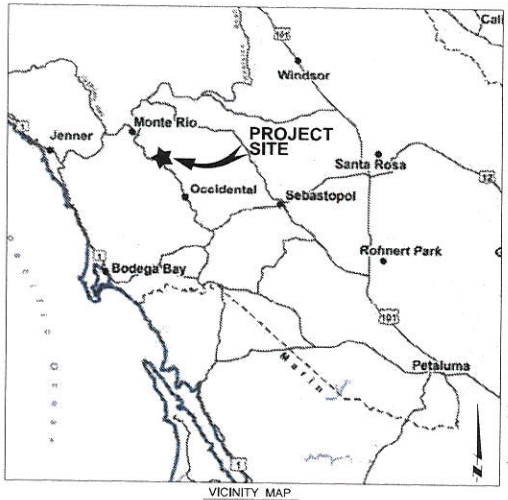
WESTMINSTER WOODS

6510 Bohemian Hwy, OCCIDENTAL , CA

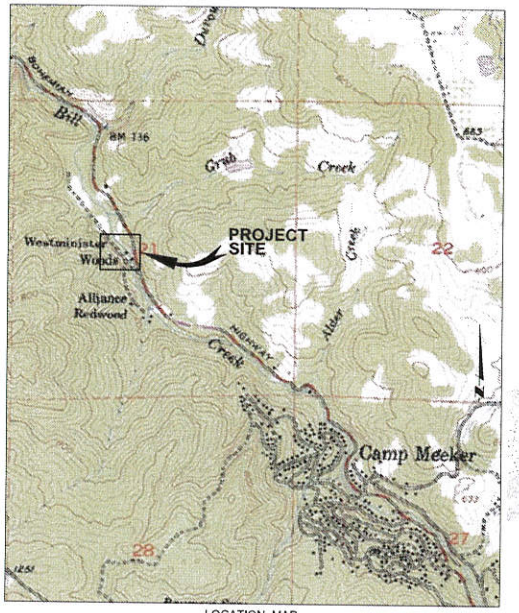
WATER CONSERVATION PROJECT

SPONSORED BY

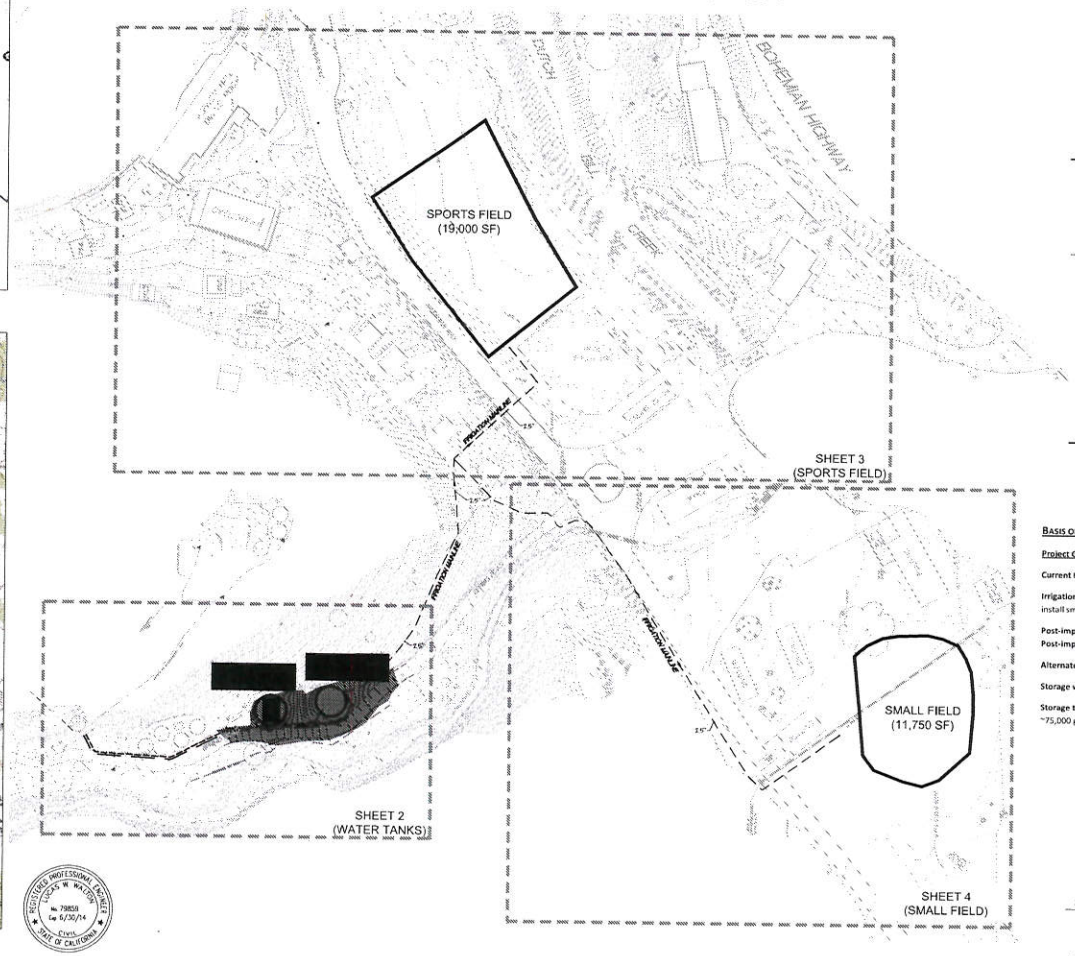
GOLD RIDGE RESOURCE CONSERVATION DISTRICT



VICINITY MAP
NOT TO SCALE



LOCATION MAP
FROM NATIONAL GEOGRAPHIC USGS DIGITAL SEAMLESS MAPS NTS



SITE PLAN
SCALE: 1"= 50'

SHEET INDEX

SHEET NO.	TITLE
1	TITLE SHEET, LOCATION MAP, VICINITY MAP, SITE PLAN
2	WATER TANK PLAN
3	SPORTS FIELD IRRIGATION PLAN
4	SMALL FIELD IRRIGATION PLAN
5	CONSTRUCTION DETAILS
6	EROSION CONTROL PLAN AND DETAILS

LEGEND

GENERAL:
ø DIAMETER
± APPROXIMATE

SECTION OR DETAIL DESIGNATION
SHEET WHERE SECTION OR DETAIL OCCURS

PROPOSED	EXISTING	
---100--	100	CONTOUR LINE
		BRUSH/VEGETATION LINE
⊗		TREE TO BE REMOVED
		TREE TO REMAIN
PP		UTILITY POLE (PP=POWER), (TP=TELEPHONE), (JP=JOINT POLE)
GP		GUY POLE

BASIS OF DESIGN

Project Goal: Reduce irrigation demand and replace direct diversion from Dutch Bill Creek

Current 6-month irrigation use: 700,000-900,000 gallons

Irrigation reduction actions: Reduce turf area, replace irrigation system, amend soil and add compost, install smart irrigation sensors and controller, replace turf with drought tolerant variety

Post-improvements 6-month irrigation demand (May-Oct): ~220,000 gallons
Post-improvements 4-month irrigation demand (July-Oct): ~139,000 gallons

Alternate water source: existing developed upland springs – direct diversion and seasonal storage

Storage volume: 4-month irrigation demand with 25% buffer

Storage type: Two bolted, steel tanks with nominal capacities of ~100,000 gallons (east tank) and ~75,000 gallons (west tank)

NOTE: TOPOGRAPHICAL SURVEY BY OTHERS

VERIFY SCALES
ONE INCH

PRUNUSKE CHATHAM, INC.
400 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600

REGISTERED PROFESSIONAL ENGINEER LUCAS W. WATSON No. 79859 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA

LICENSED LANDSCAPE ARCHITECT JUSTIN BODELL JF No. 5280 Signature Date STATE OF CALIFORNIA

DATE: 2/28/2014
SCALE: AS SHOWN
DESIGNED BY: JB/LW/AV
DRAFTED BY: JB/AV
CHECKED BY: LW, JF

REVISIONS	DATE	BY
1 REVISION 1-MISC	3/11/2014	JB

PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472

WESTMINSTER WOODS
WATER CONSERVATION PROJECT
TITLE SHEET

SHEET 1 OF 6

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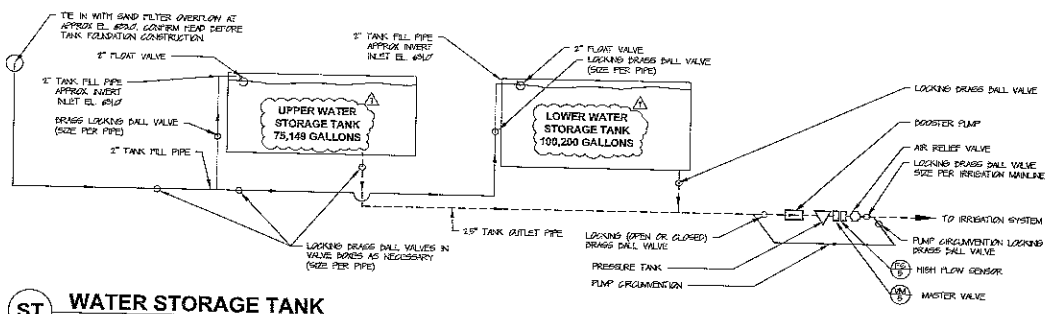
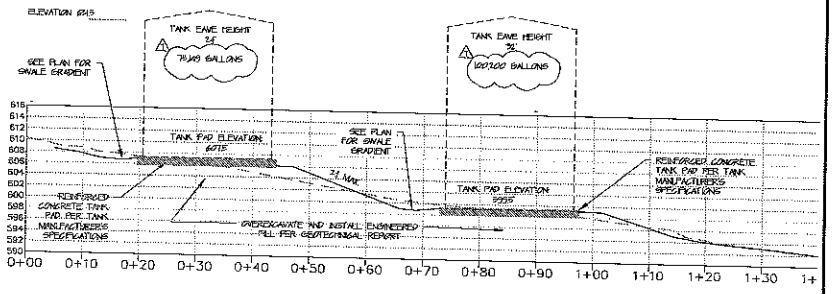


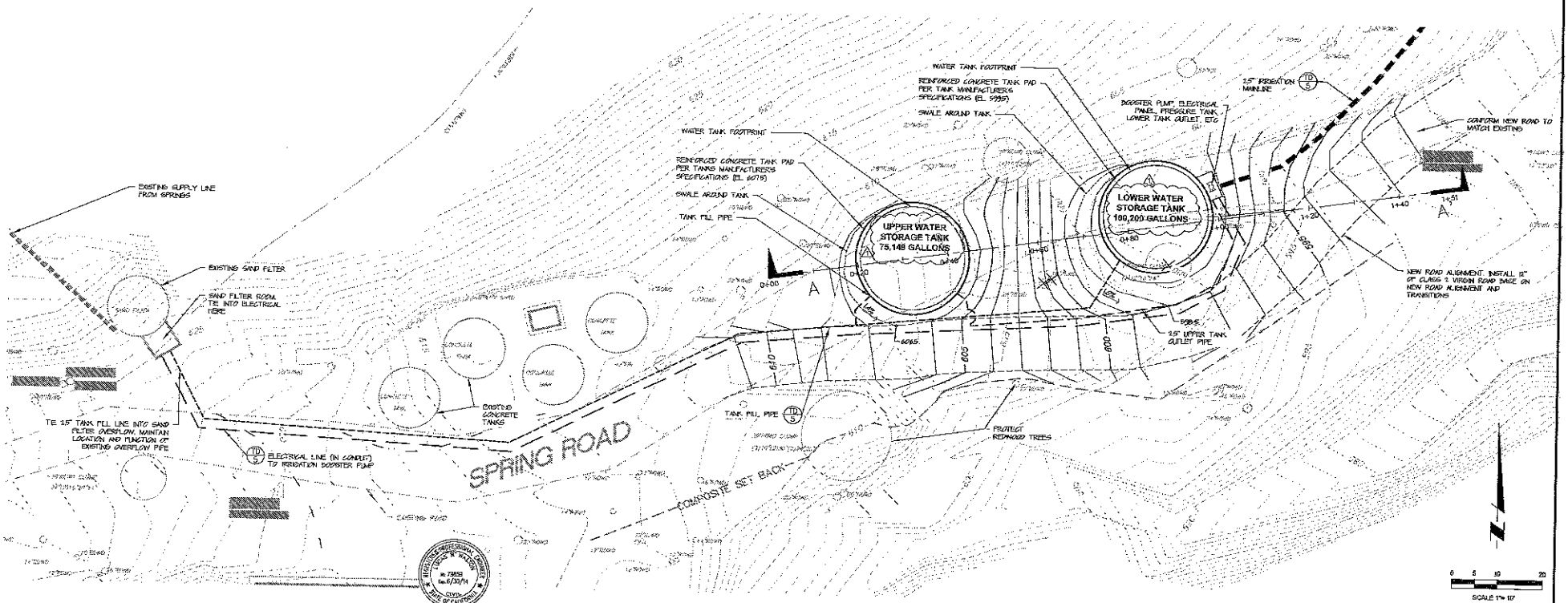
ST WATER STORAGE TANK
SCHEMATIC

NTS

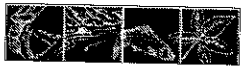


A-A TANKS SECTION A-A'
SCHEMATIC

1"=10'



PRUNUSKE CHATHAM, INC.
400 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600



DATE: 2/26/2014
SCALE: 1"=10'
DESIGNED BY: JB/LW/AV
DRAFTED BY: JB/AV
CHECKED BY: LW, JF

REVISIONS	DATE	BY
A REVISION 1-MISC	3/11/2014	JB

PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472

WESTMINSTER WOODS
WATER CONSERVATION PROJECT
WATER TANK PLAN

VERIFY SCALES ONE INCH

SHEET 2 OF 6

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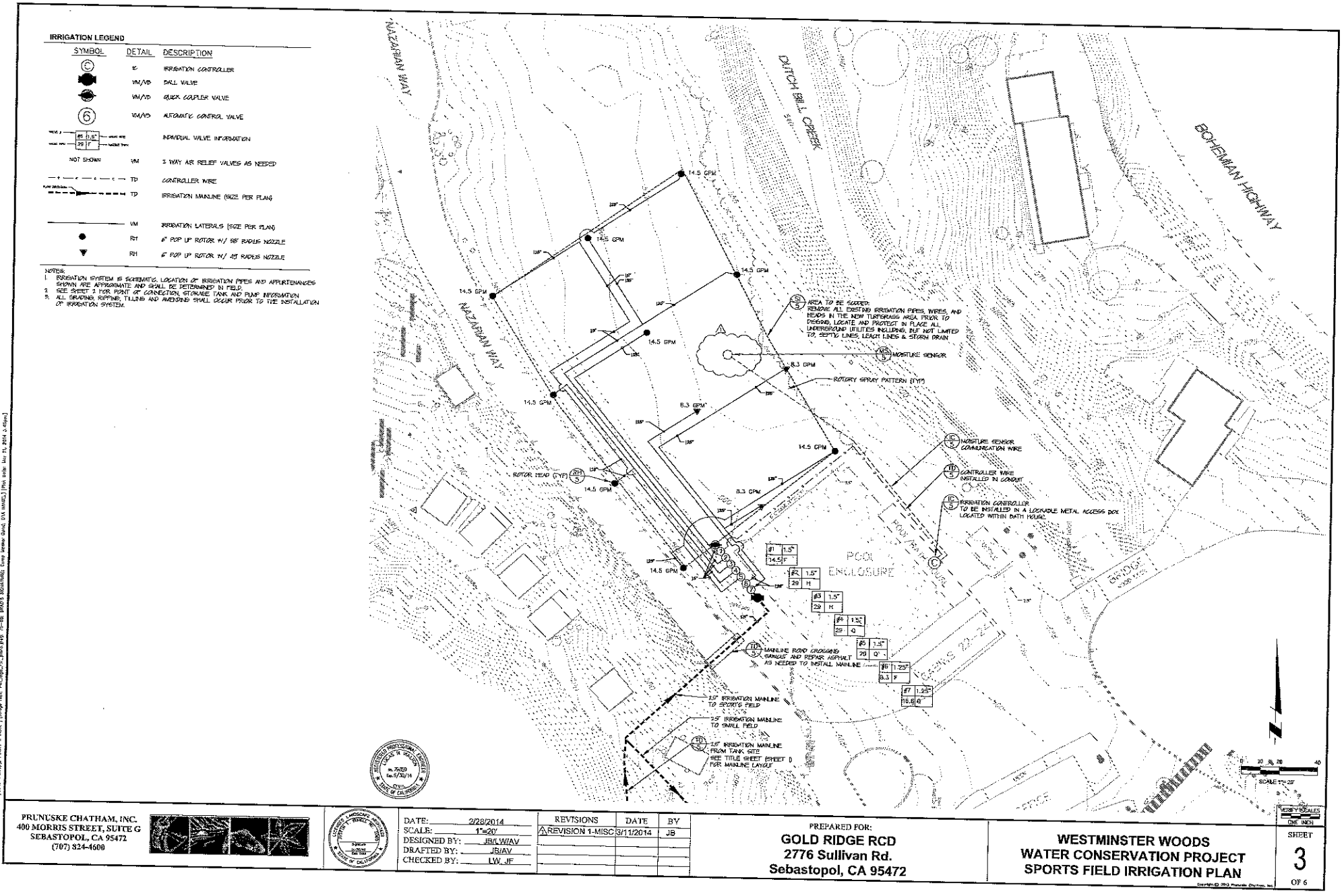
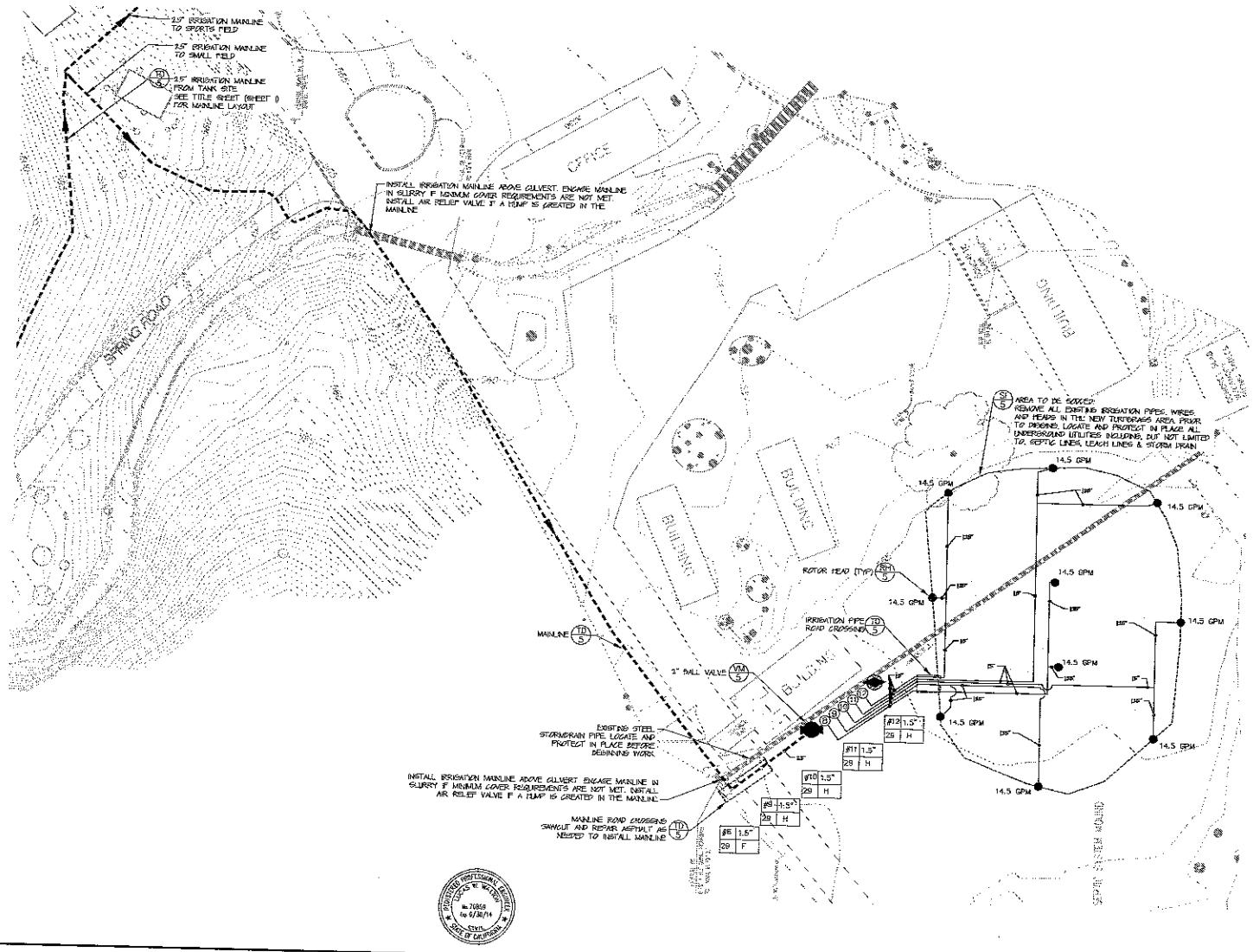

IRRIGATION LEGEND
SYMBOL DETAIL DESCRIPTION
IC IRRIGATION CONTROLLER
VM/VB BALL VALVE
VM/VB QUICK COUPLER VALVE
VM/VB AUTOMATIC CONTROL VALVE
INDIVIDUAL VALVE INFORMATION
NOT SHOWN VM 3 WAY AIR RELIEF VALVES AS NEEDED
TD CONTROLLER WIRE
TD IRRIGATION MAINLINE (SIZE PER PLAN)
VM IRRIGATION LATERALS (SIZE PER PLAN)
RH 6" POP UP ROTOR W/ 98' RADIUS NOZZLE
RH 6" POP UP ROTOR W/ 45' RADIUS NOZZLE
NOTES:
1. IRRIGATION SYSTEM IS SCHEMATIC. LOCATION OF IRRIGATION PIPES AND APPURTENANCES SHOWN ARE APPROXIMATE AND SHALL BE DETERMINED IN FIELD.
2. SEE SHEET 2 FOR POINT OF CONNECTION, STORAGE TANK AND PUMP INFORMATION.
3. ALL GRADING, RIPPING, TILLING AND AMENDING SHALL OCCUR PRIOR TO THE INSTALLATION OF IRRIGATION SYSTEM.
NAZARIAN WAY
DUTCH BILL CREEK
BOHEMIAN HIGHWAY
14.5 GPM
8.3 GPM
AREA TO BE SODDED: REMOVE ALL EXISTING IRRIGATION PIPES, WIRES, AND HEADS IN THE NEW TURFGRASS AREA PRIOR TO DIGGING. LOCATE AND PROTECT IN PLACE ALL UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, SEPTIC LINES, LEACH LINES & STORM DRAIN
MOISTURE SENSOR
ROTARY SPRAY PATTERN (TYP)
MOISTURE SENSOR COMMUNICATION WIRE
CONTROLLER WIRE INSTALLED IN CONDUIT
IRRIGATION CONTROLLER TO BE INSTALLED IN A LOCKABLE METAL ACCESS BOX LOCATED WITHIN BATH HOUSE
ROTOR HEAD (TYP)
POOL ENCLOSURE
MAINLINE ROAD CROSSING SAWCUT AND REPAIR ASPHALT AS NEEDED TO INSTALL MAINLINE
2.5" IRRIGATION MAINLINE TO SPORTS FIELD
2.5" IRRIGATION MAINLINE TO SMALL FIELD
2.5" IRRIGATION MAINLINE FROM TANK SITE SEE TITLE SHEET (SHEET 1) FOR MAINLINE LAYOUT
#1 1.5" 14.5 F
#2 1.5" 29 H
#3 1.5" 29 H
#4 1.5" 29 Q
#5 1.5" 29 Q
#6 1.25" 8.3 F
#7 1.25" 16.6 Q
SCALE 1"=20'
PRUNUSKE CHATHAM, INC.
400 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600
DATE: 2/28/2014
SCALE: 1"=20'
DESIGNED BY: JB/LW/AV
DRAFTED BY: JB/AV
CHECKED BY: LW, JF
REVISIONS DATE BY
REVISION 1-MISC 3/11/2014 JB
PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472
WESTMINSTER WOODS
WATER CONSERVATION PROJECT
SPORTS FIELD IRRIGATION PLAN
SHEET 3 OF 6



IRRIGATION LEGEND

SYMBOL	DETAIL	DESCRIPTION
C	IC	IRRIGATION CONTROLLER
	VM/VD	BALL VALVE
	VM/VD	QUICK COUPLER VALVE
6	VM/VD	AUTOMATIC CONTROL VALVE
#6 1.5" 29 F		INDIVIDUAL VALVE INFORMATION
NOT SHOWN	VM	2 WAY AIR RELIEF VALVES AS NEEDED
	TD	CONTROLLER WIRE
	TD	IRRIGATION MAINLINE (SIZE PER PLAN)
	VM	IRRIGATION LATERALS (SIZE PER PLAN)
	RH	6" POP UP ROTOR W/ 98' RADIUS NOZZLE
	RH	6" POP UP ROTOR W/ 83 RADIUS NOZZLE

NOTES:
1. IRRIGATION SYSTEM IS SCHEMATIC. LOCATION OF IRRIGATION PIPES AND APPURTENANCES SHOWN ARE APPROXIMATE AND SHALL BE DETERMINED IN FIELD.
2. SEE SHEET 2 FOR POINT OF CONNECTION, STORAGE TANK AND PUMP INFORMATION
3. ALL GRADING, RIPPING, TILLING AND AMENDING SHALL OCCUR PRIOR TO THE INSTALLATION OF IRRIGATION SYSTEM.

0 10 20 40
SCALE 1"=20'

PRUNUSKE CHATHAM, INC.
400 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600

DATE: 2/28/2014
SCALE: 1"=20'
DESIGNED BY: JB/LW/AV
DRAFTED BY: JB/AV
CHECKED BY: LW, JF

REVISIONS	DATE	BY
1 REVISION 1-MISC	3/11/2014	JB

PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472

WESTMINSTER WOODS
WATER CONSERVATION PROJECT
SMALL FIELD IRRIGATION PLAN

VERIFY SCALES ONE INCH

SHEET 4 OF 6

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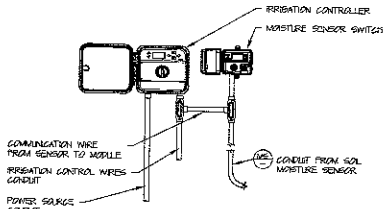
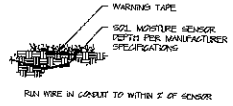
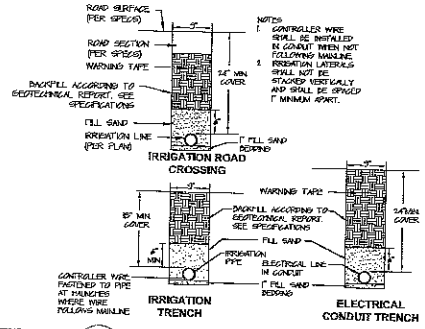


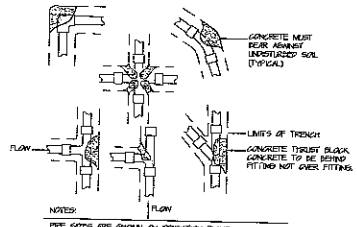
IC IRRIGATION CONTROLLER
SECTION/ ELEVATION NTS



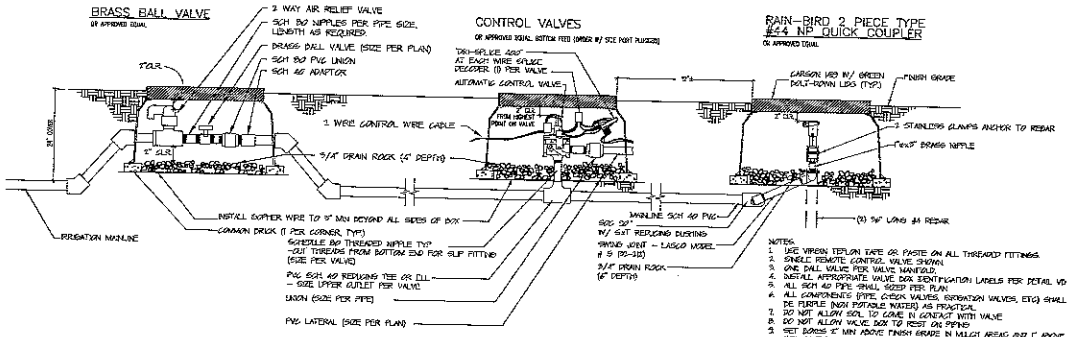
MS MOISTURE SENSOR
TYPICAL SECTION NTS



TD TRENCH DETAILS
TYPICAL SECTIONS NTS

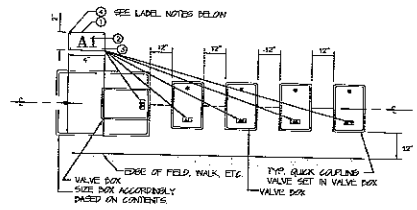


TB MAINLINE THRUST BLOCKS
PLAN VIEW NTS



NOTES:
1. USE VIRGIN TEFLON TAPE OR PASTE ON ALL THREADED FITTINGS.
2. SINGLE REMOTE CONTROL VALVE SHOWN.
3. ONE BALL VALVE FOR VALVE MANIFOLD.
4. INSTALL APPROPRIATE VALVE BOX IDENTIFICATION LABELS PER DETAIL VB
5. ALL SCH 40 PIPE SHALL SLOPE PER PLAN
6. ALL COMPONENTS (PIPE, CHECK VALVES, IRRIGATION VALVES, ETC) SHALL BE PURPLE (NON POTABLE WATER) AS PRACTICAL.
7. DO NOT ALLOW SOIL TO COME IN CONTACT WITH VALVE
8. DO NOT ALLOW VALVE BOX TO REST ON PIPES
9. SET BOXES 2" MIN ABOVE FINISH GRADE IN MULCH AREAS AND 1" ABOVE SOIL IN TURF AREAS.
10. 1" TWO CONTROL VALVES ARE LOCATED IN A SINGLE BOX, GROUP BY ROTOR NOZZLE AND SPRAY PATTERN
11. NO MORE THAN TWO CONTROL VALVES PER VALVE BOX

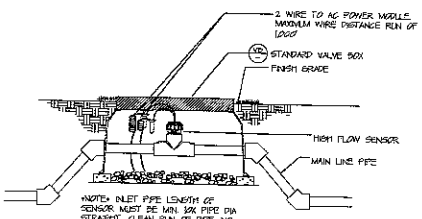
VM IRRIGATION VALVE MANIFOLD DETAIL
SECTION NTS



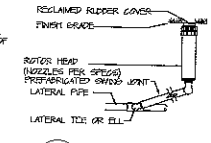
VALVE LABEL NOTES:
1. VALVE LABEL SHALL BE .08" THICK ALUMINUM PLATE WITH LETTERS AND NUMBERS RAISED HALFWAY THROUGH THE PLATE WHICH CORRESPOND TO EACH IRRIGATION VALVE, QUICK COUPLER, ETC.
2. LETTERS SHALL BE 1-1/2" HIGH HELVETICA STYLE, AND PAINTED WITH GREEN ENAMEL.
3. ATTACH WITH 5/16" POP RIVETS THRU LABEL & VALVE BOX AT EA OF THE 4 CORNERS OF LABEL.
4. CORNERS TO HAVE 1/4" RADIUS AND ALL EDGES TO HAVE SMOOTH EDGES.
5. ALL BOXES SHALL BE LABELED INCLUDING QUICK COUPLERS AND BALL VALVES.

VALVE BOX NOTES:
1. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
2. SET BOXES 2" ABOVE FINISH GRADE IN MULCH OR IN GROUND COVER/ SHRUB AREAS.
3. SET 1" ABOVE FINISH GRADE IN TURF AREAS. SET ROV AND VALVE BOX ASSEMBLY IN GROUND COVER/ SHRUB AREA. WHERE POSSIBLE INSTALL IN LAWN ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF WALK OR BUILDING. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
5. BALL VALVE BOX ONLY: INSTALL "IN LINE".

VB VALVE BOX LAYOUT
PLAN VIEW NTS



FS HIGH FLOW SENSOR
SECTION NTS



NOTES:
1. ADJUST SPRAYS FOR OPTIMAL COVERAGE.
2. AVOID OVERSPRAY ON WALKWAYS OR BUILDINGS
3. SEE IRRIGATION PLANS (SHEETS 3 & 4)

RH ROTOR HEAD
SECTION/ ELEVATION NTS

SI SOD INSTALLATION
TYPICAL SECTION NTS

PRUNUSKE CHATHAM, INC.
408 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600

DATE: 2/28/2014
SCALE: PER DETAIL
DESIGNED BY: JB/LW/AV
DRAFTED BY: JB/AV
CHECKED BY: LW/JF

REVISIONS	DATE	BY
1 REVISION 1-MISC	3/11/2014	JB

PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472

WESTMINSTER WOODS
WATER CONSERVATION PROJECT
CONSTRUCTION DETAILS

VERIFY SCALES ONE INCH

SHEET 5 OF 6

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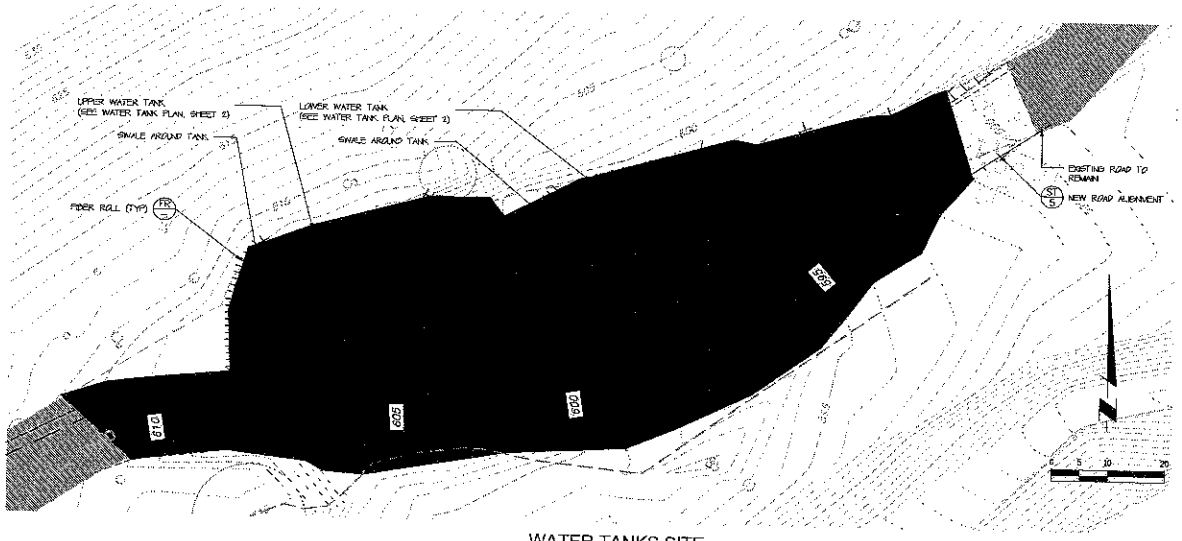
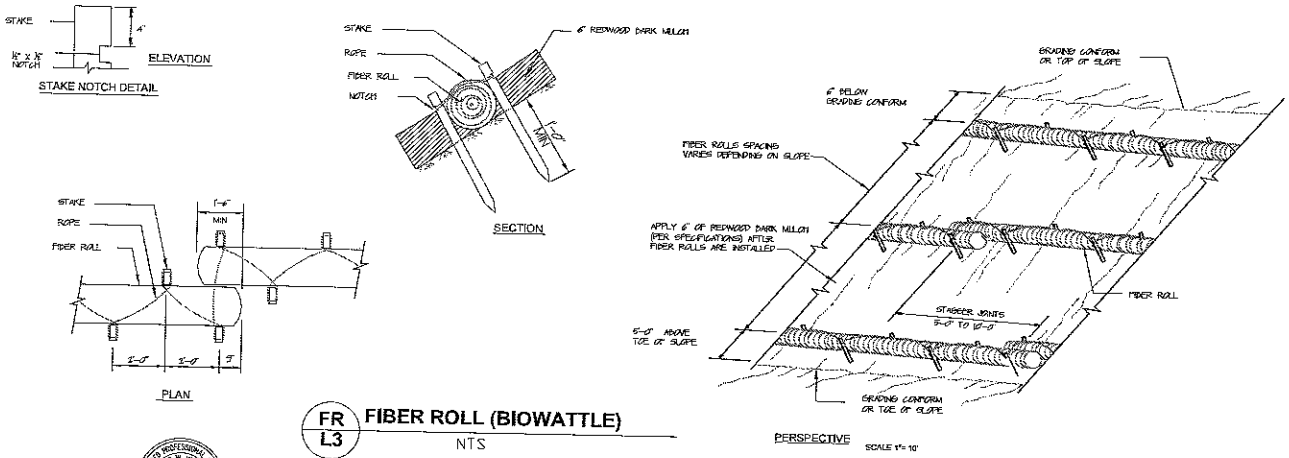


WATER TANKS SITE
SCALE 1"=10'

EROSION CONTROL LEGEND

SYMBOL	DETAIL	DESCRIPTION
		EXISTING ROAD
		NEW ROAD ALIENMENT
		6" OF REDWOOD BARK MULCH
	FR	FIBER ROLL

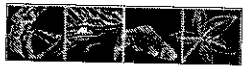
NOTES:
1. ALL GRADED AREAS WITH BARE SOIL SHALL RECEIVE 6" OF ARBOR MULCH AFTER FIBER ROLLS ARE INSTALLED.
2. TEMPORARY EROSION CONTROL MEASURES WILL BE REQUIRED (SEE SPECIFICATIONS) SHOULD RAIN BE PREDICTED OR OCCUR WHILE CONSTRUCTION IS IN PROGRESS.



FR L3 FIBER ROLL (BIOWATTLE)
NTS

REGISTERED PROFESSIONAL ENGINEER
JOHN W. WALTERS
No. 79856
Exp. 6/30/14
CIVIL
STATE OF CALIFORNIA

PRUNUSKE CHATHAM, INC.
400 MORRIS STREET, SUITE G
SEBASTOPOL, CA 95472
(707) 824-4600



LICENSED LANDSCAPE ARCHITECT
JEFFREY A. BRUTT
No. 3844
STATE OF CALIFORNIA

DATE:	2/28/2014
SCALE:	PER DETAIL
DESIGNED BY:	JB/LW/AV
DRAFTED BY:	JB/AV
CHECKED BY:	LW/JF

REVISIONS	DATE	BY
1 REVISION 1-MISC	3/11/2014	JB

PREPARED FOR:
GOLD RIDGE RCD
2776 Sullivan Rd.
Sebastopol, CA 95472

WESTMINSTER WOODS
WATER CONSERVATION PROJECT
EROSION CONTROL PLAN & DETAILS

VERIFY SCALES
ONE INCH

SHEET
6
OF 6

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Westminster Woods Camp and Conference Center
Water Right Application

Attachment No. 5 – Existing Water Rights (#13)

(1) Statement of Diversion and Use #S024280 (Attachment 5A)

If the application is approved, Westminster Woods will dedicate the riparian water diverted for the purpose of irrigation under Statement S024280 to instream flow (water diverted for domestic purposes under Westminster Woods's riparian right is not part of the Petition for Change). The Petition for Change is included with this application.

- Source: Dutch Bill Creek
- Type of right: Riparian
- Year of First Use: 1980
- Purpose: Irrigation
- Season: June through October
- Location of POD: SW ¼ of the NW ¼ of Sec. 21, Township 7 North, Range 10 West, B&M Mt. Diablo

(2) Statement of Diversion and Use filed June 2014 (Attachment 5B)

The Camp will continue to exercise its riparian rights for domestic use. This use is not touched by this application or petition.

- Source: Unnamed stream tributary to Dutch Bill Creek
- Type of right: Riparian
- Year of First Use: 1946
- Purpose: Domestic
- Season: Year-round
- Location of POD: SW ¼ of the NW ¼ of Sec. 21, Township 7 North, Range 10 West, B&M Mt. Diablo

In the event of an emergency, the storage tanks to be installed through this project are designed to provide a backup water supply for domestic use for the camp and conference center. The camp will sign an agreement with Gold Ridge Resource Conservation District agreeing that the total amount diverted and stored under this new appropriative right will not exceed 0.86 acre-feet per annum and any *emergency* potable use will be in lieu of irrigation uses.

State Water Resources Control Board

DIVISION OF WATER RIGHTS

INITIAL STATEMENT OF WATER DIVERSION AND USE

NOTE: A Statement is not a Water Right

READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM

STATEMENT COVER PAGE

Information provided by water diverters on this page will be for office use only.
For your privacy, this cover page will not be made available for public online viewing.

COVER PAGE: INITIAL STATEMENT OF WATER DIVERSION AND USE

CLAIMANT NAME Westminster Woods Camp

SOURCE/TRIBUTARY Dutch Bill Creek

DIVERSION WORKS NAME Creek pump house

A. Claimant Information (required)

Claimant Name(s):
Westminster Woods Camp

Mailing Address	City	State	Zip
6510 Bohemian Hwy	Occidental	CA	95465

Phone number	Email Address (if available)
7087-874-2426	Tony@westminsterwoods.org

Agent Name (if applicable)
Tony Fry Buildings & Grounds Manager

Mailing Address City State Zip

Phone Number	Email Address (if available)

Land Owner Name (if different from claimant)

Mailing Address City State Zip

B. Certification of Statement (required)

I declare under penalty of perjury that the information in this statement of water diversion and use is true to the best of my knowledge and belief.

DATE: 11- 4 - 13 at Sonoma County (county), California

SIGNATURE: Tony Fry 11/4/13

PRINTED NAME: Tony (first name) Olen (middle name) Fry (last name)

COMPANY NAME: Westminster Woods Camp & Conference center

Submit Form Electronically

UPON COMPLETION OF THIS STATEMENT, ATTACH ALL SUPPORTING DOCUMENTATION AND MAPS AND MAIL TO:

State Water Resources Control Board
Division of Water Rights
PO Box 2000
Sacramento, CA 95812-2000

Additional copies of this form, instructions on how to complete this form and water right information can be obtained at http://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/. Revised Jan. 1, 2013.

State Water Resources Control Board

DIVISION OF WATER RIGHTS

INITIAL STATEMENT OF WATER DIVERSION AND USE

NOTE: A Statement is not a Water Right

READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM

PAGE 1 OF 1: INITIAL STATEMENT OF WATER DIVERSION AND USE — CLAIMANT NAME Westminster Woods Camp

SOURCE/TRIBUTARY Dutch Bill Creek — DIVERSION WORKS NAME

1. Type of Claim

Check the box(es) which describe the type of claim(s) under which you are diverting water.

☑ Riparian ☐ Pre-1914 ☐ Court Decree ☐ Pending Appropriative Application ☐ Other

If you checked yes for Court Decree, Pending Appropriative Application or other, list the decree number, application ID or explanation:

2. Water Course Description (required)

Source Name at the point of diversion	Tributary to
Dutch Bill Creek	Russian River

3. Legal Land Description (required)

Provide the location of the Point of Diversion using one of the following methods (check one box and enter coordinates, if applicable)

☐ Latitude/Longitude Measurements:

☐ California Coordinate System (NAD 1983):

☑ USGS Topographic Map with point of diversion labeled on map (if checked yes, please attach map)

County (required)	Assessor's Parcel Number(s), if assigned
Sonoma	075 - 080 - 001

Provide Public Land Description to nearest 40 acres (if assigned)

SW ¼ of the NW ¼ of Section 21, Township 7 North, Range 10 West, B&M Mount Diablo

4. Place of Use Description (required)

Provide a general description of the area in which the water was used

Watering Lawns

Provide an outline of the Place of Use using one or both of the following methods (check box indicating each map attached)

☑ USGS Topographic Map ☐ County Assessor's parcel map

5. Purpose of Use Description (required)

Provide a listing of use types (see instructions for a listing of water uses)

Irrigation

Number of Acres (if applicable)	Persons Served (if applicable)	Stock Watered (if applicable)
1 Acre		

6. Diversion Works Description (required)

Name of Diversion Works, if named	Year in which diversion commenced (or specify nearest known year)
Creek Pump house	1980

List any related existing water rights, if applicable (for example, an appropriative right using the same diversion works)

NA

Type of Diversion Facility (select one)

☐ Gravity ☑ Creek Pump ☐ Well Pump ☐ Other (please specify)

Capacity of Diversion Works (specify unit of measure)	Capacity of Storage Tank or Reservoir (if applicable)
☐ cfs ☑ gpm ☐ gpd	☑ Gallons ☐ Acre-feet

7. Quantity of Water Diverted (required) *Note: Measurements must be made using "best available technology" and "best professional practices". If "best technology available" is not used to measure diversions, explain in section 8b below.*

Provide the quantity of water diverted each month in the table below as a measured in (check one box) ☐ Gallons ☐ Acre-feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2011						622,800	276,400	180,570	72,563	31,812			1184.145

CONTINUE TO PAGE 2

PAGE 2 of 2: INITIAL STATEMENT OF WATER DIVERSION AND USE CLAIMANT NAME Westminster Woods Camp

SOURCE/TRIBUTARY Dutch Bill Creek DIVERSION WORKS NAME

8. Measurement Device Description (required)

Method used to measure water diverted (select one)

- [x] Water directly diverted and/or diverted to storage was measured with a measuring device. *(if checked, proceed to section 8a and skip section 8b)*
- [ ] Direct measurement using a device listed in Section 8a is not "locally cost effective" for water directly diverted and/or diverted to storage. *(If checked, skip section 8a and proceed to section 8b).*

8a. Measuring Device

Indicate the types of measuring devices used (check all that apply):

- [x] Propeller Meter
- [ ] Sluice/Slide Gate
- [ ] Acoustic Meter
- [ ] Weir
- [ ] Staff gage and storage capacity curve
- [ ] Staff gage and floodable acreage
- [ ] Pressure transducer and storage capacity curve
- [x] Other: Flow meashurements & preshure transducer/ rating curves

Indicate any additional technology used (check all that apply and explain below):

- [ ] Flow totalizer
- [ ] Data Logger
- [ ] Telemetry
- [ ] Other:

Indicate who installed your measuring device(s) (check all that apply):

- [x] Representative using manufacturer's recommendations
- [ ] Licensed Civil or Agricultural Engineer
- [ ] Representative who is American Water Works Association (AWWA)-certified
- [ ] Hydrographer
- [ ] Representative using United States Geological Survey (USGS) techniques
- [ ] Other/Unknown:

List the make, model number, and last calibration date of your measuring device(s), if available:
Daniel L Jerman DL5200 water meter

8b. Explanation of why use of a measuring device is "not locally cost effective"

Indicate why you concluded that direct measurement using a device listed in Section 8a is not locally cost effective (check all that apply)

- [ ] Diversion is small or minimal in size
- [ ] Diversions are infrequent
- [ ] No power at diversion point
- [ ] Other:

Indicate method(s) used as an alternative to direct measurement in order to complete this report (check all that apply)

- [ ] Electricity records dedicated to the pump
- [ ] Total facility electricity records minus estimated non-pump electricity
- [ ] Engine fuel use or hour meter records
- [ ] Crop duty estimates/consumptive use estimates
- [ ] Power generation estimates
- [ ] Other water duty estimates other than for crops
- [ ] Modeled/estimated flows
- [ ] Remote satellite imaging
- [ ] Pipe/trajectory method
- [ ] Bucket and stopwatch
- [ ] Float and stopwatch
- [ ] Other:

Explain your measurement alternatives:

9. Maximum Rate of Diversion (if available)

Provide the maximum rate of diversion achieved in each month as measured in (check one box) [ ] cfs [x] gpm [ ] gpd

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011						120	120	120	120	120	120	

10. Recent Water Use

Provide the annual water use in recent years:				
	Maximum	3.5	[ ] Gallons	[x] Acre Feet
	Minimum	1.9	[ ] Gallons	[x] Acre Feet

11. Water Conservation Efforts (answer only sections applicable to your diversion)

Water Conservation: Are you currently employing any methods of water conservation? [x] Yes [ ] No

If yes, describe any water conservation efforts in use:
We are using the pump to water the grass as little as possible

Water Quality and Wastewater Reclamation: Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree that unreasonably affects such water for other beneficial uses? [ ] Yes [x] No

Conjunctive use of surface water and groundwater: Are you using groundwater in lieu of surface water? [ ] Yes [x] No

END OF INITIAL STATEMENT FORM

Sign and Submit Form | Save form (submit later)

S024280

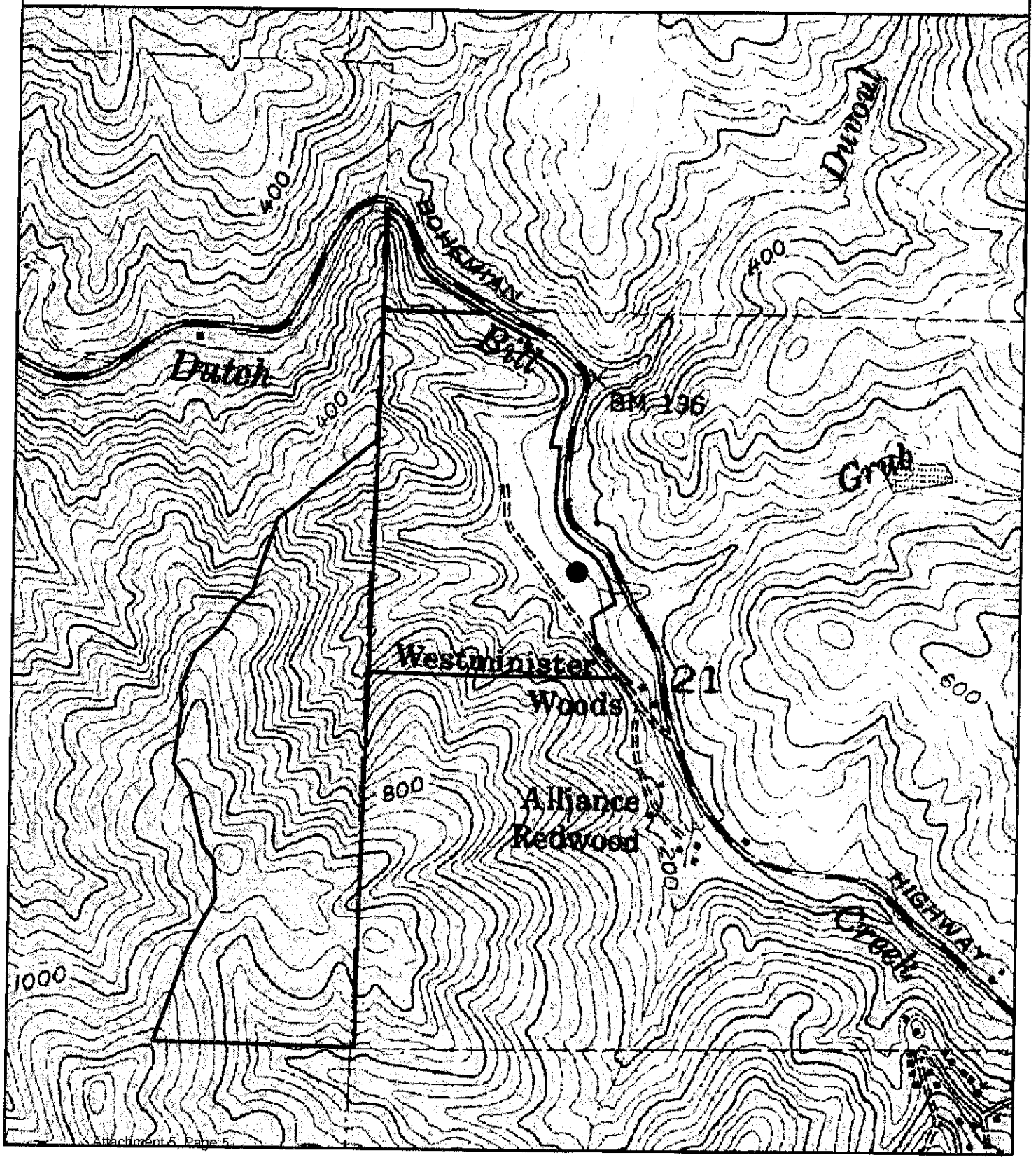
Point of Diversion

Westminster Woods
Dutch Bill Creek Watershed
Sonoma County, CA

N
W E
S

Westminster Woods parcels
Point of Diversion

0 0.125 0.25 Miles



Contact Report

A. Diverter/Responsible Party: Initial Filing

B. Contact #:

C. Temporary statement # (if applicable; i.e. 2012-206): 2013-0582

D. Contact Attempts:

Date/ Time	Contacted By	Person Contacted	Reason for Contact	Result of Contact
01/24/2014 1:10pm				

Conversions:

E. Cycle: ☐ 1 ☐ 2 ☑ 3 F: Year POD Commenced: 1980

G. Capacity of diversion works:

H. Diversion Works Name: 075-080-001

I. Capacity of storage:

J. Quantity of Water Diverted: 1,184,145gal.

K. Water use in recent years: Maximum 3.5af. Minimum 1.9af.

L. Latitude/Longitude: 122deg. 58'32.35 38deg. 26'20.721

Statement Processing:

	Date	Completed by
M. Entered into eWRIMS:	01/24/2014	DCC
N. Plotted:	01/24/2014	DCC

O. POD ID#: 62019

P. Additional Comments:

S024280 1st attempt to contact 01/23/2014 = contacted Tony = he said he will email us the capacity of diversion information and that there is no storage.

Q. Missing Information

☐ Name/Address ☐ Source/Tributary
☐ POD Info ☑ Capacity of Diversion Works/Storage
☐ Purpose of Use
☐ Year Commenced ☐ Place of Use

Attachment 5B - Statement filed in 2014

State Water Resources Control Board

DIVISION OF WATER RIGHTS

INITIAL STATEMENT OF WATER DIVERSION AND USE

A STATEMENT SHALL NOT ESTABLISH OR CONSTITUTE EVIDENCE OF A WATER RIGHT
READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM
FURTHER INFORMATION CAN BE FOUND IN WATER CODE, SECTIONS 5100-5107

Page 1 of 3: INITIAL STATEMENT OF WATER DIVERSION AND USE DIVERTER NAME Westminster Woods Camp

SOURCE/TRIBUTARY Unamed stream tributary to Dutch Bill creek DIVERSION WORKS NAME System # 4901095

A. Diverter Information

Diverter Name(s) Westminster Woods Camp			
Mailing Address 6510 Bohemian Hwy	City Occidental	State CA	Zip 95465
Phone Number 707-874-2426 Ext 625	Email Address (if available) tony@westminsterwoods.org		
Person Filing Statement (If Different From Diverter) Tony Fry Buildings & Grounds Manager			
Mailing Address 6510 Bohemian Hwy	City Occidental	State CA	Zip 95465
Phone Number 707-874-2426 Ext 625	Email Address (if available) tony@westminsterwoods.org		
Land Owner Name Westminster Woods Camp & Conference Center			
Mailing Address 6510 Bohemian Hwy	City Occidental	State CA	Zip 95465
Mail Receiver	◉ **Diverter**	○ **Person Filing**	

B. Signature and Important Information

DATE: 6/27/2014

SIGNATURE: Tony Fry

PRINTED NAME: Tony (first name) Olen (middle name) Fry (last name)

I declare that the information in this report is true to the best of my knowledge and belief. **Submit Form Electronically**

THE STATE WATER RESOURCES CONTROL BOARD MAY RELY ON THE NAMES AND ADDRESSES ON THIS DOCUMENT FOR MAILING NOTICES REGARDING PROCEEDINGS BEFORE THE BOARD. (Wat. Code, § 5106, subd. (b)(1).)

SUPPLEMENTAL STATEMENTS OF WATER DIVERSION AND USE MUST BE FILED AT THREE-YEAR INTERVALS OR IF THERE IS A CHANGE IN THE NAME OR ADDRESS OF THE DIVERTER. (Wat. Code, § 5104.)

THE MAKING OF A WILLFUL MISSTATEMENT ON A STATEMENT OF WATER DIVERSION AND USE IS A MISDEMEANOR PUNISHABLE BY A FINE NOT EXCEEDING $1,000 OR BY IMPRISONMENT IN THE COUNTY JAIL FOR UP TO SIX MONTHS, OR BOTH. THE BOARD MAY IMPOSE CIVIL LIABILITY UPON A PERSON WHO KNOWINGLY MAKES A MATERIAL MISSTATEMENT ON THIS FORM. (Wat. Code, § 5107.)

UPON COMPLETION OF THIS STATEMENT, ATTACH ALL SUPPORTING DOCUMENTATION AND MAPS AND MAIL TO:

State Water Resources Control Board
Division of Water Rights
PO Box 2000
Sacramento, CA 95812-2000

Additional copies of this form, instructions on how to complete this form and water right information can be obtained at http://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/. Revised January 2014.

State Water Resources Control Board

DIVISION OF WATER RIGHTS

INITIAL STATEMENT OF WATER DIVERSION AND USE

A STATEMENT SHALL NOT ESTABLISH OR CONSTITUTE EVIDENCE OF A WATER RIGHT
READ THE ATTACHED INFORMATION AND INSTRUCTION SHEET BEFORE COMPLETING THIS FORM
FURTHER INFORMATION CAN BE FOUND IN WATER CODE, SECTIONS 5100-5107

PAGE 2 OF 3: INITIAL STATEMENT OF WATER DIVERSION AND USE — DIVERTER NAME Westminster Woods Camp

SOURCE/TRIBUTARY Unamed stream tributary to Dutch Bill creek — DIVERSION WORKS NAME System # 4901095

1. Type of Claim

Check the box(s) which describe the type of claim(s) under which you are diverting water.

☑ Riparian ☐ Pre-1914 ☐ Court Decree ☐ Pending Appropriative Application ☐ Pueblo ☐ Other:

If you checked yes for Court Decree, Pending Appropriative Application or other, list the decree number, application ID or explanation:

2. Water Course Description

Water Course Name at the point of diversion	Water Course is tributary to
Springs	Dutch Bill Creek then Russian River

3. Legal Land Description

Provide the location of the Point of Diversion using one of the following methods (check one box and enter coordinates, if applicable)

☐ Latitude/Longitude Measurements:
☐ California Coordinate System (NAD 1983):
☑ USGS Topographic Map with point of diversion labeled on map (if checked yes, please attach map)

Assessor's Parcel Number(s), if assigned:	County
075-080-001	Sonoma

Provide Public Land Description to nearest 40 acres (if assigned)

SW ¼ of the NW ¼ of Section 21, Township 7 North, Range 10 West, B&M Mount Diablo

4. Place of Use Description

Provide a general description of the area in which the water was used

Buildings & facilities within camp & conference center as indicated on map.

Identify the location of the place of use on a specific United States Geological Survey (USGS) topographic map and on any other maps with identifiable landmarks. If assigned, provide the public land description to the nearest 40-acre subdivision and the assessor's parcel number. (check box indicating each map attached)

☑ USGS Topographic Map ☐ County Assessor's parcel map

5. Purpose of Use Description (Please select all that apply below)

☐ Irrigation Number of Acres :	☑ Domestic Persons Served :	☐ Stock watering Number of stock and type:	☐ Other Please Explain:
	100-200 people per day		

6. Diversion Works Description

Name of Diversion Works, if named	Year in which diversion commenced (or specify nearest known year)
Westminster Woods Camp	1946

List any related existing water rights, if applicable (for example, an appropriative right using the same diversion works)

S024280 (irrigation use, different POD)

Type of Diversion Facility (select one)

☑ Gravity ☐ Water Course Pump ☐ Well Pump ☐ Other (please specify)

Do you directly divert water? ☑ Yes ☐ No

Capacity of Direct Diversion Works (specify unit and amount) 8-10
☐ Cubic feet per second ☑ Gallons per minute ☐ Gallons per day

Do you divert water to storage?
☐ On-stream storage (Complete Section B)
☐ Off-stream storage (Complete Sections A & B)

A. Capacity of Storage Diversion Works (specify unit and amount)
☐ Cubic feet per second ☐ Gallons per minute ☐ Gallons per day

B. Capacity of Storage Tank or Reservoir (specify unit and amount)
☐ Gallons ☐ Acre-feet

7. Quantity of Water Diverted Note; Measurements must be made using best available technologies and best professional practices as listed in Section 8a unless documentation is provided to the State Water Resources Control Board that the implementation of those practices is not locally cost effective.

Provide the quantity of water diverted each month in the table below as a measured in (check one box) ☑ Gallons ☐ Acre-feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2013	116,710	174,750	192,130	217,590	234,530	235,590	227,540	240,580	162,030	220,710	127,770	85,330	2,235,260

CONTINUE TO PAGE 2

PAGE 3 of 3: INITIAL STATEMENT OF WATER DIVERSION AND USE DIVERTER NAME Westminster Woods Camp

SOURCE/TRIBUTARY Unamed stream tributary to Dutch Bill creek DIVERSION WORKS NAME System # 4901095

8. Measurement Device Description

Method used to measure water diverted (select one)

(●) Water directly diverted and/or diverted to storage was measured with a measuring device. (If checked, proceed to section 8a and skip section 8b)

( ) Direct measurement using a device listed in Section 8a is not locally cost effective for water directly diverted and/or diverted to storage. (If checked, skip section 8a and proceed to section 8b).

8a. Measuring Device

Indicate the types of measuring devices used (check all that apply):

- [x] Propeller Meter
- [ ] Sluice/Slide Gate
- [ ] Acoustic Meter
- [ ] Weir
- [ ] Staff gage and storage capacity curve
- [ ] Staff gage and floodable acreage
- [ ] Pressure transducer and storage capacity curve
- [ ] Other: _____

Indicate any additional technology used (check all that apply and explain below):

- [ ] Flow totalizer
- [ ] Data Logger
- [ ] Telemetry
- [ ] Other: _____

Indicate who installed your measuring device(s) (check all that apply):

- [x] Representative using manufacturer's recommendations
- [ ] Licensed Civil or Agricultural Engineer
- [ ] Representative who is American Water Works Association (AWWA)-certified
- [ ] Hydrographer
- [ ] Representative using United States Geological Survey (USGS) techniques
- [ ] Other/Unknown: _____

List the make, model number, and last calibration date of your measuring device(s), if available:

Neptune 1 inch T-10 # 93005124

8b. Explanation of why use of a measuring device is "not locally cost effective"

Indicate why you concluded that direct measurement using a device listed in Section 8a is not locally cost effective (check all that apply)

- [ ] Diversion is small or minimal in size
- [ ] Diversions are infrequent
- [ ] Ungauged Siphon
- [ ] No power at diversion point
- [ ] Other: NA

Indicate method(s) used as an alternative to direct measurement in order to complete this report (check all that apply)

- [ ] Electricity records dedicated to the pump
- [ ] Total facility electricity records minus estimated non-pump electricity
- [ ] Engine fuel use or hour meter records
- [ ] Crop duty estimates/consumptive use estimates
- [ ] Power generation estimates
- [ ] Other water duty estimates other than for crops
- [ ] Modeled/estimated flows
- [ ] Remote satellite imaging
- [ ] Pipe/trajectory method
- [ ] Bucket and stopwatch
- [ ] Float and stopwatch
- [ ] Other: NA

Explain your measurement alternatives:

9. Maximum Rate of Diversion (if available)

Provide the maximum rate of diversion achieved in each month as measured in (check one box) [ ] cfs [x] gpm [ ] gpd

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	10	10	10	10	10	10	10	10	10	10	10	10

10. Recent Water Use

Provide the annual water use in recent years:			
	Maximum 2,072,900	[x] Gallons	[ ] Acre Feet
	Minimum 2,072,900	[x] Gallons	[ ] Acre Feet

11. Water Conservation Efforts (answer only sections applicable to your diversion)

Water Conservation: Are you currently employing any methods of water conservation? [x] Yes [ ] No

If yes, describe any water conservation efforts in use:

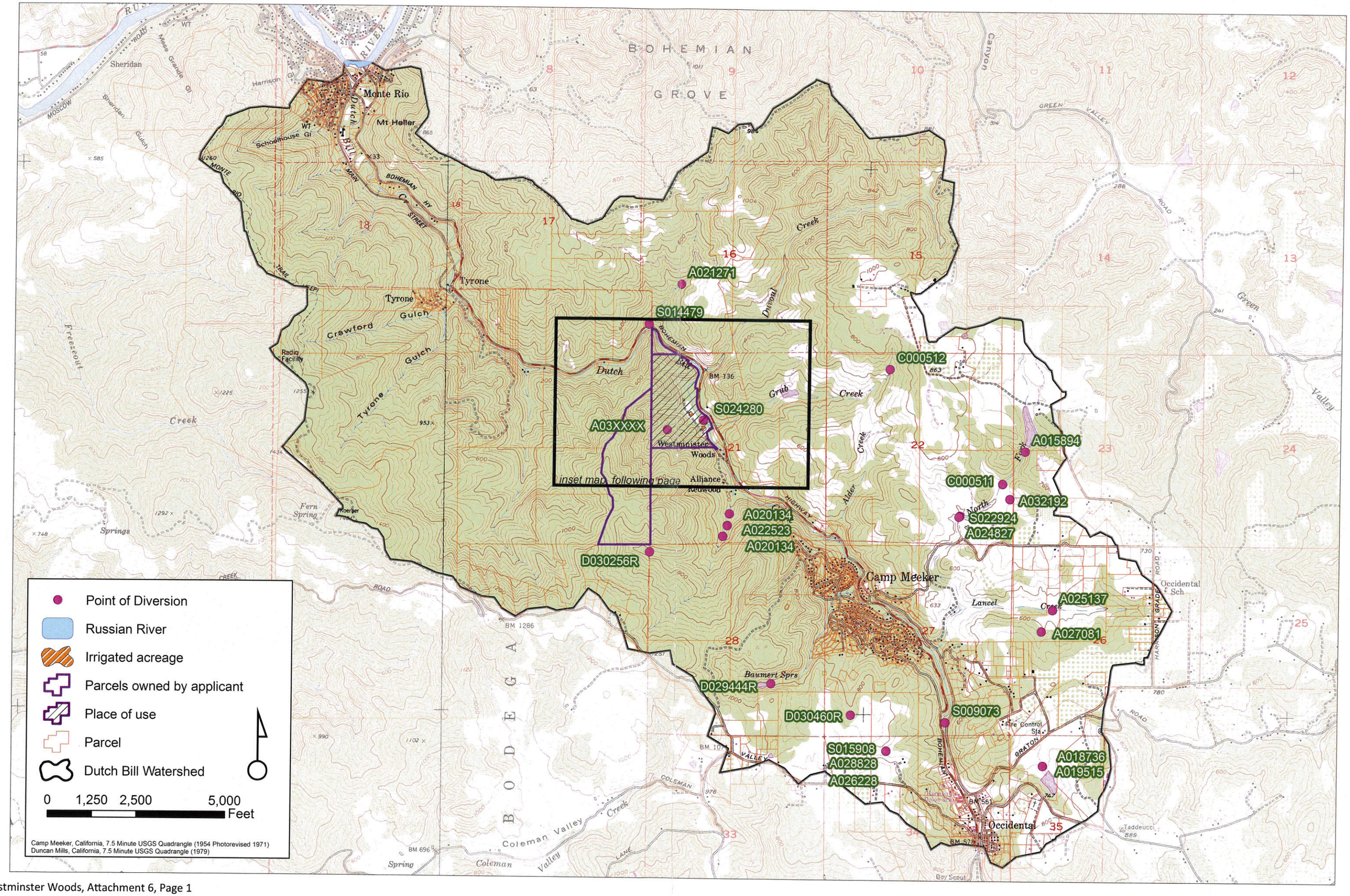
Have given notice to staff & guest to conserve water. Currently working on updrading toilets & shower heads to low flow.

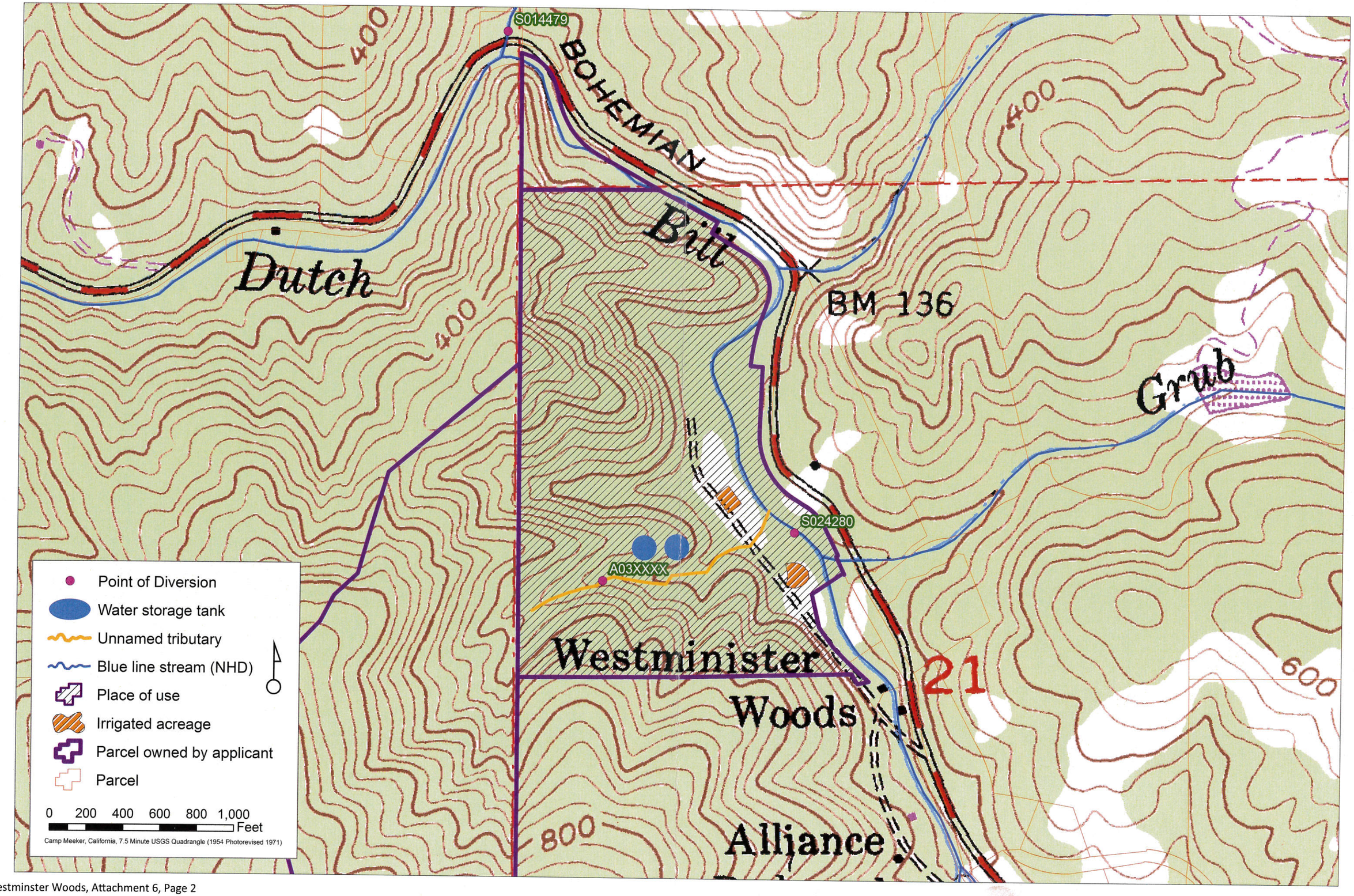
Water Quality and Wastewater Reclamation: Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility or water polluted by waste to a degree that unreasonably affects such water for other beneficial uses? [ ] Yes [x] No

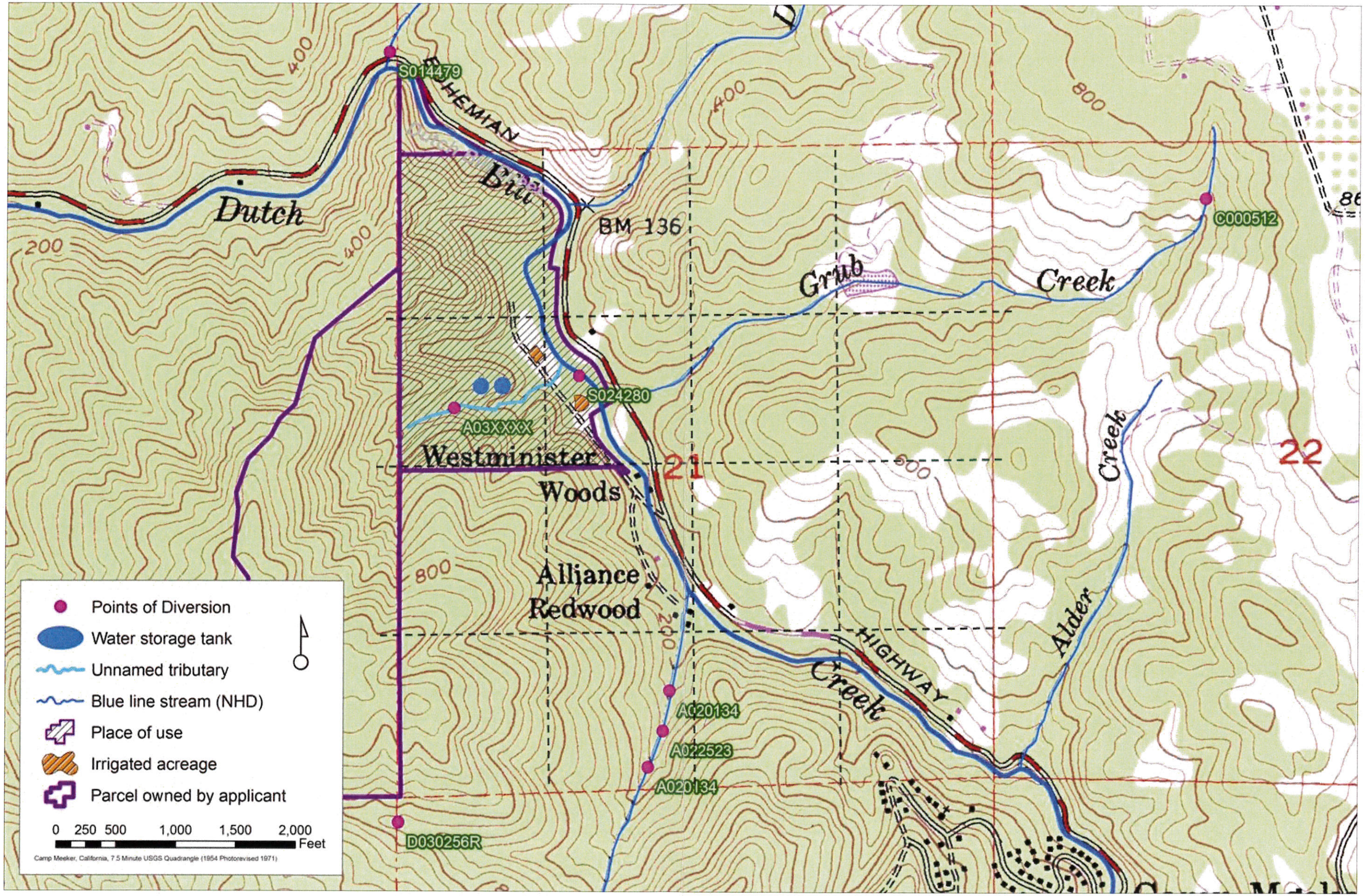
Conjunctive use of surface water and groundwater: Are you using groundwater in lieu of surface water? [ ] Yes [x] No

END OF INITIAL STATEMENT FORM

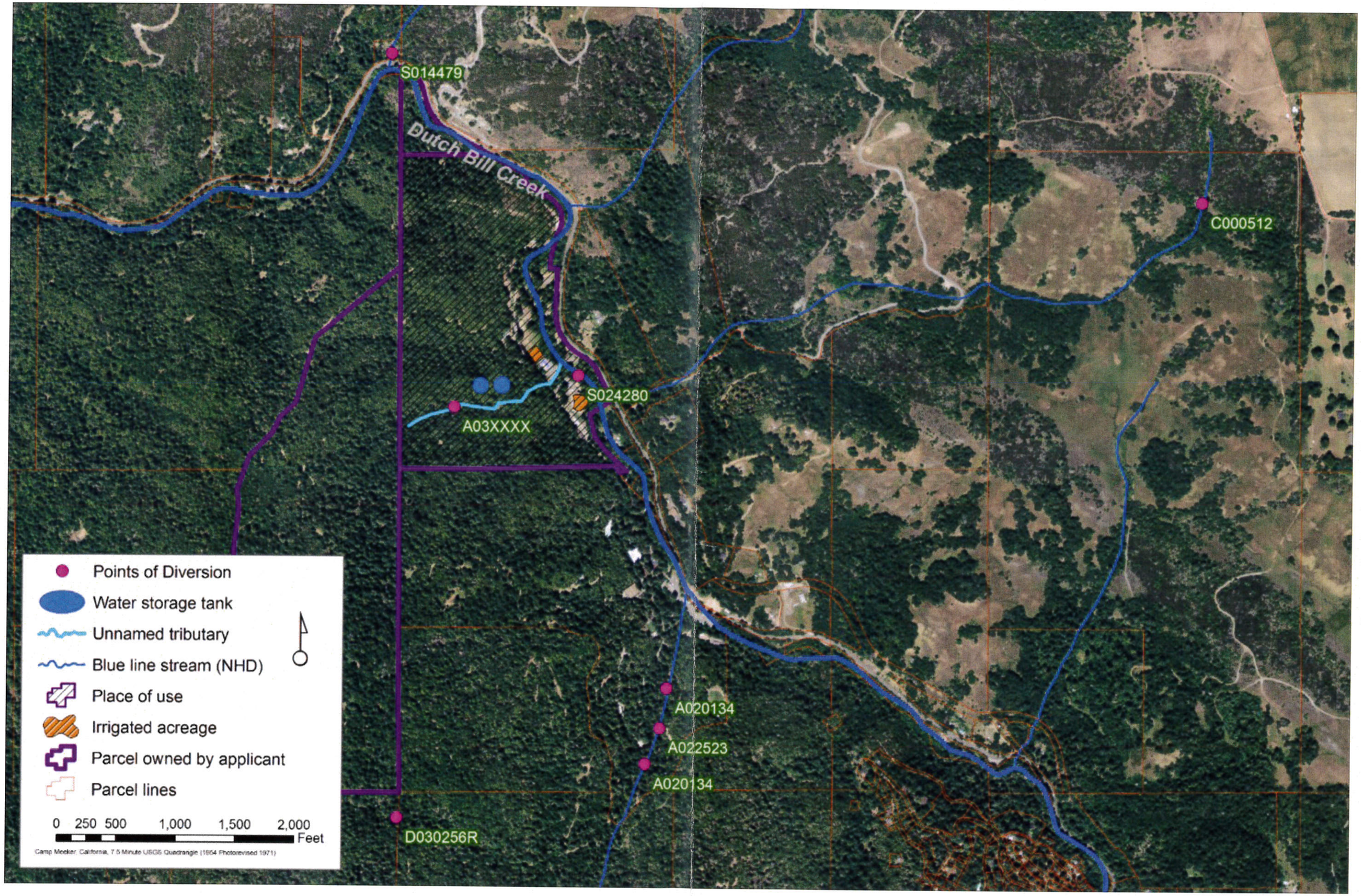
Sign and Submit Form | Save Form (submit later)


Point of Diversion
Russian River
Irrigated acreage
Parcels owned by applicant
Place of use
Parcel
Dutch Bill Watershed
0 1,250 2,500 5,000 Feet
Camp Meeker, California, 7.5 Minute USGS Quadrangle (1954 Photorevised 1971)
Duncan Mills, California, 7.5 Minute USGS Quadrangle (1979)
inset map, following page
Monte Rio
Mt Heller
Tyrone
Camp Meeker
Occidental
Westminster Woods
Alliance
Redwood
BOHEMIAN GROVE
BODEGA
S014479
A021271
C000512
S024280
A03XXXX
A015894
C000511
A032192
S022924
A024827
A020134
A022523
A020134
D030256R
A025137
A027081
D029444R
D030460R
S009073
S015908
A028828
A026228
A018736
A019515


S014479
BOHEMIAN
400
400
400
Dutch
Bill
BM 136
Grub
S024280
A03XXXX
Westminister
Woods
21
600
800
Alliance
Point of Diversion
Water storage tank
Unnamed tributary
Blue line stream (NHD)
Place of use
Irrigated acreage
Parcel owned by applicant
Parcel
0 200 400 600 800 1,000
Feet
Camp Meeker, California, 7.5 Minute USGS Quadrangle (1954 Photorevised 1971)



The point of diversion is in the southwest quarter of the northwest quarter of Section 21, 2,130 ft. south and 470 ft. east of the northwest corner of Section 21.



Aerial photo of Westminster Woods property showing new proposed diversion, place of storage, place of use, and existing diversion to be dedicated to instream flow along Dutch Bill Creek.

Westminster Woods Camp and Conference Center
Water Right Application

Attachment No. 7 – Environmental Document (#18)

The project at Westminster Woods Camp and Conference Center is included in the programmatic Mitigated Negative Declaration (MND) prepared by the Department of Fish and Wildlife for the Fisheries Restoration Grant Program.

It is available at https://www.dfg.ca.gov/fish/Administration/Grants/FRGP/Mit-Neg-Dec.asp.

The State Clearinghouse Number is 2014122048. Review of the MND ended on January 20, 2015, and the Notice of Determination (attached) was received by the State Clearinghouse on January 21, 2015.

The section pertaining to this project appears in Appendix A of the MND and is attached.

The 2015 Fisheries Restoration Grant Program

SCH Number: 2014122048

Document Type: NOD - Notice of Determination

Alternate Title: The 2015 Fisheries Restoration Grant Program Mitigated Negative Declaration

Project Lead Agency: Fish & Wildlife #2

Project Description

This project uses grant funds approved by the California Legislature to initiate activities that are designed to restore salmon and steelhead habitat in coastal and central streams and watersheds.

Contact Information

Primary Contact:
Melissa Mandrup
California Department of Fish and Wildlife, Region 2
916-327-8658
830 S Street
Sacramento, CA 95811

Project Location

County: Sacramento
City:
Region:
Cross Streets:
Latitude/Longitude:
Parcel No:
Township:
Range:
Section:
Base:
Other Location Info: Various

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency CDFW has approved the project described above on 1/21/2015 and has made the following determinations regarding the project described above.

1. The project ☐ will ☒ will not have a significant effect on the environment.

2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

Final EIR Available at: 830 S Street, Sacramento, CA 95811

Date Received: 1/21/2015

CEQAnet HOME | NEW SEARCH

Westminster Woods Water Conservation and Storage Project

Introduction:

The Grantee's Westminster Woods Water Conservation and Storage Project by North Coast Resource Conservation and Development Council (NCRCDC) will eliminate a significant irrigation diversion on Dutch Bill Creek by implementing water conservation measures and constructing sufficient water storage to extract irrigation water from springs during the winter and store it for summer use. The purpose of this project is to improve instream habitat for salmonids.

The Grantee shall not proceed with on the ground implementation until all necessary permits, consultations, and/or Notice to Proceed are secured.

All habitat improvement will follow techniques in the California Stream Habitat Restoration Manual Section VII Project Implementation.

Objective(s):

The Westminster Woods diversion decreases stream discharge by 0.3 cubic feet per second (cfs). By eliminating the irrigation diversion the Westminster Woods Water Conservation and Storage Project will help to retain a wetted volume at higher levels in the project reach during a 180-day summer and fall dry season (approximately May 1 through November 1) each year. Thus, positively impacting juvenile coho rearing, especially in drought years.

Elimination of the Westminster Woods diversion will be accomplished by implementing a suite of water conservation measures to reduce summer irrigation demand by constructing two large volume water storage tanks to store the remaining irrigation water demand and removaling an existing diversion pump from Dutch Bill Creek.

Project Description:

Location:

The project site is the Westminster Woods Camp and Conference Center, located along the mainstem of Dutch Bill Creek, approximately five miles upstream of its confluence with the Russian River in western Sonoma County. The camp is located at the confluence of Dutch Bill and Grub Creeks. The project includes several components, which are located at various sites within the Westminster Woods Camp property. The location of the existing water diversion pump is 38.4390^0 north, 122.9760^0 east, North American Datum 1983; section 21 of township 7 north, range 10 west, Mount Diablo base and meridian; Camp Meeker 7.5 Minute U.S. Geological Survey (USGS) Quadrangle map; 6510 Bohemian Highway, Occidental, California 95465.

From Santa Rosa, follow State Highway 12 west to Sebastopol. Continue west on Bodega Highway to Freestone, and turn north on Bohemian Highway. Follow Bohemian Highway through the town of Occidental and continue north approximately three miles. The Westminster Woods Camp is on the left. There are no locked gates, and the landowner contact is Tony Fry, Facilities Manager, (707) 874 2426 x125.

Project Set Up:
The NCRCDC will be responsible for the overall grant administration and issuing subcontracts for the project. As the subcontractor, Gold Ridge Resource Conservation District (GRRCD) will handle the implementation oversight and project management, landowner relations and coordination, biological surveys, the project operation & maintenance plan, project effectiveness monitoring, outreach & public education. A general contractor will be responsible for mobilization, construction of the tank fill system, water storage tank site preparation and tank construction, an irrigation system, soil amendment, and turf replacement. Prunuske Chatham Incorporated and RGH & Associates Incorporated will be the construction inspectors. The NCRCDC Grantee Project Manager and GRRCD will be responsible for reporting.

Materials:
Water tanks, concrete, pumps, turfgrass

Tasks:
Task 1. Overall Grant Administration will be performed by the Grantee. The Grantee will also be responsible for issuing subcontracts for the project.

Task 2. Implementation Oversight and Project Management will be performed by Gold Ridge Resource Conservation District (GRRCD), and includes permitting, preparation of bid materials, bid advertising and site tours, contractor selection, contract preparation and management, contractor oversight, and invoicing.

Task 3. Landowner Relations and Coordination. This task will consist of coordinating and scheduling implementation activities with camp staff and administration.

Task 4. Biological Surveys. The GRRCD Staff Ecologist will perform all biological surveys as needed to comply with permit requirements before and during construction.

Task 5. Project Construction. A contract for project construction will be awarded to a qualified general contractor through a competitive bid process. The general contractor will construct all project components, except those assigned to subcontractors. General contractor tasks include the following:

- Mobilization.

- Construction of the tank fill system. Water for irrigation will be sourced from the existing potable water supply infrastructure, and the connection will be made at the existing filtration facility.

- Water storage tank site preparation and tank construction. The general contractor will carry out all earthwork and site preparation for the water tank sites. Water tank engineering and construction will be subcontracted to a qualified water tank design and construction firm. Activities of the water tank subcontractor will be overseen by the general contractor and GRRCD. Subcontracts will also be awarded as necessary for specific components of the site preparation process, including tree removal, concrete pad forming and concrete supply.

- Irrigation system. The new irrigation system will include installation of new piping, sprinklers and controllers, as well as soil moisture probes. Installation of the irrigation pump and associated electrical components will be subcontracted to a qualified well and pump contractor.

- Soil amendment. To prepare for turf replacement and reduce irrigation demand, this task will include amending, aerating and composting the soil of the playing field and other grass areas. A subcontract will be awarded for locating camp utilities and existing irrigation lines.

- Turf replacement. Installation of new turf will be subcontracted to a qualified installer. Depending on the capacity of the general contractor, a subcontract for hauling of spoils and debris may also be subcontracted.

Task 6. Construction Inspection will be provided by the project designer, Prunuske Chatham Incorporated, and project geotechnical engineering firm, RGH & Associates Incorporated. Construction inspection includes reviewing bid materials and responding to requests for information, on-site construction and geotechnical observation and reporting, and reviewing construction change orders for design consistency.

Task 7. Project Operation and Maintenance Plan. A plan for ongoing operation and maintenance of the storage tanks and irrigation system, as well as maintenance of the irrigated areas, will be formulated. This document will guide camp facilities staff in maintaining the operability and efficiency of the system, as well as ensuring the durability of the project, and will be incorporated into the landowner agreement. Preparation of the plan will be a cooperative effort of the

GRRCD, Russian River Coho Partnership (Partnership) and Westminster Woods staff, with input from Grantor Project Manager.

Task 8. Project Effectiveness Monitoring. Effectiveness Monitoring will be straightforward, since the diversion's hydrograph signature is very distinct, and the landowner forbearance agreement will require that the means for diverting water (the pump) be removed from Dutch Bill Creek. Effectiveness monitoring will consist of two components:

- Continuous year-round streamflow monitoring will be continued through the Partnership stream gauge. Data analysis will be conducted by the Center for Ecosystem Management and Restoration.

- Water collection and use monitoring. Water collection will be monitored via level indicators installed on both water storage tanks. A water meter will be installed on the irrigation water distribution line, and readings will be taken on a periodic basis. Data collection will be performed by Westminster Woods as part of project operation and maintenance, and data analysis will be undertaken by GRRCD.

- Streamflow monitoring will be performed for a period of at least three years to ensure that all diversion of water from Dutch Bill Creek by Westminster Woods has ceased. This monitoring will be undertaken in the context of ongoing analysis of flow patterns by the Partnership to identify any additional diversions upstream of the project site. During the first year post-implementation, we expect to see the absence of the periodic drops in stream discharge that have been observed to date.

Water use monitoring has multiple purposes. Stored water volume will be monitored periodically through the winter collection period to fine-tune the collection rate. Stored water volume will also be monitored during the summer use period and checked against metered use data to ascertain that water is not collected during the use period. Meter data will also be monitored periodically during the summer use period to verify the effectiveness of water conservation measures constructed as part of the project, and to confirm that no more than the total volume of water collected is being used for irrigation. Water use data collection will be required as part of the landowner agreement, and will continue for the life of the agreement (minimum of 20 years). In addition, monitoring of juvenile coho salmon will continue in the project reach through the Partnership.

Coho survival is currently monitored on a monthly basis for the purpose of identifying correlations between habitat condition indicators (including streamflow or proxies for streamflow) and percent survival. Monthly and over-summer survival data are collected and analyzed by University of California Sea Grant,

University of California Cooperative Extension Sonoma County (UCCE). We expect to see higher over-summer juvenile coho survival numbers as a result of this project, particularly during drought years. The Partnership's goal (as stated above) is to contribute to the establishment of a healthy, selfsustaining coho population in the lower Russian River watershed by restoring streamflow in key reaches of five focus watersheds, including Dutch Bill Creek. The Russian River Keystone Initiative Business Plan has a life span of ten years, so we expect that juvenile coho monitoring will continue throughout that time period as long as funding is available.

Task 9. Outreach and Public Education consists of the following two points:

- Public Tours: GRRCD will coordinate with Westminster Woods to provide a minimum of two tours of the project site, which will be advertised and open to the public.
- GRRCD will publish a minimum of two articles in our periodic newsletter or as e-blasts during and immediately following project construction. Our newsletter is distributed throughout the Gold Ridge District, and is available on our website.

Task 10. Reporting. Annual reports, as well as draft and final project reports, will be composed by GRRCD staff under agency reporting guidelines, and submitted to the Grantor Project Manager, as well as grant managers of agencies providing cost share funding.

Deliverables:

1. Construction and geotechnical inspection reports, pre- and post-construction site photos.
2. Project operation and maintenance plan.
3. Dates and number of attendees or recipients of two public tours, and GRRCD newsletter or e-blast articles.
4. Annual reports and final project report, including the following:
    a. Description of work accomplished
    b. Documentation of listed species surveys as required
    c. Final budget including cost share
    d. Pre- and post-construction photos of work sites
    e. All reporting metrics as specified by Grantor Project Manager

Timelines:

Task 1: Grant Administration will start upon finalization of grant agreement June 1, 2015 and will continue throughout the project to end March 31, 2018.

Task 2: Implementation Oversight and Project Management will start June 1, 2015 and will continue throughout the project to end March 31, 2018.

Task 3: Landowner Relations and Coordination will start June 1, 2015 and will continue throughout the project to end March 31, 2018.

Task 4: Biological surveys will be conducted prior to and throughout the construction period which will be July 1, 2015 through October 15, 2015; July 1, 2016 through October 15, 2016; and July 1, 2017 through October 15, 2017.

Task 5: Project Construction will be implemented throughout the construction period which will be July 1, 2015 through October 15, 2015; July 1, 2016 through October 15, 2016; and July 1, 2017 through October 15, 2017.

Task 6: Construction Inspection will be concurrent with construction throughout July 1, 2015 through October 15, 2015; July 1, 2016 through October 15, 2016; and July 1, 2017 through October 15, 2017.

Task 7: Project Operation and Maintenance Plan development will begin June 1, 2015 and complete by August 31, 2015.

Task 8: Monitoring will be ongoing throughout the project from June 1, 2015 through December 31, 2017.

Task 9: Outreach and Public Education will be ongoing from June 1, 2015 through completion December 31, 2017.

Task 10: Reporting will commence June 1, 2015 and complete March 31, 2018.

Additional Requirements:

1. Grantee shall provide verification of CEQA and permit compliance to the Grantor Project Manager before project work begins. Written permission must be obtained from landowner(s) for access to perform grant work. As may be necessary, the Grantee shall be responsible for obtaining the services of appropriately licensed professionals to comply with the applicable requirements of the Business and Professions Code including but not limited to section 6700 et seq. (Professional Engineers Act) and/or section 7800 et seq. (Geologists and Geophysicists Act).

2. If the Grantee fails to perform in accordance with the provisions of this Agreement, the Grantor retains the right, at its sole discretion, to delay, interrupt, or suspend the work for which the grant monies are supplied.

3. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured. Work in flowing streams is restricted per the Army Corp of Engineers Regional General Permit. Actual project start and end dates, within this timeframe, are at the discretion of the

California Department of Fish and Wildlife.

4. No equipment maintenance will be performed within or near the stream channel where pollutants (such as petroleum products) from the equipment may enter the channel via rainfall or runoff. Appropriate spill containment devices (e.g., oil absorbent pads, tarpaulins) will be used when refueling equipment. Any and all equipment will be removed from the streambed and flood plain areas at the end of each workday.

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Common Name - Portrait
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	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	American badger *Taxidea taxus*	AMAJF04010			G5	S4	SC
2	Baker's goldfields *Lasthenia californica ssp. bakeri*	PDAST5L0C4			G3TH	SH	1B.2
3	Baker's larkspur *Delphinium bakeri*	PDRAN0B050	Endangered	Endangered	G1	S1	1B.1
4	Baker's manzanita *Arctostaphylos bakeri ssp. bakeri*	PDERI04221		Rare	G2T2	S2	1B.1
5	Baker's navarretia *Navarretia leucocephala ssp. bakeri*	PDPLM0C0E1			G4T2	S2	1B.1
6	Blasdale's bent grass *Agrostis blasdalei*	PMPOA04060			G2	S2	1B.2
7	Blennosperma vernal pool andrenid bee *Andrena blennospermatis*	IIHYM35030			G2	S2	
8	Burke's goldfields *Lasthenia burkei*	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
9	California beaked-rush *Rhynchospora californica*	PMCYP0N060			G1	S1	1B.1
10	California freshwater shrimp *Syncaris pacifica*	ICMAL27010	Endangered	Endangered	G1	S1	
11	California linderiella *Linderiella occidentalis*	ICBRA06010			G3	S2S3	
12	California red-legged frog *Rana draytonii*	AAABH01022	Threatened		G2G3	S2S3	SC
13	California tiger salamander *Ambystoma californiense*	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SC
14	Coastal Brackish Marsh	CTT52200CA			G2	S2.1	
15	Coastal Terrace Prairie	CTT41100CA			G2	S2.1	
16	Coastal and Valley Freshwater Marsh	CTT52410CA			G3	S2.1	
17	Contra Costa goldfields *Lasthenia conjugens*	PDAST5L040	Endangered		G1	S1	1B.1
18	Crystal Springs lessingia *Lessingia arachnoidea*	PDAST5S0C0			G1	S1	1B.2
19	Cunningham Marsh cinquefoil *Potentilla uliginosa*	PDROS1B4A0			GH	SH	1A
20	Franciscan onion *Allium peninsulare var. franciscanum*	PMLIL021R1			G5T1	S1	1B.2
21	Franciscan thistle *Cirsium andrewsii*	PDAST2E050			G3	S3	1B.2
22	Giuliani's dubiraphian riffle beetle *Dubiraphia giulianii*	IICOL5A020			G1G3	S1S3	
23	Greene's narrow-leaved daisy *Erigeron greenei*	PDAST3M5G0			G2	S2	1B.2
24	Gualala roach *Lavinia symmetricus parvipinnis*	AFCJB19025			G4T1T2	S1S2	SC

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25 Hoffman's bristly jewelflower *Streptanthus glandulosus ssp. hoffmanii*	PDBRA2G0J4			G4TH	SH	1B.3
26 Jepson's leptosiphon *Leptosiphon jepsonii*	PDPLM09140			G2	S2	1B.2
27 Marin hesperian *Vespericola marinensis*	IMGASA4140			G2	S2	
28 Marin knotweed *Polygonum marinense*	PDPGN0L1C0			G2Q	S2	3.1
29 Mendocino dodder *Cuscuta pacifica var. papillata*	PDCUS011A2			G5T1	S1	1B.2
30 Methuselah's beard lichen *Usnea longissima*	NLLEC5P420			G4	S4	4.2
31 Morrison's jewelflower *Streptanthus morrisonii*	PDBRA2G0S0			G2	S2	
32 Myrtle's silverspot butterfly *Speyeria zerene myrtleae*	IILEPJ608C	Endangered		G5T1	S1	
33 Napa false indigo *Amorpha californica var. napensis*	PDFAB08012			G4T2	S2	1B.2
34 Navarro roach *Lavinia symmetricus navarroensis*	AFCJB19023			G4T1T2	S1S2	SC
35 North Coast semaphore grass *Pleuropogon hooverianus*	PMPOA4Y070		Threatened	G2	S2	1B.1
36 Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
37 Northern Hardpan Vernal Pool	CTT44110CA			G3	S3.1	
38 Northern Vernal Pool	CTT44100CA			G2	S2.1	
39 Oregon polemonium *Polemonium carneum*	PDPLM0E050			G4	S1	2B.2
40 Pacific gilia *Gilia capitata ssp. pacifica*	PDPLM040B6			G5T3T4	S2	1B.2
41 Pennell's bird's-beak *Cordylanthus tenuis ssp. capillaris*	PDSCR0J0S2	Endangered	Rare	G4G5T1	S1	1B.2
42 Peruvian dodder *Cuscuta obtusiflora var. glandulosa*	PDCUS01111			G5T4T5	SH	2B.2
43 Pitkin Marsh lily *Lilium pardalinum ssp. pitkinense*	PMLIL1A0H3	Endangered	Endangered	G5T1	S1	1B.1
44 Pitkin Marsh paintbrush *Castilleja uliginosa*	PDSCR0D380		Endangered	GXQ	SX	1A
45 Point Reyes checkerbloom *Sidalcea calycosa ssp. rhizomata*	PDMAL11012			G5T2	S2.2	1B.2
46 Point Reyes horkelia *Horkelia marinensis*	PDROS0W0B0			G2	S2	1B.2
47 Point Reyes salty bird's-beak *Chloropyron maritimum ssp. palustre*	PDSCR0J0C3			G4?T2	S2	1B.2
48 Rincon Ridge ceanothus *Ceanothus confusus*	PDRHA04220			G1	S1	1B.1

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49	Rincon Ridge manzanita *Arctostaphylos stanfordiana ssp. decumbens*	PDERI041G4			G3T1	S1	1B.1
50	Russian River tule perch *Hysterocarpus traski pomo*	AFCQK02011			G5T2	S2	SC
51	San Bruno elfin butterfly *Callophrys mossii bayensis*	IILEPE2202	Endangered		G4T1	S1	
52	San Francisco Bay spineflower *Chorizanthe cuspidata var. cuspidata*	PDPGN04081			G2T1	S1	1B.2
53	San Francisco owl's-clover *Triphysaria floribunda*	PDSCR2T010			G2	S2.2	1B.2
54	Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0			G2	S2	1B.1
55	Sebastopol meadowfoam *Limnanthes vinculans*	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
56	Sonoma alopecurus *Alopecurus aequalis var. sonomensis*	PMPOA07012	Endangered		G5T1Q	S1	1B.1
57	Sonoma spineflower *Chorizanthe valida*	PDPGN040V0	Endangered	Endangered	G1	S1	1B.1
58	Sonoma sunshine *Blennosperma bakeri*	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
59	Sonoma tree vole *Arborimus pomo*	AMAFF23030			G3	S3	SC
60	The Cedars buckwheat *Eriogonum cedrorum*	PDPGN087A0			G1	S1	1B.3
61	The Cedars fairy-lantern *Calochortus raichei*	PMLIL0D1L0			G2	S2	1B.2
62	The Cedars manzanita *Arctostaphylos bakeri ssp. sublaevis*	PDERI04222		Rare	G2T2	S2	1B.2
63	Thurber's reed grass *Calamagrostis crassiglumis*	PMPOA17070			G3Q	S2?	2B.1
64	Tidestrom's lupine *Lupinus tidestromii*	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
65	Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010		Candidate Threatened	G3G4	S2S3	SC
66	Vine Hill ceanothus *Ceanothus foliosus var. vineatus*	PDRHA040D6			G3T1	S1?	1B.1
67	Vine Hill clarkia *Clarkia imbricata*	PDONA050K0	Endangered	Endangered	G1	S1	1B.1
68	Vine Hill manzanita *Arctostaphylos densiflora*	PDERI040C0		Endangered	G1	S1	1B.1
69	bank swallow *Riparia riparia*	ABPAU08010		Threatened	G5	S2S3	
70	black swift *Cypseloides niger*	ABNUA01010			G4	S2	SC
71	blue coast gilia *Gilia capitata ssp. chamissonis*	PDPLM040B3			G5T2	S2	1B.1

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72	bluff wallflower *Erysimum concinnum*	PDBRA160E3			G3	S3	1B.2
73	bristly sedge *Carex comosa*	PMCYP032Y0			G5	S2	2B.1
74	brownish beaked-rush *Rhynchospora capitellata*	PMCYP0N080			G5	S1	2B.2
75	bumblebee scarab beetle *Lichnanthe ursina*	IICOL67020			G2	S2	
76	burrowing owl *Athene cunicularia*	ABNSB10010			G4	S3	SC
77	coastal bluff morning-glory *Calystegia purpurata ssp. saxicola*	PDCON040D2			G4T2T3	S2S3	1B.2
78	coastal triquetrella *Triquetrella californica*	NBMUS7S010			G1	S1	1B.2
79	coho salmon - central California coast ESU *Oncorhynchus kisutch*	AFCHA02034	Endangered	Endangered	G4	S2?	
80	dark-eyed gilia *Gilia millefoliata*	PDPLM04130			G2	S2	1B.2
81	dwarf downingia *Downingia pusilla*	PDCAM060C0			GU	S2	2B.2
82	dwarf soaproot *Chlorogalum pomeridianum var. minus*	PMLIL0G042			G5T2	S2	1B.2
83	eulachon *Thaleichthys pacificus*	AFCHB04010	Threatened		G5	S3	SC
84	foothill yellow-legged frog *Rana boylii*	AAABH01050			G3	S2S3	SC
85	fragrant fritillary *Fritillaria liliacea*	PMLIL0V0C0			G2	S2	1B.2
86	fringed myotis *Myotis thysanodes*	AMACC01090			G4	S4	
87	globose dune beetle *Coelus globosus*	IICOL4A010			G1G2	S1S2	
88	golden larkspur *Delphinium luteum*	PDRAN0B0Z0	Endangered	Rare	G1	S1	1B.1
89	great blue heron *Ardea herodias*	ABNGA04010			G5	S4	
90	hoary bat *Lasiurus cinereus*	AMACC05030			G5	S4?	
91	holly-leaved ceanothus *Ceanothus purpureus*	PDRHA04160			G2	S2	1B.2
92	legenere *Legenere limosa*	PDCAM0C010			G2	S2	1B.1
93	long-eared myotis *Myotis evotis*	AMACC01070			G5	S4?	
94	longfin smelt *Spirinchus thaleichthys*	AFCHB03010	Candidate	Threatened	G5	S1	SC

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95	many-flowered navarretia *Navarretia leucocephala ssp. plieantha*	PDPLM0C0E5	Endangered	Endangered	G4T1	S1	1B.2
96	marsh microseris *Microseris paludosa*	PDAST6E0D0			G2	S2	1B.2
97	mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040			G2G3	S2S3	
98	monarch butterfly *Danaus plexippus*	IILEPP2010			G5	S3	
99	narrow-anthered brodiaea *Brodiaea leptandra*	PMLIL0C022			G3?	S3?	1B.2
100	northern spotted owl *Strix occidentalis caurina*	ABNSB12011	Threatened	Candidate Threatened	G3T3	S2S3	SC
101	osprey *Pandion haliaetus*	ABNKC01010			G5	S3	
102	oval-leaved viburnum *Viburnum ellipticum*	PDCPR07080			G5	S2.3	2B.3
103	pallid bat *Antrozous pallidus*	AMACC10010			G5	S3	SC
104	pappose tarplant *Centromadia parryi ssp. parryi*	PDAST4R0P2			G3T1	S1	1B.2
105	perennial goldfields *Lasthenia californica ssp. macrantha*	PDAST5L0C5			G3T2	S2	1B.2
106	pink sand-verbena *Abronia umbellata var. breviflora*	PDNYC010N4			G4G5T2	S1	1B.1
107	purple-stemmed checkerbloom *Sidalcea malviflora ssp. purpurea*	PDMAL110FL			G5T2	S2.2	1B.2
108	rhinoceros auklet *Cerorhinca monocerata*	ABNNN11010			G5	S3	
109	rose leptosiphon *Leptosiphon rosaceus*	PDPLM09180			G1	S1	1B.1
110	round-headed beaked-rush *Rhynchospora globularis*	PMCYP0N0W0			G5	S1	2B.1
111	saline clover *Trifolium hydrophilum*	PDFAB400R5			G2	S2	1B.2
112	serpentine daisy *Erigeron serpentinus*	PDAST3M5M0			G2	S2	1B.3
113	short-leaved evax *Hesperevax sparsiflora var. brevifolia*	PDASTE5011			G4T2T3	S2S3	1B.2
114	showy rancheria clover *Trifolium amoenum*	PDFAB40040	Endangered		G1	S1	1B.1
115	steelhead - central California coast DPS *Oncorhynchus mykiss irideus*	AFCHA0209G	Threatened		G5T2Q	S2	
116	swamp harebell *Campanula californica*	PDCAM02060			G3	S3	1B.2
117	thin-lobed horkelia *Horkelia tenuiloba*	PDROS0W0E0			G2	S2	1B.2

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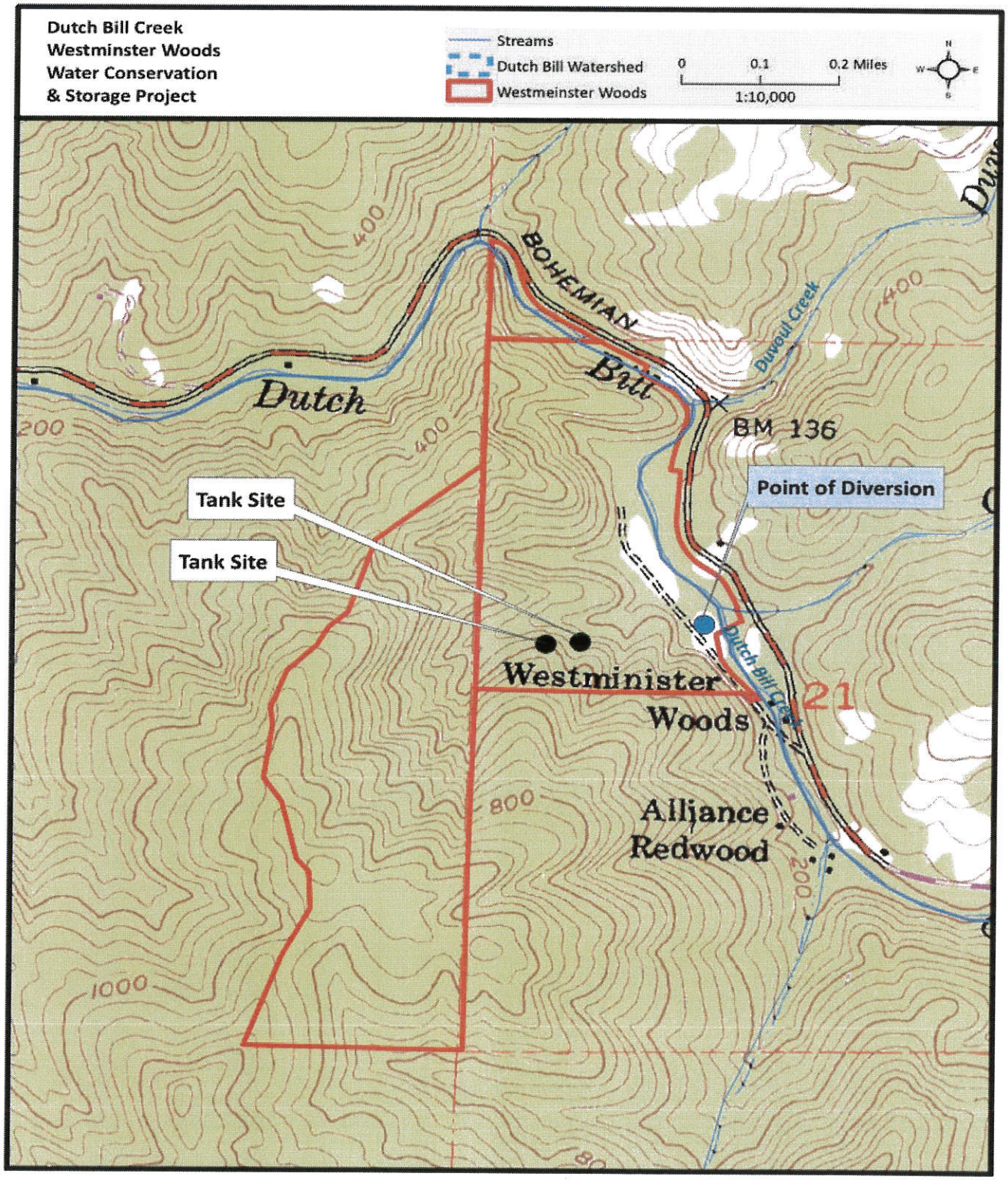
118	tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered		G3	S2S3	SC
119	tricolored blackbird *Agelaius tricolor*	ABPBXB0020			G2G3	S1S2	SC
120	tufted puffin *Fratercula cirrhata*	ABNNN12010			G5	S2	SC
121	western leatherwood *Dirca occidentalis*	PDTHY03010			G2G3	S2S3	1B.2
122	western pond turtle *Emys marmorata*	ARAAD02030			G3G4	S3	SC
123	western red bat *Lasiurus blossevillii*	AMACC05060			G5	S3?	SC
124	western snowy plover *Charadrius alexandrinus nivosus*	ABNNB03031	Threatened		G3T3	S2	SC
125	western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Proposed Threatened	Endangered	G5T3Q	S1	
126	white beaked-rush *Rhynchospora alba*	PMCYP0N010			G5	S2	2B.2
127	white seaside tarplant *Hemizonia congesta ssp. congesta*	PDAST4R065			G5T2T3	S2S3	1B.2
128	white-flowered rein orchid *Piperia candida*	PMORC1X050			G3?	S2	1B.2
129	white-tailed kite *Elanus leucurus*	ABNKC06010			G5	S3	
130	whiteworm lichen *Thamnolia vermicularis*	NLTES43860			G3G5	S1	2B.1
131	woolly-headed gilia *Gilia capitata ssp. tomentosa*	PDPLM040B9			G5T2	S2	1B.1
132	woolly-headed spineflower *Chorizanthe cuspidata var. villosa*	PDPGN04082			G2T2	S2	1B.2

Project Location Topographic Map