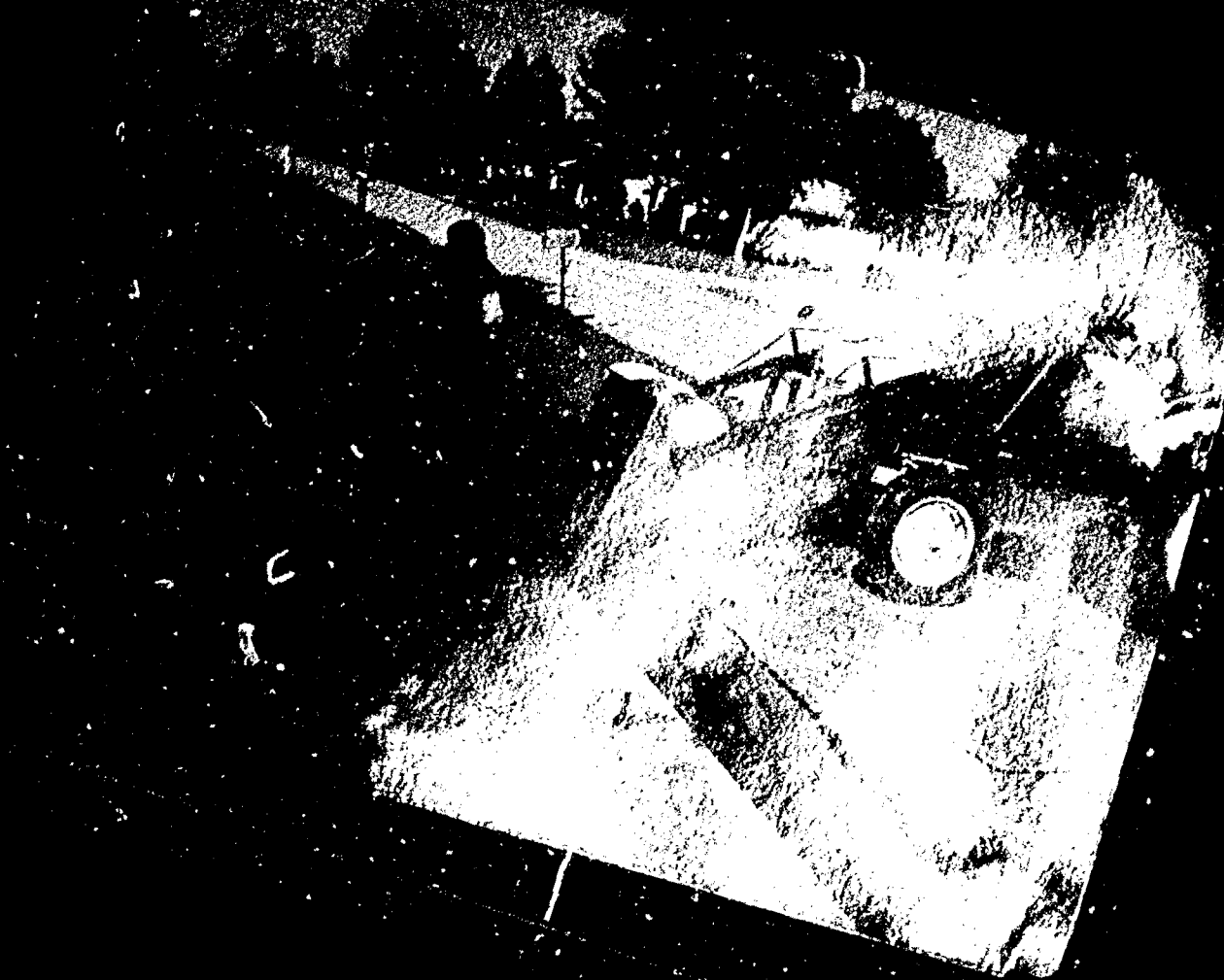














State of Wisconsin

Department of Agriculture, Trade & Consumer Protection

Alan T. Tracy
Secretary

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

0 1 3 4

April 10, 1991

Mr. David Schmidt
Winnebago County Planning
& Zoning Committee
Courthouse, Box 2808
Oshkosh WI 54903

PERMANENT FILE NO. 17619

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

Dear Mr. Schmidt:

We have received the above-named plat. Your county planning agency has the authority to object to this under the provisions of s. 236.12 (2) (b), Wis. Stats. Enclosed are four copies for your review. Your agency must either object, or certify no objection within 10 days of your receipt of this submittal.

- If the plat is objected to, you will be notified by letter (the original drawing will be returned to the surveyor with revisions).

- If the plat is certified as nonobjectionable, we must receive a print bearing your certification so that we may finalize our review (see s. 236.12 (6), Wis. Stats.).

It is important that this matter be expedited to avoid delays in processing the plat and to comply with the time limits set by statute. By the date shown below this office must either object to or certify the plat as nonobjectionable for all the objecting agencies involved, or, the subdivider can demand immediate certification of no objection.

Sincerely,

Jeanne A. Storm
Jeanne A. Storm, Supervisor
Plat Review Unit
Phone (608) 266-3200

JAS:mas

Enc: Prints (4)

cc: Clerk
Surveyor

DEPARTMENT OF AGRICULTURE, TRADE & CONSUMER PROTECTION TIME LIMIT EXPIRES: 5/10/91



Winnebago County
Planning and Zoning Department

The Way of the Future

DATE: APRIL 15, 1991

TO: PETE VAN AIRSDALE, L&WCD

FROM: JERRY L. BOUGIE, PRINCIPAL PLANNER
JLB

RE: DRAINAGE PLANS FOR QUAIL RUN FARM AND
PHEASANT CREEK FARM SUBDIVISIONS
(CITY OF OSHKOSH)

This memo is to inform you that the County's review period for the above-named subdivisions ends on Tuesday, April 30, 1991. I would appreciate your review and recommendations on these drainage plans on or before this date.

If you have any questions, please contact me. Thank you.

cc: Dave Schmidt, John Davel - Martenson & Eisele, Carol Owens



Martenson & Eisele, Inc.

Consulting Engineering and Land Surveying

RECEIVED

APR 12 1991

WINNEBAGO COUNTY
PLANNING DEPT.

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 Kohtala, P.L.S.
Daniel W. Hoel, P.L.S.
Jeffrey T. Rustick, P.L.S.

April 10, 1991

Mr. Jerry Bougie
Director of Planning & Zoning
Winnebago County
P. O. Box 2808
Oshkosh, WI 54903-2808

Re: Drainage Plan for Pheasant Creek Farm, in the City of Oshkosh

Dear Mr. Bougie:

On behalf of Quail Run Farm - Pheasant Creek Farm Limited Partnership, I am submitting the drainage plan for the above mentioned project. The runoff analysis has previously been submitted.

Please review this information according to your normal procedures at your earliest convenience.

If you need anymore information or have any questions, please contact me.

Very truly yours,

MARTENSON & EISELE, INC.

John R. Davel, P.E.
Project Engineer

JRD/nr
enc.
cc

Pete Van Airsdale, LWCD
Quail Run Farm - Pheasant Creek Farm Limited Partnership

431-043



Martenson & Eisele, Inc.

- Civil Engineering
- Municipal Engineering
- Construction Supervision
- Construction Inspection
- Consulting Engineering

- Land Subdividing
- Land Planning
- Property Surveys
- Topographical Surveys
- Certified Soil Testing

1919 American Court
Neshah, Wisconsin 54958
Telephone 414-731-0381
FAX 414-733-8578

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.

LETTER OF TRANSMITTAL

TO: Jerry Bougie / Pete Van Airsdale
Winnebago County

DATE: 4/10/91

RE: Quail Run Farm
Pheasant Creek Farm
City of Oshkosh

Copies

Date

Description

1

4-10-91

Runoff Calcs (25 yr)

ARE TRANSMITTED HEREWITH:

- ☐ For Your Information
- ☐ For Signature and Return
- ☐ For Review and Comment
- ☐ For Recording and/or Filing

- ☒ For Necessary Action
- ☐ Per Your Request
- ☐ Per Our Conversation
- ☐ For Your Files

REMARKS:

The previous calculations you received were for a 10 yr storm. The enclosed are for the 25 yr storm according to your regulations. The remaining data & maps you have still pertain.

BY:

John R. Davel

TR-55 TABULAR DISCHARGE METHOD

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-71

County : Winnebago

State: WI

Checked: _____

Date: _____

Subtitle: Proposed Developed Condition

Total watershed area: 0.330 sq mi Rainfall type: II Frequency: 25 years
Subareas

	A1	A2
Area(sq mi)	0.18*	0.15*
Rainfall(in)	4.5	4.5
Curve number	82*	83*
Runoff(in)	2.64	2.73
Tc (hrs)	1.48*	1.38*
(Used)	1.50	1.50
TimeToOutlet	0.00	0.00
Ia/P	0.10	0.09
(Used)	0.10	0.10

Time (hr)	Total Flow	Subarea Contribution to Total Flow (cfs)	
		A1	A2
11.0	3	4	4
11.3	7	5	4
11.6	13	7	6
11.9	18	10	8
12.0	22	12	10
12.1	27	15	12
12.2	36	20	16
12.3	51	28	23
12.4	73	40	33
12.5	99	54	45
12.6	130	71	59
12.7	163	89	74
12.8	191	104	87
13.0	226	123	103
13.2	244P	133P	111P
13.4	209	114	95
13.6	175	95	80
13.8	141	77	64
14.0	114	62	52
14.3	86	47	39
14.6	68	37	31
15.0	50	27	23
15.5	38	21	17
16.0	31	17	14
16.5	26	14	12
17.0	22	12	10
17.5	20	11	9
18.0	18	10	8
19.0	16	9	7
20.0	14	8	6
22.0	11	6	5
26.0	0	0	0

P - Peak Flow

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

TR-55 T₂ and T₁ THRU SUBAREA COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms

User: MSS

Date: 03-14-91

County : Winnebago

State: WI

Checked: _____

Date: _____

Subtitle: Proposed Developed Condition

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		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

F Grass, Dense

--- Shallow Concentrated ---

B Fellow (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

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: Proposed Developed Condition

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		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		300	.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

User: MGS

Date: 03-14-91

County : Winnebago State: WI

Checked: _____

Date: _____

Subtitle: Proposed Developed Condition

Subarea : A2

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)			73.8	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
County : Winnebago
Subtitle: Existing Condition

State: Wi

User: MSS

Checked: _____

Date: 03-14-91

Date: _____

Total watershed area: 0.330 sq mi Rainfall type: II Frequency: 25 years
Subareas

	Total
Area(sq mi)	0.33*
Rainfall(in)	4.5
Curve number	83*
Runoff(in)	2.73
Tc (hrs)	1.36
(Used)	1.25
TimeToOutlet	0.00
Ia/P	0.09
(Used)	0.10

Time (hr)	Total Flow	Subarea Contribution to Total Flow (cfs)
	Total	
11.0	9	9
11.3	12	12
11.6	16	16
11.9	23	23
12.0	26	26
12.1	34	34
12.2	49	49
12.3	73	73
12.4	106	106
12.5	147	147
12.6	192	192
12.7	231	231
12.8	256	256
13.0	280P	280P
13.2	240	240
13.4	191	191
13.6	147	147
13.8	116	116
14.0	94	94
14.3	70	70
14.6	55	55
15.0	42	42
15.5	33	33
16.0	28	28

TR-55 Tc and Tt THRU SUBAREA COMPUTATION

VERSION 1.11

Project : Pheasant Creek Farms
County : Winnebago
Subtitle: Existing Condition

State: Wi

User: HSS

Checked: _____

Date: 03-14-71

Date: _____

----- Subarea #1 - Total -----									
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		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
 County : Winnebago
 Subtitle: Existing Condition
 Subarea : Total

State: Wi

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)	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



Martenson & Eisele, Inc.

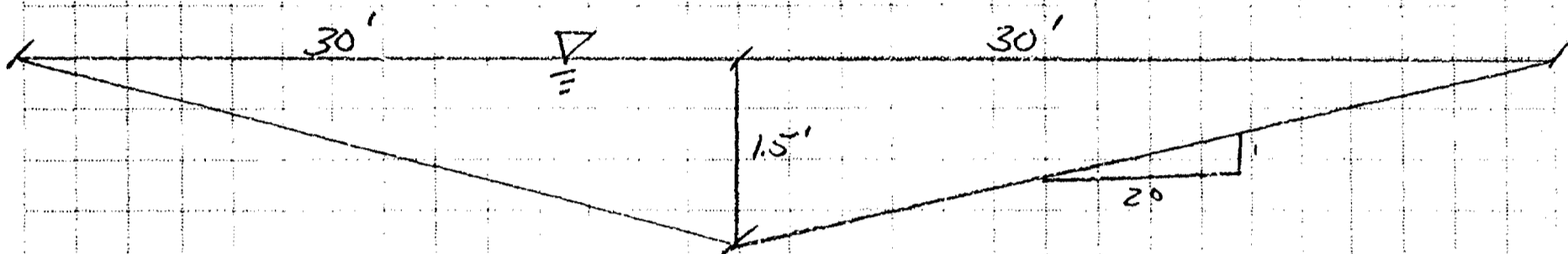
Consulting Engineering & Land Surveying

1919 American Court
Neenah, Wisconsin 54956

Telephone 414-731-0381

ASSUMED DITCH SECTIONS FOR PHEASANT CREEK FARMS (DEVELOPED CONDITION)

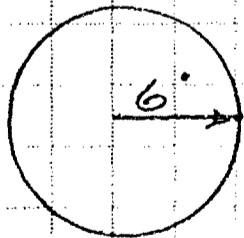
EAST WEST DITCH FLOWING THRU OUTLOTS
EASTERLY



$$A = 60 \times 1.5 = 90 \text{ SF}$$
$$W_p = \left[\frac{130^2 + 1.5^2}{2} \right] \times 2 = 60.1 \text{ FT}$$

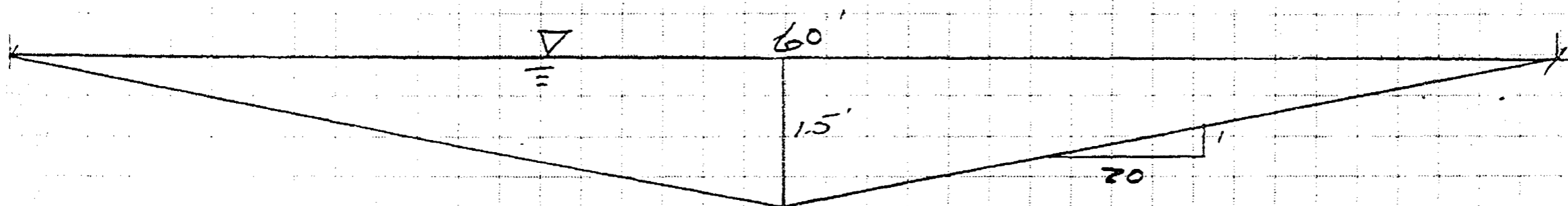
$$N = .025$$

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



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

ASSUMED DITCH SECTION FOR
PHEASANT CREEK FARMS [EXISTING CONDITION]



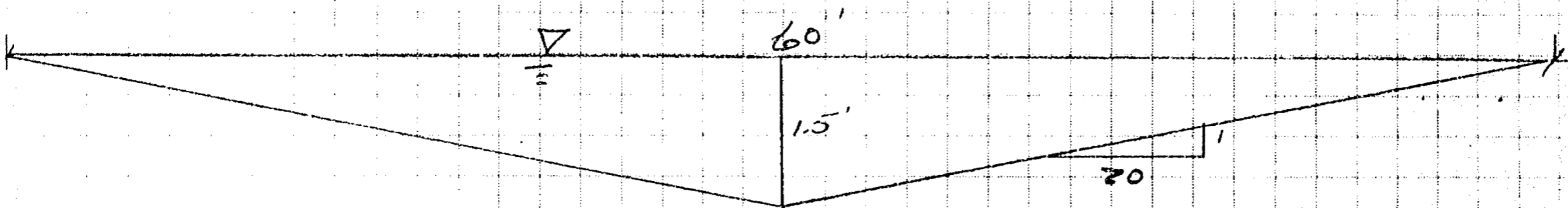
$$A = 60 \times 1.5 = 90.5F$$

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



Martenson & Eisele, Inc.
Consulting Engineering & Land Surveying
1919 American Court
Neenah, Wisconsin 54956
Telephone 414-731-0381

ASSUMED DITCH SECTION FOR
PHEASANT CREEK FARMS [EXISTING CONDITION]

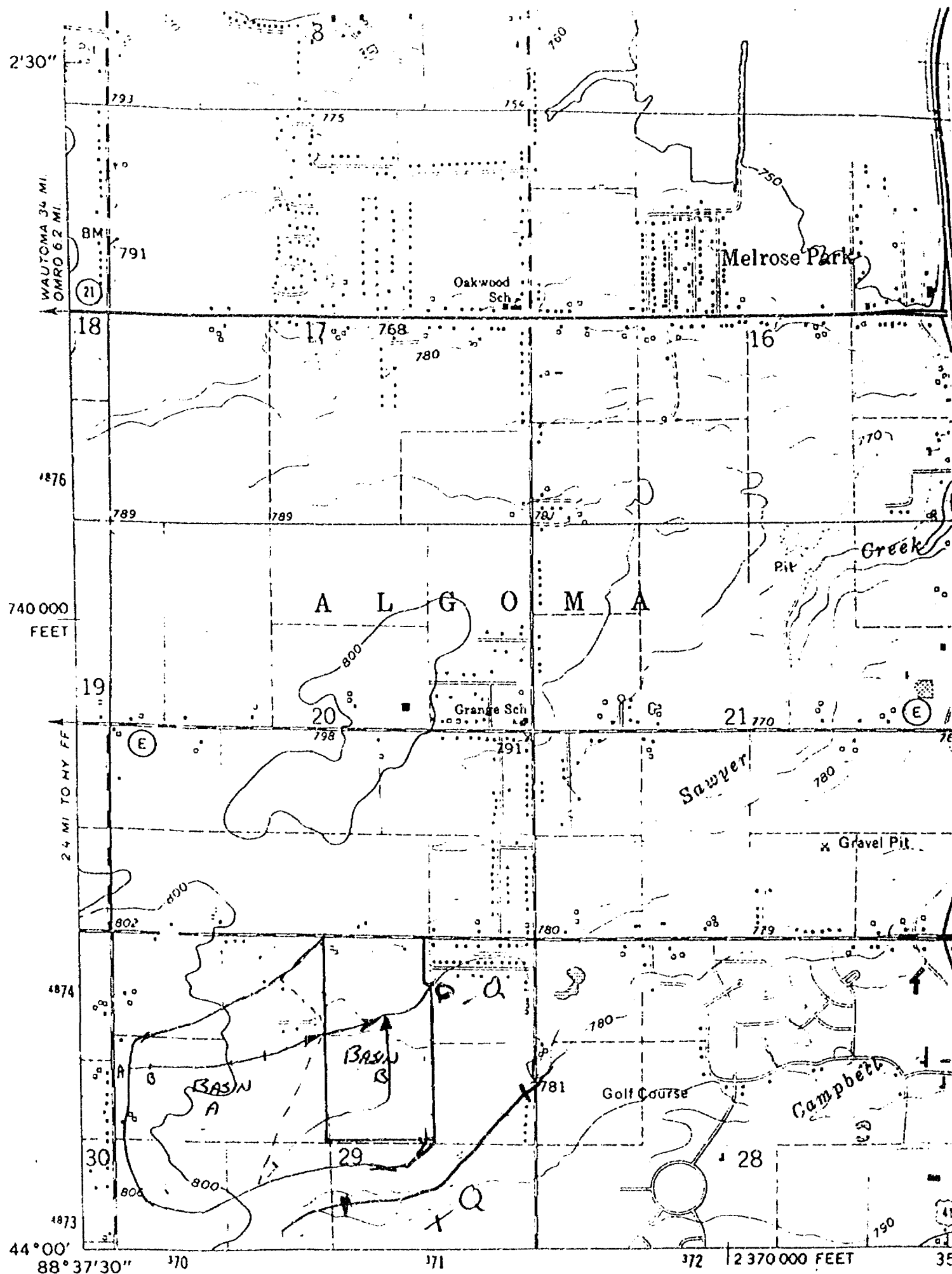


$$A = 60 \times 1.5 = 90 \text{ SF}$$

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



Martenson & Eisele, Inc.
Consulting Engineering & Land Surveying
1919 American Court
Neenah, Wisconsin 54956
Telephone 414-731-0381



ROSENDALE 1:62 5001
3271 1

Mapped, edited, and published by the Geological Survey
in cooperation with State of Wisconsin agencies

1:24,000

Control by USGS and USC&GS

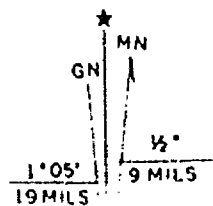
Topography by photogrammetric methods from aerial
photographs taken 1960. Field checked 1961

Selected hydrographic data compiled from U. S. Lake Survey
chart 726 (1960). This information is not intended
for navigational purposes

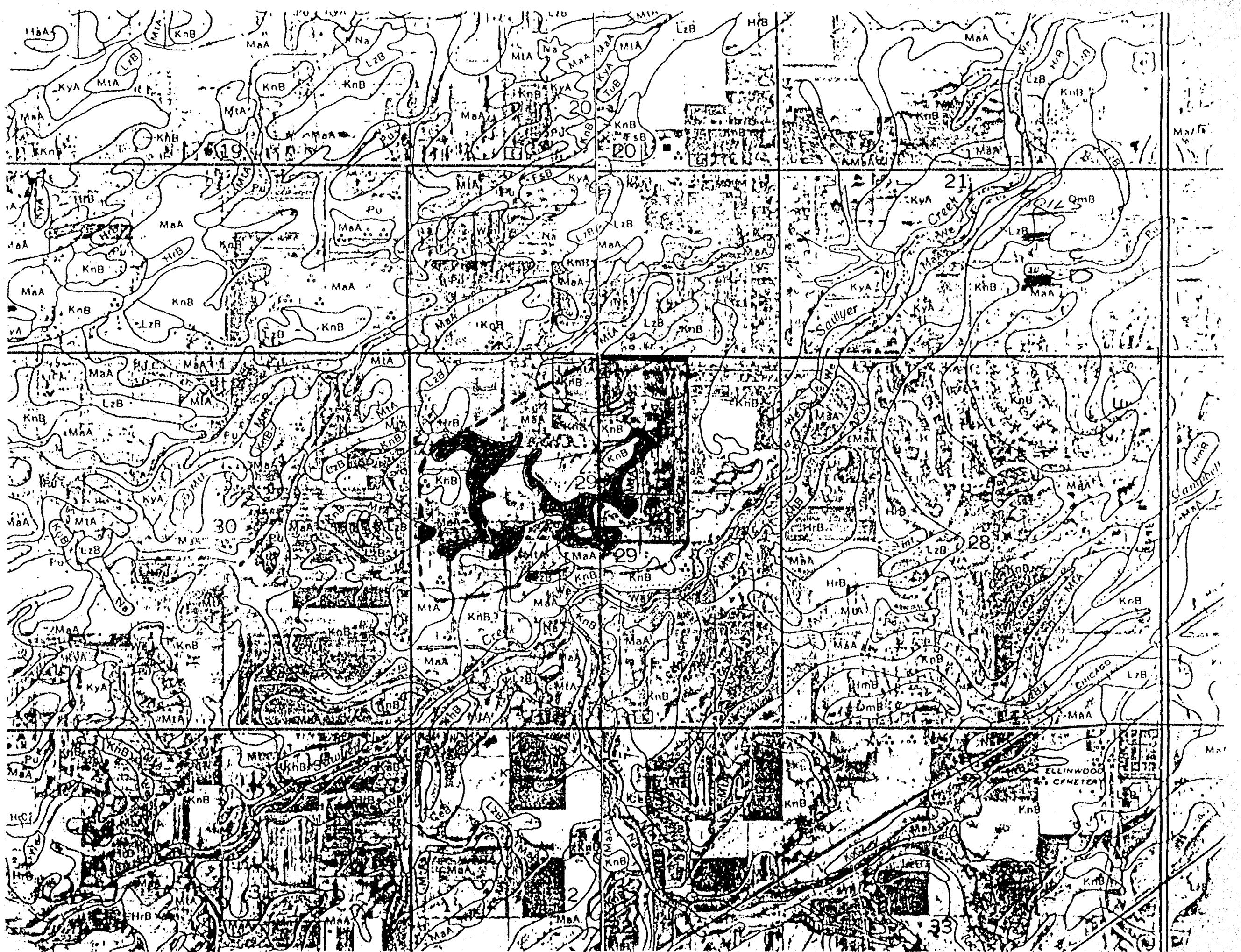
Polyconic projection. 1927 North American datum
10,000-foot grid based on Wisconsin coordinate system, south zone
1000-metre Universal Transverse Mercator grid ticks,
zone 16, shown in blue

Red tinted areas indicate areas in which only landmark buildings are shown

Fine red dashed lines indicate selected fence and field lines where
general visible on aerial photographs. This information is unchecked



UTM GRID AND 1975 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET





Martenson & Eisele, Inc.

Consulting Engineering & Land Surveying

1919 American Court

Neenah, Wisconsin 54956

Telephone 414-731-0381

SOIL TYPES WITHIN DEVELOPMENT PHEASANT CREEK FARMS



MzA = MOSEL SILT LOAM 0-3% = C

KnB = KENNAUNEE SILT LOAM 2-6% C

MiaA = 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



Martenson & Eisele, Inc.

Consulting Engineering & Land Surveying

1919 American Court

Neenah, Wisconsin 54956

Telephone 414-731-0381

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

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

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

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

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

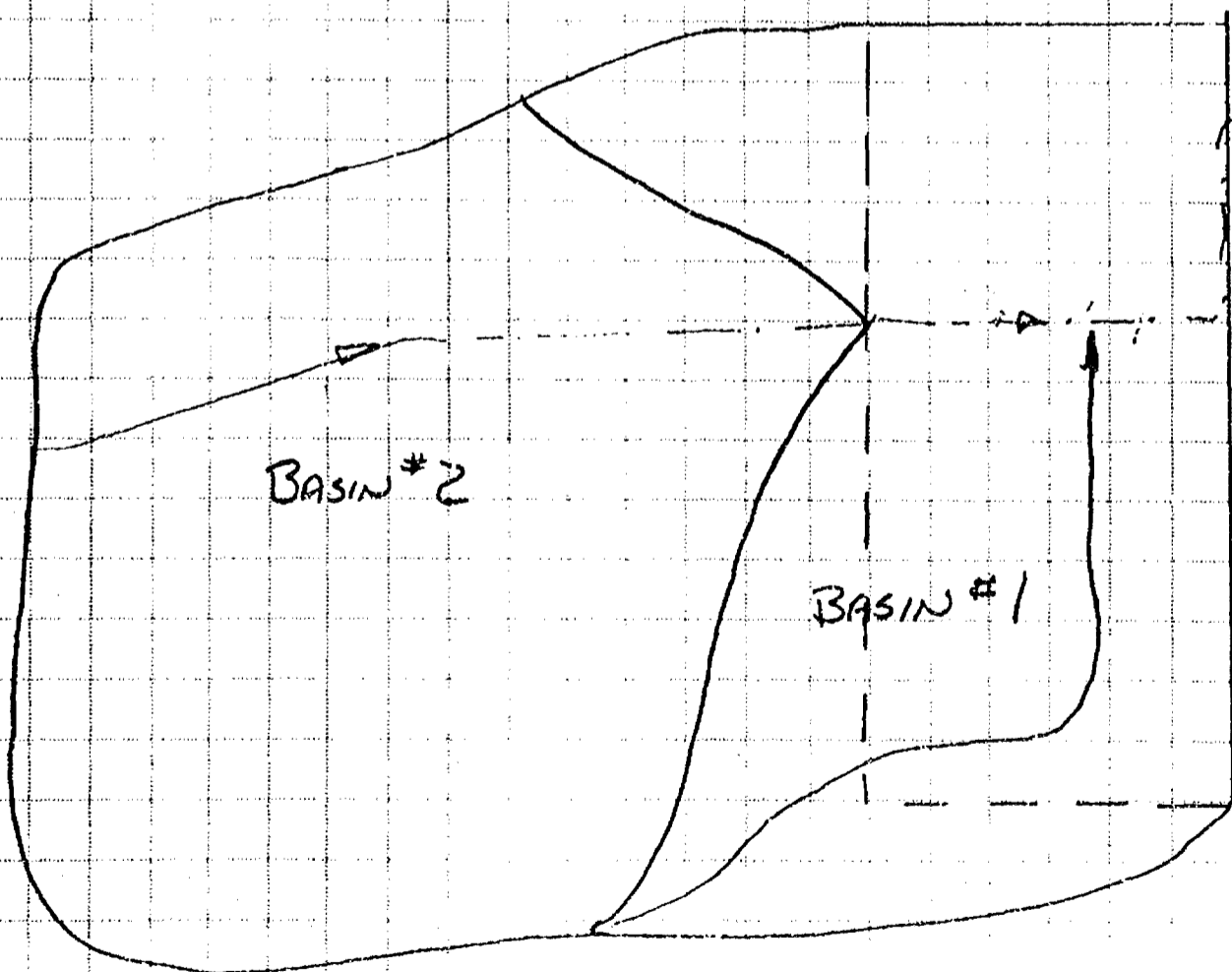


Table 2-2b.—Runoff curve numbers for cultivated agricultural lands¹

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	75	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	85
		Good	55	69	78	83
	C&T	Poor	63	73	80	83
		Good	51	67	76	80

¹Average runoff condition, and $I_a = 0.2S$.²Crop residue cover applies only if residue is on at least 5% of the surface throughout the year.³Hydrologic 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 (good $\geq 20\%$), and (e) degree of surface roughness.

Poor: Factors impair infiltration and tend to increase runoff.

Good: 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
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ³ :					
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)		98	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) ⁴ ...		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
<i>Developing urban areas</i>					
Newly graded areas (pervious areas only, no vegetation) ⁵					
		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

¹Average runoff condition, and $I_a = 0.2S$.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 98, 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 = 98) 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 tile.....	0.011	0.012*	0.014*	0.017
Glazed brickwork.....	0.011	0.012	0.013*	0.015
Brick in cement mortar; brick sewers.....	0.012	0.013	0.015*	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.....	0.0225	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 stages, 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

* Values for rougher conditions.



WINNEBAGO COUNTY - LAND and WATER CONSERVATION DEPARTMENT

500 EAST SUNNYVIEW ROAD
OSHKOSH, WI 54901-9774
(414) 424-0044 or 727-2880

RECEIVED

May 15, 1991

MAY 16 1991

To: Jerry Bougie
Principal Planner

WINNEBAGO COUNTY
PLANNING DEPT.

From: Pete Van Airsdale *P.V.A.*
County Conservationist

Subject: Drainage Plan for Pheasant Creek Farm - Phase I

I have reviewed the revised drainage plan submitted by Mike Siewert, Martenson & Eisele, Inc., for Pheasant Creek Farm, located in part of the W.1/2, N.E. 1/4, Sec. 29 T.18N.-R. 16E., in the City of Oshkosh. My comments are as follows:

1. The drainage plan for the first development phase of Pheasant Creek Farm indicates there should be no increase in the rate of surface water flow from the site after development (15 cfs peak flow), versus what it has been, under agricultural land use conditions (15 cfs peak flow). Based on the runoff calculations submitted, I agree with the analysis.
2. The storm sewer system for this section of the development is designed to carry only about 1/3 of the peak flow from the site. As a result, the plan shows that between 7,500 and 8,700 cu. ft. of surface water runoff will be detained in portions of the street abutting lots 3 thru 11. Additional detention is planned to occur in the side lot swales. This temporary detention should provide additional assurance that the rate of runoff will not be increased.
3. Recently you received a letter from Mr. Gary Galow and his neighbors who reside in the Homestead Drive area. The information provided describes flooding problems on Homestead Drive and concerns that the proposed Pheasant Creek development will add to the flooding.
While I do not believe this particular section of the proposed Pheasant Creek development will increase the rate of surface water flow into the Homestead Drive area, I believe the storm sewer may create a base flow condition leading to total saturation in the vicinity of the back lot lines of those lots that border 9th St. and Homestead Ave. (north side). This would contribute to expanded cattail growth and obstruction to surface water flow. At present, the drainage ditch, swale in the back lot line area north of Homestead Drive, lacks capacity to carry surface water runoff from the upstream drainage basin. Any amount of obstruction to flow in this area will only aggravate the situation.
4. After comparing 1964, 1971 and 1981 aerial photos, I believe that flooding in the vicinity of Homestead Drive has also been a direct result of changes in the surface drainage in the immediate area of Homestead Drive and the Gunning farm. It appears that surface drainage was re-routed from a more natural course of flow to one that better fit straight lines associated with both agricultural and urban

(Pheasant Creek Farm, pg.2)

type developments. It also appears that the re-routing work within the Homestead Drive area did not provide adequate capacity to carry the peak flow from the upstream drainage basin.

Recommendations

Construction site erosion control should be an important component of urban development projects. This plan identifies only three relatively small areas where stone rip-rap, fabric filter fencing, or straw bales are to be installed for erosion control. At a minimum, I would recommend that fabric filter fencing and/or straw bales be installed at the front and back of each lot, with particular emphasis on preventing sediment deposition in the streets and the existing drainage way bordered by lots 7, 8, 9, 10, 11, and 12.

If no other sources of information are available, the developer(s) may wish to refer to the Wisconsin Department of Natural Resources publication WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK for details on the installation and maintenance of various erosion control measures. All lot owners and applicable contractors should receive a detailed set of specifications for the installation and maintenance of the erosion control measures to be used.

With regards to ways to help alleviate the flooding problems discussed herein and still provide for development as proposed, I would recommend the following alternatives be considered. Please note that these recommendations go beyond the scope of this phase of the proposed Pheasant Creek Farm development, but the flooding problem is one that all development projects in the drainage basin will most likely contribute to in varying degrees.

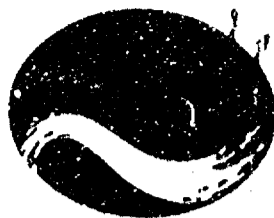
- 1) Deepen the previously described back lot line ditch or install a closed pipe to provide capacity to carry flow from the drainage basin down to Oakwood Road. A closed system (storm sewer), although by far the most expensive, would be the most effective solution. A provision for overland surface flow to accommodate shallow runoff from the adjacent lots should also be provided with this method. In addition, the culvert flow capacity through Oakwood Road would need to be increased accordingly.
- 2) Modify the large drainage ditch on the Pheasant Creek development property to prevent out-of-bank flow, particularly where the flow is now able to spill across to flood out Homestead Creek. This may require a combination of channel enlargement, channel relocation, and construction of a rip-rapped berm to prevent the flow from leaving the channel.
- 3) As an alternative to the above, circumvent the Homestead Drive development altogether by establishing an entirely different flow route and outlet for the upstream drainage basin. I don't know if this is a viable alternative in terms of available, undeveloped lands in the area but it is one worth investigating.

(Pheasant Creek Farm, pg.3)

- 4) Assuming that future development storm sewer systems will not be designed to carry peak flows from 10 or 25 yr. storm events, effective, temporary detention can be planned for and identified throughout the drainage basin. It is possible that the existing peak flow from "undeveloped" conditions could be reduced enough from this type of detention to help reduce the extent and frequency of flooding downstream.
- 5) Identify and establish large, natural detention basins throughout the drainage basin. Again, this would depend on the availability of lands, however, it would probably be the most practical, cost effective method of flood prevention to be implemented. This method is one that should be pursued in all drainage basins, large and small. It is being used extensively in other parts of the mid-west and east coast. In fact, many of these basins have been designed to form permanent pools that add to the aesthetics and value of the development projects. A local example of this is the permanent pool or "lake" in the Honey Creek subdivision, Town of Algoma.

#

cc Jeanette Diakoff
Gary Galow
Rick Hoeft
Ed Potempa
Mike Siewert



Winnebago County

Planning and Zoning Department

The Wave of the Future

February 18, 1991

Jeanne Storm, DAT&CP
Plat Review Unit
801 West Badger Road
P.O. Box 8911
Madison, WI 53708-8911

Re: PHEASANT CREEK
Preliminary Plat,
City of Oshkosh

Dear Jeanne:

The Winnebago County Planning Department has reviewed the aboved-named preliminary plat. The County certifies this plat as nonobjectionable. However, before final plat approval the following items shall be addressed:

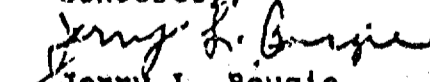
1. The following "Restriction for Public Benefit shall be placed on the final plat:

RESTRICTION FOR PUBLIC BENEFIT - WINNEBAGO COUNTY

- Pursuant to section 18.58 of the Winnebago County Land Division Ordinance, upon final grading, the developer and/or owner shall comply with the surface water drainage plan as approved by the Winnebago County Land and Water Conservation and Planning and Zoning Departments.
2. The drainage plan, as required by section 18.58 Winnebago County Land Division Ordinance, shall be submitted simultaneously with the final plat or before final plat submittal.
 3. Any easements required for drainage purposes shall be shown on the face of the final plat and recorded as a separate document against the respective lot(s).
 4. Shoreland provisions, section 17.20 Winnebago County Zoning Ordinance, shall apply to this plat. Some lots are within 300 feet of the ordinary high water mark of Sawyer Creek. Question of navigability shall be addressed to the DNR. Decision of non-navigability shall be presented to the County and City of Oshkosh. (Note: see attachment.)
 5. The City of Oshkosh shall administer County shoreland requirements, per sections 59.97(7) & 59.971(7), Wis. Stats.

If you have any questions please call or write. Thank you.

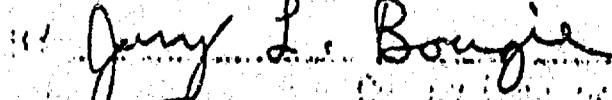
Sincerely,


Jerry L. Bougie
County Principal Planner

cc: Dave Schmidt, County
Planning Director
Carol Owens, County P&Z
Chairperson
Dave Elsele, M & E

NONOBJECTIONABLE

WINNEBAGO COUNTY PLANNING & ZONING COMMITTEE


February 18, 1991

