

BIM CHAMPION

The background of the slide is a photograph of a modern building with a curved, metallic facade. In the foreground, there are several white, circular, umbrella-like structures on poles. The sky is clear and blue, and a palm tree is visible in the upper left corner.

BIM COMPETENCIES

Engr. RACHEL ROSAS ALCANTARA

*PMP-PMI, ISO-19650 BIM Project and Asset Information Professional-BSI
CPEM-ASEM, Lean Six Sigma-IASSC,
Autodesk Certified Professional,*

Path to BIM Career

BIM Report

- ▶ About Me
- ▶ My Career Synopsis
- ▶ Qualification, Certifications and Affiliations
- ▶ My Engineering professional Journey
- ▶ Becoming an APEC Engineer
- ▶ My Advance Level Engineering Profile

About Me

Civil Engineer - BIM Report



I'm **Rachel Rosas Alcantara**

Rizal, Philippines

**BACHELOR OF SCIENCE IN CIVIL
ENGINEERING**

University of Rizal System

- **Building Information Management,**
- **Virtual Digital Construction,**
- **BIM Manager**
- *Engineer and BIM enthusiast. I use my digital talents to create unique solutions that improve engineering projects' sustainability performance and suit project requirements.*

 rrosas@besix.ae

 +971 55 258 7146 (UAE)

Engineer

BIM Champion

My Career Synopsis

Engr. Rachel Rosas Alcantara

EXPERIENTIAL LEARNING

- ✓ Engineer with over 12 years of experience, proficient in project management, and utilizes (BIM) and Virtual Digital Construction Engineering (VDCE) both in the Design and Construction Phases of the Project. This includes Innovative megaprojects Middle East, Southeast Asia, and Europe, and they range from skyscrapers and stadiums to embassies and hospitals to metro stations bridges, and LNG terminals.



HIGHLIGHTS

- ✓ Design and Build of numerous mega projects amounting to \$ 2.60 Billion combined worth.
- ✓ Obtained certifications for numerous training programs and met various Engineering Specialties
- ✓ Awardee to the TFT Watchlist 2024: Top Engineers and Architects in the Middles East with over hundreds of entries
- ✓ Shortlisted in the Middle East Construction Technology Award 2023 with over 200+ original entries

SKILLS

- ✓ Corporate BIM standardization and Auditor
- ✓ Innovation Specialist
- ✓ Subcontractor relations, Management, and Negotiation
- ✓ Employee and Engineering Society
Training and Development

QUALIFICATIONS

- ✓ MSc in Construction Management, 2023
- ✓ Polytechnic University of the Philippines
- ✓ BSc in Civil Engineering, 2011
University of Rizal System
- ✓ Specialization
Building Information Management
Virtual Design and Construction
Auditor

CERTIFICATIONS

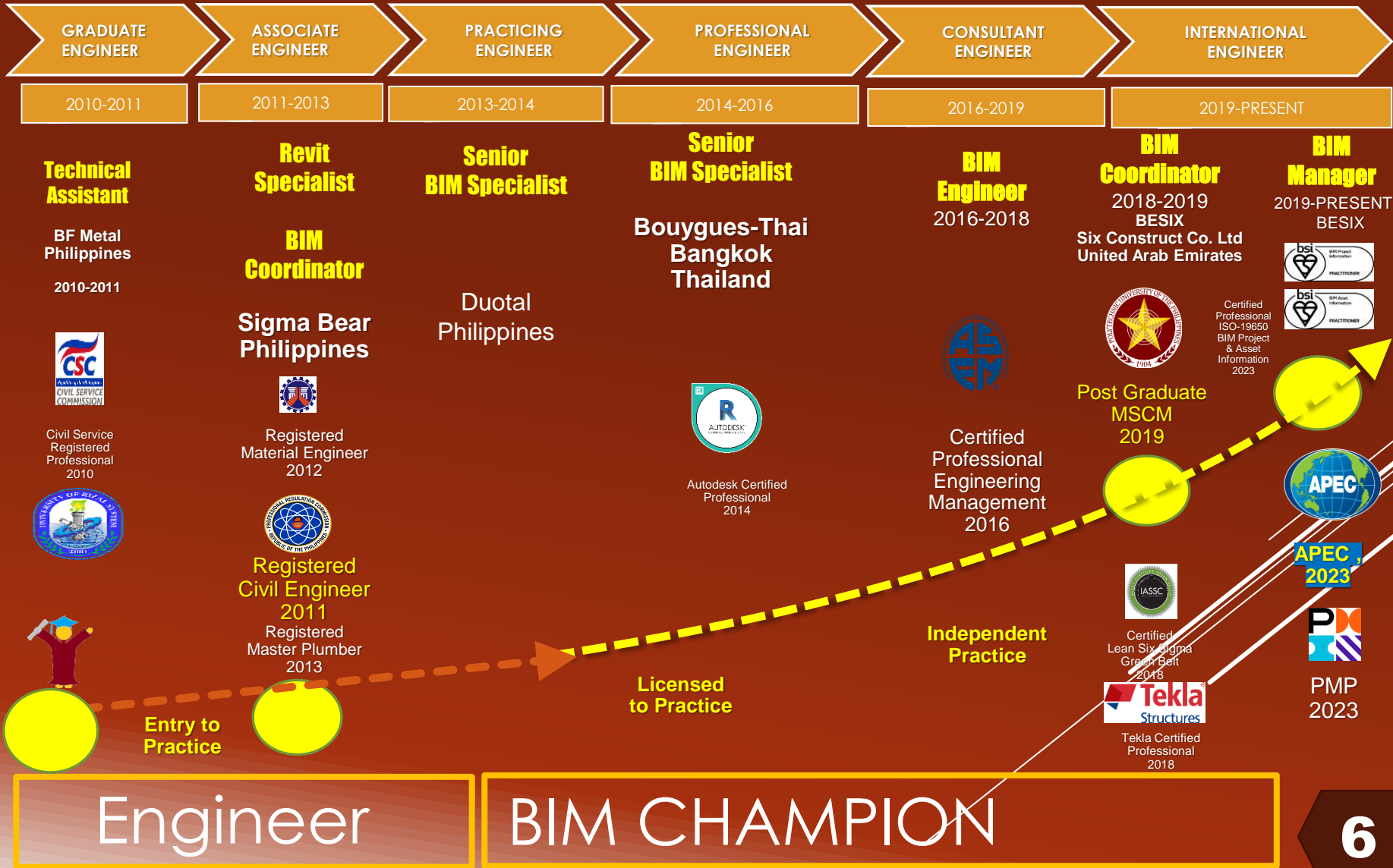
- ✓ **Certified Civil Service Professional**
2010, CSC Philippines
- ✓ **Registered Civil Engineer**
2011, PRC Philippines
- ✓ **Registered Master Plumber**
2013, PRC Philippines
2014, Autodesk Thailand
- ✓ **Certified Professional Engineering Management**, 2016, American Society for Engineering Mngmt, Alabama USA
- ✓ **Certified Lean Six Sigma green Belt**,
2018, IASSC, Arizona USA
- ✓ **Tekla Certified Professional**
2018, Trimble Philippines
- ✓ **ISO-19650 BIM Project and Asset Information Professional**
2023, British Standard Institute
- ✓ **Project Management Professional**
2023, Project Management Institute

AFFILIATIONS

- ✓ LIFE Member, Philippine Institute of Civil Engineers (PICE), UAE Chapter
- ✓ Chairwoman, COWME, Philippine Institute of Civil Engineers (PICE), UAE Chapter, 2021
- ✓ Vice-Chairwoman, COWME, Philippine Institute of Civil Engineers (PICE), UAE Chapter, 2023
- ✓ Member, Project Management Institute (PMI) , USA, 2021
- ✓ Member, American Society for Engineering Mngmt (ASEM) , USA, 2016

My Professional Engineering BIM Journey

Engr. Rachel Rosas Alcantara



My Visited Country and Involvement in the Project

Engr. Rachel Rosas Alcantara



Georgia
2020

- Tbilisi

Belgium
2018

- Leopold II Tunnel

Armania
2019

- Yerevan

France
2023

- Triangle Tower

Kazakhstan
2023

- Almaty

Saudi Arabia
2023

- Oxagon 1 Phase 1 Dredging & Quaywalls

Bahrain
2017

- Bahrain LNG Import terminal

Qatar
2022

- Barwa 9 Towers
- Lusail 2 Towers
- North Field Expansion.

UAE
2016

- Dubai Uptown tower
- Expo 2020 Belgium Pavilion
- Dubai Creek Tower (ECI)
- Al Shindagha Corridor Phase 2B2

Australia
2018

- Jubilee Place Tower

Hongkong
xxxx

- xxxx

Thailand
2014

- Noble Phloenchit 4 towers
- Australian Embassy

Philippines
2011

- Manila Bay Resorts, Hotel and Casino
- Mall of Asia Arena
- Hospital University of St. Tomas

Singapore
xxxx

- xxxx

12 Years Engineering Experiences and counting...

My Advance Level Engineer & BIM Profile

Engr. Rachel Rosas Alcantara

Contribution to the Development of Engineering Practice(PC1)

Imake important contributions to my profession and the community within my field of Building Information Management and Virtual Design and Construction through my extensive and diverse engineering experience, which showcases my significant depth of advance engineer

Demonstrated Engineering Leadership(PC3)

I have demonstrated excellence in both technical expertise and leadership skills, showcasing my diverse range of abilities as a practicing specialist in BIM within my filed of engineering.



Lead Significant Project (PC2)

I apply my project management skills and innovation expertise to bring new ideas and approaches to my project Lusail Tower in Qatar compose of 2 Towers 50 stories including podiums and basements totaling GFA of 660,000sq.m.

Engineering Business (PE1A) / Organizational Outcome

My level of strategic engineering management being an engineer with extensive and diverse experience contributed to the profession, business, and the community.

Advance Level Engineer

Code of Ethics

As an Advanced Level Engineer in the field of Building Information Management and Virtual Design and Construction, I adhere the fundamental principles of my profession, guided by a code of ethics consistent with the norms of conduct expected of an APEC Engineer.

My Advance Level Engineer & BIM Profile

Engr. Rachel Rosas Alcantara

As the BIM Manager for Lusail Towers' Design and Build. I was responsible for the development of building information management for every phases of the project (PC2), I contributed and demonstrated my advanced engineering expertise and skills (PC1), and I possessed an extensive and diverse level of technical and innovative leadership as a specialist within my engineering specialty in (PC3) project management and virtual design and construction.

(PC1) Contribution to the Development of Engineering Practice

I have involved in the growing emphasis in many countries, including my project in Qatar, in the adoption of Building Information Management (BIM) (PC1.1a). I'm also passionate to spread the knowledge in BIM for Besix organization which I conducted training in more than 15 BIM sessions (PC1.1e) and 3 trainings in Filipino organization in UAE (PC1.2a).



My Advance Level Engineer & BIM Profile

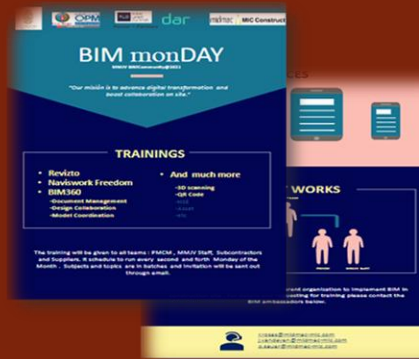
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PC1.1a

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PC1.1a



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(PC2) Lead Significant Project

I was involved in the development of BIM for Lusail Towers with two 50 stories, podiums and basement totaling GFA of 660,000 sq.m (PC2.3d). This involves my accumulation of data, reporting, and monitoring from a period of 42 months prior to the tender, design, construction, and commissioning stages of the Project (PC2.1a). I worked towards achieving the project goals in construction productivity (PC2.8a)

My Advance Level Engineer & BIM Profile

Engr. Rachel Rosas Alcantara

(PC2) Lead Significant Project

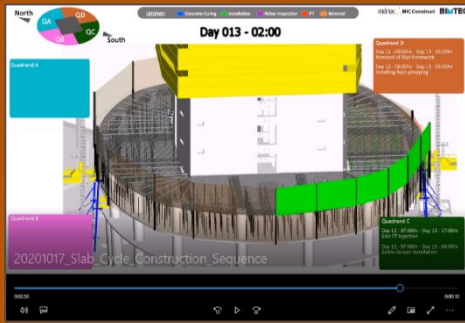
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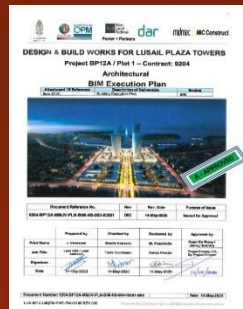


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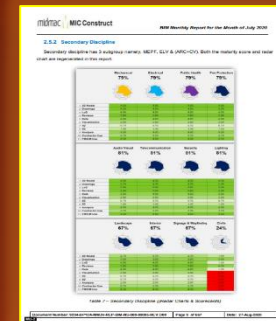


PC1.1a



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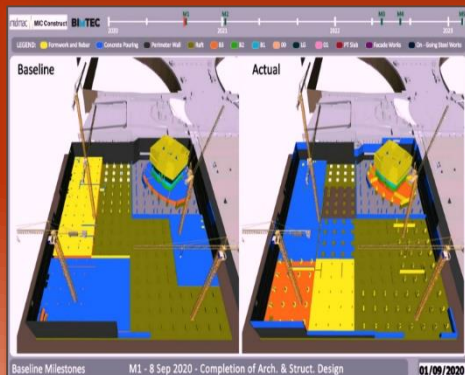
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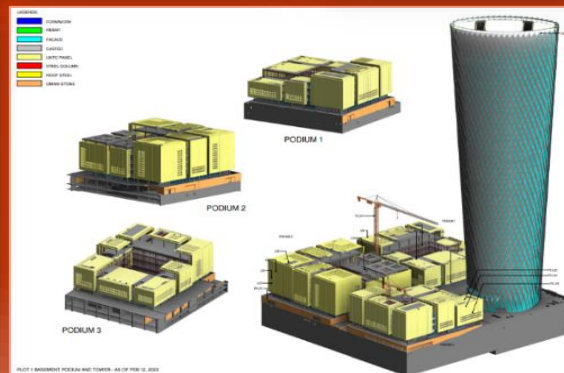
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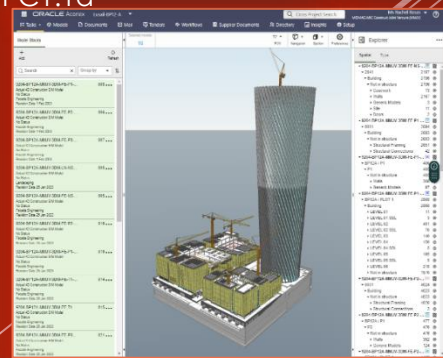
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(PC3) Demonstrated Engineering Leadership

I have applied the best practices and benefits that BIM can offer in terms of improving performance and enhancing the quality of construction for high rise buildings like my project in Lusail towers (PC3.1a). My expertise in leading BIM development has enhance the outcome of the project phases and effectively address challenges in the Architecture, Engineering and Construction sector (PC3.2c). Recently I'm being shortlisted for an award for a BIM Champion in individual Category representing my company Besix out of more than 200 entries. (PC3.2a).

My Advance Level Engineer & BIM Profile

Engr. Rachel Rosas Alcantara

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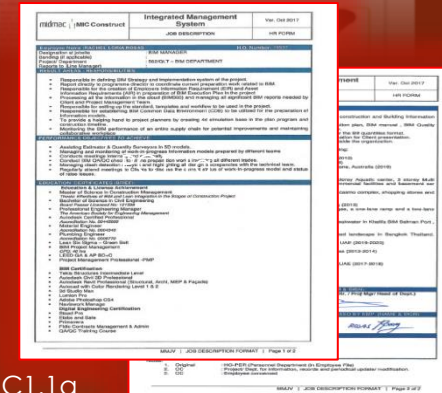
PC1.1a



PC1.1a



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My Advance Level Engineer Profile

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(PE1A) Engineering Business Outcome, Research and Development

I am responsible for setting the corporate standard of Besix in the Middle East that all projects must adhere to (PE1A.1a). I also took the lead in spearheading my project team and subcon to adapt to the new BIM360 operations that were necessary during the pandemic (PE1B.4g),

My Advance Level Engineer & BIM Profile

Engr. Rachel Rosas Alcantara

PC1.1a

PC1.1a

(PE1A) Engineering Business Outcome/ Research and Development

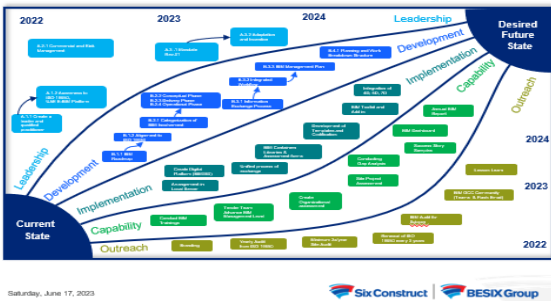
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PC1.1a

PC1.1a

Roadmap To create the ideal BIM construction ecosystem for DED



Saturday, June 17, 2023

Six Construct BESIX Group



PC1.1a

PC1.1a

PC1.1a

PC1.1a

Weekly Technical Topics for digital assistant (attendance is optional, language = EN, sessions will always be recorded)

Recordings can be found on this link: [BIM Technical Sessions](#)

If you have an interesting topic: @RachRosas or @VandenbergKrisof

- Some rules when you are presenting a topic:
- Brief introduction: what's the purpose of the tool, procedure etc.
 - Keep it technical, but not too technical (Audience = BIM Novice/intermediate, Steel, Façade, Methods, Planning...)
 - Time: 30 minutes of presentation, 15 minutes of questions afterward.
 - Try to show some live demonstrations... it shows more than a PowerPoint.

- Agenda**
- 10/02/2023: BIM Coordination with Aecme IMS by Hoang Pham (SMV)
 - 03/02/2023: KIP to BIM Tool by Mathew Onofri (R4)
 - 27/01/2023: BIM Manager by Yagmur Acik
 - 19/01/2023 = BIM @ Dubai: Visite to Energi
 - 09/12/2022 = Rachel L.Rosas (Dubai) - Laser Scanning @ Lusal Tower
 - 25/11/2022 = Michelle Ambrósio (ULB) - Brickbots
 - 18/11/2022 = Cancelled
 - 11/11/2022 = No Soapbox - Fall Break
 - 04/11/2022 = No Soapbox - Fall Break
 - 28/10/2022 = LLE - Genus & Power BI
 - 21/10/2022 = RCO = ICD19650 (5th But Time)
 - 14/10/2022 = ALU - Analytical modelling in Revit
 - 07/10/2022 = ADS - BIM Server
 - 30/09/2022 = KHE - GIS@COC
 - 23/09/2022 = TEST (Q&A) - OOHIC Accurate BIM
 - 16/09/2022 = FAA - Solibri user case: LOI audit, progress & QTO
 - 09/09/2022 = FFI - BIM interoperability: Tools for Revit
 - 02/09/2022 = M/RU - BIM Integration with Tecla (to be confirmed by Musak Malgorzata)
 - 26/08/2022 = MRC - Solibri Rules manager for IFC
 - 19/08/2022 = Scalable Robotics by Stuart Mearns
 - Summer Break
 - 24/06/2022 = TBD
 - 17/06/2022 = USA - Internship report automation of the reporting and the attribution of LBS Parameters by Louis Sartaner
 - 10/06/2022 = ADP - Fast Automation @ RGA-project
 - 03/06/2022 = HNU - Koder Structure on BIM360/ACC
 - 20/05/2022 = LLE - BIM360 - PowerBI
 - 13/05/2022 = DI - Control Plugin for Revit (Coordination of Opening)
 - 06/05/2022 = BCD Event - No Soapbox



bsi. Kitemark™ Certificate

This is to certify that:

BESIX
Avenue des Communautés 100
Brussels
1200
Belgium

Hubb Certificate Number: K04 782521

In respect of:

BIM Delivery Phase
Achieved Mile for Design, Construction and Commissioning in accordance with ISO 19650-1:2018 and ISO 19650-2:2018 following the assessment of Project Delivery and Collaborative Working Maturity when working with project stakeholders.

This means the right and license to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). It defines the terms of the Certificate. See the annex regarding as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) included on this Certificate provided it or from the above address.

For and on behalf of BSI:

Shahin Barhami
Shahin Barhami, Group Product Certification Director

First issued: 2023-05-26
Latest issue: 2023-05-26

Effective Date: 2023-05-26
Expiry Date: 2026-05-26

Page: 1 of 2

My Advance Level Engineer & BIM Profile

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**Advance
Level
Engineer**

(PE1A) Engineering Business Outcome/ Research and Development

I am responsible for setting the corporate standard of Besix in the Middle East that all projects must adhere to (PE1A.1a). I also took the lead in spearheading my project team and subcon to adapt to the new BIM360 operations that were necessary during the pandemic (PE1B.4g).

Code of Ethics

As a BIM Manager in the field of Building Information Management, I adhere the fundamental principles of my profession, guided by a code of ethics consistent with the norms of conduct expected of an APEC Engineer (PREAMBLE) which I have responsibilities to my states , community , employer, clients , employees, and colleagues (ART. II – VI)

Engr. Rachel Rosas Alcantara

BIM Engineer / Coordinator

BESIX, Six Construct Co Ltd,

Dubai UAE, 2016-2019

I carry out the leading and coordinating tasks for the Lusail Project while working remotely in Dubai (PC3.2c). I prepared the BIM Execution Plan carried out in harmony through the project. In May 2020, I and the team obtained BEP's code A approval through my constant request of meeting to resolved information gap, regularly evaluation of BIM coordination and analyzing the contracts (PC2.3e)

- I accomplished to get approval code A for the BIM model for Lusail Tower in Qatar with high efficiency of 93% ready for construction (PC2.3e).
- My designated team in BIM is meticulously modeled to LOD500 which can extract BIM Quantities from 3D model, operate as mediators in the cost process between different departments (PC2.3a).

BIM Manager

BESIX, Six Construct Co Ltd,

Dubai UAE, 2019-Present

As a result of my two years of implementing, monitoring, and controlling BIM in Lusail Tower, my role was elevated as **BIM Manager** in Civil Engineering, which is Qatar's most recent iconic project which is adjacent to the country's highest tower (PC3.2c).

In-house, I am in charge of supervising four BIM Lead engineers who have shown to be very effective and a great fit for the project (PE1A.2b).

- the structural cycle is shorter, lasting between 4 days - 5 days instead of the original 6 days (PC2.8b).
- the construction productivity exceeded the goal and was 2.02 hr./m³ (PC3.4b)



Thank You!!

Engr. Rachel Rosas Alcantara

PMP, BSI-BIM ISO 19650, MsCM, RCE, RMP, ACP, CLS-GB, CPEM

 rrosas@besix.ae

 +971 55 258 7146 (UAE)

"I want to become a BIM Champion and be an active and dynamic network of BIM enthusiasts dedicated to furthering engineering advancement and innovation. As a BIM Champion, I would have the opportunity to connect with the community and contribute to its continuous efforts to promote competitive and sustainable economic development."

Using BIM has changed the construction industry. It paves the way for us to try out innovative ideas in design, improve our processes, and complete more sustainable projects.

RACHEL ROSAS ALCANTARA

MsCM, RCEng, CPEM, LSS-CGB, ISO-BIMP
ACP, CME, RMP, CSPL

✉ rachel.rosas21@gmail.com ✉ rosas@besix.ae
☎ +971552587146 🌐 Dubai, United Arab Emirates



A. MY ROAD TO BIM MANAGER

My first intention was to work for the government, either in the military or as a public servant in some capacity as Civil engineer. My ability to further my profession and stay current with innovation advancements is one of my assets. As the years went by, I became more involved with iconic projects worldwide in private companies which maximize both my career and my network.

In my 12 years of experience as a registered Civil engineer, I have been entailed in 8 sets of iconic high-rise buildings, 5 sets of infrastructure and 2 sets of stadiums with a combined worth of \$3.15 billion, in growing prominence in the Philippines, Thailand, United Arab Emirates, France, Qatar and Saudi Arabia, all nation with highly required and ratified of Building Information Management (BIM). I strategically generate the comprehensive BIM requirements for both the appointing parties and local authorities, alongside the lean concept that aggrandize, meliorate, and advance the quality of tendering, design, and construction for projects to its exquisite and immense outcome raised and harnessed of my adroitness to formulate impact on the project.

B. EDUCATION

Master of Science in Construction Management

Polytechnic University of the Philippines
Dubai UAE-2019

Thesis: Application of BIM and Lean Integration in Construction Projects in UAE

Bachelor of Science in Civil Engineering

University of Rizal System Morong
Philippines-2011

Thesis: Design of Domestic Sewerage Septic System; An Input to Biogas Utilization

C. KEY EXPERIENCE FOR BUILDINGS

BIM Manager / BIM Coordinator	April 2019-October 2022 / 42 months
50 Levels: Lusail Tower Plot A and Plot B	Qatar / Besix - JV MIC Construct / MIDMAC

I was specifically brought on board based on my qualification and expertise for Qatar's recent iconic Lusail Towers project which is adjacent to the country's highest tower composed of two sets of 50 stories Tower totaling GFA of 660,000 sq.m, with mandatory implementation of BIM in the contracts throughout the design and construction phase of the project.

- Despite the significant COVID 19 outbreak during the Design and Construction of Lusail, the BIM team under my supervision, persist in collaborating with the entire project team in innovative ways and successfully delivered a multitude of projects with real-time sharing of 100s of an abundance of project information, early identification of 10,000s of conflicts, and reduced reworks.
- While working on the Lusail project, my expertise as a BIM ISO Auditor is my asset. I'm best suited to carry out the starting BIM process for all newly awarded projects in the Middles east namely Lusail Tower and Uptown Tower both more than 50 stories, because I'm an expert in the process and given all of my qualification.
- As the head of the BIM Team within the Main Contractor, I supervised a team of 5 members, and 20 appointing parties of BIM subcontractors, while more than half of the production was working remotely.
- My crucial responsibility whilst operating in a remote capacity in UAE as BIM Manager entails monitoring, controlling, and liaising with Construction, Operation, QAQC managers, subcontractors, and team leads across diverse trades, encompassing structural, architectural, MEP, vertical transport, external landscape, and facade.

ACHIEVEMENTS

- ✚ I accomplished to get approval code A for the BIM Deliverables for Lusail Tower in Qatar with high efficiency of 93% ready for construction.
- ✚ I am responsible for setting the corporate standard of Besix in the Middle East that all projects must adhere to. I also took the lead in spearheading my project team and subcon to adapt to the new cloud base operations that were necessary during the pandemic.

HIGHLIGHTS

- ✔ Design and Build of numerous mega projects amounting to \$3.15 Billion combined worth.
- ✔ Obtained certifications for numerous training programs and met various Engineering Specialties
- ✔ Shortlisted to the TFT Watchlist: Top Engineers and Architects in the Middles East with over hundreds of entries.
- ✔ Shortlisted in the Middle East Construction Technology Award 2023 under category of "BIM Champion of the Year" with over 200+ original entries.
- ✔ Proactive Engineer in Society and who offers Trainings and advancement opportunities.

I'm an engineer and BIM enthusiast. I use my digital talents to create unique solutions that improve engineering projects' sustainability performance and suit project requirements.



BIM Coordinator / Civil Engineer	October 2022 to Present / 13 months
77 Levels: Triangle Tower	France / BESIX

I am contributing to BIM coordination and integrating the project's information model. I conduct a BIM quality assurance and quality control audit on all task delivery work performed by all trades.

BIM Coordinator / Civil Engineer	June 2018 to Nov 2018 / 5 months
42 Levels: Dubai Uptown Tower	BESIX

I joined this project in its earliest construction phase. I drafted the initial BIM execution plan. I am responsible for establishing the project's, templates, and workflow, as well as ensuring that the subcontractor adheres to the BESIX corporate standard. I am reviewing the model through clash detection and conducting BIM coordination meetings with the entire team to address and resolve the issues.

BIM Expert / Civil Engineer	March 2017 to March 2018 / 12 months
1 KM Tower Height	UAE / BESIX / Samsung / AECOM
Early Contractor Involvement (ECI) The Tower Dubai Creek Harbor, Future Tallest Tower in the world	

I was selected to be a part of this historic and iconic project for the world's next highest skyscraper. I support the team on the project, which has complex and extensive BIM requirements. I collaborated with method teams and planners through the establishment of a thoroughly rendered four-dimensional (4D) simulation of the construction sequence. Regularly, I provide the commercial team with quantities taken from the 5D model that were derived from the BIM. This is another way that I help the team in developing the Bill of Quantities

Senior BIM Modeler / Civil Engineer	January 2015 to February 2016 / 13 months
Australian Embassy	Thailand / Bouygues-Thai / VSL Australia Limited

I am involved in the process of BIM coordination and the preparation of quantity reports. I am accountable for generating shop drawings that pertain to the structural and architectural aspects of a project. I visited the site to assess the current state of progress.

Senior BIM Modeler / Civil Engineer	February 2014 to January 2015 / 11 months
50 Levels: 4 Towers Noble Ploenchit	Thailand / Bouygues-Thai / VSL Australia Limited

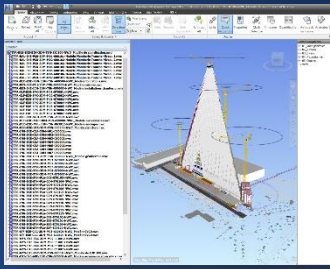
As part of my role, I assist with BIM coordination. My responsibility involves producing shop drawings that relate to both the structural and architectural aspects of the project. This includes section and plan details, as well as surveying works.

Senior BIM Specialist / Civil Engineer	June 2013 to January 2014 / 7 months
9 Levels: Private Hospital in University of Sto. Tomas	Duotal

I actively assist with the coordination of the BIM deliverables and the progress reports. I am responsible for producing contract requirements for the structural MEP and architectural drawings of a project, making sure they are finished on schedule, authorized by the consultant, and ready for construction. I went to the location to evaluate the present level of development on site.

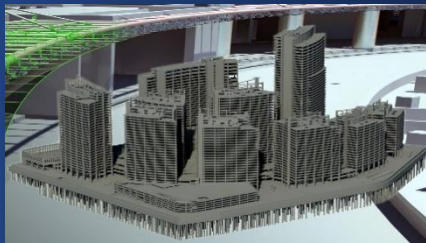
Senior BIM Specialist / Civil Engineer	April 2013 to June 2013 / 2 months
Manila Bay Resort	Philippines / Duotal

I support BIM coordination as part of my line of work. Producing shop drawings for the project's structural trade is my duty. General arrangements and details ready for construction are included in this.



Revit Specialist	Nov 2013 to April 2014 / 6 months
45 Levels: 9 Barwa Towers	Qatar Bouygues - Sigma bear

I lead the effort of putting together a set of BIM models, construction document and performing coordination tasks with Sigma bear. I modeled 3D structural and architectural based on construction designs and SDA (Site Design Amendment).



D. KEY EXPERIENCE FOR MARINE AND INFRASTRUCTURE

BIM Manager / Civil Engineer	February 2023 to Present / 9 months
Oxagon Port Quaywalls & Dredging Phase 1	Saudi Arabia / BESIX-MBL / Boskalis Consortium

I joined this project in its earliest construction phase. I got the approval of BIM execution plan. I am responsible for establishing the project's, templates, and workflow, as well as ensuring that the subcontractor adheres to the Client Neom and BESIX corporate standard. I am reviewing the model through clash detection and conducting BIM coordination meetings with the entire team to address and resolve the issues.



BIM Coordinator / Civil Engineer	November 2018 -April 2019/2017 / 14 months / UAE / BESIX
Al Shindagha Corridor consist 2 fly over bridges with 6 lanes in each direction for 1.2km , In addition 1 ramp and 2 tunnels,	

As head office support, I joined this project at its early stages of construction. I am responsible for defining the project's BIM implementation system and BIM strategy. I oversee the production of information models during the construction phase of the project. I assess the subcontractor's progress and advise the Commercial team regarding the subcontractor's monthly progress report.



BIM Coordinator / Civil Engineer	March 2017 to march 2018 / 12 months / UAE / BESIX
Expo 2020 Pedestrian Bridges and Retaining walls	

I am in charge of leading the team in the delivery of IFC drawings for Design Stage, and we recently utilized civil 3d for the modeling of retaining walls for the very first time in BESIX. This marks the beginning of the adaptation of civil 3d for usage in subsequent tender projects. In addition to discussing the information with the BIM team, my responsibilities include compiling and reviewing on the data that was provided by the Design engineers to be represented in the IFC drawings.



BIM Expert	January 2016 to March 2017 / 14 months
Bahrain LNG Import Terminal	UAE / BESIX

I am in charge of developing and producing IFC drawings for the design stage, and I utilized Revit tools for the BESIX marine project. This is the first marine project to use BIM, and it represents the start of BIM implementation for marine tender projects and awarded projects. My tasks involve acquiring and interpreting data supplied by Design Team to be appropriately incorporated in the IFC Design Stage.



BIM Coordinator	October 2013 to November 2013 / 2 months Hong Kong / Dragages / SigmaBear
MTR Station Connecting Shatin to Central Link Project Hung Hom Station and Stabling Siding (Tender Stage)	

I am the company representative of Sigma Bear in Hong Kong as BIM Coordinator. I lead the effort of putting together a set of BIM models, tender document and performing coordination tasks with Sigma bear. I gathered all sets of information in different disciplines. I review the issued tender drawings, identify any unclear portion and report to the engineer in charge in the project.



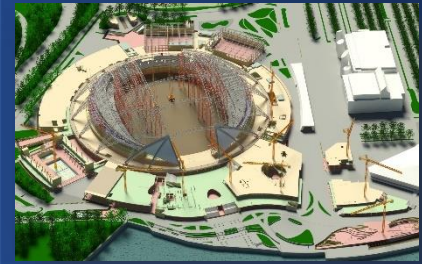
E. KEY EXPERIENCE FOR STADIUM

Revit Expert	December 2011 to October 2013 / 22 months
Singapore Sports Hub	Singapore / Dragages / Sigmabear

I created shop drawings for rebar details for the first three months, followed by promotion to Revit Expert to model updates based on construction designs and SDA (Site Design Amendment).

Assistant Technical Manager	November 2010 to June 2011 / 8 months
Singapore Sports Hub	Philippines / BF Metal Corporation

I am in charge of collecting and submitting daily, weekly, and monthly reports on time, mainly giving support to the Technical Manager. Incoming material deliveries were scrutinized. A material receiving inspection report was prepared by the project in charge and arranged by me. I visited the location and verified and evaluated the designs. I asked for supplies, gear, and cars for transportation. I created and organized the ISO specifications.



F. FREELANCE WORK

BIM Instructor	
OFCEA - Overseas Filipino Civil Engineers Association	December 2018 and April 2019
RS Management Consulting and Training Services	June 2016

I prepared class lectures, assignments, and activities per Course Outline. Discussed basic up to advance course and plugins of Revit software, I provided a nurturing environment to support student success and retention. Administer student assessments and record results. I conducted one on one coaching or in house training and provided student support outside of class time hold office hours.

Consultant Material Engineer	
Orientech CDC	March 2013 to April 2013

Inspect and analyze the improvement of the concrete work in the following barangays in Quezon City Philippines: Magsaysay Avenue, Betty Go Belmonte and Laging Handa.

G. LEVEL OF BIM COMPETENCIES

Level 10	Revit	Level 8	3D Studio Max
Level 10	Naviswork	Level 8	Photoshop
Level 10	ACC/ BIM360	Level 8	Infraworks
Level 9	Revizto	Level 8	Civil 3D
Level 9	Autocad	Level 7	Etabs
Level 9	Tekla Structure	Level 7	Synchro 4D
Level 9	Lumion	Level 6	Staad
Level 8	Primavera	Level 5	Dynamo
Level 8	Rushforth Tools	Level 5	Relatics
Level 8	Tekla BIMSight	Level 5	BIM Vision

Note: LEVEL 10 IS THE HIGHEST

H. AWARDS / CITATION RECEIVED

Date Received	Name Of Awards	Name/Address of Awarding Organization
March 01 2024	Awardee To the Filipino Times (TFT) Watchlist: Top Engineers and Architects in The Middles East with Over Hundreds of Entries	The Filipino Times: Middle East
April 24 2023	Shortlisted In the Middle East Construction Technology Award 2023 Under "BIM Champion Category with Over 200+ Original Entries	Construction Technology Award: Middle East 2023
March 25, 2023	Certificate of Recognition: Consistent Exemplary Performance and Supports as Committee on Ways and Means (COWME)	PICE-UAE: Board of Directors 2023
February 24 2023	Shortlisted To the Filipino Times (TFT) Watchlist: Top Engineers and Architects in The Middles East with Over Hundreds of Entries	The Filipino Times: Middle East
December 10, 2022	Certificate of Recognition for Consistent Exemplary Performance as Member of Committee on Membership. PICE UAE- Year End Assembly 2022	PICE-UAE: COME 2022
October 28, 2022	Certificate of Appreciation: Valued Support And Utmost Generosity to The Committee on Corporate Social Responsibility (CCRR) 2022 Construction of Pedro T. Orata National High School; Clinic	PICE-UAE: CCSR Year 2022
July 09, 2022	Certificate of Achievement in Recognition of Consistent Exemplary Performance as Member of Committee on Membership. Mid- Year Assembly 2022	PICE-UAE: COME 2022
June 21, 2019	Certificate of Appreciation as Technical Speaker: 2019 Mid-Year Assembly of The PICE UAE Chapter: Theme Competency Advancement Towards CE 4.0	PICE-UAE: BOD 2019
April 19 & 26 2019	Certificate of Appreciation in Recognition of Outstanding Contribution for Delivering a Lecture: Autodesk Revit 2019 Training Course	Overseas Filipino Civil Engineer Association OFCEA-UAE: Board of Directors: 2019
February 02 2019	Certificate of Recognition of Participation and Valuable Presentation of Innovative Research: 2 nd International Conference in Architecture and Engineering, Construction and Project Management	PSPPM & PUP- Abu Dhabi UAE
December 7 & 14 2018	Certificate of Appreciation in Recognition of Outstanding Contribution for Delivering a Lecture: BIM Revit Architecture and Structure 2018 Training Course	Overseas Filipino Civil Engineer Association OFCEA-UAE: Board of Directors: 2018

I. PROFESSIONAL QUALIFICATIONS / REGISTRATION

Date of Registration	Registration Body	Address of Registration Body	Professional Discipline
December 15, 2023	Project Management Institute	Pennsylvania, United States	Project Management Professional
July 03, 2023	British Standards Institution (BSI)	London, United Kingdom	ISO: 19650 BIM Project Information Professional
July 03, 2023	British Standards Institution (BSI)	London, United Kingdom	ISO: 19650 BIM Asset Information Professional
June 15, 2023	British Standards Institution (BSI)	London, United Kingdom	ISO: 19650 BIM Project Information Practitioner
June 15, 2023	British Standards Institution (BSI)	London, United Kingdom	ISO: 19650 BIM Asset Information Practitioner
October 05, 2021	Department of Municipalities and Transport	Abu Dhabi, United Arab Emirates	Licensed Practicing Engineer
August 5, 2018	IASSC – Arizona, United States	Dubai, United Arab Emirates	Certified Lean Six Sigma – Green Belt
March 02, 2018	VTS Co.-Trimble, New York USA	Quezon City, Philippines	Certified Tekla Structure Advance Professional

February 23, 2018	VTS Co.-Trimble, New York USA	Quezon City, Philippines	Certified Tekla Structure Intermediate Professional
November 29, 2016	American Society for Engineering Management	Dubai, United Arab Emirates	Certified Professional Engineering Manager
December 28, 2014	Autodesk-Thailand	Bangkok, Thailand	Autodesk Certified Professional
August 29, 2013	Professional Regulation Commission- (PRC) Philippines	Paredes St., Manila Philippines	Licensed Master Plumber
October 22, 2012	Department of Public Works and Highways (DPWH)- Philippines	Edsa, Quezon City, Philippines	Accredited Material Engineer
December 05, 2011	Professional Regulation Commission- (PRC) Philippines	Paredes St., Manila Philippines	Licensed Civil Engineer
December 15, 2010	Civil Service Commission- (CSC) Philippines	Diliman, Quezon City, Philippines	Certified Civil Service Professional

J. FIELD(S) OF SPECIALIZATION

- a. [Project Management And Construction Engineering \(PMCE\)](#)
- b. [BIM Management \(BIM\)](#)
- c. [Technical Engineering](#)

K. AFFILIATION IN BUSINESS / PROFESSIONAL / CIVIC ORGANIZATION

Inclusive Date	Name/Address of Organization	Positions Held
2023-Present	Society of Engineer (SOE) UAE	Member
2022-Present	Project Management Institute (PMP)	Member
2022 To Present	Philippine Institute of Civil Engineers- UAE Chapter	Life Member
2021 - 2005	Philippine Institute of Civil Engineers- UAE Chapter	Member
2023	Philippine Institute of Civil Engineers- UAE Chapter	Vice Chairman (COWME), Committee on Ways and Means
2022	Philippine Institute of Civil Engineers- UAE Chapter	Committee Member (COME) Committee on Membership

L. PROFESSIONAL TRAININGS/SEMINARS ATTENDED

Program Description/Title	Name/Address of Provider	Role (e.g., Speaker)	Units Earned	Dates Attended
2019 Mid-Year Assembly of the PICE UAE Chapter: Theme Competency Advancement Towards CE 4.0	PICE UAE	Speaker	10	2019 June 21
Autodesk Revit 2019 Training Course	OFCEA-UAE	Speaker	10	2019 April 19 & 26
2 nd International Conference in Architecture and Engineering, Construction and Project Management	PSPPM & Pup- Abu Dhabi UAE	Speaker	40	2019 February 02
Bim Revit Architecture and Structure 2018 Training Course	OFCEA-UAE	Speaker	10	2018 December 7 & 14

Program Description/Title	Name/Address of Provider	Role (e.g., Speaker)	Units Earned	Dates Attended
Advance Level Engineering Mentorship: APEC Engineer Registries	PTC-MENA	Attendees	20	2023 Mar 01– 2023 Mar 29
Advance Level Engineering Write shop: ASEAN and APEC Engineer Registries	PTC-MENA	Attendees	8	2021 April 02
Bim ISO 19650 Part 6: Health and Safety Training Course	BSI- UK	Attendees	8	2023 May 19
Bim ISO 19650 Part 5: Security and Bim Training Course	BSI- UK	Attendees	8	2023 May 18
Bim ISO 19650 Part 4: Information Exchange Train. Course	BSI- UK	Attendees	8	2023 May 17
Bim ISO 19650 Part 3: Information Management in Operational Phase Training Course	BSI- UK	Attendees	8	2023 May 16
Bim ISO 19650 Part 2: Project Delivery Training Course	BSI- UK	Attendees	8	2023 May 15
Bim Fundamentals Training Course	BSI- UK	Attendees	16	2023 May 11-12

BESIX Development Academy 1.1 Communication, Design Base, Estimating, Lean Awareness, Methods Train. Course	BESIX-UAE	Attendees	32	2023 May 02-2023 May 05
Communication Skills Workshop	Solomon P. Solution UAE	Attendees	8	2023 May 01
Certificate Of Attendance: 1 st Technical Collaboration Of PICE- UAE Chapter and ASEP RSC UAE Theme: Strategic Process of Project from Concept to Construction	PICE-UAE & ASEP RSC UAE	Attendees	2	2023 March 25
4 th PICE International Chapters Collaboration Webinar: Resilient and Innovative Solution in The Civil Engineering Specialization – Day 2	PICE-UAE- Abu Dhabi	Attendees	2	2022 July 31
4 th PICE International Chapters Collaboration Webinar: Resilient and Innovative Solution in The Civil Engineering Specialization – Day 1	PICE-UAE- Abu Dhabi	Attendees	2	2022 July 30
2022 PICE Midyear National Convention and Technical Conference	PICE NATIONAL	Attendees	15	2022 June 17 & 18
9 th International Technical Conference & 3 rd Virtual Collaboration Webinar with PICE International Chapter	PICE-USA -Las Vegas, Nevada	Attendees	5	2022 April 29 & 30
Training Course Program: Microsoft Power BI	EP&MDT-UAE	Attendees	24	2020 Nov 05 – Nov 26
PICE 1 st Webinar Lecture Series: Seismic Design of RC Beams of Special Moment Frames According to NSCP 2015	PICE NATIONAL	Attendees	2	2020 May 09
PICE 1 st Webinar Lecture Series: Rebooting Public Transport for The New Normal – Imperatives for Information Exchange and Collaborative Governance	PICE NATIONAL	Attendees	2	2020 May 08
PICE 1 st Webinar Lecture Series: Geosynthetic Applications in Civil Engineering	PICE NATIONAL	Attendees	2	2020 May 06
PICE 1 st Webinar Lecture Series: Is Sars-Cov-2 In My Water Sewer. Summary of The Current Science	PICE NATIONAL	Attendees	2	2020 May 05
PICE 1 st Webinar Lecture Series: Water Resources Challenge	PICE NATIONAL	Attendees	2	2020 May 04
Career Path Enhancement and Adm / Dubai Municipality Engineer Registration Seminar	PICE-UAE- Abu Dhabi	Attendees	8	2020 February 21
Training Course Program: Primavera Basic Training Course	OFCEA-UAE	Attendees	16	2019 October 11 & 18
BESIX Potential Academy High Rise Building Training	BESIX-UAE	Attendees	8	2019 Oct 15
Training Course Program: Fidic Contracts Administration & Management Training	OFCEA-UAE	Attendees	16	2019 August 7 & 16
Training Course Program: Autodesk Revit 2019 Façade Training Course	OFCEA-UAE	Attendees	16	2019 July 6 & 13
Training Course Program: Quality Assurance / Quality Control Training	OFCEA-UAE	Attendees	16	2019 March 8 & 15
Training Course Program: ETABS And Safe Training Course	OFCEA-UAE	Attendees	16	2019 February 15 & 22
RELATICS Training Configuration Basic	BESIX-UAE	Attendees	5	2018 July 10
Training Course Program: Lean Six Sigma Green Belt Training	GMC-UAE	Attendees	40	2018 May 04- July 27
Tekla Structures Advance Training Course	VTS-Philippines	Attendees	15	2018 February 29 – March 2
Tekla Structures Intermediate Training Course	VTS-Philippines	Attendees	20	2018 February 19-23
Training Course Program: LEED AP Exam Preparatory Course	RSMETS-UAE	Attendees	40	2017 Sept 15 - 2017 October 13
Training Course Program: Lean Six Sigma Green Belt Training	RSMETS-UAE	Attendees	40	2017 Mar 03 – 2017 April 21
Training Course Program: Project Management Professional	RSMETS-UAE	Attendees	40	2017 Jan 27 – 2017 March 10
Training Course Program: Professional Engineering Management Training	RSMETS-UAE	Attendees	40	2016 Aug 12 – 2016 Sept 30
Training Course Program: Autodesk Civil 3d 2016	Autodesk, CADD Centre Philippines	Attendees	40	2016 July 29 – August 24
Training Course Program: Building Information Management	RSMETS-UAE	Attendees	40	2016 May 06 – 2016 June 24

Training Course Program: LEED Green Associate Exam Preparatory Course	RSMETS-UAE	Attendees	40	2016 April 15 – 2016 June 03
Training Course Program: 3d Studio Max 2010	Autodesk, Microcadd- Philippines	Attendees	45	2010 April 05 - May 05
Training Course Program: Autodesk Revit 2009	Autodesk, Microcadd- Philippines	Attendees	45	2009 April 25- July 11
Training Course Program: Staad Pro 2004	Autodesk, Microcadd- Philippines	Attendees	30	2008 August 10- Sept 14
Training Course Program: AutoCAD 2008 with Color Rendering Level I And Level II	AUTODESK, Microcadd- Philippines	Attendees	70	2008 April 10- May 29

M. PERSONAL CIRCUMSTANCES

Date of Birth : May 21, 1988
 Gender : Female
 Age : 35 yrs. Old
 Birthplace : Angono Rizal - Philippines
 Civil Status : Married (3years)
 Height / Weight : 5 ft. & 4" / 62 kgs
 Citizenship/ Nationality : Filipino
 Language : Tagalog / English / Thai / French

N. REFERENCES

Engr. Benoit Meulewaeter	Arch. Marianne Celeste Zantua
(BESIX- ME) Head of Engineering Department	Bouygues UK
Design Director	Structural Design Manager / BIM Manager
bmeulewaeter@besix.ae / +971 56 188 7745	marianne.celeste@bouygues-uk.com /+447423270126
Engr. Kassem Benabid	Eng'r Roque Senga
(BESIX-ME) Head of Virtual Design and Construction - Present	IntPE (UK), PEM, MCIIOB, CCM
Project Manager	Industrial EPC Project Specialist in Abu Dhabi
kbenabid@besix.ae / +971 56 687 3317	roquesenga@gmail.com /
Eng'r. Rania Shawky	
(BESIX- ME) Head of Virtual Design and Construction 2019	
Project Manager	
rshawky@besix.ae / +971 50 557 9756	

I hereby certify that the above stated information is true and correct to the best of my knowledge, belief, and ability. Any misinterpretation or false information stated herein will be grounds for immediate cancellation of my application or my employment.







RACHEL ROSAS ALCANTARA




PATH TO BIM CHAMPION ENGINEERING & BIM REPORT

Name of Candidate: RACHEL ROSAS ALCANTARA **Date of Application:** FEB 06, 2024
Professional Discipline: CIVIL ENGINEERING

Career Episode Title: Implementation of BIM in the Design and Build of Lusail Towers in Qatar.	Competency Elements
Dates of Career Episode: 2019 2023 (42 Months)	Claimed

<p>CE 1.1 Introduction (688)</p> <p>In my 12 years of experience as a registered Civil engineer, I have been entailed in 8 sets of iconic high-rise buildings with a combined worth of \$3.15 billion, in growing prominence in the Philippines, Thailand, United Arab Emirates, France, and Qatar, all nation with highly-required and ratified of Building Information Management (BIM) (PC1.1a). I strategically generate the comprehensive BIM requirements for both the appointing parties and local authorities, alongside the lean concept that aggrandize, meliorate, and advance the quality of construction for high buildings to its exquisite and immense outcome raised and harnessed of my adroitness to formulate impact on the project. (PC2.7a). Despite the significant COVID 19 outbreak during the Construction of Lusail , the BIM team under my supervision, persist in collaborating with the entire project team in innovatives ways and successfully delivered a multitude of projects with real-time sharing of 100s of an abundance of project information, early identification of 10,000s of conflicts, and reduced reworks (PC1.1d).</p> <p>I was specifically brought on board based on my qualification and expertise for Qatar's recent iconic Lusail Towers project which is adjacent to the country's highest tower composed of two sets of 50 stories Tower totaling GFA of 660,000 sq.m, with mandatory implementation of BIM in the contracts throughout the design and construction phase of the project. (PC2.1c). In my previous involvement in the nine-tower complex of Barwa Towers in Qatar in 2011, which is considered one of the highest and most mixed-use towers in Qatar, with approximately four other buildings with more than 50 stories in Asia demonstrate that my area of expertise is high-rise structuresm, however the efficacy of the lusail project cannot be guaranteed as each project is unique, (PC3.1a). In line with the field of my work, as a growing and fast innovation, I definitely can build high-class buildings and towers that suit and reach worldwide appeal and transcend national boundaries (PC3.1a). I am considering the most</p>	   	<p style="text-align: right;">PC1.1a</p> <p style="text-align: right;">PC2.7a</p> <p style="text-align: right;">PC1.1d</p> <p style="text-align: right;">PC2.1c</p> <p style="text-align: right;">PC3.1a</p> <p style="text-align: right;">PC3.1a</p>
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NAME: RACHEL ROSAS ALCANTARA SIGNATURE:  DATE: FEB 06, 2024

<p>trusted one in line with extending deeper and more intensive ways to build more towers that surely align with BIM requirements and benefit all (PC3.1a). In addition, I conduct technical reviews to verify the comprehensiveness, lucidity, and precision of the design and construction of the structural elements and synchronization of towers architecture , which this BIM process enhances to make a more substantial contribution to the advancement of project progress (PC3.1b)</p>	 	<p>PC3.1a</p> <p>PC3.1b</p>
<p>As the head of the BIM Team within the Main Contractor, I supervised a team of 5 members, and 20 appointing parties of BIM subcontractors, while more than half of the production was working remotely (PC3.5c). My crucial responsibility whilst operating in a remote capacity in UAE as BIM Manager entails monitoring, controlling, and liaising with Construction, Operation, QAQC managers, subcontractors, and team leads across diverse trades, encompassing structural, architectural, MEP, vertical transport, external landscape, and facade. (PC3.5c) I am known for my leniency and compassion to uncover new ways of solving engineering problems and construction methodology through adaptation of BIM (PC3.2a), in advancing my engineering journey to its finest and intensified projects and in the field that totally entangled my prowess and aptitude to escalate with modernized, artistic, and asymmetrical shapes of projects (PC3.2c)</p>		<p>PC3.5c</p> <p>PC3.5c</p> <p>PC3.2a</p> <p>PC3.2c</p>
<p>After completing my mastered research titled “ Application of BIM and Lean Integration in Construction Project” and staying updated with BIM advancement and continuously researching the effectiveness of BIM application, I have implemented the best and the verified preeminent of the ideas initiated in terms of enhancing the design and construction methodology addressing the role of BIM in the parameters of Engineering borough like my project in Lusail Towers (PC3.1a). In the most prominent achievements I have been recognized, in the recently held Construction Festival Award (PC3.5b). My diligent endeavors in the realm of Building Information Management have culminated in a commendable achievement, being shortlisted from more than 200 finalists in the prestigious event in the Middle East that took place on June 1st at the esteemed Conrad Hotel Dubai, UAE (PC3.5a).I administered the advancement and preference of the success of the Lusail project on behalf of Besix through giving quantifiable outcomes in the implementation of BIM ISO-19650, approach strategy in design processes, planning, supply chain coordination, cost control, scheduling, and the administration of BIM (PC3.5e)</p>	<p>PC3.1a</p> <p>PC3.5b</p> <p>PC3.5a</p> <p>PC3.1e</p>	

CE 1.2 Background (384)

Based on my assessment, I am able to have estimated and well-defined the gravity of this project appointed to me that the Lusail region has been designated as the chosen location for the FIFA World Cup 2022 to accommodate approximately 20% of Qatar's growing population, this indicates an expedited execution of (2.0) sets of 50 stories tower for both the design and construction phases with demanding timeframe within 3 years,. **(PC2.1b)** Upon my further review, it became evident that the Lusail Towers Project is located in the "new " develop Lusail city features ultra-high-performance facade and complexity appearance , which has a correspondingly strong significant need for BIM requirements from the client applies to Lead Appointed Party as Main contractor and Appointing Parties Subcontractor. **(PC2.7b)**

PC2.1b

PC2.7b

In my expertise as practicing engineer, I possess expertise across various fields, including planning and cost. I was in charge with the responsibility of regulating the demanding BIM management for the Lusail Project as per to BIM Execution Plan correspond to ISO-19650 part 2 , started from pre-tender all the way through design, build, and initial commissioning **(PC2.1c)**. During a 42-month time frame, I systematically gathered and processed data to different sources to generate comprehensive BIM deliverables, reports, and progress tracking makes it predominantly reliable **(PC2.1a)**. I signify the BIM production to oblige appointing party

PC2.1c

PC2.1a

subcontractors to enforce BIM process in industrializing task deliverables, in addition to that covid 19 pandemic greatly impact the normal routine of delivering task **(PC3.4a)**. I observed extremely difficult to some specilize trades like architectural finishes keeping up with BIM requirements , I provide supplementary assistance and direction for the specialized subcontract to adopt BIM inovation in BIM360 and develop its own BIM process which still meet the project requirements **(PC3.1d)**.



PC3.4a

PC3.1d

I was provided with data, structural cycle had been successfully reduced to 4-5 days, down from the initial 6-day cycle. With my coordination and strategic efforts and proactive approach to resolving construction issues prior to commencing work, the construction productivity goal and the target were surpassed, and the project achieved a productivity rate of 2.02 hours per cubic meter **(PC2.8b)**. I am responsible for monitoring the BIM deliverables until the handover stage that ensure optimal design and construction of the project through implementation of BIM execution Plan and lean integration, which promote stability and progression in the task delivery process. **(PC2.6b)**.



PC2.8b

PC2.6b

CE 1.3 Identifying the Cause of the Problem (331)

Built environments for mixed-use occupancies by the human populace engulfed my engineering imagination

in many ways such that concepts at corresponding shapes and dimensions cannot be undermined when location features contemporary yet expression



of scenic art dominates, of which, Lusail City's urbanization program was situated in North of the city centered Doha Qatar (**PC2.1b**). It can be noted that my engagement with this type of projects predominantly was characterized by multifaceted encounters with interlinked stakeholders whose requirements abound incessantly coupled with tyrannies of urgency (**PC2.8a**). Although I may have done salient inputs at baseline schedules, milestones' targets are rarely established with consistent completions and executions (**PC2.6a**). Incidentally, having this two-50 stories building totaling GFA of 660,000 sq.m., which was envisioned to attract investors in the center of the newly developed Lusail city of Doha, still gotten me to a highly grueling inception stage and aggressive engineering disciplines' clashes (**PC2.6c**).

Despite of my separately done (4.0 sets) 50-Storey Towers among Asian Countries prior to Middle East assignments, these Lusail's towering structures of modifications as it emphasizes Architectural-distinctiveness, reinvented my engineering knowledge with versatility which necessitated an effective consonance to quick design development continuums (**PC3.1a**). Furthermore, my overriding assimilation to prevailing practitioners' adeptness in both **analytical framework** and **engineering tools** requires efficient validation and control, otherwise, the same will usually provide little adaptability of tasks in subsequent rollouts (**PC3.2a**). True enough, while I did accomplish the Nine (9) Tower Complex in 2011 at Barwa (15km away from New Lusail City), such achievement I gained, cannot guarantee or presupposes the same effectiveness of engineering approaches simply (**PC2.8d**). By inference and through my iterations of structural models, each building of considerable heights or towering dimensions predominantly undertakes multiple yet peculiar parameters which sometimes are beyond governing standards or specifications duly upheld by regulating agencies (**PC2.3c**).

Concerning Lusail Tower Superstructure's comprehensive, in-depth mathematically and physically modeled configuration, my preparation and identification of interweaving radical inputs so as to make an engineering tool (inclusive of BIM technology) consistent towards assumed structural-member-behavior and serviceability performance, may sometimes have gotten lopsided and verified outcomes openly unacceptable (**PC2.7d**). In the adaptedness to generate, secure, and accord to the structural project that comprises stability to encompass strategic plans in weighing the possible risks upholding and building of this project should have an in-depth analysis of the data, concise analytic designs instability and progression of the set buildings and to ensure the safety and I manage construction simulation plan and to physically review the possible causes and stimulate prior to my commitments (**PC 2.4c**).

PC2.1b

PC2.8a

PC2.6 a

PC2.6c

PC 3.1a

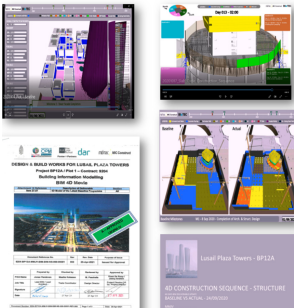

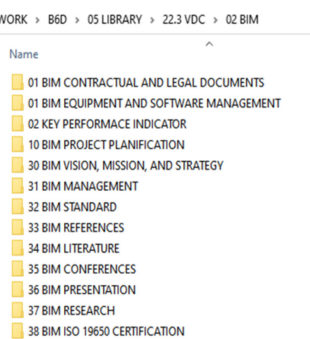
PC3.2a

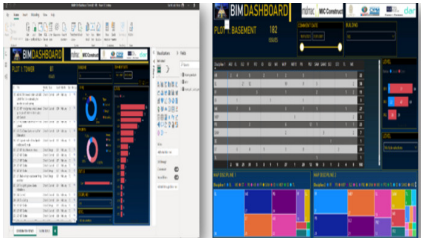
PC2.8d

PC2.3c

PC2.7d

PC 2.4c

<p>CE 1.4 Analysis of Possible Solutions (638)</p> <p>In the advancement of technology and in-depth structural area analysis it provides complete support and guidance that are up for Lusail project during a tender in 2019 , I began managing 4D simulations even during the early stages of the tender, which led to the success of winning the iconic project of Lusail Towers (PE1A.3a). I also assisted the Lusail team during the design and construction to adopt numerous innovative approaches to building information management (PC3.1e).</p>  <p>While working on the Lusail project, my expertise as a BIM ISO Auditor is my asset. I'm best suited to carry out the starting BIM process for all newly awarded projects in the Middles east namely Lusail Tower and Uptown Tower both more than 50 stories, because I'm an expert in the process and given all of my qualification (PC3.2b). Recently I'm being shortlisted for an award for a BIM Champion in individual Category representing my company Besix out of more than 200 entries. (PC3.2a).</p>  <p>Before assigning to Qatar project, I worked at the Besix headquarters in Dubai from 2016 until 2019, where I coordinated efforts with colleagues in Brussels Head office to push forward ISO-compliant standards. In addition, with the help of management in introducing efficient methodologies learned at Head office (PE1A.1b), I have assessed and tested the numerous innovations on the market, such as Revizto, BIM360, and Tekla, which are currently extensively used on 5 different projects in Besix (PE1A.1e). I'm honored to have contributed to the BIM Standardization team (PC1.1c). I and my BIM team in Besix have a firm connection with innovative technologies like Revizto and BIM360. In April 2023, the team in Besix Head Office had face-to-face meetings with Besix Team to collect our feedback and discuss our wishes for future platform development. I can assure the client that BIM standardization (PE1A.3d) n in Lusail is in line internationally and accordance to rigorous BIM ISO 19650-2-2018 (PE1A.1f). During my journey to ISO standardization, I lead my team in Dubai to collect and furnished data from prior experience and transformed it into a template for reference to starting up new projects (PE1A.3c).</p>  <p>As part of my standardization mindset, I am responsible for setting the corporate standard in the Middle East that all projects must adhere to (PE1A.1a). In addition, I'm teaching the fundamentals of BIM, the project I lead has benefited greatly from the extensive use of BIM throughout the design and build process, resulting in improved project management and streamlined asset delivery across all phases of the project PC3.2c).</p>	<p>PE1A.3a (PC3.1e)</p> <p>PC3.2b PC3.2a</p> <p>PE1A.1b PE1A.1e PC1.1c</p> <p>PE1A.3d PE1A.1f</p> <p>PE1A.3c</p> <p>PE1A1a PC3.2c</p>

<p>I carry out the leading and coordinating tasks for the Lusail Project while working remotely in Dubai (PC3.2c). I prepared the BIM Execution Plan carried out in harmony through the project. In May 2020, I and the team obtained BEP's code A approval through my constant request of meeting to resolved information gap, regularly evaluation of BIM coordination and analyzing the contracts (PC2.3e).</p> <p>My involvement in the Lusail Project extended to overseeing the entire project lifecycle, from design to construction to handover, as well as implementing BIM practices for its successful completion (PC2.1c). This involved my collaboration with the Technical team, and As I assessed project requirements, I developed a comprehensive BIM strategy that integrated BIM throughout the project lifecycle (PC2.1c). This involved my close coordination to generation of drawings and my close monitoring and resolving issues with the development of 3D combined models together with different teams (PC2.3c), I'm also producing 4D sequence for progress reporting (PC2.6b). Additionally, I played a vital role as a mediator in cost decision analysis for the project, leveraging my expertise in 5D estimation and to analyze various cost scenarios and provide valuable insights to my project team on site((PC3.1d). Furthermore, I assisted in the initial review and preparation of Laser Scanning and Cobie for Asset Management perform by subcon, to utilize the power of BIM, streamline operations and ensure project success (PC3.1b).</p>	<p>PC3.2c</p> <p>PC2.3e</p> <p>PC2.1c</p> <p>PC2.1c</p> <p>PC2.3c</p> <p>PC2.6b</p> <p>PC3.1d</p> <p>PC3.1b</p>
<p>CE 1.5 Project Planning and Implementation (426)</p> <p>I employed a range of strategies and lean approaches (PC3.1c). One of my strategies is integrating Microsoft Power BI in presenting to the client and project team the BIM progress which includes data insights and double the speed of preparation of BIM reports (PC2.6f), and I setup the BIM360 Document Management as well, which reduces team time spent in sharing documents by 2 days per week and 500 GB of files (PC2.8d). BIM360 Design Collaboration also improves the BIM production of her team even working from home (PC2.8c).</p> <div data-bbox="207 1050 625 1285">  </div> <p>Using Revizto, I was able to enhance the BIM coordination process, wherein a team of technical team members from contractors, consultants, and subcontractors attended weekly meetings every Monday to talk about potential issues that might have a big impact on the Lusail project and resolve existing issues (PE1A.2a). I setup the Revizto platform to enhance the BIM coordination in the Lusail Project; this makes my development process more effective than the conventional Navisworks technique and has a significant contribution to the development of accepted BIM models. I record the issues as well, monitor them, and control them in Revizto, which is easier and gives support in the preparation of the official request for information to the client and consultant (PE1A.2c). I observed in the progress report that issues is now 3x faster to resolve and decision-making is 93% more efficient, whereas BIM models, 3D scans, and 2D drawings can be effortlessly superimposed in Revizto (PE1A.3a). Aside from that, My BIM team receiving 3d scanning from surveyor assess and perform cross-checking for as built drawings for red marking the changes (PC3.4a). On the other hand, under my supervision, QR coding to 2d drawings was also integrated in the project to always access the most recent drawings and reduce ambiguities (PC3.1a). Last but not least, I incorporate the clients' inputs and requirements in identifying the data asset in cobie integration of as built in collaboration with Facility Management Team (PE1A.3b).</p>	<p>PC3.1c</p> <p>PC2.6f</p> <p>PC2.8d.</p> <p>PC2.8c</p> <p>PE1A.2a</p> <p>PE1A.2c</p> <p>PE1A.3a</p> <p>PC3.4a</p> <p>PC3.1a</p> <p>PE1A.3b</p> <p>PC1.1e</p>

	<p>I conducted training in more than 15 BIM sessions in Lusail project (PC1.1e). Even though her BIM team in Lusail are globally dispersed across the 7 countries, I implemented a full cloud-based solution that globally connected the 430 staff members. One of the positive outcomes I learned and witnessed during the covid pandemic was the synchronization of her team using the features in BIM360 Design Collaboration, which was used extensively on the Lusail project, helped her team improve their BIM output even though they were working from home, which has the same sensation as working in an office (PC3.4b).</p>	<p>PC3.4b</p>
<p>CE1.6 Summary (211)</p>	<p>I established the BIM standards together with Lean Integration and monitoring system, and This allows the team under my lead to visualize the project accurately and better decision-making in construction (PC2.7a). Among the other numerous positive outcomes during my leadership in BIM process were the enhancements in quality, time savings, greater construction efficiency, and a highly effective site methodology (PC2.1a). I received the report that the structural cycle is shorter, lasting between 4 days - 5 days instead of the original 6 days (PC2.8b). Therefore, my coordination through BIM model with other discipline before the actual activities led the construction productivity exceeded the goal and was 2.02 hr./m3 (PC3.4b). I collected the data of the performance analysis from control team that also reveal that the site's methodology saved with a 50% efficiency and 50% methodology (PC2.8b). My designated team in BIM is meticulously modeled to LOD500 which can extract BIM Quantities from 3D model, operate as mediators in the cost process between different departments (PC2.3a). I have contributed using BIM to the management and approval authority of the Lusail Towers (PC2.1b).</p> <p>I genuinely believed in the Integration of BIM-Lean strategy. As I chose this for my topic in master's studies. This deepens my awareness of BIM Effectiveness and confidently to succeed together with the correct skills, knowledge, and commitment to the procedure (PC3.2a).</p>	<p>PC2.7a PC2.1a PC2.8b PC3.4b PC2.8b PC2.3a PC2.1b PC3.2a</p>

Signature of Candidate:

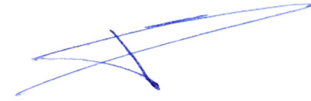


RACHEL ROSAS ALCANTARA

Candidate's Verifier:

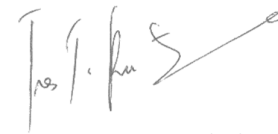
Name: **KASSEM BENABID**
Contact Nos. +971566873317

Signature:



Name: **TRESE T. BUSTAMANTE**
Contact Nos. +966509431565
+639451642189

Signature:



Engineering Qualifications: **APEC CE 0083-18**
PTC- MENA – President Adviser

SELF ASSESSMENT

UNIT PC1	CONTRIBUTES TO THE DEVELOPMENT OF ENGINEERING PRACTICE	Self-Assessment	
ELEMENTS: (ALL THESE ELEMENTS <u>MUST</u> BE ADDRESSED)			
PC1.1	Provides significant contributions to science and practice of engineering	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC1.2	Leads engineering practice in area of specialization	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
UNIT PC2	LEADS/MANAGES SIGNIFICANT PROJECTS	Self-Assessment	
ELEMENTS: (ALL THESE ELEMENTS <u>MUST</u> BE ADDRESSED)			
PC2.1	Interpret project scope	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.2	Manage project quality, safety and risk	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.3	Implement planning and design process	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.4	Review the design outcomes in operation	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.5	Prepares and maintain documentation during the design process	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.6	Manages time and progress	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.7	Review the design to achieve acceptance	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.8	Manages work priorities and resources	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC2.9	Manages the assets within the operation/system	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
UNIT PC3	DEMONSTRATES ENGINEERING LEADERSHIP	Self-Assessment	
ELEMENTS: (ALL THESE ELEMENTS <u>MUST</u> BE ADDRESSED)			
PC3.1	Facilitates innovation	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC3.2	Promotes the engineering profession	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC3.3	Provides significant engineering contributions to community	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PC3.4	Encourages and manages workplace change	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

NAME: RACHEL ROSAS ALCANTARA SIGNATURE:  DATE: FEB 06, 2024

PC3.5	Motivates and mentors other	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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UNIT PE1A	MANAGES ENGINEERING BUSINESS/ORGANIZATIONAL OUTCOME	Self-Assessment	
AT LEAST TWO ELEMENTS MUST BE ADDRESSED FROM THE FOLLOWING:			
PE1A.1	Establishes engineering business/organization direction	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1A.2	Manages a multi-disciplined team	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1A.3	Leads and manages the engineering business/organization	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

UNIT PE1B	RESEARCH AND DEVELOPMENT	Self-Assessment	
AT LEAST FOUR ELEMENTS MUST BE ADDRESSED FROM THE FOLLOWING:			
PE1B.1	Identifies opportunities for new or improved processes and / or products/materials	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1B.2	Identifies the resources required for R & D	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1B.3	Initiates concept developments	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1B.4	Gains commitments to the R&D proposal	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
PE1B.5	Ensures research is undertaken	<input type="checkbox"/> YES	<input type="checkbox"/> NO
PE1B.6	Collaborates in the application or potential commercialization of research outcome	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

NAME: RACHEL ROSAS ALCANTARA SIGNATURE:  DATE: FEB 06, 2024

Application for BIM Champion Award



RACHEL ROSAS ALCANTARA

BIM Manager
BESIX – Middle East



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Dubai, United Arab Emirates
Mobile: +971(55) 258 7146
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Home Email: rachel.rosas21@gmail.com

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

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BIOGRAPHICAL STATEMENT

RACHEL ROSAS ALCANTARA

Civil Engineer , BIM Manager

Contact Details: Al Khail Gate, Al Quoz , Dubai, UAE

Email Address: rachel.rosas21@gmail.com

Contact No: . +971 55 258 7146

PROFESSIONAL BACKGROUND:



Rachel Rosas is BIM Manager at Besix. Her professional background spans more than a decade in different part of the world including the UAE, Qatar, Thailand and Philippines, with 7 of those years spent in the Middle East. Her diverse set of abilities in BIM, Digitalization and Project management that unites the team together as they complete mega projects throughout in Middle East from tender till handling over to the client/owners. She provides full support, leadership and expertise with respect to the BIM process and as per the project requirements. She motivates her team to exploit the full potential of available technology within the market and utilize it in Iconic, challenging projects. Rachel stays current with new technologies that will benefit the organization and the following project. She continues to explore innovative techniques to

get better and because business is constantly changing. Rachel has obtained a number of certifications in order to excel in her chosen field of BIM. She is Certified Lean Six Sigma Green Belt , Autodesk Proccessional and holds Tekla Advance and Intermediate Certification. Rachel is a Professional Engineering manager of the American Society for Engineering Management. In her professional organization PICE, she is a regular resource speaker on BIM topics and offers numerous bim training sessions within Besix organization, internally trainings are provided to keep the team updated with the latest software and tools related to BIM. She concentrated on what she loves to do and she is working on what she needs to do to become a champion.



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She had collaborated with architects, engineers, contractors and specialized partners on BIM projects in her work on high rise buildings, stadiums, embassies, hospitals, metro train stations, roads, bridges, and LNG terminals.

Rachel is currently working in Dubai as BIM Manger at Six Construct Co LTD. under BESIX Group, an engineering and contracting company operating in the construction of buildings, infrastructure, environmental projects, and roads. Before her work to Besix, Rachel served as Senior BIM Specialist at Bouyges-Thai, BIM Senior Lead Officer at Duotal, BIM Coordinator at Dragages Hongkong under Sigmabear, Consultant Material Engineer at Orientech CDC, Technical Assistant at BF Metal Corp, and Revit Instructor at RS Management Consulting and Training Services and at Overseas Filipino Civil Engineering Association.

Rachel received her Master Degree in Construction Management at PUP-Open University in Dubai United Arab Emirates (2019), Bachelor's Degree in Civil Engineering at the University of Rizal System in Morong, Rizal and passed the Philippine State Licensure Examination for Civil Engineer (2011) and Master Plumber (2013). In addition, she also passed the Philippine Accreditation of Department of Public Works and Highways for Material Engineer I (2012) and Republic of the Philippine Civil Service Commission for Professional Level (2010).

SKILL AND EXPERTISE:

BIM, Project Management. Lean Six Sigma and Leed , Proficient in Autodesk (Revit Structure, Architecture and MEPF, Autocad Civil 3D, Infracore, and 3D max) and Tremble with Tekla structure , well versed in Microsoft Office Application (Word , Excel, Power point, One note and Visio . Artistic with various rendering tools using Lumion and Photoshop. Leading the coordination with Naviswork, Revizto, BIM 360 , BIMcollab, Tekla BIMsight, Knowlegable in Building Analysis and Design Software (Etabs, Safe and Staad Pro)., Scheduling and Cost Analysis using Primavera and Synchro 4D and BlueBIM , and other system engineering tools with Relatics , Power BI and Dynamo.



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CREDENTIALS AND CERTIFICATES

1. AFFILIATION IN BUSINESS/PROFESSIONAL/CIVIC ORGANIZATIONS

Inclusive Date	Name/Address of Organization	Positions Held
AUGUST 2022	PROJECT MANAGEMENT INSTITUTE	Member
2011 - PRESENT	PHILIPPINES INSTITUTE OF CIVIL ENGINEERS- UAE CHAPTER	Vice Chairman COWME,
AUGUST 2018	INTERNATIONAL ASSOCIATION OF SIX SIGMA CERTIFICATION	Member
NOVEMBER 2016	AMERICAN SOCIETY FOR ENGINEERING MANAGEMENT	Member

(Submit Supporting Documents)

2. EDUCATIONAL/PROFESSIONAL QUALIFICATIONS (Use additional sheets if necessary)

Academic Level	Degree/Title Conferred	University/College/Address	Dates Attended:
Undergraduate	Bachelor of Science in Civil Engineering	University of Rizal Sytem - Morong Rizal Philippines	2005-2011
Graduate - BS			
Graduate – Masteral	Master of Science in Construction Management	Polytechnic University of the Philippines – Sta. Mesa Manila	2016-2018
Graduate - Doctoral			

Professional Qualifications/Registration			
Date of Registration	Registration Body	Address of Registration Body	Professional Discipline
DECEMBER 05, 2011	PRC- PHILIPPINES	PAREDES ST., MANILA PHILIPPINES	CIVIL ENGINEER
AUGUST 29, 2013	PRC- PHILIPPINES	PAREDES ST., MANILA PHILIPPINES	MASTER PLUMBER
OCTOBER 22, 2012	DPWH-PHILIPPINES	EDSA, QUEZON CITY, PHILIPPINES	MATERIAL ENGINEER
DECEMBER 15, 2010	CSC-PHILIPPINES	DILIMAN, QUEZON CITY, PHILIPPINES	CIVIL SERVICE PROFESSIONAL
OCTOBER 05, 2021	AUDM- UNITED ARAB EMITAES	ABU DHABI UNITED ARAB EMIRATES	CIVIL ENGINEER
DECEMBER 28, 2014	AUTODESK-THAILAND	BANGKOK, THAILAND	AUTODESK CERTIFIED PROFESSIONAL
MARCH 02, 2018	VTS CO.-TRIMBLE , NEW YORK USA	QUEZON CITY, PHILIPPINES	TEKLA STRUCTURE ADVANCE CERTIFICATION
FEBRUARY 23, 2018	VTS CO.-TRIMBLE , NEW YORK USA	QUEZON CITY, PHILIPPINES	TEKLA STRUCTURE INTERMEDIATE CERTIFICATION
NOVEMBER 29, 2016	AMERICAN SOCIETY FOR ENGINEERING MANAGEMENT	DUBAI, UNITED ARAB EMIRTAES	PROFESSIONAL ENGINEERING MANAGER

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AUGUST 5, 2018	IASSC – ARIZONA ,UNITES STATES	DUBAI, UNITED ARAB EMIRATES	LEAN SIX SIGMA – GREEN BELT
AUGUST 20, 2022	PROJECT MANAGEMENT INSTITUTE	PENNSYLVANIA, UNITED STATES	CERTIFIED MEMBER
JUNE 15, 2023	BRITISH STANDARDS INSTITUTION (BSI)	London, United Kingdom	ISO: 19650 BIM Asset Information Practitioner
JUNE 15, 2023	BRITISH STANDARDS INSTITUTION (BSI)	London, United Kingdom	ISO: 19650 BIM Project Information Practitioner
JULY 03, 2023	BRITISH STANDARDS INSTITUTION (BSI)	London, United Kingdom	ISO: 19650 BIM Asset Information Professional
JULY 03, 2023	BRITISH STANDARDS INSTITUTION (BSI)	London, United Kingdom	ISO: 19650 BIM Project Information Professional
DECEMBER 15, 2023	PROJECT MANAGEMENT INSTITUTE	Pennsylvania, United States	Project Management Professional

3. FIELD (s) OF SPECIALIZATION

- a) BIM MANAGEMENT
- b) CONSTRUCTION PROJECT MANAGEMENT
- c) TECHNICAL PRODUCTION

4. PROFESSIONAL TRAININGS/SEMINARS ATTENDED

Program Description/Title	Name/Address of Provider	Role (e.g., Speaker)	Units Earned	Dates Attended
ADVANCE LEVEL ENGINEERING WRITESHOP ASEAN AND APEC ENG'R REGISTRIES	PTC-MENA	ATTENDIES	8	2021 APRIL 02
TRAINING COURSE PROGRAM: PROJECT MANAGEMENT PROFESSIONAL	RSMETS-UAE	ATTENDIES	40	2017 JAN 27 - MARCH 10
TRAINING COURSE PROGRAM: PROJECT MANAGEMENT PROFESSIONAL PREPARATORY COURSE	SAVEFAST, UAE	ATTENDIES	35	2022 AUGUST 7 – SEPT 1
TRAINING COURSE PROGRAM: PROFESSIONAL ENGINEERING MANAGEMENT TRAINING	RSMETS-UAE	ATTENDIES	40	2016 AUG 12 - SEPT 30
TRAINING COURSE PROGRAM: BUILDING INFORMATION MANAGEMENT	RSMETS-UAE	ATTENDIES	40	2016 MAY 06 - JUNE 24
TRAINING COURSE PROGRAM: LEAN SIX SIGMA GREEN BELT TRAINING	RSMETS-UAE	ATTENDIES	40	2017 MAR 03 - APRIL 21
TRAINING COURSE PROGRAM:	GMC-UAE	ATTENDIES	40	2018 MAY 04- JULY 27

NAME: RACHEL ROSAS ALCANTARA

DATE: FEB 06, 2024

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LEAN SIX SIGMA GREEN BELT TRAINING				
TRAINING COURSE PROGRAM: LEED GREEN ASSOCIATE EXAM PREPARATORY COURSE	RSMETS-UAE	ATTENDIES	40	2016 APRIL 15 - JUNE 03
TRAINING COURSE PROGRAM: LEED AP EXAM PREPARATORY COURSE	RSMETS-UAE	ATTENDIES	40	2017 SEPT 15 - OCTOBER 13
2 ND INTERNATIONAL CONFERENCE IN ARCHITECTURE AND ENGINEERING, CONSTRUCTION AND PROJECT MANAGEMENT	PSPPM & PUP- ABU DHABI UAE	SPEAKER	4	2019 FEBRUARY 02
2019 MID-YEAR ASSEMBLY OF THE PICE UAE CHAPTER : THEME COMPETENCY ADVANCEMENT TOWARDS CE 4.0	PICE UAE	SPEAKER	4	2019 JUNE 21
BIM REVIT ARCHITECTURE AND STRUCTURE 2018 TRAINING COURSE	OFCEA-UAE	SPEAKER	16	2018 DECEMBER 7 & 14
AUTODESK REVIT 2019 TRAINING COURSE	OFCEA-UAE	SPEAKER	16	2019 APRIL 19 & 26
9 TH INTERNATIONAL TECHNICAL CONFERENCE & 3 RD VIRTUAL COLLABORATION WEBINAR WITH PICE INTERNATIONAL CHAPTER	PICE-USA – LAS VEGA NEVADA	ATTENDIES	5	2022 APRIL 29 & 30
2022 PICE MIDYEAR NATIONAL CONVENTION AND TECHNICAL CONFERENCE	PICE NATIONAL	ATTENDIES	15	2022 JUNE 17 & 18
4 TH PICE INTERNATION CHAPTERS COLLABORATION WEBINAR : RESILIENT AND INNOVATIVE SOLUTION IN THE CIVIL ENGINEERING SPECIALIZATION – DAY 1	PICE-UAE-ABU DHABI	ATTENDIES	2	2022 JULY 30
4 TH PICE INTERNATION CHAPTERS COLLABORATION WEBINAR : RESILIENT AND INNOVATIVE SOLUTION IN THE CIVIL ENGINEERING SPECIALIZATION – DAY 2	PICE-UAE-ABU DHABI	ATTENDIES	2	2022 JULY 31
CAREER PATH ENHANCEMENT AND ADM / DM ENGINEER REGISTRATION SEMINAR	PICE-UAE-ABU DHABI	ATTENDIES	8	2020 FEBRUARY 21
PICE 1 ST WEBINAR LECTURE SERIES : WATER RESOURCES CHALLENGES	PICE NATIONAL	ATTENDIES	2	2020 MAY 04
PICE 1 ST WEBINAR LECTURE SERIES: IS SARS COV-2 IN MY WATER OR SEWER. SUMMARY OF THE CURRENT SCIENCE	PICE NATIONAL	ATTENDIES	2	2020 MAY 05
PICE 1 ST WEBINAR LECTURE SERIES : GEOSYNTHETIC APPLICATIONS TO CIVIL ENGINEERING	PICE NATIONAL	ATTENDIES	2	2020 MAY 06
PICE 1 ST WEBINAR LECTURE SERIES : REBOOTING PUBLIC TRANSPORT FOR THE NEW NORMAL – IMPERATIVES FOR INFORMATION EXCHANGE AND COLLABORATIVE GOVERNANCE	PICE NATIONAL	ATTENDIES	2	2020 MAY 08
PICE 1 ST WEBINAR LECTURE SERIES : SEISMIC DESIGN OF RC BEAMS OF SPECIAL MOMENT FRAMES ACCORDING TO NSCP 2015	PICE NATIONAL	ATTENDIES	2	2020 MAY 09
WASTE WATER TREATMENT TECHNOLOGY	RSMETS-UAE	ATTENDIES	3	2016 NOVEMBER 18

NAME: RACHEL ROSAS ALCANTARA

DATE: FEB 06, 2024

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

TRAINING COURSE PROGRAM: AUTODESK REVIT 2009	AUTODESK, MICROCADD- PHILIPPINES	ATTENDIES	45	2009 APRIL 25- JULY 11
TRAINING COURSE PROGRAM: 3D STUDIO MAX 2010	AUTODESK, MICROCADD- PHILIPPINES	ATTENDIES	45	2010 APRIL 05 - MAY 05
TRAINING COURSE PROGRAM: STAAD PRO 2004	AUTODESK, MICROCADD- PHILIPPINES	ATTENDIES	30	2008 AUGUST 10- SEPT 14
TRAINING COURSE PROGRAM: AUTOCAD 2008 WITH COLOR RENDERING LEVEL I AND LEVEL II	AUTODESK, MICROCADD- PHILIPPINES	ATTENDIES	70	2008 APRIL 10- MAY 29
AUTOCAD 2009 UPGRADE	AUTODESK, MICROCADD- PHILIPPINES	ATTENDIES	3	2008 JUNE 02
TRAINING COURSE PROGRAM: AUTODESK CIVIL 3D 2016	AUTODESK, CADD CENTRE PHILIPPINES	ATTENDIES	40	2016 JULY 29 –AUGUST 24
TRAINING COURSE PROGRAM: FIDIC CONTRACTS ADMINISTRATION & MANAGEMENT TRAINING	OFCEA-UAE	ATTENDIES	16	2019 AUGUST 7 & 16
TRAINING COURSE PROGRAM: QUALITY ASSURANCE / QUALITY CONTROL TRAINING	OFCEA-UAE	ATTENDIES	16	2019 MARCH 8 & 15
TRAINING COURSE PROGRAM: PRIMAVER BASIC TRAINING COURSE	OFCEA-UAE	ATTENDIES	16	2019 OCTOBER 11 & 18
TRAINING COURSE PROGRAM: ETABS AND SAFE TRAINING COURSE	OFCEA-UAE	ATTENDIES	16	2019 FEBRUARY 15 & 22
TRAINING COURSE PROGRAM: AUTODESK REVIT 2019 FAÇADE TRAINING COURSE	OFCEA-UAE	ATTENDIES	16	2019 JULY 6 & 13
TRAINING COURSE PROGRAM: MICROSOFT POWER BI	EP&MDT-UAE	ATTENDIES	24	2020 NOV 05 – NOV 26
RELATICS TRAINING CONFIGURATION BASIC	BESIX-UAE	ATTENDIES	5	2018 JULY 10
BESIX POTENTIAL ACADEMY HIGH RISE BUILDING TRAINING	BESIX-UAE	ATTENDIES	8	2019 OCT 15
TRAINING COURSE PROGRAM: MICROSOFT POWER BI	EP&MDT-UAE	ATTENDIES	24	2020 NOV 05 – NOV 26
TEKLA STRUTURES INTERMEDIATE TRAINING COURSE	VTS-PHILIPPINES	ATTENDIES	20	2018 FEBRUARY19-23
TEKLA STRUTURES ADVANCE TRAINING COURSE	VTS-PHILIPPINES	ATTENDIES	15	2018 FEBRUARY 29 – MARCH 2

(Submitted Supporting Documents)

Only significant certificates were uploaded due to the 10MB limit and will be made available upon request.



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SUPPORTING DOCUMENT'S
PART 1
PERSONAL DETAILS

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

RACHEL ALCANTARA

Member ID: 8237747
Member Since: 8/2022
Member Expiration: 8/2023

RACHEL ROSAS ALCANTARA

Project Management Professional (PMP)®

RACHEL LORIA ROSAS

IASSC Certified Green Belt

RACHEL ROSAS ALCANTARA

Project Management Professional Preparatory course

Certified Professional

RACHEL L ROSAS

Autodesk Certified Professional: Revit® Architecture 2014

December 28, 2015

Rachel Rosas

Professional Engineering Manager

Valid through 31 November 2019

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**



**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

Professional Engineer License

Engineer License Number (ELN)	11841	رقم ترخيص المهندس (ELN)
Name	الاسم: راقيل ليزا روساس RACHEL LIZA ROSAS	الاسم
Trade License #	1000420	رقم ترخيص التجارة
Organization	شركة سبكس القابضة المحدودة SIX CONSTRUCT COMPANY LIMITED	جهة العمل
Engineering Specialty	مجال تخصص الهندسة SPECIALTY	التخصص الهندسي
Engineering Profession	ممارسة مهنة الهندسة المعمارية HABITAT CONSTRUCTION CLEAR Types Category	المهنة الهندسية
Issue Date	2021-10-05	تاريخ الاصدار
Expiry Date	2023-10-04	تاريخ انتهاء

Regent Professional & Management Development Training
شهادة تقدير

is gratefully presented to:

RACHEL ROSAS
SIX CONSTRUCT LTD. CO.

MICROSOFT POWERBI

2021-10-05 to 2021-10-05

BESIX Potential Academy

This certificate of training achievement is awarded to:

Rachel Rosas

of
Six Construct
who attended the training course
High Rise Buildings Training on 15th October 2019, Dubai UAE

Goert Aelbrecht
Group Human Resources & Communication Director

Certificate of Appreciation

is gratefully presented to:

Engr. Rachel L. Rosas
CEng, PRCM, SACCM, BCSP, AIE

In grateful recognition and commendation to her invaluable insights and expertise as a **Technical Speaker** during the **2019 Mid-Year Assembly** of the **Philippine Institute of Civil Engineers—UAE Chapter** with a theme: **"Competency Advancement towards CE 4.0"**.

With deep appreciation, respect and gratitude for the membership to her exemplary leadership, professionalism and remarkable service that inspired the Chapter and the Filipino communities in the United Arab Emirates.

Given this 21st day of June 2019
at Sheraton Sharjah Beach Resort & Spa,
Sharjah, United Arab Emirates

Engr. Alvin E. Alejandro
2019 Secretary, PICE-UAE Chapter

Engr. Bernita N. Fayetta
2019 President, PICE-UAE Chapter

Control No.: PICE-UAE/3-07/MYA/2019/C001

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)



**PATH TO BIM CHAMPION AWARD
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PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)



bsi.

BSI Training Academy

This is to certify that

Rachel Rosas Alcantara

has successfully met the requirements to be awarded the qualification

BIM Project Information Professional

Theus Kotze

Theus Kotze Managing Director, Assurance IMETA

Date : 03/07/2023
Certificate Number: PQ-00268819

The British Standards Institution is incorporated by Royal Charter.
BSI Management Systems, 389 Chiswick High Road, London, W4 4AL, United Kingdom

bsi BIM Project Information Professional PROFESSIONAL

By Royal Charter

...making excellence a habit.™



bsi.

BSI Training Academy

This is to certify that

Rachel Rosas Alcantara

has successfully met the requirements to be awarded the qualification

BIM Asset Information Professional

Theus Kotze

Theus Kotze Managing Director, Assurance IMETA

Date : 03/07/2023
Certificate Number: PQ-00268820

The British Standards Institution is incorporated by Royal Charter.
BSI Management Systems, 389 Chiswick High Road, London, W4 4AL, United Kingdom

bsi BIM Asset Information Professional PROFESSIONAL

By Royal Charter

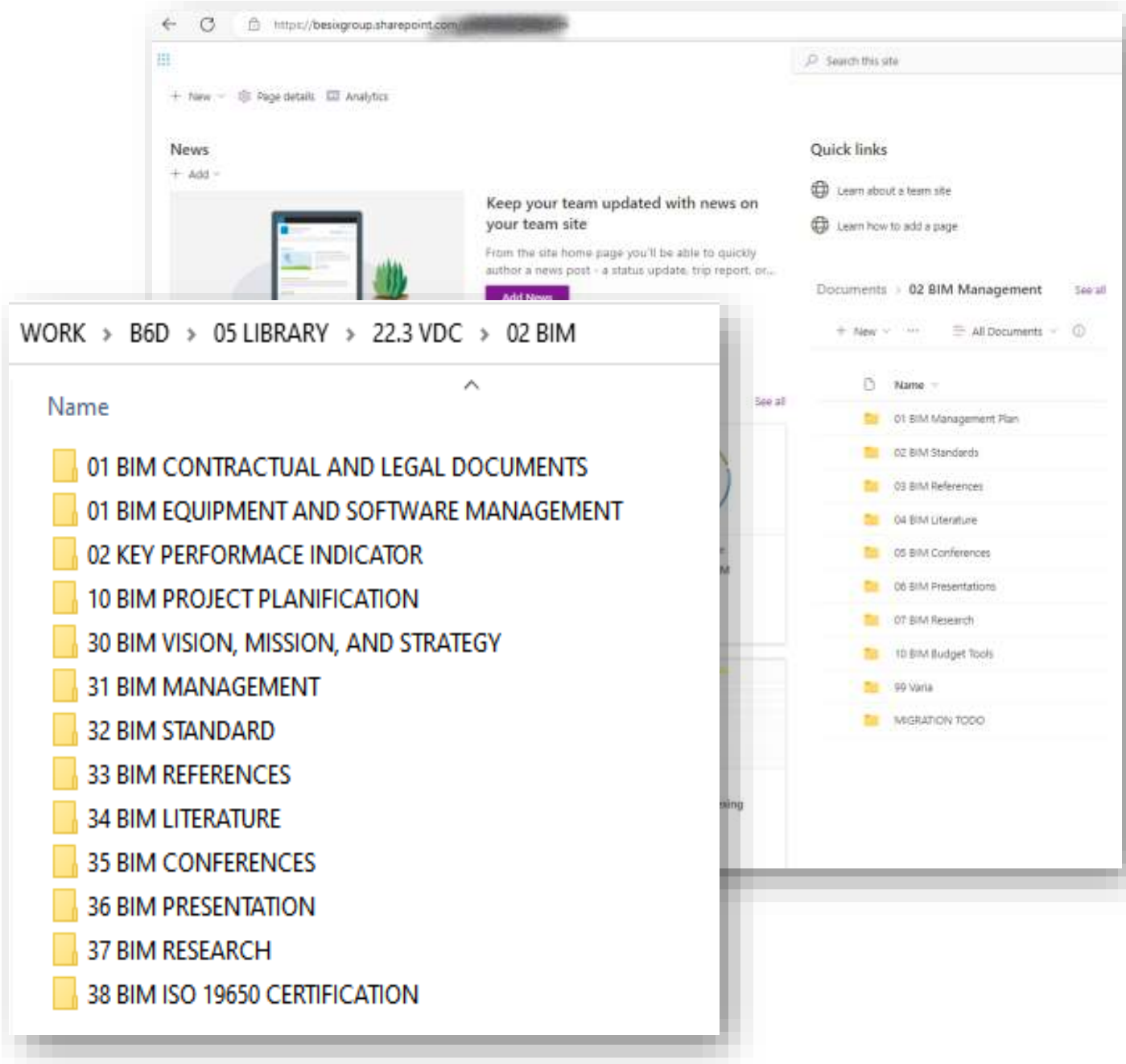
...making excellence a habit.™

SUPPORTING DOCUMENT'S
PART 2
STRATEGY AND LEADERSHIP

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

BESIX: GLOBAL BIM LIBRARIES

- GLOBAL SHAREPOINT
- MIDDLE EAST SERVER (BACKUP)



PATH TO BIM CHAMPION AWARD (SUPPORTING DOCUMENTS)

GLOBAL: BESIX SOAP BOX MEETING
ORGANIZER: BESIX HO IN BRUSSEL SINCE 2021
DECEMBER PRESENTOR: RACHEL ROSAS

Weekly Technical Topics for digital enthusiast (presence is optional, language = EN, session will always be recorded)

Recordings can be found on this link : [04. Technical Soapbox](#)

If you have an interesting topic : [@Huy, Hoang](#) or [@Vandenbogaerde, Kristof](#)

Some rules when you are presenting a topic :

- Brief introduction : what's the purpose of the tool, procedure etc.
- Keep it technical, but not too technical (Audience = BIM Modelers, Steel, Façade, Methods, Planning...)
- Max. 30 minutes of presentation. 15 minutes of questions afterward.
- Try to show some live demonstrations... it shows more than a PowerPoint.

Agenda

10/02/2023: BIM Coordination with Aconex IMS by Hoang Pham (SMV)

03/02/2023: KLIF to BIM Tool by Mathieu Ophoff (R4)

27/01/2023: Bexel Manager by Veljko Janjic

13/01/2023 – KBM – BIM @ Dubai Waste to Energy

09/12/2022 – Rachel L.Rosas (Dubai) – Laser Scanning @ Lusail Tower

02/12/2022 - Cancelled

25/11/2022 – Michele Ambrosino (ULB) – Brikiebots

18/11/2022 – Cancelled

11/11/2022 – No Soapbox – Fall break

04/11/2022 – No Soapbox – Fall Break

28/10/2022 – LLE – Genus & Power BI

21/10/2022 – RCO – ISO19650 (15h Bxl Time)

14/10/2022 – ALU - Analytical modelling in Revit

07/10/2022 – KDS – BIM Server

30/09/2022 – KHE – GIS@ROCO

23/09/2022 – TST (Qonic) – QONIC: Accurate BIM

16/09/2022 – PAA - Solibri use case: LOI audit, progress &

09/09/2022 – FPI – BIM Interoperability Tools for Revit

02/09/2022 – MMU - BIM Integration with Tekla (to be co

26/08/2022 – MRO – Solibri Ruleset manager by MRO

19/08/2022 – ScaledRobotics by Stuart Maags

---- Summer Break ----

24/06/2022 – TBD

17/06/2022 – LSA – Internship report (automatization of t

10/06/2022 – ADR – Task Automation @ RIGA-project

03/06/2022 – HHU - Folder Structure on BIM360/ACC

20/05/2022 – LLE – BIM360 + PowerBI

13/05/2022 – YDI – ConVoid Plugin for Revit (Coordination

06/05/2022 – BED Event – No Soapbox

06/05/2022 – BED Event – No Soapbox

29/04/2022 – KG-Dev – BIM & Dashboarding (KG-dev.be)

22/04/2022 – KRO - Speckle

15/04/2022 – BESIX BE Holiday – No Soapbox

08/04/2022 – QSW - Kabandy

01/04/2022 – No Soapbox

25/03/2022 – LLE - Globalmapper

18/03/2022 – YDI – Diroots Revit Plugin

11/03/2022 – KDS - iConstruct

04/03/2022 – MJA – Main Principles of ISO19650

25/02/2022 -

18/02/2022 – (Cancelled)SVDW – BIM @ COTU Oosterweel Zinktunnel

11/02/2022 –

04/02/2022 – OPE – Revit Shared Coordinates

28/01/2022 -

-- Winter Break --

10/12/2021 – PDC – LTF Volume Model & link to Model-statuses

03/12/2021 – Vincent Charlier – IDCapture on Clinic de Neuilly (FR)

29/10-12/11/2021 -- Autumn Break --

22/10/2021 – ADR – Lessons Learned on Mozambique LNG

15/10/2021 – LLE – Neanex Portal on COTU

08/10/2021 – YDI/KDS – Autodesk Infraworks (Design vs Methods&Planning)

01/10/2021 – LRY – Revizto-usage @ WatPac

17/09/2021 – KDS – Navisworks iConstruct

13/08/2021 – EHE – Revit Model Checker & LOI Automation

06/08/2021 – JMA – Plannerly

-- Summer-break --

24/06/2021 – NHO – Dynamo & LBS-codes on LTF

21/05/2021 – LLE – Data Management with Python

07/05/2021 – HHU – Open Data Vlaanderen – Use of LIDAR-information

30/04/2021 – FLE - BESIX Classification

09/04/2021 – CWI – Reporting (BIMCollab/Planning) on LTF

02/04/2021 – (EDR – Dynamo-scripts for LTF - Cancelled)

26/03/2021 – LLE – R4 Project Overview

19/03/2021 – KVA – BIMCollab Zoom (Pro)

12/03/2021 – KVA – Revit IFC Export

19/02/2021 – ASBR – The wonders of SimpleBIM

12/02/2021 – KVA – RTV Exporter Pro, Revit Plugin for Automating exports of IFC/NWC/PDF/DWG. |

05/02/2021 – LSW – StabiCAD Openings Manager

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

MIDDLE EAST: EVENTS ATTENDED
EVENT 1: AUTODESK UNIVERSITY 2018
EVENT 2: BIG 5 2019



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIM TRAINING 2020 (5 BATCHES)
PRESENTOR: RACHEL ROSAS
ATTENDEES: PROJECT STAFF, (MAIN CONTRACTOR, PMC & SUBCONTRACTOR)

BIM monDAY
MMJV BIM Champion@2021

"Our mission is to advance digital transformation and boost collaboration on site."

TRAININGS

- Revizto
- Naviswork Freedom
- BIM360
 - Document Management
 - Design Collaboration
 - Model Coordination
- And much more
 - 3D scanning
 - QR Code
 - HSE
 - Asset
 - etc.

The training will be given to all teams : PMCM , MMJV Staff, Subcontractors and Suppliers. It schedule to run every second and fourth Monday of the Month . Subjects and topics are in batches and Invitation will be sent out through email.

DEVICES

HOW IT WORKS

BIM TEAM

```

    graph TD
      BT[BIM TEAM] --- S[Suppliers]
      BT --- SC[SubContractor]
      BT --- PM[PMCM]
      BT --- MMJV[MMJV Staff]
    
```

MMJV BIM TEAM will support the different organization to Implement BIM In construction site . For details and requesting for training please contact the BIM ambassadors below.

r.rosas@midmac-mic.com
j.vandeven@midmac-mic.com
p.suskar@midmac-mic.com

CERTIFICATE OF PARTICIPATION

This certificate of training achievement is awarded to

BIM Manager *Victor Craspo*

who attended the training course
 BIM360 Document Management on 28th September 2020, Doha Qatar

Rosas
 Rachel Loria Rosas
 BIM Manager / Trainer

Johnny I. Ibrahim
 Johnny I. Ibrahim
 Dy. Project Director

Koen De Rooy
 Koen De Rooy
 Project Director

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BESIX REVIT TRAINING
PRESENTOR 2019: RACHEL ROSAS
ATTENDEES: PROJECTS SITE TEAM AND HEAD OFFICE



Training	: REVIT - BASICS	Date	:23 JULY 2019
Trainer	: MS. OUAFAE MESSAOUDI & MS. RACHEL ROSAS	Training Hours	:8:30 AM - 5:30 PM

SR.	HO. NO.	SITE	NAME	FIRST NAME	DESIGNATION	SIGNATURE
1	6875	MSR	MOEINI	MOHAMED AHMED	CHIEF SURVEYOR	
2	17135	RAP	EL KADI	WISSAM EL SHEIKH	ARCHITECT	
3	53354	RAP	MATEV	ZORAN	PROJECT ENGINEER	
4	9517	DUT	SANKARA NARAYANAN	HARI KUMAR	SURVEYOR - SENIOR	
5	42172	MSR	ALSHANTI	JALAL AMEER AHMAD	PLANNING ENGINEER	
6	30447	DED	PAULOSE	ROY	DRAUGHTSMAN - FORMWORK DESIGNER - SENIOR	
7	38188	MSR	NANGGAN	DEMETRIO	QUANTITY SURVEYOR	

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

**MIDDLE EAST: BESIX REVIT TRAINING AND SFB CODES INTEGRATION 2017
(IN COLLABORATION WITH BRUSSELS)
PRESENTOR: OLIVIER PERSH
ASSISTANT: RACHEL ROSAS
ATTENDEES: PROJECT SITES STAFF AND HEAD OFFICE**



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BESIX REVIT TRAINING 2016

PRESENTOR 2016: RACHEL ROSAS

ATTENDEES: MARINE TEAM



Ver. Oct 2011










TRAINING ATTENDANCE RECORD SHEET

HR FORMS

Training : BIM (Revit) Training Date : 20 November 2016

Trainer : Ms. Rachel Rosas Training Hours : 8:30 AM - 5:00 PM

SR.	HO. NO.	SITE	NAME	FIRST NAME	DESIGNATION	SIGNATURE
1	18944	BJE	MANOHAR	MANDAR	DRAUGHTSMAN	
2	37047	STB	BA	ABOUBACRY	DRAUGHTSMAN	
3	22263	TR2	VARGHESE	IDICHANDY	DRAUGHTSMAN - SENIOR	
4	39871	AJE	PILLAI	BINEESH	DRAUGHTSMAN	
5	37485	DCA	LANGAMAN	JONATHAN	DRAUGHTSMAN	
6	11622	BJE	CASTRO SORO	MARK	DRAUGHTSMAN	
7	17566	BBJE	BASHEER	DILSHAD	DRAUGHTSMAN - SENIOR	

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT : BIM LIBRARIES & STANDARD

- 00 Evaluation
- 00 LESSON LEARN
- 00 Timesheet
- 01 Execution Plan
- 01 Forms
- 02 BIM Standard - BIM FORUM
- 02 Cad Standard
- 02 Document Codification
- 02 Logo
- 02 Model Element List
- 02 Model List
- 02 Naviswork Setting
- 02 Parameter List
- 02 Quality Check
- 02 Revit Template
- 02 Revizto Template
- 02 Shared Parameter
- 03 3D Clash Detection
- 03 4D Simulation
- 03 5D Quantities
- 03 Cobie
- 03 MIDP
- 03 Perform
- 04 Dynamo
- 04 Families
- 05 Contact Directory
- 05 Job Description
- 05 Library
- 05 Organizational Chart
- 05 Site Template
- 05 Work Flow
- 06 BIM360
- 06 Folder Template
- 07 Minutes of Meeting
- 08 Job Description
- 09 Power BI
- 10 Softwares
- 11 Subcon Material Tracker
- 12 Shop Drawings - Templa
- 13 Shop Drawing Master lo
- 14 QR Code - f5
- 15 Revizto
- 16 Attendace
- 17 Letters
- 18 Progress - Claims
- 19 Leave Forms
- 20 Project Deliverables
- 21 Software Matrix
- 22 Label
- 23 KPI Sample
- 30 RFI List
- 31 Request IT
- 32 Change Request
- Lusail City Master Plan
- Lusail_Smart_City

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL :PROJECT PARAMETER LIST

Code	Category	Parameter Name	Value	Unit	Comments
001	General	Project Name	LUSAIL		
002	General	Project Location	Qatar		
003	General	Project Type	Commercial		
004	General	Project Status	Completed		
005	General	Project Start Date	2017-01-01	DD-MM-YYYY	
006	General	Project End Date	2017-12-31	DD-MM-YYYY	
007	General	Project Budget	1.5	Billion USD	
008	General	Project Area	100,000	Sq. Meters	
009	General	Project Height	300	Meters	
010	General	Project Complexity	High		
011	General	Project Risk	Medium		
012	General	Project Quality	Excellent		
013	General	Project Safety	High		
014	General	Project Sustainability	Medium		
015	General	Project Innovation	High		
016	General	Project Collaboration	High		
017	General	Project Communication	High		
018	General	Project Transparency	High		
019	General	Project Accountability	High		
020	General	Project Integrity	High		
021	General	Project Honesty	High		
022	General	Project Fairness	High		
023	General	Project Respect	High		
024	General	Project Responsibility	High		
025	General	Project Trust	High		
026	General	Project Loyalty	High		
027	General	Project Commitment	High		
028	General	Project Dedication	High		
029	General	Project Passion	High		
030	General	Project Enthusiasm	High		
031	General	Project Energy	High		
032	General	Project Motivation	High		
033	General	Project Inspiration	High		
034	General	Project Creativity	High		
035	General	Project Innovation	High		
036	General	Project Leadership	High		
037	General	Project Vision	High		
038	General	Project Strategy	High		
039	General	Project Execution	High		
040	General	Project Results	High		
041	General	Project Impact	High		
042	General	Project Legacy	High		
043	General	Project Reputation	High		
044	General	Project Credibility	High		
045	General	Project Reliability	High		
046	General	Project Consistency	High		
047	General	Project Stability	High		
048	General	Project Security	High		
049	General	Project Privacy	High		
050	General	Project Confidentiality	High		
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144	General	Project Integrity	High		
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160	General	Project Leadership	High		
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163	General	Project Execution	High		
164	General	Project Results	High		
165	General	Project Impact	High		
166	General	Project Legacy	High		
167	General	Project Reputation	High		
168	General	Project Credibility	High		
169	General	Project Reliability	High		
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171	General	Project Stability	High		
172	General	Project Security	High		
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174	General	Project Confidentiality	High		
175	General	Project Integrity	High		
176	General	Project Honesty	High		
177	General	Project Fairness	High		
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185	General	Project Enthusiasm	High		
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187	General	Project Motivation	High		
188	General	Project Inspiration	High		
189	General	Project Creativity	High		
190	General	Project Innovation	High		
191	General	Project Leadership	High		
192	General	Project Vision	High		
193	General	Project Strategy	High		
194	General	Project Execution	High		
195	General	Project Results	High		
196	General	Project Impact	High		
197	General	Project Legacy	High		
198	General	Project Reputation	High		
199	General	Project Credibility	High		
200	General	Project Reliability	High		

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PROJECT : JOB DESCRIPTION IN LUSAIL PROJECT

midmac MIC Construct	Integrated Management System	Ver. Oct 2017
	JOB DESCRIPTION	HR FORM

Employee Name : RACHEL LORIA ROSAS H.O. Number: 19537
 Designation at jobsite : BIM MANAGER
 Banding (if applicable) :
 Project/ Department : 562/QLT – BIM DEPARTMENT
 Reports to (Line Manager) :

RESULT AREAS - RESPONSIBILITIES:

- Responsible in defining BIM Strategy and Implementation system of the project.
- Report directly to programme director to coordinate current preparation work related to BIM.
- Responsible for the creation of Employers Information Requirement (EIR) and Asset Information Requirements (AIR) in preparation of BIM Execution Plan in the project
- Processing all the information in the cloud (BIM360) and managing all significant BIM reports needed by Client and Project Management Team.
- Responsible for setting up the standard, templates and workflow to be used in the project.
- Responsible for establishing BIM Common Data Environment (CDE) to be utilized for the preparation of information models.
- To provide a helping hand to project planners by creating 4d simulation base in the construction timeline.
- Monitoring the BIM performance of an entire supply chain for potential improvement collaborative workplace

PERFORMANCE OBJECTIVES TO ACHIEVE:

- Assisting Estimator & Quantity Surveyors in 5D models.
- Managing and monitoring of work-in-progress information models prepared by different trades.
- Conducts meetings internally and externally
- Conduct BIM QA/QC check to all the preparation works involving all different trades.
- Managing clash detection analysis and highlighting all design discrepancies with the client.
- Regularly attend meetings to Clients to discuss the current status of work-in-progress of raise issues.

EDUCATION/ CERTIFICATES (BRIEF):

Education & License Achievement

- Master of Science in Construction Management
Thesis: Effectives of BIM and Lean Integration in the Stages of Construction Project
- Bachelor of Science in Civil Engineering
Board Passer Licensed No: 121589
- Professional Engineering Manager
The American Society for Engineering Management
- Autodesk Certified Professional
Accreditation No. 00445000
- Material Engineer
Accreditation No. 0004340
- Plumbing Engineer
Accreditation No. 0006770
- Lean Six Sigma – Green Belt
- BIM Project Management
CPD: 40 hrs
- LEED GA & AP BD+C
- Project Management Professional -PMP

BIM Certification

- Teikia Structures Intermediate Level
- Autodesk Civil 3D Professional
- Autodesk Revit Professional (Structural, Archi, MEP & Façade)
- Autocad with Color Rendering Level 1 & 2
- 3d Studio Max
- Lumion Pro
- Adobe Photoshop CS4
- Naviswork Manage

Digital Engineering Certification

- Staad Pro
- Etabs and Safe
- Primavera
- Fidic Contracts Management & Admin
- QA/QC Training Course

MMJV | JOB DESCRIPTION FORMAT

midmac MIC Construct	Integrated Management System	Ver. Oct 2017
	JOB DESCRIPTION	HR FORM

YEARS OF EXPERIENCE (BRIEF):

- Overall 9 years experience as skilled Civil engineer in the field of construction and Building Information modelling from both local and international firms.
- Has technical working experience in preparing project BIM execution plan, BIM manual , BIM Quality management system and Company BIM standardization and set-ups.
- Prepared progress report, clash detection and quantity report as per the Bill quantities format.
- Produced quality movie of 4d model simulations and rendered animation for Client presentation.
- Active BIM instructor and training provider for in house staff and outside the organization.
- Conduct numerous trainings and technical talks in conferences.
- Involved to numerous prestigious BIM projects. Here are the following:

High Rise Building

- 9 towers in Barwa Financial District in Doha Qatar, (2011-2013)
- 4 towers in Noble Ploenchit Bangkok Thailand, (2014-2016)
- 14 Storey commercial office tower of Jullies Place in Brisbane, Australia (2019)
- 2 towers Lusail Plaza in Qatar (Present)

Stadium and Entertainment

- Singapore Sports Hub consist of 7 storey stadium, 3 storey Aquatic center, 3 storey Multi purpose indoor arena, 2 storey water sports center, commercial facilities and basement car park. (2011-2013)
- Manila Bay Resort and Casino consist of hotel buildings, casino complex, shopping stores and amenities. (2013-2014)

Infrastructures

- MTR station connecting Shatin to Central link in Hongkong (2013)
- Al Shindagha Corridor Phase 2 consist of 2 flyover bridges, a one-lane ramp and a two-lane tunnel in Dubai, UAE (2019-2020)

Marine

- Bahrain LNG Terminal consist of double berth jetty and breakwater in Khalifa BIM Salman Port , Bahrain. (2016-2018)

Embassy & Pavilion

- Australian Embassy consist of 3 buildings and integrated landscape in Bangkok Thailand. (2014-2016)
- French and Belgian Pavilion for Expo2020 event in Dubai, UAE (2019-2020)

Hospital

- 12 storey Santo Tomas Hospital in Metro Manila, Philippines (2013-2014)

Tender Projects

- Dubai Creek Harbour ECI & Post Tender phases in Dubai,UAE (2017-2018)
- Al West Tower in Dubai, UAE (2017)
- Lusail Towers (2019)
- North Field Expansion in Qatar (2020)

TRAINING NEEDS IDENTIFIED:	ISSUED BY (NAME & SIGN): (Line Mgr. / Pro. Dir. / Proj Mgr/ Head of Dept.) Name:
<ul style="list-style-type: none"> Internal Audit Course Financial Controlling, Reporting & Budgeting Advanced Risk Management Senior negotiation Skills 	RECEIVED & AGREED BY EMP. (NAME & SIGN): Name:

ADDITIONAL INFORMATION: ISSUED ON:

Notes:
 1. Original : HO-PER (Personnel Department (In Employee File)
 2. CC : Project/ Dept. for information, records and periodical update/ modification.
 3. CC : Employee concerned

MMJV | JOB DESCRIPTION FORMAT | Page 2 of 2



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SUPPORTING DOCUMENT'S
PART 3
PLANNING

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

EXPERTISE QUALIFICATION

- CERTIFIED AUTODESK CERTIFIED PROFESSIONAL
- ATTENDED BESIX TRAINING FOR HIGH RISE BUILDING, HOST BY BESIX POTENTIAL ACADEMY
- CERTIFICATE OF COMPLETION IN BUILDING INFORMATION MODELLING AND MANAGEMENT
- CERTIFICATE OF COMPLETION IN PRIMAVERA TRAINING
- CERTIFICATE OF COMPLETION IN FIDIC CONTRACTS & ADMINISTRATION & MANAGEMENT TRAINING



**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

EXPERTISE QUALIFICATION

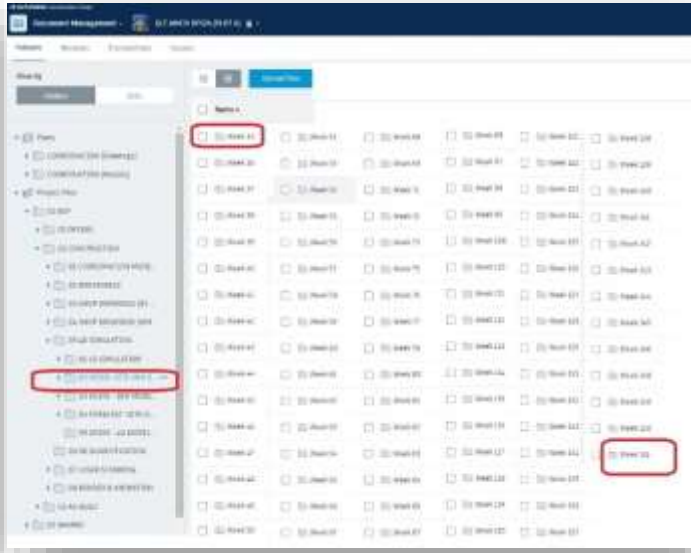
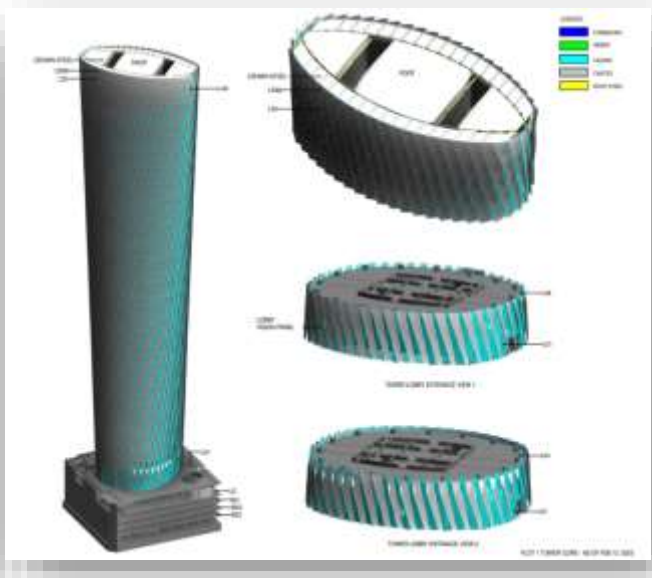
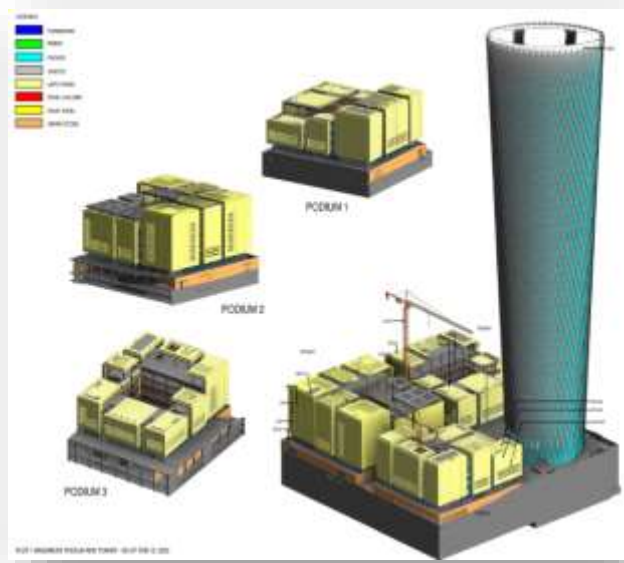
- CERTIFIED IASSC LEAN SIX SIGMA GREEN BELT
- MEMBER OF PROJECT MANAGEMENT INSTITUTE
- CERTIFICATE OF COMPLETION PROJECT MANAGEMENT PREPARATORY COURSE
- CERTIFICATE OF COMPLETION IN POWER BI
- CERTIFICATE OF ACHIEVEMENT IN TREMBLE: PASSED TEKLA ADVANCE PROGRAM



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PROJECT SAMPLE IN LUSAIL PROJECT: SITE PROGRESS IN 3D PRESENTATION

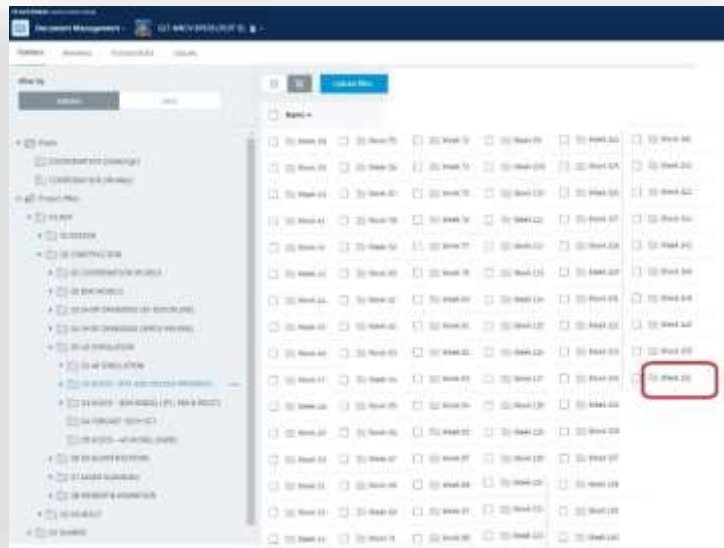
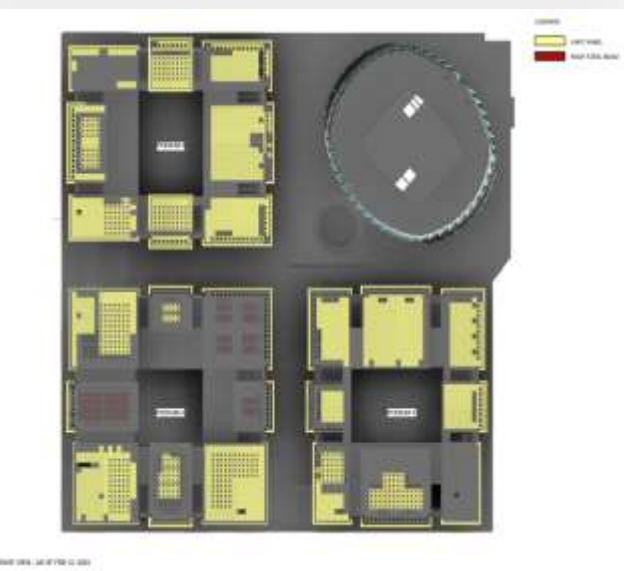
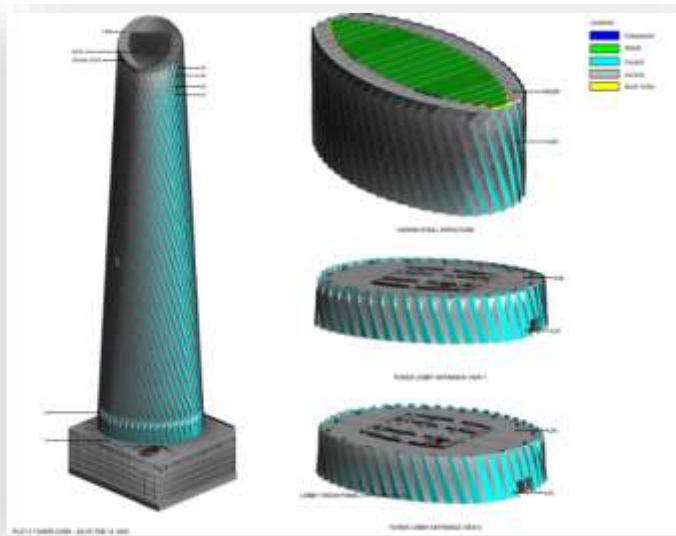
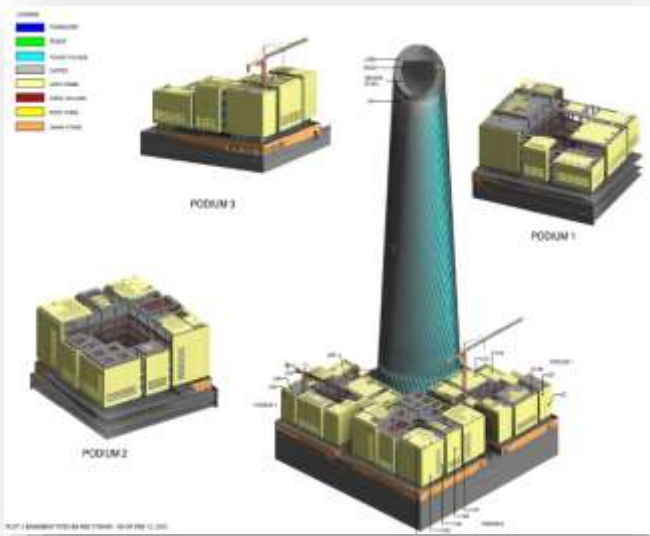
PLOT 1: AS OF FEB 12, 2023 FOR CONSTRUCTION WEEK NO. 151 WAS UPLOADED IN BIM360



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PROJECT SAMPLE IN LUSAIL PROJECT: SITE PROGRESS IN 3D PRESENTATION

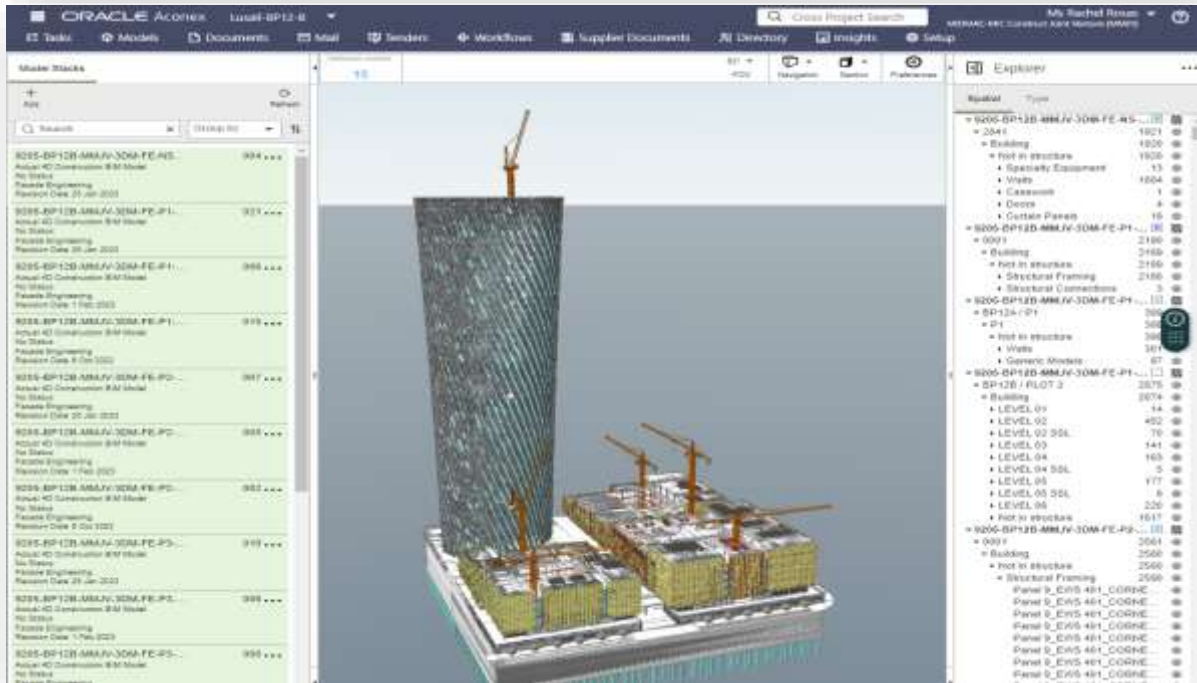
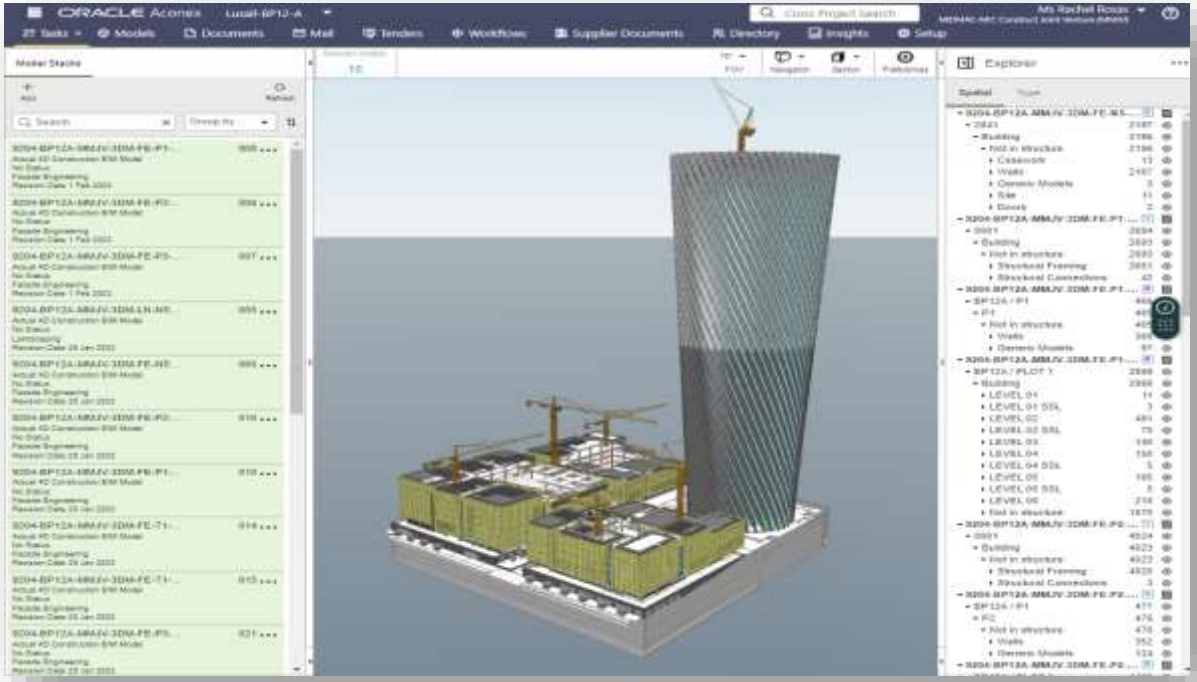
PLOT 2: AS OF FEB 12, 2023 FOR CONSTRUCTION WEEK NO. 151 WAS UPLOADED IN BIM360



PROJECT SAMPLE IN LUSAIL PROJECT: SITE PROGRESS IN 3D PRESENTATION

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

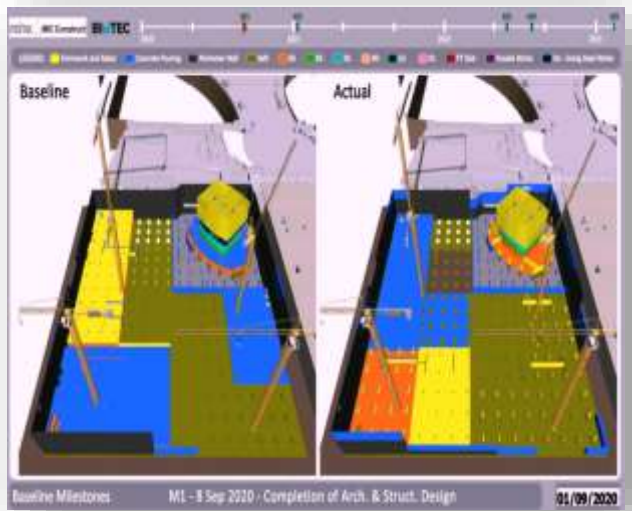
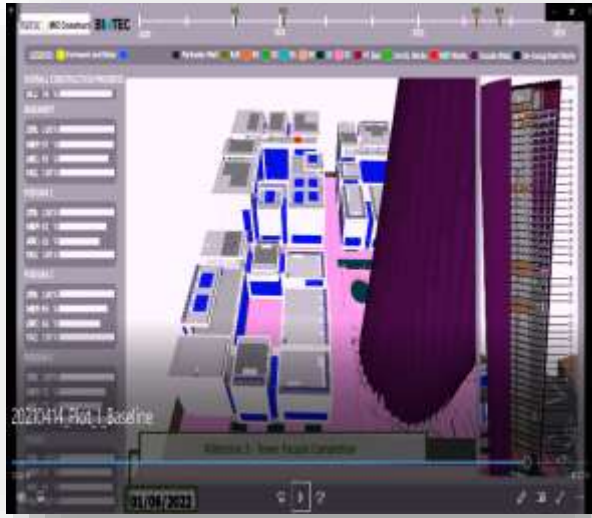
PLOT 1 & 2: AS OF FEB 01, 2023 FOR CONSTRUCTION WEEK NO. 150 UPLOADED IN ACONEX BIM MODEL INTEGRATION IN ACONEX FOR EMPLOYER AND MANAGEMENT REVIEW



**PROJECT SAMPLE IN LUSAIL PROJECT: 4D CONSTRUCTION SEQUENCE
BASELINE PROGRAM
APPROVED DOCUMENTS FOR REFERENCE**

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SLAB LIFE CYCLE
BASELINE VS ACTUAL



DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM 4D Movie



Document Reference No.	Rev	Rev. Date	Purpose of Issue
9204-BP12A-MMLV-03M-03M-03M-00001	000	29-Apr-2021	Issued for Approval

Prepared by	Checked by	Reviewed by	Approved by
James Vandenbroek	Nasiba Kibessat	St. Paschalis	Koen De Raey / Johnny Seaborn
Lead BIM / Lead Architect	Team Coordinator	Design Director	Project Director / C&E / Project Director
Signature	Signature	Signature	Signature
Date	27 Apr '21	27 Apr '21	27 APR 2021

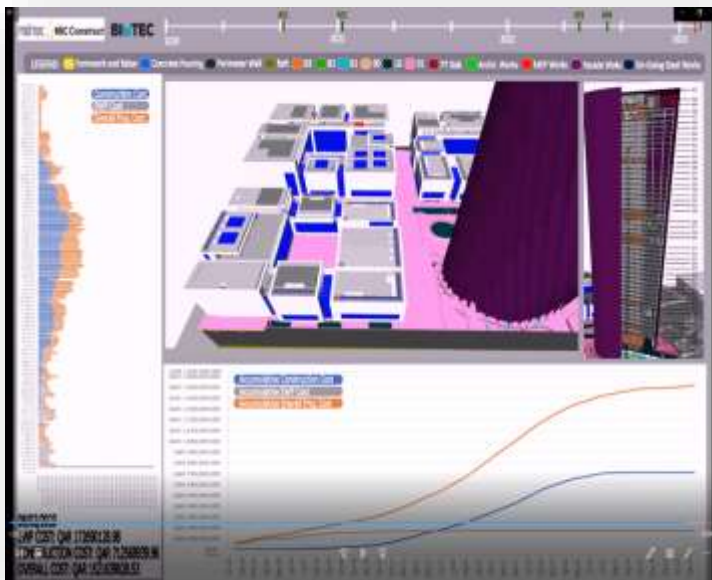


PROJECT SAMPLE IN LOCAL PROJECT, 3D COST & CONSTRUCTION SEQUENCE

- BASELINE PROGRAM
- APPROVED DOCUMENTS FOR REFERENCE

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

- SLAB LIFE CYCLE
- BASELINE VS ACTUAL



DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
 Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM 5D Movie (100% DD)

Attachment ID Reference	Description of Deliverables	Section
Item 37.07	5D Model of the Latest Baseline Programme	All

Document Reference No.	Rev	Rev. Date	Purpose of Issue
E204-BP12A-004JV-000-000-000003	003	27-Jun-2021	Issued for Approval

	Prepared by	Checked by	Reviewed by	Approved by
Print Name	Jurua Vandoren	Masha Kobasen	M. Paschalis	Koen De Raey / Johnny Brakker
Job Title	Lead BIM / Lead Architect	Track Coordinator	Design Director	Project Director C&D / Project Director
Signature				
Date	23/06/2021	27/06/2021	28/06/2021	27 JUN 2021

Document Number: E204-BP12A-004JV-000-000-000-000003 Page 1 of 3 Date: 07-Jun-2021
 SUN-BPC-LDOPM-FMS-276-001-001-BV-000



PROJECT SAMPLE IN LUSAIL PROJECT: 3D PROGRESS IN HIGH RENDERING RESOLUTION

- 2 MONTHS LOOK AHEAD OF PROJECT PROGRESS TO THE FIFA WORLD CUP 2022 IN QATAR

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

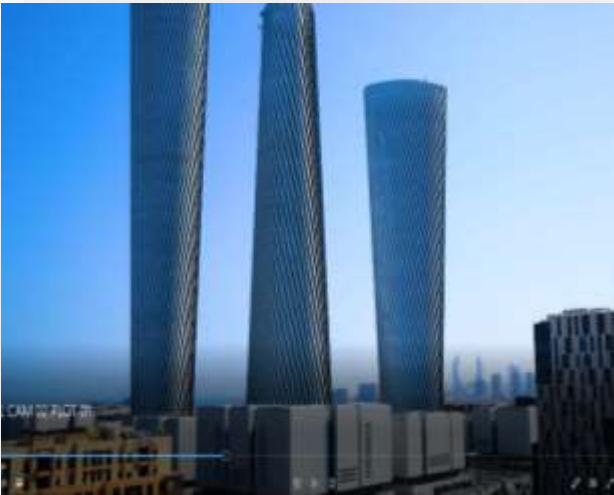


PROJECT SAMPLE IN LUSAIL PROJECT:

- ACTUAL PROGRESS ON SITE AS OF DEC 2022 DURING FIFA WORLD CUP 2022

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

- 600 PHOTOS, 2NOS VIDEOS, 4NOS TIMELAPSE



PROJECT SAMPLE IN LUSAIL PROJECT: PROCESS IN EVALUATING SUBCONTRACTOR

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

- BIM SPECIALIST COMPARISON SHEET
- PRE-QUALIFICATION DOCS FOR AWARDED SUBCONTRACTOR FOR BIM & LASER SCANNING

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204

Civil
Company Pre-Qualification Approval Request for BIM and Laser Scanning Services (BIMTEC Consultancy W.L.L.)

Document Reference No.	Rev	Rev. Date	Purpose of Issue
9204-BP12A-MMJV-PRS-CV-NS-000-00010	002	February 7, 2021	Issued for Approval

Print Name	Prepared by	Reviewed by				Approved by	
		Baris Demirci	Hussain Alkurech	Huno Amaral	Rabih Saidi	Ziad Mansell	Hasan K. Bayrad
Job Title	Project Manager	Packages & Sustainability Coordinator	HSE Manager	Project Manager (Supply Chain)	Project Technical Manager	QA/QC Manager	Project Director OR Dy. Project Director
Signature							
Date	07-Feb-2021	10-02-21	11/2/2021	11-02-2021	11-2-2021		



Document Number: 9204-BP12A-MMJV-PRS-CV-NS-000-00010- Page 1 of 44 Date: 07-Feb-2021
 Rev. 002
 LBS-BP12-LSQPM-FMT-PM-00180 REV.000 Uncontrolled if printed, refer to EDMS (Aconex) for current version

SUPPORTING DOCUMENT'S
PART 4
MANAGEMENT AND OPERATION

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

GLOBAL BESIX CERTIFICATION IN BSI

- VERIFICATION CERTIFICATE IN BIM ISO STANDARD 19650-2-2018 (2017-2023)


Verification Certificate

This is to certify that: **BESIX NV/SA**
Avenue des Communautés/
Gemeenschappenlaan, 100
Brussels
1200
Belgium

Holds Certificate Number: **VC 676254**

In respect of:
ISO 19650-2:2018 Organisation and digitisation of information about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling. Part 2: Delivery phase of the assets.
Lead Appointed Party Lead Designer and Lead Contractor which includes Project Management, Design Management, Construction and/or Information Management in accordance with ISO 19650-1:2018 and ISO 19650-2:2018

22 dated 13/01/2022.
the procedures implemented in BESIX NV/SA and BESIX Engineering
ion covers all BESIX Contracting activities; executed, supervised or
ment.



Frank Lee, Product Certification Technical and Compliance Director

For and on behalf of BSI:

First Issued: 2017-12-19
Latest Issue: 2022-02-23

Effective Date: 2022-02-23
Expiry Date: 2023-02-22

Page: 1 of 2

...making excellence a habit.™

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805331 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

First Issued: 2017-12-19
Latest Issue: 2022-02-23

Effective Date: 2022-02-23
Expiry Date: 2023-02-22

Page: 2 of 2

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A member of BSI Group of Companies.

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: EVENTS ATTENDED
EVENT 1: AUTODESK UNIVERSITY 2018
EVENT 2: BIG 5 2019



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BIM TRAINING IN LUSAIL TOWERS
PRESENTOR: RACHEL ROSAS
ATTENDEES: PROJECT STAFF, (MAIN CONTRACTOR, PMC & SUBCONTRACTOR)

BIM monDAY
MMJV BIMCommunity@2021

"Our mission is to advance digital transformation and boost collaboration on site."

TRAININGS

- Revizto
- Naviswork Freedom
- BIM360
 - Document Management
 - Design Collaboration
 - Model Coordination
- And much more
 - 3D scanning
 - QR Code
 - HSE
 - Access
 - etc.

The training will be given to all teams : PMCM , MMJV Staff, Subcontractors and Suppliers. It schedule to run every second and fourth Monday of the Month . Subjects and topics are in batches and Invitation will be sent out through email.

DEVICES

HOW IT WORKS

BIM TEAM

Suppliers, SubContractor, PMCM, MMJV Staff

MMJV BIM TEAM will support the different organization to Implement BIM in construction site . For details and requesting for training please contact the BIM ambassadors below.

rrosas@midmac-mic.com
j.vandevyn@midmac-mic.com
p.spaars@midmac-mic.com

midmac | MIC Construct

CERTIFICATE OF PARTICIPATION

This certificate of training achievement is awarded to

BIM Manager *Victor Crespo*

who attended the training course
 BIM360 Document Management on 28th September 2020, Doha Qatar

Rosas
 Rachel Loria Rosas
 BIM Manager / Trainer

J. Ibrahim
 Johnny I. Ibrahim
 Dy. Project Director

Koert De Rooy
 Koert De Rooy
 Project Director

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BESIX REVIT & BIM REQUIREMENTS TRAINING
PRESENTOR 2019: RACHEL ROSAS
ATTENDEES: PROJECTS SITE TEAM AND HEAD OFFICE



Training : REVIT - BASICS Date :23 JULY 2019
 Trainer : MS. OUAF AE MESSAOUDI & MS. RACHEL ROSAS Training Hours :8:30 AM - 5:30 PM

SR.	HO. NO.	SITE	NAME	FIRST NAME	DESIGNATION	SIGNATURE
1	6875	MSR	MOEINI	MOHAMED AHMED	CHIEF SURVEYOR	
2	17135	RAP	EL KADI	WISSAM EL SHEIKH	ARCHITECT	
3	53354	RAP	MATEV	ZORAN	PROJECT ENGINEER	
4	9517	DUT	SANKARA NARAYANAN	HARI KUMAR	SURVEYOR - SENIOR	
5	42172	MSR	ALSHANTI	JALAL AMEER AHMAD	PLANNING ENGINEER	
6	30447	DED	PAULOSE	ROY	DRAUGHTSMAN - FORMWORK DESIGNER - SENIOR	
7	38188	MSR	NANGGAN	DEMETRIO	QUANTITY SURVEYOR	

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: START UP OF NEW PROJECT (GUGGENHEIM ABU DHABI MUSEUM PROJECT)
PREPARED BY: RACHEL ROSAS
PROJECTS VISIT: 1 MONTH INVOLVEMENT FOR EVALUATION AND REPORTING

GUGGENHEIM ABU DHABI MUSEUM PROJECT – MAIN WORKS
BIM COORDINATION REPORT – February 2022

Six Construct Trojan Joint Venture

BIM COORDINATION REPORT
FEBRUARY 2022

00	03/03/2022	1 st issue	Rachel Rosas	Rania Shawky	Jean-Hugues Jacquemart	Rashid Ghamraoui
Rev	Date	Changes	Edited by / BIM Manager	Reviewed By/ Head of Civil / BIM	Reviewed by / Technical Director	Approved by / Project Director

Doc. No: GAD-STJV-MOR-ADM-000002 Rev. 00 Date: 03/03/2022 Page 1 of 15

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

**MIDDLE EAST: START UP OF NEW PROJECT (GUGGENHEIM ABU DHABI MUSEUM PROJECT
PREPARED BY: RACHEL ROSAS
PROJECTS VISIT: 1 MONTH INVOLVEMENT FOR EVALUATION AND REPORTING (22 PAGES)**

- MIDP
- BIM COORDINATION BIM MEETING
- PROPOSED BIM RATING

2. Model Information Delivery Plan (MIDP)

The Model Information Delivery Plan (further MIDP) lists all the information deliverables of a project. It identifies when project information is to be prepared, by whom, and what protocols and procedures to use. It summarizes the different "task information deliverable plans".

2.1 Model in Progress

Construction models in progress this month of February:

BIM Model Reference	Discipline	Status	Status
ISAD-STJV-EM-MI	Structure	3D model	Work in progress
ISAD-STJV-CGA-FUN-BTW-MCO-100000	Structure	3D model	Work in progress
To be check	Structure	Sheet Model	Work in progress
In progress	Structure	4D model & AEC	OK

Design model assessed this month:

BIM Model Reference	Discipline	Status	Date

GUGGENHEIM ABU DHABI
GAD-STJV-BIM COORDINATION

Issue 1: Purpose of provided opening, no services shown are passing through the wall opening. 2. Missing wall sleeve.

Assigned: Rachel Rosas
Reporter: Rachel Rosas
Created: 2022-02-16
Status: Not set
Project: GUGGENHEIM ABU DHABI

Doc No: P_STR_L_00.5

5.4 Rating

This is the list of Rating system used in BIM Quality Control. Primarily within the design stage LOD300, rating scale should passed on 90% to 95%, while LOD 400-500 are ranging between 95% to 100%

PERCENTAGE	DESCRIPTION	STAGE
98%-100%	EXCELLENT	LOD 500
95%-98%	PASSED	LOD 400
90%-95%	PASSED	LOD 300 IFC
85%-90%	SATISFACTORY	LOD 300 100%DD
75%-85%	INTERMEDIATE	LOD 300 50%DD
0%-75%	FAILED	CONCEPT

Table XX – GAD – BIM Quality Control - Rating

Doc No: GAD-STJV-MOR-ADM-000002 Rev. 00 Date: 03/03/2022 Page 11 of 15

GUGGENHEIM ABU DHABI
GAD-STJV-BIM COORDINATION

Issue 1: VERIFY VENT PIPE NOT CONNECTED, AND CHECK THE ALIGNMENT. 2. PIPES CLASHED WITH RC BEAM 500X1200P.

Assigned: Rachel Rosas
Reporter: Rachel Rosas
Created: 2022-02-16
Status: Not set
Project: GUGGENHEIM ABU DHABI

Doc No: G_PLUL_L_00.0P

3. BIM Meeting

The BIM process requires some fixed and thematic meetings during different stages of the project. Fixed meetings have a predetermined frequency, a standard agenda, and standard participants. Meeting will occur every Tuesday.

3.1 BIM Weekly Progress Meeting

The BIM Weekly Progress Meetings are led by PMC's BIM Manager every Tuesday to monitor progress, status of previous meeting and adherence to the BIM Execution Plan (BEP). Other attendees are the BIM Team from STJV's and the BIM team from PMCD. *note: no, we will like to know who is leading the weekly meeting occur every time, is it STJV or PMCD? pls confirm it STJV*

Meeting occurrence	Date
BIM Weekly Meeting #511	06/02/2022
BIM Weekly Meeting #510	11/01/2022

GUGGENHEIM ABU DHABI
GAD-STJV-BIM COORDINATION

Issue 1: Storm water pipework align (utilities are clash model) 2. Missing wall opening.

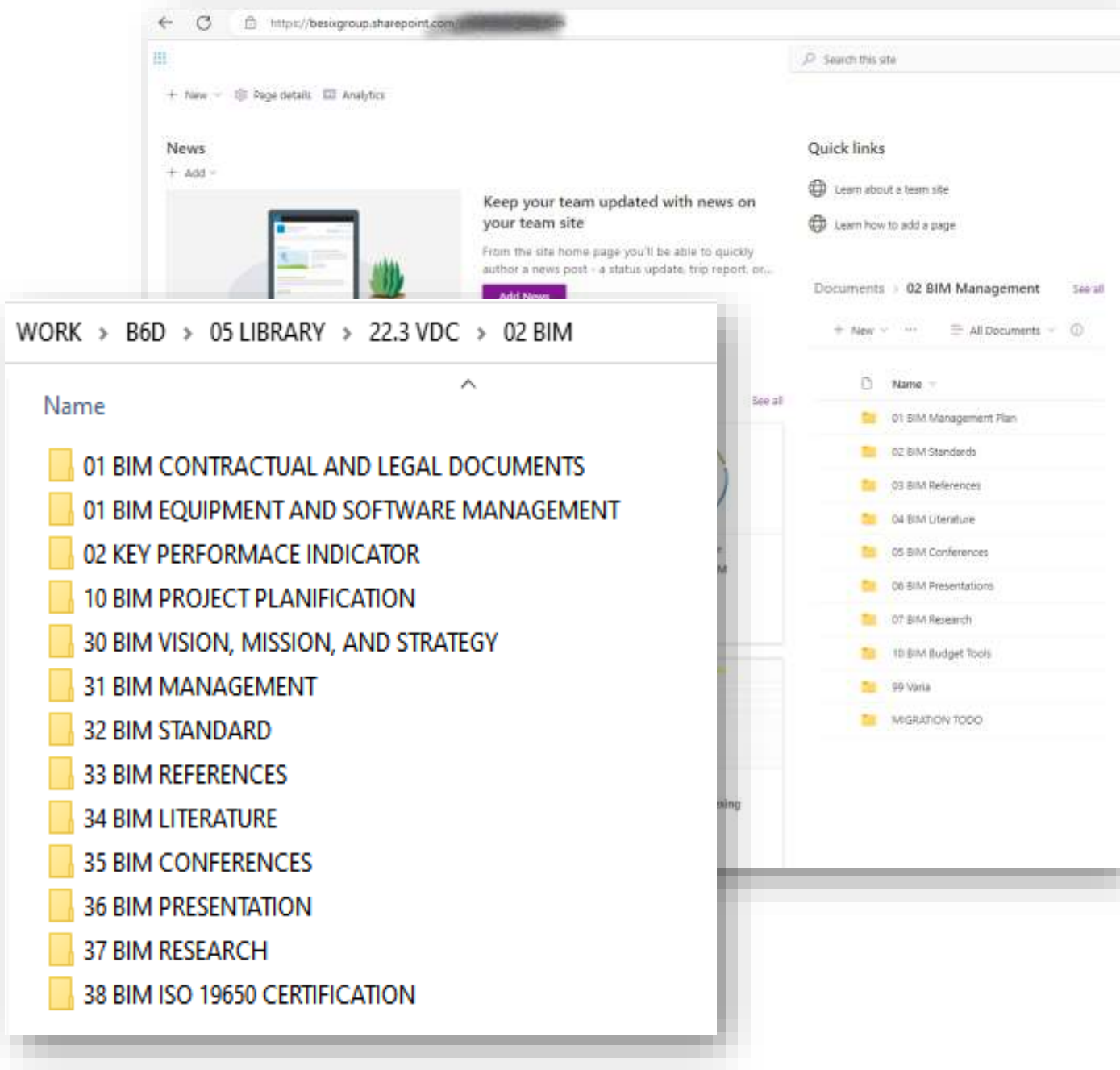
Assigned: Rachel Rosas
Reporter: Rachel Rosas
Created: 2022-02-16
Status: Not set
Project: GUGGENHEIM ABU DHABI

Doc No: P_STR_L_00.5

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

BESIX: GLOBAL BIM LIBRARIES

- GLOBAL SHAREPOINT
- MIDDLE EAST SERVER (BACKUP)



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

BESIX GLOBAL: BESIX SOAP BOX MEETING
ORGANIZER: BESIX HO IN BRUSSEL SINCE 2021
DECEMBER PRESENTOR: RACHEL ROSAS

Weekly Technical Topics for digital enthusiast (presence is optional, language = EN, session will always be recorded)

Recordings can be found on this link : [04. Technical Soapbox](#)

If you have an interesting topic : [@Huy, Hoang](#) or [@Vandenbogaerde, Kristof](#)

Some rules when you are presenting a topic :

- Brief introduction : what's the purpose of the tool, procedure etc.
- Keep it technical, but not too technical (Audience = BIM Modelers, Steel, Façade, Methods, Planning...)
- Max. 30 minutes of presentation. 15 minutes of questions afterward.
- Try to show some live demonstrations... it shows more than a PowerPoint.

Agenda

10/02/2023: BIM Coordination with Aconex IMS by Hoang Pham (SMV)

03/02/2023: KLIP to BIM Tool by Mathieu Ophoff (RA)

27/01/2023: Bexel Manager by Veijko Janjic

13/01/2023 – KBM – BIM @ Dubai Waste to Energy

09/12/2022 – Rachel L.Rosas (Dubai) – Laser Scanning @ Lusail Tower

02/12/2022 - Cancelled

25/11/2022 – Michele Ambrosino (ULB) – Brikiebots

18/11/2022 – Cancelled

11/11/2022 – No Soapbox – Fall break

04/11/2022 – No Soapbox – Fall Break

28/10/2022 – LLE – Genus & Power BI

21/10/2022 – RCO – ISO19650 (15h Bxl Time)

14/10/2022 – ALU - Analytical modelling in Revit

07/10/2022 – KDS – BIM Server

30/09/2022 – KHE – GIS@ROCO

23/09/2022 – TST (Qonic) – QONIC: Accurate BIM

16/09/2022 – PAA – Solibri use case: LOI audit, progress &

09/09/2022 – FPI – BIM Interoperability Tools for Revit

02/09/2022 – MMU - BIM Integration with Tekla (to be co

26/08/2022 – MRO – Solibri Ruleset manager by MRO

19/08/2022 – ScaledRobotics by Stuart Maags

---- Summer Break ----

24/06/2022 – TBD

17/06/2022 – LSA – Internship report (automatization of th

10/06/2022 – ADR – Task Automation @ RIGA-project

03/06/2022 – HHU - Folder Structure on BIM360/ACC

20/05/2022 – LLE – BIM360 + PowerBI

13/05/2022 – YDI – ConVoid Plugin for Revit (Coordinator

06/05/2022 – BED Event – No Soapbox

06/05/2022 – BED Event – No Soapbox

29/04/2022 – KG-Dev – BIM & Dashboarding (KG-dev.be)

22/04/2022 – KRO - Speckle

15/04/2022 – BESIX BE Holiday – No Soapbox

08/04/2022 – QSW - Kabandy

01/04/2022 – No Soapbox

25/03/2022 – LLE - Globalmapper

18/03/2022 – YDI – Diroots Revit Plugin

11/03/2022 – KDS - iConstruct

04/03/2022 – MJA – Main Principles of ISO19650

25/02/2022 -

18/02/2022 – (Cancelled)SVDW – BIM @ COTU Oosterweel Zinktunnel

11/02/2022 –

04/02/2022 – OPE – Revit Shared Coordinates

28/01/2022 -

-- Winter Break --

10/12/2021 – PDC – LTF Volume Model & link to Model-statuses

03/12/2021 – Vincent Charlier – IDCapture on Clinic de Neuilly (FR)

29/10-12/11/2021 -- Autumn Break --

22/10/2021 – ADR – Lessons Learned on Mozambique LNG

15/10/2021 – LLE – Neanex Portal on COTU

08/10/2021 – YDI/KDS – Autodesk Infraworks (Design vs Methods&Planning)

01/10/2021 – LRY – Revizto-usage @ WatPac

17/09/2021 – KDS – Navisworks iConstruct

13/08/2021 – EHE – Revit Model Checker & LOI Automation

06/08/2021 – JMA – Plannerly

-- Summer-break --

24/06/2021 – NHO – Dynamo & LBS-codes on LTF

21/05/2021 – LLE – Data Management with Python

07/05/2021 – HHU – Open Data Vlaanderen – Use of LIDAR-information

30/04/2021 - FLE - BESIX Classification

09/04/2021 – CWI – Reporting (BIMCollab/Planning) on LTF

02/04/2021 – (EDR – Dynamo-scripts for LTF - Cancelled)

26/03/2021 – LLE – R4 Project Overview

19/03/2021 – KVA – BIMCollab Zoom (Pro)

12/03/2021 – KVA – Revit IFC Export

19/02/2021 – ASBR – The wonders of SimpleBIM

12/02/2021 – KVA – RTV Exporter Pro, Revit Plugin for Automating exports of IFC/NWC/PDF/DWG...]

05/02/2021 – LSW – StabiCAD Openings Manager



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SUPPORTING DOCUMENT'S
PART 5
TECHNICAL EXECUTION

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIM DOCUMENTS
PREPARED BY: JONAS AND RACHEL
STATUS: APPROVED (105 PAGES)

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 - Contract: 9204
Architectural
BIM Execution Plan

Attachment Reference	Description of Deliverable	Status
Ann. 3.1.2	Building Execution Plan	BIM

Document Reference No.	Rev.	Rev. Date	Purpose of Issue
8204-BP12A-AMU-V-PLN-BM-NS-000-0001-001	103	14 May 2024	Issued for Approval

Prepared by	Checked by	Reviewed by	Approved by
J. Rosas	Marin Johnson	M. Panchal	Khalid De Pooj / Johny Brothers
Job Title	Lead BIM / Lead Architect	Team Coordinator	Design Checker
Signature	[Signature]	[Signature]	[Signature]
Date	14 May 2024	14 May 2024	14 May 2024

Document Number: 8204-BP12A-AMU-V-PLN-BM-NS-000-0001-001 Date: 14 May 2024
L33-BP12A-AMU-V-PLN-BM-NS-000-0001-001

BIM EXECUTION PLAN
BP12A & BP12B
DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS PLOTS 1 & 2

2.4 General Scope of Work

The statements, podiums and towers of Lusail Towers Plaza Towers - Plots 1 & 2 (BP12A & BP12B), involves the following scope of works, but not limited to: -

- Site Survey and Setting Out
- Demolition
- Demolition Works
- Earthwork, Foundation, Protection, waterproofing etc. for External Works
- Road Work, Paving Work and Drainage Work
- Underground External Drainage Networks
- Pressure Piping External Networks
- Gas Technical Work
- External Electrical Works: install, testing and commissioning of Electrical Power Supply, E.L.V., External Lighting, SSC, Electrical provisions for external signage, CCTV cabling
- Structural Steel Works
- Structure of Concrete Work
- Architectural Work
- Signage Work
- Landscaping Work
- Fire and Life Safety
- Mechanical Work
- Public Health & Drainage Services
- Heating, Ventilation, and Air Conditioning (HVAC) Services
- Motor Tunnel and CFD Modelling
- Fire Protection WORK
- Electrical, Lighting, Earthing, Fire Alarm, Security, Communications & Extra Low Voltage (ELV) WORK
- ICT system

8204-BP12A-AMU-V-PLN-BM-NS-000-0001-003 Page 11 of 103

BIM EXECUTION PLAN
BP12A & BP12B
DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS PLOTS 1 & 2

3.2 Employers Information Requirements (EIR)

The BIM requirements for the Design & Build Works for Lusail Plaza Towers - Plots 1 & 2 (BP12A & BP12B) required by the Employer to the Contractor are listed as follows:

- Detailed approach for ensuring continuity in the BIM process in terms of taking ownership of the BIM models (including enabling working from pre-contract stages and developing them further in construction phases and fit-out)
- Project specific 'BIM Element Definition Matrix'
- 'BIM Quality Assurance Plan' complete with a 'Clear Definition and Revision Procedure' and approved format for a summary report.
- 'Project BIM Document Register'
- 'Collaboration Strategy' ensuring how the Contractor will integrate the L33/DC CEE Protocols into the Contractor's internal control procedures and delivery
- 'People Plan' and associated engagement (including the distribution of BIM responsibilities across the integrated team or clearly defined BIM user categories)
- 'Training Plan' establishing how BIM training has been integrated into the overall training plan. Such training shall be administered in modules and an ongoing professional development in order to address the needs of all BIM user categories and capabilities levels across the entire delivery structure in order to ensure a successful implementation of the BIM Project Management Plan
- 'IT Plan' describing the IT systems provision (including hardware, software, storage and IT security) being implemented to support 5 dimension Stage 5BIM deliver outcomes. It should demonstrate the hardware and software provision for each BIM user category and comprises the provision across the entire delivery structure and
- Detailed discussion on the extent of proposed 'Third BIM' solution for the Works including hardware, software and associated specifications.
- A schedule of proposed BIM deliverables accompanied by a 'Third Model Lock Keyset Plan'
- Format of BIM progress report that gets incorporated into the monthly progress report.
- A BIM EIR maturity schedule in the form of a matrix authorizing how fully developed content will be maintained against each section of the BIM Plan over successive revisions.

3.2.1 Maturity Submission Process

- Work in Progress BIM Models to be made available or agreed CEE (and modified on or before the agreed date)
- Issuing Progress Summary presenting progress of each Volume (Planned vs Actual)
- 3D model of the latest baseline prog. which delivered using up-to-date BIM Model. The format to be native 4D model and a PowerPoint for the containing all frames arranged in sequence.
- User comprehension of Executive 4D Construction (Planned vs Actual) using the purposes of progress monitoring. The format to be native 4D model and a PowerPoint for containing all frames arranged in sequence.
- Progress against the 'People Plan', 'Training Plan' and 'IT Plan'

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BIM EXECUTION PLAN
BP12A & BP12B
DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS PLOTS 1 & 2

3.4.3 Format of Deliverables

Task Delivery	Applicability	Version	Release Format	Shared Format
1. Final BIM Execution Plan & CEE Model	Full	2024	PDF	IFC
2. Model-disciplinary modelling	Full	2024	PDF	IFC
3. 3D Model-disciplinary coordination and clash detection	Handover	2024	PDF	IFC
4. Creation of 2D Shop Drawings	Full	2024	PDF	IFC
5. Quantity take off	Full	2024	PDF	IFC
6. 4D Workflow planning	BIM 4D/5D Software	2024	PDF	IFC
7. As-built model documentation	Full	2024	PDF	IFC
8. Facility Management documentation	Full	2024	PDF	IFC

Table 3 - BIM tasks and deliverables

8204-BP12A-AMU-V-PLN-BM-NS-000-0001-003 Page 31 of 103

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIM MONTHLY REPORT
PREPARED BY: RACHEL & JONAS
STATUS: FOR INFORMATION (194 PAGES)

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM Monthly Report for the Month of July 2020

Document Reference No.	Rev.	Rev. Date	Purpose of Issue
0204-BP12A-MB/17-REP-BIM-MO-000-00000	000	07-Aug-2020	Issued for Information

Prepared By	Checked By	Reviewed By	Approved By	
Rachel/Rosae	Jonas/Jonas	M. Panchabala	Manoj/Manoj	
JOB TITLE	BIM Manager	Lead BIM / Lead Architect	Design Director	Project Director (BIM, IT, Project Delivery)
SIGNATURE	[Signature]	[Signature]	[Signature]	
DATE	07-Aug-2020	04-Aug-2020	03-Aug-2020	

4 Model Coordination Progress

The Model Coordination Progress shows the weekly updates in the opening, responding and closing of an called "coordination tickets". This workflow starts with the publishing of the Revit models after which they are shared and consumed by all disciplines. After iteration, the clash detection is run, and all discipline leads review the output. The most important details are that raised within the team as a "coordination ticket". The below weekly dashboard shows progress on resolving these tickets.

4.1 Week no.21

5 Clash Detection Board

APPENDIX A: BIM Progress Dashboard

100% (00) - Architectural BIM Model - Planned vs Actual Progress

100% (00) - Structural BIM Model - Planned vs Actual Progress

3 BIM Meetings this month

3.1 BIM Coordination Meeting

The BIM Coordination Meetings are led by MICU's BIM Manager every Sunday to monitor progress, clash resolution and adherence to the BIM Execution Plan (BEP). Other attendees are the BIM Coordinators from all Sub-Consultants and the BIM team from PMCM.

Meeting occurrence	Date
BIM Coordination Meeting #000	03/05/2020
BIM Coordination Meeting #000	10/05/2020
BIM Coordination Meeting #010	17/05/2020
BIM Coordination Meeting #011	24/05/2020 (Cancelled due to Eid Holiday)

3.2 BIM Design Workshops

The BIM Design Workshops are led by MICU's BIM Manager every Tuesday to coordinate and agree on combination with all discipline leads. All discipline leads from both MICU and Accadis are attending, as well as the AR-IT MEP team from PMCM. Main topics are the modeling strategy for new areas of development, proposals / solution during APL, ST, MEP design development and demonstration of closed topics.

Meeting occurrence	Date
BIM Design Workshop #000	05/05/2020
BIM Design Workshop #000	12/05/2020
BIM Design Workshop #010	19/05/2020
BIM Design Workshop #011	26/05/2020 (Cancelled due to Eid Holiday)

3.3 Other BIM Meetings

The BIM Design Studio acts as central point-of-contact for all BIM related matters. All models coordination, work-in-progress, and/or build are readily available through Accadis & MICU's BIM 360 platform. When in addition to this, other BIM meetings are organized on special request, they are listed here below.

Meeting occurrence	Date
BIM Internal Audit #001 - MEP	01/05/2020

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIM MATURITY MATIX
PREPARED BY: RACHEL ROSAS
STATUS: FOR INFORMATION (27 PAGES)

- MATURITY MATRIX WERE PREVIOUSLY SUBMITTED IN A DIFFERENT DOCUMENT AND THEN BECOME A PART OF BIM MONTHLY REPORT.

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM Maturity Matrix Report for the Month of April 2020

Document Reference No.	Rev	Rev. Date	Purpose of Issue
EDN-BP12A-0001-021-000-00-0000-001	001	11-June-2020	Issued for Approval

Prepared by	Checked by	Reviewed by	Approved by
Project Name: Lusail Plaza Towers	Checked by: Javad Vahidmanesh	Reviewed by: M. Fakhri	Approved by: Khalid Al-Khazri / Jafar Al-Jabir
Job Title: BIM Manager	Lead BIM Lead / Architect	Design Director	Project Director / BIM Project Manager
Signature: [Signature]	[Signature]	[Signature]	[Signature]
Date: 11-June-2020	11-June-2020	11-June-2020	11-June-2020

2.5.2 Secondary Discipline
Secondary discipline has 2 subgroups namely, MEP, GLV & (ARC-CV). Both the maturity score and radar chart are represented in this report.

Discipline	MEP	GLV	ARC-CV	Overall
MEP	79%	79%	79%	79%
GLV	81%	81%	81%	81%
ARC-CV	87%	87%	87%	87%

2.5 BIM Maturity Matrix (6 Months Development)
Tracking of the monthly progress of maturity matrix focusing of the generated maturity score allow us to measure BIM targets, measure setbacks and identify obstacles as well as recognize successes in the BIM implementation along the way.

Group	Discipline	March	April	May	July	July	August
Primary	Structural	80%	80%	80%	80%	80%	80%
	Architecture	81%	81%	81%	81%	81%	81%
	Facilities	82%	82%	82%	82%	82%	82%
Secondary Stage 1	Mechanical	79%	79%	79%	79%	79%	79%
	Electrical	79%	79%	79%	79%	79%	79%
	Public Health	79%	79%	79%	79%	79%	79%
Secondary Stage 2	Audio Visual	79%	79%	79%	79%	79%	79%
	Telecommunication	81%	81%	81%	81%	81%	81%
	Security	81%	81%	81%	81%	81%	81%
Secondary Stage 3	Lighting	81%	81%	81%	81%	81%	81%
	Landscape	81%	81%	81%	81%	81%	81%
	Interior	81%	81%	81%	81%	81%	81%
Secondary Stage 4	Signage & Wayfinding	81%	81%	81%	81%	81%	81%
	Cladding	81%	81%	81%	81%	81%	81%
Summary		80%	80%	80%	80%	80%	80%

2.5 Radar Chart and Scorecard of each Discipline
2.5.1 Primary Discipline
Upon completing the assessment the reports generates a single maturity score as well as a number of radar chart.

Discipline	MEP	GLV	ARC-CV	Overall
MEP	81%	81%	81%	81%
GLV	81%	81%	81%	81%
ARC-CV	81%	81%	81%	81%

LUSAIL PROJECT: BIM SUPPLEMENTARY FOR IFC CLOSURE

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PREPARED BY: RACHEL ROSAS AND ARCADIS
STATUS: FOR INFORMATION (10 PAGES)

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM Supplementary Report for Closure of IFC
(All Assets)

Document Reference No.	Rev	Rev. Date	Purpose of Issue
9204-BP12A-MM/J-REP-BIM-AS-000-0000	000	06-Oct-2021	Issued for Approval

Prepared by	Checked by	Reviewed by	Approved by
Project Manager (MM/J)	BIM Coordinator (MM/J)	Lead BIM Lead Architect	Project Director (M)

9204-BP12A-MM/J-REP-BIM-AS-000-0000-REV 000 Page 1 of 10 Date: 06-Oct-2021

1. PROCESS

1.1. Purpose
The purpose of this report is to clarify the clash detection tests run as part of IFC stage delivery of LOD300 Asset specific Federated models.

1.2. Methodology
Using the Federated model as a 'single source of the truth' & the AutoDesk Navisworks Manage application, the following steps are followed:

- Asset Isolation:**

Asset specific models are isolated using pre-defined selection sets. For example: All discipline models for Podium.
- Model Filter run LOD 300 Content for Clash test:**

Content is filtered Using Data saved in the Federated model(s) to hide elements including:

 - Non-graphical information - Rooms, Lines, etc.
 - Graphical non-LOD300 content - Plasterboard, plywood etc. can be hidden, prior to clash test run.

9204-BP12A-MM/J-REP-BIM-AS-000-0000-REV 000 Page 8 of 10 Date: 06-Oct-2021

5. Clash test

- For Basement & Lower Ground elevations, clashes are sorted using Level and grouped for exclusion.
- Using the project BEP & Level of Development Specification as a guide, non-LOD300 clashes are grouped as 'Reviewed' & excluded from the result count this is applicable on all assets.

6. LOD 300 Exclusions - Example

To further clarify, below are selected examples of reviewed & excluded clashes as per the above methodology:

MEP/ECT Services passing through non-structural elements.

MEP services passing through non-structural blockwork & curtain wall panels with notched in corners.

MEP/ECT services requiring STR openings within them 300x300 or 300x60.

9204-BP12A-MM/J-REP-BIM-AS-000-0000-REV 000 Page 9 of 10 Date: 06-Oct-2021

8. References

- BIM Execution Plan (BEP) 9204-BP12A-MM/J-PLN-BIM-AS-000-00001
- Level of Development Specification (LOD) Part 1 & Commentary – April 2019

9204-BP12A-MM/J-REP-BIM-AS-000-0000-REV 000 Page 10 of 10 Date: 06-Oct-2021

LUSAIL PROJECT: BIM AUDIT REPORT

PATH TO BIM CHAMPION AWARD (SUPPORTING DOCUMENTS)

PREPARED BY: RACHEL ROSAS
STATUS: FOR INFORMATION – 244 INDIVIDUAL REPORTS

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: S204
Building Information Modelling
BIM Audit Report
IFC Structural - Tower

Attachment 13 Reference: Item 27.13	Description of Deliverable: Modelling Progress Summary Report	Section: All
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Document Reference No.	Rev.	Rev. Date	Purpose of Issue
S204-BP12A-MB17-GOR-BIM-001-000-0002	002	09-Mar-2022	Issued for Information

Prepared by		Reviewed by		Approved by	
Print Name	Iman Elshor	Abdullah Al Etabsak	Rachael Rosas	James Vandresen	
Job Title	Project Manager (BIM/CAD)	BIM Coordinator (BIM/DES)	BIM Manager (BIM/IT)	Design Director (BIM/IT)	
Signature					
Date	20-Apr-2022	17-4-2022	05-04-2022	05-04-2022	

Document Reference: S204-BP12A-MB17-GOR-BIM-001-000-0002-002 Page 1 of 18 Date: 30 March 2022
LUS-BP12 LDCPM-FMT-PN-00130 REV.000

Model Name	Description	Status	Score	Compliance
			4.65	99%

1 Executive Summary

This report will always be used to audit the submission of ARCADIS BIM models. The following applies will allow the audit for architectural and structural models only, for IFC the same applies to going forward but it will be presented in a separate report.

Model Name	Description	Status	Compliance %
S204-BP12A-MB17-GOR-BIM-001-000-0002	Tower - All	07/03/2022	99%

2 Model Audit

BIM Model Reference	Package	Date	Origin Path
S204-BP12A-MB17-GOR-BIM-001-000-0002	Tower - All	07/03/2022	

3 Audit

The audit tool used in this report is the audit tool provided in the most recent version of the IFC. The entire number of violations has been provided in detail in the attached IFC file.

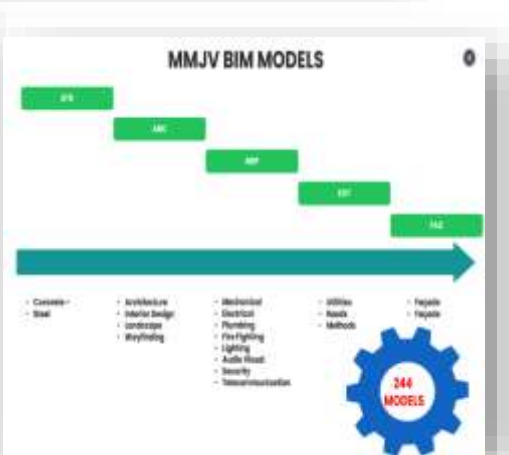
3.1 Summary Main Issues

Model

Model Name	Issues
S204-BP12A-MB17-GOR-BIM-001-000-0002	1

Type Summary

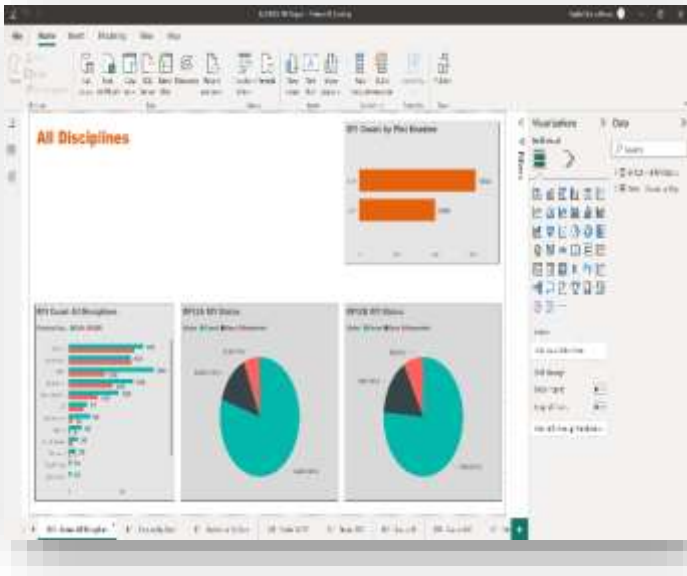
Category	Sub
Model - IFC	11
Model - IFC - Rev	12
Model - IFC - Rev - Rev	13
Model - IFC - Rev - Rev - Rev	14



LUSAIL: BIM PROGRESS REPORT

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

**PREPARED BY: RACHEL ROSAS
STATUS: FOR INFORMATION – BIM REPORTING WITH POWER BI INTEGRATION**



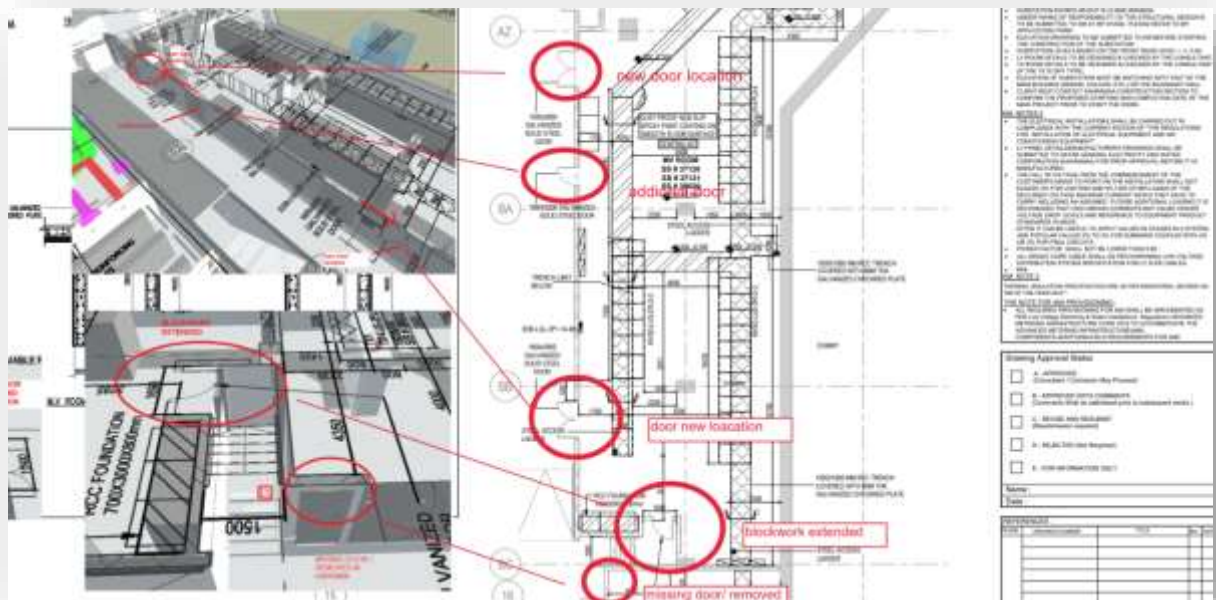
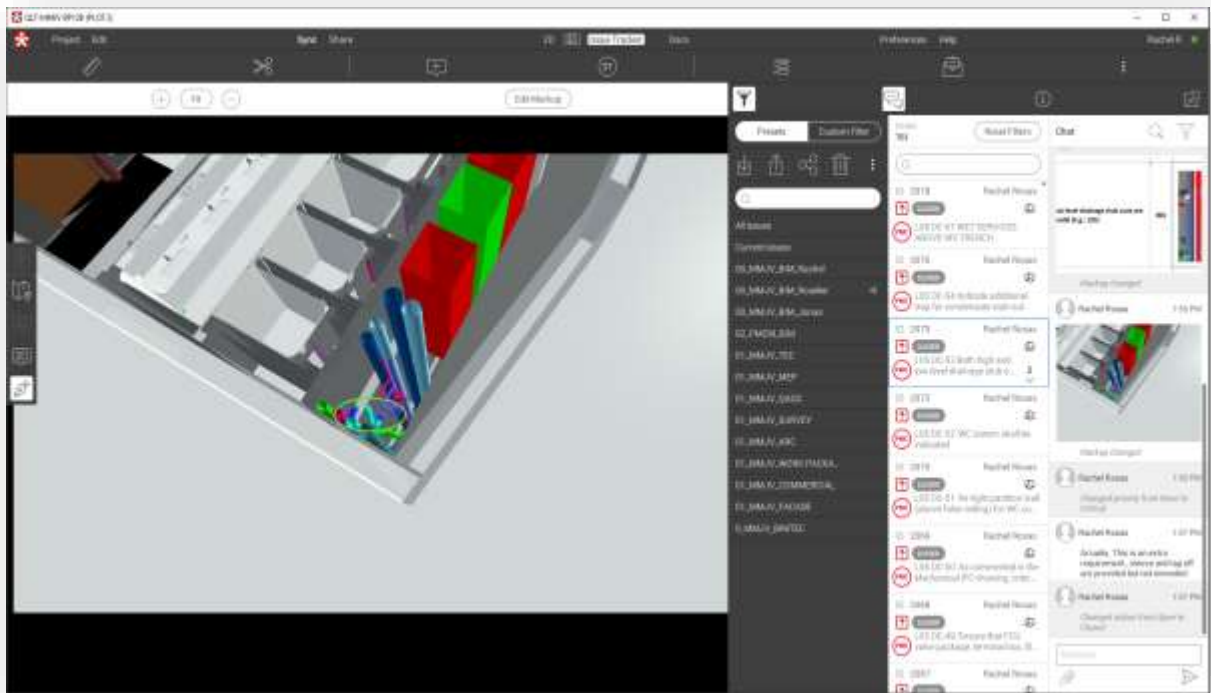
LUSAIL PROJECT: BIMCOORDINATION REPORT

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PREPARED BY: RACHEL ROSAS

STATUS: FOR INFORMATION – BIM REPORTING WITH REVIZTO INTEGRATION

- CLOSED ISSUES IN REVIZTO : OBSERVATION & COMMENTS
- 2D OVERLAY WITH LOD400, AND REVIEWING THE COMMENTS FROM KARAHMAA AUTHORITY



LUSAIL PROJECT: LASER SCANNING

PREPARED BY: RACHEL, NAIM & BIMTEC

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

STATUS: FOR INFORMATION – BIM REPORTING WITH REVIZTO& LEICA INTEGRATION

- APPROVED CODE A OF METHOS STATEMENT FOR LASER SCANNING WORKS
- SAMPLE OF LEVEL 17 WITH STATUS OF ODE B-APPROVED WITH COMMENTS

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
3DM LASER SCANNING SURVEY (Pointcloud)
For
TOWER LEVEL – L17

Reviewed by:
Mo Darling Mursale Feb 10 2022

Document Reference No.	Rev	Rev. Date	Purpose of Issue
9204-BP12A-MMJV-MST-BM-NS-000-00001	005	22-Sep-2022	Issued for Approval / Review

Prepared by	Reviewed by	Approved by																								
<table border="1"> <tr> <td>Print Name</td> <td>Abdullah Alsharif</td> <td>Muhammad Zakaria / Rachel Lata Raza</td> <td>Ziad Mansori</td> <td>Haseem K. Bayras</td> <td>Jahangir Karim / Boualemwijn Bartholomeussen</td> </tr> <tr> <td>Job Title</td> <td>3D Laser Scanning Survey</td> <td>BIM Coordinator / Manager MMJV</td> <td>Project Technical Manager</td> <td>L17/IC Manager</td> <td>Project Director O&D / Project Director</td> </tr> <tr> <td>Signature</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Date</td> <td>22/02/2022</td> <td>08/12/2022</td> <td>04-Feb-23</td> <td>07/02/23</td> <td>07/02/23</td> </tr> </table>	Print Name	Abdullah Alsharif	Muhammad Zakaria / Rachel Lata Raza	Ziad Mansori	Haseem K. Bayras	Jahangir Karim / Boualemwijn Bartholomeussen	Job Title	3D Laser Scanning Survey	BIM Coordinator / Manager MMJV	Project Technical Manager	L17/IC Manager	Project Director O&D / Project Director	Signature						Date	22/02/2022	08/12/2022	04-Feb-23	07/02/23	07/02/23		
Print Name	Abdullah Alsharif	Muhammad Zakaria / Rachel Lata Raza	Ziad Mansori	Haseem K. Bayras	Jahangir Karim / Boualemwijn Bartholomeussen																					
Job Title	3D Laser Scanning Survey	BIM Coordinator / Manager MMJV	Project Technical Manager	L17/IC Manager	Project Director O&D / Project Director																					
Signature																										
Date	22/02/2022	08/12/2022	04-Feb-23	07/02/23	07/02/23																					

Document Number: 9204-BP12A-MMJV-MST-BM-NS-000-00001 Page 1 of 4 Date: 02-02-2022

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Laser Scanning
Method Statement for Execution of Laser Scanning Works

A - APPROVED
DAR

Reviewed by:
Mo Darling Mursale Oct 3 2022

Prepared by	Checked by	Reviewed by	Approved by																												
<table border="1"> <tr> <td>Print Name</td> <td>Abdullah Alsharif</td> <td>Muhammad Zakaria / Rachel Lata Raza</td> <td>Ziad Mansori</td> <td>H. A. Amara</td> <td>Haseem K. Bayras</td> <td>Jahangir Karim / Boualemwijn Bartholomeussen</td> </tr> <tr> <td>Job Title</td> <td>Project Manager - BIM / BIMTEC</td> <td>BIM Coordinator / Manager MMJV</td> <td>Technical Project Manager</td> <td>HSE Manager</td> <td>QA/QC Manager</td> <td>Project Director O&D / Project Director</td> </tr> <tr> <td>Signature</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Date</td> <td>22/09/2022</td> <td>25/07/22</td> <td>25/7</td> <td>25/7</td> <td>25/7</td> <td>25/7</td> </tr> </table>	Print Name	Abdullah Alsharif	Muhammad Zakaria / Rachel Lata Raza	Ziad Mansori	H. A. Amara	Haseem K. Bayras	Jahangir Karim / Boualemwijn Bartholomeussen	Job Title	Project Manager - BIM / BIMTEC	BIM Coordinator / Manager MMJV	Technical Project Manager	HSE Manager	QA/QC Manager	Project Director O&D / Project Director	Signature							Date	22/09/2022	25/07/22	25/7	25/7	25/7	25/7			
Print Name	Abdullah Alsharif	Muhammad Zakaria / Rachel Lata Raza	Ziad Mansori	H. A. Amara	Haseem K. Bayras	Jahangir Karim / Boualemwijn Bartholomeussen																									
Job Title	Project Manager - BIM / BIMTEC	BIM Coordinator / Manager MMJV	Technical Project Manager	HSE Manager	QA/QC Manager	Project Director O&D / Project Director																									
Signature																															
Date	22/09/2022	25/07/22	25/7	25/7	25/7	25/7																									

Document Number: 9204-BP12A-MMJV-MST-BM-NS-000-00001 Page 1 of 91 Date: 22 September 2022

LUS-BP12-LBOPM-FMT-PM-00160 REV.000 Uncontrolled if printed, refer to E2MS (Account) for current version



LUSAIL PROJECT: COBIE
PREPARED BY: RACHEL, NAIM & BIMTEC



L17			
BM#	EASTING	NORTHING	ELEVATION
L17E	229126.846	407169.427	REFER SSL & FFL FROM SHD
L17N	229120.371	407202.062	
L17S	229095.561	407163.497	
L17W	229087.247	407195.138	

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

STATUS: FOR REVIEW

- SUBMITTED THE PROPOSED COBIE PROCESS
- LISTED THE REQUIRED FACILITY MANAGEMENT REQUIRED INFORMATION AND ITS EQUIVALENT TO COBIE

DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 - Contract / 9204

COBIE Process

Attachment to Reference	Description of Deliverable	Revision
Item 21.12	COBIE p2.5	BIM

Document Reference No.	Rev.	Rev. Date	Purpose of Issue
9204-BP12A-BIM-FM-BIM-02-000-0004	001	22 Jan 2023	Issued for Approval

Prepared by: [Signatures]
Reviewed by: [Signatures]
Approved by: [Signatures]

Document Number: 9204-BP12A-BIM-FM-BIM-02-000-0004 Rev. 001 Page 1 of 52 Date: 22 Jan 2023

3. Parameters

Parameters to be fully defined according to full description of FM Requirements, as in following Figure-D1.

System	Component	Material	Finish	Color	Texture	Height	Width	Depth	Weight	Volume	Area	Length	Diameter	Radius	Curvature	Angle	Orientation	Position	Location	Elevation	Inclination	Slope	Pitch	Roll	Yaw	Pitch	Roll	Yaw	Pitch	Roll	Yaw
...

Document Number: 9204-BP12A-BIM-FM-BIM-02-000-0004 Rev. 001 Page 2 of 52 Date: 22 Jan 2023

6. Collaboration Procedures

6.1. COBIE Sheets Production and QA/QC Workflow

```

    graph TD
      Start([Start]) --> ReviewRequest[Review Request]
      ReviewRequest --> UserApproval{User Approval}
      UserApproval -- No --> NoAction[No Action Required]
      UserApproval -- Yes --> CreateCOBIE[Create the COBIE]
      CreateCOBIE --> SubmitCOBIE[Submit COBIE to QA/QC]
      SubmitCOBIE --> ReviewCOBIE[Review COBIE]
      ReviewCOBIE --> Approved{Approved}
      Approved -- Yes --> ApprovedCOBIE[Approved COBIE]
      Approved -- No --> ReviewRequest
  
```

Document Number: 9204-BP12A-BIM-FM-BIM-02-000-0004 Rev. 001 Page 6 of 52 Date: 22 Jan 2023

In this project based on GATARI DAR Facility management Parameters, some of COBIE parameters should be populated see figure-D2a.

System	Parameter	Value	Unit	Material	Finish	Color	Texture	Height	Width	Depth	Weight	Volume	Area	Length	Diameter	Radius	Curvature	Angle	Orientation	Position	Location	Elevation	Inclination	Slope	Pitch	Roll	Yaw	Pitch	Roll	Yaw
...

Document Number: 9204-BP12A-BIM-FM-BIM-02-000-0004 Rev. 001 Page 7 of 52 Date: 22 Jan 2023

LUSAIL PROJECT: BIM360
PREPARED BY: RACHEL ROSAS

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

02. BIM PLATFORM

BIM 360

Cloud-based Autodesk BIM platform for each stage of project

- Design collaboration
- Clash detection
- Progress tracking
- Inspections

AUTODESK® BIM 360™

DOCUMENT MANAGEMENT

midmac | MIC Construct

4D, 5D & 3D SCANNING SOFTWARES ARE EXCLUDED

FINANCE TIMELINE

GRAND FINANCING PLAN FOR 3 CONSECUTIVE YEAR

Year	Cost (QAR)	Notes
2020	QAR 155,000	• For all items • The term is 12 months • This includes purchase of ventilation units & HERS
2021	QAR 195,000	• Includes purchase of the number of units in 20%
2022	QAR 215,000	• Includes purchase of the number of units from 2021 up to 100%

midmac | MIC Construct





PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SUPPORTING DOCUMENT'S
PART 6
INNOVATION

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIM360
PREPARED BY: RACHEL ROSAS

02. BIM PLATFORM

BIM 360
Cloud-based Autodesk BIM platform for each stage of project

- Design collaboration
- Clash detection
- Progress tracking
- Inspections

AUTODESK BIM 360

DOCUMENT MANAGEMENT

midmax | MIC Construct

FINANCE TIMELINE

SALES (INCLUDING EXISTING 3D SCANNING) YEAR

QAR 565,000

2020 QAR 155,000

- 2040 floors
- 100 temporary construction site
- 70 included services of ventilation, air conditioning, etc.

2021 QAR 195,000

Midmax (including 3D scanning) in QAR

2022 QAR 215,000

Midmax (including 3D scanning) in QAR

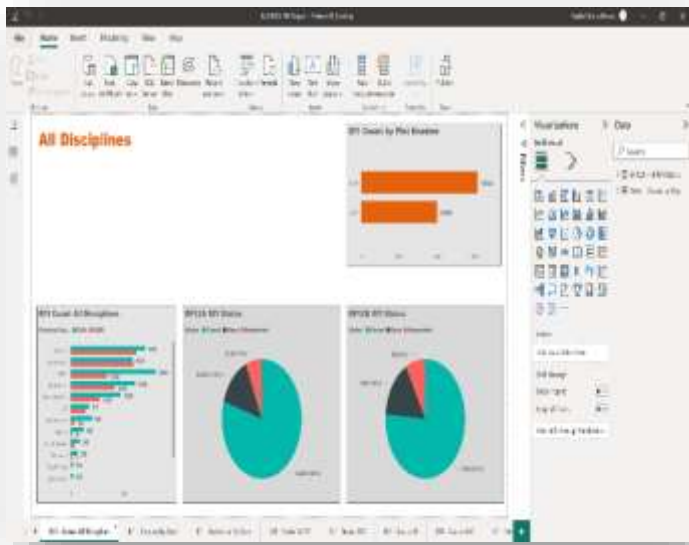
Number of services included in QAR

midmax | MIC Construct



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL: BIM PROGRESS REPORT
PREPARED BY: RACHEL ROSAS & ARCADIS
STATUS: FOR INFORMATION – BIM REPORTING WITH POWER BI INTEGRATION

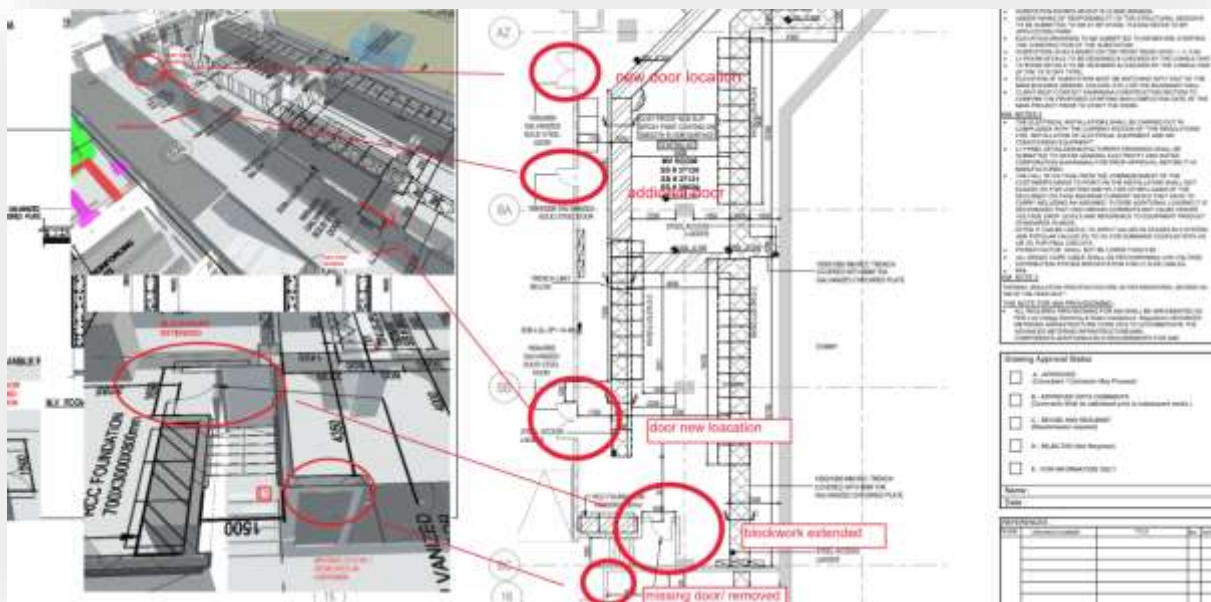
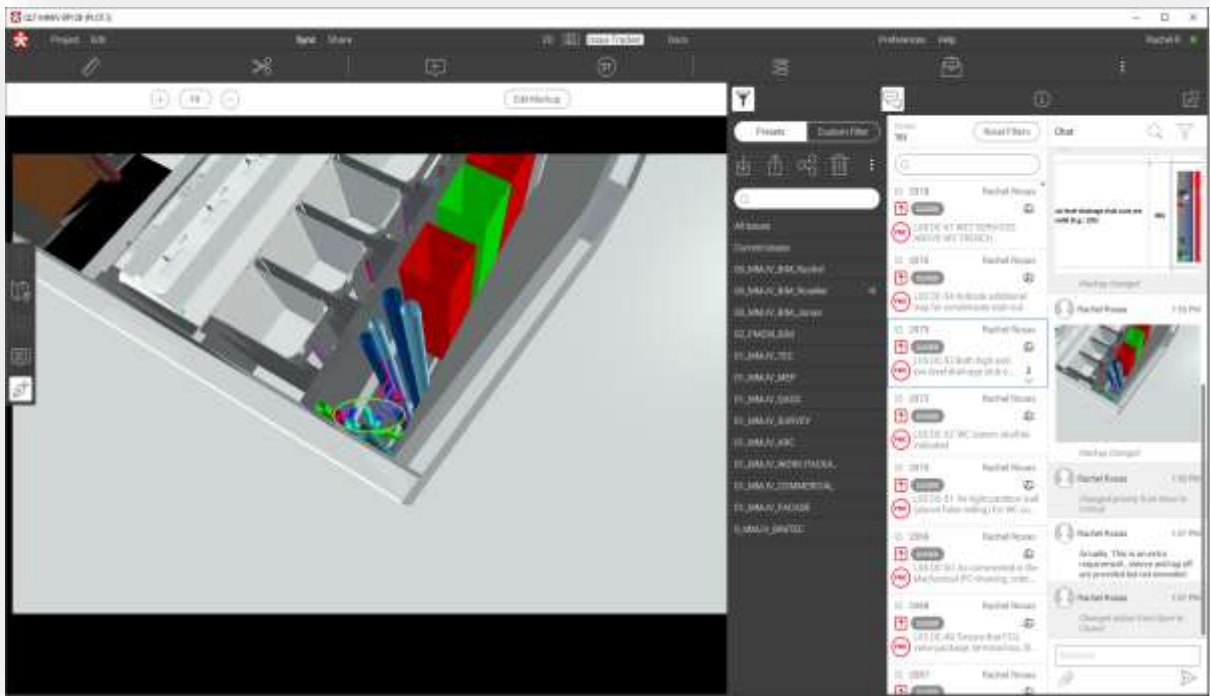


PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIMCOORDINATION REPORT
PREPARED BY: RACHEL ROSAS

STATUS: FOR INFORMATION – BIM REPORTING WITH REVIZTO INTEGRATION

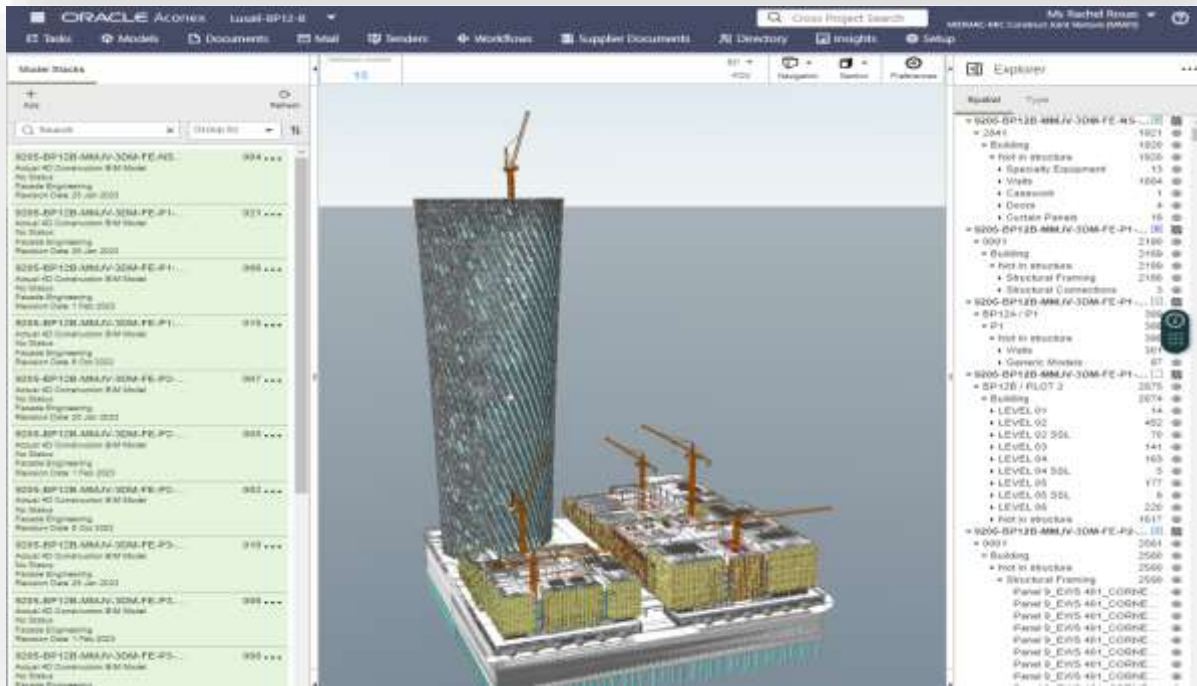
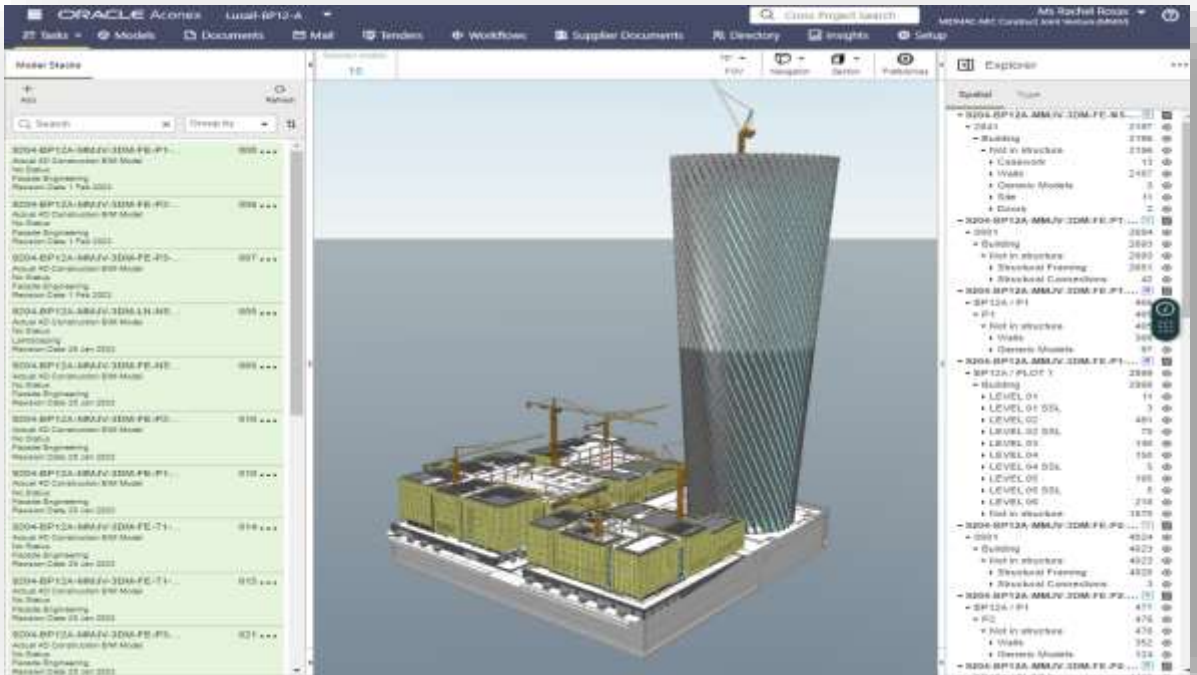
- CLOSED ISSUES IN REVIZTO : OBSERVATION & COMMENTS
- SAMPLE 2D OVERLAY WITH LOD400, AND REVIEWING THE COMMENTS FROM KARAHMAA AUTHORITY



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

PROJECT SAMPLE IN LUSAIL PROJECT: SITE PROGRESS IN 3D PRESENTATION

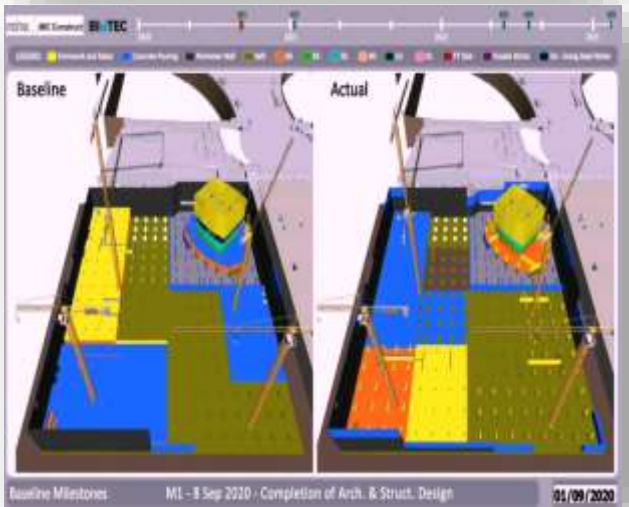
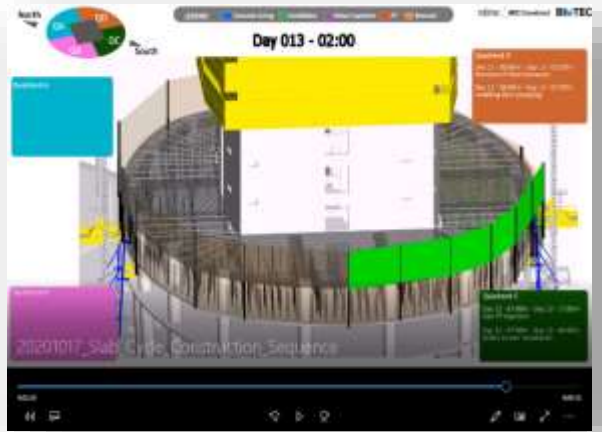
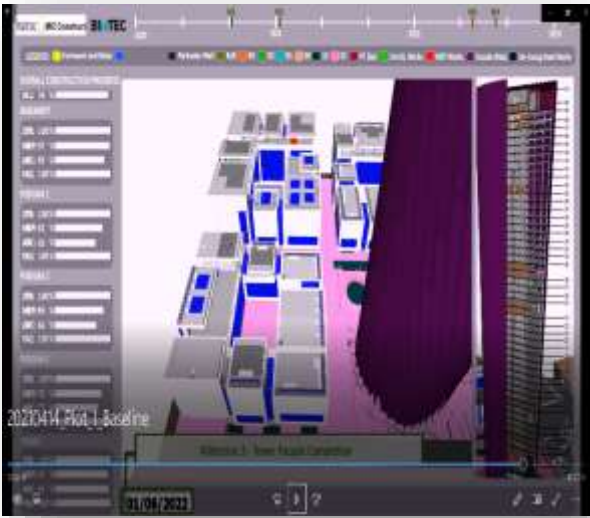
PLOT 1 & 2: AS OF FEB 01, 2023 FOR CONSTRUCTION WEEK NO. 150 UPLOADED IN ACONEX BIM MODEL INTEGRATION IN ACONEX FOR EMPLOYER AND MANAGEMENT REVIEW



PROJECT SAMPLE IN LUSAIL PROJECT: 4D CONSRUCTION SEQUENCE

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

- BASELINE PROGRAM
- APPROVED DOCUMENTS FOR REFERENCE
- SLAB LIFE CYCLE
- BASELINE VS ACTUAL



DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM 4D Movie

Attachment ID Reference	Description of Deliverable	Section
Rev 27.07	4D Model of the Latest Baseline Programme	All

A - APPROVED
LUSAIL JV

Document Reference No.	Rev	Rev. Date	Purpose of Issue
9204-BP12A-MBL JV-004-004-000-0001	005	28-Apr-2021	Issued for Approval

	Prepared by	Checked by	Reviewed by	Approved by
Print Name	James Vandoren	Shalva Kobzeva	M. Paschalis	Robert De Haegh / Jakob Suckling
Job Title	Lead BIM / Lead Architect	Tasks Coordinator	Design Director	Project Director Civil City Project Director
Signature				
Date	26 Apr '21	27 Apr '21	27 Apr '21	27 APR 2021

Document Number: 9204-BP12A-MBL JV-004-004-000-0001 REV 005 Page 7 of 8 Date: 28-Apr-2021
 1139-BP12-LMBPML-PLM1-PLM2-00100-001V-000

Lusail Plaza Towers - BP12A

4D CONSTRUCTION SEQUENCE - STRUCTURE

BASELINE VS ACTUAL - 24/09/2020

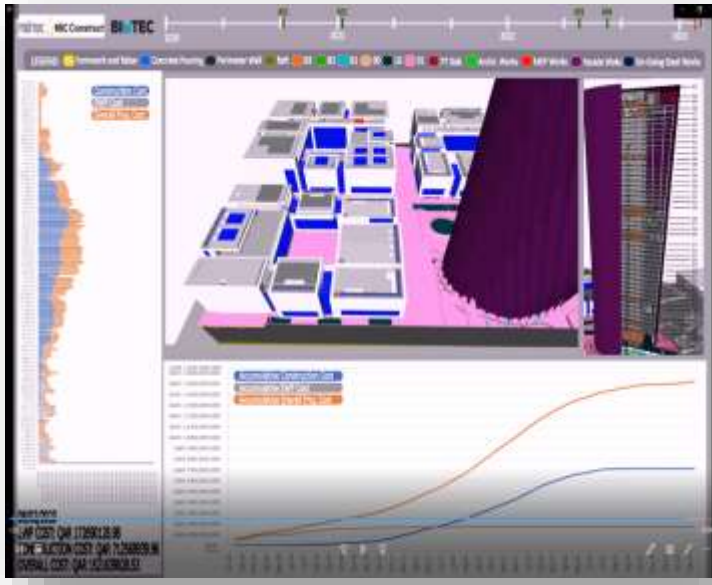
MMJV
September 30th, 2020

PROJECT SAMPLE IN LUSAIL PROJECT: 5D COST & CONSTRUCTION SEQUENCE

- BASELINE PROGRAM

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

- APPROVED DOCUMENTS FOR REFERENCE
- SLAB LIFE CYCLE
- BASELINE VS ACTUAL



DESIGN & BUILD WORKS FOR LUSAIL PLAZA TOWERS
Project BP12A / Plot 1 – Contract: 9204
Building Information Modelling
BIM 5D Movie (100% DD)

Attachment 15 Reference Item 27.47	Description of Deliverable 5D Model of the Latest Baseline Programme	Section All
---------------------------------------	---	----------------

8 - APPROVED WITH COMMENTS
LDCPM JV

Document Reference No.	Rev	Rev. Date	Purpose of Issue
8204-BP12A-MNLJV-838-838-000-00003	003	27-Jun-2021	Issued for Approval

	Prepared by	Checked by	Reviewed by	Approved by
Print Name	Jonus Vandeven	Masha Kobson	M. Paschalis	Koen De Raey / Jeffrey Straton
Job Title	Lead BIM / Lead Architect	Trade Coordinator	Design Director	Project Director CM / Project Director
Signature				
Date	23/06/2021	23/06/2021	23/06/2021	27 JUN 2021

Document Number: 8204-BP12A-MNLJV-838-838-000-00004-02v.002 Page 1 of 3 Issue: 07-Jun-2021

LIN 8P13 LDCPM JV 838-838-000-00004-02v.002



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

GLOBAL BESIX CERTIFICATION IN BSI

- VERIFICATION CERTIFICATE IN BIM ISO STANDARD 19650-2-2018 (2017-2023)
- ORGANIZER: BESIX HO IN BRUSSEL SINCE 2021

bsi.  

Verification Certificate

This is to certify that: **BESIX NV/SA**
Avenue des Communautés/
Gemeenschappenlaan, 100
Brussels
1200
Belgium

Holds Certificate Number: **VC 676254**

In respect of:
ISO 19650-2:2018 Organisation and digitisation of information about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling. Part 2: Delivery phase of the assets.

Lead Appointed Party Lead Designer and Lead Contractor which includes Project Management, Design, Design Management, Construction and/or Information Management in accordance with ISO 19650-1:2018 and ISO 19650-2:2018


For and on behalf of BSI: **Frank Lee, Product Certification Technical and Compliance Director**

First Issued: 2017-12-19 Effective Date: 2022-02-23
Latest Issue: 2022-02-23 Expiry Date: 2023-02-22

Page: 1 of 2

...making excellence a habit.™

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To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

22 dated 13/01/2022.

the procedures implemented in BESIX NV/SA and BESIX Engineering on covers all BESIX Contracting activities; executed, supervised or ment.

First Issued: 2017-12-19 Effective Date: 2022-02-23
Latest Issue: 2022-02-23 Expiry Date: 2023-02-22

Page: 2 of 2

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A member of BSI Group of Companies.

GLOBAL: BESIX SOAP BOX MEETING

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

ORGANIZER: BESIX HO IN BRUSSEL SINCE 2021
DECEMBER PRESENTOR: RACHEL ROSAS

Weekly Technical Topics for digital enthusiast (presence is optional, language = EN, session will always be recorded)
Recordings can be found on this link: [04. Technical Soapbox](#)

If you have an interesting topic: [@Huy, Hoang](#) or [@Vandenbogaerde, Kristof](#)

Some rules when you are presenting a topic :

- Brief introduction : what's the purpose of the tool, procedure etc.
- Keep it technical, but not too technical (Audience = BIM Modelers, Steel, Façade, Methods, Planning...)
- Max. 30 minutes of presentation. 15 minutes of questions afterward.
- Try to show some live demonstrations... it shows more than a PowerPoint.

Agenda

10/02/2023: BIM Coordination with Aconex IMS by Hoang Pham (SMV)

03/02/2023: KLIP to BIM Tool by Mathieu Ophoff (R4)

27/01/2023: Bexel Manager by Veljko Janjic

13/01/2023 – KBM – BIM @ Dubai Waste to Energy

09/12/2022 – Rachel L.Rosas (Dubai) – Laser Scanning @ Lusail Tower

02/12/2022 - Cancelled

25/11/2022 – Michele Ambrosino (ULB) – Brikiebots

18/11/2022 – Cancelled

11/11/2022 – No Soapbox – Fall break

04/11/2022 – No Soapbox – Fall Break

28/10/2022 – LLE – Genus & Power BI

21/10/2022 – RCO – ISO19650 (15h Bxl Time)

14/10/2022 – ALU - Analytical modelling in Revit

07/10/2022 – KDS – BIM Server

30/09/2022 – KHE – GIS@ROCO

23/09/2022 – TST (Qonic) – QONIC: Accurate BIM

16/09/2022 – PAA - Solibri use case: LOI audit, progress &

09/09/2022 – FPI – BIM Interoperability Tools for Revit

02/09/2022 – MMU - BIM Integration with Tekla (to be co)

26/08/2022 – MRO – Solibri Ruleset manager by MRO

19/08/2022 – ScaledRobotics by Stuart Maags

---- Summer Break ----

24/06/2022 – TBD

17/06/2022 – LSA – Internship report (automatization of t

10/06/2022 – ADR – Task Automation @ RIGA-project

03/06/2022 – HHU - Folder Structure on BIM360/ACC

20/05/2022 – LLE – BIM360 + PowerBI

13/05/2022 – YDI – ConVoid Plugin for Revit (Coordination

06/05/2022 – BED Event – No Soapbox

06/05/2022 – BED Event – No Soapbox

29/04/2022 – KG-Dev – BIM & Dashboarding (KG-dev.be)

22/04/2022 – KRO - Speckle

15/04/2022 – BESIX BE Holiday – No Soapbox

08/04/2022 – QSW - Kabandy

01/04/2022 – No Soapbox

25/03/2022 – LLE - Globalmapper

18/03/2022 – YDI – Dirroots Revit Plugin

11/03/2022 – KDS - iConstruct

04/03/2022 – MJA – Main Principles of ISO19650

25/02/2022 -

18/02/2022 – (Cancelled)SVDW – BIM @ COTU Oosterweel Zinktunnel

11/02/2022 –

04/02/2022 – OPE – Revit Shared Coordinates

28/01/2022 -

-- Winter Break --

10/12/2021 – PDC – LTF Volume Model & link to Model-statuses

03/12/2021 – Vincent Charlier – IDCapture on Clinic de Neuilly (FR)

29/10-12/11/2021 -- Autumn Break --

22/10/2021 – ADR – Lessons Learned on Mozambique LNG

15/10/2021 – LLE – Neanex Portal on COTU

08/10/2021 – YDI/KDS – Autodesk Infraworks (Design vs Methods&Planning)

01/10/2021 – LRY – Revizto-usage @ WatPac

17/09/2021 – KDS – Navisworks iConstruct

13/08/2021 – EHE – Revit Model Checker & LOI Automation

06/08/2021 – JMA – Plannerly

-- Summer-break --

24/06/2021 – NHO – Dynamo & LBS-codes on LTF

21/05/2021 – LLE – Data Management with Python

07/05/2021 – HHU – Open Data Vlaanderen – Use of LIDAR-information

30/04/2021 - FLE - BESIX Classification

09/04/2021 – CWI – Reporting (BIMCollab/Planning) on LTF

02/04/2021 – (EDR – Dynamo-scripts for LTF - Cancelled)

26/03/2021 – LLE – R4 Project Overview

19/03/2021 – KVA – BIMCollab Zoom (Pro)

12/03/2021 – KVA – Revit IFC Export

19/02/2021 – ASBR – The wonders of SimpleBIM

12/02/2021 – KVA – RTV Exporter Pro, Revit Plugin for Automating exports of IFC/NWC/PDF/DWG...]

05/02/2021 – LSW – StabiCAD Openings Manager

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

MIDDLE EAST: EVENTS ATTENDED
EVENT 1: AUTODESK UNIVERSITY 2018
EVENT 2: BIG 5 2019



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BESIX REVIT & BIM REQUIREMENTS TRAINING
PRESENTER 2019: RACHEL ROSAS
ATTENDEES: PROJECTS SITE TEAM AND HEAD OFFICE



SIX CONSTRUCT | TRAINING ATTENDANCE RECORD SHEET | HR FORMS

Training : REVIT - BASICS Date :23 JULY 2019
 Trainer : MS. OUAFAE MESSAOUDI & **MS. RACHEL ROSAS** Training Hours :8:30 AM - 5:30 PM

SR.	HO. NO.	SITE	NAME	FIRST NAME	DESIGNATION	SIGNATURE
1	6875	MSR	MOEINI	MOHAMED AHMED	CHIEF SURVEYOR	
2	17135	RAP	EL KADI	WISSAM EL SHEIKH	ARCHITECT	
3	53354	RAP	MATEV	ZORAN	PROJECT ENGINEER	
4	9517	DUT	SANKARA NARAYANAN	HARI KUMAR	SURVEYOR - SENIOR	
5	42172	MSR	ALSHANTI	JALAL AMEER AHMAD	PLANNING ENGINEER	
6	30447	DED	PAULOSE	ROY	DRAUGHTSMAN - FORMWORK DESIGNER - SENIOR	
7	38188	MSR	NANGGAN	DEMETRIO	QUANTITY SURVEYOR	

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

EXPERTISE QUALIFICATION

- CERTIFIED IASSC LEAN SIX SIGMA GREEN BELT
- MEMBER OF PROJECT MANAGEMENT INSTITUTE
- CERTIFICATE OF COMPLETION PROJECT MANAGEMENT PREPARATORY COURSE
- CERTIFICATE OF COMPLETION IN POWER BI
 - CERTIFICATE OF ACHIEVEMENT IN TREMBLE: PASSED TEKLA ADVANCE PROGRAM



**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**





PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

SUPPORTING DOCUMENT'S
PART 7
ENVIRONMENTAL, SOCIAL AND GOVERNANCE IMPACT

EXPERTISE QUALIFICATION

NAME: RACHEL ROSAS ALCANTARA

DATE: FEB 06, 2024

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

- CERTIFIED IASSC LEAN SIX SIGMA GREEN BELT
- CERTIFICATE OF COMPLETION IN LEAN SIX SIGMA TRAINING PROGRAM
- CERTIFICATE OF COMPLETION IN LEED GREEN ASSOCIATE PREP COURSE
- CERTIFICATE OF COMPLETION IN LEED AP BD+C COURSE
- MATERIAL ENGINEER LEVEL 1 : ACCREDITATION IN DEPARTMENT OF PUBLIC WORKS IN HIGHWAYS
- LICENSE PRACTICING ENGINEER IN DEPARTMENT OF MUNICIPALITIES AND TRANSPORT IN ABU DHABI



LUSAIL PROJECT: SUITABILITY AND ENVIRONMENTAL IMPACT

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

- SAMPLE SUSTAINABILITY MONTHLY REPORT
- PURPOSE OF SUSTAINABILITY
- NO. OF INCIDENT REPORT
- PROGRESS REPORT IN 3D PRESENTATIONS



midmac | MIC Construct Sustainability Monthly Report

Base Build:

- Façades
- Main entrance lobbies
- Sky Lobbies
- Passenger, goods and firefighter lifts
- Staircases
- Basements
- Plant rooms and BMS systems
- Car park/ loading dock installations
- External works

Typical Office Floor:

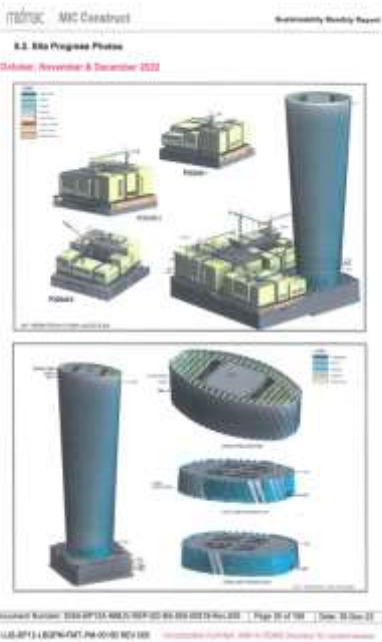
- WCs
- Pantries
- Janitor room
- Prayer rooms
- Ablution rooms
- MEP rooms

The project is pursuing green building design and construction under the GSAS Design & Build 2019 (4th Edition) targeting 4-star certification level.

2. Purpose

The objective of this report is to discuss the monthly progress during construction stage related to GSAS credits attempted during design stage. While writing this report, the provisional LOC (Letter of Conformance) is not yet available. The expected list of attempted credits is referenced to the Sustainability (SD) IFC Sustainability Report.

This report is a live document to be updated on monthly basis.



13.Environmental Report

Description	No.
Environmental Training Sessions (during this period)	10
Environmental Toolbox Talks (during this period)	8
Environmental Inspections (during this period)	32
Environmental Incidents Occurred (during this period)	0
Environmental Complaints Received (during this period)	0

LUSAIL PROJECT: SUITANABILITY AND ENVIRONMENTAL IMPACT

**PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)**

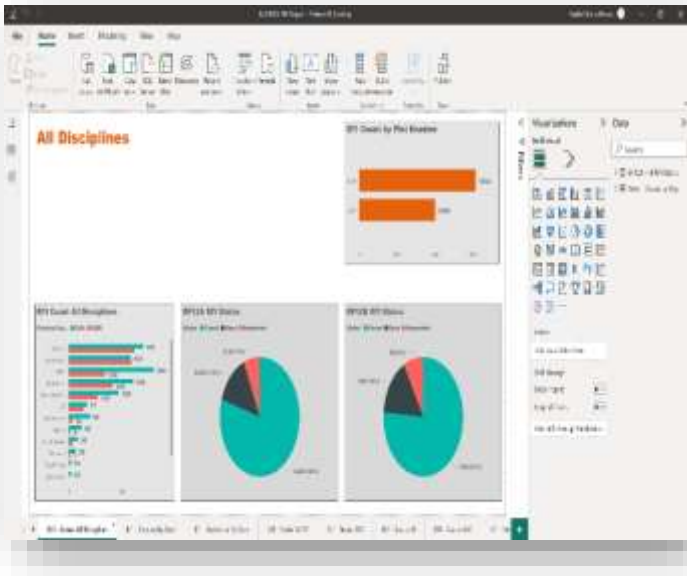
- SAMPLE LANDSCAPING MATERIAL APPROVAL
- SAMPLE FIXTURES MATERIAL APPROVAL
- HIGH LEVEL AUTHORITY STATUS



SUPPORTING DOCUMENT'S
PART 8
BENEFITS AND REALIZATION

PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

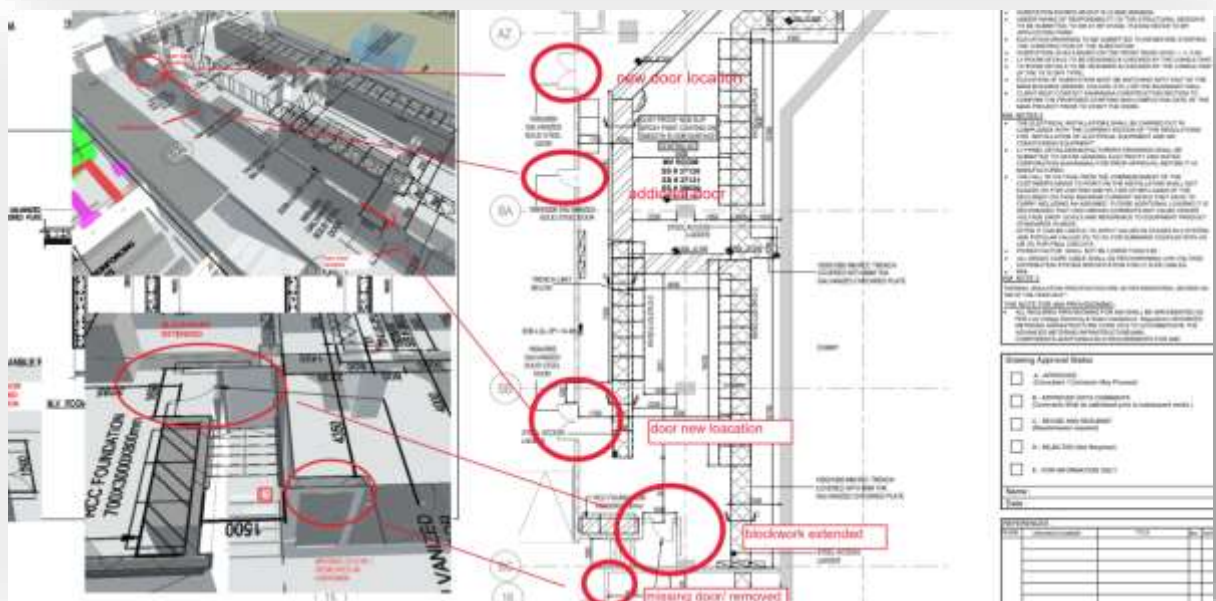
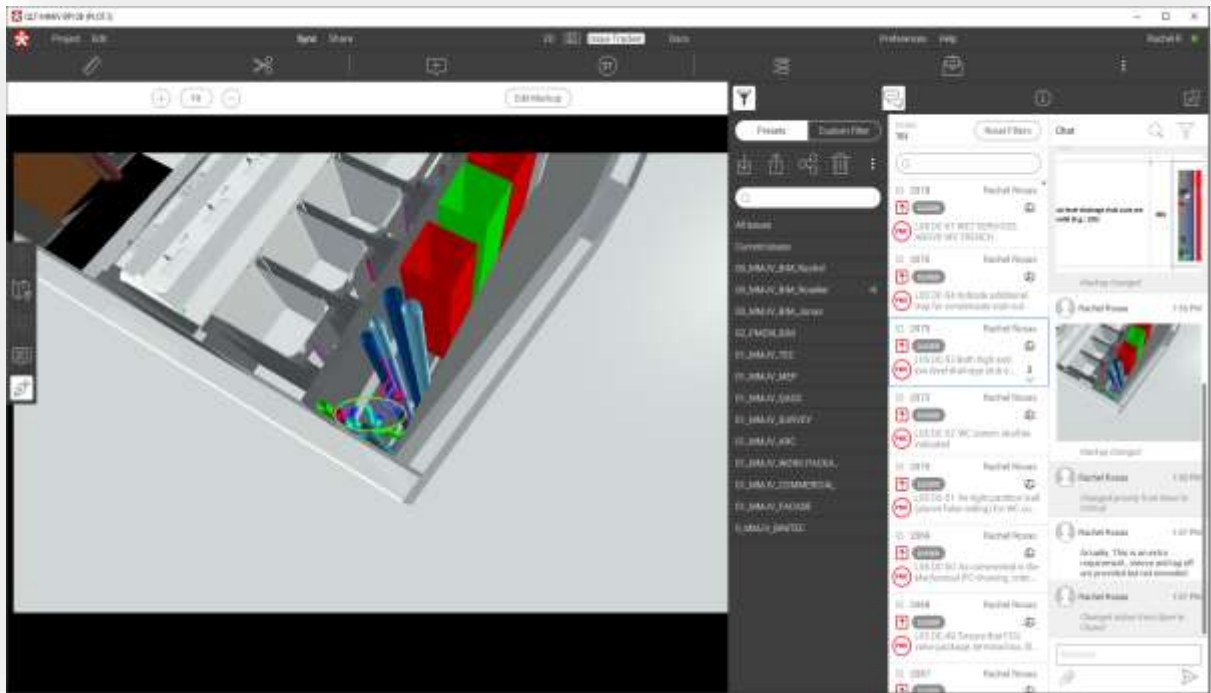
PREPARED BY: RACHEL ROSAS & ARCADIS
STATUS: FOR INFORMATION – BIM REPORTING WITH POWER BI INTEGRATION



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

LUSAIL PROJECT: BIMCOORDINATION REPORT
PREPARED BY: RACHEL ROSAS
STATUS: FOR INFORMATION – BIM REPORTING WITH REVIZTO INTEGRATION

- CLOSED ISSUES IN REVIZTO : OBSERVATION & COMMENTS
- 2D OVERLAY WITH LOD400, AND REVIEWING THE COMMENTS FROM KARAHMAA AUTHORITY



PATH TO BIM CHAMPION AWARD
(SUPPORTING DOCUMENTS)

MIDDLE EAST: BIM TRAINING 2020 (LUSAIL TOWERS)
PRESENTOR: RACHEL ROSAS
ATTENDEES: PROJECT STAFF, (MAIN CONTRACTOR, PMC & SUBCONTRACTOR)

BIM monDAY
MMJV BIM Champion@2021

"Our mission is to advance digital transformation and boost collaboration on site."

TRAININGS

- Revizto
- Naviswork Freedom
- BIM360
 - Document Management
 - Design Collaboration
 - Model Coordination
- And much more
 - 3D scanning
 - QR Code
 - HSE
 - Accet
 - etc.

The training will be given to all teams : PMCM , MMJV Staff, Subcontractors and Suppliers. It schedule to run every second and fourth Monday of the Month . Subjects and topics are in batches and Invitation will be sent out through email.

DEVICES

HOW IT WORKS

BIM TEAM

Suppliers, SubContractor, PMCM, MMJV Staff

MMJV BIM TEAM will support the different organization to Implement BIM In construction site . For details and requesting for training please contact the BIM ambassadors below.

rosas@midmac-mic.com
ibrahim@midmac-mic.com
koen@midmac-mic.com

CERTIFICATE OF PARTICIPATION

This certificate of training achievement is awarded to

BIM Manager *Victor Craspo*

who attended the training course
 BIM360 Document Management on 28th September 2020, Doha Qatar

Rosas
 Rachel Loria Rosas
 BIM Manager / Trainer

ibrahim
 Johnny I. Ibrahim
 Dy. Project Director

Koen
 Koen De Rooy
 Project Director

MASTER THESIS: ABSTRACT

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PREPARED BY: RACHEL ROSAS

TITLE: APPLICATION OF BIM AND LEAN INTEGRATION IN CONSTRUCTION PROJECTS (2019)

ABSTRACT

Title: Application of BIM and Lean Integration in Construction Projects
Researcher : Rachel Loria Rosas
Degree : Master of Science in Construction Management
Institution : Polytechnic University of the Philippines
Year : 2019
Adviser : Dr. Lincoln A. Bautista

BIM and Lean Integration has been said to have contributions on the improvement of construction process. I determine the level of agreement on the a construction projects in UAE.

The researchers considered the v attainment, length of work experience, n company sector he/she belonged along t such as pre-construction, construction ar factors in the assessment of level of : application of BIM and Lean integration in

The study used the descriptive n adapted questionnaire checklist. The said in which part 1 dealt with the responde considered determining factors wherein t statements in the scale of 1 to 5 dependir of BIM and Lean integration in stages of c

The study revealed that based on the responses of the two groups of respondents, pre-construction, construction, and post construction obtained an overall weighted mean of 4.41 ,4.34 and 4.34 respectively and verbally interpreted as "Moderately Agree". The data implied that the respondents "Moderately Agree" on the application of BIM and Lean integration in stages of construction projects.

The study also showed that there is no significant difference on the perception of the two groups of respondents with respect to pre-construction, construction, and post construction revealed by the respondents' profile in terms of sex, age, educational attainment, length of work experience, role in construction project and current company sector. This implied that regardless of their classification, they all perceived that BIM and Lean Integration indeed contributes in the improvement of construction process in stages of construction projects.

Based on the findings of the study, the conclusions and recommendations were drawn.

Keywords: BIM, Lean, Construction, Innovation, Technology

LUSAIL PROJECT: HIGHER MANAGEMENT REPORT FOR PROJECT PROGRESS
STATUS: FOR INFORMATION

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3. Executive Report

Weather Report (as on 29-Dec-22)		COVID Statistics	
Temperature	11° C 26° C	Total Positive Cases	-
Humidity	19% 31%	Total Suspected Cases	-
Wind Velocity	5 km/h 12 km/h	Total Returned to Work	-
Atmos Pressure	997 mbar 999 mbar	Under Self Quarantine	-

Commencement Date:	Finish Date:	Duration (days):	Time Elapsed (days):	Delay/Ahead (days)
12-Jan-20	16-Feb-23	1131	1083	-376

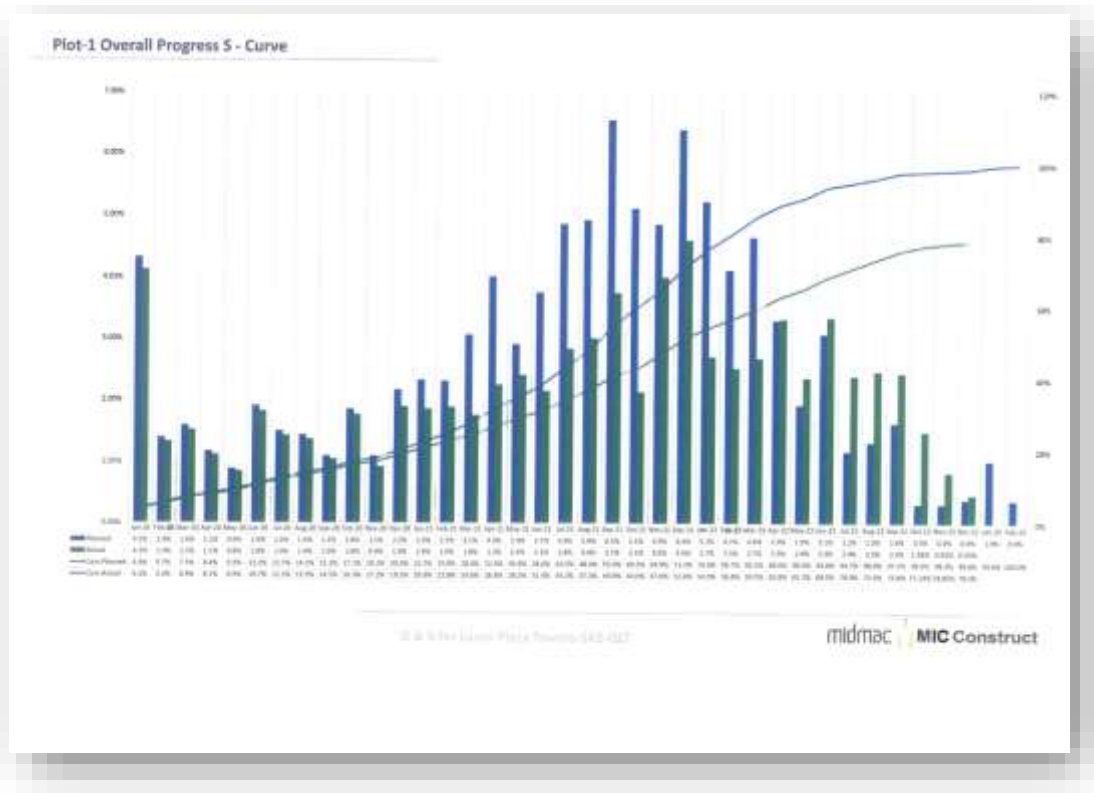
Progress Status		Overall Progress S-Curve	
<p>TIME</p> <p>4.33%</p>	<p>PROGRESS</p> <p>21.30%</p>		<p>Planned: 1.2%</p> <p>Actual: 2.8%</p> <p>Cum-Planned: 82.7%</p> <p>Cum-Actual: 70.9%</p>

Milestones	Contract Date	Forecast	Delay	HSE Statistics	NCR Statistics
1. Completion of Architectural and Structural Design	8-Sep-20	27-Oct-22	0	Average Manpower at site: 791	
2. First Installation of Tower Façade	11-Jan-21	1-Jan-23	-523	Total Project Manhours: 21,451,989	
3. Completion of All Façade Works for Tower & Podium Buildings	1-Jan-22	1-May-23	-200	Project Manhours w/o LTI: 1,245,194	
4. Complete All External and Landscape Works	25-Jul-21	13-Aug-23	-238	Major Injuries: 0	
5. Completion of All Works	16-Feb-23	8-May-24	-576	First Aid Case: 75	
				Near Miss Reported: 12	
				HSE Officers at site: 25	

Major Procurement				Payment Summary	
No.	Description of Work	Supplier/ Subcon.	Status	Budgeted Cost	Actual Cost
1.	UV panels	Swifinger International / Sphipac	Delivered		
2.	Skinner	PowerDoco / OutRight	Delivered		
3.	Terrazzo Flooring/Deck Ceiling/Skylight	CMTC	On board		
4.	UPVC Wall Lining/ Metal Ceiling	Mash	On board		
5.	Ceiling Grid System / Wall Finishes	Madal	On board		
6.	Flashed Glass Lining / Handrails	Madal	On board		
7.	Glass Wall Lining/ Handrails / Balustrade	TSE	On board		
8.	Vanity Units & Mirrors	FIT OUT INTERIORS	On board		
9.	Doors	NAFFCO/Technoade	On board		

Payment Summary
Budgeted Cost
Inviced
Certified
Paid

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midmac | MIC Construct
Monthly Progress Report No.035

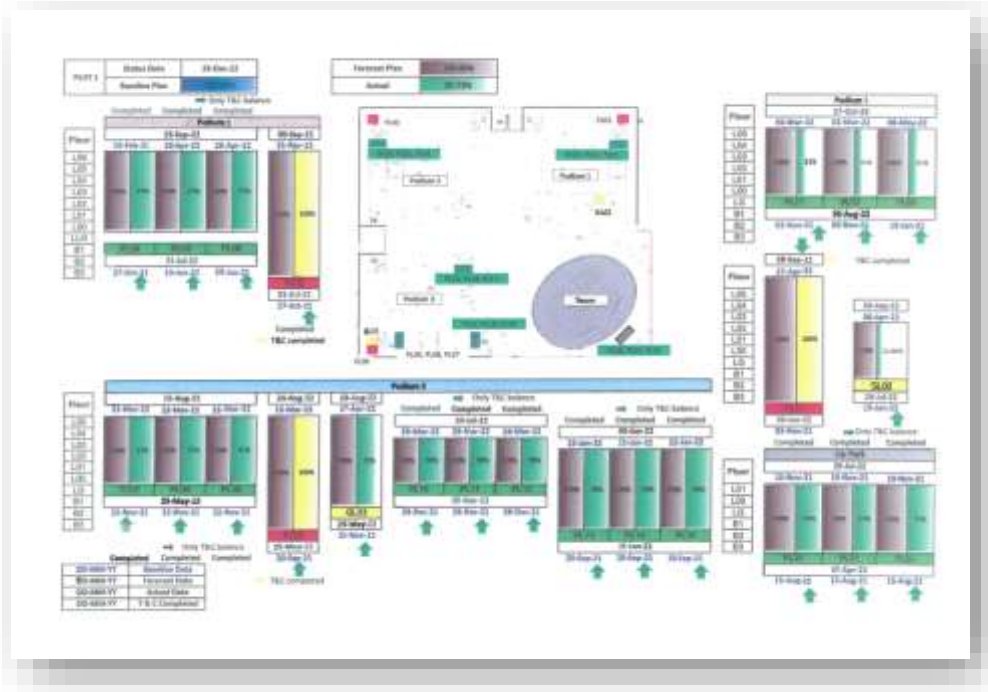
4. Project Progress Status

4.1. Progress Table

ID#	Description	Overall Weight	Baseline					Target			
			Cumulative Progress As of 32/12/2022			Weighted Progress		Weighted Progress			
			Baseline Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance
1	PRELIMINARIES	14.80	94.07%	81.21%	-12.86%	24.54%	12.19%	-12.35%	22.75%	12.20%	-0.55%
2	DESIGN	1.28	100.00%	86.88%	-13.12%	3.58%	1.25%	-2.33%	3.29%	1.20%	-2.09%
3	RAWY BIDDING PACKAGE (RBP)	11.34	100.00%	100.00%	0.00%	12.94%	12.88%	0.06%	12.84%	12.84%	0.00%
4	ENGINEERING	2.17	100.00%	81.50%	-18.50%	2.17%	0.81%	-1.36%	2.07%	2.00%	-0.07%
5	PROCUREMENT	18.35	100.00%	86.80%	-13.20%	18.35%	15.00%	-3.35%	16.94%	15.92%	-1.02%
6	CONSTRUCTION	44.92	100.00%	74.14%	-25.86%	44.92%	44.70%	-0.22%	44.24%	44.70%	0.46%
7	TESTING & COMMISSIONING	2.80	86.27%	74.91%	-11.36%	2.80%	1.81%	-0.99%	2.80%	1.81%	-0.99%
8	STARTING COSTS	3.77	77.27%	2.94%	-27.33%	1.89%	0.94%	-0.95%	0.90%	0.94%	0.04%
TOTAL		100.0				86.64%	74.58%	-12.06%	82.84%	74.58%	-11.26%

Schedule Performance Index (SPI)	0.79
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15.Areas of Concern

General

The following listed items have the potential to impact upon Scheduled Completion Date, Any milestone there to and Contract price.

- Coronavirus (COVID-19) Pandemic subject of notifications and particulars of effects which are progressively submitted to LREDC ongoing and therefore time and cost impact not determinable at this stage.
- Performance deductions imposed by LRDEC despite prevailing market conditions and changes known to the parties.

Procurement

- Material price increase due to exceptional conditions including global pandemic and associated restrictions.

PROJECT SAMPLE IN LUSAIL PROJECT:

- ACTUAL PROGRESS ON SITE AS OF DEC 2022 DURING FIFA WORLD CUP 2022

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- 600 PHOTOS, 2NOS VIDEOS, 4NOS TIMELAPSE
- OVERALL PROGRESS





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**SUPPORTING DOCUMENT'S
PART
CONTINUING PROFESSIONAL DEVELOPMENT
(CPD)**

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“Champions are made by their passion and persistence.”