November 29, 2023

VIA ELECTRONIC MAIL

Jamey Ayling, Planning Manager
Kittitas County Community Development Services
411 N. Ruby Street, Suite 2
Ellensburg, WA 98926

Dear Jamey:

We represent Scott and Bonnie Toland, generational cattle ranchers and farmers, who are proposing a 5-acre, community-serving niche meat processing facility on 5 acres of a 40-acre assemblage they own in Kittitas County near Ellensburg.

The subject property is zoned Agriculture 5, which allows meat processing facilities subject to Conditional Use Permit ("CUP") approval. Since submittal of the original CUP application, and after careful review of comments submitted by agencies, the public, and the Tribes, the Tolands have refined their proposal and taken proactive steps to ensure that any potential adverse impacts of this processing facility are mitigated to the greatest extent practicable. These additional measures include the purchase of additional water rights to address concerns about localized water impacts; refinement of the water treatment system to include a fenced, doubly-lined, aerobic pond, which will mitigate odor impacts and significantly reduce the risk of groundwater contamination.

This letter responds to the County's comment letter of April 29, 2023 (incorrectly dated April 29, 2021), which requested the following information:

- Verification from Kittitas County Public Health that the septic design meets the requirements of an On-Site Septic for this commercial use.
  Septic is proposed only for employee use of the facility, which will be a standard system subject to County Public Health review. The commercial meat processing operations will be served by an aerobic storage pond, subject to review and approval by the Department of Ecology ("DOE"). The proposed system is recommended by DOE for small processing facilities such as this one, and the consultant team has initiated the review process with DOE.
- Provide daily estimated water consumption for the Agricultural Processing Facility and information on how this estimate was reached.
  The attached Water Use Memorandum prepared by Fuller Consulting details the daily and annual estimated water assumptions.
- Responses to comments as the applicant sees fit. Please note—comments will be used in the review process for determination of SEPA and staff's recommendation to the Hearings Examiner.
  Please see the matrix in the body of this letter, which groups comments by topic and provides a consolidated response.

3BR's consultant team has thoroughly reviewed all comments submitted during the CUP comment period. Many comments raised the same general concerns/issues, so for ease of reference, we have grouped them into topics and addressed them below.

Comment	**Response**
Zoning	The property zoning is Agriculture 5 (KCC 17.28A). The proposed facility falls under the following definition within the "Agriculture processing" use category in Kittitas County Zoning Code (KCC 17.08.032) "Agriculture processing" includes but is not limited to feed mills, canneries, preparation of agriculture product (produce washing, boxing, bulk packaging, baling, etc.), animal slaughter and meat processing. (Ord. 2013-001, 2013). Agriculture processing is an allowed use in the Rural Residential Land Use and Ag 5 Zoning with a Conditional Use Permit. (KCC 17.15.060.1) The CUP process allows the County Hearing Examiner to evaluate the compatibility of the use with adjacent land uses and impose mitigation measures necessary to mitigate impacts. Comments that the site is not zoned for the proposed use are unfounded.
Compatibility with County Land Use Policy/Surrounding Land Uses	The subject property has been zoned Agriculture 5 since 2013, and many properties in the vicinity raise and maintain livestock. There are also other active commercial businesses in close proximity to the property. The square mile of land, with the proposed facility at the center, has significantly more open farm/pasture land than single family home properties and yards.
Aesthetic Impacts	The facility is proposed to be located on a 5-acre site inside a 40-acre assemblage of

	property owned by the Tolands. The exterior building design will be visually appealing and in keeping with the rural character of its surroundings, the aerobic water treatment pond will be surrounded by an attractive, high-quality fence, and appropriate and complementary landscaping will include trees, hedge fences and privacy plants shielding the business and customers from neighboring properties.
Decreased property value concerns	There is no evidence of decreased property values in the vicinity. Recent sales of multiple homes near the site have been recorded near asking price and sold within average "days on market" when the home was reasonably priced and well-marketed.
Noise	All processing tasks will take place inside the building, which will have fully-insulated walls. All activities on the property will be performed in compliance with County Code and the Washington Administrative Code ("WAC") noise standards.
Odor	An expanded interior refrigerated room will hold inedible materials (offal) in sealed drums, for frequent pick-up, as outlined in the Offal Management Plan previously submitted to the County. Some commentors cited previous feedlots in the Valley—in particular the Yakima-based Schaake Corp. cattle feedlot. That facility was far larger than the proposed facility-- holding many thousands of head of cattle, on 90-acres, for weeks at a time. In contrast, at peak times, this facility will hold less than 30 cattle at a time, for just a few hours, in pens on less than 1-acre. This is not a useful analogy.
Questions regarding number of cattle processed per day	The full capacity of the processing facility is 7500 head a year. If divided equally, over common working days, the average number would be up to 30 animals a day. This average number may vary somewhat due to seasonality or the annual Ellensburg County Fair request to

	process animals from the Junior Livestock Auction. Animals will typically be held on site for a few hours, and in no case longer than one day, except as necessary for animal health and safety. No animals will be "fed to finish" on the facility property.
Questions regarding customer base	The facility will serve ranchers, farmers, families, individuals and producers raising livestock for personal consumption or commercial sale.
Expansion plans	There are no plans to expand; capacity will not be increased.
Transportation/dust/truck impacts	The facility will generate a very low volume of road traffic, to include employees, customers, and animals transported to the site. Vehicles will enter and exit the facility on a wide driveway, with clear unimpeded sight-lines to and from the existing two-lane Wilson Creek Rd. Professional Service Trucks will be on-call and responding as needed directly relating to daily animal processing volume.
Water runoff	The facility will be designed in compliance with County and State stormwater standards, which will ensure that stormwater is detained and managed, consistent with standards.
Septic/Water Treatment	Wastewater from the facility will be captured in pipes and filtered through a world-class clean water system into a small double-lined and aerated pond to hold irrigation water. This irrigation water will be equivalent to only 3.1 inches/acre of pasture land, per year – or about 12% of the water needed. There will be no "free-flowing" waste or water from the facility. The eco-friendly system employs natural processes to treat wastewater, essentially eliminating pollution and soil disruption. It ensures safe water disposal, protecting both the environment and public health. The professional commercial equipment size will be functionally appropriate and capable of capturing and filtering all liquids safely. The

	system will be subject to review and approval by DOE. The County Public Health Department will review and approve the small septic system to serve the employees/customers.
Wildlife Impacts	Facility fencing will deter local predator animals from entering the facility property, and no wildlife will be adversely impacted as a result of facility operation. No scavenger animals will be attracted to the property because no animal by-products will be outside or accessible; it will be contained and closely-managed as outlined in the Offal Management Plan.
Lyle Creek	Lyle Creek runs north to south about 1,000 feet east of the proposed facility. There is no construction or disturbance proposed to the Creek or its buffer; no adverse impacts are anticipated to Lyle Creek.
Groundwater impacts and high-water table concerns	The water table varies throughout Kittitas County, including business, agriculture and residential areas. The building, stormwater, and water treatment system for the facility will be constructed to meet or exceed all state and local codes. The holding pen area, and all parts of the property surrounding the facility, will be properly graded to prevent water from collecting. As noted, the storage pond will be doubly-lined and regularly inspected and maintained to ensure no leakage into groundwater
Cultural resources	Applicant will agree to a mitigation measure requiring an Inadverent Discovery Plan ("IDP") to be put in place prior to implementation of ground disturbing activities.

We hope the responses above have adequately addressed the comments received by the County. Please let us know if you have any additional information or clarification on the responses above.

Finally, several new and/or revised documents are attached for the record: (1) a Revised Project Narrative; (2) a Water Use Memorandum prepared by Fuller Consulting; (3) a Wastewater Treatment Narrative prepared by DeHaan, Grabs, & Associates, LLC; (4) a Water Mitigation Memorandum prepared by Jamie Morin of Confluence Law; (5) a revised Site Plan; and (6) a Memorandum of Understanding between 3BR Custom Cuts and Baker Commodities, Inc. confirming that Baker will regularly remove byproducts from the facility.

Thank you for your attention to this letter, and please feel free to reach out to the Tolands or any member of their team with questions or requests for additional information.

Sincerely,

McCULLOUGH HILL PLLC

/Courtney E. Flora/

Courtney E. Flora

Attachments

PROJECT NARRATIVE (REVISED 11-21-23)

10. Narrative project description (include as attachment): Please include at minimum the following information in your description: describe project size, location, description of water system, sewage disposal and all qualitative features of the proposal; include every element of the proposal in the description.

Part #2 of the narrative:

Scott and Bonnie Toland are generational cattle ranchers and farmers. They are first and foremost stewards of their land, on 3 Boots Ranch in Ellensburg, attentively managing their soil and water through each season, for forage regeneration, productive health and continuing sustainability. They own the 40 acres they live and ranch on and also lease 80 additional acres in Ellensburg, for added rotational grazing capacity for their cattle.

3BR Custom Cuts, a registered Washington State corporation, is a business entity independent from their cattle ranch. The brand-new facility will be a local USDA/WSDA certified niche' meat processing operation serving the local area and surrounding counties.

The processing facility ground-area footprint will encompass approximately 5-acres, of a 15-acre parcel, owned by the Tolands. The ground footprint will include a main building of approximately 10,000 sq. ft., public access road and parking area, livestock short-term holding pens, an existing storage barn and a small double-lined and aerated pond to hold irrigation water. The land parcel is adjacent to the Toland's 25-acre parcel where they reside in their family home and have rotational pastures and corrals for their cattle operation.

The facility will not have a feedlot, or area for extended stay for any livestock on-site to be processed. The short-term livestock holding pens will not collect any volume of natural animal waste, as they will have a cement floor and be cleaned throughout the day, using routed water that funnels into a designed water filtration and collection system. Every prudent step has been taken to have environmental and civil engineering specialists, that have the proven technological expertise and experience, research, plan, develop and design the safest water capture, filtration, holding and distribution equipment and system installed and utilized. The management, handling, filtering, separation, cleaning and treatment of all water used will meet all environmental requirements and standards of the Washington Dept. of Ecology.

To further mitigate potential impacts, there will be a special separate refrigeration space inside the facility to accommodate the sealed containers containing offal (inedibles). This eliminates outside exposure and addresses concern about odor, predators or varmints. These sealed containers will be picked up multiple times a week, by a professional service, and the contents will be processed safely and appropriately by an approved independent company.
The maximum processing capacity is 20-30 animals a day, depending on species, during common operating hours Monday-Friday. An exception will be efforts to accommodate hunters, during limited annual hunting seasons.

The number of vehicles projected to enter and exit the property has been determined by the County to not negatively impact, nor significantly increase the current road traffic flow or access to other nearby residences, properties and businesses.

The overall layout of the structure on the land is low density and will operate at a very low sound volume. There are also additional steps being taken to ensure the external presentation and internal systems meet local building recommendations and all USDA/WSDA specifications. 3BR Custom Cuts has hired a meat processing facility expert to lead the entire process from site and building development, to USDA certification, to employee training and to daily operation of the facility.

The Tolands have long-standing, proven and measurable experience in ranching and successful business development and operation. They are also recognized philanthropists dedicated to contributing to and serving their community. The business has already pledged to help feed the community's hungry through their partnership with the local food bank, Friends in Service to Humanity (FISH). They also generously educate, mentor and support the next generation that will guide the future of sustainable and regenerative agriculture.

With intent to address an established community need, Scott and Bonnie have chosen 3BR Custom Cuts to be a properly sized, vertically integrated community resource to address the well-known need for additional local meat processing facilities in the region. There are no plans for future expansion of this facility.

3BR Custom Cuts processing facility will also contribute to our County's economy by investing in skilled job training and providing well-paying jobs in an industry that is essential to support local agricultural businesses. The company will also be seeking a B-Corp certification - a certified designation that means this business is meeting the highest standards of verified performance, accountability, and transparency on factors from employee benefits and charitable giving to supply chain practices and input materials.

This project will add notable resources to Kittitas County by providing increased infrastructure, capacity and capabilities, as currently there is a significant 6-12 month wait time for local producers and families to process meat in our area. 3BR Custom Cuts will provide a much-needed facility for livestock producers and it will address a community need by establishing a USDA certified processing facility to process agricultural meat commodities into products for local purveyors.

Washington has a desperate need for processing infrastructure for small farms and ranches. Decades of decreasing cattle inventory have progressed faster and greater than national averages according to the USDA. Can this be explained by a lack of affordable processing for small farms and ranches? We're confident there is substantial evidence to validate that belief.

3BR Custom Cuts is considered a “niche” processor by the USDA. According to USDA-NASS, in Washington in 2021 (2022 statistics aren’t released until 2024), 1,120,000 cattle, 18,300 sheep, 23,000 hogs and 1,500 goats were harvested. Calculating expected throughput, based on maximum annual capacity of between 5,200 and 7,800 head [prorated by species], our facility would represent just 0.67 percent of the recent total annual livestock processing in the state of Washington.

Much groundwork has been done already to move this important and exciting infrastructure project forward for Kittitas County.

3BR Custom Cuts has contracted with an experienced industry expert to oversee the overall processing facility operational needs. Financing has been secured for the entire project. A General Contractor has also been hired, with a goal of 3BR Custom Cuts opening in the 3rd quarter of 2024.

The new processing facility will help boost local food supply chains by strengthening the capabilities and responsiveness of local food infrastructure and service through increased meat processing capacity, and thereby will help increase area farm and ranch profitability. There will be a reduction of transportation costs for many of the ranchers no longer having to travel long distances to have their livestock processed. This reduces the overall carbon footprint as well. This will benefit Washington consumers by rebuilding local food supply chains and increasing consumer access and availability to locally produced meats.

The 3BR Custom Cuts project is necessary, meaningful, timely, and a financial benefit for the County based upon significant sales tax revenue it will generate.

Thank you for considering the efforts made to foster a vibrant local food ecosystem that benefits our region’s farmers, ranchers, families and community – safely, sensibly and responsibly.

11/29/2023

Fuller Consulting
19782 Santee Lane
Valley Center, CA 92082
(970) 903-4063 | chris@meatchris.com
www.meatchris.com

Attn: Jamey Ayling
Kittitas County Planning

Meat processing operations in the United States vary from the extremely large (5000 head of cattle harvested per day) to the very small (5 head of cattle harvested per day). Each plant is unique, and there is not a catch-all water usage number due to the variation in operation size, building layout, equipment usage, and employee management. However, by looking at an Oklahoma State University ("OSU") study, along with expertise of our team members, and case studies from plants similar in size to the 3BR Custom Cuts plant, we can get a close approximation to what our water usage will look like. As a plant operator for over 15 years myself and working with our wastewater expert we have estimated the 3BR Custom Cuts plant, with a processing capacity of 7500 head of cattle/year, will use approximately 12,000 gallons per day on average for each operating day. This is the estimate being used by our industrial wastewater engineers to size the treatment capacity of our effluent.

Water Usage Assumptions

Our design of the 3BR Custom Cuts meat processing plant includes a focus on reducing water usage throughout each process step to help ensure we are not wasting this resource. Through proper building design, process design, equipment implementation, and employee training we can reduce our water usage from that of the "average" processing facility. The numbers used in this report are based on 400 gallons per head, per operating day. However, our intention is to reduce this number to 250 gallons per head, per operating day as shown in the analysis attached.

According to one case study, Sunnyside Meats wastewater analysis* which is a report based on real data collected that was given to me by the owner of the plant they are using "about 1000 gallons per day". Their processing facility harvests between 8-10 head per day, and processes that amount as well, including further processing. Thus, 1000 / 8 = 125 and 1000 / 10 = 100 gallons per day, per head. This is a processing facility that is smaller in scale than the 3BR plant, but similar in size (10,000 square feet).

According to the chart provided by OSU* on water usage for processing operations there is data showing 150-450 gallons per head of cattle as a range for water usage, as well as 45 gallons per head of swine. When processing Swine, and in terms of resources such as labor, space, and pounds of throughput many processors use a formula of 2-3 head of swine as the equivalent to

one head of beef. Given this formula, we can extrapolate a low-end range of water usage of about 135 – 150 gallons per head, per day.

These two examples, along with our water reduction measures* (see "Water Reduction Measures" document attached) are used to highlight what our expert team knows from experience, that the plant's usage estimate of 400 gallons per head is conservative to ensure we do not undershoot the gallons per head for 3BR Custom Cuts. To be clear, it is not the intention of the company to run 12,000 gallons of water per operating day, this is the number used to ensure we do not exceed capacity. Below you will find the calculations used to come to the maximum water storage capacity used for the design of our wastewater treatment system.

12,000 gallons per day x 245 operating days per year = 2,940,000 gallons per year
*245 working days per year due to holiday closures

7500 head harvested per year (245 days)= 30 head per day
400 gallons/head x 30 head/day = 12,000 gallons/day

As referenced in the DeHaan Wastewater document, to be conservative in our planning, we have indicated a working year of 260 days, which gives us a smaller average daily flow rate of 8,600 gallons per day. In any case, the design of the system allows for processing and storage of a total of 9.6 acre feet of water annually.

Water Reduction Measures

Although our maximum capacity is being designed based on 400 gallons per head, this is a very conservative estimate to ensure we do not exceed our capacity. This reduction analysis is using 400 gallons per head as a starting point, the below information details the measures 3BR Custom Cuts will take to reduce water use to 250 gallons per head.

https://extension.okstate.edu/fact-sheets/slaughterhouse-water-use-and-wastewater-characteristics-fapc-240.html

Assumption (1): Sanitation = 50% of water consumption*
**This data collected from experience and conversations had with other processors*

Average plant: 400 gallons/head (total water usage) x 30 head = 12,000 gallons x 50% (sanitation usage) = 6,000 gallons/day for sanitation

6,000 sanitation gallons/day
wash-down* – 3600 gallons (6 total hoses, wash-down for 60 minutes each hose, 10 gallons per minute flow)
sanitizer – 9.97 gallons
de-greaser 57.75 gallons
pre-wash rinse – 800 gallons

washing of tools and parts – 1,533 gallons

**wash-down is the process of using hoses to wash down all of the walls, ceilings, floors, tables, equipment, and carts to remove blood, fat, meat, and other debris. This is a common practice in meat plants to begin the sanitation process.*

3BR CC: 32% reduction in water usage for sanitation (1,919 gallons/day usage)

4081 sanitation gallons/day

Wash-down* – 1680 gallons (6 total hoses, wash-down for 40 minutes each hose, 7 gallons per minute flow)

Sanitizer – 9.97 gallons

De-greaser – 57.75 gallons

Pre-wash rinse – 800 gallons

Washing of tools and parts – 1,533 gallons

**The significant reduction in wash-down is through proper employee training to use tools such as shovels, scrapers, brooms, towels, and scoops to remove material from the floors, walls, tables, equipment, and carts rather than using a hose. A hose will still be used for some applications, but not as the only tool.*

10,081 gallons/day / 30 head = 336 gallons/head

Assumption (2): No intervention spray cabinet

"the biggest users of water are the carcass washing cabinets used as interventions, which can go through 300 gallons or more per minute"
https://www.food-safety.com/articles/408-how-to-use-less-water-for-beef-processing-without-compromising-food-safety

300 gallons/minute assuming 20 seconds per head of spraying = 3,000 gallons/30 head*

**This is a minimum assumption, as the sprayer will need to run for some minutes at the start of the shift to verify proper operation and titration of the antimicrobial solution*

3BR CC: Without a spray cabinet, we will use a hand-canister style sprayer, which allows the user to direct the spray and pull a trigger when liquid is needed. With this method we will use 1 gallon per head for antimicrobial spray (30 gallons/day)

In addition to the antimicrobial spray, 3BR CC will also rinse their carcasses with hot water to help remove debris, hair, excess blood, and other contaminants. Studies have shown that the combination of hot water and the acid spray intervention can reduce bacteria to acceptable levels on the beef carcass:
https://meathaccp.wisc.edu/validation/assets/acid_spray_intervention_booklet_from_penn_state_2005.pdf

40 gallons of hot water rinse per carcass is estimated when the hose flows at a rate of 10 gallons/minute. We will reduce that flow rate using a regulator so that pressure will not suffer with this reduction. Our estimated rate of flow is 6 gallons/minute = 24 gallons per head, or 720 gallons per day for a 30 head day.

With the combination of the hand-spray of antimicrobial intervention solution, along with the hot water rinse, we will significantly reduce water usage when compared with other plants that employ a carcass wash cabinet.

30 gallons of antimicrobial spray + 720 gallons hot rinse water = 750 gallons
(2,250 gallons per day reduction, 75 gallons/head reduction)

Assumption (3): Circulating water chiller to be used for packaging

A thermoforming machine can go through 20 gallons or more of water per hour. We will use a water re-circulating machine that negates the need for ongoing water flow. For an 8 hour shift that's 160 gallons x 2 machines, or 10.66 gallons of water savings per head assuming 30 head per day.

With the 3 above assumptions for reduction of water usage, we have gone from 400 gallons/head/day to 250 gallons/head/day.

Best Regards,

Christopher Fuller, Owner
Fuller Consulting

Attached:

- *Sunnyside Meats, Inc. "Wastewater Treatment System"*
- *https://extension.okstate.edu/fact-sheets/slaughterhouse-water-use-and-wastewater-characteristics-fapc-240.html*

Sunnyside Meats, Inc.

Wastewater Treatment System

- Orenco AdvanTex AX20 System
- Domestic wastewater is treated separately in a traditional septic tank/ leach field system. Blood is primarily collected in barrels and is mixed with saw dust or old hay, composted and spread on agricultural land. Effluent form the kill floor is collected in floor drains/ floor sinks and flows into a specialized wastewater treatment system.
    - Effluent first flows into a series of 6 concrete tanks which hold 1500 gallons each, the plant produces about 1000 gallons a day of effluent. The first tank in the series has an opening in the concrete where built-up fats can be skimmed and disposed of in the dumpster.
    - The next two tanks are aerated by a blower located inside the building. This continual introduction of air satisfies the biological oxygen demand (BOD) of the microbes that are breaking down proteins in the effluent. The aeration tanks were added to the original system after we realized that the BOD was too high causing an anerobic environment that left the effluent too thick which clogged the leach field.
        - Note: if too much soap gets to the aerated tanks, the pumped air will cause overflowing suds, which doesn't seem to harm the system, but causes a sudsy mess. Monitor the amount of soap being used by the cleaning crew.
    - After aeration is a settling tank. The outlet of this tank has a screen to capture solids in the effluent. This screen is cleaned 4 times a year and the debris is rinsed back into the first tank in the system.
    - The settling tank feeds into another set of tanks, one of which has a pump in it which sprinkles effluent onto the AX20 textile filters. The filtered water then flows into the leach filed. The porous media of the filters captures sediment that provides a nutrient rich environment for bacteria, small winged insects, centipedes and worms. The worms are harvested and spread on agricultural soil.
- The system cost 40K to install 20 years ago.
- Maintenance includes biannual skimming of fats, quarterly cleaning of settling tank screen, yearly cleaning of textile filters, periodic pumping of settling tanks to remove sand and sediment, and repairing corroded parts and electrical elements.
- Pros of the system:
    - Sustainability
    - Produces valuable fertilizers for agricultural soils
    - Durable
    - Inexpensive to operate
    - Very little odor
- Cons
    - High initial capital investment
    - Include aeration tanks in the initial installation
- Land applications:
    - Spreading blood/ worms
        - No permit and no monitoring, we have a lot of agricultural property, so concentration is not an issue, and we don't transport to properties owned by other

entities. We spread materials at least 120 before harvesting crops, which satisfies the Colorado Department of Agriculture.

- Winter issues:
    - We don't have issues with freezing as the water leaving the plant is warm and the tanks are subterranean. The leach field is in a high, well-drained area so no flooding.

Table 1. Potable water use in slaughter operations.

Source	*Cattle*	*Swine*	*Poultry*
5m, 2009		45 gal/animal	
Gil & Allende, 2018	150 to 450 gal/animal		3.5 to 10 gal/animal
Matsumura & Mierzwa, 2008			3.0 to 4.5 gal/animal
Park et al., 2012		15.3 to 320 gal/cwt	
Salminen, 2002	317 to 343 gal/animal	44 to 186 gal/animal	4.7 to 4.9 gal/animal
Ziara, 2015	355 gal/1,000 lbs. body weight		

Baker Commodities Inc.
Recycling for Life

November 22, 2023

3BR Custom Cuts LLC
3200 Wilson Creek Road
Ellensburg, WA 98926

MOU:

Baker Commodities Inc is in the business of collecting and recycling of waste animal by products from packing houses and retail markets.

It is Baker's understanding that 3BR Custom Cuts will be processing beef cattle and you will have a need of disposing of the inedible parts of the animals processed.

We do require you to remove any prohibited CMPAF material of any cattle 30 months of age or older prior to pick up at your facility. Prior to service you must fill out our CMPAF form regarding your Standard Operating Procedure to insure proper segregation of CMPAF and Non-prohibited materials.

Baker is willing to provide the service to remove this waste from your facility based on our schedules for that area.
Schedules for service will need to be confirmed with our office in Grandview, WA. They can be reached at (509) 837-8686

Baker Commodities would like to thank you for your consideration of our company for your service needs.

Baker Commodities Inc
Michael Bulleri

Michael Bulleri
Division General Manager

www.bakercommodities.com (509) 535-5435 (509) 536-3817 P.O. Box 11157, Parkwater Station, Spokane WA 99211

3BR Custom Cuts, LLC

Wastewater Treatment Information

Kittitas County, Washington

November 29, 2023

Prepared By: DeHaan, Grabs & Associates LLC
Prepared For: 3BR Custom Cuts, LLC

PROJECT INFORMATION

SITE LOCATION

The project is in the W ½ of the NW ¼ of Section 29, Township 18 North, Range 19 East in Kittitas County, Washington. The site is located on a 16.26-acre parcel of land located in the North-½ of the NW-¼ at 3200 Wilson Creek, Road, Ellensburg, WA 98926.

OVERVIEW

The proposed project is the construction of a small beef processing plant. The plant itself has an estimated footprint of around 10,010 square feet.

The proposed plant will be surrounded by an access road to allow for transportation of the finished products off site. Wastewater will be run through an aerated pond system and applied on land owned by 3BR Custom Cuts, LLC.

CONTACT INFORMATION

The contact information of those involved with the facility is as follows:

NAME: **Scott Toland**
ROLE: Owner
COMPANY: 3BR Custom Cuts, LLC
PHONE: (509)-856-5272
EMAIL: stoland@3bootsranch.com

TREATMENT SYSTEM DESCRIPTION

FACILITY DESCRIPTION

3BR Custom Cuts, LLC is planning on operating a small-scale locally-serving meat processing plant that will have some by-product processing. Up to 30 head/day of beef cattle will be processed five days per week at full production. Cleanup crews work to clean and sanitize the facility during evenings and on weekends. In terms of scale and production, the proposed facility is on the low end of meat processing facilities in the region.

The wastewater collected will include the water used during processing the animals and the cleaning and sanitization activities conducted after processing. The facility will be cleaned and sanitized every evening with more cleaning on the weekends. Other processes generating wastewater include cooling water and boiler wash down. Total average flow rate is 8,600 gallons per day with most of the wastewater being produced during the five days of meat processing during the week.

The facility will employ a wastewater treatment system recommended by the Washington Department of Ecology for small scale meat processing plants. In addition to Ecology's standard requirements, the applicant is proposing a land application of wastewater that will include grease interceptors to remove grease and solids prior to transfer to an aerobic storage pond which will provide over 180 days of storage and treatment prior to disposal on the land treatment area. The pond will utilize a double lined pond with leak detection as recommended by Department of Ecology.

DESIGN PROCESS DESCRIPTION

For the treatment plant to work effectively and efficiently, it must follow specific sequences of treatment process. The degree of treatment required in each step or process and the total number of processes used depend on the effluent quality required. The following general description of each process will provide and understanding of the purposes of each step and each expected treatment efficiency which is as follows:

PRELIMINARY TREATMENT PROCESS

All the wastewater generated from the plant flows by gravity to pretreatment sump from both harvest, fabrication, and holding pens. The waste from the sump will pass through a set of 1000 gallon grease interceptors. The grease interceptors will continuously discharge to the aerobic pond.

The grease will be removed from the grease interceptors by a secondary company and disposed of at their site. This removal will be based on operational flow with a minimum every 90 days. It is estimated that the projected removal efficiency of the grease interceptors is to be 50% for Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) and 50% for Total Suspended Solids (TSS) and 60% Fats Oil and Greases (FOG).

The paunch will be collected and hauled out for land application or animal feeding.

The hides will be collected and transferred to the landfill. If grit from the hides is disposed/captured in the plant, it will be cleaned manually and disposed of with the land application of solids by a third party.

Rendering will be collected and hauled out to local rendering company.

PRIMARY TREATMENT PROCESS

The aerobic wastewater storage pond is sized to handle over 180 days of storage to meet land application limitations due to weather. storage pond also will handle the variable inflows of hydraulic loading and the treated water characteristics to make it more homogeneous for better efficiency for land application treatment. The storage pond has an air mixing system supplied from blowers through course and fine bubble diffusers. The course and fine bubble diffusers will continuously mix and aerate the water to avoid the formation of septic gases especially during shutdown period of the processing plant.

The projected removal efficiency of the aerated wastewater storage pond is to remove 80% of BOD and COD and 95% for TSS and FOG. The color of the water will be substantially reduced also.

The totally mixed water is then land applied on rotational tall grassland on the applicant's adjacent 28.9 acres for during the growing season of the crop through gated gravity irrigation pipe. This will be supplemental irrigation to the current irrigated grassland. It is estimated that the facility will produce 9.6 acre-feet annually of wastewater. With evaporation in the pond this will be reduced to 7.6 acre-feet annually. This will be equivalent of 3.1-inches/acre of wastewater applied to the land.

For a hay grass near Ellensburg the annual amount of water needed is 39 inches/acre with a stress level at 35.5 inches/acre. Approximately 9-inches is provided by rainfall, therefore, a minimum of 26.5 inches is needed annually for the grass. The 3.2-inches/acre applied by the storage pond is only 12% of annual need.

This treated water will be applied at both soil infiltration rates and agronomic required rates on water samples taken quarterly and annual soil samples.

PROCESS MONITORING AND TESTING:

Sampling and testing must be done to control the process and provide assurance to the Department of Ecology that treatment is maintained in processing and land application. Monitoring will be done on a weekly basis at several points in the process. Daily testing is necessary for process control. Weekly monitoring will assure the County and State that the pretreatment is effective and quantify the parameters in the treated water that is land applied.

a. Weekly

On a weekly basis, samples will be taken as follows:

- Influent (Sampling Port to the Lagoon) – BOD, total suspended solids (TSS), pH, Ammonia-N, TKN, FOG, and flow.

b. Monthly

On a monthly basis sample will be taken as follows:

- Final Effluent (Land Application) - BOD, total suspended solids (TSS), pH, Ammonia-N, TKN, phosphorus, potassium, Conductivity, and flow.

c. Annually

On an annual basis, samples will be on the soil of land application as follows:

- Soil samples of land application sites - Nitrate-N, Phosphorus, pH

The applicant understands that the County Department of Health (DOH) does not have a direct role in approving or monitoring the system, but the applicant will voluntarily commit to DOH monitoring to ensure the system is consistently functioning as designed.

NON-PROCESS WASTEWATER

All non-process wastewater will be treated in the sanitary waste system. It will be collected in drains as spelled out in the plans and specifications. The drains will drain through a septic system to be installed on site near the plant.

SUMMARY

The proposed treatment system is recommended by the Department of Ecology for a small-scale processing facility of this kind. In addition, the applicants are proposing an aerobic system (at greater cost) to ensure additional odor mitigation. The aerobic water storage pond will be surrounded by an attractive protective fence enclosed with a double liner and leak detection that will be monitored frequently to protect against any risk of leakage. Accordingly, this system is not expected to pose risk of groundwater contamination.

CONFLUENCE LAW

MEMORANDUM

TO: Jamey Ayling, Kittitas County Planning Manager

FROM: Jamie Morin, Confluence Law, PLLC

RE: 3 BR Custom Cuts Conditional Use Application (CU-23-00001)—Water Supply Mitigation

DATE: November 29, 2023

Since December 2, 2015, all new groundwater uses within the Yakima River basin are required to mitigate water use. The 3 BR Custom Cuts anticipates a maximum demand of 9.9 AF per year, which demand will be largely if not entirely consumptive.

To meet the full use, 3 BR Custom Cuts is negotiating with SC Aggregate Company, Inc., to secure the necessary mitigation. SC Aggregate has sufficient mitigation water to offset and allow for the permitting of a new water right at the project site. SC Aggregate water bank provides each ERU with 0.084 AF of consumptive use of mitigation water per year. 3 BR Custom Cuts is negotiating to secure 118 ERUS, which will provide 9.912 CU per year to offset proponents water demand.

Upon contracting for the necessary mitigation, applicant will file the necessary application for a new water right with the Department of Ecology.

WILSON CREEK RD

282.5'
47'
232'
SAN
ST
L
S
R40'
R20'
13'
PARKING LOT
54'
20'
111.22'
65'
96.5'
81'
R25'
257.32'
101'
PLANT AREA
EXISTING SHED
8'
61'
GI
W
45'
HOLDING PENS
EXISTING WELL APPROX. LOCATION
DOMESTIC SANITARY WASTE
PROCESSING SANITARY WASTE
PROPOSED SWALE
105.87'
TO DRAIN FIELD
APPROX. 30' OFF PROPERTY
APPROX. 60' OFF PROPERTY
212'
128'
240'
156'
AERATED WASTEWATER STORAGE POND
10' BERM
CONCRETE SPASHPAD
30.89'
EDGE OF GRADING

GENERAL NOTES

LEGEND

- TREES
- BORE HOLE LOCATION
- WELL LOCATION
- EXISTING BUILDING
- EXISTING FENCELINE
- PROPOSED FENCELINE
- SANITARY WASTE LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER LIFT STATION
- SEPTIC TANK
- SANITARY SEWER VALVE BOX
- SANITARY SEWER GREASE INTER.

0 30' 60'

No.	Revision/Issue	Date

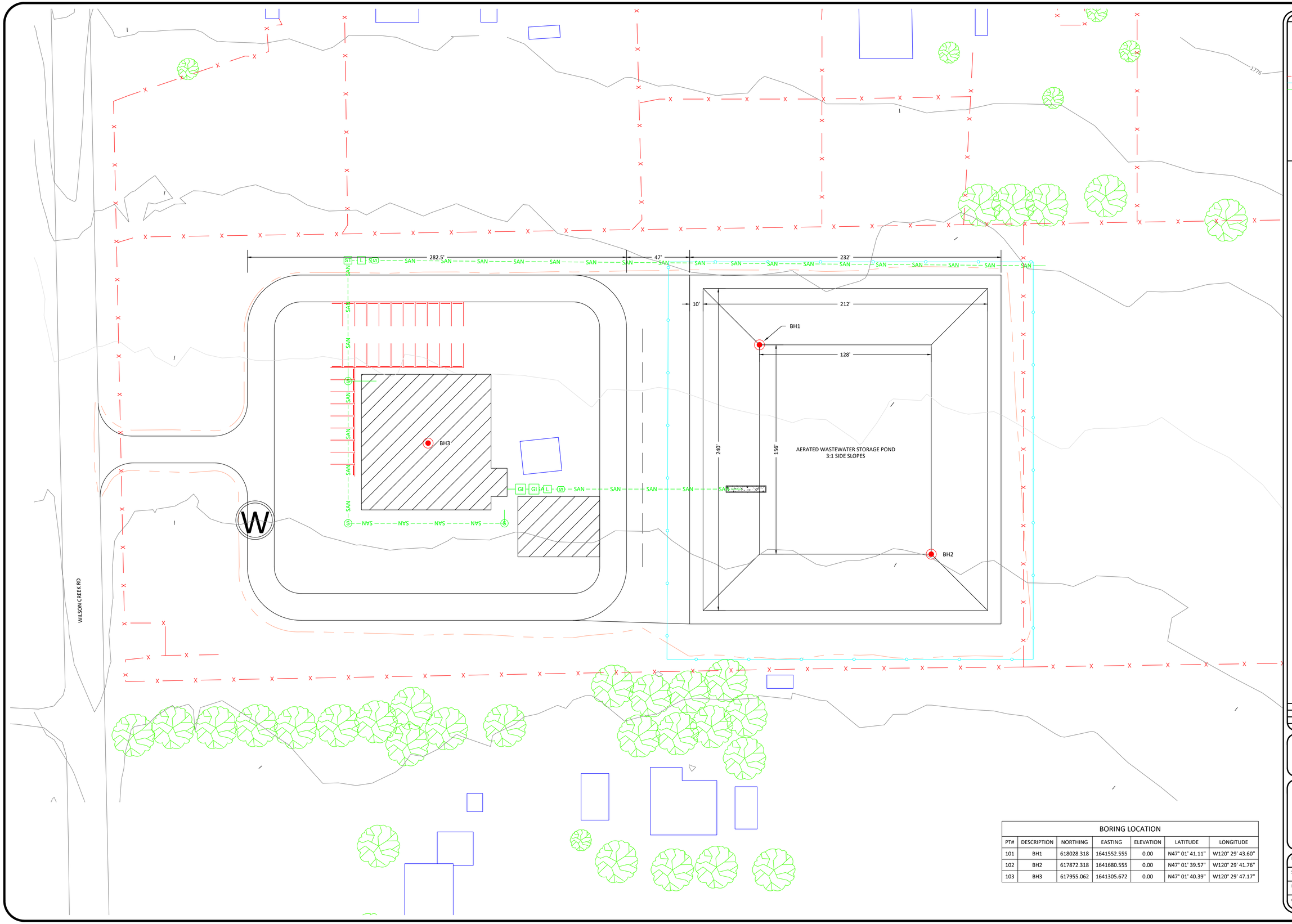
DGA CONSULTING ENGINEERS
4200 21ST ST. SE UNIT 101 MANDAN ND 58554

3BR CUSTOM CUTS PROCESSING PLANT

3200 WILSON CREEK RD
ELLENSBURG, WA

PROPOSED PLAN
SITE LOCATION

DATE: November 27, 2023	SHEET: C3.1
SCALE: 1" = 30'	
DRAWN BY: DDR	
CHECKED BY: DLD	



GENERAL NOTES

LEGEND

LEGEND
- TREES
- BORE HOLE LOCATION
- WELL LOCATION
- EXISTING BUILDING
- EXISTING FENCELINE
- PROPOSED FENCELINE
- SANITARY WASTE LINE
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- SANITARY SEWER LIFT STATION
- SEPTIC TANK
- SANITARY SEWER VALVE BOX
- SANITARY SEWER GREASE INTER.

0 30' 60'

No.	Revision/Issue	Date

DGA CONSULTING ENGINEERS
4200 21st St. Se Unit 101 Mandan ND 58554

3BR CUSTOM CUTS PROCESSING PLANT

3200 WILSON CREEK RD
ELLENSBURG, WA

PROPOSED SITE BORING LOCATIONS

DATE: November 20, 2023
SCALE: 1" = 30'
DRAWN BY: DDR
CHECKED BY: DLD
SHEET: C3.2

BORING LOCATION

PT#	DESCRIPTION	NORTHING	EASTING	ELEVATION	LATITUDE	LONGITUDE
101	BH1	618028.318	1641552.555	0.00	N47° 01' 41.11"	W120° 29' 43.60"
102	BH2	617872.318	1641680.555	0.00	N47° 01' 39.57"	W120° 29' 41.76"
103	BH3	617955.062	1641305.672	0.00	N47° 01' 40.39"	W120° 29' 47.17"

GENERAL NOTES

LEGEND

- TREES
- BORE HOLE LOCATION
- WELL LOCATION
- EXISTING BUILDING
- EXISTING FENCELINE
- PROPOSED FENCELINE
- SANITARY WASTE LINE
- SANITARY SEWER MANHOLE
- SANITARY SEWER LIFT STATION
- SEPTIC TANK
- SANITARY SEWER VALVE BOX
- SANITARY SEWER GREASE INTER.

0 40' 80'

WILSON CREEK RD

EXISTING WELL

GRADING TOE

4:1 SIDE SLOPES

3:1 INSIDE SLOPES

No.	Revision/Issue	Date

DGA CONSULTING ENGINEERS
4200 21st St. Se Unit 101 Mandan ND 58554

3BR CUSTOM CUTS PROCESSING PLANT

3200 WILSON CREEK RD
ELLENSBURG, WA

PROPOSED SITE GRADING PLAN

DATE: November 27, 2023
SCALE: 1" = 40'
DRAWN BY: DDR
CHECKED BY: DLD

SHEET: C3.3

Table 1. Earthwork Balance

Details	Cut (yd³)	Fill (yd³)
Design	11,850	9,430
Stripping	2,270	2,270
Core Trench		
Backfill		
Liner		
Total	14,120	11,700
Ratio	1.21	