
Smith's Hartford Home

Project Management Plan



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Introduction

Purpose

The purpose of this artifact is to document the basis for all project work. All process steps, tools & techniques, methods, procedures, criteria, guidelines, personnel, roles, responsibilities, etc. for initiating, planning, executing, monitoring and controlling, and closing the project are documented here. This artifact constitutes the plan for the project, therefore is referred to as the *Project Plan*. This single plan is comprised of several subordinate plans pertaining to one topic. Each of the subsidiary plans is detailed to the extent required by the specific project.

Project Overview

This project is a home construction project for the Smith family. They have signed with XYZ Homes to purchase a new home located on lot #114, subdivision II, in the Chesterfield Estates community in Rolling Acres, Pa. The model home chosen by the Smiths is the Hartford model. High-level particulars about the project include:

- Model: Hartford
- Purchase date: 8/15/2013
- Expected delivery date: 5/3/2014
- Project Sponsor: Jackie Thomas
- Project Manager: <you>

Project Management Approach

This project will be similar to past Hartford model home construction projects in size, scope, and expenses. The Project Manager will follow accepted project management industry standards for developing the Project Management Plan (this document and subsidiary sections/plans), execution of the project, monitoring and controlling of the project scope, schedule and budget, while adhering to company standards and regulations. This project team will be the first to use Project Risk Management as part of the solution to help ensure an on-time, on-budget delivery of all requested work. Most of the legwork to

produce this plan, and accompanying material will be done by the Project Manager and then presented to various project team members for their feedback. When this plan is complete and a draft made available to all stakeholders, the project manager will pursue approvals so as to establish the baseline for all project work.

This project will adhere to established company policies, procedures and artifacts documented on the company intranet site. It will also be based on accepted Project Management Institute (PMI) principles defined within the *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)-Fifth Edition*¹.

Lifecycle

The lifecycle for this project will be one that uses defined processes across the following five (5) process groups¹:

1. Initiating
2. Planning
3. Executing
4. Monitor & Controlling
5. Closing

Baselines

Upon presentation to all required stakeholders, an approval of this document is obtained. By acceptance, each stakeholder agrees to the information within. Equally, the project manager and project team agree to uphold the expectations set as a result. The approved version of this document contains the baselines for scope (WBS, Project Scope Statement), schedule (project schedule), and cost (budget). All requested changes to the project after this Project Plan is approved must be evaluated through the Change Control System (CCS).

The baselines will be established when this project plan is drafted and approved. This will take place after planning is complete and before execution.

¹ Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) – Fifth Edition*, Project Management Institute Inc.

Subsidiary Plans

This document consists of several subsidiary plans²; each pertaining to a specific subject. Not all of these plans are required but rather, can be tailored by the project manager where appropriate for the project. Each plan should be able to respond to questions such as who, what, when, where, how often, what format, why, why not, etc. Additionally, the project plan(s) may also include what life cycle will be used, and the tailored process steps to be used/not used.

- Scope Management Plan
- Schedule Management Plan
- Cost Management Plan
- Quality Management Plan
- Human resource Management Plan
- Communications Management Plan
- Risk Management Plan
- Procurement Management Plan
- Stakeholder Management Plan
- Requirements Management Plan¹
- Process Improvement Plan³
- Change Management Plan

² Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) – Fifth Edition*, Project Management Institute Inc., Page 77

³ Not all plans are depicted herein.

Scope Management Plan

Purpose

The purpose of the Scope Management Plan is to document how the project scope will be defined, validated, and controlled. This should provide guidance and direction on how scope will be managed throughout the project. This begins with an analysis of the information contained in the project charter artifact, the latest subsidiary plans (herein), historical information as part of the organizational process assets and any other relevant enterprise environmental factors.

Project Scope

The project scope will consist of the following deliverables:

- One (1) Hartford model home as per the June 2013 homeowner catalog
 - Interior rooms including a living room, kitchen, 2-car garage, master bedroom, three additional bedrooms, landscaping and driveway
 - Base utilities installed and operational including electric, gas, water, sewage. Additional utilities such as cable, phone, and security can be added by homeowner after settlement.

The project scope will NOT consist of the following:

- Work on other properties for any reason other than repairs due to errors made during the construction of this house.
- Significant add-ons or customizations such as swimming pools, additional garages, finished basements and hardscaping. These can be requested by the homeowner for installation after this project and processed as separate projects. They will be analyzed, approved or rejected using the Change Management System (CCS) herein.

Upon approval of this project management plan artifact, the scope baseline will be established. This will consist of the Scope Statement, the WBS and WBS Dictionary (if used). Any additional work added, not approved through the included Change Management process, will be considered scope creep and shall be excluded or removed. Any changes or alterations to approved requirements without approval through the included Change Management process will be considered gold plating and will also require removal or change.

Scope Statement

Shown below is the Project Scope Statement. The purpose of this artifact is to define the project scope; what is included and what is not included in the project. This document is drafted and communicated to stakeholders after requirements are elicited. From the list of requirement, decisions can be made as to which will be included and which shall be excluded. Additionally, as each deliverable is cited, any acceptance criteria or approval methods are also captured.

Scope Statement

1. Project Title and Description
Build the Hartford home for the Smith family. XYZ Homes, Inc. has been engaged to build the Hartford model home for the Smith family.
2. Project Objectives
Build the Hartford home for the Smith family and meet all requirements for scope, time and cost.
3. Project Deliverables
<ul style="list-style-type: none">• One (1) Hartford model home as per the June 2013 catalog• Installation of all appliance and utilities• Warranty documents for turnover to the customer• Creation of a final walkthrough experience inclusive of a quick education of any installed equipment, appliances and landscape care.
4. Exclusions
<ul style="list-style-type: none">• No swimming pool• No finished basement
5. Acceptance Criteria
<ul style="list-style-type: none">• Completion of all project objectives of scope, time and budget• Completion of final walkthrough with the Smiths without any significant corrections
6. Risks
<ul style="list-style-type: none">• Poor weather delaying concrete (foundation)• Price increases in lumber• Availability of required subcontracted resources
7. Estimated Budget
<ul style="list-style-type: none">• Concrete <=\$25,000, Lumber <=\$75,000, Labor <=\$105,000
8. Estimated Schedule or Milestones
<ul style="list-style-type: none">• Project Start mm/yy, excavation started mm/yy, framing mm/yy, final walkthrough mm/yy
9. Constraints and Assumptions
<ul style="list-style-type: none">• Not to exceed \$400,000 in expenses• The house is to be completed within 180 days of the initial sale
10. Approval Requirements
<ul style="list-style-type: none">• Signature indicating approval by Project Sponsor



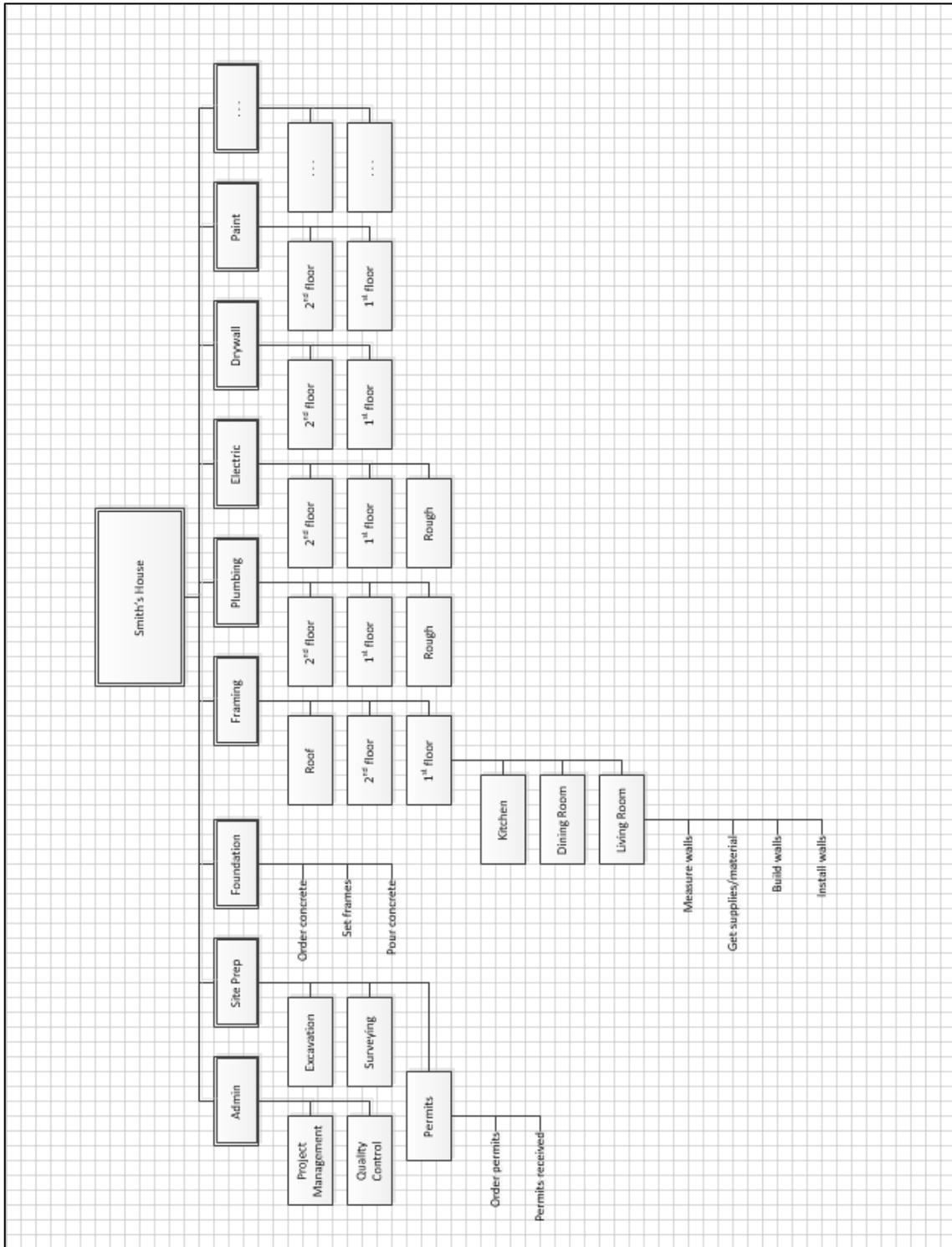
, Sponsor

Date

Work Breakdown Structure (WBS)

The Work Breakdown Structure, as part of the project scope, defines the 'what' for the project team. It is created as a result of the project team's review of the project requirements. It should show, hierarchically, the relationship of all project efforts to complete the deliverables and therefore the project. This will be used by the Project Manager to track the work being performed by the team to ensure all of the defined work is performed and nothing additional is erroneously added.

Work Breakdown Structure (WBS) – (partially complete)



WBS Dictionary

Complimentary to the WBS, the WBS Dictionary will be used for some of the components of the WBS to capture detailed information. Information that can be captured includes:

- The description of work
- Activities and work packages
- The code of accounts
- Milestones
- Contract information
- Cost
- Quality requirements

WBS Dictionary			
Project Name/ID	Work Package	Date	Responsible Party
Work Package Description			
Acceptance Criteria			
Deliverables			
Assumptions			
Resources Assigned			
Duration			

Schedule Management Plan

Purpose

The purpose of the Schedule Management Plan is to document how the schedule for the project will be created, used and maintained. It should also describe who will be involved, the detail required within in, the frequency of updates and other pertinent information.

Project Schedule

- The Project Manager will utilize Microsoft Project 2016 as the automated tool to plan, schedule and report the project schedule. The project schedule will primarily be operated via the project manager's computer but the project schedule file will be stored in the "*N:\Projects\Smith's Hartford Home project\Schedule*" folder. It will be stored with a write-protection password known by the Project Manager and peers within the Project Management Office (PMO).
- The project manager will have full read/write access to this project schedule file. All other project team members will have read-only access. PMO office members will have read/write access for backup support purposes only.
- The project schedule shall minimally be updated by the project manager once a week, on Mondays prior to noon representative of all work performed/not performed during the previous week.
- Since this project consists of building a Hartford model home and it will not be the first of that model, the project schedule will be based on positive lessons-learned from other Hartford projects. Therefore, analogous (top-down) estimation will be heavily used.
- The project manager will utilize Earned Value Management (EVM) as a technique to identify and track project performance with regards to scope, schedule and budget. This will serve as the basis for forecasting project completion dates.
- Accuracy levels for activity estimates are expected to be +- 25% during initial planning (draft), +- 10% upon completion of planning, +-5% at Stage Gate 3.
- Since Risk Management will be used on this project, time and effort to respond to risks will be captured within this project schedule, as appropriate.
- High-level milestones:
 - Project Start: 11/4/2013

- Excavation: 11/15/2013
- Framing complete: 2/15/2014
- Electric, HVAC, plumbing complete: 3/15/2014
- Landscape complete: 4/30/2014
- Settlement: 5/3/2014

Cost Management Plan

Purpose

The purpose of the Cost Management Plan is to document how the budget for the project will be created, used and maintained. It is primarily concerned with the costs for any expenditure incurred to produce the project objectives. These can include labor, materials, licensing, subcontracted resources, and other expenses. It should also describe who will be involved, the detail required within in, the frequency of updates and other pertinent information.

Project Budget

- The Project Manager will utilize Microsoft Project 2016 to track project the project budget as depicted by the schedule. Supplementary budget information such as equipment purchases will be tracked using Microsoft Excel 2013 and shared across all active projects within the PMO. The project budget will primarily be operated via the project manager's computer but it will be stored in the "*N:\Projects\Smith's Hartford Home project\Budget*" folder. It will be stored with an open-protection password.
- The project manager will have full read/write access to this project budget in MS Project and Excel. All other project team members will have read-only access to the MS Project file and no access to the Excel file. PMO office members will have read/write access to both for backup support purposes only.
- Since this project consists of building a Hartford model home and it will not be the first of that kind, the project schedule will be based on positive lessons-learned from other Hartford projects. Therefore, analogous (top-down) estimation will be heavily used. Differences are expected between this Hartford home and others due to multiple reasons including model upgrades, inflation, different personnel and subcontractor agreements, etc. Accuracy levels for budget estimates are expected to be +/- 25% during initial planning (draft), +/-10% upon completion of planning, +/-5% at Stage Gate 3.
- The project budget shall minimally be updated by the project manager once a week, on Mondays prior to noon representative of all work performed/not performed during the previous week and any expenses incurred.

- The project manager will utilize Earned Value Management (EVM) as a technique to identify and track project performance with regards to scope, schedule and budget. This will serve as the basis for forecasting project completion dates.
- Since Risk Management will be used on this project, time and effort to respond to risks will be captured within this project budget, as appropriate. This includes all labor, material and equipment costs needed to address project risks above the costs identified for the construction of the house.
- High-level budget:
 - Budget constraint <=\$ 400,000
 - Labor <=\$ 106,000
 - Materials <=\$ 215,000
 - Other: <=\$ 60,000

Quality Management Plan

Purpose

The purpose of the Quality Management Plan is to document what quality means for the project. Quality management is the process by which the project team not only completes the work, but completes the work to an acceptable standard.

It is important to identify the minimal level of quality for each deliverable of the project and the steps, measures, tools and techniques to achieve that. This plan will:

- Plan quality (this artifact)
- Define what quality for the Smith's Hartford Home is
- Define how quality will be managed
- Define quality activities
- Identify quality standards that need to be maintained

Project Quality

For the Smith's Hartford Home, the current level of quality is measured by the internal quality measurements defined by XYZ Homes for any Hartford model home. This level of quality is expressed in the catalog for each homeowner to review and understand.

Specific measures of quality for the Hartford model home include:

- Concrete will be tested to ensure strength of at least 3000 psi.
- Walls shall be framed at 16" O.C.
- HVAC temperature differences between floors of the house shall not exceed 1°.
- All walls will be back roll painted. The paint finish on many new homes is often just sprayed on. Back rolling in addition to spraying provides a multiple-coat finish, and helps eliminate visible gray stucco areas and fading.
- All walls will be checked during their construction to ensure they are straight and true. Straight and true walls in the home help eliminate surface deficiencies. Poorly built walls may show concave or convex spots, which can affect wallpaper, paint, and/or wall decorations.

- The job site shall be cleaned no less frequent than weekly. The construction site will be clean and free of debris. Messy job sites often lead to poor care and attention to the quality in construction of the new home and reflect the care taken in the building process.
- Inspections:
 - The project manager, sponsor, sales manager and team leaders shall conduct monthly walkthroughs and inspections.
 - The project manager, sales manager and homeowner will have two walkthroughs; one prior to settlement within two weeks and one the morning of settlement. All identified issues will be logged, tracked and addressed through warranty coverage.
 - Any issues identified shall be tracked by the project manager using the Issue Log stored in the "N:\Projects\Smith's Hartford Home project\Risks and Issues" folder.
 - Any issue identified requiring additional time, effort or expense shall be processed using the Change Control System (CCS) herein.
- Quality Control Manager (QCM)
 - This project will leverage the XYZ Homes Quality Control Manager assigned to the Chesterfield Estates community. Specific responsibilities and authority for the QCM include:
 - He/she will have both the authority and the duty to halt any operation appearing to be out of compliance with contract specifications.
 - The QCM is responsible for keeping and maintaining all records related to personnel, supplies, equipment use, and equipment calibration and sampling.
 - His/her function will be to ensure compliance with the contract plans and specifications.
 - He/she shall perform and document field inspections.
 - He/she shall prepare weekly Quality Control Reports.
 - He/she shall coordinate, document, and track preparatory, initial, and follow-up inspections.
 - He/she shall maintain as-built drawings.

Site Description

The Smith's Hartford Home will be built on lot #114, subdivision II, of the Chesterfield Estates community in Rolling Acres, Pa. The Chesterfield Estates neighborhood comprises an area that historically consisted of farmlands on rolling hills. No hazardous materials are expected to be found during construction due to the history and initial soil testing done during area development (Nov 2007).

Quality Assurance

To ensure quality is being met as defined herein, quality assurance will leverage the following:

- Monthly audits of quality inspection reports against quality standards. Any deviation greater than 5% shall be addressed immediately and tracked on the issue log.
- A quality audit of the measures defined herein will be performed to ensure sufficient measures are established for the project objectives and requirements. Adjustments to any measures or any suggested corrective action shall be presented to the Change Control Board for consideration and disposition.
- To ensure compliance with established ISO 9001 standards, a Quality Department liaison will be identified. This person shall be responsible for ensuring all project artifacts are updated and maintained appropriately.

Quality Control

Specific testing and inspections shall be performed to ensure construction is adhering to standards and guidelines for XYZ Homes. Through the inspections and measures listed above, Quality Control shall be fulfilled.

Quality Communications

Project communications shall be defined to/from each stakeholder in the Communications Management and Stakeholder Management Plans herein. However, specific communications regarding quality shown below shall be produced and posted as per XYZ company standards.

- Weekly warranty issue reports
- Monthly Cost of Quality (COQ) report
- Monthly Material Discard report

Human Resource Management Plan

Purpose

The purpose of the Human Resource Management Plan is to document the processes that organize, manage, and lead the project team. Key roles and responsibilities for team members are listed here. Any member of the project team will be able to review this section and understand what is expected of them including responsibilities to the project, other team members, the project manager and other stakeholders.

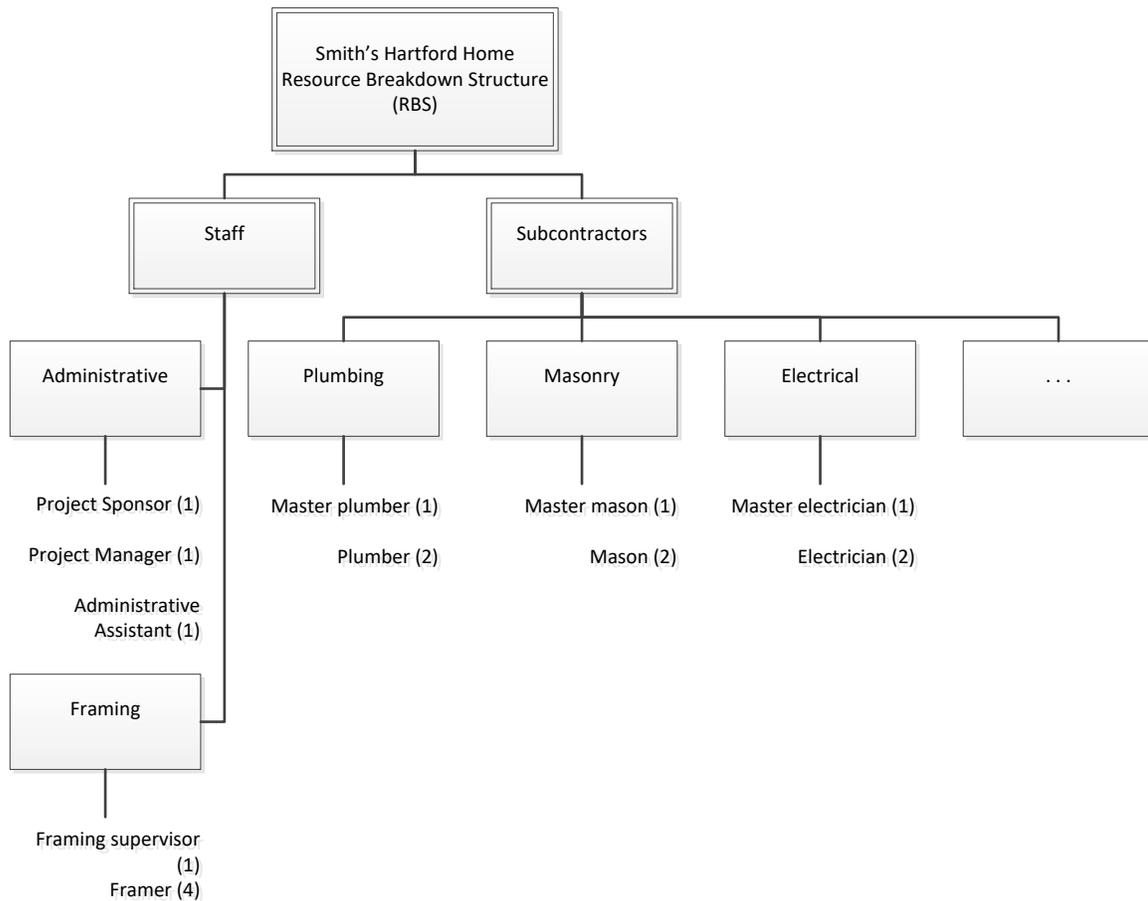
Project Human Resources

The Smith's Hartford Home project will be primarily staffed through matrixed personnel from XYZ Homes across the various departments. The project will be managed through a project manager from the XYZ Homes Project Management Office (PMO).

The staffing requirements for this project are as follows:

- Framers (4)
- Framing Supervisor (1)
- Plumbers (3)
- Masons (3)
- Electricians (3)
- Landscapers (5)
- Roofers (2)
- Drywall installers (4)
- Painters (3)
- Trim and Detail Experts (1)
- HVAC installers (2)
- Flooring installers (2)
- General laborers (2)
- Project Sponsor (1)
- Project Manager (1)
- Administrative Assistant (1)

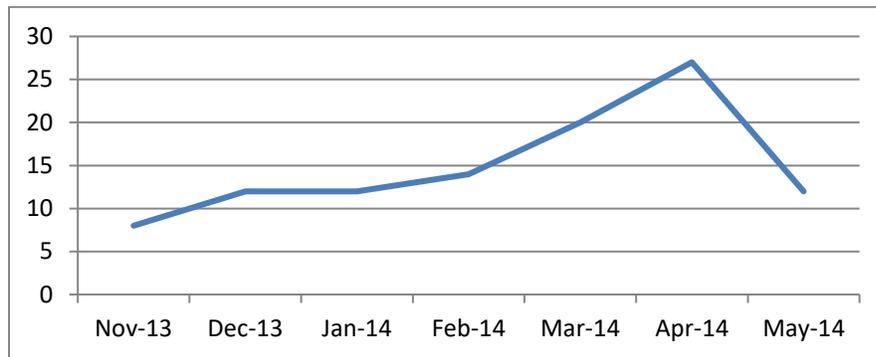
Resource Breakdown Structure (RBS)⁴



⁴ Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) – Fifth Edition*, Project Management Institute Inc., Page 261

**Resource Requirements
(FTE) by month**

	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
Framers		4	4	4			
Plumbers				2	2	2	
Masons	4	4	4				
Electricians				2	2	2	1
Landscapers						4	2
Roofers						4	
Drywall installers					4	2	
Painters					2	4	2
Trim and Detail Experts					2	2	2
HVAC installers				2	2	1	
Flooring installers					2	2	1
General laborers	2	2	2	2	2	2	2
Project Sponsor	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Project Manager	1	1	1	1	1	1	1
Administrative Assistant	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	8	12	12	14	20	27	12



- All team leaders identified after staffing is complete are expected to supervise their individual teams, provide coaching and mentoring where possible to maximize resource utilization, attend weekly project team and risk management meetings. They are also expected to provide the estimates and updates for their respective teams by close of business each Friday to the project manager.
- All team members are expected to work closely with the team leader and follow their guidance in order to achieve the project objectives. Active participation in team meetings is expected. Members are also expected to provide estimates and updates to their respective team leaders.
- Any required roles not able to be staffed by XYZ Homes employees will be filled through procurements.

- The Project Manager, with the assistance of each Team Leader, will perform monthly staff performance reviews. These will consist with monitoring activity performance, teamwork, accuracy of estimates, and other factors. This information will be shared with respective resource managers only upon request. Otherwise, the Project Manager and Team Leaders will use this information to improve the effectiveness and efficiencies of the project team.
- The following chart will be used to set expected responsibilities for the project, per role:

Item	Project Manager	Sponsor	Lead Framer	Lead Plumber	Lead Electrician	Lead Mason	Painter	Landscapers	Architect
Detailed Design Document	A	A	A	A	A	A	I	I	O
Project Management Plan	O	A	A	A	A	A	I	I	I
Stakeholder Register	O	A	A	A	A	A	I	I	I
Risk Register	O	A	O	O	O	O	I	I	I
Building permits	I								O

O=Owner, A=Approver, I=Informed

Project Team Directory:

Name	Role on Project	Email	Extension	Office
Jackie Thomas	Project Sponsor	Jackie.Thomas@xyzhomes.com	X1234	HQ, 4147
<you>	Project Manager	you@xyzhomes.com		
John Liberton	Lead Framer	John.Liberton@xyzhomes.com	X2477	HQ, 2245
Susan Benton	Admin.Asst.	Susan.Benton@xyzhomes.com	X5722	HQ, 2313
Jake Mellers	Lead Framer	Jake.Mellers@xyzhomes.com	X1870	SM, 102

Communications Management Plan

Purpose

The Communications Management Plan is a component of the project management plan that describes how project communications will be planned, structures, monitored, and controlled⁵⁵. Through this section, the project intends to provide the right information to the right people at the right time in the right format. Any effort or expense required to perform these communications shall be accounted for in the project schedule and/or budget.

Project Communications

The project manager will identify project stakeholders early in the project lifecycle. This list will be stored in the *Stakeholder Register* ("N:\Projects\Smith's Hartford Home project\Communications) and maintained through the project. The following information will be communicated to/from stakeholders in order to maintain stakeholder relationships, expectations and needs for the project.

⁵⁵ © 2013 Project Management Institute – *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* – Fifth Edition, Page 296

Item	Description	Frequency	Format	Distribution	Recipient	Owner
Weekly status report	Project progress against baselines	Weekly	MS-Word	Email	Project Sponsor, VP of PMO	Project Manager
Weekly project team meeting minutes	Discussions and decisions made during meeting	Weekly	MS-Word	Email	Project Team, Quality Department liaison	Project Manager
Monthly project review	Review all active projects	Monthly	PowerPoint	N/A	Project Sponsor, Senior Management, VP PMO, PMs	Project Manager
Project Gate Reviews	Review of project status a key intervals of lifecycle	Per schedule	Multiple	Artifacts presented at review meeting	Project Sponsor	Project Manager
Activity status updates	Updates of progress made to activities	Weekly	Text	Email	Project Manager	Team members, Team Leaders

Risk Management Plan

Purpose

The purpose of the Risk Management Plan is to document how the project team will proactively plan for risks, analyze them, respond, monitor and control risks and communicate them to stakeholders. Also, you should identify the level of acceptance regarding risks between each stakeholder.

Methodology and Approach

The Smith's Hartford Home Project Team ("project team") will utilize accepted best practices and standards of the Project Management Institute (PMI). It will also combine those from the XYZ Homes Project Management Office (PMO).

The project team will use the following steps:

Plan risk management

The project team will plan the approach, identification, analysis and response to risks. These steps will be documented here in the Risk Management Plan. The assigned project manager will be the author and owner of this artifact and will produce a draft. Minimally, through offline review of each team leader and project sponsor, edits will be made to produce the final, approved plan.

Identify risks

This is the process where the project team identifies as many risks as possible that will either positively or negatively affect the project deliverables and outcomes. The project team will utilize weekly Risk Management meetings (10:00am, Wednesdays, Conference Room 6b) to identify and update risks. Required at each meeting are the project manager, sponsor, each team lead and each risk owner. Optional for this meeting will be any internal team member or project stakeholder. The project team will utilize expert interviews, and brainstorming as methods for risk identification. Any identified risk shall be captured in the *Risk Register* ("N:\Projects\Smith's Hartford Home project\Risks and Issues").

Qualitative risk analysis

This process allows the project team to prioritize all risks and separate those that will be responded to versus those that are monitored. This is based on the stakeholder risk tolerance and threshold. The project team, at its discretion, will assess which risks are more likely to occur and have a significant impact on the project to be higher priority risks and be addressed sooner. The project team will not utilize modeling including Monte Carlo analysis to predict outcomes due to the expense of these tools and limited budget. Updates from this process will be made to the *Risk Register*.

Quantitative risk analysis

This process takes as input those risks prioritized high and attempts to truly understand their impact to the scope, schedule or budget. With this information, effective responses can be developed. Updates from this process will be made to the *Risk Register*.

Plan risk responses

This is the process where the project team analyzes each risk that was quantified and develops actions they will take to diminish or eliminate negative risks while enhancing positive risks. By leveraging the risk prioritization process done earlier, this allows the project team to focus on those risks requiring the most attention now. Minimally the owner of each risk will identify the necessary project team help to address the risk. That sub-team will meet separately to develop minimally one response but possibly more, adequate enough to meet the need. Each response must be appropriate for the significance of the risk while being realistic and cost-effective. Any effort, monies or equipment necessary to respond to risks shall be captured within the project schedule and budget. Updates from this process will be made to the *Risk Register*.

Upon completion of risk responses, supporting time on the schedule and money in the budget will be allocated to allow the project team to respond to risks.

Control risks

This is the process of implementing the risk response plans, tracking the status of any risk, monitoring the effectiveness of response plans and creation of new risks. Any risk owner will provide status updates on their owned risks and the effectiveness of their responses. Based on this analysis and control, the project manager will identify any improvements that can be made to the risk management process for future projects. Monitoring and controlling risks is a continuous effort throughout the project.

Guidelines and Metrics

The project team will use the following measures for risk management activities.

- Probability – For Qualitative Risk Analysis, a scale of five choices ranging from 1 (low) to 5 (high). For Quantitative Risk Analysis, a scale of only 10%, 25%, 50%, 75% and 90% will be used.
- Impact – For Quantitative Risk Analysis, two scales will be used.
 - Schedule - For risks impacting the schedule, values of '1 day', '2-3 days', '1 week', 'Several weeks', and 'One month or more' will be used.
 - Budget - For risks impact the budget, values of '<\$100', '\$100-\$500', '\$300-\$1,000', '>\$1,000', and '>\$5,000' will be used.
- Tools – The project team will utilize a *Probability and Impact Matrix* (next page) which will support the metrics described herein to help analyze each risk. A *Risk Register* ("N:\Projects\Smith's Hartford Home project\Risks and Issues") will be used to track all risks. Expected Monetary Value (EMV) calculations will be used to combine each risk's probability of occurring with the impact if it did.
- Strategies – The following strategies will be used for risks that affect the project:

Positive	Negative
Exploit	Avoid
Enhance	Transfer
Share	Mitigate
Accept	Accept

- Threshold – As per established PMO standards, the project team will use a threshold of '10' to prioritize risks from the watchlist (low) to those that will be quantified (high).
- Risk Attributes – The following attributes for each risk will be captured:
 - Id
 - Risk Name
 - Owner
 - Probability
 - Impact
 - Risk Score
 - Impact (Budget)
 - Impact (Schedule)

- Expected Monetary Value (Budget)
- Expected Monetary Value (Schedule)
- Risk Response

Probability	5 Almost Certain	5	10	15	20	25
	4 Highly Likely	4	8	12	16	20
	3 Likely	3	6	9	12	15
	2 Somewhat Likely	2	4	6	8	10
	1 Not Likely	1	2	3	4	5
		1 Not impactful	2 Slightly impactful	3 Moderately impactful	4 Very impactful	5 Significantly impactful
Impact						

Figure 1 - A Probability and Impact Matrix

Procurement Management Plan

Purpose

The purpose of the Procurement Management Plan is to document how the project will team will identify the need to procure, plan for procurements, identify potential sellers, and the creation of the agreements that will be used, how they will be executed and how the engagements will be managed and controlled.

Project Procurement Management

Due to past projects of similar nature, additional staffing help is required from outside of XYZ Homes. As a result, this Procurement Management Plan will guide the Smith's Hartford House Project Team in procuring subcontractors.

No additional products are required and therefore, a make/buy analysis will not be performed.

Established company policy prohibits project managers from signing contracts directly with third-party vendors. As a result, for each procurement, the project team will:

- Identify critical factors for selecting any single vendor over competitors. Since the project is firmly constrained by time and money, pricing and availability will be weighted over other factors.
- Contact and work with representatives from the Purchasing department
- Review information from a list of pre-qualified vendors
- Rate each vendor against the list of criteria
- Select the most-appropriate vendor having the highest score of matched criteria
- Work with the Purchasing department contact to establish a contract appropriate for the engagement and project
- The project manager will directly or through assistance, observe, monitor and control each engagement for the betterment of the relationship and project success
- Upon completion of each engagement, if not the project overall, a write-up of the pros, cons, and recommendations for each vendor will be done by the project manager and added to the company's organizational process assets

Stakeholder Management Plan

Purpose

The Stakeholder Management Plan is a component of the project management plan and identifies the management strategies required to effectively engage stakeholders⁶. This plan works closely with the steps identified in the Communications Management Plan.

Stakeholder Management

The Project Manager will review past and similar projects while also consulting with the Project Sponsor to identify a list of stakeholders for the project. This list will create the *Stakeholder Register*. The stakeholder register will primarily be owned and managed by the project manager of the project. It will be stored in the "N:\Projects\Smith's Hartford Home project\General" folder.

The project manager will analyze each stakeholder (stakeholder analysis). The purpose of this analysis is for the project manager to identify each stakeholder's interest in the project, availability, power or influence level, communication needs, expectations and other information. All of this information will also be added to the stakeholder register. This will help guide the appropriate steps are accounted for in the schedule and/or budget.

Despite the communication interval defined by the stakeholder analysis, as a best practice, the project manager will check-in with each stakeholder on a monthly basis to ensure the analysis of their needs is still sound and if necessary, adjustments can be made. Any changes to communications will require processing through the Change Control System (CCS) herein.

⁶ © 2013 Project Management Institute – *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* – Fifth Edition, Page 403

Requirements Management Plan

Purpose

The purpose of the Requirements Management Plan is to document the processes to identify, document, track and communicate project requirements. As project stakeholders are identified, requirements are elicited. Further analysis of them will begin to clarify their needs of which these can be checked against the overall project scope to ensure consistency. Failure to identify all or misinterpret any requirement can lead to missed objectives and project failure.

Approach

The approach to be used for requirements management for the project will be broken down into four areas:

- requirements identification
- requirements analysis
- requirements documentation
- ongoing requirements management

Requirements Identification

The project team will facilitate various methods to collect requirements which may include: interviews, focus groups, facilitated workshops, group creativity techniques, questionnaires and surveys, or product prototypes. These will be conducted among the project stakeholders to ensure all requirements are captured.

Requirements Analysis

The project team will analyze requirements to determine if they fall into project or product categories. Additionally, this analysis will determine where in the WBS the requirements will fall or what work activities

correspond to particular requirements. Accountability and priority for each requirement will also be determined as part of the analysis. Finally, metrics and acceptance criteria must be determined for all requirements in order to provide a baseline for understanding when a requirement has been fulfilled to an acceptable level.

Requirements Documentation

Once requirements have been identified and analyzed, they will be documented and assigned to accountable personnel. They will be captured in the Clarity online tool. All requirements will be 'tagged' appropriately so as to allow for per-project reporting. Those requirements identified as necessary for this project will be added to this project plan and the project team will determine what methodology the accountable personnel will use to track and report on the status of each requirement. All requirements will also be added to the project requirements checklist which must be completed before formal project closure is accepted by the project sponsor.

Ongoing Requirements Management

Throughout the project lifecycle, the project manager will ensure all team members are reporting requirement status and raising any issues or concerns with their assigned requirements as appropriate. As the project matures there may be situations in which requirements must change or be altered in some way. When appropriate and deemed fulfilled, the project manager and/or Requirements Analyst will mark the requirement as such in the Clarity database. The project team must follow the established Change Control System (herein) in order to propose any changes to requirements and receive approval to implement. Ongoing requirements management also includes receiving approval of all requirements by all vested parties as part of project closure.

Metrics and Attributes

The following metrics and attributes will be used:

- The Requirements Analyst will facilitate stakeholder meetings, as needed, in order to establish priorities for all project requirements. This project will use the following scale in order to prioritize requirements:

Priority Level	Definition
High	These requirements are mission critical. They are required for project success or for progression to the next project phase.
Medium	These requirements support the project or higher-level requirements. They can be completed later in the project but must still be completed for the project to be considered complete.
Low	These requirements are considered necessary for the project but have no timing attribute. The project team can fulfill these at any time on the project.
Wish List	These requirements are not necessary for the project's completion. They are considered to be additional or desirable for the project, if time and money are available.

- A Traceability Matrix will be generated between each included requirement and the Work Breakdown Structure (WBS) to ensure each requirement is being addressed through project efforts and no work is performed that doesn't have a driving requirement.
- The Requirements Analyst will report weekly on each requirement's completion status using the 0%, 25%, 75% and 100% scale.

Change Management Plan

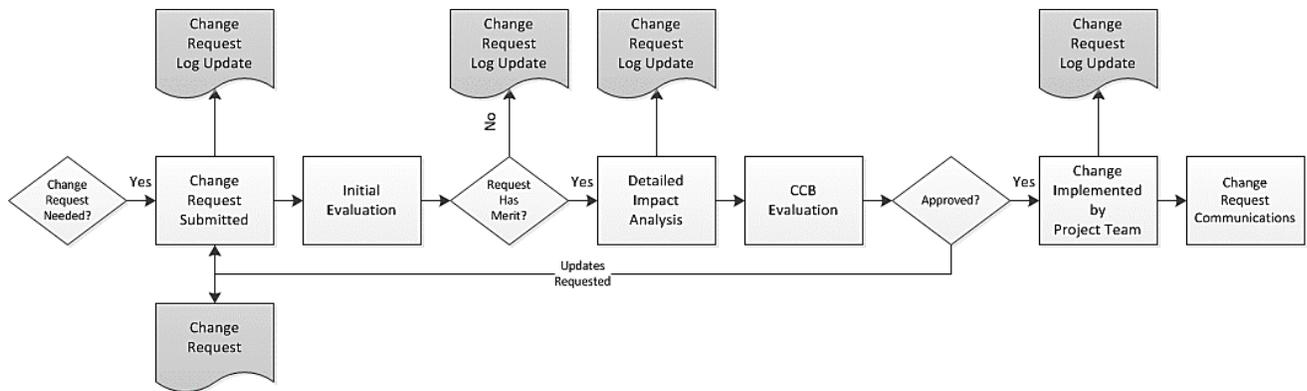
Purpose

The purpose of the Change Management Plan is to describe the change control process for this project. Changes to any project once approved must be carefully considered and the impact of the change must be clear in order to make any type of approval decisions. This plan, along with the Change Control Board (CCB), the log for any change, and tools used constitute the Change Control System (CCS).

Change Management

The following steps describe the Smith's Hartford Home project's change control process:

1. Identify the need for change (any stakeholder)
2. Submit the change to the project's CCB using the Change Request Form
3. An entry to the Change Request Log is started for new requests
4. An initial evaluation is performed of the request by the project manager and project sponsor to filter-out requests having little or no merit, allowing the project team continued focus on approved work.
5. Change requests having merit are further analyzed for impact by the project team identifying scope, schedule, budget and quality impacts.
6. The Change Control Board (CCB) reviews the change request and impact and decides to accept or reject the change, relative to this project. Deferral is also an option for those that have merit but will not be implemented at this time.
7. Changes that are approved are implemented by the project team.
8. All changes are communicated to all project stakeholders by the Project Manager in a timely fashion.
9. The change request is updated in the log.



Change Control Board (CCB)

The Change Control Board (CCB) will be a group of project team members chartered to meet regularly to evaluate any change request and decide if it should be accepted and the project plan updated or rejected. The CCB will be comprised of the project sponsor, project manager and team leads. The CCB will meet weekly at 10:00am Thursdays, in conference room 210.

Change Control Log

A log that tracks all change requests, information about them and their current and final disposition will be used. This log will be the basis for change request communications performed by the project manager to all stakeholders. The change control log, according to the change process depicted above, will be updated as needed. The change control log will be stored in the "N:\Projects\Smith's Hartford Home project\General" folder. An example of the log is below.

Change Request Form

A change request form will be used by any project stakeholder to request a change. This is the only way changes can be requested and made. The requestor must thoroughly complete the form and submit it to any member of the CCB for evaluation. The CCB will update the change request form with additional analysis and disposition information, as appropriate. An example of a change request form is below.

Change Request Form

Project Title:		Date:	
Change ID #:			
Category of Change			
<input type="checkbox"/> Scope	<input type="checkbox"/> Budget	<input type="checkbox"/> Schedule	
<input type="checkbox"/> Requirements	<input type="checkbox"/> Other	<input type="checkbox"/> Quality	
Detailed Description of Proposed Change			
Impact			
Comments			
Resolution	<input type="checkbox"/> Approve	<input type="checkbox"/> Defer	<input type="checkbox"/> Reject
Approving Authority			
Name	Role	Signature	
	Project Sponsor		
	Project Manager		

