Commercial Construction Chatbot RAG Document

If the user asks the chatbot about "BOD", "base of design" or "acceptable manufacturers", look in their uploaded PDF for sentences similar to:
1. ACCEPTABLE MANUFACTURERS:
2. MANUFACTURERS:
3. Base of design:
4. Base:
5. Optional:

If the user asks the chatbot about "LEED", "leed" or "LEED requirements", look in their uploaded PDF for sentences similar to:
1. "This is a LEED project"
2. "LEED"
3. "You must provide a LEED certified project manager"
4. "The building design is aimed at achieving a LEED Gold certification."
5. "LEED requirements must be followed for all energy-efficient systems installed."
6. "To earn LEED points, all construction waste will be sorted and recycled."
7. "LEED compliance is a key factor in the project's sustainability goals."
8. "The LEED certification will be applied for once the project reaches substantial completion."
9. "A LEED-certified consultant will be engaged to ensure adherence to green building standards."
10. "LEED credits for water efficiency can be earned through the installation of low-flow fixtures."
11. "LEED standards will influence the selection of materials for the exterior finish."
12. "All HVAC systems must comply with LEED's energy-efficient guidelines."
13. "LEED certification is an integral part of the project's environmental commitment."

If the user asks the chatbot about "project management software" or "does this project require project management software?", look in their uploaded PDF for sentences similar to:
1. "Project management software will be used to track the timeline and deliverables."
2. "All team members must log their tasks into the project management software daily."
3. "The project manager will monitor progress through the project management software dashboard."
4. "The software will allow real-time collaboration and updates on project statuses."
5. "Budget tracking will be handled through the project management software."
6. "The software will notify team members of upcoming deadlines and milestones."
7. "Project risks and issues will be logged and managed through the project management software."
8. "The software will facilitate document sharing and approvals between contractors and owners."
9. "The project management software integrates with other tools to manage resources effectively."

10. "Access to the project management software will be granted to all subcontractors for scheduling."

If the user asks the chatbot about "on-site conditions" or "what are the on-site conditions for this project?", look in their uploaded PDF for sentences similar to:
1. "On-site conditions require that the foundation be laid deeper than originally planned."
2. "The team will need to adapt the design due to unexpected on-site conditions."
3. "Heavy rain has affected on-site conditions, delaying the excavation work."
4. "The contractor must evaluate on-site conditions before beginning the demolition work."
5. "On-site conditions include challenging soil composition that may affect the foundation design."
6. "On-site conditions must be assessed to ensure proper drainage around the building."
7. "The project schedule may need to be adjusted based on changing on-site conditions."
8. "The architect reviewed the on-site conditions and suggested several modifications to the layout."
9. "Safety protocols must be adjusted according to the on-site conditions during the construction phase."
10. "Site preparation work will be delayed due to unforeseen on-site conditions."

If the user asks the chatbot about "owner responsibilities" or "what are the owner responsibilities for this project?", in their uploaded PDF for sentences similar to:
1. "The owner is responsible for securing all necessary permits before construction begins."
2. "Owner responsibilities include providing access to the site for the construction team."
3. "The owner must review and approve all project plans before work commences."
4. "Owner responsibilities also include arranging for utilities to be connected on-site."
5. "The owner is responsible for ensuring that all payments to contractors are made promptly."
6. "As per the contract, the owner must address any unforeseen issues that arise during construction."
7. "Owner responsibilities extend to coordinating with local authorities for zoning clearances."
8. "The owner must provide the project team with necessary documentation regarding land title."
9. "Owner responsibilities include conducting regular site visits to ensure quality control."
10. "The owner must ensure that the property is insured during the construction phase."

If the user asks the chatbot about "contractor responsibilities" or "what are the contractor responsibilities for this project?", in their uploaded PDF for sentences similar to:
1. "The contractor is responsible for ensuring the work is completed on time and within budget."
2. "Contractor responsibilities include managing subcontractors and ensuring compliance with safety standards."
3. "The contractor must provide weekly progress reports to the project manager."
4. "The contractor is responsible for obtaining the necessary construction materials."

5. "The contractor is obligated to notify the owner of any changes or delays in the schedule."
6. "The contractor must coordinate with the architect to implement any design modifications."
7. "Contractor responsibilities include ensuring that all work meets local building codes."
8. "The contractor is responsible for managing site logistics, including access and materials delivery."
9. "Contractor responsibilities extend to securing temporary utilities on-site during construction."
10. "The contractor is responsible for conducting quality inspections before work is approved."

If the user asks the chatbot about "Permits" or "what are the permit requirements for this project?", in their uploaded PDF for sentences similar to:
1. "All necessary building permits must be obtained before construction can begin."
2. "The owner is responsible for ensuring that permits are applied for and received on time."
3. "The construction team will submit permit applications to the local government office."
4. "A permit to begin excavation work must be approved before any digging can occur."
5. "Environmental permits will be required due to the nature of the project."
6. "The permits for the electrical and plumbing systems are still pending approval."
7. "The project will be delayed if the necessary permits are not obtained on schedule."
8. "Permits for hazardous material handling must be secured before demolition begins."
9. "The contractor must display all relevant permits on-site during the construction process."
10. "The city has approved the zoning permit for the new commercial building."

If the user asks the chatbot about "money holdbacks" or "are there any money holdbacks on this project?", in their uploaded PDF for sentences similar to:
1. "A 10% payment holdback will be applied to all progress payments until the project is completed."
2. "Payment holdbacks ensure that all punch-list items are addressed before final payment."
3. "The contractor must agree to a payment holdback clause as part of the contract."
4. "The owner will release the payment holdback upon satisfactory completion of all inspections."
5. "Holdbacks are designed to protect the owner in case of incomplete or unsatisfactory work."
6. "A payment holdback will be withheld until the contractor resolves all warranty issues."
7. "The final payment holdback will be released after a successful completion review."
8. "The payment holdback will be released within 30 days of the final inspection approval."
9. "A holdback provision is included in the contract to cover any unforeseen project costs."
10. "The contractor is required to accept the payment holdback as part of the financial terms of the agreement."

11. "PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF WORK"
12. "Amount authorized by certificate for payment of holdback amount is due and payable on day following expiration of holdback period stipulated in lien legislation applicable to Place of Work. Where lien legislation does not exist or apply, holdback amount is due and payable in accordance with other legislation, industry practice, or provisions which may be agreed to between parties. Owner may retain out of holdback amount any sums required by law to satisfy any liens against Work or, if permitted by lien legislation applicable to Place of Work, other third party monetary claims against Contractor which are enforceable against Owner."
13. "Payment of Holdback:"
14. "After issuance of Certificate of Substantial Performance of Work, submit application for payment of holdback amount in accordance with contractual agreement."

If the user asks the chatbot about "BIM" or "Is BIM required on this project?", in their uploaded PDF for sentences similar to:
1. "BIM software will be used to create a digital model of the building prior to construction."
2. "The contractor must integrate all design changes into the BIM model as they occur."
3. "BIM will be used to track material quantities and help reduce waste on-site."
4. "A 3D BIM model will be shared between the architect, contractor, and engineers for collaboration."
5. "The team will use BIM to coordinate electrical and plumbing systems within the building."
6. "BIM helps improve construction efficiency by visualizing potential issues before work begins."
7. "The BIM model will be updated throughout the construction process to reflect actual conditions."
8. "BIM enables stakeholders to conduct virtual walkthroughs and review the design before building."
9. "BIM will be used to simulate the construction schedule and identify possible delays."
10. "The project team will rely on BIM to maintain accurate as-built drawings upon completion."
11. "Construction Manager will incorporate Contractor's coordination drawing files into BIM established for Project."
12. "BIM File Incorporation"
13. "Digital data files of Architect's BIM model and CAD drawings will be provided by Architect for Contractor's use during construction"
14. "BIM Incorporation: Construction Manager will incorporate Contractor's Shop Drawing files into BIM established for Project"