



DEPARTMENT OF THE ARMY
NORTH ATLANTIC DIVISION, CORPS OF ENGINEERS
FORT HAMILTON MILITARY COMMUNITY
GENERAL LEE AVENUE, BLDG 301
BROOKLYN, NY 11252-6700

REPLY TO
ATTENTION OF:

CENAD-RBT

DEC 14 2012

MEMORANDUM FOR Commander, New York District, ATTN: CENAN-EN (Mr. Connolly),
26 Federal Plaza, Room 2039A, New York, NY 10278-0090

SUBJECT: Review Plan Approval for New York and New Jersey Harbor Deepening Project

1. References:

a. Memorandum, CENAN-EN-MC-N, undated, subject: Review Plan for New York and New Jersey Harbor Deepening

b. Memorandum, CENAN-EN-MC-F, 10 Dec 12, subject: New York and New Jersey Harbor Deepening, NY & NJ – Risk Informed Assessment of Significant Threat to Human Life

c. EC 1165-2-209 Change 1, Water Resources Policies and Authorities – Civil Works Review Policy, 31 Jan 12

2. The enclosed Review Plan for the New York and New Jersey Harbor Deepening Project has been prepared in accordance with Reference 1.c. The project consists of deepening channels in the New York and New Jersey Harbor to allow passage by the post-Panamax design vessel Maersk “S-Class.” Depending on wave environment and the amount of safety clearance, the channels will be dredged to between 42 feet and 53 feet (most channels dredged to 52 feet). The project does not include any Federal structural improvements, and any berth dredging or bulkhead improvements will be the responsibility of local service facilities.

3. NAD Business Technical Division is the Review Management Organization (RMO) for the Agency Technical Review (ATR). The Review Plan does not include Independent External Peer Review since the project does not involve potential hazards which pose a significant threat to human life (Ref. 1.b).

4. The Review Plan for the York and New Jersey Harbor Deepening Project is approved. The Review Plan is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.

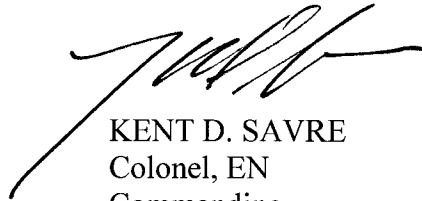
5. In accordance with Reference 1.c, Appendix B, Paragraph 5, this approved Review Plan shall be posted on your district website for public review and comment. The plan will also be posted on NAD’s website for review and comment.

CENAD-RBT

SUBJECT: Review Plan Approval for New York and New Jersey Harbor Deepening Project

6. The Point of Contact in Business Technical Division for this action is Alan Huntley, 347-370-4664 or Alan.Huntley@usace.army.mil.

Encl
as



KENT D. SAVRE
Colonel, EN
Commanding

CF (w/ encl):
CENAD-EN-MC (S. Weinberg)
CENAD-PD-X (L. Cocchieri)

**Review Plan for
New York and New Jersey Harbor Deepening Project
New York and New Jersey**

New York District
U.S. Army Corps of Engineers

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of review for the Plans and Specifications (P&S) and Design Documentation Reports (DDR) for deepening channels serving the Port of New York and New Jersey.

b. References

- (1) EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (3) ER 1110-1-12, Engineering and Design Quality Management, 31 Jul 2006, as revised through 31 Mar 2011
- (4) WRDA 2007 H. R. 1495 Public Law 110-114, 8 Nov 2007
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix G, 30 June 2004

Requirements. This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review:

- (1) District Quality Control/Quality Assurance (DQC)
- (2) Agency Technical Review (ATR)
- (3) Independent External Peer Review (IEPR)
- (4) Policy and Legal Compliance Review.

In addition to these levels of review are Model Certification Reviews and Value Engineering studies. The Guidance for policy and legal compliance reviews that is addressed in Appendix H, ER 1105-2-100 is not applicable since this is not a decision document. The legal review for implementation documents is addressed during the Contracting Process by the Business Oversight Branch (BOB)

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for implementation documents is the Major Subordinate Command (MSC), while for a decision document is the appropriate Planning Center of Expertise (per EC 1165-2-209). Therefore the RMO for the peer review of the P&S, and DDRs described in this Review Plan is the North Atlantic Division.

3. PROJECT INFORMATION

a. Implementation Documents. This Review Plan has been prepared for the plans and specifications (P&S), and Design Documentation Reports (for the New York and New Jersey Harbor Deepening Project). The purpose of these documents is to provide a record of final design.

b. Project Description. This project was authorized for construction by Section 101(a)(2) of the Water Resources Development Act of 2000 (P.L. 106-541).

The Port of New York and New Jersey is the largest port on the East Coast and provides over 269,900 full time jobs and \$11.2 billion in personal income, in port related activities to the states of New York and New Jersey. The Port of New York and New Jersey is comprised of the waterways in the estuary of the New York City, NY-Newark, NJ metropolitan area with a port district encompassing an approximate area within a 25-mile radius of the Statue of Liberty National Monument. Through the Port's three existing major container terminals waterborne cargo moves to all parts of the United States and throughout the world. Two of the terminals are located in New Jersey: Port Newark/Port Elizabeth and the Port Jersey Global Marine Terminal, and one is located in New York: New York Container Terminal in Staten Island. The Port by tonnage is the third largest in the Nation and the busiest on the East Coast. In 2010 4,811 ships entered the harbor transporting over 32.2 million metric tons of cargo valued at over \$175 billion. There is also a fourth smaller container terminal in Brooklyn. The Port is well connected via rail, truck, and inland waterway routes to transport goods to large segments of the northeast and mid-western states. The Port of New York and New Jersey receives container ships from the Far East, Atlantic and Gulf Coasts, the Caribbean, Africa and Persian Gulf. Prior to the initiation of the Harbor Deepening Program, channels within the Harbor ranged in depth from 30 to 45 feet and were inadequate to provide access to the large post-Panamax ships, which have drafts of 48 feet or more.

The project consists of deepening channels in the New York and New Jersey Harbor to handle the post-Panamax design vessel, a Maersk "S-Class." Depending upon the wave environment, and the amount of safety clearance due to hard to soft bottom, the channels will be dredged to the following depths:

Ambrose Channel.....	53ft
Anchorage Channel.....	50ft
Bay Ridge Channel	50ft
Port Jersey	52ft
Kill van Kull	52ft
Newark Bay	52ft
Elizabeth Channel	52ft
South Elizabeth Channel.....	52ft
Arthur Kill to NY Container Terminal	52ft
Arthur Kill, NYCT to Bayway Refinery...	42ft

There are no Federal structural improvements. Berth dredging, and any improvements to the bulkheads, are a responsibility of the local service facilities.

Current estimated project cost is \$1.6 billion and the BCR is 5.7 to 1.

At the time of this document's preparation most of the construction on this project is complete. The remaining contracts are known as "AK4," "S-BR-1" and "SRUC."

AK4 is the final part of the Arthur Kill, and will connect the Bayway refinery to the balance of the project. The Sponsor has recently expressed interest in this contract, and it is likely the work on the P&S will begin in FY 13.

S-BR-1 is Bay Ridge Channel. This segment is deferred until improvements are made at Brooklyn's container terminal.

SRUC is the Sediment Removal and Utility Corridor contract. Due to the 13 year construction period of this project some of the earlier segments, which had involved rock dredging, have experienced significant shoaling that will need to be addressed. Further, two watermains that cross the Anchorage Channel are being relocated, and these segments cannot be dredged until the new watermains are in place. Design of the SRUC is expected to begin in FY 13.

4. DISTRICT QUALITY CONTROL (DQC)

All implementation documents will undergo DQC. DQC is an internal review process of engineering work products focused on fulfilling product quality. This includes both internal EN reviews and a biddability, constructability, operability, and environmental (BCOE) review. The home district (New York) will manage the DQC.

- a. Documentation of DQC.** DQC will be documented through the use of DrCheckssm and a DQC report, which will be signed by all reviewers.
- b. Products to Undergo DQC.** Products that will undergo DQC include Plans and Specifications and the DDRs.
- c. Required DQC Expertise.** DQC will be performed by staff in the home district that are not involved in the preparation of the Plans and Specifications. Additional Quality Control will be performed by the Project Delivery Team during the course of completing the design.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all implementation documents. The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

- a. Products to Undergo ATR.** The products that will undergo ATR include the Plans and Specifications and DDRs.
- b. Required ATR Team Expertise.**

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works implementation documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as civil engineering).
Environmental Resources	Team member will have independently completed Water Quality Certificates or other similar State permits and be well versed in the NEPA process, will have participated in partnerships with other environmental resource agencies, will have experience with identifying and resolving environmental issues in a marine environment, particularly those relating to dredging
Civil Engineering	Team member will be an expert in the field of civil engineering, with an emphasis on dredging. The member will be a P.E. with at least 10 years of experience.
Geotechnical Engineering	Team member will be an expert in the field of geotechnical engineering, with an emphasis on dredging and geology in the marine environment. The member for the AK4 ATR will be familiar with fendering systems and bridge foundations. The member will be a P.E. with at least 10 years of experience.
Structural Engineering	Team member will be an expert in the field of structural engineering, with an emphasis on marine structures. The member for the AK4 ATR will be familiar with fendering systems and bridge foundations. The member will be a P.E. with at least 10 years of experience.

c. Documentation of ATR. DrCheckssm review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout 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 be properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable 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 DrCheckssm 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, PCX, 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 ER 1110-1-12. Unresolved concerns can be closed in DrCheckssm 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:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a copy of each ATR comment, the PDT response, a brief summary of the pertinent points in the follow on discussion, including any vertical coordination, and the agreed upon resolution.

ATR will 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 for the Plans and Specifications and the DDRs. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

An IEPR may be required for implementation documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- Type I IEPR. Type I IEPRs are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the

project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study.

- Type II IEPR. Type II IEPRs, or Safety Assurance Reviews (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. Decision on IEPR. Type I IEPR is not applicable as per EC 1165-2-209, Civil Works Review Policy, since the New York and New Jersey Harbor Deepening project is in the Construction Phase, with the study phase completed in 1999.

Type II Independent External Peer Review, Safety Assurance Review, is required by EC 1165-2-209 for hurricane and storm risk management and flood risk management projects, as well as other projects where potential hazards pose a significant threat to human life. As documented in Memorandum for Record dated 10 December 2012 (Attachment 4), New York District Chief, Engineering Division made a risk informed assessment of whether there is a significant threat to human life as a result of the New York and New Jersey Harbor Deepening Project. The key factors considered were:

- (1) The New York and New Jersey Harbor Deepening Project provides neither flood risk management nor storm risk management.
- (2) The project's purpose is deepen existing navigation channels. There are no structural components as part of the cost-shared Federal project.
- (3) Material from the project is used in a variety of beneficial reuses, most of which actually reduce risk from existing contaminated sites.

Based on a risk informed assessment which considered life safety factors, New York District Chief, Engineering Division determined that there is not a significant threat to human life associated with the New York and New Jersey Harbor Deepening Removal project. Accordingly, a Type II IEPR, Safety Assurance Review, is not required.

- b. Products to Undergo IEPR.** Not applicable.
- c. Required IEPR Panel Expertise.** Not applicable.
- d. Documentation of IEPR.** Not applicable.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All implementation documents will be reviewed for their compliance with law and policy. DQC and ATR facilitate the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of results in implementation documents.

8. MODEL CERTIFICATION AND APPROVAL

Not applicable since the New York and New Jersey Harbor Deepening project is in the Construction Phase and this relates to the use of certified or approved models for planning activities.

9. VALUE ENGINEERING STUDIES

Value Engineering. A Value Engineering (VE) study will be conducted and a report will be prepared to show the value engineering process was used. The aim of the VE studies should be to ensure that the widest range of feasible and cost efficient measures are considered and that alternatives formulated from those measures are not limited to those that first come to mind at the initiation of the study. Putting this step into the process ensures consideration of the fullest range of measures and alternatives.

10. REVIEW SCHEDULES AND COSTS

a. DQC Schedule and Cost.

AK4 Plans & Specifications, Schedule TBD, \$30,000

SRUC Plans & Specifications, Mar 2013, \$30,000

S-BR-1, Plans & Specifications, DEFERRED \$0

b. ATR Schedule and Cost. The schedule and costs budgeted for ATR reviews are as follows:

AK4 Plans & Specifications, Schedule TBD, \$25,000

SRUC Plans & Specifications, Mar 2013, \$25,000

S-BR-1, Plans & Specifications, DEFERRED \$0

c. IEPR Schedule and Cost. Not applicable.

d. Model Certification/Approval Schedule and Cost. Not applicable.

e. Value Engineering

AK4 Plans & Specifications, Schedule TBD \$20,000

SRUC Plans & Specifications, Jan 2012 \$20,000

AK4 Plans & Specifications DEFERRED, \$0

11. PUBLIC PARTICIPATION

Each contract prior to bid opening will require a Water Quality Certificate (WQC) from New York and New Jersey. These WQCs are published for public comment by the States prior to being issued. Also where material is to be placed at the Historic Area Remediation Site (HARS) where it is used to cap an old dredge disposal site, a public notice must be issued for comment prior to award. There will be no public meetings prior to the start of the construction contract.

12. REVIEW PLAN APPROVAL AND UPDATES

The North Atlantic Division Commander, or his representative, is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, PCX (RMO), MSC (RMO), and HQUSACE members) as to the appropriate scope and level of review for the implementation documents. Like the PMP, the Review Plan is a living document and may change as the engineering and design progresses.

13. REVIEW PLAN POINTS OF CONTACT

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

- Tom Shea, NAN, Project Manager, 917-790-8304
- Steven Weinberg, NAN, EN Technical Manager, 917-790-8391
- Alan Huntley, NAD, RMO Representative, 347-370-4664

ATTACHMENT 1: TEAM ROSTERS

PDT

Name	Role	Phone Number	E-mail Address
Tom Shea	Project Manager	x-8304	Thomas.Shea@usace.army.mil
Jamal Sulayman	EN Technical Manager	x-8299	Jamal.A.Sulayman@usace.army.mil
Gezahegne Assegid	Civil Engineering	x-8373	Gezahegne.Assegid@usace.army.mil
Ali Palen	Civil Engineering	x-8574	Ali.M.Palen@usace.army.mil
Lynn Rakos	Cultural Resources	x-8629	Lynn.Rakos@usace.army.mil
Kate Alcoba	Biology/NEPA	x-8216	Catherine.J.Alcoba@usace.army.mil
Ellen Simon	Counsel	x-8158	Ellen.B.Simon@usace.army.mil

DQC Team

Name	Role	Phone Number	E-mail Address
Steven R. Weinberg	EN Technical Manager	x-8391	Steven.r.weinberg@usace.army.mil
TBD	Civil Engineering		
TBD	Geotechnical Engineering		
TBD	Structural		

ATR Team*

Name	Role	Review District
TBD	Civil Engineering	
TBD	Geotechnical Engineering	
TBD	Structural Engineering	
TBD	Team Lead	

*All resumes will be reviewed and approved by the MSC prior to initiating any ATR.

Vertical Team

Name	Role	Phone Number	E-mail Address
Anthony Ciorra, P.E.	NAN PPMD Civil Works Branch Chief	917-790-8208	Anthony.Ciorra@usace.army.mil
Leonard J. Houston	NAN-PL, Environmental Analysis Branch Chief	917-790-8702	Leonard.Houston@usace.army.mil
Frank Santangelo, P.E.	NAN-EN, Civil Resources Branch Chief	917-790-8266	Frank.A.Santangelo@usace.army.mil
Thomas Dannemann, P.E.	NAN-EN, Design Branch Chief	917-790-8363	Thomas.R.Dannemann@usace.army.mil
Angelo Trotto, P.E.	NAN-EN, Engineering Management, Civil Works Section Chief	917-790-8296	Angelo.R.Trotto@usace.army.mil

**ATTACHMENT 2: STATEMENT OF AGENCY TECHNICAL REVIEW
NEW YORK AND NEW JERSEY HARBOR DEEPENING PROJECT
NEW YORK AND NEW JERSEY**

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for contract _____ of The New York and New Jersey Harbor Deepening project located in New York and New Jersey. The ATR was conducted as defined in the project's approved 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, 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 District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrChecks.

XXXX
ATR Team Leader,
CEXXX-XX

Alan Huntley
Review Management Office Representative
Deputy, Business Technical Division
CENAD-RBT

Tom Shea
Project Manager
CENAN-PP-C

CERTIFICATION OF AGENCY TECHNICAL REVIEW

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

Arthur J. Connolly, P.E.
Chief, Engineering Division, CENAN-EN

ATTACHMENT 3: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MS	The District or MSC responsible for the preparation of the decision document	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act

**ATTACHMENT 4: MFR ON RISK INFORMED ASSESSMENT OF SIGNIFICANT THREAT TO HUMAN LIFE BY
CENAN C, ENGINEERING DIVISION**

MEMORANDUM FOR RECORD

SUBJECT: New York and New Jersey Harbor Deepening, NY & NJ – Risk Informed Assessment of Significant Threat to Human Life

1. Project Information. This project was authorized for construction by Section 101(a)(2) of the Water Resources Development Act of 2000 (P.L. 106-541). It consists of deepening the channels to the container ports in Elizabeth, NJ; Bayonne, NJ; Staten Island, NY and Brooklyn, NY to handle post-Panamax container ships. A portion of the Arthur Kill 41ft project extends past the footprint of the post-Panamax deepening. This segment leads to a petroleum port in Elizabeth, NJ.

2. Project Description. The project consists of deepening channels in the New York and New Jersey Harbor to handle the post-Panamax design vessel, a Maersk “S-Class.” Depending upon the wave environment, and the amount of safety clearance due to hard to soft bottom, the channels will be dredged to the following depths:

Ambrose Channel.....	53ft
Anchorage Channel.....	50ft
Bay Ridge Channel	50ft
Port Jersey	52ft
Kill van Kull	52ft
Newark Bay	52ft
Elizabeth Channel	52ft
South Elizabeth Channel.....	52ft
Arthur Kill to NY Container Terminal	52ft
Arthur Kill, NYCT to Bayway Refinery...	42ft

There are no Federal structural improvements. Berth dredging, and any improvements to the bulkheads, are a responsibility of the local service facilities.

Material is disposed of in a variety of beneficial reuses. Rock is used to construct fishing reefs. Pre-anthropogenic material which has been found to be clean is used at the Historic Area Remediation Site (HARS) to cap an old dredge disposal site that contains material that would no longer be considered appropriate for the ocean or is used to restore eroded wetland islands. Material unsuitable for HARS capping or wetland construction (generally recent silts) is stabilized with cement or fly ash and used to remediate old landfills. Thus the disposal of material not only doesn’t present a risk, it is used to significantly ameliorate existing risks.

At the time of this document is being prepared most of the construction on this project is complete. The remaining contracts are known as "AK4," "S-BR-1" and "SRUC"

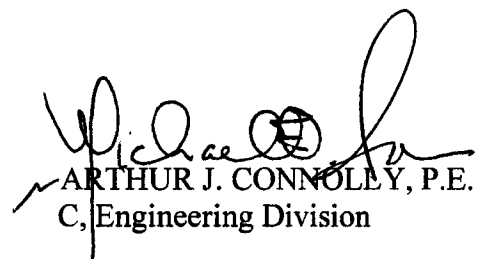
AK4 is the final part of the Arthur Kill, and will connect the Bayway refinery to the balance of the project. Design for the AK4 contract was recently initiated

S-BR-1 is Bay Ridge Channel. This segment is deferred until improvements are made at Brooklyn's container terminal.

SRUC is the Sediment Removal and Utility Corridor contract. Due to the 13 year construction period of this project some of the earlier segments, which had involved rock dredging, have experienced significant shoaling that will need to be addressed. Further, two watermains that cross the Anchorage Channel are being relocated, and these segments cannot be dredged until the new watermains are in place. Design of the SRUC is expected to begin in FY 13.

3. Risk Informed Assessment. A Type I IEPR is not warranted since the New York and New Jersey Harbor Deepening project is in the Construction Phase. Type II IEPR, or SAR, is required for hurricane and storm risk management projects, as well as other projects where potential hazards pose a significant threat to human life. The New York and New Jersey Harbor Deepening project provides neither flood risk management nor storm risk management. Its purpose is to dredge existing navigation channels to a deeper depth. As there are no structures as part of the cost-shared Federal project a Type II IEPR is not warranted.

4. Determination. Both Type I IEPR and Type II IEPR's are not warranted for the New York and New Jersey Harbor Deepening project.


ARTHUR J. CONNOLLY, P.E.
C, Engineering Division