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ENTERED



Environmental Protection Division
Water Quality & RCRA Group (ENV-RCRA)
P.O. Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

National Nuclear Security Administration
Los Alamos Site Office, A316
3747 West Jemez Road
Los Alamos, New Mexico 87545
(505) 667-5794/FAX (505) 667-5948

Date: **MAY 25 2012**
Refer To: ENV-RCRA-12-0112
LAUR: 12-20450

Mr. William M. Oberle
Regulatory Division
Albuquerque District, Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435



Dear Mr. Oberle:

SUBJECT: ACTION NO. SPA-2012-00187-ABQ. REQUEST FOR AUTHORIZATION TO CONDUCT WORK UNDER NATIONWIDE PERMIT NO. 5 FOR THE INSTALLATION OF A STREAM GAGE IN CAÑADA DEL BUEY

The US Department of Energy and Los Alamos National Security, LLC (DOE/LANS) request authorization from the US Army Corps of Engineers (USACOE) to construct a stream gaging station in Cañada del Buey under Nationwide Permit No. 5, *Scientific Measurement Devices*. The proposed stream gage is for collecting stream flow data and water quality samples at the boundary of Los Alamos National Laboratory. A pre-fabricated, steel Parshall flume and rock wing walls will be place in Cañada del Buey below the ordinary high water mark (OHWM). The following enclosures provide additional information regarding this request:

- **Enclosure 1**, application for a Department of Army Permit (ENG FORM 4345, OCT 2010)
- **Enclosure 2**, location map
- **Enclosure 3**, dredge and fill quantities worksheet
- **Enclosure 4**, design drawings of the proposed stream gage
- **Enclosure 5**, photograph of the project site

Additional information relevant to the project is provided below.



Stream Gage E229.7 Construction Project

- **Name of Waterbody:** Cañada del Buey
- **Project Location:** 35° 49.691' N; 106° 13.385' W
- **Waterbody Classification:** Cañada del Buey is an ephemeral tributary to the Rio Grande.
- **Type of Material Discharged:** A pre-fabricated, steel Parshall flume will be installed in the Cañada del Buey stream channel. Parshall flumes are the most widely used type of flume for permanent flow monitoring installations. Wing walls constructed of rock gabions will be installed on both sides of the flume to direct stream flow into the upstream end of the flume. All work in the stream channel will be done manually; no heavy equipment will be required. Duration of construction is estimated at 2-3 days.
- **Surface Area of Waters Filled:** 0.0015 acres
- **Volume of Waters Filled per Running Foot of Channel:** 0.72 cu yds/linear foot
- **Surface Area of Wetlands Filled:** None. No wetlands are present at the project site.

Because this activity involves the discharge of fill material into waters of the U.S., DOE/LANS is aware that measures must be taken to minimize impacts. These measures will include (1) conducting work during a traditional season of no streamflow (May and June), and (2) scheduling construction during a forecasted period of dry weather.

The Laboratory's Biological Resources Team completed a Biological Resources Project Review—for federally listed threatened and endangered species, wetlands, and floodplains—of the proposed stream gaging station in Cañada del Buey. No federally threatened or endangered species were identified within the work area. Their review approved the project with the following conditions for conducting work in floodplains:

- Do not disrupt the integrity of the stream bank for wet or dry channels. This includes actions such as driving across stream channels off-road or digging into the stream bank, with the exception of keying the rock gabions into the stream bank to prevent erosion (See Enclosure 3).
- Work shall not occur in a floodplain when soil is too wet to adequately support equipment.
- Equipment staging areas shall not be located within the floodplain.
- Refueling of equipment shall be at least 100 ft from any drainage, including dry arroyos.
- Hazardous materials, chemical, fuels, and oils shall not be stored within a floodplain.
- Revegetate following soil disturbances using an appropriate native seed mix or plants.
- Remove all debris (vegetation, construction material) from floodplains.

The Laboratory's Cultural Resources Team completed a Cultural Resources Project Review of the proposed stream gaging station in Cañada del Buey. Their review approved the project with no concerns.

Mr. William M. Oberle
ENV-RCRA-12-0112

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Please contact Robert S. Beers by telephone at (505) 667-7969 or by email at bbeers@lanl.gov if you have questions regarding this information.

Sincerely,



Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Security, LLC

AMD:GET:BB/lm

Sincerely,



Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Los Alamos Site Office
U.S. Department of Energy

Enclosures:

1. Application for a Department of Army Permit
2. Location map
3. Dredge and fill quantities worksheet
4. Design drawings
5. Photograph of the project site

Cy: James P. Bearzi, NMED/SWQB, Santa Fe, NM, w/enc.
John E. Kieling, NMED/HWB, Santa Fe, NM, w/enc.
Steve M. Yanicak, NMED/DOE/OB, w/enc., M894, (E-File)
George J. Rael, LASO-NSM, w/o enc., A906 (E-File)
Hai Shen, LASO-EPO, w/enc., A316, (E-File)
Gene E. Turner, LASO-EPO, w/enc., A316, (E-File)
Carl A. Beard, PADOPS, w/o enc., A102
Michael T. Brandt, ADESH, w/o enc., K491, (E-File)
Michael J. Graham, ADEP, w/o enc., M991, (E-File)
Alison M. Dorries, ENV-DO, w/o enc., K491, (E-File)
Victoria A. George, REG-DO, w/o enc., M991, (E-File)
Steven J. Veenis, PMFS-DO, w/enc., M997, (E-File)
Amanda B. White, ET-EL, w/enc., M997, (E-File)
Michael T. Saladen, ENV-RCRA, w/o enc., K490, (E-File)
Robert S. Beers, ENV-RCRA, w/enc., K490
Taylor A. Valdez, w/o enc., K404, (E-File)
Linda M. Salazar, w/o enc., K491, (E-File)
IRM-RMMSO, w/enc., A150, (E-File)
ENV-RCRA Correspondence File, w/enc., K490

ENCLOSURE 1

Application for a Department of Army Permit

ENV-RCRA-12-0112

LAUR-12-20450

Date: MAY 25 2012

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)**

OMB APPROVAL NO. 0710-0003
EXPIRES: 31 AUGUST 2012

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Steven Middle - J Last - Veenis Company - Los Alamos National Security, LLC E-mail Address - veenis@lanl.gov		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Middle - Last - Company - E-mail Address -	
6. APPLICANT'S ADDRESS: Address- PO Box 1663, MS M997 City - Los Alamos State - NM Zip - 87545 Country - US		9. AGENT'S ADDRESS: Address- City - State - Zip - Country -	
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax NA 505-667-0013 NA		10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax	

STATEMENT OF AUTHORIZATION

11. I hereby authorize, NA to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT

DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Canada del Buey Stream Gage E229.7 Installation Project			
13. NAME OF WATERBODY, IF KNOWN (if applicable) Canada del Buey		14. PROJECT STREET ADDRESS (if applicable) Address	
15. LOCATION OF PROJECT Latitude: +N 35° 49.691' Longitude: -W 106° 13.385'		City -	State - Zip -
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Los Alamos County Section - 32 Township - 19N Range - 07E			

17. DIRECTIONS TO THE SITE

From Albuquerque, take I-25 north to US-285 north to NM502 west towards Los Alamos. Merge onto NM-4 west via the ramp towards White Rock. Continue on NM-4 towards White Rock. Turn right onto Pajarito Road. Stop at the Los Alamos National Laboratory Access Control Station for authorized escort to the project site. See Enclosure 2, Location Map.

18. Nature of Activity (Description of project, include all features)

Installation of a stream gaging and sampling station in Canada del Buey. A steel flume and rock gabions will be placed below the Ordinary High Water Mark (OHWM). The new stream gage, E229.7, will replace a previously existing stream gage, E230. Stream gage E230, previously located downstream approximately 1500 ft, was removed during the construction of the new visitor's center in White Rock.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Canada del Buey originates within Los Alamos National Laboratory at Technical Area (TA)-63 and passes across the Pueblo of San Ildefonso and the town of White Rock before joining Mortandad Canyon near the Rio Grande. Stream gaging station E229.7 is located in Canada del Buey near the boundary between Los Alamos National Laboratory and the Pueblo of San Ildefonso. In addition to measuring streamflow the gage will be equipped with an automated sampler for the collecting water quality samples as part of Los Alamos National Laboratory's environmental surveillance activities.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

A pre-fabricated, steel Parshall flume will be installed in the Canada del Buey stream channel. Parshall flumes are the most widely used type of flume for permanent flow monitoring installations. Wingwalls constructed of rock gabions will be installed on both sides of the flume to direct stream flow into the upstream end of the flume. See Enclosure 4.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type	Type	Type
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards

See Enclosure 3, Dredge and Fill Worksheet.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres 0.0015

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Work will be conducted during the month of May and June, typically a no-flow period for the lower reach of Canada del Buey. All work in the stream channel will be done manually; no heavy equipment will be required. Duration of construction: 2-3 days. Weather forecasts will be checked prior to the scheduling of work.

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- Pueblo of San Ildefonso, Route 5, Box 315-A

City - San Ildefonso Pueblo State - NM Zip - 87506

b. Address- County of Los Alamos, 133 Central Park Square

City - Los Alamos State - NM Zip - 87545

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
NA	NA	NA	NA	NA	NA

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.



SIGNATURE OF APPLICANT

5-10-12

DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

ENCLOSURE 2

Location Map

ENV-RCRA-12-012

LAUR-12-20450

Date: MAY 25 2012

1635000

1640000

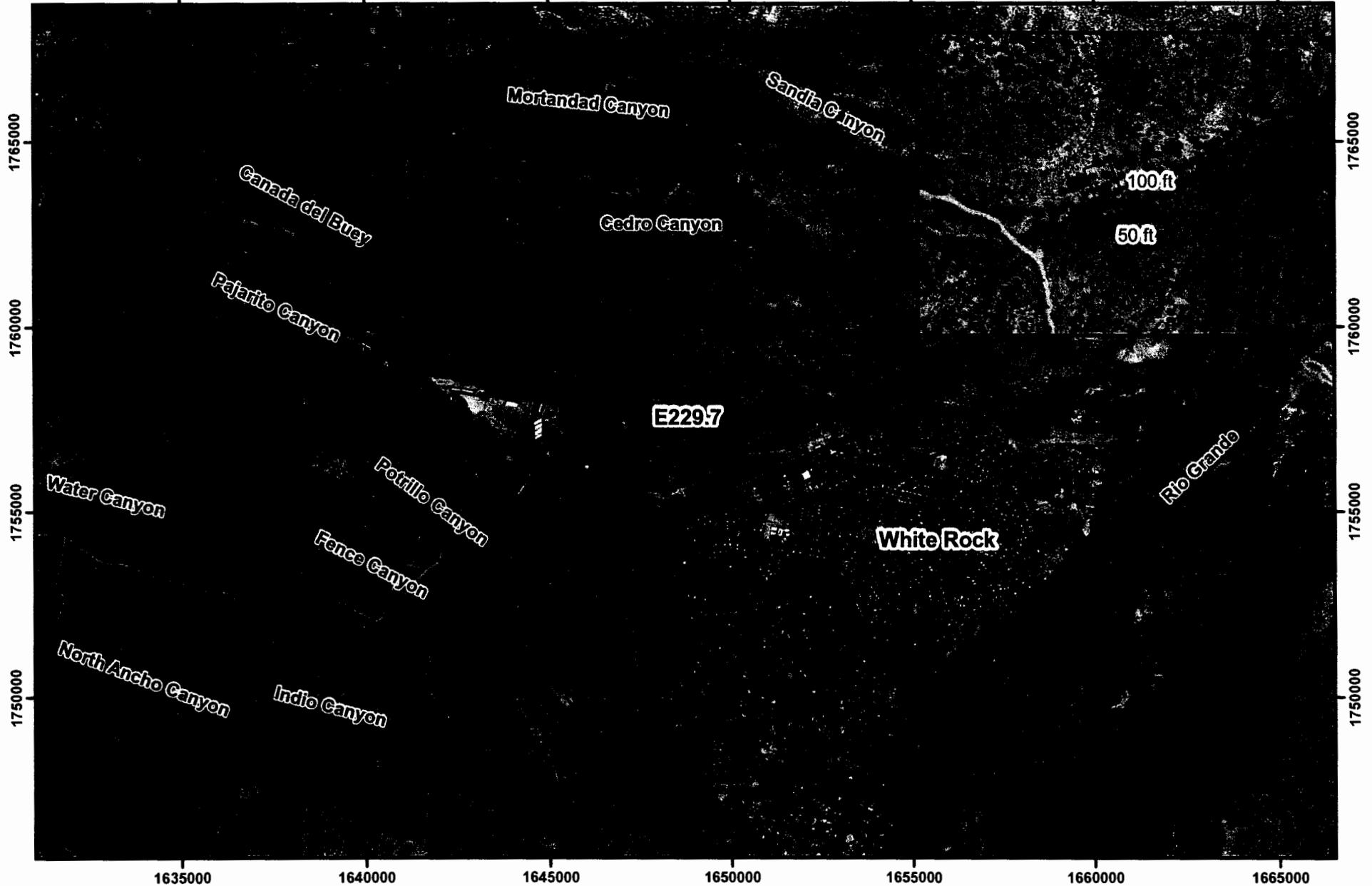
1645000

1650000

1655000

1660000

1665000



State Plane Coordinate System
 New Mexico, Central Zone, US Feet
 NAD 1983 Datum
 Grid Interval = 5,000 ft

This map was created for work processes associated with LANL Environmental Surveillance.
 All other uses for this map should be confirmed with LANL EP-CAP staff.

E230 Replacement Map

Map created by: Amanda White, ET-EI
 22 March 2012, Map New230.mxd

ENCLOSURE 3

Dredge and Fill Quantities Worksheet

ENV-RCRA-12-0112

LAUR-12-20450

Date: MAY 25 2012

ENCLOSURE 3
 Dredge and Fill Quantities Worksheet
 Action No. SPA-2012-00187-ABQ

Site #	Location	OHWM (ft)	Fill Length (ft)	Fill Width (ft)	Fill depth (ft)	Fill Volume (cu.ft)	Area (sq. ft.)	CY	Acres	Fill Materials
1	Parshall Flume	5	10	5	3	150	50	5.6	0.0011	steel
2	rock gabion wing walls	5	3	5	3	45	15	1.7	0.0003	rock gabions
Total Volume of Materials Discharge Below the OHWM						195	65	7.2	0.0015	all

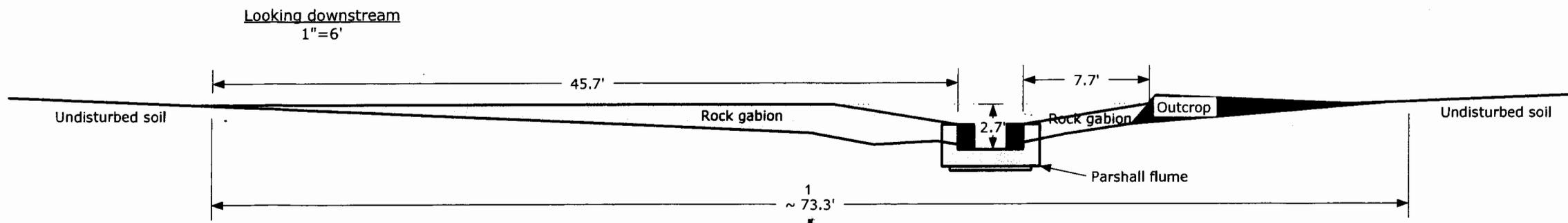
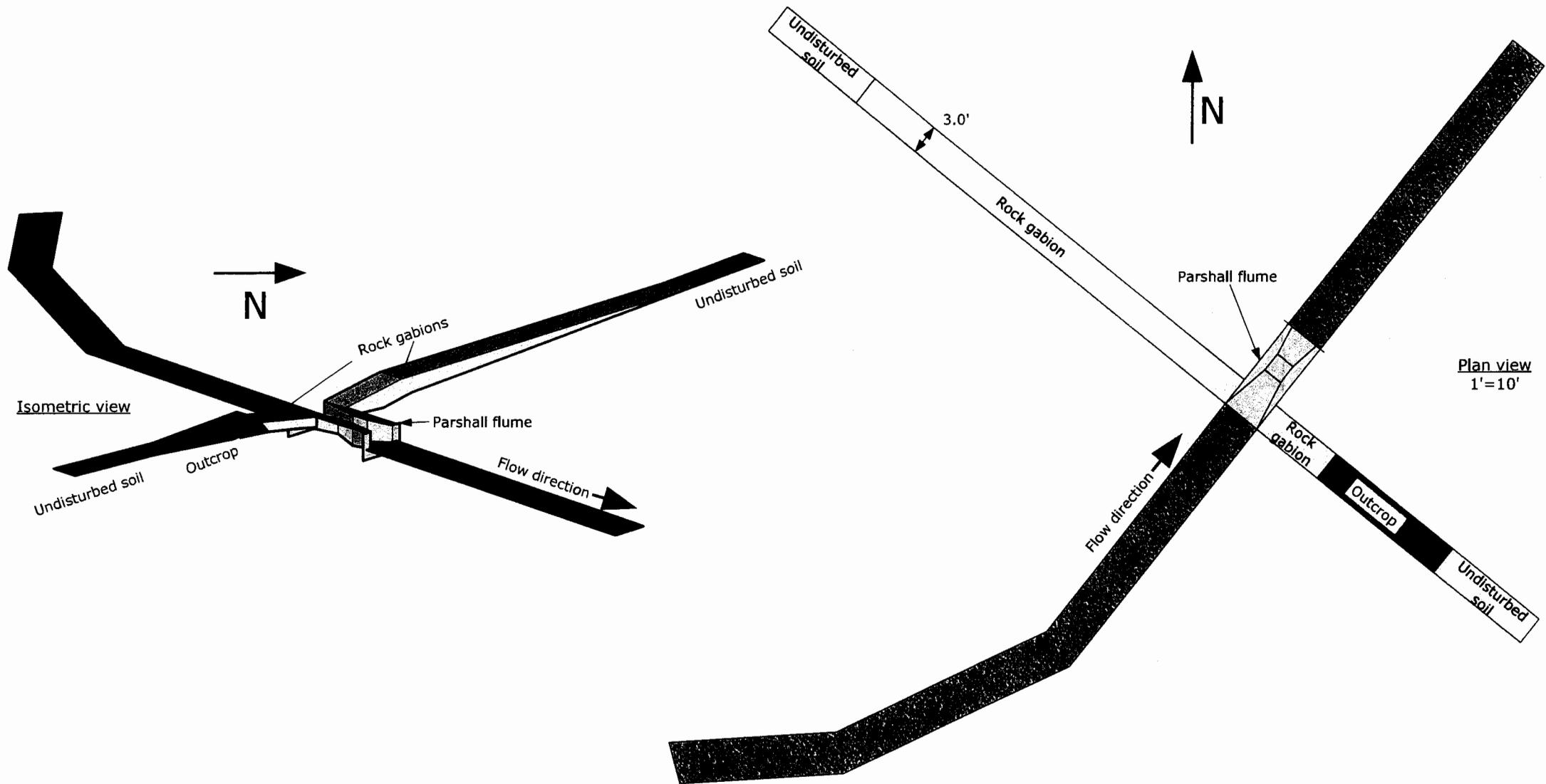
ENCLOSURE 4

Design drawings

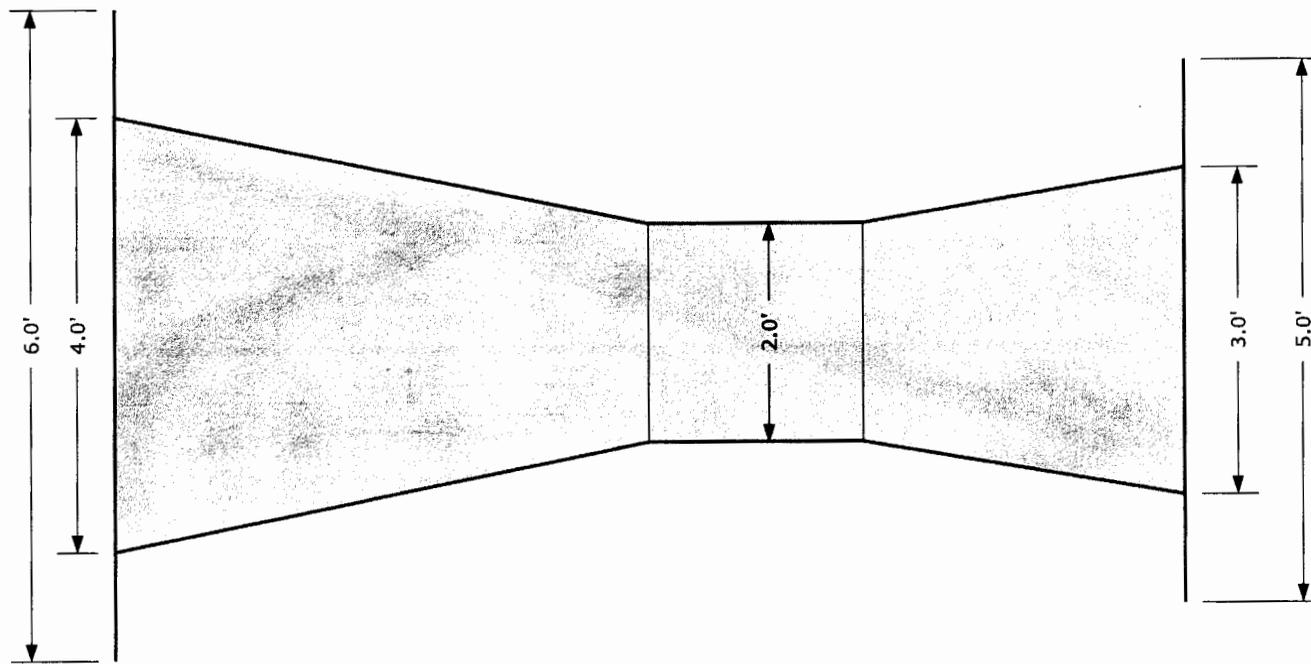
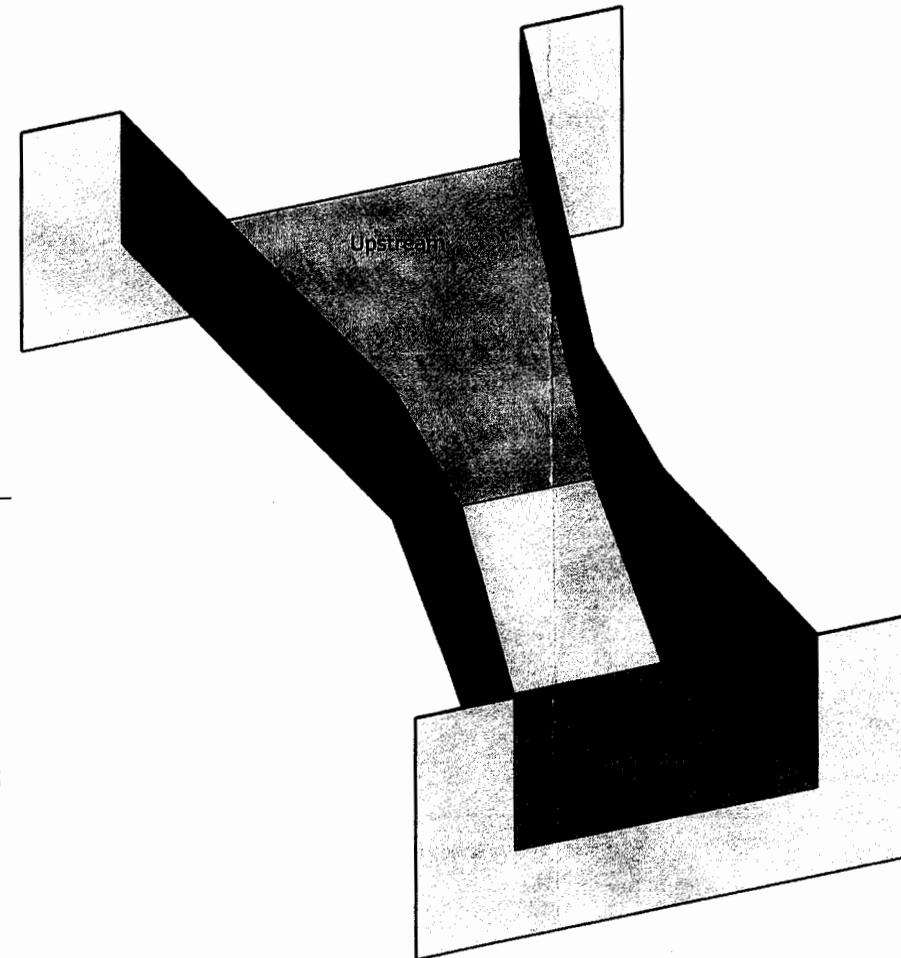
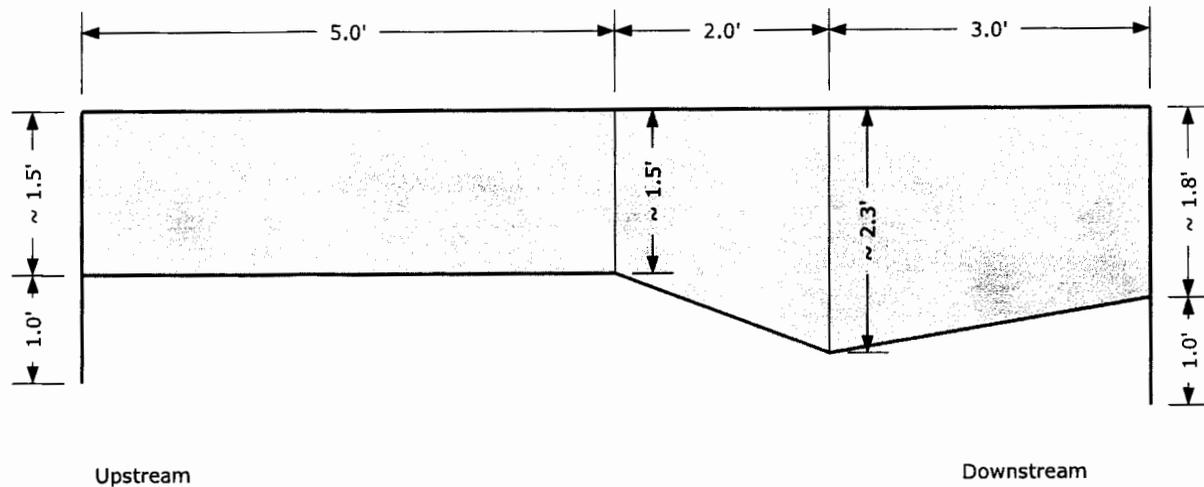
ENV-RCRA-12-0112

LAUR-12-20450

Date: MAY 25 2012



Side view
3/4"=1'-0"



Top view
3/4"=1'-0"

Parshall flume dimensions

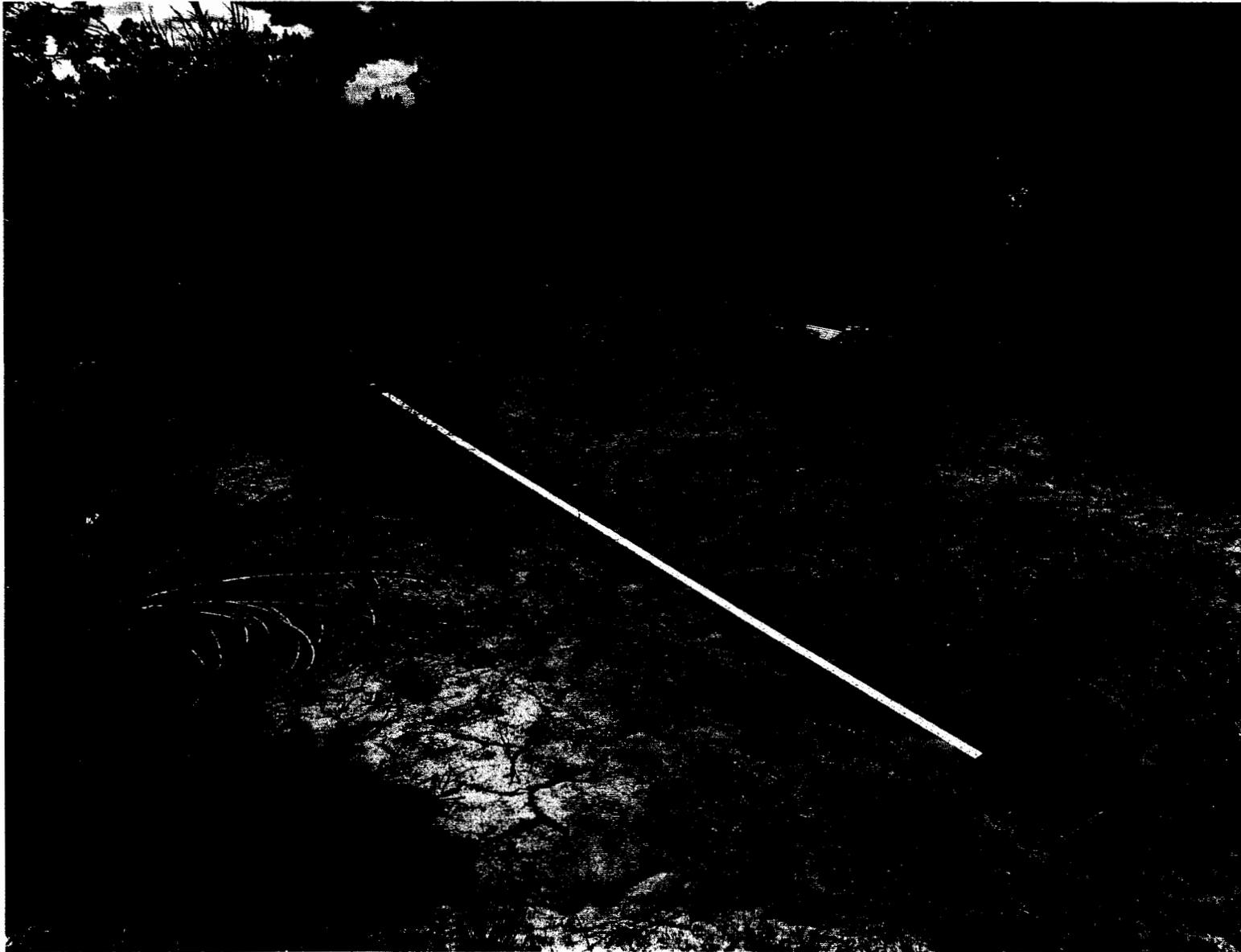
ENCLOSURE 5

Photograph of the project site

ENV-RCRA-12-0112

LAUR-12-20450

Date: MAY 25 2012



Photograph of the Cañada del Buey stream channel at the location of stream gage E229.7.