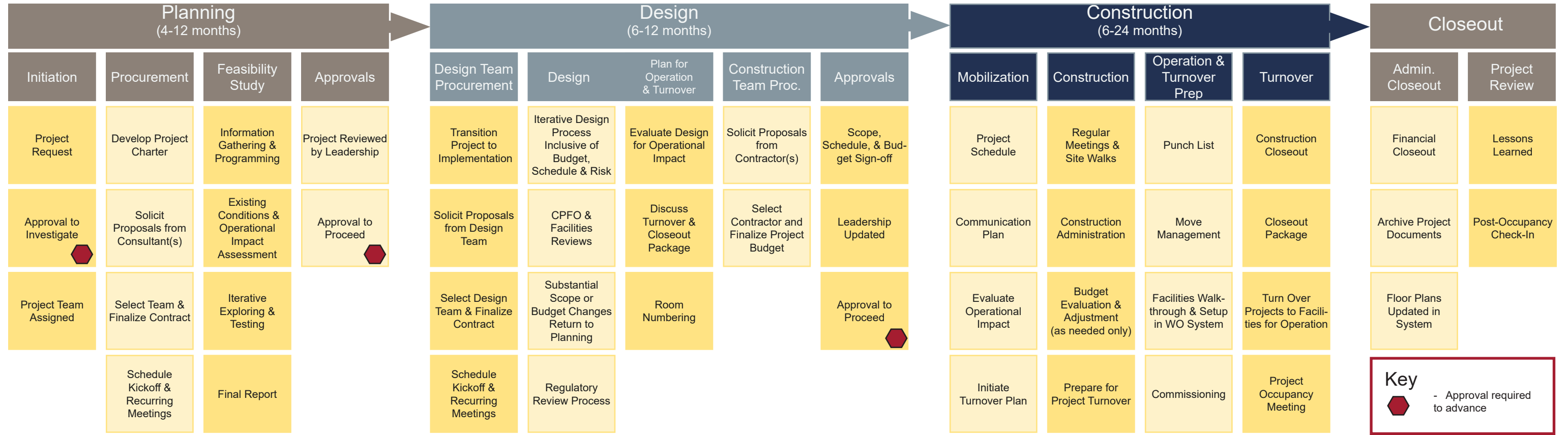


# HMS PDP Workflow - Level 4

(1.5-4 years)

Departmental Impact: High  
 Campus Impact: High  
 University Impact: Moderate to High



**Key**

 - Approval required to advance

Majors Steps

Start

## A. PROJECT INITIATION

Phase Owner: Planning Leader

Start

### 1. Confirm and evaluate project request

**Goal:** Customer is engaged in an early “Go-No/Go” to objectively vet request against HMS broader vision, identify level of effort needed, and key decision-makers.

**1.1 Receive Project Request**

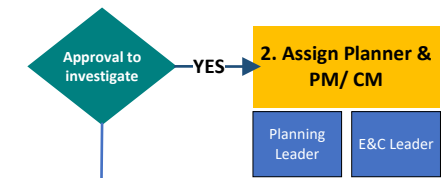
- Customer submits project request with brief description of requirements and expectations

Customer Planning Leader

**1.2 Define project at a high level**

- Define project goals at high level
- Contribution to HMS strategic goals
- Available funding source for Planning phase
- Likely project category (scope, visibility, level of effort, budget, duration)
- Approvers and decision-makers

Planning Leader Customer CPFO



Inform Customer & Stakeholders



Detail Sub Process Steps

## B. PROJECT DEFINITION / SCOPING & FEASIBILITY PROCUREMENT

Phase Owner: Planner

### 1. Project Ramp Up

**Goal:** Establish a strong foundation of project goals and parameters to serve as a guide throughout the entire project lifecycle.

**1.1 Develop Project Charter**

- Outline the project charge – what need is the project satisfying
- Project Effort
- Project Scope
- Project Risk
- Project Deliverables
- Project Approach
- Project Oversight
- Project Team
  - Internal Stakeholders
  - Internal Collaborators
  - Consultants
  - Define rolls and responsibilities
  - Establish committee(s)
- Project Timeline
- Approval Process
- Feasibility Study Budget
- Preferred communication method & frequency

Planner PM Planning Leader Customer

CPFO E&C Leader Facilities Leader

**1.2 Review Project Charter with Leadership**

- Revise based on feedback

Planner HMS Leadership CPFO

Planning Leader Customer

**1.3 Share Project Charter with HU Planning Office**

Planner CPFO HUPO

Project Charter

### 2. RFP and Project Team Awards

**Goal:** Identify all external partners and consultants needed to support the planning effort on the project. Vet and select the firm that will best support the project goals and objectives.

**2.1 Evaluate applicable project intent to confirm code requirements, parameters, and standards that will influence overall concept**

Space / Office Lab Std.  
Design Goals – HMS, HU standards  
Sustainability  
Accessibility  
Equipment O&M guidelines

Planner E&C Leader/ PM FOM/ Engineer/ Energy

**2.2 Confirm required consultants and identify criteria for selection of A/E/CM, specialties, consider:**

- Required program elements for feasibility study including, but not limited to:
  - Planning, Architecture, MEP, Structural, Building Code, Accessibility, etc
- Required program elements for design effort including, but not limited to:
  - MEP, IT, AV, Lighting, Furniture, Security
- Design parameters & metrics
- Relevant communication and data formats and software needed
- Process for design reviews & approvals
- Required meetings / approaches (e.g. attend & participate in pull planning meetings, etc.)
- Applicable regulations
- Identify Risks / Testing Needs: ACM, Hazmat, non & destructive testing

Planner Planning Leader E&C Leader/ PM CPFO

**2.3 Develop and review RFP based on agreed-upon criteria**

- Identify and create applicable exhibits

Planner Planning Leader E&C Leader/ PM CPFO HUPO

**2.4 Assemble Designer Selection and Review Committee (DSRC)**

- Per HU guidelines
- Distribute RFP to committee members
- Including: Planner, Planning Leader, CP&FO, E&C Leader, Design Panelists, HU PO Leader, Customer

Planner HUPO CPFO Planning Leader E&C Leader/ PM

Sustainability Requirements Matrix RFP Recipients Executive Summary Matrix RFP

**2.5 Identify recipients of RFP**

Planner DSRC

**2.6 Send RFPs to AEC partners to propose work**

- Planners/ architects/designers
- Engineers
- Pre-con/Construction Manager
- Other relevant specialties

**2.7 Schedule & conduct walk-throughs with relevant info packet**

Planner

**2.8 Review RFPs**

- RFP Submissions Executive Summary
- Determine which firms to invite for interviews

Planner DSRC

**2.9 External Partner Selection Process**

- Interview potential AEC team partners
- Evaluate & Select A/E/C Partners
- Compare AEC firms’ capabilities & approach vs. project charter, customer conditions of satisfaction, and other agreed-upon, shared criteria

Planner DSRC

**2.10 Notify A/E/C Partners**

Planner

RFP Submissions Executive Summary Matrix AEC Selection Justification Matrix

Outputs

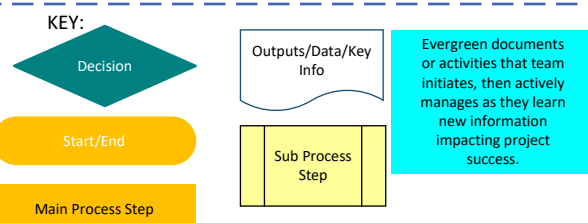
Project Brief

Enter Project into Sharepoint  
Monthly report (dashboard) with Project in Request

Recurring Project Management Actions

**Key for RACI:**

- Responsible, does the work
- Accountable, buck stops here
- Consulted prior to, or during task
- Informed of key outputs/decisions



Initiate Monthly Report  
Project Charter

C. FEASIBILITY STUDY  
Phase Owner: Planner

3. Onboard AEC team

**3.1 AEC Procurement**

- Execute contract for feasibility study
- Internal funding mechanism and PO creation

Planner AEC Partner

**3.2 Initiate formal project kick-off meeting with AEC partners and internal project team**

**3.3 Schedule regular team meetings & stakeholder meetings for duration of project**

Planner AEC Partner PM Customer  
Key Stakeholders

1. Information Gathering

**Goal:** Identify and gather the information needed upfront to launch the planning effort. Create a strong foundation upon which the programming and exploration steps will be based.

**1.1 Data & Information Gathering:**

- Verify program elements
- Existing condition plans
- Applicable historical information
- In person interviews
- Survey or Focus groups
- Space tours
- Benchmarking

Planner AEC Customer

**1.2 Data Analysis & Reassessment**

- Utilization analysis
- Key metrics
- Verify goals

Planner AEC Customer

**1.3 Review project parameters against city and state agency requirements**

Planner CPO City Rep HUPO

**1.4 Create Criteria Matrix**

- Core project drivers upon which all options will be evaluated

Planner AEC Customer

**1.5 Meeting with Dean and/or Leadership**

- Understand overall vision and goals for the project

Planner AEC Planning Leader CPFO Customer

Criteria Matrix

2. Programming

**Goal:** The customer feels as though they been heard, their needs are understood and documented, and senses they are part of a collaborative process.

**2.1 Produce Program**  
Get sign off before moving forward

Planner AEC Customer PM

**2.2 Initiate Risk Register**  
Will become part of a living Project Management Plan

Planner AEC

**2.3 Initiate Decision Matrix**  
Will become part of a living Project Management Plan

Planner AEC

Program Risk Register Decision Matrix

Updated Project Charter

3. Exploring & Testing

**Goal:** Translate the program to proposed space solutions in an iterative process. Cost, schedule and operational impacts of proposed solutions are developed in parallel. The customer as well as key stakeholders have an opportunity to inform the proposed options so that they can have ownership of the final product.

**3.1 Identify Available Space Options**

- Existing space that can meet programmatic needs
- SF available that can be modified to satisfy the program
- Other options available

Planner Planning Leader CPFO Customer  
PM AEC

**3.2 Existing Conditions Assessment**  
Walk the space(s) to verify existing plans and note any existing conditions to consider as part of the scope development

- Existing conditions
- Suitability of space for desired use
- MEP and infrastructure

Planner AEC CM PM FOM

**3.3 Identify applicable preventive maintenance or opportunities for capital/ expense project coordination multiple years out of each option**

Planner PM Planning Leader FRWG

**3.4 Evaluate MEP, Design, and other project elements to identify operational impact (utility, O&M) of each option**

Planner AEC Energy  
Facilities Engineer PM FOM

Key stakeholders (EHS, Sustainability, Security, AV, etc.)

Operational Impact Assessment

**3.5 Create & develop multiple options for review**

- Evaluate how options align with stated project goals and program
- Perform continuous cost estimating and scheduling based on concept & constructability reviews and adjustments
- Evaluate delivery method (DBB, CM@R, D/B)

Planner AEC CM PM FOM

Key stakeholders (EHS, Sustainability, Security, AV, etc.)

**3.6 Meetings to review options with customer and key stakeholders**

Planner Customer AEC Partners  
PM  
FOM Key stakeholders (EHS, Sustainability, Security, AV, etc.)

**3.7 Review project progress against city and state agency requirements**

Planner CPO City Rep HUPO

Concept Plans with associated budget and schedules

**3.8 Create & distribute briefing materials for design review with Designer Selection & Review Committee**

- Distribute material 1 week prior to meeting

Planner AEC Partners CPFO  
HUPO

**3.9 Conduct progress review at 50% and 75%**

- Conduct site tour at 50%

Planner AEC Partners DSRC  
Facilities Leader

**3.10 Feedback from design review(s)**

- Receive feedback from Design Review Panel
- Provide response
- Incorporate applicable feedback

Planner CPFO AEC Partners  
HUPO

**3.11 Progress review with Dean and/or Leadership at 50% and/or 75%**

Planner AEC Planning Leader CPFO  
Customer

4. Synthesizing & Output

**Goal:** Project team has consensus on the recommendations being presented. Key stakeholders and customer have confidence in the documentation being presented for approval. Material being presented allows the committee(s) to make an informed decision.

**4.1 Select option(s) for presentation**

- Summary of findings
- Evaluation of cost/ criteria matrix
- Identify recommended option(s)
- Team sign off

Planner Planning Leader CPFO Customer AEC  
PM E&C Leader Facilities Leader/FOM

**4.2 Develop & distribute final report or deliverable**

- Deliverable A: Single option for approval
- Deliverable B: Multiple options with recommendation

Planner AEC Planning Leader CPFO Customer  
E&C Leader/PM Facilities Leader/FOM HUPO

Final Report/ Deliverable

Initiate Planning Project Milestone Schedule & Budget

Meeting Agenda & Minutes



Project Charter

Risk Register

Decision Matrix

Planning Project Milestone Schedule & Budget

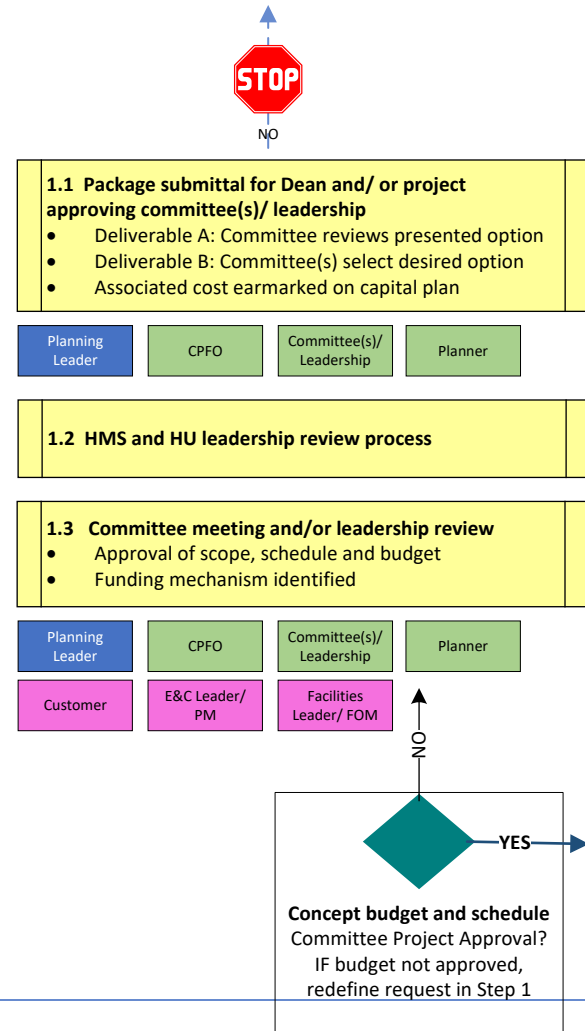


D. APPROVAL

E. Project Team Selection and Onboarding  
Phase Owner: Project Manager

1. Approval and Customer Notification (Yes/No)

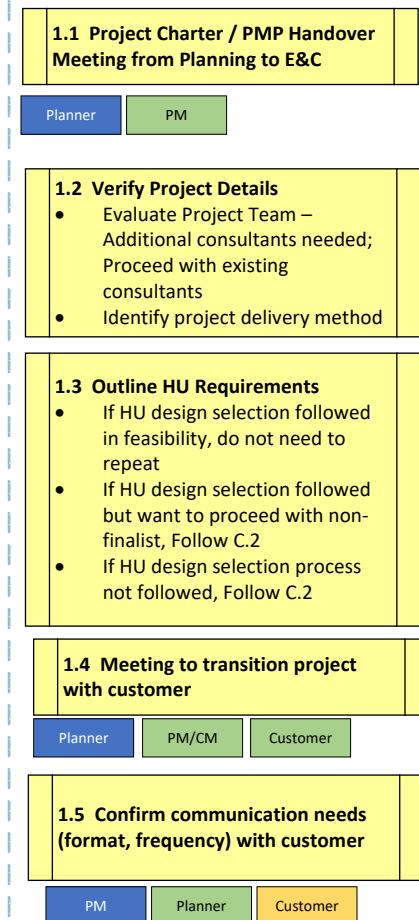
**Goal:** Project is reviewed for approval and clear direction is provided to the project team. Funding is earmarked on the capital plan.



Approved Recommendation and Funding Mechanism

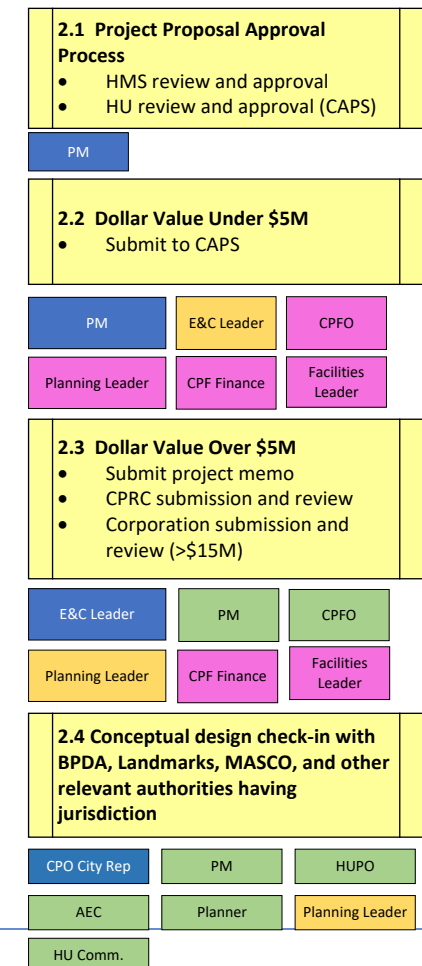
1. Transition from Planning to Implementation

**Goal:** Customer knows project has shifted to implementation phase, understand timing, how and when they will be engaged in project delivery, and knows their experience is a priority.



2. Administrative Ramp Up & Regulatory Review

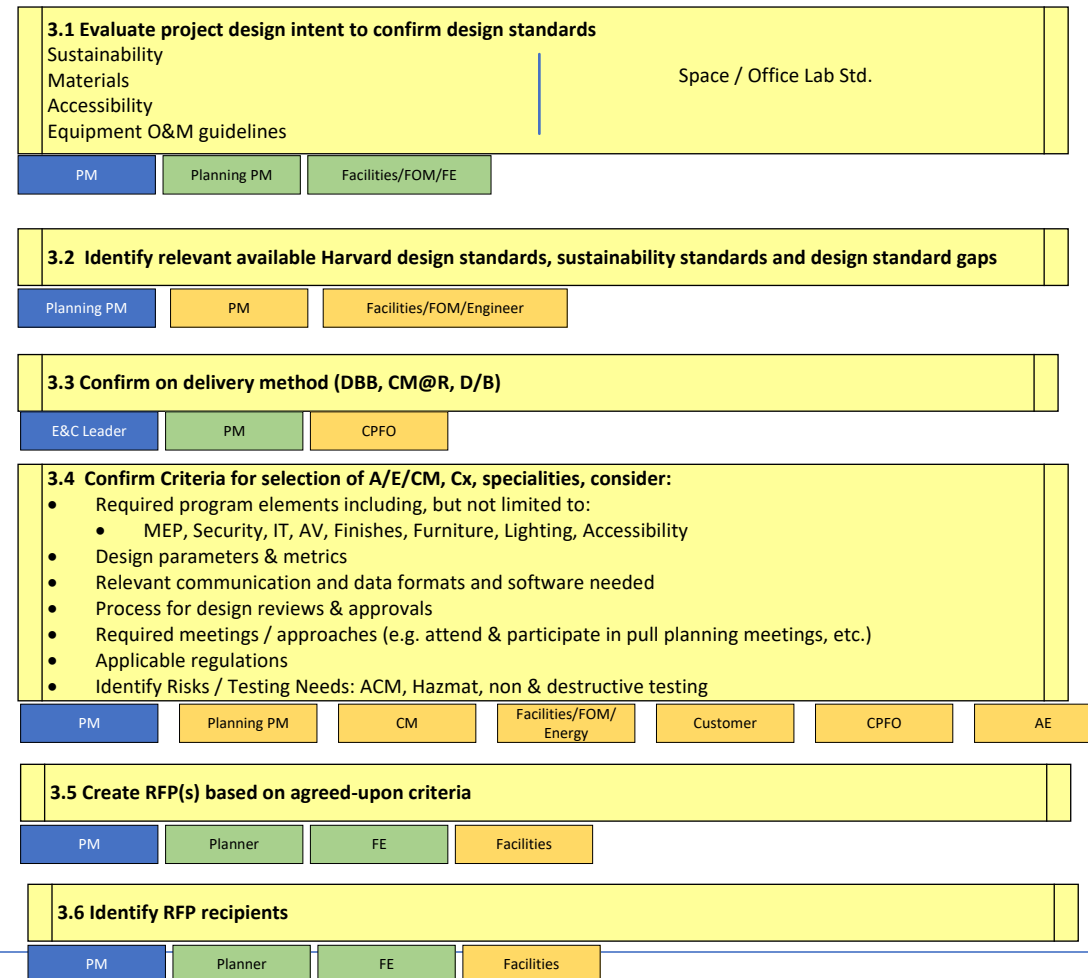
**Goal:** Customer knows project has shifted to implementation phase, understand timing, how and when they will be engaged in project delivery, and knows their experience is a priority.



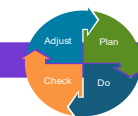
PM notify email blast list of project opening and location of PMP

3. RFP and Project Team Awards

**Goal:** We shepherd the customer's vision from concept to executable form that our Architect, Engineering & Construction (AEC) partners can deliver. We match the right AEC partners with customer's conditions of satisfaction and project category.



RFP (use standard template) with relevant information/packets



**4. Onboard AEC team**

**Goal:** AEC team understands scope and Conditions of Satisfaction for process and project success.

**3.7 Send RFPs to AEC partners to propose work**

- Architects/designers
- Engineers
- Pre-con/Construction Manager
- Commissioning agent
- Other relevant specialties

**3.8 Schedule & conduct walk-throughs with relevant info packet**

PM PM

**3.9 Review RFPs**

- RFP Submissions Executive Summary
- Determine which firms to invite for interviews

PM Planner CPFO Customer AE

**3.10 Interview potential AEC team partners**

PM Planner Customer AE

**3.11 Evaluate & Select A/E/C Partners**

Compare AEC firms' capabilities & approach vs. project charter, customer conditions of satisfaction, and other agreed-upon, shared criteria

PM Planner E&C, FAC, Planning Leaders CPFO Customer AE

Note: RACI may change depending on scope and scale of project. Some parties here may shift to "C" (consulted)

**3.12 Notify A/E/C Partners**

PM

Architect/Engineer/ CM Interview/ Selection Report (use std template) on how/why chosen

Contract

Updated PMP with:

- added team members & roles
- Commissioning needs
- Risks Register: inc. Constructability issues, space constraints, ACM/hazmat needs, other
- Enabling projects & relevant infrastructure needs that will be addressed by this project
- Sustainability Goals (Energy, Carbon, Water, Materials)

**F. Design the Project**  
Phase Owner: Project Manager

**G. Pre-Construction Management**  
Phase Owner: Project Manager

**1. Develop Design**      **2. Regulatory Review**      **3. Actively Manage Budget, Schedule & Risks**

**Goal:** Planning, E&C, and Facilities and AEC partners perform design and constructability reviews and collaborate to regularly make problems visible, and the team works together to resolve. All team members contribute ideas and alternatives that can ensure the team delivers the customer's conditions of satisfaction, budget, and schedule.

**Outcome:** The team has a clear picture of what the project will look like, how it will be executed, by when.



**1.1 Initiate design process with project team and client. Conduct scoping and design meeting. Perform design and constructability reviews in accordance with PMP**

PM CM Planner Customer  
AEC Partners Key stakeholders (Facilities, EHS, Sustainability, Security, Custodial, etc.)

**1.2 Provide design updates and modifications to project area, scope, specs, risk register, and charter**

PM AEC Partners Planner Customer FOM

**1.3 Schedule & conduct DD, CD comment, and specifications review meetings**

PM CM FE FOM

**1.4 Schedule & conduct design reviews at SD and DD**

- Incorporate HU reviews & reporting

PM Planner E&C, FAC, Planning Leaders  
CPFO AE Partners Customer HU DRP

**1.5 Schedule & conduct design reviews with school leadership at SD and DD**

PM Planner E&C, FAC, Planning Leaders  
CPFO AE Partners Dean HMS Leadership

**1.6 Perform continuous cost estimating based on design & constructability reviews and adjustments**

**1.7 (As needed) - Develop target budgets for each area program or design element**

CM PM

**1.8 Identify scope additions/unforeseen conditions**

PM CM

**2.1 Initiate project development impact review process**

CPO City Rep PM HUPO HU Comm.  
AEC Planner Planning Leader

**2.2 Continuous review process with BPDA, Landmarks, MASCO, and other relevant authorities having jurisdiction**

CPO City Rep PM HUPO HU Comm.  
AEC Planner Planning Leader

**2.3 Secure final regulatory approvals**

CPO City Rep PM HUPO HU Comm.  
AEC Planner Planning Leader

**3.1 Create 6-8 week Pull Plan Schedule to align with Milestone Schedule. Includes:**

- Designs & reviews
- Demo
- Construction start
- Critical path construction schedule
- Long lead items
- Enabling project work
- Commissioning
- FFE Selection and Bid
- Decisions needed by area ("last responsible moments"), including when customer makes what decisions
- Target Move-in date

PM AEC Partners Planner FOM  
Customer

**3.2 Develop risk mitigation plan for unresolved issues ID'd in Milestone Schedule and 6-8 week pull plan**

PM CM AEC Partners Facilities/FE/FOM/Energy

**3.3 Identify program changes that require escalation because they impact scope, budget, schedule**

PM Planner CPFO

If substantial scope changes, go back to Planning for review

**3.4 Review & approve non-substantial scope or budget changes**

PM Planner

Updated PMP with Design Brief, 6-8 week Pull Plan, included

4. Plan for O&M

1. Deliver construction documents

2. Project Team Evaluation

3. RFP and Project Team Awards

**Goal:** PM and Construction Manager secure subcontractor partners capable of fulfilling the customer's conditions of satisfaction, budget, schedule, and project approach requirements.

**Goal:** Identify the CM best able to delivery the project on time and on budget. Finalize the project budget based on input from the CMs using the contract document set.

4.1 Evaluate MEP Design and other program areas to identify operational impact (utility, O&M)  
4.2 Identify applicable preventive maintenance needs 6 months out

PM FE

4.3 Identify non-capital costs or savings (O&M & Utility Considerations)

PM FE

4.4 Discuss project turnover: deliverables and format required

PM FE

4.5 Perform room numbering review

PM Planner

1.1 Provide final construction drawings

PM

AEC

1.2 Review & approve Construction Documents

PM

Planner

Facilities/ FOM/ Energy

2.1 Verify if CM or other consultants needed to execute the construction project

PM

E&C Leader

Planner

3.1 Evaluate project requirements and parameters  
Sustainability  
Equipment O&M guidelines  
Delivery Method  
Scheduling and phases

PM Planner Facilities/FOM/FE

3.2 Confirm delivery method (DBB, CM@R)

E&C Leader PM CPFO

3.3 Confirm Criteria for selection of CM, Cx, specialties, consider:  
• Relevant experience: Occupied space, phases, science or specialty spaces, etc  
• Required program elements including, but not limited to:  
• MEP, Security, IT, AV  
• Relevant communication and data formats and software needed  
• Applicable regulations  
• Identify Risks / Testing Needs: ACM, Hazmat, non & destructive testing

PM Planning PM CM Facilities/FOM/ Energy

Customer CPFO

3.4 Create RFP(s) based on agreed-upon criteria

PM Planner FE Facilities

3.5 Select RFP recipients

PM E&C Leader CPFO Planner Planning Leader

3.6 Send RFPs to partners to propose work  
• Construction Manager  
• Commissioning agent  
• Other relevant specialties

3.7 Schedule & conduct walk-throughs with relevant info packet  
• Identify opportunities for subsequent walk-throughs with subcontractors

PM

3.8 Review RFPs  
• Descope bids  
• Level bids  
• Determine which firms to invite for descscope interviews

PM E&C Leader CPFO Planner Planning Leader

Facilities Leader Customer

3.9 Conduct descscope interviews with potential CMs  
• CMs submit revised RFPs based on interview questions and requested follow up

PM E&C Leader CPFO Planner Customer

Planning Leader Facilities Leader


3.10 Evaluate & Select CM  
• Compare leveled budget, schedule, and qualifications and exclusions in addition to capabilities & approach vs. project charter, customer conditions of satisfaction, and other agreed-upon, shared criteria

PM CPFO E&C Leader Customer Planner

Planning Leader Facilities Leader

3.11 Notify CM Partners

PM

  
- Final Budget and Schedule approved by CPFO  
- Committee Notifications  
- Construction Administration Approved by HU (HU CAPS Step 2)

Initial O&M Plan Including schedule, trainings, and deliverables

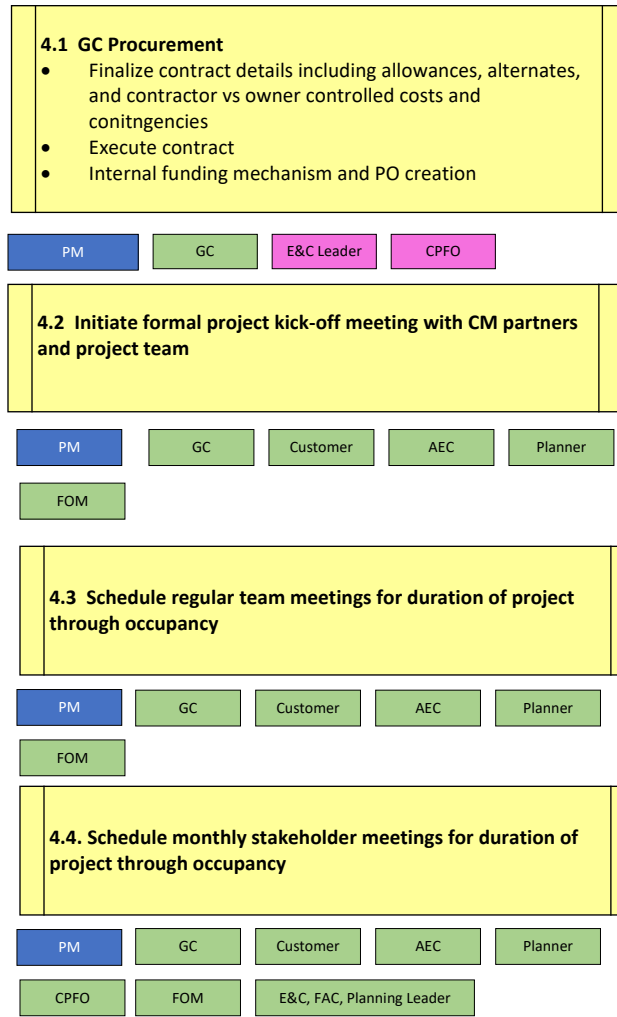
RFP (use standard template) with relevant information/packets

Architect/Engineer/ CM Interview/ Selection Report (use std template) on how/why chosen

Conduct meetings, share meeting notes, make visible: decisions & action items & resolution; actively update Harvard central files (SharePoint) with critical project information and documents (e.g. pull from ProCore, Ebuilder, etc.)

#### 4. Onboard CM

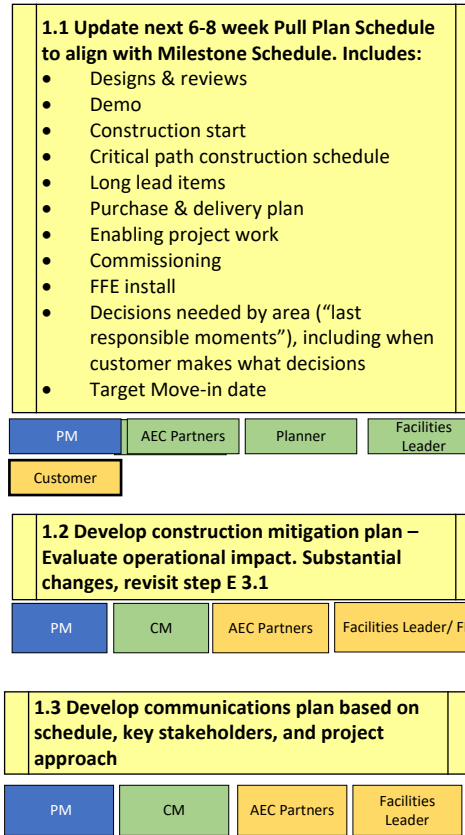
**Goal:** Contract with GC is executed and team understands scope and Conditions of Satisfaction for process and project success.



### I. Construction Mobilization Phase Owner: Project Manager

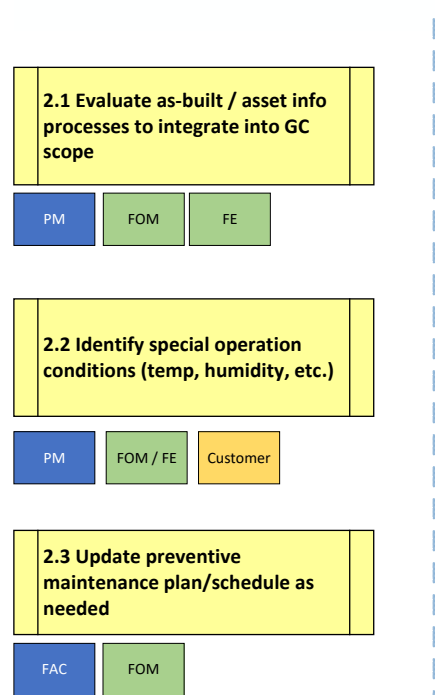
#### 1. Actively manage budget, schedule & risks

**Goal:** PM, CM and AE team collaboratively manage production, make reliable promises, identify constraints and escalate to leadership as needed in order to resolve and ensure the team delivers the customer's conditions of satisfaction, budget, and schedule.



#### 2. Start executing O&M Plan

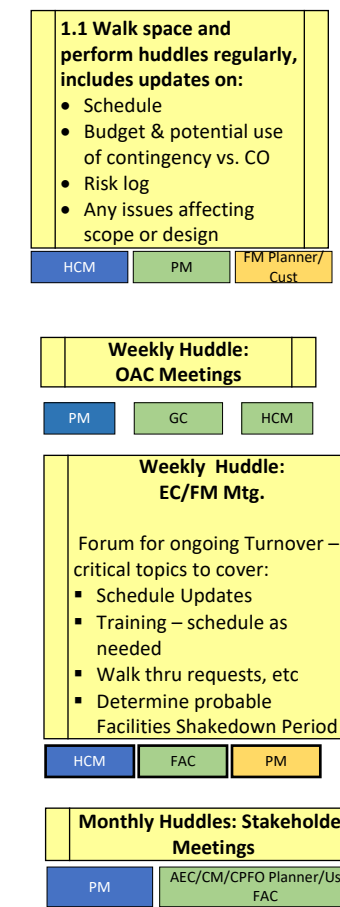
**Goal:** We make use of available information to start the O&M process so that Facilities is prepared and trained upon turnover, and we prevent emergencies and failures of customer's systems and equipment.



### J. Construction Phase/Install & Commissioning Phase Owner: Project Manager

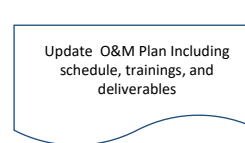
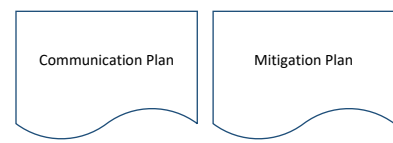
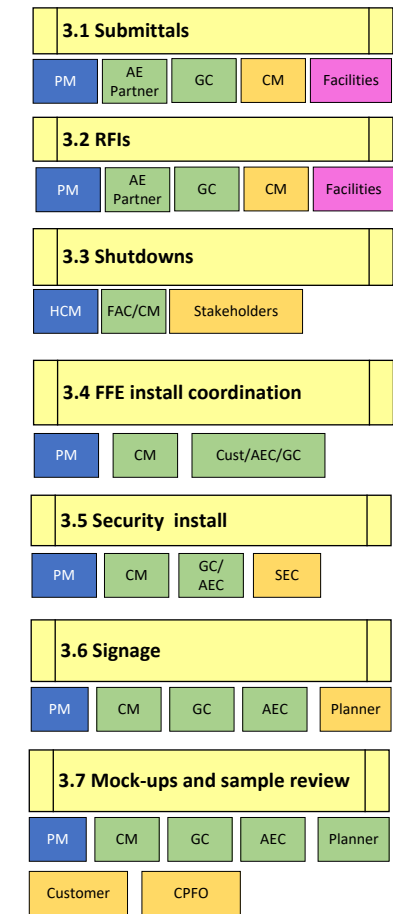
#### 1. Actively manage schedule & risks

**Goal:** PM, CM and AE team collaboratively manage production, make reliable promises, identify constraints and escalate to leadership as needed in order to resolve and ensure the team delivers the customer's conditions of satisfaction, budget, and schedule.



#### 2. Financial project management

#### 3. Execute project



Conduct meetings, share meeting notes, make visible: decisions & action items & resolution; actively update Harvard central files (SharePoint) with critical project information and documents (e.g. pull from ProCore, Ebuilder, etc.)



4. Execute O&M Plan to 80% integration into O&M process, programs, systems

5. Commission Project

K. Project Turnover  
Phase Owners: Project Manager and Facilities

1. Turnover Project to Facilities

2. Final 20% integration into maintenance & operations process, programs, systems

3. Turnover Project to Customer

L. Project Closeout  
Phase Owners: Project Manager and Facilities

1. Administrative Closeout

2. Project Review

End

**Goal:** Completed space is fully functional in accordance with customer's conditions of satisfaction, Facilities is ready to maintain in accordance with their operational conditions of satisfaction. No outstanding punchlist items. Adequate Facilities Shakedown periods based on complexity of project and schedule.

4.1 HFE/FFE Punchlist items  
PM, CM, AEC, Planner

4.2 Move management & coordination  
Contact list (Facilities, Custodial, etc)  
PM, GC or Movers, Customer, Custodial, Facilities, Operations

4.3 Keys / access to space  
PM, Customer, Security, Facilities

4.4 Set up Project in Facilities Work Order System (Job Plans, Schedule Frequency)  
FAC

4.5 Perform inspection & identify deficiencies. Start to finish.

4.6 Conduct walkthrough before ceiling installation  
FAC, FAC/HCM

4.7 Track Asset "adds and deducts"  
CM, HM/FM, FE

4.8 Issue new asset tags  
FM, FM, FE

FFE Warranty Info

Asset Forms

Commissioning Report  
Inspection Report

5.1 Commission project/building/system  
Cx Agent, PM/FM, FE

5.2 Facilities review Commissioning for operational readiness.  
Facilities Leader, Energy Manager, PM

5.3 BAS  
Trending PT checklist alarm set points  
Facilities Leader, FE / FOM

1.1. Construction Closeout Meeting  
CM, FAC

1.2 Schedule & Execute critical alarm testing  
PM, CM, Facilities

1.3 Notify Security to make needed systems update  
PM, CM, Customer

2.1 Construction Turnover / Shakedown Period  
• Schedule necessary training (Should be discussed and set up in weekly EC /FM Mtgs in prior step)  
• Track and closeout requirements from facilities walk through  
• Track close-out deliverables  
Facilities, CM, PM

2.2 Custodial task sheet review update  
Facilities, Custodial

3.1 Project Occupancy & Operation Turnover Meeting  
PM, FAC, CM, Customer, Operations

1.1 Execute Administrative Project Closeout:  
▪ Financial Close Out  
▪ Submit Project documents to archive  
PM, CM

2.1 Lessons Learned (1-month post move in)  
PM, Planner, Customer, Stakeholders, E&C Leader, Planning Leader, Facilities Leader

2.2 6-month post-occupancy check-in  
Planner, PM, Customer, Stakeholders, E&C Leader, Planning Leader, Facilities Leader

Updated floor plans  
Critical Alarm Form  
Close-out package, inc.:  
O&M manuals  
As-builts  
Warranties

Close-out package archived  
Lessons Learned  
Improvement Goals

Risk Register

