



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1399

June 5¹ 2012

CESPD-PDS-P

MEMORANDUM FOR Commander, Los Angeles District, ATTN: CESPL-PD-C. Mr. Darrell Buxton

Subject: Tujunga Wash Ecosystem Restoration Project, Los Angeles River Drainage System, California, Section 1135 Continuing Authority Program, Review Plan Approval

1. The Tujunga Wash Ecosystem Restoration Project, Los Angeles River Drainage System, California, Section 1135 Continuing Authority Program, Review Plan that is enclosed is in accordance with Engineering Circular (EC) 1165-2-209, Review of Decision Documents, dated 31 Jan 2012 and CECW-P, Director of Civil Works' Policy Memorandum # 1, Continuing Authority Program Planning Process Improvements, 19 Jan, 2011 (Encl 2). The South Pacific Division, Planning and Policy Division and Los Angeles District Support Team have reviewed the Review Plan that has been submitted. The South Pacific Division approves the Tujunga Wash Ecosystem Restoration Project, Los Angeles River Drainage System, California, Review Plan.
2. With MSC approval the Review Plan will be made available for public comment via the internet and the comments received will be incorporated into future revisions of the Review Plans. The Review Plan does not require independent external peer review as established in Encl 2.
3. I hereby approve the Review Plan which is subject to change as study circumstances require. This is consistent with study development under the Project Management Business Process. Subsequent revisions to the Review Plan after public comment or during project execution will require new written approval from this office.
4. Point of contact for this action is Kurt Keilman, CESPD-PDS-P, 415-503-6596, Kurt.Keilman@usace.army.mil.

Building Strong From New Mexico All The Way To The Pacific!

Encls

1. Review Plan
2. CECW-P Memo


JOSEPH CALCARA
Director
Programs

REVIEW PLAN

TUJUNGA WASH ECOSYSTEM RESTORATION PROJECT Los Angeles River Drainage System

**Prepared by:
U.S. Army Corps of Engineers Los Angeles District
February 2012**



**US Army Corps
of Engineers** ©
Los Angeles District

TUJUNGA WASH ECOSYSTEM RESTORATION PROJECT
Los Angeles River Drainage System

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TUJUNGA WASH ECOSYSTEM RESTORATION PROJECT

Los Angeles River Drainage System

February 2012

1. INTRODUCTION.

a. Purpose. This Review Plan defines the scope and level of quality management activities for the Tujunga Wash Ecosystem Restoration Project (Project), Los Angeles Drainage System.

b. References.

- (1) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (2) ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3) WRDA 2007 H. R. 1495 Public Law 110-114, 8 Nov 2007
- (4) EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (5) Army Regulation 15-1, Committee Management, 27 November 1992 (Federal Advisory Committee Act Requirements)
- (6) National Academy of Sciences, Background Information and Confidential Conflict Of Interest Disclosure, BI/COI FORM 3, May 2003
- (7) Director of Civil Works' Policy Memorandum #1, 19 January 2011, Continuing Authority Program Planning Process Improvements.

c. Review Requirements. This Review Plan was developed in accordance with EC 1165-2-209, which establishes the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision and implementation documents through independent review. This Review Plan describes the scope of review for the current phase of work. All appropriate levels of review (DQC, ATR, and IEPR) will be included in this Review Plan and any levels not included will require documentation in the Review Plan (RP) of the risk-informed decision not to undertake that level of review. The RP identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project.

2. PROJECT DESCRIPTION.

a. Project Authority. The Tujunga Wash Ecosystem Restoration Project was authorized by Section 1135 (c) of the Water Resources Development Act of 1986 (Public Law 99-662). Recreation as a project purpose was authorized by Section 4 of the Flood Control Act of 1944 (Public Law 78-534) and the Federal Water Project Recreation Act of 1965 (Public Law 89-72). Section 1135 of the Water Resources Development Act of 1986 (Public Law 99-662) and Section 103 of The Water Resources Development Act of 1986 (Public Law 99-662) specify the cost-sharing requirements applicable to the Project.

Section 1135 provides that the Federal share shall not exceed more than \$5 million and the non-Federal sponsor's share shall equal 25% of the total project costs. Not more than 80 percent of the non-Federal share may be in kind, including a facility, supply, or service that is necessary to carry out the modification or measure.

b. Location and Description. The Tujunga Watershed is the largest sub-watershed of the Los Angeles River Watershed. It encompasses 225 square miles in north-central Los Angeles County, California. The site is located in the eastern San Fernando Valley (a part of the incorporated body of the City of Los Angeles), Los Angeles County, California. The proposed project reach extends from Vanowen Street north to Sherman Way, a distance of approximately 3,000 feet and approximately 65 feet on both sides of the Tujunga Wash flood control channel (See Exhibit C), which was constructed by the Corps under a separate authority. The purpose of the Project is to restore degraded habitat along a 3,000 foot long part of the Tujunga Wash by constructing a meandering stream and increasing the habitat value by planting native/riparian types of vegetation along the banks of the stream to increase opportunity for wildlife movement and to provide nesting areas for migratory birds and other sensitive species located in the vicinity of the Project area. Wildlife corridor connectivity can be further expanded by connecting to the Sponsor's 6,000 foot long restoration project and the Corps' existing 4,200 foot long Tujunga Greenbelt Project downstream of the Federal project (See Figure B); The Project is to be design and constructed to function similar to the constructed Green Belt Project. Figure D shows the water source for the Project (South Pacoima Wash Channel), the inlet connection location, as well as the staging areas.

Tujunga Wash originates in the San Gabriel Mountains to the immediate north and passes through the study area before its confluence with the Los Angeles River. The Wash is formed upstream by the confluence of the Big Tujunga River and the Little Tujunga River, and is joined immediately upstream of the Project area by the Pacoima Wash. The Tujunga Wash is the major tributary of the Los Angeles River system in the upper Los Angeles River basin. The Tujunga Wash, once downstream of Hansen Dam, traverses through a heavily urbanized environment.

Historically, the Tujunga Wash, as it flowed through the eastern San Fernando Valley, was a braided stream course. It was a major source of stream deposition and alluvial deposits in the region. The Tujunga Wash consisted of three primary channels. Streams flowing in a southerly direction were primarily carrying the discharge of only the larger flood flows. The natural channel was converted into the flood control channel and natural native vegetation was damaged during construction of the Hollywood Freeway and other intensive urban development. Thus the natural streams and vegetation were degraded.

The channel is a rectangular box structure for its entire length from Hansen Dam to the Los Angeles River confluence. The Tujunga Wash has the widest right-of-way (sixty-five feet average width, on each side of the channel bank) of any tributary channel system in the entire Los Angeles County Drainage Area (LACDA) system. This right-of-way is owned in its entirety by the Los Angeles County Flood Control District, which is represented by the Los Angeles County Department of Public Works (LACDPW), which operates the LACDA system in conjunction with the U.S. Army Corps of Engineers (Corps). Both sides of the channel currently lack any type of vegetation.

c. Project History.

There was a review of the integrated Final Detailed Project Report (DPR) and Environmental Assessment (EA) for this Project that was finalized and signed in May of 2009. A notice of exemption was prepared by the local sponsor, the Los Angeles County Department of Public Works (County), to comply with the California Environmental Quality Act (CEQA). The DPR was prepared in compliance

with the National Environmental Policy Act (NEPA), and all applicable environmental regulations including ER 200-2-2, U.S. Army Corps of Engineers Policy and Procedures for Implementing NEPA. The DPR was prepared in accordance with guidance of ER-1105-2-100, Appendix E and F, and other applicable USACE guidelines to implement Ecosystem Restoration. This Integrated Report was referred to as a DPR and it included the following: descriptions of existing environmental resources; development and description of alternatives; real estate analysis; hydrology and hydraulics analysis; environmental laws, regulations, and required permits; environmental impacts; environmental benefits and cost evaluation; correspondence; and an operation and maintenance plan.

The nine acre area proposed for restoration includes two strips of land that are 65-feet wide and approximately 3000 feet long located on both sides of the Tujunga Wash channel between Sherman Way and Vanowen Street. The proposed Project will connect to two constructed restoration areas: 1) the County's restoration project, which is 6,000 feet long, located between Vanowen Street and Oxnard Street and 2) USACE existing Tujunga Greenbelt project, which is 4,200 feet long, located between Oxnard Street and Chandler Boulevard. With the addition of these two projects, the total length of the riparian habitat corridor would increase to 13,200 feet. The subject lands are owned by Los Angeles County and are both located downstream of the section 1135 project.

The habitat along this portion of the channel has been substantially degraded due to modifications of the natural stream into a manmade flood control channel. The Opportunity exists to restore and increase habitat along the banks of the flood control channel by establishing native/riparian vegetation. For the vegetation to become successful, a meandering stream parallel to the channel would be constructed on the west bank and would receive water from the eastern branch of the South Pacoima Wash via gravity feed pipeline; no water would be removed from Tujunga Wash. In addition, the Project would provide passive recreational and educational opportunities. By implementation of the recommended plan, the habitat value would be increased from 0 to 7.1 Habitat Units (HUs).

No Federally threatened or endangered species are located in the project area. Coordination with the U.S. Fish and Wildlife Service (USFWS) has been performed and they provided a final Coordination Act Report (CAR) in compliance with the Coordination Act. The Draft and Final CAR evaluates four alternatives, but the DPR evaluates three alternatives. This discrepancy occurred because USFWS prepared the Draft and Final CAR prior to preparation of the Draft DPR. Further refinement was made by combining two of the alternatives identified in the CAR to reduce redundancy and to generate greater output in HUs. The USACE then coordinated with USFWS regarding the refinements and number of alternatives evaluated in the Draft DPR. USFWS stated there is no need to provide a revised CAR because combining the two alternatives in the CAR created greater benefits for the ecosystem. Both the USACE and USFWS agreed on this decision.

The Project would not result in any discharge of material into waters of the United States; therefore, it is not subject to Section 404 of the Clean Water Act.

Both Phase I and Phase II Environmental Site Assessments were conducted in the Project area. It was determined that no Hazardous, Toxic, or Radioactive Waste exist within the Project area.

This Project complies with Section 106 of the National Historic Preservation Act (36 CFR 800)

The Project would result in minimal, short-term impacts on air, noise and traffic. Environmental commitments identified in the DPR would be implemented during construction to minimize the temporary impacts to environmental resources. The restored area would be maintained by the local sponsor in perpetuity.

COL Thomas H. Magness signed the DPR with the conclusion that an Environmental Impact Statement (EIS) is not required for this Project. SPL management decided the best approach to complete this Project would be through a design-build contract. A Request for Proposal (RFP) was written, advertised, and awarded as a Lowest Priced Technically Acceptable (LPTA) Design-Build Project. The RFP was consistent with the DPR. A CESPL design team performed the District Quality Control Team (DQC) and oversaw compliance with USACE guidelines, as well as best engineering practices.

3. WORK PRODUCTS.

a. Description of Work Products. The work products for this project include a Design Documentation Report (DDR), Plans and Specifications (P&S), and Operation and Maintenance Manual (O&M Manual) upon completion.

- (1) Design Documentation Report (DDR). The DDR for the entire Project will serve as a summary of the design to be used by the (DQC) concurrently with the development of the Plans & Specifications. The engineering firms, Kiewit Infrastructure West Company serving as the Prime and HNTB serving as the Sub-Contractor will incorporate the respective design disciplines technical appendices, which includes hydrology and hydraulics, geotechnical, structural, soil analysis, civil, landscape and irrigation. This document will be reviewed by the DQC team members through DrChecks along with, Review Conferences for respective 35%, 65%, 95% Design-Build submittals. The DDR shall include all pertinent information associated with the Project's deliverable.
- (2) Plans & Specification (P&S). The P&S for the Project will be prepared by engineering firms, Kiewit Infrastructure West Company and subcontractor HNTB that will be in accordance with ER 1110-2-1200. The specifications will include demolition, miscellaneous cast-in-place concrete, masonry, decorative metal specialties, site furnishings, earthwork, clearing and grubbing, aggregate base course, bituminous tack and prime coat, hot mix bituminous pavement, aggregate surface course, and storm drainage utilities for civil, structural, irrigation and planting designs. The P&S will encompass design work which consists of constructing a meandering trapezoidal channel, intake and gravity feed pipe and native habitat in Los Angeles, California along Tujunga Wash extending from Vanowen to Sherman Way. On the west terrace, a manmade stream will be constructed which will use diverted water from the South Pacoima Wash Diversion Channel. The west terrace will also have a domestic water irrigation system to help support the plants. The east terrace will have more drought tolerant native plant communities which will be irrigated with domestic water. This terrace will be open to the public with a trail, seating/wildlife observation areas and interpretive signage. This document will be reviewed by the DQC team members through DrChecks along with, Review Conferences for respective 35%, 65%, 95% Design-Build submittals.

- (3) Operations & Maintenance Manual (O&M). An operations and maintenance manual for the Project will be prepared by engineering firms, Kiewit Infrastructure West Company and subcontractor HNTB prior to end of construction to be reviewed by the DQC team and Sponsor through DrChecks for turnover. The Contractors shall furnish as-built drawings and written instructions of year-round care of the installed plant materials including when and where maintenance should occur for HDPE pipe, manholes, fencings, entry gates, junction structures, site amenities, and procedures for plant material replacement.

b. Required Level of Review.

The DDR, P&S, and O&M for the Tujunga Wash Ecosystem Restoration Project will be subject to the following review: District Quality Control (DQC) and Agency Technical Review (ATR). The Project products will also be reviewed by the Sponsor, Los Angeles County Department of Public Works, whom are a part of the DQC team and the Contractor who has their Design Quality Control Plan review (see Appendix E) during the design-build process. The Type I Individual External Peer Review (IEPR) and Type II IEPR (Safety Assurance Review) are not required for this project. The triggers for these reviews listed in ER 1165-2-209 are not met, in addition to our chief of engineering division acknowledges that this Project has no significant threat to life safety.

c. Authorization & Reference Materials. Electronic versions of all pertinent documents, including, Design Documentation Report, Plans & Specifications, O&M Manual and all relevant information available shall be posted in Adobe Acrobat PDF format for the ATR Reviewers at the appropriate time.

4. SCOPE OF REVIEW. The Scope of this Review Plan is for:

a. District Quality Control Activities. DQC activities for the DDR, P&S, and O&M Manual will consist of Quality Checks and Reviews, supervisory reviews, Project Delivery Team (PDT) reviews of the DPR and Request for Proposal (RFP), including input from the Local Sponsor, and, constructability, operability, and environmental reviews, as required by the District's Quality Manual. Specifically, the DQC will consist of a review of the Design-Build Project for DDR and P&S at the 35%, 65%, 95%, and 100% design submittals. It will also include at least four face-to-face Design Review Conferences. Additionally, the DQC members are responsible for a complete reading of the DPR report and RFP and each P&S submittal to assure the overall integrity of the reports, technical appendices, and final products.

b. Agency Technical Review. ATR is an in-depth review that ensures the proper application of clearly established criteria, regulations, laws, codes, principles, and professional practices. ATR also assures that all work products coherently fit together. ATR teams will be comprised of senior USACE personnel. The ATR team will further review and comment on the DDR, P&S, and O&M Manual. The ATR team will also be instructed that this is a Continuing Authorities Program (CAP) project with no significant threat to life safety and the risk to the quality and credibility of the governments scientific information will not be in question. A description of the points of emphasis for each document is below, followed by general review guidelines for the ATR team.

- (1) Emphasis of Review for Work Products

When reviewing the DDR, the ATR team should verify that it is sufficiently detailed for each technical specialty and in accordance with ER 1110-2-1150 appendix D. In this way, the criteria that were used, the critical assumptions which were made, and the analytical methods that were used will be evident for purposed review and historical documentation. Verify that it contains summaries of important calculation results and selected example calculations for all critical elements of the design.

When reviewing the P&S, the ATR team should verify that the documents are prepared in accordance with ER 1110-2-1200 and the Architect/Engineering/Construction CADD Standards along with Tri-Service Spatial Data Standards. The team should verify that the P&S contains all necessary information required to construct the plan detailed in the engineering appendix and documented in the DDR. Review the design for, constructability, operability, and environmental aspects of the design in accordance with ER 1110-2-1150 section 14.

When reviewing the O&M Manual, the ATR team should verify that the documents are prepared in accordance with ER 1110-2-1150 section 13, 15, and ER 1110-2-401 for year-round care of the installed plant material; including, when and where maintenance should occur, and the procedures for plant material replacement, maintenance of intake system, HDPE pipe, manholes, fencing, entry gates, junction structure, and site amenities.

(2) General Review Guidelines

ATR is undertaken to “ensure the quality and credibility of the government’s scientific information” in accordance with ER 1110-1-12.

(a) ATR Team Responsibilities

- i. Reviewers shall review project authorization material, design documents to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the design documents shall be submitted into Document Review and Checking System (DrChecks).
- ii. Reviewers shall pay particular attention to one’s discipline, but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.
- iii. Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to the ATR manager via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ATR manager shall provide these comments to the Project Manager and Lead Engineer.
- iv. The “Critical” comments flag in DrChecks shall not be used unless the comment is discussed with the ATR manager and/or the Lead Engineer.

(b) PDT Responsibilities

- i. The team shall review comments provided by the ATR Team in DrChecks and provide responses to each comment using “Concur,” “Non-Concur,” or “For Information Only.” Concur responses shall state what action was taken and provide revised text from the report if applicable. Non-Concur responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

Team members shall contact the DQC and ATR managers to discuss any “Non-Concur” responses prior to submission.

c. Policy Compliance and Legal Review. In accordance with EC 1165-2-209 paragraph 14, policy compliance and legal review, only applies to decision documents, which was applied to the Detailed Project Report (DPR) that was reviewed and approved through SPD; this Review Plan is an implementation document.

5. REVIEW TEAM.

a. Project Delivery Team (PDT). The PDT developed the DPR

<u>Name</u>	<u>Discipline</u>	<u>Agency/Office</u>	<u>Phone No.</u>
Randy Tabije	Environmental Coordinator/Study Manager	CESPL-PM-M	213-452-3669
Melanie Stalder & Michael Fink	Biologist		
Lu Tan & Kerry Casey	Hydraulics & Hydrology		
Sandra L. Willis	Landscape Architect		
Ted Ingersoll	Geotechnical Engineer		
Juan Dominguez	Cost Estimating		
Mark Bierman & Mike Hallisy	Economics		
Lisa Sandoval	Real Estate		

b. District Quality Control Activities. This is the list of the review team who will perform the DQC activities.

<u>Name</u>	<u>Discipline</u>	<u>Agency/Office</u>	<u>Phone No.</u>
Mohammad	Project Manager	CESPL-PM-C	213-280-4013

Monshizadeh			
Darrell Buxton	Program Manager	CESPL-PM-C	213-452-4007
Shawn Murphy	DQC Lead Civil Engineer	CESPL-ED-DA	213-452-3616
Emili Kolevski	Civil Engineer Supervisor	CESPL-ED-DA	213-452-3659
Kerry Casey	Hydrology & Hydraulics	CESPL-ED-HH	213-452-3574
Stanley Fujimoto	Construction	CESPL-CD-SL	626-401-4084
Naeem Siddiqui	Ecosystem Planning	CESPL-PD-RN	213-452-3852
Sandra L. Willis	Landscape Architect	CESPL-ED-DA	213-452-3638
Robert Ngo	Structural	CESPL-ED-DS	213-452-3609
Julia Yang	Geotechnical Soils	CESPL-ED-GS	213-452-3468
Michael Leongsen	Geotechnical Soils	CESPL-ED-GS	213-452-3600

c. Local Sponsor. The Local Sponsor, Los Angeles County Department of Public Works will be conducting an in-house review of the DDR, P&S, and O&M Manual.

<u>Name</u>	<u>Discipline</u>	<u>Agency/Office</u>	<u>Phone No.</u>
Tona Avalos	Sponsor Lead	LACDPW	626-458-4312
James Hilovsky	Civil Engineer	LACDPW	
Chien-Hao Chen	Civil Engineer	LACDPW	
John Ng	Civil Engineer	LACDPW	
Amir Zandieh	Civil Engineer	LACDPW	
Jim Thurow	Civil Engineer	LACDPW	
Eric Batman	Civil Engineer	LACDPW	
Adam Walden	Civil Engineer	LACDPW	
Richard Gomez	Civil Engineer	LACDPW	
Richard Shieh	Landscaping Plans	LACDPW	
Mie Jones	Landscaping Plans	LACDPW	

d. Contractor. Kiewit Infrastructure West Company and HNTB will be conducting their own review of their design-build products (see appendix E; (appendix B: Design Quality Management Plan for HNTB)).

<u>Name</u>	<u>Discipline</u>	<u>Agency/Office</u>	<u>Phone No.</u>
Allen Drebi	Project Manager	Kiewit	858-486-3410
Jefferson Horn	Project Engineer	Kiewit	
Dan Kellerman	Project Principal	HNTB	
Rob Rastorfer	Project Manager	HNTB	
Tom Poer	Quality Control	HNTB	
Mike O'Hagan	Civil Lead	HNTB	
Pete Jarchow	Water Resources Lead	HNTB	

e. Agency Technical Review. Required ATR Team Expertise for Implementation of DDR, P&S, and O&M Manual; ATR team To Be Determined after approval of RP.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR Lead should be a senior engineer with experience in preparation and review of DDR, P&S, and O&M Manual for ecosystem restoration in a surrounding urban setting, small intake system, small inlet and outlet structure, Landscaping, irrigation system, planting establishment, utilities, and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead may also serve as a reviewer for a specific discipline (such as Landscape Architect, Civil Design Engineering, or Construction).
Landscape Architect	The reviewer should be a senior Landscape Architect with experience in irrigation system, plant establishment, landscaping, restoration ecology, design and review of ecosystem restoration and water movement, and environmental compliance.
Civil Design Engineering	The reviewer should be a senior civil design engineer with experience in care and diversion and control of water, ecosystem restoration in an urban setting that includes streambed and ponds, excavation and backfill for inlet and outlet structures, small junction structure, and roadway restoration. Experience in design-build construction would be beneficial.

Reviewer Type	Hours	Labor Rate	Total
ATR Team Lead	24	\$120/hr	\$2,880
ATR Team Members (2)	48	\$120/hr	\$5,760
Total:	---	---	\$8,640

6. PUBLIC COMMENT. To ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal Government, SPL will provide an opportunity for public comment by posting the approved RP on its public website, http://spl.usace.army.mil/review_plans, for 30 calendar days. This is not a formal comment period; however, if and when comments are received, the PDT will consider them and decide if revisions to the review plan are necessary. If significant and relevant comments are made, the comments will be provided to the reviewers before they conduct their review.

7. REVIEW SCHEDULE.

Activity	Dates
Detailed Project Report Completed	1-May-09
RFP Review Completed	20-Apr-11
BCOE Certificate for RFP	20-May-11

VE Study Completed	1-Jul-11
RFP Awarded	13-Jul-11
Design-Build NTP	29-Jul-11
Submit 35% Design-Build P&S and DDR	8-Sep-11
35% DQC Design-Build Review Completed	27-Sep-11
35% Review Conference Completed	28-Sep-11
65% DQC Design-Build Review Completed	7-Nov-11
65% Review Conference Completed	8-Nov-11
95% DQC Design-Build Review Completed	20-Dec-11
95% Review Conference Completed	21-Dec-11
Final Design-Build P&S and DDR Completed	29-Dec-11
DQC Certificate	10-Feb-12
Review Plan Approval by SPD	27-Feb-12
Public Comment Posted	6-Mar-12
Submit Final P&S and DDR for ATR	7-Mar-12
ATR Certification	16-Mar-12
Begin Construction	TBD
Submit As-builts and O&M Manual	TBD
Complete As-builts and O&M Manual	TBD
End Construction	TBD

8. DOCUMENTATION OF REVIEW. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished through the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probably specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the

vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-2-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall;

- (1) Identify the document(s) reviewed and the purpose of the review;
- (2) Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- (3) Include the charge to the reviewers;
- (4) Describe the nature of their review and their findings and conclusions;
- (5) Identify and summarize each unresolved issue (if any); and
- (6) Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed prior to the District Commander signing the final report.

9. POINTS OF CONTACT. Public questions and/or comments on this review plan can be directed to the following points of contact:

Los Angeles District:

Project Manager: Darrell Buxton (213) 452-4007

Lead Engineer: Shawn Murphy (213) 452-3616

South Pacific Division

SPD Team Lead: Paul Devitt (415) 503-6558

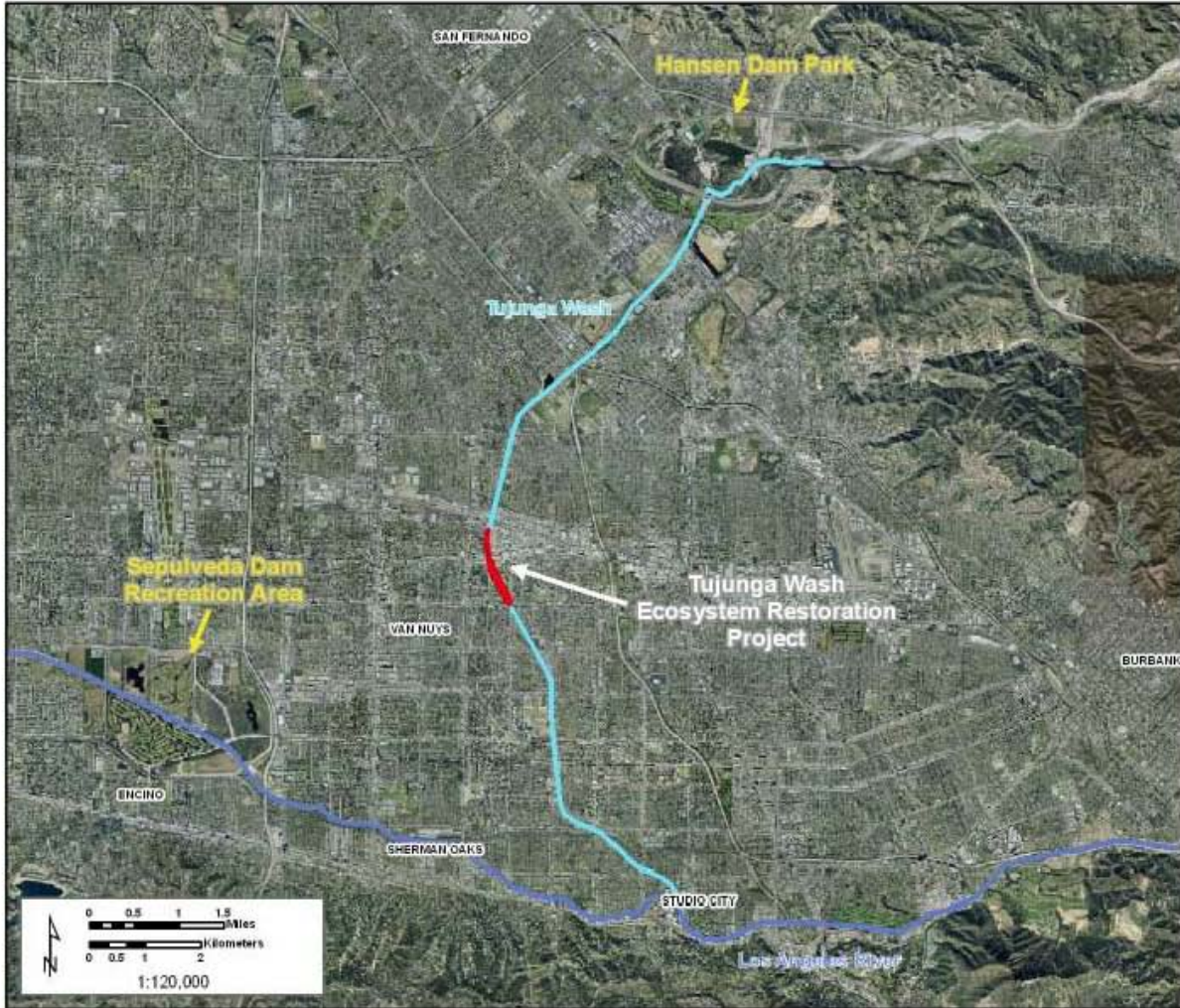
10. REVIEW PLAN APPROVAL. The Review Management Office (RMO) for all work products of Tujunga Wash Ecosystem Restoration Project is the RMC, within close coordination with the SPD MSC.

In summary, the Los Angeles District proposes to fully comply with all existing guidance and conduct DQC and ATR. Type I and II IEPR (SAR) are not required for this project in accordance with EC 1110-2-209. Approval of this RP as outlined above will help facilitate the District's completion of the Project features to complete within the design-build schedule. In order to ensure the RP is in compliance with the principles of EC 1165-2-209, the RP must be approved by the applicable MSC, in this case the Commander, South Pacific Division. Once the RP is approved, the District will post it to its district

public website and notify SPD. If necessary, any changes to the review plan will be approved by following the process used for initially approving the plan.

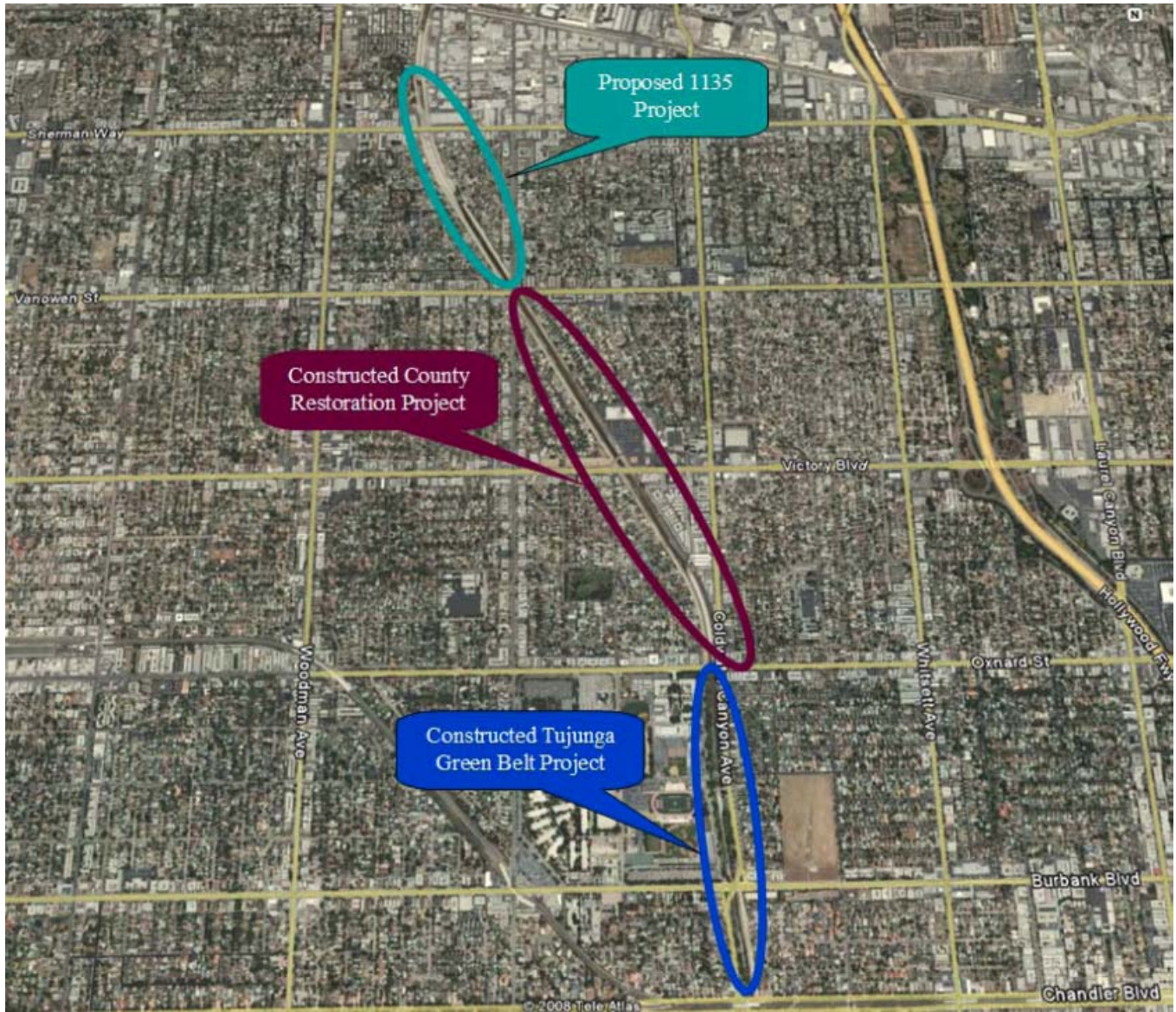
Los Angeles District requests that the South Pacific Division endorse the above recommendations and approve this Review Plan as described in Appendix B of EC 1165-2-209.

FIGURE A



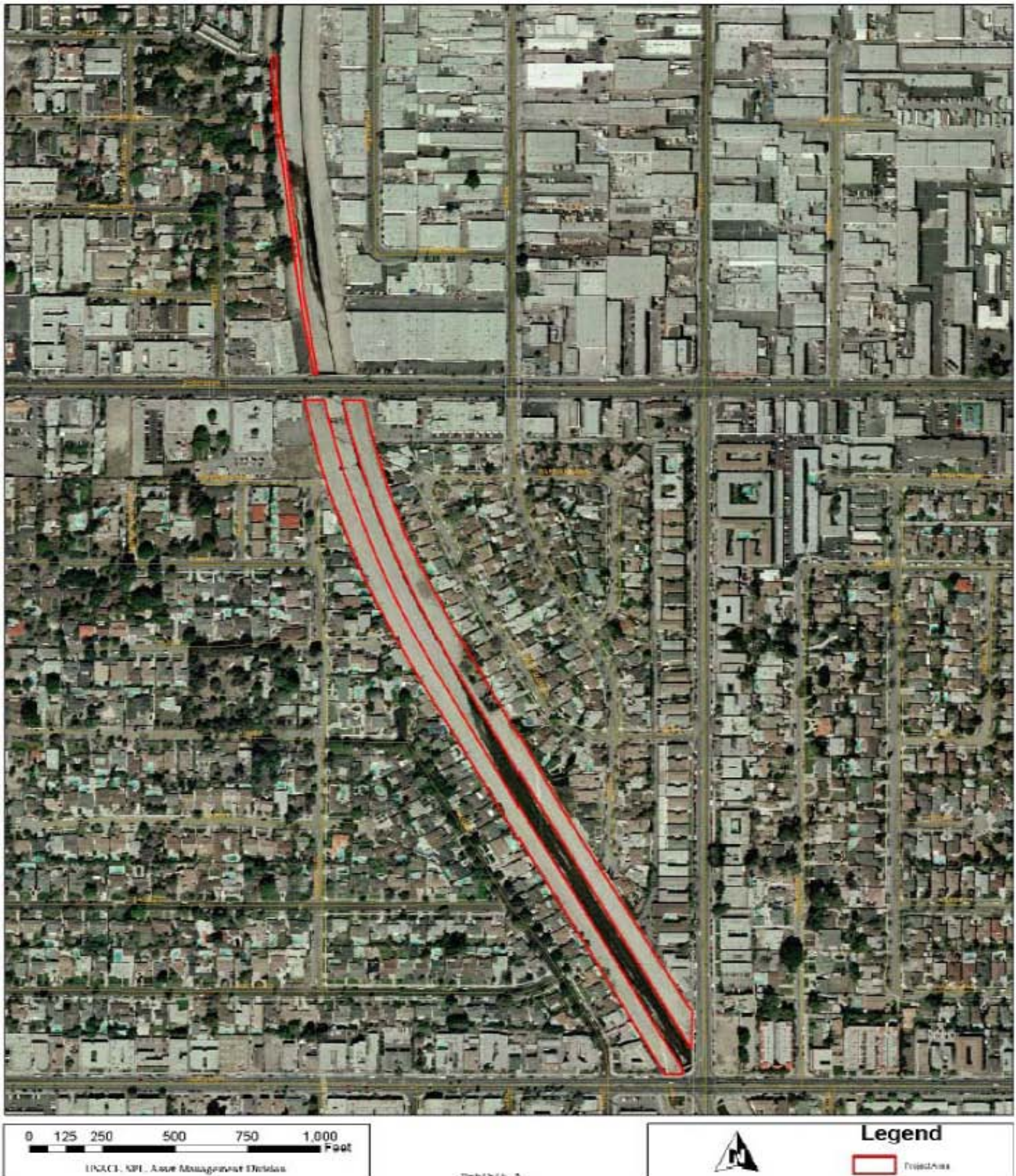
PROJECT LOCATION MAP

FIGURE B



PROJECT AREA MAP 1

FIGURE C



PROJECT AREA MAP 2

FIGURE D



PROJECT WATER SOURCE

ATTACHMENT 1: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR IMPLEMENTATION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Tujunga Wash Ecosystem Restoration Project and Specifications for Tujunga Wash Ecosystem Restoration Project, Los Angeles, CA. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the Design-Build process to award. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company

Date

SIGNATURE

Darrell Buxton
Project Manager
Office Symbol

Date

SIGNATURE

Name
Landscape Architect,
Office Symbol

Date

SIGNATURE

Name
Civil Engineer,
Office Symbol

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

Name

Chief, Engineering Division

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

Office Symbol

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 2: KIEWIT QUALITY MANAGEMENT PLAN, INCLUDING HNTB DESIGN QUALITY CONTROL PLAN