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June 16, 2011

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

Subject: Duke Energy Carolinas, LLC
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019
AP1000 Combined License Application for the
William States Lee III Nuclear Station Units 1 and 2
Responses to Request for Additional Information
Ltr# WLG2011.06-03

References: Letter from Sarah Lopas (NRC) to Bryan Dolan (Duke Energy), *Request for Additional Information Regarding the Supplement to the Environmental Report for the William States Lee III Nuclear Station Units 1 and 2, Combined License Application*, dated June 22, 2010 (ML101370398)

Letter from Sarah Lopas (NRC) to Bryan Dolan (Duke Energy), *Follow-Up Requests for Additional Information Regarding the Supplement to the Environmental Report for the William States Lee III Nuclear Station Units 1 and 2, Combined License Application*, dated September 14, 2010 (ML102371173)

This letter provides supplemental information for Duke Energy's responses to the Nuclear Regulatory Commission's request for additional information (RAI) included in the referenced letters.

RAI 190 Supplement, Site Layout and Plant Description

RAI 210 Supplement, Ecology, Aquatic

The supplemental responses to these NRC information requests are addressed in the enclosures, which also identify associated changes to the Combined License Application for the Lee Nuclear Station, when appropriate.

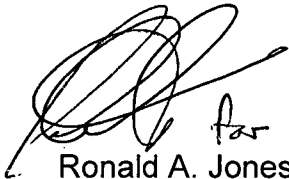
DO93
NRW

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June 16, 2011

Page 2 of 4

If you have any questions or need any additional information, please contact Peter S. Hastings, Nuclear Plant Development Licensing Manager, at 980-373-7820.

A handwritten signature in black ink, appearing to be "Ronald A. Jones". The signature is stylized with loops and a long horizontal stroke extending to the right.

Ronald A. Jones
Sr Vice President
Nuclear Development

Enclosures:

- 1) RAI 190 Supplement, Site Layout and Plant Description
- 2) RAI 210 Supplement, Aquatic Ecology

Document Control Desk
June 16, 2011
Page 3 of 4

xc (w/o enclosures):

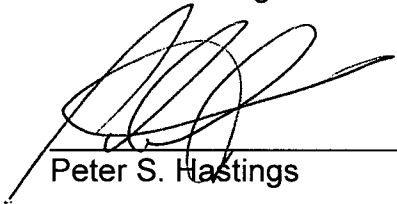
Loren Plisco, Deputy Regional Administrator, Region II
Allen Fetter, Branch Chief, DSER

xc (w/ enclosures):

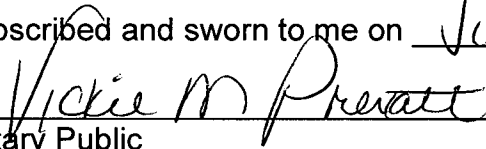
Sarah Lopas, Project Manager, DSER
Brian Hughes, Senior Project Manager, DNRL
Terri Miley, PNNL

AFFIDAVIT OF PETER S. HASTINGS

Peter S. Hastings, being duly sworn, states that he is Licensing Manager, Nuclear Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.



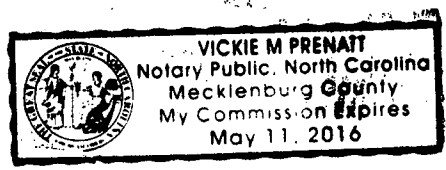
Peter S. Hastings

Subscribed and sworn to me on June 16, 2011


Notary Public

My commission expires: _____

SEAL



Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Number: ER RAI 190 Supplement, Site Layout and Plant Description

NRC RAI:

Provide physical descriptions (e.g., location, dimensions, construction materials, pump systems) of the "River Water Intake Subsystem" and the "Refill Subsystem Intake" referred to in Supplemental ER Figure 3.3-1, Sheets 1 and 2.

Discuss any changes to the site preparation and construction methods, affected area, spoils volume and disposition, timing, and duration for the river intake and associated distribution systems. Provide a narrative description of the relationship or interconnections between these intake(s) and the various Make-Up ponds, including the expected flow rate and duration of refill pumping operations.

During a conference call on May 18, 2011 the NRC requested that figures be provided in RAI 190 be enlarged.

Duke Energy Response:

Duke Energy is supplementing the previous response to this RAI.

In addition to providing enlarged figures, the width of the Dual Flow Traveling Screens (refer to Mat Plan View @ El 497'-0" on updated ER Supplement Figure 5.3-1 Sheet 6 of 7 [Attachment 190S-01]) has been increased from 12'-4" to 20'-0" to provide additional design margin and to ensure through-screen velocity of the intake screens will be less than 0.5 feet per second. This change also results in the overall width of the River Water Intake Structure increasing by 8'-0".

The plan views and section views of the River Water Intake Structure have each been shown on a separate sheet to enhance legibility of the intake structure drawings (refer to updated ER Supplement Figure 5.3-1 - Attachment 190S-01).

There are no other changes to the information provided in Reference 1 as a result of these updates that reflect the latest conceptual design.

Reference:

1. Letter from B.J. Dolan to Document Control Desk, Duke Energy Carolinas, LLC, William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019, *AP1000 Combined License Application for the William States Lee III Nuclear Station Units 1 and 2, Response to Request for Additional Information*, Ltr# WLG2010.07-08, dated July 22, 2010 (ML102070357)

Associated Revision to the Lee Nuclear Station Combined License Application:

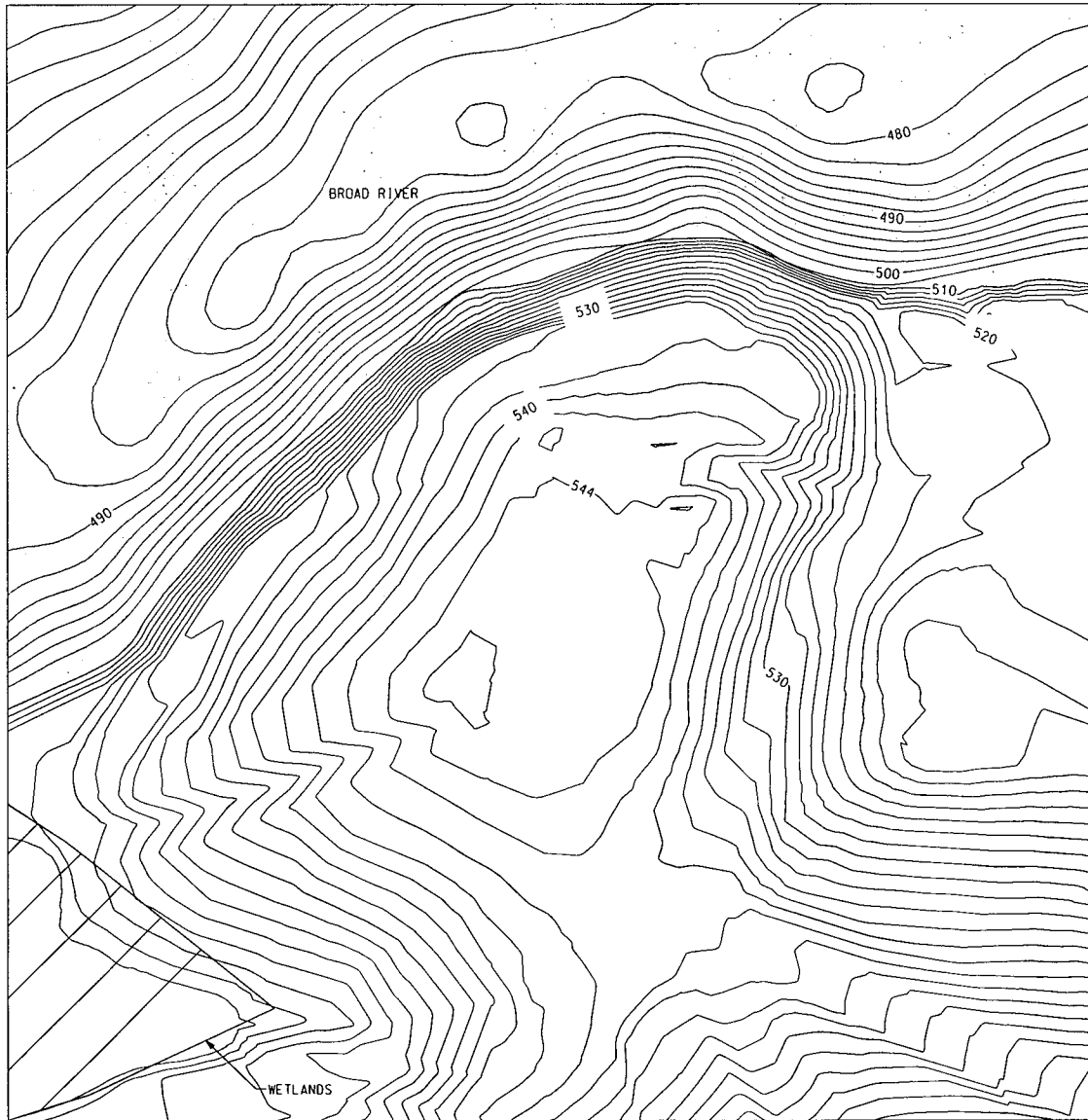
ER Supplement Figure 5.3-1 (Sheets 1 and 2 and added new Sheets 3 through 7)

Attachment:

Attachment 190S-01 Updated ER Supplement Figure 5.3-1, River Water Intake Structure
(7 Sheets)

Attachment 190S-01

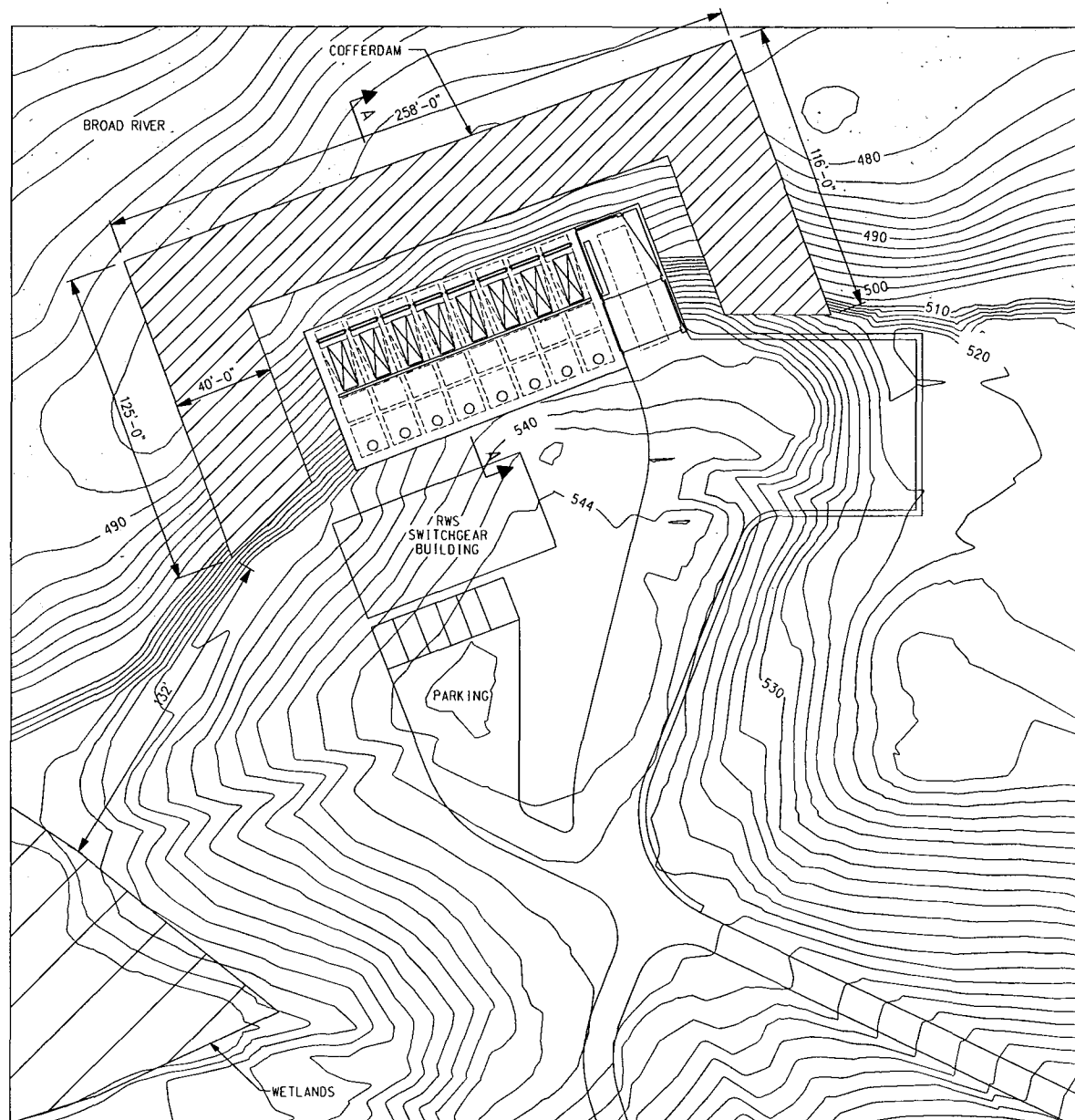
Updated ER Supplement Figure 5.3-1,
River Water Intake Structure
Sheets 1 through 7 of 7



EXISTING CONDITION
RIVER WATER INTAKE STRUCTURE
NTS

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

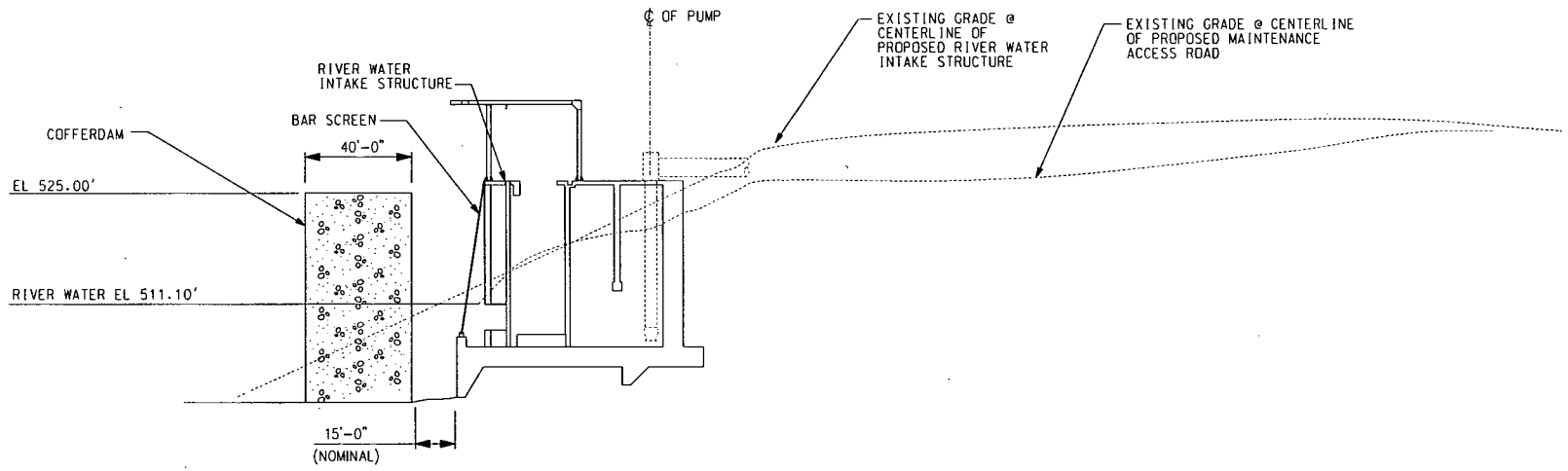
River Water Intake Structure
Sheet 1 of 7
Figure 5.3-1, Rev 3



PROPOSED PLAN ARRANGEMENT
RIVER WATER INTAKE STRUCTURE
NTS

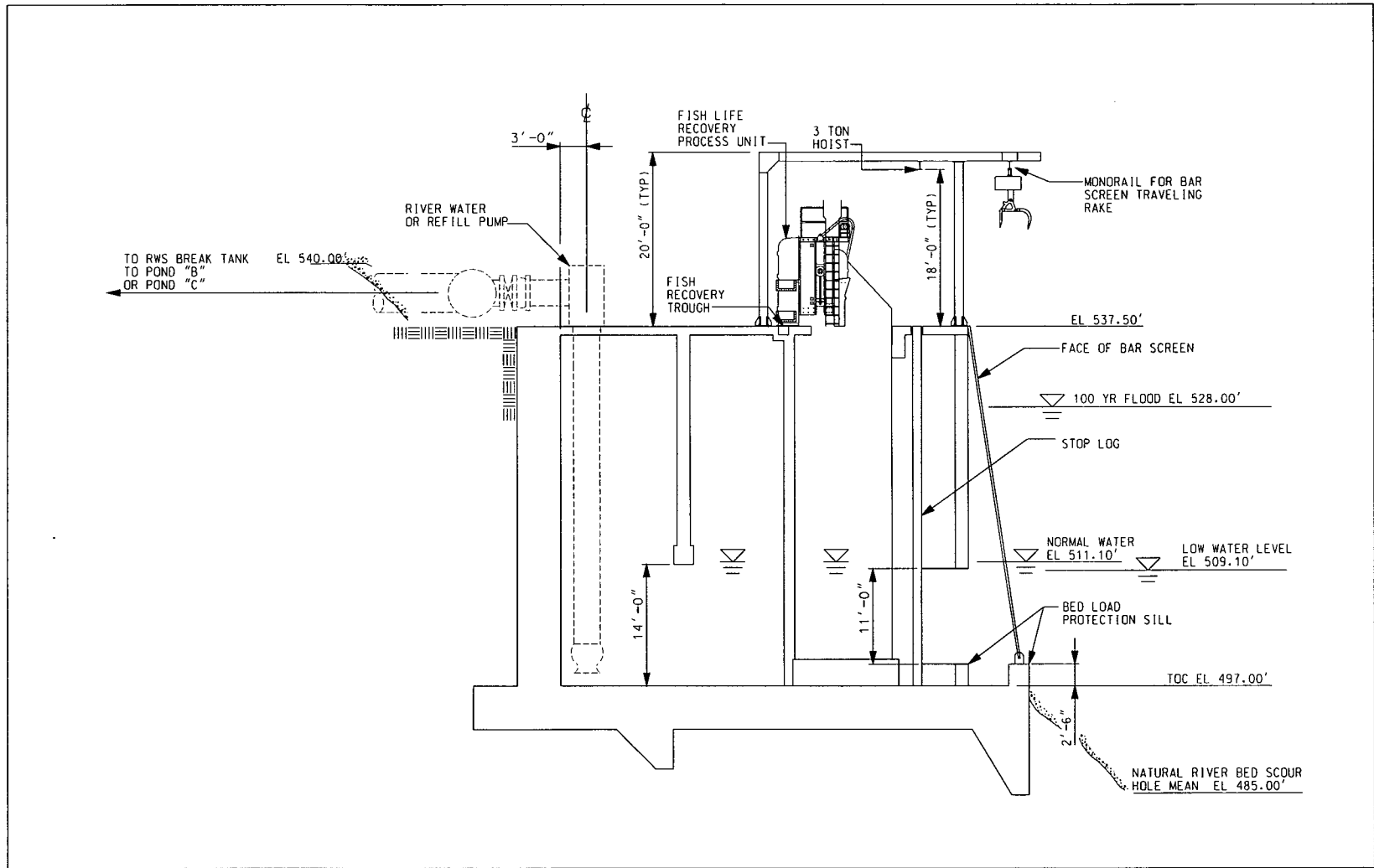
WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

River Water Intake Structure
Sheet 2 of 7
Figure 5.3-1, Rev 3



SECTION A-A
 COFFERDAM AND INTAKE STRUCTURE
 PUMP AND PIPE OUTLINE NOT TO SCALE

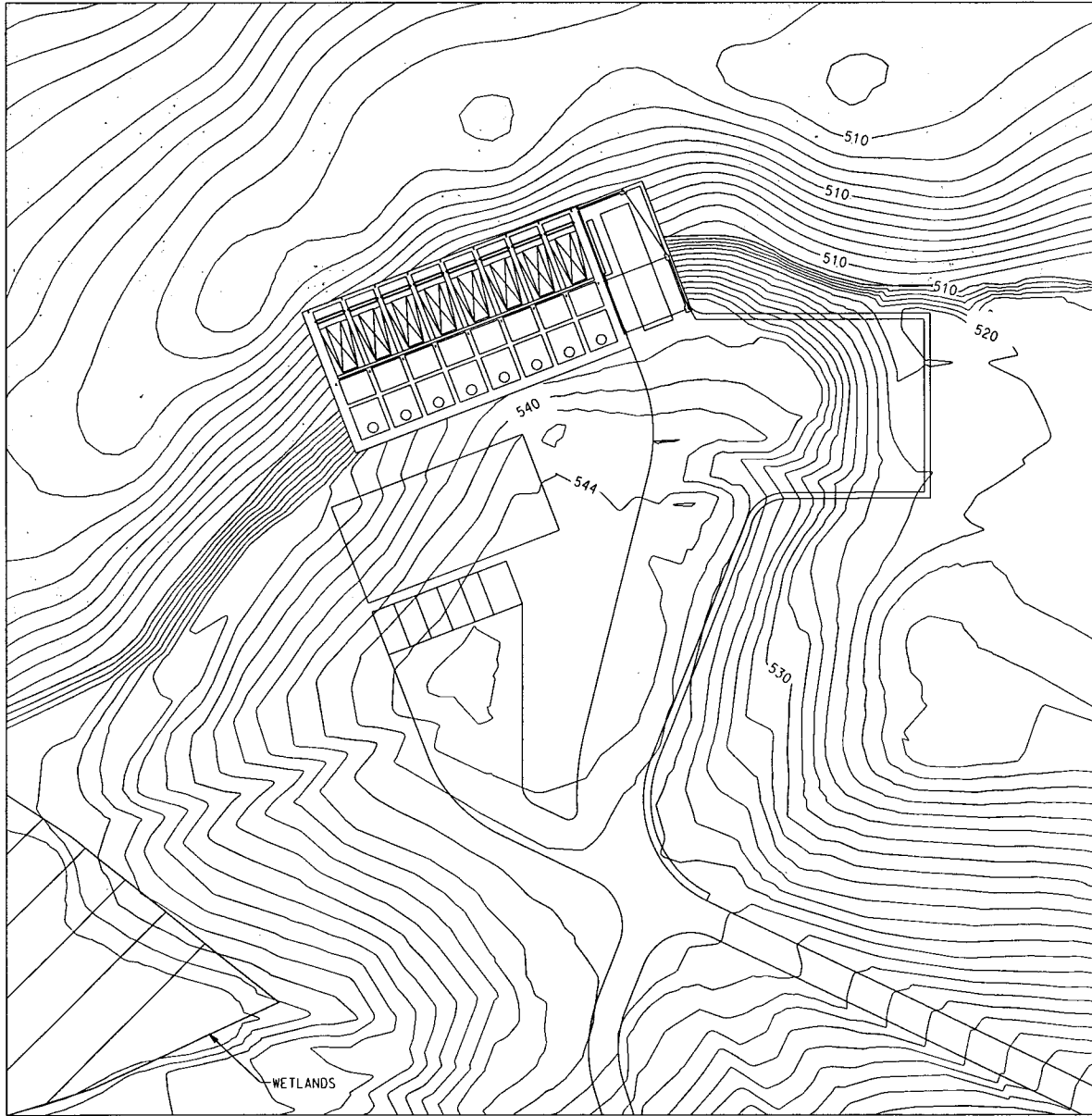
WILLIAM STATES LEE III NUCLEAR STATION UNITS 1 AND 2
River Water Intake Structure Sheet 3 of 7 Figure 5.3-1, Rev 3



SECTION B-B
PUMP AND PIPE OUTLINE NOT TO SCALE

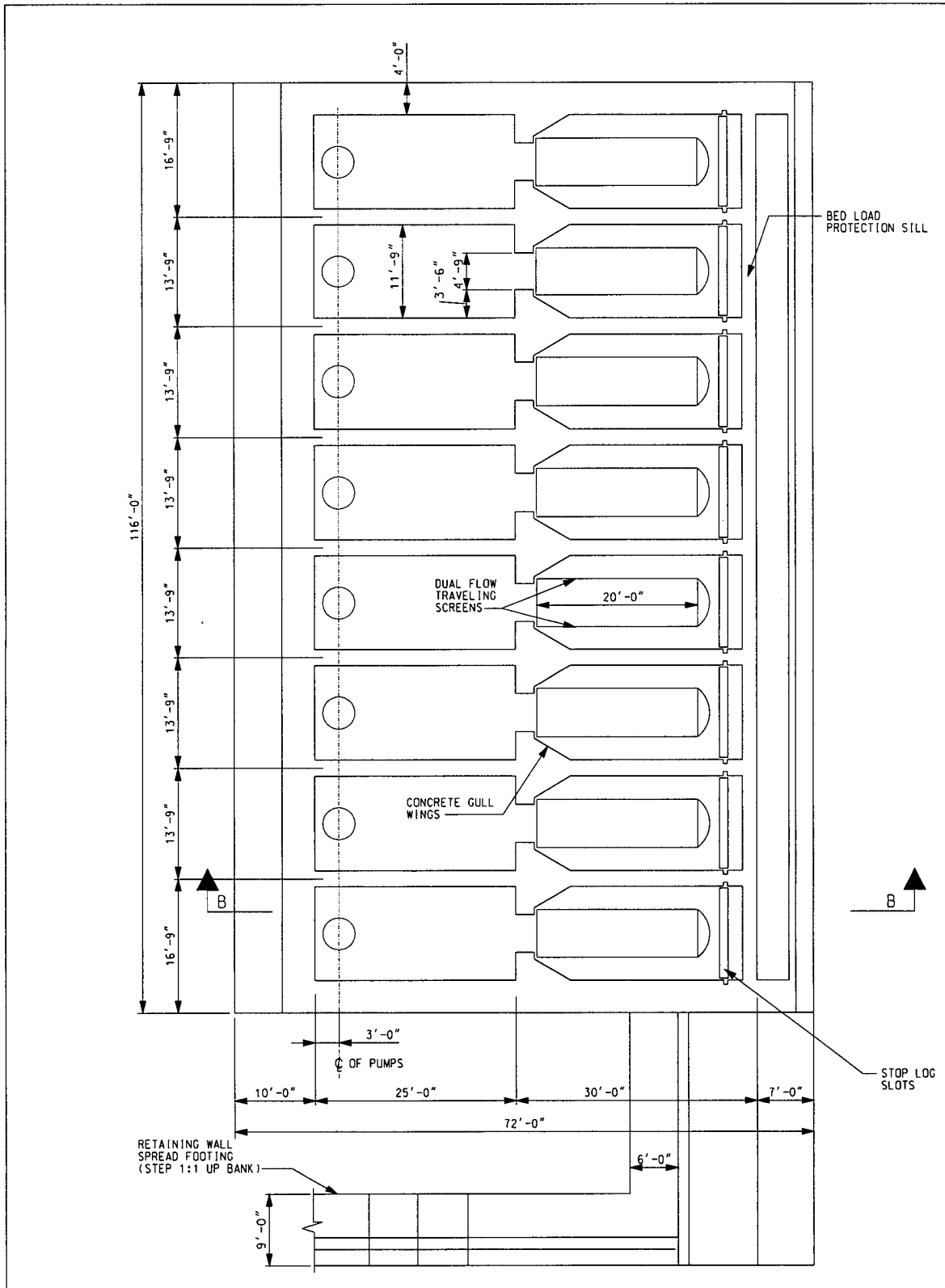
WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

River Water Intake Structure
Sheet 4 of 7
Figure 5.3-1, Rev 3



PROPOSED PLAN VIEW
 RIVER WATER INTAKE STRUCTURE
 NTS

WILLIAM STATES LEE III NUCLEAR STATION UNITS 1 AND 2
River Water Intake Structure Sheet 5 of 7 Figure 5.3-1, Rev 3

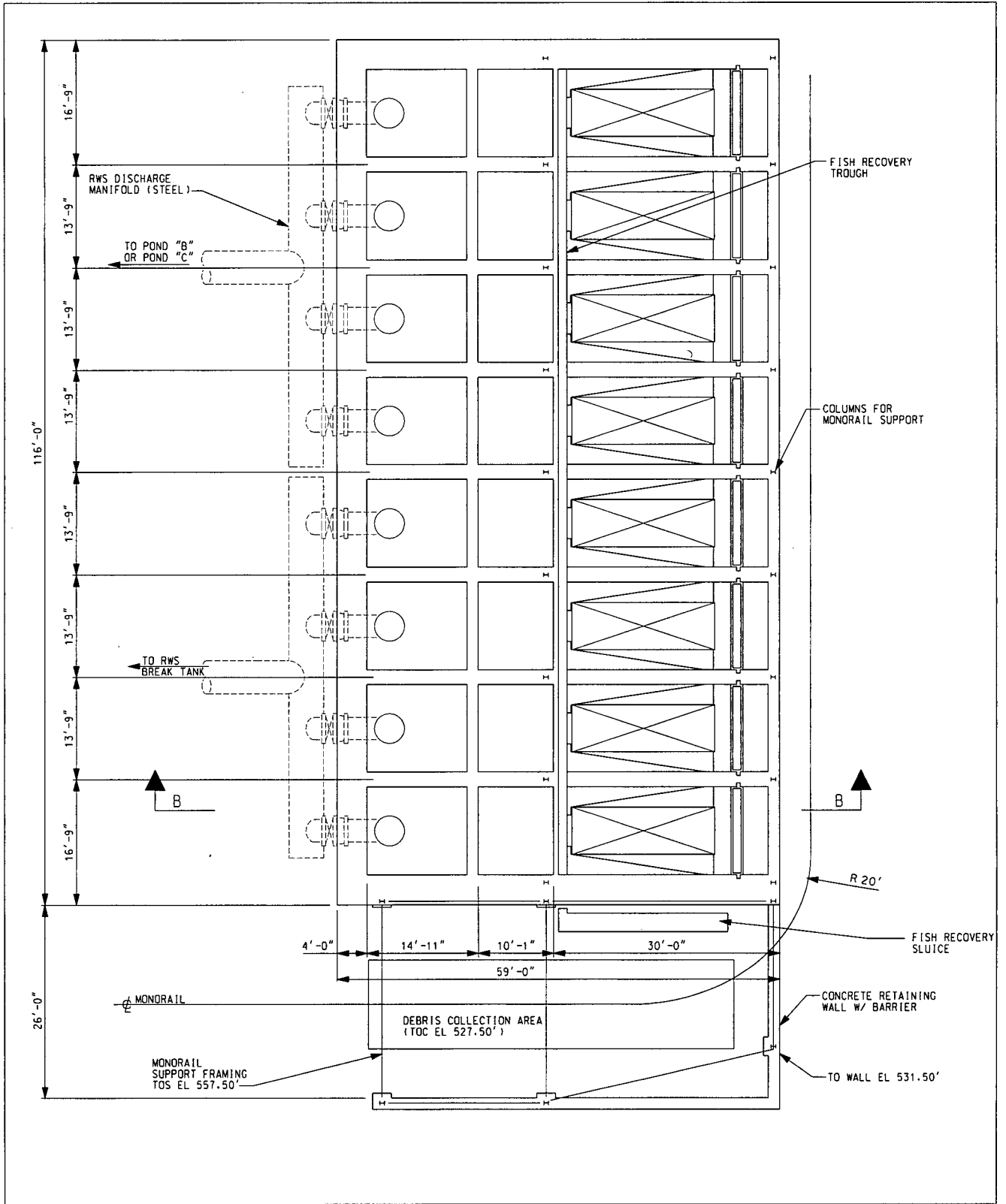
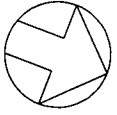


RETAINING WALL
SPREAD FOOTING
(STEP 1:1 UP BANK)

MAT PLAN @ EL 497.00'
PUMP AND PIPE OUTLINE NOT TO SCALE

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

River Water Intake Structure
Sheet 6 of 7
Figure 5.3-1, Rev 3



DECK PLAN
PUMP AND PIPE OUTLINE NOT TO SCALE

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

River Water Intake Structure
Sheet 7 of 7
Figure 5.3-1, Rev 3

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: September 14, 2010

Reference NRC RAI Number: ER RAI 210 Supplement, Ecology - Aquatic

NRC RAI:

Provide bathymetric maps of Ponds A, B, and C that show clearly labeled contour lines with the locations of the intake screen and supporting structures superimposed. Provide plan and section views of each intake structure. For clarity and legibility, print the maps in black and white. Describe what is known about the options for wedge wire slot sizes for the traveling screens, particularly if an estimate or range of potential slot sizes is known. Provide information about the height the Pond B and C drum screens will be elevated above the substrate. Also, describe the potential cleaning methods for the Ponds A, B, and C intake screens. Indicate in the response when and how through-screen velocity calculations will be provided to the NRC (e.g., through submittal of a copy of the National Pollution Discharge Elimination System permit application).

During a conference call on May 18, 2011 the NRC requested that figures be provided in RAI 210 for Pond A be enlarged.

Duke Energy Response:

Duke Energy is supplementing the previous responses to this RAI.

In addition to providing enlarged figures, the width of the Dual Flow Traveling Screens (refer to Mat Plan View @ El 510'-0" on updated ER Figure 5.3-3 Sheet 3 of 5 [Attachment 210S-01]) has been increased from 12'-4" to 20'-0" to provide additional design margin and to ensure through-screen velocity of the intake screens will be less than 0.5 feet per second. This change also results in the overall width of the Make-Up Pond A Intake Structure increasing by 8'-0".

The plan views and section view of the Make-Up Pond A Intake Structure have each been shown on a separate sheet to enhance legibility of the intake structure drawings (refer to updated ER Figure 5.3-3 - Attachment 210S-01).

There are no other changes to the information provided in References 1 and 2 as a result of these updates that reflect the latest conceptual design.

References:

1. Letter from B.J. Dolan to Document Control Desk, Duke Energy Carolinas, LLC, William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019, *AP1000 Combined License Application for the William States Lee III Nuclear Station Units 1 and 2, Response to Request for Additional Information*, Ltr# WLG2010.10-04, dated October 14, 2010 (ML103360419)
2. Letter from B.J. Dolan to Document Control Desk, Duke Energy Carolinas, LLC, William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019, *AP1000*

Combined License Application for the William States Lee III Nuclear Station Units 1 and 2, Response to Request for Additional Information, Ltr# WLG2010.11-02, dated November 12, 2010 (ML103210413)

Associated Revision to the Lee Nuclear Station Combined License Application:

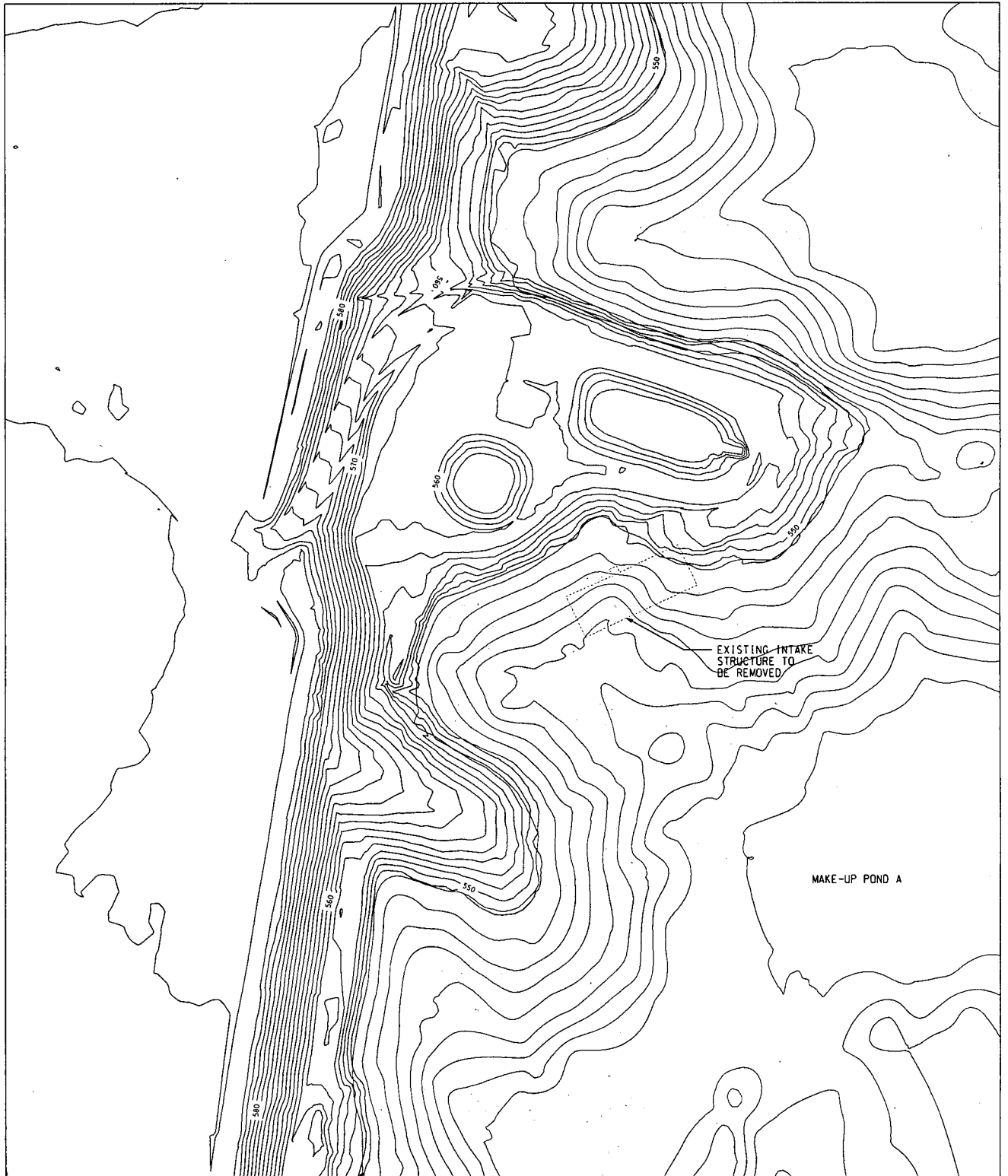
ER Figure 5.3-3 (Sheets 1 and 2 and added Sheets 3 through 5)

Attachment:

Attachment 210S-01 Updated ER Figure 5.3-3, Make-Up Pond A Intake Structure
(5 Sheets)

Attachment 210S-01

Updated ER Figure 5.3-3,
Make-Up Pond A Intake Structure
Sheets 1 through 5 of 5

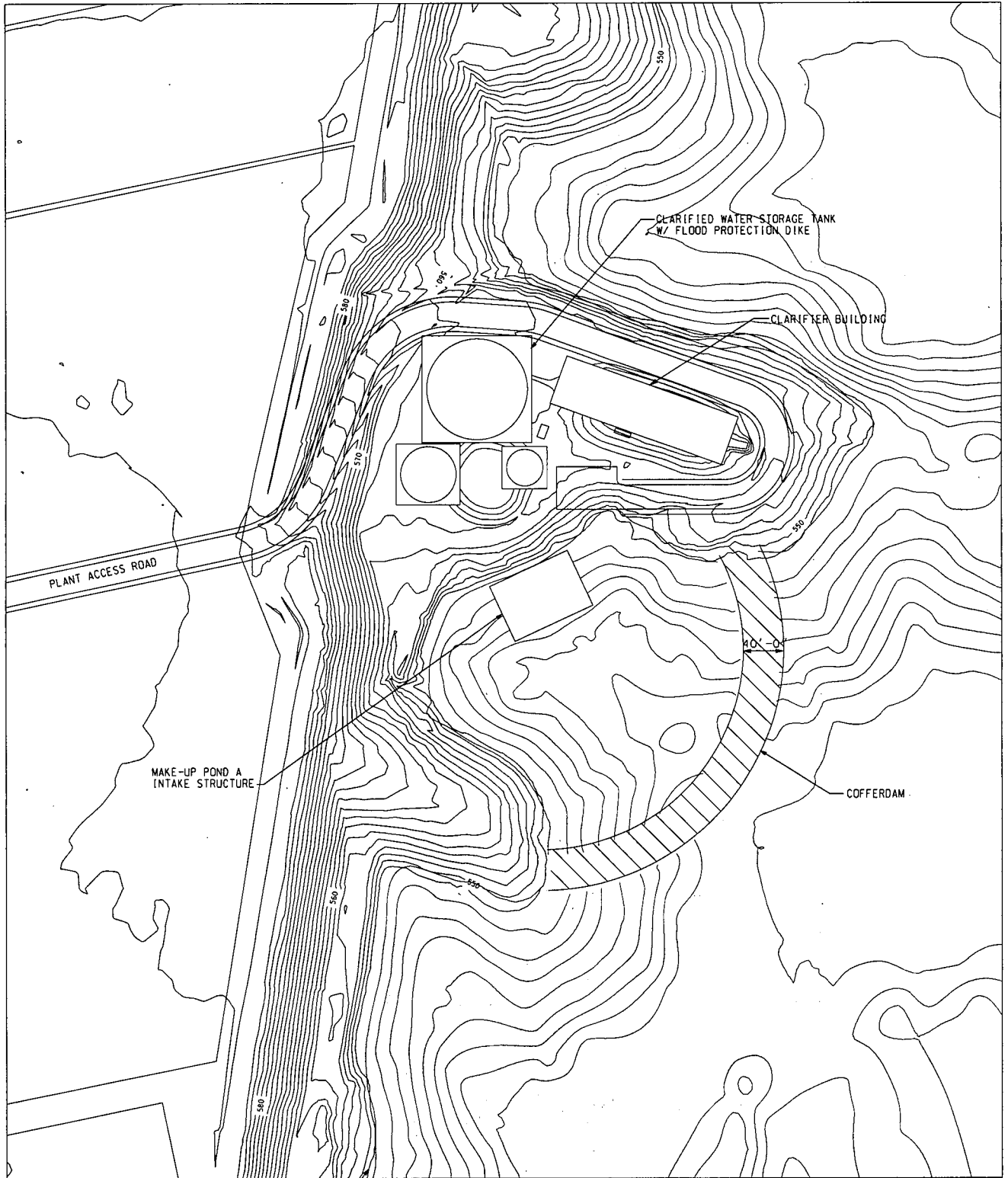


FULL POND
LEVEL EL 547.00'

EXISTING CONDITION
MAKE-UP POND AND INTAKE STRUCTURE
NTS

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

Make-Up Pond A Intake Structure
Sheet 1 of 5
Figure 5.3-3, Rev 3

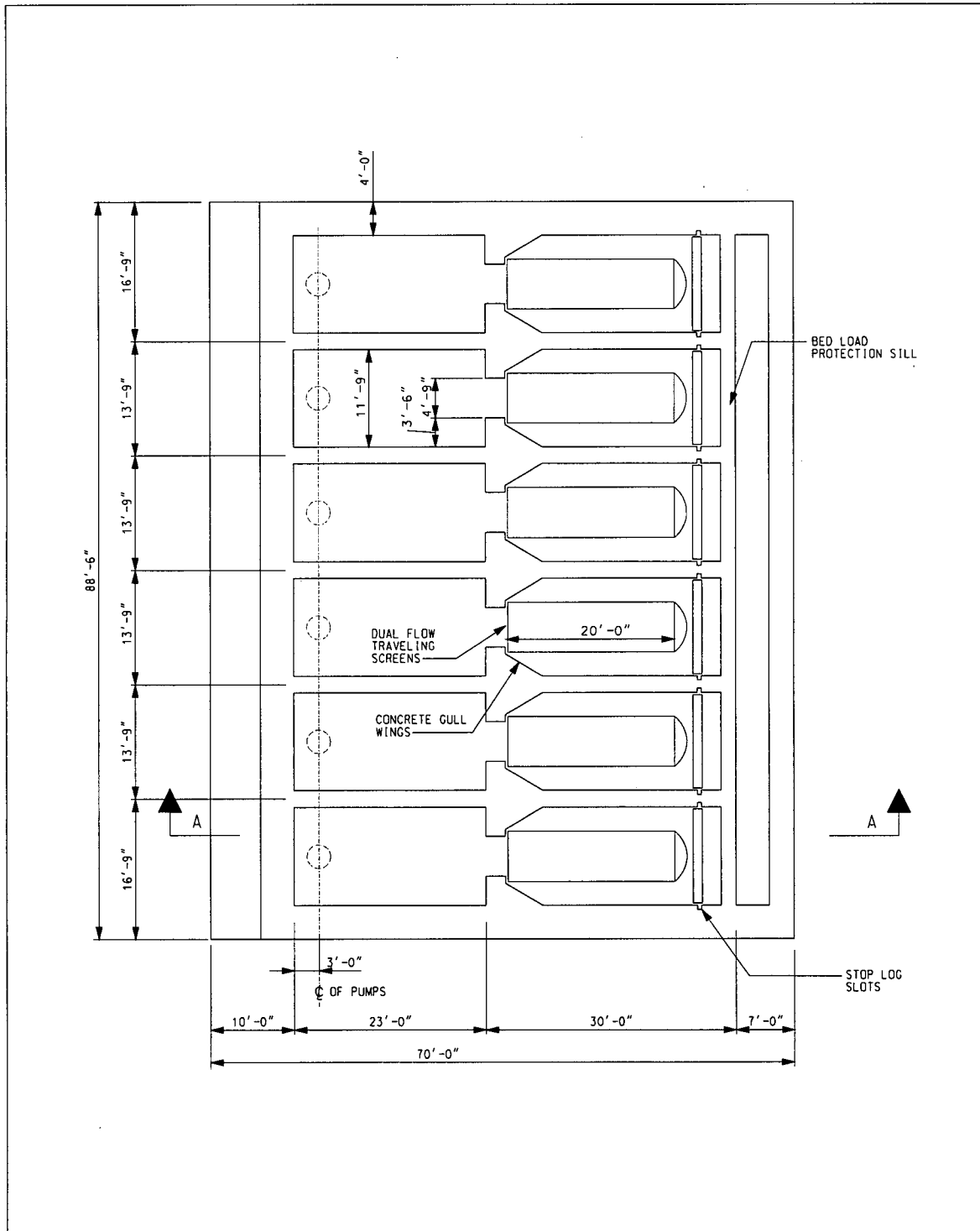


FULL POND
LEVEL EL 547.00'

LOCATION PLAN - MAKE-UP POND A
INTAKE STRUCTURE
NTS

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

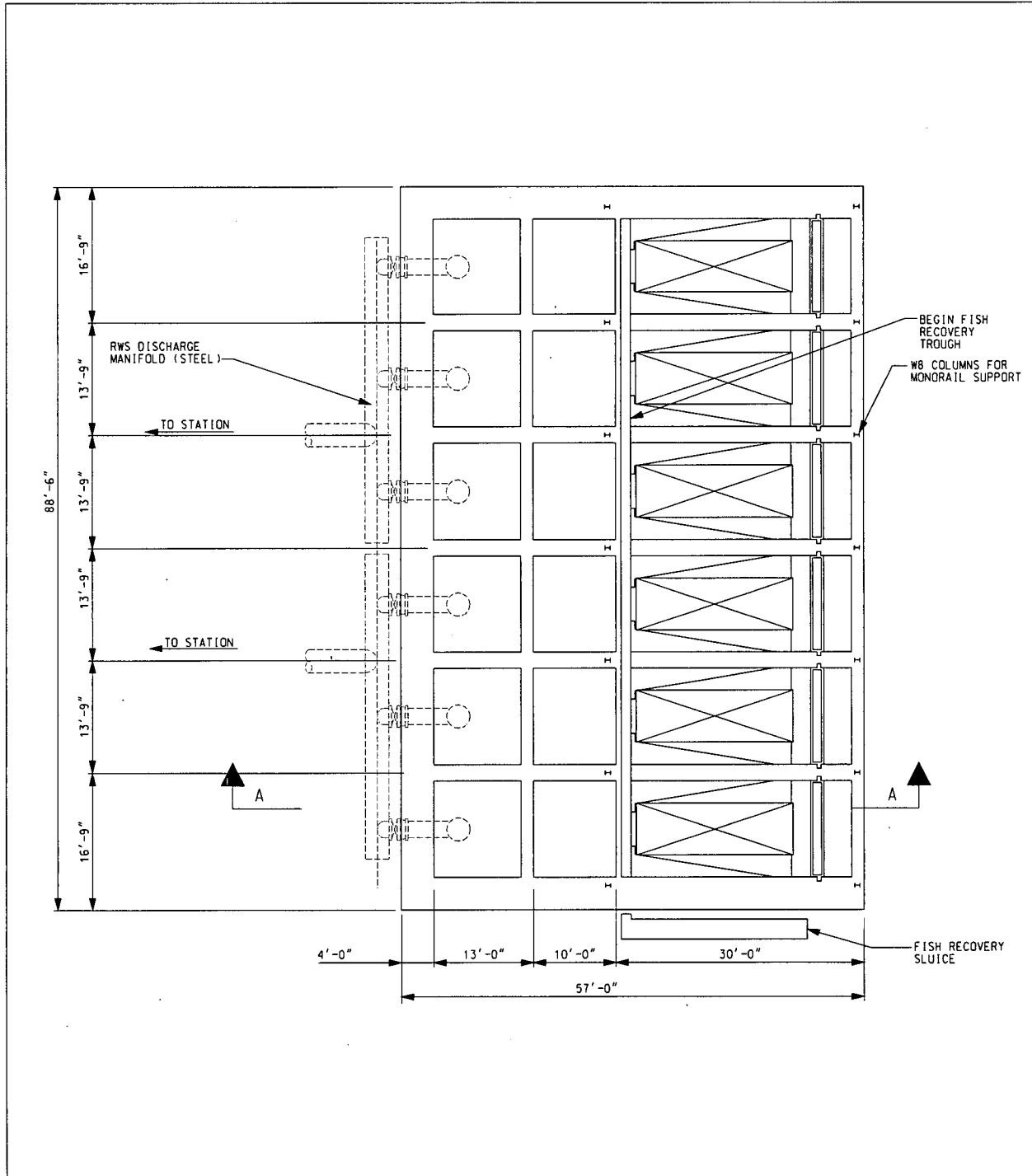
Make-Up Pond A Intake Structure
Sheet 2 of 5
Figure 5.3-3, Rev 3



MAT PLAN @ EL 510.00'
PUMP AND PIPE OUTLINE NOT TO SCALE

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

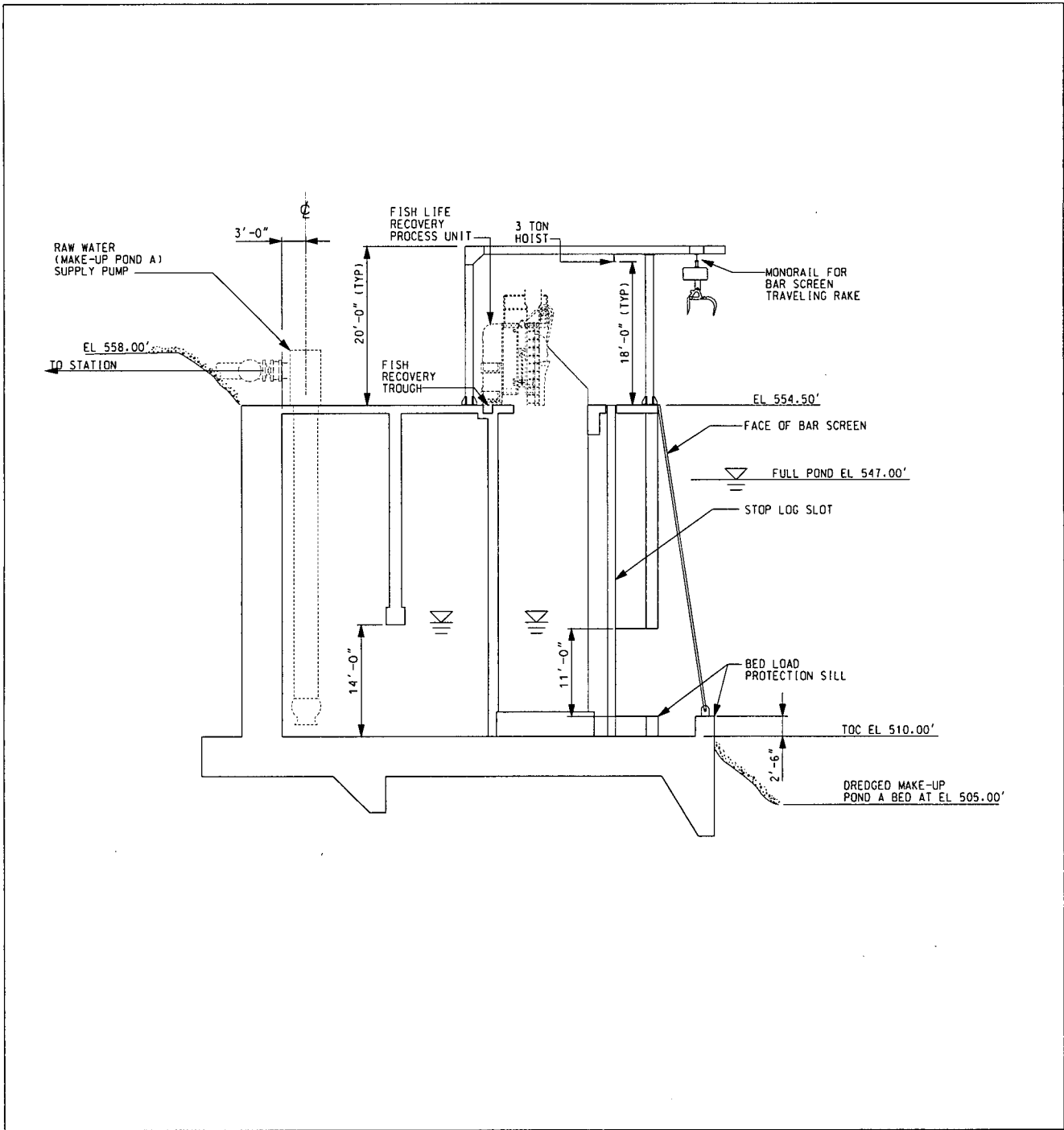
Make-Up Pond A Intake Structure
Sheet 3 of 5
Figure 5.3-3, Rev 3



DECK PLAN
PUMP AND PIPE OUTLINE NOT TO SCALE

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 AND 2

Make-Up Pond A Intake Structure
Sheet 4 of 5
Figure 5.3-3, Rev 3



SECTION A-A
 PUMP AND PIPE OUTLINE NOT TO SCALE

WILLIAM STATES LEE III
 NUCLEAR STATION UNITS 1 AND 2

Make-Up Pond A Intake Structure
 Sheet 5 of 5
 Figure 5.3-3, Rev 3