

Exhibit 10

Prosecution Team Evidence List Exhibits for:
Rocklin Crossings



TRANSMITTAL

DATE: 01-25-13

TO: Marty Hartzell
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

- Mail
- Hand Delivery
- Will Call
- Overnight
- Messenger

PROJECT: Rocklin Crossings, Dominguez Loop, Center @ Secret Ravine, Detention Basin

SDD NO.: 992.1-.3 and 992A

<u>NO. OF COPIES</u>	<u>DESCRIPTION</u>
2	NAL Exceedance Report including Contracts between SD Deacon and Donahue Schriber

- For Approval
- For Your Signature
- Per Your Request
- For Payment
- For Your Records

- SUBMITTALS
- Approved as Submitted
 - Make Corrections Noted
 - Rejected / Resubmit

Remarks:

Accepted by:

Delivered by: 

Andy Van Veldhuizen
Sr. Project Manager

cc: Files/ SDD Project #992

RECEIVED
SACRAMENTO
CVR/006
13 JAN 25 PM 1:54

S.D. Deacon Corp. of California
7745 Greenback Lane, Suite 250, Citrus Heights, CA 95610
T: 916.969.0900 • F: 916.729.0900
Contractor's License No. 760475
www.deacon.com

SEATTLE | PORTLAND | SACRAMENTO | IRVINE



January 25, 2013

Via Hand Delivery

Pamela C. Creedon
Executive Officer
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, California 95670

RECEIVED
SACRAMENTO
CVR REGION
13 JAN 25 11

Re: Response to Notice of Violation and Water Code Section 13267 Order Issued on December 21, 2012 for Rocklin Crossings (WDID #5S31C364098, #5S31C364108, #5S31C364102, and #5S31C364105)

Dear Ms. Creedon:

This letter responds to the Notice of Violation (“NOV”) and Water Code Section 13267 Order for Technical and Monitoring Reports issued on December 21, 2012 for the Rocklin Crossings construction site. The Rocklin Crossings construction site has coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ (“CGP”) issued by the California State Water Resources Control Board. On behalf of Rocklin Crossings LLC, Rocklin Holdings LLC and Donahue Schriber Asset Management Company as the legally responsible person (“LRP”) under the CGP, I am providing a complete Numeric Action Level (“NAL”) Exceedance Report as outlined in Attachment D, Section 1.15 of the CGP for the storm event that occurred from November 28, 2012 to December 5, 2012, as requested in the NOV. In addition to information required for the NAL Exceedance Report in the CGP, the attached NAL Exceedance Report also includes the following information requested in the NOV:

- An estimated volume of sediment laden water discharged from the construction site. (See Section 4 and Appendix F of the NAL Exceedance Report for this information.)
- Copies of all water quality sampling results with a map identifying sampling locations. (See Appendix C of the NAL Exceedance Report for this information.)
- An updated Storm Water Pollution Prevention Plan (“SWPPP”) Map showing current Best Management Practices (“BMPs”) installed across the site. (See Appendix D of the NAL Exceedance Report for this information.)
- Representative photographs showing current site conditions and how the site has been effectively stabilized with both sediment and erosion controls. (See Appendix E of the NAL Exceedance Report for this information.)

- A narrative explanation of how the structural BMPs were installed and will be maintained throughout the construction site and how the Advanced Treatment System (ATS) will be operated to ensure future discharges comply with the CGP. (See Section 4 of the NAL Exceedance Report for this information.)

The NOV discusses several sections of the General Permit and alleges that Rocklin Crossings construction site did not comply with those provisions. As explained in the attached NAL Exceedance Report, S.D. Deacon Corporation (the "Contractor"), continuously implemented BMPs in compliance with the General Permit during the days of the alleged violations. (See Section 3 of the NAL Exceedance Report for this information.) BMPs were maintained on a regular basis, repaired as needed, and added to address changes in site conditions from the beginning of construction up to, during, and after the rain event occurred. These actions are evidenced by the site's SWPPPs, Rain Event Action Plans (REAPs), and correspondence sent to Regional Board staff documenting these activities. As demonstrated in these documents and the NAL Exceedance Report, Rocklin Crossings LLC, Rocklin Holdings LLC, Donahue Schriber Asset Management Company and S.D. Deacon are committed to maintaining BMPs in the best possible condition to most effectively protect water quality.

The NOV attaches an inspection report from November 30, 2012, wherein by Regional Board staff observed discharges from the Rocklin Crossings construction site during very heavy rains. As addressed in the NAL Exceedance Report, the Contractor immediately began to implement corrective actions to address the discharges and was able to stop the discharges through its efforts. As requested in the NOV, the NAL Exceedance Report estimates volume of sediment laden water discharged from the site for a limited period of time during particularly heavy rain that exceeded the capacity of the site. These estimates, however, should not be construed as an admission of liability or of any violation of the CGP. Neither Rocklin Crossings LLC, Rocklin Holdings LLC, Donahue Schriber Asset Management Company nor S.D. Deacon waive any potential defenses should the Regional Board take further action in this matter.

Finally, the NOV requests all contracts between Rocklin Crossings, LLC, Rocklin Holdings, LLC, Donahue Schriber Asset Management Company and S.D. Deacon in regard to the Rocklin Crossings construction site. The requested contracts contain confidential and proprietary information. Nonetheless, in a good faith effort to work with the Regional Board we have provided copies of the requested contracts. Please note that we have redacted the contract price from the documents. In providing the redacted contracts Rocklin Crossings LLC, Rocklin Holdings LLC, Donahue Schriber Asset Management Company do not waive any claims regarding the confidential nature of the contracts themselves. If the Regional Board needs additional information regarding the contracts or the contract price, please let me know what information is needed and the reasons the information is necessary to resolve this matter.

Pamela C. Creedon
January 25, 2013
Page 3

I believe that this letter fully responds to the NOV and your request for information. Rocklin Crossings LLC, Rocklin Holdings LLC, Donahue Schriber Asset Management Company remain committed to working with the Regional Board to ensure the Rocklin Crossings construction site remains in compliance with the CGP in order to effectively protect water quality. If you have any questions about this letter or believe additional information is needed to evaluate compliance with the CGP, please contact me at your earliest convenience at 714-966-6426.

Sincerely,

DONAHUE SCHRIBER REALTY GROUP, LP



Janet L. Petersen
Vice President - Development Services

JLP:lir

cc: via email only

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Attachments to January 25, 2013 Response to Notice of Violation and Water Code Section 13267 Order Issued on December 21, 2012 for Rocklin Crossings (WDID #5S31C364098, #5S31C364108, #5S31C364102, and #5S31C364105)

- (1) Numeric Action Level Exceedance Report for Rocklin Crossings Construction Site by Donahue Schriber Asset Management Corp., Rocklin Crossings LLC, Rocklin Holdings, LLC, dated January 25, 2013.
- (2) Construction Contract for Rocklin Crossings, Dominguez Loop and Schriber Way (Contract # RC25900) between Rocklin Crossings, LLC & Rocklin Holdings, LLC and Donahue Schriber Asset Management Corporation and S.D. Deacon Corp. Of California, dated September 5, 2012 [contract price redacted]
- (3) Construction Contract for Rocklin Crossings, On and Off Site Work (Contract # RC251000) between Rocklin Crossings, LLC & Rocklin Holdings, LLC and S.D. Deacon Corp. of California, dated September 5, 2012 [contract price redacted]
- (4) Construction Contract for Rocklin Crossings, PCWA Onsite Water Improvements (Contract # RC251001) between Rocklin Crossings, LLC & Rocklin Holdings, LLC and S.D. Deacon Corp. of California, dated September 5, 2012 [contract price redacted]
- (5) Construction Contract for Rocklin Crossings, East Side Canal Relocation (Contract # RC251002) between Rocklin Crossings, LLC & Rocklin Holdings, LLC and S.D. Deacon Corp. of California, dated September 5, 2012 [contract price redacted]

Donahue Schriber Asset Management Corp
Rocklin Crossings LLC
Rocklin Holdings LLC.

Numeric Action Level Exceedance Report

Rocklin Crossings Construction Site

January 25, 2013

This document contains the information required by the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, issued by the California State Water Resources Control Board and the Notice of Violation and Water Code Section 13267 Order for Technical and Monitoring Reports issued on December 21, 2012 to the Rocklin Crossings Construction Site. Submission of this document does not equate to an admission of liability, of responsibility, of wrongdoing, or of any violation of the Construction General Permit, and does not constitute a waiver of any potential defenses.

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Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Legally Responsible Person's (LRP) Signature

1/24/13

Date

JANET L PETERSEN

Name

714.966.6426

Telephone Number

VICE PRESIDENT DEVELOPMENT SERVICES

Title

DONAHUE SCHRIBER

Company

Section 1 Introduction

This Numeric Action Level (NAL) Exceedance Report was prepared and is being timely submitted in response to a Notice of Violation (NOV) and Water Code Section 13267 Order for Technical and Monitoring Reports issued on December 21, 2012 by the Central Valley Regional Water Quality Control Board (Regional Board) for the Rocklin Crossings Construction Site (site). The site is located on the Southeast Corner of Interstate-80 and Sierra College Boulevard in Placer County. The Rocklin Crossings Construction Site has coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ (Construction General Permit) issued by the California State Water Resources Control Board. The site consists of the following separate Waste Discharge Identification (WDID) Numbers and Site Owners:

Site Name	WDID Number	Owner Name
Rocklin Crossings	5S31C364098	Rocklin Crossings LLC and Rocklin Holdings LLC
Rocklin Crossings Detention Basin	5S31C364108	Rocklin Crossings LLC and Rocklin Holdings LLC
Dominguez Loop Road	5S31C364102	Donahue Schriber Asset Management Corp
Center at Secret Ravine	5S31C364105	Donahue Schriber Asset Management Corp

Notice of Violation

A NOV was issued as a result of an inspection that was conducted by Regional Board staff on November 30, 2012. At that time, a storm event was occurring, which began on November 28th and lasted until December 2nd. During this period of time the site received approximately 7.0 inches of rainfall according to the onsite rain gauge (see Appendix A for Rainfall Chart).

As noted in the NOV, the owner representative of all four Sites and the Legally Responsible Person (LRP) enrolled in the Construction General Permit for each project, Donahue Schriber Asset Management Corporation, is responsible for complying with all elements of the General Permit.¹ The NOV also noted that the Rocklin Crossings construction sites are identified as Risk Level 2 sites under the terms of the Construction General Permit.

Pursuant to California Water Code Section 13267, the NOV requested the preparation of a NAL Exceedance Report pursuant to the requirements of the General Permit, Attachment D, Section I.15. In compliance with the information required under the Construction General Permit, this NAL Exceedance Report provides the following information requested in the NOV:

- An estimated volume of sediment laden water discharged from the construction site. See Section 4 of this report for this information.

¹ Under the Construction General Permit, the LRP is the project proponent that possesses a real property interest in the land containing the construction site. (Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ, Appendix 5 at pages 5-6.)

- An estimated volume of sediment laden water discharged to Secret Ravine. See Section 4 and Appendix F of this Report for this information.
- Copies of all water quality sampling results with a map identifying sampling locations. See Appendix C.
- An updated Storm Water Pollution Prevention Plan (SWPPP) Map showing current Best Management Practices (BMPs) installed across the site. See Appendix D.
- Representative photographs showing current site conditions and how the site has been effectively stabilized with both sediment and erosion controls. See Appendix E.
- A narrative explanation of how the structural BMPs were installed and will be maintained throughout the construction site and how the Advanced Treatment System (ATS) will be operated to ensure future discharges comply with the Construction General Permit. See Section 4.

The majority of this information was previously submitted to Regional Board staff through email correspondence, in a submittal of a summary of requested information, dated December 18, 2012, or was included in the Regional Board approved Active Treatment System (ATS) Plan prepared by Active Treatment System, Inc. This document not only provides, incorporates by reference and summarizes the previously provided information, but also provides a supplemental account of the BMPs that were in place prior to the event, a more in depth explanation of the events that occurred, a summary of communication with Regional Board staff, and a summary of the actions that have been implemented to ensure continued compliance with the Construction General Permit.

Section 2 Site Information

This section provides general information related to the Rocklin Crossings construction site to provide context for the rest of the document.

Site Description

Prior to Construction - The Rocklin Crossings construction site consists of approximately 50.4 acres and is located on the southeast corner of Interstate 80 and Sierra College Boulevard in Rocklin, California. The project site is located approximately 1,000 feet north of Secret Ravine. Prior to construction, storm water runoff generated from the site sheet flowed into a number of offsite ephemeral drainages that ultimately discharged into Secret Ravine.

Prior to Event - Since the commencement of construction, the site has been mass graded into two onsite watersheds, Shed A and Shed B (See Appendix B, Pre-Event SWPPP Map). Until mid-December 2012, Shed A sheet-flowed in a north to south direction, to numerous low spots, where any accumulating water was then pumped from the various areas to Basin A to allow for settlement prior to discharge. Shed B also sheet-flowed to various low spots and then was captured, pumped and transported to Basin A.

Post Event - Between December 5-10, 2012, a second basin, Basin B, was constructed to provide additional onsite storage. Runoff is now pumped to Basin B for holding and then transferred to Basin A for treatment by an Active Treatment System (ATS). Deployment of the ATS was on December 10, 2012 and the system was fully operational December 18, 2012. The ATS discharges indirectly to Secret Ravine.

Storm Water Pollution Prevention Plan

The original SWPPP for this construction site, dated July 11, 2012, was prepared by RSC Engineering (Daniel Taylor, Qualified SWPPP Developer (QSD)). The SWPPP was submitted, as required by the Construction General Permit, to the Regional Board via the Storm Water Multiple Application and Reporting Tracking System (SMARTs). The Qualified SWPPP Practitioner (QSP) for the site is Dave Clayson of Total Site Maintenance (TSM). The QSD is responsible for the day-to-day upkeep of the SWPPP and any required SWPPP amendments; while the QSP is responsible for observation and inspection activities, required sampling, and providing sediment and erosion control recommendations.

Section 3 Best Management Practices (BMPs) In Place Prior to Event

Prior to the late November/early December rain event that is the subject of the NOV, grading along with rock drilling and blasting were the primary construction activities being conducted at the site. Therefore, BMP implementation mostly focused on erosion and sediment control efforts consistent with SWPPP prepared for the site. The Contractor, S.D. Deacon Corporation, continuously implemented BMPs from the beginning of construction up to, during, and after the rain event occurred. BMPs were maintained on a regular basis, repaired as needed, and added to address changes in site conditions continuously during the months of October and November (prior to the event). These actions are evidenced by the continuous, at least weekly email correspondence sent to Regional Board staff documenting these activities. This continuous flow of communication demonstrates the ongoing commitment to storm water quality on the site.

Additionally, the SWPPP Map provided in Appendix B identifies the BMPs that were implemented on the site. Below is a summary of the specific BMPs that were fully implemented prior to the event.

Good Site Management (Housekeeping)

Throughout the site, good housekeeping BMPs were deployed and good housekeeping practices were followed to ensure storm water runoff did not come into contact with waste or hazardous materials.

- A self-contained tire wash was installed at the entrance.
- All sanitation facilities were located away from watercourses and storm drains, and were placed in a manner that they could not easily be knocked over by equipment or vehicles.
- Waste disposal containers were covered.
- Hazardous and waste materials were stored in a manner that would eliminate the potential for these materials to come into contact with storm water runoff.

Non Storm Water Management

Sources of non-storm water, prior to the event, were related to the tire wash (located at the construction entrance) and dust control. However, since the tire wash is self-contained and recycles the wash water, there was no need to discharge any associated water. Additionally, dust control activities were completed in a fashion that did not generate excess water. With these activities, the potential non-storm water discharges were eliminated.

Erosion Control

Prior to the event, sediment discharges from the site were controlled by a combination of erosion control and containment BMPs. Please refer to the SWPPP Map located in Appendix B.

- Areas that were complete and were considered non-active were stabilized with hydroseed and/or soil stabilizing emulsion, mulched with recycled vegetative material left over from the clearing and grubbing phase, or were covered with a rolled erosion control product.
- Areas that were not completed and were still active were controlled by relying on the graded topography and constructed dikes for containment. It was understood that this approach was

acceptable to Regional Board staff as it was discussed during the October 31, 2012 field meeting and documented in a subsequent email to Regional Board staff.

Sediment Control

A variety of sediment control measures were deployed throughout the site prior to the event. Below is a summary of these measures. Please refer to the SWPPP Map located in Appendix B for the specific BMPs that were deployed and for the locations of deployment.

- The Contractor installed silt fencing or fiber rolls along the perimeter of the job site.
- The construction entrance was stabilized with rock.
- Sediment Basin A was constructed in accordance with the sizing requirements prepared by the QSD and included in the SWPPP. The sizing of the basin was completed in accordance with the Construction General Permit.
- Appropriate linear sediment controls were placed along slopes to reduce the slope length.
- Drain inlet protection was installed on manholes and inlets as they were constructed or the constructed manholes and/or inlets were plugged.
- Access roads were compacted and stabilized with rock material.
- Rock check dams were constructed to reduce the velocity of storm water runoff.
- Street sweeping was completed as necessary to address any tracking of sediment off of the site.

Run-off and Run-on Controls

Both run-off and run-on controls were in place prior to the event. Run-off controls consisted of energy dissipation and careful placement of discharge points. Run-on primarily occurs on the western edge of the site. A clear water diversion was installed to divert run-on from an 18-inch culvert. Inlets to the culvert were plugged to prevent storm water runoff from disturbed soil areas from entering into the system.

Section 4 Description of Numerical Action Limit Exceedance

The Construction General Permit includes Numeric Action Levels (NALs) for pH and turbidity. The NAL for pH is 6.5 to 8.5 and the NAL for turbidity is 250 nephelometric turbidity units (NTU). The NALs primary purpose is to assist dischargers in evaluating the effectiveness of their on-site measures; they are not effluent limitations. Exceedance of an NAL does not itself constitute a violation of the General Permit; rather they are triggers for additional action if exceeded. The Permit requires Risk Level 2 and 3 sites to complete the following if a NAL is exceeded:

- Implement additional BMPs and revise the SWPPP to substantially reduce pollutants consistently below the NAL.
- Conduct sampling activities.
- Report the NAL and required sampling results through SMARTs.
- Prepare a NAL Exceedance Report, if requested by the Regional Board.

Below is a summary of the rain event and the NAL exceedance for turbidity; including discharge calculations.

Description of Event and Immediate Short Term Corrective Actions Taken

The NOV was related to the continuous Qualifying Rain Event that occurred during the time period of November 28th to December 2, 2012. The Construction General Permit defines a Qualifying Rain Event as any event that produces 0.5 inches or more of precipitation with a 48-hour or greater period between storm events. **As previously stated, during that period of time, the site received approximately 7.0 inches of rain. Please note that this amount of rain exceeds the 5-year, 24-hour Compliance Storm Event identified in the Construction General Permit.²**

A written narrative of the events that occurred and the actions taken, along with photographs and site maps, was provided to Regional Board Staff on December 18, 2012. Therefore, the information below is a summary of this previously provided information. In addition to the summary, discharge calculations are provided.

During a 23-hour period, beginning 8:00 AM on November 28th and ending 7:00 AM on November 29th the rain gauge present on the site indicated that the site received 0.75 inches of rain. During the inspection that occurred the morning of November 29th, it was observed that the BMPs implemented on the site were effectively controlling the discharge of sediment from the site. The Contractor performed BMP maintenance as necessary and continued pumping operations, removing water from low containment areas to transport sediment laden water to Basin A.

² Under the Construction General Permit, Risk Level 3 discharges are exempt from compliance with Numeric Effluent Limitations if rainfall is equal to or larger than a 5 year, 24-hour storm event. (Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ at page 29, Provision V.B.3.) A larger storm event "exceeds the capacities of available BMPs to minimize discharges." (*California Building Industry Association v. SWRCB*, Judgment, Case No. 34-2009-800000338-CU-WM-GDS at page 9, lines 23-25.)

During the 96-hour period, starting at 5:00 AM on November 30th through 7:00 AM December 2nd, the site received an additional approximately 6.25 inches of rain. During an inspection that occurred at 5:30 AM on November 30, 2012, it was observed that although heavy rain was occurring, the BMPs and runoff control measures on the site were effectively managing storm water runoff and controlling the discharge of sediment.

By 8:00 AM, it was observed that due to the heavy rain and associated storm water accumulation, there was one location, located near Basin A, where a constructed berm had been breached, resulting in storm water overwhelming a protected outlet culvert located on the south side of the Immediately upon the identification of this issue, repairs to the berm were initiated and the culvert was plugged to prevent future discharges.

missed word

While the Contractor was addressing the berm breach, the containment area located at the west end of Dominguez Loop also began to become overwhelmed due to the severe rains the site was experiencing. Normally, runoff accumulating in the containment area was pumped into a water truck that was then transported the water to Basin A. However, due to the heavy amount of rainfall occurring, the containment area was overwhelmed resulting in the discharge of water that caused eventual failure of an earthen dike that had been constructed to prevent storm water runoff from leaving the site. Immediate efforts were initiated to repair the dike, and the flow of storm water runoff was stopped within 1.5 hours. As a temporary measure, the dike was immediately protected with visquine. The Contractor then contacted a subcontractor to request the deployment of a dozer to re-grade the dike higher and wider. Re-grading of the dike began at 11:00 AM. By the end of the day, on November 30, 2012, the dike had been completely reconstructed. Much of the sediment that left the site was stopped by heavy vegetation prior to reaching Secret Ravine.

In addition to the dike repair, the Contractor also ordered a 6-inch pump to be delivered the following day (December 1, 2012). This larger pump was used to pump water from the containment area, located within Dominguez Loop, to Basin A. The 6-inch pump was on site by 7:00 AM on December 1, 2012, the day after the event. Pumping began by 9:30 AM and was continued through the weekend.

Sampling Activities

The QSP took samples on November 28, 2012 and November 30, 2012. Turbidity samples were taken up stream, at the point of discharge, and downstream. An Ad Hoc Monitoring report providing the sampling results were reported to the Regional Board through SMARTs. This report, additional sampling information, and a map depicting the locations where the samples were taken are located in Appendix E. *c*

Long Term Corrective Actions

To eliminate the potential for further discharges of sediment, the Contractor worked diligently to implement additional BMPs on the site. Immediately after the event, a long term corrective action strategy was developed and provided to Regional Board staff on December 10, 2012, that included:

- The implementation of an Active Treatment System (ATS) and placement of associated piping.

- The construction of an additional basin to increase storm water storage capacity well beyond the Construction General Permit's requirement for the ATS to be designed to capture and treat a volume equivalent to the run-off from a 10-year, 24-hour storm event using a runoff coefficient of 1.0 .
- Placement of additional pumps and associated piping to transport water to the basin.
- The implementation of a more restrictive phased grading plan to make the site more manageable in regards to management of storm water runoff.
- The application of additional erosion control measures to address areas that recently became inactive.
- Construction of all-weather access roads.
- Obtaining additional support from storm water consultants (Supplemental QSP) as a QA/QC oversight of the contracted QSP and QSD to review and supplement the SWPPP.

Active Treatment System - The day of the event, November 30, 2012, the Contractor contacted Active Treatment Systems, Inc. to provide an Active Treatment System (ATS) to treat storm water generated from the site. Active Treatment Systems, Inc. prepared an ATS Plan that was submitted to the Regional Board for approval per the requirements of the Construction General Permit. The system described in the ATS Plan and implemented on site was designed to accommodate a 10-year, 24-hour storm event (4 inches of rain)³ and drain in less than 72-hours. The ATS Plan was uploaded to SMARTs on December 11, 2012 and approval of the plan was obtained from the Regional Board on December 12, 2012. The ATS was mobilized on December 10, 2012 and was fully operational on December 18, 2012.

Storm water accumulating within Dominguez Loop is pumped by the 6-inch pipe to either Basin A or Basin B. If Basin A has capacity and is not in the process of actively treating storm water, water is pumped to Basin A. If Basin A does not have capacity, water is pumped to Basin B and stored until such time that the water is pumped to Basin A for pre-treatment and settlement. The chemical additive Chitosan is added to the water in Basin A to aid in flocculation of the sediment particles. Once the appropriate amount of flocculation has occurred, settlement of sediment occurs within the basin. Water is then transferred to a series of baker tanks for additional treatment and then is finally processed through a series of sand filters that removes the remaining sediment and the chemical additive prior to discharge.

To date, the system has been working as intended and in compliance with the ATS requirements indicated in the Construction General Permit. All observation, sampling, and documentation activities have been completed and required documentation has been uploaded to SMARTs.

Erosion Control – Additional erosion control measures are continuously implemented on the site to address changing site conditions and to ensure that the potential for sediment laden discharges to

³ In the case of ATS, the industry-standard design storm is 10-year, 24-hour storm (as stated in Attachment F of the General Permit), so the compliance storm event was established as the 10-year, 24-hour storm event as well to provide consistency. (Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ, Fact Sheet at page 37.)

Secret Ravine are eliminated or minimized. Areas of the site that are non-active are stabilized and construction will not be reinitiated in these areas until after the rainy season. Additional Erosion Control BMPs, such as stabilizing emulsion, and hydro mulch, have been placed at multiple locations throughout the site.

Going forward, the storm water runoff from the site will be managed by implementing the existing pumping and treatment strategy. This strategy is proving to be an effective way to manage storm water at the site. Additionally, BMPs will continue to be repaired and improved and additional new BMPs will be considered and implemented, as needed. Please refer to the SWPPP Map located in Appendix D for details. Please refer to Appendix E for photographs of the BMPs implemented.

Discharge Calculations

The QSD, Daniel Taylor, P.E. of RSC Engineering, prepared a memorandum providing the discharge calculations required by the NOV (See Appendix F). The discharge calculation memorandum provides the following information:

- A summary of the assumptions that were utilized to complete the calculations.
- A description of the methods that were utilized to complete the calculations.
- Separate calculations for the two discharge locations.
- Calculation backcheck information to confirm the validity of the calculations.
- Summary of total estimated volume discharged from the site during the event.

It should be noted that the calculations do not attempt to determine the amount of any specific discharge that exceeded the NAL for turbidity. It is reasonable to assume that not 100% of any specific discharge exceeded 250 NTUs.

Appendix A Rainfall Chart

Rain Gauge Log Sheet

Construction Site Name:

Rocklin Crossing

JOB # 992

WDID #:

Date (mm/dd/yy)	Time (24-hr)	Initials	Rainfall Depth (Inches)	Notes:
NOV 1.12	9AM	BN	1/2	RAIN FALL From 8:30 PM 9AM measured 10/31 - 11/1
11/8/12	5:30 AM	D	1/4	RAIN FALL From 11:30 PM - 5:30 AM 11/8 - 11/9
11/29/12	8:00 AM - 7:00 AM	D	3/4"	RAIN FALL From 8:00 AM - 7:00 AM 11/28 - 11/29
12/2/12		BN	6 1/4"	RAIN FALL From 5:00 - 7:00 11/30 12/2
12/5/12		D	7/8"	RAIN FALL From 11:00 AM 4:00 P.M. 12/5 12/5

Att: F-2

Table 5-A-1
 Depth-Duration-Frequency Coefficients

150 - 3000 feet elevation
 West of Sierra Nevada Crest

Depths in inches at 150 feet

Duration	2yr	5yr	10yr	25yr	50yr	100yr	200yr	500yr
5m	0.13	0.20	0.25	0.32	0.38	0.44	0.49	0.58
10m	0.19	0.29	0.36	0.46	0.54	0.62	0.70	0.82
15m	0.23	0.35	0.43	0.55	0.64	0.73	0.82	0.96
30m	0.32	0.47	0.57	0.72	0.83	0.94	1.04	1.22
1h	0.45	0.64	0.77	0.94	1.07	1.21	1.33	1.53
2h	0.64	0.88	1.04	1.26	1.42	1.59	1.76	2.00
3h	0.77	1.04	1.23	1.47	1.66	1.85	2.03	2.31
6h	1.06	1.40	1.65	1.95	2.22	2.23	2.75	3.10
12h	1.43	1.91	2.24	2.67	3.00	3.30	3.60	4.00
1d	1.90	2.50	2.98	3.46	3.85	4.25	4.60	5.20
2d	2.51	3.40	3.95	4.65	5.15	5.70	6.20	7.00
3d	3.00	4.07	4.65	5.50	6.20	6.80	7.50	8.40
5d	3.61	4.91	5.76	6.85	7.63	8.42	9.20	10.29
10d	4.73	6.44	7.54	8.96	9.97	11.01	11.95	13.45

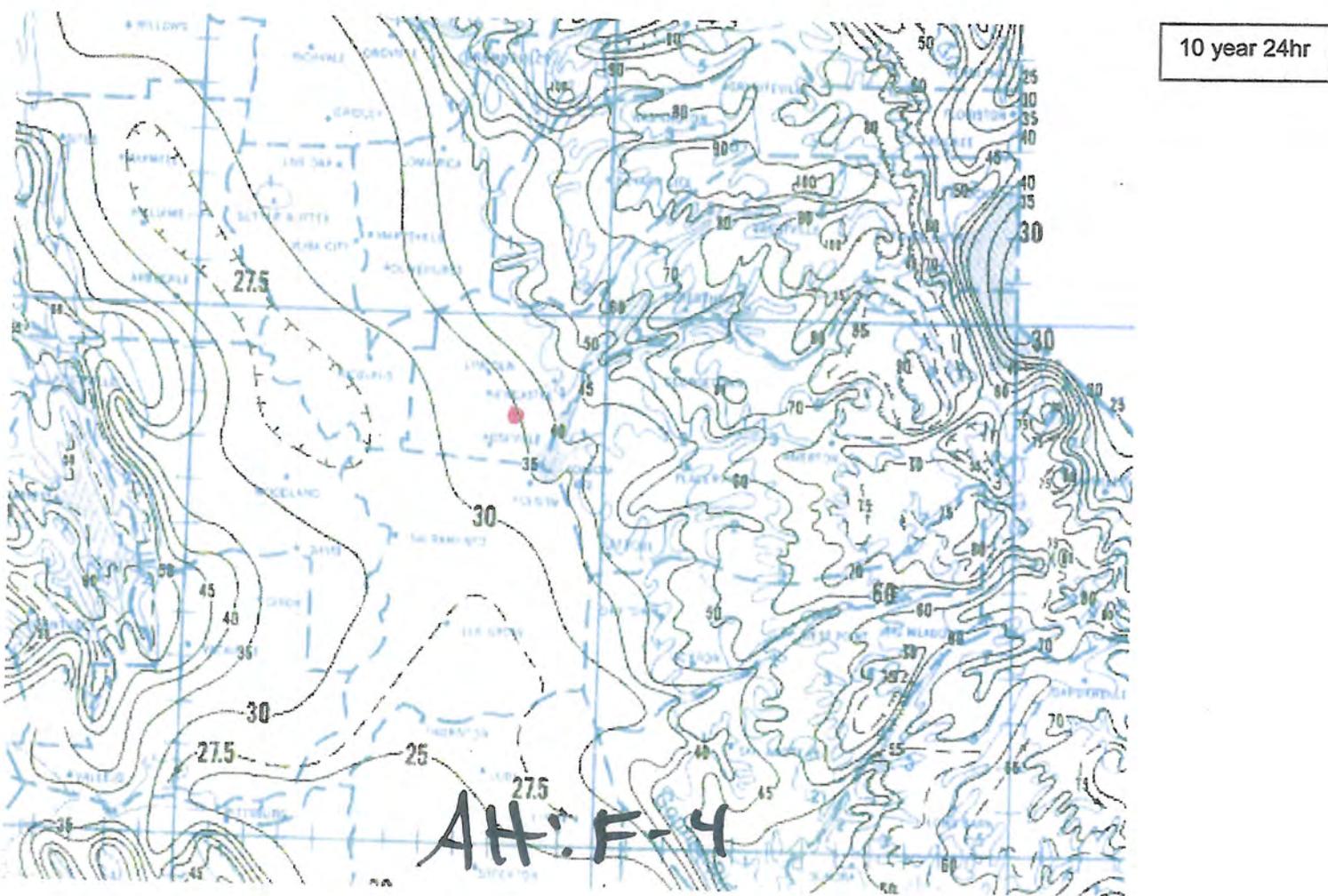
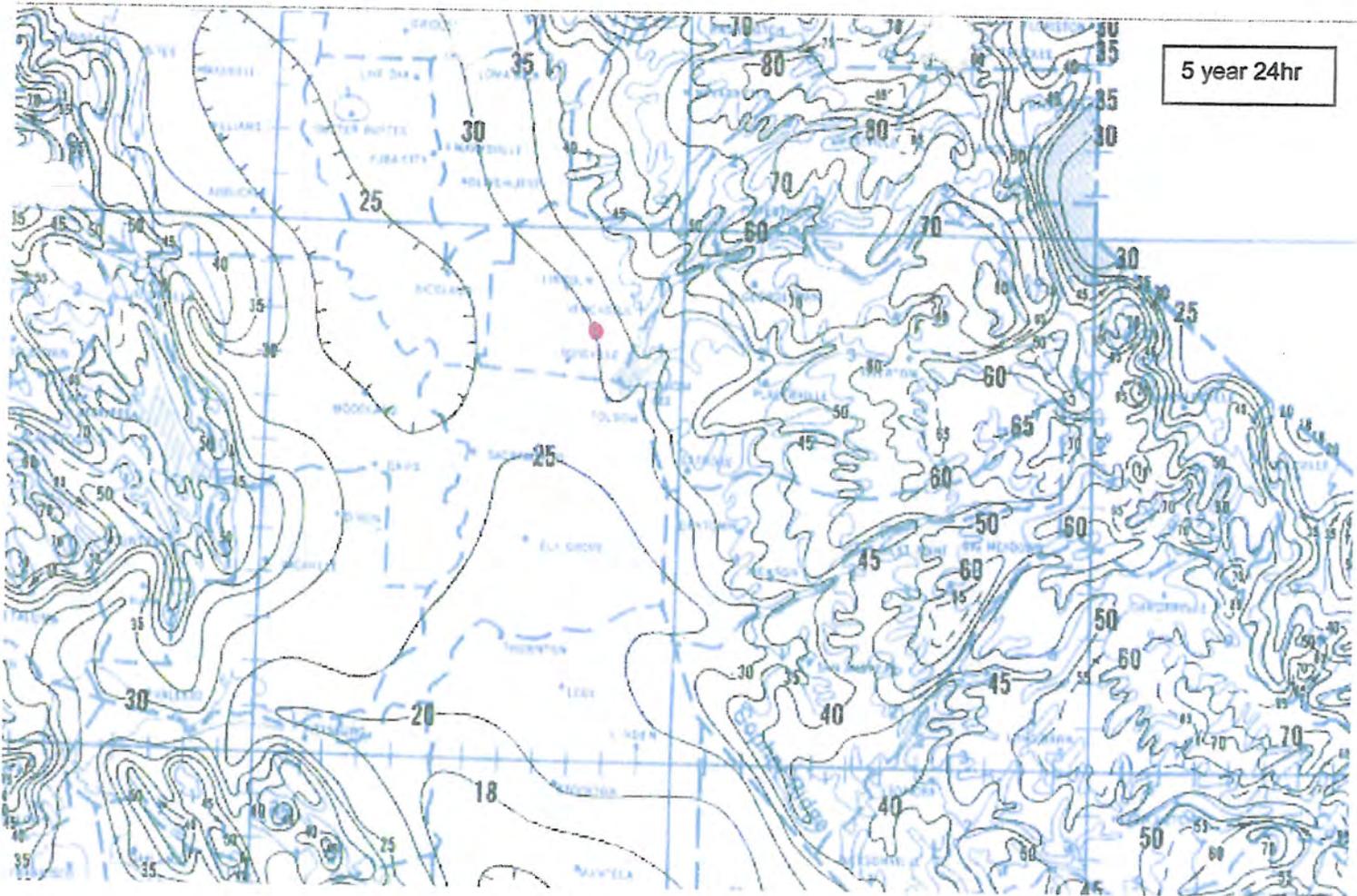
total for 3 day period
 per rain gauge measurements
 beginning Nov 30 and
 ending Dec 2nd

7"

total for rain event
 per rain gauge measurements
 beginning Nov 28 and ending
 Dec 2nd

Change in depth, inches per 1000 feet

Duration	2yr	5yr	10yr	25yr	50yr	100yr	200yr	500yr
5m	0.007	0.000	-0.003	-0.007	-0.017	-0.023	-0.027	-0.037
10m	0.007	0.003	0.000	-0.010	-0.020	-0.027	-0.037	-0.050
15m	0.017	0.013	0.013	0.003	0.000	-0.007	-0.013	-0.027
30m	0.030	0.040	0.040	0.040	0.040	0.040	0.040	0.030
1h	0.063	0.087	0.100	0.120	0.133	0.137	0.157	0.173
2h	0.107	0.157	0.193	0.230	0.260	0.287	0.313	0.350
3h	0.143	0.220	0.263	0.327	0.373	0.413	0.457	0.513
6h	0.230	0.357	0.433	0.540	0.593	0.733	0.757	0.850
12h	0.453	0.663	0.820	0.977	1.127	1.250	1.400	1.600
1d	0.700	1.037	1.240	1.547	1.783	1.983	2.200	2.500
2d	1.163	1.667	2.017	2.483	2.850	3.167	3.533	4.000
3d	1.647	2.343	2.850	3.500	3.933	4.383	4.833	5.533
5d	2.287	3.230	3.913	4.717	5.390	5.960	6.600	7.570
10d	3.490	4.920	5.987	7.180	8.177	8.997	10.350	11.683



Appendix B Pre-Incident SWPPP Map

ROCKLIN CROSSINGS

NORTH

- BASIN "B"

HYDRO MULCH SOIL STABILIZATION 11-7-12

TREE GRINDINGS ON SLOPES 10-30-12

PUMP LOCATION C

TEMP SILT BASIN A HYDROSEEDDED 10-19-12

DETENTION BASIN
 -ROUGHGRADED
 -APPLIED HYDRO MULCH SOIL STABILIZER ON 11-7-12
 -REAPPLIED ADDITIONAL HYDRO MULCH STABILIZER WITH SEED ON 11-13-12.
 - ROCK CHECK DAMS ADDED 11-26-12

MATERIAL STOCKPILE AND STORAGE AREA

PUMP LOCATION A

TEMP HAUL ROADS

CENTER AT SECRET RAVINE
 -ROUGHGRADE
 -HYDRO MULCH SOIL STABILIZATION 11-7-12
 -GEO WALL INSTALLATION 60% COMPLETE GRADING CONTINUING IN CONJUNCTION WITH GEO WALL.
 -COMPACTION TRACKING & CURLEX BLANKETS IN PLACE BEFORE NEXT RAIN EVENT
 -ROCKERY WALLS AT SLOPES & WETLANDS IN PLACE 11-14-12.
 -TREE GRINDING ON SLOPES 11-13-12

FLOW

HYDRO MULCH STABILIZER WITH SEED

TREE GRINDINGS / MULCH STABILIZATION

PARKING LOTS TO CONTAIN ALL STORM WATER IN LOW SPOTS. PUMP STORED WATER TO SILT BASIN A

T WINTERIZED FOR TRAILER AND PARKING

CE STABILIZED CONSTRUCTION ENTRANCE AND AUTO WHEEL WASH

P WINTERIZED FOR CONSTRUCTION PARKING

SILT FENCE

11-26-12

-APPLIED HYDRO MULCH SOIL STABILIZER ON 11-7-12
 -REAPPLIED ADDITIONAL HYDRO MULCH STABILIZER WITH SEED ON 11-13-12.

-INSTALLED DRAINAGE STRUCTURE 11-12-12
 -CLEAN WATER DIVERSION OF WATER FROM WEST SIDE OF SIERRA COLLEGE THRU DRAINAGE SYSTEM.
 -PLUGGED CULVERTS TO CONTAIN ON SITE WATER

ROCK CHECK DAMS ADDED 11-26-12 BETWEEN HEAD WALL & HEAVY VEGETATION

PUMP LOCATION B

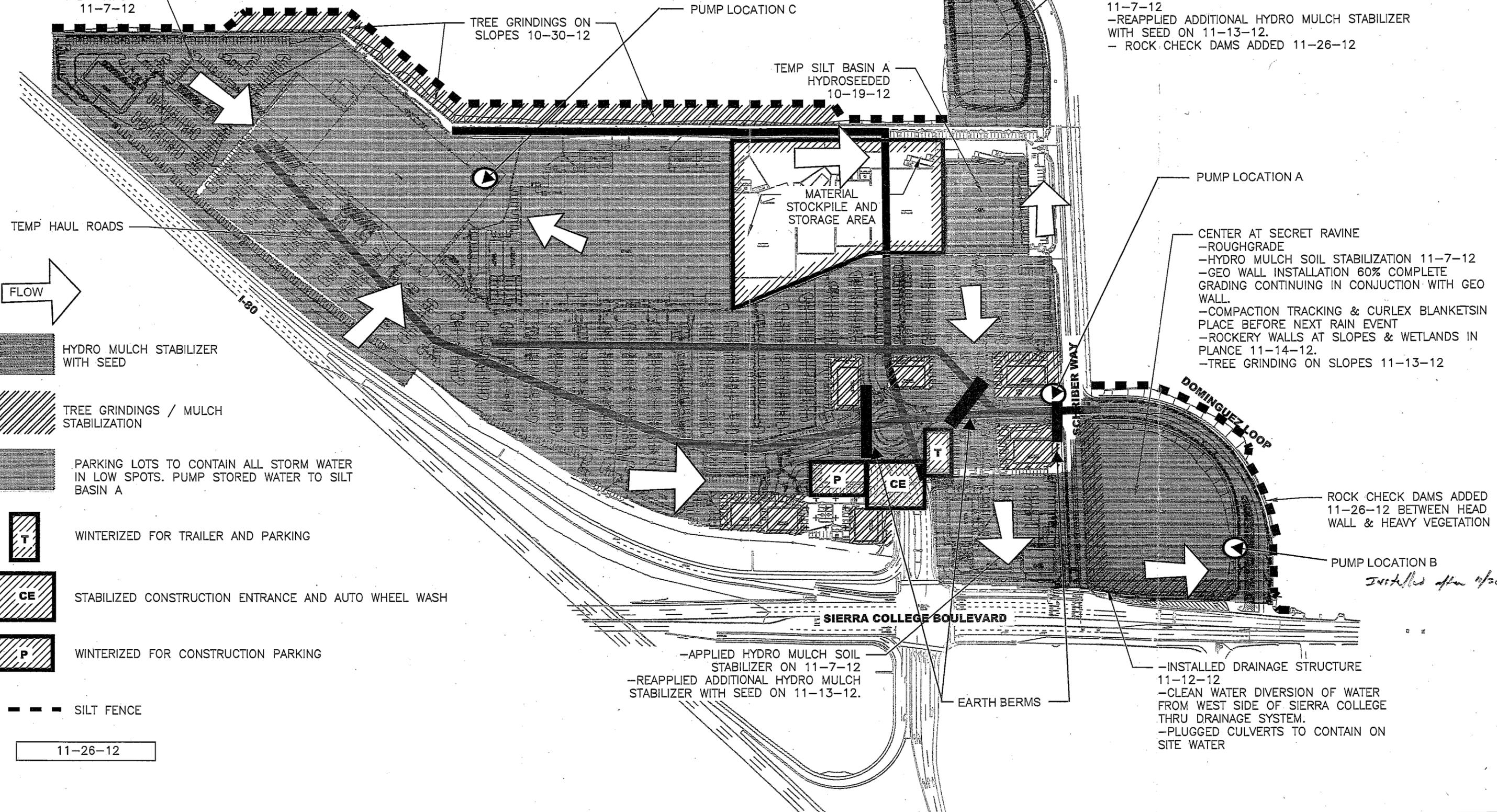
Installed after 2/20 discharge

EARTH BERMS

SIERRA COLLEGE BOULEVARD

SCRIBER WAY

DOMINGUEZ LOOP



Appendix C Sampling Information



Erosion Control Quote Sheet
A CA. SBE Co #46336

Serving All of California

903 Lucas Road
Lodi, Ca 95242
916/826-0154 office
888/557-9332 fax
go-tsm.com
License # 843101

Date: 1/7/2013
Customer: SD Deacon
From: Dave Clayson
Attention: Andy

Office: 969-0900
Job Name: Rocklin Crossing

Fax:

Following is the narrative defining each grab sample taken including location, date and approximate time for exhibit 1 dated 1/7/13 –

- #1 - 3 grab samples taken of discharge just out from headwall structure at Dominguez Loop Rd on 11/28/2012 at approx 3:30 pm.
 - a) Ph 8.16 Turbidity 18.2
 - b) Ph 8.21 Turbidity 16.5
 - c) Ph 8.12 Turbidity 17.0
- #2 - grab sample taken from where basin wall broke leading to discharge from site on 11/30/2012 @ approximately 9:30 am - Dominguez Loop Rd.
 - a) Ph 7.69 Turbidity 3245 ntu
- #3 - grab sample taken from discharged water approximately 100' out from headwall structure on 11/30/2012 @ approximately 9:30 am - Dominguez Loop Rd.
 - a) Ph 7.50 Turbidity 2805 ntu
- #4 - grab sample taken from Basin B prior to entering outfall structure on 11/30/2012 @ approximately 9:45 am - Detention Basin Site.
 - a) Ph 7.92 Turbidity 2610 ntu
- #5 - grab sample taken from discharged water approx 50' out from outfall structure on 11/30/2012 @ approximately 9:50 am - Detention Basin site.
 - a) Ph 7.87 Turbidity 2425 ntu
- #6 - grab sample taken from Secret Ravine Creek upstream from where our discharge entered the same Creek on 11/30/2012 @ approximately 10 am - Detention Basin Site.
 - a) Ph 7.9 Turbidity 871 ntu
- #7 - grab sample taken from Secret Ravine Creek at the upstream bridge prior to job site to establish a baseline prior to the next storm event, on 12/20/2012 @ approximately 12:50 pm.
 - a) Ph 7.98 Turbidity 15.2
- #8 - grab sample taken from Secret Ravine Creek at bridge below job site to establish baseline prior to next storm event, on 12/20/2012 @ approximately 1:00 pm.
 - a) Ph 7.95 Turbidity 5.03
- #9 - visual observation of clean flow through the site water out from the headwall structure on 12/23/2012 @ approximately 9:50 am - Dominguez Loop Rd.
 - a) No samples taken

Authorized Signature /

Date

Dave Clayson 1/7/13
TSM Inc. Rep / Date

AD HOC MONITORING REPORT

For
RAIN EVENT PERIOD: 11/28/2012 – 12/05/2012
STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Annual Reporting Period July 1, 2012 through June 30, 2013

WDID No: 5S31C364108

Risk Level: Level2

Property Owner Information:

Owner Name: Rocklin Crossings LLC and Rocklin Holdings LLC Contact Person: Jan Petersen
Address: 200 East Baker Street Suite 100 e-mail: jpetersen@dsrg.com
City: Costa Mesa State: CA Zip: 92626 Phone: 714-966-6426

Site Information:

Site Name: Rocklin Crossings Detention Basin Contact Person: Jan Petersen
Address: South East Corner of I80 and Sierra College Boulevard e-mail: jpetersen@dsrg.com
City: Rocklin State: CA Zip: 95650 Phone: 714-966-6426

Event Information:

Event Type: RAIN EVENT	Event ID: 781639
Event Start Date/Time: 11/28/2012	Event End Date/Time: 12/05/2012
Rainfall Amount: 9.39	Number of Business Days: 1
Certified By:	Date Certified:

DESCRIPTION OF ANALYTICAL PARAMETERS

The Construction Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least two parameters. These are pH and turbidity. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge (i.e. non-visible pollutants) as a result of construction site materials.

pH (required) - is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5 (Numeric Action Level-NAL range). At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. The Numeric Effluent Limitation (NEL) for pH is 6.0-9.0. An example of an acidic substance is vinegar, and an alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or construction activities which could increase or decrease the pH of your storm water discharge.

Turbidity (required) - is the cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU). The NAL for turbidity in this General Permit is 250 NTU. The NEL is 500 NTU

Suspended Sediment Concentration (SSC) - is the measure of the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

Benthic Macroinvertebrate Bioassessment – evaluation of animals without backbones, living in or on sediments or other substrates, of a size large enough to be seen by the unaided eye, and which can be retained by a U.S. Standard No. 30 sieve (28 openings per inch, 0.595-mm openings) to assess the biological conditions (health) of a waterbody.

Ad Hoc Monitoring Report -11/28/2012 - 12/05/2012
DATA SUMMARY

Monitoring Location	Sample Date / Time	% Total Discharge	Parameter	Results	Units	Analytical Method	Method Detection Limit	Analyzed By	QSP Name
Prior to leaving thru outfall of detention basin B	2012-11-30 09:45:00.0	10	pH	7.92	SU	GRAB	8.5	SELF	Dave Clayson
Prior to leaving thru outfall of detention basin B	2012-11-30 09:45:00.0	10	Turbidity	2610	NTU	GRAB	250	SELF	Dave Clayson
Sample from just outside of outfall in detention basin B	2012-11-30 09:50:00.0	10	pH	7.87	SU	GRAB	8.5	SELF	Dave Clayson
Sample from just outside of outfall in detention basin B	2012-11-30 09:50:00.0	10	Turbidity	2425	NTU	GRAB	250	SELF	Dave Clayson
Sample from Creek upstream of discharge from detention basin B	2012-11-30 10:00:00.0	10	pH	7.9	SU	GRAB	8.5	SELF	Dave Clayson
Sample from Creek upstream of discharge from detention basin B	2012-11-30 10:00:00.0	10	Turbidity	871	NTU	GRAB	250	SELF	Dave Clayson

Ad Hoc Monitoring Report -11/28/2012 - 12/05/2012
DAILY AVERAGES

No. of Business Days	Business Day Date	pH Average/SU	Turbidity Average/NTU	Calculation Summary
1	2012-11-30	7.89	1968	Numbers are from an average of all 3 samples.

Ad Hoc Monitoring Report -11/28/2012 - 12/05/2012

ATTACHMENTS

Attachment Title	Description	Date Uploaded	Attachment Type	Doc Part No/Total Parts
Detention Basin Corrective Action	Corrective actions implemented since discharge	2012-12-06 12:59:41.0	Supporting Documentation	1/1

Corrective Action Log

Location	BMP Deficiencies and Corrective Action Needed	Action Noted Date	Repair Date	Verified Date	Notes
	FILL IN LARGE SLIDE AREA ON SLOPE I.E. LARGE ROCK ETC.	11/30/12			
	FURTHER STABILIZE CONCENTRATED FLOW LINE @ TOE OF SLOPE	11/30/12			
	RECOMMEND PLUGGING OUTFALL TO PREVENT WATER FROM LEAVING SITE, CONTAIN WITHIN BASIN.	11/30/12	11/30/12		COMPLETED
	COMPLETELY PLUGGED OF DISCHARGE PIPE TO INSURE NO FURTHER DISCHARGES, COMPLETELY REGRADING/SHAPING BASIN B, MAKING DEEPER, CREATING EARTH WALL ACROSS BASIN CUTTING OFF ANY ACCESS TO OUTFALL. THE PLAN IS TO STABILIZE ENTIRE NEWLY DISTURBED SOIL OF SLOPES & BOTTOM WITH GEO TEX FABRIC. BADLY RILLED SLOPES BEING FIXED ALSO.	12/4/12			IMPLEMENTATIONS

AD HOC MONITORING REPORT

For
RAIN EVENT PERIOD: 11/28/1900 – 12/05/2012
STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Annual Reporting Period July 1, 2012 through June 30, 2013

WDID No: 5S31C364102

Risk Level: Level2

Property Owner Information:

Owner Name: Donahue Schriber Asset Management Corp DSAMC Contact Person: Janet Petersen
Address: 200 E Baker St Ste 100 e-mail: jpetersen@dsrg.com
City: Costa Mesa State: CA Zip: 92626 Phone: 714-966-6426

Site Information:

Site Name: Dominguez Loop Road Contact Person: Janet Petersen
Address: East side of Sierra College Boulevard and South of Croftwood Drive e-mail: jpetersen@dsrg.com
City: Rocklin State: CA Zip: 95650 Phone: 714-966-6426

Event Information:

Event Type: RAIN EVENT Event ID: 781629
Event Start Date/Time: 11/28/1900 Event End Date/Time: 12/05/2012
Rainfall Amount: 9.39 Number of Business Days: 1
Certified By: Date Certified:

DESCRIPTION OF ANALYTICAL PARAMETERS

The Construction Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least two parameters. These are pH and turbidity. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge (i.e. non-visible pollutants) as a result of construction site materials.

pH (required) - is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5 (Numeric Action Level-NAL range). At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. The Numeric Effluent Limitation (NEL) for pH is 6.0-9.0. An example of an acidic substance is vinegar, and an alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or construction activities which could increase or decrease the pH of your storm water discharge.

Turbidity (required) - is the cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU). The NAL for turbidity in this General Permit is 250 NTU. The NEL is 500 NTU

Suspended Sediment Concentration (SSC) - is the measure of the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

Benthic Macroinvertebrate Bioassessment – evaluation of animals without backbones, living in or on sediments or other substrates, of a size large enough to be seen by the unaided eye, and which can be retained by a U.S. Standard No. 30 sieve (28 openings per inch, 0.595-mm openings) to assess the biological conditions (health) of a waterbody.

Ad Hoc Monitoring Report -11/28/1900 - 12/05/2012
DATA SUMMARY

Monitoring Location	Sample Date / Time	% Total Discharge	Parameter	Results	Units	Analytical Method	Method Detection Limit	Analyzed By	QSP Name
100' out from outfall structure into vegetated field	2012-11-30 09:30:00.0	10	pH	7.59 7.5	SU	GRAB	8.5	SELF	Dave Clayson
100' out from outfall structure into vegetated field	2012-11-30 09:30:00.0	10	Turbidity	3245 2805	NTU	GRAB	250	SELF	Dave Clayson
outfall area where discharge occurred	2012-11-30 09:35:00.0	10	pH	7.51 7.69	SU	GRAB	8.5	SELF	Dave Clayson
outfall area where discharge occurred	2012-11-30 09:35:00.0	10	Turbidity	3245 3245	NTU	GRAB	250	SELF	Dave Clayson

Ad Hoc Monitoring Report -11/28/1900 - 12/05/2012
DAILY AVERAGES

No. of Business Days	Business Day Date	pH Average/SU	Turbidity Average/NTU	Calculation Summary
1	2012-11-30	7.59	3025	The numbers represent the average of both samples taken.

Ad Hoc Monitoring Report -11/28/1900 - 12/05/2012

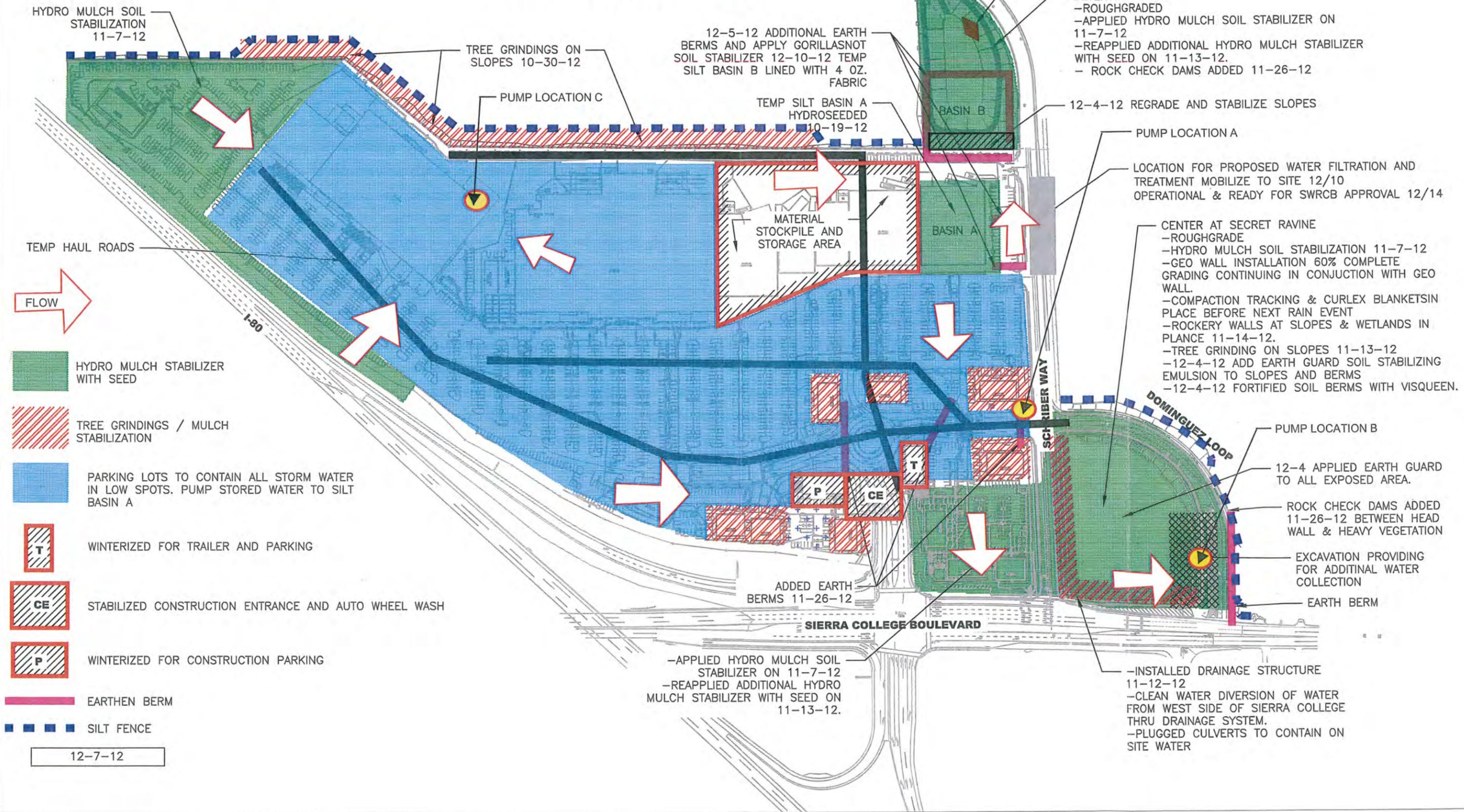
ATTACHMENTS

Attachment Title	Description	Date Uploaded	Attachment Type	Doc Part No/Total Parts
Corrective action recommendations	Corrective actions implemented to prevent future discharges	2012-12-06 11:03:10.0	Supporting Documentation	1/1

Appendix D Post-Incident SWPPP Map

ROCKLIN CROSSINGS

NORTH



HYDRO MULCH SOIL STABILIZATION 11-7-12

TREE GRINDINGS ON SLOPES 10-30-12

12-5-12 ADDITIONAL EARTH BERMS AND APPLY GORILLASNOT SOIL STABILIZER 12-10-12 TEMP SILT BASIN B LINED WITH 4 OZ. FABRIC

11-29-12 - PLUGGED EXISTING 60" CULVERT AND EXISTING 36" DRAINPIPE

DETENTION BASIN - ROUGHGRADED - APPLIED HYDRO MULCH SOIL STABILIZER ON 11-7-12 - REAPPLIED ADDITIONAL HYDRO MULCH STABILIZER WITH SEED ON 11-13-12 - ROCK CHECK DAMS ADDED 11-26-12

PUMP LOCATION C

TEMP SILT BASIN A HYDROSEEDED 10-19-12

12-4-12 REGRADE AND STABILIZE SLOPES

PUMP LOCATION A

LOCATION FOR PROPOSED WATER FILTRATION AND TREATMENT MOBILIZE TO SITE 12/10 OPERATIONAL & READY FOR SWRCB APPROVAL 12/14

TEMP HAUL ROADS

FLOW

MATERIAL STOCKPILE AND STORAGE AREA

CENTER AT SECRET RAVINE - ROUGHGRADE - HYDRO MULCH SOIL STABILIZATION 11-7-12 - GEO WALL INSTALLATION 60% COMPLETE GRADING CONTINUING IN CONJUNCTION WITH GEO WALL. - COMPACTION TRACKING & CURLEX BLANKETS IN PLACE BEFORE NEXT RAIN EVENT - ROCKERY WALLS AT SLOPES & WETLANDS IN PLACE 11-14-12. - TREE GRINDING ON SLOPES 11-13-12 - 12-4-12 ADD EARTH GUARD SOIL STABILIZING EMULSION TO SLOPES AND BERMS - 12-4-12 FORTIFIED SOIL BERMS WITH VISQUEEN.

HYDRO MULCH STABILIZER WITH SEED

TREE GRINDINGS / MULCH STABILIZATION

PARKING LOTS TO CONTAIN ALL STORM WATER IN LOW SPOTS. PUMP STORED WATER TO SILT BASIN A

T WINTERIZED FOR TRAILER AND PARKING

CE STABILIZED CONSTRUCTION ENTRANCE AND AUTO WHEEL WASH

P WINTERIZED FOR CONSTRUCTION PARKING

EARTHEN BERM

SILT FENCE

12-7-12

ADDED EARTH BERMS 11-26-12

SIERRA COLLEGE BOULEVARD

- APPLIED HYDRO MULCH SOIL STABILIZER ON 11-7-12 - REAPPLIED ADDITIONAL HYDRO MULCH STABILIZER WITH SEED ON 11-13-12.

PUMP LOCATION B

12-4 APPLIED EARTH GUARD TO ALL EXPOSED AREA.

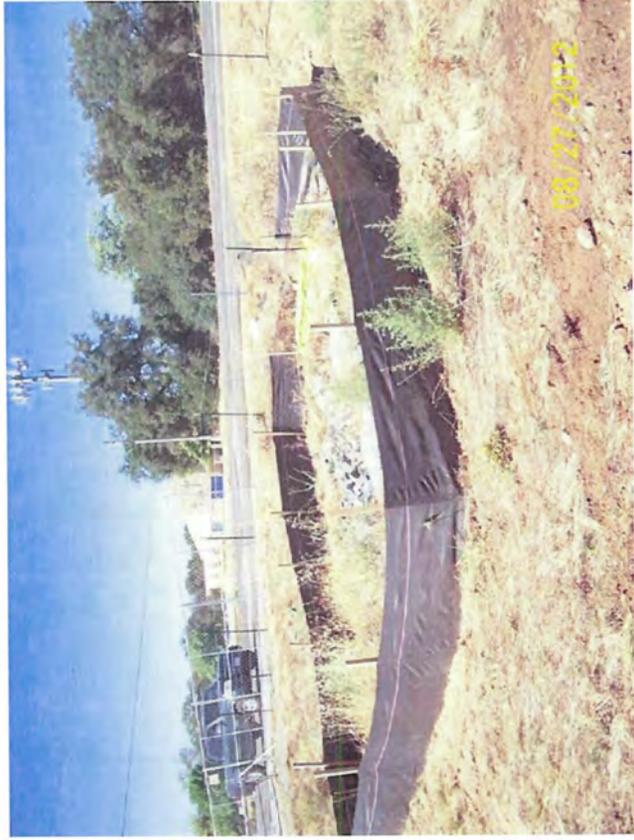
ROCK CHECK DAMS ADDED 11-26-12 BETWEEN HEAD WALL & HEAVY VEGETATION

EXCAVATION PROVIDING FOR ADDITIONAL WATER COLLECTION

EARTH BERM

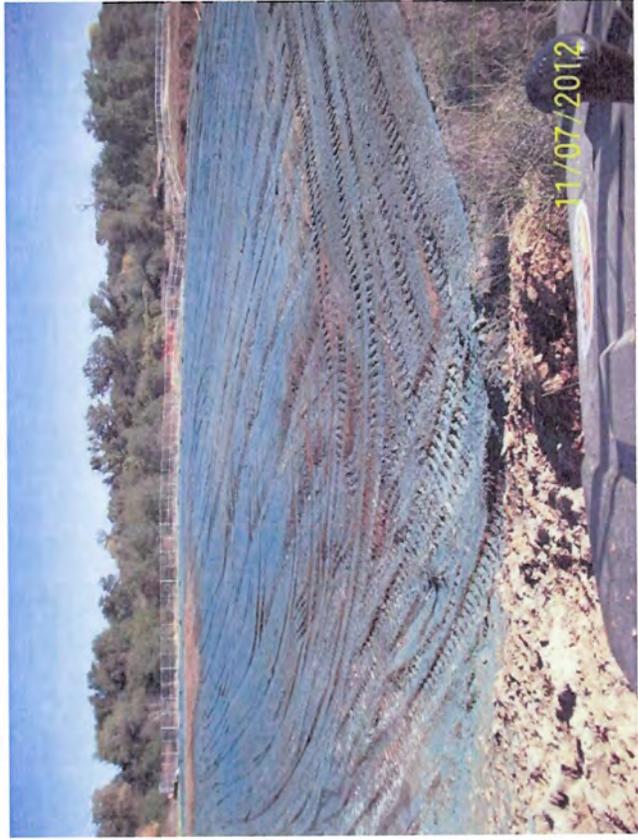
- INSTALLED DRAINAGE STRUCTURE 11-12-12 - CLEAN WATER DIVERSION OF WATER FROM WEST SIDE OF SIERRA COLLEGE THRU DRAINAGE SYSTEM. - PLUGGED CULVERTS TO CONTAIN ON SITE WATER

Appendix E BMP Photographs



Protected drain inlet, Sierra College - Schriber

Mulch at Slopes (screen wall behind WM&HD) – 11-5-12



Basin B Hydroseeded prior to using as secondary Basin



Dominguez Loop Rockery wall construction with bark on slopes



Geo Wall looking West 11-20-12



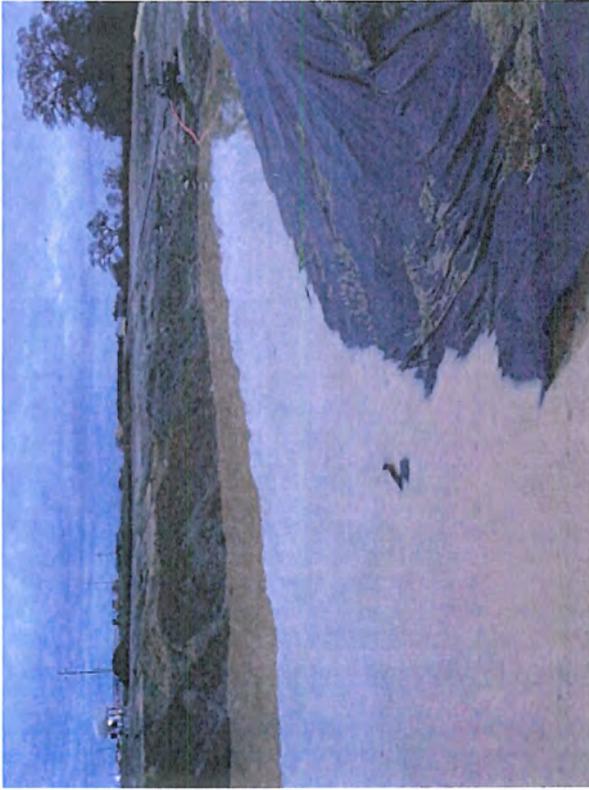
Geo Wall looking West



Geo Wall looking East



Dominguez Loop - Curlex Blankets & Earth Berm



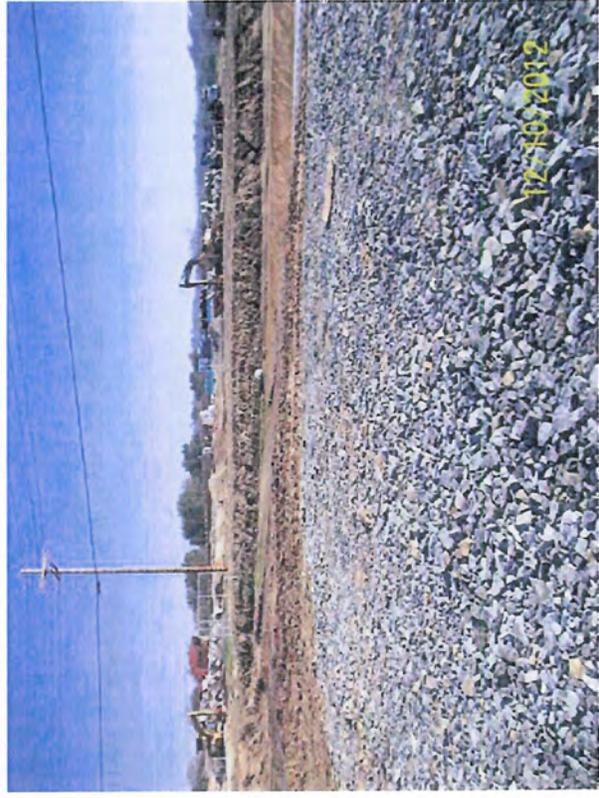
Dominguez Loop Pumping – 12-1-12.



Basin B under construction to become secondary Basin



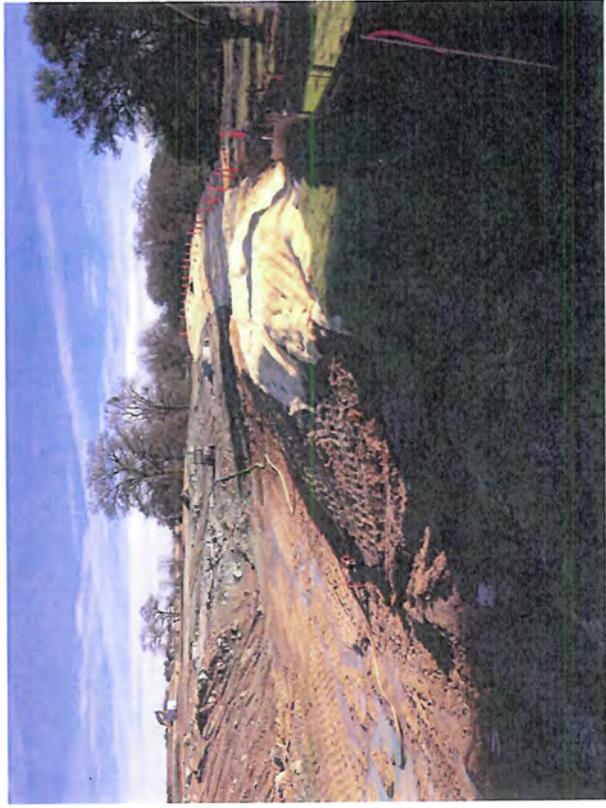
Basin B looking west – 12-10-12



Extended Stabilized Construction Entrance



Dominguez Loop Earthguard applied – 12-18-12



Dominguez Loop Earthguard applied and curlex blankets in place – 12-19-12



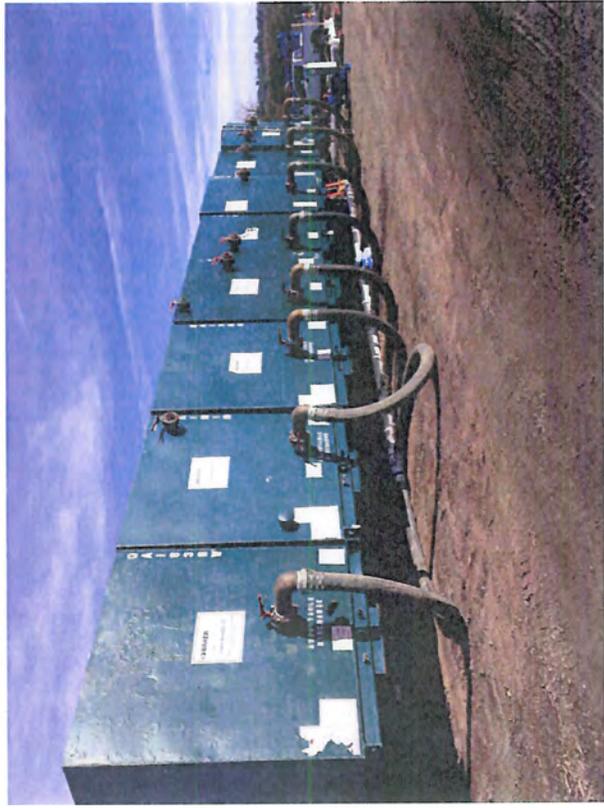
Dominguez Loop Earthguard applied 12-19-12



Earthguard applied to Site – 12-19-12



ATS Filtration System – 12-19-12



ATS Sediment Tanks – 12-19-12



Pumping at Dominguez Loop – 12-23-12



Mulch on slopes of Sierra College – 12-24-12



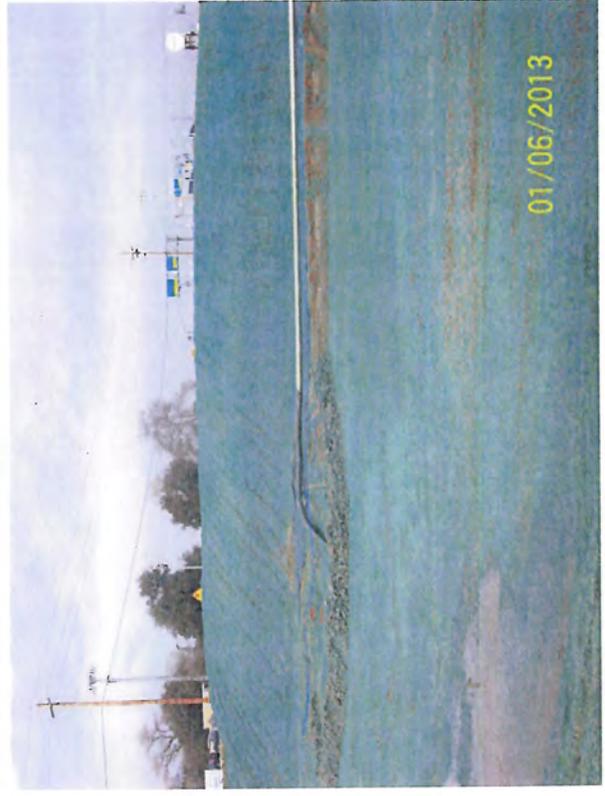
Pumping at Dominguez Loop - 12-24-12



Pumping at Schriber Way - 12-24-12



Pumping at Walmart loading dock



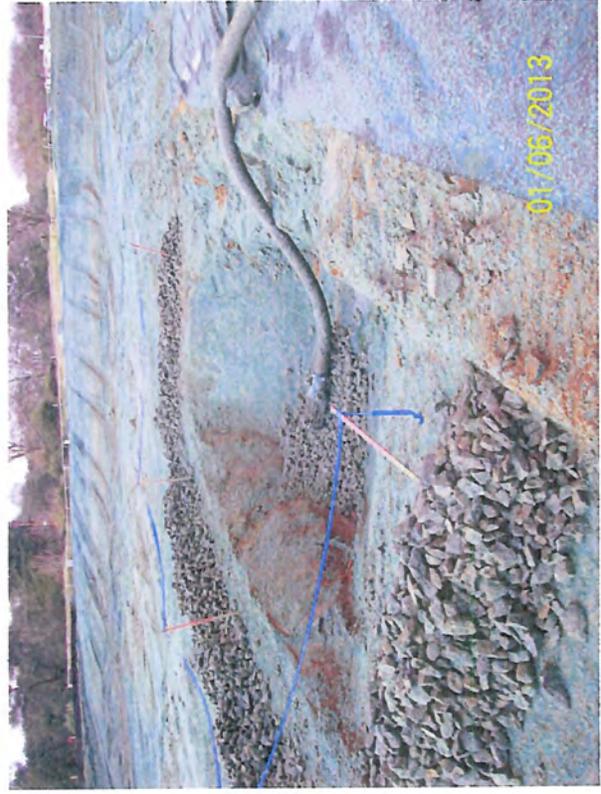
Center at Secret Ravine from Dominguez Loop - Hydroseeded



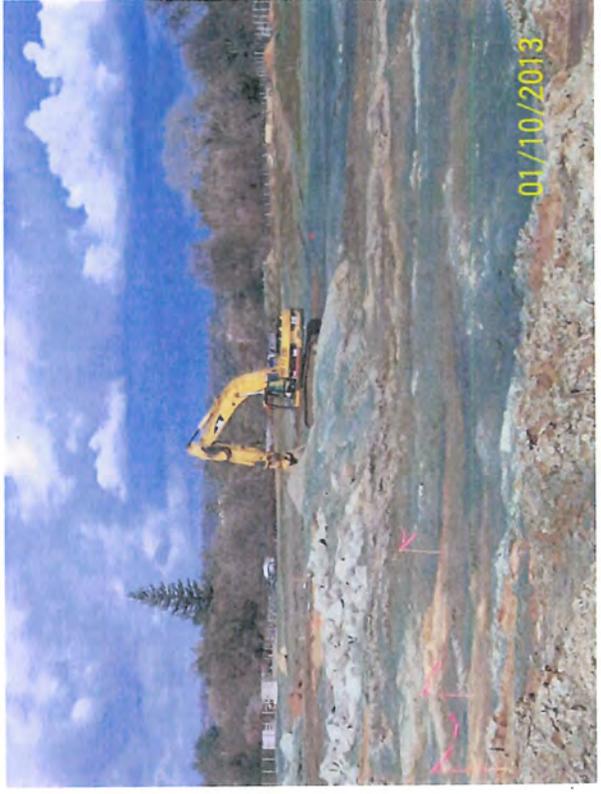
Looking North - Center at Secret Ravine/Dominguez Loop - Hydroseeded



Looking South - Center at Secret Ravine - Curlex Blankets & Mulch



Dominguez Loop - sump pump out location



Hydroseeded North Section

Appendix F Discharge Calculations



Estimated volume of sediment laden water discharged from the site Response to Notice of Violation

For:

Rocklin Crossings WDID# 5S31C364098
Rocklin Crossings Detention Basin WDID# 5S31C364108
Dominguez Loop Road WDID# 5S31C364102
Center at Secret Ravine WDID# 5S31C364105

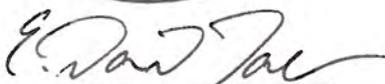
Prepared by:

RSC Engineering

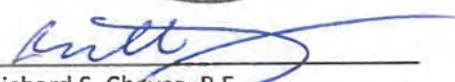
January 25, 2013

RSC Engineering, Inc.
Consulting Engineers




E. Daniel Taylor, P.E.




Richard S. Chavez, P.E.
President

2750 Douglas Blvd.
Suite 150
Roseville, CA 95661
916.788.2884
Fax 916.788.4408
rsc-engr.com

Response to Notice of Violation

for

Rocklin Crossings WDID# 5S31C364098
Rocklin Crossings Detention Basin WDID# 5S31C364108
Dominguez Loop Road WDID# 5S31C364102
Center at Secret Ravine WDID# 5S31C364105

Estimated volume of sediment laden water discharged from the site

January, 25 2013

1. Introduction:

This calculation is in response to a request in the Notice of Violation (NOV) dated December 21, 2012 for the following projects:

Rocklin Crossings	WDID# 5S31C364098
Rocklin Crossings Detention Basin	WDID# 5S31C364108
Dominguez Loop Road	WDID# 5S31C364102
Center at Secret Ravine	WDID# 5S31C364105

The request is to provide “An estimate of the volume of sediment laden water discharged from the construction site” and “An estimate of sediment laden water discharged into Secret Ravine”.

As stated in the NOV, the storm event started on November 28, 2012 and ended on December 5, 2012. The site discharged water at two locations: **Discharge location #1 was at the inlet structure of the detention basin** and **discharge location #2 was at the south side of Dominguez Loop**. Refer to Figure 1 for discharge locations.

This report presents the volume estimates of the water discharged from the site and into Secret Ravine based on available information including: the report prepared by Andy Van Veldhuizen with SD Deacon Dated December 18, 2012 describing the events surrounding the storm event in question (**Appendix A**), the NOV dated December 21, 2012 (**Appendix B**), and the stream gauge station data provided by the City of Roseville for the stream gauge located at Rocklin Road and Secret Ravine (Attached).

3. Methods:

Discharge volumes were determined by multiplying the contributing shed area, the depth of rainfall, and a land use coefficient (C).

$$\text{Volume (cubic feet)} = C * \text{Area (square feet)} * \text{Rainfall (feet)} + \text{assumed storage volume}$$

The land use coefficient adjusts the amount of runoff to account for cover material and infiltration. Based on the table below, a “C” of 0.30 was used for bare soil areas since the soil in both Areas 1 and 2 were reported to have been loosely compacted with rocky material. A “C” coefficient of 0.20 was used for the detention basin area since it was un-compacted and covered with vegetation:

Land Use	C	Land Use	C
<i>Business:</i> Downtown areas Neighborhood areas	0.70 - 0.95 0.50 - 0.70	<i>Lawns:</i>	
		Sandy soil, flat, 2%	0.05 - 0.10
		Sandy soil, avg., 2-7%	0.10 - 0.15
		Sandy soil, steep, 7%	0.15 - 0.20
		Heavy soil, flat, 2%	0.13 - 0.17
		Heavy soil, avg., 2-7%	0.18 - 0.22
		Heavy soil, steep, 7%	0.25 - 0.35
<i>Residential:</i> Single-family areas Multi units, detached Multi units, attached Suburban	0.30 - 0.50 0.40 - 0.60 0.60 - 0.75 0.25 - 0.40	<i>Agricultural land:</i>	
		<i>Bare packed soil</i>	
		*Smooth	0.30 - 0.60
		*Rough	0.20 - 0.50
		<i>Cultivated rows</i>	
		*Heavy soil, no crop	0.30 - 0.60
		*Heavy soil, with crop	0.20 - 0.50
		*Sandy soil, no crop	0.20 - 0.40
		*Sandy soil, with crop	0.10 - 0.25
		<i>Pasture</i>	
		*Heavy soil	0.15 - 0.45
		*Sandy soil	0.05 - 0.25
		Woodlands	0.05 - 0.25
<i>Industrial:</i> Light areas Heavy areas	0.50 - 0.80 0.60 - 0.90	<i>Streets:</i>	
		Asphaltic	0.70 - 0.95
		Concrete	0.80 - 0.95
		Brick	0.70 - 0.85
Parks, cemeteries	0.10 - 0.25	Unimproved areas	0.10 - 0.30
Playgrounds	0.20 - 0.35	Drives and walks	0.75 - 0.85
Railroad yard areas	0.20 - 0.40	Roofs	0.75 - 0.95

Source: <http://water.me.vccs.edu/courses/CIV246/table2.htm>

Back check calculations were performed, when possible, to compare the estimated discharge volumes against the photos documenting the discharge event. Location 1 was back checked using the weir equation over the inlet drain structure at the downstream end of the detention basin and location 2 was back checked using the Manning’s channel flow equation at the discharge adjacent to the end of the retaining wall at the south side of Dominguez Loop.

Discharge Location #1 Backcheck:

Photo # 15 in the NOV shows a discharge at the inlet structure in the detention basin. Given a total volume of 2,256 cubic feet over a 4 hour time span the average flow rate is 0.16 cfs. Based on the known weir parameters of the inlet structure the depth of flow over the weir can be calculated. The front side of the inlet structure is negated from the following calculations since a board was placed at the front of the inlet to stop the flow. The water built up and overtopped the 2 sides of the riser structure.

$$\text{Weir equation: } Q = \frac{2}{3} * C_d * A * \sqrt{2gh}$$

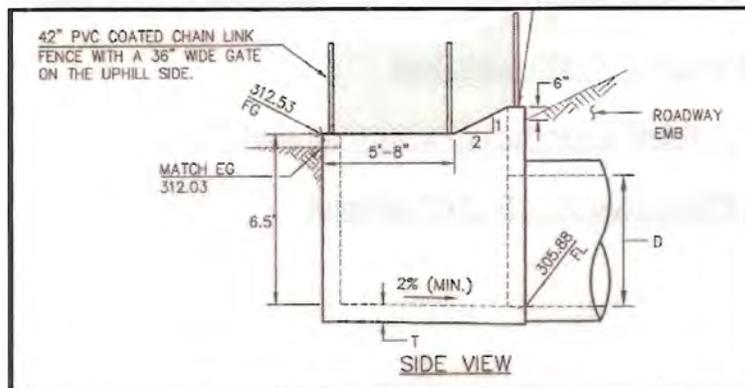
$$C_d = 0.6$$

$$A = h \times 5.67' \times 2 \text{ (two sides)}$$

$$Q = 0.16 \text{ cfs}$$

$$h = 0.03'$$

A flow depth of 0.03' seems reasonable with the water depth shown in Photo #15.

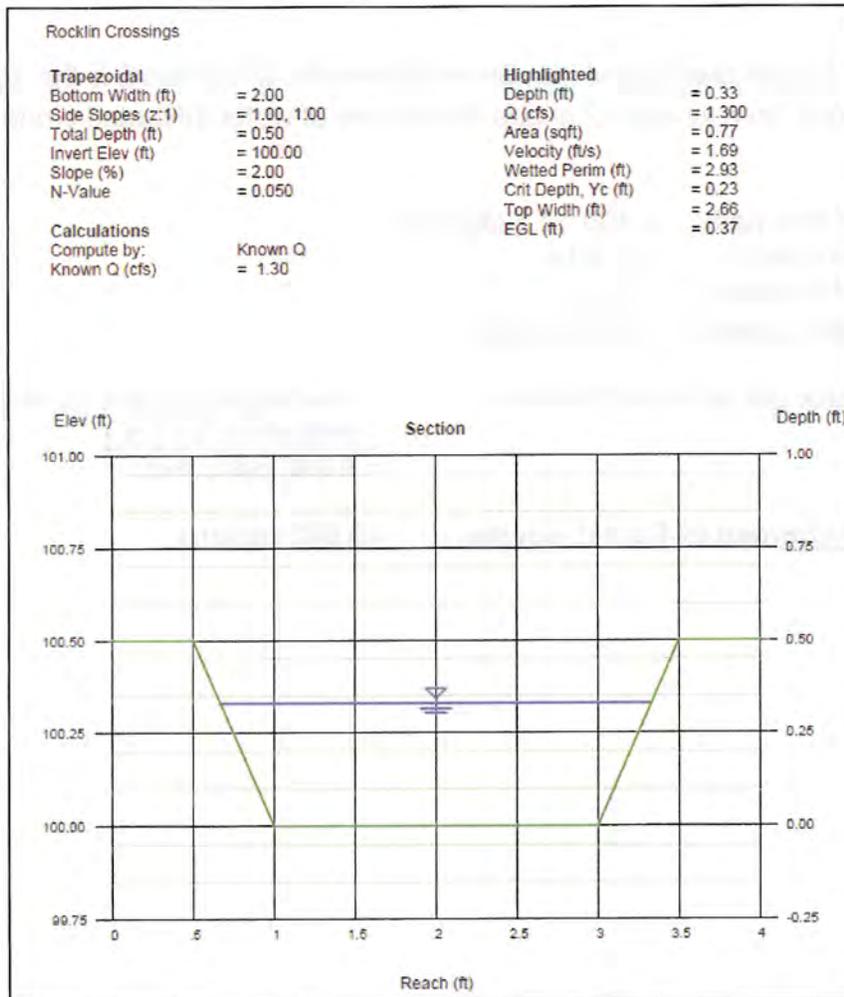


Existing Riser Detail (Outlet structure at Detention Basin)

Detail from Croftwood Access Road by TLA Engineering & Planning Dated 3/1/07

Discharge Location #2 backcheck:

Photo # 9 in the NOV shows the discharge at location #2 as defined channel flow at the end of the retaining wall on the south side of Dominguez Loop Road. Given a total volume of 6,840 cubic feet over a 1.5 hour time span the average flow rate is 1.3 cfs. Based on photo # 9 in the NOV it is assumed that the channel formed by the discharge at location #2 had an approximate 2' bottom with 1:1 side slopes and a 2% slope in the direction of flow. The depth of flow in the channel is calculated using the Manning's equation for open channel flow as follows:



Manning's Equation Channel Flow Calculator

Depth of flow= 0.33'

A flow depth of 0.33' seems reasonable compared to the water depth shown in Photo #9.

7. Summary / Discussion:

The results from the calculations in the above report are summarized as follows:

Volume discharged from site:

Discharge Location #1 (Detention Basin)
Area: 3.1 acres
Rainfall: 0.87 inches
Estimated volume: 16,873 gallons ✓

Discharge Location #2 (Dominguez Loop)
Area: 6.2 acres
Rainfall: 0.30 inches
Storage released 4,800 cubic feet
Estimated volume: 51,167 gallons

Total Estimated volume discharged from Site: 68,039 gallons ✓

Volume discharged Into Secret Ravine:

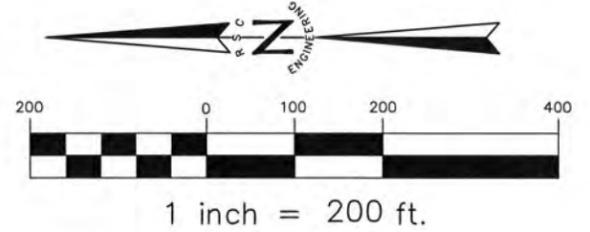
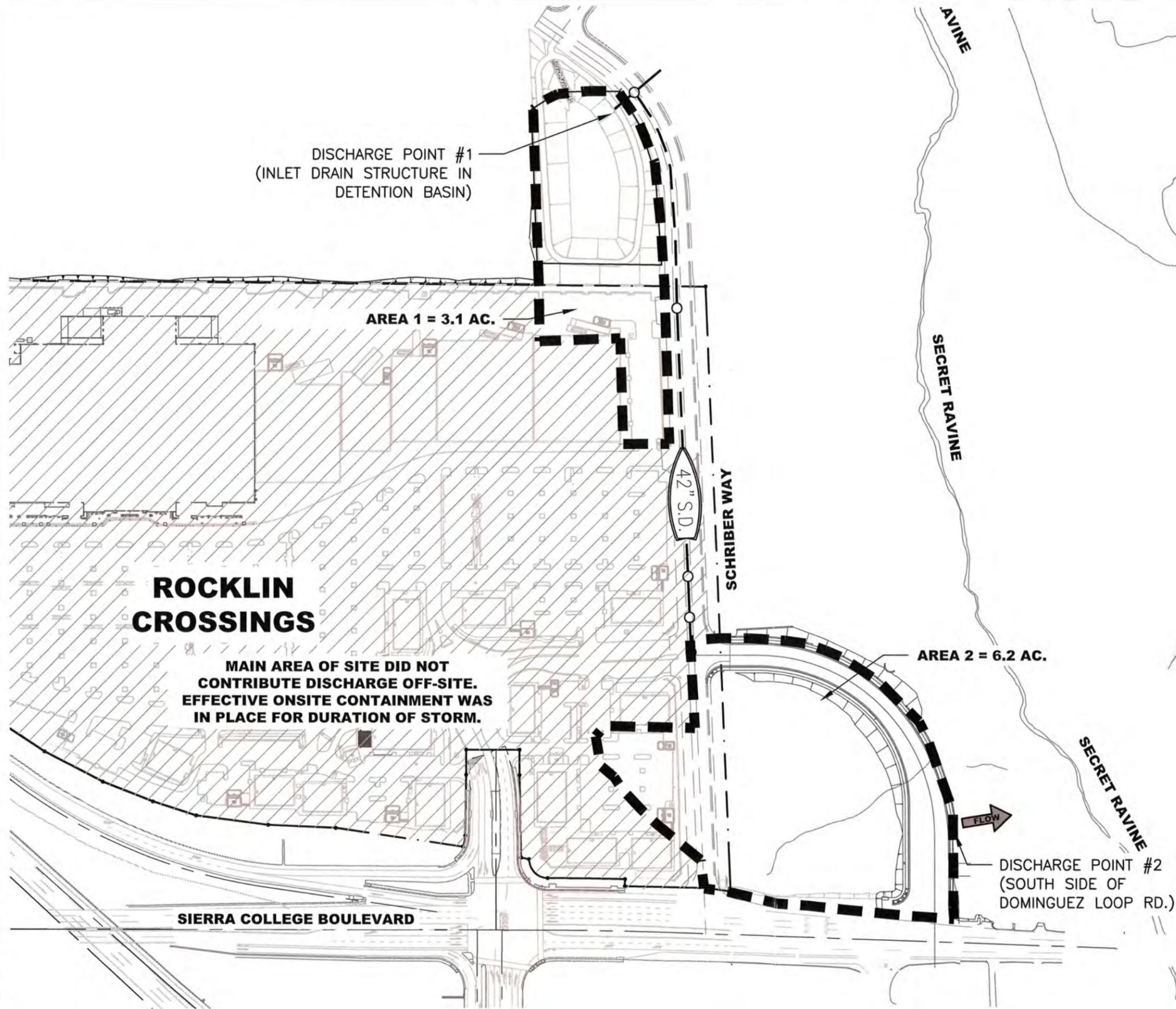
Estimated volume from location #1 (Detention Basin): 16,873 gallons
Estimated volume from location #2 (Dominguez Loop): 49,592 gallons

Total Estimated volume discharged into Secret Ravine: 66,465 gallons

The results listed above are estimates based on available information including: photos, field reports by personnel (eye witnesses) at the site during the rain event, and recorded rainfall data from the City of Roseville. The calculations are not based on field measurements during the storm event. The volume estimates listed in this report should not be misconstrued as quantitative engineering results but rather as opinions based on engineering judgment.

The back-checks of volumes for each discharge are provided as an independent check of the reasonableness of the assumptions used in the primary volume calculations. The back checks are not intended to provide confirmation of the primary calculations; they are intended to put the primary calculations into perspective and verify reasonableness.

DRAWING: P:\A...-002\Engineering\Reports\SWPPP (MULTI)\NOV Technical Report\FIGURES\Figure 1_Discharge Map.dwg
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PLOT DATE: Jan 24, 2013 - 9:00:51 AM



ROCKLIN CROSSINGS
ROCKLIN, CA

FIGURE - 1
DISCHARGE EXHIBIT

PROJECT NO.:001-002 DATE: 1/25/2013 SHEET NO. 1 OF 1

ROCKLIN CROSSINGS

**City of Roseville
Rain Gage Records
Secret Ravine at Rocklin Road**

November 28, 2012 – December 5, 2012

Tabular Data Display
 Point: 1618 CHINA GARDEN RD Precipitation Gage

28-Nov-12		29-Nov-12		30-Nov-12		1-Dec-12		2-Dec-12		3-Dec-12		4-Dec-12		5-Dec-12	
Time (hr.)	Depth (in.)														
6.4	2.1	6.3	2.7	0.2	3.1	5.9	5.8	0.8	6.4	6.0	8.2	5.9	8.2	0.4	8.3
8.3	2.1	15.9	2.7	0.3	3.1	6.2	5.8	1.3	6.5			16.2	8.3	8.6	8.4
9.5	2.2	18.3	2.7	0.3	3.2	8.0	5.8	2.2	6.5			17.8	8.3	15.9	8.4
9.8	2.2	19.8	2.8	0.5	3.2	8.6	5.9	2.6	6.5			23.9	8.3	25.2	8.5
10.0	2.3	21.6	2.8	0.6	3.2	9.1	5.9	3.5	6.6					25.2	8.5
11.1	2.4	22.2	2.8	0.8	3.3	9.4	5.9	5.4	6.6					25.2	8.5
11.4	2.4	22.7	2.9	1.1	3.3	9.6	6.0	6.0	6.7					25.2	8.6
11.6	2.5	22.8	2.9	1.4	3.3	9.7	6.0	6.1	6.7					25.2	8.6
11.9	2.5	23.3	3.0	1.8	3.4	9.8	6.0	6.2	6.7					25.2	8.7
12.0	2.6	23.7	3.0	2.2	3.4	11.3	6.1	6.4	6.7					25.2	8.7
12.2	2.6	24.0	3.0	2.4	3.5	18.1	6.1	6.6	6.8					25.2	8.7
18.3	2.6			2.7	3.5	18.8	6.1	6.9	6.8					25.2	8.8
23.1	2.6			3.5	3.6	19.7	6.1	7.1	6.9					25.2	8.8
23.2	2.7			4.4	3.6	21.7	6.2	7.2	6.9					25.2	8.8
				5.3	3.7	22.0	6.2	7.4	6.9					25.2	8.8
				5.4	3.7	22.4	6.3	7.5	7.0					25.2	8.9
				5.5	3.7	22.7	6.3	7.8	7.0					25.2	8.9
				5.6	3.8	22.9	6.3	8.0	7.1					25.2	8.9
				5.8	3.9	23.6	6.4	8.1	7.1					25.2	8.9
				5.9	3.9			8.2	7.2						
				5.9	3.9			8.2	7.2						
				6.0	4.0			8.2	7.2						
				6.0	4.0			8.2	7.3						
				6.2	4.1			8.2	7.4						
				6.2	4.1			8.2	7.4						
				6.9	4.1			8.2	7.4						
				8.1	4.1			8.2	7.5						
				8.6	4.2			8.2	7.5						
				8.8	4.2			8.2	7.6						
				8.8	4.3			8.3	7.6						
				8.9	4.3			8.3	7.7						
				9.0	4.3			8.4	7.7						
				9.2	4.4			8.4	7.7						
				9.3	4.4			8.5	7.8						
				9.4	4.5			8.6	7.8						
				9.7	4.5			8.6	7.8						
				10.3	4.5			8.7	7.8						
				10.6	4.6			8.8	7.9						
				10.8	4.6			8.9	8.0						
				10.9	4.7			9.1	8.0						
				11.1	4.7			9.3	8.0						
				11.2	4.8			9.5	8.1						
				11.3	4.8			9.5	8.1						
				11.4	4.8			9.8	8.2						
				11.6	4.9			10.1	8.2						
				11.7	4.9			10.4	8.2						
				11.8	5.0			10.4	8.2						
				12.2	5.0			18.1	8.2						
				12.5	5.0										
				12.9	5.1										
				13.0	5.1										
				13.2	5.2										
				13.7	5.2										
				13.8	5.2										
				18.2	5.2										
				19.2	5.3										
				19.4	5.3										
				19.5	5.4										
				19.8	5.4										
				20.3	5.4										
				20.4	5.5										
				20.5	5.5										
				20.6	5.6										
				20.7	5.6										
				22.2	5.7										

0.6

0.3

0.6

0.6

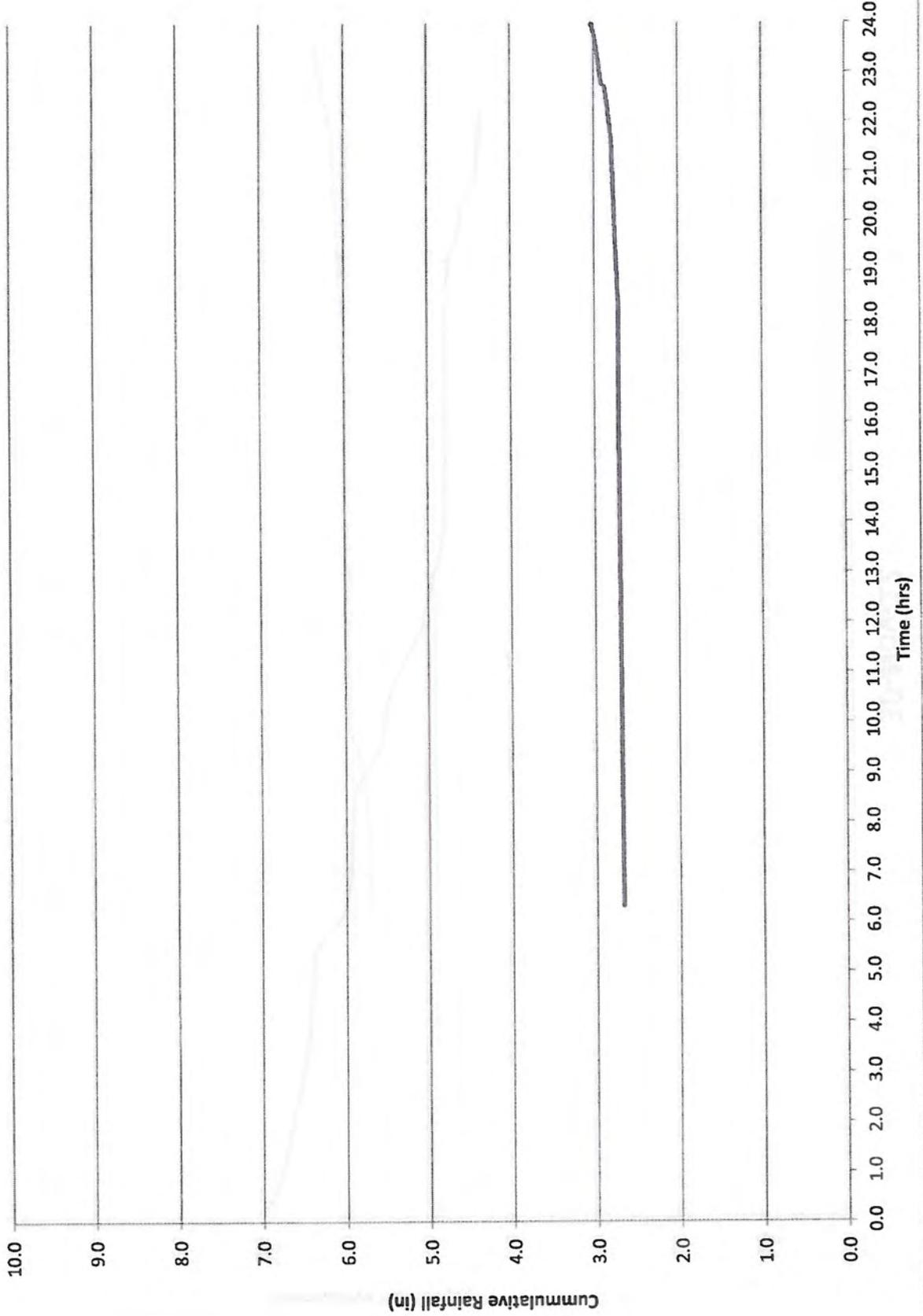
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0.6

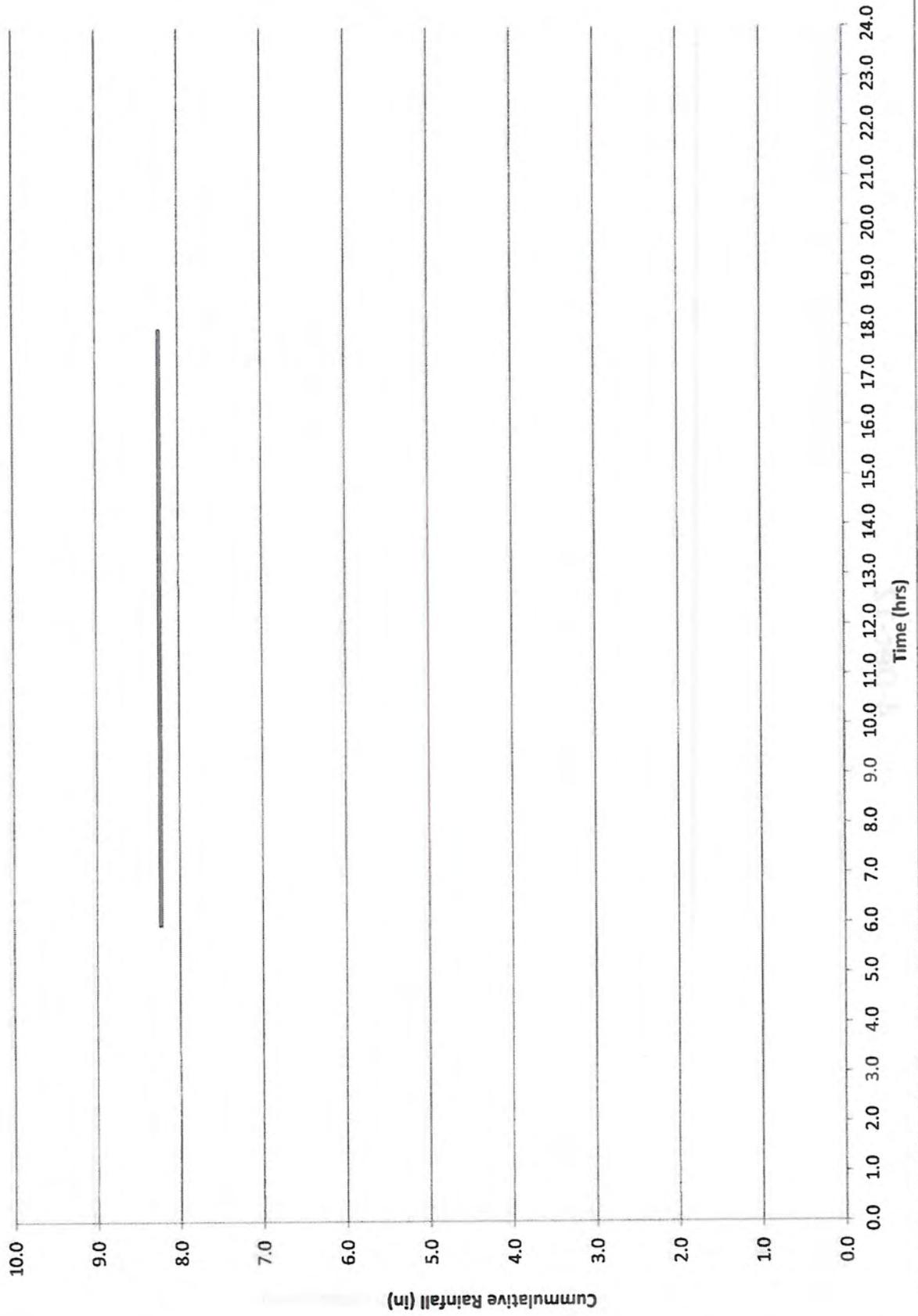
1.8

2.6

29-Nov-12



3-Dec-12



5-Dec-12

