“K”

Horizontal Directional Drilling Exhibit
Duckhorn Vineyards Winery Major Modification
P19-00097-MOD

BARTELT
ENGINEERING

January 7, 2021
Job #13-14

Emily Hedge
Napa County Planning, Building
& Environmental Services Department
Planning Division
1195 Third Street, Second Floor
Napa, CA 94558

Re: Duckhorn Vineyards Major Modification and Variance, 1000 Lodi Lane, Napa County, CA
APN 022-130-010, P19-00097, and P19-00098

Dear Ms. Hedge:

We are in receipt of your Memorandum dated December 23, 2020, regarding the above mentioned project located at 1000 Lodi Lane in Napa County, CA, APN 022-130-010 and offer the following responses to your comments:

4. Previous Comment # 16. Supplemental reports note that the water system will be improved to serve the western property. Provide information on the necessary infrastructure improvements, how the system will reach the adjacent property, and any work in the creek setback. See Environmental Health Division comments.

> Response to Applicant Resubmittal - Please provide additional information regarding the proposed construction process of the directional bores going under the Napa River so staff can determine whether or not this issue would be subject to our Conservation Regulations and therefore require a Use Permit Exception. This information will also be used in the environmental analysis of the project. With this information, please provide any documentation that you have had with State or local resource agencies concerning special permits required (e.g., Department of Fish and Wildlife, Regional Water Quality Control Board, Army Corp of Engineers). These agencies will be provided a copy of the environmental document for review and comment.

The application of Horizontal Directional Drilling (HDD), also referred to as Directional Boring, are used to construct pipelines under rivers and other environmentally sensitive areas, such as wetlands and ravines, as well as major transportation corridors, such as railways and highways, to minimize or avoid environmental impacts. The HDD construction process involves setting up a drill rig on one side of the crossing, excavating temporary entry and exit pits, and drilling a pilot bore from the entry pit to the exit pit. Following the drilling of a pilot bore, the borehole diameter is enlarged using a series of consecutively larger reams to accommodate the proposed pipe diameter. Upon completion of the borehole, a welded plastic pipe assembly located on the opposite side of the crossing is pulled back through the drill path using the HDD drill rig. The HDD drill rig, entry, and exit pits will all be located outside of the required drainage and conservation setbacks. Refer to the following image for an illustration of the process.

CIVIL ENGINEERING • LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94559
www.barteltengineering.com Tel: 707-258-1301 Fax: 707-258-2926

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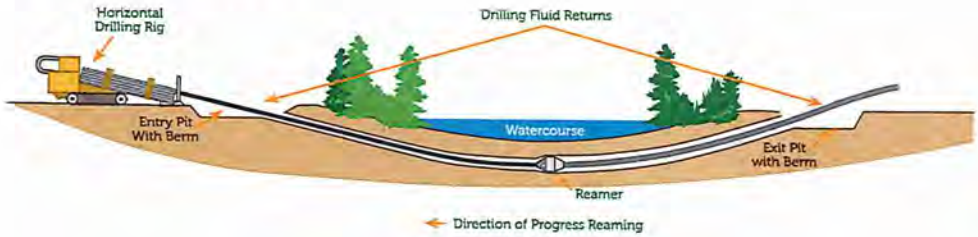
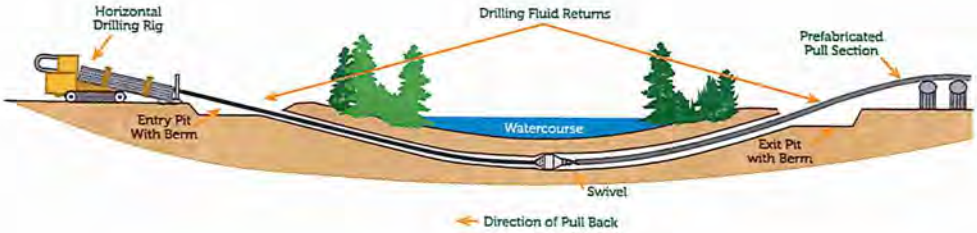
Stage 1: Pilot Hole Directional Drilling

Stage 2: Reaming and Pulling Back





Bartelt Engineering has contacted the California Department of Fish and Wildlife, California Regional Water Quality Control Board, and the United States Army Corp of Engineers and have included a copy of the emails for your reference. Per the email communications, the California Regional Water Quality Control Board and the United States Army Corps will not require any permits. It is uncertain at this time if the California Department of Fish and Wildlife will require a permit, if a permit is required, the project team will file the appropriate permit with the California Department of Fish and Wildlife in advance of any HDD.

January 7, 2021
Job #13-14

If you require any additional information or have any questions regarding the information provided, please feel free to contact me at your earliest convenience at (707) 258-1301.

Sincerely,

Richard Paxton

Richard Paxton, P.E.
Project Engineer

RP:sd

Enclosures:

Email communication from the California Department of Fish and Wildlife, California Regional Water Quality Control Board, and the United States Army Corp of Engineers.

cc: Matt Dexter, Duckhorn Vineyards
George Monteverdi, Monteverdi Consulting, LLC

From:	Allen, Garrett@Wildlife
To:	Richard Paxton
Cc:	Farres, Agnes@Waterboards; Cohen, Sahrye E SPN
Subject:	RE: Horizontal Directional Drilling Questions
Date:	Tuesday, January 05, 2021 9:59:50 AM
Attachments:	image001.jpg

Hi Rich,

Please submit a Notification of Lake or Streambed Alteration for a Standard Agreement via our new online permitting system, EPIMS. Once we get the Notification and fee I can then determine if a Streambed Alteration Agreement will be necessary for this project. In order to ensure that your Notification is deemed complete, CDFW prefers to see the utilities installed at least 10 feet underneath the streambed elevation, if feasible, and please provide a frac out plan.

The link to get to EPIMS is at the bottom of my signature block. Hope you had nice holidays as well.

Best,

Garrett Allen
Environmental Scientist (Serving: Napa County, Vallejo, Benicia)
California Department of Fish and Wildlife – Bay Delta Region (Region 3)
Habitat Conservation Program
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002 (front desk)
(707) 428-2076 (direct line) **NOTE**: I will be working from home for the forseeable future and cannot be reached on this line. I will check voicemails periodically.

Please be advised that CDFW has transitioned to the Environmental Permit Information Management System (EPIMS), an online system, for all Lake or Streambed Alteration (LSA) notifications. **As of September 1, 2020, paper copies and PDFs, including Joint Aquatic Resource Permit Applications (JARPAs), will no longer be accepted outside of EPIMS**. For more information about EPIMS, please visit https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS.

From: Richard Paxton <RichP@Barteltengineering.com>
Sent: Tuesday, January 5, 2021 9:40 AM
To: Allen, Garrett@Wildlife <Garrett.Allen@wildlife.ca.gov>; Farres, Agnes@Waterboards <Agnes.Farres@waterboards.ca.gov>; Cohen, Sahrye E SPN <Sahrye.E.Cohen@usace.army.mil>
Subject: Horizontal Directional Drilling Questions

Warning: This email originated from outside of CDFW and should be treated with extra caution.

All,
We are working on a Use Permit for a winery north of Lodi Lane in north Napa County. The project will have two (2) facilities located on either side of the Napa River that will need to be connected to each other with utilities (water, sewer, etc.). The plan would be to utilize a horizontal directional drilling rig to drill and install utility lines under the Napa River. No work is proposed within the banks of the river; at a minimum, equipment operation will be located at least 45 feet back from top of bank to adhere to Napa County Conservation setback requirements.

Will there be any permitting or approval requirements with your agencies?

I hope you all had enjoyable and safe holidays; hopefully 2021 will be much better.
Thank you,

Rich Paxton, P.E.
Project Engineer
Bartelt Engineering
1303 Jefferson Street, 200B
Napa, CA 94559
707.258.1301 (p)
707.258.2926 (f)
RichP@BarteltEngineering.com

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From: Farres, Agnes@Waterboards
To: Richard Paxton; Cohen, Sahrye E CIV USARMY CESPN (USA); Allen, Garrett@Wildlife
Subject: RE: Horizontal Directional Drilling Questions
Date: Wednesday, January 06, 2021 2:14:45 PM

Thanks Rich. If the utility line will be installed at least 10 feet below the channel bed and all ground disturbance, staging, and access is conducted outside top of bank, then we will not need to issue a permit.

****

Agnes Farres
SF Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
510.622.2401
*I'm working remotely. Please email me if you want to schedule a time to talk on the phone.

From: Richard Paxton <RichP@Barteltengineering.com>
Sent: Tuesday, January 5, 2021 2:53 PM
To: Farres, Agnes@Waterboards <Agnes.Farres@waterboards.ca.gov>; Cohen, Sahrye E CIV USARMY CESPN (USA) <Sahrye.E.Cohen@usace.army.mil>; Allen, Garrett@Wildlife <Garrett.Allen@wildlife.ca.gov>
Subject: RE: Horizontal Directional Drilling Questions

EXTERNAL:

Agnes,
At a minimum, the utilities will be 10 feet to 15 feet below the flowline of the river.

Rich Paxton, P.E.
Bartelt Engineering
707.258.1301 (p)
RichP@BarteltEngineering.com

From: Farres, Agnes@Waterboards [mailto:Agnes.Farres@waterboards.ca.gov]
Sent: Tuesday, January 05, 2021 1:17 PM
To: Richard Paxton; Cohen, Sahrye E CIV USARMY CESPN (USA); Allen, Garrett@Wildlife
Subject: RE: Horizontal Directional Drilling Questions

Hi Rich,

Can you tell me how deep the utilities will be installed beneath the channel bed? Depending on how deep they are installed, we may not need to issue a permit.

Thanks,
agnes
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SF Bay Regional Water Quality Control Board
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From: Richard Paxton <RichP@Barteltengineering.com>
Sent: Tuesday, January 5, 2021 10:29 AM
To: Cohen, Sahrye E CIV USARMY CESPN (USA) <Sahrye.E.Cohen@usace.army.mil>; Allen, Garrett@Wildlife <Garrett.Allen@wildlife.ca.gov>; Farres, Agnes@Waterboards <Agnes.Farres@waterboards.ca.gov>
Subject: RE: Horizontal Directional Drilling Questions

EXTERNAL:

Sahrye,

As a crow flies, the project is 19 +/- miles north of the 1st Street Bridge.

Rich Paxton, P.E.
Bartelt Engineering
707.258.1301 (p)
RichP@BarteltEngineering.com

From: Cohen, Sahrye E CIV USARMY CESPN (USA) [mailto:Sahrye.E.Cohen@usace.army.mil]
Sent: Tuesday, January 05, 2021 10:09 AM
To: Richard Paxton; Garrett Allen - California Department of Fish & Wildlife (garrett.allen@wildlife.ca.gov); Farres, Agnes@Waterboards
Subject: RE: Horizontal Directional Drilling Questions

Hi Rich,

Is it within the first 15.7 miles of the Napa River up to 1st street in Napa? If the work is under the Navigable portion of the Napa it may require a Section 10 of the Rivers and Harbors Act permit. Here's the list of navigability https://www.spn.usace.army.mil/Portals/68/docs/regulatory/1%20-

%20Sect10waters.pdf

Sahrye Cohen
Regulatory North Branch Chief
U.S. Army Corps of Engineers
Sahrye.E.Cohen@usace.army.mil

From: Richard Paxton <RichP@Barteltengineering.com>
Sent: Tuesday, January 5, 2021 9:40 AM
To: Garrett Allen - California Department of Fish & Wildlife (garrett.allen@wildlife.ca.gov) <garrett.allen@wildlife.ca.gov>; Farres, Agnes@Waterboards <agnes.farres@waterboards.ca.gov>; Cohen, Sahrye E CIV USARMY CESPN (USA) <Sahrye.E.Cohen@usace.army.mil>
Subject: [Non-DoD Source] Horizontal Directional Drilling Questions

All,
We are working on a Use Permit for a winery north of Lodi Lane in north Napa County. The project will have two (2) facilities located on either side of the Napa River that will need to be connected to each other with utilities (water, sewer, etc.). The plan would be to utilize a horizontal directional drilling rig to drill and install utility lines under the Napa River. No work is proposed within the banks of the river; at a minimum, equipment operation will be located at least 45 feet back from top of bank to adhere to Napa County Conservation setback requirements.

Will there be any permitting or approval requirements with your agencies?

I hope you all had enjoyable and safe holidays; hopefully 2021 will be much better.
Thank you,
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To:	Richard Paxton; Farres, Agnes@Waterboards; Allen, Garrett@Wildlife
Subject:	RE: Horizontal Directional Drilling Questions
Date:	Wednesday, January 06, 2021 3:23:45 PM
Attachments:	image001.jpg

Similarly, since this appears to be above navigability, unless some part of this involves fill in a wetland or water, you would not need a Section 404 permit.

Sahrye Cohen
Regulatory North Branch Chief
U.S. Army Corps of Engineers
Sahrye.E.Cohen@usace.army.mil

From: Richard Paxton <RichP@Barteltengineering.com>
Sent: Wednesday, January 6, 2021 3:16 PM
To: Farres, Agnes@Waterboards <agnes.farres@waterboards.ca.gov>; Cohen, Sahrye E CIV USARMY CESPN (USA) <Sahrye.E.Cohen@usace.army.mil>; Allen, Garrett@Wildlife <Garrett.Allen@wildlife.ca.gov>
Subject: [Non-DoD Source] RE: Horizontal Directional Drilling Questions

Agnes, thank you for the information.

Rich Paxton, P.E.
Bartelt Engineering
707.258.1301 (p)
RichP@BarteltEngineering.com

From: Farres, Agnes@Waterboards [mailto:Agnes.Farres@waterboards.ca.gov]
Sent: Wednesday, January 06, 2021 2:15 PM
To: Richard Paxton; Cohen, Sahrye E CIV USARMY CESPN (USA); Allen, Garrett@Wildlife
Subject: RE: Horizontal Directional Drilling Questions

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