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10 CFR 50.4
10 CFR 52.79

July 29, 2009

UN#09-330

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016
Calvert Cliffs Nuclear Power Plant, Unit 3
Follow-up Response to Requests for Additional Information
Nos. 1001-14 and 1008-6

Reference: 1) Thomas Fredrichs (NRC) to Greg Gibson (UniStar Nuclear Energy), "Request for Additional Information Related to the Environmental Report for the Calvert Cliffs Combined License Application," dated February 3, 2009.

The purpose of this letter is to provide a follow-up response to requests for additional information (RAIs) identified in Reference 1. This follow-up response revises the previous responses, submitted on March 5, 2009, regarding inclusion of Figure 3B in the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA). UniStar Nuclear Energy has determined that this figure was intended only as a clarification document, and not for incorporation into the COLA.

The enclosure provides follow-up responses to RAI No. 1001-14, ESRP 4.3.2-3, and RAI No. 1008-6, ESRP 4.3.2-6. The responses do not include any new regulatory commitments and do not impact COLA content.

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If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Dimitri Lutchenkov at (410) 470-5524.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 29, 2009



Greg Gibson

Enclosure: Follow-up Responses to NRC Requests for Additional Information, RAI No. 1001-14, ESRP 4.3.2-3, and RAI No. 1008-6, ESRP 4.3.2-6, Calvert Cliffs Nuclear Power Plant Unit 3

cc: John Rycyna, NRC Project Manager, U.S. EPR COL Application
Laura Quinn, NRC Environmental Project Manager, U.S. EPR COL Application
Getachew Tesfaye, NRC Project Manager, U.S. EPR DC Application (w/o enclosure)
Loren Plisco, Deputy Regional Administrator, NRC Region II (w/o enclosure)
Silas Kennedy, U.S. NRC Resident Inspector, CCNPP, Units 1 and 2
U.S. NRC Region I Office

GTG/KAB/kat

UN#09-330

Enclosure

**Follow-up Responses to NRC Requests for Additional Information
RAI No. 1001-14, ESRP 4.3.2-3, and RAI No. 1008-6, ESRP 4.3.2-6
Calvert Cliffs Nuclear Power Plant Unit 3**

RAI No. 1001-14

ESRP 4.3.2-3

The September 29, 2008 RAI response to RAI #6 includes a Fig. 3A, which refers (within the figure) to Fig. 3B (Proposed Armor Protection—see Figure 3B for Extent of Protection), which was not found. Provide this or a new graphic that shows the bayward extent of the armoring that would be added to protect the new baffle wall installed for the intake system for proposed Unit 3.

Follow-up Response

Figure 3, "Site Plan @ Unit 3 Intake Structure - Sht 1", is the figure that shows the bayward extent of the armoring as 75'-0" +/- (an annotated copy of this figure showing this dimension highlighted in green is attached herein). This figure references Figure 3A, "Site Plan @ Unit 3 Intake Structure - Sht 2", which provides a more detailed view of the wedged-shaped pool intake structure proposed for Unit 3. This figure, in turn, references Figure 3B, "Proposed Armor Protection".

Attached is the requested Figure 3B, "Proposed Armor Protection". Figure 3B shows a cross section of the proposed armor protection. This figure identifies the 3:1 ratio of rise to run (i.e., depth to width of armor protection at the bay bottom) with a maximum bay bottom width of 95' - 0" +/- @ lowest elevation.

The NRC and its contractor have requested additional clarification regarding two items: 1) "Channelward" dimension of 205 feet described in the Joint Permit Application Work Description and 2) the actual footprint of the proposed armor protection on the bay floor. In response to this request, attached is an annotated copy of Figure 3A, "Site Plan @ Unit 3 Intake Structure - Sht 2" which graphically presents the responses and is explained as follows:

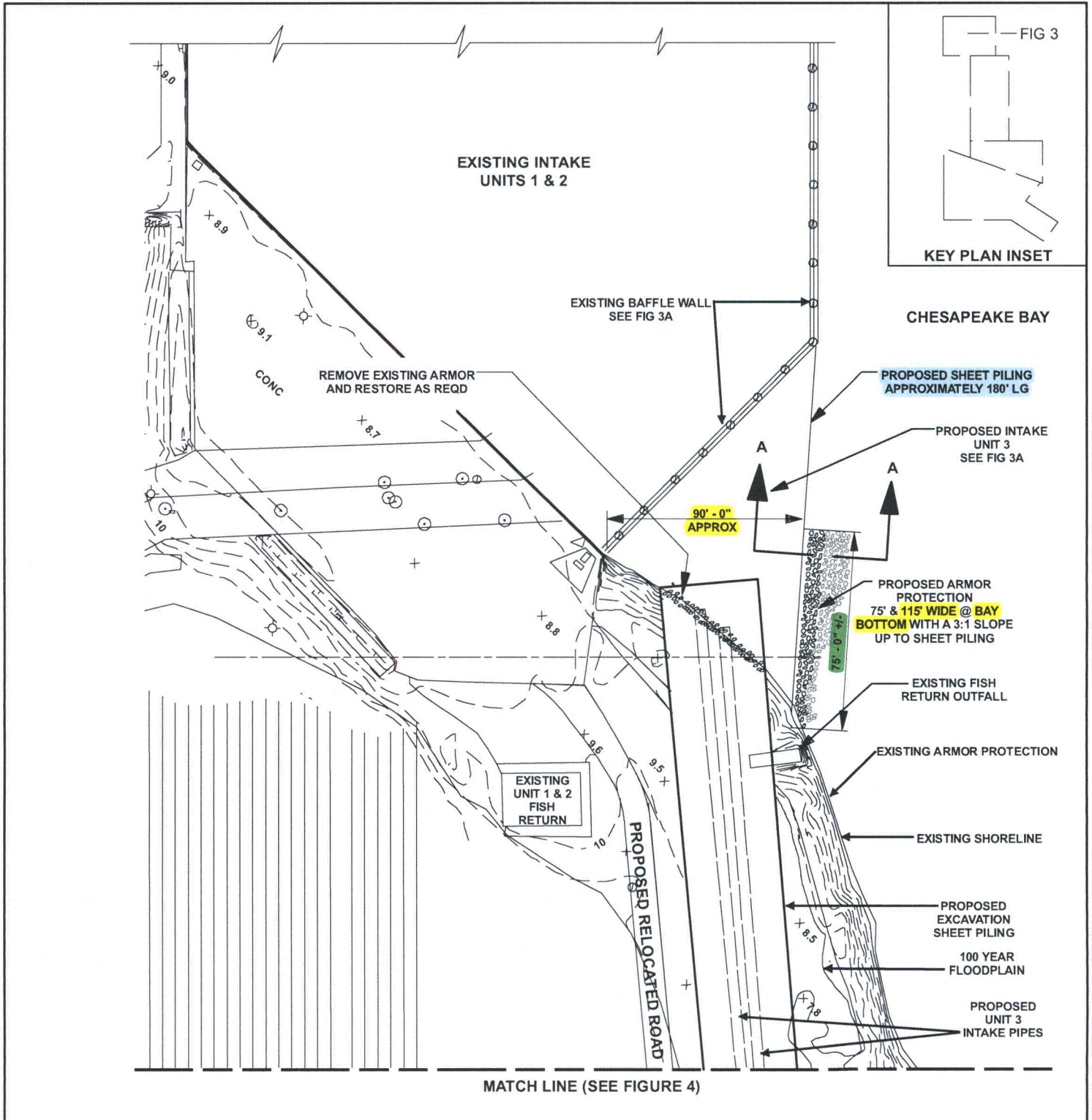
- 1) The term "Channelward" is an Army Corps term used to define an impact distance extending perpendicular to the existing shore to the furthest extent of tidal work and was identified as 215'. For this project it is the sum of the width of the "Proposed Intake Unit 3" and the footprint of the armor protection and the bay floor. These dimensions are "90'-0" APPROX" and "115' WIDE @ BAY BOTTOM" as identified in yellow highlight on the attached annotated Figure 3. It should be noted that based on further refinements in design to reduce impacts the 115' dimension has been updated/changed to 95' as shown in Figure 3B. As such, Figure 3A will be updated reflect this change. The attached annotated Figure 3A identifies the updated "Channelward" dimension as 185'.
- 2) The attached annotated Figure 3A shows that the "estimate" impact on the bay bottom by the armor protection is approximately 4650 sq ft. This "estimate" was derived graphically by assuming a hypothetical footprint of the armor protection bottom dimension utilizing the 3:1 ratio and the bay depth shown on the figure.

Actual impact on the bay bottom will be determined when the final detailed design is developed.

COLA Impact

The COLA ER will not be revised as a result of this response.

TIDAL



PURPOSE: PLANT EXPANSION

DATA SOURCE:
 BECHTEL CORPORATION

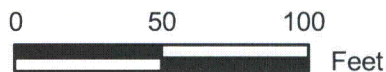
DATUM: (NGVD 29)

PROJECT LATITUDE/LONGITUDE:
 38.424133
 -76.441598



Figure 3 Annotated
SITE PLAN @ UNIT 3 INTAKE
STRUCTURE - SHT 1

SCALE IN FEET



CALVERT CLIFFS NUCLEAR
POWER PLANT

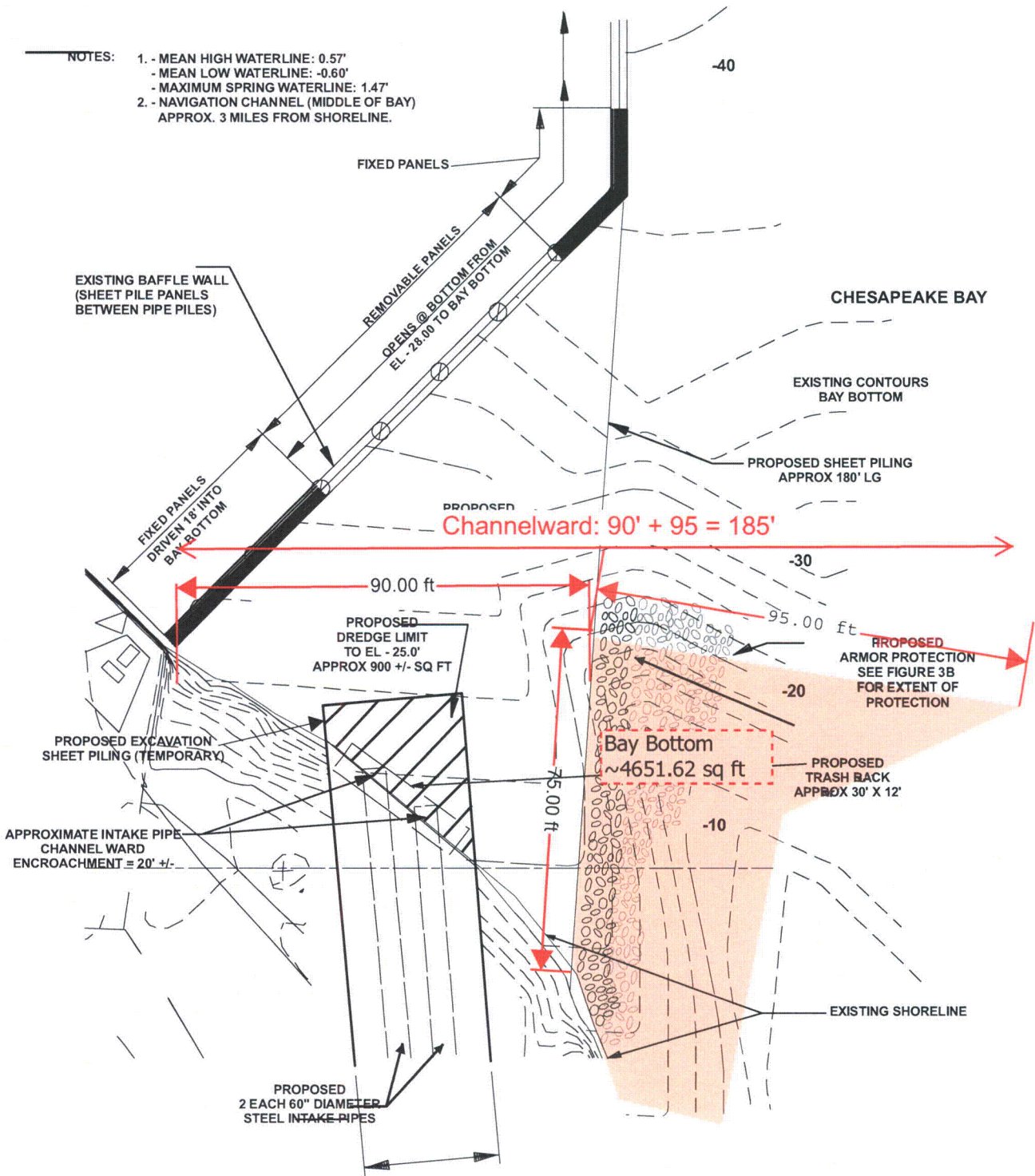
IN:
 PATUXENT / WEST CHESAPEAKE BAY
 COUNTY OF: CALVERT STATE: MD

APPLICATION BY:
 CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC
 AND UNISTAR NUCLEAR OPERATING SERVICES, LLC

DATE: 5/09/08 REV1 7/14/08

TIDAL

- NOTES:
1. - MEAN HIGH WATERLINE: 0.57'
 - MEAN LOW WATERLINE: -0.60'
 - MAXIMUM SPRING WATERLINE: 1.47'
 2. - NAVIGATION CHANNEL (MIDDLE OF BAY)
APPROX. 3 MILES FROM SHORELINE.



PURPOSE: PLANT EXPANSION

DATA SOURCE:
BECHTEL CORPORATION

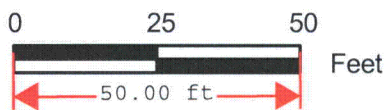
DATUM: (NGVD 29)

PROJECT LATITUDE/LONGITUDE:
38.424133
-76.441598



Figure 3A Annotated Bay Bottom
SITE PLAN @ UNIT 3 INTAKE
STRUCTURE - SHT 2

SCALE IN FEET



CALVERT CLIFFS NUCLEAR
POWER PLANT

IN:
PATUXENT / WEST CHESAPEAKE BAY
COUNTY OF: CALVERT STATE: MD

APPLICATION BY:
CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC
AND UNISTAR NUCLEAR OPERATING SERVICES, LLC

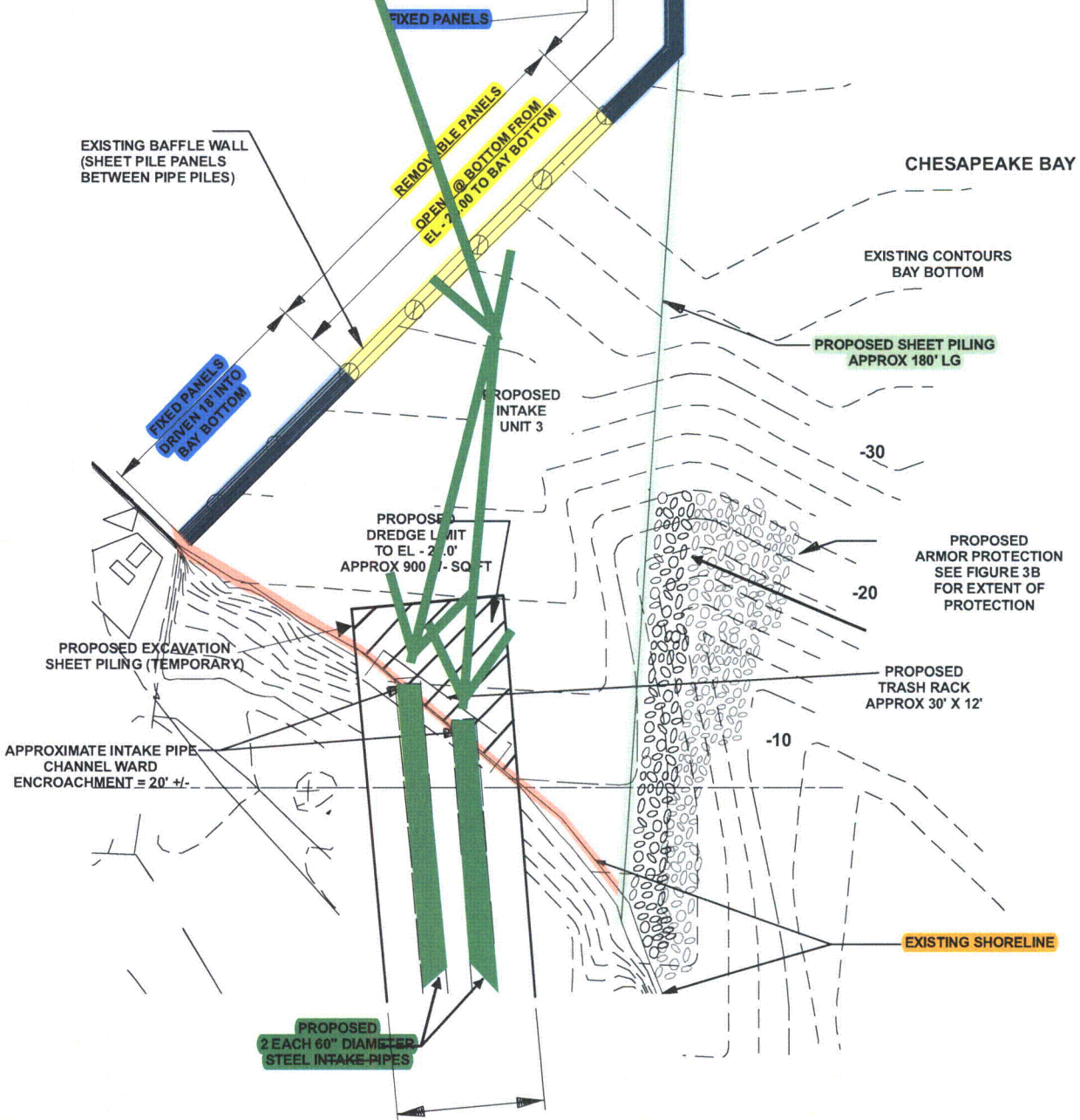
DATE: 5/09/08 REV1 7/14/08

TIDAL

To Unit 1 & 2

Flow from bay

- NOTES:
- MEAN HIGH WATERLINE: 0.57'
 - MEAN LOW WATERLINE: -0.60'
 - MAXIMUM SPRING WATERLINE: 1.47'
 - NAVIGATION CHANNEL (MIDDLE OF BAY) APPROX. 3 MILES FROM SHORELINE.



PURPOSE: PLANT EXPANSION

DATA SOURCE:
BECHTEL CORPORATION

DATUM: (NGVD 29)

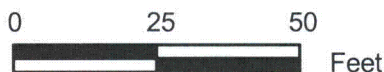
PROJECT LATITUDE/LONGITUDE:
38.424133
-76.441598



Figure 3A Annotated Flow

SITE PLAN @ UNIT 3 INTAKE
STRUCTURE - SHT 2

SCALE IN FEET



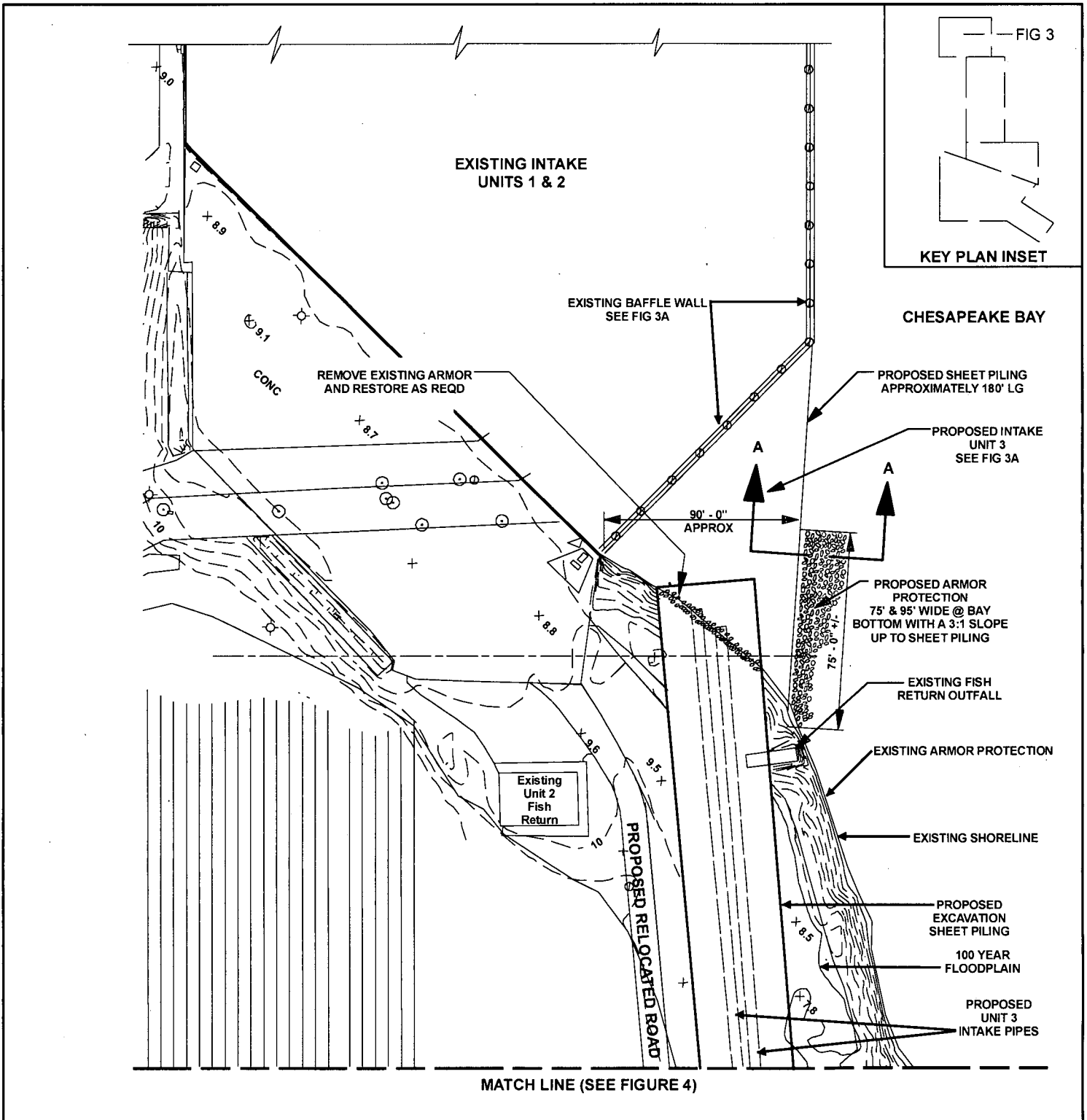
CALVERT CLIFFS NUCLEAR
POWER PLANT

IN:
PATUXENT / WEST CHESAPEAKE BAY
COUNTY OF: CALVERT STATE: MD

APPLICATION BY:
CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC
AND UNISTAR NUCLEAR OPERATING SERVICES, LLC

DATE: 5/09/08 REV1 7/14/08

TIDAL



PURPOSE: PLANT EXPANSION

DATA SOURCE:
BECHTEL CORPORATION

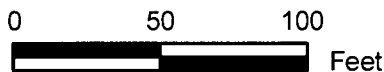
DATUM: (NGVD 29)

PROJECT LATITUDE/LONGITUDE:
38.424133
-76.441598



**FIGURE 3
SITE PLAN @ UNIT 3 INTAKE
STRUCTURE - SHT 1**

SCALE IN FEET

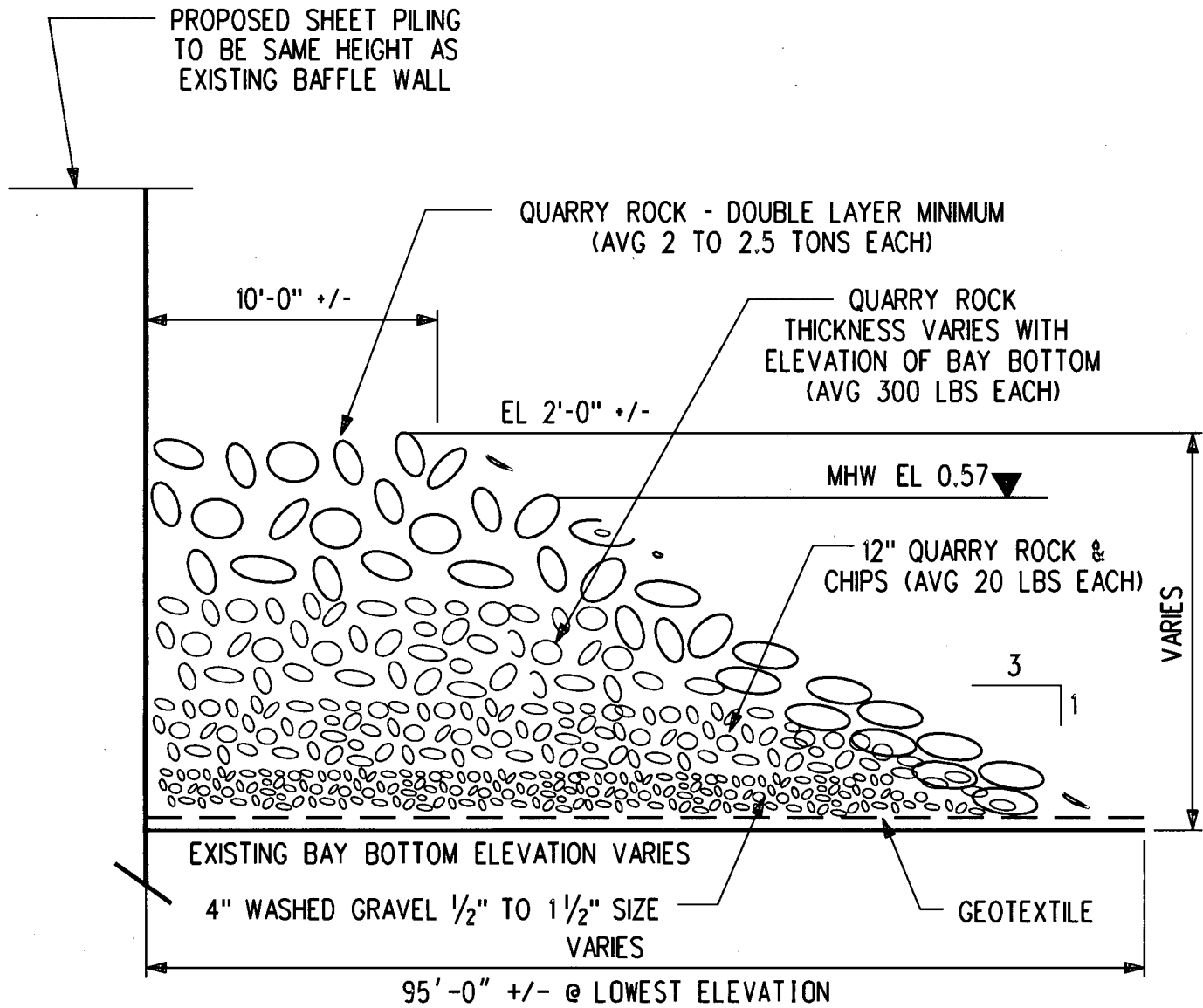


**CALVERT CLIFFS NUCLEAR
POWER PLANT**

IN:
PATUXENT / WEST CHESAPEAKE BAY
COUNTY OF: CALVERT STATE: MD

APPLICATION BY:
CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC
AND UNISTAR NUCLEAR OPERATING SERVICES, LLC

DATE: 5/09/08 REV3 3/3/09



SEE FIGURE 3 FOR LENGTH OF PROPOSED ARMOR PROTECTION

SECTION A - A

PURPOSE: PLANT EXPANSION DATUM: (NGVD 29) PROJECT LATITUDE/LONGITUDE: 38.424133 -76.441598	FIGURE 3B PROPOSED ARMOR PROTECTION	CALVERT CLIFFS NUCLEAR POWER PLANT UNIT 3
	SCALE NOT TO SCALE	IN: PATUXENT/ WEST CHESAPEAKE BAY COUNTY OF: CALVERT STATE: MD APPLICATION BY: UNISTAR NUCLEAR ENERGY
SHEET OF DATE:		

RAI No. 1008-6

ESRP 4.3.2-6

Provide a figure that shows the bayward extent of the armoring that would be added to protect the new baffle wall installed for the intake system for proposed Unit 3. This is Figure 3B, which was not included in the September 29, 2008 RAI response. The figure should fit on one 8.5" x 11" page.

Follow-up Response

UniStar response to RAI 1001-14 (ESRP 4.3.2-3) provides the requested figure.

COLA Impact

The COLA ER will not be revised as a result of this response.