

## City Airport Development Programme (CADP1)

### Condition 34: Design



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## 1.0 Introduction

- 1.1 The City Airport Development Programme (CADP1) planning application (13/01228/FUL) was granted planning permission by the Secretaries of State for Communities and Local Government and Transport in July 2016 following an appeal and public inquiry which was held in March/April 2016.
- 1.2 On 5th January 2017, the London Borough of Newham (LBN) approved some minor non-material design changes to the appearance of the western and southern elevations of the Western Terminal Extension (WTE) (16/03797/NONMAT). A further non-material amendment (17/02865/NONMAT) to the Planning Permission was approved on 27 September 2017 for minor amendments to the terminal buildings and associated service yard, East Pier, forecourt and decked car park.
- 1.3 A Section 96a application for some minor changes to the West Energy Centre (WEC) and East Energy Centre (EEC) has been submitted to LBN under separate cover in February 2018.
- 1.4 All minor changes to the design referred to above have been incorporated into the details provided to satisfy this condition.
- 1.5 Condition 34 of CADP1 permission states that:

*'No building within the Development hereby approved shall be constructed until details and samples of the materials to be used in the external elevations, fenestrations and roofs of the building(s) and Noise Barriers, have been submitted to and approved in writing by the Local Planning Authority. The Development shall be carried out in accordance with the approved design details. The details submitted shall be to a scale agreed with the Local Planning Authority in writing prior to submission.'*

*Reason: To ensure a satisfactory standard of external appearance, protect local amenity and with regard to the assessment contained in the UES, Policies 7.3, 7.4, 7.5, 7.6 of the London Plan (consolidated with alterations since 2011 and published March 2015) and Policies SP2, SP3, SP4 and SP5 of the Newham Core Strategy (adopted 26 January 2012).'*

- 1.6 This submission seeks approval of the design materials pursuant to Condition 34 for the following approved CADP1 buildings and noise barrier:
  - West Terminal Extension (WTE);
  - West Energy Centre (WEC);
  - Main Terminal Building (MTB) & East Terminal Extension (ETE);
  - New East Pier (NEP);
  - East Energy Centre (EEC); and
  - Permanent Noise Barrier.

- 1.7 The relevant materials for the remaining dockside buildings will be subject to a further submission once procured. It was agreed with LBN Officers on 24 January 2018 that material samples for the decked car park are not required given the construction characteristics of this structure.
- 1.8 The materials set out below and samples provided to LBN Officers, conform with the principles of the approved Design and Access Statement (July 2013); Design and Access Statement Addendum (March 2014); and the Update to Design and Access Statement (September 2015). One minor change to the composition of the gold cladding on the ETE is proposed as was agreed in principle with LBN Officers on 24 January 2018 subject to review of the revised material sample (see para 2.1 c. below).

## 2.0 Material Specifications

2.1 The CADP1 building materials for approval are detailed in Appendix 1 and are summarised in this section as follows:

a. **Western Terminal Extension (WTE):** Refer to *A400-PAW-A-14-XXX-XX-DR-DE-213-001-B-S3*

1. The material palette is restricted to metal products whilst the colour palette is restricted to metallic silver (natural anodised aluminium) and black-grey (RAL 7021). Physical samples have been provided to LBN Officers to correspond with the numbered items in *A400-PAW-A-14-XXX-XX-DR-DE-213-001-B-S3*:

1. Natural anodised aluminium expanded metal (silver) sample. Circa 290 x 360mm. For material and colour;
2. Polyester powder coated aluminium cladding (black-grey RAL 7021) with recessed joints mock-up sample, circa 430 x 590mm for material, joint type and colour;
3. Anodised aluminium expanded metal (black grey) sample. Circa 290 x 360mm. For material and colour;
4. Concrete paver for inverted roof. Sample not provided as is generic;
5. Glazing with slight grey tint not provided as is generic and as agreed with LBN prior;
6. Feature glazing system with external black silicon-butt detail not provided as is generic;
7. Natural anodised aluminium expanded metal (silver) perpendicular 'blades' cladding sample. Colour/finish is illustrated by sample 1 above; and
8. Polyvinylidene fluoride coating (PVDF) aluminium (black-grey RAL 7021) standing seam canopy roofing sample. Circa 210 x 290mm. For material and colour.

b. **Western Energy Centre (WEC):** Refer to *A400-PAW-A-14-XXX-XX-DR-DE-213-002-B-S3*. The material palette is restricted to metal products whilst the colour palette is restricted to metallic silver (natural anodised aluminium) and black-grey (RAL 7021). Physical samples have been provided to LBN Officers to correspond with the numbered items in *A400-PAW-A-14-XXX-XX-DR-DE-213-002-B-S3*:

1. Natural anodised aluminium louvre (silver) mock-up sample. Circa 250 x 300mm. For material, colour and profile type/size. Clads body of building and doors;
2. Concrete paver for inverted roof. Sample not provided as is generic;
3. Natural anodised aluminium expanded metal (silver) doors, window frames and trims. Sample not provided as is generic; and
4. Glazing with slight grey tint. Sample not provided as is generic.

c. **Main Terminal Building (MTB), Eastern Terminal Extension (ETE):** Refer to *A400-PAW-A-14-XXX-XX-DR-DE-213-003-B-S3*. The material palette is restricted to metal products whilst the colour palette is restricted to metallic silver (natural anodised aluminium), metallic gold (pigmented titanium-zinc), and black-grey (RAL 7021).

The cladding on the ETE was previously intended to comprise of a gold coloured copper-aluminium material as detailed in the Design and Access Statement Addendum (March 2014). Whilst it is still proposed to clad the ETE in a gold colour, the cladding will comprise of a slightly different titanium-zinc composition. This is due to recent scientific weathering data which evidences the distinct risk that the copper-aluminium may transform to have a very dark appearance in the context of the air around the dock waters and the aviation operation.

The titanium-zinc material in place of the copper-aluminium one, offers the desired metallic gold appearance as a permanent finish and without any risk of such adverse colour transformation. The composition and format of the standing seam façade would be identical to that of the replaced copper aluminium one. This minor change to the composition of the gold cladding was discussed with LBN Officers on 24 January 2018 and agreed in principle subject to review of the revised material sample.

Physical samples have been provided to LBN Officers to correspond with the numbered items in *A400-PAW-A-14-XXX-XX-DR-DE-213-003-B-S3*:

1. Natural anodised aluminium expanded metal (silver) sample. Circa 290 x 360mm. For material and colour;
2. Polyester powder coated aluminium cladding (black-grey RAL 7021) with recessed joints mock-up sample, circa 430 x 590mm for material, joint type and colour;
3. Concrete paver (for areas of inverted roof) not provided as is generic;
4. Glazing with slight grey tint not provided as is generic and as agreed with LBN prior;
5. Feature glazing system with external black silicon-butt detail not provided as is generic;
6. Natural anodised aluminium expanded metal (silver) perpendicular 'blades' cladding sample. Colour/finish is illustrated by sample 1 above;
7. Natural anodised aluminium expanded metal (gold) sample. Circa 270 x 390mm. For material and colour;
8. Titanium-zinc (with permanent metallic gold coloured pigment) standing seam cladding with diagonal seam direction and matching hood surround to glazing. Circa 200 x 300mm. For material, colour and profile type; and
9. Polyvinylidene fluoride coating (PVDF) (silver) standing seam roofing sample. Circa 210 x 290mm. For material and colour.

- d. **New Eastern Pier (NEP):** Refer to *A400-PAW-A-14-XXX-XX-DR-DE-213-004-A-S3*. The material palette is restricted to metal products whilst the colour palette is restricted to metallic silver (natural anodised aluminium), metallic gold (gold anodised aluminium) and black-grey (RAL 7021). Samples have been provided as follows and as related to the numbered items in the reference document:

1. Natural anodised aluminium expanded metal (silver) sample. Circa 290 x 360mm. For material and colour;
2. Polyester powder coated aluminium cladding (black-grey RAL 7021) with recessed joints mock-up sample, circa 430 x 590mm for material, joint type and colour;
3. Glazing with slight grey tint not provided as is generic and as agreed with LBN prior;
4. Natural anodised aluminium expanded metal (silver) perpendicular 'blades' cladding sample. Colour/finish is illustrated by sample 1 above;
5. Natural anodised aluminium expanded metal (gold) sample. Circa 270 x 390mm For material and colour;
6. Polyvinylidene fluoride coating (PVDF) (gold coloured) standing seam cladding with diagonal seam direction and matching hood surround to glazing. Circa 100 x 150mm. For material, colour (pre-weathered) and profile type;
7. Polyvinylidene fluoride coating (PVDF) (silver) standing seam roofing sample. Circa 210 x 290mm. For material and colour;
8. Feature glazing system with external black silicon-butt detail not provided as is generic;
9. 'Regency Gold' anodised-look aluminium composite panel (ACM) cladding sample, circa 90 x 150mm. For material and colour; and
10. Natural anodised-look (silver) aluminium composite panel (ACM) cladding sample, circa 90 x 150mm. For material and colour.

- e. **Permanent Noise Barrier:** Details relating to the Permanent Noise barrier have been provided under separate cover pursuant to the requirements of Condition 53. Refer to A400-PAW-A-14-XXX-XX-DR-DE-213-007.

1. Natural anodised-look (silver) aluminium composite panel (ACM) cladding sample, circa 90 x 150mm. For material and colour (as per item d/10 above).

- f. **East Energy Centre (EEC):**

Refer to A400-ATK-A--37-XXX-XX-DR-EL-200-906-01-S2.

1. Oxidised metal cladding - Corten steel cladding. Samples provided are weathered sample and larger panel pre-weathered (Ruukki Liberta cor-ten 700 flat 1.5mm flat steel corten plate); and
2. Louvres – PPC coated aluminium blades. Sample provided for profile detail –proposed dark grey colour (Renson Linius 66mm blade L.066.01).

### 3.0 Schedule of Submitted Deliverables

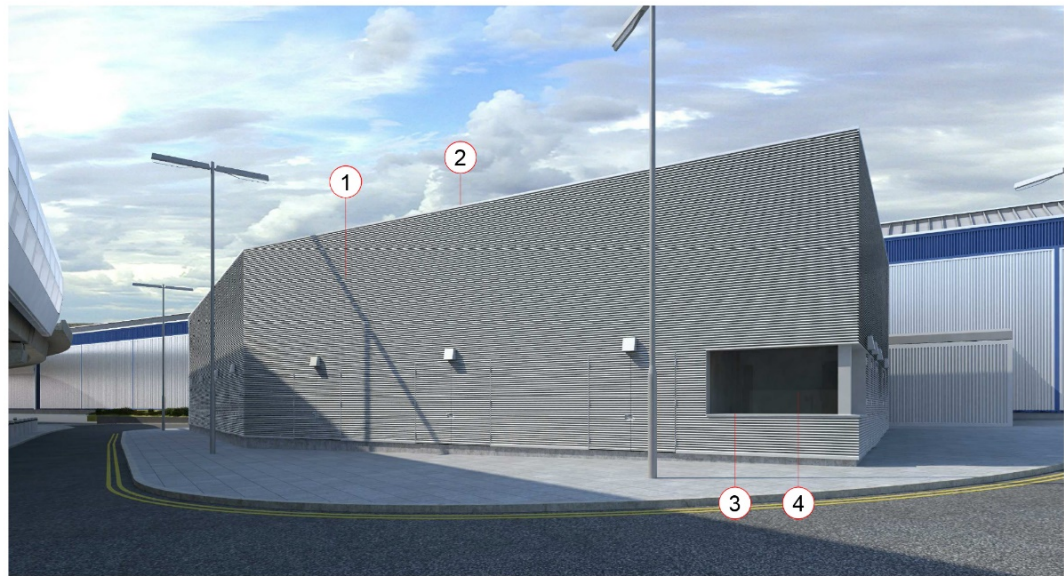
The following schedule identifies the deliverables submitted for this condition.

Drawing Number	Drawing Name	Status
Material Details – Sheet 1	A400-PAW-A-14-XXX-XX-DR-DE-213-001-B-S3	For Approval
Material Details – Sheet 2	A400-PAW-A-14-XXX-XX-DR-DE-213-002-B-S3	For Approval
Material Details – Sheet 3	A400-PAW-A-14-XXX-XX-DR-DE-213-003-B-S3	For Approval
Material Details – Sheet 4	A400-PAW-A-14-XXX-XX-DR-DE-213-004-A-S3	For Approval
Proposed Eastern Energy Centre Ground Floor Plan	A400-ATK-A--37-XXX-XX-DR-EL-200-906-01-S2	For Approval

*Figure 3.0.1: Schedule of submitted deliverables.*



4.0 Appendix 1: Details for Approval



WESTERN ENERGY CENTRE (WEC) MATERIAL DETAILS

1

Anodised aluminium, natural finish

LOCATION: Louvre envelope screen and doors.

SAMPLE/IMAGE OBTAINED FROM: Levolut. Sample not provided.

PRODUCT/DESCRIPTION: Levolut VLS 50 or similar approved linear louvres with a curved profile to block views of the plant systems behind while providing high air flow ventilation for mechanical requirements.

COLOUR/FINISH: Anodised aluminium, natural finish.

2

LOCATION: R30 roof.

SAMPLE/IMAGE OBTAINED FROM: Bauder Limited. Sample not provided.

PRODUCT/DESCRIPTION: Inverted roof; loosely laid insulation boards over waterproof membrane and concrete pavers over.

COLOUR/FINISH: Concrete pavers.

3

Anodised aluminium, natural finish

LOCATION: Window, door frames and trims.

SAMPLE/IMAGE OBTAINED FROM: Schueco. Sample not provided.

PRODUCT/DESCRIPTION: Aluminium door and window joinery (profile TBC).

COLOUR/FINISH: Anodised aluminium, natural finish to match louvre envelope.

4

LOCATION: Window glazing.

SAMPLE/IMAGE OBTAINED FROM: Saint Gobain. Sample not provided.

PRODUCT/DESCRIPTION: Double glazing with 16mm air-filled cavity, 10mm outer Saint Gobain glass, 4mm inner Saint Gobain Planilux glass.

COLOUR/FINISH: Parsol Grey

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- Base building survey information by LCY and MSA

SCALE BAR

N

NOTE:  
ALL PRODUCTS ILLUSTRATED HERE ACCORD WITH THE ARCHITECTURAL INTENTION. HOWEVER THESE PRODUCTS MAY BE SUBSTITUTED DURING LCY'S PROCUREMENT PROCESS AND WILL BE REQUIRED TO RETAIN SUFFICIENT VISUAL AND MATERIAL SIMILARITY TO THE ARCHITECTURAL INTENT.

B	CG	24/01/18	PCC34: For Planning Approval
Previously issued as A400-PAW-A-03-XXX-DR-DE-735-006			
A	RC	10/02/17	For Planning Approval
Rev	Dim	Date	Description

Planning

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Client  
LONDON CITY AIRPORT

Project Name  
CITY AIRPORT DEVELOPMENT PROGRAMME

File  
CADP  
Pre-Commencement  
Condition 34:  
Material Details - Sheet 2

Discipline Architecture	Project of Issue For Approval		
Discipline Originator Pascall+Watson architects	Discipline Job No. 5077		
Checked By SW	Checked date 24/01/2018	Drawn By AB	Drawn Date 24/01/2018
Approved By MN	Approval Date 24/01/2018	Scale @ A1 1 : 300	

Building Grid Reference  
CADP

Proj Code	Orig	Disc	Zone	Level	File	Type	Discipline	Disc	Source/Ref	Rev	Status
A400 PAW	A	14	XXXXXX	DR	DE	213-002	B	IS	3		

Figure 4.0.1: Western Energy Centre Material Details



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- Base building survey information by LCY and MSA.

SCALE BAR

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NOTE:  
ALL PRODUCTS ILLUSTRATED HERE ACCORD WITH THE ARCHITECTURAL INTENTION. HOWEVER THESE PRODUCTS MAY BE SUBSTITUTED DURING LCY'S PROCUREMENT PROCESS AND WILL BE REQUIRED TO RETAIN SUFFICIENT VISUAL AND MATERIAL SIMILARITY TO THE ARCHITECTURAL INTENT.

B	AB	06/10/17	PCC34: For Planning Approval
Previously issued as A400-PAW-A-03-XXXX-DR-DE-735-005			
A	RC	10/02/17	For Planning Approval
Rev	Dim	Date	Description

Planning

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Client:  
LONDON CITY AIRPORT

Project Name:  
CITY AIRPORT DEVELOPMENT PROGRAMME

Title:  
CADD  
Pre-Commencement  
Condition 34:  
Material Details - Sheet 1

Discipline: Architecture		Purpose of Issue: For Approval	
Drawing Originator: Pascall+Watson architects		Originator Job No: 5077	
Checked By: SW	Checked date: 06/10/2017	Drawn By: AB	Drawn Date: 06/10/2017
Approved By: MN	Approval Date: 06/10/2017	Scale @ A1: 1 : 300	

Building Grid Reference:  
CADD

Proj Code	Orig	Dim	Zone	Level	Title	Type	Subapp/Orig	Revised	Rev	Status
A400-PAW	A	14	XXXX	DR	DE	213-001	B	S3		



WESTERN TERMINAL EXTENSION (WTE) MATERIAL DETAILS

1

Anodised aluminium, natural finish

LOCATION: Mesh screen over metal cladding.

SAMPLE/IMAGE OBTAINED FROM: James & Taylor. Loose sample provided.

PRODUCT/DESCRIPTION: Facade screen system; expanded aluminium mesh with trapezoidal eye slits and 15mm gap between panels. Steel face composite panel behind, RAL 7021.

COLOUR/FINISH: Anodised expanded aluminium mesh, natural finish.

2

RAL 7021 Black Grey colour.

LOCATION: Metal cladding at L00 external walls.

SAMPLE/IMAGE OBTAINED FROM: Booth Muir. Loose sample provided.

PRODUCT/DESCRIPTION: Facade panel system; aluminium metal panels with recessed joints.

COLOUR/FINISH: RAL 7021 Black Grey colour.

3

Black Grey colour.

LOCATION: Rotated mesh panels at ground level external walkway.

SAMPLE/IMAGE OBTAINED FROM: James & Taylor. Loose sample provided.

PRODUCT/DESCRIPTION: Screen panel; expanded aluminium mesh with trapezoidal eye slits fixed in steel frame.

COLOUR/FINISH: Anodised expanded aluminium mesh, Black Grey colour.

4

LOCATION: R30 roof.

SAMPLE/IMAGE OBTAINED FROM: Bauder Limited. Sample not provided.

PRODUCT/DESCRIPTION: Inverted roof; loosely laid insulation boards over waterproof membrane and concrete pavers over.

COLOUR/FINISH: Concrete pavers.

5

Clear glass

LOCATION: Window glazing.

SAMPLE/IMAGE OBTAINED FROM: Saint Gobain. Sample not provided.

PRODUCT/DESCRIPTION: Double glazing with 16mm air-filled cavity, 8mm outer Saint Gobain Planiclear glass, 10.8 mm inner Saint Gobain Planiclear glass.

COLOUR/FINISH: Clear glass (SGG Planiclear).

6

RAL 7021 Black Grey colour.

LOCATION: In all facade glazing elements.

SAMPLE/IMAGE OBTAINED FROM: Schueco. Sample not provided.

PRODUCT/DESCRIPTION: Aluminium curtain wall with vertical silicone joint (profile TBC).

COLOUR/FINISH: External framing in polyester powder coated (PPC) aluminium, RAL 7021, when required at the edges of the windows.

7

Anodised aluminium, natural finish

LOCATION: Selected windows

SAMPLE/IMAGE OBTAINED FROM: James & Taylor. Loose sample provided.

PRODUCT/DESCRIPTION: Expanded aluminium mesh panel with trapezoidal eye slits and metal frame.

COLOUR/FINISH: Anodised expanded aluminium mesh, natural finish.

8

LOCATION: Roof at ground level external walkway.

SAMPLE/IMAGE OBTAINED FROM: Kalzip. Loose sample provided.

PRODUCT/DESCRIPTION: Aluminium standing seam profiled roof.

COLOUR/FINISH: Polyvinylidene fluoride coating (PVDF) aluminium, RAL 7021 Black Grey colour.

Figure 4.0.2: Western Terminal Extension Material Details