APPENDIX L2

Conditional Letter of Map Revision Request

Conditional Letter of Map Revision Request

For

North River Farms

At

San Luis Rey River

City of Oceanside, California

Project No. 397-02

Prepared For:

The NRF Project Owner LLC.

2235 Encinitas Blvd, Suite 216

Encinitas, CA 92024

February 2018

Prepared by:

Tory R. Walker, PE
R.C.E. 45005

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES
122 CIVIC CENTER DR, STE 206, VISTA, CA 92084 · 760-414-9212

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ATTACHMENTS

1.0 INTRODUCTION

This is a Conditional Letter of Map Revision (CLOMR) Request for the proposed project, North River Farms, located west of the intersection of Vandergrift Boulevard and North River Road, (APNs 157-100-83 and 157-100-84) in the City of Oceanside, California. The proposed project will include the mass grading of 130 proposed residential lots that will include up to 725 residential units including mixed commercial. The proposed grading is located within the Effective FEMA Zone AE along the northern bank of the San Luis Rey River, with 100-year water surface elevations indicated. The downstream tie-in to the effective FEMA Flood Insurance Rate Map (FIRM) Panel 06073C0468H, dated May 12, 2012, occurs at FIS Cross Section AC. The upstream tie-in occurs at FIS Cross Section AL on FIRM Panel 06073C0469G, the effective floodplain extends to FIRM panels 0673C04756H to the southwest and FIRM panel 06073C0457G to the southeast including parts of the Guajome lake. Copies of the Effective Firms are included in Attachment 7.

2.0 APPLICABILITY AND PROJECT TYPE

Based on the criteria established by FEMA through its National Flood Insurance Program Regulations Chapter 44 of the Code of Federal Regulations (44CFR) parts 60, 65, and 72 enclosed are the following items:

- MT-2 Forms 1 and 2
- HEC-RAS hydraulic models
- Pre-project and post-project floodplain mapping
- Floodplain mapping (annotated FIRMs), floodway data table, floodway profile, and work map
- Digital files for the hydraulic models and mapping

The descriptions that follow go into further detail regarding the hydrologic and hydraulic aspects of this CLOMR submittal.

3.0 PROJECT OVERVIEW

3.1 Project Location

The North River Farms Project is located west of the intersection of Vandergrift Boulevard and North River Road (APNs 157-100-83 and 157-100-84) in the City of Oceanside, California. The southern portion of the proposed grading, south of North River Road, is located within the Effective FEMA Zone AE along the northern bank of the San Luis Rey River (see Figure 3.1 below):

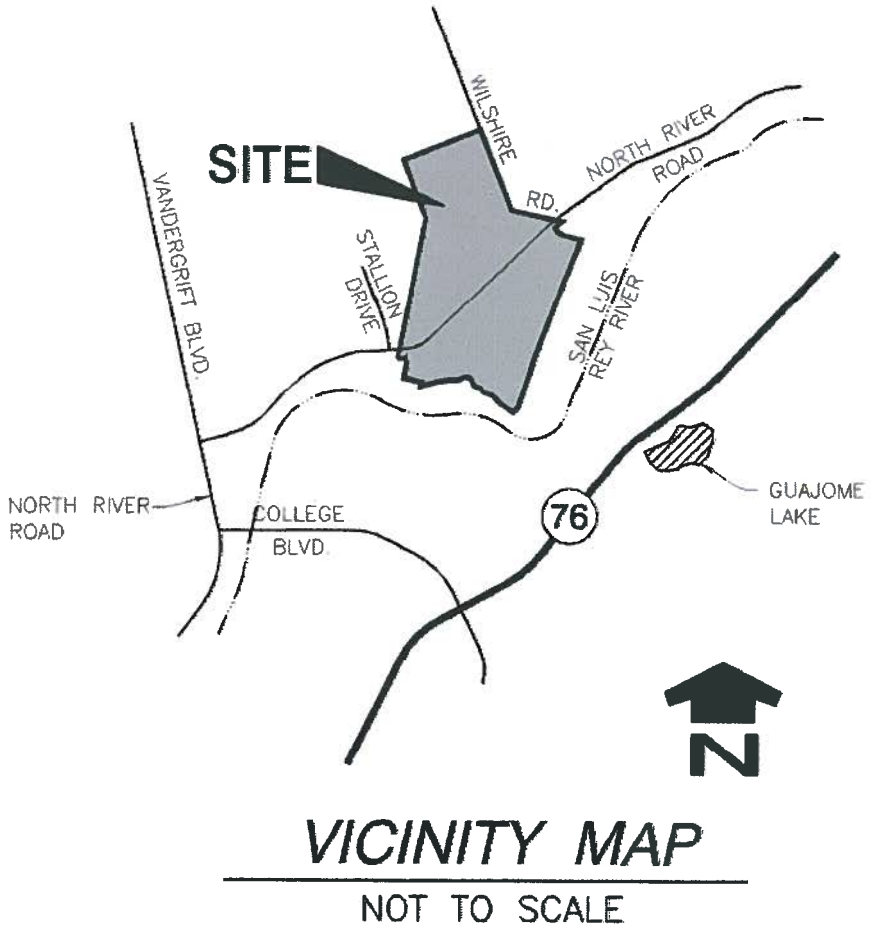

Figure 3.1

3.2 Project Description

The proposed project will include the mass grading of 22 proposed lots that will include up to 725 residential dwelling units and mixed-use commercial. The project site encroaches within the Zone AE floodplain, along the northern portion of the San Luis Rey River floodplain. The project applicant proposes a balanced cut and fill operation to raise the project site above the 100-year inundation line. Grading information is available in the Vesting Tentative plans for North River Farms (at this time considered the preliminary grading plans) provided in Attachment 8.

4.0 HYDROLOGY

4.1 Hydrology

The effective FEMA Flood Insurance Study (FIS) 06073CV001D, dated April 5, 2016, lists the flows for the San Luis Rey River reported downstream of the confluence with Moosa Canyon Creek, down to the mouth of the Pacific Ocean. These flows are listed in Table 1 below:

Table 1: Summary of Peak Flows

Location	Drainage Area (mi^2)	Peak Discharge (cfs)			
		10-year	50-year	100-year	500-year
FEMA FIS SD County 2012	560.0	6,600	31,000	51,000	120,000

5.0 HYDRAULIC MODELS

5.1 Effective Model

The Effective HEC-RAS Hydraulic Model and Effective Work Map were obtained in digital form from the FEMA Project Library. The Effective HEC-RAS Hydraulic Model is provided in Attachment 4.

The model is bound at the upstream (US) and downstream (DS) ends by FEMA FIS cross sections AL and AC, respectively. Only the 100-year storm event was included in the model results provided by FEMA.

Manning's roughness coefficients through the study area range between n=0.03-0.08 in the main channel and 0.04-0.05 in the overbanks. The FIS published 100-year computed water surface elevations (WSELs) range from 104.4 feet US to 91.6 feet DS (NAVD 88) through this area.

5.2 Duplicate Effective/Existing Conditions Model

The Effective HEC-RAS Model was used to create the Duplicate Effective Model. HEC-RAS version 4.1 was used. In the Effective HEC-RAS Model 10-year (10%), 50-year (2%), and 500-year (0.2%) flows were also run; therefore, the Duplicate Effective/Existing Conditions HEC-RAS Model included in this submittal includes the hydraulic results for the same flood frequencies.

The Duplicate Effective HEC-RAS Model also reflects the "existing" condition within the reach. Careful review determined that there have been no modifications or changes within the study boundaries. Since no man-made modifications or changes have been made to this river reach since the map was last revised, the Effective Model is also considered the Existing Condition Model.

5.3 Developed Condition Model

The Post-Project Model incorporates the proposed project grading. The proposed grading, as shown on the preliminary grading plans (refer to Attachment 8), impacts the northern bank of the San Luis Rey River approximately between cross sections AC and AJ.

Because there is a shaded Zone X (500-year inundation limits) mapped within the project area, a 500-year analysis was performed for the post-project condition; the starting 500-year WSEL from the San Luis Rey River FEMA FIS profile at cross section AB (92 feet) was used as the downstream boundary condition. The FEMA published 120,000 cfs 500-year peak flow from the Effective Model was used. The resulting floodplain limits were mapped between cross sections AC and AJ. The table that follows compares the computed WSELs for the existing project and proposed project conditions.

6.0 CONCLUSION

Table 3 compares the computed WSELs for the post-development conditions and the existing conditions. Results from the two models show that the proposed grading will cause increases in WSELs between cross sections AC and AJ. Per NFIP regulations, any increment greater than one foot will require notifications to be sent to the property owners affected by this increase. The proposed project causes increase in WSELs below 1.0 foot, and all building pads will be above the 100-year inundation line, as shown in the supporting documentation; therefore, no notifications are necessary. The Effective Floodway was not revised, as shown in the HEC-RAS output table included in Attachments 4 and 5. The floodplain mapping is shown on the submitted Work Map in Attachment 6 and on the annotated FIRMs found in Attachment 7.

Table 3: Summary of Differences in WSELs

Cross Section ID	Existing Condition Model WSEL (ft. - NAVD 88)	Proposed Condition Model WSEL (ft. – NAVD 88)	Change in WSELs (ft.) Proposed vs Existing Model
10579.00 (AL)	111.61	111.61	0.00
10234	108.94	108.94	0.00
9869	106.56	106.56	0.00
9569.35 (AK)	107.31	107.31	0.05
9062 (AJ)	106.66	106.70	0.07
8615.85	105.35	105.45	0.11
8161.7 (AI)	104.15	104.33	0.09
7645.16	102.69	103.02	0.08
7000.4 (AH)	100.40	100.58	0.25
6455.66	97.69	98.03	0.20
5982.43 (AG)	96.28	96.37	0.02
5536.03	95.70	95.68	0.00
6169.79 (AF)	95.50	95.51	0.00
4222.64 (AE)	95.00	95.00	0.00
3856.01	94.67	94.67	-0.01
3545.16 (AD)	94.37	94.37	0.00
3001.61	92.74	92.74	0.00
2749.05	92.67	92.67	0.00
2194.69 (AC)	91.58	91.58	0.00

ATTACHMENT 1

MT-2 Forms:

Form 1, Form 2 and Payment Form

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. Please do not send your completed survey to the above address.

PRIVACY ACT STATEMENT

AUTHORITY: The National Flood Insurance Act of 1968, Public Law 90-448, as amended by the Flood Disaster Protection Act of 1973, Public Law 93-234.

PRINCIPAL PURPOSE(S): This information is being collected for the purpose of determining an applicant's eligibility to request changes to National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM).

ROUTINE USE(S): The information on this form may be disclosed as generally permitted under 5 U.S.C § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA/NFIP/LOMA-1 National Flood Insurance Program (NFIP); Letter of Map Amendment (LOMA) February 15, 2006, 71 FR 7990.

DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a (NFIP) Flood Insurance Rate Maps (FIRM).

A. REQUESTED RESPONSE FROM DHS-FEMA

This request is for a (check one):

☒ CLOMR: A letter from DHS-FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☐ LOMR: A letter from DHS-FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See 44 CFR Ch. 1, Parts 60, 65 & 72)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Example: 480301 480287	City of Katy Harris County	TX TX	48473C 48201C	0006D 0220G	02/08/83 09/28/90
060294	Oceanside, City of	CA	06073C	0466H	05/16/12
060294	Oceanside, City of **Refer to the attached report for additional panels	CA	06073C	0489G	05/16/12

2. a. Flooding Source: San Luis Rey River

   b. Types of Flooding: ☒ Riverine ☐ Coastal ☐ Shallow Flooding (e.g., Zones AO and AH)
   ☐ Alluvial fan ☐ Lakes ☐ Other (Attach Description)

3. Project Name/Identifier: North River Farms

4. FEMA zone designations affected: Zone AE (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

   a. The basis for this revision request is (check all that apply)

   ☒ Physical Change ☐ Improved Methodology/Data ☐ Regulatory Floodway Revision ☐ Base Map Changes
   ☐ Coastal Analysis ☐ Hydraulic Analysis ☐ Hydrologic Analysis ☐ Corrections
   ☐ Weir-Dam Changes ☐ Levee Certification ☐ Alluvial Fan Analysis ☐ Natural Changes
   ☐ New Topographic Data ☐ Other (Attach Description)

   Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following structures (check all that apply)

Structures: ☐ Channelization ☐ Levee/Floodwall ☐ Bridge/Culvert ☐ Dam ☐ Fill ☐ Other (Attach Description)

c. ☒ Documentation of ESA compliance is submitted (required to initiate CLOMR review). Please refer to the instructions for more information.

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☒ Yes Fee amount: $8,500 ☐ No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Lance Waite	Company: Integral Communities
Mailing Address: 2235 Encinitas Blvd, Ste 216 Encinitas, CA	Daytime Telephone No.: (760) 944-7511 Fax No.: (760) 944-7577
	E-Mail Address: drood@integralcommunities.com
Signature of Requester (required):	Date: 04/30/2018

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirements for when fill is placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. For Conditional LOMR requests, the applicant has documented Endangered Species Act (ESA) compliance to FEMA prior to FEMA's review of the Conditional LOMR application. For LOMR requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Steve Strapac, City Engineer	Community Name: City of Oceanside
Mailing Address: 300 N. Coast Highway Oceanside, CA 92054	Daytime Telephone No.: (760) 435-5074 Fax No.: (760) 435-5165
	E-Mail Address: sstrapac@ci.oceanside.ca.us
Community Official's Signature (required):	Date: 4/12/2018

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting information as per NFIP regulations paragraph 65.2(b) and as described in the MT-2 Forms instructions. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Tory R. Walker	License No.: 45006	Expiration Date: 03/31/18
Company Name: Tory R. Walker Engineering, Inc.	Telephone No.: 760-414-9212	Fax No.: 760-414-9277
Signature:	Date: 4/2/18	E-Mail Address: Tory@trwengineering.com

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☒ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☐ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans

Seal (Optional)

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

RIVERINE HYDROLOGY & HYDRAULICS FORM

O.M.B No. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.5 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington VA 20958-3005, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

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DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a NFIP Flood Insurance Rate Maps (FIRM).

Flooding Source: San Luis Rey River

Note: Fill out one form for each flooding source studied

A. HYDROLOGY

1. Reason for New Hydrologic Analysis (check all that apply)

☒ Not revised (skip to section B) ☐ No existing analysis ☐ Improved data
☐ Alternative methodology ☐ Proposed Conditions (CLOMR) ☐ Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	Effective/FIS (cfs)	Revised (cfs)

3. Methodology for New Hydrologic Analysis (check all that apply)

☐ Statistical Analysis of Gage Records ☐ Precipitation/Runoff Model → Specify Model: _____
☐ Regional Regression Equations ☐ Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters), and documentation to support the new analysis.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Is the hydrology for the revised flooding source(s) affected by sediment transport? ☐ Yes ☐ No

If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation..

B. HYDRAULICS

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.) Effective	Proposed/Revised
Downstream Limit*	FIS County of San Diego	AC	91.6	91.6
Upstream Limit*	FIS County of San Diego	AJ	107.3	107.3

*Proposed/Revised elevations must tie-into the Effective elevations within 0.5 foot at the downstream and upstream limits of revision.

2. Hydraulic Method/Model Used: HEC-RAS 4.1.0

3. Pre-Submittal Review of Hydraulic Models*

DHS-FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS.

4.

Models Submitted	Natural Run		Floodway Run		Datum
Duplicate Effective Model*	File Name: NRF_San Luis Rey Riv	Plan Name: SLR	File Name: NRF_San Luis Rey Riv	Plan Name: SLR	NAVD 88
Corrected Effective Model*	File Name:	Plan Name:	File Name:	Plan Name:	
Existing or Pre-Project Conditions Model	File Name: NRF_San Luis Rey Riv	Plan Name: Exist_Cond.	File Name: NRF_San Luis Rey Riv	Plan Name: SLR	NAVD 88
Revised or Post-Project Conditions Model	File Name: NRF_San Luis Rey Riv	Plan Name: Post_Cond.	File Name: NRF_San Luis Rey Ri	Plan Name: SLR_Post_Cond.	NAVD 88
Other - (attach description)	File Name:	Plan Name:	File Name:	Plan Name:	

* For details, refer to the corresponding section of the instructions.

☒ Digital Models Submitted? (Required)

C. MAPPING REQUIREMENTS

A **certified topographic work map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

☒ Digital Mapping (GIS/CADD) Data Submitted (preferred)

Topographic Information: Existing topo is NAVD 88 vertical datum.

Source: R.J. Lung/City of Oceanside Topo Date: R.J. Lung flown 03-17-15/Oceanside Topo date Unkwo

Accuracy: R.J. Lung Topo is 1-foot and City Topo is 2-foot

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach **a copy of the effective FIRM and/or FBFM**, at the same scale as the original, annotated to show the boundaries of the revised 1%-and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%-and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area on revision.

☒ Annotated FIRM and/or FBFM (Required)

D. COMMON REGULATORY REQUIREMENTS*

1. For LOMR/CLOMR requests, do Base Flood Elevations (BFEs) increase? ☒ Yes ☐ No

   a. For CLOMR requests, if either of the following is true, please submit **evidence of compliance with Section 65.12 of the NFIP regulations**:

      - The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot compared to pre-project conditions.
      - The proposed project encroaches upon a SFHA with or without BFEs established and would result in increases above 1.00 foot compared to pre-project conditions.

   b. Does this LOMR request cause increase in the BFE and/or SFHA compared with the effective BFEs and/or SFHA? ☐ Yes ☐ No
      If Yes, please attach **proof of property owner notification and acceptance (if available)**. Elements of and examples of property owner notifications can be found in the MT-2 Form 2 Instructions.

2. Does the request involve the placement or proposed placement of fill? ☒ Yes ☐ No

   If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(A)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.

3. For LOMR requests, is the regulatory floodway being revised? ☐ Yes ☐ No

   If Yes, attach **evidence of regulatory floodway revision notification**. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being established. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)

4. For CLOMR requests, please submit documentation to FEMA and the community to show that you have complied with Sections 9 and 10 of the Endangered Species Act (ESA).

For actions authorized, funded, or being carried out by Federal or State agencies, please submit documentation from the agency showing its compliance with Section 7(a)(2) of the ESA. Please see the MT-2 instructions for more detail.

* Not inclusive of all applicable regulatory requirements. For details, see 44 CFR parts 60 and 65.

FEDERAL EMERGENCY MANAGEMENT AGENCY

PAYMENT INFORMATION FORM

Community Name: Oceanside, City Of

Project Identifier: North River Farms

THIS FORM MUST BE MAILED, ALONG WITH THE APPROPRIATE FEE, TO THE ADDRESS BELOW OR FAXED TO THE FAX NUMBER BELOW.

Please make check or money order payable to the National Flood Insurance Program.

Type of Request:

☐ MT-1 application
☒ MT-2 application

LOMC Clearinghouse
847 South Pickett Street
Alexandria, VA 22304-4605
Attn.: LOMC Manager

☐ EDR application

FEMA Project Library
847 South Pickett Street
Alexandria, VA 22304-4605
FAX (703) 212-4090

Request No. (if known): _____ **Check No.:** 177 **Amount:** $6,500

☐ INITIAL FEE* ☐ FINAL FEE ☐ FEE BALANCE** ☐ MASTER CARD ☐ VISA ☒ CHECK ☐ MONEY ORDER

*Note: Check only for EDR and/or Alluvial Fan requests (as appropriate).

****Note: Check only if submitting a corrected fee for an ongoing request.**

COMPLETE THIS SECTION *ONLY* IF PAYING BY CREDIT CARD

CARD NUMBER **EXP. DATE**

☐☐☐☐ – ☐☐☐☐ – ☐☐☐☐ – ☐☐☐☐ ☐☐ – ☐☐

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Month Year

_____ _____

Date Signature

NAME *(AS IT APPEARS ON CARD)*: _____
(please print or type)

ADDRESS: _____
(for your credit card receipt-please print or type) _____

DAYTIME PHONE: _____

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

THE NRF PROJECT OWNER, LLC
888 SAN CLEMENTE DR
SUITE 100
NEWPORT BEACH CA 92660
949-720-3612

FARMERS & MERCHANTS BANK 90-119/1222
315 N HARBOR BLVD
FULLERTON, CA 92832

177

DATE 04/24/2018

Pay:**********Six thousand five hundred dollars and no cents

$ ****6,500.00

TO THE ORDER OF
NATIONAL FLOOD INSURANCE PROGRAM

Jeanne M Chalina

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK—HOLD AT AN ANGLE TO VIEW

⑈000000177⑈ ⑆122201198⑆14209861⑈

ATTACHMENT 2

ESA Compliance Letter

TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES

February 9, 2018

Federal Emergency Management Agency
LOMC Clearinghouse
Attn: LOMC Manager
847 South Pickett Street
Alexandria, VA 22304-4605

SUBJECT: North River Farms – ESA Compliance

Dear LOMC Manager:

The purpose of this letter is to demonstrate ESA compliance, in conjunction with our application for CLOMR for the subject property. Having reviewed the attached Biological report from the project team biologist, the following findings are true to the site. The attached biological report indicates the following:

- The proposed 177-acre North River Farms Project is located in the South Morro Hills area, within the north-eastern portion of the City of Oceanside, California. The proposed project site is located within the North County Multiple Habitat Conservation Program (MHCP; SANDAG 2003), which is a long-term regional conservation plan established to protect sensitive species and habitats in northern San Diego County.
- Per sections 4.3.1 and section 6.2: direct and indirect Impacts to vegetation communities is expected at the project site. The attached report indicates that five vegetation communities considered special-status are found within the project site; The City of Oceanside requires mitigation measures, at various degrees, for the impacted special-status vegetation communities. Mitigation measures have been described in further detail in section 7 of the attached report.
- Per sections 4.3.2 and 5.2.2: there are no special-status plant species observed or expected to occur at the project site.
- Per section 4.3.3 and 6.5: there are no special-status wildlife species detected in the project site, however, some special-status wildlife species have a moderate or higher potential to occur; these include bird and bat species. Moreover, because wildlife species with a moderate or higher potential to occur include bird and bat species, which are highly mobile, it is unlikely that the proposed project would result in the loss of individual adult special-status bird and bat species. Refer to Appendix D of the attached report for more details.

After careful review of the findings described in the attached biological report, we have determined that there are no listed species within the Project Area, including no special status-plant species, however, some special-status wildlife species have a moderate or higher potential to occur. These special-status wildlife species are highly mobile bird and bat species, which is unlikely that the proposed project would result in the loss of individual adult special-status bird and bat species.

Because no listed species, including special-status plants species, were detected or have the potential to occur in the project site, direct impacts to listed species and special-status plant species are not anticipated, moreover, direct and indirect impacts to special-status bird and bat species would be less than significant. Additionally, the project applicant has proposed mitigation measures in line with the recommendations provided in the attached biological report, including additional coordination before the commencement of work. Based on the information provided we have concluded that a "Take" will not occur due to the proposed action.

Best Regards,

Tory R. Walker, PE, CFM, LEED GA
Principal

Attachments

1. APPENDIX D Biological Resources Technical Report for the North River Farms Project.

BIOLOGICAL RESOURCES TECHNICAL REPORT FOR THE NORTH RIVER FARMS PROJECT OCEANSIDE, CALIFORNIA

Prepared for:

Integral Communities
2235 Encinitas Boulevard, Suite 216
Encinitas, California 92024
Contact: Ninia Hammond

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Patricia Schuyler

MAY 2017

ATTACHMENT 3

Effective LOMR
for
San Luis Rey River

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Oceanside San Diego County California	NO PROJECT	FLOODWAY HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 060294		
IDENTIFIER	San Luis Rey River (At Oceanside)	APPROXIMATE LATITUDE & LONGITUDE: 33.251, -117.280 SOURCE: USGS QUADRANGLE DATUM: NAD 83	

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO.: 06073C0468H DATE: May 16, 2012 TYPE: FIRM* NO.: 06073C0469G DATE: May 16, 2012 TYPE: FIRM* NO.: 06073C0756H DATE: May 16, 2012 TYPE: FIRM* NO.: 06073C0757G DATE: May 16, 2012	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 05, 2016 PROFILE(S): 383P-388P FLOODWAY DATA TABLE: TABLE 13

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM - Flood Insurance Rate Map

FLOODING SOURCE(S) & REVISED REACH(ES) See Page 2 for Additional Flooding Sources

San Luis Rey River (At Oceanside) -- from approximately 1,030 feet upstream to approximately 11,930 feet upstream of College Boulevard

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
San Luis Rey River (At Oceanside)	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
	BFEs*	BFEs	YES	YES
	Floodway	Floodway	YES	YES

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

OTHER FLOODING SOURCES AFFECTED BY THIS REVISION

FLOODING SOURCE(S) & REVISED REACH(ES)

San Luis Rey River (At Oceanside) - from approximately 1,030 feet upstream to approximately 11,930 feet upstream of College Boulevard

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
San Luis Rey River (At Oceanside)	Zone A	Zone A	YES	YES

* BFEs - Base Flood Elevations

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Jeffrey D. Lusk
Director, Mitigation Division
Federal Emergency Management Agency, Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052
(510) 627-7175

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the Federal Register. This information also will be published in your local newspaper on or about the dates listed below and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp.

LOCAL NEWSPAPER Name: *The San Diego Union-Tribune*
Dates: December 7, 2016 and December 14, 2016

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination information presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
San Luis Rey River (At Oceanside)								
AA	37,967	696	5,939	8.6	84.5	84.5	84.5	0.0
AB	39,077	590	5,004	10.2	86.1	86.1	86.1	0.0
AC	41,272	513	7,329	7.1	91.6	91.6	91.6	0.0
AD	42,622	981	10,886	4.7	94.4	94.4	94.5	0.1
AE	43,300	1,726	17,686	2.9	95.0	95.0	95.4	0.4
AF	44,247	1,693	17,381	2.9	95.5	95.5	95.8	0.3
AG	45,060	1,055	9,347	5.5	96.3	96.3	97.0	0.7
AH	46,077	1,100	8,014	6.4	100.4	100.4	101.2	0.8
AI	47,239	1,215	9,296	5.5	104.2	104.2	105.1	0.9
AJ	48,139	1,019	8,470	6.0	106.7	106.7	107.4	0.7
AK	48,646	700	8,350	6.1	107.3	107.3	107.9	0.6
AL	49,656	883	6,876	7.4	111.6	111.6	111.6	0.0
AM	51,550	808	9,341	5.5	113.8	113.8	114.0	0.2
AN	53,180	992	7,025	7.3	117.8	117.8	118.5	0.7
AO	55,408	1,090	9,731	5.2	121.9	121.9	122.1	0.2
AP	56,382	938	7,533	6.8	122.9	122.9	123.2	0.3
AQ	58,139	575	6,140	8.3	127.4	127.4	127.4	0.0
AR	59,318	650/0	4,840	10.5	128.9	128.9	129.1	0.2

REVISED DATA

REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017

[1] Feet Above Mouth

REVISED BY LOMR EFFECTIVE DECEMBER 31, 2012

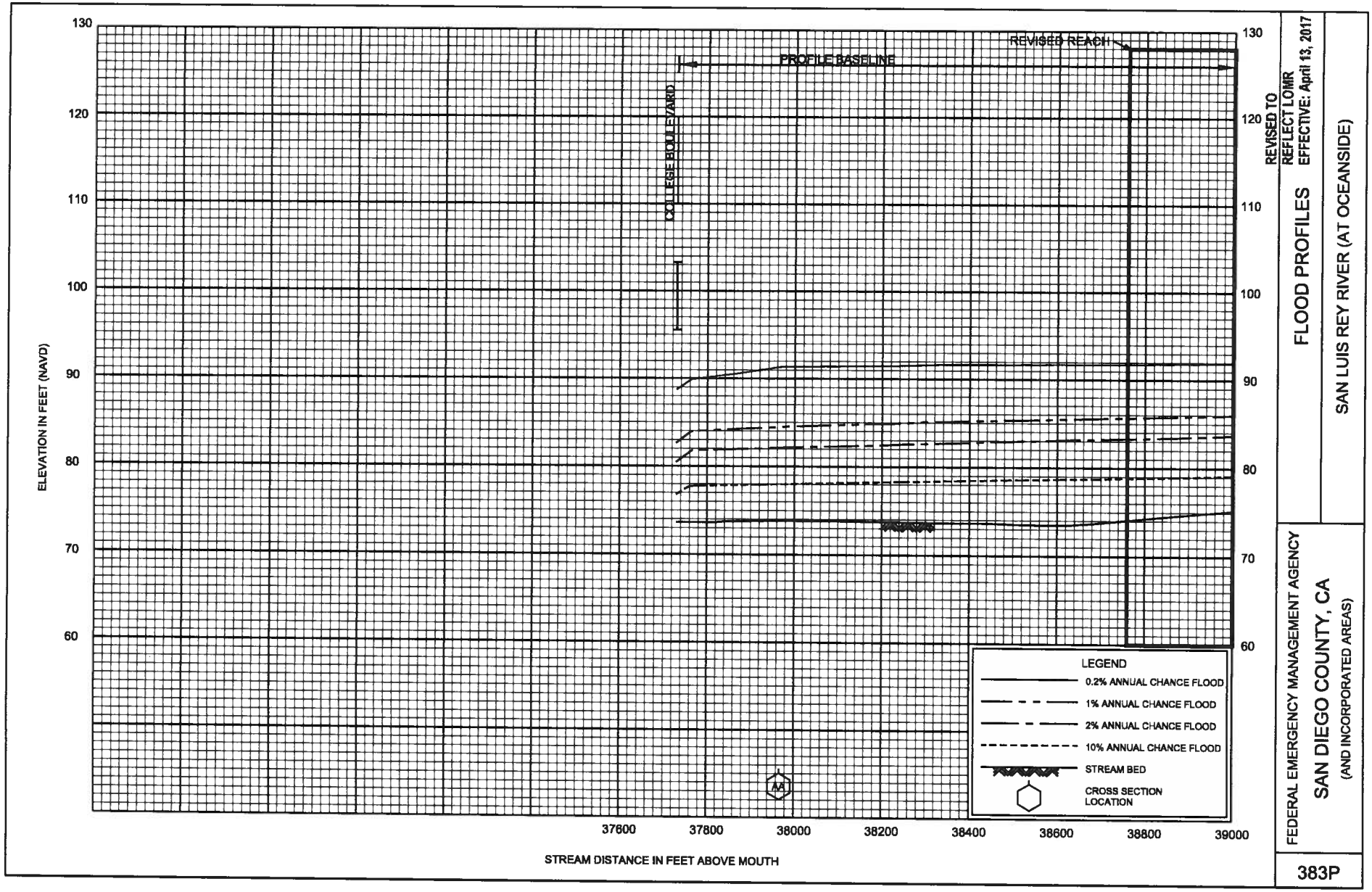
TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

FLOODWAY DATA

SAN LUIS REY RIVER (AT OCEANSIDE)



FLOOD PROFILES

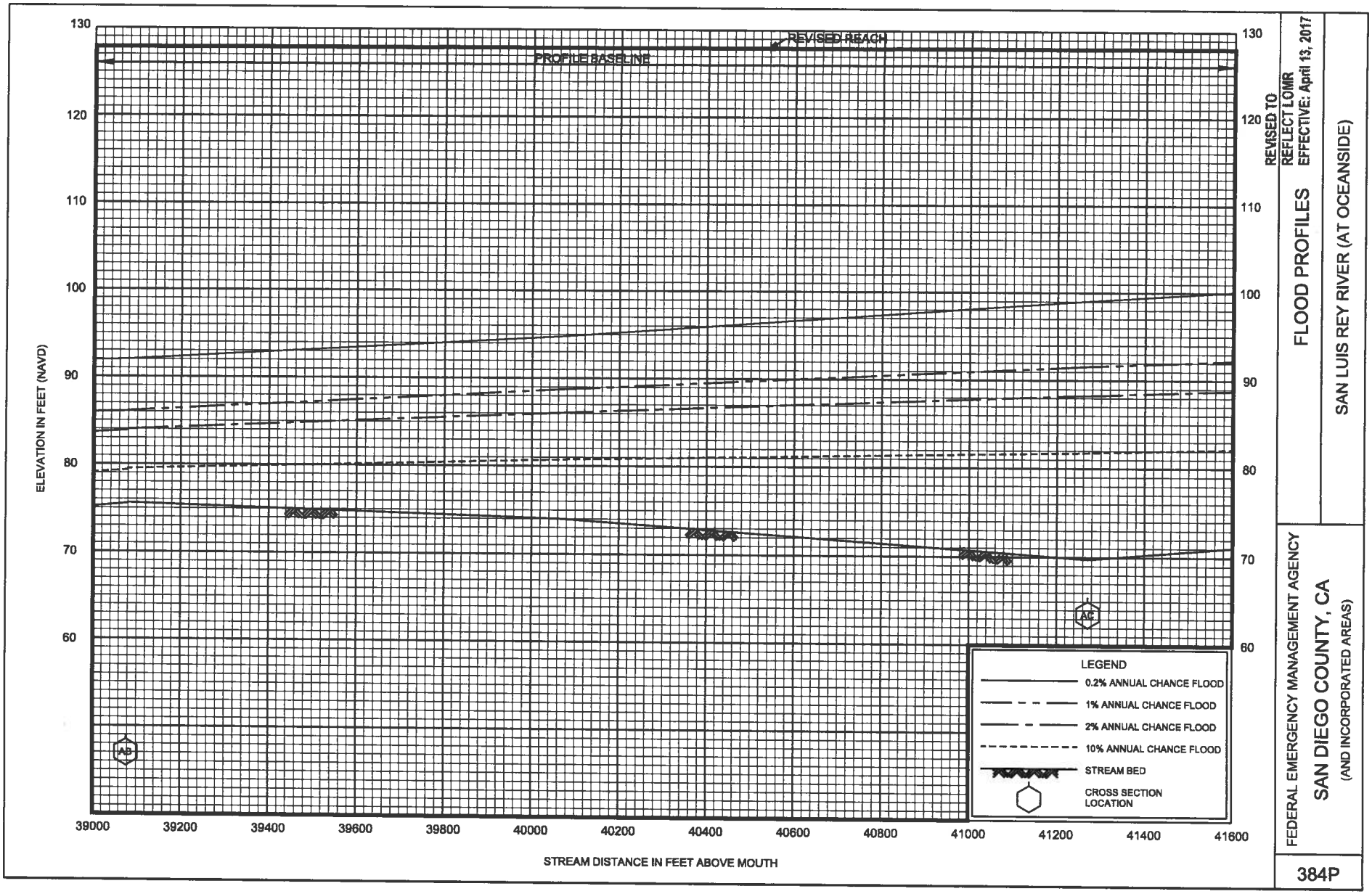
SAN LUIS REY RIVER (AT OCEANSIDE)

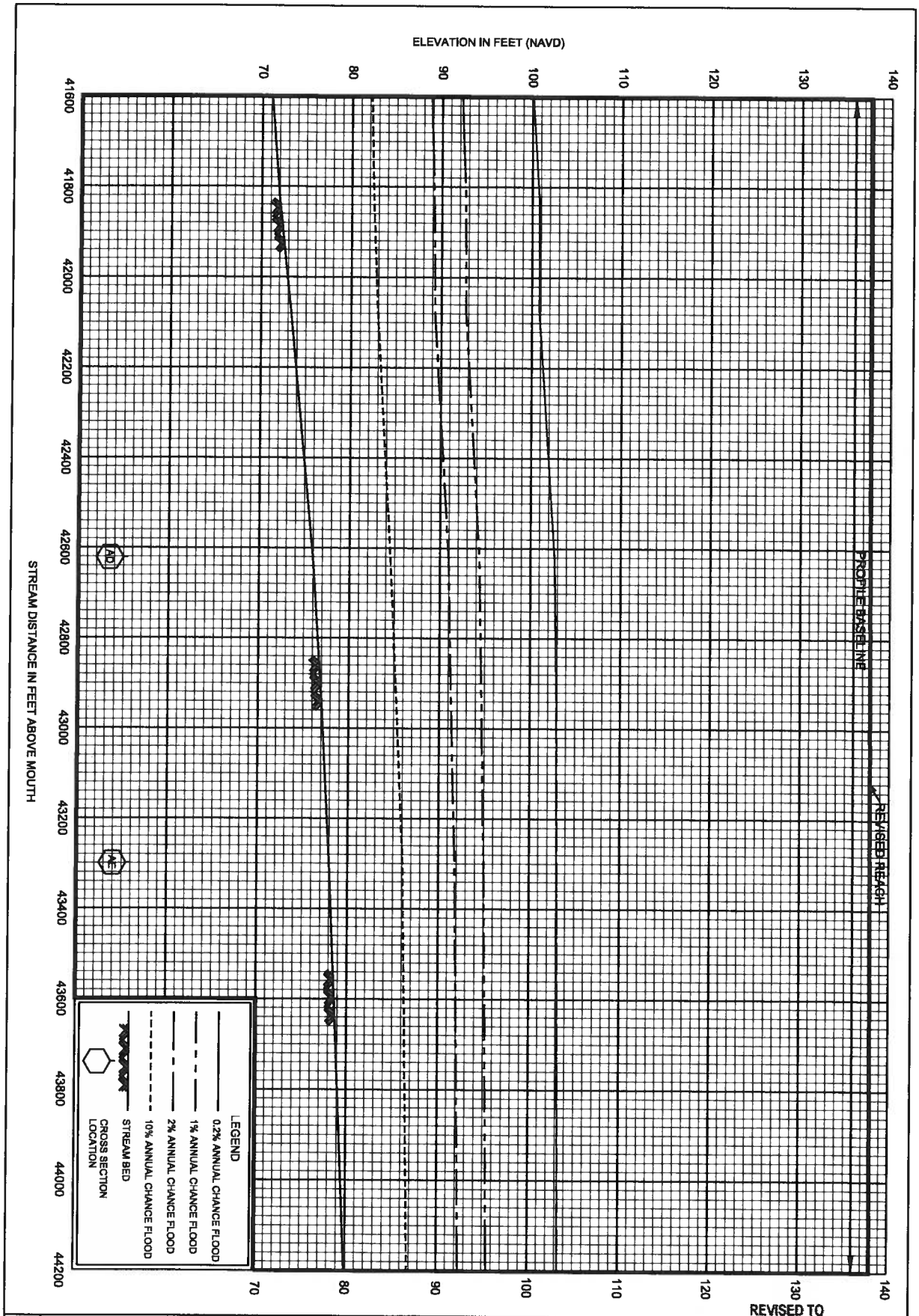
FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA

(AND INCORPORATED AREAS)

383P


REVISED REACH
PROFILE BASELINE
ELEVATION IN FEET (NAVD)
STREAM DISTANCE IN FEET ABOVE MOUTH
130
120
110
100
90
80
70
60
39000
39200
39400
39600
39800
40000
40200
40400
40600
40800
41000
41200
41400
41600
AB
AC
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017
FLOOD PROFILES
SAN LUIS REY RIVER (AT OCEANSIDE)
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)
384P



385P

FEDERAL EMERGENCY MANAGEMENT AGENCY

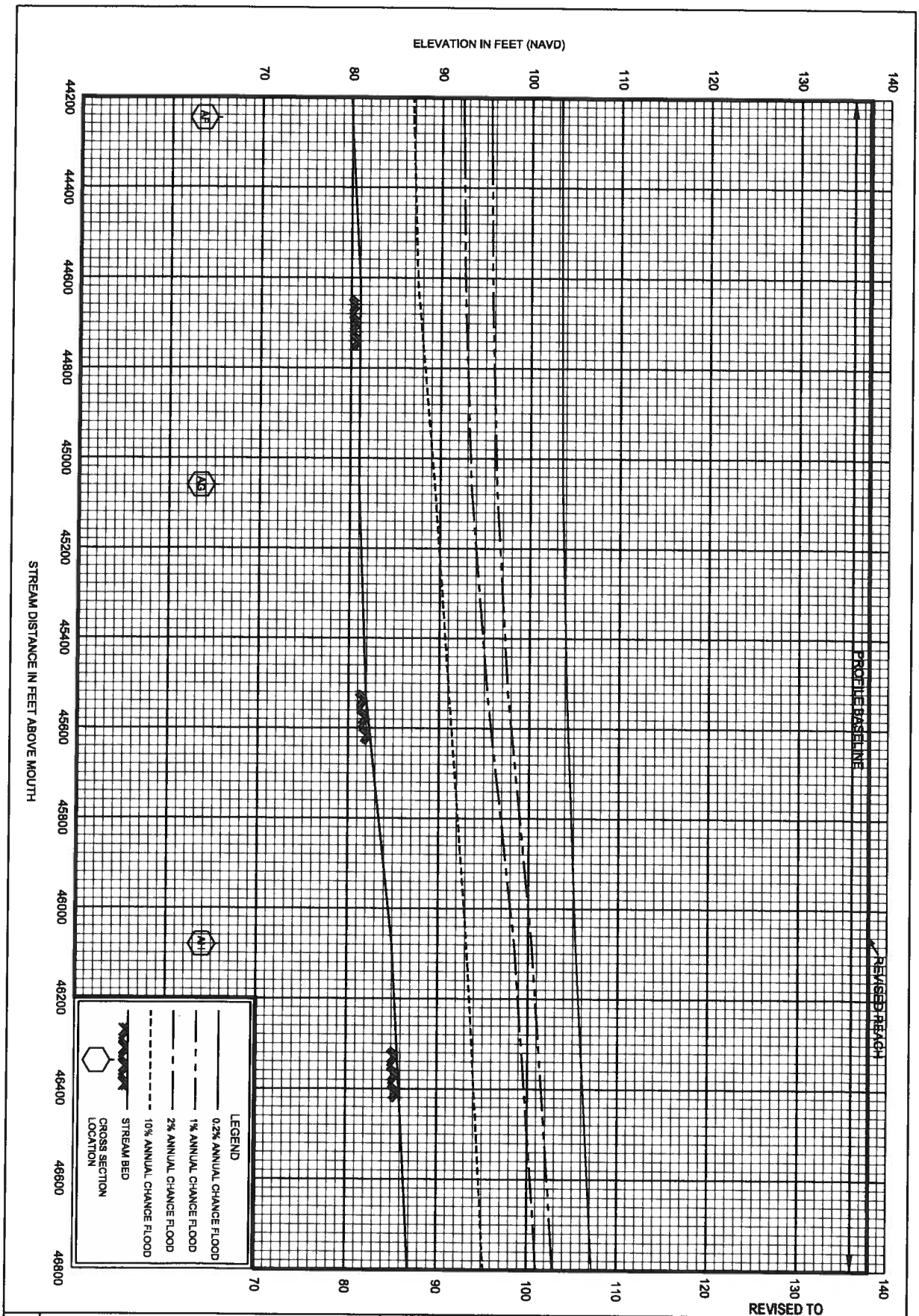
SAN DIEGO COUNTY, CA

(AND INCORPORATED AREAS)

FLOOD PROFILES

REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017

SAN LUIS REY RIVER (AT OCEANSIDE)



386P

FEDERAL EMERGENCY MANAGEMENT AGENCY

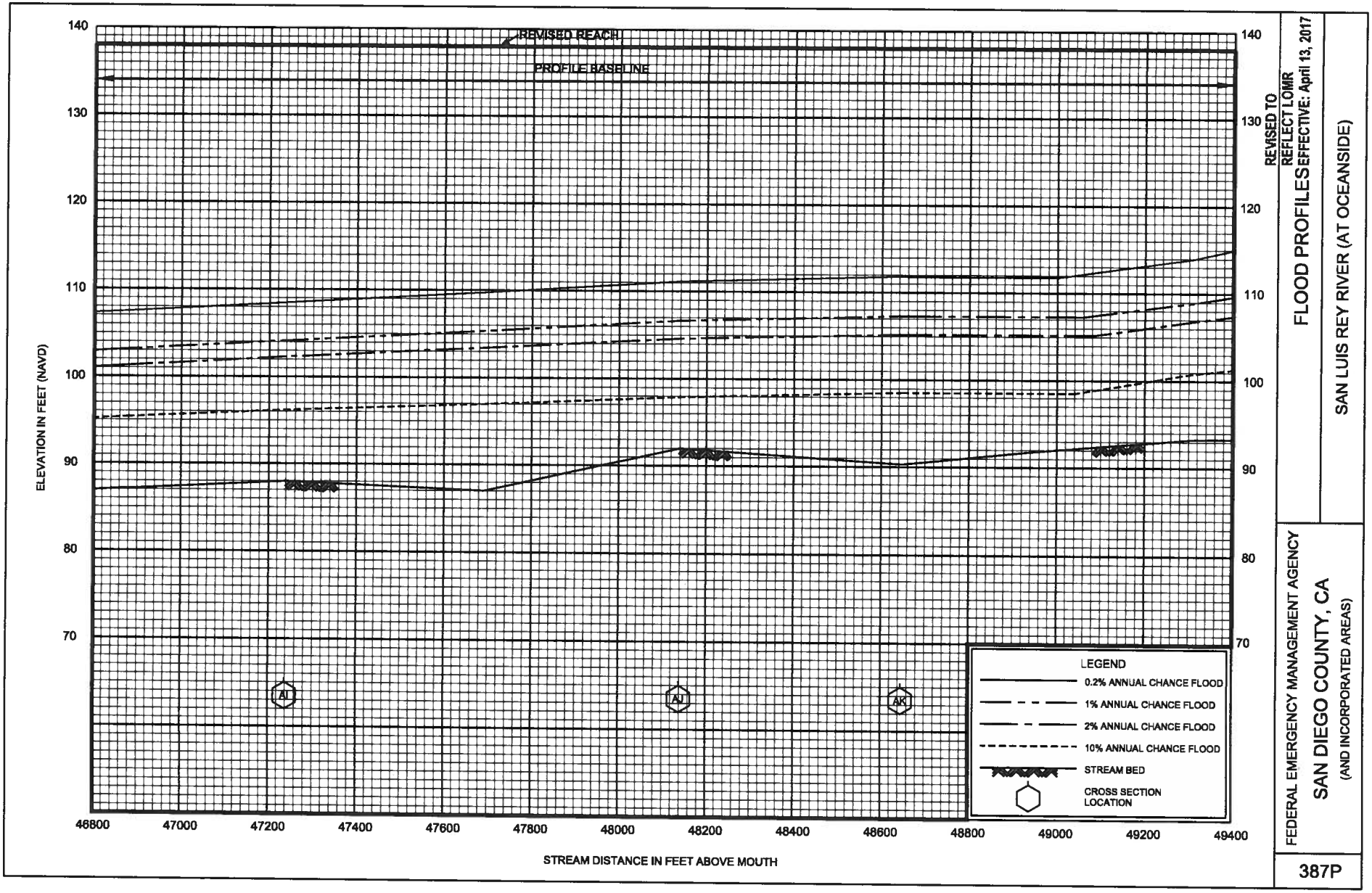
SAN DIEGO COUNTY, CA

(AND INCORPORATED AREAS)

FLOOD PROFILES

REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017

SAN LUIS REY RIVER (AT OCEANSIDE)



REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017

FLOOD PROFILES

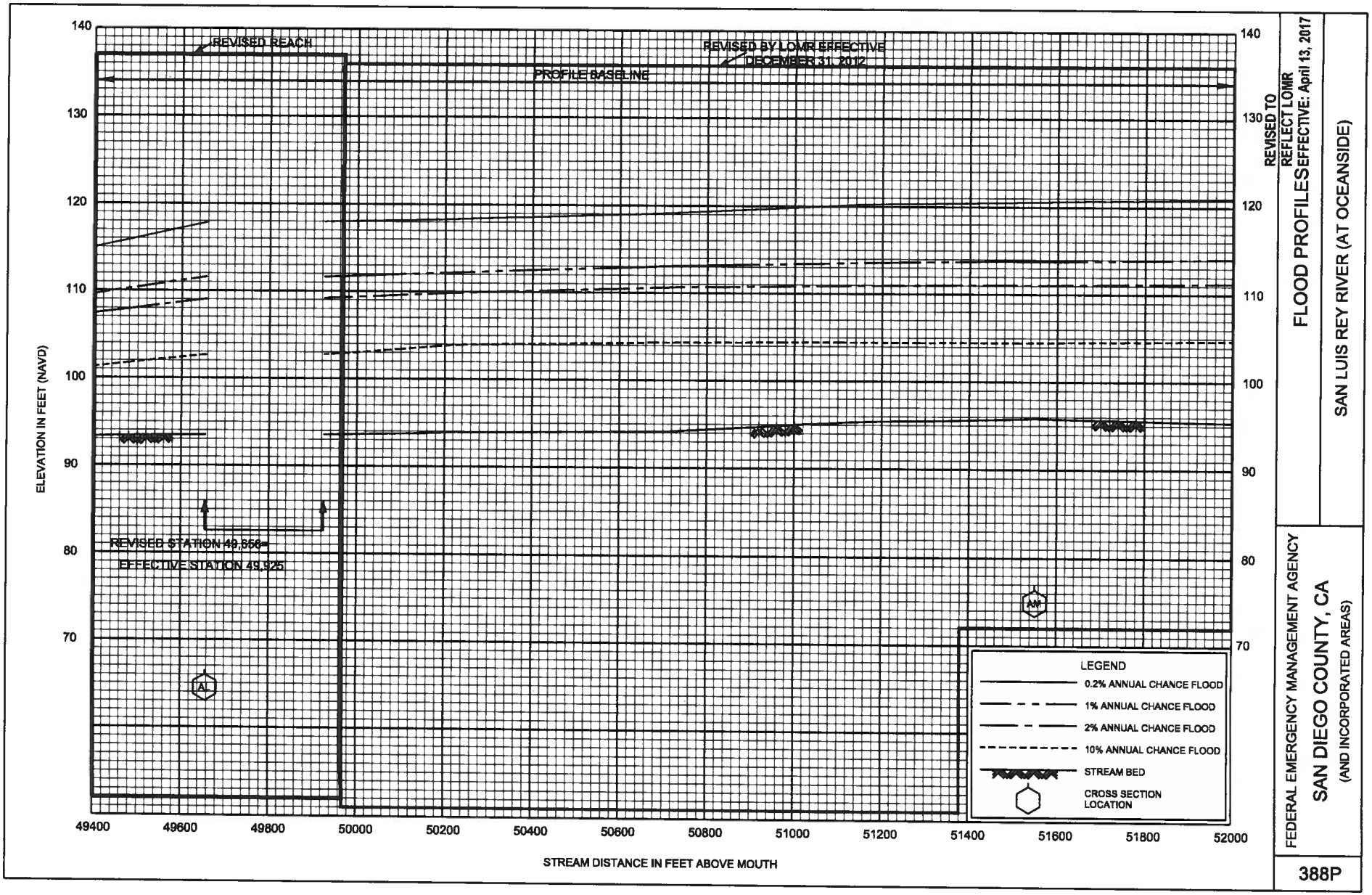
SAN LUIS REY RIVER (AT OCEANSIDE)

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA

(AND INCORPORATED AREAS)

387P



REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017

FLOOD PROFILES

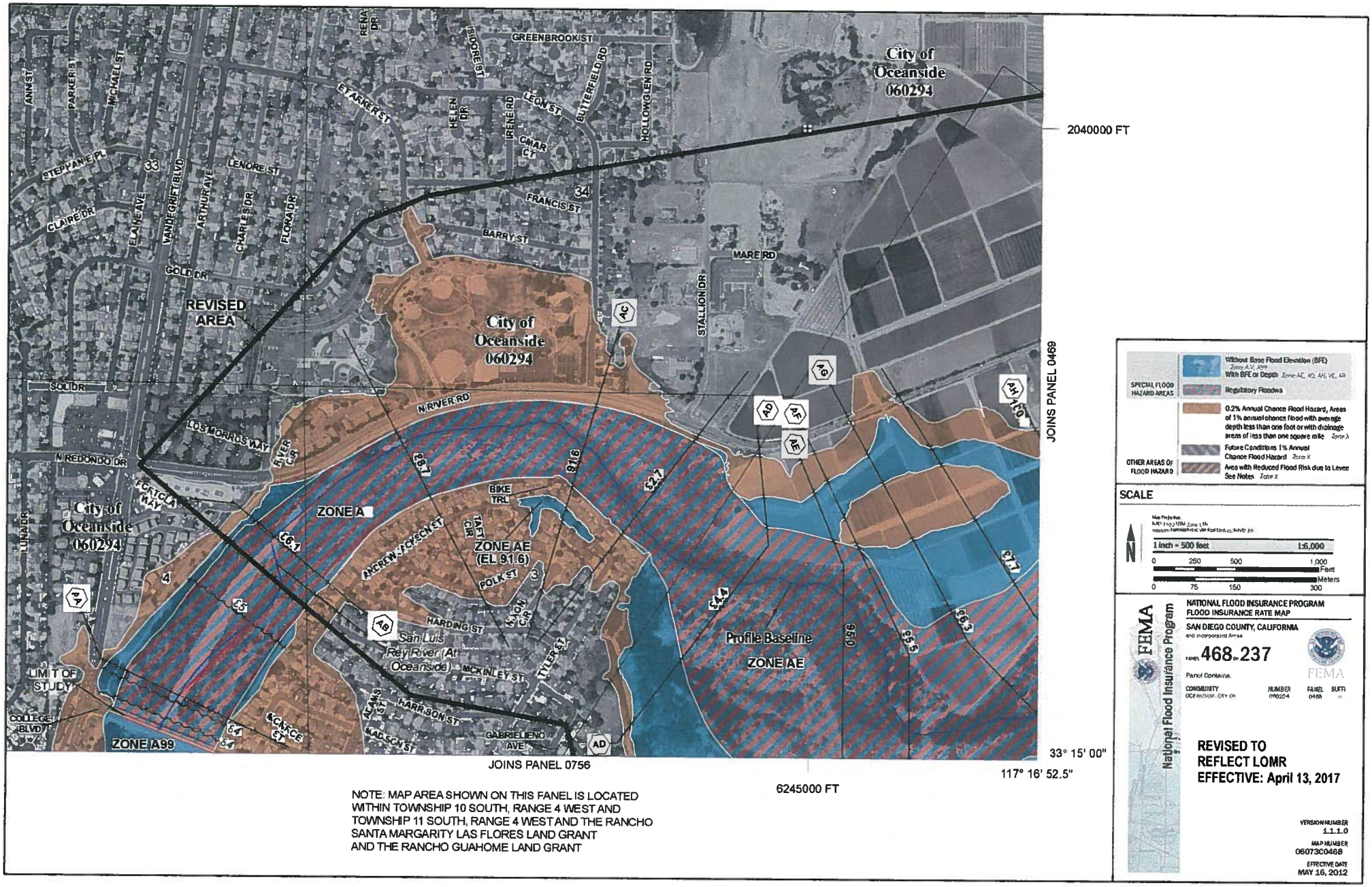
SAN LUIS REY RIVER (AT OCEANSIDE)

FEDERAL EMERGENCY MANAGEMENT AGENCY

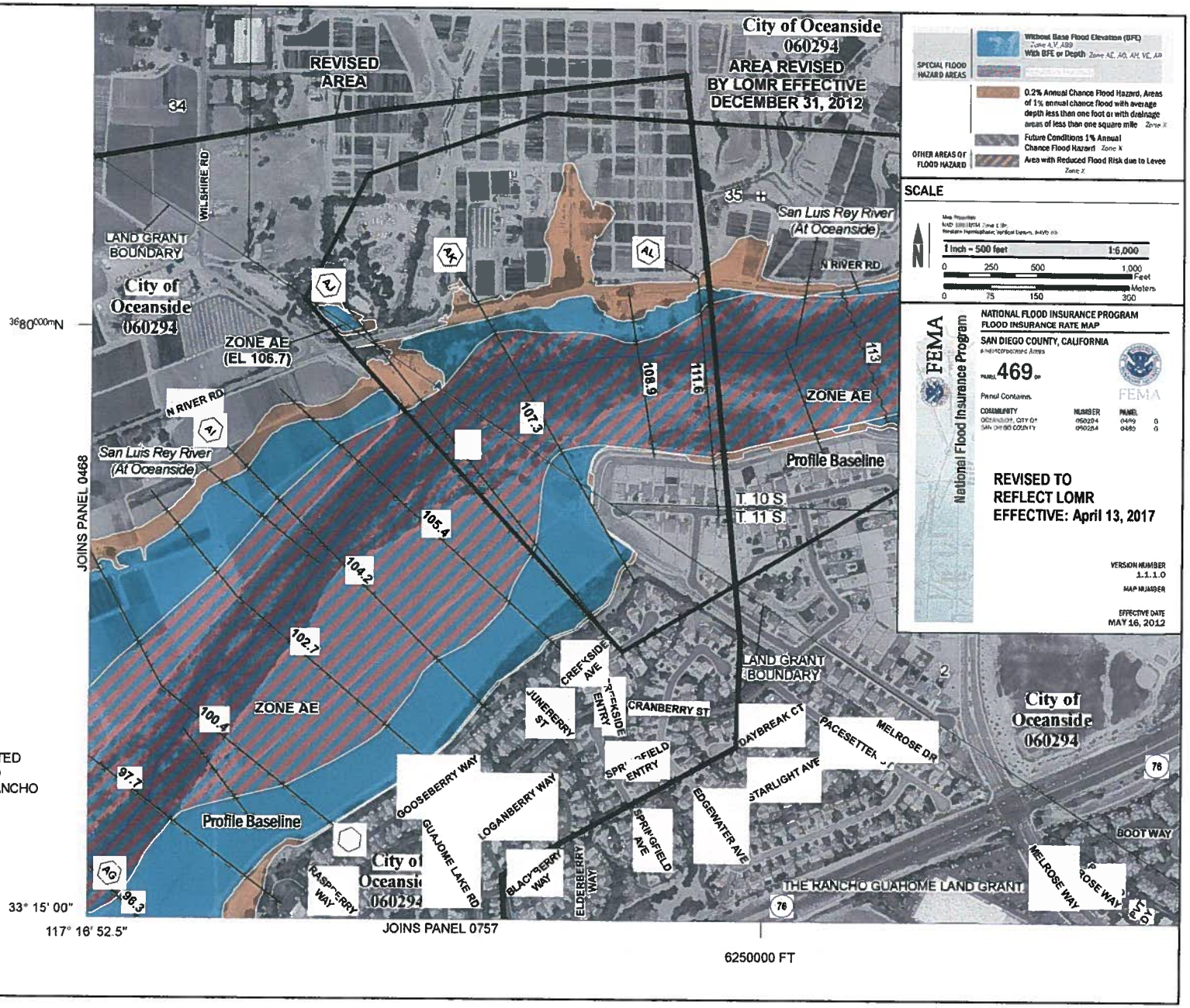
SAN DIEGO COUNTY, CA

(AND INCORPORATED AREAS)

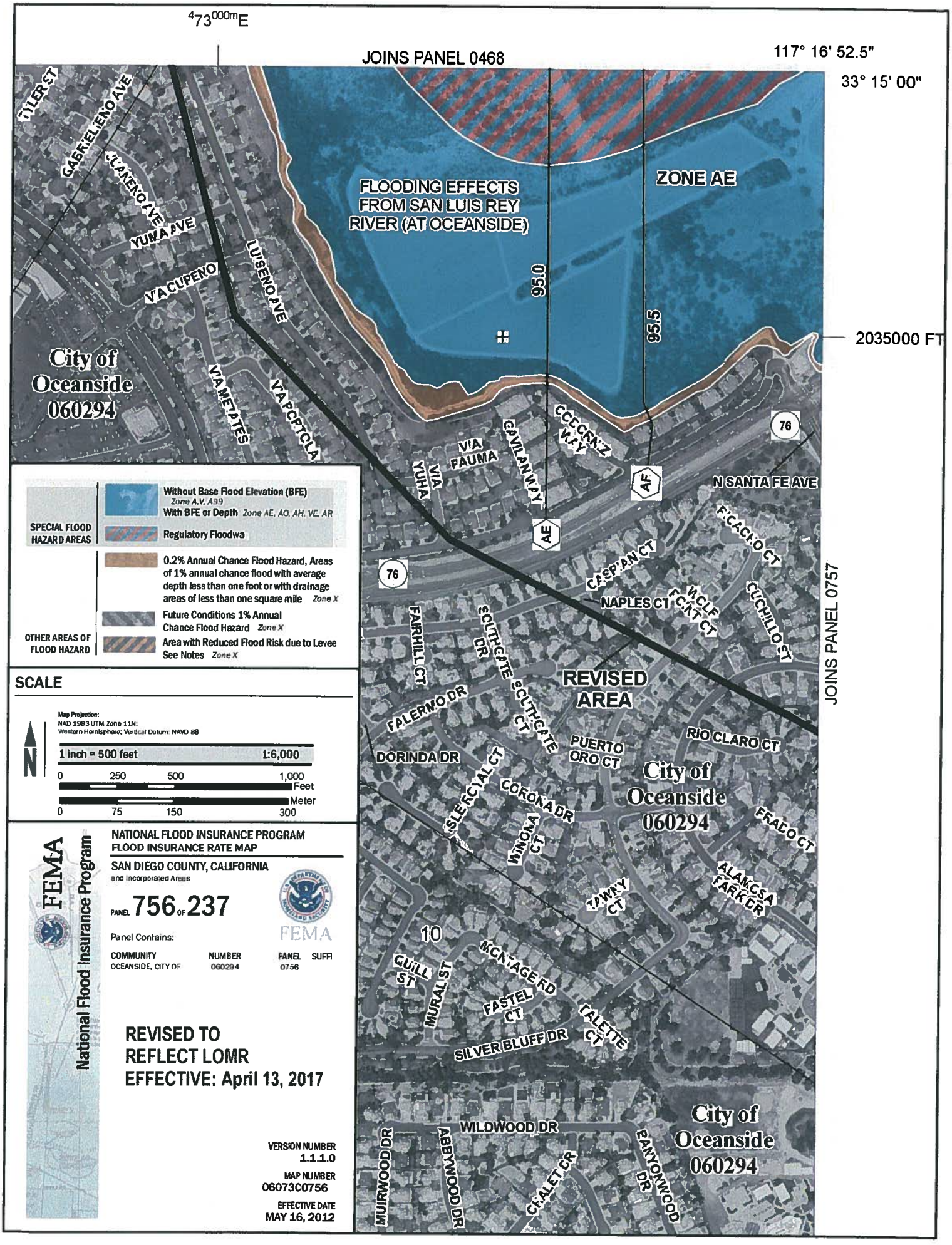
388P

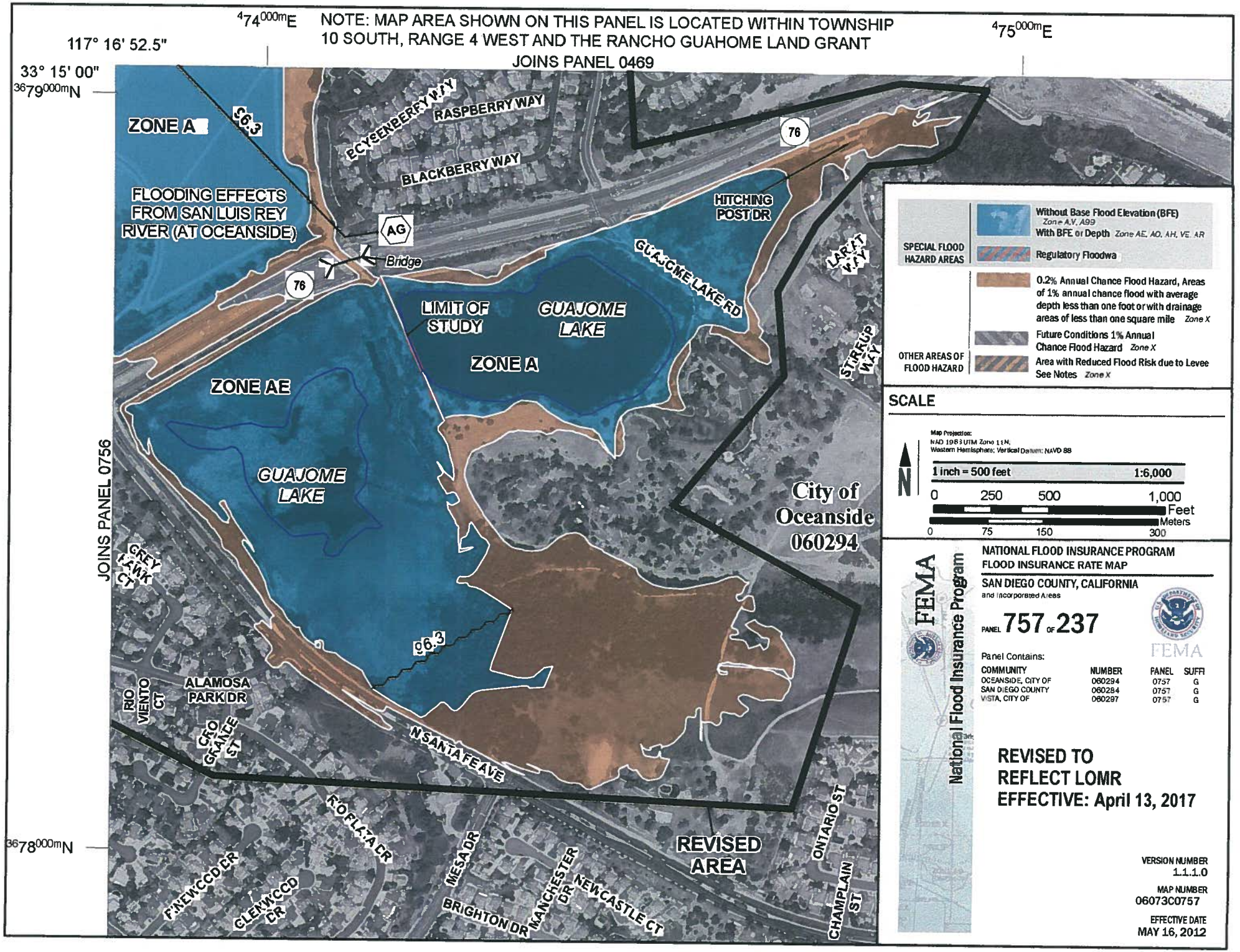


NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 10 SOUTH, RANGE 4 WEST AND TOWNSHIP 11 SOUTH, RANGE 4 WEST AND THE RANCHO SANTA MARGARITY LAS FLORES LAND GRANT AND THE RANCHO GUAHOME LAND GRANT



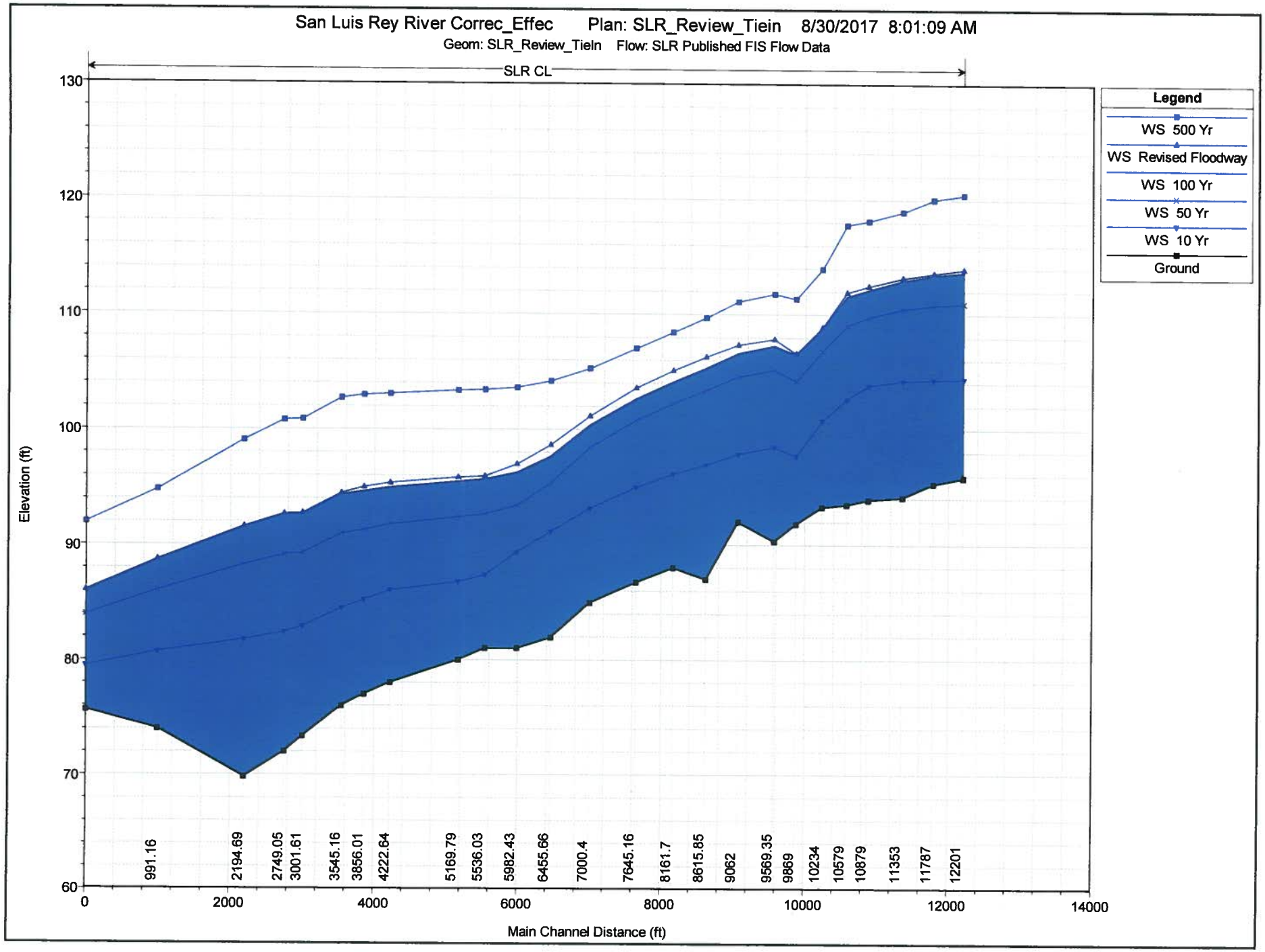
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 10 SOUTH, RANGE 4 WEST AND TOWNSHIP 11 SOUTH, RANGE 4 WEST AND THE RANCHO


473000mE
JOINS PANEL 0468
117° 16' 52.5"
33° 15' 00"
2035000 FT
TYLER ST
GABRIELENO AVE
LUISENO AVE
YUMA AVE
VIA CUPENO
LUISENO AVE
VAMETATES
VAPOPTOLA
City of Oceanside 060294
FLOODING EFFECTS FROM SAN LUIS REY RIVER (AT OCEANSIDE)
ZONE AE
95.0
95.5
VIA PAUMA
GAVILAN WAY
CCCCKKZ WAY
VIA YUHA
AF
AE
76
N SANTA FE AVE
FCACLO CT
CASPIAN CT
NAPLES CT
FCKT CT
CUCHILLO ST
FAIRHILL CT
ECLTHGATE DR
ECLTHGATE CT
REVISED AREA
FALERMO DR
DORINDA DR
PUERTO ORO CT
RIO CLARO CT
City of Oceanside 060294
SLERCIAL CT
CORONA DR
WINONA CT
FRADO CT
ALAMCSA PARK DR
TAWNY CT
10
CUILL ST
MURAL ST
MCNAGE RD
FASTEL CT
TALETTE CT
SILVER BLUFF DR
WILDWOOD DR
City of Oceanside 060294
MUIRWOOD DR
ABBYWOOD DR
CHALET DR
CANYONWOOD DR
JOINS PANEL 0757
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A,V,A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodwa
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee See Notes Zone X
SCALE
Map Projection:
NAD 1983 UTM Zone 11N;
Western Hemisphere; Vertical Datum: NAVD 88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 75 150 300 Meter
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
SAN DIEGO COUNTY, CALIFORNIA
and Incorporated Areas
PANEL 756 OF 237
Panel Contains:
COMMUNITY NUMBER PANEL SUFFI
OCEANSIDE, CITY OF 060294 0756
REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017
VERSION NUMBER 1.1.1.0
MAP NUMBER 06073C0756
EFFECTIVE DATE MAY 16, 2012


NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 10 SOUTH, RANGE 4 WEST AND THE RANCHO GUAHOME LAND GRANT
JOINS PANEL 0469
474000mE
475000mE
117° 16' 52.5"
33° 15' 00"
3679000mN
3678000mN
JOINS PANEL 0756
ZONE A
FLOODING EFFECTS FROM SAN LUIS REY RIVER (AT OCEANSIDE)
AG
Bridge
76
LIMIT OF STUDY
GUAJOME LAKE
ZONE A
ZONE AE
GUAJOME LAKE
City of Oceanside 060294
REVISED AREA
RASPBERRY WAY
BLACKBERRY WAY
HITCHING POST DR
GUAJOME LAKE RD
LARIAT WAY
STIRRUP WAY
GREY HAWK CT
RIO VIENTO CT
ALAMOSA PARK DR
CERO GRANDE ST
N SANTA FE AVE
RIO FLAT CR
MESA DR
BRIGHTON DR
MANCHESTER DR
NEWCASTLE CT
ONTARIO ST
CHAMPLAIN ST
FNEWCCD ER
GLENWCCD CR
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A,V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodwa
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee See Notes Zone X
SCALE
N
Map Projection: NAD 1983 UTM Zone 11N, Western Hemisphere; Vertical Datum: NAVD 88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 75 150 300 Meters
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
SAN DIEGO COUNTY, CALIFORNIA
and Incorporated Areas
PANEL 757 OF 237
Panel Contains:
COMMUNITY NUMBER PANEL SUFFI
OCEANSIDE, CITY OF 060294 0757 G
SAN DIEGO COUNTY 060284 0757 G
VISTA, CITY OF 060297 0757 G
REVISED TO REFLECT LOMR EFFECTIVE: April 13, 2017
VERSION NUMBER 1.1.1.0
MAP NUMBER 06073C0757
EFFECTIVE DATE MAY 16, 2012

ATTACHMENT 4

Effective/Existing Conditions HEC-RAS Model
Profile, Output Table, Cross Sections


San Luis Rey River Correc_Effec Plan: SLR_Review_Tiein 8/30/2017 8:01:09 AM
Geom: SLR_Review_TieIn Flow: SLR Published FIS Flow Data
SLR CL
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Elevation (ft)
130
120
110
100
90
80
70
60
0
2000
4000
6000
8000
10000
12000
14000
Main Channel Distance (ft)
991.16
2194.69
2749.05
3001.61
3545.16
3856.01
4222.64
5169.79
5536.03
5982.43
6455.66
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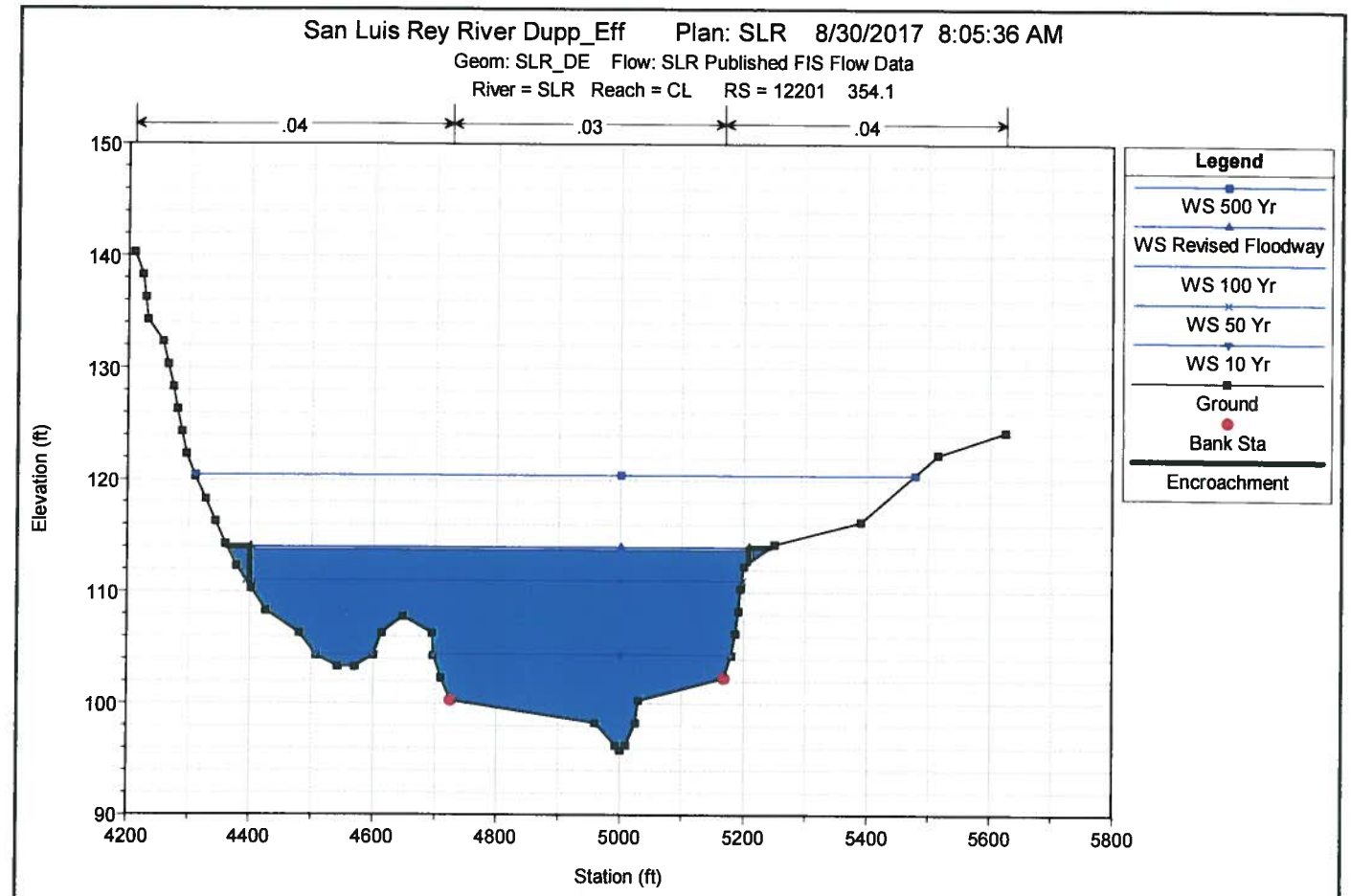
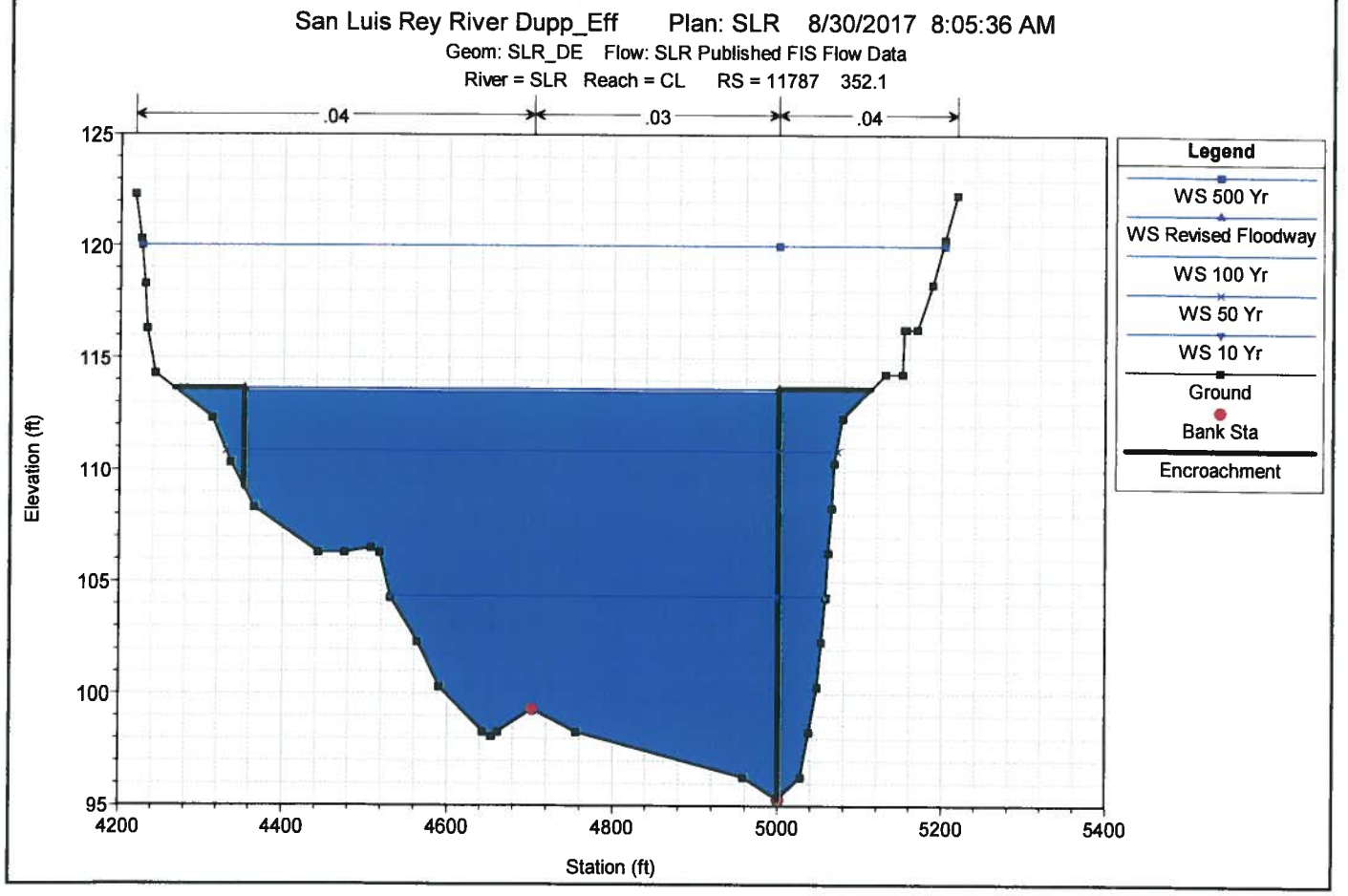
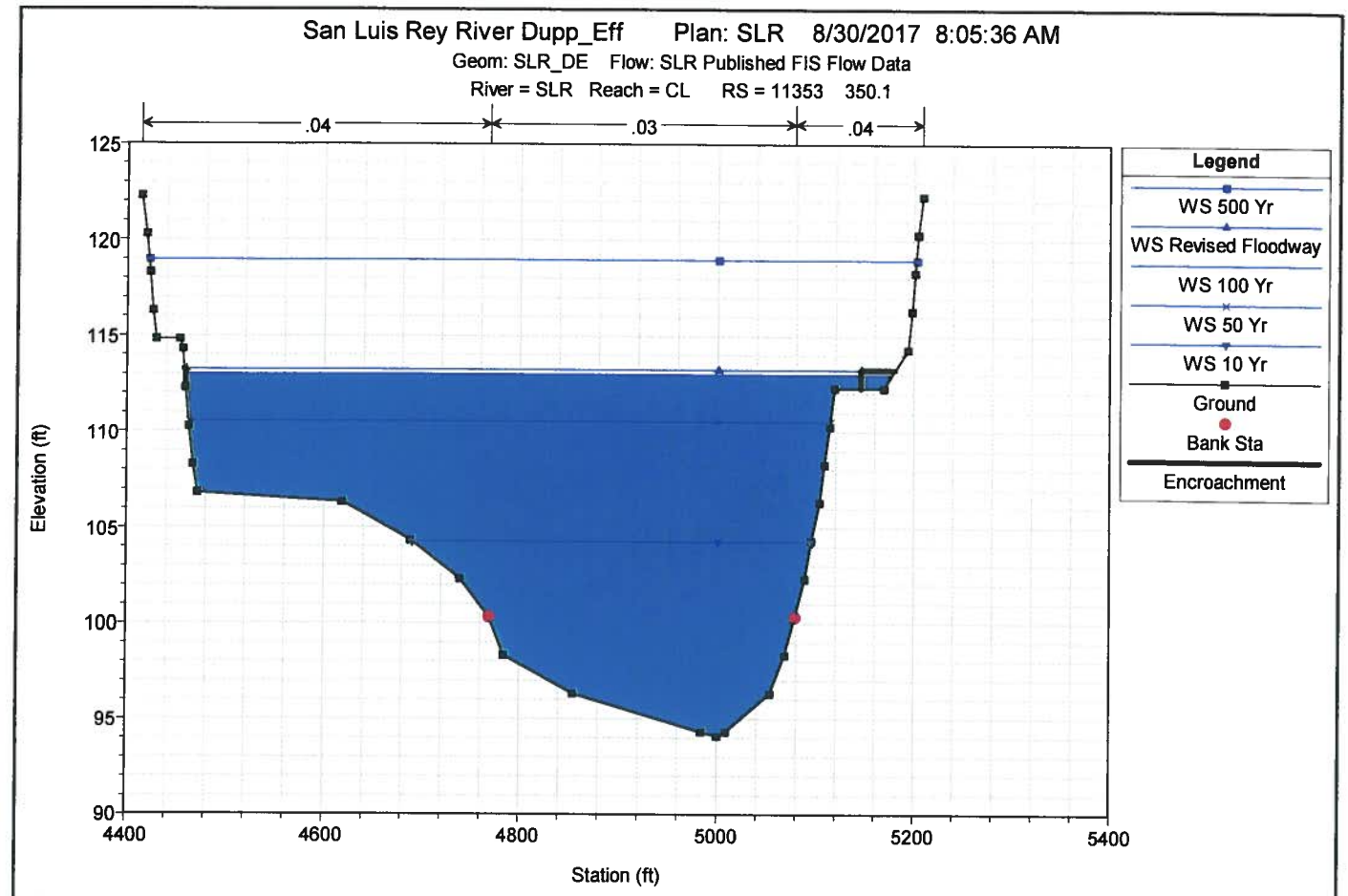
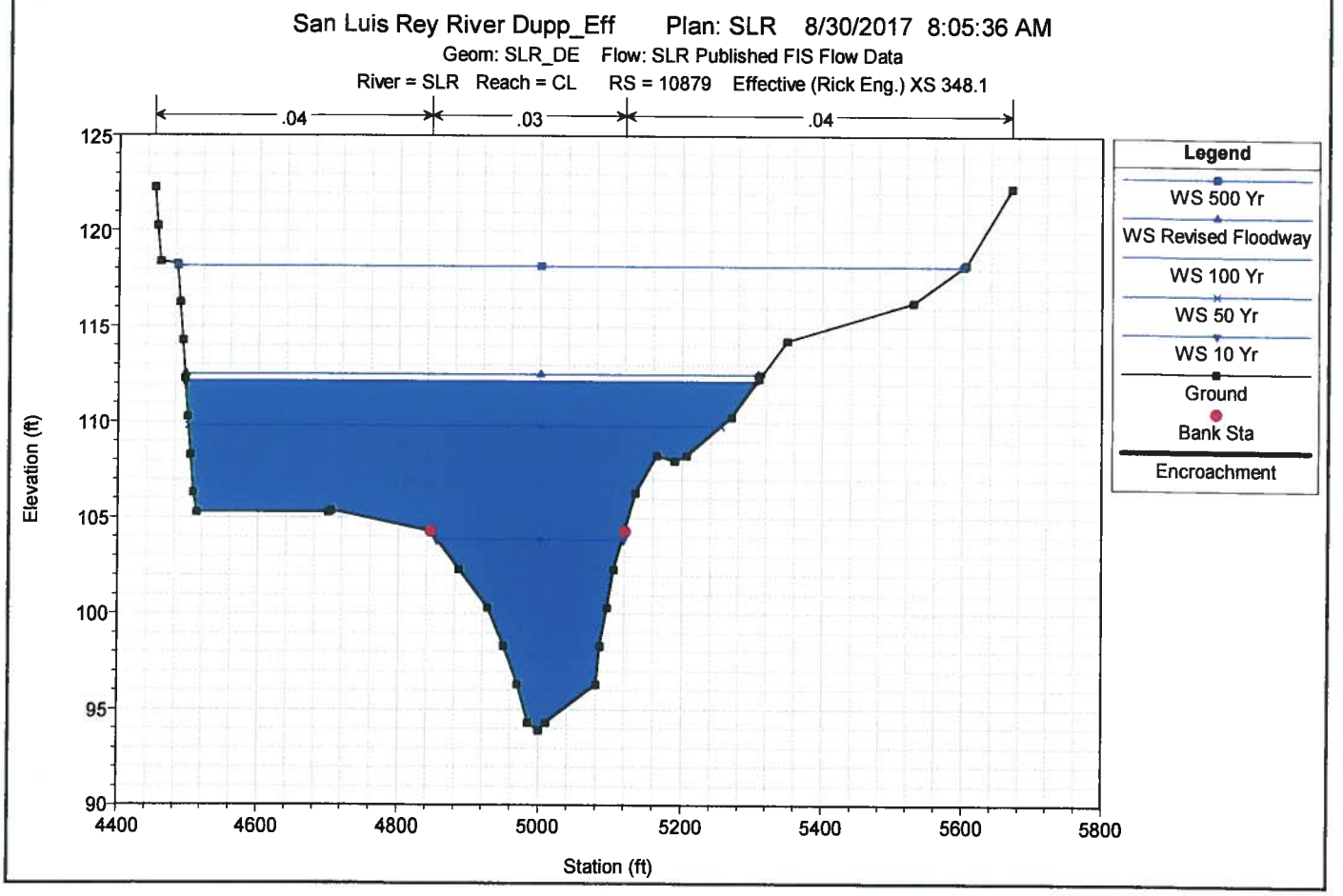
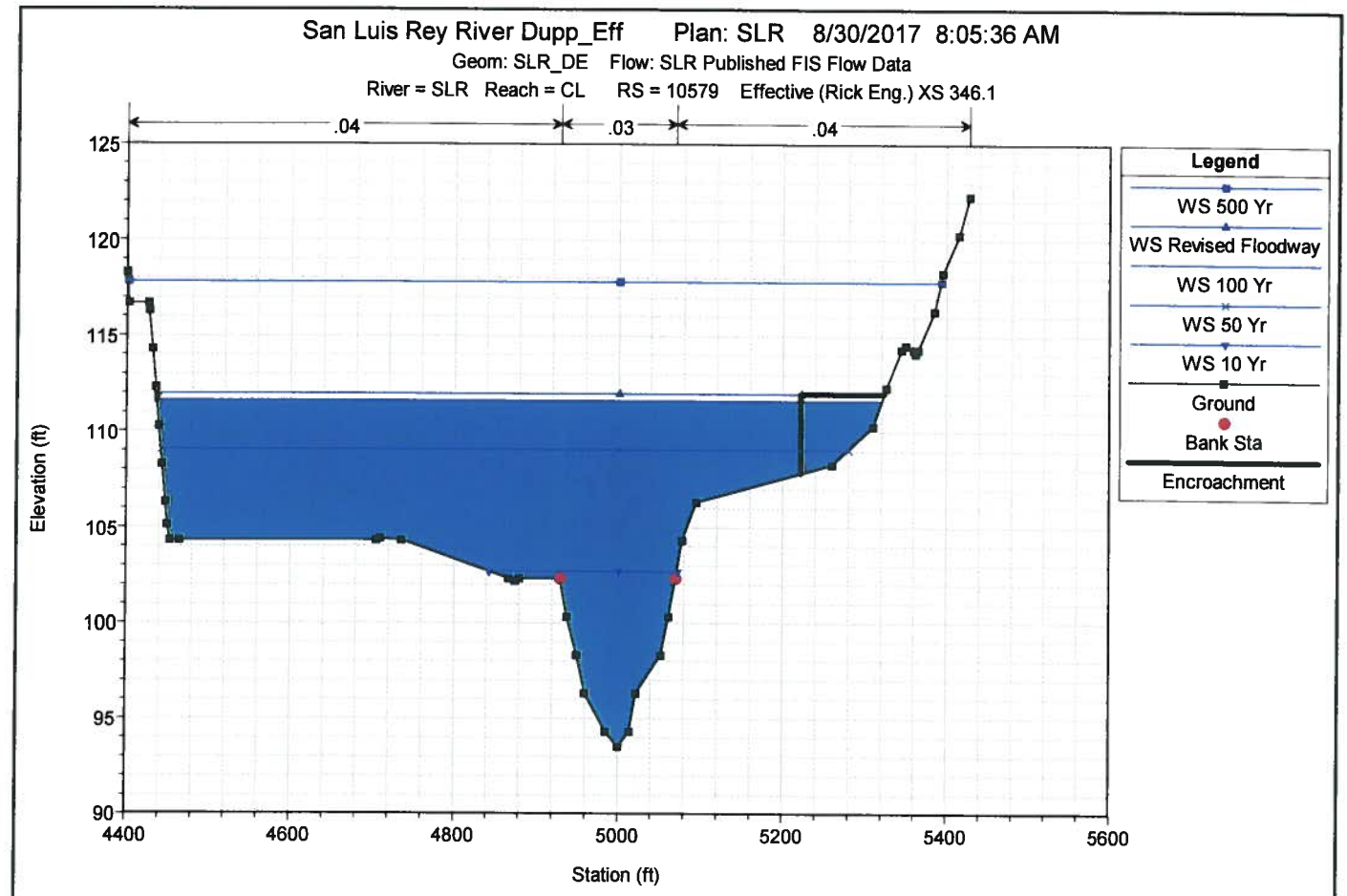
10579
10879
11353
11787
12201

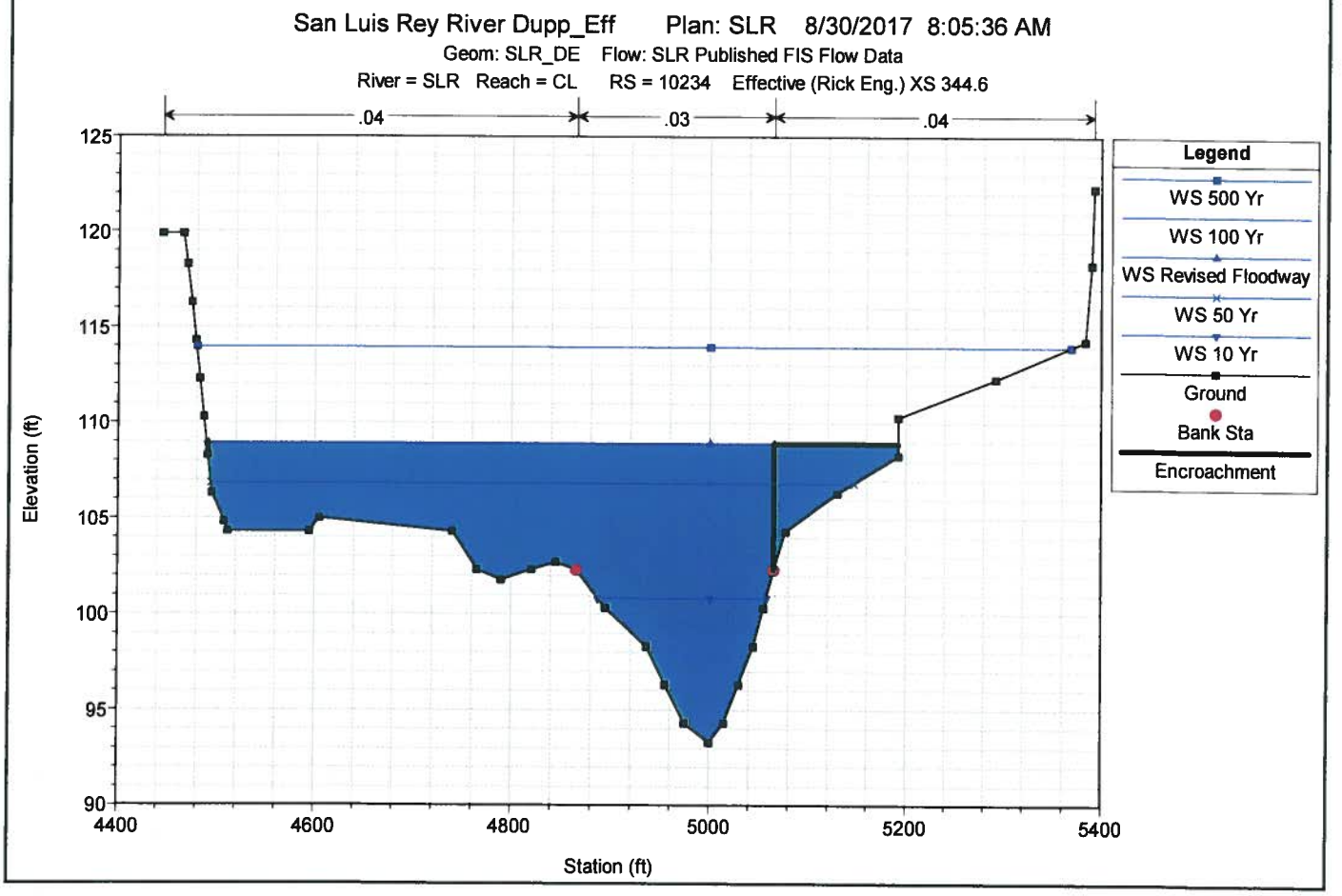

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 12201 354.1
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
150
140
130
120
110
100
90
4200
4400
4600
4800
5000
5200
5400
5600
5800

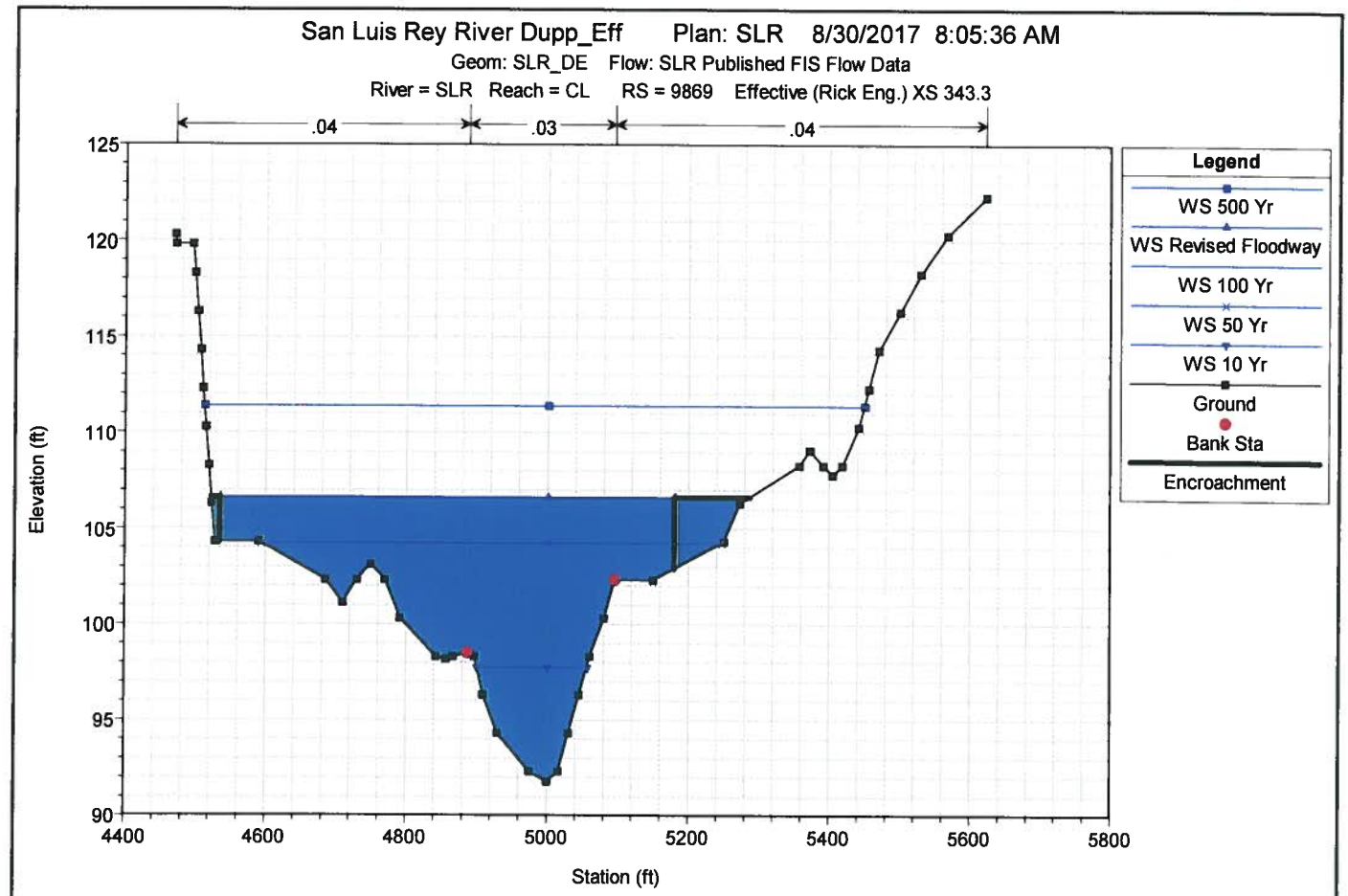

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 11787 352.1
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
125
120
115
110
105
100
95
4200
4400
4600
4800
5000
5200
5400

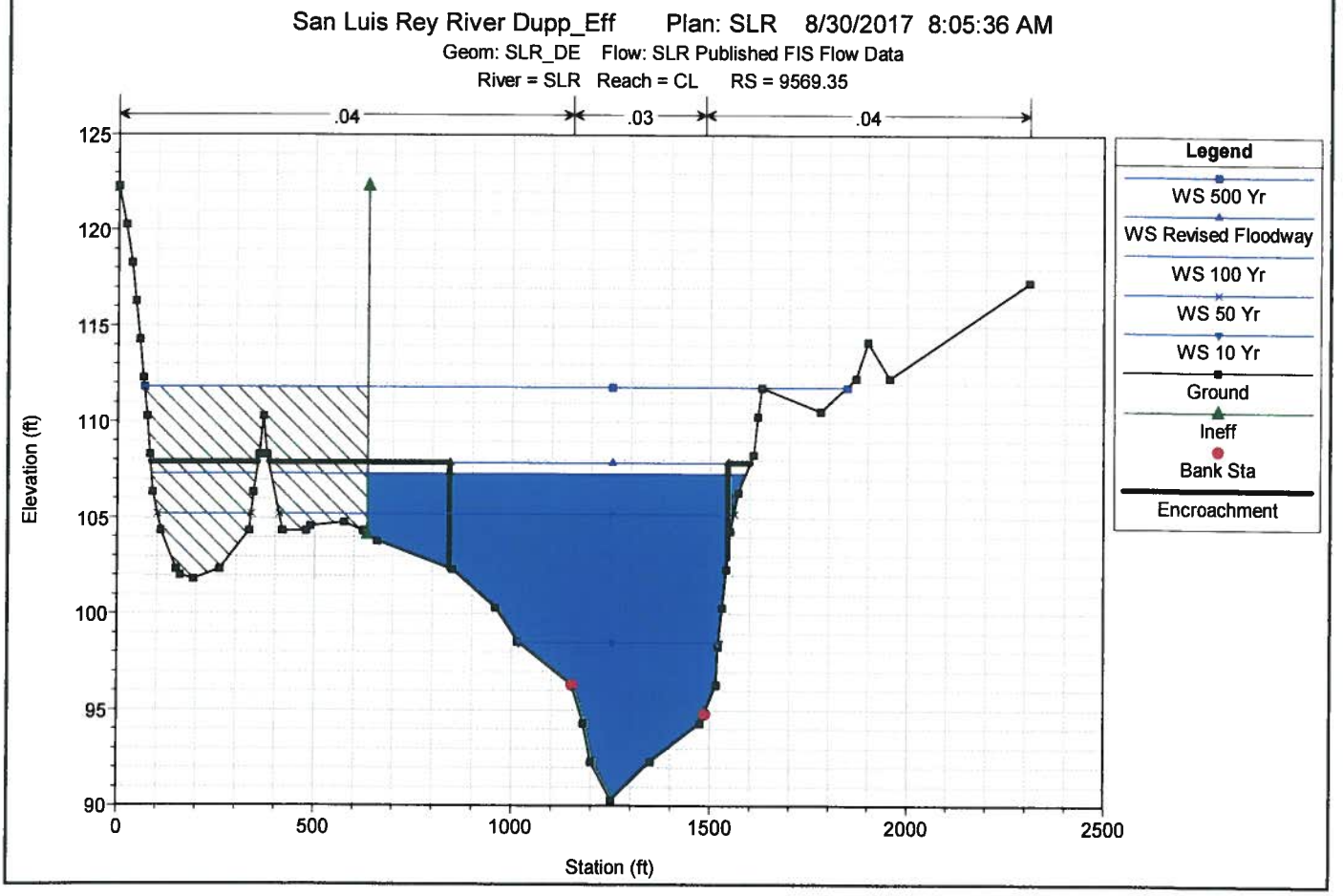

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 11353 350.1
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
Station (ft)

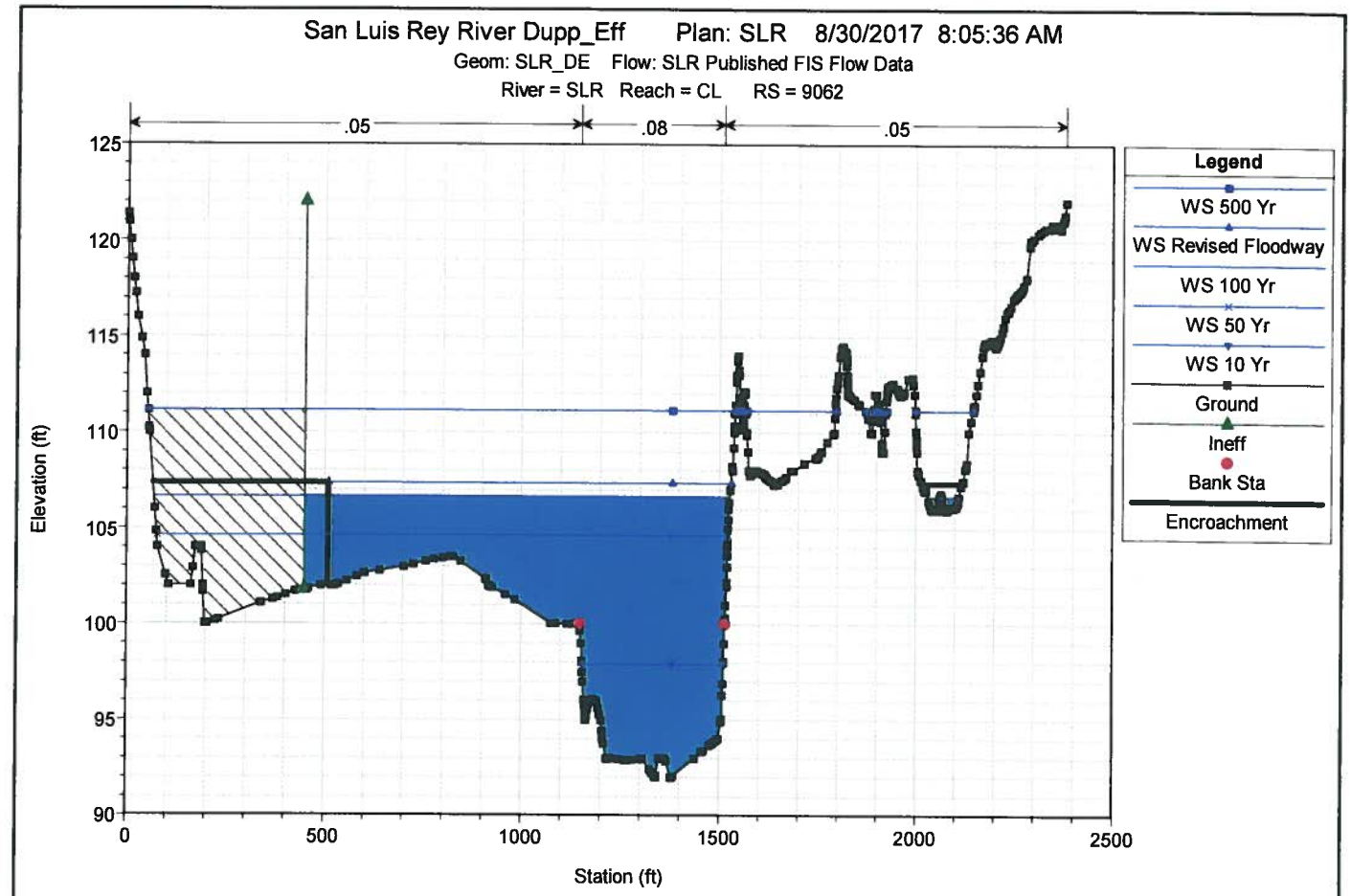

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10879 Effective (Rick Eng.) XS 348.1
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
5800
Station (ft)

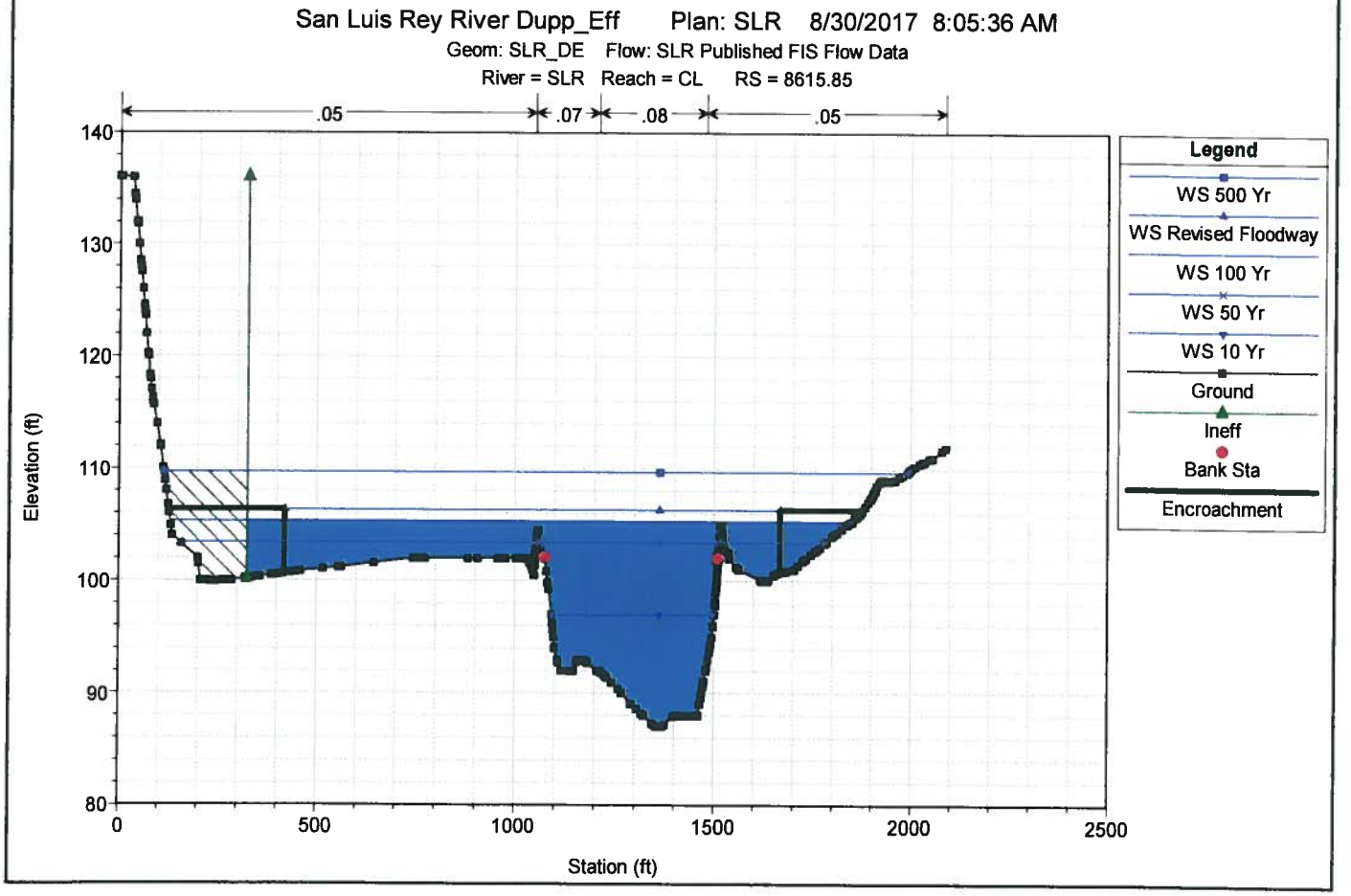

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10579 Effective (Rick Eng.) XS 346.1
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
Station (ft)

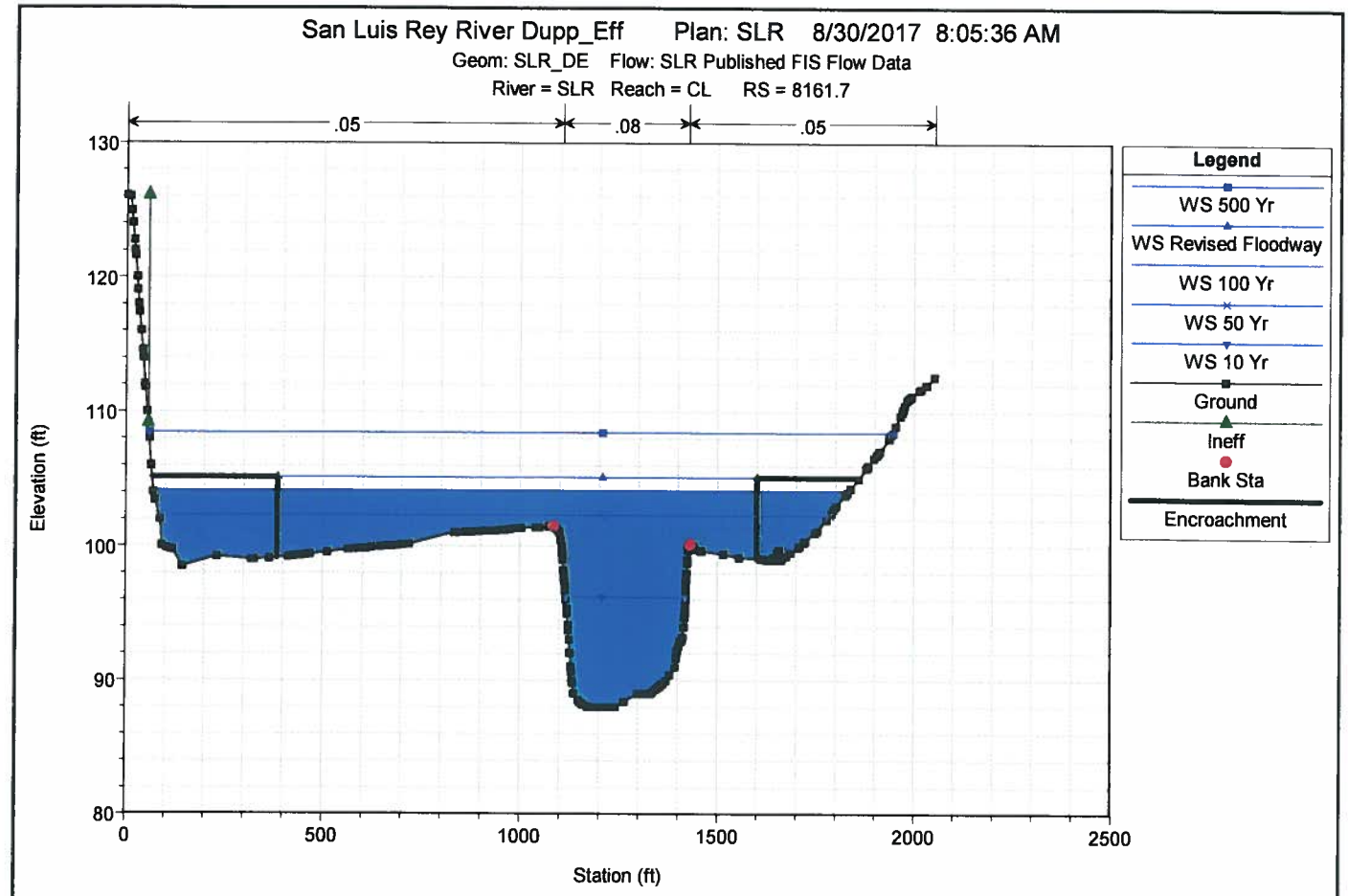

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10234 Effective (Rick Eng.) XS 344.6
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS Revised Floodway
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
Station (ft)

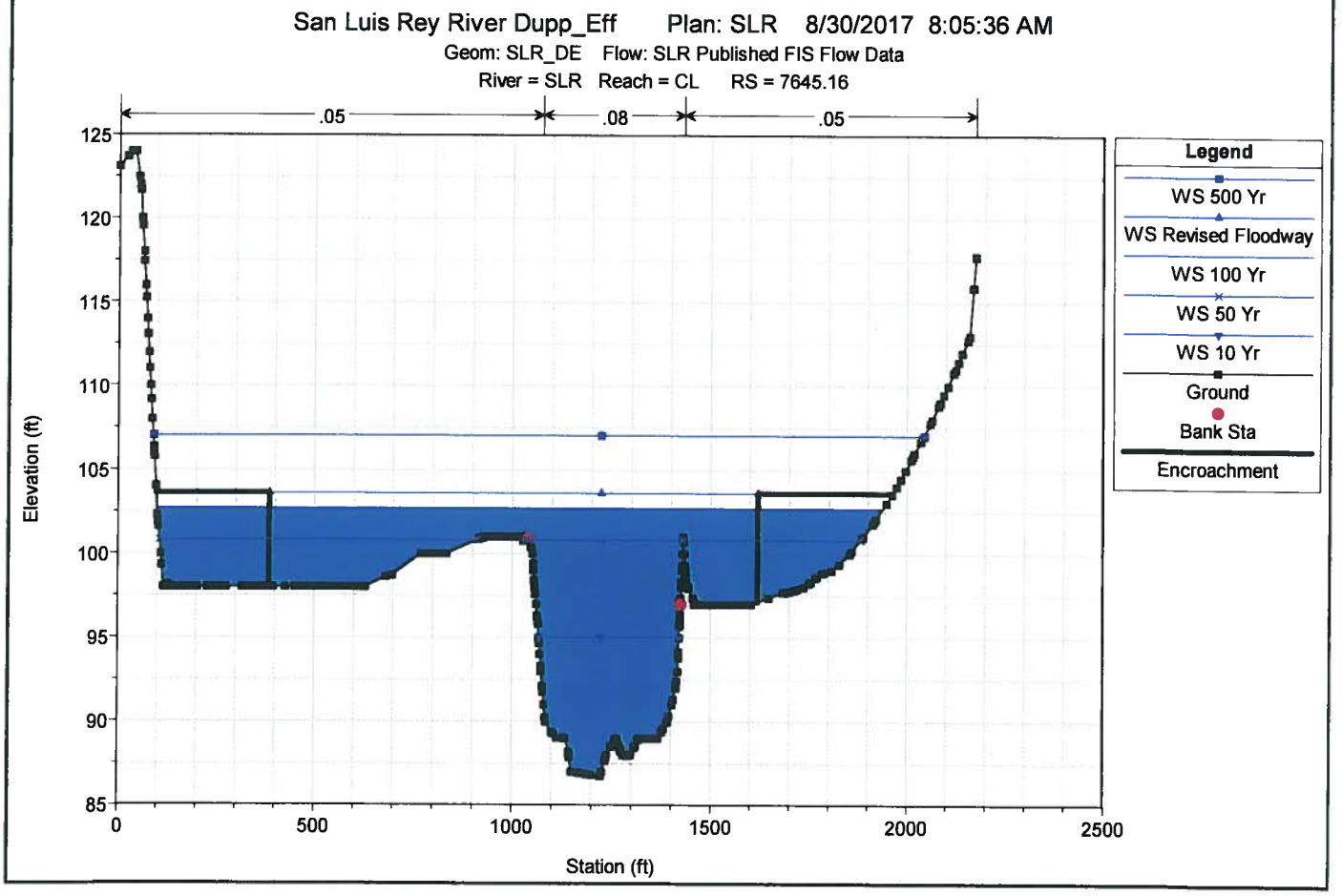

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9869 Effective (Rick Eng.) XS 343.3
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
5800
Station (ft)

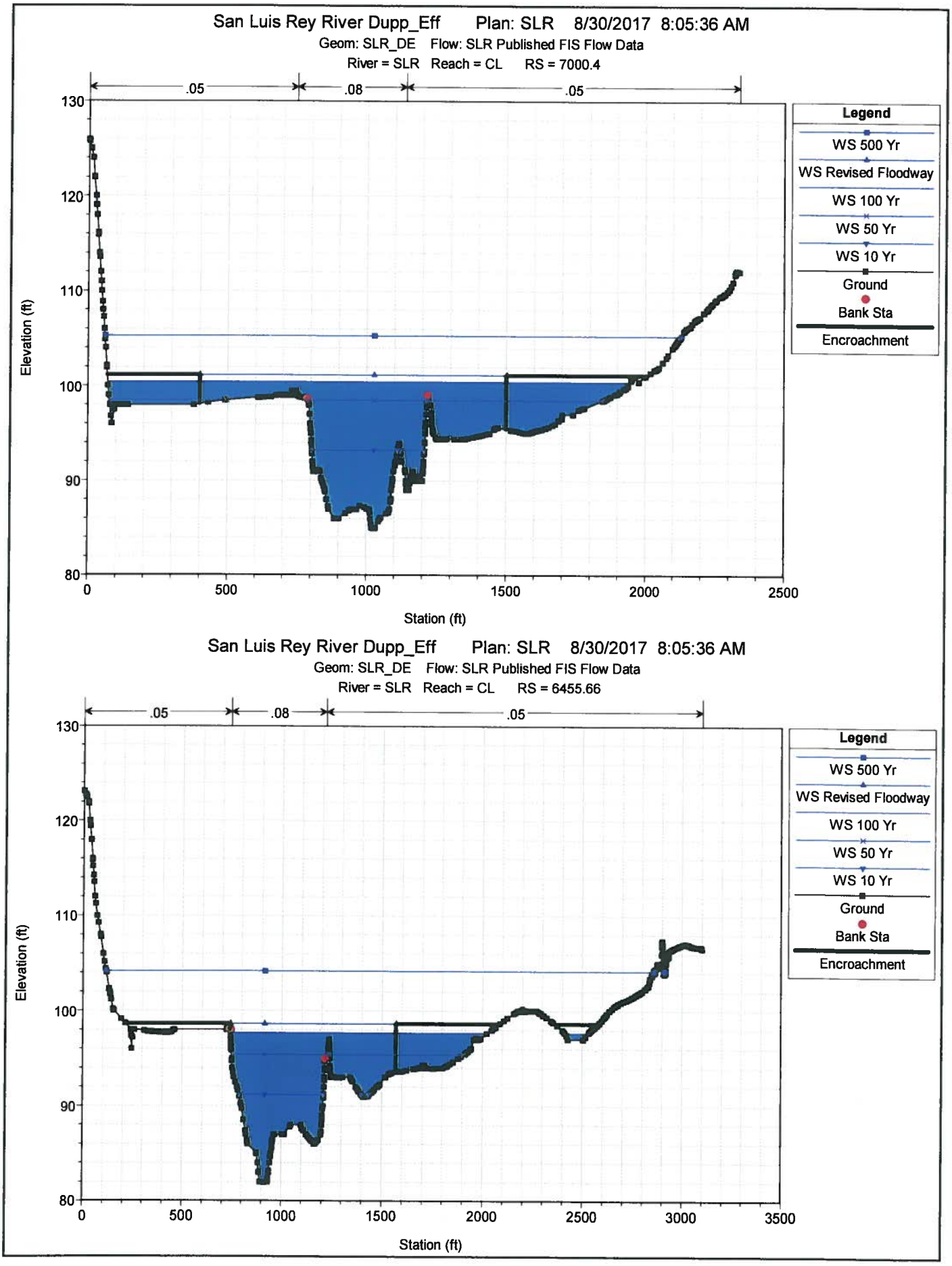

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9569.35
.04
.03
.04
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
125
120
115
110
105
100
95
90
0
500
1000
1500
2000
2500
Station (ft)

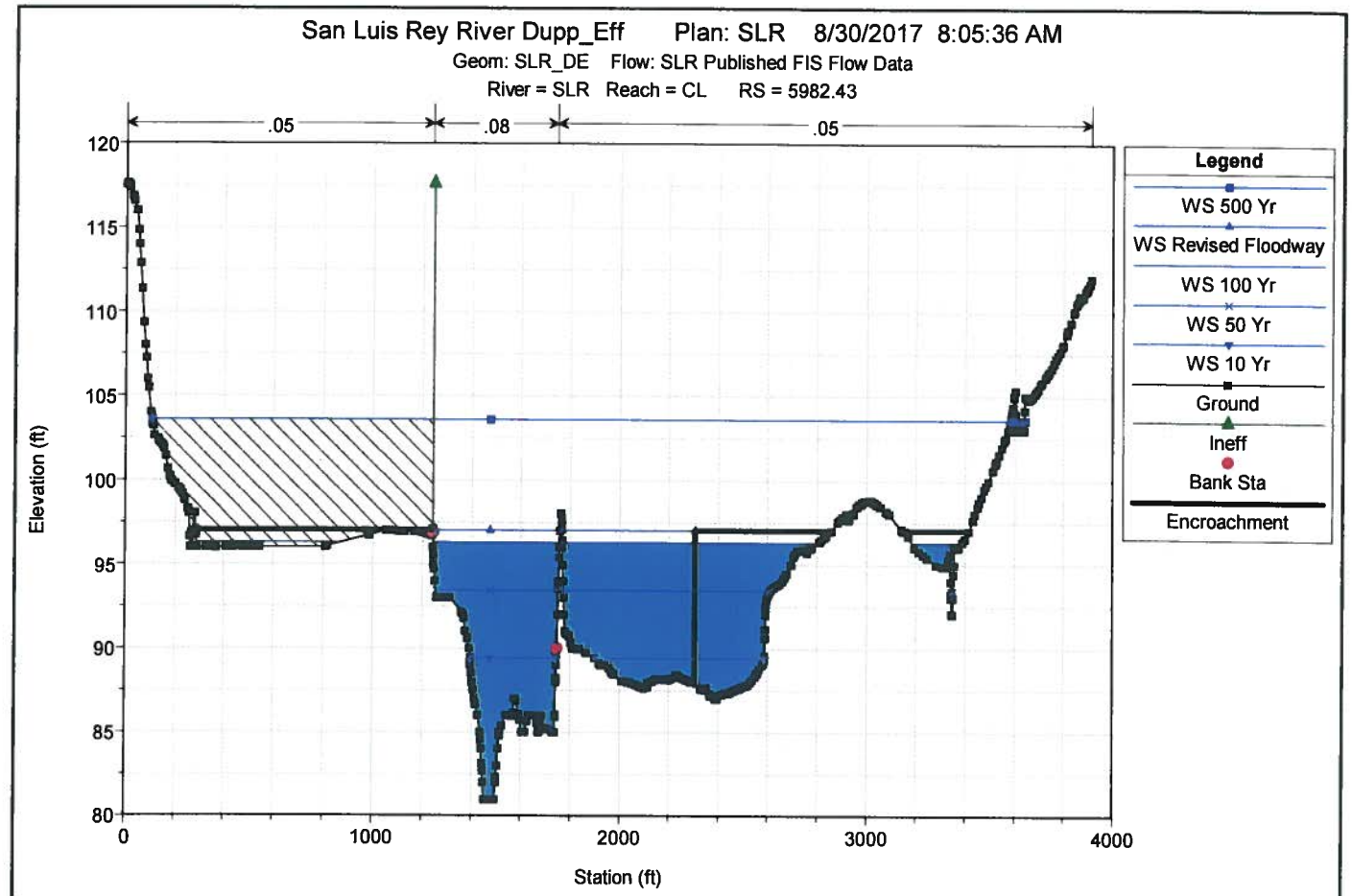

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9062
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

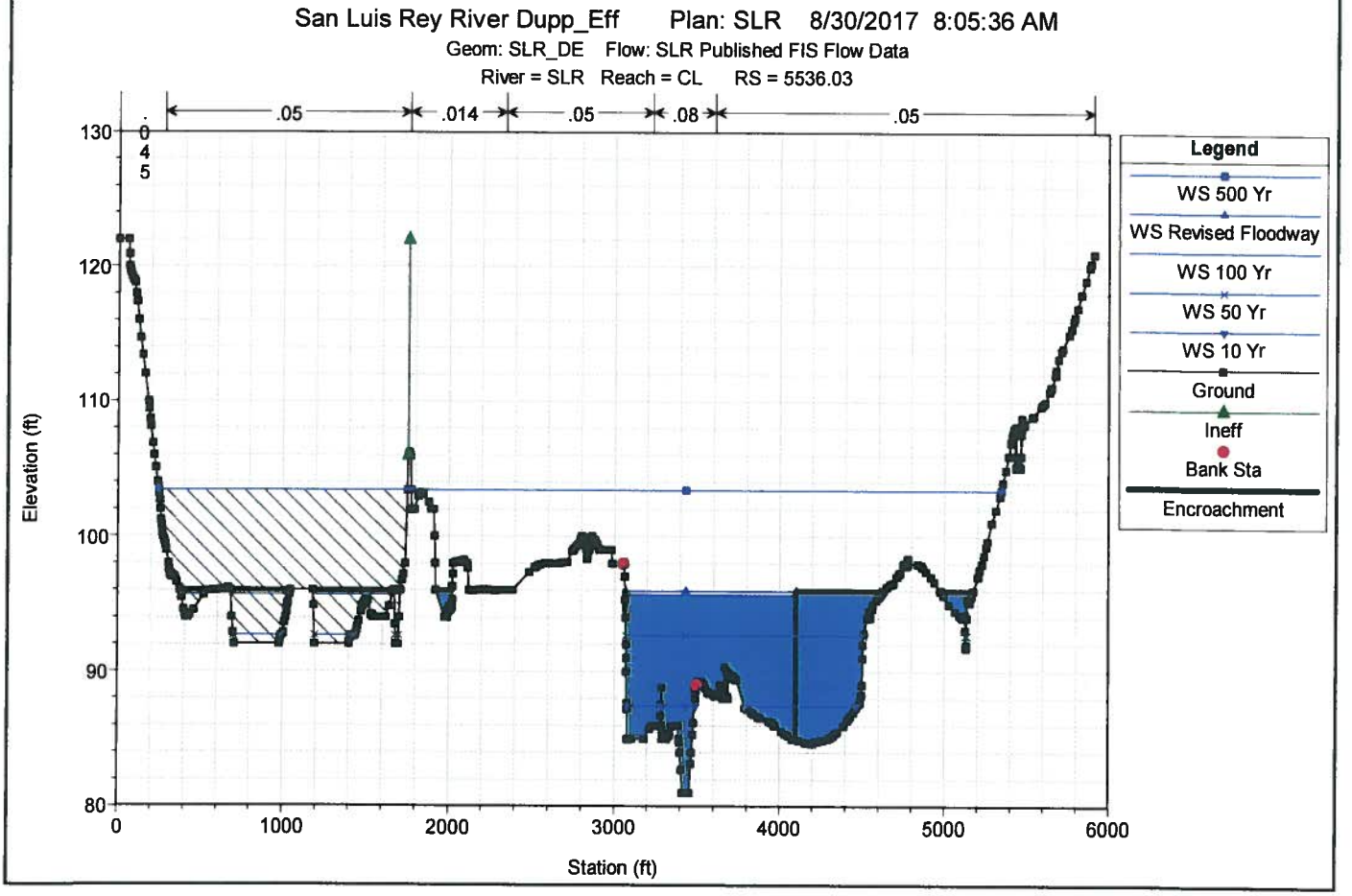

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 8615.85
.05
.07
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

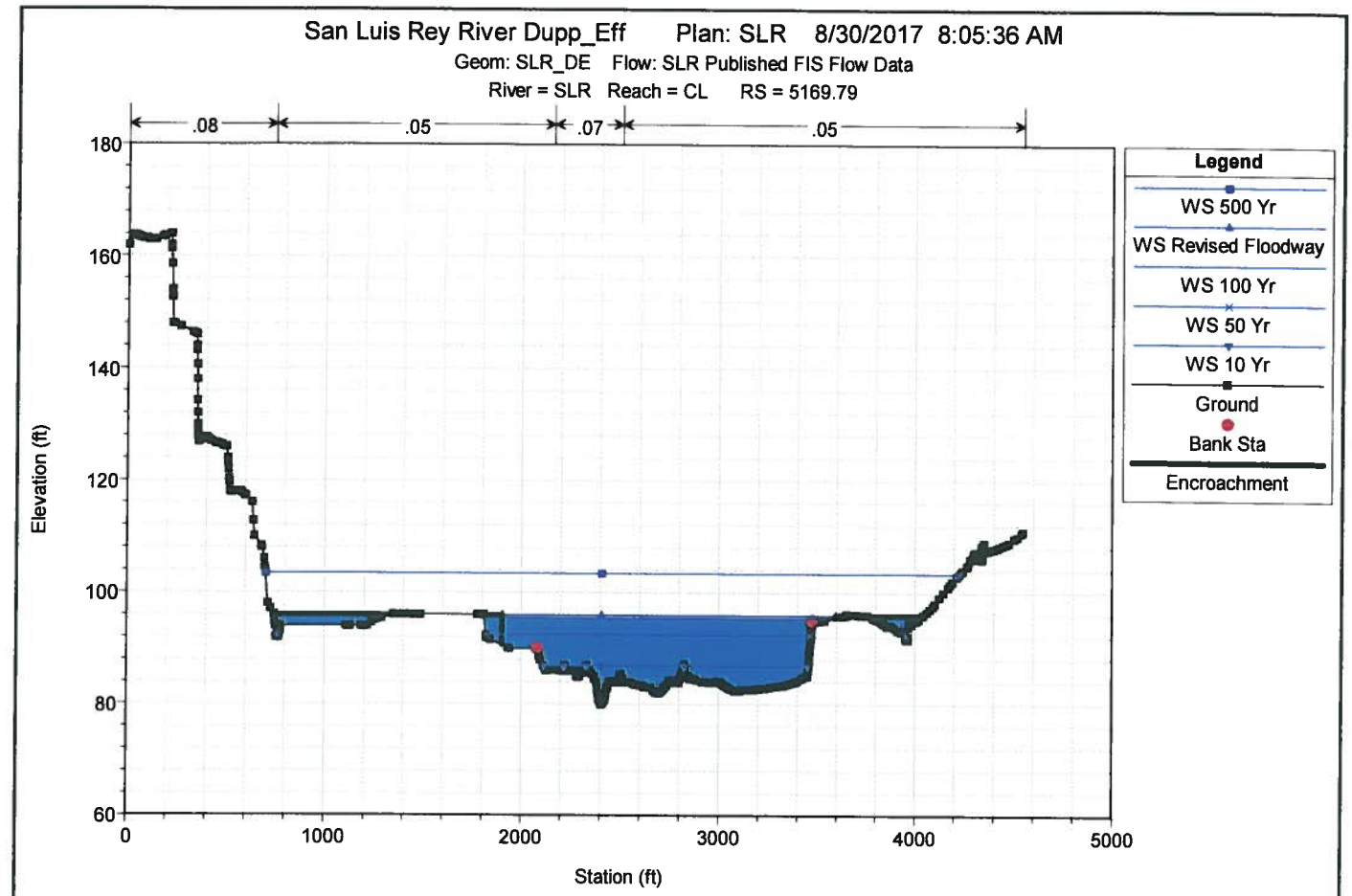

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 8161.7
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
130
120
110
100
90
80
0
500
1000
1500
2000
2500

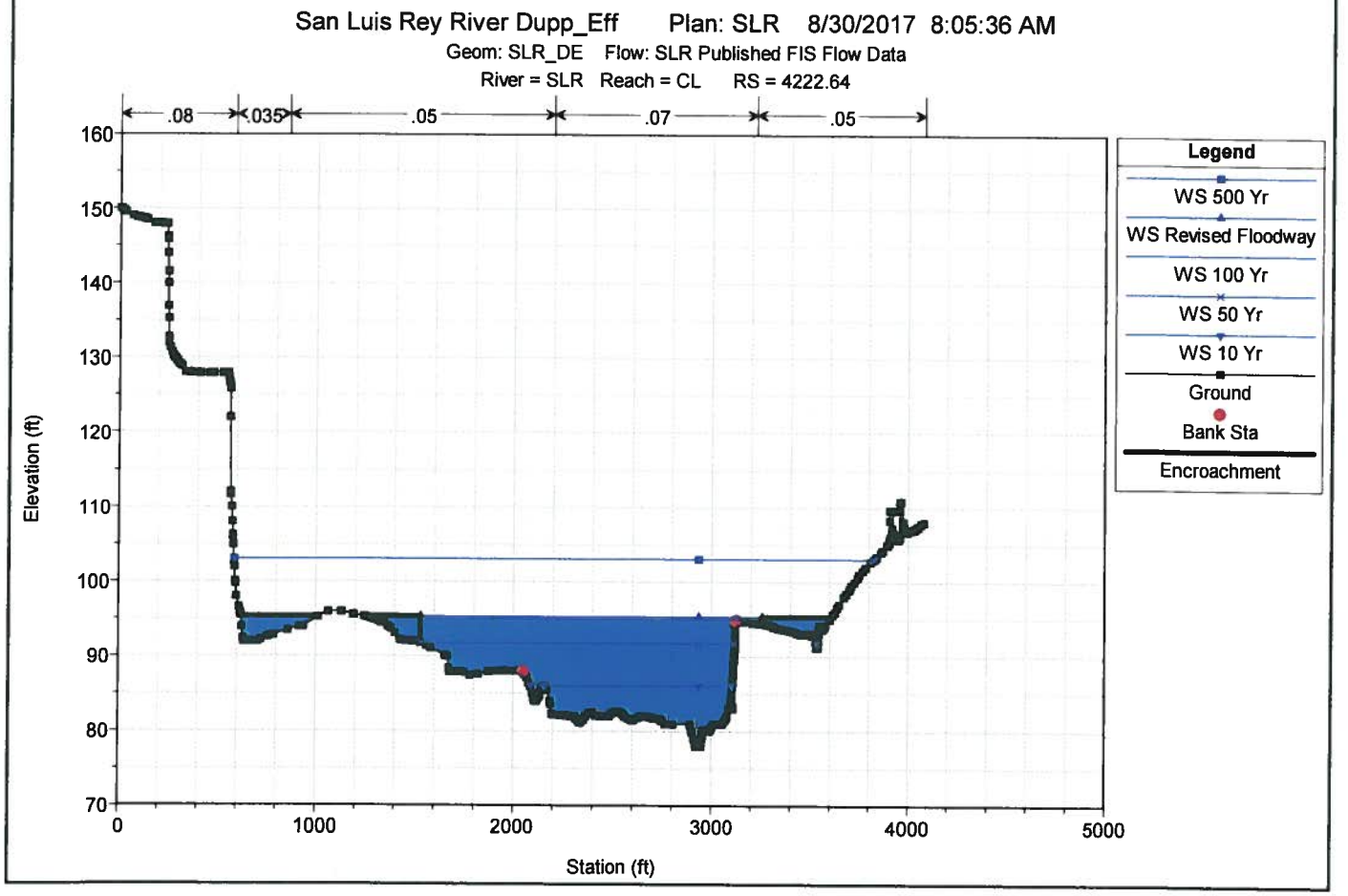

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 7645.16
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
125
120
115
110
105
100
95
90
85
0
500
1000
1500
2000
2500

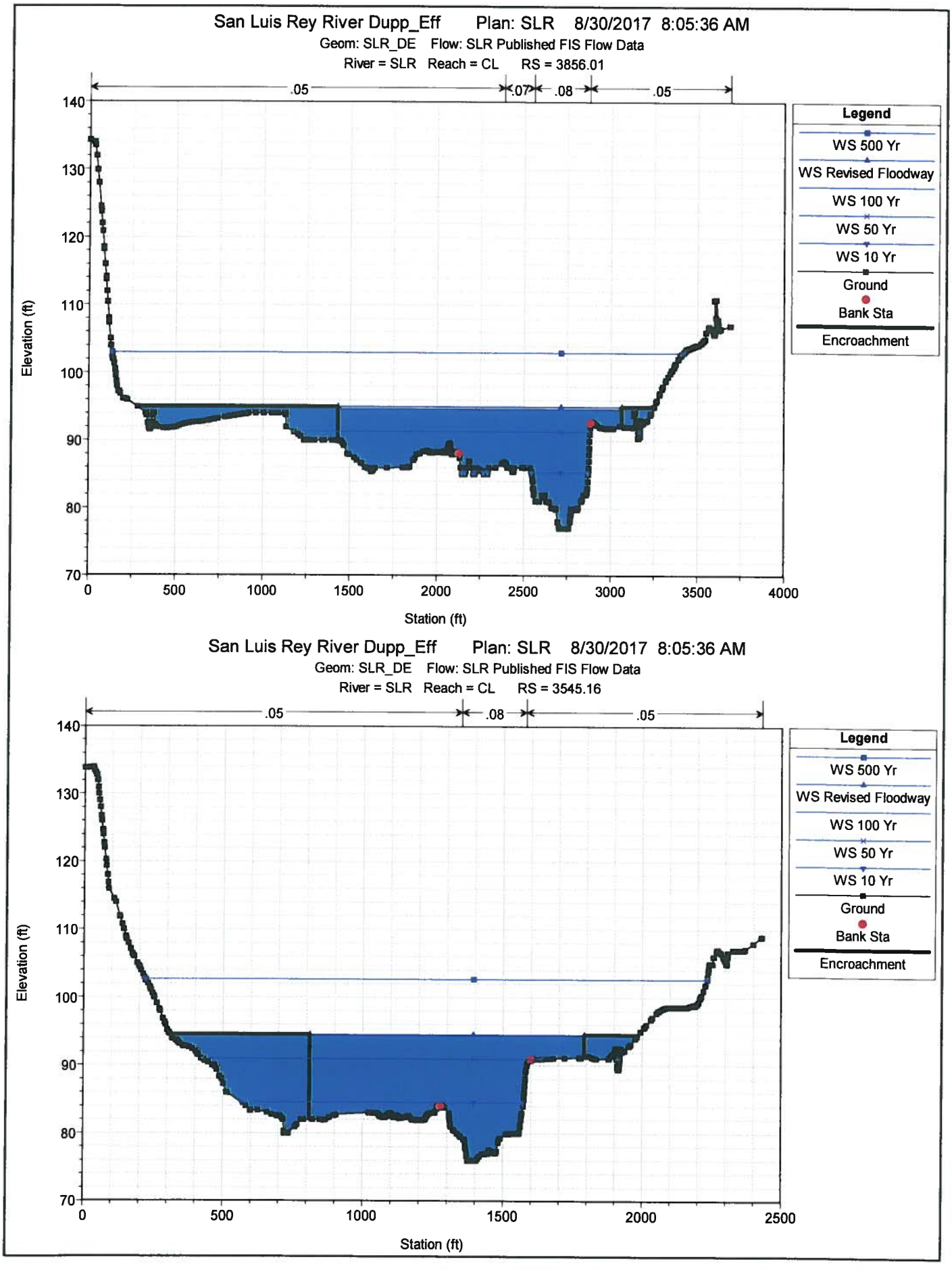

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 7000.4
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
130
120
110
100
90
80
0
500
1000
1500
2000
2500
Station (ft)
San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 6455.66
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
130
120
110
100
90
80
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

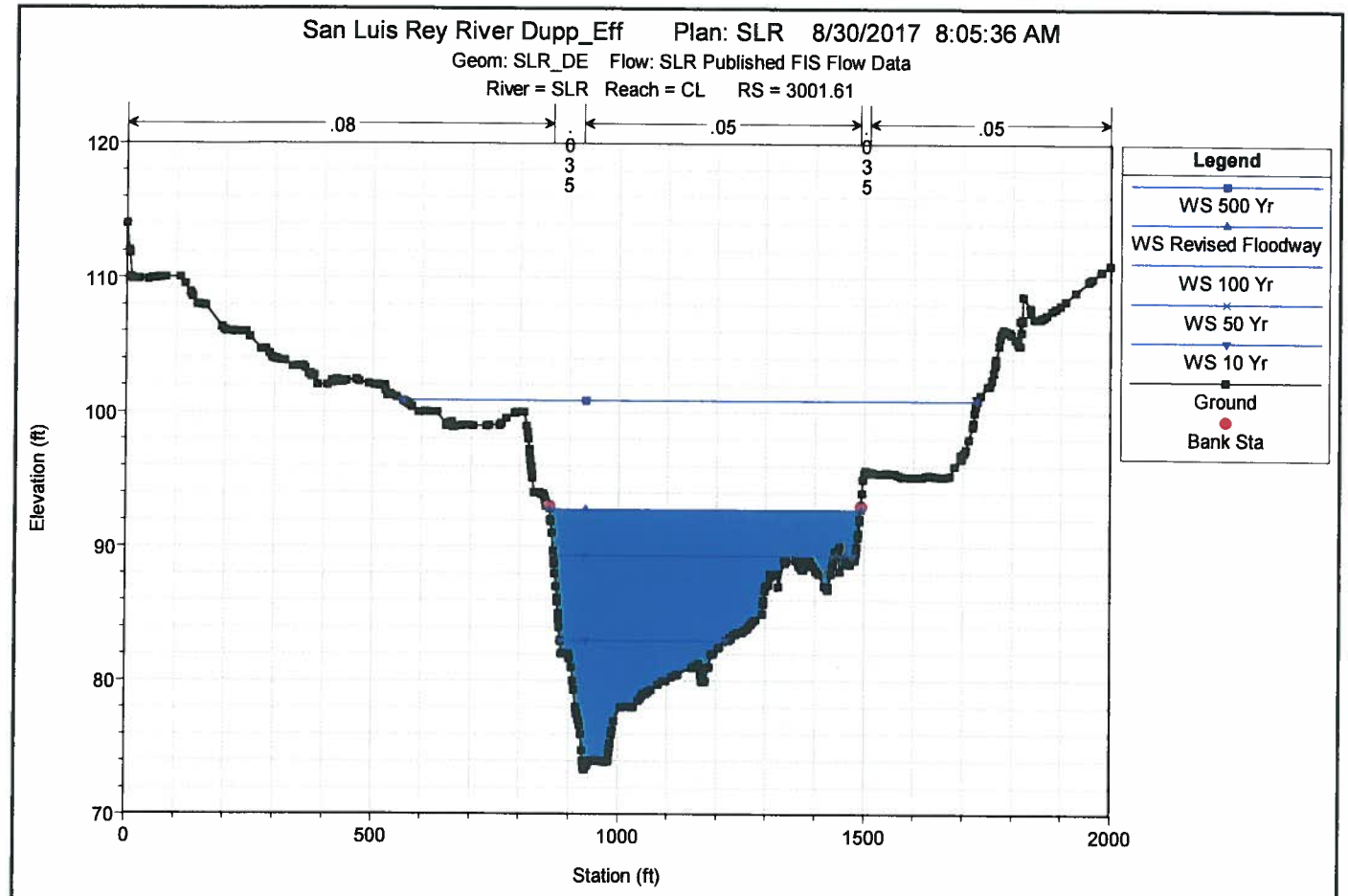

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5982.43
.05
.08
.05
Elevation (ft)
Station (ft)
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment

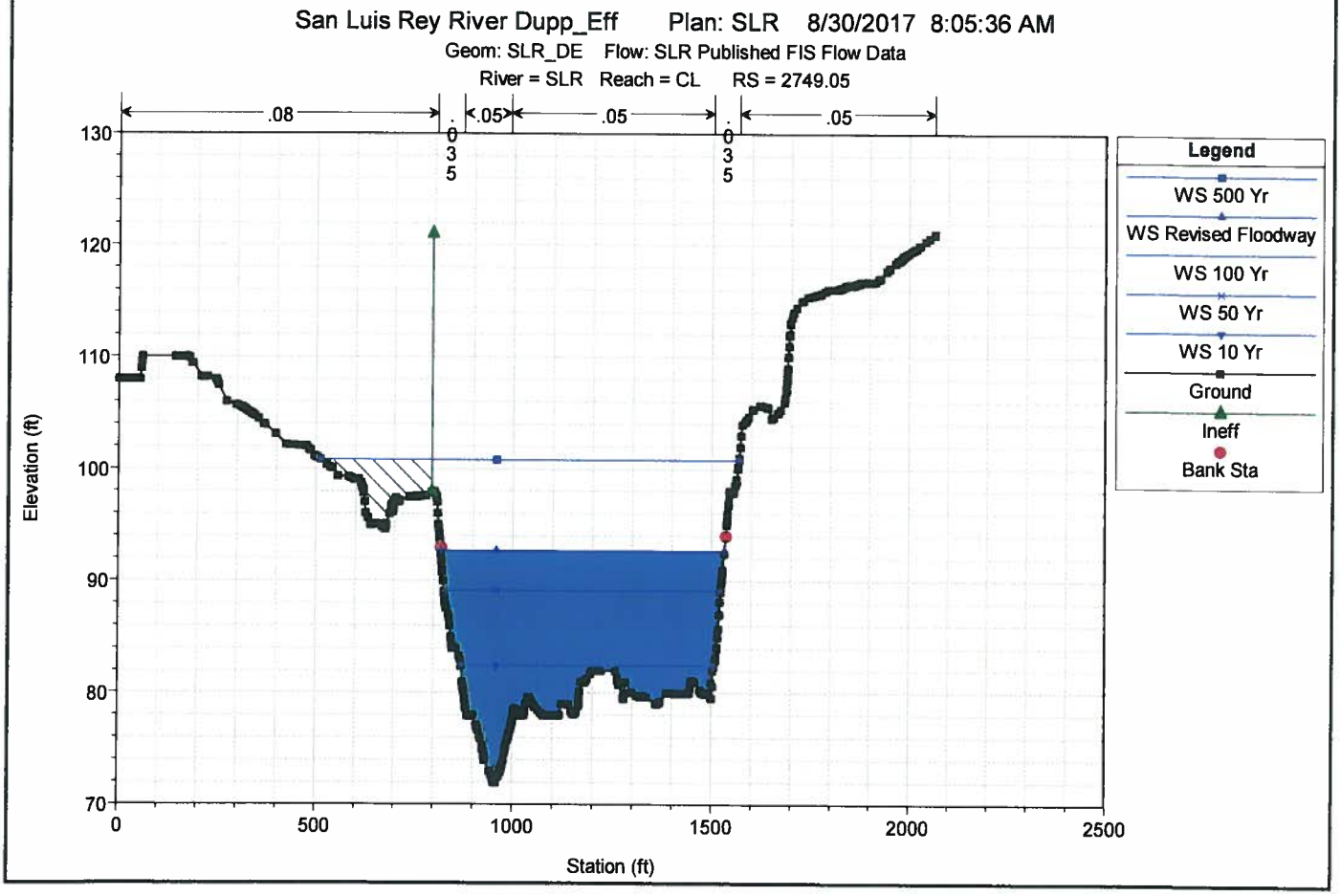

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5536.03
.05
.014
.05
.08
.05
Elevation (ft)
Station (ft)
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Encroachment

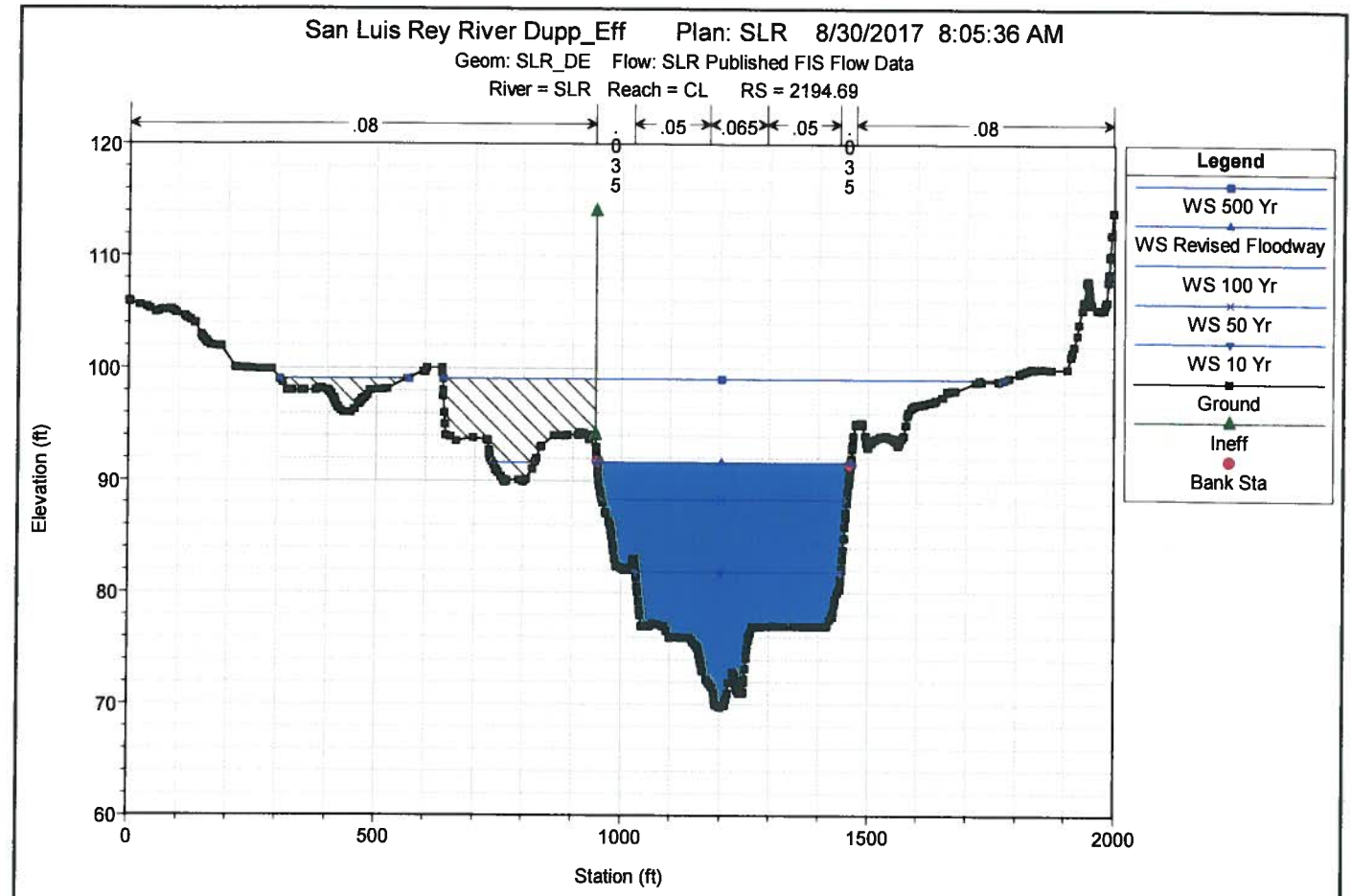

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5169.79
.08
.05
.07
.05
Elevation (ft)
Station (ft)
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment

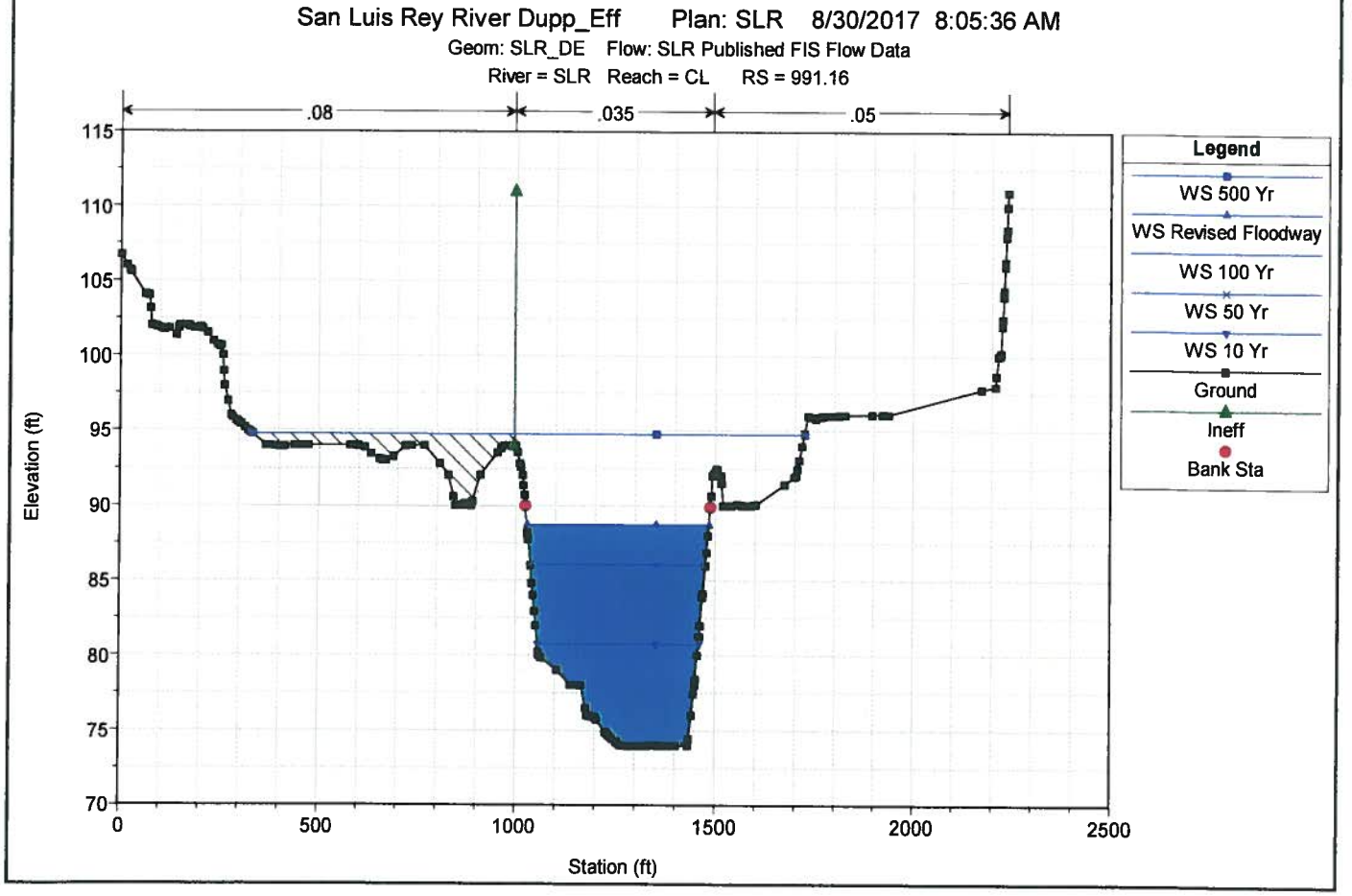

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 4222.64
.08
.035
.05
.07
.05
Elevation (ft)
Station (ft)
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment

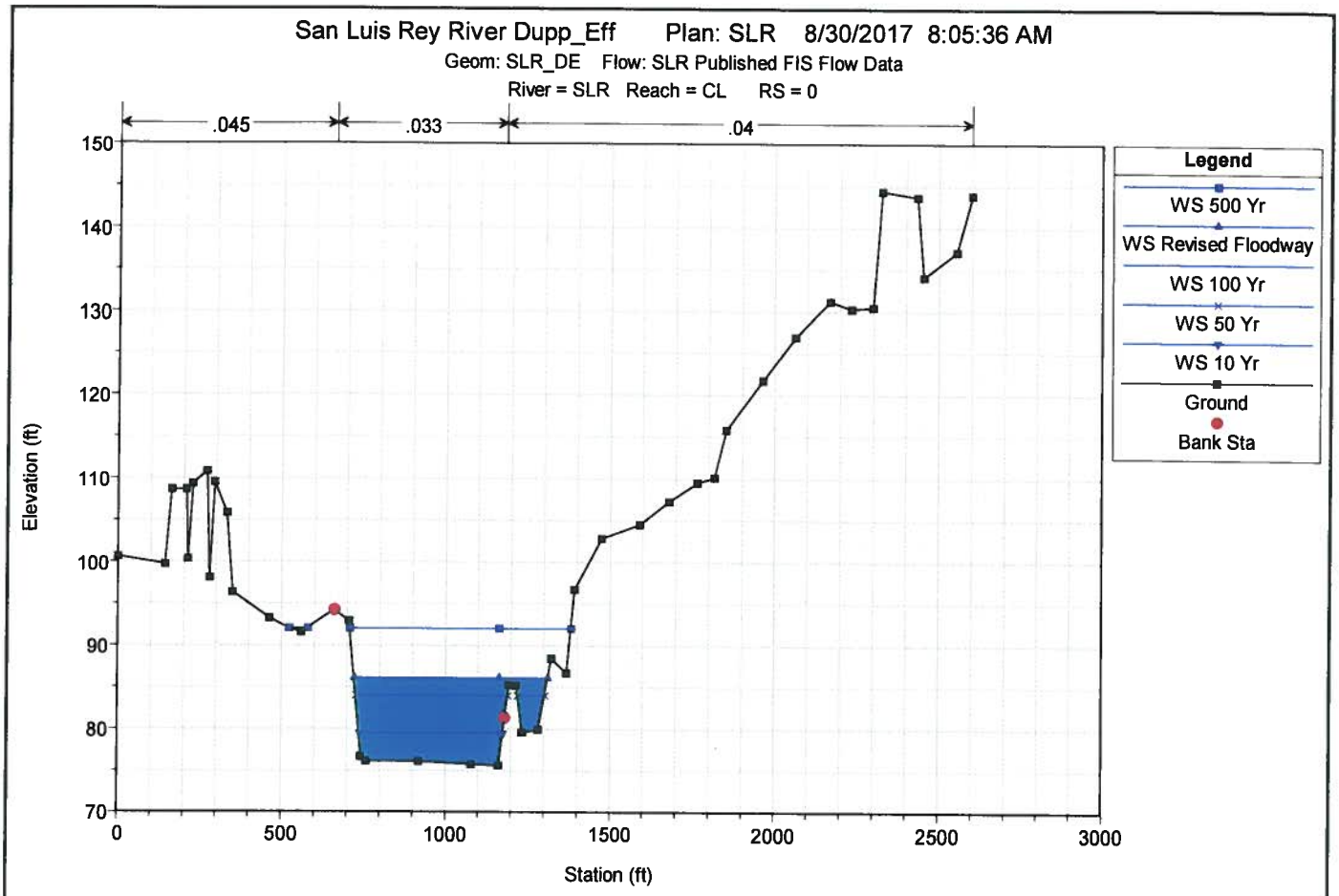

San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 3856.01
.05
.07
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 3545.16
.05
.08
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 3001.61
.08
.035
.05
.035
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
120
110
100
90
80
70
0
500
1000
1500
2000
Station (ft)


San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 2749.05
.08
.035
.05
.05
.035
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
130
120
110
100
90
80
70
0
500
1000
1500
2000
2500
Station (ft)


San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 2194.69
.08
.035
.05
.065
.05
.035
.08
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)


San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 991.16
.08
.035
.05
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)


San Luis Rey River Dupp_Eff Plan: SLR 8/30/2017 8:05:36 AM
Geom: SLR_DE Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 0
.045
.033
.04
Elevation (ft)
150
140
130
120
110
100
90
80
70
0
500
1000
1500
2000
2500
3000
Station (ft)
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta

HEC-RAS Plan: SLR_DE River: SLR Reach: CL

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	12201	100 Yr	51000.00	95.80	113.74		114.33	0.000527	6.65	9225.73	871.00	0.31
CL	12201	10 Yr	6600.00	95.80	104.43		104.57	0.000451	3.01	2294.37	578.21	0.24
CL	12201	50 Yr	31000.00	95.80	111.00		111.38	0.000439	5.26	6945.70	803.08	0.27
CL	12201	500 Yr	120000.00	95.80	120.46		121.58	0.000642	9.51	16255.84	1167.67	0.37
CL	11787	100 Yr	51000.00	95.30	113.50		114.11	0.000520	7.22	9434.28	838.37	0.32
CL	11787	10 Yr	6600.00	95.30	104.36		104.44	0.000177	2.41	3189.38	527.49	0.16
CL	11787	50 Yr	31000.00	95.30	110.85		111.20	0.000368	5.39	7377.23	741.06	0.26
CL	11787	500 Yr	120000.00	95.30	120.05		121.29	0.000715	10.62	15538.20	975.52	0.39
CL	11353	100 Yr	51000.00	94.10	113.00		113.85	0.000602	8.00	7956.43	719.79	0.34
CL	11353	10 Yr	6600.00	94.10	104.26		104.36	0.000162	2.55	2709.18	405.93	0.16
CL	11353	50 Yr	31000.00	94.10	110.52		111.02	0.000417	5.99	6291.88	652.01	0.28
CL	11353	500 Yr	120000.00	94.10	118.97		120.87	0.000968	12.40	12497.25	780.33	0.46
CL	10879	100 Yr	51000.00	93.90	112.17		113.41	0.001277	10.04	6786.37	812.30	0.48
CL	10879	10 Yr	6600.00	93.90	103.87		104.19	0.000866	4.54	1453.38	262.96	0.34
CL	10879	50 Yr	31000.00	93.90	109.81		110.68	0.001083	8.14	4933.41	754.75	0.43
CL	10879	500 Yr	120000.00	93.90	118.20		120.29	0.001462	13.72	12518.20	1118.03	0.55
CL	10579	100 Yr	51000.00	93.50	111.61		112.95	0.001654	11.99	6873.39	883.43	0.55
CL	10579	10 Yr	6600.00	93.50	102.68		103.70	0.002658	8.13	837.80	229.23	0.60
CL	10579	50 Yr	31000.00	93.50	109.06		110.24	0.001696	10.69	4667.93	836.89	0.54
CL	10579	500 Yr	120000.00	93.50	117.84		119.76	0.001637	15.10	12685.44	991.97	0.58
CL	10234	100 Yr	51000.00	93.30	108.94	108.94	111.94	0.004062	15.92	4521.73	702.01	0.83
CL	10234	10 Yr	6600.00	93.30	100.85	100.39	102.32	0.006184	9.73	678.24	170.91	0.86
CL	10234	50 Yr	31000.00	93.30	106.83	106.83	109.26	0.003935	13.66	3078.97	652.03	0.79
CL	10234	500 Yr	120000.00	93.30	113.98	113.98	118.62	0.004319	20.95	8416.91	888.76	0.91
CL	9869	100 Yr	51000.00	91.80	106.56	106.56	109.55	0.004088	15.83	4604.52	761.61	0.83
CL	9869	10 Yr	6600.00	91.80	97.73	97.73	99.65	0.008445	11.11	593.91	155.05	1.00
CL	9869	50 Yr	31000.00	91.80	104.23	104.23	106.92	0.004464	14.17	2887.96	652.80	0.84
CL	9869	500 Yr	120000.00	91.80	111.39	111.39	115.66	0.004183	20.33	8830.32	937.09	0.89
CL	9569.35	100 Yr	51000.00	90.30	107.31		108.04	0.000672	7.70	8877.03	1467.02	0.35
CL	9569.35	10 Yr	6600.00	90.30	98.54		98.69	0.000391	3.20	2228.69	505.50	0.23
CL	9569.35	50 Yr	31000.00	90.30	105.21		105.66	0.000485	5.90	6912.27	1387.01	0.29
CL	9569.35	500 Yr	120000.00	90.30	111.83		113.60	0.001216	12.38	13436.99	1778.22	0.50

HEC-RAS Plan: SLR_DE River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	9062	100 Yr	51000.00	92.00	106.66		107.31	0.004503	6.92	8076.84	1532.67	0.34
CL	9062	10 Yr	6600.00	92.00	97.90		98.17	0.006745	4.14	1595.95	355.79	0.34
CL	9062	50 Yr	31000.00	92.00	104.62		105.11	0.004317	6.05	5842.87	1445.50	0.32
CL	9062	500 Yr	120000.00	92.00	111.15		112.33	0.004853	8.74	14188.83	1906.25	0.37
CL	8615.85	100 Yr	51000.00	87.00	105.35		105.79	0.002466	5.83	10338.94	1723.79	0.27
CL	8615.85	10 Yr	6600.00	87.00	96.98		97.07	0.001173	2.39	2757.00	408.16	0.16
CL	8615.85	50 Yr	31000.00	87.00	103.45		103.78	0.002051	4.84	7521.45	1611.14	0.24
CL	8615.85	500 Yr	120000.00	87.00	109.73		110.51	0.003056	7.74	17253.16	1877.46	0.31
CL	8161.7	100 Yr	51000.00	88.00	104.15		104.56	0.002942	5.85	10438.00	1765.07	0.28
CL	8161.7	10 Yr	6600.00	88.00	96.18		96.34	0.002314	3.20	2064.36	302.80	0.22
CL	8161.7	50 Yr	31000.00	88.00	102.30		102.65	0.003010	5.40	7221.29	1700.58	0.28
CL	8161.7	500 Yr	120000.00	88.00	108.45		109.13	0.002906	6.95	18292.00	1885.93	0.29
CL	7645.16	100 Yr	51000.00	86.75	102.69		103.07	0.002803	5.62	10802.19	1839.16	0.27
CL	7645.16	10 Yr	6600.00	86.75	95.01		95.15	0.002256	3.00	2200.92	352.56	0.21
CL	7645.16	50 Yr	31000.00	86.75	100.82		101.15	0.002795	5.08	7447.60	1649.03	0.27
CL	7645.16	500 Yr	120000.00	86.75	107.05		107.67	0.002693	6.67	19074.96	1953.51	0.28
CL	7000.4	100 Yr	51000.00	84.97	100.40		100.92	0.003987	6.43	9463.68	1874.98	0.33
CL	7000.4	10 Yr	6600.00	84.97	93.18		93.35	0.003508	3.38	1949.93	393.55	0.27
CL	7000.4	50 Yr	31000.00	84.97	98.46		98.93	0.004264	5.89	6020.99	1468.23	0.33
CL	7000.4	500 Yr	120000.00	84.97	105.29		105.91	0.002767	6.81	19229.57	2070.11	0.30
CL	6455.66	100 Yr	51000.00	81.94	97.69		98.31	0.005782	6.76	8168.58	1407.87	0.37
CL	6455.66	10 Yr	6600.00	81.94	91.16		91.32	0.003967	3.29	2011.33	461.94	0.27
CL	6455.66	50 Yr	31000.00	81.94	95.39		95.97	0.007161	6.45	5316.13	1149.97	0.39
CL	6455.66	500 Yr	120000.00	81.94	104.21		104.60	0.001908	5.35	24081.23	2754.94	0.23
CL	5982.43	100 Yr	51000.00	80.99	96.28		96.60	0.002267	3.80	11502.18	2336.29	0.22
CL	5982.43	10 Yr	6600.00	80.99	89.40		89.52	0.003628	2.97	2460.05	1031.02	0.25
CL	5982.43	50 Yr	31000.00	80.99	93.44		93.74	0.003125	3.53	7257.66	1340.46	0.25
CL	5982.43	500 Yr	120000.00	80.99	103.61		103.91	0.001051	3.85	27438.77	3515.30	0.17
CL	5536.03	100 Yr	51000.00	80.99	95.70		95.90	0.001044	3.43	14001.15	2827.78	0.19
CL	5536.03	10 Yr	6600.00	80.99	87.41		87.55	0.005390	3.00	2172.10	1083.16	0.33
CL	5536.03	50 Yr	31000.00	80.99	92.65		92.83	0.001332	3.12	9219.85	2001.77	0.20
CL	5536.03	500 Yr	120000.00	80.99	103.44		103.60	0.000392	3.01	37437.83	5074.76	0.13

HEC-RAS Plan: SLR_DE River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	5169.79	100 Yr	51000.00	79.99	95.50		95.64	0.000464	3.02	18272.77	2578.91	0.16
CL	5169.79	10 Yr	6600.00	79.99	86.82		86.87	0.000879	1.74	3782.70	1327.62	0.18
CL	5169.79	50 Yr	31000.00	79.99	92.41		92.52	0.000540	2.65	11996.71	1679.91	0.16
CL	5169.79	500 Yr	120000.00	79.99	103.35		103.48	0.000254	3.16	44733.86	3518.82	0.13
CL	4222.64	100 Yr	51000.00	77.99	95.00		95.12	0.000630	3.02	18670.20	2686.29	0.15
CL	4222.64	10 Yr	6600.00	77.99	86.08		86.11	0.000726	1.54	4278.23	1023.12	0.13
CL	4222.64	50 Yr	31000.00	77.99	91.81		91.92	0.000752	2.73	11937.53	1594.01	0.15
CL	4222.64	500 Yr	120000.00	77.99	103.09		103.21	0.000311	2.95	43608.00	3240.03	0.11
CL	3856.01	100 Yr	51000.00	76.99	94.67		94.82	0.001085	3.59	16892.24	2946.29	0.19
CL	3856.01	10 Yr	6600.00	76.99	85.27		85.51	0.005720	3.95	1668.92	381.33	0.33
CL	3856.01	50 Yr	31000.00	76.99	91.29		91.49	0.001943	3.78	8954.91	1717.43	0.24
CL	3856.01	500 Yr	120000.00	76.99	102.97		103.09	0.000334	2.88	43014.37	3285.78	0.12
CL	3545.16	100 Yr	51000.00	75.98	94.37		94.56	0.000684	3.24	15314.46	1669.35	0.15
CL	3545.16	10 Yr	6600.00	75.98	84.54		84.61	0.001598	2.46	3011.55	1009.24	0.19
CL	3545.16	50 Yr	31000.00	75.98	90.96		91.11	0.000786	2.92	9989.48	1222.89	0.16
CL	3545.16	500 Yr	120000.00	75.98	102.70		102.96	0.000487	3.72	30725.21	2010.85	0.14
CL	3001.61	100 Yr	51000.00	73.34	92.74		93.76	0.003395	8.12	6281.68	632.67	0.45
CL	3001.61	10 Yr	6600.00	73.34	82.96		83.32	0.003703	4.79	1376.55	335.31	0.42
CL	3001.61	50 Yr	31000.00	73.34	89.31		90.18	0.004628	7.47	4149.45	602.94	0.50
CL	3001.61	500 Yr	120000.00	73.34	100.86		102.34	0.002312	9.96	13241.48	1166.28	0.41
CL	2749.05	100 Yr	51000.00	72.00	92.67		93.15	0.001098	5.55	9189.11	714.25	0.27
CL	2749.05	10 Yr	6600.00	72.00	82.45		82.59	0.001955	3.00	2201.54	636.36	0.28
CL	2749.05	50 Yr	31000.00	72.00	89.18		89.51	0.001123	4.61	6727.21	697.27	0.26
CL	2749.05	500 Yr	120000.00	72.00	100.80		101.78	0.001173	7.94	15228.68	1057.08	0.31
CL	2194.69	100 Yr	51000.00	69.78	91.58		92.36	0.001764	7.06	7221.37	599.94	0.33
CL	2194.69	10 Yr	6600.00	69.78	81.79		81.90	0.000850	2.63	2507.95	414.90	0.19
CL	2194.69	50 Yr	31000.00	69.78	88.29		88.77	0.001522	5.58	5555.31	496.52	0.29
CL	2194.69	500 Yr	120000.00	69.78	99.07		100.82	0.002286	10.68	11911.60	1402.87	0.41
CL	991.16	100 Yr	51000.00	74.00	88.72		90.11	0.001865	9.46	5390.16	456.31	0.49
CL	991.16	10 Yr	6600.00	74.00	80.75		80.92	0.000761	3.36	1963.67	402.83	0.27
CL	991.16	50 Yr	31000.00	74.00	86.09		86.93	0.001488	7.36	4209.50	438.71	0.42
CL	991.16	500 Yr	120000.00	74.00	94.78		97.83	0.002464	14.21	9163.02	1391.27	0.60

HEC-RAS Plan: SLR_DE River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	0	100 Yr	51000.00	75.60	86.10	83.50	87.84	0.002783	10.81	5004.30	590.29	0.61
CL	0	10 Yr	6600.00	75.60	79.50	77.93	79.80	0.001814	4.37	1510.43	437.98	0.41
CL	0	50 Yr	31000.00	75.60	84.00	81.48	85.08	0.002322	8.47	3812.89	545.18	0.54
CL	0	500 Yr	120000.00	75.60	92.00	89.13	95.18	0.002903	14.87	8832.83	730.63	0.67

HEC-RAS Plan: SLR_DE River: SLR Reach: CL

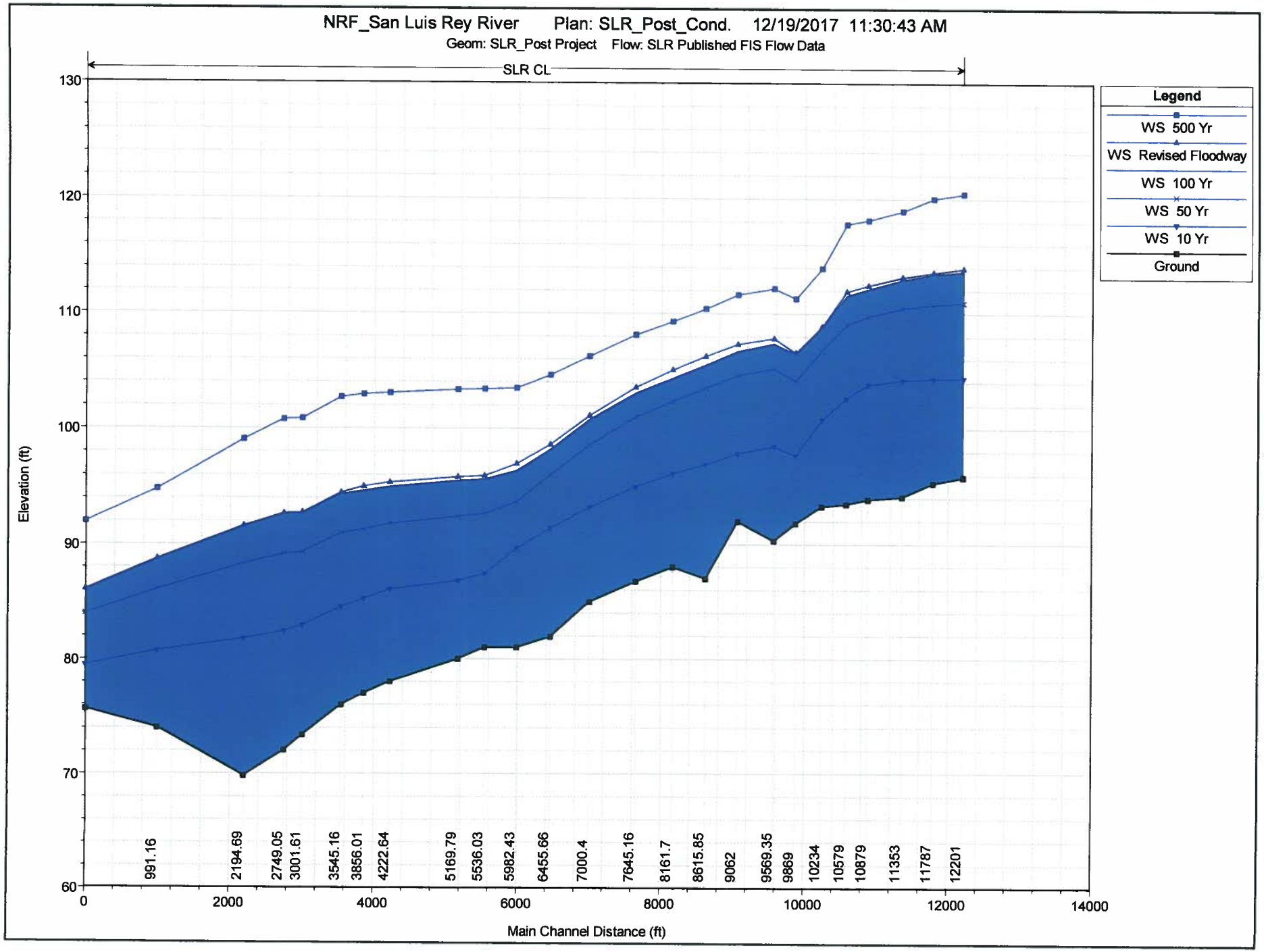
Reach	River Sta	Profile	W.S. Elev	Prof Delta WS	E.G. Elev	Top Wdth Act	Q Left	Q Channel	Q Right	Enc Sta L	Ch Sta L	Ch Sta R	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)
CL	12201	100 Yr	113.74		114.33	871.00	8716.96	41722.55	560.49		4725.00	5168.00	
CL	12201	Revised Floodway	114.00	0.25	114.55	808.04	9014.71	41269.20	716.10	4399.98	4725.00	5168.00	5208.02
CL	11787	100 Yr	113.50		114.11	838.37	12663.76	34608.45	3727.78		4703.00	5000.00	
CL	11787	Revised Floodway	113.62	0.12	114.32	648.00	14831.22	36168.78		4352.00	4703.00	5000.00	5000.00
CL	11353	100 Yr	113.00		113.85	719.79	8350.43	41951.86	697.71		4769.00	5079.00	
CL	11353	Revised Floodway	113.25	0.25	114.05	687.00	8529.44	41619.40	851.16	4459.00	4769.00	5079.00	5146.00
CL	10879	100 Yr	112.17		113.41	812.30	11613.04	37490.95	1896.02		4845.00	5120.00	
CL	10879	Revised Floodway	112.52	0.34	113.65	811.50	11910.52	36981.16	2108.32	4495.50	4845.00	5120.00	5307.00
CL	10579	100 Yr	111.61		112.95	883.43	22350.45	24802.33	3847.22		4929.00	5070.00	
CL	10579	Revised Floodway	111.98	0.37	113.24	784.80	22958.92	24583.94	3457.15	4437.20	4929.00	5070.00	5222.00
CL	10234	100 Yr	108.94		111.94	702.01	13062.38	36221.25	1716.36		4865.00	5065.00	
CL	10234	Revised Floodway	108.91	-0.03	112.20	573.70	13696.04	37303.96		4491.30	4865.00	5065.00	5065.00
CL	9869	100 Yr	106.56		109.55	761.61	11009.53	36992.57	2997.90		4887.00	5095.00	
CL	9869	Revised Floodway	106.63	0.07	109.72	645.00	11302.22	37524.32	2173.46	4535.00	4887.00	5095.00	5180.00
CL	9569.35	100 Yr	107.31		108.04	954.65	11093.53	37900.03	2006.44		1150.00	1485.00	
CL	9569.35	Revised Floodway	107.89	0.58	108.62	700.00	10072.45	38535.85	2391.70	843.00	1150.00	1485.00	1543.00
CL	9062	100 Yr	106.66		107.31	1151.96	17668.31	33141.42	190.27		1147.79	1513.99	
CL	9062	Revised Floodway	107.37	0.71	107.95	1018.60	18263.96	32576.12	159.92	510.00	1147.79	1513.99	1535.00
CL	8615.85	100 Yr	105.35		105.79	1528.03	10336.65	36972.77	3690.58		1073.89	1510.57	
CL	8615.85	Revised Floodway	106.33	0.98	106.72	1247.00	11048.60	36824.89	3126.51	420.00	1073.89	1510.57	1667.00
CL	8161.7	100 Yr	104.15		104.56	1765.07	17150.75	27336.54	6512.70		1085.33	1431.67	
CL	8161.7	Revised Floodway	105.13	0.98	105.62	1215.00	15207.61	30927.35	4865.05	385.00	1085.33	1431.67	1600.00
CL	7645.16	100 Yr	102.69		103.07	1839.16	13497.55	28343.54	9158.92		1040.35	1423.84	
CL	7645.16	Revised Floodway	103.63	0.94	104.10	1235.00	12130.69	32235.13	6634.19	385.00	1040.35	1423.84	1620.00
CL	7000.4	100 Yr	100.40		100.92	1874.98	4371.83	31863.76	14764.41		788.03	1217.14	
CL	7000.4	Revised Floodway	101.17	0.78	101.85	1100.00	3290.84	36491.47	11217.70	400.00	788.03	1217.14	1500.00
CL	6455.66	100 Yr	97.69		98.31	1407.87	13.24	33870.59	17116.18		740.55	1217.26	
CL	6455.66	Revised Floodway	98.65	0.97	99.36	830.00	0.20	36493.72	14506.07	740.00	740.55	1217.26	1570.00
CL	5982.43	100 Yr	96.28		96.60	1748.57		17078.01	33921.99		1242.59	1744.38	
CL	5982.43	Revised Floodway	97.01	0.73	97.52	1054.70	0.00	22088.31	28911.68	1242.00	1242.59	1744.38	2305.00
CL	5536.03	100 Yr	95.70		95.90	1815.04	355.13	15555.66	35089.21		3050.23	3495.92	

HEC-RAS Plan: SLR_DE River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	W.S. Elev	Prof Delta WS	E.G. Elev	Top Wdth Act	Q Left	Q Channel	Q Right	Enc Sta L	Ch Sta L	Ch Sta R	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)
CL	5536.03	Revised Floodway	95.95	0.25	96.37	1032.00		23338.86	27661.14	3068.00	3050.23	3495.92	4100.00
CL	5169.79	100 Yr	95.50		95.64	2578.91	3091.70	47638.26	270.05		2078.02	3476.32	
CL	5169.79	Revised Floodway	95.84	0.34	95.98	1693.00	2036.72	48918.71	44.57	1900.00	2078.02	3476.32	3593.00
CL	4222.64	100 Yr	95.00		95.12	2686.29	9115.14	41424.78	460.08		2051.02	3123.83	
CL	4222.64	Revised Floodway	95.36	0.37	95.49	1726.00	8805.39	42149.42	45.19	1530.00	2051.02	3123.83	3256.00
CL	3856.01	100 Yr	94.67		94.82	2946.29	19358.21	30257.11	1384.69		2127.46	2884.85	
CL	3856.01	Revised Floodway	95.02	0.35	95.21	1632.00	19553.01	30475.87	971.13	1430.00	2127.46	2884.85	3062.00
CL	3545.16	100 Yr	94.37		94.56	1669.35	34101.71	15064.50	1833.79		1275.85	1600.69	
CL	3545.16	Revised Floodway	94.49	0.12	94.86	981.00	29255.81	20228.75	1515.44	810.00	1275.85	1600.69	1791.00
CL	3001.61	100 Yr	92.74		93.76	632.67		51000.00			859.02	1493.13	
CL	3001.61	Revised Floodway	92.74	0.00	93.76	632.67		51000.00			859.02	1493.13	
CL	2749.05	100 Yr	92.67		93.15	714.25		51000.00			816.93	1535.68	
CL	2749.05	Revised Floodway	92.67	0.00	93.15	714.25		51000.00			816.93	1535.68	
CL	2194.69	100 Yr	91.58		92.36	513.37		51000.00	0.01		951.23	1464.40	
CL	2194.69	Revised Floodway	91.58	0.00	92.36	513.37		51000.00	0.01		951.23	1464.40	
CL	991.16	100 Yr	88.72		90.11	456.31		51000.00			1022.45	1486.98	
CL	991.16	Revised Floodway	88.72	0.00	90.11	456.31		51000.00			1022.45	1486.98	
CL	0	100 Yr	86.10		87.84	590.29		48480.59	2519.41		660.70	1180.20	
CL	0	Revised Floodway	86.10	0.00	87.84	590.29		48480.59	2519.41		660.70	1180.20	

ATTACHMENT 5

Proposed Condition HEC-RAS Model Profile, Output Table, Cross Sections


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
SLR CL
Legend
WS 500 Yr
WS Revised Floodway
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Elevation (ft)
Main Channel Distance (ft)
130
120
110
100
90
80
70
60
0
2000
4000
6000
8000
10000
12000
14000
991.16
2194.69
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10579
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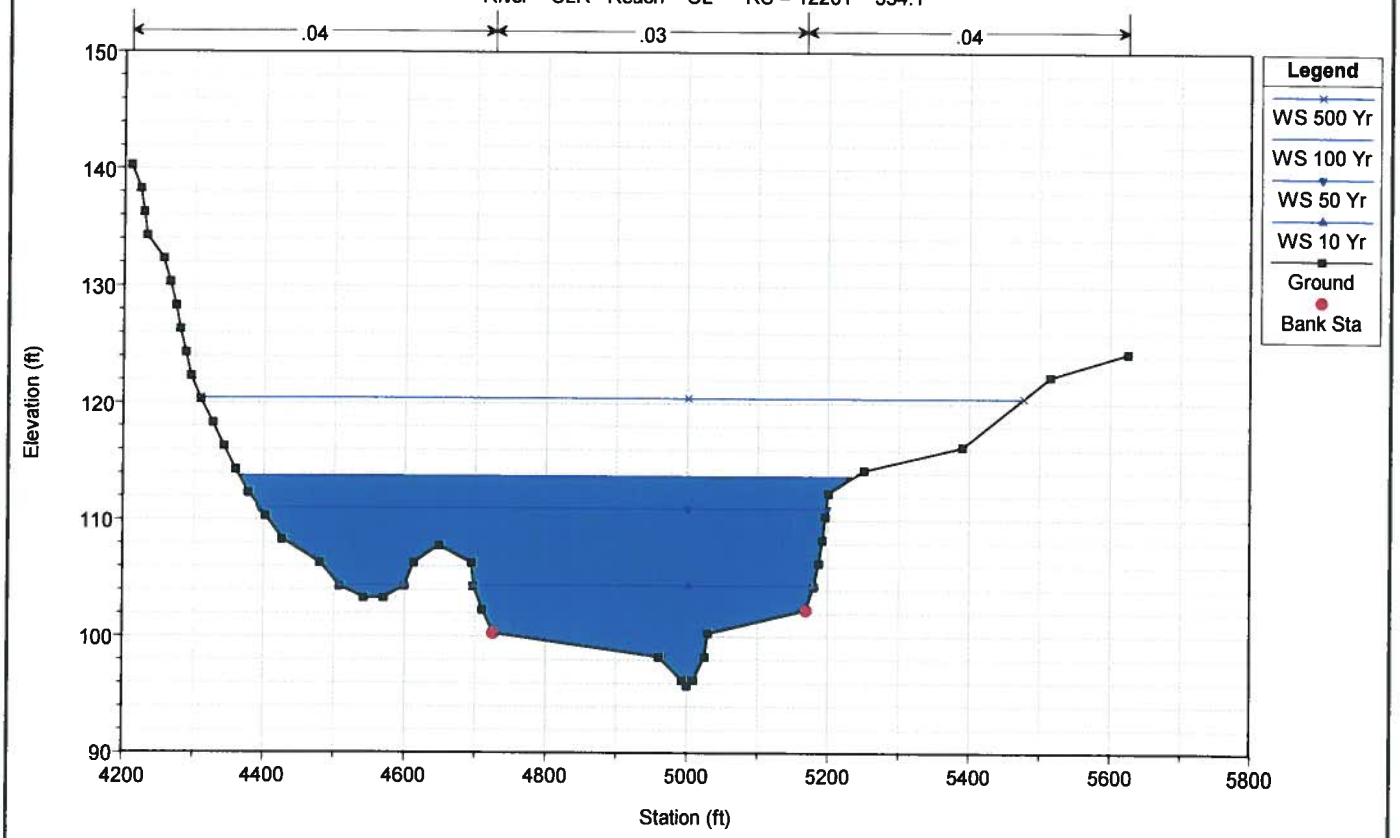
11353
11787
12201

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM

Geom: SLR_Post Project Flow: SLR Published FIS Flow Data

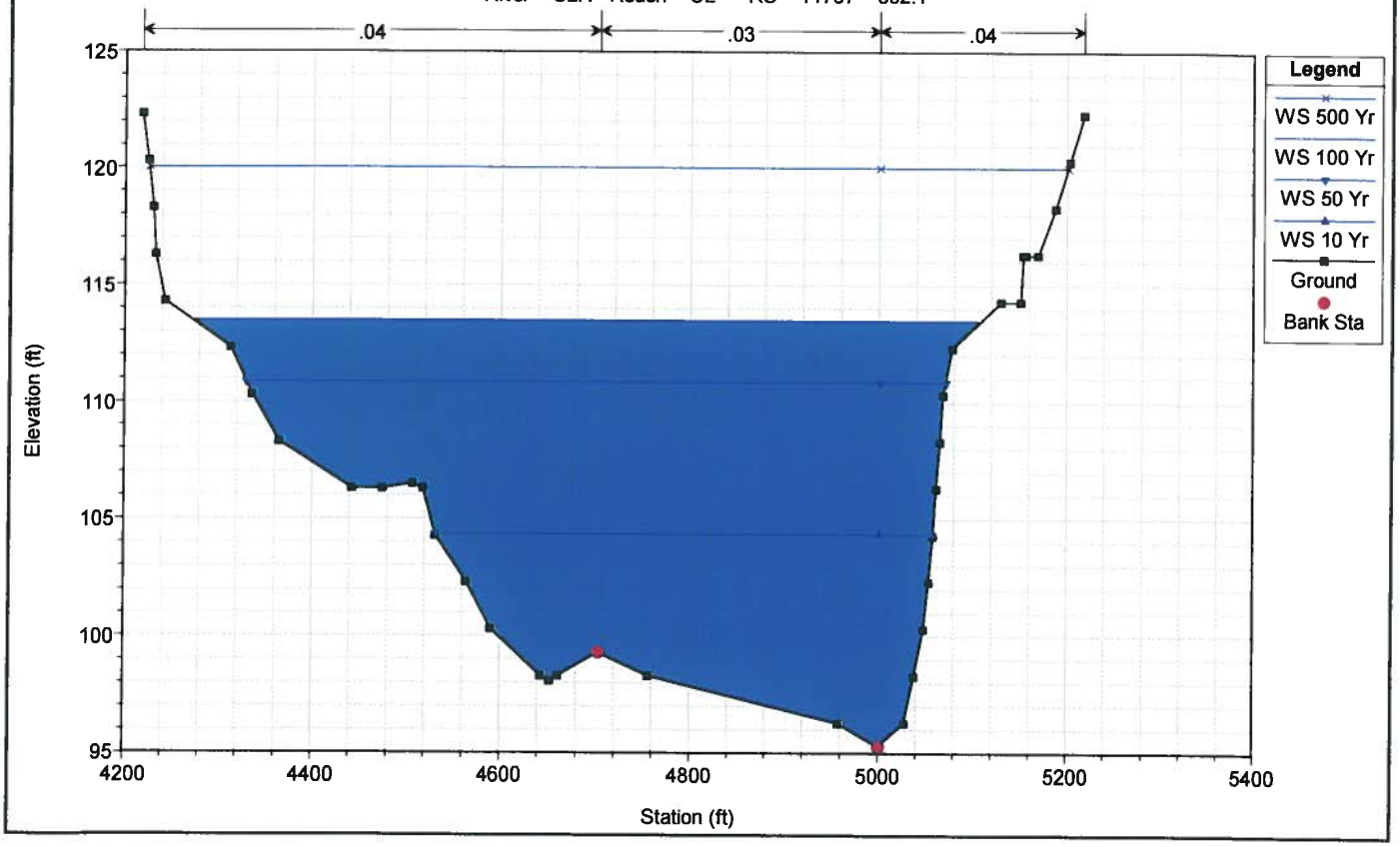
River = SLR Reach = CL RS = 12201 354.1

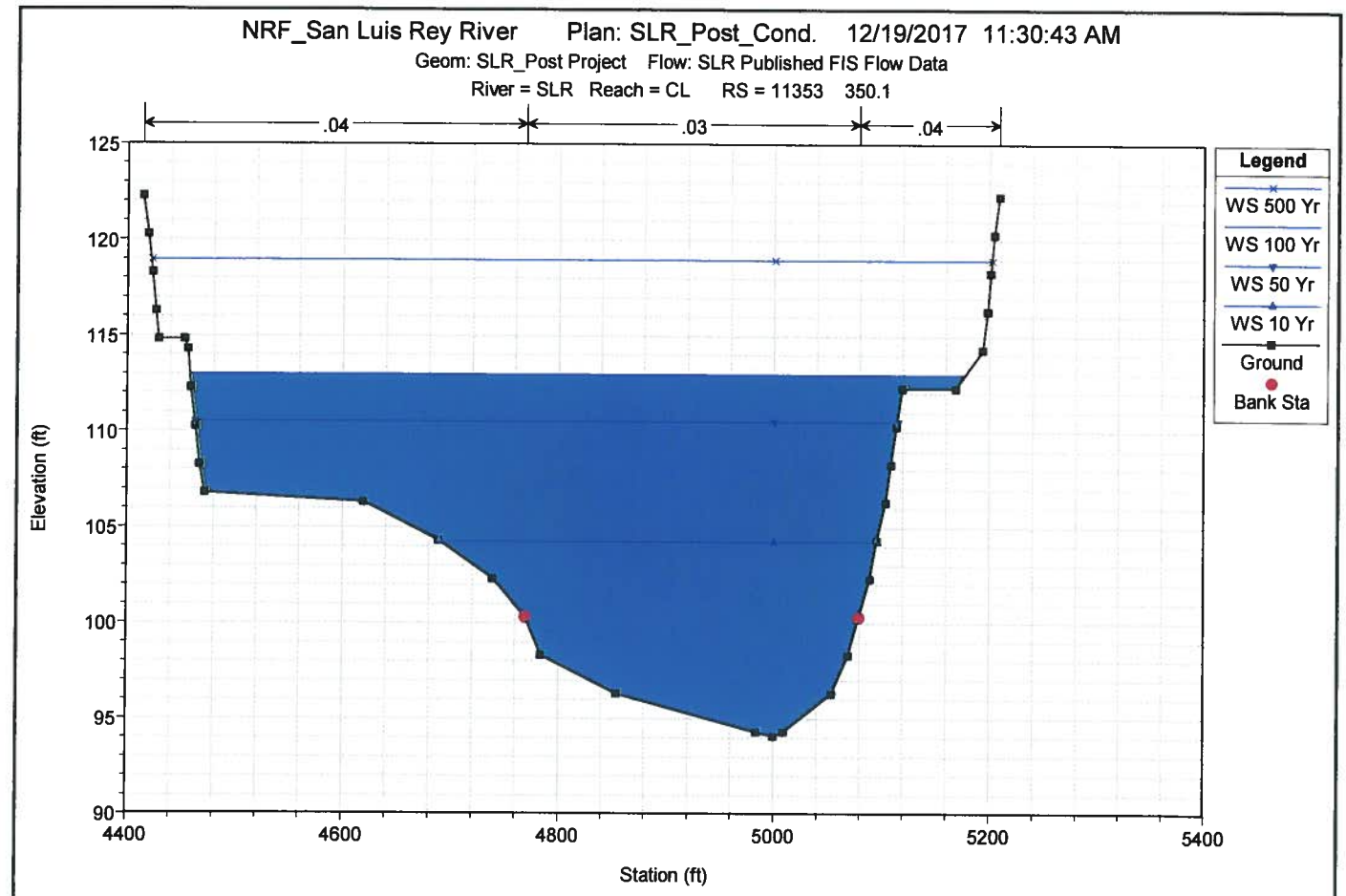


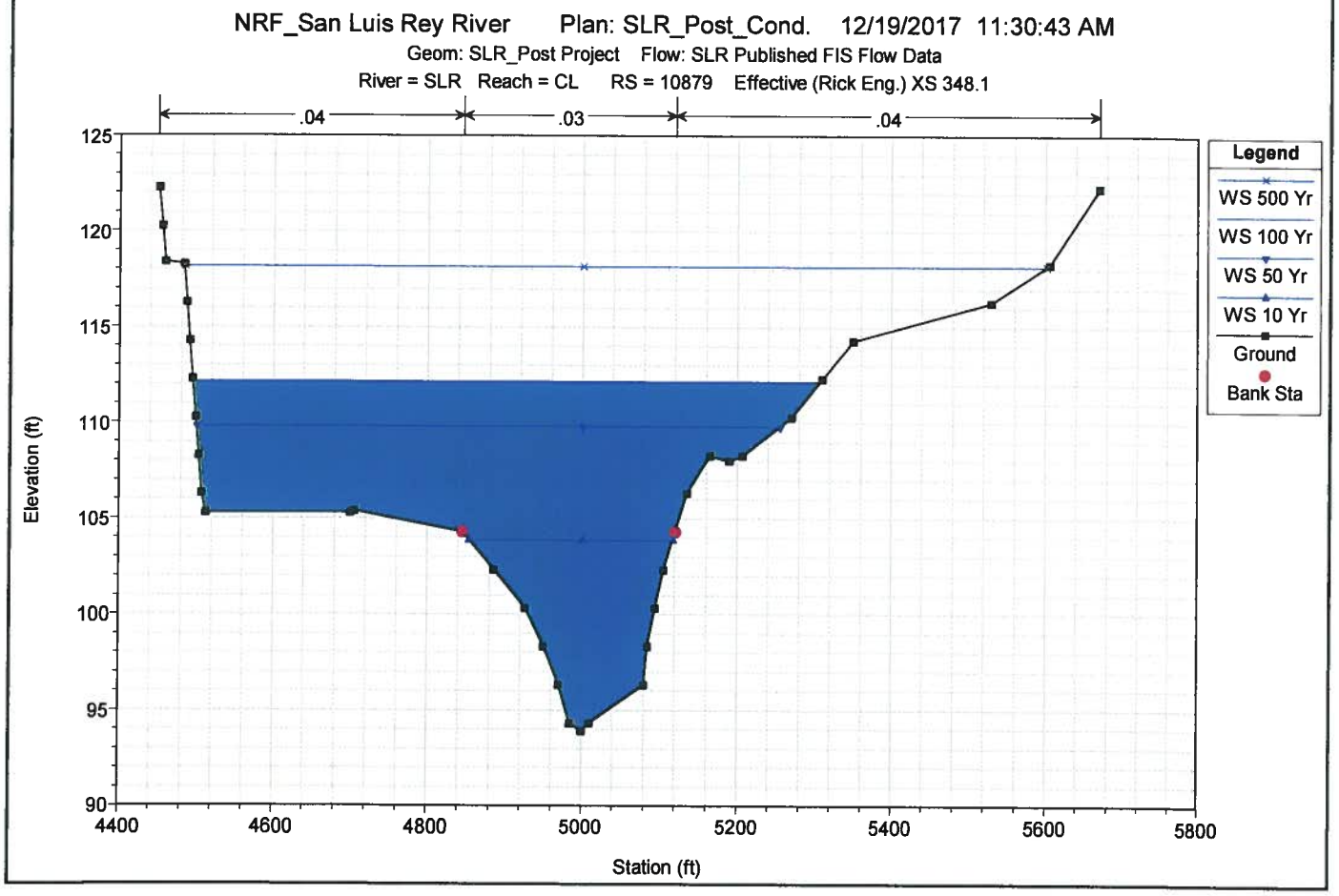
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM

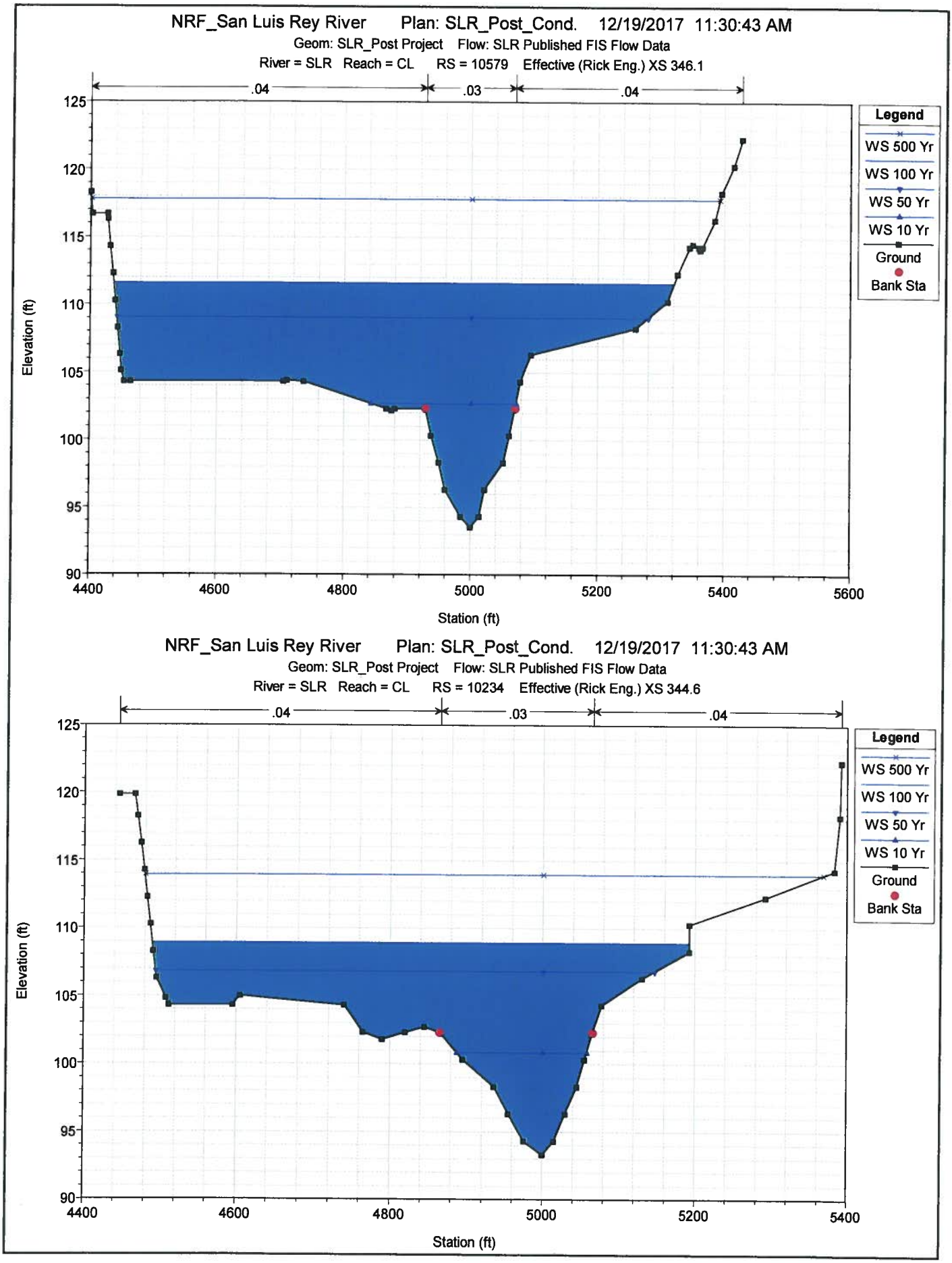
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data

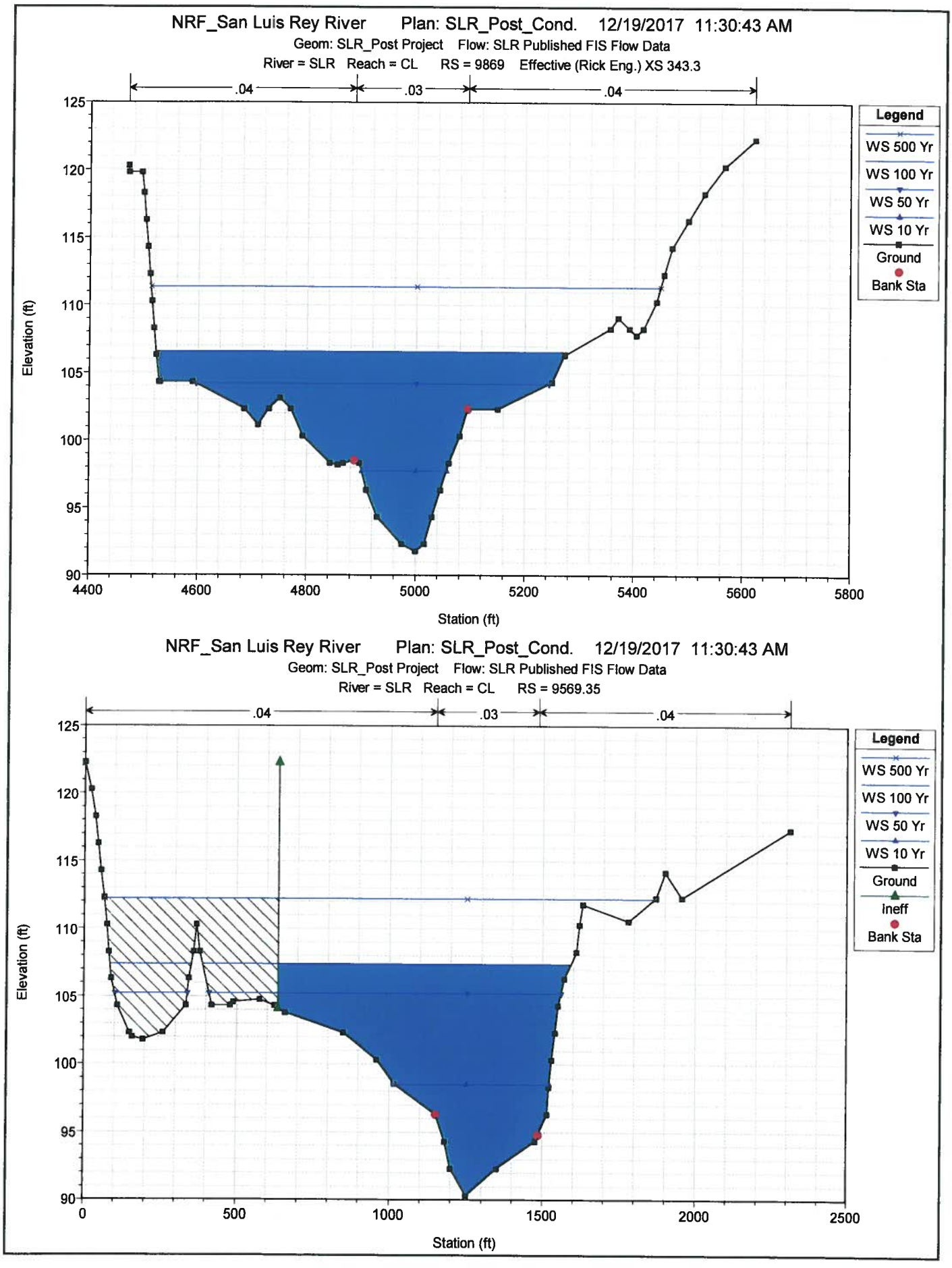
River = SLR Reach = CL RS = 11787 352.1

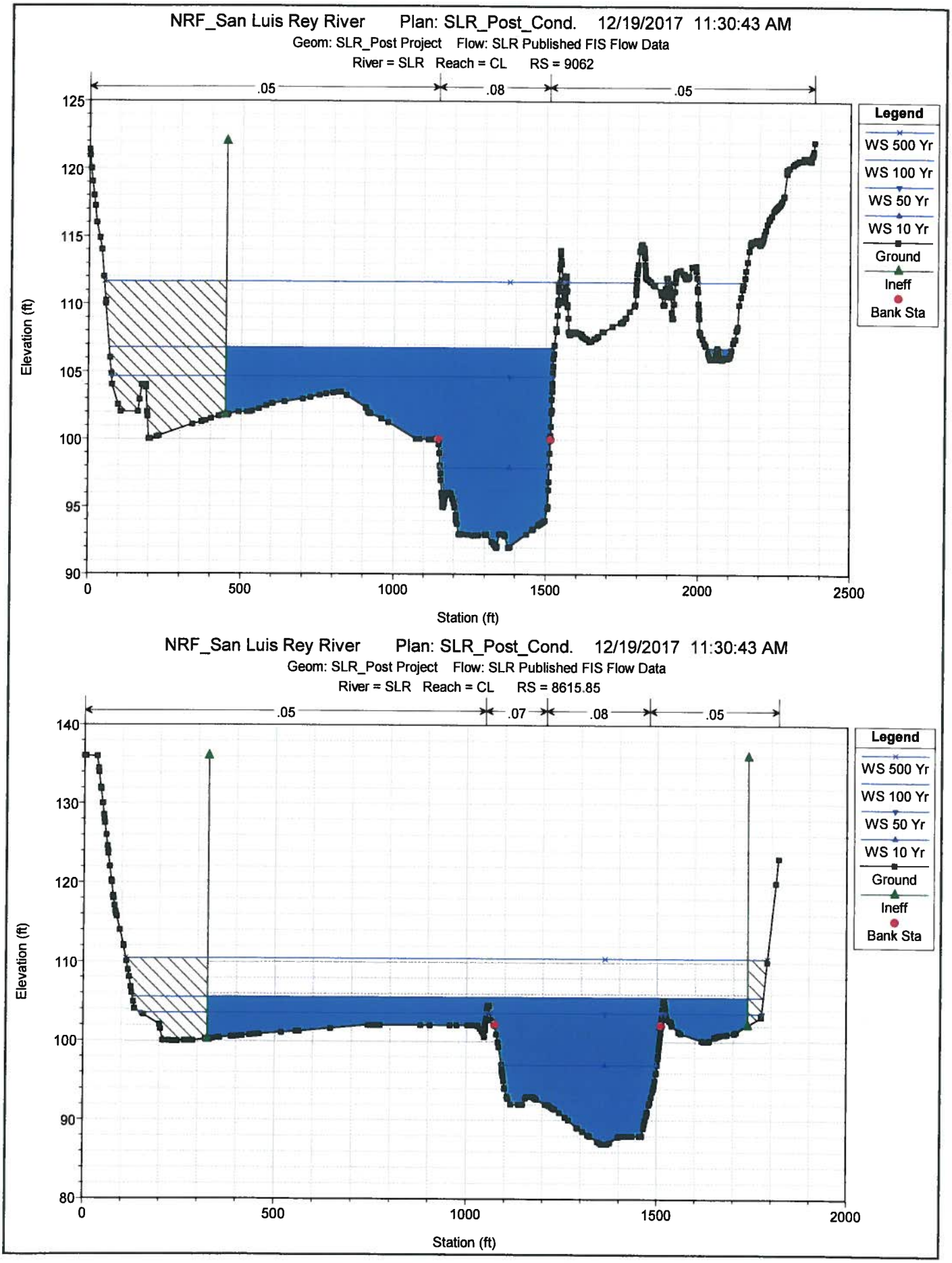


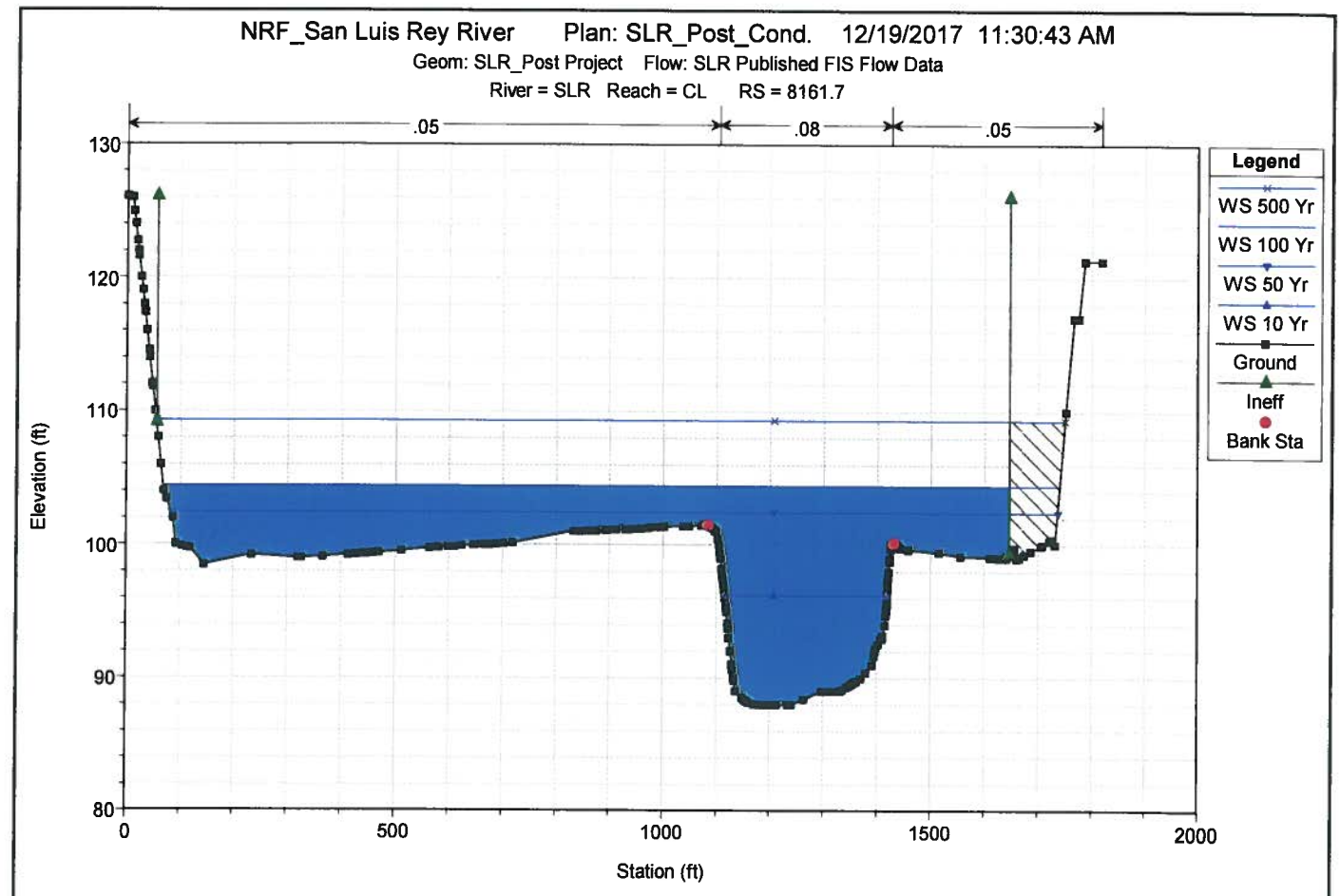

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 11353 350.1
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400

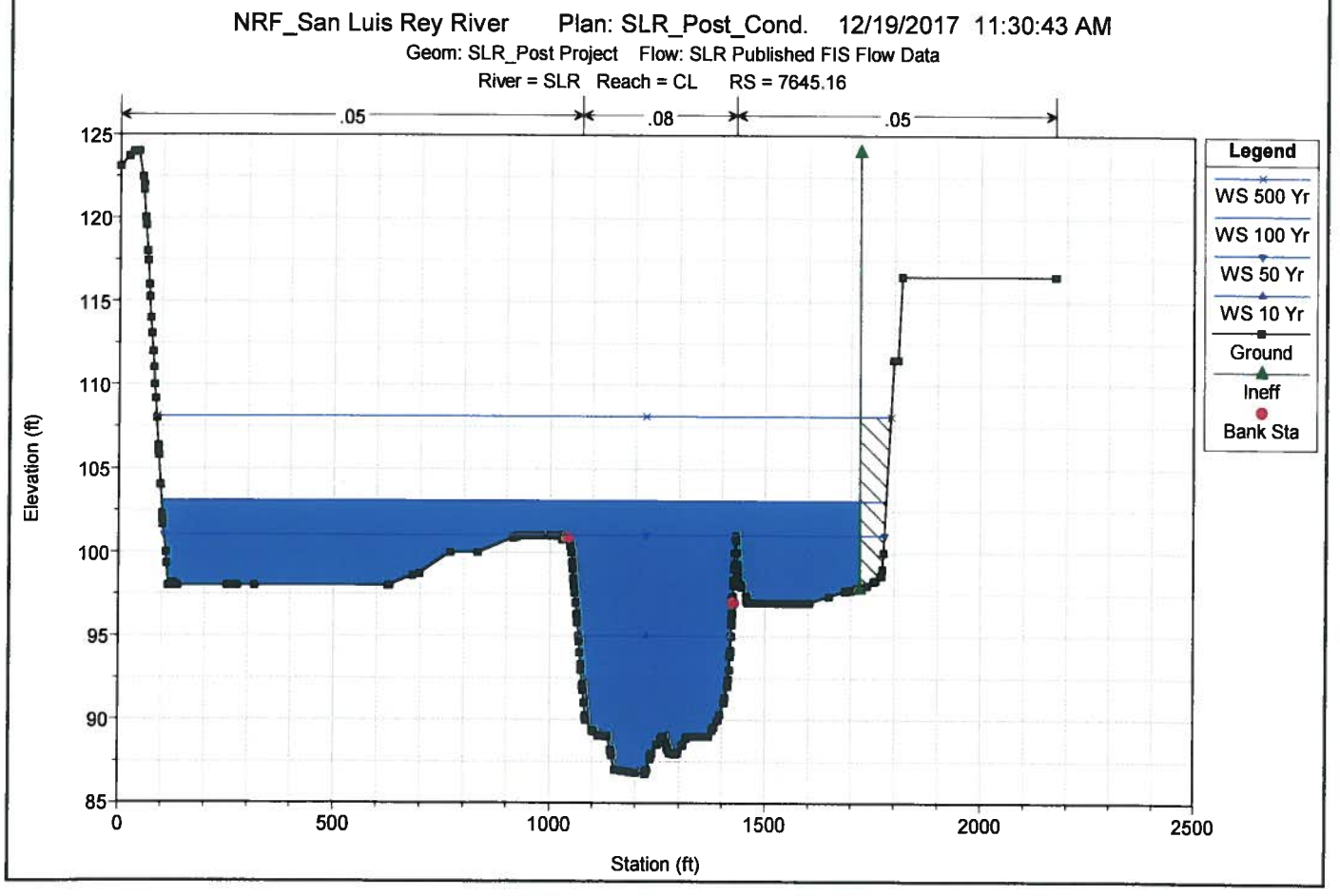

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10879 Effective (Rick Eng.) XS 348.1
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
5800

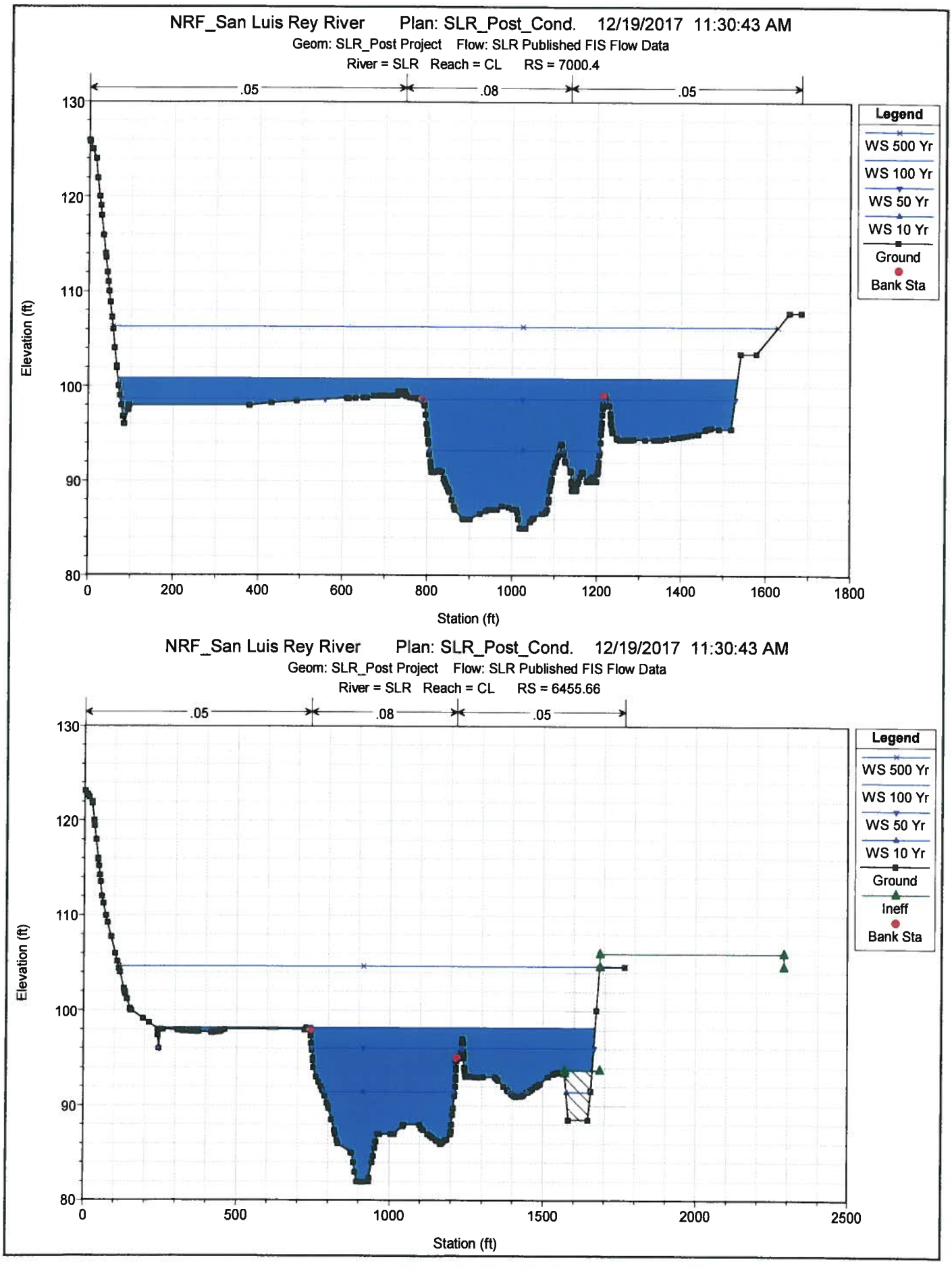

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10579 Effective (Rick Eng.) XS 346.1
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 10234 Effective (Rick Eng.) XS 344.6
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
Station (ft)

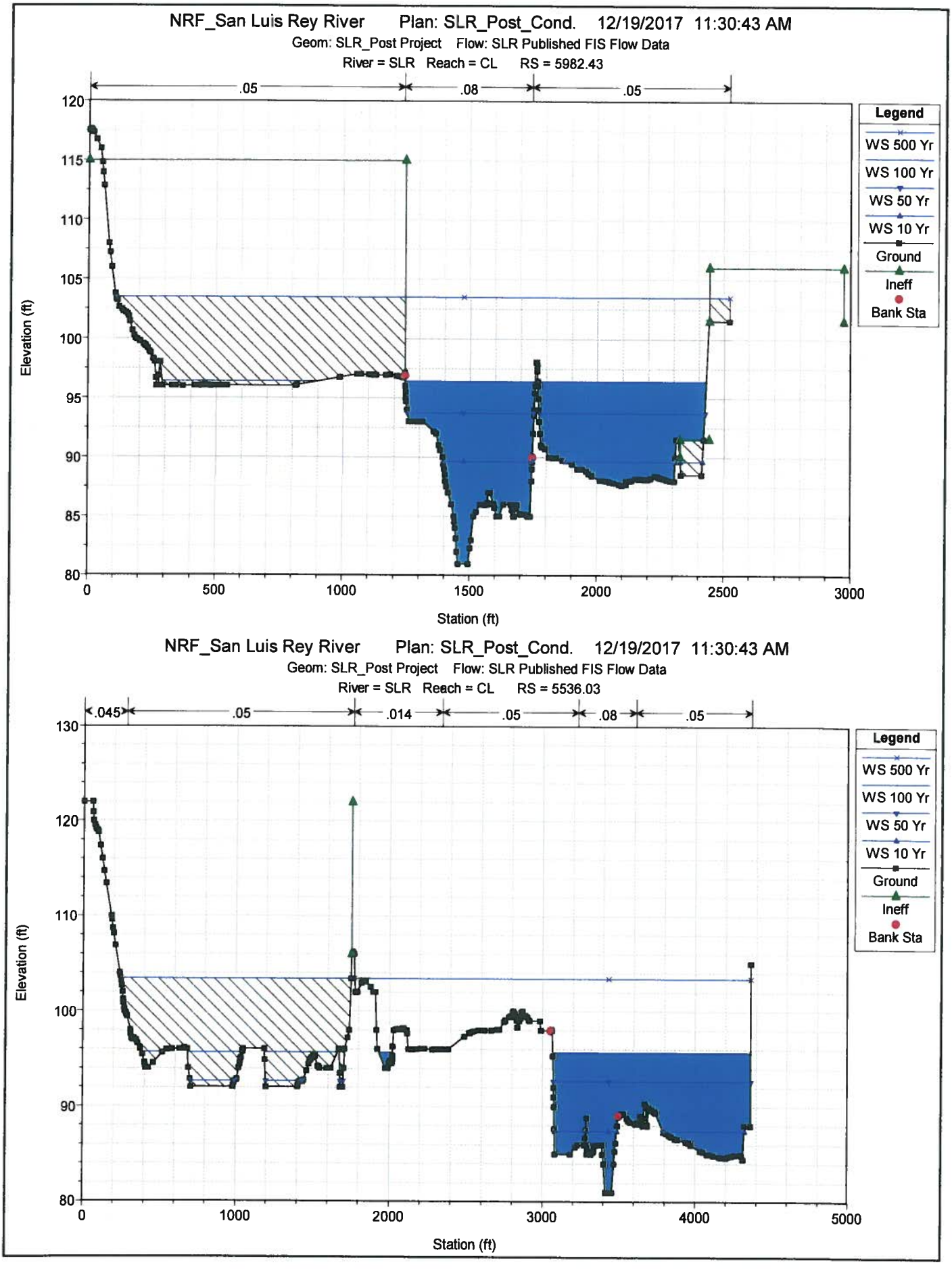

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9869 Effective (Rick Eng.) XS 343.3
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
125
120
115
110
105
100
95
90
4400
4600
4800
5000
5200
5400
5600
5800
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9569.35
.04
.03
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
125
120
115
110
105
100
95
90
0
500
1000
1500
2000
2500
Station (ft)

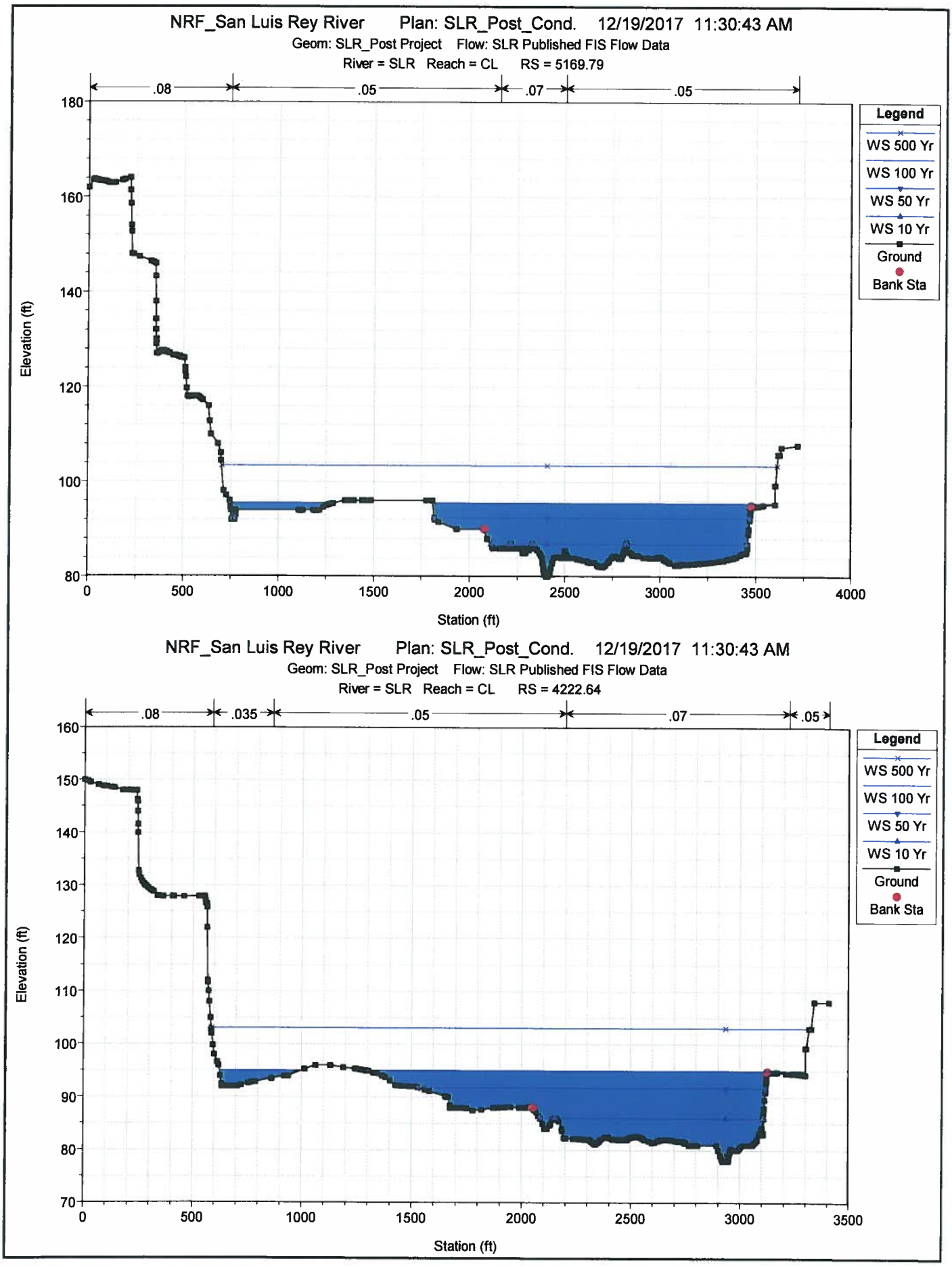

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 9062
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 8615.85
.05
.07
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 8161.7
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
130
120
110
100
90
80
0
500
1000
1500
2000


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 7645.16
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
125
120
115
110
105
100
95
90
85
0
500
1000
1500
2000
2500


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 7000.4
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
130
120
110
100
90
80
0
200
400
600
800
1000
1200
1400
1600
1800
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 6455.66
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
130
120
110
100
90
80
0
500
1000
1500
2000
2500
Station (ft)

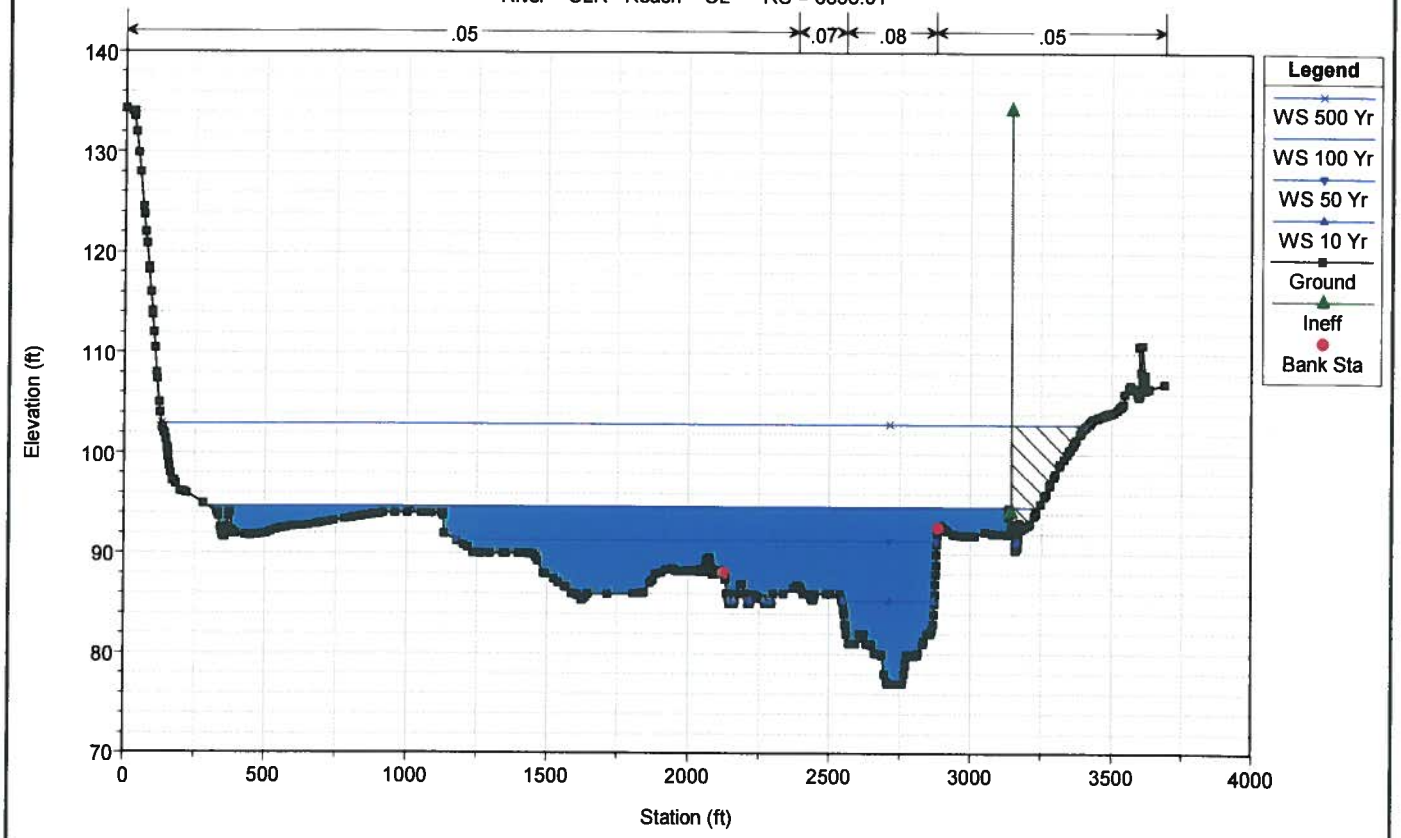

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5982.43
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
120
115
110
105
100
95
90
85
80
0
500
1000
1500
2000
2500
3000
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5536.03
.045
.05
.014
.05
.08
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
130
120
110
100
90
80
0
1000
2000
3000
4000
5000
Station (ft)


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 5169.79
.08
.05
.07
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 4222.64
.08
.035
.05
.07
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM

Geom: SLR_Post Project Flow: SLR Published FIS Flow Data

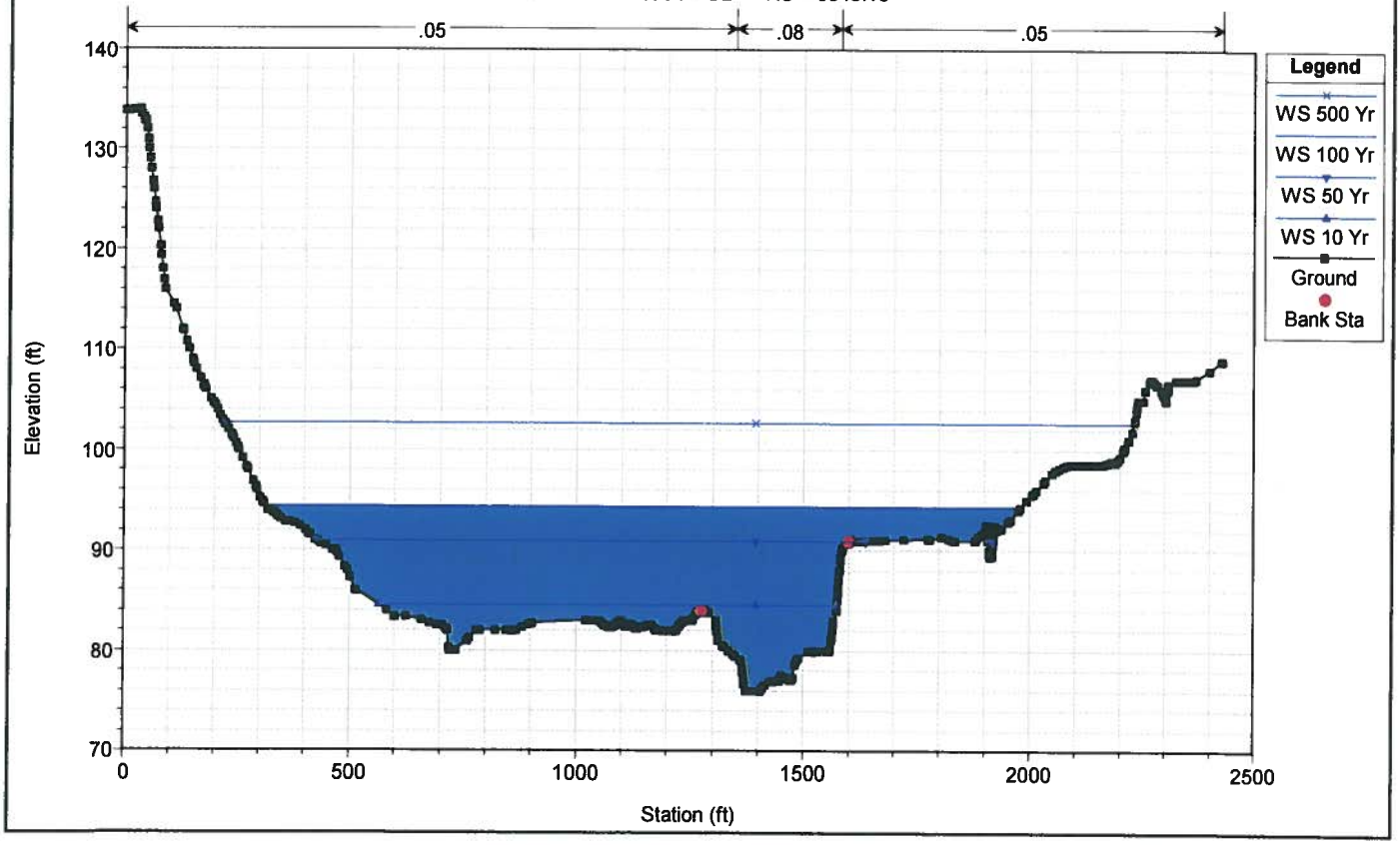
River = SLR Reach = CL RS = 3856.01

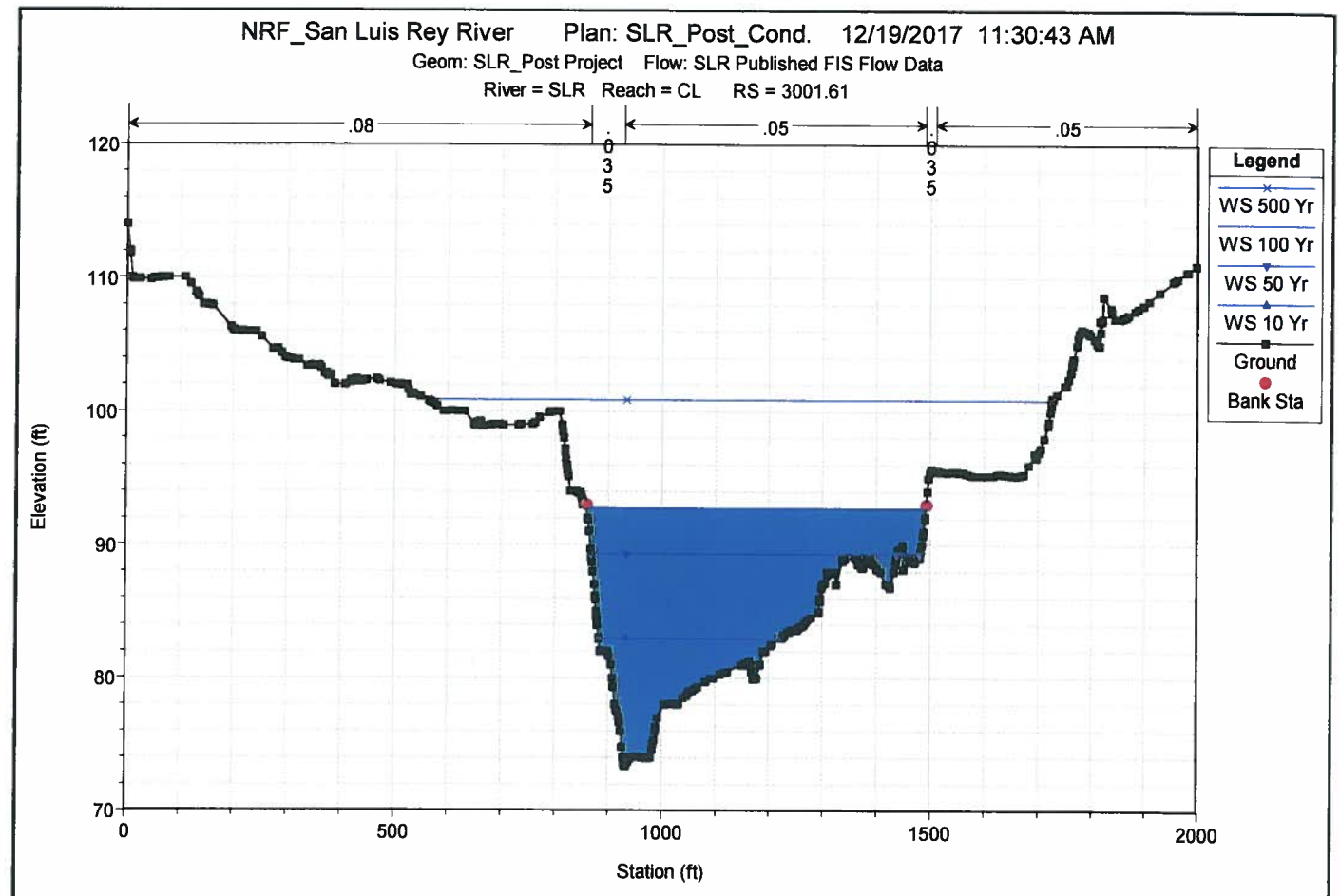


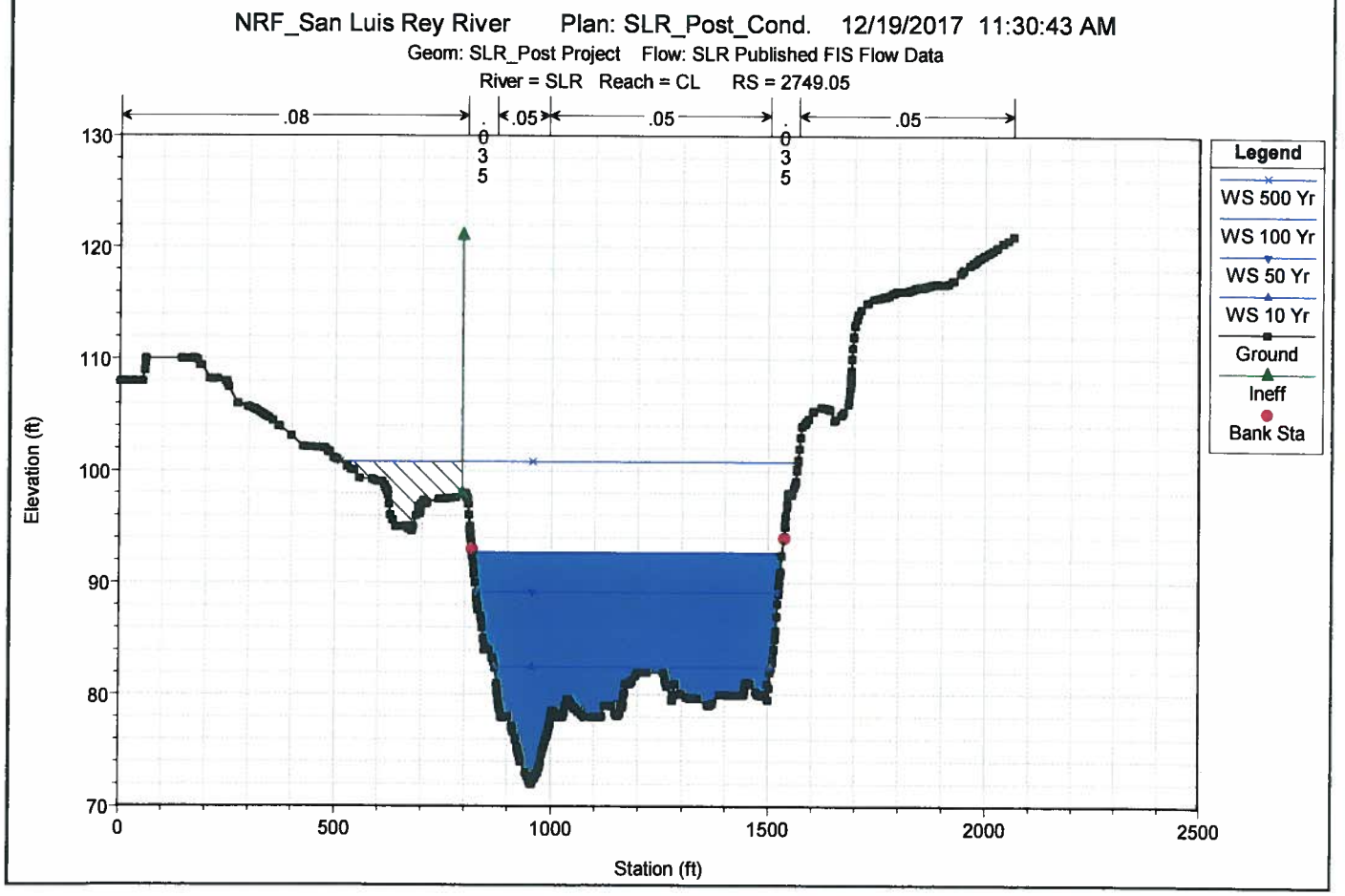
NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM

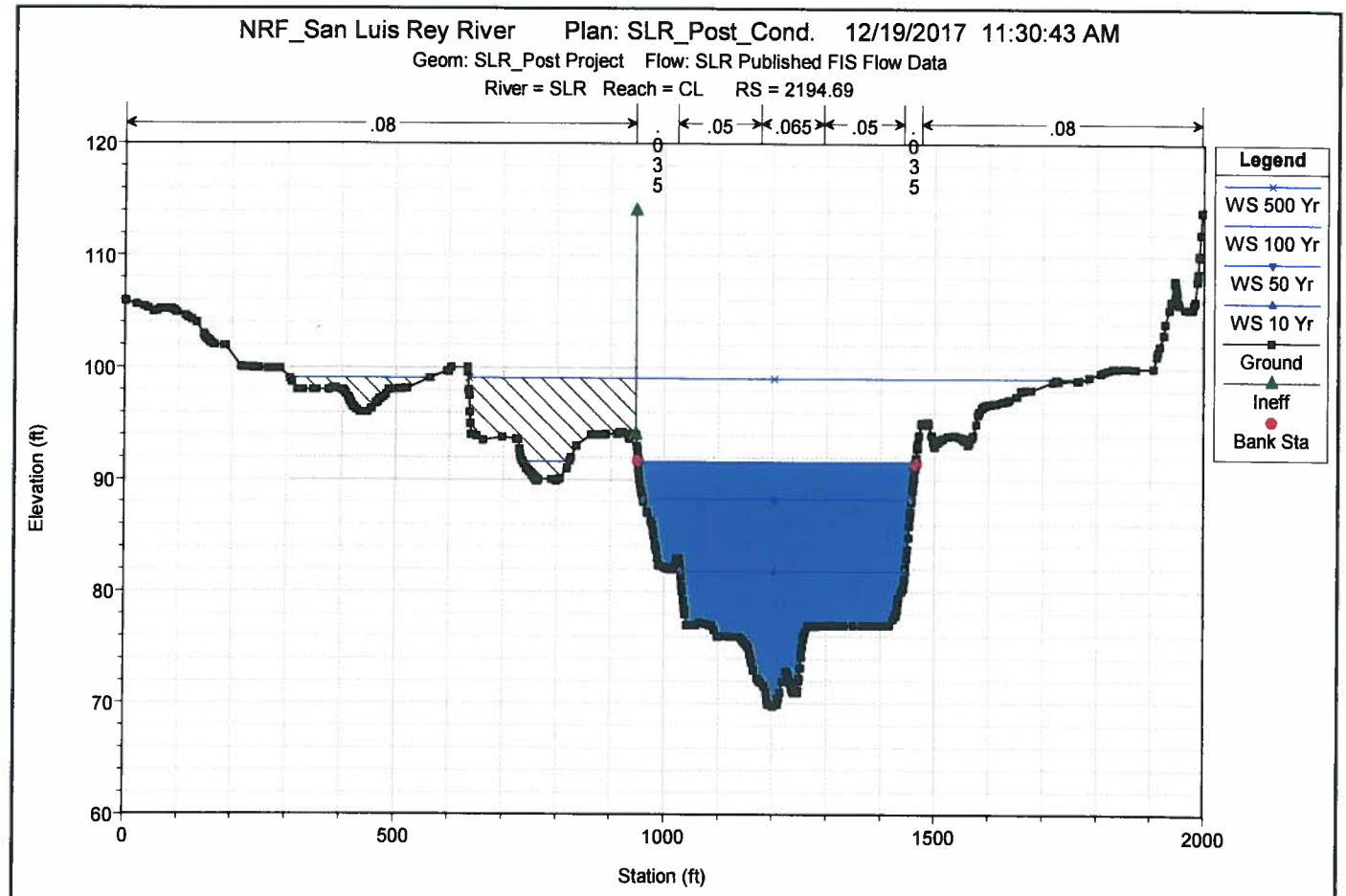
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data

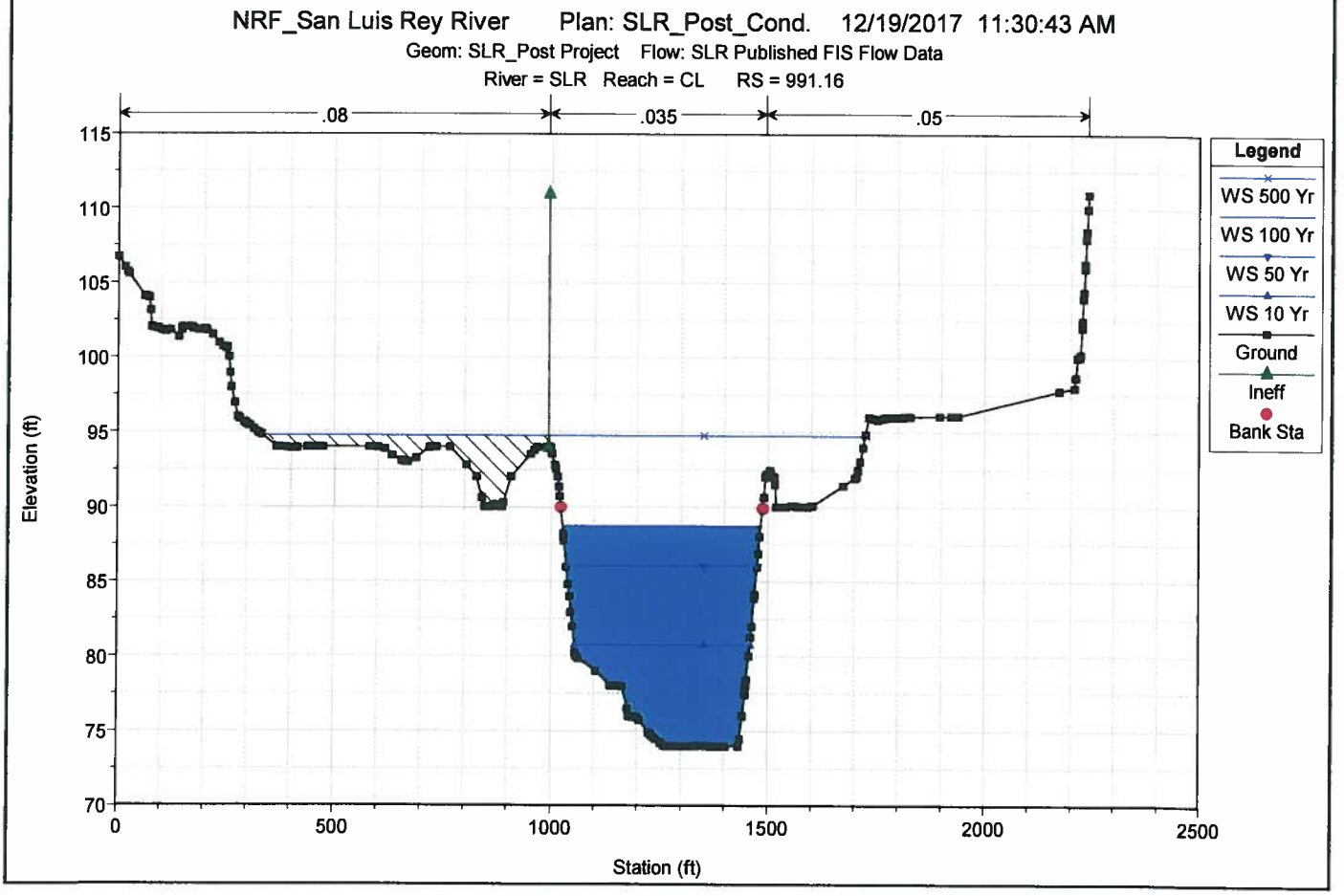
River = SLR Reach = CL RS = 3545.16

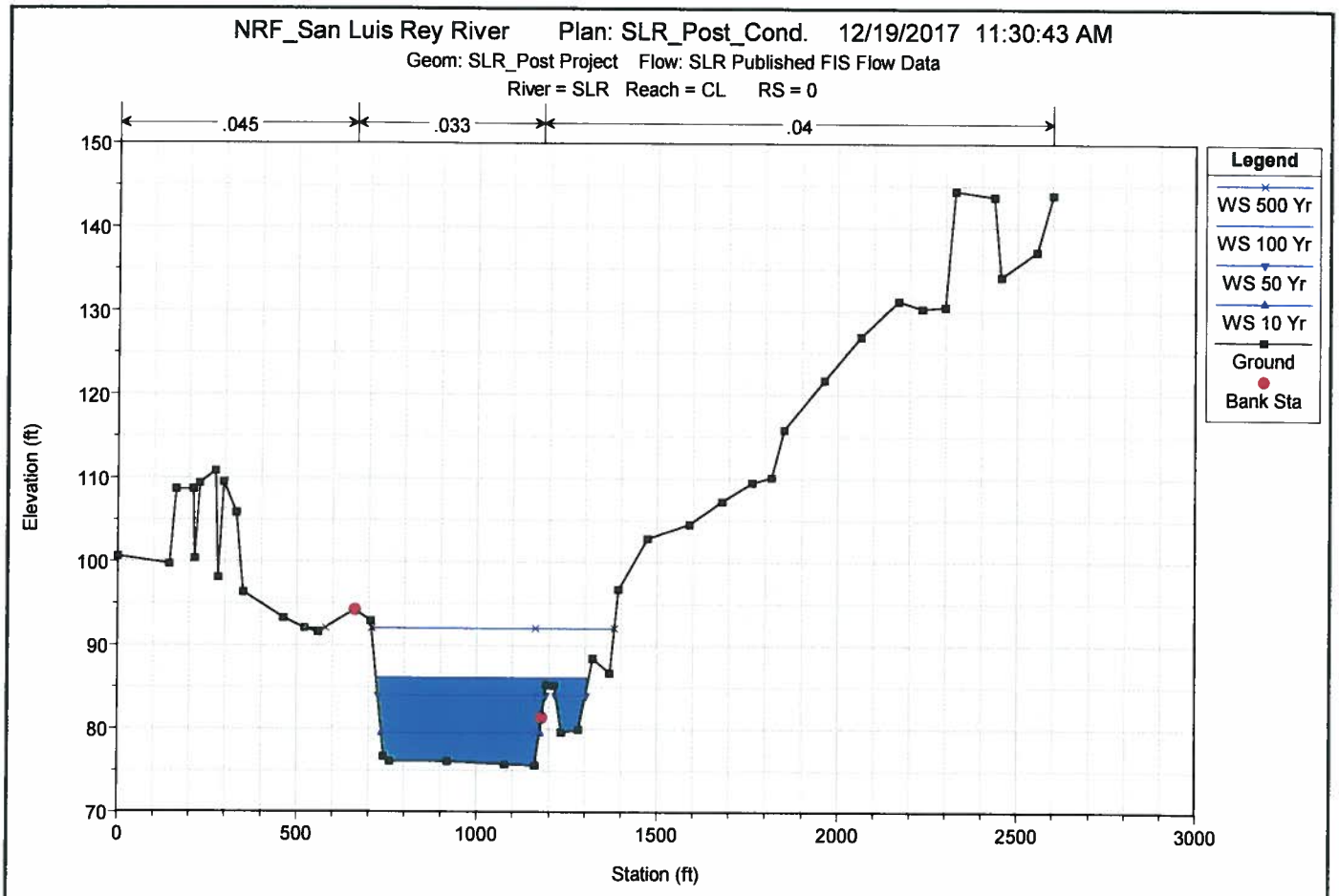



NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 3001.61
.08
.05
.05
0.035
0.035
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
120
110
100
90
80
70
0
500
1000
1500
2000
Station (ft)


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 2749.05
.08
.05
.05
.05
0.035
0.035
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
130
120
110
100
90
80
70
0
500
1000
1500
2000
2500
Station (ft)


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 2194.69
.08
.05
.065
.05
.08
.035
.035
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
120
110
100
90
80
70
60
0
500
1000
1500
2000


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 991.16
.08
.035
.05
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
115
110
105
100
95
90
85
80
75
70
0
500
1000
1500
2000
2500


NRF_San Luis Rey River Plan: SLR_Post_Cond. 12/19/2017 11:30:43 AM
Geom: SLR_Post Project Flow: SLR Published FIS Flow Data
River = SLR Reach = CL RS = 0
.045
.033
.04
Legend
WS 500 Yr
WS 100 Yr
WS 50 Yr
WS 10 Yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
150
140
130
120
110
100
90
80
70
0
500
1000
1500
2000
2500
3000

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	12201	100 Yr	51000.00	95.80	113.74		114.33	0.000527	6.65	9225.73	871.00	0.31
CL	12201	10 Yr	6600.00	95.80	104.43		104.57	0.000451	3.01	2294.34	578.21	0.24
CL	12201	50 Yr	31000.00	95.80	111.00		111.38	0.000439	5.26	6945.74	803.08	0.27
CL	12201	500 Yr	120000.00	95.80	120.46		121.58	0.000642	9.51	16255.87	1167.67	0.37
CL	11787	100 Yr	51000.00	95.30	113.50		114.11	0.000520	7.22	9434.28	838.37	0.32
CL	11787	10 Yr	6600.00	95.30	104.36		104.44	0.000177	2.41	3189.35	527.49	0.16
CL	11787	50 Yr	31000.00	95.30	110.85		111.20	0.000368	5.39	7377.26	741.06	0.26
CL	11787	500 Yr	120000.00	95.30	120.05		121.29	0.000715	10.62	15538.22	975.52	0.39
CL	11353	100 Yr	51000.00	94.10	113.00		113.85	0.000602	8.00	7956.43	719.79	0.34
CL	11353	10 Yr	6600.00	94.10	104.26		104.36	0.000162	2.55	2709.16	405.92	0.16
CL	11353	50 Yr	31000.00	94.10	110.52		111.02	0.000417	5.99	6291.90	652.01	0.28
CL	11353	500 Yr	120000.00	94.10	118.97		120.87	0.000968	12.40	12497.27	780.33	0.46
CL	10879	100 Yr	51000.00	93.90	112.17		113.41	0.001277	10.04	6786.40	812.30	0.48
CL	10879	10 Yr	6600.00	93.90	103.87		104.19	0.000866	4.54	1453.37	262.96	0.34
CL	10879	50 Yr	31000.00	93.90	109.81		110.68	0.001083	8.14	4933.45	754.75	0.43
CL	10879	500 Yr	120000.00	93.90	118.20		120.29	0.001462	13.72	12518.25	1118.03	0.55
CL	10579	100 Yr	51000.00	93.50	111.61		112.95	0.001654	11.99	6873.43	883.43	0.55
CL	10579	10 Yr	6600.00	93.50	102.68		103.70	0.002659	8.13	837.77	229.22	0.60
CL	10579	50 Yr	31000.00	93.50	109.07		110.24	0.001696	10.69	4668.00	836.89	0.54
CL	10579	500 Yr	120000.00	93.50	117.84		119.76	0.001637	15.10	12685.49	991.97	0.58
CL	10234	100 Yr	51000.00	93.30	108.94	108.94	111.94	0.004062	15.92	4521.73	702.01	0.83
CL	10234	10 Yr	6600.00	93.30	100.85	100.39	102.32	0.006180	9.73	678.40	170.93	0.86
CL	10234	50 Yr	31000.00	93.30	106.83	106.83	109.26	0.003935	13.66	3078.97	652.03	0.79
CL	10234	500 Yr	120000.00	93.30	113.98	113.98	118.62	0.004319	20.95	8416.87	888.76	0.91
CL	9869	100 Yr	51000.00	91.80	106.55	106.55	109.55	0.004111	15.87	4594.35	761.03	0.83
CL	9869	10 Yr	6600.00	91.80	97.73	97.73	99.65	0.008452	11.12	593.74	155.03	1.00
CL	9869	50 Yr	31000.00	91.80	104.19	104.19	106.92	0.004553	14.26	2861.48	648.83	0.84
CL	9869	500 Yr	120000.00	91.80	111.36	111.36	115.66	0.004217	20.39	8804.31	936.84	0.90
CL	9569.35	100 Yr	51000.00	90.30	107.40		108.11	0.000656	7.64	8957.40	1470.51	0.35
CL	9569.35	10 Yr	6600.00	90.30	98.54		98.69	0.000390	3.20	2229.79	505.64	0.23
CL	9569.35	50 Yr	31000.00	90.30	105.25		105.70	0.000479	5.87	6944.29	1388.22	0.29
CL	9569.35	500 Yr	120000.00	90.30	112.23		113.89	0.001107	11.98	13936.34	1801.31	0.48

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	9062	100 Yr	51000.00	92.00	106.77		107.40	0.004297	6.79	8204.69	1539.44	0.33
CL	9062	10 Yr	6600.00	92.00	97.90		98.17	0.006730	4.13	1597.10	355.81	0.34
CL	9062	50 Yr	31000.00	92.00	104.67		105.15	0.004209	5.99	5895.96	1445.74	0.32
CL	9062	500 Yr	120000.00	92.00	111.68		112.73	0.004126	8.22	14998.67	1954.97	0.34
CL	8615.85	100 Yr	51000.00	87.00	105.56		105.97	0.002278	5.66	10451.96	1650.85	0.26
CL	8615.85	10 Yr	6600.00	87.00	96.99		97.08	0.001170	2.39	2759.39	408.19	0.16
CL	8615.85	50 Yr	31000.00	87.00	103.55		103.86	0.001953	4.75	7635.42	1606.74	0.23
CL	8615.85	500 Yr	120000.00	87.00	110.45		111.20	0.002596	7.31	17369.80	1679.61	0.29
CL	8161.7	100 Yr	51000.00	88.00	104.42		104.83	0.002783	5.76	10282.01	1672.45	0.27
CL	8161.7	10 Yr	6600.00	88.00	96.19		96.34	0.002305	3.19	2066.94	302.83	0.22
CL	8161.7	50 Yr	31000.00	88.00	102.44		102.79	0.002892	5.33	7168.48	1653.36	0.27
CL	8161.7	500 Yr	120000.00	88.00	109.33		110.02	0.002526	6.69	18063.09	1695.18	0.27
CL	7645.16	100 Yr	51000.00	86.75	103.10		103.46	0.002470	5.38	10824.39	1682.07	0.26
CL	7645.16	10 Yr	6600.00	86.75	95.03		95.17	0.002238	2.99	2206.55	352.65	0.21
CL	7645.16	50 Yr	31000.00	86.75	101.04		101.35	0.002644	4.99	7490.11	1670.80	0.26
CL	7645.16	500 Yr	120000.00	86.75	108.16		108.78	0.002218	6.30	19060.82	1704.80	0.26
CL	7000.4	100 Yr	51000.00	84.97	100.83		101.43	0.004055	6.65	8714.94	1463.47	0.34
CL	7000.4	10 Yr	6600.00	84.97	93.23		93.41	0.003388	3.35	1971.63	394.24	0.26
CL	7000.4	50 Yr	31000.00	84.97	98.62		99.15	0.004469	6.08	5556.77	1214.26	0.34
CL	7000.4	500 Yr	120000.00	84.97	106.28		107.07	0.003135	7.55	16925.18	1570.76	0.32
CL	6455.66	100 Yr	51000.00	81.94	98.23		98.91	0.005295	6.68	7821.99	1437.06	0.35
CL	6455.66	10 Yr	6600.00	81.94	91.41		91.56	0.003356	3.11	2132.36	567.83	0.25
CL	6455.66	50 Yr	31000.00	81.94	96.03		96.51	0.005215	5.77	5637.90	913.79	0.34
CL	6455.66	500 Yr	120000.00	81.94	104.68		105.43	0.002853	6.66	17677.77	1654.22	0.28
CL	5982.43	100 Yr	51000.00	81.00	96.39	92.12	96.89	0.003349	4.66	9281.52	1793.15	0.27
CL	5982.43	10 Yr	6600.00	81.00	89.66	87.17	89.81	0.004122	3.28	2182.56	870.14	0.27
CL	5982.43	50 Yr	31000.00	81.00	93.72	90.69	94.12	0.004805	4.49	6173.56	1149.94	0.31
CL	5982.43	500 Yr	120000.00	81.00	103.50	95.39	104.27	0.002129	5.45	17759.02	2414.24	0.24
CL	5536.03	100 Yr	51000.00	80.99	95.68		95.95	0.001267	3.78	12289.22	2399.34	0.21
CL	5536.03	10 Yr	6600.00	80.99	87.41		87.59	0.006117	3.20	1990.25	931.25	0.35
CL	5536.03	50 Yr	31000.00	80.99	92.65		92.87	0.001702	3.52	8274.89	1846.44	0.23
CL	5536.03	500 Yr	120000.00	80.99	103.44		103.70	0.000518	3.46	29339.66	4093.18	0.14

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	5169.79	100 Yr	51000.00	80.00	95.51		95.65	0.000468	3.03	17975.47	2345.78	0.16
CL	5169.79	10 Yr	6600.00	80.00	86.82		86.87	0.000879	1.74	3783.17	1327.58	0.18
CL	5169.79	50 Yr	31000.00	80.00	92.41		92.52	0.000540	2.65	11988.42	1667.32	0.16
CL	5169.79	500 Yr	120000.00	80.00	103.38		103.53	0.000288	3.36	40468.68	2908.79	0.14
CL	4222.64	100 Yr	51000.00	77.99	95.00		95.13	0.000640	3.04	18217.31	2385.64	0.15
CL	4222.64	10 Yr	6600.00	77.99	86.08		86.11	0.000726	1.54	4278.22	1023.09	0.13
CL	4222.64	50 Yr	31000.00	77.99	91.81		91.92	0.000752	2.73	11932.57	1583.51	0.15
CL	4222.64	500 Yr	120000.00	77.99	103.08		103.23	0.000354	3.14	39907.74	2741.48	0.12
CL	3856.01	100 Yr	51000.00	76.99	94.66		94.82	0.001096	3.60	16711.38	2946.20	0.19
CL	3856.01	10 Yr	6600.00	76.99	85.27		85.51	0.005720	3.95	1668.92	381.33	0.33
CL	3856.01	50 Yr	31000.00	76.99	91.29		91.49	0.001944	3.78	8947.09	1717.43	0.24
CL	3856.01	500 Yr	120000.00	76.99	102.96		103.09	0.000349	2.95	41334.09	3285.47	0.12
CL	3545.16	100 Yr	51000.00	75.98	94.37		94.56	0.000684	3.24	15314.46	1669.35	0.15
CL	3545.16	10 Yr	6600.00	75.98	84.54		84.61	0.001598	2.46	3011.55	1009.24	0.19
CL	3545.16	50 Yr	31000.00	75.98	90.96		91.11	0.000786	2.92	9989.48	1222.89	0.16
CL	3545.16	500 Yr	120000.00	75.98	102.70		102.96	0.000487	3.72	30725.21	2010.85	0.14
CL	3001.61	100 Yr	51000.00	73.34	92.74		93.76	0.003395	8.12	6281.68	632.67	0.45
CL	3001.61	10 Yr	6600.00	73.34	82.96		83.32	0.003703	4.79	1376.55	335.31	0.42
CL	3001.61	50 Yr	31000.00	73.34	89.31		90.18	0.004628	7.47	4149.45	602.94	0.50
CL	3001.61	500 Yr	120000.00	73.34	100.86		102.34	0.002312	9.96	13241.48	1166.28	0.41
CL	2749.05	100 Yr	51000.00	72.00	92.67		93.15	0.001098	5.55	9189.11	714.25	0.27
CL	2749.05	10 Yr	6600.00	72.00	82.45		82.59	0.001955	3.00	2201.54	636.36	0.28
CL	2749.05	50 Yr	31000.00	72.00	89.18		89.51	0.001123	4.61	6727.21	697.27	0.26
CL	2749.05	500 Yr	120000.00	72.00	100.80		101.78	0.001173	7.94	15228.68	1057.08	0.31
CL	2194.69	100 Yr	51000.00	69.78	91.58		92.36	0.001764	7.06	7221.37	599.94	0.33
CL	2194.69	10 Yr	6600.00	69.78	81.79		81.90	0.000850	2.63	2507.95	414.90	0.19
CL	2194.69	50 Yr	31000.00	69.78	88.29		88.77	0.001522	5.58	5555.31	496.52	0.29
CL	2194.69	500 Yr	120000.00	69.78	99.07		100.82	0.002286	10.68	11911.60	1402.87	0.41
CL	991.16	100 Yr	51000.00	74.00	88.72		90.11	0.001865	9.46	5390.16	456.31	0.49
CL	991.16	10 Yr	6600.00	74.00	80.75		80.92	0.000761	3.36	1963.67	402.83	0.27
CL	991.16	50 Yr	31000.00	74.00	86.09		86.93	0.001488	7.36	4209.50	438.71	0.42
CL	991.16	500 Yr	120000.00	74.00	94.78		97.83	0.002464	14.21	9163.02	1391.27	0.60

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
CL	0	100 Yr	51000.00	75.60	86.10	83.50	87.84	0.002783	10.81	5004.30	590.29	0.61
CL	0	10 Yr	6600.00	75.60	79.50	77.93	79.80	0.001814	4.37	1510.43	437.98	0.41
CL	0	50 Yr	31000.00	75.60	84.00	81.48	85.08	0.002322	8.47	3812.89	545.18	0.54
CL	0	500 Yr	120000.00	75.60	92.00	89.13	95.18	0.002903	14.87	8832.83	730.63	0.67

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL

Reach	River Sta	Profile	W.S. Elev	Prof Delta WS	E.G. Elev	Top Wdth Act	Q Left	Q Channel	Q Right	Enc Sta L	Ch Sta L	Ch Sta R	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)
CL	12201	100 Yr	113.74		114.33	871.00	8716.96	41722.55	560.49		4725.00	5168.00	
CL	12201	Revised Floodway	114.00	0.25	114.55	808.04	9014.71	41269.20	716.10	4399.98	4725.00	5168.00	5208.02
CL	11787	100 Yr	113.50		114.11	838.37	12663.76	34608.45	3727.78		4703.00	5000.00	
CL	11787	Revised Floodway	113.62	0.12	114.32	648.00	14831.22	36168.78		4352.00	4703.00	5000.00	5000.00
CL	11353	100 Yr	113.00		113.85	719.79	8350.44	41951.86	697.71		4769.00	5079.00	
CL	11353	Revised Floodway	113.25	0.25	114.05	687.00	8529.44	41619.40	851.16	4459.00	4769.00	5079.00	5146.00
CL	10879	100 Yr	112.17		113.41	812.30	11613.06	37490.91	1896.03		4845.00	5120.00	
CL	10879	Revised Floodway	112.52	0.34	113.65	811.50	11910.52	36981.16	2108.32	4495.50	4845.00	5120.00	5307.00
CL	10579	100 Yr	111.61		112.95	883.43	22350.47	24802.28	3847.25		4929.00	5070.00	
CL	10579	Revised Floodway	111.98	0.37	113.24	784.80	22958.92	24583.94	3457.15	4437.20	4929.00	5070.00	5222.00
CL	10234	100 Yr	108.94		111.94	702.01	13062.38	36221.25	1716.36		4865.00	5065.00	
CL	10234	Revised Floodway	108.91	-0.03	112.20	573.70	13696.04	37303.96		4491.30	4865.00	5065.00	5065.00
CL	9869	100 Yr	106.55		109.55	761.03	10987.37	37021.83	2990.81		4887.00	5095.00	
CL	9869	Revised Floodway	106.63	0.08	109.72	645.00	11302.73	37523.69	2173.58	4535.00	4887.00	5095.00	5180.00
CL	9569.35	100 Yr	107.40		108.11	956.33	11197.08	37795.38	2007.55		1150.00	1485.00	
CL	9569.35	Revised Floodway	107.89	0.50	108.62	700.00	10072.53	38535.76	2391.71	843.00	1150.00	1485.00	1543.00
CL	9062	100 Yr	106.77		107.40	1158.35	17959.11	32833.14	207.74		1147.79	1513.99	
CL	9062	Revised Floodway	107.37	0.60	107.95	1018.60	18264.32	32575.75	159.93	510.00	1147.79	1513.99	1535.00
CL	8615.85	100 Yr	105.56		105.97	1413.55	10825.55	36372.65	3801.81		1073.89	1510.57	
CL	8615.85	Revised Floodway	106.33	0.78	106.72	1247.00	11049.13	36824.23	3126.63	420.00	1073.89	1510.57	1667.00
CL	8161.7	100 Yr	104.42		104.83	1577.57	18520.76	27448.42	5030.81		1085.33	1431.67	
CL	8161.7	Revised Floodway	105.13	0.71	105.62	1215.00	15208.62	30926.14	4865.24	385.00	1085.33	1431.67	1600.00
CL	7645.16	100 Yr	103.10		103.46	1620.91	15022.57	27993.25	7984.19		1040.35	1423.84	
CL	7645.16	Revised Floodway	103.63	0.53	104.10	1235.00	12132.71	32232.76	6634.54	385.00	1040.35	1423.84	1620.00
CL	7000.4	100 Yr	100.83		101.43	1463.47	6062.97	34193.54	10743.49		788.03	1217.14	
CL	7000.4	Revised Floodway	101.18	0.35	101.86	1100.00	3295.32	36486.30	11218.38	400.00	788.03	1217.14	1500.00
CL	6455.66	100 Yr	98.23		98.91	1437.06	157.16	35205.68	15637.17		741.44	1218.15	
CL	6455.66	Revised Floodway	98.66	0.43	99.36	830.00	0.66	36487.97	14511.37	740.00	741.44	1218.15	1570.00
CL	5982.43	100 Yr	96.39		96.89	1175.56		21167.90	29832.10		1244.97	1746.76	
CL	5982.43	Revised Floodway	97.01	0.63	97.52	1052.31	0.00	22156.12	28843.88	1242.00	1244.97	1746.76	2305.00
CL	5536.03	100 Yr	95.68		95.95	1388.62	384.46	17100.17	33515.38		3050.23	3495.92	

HEC-RAS Plan: NRF_PPC River: SLR Reach: CL (Continued)

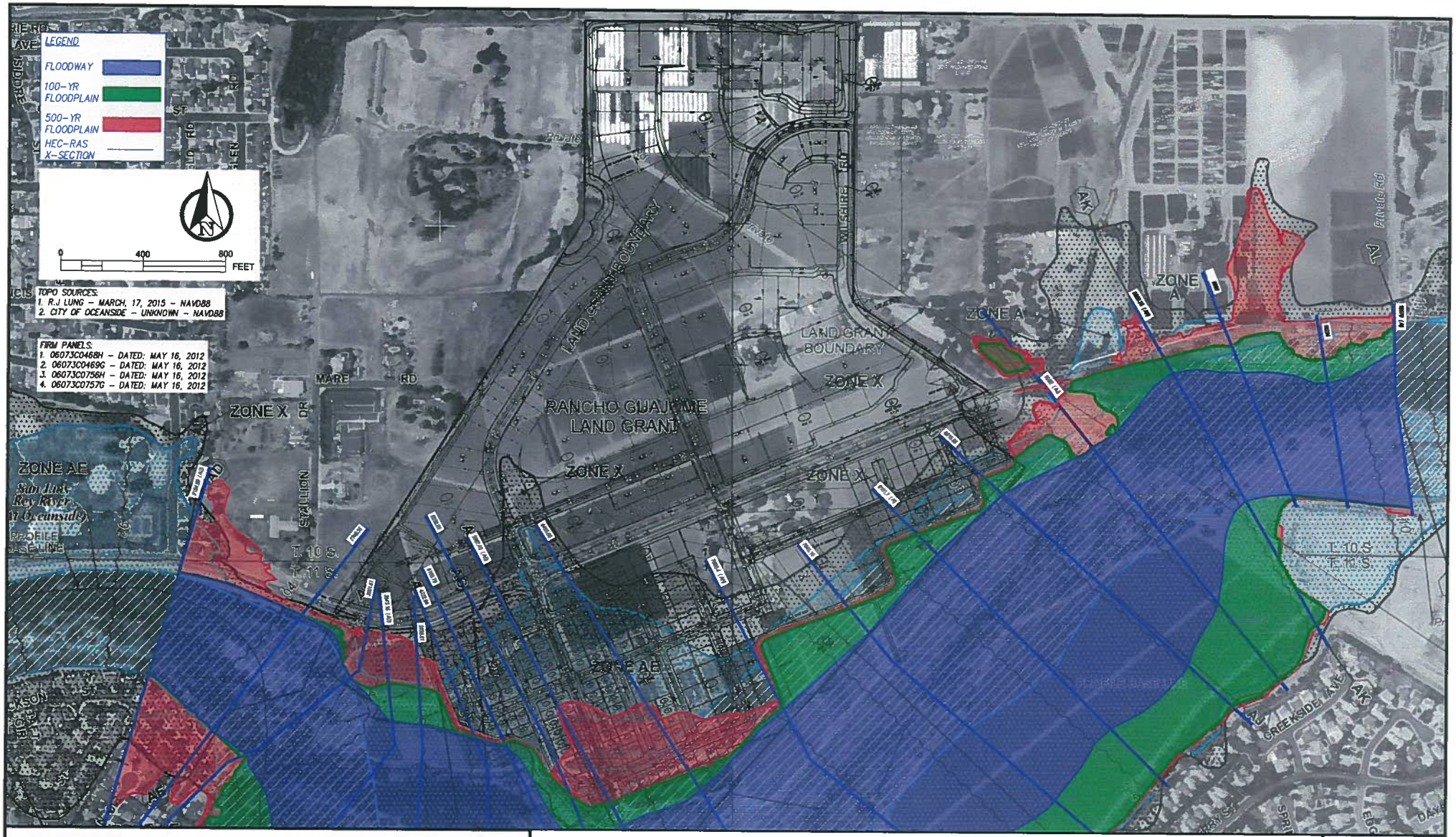
Reach	River Sta	Profile	W.S. Elev	Prof Delta WS	E.G. Elev	Top Wdth Act	Q Left	Q Channel	Q Right	Enc Sta L	Ch Sta L	Ch Sta R	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)
CL	5536.03	Revised Floodway	95.95	0.27	96.37	1032.00		23339.24	27660.76	3068.00	3050.23	3495.92	4100.00
CL	5169.79	100 Yr	95.51		95.65	2345.78	3115.10	47863.90	21.00		2078.02	3476.32	
CL	5169.79	Revised Floodway	95.84	0.33	95.98	1693.00	2036.38	48913.83	49.80	1900.00	2078.02	3476.32	3593.00
CL	4222.64	100 Yr	95.00		95.13	2385.64	9195.59	41772.86	31.54		2051.02	3123.83	
CL	4222.64	Revised Floodway	95.36	0.36	95.49	1726.00	8805.53	42149.28	45.19	1530.00	2051.02	3123.83	3256.00
CL	3856.01	100 Yr	94.66		94.82	2845.79	19443.99	30399.96	1156.04		2127.46	2884.85	
CL	3856.01	Revised Floodway	95.02	0.35	95.21	1632.00	19553.01	30475.87	971.13	1430.00	2127.46	2884.85	3062.00
CL	3545.16	100 Yr	94.37		94.56	1669.35	34101.71	15064.50	1833.79		1275.85	1600.69	
CL	3545.16	Revised Floodway	94.49	0.12	94.86	981.00	29255.81	20228.75	1515.44	810.00	1275.85	1600.69	1791.00
CL	3001.61	100 Yr	92.74		93.76	632.67		51000.00			859.02	1493.13	
CL	3001.61	Revised Floodway	92.74	0.00	93.76	632.67		51000.00			859.02	1493.13	
CL	2749.05	100 Yr	92.67		93.15	714.25		51000.00			816.93	1535.68	
CL	2749.05	Revised Floodway	92.67	0.00	93.15	714.25		51000.00			816.93	1535.68	
CL	2194.69	100 Yr	91.58		92.36	513.37		51000.00	0.01		951.23	1464.40	
CL	2194.69	Revised Floodway	91.58	0.00	92.36	513.37		51000.00	0.01		951.23	1464.40	
CL	991.16	100 Yr	88.72		90.11	456.31		51000.00			1022.45	1486.98	
CL	991.16	Revised Floodway	88.72	0.00	90.11	456.31		51000.00			1022.45	1486.98	
CL	0	100 Yr	86.10		87.84	590.29		48480.59	2519.41		660.70	1180.20	
CL	0	Revised Floodway	86.10	0.00	87.84	590.29		48480.59	2519.41		660.70	1180.20	

ATTACHMENT 6

HEC-RAS Work Maps
for
Existing and Proposed Conditions

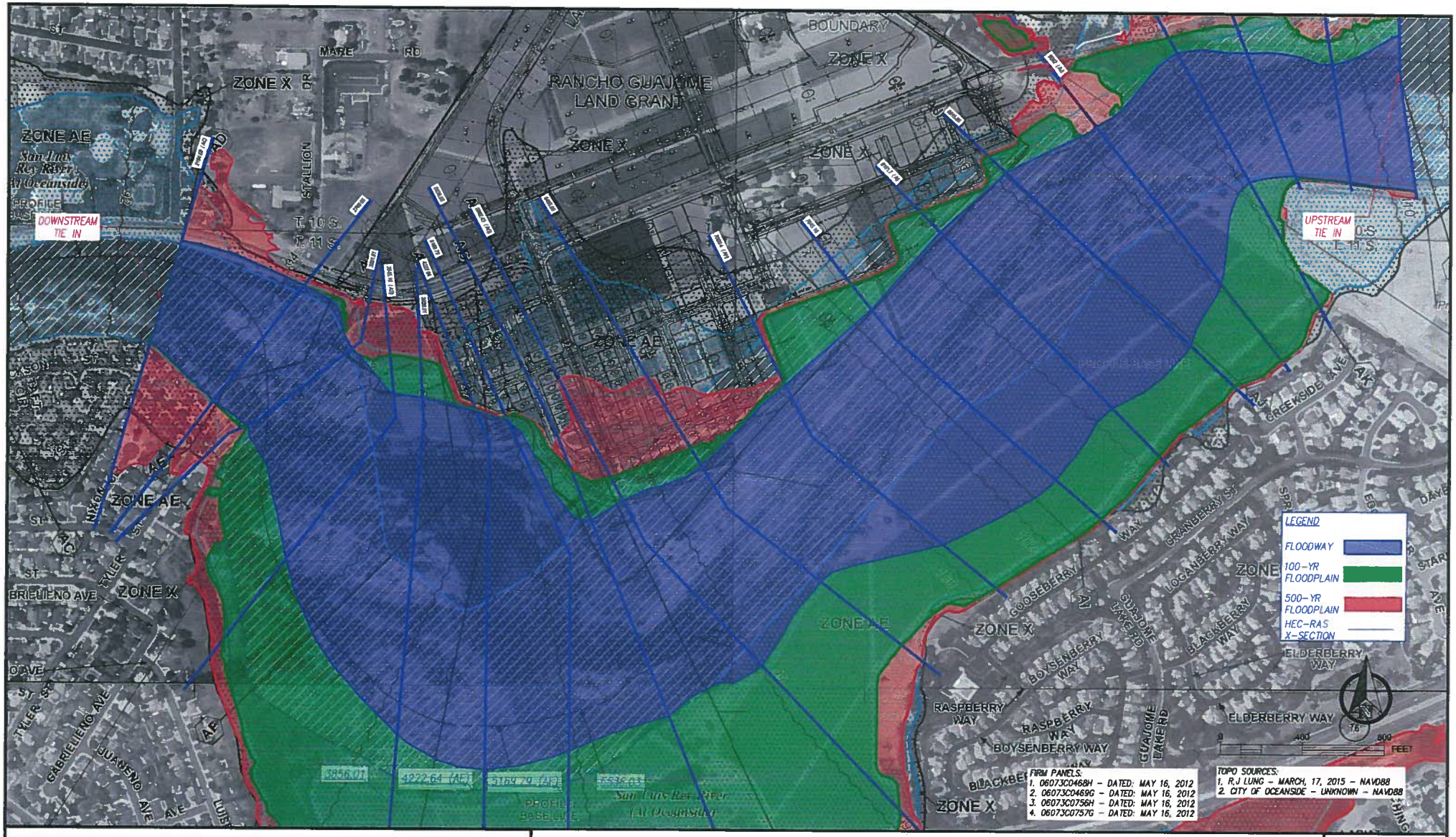
ATTACHMENT 7

Annotated FIRMs



TORY R. WALKER ENGINEERING
RELIABLE SOLUTIONS IN WATER RESOURCES
122 CIVIC CENTER DR, STE 206, VISTA, CA 92084 · 760-414-9212

PROPOSED CONDITIONS ANNOTATED FRIM MAPS FOR NORTH RIVER FARMS



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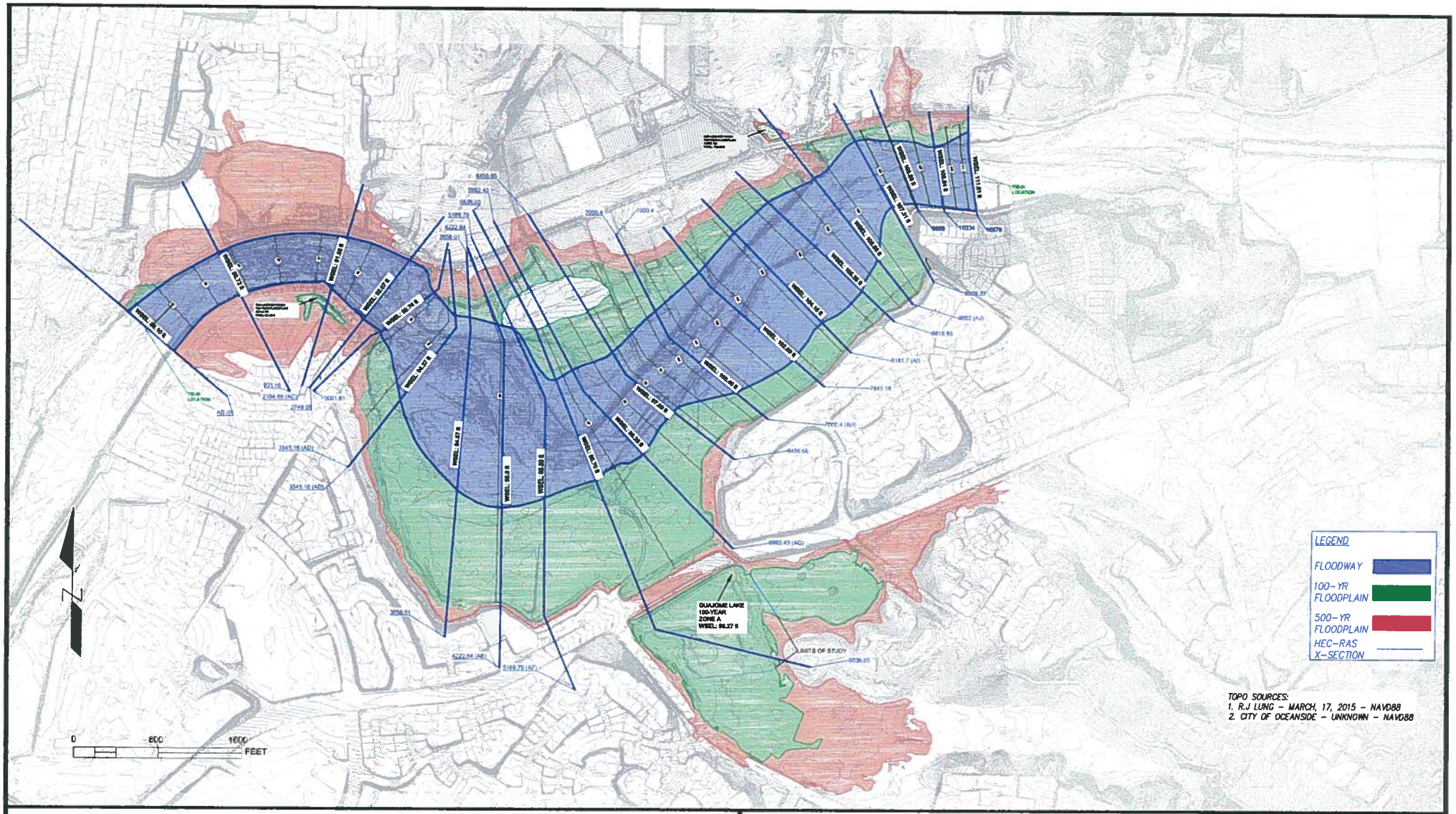
122 CIVIC CENTER DR, STE 206, VISTA, CA 92084 · 760-414-9212

PROPOSED CONDITIONS HEC-RAS WORK MAP FOR NORTH RIVER FARMS



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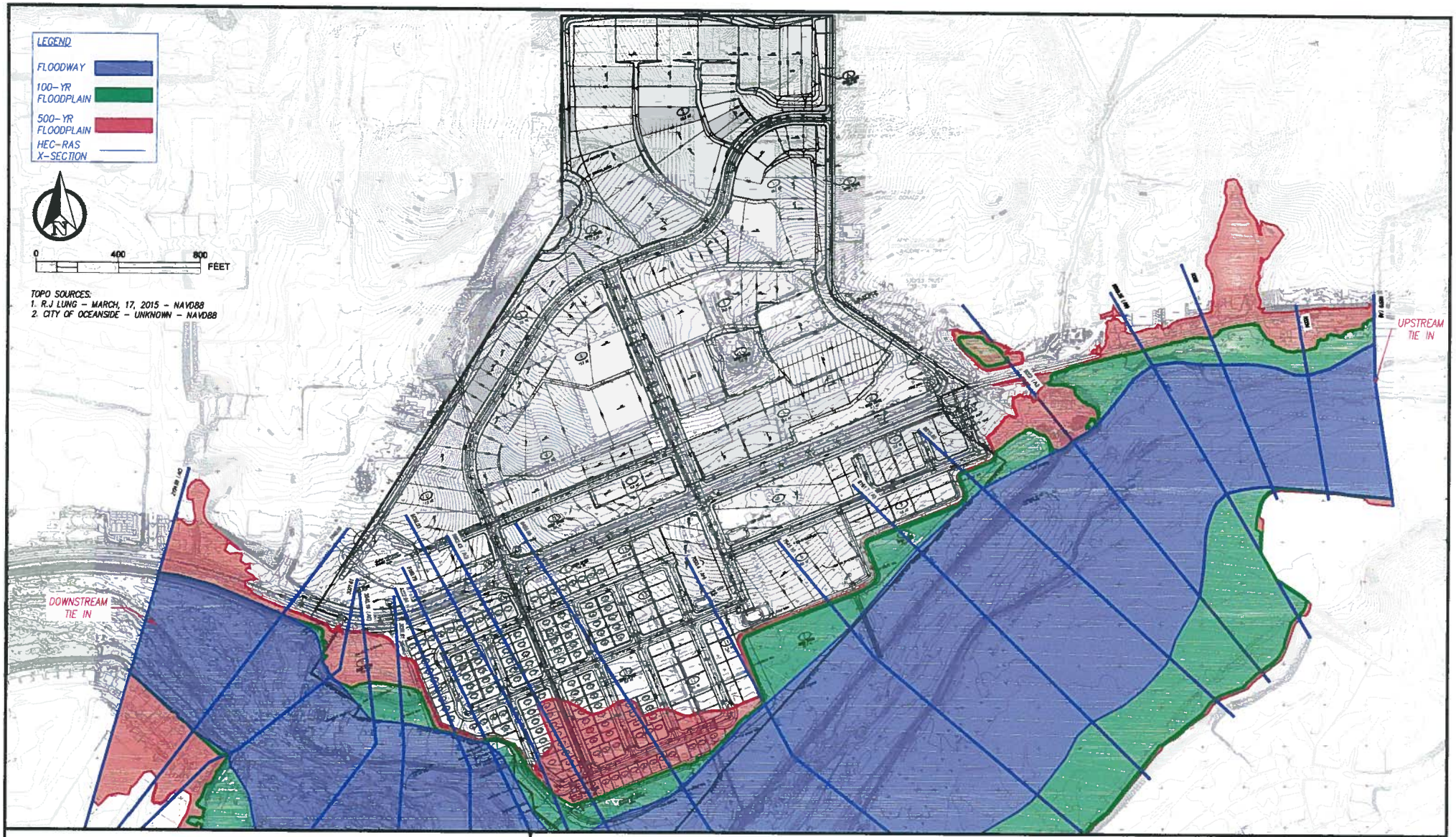
122 CIVIC CENTER DR, STE 206, VISTA, CA 92084 · 760-414-9212

EXISTING HEC-RAS WORK MAP FOR SAN LUIS REY RIVER



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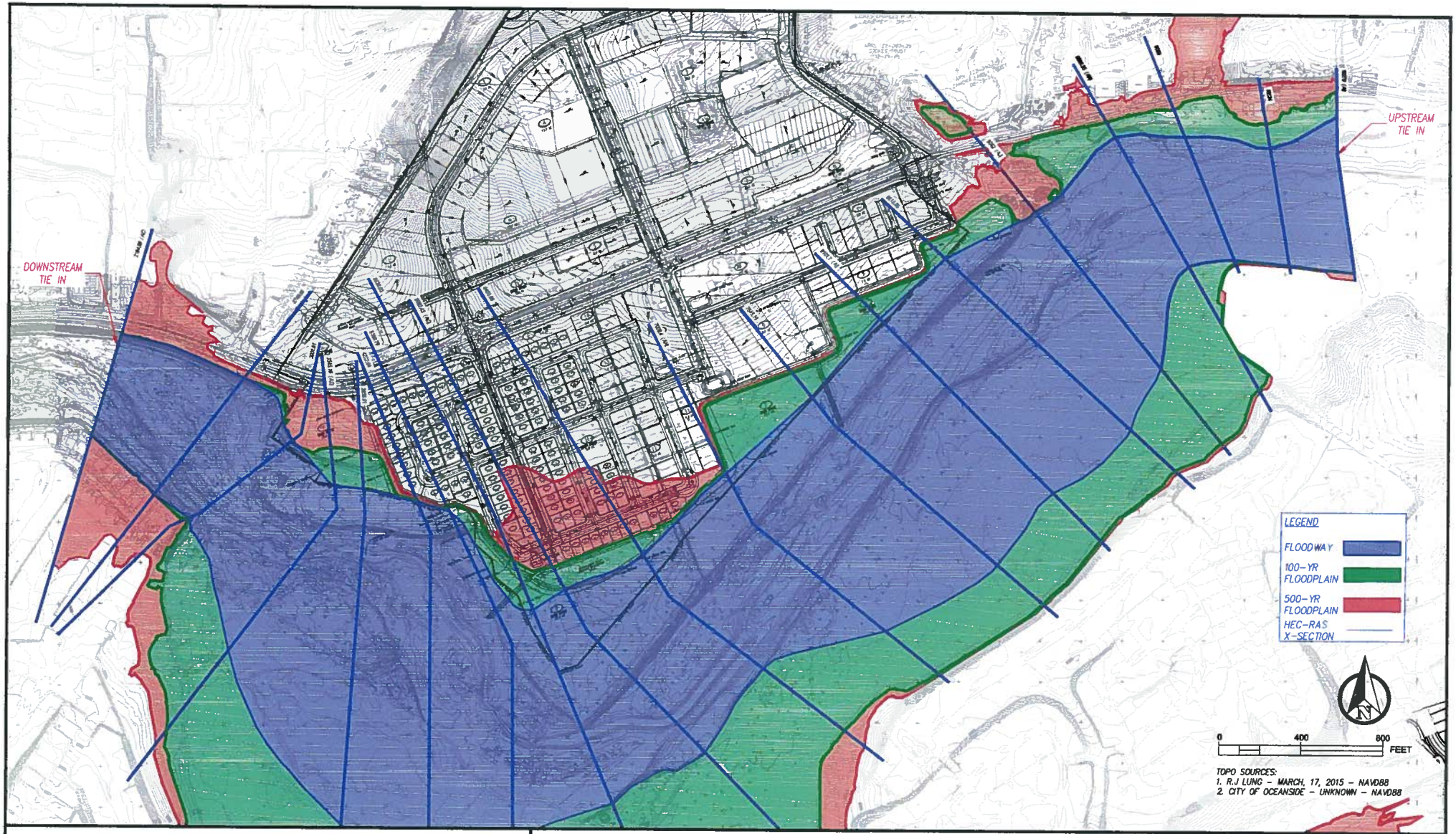
PROPOSED CONDITIONS HEC-RAS WORK MAP FOR NORTH RIVER FARMS



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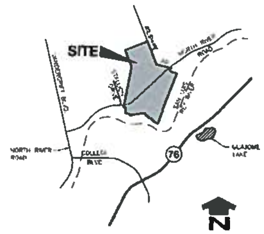
PROPOSED CONDITIONS HEC-RAS WORK MAP FOR NORTH RIVER FARMS

ATTACHMENT 8

Vesting Tentative Map
(Preliminary Grading Plans)
for
North River Farms

VESTING TENTATIVE MAP
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA



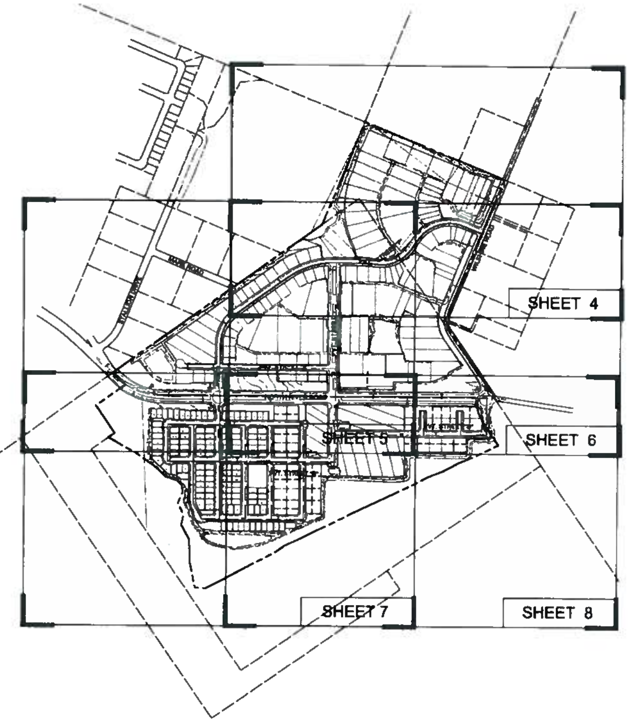
VICINITY MAP
NOT TO SCALE

SINGLE FAMILY LOTS	
LOT #	LOT AREA SF
15	4,000
16	4,000
17	4,000
18	4,000
19	4,000
20	4,000
21	4,000
22	4,757
23	4,762
24	4,000
25	4,000
26	4,000
27	4,000
28	4,300
29	4,565
30	4,087
31	4,374
32	4,000
33	3,999
34	4,429
35	4,565
36	4,814
37	4,798
38	4,782
39	4,501
40	5,950
41	5,999
42	4,744
43	4,000
44	4,444
45	5,316
46	4,000
47	4,000
48	4,000
49	4,000
50	4,000
51	4,000
52	4,000
53	4,000
54	4,000
55	4,000
56	5,218
57	4,000
58	4,000
59	4,000
60	4,444
61	4,000
62	4,000
63	4,000
64	4,444
65	4,892
66	4,400
67	4,400
68	4,400
69	4,892
70	4,400
71	4,400
72	4,400
73	5,182
74	4,400
75	5,129
76	4,000
77	4,000
78	4,000
79	4,000

SINGLE FAMILY LOTS (CONTINUED)	
LOT #	LOT AREA SF
80	4,000
81	4,000
82	4,444
83	4,444
84	4,000
85	4,000
86	4,000
87	4,444
88	4,907
89	4,400
90	4,400
91	4,400
92	4,892
93	4,892
94	4,400
95	4,400
96	4,400
97	4,400
98	4,400
99	4,400
100	5,182
101	4,400
102	5,129
103	4,100
104	4,100
105	4,100
106	4,100
107	4,100
108	4,100
109	4,100
110	4,556
111	4,556
112	4,100
113	4,100
114	4,100
115	4,571
116	4,556
117	4,100
118	4,100
119	4,103
120	4,556
121	4,556
122	4,100
123	4,100
124	4,100
125	4,100
126	4,100
127	7,004
128	4,292
129	4,400
130	4,400
131	4,400
132	4,892
133	4,410
134	4,000
135	4,000
136	4,000
137	4,410
RES. SUBTOTAL SF	282,187
RES. SUBTOTAL AC	6.5
MAX	5,999
MIN	3,999
RES. AVG LOT SIZE	4,341
TOTAL SF	282,187
TOTAL AC	6.48

LEGEND

- SUBDIVISION BOUNDARY
- TOPO CONTOUR
- LOT NUMBER
- OPEN SPACE LOT
- LOT LINE
- SLOPE (2:1 MAX)
- EARTHEN SWALE
- STREET ELEVATION — 102.5
- PERCENT OF GRADE — 2%
- SPOT ELEVATION — 106.5
- SEWER MAIN (8"PVC MIN.)
- SEWER FORCE MAIN (4") — FM
- WATER MAIN (8"PVC*) — W
- FIRE HYDRANT
- RECLAIMED WATER MAIN (8"PVC*) — RW
- STORM DRAIN (18"*)
- STREET LIGHT
- EASEMENT CALLOUT
- EASEMENT LINE
- RETAINING WALL (CMU)
- TOP OF WALL ELEVATION — TW
- FINISHED SURFACE ELEVATION — FS
- FEMA SECTION/WATER SURFACE ELEV. — 97.6
- FEMA FLOODWAY
- FEMA 100 YR FLOODPLAIN
- FEMA 500 YR FLOODPLAIN
- CORNER SIGHT DIST. (CALTRANS)
- *UNLESS SHOWN OTHERWISE



SHEET KEY MAP
NOT TO SCALE

CONDOMINIUM NOTE

THIS IS A MAP OF A CONDOMINIUM PROJECT AS DEFINED IN SECTION 4125 OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND IS FILED PURSUANT TO THE SUBDIVISION MAP ACT. THE TOTAL NUMBER OF CONDOMINIUM UNITS IS 145 (40 UNITS LOT 6, 25 UNITS LOT 7, 20 UNITS LOT 11, 30 UNITS LOT 12, 20 UNITS LOT 13, 10 UNITS LOT 14).

TOPOGRAPHY SOURCE

TOPOGRAPHY USED FOR THIS TENTATIVE MAP WAS FLOWN ON 3-17-15 BY ROBERT J. LUNG. CONTROL PROVIDED BY HUNSAKER & ASSOCIATES.

LEGAL DESCRIPTION

SEE SHEET 9

EASEMENTS

SEE SHEET 9

CIVIL ENGINEER

HUNSAKER & ASSOCIATES, SAN DIEGO, INC
9707 WAPLES STREET
SAN DIEGO, CA 92121
(858) 558-4500

RAYMOND L. MARTIN R.C.E. 48670 — 01/28/16 DATE
MY REGISTRATION EXPIRES ON 6/30/18

REGISTERED PROFESSIONAL ENGINEER RAYMOND L. MARTIN NO. 48670 EXP. 6/30/18 CIVIL STATE OF CALIFORNIA

GENERAL NOTES

1. EXISTING GROSS SUBDIVISION AREA: 176.636 ACRES
2. PUBLIC STREET DEDICATION AREA: 9.12 ACRES
3. PRIVATE STREET AREA: 11.66 ACRES
4. TOTAL NUMBER OF EXISTING LOTS: 2
5. TOTAL NUMBER OF PROPOSED LOTS: 135 (127 RESIDENTIAL, 8 OPEN SPACE/PARK)
6. TOTAL NUMBER OF UNITS: 720
7. ASSESSOR PARCEL NUMBER: 157-100-83 & 84
8. EXISTING GENERAL PLAN LAND USE: A AGRICULTURAL
9. PROPOSED GENERAL PLAN: TBD
10. EXISTING ZONING: A, SP(SOUTH OF NORTH RIVER ROAD)
11. PROPOSED ZONING: PD
12. PROPOSED DENSITY: 4.1 DU/AC
13. TOPOGRAPHIC CONTOUR INTERVAL: 1 FOOT
14. MAXIMUM SLOPE GRADIENT: 2:1
15. AREA/PERCENT OF PROJECT IN STREETS: 20.78 ACRES/12%
16. AREA/PERCENT OF PROJECT IN OPEN SPACE (LOTS A-K): 39.1 ACRES/22%
17. AREA/PERCENT OF LANDSCAPING: TBD
18. GRADING QUANTITIES: RAW CUT: 964,000 CY RAW FILL: 964,000 CY
19. GRADED AREA: 159.3 ACRES
20. FEMA FLOOD DESIGNATION: X

DESIGN NOTES

1. ALL STREET DESIGN SHALL CONFORM TO THE CITY OF OCEANSIDE DESIGN STANDARDS AS REQUIRED BY THE CITY ENGINEER.
2. EASEMENTS SHALL BE PROVIDED, REMOVED OR RELOCATED AS REQUIRED BY THE CITY ENGINEER.
3. ALL PROPOSED UTILITIES SHALL BE UNDERGROUNDED AND EASEMENTS PROVIDED.
4. GEOTECHNICAL INVESTIGATION PREPARED BY: GEOCON INC.
5. THE DEVELOPER SHALL INSTALL STREET LIGHTS PER THE CITY OF OCEANSIDE ENGINEERING DEPARTMENT TRAFFIC DIVISION, THE STREET LIGHT DESIGN MANUAL AND THE CITY OF OCEANSIDE STANDARD DRAWING NO. M-4. STREET LIGHT LOCATIONS MAY VARY IN FINAL DESIGN.
6. ALL RETAINING WALLS IN EXCESS OF 4 FEET SHALL BE PLANTABLE.
7. THE PROPOSED SEWER IN SHALL REMAIN, ALL PROPOSED SEWER IS PUBLIC AND SHALL BE INSTALLED PER CITY OF OCEANSIDE STANDARDS.
8. THE PROPOSED WATER SHALL BE INSTALLED PER CITY OF OCEANSIDE STANDARDS. ALL ON-SITE WATER IS PUBLIC.
9. FINISH GRADES ARE APPROXIMATE AND SUBJECT TO CHANGE IN FINAL DESIGN.
10. MODEL UNITS MAY BE BUILT PRIOR TO FINAL MAP WITH APPROVAL FROM THE CITY ENGINEER AND PLANNING DIRECTOR.
11. ALL FUTURE DRIVEWAYS AND GEOMETRIC DESIGN SHALL BE DESIGNED IN COMPLIANCE WITH THE CITY OF OCEANSIDE ENGINEERS DESIGN STANDARDS.
12. THE PRESENT OR FUTURE OWNER/DEVELOPER SHALL INDEMNIFY AND SAVE CITY OF OCEANSIDE, ITS OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITIES, CLAIMS ARISING FROM ANY FLOODING THAT OCCURS ON THIS SITE AND FLOODING THAT MAYBE DISCHARGED FROM THIS SITE INTO ADJACENT PROPERTIES.

OWNER

SELF REALIZATION FELLOWSHIP CHURCH
3880 SAN RAFAEL AVENUE
LOS ANGELES, CA 90065
(323) 225-2471

DATE

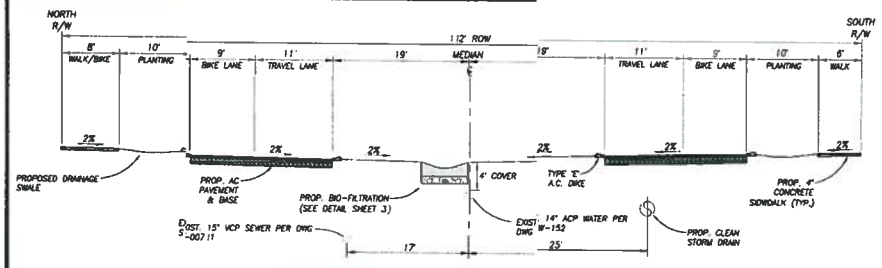
SHEET INDEX

PREPARED BY:
HUNSAKER & ASSOCIATES
SAN DIEGO, INC
PLANNING ENGINEERING SURVEYING
9707 Waples Street
San Diego, Ca 92121

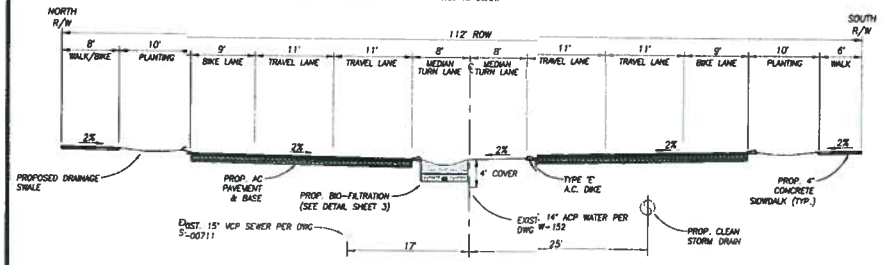
REVISION	DATE	BY
PRE-APPLICATION SUBMITTAL	05/21/17	HBA
REVISED PER ARC LETTER	11/10/17	HBA

TITLE SHEET
VESTING TENTATIVE MAP
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA

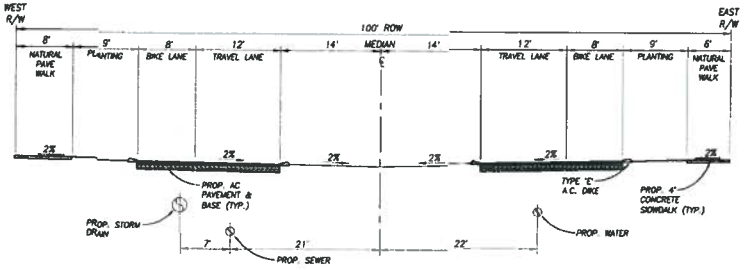
W.O. NO. 2445-17



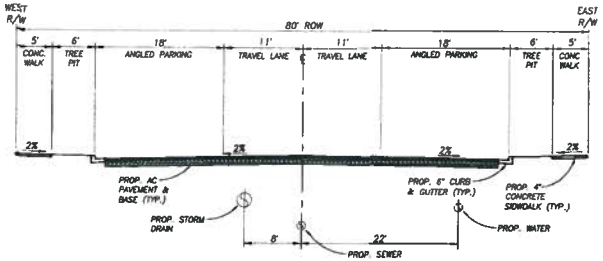
NORTH RIVER ROAD
INTERIM TWO-LANE MAJOR ROAD
NOT TO SCALE



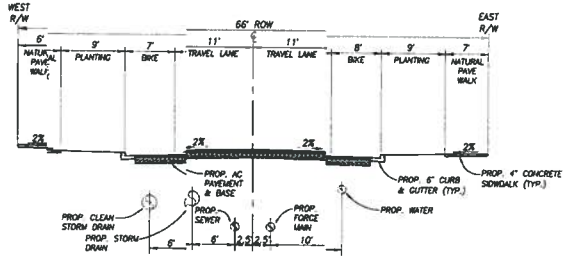
NORTH RIVER ROAD
FUTURE FOUR-LANE MAJOR ROAD
NOT TO SCALE



PORTION OF PVT. STREET "B"
FROM PVT. ST. "C" TO NORTH RIVER ROAD
NOT TO SCALE



PORTION OF PVT. STREET "B"
FROM NORTH RIVER ROAD TO PVT. STREET "G"
NOT TO SCALE



PVT. STREET "A"
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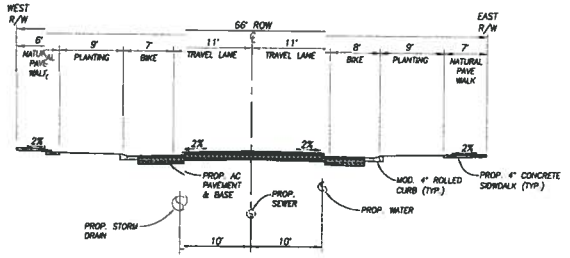
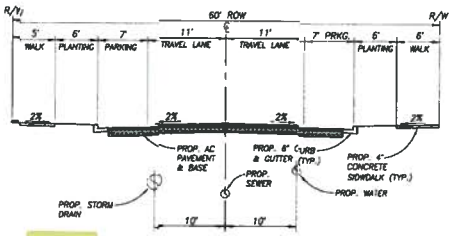
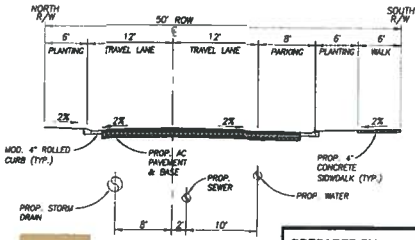


PVT. STREET "C"
NOT TO SCALE



PVT. STREETS "E" THROUGH "O"
NOT TO SCALE



PVT. STREETS "D"
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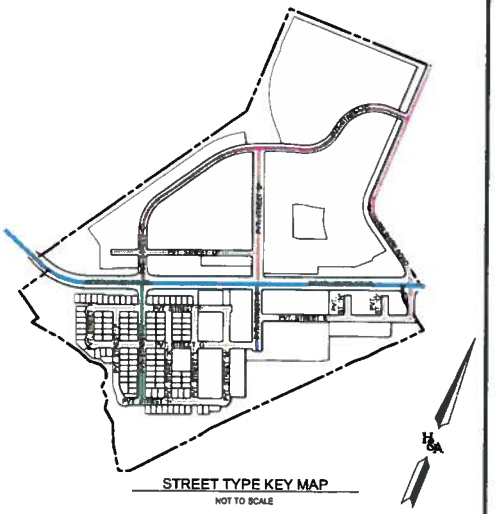


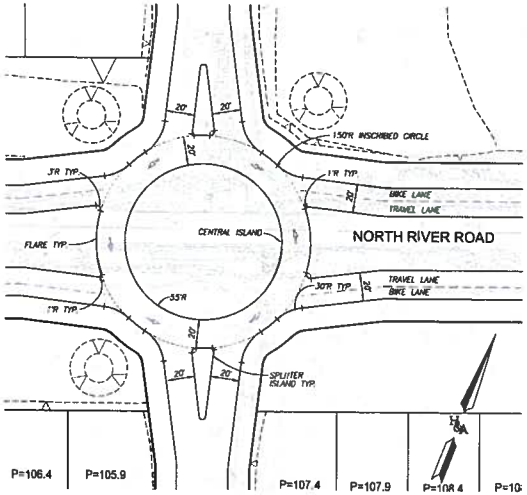
STREET TYPE KEY MAP
NOT TO SCALE

PREPARED BY:
HUNSAKER & ASSOCIATES
SAN DIEGO, INC
PLANNING
ENGINEERING
SURVEYING

SECTIONS / DETAILS
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA

SHEET 2 OF 9

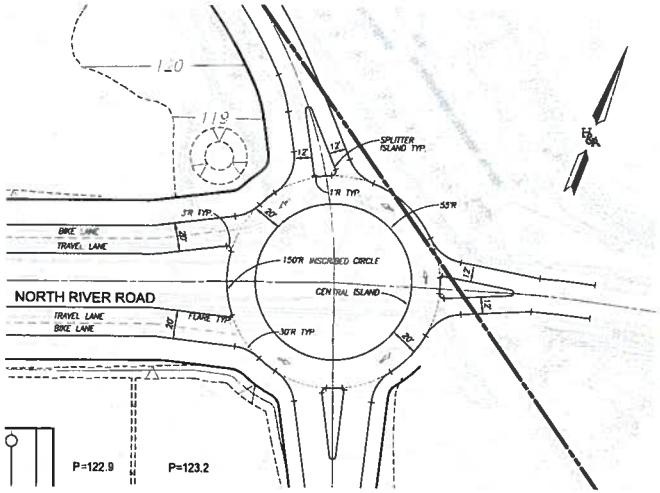
W.O. NO. 2445-17



WEST ROUNDABOUT DETAIL

SCALE: 1" = 40'

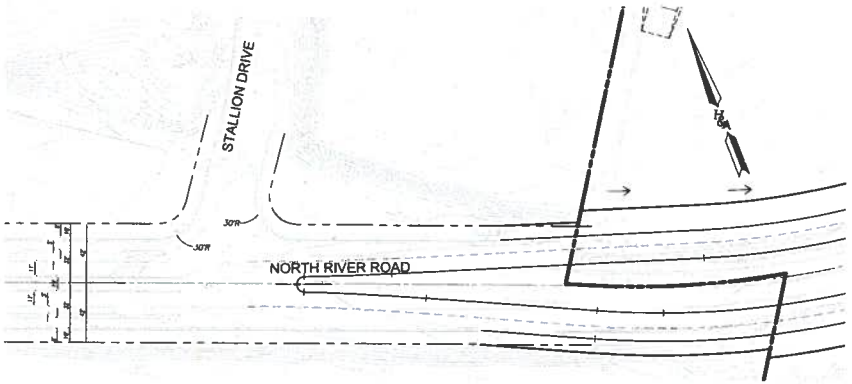
ROUNDABOUT DESIGN BASED ON U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION PUBLICATION NO. FHWA-RD-00-067 "ROUNDABOUTS: AN INFORMATIONAL GUIDE"



EAST ROUNDABOUT DETAIL

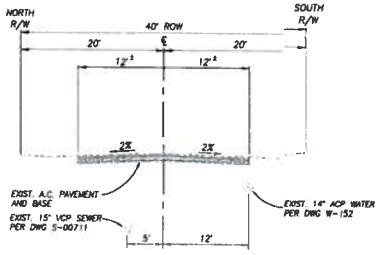
SCALE: 1" = 40'

ROUNDABOUT DESIGN BASED ON U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION PUBLICATION NO. FHWA-RD-00-067 "ROUNDABOUTS: AN INFORMATIONAL GUIDE"



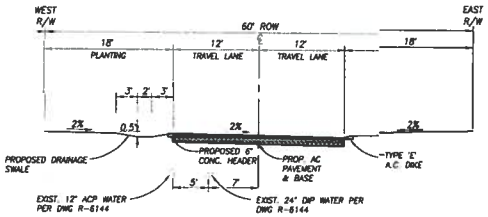
INTERSECTION DETAIL
NORTH RIVER ROAD AND STALLION DRIVE

SCALE: 1" = 40'



EXISTING
NORTH RIVER ROAD

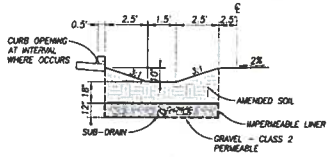
NOT TO SCALE



WILSHIRE ROAD (FULL WIDTH)

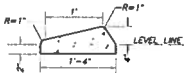
2% SUPER ELEVATION
TWO-LANE COLLECTOR

NOT TO SCALE



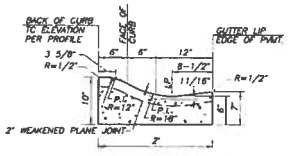
BIO-FILTRATION SWALE DETAIL

NOT TO SCALE



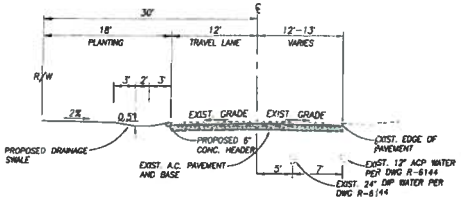
TYPE E A.C. DIKE

NOT TO SCALE



MODIFIED 4" ROLLED CURB

NOT TO SCALE



WILSHIRE ROAD (HALF WIDTH)

TWO-LANE COLLECTOR

NOT TO SCALE

PREPARED BY:

HUNSAKER & ASSOCIATES SAN DIEGO, INC

PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING PH(858)558-4500 FX(858)558-1414

DETAILS

NORTH RIVER FARMS

CITY OF OCEANSIDE, CALIFORNIA

SHEET 3 OF 9

W.O. NO. 2445-17

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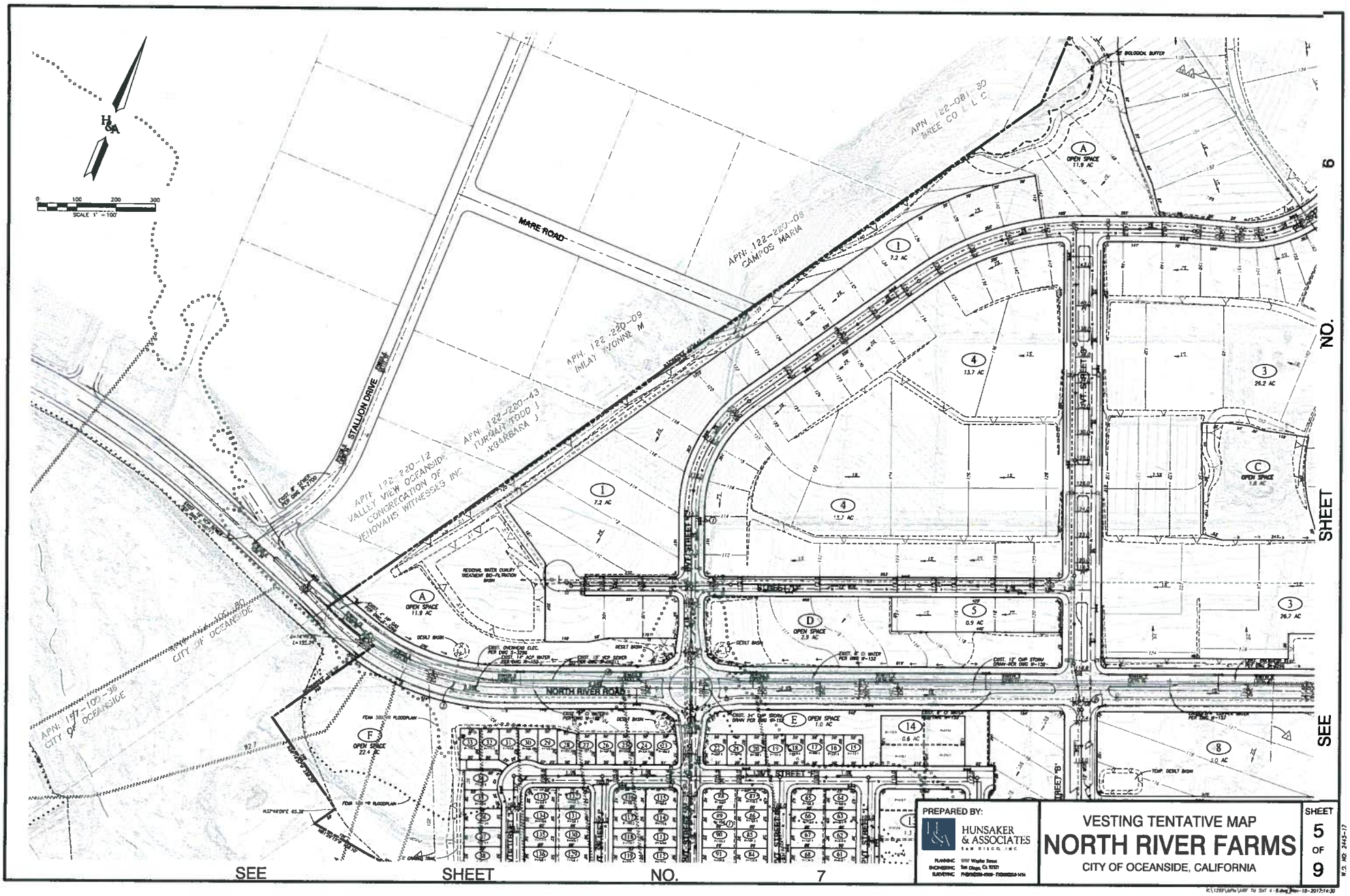
APN: 122-521-35
L A B INVESTMENT L L C
APN: 122-090-57
LIBS CHRISTINE A TRUST
07-17-03
APN: 122-090-58
STICKLES DONALD R
APN: 122-090-12
TRIPLE M PACKING
CHINO KAZUO
MURAI GEORGE H FAMILY
TRUST ET AL
APN: 122-090-45
AVELAR ELISEO LIVING
TRUST 04-14-06
APN: 122-090-46
300 WILSHIRE ROAD
L L C
APN: 122-050-48
BRUGGEMAN JOYCE L
BRUGGEMAN KATHRYN
BRUGGEMAN BRIAN
APN: 122-090-47
RUSH FAMILY TRUST
01-07-11
APN: 122-090-21
MELLANO HARRY M FAMILY
TRUST 02-15-79
APN: 122-090-23
JOHNSON DONALD W
APN: 122-090-24
TOKER TR TRUST
12-19-85
APN: 122-081-30
BREE CO L L C
APN: 122-090-09
CAMPOS MARIA
A
OPEN SPACE
11.9 AC
B
OPEN SPACE
4.1 AC
1
7.2 AC
2
20.3 AC
3
26.2 AC
4
13.7 AC
100' PLANTED BUFFER
BIOLOGICAL BUFFER
SCALE 1" =100'
0 100 200 300
SEE SHEET NO. 6
PREPARED BY:
HUNSAKER & ASSOCIATES
SAN DIEGO, INC
PLANNING
ENGINEERING
SURVEYING
VESTNG TENTATIVE MAP
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA
SHEET
4
OF
9
W.O. NO. 2442-17



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PLANNING | ENGINEERING | SURVEYING

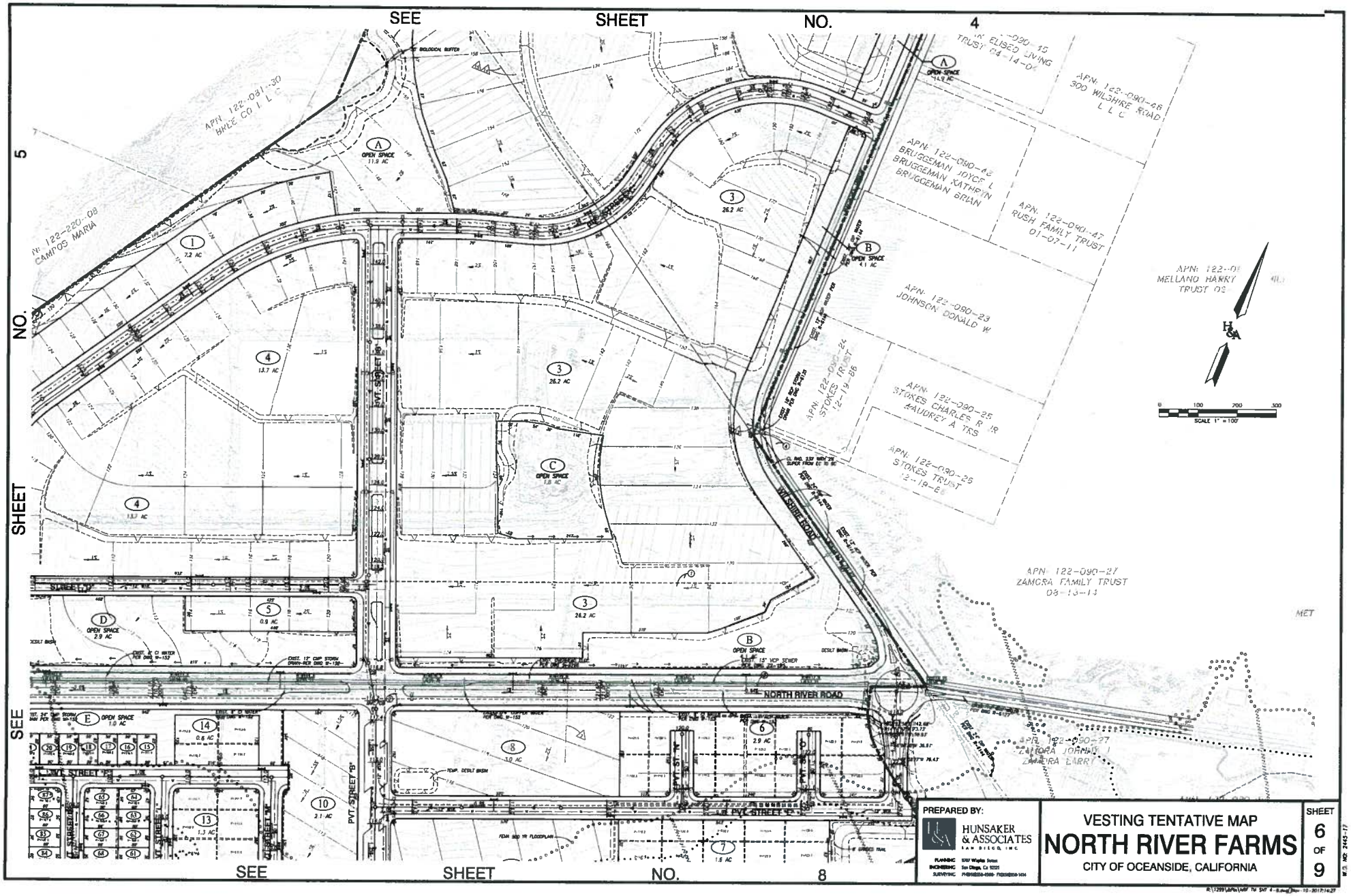
VESTING TENTATIVE MAP

NORTH RIVER FARMS

CITY OF OCEANSIDE, CALIFORNIA

SHEET 5 OF 9

H.S. JOB NO. 2443-17



PREPARED BY:
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SAN DIEGO, INC
PLANNING
ENGINEERING
SURVEYING

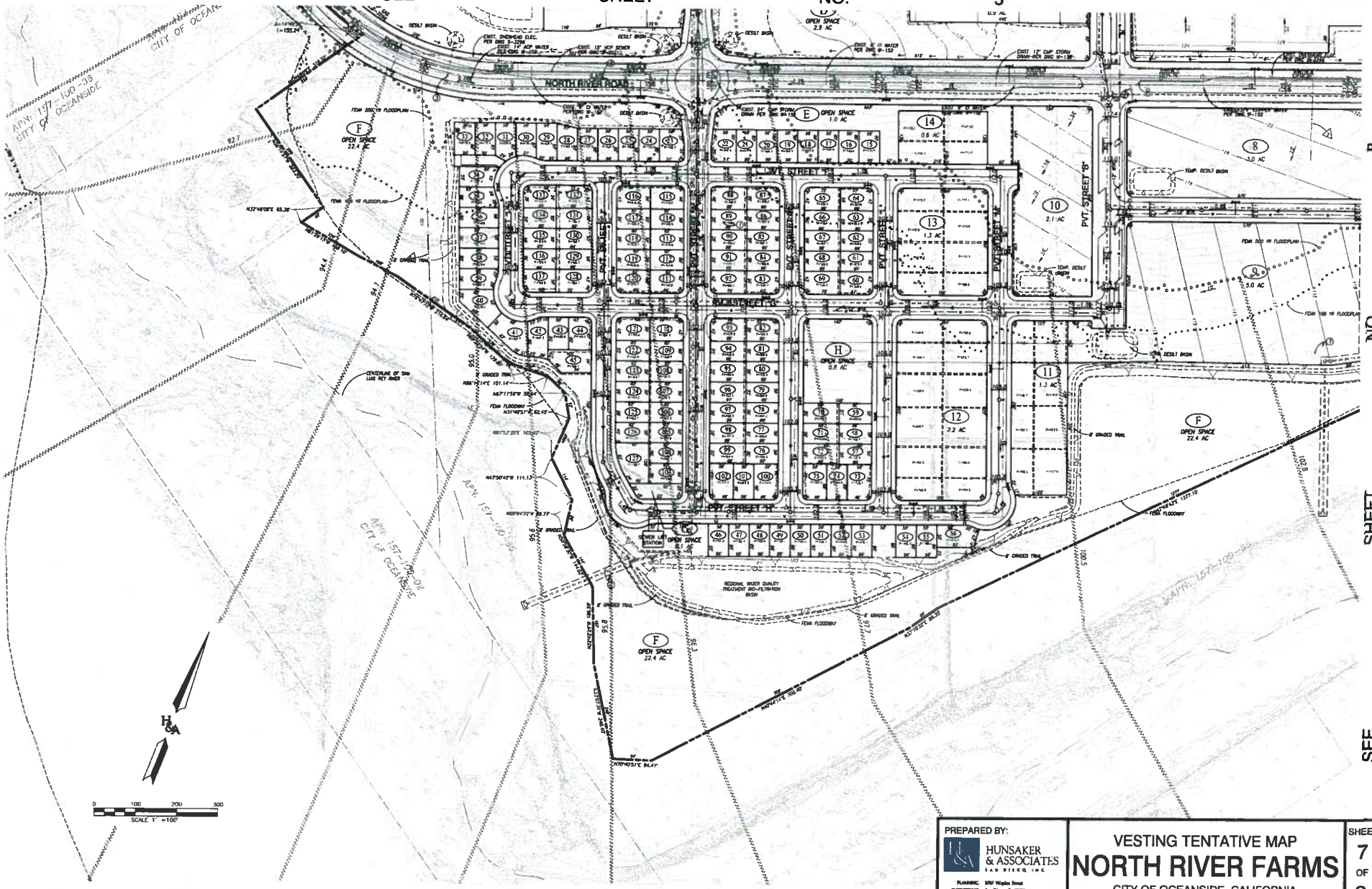
VESTING TENTATIVE MAP

NORTH RIVER FARMS

CITY OF OCEANSIDE, CALIFORNIA

SHEET 6 OF 9

M.S. NO. 2445-17



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PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
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VESTING TENTATIVE MAP
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA

SHEET 7 OF 9

P.D. NO. 2443-17

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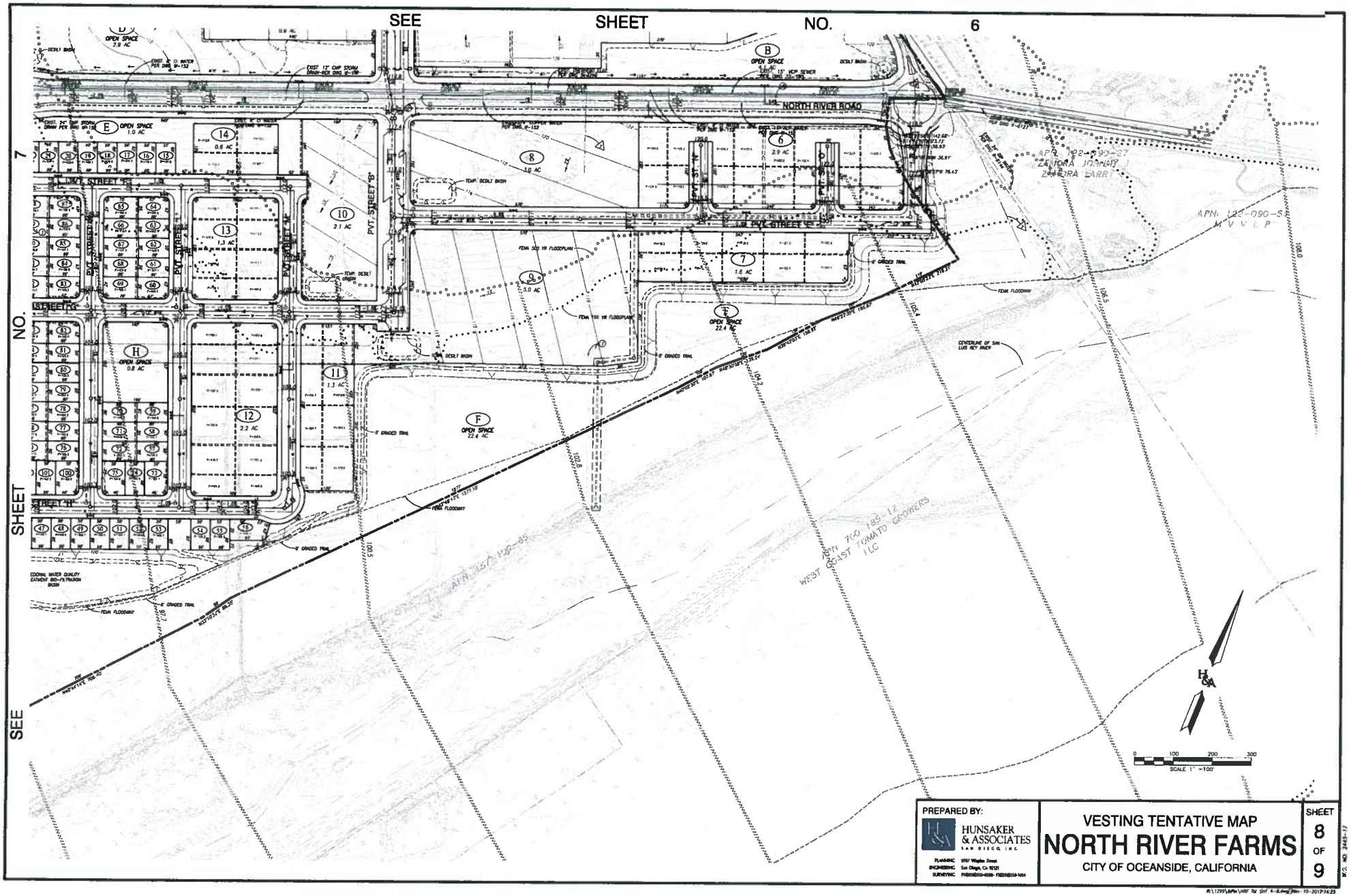


PREPARED BY:
HUNSAKER & ASSOCIATES SAN DIEGO, INC.
PLANNING
ENGINEERING
SURVEYING

VESTING TENTATIVE MAP

NORTH RIVER FARMS

CITY OF OCEANSIDE, CALIFORNIA

SHEET 8 OF 9

W.O. NO. 2445-17

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF OCEANSIDE, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL "A" OF CERTIFICATE OF COMPLIANCE RECORDED AUGUST 24, 2016 AS INSTRUMENT NO. 2016-0436800 OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

LOT 1 OF SECTION 34, TOWNSHIP 10 SOUTH, RANGE 4 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF, TOGETHER WITH A PORTION OF LOT 1 OF RANCHO GUAJOME, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE PARTITION MAP THEREOF MADE IN THE FINAL DECREE IN THE ACTION ENTITLED "SUSIE G. COUTS VS RICHARD O'NEILL, ET AL" UNDER SUPERIOR COURT CASE NO. 10201 ON FILE IN THE OFFICE OF THE COUNTY CLERK OF SAID COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 1 OF RANCHO GUAJOME; THENCE ALONG THE NORTHEASTERLY LINE THEREOF NORTH 58°16'57" WEST, 718.05 FEET (RECORD "N58°44'18"W, 718.05"" PER RECORD OF SURVEY NO. 9119) TO THE POINT OF INTERSECTION WITH THE CENTERLINE OF NORTH RIVER ROAD AS SHOWN AND DESCRIBED ON RECORD OF SURVEY NO. 9119, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF SAID COUNTY RECORD ON AUGUST 12, 1982, ALSO BEING THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID NORTHEASTERLY LINE ALONG SAID CENTERLINE SOUTH 68°23'56" WEST, 2916.85 FEET TO THE BEGINNING OF A 600.00 FOOT RADIUS CURVE CONCAVE NORTHERLY; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°28'14" A DISTANCE OF 497.11 FEET TO A POINT ON THE NORTHWESTERLY LINE OF SAID LOT 1 OF RANCHO GUAJOME; THENCE LEAVING SAID CENTERLINE ALONG SAID NORTHWESTERLY LINE NORTH 32°46'09" EAST, 2254.41 FEET TO THE POINT OF INTERSECTION WITH THE BOUNDARY OF SAID LOT 1 OF SECTION 34; THENCE LEAVING SAID NORTHWESTERLY LINE ALONG SAID BOUNDARY NORTH 00°45'15" EAST, 876.18 FEET; THENCE SOUTH 88°40'10" EAST, 1328.15 FEET; THENCE SOUTH 00°58'59" WEST, 1369.08 FEET TO A POINT ON SAID NORTHEASTERLY LINE; THENCE LEAVING SAID BOUNDARY ALONG SAID NORTHEASTERLY LINE SOUTH 58°16'57" EAST, 791.40 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL "B" OF CERTIFICATE OF COMPLIANCE RECORDED AUGUST 24, 2016 AS INSTRUMENT NO. 2016-0436800 OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:

THAT PORTION OF LOT 1 OF RANCHO GUAJOME, IN THE CITY OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE PARTITION MAP THEREOF MADE IN THE FINAL DECREE IN THE ACTION ENTITLED "SUSIE G. COUTS VS RICHARD O'NEILL, ET AL" UNDER SUPERIOR COURT CASE NO. 10201 ON FILE IN THE OFFICE OF THE COUNTY CLERK OF SAID COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE ALONG THE NORTHEASTERLY LINE THEREOF NORTH 58°16'57" WEST, 718.05 FEET (RECORD "N58°44'18"W, 718.05"" PER RECORD OF SURVEY NO. 9119) TO THE POINT OF INTERSECTION WITH THE CENTERLINE OF NORTH RIVER ROAD AS SHOWN AND DESCRIBED ON RECORD OF SURVEY NO. 9119, IN THE CITY OF OCEANSIDE, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FILED IN THE OFFICE OF SAID COUNTY RECORDER ON AUGUST 12, 1982; THENCE LEAVING SAID NORTHEASTERLY LINE ALONG SAID CENTERLINE SOUTH 68°23'56" WEST, 142.68 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID CENTERLINE SOUTH 68°23'56" WEST, 2774.27 FEET TO THE BEGINNING OF A 600.00 FOOT RADIUS CURVE CONCAVE NORTHERLY; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 32°38'46" A DISTANCE OF 341.87 FEET TO A POINT ON THE SOUTHEASTERLY LINE OF THE NORTHWESTERLY 150.00 FEET OF SAID LOT 1; THENCE LEAVING SAID CENTERLINE ALONG SAID SOUTHEASTERLY LINE SOUTH 32°46'09" WEST, 318.32 FEET TO A POINT ON THE NORTHEASTERLY LINE OF THE SOUTHWESTERLY 700.00 FEET OF SAID LOT 1; THENCE LEAVING SAID SOUTHEASTERLY LINE ALONG SAID NORTHEASTERLY LINE SOUTH 56°16'57" EAST, 209.20 FEET TO A POINT ON A LINE PARALLEL WITH SAID NORTHWESTERLY LINE OF LOT 1; THENCE LEAVING SAID NORTHEASTERLY LINE ALONG SAID PARALLEL LINE SOUTH 32°46'09" WEST, 65.38 FEET; THENCE LEAVING SAID PARALLEL LINE SOUTH 81°26'15" EAST, 198.10 FEET; THENCE SOUTH 84°23'33" EAST, 108.87 FEET; THENCE SOUTH 78°47'33" EAST, 214.64 FEET; THENCE SOUTH 68°23'54" EAST, 128.60 FEET; THENCE NORTH 86°14'14" EAST, 101.14 FEET; THENCE SOUTH 67°11'58" EAST, 58.54 FEET; THENCE SOUTH 31°40'51" EAST, 82.45 FEET; THENCE SOUTH 01°52'35" WEST, 105.82 FEET; THENCE SOUTH 47°50'43" EAST, 114.13 FEET; THENCE SOUTH 08°04'22" EAST, 88.77 FEET; THENCE SOUTH 60°58'30" EAST, 144.02 FEET; THENCE SOUTH 22°42'26" EAST, 189.58 FEET; THENCE SOUTH 33°08'36" EAST, 240.40 FEET; THENCE NORTH 70°40'51" EAST, 84.41 FEET; THENCE NORTH 40°44'14" EAST, 708.40 FEET; THENCE NORTH 33°10'32" EAST, 86.35 FEET; THENCE NORTH 42°46'43" EAST, 1277.10 FEET; THENCE NORTH 40°02'30" EAST, 107.87 FEET; THENCE NORTH 48°30'58" EAST, 138.24 FEET; THENCE NORTH 38°42'03" EAST, 158.82 FEET; THENCE NORTH 46°22'35" EAST, 166.67 FEET; THENCE NORTH 42°05'23" EAST, 219.21 FEET; THENCE NORTH 55°44'18" WEST, 218.86 FEET; THENCE NORTH 51°38'27" WEST, 78.43 FEET; THENCE NORTH 46°06'38" WEST, 38.81 FEET; THENCE NORTH 31°59'31" WEST, 59.83 FEET; THENCE NORTH 14°51'07" WEST, 73.73 FEET TO THE TRUE POINT OF BEGINNING.

APN: 157-100-83 & 84

TITLE REPORT EXCEPTIONS

THE FOLLOWING IS A LIST OF EXCEPTIONS PER A PRELIMINARY REPORT PROVIDED BY CHICAGO TITLE COMPANY, PER ORDER NUMBER 12207407-996-SDI-RT4 DATED JUNE 14, 2017.

A. PROPERTY TAXES, WHICH ARE A LIEN NOT YET DUE AND PAYABLE, INCLUDING ANY ASSESSMENTS COLLECTED WITH TAXES TO BE LEVIED FOR THE FISCAL YEAR 2014-2015.

B. THE LIEN OF SUPPLEMENTAL OR ESCAPED ASSESSMENTS OF PROPERTY TAXES, IF ANY, MADE PURSUANT TO THE PROVISIONS OF CHAPTER 3.5 OR PART 2, CHAPTER 3, ARTICLES 3 AND 4 RESPECTIVELY (COMMENCING WITH SECTION 75) OF THE REVENUE AND TAXATION CODE OF THE STATE OF CALIFORNIA AS A RESULT OF THE TRANSFER OF TITLE TO THE VESTEE NAMED IN SCHEDULE A; OR AS A RESULT OF CHANGES IN OWNERSHIP OR NEW CONSTRUCTION OCCURRING PRIOR TO DATE OF POLICY.

1. THE RIGHTS OF THE PUBLIC IN AND TO THAT PORTION OF THE HEREIN DESCRIBED LAND LYING WITHIN NORTH RIVER ROAD, ROAD SURVEY 647.

2. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: THE COUNTY OF SAN DIEGO PURPOSE: PUBLIC ROAD PURPOSES RECORDED: JULY 1, 1902 IN BOOK 310, PAGE 74 OF DEEDS

AFFECTS: THE EXACT LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD

△3 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: COUNTY OF SAN DIEGO PURPOSE: PUBLIC HIGHWAY RECORDED: BOOK 1381, PAGE 32 OF DEEDS AFFECTS: THE EASTERLY 20.00 FEET

4. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE:PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: IN BOOK 253, PAGE 308 OF OFFICIAL RECORDS.

AFFECTS: THE EXACT LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD

△5 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY, A CORPORATION PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: MARCH 21, 1935 IN BOOK 383, PAGE 308 OFFICIAL RECORDS

AFFECTS: THE EXACT LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD

△6 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE:PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: OCTOBER 30, 1944 IN BOOK 1770, PAGE 182 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△7 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE:PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: JULY 15, 1946 IN BOOK 2180, PAGE 285 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△8 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: JANUARY 13, 1947 IN BOOK 2325, PAGE 199 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△9 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: AUGUST 31, 1949 IN BOOK 3305, PAGE 269 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

TITLE REPORT EXCEPTIONS (CONT.)

△10 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: APRIL 19, 1951 IN BOOK 4063, PAGE 81 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△11 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: APRIL 27, 1954 IN BOOK 5219, PAGE 198 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△12 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: JAMES E. BREE PURPOSE: ROAD RECORDED: APRIL 27, 1956 IN BOOK 6078, PAGE 589 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT. SAID EASEMENT HAS BEEN CONVEYED AND/OR RESERVED IN VARIOUS OTHER INSTRUMENTS OF RECORD.

TITLE REPORT EXCEPTIONS (CONT.)

13. AN AGREEMENT, AND THE TERMS AND CONDITIONS AS CONTAINED THEREIN APRIL 12, 1988 BY AND BETWEEN: OCEANSIDE UNIFIED SCHOOL DISTRICT AND VISTA UNIFIED SCHOOL DISTRICT RECORDED: APRIL 20, 1988 AS INSTRUMENT NO. 88-182372 OF OFFICIAL RECORDS REGARDING: TRANSFER OF TERRITORY REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

△14 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS RECORDED: NOVEMBER 26, 1991 AS INSTRUMENT NO. 1991-0611757 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

△15 AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT. GRANTED TO: CITY OF OCEANSIDE PURPOSE: PUBLIC STREET AND HIGHWAY PURPOSES RECORDED: NOVEMBER 13, 2007 AS INSTRUMENT NO. 2007-0715545 OF OFFICIAL RECORDS AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

16. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT ENTITLED: MEMORANDUM OF LEASE SELF-REALIZATION FELLOWSHIP CHURCH, A CALIFORNIA RELIGIOUS NONPROFIT CORPORATION. HERB THYME FARMS, INC., A DELAWARE CORPORATION RECORDING SEPTEMBER 8, 2008 RECORDING NO: 2008-0477174 OF OFFICIAL RECORDS THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREON.

TITLE REPORT EXCEPTIONS (CONT.)

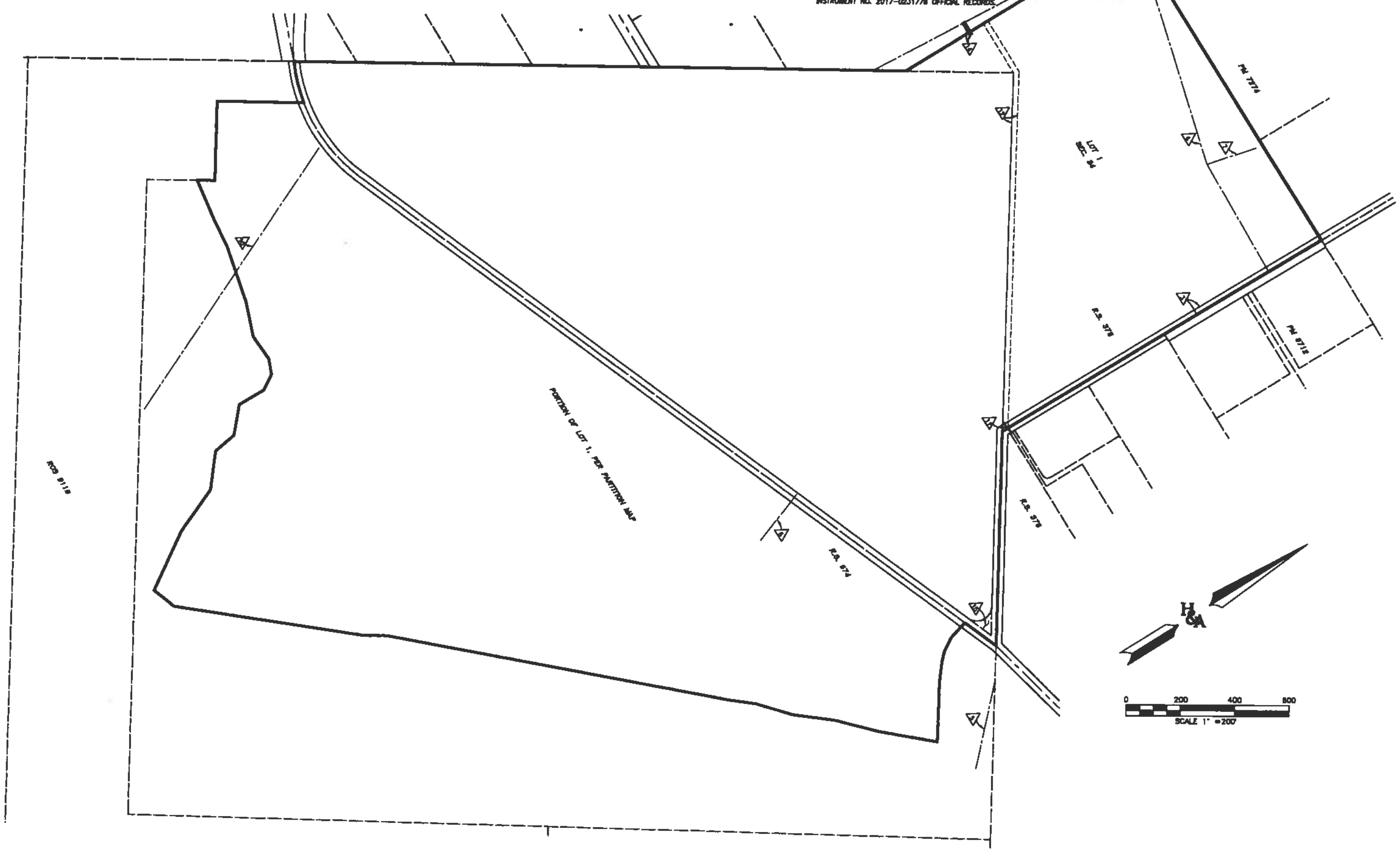
17. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT
ENTITLED: AGREEMENT
EXECUTED BY: BREE COMPANY, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY AND SELF-REALIZATION FELLOWSHIP CHURCH, A CALIFORNIA RELIGIOUS NON-PROFIT CORPORATION
RECORDING DATE:JANUARY 22, 2015
RECORDING NO: 2015-0027827 OF OFFICIAL RECORDS. REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

18. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT
ENTITLED: MEMORANDUM OF AGREEMENT
EXECUTED BY: SELF-REALIZATION FELLOWSHIP CHURCH, A CALIFORNIA RELIGIOUS NON-PROFIT CORPORATION AND THE NRF PROJECT OWNER, LLC, A DELAWARE LIMITED LIABILITY COMPANY
RECORDING DATE:JANUARY 30, 2015
RECORDING NO: 2015-042254 OF OFFICIAL RECORDS.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

19. ANY RIGHT, INTEREST OR CLAIM THAT MAY EXIST, ARISE OR BE ASSERTED AGAINST THE TITLE UNDER OR PURSUANT TO THE PERISHABLE AGRICULTURAL COMMODITIES ACT OF 1930, AS AMENDED, 7 USC 499A ET SEQ., THE PACKERS AND STOCKYARD ACT OF 1921, AS AMENDED, 7 USC 181 ET SEQ., OR ANY SIMILAR STATE LAWS.

20. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORDS.

21. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "ENCROACHMENT REMOVAL AGREEMENT PROPOSED ENCROACHMENT ON RIGHT-OF-WAY" RECORDED MAY 23, 2017 AS INSTRUMENT NO. 2017-0231778 OFFICIAL RECORDS.



PREPARED BY:
HUNSAKER & ASSOCIATES SAN DIEGO, INC

BOUNDARY & ENCUMBRANCES
NORTH RIVER FARMS
CITY OF OCEANSIDE, CALIFORNIA

SHEET 9 OF 9

W.O. NO. 2445-17