

## **CHAPTER 11 - Project Continuity**

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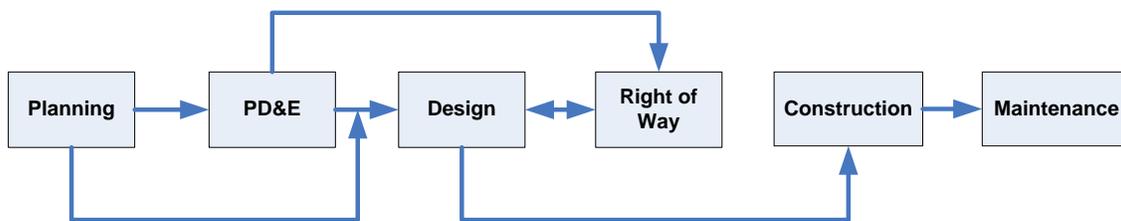
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## Introduction

A Project Manager (PM) must have a primary objective to understand clearly the history of a project and ensure a smooth transition among phases. A typical Florida Department of Transportation (FDOT) project can take many years to move through Planning, Project Development and Environment (PD&E), Design, Right of Way (R/W) and Construction phases. Throughout a project's life there will be a number of PMs (both FDOT and consultant). Many decisions will be reached, commitments made and technical details added. Phase-to-phase coordination and hand-off of projects is very important. Valuable work performed in earlier phases must not be lost, and commitments must be fulfilled. Each phase PM have an understanding of the history of the project, including its conceptual objectives and commitments made in previous phases. Districts have project continuity policies which must be followed. This chapter provides helpful ideas for implementing these policies.

In general, a Project Concept Book should be maintained, which will be handed off between phases. It should contain the original project scoping report, a summary of the key issues which each phase PM faced, references of key documents produced in the project and recommendations of each PM for the next phase. Figure 1, **Overall Project Work Phase** depicts typical work flow from Planning to Maintenance. Note the unique relationship of the R/W phase with the PD&E and Design phases – a copy of the Project Concept Book should be made for the R/W PM. The R/W PM can return the updated copy to the Design PM (DPM) at the end of the R/W phase, so the DPM can update the original book.

Figure 1 – Overall Project Work Phase



Commitments (including those made to local governments, permitting agencies, business and property owners, utilities, homeowner associations, and any other individuals and groups) must be tracked through each project phase. If a District has not instituted formal commitment tracking systems for this purpose, each PM should provide a listing of the commitments which includes a commitment summary, name of the individual, group or agency making it, and its date and

document file reference. The receiving PM must review and honor previously made commitments.

The receiving PM should be identified before the hand-off date. That PM should become an active participant in the project to become familiar with the project and to participate in decisions that will directly affect the next work phase. The receiving PM should consult frequently with the previous phase PM on sensitive and unclear issues to understand the project history, ensure continuity, and avoid duplicate, unnecessary and inappropriate work.

## **Filling the Gaps**

It had been observed that in spite of making diligent efforts to cover all issues during the course of projects' lives, things still "fell through the cracks," and resulted in unanticipated changes, and often delays and increased cost. A task team was assembled in 2012 to assess projects' interphase relationships and needs, identify where the breakdowns were happening and recommend ways to minimize risk of occurrence. The task team completed its analysis and at the May 2014 Executive Workshop presented its *Filling the Gaps* findings and recommendations.

## **Phase Hand-Offs**

Most FDOT projects involve phases in the order, **Planning–PD&E–Design–R/W–Construction–Maintenance**. An exception is Design-Build which combines Construction and Design. Another occasional exception is when the PD&E phase is omitted (Planning to Design)

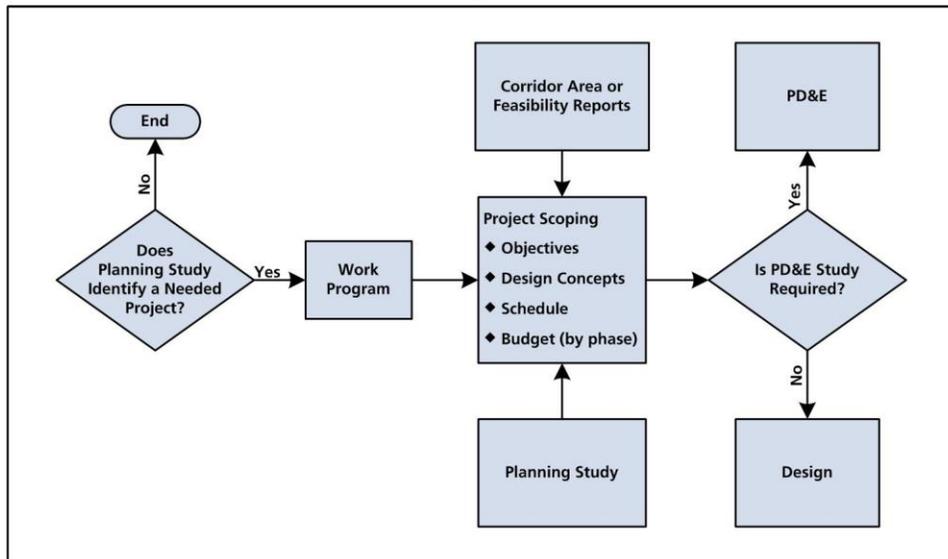
### **Filling the Gaps – Gap's Identified:**

- Planning to Program Management
- Planning to Design
- PDE to Design
- Design to R/W
- ROW to Construction
- Design to Construction
- Construction to Maintenance
- Maintenance to Planning

**Planning to PD&E.** The Planning process discussed in Part I, Chapter 8, of this handbook, identifies transportation needs which drive the Work Program discussed in Part I, Chapter 10. When a project enters the Work Program, a Project Scoping Report is prepared that includes project objectives, design concepts, schedule and budget (by phase). This report is the basis of the work program data for the project.

Generally, the first phase of a specific project is Planning. Figure 2, **Planning to PD&E**, depicts how a project progresses from the Planning phase to the PD&E phase.

Figure 2  
Planning to PD&E



Planning projects are programmed and funded before the identification of specific projects. It is not known at the initiation of a planning study if a project is needed and justified. Not all planning studies identify specific projects; however many corridor, area, feasibility and conceptual studies result in the recommendation of projects. Commonly, corridor and area studies will identify large-scale transportation needs, which will later be broken into smaller projects that can be more easily funded and managed. When projects are likely to be initiated as a result of a planning study, the planning report should, whenever possible, define the project objectives, establish the need for the project, identify design concepts, identify project limits and provide initial cost estimates. Political, public and stakeholder issues as well as potential environmental issues should be identified.

When a Project Scoping Report is prepared, any corridor, area or feasibility reports available must be reviewed carefully to identify pertinent information. This information will help make the Project Scoping Report as complete and

accurate as possible. Appropriate planning studies should be referenced in the Project Scoping Report.

At initiation of a PD&E project, the PD&E PM should review carefully the Project Scoping Report and referenced planning studies and use this information to plan the PD&E project.

Working in conjunction with the Federal Highway Administration (FHWA) and other federal, state and local agencies, the FDOT developed its Efficient Transportation Decision Making (ETDM) process for streamlining transportation decisions. The process redefines how FDOT will accomplish transportation planning, project development, and permitting within its current statutes and regulations. The ETDM process creates linkages between land use, transportation and environmental resource planning initiatives. ETDM results in more effective integration of the Planning and PD&E phases and facilitation of project hand-offs.

### **Filling the Gaps – Planning to PD&E**

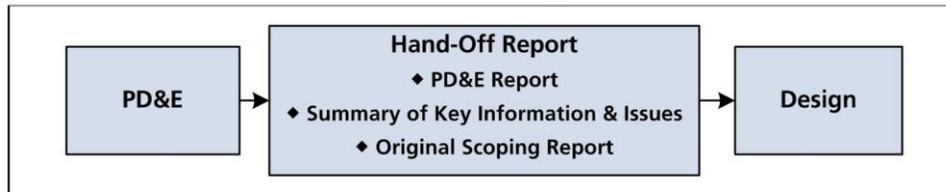
- Planning & Environment Linkage (PEL) Scoping report (What to expect)
- Multi-Modal Corridor Planning Guidebook (screening of alternates based on agreed measures)
- Intermodal Systems Development (ISD) unit performs all activities necessary for successful delivery of Scope, Staff hours estimate, and documentation of preliminary agency coordination for PDE staff to begin PDE study.

### **Filling the Gaps – Planning to Design**

- Identifying projects to go straight to design for simpler projects
- Pass the Torch for more complex projects
- Preparation of Concept Reports (Scopes and project cost estimates and Environmental decisions)
- Identify Utility information earlier
- Perform subsurface Utility Engineering

**PD&E to Design.** So an effective overlap will take place, the DPM should be designated before the completion of the PD&E project. The DPM can take an active part in the PD&E project by making an effort to attend public meetings and hearings. These events provide an excellent overview of the project and associated key issues. Figure 3, **PD&E to Design**, depicts how a project progresses from the PD&E phase to Design.

Figure 3  
PD&E to Design



The PD&E report and/or environmental documentation will contain the improvement alternatives considered, the selected alternative, anticipated socio-economic and environmental impacts, permitting issues, and projected R/W and construction costs. This information is valuable for planning and scoping a design project. The PD&E PM should consider preparing a design hand-off report that summarizes the key information from the PD&E report and clearly lists all commitments made to local government and permitting agencies, business and property owners, and any other groups. The PD&E PM should remember that PD&E projects are frequently subdivided into more than one design project. Also, gaps of several months or years often occur between the end of a PD&E project and the beginning of a design project. The PD&E PM should assemble a hand-off file containing the original Project Scoping Report, a hand-off report, and either a reference to the PD&E report or the report itself. The PD&E and DPM should meet to ensure hand-off of appropriate information.

In some cases, the PD&E phase is omitted and a project goes directly from Planning to Design. The DPM should begin building a project history file with the Project Scoping Report, environmental reports and available project conceptual information.

Projects that have not gone through the PD&E phase are in general relatively small and limited in scope, such as safety, minor capacity improvements and Resurfacing, Restoration and Rehabilitation (RRR) projects. The justification for safety projects normally includes a benefit/cost analysis. Adding project features which result in additional cost can change the original justification, so the budget should be a major consideration in the scoping process. Districts are allocated RRR funds based on a fixed amount per lane mile for resurfacing plus a limited amount for other improvements and upgrades. When these projects are scoped, clearly understanding project objectives and available funds is critical. Guidance

for scoping RRR projects is in Chapter 25, Sections 2 and 3, of **Procedure No. 625-000-007, [Plans Preparation Manual, Volume I](#)**.

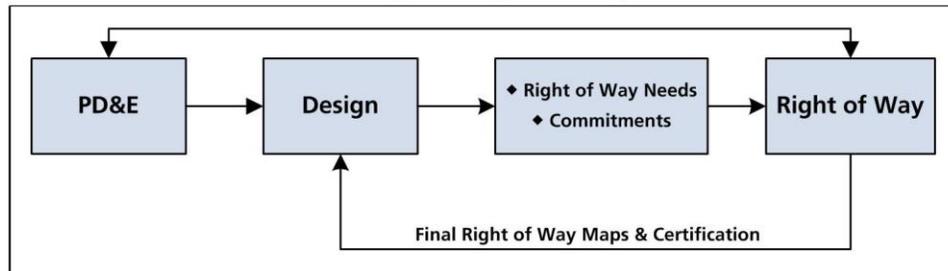
#### **Filling the Gaps – PD&E to Design**

- **Include Design PM**
- **Keep communication current between PDE and Design**
- **Project Liaisons representing various functional areas from future Design phase all involved in commitments**
  - **Project Liaisons**
  - **Environmental Liaisons**
- **Pass the Torch Meeting/Hand-Off-Meetings – end of PDE Phase**
- **Design team Members assigned to PDE study**
- **Design Unit meeting checkpoints throughout**
- **Design Unit leaders invited to PDE management meetings**
- **Field review with R/W Staff for alternative development**
- **PDE Staff included in Design Scope of Services, selection process and negotiations**
- **PDE Study – document to provide summary of items included in the Pass the Torch Agenda for the Design Phase**

**Design to R/W.** The R/W PM should be involved with a project beginning with the PD&E phase. The R/W PM must be consulted during design (and PD&E) to ensure that appropriate and realistic right of way impacts and costs are considered.

The R/W phase officially begins during the design phase. Commitments that have been made from the beginning of a project must be made available to the right of way PM. Figure 4, **Design to Right of Way**, depicts a project's progress from the design phase into the right of way phase.

Figure 4  
**Design to Right of Way**



### Filling the Gaps – Design to R/W

#### Design/Survey & Mapping to R/W & Legal

- All Districts have recognized the need for early and continuous collaboration/coordination between the various disciplines of Design and R/W in the establishment of right of way requirements to design a safe and cost effective transportation facility.
- All Districts have introduced into process some level of coordination efforts, whether formally or informally, prior to Phase II plans completion and/or the start of the final right of way map phase to ensure all disciplines are providing input into the establishment of the R/W requirements.
- All Districts recognize this collaboration/coordination must continue through the actual acquisition of the property whether negotiated or through final judgment as there will always be things that may occur and warrant R/W requirements be revised.
- Dedicated R/W-Design Support and Cost estimating Staff
- Three Opportunity Letters
- Defined Schedule Activity Phase identifying the Plans development stage where R/W requirements are deemed “final”
- Pre-Parcel Review Meeting or 210 Review – tied to Phase II Plans Review
- R/W Impact Revisions or Response to 210 Review

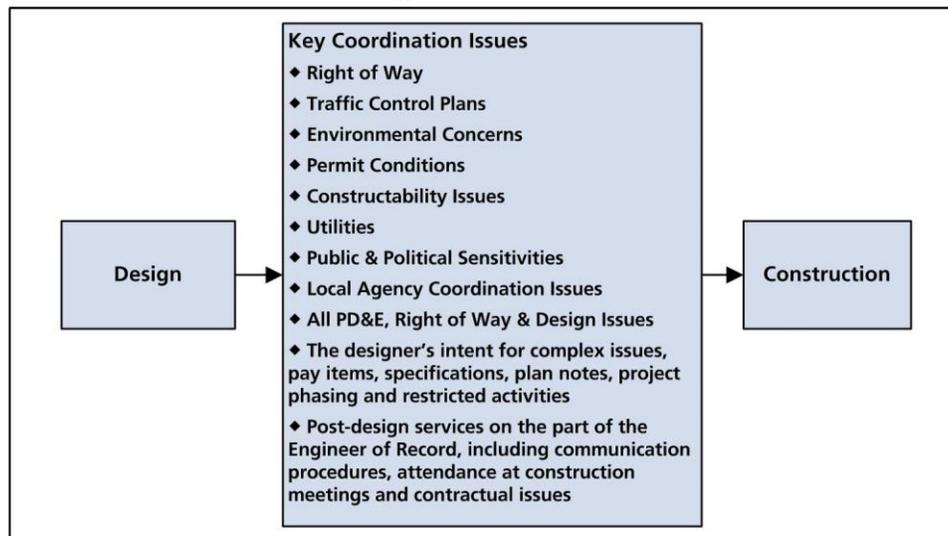
- **60% Mapping Team Meeting or Parcel by Parcel Meeting or Design Team Meeting**
- **R/W-Design Partnering Meeting or Micro Hit List Meeting**
- **R/W-Design Support Pass-the-Baton Project Summary**
- **Each district has “Hand-Off” meeting to explain past communication and detailing about specific takes.**
- **The purpose of this Hand-Off Meeting is to discuss with construction the provisions of any agreements made (including, but not limited to, Purchase Agreements, Orders of Taking, Final Judgments, License Agreements and Temporary Construction Easements) that survived title transfer and that will need to be honored by Construction.**

**R/W to Design and Construction.** During the R/W process, there must be frequent communications and careful coordination between R/W and Design. Small changes in the design can have a major R/W impact, and R/W commitments must be accounted for in the design. When appropriate, R/W commitments should be shown on the construction plans. For instance, there may have been a commitment to preserve certain trees within acquired R/W. A final meeting near the end of the R/W phase should be held to ensure that all issues have been coordinated. Construction should be part of this meeting so that all important R/W issues and commitments impacting the construction project are understood.

**Design to Construction.** The Construction PM (CPM) should be involved in the design of a project from the outset, and the DPM should continue to be involved through construction completion. The CPM should review the plans at each phase submittal to ensure that the project is constructible. The familiarity gained through these reviews will greatly aid in planning the inspection and engineering efforts required for the construction project.

Figure 5, **Design to Construction**, depicts how a project progresses from the design phase to the construction phase.

Figure 5  
**Design to Construction**



There should be a formal hand-off meeting, frequently referred to as a Pass the Torch (PTT) meeting, between the DPM and the CPM. This meeting should include the R/W PM and representatives of all appropriate support offices. Among the key issues to be coordinated are:

- R/W
- Traffic control plans
- Environmental concerns, including permit conditions and requirements
- Utilities
- Public and political sensitivities
- Local agency coordination issues
- All PD&E, R/W and design commitments
- Designer's intent for complex issues, pay items, specifications, plan notes, project phasing and restricted activities
- Post-design services on the part of the Engineer of Record, including communication procedures, attendance at construction meetings and contractual issues

## PASS THE TORCH (PTT) MEETING

The PTT is a vehicle for the Design group to formally hand a construction job over to Construction. It encourages communication across all functional groups in Florida Department of Transportation (FDOT). Ultimately, the outcome we are looking for is to eliminate unforeseen conditions on the job site, and thereby complete the job on time within budget. In order for this exercise to be successful, we need the District Project Managers (DPM) to take ownership of this process and fully participate. As the Consultant Construction Engineering and Inspection (CCEI) contact, it is critical you work closely with the DPM's to plan the meeting. The CCEI should begin contacting the responsible parties or participants at least 4 weeks prior to the PTT meeting. The PTT meeting should occur a minimum of 4 weeks prior to the pre-construction meeting and start of construction.

### PTT - LESSONS LEARNED

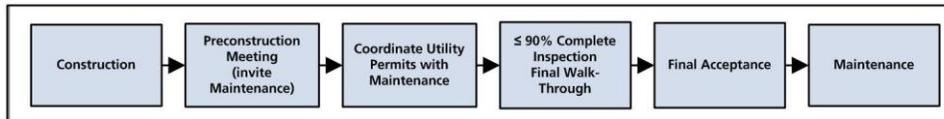
Here are some lessons learned you, as the Consultant Construction Engineer and Inspection (CCEI) contact person, should adhere to when planning the Pass the Torch Meeting:

1. Introduce yourself to the District Project Manager (DPM) as soon as possible. Work with the DPM to decide who needs to attend.
2. Once you get the list of attendees and send an invitation, follow up with a phone call and tell them exactly what you need from them. Please note: If any parcels have not been settled completely, Legal should attend as well.
3. Prior to the meeting, the CCEI shall:
  - Review the Plans and Permits.
  - Provide constructability issues to the DPM and Engineer of Record (EOR in advance for review.
  - Prepare the agenda.
4. As Chairman of the meeting, it is up to you to ask the hard questions, if answers are not forthcoming.
5. Minutes of the meeting shall be prepared and distributed to all attendees. Include Action Items in the minutes. Copy the District Construction Engineer, Operation Center Engineer, Director of Operations and Director of Production.

For reference, at the end of this chapter is District 5's PTT Agenda.

**Construction to Maintenance.** The responsible maintenance professional should be involved in a project from the design phase through the construction phase. The maintainability of a project is an important consideration for both the design PM and the construction PM. From a life-cycle perspective, maintenance costs can be a major portion of the total project cost. Expenditures during design and construction that improve maintainability reduce cost to the taxpayer in the long run. The responsible maintenance professional and the construction PM should perform an inspection of the construction project in the final stages to identify maintenance concerns that can be addressed prior to completion of the construction project. This inspection is commonly done at 90% complete or sooner. Maintenance should always be invited to participate in the final walk-through inspection before a project is accepted from the contractor. All districts have a formalized turnover process that should be followed at the completion of a project. Figure 6, **Construction to Maintenance**, depicts how a project's construction phase progresses to maintenance.

Figure 6  
**Construction to Maintenance**



**Combined Phases.** The FDOT frequently contracts for combined phases, such as PD&E and design or design-build. The hand-off between phases that have been combined may not be so well defined as is hand-off of more traditional projects, but the concepts discussed above still apply. When hand-off procedures are not well defined, both the transferring and receiving PMs must ensure that all necessary coordination has occurred and that the hand-off is well documented. Previous phase PMs must be readily available to respond on a timely basis to questions from subsequent phase PMs.

## Project Feedback

Throughout the process, the current phase PM should keep the preceding phase PMs informed of problems that have occurred, with the objective of improving future projects. Many districts have formal procedures to identify lessons learned. An effective technique is to conduct an on-site review after the project has been completed. The PD&E, design, construction and maintenance PMs should participate. The Florida Highway Patrol may also have useful suggestions. If the review is conducted after the project has been open to traffic from two to five years, the project should still be fresh in the minds of those involved in its development; and maintenance and enforcement personnel will have gained some experience with the project. This review team should evaluate project development, design and construction and recommend

procedures to enhance performance on future projects. Regardless of the technique used, a lesson is not learned until procedural changes actually take place.

## **Project Management Team Approach**

One strategy to help ensure a more effective hand-off at each phase is the project management team approach. This approach involves designating the likely PMs for all phases of a project, from planning (if appropriate) through PD&E, design, right of way, construction and maintenance. For major projects in their early stages, there probably will be changes in future phase PMs. Nevertheless, this approach ensures that there is always one designated person who will be responsible for each phase of the project. The chairperson of this team should be the PM of the current phase. This approach will be most effective if all PMs stay with the team throughout the project life. PMs from early phases will be available to answer questions about history of the project, and PMs for future phases will be aware of a project as it progresses from phase to phase.

A major concern about this approach is the time that may be required of PMs with other responsibilities. Using project management teams on large and complex projects only can minimize time demands. Frequent meetings of the team are not necessary. Monthly or quarterly team meetings may be sufficient. Much coordination can be accomplished by e-mail. As one phase comes to an end, the involvement of the next PM will increase. The value of the project management team approach is that a designated individual represents each project phase throughout the project.

## **PM Changes**

**FDOT PM.** FDOT projects last for several months or even years. Individuals get promoted or transferred, retire or leave the organization. Project continuity is a serious concern when there is a PM change during an active project phase. PMs should keep in mind that they may not finish a project. Therefore, project documentation should be maintained in a manner that will make it easy for a successor to take over. Least project interruption occurs when the PM has been diligent about developing a solid Project Work Plan and keeping it current (see Part I, Chapter 3, of this handbook), documenting all important activities and decisions, and ensuring that the project files are current, complete and accurate. It is good business to manage a project as if someone else will take it over next week.

As soon as a PM knows that they will be leaving a project, the supervisor should be notified and the project records updated. The new PM should be designated as quickly as possible to maximize overlap time of the two PMs. The Project

Work Plan is a good checklist for briefing the new PM on key project issues. Every PM develops a list of personal contacts necessary to conduct project business. This list should be shared with the new PM and personal introductions made. The consultant PM should be notified promptly of the pending change, and the new PM should establish a positive working relationship with the consultant as quickly as possible.

**Consultant PM.** Consultant PM changes in should be handled very carefully since it is likely that the consultant firm was selected in large part on the qualifications of the PM. Therefore, a change in PM has contractual implications. The consultant firm should make every practical attempt to avoid such a change. When it cannot be avoided, the FDOT PM should be notified of the situation immediately. This notification should include a proposed replacement (with qualifications equal to or exceeding those of the original PM) for approval by the FDOT. In addition, the firm should propose a transition plan, developed with the objective of minimizing negative impact to the project. The notification, name of nominated replacement and transition plan should be from the firm's principal in charge of the project.

## **Sample PTT Meeting AGENDA (District 5)**

1. Parcel by parcel discussion
  - Construction commitments
  - Contact Information
  - Encroachments
  - Uneconomic Remainders
  - ODA issues
  - Owner concerns/Difficulties
  - Negotiation/Litigation status
  - Cure plans/Right of Entry agreements
  - Access issues
  - Plan notes
  - Utility issues
  - Demolition status/Improvements left for clearing and grubbing
  - Environmental/contamination issues
  - Fencing and livestock control
2. Driveway Modifications & Property Owner Coordination
3. Utilities:
  - Update on utility relocation status
  - Joint Project Agreements
4. Non-Utility Joint Project Agreements i.e., like landscaping, street lighting
5. Discuss EOR post design services availability – Methods for dealing with RFIs
6. Environmental concerns
  - Review environmental permits with the EOR
  - Discuss implementation of the Erosion Control Plan
7. Local Funds and Funding Agreements
8. Transfer of hard copy documents (commitment sheets on each parcel, right of entries, deed with special conditions, easements, final judgments, aerial photos, right of way maps)
9. Customer satisfaction survey