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

Referral
Early Consultation

Date: **May 25, 2018**

To: **Distribution List (See Attachment A)**

From: **Kristen Anaya, Assistant Planner, Planning and Community Development**

Subject: **USE PERMIT APPLICATION NO. PLN2018-0043 – COUCO CREEK DAIRY, INC.**

Respond By: **June 12, 2018**

****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: **Tony Machado**

Project Location: **3303 S Washington Road, on the southwest corner of W Harding and S Washington Roads, in the Turlock area.**

APN: **044-039-001 & 002; 044-040-041 & 042; 057-015-034**

Williamson Act Contract: **1976-2290 & 2002-4491**

General Plan: **Agriculture**

Current Zoning: **A-2-40 (General Agriculture)**

Project Description: **Request to modify the heifer units approved under UP PLN2014-0028 – Machado (Couco Creek) Dairy from 250 medium heifers and 250 small heifers to 750 large heifers, 1,000 medium heifers, and 500 small heifers. Cow numbers are to remain at 3,050 milk cows and 437 dry cows. This project includes construction of three freestall shade barns, totaling 176,550 square feet, over existing corrals located due south of the southwest corner of W Harding and S Washington Roads. The estimated wastewater storage needs will be accommodated by the existing capacity of the on-site lagoons.**

Attachments: Maps, Application, Waste Management Plan, Nutrient Management Plan, UP PLN2014-0028 Conditions of Approval and Initial Study Checklist.

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. PLN2018-0043 – COUCO CREEK DAIRY, INC.
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
	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
X	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
	CITY OF:		STAN CO PARKS & RECREATION
	COMMUNITY SERVICES/SANITARY DIST	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION		STAN CO RISK MANAGEMENT
	COUNTY OF:	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: MOUNTAIN VIEW & TURLOCK	X	STAN CO SUPERVISOR DIST #2: CHIESA
	HOSPITAL DIST:	X	STAN COUNTY COUNSEL
X	IRRIGATION DIST: TURLOCK		StanCOG
X	MOSQUITO DIST: TURLOCK	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOUNTIAN VALLEY EMERGENCY MEDICAL SERVICES	X	STANISLAUS LAFCO
	MUNICIPAL ADVISORY COUNCIL:		STATE OF CA SWRCB DIVISION OF DRINKING WATER DIST. 10
X	PACIFIC GAS & ELECTRIC		SURROUNDING LAND OWNERS
	POSTMASTER:	X	TELEPHONE COMPANY: AT&T
X	RAILROAD: UNION PACIFIC		TRIBAL CONTACTS (CA Government Code §65352.3)
X	SAN JOAQUIN VALLEY APCD		US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: TURLOCK	X	US FISH & WILDLIFE
X	SCHOOL DIST 2: CHATOM	X	US MILITARY (SB 1462) (7 agencies)
	STAN ALLIANCE	X	USDA NRCS
X	STAN CO AG COMMISSIONER		WATER DIST:

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. PLN2018-0043 – COUCO CREEK DAIRY, INC.**

Based on this agencies 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).

_____

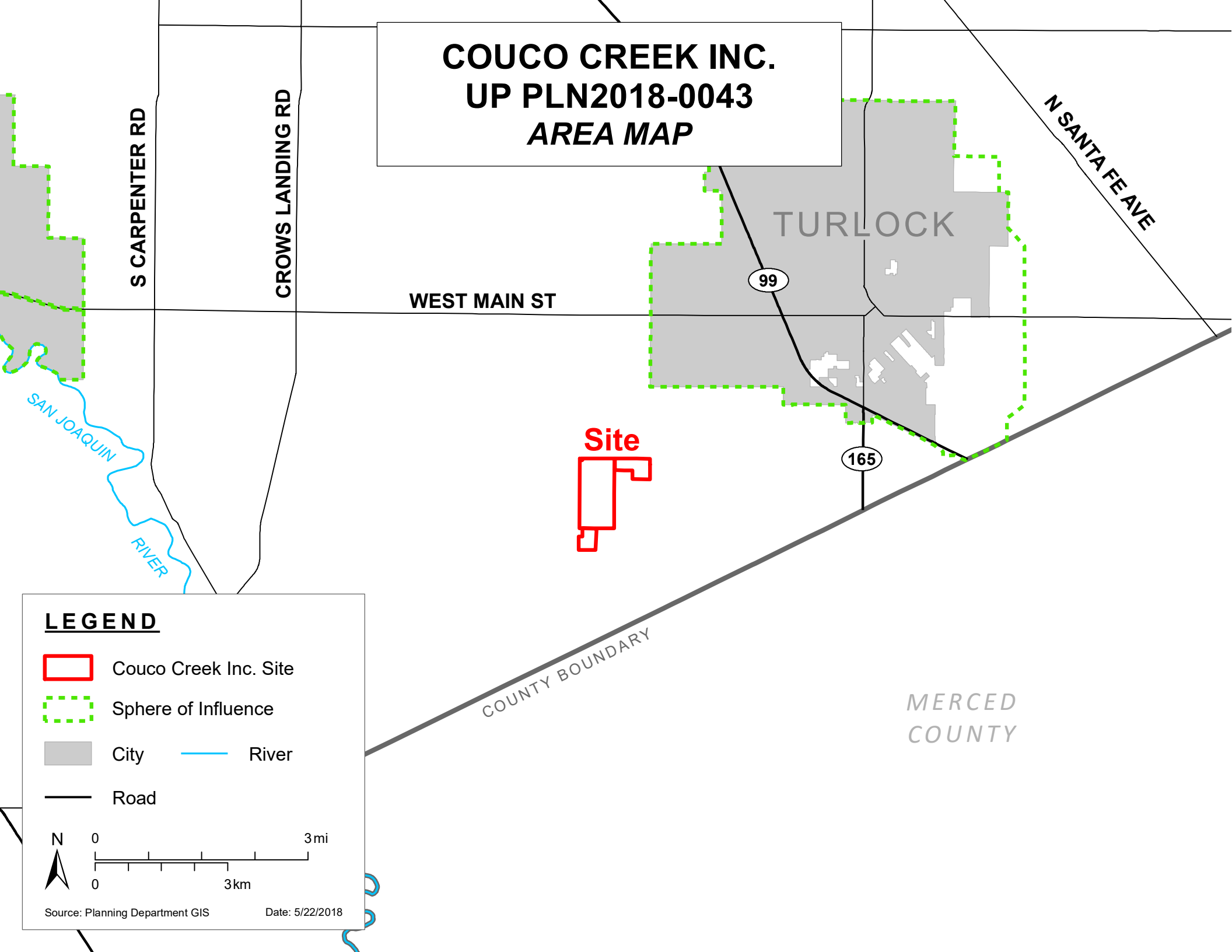
_____

Response prepared by:

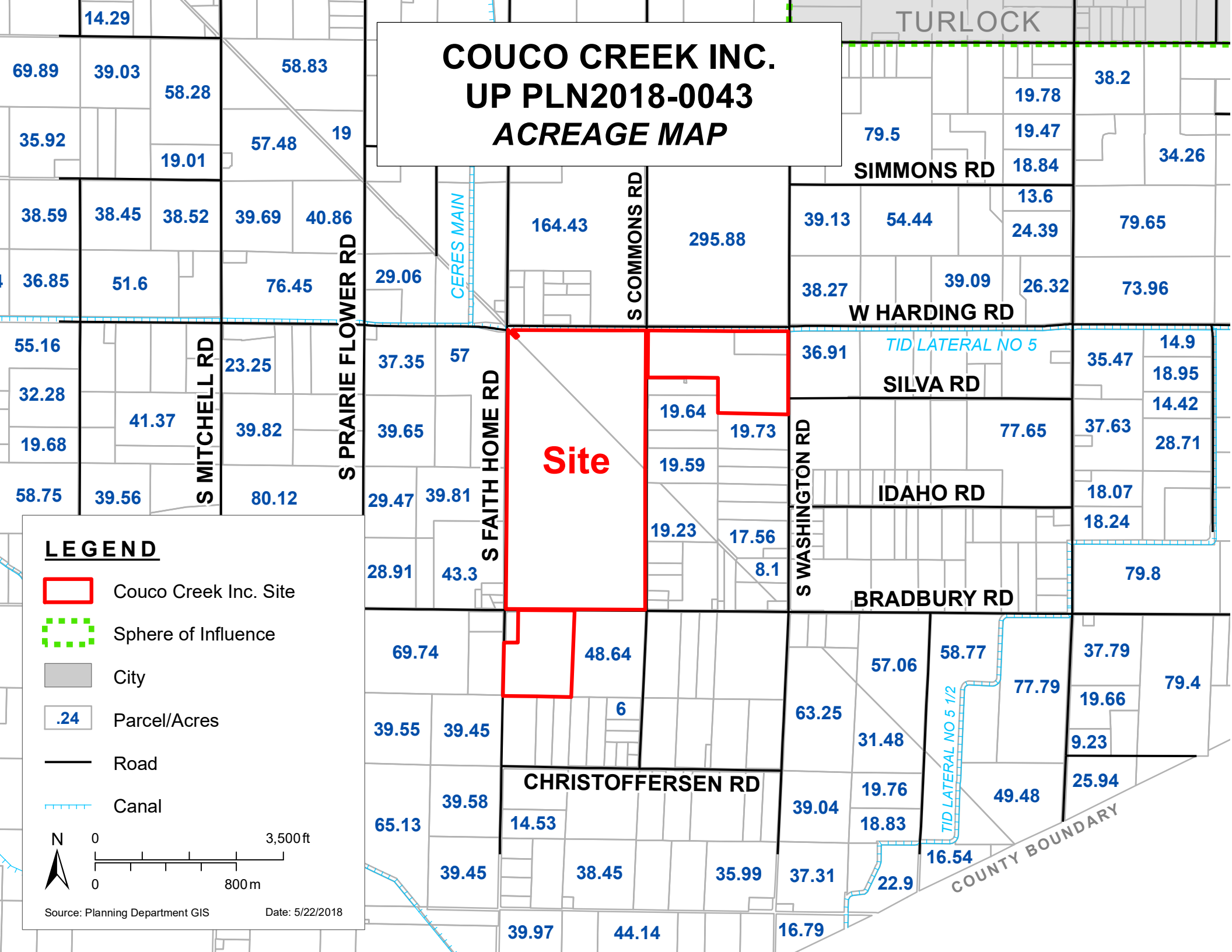
_____

Name Title Date

COUCO CREEK INC.
UP PLN2018-0043
AREA MAP



COUCO CREEK INC.
UP PLN2018-0043
ACREAGE MAP



LEGEND

- Couco Creek Inc. Site
- Sphere of Influence
- City
- .24 Parcel/Acres
- Road
- Canal

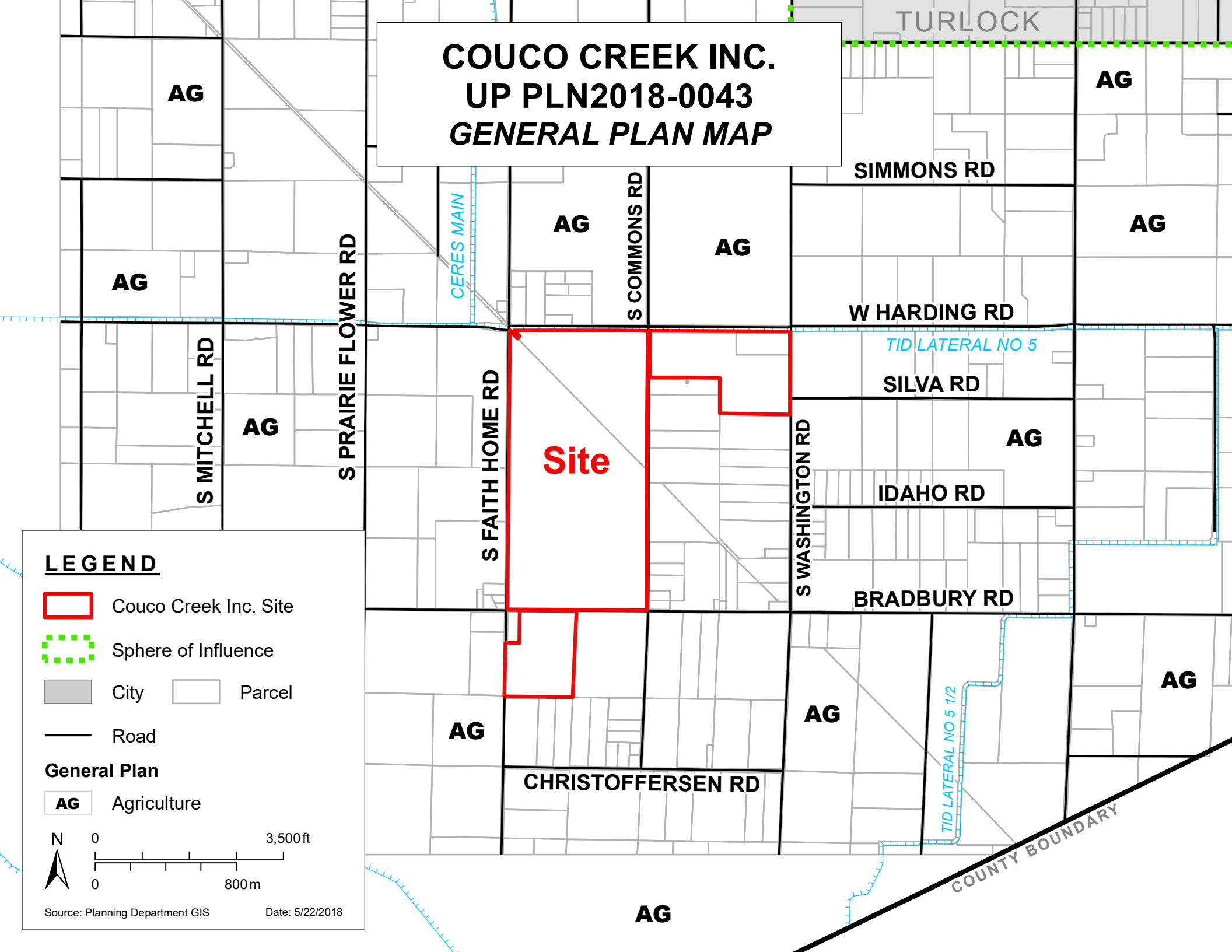
N

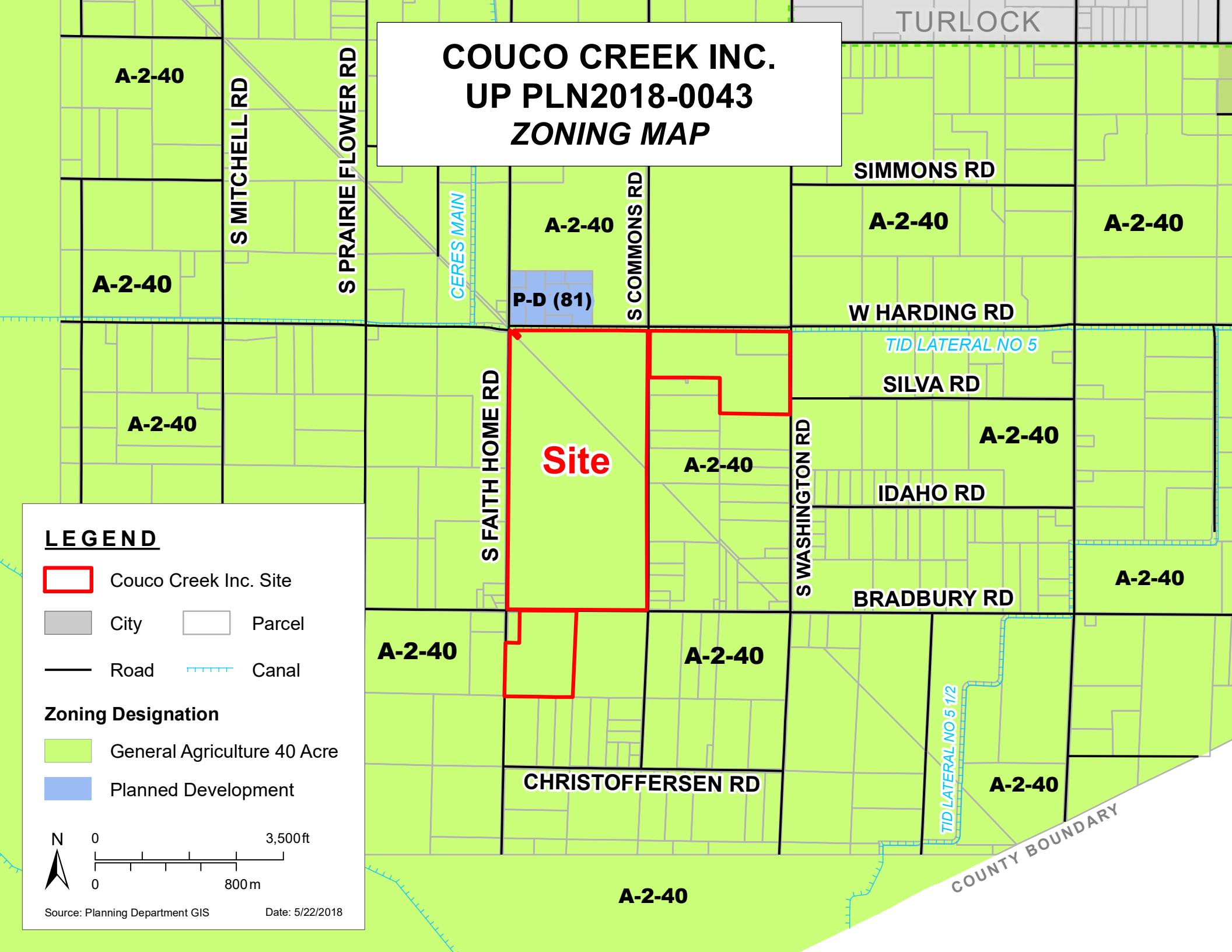
0 3,500 ft

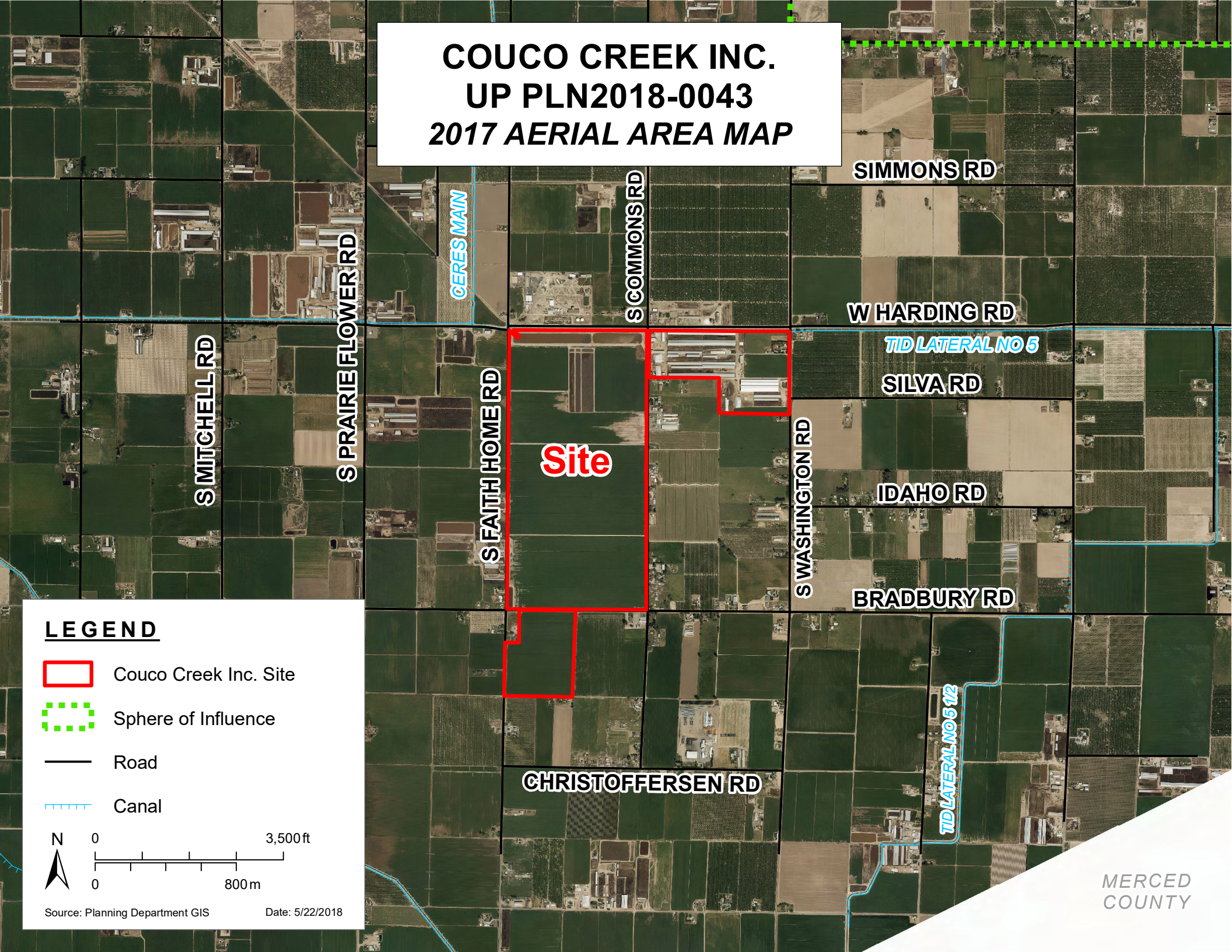
0 800 m

Source: Planning Department GIS

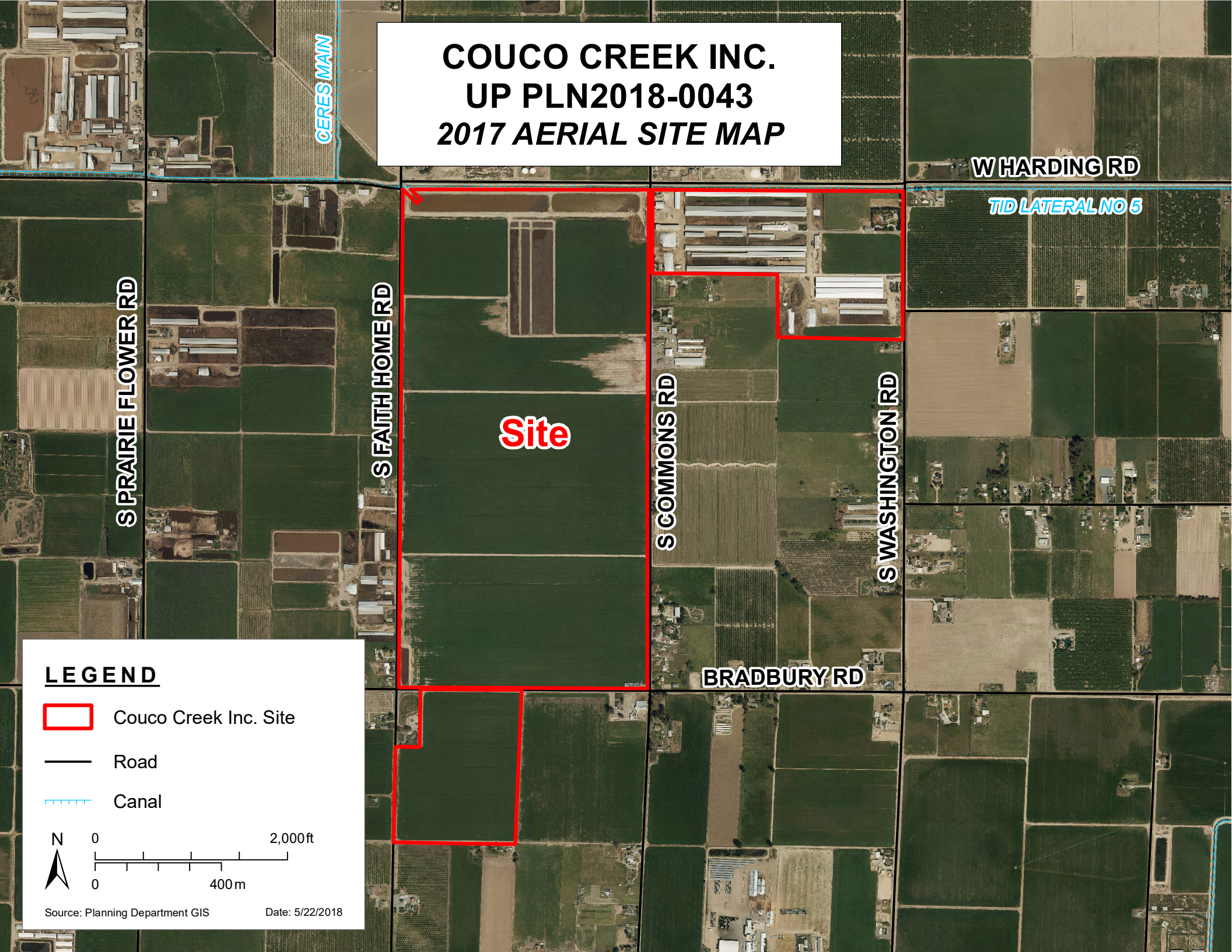
Date: 5/22/2018


COUCO CREEK INC.
UP PLN2018-0043
GENERAL PLAN MAP
TURLOCK
AG
SIMMONS RD
CERES MAIN
S COMMONS RD
W HARDING RD
TID LATERAL NO 5
SILVA RD
S PRAIRIE FLOWER RD
S MITCHELL RD
S FAITH HOME RD
Site
S WASHINGTON RD
IDAHO RD
BRADBURY RD
CHRISTOFFERSEN RD
TID LATERAL NO 5 1/2
COUNTY BOUNDARY
LEGEND
Couco Creek Inc. Site
Sphere of Influence
City
Parcel
Road
General Plan
AG
Agriculture
N
0
3,500 ft
0
800 m
Source: Planning Department GIS
Date: 5/22/2018


COUCO CREEK INC.
UP PLN2018-0043
ZONING MAP
TURLOCK
A-2-40
S MITCHELL RD
S PRAIRIE FLOWER RD
CERES MAIN
S COMMONS RD
SIMMONS RD
P-D (81)
W HARDING RD
TID LATERAL NO 5
SILVA RD
S FAITH HOME RD
Site
S WASHINGTON RD
IDAHO RD
BRADBURY RD
CHRISTOFFERSEN RD
TID LATERAL NO 5 1/2
COUNTY BOUNDARY
LEGEND
Couco Creek Inc. Site
City
Parcel
Road
Canal
Zoning Designation
General Agriculture 40 Acre
Planned Development
N
0
3,500 ft
0
800 m
Source: Planning Department GIS
Date: 5/22/2018


COUCO CREEK INC.
UP PLN2018-0043
2017 AERIAL AREA MAP
SIMMONS RD
CERES MAIN
S COMMONS RD
W HARDING RD
TID LATERAL NO 5
SILVA RD
S MITCHELL RD
S PRAIRIE FLOWER RD
S FAITH HOME RD
Site
S WASHINGTON RD
IDAHO RD
BRADBURY RD
CHRISTOFFERSEN RD
TID LATERAL NO 5 1/2
MERCED COUNTY
LEGEND
Couco Creek Inc. Site
Sphere of Influence
Road
Canal
N
0
3,500 ft
0
800 m
Source: Planning Department GIS
Date: 5/22/2018

COUCO CREEK INC.
UP PLN2018-0043
2017 AERIAL SITE MAP



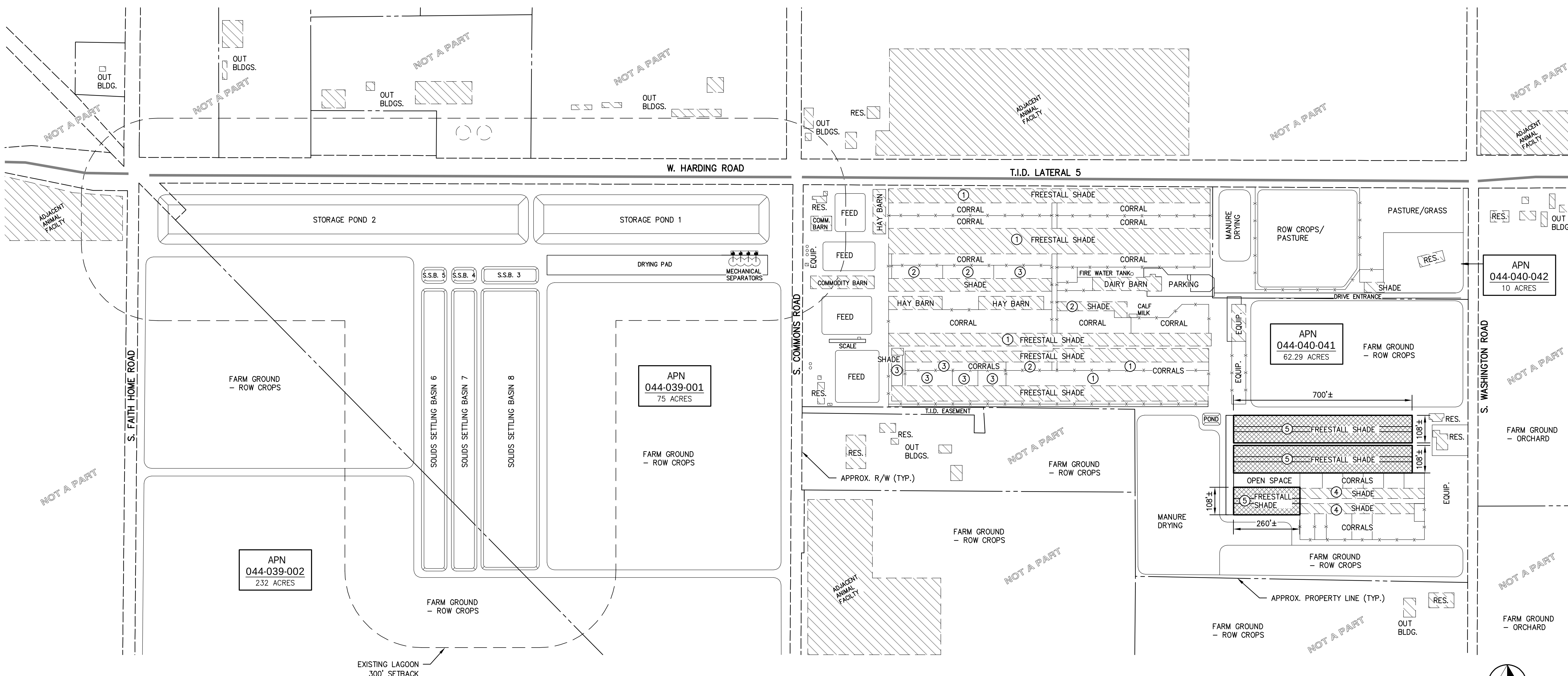
Know what's below. Call before you dig.

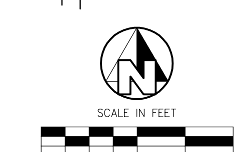
WARNING
POWER LINES OVERHEAD

SITE LEGEND

Symbol	Meaning	Symbol	Meaning
— — —	SITE BOUNDARY LINE	— - —	APPROXIMATE PROPERTY LINE
(grey line)	CANALS & DITCHES	(hatched)	EXISTING STRUCTURE / ADJACENT ANIMAL FACILITY
- - - -	APPROXIMATE RIGHT-OF-WAY	(cross-hatched)	PROPOSED STRUCTURE
(#)	HERD INDEX LABEL (SEE TABLE)		

HERD INDEX – PROPOSED					
#	DESCRIPTION	HOUSING	FLUSH/SCRAPE	ANIMALS	
1	MILK COWS	FREESTALL / EXERCISE PEN	FLUSH	3100	3537 MATURE COWS
2	DRY / SPECIAL NEEDS COWS	FREESTALL / LOAFING / EXERCISE PEN	FLUSH	437	
3	HEIFERS	FREESTALL / LOAFING / EXERCISE PEN	FLUSH	400	
4	HEIFERS	OPEN CORRAL	FLUSH	400	
5	HEIFERS	FREESTALL / NO EXERCISE PEN	FLUSH	1980	
			TOTAL	6,317	





SITE PLAN – PROPOSED

No.	REVISION	BY	DATE

NOT FOR CONSTRUCTION 4/11/18

COUCO CREEK DAIRY

COUCO CREEK DAIRY
STANISLAUS COUNTY, CALIFORNIA

COUNTY PERMITTING

SITE PLAN – PROPOSED

EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
4701 SISK ROAD, SUITE 102
MODESTO, CALIFORNIA 95356
209/809–2300 FAX 209/809–2290
www.ppeng.com

DESIGN ENGINEER: J.TOSTE
LICENSE NO: RCE 77353

DRAFTED BY:	CHECKED BY:
P&P	JT

DATE: 4–11–2018
JOB NO: 2301–1801
PROJECT NO: 2301
PHASE: DES

0 1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 3

4/11/2018 5:12 PM G:\Couco Creek Dairy–2301\2301–Couco Creek Dairy–3303 S Washington Turlock\230113M1–Dairy Remodel\DWG\SHEET\COUNTY\2018\3 SITE PLAN – PROPOSED.dwg –Jason Toste

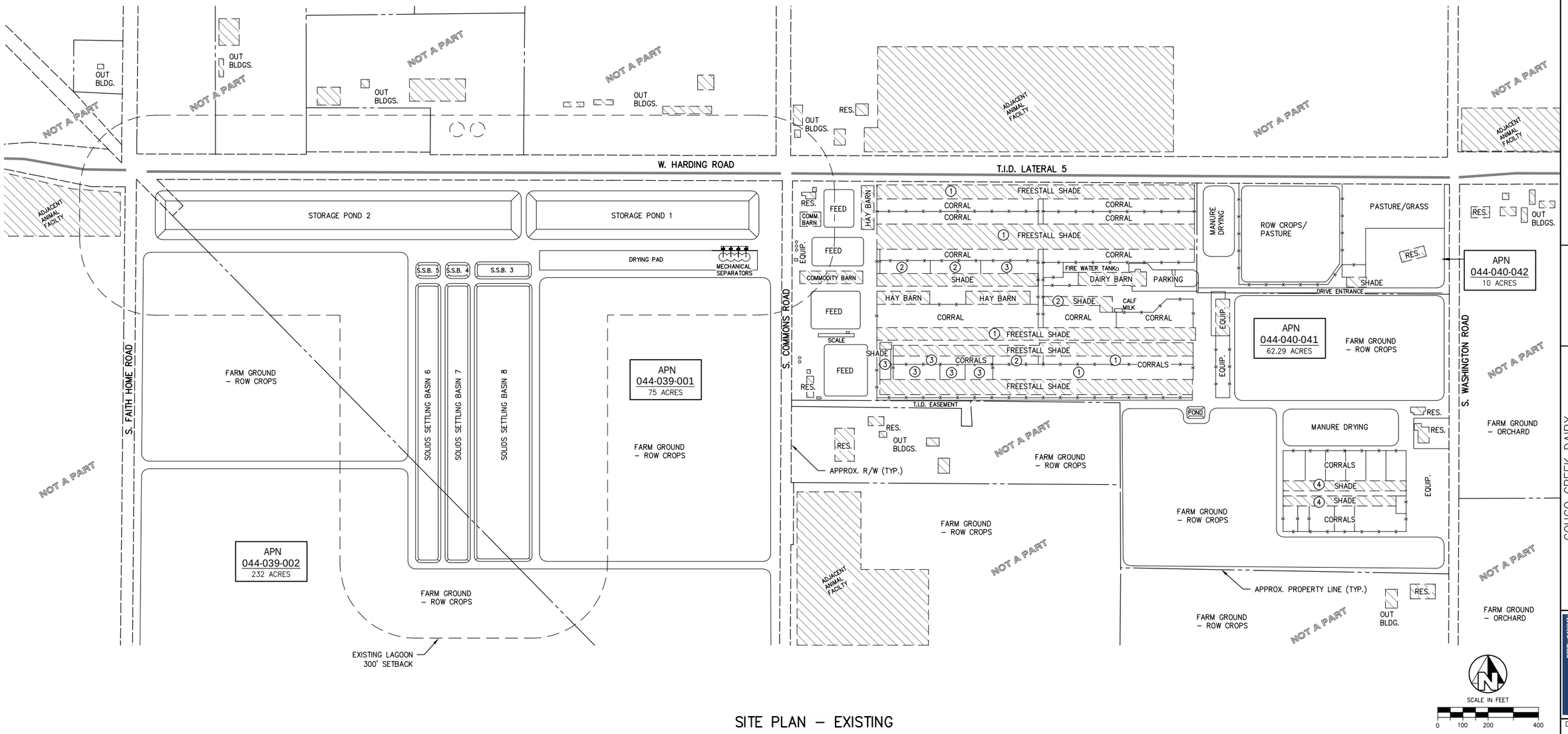
811 Know what's below. Call before you dig.

WARNING
POWER LINES OVERHEAD

SITE LEGEND

- SITE BOUNDARY LINE
- CANALS & DITCHES
- APPROXIMATE RIGHT-OF-WAY
- APPROXIMATE PROPERTY LINE
- EXISTING STRUCTURE / ADJACENT ANIMAL FACILITY
- (#) HERD INDEX LABEL (SEE TABLE)

HERD INDEX – EXISTING					
(#)	DESCRIPTION	HOUSING	FLUSH/SCRAPE	ANIMALS	
1	MILK COWS	FREESTALL / EXERCISE PEN	FLUSH	3100	3537 MATURE COWS
2	DRY / SPECIAL NEEDS COWS	FREESTALL / LOAFING / EXERCISE PEN	FLUSH	437	
3	HEIFERS	FREESTALL / LOAFING / EXERCISE PEN	FLUSH	400	
4	HEIFERS	OPEN CORRAL	FLUSH	400	
		TOTAL		4,337	



SCALE IN FEET
0 100 200 400

SITE PLAN – EXISTING

NOT FOR CONSTRUCTION 4/11/18

No.	REVISION	BY	DATE

COUCO CREEK DAIRY
COUCO CREEK DAIRY
STANISLAUS COUNTY, CALIFORNIA
COUNTY PERMITTING

SITE PLAN – EXISTING

EST. 1968 PROVOST & PRITCHARD CONSULTING GROUP
An Employee Owned Company
4701 SISK ROAD, SUITE 102
MODESTO, CALIFORNIA 95356
209/809-2300 FAX 209/809-2290
www.ppeng.com

DESIGN ENGINEER: J.TOSTE
LICENSE NO: RCE 77353
DRAFTED BY: P&P | CHECKED BY: JT
DATE: 4-11-2018
JOB NO: 2301-1801
PROJECT NO: 2301
PHASE: DES
0 1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET 2
2 OF 4

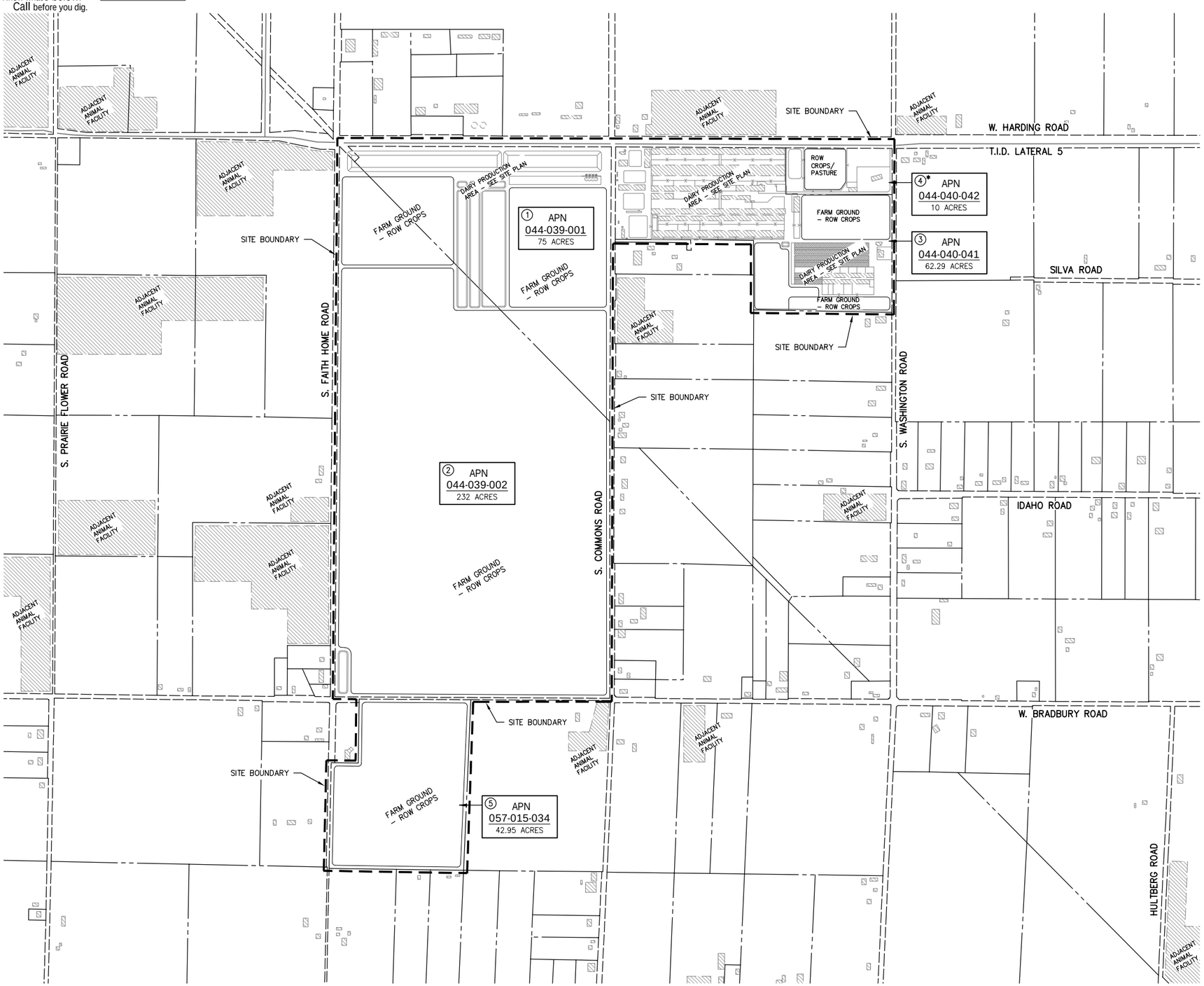
4/11/2018 5:08 PM G:\Couco Creek Dairy-2301\2301-Couco Creek Dairy-3303 S Washington Turlock\2301SM1-Dairy Remodel\DWG\SHEET\COUNTY\2018\2 SITE PLAN - EXISTING.dwg -Jason Toste

811 Know what's below. Call before you dig.

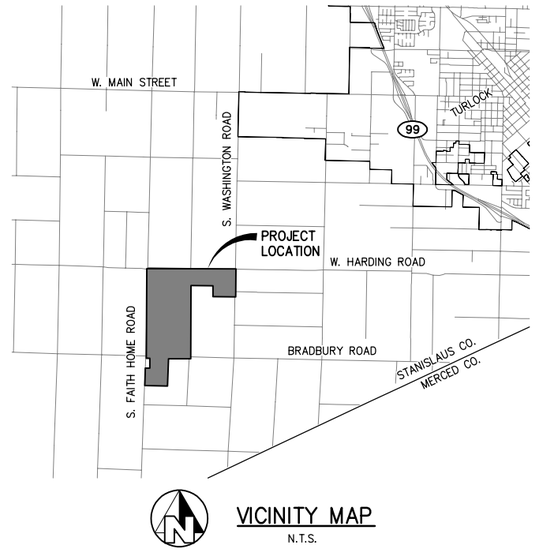
WARNING
POWER LINES OVERHEAD

SITE LEGEND

- SITE BOUNDARY LINE
- CANALS & DITCHES
- APPROXIMATE RIGHT-OF-WAY
- APPROXIMATE PROPERTY LINE
- STRUCTURE / ADJACENT ANIMAL FACILITY



LAND USE MAP



VICINITY MAP
N.T.S.

SITE DATA	
OWNER:	COUCO CREEK DAIRY PO BOX 3489 TURLOCK, CA 95381 209-664-2021
JURISDICTION:	STANISLAUS COUNTY
ZONE:	A-2-40
SITE AREA:	422.24 AC GROSS
A.P.N.:	SEE LAND USE TABLE
SITE ADDRESS:	3303A S. WASHINGTON ROAD TURLOCK, CA 95380
SEISMIC CAT:	D
WATER:	DOMESTIC WELL
SEWER:	SEPTIC
GAS:	LPG
ELECTRIC:	TID

SUMMARY OF LAND USE		
#	APN #	GROSS ACRES
1	044-039-001	75.00
2	044-039-002	232.00
3	044-040-041	62.29
* 4	044-040-042	10.00
5	057-015-034	42.95
TOTAL GROSS ACRES		422.24
DAIRY FACILITY		80
NON FARMABLE ACRES		27
NET FARMABLE ACRES		315

*LEASED PROPERTY

SCALE IN FEET
0 250 500 1000

NOT FOR CONSTRUCTION
4/11/18

No.	REVISION	BY	DATE

COUCO CREEK DAIRY
COUCO CREEK DAIRY
STANISLAUS COUNTY, CALIFORNIA
COUNTY PERMITTING

LAND USE MAP

EST. 1956
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
470 SISK ROAD, SUITE 102
MODESTO, CALIFORNIA 95356
209/809-2300 FAX 209/809-2290
www.ppeng.com

DESIGN ENGINEER: J.TOSTE
LICENSE NO: RCE 77353

DRAFTED BY:	CHECKED BY:
P&P	JT

DATE: 4-11-2018
JOB NO: 2301-1801
PROJECT NO: 2301
PHASE: DES

0 1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 1
1 OF 4

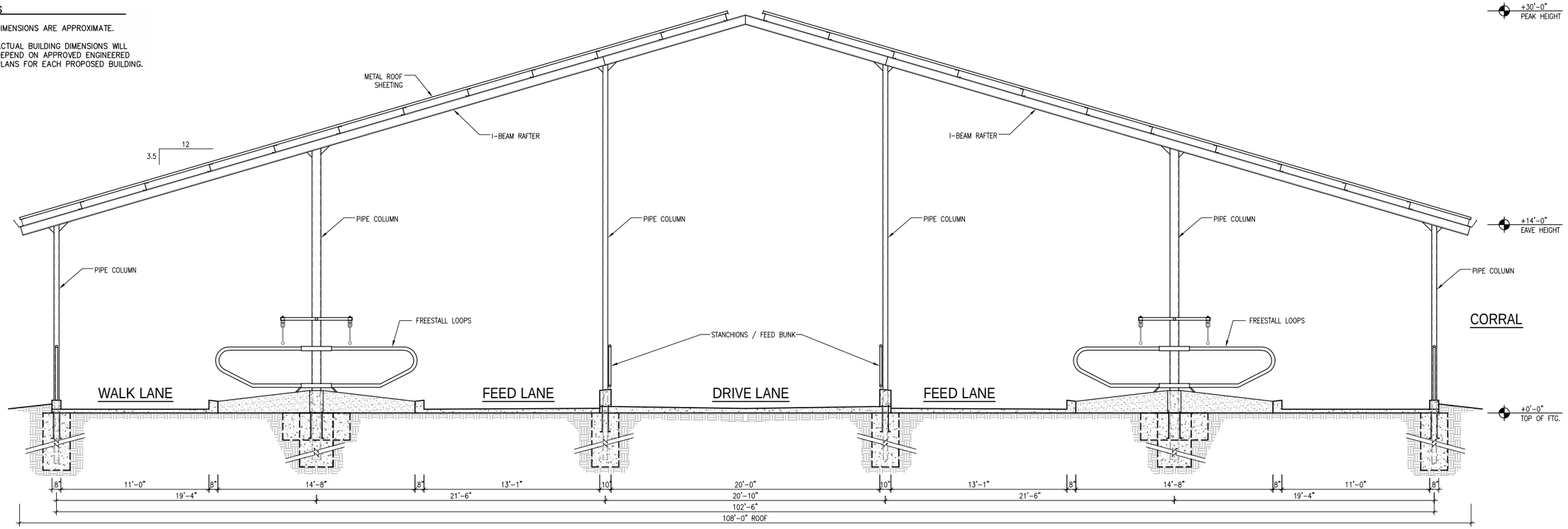
4/11/2018 5:08 PM G:\Couco Creek Dairy-2301\2301-Couco Creek Dairy-3303 S Washington Turlock\230113M1-Dairy Remodel\DWG\SHEET\COUNTY\2018\1 LAND USE MAP.dwg -Jason Toste

811 Know what's below. Call before you dig.

WARNING
POWER LINES OVERHEAD

NOTES

1. DIMENSIONS ARE APPROXIMATE.
2. ACTUAL BUILDING DIMENSIONS WILL DEPEND ON APPROVED ENGINEERED PLANS FOR EACH PROPOSED BUILDING.



PROPOSED BARNS – TYPICAL CROSS SECTION / ELEVATION

SCALE IN FEET
4 0 4 8
1/4" = 1'-0"

NOT FOR CONSTRUCTION
4/11/18

No.	REVISION	BY	DATE

COUCO CREEK DAIRY
COUCO CREEK DAIRY
STANISLAUS COUNTY, CALIFORNIA
COUNTY PERMITTING

PROPOSED BUILDING ELEVATIONS

EST 1968 PROVOST & PRITCHARD CONSULTING GROUP
An Employee Owned Company
4701 SISK ROAD, SUITE 102
MODESTO, CALIFORNIA 95356
209/809-2300 FAX 209/809-2290
www.ppeng.com

DESIGN ENGINEER: J.TOSTE
LICENSE NO: RCE 77353
DRAFTED BY: P&P | CHECKED BY: JT
DATE: 4-11-2018
JOB NO: 2301-1801
PROJECT NO: 2301
PHASE: DES
0 1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET 4
4 OF 4

4/11/2018 5:08 PM G:\Couco Creek Dairy-2301\2301-Couco Creek Dairy-3303 S Washington Turlock\2.3011.3M1-Dairy Remodel\DWG\SHEET\COUNTY\2018\4 PROPOSED BUILDING ELEVATIONS.dwg -Jason Toste

APPLICATION QUESTIONNAIRE

Please Check all applicable boxes

APPLICATION FOR:

Staff is available to assist you with determining which applications are necessary

- ☐ General Plan Amendment
- ☐ Rezone
- ☒ Use Permit
- ☐ Variance
- ☐ Historic Site Permit
- ☐ Subdivision Map
- ☐ Parcel Map
- ☐ Exception
- ☐ Williamson Act Cancellation
- ☐ Other _____

PLANNING STAFF USE ONLY:

Application No(s): UP PLN2018-
Date: 4/24/2018
S 31 T 5 R 10
GP Designation: AG
Zoning: A-2-40
Fee: $3,383
Receipt No.
Received By: KCO 4/24/2018
Notes: Previous UPPLN2014-0028

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 all necessary corrals, milking facilities, waste storage structures, and utilities in place. The operation currently houses 3050 milk cows, 437 dry cows, 250 medium heifers and 250 small heifers. The application is to maintain the milk/dry cows as currently permitted and increase support stock by 1750 head. Proposed project would result in a proposed herd size of 3050 milk cows, 437 dry cows, 750 large heifers 1000 med. heifers and 500 small heifers. Increase in herd size will result in 1 additional fed delivery per day. Milk delivery and employee trips will be unaffected. All proposed improvements would be constructed within the existing dairy footprint.

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** 044 **Page** 040 **Parcel** 041

Additional parcel numbers: 044-039-001

Project Site Address or Physical Location: 3303 So. Washington Rd. Turlock, Ca. 95380

Property Area: Acres: 60+/- (facility) 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: A-2-40

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: Dairy facility, cropland and rural residences

North: Feedlot, cropland and rural residences

South: Cropland and rural residences

WILLIAMSON ACT CONTRACT:

Yes ☒ **No** ☐

Is the property currently under a Williamson Act Contract?
Contract Number: _____

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.) _____

_____

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: 513271 Sq. Ft. Landscaped Area: 4800+/- Sq. Ft.

Proposed Building Coverage: 176550 Sq. Ft. Paved Surface Area: 735721 Sq. Ft.

BUILDING CHARACTERISTICS:

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

(2) Freestall Barns - 74,900 Sq. ft. ea. (1) Freestall Barn 26,750 Sq. Ft.

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 2000 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: _____

(complete if applicable)	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 513,271 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): 8 (Minimum Shift): 6

Estimated number of daily customers/visitors on site at peak time: 2

Other occupants:

Estimated number of truck deliveries/loadings per day: 5

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 dairy area (i.e. corrals, ponds, feed storage, etc.) = 2,656,832 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)

Washington Road, Commons Road and Harding 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 all the necessary corrals, feed storage, waste containment, and utilities in place. The application is to increase the number of support stock by 1750 head which will require the construction of two (2) 107 X 700 freestall barns and one (1) 107 X 250 freestall barn at the southeast corner of the subject facility within the existing footprint of the dairy.

Couco Creek Dairy, Inc. (Machado)
2014 UP vs. 2018 UP Truck Trips

Animal unit deliveries/loadings	
2014	**2018**
5/day	1/day

Commodity deliveries/loadings	
2014	**2018**
6-7/day	8/day

Milk truck deliveries/loadings	
2014	**2018**
5-6/day	5-6/day

Manure exportation	
2014	**2018**
1,070 trips/year	1,320 trips/year

Vet visits/trash service/fuel, seed & dairy-related chemical deliveries	
2014	**2018**
1/week	1/week

WASTE MANAGEMENT PLAN

Couco Creek Dairy Inc.
3303 S. Washington Road
Turlock, Ca. 95380

Prepared By:

FR Ag Services, Inc.

2857 Geer Road, Suite A
Turlock, California 95382

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

TRS Data and Coordinates:

5S	9E	31	Mt. Diablo	37° 44' 28.00" N	120° 29' 51.00" W
Township (T_)	Range (R_)	Section (S_)	Baseline meridian	Latitude (N)	Longitude (W)

Date facility was originally placed in operation: 06/01/1961

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

County Assessor Parcel Number(s) for dairy facility:

0044-0039-0001-0000 0044-0040-0041-0000

B. OPERATOR NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

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

C. LEGAL OWNER NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

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

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

Title: Professional Engineer

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

CONTACT NAME: Ramos, Joe Telephone no.: Landline (209) 250-2471 Cellular (209) 226-2375

Title: Technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

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:

3,487 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	3,050	3,050	20	1,400
Dry Cows	437	437	6	1,450
Bred Heifers (15-24 mo.)	750	750	24	900
Heifers (7-14 mo.)	1,000	1,000	24	600
Calves (4-6 mo.)	500	500	6	
Calves (0-3 mo.)	0	0	0	

Predominant milk cow breed: Holstein

Average milk production: 72 pounds per cow per day

Average number of milk cows per string sent to the milkbarn: 300 milk cows per string

Number of milkings per day: 2.0 milkings per day

Number of times milk tank is emptied/filled each day: 5.0 per day

Number of hours spent milking each day: 22.0 hours per day

B. MILKBARN EQUIPMENT AND FLOOR WASH

Bulk tank wash and sanitizing: 4.0 run cycles/wash

Bulk tank wash vat volume: 50 gallons/cycle

Bulk tank wash wastewater: 1,000.0 gallons/day

Pipeline wash and sanitizing: 3.0 run cycles/wash

Pipeline wash vat volume: 100 gallons/cycle

Pipeline wash wastewater: 600.0 gallons/day

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

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

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

Plate coolers volume: 54,617 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: 64,992 gallons/day

C. OTHER WATER USES

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

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Bred Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number of cows drinking from reusable water:	0	0	0	0	0	0
	of 3,050	*of 437*	*of 750*	*of 1,000*	*of 500*	*of 0*
Gallons per head per day:	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: [X] Yes [ ] No

Number of sprinklers in the holding pen: 175 sprinklers

Duration of each sprinkler cycle: 1.0 minutes

Number of sprinkler pen runs/milking: 3 cycles/milking

Flow rate for each sprinkler head: 5.0 gallons/minute

Total sprinkler pen wastewater volume: 53,392 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: 54,617 gallons/day

Recycled water reused: 63,392 gallons/day

Recycled water leaving system: 0 gallons/day

Reusable water balance: 0 gallons/day

Volume of milkbarn and equipment wastewater generated for storage period: 7,799,040 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)
Almond shells	100	20.0	85%	1,500
Facility generated bedding	366	40.0	50%	9,150
			Total:	10,650

B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 50 %

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

Multiple Mechanical separators with six solid separation basins.

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	9,111.61	1,093,393	68,159.59	8,179,151
Manure generated by the herd sent to pond(s):	6,156.92	738,830	46,056.93	5,526,832
Manure generated by the herd sent to dry lot(s):	1,677.54	201,305	12,548.89	1,505,867
Manure solids (herd) removed by separation:	618.26	74,192	4,624.94	554,993
Liquid component in separated solids not send to pond(s):	658.89	79,067	4,928.83	591,459
Imported and facility generated bedding sent to pond(s):	88.75	10,650	663.90	79,668
Total manure and bedding sent to pond(s):	6,245.67	749,480	46,720.83	5,606,500
Residual manure solids and bedding sent to pond(s) w/factor:	353.51	42,421	2,644.42	317,330
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:		129,030		965,213

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Turlock

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): 8.56 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
Barn 10 Feed Lane	18,960	1	0.97	0.50	Drains into pond(s).
Barn 2 Feed and Flush Lanes	15,400	1	0.97	0.50	Drains into pond(s).
Barn 3 Feed Lane	5,859	1	0.97	0.50	Drains into pond(s).
Center Control Lane	4,813	1	0.97	0.50	Drains into pond(s).
Concrete Feed Area	196,140	1	0.97	0.50	Drains into pond(s).
Existing Manure Stacking Pad	60,000	1	0.97	0.50	Drains into pond(s).
Existing Separator Pad	20,230	1	0.97	0.50	Drains into pond(s).

Heifer Feed and Flush Lanes	12,293	1	0.97	0.50	Drains into pond(s).
Milk Barn Parking and Side Yards	67,479	1	0.97	0.50	Drains into pond(s).
North Control Lane	1,829	1	0.97	0.50	Drains into pond(s).
Proposed Manure Stacking Pad	134,000	1	0.97	0.50	Drains into pond(s).
Proposed Separator Pad Extension	150,000	1	0.97	0.50	Drains into pond(s).
South Control Lane	1,295	1	0.97	0.50	Drains into pond(s).
South Feed Alley and Flush Lane	36,313	1	0.97	0.50	Drains into pond(s).
Sprinkler/Crowd Pens	5,110	1	0.97	0.50	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	729,721 sq. ft.
Total surface area:	729,721 sq. ft.
Runoff from normal storage period rainfall:	1,946,934 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	2,920,400 gallons/storage period
25 year/24 hour storm event runoff:	1,103,111 gallons/storage period
Total surface area runoff:	3,050,044 gallons/storage period
Total surface area runoff with 1.5 factor:	4,023,511 gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Barn 1	72,879	1	Wastewater pond
Barn 10	58,607	1	Wastewater pond
Barn 11	8,752	1	Wastewater pond
Barn 12	4,428	1	Wastewater pond
Barn 13	12,938	1	Wastewater pond
Barn 14	1,100	1	Wastewater pond
Barn 15	19,704	1	Wastewater pond
Barn 16	19,483	1	Wastewater pond
Barn 19	14,785	1	Wastewater pond
Barn 2	21,737	1	Wastewater pond
Barn 3	32,811	1	Wastewater pond
Barn 4	58,178	1	Wastewater pond
Barn 5	10,639	1	Wastewater pond
Barn 6	12,325	1	Wastewater pond
Barn 7	10,115	1	Wastewater pond
Barn 8	29,331	1	Wastewater pond
Barn 9	125,459	1	Wastewater pond

Proposed Barn 19	26,750	1 To Field
Proposed Barns 17 and 18	74,900	2 To Field

Surface area that does not run off into pond(s):	176,550 sq. ft.
Surface area that runs off into pond(s):	513,271 sq. ft.
Total surface area:	689,821 sq. ft.
Runoff from normal storage period rainfall:	2,738,867 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	4,108,301 gallons/storage period
25 year/24 hour storm event runoff:	799,903 gallons/storage period
Total surface area runoff:	3,538,770 gallons/storage period
Total surface area runoff with 1.5 factor:	4,908,204 gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24 Storm Coefficient	Storage Period Coefficient	Runoff Destination
Earthen Areas subtracting Roof and Concrete	820,475	1	0.35	0.20	Drains into pond(s).
Earthen Areas subtracting Roof and Concrete	826,475	1	0.35	0.20	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	1,646,950 sq. ft.
Total surface area:	1,646,950 sq. ft.
Runoff from normal storage period rainfall:	1,757,659 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	2,636,489 gallons/storage period
25 year/24 hour storm event runoff:	898,336 gallons/storage period
Total surface area runoff:	2,655,996 gallons/storage period
Total surface area runoff with 1.5 factor:	3,534,825 gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Pond 1

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	923 ft.	Earthen Depth (ED):	17 ft.
Earthen Width (EW):	193 ft.	Side Slope (S):	1.8 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations

Liquid Length (LL):	916 ft.	Storage Volume Adjusted for Dead Storage Loss:	1,886,408 cu. ft.
Liquid Width (LW):	186 ft.		
Pond Surface Area:	178,139 sq. ft.	Pond Marker Elevation:	14.4 ft.
Storage Volume:	2,120,767 cu. ft.	Evaporation Volume:	908,197 gals/period
		Adjusted Surface Area:	168,916 sq. ft.

POND OR BASIN DESCRIPTION: Pond 2

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,452 ft.	Earthen Depth (ED):	14 ft.
Earthen Width (EW):	194 ft.	Side Slope (S):	1.4 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.

Calculations

Liquid Length (LL):	1,446 ft.	Storage Volume Adjusted for Dead Storage Loss:	2,498,759 cu. ft.
Liquid Width (LW):	188 ft.		
Pond Surface Area:	281,688 sq. ft.	Pond Marker Elevation:	11.4 ft.
Storage Volume:	2,944,961 cu. ft.	Evaporation Volume:	1,457,539 gals/period
		Adjusted Surface Area:	271,088 sq. ft.

POND OR BASIN DESCRIPTION: SSB 3

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	224 ft.	Earthen Depth (ED):	3 ft.
Earthen Width (EW):	68 ft.	Side Slope (S):	1.7 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	1.9 ft.

Calculations

Liquid Length (LL):	221 ft.	Storage Volume Adjusted for Dead Storage Loss:	1,420 cu. ft.
Liquid Width (LW):	65 ft.		
Pond Surface Area:	15,232 sq. ft.	Pond Marker Elevation:	1.3 ft.
Storage Volume:	26,593 cu. ft.	Evaporation Volume:	74,962 gals/period
		Adjusted Surface Area:	13,942 sq. ft.

POND OR BASIN DESCRIPTION: SSB 4

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	97 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	63 ft.	Side Slope (S):	1.6 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	94 ft.	Storage Volume Adjusted for Dead Storage Loss:	558 cu. ft.
Liquid Width (LW):	60 ft.		
Pond Surface Area:	6,111 sq. ft.	Pond Marker Elevation:	2.3 ft.
Storage Volume:	14,708 cu. ft.	Evaporation Volume:	29,304 gals/period
		Adjusted Surface Area:	5,450 sq. ft.

POND OR BASIN DESCRIPTION: SSB 5

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	97 ft.	Earthen Depth (ED):	2 ft.
Earthen Width (EW):	63 ft.	Side Slope (S):	1.9 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	0.9 ft.

Calculations

Liquid Length (LL):	93 ft.	Storage Volume Adjusted for Dead Storage Loss:	549 cu. ft.
Liquid Width (LW):	59 ft.		
Pond Surface Area:	6,111 sq. ft.	Pond Marker Elevation:	0.3 ft.
Storage Volume:	5,233 cu. ft.	Evaporation Volume:	28,643 gals/period
		Adjusted Surface Area:	5,327 sq. ft.

POND OR BASIN DESCRIPTION: SSB 6

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,108 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	100 ft.	Side Slope (S):	2.5 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	1,103 ft.	Storage Volume Adjusted for Dead Storage Loss:	10,449 cu. ft.
Liquid Width (LW):	95 ft.		
Pond Surface Area:	110,800 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	287,625 cu. ft.	Evaporation Volume:	553,223 gals/period
		Adjusted Surface Area:	102,894 sq. ft.

POND OR BASIN DESCRIPTION: SSB 7

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,108 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	100 ft.	Side Slope (S):	2.5 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

Liquid Length (LL):	1,103 ft.	Storage Volume Adjusted for Dead Storage Loss:	10,449 cu. ft.
Liquid Width (LW):	95 ft.		
Pond Surface Area:	110,800 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	287,625 cu. ft.	Evaporation Volume:	553,223 gals/period
		Adjusted Surface Area:	102,894 sq. ft.

POND OR BASIN DESCRIPTION: SSB 8

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions

Earthen Length (EL):	1,103 ft.	Earthen Depth (ED):	4 ft.
Earthen Width (EW):	229 ft.	Side Slope (S):	2.3 ft. (h:1v)
Free Board (FB):	1 ft.	Dead Storage Loss (DS):	2.9 ft.

Calculations

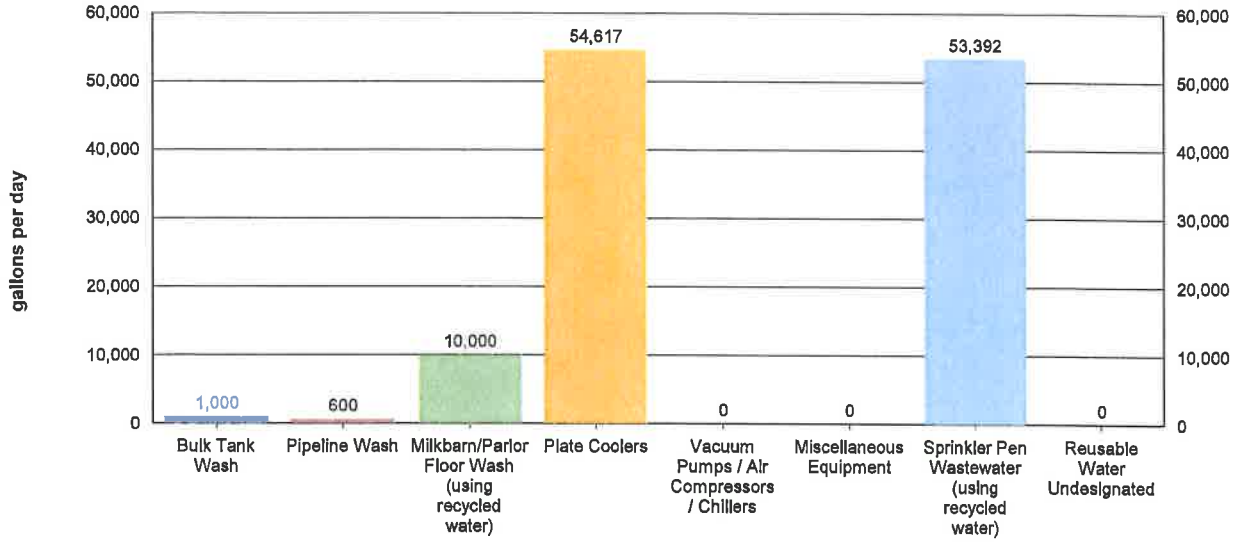
Liquid Length (LL):	1,098 ft.	Storage Volume Adjusted for Dead Storage Loss:	24,618 cu. ft.
Liquid Width (LW):	224 ft.		
Pond Surface Area:	252,587 sq. ft.	Pond Marker Elevation:	2.4 ft.
Storage Volume:	712,251 cu. ft.	Evaporation Volume:	1,315,224 gals/period
		Adjusted Surface Area:	244,619 sq. ft.

Potential storage losses (due to dead storage):	1,966,553.0 cubic feet - or -	14,710,838.0 gallons
Liquid storage surface area:	924,086 sq. ft.	
Rainfall onto retention pond(s):	5,130,493 gallons/storage period	
Rainfall runoff into retention pond(s):	6,443,460 gallons/storage period	
Normal rainfall onto retention pond(s) with 1.5 factor:	7,695,740 gallons/storage period	
Normal rainfall runoff into retention pond(s) with 1.5 factor:	9,665,190 gallons/storage period	
Storage period evaporation (default):	11.50 inches/storage period	
Storage period evaporation (user-override):	inches/storage period	
Storage period evaporation volume:	4,920,315 gallons/storage period	
Manure and bedding sent to pond(s):	5,606,500 gallons/storage period	

Milkbarn water sent to pond(s):	7,799,040	gallons/storage period
Fresh flush water for storage period:	0	gallons/storage period

CHARTS

A. MILKBARN WASTEWATER SENT TO POND(S)

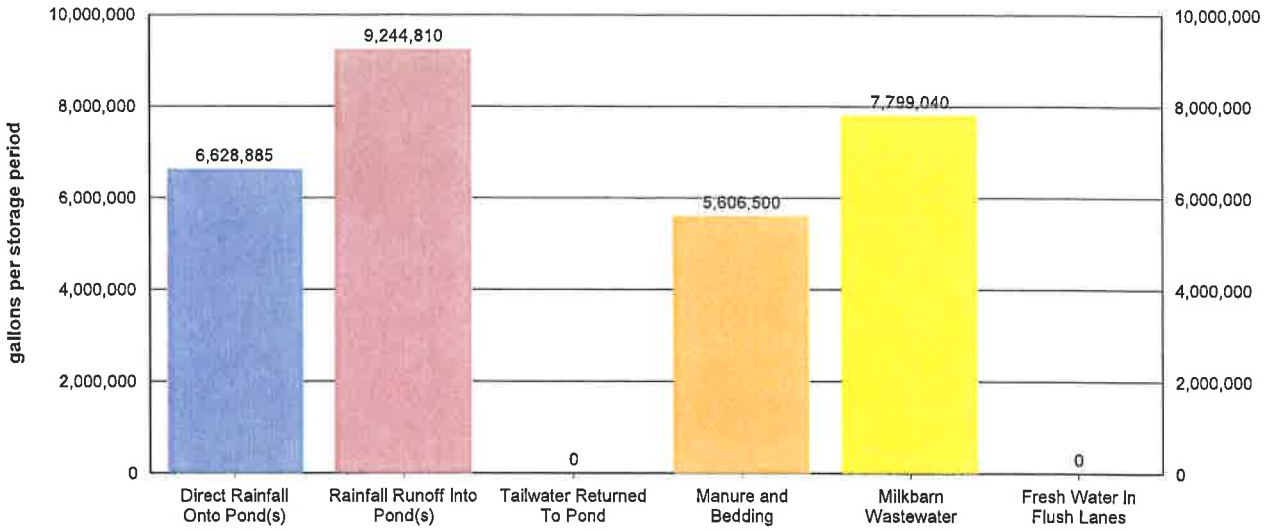


Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily: 64,992 gallons/day

Total milkbarn wastewater generated per period: 7,799,040 gallons/storage period

B. PROCESS WASTEWATER (NORMAL PRECIPITATION)

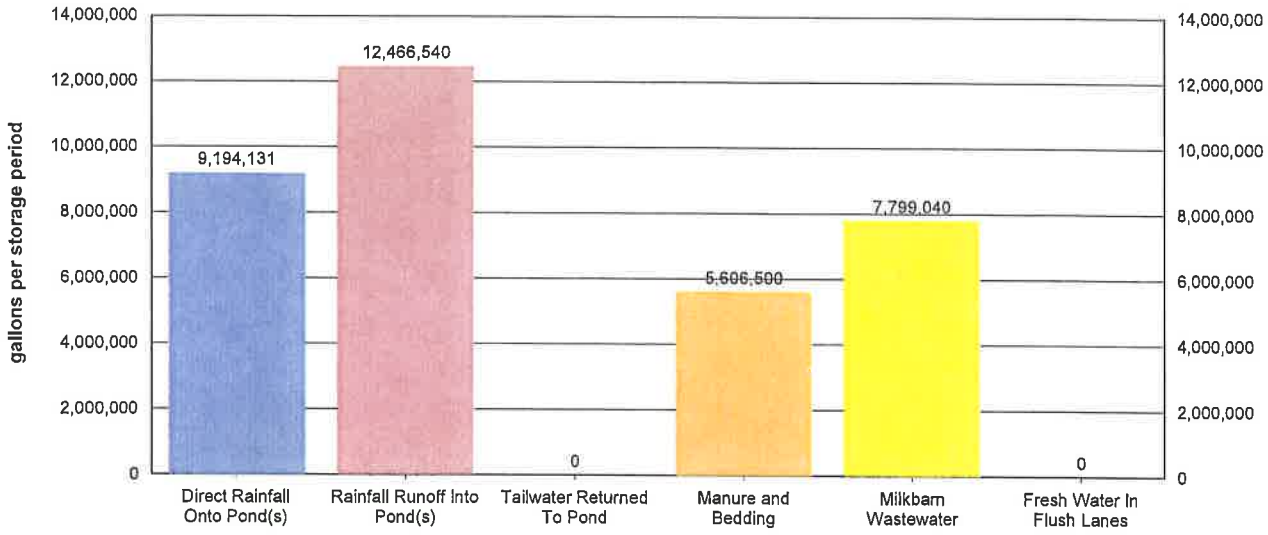


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	243,994	gallons/day
Total process wastewater generated per period:	29,279,235	gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315	gallons/storage period
Total storage capacity required:	24,358,920	gallons
	3,256,314	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	33,162,714	gallons
	4,433,210	cu. ft.

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

C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)

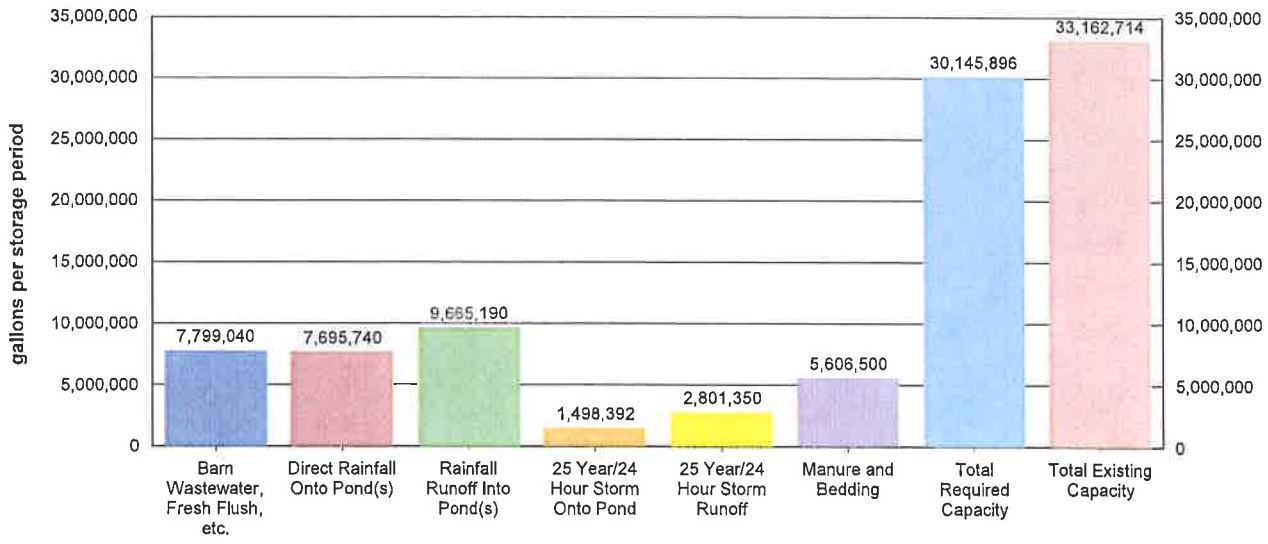


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	292,218	gallons/day
Total process wastewater generated per period:	35,066,211	gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315	gallons/storage period
Total storage capacity required:	30,145,896	gallons
	4,029,920	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	33,162,714	gallons
	4,433,210	cu. ft.

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

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



Values shown in chart are approximate values for storage period.

Storage period:	120 days
Barn wastewater, fresh flush water, and tailwater:	7,799,040 gallons/storage period
Manure and bedding sent to pond:	5,606,500 gallons/storage period
Precipitation onto pond:	7,695,740 gallons/storage period
Precipitation runoff:	9,665,190 gallons/storage period
25 year/24 hour storm onto pond:	1,498,392 gallons/storage period
25 year/24 hour storm runoff:	2,801,350 gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	317,330 gallons/storage period
Total process wastewater removed due to evaporation:	4,920,315 gallons/storage period
Total required capacity:	30,145,896 gallons/storage period
Total existing capacity:	33,162,714 gallons/storage period
Existing capacity meets estimated storage needs:	[X] Yes [ ] No

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: Pond 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 April 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 7.0 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 can be transferred to SSB's 6-8 for drying or pumped out directly 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: Pond 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 2.0 feet above the pond invert beginning in April 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 4.0 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 can be transferred to SSB's 6-8 for drying or pumped out directly 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: SSB 4

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 April 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 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 6

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 April 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 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 7

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 April 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 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 8

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 April 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 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 3

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 April 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 2.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

OPERATIONS AND MAINTENANCE PLAN FOR POND: SSB 5

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 April of each year.

Sludge accumulation will be measured annually.

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

SSB is dewatered and solids are allowed to dry. Manure is then typically removed from the basin using a front end loader.

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:

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

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.

Buildings with rooftop rainfall collection systems	Quantity	Surface Area (sq. ft.)
Barn 1	1	72,879
Barn 10	1	58,607
Barn 11	1	8,752
Barn 12	1	4,428
Barn 13	1	12,938
Barn 14	1	1,100
Barn 15	1	19,704
Barn 16	1	19,483
Barn 19	1	14,785
Barn 2	1	21,737
Barn 3	1	32,811
Barn 4	1	58,178
Barn 5	1	10,639
Barn 6	1	12,325
Barn 7	1	10,115

Barn 8	1	29,331
Barn 9	1	125,459
Proposed Barn 19	1	26,750
Proposed Barns 17 and 18	2	149,800

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 October

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 runon and 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.

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 runon 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, 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: 1st 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

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 runon 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: 1st 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: Kows R Us

Rendering company or landfill telephone number: (559) 668-3805

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 [X] 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

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 Name	Disposal Company Phone	Collection Frequency
G.R. 100 chlorinated detergent	165	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed
G.R. 200 CIP Acid Cleaner	65	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed
HASA 12.5% Hypo Chloride	30	gallons	month	Milk Barn	Returned to supplier	TDR	(209) 667-6455	as needed

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: Figures 2A & 2B

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: NA

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: Figures 2A, 2B & 3

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 3a, 3b & 4

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: Figure 4

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 2A

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: 06099C0800E

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
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
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: 2018.04.20 08:26:20 -07'00'

4/20/2018

SIGNATURE OF CIVIL ENGINEER — DATE

Manuel Sousa
PRINT OR TYPE NAME

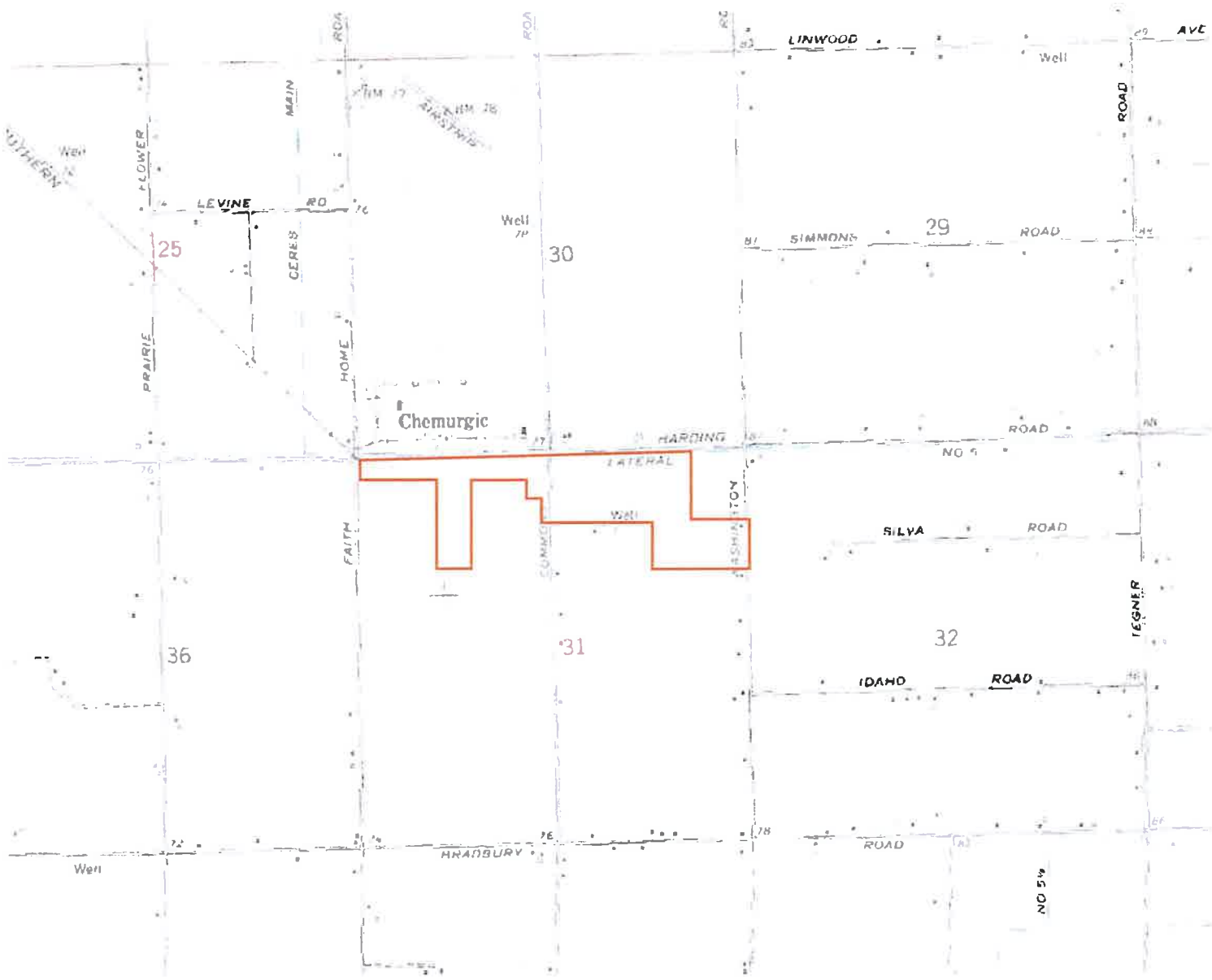
P.O. Box 1613; Oakdale, CA 95361
MAILING ADDRESS

(209) 238-3151
PHONE NUMBER

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.

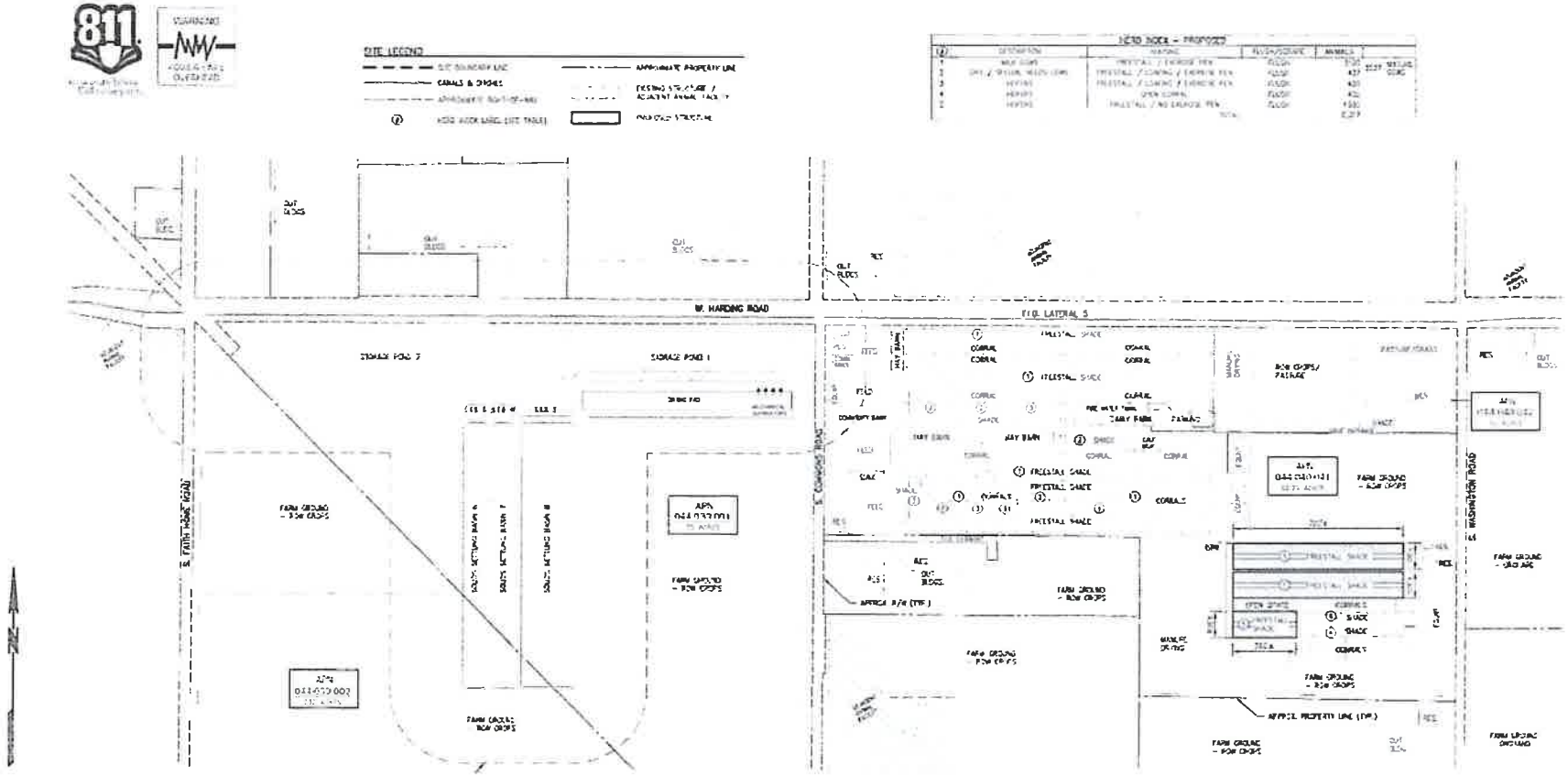
SIGNATURE OF OWNER	SIGNATURE OF OPERATOR
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4-23-2018	
DATE	DATE



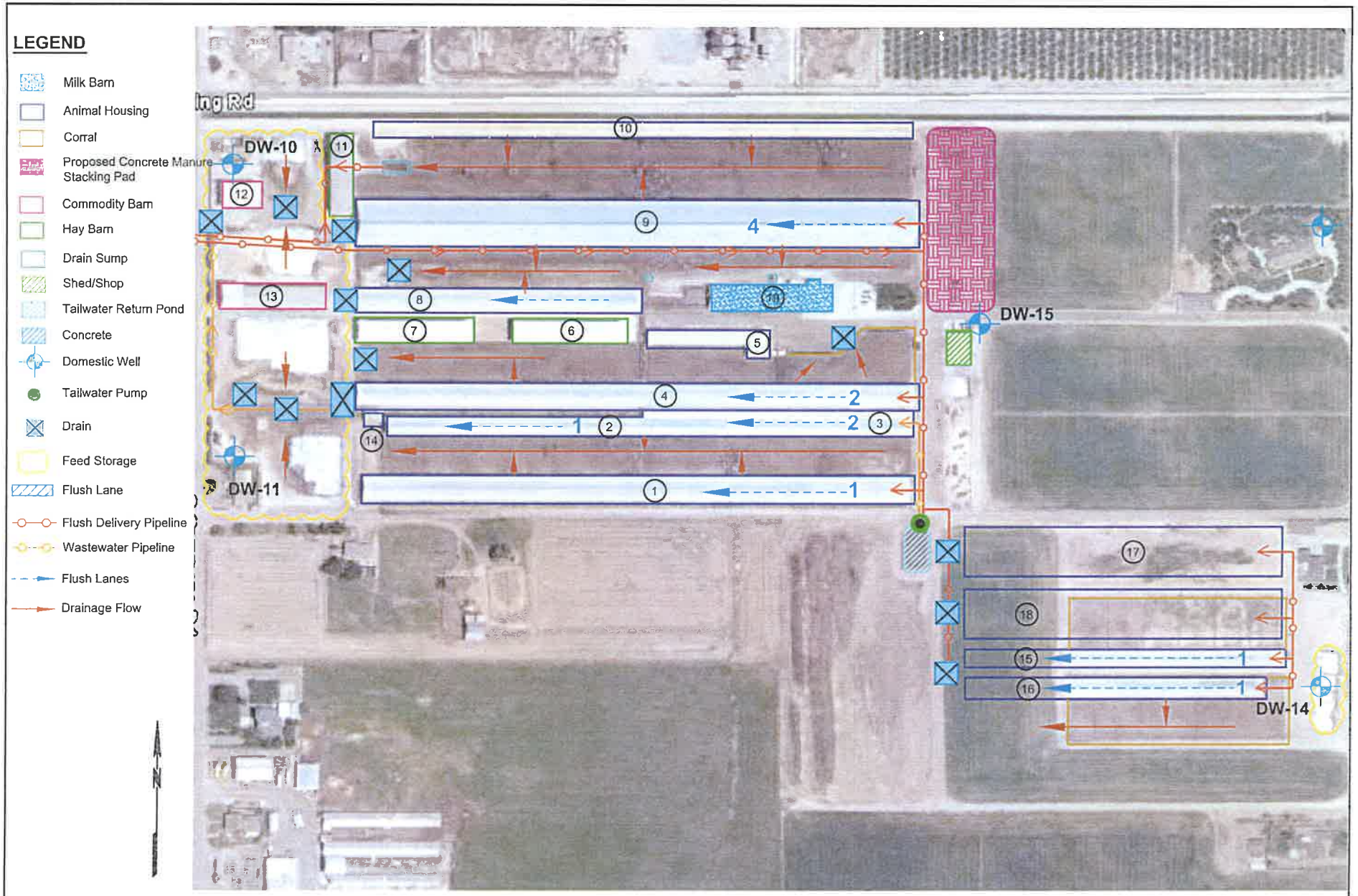
LEGEND

Facility Boundary

FR Ag Services, Inc.	SCALE: 0 4000 8000 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 1** TOPOGRAPHIC MAP
	PROJECT NO. FRA-00	DATE: 5/1/14	DRAWN BY: SB	APP. BY: JR	COUCO Creek topomap

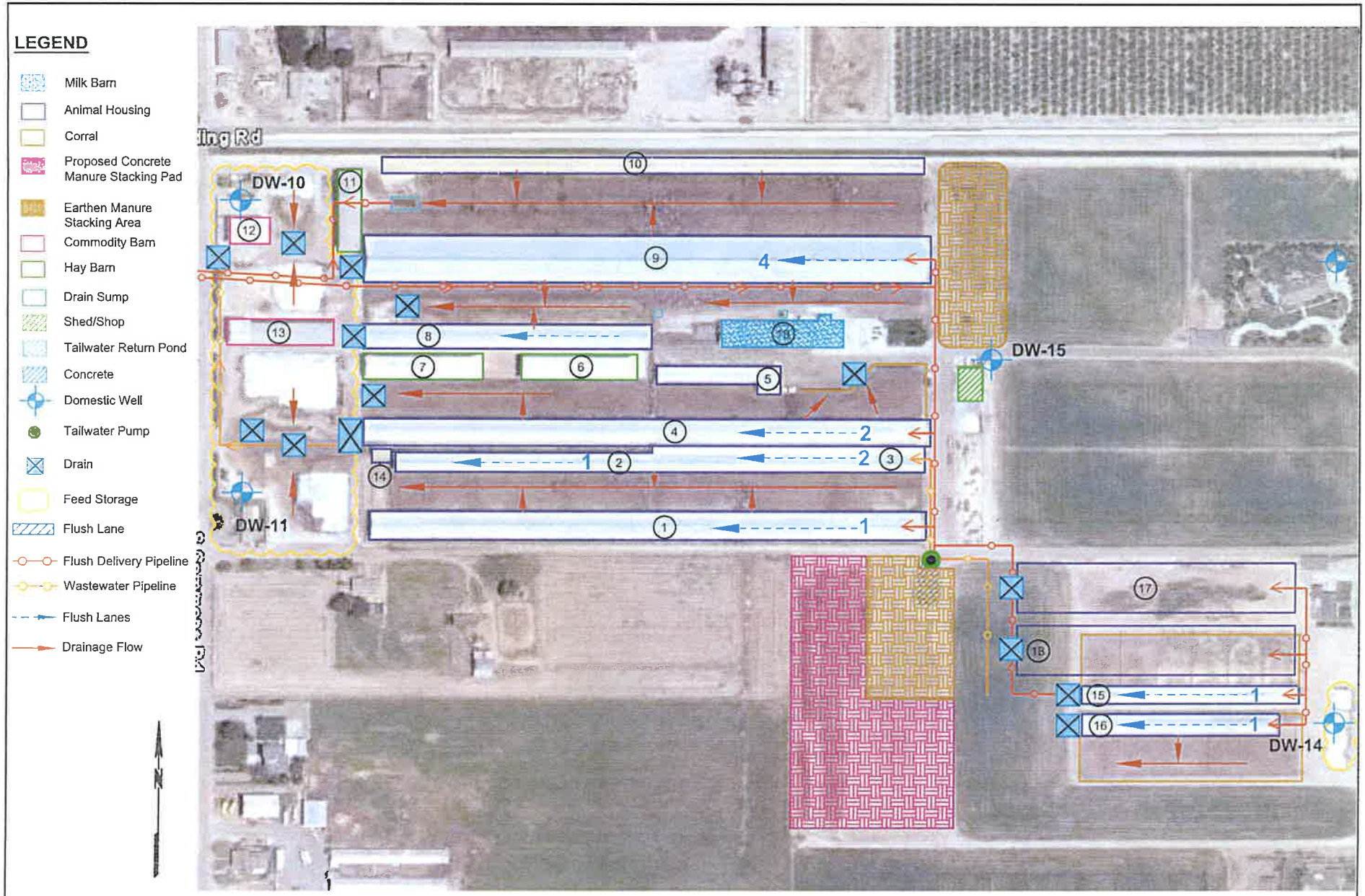


FR Ag Services, Inc.	SCALE: 0 — 700 — 1500 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA	**FIGURE 2** PROPOSED SITE PLAN	
PROJECT NO. FRA-00	DATE: 4/12/18	DRAWN BY: SB	APP. BY: JR	COUCO fields and Facility



FR Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA	**FIGURE 3A** DAIRY FACILITY	
	PROJECT NO. FRA-00	DATE: 3/31/18	DRAWN BY: SB	APP. BY: JR

COUCO fields and Facility



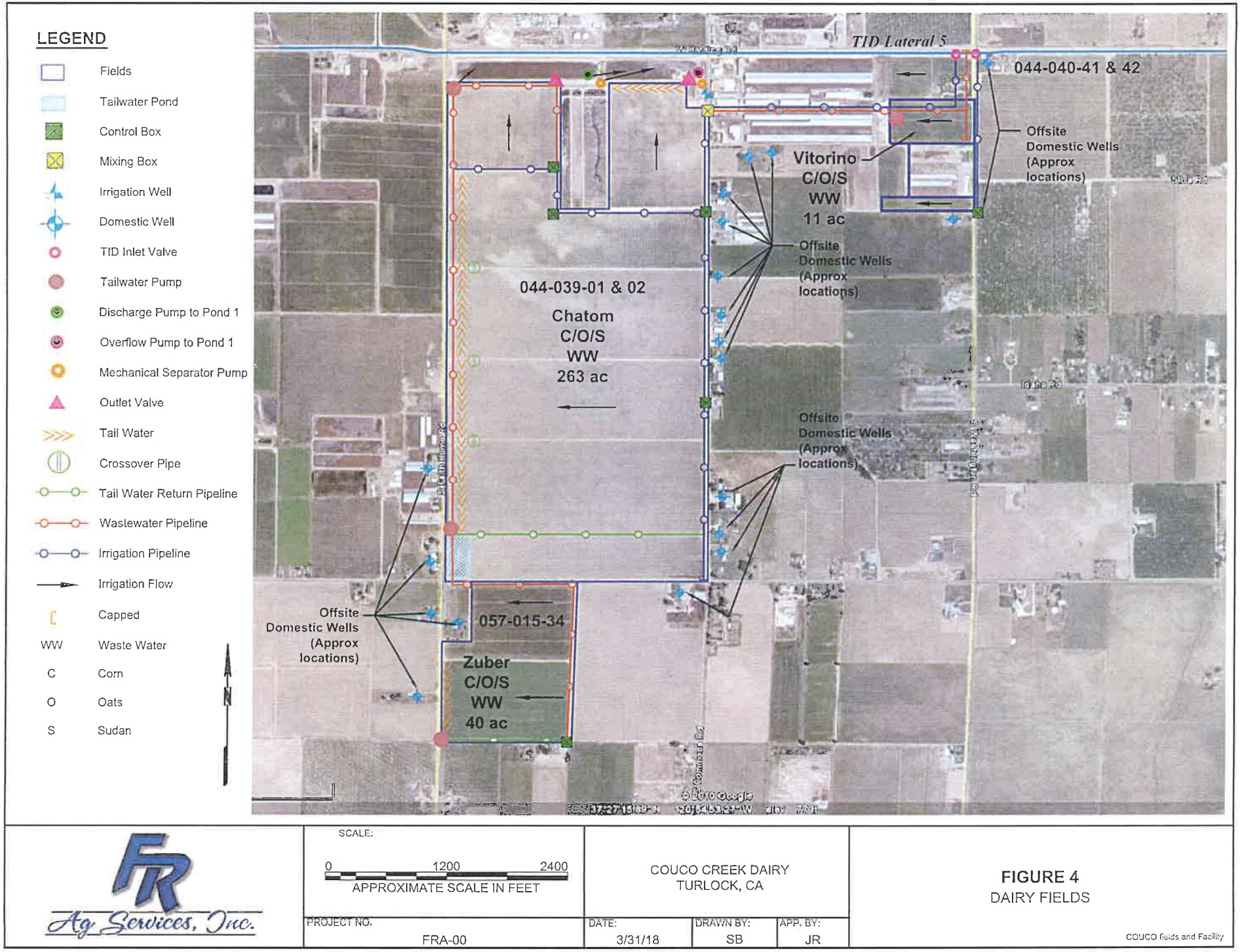
Ag Services, Inc.

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	3/31/18	SB	JR

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 3B
DAIRY FACILITY

COUCO fields and Facility



Ag Services, Inc.

SCALE:
0 1200 2400
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	3/31/18	SB	JR

COUCO fields and Facility

NUTRIENT MANAGEMENT PLAN

Couco Creek Dairy Inc.
3303 S. Washington Road
Turlock, Ca. 95380

Prepared By:

Ag Services, Inc.

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: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 06/01/1961

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

County Assessor Parcel Number(s) for dairy facility:

0044-0039-0001-0000 0044-0040-0041-0000

B. OPERATOR NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

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

C. LEGAL OWNER NAME: Machado, Tony Telephone no.: Landline (209) 761-9322 Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

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

D. CONTACT NAME: Ramos, Joe Telephone no.: Landline (209) 250-2471 Cellular (209) 226-2375

Title: Technical Service Provider

2857 Geer RD, STE A	Turlock	CA	95382
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

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:

3,487 *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	3,050	437	750	1,000	500	0
Maximum count	3,050	437	750	1,000	500	0
Avg live weight (lbs)	1,400	1,450	900	600		
Daily hours on flush	20	6	24	24	6	0

Predominant milk cow breed: Holstein

Average milk production: 72 *pounds per cow per day*

B. IRRIGATION SOURCES

Irrigation Source Name	Type	Nitrogen (mg/L)	Phosphorus (mg/L)	Potassium (mg/L)	Discharge Rate
Chatom Irrigation Well	Groundwater (well)	0.50			2,000 *gpm*
Chatom Irrigation Well	Groundwater (well)	3.50			2,000 *gpm*
TID Canal	Surface water (canal, river)	0.50			15 *cfs*
TID Canal	Surface water (canal, river)	4.15			15 *cfs*

C. NUTRIENT IMPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
11-5-0	32.10 *ton*	0.1%	11.000%	5.000%	0.000%
30-0-0	16.05 *ton*	0.1%	30.000%	0.000%	0.000%

Total nitrogen imported: 16,675.31 *lbs*

Total phosphorus imported: 1,401.37 *lbs*

Total potassium imported: 0.00 *lbs*

D. NUTRIENT EXPORTS

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
Fall Manure	9,000.00 *ton*	25.0%	2.000%	1.000%	2.000%
Spring Manure	7,500.00 *ton*	50.0%	1.500%	0.750%	1.500%
Spring Manure	7,500.00 *ton*	50.0%	1.500%	0.750%	1.500%

Nutrient Type/Name	Quantity	Moisture	Nitrogen	Phosphorus (as P2O5)	Potassium (as K2O)
Fall Manure	8,700.00 *ton*	25.0%	2.000%	1.000%	2.000%

Total nitrogen exported: 756,000.00 *lbs*

Total phosphorus exported: 165,186.00 *lbs*

Total potassium exported: 627,480.00 *lbs*

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 adsorbtion/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*

APPLICATION AREA

A. ASSESSOR PARCEL NUMBER: 0044-0039-0001-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0044-0039-0002-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0044-0040-0041-0000
Legal owner of parcel: Owned by Dairy

ASSESSOR PARCEL NUMBER: 0057-0015-0034-0000
Legal owner of parcel: Owned by Dairy

B. FIELD NAME: Chatom

Cropable acres: 263

Predominant soil type: Loamy sand

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

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] 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	Early November	Middle April	263
Corn, silage	Early May	Late August	263
Sudangrass, silage	Late August	Late October	263

FIELD NAME: Vitorino

Cropable acres: 11

Predominant soil type: Loamy sand

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

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

Can process wastewater be delivered to the field at agronomic rates and times? [X] 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	Early November	Middle April	11
Corn, silage	Early May	Late August	11
Sudangrass, silage	Late August	Late October	11

FIELD NAME: Zuber

Cropable acres: 40

Predominant soil type: Loamy sand

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

Can fresh water for irrigation purposes be delived to the field year round? [X] Yes [ ] No

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

Tailwater management method: Returned to top of field

Crops grown and rotation:

Crop Type	Plant Date	Harvest Date	Acres Planted
Oats, silage-soft dough	Early November	Middle April	40
Corn, silage	Early May	Late August	40

Sudangrass, silage	Late August	Late September	40

C. LAND APPLICATION AREA FIELDS AND PARCELS

Field name	Cropable acres	Total harvests	Parcel number
Chatom	263	3	0044-0039-00010000
			0044-0039-00020000
Vitorino	11	3	0044-0040-00410000
Zuber	40	3	0057-0015-00340000
Land application area totals	577	12	

NUTRIENT BUDGET

A. NUTRIENT BUDGET FOR CROP: Chatom / 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	80.0	11.0	95.0	80.6
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (no fertilizer)	1	0.0	0.0	0.0	0.6
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	1	106.0	17.0	98.0	108.2
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	2.2	0.0	0.0	168.0
	2.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	3.5	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	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	194.1	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	54.1	5.6	76.8
Applied to removal ratio	1.39	1.25	1.66

Fresh water applied: 1.14 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Chatom / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting	1	22.0	10.0	0.0	22.0
Nutrient source: Commercial fertilizer		100%	100%	0%	
Application method: Sidedress					
Pre-irrigation prior to planting (with fertilizer)	1	80.0	11.0	95.0	80.7
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	112.0
	0.7	0.0	0.0	

In season irrigation (no fertilizer)	3	0.0	0.0	0.0	1.8
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	3	40.0	5.5	47.5	121.8
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	1	30.0	0.0	0.0	30.6
Nutrient source: Commercial fertilizer		100%	0%	0%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	261.7	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	69.7	1.5	79.1

Applied to removal ratio	1.36	1.04	1.50

Fresh water applied: 3.70 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Chatom / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer)	1	0.0	0.0	0.0	0.6
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	2	50.0	7.5	60.0	101.2
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	96.0
	0.6	0.0	0.0	

	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	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	106.5	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	24.0	2.3	30.0
Applied to removal ratio	1.29	1.18	1.33

Fresh water applied: 1.36 *feet* Total harvests: 1

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

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Vitorino / 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	80.0	11.0	95.0	81.2
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	1.2	0.0	0.0	8.0
	1.2	0.0	0.0	

In season irrigation (no fertilizer)	1	0.0	0.0	0.0	0.9
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.9	0.0	0.0	6.0
	0.9	0.0	0.0	

In season irrigation (with fertilizer)	1	106.0	17.0	98.0	111.7
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	5.7	0.0	0.0	18.0
	5.7	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	7.9	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	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	198.5	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	58.5	5.6	76.8
Applied to removal ratio	1.42	1.25	1.66

Fresh water applied: 2.18 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Vitorino / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Vitorino / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting	1	22.0	10.0	0.0	22.0
Nutrient source: Commercial fertilizer		100%	100%	0%	
Application method: Sidedress					
Pre-irrigation prior to planting (with fertilizer)	1	80.0	11.0	95.0	81.5
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	1.5	0.0	0.0	10.0
	1.5	0.0	0.0	

In season irrigation (no fertilizer)	3	0.0	0.0	0.0	2.8
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.9	0.0	0.0	6.0
	0.9	0.0	0.0	

In season irrigation (with fertilizer)	3	40.0	5.5	47.5	122.8
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.9	0.0	0.0	6.0
	0.9	0.0	0.0	

In season irrigation (with fertilizer)	1	30.0	0.0	0.0	30.9
Nutrient source: Commercial fertilizer		100%	0%	0%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.9	0.0	0.0	6.0
	0.9	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	8.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	264.6	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	72.6	1.5	79.1

Applied to removal ratio	1.38	1.04	1.50

Fresh water applied: 5.86 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Vitorino / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer)	1	0.0	0.0	0.0	1.2
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	1.2	0.0	0.0	8.0
	1.2	0.0	0.0	

In season irrigation (with fertilizer)	2	50.0	7.5	60.0	102.5
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	1.2	0.0	0.0	8.0
	1.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	3.7	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	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	108.3	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	25.8	2.3	30.0
Applied to removal ratio	1.31	1.18	1.33

Fresh water applied: 2.70 *feet* Total harvests: 1

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

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Zuber / 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	80.0	11.0	95.0	80.7
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

In season irrigation (no fertilizer)	1	0.0	0.0	0.0	0.5
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.5	0.0	0.0	12.0
	0.5	0.0	0.0	

In season irrigation (with fertilizer)	1	106.0	17.0	98.0	109.2
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
Chatom Irrigation Well	3.2	0.0	0.0	36.0
	3.2	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	4.3	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	186.0	28.0	193.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	195.0	28.0	193.0
Potential crop nutrient removal	140.0	22.4	116.2
Nutrient balance	55.0	5.6	76.8
Applied to removal ratio	1.39	1.25	1.66

Fresh water applied: 1.20 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Zuber / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)

NUTRIENT BUDGET FOR CROP (CONTINUED): Zuber / Corn, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
Starter fertilizer at planting	1	22.0	10.0	0.0	22.0
Nutrient source: Commercial fertilizer		100%	100%	0%	
Application method: Sidedress					
Pre-irrigation prior to planting (with fertilizer)	1	80.0	11.0	95.0	80.8
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.8	0.0	0.0	20.0
	0.8	0.0	0.0	

In season irrigation (no fertilizer)	3	0.0	0.0	0.0	1.8
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	3	40.0	5.5	47.5	121.8
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

In season irrigation (with fertilizer)	1	30.0	0.0	0.0	30.6
Nutrient source: Commercial fertilizer		100%	0%	0%	
Application method: Pipeline					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.6	0.0	0.0	14.0
	0.6	0.0	0.0	

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)
Irrigation sources	5.0	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	52.0	10.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	200.0	27.5	237.5
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	261.6	37.5	237.5
Potential crop nutrient removal	192.0	36.0	158.4
Nutrient balance	69.6	1.5	79.1

Applied to removal ratio	1.36	1.04	1.50

Fresh water applied: 3.66 *feet* Total harvests: 1

NUTRIENT BUDGET FOR CROP: Zuber / Sudangrass, silage

Activity / Event	# of Events	N (lbs/acre) % avail.	P (lbs/acre) % avail.	K (lbs/acre) % avail.	Total N (lbs/acre)
In season irrigation (no fertilizer)	1	0.0	0.0	0.0	0.7
Nutrient source: Water only		0%	0%	0%	
Application method: Surface					

Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

In season irrigation (with fertilizer)	2	50.0	7.5	60.0	101.3
Nutrient source: Retention pond (lagoon)		66%	80%	80%	
Application method: Pipeline					

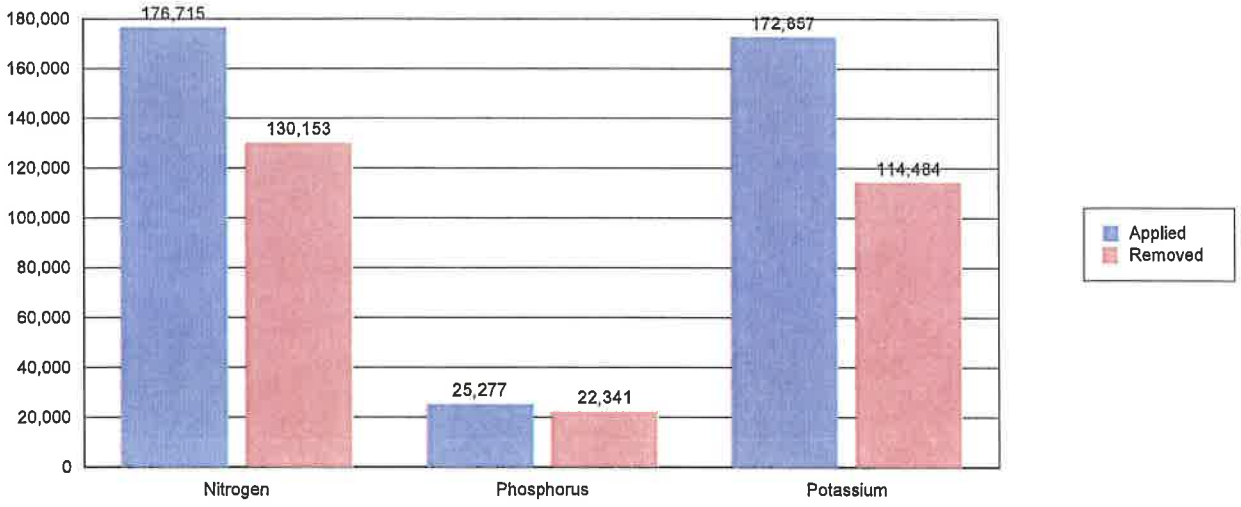
Irrigation Source	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Runtime (hrs)
TID Canal	0.7	0.0	0.0	16.0
	0.7	0.0	0.0	

	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	100.0	15.0	120.0
Other	0.0	0.0	0.0
Atmospheric deposition	4.7		
Nutrients applied	106.7	15.0	120.0
Potential crop nutrient removal	82.5	12.8	90.0
Nutrient balance	24.2	2.3	30.0
Applied to removal ratio	1.29	1.18	1.33

Fresh water applied: 1.49 *feet* Total harvests: 1

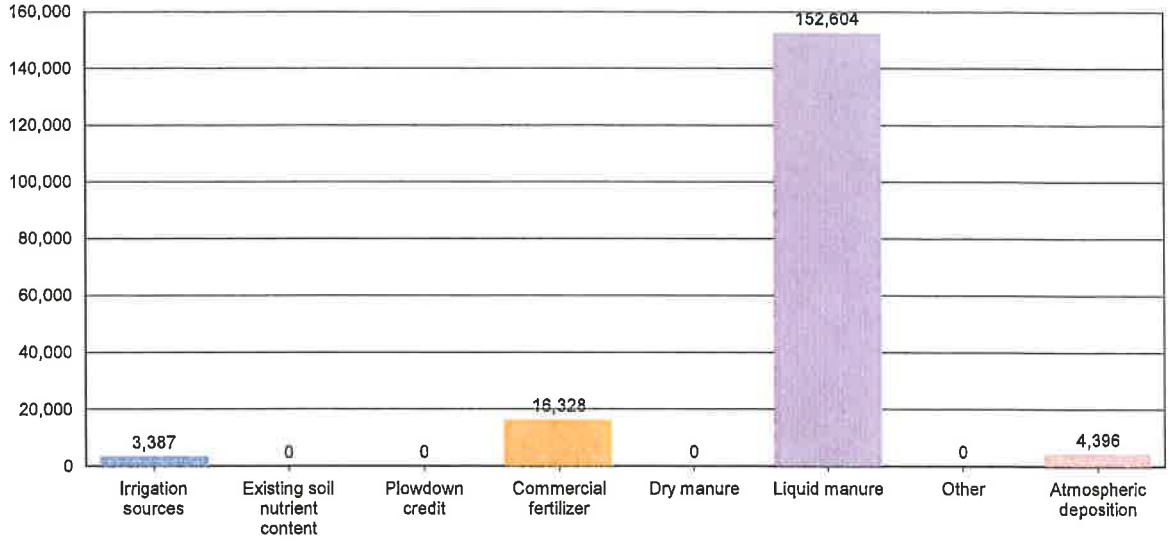
NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

A. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL POTENTIAL



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	3,387.2	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16,328.0	3,140.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	152,604.0	22,137.0	172,857.0
Other	0.0	0.0	0.0
Atmospheric deposition	4,396.0		
Nutrients applied to all crops	176,715.2	25,277.0	172,857.0
Potential crop nutrient removal	130,153.0	22,341.1	114,484.4
Nutrient balance	46,562.2	2,935.9	58,372.6
Applied to removal ratio	1.36	1.13	1.51

B. POUNDS OF NITROGEN APPLIED BY NUTRIENT SOURCE



	Total N (lbs)	Total P (lbs)	Total K (lbs)
Irrigation sources	3,387.2	0.0	0.0
Existing soil nutrient content	0.0	0.0	0.0
Plowdown credit	0.0	0.0	0.0
Commercial fertilizer	16,328.0	3,140.0	0.0
Dry manure	0.0	0.0	0.0
Liquid manure	152,604.0	22,137.0	172,857.0
Other	0.0	0.0	0.0
Atmospheric deposition	4,396.0		
Nutrients applied to all crops	176,715.2	25,277.0	172,857.0
Potential crop nutrient removal	130,153.0	22,341.1	114,484.4
Nutrient balance	46,562.2	2,935.9	58,372.6
Applied to removal ratio	1.36	1.13	1.51

NUTRIENT BALANCE

A. WHOLE FARM BALANCE

	Total N (lbs)	Total P (lbs)	Total K (lbs)
Nutrients in storage from herd*			
Daily gross	3,571.6	590.0	1,611.3
Annual gross	1,303,647.0	215,332.6	588,110.8
Net to pond storage after ammonia losses (30% loss applied)	736,837.7	176,933.1	490,092.4
Net to drylot storage after ammonia losses (30% loss applied)	175,715.3	38,399.5	312,319.1
Net in storage (30% loss applied)	912,552.9	215,332.6	802,411.5
Irrigation sources	3,387.2	0.0	0.0
Atmospheric deposition	4,396.0		
Imports	16,675.3	1,401.4	0.0
Exports	756,000.0	165,186.0	627,480.0
Potential crop nutrient removal	130,153.0	22,341.1	114,484.4
Nutrient balance	50,858.4	29,206.8	60,447.1
Nutrient balance ratio	1.39	2.31	1.53

* Potassium excretion from milk cows and dry cows only.

SAMPLING AND ANALYSIS PLAN

A. MANURE SAMPLING AND ANALYSIS PLAN

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

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	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.	Separator solids Corral solids Settling basin 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.	Separator Solids Corral solids Settling basin solids	None required	General minerals, including: calcium, magnesium, sodium, sulfate, chloride Fixed solids (ash)
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.	Separator solids Corral solids Settling basin solids	Date exported and total weight (tons) exported	Percent moisture

A. MANURE SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
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.	Separator solids Corral solids Settling basin solids	Date applied and total weight (tons) applied	Percent moisture

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
Anually	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.	Pond 1	None required	pH, total dissolved solids, electrical conductivity, nitrate-nitrogen, ammonion-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.	Pond 1	None required	General minerals, including: calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride

B. PROCESS WASTEWATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	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.	Pond 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. 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.	Pond 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

C. SOIL SAMPLING AND ANALYSIS PLAN

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

C. SOIL SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
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.	Chatom Field - 263 ac. Vitorino Field - 18ac. Zuber Field - 40ac.	None required	Soluble phosphorus
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.	Chatom Field - 263 ac. Vitorino Field - 18ac. Zuber Field - 40ac.	None required	0 to 1 foot: Nitrate-nitrogen and organic matter 1 to 2 foot: Nitrate-nitrogen

D. PLANT TISSUE SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	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.	Chatom Field - Oat/Corn/Sudan Silage Vitorino Field - Oat/Corn/Sudan Silage Zuber Field - Oat/Corn/Sudan 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

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

E. IRRIGATION WATER SAMPLING AND ANALYSIS PLAN (CONTINUED)

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	Field Analytes	Lab Analytes
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.	TID Canal Chatom Well	None required	Electrical conductivity, total dissolved solids, and total nitrogen
Each fresh water irrigation event for each land application area	TID Canal - flow rate multiplied by runtime. Chatom Well - flow rate multiplied by runtime.	TiD Canal Chatom Well	Date applied and volume (gallons or acre-inches) applied	None required

F. GROUNDWATER MONITORING SAMPLING AND ANALYSIS PLAN

			Minimum data collection requirements	
Frequency	Sampling Methods	Source	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.	All onsite domestic wells Chatom 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.	All domestic onsite wells Chatom Well	Electrical conductivity and ammonion-nitrogen	Nitrate-nitrogen. If field measurement indicates the presence of ammonium-nitrogen, the Discharger shall collect a sample for laboratory analysis of ammonium-nitrogen.

NUTRIENT MANAGEMENT PLAN REVIEW

A. NUTRIENT MANAGEMENT PLAN REVIEW

Person who created the NMP:	Ramos, Joe	*See above for contact information.*
Date the NMP was drafted:	05/10/2014	
Person who approved the final NMP:	Ramos, Joe	*See above for contact information.*
Date of NMP implementation:	05/10/2014	

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 4

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: Not Applicable

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 4

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: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Physical Address Number and Street	City	County	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: 4/2/18

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.

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4-23-2018	
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: Couco Creek Dairy Inc.

Physical address of dairy:

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	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: 4/2/18

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.

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4-23-2018	
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: Couco Creek Dairy Inc.

3303 S Washington RD	Turlock	Stanislaus	95380
Number and Street	City	County	Zip Code

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

Operator name: _____ Telephone no.: _____ _____
Landline Cellular

Mailing Address Number and Street	City	State	Zip Code

Legal owner name: Machado, Tony Telephone no.: _____ (209) 761-9322
Landline Cellular

3303 S Washington RD	Turlock	CA	95380
Mailing Address Number and Street	City	State	Zip Code

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.

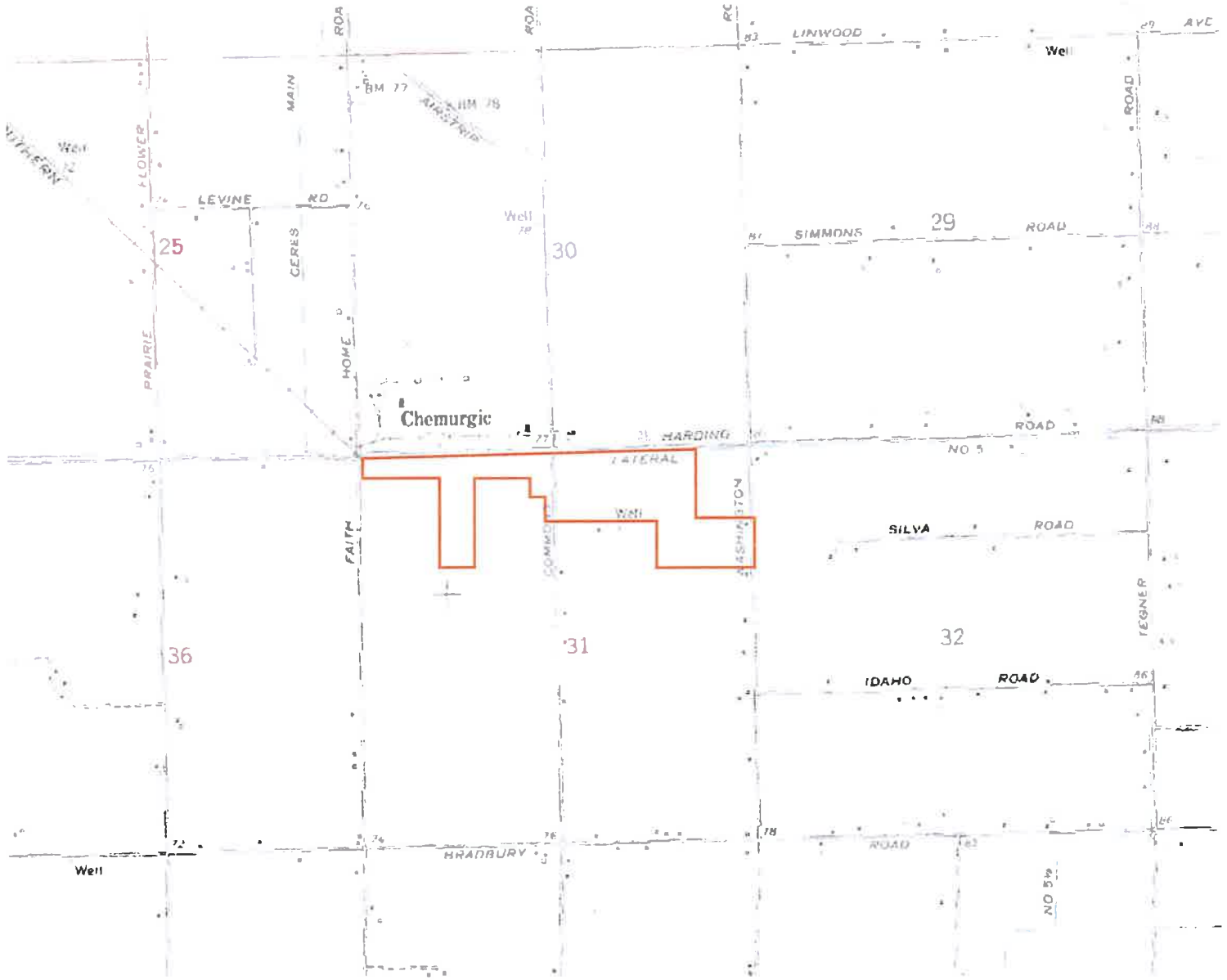
Has Item III (Nutrient Budget) of the Nutrient Management Plan been certified by a Certified Nutrient Management Specialist as required in the General Order?

☐ Yes ☐ No

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.

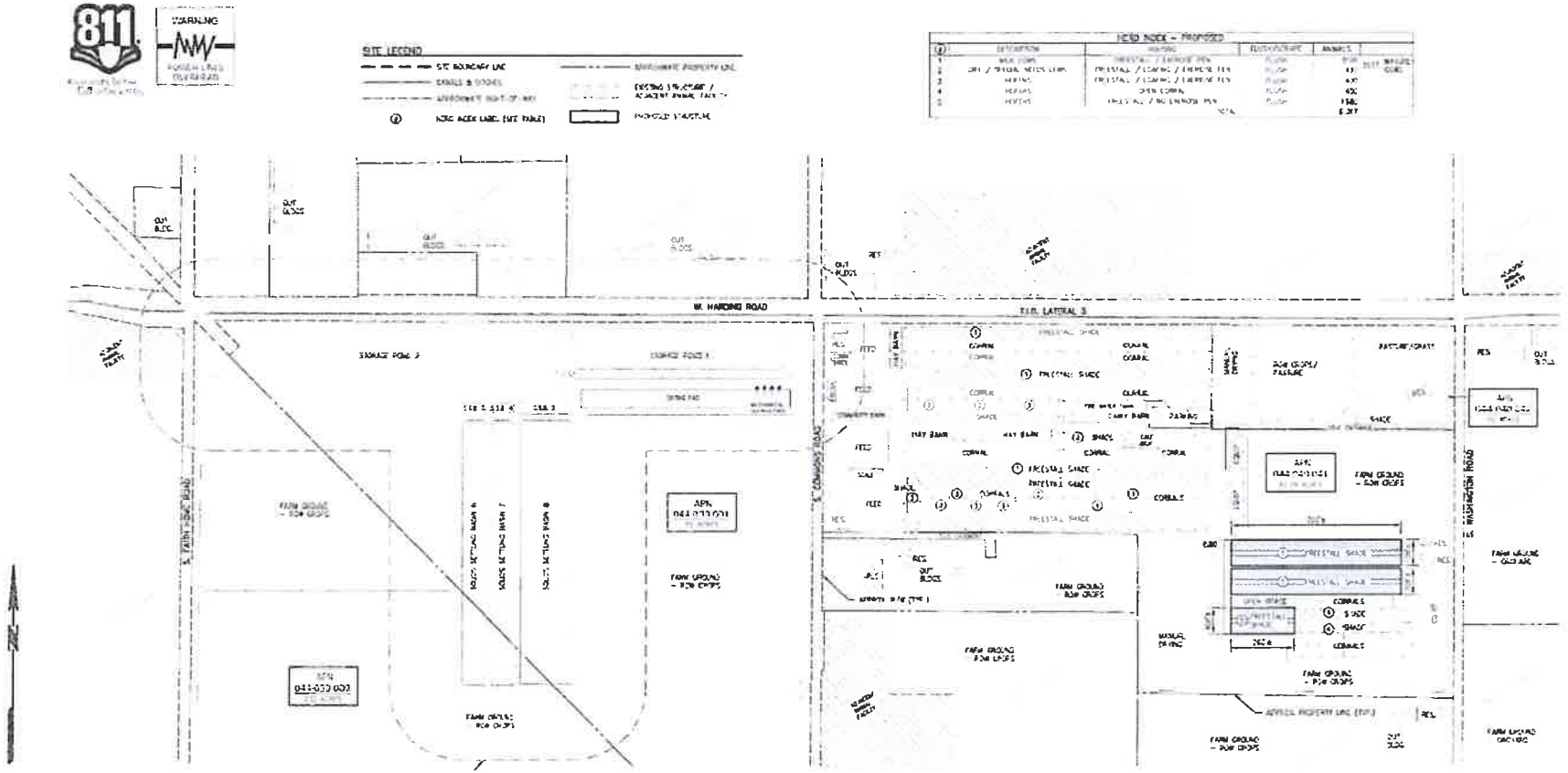
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Tony Machado	
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4-23-2018	
DATE	DATE



LEGEND

Facility Boundary

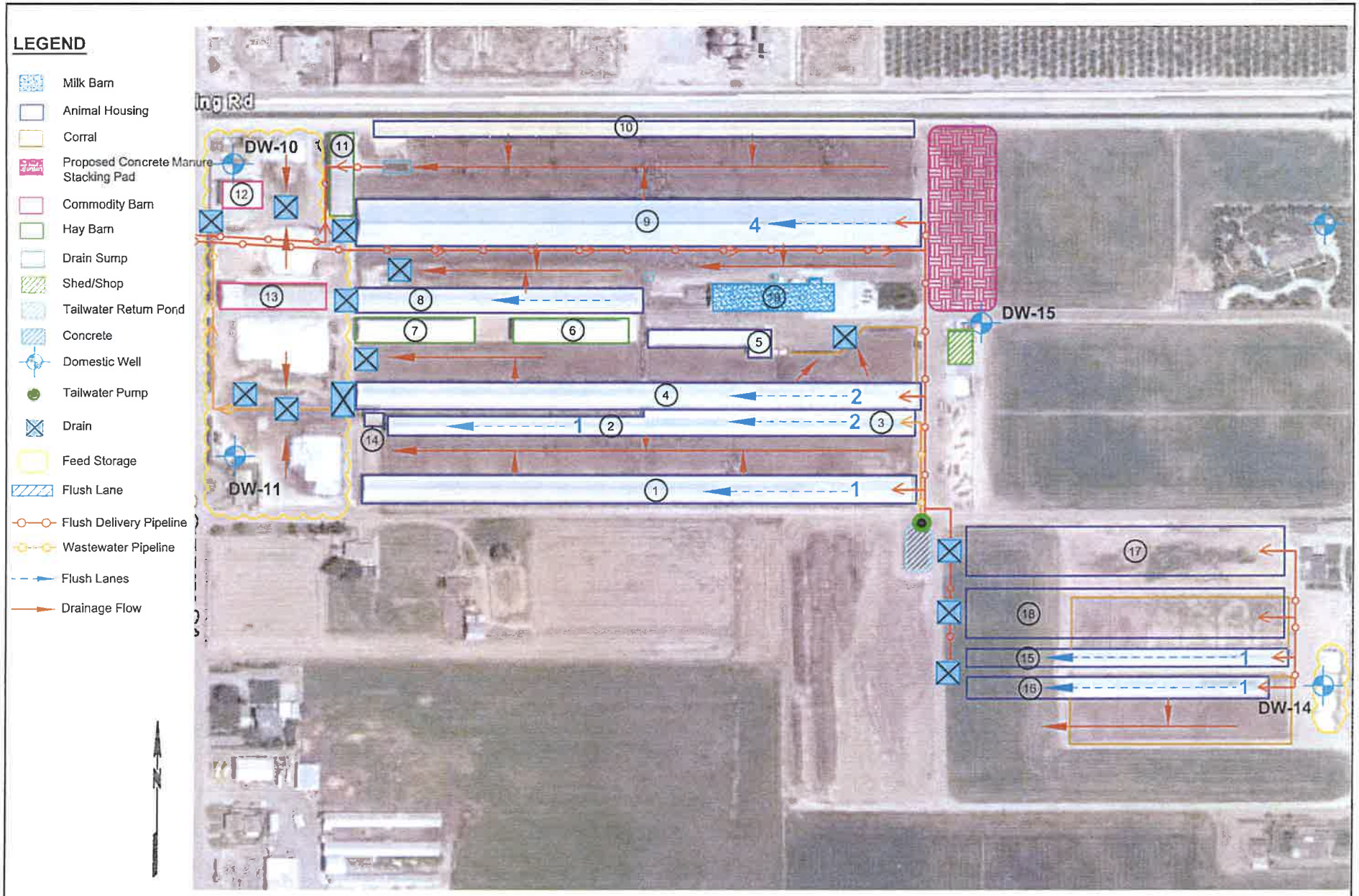
FR Ag Services, Inc.	SCALE: 0 4000 8000 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 1** TOPOGRAPHIC MAP
	PROJECT NO. FRA-00	DATE: 5/1/14	DRAWN BY: SB	APP. BY: JR	COUCO Creek topomap



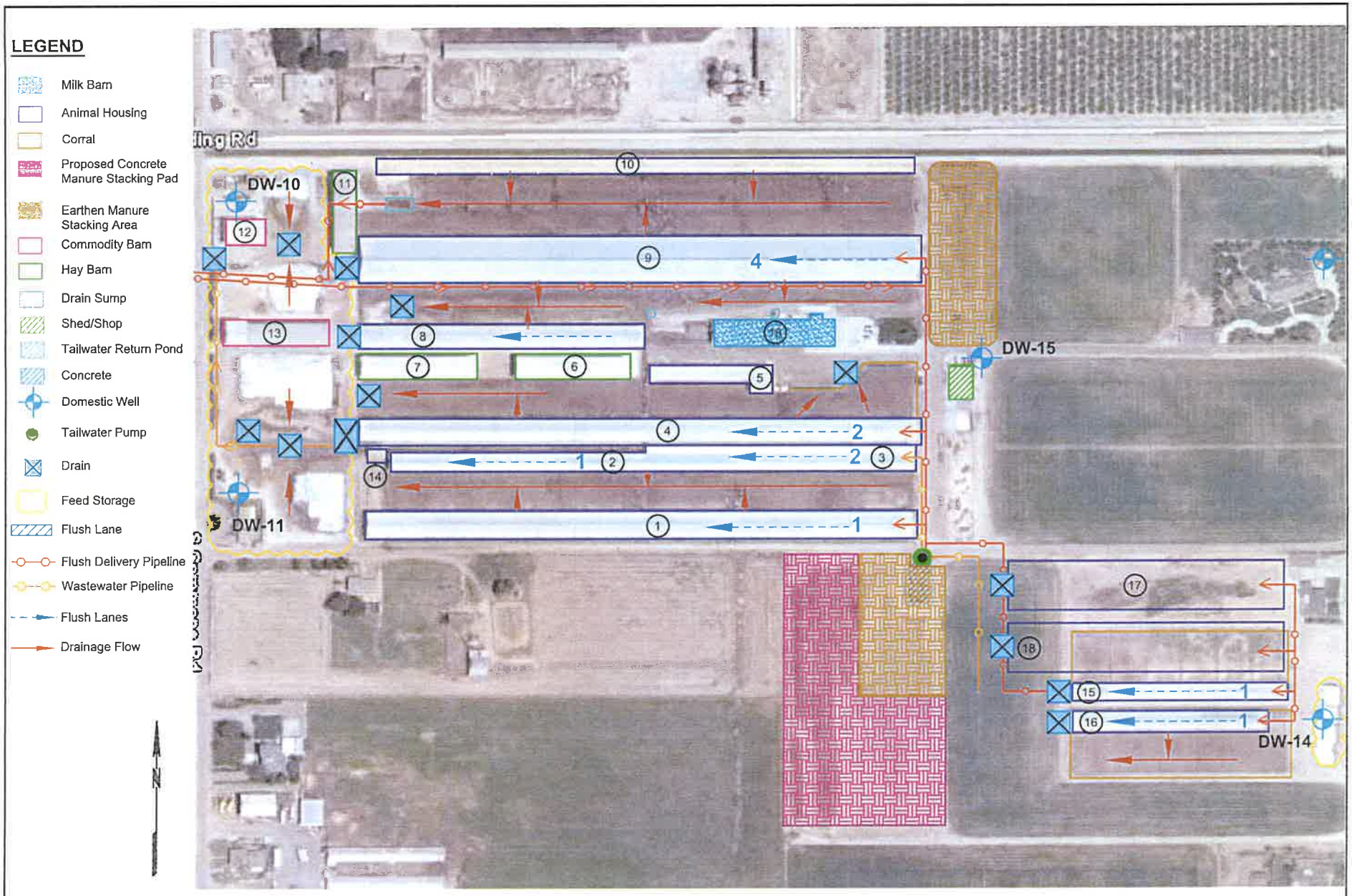
SCALE: 0 700 1500 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA	**FIGURE 2** PROPOSED SITE PLAN
PROJECT NO. FRA-00	DATE: 4/12/18	DRAWN BY: SB / APP. BY: JR

Ag Services, Inc.

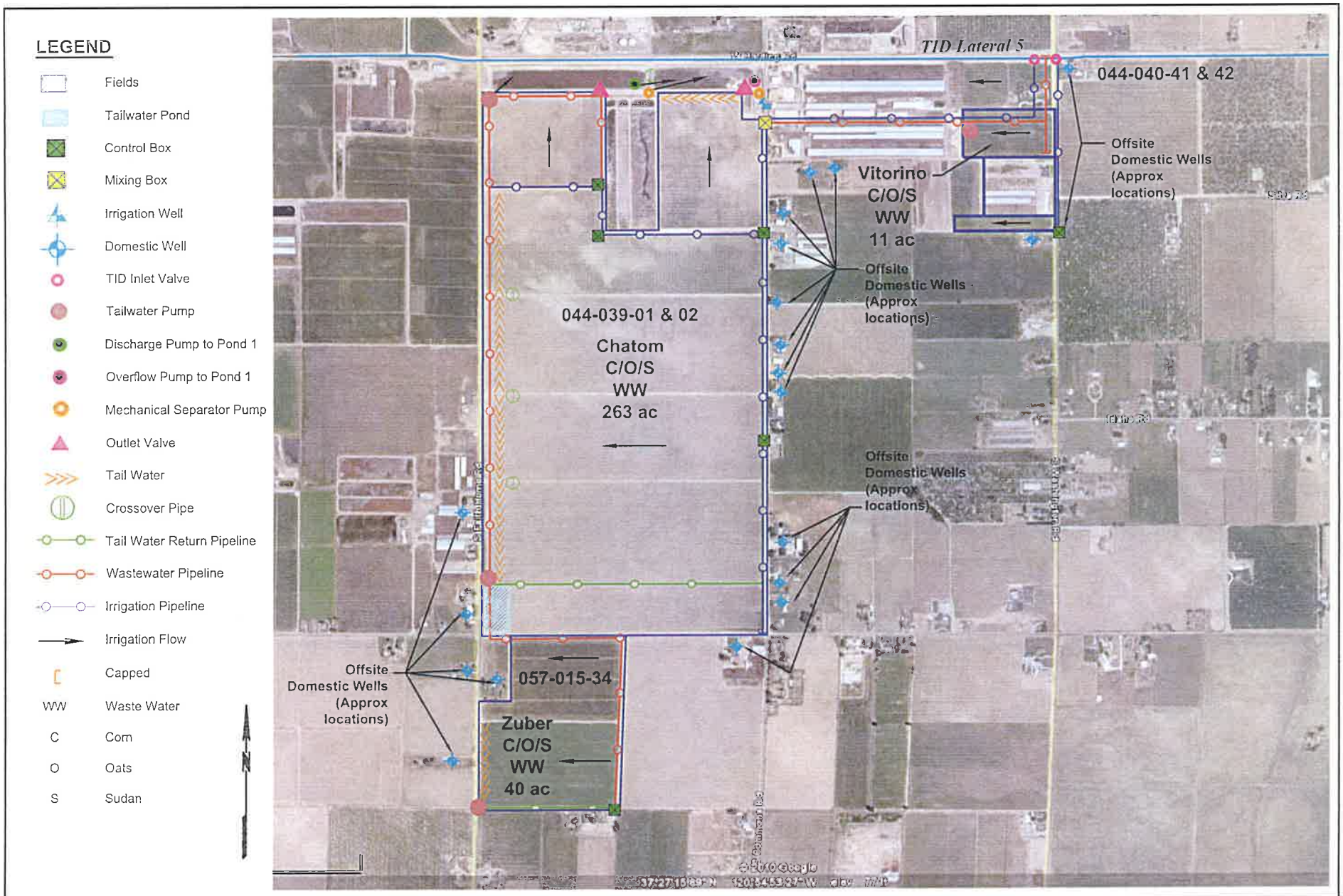
COUCO fields and Facility



Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 3A** DAIRY FACILITY
	PROJECT NO. FRA-00	DATE: 3/31/18	DRAWN BY: SB	APP. BY: JR	COUCO fields and Facility



Ag Services, Inc.	SCALE: 0 300 600 APPROXIMATE SCALE IN FEET	COUCO CREEK DAIRY TURLOCK, CA			**FIGURE 3B** DAIRY FACILITY
	PROJECT NO. FRA-00	DATE: 3/31/18	DRAWN BY: SB	APP. BY: JR	COUCO fields and Facility



Ag Services, Inc.

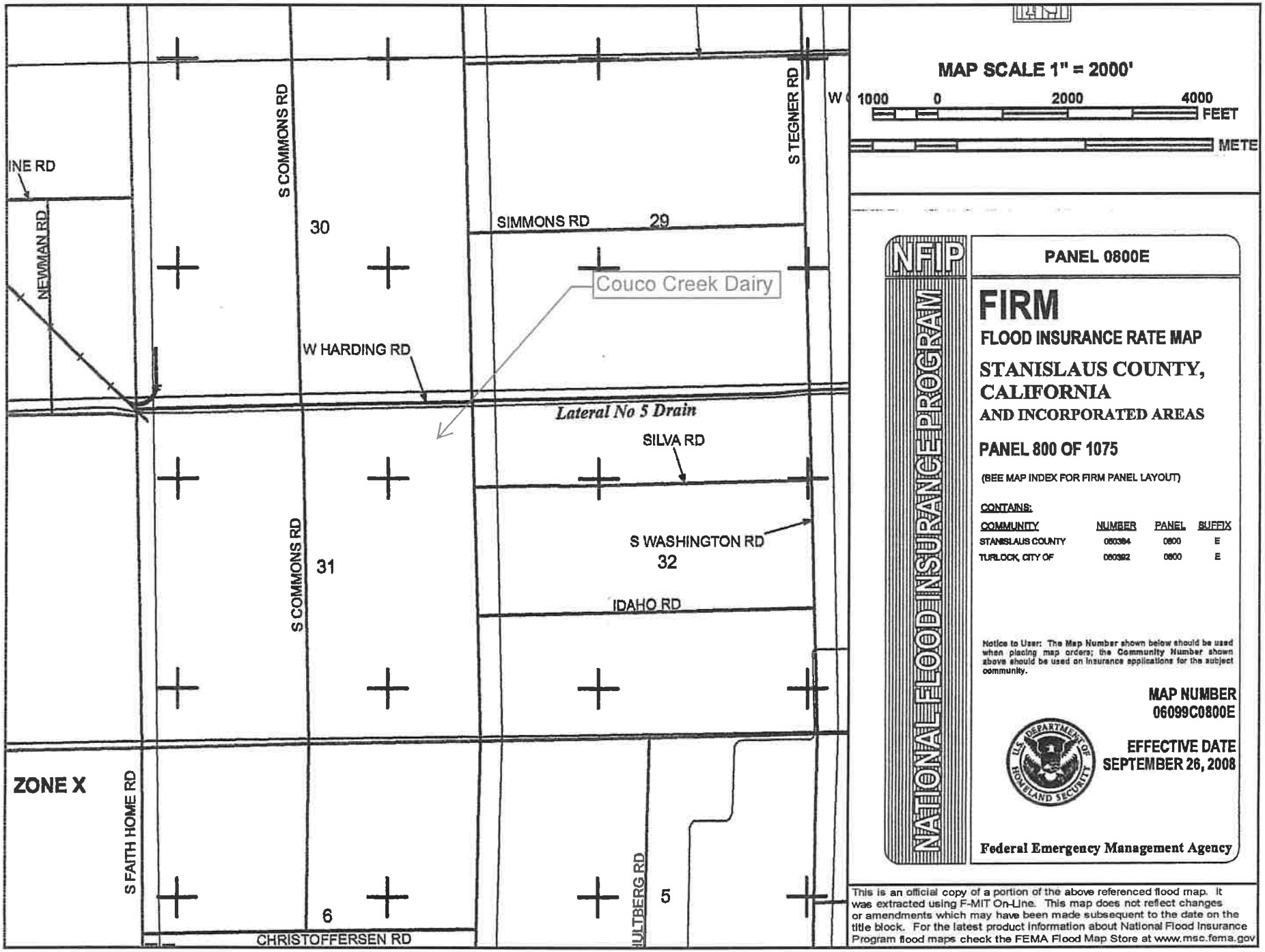
SCALE:
0 1200 2400
APPROXIMATE SCALE IN FEET

COUCO CREEK DAIRY
TURLOCK, CA

FIGURE 4
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
FRA-00	3/31/18	SB	JR

COUCO fields and Facility


INE RD
NEWMAN RD
S COMMONS RD
30
SIMMONS RD
29
S TEGNER RD
Couco Creek Dairy
W HARDING RD
Lateral No 5 Drain
SILVA RD
S COMMONS RD
31
S WASHINGTON RD
32
IDAHO RD
ZONE X
S FAITH HOME RD
6
CHRISTOFFERSEN RD
ULTBERG RD
5
MAP SCALE 1" = 2000'
1000 0 2000 4000
FEET
METE
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0800E
FIRM
FLOOD INSURANCE RATE MAP
STANISLAUS COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 800 OF 1075
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
STANISLAUS COUNTY 060394 0800 E
TURLOCK, CITY OF 060392 0800 E
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
06099C0800E
EFFECTIVE DATE
SEPTEMBER 26, 2008
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

As Approved by the Planning Commission
October 16, 2014

NOTE: Approval of this application is valid only if the following conditions are met. This permit shall expire unless activated within 18 months of the date of approval. In order to activate the permit, it must be signed by the applicant and one of the following actions must occur: (a) a valid building permit must be obtained to construct the necessary structures and appurtenances; or, (b) the property must be used for the purpose for which the permit is granted. (Stanislaus County Ordinance 21.104.030)

CONDITIONS OF APPROVAL

USE PERMIT APPLICATION NO. PLN2014-0028
MACHADO (COUCO CREEK) DAIRY

Department of Planning and Community Development

1. Use(s) shall be conducted as described in the application and supporting information (including the plot plan) as approved by the Planning Commission and/or Board of Supervisors and in accordance with other laws and ordinances.

2. Pursuant to Section 711.4 of the California Fish and Game Code (effective January 1, 2014), the applicant is required to pay a California Department of Fish and Wildlife (formerly the Department of Fish and Game) fee at the time of filing a "Notice of Determination." Within five (5) days of approval of this project by the Planning Commission or Board of Supervisors, the applicant shall submit to the Department of Planning and Community Development a check for **$2,238.25**, made payable to **Stanislaus County**, for the payment of California Department of Fish and Wildlife and Clerk Recorder filing fees.

   Pursuant to Section 711.4 (e) (3) of the California Fish and Game Code, no project shall be operative, vested, or final, nor shall local government permits for the project be valid, until the filing fees required pursuant to this section are paid.

3. Developer shall pay all Public Facilities Impact Fees and Fire Facilities Fees as adopted by Resolution of the Board of Supervisors. The fees shall be payable at the time of issuance of a building permit for any construction in the development project and shall be based on the rates in effect at the time of building permit issuance.

4. The applicant/owner is required to defend, indemnify, or hold harmless the County, its officers, and employees from any claim, action, or proceedings against the County to set aside the approval of the project which is brought within the applicable statute of limitations. The County shall promptly notify the applicant of any claim, action, or proceeding to set aside the approval and shall cooperate fully in the defense.

5. All exterior lighting shall be designed (aimed down and toward the site) to provide adequate illumination without a glare effect. This shall include, but not be limited to, the use of shielded light fixtures to prevent skyglow (light spilling into the night sky) and the installation of shielded fixtures to prevent light trespass (glare and spill light that shines onto neighboring properties).

6. Pursuant to Section 404 of the Clean Water Act, prior to construction, the developer shall be responsible for contacting the US Army Corps of Engineers to determine if any "wetlands,"

"waters of the United States," or other areas under the jurisdiction of the Corps of Engineers are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from the Corps, including all necessary water quality certifications, if necessary.

7. Any construction resulting from this project shall comply with standardized dust controls adopted by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and may be subject to additional regulations/permits, as determined by the SJVAPCD.

8. A sign plan for all proposed on-site signs indicating the location, height, area of the sign(s), and message must be approved by the Planning Director or appointed designee(s) prior to installation.

9. Pursuant to Sections 1600 and 1603 of the California Fish and Game Code, prior to construction, the developer shall be responsible for contacting the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and shall be responsible for obtaining all appropriate stream-bed alteration agreements, permits, or authorizations, if necessary.

10. The Department of Planning and Community Development shall record a Notice of Administrative Conditions and Restrictions with the County Recorder's Office within 30 days of project approval. The Notice includes: Conditions of Approval/Development Standards and Schedule; any adopted Mitigation Measures; and a project area map.

11. Pursuant to the federal and state Endangered Species Acts, prior to construction, the developer shall be responsible for contacting the US Fish and Wildlife Service and the California Department of Fish and Wildlife (formerly the Department of Fish and Game) to determine if any special status plant or animal species are present on the project site, and shall be responsible for obtaining all appropriate permits or authorizations from these agencies, if necessary.

12. Pursuant to State Water Resources Control Board Order 99-08-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, prior to construction, the developer shall be responsible for contacting the California Regional Water Quality Control Board to determine if a "Notice of Intent" is necessary, and shall prepare all appropriate documentation, including a Storm Water Pollution Prevention Plan (SWPPP). Once complete, and prior to construction, a copy of the SWPPP shall be submitted to the Stanislaus County Department of Public Works.

13. Should any archaeological or human remains be discovered during development, work shall be immediately halted within 150 feet of the find until it can be evaluated by a qualified archaeologist. If the find is determined to be historically or culturally significant, appropriate mitigation measures to protect and preserve the resource shall be formulated and implemented. The Central California Information Center shall be notified if the find is deemed historically or culturally significant.

14. The facility operator shall use best management practices for odor and vector control at all times. If the operator is unable to control flies, then the operator shall retain the services of a licensed vector control service.

Department of Public Works

15. An encroachment permit shall be taken out for any new driveway or for any work to be done in the Faith Home Road, Commons Road, Bradbury Road, or Washington Road rights-of-way. Any new driveway location will have to be approved by Public Works.

16. Faith Home Road, Washington Road, and Bradbury Road are all classified as 60-foot Collector Roadways. Commons Road is classified as a 60-foot Local Roadway. The current right-of-way is 40 or 50 feet wide along the frontages of the parcels associated with this project. Since the project only includes the installation of a shade structure over an existing free-stall barn and there will not be a significant increase in traffic traveling over County maintained roadways, an Irrevocable Offer of Dedication is not required at this time. If a subsequent permit is submitted, an Irrevocable Offer of Dedication will be required for the parcel where the work is being installed. A subsequent permit will include a building permit for a new structure, a discretionary permit (Staff Approval, Use Permit, or Rezone), or a grading permit. The required ½ width of Faith Home Road, Commons Road, Bradbury Road or Washington Road will be 30-feet from the centerline of the roadway towards the property/parcel. If 30-feet of the road right-of-way does not exist, then the remainder 30-feet shall be dedicated with an Irrevocable Offer of Dedication for the entire parcel frontage.

    A. Faith Home Road will be for 30-feet east of the centerline on the parcel's frontage.

    B. Washington Road will be for 30-feet west of the centerline on the parcel's frontage.

    C. Commons Road will be for 30-feet east or west of the centerline on the parcel's frontage, dependent on the location of the permitted work.

    D. Bradbury Road will be for 30-feet north or south of the parcel's frontage, dependent on the location of the permitted work.

17. No parking, loading or unloading of vehicles will be permitted within the County Road right-of-way.

18. A grading, drainage, and erosion/sediment control plan for the project site shall be submitted before any building permit for the site is issued that creates a new or bigger building footprint on this parcel. Public Works will review and approve the drainage calculations. The grading and drainage plan shall include the following information:

    A. The plan shall contain enough information to verify that all runoff will be kept from going onto adjacent properties and the Stanislaus County road right-of-way.

    B. The grading, drainage, and erosion/sediment control plan shall comply with the current State of California National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

    C. The grading, drainage, and associated work shall be accepted by Stanislaus County Public Works prior to a final inspection or occupancy, as required by the building permit.

    D. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for the plan review of the building and/or grading plan.

E. The applicant of the building permit shall pay the current Stanislaus County Public Works weighted labor rate for all on-site inspections. The Public Works inspector shall be contacted 48 hours prior to the commencement of any grading or drainage work on-site.

Building Permits Division

19. Building permits are required and the project must conform with the California Code of Regulations, Title 24.

Turlock Irrigation District (TID)

20. TID shall review and approve all maps and plans of the project. Any improvements to this property which impact irrigation facilities shall be subject to TID approval and meet all District standards and specifications.

21. There is an existing 16-inch discharge pipe associated with TID Pump 149 that is located about 720 feet east of and parallel to Commons Road within APN: 044-040-041. The pipeline crosses perpendicular to the existing and proposed freestall barn and discharges into Lateral 5. Before applying for a building permit for the proposed freestall barn, the facility operator/developer shall submit plans detailing the existing irrigation facilities, relative to the proposed site improvements, in order for the District to determine specific impacts and requirements. A copy of the TID approved site plan and any resulting conditions and/or construction requirements shall be submitted with the Building Permit for the proposed freestall barn.

22. Electric utility distribution maps show existing facilities within and near the project area. If any of the facilities need relocation, the owner/developer must apply for a facility change for any pole or electrical facility relocation. Facility changes are performed at developer's expense.

Regional Water Quality Control Board (RWQCB)

23. The facility operator shall, at all times, implement and comply with all waste and nutrient management practices and waste discharge requirements as approved by the RWQCB; including future modifications to the Waste Management Plan (WMP) and Nutrient Management Plan (NMP) in accordance with RWQCB review, permitting, and approval.

24. This project is subject to Individual Waste Discharge Requirements as determined by RWQCB. The existing dairy is allowed 2,400 mature cows under the Dairy General Order. In order to expand to 3,487 mature cows, as requested as a part of this project, the facility operator shall obtain and comply with the Individual WDR as required.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

25. The proposed project may be subject to the following District Rules:
    - Regulation VIII (Fugitive PM10 Prohibitions);
    - Rule 4102 (Nuisance) – This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to District enforcement action;

- Rule 4601 (Architectural Coatings);
- Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations);
- Rule 4002 (National Emission Standards for Hazardous Air Pollutants); and
- Rule 4550 (Conservation Management Practices) – The purpose of this rule is to limit fugitive dust emissions from agricultural operation sites. These sites include areas of crop production, animal feeding operations and unpaved roads/equipment areas. The District's CMP handbook can be found online at the District's website.

26. A Rule 4570 (Confined Animal Facilities) application shall be submitted to the District. District Rule 4570 was adopted by the District's Governing Board on June 15, 2006. Dairies with greater than or equal to 1,000 milk cows are subject to the requirements of District Rule 4570.

27. This list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is encouraged to contact the District's Small Business Office. Current District rules can also be found online at www.valleyair.org/rules/1ruleslist.htm.

****

Please note: If Conditions of Approval/Development Standards are amended by the Planning Commission or Board of Supervisors, such amendments will be noted in the upper right-hand corner of the Conditions of Approval/Development Standards; new wording is in ***bold****, and deleted wording will have a ~~line through it.~~*

Stanislaus County
Striving to be the Best

Stanislaus County
Planning and Community Development

1010 10th Street, Suite 3400
Modesto, California 95354

Phone: (209) 525-6330
Fax: (209) 525-5911

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, December 30, 2009

1.	**Project title:**	Use Permit Application No. PLN2014-0028 - Machado (Couco Creek) Dairy
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Rachel Wyse, Associate Planner (209) 525-6330
4.	**Project location:**	3303 S. Washington Road, on the southwest corner of W. Harding and S. Washington Roads, in the Turlock area. APN: 044-039-001, 044-039-002, 044-040-041, 044-040-042, 057-015-034
5.	**Project sponsor's name and address:**	Tony Machado 3303 S. Washington Road Turlock, CA 95380
6.	**General Plan designation:**	Agriculture
7.	**Zoning:**	A-2-40 (General Agriculture)

8. Description of project:

Request to reorganize the existing Machado (Couco Creek) Dairy herd size from 2,100 milk cows, 200 dry cows, 820 bred heifers, 667 medium heifers, and 250 small heifers (for a total of 4,037 head), to 3,050 milk cows, 437 dry cows, 0 bred heifers, 250 medium heifers, and 250 small heifers (for a total of 3,987 head). The applicant is proposing to eventually increase the milk and dry cow head count while completely removing bred heifers from the site and reducing the medium heifers to increase the financial viability of the existing dairy facility. Ultimately, the total number of cows will be reduced by 50. Consequently, the number of mature cows on-site will increase by 1,187, thereby generating additional waste. The dairy's existing Waste Management Plan (WMP) and Nutrient Management Plan (NMP) were revised to account for the increase in waste and resulting storage and disposal needs associated with the reorganization of the herd size. The updated WMP estimates that daily manure production will be approximately 41,091 gallons per day. The NMP estimates the additional manure generation by the expanded herd will result in approximately 12,250 tons of additional manure per year. All manure will be trucked off-site.

The existing dairy operation contains all the necessary corrals, feed storage, waste containment, and utilities. The dairy milk barn is a double 30 parallel parlor with a capacity of over 250 cows per hour. The proposed increase in herd size will not require any modifications to the existing milking facility as it is currently underutilized. The dairy facility is proposing to remove 1,237 large and medium heifers from the site and replace them with 950 additional milk cows and 237 dry cows. Due to the increase in animal units, this application includes a request to install a roof-only freestall barn over the existing most northerly corrals within the facility. The applicant has contacted the San

Joaquin Valley Air Pollution Control District (SJVAPCD) and the Regional Water Quality Control Board (RWQCB) and has confirmed that the proposed numbers are below CEQA significant impact thresholds and that the project requires individual Waste Discharge Requirements (WDRs). (See emails dated March 4, 2014, from Mr. Heinen and Mrs. Herbst.)

There are five Assessor parcels included in this request; however, only APN: 044-040-041 houses the dairy facility. The remaining four APNs consist of 340 acres of cropland. According to the NMP for this expansion, the dairy anticipates importing 3,740 pounds of nitrogen in the form of commercial fertilizer, utilizing all the wastewater generated at the site, and exporting all the solid manure. In the revised NMP, the field-by-field nitrogen applied-to-removed ratio ranges from 1.38 to 1.40. The whole farm nitrogen balance ration was 1.4. Furthermore, the WMP was prepared to evaluate the impact of the expansion on required lagoon capacity. In the WMP, the storage capacities were calculated using 2 feet of freeboard and 2 feet of dead storage loss for the storage lagoons. The existing and required storage capacities were calculated to be 33.2 and 25.9 million gallons respectively. Consequently, the current design and capacity of the existing lagoons is adequate. RWQCB staff have determined that the revised NMP and WMP are in accordance with the standards outlined in the General Order and that thorough implementation of these plans will minimize the impacts of animal waste on surface and groundwater quality. Furthermore, the SJVAPCD has determined that, based on the information provided to the District, project specific emissions criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10; therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

9.	**Surrounding land uses and setting:**	Unrelated dairies to the west; Planned Development (P-D [81]) - Chemurgic Agricultural Chemicals and orchards to the north; and various agricultural uses, farm houses, and outbuildings to the north, west, east, and south.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**	Regional Water Quality Control Board San Joaquin Valley Air Pollution Control District Department of Environmental Resources - Hazardous Waste Division Building Permits Division CA Department of Fish and Wildlife US Fish and Wildlife Service

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture & Forestry Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Geology /Soils**
☐ **Greenhouse Gas Emissions**	☐ **Hazards & Hazardous Materials**	☐ **Hydrology / Water Quality**
☐ **Land Use / Planning**	☐ **Mineral Resources**	☐ **Noise**
☐ **Population / Housing**	☐ **Public Services**	☐ **Recreation**
☐ **Transportation/Traffic**	☐ **Utilities / Service Systems**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☒ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☐ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

☐ **I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.**

☐ **I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Rachel Wyse, Associate Planner — August 22, 2014
Prepared By — Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

I. AESTHETICS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				**X**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	
Discussion: Any development resulting from this project will be consistent with existing area developments. The site itself is not considered to be a scenic resource or a unique scenic vista. The site is currently developed with existing "dairy" facilities/structures. The existing structures are comprised of metal which is a material consistent with accessory structures in and around the A-2 (General Agriculture) zoning district. The applicant is proposing to construct a roof-only freestall barn over the existing northernmost corrals within the facility. Standard conditions of approval will be added to this project to address glare from any previously installed or any proposed supplemental on-site lighting.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**

d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

Discussion: The project site is comprised of five separate assessor parcel numbers (APNs) currently enrolled under Williamson Act Contract Nos. 76-2290 & 02-4491. The existing dairy facility is located at 3303 S. Washington Road, further identified as APN 044-040-041. The property has soils classified by the Farmland Mapping and Monitoring Program as being primarily "Confined Animal Agriculture", "Farmland of Statewide Importance", and "Prime Farmland". Soils include Dinuba sandy loam, Dinuba sandy loam slightly saline-alkali, and Hilmar loamy sand.

This project will have no impact to forest land or timberland. This project will not conflict with any agricultural activities in the area and/or lands enrolled in the Williamson Act. The project was referred to the Department of Conservation but a response has not been received to date.

Surrounding uses include unrelated dairies to the west; Planned Development (P-D [81]) - Chemurgic Agricultural Chemicals and orchards to the north; and various agricultural uses, farm houses, and outbuildings to the north, west, east, and south. The County has a Right-to-Farm Ordinance in place to protect agricultural operations from unjust nuisance complaints.

Mitigation: None.

References: USDA-NRCS Web Soil Survey; Rezone Application No. 82-04 - Chemurgic Agricultural Chemicals; Stanislaus County Geographical Information Systems (GIS); and the Stanislaus County General Plan and Support Documentation[1].

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?				**X**
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			**X**	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
d) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
e) Create objectionable odors affecting a substantial number of people?			**X**	

Discussion: The project site is within the San Joaquin Valley Air Basin, which has been classified as "severe non-attainment" for ozone and respirable particulate matter (PM-10) as defined by the Federal Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has been established by the State in an effort to control and minimize air pollution. As such, the District maintains permit authority over stationary sources of pollutants.

The SJVAPCD responded to a previously circulated Early Consultation for the proposed project which consists of a request to reorganize the existing dairy herd size from 2,100 milk cows, 200 dry cows, 820 bred heifers, 667 medium heifers, and 250 small heifers (for a total of 4,037 head) to 3,050 milk cows, 437 dry cows, 0 bred heifers, 250 medium heifers, and 250 small heifers (for a total of 3,987 head). The applicant is proposing to eventually increase the milk and dry cow head count while completely removing bred heifers from the site and reducing the medium heifers. Ultimately, the total number of cows will be reduced by 50. This project also includes a request to construct a roof-only freestall barn over the existing northernmost corrals within the facility. The SJVAPCD offered the following comments:

1) The District is currently designated as extreme nonattainment for the 8-hour ozone standard, attainment for PM10 and CO, and nonattainment for PM2.5 for the federal air quality standards. At the state level, the District is designated as nonattainment for the 8-hour ozone, PM10, and PM2.5 air quality standards.

2) Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year, NOX, 10 ton/year ROG, and 15 tons/year PM10. Therefore the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

The SJVAPCD did state that the project would be subject to Regulation VIII (Fugitive PM-10 Prohibitions), District Rules 4102 (Nuisance), 4601 (Architectural Coatings), 4641 (Cutback, Slow Cure, & Emulsified Asphalt, Paving & Maintenance Operations), 4550 (Conservation Management Practices), and 4507 (Confined Animal Facilities). In the event an existing building will be renovated, partially demolished, or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). All comments provided by the District will be incorporated into the project's conditions of approval.

Mitigation: None.

References: Referral response from the San Joaquin Valley Air Pollution Control District dated March 26, 2014; San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; and the Stanislaus County General Plan and Support Documentation[1].

IV. BIOLOGICAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				**X**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				**X**
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				**X**

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

Discussion: It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or mitigation corridors. The project site is an existing facility that has been used to house milk cows, dry cows, and various sized heifers. Moreover, the number of animal units will decrease by 50 and be housed in existing corrals. Likewise, the proposed roof-only freestall barn will be constructed over the existing northernmost corrals. Consequently, no new areas of disturbance will occur as a result of this request. The remaining portion of the site, not developed with structures or pens, is used as crop land in support of the dairy (see project description). A referral response from RWQCB identified that the site is currently permitted for a maximum of 2,400 mature milk cows (milking and dry cows) with 340 acres of cropland under the Board's General Order issued to the project location. The dairy intends to increase the herd size to 3,487 mature milk cows (3,050 milking and 437 dry) with no change in the acreage of cropland. No additional wastewater storage facilities will be constructed as existing lagoon capacity is sufficient for increased liquid waste resulting from the expansion. Increased manure production will be moved to the existing on-site manure storage location and trucked off site.

Under the Clean Water Act, Concentrated Animal Feeding Operations (CAFOs) are defined as point source dischargers. The revised National Pollutant Discharge Elimination System (NPDES) CAFO regulation requires all CAFOs to apply for, and comply with, the conditions in an NPDES permit. The NPDES regulation describes which operations qualify as CAFOs and sets forth the basic requirements that will be included in all CAFOs' permits. A condition of approval will be added to the project requiring the applicant to comply with the revised NPDES regulation, if applicable.

The project was referred to the California Department of Fish and Wildlife (formerly the Department of Fish and Game) and the United States Fish and Wildlife Service for Early Consultation comments but no response has been received to date.

Mitigation: None.

References: Referral response from the Regional Water Quality Control Board dated July 18, 2014; California Department of Fish and Wildlife (formerly the Department of Fish and Game) California Natural Diversity Database; and the Stanislaus County General Plan and Support Documentation[1].

V. CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				**X**
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				**X**
d) Disturb any human remains, including those interred outside of formal cemeteries?				**X**

Discussion: It does not appear this project will result in significant impacts to any archaeological or cultural resources. The applicant is proposing to construct a roof-only freestall barn over the existing northernmost corral. Minor ground disturbance will occur during the construction of footings to support the roof-only structure. Consequently, a standard condition of approval will be added to this project to address any discovery of cultural resources during any ground disturbing activities. The project was referred to the Native American Heritage Commission (NAHC) via the State Clearinghouse; however, a response to the Early Consultation has not been received to date.

Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				
VI. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil creating substantial risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	
Discussion: As contained in Chapter Five of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required as part of the building permit process. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Any earth moving is subject to Public Works Standards and Specifications which consider the potential for erosion and run-off prior to permit approval. Likewise, any addition of a septic tank or alternative waste water disposal system would require the approval of the Department of Environmental Resources (DER) through the building permit process, which also takes soil type into consideration within the specific design requirements. The project was referred to DER and the County's Building Permits Division. DER has not responded to date. Building Permits Division comments will be incorporated into the conditions of approval for this project.				
Mitigation: None.				
References: Referral response from the Stanislaus County Building Permits Division dated March 27, 2014; California Building Code; and the Stanislaus County General Plan and Support Documentation - Safety Element[1].				

VII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion: The Environmental Protection Agency (EPA) has issued a rule mandating that livestock facilities report methane and nitrous oxide emissions if they have manure management systems that emit 25,000 metric tons, or 55.1 million pounds, of carbon dioxide each day. The EPA further estimated that 3,200 mature dairy cows produce the 25,000 metric tons of annual carbon dioxide equivalent that would trigger reporting requirements. The USDA Agricultural Research Service's Northwest Irrigation and Soils Research laboratory, in Kimberly, Idaho, conducted a study on a 10,000 milking cow facility and found that emissions thresholds for 25,000 metric tons of annual carbon dioxide equivalent is actually 4,808 mature cows, based on the dairy it monitored. Based on the USDA findings, each cow would produce 5.2 metric tons of annual carbon dioxide equivalent. Machado Dairy currently is permitted by the RWQCB to have up to 2,400 mature milk cows. The current expansion request would increase the herd size to 3,487 mature milk cows (3,050 milking and 437 dry). It is important to note that some Stanislaus County dairy farmers sold off their cows in 2008 and 2009 to maintain milk prices. In 2007, there were 186,802 cows and 301 dairies in Stanislaus County. In 2011, there were 180,416 cows and 232 dairies. As of 2012, there were 187,061 cows and 216 dairies. This project (Machado Dairy) will add an annual amount of carbon dioxide to the region but Planning staff believes it will be less than significant as the increase will generate less than 25,000 metric tons of annual carbon dioxide equivalent. This project was referred to, reviewed by, and commented on by the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Mitigation: None.

References: "Piloting Innovative Beef and Dairy GHG Emission Reduction Strategies in U.S. Feedlots and Dairies" www.csrwire.com/press_releases/33079-Innovativ; California Department of Food & Agriculture, California Dairy Statistics 2012 Data; referral response from the Regional Water Quality Control Board dated July 18, 2014; referral response from the San Joaquin Valley Air Pollution Control District dated March 26, 2014; and the Stanislaus County General Plan and Support Documentation[1].

VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				**X**
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				**X**
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				**X**

Discussion: Hazardous materials potentially used on site include: pipeline cleaning soap; acid cleaner; iodine; teat dip; refrigerant (R22) (used in the milk barn); formaldehyde and copper sulfate (used in cow foot baths); diesel fuel and gasoline (in tanks); motor oil hydraulic fluid; brake fluid; and antifreeze (for farm vehicle maintenance).

Pesticide exposure is a risk in agricultural areas. Sources of exposure include contaminated groundwater, which is consumed, and drift from spray applications. Application of sprays is strictly controlled by the Agricultural Commissioner and can only be accomplished after first obtaining permits. DER is responsible for overseeing hazardous materials in this area. The project was referred to the Hazardous Materials Division via the Environmental Review Committee but no response has been received to date.

The Envirostar database was accessed to determine if any of the properties were listed as potential hazardous waste or superfund sites. None of the properties included in this application were identified on this list; however, the parcel located at the northeast corner of W. Harding and Faith Home Roads was identified as an inactive site requiring further evaluation. According to the Envirostar database, the Chemurgic Corporation constructed a facility to fulfill a contract with the Chemical Warfare Service of the Army for M-69 (Incendiary Oil) bomb loading and storage. The contract was terminated in 1945. Thereafter, according to County records, the property was rezoned to P-D (81) by the Chemurgic Ag Chemicals, Inc. to allow a feed manufacturing operation and similar agricultural-commercial uses. The Chemurgic Ag Chemicals, Inc. site is located across from the dairy site's lagoons (on APN 044-039-001) and further separated by W. Harding Road and the Turlock Irrigation District's 60-foot wide Lateral No. 5. Information concerning the Chemurgic Ag Chemicals, Inc. site was forwarded to the Department of Environmental Resources for input; no comments have been received to date.

Mitigation: None.

References: Department of Toxic Substances Control (www.envirostar.dtsc.ca.gov); Rezone 82-04 - Chemurgic Agricultural Chemicals; Stanislaus County Geographical Information System; and the Stanislaus County General Plan and Support Documentation[1].

IX. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?			**X**	

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Discussion: Run-off is not considered an issue because of several factors which limit the potential impact. These factors include a relative flat terrain of the subject site and relatively low rainfall intensities. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act. The project site itself is not located within a recognized flood zone and, as such, flooding is not an issue with respect to this project. The Stanislaus County Department of Public Works has reviewed the project and is requiring a grading, drainage, and erosion/sediment control plan as a part of the building permit for the roof-only structure. Consequently, run-off associated with the construction of the new structure will be reviewed as part of the overall building permit review process. No septic systems or additional wells are being proposed as a part of this project.

The WMP and NMP were reviewed by RWQCB staff to determine if the amount of wastewater generated, utilized to wash down the facility, and applied to crops was in accordance with the standards outlined in the General Order and whether WDRs are needed. The purpose of these plans, and the General Order, is to insure that approved plans are designed and implemented to insure that the impact of animal waste on surface and groundwater quality is minimized and poses a less than significant impact on water quality. According to the WMP, the facility will increase water usage from 48,813 gallons per day to 64,992 gallons per day. The existing and required lagoon storage capacities were calculated to be 33.2 and 25.9 million gallons respectively. RWQCB staff have determined that the aforementioned plans are compliant with the General Order and that the existing lagoons are adequately sized to handle any additional waste resulting from the reorganization. Consequently, the potential for impacts to ground and surface water, water quality, and polluted run-off were determined to be less than significant.

Mitigation: None.				
References: Referral response from the Stanislaus County Department of Public Works dated March 12, 2014; referral response from the Regional Water Quality Control Board dated July 18, 2014; Machado (Couco Creek) Dairy's Revised Waste Management and Nutrient Management Plans; and the Stanislaus County General Plan and Support Documentation[1].				
X. LAND USE AND PLANNING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?				**X**
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				**X**
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				**X**
Discussion: The project site is designated Agriculture and zoned A-2-40 (General Agriculture, 40-acre minimum). The site currently houses a total of 4,037 head as permitted in the agricultural zone; however, the RWQCB has determined that the proposed project is subject to CEQA and, therefore, requires that the applicants obtain a Use Permit in accordance with §21.20.030(F) of the Stanislaus County Zoning Ordinance. CEQA is required in instances where a dairy will be required to obtain Individual WDRs as part of an expansion. This project will not conflict with any applicable habitat conservation plan or natural community conservation plan and will not physically divide an established community.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				
XI. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**
Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

XII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion: Noise impacts associated with on-site activities and traffic are not anticipated to exceed the normally acceptable level of noise. The project will increase ambient noise levels. Permanent increases may result as the number of animal units is increased on site; however, noise associated with animals in the Agricultural zone is permissible. There will be a temporary increase in noise due to the construction of the freestall barn roof; however, a condition of approval will be added limiting the hours of construction so as to lessen noise impacts to neighbors. The nearest sensitive noise receptors are homes on neighboring properties. The nearest dwellings are located within 300 feet of the existing dairy facility footprint. The dwelling to the north is accessory to an existing confined animal facility operation. The dwelling to the south of Machado (Couco Creek) Dairy is a nine acre homesite.

Mitigation: None.

References: Application information; Stanislaus County Geographical Information Systems; and the Stanislaus County General Plan and Support Documentation[1].

XIII. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**

Discussion: The proposed use of the site will not create significant service extensions or new infrastructure which could be considered as growth inducing. No housing or persons will be displaced by this project. The increased animals will utilize existing corrals. The roof-only structure will be constructed over an existing corral. This project is adjacent to large scale agricultural operations and the nature of the use is considered consistent with the A-2 zoning district.

Mitigation: None.

References: Application information and the Stanislaus County General Plan and Support Documentation[1].

XIV. PUBLIC SERVICES --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			**X**	
Police protection?			**X**	
Schools?				**X**
Parks?				**X**
Other public facilities?			**X**	

Discussion: The County has adopted Public Facilities Fees, as well as one for the Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Such fees are required to be paid at the time of building permit issuance. The project was referred to school districts within the area, the Sheriff's office, the local fire authority, Turlock Irrigation District (TID), and the Stanislaus County Environmental Review Committee (ERC). A referral response was not received from the Sheriff's office or the fire district; however, conditions of approval will be added to this project to insure that the roof-only freestall barn will comply with all applicable fire department standards with respect to access and water for fire protection. On-site water storage for fire protection will be further evaluated as part of any future building permit process. Referral responses were received from the ERC and TID. TID submitted non-CEQA comments regarding the need to map and protect existing irrigation facilities as well as District approval of any improvements prior to building permit issuance and/or ground disturbance. The ERC responded with comments and a request for additional information. The additional information has been incorporated into the CEQA project description for this project.

Mitigation: None.

References: Referral response from Turlock Irrigation District dated March 27, 2014; referral response from the Stanislaus County Environmental Review Committee dated March 20, 2014; and the Stanislaus County General Plan and Support Documentation[1].

XV. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**
Discussion: This project is not anticipated to increase significant demands for recreational facilities as such impacts typically are associated with residential development.				
Mitigation: None.				
References: Stanislaus County General Plan and Support Documentation[1].				

XVI. TRANSPORTATION/TRAFFIC -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			**X**	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			**X**	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			**X**	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
e) Result in inadequate emergency access?				**X**
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				**X**
Discussion: Significant impacts to traffic and transportation were not identified by reviewing agencies. According to the application, a maximum shift is comprised of eight employees. Employee trips will not increase as the existing dairy barn is currently underutilized. The number of daily customers/visitors on site at peak time is two. Furthermore, the applicant estimates that there will be five truck deliveries/loadings per day, eight hours a day, resulting in an increase in 10 truck traffic trips per month. On-site veterinarian visits, trash service, and deliveries of fuel, seed, and dairy-related chemicals will				

continue to occur once a week. Commodity truck trips will increase from four or five per day to six or seven; milk truck trips will increase from three or four to five or six. Truck trips associated with the exportation of manure will increase by 580 trips per year to 1,070 trips per year. The existing facility has direct access onto S. Commons and S. Washington Roads which are County maintained. The access onto the project site is large enough to offer emergency access and the size of the parcel is large enough to offer adequate on-site parking opportunities. The project was referred to the Stanislaus County Department of Public Works which has requested conditions of approval to address new driveway approaches, the need for an irrevocable offer of dedication, and the need for a grading, drainage, and sediment management plan.

Mitigation: None.

References: Application information; referral response from the Stanislaus County Department of Public Works dated March 12, 2014; email response from Joe Ramos (F&R Ag Services) dated August 21, 2014; and the Stanislaus County General Plan and Support Documentation[1].

XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			**X**	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			**X**	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			**X**	

Discussion: Limitations on providing services have not been identified. The RWQCB has reviewed this project and has determined that the NMP and WMP are in accordance with the standards outlined in the General Order. The NMP and WMP are the working documents for the dairy and, as such, implementation of such plans are extremely important to minimize the impact of animal waste on surface and groundwater quality. Impacts to the existing utility and service systems are anticipated to be minimal as a result of this project. Less than significant impacts associated with public utility and irrigation easement(s) will be reflected in the project's conditions of approval. Staff has not received any referral responses indicating limitations on providing services.

The project was referred to TID, DER, ERC, and RWQCB. DER did not respond; however, referral responses were received from the ERC and TID. TID is the irrigation and electric service provider for this project site. TID submitted non-CEQA comments regarding the need to map and protect existing irrigation facilities as well as District approval of any

improvements prior to building permit issuance and/or ground disturbance. The ERC responded with comments regarding the wastewater generated by the facility and a request for additional information. The additional information has been incorporated into the project description for this project. The ERC indicated concerns regarding the lagoon's ability to hold the additional wastewater and whether or not a demand for additional water resources would cause impacts.

The project site is improved with on-site wells which provide drinking and milk room wash water for the facility. Flush lanes utilized in freestall barns are washed out with lagoon water. Solid waste (manure) is separated from liquid waste. Liquid waste is stored in lagoons along with wash water. The WMP for this project indicates that the lagoon has sufficient carrying capacity for the increased liquid waste resulting from the proposed expansion. Wastewater will be applied to 304 acres of cropland. Application of wastewater is strictly monitored by the RWQCB to insure that wastewater does not impact the quality of surface water and groundwater. As a result, dairies are required to submit a NMP and WMP to insure the optimal level of lagoon water is used on crop land without it causing impacts to water resources.

Mitigation: None.

References: Referral response from the Turlock Irrigation District dated March 27, 2014; referral response from the Stanislaus County Environmental Review Committee dated March 20, 2014; referral response from the Regional Water Quality Control Board dated July 18, 2014; Machado (Couco Creek) Dairy Waste Management Plan and Nutrient Management Plan; and the Stanislaus County General Plan and Support Documentation[1].

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				**X**
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Discussion: Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area. The RWQCB reviews all dairies for this region. No indications were given by RWQCB that the project would have a cumulative impact or substantial adverse effects on human beings, either directly or indirectly.

[1]Stanislaus County General Plan and Support Documentation adopted in October 1994, as amended. Optional and updated elements of the General Plan and Support Documentation: ***Agricultural Element*** adopted on December 18, 2007; ***Housing Element*** adopted on August 28, 2012; ***Circulation Element*** and ***Noise Element*** adopted on April 18, 2006.