TADD

LANL
LA/Pueblo Surface Water
Grade Control

ENTERED

Cobrain, Dave, NMENV

From: Rodriguez, Cheryl [CRodriguez2@doeal.gov]
Sent: Friday, September 18, 2009 4:18 PM
To: Cobrain, Dave, NMENV
Cc: katzman@lanl.gov; Werdel, Nancy; Gregory, David R.; Ford-Schmid, Ralph, NMENV
Subject: DP/Pueblo Canyons Grade Control Structures Project
Attachments: C-102 - PUEBLO CANYON OVERALL WITH AERIAL.pdf; C-104 - PUEBLO CANYON EROSION CONTROL PLAN.pdf; C-200 - PUEBLO CANYON CROSS SECTIONS.pdf; C-201 - PUEBLO CANYON CROSS SECTIONS.pdf; C-202 - PUEBLO CANYON CROSS SECTIONS.pdf

Dave-
Thanks for providing your initial observations on our engineering design submittal for the grade control structures in Los Alamos and Pueblo Canyons. Pursuant to NMED's suggestion to increase the height of the spillway of the Pueblo Canyon grade control structure by 2 ft, we have consulted with our engineering/construction subcontractors. We've determined that the adaptability of the structure enables your requested modification. We've directed the subcontractors to include the modification in the final design. As an additional note, during the review period the subcontractor has further assessed some details of the design and has recommended a modification that will have a smaller footprint, while maintaining all of the hydraulic objectives of the design. The modified design drawings are attached. Since the suggestion to increase the height of the Pueblo Canyon low flow weir was a recent request, the attached modified drawings do not reflect the change in height.

Our construction subcontractors have also stated that due to the complexity of the proposed design, construction of these structures will require more time than available between an assumed NMED approval date and December 31, 2009 which is the NMED completion date for field work. We're requesting your consideration of either an extension of the construction completion date to January 30, 2010 or, better yet, not specifying a completion date but rather managing the construction of the structures to allow for the March 30, 2010 completion report deliverable date.

We have also identified a source for borrow material for the fill that will be placed upgradient of the structure as proposed in the design package you've received. The borrow area consists of post-Lab aged sediments located immediately down canyon of the location of the structure and is shown as a polygon on the attached map (See drawing C-104; note the area that will be targeted will not encroach on the concrete embankment along the highway). Besides being a useful source of fill material, removal of those sediments will remove it from access to erosion by floodwater that may potentially overtop the structure. Addition of fill material above the structure as part of the construction phase will also considerably accelerate ideal functioning of the wetland and maintain stability of the reused sediment within the canyon.

Let me or Danny know if you have any questions.

Cheryl

This inbound email has been scanned by the MessageLabs Email Security System.

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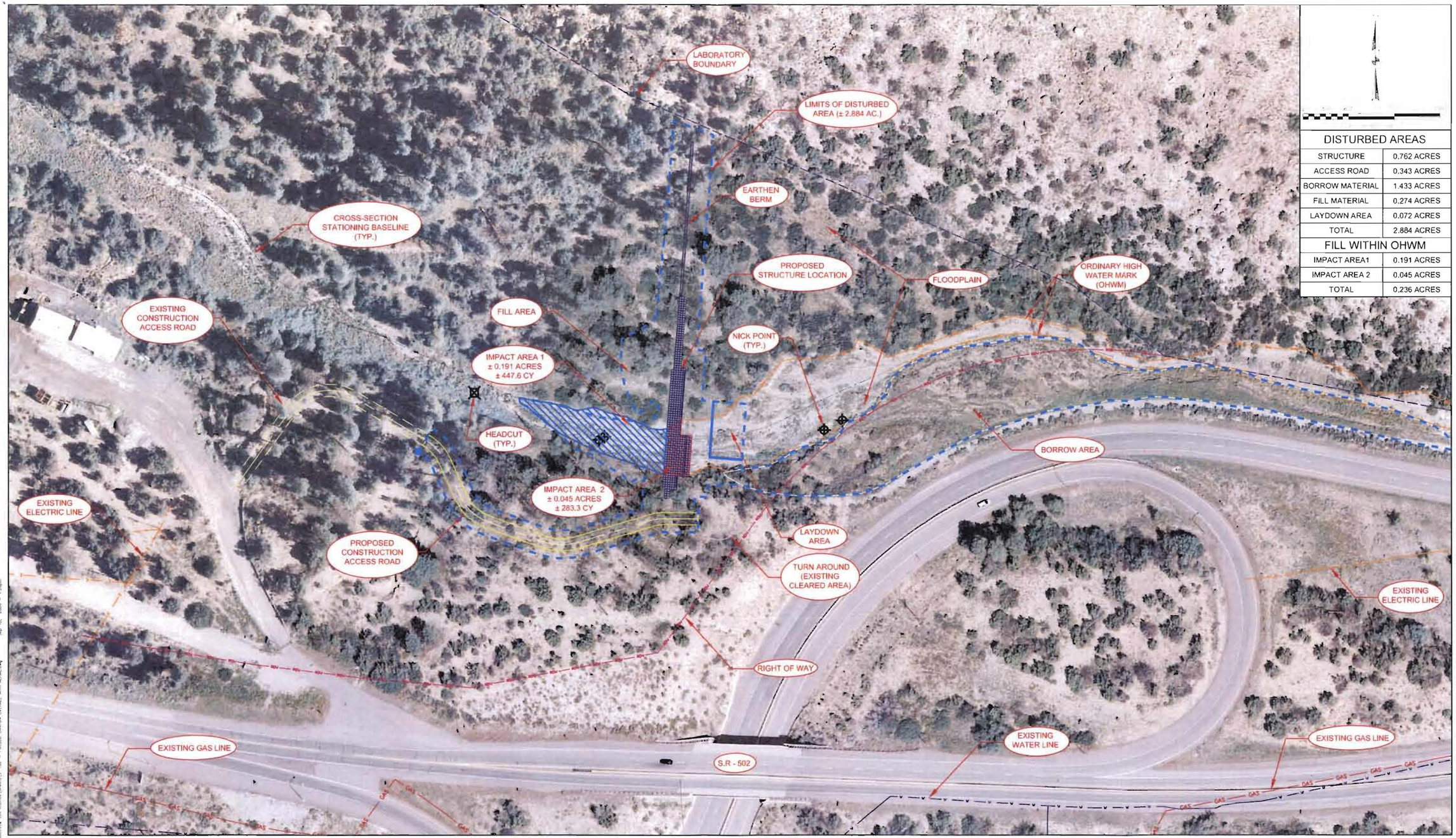
9/21/2009



DISTURBED AREAS	
STRUCTURE	0.762 ACRES
ACCESS ROAD	0.343 ACRES
BORROW MATERIAL	1.433 ACRES
FILL MATERIAL	0.274 ACRES
LAYDOWN AREA	0.072 ACRES
TOTAL	2.884 ACRES
FILL WITHIN OHWM	
IMPACT AREA1	0.191 ACRES
IMPACT AREA 2	0.045 ACRES
TOTAL	0.236 ACRES

PBS&J
101 Arthur Andersen Parkway, Suite 260
Sarasota, Florida 34232
Ph. (941) 378-0272

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CLIENT	PROJECT	TASK
LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM	LOS ALAMOS NATIONAL LABORATORY GRADE CONTROL STRUCTURES	PUEBLO CANYON OVERALL SITE PLAN WITH AERIAL

ORIGINAL DATE: 08/24/09
REVISIONS:
1 ISSUED FOR NMED PERMITTING 08/28/2009
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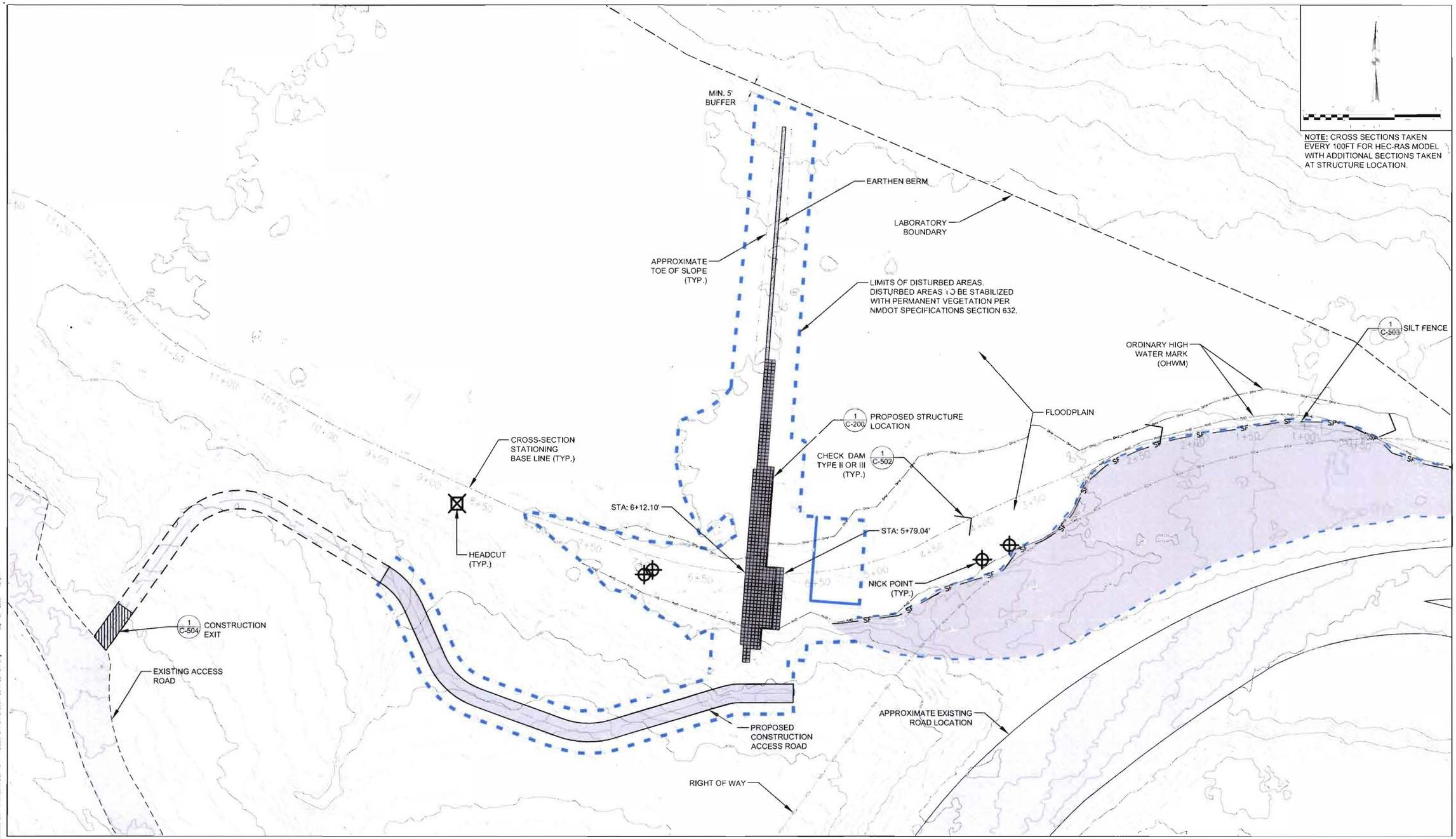
JOB NO 100005632
DATE 09/14/2009
DESIGNED DTW
PE RMP
CHECKED IMT
QC MS
SHEET C-102



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CLIENT	PROJECT	TASK
LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM	LOS ALAMOS NATIONAL LABORATORY GRADE CONTROL STRUCTURES	PUEBLO CANYON EROSION CONTROL PLAN

ORIGINAL DATE: 08/24/09
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JOB NO. 100005632
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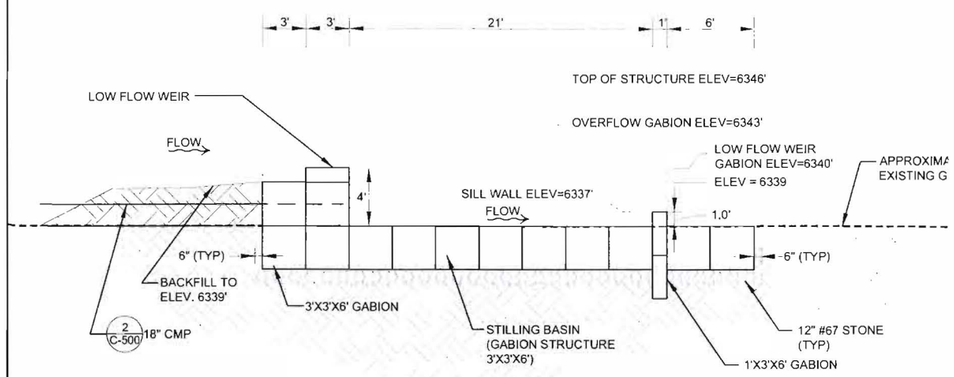
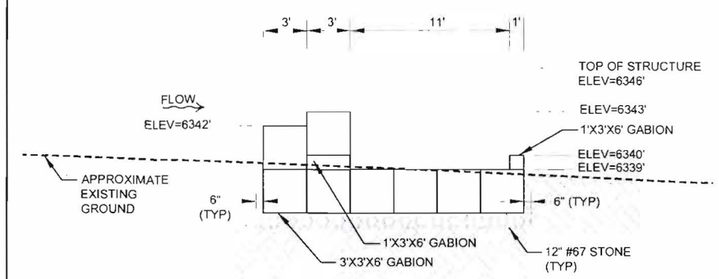
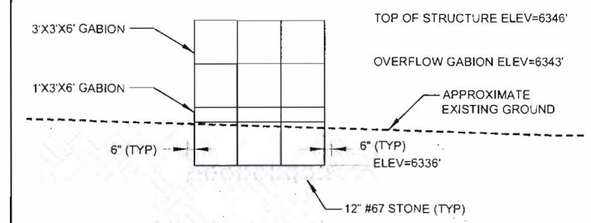
SHEET C-104



B SECTION B-B
C-200 C-200 SCALE: N.T.S.

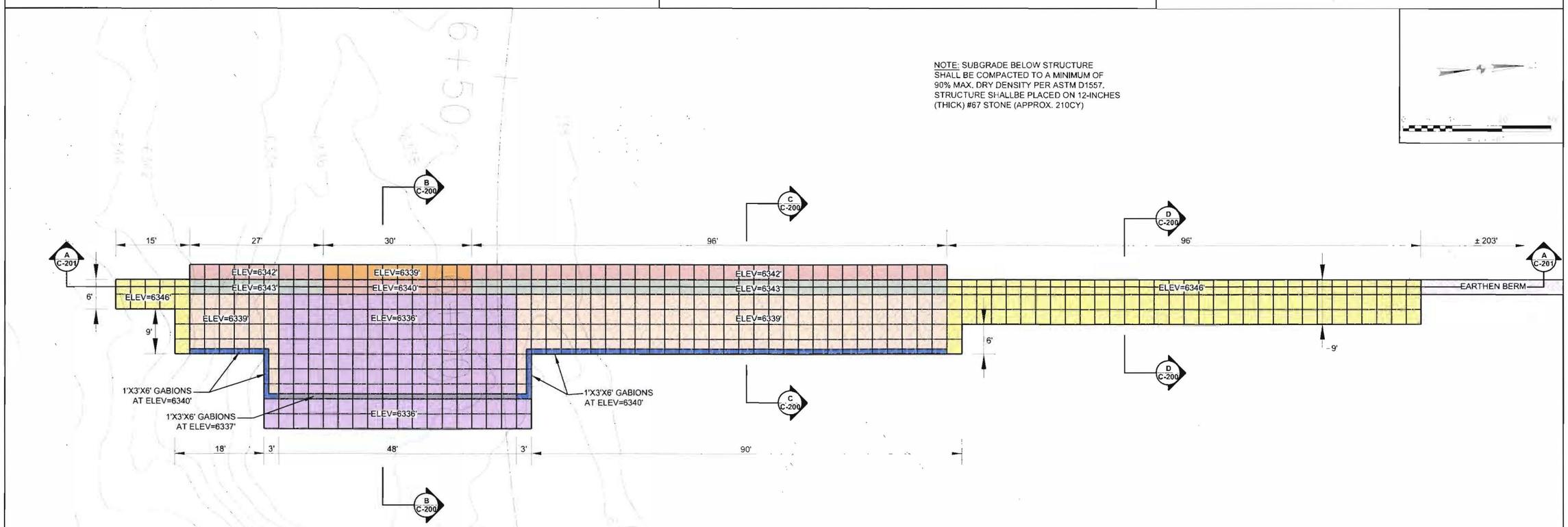


C SECTION C-C
C-200 C-200 SCALE: N.T.S.



D SECTION D-D
C-200 C-200 SCALE: N.T.S.

NOTE: SUBGRADE BELOW STRUCTURE SHALL BE COMPACTED TO A MINIMUM OF 90% MAX. DRY DENSITY PER ASTM D1557. STRUCTURE SHALLBE PLACED ON 12-INCHES (THICK) #67 STONE (APPROX. 210CY)



1 PUEBLO CANYON GABION PLAN VIEW
C-103 C-200 SCALE: 1"=10'

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CLIENT	PROJECT	TASK
LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM	LOS ALAMOS NATIONAL LABORATORY GRADE CONTROL STRUCTURES	PUEBLO CANYON CROSS SECTIONS

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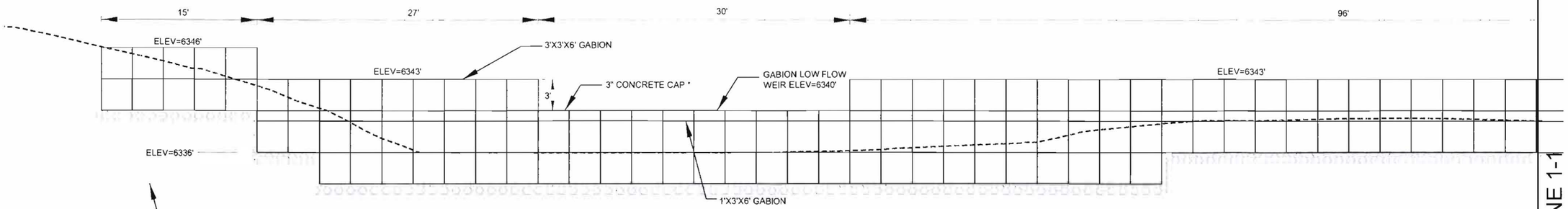
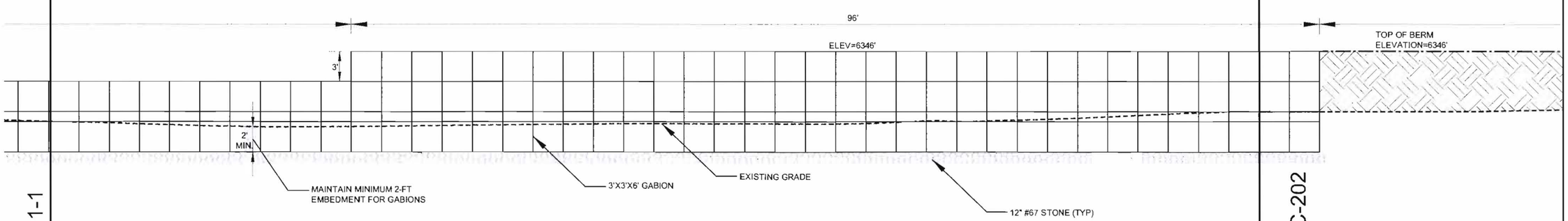


MATCH LINE 1-1

* WEIR CONCRETE CAP SHALL BE MIN. 4,000 PSI CONCRETE, EMBEDDED 5" INTO TOP GABION. PROVIDE ¾" CHAMFER AT EDGES AND INTEGRAL COLORS - CLIFFSIDE BROWN #6804 (OR APPROVED EQUAL) PER MANUFACTURER'S INSTRUCTIONS.

NOTE:
GABIONS SHALL BE STAGGERED VERTICALLY (TYPICAL)



MATCH LINE 1-1

MATCH LINE
SEE SHEET C-202

C
C-200 C-201 PUEBLO CANYON GABION CROSS SECTION B-B
SCALE: 1"=5'

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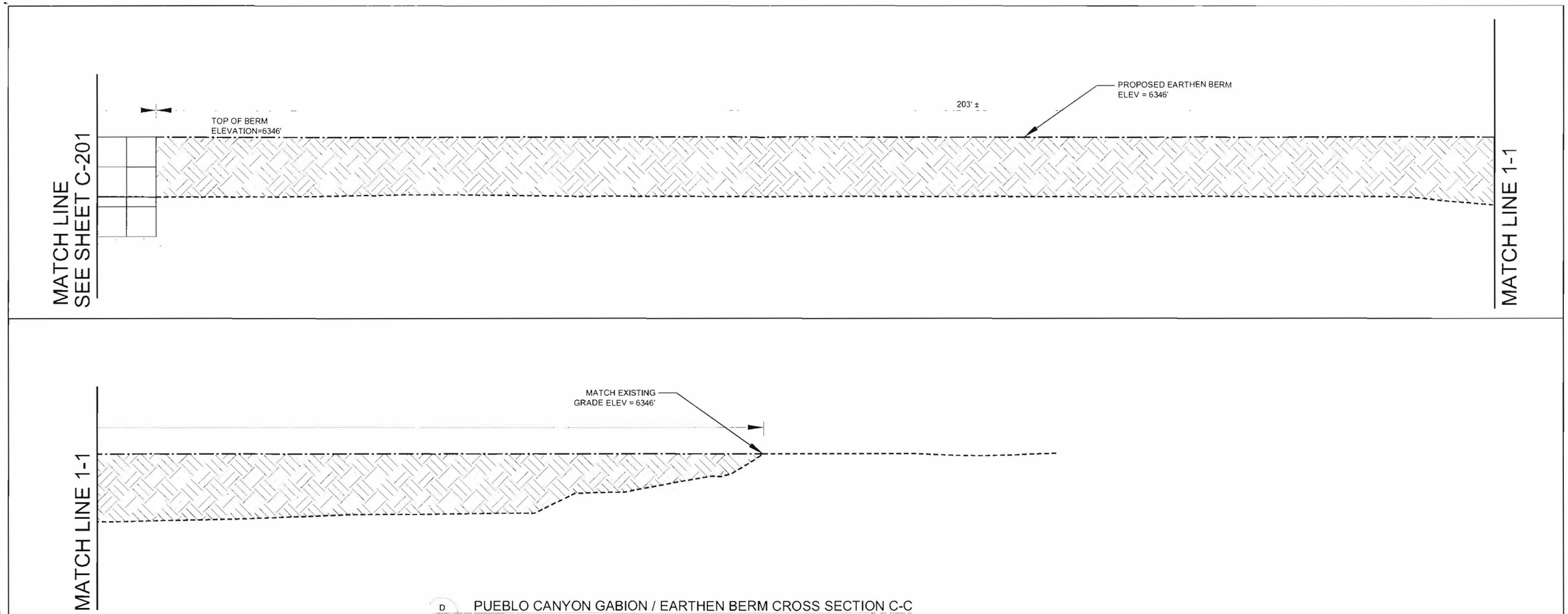
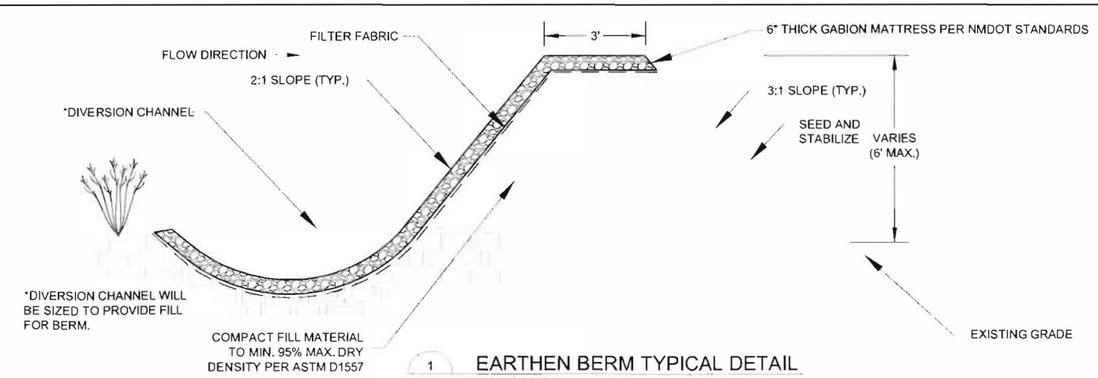


D PUEBLO CANYON GABION / EARTHEN BERM CROSS SECTION C-C
C-200 C-202 SCALE: 1"=5'



1 EARTHEN BERM TYPICAL DETAIL
SCALE: NTS

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