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What **OIG Audited**

OIG conducted this performance audit to determine whether the Department (1) resolved security issues with the curtain wall design before authorizing initiation of construction and (2) whether the contracting officer adhered to Federal Acquisition Regulation (FAR) requirements specified for a fixed-price incentive (successive targets) (FPIS) contract in negotiating the price for the construction of New Embassy Compound (NEC) London.

What **OIG Recommends**

OIG made two recommendations to the Bureaus of Overseas Buildings Operations (OBO) and Diplomatic Security (DS) to establish additional controls to ensure that construction is not initiated before innovative and developmental designs have been approved by DS after required research and developmental testing is completed and results are fully analyzed. Based on OBO and DS responses to Recommendations 1 and 2, respectively, OIG considers the recommendations unresolved.

In addition, OIG made two recommendations to the Bureau of Administration, Office of the Procurement Executive (A/OPE), to establish policies and procedures and to provide training for utilizing the Early Contractor Involvement (ECI) project-delivery method which uses an FPIS contract type. A/OPE concurred with the recommendations. Based on the response, OIG considers Recommendations 3 and 4 resolved, pending further action.

July 2015

OFFICE OF AUDITS

Contracts, Grants, and Infrastructure

Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London

What **OIG Found**

OIG found that DS and OBO did not obtain blast testing results for the NEC London Chancery's glass curtain wall design before the Under Secretary of State for Management (M) certified the more than \$1 billion project to Congress and authorized the initiation of construction. In December 2013, M certified that the NEC London design would meet physical security standards and would provide appropriate security for sensitive activities and personnel. However, OBO did not initiate blast testing of the curtain wall until February 2014. The curtain wall was a new design feature that had not been tested to determine whether it met safety requirements for blast protection. Although test results ultimately indicated that the curtain wall met standards, the Department prematurely committed to construction that could have required significant redesign and additional costs. The Department's approach to construction and security certification for this project did not comply with Department policy for P.L. 100-204 security certifications in *12 Foreign Affairs Manual* (FAM) 360.

OIG found that the contracting officer did not obtain sufficient data when negotiating the final price for the construction portion of the contract, even though OBO requested such information. To implement the ECI project-delivery method using the FPIS contract type, contractors must submit two cost proposals, and contracting officers must obtain sufficient data to support the final proposal and an explanation of the differences between the proposals. The contracting officer awarded the construction portion of the contract without requiring the contractor to provide an explanation to address the approximate \$42 million difference between the initial proposal (submitted in 2012) and the final proposal (submitted in 2013). This occurred because the contracting officer was not sufficiently familiar with the implementation of FPIS contracts. The absence of detailed cost and pricing data presented challenges to OBO because it did not have the information to fully evaluate the contents of the proposal. As of September 2014, OBO was still unable to reconcile pricing information.



OIG

Office of Inspector General

U.S. Department of State • Broadcasting Board of Governors

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CONTRACTS, GRANTS, AND INFRASTRUCTURE DIVISION

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OBJECTIVES

The objectives of the audit were to determine (1) whether the Department of State (Department) resolved security issues with the curtain wall design before authorizing initiation of construction and (2) whether the Department adhered to Federal Acquisition Regulation (FAR) requirements specified for a fixed-price incentive (successive targets) (FPIS) contract in negotiating the price for the construction of New Embassy Compound (NEC) London.

The Office of Inspector General (OIG) did not audit the Department's use of Early Contractor Involvement (ECI) project-delivery method in comparison to other delivery methods. In addition, OIG did not audit the Department's shift from standard embassy design (SED) to Design Excellence. The Government Accountability Office (GAO) plans to conduct an audit on the latter.

BACKGROUND

NEC Construction, Security, and Contract Management Responsibilities

Within the Department, the Bureau of Overseas Buildings Operations (OBO) directs building programs with a mission to provide safe, secure, and functional facilities that represent the U.S. Government to the host nation and support Department staff in the achievement of U.S. foreign policy objectives. In support of that mission, OBO works regularly with other Department bureaus, including the Bureau of Diplomatic Security (DS) and the Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management (A/LM/AQM).

DS is responsible for overseeing new construction to ensure compliance with Overseas Security Policy Board¹ (OSPB) security standards. OSPB establishes physical security standards for all overseas posts. The Department implements physical security standards through the *Foreign Affairs Manual* (FAM). The FAM assigns DS the responsibility to ensure that all new construction and major renovation design plans for buildings occupied by U.S. Government personnel comply with physical security standards.²

¹ OSPB is a part of the National Security Council. The OSPB is chaired by the Assistant Secretary of State for DS, and the Board's membership consists of representatives from entities across the Federal Government. The OSPB "considers, develops, coordinates, and promotes security policies, standards, and agreements on overseas security operations, programs, and projects that affect all U.S. Government agencies under the authority of a chief of mission abroad."

² 12 FAM 312, "Program Management Responsibilities." The Department also incorporates physical security standards into the *Foreign Affairs Handbook* (FAH) through the *Physical Security Handbook* (12 FAH 5) and the *OSPB Security Standards and Policy Handbook* (12 FAH 6 classified), both of which provide guidance regarding the general policies on physical security standards established in the FAM.

Procurement authority within the Department flows from the Secretary of State to the Assistant Secretary of State for Administration (A), to the Procurement Executive (A/OPE), and on to contracting officers. Delegation of contracting authority is conducted through the issuance of a contract warrant. A/OPE responsibilities include the following:

- developing Department's procurement policies and regulations for both domestic and overseas contracting activities to improve the overall quality of acquisition;
- enhancing career development of the procurement work force to include approving Department acquisitions training curricula and conducting training; and
- appointing contracting officers.

The contracting officer is the U.S. Government's authorized agent for dealing with contractors and has sole authority to solicit proposals; to negotiate, award, administer, modify, or terminate contracts; and to make related determinations and findings on behalf of the U.S. Government. A contracting officer's authority is limited to enter into contracts at the value at or below the value stated on the contracting officer's warrant.³ The NEC London contracting officer held an unlimited warrant, which allows the contracting officer to enter into a contract for any value.

A/OPE has delegated acquisition authority to A/LM/AQM. A/LM/AQM is responsible for managing, planning, and directing the Department's acquisition programs and conducts contract operations in support of activities worldwide. OBO works with A/LM/AQM contracting officers to award construction contracts.⁴ The contracting officer performs duties at the request of the requirements office, OBO, and relies on that office for technical advice concerning the supplies or services being acquired.⁵

The FAR establishes the uniform policies and procedures for acquisition to be followed by executive agencies. The FAR and Department regulations describe the roles and responsibilities of Government personnel, such as contracting officers, who are responsible for awarding, administering, and overseeing contracts.

³ FAR 1.602-1(a), "Authority," states that contracting officers have authority to enter into, administer, or terminate contracts and make related determinations and findings. Contracting officers may bind the Government only to the extent of the authority delegated to them. Contracting officers shall receive from the appointing authority (see 1.603-1) clear instructions in writing regarding the limits of their authority. Information on the limits of the contracting officers' authority shall be readily available to the public and agency personnel.

⁴ 1 FAM 215.2-1, "Facilities, Design, and Construction Division (A/LM/AQM/FDCD)."

⁵ 14 FAH-2 H-141, "Responsibilities of the Contracting Officer."

NEC London Project

The current U.S. Embassy Chancery⁶ building in London, England, is located in Grosvenor Square and was built in 1960. According to the Department, this building does not conform to current security and building standards. Because of the location and other limitations, OBO determined that it was not possible to bring the building into compliance with current security standards via rehabilitation. Estimates for rehabilitating the building were more than \$500 million and even after such a significant investment, the Chancery would still be unable to meet all DS security standards. OBO planned a self-financing approach to fund the NEC using proceeds from the sale of buildings owned by the Department in London: the current embassy Chancery, the Navy Annex, and the Marine Security Guard Quarters. In October 2008, the Department announced plans to build the NEC, which was planned for move-in in 2017.⁷ At an estimated cost of more than \$1 billion, NEC London is among the most expensive embassies ever built by the Department. The architectural rendering of NEC London is shown in Figure 1.⁸



Figure 1: Architectural rendering of NEC London. (OBO)

⁶ The Chancery is the office building in which a diplomatic mission is housed. The embassy refers to the entire diplomatic compound, which could include annexes, Marine Security Guard housing, or other official residences.

⁷ Embassy London has posted information about the NEC at http://london.usembassy.gov/new_embassy.html.

⁸ In February 2010, the Department announced Kieran Timberlake, an architecture firm, as the winner of the design competition and awarded the design contract in September 2010. The firm stated: "The State Department sought to create a new embassy that would serve as the centerpiece of one of America's longest-standing and most valued relationships. It also wanted to pursue a new paradigm in embassy design, termed Design Excellence, which emphasizes the role of architecture in diplomacy. This new model seeks buildings that represent the ideals of the American government—giving priority to transparency, openness, and equality, and drawing on the best of American architecture, engineering, technology, art, and culture."

The design for the outer façade of the Chancery building comprises two layers. The outermost layer consists of a scrim⁹ stretched over a network of thin aluminum members that work in tension and compression. The scrim wraps the building to the east, west, and south, acting as a screen. Underneath the scrim, a glass curtain wall with an aluminum frame forms the inner layer of the building's envelope. An architectural rendering of the scrim and curtain wall design is shown in Figure 2.

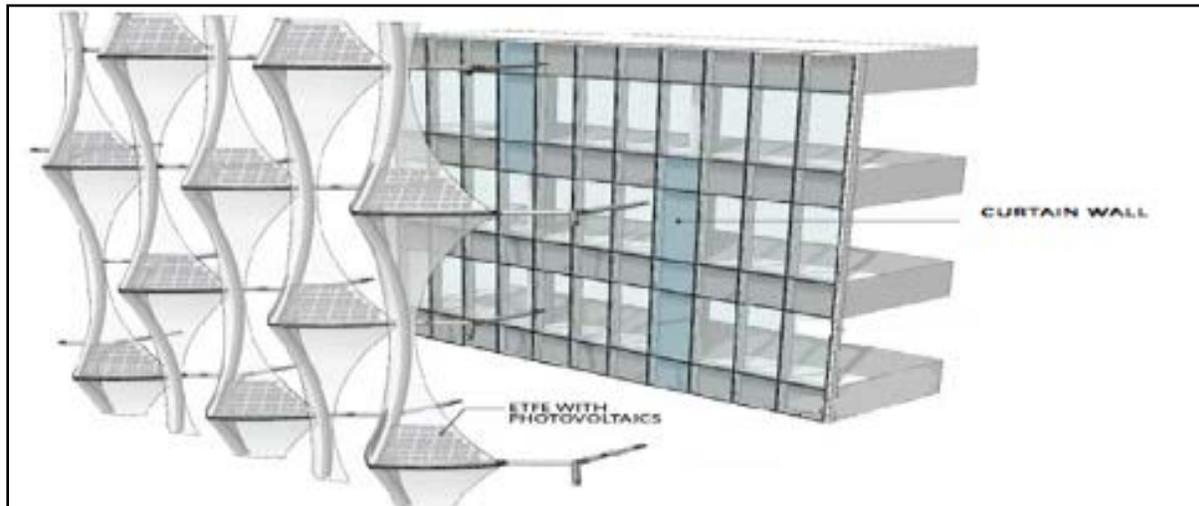


Figure 2: Architectural Rendering of the NEC London Outer Scrim and Curtain Wall. (OBO)

Security Requirements for NECs

Physical security standards require all new office buildings such as the NEC London Chancery to provide blast protection to keep people and property safe from an attack.¹⁰ With regard to the NEC London Chancery, the glass curtain wall design must meet criteria that include forced-entry/ballistic resistant (FE/BR) and blast protection requirements.

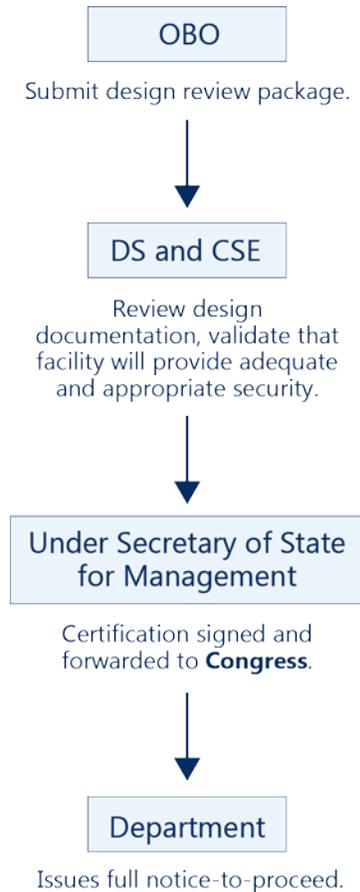
In addition, "before undertaking any new construction or any major renovation project in any foreign facility intended for the storage of classified materials or the conduct of classified activities," the Secretary of State is required, after consultation with the Director of National Intelligence, to "certify to [certain committees of Congress] that (1) appropriate and adequate steps have been taken to ensure the security of the construction project...(2) the facility resulting from such project incorporates (A) adequate measures for protecting classified information and national security-related activities and (B) adequate protection for the personnel working in the diplomatic facility...and (3) a plan has been put into place for the continued evaluation and maintenance of adequate security at such facility... "¹¹

⁹ The ethylene-tetrafluoroethylene (ETFE) scrim is a fluorine-based plastic designed to have high corrosion resistance and strength over a wide temperature range.

¹⁰ 12 FAH-5 H-442, "Blast Protection."

¹¹ Public Law 100-204, the Foreign Relations Authorization Act for Fiscal Years 1988 and 1989, Section 160, as amended by Public Law 101-246, the Foreign Relations Authorization Act, Fiscal Year 1990 and 1991, Section 135 (22 U.S.C. Section 4851 note).

Figure 3: Department Process for Certification of Project Design to Congress



The Department implements this statutory certification requirement through its published policy in 12 FAM 360¹² and unpublished procedures set forth in a 2003 draft agreement between DS and OBO.¹³ Before the congressional certification occurs, DS reviews the design drawings and other documents related to a NEC to ensure they meet minimum security certification standards. DS consults with the Center for Security Evaluation (CSE) Directorate, a part of the Office of the Director of National Intelligence, which conducts a comprehensive review of the design documentation to validate that the facility will provide adequate and appropriate security. If satisfied, and with concurrence obtained from CSE on the design, DS formally accepts the package as complete and ready for the congressional certification process.¹⁴ Once the certification is signed by the Under Secretary of State for Management and submitted to Congress, the Department issues a full notice to proceed¹⁵ (NTP) directive to the construction contractor, authorizing the start of construction. Since at least 2003, the Department has followed the practice set forth in the 2003 draft agreement between DS and OBO of issuing limited NTPs authorizing construction contractors to begin limited tasks (*not* including foundation work) prior to certification. However, this practice does not comply with 12 FAM 361.1, which states that “no contract should be awarded or construction undertaken until the proponent of a project has been notified by the Department that the appropriate certification action has been completed,” or 12 FAM 361.3, which states that “[t]he chief of mission is responsible for ensuring that no project subject to...certification...is initiated without certification...approval.”

¹² 12 FAM 360, “Construction Security Certification Program,” 12 FAM 362.1, “Congressional Certification,” states that all new construction projects (over \$1 million) and under the authority of a chief of mission are subject to certification by the Secretary of State to the Senate Foreign Relations Committee and the House Foreign Affairs Committee when the facility is intended for the storage of classified materials or the conduct of classified activities. This authority is delegated to the Under Secretary of State for Management.

¹³ *DRAFT Protocol for Certification of Design/Build/SED Construction Projects*, unsigned agreement between DS and OBO, draft dated January 28, 2003.

¹⁴ DS then certifies the design and notifies OBO accordingly. The certification package is routed for signature within DS and OBO, routed to the Under Secretary of State for Management for signature, and then forwarded to Congress.

¹⁵ An NTP is a written notice from the contracting officer authorizing the contractor to incur obligations and proceed with the work under the contract as of a date set forth in the notice. In contrast to a full NTP, which allows the contractor to start all work under the contract, a limited NTP delineates the specific work and tasks the contractor is allowed to start.

OBO Chooses Early Contractor Involvement Project Delivery Method for NEC London

The Department chose the Early Contractor Involvement (ECI) delivery method for the project. This was the Department's first venture using ECI. Previously, the Department used a more traditional delivery method whereby an architecture firm completes a project design before a construction contractor is involved. This approach was not considered desirable by OBO for NEC London because of the risk posed by the lag time between design of the project, an almost 3-year design schedule, and the award of the contract for construction. ECI is intended to shorten the time between design and construction and seeks to bridge the gap between design and constructability of the design because the construction contractor is involved at an early point in the design working alongside the Department, and the architecture firm, to complete the project. Under ECI, the Government maintains separate contracts with the architect and construction contractor.

OIG identified the U.S. Army Corps of Engineers (USACE) as the government agency leading the use of the ECI project delivery method.¹⁶ To carry out the ECI procurement, USACE issues solicitations for construction projects under the provisions of FAR 16.403-2 "fixed price incentive (successive targets)" (FPIS) contracts. The ECI contract is competed at an early point in the development of the project's design; therefore, this contract type is the mechanism that allows the Government to negotiate a price for construction services at a point where the project design is only partially completed.

Like the USACE model, the Department issued the ECI contract, which included a requirement for the construction contractor to provide both pre-construction services and construction services. Construction services were included within the ECI contract as a separate contract line item¹⁷ (CLIN) to be exercised at an agreed upon time by the Department and the construction contractor. Competition for this contract was based upon contractors' proposals to perform for both the preconstruction services and construction services.

The construction contractor provides preconstruction services concurrent with the design of the project that is being performed by the architecture firm. The preconstruction activities assist the Government by providing construction execution (constructability) and material cost information to the Government while scope and quality decisions are being refined. The preconstruction

¹⁶ USACE has significant experience and knowledge in using ECI. Prior to 2007, USACE had a pilot program underway to evaluate ECI for five U.S. Army projects. In 2007, USACE expanded this pilot program and began evaluating ECI for major construction projects. By this time, USACE was writing guidance for ECI use in construction programs. During 2005–2009, USACE used ECI on nine contracts, totaling \$4.7 billion. USACE now publishes an ECI training manual and teaches a training course in ECI at its USACE Learning Center in Huntsville, Alabama. USACE policies and procedures for the ECI project delivery method govern every aspect of the process to include acquisition planning, contract administration, negotiation of price, and training for key personnel involved in an ECI project.

¹⁷ According to FAR 4.1001 "Contract Line Items," contracts may identify the items or services to be acquired as separately identified line items. The NEC London ECI contract consisted of six CLINs, which are described in Appendix B.

services portion of the ECI contract was negotiated as a firm-fixed price¹⁸ (FFP) effort while, as mentioned above, the construction services portion of the contract was negotiated as an FPIS effort. OIG focused its review on the pricing for construction services because the FPIS contract type is not commonly used and because of complaints received by OIG regarding the construction pricing.

In its solicitation to construction contractors, the Department instructed offerors to provide a FFP for the preconstruction services portion of the contract. For the construction work (CLIN 4), offerors were instructed to provide an initial target cost, initial target profit, initial target price (cost plus profit), an initial profit adjustment formula for establishing the firm target profit, and a ceiling price for construction services, which are required for an FPIS contract.

In April 2012, the contracting officer awarded the contract to B.L. Harbert International, LLC (BLHI). BLHI was chosen as the best value source selection after an evaluation of its proposal for both preconstruction and construction services. In addition to initiating preconstruction services, the award established the initial price for construction services under CLIN 4. Under an FPIS contract, the parties negotiate a final price for construction services at the point of production. For NEC London, the Department indicated within its solicitation to the offerors that it intended to request that the contractor submit proposals to negotiate a final price for construction services when approximately 90 to 100 percent of design development was completed—which would effectively convert CLIN 4 at that time from an FPIS to an FFP arrangement. The FAR requires contractors to submit sufficient data to support the accuracy and reliability of the estimate (proposal) and provide an explanation of the differences between the final proposal and the initial proposal to establish the FFP.¹⁹

¹⁸ According to FAR 16.202-1, "Firm-fixed-price contracts," a firm-fixed-price agreement provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract.

¹⁹ See FAR 52.216-17(c)(1)(iii).

AUDIT RESULTS

Finding A: Initiating Construction Prior to Blast Testing Placed the Department at Financial Risk and Did Not Comply With Department Policy

OIG found that the Department did not resolve security issues with the curtain wall design before authorizing initiation of construction. The Department must provide certification to Congress that the project design will meet security standards prior to “undertaking” construction.²⁰ The NEC London Chancery’s glass curtain wall was a new design feature that had not been tested to determine whether it met security standards for blast and FE/BR protection. OIG found that DS and OBO did not obtain blast testing results for the curtain wall design before certifying the project to Congress and authorizing the initiation of construction. In

OIG found that the Department did not resolve security issues with the curtain wall design before authorizing initiation of construction.

December 2013, the Under Secretary of State for Management certified to Congress that the NEC London project would be constructed in a secure manner and provide adequate and appropriate security for sensitive activities and personnel working in the facility. However, OBO did not initiate blast testing of the

glass curtain wall until February 2014. The completion of certification before blast testing was driven by the constrained schedule to complete construction of the new embassy by 2017, the time-sensitive terms of the contract for the sale of the current embassy, and the complexity and developmental nature of the design. Failure to meet the construction schedule could have resulted in additional construction and leasing costs that may have caused total expenses to exceed funds available for the construction of NEC London.²¹ After several rounds of blast tests, DS and OBO ultimately agreed that the curtain wall met OSPB blast standards. Nonetheless, by initiating construction without first completing blast testing, the Department committed itself to the construction of a building that could have required significant redesign, placing hundreds of millions of taxpayer dollars in jeopardy.

²⁰ Public Law 100–204, the Foreign Relations Authorization Act for Fiscal Years 1988 and 1989, Section 160, as amended by Public Law 101–246, the Foreign Relations Authorization Act, Fiscal Years 1990 and 1991, Section 135 (22 U.S.C. Section 4851 note).

²¹ OBO chose a self-financing approach to fund the NEC London project via proceeds of sales from the Department’s properties in London (Navy Annex, existing Chancery, and the Marine Security Guard quarters). Subsequently, Congress passed Public Law 112–74, Section 7004(f)(1), which established OBO’s self-financing approach into law.



Figure 4: Preparation of the mat slab foundation, February 2014. (Department)

The Department's approach to contracting and security certification for this project also did not comply with 12 FAM 360, "Construction Security Certification Program." The Department's award of the construction contract and initiation of site and foundation work prior to the security certification did not comply with 12 FAM 361.1, which states that "no contract should be awarded or construction undertaken until the proponent of a project has been notified by the Department that the appropriate certification action has been completed," and 12 FAM 361.3, which states that "[t]he chief of mission is responsible for ensuring that no project subject to... certification...is initiated without certification...approval." Further, the Department's authorization of foundation work prior to certification of NEC London did not comply with the more permissive internal procedures set forth in the 2003 draft agreement between DS and OBO, which allowed initial tasks to begin but not foundation work to proceed prior to certification.²²

Blast Testing Results Were Not Obtained Prior To Certification of the NEC London Design and Initiating Construction

DS and OBO did not obtain blast testing results for the Chancery's curtain wall before the Undersecretary for Management certified to Congress that the design met physical security standards and authorizing the initiation of construction. In November 2012 and April 2013, DS

²² Section 3.4.1 of the 2003 draft agreement between DS and OBO states that a limited notice to proceed can be issued to a contractor prior to certification only for the following tasks: design, mobilization, site preparation, excavation, perimeter security, and unclassified out-buildings. OIG obtained slides, titled "Construction Security Certification and Accreditation Overview" and "Certification-Cycle seminar" prepared by DS, which repeat these allowable tasks but emphasize "No certification = No foundation."

notified OBO of its concerns with the curtain wall design. DS did not accept design completion packages²³ submitted by OBO for certification review.²⁴ DS informed OBO that there were substantial omissions and deficiencies of essential information related to FE/BR testing, curtain wall sound mitigation, and blast design methodology. This meant that DS would not accept computer modeling of the curtain wall to certify whether it would meet blast requirements and thus would still require field validation as a condition to certify the project. DS stated that it considered the missing information "crucial to certification, and ultimately accreditation." DS further indicated to OBO that it was imperative that the information be incorporated into the final design submittal.

Between June and July 2013, DS notified OBO that it would not certify the design for NEC London because it still had concerns with the curtain wall design. DS believed analyses submitted by the contractor for blast protection were insufficient to meet DS standards required by 12 FAH-5 H-442, "Blast Protection." DS reiterated to OBO that the full mock-up blast testing of the curtain wall contained in the contract would need to be completed to ensure that the curtain wall design met physical security standards. On December 6, 2013, after reviewing the completed design documentation, CSE notified DS that it could not concur with the design of NEC London. CSE further indicated that the issues related to the curtain wall design would "need to be resolved by either a follow-on design or a written agreement" from OBO.

On December 12, 2013, the OBO Director sent an email to the CSE Assistant Director stating the following:

As we discussed...with DS certification of the Design, OBO will proceed with construction and testing. We have assured DS, and now assure you, that if any revisions to the design or manufacture of the curtain wall system are required as a result of the FE/BR and blast tests, they will be done to the satisfaction of DS before the final curtain wall system is installed.

Similarly, the OBO Director reiterated in a memorandum to the DS Assistant Secretary on December 16, 2013, the plan to move forward with construction and testing, stating "we have worked with Diplomatic Security (DS) and the design and construction teams and have

²³ Project certification for an SED project typically involves DS review of the design when 35 percent of the project design documentation is complete and takes approximately 45 days to complete. However, the certification timeline was not achievable for the NEC London project design because it was not an SED project. OBO submitted to DS for certification review, design documentation packages at the times of 60 percent and 90 percent design documentation completion that were not accepted and deemed not complete for certification by DS, thus delaying certification of the project past OBO projected milestones.

²⁴ Diplomatic Security, Countermeasures Directorate, Physical Security Programs Division (DS/C/PSP) memorandum, "London, United Kingdom NEC Certification Review," for review of the 60 percent design submission, November 30, 2012, and Diplomatic Security, Countermeasures Directorate, Physical Security Programs Division (DS/C/PSP) memorandum, "London, United Kingdom NEC Certification Review," for review of the 90 percent design submission, April 30, 2013.

established test procedures to ensure that the NLE [New London Embassy] curtain wall will perform to DS requirements, as designed.”

Although the blast testing did not begin until late February 2014 and was not completed until May 2014, the Under Secretary of State for Management signed the certification to Congress on December 16, 2013. As a stipulation for issuance of this certification, the OBO Director provided written assurances to both CSE and DS that OBO would take all necessary steps to rectify all issues and comply with FE/BR and blast requirements should the blast testing highlight weaknesses in the design of the curtain wall. On December 18, 2013, the project’s contracting officer issued a full NTP with construction to the contractor.

On December 17, 2013, OBO tasked the design firm to develop solutions in the event that the curtain wall failed testing. Specifically, OBO worked with the contractor to develop an “alternate curtain wall system” based upon a “captured edge” design that was acceptable to DS for certification without blast testing.²⁵ In December 2013 DS informed OIG that this alternative design was in the early stages of review.²⁶ In April 2014, OBO was working with the contractor to develop an “augmentation option” or modification consisting of a simple angle applied to the as-designed curtain wall system.²⁷

After Several Tests, OBO and DS Agreed To Modify the Curtain Wall Design

DS provided oversight of the testing that included two series of component-level blast²⁸ tests and one full mock-up blast test. DS explained that the two component level tests²⁹ were necessary to investigate the viability of employing structural silicone for curtain wall applications before designing and conducting the final test.

The first component test series report, provided to OIG in April 2014, was inconclusive. In June 2014, after additional OIG requests for information, DS provided the second component test series report. This test report also provided mixed and inconclusive results. [Redacted] (b) (5)

[Redacted]

²⁵ Modification 9 to the construction contract issued in February 2014 added additional funds to the contract and tasked BLHI to provide design assist services to develop this alternate curtain wall design in coordination with the design firm.

²⁶ Kieran Timberlake Alternative Curtainwall 60% Review Presentation Slides, December 17, 2013.

²⁷ As described within a project memorandum, the augmentation consists of a supplemental angle, applied around the interior perimeter of the windows (Chancery Level 1 and 2) engineered to increase the structural silicone retention of the glass on the frame. [Redacted]

²⁸ Component testing was performed to collect data on the performance and the reliability of the individual components that make up the curtain wall system in blast scenarios.

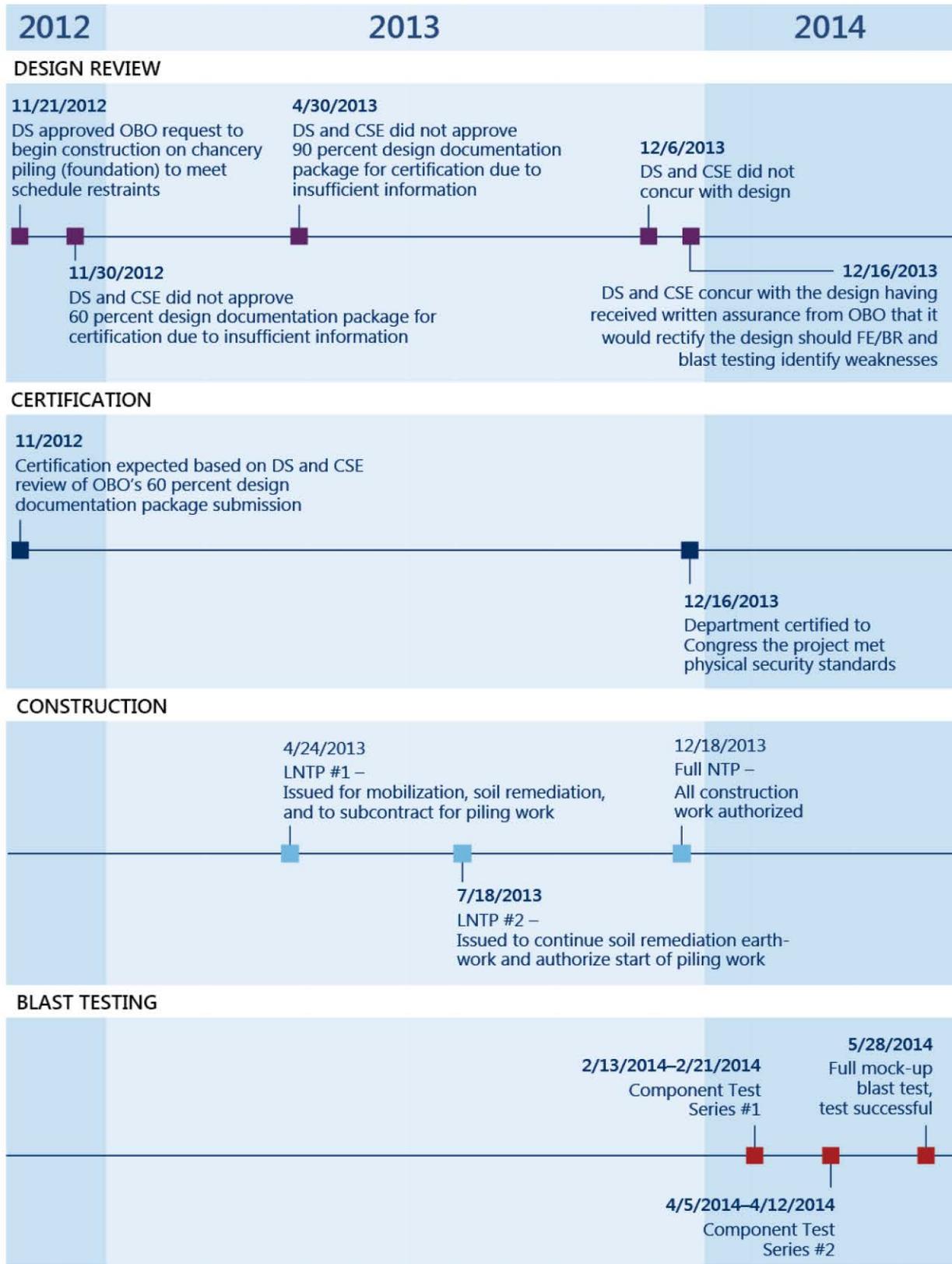
²⁹ The first and second component blast tests were completed in February 2014 and April 2014, respectively.

[Redacted] (b) (5)

Therefore, OBO and DS agreed that the only true and valid test of the structural silicone curtain wall design was the full scale mock-up test.

The full mock-up blast test occurred on May 28, 2014. Beginning in June 2014, OIG requested the results of the full mock-up blast test from DS. After numerous OIG requests for their analysis of the blast test, DS informed OIG on July 25, 2014, that in May 2014 it had reached an agreement with OBO to incorporate the augmentation option to the curtain wall design for the first two floors of the Chancery building. DS indicated that the modification, referred to as the "augmentation," would improve the blast performance of the curtain wall. DS further stated that the curtain wall augmentation option was designed prior to the full scale test so that it could be implemented should the results of the blast test indicate that the augmentation option would be necessary. Although "the full scale test conducted in May 2014 confirmed compliance of the structural silicone curtain wall system with all blast design performance requirements," DS and OBO agreed to a \$2 million design augmentation to the first and second levels of the curtain wall design as a "security enhancement." DS and OBO "mutually agreed, in light of the modest cost of the augmentation, to incorporate the modification as an extra measure of protection." According to contract documentation for the design augmentation, the redesign would not impact the construction schedule, and it would not require additional blast testing. A timeline of key dates for the NEC London project is shown in Figure 5.

Figure 5: Timeline of Key Dates



Construction Schedule Drove Decisions To Initiate Construction Before Certification Was in Place and Blast Testing Was Completed

The approach the Department used for funding the NEC London project with proceeds from time-sensitive sales of Department properties in London created significant pressure to complete the project on schedule. First, the Department did not plan to use appropriated capital security construction funds for the design and construction of the NEC because London was not considered one of the 80 most vulnerable posts worldwide.³⁰ Instead, OBO planned to fund the NEC using proceeds from the sale of the existing Chancery and other properties owned by the Department in London. In 2012, Congress, in the Consolidated Appropriations Act of 2012,³¹ required that NEC London funding (site acquisition and preparation, planning, design, and construction) be provided only by the proceeds of real property sales located in London. The Act also required the Department to provide to Congress a semiannual report on the project's progress and cost until its completion.

Second, at the closing for the sale of the Chancery, the Department prepaid a 3 ½ year lease for the Chancery for approximately \$33 million,³² which covers the Department's leaseback of the Chancery through February 28, 2017. If the Department does not vacate the Chancery by that date, further rents will be due (that is, approximately \$22 million for a 6-month extension).

Meeting these deadlines was made more difficult because the NEC London project included design elements, such as a curtain wall, that had not been previously evaluated or tested by DS. As stated by BLHI in its proposal to the Government, the first and probably greatest technical challenge for the NEC London project was the blast and FE/BR curtain wall system.

The original NEC project schedule estimated that certification to Congress would be achieved by November 15, 2012, with the completion of the 60 percent design development package, allowing BLHI to begin construction of the foundation immediately thereafter. OBO, in concurrence with DS, approved early site work and construction of the piling³³ foundation in November 2012; however, certification to Congress was not achieved until December 16, 2013, more than a year after certification was originally projected by OBO and a year after site work

³⁰ Each year, DS ranks all posts worldwide according to their security vulnerability, and OBO uses this list to develop its top 80 Posts for the Department's Capital Security Construction Program. The "Top 80 List" is a list of vulnerable posts for which Capital Security funds are dedicated.

³¹ Consolidated Appropriations Act of 2012, Pub. L. No. 112-74, Division I, Title VII, § 7004, 125 Stat. 1194 (2011).

³² The Department prepaid \$63 million in lease payments minus an approximately \$30 million refund upon vacating the premises. The sale contract provides a refund of £18,180,000 (British pounds). The Department will receive a partial refund of approximately \$30 million of the \$63 million prepaid lease regardless of whether the premises are vacated before or after February 28, 2017.

³³ As defined by the Deep Foundations Institute, an international association of contractors, engineers, suppliers, academics, and others in the field of design and construction of deep foundations and excavations, piles are the most common type of deep foundation. A pile is a relatively long, slender column installed in the ground to generate support.

and foundation construction was approved.³⁴ In April 2013, the date for substantial project completion was established in the construction contract as November 30, 2016.³⁵ The construction contract established an allowable period of performance of up to 44 months, but the contractor agreed to a 41-month construction schedule for substantial completion, with performance starting in July 2013. Should the contractor require a full 44 months to attain substantial completion, performance would continue into February 2017. Any extensions past this November 2016 deadline would force OBO to extend the lease for the current embassy Chancery building, which would cost additional money.³⁶

Initiation of Construction Prior to Security Certification and Blast Testing Placed the Department at Financial Risk and Did Not Comply With Department Policy

Site and foundation work were approved more than a year before certification, and blast testing results were not known until another six months after the design was certified to Congress.

A DS official explained that the security certification process is the tool that DS has to ensure that the design will meet physical security requirements. The process also protects the Department's assets before construction begins and prevents the Department from committing itself to a design that will not

meet security requirements and ultimately fail to protect the personnel who will occupy the building or will require additional costs for redesign and modification.

In the case of NEC London, however, site and foundation work was approved more than a year before certification, and blast testing results were not known for approximately another 6 months *after* the design was certified to Congress. By proceeding with site work and foundation construction prior to certification and proceeding with full construction without having obtained blast testing results, the Department circumvented the process it established to safeguard against committing to a design and construction of a building that may not have met physical security standards. The decision to initiate construction with unresolved security design issues posed financial risks to the Department. If the design failed testing, the Department could

³⁴ Because certification was not achieved when projected, the Department approved an early site work package in November 2012 to begin work on the Chancery's piling (foundation). In 2013, the Department issued limited NTP following the April 2013 CLIN 4 award. This limited NTP allowed the contractor to further work on the Chancery's foundation. In addition, limited NTP 2 indicated that a full NTP would be issued to the contractor for all remaining work by September 2013. However, the full NTP was not issued until December 18, 2013, because certification to Congress had not been achieved. Once certification to Congress was achieved, OBO issued the full NTP; however, blast testing of the curtain wall design had not been initiated. Therefore, it was still unknown whether the NEC London project design would meet security standards.

³⁵ In April 2013, the Department finalized the price negotiation for construction services (CLIN 4) and the terms for contract completion.

³⁶ According to the terms of the embassy sale contract, the Department would also have incurred costs of about \$22 million for a 6-month leaseback extension for any delay beyond February 27, 2017. Additional leaseback costs would then be added for each additional quarter that the Department did not vacate the current embassy.

have incurred additional expenses brought about by a need for redesign of the complete curtain wall system or the use of new materials. This could have led to a delay in moving the staff to the NEC and would have considerably increased the overall cost associated with NEC London. OIG acknowledges that the Department attempted to balance the competing financial risks because of the time-sensitive sales contracts for Department-owned properties in London, construction schedule, and the funding restraints.



Figure 6: NEC London site, November 2013. (Department)

Additionally, the Department's approach to contracting and security certification for this project did not comply with 12 FAM 360, "Construction Security Certification Program," which sets forth Department policy to implement Public Law 100-204, as amended. The Department's award of the construction contract and initiation of site and foundation work prior to the security certification did not comply with 12 FAM 361.1, which states that "no contract should be awarded or construction undertaken until the proponent of a project has been notified by the Department that the appropriate certification action has been completed," and 12 FAM 361.3, which states "[t]he chief of mission is responsible for ensuring that no project subject to... certification...is initiated without certification...approval." These FAM provisions are the Department's published policy for implementing Public Law 100-204, which requires certification "[b]efore undertaking any new construction or any major renovation project in any foreign facility intended for the storage of classified materials or the conduct of classified activities." As stated above, the Department's authorization of foundation work prior to certification of NEC London did not comply with the more permissive internal procedures set forth in the 2003 draft agreement between DS and OBO, which allow initial site work or tasks (mobilization, site preparation, excavation, perimeter security, and construction of unclassified out-buildings) but not foundation work to proceed prior to certification.

In order to avoid a similar situation in the future, the Department should establish and implement additional controls to ensure that construction is not “undertaken” before DS approves the building designs. Specifically, the Department should implement controls that will ensure required blast or other security testing is performed and the results are analyzed and accepted before a design is certified for construction.

Recommendation 1: OIG recommends that the Bureau of Overseas Buildings Operations establish controls to ensure that construction is not initiated before innovative and developmental designs have been approved by the Bureau of Diplomatic Security.

Management Response: OBO responded to the recommendation by stating that construction of NEC London was executed in accordance with existing controls between DS, OBO, and CSE. It denied that activities prior to certification amounted to “construction.” Further, OBO stated that the work that proceeded prior to the certification of the project was “site work, excavation, and perimeter security [that] are typically permitted prior to the construction of embassy buildings.” OBO stated that the 2003 Draft protocol for certification established the process, which OBO and DS followed, that allows those work elements to proceed.

In technical comments to the draft version of this report, OBO recognized that although piling work was initiated prior to certification, it followed established procedures in requesting and obtaining approval from DS to initiate this work. OBO stated that the foundation work approved did not include the installation of the mat foundation that rests on the piles, which OBO and DS consider the start of foundation work.

OIG Reply: OIG considers the recommendation unresolved. Regardless whether OBO followed the 2003 Draft protocol between OBO and DS, initiation of construction prior to security certification and blast testing placed the Department at financial risk and did not comply with the Department’s published policy for P.L. 100-204 security certifications in 12 FAM 360. Final DS acceptance and approval of the specific design did not occur until after blast testing, and initiation of foundation work, including installation of piling, prior to that point created financial risk. In addition to this practical concern regarding financial risk, the Department should comply with its published policy on security certification set forth in 12 FAM 360 (which is the Department’s published interpretation and implementation of the Pub. L. 100-204 security certification requirement) to ensure that its certifications are transparent to, and clearly understood by, Congress. Following a draft internal protocol that is contrary to the Department's published policy, without openly acknowledging it is doing so, is likely to mislead audiences, including Congress, who expect the Department to follow its published policies. If the published policy, which conforms to the law, needs to be changed, the Department should first seek a statutory change if necessary; if it changes a published policy in the absence of a statutory change, it should ideally both notify the interested public and Congress, and justify its change by explaining the new policy's consonance with applicable statutes.

With respect to OBO's comments regarding the importance of innovation and collaboration with DS, OIG neither stated nor implied that it is against either innovation or inter-bureau collaboration. OIG in fact has no objection to either, provided that the bureaus conform to law and applicable regulations and do not expose the Department to unnecessary risk.

Recommendation 2: OIG recommends that the Bureau of Diplomatic Security establish controls to ensure that required research and developmental testing is completed and results are fully analyzed before it certifies to Congress designs for construction.

Management Response: DS responded by stating that the NEC London project was in full compliance with Pub. L. 100-204. DS stated that each project requiring certification undergoes a thorough review process beginning with initial concepts and continuing throughout the design and construction of the project. The innovation of the New London Embassy curtain wall design necessitated field validation. DS further stated that OBO provided DS with full assurances that if testing indicated that the design needed augmentation, such an augmentation would be made – while keeping the project on schedule and on budget.

OIG Reply: OIG considers the recommendation unresolved. OIG recognizes that DS and OBO collaborated continuously on the progression of the innovative design and construction of NEC London, and acknowledges that had blast testing highlighted any vulnerabilities in the design, DS and OBO would have worked together to resolve design weaknesses through the use of an augmentation or of an alternate curtain wall system design. However, initiation of construction prior to security certification and blast testing placed the Department at financial risk and did not comply with the Department's published policy for P.L. 100-204 security certifications in 12 FAM 360. Final DS acceptance and approval of the specific design did not occur until after blast testing, and initiation of construction prior to that point created some financial risk. In addition to this practical concern regarding financial risk, the Department should comply with its published policy on security certification set forth in the FAM (which is the Department's published interpretation and implementation of the Pub. L. 100-204 security certification requirement) to ensure that its certifications are clearly understood by Congress. Following a draft internal protocol that is contrary to the Department's published policy, without openly acknowledging it is doing so, is likely to mislead audiences, including Congress, who expect the Department to follow its published policies. If the published policy, which conforms to the law, needs to be changed, the Department should first seek a statutory change if necessary; if it changes a published policy in the absence of a statutory change, it should ideally both notify the interested public and Congress, and justify its change by explaining the new policy's consonance with applicable statutes.

With respect to DS comments regarding the importance of innovation and collaboration with OBO, OIG neither stated nor implied that it is against either innovation or inter-bureau collaboration. OIG in fact has no objection to either, provided that the bureaus conform to law and applicable regulations and do not expose the Department to unnecessary risk.

Finding B: Contracting Officer Did Not Obtain Sufficient Cost and Pricing Data From Construction Contractor Prior to Finalizing the Terms for CLIN 4

OIG found that the contracting officer did not adhere to FAR requirements in negotiating the construction phase of the FPIS contract. To implement the ECI project-delivery method using the FPIS contract type requires contractors to submit two proposals. The initial proposal contains a FFP for the preconstruction work and a target price for the construction work. The second proposal, obtained at the point of production, contains a FFP for the construction work. According to the FAR, contracting officers must obtain sufficient data to support the accuracy and reliability of this final proposal and an explanation of the differences between the proposals.³⁷ In the case of NEC London, OIG found that the contracting officer did not obtain sufficient cost and pricing data from BLHI when negotiating the final price for CLIN 4, the construction portion of the contract, even though OBO requested such information. The contracting officer awarded CLIN 4 without requiring BLHI to provide an explanation to address the approximate \$42 million difference between the initial proposal (submitted in 2012) and the final proposal (submitted in 2013). The contracting officer stated that he believed that it would be inappropriate to request additional cost or pricing data because the initial proposal was competed and therefore established reasonableness and fairness. As of September 2014, OBO was still unable to reconcile pricing information. Not obtaining details of the pricing data from BLHI made it difficult for OBO to determine the total cost of certain components of the NEC, such as the curtain wall.

Contracting Officer Did Not Resolve Differences Between Initial and Final Proposals and Relied on Incorrect FAR Provision

At the request of the contracting officer, BLHI submitted its final proposal for CLIN 4 in 2013 for the construction portion of the NEC London project. Table 1 shows the unexplained difference between BLHI's initial and final proposals.

³⁷ FAR Clause 52.216-17 (c) requires contractors to submit sufficient data to support the accuracy and reliability of the estimate (proposal) and provide an explanation of the differences between the final proposal and the original proposal.

Table 1: Unexplained Difference Between Proposals

| Category | Initial Proposal (2012) | FFP Proposal (2013) | Difference |
|-----------------------------------|-------------------------|----------------------|---------------------|
| [Redacted] (b) (4) | | | |
| Total | \$442,274,159 | \$522,906,611 | \$80,632,452 |
| Requests for Equitable Adjustment | | | (\$38,480,213) |
| Unexplained Difference | | | \$42,152,239 |

Source: Generated by OIG from data provided by OBO.

In comparing the contractor’s 2013 final proposal with the 2012 initial proposal, OIG could not reconcile or attribute all of the differences between the proposals. For instance, the “Standard Foundation” in the initial proposal increased [Redacted] (b) (4) in the final proposal without sufficient explanation.³⁸ Similarly, the costs for “Floor Construction,” “Exterior Wall,” and “Floor Finishes” increased a total of [Redacted] from the initial proposal to the final proposal without sufficient documentation explaining or justifying the increase. According to the contracting officer,³⁹ the increase between BLHI’s proposals was due to the Requests for Equitable Adjustments⁴⁰ (REAs), but these did not account for all of the increases.

Emails between OBO, the contracting officer, and BLHI demonstrate that OBO personnel⁴¹ requested detailed cost and pricing data to better understand BLHI’s proposal 4 months prior to the award of CLIN 4. In an email to BLHI in December 2012, OBO stated that BLHI’s proposal did not contain sufficient data for evaluation and requested BLHI resubmit the proposal. In a series of emails sent in January 2013, OBO requested that BLHI provide additional details about the proposal so that OBO could determine whether the contractor-revised target price of \$523 million was valid. The OBO cost evaluator stated that “validating/understanding” the \$523 million was “critical” to the evaluation of the proposal. Although OBO acknowledged to BLHI that the contracting officer was the deciding authority for requiring submission of more

³⁸ These are subcategories under the Chancery category.

³⁹ The contracting officer documented the negotiations and explained the analysis performed to negotiate and establish the contract price within the Price Negotiation Memorandum dated April 19, 2013.

⁴⁰ The contractor submits an REA pursuant to the “changes clause,” to obtain compensation for expenses incurred because of changes by the Government within the scope of the contract, such as changes in drawings or design specifications.

⁴¹ FAR 15.404-1 (5), “Proposal analysis techniques,” provides that for the evaluation and analysis of proposals the contracting officer may request the advice and assistance of personnel having specialized knowledge of the requirements set forth in the proposal (program personnel/buyer) to ensure that an appropriate analysis is performed.

detailed information and that he had yet to provide an "official ruling," OBO stated to the contractor that the additional information was needed for the following reasons:

- (1) by virtue of the fact that the award would be in effect a sole source contract at a higher rate than the ceiling established at the initial award,
- (2) by virtue of the fact that BLHI had stated that the \$523 million proposal was based on a whole new estimate, and
- (3) by virtue of the fact that all of the old numbers had been thrown out and the quotes that were the basis for the \$442 million original proposal may not be valid anymore.

In his April 2013 price negotiation memorandum, the contracting officer determined that because competition established the original target price (\$442 million), requesting additional cost or pricing data was inappropriate. In making this determination, the contracting officer relied on a section of the FAR that states that when prices are established by competition, fair and reasonable pricing exists; no additional cost or pricing data is required from the contractor.⁴²

However, an FPIS-type contract provides the contracting officer the authority to request additional cost or pricing data from the contractor to support the accuracy and reliability of the final proposal. FAR clause 52.216-17 (c) *requires* contractors to submit sufficient data to support the accuracy and reliability of the estimate (proposal) and provide an explanation of the differences between the final proposal and the original proposal. This clause establishes the Government's ability to request sufficient information and properly evaluate a contractor's proposal at the production point when there is no additional competition involved when negotiating the FFP. The clause further amplifies the requirement to submit sufficient, accurate, and reliable data for the Government to understand all of the differences between the initial proposal and the final proposal.

To address OBO's concerns, the contracting officer contacted the Office of the Legal Adviser for Buildings and Acquisitions (L/BA) for evaluation of his decision and was informed a week later by L/BA that he (the contracting officer) had outlined a reasonable manner of justifying the revised construction price. However, based on the information OIG obtained, OIG determined that the contracting officer did not present all of the facts or share OBO's request for additional information with L/BA. The contracting officer did not disclose to L/BA that the OBO cost evaluator and other OBO personnel involved with the project and familiar with its requirements, including the project manager, who was also the assigned contracting officer representative,⁴³ believed that additional information was necessary to fully understand the proposal submitted by the contractor.

⁴² FAR 15.403-1, "Prohibition on obtaining certified cost or pricing data."

⁴³ The contracting officer may designate a technically qualified individual as a contracting officer representative (COR). The COR is the contracting officer's authorized representative to assist in the administration of the contract.

In response to OIG's request for policies and procedures to guide the implementation of ECI, the contracting officer stated that A/LM/AQM did not have any guidance to follow. He further stated that ECI is simply "a technical contract performance requirement" established in the contract. OBO officials also stated that there were no policies or procedures in place to guide ECI. As a result, neither A/LM/AQM nor OBO had a sufficient understanding of ECI to effectively implement it or oversee and administer the FPIS contract.

OBO Is Still Unable To Reconcile Pricing

In February 2014, during negotiations for a contract modification, the contracting officer required that BLHI provide more detailed pricing information. BLHI provided pricing details to OBO, via the contracting officer, in April 2014. However, after OBO evaluated the information provided, it rejected BLHI's pricing details in May 2014, stating that they were incomplete, contained line items with prices that were listed as lump sums or were left blank, and that the submittal did not meet the standards that govern the classification of building elements and related site work. Therefore, 1 year after the award of the construction services option, OBO was still working with the contractor to determine the contents of the awarded proposal. In an email between OBO project officials and the contracting officer 7 months after the award, OBO officials described the pricing for the final proposal as "fruit salad...we could not distinguish the pears from the peaches. We just had fruit."⁴⁴

OBO officials described the pricing for the final proposal as "fruit salad...we could not distinguish the pears from the peaches. We just had fruit."

The lack of detailed pricing leaves the Department vulnerable when negotiating for any additional REAs that the contractor may submit for items or work it may deem a change. Further, not obtaining details of the pricing data from BLHI made it difficult for OBO to determine the total cost of certain components of the NEC, such as the curtain wall.⁴⁵

Conclusion

If the Department chooses to continue its use of the ECI project delivery method for future construction projects, it is important that guidance and training are provided to promote effective implementation of ECI. OIG reviewed policies and procedures established by USACE to guide the use of the ECI project-delivery method via the FPIS contract type and believes that the

⁴⁴ Email received by OIG from OBO dated November 20, 2013.

⁴⁵ Thirteen months after CLIN 4 pricing was finalized, A/LM/AQM and OBO continued to work with BLHI to obtain additional data that should have been obtained before negotiating and finalizing CLIN 4. BLHI submitted additional data but it was rejected by the Department as it was still deemed incomplete and insufficient. As of September 2014, OBO had not received the detailed data from BLHI to further understand the contents of the proposal.

Department would benefit from emulating USACE.⁴⁶ Further, USACE has developed a training curriculum required for all personnel involved in an ECI project, including contracting personnel and functional personnel, to ensure that the ECI project delivery method is understood by all involved. Training is especially important for those in critical contract administration positions, such as the contracting officer, contracting officer representative, and project director positions, to ensure the knowledge required to administer an FPIS contract and its related clauses and full benefits of ECI are obtained. Sufficient training would help prevent situations like the present one where the contracting officer failed to request the cost and pricing data needed to fully understand the contractor's proposal.

Recommendation 3: OIG recommends that the Bureau of Administration, Office of the Procurement Executive, develop and implement policies and procedures for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive (successive targets) (FPIS) contract, in accordance with Federal Acquisition Regulation.

Management Response: A/OPE concurred with the recommendation, stating that it would issue appropriate policies and procedures for Early Contractor Involvement contracting.

OIG Reply: OIG considers the recommendation resolved. This recommendation can be closed when OIG reviews and accepts documentation showing that A/OPE developed and implemented policies and procedures for administering the Early Contractor Involvement project-delivery method that uses a fixed-price incentive (successive targets) (FPIS) contract.

Recommendation 4: OIG recommends that the Bureau of Administration, Office of the Procurement Executive develop and implement training for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive (successive targets) (FPIS) contract, in accordance with Federal Acquisition Regulation.

Management Response: A/OPE concurred with the recommendation, stating that it agreed with the need for training. A/OPE further stated that it would include in its ECI contracting guidance a requirement for project Acquisition Plans to identify training as a condition of proceeding with the procurements.

In addition, A/OPE made note of USACE's ECI training courses and availability to provide other government agencies with the training. A/OPE stated that OBO and A/LM/AQM would be responsible to arrange for the entire procurement team to either attend USACE training at the USACE Learning Center, sponsor USACE training in Washington, or acquire equivalent training via an interagency agreement (if agency provided) or via contract (if a contractor is identified to present the training).

⁴⁶ USACE policies and procedures for the ECI project delivery method govern every aspect of the process to include acquisition planning, contract administration, negotiation of price, and training.

OIG Reply: OIG considers the recommendation resolved. This recommendation can be closed when OIG reviews and accepts documentation showing that A/OPE developed and implemented training for administering the Early Contractor Involvement project-delivery method that uses a fixed-price incentive (successive targets) (FPIS).

OTHER MATTERS

During the review of documentation related to blast testing of the curtain wall, OIG identified changes to blast test parameters 3 days prior to the performance of the full mock-up blast test. To evaluate these changes OIG collaborated with USACE to obtain engineering consultant services. USACE performed an assessment of the changes and provided an opinion of their legitimacy and their effects on the overall test. A summary of USACE's assessment and conclusions are provided below.

Change to Blast Testing Parameters

The original test requirements were provided to the construction contractor and the test provider on March 20, 2014. The test was scheduled for May 28, 2014, at the facilities of the Energetic Materials Research and Testing Center (EMRTC), the contracted test provider, in New Mexico. On May 25, 2014, 3 days prior to the scheduled test, OBO issued a letter to the construction contractor and independent test provider that contained 8 items redefining various test parameters. On June 25, 2014, EMRTC issued a test report confirming a successful test.

USACE Review of Changes to Blast Testing Parameters and Test Results

USACE indicated that at first glance the changes to the test parameters could possibly have appeared questionable. However, upon their assessment, it is USACE's opinion that all 8 items were justifiable and were largely intended as necessary clarifications to avoid any dispute about conducting and evaluating the full scale curtain wall test. They did not appear to be an attempt to lower the test standards to ensure the curtain wall specimen would pass the blast test.

Additionally, in the review of the final curtain wall test report issued by EMRTC there were also findings of some questionable issues that arose during the test itself. However, USACE's assessment was that each occurrence, in and of itself, would not be cause of significant concern or reason to invalidate the test. USACE further noted that all of the questionable items when taken in the aggregate still would not be considered reason to dispute the validity or acceptance of the test results.

RECOMMENDATIONS

Recommendation 1: OIG recommends that the Bureau of Overseas Buildings Operations establish controls to ensure that construction is not initiated before innovative and developmental designs have been approved by the Bureau of Diplomatic Security.

Recommendation 2: OIG recommends that the Bureau of Diplomatic Security establish controls to ensure that required research and developmental testing is completed and results are fully analyzed before it certifies to Congress designs for construction.

Recommendation 3: OIG recommends that the Bureau of Administration, Office of the Procurement Executive, develop and implement policies and procedures for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive (successive targets) (FPIS) contract, in accordance with Federal Acquisition Regulation.

Recommendation 4: OIG recommends that the Bureau of Administration, Office of the Procurement Executive develop and implement training for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive (successive targets) (FPIS) contract, in accordance with Federal Acquisition Regulation.

APPENDIX A: SCOPE AND METHODOLOGY

The Department of State (Department), Office of Inspector General (OIG), Office of Audits, conducted this performance audit to determine (1) whether the Department resolved security issues with the curtain wall design before authorizing initiation of construction and (2) whether the contracting officer adhered to Federal Acquisition Regulation (FAR) requirements specified for a fixed-price incentive (successive targets) (FPIS) contract in negotiating the price for the construction of New Embassy Compound (NEC) London. OIG established the first objective to address a complaint received in June 2013, which alleged that the NEC London design features did not meet Bureau of Diplomatic Security (DS) security criteria and would require additional research and developmental testing, resulting in increased project costs. In addition, OIG established the second objective to address an anonymous Hotline complaint made in May 2013 in which the complainant suggested that OIG evaluate the project-delivery method used to contract for construction services. The complainant alleged poor contracting practices and that construction costs associated with the project were neither transparent nor supported. To achieve the Early Contractor Involvement (ECI) delivery method with the construction contractor, the Department awarded a FAR 16.403-2 “fixed price incentive (successive targets)” (FPIS) contract for the construction of NEC London. Therefore, to address the concerns regarding the support and transparency of construction costs, OIG focused its review on the negotiation of the construction price.

OIG did not audit the Department’s use of Early Contractor Involvement (ECI) project-delivery method in comparison to other delivery methods. In addition, OIG did not audit the Department’s shift from standard embassy design (SED) to Design Excellence. The Government Accountability Office (GAO) will conduct an audit on the Department’s shift from SED to Design Excellence.

In August 2013, OIG entered into an interagency agreement with representatives from the U.S. Army Corps of Engineers (USACE) to assist OIG staff in evaluating the Department’s implementation of ECI, including a review of contracting procedures followed to award the construction option to a general construction contractor. USACE has significant experience and knowledge in using ECI. Prior to 2007, USACE had a pilot program underway to evaluate ECI for five U.S. Army projects. In 2007, USACE expanded this pilot program and began evaluating ECI for construction projects. By this time, USACE was writing guidance for ECI use in major construction programs. During 2005–2009, USACE used ECI on nine contracts, totaling \$4.7 billion. USACE now publishes an ECI training manual and teaches a training course in ECI at its USACE Learning Center in Huntsville, Alabama.

OIG entered into a second interagency agreement with USACE in September 2014 to obtain a technical review of the NEC London curtain wall system blast testing. USACE performed an assessment of the blast testing parameters and provide an opinion of their legitimacy and their effects on the overall test (see the Other Matters section of this report).

OIG performed fieldwork in the Washington, DC, area during September 2013–September 2014. OIG conducted interviews with officials from the Department’s Bureau of Overseas Buildings Operations (OBO); the Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management (A/LM/AQM); and DS. OIG also interviewed officials from the Office of the National Counterintelligence Executive, Center for Security Evaluation (CSE) Directorate, a part of the Office of the Director of National Intelligence. To conduct our work, OIG also requested from OBO and A/LM/AQM the policies and procedures, directives, or guidance followed to implement ECI. OIG reviewed official contract files and applicable provisions of the FAR, the *Foreign Affairs Manual* (FAM), the *Foreign Affairs Handbook* (FAH), and other relevant internal guidance. Further, OIG reviewed documentation related to the planning, design, funding, and oversight of the project, such as memoranda to senior officials involved with project management and semiannual progress reports to Congress.

OIG conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that OIG plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives. OIG believes that the evidence obtained provides a reasonable basis for the findings and conclusions based on the audit objectives.

Access to Project Documents and Information

OIG submitted several requests for information to OBO management numerous times during August 2013–January 2014. Specifically, OIG requested project documentation related to the planning, design, contracting, and funding for NEC London. As of February 2014, OBO had not adequately responded to OIG requests, and the Inspector General wrote on February 14 to the Director of OBO explaining that delays in providing or limiting access to project information was unacceptable and was limiting the audit team’s ability to complete the audit. The Inspector General further requested that OBO provide answers to OIG’s open requests within 5 business days of the memorandum date. On February 21, 2014, OBO complied with the Inspector General’s request, providing OIG with new information and subsequently facilitating meetings with functional personnel for the audit team to obtain the outstanding information.

OIG requested similar documentation from DS during August 2013–December 2013, including project and trip reports, design certification packages, and decision documents. OIG obtained the requested documentation and information only after the efforts described below.

During June 2014–August 2014, OIG requested from DS documentation pertaining to the test parameters of the blast tests and the results of the component and full mock-up blast tests, documentation to support DS decisions based on the results of the blast tests, and other related documentation and information. DS provided some documentation to OIG but did not provide all the documents requested. Further, DS’s responses were incomplete, which prompted OIG to ask for additional documentation to support DS’s statements. On July 18, 2014, OIG received notice that the requested documents were forwarded to the DS front office for internal coordination and clearance. However, on July 24, 2014, the audit team elevated its request to

the Deputy Inspector General because DS had not responded. On July 25, 2014, DS submitted its response to OIG, but the answers were incomplete and some were unanswered because DS stated that OBO was better suited to answer the questions. On August 13, 2014, the OIG team, accompanied by the Deputy Inspector General, met with the OBO Director, the Assistant Secretary for DS, and personnel from both bureaus involved with NEC London. During this meeting, OIG resolved the outstanding requests related to the blast testing.

Delays in obtaining the information and documentation from both DS and OBO resulted, in part, from the policies senior management from both organizations had put in place to control the release of information to OIG. As a result, the audit team could not make a timely assessment of the NEC London contracting and design issues until receipt and additional verification of information, delaying issuance of this report by 5 months.

Prior OIG and GAO Reports

Prior OIG and Government Accountability Office audit reports on embassy construction around the world by the Department identified multiple deficiencies in the Department's planning, design, and construction processes, resulting in increased project costs, move-in delays, and maintenance and safety issues.¹ Because this remains an area of significant risk, OIG included an audit of NEC London as part of its FY 2013 work plan.

Work Related to Internal Controls

OIG performed steps to assess the adequacy of internal controls related to the areas audited. For example, OIG reviewed contract and project documentation to evaluate the award of the construction contract for NEC London. OIG also reviewed the FAR, Department guidance, policies, procedures, and related controls to ensure that such guidance, policies, and procedures were implemented and followed by the contracting official for the award of the contract. Further, OIG reviewed steps taken by the Department to certify to Congress the design for NEC London before authorizing initiation of construction to determine whether the Department had complied with the law and took appropriate steps to ensure that NEC London would meet security standards. Deficiencies identified by OIG are presented in the Audit Results section of the report.

Use of Computer-Processed Data

OIG did not rely on computer-processed data to support its findings, conclusions, or recommendations.

¹ Related reports include the following: *Audit of the Design and Construction of the New Embassy Compound in Baghdad, Iraq* (OIG, AUD/IQO-09-25, Oct. 2009); *Audit of Procurement Competition for the New Embassy Compound at Baghdad, Iraq* (OIG, AUD/IQO-09-04, Dec. 2008); and *New Embassy Compounds - State Faces Challenges in Sizing Facilities and Providing for Operations and Maintenance Requirements* (GAO-10-689, Jul. 2010).

Detailed Sampling Methodology

OIG did not sample data. Rather, OIG reviewed documents and communications that were pertinent to the objectives of the audit.

APPENDIX B: DESCRIPTION OF NEW EMBASSY COMPOUND LONDON CONSTRUCTION CONTRACT

The construction contract, including preconstruction services, comprises six contract line item numbers (CLINs) described as follows:

CLIN 1—Preconstruction Services (FIRM FIXED PRICE). The contractor will review the design as it is developed, working with the architect to identify cost savings and improve constructability of the project. Specifically, the contractor shall complete all work to perform and provide preconstruction services during the design phase of the project, including furnishing all professional services, labor, material, equipment, and services, unless otherwise specified herein, required under this contract for the following firm fixed price and within the time specified herein. Services will include constructability, quality control and/or quality assurance reviews, scheduling, cost estimating and budget control, Value Engineering and Recommendations, vendor consultation, mockups, packaging organization, and general construction technique consulting. Preconstruction services phase will conclude with the development and submission of a technical solution plan for the project construction and a firm fixed price proposal for construction services (see CLIN 3).

CLIN 2—Allowance for Reimbursement of Value Added Tax (COST). Value Added Tax costs are added to the CLIN as firm numbers for materials purchased become known. This CLIN is a lot sum amount included in the contract price for direct reimbursement to the contractor for payment of value added tax paid on materials, supplies, equipment, and services purchased within the United Kingdom required to perform the contract and purchased for incorporation into the work.

CLIN 3— Firm Fixed Price (FFP) Quote for Construction Services. CLIN 3 is not an exercisable option and has no cost to the Department. It is an administrative CLIN added to the contract to specify the production point to negotiate and establish the FFP as required for fixed price incentive (successive targets) (FPIS) contracts (see CLIN 4). This CLIN established that the contractor would propose a FFP for construction services towards the end of the design phase – approximately 90 to 100 percent design construction documents.¹

CLIN 4—Construction Services (FIXED PRICE INCENTIVE SUCCESSIVE TARGETS²) The contractor shall provide pricing for construction phase price proposal, including target price, ceiling price,

¹ The contract was amended in February 2013 to require the contractor to provide the FFP proposal based on 60 percent completion of design construction documents.

² The contract established that it was the Department's intent at the production point established for CLIN 0004 for Construction Services to negotiate and award an FFP with provisions for Economic Price Adjustment.

and profit. At the specified production point (see CLIN 3), the contractor will submit the data required by paragraph (c) of Federal Acquisition Regulation clause 52.216-17 and propose a FFP. (U) Under this CLIN, the contractor shall complete all work necessary to construct the NEC London in accordance with the Bureau of Overseas Buildings Operations (OBO) provided design. CLIN 4 comprises two sub-CLINs:

- CLIN 4a. The contractor shall complete all work necessary to construct the Parking Garage and Support Annex. Specifically, under this CLIN the contractor was allowed to perform all work related to permanent piling (foundation) of the NEC.¹
- CLIN 4b. The contractor shall complete all work necessary to construct the NEC London in accordance with the OBO provided design.²

CLIN 5—Allowance for Reimbursement (COST). Installation Materials and Labor to Install the Exterior Building Performative Screen and Photovoltaic System. This CLIN is a lump sum amount included in the contract price for direct reimbursement to the contractor for the acquisition of materials (material cost) and the labor required to mount and install the Screen and Photovoltaic materials on the building exterior.

CLIN 6—Allowance for Reimbursement (COST). Materials and Labor for Mockups and Testing During Preconstruction Services. This CLIN is a lump sum amount included in the contract price for direct reimbursement to the contractor for the acquisition of materials and labor required to build/construct and test the mockups as required by the contract. CLIN 6 also includes design assist services for development of potential modifications to the curtain wall design.

¹ Limited notice to proceed (NTP) 1 issued April 24, 2013, allowed early and preparatory work that included issuance of all subcontracts for all piling work at the NEC. Limited NTP 2 issued July 18, 2013, allowed the contractor to start all work related to permanent piling.

² The Department provided the contractor the full notice to proceed (NTP) on December 18, 2013. The full NTP could not be awarded until OBO completed transactions to obtain funds from the sale of the Chancery (August 28, 2013) and most importantly until it resolved design certification issues with the Bureau of Diplomatic Security (December 16, 2013) and the Office of the Director of National Intelligence, Center for Security Evaluation (CSE) Directorate. The sale provided the balance of required project funding and triggered the leaseback period. The sale contract stipulated that closing had to occur between March 1 and September 2, 2013, and it required no less than 6 months' notice to the buyer of OBO's intended closing date to finalize the sale of the Chancery. In order to complete the design and minimize the length and cost of the leaseback, OBO notified the buyer in February of its intent to close the sale on August 28, 2013.

APPENDIX C: BUREAU OF OVERSEAS BUILDINGS OPERATIONS RESPONSE TO DRAFT REPORT



United States Department of State

Washington, D.C. 20520

JUN 9 2015

~~SENSITIVE BUT UNCLASSIFIED~~

MEMORANDUM

TO: OIG – Steve A. Linick, Inspector General

FROM: OBO – Lydia Muniz, Director 

SUBJECT: Draft Report of OIG Audit of the Construction Award and
Security Evaluation of the New London Embassy

I wanted to personally convey my concerns with the draft IG Report on the New London Embassy (NLE). I am not sure to what degree your staff have kept you abreast of the meetings and discussions we have had on the subject – but given the importance of the project to OBO, I felt it best to ensure that our concerns were conveyed to you directly.

On reading the OIG draft report of the audit of the Construction Award and Security Evaluation of the NLE, we in OBO were struck by the fact that it contained conjecture and criticisms of the project, few of which were based in fact, and many of which were based on what appeared to be a fundamental misunderstanding of the design/engineering, planning approval, construction, and certification processes. It reads like a broad condemnation of the effort, followed by a single recommendation for OBO: that OBO establish controls to ensure that construction is not initiated before innovative and development designs have been approved by DS. We must highlight that OBO and DS have had such protocols in place since 2003, rendering this recommendation unnecessary (see attachment 1).

The impact of such a report would be to leave the reader with the sense that the project was ill conceived and executed – in spite of the single recommendation for OBO – when that is far from the truth. The project continues to be within scope (including meeting or exceeding all security standards), on schedule, and within budget; no small feat for a project of this scale and complexity.

The report incorrectly states that the Department's approach to the contracting and security certification processes for this project did not

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comply with Department's requirements and practices and erroneously states that certification submissions to DS were rejected. It incorrectly interprets site piles as part of the foundations and fails to acknowledge that OBO and DS followed established protocols and due process in approving early site work prior to certification.

The draft report incorrectly states that only two preliminary tests were undertaken of the curtain wall components and incorrectly assumes design changes or modifications were required to the curtain wall system after the successful full-size test. It also asserts that OBO did not adequately plan to mitigate a failed blast test and misunderstands the purpose and application of the "augmentation option." Further, the report does not adequately consider how external factors are assessed and mitigated during project planning, as well as the advantages that the Early Contractor Involvement process provided in addressing unforeseen conditions and schedule constraints. It presupposes that committing to a design that may or may not have all security requirements fully resolved at an interim stage will result in additional cost to correct deficiencies. These specific items and others are discussed in detail in OBO's response to the draft report found at attachment 2.

It is also important to note that the draft report completely omits the context of the project. You might recall that the current embassy was due for a major rehabilitation to address abundant shortcomings in the areas of security, life safety, and functionality. Even at a cost of approximately \$730M (adjusted \$s) in appropriated funds, the rehabilitation would never meet the Department's most critical security standards.

The construction of the new facility (excluding the cost of the new site and the lease-back of the existing facility during construction) is \$775M, which will result in a facility that will meet or exceed all of the Department's security and life-safety standards, as well as all of the mission's functional needs. Furthermore, the Department was able to finance the entire project without any appropriated funds, through the sale of our existing functional properties in London.

In addition, the report completely ignores the wide-ranging benefits of the deployment of new technologies on the project and the impact of such technologies on the entire construction program, resulting in significant cost savings (both capital and operating) and reduced construction durations. This should be a good news story for the Department. It should also be noted also that innovation, sustainability, and transparency were required for local planning approval, not experiments or "nice-to-haves."

We have shared these comments and concerns with the IG team, in writing and verbally, on numerous occasions. I am hopeful that, as a result, a more comprehensive picture of the project will emerge in the final report.

I recognize the benefit that critical reviews provide, even to what we consider some of our best work. Our goal is to always strive towards improvement in our work and in the products of that work. I deeply respect and appreciate the IG's role in that pursuit and look forward to continuing to work with you to achieve this goal.

Attachments:

1. OBO comments on Recommendation 1
2. OBO comments/objections to report sections

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United States Department of State

Washington, D.C. 20520

APR 10 2015

~~SENSITIVE BUT UNCLASSIFIED~~
(~~UNCLASSIFIED~~ when separated from attachment)

TO: OIG/AUD – Mr. Norman P. Brown

FROM: OBO/RM – Jürg E. Hochuli 

SUBJECT: Draft Report for Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London, March 2015

OBO has attached a response to Recommendation 1 of the subject report.

Attachment:

As stated.

~~SENSITIVE BUT UNCLASSIFIED~~
(~~UNCLASSIFIED~~ when separated from attachment)

Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London

OBO RECOMMENDATION RESPONSE

Recommendation 1: ~~(SBU)~~ OIG recommends that the Bureau of Overseas Buildings Operations, establish controls to ensure that construction is not initiated before innovative and developmental designs have been approved by the Bureau of Diplomatic Security.

OBO Response:

Construction of the New London Embassy was executed in accordance with existing controls between DS, OBO, and CSE. Construction of the embassy was not initiated prior to certification by the Bureau of Diplomatic Security.

The 2003 Draft Protocol for Certification established the process for certification which OBO and DS follow. This protocol outlines, among other things, what work can proceed prior to certification. Site work, excavation, and perimeter security are typically permitted prior to the construction of embassy buildings. A process is currently in place for requesting these work elements to proceed prior to certification. Detailed submissions to DS are required with explanations of the critical nature of the work, what safeguards will be incorporated to ensure the continued security of the project, and the impact to the project of permitting the work to proceed. DS reviews these requests in detail with CSE and the security community to ensure that the security of the project will not be compromised prior to rendering a decision.

Innovation is important to executing our mission of providing safe and secure facilities. Advancements will be included in OBO projects, to the degree feasible, without jeopardizing the schedule, budget, or certification. In addition, DS and OBO work collaboratively on an R&D program to advance new technologies and systems.

**OBO Responses to the OIG Audit of the Construction Contract
Award and Security Evaluation of the New Embassy Compound
London Evaluation**
April 9, 2015

Item 1: (U) NEC London Project

Page 3: The report does not capture the full context of the development of the New London Embassy.

The sale of the surplus Navy Annex in 2007 afforded an opportunity to replace the existing Grosvenor Square chancery using proceeds of sale. The existing chancery is deficient in meeting even minimal security standards, including setback, and its systems are rapidly deteriorating. At the time of the analysis, the estimate to renovate the facility was approximately \$500M. Even after such a significant investment, the renovated chancery would still be unable to meet all DS security standards. The overarching goal of the New London Embassy project is to provide a safe and secure facility.

Page 4: The report mischaracterizes the Outer Envelope.

The outer envelope "scrim" does not contain air pockets. It is a single thickness, high performance ethylene-tetrafluoroethylene (ETFE) sheet stretched over aluminum members

Item 2: ~~(SBU)~~ Finding A: Initiating Construction Prior to Blast Testing Placed the Department at Financial Risk and Did Not Comply With Department Policy

Page 9: The Report assumes that design changes were required after several rounds of tests:

After countless hours of computer modeling, numerous component level tests and a successful full size test, DS and OBO concluded that the as-designed curtain wall did meet the OSPB blast standards.

An "augmentation option" consisting of a simple angle had been developed and would have been incorporated if the full size test indicated such an augmentation was needed to meet the performance requirements, and even after a successful blast test, DS and OBO elected to incorporate the already developed "augmentation option" as an extra measure of protection on the first and second level of the curtain wall.

Page 10: The Report incorrectly considers site piles part of the foundation and that the installation was incorrectly started before receiving certification, without regard to due process and approval.

On November 8, 2012, after months of coordination with DS, OBO submitted a detailed request to DS to allow early site work to proceed prior to certification. Early site work included excavation, installation of site piles. The request did not include the installation of the mat foundation which rests on the piles, which OBO and DS consider the start of foundation work for the building. Upon review and consultation with CSE, DS approved the request on November 12, 2012. This request and acceptance has been omitted from the report.

Item 3: ~~(SBU)~~ Blast Testing Results Were Not Obtained Prior To Certification of the NEC London Design and Initiating Construction

Page 11: The Report (and footnote #22) incorrectly states that the Certification Submissions to DS were rejected:

The purpose of the DS/CSE certification is to receive substantial and sometimes critical comments on the development of the design leading to an improved solution or certification. Typically, OBO reviews all certification comments with the Design Team and obtains a commitment from the Design Team to incorporate the resolution of all comments into the final construction documents. Once received, OBO commits to DS to ensure that the resolution of all comments is incorporated into the final construction documents. This is the standard process of due-diligence on the part of DS and OBO and is typically sufficient to allow the certification process to move forward.

While there was considerable discussion of the curtain wall design, at no time did OBO refuse to incorporate any of the certification review comments and remained consistent in their commitment to ensure that all requirements of the OSPB and SECCA would be met and that this would be reflected in final documents.

The 60% Design documents were submitted to and accepted by DS for Certification review. Comments received from DS on November 30, 2012 indicated that, "Due to numerous omissions, substantial deficiencies and the absence of a Construction Security Plan (CSP) for the project, DS and CSE cannot initiate the certification process...". This does not constitute a rejection of the submittal. After further development, the 90% Design documents were submitted to and accepted by DS for certification review. Comments returned to OBO on April 30, 2013 did state that the documents "lacked items critical to certification and ultimately accreditation" and that it was "imperative that these items are incorporated into the next drawing submittal". It also stated that "When DS receives the FEBR and blast information, [they would] continue the formal certification process". Again, this does not constitute a rejection of the submission, but rather highlights the requirements of the certification process.

By early June 2013, the Forced Entry/Ballistic Resistance tests had been scheduled and by early August 2013 OBO had committed to undertaking the blast tests and by early August 2013 a blast tests schedule had been developed demonstrating OBO's

commitment to resolve these two major issues raised in their review of the 90% Certification submission. With these test plans and schedules defined, DS acknowledged both the FE/BR and the Blast Testing plan and schedules in November 2013, recognizing OBO and DS commitment to work together to execute the required tests.

With the test plans and schedules in place and acceptance by DS, along with the development of an alternate curtain wall system, and OBO's December 12, 2013 commitment to ensure that all OSPB and SECCA requirements would be incorporated into the project as noted below, DS had sufficient assurance to allow the certification process to continue. The critical DS Certification cable was sent to Embassy London on December 20, 2013, prior to any foundation work being started.

Item 5: ~~(SBU)~~ After Several Tests, OBO and DS Agreed To Modify the Curtain Wall Design

Page 12, paragraph 1: The Report incorrectly states that only two component level tests were undertaken.

Two series of tests were planned with the intention of testing the ability of the silicone to retain the glass on the frame and to determine the most efficient glass type for the project. In preparation for the tests, high fidelity computational analysis of the scheduled samples was undertaken to predict the behavior and results of said tests. ~~(b) (5)~~

~~(b) (5)~~

A total of 5 tests on 7 pieces of glass representing three different glass layups were performed in February and April 2014. The glass samples were adhered to the representative frame and rigidly mounted in the reaction structure. With the frame rigidly mounted in the test structure, the frame could not deflect to absorb some of the blast forces, so almost all of the forces were transferred to the glass and silicone making the component tests more severe than what was expected in the full size test. While important and valuable data was collected and lessons were learned, the results were mixed and inconclusive. Only executive summaries of the two test reports were made available to OBO. OBO was not provided with the full reports. ~~(b) (5)~~

~~(b) (5)~~

Page 12, paragraph 3: The Report incorrectly states that the curtain wall system was modified after the full size test.

Page 12, paragraph 3: The Report assumes design changes were required after the full size test and may not understand the "augmentation option".

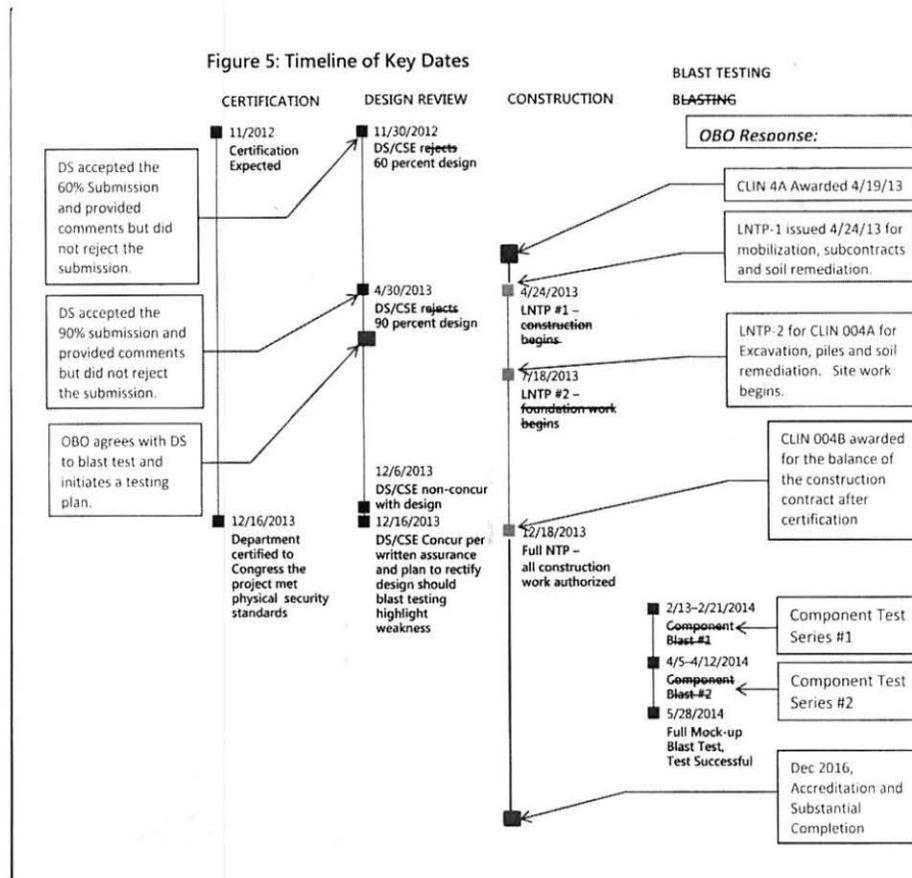
The curtain wall system was not redesigned or modified as a result of either the

Component Level or the Full size test. A simple augmentation option was developed prior to the full size test, in case the test indicated the augmentation was necessary.

After countless hours of computer modeling, numerous component level tests and a successful full size test, DS and OBO concluded that the as-designed curtain wall met the OSPB blast standards. Both an “alternate curtain wall system” based upon a captured edge design which was acceptable to DS for certification without testing and simpler “augmentation option” consisting of a simple angle applied to the as-designed system had been developed. In the end, the “augmentation option” was not needed, but DS and OBO nevertheless elected to incorporate the “augmentation option” on the first and second curtain wall levels as an extra measure of protection, given the very modest cost of the option.

Page 13: Figure 5; The timeline incorrectly states Certification submissions were rejected, misconstrues the meaning of the Limited Notices to Proceed (LNTN) and does not recognize that multiple component tests were completed.

OBO Annotated Table 5:



Item 5: ~~(SBU)~~ Construction Schedule Drove Decisions To Initiate Construction Before Certification Was in Place and Blast Testing Was Completed

Page 13: The Report does not adequately consider the impact of external factors are assessed and how they are mitigated in project planning as well as the advantage the ECI process provided in addressing unforeseen schedule constraints.

It is not unusual for the project schedule to affect the decision making process. There are conditions like lease expiration or other external factors that impose financial or contractual penalties that constrain a project schedule to a defined completion date. These conditions are made known to the Contractors well in advance either by specifying the completion date directly or indirectly through the period of performance so the construction schedule can be developed and managed accordingly. However, schedule constraints are not considered an acceptable reason to circumvent security requirements that would ultimately present security risks to the building occupants.

Fortunately, in the case of the NLE, OBO had been working cooperatively with the contractor through the ECI process and into construction so that challenging aspects of the project such as the blast and FE/BR resistance of the curtain wall system could be identified early in the process and a plan developed to mitigate any possible schedule impact. This is precisely why the contractor selected and engaged the curtain wall subcontractor during the ECI period. In addition, the potential schedule impact imposed by receiving certification after mid-December 2013 was identified well in advance for OBO to proactively request permission from DS to begin early site work. In addition, once the schedule constraint of the blast test requirement was identified, OBO, DS, the Design Team and the Contractor and their sub-contractors worked cooperatively to continually advance the test development program to mitigate delays even when external factors such as test location personnel unavailability, test infrastructure construction delays as well as test site relocations threatened on time completion of the blast tests.

Page 14: Footnote #29 does not recognize that OBO and DS followed established procedures in starting the installation of the piles prior to Certification and that it was uncertain that security standards would be met.

OBO followed established procedures in requesting work prior to certification. On November 8, 2012, after months of coordination with DS, OBO submitted a detailed request to DS to allow early site work to proceed prior to certification. Early site work

included excavation, installation of site piles and the installation of the diaphragm wall. The request did not include the installation of the mat foundation which rests on the piles which OBO and DS consider the start of foundation work. Upon review and consultation with CSE, DS approved the request on November 12, 2012.

The approval to install the site piles prior to certification is not unique to the New London Embassy. At least 13 other projects going back as far as 2003 have been permitted to install site piles or other similar site stabilization systems prior to certification and the full notice to proceed.

Further, as in all projects regardless of the scale and complexity, there was never any uncertainty of OBO's commitment to ensure that all required security standards would be incorporated into the New London Embassy.

Item 6: ~~(SBU)~~ Initiation of Construction Prior to Security Certification and Blast Testing Placed the Department at Financial Risk and Did Not Comply With Department Policy

Page 15: Paragraph 1: The report presupposes that committing to a design that may or may not, at an interim stage of design, meet all security requirements will result in additional cost to correct deficiencies.

Page 15: The graphic pull-quote states that site work began more than a year before certification.

The OBO corrected timeline in Table 5 shows that site work started approximately 6 months before Certification was issued.

Page 15: Paragraph 2: The report fails to acknowledge that OBO and DS followed established protocol in approving early site work prior to certification. It also asserts that OBO did not adequately plan to mitigate a failed blast test.

OBO's response to Item 5, page 14 of the Report addresses the issue of following established protocol in starting site work prior to certification. In addition, with the development of both the alternated curtain wall system and the augmentation option noted in the response to Item 5 page 12, OBO took reasonable and adequate steps to mitigate potential problems, should the curtain wall test have turned out to be less than successful.

APPENDIX D: BUREAU OF DIPLOMATIC SECURITY RESPONSE TO DRAFT REPORT



United States Department of State

*Assistant Secretary of State
for Diplomatic Security*

Washington, D.C. 20520

~~SENSITIVE BUT UNCLASSIFIED~~

April 6, 2015

~~(UNCLASSIFIED)~~ when separated from attachments)

INFORMATION MEMO TO INSPECTOR GENERAL LINICK – OIG

FROM: DS– Gregory B. Starr  APR 06 2015

SUBJECT: DS Responses to the Draft Audit Report on the Construction Contract Award and Security Evaluation of the New Embassy Compound London (AUD-CGI-15-XX, March 2015)

Attached are the Bureau of Diplomatic Security's comments to the March 2015 Draft Audit Report.

Attachment:

As stated.

~~SENSITIVE BUT UNCLASSIFIED~~

~~(UNCLASSIFIED)~~ when separated from attachments)

~~SENSITIVE BUT UNCLASSIFIED~~

**DS Comments to OIG Audit of the
Construction Contract Award and Security Evaluation of the New Embassy
Compound London (AUD-CGI-15-XX, March 2015)**

~~(SBU)~~ **Recommendation 2:** OIG recommends that the Bureau of Diplomatic Security establish controls to ensure that required research and developmental testing is completed and results are fully analyzed before it certifies designs for construction.

~~(SBU)~~ **DS Comments (3/31/2015):**

The certification of this project was in full compliance with P.L. 100-204.

Each project requiring certification undergoes a thorough review process beginning with initial concepts and continuing throughout the design and construction of the project. The innovation of the New London Embassy curtain wall design necessitated field validation. OBO provided DS with full assurances that if testing indicated that the design needed augmentation, such an augmentation would be made – while keeping the project on schedule and on budget.

The senior leadership of DS and OBO have agreed – based on the experience of its most successful projects – that very close collaboration at all levels of both bureaus from the earliest opportunity in the design process is vital to a successful security driven building program.

The senior leadership of DS and OBO have also agreed that innovation is vital to the program. Such innovation will be validated either in the context of projects or within the framework of a freestanding R&D program where such development and validation might adversely impact a project's schedule or budget.

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APPENDIX E: BUREAU OF ADMINISTRATION, OFFICE OF THE PROCUREMENT EXECUTIVE'S RESPONSE TO DRAFT REPORT



United States Department of State

Washington, D.C. 20520

March 25, 2015

UNCLASSIFIED

MEMORANDUM

TO: OIG/AUD-Norman P. Brown

FROM: A/OPE- Corey M. Rindner *Corey M. Rindner*

SUBJECT: Draft Report on *Audit of the Construction Contract Award and Security Evaluation of the New Embassy Compound London*

Thank you for the opportunity to review and comment on the subject audit report. The point of contact for the A Bureau is Eric N. Moore in the Office of the Procurement Executive (A/OPE) who can be reached at 703-875-[Redacted] (b) (6)@state.gov).

Recommendation 3: (U) OIG recommends that the Bureau of Administration, Office of the Procurement Executive develop and implement policies and procedures for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive, successive targets (FPIS) contract, in accordance with Federal Acquisition Regulation.

Management Response: A/OPE concurs with the recommendation and will issue appropriate policies and procedures for Early Contractor Involvement contracting.

Recommendation 4: (U) OIG recommends that the Bureau of Administration, Office of the Procurement Executive develop and implement training for administering the Early Contractor Involvement project-delivery method, which uses a fixed-price incentive (successive targets) (FPIS) contract, in accordance with Federal Acquisition Regulation.

Management Response: A/OPE concurs with the need for training. The U.S. Army Corps of Engineers (USACE) implemented at least twenty ECI contracts with a value exceeding \$5B since 2005. USACE developed a training course entitled Early Contractor Involvement (ECI), Course Number 41ECI01A comprising 36 hours of training at the USACE Learning Center. The class is recommended for the integrated team of contracting professionals and engineers pursuing an ECI project at the outset of a program. Acquisition planning requires the team to include information on the training taken to support the use of the ECI method. USACE training is available to students at other government agencies on a tuition basis.

A/OPE will include in ECI contracting guidance a requirement for the Acquisition Plan to identify training for the program as a condition of proceeding with the procurement. The Bureau of Overseas Building Operations (OBO) and A/LM/AQM will arrange for the team to either attend USACE training at the USACE Learning Center, sponsor USACE training in Washington, or acquire equivalent training via an interagency agreement (if agency provided) or via contract (if a contractor is identified to present the training. At present, both OBO and A/LM/AQM indicate that they do not anticipate future use of the ECI method because of the high dollar limits for application (USACE does not recommend consideration below \$20M) and availability of other more appropriate methods.

ABBREVIATIONS

| | |
|----------|---|
| A | Bureau of Administration |
| A/LM/AQM | Bureau of Administration, Office of Logistics Management, Office of Acquisitions Management |
| A/OPE | Bureau of Administration, Office of the Procurement Executive |
| BLHI | B.L. Harbert International, LLC |
| CLIN | contract line item |
| CSE | Center for Security Evaluation |
| DS | Bureau of Diplomatic Security |
| ECI | early contractor involvement |
| EMRTC | Energetic Materials Research and Testing Center |
| FAH | Foreign Affairs Handbook |
| FAM | Foreign Affairs Manual |
| FAR | Federal Acquisition Regulation |
| FE/BR | forced-entry/ballistic resistant |
| FFP | firm-fixed price |
| FPIS | fixed-price incentive (successive targets) |
| GAO | Government Accountability Office |
| L/BA | Office of the Legal Adviser for Buildings and Acquisitions |
| NEC | New Embassy Compound |
| NTP | notice to proceed |
| OBO | Bureau of Overseas Buildings Operations |
| OIG | Office of Inspector General |
| OSPB | Overseas Security Policy Board |
| REA | request for equitable adjustment |
| SED | standard embassy design |
| USACE | U.S. Army Corps of Engineers |

OIG AUDIT TEAM

Denise Colchin, Director
Contracts, Grants, and Infrastructure Division
Office of Audits

Zorayma Torres-Alvarez, Audit Manager
Contracts, Grants, and Infrastructure Division
Office of Audits

Doug Hundley, Auditor
Contracts, Grants, and Infrastructure Division
Office of Audits

Maria Sharp, Auditor
Contracts, Grants, and Infrastructure Division
Office of Audits



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