

**RAYMOND CENTRAL PUBLIC SCHOOLS - DISTRICT #55-0161**  
BOARD OF EDUCATION WORKSHOP, TUESDAY, AUGUST 6, 2019 - 5:00 PM  
JR/SR HIGH SCHOOL MUSTANG CLASSROOM  
1800 WEST AGNEW ROAD  
RAYMOND, NE 68428-9783

**AGENDA**

1. Call to Order and Pledge of Allegiance
2. Motion to Excuse Board Member's Absence
3. Open Meeting Law
4. Public Forum
5. Discussion Items
  - 5.1. Costco Chicken Operation Location to the Jr / Sr. High School - Consider, discuss and take all necessary action
6. Adjournment



# JOHNS HOPKINS

CENTER *for* A LIVABLE FUTURE

The Johns Hopkins Center for a Livable Future  
Bloomberg School of Public Health  
615 North Wolfe Street, W7010  
Baltimore, MD 21205

September 19, 2016

Mayor Getzschman and Fremont City Council  
400 E. Military Ave.  
Fremont, NE 68025

*Disclaimer: The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.*

RE: Costco Wholesale and Lincoln Premium Poultry Processing Plant and Broiler Production

Dear Mayor Getzschman and members of the Fremont City Council,

We are researchers at The Johns Hopkins Center for a Livable Future, based at the Bloomberg School of Public Health in the Department of Environmental Health and Engineering. The Center engages in research, policy analysis, education, and other activities guided by an ecologic perspective that diet, food production, the environment, and public health are interwoven elements of a complex system. We recognize the prominent role that food animal production plays regarding a wide range of public health issues surrounding that system.

We have been contacted by citizens of Dodge County who are concerned about Lincoln Premium Poultry and Costco Wholesale's proposed poultry processing plant south of Fremont. Citizens have also voiced concern about plans for approximately 400 new broiler\* houses in the area, which would house a combined 17 million broilers (approximately 19 times larger than Nebraska's 2012 broiler inventory).† In response to local citizens' concerns, below we present a summary of the peer-reviewed scientific literature on the human health and environmental concerns associated with poultry processing facilities and industrial broiler production. Detailed

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\* Chicken raised for meat

† U.S. Department of Agriculture. Nebraska State Profile, 2012 Census of Agriculture. National Agricultural Statistical Service Website.  
[https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Nebraska/cp99031.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Nebraska/cp99031.pdf).  
Published 2012. Accessed July 18, 2016.

information regarding these concerns can be found in Appendices I and II. We have also reviewed information provided by the Greater Fremont Development Council regarding plans Lincoln Premium Poultry and Costco Wholesale have to address some community concerns, such as worker safety, water use, wastewater treatment, poultry transport, traffic, waste management and spread of disease.<sup>‡</sup> It is possible that these planned activities and practices could reduce risks to workers and community members, but many of the proposed plans lack regulatory requirements and enforcement mechanisms. Therefore, we are considering all relevant literature related to poultry processing plants and production operations to fully describe potential risks.

Based on evidence from numerous scientific studies of industrial poultry operations and processing facilities, the operations proposed by Costco Wholesale and Lincoln Premium Poultry may present a range of health risks to members of the surrounding communities. We recommend that these risks are taken into account as decisions are made about i) the future of this project and ii) requirements for active monitoring and plans for responding if human health risks or environmental degradation are identified.

## **Summary**

There are serious human health and environmental concerns associated with large poultry processing plants, including occupational risks, exposure to air pollution and pathogens, and the environmental impacts of excessive water use and wastewater discharge (for a more in-depth review of these concerns and references, please refer to Appendix I on pages 5-6). The poultry processing industry has some of the highest injury rates among U.S. industries, and processing plant workers are at risk of exposure to pathogens, including those that are drug resistant, which can be spread to family members and the surrounding community. The anticipated increase in vehicular traffic to and from the processing plant may increase traffic-related air pollution, increasing the risk of developing or exacerbating respiratory and other conditions. Johns Hopkins researchers have also found that poultry trucks driving to processing plants can spread harmful bacteria, including drug-resistant bacteria, into the environment, exposing other drivers, pedestrians, and rural communities to these bacteria. Lastly, poultry processing plants require a substantial amount of water and discharge potentially hazardous wastewater. The extensive water needs of processing plants may affect the availability of water that neighboring communities need for drinking and household use, and wastewater high in nutrients, suspended solids, fecal coliforms and possibly pathogenic bacteria could threaten water quality if discharged into waterways.

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<sup>‡</sup> Greater Fremont Development Council. Project Rawhide FAQ. [http://www.fremontecodev.org/media/userfiles/subsite\\_34/files/RAWHIDE/Project%20Rawhide%20FAQ%204%2022%2016.pdf](http://www.fremontecodev.org/media/userfiles/subsite_34/files/RAWHIDE/Project%20Rawhide%20FAQ%204%2022%2016.pdf). Published April 22, 2016. Accessed August 5, 2016.

Industrial broiler production is also associated with a range of human health and environmental risks (a more in-depth review of these risks, including references, is provided in Appendix II on pages 7-10). The dense confinement used in industrial broiler operations present opportunities for disease transmission among animals, and between animals and humans. Nearby residents, especially if they live in proximity to multiple operations, may have an increased risk of infection from the transmission of harmful microorganisms from broiler operations via flies or contaminated air and water. Community members living near broiler operations also face increased exposure to air pollution from broiler operations, which can exacerbate respiratory conditions including asthma, bronchitis, and allergic reactions. Manure from broiler operations can also contaminate ground and surface waters with nitrates, drug residues, and other hazards. Increased exposure to these agents is associated with adverse health effects, including cancer, birth defects, thyroid problems, methemoglobinemia, neurological impairments, and liver damage.

### **Recommendations**

We recognize that the Greater Fremont Development Council, Costco Wholesale, and Lincoln Premium Poultry have identified some steps to reduce risks to poultry workers and the community. Many of these plans fall outside of the current regulatory structure that applies to poultry production and processing facilities, so monitoring and enforcement is unlikely to occur without strict requirements developed by the City Council and other government agencies. To address existing regulatory gaps, we recommend developing a plan for robust, transparent environmental monitoring that includes baseline and periodic testing of air and water quality around production sites and the processing plant facilities. The plan should also clearly state what actions would be required of Costco Wholesale and/or Lincoln Premium Poultry if environmental contamination and increased human health risks were found.

### **Conclusion**

We appreciate your consideration of environmental and human health risks associated with industrial poultry production and processing. We are available to answer any questions about the information we have presented. Through our research, we know that local government agencies

often face barriers related to regulating industrial food animal production due to narrow regulations and limited resources,<sup>§</sup> and we are prepared to serve as a resource to your office.

Sincerely,

**Jillian P. Fry, PhD, MPH**

Assistant Scientist, Department of Environmental Health and Engineering  
Johns Hopkins Bloomberg School of Public Health  
Project Director, Food Production and Public Health  
Johns Hopkins Center for a Livable Future  
Johns Hopkins University

**Robert Martin**

Senior Lecturer, Department of Environmental Health and Engineering  
Johns Hopkins Bloomberg School of Public Health  
Program Director, Food System Policy  
Johns Hopkins Center for a Livable Future  
Johns Hopkins University

**Claire M. Fitch, MSPH**

Program Officer, Food Systems Policy  
Johns Hopkins Center for a Livable Future  
Johns Hopkins University

**Carolyn R. Hricko, MPH**

Research Assistant, Food Systems Policy  
Johns Hopkins Center for a Livable Future  
Johns Hopkins University

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<sup>§</sup> Fry JP, Laestadius LI, Grechis C, Nachman KE, Neff RA. Investigating the role of state and local health departments in addressing public health concerns related to industrial food animal production sites. *PLoS one*. 2013;8(1):e54720.

Fry JP, Laestadius LI, Grechis C, Nachman KE, Neff RA. Investigating the role of state permitting and agriculture agencies in addressing public health concerns related to industrial food animal production. *PLoS one*. 2014;9(2):e89870.

## **Appendix I. Environmental and human health concerns associated with poultry processing**

The main environmental and human health concerns associated with large poultry processing plants are:

- Occupational safety risks including injury and exposure to pathogens;
- Air pollution from increased traffic;
- Exposure of citizens to pathogens from poultry transport trucks; and
- Environmental impacts due to excessive water use and wastewater discharge.

### **Occupational safety risks for workers**

There are significant occupational safety risks for slaughterhouse workers. According to the U.S. Government Accountability Office, the poultry processing industry ranks among the highest among all industries in the U.S. for occupational injury rates.<sup>1</sup> In addition, poultry processing plant workers, particularly those who are in contact with live poultry or carcasses, are at risk of exposure to pathogens.<sup>2</sup> Researchers have also found that poultry processing plant workers are at a higher risk than the general public of being carriers of drug resistant pathogens, such as methicillin-resistant *Staphylococcus aureus* (MRSA).<sup>3</sup> These pathogens can cause infections that are harder to treat due to their resistance to certain antibiotics, and workers can spread these pathogens to their families and other community members.<sup>4-6</sup>

Our understanding is that Costco Wholesale and Lincoln Premium Poultry may plan to raise poultry without the routine use of antibiotics. While this practice would likely lessen the risk to workers and community members of infection with antibiotic-resistant bacteria, pathogens (antibiotic-resistant or otherwise) may still spread from industrial livestock operations to workers and into communities.<sup>7</sup>

### **Air pollution from increased traffic**

The proposed poultry processing facility will increase vehicular traffic significantly due to the transportation needs of the 1,100 anticipated employees, the poultry transport trucks traveling to and from the 400 planned broiler houses, as well as other transport related to management and distribution operations. Air pollution from traffic increases the risk of developing or exacerbating respiratory and other conditions.<sup>8</sup>

### **Exposure to pathogens from transport trucks**

Poultry transportation also has another important health risk. In 2008, Johns Hopkins researchers found that poultry trucks driving to processing plants spread harmful bacteria into the environment, exposing other drivers, pedestrians, and rural communities to these bacteria.

Researchers consistently detected drug-resistant bacteria in the air and on surfaces inside vehicles while driving behind poultry trucks.<sup>9</sup> The study was conducted on a roadway as poultry trucks were transporting live birds to a processing plant. It is likely that driving behind poultry trucks in Dodge County would produce similar outcomes. This study exemplifies one facet of the increased burden of risk that the community may face as a result of having hundreds of thousands of birds transported to the proposed processing plant each day. According to the Greater Fremont Development Council, poultry transport trucks and the processing plant receiving dock will be enclosed.<sup>10</sup> These steps may reduce the risk to community members, and should therefore be both required and monitored.

### **Excessive water use and wastewater discharge**

Poultry processing is a water-intensive endeavor, requiring, on average, seven gallons of potable water per bird.<sup>11</sup> The Fremont City Council's decision to annex the land under consideration for the poultry processing plant allows the city to extend utilities services, including water, to this area. It is essential that the water allocation to the processing plant not impact the availability of water to the neighboring communities that also rely on this water source for drinking and household use.

In addition, the discharge of processing plant wastewater is a potential hazard to nearby waterways and communities. Poultry processing plant effluents are high in nitrogen, phosphorus, and total suspended solids,<sup>12</sup> all of which could threaten water quality if discharged into waterways. The proposed poultry processing plant would be a source of these nutrients, as well as fecal coliforms and possibly other pathogenic bacteria,<sup>13</sup> discharged into the surrounding waterways including the Platte River, a major tributary of the Missouri River. Dodge County encompasses four watersheds (the Lower Platte-Shell, Lower Platte, Lower Elkhorn and Logan), all of which contain water bodies considered impaired in 2014, the most recent reporting year.<sup>14</sup> Nitrogen, phosphorus and pathogens are already among the listed contaminants causing the impairment of these water bodies.<sup>14</sup>

In light of these concerns, it is especially important to ensure that the City of Fremont and Costco Wholesale maintain their commitment to treat all wastewater from the processing facility at the city's municipal wastewater treatment plant.<sup>10</sup> Baseline and periodic monitoring should be conducted to ensure that the processing plant does not adversely affect the water quality in the area.

## Appendix II. Human health concerns associated with industrial broiler production

The main human health concerns associated with industrial broiler production include:

- Infections resulting from the potential transmission of harmful microorganisms from broiler operations to nearby residents, for example, via flies or contaminated air and water;
- Increased exposure to air pollution from broiler operations associated with health effects, including exacerbation of asthma, bronchitis, and allergic reactions; and
- Increased exposure to nitrates, drug residues, and other hazards that may be present in ground and/or surface waters contaminated by manure from broiler operations associated with health effects, including thyroid problems, methemoglobinemia, neurological impairments, and liver damage.

### Disease transmission

Crowded conditions in industrial broiler operations present opportunities for the transmission of bacterial pathogens among animals, and between animals and humans.<sup>15</sup> Human exposure to infectious agents can occur through multiple routes, including breathing contaminated air and drinking contaminated water.<sup>6,9,16-18</sup>

Of additional concern is exposure to pathogens that are resistant to antibiotics used in human medicine. The non-therapeutic use of antibiotic drugs as a means for growth promotion<sup>\*\*</sup> in animals is commonplace—an estimated 80 percent of antibiotics sold for human and animal uses in the U.S. are sold for use in food-producing animals.<sup>19</sup> Administering antibiotics to animals at levels too low to treat disease fosters the proliferation of antibiotic-resistant pathogens. Resistant infections in humans are more difficult and expensive to treat<sup>20</sup> and more often fatal<sup>21</sup> than infections with non-resistant strains. As mentioned previously, it is our understanding that antibiotics may not be used in the proposed broiler production. While this may reduce the risk of infection with antibiotic resistant-bacteria to community members and workers, pathogens can still spread from poultry operations to communities.<sup>7</sup>

A growing body of evidence provides support that pathogens can be found in and around broiler operations. In broiler operations that administer antibiotics for non-therapeutic purposes, broilers have been shown to be carriers of antibiotic-resistant pathogens<sup>22,23</sup> and these resistant pathogens have also been found in the environment in and around broiler production facilities, specifically in the manure<sup>24,25</sup> and flies.<sup>26</sup> Additionally, *Salmonella* and *Campylobacter* are highly prevalent among U.S. broilers, and *Campylobacter* is found in about 50% of manure samples.<sup>3</sup>

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\*\* U.S. Food and Drug Administration (FDA) voluntary industry guidelines continue to endorse the use of antibiotics in livestock production for “disease prevention”, which allows for dosing that is largely indistinguishable from growth promotion, thus tolerating business as usual.

*Campylobacter* infections in people have led to gastrointestinal illness, neuromuscular paralysis, and arthritis.<sup>3</sup> Manure runoff from broiler operations may introduce these harmful microorganisms into nearby water sources. Land application of broiler manure may present an opportunity for pathogens contained in the manure to leach into the ground or run off into recreational water and drinking water sources, potentially causing a waterborne disease outbreak.<sup>25</sup> This is of particular concern for the approximately 16% of Dodge County residents who rely on private wells for drinking water and household use.<sup>27</sup>

Several studies have shown that workers in broiler operations are disproportionately exposed to pathogens: in a Dutch study, 5.6% of workers in broiler houses were carriers of MRSA<sup>28</sup> vs. 0.01% of the general population, and workers in broiler houses on the Delmarva Peninsula were found to have 32 times the odds of carrying gentamicin-resistant *E. coli* compared with other residents in the community.<sup>6</sup> Colonized or infected workers may transport pathogens into their communities.<sup>6</sup>

People living near broiler operations may be exposed to harmful microorganisms, which have been found to spread in the air up to 3,000 meters from broiler operations.<sup>16</sup> The shape and spread of this airflow varies with changes in wind patterns, making it difficult to predict which residents might be most affected.<sup>16</sup> Infectious agents have been found on deposits of particulate matter several miles from operations.<sup>16</sup> Harmful bacteria such as *Campylobacter* have been reported to enter and leave poultry operations via insects and ventilation systems.<sup>18</sup>

The elevated presence of flies near broiler operations can be more than a nuisance; it also may facilitate residents' exposure to pathogens, including antibiotic-resistant strains of *Enterococci* and *Staphylococci*.<sup>9,18</sup> One study found that residences within a 0.5 mile of broiler operations had 83 times the average number of flies compared to control households.<sup>28</sup>

### **Air pollution from broiler operations**

The air inside broiler operations contains elevated concentrations of gases, particulate matter, pathogens, endotoxins, and other hazards.<sup>9,17,18,29,30</sup> While these studies provide important insights on worker exposure to broiler operation air pollution, additional studies are needed to characterize community exposures and health outcomes. Despite the need for more research, some studies suggest that communities face health risks from poultry operation air pollution. For example, airborne contaminants from broiler operations are transported from broiler houses through large exhaust fans and may pose a health risk to nearby residents.<sup>16,18,25,31-36</sup> In addition, ammonia,<sup>37</sup> particulate matter,<sup>25</sup> endotoxins,<sup>35</sup> and microorganisms<sup>16,18,25</sup> have been detected in air samples surrounding poultry operations. While there are currently few data available on odor, nitrous oxide, hydrogen sulfide, and non-methane volatile organic compound levels surrounding poultry operations, odors associated with air pollutants from intensive livestock hog operations

have been shown to interfere with daily activities, quality of life, social gatherings, and community cohesion.<sup>29,33,38</sup>

Exposure to airborne contaminants expelled from broiler operations has been associated with a range of adverse health effects. Ammonia emissions have been implicated in respiratory health issues, with up to 50% of poultry workers suffering from upper respiratory illnesses that are believed to be due to ammonia exposure.<sup>31</sup> Studies have shown that endotoxin exposure can exacerbate pre-existing asthma or induce new cases of asthma, and exposure was found to be a significant predictor of chronic phlegm for poultry workers.<sup>33,39</sup> Additionally, poultry workers demonstrated a high prevalence of obstructive pulmonary disorders, with increasing prevalence associated with longer exposure, regardless of smoking status.<sup>34</sup> Particulate matter—consisting mainly of down feathers, mineral crystals from urine, and poultry litter in broiler operations—may also have detrimental effects on human health, causing chronic cough and phlegm, chronic bronchitis, allergic reactions, asthma-like symptoms in farmers, and respiratory problems in people living in the vicinities of operations.<sup>35</sup>

A 2010 USDA study measured volatile organic compounds (VOCs) inside industrial broiler operations and found that not only were ten classes of VOCs present, but that areas of the compound with birds had VOC levels seven fold higher than those without birds.<sup>40</sup> Exposure to VOCs is associated with short- and long-term adverse health effects, including nausea; headaches; eye, nose and throat irritation; and liver and kidney damage, while some are suspected or known to cause cancer.<sup>41</sup> It is important to note that even industrial broiler operations that employ best management practices and mitigation techniques have been shown to generate airborne contaminants.<sup>32</sup>

### **Contaminated ground and surface water**

Based on manure production data from the American Society of Agricultural Engineers,<sup>42</sup> 17 million broilers would produce an estimated 3,910,000 pounds of waste per day (0.23 lbs. per bird), or more than twice the equivalent amount of human waste generated daily by the entire city of Omaha, Nebraska's largest city. Although animal manure is an invaluable fertilizer, waste quantities of this magnitude - concentrated over a small geographic footprint - represent a public health and ecological hazard.

Manure from industrial poultry operations contain nutrients and may contain heavy metals, drug residues, and pathogens that can leach into groundwater or runoff into surface water.<sup>17,28,36,43,44</sup> Studies have demonstrated that humans can be exposed to waterborne contaminants from livestock and poultry operations through the recreational use of contaminated surface water and the ingestion of contaminated drinking water.<sup>30,44</sup> Furthermore, the disposal and decomposition

of diseased poultry carcasses may contaminate water sources and pose a threat to human health.<sup>28</sup>

The nutrients nitrogen and phosphorus--naturally occurring in chicken manure--have been found in both ground and surface water near Maryland broiler chicken operations<sup>45</sup> and can have deleterious effects on water quality and human health.<sup>25,28,30,34,44,46-48</sup> In one study, proximity to broiler chicken and corn production was associated with higher nitrate concentrations in drinking water in Maryland wells.<sup>46</sup> Ingesting high levels of nitrate has been associated with increased risks for thyroid conditions,<sup>30,49,50</sup> birth defects and other reproductive problems,<sup>30,50,51</sup> diabetes,<sup>30,50</sup> various cancers,<sup>50,52</sup> and methemoglobinemia (blue baby syndrome), a potentially fatal condition among infants.<sup>30,53</sup> As stated previously, approximately 16% of Dodge County residents rely on private wells for drinking water,<sup>27</sup> so there is cause for concern regarding the spread of nitrate into groundwater that is used for drinking and other household uses and is not monitored by government agencies.

Nutrient runoff has also been implicated in the growth of harmful algal blooms,<sup>25,28,47</sup> which may pose health risks for people who swim or fish in recreational waters, or who consume contaminated fish and shellfish. Exposure to algal toxins has been linked to neurological impairments, liver damage, gastrointestinal illness, severe dermatitis, and other adverse health effects.<sup>54,55</sup> According to the Nebraska Department of Environmental Quality (NDEQ), water quality degradation is already a concern for sandpit lakes in the state.<sup>56</sup> These lakes, used for fishing, swimming, and other recreational activities, are affected by nutrient loading, especially phosphorus, leading to eutrophication.<sup>56</sup> Fremont Lake #20 near the city of Fremont is one of the lakes affected by nutrient runoff. Algal toxins discovered in the lake from 2005 to 2007 resulted in significant restrictions on recreational water use and monitoring of water quality during this period identified high concentrations of phosphorus and nitrogen as the cause of blue green algae blooms.<sup>56</sup> More recently, eight lakes in the Fremont State Lake System were identified as impaired by nutrients in the NDEQ 2012 Water Quality Integrated Report.<sup>57</sup> Introducing a poultry processing plant and waste from 17 million birds will likely exacerbate existing water quality issues, and introduce nutrient runoff to previously unaffected areas.

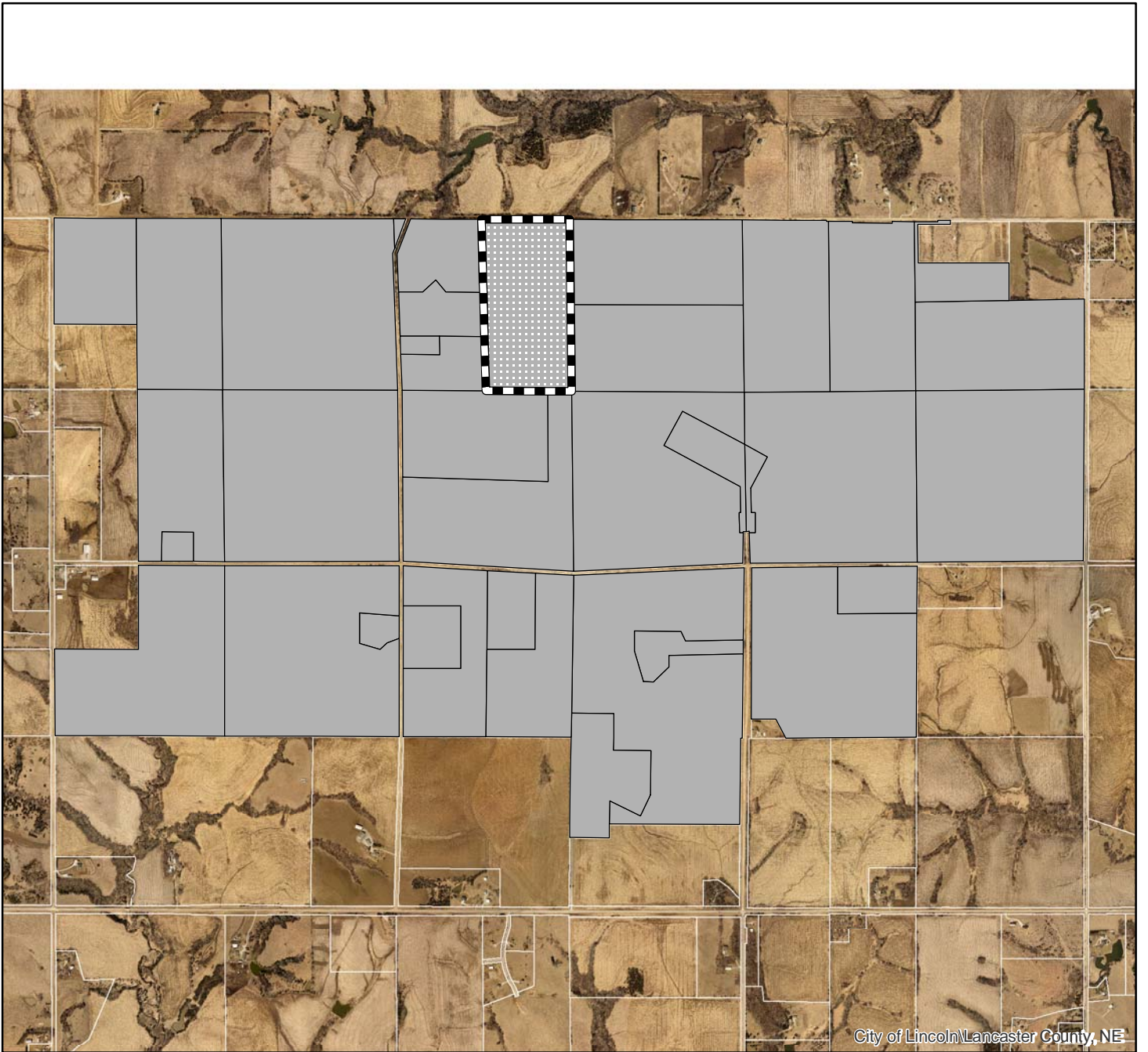
## References

1. Government Accountability Office (GAO). Workplace safety and health: Safety in the meat and poultry industry, while improving, could be further strengthened. Report to the ranking minority member, Committee on Health, Education, Labor, and Pensions, U.S. Senate (report no. GAO-05-96) Washington: GAO. Published 2005.
2. You Y, Leahy K, Resnick C, Howard T, Carroll KC, Silbergeld EK. Exposure to pathogens among workers in a poultry slaughter and processing plant. *Am J Ind Med.* 2016;59(6):453-464.
3. Mulders M, Haenen A, Geenen P, et al. Prevalence of livestock-associated MRSA in broiler flocks and risk factors for slaughterhouse personnel in the Netherlands. *Epidemiol Infect.* 2010;138(05):743-755.
4. Centers for Disease Control and Prevention. About antimicrobial resistance. <http://www.cdc.gov/drugresistance/about.html>. Updated 2015. Accessed July 21, 2016.
5. Smith TC, Pearson N. The emergence of Staphylococcus aureus ST398. *Vector-Borne and Zoonotic Diseases.* 2011;11(4):327-339.
6. Price LB, Graham JP, Lackey LG, Roess A, Vailes R, Silbergeld E. Elevated risk of carrying gentamicin-resistant Escherichia coli among US poultry workers. *Environ Health Perspect.* 2007:1738-1742.
7. Casey JA, Kim BF, Larsen J, Price LB, Nachman KE. Industrial food animal production and community health. *Current environmental health reports.* 2015;2(3):259-271.
8. Laumbach RJ, Kipen HM. Respiratory health effects of air pollution: Update on biomass smoke and traffic pollution. *J Allergy Clin Immunol.* 2012;129(1):3-11.
9. Rule AM, Evans SL, Silbergeld EK. Food animal transport: A potential source of community exposures to health hazards from industrial farming (CAFOs). *Journal of Infection and Public Health.* 2008;1(1):33-39.
10. Greater Fremont Development Council. Project rawhide FAQ. [http://www.fremontcodev.org/media/userfiles/subsite\\_34/files/RAWHIDE/Project%20Rawhide%20FAQ%204%2022%2016.pdf](http://www.fremontcodev.org/media/userfiles/subsite_34/files/RAWHIDE/Project%20Rawhide%20FAQ%204%2022%2016.pdf). Published April 22, 2016. Accessed August 5, 2016.
11. Northcutt J, Jones D. A survey of water use and common industry practices in commercial broiler processing facilities. *The Journal of Applied Poultry Research.* 2004;13(1):48-54.
12. Plumber H, Kiepper B, Ritz C. Effects of broiler carcass bleed time and scald temperature on poultry processing wastewater. *The Journal of Applied Poultry Research.* 2012;21(2):375-383.
13. United States Environmental Protection Agency (EPA). Technical development document for the final effluent limitations guidelines and standards for the meat and poultry products point source category (40 CFR 432), EPA-821-R-04-011. [https://www.epa.gov/sites/production/files/2015-11/documents/meat-poultry-products\\_tdd\\_2004\\_0.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/meat-poultry-products_tdd_2004_0.pdf). Published 2004. Accessed August 5, 2016.
14. U.S. EPA. Nebraska impaired waters and TMDL information. [https://iaspub.epa.gov/waters10/attains\\_state.control?p\\_state=NE&p\\_cycle=2014&p\\_report\\_type=T](https://iaspub.epa.gov/waters10/attains_state.control?p_state=NE&p_cycle=2014&p_report_type=T). Updated July 21, 2016. Accessed July 21, 2016.

15. Gomes A, Quinteiro-Filho W, Ribeiro A, et al. Overcrowding stress decreases macrophage activity and increases Salmonella enteritidis invasion in broiler chickens. *Avian Pathol.* 2014;43(1):82-90.
16. Baykov B, Stoyanov M. Microbial air pollution caused by intensive broiler chicken breeding. *FEMS Microbiol Ecol.* 1999;29(4):389-392.
17. Spencer JL, Guan J. Public health implications related to spread of pathogens in manure from livestock and poultry operations. *Public Health Microbiology: Methods and Protocols.* 2004:503-515.
18. Graham JP, Leibler JH, Price LB, et al. The animal-human interface and infectious disease in industrial food animal production: Rethinking biosecurity and biocontainment. *Public Health Rep.* 2008:282-299.
19. United States Food and Drug Administration (FDA). Letter to the Honorable Louise M. Slaughter: Sales of antibacterial drugs in kilograms. Washington D.C. 2010.
20. Roberts RR, Hota B, Ahmad I, et al. Hospital and societal costs of antimicrobial-resistant infections in a Chicago teaching hospital: Implications for antibiotic stewardship. *Clin Infect Dis.* 2009;49(8):1175-1184.
21. Filice GA, Nyman JA, Lexau C, et al. Excess costs and utilization associated with methicillin resistance for patients with Staphylococcus aureus infection. *Infection Control & Hospital Epidemiology.* 2010;31(04):365-373.
22. Smith JL, Drum DJ, Dai Y, et al. Impact of antimicrobial usage on antimicrobial resistance in commensal Escherichia coli strains colonizing broiler chickens. *Appl Environ Microbiol.* 2007;73(5):1404-1414.
23. Price LB, Lackey LG, Vailes R, Silbergeld E. The persistence of fluoroquinolone-resistant Campylobacter in poultry production. *Environ Health Perspect.* 2007:1035-1039.
24. Graham JP, Evans SL, Price LB, Silbergeld EK. Fate of antimicrobial-resistant enterococci and staphylococci and resistance determinants in stored poultry litter. *Environ Res.* 2009;109(6):682-689.
25. U.S. EPA. Literature review of contaminants in livestock and poultry manure and implications for water quality. July 2013:1-137.
26. Graham JP, Price LB, Evans SL, Graczyk TK, Silbergeld EK. Antibiotic resistant enterococci and staphylococci isolated from flies collected near confined poultry feeding operations. *Sci Total Environ.* 2009;407(8):2701-2710.
27. United States Geological Survey (USGS). USGS Water Use Data for the Nation. <http://waterdata.usgs.gov/nwis/wu>. Updated June 8, 2016. Accessed July 21, 2016.
28. Gerber, P., Opio, C., Steinfeld, H. Poultry production and the environment: A review. Animal Production and Health Division, Food and Agriculture Organization of the United Nations. Web site. [http://www.fao.org/Ag/Againfo/home/events/bangkok2007/docs/part2/2\\_2.pdf](http://www.fao.org/Ag/Againfo/home/events/bangkok2007/docs/part2/2_2.pdf). Published 2008.
29. Donham KJ, Wing S, Osterberg D, et al. Community health and socioeconomic issues surrounding concentrated animal feeding operations. *Environ Health Perspect.* 2007:317-320.
30. Burkholder J, Libra B, Weyer P, et al. Impacts of waste from concentrated animal feeding operations on water quality. *Environ Health Perspect.* 2007:308-312.

31. Nahm K. Environmental effects of chemical additives used in poultry litter and swine manure. *Crit Rev Environ Sci Technol*. 2005;35(5):487-513.
32. Rice J, Caldwell D, Humenik F. *Animal agriculture and the environment: National center for manure & animal waste management white papers*. Amer Society of Agricultural; 2006.
33. Heederik D, Sigsgaard T, Thorne PS, et al. Health effects of airborne exposures from concentrated animal feeding operations. *Environ Health Perspect*. 2007:298-302.
34. Viegas S, Faisca VM, Dias H, Clérigo A, Carolino E, Viegas C. Occupational exposure to poultry dust and effects on the respiratory system in workers. *Journal of Toxicology and Environmental Health, Part A*. 2013;76(4-5):230-239.
35. Cambra-López M, Aarnink AJ, Zhao Y, Calvet S, Torres AG. Airborne particulate matter from livestock production systems: A review of an air pollution problem. *Environmental pollution*. 2010;158(1):1-17.
36. Graham JP, Nachman KE. Managing waste from confined animal feeding operations in the United States: The need for sanitary reform. *Journal of water and health*. 2010;8(4):646-670.
37. Fairchild B, Czarick M, Harper L, et al. Ammonia concentrations downstream of broiler operations. *The Journal of Applied Poultry Research*. 2009;18(3):630-639.
38. Wing S, Wolf S. Intensive livestock operations, health, and quality of life among eastern North Carolina residents. *Environ Health Perspect*. 2000;108(3):233-238.
39. Kirychuk SP, Dosman JA, Reynolds SJ, et al. Total dust and endotoxin in poultry operations: Comparison between cage and floor housing and respiratory effects in workers. *J Occup Environ Med*. 2006;48(7):741-748.
40. Trabue S, Scoggin K, Li H, Burns R, Xin H, Hatfield J. Speciation of volatile organic compounds from poultry production. *Atmos Environ*. 2010;44(29):3538-3546.
41. U.S. EPA. Volatile organic compounds' impact on indoor air quality. <https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality>. Updated May 16, 2016. Accessed July 22, 2016.
42. American Society of Agricultural Engineers. Manure production and characteristics (no. ASAE D384.2). 2005.
43. Nachman KE, Graham JP, Price LB, Silbergeld EK. Arsenic: A roadblock to potential animal waste management solutions. *Environ Health Perspect*. 2005;113(9):1123.
44. Edwards D, Daniel T. Environmental impacts of on-farm poultry waste disposal—A review. *Bioresour Technol*. 1992;41(1):9-33.
45. Beckert KA, Fisher TR, O'Neil JM, Jesien RV. Characterization and comparison of stream nutrients, land use, and loading patterns in Maryland coastal bay watersheds. *Water, Air, & Soil Pollution*. 2011;221(1-4):255-273.
46. Lichtenberg E, Shapiro LK. Agriculture and nitrate concentrations in Maryland community water system wells. *J Environ Qual*. 1997;26(1):145-153.

47. Heisler J, Glibert PM, Burkholder JM, et al. Eutrophication and harmful algal blooms: A scientific consensus. *Harmful algae*. 2008;8(1):3-13.
48. Dolah FMV, Roelke D, Greene RM. Health and ecological impacts of harmful algal blooms: Risk assessment needs. *Human and Ecological Risk Assessment: An International Journal*. 2001;7(5):1329-1345.
49. Aschebrook-Kilfoy B, Heltshe SL, Nuckols JR, et al. Modeled nitrate levels in well water supplies and prevalence of abnormal thyroid conditions among the old order Amish in Pennsylvania. *Environ Health*. 2012;11(1):1.
50. Ward MH. Too much of a good thing? Nitrate from nitrogen fertilizers and cancer. *Rev Environ Health*. 2009;24(4):357-363.
51. Manassaram DM, Backer LC, Moll DM. A review of nitrates in drinking water: Maternal exposure and adverse reproductive and developmental outcomes. *Environmental Health Perspectives*. 2006.
52. Chiu H, Tsai S, Yang C. Nitrate in drinking water and risk of death from bladder cancer: An ecological case-control study in Taiwan. *Journal of Toxicology and Environmental Health, Part A*. 2007;70(12):1000-1004.
53. Knobeloch L, Salna B, Hogan A, Postle J, Anderson H. Blue babies and nitrate-contaminated well water. *Environ Health Perspect*. 2000;108(7):675-678.
54. Carmichael WW. Health effects of toxin-producing cyanobacteria: "The CyanoHABs". *Human and ecological risk assessment: An International Journal*. 2001;7(5):1393-1407.
55. Paerl HW, Fulton RS, 3rd, Moisaner PH, Dyble J. Harmful freshwater algal blooms, with an emphasis on cyanobacteria. *ScientificWorldJournal*. 2001;1:76-113.
56. Nebraska Department of Environmental Quality. Fremont lake #20 Dodge County, Nebraska - microcystin toxin migration, bioaccumulation, and treatment. Water Quality Assessment Section, Water Quality Division Web site. <http://deq.ne.gov/Publications/a9f87abbcc29fa1f8625687700625436/b5371d02239d168186257879006dbb86!OpenDocument>. Published March 2011. Updated April 2011. Accessed July 27, 2016.
57. Nebraska Department of Environmental Quality. 2012 Water Quality Integrated Report. Water Quality Division Web site. <http://nlcs1.nlc.state.ne.us/epubs/E6900/B018-2012.pdf>. Published April 2012. Accessed July 27, 2016.



City of Lincoln/Lancaster County, NE

2018 aerial

**Special Permit #: SP19035**

**Sunset Poultry**  
**NW 27th St & Washington Rd**

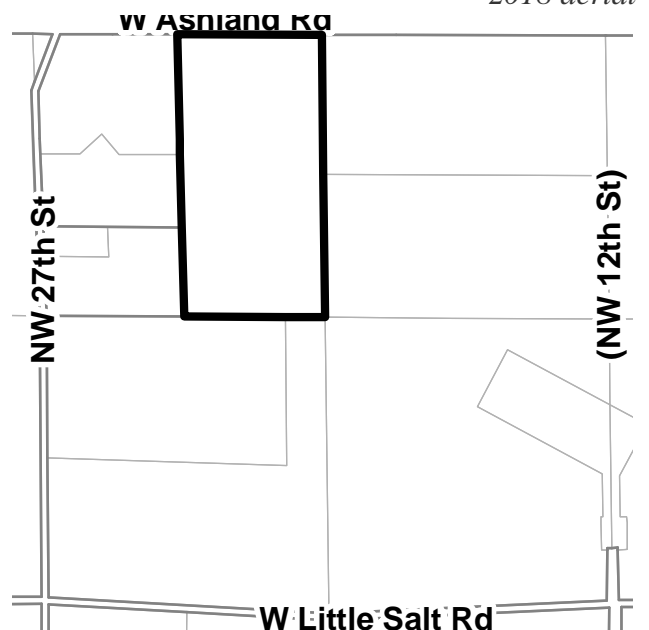
# Notified

**Zoning:**

- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District

One Square Mile:  
 Sec.04 T12N R06E

	Area of Application
	Zoning Jurisdiction Lines
	City of Lincoln Jurisdiction



BENES, IVAN L & ELEANOR JANE LIFE ESTATES

Attn: IVAN BENES 3095 COUNTY RD A  
VALPARAISO NE 68065

BENES, LAWRENCE R & MARGARET Y

2400 W LITTLE SALT RD  
VALPARAISO NE 68065

BENES, LEE RAYMOND

22210 NW 27 ST  
VALPARAISO NE 68065

BENES, LUKE

3195 COUNTY ROAD B  
VALPARAISO NE 68065

BENES, TIMOTHY R

2125 W LITTLE SALT RD  
VALPARAISO NE 68065

BRINKERHOFF, DAVID S & JENNIFER J

22151 NW 12 ST  
RAYMOND NE 68428

GERDES, MERLIN L & CYNTHIA L

3500 W LITTLE SALT RD  
VALPARAISO NE 68065

GERDES, MILDRED T LIFE ESTATE

7411 N 18 CT  
LINCOLN NE 68521

GERDES, MYRON E

23220 NW 40 ST  
VALPARAISO NE 68065-8609

GREVE, WAYNE D & CHARLENE M

2342 ASHLAND RD  
CERESCO NE 68017

HEISS, JORY & LORI

23800 NW 27 ST  
VALPARAISO NE 68065

HELLERICH LAND COMPANY LLC

2854 COUNTY RD A  
VALPARAISO NE 68065

LECHTENBERG, CHAD M

701 W LITTLE SALT RD  
RAYMOND NE 68428

MARSHALEK, GLENN JOSEPH

1538 W LITTLE SALT RD  
RAYMOND NE 68428

MASEK, MARK A & RAVAE M

484 BRANCHED OAK RD  
DAVEY NE 68336

MATULKA, EUGENE & ALYCE LIFE ESTATE

225 E 7 ST  
VALPARAISO NE 68065

MATULKA, LOUIS G LIFE ESTATE

902 W LITTLE SALT RD  
RAYMOND NE 68428

MATULKA, LOUIS L & LESLIE L

902 W LITTLE SALT RD  
RAYMOND NE 68428

PICKERING FAMILY LLC

Attn: ROGER PICKERING 1750 WILCOX AVE APT 301  
LOS ANGELES CA 90028

SCHMALKEN, JEFFERY E & MELANIE

22101 NW 27 ST  
VALPARAISO NE 68065

SCHOOL DISTRICT #161  
1800 W AGNEW RD  
RAYMOND NE 68462

SVOBODA, KEVIN  
23500 NW 27 ST  
VALPARAISO NE 68065

YOUNG, AMANDA & DUSTIN  
611 W ASHLAND RD  
CERESCO NE 68017-4368

**LINCOLN/LANCASTER COUNTY PLANNING COMMISSION STAFF REPORT**

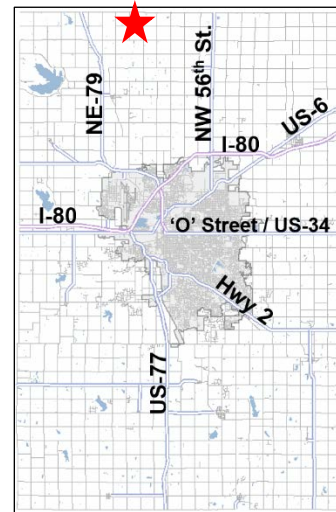
FROM THE LINCOLN/LANCASTER COUNTY PLANNING DEPARTMENT, 555 S. 10TH STREET, SUITE 213, LINCOLN, NE 68508

APPLICATION NUMBER Special Permit #19035	FINAL ACTION? Yes	DEVELOPER/OWNER Wayne & Charlene Greve
PLANNING COMMISSION HEARING DATE August 7, 2019	RELATED APPLICATIONS None	PROPERTY ADDRESS/LOCATION Approximately ¼ mile east of NW 27 <sup>th</sup> St. and W. Ashland Rd.

**RECOMMENDATION: CONDITIONAL APPROVAL**

**BRIEF SUMMARY OF REQUEST**

This is a request for a Commercial Feedlot for up to 380,000 chickens in 8 barns. Each barn is roughly 63' wide by 600' long. The area of the special permit is approximately 20 acres within an 80 acre lot. The area of the special permit is in the east half of the lot.



**JUSTIFICATION FOR RECOMMENDATION**

This application is in conformance with the goals of the 2040 Lincoln-Lancaster County Comprehensive Plan and should not have a negative impact on the surrounding area. There is one house within a quarter mile and only 5 houses within one-half mile of the boundaries of the special permit. The nearest house should not be negatively impacted by the proposal as it is approximately ¼ mile from the site and is the owner's house.

**APPLICATION CONTACT**  
Sunset Poultry, LLC, 402-326-3152  
bussardj@gmail.com

The proposed conditions will address any impact of the proposal. The increase in traffic is relatively minor and the applicant will be required to improve West Ashland Road. The special permit application was reviewed by Lower Platte South Natural Resource District and Lincoln-Lancaster County Health Department and they did not object to this application. The Nebraska Department of Environmental Quality (NDEQ) reviewed the applicant's permit for the concentrated animal feeding operation and did not object. Even though this is an enclosed "dry litter" operation without any outdoor waste storage, a permit from NDEQ is still being required to ensure compliance and prevent impact to ground water and reduce odors.

**STAFF CONTACT**  
Tom Cajka, (402) 441-5662 or  
[tcajka@lincoln.ne.gov](mailto:tcajka@lincoln.ne.gov)

**COMPATIBILITY WITH THE COMPREHENSIVE PLAN**

The Comprehensive Plan identifies the area of application as agricultural. A commercial feedlot is a type of agricultural land use, which given the proposed conditions, is appropriate at this location. The goals of the Comprehensive Plan encourage more diversified agribusiness ventures, local food production and to preserve land for agricultural purposes. The Plan also encourages compatibility of businesses with residential uses. The proposed conditions address the

potential impact from traffic, odor, and noise on nearby residences and the larger community.

#### KEY QUOTES FROM THE 2040 COMPREHENSIVE PLAN

P. 2.7- Acknowledge the fundamental "Right to Farm." Preserve areas throughout the county for agricultural production by designating areas for rural residential development—thus limiting potential conflicts between farms and acreages.

P. 2.7 - Ensure that acreage and rural development preserve and protect environmentally sensitive areas, and maximize the preservation of our nonrenewable resources, such as land and fossil fuels.

P. 3.1- Surface water is susceptible to pollution in the form of sedimentation and contamination from runoff. Fertilizers and sediment are the most common water quality problems in the County's streams and lakes.

p. 3.2 - High salinity in the northern part of the county makes groundwater more difficult to acquire. Groundwater contamination includes infiltration of agricultural chemicals into supplies.

P. 3.11- Agricultural lands refers to land-about 90.3% of the county- utilized for growing crops, raising livestock, or producing other agricultural products.

P. 3.12 - Production of food closer to the urban center, if not within it, reduces the distance food must be transported, increase the freshness of food available, supports the local agricultural economy, and provides nutritious food to those who might not otherwise be able to obtain it.

P. 3.12 - Local food may be produced in the rural area of the county, or counties nearby; or it may also be produced within the urban area itself.

P. 5.4 - Agriculture is the dominant land use in Lancaster County, accounting for roughly  $\frac{3}{4}$  of all land. While this land is largely considered "undeveloped," it is still an important economic factor in the county's future. Agriculture's impact on the local economy goes beyond the sale at the end of production. Farms of all sizes make purchase of goods and services in the city and county throughout the year, which contributes to the local tax base and sustain growth for other business in the agriculture industry.

P. 5.5 - Continue efforts to preserve the viability of the county's agriculture industry through zoning, easements and other means.

P. 7.2- Encourage acreages to develop in appropriate areas and preserve farmland.

P. 7.12- LPlan 2040 supports the preservation of land in the bulk of the County for agricultural and natural resource purposes.

P. 7.13 - Many families are not well-informed of all the implications of rural living before they make that lifestyle choice. This includes an understanding of the state's Right-to Farm law, which protects farmers from nuisance claims when conducting normal agricultural practices, and an understanding of the difference between urban and rural public services.

P. 12.3 - this site is shown as future agriculture on the 2040 Lincoln Area Future Land Use Plan.

P. 12.4 - Agricultural. Land principally in use for agricultural production. Agricultural land may be in transition to more diversified agribusiness ventures such as growing and marketing of products (eg., horticulture, silvaculture, aquaculture) on site.

#### ANALYSIS

1. This is a request for a special permit under Article 13.035 Commercial Feedlot of the Lancaster County Zoning Regulations. The proposal is for 8 barns each housing up to 47,500 chickens for a total of 380,000 chickens. Each barn will be approximately 63' x 600' in size.
2. Article 13.035 does not have specific conditions for commercial feedlots other than a statement from Nebraska Department of Environmental Quality (NDEQ) addressing anti-pollution controls is required. (see attached statement from NDEQ) Although there are no specific conditions listed, Articles 13.001 and 13.002 offers guidance to the Planning Commission in reviewing special permits; "The Planning Commission may modify or waive or add conditions of approval to the listed conditions in this Article as deemed appropriate to maintain the health, safety

and general welfare of the surrounding properties." "The Planning Commission shall hold a public hearing and shall consider the effect of such proposed building or uses upon the character of the neighborhood, traffic conditions, public utility facilities, the Comprehensive Plan and other matters relating to the public health, safety and general welfare."

3. The current parcel is 80 acres. The special permit is for approximately 20 acre within the 80 acre lot on the east half of the property. The site plan shows the proposed area for the special permit. All barns and other related buildings associated with the commercial feedlot must be within the special permit boundary.
4. This site is shown as agriculture in the Comprehensive Plan, a feedlot is an agricultural use. The definition of Agriculture in the zoning regulations is, "Agriculture shall mean the use of land for the purpose of raising and harvesting crops; or for the raising, breeding, or management of livestock, poultry, fish or honeybees; or for dairying, truck gardening, forestry, nurseries or orchards; for the non-commercial on-farm storage or processing of agricultural products produced on the premises; or for any other similar agricultural, horticultural, or silvicultural or aquacultural use.
5. The Lancaster County Zoning Regulations state that the Agricultural District is designated for agricultural use and is intended to encourage a vigorous agricultural industry throughout the county and to preserve and protect agricultural production by limiting urban sprawl as typified by urban or acreage development.
6. Raymond Central School is located approximately one mile to the south of the most southern barn. The Lower Platte South Natural Resource District (NRD) confirmed that the school has a well north of the intersection of W. Ashland Rd. and County Road 23, approximately three-fourths of a mile from the barns. The school also has 2 additional wells located on school property approximately 1 mile south of the proposed poultry barns. Approximately one-half mile to the east is an area shown as Environmental Resources in the 2040 Comprehensive Plan. The area is shown as having native hay and pasture.
7. The NRD submitted ground water information for the proposed site. (See attached) The report identifies 11 registered wells within a one mile radius of the proposed facility. Nine of the wells are domestic, one irrigation and one is classified as other. The irrigation and "other" wells are inactive. The active wells show a pumping rate ranging from 7 to 30 gallons per minute which is fairly typical for domestic and stock wells in southeast Nebraska.  
  
The nearest well the NRD has sampled is located about 1 ½ miles northwest of the proposed site. The report states that in agricultural areas, the primary concern is the level of nitrate-nitrogen in ground water due to infiltration of fertilizers and animal waste applied to the landscape. However, the NRD's ground water sampling in this area has indicated no elevated levels of nitrate; all samples taken for the well indicated showed no detectable levels of nitrate. The report concludes that the overall vulnerability of ground water to contamination from surface sources in this area is fairly low.
8. NRD also noted that they anticipate the owners will need to obtain permits from this NRD for installing ground water wells. The ground water supply appears to be somewhat limited. Test holes, pump tests, and water quality sampling will likely be required before issuing a well permit. The NRD recommends the operators of the facility agree to follow the Nebraska Department of Environment & Energy's permitting requirements and properly manage the facility and wastes generated. During construction of the facility, the owners will also need to install adequate erosion and sediment control practices.
9. Nebraska Department of Environmental Quality (NDEQ) has inspected the site. NDEQ has determined that this facility is not required to construct a livestock waste control facility or obtain a Construction and Operating Permit or a National Pollutant Discharge Elimination System permit. While the operation is exempt from the Title 130 permitting requirements, any construction activity that disturbs a land area of one acre or more must obtain coverage under the Construction Storm water General Permit Number NER 160000, which authorizes storm water discharges from construction sites.  
  
The proposed operation would handle waste using a "dry litter" system. Per information from the applicant about typical operations, chicken waste would not be stored outside. Instead, it would be composted after the chickens are removed. The operation is designed to reduce the amount of water within the buildings so to reduce odors. After several times of composting, the remaining product would be removed for field application as a fertilizer.
10. Since the proposal is for a dry litter operation with no outside waste NDEQ doesn't require a Construction and Operating Permit (COP). The COP includes a requirement for a Nutrient Management Plan to address how the waste product would be handled and field applied. In previous special permits for chicken farms (SP18025 and SP14044A)

the approval required the submittal of the Nutrient Management Plan or COP prior to building permit for the chicken barns. This is recommended by the Lincoln/ Lancaster County Health Department in this case as well.

A COP specifies maximums for headcount and confinement structures. It requires that construction be completed as approved in the application. It requires among other items, land application training for large operations, proper management of mortalities, protocols for appropriate testing of manure and protocols to land apply manure.

As there is not any outside waste storage, the regulating state agencies are not concerned about this proposal having a negative impact via water runoff contaminating adjacent properties or the surrounding area. The site plan does not show any outside waste storage, only small compost sheds to handle dead chicken, which will be covered with litter and composted.

11. The nationwide literature about odor concerns from chicken farms have primarily been about facilities with barns that are partially open and may include outside waste storage. This proposal is for an enclosed barn without any outside waste storage. Thus, the concerns about odors are significantly reduced. A quarter mile setback (1,320 feet) is recommended in order to minimize potential odor concerns on adjacent properties.
12. There are 20 houses within one mile of the proposed site. Four houses are between  $\frac{1}{4}$  to  $\frac{1}{2}$  miles of the barns. Seven houses are between  $\frac{1}{2}$  and  $\frac{3}{4}$  miles from the barns. Eight houses are between  $\frac{3}{4}$  and 1 mile from the proposed barns. There is one house within  $\frac{1}{4}$  mile of the barns, but this is the owner's house. (see attached map)
13. Lincoln-Lancaster County Health Department (LLCHD) has reviewed this application and recommends that the applicant obtain a Construction and Operating Permit from NDEQ. The owner/operator is responsible for controlling dust from the site. All chicken barns must be located a minimum of 100 feet from any well.
14. This application was reviewed by Valparaiso Rural Fire Department. The fire department has concerns with the condition of West Ashland Road and potential health impacts if one of the barns has a fire. The rural fire department would like a sprinkler suppression system and a clean water hookup for fire suppression since it is so far out in the district.
15. The applicant's letter states that there will be 20 trucks per week on average serving this site. Some weeks there will be as few as 4 trucks. The most trucks in one week will be when the chickens are ready to be transported to the processing facility. The site will use 62 trucks in this week.
16. West Ashland Road is a minimum maintenance dirt road for approximately one -quarter mile from this site before there is gravel. Improvements to the road to accommodate truck traffic is required. The Saunders County Board of Supervisors determined that the road should be improved to the next minimum standards design because of the new traffic due to the poultry farm if built. The developer should provide the cost for the improvements. Lancaster County and Saunders County have a joint agreement for maintenance of this County line road. Saunders County, specifically Rockcreek Township, is responsible for maintenance of W. Ashland Rd. from the subject property to NW 12<sup>th</sup> St.
17. The chickens from this proposed site will be transported to Fremont for processing. The most probable route would be for trucks to leave the site go east on West Ashland Rd for about one-half mile and then drive one mile north on County Road 23 in Saunders County before heading east on County Road A. County Road A becomes Main Street in Ceresco. Ceresco Elementary and several houses abut Main Street. County Road A/ Main Street carries a mix of truck and personal vehicles every day. There are grain elevators are located south of Main Street and the Ceresco Business District is located two blocks south of Main Street.
18. The site has significant slope to it with a drop of over 30 feet from west to east. There is also a minor drainage way in the southern portion of the special permit boundary. The Lancaster County Engineering Department has requested that a drainage study and grading plan be provided.
19. This proposal is part of an overall system which will utilize feed grown in Nebraska with processing in Fremont, Nebraska. The final product will be sold locally, as well as to a larger market. The Comprehensive Plan encourages local food production. It states "Local food production is encouraged, building a stronger relationship between city and rural communities and greater security for our food supplies. "The economy provides opportunities for local food production and sales, renewable energy production, and the benefit of natural resources produced in the area and integrates them into the land use pattern." (Page 1.5)
20. The Comprehensive Plan also encourages keeping the public engaged and informed about planning matters. In this case the applicant met with nearby owners, but did not hold any public meetings to inform the larger public about

the proposal. This unfortunately led to great concern about the application due to the limited information. While the applicant did not hold public information meetings, that is not a reason for denial of this application. It is unfortunate, but the proposal must be judged on the facts of the application.

21. The Lancaster County Board of Commissioners established the CAFO working group of 10 members of varied interest to work with County staff to review state and other community regulations in order to advise on potential changes to the existing zoning. The working group has met nine times from March through July 2019. The group is currently reviewing draft of proposed zoning revisions. The draft and additional information from the Working Group meetings can be found on the Planning Department website. The Working Group is scheduled to meet again on August 8<sup>th</sup>.

This application will be reviewed using the current regulation as well as being informed by past practices on previous commercial feedlot special permits. It is not appropriate to use the Working Groups draft document in order to review this application.

**CONDITIONS OF APPROVAL:** See attached.

**EXISTING LAND USE & ZONING:** AG-Agriculture                      Farm ground

**SURROUNDING LAND USE & ZONING**

North:	A-1 Agriculture Saunders County	Farm ground
South:	AG Agricultural	Farm ground
East:	AG Agricultural	Farm ground
West:	AG Agricultural	Farm ground and 3 houses

**APPROXIMATE LAND AREA:** 20 acres, more or less

**LEGAL DESCRIPTION:** A portion of the E1/2, NW ¼ of Section 4, Township 12 North, Range 6 East; Lancaster County, Nebraska

Prepared by

\_\_\_\_\_  
Tom Cajka, Planner

Date: July 30, 2019

Applicant: Sunset Poultry, LLC  
3045 W. Rock Creek Rd.  
Raymond, NE 68428  
402-326-3152  
bussardj@gmail.com

Contact: Nutrient Advisors  
449 E. Deere Street  
West Point, NE 68788  
402-372-2236  
info@nutrientadvisors.com

Wayne Greve  
2342 Ashland Rd.  
Cresco, NE 68017  
402-326-0830

Owner: Wayne Greve  
2342 Ashland Rd.  
Ceresco, NE 68017  
402-326-0830  
[Cgreve.66@gmail.com](mailto:Cgreve.66@gmail.com)

## CONDITIONS OF APPROVAL - SPECIAL PERMIT #19035

Per Article 13.035 this approval permits a Commercial Feedlot for 8 barns and up to 380,000 chickens.

### Site Specific Conditions:

1. Before receiving building permits the permittee shall cause to be prepared and submitted to the Planning Department a revised and reproducible final plot plan including 3 copies with all required revisions and documents as listed below:
  - 1.1 On the site plan below the name Sunset Poultry add Special Permit #19035.
  - 1.2 Add the legal description to the site plan.
  - 1.3 Add a note to the site plan that any chicken barn and compost shed shall be located a minimum of a quarter mile (1,320 feet) from any existing house, except for the house at 2342 Ashland Road (currently owned by the applicant).
  - 1.4 Add a note that all buildings shall be setback a minimum of 100 feet from any lot line.
  - 1.5 Submit a grading plan to the satisfaction of the Lancaster County Engineering Department.
  - 1.6 Submit a drainage study of the site to the satisfaction of Lancaster County Engineering Department that will confirm that the change in land use shall not adversely affect runoff to adjacent properties and the county right-of-way.
  - 1.7 Identify the distance from the special permit boundary at the northeast corner to the east lot line and from the southeast corner to the east lot line.
2. Before receiving building permits provide the following documents to the Planning Department:
  - 2.1 Verification from the Register of Deeds that the letter of acceptance as required by the approval of the special permit has been recorded.
- 2.2 Before beginning the operation, the permittee shall:
  - 2.2.1 Obtain a Construction and Operating Permit and Nutrient Management Plan from Nebraska Department of Environmental Quality.
  - 2.2.2 Improve West Ashland Road to the satisfaction of the Saunders County Highway Superintendent.

### Standard Conditions:

3. The following conditions are applicable to all requests:
  - 3.1 Before starting the operation all development and construction shall substantially comply with the approved plans.
  - 3.2 The physical location of all setbacks and yards, buildings, parking and circulation elements, and similar matters be in substantial compliance with the location of said items as shown on the approved site plan.
  - 3.3 The terms, conditions, and requirements of this resolution shall run with the land and be binding upon the Permittee, its successors and assigns.
  - 3.4 The applicant shall sign and return the letter of acceptance to the County Clerk. This step should be completed within 60 days following the approval of the special permit. The Permittee shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds. Building permits will not be issued unless the letter of acceptance has been filed.



W ASHLAND RD

AG

City of Lincoln/Lancaster County, NE

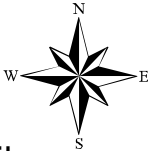
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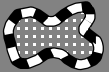


**Special Permit #: SP19035**  
**Sunset Poultry**  
**NW 27th St & W Ashland Rd**

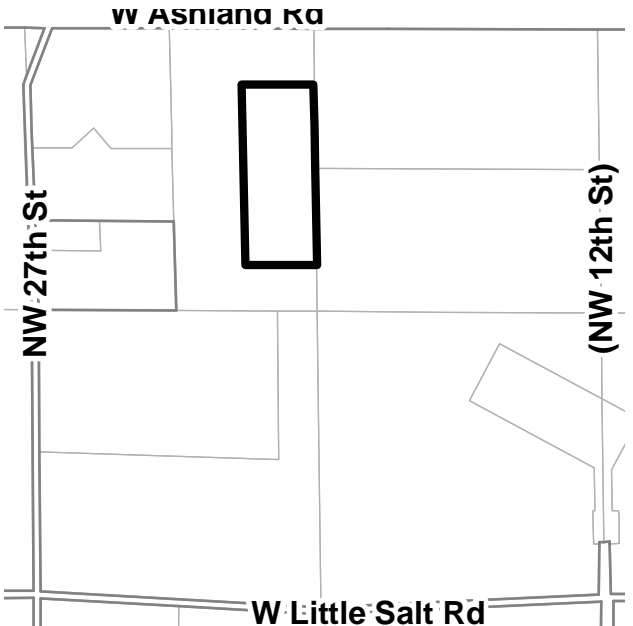
**Zoning:**

- R-1 to R-8 Residential District
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- I-3 Employment Center District
- P Public Use District

One Square Mile:  
 Sec.04 T12N R06E



	Area of Application
	Zoning Jurisdiction Lines
	City of Lincoln Jurisdiction



# Sunset Poultry, LLC

Site Map

**Key**

- Parcel Boundary
- Special Permit Boundary 20.5 acres

NW 1/4 Sec 16, T12N, R10W

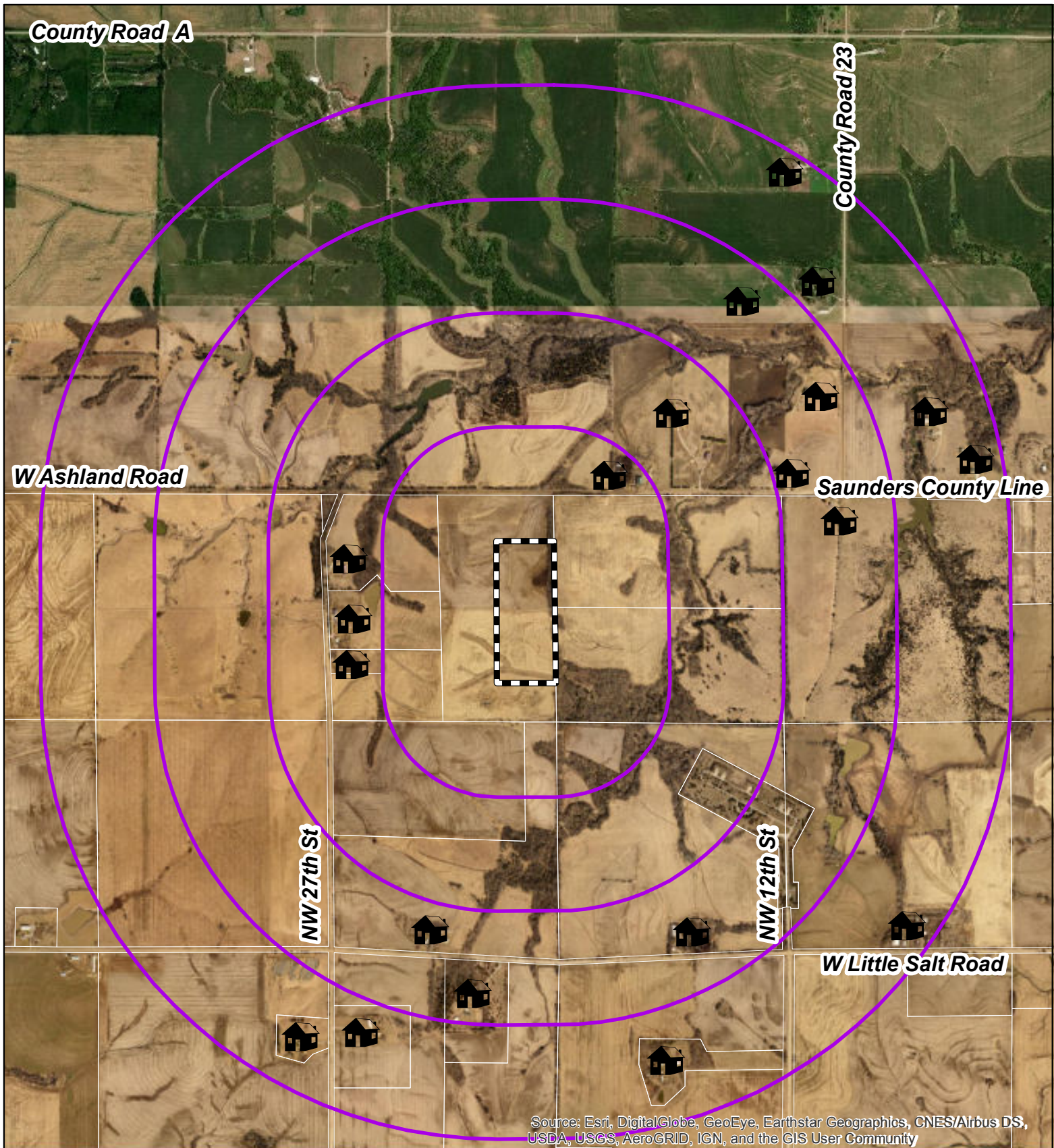


Google Earth

© 2018 Google

1000 ft





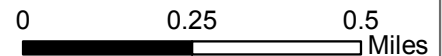
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**Dwellings within 1 Mile**

- 1/4 Mile Buffer = 1 (Applicant's House)
- 1/4 to 1/2 Mile Buffer = 4 Du's
- 1/2 to 3/4 Mile Buffer = 7 Du's
- 3/4 to 1 Mile Buffer = 8 Du's
- Total Du's = 20**

Date: 7/19/2019



Document Path: F:\ITS\ITS\_Requests\Tom\Sunset3.mxd

**Geological and Ground Water Background Information**  
**Proposed Sunset Poultry LLC Facility Near NW 27<sup>th</sup> St. and W. Ashland Rd.**  
**E ½ of NW ¼, Sec. 4, T12N, R6E, Lancaster County**

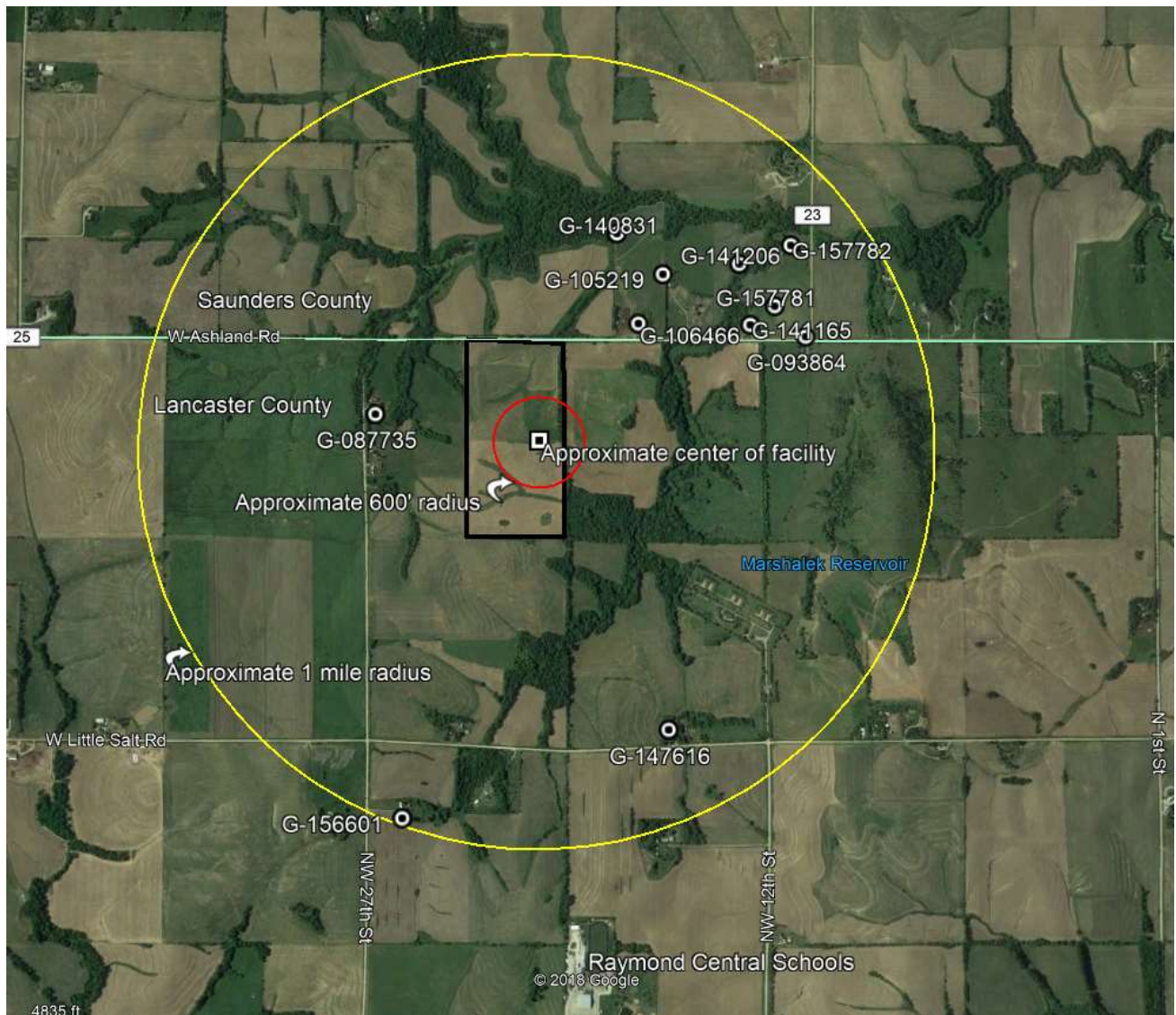
**Dick Ehrman, Water Resources Specialist**  
**Lower Platte South Natural Resources District**

**General Geological and Ground Water Background**

The site is located in far northern Lancaster County (the northern property boundary is the Lancaster-Saunders County line) in the Rolling Hills topographic region. In general, the area is underlain by windblown silt (loess) and glacial till (a poorly-sorted mixture of clay, silt, sand and gravel but often characterized by thick sequences of clay) and ancient sand and gravel deposits which can yield variable amounts of ground water. Additionally, the Dakota Group bedrock sandstones can produce ground water but if wells are drilled too deep into the Dakota, poor water quality from high salt levels can be a concern.

Within a one-mile radius of the proposed facility, the Nebraska Department of Natural Resources' well registration database lists a total of 11 registered wells, nine of these being domestic wells, one being an irrigation well, and one falling into the "other" category. Note that four of these wells are currently listed as inactive (two of the domestics, and each of the irrigation and "other" wells). The table below summarizes the basic characteristics of those wells; the map on the following page shows their locations in relation to the proposed facility:

<b>Well Registration Number</b>	<b>Use</b>	<b>Completion Date</b>	<b>Land Surface Elevation</b>	<b>Static Water Level</b>	<b>Water Table Elevation</b>	<b>Well Depth</b>	<b>Screen Interval</b>	<b>Pump Rate (gpm)</b>
G-087735	Domestic	1995	1357	63	1294	155	145-155	10
G-093864	Domestic	1997	1295	61	1234	200	190-200	30
G-105219	Domestic (Inactive)	1999	1309	Unk.	Unk.	190	180-190	N/A
G-106466	Domestic	2000	1325	66	1259	210	200-210	25
G-140831	Irrigation (Inactive)	2005	1307	30	1277	167	147-167	N/A
G-141165	Domestic	2005	1303	59	1244	190	180-190	10
G-141206	Other (Inactive)	2005	1269	13	1256	65	60-65	N/A
G-147616	Domestic	2007	1339	28	1311	90	50-90	7
G-156601	Domestic	2010	1378	67	1311	190	175-190	15
G-157781	Domestic	2010	1284	20	1264	163	153-163	20
G-157782	Domestic (Inactive)	2010	1258	60	1198	140	130-140	N/A



In general, the geologic logs for the above wells show a few tens of feet of brown silt and clay, then several tens of feet of alternating sand, silt, and clay, then a few tens of feet of blue silty clay, and finally sandstone and shale at around 200 feet below the land surface. Note that this is only a summary; each of the above wells' logs is slightly different. It appears that two of the above wells are screened in the shallower sand units around 60-90 feet below the surface, while the remainder of the wells are screened considerably deeper, between 140 and 210 feet below the surface. All of the wells are registered as pumping between 7 and 30 gallons per minute (gpm), which is fairly typical for domestic and stock wells in southeast Nebraska.

### **Ground Water Quality**

The Lower Platte South NRD has not sampled any wells in the area indicated on this map. The nearest wells that the NRD has sampled is an irrigation well approximately 1 ½ miles northwest of the proposed facility. In agricultural areas, the primary concern is the level of nitrate-nitrogen in ground water due to infiltration of fertilizers and animal waste applied to the landscape. However, the NRD's ground water sampling in this area has indicated no elevated levels of nitrate; all samples taken for the well indicated above showed no detectable levels of nitrate. For reference, the US Environmental Protection Agency's maximum contaminant level (MCL) for nitrate-nitrogen in drinking water is 10 ppm. Therefore, the Lower Platte South NRD has no indication of widespread nitrate contamination in the area surrounding the proposed facility. As already mentioned, some results from some sampling events have shown slightly elevated levels of dissolved salts (particularly sodium), but these are attributed to natural sources associated with the bedrock units in the area, and are generally considered a nuisance. All other parameters in the NRD's database for samples from this area have been well within associated guidelines for drinking water.

### **Water Quality Considerations**

As noted above, the subsurface materials in this area consist of a variety of silt and clay materials, under which occur different kinds of aquifer materials. As a general rule, the greater the distance from the surface to the ground water, and the more fine-grained the materials that make up this zone (generally known as the unsaturated or vadose zone), the less likely the leaching of materials applied to the surface. That being the case, most of the wells listed that are screened in the deeper aquifer units, especially where there are significant thicknesses of glacial till or clay, appear to be at comparatively low risk from surface contamination. The wells that are constructed and screened at a shallower depth would have a higher vulnerability to contamination from the surface, but even so the fine-grained materials near the surface offer some protection from widespread ground water pollution. Therefore, the overall vulnerability of ground water to contamination from surface sources in this area is fairly low, especially compared to areas with coarse, sandy soils and shallow depths to ground water. However, as with any applied fertilizer materials, careful application and management is necessary to minimize any risks to water quality. Given that this area is characterized by sloping land surfaces, this is especially important to protect surface water from runoff which might contain high amounts of nutrients which can negatively impact water quality in streams and lakes.

### **Helpful References:**

Korus, J.T., L.M. Howard, A.R. Young, D.P. Divine, M.E. Burbach, J.M. Jess, and D.R. Hallum. 2013. *The Groundwater Atlas of Nebraska*. Conservation and Survey Division, University of Nebraska-Lincoln. Resources Atlas # 4b/2013. 64 p.

Divine, D.P. 2014. *The Groundwater Atlas of Lancaster County, Nebraska*. Conservation and Survey Division, University of Nebraska-Lincoln. Resources Atlas #7. 39 p.

## LANCASTER COUNTY ENGINEERING DEPARTMENT

Upon review, this office would offer the following comments for "SUNSET POULTRY" Special Permit "SP19035" submittal dated 7-9-2019 (V1) in the NW ¼ of Section 4, T12N, R6E, located along Ashland Road approximately ½ mile east of NW 27th Street.

1. Please provide a grading plan for the site area and access driveway for our review.
2. Provide a drainage study of the site that will confirm that the change in land use shall not adversely affect runoff to adjacent properties and county right-of-way. The study should include at a minimum a topographical map showing existing drainage areas and resulting runoff from all land lying outside the limits of the proposed construction which discharge storm water runoff into or through the area; a topographical map showing proposed contour lines, all sub drainage areas, and resulting runoff; and a copy of the drainage computations. Post-development flows should be less than or equal to pre-development flows.
3. Install necessary erosion and sediment control (ESC) measures to stabilize any disturbed lands.
4. It should be noted that West Ashland Road adjacent to proposed Special Permit is currently an unimproved dirt roadway and is within the maintenance jurisdiction of adjoining Saunders County. This unimproved dirt road would need to be reviewed by adjacent Saunders County Highway Department for comments/concerns/procedures/costs, etc., to upgrade roadway grading, surfacing and drainage to accommodate the anticipated traffic use proposed by this Special Permit.
5. Applicant to make access permit application with Lancaster County Engineering Department at 444 Cherrycreek Road Building 'C', Lincoln, NE for entrance to proposed site from West Ashland Road. Access permit application information can be found on the Lancaster County Engineer's website at <http://lancaster.ne.gov/engineer/driveway.htm> NOTE: Access permit guidelines along Lancaster County's boundary in this area is as follows: • Adjoining County's road maintenance with property access coming from Lancaster County --- Applicant to take out drive permit from Lancaster County Engineering Department so we can check sight distance and locate for addressing and address sign installation if applicable. Also, LCED will forward a copy of access permit to adjoining County for their review and approval. Landowner and applicant to receive processed access permit from adjoining County.

## LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT

The application indicates the use of a back-up generator. Prior to installation, the applicant should contact the Lincoln-Lancaster County Health Department's (LLCHD) Air Quality Program at (402) 441-8040. The owner/operator will be responsible for controlling off-site dust emissions in accordance with Article 2, Section 32 of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards. LLCHD recommends that the applicant obtain a construction/operating permit from NDEQ in accordance with Nebraska Administrative Code Title 130-Livestock Waste Control Regulations. This would require the submittal of a Nutrient Management Plan approved by NDEQ. The proposed chicken barns must be located a minimum of 100 feet from any water well.

## LOWER PLATTE SOUTH NATURAL RESOURCE DISTRICT

NRD staff has reviewed the application, and anticipate the owners will need to obtain permits from this NRD for installing ground water wells. The ground water supply appears to be somewhat limited. Test holes, pump tests, and water quality sampling will likely be required before issuing a well permit. We

recommend the operators of the facility agree to follow the Nebraska Department of Environment & Energy's permitting requirements and properly manage the facility and wastes generated. During construction of the facility, the owners will also need to install adequate erosion and sediment control practices.

#### VALPARAISO RURAL FIRE

As a rural Fire department we feel there are too many hazards and risk with this project location.

**DEPT. OF ENVIRONMENT AND ENERGY**

Joshua L. Bussard  
Sunset Poultry, LLC  
3045 West Rock Creek Road  
Raymond, NE 68428-4454

RE: Sunset Poultry, LLC Concentrated Animal Feeding Operation  
NDEQID: 112920  
Program ID: LWC 2-1089  
**Subject: Construction & Operating or NPDES Permit Not Required**  
E 1/2, NW 1/4, Section 04, Township 12N, Range 06E, Lancaster County

JUL 12 2019



Pete Ricketts, Governor

Dear Mr. Bussard:

Your proposed concentrated animal feeding operation (CAFO) is not required to construct a livestock waste control facility (LWCF) or obtain a Construction and Operating Permit or a National Pollutant Discharge Elimination System (NPDES) Permit for CAFOs. This determination is based on the July 11, 2019 inspection conducted by Kevin Franzluebbers from the Nebraska Department of Environment and Energy (Department), according to the Livestock Waste Management Act and Title 130, *Livestock Waste Control Regulations*.

While your operation is exempt from the Title 130 permitting requirements described above, please be aware that any construction activity that disturbs a land area of one (1) acre or more must still obtain coverage under the Construction Storm Water General Permit Number NER160000, which authorizes storm water discharges from construction sites (Title 119). This permit may be obtained by the operation's authorized representative, the contractor or other party responsible for the construction project. Application for permit coverage can be made by accessing the following website: <https://ecmp.nebraska.gov/DEQ-CSW>.

At the time of the inspection, the Department considered your operation a large CAFO that proposed the following:

Livestock Species	Maximum No. of Head Capacity	Existing or Proposed?
Chickens (Broilers)	380,000	Proposed

Type of Structure	Number of Each Type	Existing or Proposed?
Dry Litter Barns	8	Proposed

If you desire to receive a Construction and Operating Permit for your operation, please refer to the minimum application requirements outlined in Title 130, Chapter 4, 001. These include, but are not limited to, the submission of a Nutrient Management Plan and a \$200 application fee. It may take the Department up to 110 days from the receipt of a complete application to approve or deny the application.

Please remember, you are responsible for complying with any Natural Resources District, county or local zoning requirements and for preventing any discharge of livestock waste to waters of the State. If you plan to expand or modify the operating style of your operation in the future, you must request an inspection by the Department prior to starting construction or modifications. Failure to request an inspection could result in late fees or other penalties. Enclosed is a copy of Title 130 for your information. If you have any questions, please contact Kevin Franzluebbbers at (402) 471-6687 or myself at (402) 471-4239.

Sincerely,

A handwritten signature in black ink that reads "Benjamin Miller". The signature is written in a cursive style with a large initial "B".

for

Cay Ewoldt, Supervisor  
Agriculture Section  
Water Permits Division  
cay.ewoldt@nebraska.gov

Enclosure  
cc: Nutrient Advisors



July 22, 2019

Lincoln/Lancaster County Planning Commission  
555 S 10<sup>th</sup> St, Ste 213  
Lincoln, NE 68508

Subject: Special Use Permit Request

To whom it may concern,

Please accept this application and request for a special use permit on behalf of Josh & Tonya Bussard and Wayne & Charlene Greve. The purpose of this permit is to take a portion of land out of crop production and construct eight barns for broiler chickens. Each building will house approximately 47,500 chickens. The buildings will roughly be 63' wide by 600' long with 50' pathways between buildings. In front of the building there will be 50' rock for semi-trucks to be able to maneuver and turn around to load and unload chickens. Throughout the year, there will be six flocks of birds that will be brought to the site. There will be an average of twenty trucks per week that serve the site and is broken down as follows: Two weeks before the birds are placed, twenty loads of bedding will be brought and spread out in the barns. One week before bird placement, two loads of propane will be brought to the site (This is dependent on the time of year. If the propane is not needed, it will not be brought to the site) along with four loads of feed. The week that birds are scheduled to be placed in the barns there will be four trucks bringing in the chicks. The week after bird placement, four loads of feed will be delivered. In the second and third weeks after bird placement, eight loads of feed will be brought each of week, along with two loads of propane in the second week (if necessary). The fourth week after bird placement, twelve loads of feed will be delivered. In the fifth and sixth weeks after bird placement, fourteen loads of feed will be delivered each week. In the final week of the flock, week seven, sixty-two trucks will be used to pick up the birds and deliver them to the processing center in Fremont, NE. This process will be performed six times throughout the year. All trucks will be covered to help eliminate dust, odor, and for the health and safety of the birds. There will also be two maintenance buildings for housing tools, equipment, and a backup generator. The manure produced from the chickens will be applied to fields listed in the Nutrient Management Plan in place of commercial fertilizer. The manure will be removed once a year and applied to the fields in a timely manner. No waivers are requested.

Sincerely,

Trevor Enstrom





SP19035\_-SAUN...



**SAUNDERS COUNTY HIGHWAY SUPERINTENDENT**  
**STEVE MIKA**

ANDY NORDSTROM, ASST. HIGHWAY SUPT.  
426 North Broadway  
Wahoo, Nebraska 68066-1964  
Phone (402) 443-8124 Fax (402) 443-5702

July 30, 2019

Lincoln-Lancaster County Planning  
Attn: Tom Cajka, Planner II  
555 S. 10<sup>th</sup> St., #213  
Lincoln, NE 68508

Mr. Cajka:

At this time, Saunders County Highway Department will not participate in any financial funding to construct, improve or maintain any portion of Ashland Road located between County Road 23 and County Road 24 in Saunders County, Nebraska. This road is under the jurisdiction of Rock Creek Township. If Rock Creek Township wants to participate in the construction and improvement of said road, it is their decision.

Sincerely,

Steve Mika  
Highway Superintendent

SM:ln



July 29

To Mr. Wayne Greves,

We, the Rock Creek township, wrote for you a letter of intent to fix and maintain a road to accomodate your future business. We have to withdraw the intent because we feel that we were misinformed and not given all the facts. The business will benefit Lancaster County, not Saunders County as we believed.

Sincerely

Micki Novak

We will have a meeting the second Monday of August in Valparaiso if you would like to attend.