



Referral Early Consultation

Date: December 10, 2020
To: Distribution List (See Attachment A)
From: Emily Basnight, Assistant Planner Planning and Community Development
Subject: USE PERMIT APPLICATION NO. PLN2020-0081 – AHLEM FARMS JERSEYS
Respond By: December 28, 2020

******PLEASE REVIEW REFERRAL PROCESS POLICY******

The Stanislaus County Department of Planning and Community Development is soliciting comments from responsible agencies under the Early Consultation process to determine: a) whether or not the project is subject to CEQA and b) if specific conditions should be placed upon project approval.

Therefore, please contact this office by the response date if you have any comments pertaining to the proposal. Comments made identifying potential impacts should be as specific as possible and should be based on supporting data (e.g., traffic counts, expected pollutant levels, etc.). Your comments should emphasize potential impacts in areas which your agency has expertise and/or jurisdictional responsibilities.

These comments will assist our Department in preparing a staff report to present to the Planning Commission. Those reports will contain our recommendations for approval or denial. They will also contain recommended conditions to be required should the project be approved. Therefore, please list any conditions that you wish to have included for presentation to the Commission as well as any other comments you may have. Please return all comments and/or conditions as soon as possible or no later than the response date referenced above.

Thank you for your cooperation. Please call (209) 525-6330 if you have any questions.

Applicant: Manuel Azevedo dba Ahlem Farms Jerseys
Project Location: 825 Ruble Road, between Crows Landing Road and S. Carpenter Road, between the Cities of Patterson and Turlock.
APN: 058-003-007, 058-003-008, 058-004-012 & 058-004-015
Williamson Act Contract: 73-1535, 99-4400 & 77-2877
General Plan: Agriculture
Current Zoning: A-2-40 (General Agriculture)

Project Description: Request to expand the herd of an existing dairy facility located on four parcels across a total of 79± acres, in the A-2-40 (General Agriculture) zoning district. The applicant proposes to expand the herd from 1,305 to 2,500 mature cows, an increase of 1,090 milk and 105 dry cows; and to increase support stock numbers from 1,007 to 2,250, which includes an increase of 371 heifers 15-24 months old, 589 heifers 7-14 months, and 147 additional calves 4-6 months old, and 136 calves 0-3 months. Additionally, the applicant proposes to construct two freestall barns totaling 48,624± square feet, and a new 2.8± acre covered digester pond. The applicant anticipates an increase of 1,900 cubic feet of additional manure per day generated on the facility from the proposed herd expansion. Nutrients produced from the herd will be utilized to fertilize approximately 175± acres of irrigated cropland on parcels located to the west of the project site, which are also owned by the applicant. Hours of operation are 24-hours a day, seven days a week. There are currently two single-family dwellings on-site which are occupied by employees and their families. The proposed request is expected to increase the number of employees by two for a total

of four employees on a maximum shift, which will increase the number of total employee trips by two per day. No additional housing is proposed as part of this request; the two additional employees will not live on-site. The applicant estimates one customer/visitor on-site per day. The proposed request is expected to increase the number of truck trips by two for a total of four truck trips per day. The existing facility is currently improved with 285,190± square feet of dairy and residential building space and 32± acres of corrals, storage ponds, and feed storage. The site is served by private wells and septic system and has access to County-maintained Ruble Road. Confined Animal Facilities (CAF), which include dairies, are considered to be permitted agricultural uses; however, a use permit is required for new or expanding CAFs requiring a new or modified permit waiver, order, or Waste Discharge Requirements (WDRs) from the Regional Water Quality Control Board (RWQCB), where the issuance of such permit, waiver, order, or WDR requires compliance with the California Environmental Quality Act (CEQA) (Section 21.20.030 (F) of the Stanislaus County Zoning Code). The County adopted the use permit requirement in 2003 in order to allow the County to facilitate the environmental review (in accordance with CEQA) required for issuance of any permit, waiver, order, or WDR by the RWQCB.

Full document with attachments available for viewing at:
<http://www.stancounty.com/planning/pl/act-projects.shtm>



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10TH Street, Suite 3400, Modesto, CA 95354
 Planning Phone: (209) 525-6330 Fax: (209) 525-5911
 Building Phone: (209) 525-6557 Fax: (209) 525-7759

USE PERMIT APPLICATION NO. PLN2020-0081 – AHLEM FARMS JERSEYS

Attachment A

Distribution List

X	CA DEPT OF CONSERVATION Land Resources		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
	CA STATE LANDS COMMISSION	X	STAN CO ERC
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
	CITY OF:	X	STAN CO MILK & DAIRY
	COMMUNITY SERVICES DIST:		STAN CO PARKS & RECREATION
X	COOPERATIVE EXTENSION	X	STAN CO PUBLIC WORKS
	COUNTY OF:		STAN CO RISK MANAGEMENT
X	DER GROUNDWATER RESOURCES DIVISION	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: MOUNTAIN VIEW	X	STAN CO SUPERVISOR DIST 2: CHIESA
X	GSA: WEST TURLOCK SUBBASIN	X	STAN COUNTY COUNSEL
	HOSPITAL DIST:		StanCOG
X	IRRIGATION DIST: TURLOCK	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOSQUITO DIST: TURLOCK		STANISLAUS LAFCO
X	MOUNTAIN VALLEY EMERGENCY MEDICAL SERVICES	X	STATE OF CA SWRCB DIVISION OF DRINKING WATER DIST. 10
	MUNICIPAL ADVISORY COUNCIL:		SURROUNDING LAND OWNERS
X	PACIFIC GAS & ELECTRIC	X	TELEPHONE COMPANY: AT&T
	POSTMASTER:		TRIBAL CONTACTS (CA Government Code §65352.3)
	RAILROAD:		US ARMY CORPS OF ENGINEERS
X	SAN JOAQUIN VALLEY APCD	X	US FISH & WILDLIFE
X	SCHOOL DIST 1: CHATOM UNION		US MILITARY (SB 1462) (7 agencies)
X	SCHOOL DIST 2: TURLOCK UNIFIED		USDA NRCS
	WORKFORCE DEVELOPMENT		WATER DIST:
X	STAN CO AG COMMISSIONER		
	TUOLUMNE RIVER TRUST		



STANISLAUS COUNTY CEQA REFERRAL RESPONSE FORM

TO: Stanislaus County Planning & Community Development
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: USE PERMIT APPLICATION NO. PLN2020-0081 – AHLEM FARMS JERSEYS

Based on this agency’s particular field(s) of expertise, it is our position the above described project:

- Will not have a significant effect on the environment.
- May have a significant effect on the environment.
- No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

- 1.
- 2.
- 3.
- 4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

- 1.
- 2.
- 3.
- 4.

In addition, our agency has the following comments (attach additional sheets if necessary).

Response prepared by:






Name	Title	Date
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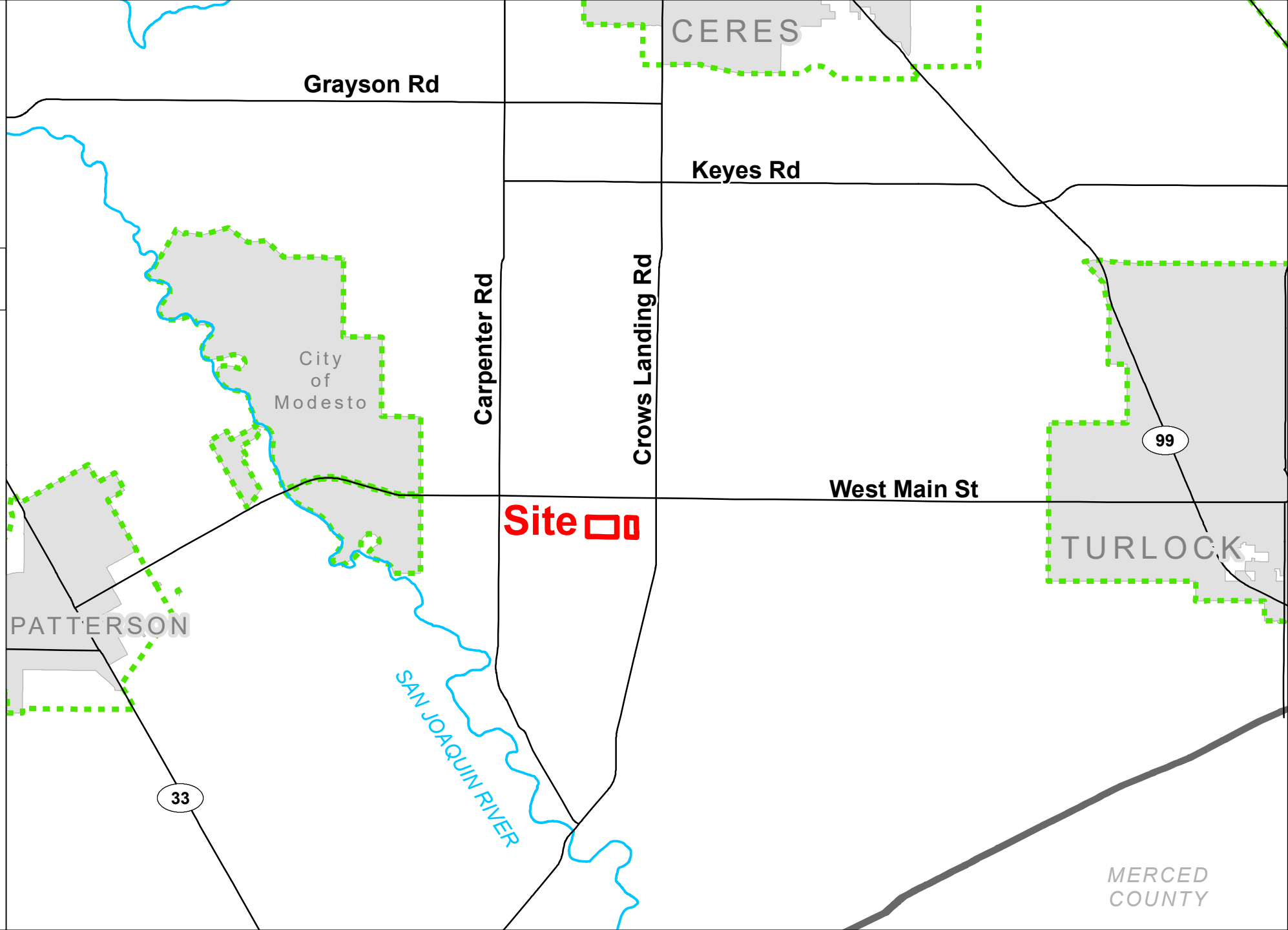
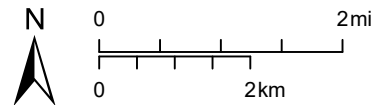
AHLEM FARMS JERSEYS

UP PLN2020-0081

AREA MAP

LEGEND

-  Project Site
-  Sphere of Influence
-  City
-  Road
-  River



AHLEM FARMS JERSEYS

UP PLN2020-0081

GENERAL PLAN MAP

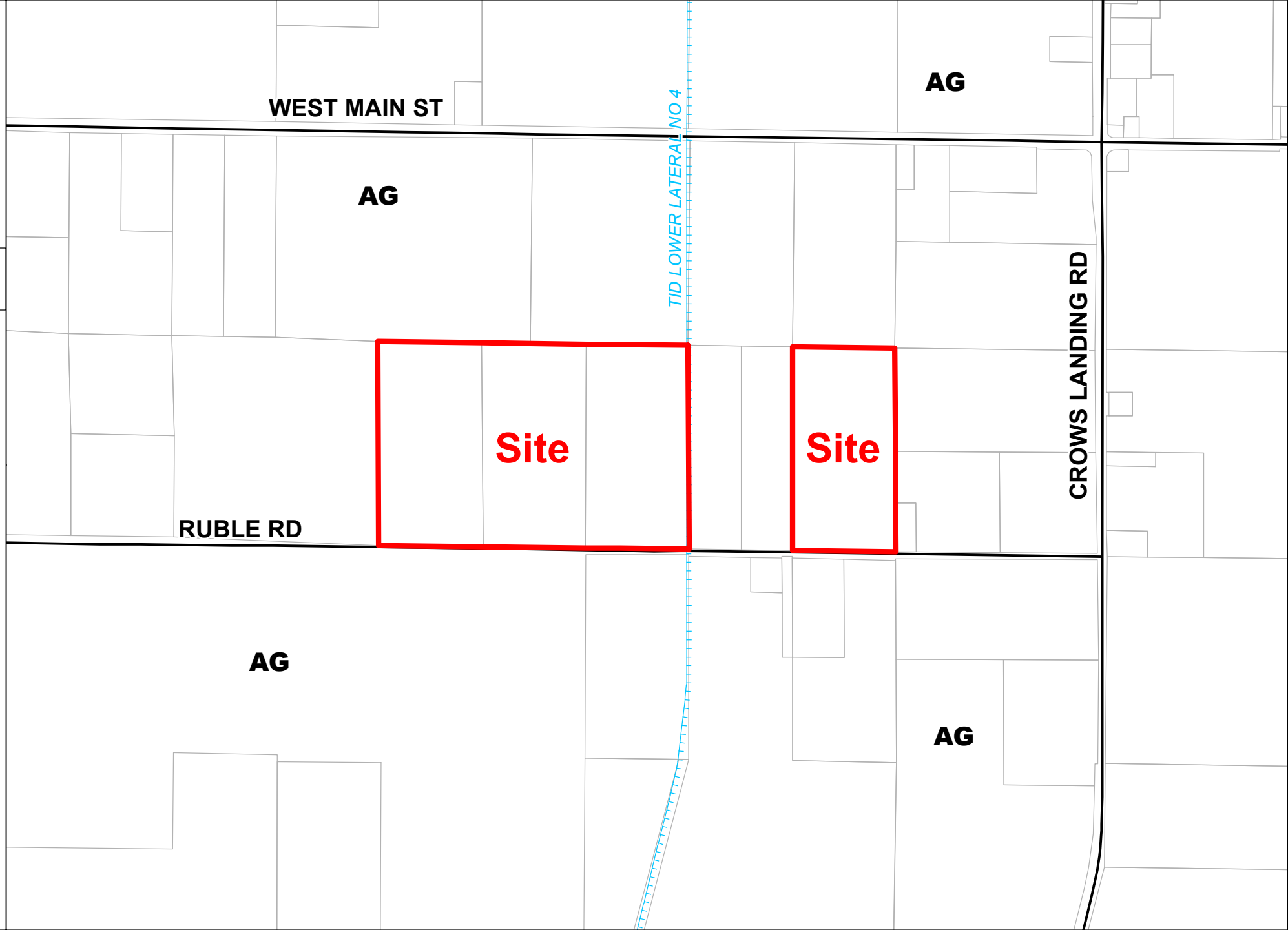
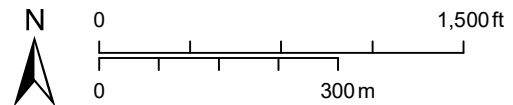
LEGEND

 Project Site

 Parcel

 Road  Canal

General Plan
 Agriculture



AHLEM FARMS JERSEYS

UP PLN2020-0081

ZONING MAP

LEGEND

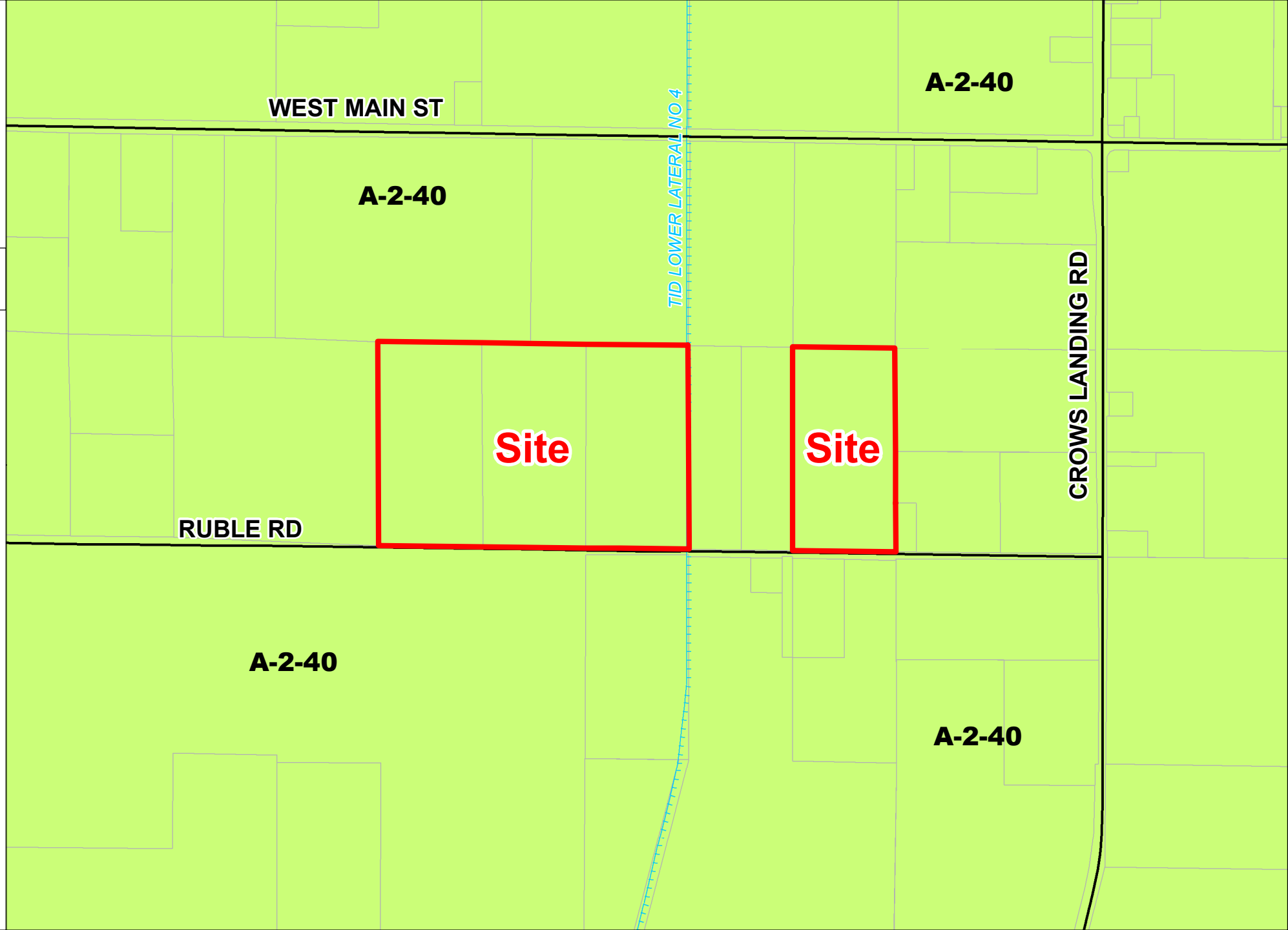
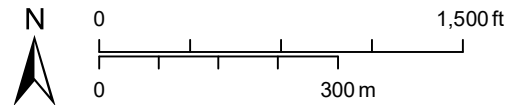
 Project Site

 Parcel

 Road  Canal

Zoning Designation

 General Agriculture 40 Acre



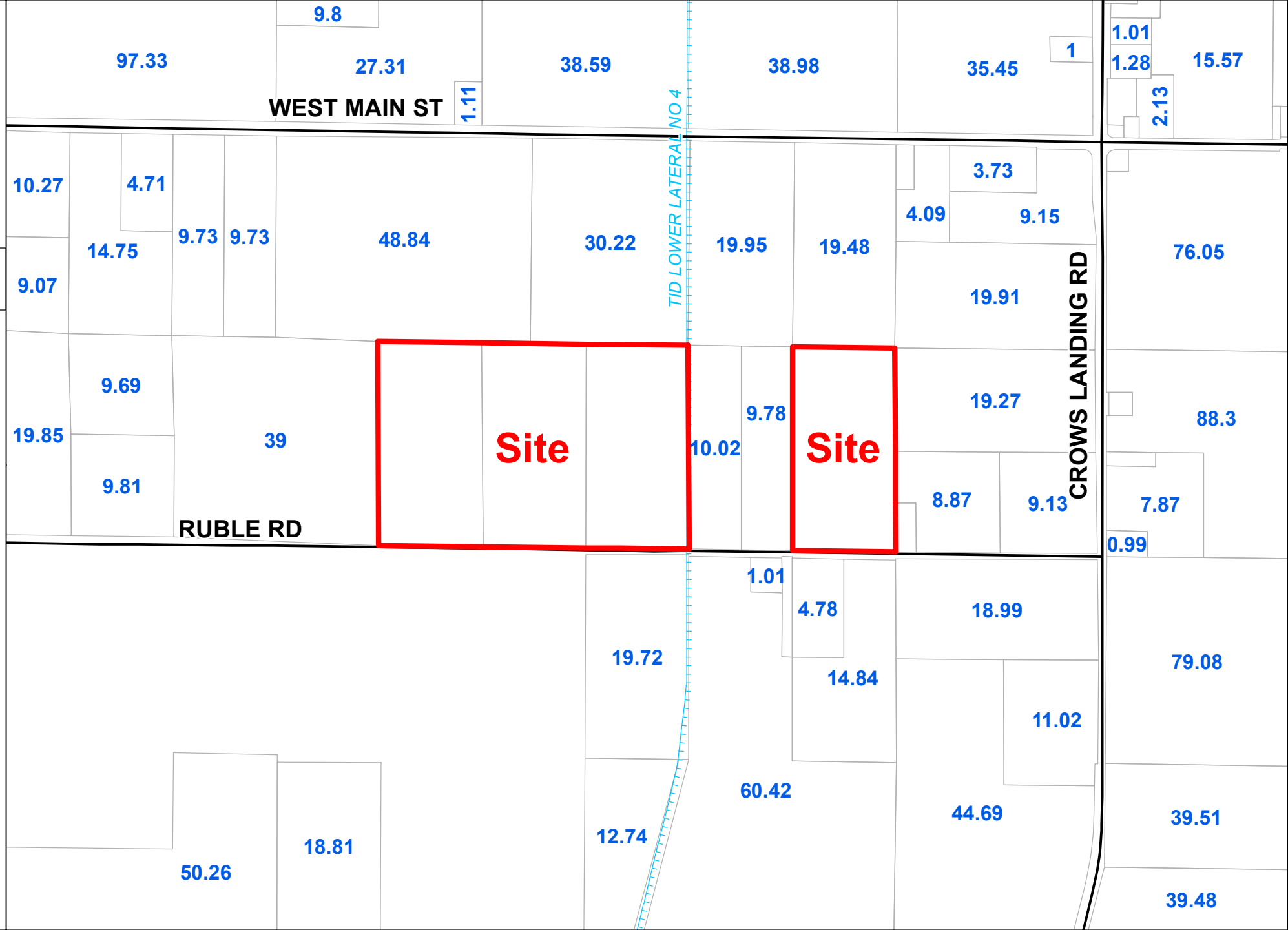
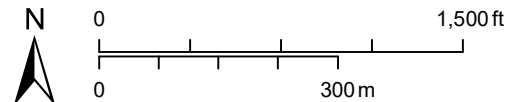
AHLEM FARMS JERSEYS

UP PLN2020-0081

ACREAGE MAP

LEGEND

-  Project Site
-  Parcel/Acres
-  Road
-  Canal






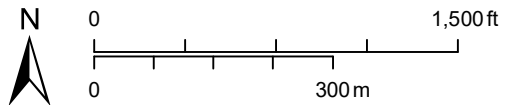
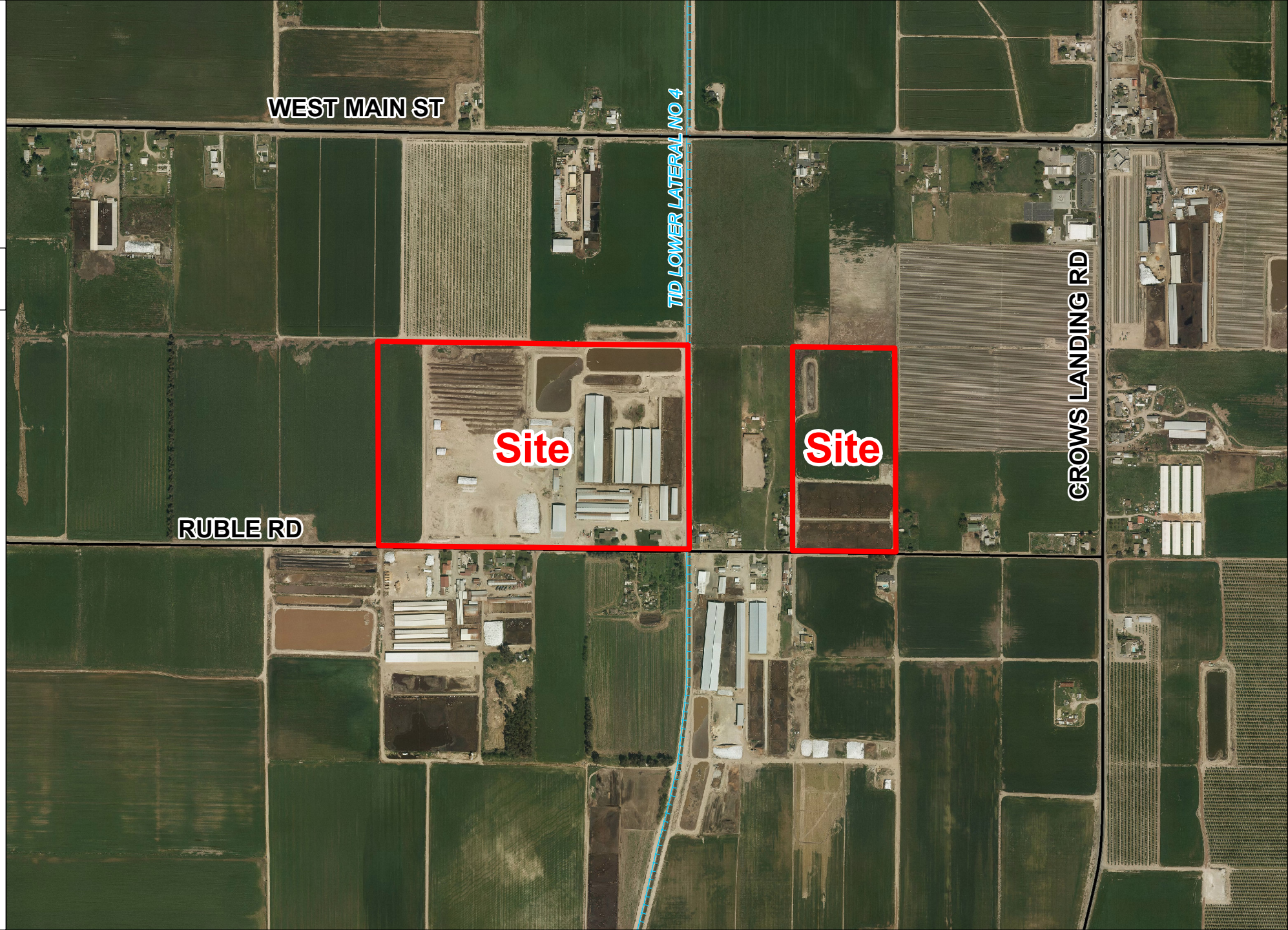
AHLEM FARMS JERSEYS

UP
PLN2020-0081

2017 AERIAL AREA MAP

LEGEND

-  Project Site
-  Road
-  Canal






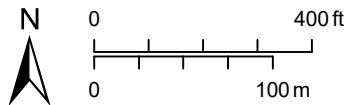
AHLEM FARMS JERSEYS

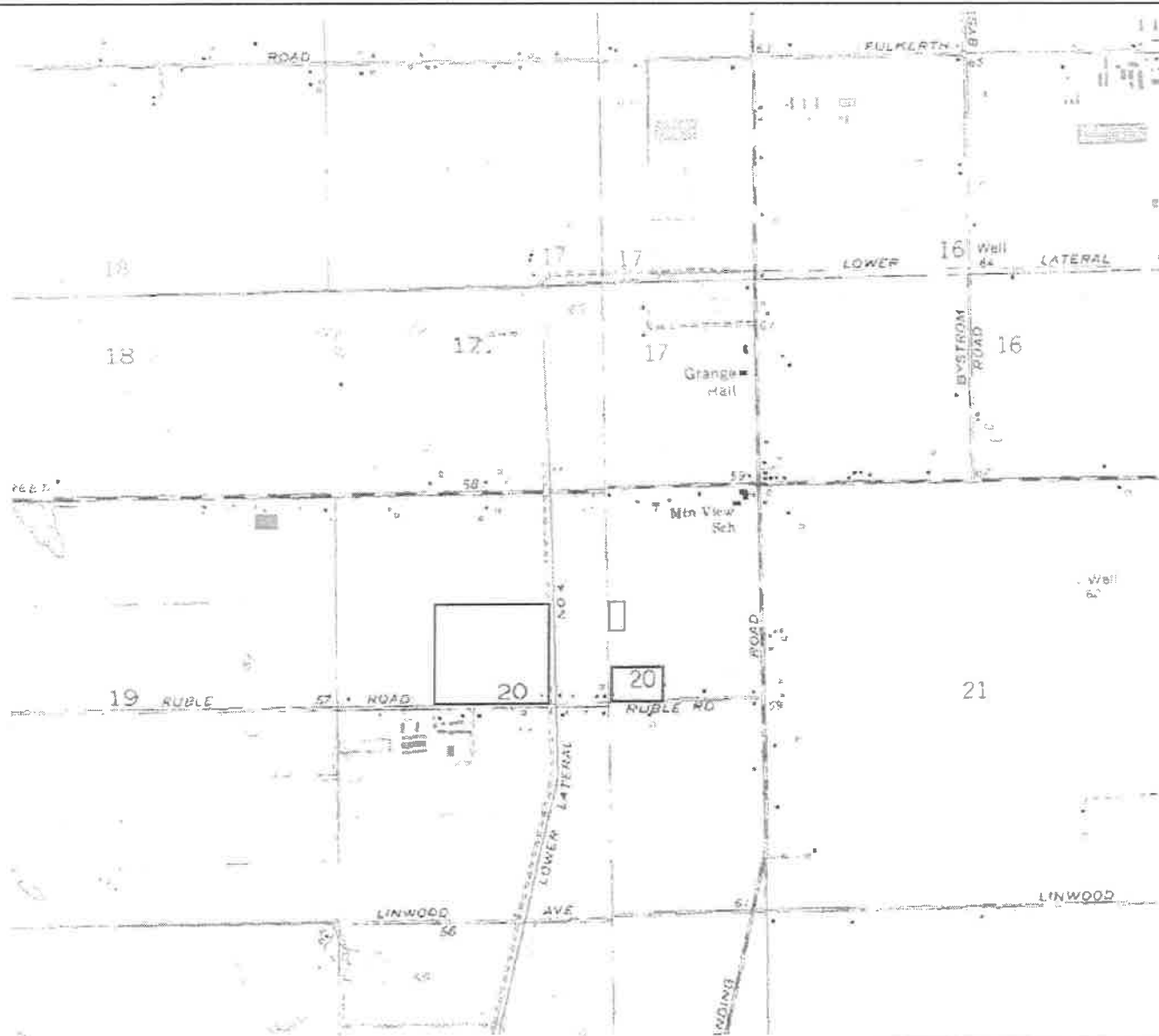
UP PLN2020-0081

2017 AERIAL SITE MAP

LEGEND

-  Project Site
-  Road
-  Canal



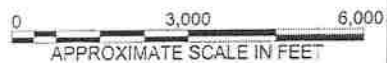


LEGEND

 Owned Land



SCALE:



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 1
TOPOGRAPHIC MAP

PROJECT NO.

FRA-00

DATE:

9/3/2020

DRAWN BY:


























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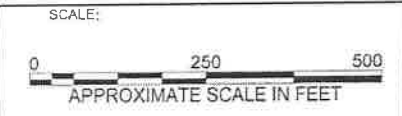
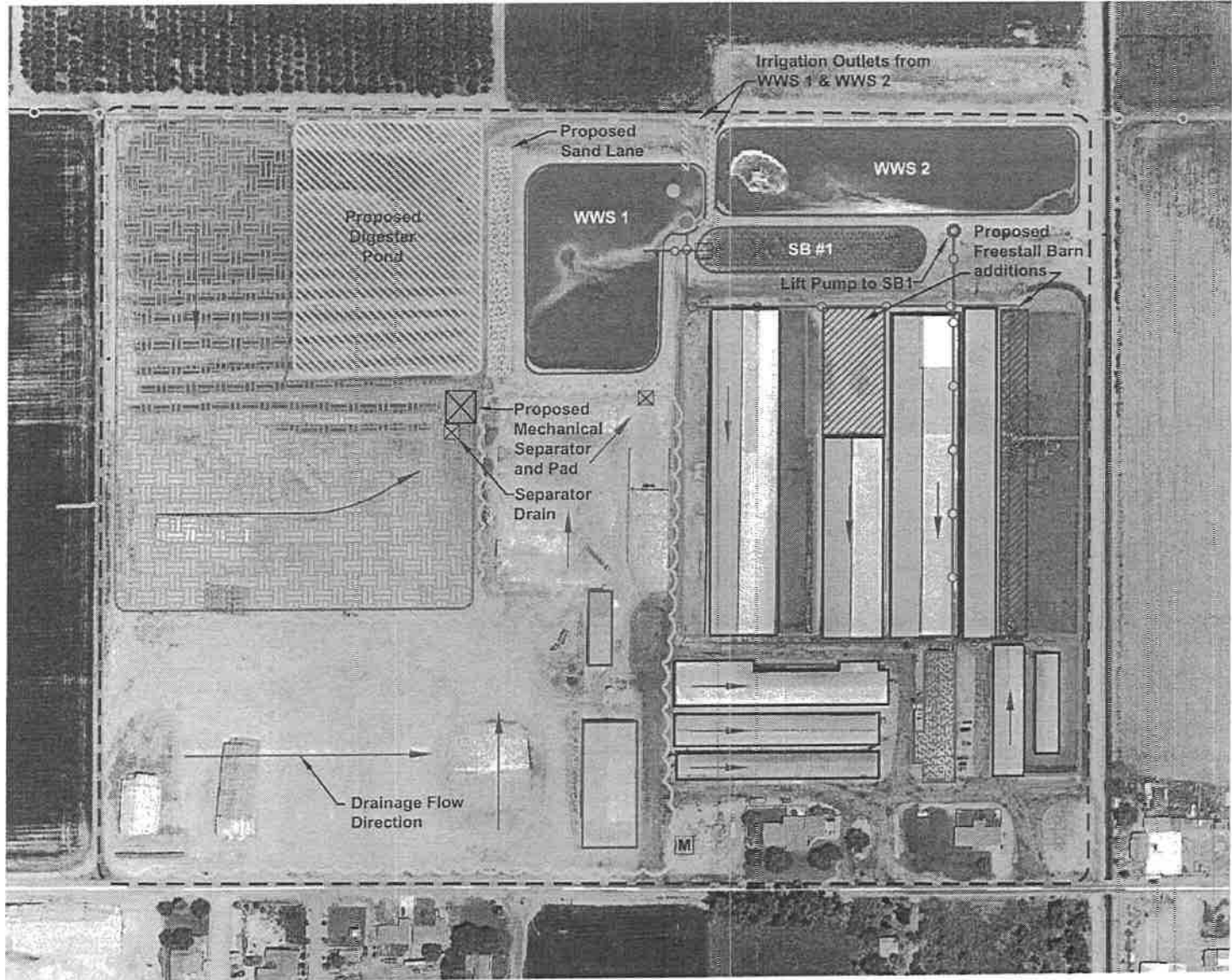
APP. BY:

JR

FRA-00_Ahlem Farms Jersey

LEGEND

-  Milk Barn
-  Animal Housing
-  Waste Water Storage
-  Solids Settling Basin
-  Corrals
-  Commodity Barn
-  Hay Barn
-  Manure Stacking
-  Digester Pond
-  Mechanical Separator
-  Feed Storage
-  Facility Boundary
-  Floating Pump
-  Flush Return Pump
-  Stationary Pump
-  Lift Pump
-  Weir Box
-  Drain
-  Mortality Holding Box
-  Domestic Well
-  Flush Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Irrigation Pipeline
-  Irrigation Outlet













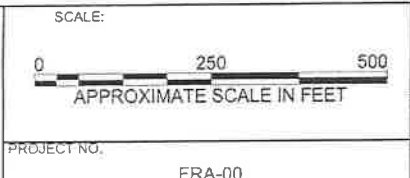
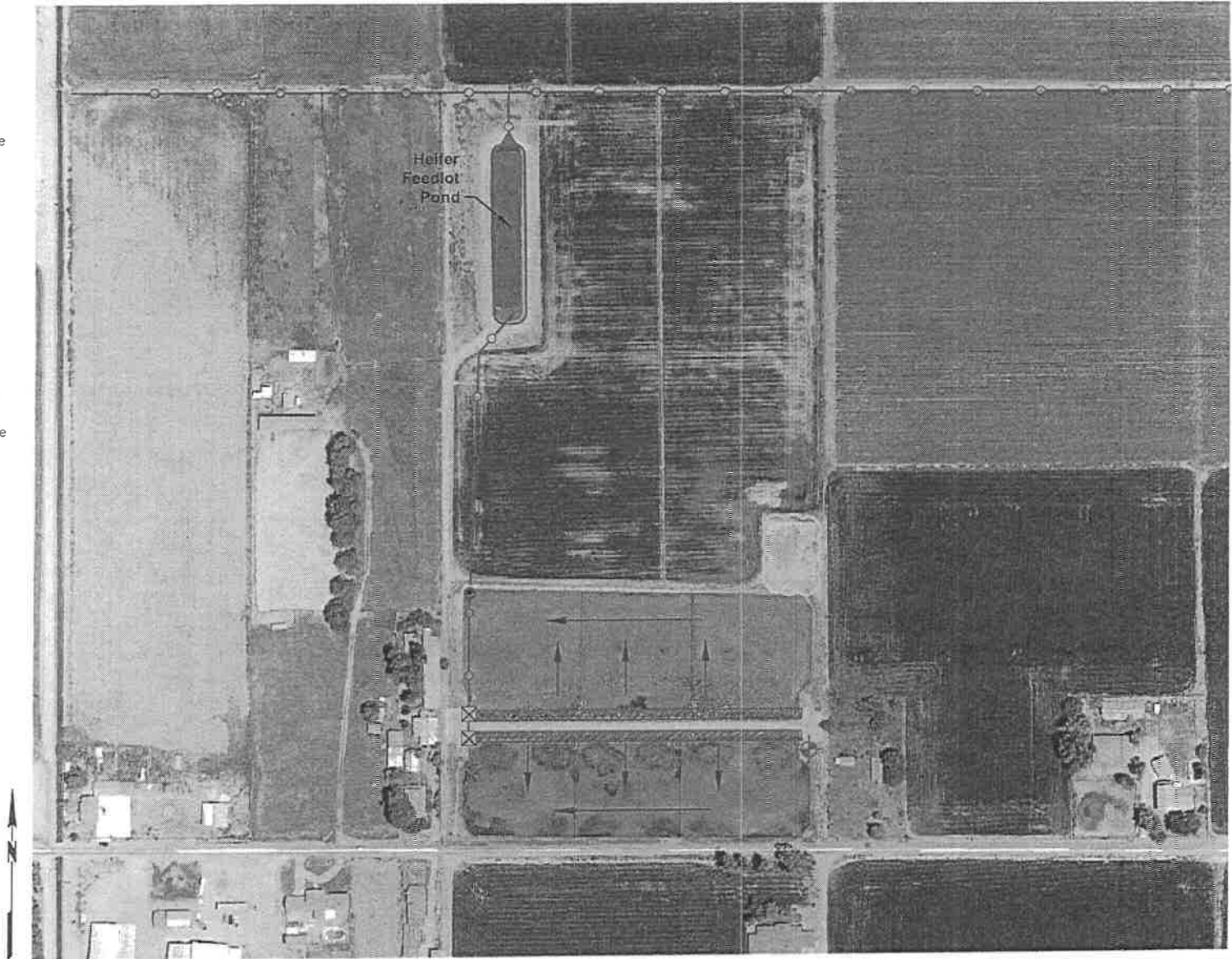
AHLEM FARMS JERSEYS
 OWNED BY MANUEL AZEVEDO
 STANISLAUS COUNTY, CA

FIGURE 2A
 DAIRY FACILITY

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/3/2020	SB	JR

LEGEND

-  Waste Water Storage
-  Feed Storage
-  Outlet Valve
-  Drain Pump
-  Flush Drain
-  Domestic Well
-  Drainage Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Flush Lanes



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

DATE: 9/3/2020

DRAWN BY: SB

APP. BY: JR


FIGURE 2B
HEIFER FEEDLOT

FRA-00 Ahlem Farms Jersey

LEGEND

-  Field Boundary
-  Irrigation Pipeline
-  Drain Pipeline
-  Irrigation Flow
-  Facility Boundary
-  Tailwater Pump
-  Inlet Storage
-  Drain
-  Tailwater
- WW** Wastewater
- SM** Solid Manure













SCALE:	
	
APPROXIMATE SCALE IN FEET	
PROJECT NO.	FRA-00

AHLEM FARMS JERSEYS OWNED BY MANUEL AZEVEDO STANISLAUS COUNTY, CA		
DATE:	DRAWN BY:	APP. BY:
9/1/2020	SB	JR

FIGURE 3 DAIRY FIELDS
FRA-00_Ahlem Farms Jersey

LEGEND

-  Field Boundary
-  Drain Pipeline
-  Irrigation Pipeline
-  Tailwater Return Pipeline
-  Irrigation Flow
-  Surface Drainage Flow
-  Berms/Levees
-  Tailwater Pump
-  Crossover Drain Pipe
-  Drain
- WW Wastewater
- SM Solid Manure



SCALE:



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.

FRA-00

DATE:

9/1/2020

DRAWN BY:

SB

APP. BY:

JR

FRA-G0_Ahlem Farms Jersey



APPLICATION QUESTIONNAIRE

<p><u>Please Check all applicable boxes</u> APPLICATION FOR: <i>Staff is available to assist you with determining which applications are necessary</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 2px;"><input type="checkbox"/> General Plan Amendment</td> <td style="width: 50%; vertical-align: top; padding: 2px;"><input type="checkbox"/> Subdivision Map</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Rezone</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Parcel Map</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> Use Permit</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Exception</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Variance</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Williamson Act Cancellation</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Historic Site Permit</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Other _____</td> </tr> </table>	<input type="checkbox"/> General Plan Amendment	<input type="checkbox"/> Subdivision Map	<input type="checkbox"/> Rezone	<input type="checkbox"/> Parcel Map	<input checked="" type="checkbox"/> Use Permit	<input type="checkbox"/> Exception	<input type="checkbox"/> Variance	<input type="checkbox"/> Williamson Act Cancellation	<input type="checkbox"/> Historic Site Permit	<input type="checkbox"/> Other _____	<p>PLANNING STAFF USE ONLY: Application No(s): <u>UP PLN2020-0081</u> Date: <u>9/9/2020</u> S <u>20</u> T <u>5</u> R <u>9</u> GP Designation: <u>Agriculture</u> Zoning: <u>A-2-40</u> Fee: <u>\$ 4,592.00</u> Receipt No. _____ Received By: <u>KA</u> Notes: _____</p>
<input type="checkbox"/> General Plan Amendment	<input type="checkbox"/> Subdivision Map										
<input type="checkbox"/> Rezone	<input type="checkbox"/> Parcel Map										
<input checked="" type="checkbox"/> Use Permit	<input type="checkbox"/> Exception										
<input type="checkbox"/> Variance	<input type="checkbox"/> Williamson Act Cancellation										
<input type="checkbox"/> Historic Site Permit	<input type="checkbox"/> Other _____										

In order for your application to be considered COMPLETE, please answer all applicable questions on the following pages, and provide all applicable information listed on the checklist on pages i – v. Under State law, upon receipt of this application, staff has 30 days to determine if the application is complete. We typically do not take the full 30 days. It may be necessary for you to provide additional information and/or meet with staff to discuss the application. Pre-application meetings are not required, but are highly recommended. An incomplete application will be placed on hold until all the necessary information is provided to the satisfaction of the requesting agency. An application will not be accepted without all the information identified on the checklist.

Please contact staff at (209) 525-6330 to discuss any questions you may have. Staff will attempt to help you in any way we can.

PROJECT INFORMATION

PROJECT DESCRIPTION: (Describe the project in detail, including physical features of the site, proposed improvements, proposed uses or business, operating hours, number of employees, anticipated customers, etc. – Attach additional sheets as necessary)

**Please note: A detailed project description is essential to the reviewing process of this request. In order to approve a project, the Planning Commission or the Board of Supervisors must decide whether there is enough information available to be able to make very specific statements about the project. These statements are called "Findings". It is your responsibility as an applicant to provide enough information about the proposed project, so that staff can recommend that the Commission or the Board make the required Findings. Specific project Findings are shown on pages 17 – 19 and can be used as a guide for preparing your project description. (If you are applying for a Variance or Exception, please contact staff to discuss special requirements).*

The facility is an existing and operating dairy facility with corrals, milking facilities, waste storage structures, and utilities in place. The operation currently houses approximately 1500+/- Mature cows and 1250+/- support stock. Application is to increase the milk/dry cows by 1000 head for a total of 2500 mature cows and increase support stock also by 1000+/- head to 2250. There will be an estimated increase of 1 milk truck trip and 1 commodity truck trip and 2 employee trips per day. Project requires the construction of 48,000 sq. ft. of additional freestall housing, all within the current footprint. Additional improvements proposed for the project include the installation of a covered digester pond and mechanical manure separation, both of which are proposed to be placed at the northwest corner of the facility footprint. Nutrients produced by the herd are utilized to fertilize 175 +/- acres of irrigated cropland.

PROJECT SITE INFORMATION

Complete and accurate information saves time and is vital to project review and assessment. Please complete each section entirely. If a question is not applicable to your project, please indicated this to show that each question has been carefully considered. Contact the Planning & Community Development Department Staff, 1010 10th Street – 3rd Floor, (209) 525-6330, if you have any questions. Pre-application meetings are highly recommended.

ASSESSOR'S PARCEL NUMBER(S): Book 058 Page 004 Parcel 015 & 012

Additional parcel numbers: _____
Project Site Address
or Physical Location: 825 Ruble Rd. Crows Landing CA 95313

Property Area: Acres: 79 +/- or Square feet: _____

Current and Previous Land Use: (Explain existing and previous land use(s) of site for the last ten years)
The current and previous use is a dairy operation

List any known previous projects approved for this site, such as a Use Permit, Parcel Map, etc.: (Please identify project name, type of project, and date of approval)

Existing General Plan & Zoning: AG-40

Proposed General Plan & Zoning: Unchanged
(if applicable)

ADJACENT LAND USE: (Describe adjacent land uses within 1,320 feet (1/4 mile) and/or two parcels in each direction of the project site)

East: Cropland and rural residences.
West: Cropland.
North: Dairy Facility, cropland
South: Cattle Feedlot, cropland

WILLIAMSON ACT CONTRACT:

Yes No

Is the property currently under a Williamson Act Contract?
Contract Number: 1976-2877, 1972-1535, 1998-4400

If yes, has a Notice of Non-Renewal been filed?

Date Filed: _____

Yes No

Do you propose to cancel any portion of the Contract?

Yes No

Are there any agriculture, conservation, open space or similar easements affecting the use of the project site. (Such easements do not include Williamson Act Contracts)

If yes, please list and provide a recorded copy: _____

SITE CHARACTERISTICS: (Check one or more) Flat Rolling Steep

VEGETATION: What kind of plants are growing on your property? (Check one or more)

Field crops Orchard Pasture/Grassland Scattered trees

Shrubs Woodland River/Riparian Other

Explain Other: _____

Yes No

Do you plan to remove any trees? (If yes, please show location of trees planned for removal on plot plan and provide information regarding transplanting or replanting.)

GRADING:

Yes No

Do you plan to do any grading? (If yes, please indicate how many cubic yards and acres to be disturbed. Please show areas to be graded on plot plan.) All stated improvements are proposed to be constructed within the existing footprint of the current dairy facility.

STREAMS, LAKES, & PONDS:

Yes No

Are there any streams, lakes, ponds or other watercourses on the property? (If yes, please show on plot plan)

Yes No

Will the project change any drainage patterns? (If yes, please explain – provide additional sheet if needed) _____

Yes No

Are there any gullies or areas of soil erosion? (If yes, please show on plot plan)

Yes No

Do you plan to grade, disturb, or in any way change swales, drainages, ditches, gullies, ponds, low lying areas, seeps, springs, streams, creeks, river banks, or other area on the site that carries or holds water for any amount of time during the year? (If yes, please show areas to be graded on plot plan)

Please note: If the answer above is yes, you may be required to obtain authorization from other agencies such as the Corps of Engineers or California Department of Fish and Game.

STRUCTURES:

Yes No Are there structures on the site? (If yes, please show on plot plan. Show a relationship to property lines and other features of the site.)

Yes No Will structures be moved or demolished? (If yes, indicate on plot plan.)

Yes No Do you plan to build new structures? (If yes, show location and size on plot plan.)

Yes No Are there buildings of possible Historical significance? (If yes, please explain and show location and size on plot plan.) _____

PROJECT SITE COVERAGE:

Existing Building Coverage: 285,190+/- Sq. Ft.

Landscaped Area: N/A Sq. Ft.

Proposed Building Coverage: 48,624+/- Sq. Ft.

Paved Surface Area: 194506 +/- Sq. Ft.

BUILDING CHARACTERISTICS:

Size of new structure(s) or building addition(s) in gross sq. ft.: (Provide additional sheets if necessary) _____

Construct one (1) 104X210 Freestall and one (1) 48X558 Freestall to house milk and dry cows.

Number of floors for each building: One

Building height in feet (measured from ground to highest point): (Provide additional sheets if necessary) 30+/-

Height of other appurtenances, excluding buildings, measured from ground to highest point (i.e., antennas, mechanical equipment, light poles, etc.): (Provide additional sheets if necessary) _____

Proposed surface material for parking area: (Provide information addressing dust control measures if non-asphalt/concrete material to be used) _____

UTILITIES AND IRRIGATION FACILITIES:

Yes No Are there existing public or private utilities on the site? Includes telephone, power, water, etc. (If yes, show location and size on plot plan)

Who provides, or will provide the following services to the property?

Electrical: Turlock Irrigation District

Sewer*: Septic

Telephone: Public provider

Gas/Propane: Private distributor

Water**: Private wells

Irrigation: Turlock Irrigation District

*Please Note: A "will serve" letter is required if the sewer service will be provided by City, Sanitary District, Community Services District, etc.

**Please Note: A "will serve" letter is required if the water source is a City, Irrigation District, Water District, etc., and the water purveyor may be required to provide verification through an Urban Water Management Plan that an adequate water supply exists to service your proposed development.

Will any special or unique sewage wastes be generated by this development other than that normally associated with resident or employee restrooms? Industrial, chemical, manufacturing, animal wastes? (Please describe:)

There will be approximately 1900 cu. ft. per day of additional manure generated on the facility from the proposed increase in the animals housed on the operation

Please Note: Should any waste be generated by the proposed project other than that normally associated with a single family residence, it is likely that Waste Discharge Requirements will be required by the Regional Water Quality Control Board. Detailed descriptions of quantities, quality, treatment, and disposal may be required.

Yes No Are there existing irrigation, telephone, or power company easements on the property? (If yes, show location and size on plot plan.)

Yes No Do the existing utilities, including irrigation facilities, need to be moved? (If yes, show location and size on plot plan.)

Yes No Does the project require extension of utilities? (If yes, show location and size on plot plan.)

AFFORDABLE HOUSING/SENIOR:

Yes No Will the project include affordable or senior housing provisions? (If yes, please explain)

RESIDENTIAL PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Total No. Lots: _____ Total Dwelling Units: _____ Total Acreage: _____

Net Density per Acre: _____ Gross Density per Acre: _____

<i>(complete if applicable)</i>	Single Family	Two Family Duplex	Multi-Family Apartments	Multi-Family Condominium/Townhouse
Number of Units:	_____	_____	_____	_____
Acreage:	_____	_____	_____	_____

COMMERCIAL, INDUSTRIAL, MANUFACTURING, RETAIL, USE PERMIT, OR OTHER PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Square footage of each existing or proposed building(s): Existing buildings comprise a total area of 191,900 +/- sq. ft.

The individual buildings have been shown on the site plan.

Type of use(s): All dairy related buildings are agricultural use (2010 CBC category u). The only other buildings use on the property is residential (2010 CBC category R).

Days and hours of operation: 24 hours per day/7 days per week

Seasonal operation (i.e., packing shed, huller, etc.) months and hours of operation: _____

Occupancy/capacity of building: _____

Number of employees: (Maximum Shift): 4 (Minimum Shift): 2

Estimated number of daily customers/visitors on site at peak time: 1

Other occupants: _____

Estimated number of truck deliveries/loadings per day: 4

Estimated hours of truck deliveries/loadings per day: 8

Estimated percentage of traffic to be generated by trucks: 10

Estimated number of railroad deliveries/loadings per day: 0

Square footage of:

Office area: _____ Warehouse area: _____

Sales area: _____ Storage area: _____

Loading area: _____ Manufacturing area: _____

Other: (explain type of area) Non-building dalry area (corrals, ponds, feed storage, etc.) = 1,400,000+/- sq. ft.

Yes No Will the proposed use involve toxic or hazardous materials or waste? (Please explain)

ROAD AND ACCESS INFORMATION:

What County road(s) will provide the project's main access? (Please show all existing and proposed driveways on the plot plan)

Ruble Road

Yes No Are there private or public road or access easements on the property now? (If yes, show location and size on plot plan)

Yes No Do you require a private road or easement to access the property? (If yes, show location and size on plot plan)

Yes No Do you require security gates and fencing on the access? (If yes, show location and size on plot plan)

Please Note: Parcels that do not front on a County-maintained road or require special access may require approval of an Exception to the Subdivision Ordinance. Please contact staff to determine if an exception is needed and to discuss the necessary Findings.

STORM DRAINAGE:

How will your project handle storm water runoff? (Check one) Drainage Basin Direct Discharge Overland

Other: (please explain) Drainage basins (storage ponds) and land application to cropland

If direct discharge is proposed, what specific waterway are you proposing to discharge to? _____

Please Note: If direct discharge is proposed, you will be required to obtain a NPDES permit from the Regional Water Quality Control Board, and must provide evidence that you have contacted them regarding this proposal with your application.

EROSION CONTROL:

If you plan on grading any portion of the site, please provide a description of erosion control measures you propose to implement.

Please note: You may be required to obtain an NPDES Storm Water Permit from the Regional Water Quality Control Board and prepare a Storm Water Pollution Prevention Plan.

ADDITIONAL INFORMATION:

Please use this space to provide any other information you feel is appropriate for the County to consider during review of your application. (Attach extra sheets if necessary)

The facility is an existing dairy operation that has corrals, feed storage, waste containment, and
utilities in place. The application is to increase the number of mature cows on the operation by 1000 hd. and support
stock by 1000 hd. Proposed expansion will require the construction of 48,624 sq. ft. of additional cow housing.
and a 350+/- X 350+/- covered digester pond. All proposed improvements will be constructed within the
existing facility footprint. No other physical changes to the facility will be required.

WASTE MANAGEMENT PLAN

Ahlem Farms Jerseys
Owned By Manuel Azevedo
825 Ruble Rd.
Crows Landing, CA 95313

Prepared By:



2857 Geer Road, Suite A
Turlock, California 95382

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DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Ahlem Farms Jerseys

Physical address of dairy:

825 Ruble RD Crows Landing Stanislaus 95313
Number and Street City County Zip Code

Street and nearest cross street (if no address): _____

TRS Data and Coordinates:

5S 9E 20 Mt. Diablo 37° 29' 11.08" N 121° 0' 16.57" W
Township (T_) Range (R_) Section (S_) Baseline meridian Latitude (N) Longitude (W)

Date facility was originally placed in operation: 01/01/1980

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0053-0003-0008-0000 0058-0003-0007-0000 0058-0004-0012-0000 0058-0040-0015-0000

B. OPERATOR NAME: Herrera, Rogelio Telephone no.: (209) 632-5822

Landline Cellular

24093 American AVE Hilmar CA 95324
Mailing Address Number and Street City State Zip Code

Operator should receive Regional Board correspondence (check): Yes No

C. LEGAL OWNER NAME: Azevedo, Manuel Telephone no.: (209) 632-6393

Landline Cellular

2800 White RD Turlock CA 95380
Mailing Address Number and Street City State Zip Code

Owner should receive Regional Board correspondence (check): Yes No

D. CONTACT NAME: Sousa, Manuel Telephone no.: (209) 238-3151

Landline Cellular

Title: Professional Engineer

P.O. Box 1613 Oakdale CA 95361
Mailing Address Number and Street City State Zip Code

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HERD AND MILKING EQUIPMENT

A. HERD AND MILKING

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

2,500 milk and dry cows combined (regulatory review is required for any expansion)

Type of Animal	Present Count	Maximum Count	Daily Flush Hours	Avg Live Weight (lbs)
Milk Cows	1,085	2,175	24	1,000
Dry Cows	220	325	15	1,000
Bred Heifers (15-24 mo.)	354	725	6	750
Heifers (7-14 mo.)	336	925	6	550
Calves (4-6 mo.)	153	300	6	
Calves (0-3 mo.)	164	300	24	

Predominant milk cow breed: Jersey

Average milk production: 60 pounds per cow per day

Average number of milk cows per string sent to the milkbarn: 150 milk cows per string

Number of milkings per day: 2.0 milkings per day

Number of times milk tank is emptied/filled each day: 3.0 per day

Number of hours spent milking each day: 20.0 hours per day

B. MILKBARN EQUIPMENT AND FLOOR WASH

Bulk tank wash and sanitizing: 3.0 run cycles/wash

Bulk tank wash vat volume: 65 gallons/cycle

Bulk tank wash wastewater: 585.0 gallons/day

Pipeline wash and sanitizing: 4.0 run cycles/wash

Pipeline wash vat volume: 50 gallons/cycle

Pipeline wash wastewater: 400.0 gallons/day

Reused / recycled water is the source of parlor floor wash water: Yes No

Milkbarn / parlor floor wash volume: 10,000 gallons/day

Plate coolers type: Well Water Cooled (Water Reused/Recycled)

Plate coolers volume: 28,000 gallons/day

Vacuum pumps / air compressors / chillers type: Mechanically/Air Cooled

Vacuum pumps / air compressors / chillers volume: 0 gallons/day

Milkbarn and equipment wastewater volume generated daily: 28,985 gallons/day

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C. OTHER WATER USES

Reused/recycled water is the source of herd drinking water: Yes No

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Bred Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)
<i>Number of cows drinking from reusable water:</i>	0	0	0	0	0	0
	<i>of 1,085</i>	<i>of 220</i>	<i>of 354</i>	<i>of 336</i>	<i>of 153</i>	<i>of 164</i>
<i>Gallons per head per day:</i>	0	0	0	0	0	0

Total reusable water consumed by herd: _____ 0 gallons/day

Reused/recycled water is the source of sprinkler pen water: Yes No

Number of sprinklers in the holding pen: _____ 1 sprinklers

Duration of each sprinkler cycle: _____ 0.1 minutes

Number of sprinkler pen runs/milking: _____ 1 cycles/milking

Flow rate for each sprinkler head: _____ 0.1 gallons/minute

Total sprinkler pen wastewater volume: _____ 0 gallons/day

Total fresh water used in manure flush lane system (s): _____ 0 gallons/day

D. MISCELLANEOUS EQUIPMENT

No miscellaneous equipment entered.

E. MILKBARN AND EQUIPMENT SUMMARY

Number of days in storage period: _____ 120 days

Water available for reuse/recycle: _____ 28,000 gallons/day

Recycled water reused: _____ 10,000 gallons/day

Recycled water leaving system: _____ 0 gallons/day

Reusable water balance: _____ 18,000 gallons/day

Volume of milkbarn and equipment wastewater generated for storage period: _____ 3,478,200 gallons/storage period

MANURE AND BEDDING SOLIDS

A. IMPORTED AND FACILITY GENERATED BEDDING

Bedding Type	Imported or Generated (tons)	Density (lbs/cu. ft.)	Applied Separation Efficiency (default)	Solids to Pond (cu. ft./period)
Straw (chopped)	100	7.0	75%	7,143
Facility generated bedding	182	40.0	50%	4,550
			Total:	11,693

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B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 60 %

Description of all solids separation equipment used in flushed lane manure management systems:

Proposed twin screen mechanical separator

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	6,565.58	787,869	49,113.92	5,893,670
Manure generated by the herd sent to pond(s):	4,274.65	512,958	31,976.58	3,837,190
Manure generated by the herd sent to dry lot(s):	1,222.98	146,757	9,148.51	1,097,821
Manure solids (herd) removed by separation:	516.99	62,039	3,867.36	464,083
Liquid component in separated solids not sent to pond(s):	550.96	66,115	4,121.47	494,576
Imported and facility generated bedding sent to pond(s):	97.44	11,693	728.91	87,469
Total manure and bedding sent to pond(s):	4,372.09	524,651	32,705.49	3,924,658
Residual manure solids and bedding sent to pond(s) w/factor:	221.05	26,526	1,653.57	198,429
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:	80,683		603,554	

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Newman

25 year/24 hour storm event (default NOAA Atlas 2, 1973): 2.50 inches/storage period

25 year/24 hour storm event (user-override): inches/storage period

Storage period rainfall (default DWR climate data): 7.58 inches/storage period

Storage period rainfall (user-override): inches/storage period

Flood zone: Zone X

B. IMPERVIOUS AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24hr Storm Runoff Coefficient	Storage Period Runoff Coefficient	Runoff Destination
Center Dairy Control Lane	5,771	1	0.97	0.50	Drains into pond(s).
Dry Cow Feed Alley	4,583	1	0.97	0.50	Drains into pond(s).
East Heifer Feedlot Feed Alley	35,545	1	0.97	0.50	Drains into pond(s).
East Heifer Silage Slab	9,358	1	0.97	0.50	Drains into pond(s).
Hay Barn Concrete Extension	3,778	1	0.97	0.50	Drains into pond(s).
Proposed Diogester Sand Lane	2,500	1	0.97	0.50	Drains into pond(s).
Proposed Mechanical Separator Pad	10,000	1	0.97	0.50	Drains into pond(s).

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Proposed West Heifer Feed Alley Addition	5,080	1	0.97	0.50	Drains into pond(s).
Silage/Commodity Slab	107,021	1	0.97	0.50	Drains into pond(s).
West Heifer Feed Alley	10,070	1	0.97	0.50	Drains into pond(s).

Surface area that does not run off into pond(s):	<u>0</u> sq. ft.
Surface area that runs off into pond(s):	<u>194,506</u> sq. ft.
Total surface area:	<u>194,506</u> sq. ft.
Runoff from normal storage period rainfall:	<u>459,539</u> gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	<u>689,309</u> gallons/storage period
25 year/24 hour storm event runoff:	<u>294,032</u> gallons/storage period
Total surface area runoff:	<u>753,572</u> gallons/storage period
Total surface area runoff with 1.5 factor:	<u>983,341</u> gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Calf Barn	12,949	1	Wastewater pond
Center Freestall	35,256	1	Wastewater pond
Commodity Shed	4,611	1	Wastewater pond
East Dry Cow Barn	6,615	1	Wastewater pond
East Freestall	57,225	1	Wastewater pond
Half Freestall	26,784	1	Wastewater pond
Hay Barn	14,414	1	Wastewater pond
Milking Parlor	11,185	1	Yard
North Heifer Barn	25,253	1	Wastewater pond
Proposed Center Freestall Extension	21,840	1	Wastewater pond
Proposed Half Freestall Addition	26,784	1	Wastewater pond
South Heifer Barn	16,976	1	Wastewater pond
West Dry Cow Barn	10,880	1	Wastewater pond
West Freestall	63,042	1	Wastewater pond

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Surface area that does not run off into pond(s):	<u>11,185</u> sq. ft.
Surface area that runs off into pond(s):	<u>322,629</u> sq. ft.
Total surface area:	<u>333,814</u> sq. ft.
Runoff from normal storage period rainfall:	<u>1,524,485</u> gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	<u>2,286,727</u> gallons/storage period
25 year/24 hour storm event runoff:	<u>502,798</u> gallons/storage period
Total surface area runoff:	<u>2,027,283</u> gallons/storage period
Total surface area runoff with 1.5 factor:	<u>2,789,526</u> gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24 Storm Coefficient	Storage Period Coefficient	Runoff Destination
Dairy Facility Earthen Area	1,070,871	1	0.35	0.20	Drains into pond(s).
Heifer Feedlot Earthen Area	249,542	1	0.35	0.20	Drains into pond(s).

Surface area that does not run off into pond(s):	<u>0</u> sq. ft.
Surface area that runs off into pond(s):	<u>1,320,413</u> sq. ft.
Total surface area:	<u>1,320,413</u> sq. ft.
Runoff from normal storage period rainfall:	<u>1,247,842</u> gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	<u>1,871,763</u> gallons/storage period
25 year/24 hour storm event runoff:	<u>720,225</u> gallons/storage period
Total surface area runoff:	<u>1,968,067</u> gallons/storage period
Total surface area runoff with 1.5 factor:	<u>2,591,988</u> gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

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LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Heifer Feedlot

Pond is rectangular in shape: Yes No

Dimensions

Earthen Length (EL): 320 ft.
 Earthen Width (EW): 60 ft.
 Free Board (FB): 2 ft.

Earthen Depth (ED): 10 ft.
 Side Slope (S): 2.0 ft. (h:1v)
 Dead Storage Loss (DS): 1.0 ft.

Calculations

Liquid Length (LL): 312 ft.
 Liquid Width (LW): 52 ft.
 Pond Surface Area: 19,200 sq. ft.
 Storage Volume: 85,931 cu. ft.

Storage Volume Adjusted
 for Dead Storage Loss: 79,725 cu. ft.
 Pond Marker Elevation: 7.0 ft.
 Evaporation Volume: 83,590 gals/period
 Adjusted Surface Area: 15,547 sq. ft.

POND OR BASIN DESCRIPTION: Proposed Digester Pond

Pond is rectangular in shape: Yes No

Dimensions

Earthen Length (EL): 350 ft.
 Earthen Width (EW): 350 ft.
 Free Board (FB): 2 ft.

Earthen Depth (ED): 12 ft.
 Side Slope (S): 2.0 ft. (h:1v)
 Dead Storage Loss (DS): 4.0 ft.

Calculations

Liquid Length (LL): 342 ft.
 Liquid Width (LW): 342 ft.
 Pond Surface Area: 122,500 sq. ft.
 Storage Volume: 1,038,173 cu. ft.

Storage Volume Adjusted
 for Dead Storage Loss: 653,688 cu. ft.
 Pond Marker Elevation: 9.2 ft.
 Evaporation Volume: 622,801 gals/period
 Adjusted Surface Area: 115,835 sq. ft.

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POND OR BASIN DESCRIPTION: SSB

Pond is rectangular in shape: Yes No

Dimensions

Earthen Length (EL): 371 ft.
 Earthen Width (EW): 68 ft.
 Free Board (FB): 2 ft.

Earthen Depth (ED): 8 ft.
 Side Slope (S): 1.1 ft. (h:1v)
 Dead Storage Loss (DS): 0.0 ft.

Calculations

Liquid Length (LL): 367 ft.
 Liquid Width (LW): 64 ft.
 Pond Surface Area: 25,228 sq. ft.
 Storage Volume: 123,207 cu. ft.

Storage Volume Adjusted
 for Dead Storage Loss: 123,207 cu. ft.
 Pond Marker Elevation: 5.1 ft.
 Evaporation Volume: 123,190 gals/period
 Adjusted Surface Area: 22,912 sq. ft.

POND OR BASIN DESCRIPTION: WWS 1

Pond is rectangular in shape: Yes No

Dimensions

Earthen Length (EL): 352 ft.
 Earthen Width (EW): 246 ft.
 Free Board (FB): 2 ft.

Earthen Depth (ED): 12 ft.
 Side Slope (S): 1.9 ft. (h:1v)
 Dead Storage Loss (DS): 2.0 ft.

Calculations

Liquid Length (LL): 344 ft.
 Liquid Width (LW): 238 ft.
 Pond Surface Area: 86,592 sq. ft.
 Storage Volume: 715,131 cu. ft.

Storage Volume Adjusted
 for Dead Storage Loss: 508,436 cu. ft.
 Pond Marker Elevation: 9.2 ft.
 Evaporation Volume: 436,501 gals/period
 Adjusted Surface Area: 81,185 sq. ft.

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POND OR BASIN DESCRIPTION: WWS 2

Pond is roctangular in shape: Yes No

Dimensions

Earthen Length (EL):	<u>610 ft.</u>	Earthen Depth (ED):	<u>12 ft.</u>
Earthen Width (EW):	<u>156 ft.</u>	Side Slope (S):	<u>2.0 ft. (h:1v)</u>
Free Board (FB):	<u>2 ft.</u>	Dead Storage Loss (DS):	<u>1.0 ft.</u>

Calculations

Liquid Length (LL):	<u>602 ft.</u>	Storage Volume Adjusted for Dead Storage Loss:	<u>684,252 cu. ft.</u>
Liquid Width (LW):	<u>148 ft.</u>	Pond Marker Elevation:	<u>9.1 ft.</u>
Pond Surface Area:	<u>95,160 sq. ft.</u>	Evaporation Volume:	<u>472,246 gals/period</u>
Storage Volume:	<u>746,293 cu. ft.</u>	Adjusted Surface Area:	<u>87,833 sq. ft.</u>

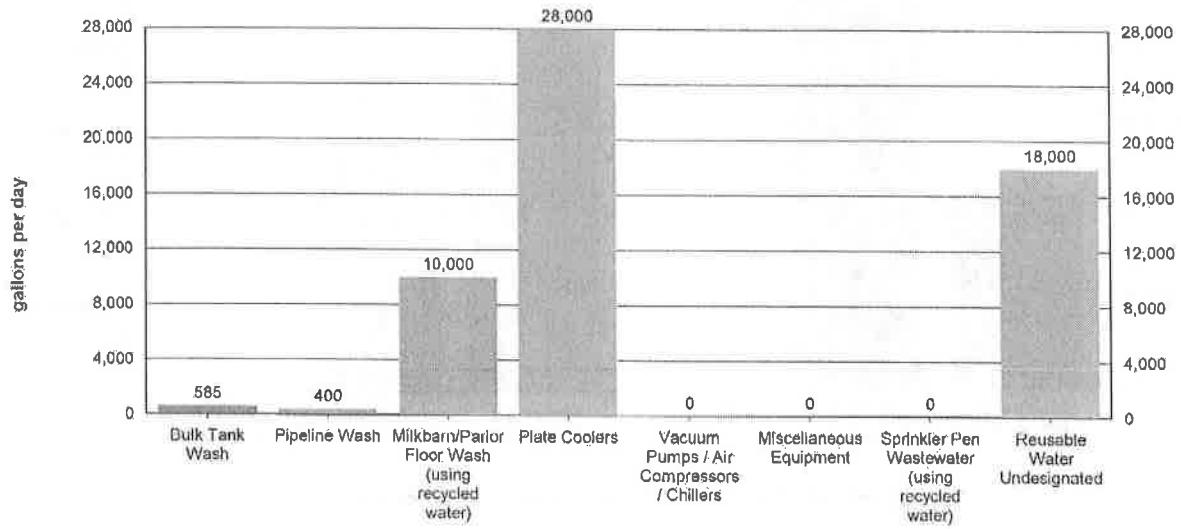
Potential storage losses (due to dead storage): 579,427.0 cubic feet - or - 4,334,414.9 gallons

Liquid storage surface area:	<u>327,705</u> sq. ft.
Rainfall onto retention pond(s):	<u>1,647,581</u> gallons/storage period
Rainfall runoff into retention pond(s):	<u>3,231,866</u> gallons/storage period
Normal rainfall onto retention pond(s) with 1.5 factor:	<u>2,471,371</u> gallons/storage period
Normal rainfall runoff into retention pond(s) with 1.5 factor:	<u>4,847,799</u> gallons/storage period
Storage period evaporation (default):	<u>11.50</u> inches/storage period
Storage period evaporation (user-override):	<u> </u> inches/storage period
Storage period evaporation volume:	<u>1,738,328</u> gallons/storage period
Manure and bedding sent to pond(s):	<u>3,924,658</u> gallons/storage period
Milkbarn water sent to pond(s):	<u>3,478,200</u> gallons/storage period
Fresh flush water for storage period:	<u>0</u> gallons/storage period

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CHARTS

A. MILKBARN WASTEWATER SENT TO POND(S)



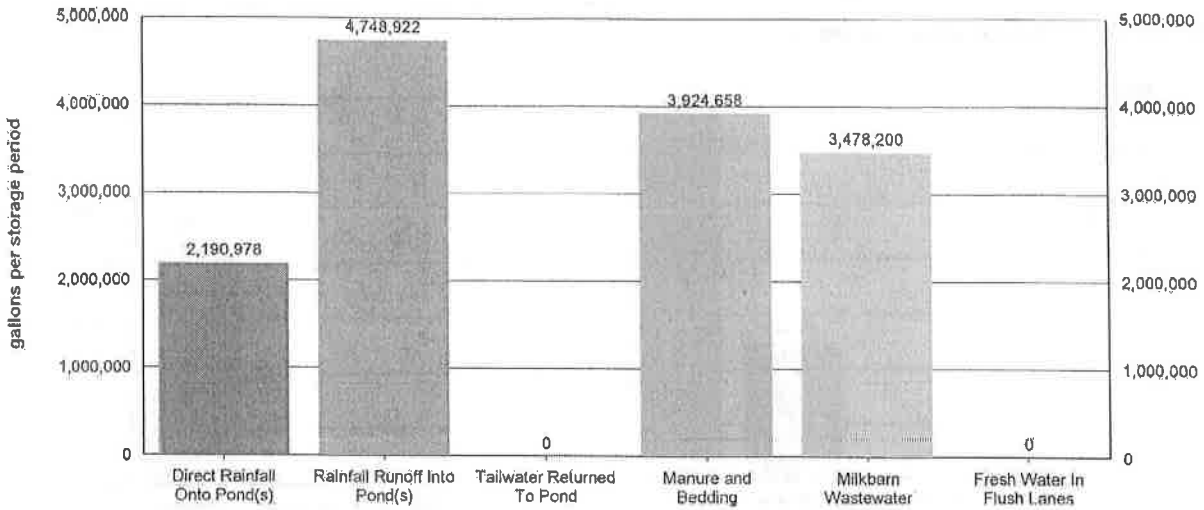
Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily: 28,985 gallons/day

Total milkbarn wastewater generated per period: 3,478,200 gallons/storage period

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B. PROCESS WASTEWATER (NORMAL PRECIPITATION)



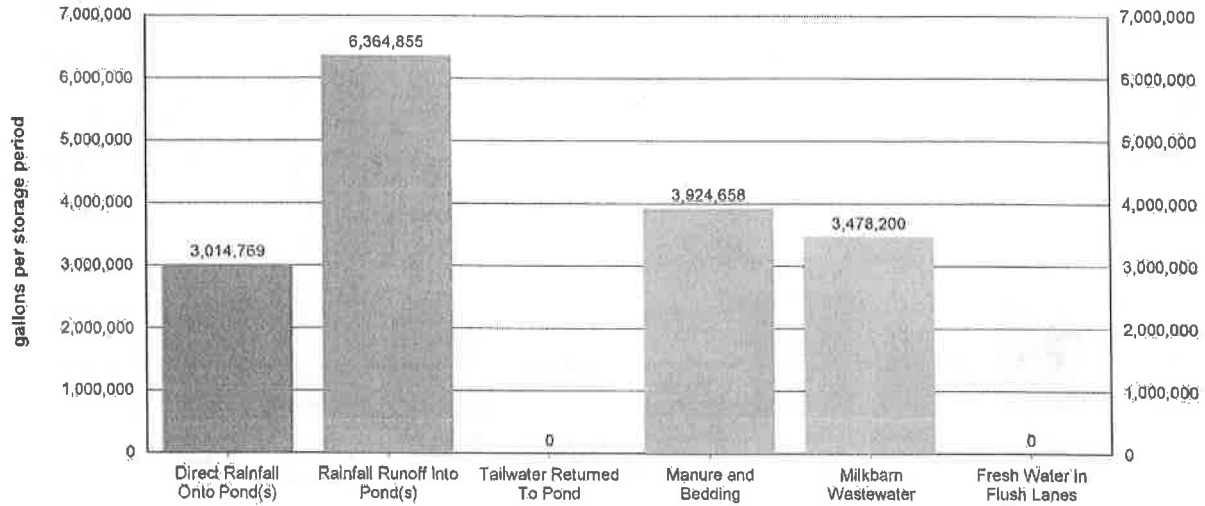
Values shown in chart are approximate values for storage period.

Storage period:	<u>120 days</u>
Total process wastewater generated daily:	<u>119,523 gallons/day</u>
Total process wastewater generated per period:	<u>14,342,759 gallons/storage period</u>
Total process wastewater removed due to evaporation:	<u>1,738,328 gallons/storage period</u>
Total storage capacity required:	<u>12,604,431 gallons</u>
	<u>1,684,967 cu. ft.</u>
Existing storage capacity (adjusted for dead storage loss):	<u>15,928,330 gallons</u>
	<u>2,129,308 cu. ft.</u>

Considering normal precipitation, existing capacity meets estimated storage needs: Yes No

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C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)



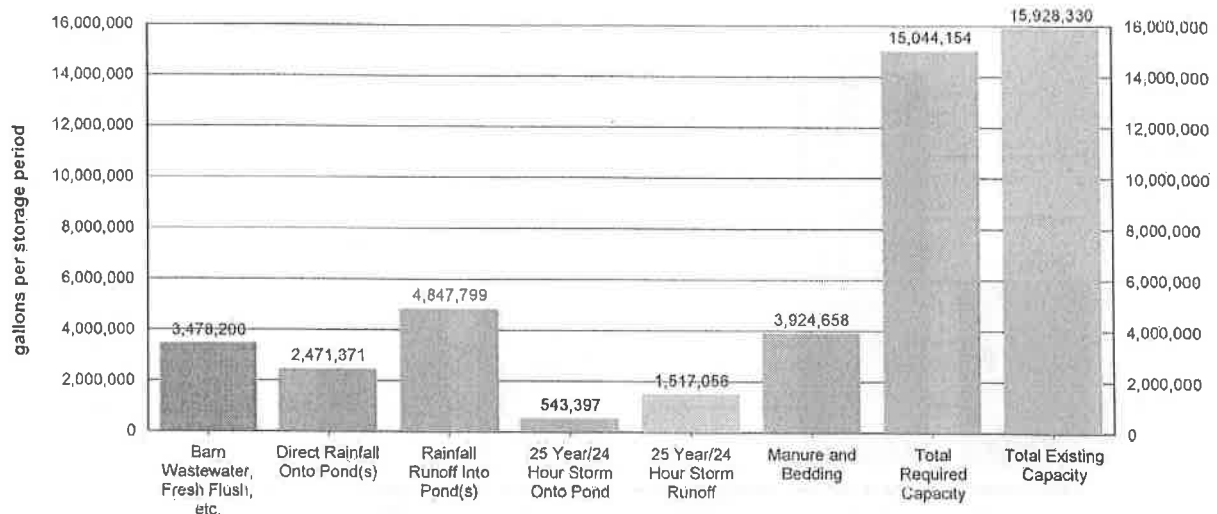
Values shown in chart are approximate values for storage period.

Storage period:	<u>120 days</u>
Total process wastewater generated daily:	<u>139,854 gallons/day</u>
Total process wastewater generated per period:	<u>16,782,482 gallons/storage period</u>
Total process wastewater removed due to evaporation:	<u>1,738,328 gallons/storage period</u>
Total storage capacity required:	<u>15,044,154 gallons</u>
	<u>2,011,111 cu. ft.</u>
Existing storage capacity (adjusted for dead storage loss):	<u>15,928,330 gallons</u>
	<u>2,129,308 cu. ft.</u>

Considering factored precipitation, existing capacity meets estimated storage needs: Yes No

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D. STORAGE VOLUME ASSESSMENT (NORMAL PRECIPITATION WITH 1.5 FACTOR)



Values shown in chart are approximate values for storage period.

Storage period:	<u>120 days</u>
Barn wastewater, fresh flush water, and tailwater:	<u>3,478,200</u> gallons/storage period
Manure and bedding sent to pond:	<u>3,924,658</u> gallons/storage period
Precipitation onto pond:	<u>2,471,371</u> gallons/storage period
Precipitation runoff:	<u>4,847,799</u> gallons/storage period
25 year/24 hour storm onto pond:	<u>543,397</u> gallons/storage period
25 year/24 hour storm runoff:	<u>1,517,056</u> gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	<u>198,429</u> gallons/storage period
Total process wastewater removed due to evaporation:	<u>1,738,328</u> gallons/storage period
Total required capacity:	<u>15,044,154</u> gallons/storage period
Total existing capacity:	<u>15,928,330</u> gallons/storage period
Existing capacity meets estimated storage needs:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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OPERATION AND MAINTENANCE PLAN

The goal of the Operation and Maintenance Plan is to eliminate discharges of waste or storm water to surface waters from the production area and the protection of underlying soils and ground water.

A. POND MAINTENANCE

i. FREEBOARD MONITORING

1. Freeboard will be monitored monthly from June 1 through September 1 (dry season) and weekly from October 1 through May 31 (wet season). The results will be recorded on a Dairy Production Area Visual Inspection Form.
2. Freeboard will be monitored during and after each significant storm event and the results recorded on a Production Area Significant Storm Event Inspection Form.
3. Ponds will be photographed on the first day of each month. Pond photos will be labeled and maintained with the dairy's monitoring records.

ii. PREPARATION FOR MAINTAINING WINTER STORAGE CAPACITY

1. The retention pond(s) will begin to be lowered to the minimum operating level on or before a designated date each year.
2. The minimum operating level will include the necessary storage volume as identified in Section II.A in Attachment B of the General Order.

iii. OTHER POND MONITORING

1. At the time of each monitoring for freeboard, the pond(s) will be inspected for evidence of excessive odors, mosquito breeding, algae, or equipment damage; and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Other Pond Monitoring.
2. At the time of each monitoring during and after each significant storm event, the ponds will be inspected for evidence of any discharge and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Production Area Significant Storm Event Inspection Form.

iv. SOLIDS REMOVAL PROCEDURES

1. The average thickness of the solids accumulated on the bottom of the pond(s) will be measured on the designated interval using the owner, operator, and/or designer specified procedure.
2. Once solids/sludge on the bottom of the pond(s) reach the owner, operator, and/or designer specified critical thickness, solids/sludge will be removed so that adequate capacity is maintained.
3. When necessary, solids/sludge will be removed using the owner, operator, and/or designer specified methods for protecting any pond liner.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 1

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2.0 feet above the pond invert beginning in August of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

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When solids/sludge accumulate to a thickness of 2.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Heifer Feedlot

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 1.0 feet above the pond invert beginning in August of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 1.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Proposed Digester Pond

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 4.0 feet above the pond invert beginning in August of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation will be monitored by a third party company which will be operating the digester.

When solids/sludge accumulate to a thickness of 4.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

In the event solids/sludge accumulation requires to be removed, digester cover will be removed, storage agitated and contents removed through the use of slurry wagons.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0.0 feet above the pond invert beginning in August of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

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When solids/sludge accumulate to a thickness of 1.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner.

SSB is typically dewatered in the late summer/early fall and excavated prior to the onset of winter weather.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 2

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 1.0 feet above the pond invert beginning in August of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 1.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application. If excavation is required, cleaning equipment operator will be informed as to overall depth of storage and instructed to remain 6-12 inches from the floor.

B. RAINFALL COLLECTION SYSTEM MAINTENANCE

- i. Annually, rainfall collection systems will be assessed to ensure:
 1. Conveyances are free of debris and operating within designer/manufacturer specifications.
 2. Components are properly fastened according to designer/manufacturer specifications.
 3. All downspouts and related infrastructure are connected to conveyances that divert water away from manured areas.
 4. Water from the rainfall collection system(s) is diverted to an appropriate destination.

<i>Buildings with rooftop rainfall collection systems</i>	Quantity	Surface Area (sq. ft.)
Calf Barn	1	12,949
Center Freestall	1	35,256
Commodity Shed	1	4,611
East Dry Cow Barn	1	6,615
East Freestall	1	57,225
Half Freestall	1	26,784
Hay Barn	1	14,414
Milking Parlor	1	11,185
North Heifer Barn	1	25,253
Proposed Center Freestall Extension	1	21,840
Proposed Half Freestall Addition	1	26,784
South Heifer Barn	1	16,976
West Dry Cow Barn	1	10,880

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West Freestall

1

63,042

Assessment for buildings with rooftop rainfall collection systems will occur on or before: 1st of October

Assessment for other rainfall collections systems will occur on or before: 1st of November

Description of how rainfall collection systems will be assessed:

Gutters and downspouts will be cleaned and repaired as needed to prevent unneeded overland flow of runoff.

C. CORRAL MAINTENANCE

i. Monthly from June 1st through September 30th (dry season) and weekly from October 1st through May 31st (wet season), the perimeter of the corrals and pens will be assessed to ensure that runoff controls such as berms are functioning correctly, and that all water that contacts waste is collected and diverted into the wastewater retention pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Corrals.

ii. The corrals will be assessed by the designated date to determine:

1. Whether manure needs to be removed from the corrals based on the owner, operator, and/or designer specified conditions.

2. Whether there are depressions within the corrals that should be filled/groomed to prevent ponding.

iii. Removal of manure and/or regrading, when necessary, will be completed on or before the designated month/day of each year.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Solid manure removal and regrading assessment will occur on or before: 1st of October

Conditions requiring manure removal and/or regrading:

Corral conditions should be assessed by October 1 of each year to allow the owner/operator the opportunity to regrade and add fill material to the corrals. The corrals should be graded to prevent accumulation of wastewater in the corrals for longer than 48 hours. Well maintained/scraped corrals should provide adequate drainage at 1% to 1 1/2% slope. During the rainy season, corrals must still be groomed or cleaned to provide adequate drainage. Corral manure management must be in accordance with SJVAPCD permit requirements.

Solid manure removal and/or regrading will occur on or before: 1st of November

D. FEED STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of storage areas will be assessed to ensure all runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, feed storage area(s) will be assessed to determine if there are depressions within any feed storage area that should be filled or repaired to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 1st of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 1st of November

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E. SOLID MANURE STORAGE AREA MAINTENANCE

- i. During the dry season and prior to the wet season, the perimeter of manure storage areas will be assessed to ensure all runoff and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.
- ii. During the wet season, manure storage area(s) will be assessed to determine if there are depressions within any manure storage area that should be filled to prevent ponding.
- iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month
Day of the month wet season assessment will occur: Monday
Regrading/resurfacing and berm maintenance assessment will occur on or before: 1st of October
Regrading/resurfacing and berm maintenance completion will occur on or before: 1st of November

F. ANIMAL HOUSING AND FLUSH WATER CONVEYANCE SYSTEM MAINTENANCE

- i. A map will be attached that identifies critical points for monitoring the animal housing and flush water conveyance system to verify that water is being managed as identified in this Waste Management Plan. These points will be maintained at owner, operator, and/or designer specified intervals.

Animal housing area assessment will occur on or before: 1st of October
Animal housing drainage system maintenance will occur on or before: 1st of November

Animal housing area drainage system assessment and maintenance methods:

Debris is removed from flush lanes, drains, and corral drains as needed. Pumps are monitored daily. Corrals are regraded and soil is added as needed to insure drainage. The critical animal housing/flush conveyance points to monitor are all drains. These drains should be checked before every storm and during each flush event to insure that drain/conveyance clogging has not occurred.

G. MORTALITY MANAGEMENT

- i. Dead animals will be stored, removed, and disposed of properly.

Rendering company or landfill name: DDT
Rendering company or landfill telephone number: (209) 678-1820

H. ANIMALS AND SURFACE WATER MANAGEMENT

- i. A system will be in place, monitored, and maintained to prevent animals from entering any surface waters when a stream or other surface water crosses or adjoins the corral(s).

Does a stream or any other surface water cross or adjoin the corrals? Yes No

I. MONITORING SALT IN ANIMAL RATIONS

- i. The combined quantity of minerals as salt in animal drinking water and feed rations will be reviewed by a qualified nutritionist on a routine basis to verify that minerals are limited to the amount required to maintain animal health and optimum production. As feed rations change, mineral content may change.

Assessment interval: Monthly

Waste Management Plan Report
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 July 1, 2010 deadline

J. CHEMICAL MANAGEMENT

i. Chemicals and other contaminants handled at the facility will not be disposed of in any manure or process wastewater, storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.

Chemical Name	Quantity	Units	Frequency	Usage Area	Destination (Used Chemical / Container)	Disposal Company		Collection Frequency
						Name	Phone	
Mandate Plus (Acid Sanitizer)	50	gallons	month	Milk Barn	Totes picked up by distributor			
TDR Mega Force	120	gallons	month	Milk Barn	Totes picked up by distributor			
Back Flush Sanitizer	36	gallons	month	Milk Barn	Containers recycled by distributor			
Multichlor Chlorine	75	gallons	month	Milk Barn	Totes picked up by distributor			
Eco Plus 50 Iodine	400	gallons	month	Milk Barn	Totes picked up by distributor			
Eco Plus I-100	850	gallons	month	Milk Barn	Totes picked up by distributor			

Waste Management Plan Report
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July 1, 2010 deadline

REQUIRED ATTACHMENTS

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Waste Management Plan for the reporting schedule of 'July 1, 2010'.

A. SITE MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: structures used for animal housing, milk parlor, and other buildings; corrals and ponds; solids separation facilities (settling basins or mechanical separators); other areas where animal wastes are deposited or stored; feed storage areas; drainage flow directions and nearby surface waters; all water supply wells (domestic, irrigation, and barn wells) and groundwater monitoring wells.

Production area map reference number: Figure 2

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: a field identification system (Assessor's Parcel Number; field by name or number; total acreage of each field; crops grown; indication if each field is owned, leased, or used pursuant to a formal agreement); indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

Application area map reference number: Figure 3

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all cropland (land that is part of the dairy but not used for dairy waste application) including the following in sufficient detail: Assessor's Parcel Number, total acreage, crops grown, and information on who owns or leases the field. The Waste Management Plan shall indicate if such cropland is covered under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R5-2006-0053 for Coalition Group or Order No. R5-2006-0054 for Individual Discharger, or updates thereto).

Non-application area map reference number: N/A

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all off-property domestic wells within 600 feet of the production area or land application area(s) associated with the dairy and the location of all municipal supply wells within 1,500 feet of the production area or land application area(s) associated with the dairy.

Well area map reference number: Figure 2

Provide a site map (or maps) of appropriate scale to show property boundaries and a vicinity map, north arrow and the date the map was prepared. The map shall be drawn on a published base map (e.g., a topographic map or aerial photo) using an appropriate scale that shows sufficient details of all facilities.

Vicinity map reference number: Figure 1

B. PROCESS WASTEWATER MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: process wastewater conveyance structures, discharge points, and discharge/mixing points with irrigation water supplies; pumping facilities and flow meter locations; upstream diversion structures, drainage ditches and canals, culverts, drainage controls (berms/levees, etc.), and drainage easements; and any additional components of the waste handling and storage system.

Production infrastructure system area map reference number: Figures 2-3

Waste Management Plan Report
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July 1, 2010 deadline

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals, culverts, drainage controls (berms, levees, etc.), and drainage easements.

Land application infrastructure system area map reference number: Figures 2-3

C. EXCESS PRECIPITATION CONTINGENCY REPORT

There were no attachment references entered or required for this attachment section.

D. OPERATION AND MAINTENANCE PLAN

Attach a map that identifies critical points for monitoring the system to verify that water is being managed as identified in this Waste Management Plan (see Attachment B, Pg B-7 V.F, V.G, and V.H for additional requirements).

Animal housing assessment map reference number: Figure 2

E. FLOOD PROTECTION / INUNDATION REPORT

Provide a published flood zone map that shows the facility is outside the relevant flood zones.

Flood zone map and/or document reference number: 06099C0760E

F. BACKFLOW PROTECTION

Attach documentation from a trained professional (i.e. a person certified by the American Backflow Prevention Association, an inspector from a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training), as specified in Required Reports and Notices H.1 of Waste Discharge Requirements General Order No. R5-2007-0035, that there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the Site Map.

Backflow documentation reference number: Backflow Certificate

Waste Management Plan Report
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July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Ahlem Farms Jerseys

Physical address of dairy:

<u>825 Ruble RD</u>	<u>Crows Landing</u>	<u>Stanislaus</u>	<u>95313</u>
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address): _____

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I have reviewed the portion of the waste management plan that is related to storage capacity facility and design specifications in accordance with Item II, Attachment B of the Waste Discharge Requirements General Order for Existing Milk Cow Dairies - Order No. R5-2007-0035 and certify that this plan was prepared by, or under the responsible charge of, and certified by a civil engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.

Storage capacity is:

Insufficient

- Retrofitting Plan/Schedule/Design Criteria attached in accordance with Attachment B, II.B. 1-5 and Attachment B, II. C.

Sufficient

- Certification 1 - Certified in accordance with Attachment B, II. A. 1-8. (no contingency plan)
- Certification 2 - Certified in accordance with Attachment B, II. A. 1-8, II. C. (with contingency plan attached)



CIVIL ENGINEER'S WET STAMP

Digitally signed by Manny
Sousa, PE
Date: 2020.09.07 11:49:55
-07'00'

9/7/2020

SIGNATURE OF CIVIL ENGINEER

DATE

Manuel Sousa

PRINT OR TYPE NAME

P.O. Box 1613; Oakdale, CA 95361

MAILING ADDRESS

(209) 238-3151

PHONE NUMBER

Waste Management Plan Report
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C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Manuel Azovedo

SIGNATURE OF OWNER

Rogelio Herrera

SIGNATURE OF OPERATOR

Manuel Azovedo

PRINT OR TYPE NAME

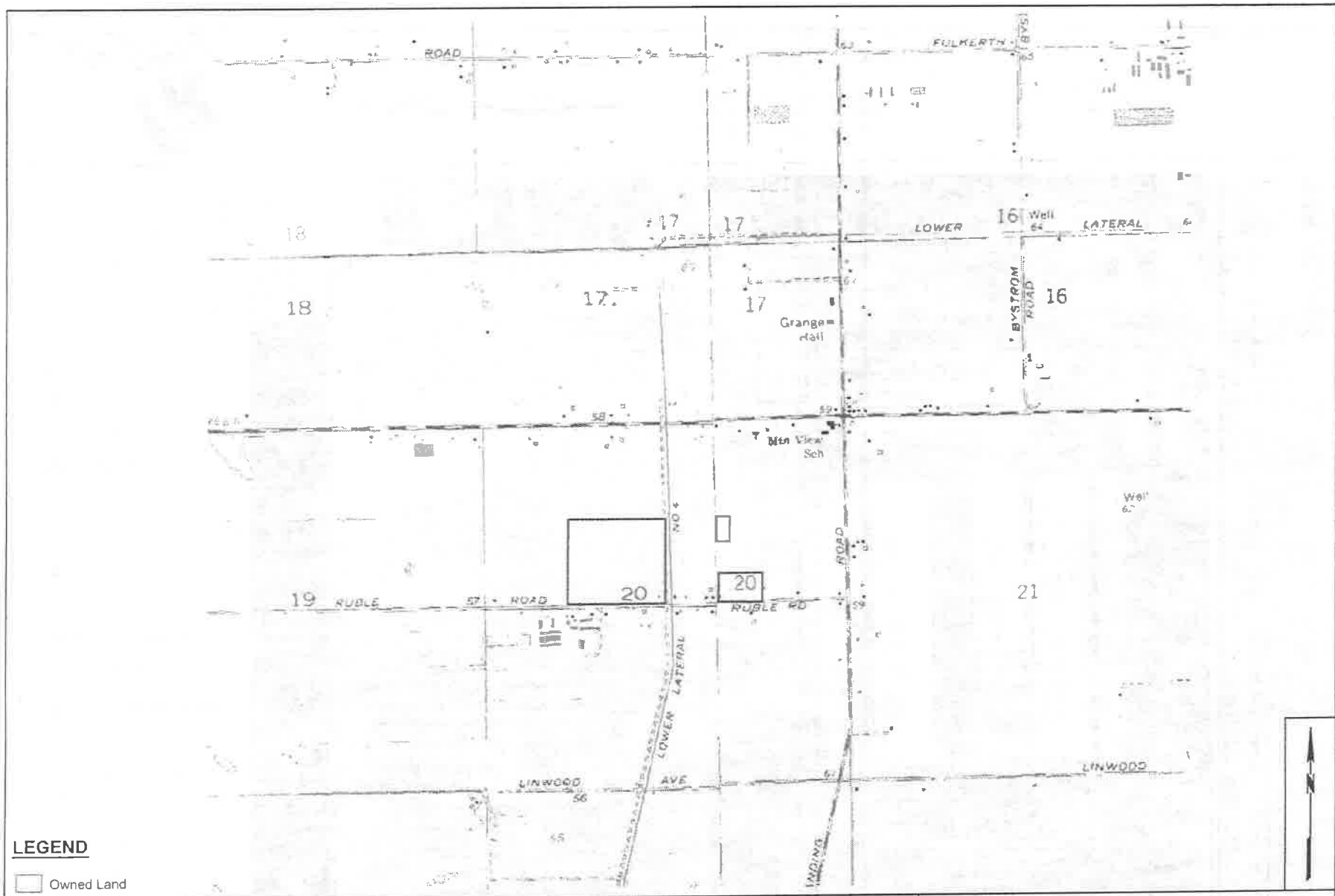
Rogelio Herrera

PRINT OR TYPE NAME

9-8-2020

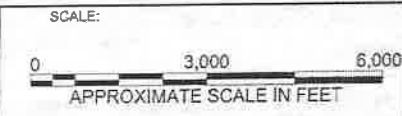
DATE

DATE



LEGEND

□ Owned Land




























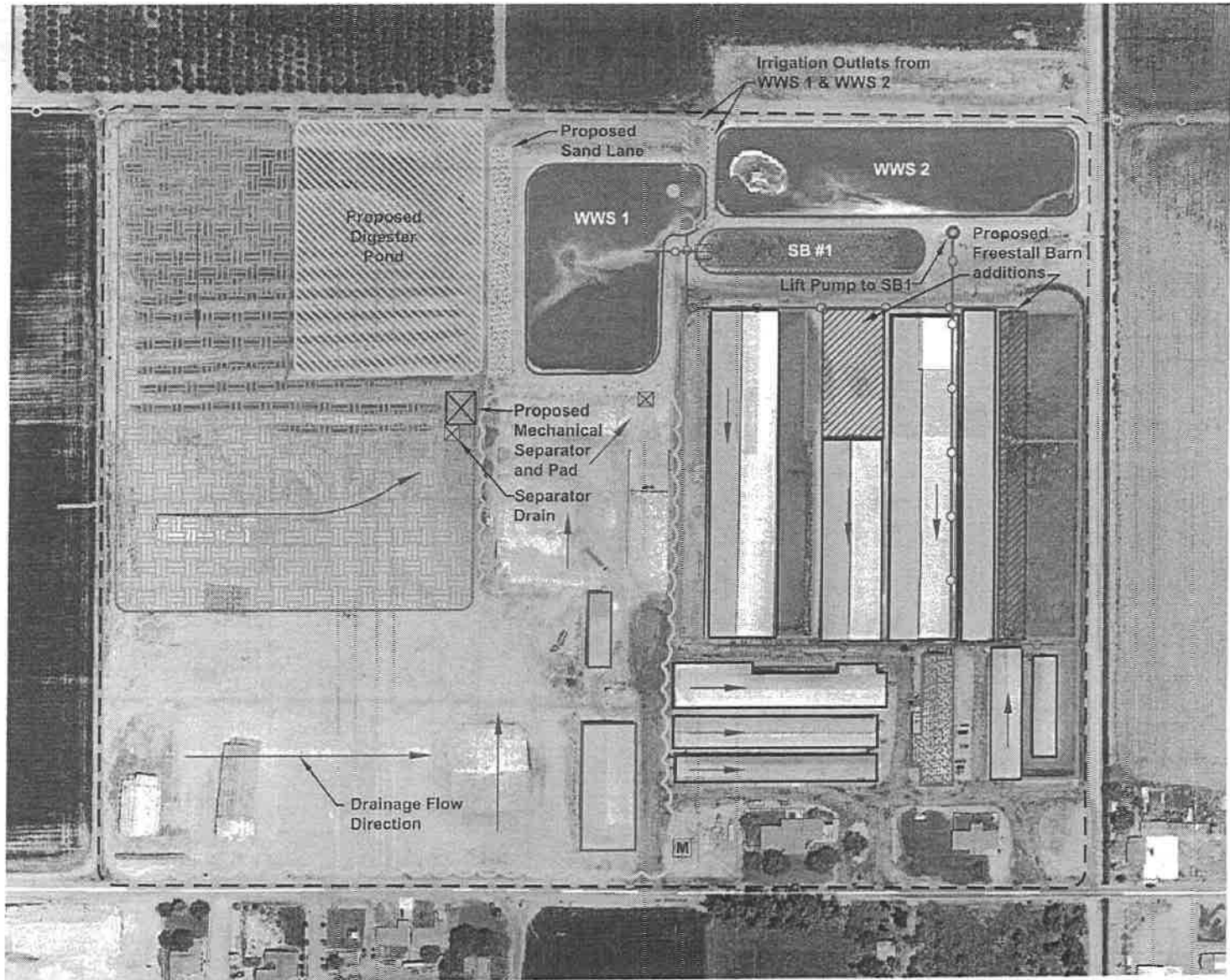
AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 1
TOPOGRAPHIC MAP

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/3/2020	SB	JR

LEGEND

-  Milk Barn
-  Animal Housing
-  Waste Water Storage
-  Solids Settling Basin
-  Corrals
-  Commodity Barn
-  Hay Barn
-  Manure Stacking
-  Digester Pond
-  Mechanical Separator
-  Feed Storage
-  Facility Boundary
-  Floating Pump
-  Flush Return Pump
-  Stationary Pump
-  Lift Pump
-  Weir Box
-  Drain
-  Mortality Holding Box
-  Domestic Well
-  Flush Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Irrigation Pipeline
-  Irrigation Outlet



SCALE:



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 2A
DAIRY FACILITY

PROJECT NO.

FRA-00

DATE:

9/3/2020











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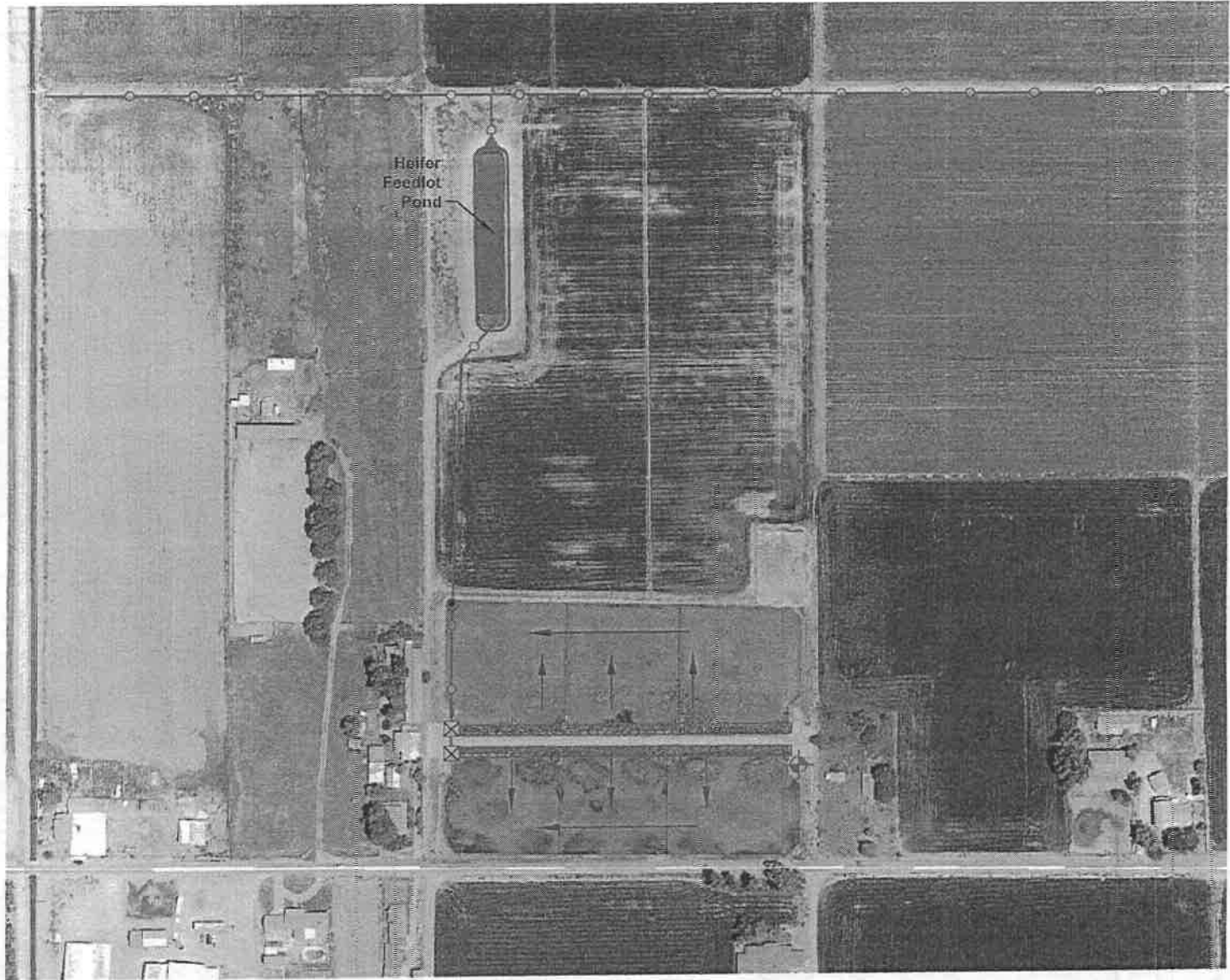
SB

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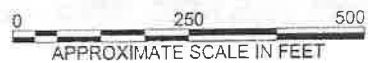
JR

LEGEND

-  Waste Water Storage
-  Feed Storage
-  Outlet Valve
-  Drain Pump
-  Flush Drain
-  Domestic Well
-  Drainage Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Flush Lanes



SCALE:



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 2B
HEIFER FEEDLOT

PROJECT NO.

FRA-00

DATE:

9/3/2020

DRAWN BY:









SB

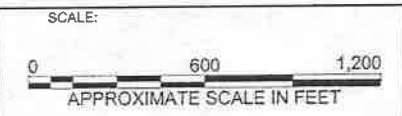
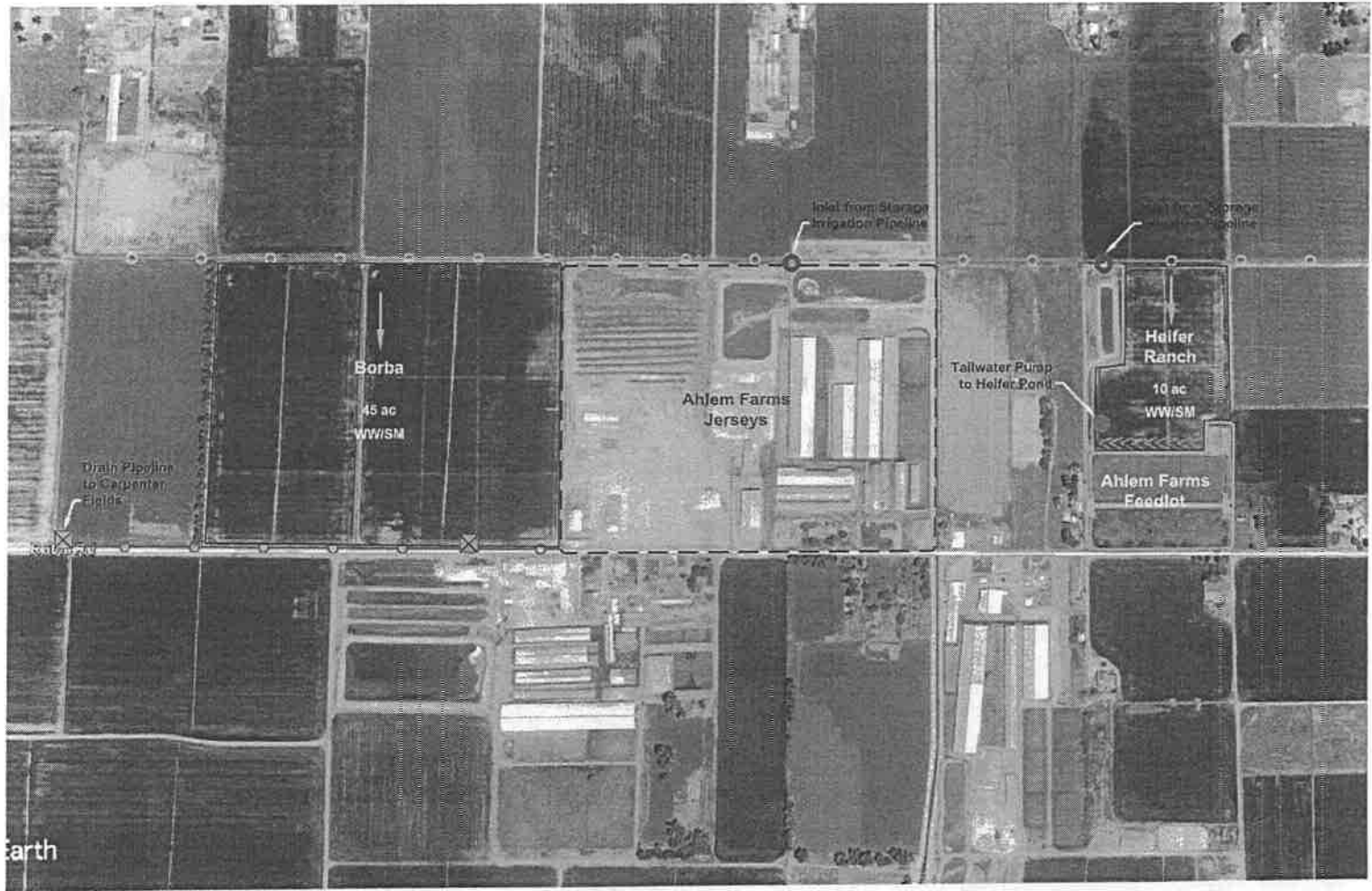
APP. BY:

JR

FRA-00 Ahlem Farms Jersey

LEGEND

-  Field Boundary
-  Irrigation Pipeline
-  Drain Pipeline
-  Irrigation Flow
-  Facility Boundary
-  Tailwater Pump
-  Inlet Storage
-  Drain
-  Tailwater
-  WW Wastewater
-  SM Solid Manure













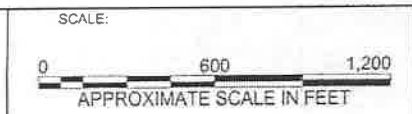
AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 3
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/1/2020	SB	JR

LEGEND

-  Field Boundary
-  Drain Pipeline
-  Irrigation Pipeline
-  Tailwater Return Pipeline
-  Irrigation Flow
-  Surface Drainage Flow
-  Berms/Levees
-  Tailwater Pump
-  Crossover Drain Pipe
-  Drain
- WW Wastewater
- SM Solid Manure



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 4
DAIRY FIELDS

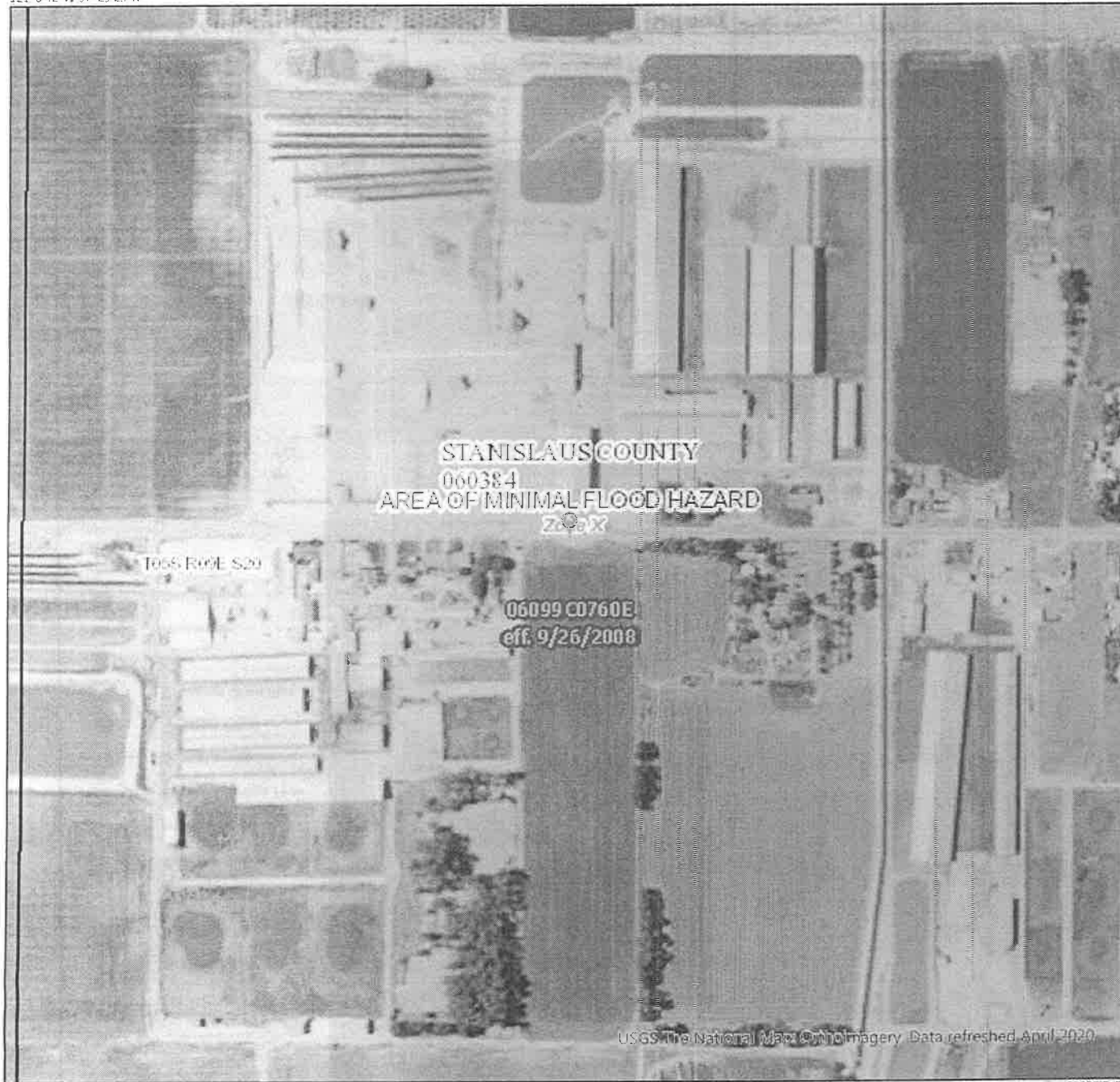
PROJECT NO. FRA-00

DATE: 9/1/2020	DRAWN BY: SB	APP. BY: JR
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National Flood Hazard Layer FIRMette



121°0'42"W 37°29'23"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, AE
		With BFE or Depth Zone AE, AD, AH, XE, AF
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone I
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee, See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
	Hydrographic Feature	
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
	The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.	

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/3/2020 at 8:45 PM, and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map © 2020 Imagery Data refreshed April 2020

National Flood Hazard Layer FIRMette



121°0'23"W 37°29'23"N



USGS The National Map: Orthoimagery. Data refreshed April 2020



120°59'45"W 37°28'55"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, AE
		With BFE or Depth Zone AE, AD, AH, VE, AP
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone D
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone X
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/3/2020 at 2:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NUTRIENT MANAGEMENT PLAN

Ahlem Farms Jerseys
Owned By Manuel Azevedo
825 Ruble Rd.
Crows Landing, CA 95313

Prepared By:



2857 Geer Road, Suite A
Turlock, California 95382

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Ahlem Farms Jerseys

Physical address of dairy:

<u>825 Ruble RD</u>	<u>Crows Landing</u>	<u>Stanislaus</u>	<u>95313</u>
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address): _____

Date facility was originally placed in operation: 01/01/1980

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0053-0003-0008-0000 0058-0003-0007-0000 0058-0004-0012-0000 0058-0040-0015-0000

B. OPERATOR NAME: Herrera, Rogelio Telephone no.: (209) 632-5822

<u>24093 American AVE</u>	<u>Hilmar</u>	<u>CA</u>	<u>95324</u>
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): Yes No

C. LEGAL OWNER NAME: Azevedo, Manuel Telephone no.: (209) 632-6393

<u>2800 White RD</u>	<u>Turlock</u>	<u>CA</u>	<u>95380</u>
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): Yes No

D. CONTACT NAME: Ramos, Joe Telephone no.: (209) 250-2471

<u>Title: Technical Service Provider</u>	<u>Landline</u>	<u>Cellular</u>
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<u>2857 Geer RD, STE A</u>	<u>Turlock</u>	<u>CA</u>	<u>95382</u>
Mailing Address Number and Street	City	State	Zip Code

Nutrient Management Plan Report
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AVAILABLE NUTRIENTS

A. HERD INFORMATION

The milk cow dairy is currently regulated under individual Waste Discharge Requirements.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

2,500 milk and dry cows combined (regulatory review is required for any expansion)

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Present count	1,085	220	354	336	153	164
Maximum count	2,175	325	725	925	300	300
Avg live weight (lbs)	1,000	1,000	750	550		
Daily hours on flush	20	15	6	6	6	24

Predominant milk cow breed: Jersey

Average milk production: 60 pounds per cow per day

B. IRRIGATION SOURCES

Irrigation Source Name	Type	Nitrogen (mg/L)	Phosphorus (mg/L)	Potassium (mg/L)	Discharge Rate
T.I.D Canal	Surface water (canal, river)	0.67	0.00	0.00	12 cfs

C. NUTRIENT IMPORTS

No nutrient imports entered.

D. NUTRIENT EXPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
Corral Solids	8,000.00 ton	33.0%	2.250%	1.330%	1.500%
Separated Solids Fall	8,250.00 ton	50.0%	2.000%	1.000%	1.750%
Separated Solids Spring	8,400.00 ton	50.0%	2.000%	1.000%	1.750%

Total nitrogen exported: 574,200.00 lbs

Total phosphorus exported: 135,066.21 lbs

Total potassium exported: 375,305.25 lbs

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E. STORAGE PERIOD

Storage period is the maximum period of time anticipated between land application of process wastewater (from storage ponds/lagoons) to croplands. A qualified agronomist and civil engineer should collaborate and collectively consider predominant soil types, soil infiltration rates, maximum depth, available water, field capacity, permanent wilting point, allowable depletion, crop water use, evapotranspiration, precipitation, irrigation system capacity, water delivery constraints, crop nutrient requirements, soil nutrient adsorption/desorption, rooting depth, nutrient accumulation/availability for current and future crop needs, facility wide process wastewater storage capacity and other factors as deemed necessary across all croplands where process wastewater is applied in selecting a storage period. In many cases conflicts will arise between crop water demands, crop nutrient demands and insufficient process wastewater storage capacity. Process wastewater may not be the best choice as a source of either water and/or nutrients to meet crop demands throughout the year. Groundwater and surface water vulnerability has been considered.

The storage period selected in this Nutrient Management Plan is consistent with the storage period selected in the Waste Management Plan.

Storage period: 120 days

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APPLICATION AREA

A. ASSESSOR PARCEL NUMBER: 0058-0003-0008-0000

Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0058-0003-0009-0000

Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0058-0003-0012-0000

Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0058-0003-0022-0000

Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0058-0003-0023-0000

Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0058-0004-0012-0000

Legal owner of parcel: Owned by Dairy

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B. FIELD NAME: Borba 50

Cropable acres: 45

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? Yes No

Can fresh water for irrigation purposes be delivered to the field year round? Yes No

Can process wastewater be delivered to the field at agronomic rates and times? Yes No

Tailwater management method: Drained to Carpenter East

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Late October	Early April	45
Corn, silage	Middle May	Middle September	45

FIELD NAME: Carpenter East

Cropable acres: 38

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? Yes No

Can fresh water for irrigation purposes be delivered to the field year round? Yes No

Can process wastewater be delivered to the field at agronomic rates and times? Yes No

Tailwater management method: Tailwater Return To Top Of Field

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Late October	Early April	38
Corn, silage	Middle May	Middle September	38

FIELD NAME: Carpenter West

Cropable acres: 37

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? Yes No

Can fresh water for irrigation purposes be delivered to the field year round? Yes No

Can process wastewater be delivered to the field at agronomic rates and times? Yes No

Tailwater management method: Drained to Carpenter East

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Late October	Early April	37
Corn, silage	Middle May	Middle September	37

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FIELD NAME: Heifer Ranch

Cropable acres: 10

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? Yes No

Can fresh water for irrigation purposes be delivered to the field year round? Yes No

Can process wastewater be delivered to the field at agronomic rates and times? Yes No

Tailwater management method: Returned to retention pond

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Late October	Early April	10
Corn, silage	Middle May	Middle September	10

FIELD NAME: Main 45

Cropable acres: 45

Predominant soil type: Sandy loam

Do irrigation system head-to-head flow conditions exist on the field? Yes No

Can fresh water for irrigation purposes be delivered to the field year round? Yes No

Can process wastewater be delivered to the field at agronomic rates and times? Yes No

Tailwater management method: Drained to Carpenter East

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Late October	Early April	45
Corn, silage	Middle May	Middle September	45

C. LAND APPLICATION AREA FIELDS AND PARCELS

Field name	Cropable acres	Total harvests	Parcel number
Borba 50	45	2	0058-0003-00080000 0058-0003-00090000
Carpenter East	38	2	0058-0003-00120000
Carpenter West	37	2	0058-0003-00120000
Heifer Ranch	10	2	0058-0004-00120000
Main 45	45	2	0058-0003-00220000 0058-0003-00230000
Land application area totals	265	14	

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NUTRIENT BUDGET

A. NUTRIENT BUDGET FOR CROP: Borba 50 / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	50.0	8.0	60.0	51.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)	
T.I.D Canal	1.0	0.0	0.0	24.0	
	1.0	0.0	0.0		
In season irrigation (with fertilizer)	1	60.0	10.0	70.0	60.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
In season irrigation (with fertilizer)	1	40.0	6.0	50.0	40.8
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)	
T.I.D Canal	0.8	0.0	0.0	20.0	
	0.8	0.0	0.0		
In season Irrigation (with fertilizer)	1	45.0	7.0	50.0	45.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	1.8	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	195.0	31.0	230.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	203.8	31.0	230.0
Potential crop nutrient removal	150.0	24.0	124.5
Nutrient balance	53.8	7.0	105.5
Applied to removal ratio	1.36	1.29	1.85

Fresh water applied: 0.97 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Borba 50 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Borba 50 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	90.0	14.0	100.0	91.1
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		1.1	0.0	0.0	28.0
		1.1	0.0	0.0	
In season irrigation (no fertilizer)	2	0.0	0.0	0.0	1.8
<i>Nutrient source:</i> Water only		0%	0%	0%	
<i>Application method:</i> Surface					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.9	0.0	0.0	22.0
		0.9	0.0	0.0	
In season irrigation (with fertilizer)	4	50.0	6.6	60.0	202.9
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.7	0.0	0.0	18.0
		0.7	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.8	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	40.4	340.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	302.8	40.4	340.0
Potential crop nutrient removal	216.0	40.5	178.2
Nutrient balance	86.8	-0.1	161.8
Applied to removal ratio	1.40	1.00	1.91

Fresh water applied: 3.17 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Carpenter East / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Carpenter East / Oats, slage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	50.0	8.0	60.0	51.1
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)	
T.I.D Canal	1.1	0.0	0.0	24.0	
	1.1	0.0	0.0		
In season irrigation (with fertilizer)	1	60.0	10.0	70.0	60.0
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
In season irrigation (with fertilizer)	1	40.0	6.0	50.0	40.8
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)	
T.I.D Canal	0.8	0.0	0.0	16.0	
	0.8	0.0	0.0		
In season irrigation (with fertilizer)	1	45.0	7.0	50.0	45.0
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	1.9	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	195.0	31.0	230.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	203.9	31.0	230.0
Potential crop nutrient removal	150.0	24.0	124.5
Nutrient balance	53.9	7.0	105.5
Applied to removal ratio	1.36	1.29	1.85

Fresh water applied: 1.04 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Carpenter East / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Carpenter East / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	90.0	14.0	100.0	91.1
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
T.I.D Canal	1.1	0.0	0.0	24.0	
	1.1	0.0	0.0		
In season irrigation (no fertilizer)	2	0.0	0.0	0.0	1.7
<i>Nutrient source:</i> Water only					
<i>Application method:</i> Surface					
Irrigation Source					
T.I.D Canal	0.9	0.0	0.0	18.0	
	0.9	0.0	0.0		
In season irrigation (with fertilizer)	4	50.0	6.6	60.0	202.9
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
T.I.D Canal	0.7	0.0	0.0	15.0	
	0.7	0.0	0.0		

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.7	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	40.4	340.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	302.7	40.4	340.0
Potential crop nutrient removal	216.0	40.5	178.2
Nutrient balance	86.7	-0.1	161.8
Applied to removal ratio	1.40	1.00	1.91

Fresh water applied: 3.13 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Carpenter West / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Carpenter West / Oats, silage soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	50.0	8.0	60.0	51.2
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		1.2	0.0	0.0	24.0
		1.2	0.0	0.0	
In season irrigation (with fertilizer)	1	60.0	10.0	70.0	60.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
In season irrigation (with fertilizer)	1	40.0	6.0	50.0	40.8
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.8	0.0	0.0	16.0
		0.8	0.0	0.0	
In season irrigation (with fertilizer)	1	45.0	7.0	50.0	45.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	2.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	195.0	31.0	230.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	204.0	31.0	230.0
Potential crop nutrient removal	150.0	24.0	124.5
Nutrient balance	54.0	7.0	105.5
Applied to removal ratio	1.36	1.29	1.85

Fresh water applied: 1.07 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Carpenter West / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Carpenter West / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	90.0	14.0	100.0	91.2
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
N (lbs/acre) P (lbs/acre) K (lbs/acre) Runtime (hrs)					
T.I.D Canal	1.2	0.0	0.0	24.0	
	1.2	0.0	0.0		
In season irrigation (no fertilizer)	2	0.0	0.0	0.0	1.8
<i>Nutrient source:</i> Water only					
<i>Application method:</i> Surface					
Irrigation Source					
N (lbs/acre) P (lbs/acre) K (lbs/acre) Runtime (hrs)					
T.I.D Canal	0.9	0.0	0.0	18.0	
	0.9	0.0	0.0		
In season irrigation (with fertilizer)	4	50.0	6.6	60.0	202.9
<i>Nutrient source:</i> Retention pond (lagoon)					
<i>Application method:</i> Pipeline					
Irrigation Source					
N (lbs/acre) P (lbs/acre) K (lbs/acre) Runtime (hrs)					
T.I.D Canal	0.7	0.0	0.0	15.0	
	0.7	0.0	0.0		

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.9	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	40.4	340.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	302.9	40.4	340.0
Potential crop nutrient removal	216.0	40.5	178.2
Nutrient balance	86.9	-0.1	161.8
Applied to removal ratio	1.40	1.00	1.91

Fresh water applied: 3.22 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Heifer Ranch / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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Nutrient Management Plan Report
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NUTRIENT BUDGET FOR CROP (CONTINUED): Heifer Ranch / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	50.0	8.0	60.0	51.1
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		1.1	0.0	0.0	6.0
		1.1	0.0	0.0	
In season irrigation (with fertilizer)	1	60.0	10.0	70.0	60.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
In season irrigation (with fertilizer)	1	40.0	6.0	50.0	40.9
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.9	0.0	0.0	5.0
		0.9	0.0	0.0	
In season irrigation (with fertilizer)	1	45.0	7.0	50.0	45.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	2.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	195.0	31.0	230.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	204.0	31.0	230.0
Potential crop nutrient removal	150.0	24.0	124.5
Nutrient balance	54.0	7.0	105.5
Applied to removal ratio	1.36	1.29	1.85

Fresh water applied: 1.09 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Heifer Ranch / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Heifer Ranch / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	90.0	14.0	100.0	91.4
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		1.4	0.0	0.0	8.0
		1.4	0.0	0.0	
In season irrigation (no fertilizer)	2	0.0	0.0	0.0	1.8
<i>Nutrient source:</i> Water only		0%	0%	0%	
<i>Application method:</i> Surface					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.9	0.0	0.0	5.0
		0.9	0.0	0.0	
In season irrigation (with fertilizer)	4	50.0	6.6	60.0	202.9
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
<i>Irrigation Source</i>		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal		0.7	0.0	0.0	4.0
		0.7	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	6.1	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	40.4	340.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	303.1	40.4	340.0
Potential crop nutrient removal	216.0	40.5	178.2
Nutrient balance	87.1	-0.1	161.8
Applied to removal ratio	1.40	1.00	1.91

Fresh water applied: 3.37 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Main 45 / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Main 45 / Oats, silage-soft dough

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	50.0	8.0	60.0	51.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal	1.0	0.0	0.0	0.0	24.0
	1.0	0.0	0.0	0.0	
In season irrigation (with fertilizer)	1	60.0	10.0	70.0	60.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
In season irrigation (with fertilizer)	1	40.0	6.0	50.0	40.8
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal	0.8	0.0	0.0	0.0	20.0
	0.8	0.0	0.0	0.0	
In season irrigation (with fertilizer)	1	45.0	7.0	50.0	45.0
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	1.8	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	195.0	31.0	230.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	203.8	31.0	230.0
Potential crop nutrient removal	150.0	24.0	124.5
Nutrient balance	53.8	7.0	105.5
Applied to removal ratio	1.36	1.29	1.85

Fresh water applied: 0.97 feet Total harvests: 1

NUTRIENT BUDGET FOR CROP: Main 45 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
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NUTRIENT BUDGET FOR CROP (CONTINUED): Main 45 / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Pre-irrigation prior to planting (with fertilizer)	1	90.0	14.0	100.0	91.1
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal	1.1	0.0	0.0		28.0
	1.1	0.0	0.0		
In season irrigation (no fertilizer)	2	0.0	0.0	0.0	1.6
<i>Nutrient source:</i> Water only		0%	0%	0%	
<i>Application method:</i> Surface					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal	0.8	0.0	0.0		20.0
	0.8	0.0	0.0		
In season irrigation (with fertilizer)	4	50.0	6.6	60.0	202.6
<i>Nutrient source:</i> Retention pond (lagoon)		62%	90%	90%	
<i>Application method:</i> Pipeline					
Irrigation Source		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
T.I.D Canal	0.6	0.0	0.0		16.0
	0.6	0.0	0.0		

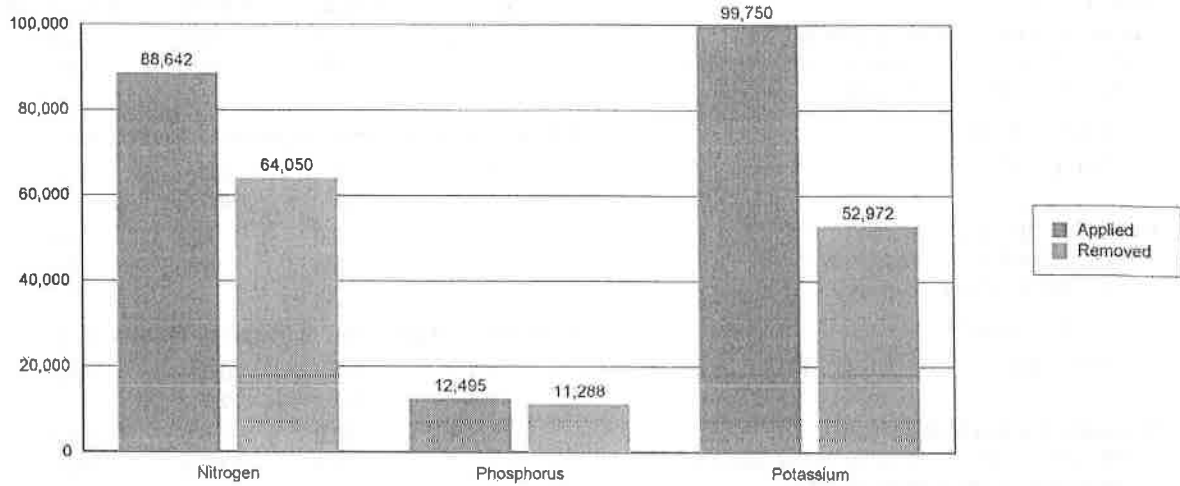
	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.3	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	290.0	40.4	340.0
Other	0.0	0.0	0.0
Atmospheric deposition	7.0		
Nutrients applied	302.3	40.4	340.0
Potential crop nutrient removal	216.0	40.5	178.2
Nutrient balance	86.3	-0.1	161.8
Applied to removal ratio	1.40	1.00	1.91

Fresh water applied: 2.91 feet Total harvests: 1

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NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

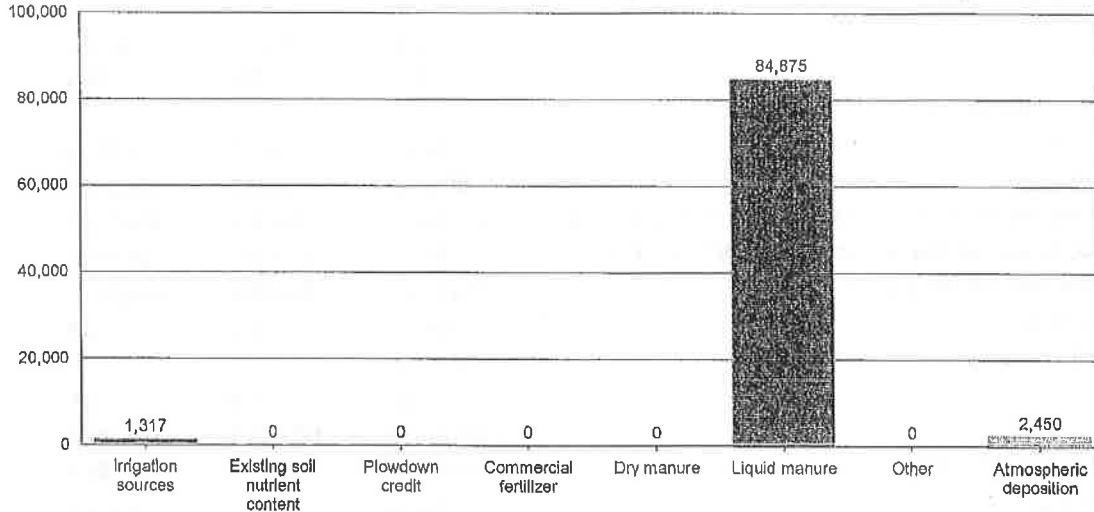
A. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL POTENTIAL



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	1,317.2	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	84,875.0	12,495.0	99,750.0
Other	0.0	0.0	0.0
Atmospheric deposition	2,450.0		
Nutrients applied to all crops	88,642.2	12,495.0	99,750.0
Potential crop nutrient removal	64,050.0	11,287.5	52,972.5
Nutrient balance	24,592.2	1,207.5	46,777.5
Applied to removal ratio	1.38	1.11	1.88

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B. POUNDS OF NITROGEN APPLIED BY NUTRIENT SOURCE



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	1,317.2	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	0.0	0.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	84,875.0	12,495.0	99,750.0
Other	0.0	0.0	0.0
Atmospheric deposition	2,450.0		
Nutrients applied to all crops	88,642.2	12,495.0	99,750.0
Potential crop nutrient removal	64,050.0	11,287.5	52,972.5
Nutrient balance	24,592.2	1,207.5	46,777.5
Applied to removal ratio	1.38	1.11	1.88

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NUTRIENT BALANCE

A. WHOLE FARM BALANCE

	Total N (lbs)	Total P (lbs)	Total K (lbs)
Nutrients in storage from herd*			
Daily gross	2,582.6	421.5	1,102.0
Annual gross	942,634.7	153,851.5	402,242.8
Net to pond storage after ammonia losses (30% loss applied)	472,810.4	110,669.0	335,202.3
Net to drylot storage after ammonia losses (30% loss applied)	187,033.9	43,182.4	121,619.4
Net in storage (30% loss applied)	659,844.3	153,851.5	456,821.7
Irrigation sources	1,317.2	0.0	0.0
Atmospheric deposition	2,450.0		
Imports	0.0	0.0	0.0
Exports	574,200.0	135,066.2	375,305.3
Potential crop nutrient removal	64,050.0	11,287.5	52,972.5
Nutrient balance	25,361.5	7,497.8	28,544.0
Nutrient balance ratio	1.40	1.66	1.54

* Potassium excretion from milk cows and dry cows only.

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SAMPLING AND ANALYSIS PLAN

A. MANURE SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Annually	<p>Annual estimation for total manure dry weight applied to each field will be quantified using the following:</p> <p>Dry weight applied from a source to a crop per application event = weight applied * (1 - (percent moisture / 100))</p> <p>Dry weight applied to crop per application event = sum of dry weights applied from each source</p> <p>Dry weight applied to a crop = sum of dry weights applied during each application</p> <p>Dry weight applied to a field = sum of dry weights applied to each crop</p> <p>Annual estimation for total manure dry weight exported will be quantified using the following:</p> <p>Dry weight exported from a source per event = weight exported * (1 - (percent moisture / 100))</p> <p>Dry weight exported per event = sum of dry weights exported from each source</p> <p>Dry weight exported to any offsite destination = sum of dry weights exported per event</p>	<p>Corral solids</p> <p>Settling basin solids</p> <p>Mechanical separator solids</p>	<p>Total dry weight (tons) manure applied annually to each land application area, and total dry weight (tons) manure exported offsite annually</p>	<p>None required</p>

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A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Twice per year	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Corral solids Settling basin solids Mechanical separator solids	None required	Total nitrogen, total phosphorus, total potassium, and percent moisture
Once every two years (biennially)	For each manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Corral solids Settling basin solids Mechanical separator solids	None required	General minerals, including: calcium, magnesium, sodium, sulfate, chloride Fixed solids (ash)
Each application to each land application area	For each applied manure source, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each applied manure source, a scaled weight by truckload will be recorded.	Corral solids Settling basin solids Mechanical separator solids	Date applied and total weight (tons) applied	Percent moisture

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A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each offsite export of manure	For each manure source exported, a composite sample "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each manure source exported, a scaled weight by truckload will be recorded.	Corral solids Settling basin solids Mechanical separator solids	Date exported and total weight (tons) exported	Percent moisture

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Annually	A composite or grab sample prior to blending with irrigation water per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	WWS 1	None required	pH, total dissolved solids, electrical conductivity, nitrate-nitrogen, ammonium-nitrogen, total Kjeldahl nitrogen, total phosphorus, and total potassium
Once every two years (biennially)	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	WWS 1	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride

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B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each application	For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	WWS 1	Date applied and volume (gallons or acre-inches) applied	None required
Quarterly during one application event	For field measurement: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	WWS 1	Date applied and electrical conductivity	Nitrate-nitrogen (only when pond is aerated), un-ionized ammonia-nitrogen, total Kjeldahl nitrogen, total phosphorus, total potassium, and total dissolved solids
	For laboratory analyses: For each pond, a composite or grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.			

C. SOIL SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes

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C. SOIL SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Spring pre-plant for each crop	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Borba 50-45 acres Main 45-45 acres Carpenter East-38 acres Carpenter West-37 acres Heifer Ranch-10 acres	None required	0 to 1 foot: Nitrate-nitrogen and organic matter 1 to 2 foot: Nitrate-nitrogen
Once every five years for each land application area (may be distributed over a 5-year period by sampling 20% of the land application areas annually)	For each field, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Borba 50-45 acres Main 45-45 acres Carpenter East-38 acres Carpenter West-37 acres Heifer Ranch-10 acres	None required	Soluble phosphorus

D. PLANT TISSUE SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each crop harvest from each land application area	For each field and crop, a composite sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. For each field and crop, a scaled weight by truckload will be recorded.	Borba 50-oat silage/corn silage Main 45-oat silage/corn silage Carpenter East-oat silage/corn silage Carpenter West-oat silage/corn silage Heifer Ranch-oat silage/corn silage	Date harvested and total weight (tons) of harvested material removed from each land application area	Percent wet weight of harvested plant removed Laboratory analyses for total nitrogen, total phosphorus, total potassium (expressed on a dry weight basis), fixed solids (ash), and percent moisture

E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes

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E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Each fresh water irrigation event for each land application area	List individual irrigation sources and the measurement method, e.g.: T.I.D Canal- flow rate multiplied by runtime	T.I.D Canal	Date applied and volume (gallons or acre-inches) applied	None required
One irrigation event during each irrigation season during actual irrigation events – for each irrigation water source (well and canal)	For each irrigation source, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected. In lieu of sampling the irrigation water, the Discharger may provide equivalent data from the local irrigation district.	T.I.D Canal	None required	Electrical conductivity, total dissolved solids, and total nitrogen

F. GROUNDWATER MONITORING SAMPLING AND ANALYSIS PLAN

Frequency	Sampling Methods	Source	Minimum data collection requirements	
			Field Analytes	Lab Analytes
Every five years (may be distributed over a 5-year period by sampling 20% of the wells annually)	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Domestic Well Barn Domestic Well Home Feedlot Well	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, chloride Total dissolved solids
Annually	For each domestic and agricultural supply well, a grab sample per the "Approved Sampling Procedures for Nutrient and Groundwater Monitoring at Existing Milk Cow Dairies" will be collected.	Domestic Well Barn Domestic Well Home Feedlot Well	Electrical conductivity and ammonium-nitrogen	Nitrate-nitrogen, If field measurement indicates the presence of ammonium-nitrogen, the Discharger shall collect a sample for laboratory analysis of ammonium-nitrogen.

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NUTRIENT MANAGEMENT PLAN REVIEW

A. NUTRIENT MANAGEMENT PLAN REVIEW

Person who created the NMP:	<u>Ramos, Joe</u>	<i>See above for contact information.</i>
Date the NMP was drafted:	<u>08/14/2020</u>	
Person who approved the final NMP:	<u>Ramos, Joe</u>	<i>See above for contact information.</i>
Date of NMP implementation:	<u>08/14/2020</u>	

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ATTACHED MAP AND DOCUMENTATION REFERENCES

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Nutrient Management Plan for the reporting schedule of 'July 1, 2009'.

A. PRELIMINARY DAIRY FACILITY ASSESSMENT

The NMP will include the initial Preliminary Dairy Facility Assessment (Attachment A) and the annual updates as required by Monitoring and Reporting Program No. R5-2007-0035. Copies of these assessments shall be maintained for 10 years.

B. LAND AREA MAP(S)

Identify each land application area (under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) on a single published base map

1. A field identification system (Assessor's Parcel Number; land application area; crops grown); indication if each land application is owned, rented, or leased by the Discharger; indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.
2. Process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals, culverts, draining controls (berms, levees, etc.), and drainage easements.

Application area map reference number: Figure 3-5

Identify each field under control of the Discharger and within five miles of the dairy where neither process wastewater nor manure is applied. Each field shall be identified on a single published base map at an appropriate scale by the following:

1. Assessor's Parcel Number.
2. Total acreage.
3. Information on who owns or leases the field

Non-application area map reference number: N/A

Setbacks, Buffers, and Other Alternatives to Protect Surface Water (see Technical Standard VII):

1. Identify all potential surface waters or conduits to surface water that are within 100 feet of any land application area.
2. For each land application area that is within 100 feet of a surface water or a conduit to surface water, identify the setback, vegetated buffer, or other alternative practice that will be implemented to protect surface water (Technical Standard VII).

Setbacks and buffers map reference number: Figure 3-5

C. PROCESS WASTEWATER WRITTEN AGREEMENTS

Provide copies of written agreements with third parties that receive process wastewater for their own use from the Discharger's dairy (Technical Standards V.A.1 and V.A.3).

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

SAMPLING AND ANALYSIS PLAN CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Ahlem Farms Jerseys

Physical address of dairy:

825 Ruble RD

Physical Address Number and Street

Crows Landing

City

Stanislaus

County

95313

Zip Code

Street and nearest cross street (if no address): _____

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Sampling and Analysis plan.

Technical Service Provider

TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

SIGNATURE OF TRAINED PROFESSIONAL

DATE

Joe Ramos

PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382

MAILING ADDRESS

(209) 250-2471

PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Manuel Azevedo

SIGNATURE OF OWNER OF FACILITY

Rogelio Herrera

SIGNATURE OF OPERATOR OF FACILITY

Manuel Azevedo

PRINT OR TYPE NAME

Rogelio Herrera

PRINT OR TYPE NAME

9-8-2020

DATE

DATE

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

NUTRIENT BUDGET CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Ahlem Farms Jerseys

Physical address of dairy:

825 Ruble RD

Number and Street

Crows Landing
City

Stanislaus
County

95313

Zip Code

Street and nearest cross street (if no address): _____

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I certify that I meet the requirements as a certified specialist in developing nutrient management plans as described in Attachment C of Waste Discharge Requirements General Order No. R5-2007-0035 and that I prepared the Nutrient Budget plan.

Technical Service Provider

TITLE/QUALIFICATIONS OF CERTIFIED NUTRIENT MANAGEMENT SPECIALIST

SIGNATURE OF TRAINED PROFESSIONAL

DATE

Joe Ramos

PRINT OR TYPE NAME

2857 Geer RD, STE A; Turlock, CA 95382

MAILING ADDRESS

(209) 250-2471

PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Manuel Azevedo

SIGNATURE OF OWNER OF FACILITY

Rogello Herrera

SIGNATURE OF OPERATOR OF FACILITY

Manuel Azevedo

PRINT OR TYPE NAME

Rogello Herrera

PRINT OR TYPE NAME

9-8-2020

DATE

DATE

Nutrient Management Plan Report
 General Order No. R5-2007-0035, Attachment C
 July 1, 2009 deadline

STATEMENTS OF COMPLETION

Waste Discharge Requirements General Order No. R5-2007-0035 for Existing Milk Cow Dairies (General Order) requires owners and operators of existing milk cow dairies (Dischargers) to develop and implement a Nutrient Management Plan for their land application areas (land under control of the Discharger, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient cycling). The Discharger is required to maintain the NMP at the dairy, make the NMP available to Central Valley Water Board staff during their inspections, and submit the NMP to the Executive Officer upon request.

The General Order requires the Discharger to submit two Statements of Completion during development of the NMP. The Discharger may use this form to comply with the General Order requirement to submit one or both of these Statements of Completion. Parts A and E must be completed for each Statement of Completion. Parts B, C and D are to be completed for the Statements of Completion due by 1 July 2008, 31 December 2008 and 1 July 2009, respectively. Both the owner and the operator of the dairy must sign this form in Part E below.

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Ahlem Farms Jerseys

825 Ruble RD	Crows Landing	Stanislaus	95313
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address): _____

Operator name: <u>Herrera, Rogelio</u>	Telephone no.: <u>(209) 632-5822</u>
	Landline Cellular

24093 American AVE	Hilmar	CA	95324
Mailing Address Number and Street	City	State	Zip Code

Legal owner name: <u>Azevedo, Manuel</u>	Telephone no.: <u>(209) 632-6393</u>
	Landline Cellular

2800 White RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

B. STATEMENT OF COMPLETION DUE 1 JULY 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2008:

- Item I.A.1 Land Application Information**
Identification of land used for manure application and needed information on a facility map.
- Item I.B Land Application Information**
Information list for information provided on map above.
- Item I.C Land Application Information**
Copies of written third-party process wastewater agreements.
- Item I.D Land Application Information**
Identification of fields under control of the discharger within five miles of the dairy where neither process wastewater nor manure is applied.
- Item II Sampling and Analysis Plan**
- Item IV Setbacks, Buffers, and Other Alternatives to Protect Surface Water**
Identification of all potential surface waters or conduits to surface waters within 100 feet of land application areas and appropriate protection.
- Item VI Record-Keeping Requirements**
Identification of monitoring records that will be maintained as required in the production and land application areas.

Has Item II (Sampling and Analysis Plan) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

- Yes No

C. STATEMENT OF COMPLETION DUE 31 DECEMBER 2008

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 31 December 2008:

- Item V Field Risk Assessment**
Evaluation of the effectiveness of management practices used to control the discharge of waste constituents from land application areas by assessing the water quality monitoring results of discharges of manure, process wastewater, tailwater, subsurface (tile) drainage, or storm water from the land application areas.

D. STATEMENT OF COMPLETION DUE 1 JULY 2009

I have completed the following items of the Nutrient Management Plan (check the boxes of completed sections), which are due 1 July 2009:

- Item I.A.2 Land Application Area Information**
Identification of process wastewater conveyance, mixing and drainage information for each land application area on a facility map.
- Item III Nutrient Budget**
Established planned rates of nutrient applications by crop based on nutrient monitoring results for each land application area.

Has Item III (Nutrient Budget) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

- Yes No

Nutrient Management Plan Report
General Order No. R5-2007-0035, Attachment C
July 1, 2009 deadline

E. CERTIFICATION STATEMENT

I certify under penalty of law that I have completed the items of the Nutrient Management Plan that are checked in Parts B, C and/or D above for the dairy identified in Part A above and that the appropriate certified nutrient management specialist has certified the items requiring such certification as noted in part B and/or D above and that I have personally examined and am familiar with the information submitted in Parts A, B, C and D of this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Manuel Azovedo
SIGNATURE OF OWNER OF FACILITY

Rogelio Herrera
SIGNATURE OF OPERATOR OF FACILITY

Manuel Azovedo
PRINT OR TYPE NAME

Rogelio Herrera
PRINT OR TYPE NAME

9-8-2020
DATE

DATE



LEGEND

□ Owned Land



Ag Services, Inc.

SCALE:



APPROXIMATE SCALE IN FEET

AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 1
TOPOGRAPHIC MAP

























PROJECT NO. FRA-00

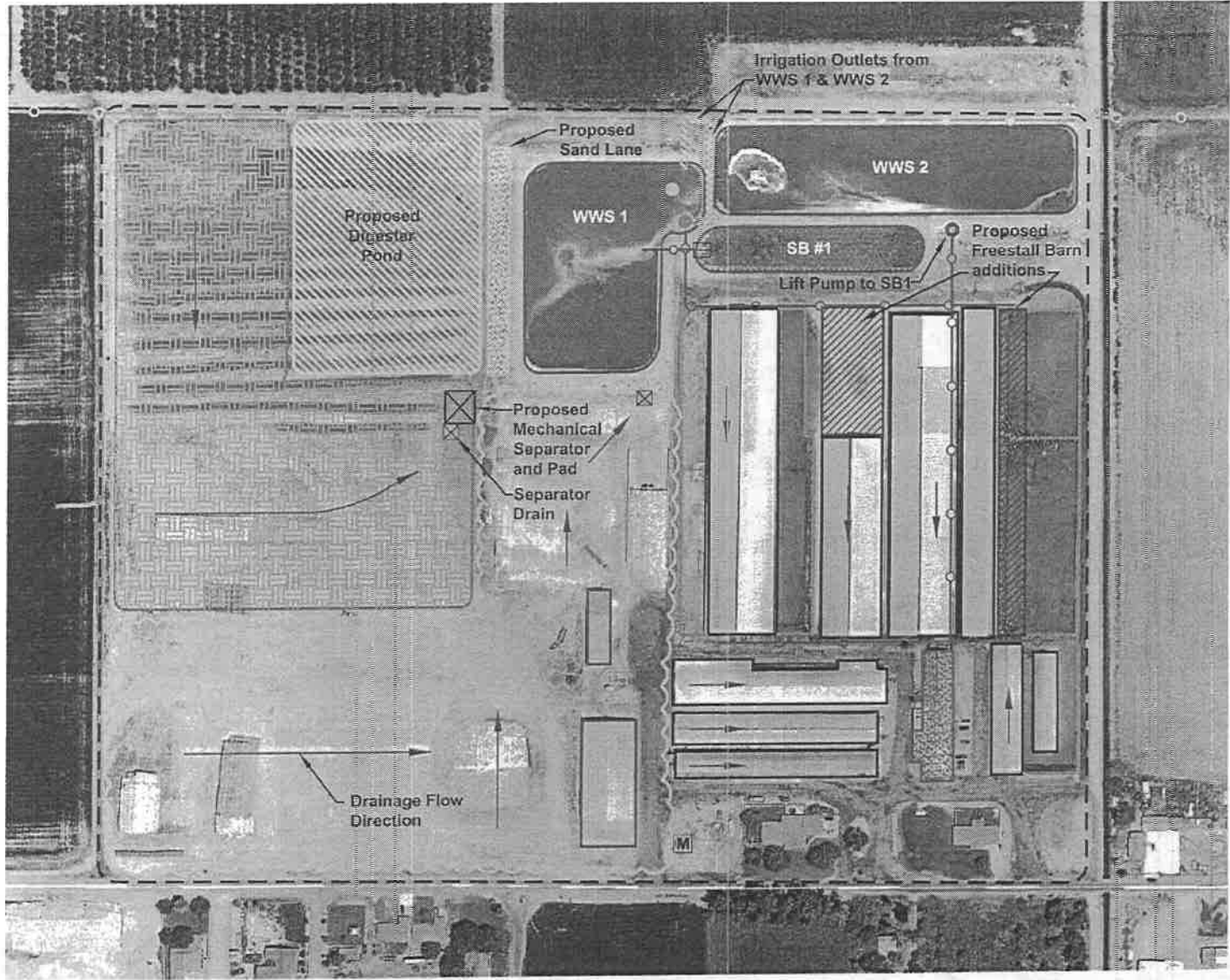
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DRAWN BY: SB

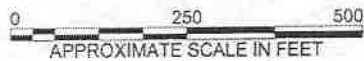
APP. BY: JR

LEGEND

-  Milk Barn
-  Animal Housing
-  Waste Water Storage
-  Solids Settling Basin
-  Corrals
-  Commodity Barn
-  Hay Barn
-  Manure Stacking
-  Digester Pond
-  Mechanical Separator
-  Feed Storage
-  Facility Boundary
-  Floating Pump
-  Flush Return Pump
-  Stationary Pump
-  Lift Pump
-  Weir Box
-  Drain
-  Mortality Holding Box
-  Domestic Well
-  Flush Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Irrigation Pipeline
-  Irrigation Outlet



SCALE:



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 2A
DAIRY FACILITY

PROJECT NO.

FRA-00

DATE:

9/3/2020

DRAWN BY:











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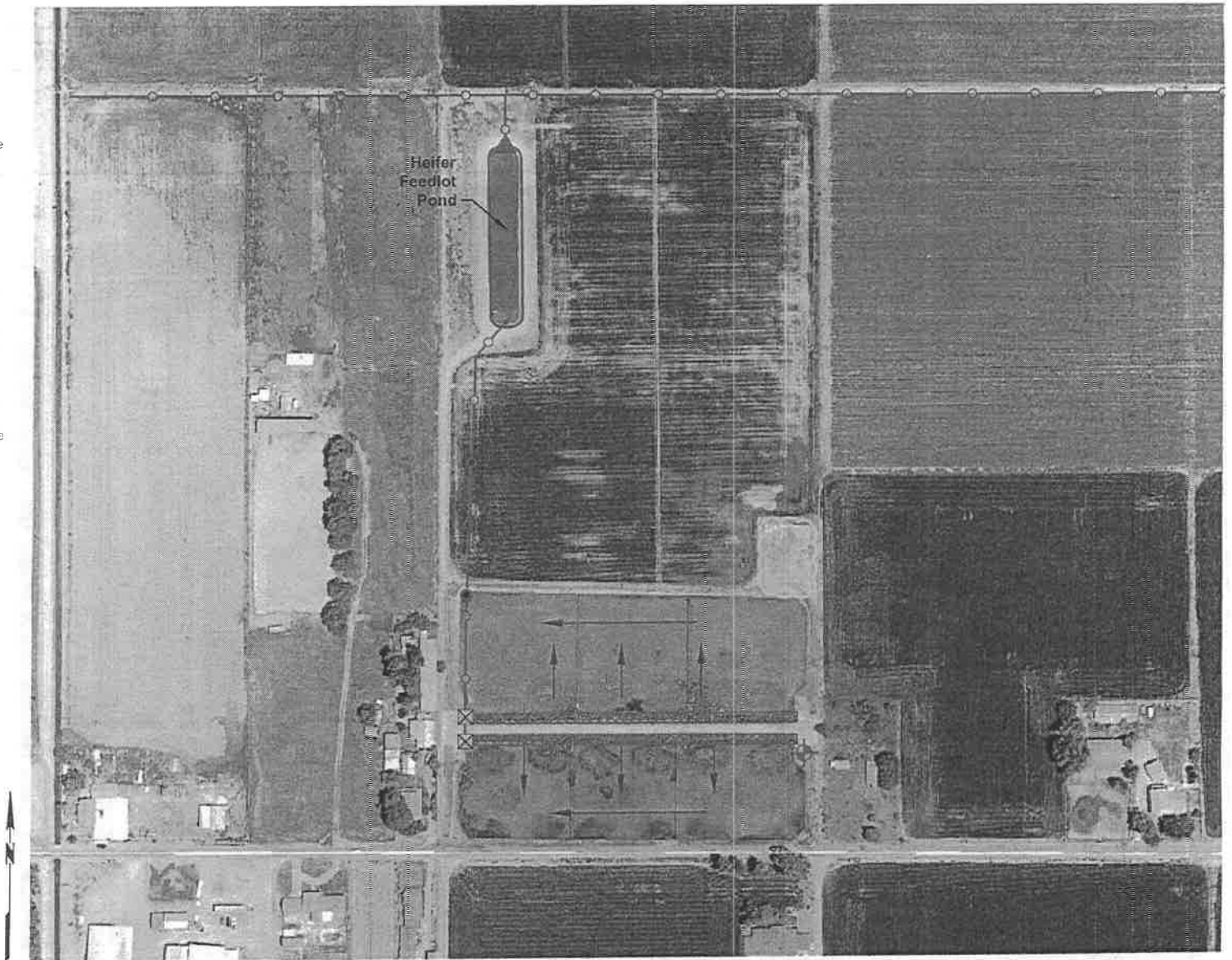
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JR

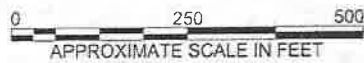
FRA-00 Ahlem Farms Jersey

LEGEND

-  Waste Water Storage
-  Feed Storage
-  Outlet Valve
-  Drain Pump
-  Flush Drain
-  Domestic Well
-  Drainage Flow
-  Wastewater Pipeline
-  Flush Return Pipeline
-  Flush Lanes



SCALE:



AHLEM FARMS JERSEYS
 OWNED BY MANUEL AZEVEDO
 STANISLAUS COUNTY, CA

FIGURE 2B
HEIFER FEEDLOT

PROJECT NO.

FRA-00

DATE:

9/3/2020

DRAWN BY:

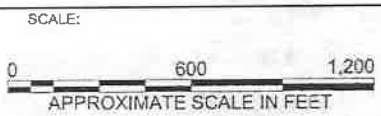
SB

APP. BY:

JR

LEGEND

-  Field Boundary
-  Irrigation Pipeline
-  Drain Pipeline
-  Irrigation Flow
-  Facility Boundary
-  Tailwater Pump
-  Inlet Storage
-  Drain
-  Tailwater
- WW Wastewater
- SM Solid Manure













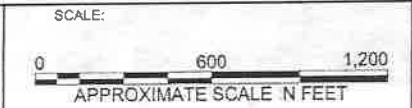
AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 3
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/1/2020	SB	JR

LEGEND

-  Field Boundary
-  Drain Pipeline
-  Irrigation Pipeline
-  Tailwater Return Pipeline
-  Irrigation Flow
-  Surface Drainage Flow
-  Berms/Levees
-  Tailwater Pump
-  Crossover Drain Pipe
-  Drain
- WW Wastewater
- SM Solid Manure



AHLEM FARMS JERSEYS
OWNED BY MANUEL AZEVEDO
STANISLAUS COUNTY, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	9/1/2020	SB	JR

