

BSC

Transportation Data Pedigree Form

QA: N/A

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Complete only applicable items.

Subcontractor: N/A	Item Number/Title/Revision: Relocation of Proposed Siding for Caliente Rail Corridor Ballast Quarry CA-8B Technical Memo	Submittal Date: 2/15/08	SRCT No.: 08-00069
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Section I. Submittal Information (includes above information)

Submittal Description and Revision Summary for Entire Submittal:

Technical memo describing a new location for the quarry siding that would support the Upland Staging Yard.

Special Instructions:

Cross-reference to 06-00014 Construction Plan Caliente Rail Corridor (ENG.20070606.023) and 06-00104 Waters of the U.S. Jurisdictional Determination Report for Yucca Mountain Project – Caliente Rail Corridor (ENG.20070614.0004)

Section II. Data File Information (Add lines below if needed for additional files. Indicate "Last item" or "End of list" after last line used.)

Filename	Rev.	File Size	Description (File description and revision summary for file)	Application and Version/ Add-in or Extension and Version
TechMemoQuarry Siding.doc	00	1,458 KB	Caliente Rail Corridor Ballast Quarry CA-8B Proposed Relocation Technical Memo	Microsoft Office Word

*****Last Item*****

Section III. Metadata

GIS Metadata
All GIS data is preferred in ArcGIS9.1 UTM, NAD1983, Zone11, Feet.

Projection:

Datum:

Zone:

Units:

CAD Metadata
CAD drawings are preferred in Bentley MicroStation V8 and/or InRoads and should adhere to established CAD standards.

Level descriptions:

Scale:

Units of Measurement:

Horizontal and Vertical Datum:

Section IV. Data Screening (Completed by BSC personnel)

Acceptable for Review? <input checked="" type="checkbox"/> Yes* <input type="checkbox"/> No	Screening Name: Cathy Stettler	Signature: <i>Cathy Stettler</i>	Date: 2/19/08
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*If "Yes", Data Storage Location: nvtdata\NRP\Task 14 Construction Planning\08-00069 Ballast Quarry CRC Proposed Relocation Rev 00 02-15-08

Comments: (Justification for returning submittal is **required**; other comments are optional.)

Section V. STR/STR Support Disposition of Submittal

Process for Review? <input type="checkbox"/> Yes <input type="checkbox"/> No**	** If "No", date returned:	Comments:
STR/STR Support Name: <i>Wm. Garfield</i>	Signature: <i>Wm. I. Garfield</i>	Date: <i>2/19/08</i>

TECHNICAL MEMO

Title: Relocation of Proposed Siding for Caliente Rail Corridor Ballast Quarry CA-8B

From: Kurt R. Rautenstrauch
Bechtel SAIC

To: Mike West
Potomac-Hudson Engineering

Date Created: 02/15/2008

The *Construction Plan Caliente Rail Corridor* (NRP 2007 [DIRS 180922], p. 3-6) identifies two possible locations where ballast from quarry CA-8B may be loaded onto ballast trains. If DOE were to select the Upland Staging Yard, ballast would be loaded at a siding constructed south of that staging yard and east of the quarry. This memo describes a new location for the quarry siding that would support the Upland Staging Yard. If DOE were to select the Indian Cove Staging Yard, ballast would be loaded at that yard; no change is being made to the design for that yard.

The proposed location for the ballast siding to support the Upland Staging Yard identified in the *Construction Plan Caliente Rail Corridor* (NRP 2007 [DIRS 180922], p. 3-6) is approximately 5 miles south of the yard at track station 1210+00. It was estimated in the Draft Rail Alignment Environmental Impact Statement that construction of that siding would require filling of up to 22 acres of wetlands. In response to comments received from the U.S. Environmental Protection Agency, a new location for that siding is proposed that would impact fewer wetlands.

The new proposed location of the quarry siding is immediately south of Beaver Dam Road and to the east of the mainline track (see attached figure). The siding would be 5,000 feet long and 200 feet wide.

Ballast may be transported from the quarry to the siding on a conveyor belt. The proposed location of that conveyor belt is shown on the attached figure. The route of the conveyor belt was selected to avoid dwellings to the maximum extent possible and maintain an optimum grade.

Ballast could be stored at multiple locations along the siding so that loading would occur along the entire length of a stationary train. Loading of ballast could also occur at a single point if small (i.e., approximately 1,500 feet long) sections of a ballast train were loaded at one time while the remainder of the ballast train was temporarily stored at the Upland Staging Yard.

Wetlands in the western 100 feet of this proposed location (i.e., within 100 feet of the alignment centerline) were delineated as described in *Waters of the U.S. Jurisdictional Determination Report for Yucca Mountain Project - Caliente Rail Corridor* (PBS&J 2006 [DIRS 183595]). A total of 1.24 acres of wetlands were delineated in that area. On January 31 and February 12, 2008, staff from Bechtel SAIC Company, LLC; Potomac-Hudson Engineering; and URS Corporation visited the proposed siding location and mapped potential wetlands in the eastern half of the site. A total of 0.35 acres of wetlands were

mapped; thus, the total area of wetlands within the site is estimated to be 1.59 acres. Note that the mapping of wetlands conducted in 2008 should not be considered a formal delineation of wetlands conducted in accordance with methods approved by the U.S. Army Corps of Engineers.

Alternative locations for the quarry siding north and south of the selected site were considered but eliminated because they could have greater impacts on wetlands, land use, or operation of the railroad. Moving the siding north 2,000 feet to avoid the wetlands at the proposed site would require blocking Beaver Dam Road for long periods while ballast trains are being loaded. Constructing the siding immediately north of Beaver Dam Road would require channelizing a portion of Meadow Valley Wash and filling more than 2 acres of wetlands adjacent to that wash. Moving the siding farther north to avoid all wetlands and streams in the area would interfere with operations at the Upland Staging Yard. Locating the siding south of the proposed location would require filling more than 5 acres of wetlands in the large complex of wet meadows at the south end of Meadow Valley.

The following three GIS files will be submitted to the GIS baseline. These files will be included in the next GIS baseline submittal.

Footprint of siding: Caliente_Auarry_Siding_0208
Location of Conveyor: CRC_Conveyors_CQS_3D_rev0
Additional Wetlands: Siding_wetlands

References

NRP (Nevada Rail Partners) 2007. *Construction Plan Caliente Rail Corridor, Task 14: Construction Planning Support, Rev. 03*. Document No. NRP-R-SYSW-CP-0008-03. Las Vegas, Nevada: Nevada Rail Partners. ACC: ENG.20070606.0023.

PBS&J (Post, Buckley, Schuh & Jernigan) 2006. *Waters of the U.S. Jurisdictional Determination Report for Yucca Mountain Project - Caliente Rail Corridor, Task 1.1 Information on Wetlands and Floodplains, REV. 03*. 06-00104. Henderson, Nevada: Post, Buckley, Schuh & Jernigan. ACC: ENG.20070614.0004.

