SCM -656 PROJECT MANAGEMENT

FINAL PROJECT
REMODELING A HISTORIC HOME IN SEDGEWICK AREA

Instructor - Prof. Gary La Point.

Submitted by

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&

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EXECUTIVE SUMMARY

Project Summary: The project involves a complete renovation of the house, including updating the kitchen and bathrooms, creating a new entertainment area, and adding new flooring and fixtures. The kitchen will be completely redesigned to include new cabinets, countertops, and appliances. The bathrooms will also be updated with new fixtures and finishes. A new entertainment space will be created in the basement with a home theater system and a bar.

Time and Schedule Estimates: The project is estimated to take 6-8 months to complete. The first month will be dedicated to planning and design, including getting necessary permits and approvals. The next four months will be focused on construction and renovation, including demolition, framing, electrical, plumbing, and finishing work. The final 1-2 months will be for final touches, inspections, and cleanup. A detailed schedule and timeline will be developed and updated regularly to ensure the project stays on track.

Team: A team of contractors, architects, and designers will be hired to carry out the renovations. The team will work closely with the homeowners to ensure that their vision for the remodel is achieved while staying within the budget and timeline.

Expected Outcome: Upon completion of the project, the house will be transformed into a modern, functional, and energy-efficient living space that meets the needs and preferences of the homeowners. The remodel will also increase the value of the property, making it a wise investment for the future.

Conclusion: In conclusion, renovating this historic home in the Sedgewick neighborhood of Syracuse presents a great investment opportunity. Despite the challenges of renovating an old home and working with the city planning board, the location and potential value make it a worthwhile endeavor. With a team of experienced professionals, a scheduled estimate of 12-18 months, and an expected outcome of a fully renovated, modernized home that preserves its historic charm, this project has the potential to yield significant returns for the owner.

1. INITIATE PHASE

Project Charter

Title of the project:	Remodeling a Historic Home in Sedgewick Area
Location of the project	Sedgewick, Syracuse
Project sponsor/champion	Sri Mahitha Karuturi, Surabhi Architha
Project stakeholders	Homeowner, Project manager, Architect, Contractor, Subcontractors, Interior designer, Civil engineer, Neighbors, Suppliers, Inspectors, Insurance companies, Project workers.

Problem Statement	• The problem is that the 130-year-old home is badly in need of a major renovation, and that working with the city planning board can be difficult, especially in this area of the city. • The house has outdated plumbing and electrical systems, rotted exterior wood, and inadequate insulation. • The garage is too small to accommodate modern automobiles, and the house lacks the closet space and other amenities that modern homeowners expect. • In addition, the renovation must be completed during a time when supply chain issues exist, resulting in shortages of materials. These challenges must be addressed to successfully renovate the home.
Project Goal	• The goal of the project is to successfully remodel the house within the allocated budget, timeline, and quality standards. • This involves transforming the existing house into a modern and functional living space that meets the needs and preferences of the homeowners. • Also involves upgrading the existing infrastructure, modernizing the interior and exterior, and optimizing the use of space to accommodate the needs of the family. • The remodeling will improve the aesthetic appeal of the house, increase its value, and enhance its functionality and comfort. • The project aims to achieve this goal by employing a well-structured and organized approach to project management, including effective communication, budgeting, scheduling, risk management, and quality control measures. • Ultimately, the project goal is to deliver a successful and satisfying outcome that meets the expectations of all stakeholders.

Project Assumptions	• The budget allocated for the project will be sufficient to cover all the planned activities and any unforeseen expenses that may arise. • The local authorities will approve all necessary permits and licenses required for the project. • The selected contractor will complete the project within the agreed-upon time frame and to the expected quality standards. • The weather will not cause any major delays or disruptions to the project timeline. • The availability of building materials and supplies required for the project will not be impacted by any external factors such as global supply chain disruptions or natural disasters. • The proposed changes to the house design will not violate any building codes or regulations. • The project team will have access to the site at all times needed to complete the work. • The stakeholders will remain committed to the project and aligned with the project goals throughout the project lifecycle. • The homeowner will provide all necessary information and approvals in a timely manner to prevent any delays in the project. • The project will not uncover any unforeseen structural or electrical issues that could impact the timeline or budget. • All materials and labor costs will remain consistent throughout the project duration. • There will be no unexpected changes to the project scope or requirements that could impact the timeline or budget.
Project Scope	The project scope includes the complete renovation of the historic home in Sedgewick Area, including upgrading the plumbing, electrical, and HVAC systems, replacing the rotted exterior wood, the front porch, and expanding the carriage house/garage. The scope also includes adding closet space to the small bedrooms and maximizing the use of available space for modern living. The project will not include any major structural changes to the house, such as adding rooms or changing the footprint of the house.
Key Milestones	• Project Initiation: This milestone includes defining the project objectives, identifying stakeholders, and setting up the project team. • Design and Planning: This milestone involves creating a design plan and developing a detailed project plan, which includes timelines, budgets, and resource requirements. • Permitting and Approvals: This milestone involves obtaining any necessary permits and approvals from local authorities before starting the remodeling work.

	• Demolition and Construction: This milestone marks the start of the actual remodeling work, which may involve demolition of existing structures and the construction of new ones. • Rough-In: This milestone involves the installation of new plumbing, electrical, and HVAC systems, along with the framing and installation of walls, doors, and windows. • Inspections and Testing: This milestone involves conducting inspections and testing to ensure that all work has been done in compliance with building codes and regulations. • Finishing: This milestone involves the installation of finishing materials, such as flooring, paint, cabinets, and fixtures. • Final Inspection and Acceptance: This milestone marks the end of the project and involves a final inspection to ensure that all work has been completed according to the project plan and specifications. • Project Closure: This milestone includes obtaining final sign-off from stakeholders, archiving project documentation, and conducting a post-project review to identify lessons learned and opportunities for improvement.
Business case	The business case for this project is to renovate and upgrade an old, historic house in the Sedgewick area of Syracuse. The house was acquired at an estate sale auction for a price well below market value. Despite its small size compared to other homes in the area, the property is desirable due to its location in a close-knit community and proximity to downtown Syracuse, hospitals, and Syracuse University. Renovating the house would allow the owner to increase its value and potentially make a profit on the investment. It is estimated that present renovations will cost approximately $250 per square foot, not including appliances, while building a new home will cost $300 per square foot elsewhere. Moreover, a new house is not feasible due to the prohibitive cost of building lots in the area, which makes the current property's large lot attractive. Purchasing a home of comparable size in this neighborhood will cost approximately $500,000, and that does not include any renovations that might need to be done. Thus, a major upgrade to the house would be cost-effective and potentially profitable. However, there are challenges to consider, including the difficulty of working with the city planning board, supply chain issues, and the need to complete the renovations by September 2024.
High-Level Scope	The high-level scope of the project is to completely remodel a 130-year-old, 2-story home in the historic Sedgewick area of Syracuse. The project will involve upgrading the plumbing and electrical systems, replacing the rotted exterior wood, adding new insulation, installing new appliances, and renovating the entire interior of the house, including the kitchen and bathroom. The project will also involve expanding the garage, which currently serves as a carriage

	house, to accommodate modern automobiles. The project must comply with current building codes and regulations and must meet the high aesthetic standards set by the city planning board.
Project Objectives	To renovate the historic home in Sedgewick Area to modern standards while preserving its historic character. To upgrade the plumbing, electrical, and HVAC systems to current building codes and standards. To replace the rotted exterior wood, the front porch, and expand the carriage house/garage. To add closet space to the small bedrooms and maximize the use of available space for modern living. To complete the project within budget and timeline constraints.
Success Criteria	• Quality: All materials used in the remodeling process must be of high quality and meet industry standards. • Safety: The renovated house must meet all safety regulations and building codes. • Schedule: The project must be completed within the agreed timeline to avoid delays and budget overruns. • Budget: The project must be completed within the agreed budget. • Functionality: The renovated house must be functional and meet the client's requirements. • Aesthetics: The renovated house must be visually appealing and meet the client's design specifications. • Sustainability: The project must incorporate environmentally sustainable practices, such as using energy-efficient appliances and recycling construction waste. • Communication: Regular updates on the project's progress must be provided to the stakeholders. • Customer satisfaction: The client must be satisfied with the result and feel that their requirements have been met. • The project should not cause any major disruptions to the surrounding environment or community. • All project documentation and records should be maintained and updated regularly.
Risk/Constraints	Old house: The house is over 130 years old and has not been maintained properly, so it may have hidden structural issues that could increase the cost of renovation. Limited timeline: The timeline for the renovation to be completed by is September 2024, but supply chain issues and unforeseen delays may make it difficult to meet that deadline. Permitting issues: Obtaining the necessary permits and approvals for the renovation may be time-consuming and expensive.

	Cost overruns: There is a risk that the actual cost of the renovation could exceed the initial budget, which could lead to financial difficulties for the owner.
Range of Probable Costs	$732,500

a. **Stakeholder register:**

S.No.	Name	Contact	Influence	Communication requirements
001	Homeowner	xxx-xxx-6201	High	Audio, Video call, Email
002	Project manager	xxx-xxx-6202	High	Audio, Video call, Email, Text
003	Architect	xxx-xxx-6203	High	Audio, Meetings, Email
004	Contractor	xxx-xxx-6204	High	Audio, Meetings, Email
005	Sub-contractor	xxx-xxx-6205	Medium	Audio, Meetings, Email
006	Interior designer	xxx-xxx-6206	Medium	Audio, Meetings, Email
007	Building inspector	xxx-xxx-6207	Low	Email
008	Civil Engineer	xxx-xxx-6208	Medium	Email, meetings
009	Neighbors	xxx-xxx-6209	Low	Email, Text
010	Suppliers	xxx-xxx-6210	Medium	Email, Audio calls
011	Financial institutions and insurance companies	-	Low	Email
012	Project workers	-	Low	Emails, Text

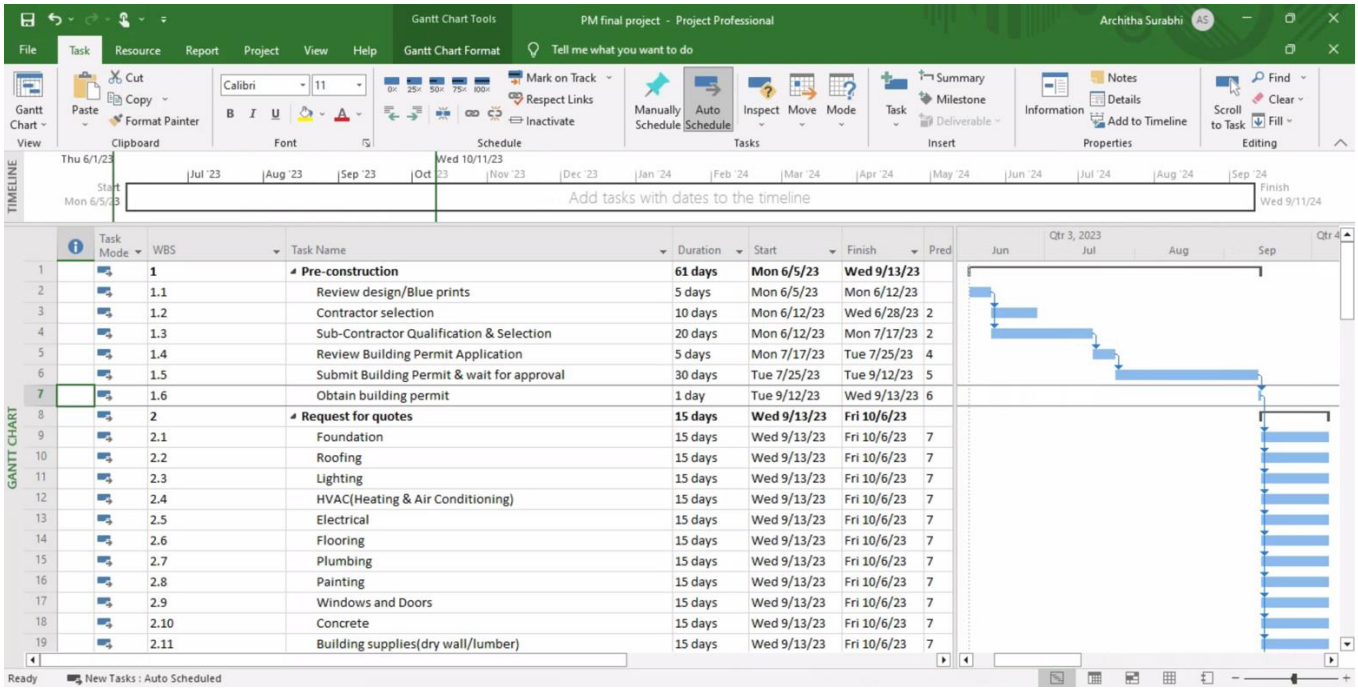
2. PLANNING PHASE:

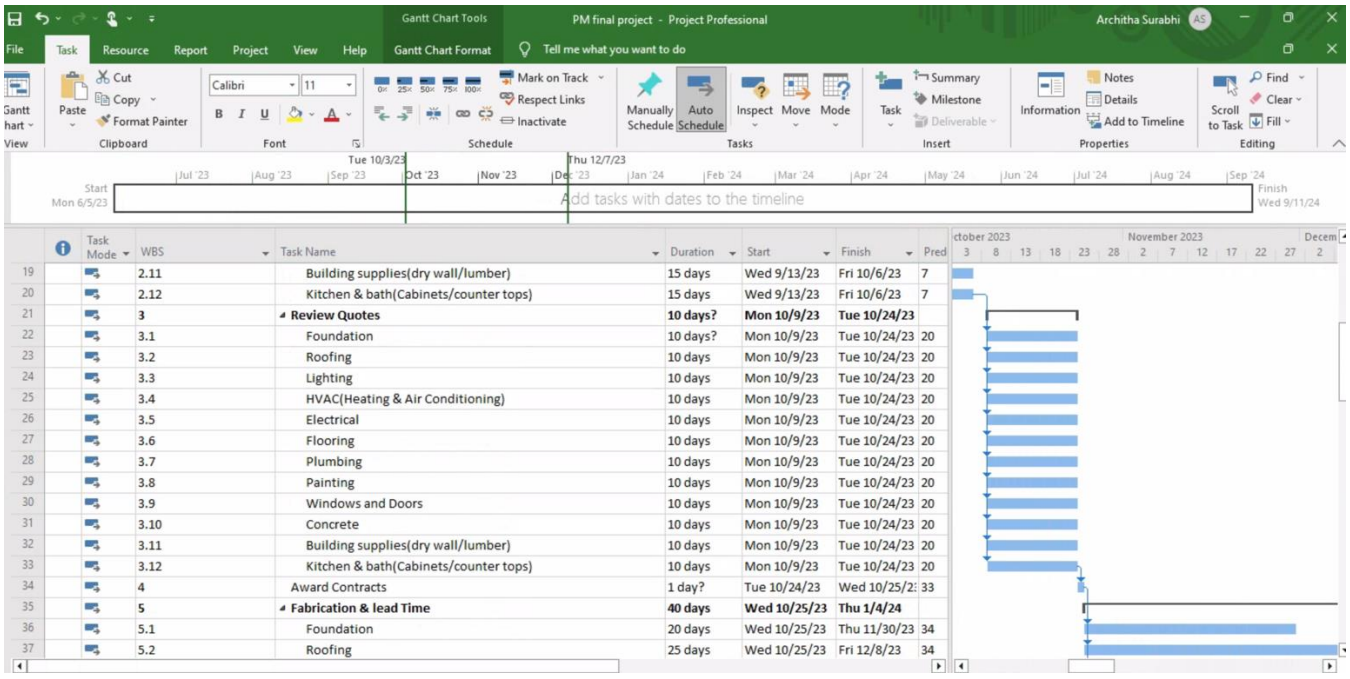
a. Work-breakdown structure:

A Work Breakdown Structure (WBS) is a hierarchical decomposition of the project deliverables into smaller, more manageable components. It organizes and defines the total scope of the project into a set of manageable tasks, each representing a deliverable component of the project. The WBS is a useful tool for breaking down a complex project into manageable parts, allowing project managers to identify tasks, assign responsibilities, and estimate the resources required for each component. WBS serves as a foundation for scheduling, cost estimating, resource allocation, and risk management.

Here in the project, after creating in the work break-down structure we see that this project takes about one year three months to complete.

The following Screenshots below show the Work break-down Structure with Gantt charts which is created in the MS-Project.

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Tue 10/3/23
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Start Mon 6/5/23
Add tasks with dates to the timeline
Finish Wed 9/11/24
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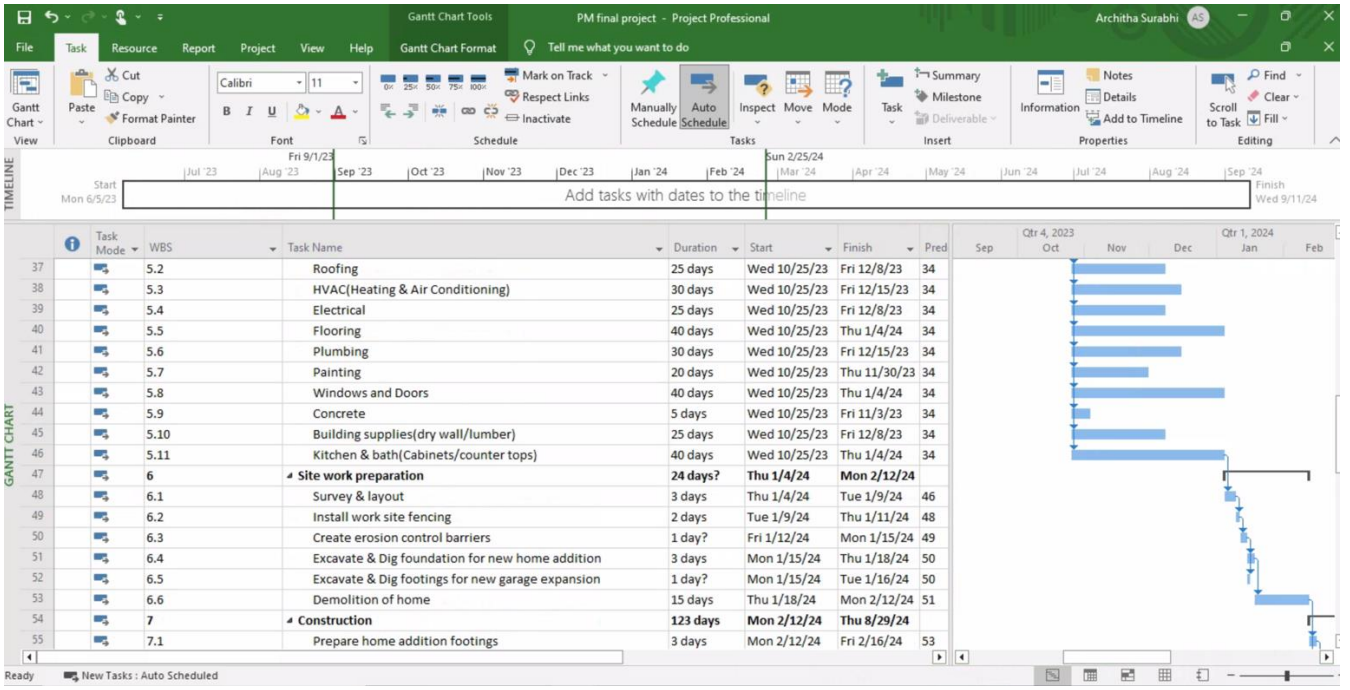
19 2.11 Building supplies(dry wall/lumber) 15 days Wed 9/13/23 Fri 10/6/23 7
20 2.12 Kitchen & bath(Cabinets/counter tops) 15 days Wed 9/13/23 Fri 10/6/23 7
21 3 Review Quotes 10 days? Mon 10/9/23 Tue 10/24/23
22 3.1 Foundation 10 days? Mon 10/9/23 Tue 10/24/23 20
23 3.2 Roofing 10 days Mon 10/9/23 Tue 10/24/23 20
24 3.3 Lighting 10 days Mon 10/9/23 Tue 10/24/23 20
25 3.4 HVAC(Heating & Air Conditioning) 10 days Mon 10/9/23 Tue 10/24/23 20
26 3.5 Electrical 10 days Mon 10/9/23 Tue 10/24/23 20
27 3.6 Flooring 10 days Mon 10/9/23 Tue 10/24/23 20
28 3.7 Plumbing 10 days Mon 10/9/23 Tue 10/24/23 20
29 3.8 Painting 10 days Mon 10/9/23 Tue 10/24/23 20
30 3.9 Windows and Doors 10 days Mon 10/9/23 Tue 10/24/23 20
31 3.10 Concrete 10 days Mon 10/9/23 Tue 10/24/23 20
32 3.11 Building supplies(dry wall/lumber) 10 days Mon 10/9/23 Tue 10/24/23 20
33 3.12 Kitchen & bath(Cabinets/counter tops) 10 days Mon 10/9/23 Tue 10/24/23 20
34 4 Award Contracts 1 day? Tue 10/24/23 Wed 10/25/23 33
35 5 Fabrication & lead Time 40 days Wed 10/25/23 Thu 1/4/24
36 5.1 Foundation 20 days Wed 10/25/23 Thu 11/30/23 34
37 5.2 Roofing 25 days Wed 10/25/23 Fri 12/8/23 34
October 2023
November 2023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Add tasks with dates to the timeline
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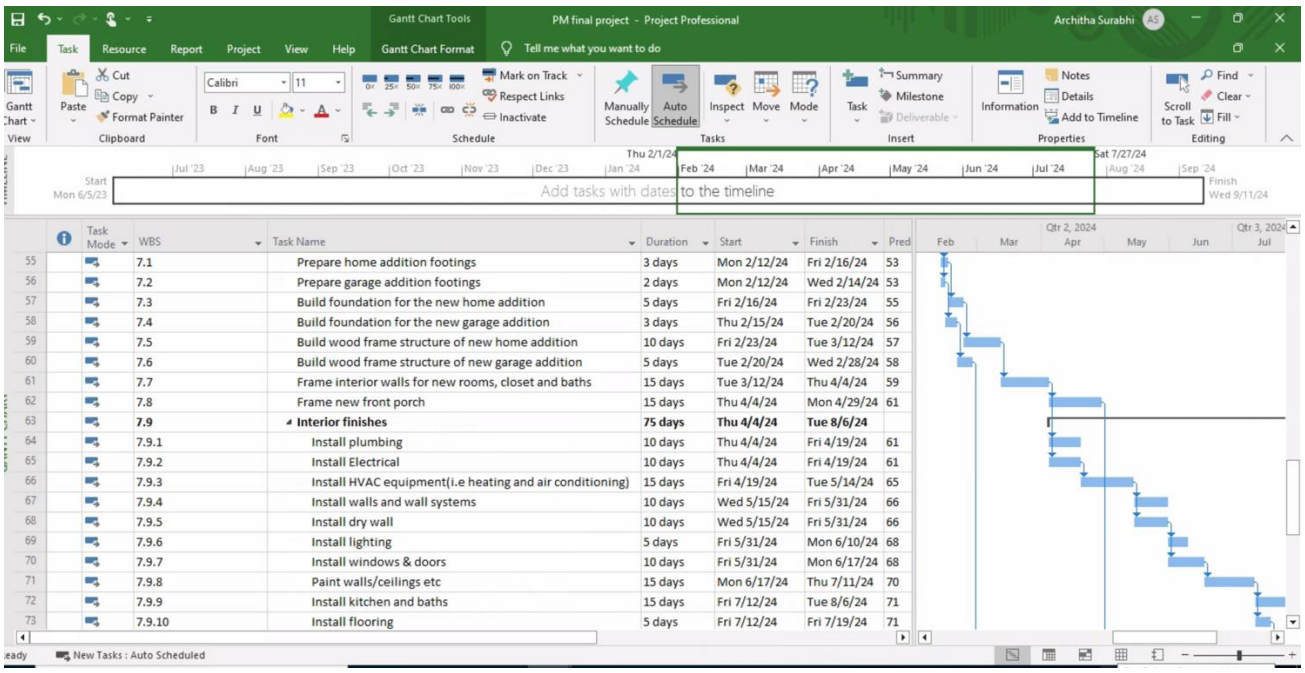
37 5.2 Roofing 25 days Wed 10/25/23 Fri 12/8/23 34
38 5.3 HVAC(Heating & Air Conditioning) 30 days Wed 10/25/23 Fri 12/15/23 34
39 5.4 Electrical 25 days Wed 10/25/23 Fri 12/8/23 34
40 5.5 Flooring 40 days Wed 10/25/23 Thu 1/4/24 34
41 5.6 Plumbing 30 days Wed 10/25/23 Fri 12/15/23 34
42 5.7 Painting 20 days Wed 10/25/23 Thu 11/30/23 34
43 5.8 Windows and Doors 40 days Wed 10/25/23 Thu 1/4/24 34
44 5.9 Concrete 5 days Wed 10/25/23 Fri 11/3/23 34
45 5.10 Building supplies(dry wall/lumber) 25 days Wed 10/25/23 Fri 12/8/23 34
46 5.11 Kitchen & bath(Cabinets/counter tops) 40 days Wed 10/25/23 Thu 1/4/24 34
47 6 Site work preparation 24 days? Thu 1/4/24 Mon 2/12/24
48 6.1 Survey & layout 3 days Thu 1/4/24 Tue 1/9/24 46
49 6.2 Install work site fencing 2 days Tue 1/9/24 Thu 1/11/24 48
50 6.3 Create erosion control barriers 1 day? Fri 1/12/24 Mon 1/15/24 49
51 6.4 Excavate & Dig foundation for new home addition 3 days Mon 1/15/24 Thu 1/18/24 50
52 6.5 Excavate & Dig footings for new garage expansion 1 day? Mon 1/15/24 Tue 1/16/24 50
53 6.6 Demolition of home 15 days Thu 1/18/24 Mon 2/12/24 51
54 7 Construction 123 days Mon 2/12/24 Thu 8/29/24
55 7.1 Prepare home addition footings 3 days Mon 2/12/24 Fri 2/16/24 53
Qtr 4, 2023
Qtr 1, 2024
Ready
New Tasks : Auto Scheduled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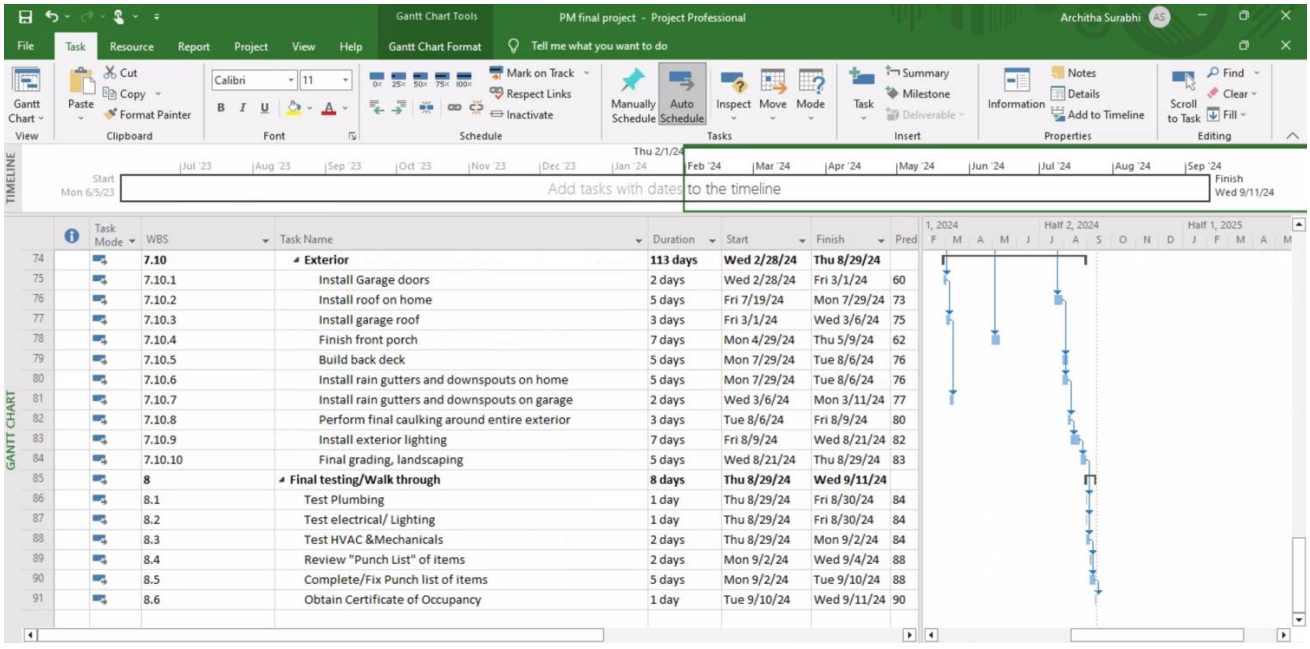
55 7.1 Prepare home addition footings 3 days Mon 2/12/24 Fri 2/16/24 53
56 7.2 Prepare garage addition footings 2 days Mon 2/12/24 Wed 2/14/24 53
57 7.3 Build foundation for the new home addition 5 days Fri 2/16/24 Fri 2/23/24 55
58 7.4 Build foundation for the new garage addition 3 days Thu 2/15/24 Tue 2/20/24 56
59 7.5 Build wood frame structure of new home addition 10 days Fri 2/23/24 Tue 3/12/24 57
60 7.6 Build wood frame structure of new garage addition 5 days Tue 2/20/24 Wed 2/28/24 58
61 7.7 Frame interior walls for new rooms, closet and baths 15 days Tue 3/12/24 Thu 4/4/24 59
62 7.8 Frame new front porch 15 days Thu 4/4/24 Mon 4/29/24 61
63 7.9 Interior finishes 75 days Thu 4/4/24 Tue 8/6/24
64 7.9.1 Install plumbing 10 days Thu 4/4/24 Fri 4/19/24 61
65 7.9.2 Install Electrical 10 days Thu 4/4/24 Fri 4/19/24 61
66 7.9.3 Install HVAC equipment(i.e heating and air conditioning) 15 days Fri 4/19/24 Tue 5/14/24 65
67 7.9.4 Install walls and wall systems 10 days Wed 5/15/24 Fri 5/31/24 66
68 7.9.5 Install dry wall 10 days Wed 5/15/24 Fri 5/31/24 66
69 7.9.6 Install lighting 5 days Fri 5/31/24 Mon 6/10/24 68
70 7.9.7 Install windows & doors 10 days Fri 5/31/24 Mon 6/17/24 68
71 7.9.8 Paint walls/ceilings etc 15 days Mon 6/17/24 Thu 7/11/24 70
72 7.9.9 Install kitchen and baths 15 days Fri 7/12/24 Tue 8/6/24 71
73 7.9.10 Install flooring 5 days Fri 7/12/24 Fri 7/19/24 71
Ready
New Tasks : Auto Scheduled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Half 1, 2025
74 7.10 Exterior 113 days Wed 2/28/24 Thu 8/29/24
75 7.10.1 Install Garage doors 2 days Wed 2/28/24 Fri 3/1/24 60
76 7.10.2 Install roof on home 5 days Fri 7/19/24 Mon 7/29/24 73
77 7.10.3 Install garage roof 3 days Fri 3/1/24 Wed 3/6/24 75
78 7.10.4 Finish front porch 7 days Mon 4/29/24 Thu 5/9/24 62
79 7.10.5 Build back deck 5 days Mon 7/29/24 Tue 8/6/24 76
80 7.10.6 Install rain gutters and downspouts on home 5 days Mon 7/29/24 Tue 8/6/24 76
81 7.10.7 Install rain gutters and downspouts on garage 2 days Wed 3/6/24 Mon 3/11/24 77
82 7.10.8 Perform final caulking around entire exterior 3 days Tue 8/6/24 Fri 8/9/24 80
83 7.10.9 Install exterior lighting 7 days Fri 8/9/24 Wed 8/21/24 82
84 7.10.10 Final grading, landscaping 5 days Wed 8/21/24 Thu 8/29/24 83
85 8 Final testing/Walk through 8 days Thu 8/29/24 Wed 9/11/24
86 8.1 Test Plumbing 1 day Thu 8/29/24 Fri 8/30/24 84
87 8.2 Test electrical/ Lighting 1 day Thu 8/29/24 Fri 8/30/24 84
88 8.3 Test HVAC &Mechanicals 2 days Thu 8/29/24 Mon 9/2/24 84
89 8.4 Review "Punch List" of items 2 days Mon 9/2/24 Wed 9/4/24 88
90 8.5 Complete/Fix Punch list of items 5 days Mon 9/2/24 Tue 9/10/24 88
91 8.6 Obtain Certificate of Occupancy 1 day Tue 9/10/24 Wed 9/11/24 90

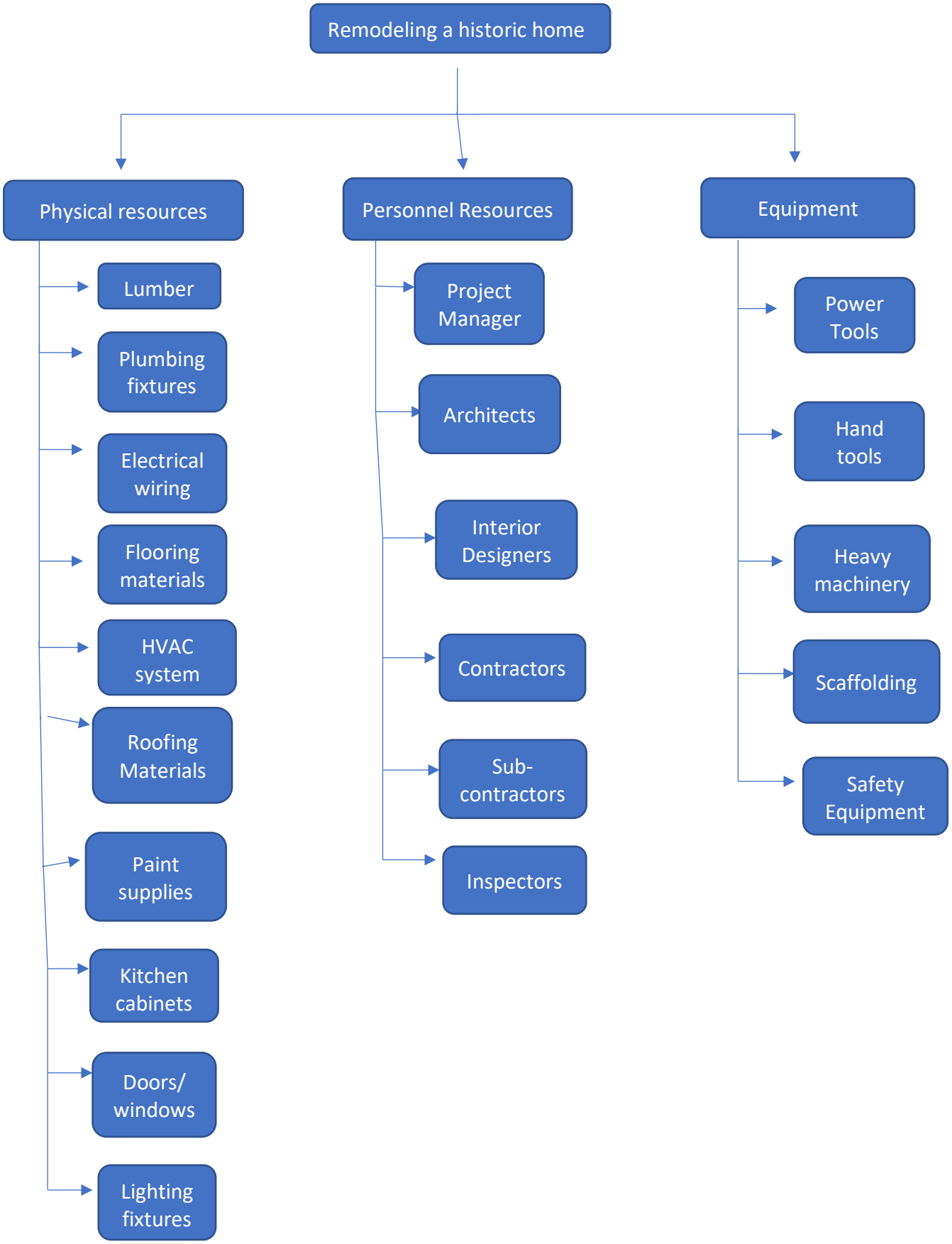
b. Risk Management plan:

Risk	Mitigation Plan	Contingency plan
Budget overruns	Regular budget review and adjustment, seeking cost-effective alternatives for materials and labor, prioritizing project requirements, and reducing non-essential costs	Delay non-critical tasks, re-prioritize tasks, and reduce the scope of the project
Delay in project schedule	Setting realistic timelines, proactive tracking of progress, identifying and resolving issues in a timely manner, and allocating additional resources	Re-prioritize tasks, adjust timelines, and increase the workforce
Poor quality	implementing strict quality control procedures, regular inspection of work, hiring experienced and reputable contractors and vendors, and using high-quality materials	Rectify inadequate work, implement stricter quality control procedures, and hire more experienced contractors
Weather conditions	Monitor weather forecasts and plan work accordingly. Plan and schedule around anticipated weather conditions, prepare for unexpected weather disruptions.	Adjust project timelines, reschedule work for indoor activities, and increase workforce to make up for lost time
Delays in material delivery	identify alternate suppliers and place orders well in advance	Consider temporary substitutions or reschedule the project timeline
Increase in materials costs	Regularly reviewing and adjusting project budgets based on current material costs and seeking out cost-effective alternatives.	Re-evaluate the project budget, reduce the scope or if the cost increase is significant, consider delaying the project until the materials costs become more manageable.
Supply chain issues and material shortages	Build a good relationship with suppliers. Plan for alternative materials or suppliers. Order materials early to avoid delays.	Consider phased construction to manage delays. Allocate extra budget for unexpected delays.

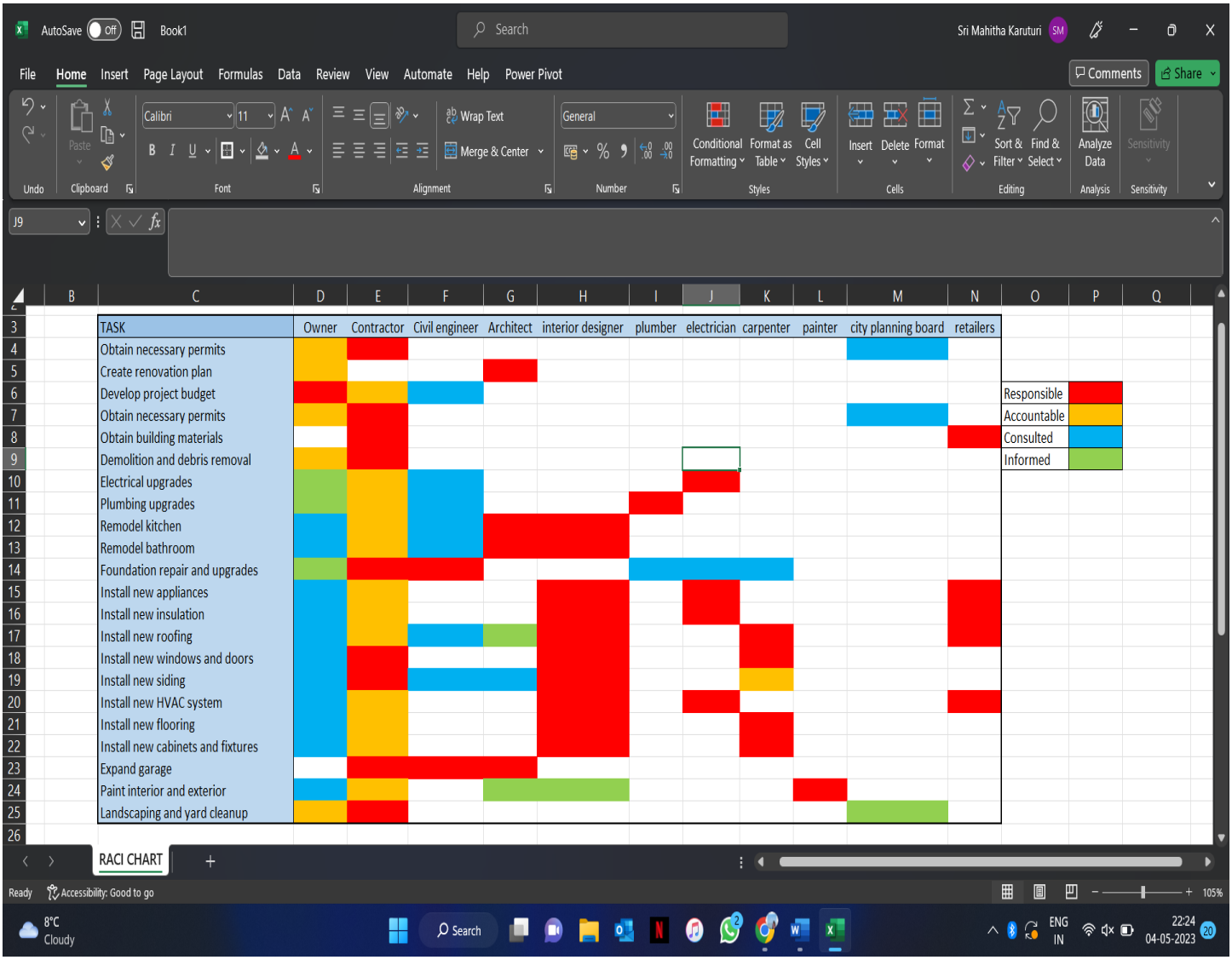
Changes in building codes	Staying updated with the latest building codes and regulations and consulting with local authorities before beginning the project.	proactively communicate with the relevant authorities and stakeholders to address any issues related to compliance with the new building codes, modify the renovation plan to comply with the new building codes while still meeting the project objectives and timeline.
Contractor Delays	It is important to choose a reputable contractor and have a clear timeline and expectations outlined in the contract.	Contact a different contractor or negotiating additional compensation for delays.
Change in design specifications	Clearly define the scope of work and obtain formal sign-off from stakeholders before starting work	Reassess the project timeline and budget, and initiate a formal change request process
Health and safety risks	Develop a detailed health and safety plan and ensure that all personnel follow appropriate safety protocols and use necessary protective equipment	Have a contingency plan in place in case of accidents or injuries, including first-aid kits, emergency contact information, and access to medical care
City planning board delays or rejection	Consult with a local architect or construction professional familiar with the board. Follow all regulations and guidelines closely. Clearly and thoroughly communicate project plans and intentions to the board	Adjust project plans to comply with the board's requirements
Asbestos and lead paint hazards	Conduct an asbestos and lead paint inspection prior to starting work. Properly seal off work areas to prevent hazardous materials from spreading	Adjust project plans and timeline to accommodate hazardous materials remediation. Include

		costs for hazardous materials removal and disposal in the project budget
Hidden water damage in ceilings or walls	Ensure that all plumbing and water-related fixtures are inspected, tested, and approved before and after installation to prevent future water damage.	If hidden water damage is discovered during renovation, stop work on the affected area and assess the extent of the damage.
Electrical and plumbing issues	Hire a licensed and experienced electrician and plumber to evaluate existing systems and make necessary upgrades	If unforeseen electrical or plumbing issues arise during the renovation, stop work immediately and consult with the electrician/plumber to assess the situation.
Hidden structural damage, such as rot, termite damage that is not visible until walls are opened during demolition	Perform a thorough inspection of the home before demolition begins to identify any hidden damage.	Budget for potential repairs and have additional funds available in case unexpected repairs are necessary.
Foundation issues	Conduct a thorough inspection of the foundation before beginning renovations and hire a professional contractor with experience in foundation repair.	conduct a detailed analysis of the soil to identify any potential issues with soil stability and foundation strength before starting the construction work.
Structural changes, addition of new space or removal of walls can impact he structural integrity of the house	Hire an experienced and licensed structural engineer to review the building plans and inspect the construction site periodically.	If any damages take place during renovation, consult with the structural engineer to determine the best course of action.

c. Resource Management plan:



RACI CHART



TASK	Owner	Contractor	Civil engineer	Architect	interior designer	plumber	electrician	carpenter	painter	city planning board	retailers
Obtain necessary permits	A	R								I	
Create renovation plan	A			R							
Develop project budget	R	A	C								
Obtain necessary permits	A	R								I	
Obtain building materials		R									R
Demolition and debris removal	A	R									
Electrical upgrades	I	A	C				R				
Plumbing upgrades	I	A	C			R					
Remodel kitchen	C	A	C	R	R	R					
Remodel bathroom	C	A	C	R	R	R					
Foundation repair and upgrades	I	R	R			C	C	C			
Install new appliances	C	A			R		R				R
Install new insulation	C	A			R		R				R
Install new roofing	C	A	C	I	R			R			R
Install new windows and doors	C	R			R			R			
Install new siding	C	R	C	C	R			A			
Install new HVAC system	C	A			R		R				R
Install new flooring	C	A			R			R			
Install new cabinets and fixtures	C	A			R			R			
Expand garage		R	R	R							
Paint interior and exterior	C	A		I	I	I			R		
Landscaping and yard cleanup	A	R								I	

Responsible	
Accountable	
Consulted	
Informed	

d. Procurement plan:

A procurement plan is a document that outlines the process and approach that will be used to acquire the goods and services needed for a project. It includes details on what goods and services will be needed, the quantity required, when they will be required, and the cost of each item. The procurement plan is an important tool for project managers to ensure that the procurement process is well organized, cost-effective, and meets the needs of the project.

Materials	Procurement process	Contract type	Cost estimates
Lumber	Request for quote	Fixed price contract	$20,000
Plumbing fixtures	Request for Proposal	Time and Materials contract	$8,650
Electrical wiring and components	Invitation to Bid	Fixed price contract	$10,000
Paint	Request for quote	Time and materials contract	$2,000
Flooring materials	Request for proposal	Cost Reimbursable contract	$25,000
HVAC system	Request for proposal	Cost reimbursable contract	$15,000
Roofing sheets	Request for quote	Cost reimbursable contract	$30,000
Lighting	Request for proposal	Time and materials contract	$4,000
Windows and doors	Request for quotes	Time and materials contract	$5,000
Kitchen cabinets	Request for quotes	Fixed price contract	$10,000

e. Communication plan:

A communication plan for the renovation of a house outlines how communication will occur among stakeholders involved in the project. It details what information needs to be communicated, who will be communicating it, and how often communication will occur. The purpose of a communication plan is to ensure that everyone involved in the project has the information they need to make informed decisions and to keep the project on track.

Stakeholder	Type of Communication	Purpose	Frequency
Homeowner	Face to face meetings, Audio call, Text	To update on Project progress, issues, and concerns	Weekly or as needed
Project Manager	Face to face meetings, Group meetings, Audio call, Emails	To ensure that the project is progressing according to the plan, schedule, and budget	Daily
Architect	Face to face meetings, Audio call	To Discuss regarding changes, construction, planning.	As needed
Contractor	Audio call, Text, Emails	To Provide project updates and discuss issues and discuss issues regarding electricity, plumbing, carpentry, trades, etc.	Weekly
Sub-Contractor	Audio call, Emails	To ensure that they understand the project requirements, timelines, and specifications	Weekly
Interior Designer	Video meetings, Face to face meetings, Emails	To plan the interiors and discuss the budget for interiors	As needed
Civil Engineer	Face to face meetings	To discuss about the construction of the house	Weekly
Neighbors	Newsletters, Face to face meetings	To resolve issues causing due to the renovation of the house	Monthly or as needed
Suppliers	Emails, Audio call	To place orders, to establish delivery schedule, to negotiate pricing and payment terms, to ensure the quality of materials etc.	Weekly or as needed
Financial Institutions	Emails, Face to face meetings	To secure funding for the project, to ensure payments are processed correctly and to provide updates on project's financial status	As needed
Inspectors	Face to face meeting	To ensure that the construction work follows the building codes, regulations, and standards	After each inspection
Insurance companies	Emails	To process and resolve any insurance claims	As needed
Project workers	Email, Text	To provide instructions on specific tasks, o provide progress update, to provide training to the workers on new equipment, processes, or procedures related to the project.	Weekly

3. Execute phase:

The execution phase is the third phase of the project management life cycle, which comes after the planning phase and the initiation phase. During this phase, the actual work of the project is carried out based on the plans and processes established during the earlier phases. This phase involves managing the project plan, carrying out the tasks assigned to the team members, and tracking progress to ensure that the project is completed on time, within budget, and to the required quality standards.

In the Execute phase of this project, the project team is responsible for managing the construction process and ensuring that the work is completed on time, within budget, and to the required quality standards. This involves coordinating the activities of all the different contractors and tradespeople involved in the project, as well as overseeing the procurement and delivery of materials and equipment.

a. The project can be divided into several work packages for several reasons such as Accountability, Manageability, Resource Allocation etc.

1. Demolition:
   - Remove existing flooring, cabinetry, fixtures, and appliances.
   - Remove non-load bearing walls.
   - Remove existing roof materials.
   - Haul away debris and dispose of it properly.

2. Foundation:
   - Excavate foundation area.
   - Pour concrete foundation.
   - Install vapor barrier.
   - Install drainage system.

3. Framing:
   - Install framing for new walls and ceiling.
   - Install roof trusses or rafters.
   - Install windows and exterior doors.
   - Install siding and trim.

4. Electrical:
   - Install electrical wiring and outlets according to plan.
   - Install circuit breaker panel.
   - Install lighting fixtures.
   - Install smoke detectors and carbon monoxide detectors.

5. Plumbing:
   - Install plumbing lines according to plan.
   - Install water heater.
   - Install bathroom fixtures (sink, toilet, shower/bath)
   - Install kitchen sink and dishwasher.

6. HVAC:
    - Install ductwork and vents for heating and cooling.
    - Install furnace and air conditioner units.
    - Install thermostat.
    - Insulation work package:
    - Install insulation in walls, ceilings, and floors.
    - Install vapor barrier as necessary.
    - Ensure proper ventilation.

7. Drywall:
    - Install drywall on all walls and ceilings.
    - Tape and mud joints
    - Sand and finish to a smooth surface

8. Interior finishes:
    - Install flooring (hardwood, tile, carpet, etc.)
    - Install cabinetry and countertops.
    - Install interior doors and trim.
    - Install paint or wallpaper on walls and ceilings.

9. Exterior finishes:
    - Install roofing materials.
    - Install gutters and downspouts.
    - Install exterior doors and trim.
    - Install paint or stain on exterior surfaces.

10. Final inspection:
    - Coordinate with building inspector for final inspection
    - Ensure all work meets building code requirements.
    - Address any issues identified by inspector.

11. Close-out:
    - Assemble all necessary documentation (permits, inspections, warranties, etc.)
    - Provide the homeowner with documentation and keys to the house.

b. Quality Management plan:

A quality plan outlines the specific quality standards and practices that will be used throughout a project. It defines the objectives, responsibilities, and procedures for ensuring that the project deliverables meet the required quality standards. The quality plan outlines the process and methodology that will be used to verify and validate that the product or service meets the customer's expectations and requirements.

Maintaining quality during different tasks such as plumbing, electrical work, and other tasks in the renovation project requires specific steps and procedures to ensure that the work is done correctly and up to the required standards. Below are some guidelines for maintaining quality during different tasks:

Task	Allocated	Objective	Quality	Inspection
Plumbing	Plumber	Ensure that all plumbing is installed correctly and meets building codes and regulations.	Use high-quality materials for plumbing work, such as copper pipes, which are less likely to leak and corrode than other materials.	Conduct pressure tests to identify leaks before closing walls and ceilings. Conduct water flow tests to ensure proper water pressure in all fixtures. Conduct a final inspection to ensure that all plumbing is properly installed, sealed, and insulated
Electric work	Electricians	Ensure that all electrical work is performed by a licensed electrician and meets building codes and regulations.	Use high-quality electrical components, such as switches, outlets, and wires	Test all electrical systems to ensure proper voltage and grounding. Conduct insulation resistance tests to identify any shorts or faults in the system. Install surge protectors to protect against power surges. Conduct a final inspection to ensure that all electrical work is properly installed and grounded
Painting	Painters	Properly prepare the surface by cleaning, sanding, and priming as needed. Use proper techniques when applying paint, such as using the correct brushes or rollers, and following	Use high-quality paint and primers to ensure durability and longevity of the paint job.	Conduct a final inspection to ensure that the paint job meets the required standards and is free of defects

		manufacturer's instructions.		
Flooring	Contractor	Ensure that all flooring is installed according to the manufacturer's instructions and meets building codes and regulations.	Use high-quality flooring materials that are durable and fit for the intended use, such as hardwood or tile for high traffic areas	Conduct moisture tests to ensure that the subfloor is dry and ready for installation. Conduct a final inspection to ensure that the flooring is properly installed, level, and free of defects.
Carpentry	Carpenter	Ensure that all carpentry work meets building codes and regulations. Use proper techniques and tools when cutting, drilling, and assembling the pieces.	Use high-quality materials for carpentry work, such as solid wood or high-quality engineered wood products.	Conduct a final inspection to ensure that the carpentry work is properly installed, level, and free of defects.
Foundation and framing	Civil engineer	Ensure that the foundation and framing are constructed according to the architect's plans and local building codes.	Use high-quality building materials for the foundation and framing to ensure their strength and durability.	Conduct regular inspections to ensure that the foundation and framing are level, plumb, and square.
Roofing	Contractor	Ensure that the roofing is properly installed, including all flashing and sealant, to prevent leaks.	Use high-quality roofing materials that are durable and can withstand harsh weather conditions.	Conduct regular inspections of the roof to identify any signs of damage or wear and tear.
HVAC	Civil engineer	Ensure that the HVAC system is properly sized for the house and that it meets local building codes	Use high-quality equipment and materials for the HVAC system to ensure that it is efficient and durable	Conduct regular inspections and maintenance on the HVAC system to ensure that it is functioning properly and efficiently

4. Monitor and Control Phase:

In the monitor and control phase of the project, the following activities are performed:

- Monitor project progress: This includes monitoring the progress of each task in the project plan, tracking the actual progress against the planned progress, and identifying any variances.
- Monitor budget and costs: This includes monitoring the actual costs of the project against the budgeted costs, identifying any cost overruns, and implementing corrective actions if needed.
- Monitor schedule: It involves monitoring the project schedule, identifying any schedule delays or deviations, and implementing corrective actions if needed.
- Risk management: It includes monitoring the identified risks, assessing the effectiveness of the risk mitigation strategies, and implementing corrective actions if needed.
- Quality control: It involves monitoring the quality of the work being performed, ensuring that it meets the established quality standards, and implementing corrective actions if needed.
- Communication management: This includes monitoring the project communication plan, ensuring that all stakeholders are adequately informed about project progress, and addressing any communication issues that arise.
- Change management: This involves monitoring any changes to the project scope, schedule, or budget, ensuring that they are properly documented and approved, and implementing corrective actions if needed.

Overall, the monitor and control phase are focused on ensuring that the project stays on track, meets its objectives, and delivers the expected outcomes within the established constraints of time, cost, and quality.

5. Close out Phase:

The closeout phase of a project is a critical phase as it ensures that all the project objectives have been met and the project is complete. The following are steps that are taken to close out the home renovation project:

- Final Inspection: Schedule a final inspection with the building inspector to ensure that all work meets the building code requirements.
- Punch List: Develop a punch list of items that need to be completed before closing out the project. The punch list should include all the items that need to be completed and any tasks that were not completed according to the project plan.
- Corrective Actions: Complete any corrective actions identified in the final inspection and punch list.
- Warranties: Collect all warranties from suppliers and contractors and provide them to the homeowner.
- As-Built Drawings: Collect and organize all as-built drawings and provide them to the homeowner.

- Permits: Ensure that all necessary permits have been closed out and provide copies to the homeowner.
- Final Payments: Ensure that all invoices have been paid and all outstanding balances have been cleared.
- Project Documentation: Collect all project documentation, including plans, specifications, contracts, and change orders, and organize them for future reference.
- Project Evaluation: Conduct a project evaluation to assess the performance of the project team and identify areas for improvement in future projects.
- Lessons Learned: Conduct a lesson learned session to capture feedback from the project team and stakeholders and incorporate the lessons learned into future projects.

The Closeout Plan includes a detailed list of all the tasks that need to be accomplished, who is responsible for each task, and the deadlines for each task. The Closeout Plan will be communicated to all stakeholders, and progress will be tracked regularly to ensure that the project is closed out successfully.

- After Action Review:

- Archival of documents:

  Archival of documents refers to the process of organizing, storing, and preserving project-related documents and records in a secure and easily retrievable manner. It involves identifying which project documents and records should be retained, cataloging and indexing them, and then storing them in a secure location for future reference. Archiving documents is an important part of project closeout as it ensures that all project-related information is properly preserved for future reference and that all legal, regulatory, and business requirements are met.

  Final Audit Checklist

Task	Responsible Team	Completion date
Confirm all project documents are complete and accurate	Project Manager	
Identify documents to be archived	Project Manager	
Verify all necessary signatures and approvals are in place	Project Manager	
Ensure all documents are properly labeled and stored	Project Manager	
Verify that all warranties and guarantees have been received and are accurate	Procurement Team	
Verify that all financial records are complete and accurate	Financial Team	
Verify that all documents follow relevant laws and regulations	Legal Team	
Ensure that all physical items are returned or disposed of properly	Operations Team	
Create an inventory of all archived documents	Project Manager	

Label and store all archived documents in a secure location	Project Manager	
conduct a final review of all archived documents	Project Manager and Legal Team	
Obtain final sign off from project sponsor and stakeholders	Project Manager	
Close out the project and transition to operations	Project Manager	

Certificate of occupancy:

CERTIFICATE OF OCCUPANCY – 09/11/2024	
Project Name: Remodeling of a historic home in Sedgewick area	
Project Address:	
Permit Number:	
Date issued:	
This certifies that the above project has been completed in accordance with the approved plans and all applicable codes and regulations.	
The following items have been inspected and found to comply with the requirements of the applicable codes and regulations:	
1. Structural	Status
2. Mechanical	
3. Electrical	
4. Plumbing	
5. Fire and Life safety	
This certificate is valid for the approved use and occupancy of the structure.	
Permit Issuer Signature:	
Date:	
Please note that the exact format and information included in a certificate of occupancy document may vary depending on the location and jurisdiction of the project. It is important to consult with local authorities to ensure compliance with all relevant regulations and requirements.	

Historic & Zoning Requirements:

Historic District:

- The following locations in Syracuse have been listed as historic places. https://en.wikipedia.org/wiki/National_Register_of_Historic_Places_listings_in_Syracuse,_New_York
- Based on historical genealogy records, the entire region of Syracuse is located within Onondaga County.
- As such, the zoning requirements for residential buildings in Syracuse will likely be influenced by factors such as the location, size, and intended use of the building, as well as the zoning regulations set forth by the local government.

Zoning:

- According to the zoning rules and regulations of Syracuse city remodeling this home comes under PRD – Planned Residential Development
- The house fall under R1 – Single Unit Residential Unit Permit.

https://www.codepublishing.com/UT/Syracuse/html/Syracuse10/Syracuse1075.html
https://www.syr.gov/files/sharedassets/public/2-departments/planning/documents/rezone/rezone-syracuse-ordinance_march-2023.pdf

2.2 R1: Single-Unit Residential

A. Purpose

The R1 district is established to provide for neighborhoods made up of primarily detached, single-unit homes with green space, street trees, front porches and sidewalks. Complementary uses such as parks, open space, schools, assemblies, minor utilities, and accessory dwelling units and accessory structures may also be allowed.

Figure 2-1: R1 District Dimensional Standards

B. Standards

Table 2.2
R1 Single-Unit District: Dimensional Standards
Labels correspond to illustration

		Principal Structure	Accessory Structure
Setbacks minimum			
A	Front	Average setback on developed street frontages; see 2.17C(4). If the block is less than 50% developed, the setback shall be 30 feet.	May not be located within the front setback
B	Side	4 feet/0 feet for common wall construction	
	Side, corner lot	Not less than 15% of total front width (narrower frontage) of the lot, but need not exceed established front setback line for side street.	
C	Rear	20 feet or 15% of lot depth, whichever is greater	4 feet
Height maximum			
	Building height	40 feet	16 feet
Lot minimum			
D	Width	Single-unit detached dwelling: 40 feet Single-unit attached dwelling: 25 feet	n/a
	Area	Single-unit detached dwelling: 4,000 square feet Single-unit attached dwelling: 3,000 square feet	
Impervious coverage maximum			
	Structural	30%	
	Parking and driveway surfaces	30%	