CONDITIONAL USE PERMIT
FORM

FINAL
Revised 10/1/15

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

Please Answer the Following Questions *(Please attach a separate sheet if needed)*:

1. Are you applying for a: ☐ Type 1 ☒ Type 2 ☐ Type 3 ☐ Type 4
2. What is the proposed use, as listed in YCC Table 19.14-1? AG CAFO
3. What is the size of the subject property? (Amount of acreage or square feet): 30 Acres
4. What is the size and use of structures currently located on the property? See site plan
5. What is the size, height and use of structures proposed to be placed or constructed? under 15,000 SqFt under 30' Height
6. List other permits and approvals that will be required Sepa, Building permits, grading permit
7. Will the project be conducted entirely within a structure? ☐ Yes ☒ No
   If no, explain what outdoor activities would occur: normal cattle corrals
8. Total number of employees? 10-15
9. How many parking spaces are you proposing? Existing: 0 Proposed: 15 Surface Type: Gravel
10. Will you have a sign? ☒ Yes (if yes, please answer the following questions.) ☐ No
    a. How many signs are proposed? 1
    b. What is the square footage of the sign? 4'x5'
    c. What is the height of the sign? 5'
    d. Will the sign be illuminated? ☐ Yes ☒ No
    e. If the sign is illuminated, how will it be illuminated? ☐ Internally ☐ Externally
    f. Where will it be located? At the entrance
11. What is the name of the road that the proposed/existing access is located on? Glade Rd
    a. Is the road a: ☒ County Road ☐ State Highway ☐ Private Road
       If the road is a private road, is there an existing Road Maintenance Agreement? ☐ Yes ☒ No
       (If yes, please provide a copy)
    b. Is the road constructed out of: ☒ Pavement ☐ Gravel ☐ Dirt
    c. How wide is the Right-of-Way/Easement? 20'
    d. How wide is the surface of the road? 30'
12. How will you manage storm water runoff? put in lined Storage pond

13. Fencing (If applicable check both)? ☐ New ☐ Existing

a. Fence Material: pipe and cable fence materials

b. Will the fence be view obscuring fence? ☐ Yes ☒ No

c. Will you be placing barbed wire on the top of the fence? ☐ Yes ☒ No

d. What is the total height of the fence (including the barbed wire if proposed)? 5'

14. Are you proposing any site screening or landscaping? ☐ Yes ☒ No

If yes, what type and what is the location? _____

15. What is the proposed source of irrigation water? None

16. What are the days & hours of operation? Days: 7 Hours: 12

17. Will the operation be seasonal? If so list months of operation: No

18. Is any outdoor lighting proposed? ☒ Yes ☐ No

If yes, what is the proposed location(s)? Around the Shop and mixing Area

19. What is the proposed source of domestic water?

a. ☐ Public Water: Name of provider: _____

b. ☐ Community Well: What is the well number: _____

i. Where is the well located? _____

ii. Is there an existing Well Maintenance Agreement? ☐ Yes ☐ No

(If yes, please provide a copy)

c. ☒ Individual Well

20. What is the proposed method of sewage disposal?

a. ☐ Public Sewer: Name of provider: _____

b. ☐ Community Septic System: Where is the septic system located? _____

c. ☒ Individual Septic System

d. ☐ Other explain: _____

_____

ANIMAL FEEDING OPERATION
FORM

FINAL
Revised: 10/1/15

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Please Answer the Following Questions:

1. Are you proposing an:
   - ☐ Animal Feeding Operation (AFO)
   - ☒ Concentrated Animal Feeding Operation (CAFO)
   - ☐ Dairy
2. When was your Dairy Nutrient Management Plan last updated and approved? 2015
3. How many employees: Full Time: 10 - 15 Part Time: _____
4. Describe the type of deliveries to and from the property: Milk Replacer, Dry Feed
5. What type of vehicles will be visiting the site? Employee cars, feed deliveries cattle trailers
6. How many vehicle trips will be made to the property per day? 40
7. What sign(s) are planned to be installed on the site? entrance Sign
8. Where will the sign(s) be located? At the entrance
9. Are you proposing any off-site sign(s) ☐ Yes ☒ No If yes, describe their location:
10. How many parking spaces are: Existing: 0 Proposed: 15
11. What is the existing/proposed surface type for the parking spaces? ☐ Paved ☐ Gravel
12. Where will the loading zone be located? By the Shop
13. How will storm water runoff be managed? lined Storage pond
14. What type of fencing, screening or landscaping is proposed? pipe & cable fencing
15. Is any outdoor lighting proposed? ☒ Yes ☐ No
    If yes, describe the type and location: Around mixing Area, Shop
16. Indicate the source of irrigation: None

17. What is the proposed source of domestic water?

- ☐ Public Water System (City, Nob Hill Water, County)
- ☒ On-site individual well
- ☐ On-site shared or community well Name: _____
  ID#: _____
  Location: _____
- ☐ Other: _____

18. What is the proposed method of domestic sewage disposal?

- ☐ Public Sewer System (City, County)
- ☒ On-site individual septic system
- ☐ On-site shared or community septic system Location: _____
- ☐ Other: _____

19. How many gallons of water are expected to be used per day? 25,000

Please provide the following information in your attached narrative:

- ☒ Proposed methods of waste management
- ☒ Odor Control
- ☒ Vector Control
- ☐ Silage Management
- ☒ Track-Out Control
- ☒ Howe the waste water systems/lagoons are lined

FINAL
Revised 10/01/15

NARRATIVE
FORM

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
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The Narrative Form is designed to help you, the application review, interested agencies, and adjacent property owners to the proposal understand the scope of your project and how your project meets the legal requirements in the Yakima County Codes. You should refer to the appropriate sections of the ordinance when describing your proposal if applicable. You can obtain a copy of the ordinance in our office or access it on the internet at:

http://codepublishing.com/wa/yakimacounty/

Narrative Content: Please tell us the "who", "what", "where", and "why" of your proposal. A list of typical content is provided below. **Please do not limit your project's description to just these items.** In order for us to conduct a timely review of your project please **be as detailed as possible**. Any missing/confusing information could result in the delay of our review.

Note: Not all content listed below will be pertinent to your proposal. These items are suggestions in order to help you draft your narrative.

Suggested Content:

- Describe the current use of the site including all existing structures with their dimensions, square footage and usage.
- Describe the proposed use in detail (including but not limited to the type of business and/or use, hours and days of operation, number of employees, number of people living on-site, maximum number of customers and/or guests, changes or additions to the driveways or other access points, the type of mitigation or adjustment requested).
- Describe which standards are proposed to be adjusted and justify why the standard needs to be adjusted.
- Describe any new or existing structures to be used as part of this proposal.
- Describe how the proposed use will be pertinent to the proposed/existing structures.
- Describe any parking facilities (number of spaces and surface type), landscaping, signage, and lighting that will be associated with your proposal.
- Describe your access to the property and the route of travel to the site.
- For commercial operations describe the travel ways that will be located onsite.
- Describe the timelines for completion of your proposal.

Please remember that your narrative must explain in detail the specifics of your proposal and any missing information may result in the need for future reviews. Your narrative can be typed and printed on a separate sheet of paper with "See Attached" written below, or you may print out legibly your narrative on the lines provided.

See Attached

Fryslan Ranch Calf Yard
Descriptive Narrative

Prepared by: B7 Engineering
PO Box 487
1614 Eastway Drive
Sunnyside WA 98944
509-837-8600

B7 job number 14122B

Fryslan Ranch Calf Yard

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Attention

Dairies and Feedlots are subject to the following RCW regarding sharing of information. If you are providing information to a member of the public make sure you are in compliance.

RCW42.56.610
Certain information from dairies and feedlots limited-rules.

The following information plans, records, and reports obtained by state and local agencies from dairies, animal feeding operations, and concentrated animal feeding operations, not required to apply for a national pollutant discharge elimination system permit is disclosable only in ranges that provide meaningful information to the public while ensuring confidentiality of business information regarding: (1) Number of animals; (2) volume of livestock nutrients generated; (3) number of acres covered by the plan or used for land application of livestock nutrients; (4) livestock nutrients transferred to other persons; (5) crop yields. The department of agriculture shall adopt rules to implement this section in consultation with affected state and local agencies.

[2005 c 510 § 5. Formerly REC 42.17.31923.]

Fryslan Ranch Calf Yard

Introduction

The Fryslan Ranch operates three concentrated animal feeding operations (CAFO) which provide replacement cows for four dairies owned by the parent company, Wind Mill Estates. All of the concentrated animal feeding operations are located in the central Yakima Valley. The Fryslan Ranch wants to move the young calf (70-150 lbs range) and elementary calf (150-350 lbs) raising operations to a new facility located about 2-1/2 miles southeast of Mabton WA. This narrative will describe the operation and specific details. It will also present arguments supporting the position that this project should be approved.

Fryslan Ranch recently purchased 1456.94 acres on 13 parcels in the area east of Glade Road and south of the Sunnyside Irrigation District canal. 1130.69 acres of these parcels are adjoining. On two adjoining parcels 2301817-21001 (160.07 A), and 230808-33001 (35.1 A), Fryslan Ranch wants to build a calf yard covering about 30 acres. The new facilities will include about 16 acres of corrals, about 4 acres of hutch yard with about 1500 calf hutches, one to four buildings totaling 15,000 sf or less to house various support functions, and a 5 Mg waste water pond. Permits from Yakima Public Services are required for adjusting the grading, excavating the pond, and buildings. The cattle population will be about 1300 animal units which triggers designating the facility a CAFO and therefore a conditional use permit and an environmental review (SEPA) is required.

Wind Mill Estates applied for building a larger facility at this same location under docket PRJ 2015-350, CUP 2015-036 an SEP 2015-015. The Fryslan Ranch wants to close these 2015 applications, down scope the project, and reapply as described therein.

THIS PROJECT WILL NOT INCREASE CATTLE POPULATIONS IN YAKIMA VALLEY. The purpose of the Calf Yard is to join the new-born and elementary cattle raising operations at one site. Currently, Fryslan Ranch has new-born hutches at Stover and Hornby Roads and corrals for elementary calves at a rented facility on Den Boer Road. This proposal will relocated these operations to one facility.

The shop has several purposes. The primary purpose is to shelter and repair equipment used at the calf yard. The shop will also be used for new-born formula preparation, and, when needed, provide shelter for very young or sick calves. Grading for corrals will be minimal, the existing grade is very close to ideal, but some cuts and fills less than 3 feet may be needed to achieve proper drainage for control of storm water. The Waste Water Pond has two purposes: a precautionary structure to ensure that potentially contaminated storm water is captured, and to receive water used to clean and sanitize new-born formula equipment. The waste water

pond will receive storm water rarely about every two years. The waste stream from new-born formula will less that the annual evaporation about, about 2500 gpd.

Operations

This section discusses envisioned operations for the Fryslan Ranch Calf Yard.

Water Source

The Fryslan Ranch will draw water from one of four wells under the exempt water right for stock watering purposes. Some water will be used for mixing and cleaning of new-born formula and feedings equipment. This accessory use of water related to watering livestock is claimed to be part of stock watering purposes. Water withdrawals will be about 30 Acre feet per year, 25,000 gallons per day, or about 18 gallons per minute (gpm) average draw.

Fryslan Ranch has four available wells for this operation. Two wells for stock watering were drilled during 2015 anticipating approval of the 2015 land use applications. The following table lists these four wells.

Year	Well Tag #	Well log #	Size	Depth	Test Capacity	Name
1996	ACE-511	121501	6"	122'	100 gpm	Alberto Molina
1997	ACL-582	122057	6"	157'	23 gpm	Cindy Crawford
2015	BIF-429	1050530	8"	765'	200+ gpm	Fransisca V
2015	BIF-430	1035873	8"	370'	150+ gpm	FRH Enterprises

These four wells draw from three different aquifers, Local shallow, Saddle Mountain and Wanapum. With four available wells from three different aquafers there is great reliability and flexibility. One concern of the 2015 environmental review was potential drawdown of the deeper Wanapum aquifer. Although the BIF-429 will remain available, its use would only be for extreme conditions, as directed by water resource.

Another concern of the 2015 review was an increase in water usage and a concurrent reduction of in-stream flows to Yakima River. Water usage in the Yakima Valley is not increase by this new facility because this facility does not increase the cattle population in Yakima Valley. The point of withdrawal will shift from the wells at the current operations to one of these four wells. The water draws from wells at the other cattle operations will see a reduction equal to the draws at this new facility.

Whereas the wells at the current operations draw from the Saddle Mountain and Wanapum Aquifers, water withdrawal for this operation can pull from aquifers proportioned anyway that water resource officials think is appropriate. Without guidance, the Fryslan Ranch will draw primarily from the local shallow aquifer which have been demonstrated adequate.

A complete Hydrogeological study was not conducted, a draw down test was performed to observe the effect of a heavy draw on the wells. Well ACE-511 was observed to drawdown 18

feet when 61 gpm was pumped. The drawdown came to equilibrium in 90 minutes, the test duration was 28 hours.

Well BIF-439 was also tested. The volume was initially 110 gpm, and equilibrium drawdown of 6 feet was achieved in 90 minutes. The flow was increased to 200 gpm, and drawdown equilibrium was achieved in less than an hour measured at 10 feet. When the test was completed, the well recovered in 10 seconds. The duration of the test was 28 hours.

This test conducted by Davis Pumps and the logs of these tests are found as Attachment (4). Feed lot operations typically use less water per acre than growing field crops. In this proposal, the anticipated water used is less than 1 foot per year per acre. Typical field crop require 2 to 3 feet.

Nutrient Management Plan

The Wind Mill Estates has four dairies each with an approved Dairy Nutrient Management Plan (DNMP). All of these DNMPs share a common plan for dispersion of liquid and solid waste. This global dispersion plan includes solid waste streams from cattle operations of the Fryslan Ranch. Although there is no requirement for having a nutrient management plan for non-dairy feed lots, the Fryslan Ranch operation will have a plan approved by a governing authority with enforcement oversight.

The contents of these DNMPs is confidential, protected from general public dissemination by RCW42.56.610, Certain Information from Dairies and Feedlots Limited-rules.

These DNMPs are based on the number of animal units and accounts for meteorology, soil conditions, and farming practices at the time the DNMP was prepared. Language in the DNMP required that it be amended if the total animal units exceed 110% of the animal units when the CNMP was prepared.

These DNMP describe manure quantities, waste water storage requirements, and field application methods at agronomic rates. Total waste quantities are calculated based on the following factors: herd size, waste water volume, and storm water runoff including runoff from a 24-hour, 25- year storm event.

These DNMPs address three principle nutrients: nitrogen, phosphorus, and potassium. Generally, phosphorus and potassium will precipitate in the soil and become relatively immobile. Potassium is generally not considered a pollutant. Phosphorus pollution is controlled by preventing soil erosion.

Nitrogen sourced from the dairy nutrients is primarily in the form of organic matter. Organic nitrogen is a natural slow release material. The second form of nitrogen is Ammonia in the ion form (NH_4^+) which can bond with multiple soil components rendering it immobile. The third form of nitrogen and the minority component is Nitrate ion (NO_3^-) which is water soluble. It

does not bond readily with soil components and with excessive soil moisture will migrate with the moisture below the root capture zone.

Nitrate Nitrogen is the nutrient of most concern, due to its ability to migrate into ground water aquifers. Concentrations of all three macronutrients are tested at the application fields and these records are inspected by WSDA along with the entire facility on an annual basis. Applications of nutrients are timed to match crop growth and rates to match plant needs, at agronomic rates. Many dairy fields are double cropped in a system with winter triticale as the fall/winter crop, and silage corn or Sudan grass as the spring/summer crop to maximize feed production, nutrient efficiency and nutrient removal.

Specific nutrient tests required include: nitrate-N, ammonia-N, phosphorus (P2O2), and potassium (K2O). Soil testing is conducted bi-annually on all fields, generally in the spring and fall.

The total nitrogen available in the liquid waste depends upon feed mixtures, cleaning water used, and the weather. Testing of the nitrogen concentration in the pond will be addressed in the DNMP. Liquid waste is applied to application fields via irrigation or by tanker at agronomic rates. Solid wastes will be hauled to various agricultural fields listed in the DNMPs and dispersed at agronomic rates or composted and sold as a co-product.

The use of solid animal manure as a nutrient source, generally, benefits the soil better than inorganic salt fertilizers. Manure ads organic matter to the soil, which improves soil structure, air and water infiltration, and general tilth. Soil erosion is reduced and the moisture holding capacity is increased. Another benefit is that nitrogen and phosphorus are released slowly by action of microorganisms. This benefit conserves these elements and makes them available throughout the year as they are needed for plant growth.

The DNMP will includes a listing of land areas designated for application of solid and liquid manure at agronomic rates.

<u>Wastewater Management</u>

Waste water comes from two sources: Cleaning of new-born formula equipment, and storm water event that exceeds the capacity for soil absorption.

The waste water from cleaning new-born formula equipment is piped directly to the storage pond. The inflow is estimated to be about 2500 gallons per day. The pond is sized to provide evaporative dispersion of this waste stream. The waste stream will be relatively High BOD residues of milk replacer and sanitation chemicals, usually sodium hypo-chlorite based. A pH balancing acid may be added according the management protocol of the sanitation product chosen for use.

The waste water pond will be have a synthetic liner. The design will conform with standards set by the USDA NRCS. The design will likely use a 60 mil liner made from an acceptable material like high density polyethylene.

The pond will be sized to collect stormwater for the 25 year storm event and include the waste stream from the new-born formula equipment. Storm water collected from the residential corrals will be contaminated with manure, and will be handles according to the DNMP nutrients. When storm water is collected, the inflow may exceed the evaporative out-flow capacity and contents may need further dispersion by pumping or trucking to dispersion fields.

Storm Water Management

The calf yard will be sited on a higher flat area of undeveloped agricultural land. Before corrals are built, a building platform will be established provide good drainage and surface water collection.

For most storm events the precipitation will be absorbed like a sponge by the bare soil. The soil will later release this moisture by evaporation. The fine particulates in cattle manure has been shown to plug pores between soil particles effectively reducing the effective thickness of the soil to absorb the storm water. Consequently, during colder and wetter conditions surface soil will become saturated and standing water can occur in the corrals before unaffected native soils become saturated. For this reason, the individual corrals will be contoured to easily collect this water and rout it to the collection pond. Possible paved areas for feed handling, will also be graded to catch basins to collect potential leachant and storm water to be routed to the pond.

Most years the evaporative dispersion of water offered by the pond will be sufficient for these waste streams. In the event of the pond evaporation not keeping up with inflows, the pond water will be dispersed according to the DNMPs. Most of the storm water falling on the dairy is absorbed by the soil.

Sources of off-site storm water are not likely to overwhelming the on-site facilities. The calf yard is located between two ravines which provide the natural drain routs for the area. The one to the east of the facility is designated as a type 5 stream. The ravine for this Type 5 stream will be unaffected by this project and continue to be a Type 5 stream. The ravine to the west is not designated a critical area and sits about 10 feet below the corrals. This west side ravine is where the stormwater pond will be built. A precautionary by=pass drain will be provided around the pond in the event that this ravine becomes a stream to prevent over-fill of the pond.

Open Corrals

The Fryslan Ranch Calf Yard will be equipped with residence corrals where calves wander freely

within the corrals. Manure and urine is distributed throughout the corrals, but there are always areas where manure will accumulated. These accumulations of animal waste usually occur at the feeding alley/lockouts or near watering toughs. Tractors equipped with rubber blades will be used to pull these accumulations to the center of the corrals or to the designated manure drying yards.

Most of the year, manure and urine deposited in the corrals will dry without additional intervention. Accumulated dried manure is scrapped into piles and removed with loaders and trucks, and shipped to active agricultural fields located adjacent to the dairy operations or to a composting yard. Trucks shipping this manure will usually use private roads interconnecting the Calf Yard with various nearby dry-land crop fields controlled by Fryslan Ranch or its parent company Wind Mill Estates.

Employee Training

Employees receive training appropriate to their assigned tasks. Employees involved in manure and wastewater management are trained in the relevant procedures and requirements of the Dairy Nutrient Management Plans.

All employees are trained to correct or notify management if they observe conditions requiring corrective action. Areas emphasized in training include storm water management controls, manure and wastewater management controls, fly control, noise control, vehicle track-out prevention, work place safety, and spill prevention control and countermeasures plan.

Nuisance Mitigations

This section addresses perceived nuisances and methods used to mitigate these nuisances.

Water Quality

Water quality as related to this proposal is summarized as two concerns:

1. Prevent contaminated waste water from contaminating ground.
2. Prevent leachates from solid wastes from contaminating ground and surface waters.

These two concerns are essentially the same but become distinct when viewing the calf yard operation; waste water will be handled using methods different than manure (solid waste).

The concern focuses on one contaminate, Nitrate. Phosphate can be a concern for storm water runoff. A discussion of the nutrient mobility is found in the Nutrient Management Plan section. What is often ignored in the discussion is that nitrate is not a noble ion and mechanisms have been identified that decompose nitrate in the vadose zone.

The proposed site has a deep vadose composed of fine textured soils. Well logs indicate the vadose is about 50 (+) feet. The brown clay and brown sand layer varies in depth but there is at least 50 feet before entering a more porous water-bearing sand or gravel layer.

Although more studies are needed, there is evidence that 90-100 percent of the nitrogen compounds can be oxidized and then reduced in the first 2 feet of unsaturated soil. See Attachment (3). At least one soil profile under a decommissioned lagoon in Yakima County has been performed where nitrates were sampled at one foot intervals to 40 feet. This profile indicated a similar claim, that the nitrates are not penetrating the soil.

This deep vadose will prevent nitrate contamination of ground water due to manure handling and waste water storage. Capturing all accumulated storm water from corrals and manure handling areas; and then dispersing it according to the Nutrient Management Plan will prevent contamination of surface waters.

Odor Management

Some odor is a natural part of any cattle feeding operation. Manure production and land application involves manure handling at the storage site, hauling to the application site, and land application. These processes can lead to potential sources of odor.

The prevailing wind is from the west. The first facility directly east of the proposed calf yard is a large dairy. This proposed calf yard will be one of seven CAFO operations within 3 miles. This facility will be the smallest. Four of these CAFO facilities are west of the proposed calf yard. This proposed calf yard will not add a new nuisance to the area.

The following practices are used to minimize odors:

1. Corrals are kept as dry as possible to provide the least favorable environment for odors and fly pupae (eggs).
2. The disposition of dead animals is accomplished in a sanitary manner and in accordance with all state and local laws.
3. Feed spillage around feed bunkers is kept to a minimum, especially under moist conditions.
4. All animal holding areas are kept clean of excess manure. This provides a less desirable environment for disease organisms to thrive and proliferate.
5. Manure is only applied on days when the wind is relatively calm so that the aerosols and odors are minimized from drifting onto neighboring areas

Since this proposed operation is a dry feed lot there will be little or no waste water to disperse releasing odorants.

Storage pond odor is not likely. The sanitation chemicals used for cleaning the new-born formula equipment will likely control bacterial activity. As time progresses, salts will begin to concentrate. These salts will also hindering bacterial growth. Since the pond will usually be less than 24 inches deep, the natural diffusion of oxygen into the water will likely maintain aerobic conditions in the event of a bacterial bloom. Another feature contributing toward

reduced impact due to odors is this pond is positioned with a favorable stand-off distance from residences not associated with the calf yard. This feature reduces the intensity of any potential odor sensed due to dilution with moving air.

Vector Control

The Fryslan Ranch Calf Yard will use two methods for fly management.

The first method reduces the potential for larvae nurseries in the waste handling area. Weeds along the edge of the lagoons can create pockets ideal for fly larvae. The pond will be lined and this liner will prevent growth of weeds.

The second method targets manure solids to be as dry as possible to reduce the suitability of manure as growth medium for larval development. This also promotes good habitat for fly predator reproduction.

A third means of vector control is distance from potentially offended people. It is also noteworthy that there are six other CAFOs which are larger than this proposed facility within 2-1/2 miles. This proposed facility will likely be the smallest source and will not be adding a new nuisance to the area.

Dust Control

The most frequently traveled roadways and cattle walks on the property are covered with gravel.

Fields not in active agriculture will maintain natural vegetation of sage brush, and grasses as ground cover to prevent wind erosion.

Active agricultural fields will have crops as ground cover. Agricultural practices will be chosen to minimize vulnerabilities to wind erosion such as leaving stubble after harvest.

Vehicle Parking

Due the remote location vehicle parking must be provided on-site for all employees and visitors. Gravel covered area will be provided around the shop. Trucks delivering commodities or receiving milk, will park adjacent to the delivery site until they are loaded or unloaded.

Vehicle Track-out

Access to the calf yard will from Glade road which is about 1-1/2 miles west. The calf yard operations will be supported by an on-site system of gravel-surfaced roadways. Use of these internal roadways substantially reduces the frequency of operation vehicles entering onto the public roads from the calf yard. The most frequently used internal roadways will be gravel. Vehicles leaving the calf yard will transit at lease 1-1/2 miles on gravel road before access to the paved Glade Road. This long transit effectively cleans tires to minimizes mud from being carried onto public roads.

All conceivable transportation of manure will be done on the internal private gravel roads. Fields intended for spread of manure will not require other transit on public roads. In the event of conditions requiring transit on public roads best management practices to prevent or reduce vehicle track out will be observed. Again the 1-1/2 mile transit to glade road will provide good tire cleaning.

Noise Control

Commodities delivered by truck are intended to be completed between the hours of 5:00 a.m. to 5:00 p.m., Monday through Saturday. No deliveries will be made on Sunday.

Calf yard vehicle equipment will be well maintained, including repair and replacement of exhaust systems and mufflers as necessary. Backing up of equipment is minimized as much as possible to reduce noise from backup alarms.

The will not have a public address system or other source of load outside noise. Employees communicate by radio or cell phone as necessary.

Glare

The calf Yard will be equipped with limited lighting for security and after dark operations. Luminaires will be selected with features to stop direct light trespass.

Reflective glare from roofs is not generally a concern. The calf yard does not have large areas covered with metal roof panels.

Communications and Complaint Resolution

Jake Veldhuis is responsible for communications with neighbors and regulatory agencies, and for responding to any inquiries or complaints.

Other Potential Concerns

The 2015 review of the larger scope project identified two concerns dealing with Yakima Nation cultural resources, and wild life habitat and migration. This section will address these concerns:

Cultural Resources

The Mr Tim Bardell contacted the Yakima Nation to address their concerns on 6 Nov 2015 in a telephone call and e-mail. No response from the Yakima Nation has been received. Mr Robert Whitlan of the Washington State Department of Archeology and Historic Preservations was also contacted. He indicated that the Calf Yard proposal would not affect known cultural properties. He did add that if something is found that may have cultural significance to the tribe, that work at the site be suspended, and both the tribe and his office be contacted.

A copy of the letter of response from Mr Whitlam is provided as Attachment (1).

Wild Life Habitat

Comments from the Washington State Department of Fish and Wild Life (WDFW) in the previous application were motivated by not have access to the site to make observations and limited understanding of the scope of the project . An inspection of the site was conducted on 6 January 2016 by Mr. Scott Downes, a biologist with the department. In preparation for his visit, the area affected by the calf yard proposal was staked. During his site visit and subsequent historical studies of the area, he identified the area part of a larger intact habitat important to shrub-steppe wildlife species.

As a mitigating compensation for this 40 acre development, WDFW requests either 60 or 80 acres, (depending on details) be designated a conservation easement. These conditions are acceptable to the Fryslan Ranch. As noted in the introduction of this narrative, the Fryslan Ranch owns nearly 1500 acres in the area on 13 parcels. It has been expressed that it is preferential to have adjoining parcels. Some candidate parcels owned by the Fryslan Ranch adjoin parcels owned by the Washington State Department of Natural Resources. It is optimistic that a favorable mitigation can be achieved.

A copy of his report is provided as Attachment (2).

Compatibility with Neighboring Land Uses and Critical Areas

This proposal transfers what many people perceive as a nuisance land use to a more remote location. This proposed calf yard CAFO will be less visible to those offended by these operations than the current operations.

The location is undeveloped farm land without water rights. Adjacent land uses east, west, north, and south are compatible with this proposed calf yard, all zoned AG. There are no track housing developments within 2 miles. The nearest urban center is the City of Mabton, about 2-1/4 miles northwest with several hundred residences within a square mile. There are 3 residences not associated with the Fryslan Ranch within ½ mile. There are about 30 residences within 1 mile. All of these residences appear to be hobby farms. Within 3 miles are six other CAFOs. The closest is the Van Boven Calf Yard about ¾ mile west. The Mensonides Dairy is located about 1-1/2 miles east. Veldhuis Dairy located about 2 miles north east. The Sunny Dene North Dairy is located about 2-1/2 miles west and the Hidden Valley Dairy and Sunny Dene South Dairy located about 3 miles west.

The Yakima Critical Area Map (Yakima County GIS Mapping) identifies no wet lands or critical areas on the Cafe Yard site. There are two Class 5 streams on the adjacent parcels east and west.

Relevant sections of the zoning ordinance are quoted below, with notations as to the proposal's consistency.

The parcels that compose the dairy are zoned "Agricultural, (AG)":

15.11.010 Purpose. The Agriculture (AG) Zoning District is intended to preserve and maintain areas for the continued practice of agriculture by limiting the creation of small lots, permitting only those new uses that are compatible with agricultural activities, protection of agricultural lands of long-term commercial significance, and providing measures to notify and separate especially sensitive land uses from customary and innovative agricultural land management practices. (The proposal expands the facilities of an existing agricultural operation, helping to ensure the continued practice of agriculture through improving viability of the operation. The remote nature of this farm provides the intended separation of an especially sensitive land use (CAFO) from the customary use of residential. It would not introduce any new use incompatible with other agricultural activities). The specific intent of this zoning it to:

(1) Implement the comprehensive plan which calls for the preservation of agricultural lands; (*This parcel of AG land without water has very few practical uses in agriculture. This proposal puts to use otherwise non-productive agricultural parcel.).*

(2) Provide a zoning district to protect, stabilize and enhance the land base devoted to, or important for, the long-term commercial production of agricultural goods in Yakima County and to protect the best agricultural areas from conflicting uses and influences; (*This proposal will effectively increase the land base devoted to agriculture production, and will release previously used land for higher agricultural uses/production.)*

(*The remaining intent provisions of the zoning ordinance do not pertain to the proposal.*)

The only Policy of the Comprehensive Plan that is relevant to the proposal is LU-ER-AG 1. "Encourage conservation of the County's high quality agricultural lands for productive agricultural use and protect the opportunity for these lands to support the widest variety of agricultural crops."

The proposal is consistent with this provision and other policies of Comprehensive Plan 2015 last amended 2007. The existing dairies are a productive agricultural land use, has many employees, and a multimillion dollar operating budget, thereby contributing significantly to the local economy. The proposed calf yard will help the entire operation enhance efficiency with economic and environmental resources consistent with the County's goals of preserving productive agricultural lands and protecting farmers from nuisance complaints and lawsuits.

Attachment (1)

dahp

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

December 21, 2015

Ms. Laurie Crowe
South Yakima Conservation District
200 Cheyne Road PO Box 1766
Zillah, Washington 98953

Re: Jake Veldhuis/Windmill Estates New Feedlot Project
Log No.: 122115-18-WSCC

Dear Ms. Crowe:

Thank you for contacting our department. We have reviewed the information you provided for the proposed Jake Veldhuis/Windmill Estates New Feedlot Project, Mabton, Yakima County, Washington.

We concur with the determination the proposed project will have no effect upon cultural properties.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive.

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and the concerned tribe's cultural staff and cultural committee and this department notified.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with Executive Order 05-05. Should additional information become available, our assessment may be revised, including information regarding historic properties that have not yet been identified. Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 890-2615
email: *rob.whitlam@dahp.wa.gov*

ATTACHMENT (2)
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State of Washington
DEPARTMENT OF FISH AND WILDLIFE
South Central Region • Region 3 • 1701 South 24th Avenue, Yakima, WA 98902-5720
Telephone: (509) 575-2740 • Fax: (509) 575-2474

January 26, 2016

Byron J. Gumz
Yakima County Public Services, Planning Division
Senior Project Planner, Environmental and Natural Resources Section
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

Subject: WDFW Shrub-steppe habitat survey and potential mitigation options on Proposed Concentrated Animal Feeding Operation (CAFO) for Wind Mill Estates

Dear Mr. Gumz:

Below is a summary of the habitat assessment that I made of the proposed site in January 2016. This letter summarizes the steps that WDFW requests of the applicant going forward to meet for our shrub-steppe habitat concerns over the site.

Background
Washington Department of Fish and Wildlife (WDFW) originally commented on an EIS scoping in August 2015 for the proposed Wind Mill Estates Concentrated Animal Feeding Operation (CAFO) that we had habitat conversion concerns over the proposed project. Following those initial comments, WDFW has learned that the applicant has scaled back the proposal and has located all planned facilities to the northern edge of the site, reducing the sprawl of the footprint to the south towards existing unconverted shrub-steppe habitat.

The application has stated to WDFW that the current revised footprint of the proposed project is 40 acres. These 40 acres sits south of the Mabton West Lateral Canal and lies at the base of the Horse Heaven Hills southeast of Mabton. The entire 40 acres would be converted into developed area and result in loss of shrub-steppe habitat. The parcel is parted on mapped priority shrub-steppe habitat shown on the WDFW Priority Habitats and Species (PHS) page: http://wdfw.wa.gov/conservation/phs/. A brief map showing the landscape and its mapping under PHS is included as an attachment to this letter. The landscape on which the site sits qualifies under the Yakima County Critical Areas Ordinance of:

"Upland Wildlife Habitat Conservation Areas (YCC Title 16C.11)
Upland Wildlife Habitat Conservation Areas (UWHCA) are areas within the county where state or federally designated endangered, threatened, or sensitive species have a primary association. Developments proposed within UWHCA may require a habitat assessment if it is determined that the development proposal could impact the UWHCA. The County relies on existing large lot

zoning districts to protect existing blocks of upland habitat and keep human pressure on animals low. The County also relies on existing State and Federal wildlife habitat programs."

Though the department makes an attempt to map areas of important habitat and species associations through the WDFW PHS system, not all upland habitat areas of importance for connectivity or association with sensitive species are mapped. The county relies on WDFW habitat biologists to determine the value of the land in question and to make assessments of the habitat's worth.

I made a habitat assessment of the site in January 2016 through a site visit on January 15, 2016 and review of additional office resources including soil maps and historical aerial imagery of the site. This habitat assessment outlined below allowed WDFW to clarify our position regarding habitat concerns and potential steps for habitat mitigation.

Habitat Assessment of the Proposed Site

I toured the site on the afternoon of January 15th with the applicant and found that the sagebrush of the site had been mowed recently, either in 2014 or 2015. The habitat assessment was limited to the proposed footprint of the proposed development and a small (perhaps 100 yards) buffer around the west and south side of the proposed footprint. Thus, habitat quality had been reduced but the ground has not been plowed or converted. A few sagebrush plants were still growing though even these plants no longer had structural habitat value due to being mowed to near ground level.

Wildlife evidence was limited to fresh deer scat which was frequently noted on the parcel indicating that the land was still being used by mule deer. A few isolated burrows of small mammals were noted, but none appeared to be of the quality that Townsend's ground squirrel would likely use if they were present within the footprint of the site. Horned lark, a bird of the grassland and shrub-steppe environment was also noted on the site. This was not the time period (January) when most wildlife is active but did allow me to determine habitat potential of the site.

In conjunction with the site visit, landscape maps showing aerial imagery and soil maps were consulted. Soils listed in the USDA NRCS Soil Survey for the site are a series of silt loams that are well drained and listed as at least 80 inches to restrictive bedrock. During the site visit, some scattered rocks were found on the surface indicating that the soil depth may not be consistent across the entire site, but most of the site is deep soil shrub-steppe habitat. Aerial imagery from May of 2015 indicated that while the current site may be mowed, the area is still part of a larger intact habitat that is important to shrub-steppe wildlife species, and if left unconverted and without continued mowing the site has the potential to return to habitat that a suite of State Candidate wildlife species may use including but not limited to Black-tailed Jackrabbit, Townsend's Ground Squirrel, Burrowing Owl and Loggerhead Shrike. As referenced above, the habitat continues to be used by mule deer.

WDFW Requested Steps to Achieve Habitat Mitigation for the Site

While the site has been mowed, it has not been converted to developed ground and further development of the site would lead to a reduction of shrub-steppe habitat, in particular deep soil shrub-steppe habitat that is critical for many shrub-steppe wildlife species that currently are

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candidates for listing due to declines in this habitat in the Columbia Basin. Thus to compensate for these habitat losses, WDFW typically requires habitat mitigation to ensure that the net amount of shrub-steppe is not lost in the area. Our agency standard for shrub-steppe has been a 2:1 ratio where the applicant is responsible for mitigating losses at 2 acres of comparable habitat for every 1 acre that is converted from shrub-steppe habitat.

WDFW is requesting this 2:1 ratio for habitat mitigation concerns for the proposed Windmill Estates project. Thus, under the proposed 40 acre footprint the habitat mitigation would be 80 acres of comparable deep soil shrub-steppe habitat. This ratio is deemed appropriate based upon the site potential if no further conversion or mowing of the habitat is conducted. Habitat mitigation can be accomplished in a number of ways including working with WDFW to purchase habitat of comparable or better value in the general area or if an appropriate option for conservation easement exists on the applicant's land that can also be a possibility. Typically habitat purchases or conversation easements are most desired adjoining to tracts of intact habitat and in particular public lands that are secured from habitat conversion where they can be used by wildlife in the greater landscape context. Conservation easements would likely require some habitat restoration if the targeted lands were also mowed and would likely include stipulations to manage the land against weeds and keep cattle grazing off of the habitat. There are parcels of Department of Natural Resource (DNR) land in the immediate area and joining habitat mitigation options directly adjacent to those lands would be a sound strategy.

The 2:1 ratio is a general guideline, and comes with some flexibility. If a conservation easement could be arranged along with habitat restoration, it is possible that a slightly lower ratio of 1.5:1 might be possible. Details will need to be worked out with WDFW staff if habitat mitigation is pursued for this project. WDFW does not believe there is a high likelihood of sensitive wildlife occupying the site in its current mowed condition and is not requiring a wildlife survey as requested in the original scoping comments dated August 2015. Provided that the applicant keeps the converted habitat to the currently proposed 40 acres, does not plan to convert additional habitat to further reduce the shrub-steppe habitat to the south and works with WDFW on habitat mitigation at the suggested ratios listed above, WDFW will not oppose the building of this project over habitat conversion issues.

These are the steps that will satisfy WDFW habitat concerns if the applicant and Yakima County planning division decide to proceed with development of the project. We look forward to working with the applicant on habitat mitigation for this project. If you have questions regarding any of the above comments, please contact me at 509-457-9307.
Sincerely,

Scott Downes
Area Habitat Biologist

Cc: Brent Renfrow, WDFW
Perry Harvester, WDFW

PubMed

ATTACHMENT (3)

Abstract

J Environ Qual. 2012 Sep-Oct;41(5):1623-32. doi: 10.2134/jeq2012.0015.

Infiltration mechanism controls nitrification and denitrification processes under dairy waste lagoon.

Baram S[1], Arnon S, Ronen Z, Kurtzman D, Dahan O.

Author information

Abstract

Earthen waste lagoons are commonly used to store liquid wastes from concentrated animal feeding operations. The fate of ammonium (NH) and nitrate (NO) was studied in the vadose zone below earthen-clay dairy farm waste lagoons using three independent vadose zone monitoring systems. The vadose zone was monitored from 0.5 to 30 m below land surface through direct sampling of the sediment porewater and continuous measurement of the sediment profile's water content variations. Four years of monitoring revealed that wastewater infiltration from the lagoon is controlled by two mechanisms: slow (mm d), constant infiltration from the lagoon bed; and rapid (m h) infiltration of wastewater and rainwater via preferential flow in desiccation cracks formed in the unsaturated clay sediment surrounding the lagoon banks. The preferential flow mechanism is active mainly during wastewater-level fluctuations and intensive rain events. The vadose zone below the waste sources remained unsaturated throughout the monitoring period, and all infiltrating NH was oxidized in the upper 0.5 m. The NH oxidation (nitrification) was coupled with NO reduction (denitrification) and depended on the sediment water content, which was controlled by the infiltration mechanism. Coupled nitrification-denitrification (CND) resulted in 90 to 100% reduction in the total nitrogen mass in the vadose zone, with higher removal under high water content (~0.55 m m). Mass balance of nitrogen and isotopic composition of NO indicated that CND, rather than cation exchange capacity, is the key factor regulating nitrogen's fate in the vadose zone underlying earthen waste lagoons.

PMID: 23099954 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances

PubMed Commons

PubMed Commons home

ATTACHMENT (4)

DAVIS PUMPS & ELECTRIC MOTORS, INC. 1/2

2500 Mabton-Sunnyside Hwy. P.O. Box 566 Sunnyside, Wa. 98944 509-837-5303 (FAX 836-2000)

WELL LOCATION: Open Land west of 6220 Christenson Rd. Mabton, Wa.

EQUIPMENT USED: 20 hp Submersible pump, flow meter, Sonic Depth finder

LAND PARCELL # 230808330001

STATIC WATER LEVEL: 220'

CASING SIZE: 10"

DEPTH OF WELL: 370'

DATE	HOUR	PUMPING LEVEL(ft.)	DRAW DOWN (ft.)	VOLUME GPM	REMARKS: WATER CONDITION, TEMPERATURE, HARDNESS, DIRTY, CLEAN, DISCOLORED, ETC.
12-30-2015	Start	220'	~~0~~	~~0~~	new well - water
	8:15	220'	~~0~~	110	started out murky
	8:45	226'	6'	110'	and Grey. Cleared
	9:15	226'	6'	110	up in 20 minutes.
	9:45	227'	7'	150	Opened Gate Valve up
	10:45	230'	10'	200	to see if well would
	11:45	230'	10'	200	draw down. Very little
	4:45	226'	6'	110	Level change from 100GPM
12-31 2015	8:15	226'	6'	110	to 200 GPM. Well recovered
	12:15	226'	6'	110	in under 10 seconds

DAVIS PUMPS & ELECTRIC MOTORS, INC.

2500 Mabton-Sunnyside Hwy. P.O. Box 566 Sunnyside, Wa. 98944 509-837-5303 (FAX 836-2000)

WELL LOCATION: 620 Christenson Rd. Mabton, Wa.

EQUIPMENT USED: Existing 5hp well pump, Flow meter, Sonic Depth Finder

LAND PARCELL # 230B0B43001

STATIC WATER LEVEL: 58'

CASING SIZE: 6".

DEPTH OF WELL: N A

DATE	HOUR	PUMPING LEVEL(ft.)	DRAW DOWN (ft.)	VOLUME GPM	REMARKS: WATER CONDITION, TEMPERATURE, HARDNESS, DIRTY, CLEAN, DISCOLORED, ETC.
12-30-2015	Start	58'	0	0	Test was done
	8:30	58'	0	63	at 40 psi.
	9:00	72'	14'	61	Water was Clean.
	9:30	75'	17'	61	No Sand.
	10:00	76'	18'	61	
	11:00	76'	18'	61	
	12:00	76'	18'	61	
	5:00	76'	18'	61	
12-31-2015	8:30	76'	18'	61	
	12:30	76'	18'	61	

Fryslan Ranch Calf Yard
Descriptive Narrative

Prepared by: B7 Engineering
PO Box 487
1614 Eastway Drive
Sunnyside WA 98944
509-837-8600

B7 job number 14122B

Fryslan Ranch Calf Yard

Contents **Page**

Attention

Dairies and Feedlots are subject to the following RCW regarding sharing of information. If you are providing information to a member of the public make sure you are in compliance.

RCW42.56.610
Certain information from dairies and feedlots limited-rules.

The following information plans, records, and reports obtained by state and local agencies from dairies, animal feeding operations, and concentrated animal feeding operations, not required to apply for a national pollutant discharge elimination system permit is disclosable only in ranges that provide meaningful information to the public while ensuring confidentiality of business information regarding: (1) Number of animals; (2) volume of livestock nutrients generated; (3) number of acres covered by the plan or used for land application of livestock nutrients; (4) livestock nutrients transferred to other persons; (5) crop yields. The department of agriculture shall adopt rules to implement this section in consultation with affected state and local agencies.

[2005 c 510 § 5. Formerly REC 42.17.31923.]

Fryslan Ranch Calf Yard

Introduction

The Fryslan Ranch operates three concentrated animal feeding operations (CAFO) which provide replacement cows for four dairies owned by the parent company, Wind Mill Estates. All of the concentrated animal feeding operations are located in the central Yakima Valley. The Fryslan Ranch wants to move the young calf (70-150 lbs range) and elementary calf (150-350 lbs) raising operations to a new facility located about 2-1/2 miles southeast of Mabton WA. This narrative will describe the operation and specific details. It will also present arguments supporting the position that this project should be approved.

Fryslan Ranch recently purchased 1456.94 acres on 13 parcels in the area east of Glade Road and south of the Sunnyside Irrigation District canal. 1130.69 acres of these parcels are adjoining. On two adjoining parcels 2301817-21001 (160.07 A), and 230808-33001 (35.1 A), Fryslan Ranch wants to build a calf yard covering about 30 acres. The new facilities will include about 16 acres of corrals, about 4 acres of hutch yard with about 1500 calf hutches, one to four buildings totaling 15,000 sf or less to house various support functions, and a 5 Mg waste water pond. Permits from Yakima Public Services are required for adjusting the grading, excavating the pond, and buildings. The cattle population will be about 1300 animal units which triggers designating the facility a CAFO and therefore a conditional use permit and an environmental review (SEPA) is required.

Wind Mill Estates applied for building a larger facility at this same location under docket PRJ 2015-350, CUP 2015-036 an SEP 2015-015. The Fryslan Ranch wants to close these 2015 applications, down scope the project, and reapply as described therein.

THIS PROJECT WILL NOT INCREASE CATTLE POPULATIONS IN YAKIMA VALLEY. The purpose of the Calf Yard is to join the new-born and elementary cattle raising operations at one site. Currently, Fryslan Ranch has new-born hutches at Stover and Hornby Roads and corrals for elementary calves at a rented facility on Den Boer Road. This proposal will relocated these operations to one facility.

The shop has several purposes. The primary purpose is to shelter and repair equipment used at the calf yard. The shop will also be used for new-born formula preparation, and, when needed, provide shelter for very young or sick calves. Grading for corrals will be minimal, the existing grade is very close to ideal, but some cuts and fills less than 3 feet may be needed to achieve proper drainage for control of storm water. The Waste Water Pond has two purposes: a precautionary structure to ensure that potentially contaminated storm water is captured, and to receive water used to clean and sanitize new-born formula equipment. The waste water

pond will receive storm water rarely about every two years. The waste stream from new-born formula will less that the annual evaporation about, about 2500 gpd.

Operations

This section discusses envisioned operations for the Fryslan Ranch Calf Yard.

Water Source

The Fryslan Ranch will draw water from one of four wells under the exempt water right for stock watering purposes. Some water will be used for mixing and cleaning of new-born formula and feedings equipment. This accessory use of water related to watering livestock is claimed to be part of stock watering purposes. Water withdrawals will be about 30 Acre feet per year, 25,000 gallons per day, or about 18 gallons per minute (gpm) average draw.

Fryslan Ranch has four available wells for this operation. Two wells for stock watering were drilled during 2015 anticipating approval of the 2015 land use applications. The following table lists these four wells.

Year	Well Tag #	Well log #	Size	Depth	Test Capacity	Name
1996	ACE-511	121501	6"	122'	100 gpm	Alberto Molina
1997	ACL-582	122057	6"	157'	23 gpm	Cindy Crawford
2015	BIF-429	1050530	8"	765'	200+ gpm	Fransisca V
2015	BIF-430	1035873	8"	370'	150+ gpm	FRH Enterprises

These four wells draw from three different aquifers, Local shallow, Saddle Mountain and Wanapum. With four available wells from three different aquafers there is great reliability and flexibility. One concern of the 2015 environmental review was potential drawdown of the deeper Wanapum aquifer. Although the BIF-429 will remain available, its use would only be for extreme conditions, as directed by water resource.

Another concern of the 2015 review was an increase in water usage and a concurrent reduction of in-stream flows to Yakima River. Water usage in the Yakima Valley is not increase by this new facility because this facility does not increase the cattle population in Yakima Valley. The point of withdrawal will shift from the wells at the current operations to one of these four wells. The water draws from wells at the other cattle operations will see a reduction equal to the draws at this new facility.

Whereas the wells at the current operations draw from the Saddle Mountain and Wanapum Aquifers, water withdrawal for this operation can pull from aquifers proportioned anyway that water resource officials think is appropriate. Without guidance, the Fryslan Ranch will draw primarily from the local shallow aquifer which have been demonstrated adequate.

A complete Hydrogeological study was not conducted, a draw down test was performed to observe the effect of a heavy draw on the wells. Well ACE-511 was observed to drawdown 18

feet when 61 gpm was pumped. The drawdown came to equilibrium in 90 minutes, the test duration was 28 hours.

Well BIF-439 was also tested. The volume was initially 110 gpm, and equilibrium drawdown of 6 feet was achieved in 90 minutes. The flow was increased to 200 gpm, and drawdown equilibrium was achieved in less than an hour measured at 10 feet. When the test was completed, the well recovered in 10 seconds. The duration of the test was 28 hours.

This test conducted by Davis Pumps and the logs of these tests are found as Attachment (4). Feed lot operations typically use less water per acre than growing field crops. In this proposal, the anticipated water used is less than 1 foot per year per acre. Typical field crop require 2 to 3 feet.

Nutrient Management Plan

The Wind Mill Estates has four dairies each with an approved Dairy Nutrient Management Plan (DNMP) and it currently being updated by the soil conservation district. All of these DNMPs share a common plan for dispersion of liquid and solid waste. This global dispersion plan includes solid waste streams from cattle operations of the Fryslan Ranch.

Although there is no requirement for having a nutrient management plan for non-dairy feed lots, the Fryslan Ranch operation will have a plan approved by a governing authority with enforcement oversight.

The contents of these DNMPs is confidential, protected from general public dissemination by RCW42.56.610, Certain Information from Dairies and Feedlots Limited-rules.

These DNMPs are based on the number of animal units and accounts for meteorology, soil conditions, and farming practices at the time the DNMP was prepared. Language in the DNMP required that it be amended if the total animal units exceed 110% of the animal units when the CNMP was prepared.

These DNMP describe manure quantities, waste water storage requirements, and field application methods at agronomic rates. Total waste quantities are calculated based on the following factors: herd size, waste water volume, and storm water runoff including runoff from a 24-hour, 25- year storm event.

These DNMPs address three principle nutrients: nitrogen, phosphorus, and potassium. Generally, phosphorus and potassium will precipitate in the soil and become relatively immobile. Potassium is generally not considered a pollutant. Phosphorus pollution is controlled by preventing soil erosion.

Nitrogen sourced from the dairy nutrients is primarily in the form of organic matter. Organic nitrogen is a natural slow release material. The second form of nitrogen is Ammonia in the ion form (NH_4^+) which can bond with multiple soil components rendering it immobile. The third

form of nitrogen and the minority component is Nitrate ion (NO3-) which is water soluble. It does not bond readily with soil components and with excessive soil moisture will migrate with the moisture below the root capture zone.

Nitrate Nitrogen is the nutrient of most concern, due to its ability to migrate into ground water aquifers. Concentrations of all three macronutrients are tested at the application fields and these records are inspected by WSDA along with the entire facility on an annual basis. Applications of nutrients are timed to match crop growth and rates to match plant needs, at agronomic rates. Many dairy fields are double cropped in a system with winter triticale as the fall/winter crop, and silage corn or Sudan grass as the spring/summer crop to maximize feed production, nutrient efficiency and nutrient removal.

Specific nutrient tests required include: nitrate-N, ammonia-N, phosphorus (P2O2), and potassium (K2O). Soil testing is conducted bi-annually on all fields, generally in the spring and fall.

The total nitrogen available in the liquid waste depends upon feed mixtures, cleaning water used, and the weather. Testing of the nitrogen concentration in the pond will be addressed in the DNMP. Liquid waste is applied to application fields via irrigation or by tanker at agronomic rates. Solid wastes will be hauled to various agricultural fields listed in the DNMPs and dispersed at agronomic rates or composted and sold as a co-product.

The use of solid animal manure as a nutrient source, generally, benefits the soil better than inorganic salt fertilizers. Manure ads organic matter to the soil, which improves soil structure, air and water infiltration, and general tilth. Soil erosion is reduced and the moisture holding capacity is increased. Another benefit is that nitrogen and phosphorus are released slowly by action of microorganisms. This benefit conserves these elements and makes them available throughout the year as they are needed for plant growth.

The DNMP will includes a listing of land areas designated for application of solid and liquid manure at agronomic rates.

Wastewater Management

Waste water comes from two sources: Cleaning of new-born formula equipment, and storm water event that exceeds the capacity for soil absorption.

The waste water from cleaning new-born formula equipment is piped directly to the storage pond. The inflow is estimated to be about 2500 gallons per day. The pond is sized to provide evaporative dispersion of this waste stream. The waste stream will be relatively High BOD residues of milk replacer and sanitation chemicals, usually sodium hypo-chlorite based. A pH

balancing acid may be added according the management protocol of the sanitation product chosen for use.

The waste water pond will be have a synthetic liner. The design will conform with standards set by the USDA NRCS. The design will likely use a 60 mil liner made from an acceptable material like high density polyethylene.

The pond will be sized to collect stormwater for the 25 year storm event and include the waste stream from the new-born formula equipment. Storm water collected from the residential corrals will be contaminated with manure, and will be handles according to the DNMP nutrients. When storm water is collected, the inflow may exceed the evaporative out-flow capacity and contents may need further dispersion by pumping or trucking to dispersion fields.

Storm Water Management

The calf yard will be sited on a higher flat area of undeveloped agricultural land. Before corrals are built, a building platform will be established provide good drainage and surface water collection.

For most storm events the precipitation will be absorbed like a sponge by the bare soil. The soil will later release this moisture by evaporation. The fine particulates in cattle manure has been shown to plug pores between soil particles effectively reducing the effective thickness of the soil to absorb the storm water. Consequently, during colder and wetter conditions surface soil will become saturated and standing water can occur in the corrals before unaffected native soils become saturated. For this reason, the individual corrals will be contoured to easily collect this water and rout it to the collection pond. Possible paved areas for feed handling, will also be graded to catch basins to collect potential leachant and storm water to be routed to the pond.

Most years the evaporative dispersion of water offered by the pond will be sufficient for these waste streams. In the event of the pond evaporation not keeping up with inflows, the pond water will be dispersed according to the DNMPs. Most of the storm water falling on the dairy is absorbed by the soil.

Sources of off-site storm water are not likely to overwhelming the on-site facilities. The calf yard is located between two ravines which provide the natural drain routs for the area. The one to the east of the facility is designated as a type 5 stream. The ravine for this Type 5 stream will be unaffected by this project and continue to be a Type 5 stream. The ravine to the west is not designated a critical area and sits about 10 feet below the corrals. This west side ravine is where the stormwater pond will be built. A precautionary by=pass drain will be provided around the pond in the event that this ravine becomes a stream to prevent over-fill of the pond.

Open Corrals

The Fryslan Ranch Calf Yard will be equipped with residence corrals where calves wander freely within the corrals. Manure and urine is distributed throughout the corrals, but there are always areas where manure will accumulated. These accumulations of animal waste usually occur at the feeding alley/lockouts or near watering toughs. Tractors equipped with rubber blades will be used to pull these accumulations to the center of the corrals or to the designated manure drying yards.

Most of the year, manure and urine deposited in the corrals will dry without additional intervention. Accumulated dried manure is scrapped into piles and removed with loaders and trucks, and shipped to active agricultural fields located adjacent to the dairy operations or to a composting yard. Trucks shipping this manure will usually use private roads interconnecting the Calf Yard with various nearby dry-land crop fields controlled by Fryslan Ranch or its parent company Wind Mill Estates.

Employee Training

Employees receive training appropriate to their assigned tasks. Employees involved in manure and wastewater management are trained in the relevant procedures and requirements of the Dairy Nutrient Management Plans.

All employees are trained to correct or notify management if they observe conditions requiring corrective action. Areas emphasized in training include storm water management controls, manure and wastewater management controls, fly control, noise control, vehicle track-out prevention, work place safety, and spill prevention control and countermeasures plan.

Nuisance Mitigations

This section addresses perceived nuisances and methods used to mitigate these nuisances.

Water Quality

Water quality as related to this proposal is summarized as two concerns:

1. Prevent contaminated waste water from contaminating ground.
2. Prevent leachates from solid wastes from contaminating ground and surface waters.

These two concerns are essentially the same but become distinct when viewing the calf yard operation; waste water will be handled using methods different than manure (solid waste).

The concern focuses on one contaminate, Nitrate. Phosphate can be a concern for storm water runoff. A discussion of the nutrient mobility is found in the Nutrient Management Plan section. What is often ignored in the discussion is that nitrate is not a noble ion and mechanisms have been identified that decompose nitrate in the vadose zone.

The proposed site has a deep vadose composed of fine textured soils. Well logs indicate the vadose is about 50 (+) feet. The brown clay and brown sand layer varies in depth but there is at least 50 feet before entering a more porous water-bearing sand or gravel layer.

Although more studies are needed, there is evidence that 90-100 percent of the nitrogen compounds can be oxidized and then reduced in the first 2 feet of unsaturated soil. See Attachment (3). At least one soil profile under a decommissioned lagoon in Yakima County has been performed where nitrates were sampled at one foot intervals to 40 feet. This profile indicated a similar claim, that the nitrates are not penetrating the soil.

This deep vadose will prevent nitrate contamination of ground water due to manure handling and waste water storage. Capturing all accumulated storm water from corrals and manure handling areas; and then dispersing it according to the Nutrient Management Plan will prevent contamination of surface waters.

Odor Management

Some odor is a natural part of any cattle feeding operation. Manure production and land application involves manure handling at the storage site, hauling to the application site, and land application. These processes can lead to potential sources of odor.

The prevailing wind is from the west. The first facility directly east of the proposed calf yard is a large dairy. This proposed calf yard will be one of seven CAFO operations within 3 miles. This facility will be the smallest. Four of these CAFO facilities are west of the proposed calf yard. This proposed calf yard will not add a new nuisance to the area.

The following practices are used to minimize odors:

1. Corrals are kept as dry as possible to provide the least favorable environment for odors and fly pupae (eggs).
2. The disposition of dead animals is accomplished in a sanitary manner and in accordance with all state and local laws.
3. Feed spillage around feed bunkers is kept to a minimum, especially under moist conditions.
4. All animal holding areas are kept clean of excess manure. This provides a less desirable environment for disease organisms to thrive and proliferate.
5. Manure is only applied on days when the wind is relatively calm so that the aerosols and odors are minimized from drifting onto neighboring areas

Since this proposed operation is a dry feed lot there will be little or no waste water to disperse releasing odorants.

Storage pond odor is not likely. The sanitation chemicals used for cleaning the new-born formula equipment will likely control bacterial activity. As time progresses, salts will begin to

concentrate. These salts will also hindering bacterial growth. Since the pond will usually be less than 24 inches deep, the natural diffusion of oxygen into the water will likely maintain aerobic conditions in the event of a bacterial bloom. Another feature contributing toward reduced impact due to odors is this pond is positioned with a favorable stand-off distance from residences not associated with the calf yard. This feature reduces the intensity of any potential odor sensed due to dilution with moving air.

Vector Control

The Fryslan Ranch Calf Yard will use two methods for fly management.

The first method reduces the potential for larvae nurseries in the waste handling area. Weeds along the edge of the lagoons can create pockets ideal for fly larvae. The pond will be lined and this liner will prevent growth of weeds.

The second method targets manure solids to be as dry as possible to reduce the suitability of manure as growth medium for larval development. This also promotes good habitat for fly predator reproduction.

A third means of vector control is distance from potentially offended people. It is also noteworthy that there are six other CAFOs which are larger than this proposed facility within 2-1/2 miles. This proposed facility will likely be the smallest source and will not be adding a new nuisance to the area.

Dust Control

The most frequently traveled roadways and cattle walks on the property are covered with gravel.

Fields not in active agriculture will maintain natural vegetation of sage brush, and grasses as ground cover to prevent wind erosion.

Active agricultural fields will have crops as ground cover. Agricultural practices will be chosen to minimize vulnerabilities to wind erosion such as leaving stubble after harvest.

Vehicle Parking

Due the remote location vehicle parking must be provided on-site for all employees and visitors. Gravel covered area will be provided around the shop. Trucks delivering commodities or receiving milk, will park adjacent to the delivery site until they are loaded or unloaded.

Vehicle Track-out

Access to the calf yard will from Glade road which is about 1-1/2 miles west. The calf yard operations will be supported by an on-site system of gravel-surfaced roadways. Use of these internal roadways substantially reduces the frequency of operation vehicles entering onto the public roads from the calf yard. The most frequently used internal roadways will be gravel. Vehicles leaving the calf yard will transit at lease 1-1/2 miles on gravel road before access to the

paved Glade Road. This long transit effectively cleans tires to minimizes mud from being carried onto public roads.

All conceivable transportation of manure will be done on the internal private gravel roads. Fields intended for spread of manure will not require other transit on public roads. In the event of conditions requiring transit on public roads best management practices to prevent or reduce vehicle track out will be observed. Again the 1-1/2 mile transit to glade road will provide good tire cleaning.

Noise Control

Commodities delivered by truck are intended to be completed between the hours of 5:00 a.m. to 5:00 p.m., Monday through Saturday. No deliveries will be made on Sunday.

Calf yard vehicle equipment will be well maintained, including repair and replacement of exhaust systems and mufflers as necessary. Backing up of equipment is minimized as much as possible to reduce noise from backup alarms.

The will not have a public address system or other source of load outside noise. Employees communicate by radio or cell phone as necessary.

Glare

The calf Yard will be equipped with limited lighting for security and after dark operations. Luminaires will be selected with features to stop direct light trespass.

Reflective glare from roofs is not generally a concern. The calf yard does not have large areas covered with metal roof panels.

Communications and Complaint Resolution

Jake Veldhuis is responsible for communications with neighbors and regulatory agencies, and for responding to any inquiries or complaints.

Other Potential Concerns

The 2015 review of the larger scope project identified two concerns dealing with Yakima Nation cultural resources, and wild life habitat and migration. This section will address these concerns:

Cultural Resources

The Mr Tim Bardell contacted the Yakima Nation to address their concerns on 6 Nov 2015 in a telephone call and e-mail. No response from the Yakima Nation has been received. Mr Robert Whitlan of the Washington State Department of Archeology and Historic Preservations was also contacted. He indicated that the Calf Yard proposal would not affect known cultural properties. He did add that if something is found that may have cultural significance to the tribe, that work at the site be suspended, and both the tribe and his office be contacted.

A copy of the letter of response from Mr Whitlam is provided as Attachment (1).

Wild Life Habitat

Comments from the Washington State Department of Fish and Wild Life (WDFW) in the previous application were motivated by not have access to the site to make observations and limited understanding of the scope of the project . An inspection of the site was conducted on 6 January 2016 by Mr. Scott Downes, a biologist with the department. In preparation for his visit, the area affected by the calf yard proposal was staked. During his site visit and subsequent historical studies of the area, he identified the area part of a larger intact habitat important to shrub-steppe wildlife species.

As a mitigating compensation for this 40 acre development, WDFW requests either 60 or 80 acres, (depending on details) be designated a conservation easement. These conditions are acceptable to the Fryslan Ranch. As noted in the introduction of this narrative, the Fryslan Ranch owns nearly 1500 acres in the area on 13 parcels. It has been expressed that it is preferential to have adjoining parcels. Some candidate parcels owned by the Fryslan Ranch adjoin parcels owned by the Washington State Department of Natural Resources. It is optimistic that a favorable mitigation can be achieved.

A copy of his report is provided as Attachment (2).

Compatibility with Neighboring Land Uses and Critical Areas

This proposal transfers what many people perceive as a nuisance land use to a more remote location. This proposed calf yard CAFO will be less visible to those offended by these operations than the current operations.

The location is undeveloped farm land without water rights. Adjacent land uses east, west, north, and south are compatible with this proposed calf yard, all zoned AG. There are no track housing developments within 2 miles. The nearest urban center is the City of Mabton, about 2-1/4 miles northwest with several hundred residences within a square mile. There are 3 residences not associated with the Fryslan Ranch within ½ mile. There are about 30 residences within 1 mile. All of these residences appear to be hobby farms. Within 3 miles are six other CAFOs. The closest is the Van Boven Calf Yard about ¾ mile west. The Mensonides Dairy is located about 1-1/2 miles east. Veldhuis Dairy located about 2 miles north east. The Sunny Dene North Dairy is located about 2-1/2 miles west and the Hidden Valley Dairy and Sunny Dene South Dairy located about 3 miles west.

The Yakima Critical Area Map (Yakima County GIS Mapping) identifies no wet lands or critical areas on the Cafe Yard site. There are two Class 5 streams on the adjacent parcels east and west.

Relevant sections of the zoning ordinance are quoted below, with notations as to the proposal's consistency.

The parcels that compose the dairy are zoned "Agricultural, (AG)":

15.11.010 Purpose. The Agriculture (AG) Zoning District is intended to preserve and maintain areas for the continued practice of agriculture by limiting the creation of small lots, permitting only those new uses that are compatible with agricultural activities, protection of agricultural lands of long-term commercial significance, and providing measures to notify and separate especially sensitive land uses from customary and innovative agricultural land management practices. (The proposal expands the facilities of an existing agricultural operation, helping to ensure the continued practice of agriculture through improving viability of the operation. The remote nature of this farm provides the intended separation of an especially sensitive land use (CAFO) from the customary use of residential. It would not introduce any new use incompatible with other agricultural activities). The specific intent of this zoning it to:

(1) Implement the comprehensive plan which calls for the preservation of agricultural lands; (*This parcel of AG land without water has very few practical uses in agriculture. This proposal puts to use otherwise non-productive agricultural parcel.).*

(2) Provide a zoning district to protect, stabilize and enhance the land base devoted to, or important for, the long-term commercial production of agricultural goods in Yakima County and to protect the best agricultural areas from conflicting uses and influences; (*This proposal will effectively increase the land base devoted to agriculture production, and will release previously used land for higher agricultural uses/production.)*

(*The remaining intent provisions of the zoning ordinance do not pertain to the proposal.*)

The only Policy of the Comprehensive Plan that is relevant to the proposal is LU-ER-AG 1. "Encourage conservation of the County's high quality agricultural lands for productive agricultural use and protect the opportunity for these lands to support the widest variety of agricultural crops."

The proposal is consistent with this provision and other policies of Comprehensive Plan 2015 last amended 2007. The existing dairies are a productive agricultural land use, has many employees, and a multimillion dollar operating budget, thereby contributing significantly to the local economy. The proposed calf yard will help the entire operation enhance efficiency with economic and environmental resources consistent with the County's goals of preserving productive agricultural lands and protecting farmers from nuisance complaints and lawsuits.

FRYSLAN CALF YARD
SITE PLAN

Based on othophotography from Yakimap and Google

Scale 1 in. = 1000 ft

Wind Mill Estates Feed Shed

Owner: Windmill Estates, Jake Veldhuis
Parcel 230817-21001, 160.07 Acres
230818-11002, 82.25 Acres
230808-33001, 35.1 Acres
Address: Glade Road Mabton WA
Zone: AG

NORTH

NEW CALF YARD
FOR DAIRY CATTLE

EXISTING FEED LOT

Pivot

Pivot

Pivot

Residence with OSS & Well

Mabton West Lateral Canal

Lengths of property lines and distances thereto are intentionally omitted to reduce clutter. These distances may be obtained by scaling

230808-33001
(35.10A)

Nursery Hutches 4x8
1,500(0-3 mo)
Avg 140 lbs

Hospital/Nursery 60x120

500'

Shop 50x120

230808-34002
(17.92A)

New Bridge

230808-34003
(15.56A)

Residence with OSS & Well

Residence with OSS & Well

230808-43001
(19.75A)

Residence with OSS & Well

1045-2?6

483'-8?6

1200'

Elementary Corrals 40 30x130
(3-5 mo)
approx 1200 avg 300 lbs

Middle Corrals
8 300x200
(5-10mo)
approx 2000 hd. avg 400lbs

Emerg storm water lagoon 5 mG

220813-11001
(581.02A)

Gravel ACCESS ROAD 30 ft wide

230818-21001
(124.1A)

230818-12001
(41.27A)

230818-11002
(82.25A)

TYPE V Stream Ford

230817-12001
(39.42A)

BPA EASEMENT

230818-22001
(73.4A)

CLASS V STREAM

230817-21001
(160.07A)

230817-13001
(40.18A)

CLASS V STREAM

DNR

230818-42001
(41.4A)

DNR

230817-31001
(80.21A)

230817-42001
(40.36A)

230818-43001

230818-44001

230817-33001

230819-11001

Sheet: 1
Drawn by: TWB

Revisions:
16 Dec 2015
23 Feb 2016

FRYSLAN RANCHES
Calf Yard
B7 Job 14122

B7 ENGINEERING
PO Box 487
1614 Eastway Drive
Sunnyside Wa,98944
(509) 837-8600

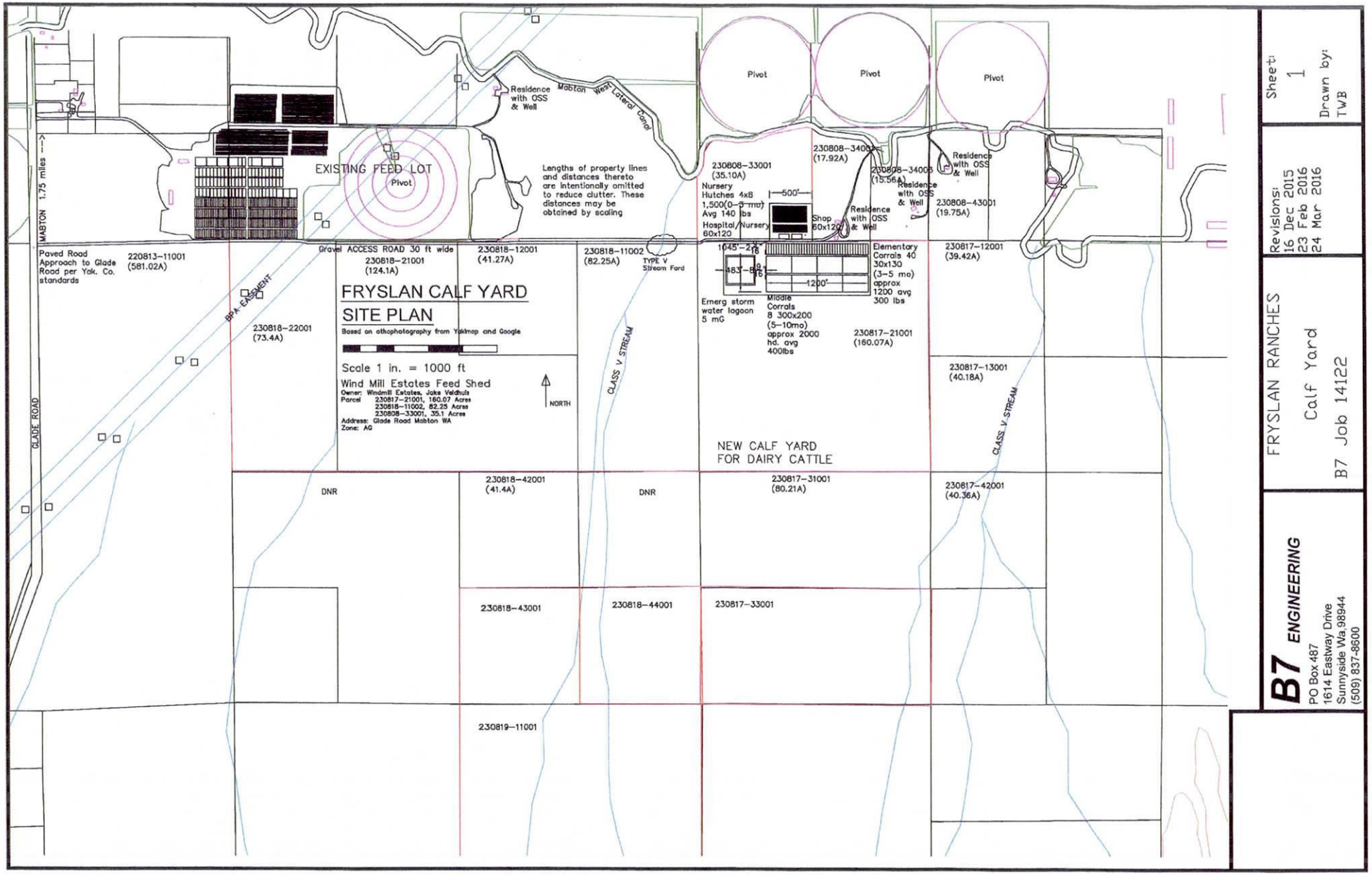
MINIMUM REQUIREMENTS
SITE PLAN SUBMITTAL CHECKLIST
Land Use Actions

FINAL
Revised10/01/15

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

This informational brochure will assist in the preparation of your site plan for project submittal. The minimum site plan information on this page is required. Check the box beside those items that you have included on your site plan. A sample site plan is also included for your assistance. If you need information or assistance please contact the Public Services at (509) 574-2300.

Required Site Plan Information:		
1	☒	Paper size shall be 8.5 x 11 or 11 x 17. If multiple pages, provide an index sheet showing the entire site. **Grid paper or picture backgrounds are not acceptable, the map must be reproducible**
2	☒	Blue or Black Ink, in order that they may be photocopied.
3	☒	North Arrow (north should be pointing to the top of the page)
4	☒	Legend to include:
	☒	***Owner/Applicant Name***
	☒	***Date the Site Plan was drawn.***
	☒	***Name, address and telephone number of the person preparing the site plan***
	☒	***Tax Parcel Number***
	☒	***Standard engineering scale of the drawing (at least: 1" = 200 ft.)***
5	☒	Property line dimensions of all lot(s) involved in the project. Scaled
6	☒	The location, width and purpose of all easements (utility, access and/or irrigation) on the site and adjacent to the site.
7	☒	Location of new and/or expanded public and private utility infrastructure. NA
8	☒	Streets and access easements, with the name, dimensions, type (public or private) and road surface (paved, gravel or dirt).
9	☒	Location, dimension and design of off-street parking facilities and points of ingress (to) and egress (from).
10	☒	Location of pedestrian and vehicular circulation patterns, sidewalks, trails and bicycle paths. NA
11	☒	Location, shape, size, gross floor area, height and types of all existing and proposed structures, minimum building setbacks from the property lines and other structures, and the total lot coverage. SCALE
12	☒	Location and dimensions of all proposed exterior land uses.
13	☒	The distance from existing and proposed structures to the centerline of state, county, or private access roads. SCALE
14	☒	Location of structures on the adjoining lots, which may cause compatibility issues. NA
15	☒	All major man-made and natural physical features such as railroads, canals, streams, creeks, drainage ditches, hills, depressions, steep slopes, lakes, shorelines, floodplains*, floodways, the 100-year base flood elevations etc. on-site or adjacent to the site. **(*Boundaries of the 10 and 25-year floodplain using the flood risk maps as provided by Yakima County as part of a mandatory pre-application meeting.)**
16	☒	Description of the extent to which any watercourse will be altered or relocated as a result of the proposal NA
17	☒	Proposed location and dimensions of community and other open space. NA
18	☒	Existing and proposed landscaping, site screening, street trees and stormwater drainage facilities.
19	☒	Location of well or water systems within 100 feet of the subject property or within a 100 foot well control zone and the distance from any structures within the well control zone.
20	☒	Proposed contours and grading as they affect lot layout, streets, and drainage ways.
21	☒	Location of proposed or existing drain field area, extension area, and tank area as well as replacement areas and distances to structures and property lines
22	☒	Location of adjacent public water, sewer main, fire protection systems and other underground facilities within or adjacent to the development. NA
23	☒	Within a UGA, Master Planned Resort or Rural Settlement show the existing topographic contours at intervals of not more than 5' when the ground slopes exceed 10%. Extend 100' beyond the boundaries of the site. NA



Sheet: 1
Drawn by: TWB

Revisions:
16 Dec 2015
23 Feb 2016
24 Mar 2016

FRYSLAN RANCHES
Calf Yard
B7 Job 14122

B7 ENGINEERING
PO Box 487
1614 Eastway Drive
Sunnyside Wa. 98944
(509) 837-8600

SEPA
ENVIRONMENTAL CHECKLIST
SUBMITTAL SUPPLEMENTAL

Form # PLN ENR 003-SS1-A
Revised: 8/12/14

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

(For Staff Use Only)
DATE: 2-25-2016
REVIEWED BY: AJL
PROJECT #: PRJ2015-00350
CASE #: SEP2016-00007
RELATED FILES: CUP2016-00019

WAC 197-11-960 Environmental checklist.

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

STAFF USE ONLY

1. Name of proposed project, if applicable:

Fryslan Calf Yard

2. Name of applicant:

Fryslan Ranch

3. Address and phone number of applicant and contact person:

650 Hornby Road Grandview WA 98930

Ruurd Veldhuis

4. Date checklist prepared:

19 Feb 2016

5. Agency requesting checklist:

Yakima County Planning

6. Proposed timing or schedule (including phasing, if applicable):

Construction to start when permits are secured

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Type II Land Use permits, CAFO

SEPA.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No active applications, Similar application for larger scope project was submitted in April 2005 as PRJ 2015-0350

10. List any government approvals or permits that will be needed for your proposal, if known.

Building Permits, Conditional Use Permit, Grading Permit

STAFF USE ONLY

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Build New Bovine cattle Feed lot for raising replacements dairy cattle and related cattle markets including:

Project affects about 30.2 acres on three parcels totaling 213.09 A
Build about 16 A of cattle corrals
Allocate about 5.75 acres for Calf Hutches
Cover about 1.5 acres with gravel for truck maneuvering.
Cover about 2 acres with asphalt concrete for feed lay down and feeding alleys.
Move about 70,000 yards of soil for corral grading
Build one to four buildings totaling less than 15,000 SF for various functions including equipment maintenance, formula mixing, break area, restrooms and sick cattle shelter. Details to be determined.
Build one approx. 5 million gallon waste water storage pond, about 2.5 A
Grade storm water collection and capture.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Address: Glade Road (address not assigned)
Sections 08, 17 and 18, Township 23 East, Range 08 North
Located about 2 miles Southeast from Mabton WA

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.....

Generally flat with slopes to North about 3 percent.

STAFF USE ONLY

b. What is the steepest slope on the site (approximate percent slope)?

Localized slopes about 6 percent to the south.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Silt-Loams, specifically: Warden Silt Loam #177 & 179 (about 90%), Esquatzel Silt loam #33 (about 10 %), per Soil Survey of Yakima County Area, Washington, published by the US Dept. of Ag. Soil Conservation Service.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None Identified

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Minor cuts and fills to establish desired Corral grading. Estimated volume over about 30 acres 70,000 Cu Yd.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Affecting 3 parcels, totaling 213.09 acres, actual affected area about 30.2 acres.

Building Roofs	15,000 SF (30.2acres/43560sf/acre	=	1.1 %
Calf Hutch roofs	48,000 SF	=	3.6 %
Paving about	150,000 SF estimate for transit and feed alleys	=	11.4 %
Total Impervious Surface		=	16.1 %

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

None

STAFF USE ONLY

2. **Air**

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction equipment motor exhaust, limited fugitive soil dust. During normal operations, some fugitive feed and soil dust, equipment motor exhaust, and emissions associated with bovine calves

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Apply best practices for minimizing animal smells as much as practical. Keep equipment motors in good repair. The remote location of the feed lot will contribute toward minimizing complaints.

3. **Water**

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Mabton West Lateral Irrigation Canal

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

STAFF USE ONLY

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Yes – Water for stock watering, and cleaning,formula bottles. Drawn from one of four wells. Water drawn for domestic purposes. Approximately 30 acre-feet per year, about 25,000 gallons per day

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Human waste processed by an on-site sewer systems approved by Yakima County Public Health.

Animal waste is collected and processed as according to an approved Dairy Nutrient Management Plan.

STAFF USE ONLY

c. Water runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water is the only conceivable source of run off. Most storm events will be absorbed by the dry corral surface soil and evaporated. For more severe storm events, corrals and paved surfaces will be graded to facilitate collection and routing to the waste water pond. Most of the waste water will evaporate in the pond. Excessive waste water due to unusual wet years will be dispersed according to an approved Dairy Nutrient Management Plan. Water from high ground to the south will by the natural contours be diverted around the operation.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. The waste water storage pond will be an engineered structure considering the soil permeability, climate, and other relevant factors. It will also be lined with minimum 60 mil synthetic liner. The vadose is deep providing good protection and treatment in the event of a liner leak.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

Yes, The waste water pond is located in a gulley not designated a Type 5 stream. Diversion features will be provided to prevent over filling the pond due to a flash flood south of the Feed Lot.

STAFF USE ONLY

4. **Plants**

a. Check the types of vegetation found on the site:

— Deciduous tree: Alder, maple, aspen, other

— Evergreen tree: Fir, cedar, pine, other

x- Shrubs

X- Grass

--Pasture

--Crop or grain

— Orchards, vineyards or other permanent crops.

— Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other

— Water plants: Water lily, eelgrass, milfoil, other

— Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

All the natural vegetation located on the affected area will be removed about 30 acres.

c. List threatened and endangered species known to be on or near the site.

None identified

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None

e. List all noxious weeds and invasive species known to be on or near the site.

Typical for Yakima Valley, including Kosha, Tumble weed, and others..

STAFF USE ONLY

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: Hawk, heron, eagle, songbirds, other:

Mammals: Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

None Identified

c. Is the site part of a migration route? If so, explain.

Yes, the parcel is parted on mapped priority shrub-steppe habitat shown on the WDFW Priority Habitat and Species. This designation qualifies this area as a critical area.

d. Proposed measures to preserve or enhance wildlife, if any:

60-80 acres will be designated a conservation easement to mitigate the loss of shrub-steppe habitat. Specific details are to be negotiated.

e. List any invasive animal species known to be on or near the site.

None identified

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric power for motors, lighting, and control. Conventional petroleum fueled internal combustion engines for equipment and vehicles.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

STAFF USE ONLY

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

High efficiency lighting, and use of High efficiency motors.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Yes, Water contaminated with animal waste material is natural but a potentially serious contaminant to surface and ground water. It has high BOD, High e-coli counts, and high levels of phosphorous. For this reason potential contaminated waste water will be captured and treated in accordance with an approved Dairy Nutrient Management Plan.

1) Describe any known or possible contamination at the site from present or past uses.

None known

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Bovine manure contaminated storm water. The design will provide for collection and processing in accordance with an approved Dairy Nutrient Management Plan.

4) Describe special emergency services that might be required.

No new services required.

5) Proposed measures to reduce or control environmental health hazards, if any:

Provide design features to collect and transfer manure contaminated storm water to a storage pond for dispersion like dairy waste.

STAFF USE ONLY

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Bovine Animal noise. Equipment operation and motor noise. Traffic noise from deliveries, pickups and employee commutes.

3) Proposed measures to reduce or control noise impacts, if any:

Keep equipment and vehicle exhaust systems in good repair. Minimize operations during non-typical working hours.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is undeveloped AG resource without irrigation water rights. Adjacent properties to north are irrigated crop land and hobby farms. There are 5 residents within ½ mile of the proposed feed lot. There is one similar feed lot to the west about ¾ mile. Adjacent properties south are undeveloped dry lands, some engaged in wheat production. This feedlot could be offensive to nearby residences, but they should be accustom to fugitive odors by merit of two CAFO size dairies about 1 mile east of this proposed feed lot. Odiferous emissions from this feedlot will be less than those released by the nearby dairies.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No, this property is undeveloped Ag resource.

STAFF USE ONLY

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

c. Describe any structures on the site.

Two residences and some small sheds.

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

AG

f. What is the current comprehensive plan designation of the site?

Agriculture resource

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

10-15 full time employees.

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

STAFF USE ONLY

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

None

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

About 24 feet, structural rolled metal siding.

b. What views in the immediate vicinity would be altered or obstructed?

None Identified

c. Proposed measures to reduce or control aesthetic impacts, if any:

None

STAFF USE ONLY

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Night corral lighting.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing offsite sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

Select low-trespass, high-efficiency luminaires. For night lighting.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

None Identified

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

No

STAFF USE ONLY

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Is there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None Identified, but the project planners are aware that artifacts of interest to the Yakima Nation may be found.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

If artifacts are found, the project will be halted until their significance is determined.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

Road access to the Feedlot is provided from Glade Road (Mabton – Bickleton Road). Glade Road is a paved county road. From Glade Road access to county arterials, state and federal highways can be made. See Site Plan

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

STAFF USE ONLY

c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

Employee parking is provided on site alongside the shop and other convenient locations about 25 spaces will be provided on site.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

About 40 vehicle trips per day including employee commutes, pick-ups and deliveries. About one third of these trips will be passenger cars. Most of these trips will be trucks.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

h. Proposed measures to reduce or control transportation impacts, if any:

None

STAFF USE ONLY

15. **Public services**

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. **Utilities**

a. Circle utilities currently available at the site: Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity from Benton Rural Electric Association (BREA)

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: 2-23-16

SEPA
ENVIRONMENTAL CHECKLIST
SUBMITTAL SUPPLEMENTAL

Form # PLN ENR 003-SS1-A
Revised: 8/12/14

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

(For Staff Use Only)
DATE: _____
REVIEWED BY: _____
PROJECT #: _____
CASE #: _____
RELATED FILES:

WAC 197-11-960 Environmental checklist.

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

STAFF USE ONLY

1. Name of proposed project, if applicable:

Fryslan Calf Yard

2. Name of applicant:

Fryslan Ranch

3. Address and phone number of applicant and contact person:

650 Hornby Road Grandview WA 98930

Ruurd Veldhuis

4. Date checklist prepared:

19 Feb 2016

5. Agency requesting checklist:

Yakima County Planning

6. Proposed timing or schedule (including phasing, if applicable):

Construction to start when permits are secured

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Type II Land Use permits, CAFO

SEPA.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Similar application for larger scope project was submitted in April 2015 as PRJ 2015-0350, CUP 20015-036, SEP 2015-015

An Open Grading Permit GRD 2015-007 related to the earlier proposed project will be closed.

A recent code violation COD 2016-057 regarding disposal of animal carcasses was investigated by WA Department of Agriculture, and no citation was written, carcasses were being buried according to regulation. There is sufficient isolation to permit in-the-open surface decay.

STAFF USE ONLY

10. List any government approvals or permits that will be needed for your proposal, if known.

Building Permits, Conditional Use Permit, Grading Permits, Road Approach permit.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Build New Bovine cattle Feed lot for raising replacements dairy cattle and related cattle markets including:

Project affects about 30.2 acres on three parcels totaling 213.09 A
Build about 16 A of cattle corrals
Allocate about 5.75 acres for Calf Hutches
Cover about 1.5 acres with gravel for truck maneuvering.
Cover about 2 acres with asphalt concrete for feed lay down and feeding alleys.
Move about 70,000 yards of soil for corral grading
Build one to four buildings totaling less than 15,000 SF for various functions including equipment maintenance, formula mixing, break area, restrooms and sick cattle shelter. Details to be determined.
Build one approx. 5 million gallon waste water storage pond, about 2.5 A
Grade storm water collection and capture.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Address: Glade Road (address not assigned)
Sections 08, 17 and 18, Township 23 East, Range 08 North
Located about 2 miles Southeast from Mabton WA

B. ENVIRONMENTAL ELEMENTS

STAFF USE ONLY

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.....

Generally flat with slopes down to North about 3 percent.

b. What is the steepest slope on the site (approximate percent slope)?

Localized slopes about 6 percent upward to the south.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Silt-Loams, specifically: Warden Silt Loam #177 & 179 (about 90%), Esquatzel Silt loam #33 (about 10 %), per Soil Survey of Yakima County Area, Washington, published by the US Dept. of Ag. Soil Conservation Service.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None Identified

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Minor cuts and fills to establish desired Corral grading. Estimated volume over about 30 acres 70,000 Cu Yd. Excavate pond for waste water, about 25,000 Cu Yd.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Affecting 3 parcels, totaling 213.09 acres, actual affected area about 30.2 acres.

Building Roofs	15,000 SF (30.2acres/43560sf/acre	=	1.1 %
Calf Hutch roofs	48,000 SF	=	3.6 %
Paving about	150,000 SF estimate for transit and feed alleys	=	11.4 %
Total Impervious Surface		=	16.1 %

STAFF USE ONLY

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The ground us flat enough to neglect water erosion, wind erosion will be managed by sprinkling with water as needed with tank truck/trailer.

2. **Air**

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction equipment motor exhaust, limited fugitive soil dust. During normal operations, some fugitive feed and soil dust, equipment motor exhaust, and flatulent emissions associated with bovine calves. Estimated quantities: motor exhaust about 33 tons/year CO2, fugitive dust about 100 lbs/year, animal flatulence: CH4 about 160 tons/year, NH3 about 54 tons/year, H2S about 9 tons/year, VOC about 3 tons/year. (Derived from data obtained from ProCon.Org)

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Apply best management practices for minimizing animal smells as much as practical: including animal diet, maintaining dry corrals, stacking manure solids to reduce exposed surfaces. Keep equipment motors in good repair. The remote location of the feed lot will contribute toward minimizing offense to public members.

3. **Water**

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Mabton West Lateral Irrigation Canal

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

STAFF USE ONLY

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Yes – Water for stock watering, and cleaning,formula bottles. Drawn from one of four wells. Water drawn for domestic purposes. Approximately 30 acre-feet per year, about 25,000 gallons per day.

Well Tag	Well Log	Depth	Test capacity	Aquifer
ACE-511	121501	122'	100 gpm	Local Shallow
ACL-582	122057	157'	23 gpm	Local Shallow
BIF-429	1050530	765'	200+ gpm	Wanapum
BIF-430	1035873	370'	150+gpm	Saddle Mt.

STAFF USE ONLY

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Human waste processed by an on-site sewer systems approved by Yakima County Public Health.

Animal waste is collected and processed as according to an approved Dairy Nutrient Management Plan.

c. Water runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water is the only conceivable source of run off. Most storm events will be absorbed by the dry corral surface soil and evaporated. For more severe storm events, corrals and paved surfaces will be graded to facilitate collection and routing to the waste water pond designed to contain at least the 25 year event. Most of the waste water will evaporate in the pond. Excessive waste water due to unusual wet years will be dispersed according to an approved Dairy Nutrient Management Plan. Water from high ground to the south will by the natural contours be diverted around the operation.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. The waste water storage pond will be an engineered structure considering the soil permeability, climate, and other relevant factors. It will also be lined with minimum 60 mil synthetic liner. The vadose is deep providing good protection and treatment in the event of a liner leak.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

STAFF USE ONLY

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

The waste water pond is located in a gulley not designated a Type 5 stream. Diversion features will be provided to prevent over filling the pond due to a flash flood south of the Feed Lot.

4. **Plants**

a. Check the types of vegetation found on the site:

— Deciduous tree: Alder, maple, aspen, other

— Evergreen tree: Fir, cedar, pine, other

x- Shrubs

X- Grass

--Pasture

--Crop or grain

— Orchards, vineyards or other permanent crops.

— Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other

— Water plants: Water lily, eelgrass, milfoil, other

— Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

All the natural vegetation located on the affected area will be removed about 30 acres. The balance of the site will be held in reserve until a business opportunity or need for the property is identified.

c. List threatened and endangered species known to be on or near the site.

None identified

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None

STAFF USE ONLY

e. List all noxious weeds and invasive species known to be on or near the site.

Typical for Yakima Valley, including Kosha, Tumble weed, and others..

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: Hawk, heron, eagle, songbirds, other:

Mammals: Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

None Identified

c. Is the site part of a migration route? If so, explain.

Yes, the parcel is parted on mapped priority shrub-steppe habitat shown on the WDFW Priority Habitat and Species. This designation qualifies this area as a critical area.

d. Proposed measures to preserve or enhance wildlife, if any:

60-80 acres will be designated a conservation easement to mitigate the loss of shrub-steppe habitat. Specific details are to be negotiated.

e. List any invasive animal species known to be on or near the site.

None identified

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric power for motors, lighting, and control. Conventional petroleum fueled internal combustion engines for equipment and vehicles.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

STAFF USE ONLY

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

High efficiency lighting, and use of High efficiency motors.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Yes, Water contaminated with animal waste material is natural but a potentially serious contaminant to surface and ground water. It has high BOD, High e-coli counts, and high levels of phosphorous. For this reason potential contaminated waste water will be captured and treated in accordance with an approved Dairy Nutrient Management Plan.

1) Describe any known or possible contamination at the site from present or past uses.

None known

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Bovine manure contaminated storm water. The design will provide for collection and processing in accordance with an approved Dairy Nutrient Management Plan.

4) Describe special emergency services that might be required.

No new services required.

5) Proposed measures to reduce or control environmental health hazards, if any:

Provide berms, curbs, and contours to collect and transfer manure contaminated storm water to a storage pond for dispersion as dairy waste. Solid wastes shall be treated and dispersed according the approved Dairy Nutrient Management Plan.

STAFF USE ONLY

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Bovine Animal noise. Equipment operation and motor noise. Traffic noise from deliveries, pickups and employee commutes.

3) Proposed measures to reduce or control noise impacts, if any:

Keep equipment and vehicle exhaust systems in good repair. Minimize operations during non-typical working hours.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is undeveloped AG resource without irrigation water rights. Adjacent properties to north are irrigated crop land and hobby farms. There are 5 residents within ½ mile of the proposed feed lot. There is one similar feed lot to the west about ¾ mile. Adjacent properties south are undeveloped dry lands, some engaged in wheat production. This feedlot could be offensive to nearby residences, but they should be accustom to fugitive odors by merit of two CAFO size dairies about 1 mile east of this proposed feed lot. Odiferous emissions from this feedlot will be less than those released by the nearby dairies.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No, this property is undeveloped Ag resource. The property has been used for cattle grazing. This development will improved the property for cattle production.

STAFF USE ONLY

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

c. Describe any structures on the site.

Two residences and some small sheds.

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

AG

f. What is the current comprehensive plan designation of the site?

Agriculture resource

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified critical area by the city or county? If so, specify.

Type 5 streams as illustrated on Site Plan. Where the road crosses this stream bed, a ford will be provided.

The area qualifies for designation as Upland Wildlife Habitat Conservation Area. The developer is willing to designate 2 acres as a conservation easement to mitigate each acre developed as a calf yard.

i. Approximately how many people would reside or work in the completed project?

10-15 full time employees.

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

STAFF USE ONLY

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

None

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

About 24 feet, structural rolled metal siding.

b. What views in the immediate vicinity would be altered or obstructed?

None Identified

c. Proposed measures to reduce or control aesthetic impacts, if any:

None

STAFF USE ONLY

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Night corral lighting.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing offsite sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

Select low-trespass, high-efficiency luminaires. For night lighting.

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?

None Identified

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. **Historic and cultural preservation**

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

No

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b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Is there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None Identified, but the project planners are aware that artifacts of interest to the Yakima Nation may be found.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Washington State Department of Archeology (WADA) was consulted regarding the area as a Native American cultural resource. WADA instructed that if artifacts are found, the project will be halted until their significance is determined.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

14. **Transportation**

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

Road access to the Feedlot is provided from Glade Road (Mabton – Bickleton Road). Glade Road is a paved county road. From Glade Road access to county arterials, state and federal highways can be made. See Site Plan

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

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c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

Employee parking is provided on site alongside the shop and other convenient locations about 25 spaces will be provided on site.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

About 40 vehicle trips per day including employee commutes, pick-ups and deliveries. About one third of these trips will be passenger cars. Most of these trips will be trucks.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

h. Proposed measures to reduce or control transportation impacts, if any:

None

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15. **Public services**

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. **Utilities**

a. Circle utilities currently available at the site: Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity from Benton Rural Electric Association (BREA)

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: _____