



AUSTRALIAN EMBASSY PROJECT WASHINGTON DC, USA

FIT-OUT OF TEMPORARY EMBASSY ACCOMMODATION; DEMOLITION OF EXISTING EMBASSY BUILDING AND CONSTRUCTION OF A NEW EMBASSY BUILDING ON THE EXISTING SITE

STATEMENT OF EVIDENCE FOR PRESENTATION TO
THE PARLIAMENTARY STANDING COMMITTEE ON
PUBLIC WORKS

SUBMISSION 1



Australian Government

Department of Foreign Affairs and Trade

Overseas Property Office

Date of Submission: 1 December 2016

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1 IDENTIFICATION OF THE NEED

1.1 Project Objectives

- 1.1.1 The Department of Foreign Affairs and Trade (DFAT) through the Overseas Property Office (OPO) seeks approval from the Parliamentary Standing Committee on Public Works (PWC) to proceed with the construction of a new chancery to replace the existing chancery to house the functions of the Australian Embassy in Washington, District of Columbia (DC) in the United States of America. The replacement chancery will be constructed on the current site owned by the Commonwealth located at 1601 Massachusetts Avenue NW.
- 1.1.2 In order to construct the new chancery, the existing chancery (seven upper and two basement levels) will be demolished. The proposal also requires the fitout of appropriate leased commercial office space to temporarily accommodate the staff of the Embassy during the period of the demolition of the existing and construction the new chancery.
- 1.1.3 A detailed business case was considered and approved in the 2015/16 Budget context.
- 1.1.4 On completion of the works the Australian Embassy will be provided with a prominent, purpose-built chancery to replace the original 1967 building that is approaching the end of its economic and useful life. The new chancery will distinctly represent Australia's unique culture showcased through best practice architecture and engineering design.
- 1.1.5 The contemporary chancery will incorporate the full range of facilities to meet the Australian Government's ongoing and future whole-of-government foreign policy objectives and representational requirements. Operational and business needs will be provided in a functional, flexible and secure environment and represent the Australian diplomatic standing at the centre of Australia's engagement with the USA. The OPO, as the building owner, will manage and deliver the works detailed under this submission.

1.2 Background

- 1.2.1 The Australian Embassy in Washington DC is located at 1601 Massachusetts Avenue, NW, on the north side of prominent Scott's Circle. The Embassy is approximately two kilometres north of the presidential White House along the 16th Street NW ceremonial axis within the central business district and centre of the Washington diplomatic precinct. The corner location is one of the most prestigious of all foreign missions and one of the closest to the White House.
- 1.2.2 The Embassy supports Australia's largest diplomatic presence globally, and is the hub of Australia's comprehensive relationship centred on highly congruent world views and the pursuit of closely-aligned strategic interests.
- 1.2.3 Australia and the United States engage across foreign policy, defence, and security, intelligence, development, trade and economic cooperation and a range of other sectors. The United States is a large investment partner with Australia and a key trading partner. Australia's private sector trade and investment, academic and research links are extensive and dynamic.
- 1.2.4 The chancery supports the functions of the Embassy and enables the Australian Government to advance the interests of Australia and its people internationally. It is the venue for constant trade, cultural and people-to-people promotional events and represents the scale; the quality of the relationship and the importance Australia places on it. Including DFAT there are eleven Commonwealth agencies represented in the Embassy.
- 1.2.5 The Commonwealth owned land (District Square 181-Lot 162) of 2,816sqm was

procured in two stages, namely; for the original build in 1963 (at \$1 million) and adjacent land for an extension in 1974 (at \$3.1 million). The land, in a corner block, sits at the point of convergence of six strategic well known thoroughfares. The land is bounded on three sides by street frontages with pedestrian access to the rear (north side) adjacent to the well-known First Baptist Church (1890).

- 1.2.6 The existing chancery was designed in 1964 by the respected architectural practice Bates Smart McCutcheon (founded in Melbourne in 1853) and purpose built in 1967 at a cost of \$7.5 million. An integrated extension to the rear north side was added in 1977 at a cost of \$5.8 million. It was the first purpose built Australian chancery undertaken since 'Australia House' in London was opened in 1918, and is based on the classical modernism style. It sits within the 'The DuPont Circle Historic District' although the building was classified in 2007 as 'non-contributing' to the character of the historic district.
- 1.2.7 The existing chancery provides 11,600sqm of office Net Lettable Area (NLA) over seven upper levels and 1,800sqm Gross Floor Area (GFA) of storage in the two basement levels. DFAT and the attached agencies currently occupy 10,580sqm NLA of the office accommodation.
- 1.2.8 The building underwent an internal fitout refurbishment from ground to level six that was completed in 1999-2000 which excluded replacement of the building services plant and equipment.

1.3 Need

- 1.3.1 This proposal is to design and construct a contemporary replacement chancery building that distinctly defines and showcases Australia's physical presence in Washington. It must provide for the Australian Government's existing operational requirements as well as for future foreign policy, defence and security, intelligence, development, trade and economic cooperation objectives and needs. It must also cater for the Embassy's considerable representational and cultural activities consistent with the capacity of the current Australian Embassy and be capable of supporting Embassy operations on a 24-hour, seven days a week basis.
- 1.3.2 The current building structure and most of the building services are at the end of their useable life. The electrical and hydraulic building services have become unreliable to the point that the running of the Embassy is subject to significant business continuity risks that could compromise critical core functions for the Australian Government.
- 1.3.3 The building is old, in poor condition and classified as 'B-Grade' office accommodation. Chronic delamination and spalling of the marble façades renders external areas unsafe to occupants, visitors and the general public to the extent that the building is now shrouded with scaffolding and protective netting. The building also requires significant base building services upgrade and site measures to provide appropriate level of security, including the need for a sally port for vehicle screening.
- 1.3.4 The Australian Government requires a replacement chancery to ensure Embassy staff are provided with secure, modern and environmentally efficient facilities. The new chancery will highlight a modern, vibrant Australia to the various visitors, business groups and agencies which will include Australians who seek passport and consular assistance, international visits by Australian Government, State and Territory Ministers and Parliamentarians and Australian business representatives who attend for trade development opportunities.

1.4 Current Leasing Arrangement

- 1.4.1 N/A as the existing building is owned and Agencies enter into a sub-leasing arrangement with DFAT.

1.5 Proposed Leasing Arrangements

- 1.5.1 As 1.3.5 above there will be the requirement to take out a lease for approximately 6,300sqm of floor space in a conveniently located commercial office building in order to temporarily accommodate the Embassy staff until the new chancery is available for occupation. The leased NLA will be significantly less than the area identified for the new chancery by compressing office space requirements and hiring external commercial exhibition and conference space for the duration. The lease will be taken out for a period of approximately five years with a provision for month by month extension as a contingency.

1.6 Additional Space Request

- 1.6.1 While the design of the new facility will accommodate existing agencies requirements (including expansion for Defence), additional area of approximately 430sqm will be included across the office floor plates to cater for potential future growth and expansion needs.

1.7 Description of Proposal

- (a) Three Options were presented, analysed and considered in order to address the Business Case needs for the proposal to construct a new chancery.
 - (b) Option No.1 - "Status Quo";
 - (c) Option No. 2 - "Construct New Chancery on the Existing Site"; and
 - (d) Option No. 3 - "Refurbish the Existing Chancery"
- 1.7.1 No.2 was assessed as the best option to support the current and forecast operational requirements of the Australian Government in Washington. It will showcase Australia as a dynamic and vibrant country and will be an economical, ethical, efficient and effective use of Commonwealth funds (refer to section 1.9).
- 1.7.2 The new chancery will consist of approximately 9,889sqm of office NLA over six upper levels and 6,860sqm GFA of storage and car parking on three basement levels. Future proofing is achieved through a combination of a very modest expansion space factored into the building footprint and additional density through the use of a flexible, modular layout in open-plan areas. Across designated office areas an average of 11.56 sqm per work point will be achieved. The new building will provide a contemporary facility with a lifespan of 60 years that will meet all designated construction and environmental standards, whilst conforming to appropriate work, health and safety regulations.
- 1.7.3 During the demolition and construction phase (approximately three and a half years) Embassy staff will operate from a temporary chancery, in leased premises.

1.8 Options Considered for the construction of a new Australian Embassy

Option 1 – "Status Quo"

- 1.8.1 The current condition of the building requires continuous major repairs and high levels of maintenance to the building structure, fabric, building services and office fit out over the next 20 years to delay the inevitable need to replace the building fabric and engineering infrastructure in the longer term.
- 1.8.2 The existing chancery design represents an inefficient long-term solution in terms of

function and operations and opportunity for Ecologically Sustainable Design (ESD) measures. Any effort or expenditure would not be considered as representing good value for money.

- 1.8.3 The Option has an increasing likelihood of building failure owing to the known degradation of the building services, structure and fabric. A building services failure could render the Embassy inoperable thereby disrupting business continuity, at short notice and for an extended period of time.

Option 2 – “Construct New Chancery on the Existing Site”

- 1.8.4 This Option considers the demolition of the existing building, relocation of the Embassy to a temporary building for up to four years and the construction of a new chancery on the existing site.
- 1.8.5 It will result in the delivery of a new purpose-built facility with a long life span on the existing site designed to meet the functional and representational space needs required by user agencies and official guests and visitors.
- 1.8.6 The Option offers optimal and contemporary space utilisation; the opportunity to embed appropriate security measures within the base building; deliver a design that is environmentally efficient through incorporation of the latest technology in building materials and systems; allow for ‘future-proofing’ and flexibility due to changing Australian Government priorities and requirements; and
- 1.8.7 This Option will result in a contemporary, stand-alone building that distinctly represents and defines Australia’s physical and cultural presence in Washington.

Option 3 – “Refurbish the Existing Building”

- 1.8.8 This Option would involve a substantial refurbishment program with the requirement to completely strip back the building to the basic structural frame and concrete floor plates.
- 1.8.9 It would result in all occupants having to relocate to a temporary building for up to four years.
- 1.8.10 Efficiencies in resources and area cannot be achieved as the structure would be retained across the existing 11,600sqm of inefficient floor plates and limited ceiling heights.
- 1.8.11 This will also limit the capacity to improve physical security and will not support efficient, contemporary facilities, modern building engineering services and other internal and external fabric requirements. The resultant building will not overcome latent issues and provide access to natural light throughout due to the deep floorplates and existing ceiling heights.
- 1.8.12 Buildings are typically designed for a 50-year lifespan. Structural elements in a sealed internal environment (eg internal floors, walls and columns) will last significantly longer than this, however structural elements that are exposed to weather will require ongoing maintenance beyond this period. As the existing structure is approaching 50 years old, it is anticipated that some sections of the stripped-back structure will require costly remedial repairs. A significant refurbishment will trigger a requirement to bring the whole building up to current building codes and standards. The required works retrospectively applied to a building that is approaching 50 years old will be both complex and expensive, not representing value for money.

Options Assessment

- 1.8.13 Options 1 and 3 will both result in considerable long-term dislocation that will not provide the desired long-term outcomes. Both Options have higher delivery and budget risks over Option 2.
- 1.8.14 Options 1 or 3 will not provide the opportunity to showcase a modern and vibrant

Australia through a new contemporary physical form.

- 1.8.15 Options 2 and 3 are comparable in costs, however Option 2 will deliver a far superior, supportable and efficient building with a longer life span. Option 3 has the highest cost with the longest program and higher delivery and budget risks.

1.9 Reasons for Adopting Proposed Course of Action: Option 2 – “Construct New Chancery on the Existing Site”

- 1.9.1 Option 2 is preferred as it represents best value for money for the Commonwealth. It will deliver a superior building product to meet the long-term needs of the Embassy; increase asset value; and offers the lowest risk to the program and budget.
- 1.9.2 It will ensure that the Embassy in Washington is provided with a secure, contemporary and environmentally efficient new facility from which Australian Government agencies can deliver the whole-of-government policy objectives.
- 1.9.3 A new chancery will incorporate the latest integrated technology; provide future proofing and flexibility across floor plates; provide representation and other spaces in which to showcase Australian diplomacy, public and cultural affairs and business promotional events.
- 1.9.4 Provide a substantial new building within the diplomatic precinct that reflects Australia’s unique cultural values and defines Australia’s physical presence in Washington.
- 1.9.5 This Option requires Commonwealth funding to demolish the existing building; provide temporary office accommodation to maintain operational activities; develop the design documentation; and construct the base building including appropriate security measures together with an integrated furnished office fit out

1.10 Environmental Impact Assessments

- 1.10.1 There are no known requirements or actions proposed that require this submission to undergo an environmental impact assessment.
- 1.10.2 A hazardous materials register is currently in place for the existing chancery complex and some removal of hazardous materials, including asbestos, will be necessary to perform the demolition works. All work will be undertaken in accordance with relevant legislation and approved safe work practices.
- 1.10.3 A comprehensive geotechnical investigation will be commissioned following PWC approval. The existing chancery’s lowest basement RL is 50.55” with the ground floor level RL set at 75.80’. The new chancery will have an additional third basement level set lower than the existing lowest level. The water table will need to be established, as the last bore holes were undertaken in 1974 and there may have been changes in the level of the water in the area and this may have an impact on the basement retention system utilised.

1.11 Heritage and Moral Rights Considerations

- 1.11.1 The existing chancery sits within the “Sixteenth Street Historic District”. The building was classified in 2007 as non-contributing to the character of that historic district when it was expanded in 2007. An application must be filed with the Foreign Missions Board of Zoning Adjustment (FMBZA) in order to demolish the existing chancery building. As part of the review process, the demolition can be authorized if the Historic Preservation Review Board (HPRB) reports that the existing building does not contribute to the character of the historic district. Preliminary advice is that it is unlikely

that the HPRB and FMBZA will object to the demolition of the building. The new construction will also be subject to historic preservation review. As part of the historic preservation review in the FMBZA process, the HPRB staff will review the exterior design features of the building, including the cladding, the fenestration, the façade treatment and modulation of the design. The standard review for new construction is whether the design of buildings and the character of the Historic District are not incompatible.

- 1.11.2 Under the Moral Rights legislation there is an obligation to formally write to the original designer with respect to demolition of the existing chancery and surrounds. The original designer, Bates Smart, has been informally consulted to gain a preliminary understanding of any objections to the demolition of the building and if any elements may require preservation and inclusion in the new build. Bates Smart has not objected to the demolition but is considering an opportunity to reuse the current coat of arms.

1.12 Details of Organisations Consulted

- 1.12.1 Development of the scope for the project has involved extensive consultations with DFAT's geographic division; the Head of Mission, post management, post agency heads and senior representatives of attached departments and agencies in Canberra.
- 1.12.2 Preliminary consultations have also been undertaken in Washington with the Department of State, Office of Foreign Missions (OFM). The Department of State has provided written approval to the Australian Embassy request to demolish and rebuild the Chancery.
- 1.12.3 DFAT's Security Operations Branch has been consulted on the preliminary physical and technical security requirements for the design of the new chancery.
- 1.12.4 Further detailed consultations with all stakeholders will be undertaken as part of the design development process.

2 TECHNICAL INFORMATION

2.1 Location and Climate

- 2.1.1 Washington D.C. (District of Columbia), also referred to as 'Washington' or 'The District' is the capital of the United States located along the Potomac River on the East Coast of the country. In 1790 Congress approved the creation of a national capital on the Potomac River. A French born architect and city planner Pierre Charles L'Enfant was commissioned in 1791 by President Washington to design the new capital. Washington DC is a vibrant and culturally diverse city that has many national institutions as well as a large diplomatic corp.
- 2.1.2 Washington DC has a total area of 68.34 square miles (177 sq kms) and has an estimated population of 601,700. The Washington metropolitan area, of which DC is part, has a population of over six million with commuters from the neighbouring States of Maryland and Virginia raising the DC population to more than one million during the work week.
- 2.1.3 The highest natural elevation in DC is 125metres with the lowest point being sea level at the Potomac River. Washington is in the humid subtropical climate zone. Winters are usually cool with annual snowfall averaging 39mms. Spring and autumn are warm, while winter has average temperatures around 3.3C from mid-December to mid-February. Summers are hot and humid with a July daily average daily average of 26.6C and average daily relative humidity around 66%. The combination of heat and humidity

brings frequent thunderstorms. Hurricanes can occasionally track through the area in late summer but are often weak by the time they reach Washington owing to its inland location.

2.2 Scope of Work

- 2.2.1 The proposal is to construct a new chancery office building in Washington D.C. on the site of the former Australian chancery. The scope of work comprises the fitout of a temporary chancery, the demolition of the existing chancery, and the construction of a new chancery. The proposal will be in accordance with DFAT and individual agency spatial, operational and security requirements
- 2.2.2 The new chancery will consist of approximately 9,889sqm of office NLA over six upper levels and 6,860sqm GFA of storage and car parking on three basement levels, meeting the current specific space and functional requirements of the agencies. Expansion space has been factored into the building footprint, and additional density can be achieved through the modular layout in open plan areas.
- 2.2.3 The construction works will comprise the following:
 - (a) Fitout of a Temporary Chancery,
 - (b) Demolition of existing Chancery, and
 - (c) Construction of new Chancery.

2.3 Zoning and Approvals

- 2.3.1 The MU-15 zoning of the site permits a chancery but is subject to public consultation and hearing and the Foreign Missions Board of Zoning Adjustment (FMBZA) approval. No change to the zoning classification will be required for this project.
- 2.3.2 The site is subject to the development and planning controls of the Washington DC Office of Zoning (DCOZ); FMBZA; The Office of Planning (OP); Department of Transportation (DDOT) as well as local permits for the undertaking of the works required from relevant DC municipal authorities and agencies.

2.4 Land Acquisition

- 2.4.1 The land of the Australian Embassy in Washington DC is fully owned by the Commonwealth and no additional land will be acquired for this Project.

2.5 Codes and Standards

- 2.5.1 All works will be designed to comply with US and specific Washington DC codes and standards.
- 2.5.2 The project works will be delivered in accordance with the Australian Disability Discrimination Act 1992 (DDA). Particular attention will be given to equality in access to premises and all amenities in the facility.

2.6 Architecture

- 2.6.1 The proposal for the new Australian Embassy in Washington D.C. successfully addresses the key considerations of national expression, security and operational functionality in a scheme that is bold yet elegant, innovative yet practical and expressive yet dignified.

- 2.6.2 A sophisticated visual imagery, including the expression of national identity in built form, is achieved through an innovative and unique spatial composition, using material richness, visual clarity and the expression of diversity. The building seeks to evoke distinctive characteristics of the Australian natural environment – expansive skies, rich red colouration, and a diversity of light and materials- into the architectural expression through the use of open and engaging spaces, direct and dappled light, solid and defined forms, and an honesty of expression with the use of rich natural materials.
- 2.6.3 The exterior of the building utilises two main materials, metal and glass – viewed simplistically as ‘red’ and solid versus ‘clear’ and open. The utilisation of these two materials and how they are composed across the facade are important with regard to how the building is perceived and the performance of the building.
- 2.6.4 **Facade Context**
The external composition of the building relates directly to its context, when viewed from the North and West the building appears more solid, with a predominance of reddish metal being presented, whilst when viewed from the South and East the building opens up with a greater extent of glass being visible. This approach to materiality responds to the local context and environmental considerations. The neighbouring buildings to the North, North West and North East are predominately a warm masonry construction whilst those to the South incorporate greater glazing and are Civic in nature as they move towards the commercial centre. This approach references both the 16th Street Historic District and the Civic centre.
The directionality of the facade also celebrates the building’s unique location on a key civic corner site that has multiple approach points. The design allows for a dynamic reading of the building as it appears to seamlessly shift from a more solid reading to open and transparent and vice versa depending on point of approach.
- 2.6.5 **Facade Representational**
The materiality of the facade allows for multiple interpretations of the building. The materiality responds to unique characteristics of the Australian landscape, which have been explored by generations of Australian artists and photographers.
The warm reddish colour of the metal references the quintessential red colouration of the outback, whilst the crisp clear glazing references the open expanse of Australian sky. The two materials change in density across the building according to their location, coming to a culmination at the South East corner of the building as a crisp clear line of glass, referring to the horizon line. The horizon line and lands edge are important qualities of Australian identity, the country’s expanse and its distinct form as an island nation. This ‘horizon’ line occurs at the main civic corner of the building, facing onto Scott Circle and adjacent to the formal entrance of the Chancery.
- 2.6.6 Environmentally the materiality also suits the context, with the glass facing to the Southern light and main views, whilst the insulated metal elements provide thermal protection to the West and Northern aspects. The solid cladding is also significant to providing more secure shielding of the building.

2.7 Master Planning and Site Planning

- 2.7.1 The building is designed to continue the street wall / boulevard language of Washington, unlike the existing Chancery which is set back from the site boundary and is read as an object rather than part of the city fabric. This planning strategy is consistent with the other buildings fronting onto Scott Circle and helps further define this important intersection.
The main entry to the Chancery is on the Southern face, facing onto the greenery of Scott Circle, similar to the flanking building on General Scott Condominiums.
The building is then arranged around a generous central atrium space to maximise

natural light to the secure work place. Light and sky are seen as key qualities of an Australia experience and the celebration at the heart of the building of both natural light and a framed view to the sky reflects this concept.

The core is located midway along the laneway on the Western elevation, reducing the heat load from the Western sun to the facade and minimising obstruction to the best vistas and natural light for the rest of the floorplate. An open 'interconnected' stair and communal work space is located between the lifts and the atrium – providing informal meeting opportunities for all agencies at each floor.

The floors are then divided into two main areas, the North Block and South Block. These large areas to either side of the Atrium allow for a range of department growth and change and flexible workplace arrangements, from complete open plan to traditional cellular offices to hybrid models.

The ground floor is dedicated to public functions, with a clear line of sight from the front entry all the way through to the central atrium and terminating on the Art courtyard. Light, warm materiality and a sense of space are key attributes to these formal areas.

A mezzanine level connects down to the ground floor and includes expansion space and staff lounge and support facilities. The mezzanine level also includes an outdoor terrace, with a Southerly aspect (the correct orientation for sun in Northern Hemisphere).

- 2.7.2 The design removes all existing vehicular egress from 16th Street and removes vehicular basement access from Massachusetts Avenue. Vehicular access to the basement parking is achieved through a sally port located off the western laneway, providing greater security control. Egress is also provided via the western laneway. Importantly laneway security could be enhanced in the future, pending authority approval, should threat levels require greater control of vehicles to the site.

Formal vehicular drop off and pick up is achieved by a new crossover located away from the street intersection, in accordance with Department of Transport guidelines. Additionally, the area directly in front of the main entrance is a dedicated pedestrian zone, separating pedestrian gathering spaces from the vehicle drop off. Loading is provided directly from the laneway to a dedicated, secure loading dock.

- 2.7.3 Attractive passive site perimeter security measures are integrated into the site landscaping with a continuous upstand anti-ram wall addressing the entire frontage of 16th Street. Where pedestrian access is required, bollards are utilised to provide security in lieu of the upstand wall.

Wattle Trees provide an Australian identity along the 16th Street frontage to the built-up soil located behind the upstand wall. Along 16th street the wall is periodically setback to correspond with dedicated external courtyards that relate internally to breakout spaces. These courtyards are not directly accessible but provide outlook. The external spaces will be curated over time, providing a platform to promote Australia from an urban perspective and provide internal amenity. A clear zone is provided around the full perimeter of the building.

These strategies incorporate the principles outlined in National Capital Planning Commission's 'The National Capital Urban Design and Security Plan' (November 2004) which aim to remove unsightly security barriers that negatively impact on the historic beauty of Washington D.C.

- 2.7.4 The proposal includes the required security measures within the building design and siting by clearly separating public from office areas. All pedestrians are screened, regardless of their status. All vehicles entering the basement are pre-screened at the sally port. The interior is based on the 'defence in depth' model, with clearly delineated and readily enforced security protocols.

- 2.7.5 Public Access

Public access is through the main entry vestibule and screening area to a reception area.

Immediately adjacent to the reception area are the public galleries and function spaces, which are arranged around the central atrium. Downstairs are the consular services which can also be reached via an independent lift.

2.7.6 Staff Access

Staff pass through the main entry vestibule and screening area to the reception area. Adjacent to the reception area is a secure lift lobby which provides access to the office floors and basement levels. The staff kitchen and amenities on level 02 is accessible directly via stairs or an independent lift adjacent to the reception area.

2.7.7 Internal Circulation

The design utilises floor to floor separation and rational floor divisions to provide the required security designations of Public, Controlled, Restricted and Secure zones aligned with Defence in Depth principles.

2.7.8 Imperial Floorplate

The floorplates are set-out on an imperial grid of 30 feet x 30 feet, which relate to an office module of 10' which subdivides into a typical facade module of 5' which in turn relates to a typical ceiling grid of 2 feet x 2 feet and the standard planning module of 1 foot. The building will utilise US construction methodologies, dimensions and materials.

2.7.9 Core

One single vertical circulation core is provided centrally to the west of the site, minimising the distance travelled to any one point on the floor. Fire stairs are located to either side of the core to facilitate ease of egress from the floor plate. From a security perspective toilets and service risers are co-located in the core, removing the requirement for direct access to the main work spaces on each floor.

2.7.10 Hub Space

Adjacent to the core is a signature communal vertical stair and informal kitchen/meeting spaces. These spaces are separated from the main office floor plates and allow for a range of interdepartmental functions in a secure yet accessible environment for all staff.

2.7.11 Perimeter circulation around the atrium provides access to any department or agency, maintaining natural light and connectivity. This layout also allows for ease of access to the break-out/informal meeting spaces adjacent to the core.

2.7.12 Physical Expansion Space

Expansion space of approximately 430sqm has been built into the design, with growth allowed for on the mezzanine floor, and a number of other key floors.

2.7.13 Workplace Scalability

The workplace design will be configured to suit the imperial planning module and will have inbuilt scalability. Open plan spaces will consider how increased efficiency can be achieved through workstation design, allowing for greater density for each department without the need to increase actual department footprint. Department layouts, where appropriate, will incorporate greater flexibility through a kit of parts approach, allowing spaces to be reconfigured with minimal disruption and minimal cost.

2.7.14 Parking

Ninety four secure basement car parking spaces and six motorbike spaces, over three levels, will be provided for A-based staff, official fleet vehicles and designated chancery service vehicles. No provision is made for on-grade parking. A porte cochere is provided at the entrance for drop offs and pick-ups only.

2.7.15 Bicycle

On site bicycle parking is provided to encourage sustainable travel. Change facilities and showers are provided for staff in the basement

- 2.7.16 **Basement**
Facility management, and workshops are located in the basement. A generous landscaped light well, with a southern aspect, provides natural light to the Consular services area.

2.8 Materials and Finishes

- 2.8.1 Materials and finishes will be selected to present a high quality, fit-out that is durable, and requires minimum maintenance. Materials will be selected to reflect natural characteristics of Australia, including sustainably source timber, and coloured metal cladding to the facade. Low iron glass will be utilised internally to the atrium and where required externally to provide clear non-coloured glazing.
- 2.8.2 Where practicable materials will be sourced locally in the US, to minimise cost, provide expediency and reduce the building's carbon footprint.
- 2.8.3 Internal partitions with a security requirement will be constructed in accordance with DFAT requirements.

2.9 Structure

- 2.9.1 The building will be designed in accordance with the relevant American Standards, with reference to DFAT design requirements and Australian Design Codes where appropriate.
- 2.9.2 The design loads will be in accordance with the relevant American Standards, and the tenant specific requirements as defined by DFAT. Consideration will be taken of local site conditions including wind, snow and seismic forces appropriate to the location.
- 2.9.3 A post-tensioned concrete flat slab will be used as the primary structural form for the floors, which is a typical form of construction in both Washington and Australia. A regular grid of approximately 9 metres (30 feet) is proposed with the opportunity for some variations to this layout including modest cantilevers. The concept design incorporates a core located reasonably centrally. As well as housing lifts, stairs and risers, this core is the primary structural element providing lateral stability under earthquake and wind loads. Columns and load bearing walls will be insitu reinforced concrete in keeping with local building practice and for maximum robustness. A concrete slab will also be provided at roof level to assist with security. The structural elements used in the design will be selected with due regard to the life of the building and to minimise ongoing maintenance.
- 2.9.4 The façade concept for the Embassy has been developed focused on producing a prestigious appearance befitting the site and energy efficient performance, whilst also satisfying the security and blast requirements of the building.
- 2.9.5 The level of the groundwater table at the site is around one basement level below the surface. As the design incorporates three basements, it is expected that excavation will continue well below the groundwater table. There are two main approaches that can be implemented to combat water infiltration; (a) provide a completely waterproofed foundation including walls and lower level slab to create a "bathtub" condition; or (b) draw the groundwater table down using a permanent dewatering system (internal sump pumps, continuously running). The expected approach is to use a "bathtub" type design so that the building does not rely on a continuous pumping system.
- 2.9.6 The excavation will be created and braced using a soldier pile and lagging system. Waterproofing will be applied to the lagging directly and foundation walls will then be cast directly against the waterproofing system using a one-sided formwork system. A good quality continuous foundation waterproofing system will be necessary. The

waterproofing should be placed on the outside of the foundation walls and slab (positive waterproofing).

- 2.9.7 Subject to a detailed geotechnical investigation being undertaken for this project, the level of the bedrock that underlies this part of Washington will be well below the lowest level, basement B3. Based on the information sourced, it is intended that columns will be founded on spread footings.

2.10 Mechanical Services

- 2.10.1 The building will be designed in accordance with the relevant American Standards, with reference to DFAT design requirements and Australian Design Codes where appropriate.
- 2.10.2 The proposed mechanical services scheme is based on contemporary modular technology and systems that offer energy efficiency and versatility over the life of the Embassy building. The system is a multiple unit modular air conditioning system based on variable refrigerant flow (VRF) technology previously used at other Australian Embassy projects. Roof mounted VRF condenser units serve multiple indoor fan coil units in the ceiling of each office or zone. Outdoor air will be pre-conditioned via roof mounted air to air heat recovery (DOAS) units and ducted to the indoor units. The DOAS integrated air heat exchanger utilises the building relief air flow.
- 2.10.3 The VRF system proposed caters for varying loads and indoor temperatures, thus is efficient even when the parts of the building are not in use or when the building is only partly occupied. Additionally, the VRF systems are typically reliable and resilient, appropriate for operation in a range of climates, including that of Washington.
- 2.10.4 The modular nature of the proposed system allows easy replacement of equipment over the life of the building and limit extent of disruptions to the building operation during repair and maintenance. The VRF system allows for any future modifications to the building.
- 2.10.5 Exhaust ventilation systems will generally be provided for the basement car park, amenities, utility areas and service kitchen.
- 2.10.6 In the proposed design all equipment will generally be located on the roof of the building, providing a secure plant room and limiting the requirement for additional plant space, or access to the building interior by service personnel.

2.11 Hydraulic Services

- 2.11.1 The Hydraulic systems design for the building will be designed in accordance with the relevant American Standards, with reference to DFAT design requirements and Australian Design Codes where applicable.
- 2.11.2 Conventional hydraulic systems are expected responding to the ESD expectations of the project for water and energy efficiency while providing a high level of occupant amenity and safety. Local high quality fixtures and fittings will be sourced for the project.
- 2.11.3 Roof water drainage may be retained on site for toilet flushing subject to local regulations and ESD initiatives.

2.12 Electrical Services

- 2.12.1 Electrical design for the building will be designed in accordance with the relevant American Standards, with reference to DFAT design requirements and Australian Design Codes where applicable.

- 2.12.2 All equipment will require robust construction to minimise servicing and maintenance, particularly equipment mounted externally such as satellite dishes and luminaires. The design of the electrical supply will seek to provide reticulation redundancy and secure power and communications cable pathways, rooms and cupboards in response to DFAT requirements as appropriate.
- 2.12.3 Security and access including ease of servicing redundancy and where possible integration with landscape will be considered in the locating of site utilities. Some items considered include but are not limited to:
- diesel storage tanks are located below ground adjacent to the eastern lane way for ease of refuelling;
 - water storage in the Basement;
 - a dedicated substation is below ground; and
 - alternative access points for telecommunications.
- 2.12.4 A central stand-by power systems with all associated equipment (switchboards, generators and diesel tanks), sized for redundancy configuration to back up grid power will be provided.
- 2.12.5 A separate sub-main for standby power and normal (grid) power to all distribution boards including switchboards for mechanical services and lifts with automatic transfer switches located in the distribution boards and switchboards will also be provided.
- 2.12.6 Indoor lighting will enhance the architect's interior design and provide a comfortable and productive working environment that is both energy efficient and low-maintenance. The distributed lighting control system will provide control, monitoring of lamps and energy-efficient operation. LED lighting will be used including for general office lighting.

2.13 Telecommunications

The telecommunications system will be designed to the IT and Equipment Specifications Brief of DFAT. Consultant team will work with DFAT during the design process to ensure the telecommunications system meets their requirements and coordinates with security topology of the buildings.

2.14 Lightning Protection

Lightning protection and surge diverters will be provided to the Chancery.

2.15 SSISEP/ Public Address System

- 2.15.1 A public address system will be provided as part of the Emergency Warning and Intercommunication System.

2.16 Security

- 2.16.1 The security requirements will be incorporated as part of the design development phase for the Project. Allowances have been made in the project budget for both physical and technical security works.
- 2.16.2 The electronic security system is generally expected to include;
- CCTV
 - Duress Alarms
 - Entry Access Control Systems (EACS)
 - Locks
 - Intruder Alarms
 - Public Address Systems

- 2.16.3 Intrusion alarm systems will comply with Type 1 standards with all intrusion detection devices SCEC Endorsed for Secure Areas. CCTV systems are expected to be IP-based with digital recording and control and designed for reliability. Electronic access control would generally be designed so that physical security is not compromised.
- 2.16.4 The electronic security systems will be designed to the security requirements of DFAT and in response to the Protective Services Manual. The design process will refine the electronic security system requirements and ensure that they are coordinated with the support of the physical security and blast resistance approaches.

2.17 Lift Services

- 2.17.1 Lifts will be designed generally in accordance with local regulations including ASME A17.1 and EN81.20 and in response to DDA input criteria.
- 2.17.2 The elevator system will be designed to provide a commercial office handling capacity. All Lifts will be machine room-less type with conventional control.
- 2.17.3 Lifts will be fully compliant with codes for persons with disabilities and stretcher provisions of 2000mm deep will be provided within goods lift.
- 2.17.4 Only one lift will service the basement levels. A separate goods lift will serve all floors including roof top plant room and basement levels.

2.18 Civil Works

- 2.18.1 The new building will occupy most of the site, so the civil component of the project (apart from the basement excavation described in the structural section above) will consist of aligning the pavement typology and levels into the surrounding footpaths and streets, Civil works will also include consultation with the relevant authorities for the connection of the utilities including water, stormwater, sewerage, gas etc into the new building.

2.19 Landscape Design

- 2.19.1 The site landscaping will include, subject to local approval, a selection of Australian species. An upstand anti-ram wall and bollards will provide security within a landscape setting. Low level planting will be complimented with a series of small trees and dedicated courts to enhance building presentation. The surrounding footpaths and kerb cuts will be upgraded in line with local requirements to ensure that the new building interfaces with the Washington urban streetscape. Design will allow for clear lines of sight and automatic perimeter lighting.

2.20 Operations, Maintenance and Warranties

- 2.20.1 Operation and maintenance manuals will be provided by the building contractor. The manuals will contain equipment data, supplier identification and contacts, specifications, recommended maintenance procedures and manufacturers manuals. As-built documentation will be incorporated into the Hand-over Completion Report.
- 2.20.2 Warranties and guarantees will be provided in the name of the Commonwealth of Australia.

2.21 Acoustics

- 2.21.1 Acoustic attenuation measures will be included in the design in accordance with the requirements and recommendations of AS1055: 'Acoustics – Description and

Measurement of Environmental Noise’ and ‘Design Aids for Noise Control in and around Buildings’ specifically ‘Design Criteria for use inside Buildings’ to minimise noise across the office interiors, specifically open plan spaces, enclosed offices and meeting room.

- 2.21.2 The final scope of acoustic works will be detailed in the design development phase of the Project and respond to local external noise requirements.

2.22 Ecologically Sustainable Design (ESD)

- 2.22.1 The following sustainability measures will be considered in the design of the new Washington Embassy project:

- Platinum Rating under LEED for New Construction 2009;
- facade treatment to manage heat transfer, solar gain, daylight and glare;
- rooftop photovoltaic system integrated with green roof;
- variable refrigerant flow type air conditioning to enable occupancy driven operation and heat recovery function;
- multi-level atrium to increase interior daylight penetration and to allow for basement daylight access;
- Water Sensitive design strategies that are integrated into the rooftop and public realm including rainwater tank for use in toilet flushing;
- end of trip facilities to encourage cycling;
- sustainable materials that provide improved indoor air quality and are sustainably sourced;
- sensor network to monitor and control occupant comfort and environmental performance;
- real time display of building environmental performance to encourage resource use awareness and conservation;
- increased levels of outdoor air ventilation and filtration to improve air quality and amenity;
- low air permeability building enclosure, high levels of insulation with air leakage confirmed through building pressure testing; and
- metering of water and electricity use to facilitate ongoing resource management, monitoring and reporting.

2.23 Provisions for People with Disabilities

- 2.23.1 The building and external surrounds will be designed in accordance with the DDA 1992 to make provision for people with disabilities, including ingress and egress routes, lifts, car parking, access toilets and other facilities.

2.24 Heritage Issues

- 2.24.1 The existing chancery sits within the “Sixteenth Street Historic District”. The building was classified in 2007 as non-contributing to the character of that historic district when it was expanded in 2007. An application must be filed with the Foreign Missions Board of Zoning Adjustment (FMBZA) in order to demolish the existing chancery building. As part of the review process, the demolition can be authorized if the Historic Preservation Review Board (HPRB) reports that the existing building does not contribute to the character of the historic district. Preliminary advice is that it is unlikely that the HPRB and FMBZA will object to the demolition of the building.

2.25 Child Care Provisions

2.25.1 N/A

2.26 Fire Protection

2.26.1 The Fire protection systems design for the building will be designed in accordance with the relevant American Standards, with reference to DFAT design requirements and Australian Design Codes where applicable.

2.26.2 The building will be provided with sprinkler protection, smoke detection and a hydrant system as required by the local authorities.

2.27 Work Health and Safety

2.27.1 Compliance with Work Health and Safety (WH&S) standards is of high importance to OPO as the building owner. In accordance with the Work Health and Safety Act 2011, considerable attention will be given to this aspect during the detailed planning of the project and preparation of the contract documentation.

2.27.2 WH&S issues will be particularly important during the demolition and construction stages of the project. The building contractor will be required to implement stringent project specific WHS Management Plan including safety induction training for all workers and visitors. These practices will be consistent with US and Washington DC local authority laws, regulations and ordinances.

2.28 Authorities and Local Industry Consultation

2.28.1 The OPO has consulted in Washington with:

- (a) Department of State, Office of Foreign Missions (OFM) Post Management,
- (b) Tenant Agencies;
- (c) Land and Building Attorney,
- (d) local consultants (local authority approvals advice), and
- (e) adjoining neighbours.

2.29 Local Impact

2.29.1 The business and community impact of the new chancery building is expected to be low, as it is keeping with its current operations and will be built to the height and density of the existing chancery building.

2.29.2 The nature of the demolition works and construction of the new building will provide a certain amount of disruption to neighbours, the general public and occasionally to passing traffic. Extensive consultation with the approving authorities, community stakeholders and immediate neighbours will be undertaken prior to the commencement of any of the works and will continue through all the stages to keep all informed of all activities and progress. All appropriate measures will be taken to mitigate the disruption, nuisance and other issues that may arise while undertaking the works.

2.29.3 The selected contractor will be obliged to ensure that an effective traffic management and site management plans are applied and all WHS requirements of the work site and surrounds are carried out and maintained in accordance with the Washington DC local authority laws, regulations and ordinances.

2.30 Project Cost Estimates

2.30.1 The out-turn cost estimate of the proposed works is \$236.9 million, based on 2015

prices which have been escalated to support the construction program. The out-turn cost estimate has been developed by a cost planning consultant and includes demolition, fit out of temporary office accommodation, construction of the Works and all other related elements such as design consultant fees, project management, supervision and site office expenses. Escalation risk will be borne by the contractor, with foreign currency risk remaining with the Commonwealth.

- 2.30.2 The estimate does not include any office business machines, computers, artworks or white goods.
- 2.30.3 The estimate includes local Washington DC sales tax currently 5.75%.
- 2.30.4 The estimated out-turn cost of the proposed Works is further detailed in Submission 1.1.

2.31 Project Delivery Strategy

- 2.31.1 Following a detailed analysis, a Head Works Contractor (HWC) construction delivery system using a conventional style of design development with fully detailed tender documentation has been selected as appropriate for this project. This method is commonplace in the US for building construction projects and represents the best value for money for the Commonwealth. This method will also enable OPO to maintain control of the various project stages including the selections and specifications for building finishes, materials and services, as well as the delivery of the temporary accommodation fit out and the demolition of the existing building.
- 2.31.2 An Australian design consultancy, in collaboration with Washington based architects and engineers, has been engaged to prepare construction documentation for both the temporary accommodation and the new chancery. The collaboration between design teams will enable production of documentation to local construction requirements and expectations, facilitate local authority approvals and enable a comparative compliance assessment between US and Australian building codes and standards.
- 2.31.3 An independent cost planning consultant has been engaged to manage the preparation and review of project budgets, prepare the construction Bills of Quantities and provide on-site services related to the HWC's monthly progress invoices and provide input to any project variations or claims.
- 2.31.4 A lump sum Contract will be awarded to a HWC for the new chancery works. Tenders will be called from a selected short list of Tier 1 building contractors following a pre-qualification process. As the building industry in the US is a very sophisticated marketplace with a high level of capacity and skill to undertake the proposed works, the pre-qualification process will be publicly advertised only in the US. A separate Head Works Contractor will be engaged for the fit out works for the temporary accommodation.
- 2.31.5 A Project Director will be engaged from the OPO Services Panel to oversee the design development in Australia followed by relocating to Washington for the construction phase.
- 2.31.6 A project management consultancy with international experience will be engaged to provide project administrative and superintendency services to oversee the HWC Contract, with on-site support provided by the local design and cost planning consultant representatives.
- 2.31.7 Local authority and utility supply approvals will also be the responsibility of the consultants using their local partners.

2.32 Construction Program

- 2.32.1 Following the PWC public hearing, and subject to Parliamentary approval, including resolution of any outstanding requirements, the current program provides for the tendering of the Works (demolition of the existing and construction of the new chancery) and appointment of a HWC in first quarter 2019 with practical completion of the Works anticipated in late 2021 with occupation of the new chancery in the first quarter 2022. A 12 month Defects Liability Period will be applied,

Annexure 1 – DRAWINGS



AUSTRALIAN EMBASSY, WASHINGTON D.C.

SOUTH-WEST, ENTRANCE FROM MASSACHUSETTS
AVENUE



AUSTRALIAN EMBASSY, WASHINGTON D.C.

SOUTH, ENTRANCE FROM MASSACHUSETTS
AVENUE



AUSTRALIAN EMBASSY, WASHINGTON D.C.

EAST, 16TH STREET ELEVATION



AUSTRALIAN EMBASSY, WASHINGTON D.C.

ATRIUM, LOOKING NORTH TO MULTIPURPOSE
ROOM



AUSTRALIAN EMBASSY, WASHINGTON D.C.

ATRIUM, LOOKING NORTH-EAST TO BREAKOUT
SPACE AND MULTIPURPOSE ROOM



AUSTRALIAN EMBASSY, WASHINGTON D.C.

ATRIUM, FROM LEVEL 03, LOOKING SOUTH TO
ENTRANCE



AUSTRALIAN EMBASSY, WASHINGTON D.C.

LEVEL 02, MEZZANINE, LOOKING NORTH-EAST TO
BREAKOUT SPACE



AUSTRALIAN EMBASSY, WASHINGTON D.C.

ATRIUM, LEVELS 03-06, LOOKING NORTH TO WORK
HUB





















