

## **COMPANY PROFILE.**

**GCL CONSULTANTS LTD.**

**CIVIL, STRUCTURAL ENGINEERS.**



**GCL CONSULTANTS LTD.**

**Consulting Engineers**

**Professional House, Karen Kufuga Road off Langata Road**

**P.O. Box 1285-00502 Nairobi**

**Email: [info@gridconsult.co.ke](mailto:info@gridconsult.co.ke) / [gridconsulteng@gmail.com](mailto:gridconsulteng@gmail.com)**

**Telephone: +254 202013921 / 0722885687**

## **BACKGROUND INFORMATION.**

### **Brief Description Of The Company:**

**GCL CONSULTANTS** is a Consulting Engineering Practice owned and managed by Kenyan Engineers. The company was registered in 2008 and incorporated as a limited liability company in 2013 as Grid Consult Ltd but subsequently changed name to GCL Consultants Ltd in 2019 as it expanded its core mandate.

The principals are academically well qualified and have comprehensive experience in the practice of engineering consultancy with a strong bias for adapting technology into day to day engineering solutions.

**GCL CONSULTANTS** has invested heavily on technology and has acquired the state of the art Autodesk Building Suite incorporating the following software:-

- a. **Revit Structure** for the 3-D analysis of structural frames
- b. **ROBOT Structural Analysis** for the design of structural frames
- c. **AutoCAD Structural Detailing** for the detailing of structural elements
- d. **CIVIL3D** for the design of civil works elements such as water reticulation, sewerage reticulation, highway geometric and pavement design, pumping stations, etc

**GCL CONSULTANTS LTD** has in-House competence in most engineering fields.

- Structural engineering Roads, highway and bridges
- Water resources planning Water supply and distribution
- Sanitary and public health engineering

- Solid wastes, collection, treatment and disposal
- National, regional and town infrastructure developments

**Consultancy services in any of the above fields can include:-**

- Pre-investment studies, initial design and preliminary Cost evaluation.
- Feasibility studies and project planning
- System detailed design and preparation of construction contract documents
- Supervision of construction.

**PROJECTS UNDERTAKEN BY GCL CONSULTANTS LTD.**

<b>NAME OF PROJECT</b>	<b>CLIENT</b>	<b>VALUE OF THE PROJECT</b>	<b>SERVICES OFFERED</b>	<b>STAGE OF PROJECT</b>
Hostel block near Nazarene Uni. in Rongai, Kenya	Dream Holdings Ltd	550 million	Civil & Structural Engineering services	COMPLETE
Residential Estate on Plot LR. No. 7022/150 Kiambu (Kugeria)	Gathimbu Mbugua	600 million	Civil & Structural Engineering services	COMPLETE
Proposed Tannery for Ewaso Ngiro South River Development Authority in Narok	Ewaso Ngiro South River Development Authority	500 million	Civil & Structural Engineering services	Pre-contract complete; yet to be tendered
Structural Investigations for Family Bank Homabay Branch	Family Bank Ltd	500,000	Structural Integrity Testing	COMPLETE
Proposed office block for Mbandu Investments in Wote, Makueni County	Mbandu Investments Ltd	545 million	Civil & Structural, Mechanical & Electrical Engineering services	COMPLETE
Proposed Residential Apartments in Machakos County	Mbandu Investments	500 million	Civil & Structural, Mechanical & Electrical Engineering services	COMPLETE
Proposed Tepesi Heights Apartment	Stanley Kebathi	600 million	Civil & Structural Engineering services	Pre-Contract Complete
Proposed Modern Building for West Pokot County Assembly	West Pokot County Assembly	600 million	Civil & Structural Engineering services	Pre-Contract Complete; Construction 90% Done
Proposed Kalamba Fruit Processing Plant	County Government of Makueni	650 million	Civil & Structural Engineering services	Phase I: Complete Phase II: Complete Phase III: Pre-Contract Complete
Proposed Office Block in Kiambu	Mrs Jane N. Karume	600 million	Civil & Structural, Mechanical & Electrical Engineering services	COMPLETE

**PROJECTS UNDERTAKEN BY GCL CONSULTANTS LTD.**


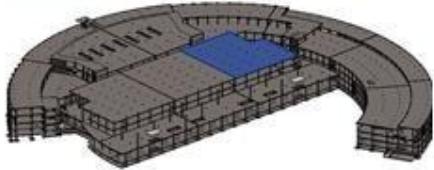
<b>NAME OF PROJECT</b>	<b>CLIENT</b>	<b>VALUE OF THE PROJECT</b>	<b>SERVICES OFFERED</b>	<b>STAGE OF PROJECT</b>
Proposed Kassarvitta Apartments, KV Homes on Waiyaki Way, Nairobi	Kassarvita Ltd	550million	Civil & Structural Engineering services	COMPLETE
Proposed Modernisation of Sportsview Hotel	Sportsview Hotel Ltd	520million	Civil & Structural Engineering services	Pre-Contract On-going
Proposed Apartment Block in Thome, Nairobi	Mr. Kiarie Amon	530million	Civil & Structural Engineering services	COMPLETE
Proposed block of apartments on Mander Road	China Jiangxi Developers Ltd	500million	Civil & Structural Engineering services	Pre-Contract On-going (Design stage)
Proposed Solar Stream in Kericho County	Solar Stream Ltd	650million	Civil & Structural Engineering services	Pre-Contract Complete

**PROJECTS UNDERTAKEN BY GCL CONSULTANTS LTD.**


<b>NAME OF PROJECT</b>	<b>CLIENT</b>	<b>VALUE OF THE PROJECT</b>	<b>SERVICES OFFERED</b>	<b>STAGE OF PROJECT</b>
Kenya Airports Authority Jkia T1 - Bcd Remodelling	KAA	38 Billion	Structural Consultants	Tender Stage
Proposed Construction Of A Modern Slaughterhouse For Spring Kod Limited, Kenya At Thika	Spring Kod Limited	500 Million	Civil - Structural Consultants	Design Stage
The Construction Of Proposed Roads Upgrade To Bituminous And Concrete Block Paving Standards Of Roads In Wote Town	Wote Municipality	700 Million	Civil - Structural Consultants	Ongoing
Proposed Rehabilitation Of Kipchoge Keino Stadium, Uasin Gishu County	Sports Kenya	625 Million	Civil - Structural Consultants	Ongoing
Proposed Rehabilitation of Kamariny Stadium, Elgeyo Marakwet County	Sports Kenya	755 Million	Civil - Structural Consultants	Re -Tender Stage
Proposed Fresh Produce Kithomboani Market Development- Kitui County	Kitui County	650 Million	Civil - Structural Consultants	Ongoing
Proposed Construction of a New Complex for West Pokot County	West Pokot County	500 Million	Civil - Structural Consultants	Ongoing
Proposed Mixed Use Facilty For Tracom Limited	TRACOM LTD	2 Billion	Civil - Structural Consultants	Design Stage
Proposed Multistory for Stima Investments	Stima Investments Ltd	1 Billion	Civil - Structural Consultants	Design Stage







<b>Assignment Name:-</b> Kenya Airports Authority JKIA T1 - BCD Remodeling		<b>Country:-</b> Kenya
<b>Location within Country:-</b> Syokimau, Nairobi		<b>Professional Staff provided by your firm:-</b> Pre-contract with APEC Consortium for Structural & Civil Engineer Services
<b>Name of client:-</b> Kenya Airports Authority (KAA)		<b>No. of staff:-</b> 8
		No. of staff Months:- 2
<b>Address:-</b> P.O.BOX 37866-01000 Nairobi		 <p>Arch Render</p>  <p>Structural Revit model on progress</p>
<b>Start Date (Month/Year)</b> 09/2018	<b>Completion Dated: (Month/Year)</b> Detailed Design Stage (ONGOING)	
<b>Approx. value of Services(Detailed Design Stage):</b> 45,000,000	<b>Approx.Current value of Project:</b> 26,000,000,000	
<b>Name of Associated Firm (s) if any:</b> APEC Consortium Ltd / ADPI		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinating designs and production of detailed drawings and submission drawings to the ADPI / APEC CONSORTIUM and Kenya Airports Authority.		
<b>Narrative Description of Project:-</b> Design of structural engineering works for remodelling of JKIA New Terminal 1 - B, C & D as 560,000m2 of built up area covering airport passenger terminals, baggage area, rotunda, boarding bridges, as well as interconnected links to buildings and road bridges.		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		




<b>Assignment Name:</b> STIMA HEIGHTS		<b>Country:</b> Kenya
<b>Location within Country:</b> Nairobi		<b>Professional Staff provided by your firm:</b> Civil - Structural Engineer Services
<b>Name of client:</b> - Stima Investment Limited		<b>No. of staff:</b> 10
		<b>No. of staff Months:</b> 4
<b>Address:-</b> 5th Floor, Mushembi Road, Parklands, Nairobi.		
<b>Start Date</b> (Month/Year) 2022	<b>Completion Dated:</b> (Month/Year) Construction Stage (ONGOING)	
<b>Approx. value of Services(Detailed Design Stage):</b> 8,000,000	<b>Approx. Current value of Project:</b> 1,000,000,000	
<b>Name of Associated Firm (s) if any:</b> N/A		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader)involved and functions performed:-</b> Alexander Mbugua co-ordinating designs and production of detailed drawings and submission drawings to the Stima Investment		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Stima Investment		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		



<b>Assignment Name:</b> TRACOM LTD		<b>Country:</b> Kenya
<b>Location within Country:</b> Nairobi		<b>Professional Staff provided by your firm:-</b> Structural Engineer Services
<b>Name of client:-</b> TRACOM		<b>No. of staff:-</b> 8
		<b>No. of staff Months:-</b> 2
<b>Address:-</b> P.O.BOX 25749-00603 Nairobi		
<b>Start Date (Month/Year)</b> 09/2019	<b>Completion Dated: (Month/Year)</b> Detailed Design Stage (ONGOING)	
<b>Approx. value of Services(Detailed Design Stage):</b> 5,000,000	<b>Approx. Current value of Project:</b> 2,000,000,000	
<b>Name of Associated Firm (s) if any:</b> NA		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader)involved and functions performed:</b> Alexander Mbugua co-ordinating designs and production of detailed drawings and submission drawings to the Tracom		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Tracom Ltd		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		

<b>Assignment Name:-</b> Proposed Rehabilitation of Kipchoge Keino Stadium, Uasin Gishu County		<b>Country:-</b> Kenya
<b>Location within Country:-</b> Eldoret, Uasin Gishu County		<b>Professional Staff provided by your firm:-</b> Structural Engineer Civil Engineer
<b>Name of client:-</b> SPORTS KENYA		<b>No. of staff:-</b> 8
		<b>No. of staff Months:-</b> 12
<b>Address:-</b> P.O.BOX Private Bag Nairobi		<b>Stadium &amp; Racing Track</b> 
<b>Start Date (Month/Year)</b> 08/2023	<b>Completion Dated: (Month/Year)</b> On going	
<b>Approx. value of Services:</b> 20,000,000	<b>Approx. Current value of Project:</b> 800,000,000	
<b>Name of Associated Firm (s) if any:</b> Phumaf Engineers Pty (SA)		<b>No. of Months of Professional Staff Provided by Associated Firm (s):</b> N/A
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinated designs and production of preliminary and working drawings and submission drawings to the Uasin Gishu County Council and supervision of works and contract administration.		
<b>Narrative Description of Project:-</b> Rehabilitation and Upgrading of the Stadium to CAF/FKF standards.		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements and civil works, production of working drawings, bar bending schedules and civil working drawings and details, and contract administration preparation of contractors payment certificates and preparation of financial appraisals.		

<b>Assignment Name:</b> Proposed Rehabilitation of Kamariny Stadium, Elgeyo Marakwet County		<b>Country:</b> Kenya
<b>Location within Country:-</b>  Elgeyo Marakwet County		<b>Professional Staff provided by your firm:-</b> Structural Engineer Civil Engineer
<b>Name of client:-</b>  SPORTS KENYA		<b>No. of staff:</b> 8
		<b>No. of staff Months:</b> 12
<b>Address:-</b> P.O.BOX 600100-00200 Nairobi		
<b>Start Date (Month/Year)</b>  08/2023	<b>Completion Dated: (Month/Year)</b> On going	
<b>Approx. value of Services:</b> 15,000,000	<b>Approx. Current value of Project:</b>  650,000,000	
<b>Name of Associated Firm (s) if any:</b> Phumaf Engineers Pty (SA)		
		<b>No. of Months of Professional Staff Provided by Associated Firm (s):</b> N/A
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinated designs and production of preliminary and working drawings and submission drawings to the Uasin Gishu County Council and supervision of works and contract administration.		
<b>Narrative Description of Project:-</b> Rehabilitation and Upgrading of the Stadiums to CAF/FKF standards.		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements and civil works, production of working drawings, bar bending schedules and civil working drawings and details, and contract administration preparation of contractors payment certificates and preparation of financial appraisals.		

<b>Assignment Name:-</b> Proposed Kalamba Fruit Processing Plant		<b>Country:-</b> Kenya	
<b>Location within Country:-</b>  Wote, Makueni County		<b>Professional Staff provided by your firm:-</b> Project management Structural Engineer Civil Engineer	
<b>Name of client:-</b> Government of Makueni County		<b>No. of staff:</b> 8	
<b>Address:-</b> P.O.BOX 78 – 90300 Makueni		<b>No. of staff Months:</b> 12	
<b>Start Date (Month/Year)</b>  04/2014	<b>Completion Dated: (Month/Year)</b> Finished	<b>Approx. value of Services:</b> 5,000,000	<b>Approx. Current value of Project:</b> 650 Million
<b>Name of Associated Firm (s) if any:</b> N/A	<b>Name of Associated Firm (s) if any:</b> N/A		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinated designs and production of preliminary and working drawings and submission drawings to the Makueni County Council and supervision of works and contract administration.			
<b>Narrative Description of Project:-</b> <ul style="list-style-type: none"> <li>● Project management,</li> <li>● civil and structural engineering works for 2,000 Square Metres,</li> <li>● water intake works from river over 11km long with gravity line</li> <li>● water treatment tanks and reverse osmosis plant for water production for the plant</li> <li>● Waste water effluent treatment prior to discharge into the river</li> </ul>			
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements and civil works, production of working drawings, bar bending schedules and civil working drawings and details, and contract administration preparation of contractors payment certificates and preparation of financial appraisals.			






<b>Assignment Name:-</b> <b>Proposed Affordable House Development In Kisumu For LAPFUND On Plot Lr. Nos. Kisumu Municipality Blocks 5/ 360, 5/361 ,5/362 ,5/363 Kisumu County</b>		<b>Country:</b> Kenya
<b>Location within Country:</b> Kisumu		<b>Professional Staff provided by your firm:-</b> Pre-contract with Professional Consultants Ltd for Structural Engineer Services
<b>Name of client:-</b>  LOCAL AUTHORITY PROVIDENT FUND (LAPFUND)		<b>No. of staff:-</b> 6
<b>Address:-</b>  P.O BOX 79592-00200 NAIROBI, KENYA		<b>No. of staff Months:-</b> 6
<b>Start Date (Month/Year)</b> 03/2020	<b>Completion Dated: (Month/Year)</b> CONSTRUCTION STAGE (ONGOING)	 
<b>Approx. value of Services(Detailed Design Stage):</b> 24,000,000	<b>Approx.Current value of Project:</b> 1,500,000,000	
<b>Name of Associated Firm (s) if any:</b> Professional Consultants Ltd		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:</b> Gideon Kamande coordinating designs and production of detailed drawings and submission drawings to the Professional Consultants Ltd		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Professional Consultants Ltd		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		

<b>Assignment Name:-</b> Proposed Kisumu County Assembly Building		<b>Country:</b> Kenya
<b>Location within Country:-</b> Kisumu		<b>Professional Staff provided by your firm:-</b> Pre-contract with Professional Consultants Ltd for Structural Engineer Services
<b>Name of client:-</b> Kisumu County Assembly		<b>No. of staff:-</b> 4
		<b>No. of staff Months:-</b> 3
<b>Address:</b> P.O BOX 79592-00200 Nairobi, Kenya		
<b>Start Date (Month/Year)</b> 05/2021	<b>Completion Dated: (Month/Year)</b> CONSTRUCTION STAGE (ONGOING)	
<b>Approx. value of Services(Detailed Design Stage):</b> 4,500,000	<b>Approx. Current value of Project:</b> 500,000,000	
Name of Associated Firm(s) if any: Professional Consultants Ltd		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua coordinating designs and production of detailed drawings and submission drawings to the Professional Consultants Ltd		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Professional Consultants Ltd		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		



<b>Assignment Name:-</b> Proposed Jomo Kenyatta International Stadium		<b>Country:-Kenya</b>
<b>Location within Country:</b> Kisumu		<b>Professional Staff provided by your firm:-</b> Pre-contract with Professional Consultants Ltd for Structural Engineer Services
<b>Name of client:-</b> Kisumu County & Sports Kenya		<b>No. of staff:</b> 8  <b>No. of staff Months:</b> 10
<b>Address:-</b> P.O BOX 79592-00200 NAIROBI, KENYA		
<b>Start Date (Month/Year)</b> 08/2021	<b>Completion Dated: (Month/Year)</b> CONSTRUCTION STAGE (ONGOING)	
<b>Approx. value of Services(Detailed Design Stage):</b> 6,500,000	<b>Approx. Current value of Project:</b> 2,000,000,000	
<b>Name of Associated Firm (s) if any:</b> Professional Consultants Ltd		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua coordinating designs and production of detailed drawings and submission drawings to the Professional Consultants Ltd		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Professional Consultants Ltd		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		

<b>Assignment Name:-</b>  PROPOSED OFFICE DEVELOPMENT FOR AFRICA GUARANTEE FUND ON PLOT NO. LR.NO.3734/1200 ALONG MUTHANGARI ROAD, LAVINGTON		<b>Country:-</b>  Kenya
<b>Location within Country:-</b>  Kisumu		<b>Professional Staff provided by your firm:-</b> Pre-contract with Professional Consultants Ltd for Structural Engineer
<b>Name of client:-</b>  AFRICA GUARANTEE FUND		<b>No. of staff:</b> 3
		<b>No. of staff Months:</b> 12
<b>Address:-</b>  P.O.BOX 57795-00200 NAIROBI, KENYA		
<b>Start Date</b> (Month/Year) 05/2019	<b>Completion Dated:</b> (Month/Year) Structural Works Completed	
<b>Approx. value of Services:</b> 3,000,000	<b>Approx. Current value of Project:</b> 1,500,000,000	
<b>Name of Associated Firm (s) if any:</b> Professional Consultants Ltd		
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:</b> Gideon Kamande coordinating designs and production of detailed drawings and submission drawings to the Professional Consultants Ltd		
<b>Narrative Description of Project:-</b> Design of structural engineering works for Professional Consultants Ltd		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements works, production of working drawings, bar bending schedules and details, and contract administration.		

<b>Assignment Name:-</b> Proposed Fresh Produce Kithomboani Market Development- Kitui County		<b>Country:-</b> Kenya
<b>Location within Country:-</b> Kitui Town, Kitui County		<b>Professional Staff provided by your firm:-</b> Structural Engineer Civil Engineer
<b>Name of client:-</b> Kitui County Government		 
<b>Address:-</b> P.O. BOX 33-90200 KITU		
<b>Start Date (Month/Year)</b> 09/2019	<b>Completion Dated: (Month/Year)</b> On going	
<b>Approx. value of Services:</b> 5,000,000	<b>Approx. Current value of Project:</b> 450,000,000	
<b>No. of staff:-</b> 8	<b>No. of staff Months:-</b> 12	
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinated designs and production of preliminary and working drawings and submission drawings to the Kitui County Council and supervision of works and contract administration.		
<b>Narrative Description of Project:-</b> Design of structural engineering works for 30,000 Square Metres of built up Market block on 5-storey building with associated civil works as parking facilities in paving block for the development . Design for support of Solar transparent glasses panels support system.		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements and civil works, production of working drawings, bar bending schedules and civil working drawings and details, and contract administration preparation of contractors payment certificates and preparation of financial appraisals.		

<b>Assignment Name:-</b>  Proposed Construction of a New Complex for West Pokot County		<b>Country:-</b>  Kenya
<b>Location within Country:-</b>  Kapenguria, West Pokot		<b>Professional Staff provided by your firm:-</b> Structural Engineer Civil Engineer
<b>Name of client:-</b>  West Pokot County Assembly		<b>No. of staff:</b> 8
		<b>No. of staff Months:</b> 12
<b>Address:-</b>  P.O.BOX 6-30600 Kapenguria		
<b>Start Date (Month/Year)</b> 06/2014	<b>Completion Dated: (Month/Year)</b> On going	
<b>Approx. value of Services:</b>  12,000,000	<b>Approx.Current value of Project:</b>  550,000,000	
<b>Name of Associated Firm (s) if any:</b> N/A		<b>No. of Months of Professional Staff Provided by Associated Firm (s):</b> N/A
<b>Name of senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:-</b> Alexander Mbugua co-ordinated designs and production of preliminary and working drawings and submission drawings to the Makueni County Council and supervision of works and contract administration.		
<b>Narrative Description of Project:-</b> Design of structural engineering works for 12,000 Square Metres of built up office block on 7-storey building with associated civil works as parking facilities in paving block for the development and biodigester unit for treatment for sewerage.		
<b>Description of Actual Services Provided by your staff:</b> Design of structural elements and civil works, production of working drawings, bar bending schedules and civil working drawings and details, and contract administration preparation of contractors payment certificates and preparation of financial appraisals.		



## USE OF BUILDING INFORMATION TECHNOLOGY – BIM REVIT MODELLING, & STEEL PROJECTS

### Structural Drawings

The detailed construction drawings shall be developed from the member sizing and structural system layout. Autodesk robot structural program will be used for design model and the same model will be used by Autodesk Revit program to produce detailed drawings. This is called Building Infrastructure Modelling (BIM).

### Use of Building Infrastructure Modelling (BIM).

Building Information Modeling is an intelligent model-based process that provides value across the lifecycle of a project. The BIM process involves creating and using an intelligent (3D) model to inform and communicate project decisions. A process shift to Building Information Modeling (BIM) fundamentally improves the way we plan, design, build and manage our building, infrastructure, utility or natural resource projects.

Building Information Modeling (BIM) is changing how buildings, infrastructure, and utilities are planned, designed, built, managed, visualization, simulation, and collaboration enabled by BIM solutions provide greater clarity for all stakeholders across the project lifecycle. BIM can make it easier to achieve project and business goals. BIM solutions help turn information into insight and deliver business value at every step in the process.

Why chose BIM solutions?

- Advanced technology for design, visualization, simulation, and coordination
- Comprehensive workflow solutions with interoperability to help maintain data fidelity and support greater efficiency
- Business agility made possible with desktop, cloud, web, and mobile platforms along with more cost-effective packaging to better meet changing project needs



**Figure above shows BIM model solutions.**



Below is a brief summary of the BM process. From the Architect model in Revit or IFC format we develop a Revit physical model. This is used to produce the general arrangement drawings. The physical model is sent to Robot for loading, analysis and design. The results in the model are sent back to Revit to update the model. The updated model in Revit is used to produce drawings and bending schedules.

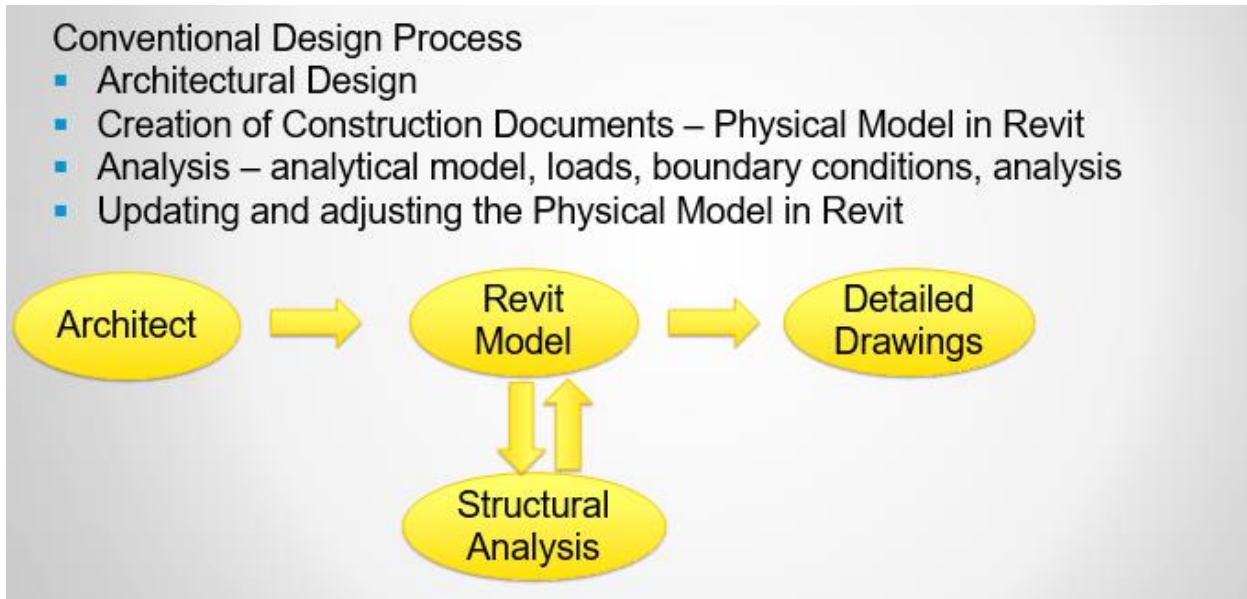


Figure above shows summary of BIM.

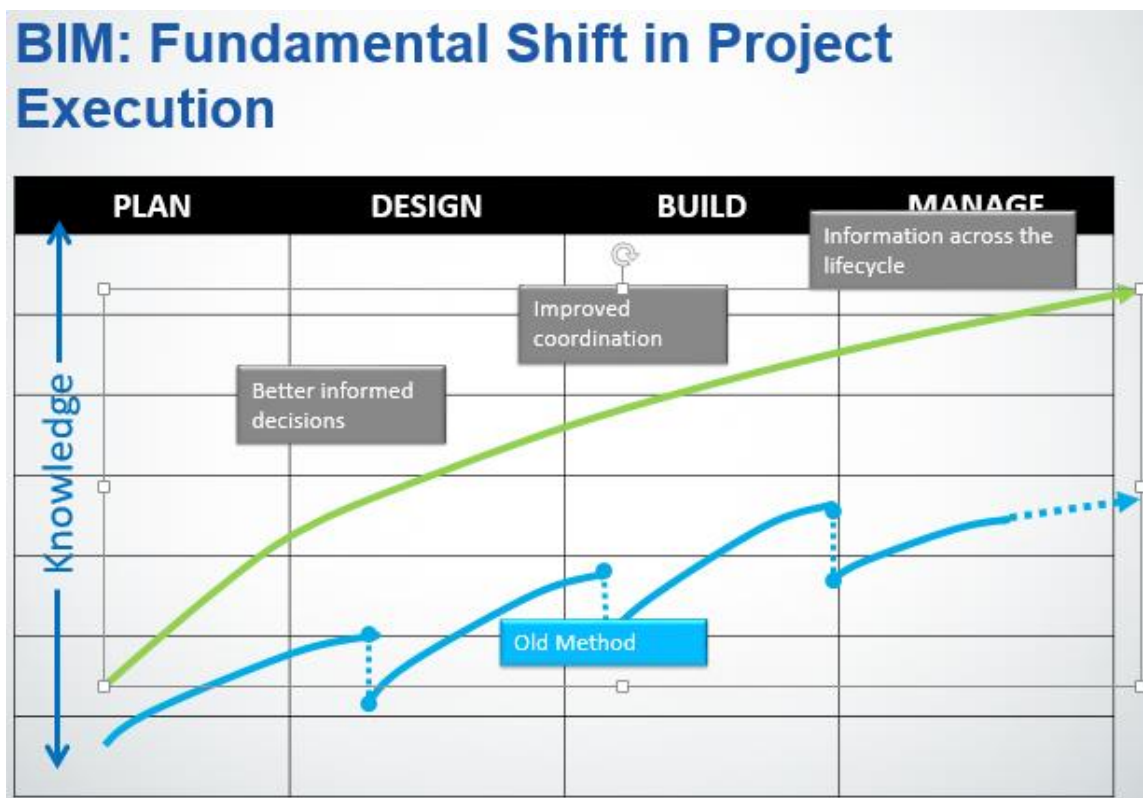
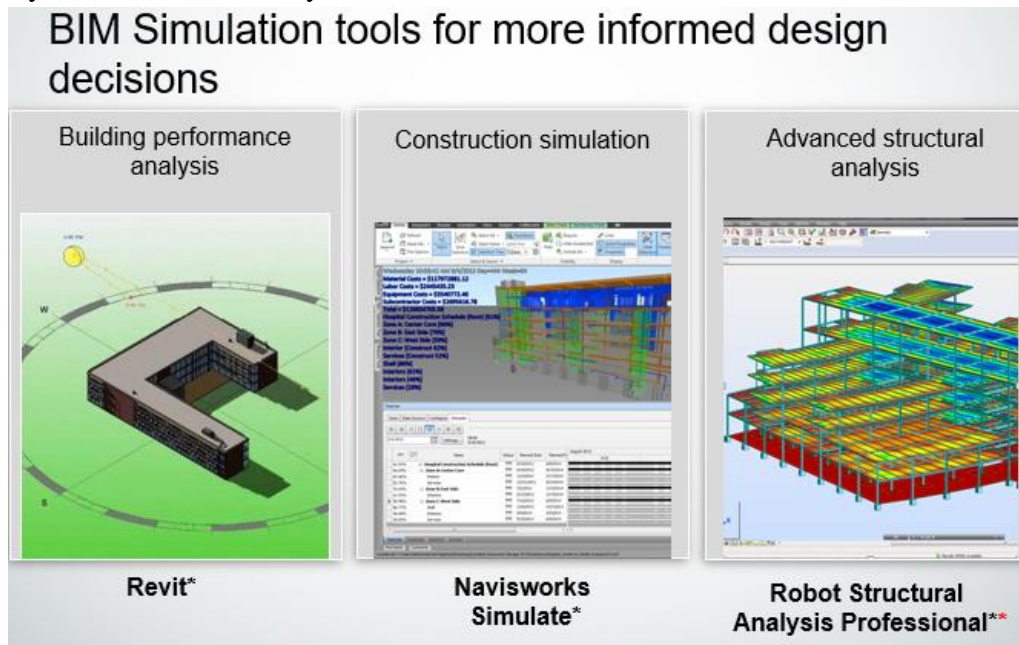


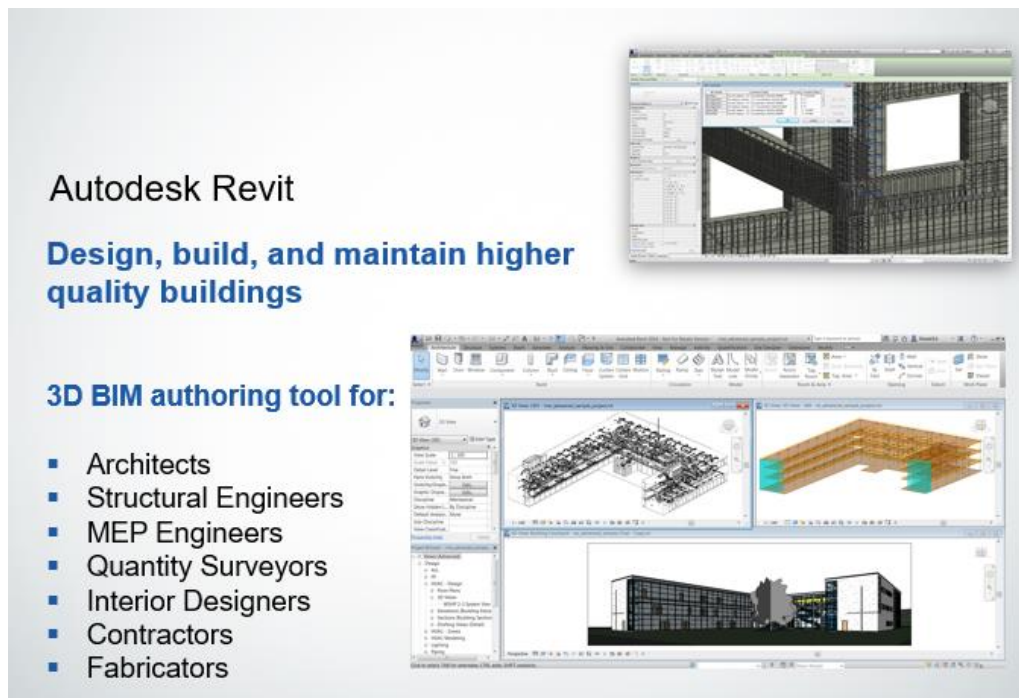
Figure above shows performance of BIM versus old convectional method.



The REVIT production drawings entails general arrangement layout for foundations, beams, slabs and columns shall be made from which formwork layout can be evaluated by the Quantity Surveyor and constructed by the contractor.



**Figure above shows Autodesk revit, Navisworks and robot interoperability.**

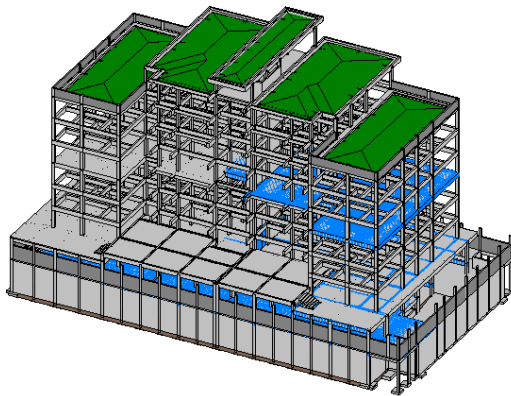


**Figure above shows BIM sharing information between all consultants .**

*Figure below shows BIM sharing information models and actual photos on site.*

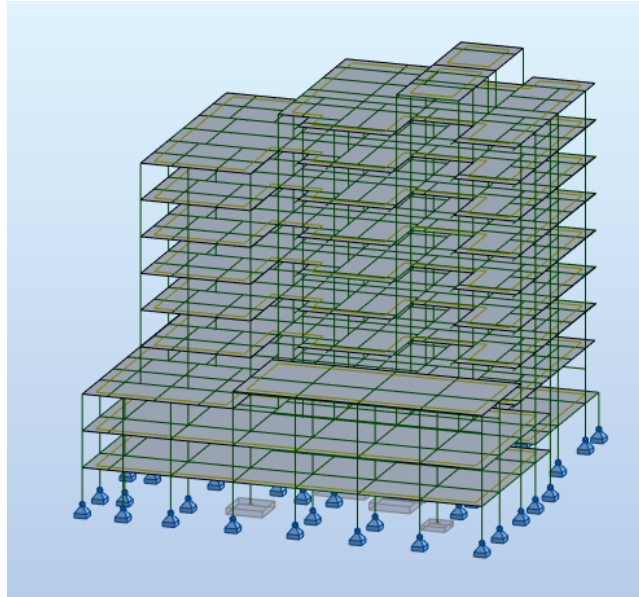
*Sample Projects in Revit*

*Manor View*

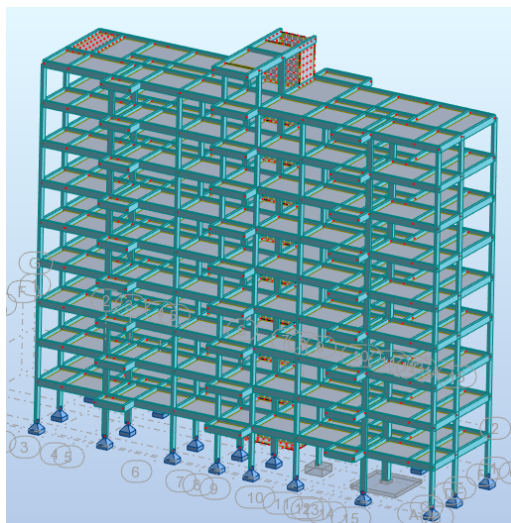


*Sample Projects in robot*

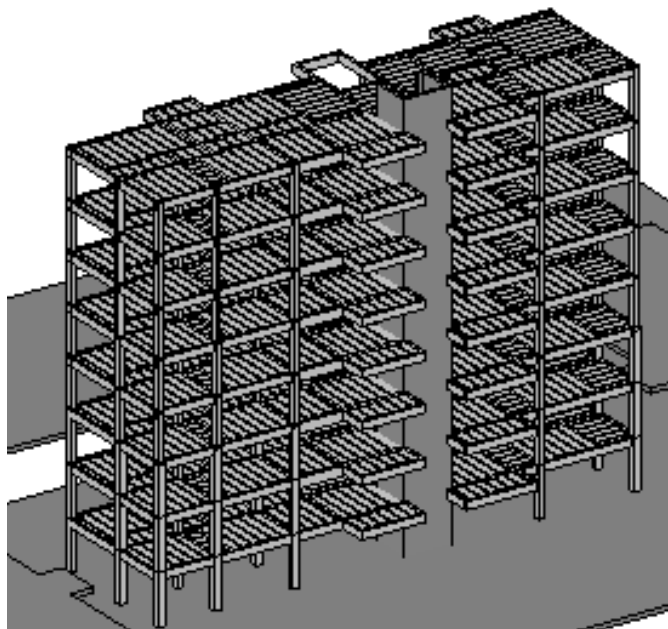
*Manor view*



*Tepesi Heights*



*Tepesi Heights*

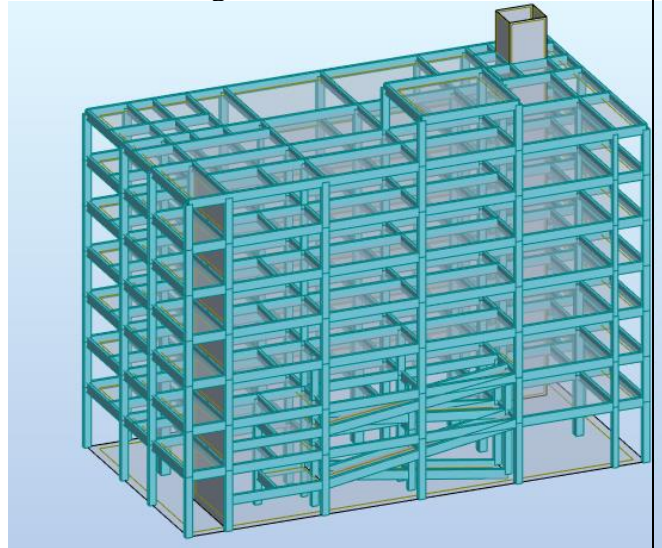




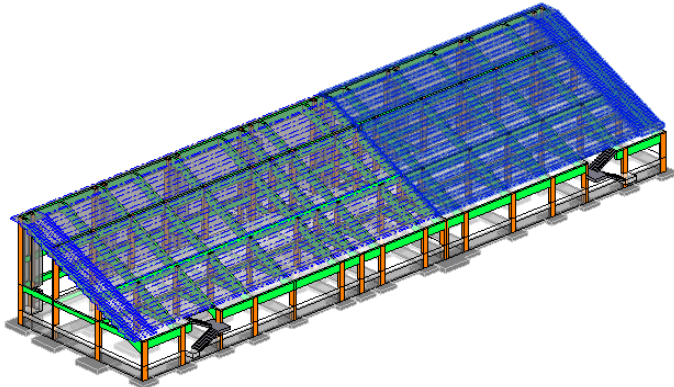
Spring Green Britam



West Pokot Heights



Kipchoge Keino Eastern Stand



Kipchoge Keino Western Stand

