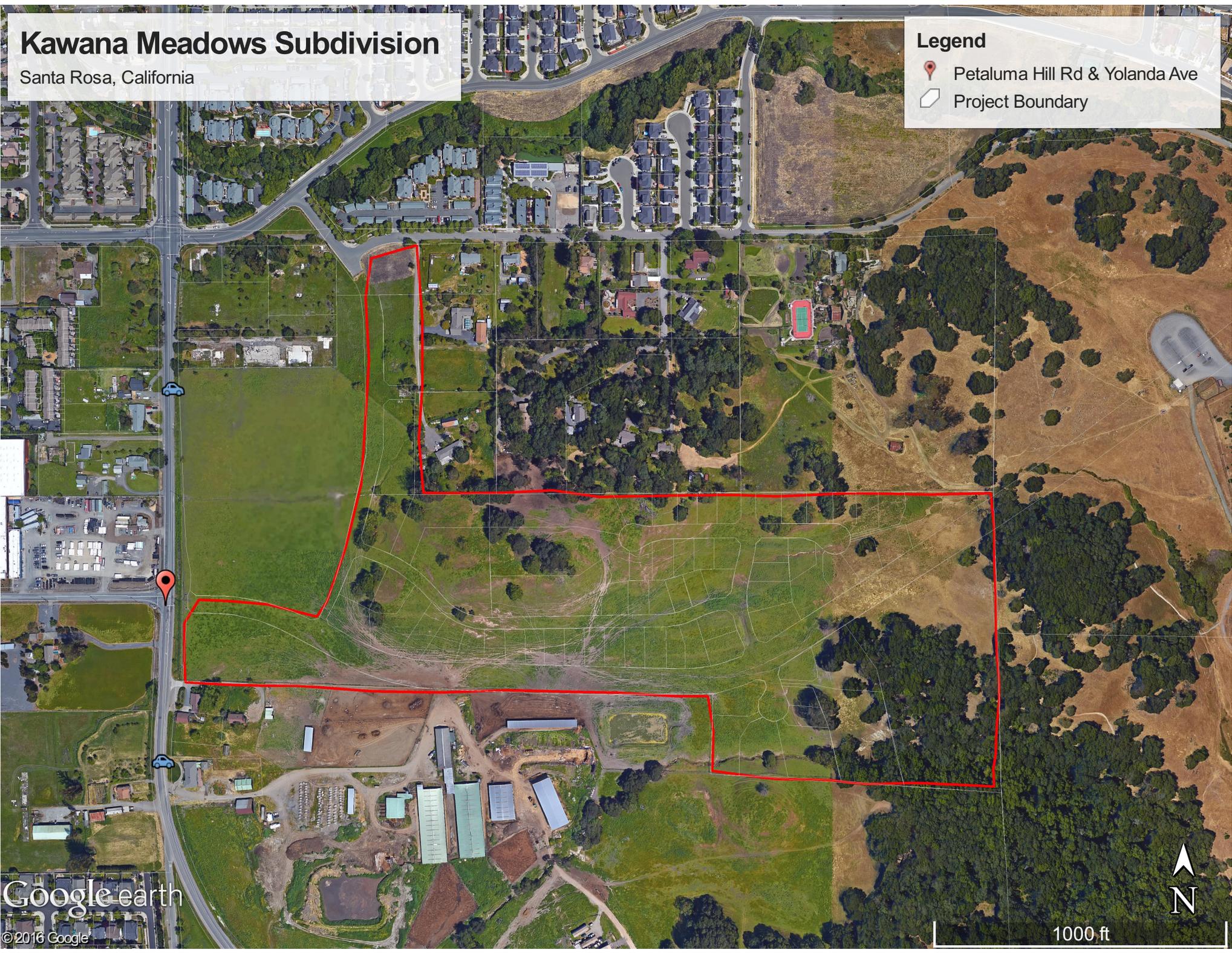


# Kawana Meadows Subdivision

Santa Rosa, California

## Legend

-  Petaluma Hill Rd & Yolanda Ave
-  Project Boundary



## Attachment 2



**Photo 1.** Unstabilized construction entrance/exit of the Project's access road, located at the intersection of Kawana Terrace and Franz Kafka Avenue. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 12:36. Photo facing north.



**Photo 2.** Unstabilized entrance/exit located at Franz Kafka Avenue and the Project entrance. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:11. Photo facing northeast.



**Photo 3.** Silt fence serving as perimeter control in poor condition along the western boundary of the Site. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:35. Photo facing northwest.



**Photo 4.** The failure of the silt fence perimeter control (top left corner of photo; see Photo 5 for a magnified view) resulted in a sediment discharge to an unnamed tributary to Todd Creek, thence to Bellview/Wilfred Channel, thence to Laguna de Santa Rosa, thence to Mark West Creek, thence to the Russian River. Note the sediment plume and visible change in turbidity from background in the lower right as a result of Site discharge. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:39. Photo facing south.



**Photo 5.** Silt fence perimeter control as seen in Photo 4. Note the improper installation and maintenance that is allowing sediment-laden water to flow through the fence and to an unnamed tributary to Todd Creek, thence to Bellview/Wilfred Channel, thence to Laguna de Santa Rosa, thence to Mark West Creek, thence to the Russian River. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:40. Photo facing southeast.



**Photo 6.** Exposed stockpile on southern boundary of project. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:45. Photo facing southeast.



**Photo 7.** Improper placement of wattles for the use of the stockpile berm. Wattles cut across the stockpile rather than at the base. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 11:45. Photo facing southeast.



**Photo 8.** Run-on from upslope of the Site (undisturbed area in the photo) contributing to erosion on site. Note the run-on appearing in the lower left corner traveling to the upper right, and the rilling that has developed downslope of the flow. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 12:02.



**Photo 9.** Lack of soil cover on inactive area. As a result, runoff contacting the exposed soil entrained and transported sediment, adding to the overall sediment discharges from the site to waters of the state. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 12:00. Photo facing northeast.



**Photo 10.** Lack of soil on inactive areas. As a result, runoff contacting the exposed soil entrained and transported sediment, adding to the overall sediment discharges from the site to waters of the state. Photo taken by Devon Jorgenson on 01/15/2016 at approximately 12:25. Photo facing east.

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## North Coast Regional Water Quality Control Board

### **Attachment 3**

Date: February 15, 2016

To: Stephen Bargsten, Senior, Regional Water Board, 401 Unit  
Devon Jorgenson, Regional Water Board, Storm water Unit  
Mona Dougherty, Regional Water Board, Unit Supervisor  
Paul Keiran, Regional Water Board, Storm water Unit

From: Gil Falcone, Environmental Scientist, Regional Water Board, 401 Unit

Subject: Kawana Meadows Development / Farmers Lane Extension 1/15/2016 site Clean Water Act section 401 Water Quality Certification inspection memo

On January 15, 2016, I participated in a site inspection for an active development project at approximately 2660 Petaluma Hill Rd. Santa Rosa, Ca, Latitude 38.413184 N / Longitude 122.702432 W (Project). The Project area contains wetlands and waters of the U.S. linear watercourses. Prior to our site visit, Devon Jorgenson, Regional Water Board staff, contacted the Responsible Party on record for enrollment of the State Water Board Construction General Storm Water NPDES Permit as notification that we would be conducting an inspection.

#### **PARTICIPANTS**

Gil Falcone, Regional Water Board  
Devon Jorgenson, Regional Water Board

#### **GENERAL PROJECT SUMMARY**

At the time of inspection, the project did not have a 401 Water Quality Certification required for fill and / or excavation of wetlands and waters of the United States and State. The Project was in construction phase of development. The Project site included grading and excavation for roads and buildings and a pile of asphalt grindings. The Project appeared to include construction of the Farmers Lane extension where it joins Petaluma Hill Road (public road) and the proposed housing development, Kawana Meadows.

#### **OBSERVATIONS**

The site inspection involved visual inspection of the grading, excavation and fill discharge areas and containment structures, as well as, identification of possible jurisdictional wetlands and waters of the United States and State. Where possible jurisdictional wetlands and waters were impacted these impacts were documented. Inspection photos and

JOHN W. CORBETT, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

documentation of impact sites where beneficial uses of waters of the state and ecological functions of waters of the United States or state have been degraded or lost and would require mitigation if land owner had obtained Clean Water act section 401 Water Quality Certification.

The Project was accessed through Kawana Springs Road and then Franz Kafka Avenue in Santa Rosa.

**Impact site 1:** South of the contractor trailer there was a culvert with drainage flowing onto the property into vegetated swale (likely jurisdictional waters of the United States or State) that was excavated or graded that contained ponded water.



Site 1: culvert and swale conveying water onto property



Site 1: culvert and swale and impacted area possible wetland

**Site 2:** A construction roadway excavated or graded through an unnamed linear watercourse running onto, through and off of the property (jurisdictional waters of the United States or State). The impact to the watercourse was **approximately 60 linear feet** of grading of the channel. Due to the recent excavation water flowing across Site 2 was diverted into a temporary culvert in an attempt to dewater this section of the watercourse.



Site 2: defined channel flowing toward impact site 2



Site 2: approx. 60 linear feet of excavation impact, and temporary diversion



Site 2: diversion outlet, fiber roll check dams placed in water course (additional impacts)

**Site 3:** Farmers Lane extension meets Yolanda Rd. This site had a previously delineated United States Army Corps of Engineers (USACE) jurisdictional wetland **approximately 0.036 acres** (Monk & Associates wetland delineation verified by USACE June 6, 2006). This previous delineation did not include the entire area at Site 3 so the size of the impacted wetland may be greater. The area at Site 3 had been excavated and was completely inundated with no evidence of wetland plants, complete loss of area.



Site 3: Excavated, now ponded and completely inundated



Site 3: straw bales and silt fence placed in wetland area to reduce sediment discharge to waters of the United States (channel on right side of photo)



Site 3: just below sediment control. Plume of turbid water discharging into waters of the United States

**Site 4:** Unnamed linear water course flowing onto the property was graded and possibly rerouted for **approximately 500 linear feet**. This linear water course likely was **approximately 2,700 feet long** where it exited the property at Petaluma Hill Road. Impacts at Site 4 were complete loss of ecological functions and active discharge of sediment off of the property.



Site 4: unnamed water course with defined bed and bank flowing onto property from Taylor Mountain Open Space Park Property



Site 4: water course  
flowing onto property,  
grading impacts evident



Site 4: beginning of graded  
/eroded channel



Site 4: graded/eroded channel flowing



Site 4: graded/eroded channel (possibly rerouted) flowing off property to the north, delivering sediment



### Summary

Impacts to wetlands and water courses that are likely jurisdictional waters of the United States were evident at Sites 1 – 4. **Approximately 2,760 linear feet of linear water courses (waters of the United States and state) were impacted and at least 0.035 acres of known jurisdictional wetlands were impacted.** The presence of jurisdictional waters require Clean Water Act section 401 and 404 permitting through the Regional Water Board and USACE. Through regular permit review and issuance these types of impacts would have had to have been avoided, minimized or mitigated for to ensure no net loss of waters area, linear feet and ecological functions. Permit requirements typically prohibit ground disturbance work to be conducted within waters (as was done here) between October 15 – May 15, to avoid discharge of sediment (as was done here) that may violate Basin Plan Water Quality Objectives.

Because the land owner did not get a water quality certification from the Regional Water Board they may have not conducted a complete delineation of wetlands and waters of the

United States and state which is required. Due to the extent of the grading at the site it was difficult to other jurisdictional waters at the site that may have been impacted.

**Recommendations:**

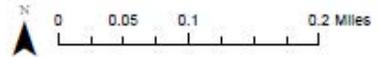
1. Through enforcement actions a complete wetland and waters delineation should be conducted forensically to determine the extent of impacts to wetlands and waters if one was not completed prior to grading. This delineation shall be conducted physically using the USACE 1987 delineation manual and appropriate supplemental guidelines as well as through forensic historical ecology of the site. Delineation shall also include those waters that would meet the definition of waters of the state of California.
2. Diverting water from flowing onto the disturbed soil at Site 4 would reduce active discharge of sediment.
3. Develop a restoration and mitigation plan to address all unpermitted impacts to waters with the goal of restoration of functions first and secondly mitigation of lost area and or functions. This plan shall include monitoring and reporting as well as success criteria to ensure functions are restored and or mitigation for losses is successful.
4. Restoration of impacted waters at Site 1 and Site 4 should be attempted after May 15th to restore functions.
5. Mitigation for temporal loss of function and permanent loss of function should be provided by the land owner where necessary.



# Kawana-Taylor-Farmers Lane Extension Site



Base Imagery: California NAIP 2014  
Created January 13, 2016 by A. Clark



Attachment 4

<b>Name and Location of Facility Inspected</b> Kawana Meadows Development, Santa Rosa, Sonoma County	<b>Facility Permit</b> CGP WDID No.1 49C374058	<b>Inspection Date</b> January 27, 2016	<b>Inspection Time</b> 1100
<b>Names &amp; Titles of On-Site Representatives and Consenting Parties</b>	<b>Consent Provided?</b>	<b>Contact Information</b>	Notified of Inspection?
Will Oswald, CEO, CMservices	<input checked="" type="checkbox"/> Yes	Phone: 415-828-0224 Email: CMservices@aol.com	<input checked="" type="checkbox"/> No
<b>Property Owner(s)</b>		<b>Address:</b> Petaluma Hill Road and Yolanda Road, Santa Rosa	
Kawana Meadows Development Corporation		2 Fifer Avenue, Corte Madera, CA 94925	
<b>WQ Inspector Name(s) &amp; Title(s)</b> Paul Keiran, Water Resource Control Engineer (WRCE), Regional Water Board (WQ)			
<b>California SMARTS Inspection</b>			
<b>Weather Conditions at the Time of the Inspection:</b> Partly cloudy	<b>Facility Receiving Water Names:</b> Todd Creek, Laguna de Santa Rosa		
<b>Prepared By:</b> Paul Keiran on January 28, 2016			
<b>Reviewed By:</b> Mona Dougherty, Senior Water Resource Control Engineer			
<b>Foot Notes:</b> 1. All photographs taken by Paul Keiran			

**I. Background**

Kawana Meadows Subdivision Unit 1 (hereinafter Site) consists of both a single family home subdivision and the Farmer's Lane road extension, linking Yolanda Avenue to Farmer's Lane. Construction grading at the Site begins at the intersection of Yolanda Avenue and Petaluma Hill Road, extending upgradient towards the Taylor Mountain water tanks. The Site drains to the headwaters of Todd Creek, which flows to the Laguna de Santa Rosa and lies within the Laguna de Santa Rosa watershed. The Laguna de Santa Rosa is located within the Hydrologic Subarea of the Russian River Hydrologic Area, in Santa Rosa. The Russian River is listed as impaired due to sediment, temperature, pathogens, and dissolved oxygen pursuant to Clean Water Act section 303(d).

On January 27, 2016, North Coast Regional Water Quality Control Board staff (hereinafter staff) inspected the Site. Staff's inspection objectives were to identify and inspect Site Best

## Attachment 4

Management Practices (BMPs), site drainage, any adjacent dairy discharges potentially exacerbated due to construction and overall impacts to water quality and beneficial uses due to site grading.

### **II. Staff observations of Site lower section**

Staff arrived at 10:00 on January 27, 2016, and met with Mr. Will Oswald onsite. Mr. Oswald walked the entire Site with staff, viewing lower road prism portions onsite areas. These areas were previously inspected on December 23, 2015, January 6 and 15, 2016, by staff who observed inadequate installation of sediment and erosion control BMPs and discharges of turbid runoff to an unnamed tributary to Todd Creek, a water of the State. On January 27, 2016, staff observed that these areas are now well covered with erosion control blankets, added wire-backed silt fencing, and additional straw bales and gravel bags surrounding the lower portion of the created detention pond (see Photo 1 and Photo 3). Additional blankets were placed above the pond up to an area adjacent to the dairy loafing area (see Photo 2).

### **III. Staff observations of Site mid-section and adjacent dairy**

The bulk of BMPs in this portion of the Site relied on wattles within the road prism and straw, which staff observed being spread by workers on the side slopes during the inspection. Staff observed the discharge of waste from the adjacent dairy onto the Site. With the Site grading that occurred, staff observed dairy wastes flowing down gradient, into the construction graded areas and directly into the lower detention pond. Staff also observed dairy wastes comingling with Site runoff and discharging into a ditch along Petaluma Hill Road (see Photos 4 and 5). The ditch ultimately discharges into the headwaters of Todd Creek. Staff noted that the discharge into the ditch was highly turbid as evidenced by the murky brown color observed in the runoff. Prior ditch turbidity data collected during the January 15, 2016, inspection detected 634 NTUs in ditch runoff. Other observations in this area of grading included incorrect heavy equipment tracking on road cut slopes, with tracking parallel to runoff instead of perpendicular to the flow of runoff. This condition has created ever widening rills and small gullies and runoff has eroded these tracked channels, which continue to threaten to discharge sediment to Todd Creek during significant rain events. Please note that during prior inspections, staff observed discharge of sediment from the Site into Todd Creek.

### **IV. Staff observations of Site upper**

The upper section of the Site, approximately 8 acres, contains mostly exposed soils in need of immediate erosion control (see Photo 6). Staff observed several one-eighth of an acre self-created detention areas storing runoff several days after the last rain event (see Photo 7). Staff observed runoff discharging offsite onto an adjacent property through the drainage swale in the upper graded area (see Photo 8). The runoff was observed discharging into the small creek that is being piped across a lower graded roadway into adjacent property. This runoff was clear as seen discharging through the outfall of this above grade pipe conveyance (see Photo 3).

The following photographs depict Site conditions at the time of the inspection:

#### **Site Lower Section**

Attachment 4



**Photograph 1. Lower detention pond with additional straw bales, wire fencing and gravel bags**



**Photograph 2. Lower section ground coverage**

Attachment 4



**Photograph 3. Creek above-grade crossing with additional BMPs**

**Site Mid-Section**



**Photograph 4. Dairy waste discharges mingling with site runoff and entering ditch**

Attachment 4



**Photograph 5. Cow loafing area discharging onto construction site**

**Site upper section**



**Photograph 6. Upper section exposed soils**

## Attachment 4



**Photograph 7. Upper section runoff detention areas**



**Photograph 8. Looking at graded areas from linear watercourse**

Staff requested that the site's Storm Water Pollution Prevention Plan (SWPPP) and site maps be revised to reflect actual site conditions and improved site controls. The SWPPP did not reflect present site conditions. Staff concluded the inspection by stating that a re-inspection would occur in early February. Staff left the site at 1300.