

Running head:

**"Comparing Public and Private Sector Construction Projects: Funding, Objectives,
Procurement, and Accountability'"**

Student name:

Student Id number:

Date prepared

Table of Contents

Introduction:.....	4
Comparison of Public and Private Sector Construction Projects.....	4
Project Background: Vermont Construction - Manchester Waters Project.....	5
Project Timeline:	5
Project Phases and Activities:	6
Feasibility Study and Conceptualization:	6
Pre-Planning and Pre-Application:	6
Planning Permission:	6
Detailed Design:.....	7
Tendering and Procurement:	7
Construction:.....	7
Testing and Commissioning:.....	8
Handover and Occupation:	8
Post-Construction Evaluation:	8
Main Professionals and Professional Bodies Involved in the Manchester Waters Project:	8
1. Architects:	9
Role and Responsibilities:.....	9
2. Engineers (Structural, Civil, Mechanical, Electrical):	9
Roles and Responsibilities:	9
3. Quantity Surveyors:	10
Role and Responsibilities:.....	10
4. Project Managers:	10
Role and Responsibilities:.....	10
5. Contractors and Subcontractors:	10
Role and Responsibilities:.....	10

6. Tradespeople (Plumbers, Electricians, Carpenters, etc.):	11
Role and Responsibilities:.....	11
Benefits of the Construction Industry to the UK Economy:.....	12
Social and Financial Benefits of the Manchester Waters Project to the Local Community:	14
Job Creation:	14
Skills Development:.....	14
Community Engagement:	14
Improved Infrastructure:	14
Enhanced Amenities:	14
Property Value Appreciation:	15
Tourism and Regeneration:	15
Reflection	15
Conclusion	16
References.....	17

Introduction:

This essay centers around Manchester Waters development by Vermont Construction that lies at M15 0TT. Through key learning objectives, we try to realize the delicate structure by means of a sequence of patterns of the construction industry in the context of this innovative project. The industry of construction is a dynamic field where parties link up and skills meet together to give true form of the projects (Li, 2023). As from architects to builders, each of them is a key player and a vital part of the scheme's success in a case like Manchester Waters.

In this article we will search for the essence of construction by: finding and understanding the meaning of the industry specific terms and then understanding the roles and duties of the contractors. Furthermore, it examines the aggravating economic effects of construction schemes, thus highlighting their role in creating local employment as well as business development. The construction design processes enlighten us in the form of the obsessive attention to detail and intricate sequence of activities and events in order to achieve the bold goals. The purpose of this essay is to introduce you to the amazing world of construction, where innovation meets infrastructure, and where endless possibilities exist.

Comparison of Public and Private Sector Construction Projects

The construction industry is a sector that includes many subdivisions of the built environment, with each subsector having its own special features and participants (Ofori, 2024). As such, the sectors can be roughly seen to be either the public sector or the private sector. Public sector covers construction schemes which are initiated, designed and funded by government either at the local, regional or the national level. This can involve a wide range of infrastructure projects including roads, bridges, schools, hospitals and affordable housing units.

In addition to that, the private sector has projects such as construction works which are started and financed by individuals and organizations through activities such as commercial development, building of homes or renting of land. Private sector investments in construction can be in the form of residential houses market, office blocks, shopping centers, to manufacturing sites and entertainment centers (McKellar, 2023). The actualization of these projects is based on the market demand as well as investment opportunities and the developers are looking to earn returns by selling or renting out their properties or through leasing arrangements.

The two sectors differ in several key aspects:

1. **Funding:** Funding for public sector projects is mostly provided through government budgets, taxpayers' money or public-private partnerships (PPPs), while private sector ones are financed via private investment, bank loans or commercial financing (Wulandari, 2024).
2. **Objectives:** Public sector projects usually include projects that give priority to the society and the benefits of the community in general, which in most cases are centered on supplying basic social services and facilities (Lam, 2024).
3. **Procurement:** The public procurement processes that govern public projects are mostly founded on strict regulations, with public tendering procedures being aimed at achieving transparency, fairness, and value for money. Private sector undertakings may or may not involve a bidding competition but, on the other hand, they are quite flexible generally in their procurement arrangements and contractual commitments (Ross, 2020).
4. **Accountability:** Public sector projects are usually exposed to more rigorous examination made by the taxpayers and regulatory bodies, and that is the reason they would be emphasizing on transparency, compliance with regulations and effective utilization of public funds (Rosenbloom, 2022).

Project Background: Vermont Construction - Manchester Waters Project

Manchester Waters, a truly unique development carried out by Vermont Construction, is a landmark located at M15 OTT in Manchester, Great Britain. This detail-oriented project is about changing the city's skyline and delivering the twenty first century, environmentally friendly accommodation on the embankment of the river Irwell. The Manchester Waters is a new type of project that combines residential and commercial spaces and leisure facilities that are intended to give a boost to the city's urban environment and meet the increased demand for high-quality accommodation and services (Manchester Waters).

Project Timeline:

The Manchester Water Project began in early 2018, which entailed its initial stages of site preparation, planning, and designing. The construction works were started with great commitment in the middle of 2019 by receiving construction permits and contracts purchase (Manchester Waters). The whole project is planned to be carried out in stages, with the completion of different

components being on concert in certain stages during several years. After the most recent progress reports it is projected that the last stages of the manufacturing will be done by late 2023, which will mark the closure of this extraordinary project.

Project Phases and Activities:

Feasibility Study and Conceptualization:

- At the start, the project started with carrying out feasibility studies that later shaped the vision for Manchester Waters. This stage incorporated a thorough analysis of the site, research of the market and engagement of the stakeholders to ensure that the site has the potential and that the development will be viable.
- Hand in hand with architects, engineers and urban designers, Vermont Construction team forged the purpose, limitations of the project, and researched the applicable innovations that could drive potential value of the property.

Pre-Planning and Pre-Application:

- Vermont Construction met with local authorities, community stakeholders, and regulatory bodies in an effort to take cognizance of planning regulations, environmental issues, and physical infrastructure before submitting development proposals.
- Feedback, concerns, and planning policies communities were taken into consideration during pre-application consultations, which were held to modify and finalize the project proposal.

Planning Permission:

- The process of getting the planning permission included carrying out planning applications that include detailed plans, architectural drawings, and environmental impact assessments.
- Vermont construction worked closely with planning authorities, made applications and participated in review processes, responding queries and making modifications where necessary to attain the license.
- Plans of permission were obtained in phases, corresponding to diverse stages of the development like residential towers, commercial spaces, and public facilities.

Detailed Design:

- Permitting problems were no obstacle for Vermont Construction that went straight into the detail design phase where architects, engineers, and consultants did all the detailed designs.
- The process involved architectural design, structural engineering, MEP (mechanical, electrical, plumbing) systems design, and interior fit-outs for residential and commercial construction.
- Detailed drawings, specifications and schedules were made to be used in guiding construction activities and to ensure compliance to regulatory standards and project requirements.

Tendering and Procurement:

- Vermont Construction made tender of drawings, specifications, and a bill of quantities, and invited competitive bids from contractors and subcontractors.
- Tendering comprised the evaluation of offers, assessing the expertise of contractors, and contracting which were instrumental in choosing the right partners to implement construction works.
- The contracts were finalized and agreements were made with the commissioned contractors, indicating the project scope, deliverables, timelines and standards in terms of quality.

Construction:

- Construction work start with mobilization of the site, earthworks and foundation works and the process of vertical construction which is getting prepared.
- The construction phase included erecting the residential towers, the commercial buildings and the civil infrastructure, including roads, utilities and landscaping.
- The employment of Vermont Construction for construction activities included scheduling of subcontractors, progress management, quality control to ensure adherence to specifications and safety standards.

Testing and Commissioning:

- Upon the end of construction works, testing and commissioning activities were carried out in order to warrant the functionality and performance of building systems and components.
- The testing of HVAC systems, electrical installations, plumbing fixtures, and fire safety systems was carried out during this stage to verify that they conform with the required standards and the design specifications.
- During the testing phase, defects or any issues that were identified were fixed, and lastly, adjustments were made to the services for the building to function as it was intended for.

Handover and Occupation:

- The client and the end-users are given completed buildings and infrastructure after passing tests and commissioning which are handed over by Vermont Construction.
- The maintenance manuals and user guides as well as the 24/7 maintenance hotline were made available to help the occupants to manage and maintain their properties.
- Vermont Construction was available at all times to fix any problems that might arise and to make sure that the users of the buildings, whether they are residents or business persons or tenants, would enjoy smooth transition to the new occupancy.

Post-Construction Evaluation:

- As the project nears completion, Vermont Construction will conduct post-construction evaluations to assess project performance, identify lessons learned, and address any outstanding warranty or defect issues.
- This phase involves compiling project documentation, conducting final inspections, and closing out contracts in accordance with contractual obligations and regulatory requirements.

Main Professionals and Professional Bodies Involved in the Manchester Waters Project:

The Manchester Waters project involves collaboration among various professionals and professional bodies to ensure its successful planning, design, and construction. The following are the main professionals and their respective professional bodies involved in the project:

1. Architects:

Professional Body: Royal Institute of British Architects (RIBA) is an organization that elevates architects and offers support to enhance the practice of architecture and the designs of spaces (Coates, 2022).

Role and Responsibilities:

Develop drawings and plans for residential, commercial and recreational sites and structures within the development.

Work closely with clients, stakeholders, and government agencies to make sure that the designs are in accordance with the required standards, building codes, and the planning regulations.

Envision and collaborate with other experts, like engineers and interior designers, to merge architectural features into comprehensive project plans.

2. Engineers (Structural, Civil, Mechanical, Electrical):

Professional Bodies: The Institution of Structural Engineers (IStructE) and the Institution of Civil Engineers (ICE) and the Institution of Mechanical Engineers (IMechE) and the Institution of Engineering and Technology (IET).

Roles and Responsibilities:

Structural Engineers: Scheme structural systems and components to provide stability, strength and resilience of the buildings and infrastructure.

Civil Engineers: Put in place the site planning and design of the infrastructure including roads, drainage systems and utilities for the development.

Mechanical Engineers: When designing HVAC systems, plumbing and fire protection systems, keep the occupants comfort and safety in mind.

Electrical Engineers: Create the electrical distribution systems, lighting systems, and communication networks suitable for the power, and connectivity needs, respectively.

3. Quantity Surveyors:

Professional Body: Chartered Institute of Building (CIOB)

Role and Responsibilities:

Prepare budgets, cost estimates, and financial forecasts for the project taking into account materials expenses, labor, and other project related expenses.

Procure and take onboard contracts with suppliers, subcontractors and service providers to provide the projects with quality services and materials on reasonable prices.

Take care of project costs, track expenditure, and give financial advice, which can help enhance the ability to perform and to reduce the risks.

4. Project Managers:

Professional Body: The Institution of Project Management (IPM).

Role and Responsibilities:

Undertake every stage of the project lifecycle, starting with planning and design, up to the construction and delivery process, with expeditiousness and strict adherence to standards.

Coordinate resources, manage schedules and budgets, and do everything else necessary to meet project objectives and satisfy clients' needs.

Create an environment conducive to communication and collaboration among the stakeholders that would enable the efficient resolution of conflicts and the effective addressing of burdens and issues to ensure the smooth running and completion of the project.

5. Contractors and Subcontractors:

Professional Bodies: The Construction Industry Training Board (CITB), Federation of Master Builders (FMB), and National Federation of Builders (NFB) are organisational training providers.

Role and Responsibilities:

Perform work as per the execution of constructions master plans, designs, and schedules, which include the adherence to safety regulations and quality standards.

Ensure that quality materials, tools, and skilled personnel are available to complete the tasks on time and to the required standard.

In conjunction with project managers, architects, and engineers, use your technical skills to solve difficulties, make proposed changes, and do work that meets a high standard.

6. Tradespeople (Plumbers, Electricians, Carpenters, etc.):

Professional Bodies: As far as the intra-trade sector is concerned, it is also associated with the existence of a lot of trade specific entities, such as organizations and associations.

Role and Responsibilities:

To do jobs of a specialized nature, for example electrical wiring, plumbing work, carpentry, and finishes, that meet industry standards and the project specifications.

Installing, maintaining, and repairing machinery and components within building systems to keep them in proper working order, safe and durable.

Work with various contractors, project managers, and other tradespeople to facilitate sharing loads and putting the project milestones in order.

Professionals/Professional Bodies	Phase of Project Lifecycle	Contributions to the Project
Architects	Feasibility Study, Pre-Planning, Detailed Design	Contrive architectural facades and concepts, verify that all the designs are compliant with restrictions and design standards, interact with stakeholders.
Engineers	Feasibility Study, Pre-Planning, Detailed Design, Construction, Testing and Commissioning	Design structural, civil, mechanical, and electrical systems by meeting the objectives for functionality, safety, and compliance

Professionals/Professional Bodies	Phase of Project Lifecycle	Contributions to the Project
Quantity Surveyors	Feasibility Study, Pre-Planning, Tendering and Procurement, Construction, Post-Construction Evaluation	Draft budgets and estimates, manage contracts and procurement as well as finance assessment and monitoring of project costs
Project Managers	Pre-Planning, Construction, Testing and Commissioning, Handover and Occupation	Supervise projects over their lifecycle, organize resources and schedules, carry out communication and collaboration
Contractors and Subcontractors	Construction	Make actual construction from the design documentation, keep track of the expenditures and workforce, maintain the quality and safety.
Tradespeople	Construction	Conduct specialized types of construction work, install and maintain building systems and components.

By leveraging their expertise and professionalism, these professionals and professional bodies contribute to the successful delivery of the Manchester Waters project, ensuring that it meets quality standards, regulatory requirements, and client expectations.

Benefits of the Construction Industry to the UK Economy:

The construction industry acts as vital ignition source for the economic boom of the UK (Moavenzadeh, 2022). Some of the key benefits of the construction industry to the UK economy include:

1. **Employment Generation:** The building industry is the largest employer in the UK, employing millions of people in a wide range of occupations from different talent levels

(Czako, 2020). Architects and engineers are just examples of the technicians while the tradespeople and laborers are the workers. Such a wide range of employment opportunity helps reduce unemployment rates and improve the lives of the workers.

2. **Infrastructure Development:** Construction projects create jobs in infrastructure development and also preserve and modernize existing roads, railways, bridges, airports, utilities, and public buildings. Investments in infrastructure give rise to connectivity, development of trade and transportation, and optimize systemic gains in economic efficiency (Shukhratovch, 2023).
3. **Stimulating Economic Activity:** Building construction also stimulates economic activity by exerting pressure on material, equipment, and service supplies from different sources (Su, 2022). The effect of construction spending - specifically the multiplier effect - can be seen in other areas of the economy, in addition to producing additional business opportunities and supporting local industries.
4. **Investment Attraction:** Big projects in construction create interest from investors both domestic and foreign, as well as sign of confidence in economy, which have further positive impact on economic growth (Sadiq, 2021). Investment in infrastructure, commercial properties as well as urban regeneration activities results to job creation, innovation and growth in business.
5. **Innovation and Technology Adoption:** Construction sector through the application of cutting-edge construction techniques and materials, leading to the adoption of technology (Rane, 2023). The research and development investments result in advancements in the construction engineering which in turn produce the increased productivity, efficiency, and sustainability.
6. **Contribution to GDP:** The UK's economy will continue to be dependent on the construction industry, which contributes substantially to the gross domestic product (GDP). Construction output accounts for a significant portion of the GDP (gross domestic product), and hence the industry is considered to be a key engine of growth both in economic activity as well as wealth creation.
7. **Export Potential:** The UK construction industry has potential in export, with the UK constructing firms contributing to international projects and exporting construction goods and services (Alaloul, 2021). International collaborations and partnerships not only

generate revenue for the UK but also act as a major amplifier to the UK image as a world's chief expert in construction.

Social and Financial Benefits of the Manchester Waters Project to the Local Community:

The Manchester Waters project brings a wide range of social and financial benefits to the local community, including:

Job Creation:

The realisation of the Manchester Waters scheme has been a major source of local employment for residents that come from diverse backgrounds. These include skilled tradespeople, labourers, and support staff. Job creation serves as a trigger for economic activity, higher house incomes, and a higher standard of living for residents.

Skills Development:

The project is committed to skills development through the training aspect in the construction industry fostering development of experience and qualifications. Apprenticeships, vocational training programs, and job training programs provide the education and skills needed to be part of a skilled labor force and help address the shortage of skills in the construction sector.

Community Engagement:

Vermont Construction strongly believes in communication and cooperation with the community. Consultation meetings, outreach programs, and community events are all important tools to get the people involved and informed throughout the development process. Community engagement that increases positive relationship helps to solve problem and also improves social unity in the area.

Improved Infrastructure:

The Manchester Waters planning encompasses the construction of new roads, utilities, and public spaces which in turn makes the locality more accessible, permeable as well as agreeable. Infrastructure development can lead to economic growth, attracts investment and, generally, improves the quality of people existence.

Enhanced Amenities:

This project shows the provision of amenities like parks, playgrounds, and recreational zones, which are of health and wellbeing benefit for the public. Access to parks, exercise, and

community amenities is a major contributor for higher quality of life and a feeling of connecting to others.

Property Value Appreciation:

The realization of the Manchester Waters project can foster an environment where property values can appreciate in the vicinity, thereby putting homeowners and property investors on the winning end. Higher property values, in turn, facilitate asset creation, not just in the upkeep but also in the renovation of property, and more strongly, to local businesses and services.

Tourism and Regeneration:

The development of a mixed-use waterfront area specifically into a vibrant place becomes a magnet for tourists, visitors and investors who will be flocking the area to boost the tourism and the economic regeneration of the town. The revitalization of urban spaces contributes to the economic development, public art and multi-culturalism in the town which makes it a place to be for living, working and recreation.

Reflection

I picked up the Manchester Waters project by Vermont Construction for its magnitude, the impact, and the status it holds within the British construction sector. As the mixed-use development located the river Irwell waterfront in Manchester, it is an innovative urban regeneration project which brings together residential, retail and recreational areas to form a multi-functional community center. The most interesting part of this undertaking from my perspective is embracing the holistic method of urban development, integrating eco-friendly design, up-to-date facilities, and community-based programs. The incorporation of green facilities, walkable passages and public services that results in the development of a habitable, inclusive society that values the safety and enjoyment of the residents and the visitors.

For enhancing the project in general, I suggest implementing some best practices besides sustainability measures, for example, by introducing renewable energy technologies, green building materials and sustainable transportation arrangements. Also, creating communication with local businesses and other organizations to make a meaningful contribution to the economic growth and community engagement within the area would result in a multiplied impact of the project.

Conclusion

I picked up the Manchester Waters project by Vermont Construction for its magnitude, the impact, and the status it holds within the British construction sector. As the mixed-use development located the River Irwell waterfront in Manchester, it is an innovative urban regeneration project which brings together residential, retail and recreational areas to form a multi-functional community center. The most exciting part of this undertaking from my perspective is embracing the holistic method of urban development, integrating eco-friendly design, up-to-date facilities, and community-based programs. The incorporation of green facilities, walkable passages and public services that results in the development of a habitable, inclusive society that values the safety and enjoyment of the residents and the visitors.

For bettering the project in general, I suggest implementing some best practices besides sustainability measures, for example, by introducing renewable energy technologies, green building materials and sustainable transportation arrangements. Also, creating communication with local businesses and other organizations to make a meaningful contribution to the economic growth and community engagement within the area would result in a multiplied impact of the project.

References

- Alaloul, W.S., Musarat, M.A., Rabbani, M.B.A., Iqbal, Q., Maqsoom, A. and Farooq, W., 2021. Construction sector contribution to economic stability: Malaysian GDP distribution. *Sustainability*, 13(9), p.5012.
- Coates, M., 2022. The Architects' Revolutionary Council: Architectural anarchy in Britain & Ireland in the 1970s and how to destroy the RIBA (Doctoral dissertation, University of Sheffield).
- Czako, V., 2020. Employment in the energy sector. Publications Office of the European Union: Luxembourg.
- Lam, P.T. and Yang, W., 2020. Factors influencing the consideration of Public-Private Partnerships (PPP) for smart city projects: Evidence from Hong Kong. *Cities*, 99, p.102606.
- Li, S., Martins, J.T., Vasconcelos, A.C. and Peng, G., 2023. Knowledge sharing in project work: the dynamic interplay of knowledge domains and skills. *Journal of Knowledge Management*, 27(2), pp.328-355.
- Manchester Waters | Vermont Property Group. (n.d.). Vermont Property Group. <https://www.vermontcl.com/projects/manchester-waters>
- McKellar, J., 2023. *Infrastructure as Business: The Role of Private Investment Capital*. Taylor & Francis.
- Moavenzadeh, F., 2022. The construction industry. In *Shelter, Settlement & Development* (pp. 73-109). Routledge.
- Ofori, G., 2024. The built environment, construction, development and their implications for labour. In *Routledge Handbook on Labour in Construction and Human Settlements* (pp. 12-38). Routledge.
- Rane, N., 2023. Integrating leading-edge artificial intelligence (AI), internet of things (IOT), and big data technologies for smart and sustainable architecture, engineering and construction (AEC) industry: Challenges and future directions. *Engineering and Construction (AEC) Industry: Challenges and Future Directions* (September 24, 2023).

- Rosenbloom, D.H., Kravchuk, R.S. and Clerkin, R.M., 2022. Public administration: Understanding management, politics, and law in the public sector. Routledge.
- Ross, T.W. and Yan, J., 2020. Comparing public-private partnerships and traditional public procurement: Efficiency vs. flexibility. In *Institutions and Governance in Comparative Policy Analysis Studies* (pp. 67-85). Routledge.
- Sadiq, M., Usman, M., Zamir, A., Shabbir, M.S. and Arif, A., 2021. Nexus between economic growth and foreign private investment: evidence from Pakistan economy. *Cogent Economics & Finance*, 9(1), p.1956067.
- Shukhratovch, J.O., 2023. INVESTMENTS IN INFRASTRUCTURE DEVELOPMENT IN UZBEKISTAN: TRANSPORT NETWORKS, ENERGY, AND COMMUNICATIONS. *IJTIMOIIY FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI*, 3(5), pp.209-227.
- Su, Y., Zou, Z., Ma, X. and Ji, J., 2022. Understanding the relationships between the development of the construction sector, carbon emissions, and economic growth in China: Supply-chain level analysis based on the structural production layer difference approach. *Sustainable Production and Consumption*, 29, pp.730-743.
- Wulandari, S. and Septian, E., 2024. Public Financing Model Through Long-Term Contractual Agreements for Public-Private Partnership Projects. *PERSPEKTIF*, 13(2), pp.365-372.