

STATE OF MINNESOTA
BOARD OF ARCHITECTURE, ENGINEERING,
LAND SURVEYING, LANDSCAPE ARCHITECTURE, GEOSCIENCE
AND INTERIOR DESIGN

In the matter of Jason P. O'Mara
Professional Engineer
License Number 47562

STIPULATION AND ORDER

Board File No. 2009-0061

TO: Jason P. O'Mara
Post Office Box 173
240 North 2nd Street
Lyons, Nebraska 68038

The Minnesota Board of Architecture, Engineering, Land Surveying, Landscape
Architecture, Geoscience and Interior Design ("Board") is authorized pursuant to
Minnesota Statutes section 214.10 (2008) and Minnesota Statutes section 326.111 (2008)
to review complaints against architects, professional engineers, land surveyors,
landscape architects, geoscientists, and certified interior designers, and to take
disciplinary action whenever appropriate.

The Board received information concerning Jason P. O'Mara ("Respondent").
The Board's Complaint Committee ("Committee") reviewed the information. The
parties have agreed that the matter may now be resolved by this Stipulation and Order.

STIPULATION

IT IS HEREBY AGREED by and between Respondent and the Committee as
follows:

1. Jurisdiction. The Respondent has held a license to practice professional
engineering from the Board since July 6, 2009. Respondent is subject to the jurisdiction

of the Board with respect to the matters referred to in this Stipulation.

2. Facts. This Stipulation is based upon the following facts:

a. Respondent was first licensed to practice professional engineering in the State of Minnesota on July 6, 2009.

b. Respondent's Professional Engineers license is current with an expiration date of June 30, 2010.

c. At the times relevant to the complaint received by the Board, Respondent was a licensed Professional Engineer, Structural, in the State of Iowa, license number 19167, issued on November 20, 2008. A true and correct print out taken from the Iowa Professional Licensing Bureau of Engineers and Land Surveyors website, on July 7, 2009, is attached as Exhibit A.

d. Before Respondent became licensed in Minnesota, in a report dated April 28, 2009, for the Engineering Certification for Tower and Foundation Design for Proposed Kohlnhofer Farms Wind Turbine Projects near Goodhue, Minnesota, Respondent certified and signed the report on April 28, 2009 with his Iowa certification stamp. A true and correct copy of the report dated April 28, 2009, along with attachments is attached as Exhibit B.

e. Before Respondent became licensed in Minnesota, in the same report dated April 28, 2009, for the Engineering Certification for Tower and Foundation Design for Proposed Kohlnhofer Farms Wind Turbine Projects near Goodhue, Minnesota, there was an attachment letter dated April 28, 2009, where the Respondent certified and signed the "Decommissioning Plan for Proposed

Kohlhofer Farms Wind Turbine Projects near Goodhue, Minnesota,” with his Iowa certification stamp. A true and correct copy of the report dated April 28, 2009, along with attachments is attached as Exhibit B.

f. Before Respondent became licensed in Minnesota, in the same report dated April 28, 2009, for the Engineering Certification for Tower and Foundation Design for the Proposed Kohlhofer Farms Wind Turbine Projects near Goodhue, Minnesota, there were attachments where the Respondent certified and signed three (3) structural design drawings identified as S1, S2, and S3 with his Iowa certification stamp on April 28, 2009. A true and correct copy of the report dated April 28, 2009, along with attachments is attached as Exhibit B

g. Before Respondent became licensed in Minnesota, in a letter dated May 15, 2009, Respondent stated: “Mr.Kohlhofer informed me that he had not been required to obtain certification from a professional engineer for previous agricultural structures on his property and that he believed that engineering certification would not be required in this case. He asked that I send the drawings, a letter explaining that the design of the foundation system was based on the default “worst case” soil conditions in the International Building Code, and a letter outlining the plan for decommissioning, all with my Iowa P.E. stamp affixed. He assured me that he understood, and that the Goodhue County board (with whom he is acquainted) would understand that my Iowa P.E. is not valid in the state of Minnesota, but he felt that it would add some credibility and assurance for the Goodhue County board if they knew that I am licensed in

Iowa. To summarize and clarify: The intention was to try to obtain a permit without engineering certification under an exemption for agricultural structures. The Iowa P.E. stamp was affixed in an effort to add credibility, but with the full understanding that it was not intended to be a substitute for a Minnesota P.E. If Goodhue County were to rule that P.E. certification is required, we would either wait until I received my Minnesota P.E. to re-submit for permit, or hire an engineer already licensed in Minnesota to oversee the project. I understand now, after having this read back to me, that red flags should have been flying, and I should have refused to stamp the documents with my Iowa stamp. My only defense, I think, is that this was a rookie mistake." A true and correct copy of the May 15, 2009 letter is attached as Exhibit C.

3. Violations. Respondent admits that the facts specified in section 2, paragraphs d through g, constitute violations of Minnesota Statutes section 326.02, subdivisions 1 and 3 and section 326.03, subdivision 1 and are sufficient grounds for the action specified below.

4. Enforcement Action. Respondent and the Committee agree that the Board should issue an Order in accordance with the following terms:

- a. Reprimand. Respondent is reprimanded for the foregoing conduct.
- b. Civil Penalty. Respondent shall pay to the Board a civil penalty of Two Thousand Dollars (\$2,000.00). Respondent shall submit a civil penalty of Two Thousand Dollars (\$2,000.00) by cashier's check or money order to the Board within sixty (60) days of the Board's approval of this Stipulation and Order.

5. Additional Discipline for Violations of Order. If Respondent violates this Stipulation and Order, Minnesota Statutes Chapter 326 (2008), or Minnesota Rules Chapter 1800 (2007) or Minnesota Rules Chapter 1805 (2007), the Board may impose additional discipline pursuant to the following procedure:

a. The Committee shall schedule a hearing before the Board. At least thirty days prior to the hearing, the Committee shall mail Respondent a notice of the violation alleged by the Committee and of the time and place of the hearing. Within fourteen days after the notice is mailed, Respondent shall submit a response to the allegations. If Respondent does not submit a timely response to the Board, the allegations may be deemed admitted.

b. At the hearing before the Board, the Complaint Committee and Respondent may submit affidavits made on personal knowledge and argument based on the record in support of their positions. The evidentiary record before the Board shall be limited to such affidavits and this Stipulation and Order. Respondent waives a hearing before an administrative law judge and waives discovery, cross-examination of adverse witnesses, and other procedures governing administrative hearings or civil trials.

c. At the hearing, the Board will determine whether to impose additional disciplinary action, including additional conditions or limitations on Respondent's practice or suspension or revocation of Respondent's license.

6. Waiver of Respondent's Rights. For the purpose of this Stipulation, Respondent waives all procedures and proceedings before the Board to which

Respondent may be entitled under the Minnesota and United States constitutions, statutes, or the rules of the Board, including the right to dispute the allegations against Respondent, to dispute the appropriateness of discipline in a contested case proceeding pursuant to Minnesota Statutes Chapter 14 (2008), and to dispute the civil penalty imposed by this Agreement. Respondent agrees that upon the application of the Committee without notice to or an appearance by Respondent, the Board may issue an Order containing the enforcement action specified in paragraph 4 herein. Respondent waives the right to any judicial review of the Order by appeal, writ of certiorari, or otherwise.

7. Collection. In accordance with Minnesota Statutes section 16D.17 (2008), in the event this order becomes final and Respondent does not comply with the condition in paragraph 4(b) above, Respondent agrees that the Board may file and enforce the unpaid portion of the civil penalty as a judgment without further notice or additional proceedings.

8. Board Rejection of Stipulation and Order. In the event the Board in its discretion does not approve this Stipulation and Order or a lesser remedy than specified herein, this Stipulation and Order shall be null and void and shall not be used for any purpose by either party hereto. If this Stipulation is not approved and a contested case proceeding is initiated pursuant to Minnesota Statutes Chapter 14 (2008), Respondent agrees not to object to the Board's initiation of the proceedings and hearing the case on the basis that the Board has become disqualified due to its review and consideration of this Stipulation and the record.

9. Unrelated Violations. This settlement shall not in any way or manner limit or affect the authority of the Board to proceed against Respondent by initiating a contested case hearing or by other appropriate means on the basis of any act, conduct, or admission of Respondent justifying disciplinary action which occurred before or after the date of this Stipulation and Order and which is not directly related to the specific facts and circumstances set forth herein.

10. Record. The Stipulation, related investigative reports and other documents shall constitute the entire record of the proceedings herein upon which the Order is based. The investigative reports, other documents, or summaries thereof may be filed with the Board with this Stipulation.

11. Data Classification. Under the Minnesota Government Data Practices Act, this Stipulation and Order is classified as public data upon its issuance by the Board, Minnesota Statutes section 13.41, subdivision 5 (2008). All documents in the record shall maintain the data classification to which they are entitled under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13 (2008). They shall not, to the extent they are not already public documents, become public merely because they are referenced herein. A summary of this Order will appear in the Board's newsletter. A summary will also be sent to the national discipline data bank pertaining to the practice of engineering.

12. Entire Agreement. Respondent has read, understood, and agreed to this Stipulation and is freely and voluntarily signing it. The Stipulation contains the entire agreement between the parties hereto relating to the allegations referenced herein.

Respondent is not relying on any other agreement or representations of any kind, verbal or otherwise.

13. Counsel. Respondent is aware that he may choose to be represented by legal counsel in this matter. Respondent knowingly waived legal representation.

14. Service. If approved by the Board, a copy of this Stipulation and Order shall be served personally or by first class mail on Respondent. The Order shall be effective and deemed issued when it is signed by the Chair of the Board.

RESPONDENT

J — P. O —
Jason P. O'Mara, PE

Dated: July 22, 2009

COMPLAINT COMMITTEE

By: Billie Lawton
Billie Lawton, Public Member,
Committee Chair

Dated: 8-19, 2009

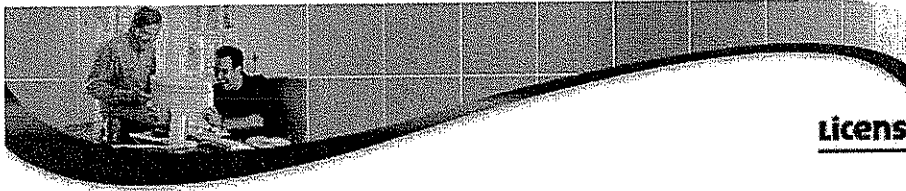
ORDER

Upon consideration of the foregoing Stipulation and based upon all the files, records and proceedings herein, all terms of the Stipulation are approved and hereby issued as an Order of this Board on this the 18th day of September, 2009.

MINNESOTA BOARD OF
ARCHITECTURE, ENGINEERING,
LAND SURVEYING, LANDSCAPE
ARCHITECTURE, GEOSCIENCE AND
INTERIOR DESIGN

By: Kristine A. Kubes

Kristine A. Kubes, J. D.
Board Chair



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Displaying 1 of 1 ([View All](#))

O'MARA , JASON P.

Contact Information

PO BOX 173
240 ORTH 2ND STREET
LYONS, NE 68038

Phone: 402-380-6330

Fax:

E-Mail: jasonpomara@msn.com

License Information

Number: 19167

Type: Professional Engineer

Status: Active **Expires:** 12-31-2009

Original Issue Date: Professional Engineer: Structural: 11-20-2008 **Method:** Comity

For additional questions on licensing please call 515-281-4126

Discipline: Online information currently not available - please call 515-281-7360 for discipline information.

EXHIBIT



April 28, 2009

Mr. Yon Kohlnhofer
35559 County 45 Blvd
Lake City, MN 55041

RE: Engineering Certification for Tower and Foundation Design
for Proposed Kohlnhofer Farms Wind Turbine Projects near Goodhue, MN

Dear Mr. Kohlnhofer:

This letter certifies that the Wind Turbine Tower and Foundation, as detailed on the attached drawings S1, S2 and S3, have been designed in accordance with accepted professional standards, given local soil and climate conditions. Specifically the design conforms to the latest editions of:

1. International Building Code (IBC 2006 – as adopted by the Minnesota State Building Code)
2. American Society of Civil Engineers Minimum Design Loads for Buildings & Other Structures (ASCE7-05)
3. IEC 61400-1 International Standard: Wind Turbines-Part 1: Design Requirements
4. American institute of Steel Construction: Specifications (AISC 13th Edition – including Fatigue provisions of appendix 3)
5. American Concrete Institute Building Code Requirements for Structural Concrete (ACI 318-05)

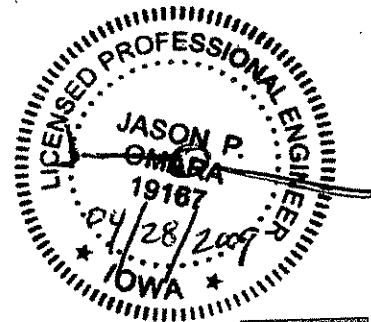
With regard to soil bearing capacity, our design assumes a worst-case allowable foundation pressure of 1,500psf, as allowed per Table 1804.2 of the 2006 International Building Code (see attached). Per footnote "c" of that Table, a soils investigation is not required unless the building official has reason to believe that soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site. This is extremely unlikely outside of organic peat or uncompacted garbage fill conditions, which, based on our observations, do not exist at the proposed sites. In addition, as the structural engineer, I will observe the excavation at the time of construction to verify that we are bearing on non-organic undisturbed native soils suitable for the foundation.

Also, as indicated on attached drawing S1, the foundation will bear at 5'-2" below grade, which is well below the Goodhue County requirement of 3'-5" for protection against frost heave.

Please feel free to contact me with any other questions.

Sincerely,

Jason P. O'Mara, P.E.
A J Energy, Inc.
McCook Lake, SD 57049
720-936-9846



EXHIBIT



TABLE 1804.2
ALLOWABLE FOUNDATION AND LATERAL PRESSURE

CLASS OF MATERIALS	ALLOWABLE FOUNDATION PRESSURE (psf) ^a	LATERAL BEARING (psf/ft below natural grade) ^d	LATERAL SLIDING	
			Coefficient of friction ^a	Resistance (psf) ^b
1. Crystalline bedrock	12,000	1,200	0.70	—
2. Sedimentary and foliated rock	4,000	400	0.35	—
3. Sandy gravel and/or gravel (GW and GP)	3,000	200	0.35	—
4. Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC)	2,000	150	0.25	—
5. Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH and CH)	1,500 ^c	100	—	130

For SE: 1 pound per square foot = 0.0479 kPa, 1 pound per square foot per foot = 0.157 kPa/m.

- a. Coefficient to be multiplied by the dead load.
- b. Lateral sliding resistance value to be multiplied by the contact area, as limited by Section 1804.3.
- c. Where the building official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.
- d. An increase of one-third is permitted when using the alternate load combinations in Section 1605.3.2 that include wind or earthquake loads.

1805.2 Depth of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the depth of footings shall also conform to Sections 1805.2.1 through 1805.2.3.

1805.2.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected by one or more of the following methods:

1. Extending below the frost line of the locality;
2. Constructing in accordance with ASCE 32; or
3. Erecting on solid rock.

Exception: Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Classified in Occupancy Category I, in accordance with Section 1604.5;
2. Area of 600 square feet (56 m²) or less for light-frame construction or 400 square feet (37 m²) or less for other than light-frame construction; and
3. Eave height of 10 feet (3048 mm) or less.

Footings shall not bear on frozen soil unless such frozen condition is of a permanent character.

1805.2.2 Isolated footings. Footings on granular soil shall be so located that the line drawn between the lower edges of adjoining footings shall not have a slope steeper than 30 degrees (0.52 rad) with the horizontal, unless the material supporting the higher footing is braced or retained or otherwise laterally supported in an approved manner or a greater slope has been properly established by engineering analysis.

1805.2.3 Shifting or moving soils. Where it is known that the shallow subsoils are of a shifting or moving character,

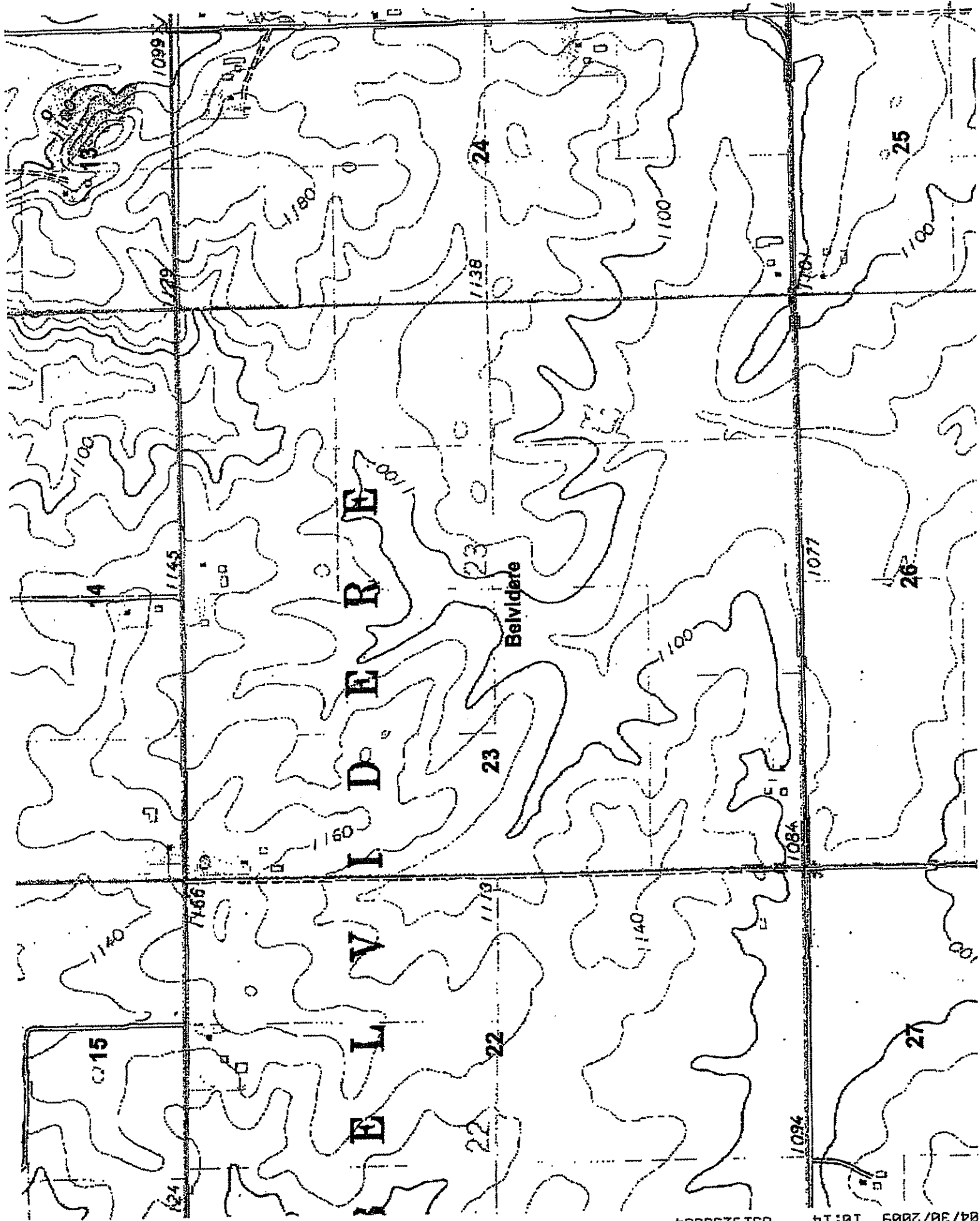
footings shall be carried to a sufficient depth to ensure stability.

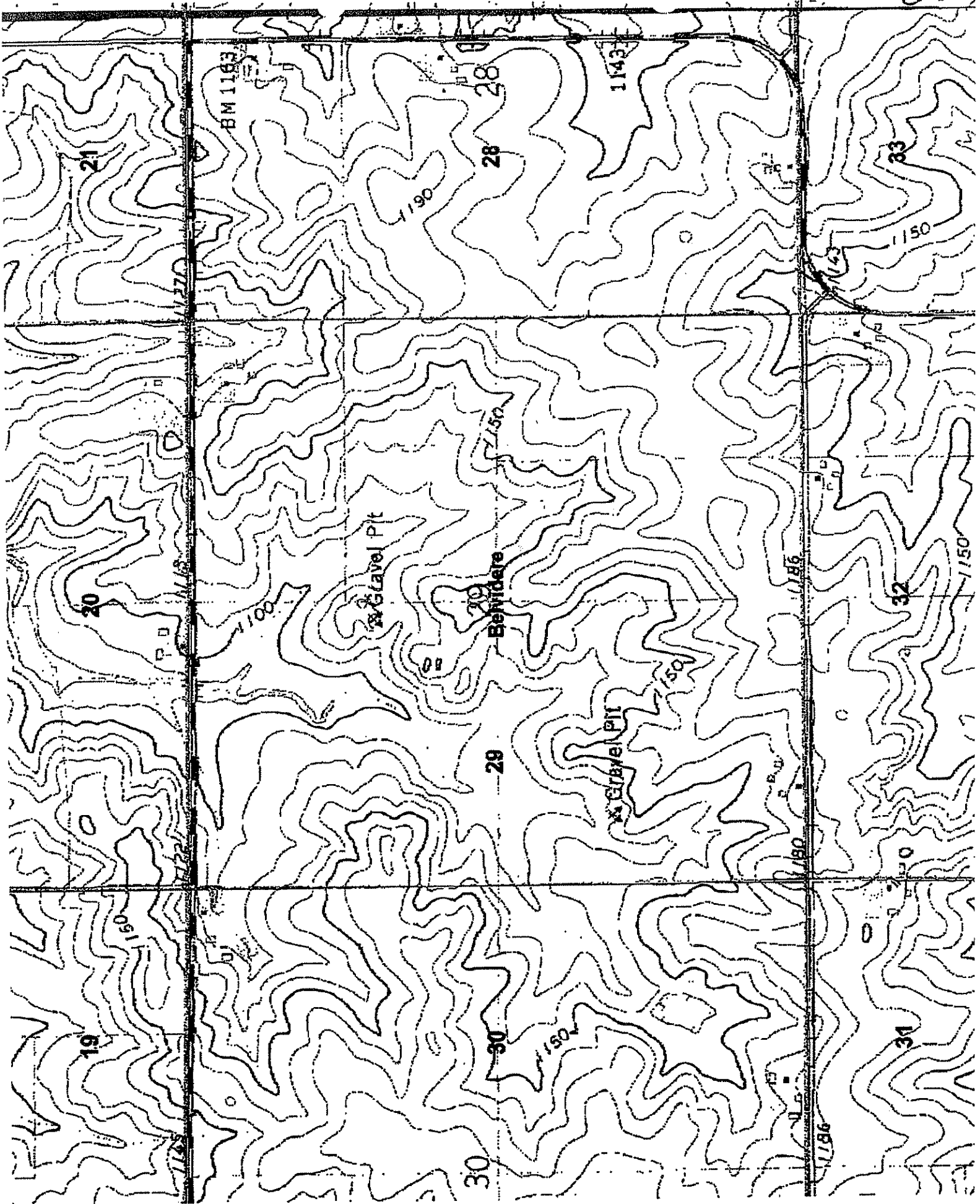
1805.3 Footings on or adjacent to slopes. The placement of buildings and structures on or adjacent to slopes steeper than one unit vertical in three units horizontal (33.3-percent slope) shall conform to Sections 1805.3.1 through 1805.3.5.

1805.3.1 Building clearance from ascending slopes. In general, buildings below slopes shall be set a sufficient distance from the slope to provide protection from slope drainage, erosion and shallow failures. Except as provided for in Section 1805.3.5 and Figure 1805.3.1, the following criteria will be assumed to provide this protection. Where the existing slope is steeper than one unit vertical in one unit horizontal (100-percent slope), the toe of the slope shall be assumed to be at the intersection of a horizontal plane drawn from the top of the foundation and a plane drawn tangent to the slope at an angle of 45 degrees (0.79 rad) to the horizontal. Where a retaining wall is constructed at the toe of the slope, the height of the slope shall be measured from the top of the wall to the top of the slope.

1805.3.2 Footing setback from descending slope surface. Footings on or adjacent to slope surfaces shall be founded in firm material with an embedment and set back from the slope surface sufficient to provide vertical and lateral support for the footing without detrimental settlement. Except as provided for in Section 1805.3.5 and Figure 1805.3.1, the following setback is deemed adequate to meet the criteria. Where the slope is steeper than 1 unit vertical in 1 unit horizontal (100-percent slope), the required setback shall be measured from an imaginary plane 45 degrees (0.79 rad) to the horizontal, projected upward from the toe of the slope.

1805.3.3 Pools. The setback between pools regulated by this code and slopes shall be equal to one-half the building footing setback distance required by this section. That portion of the pool wall within a horizontal distance of 7 feet





Soil Map Summary



Client Information:

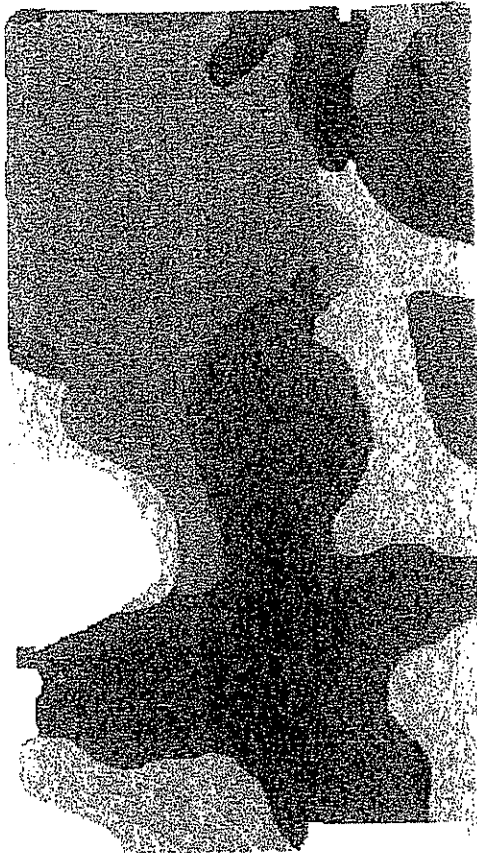
Client: kohlnhofer farms
Farm: Elde Hinch 2009
Field: NORTH

Legend Information:

Color	Value
	M506B
	N514B
	N519B
	N578B
	N585B
	N585C2
	N601C2
	N601D2
	N602A

Field Information:

Field information and legend apply to active map layer only.



Soils Inventory Report

CIRCLE K FAMILY FARMS

Map Unit Symbol	Map Unit Name	Acres	Percent
N578B	Barremills silt loam, drainageway, 1 to 5 percent slopes, occasionally flooded	33.4	15%
N585B	Mt. Carroll-Hersey complex, 2 to 6 percent slopes	87.5	39%
N585C2	Mt. Carroll-Hersey complex, 6 to 12 percent slopes, moderately eroded	65.4	29%
N585D2	Mt. Carroll-Hersey complex, 12 to 18 percent slopes, moderately eroded	24.4	11%
N598D2	Winneshiek-Waucoma complex, 12 to 18 percent slopes, moderately eroded	4.4	2%
N601C2	Oak Center-Hersey complex, 6 to 12 percent slopes, moderately eroded	3.1	1%
N601D2	Oak Center-Hersey complex, 12 to 18 percent slopes, moderately eroded	2.8	1%
N602A	Joy silt loam, 1 to 3 percent slopes	1.1	0%
	Total:	222.1	



Conservation Plan Map

N



Customer(s): **CIRCLE K FAMILY FARMS**

Field Office: GOODHUE SERVICE CENTER

Agency: NRCS

Assisted By: Spiering, Ronald M L








Legal Description: Section 23 of Belvidere Twp Tract 10467

Jeff



Soils Map

MUSYM

-  N578B
-  N585B
-  N585C2
-  N585D2
-  N598D2
-  N601C2
-  N601D2
-  N602A

 Tract 10467

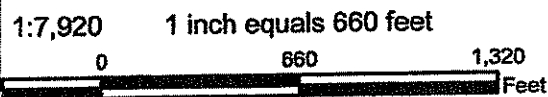
 Kohlenhofer_Bros—WC2_11KB-consplan

 Tract 3192

 Tract 9029

 Sections - Goodhue

 Civil Townships - Goodhue



Maps are for graphical purposes only. They do not represent a legal survey. While every effort has been made to ensure that these data are accurate and reliable within the limits of the current state of the art, NRCS cannot assume any responsibility for any errors or omissions in the data, nor as a result of the failure of the data to function on a particular system. NRCS makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty.

April 28, 2009

Mr. Yon Kohlnhofer
35559 County 45 Blvd
Lake City, MN 55041

RE: Decommissioning Plan for Proposed Kohlnhofer Farms Wind Turbine Projects near Goodhue, MN

Dear Mr. Kohlnhofer:

As we discussed on the phone today, Kohlnhofer Farms will be responsible for taking down the turbine and the tower and the end of the useful life, estimated to be 20 to 25 years, or after 1 year without energy production, and either selling for scrap or for reconditioning and reuse. These turbines will be installed on property that is owned and operated by Kohlnhofer Farms, so the decision as to whether to remove the foundations will be left to the discretion of Kohlnhofer Farms.

In my professional estimation, the cost of decommissioning will be roughly offset by the salvage value of the turbine and tower.

Please feel free to contact me with any other questions.

Sincerely,

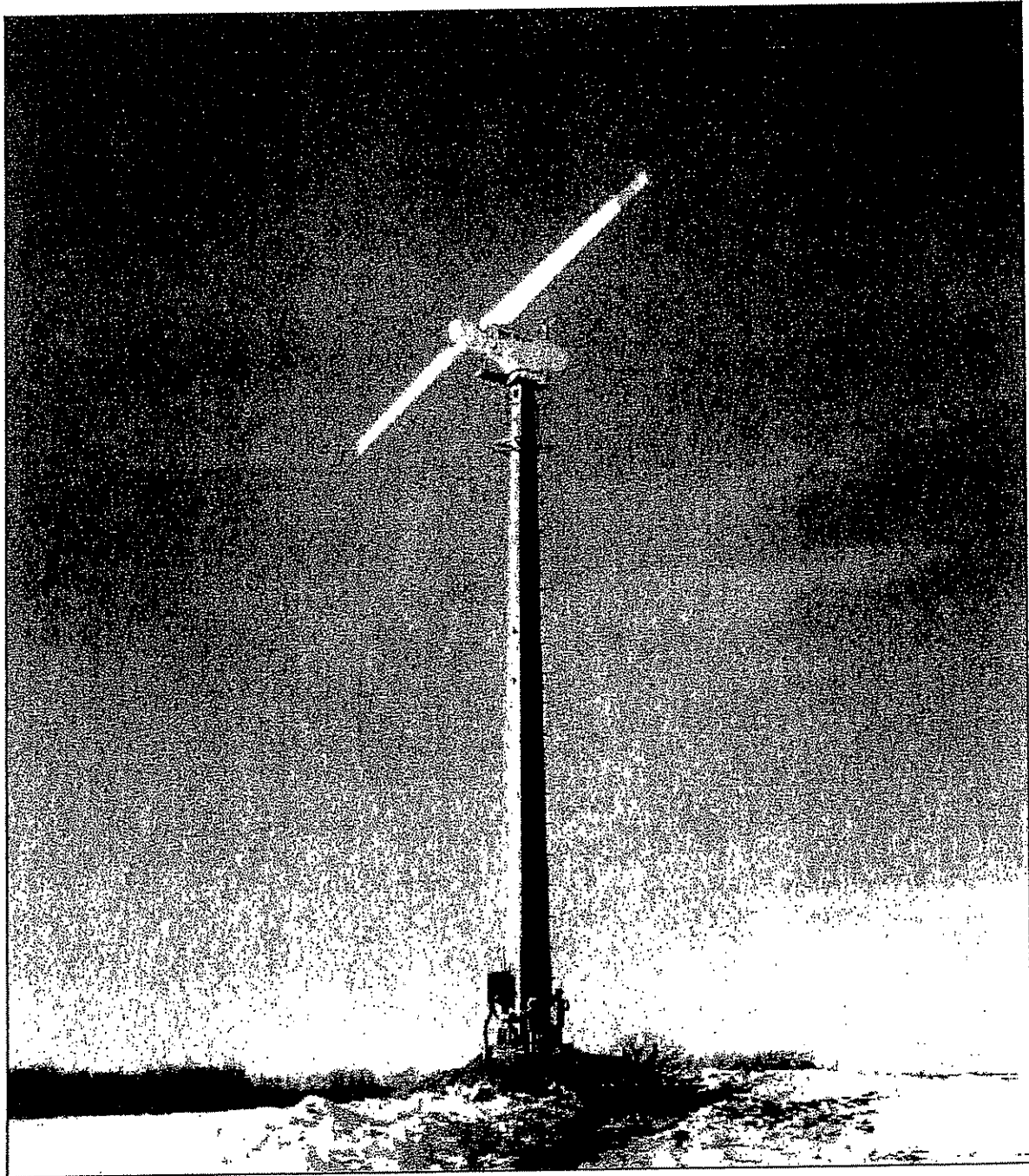
Jason P. O'Mara, P.E.
A J Energy, Inc.
McCook Lake, SD 57049
720-936-9846





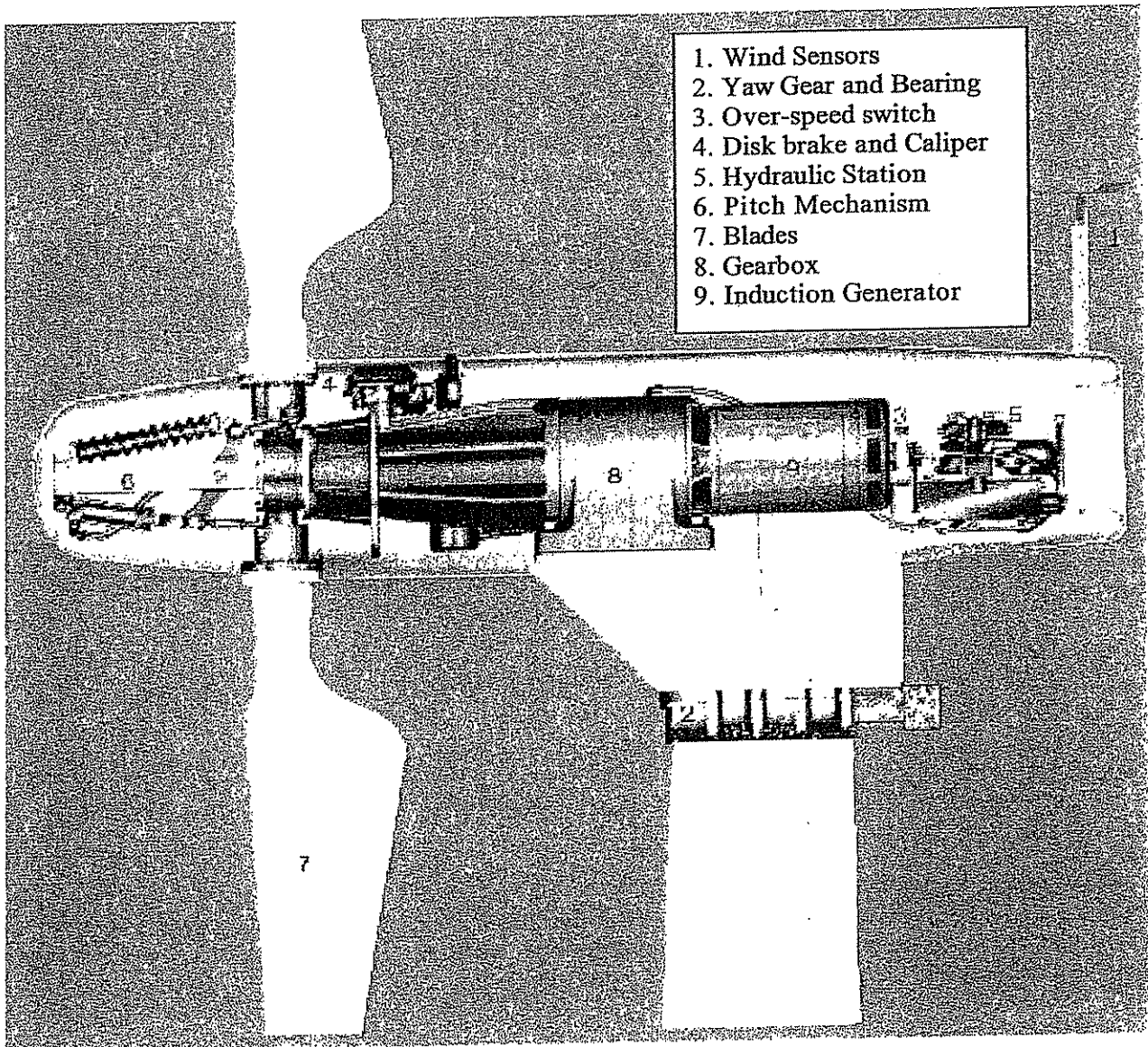
Renewable energy systems for your home, farm and business.

NG 12.5 (33kW) Wind Turbine



System Description

The figure below lists the main components of the NG 12-5 wind turbine nacelle.





Renewable energy systems for your home, farm and business.

1. Wind Sensors

The wind sensors provide the proper signals to the Twelve-Five controller to orient itself into the wind. The wind sensors consist of a cup style anemometer for sensing wind speed and an electronic wind vane for sensing wind direction.

2. Yaw Gear and Bearing

The yaw gear and yaw bearing are the means by which the Twelve-Five is attached to the tower and allows full 360° rotation to track the wind.

3. Over-speed Switch

The over-speed switch is a safety device that will fully feather the blades and apply the disk brake (position #4) in the event of an emergency over-speed condition. This device must be reset manually at the tower top after engagement.

4. Disk brake and Caliper

The disk brake is used in the event of the over-speed switch (position #3) engaging or can be activated manually at the tower base for maintenance purposes. The caliper is applied with spring tension and is released hydraulically via the hand pump on the hydraulic station (position #5).

5. Hydraulic Station

The hydraulic station houses all the hydraulic components used in the operation of the blade pitch mechanism (position #6) and the disk brake (position #4). It also houses a hand pump for releasing the Disk Brake (position #4) after engagement.

6. Pitch Mechanism

The pitch mechanism is used in varying the pitch angle of the blades under the varying operating wind conditions. The Twelve-Five's controller sends the appropriate signals to the hydraulic station (position #5) to change the blade pitch angle via the pitch mechanism.

7. Blades

The blades convert the winds energy into rotational forces used to drive the induction generator (position #9)

8. Gearbox

The gearbox is used to increase the rotational speed of the blades (position #7) to the appropriate speed for the induction generator (position #9).

9. Induction Generator

The induction generator uses the rotational forces created by the blades to produce electricity. It is flange mounted to the gearbox (position #8) and provides the mounting structure for the hydraulic station (position #5).

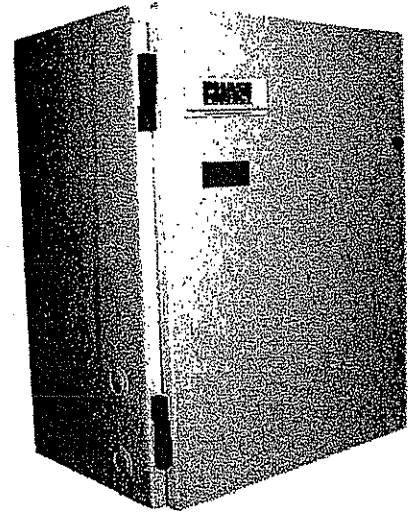
PHASE PERFECT

DIGITAL PHASE CONVERTERS

PRODUCT INFORMATION MODEL: PT380

Phase Perfect® Digital Phase Converters represent the ultimate technology for converting single-phase electrical power to three-phase electrical power. In fact, the three-phase power produced by Phase Perfect® is often superior in power quality to utility supplied three-phase.

Phase Perfect® utilizes the latest advances in solid state power switching technology. Unlike rotary phase converters, it does not rely on a motor to generate a voltage. Proprietary software controls power switching devices that generate three-phase power with much more precision and efficiency. Its patented design makes it unlike any other phase converter.



POWER QUALITY

Phase Perfect® produces true sinusoidal three-phase output voltages balanced to within 1% under all load conditions. Because the output voltage is a sine wave with very low harmonic distortion, all types of three-phase equipment can be safely powered. Input current is true sinusoidal, near unity (.99) power factor and does not produce harmonics which can pollute the power grid. Phase Perfect's PT Series has 3-stage EMI filtering with EMI gasketed enclosures available when electromagnetic interference is an issue.

REGENERATIVE POWER CAPABILITY

Phase Perfect converters handle regenerative power by passing clean, balanced power back onto the single-phase line when three-phase loads are in a generating mode. Most other power switching converters waste regenerative power by burning it up with braking resistors. Putting regenerative power back onto the line saves electrical power and even allows Phase Perfect to operate continuously as a three-phase to single-phase converter.

VERSATILITY

Phase Perfect® can safely power virtually any three-phase application within its rated capacity. It can power resistive and capacitive loads as well as motor or inductive loads. Its power quality makes it ideal for powering demanding loads such as CNC machine equipment, submersible pumps and other voltage sensitive applications. The Phase Perfect PT Series can operate with either 50 or 60Hz input.

EASY INSTALLATION AND OPERATION

Phase Perfect® is available with built-in contactor and adjustable solid state overload relay, which allows it to function as a motor starter for most single-motor applications. It also has a control circuit and terminals, which allows an external switch to control both the converter and the load. Installation is straightforward and simple and can usually be accomplished in minutes with a minimum of additional equipment required.

ECONOMY

Utility three-phase service can cost thousands of dollars to install, even when three-phase lines are nearby. Phase Perfect® is an affordable alternative that provides better phase balance than most utilities will specify for their service. It also protects three-phase equipment from damage due to under-voltage, over-voltage and single-phasing that can occur with AC mains power. Phase Perfect® is rugged, reliable and typically 97% efficient.

PHASE PERFECT[®]

DIGITAL PHASE CONVERTERS

Model PT380

FEATURES

- > Balanced three-phase voltages
- > High efficiency
- > Electronic power factor correction
- > High momentary overload current capacity
- > Automatic brownout and over-voltage protection
- > Fault protection and overload protection
- > Built-in motor starter capability
- > Clean power fed back to utility grid from three-phase generating loads
- > 50 or 60 Hz input frequency allows operation anywhere in the world

SPECIFICATIONS

Specifications are subject to change without notice.

SINGLE-PHASE POWER

1-phase current characteristics	Sinusoidal, 2% total harmonic distortion
Power factor	Near unity, all load conditions (.99)
Voltage	187 – 260 volts
Recommended maximum 1-phase circuit breaker rating	175-200 amps

THREE-PHASE POWER

Rated HP	30
3-phase power characteristics	Sinusoidal, 3% total harmonic distortion
Phase-to-phase voltage balance	Better than 1% (NEMA MG1 standard for voltage unbalance)
Voltage	Equal to single-phase input voltage – 187-260 volts
Maximum 3-phase current, steady state	96 amps
Overload current, 4 seconds	400 amps

PROTECTIVE FUNCTIONS

Under-voltage	Automatic shutdown <187 V, restart when >199 V
Over-voltage	Automatic shutdown >260 V, restart when <260 V
Internal temperature sensor	Automatic shutdown if overheated

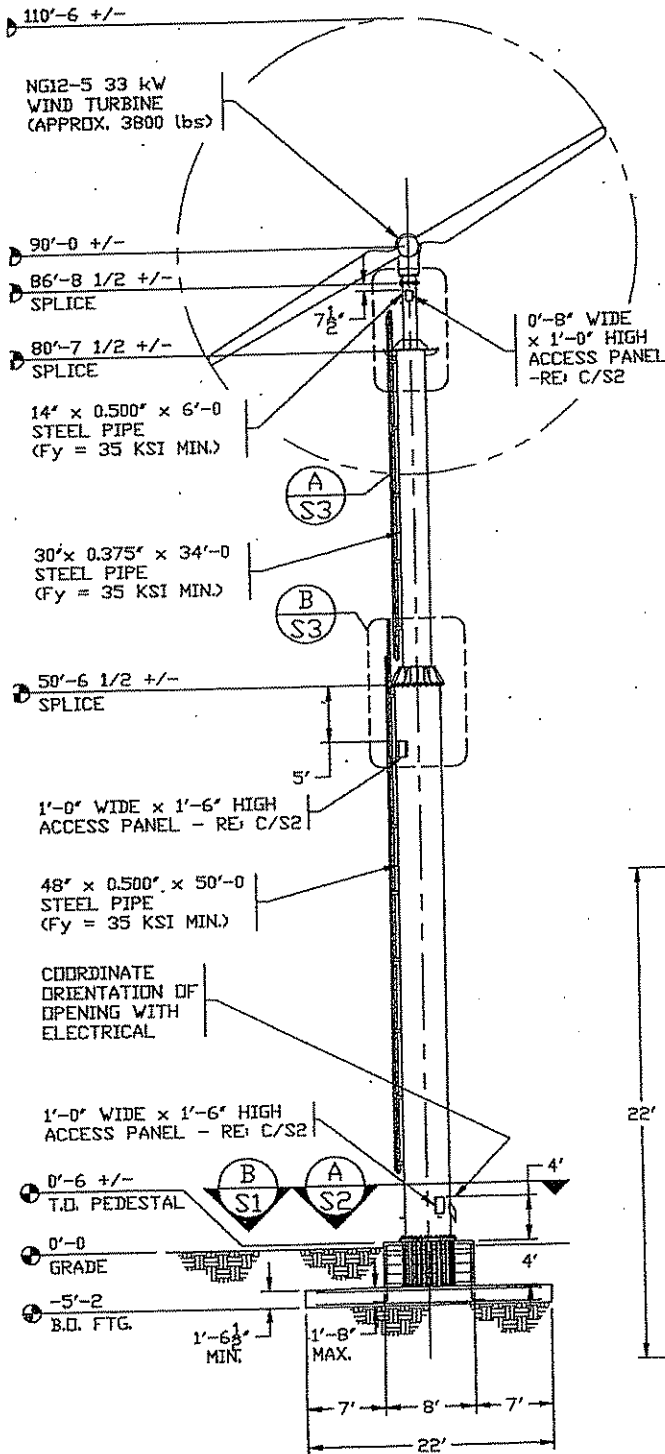
GENERAL

Efficiency	97% typical
Operating temperature range	-10 – 40 C
Storage temperature	-20 – 60 C
Weight	180 lb.
Enclosure	Powder coated steel, Type 1 indoor or Type 3R rain proof, and powder coated Al with EMI gasketing
Dimensions (H x W x D)	Wall mount
Type 1 indoor	31 x 24 x 13 in.
Type 3R rainproof	35 x 24 x 13 in.

OPTIONS

3-stage EMI filtering with EMI gasketed enclosure
Plasma display with 36 character text for status indicators
Built-in motor starter for controlling single motor loads

NOTE: ALL STEEL SHALL BE GALVANIZED PER ASTM A123 SPECIFICATIONS (3 MILS MIN.)

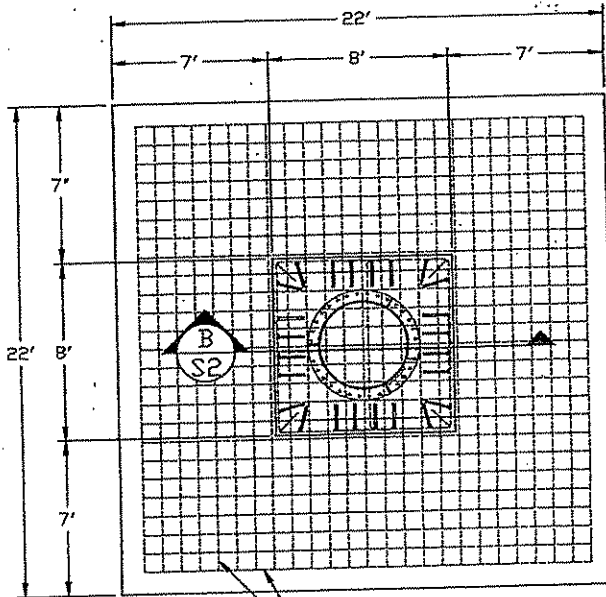


(A) ELEVATION

SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. DESIGN CRITERIA: THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS:
 - A. INTERNATIONAL BUILDING CODE 2006 EDITION
 - B. IBC 6100-1 INTERNATIONAL STANDARD WIND TURBINES - PART 1 DESIGN REQUIREMENTS:
 - i. WIND TURBINE CLASS II
 - ii. REFERENCE WIND SPEED 42.5 m/s (95.1 mph)
 - iii. REFERENCE TURBULENCE INTENSITY 0.16 (CATEGORY A)
 - iv. TURBULENCE MODEL 2-POINT EXPERIMENTAL COHERENCE MODEL
 - v. METHOD OF ANALYSIS SDDF TIME HISTORY MODEL
 - vi. PERIOD OF VIBRATION 0.96 S (FREQUENCY = 1.046 Hz)
 - C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION (AISC) MANUAL 13TH EDITION - INCLUDING FATIGUE PROVISIONS OF APPENDIX 3.
 - D. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-05)
2. CONCRETE:
 - A. ALL CONCRETE SHALL BE MIXED, TRANSPORTED, PLACED, FINISHED, CURED, AND TESTED IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE ACI 318-05 REQUIREMENTS AND ACI 301 SPECIFICATIONS.
 - B. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSF. CEMENT SHALL BE ASTM C150, TYPE II. AGGREGATES SHALL BE ASTM C33, 1" NOMINAL MAXIMUM SIZE. AIR ENTRAINING ADMIXTURE CONFORMING TO ASTM C260 SHALL BE USED TO ACHIEVE 4.5% TO 6% ENTRAINED AIR CONTENT. WATER SHALL BE POTABLE. THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55. WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C1017 MAY BE USED TO IMPROVE WORKABILITY. MAXIMUM CHLORIDE ION CONTENT SHALL NOT EXCEED 0.05% BY WEIGHT OF CEMENT.
 - C. PLACED CONCRETE SHALL BE MAINTAINED ABOVE 50 F AND CURED IN MOIST CONDITION FOR AT LEAST THE FIRST 7 DAYS.
 - D. IF WOUND IS FROZEN OR AMBIENT TEMPERATURE IS LESS THAN 40 DEGREES F, EITHER DELAY PLACEMENT, OR FOLLOW COLD WEATHER CONCRETING RECOMMENDATIONS OF ACI 306.
 - E. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A635 WITH A MINIMUM YIELD STRENGTH OF 60,000 PSF. SUPPLIER SHALL PROVIDE CHAIRS AND STANDEES AS REQUIRED TO MAINTAIN PLACEMENT AND CLEAR COVER REQUIREMENTS SHOWN ON THE DRAWINGS.
 3. STRUCTURAL STEEL:
 - A. ALL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE.
 - B. PIPES SHALL CONFORM TO ASTM A53 OR A36 SPECIFICATIONS OR APPROVED SUBSTITUTE. PLATES AND MISC. STEEL SHALL CONFORM TO ASTM A36 SPECIFICATIONS.
 - C. BOLTS SHALL BE GALVANIZED ASTM A325-N BOLTS WITH NUTS AND HARDENED WASHERS. THE ERECTOR MAY USE TENSION INDICATING WASHERS OR "TURN-OF-THE-NUT" METHOD TO VERIFY ADEQUATE TIGHTENING.
 - D. ANCHOR BOLTS SHALL BE GALVANIZED ASTM A36 (36KSD) OR APPROVED SUBSTITUTE.
 - E. WELDING SHALL BE PERFORMED PER AWS D11 SPECIFICATIONS BY A CERTIFIED WELDER, USING E70 ELECTRODES. ALL WELDING SHALL BE PERFORMED IN THE SHOP PRIOR TO HOT-DIP GALVANIZING.
 - F. ALL STEEL SHALL BE GALVANIZED PER ASTM A123 SPECIFICATIONS, MIN. THICKNESS = 3 MILS. PIPES MAY BE GALVANIZED IN OUTSIDE ENCL.
 4. FOUNDATION:
 - A. THE SPREAD FOOTING FOUNDATION HAS BEEN DESIGNED ASSUMING A MINIMUM BEARING CAPACITY OF 1500 PSF. THE ACTUAL BEARING CONDITION SHALL BE VISUALLY OBSERVED AND APPROVED BY EITHER THE STRUCTURAL ENGINEER, A GEOTECHNICAL ENGINEER, OR THE BUILDING OFFICIAL, TO THE SATISFACTION OF THE BUILDING OFFICIAL.



(B) FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

50 - #7 X 20'-0" BOTTOM BARS (25 EACH WAY at 10' o.c.) AND 50 - #5 X 20'-0" TOP BARS (25 EACH WAY at 10' o.c.)

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STRUCTURAL SHEET 1 OF 3

S1

STRUCTURAL ELEVATION

90' CANTILEVERED TOWER FOR NG12-5 WIND TURBINE VARIOUS U.S. LOCATIONS

36 Bear Run Circle
Hickory Lake, TN 37049
Office: 603-848-4743
Fax: 603-848-4744
ajenergy@njenergy.com

A J Energy, Inc.

LICENSED PROFESSIONAL ENGINEER

JASON P. ONYIA

19187

01/28/2008

STATE OF NEW JERSEY

MAY 18 2009

May 15th, 2009

RECEIVED
MAY 18 2009

Lynette DuFresne
Investigator
The Minnesota Board of Architecture, Engineering, Land Surveying, Landscape
Architecture, Geoscience & Interior Design
85 East 7th Place, Suite 160
St. Paul, MN 55101

RE: Jason O'Mara, Unlicensed, File No. 2009-0061

Dear Ms. DuFresne:

This letter is my response to the complaint that has been filed against me alleging that I may have held myself out to the public as a professional engineer and/or practiced professional engineering without a license in the State of Minnesota when I provided drawings and an engineering certification for the Tower and Foundation Design for the Proposed Kohlhofer Farms Wind Turbine Projects near Goodhue, Minnesota, for Mr. Kohlhofer, 35559 County 45 Boulevard, Lake City, Minnesota, 55041.

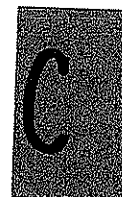
The following is my account of the events and circumstances leading to and giving rise to the complaint:

A J Energy is a new business, incorporated in South Dakota in the Fall of 2008. We sell farm-scale wind turbine systems, primarily to hog farmers. We do most of our business in the state of Iowa, where I am licensed as a professional engineer. I am also licensed in the state of Colorado (#39824), where I worked for a mid-sized consulting firm as a Project Engineer until October of 2008.

Mr. Kohlhofer's project is our first and only project in the state of Minnesota. Mr. Kohlhofer is in the beginning stages of applying for a USDA grant program to help fund the project. One of the conditions for this USDA grant program is that any money spent prior to completion and submittal of the application to the USDA will be ineligible for the program. For this reason, we have not yet signed a contract, sent any invoice, or collected any money from Mr. Kohlhofer.

During our sales visit, I provided Mr. Kohlhofer with unstamped drawings and specifications as part of our sales literature. Once he had decided to proceed with the project, he was eager to get the permitting process started with Goodhue County. I informed Mr. Kohlhofer that I am not licensed in Minnesota, but that I would be

EXHIBIT



sending in my application soon, and I estimated that it would take 2 to 3 months for the application to be reviewed and for a decision to be made. Given the fact that there would be a 10 to 12 week lead time for the wind turbine, and the fact that we would not be placing the order for a few weeks while we finished the USDA grant application, I told him that I felt comfortable that I would be able to get licensed in time for the project, but that we may have to hire a Minnesota licensed engineer to oversee the project if I were unable to obtain the Minnesota license in time.

Mr. Kohlnhofer informed me that he had not been required to obtain certification from a professional engineer for previous agricultural structures on his property and that he believed that engineering certification would not be required in this case. He asked that I send the drawings, a letter explaining that the design of the foundation system was based on the default "worst case" soil conditions in the International Building Code, and a letter outlining the plan for decommissioning, all with my Iowa P.E. stamp affixed. He assured me that he understood, and that the Goodhue County board (with whom he is acquainted) would understand that my Iowa P.E. is not valid in the state of Minnesota, but he felt that it would add some credibility and assurance for the Goodhue County board if they knew that I am licensed in Iowa.

To summarize and clarify: The intention was to try to obtain a permit without engineering certification under an exemption for agricultural structures. The Iowa P.E. stamp was affixed in an effort to add credibility, but with the full understanding that it was not intended to be a substitute for a Minnesota P.E. If Goodhue County were to rule that P.E. certification is required, we would either wait until I received my Minnesota P.E. to re-submit for permit, or hire an engineer already licensed in Minnesota to oversee the project.

I understand now, after having this read back to me, that red flags should have been flying, and I should have refused to stamp the documents with my Iowa stamp. My only defense, I think, is that this was a rookie mistake. Up until this past fall, all of my work has been overseen and stamped by the principals at the companies that I used to work for.

Regarding the four items that were specifically requested by the board:

1. There are no other certified plans, letters or invoices issued under my signature regarding the Kohlnhofer Farms Wind Turbine Projects (other than those already included in the complaint).
2. We have not used any letterhead, advertisements, or solicitous materials in the state of Minnesota between April 28th and the date of your letter. We HAVE used some in the state of Iowa, but I assume that this is irrelevant. Please let me know if it isn't.
3. I have not distributed business cards in the state of Minnesota between April 28, 2009 and the date of your letter. I HAVE distributed some in the state of Iowa, but I assume that this is irrelevant. Please let me know if it isn't.

4. I have not written or had any articles published between April 28th and the date of your letter.

I sincerely apologize for the trouble that I have caused.

Respectfully,

A handwritten signature in black ink, appearing to read "J. O.", followed by a horizontal line.

Jason P. O'Mara
A J Energy, Inc.
36 Deer Run Circle
McCook Lake, SD 57049
Phone: 402-380-6330

