The Douglas County Internal Audit Division (DCIAD)

Special Report
2006/ 2007 - 04

Review of Construction in Progress (CIP)

Tom Doyle
Douglas County Engineer
15505 West Maple Road
Omaha, Nebraska 68116-5173

Mr. Tom Doyle
Douglas County Engineer

We have reviewed the Construction in Progress (CIP) process in the Douglas County Engineer Department. The period of the review was December 21, 2004 through January 15, 2006. The review was conducted in accordance with Standards for the Professional Practice of Internal Auditing (IIA). The review included examining, on a test basis, evidence supporting the CIP process including expenditures and performing other procedures we considered necessary to support findings and recommendations.

The purpose of this report is to describe the results of our testing, including internal controls and compliance, and not to provide an opinion on the internal controls or compliance.

This report is intended solely for the information and use of the Department. However, this report is a matter of public record and its distribution is not limited.

Ms. Carmen Harmon
Internal Audit Division, Supervisor

Executive Summary

A construction-in-progress asset is an asset you construct over time. You create and maintain your CIP asset as you spend money for raw materials and labor to construct them. Since a CIP asset is not yet in use, it does not depreciate. When you finish building the CIP asset, you can place it in service and, if appropriate, begin depreciating it.

Finding # 1:

There was no written information provided to outline the steps of the CIP process, from start to finish, within the County Engineer Department. Subsequently it was determined the County Engineer does not maintain comprehensive written policies and procedures for the Construction in Progress process.

Finding # 2:

County Engineer personnel assign a project number to each job under consideration for tracking purposes. The Douglas County Engineer does not have any written policy or procedure for assigning a project number, including who is responsible to assign a project number, to a job when a project is created.

Finding # 3:

DCIAD was unable to locate an Interlocal Agreement between the County and SID 405 specifically mentioning Project No. C-28(352). Without an updated resolution, specifically mentioning project C-28(352) it would be difficult for the County Board to give deliberate approval for the project.

Finding # 4:

DCIAD was unable to determine if the design process, especially making a determination to outsource the design process, was uniform and/or reasonable since there are no written procedures or policies guiding the process.

Finding # 5:

Estimated budgeted costs of the two projects tracked were significantly lower than actual costs.

Finding # 6:

Construction in progress costs are presented in stages to the County Board for approval. This process makes it difficult for the Board to follow the accumulated cost of a project.

Finding # 7:

The County Engineer does not aggregate any budgeted to actual data on construction projects.

Finding # 8:

The County Engineers office processes CIP invoices, and authorizes change orders for projects, before Board authorization has been obtained.

Finding # 9:

Douglas County totally finances a number of road construction projects for extended periods of time before requiring payment from participating political subdivisions.

Review Scope and Objectives

The scope of this review will test the design and operating effectiveness of internal controls related to the construction in progress (CIP) account. The review will also include an examination of applicable policies, procedures, state statutes, and standards governing, (1) New Projects, (2) Completed Projects and (3) Continuing Projects. The review will be coordinated and conducted with selected management staff, at the DC Engineer Department.

Background Construction in Progress

Each year the County contracts with an external independent auditor to audit the basic financial statements of Douglas County, Nebraska. At the conclusion of that process the Douglas County Clerk/Comptrollers office issues a report, the Comprehensive Annual Financial Report (CAFR). The report for Fiscal Year ended June 30, 2004 was issued on December 10, 2004. The report contains a letter from the Douglas County independent external auditor, KPMG, LLP, to the Board of Commissioners explaining that during the audit they noted "*certain matters involving internal control and other operational matters, for consideration.*" The report states that, "*comments and recommendations, all of which have been discussed with the appropriate members of management, are intended to improve internal control or result in other operating efficiencies."*

Under the report comment for *Capitalized Assets*, the independent auditors explained the, "*County utilizes a fixed asset module to track its capitalized assets. Similar assets are recorded in the fixed asset module system with varying depreciable lives. To ensure capitalized assets, including infrastructure and* ***construction in progress,*** *are completed and accurately recorded we recommend the County continue to develop and refine its current process taking into consideration the following items,:*

- Develop monthly procedures to reduce the significant investment of time required at year-end and to help the County identify problems in a timely manner;
- Implement appropriate reconciliation and review procedures;
- Refine **construction in progress** procedures to ensure new additions, and projects completed and closed to infrastructure, are accurately identified and reported;
- Communicate policies and procedures to departments to ensure they understand their respective duties and responsibilities.

Douglas County Management response to these comments was, "*Management concurs with this recommendation. Monthly procedures/reconciliations have been put in place. Work is being done to refine* ***construction in progress*** *procedures, and to communicate procedures to departments."*

A construction-in-progress asset is an asset you construct over time. You create and maintain your CIP asset as you spend money for raw materials and labor to construct them. Since a CIP asset is not yet in use, it does not depreciate. When you finish building the CIP asset, you can place it in service and, if appropriate, begin depreciating it.

The following table illustrates Construction in Progress totals for Douglas County from FY 2003 through FY 2006.

Table 1	2003	2004	2005	2006
Construction in Progress	$ 68,617,000.	$ 89,078,000.	$ 22,830,000.	$12, 170,000.

Information in Table 1 obtained from 2004, 2005, 2006
Comprehensive Annual Financial Report for Douglas County

In 2005 Douglas County's Construction in Progress decreased by $66.2 million as a result of the $40 million Corrections addition and renovation project and the $21 million public safety communications project nearing completion.

Many government organizations are reviewing their systems of internal control over CIP to strengthen weaknesses in financial reporting, reduce the organization's exposure to misstatement of assets and mitigate operational risks. So, in addition to the changes outlined above a review of infrastructure **Construction in Progress**, in the Douglas County Engineers Office, was added to the 2005/2006 Douglas County Internal Audit Division schedule. This assignment was carried over to the 2006/2007 fiscal year to allow DCIAD to follow a construction project through to completion.

The Douglas County Engineer is an elected partisan position with a four year term of office. The elected official must be a licensed engineer. Nebraska state law *(Neb.Rev.Stat.§39-1506)* also designates the County Engineer in Douglas County as the Highway Superintendent. Nebraska state law, *(Neb.Rev.Stat.§23-1901)*, defines the duties for the County Engineer. The Douglas County Engineer's Office employs approximately 70 people and is responsible for:

- Preparing the Six Year Highway Improvement Plan (SYHIP). The SYHIP is a publication of proposed road improvements for Douglas County.

- Construction of roadway improvement projects, as approved by the Board of Commissioners, including design, advertisement, bid letting, recommendation for contract award, and project construction management.

- Issuing right-of-way permits for the following:
  - Construction of driveways, field entrances, streets, and public roads on County right-of-way
  - Over-weight / over-width permits

- County road right-of-way usage for miscellaneous purposes

- Supervision of the following divisions:
    - **Highway & Maintenance Division**: provides for the roadway maintenance, traffic signing/striping, and snow removal.
    - **Survey Division**: establishes and perpetuates public section corners, roadway improvement surveys, construction staking and maintaining of survey records. The Division is also responsible for the implementation of the City/County Geographic Information System (GIS).
    - **Engineering and Traffic Planning Division** provides for drafting, engineering design, bridge inspection and review of surveys, and proposed roadway design of improvements on the public right-of-way. The traffic engineering group provides technical assistance to Sanitary Improvement Districts (SID), performs traffic and speed studies, and installs approved traffic devices, at the SID's expense, with the approval of the County board.

Construction Division provides construction, inspection, and administration to support construction projects.

DCIAD also verified there are several relevant state statutes controlling the office of County Engineer. After reviewing all controlling statutes we concluded there are two key statutes governing the office. The Douglas County Engineer is an elected partisan position with a four year term of office. The elected official must be a licensed engineer. Nebraska state law *(Neb.Rev.Stat.§39-1506)* also designates the County Engineer in Douglas County as the Highway Superintendent. Nebraska state law, *(Neb.Rev.Stat.§ 23-1901),* defines the duties for the County Engineer

An entrance meeting was held December 21, 2004 with personnel from the Douglas County Engineers Department.

Prior to the meeting, DCIAD requested written policies and procedures for fixed assets and construction in progress projects from the County Engineer Department. No written policies and procedures were provided at the entrance meeting. In response to a formal written request, dated March 14, 2005, the Department provided a memo from Mary Reichmuth describing the basic steps the Department follows for each project.

Later in the review process, a copy of the publication; *Standard Specification for Highway Construction, Douglas County Nebraska*, adopted by County Board Resolution dated September 26, 2000, was provided to DCIAD as a controlling document over construction projects. This manual explains the general requirements and covenants guiding the construction process once a determination is made to issue a contract. It does not outline procedures prior to the determination to issue a contract and it does not explain any of the procedures or policies within the Engineers office.

Finding #1
There was no written information provided to outline the steps of the CIP process, from start to finish, within the County Engineer Department. Subsequently it was determined the County Engineer does not maintain comprehensive written policies and procedures for the Construction in Progress process.

Recommendation
The County Engineer is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, and contracts. The County Engineer Department could help ensure adherence to office practices, especially with future personnel, by preparing written policies and procedures for office practices, including the Construction in Progress process. Without formal written policies and procedures DCIAD is unable to adequately assess internal controls over office practices.

Management Response:
Noted

To determine CIP process flow, DCIAD chose two projects to follow from origination to completion. One project, C-28(352), was chosen because it was new construction and would be booked as a fixed asset. The second project, C-28(448), was an asphalt paving project that would not be booked as a fixed asset. Tracking these projects allowed DCIAD to learn process flow from origination to completion and track the project through documentation, at the Engineers office, and on the Oracle system.

During the entrance meeting, Douglas County Engineer staff stated, "different personnel have assigned project numbers and no written procedures have been developed to assure consistency of the process."

Finding # 2

County Engineer personnel assign a project number to each job under consideration for tracking purposes. The Douglas County Engineer does not have any written policy or procedure for assigning a project number, including who is responsible to assign a project number, to a job when a project is created.

Recommendation

To help ensure standardization in the assigning of a project number to a construction job and an awareness of the acceptable process by all personnel, including future personnel, the Douglas County Engineer should establish, and maintain, written policies and procedures for assigning CIP project numbers.

Management Response:
Project Numbers are assigned by the Engineering Manager.

After assigning an internal project number, either a C (construction)-28 number, or an SP (special project) number and an Oracle project number, the project enters the design phase of the process.

The County Engineer employs one design engineer, as well as several draftsmen and design technicians to design projects as assigned. If a project is larger than current staff levels can accommodate, or more complicated than current staff capabilities can provide, the project is outsourced to a private sector design firm. Estimated total cost of the project, and inclusion of federal funds, are also considered when deciding whether or not to use a private sector outside design firm.

Some SID projects already include design plans from a developers engineering firm. In these cases the costs for design are shared by the County and the participating political subdivision according to the agreed upon percentages of obligation in an Interlocal Agreement approved by the County Engineer and the SID. Interlocal Agreements must be approved by the County Board in a resolution.

DCIAD requested a copy of the Interlocal Agreement for project C-28(352) from the County Engineers office. Several requests were made in an attempt to locate an Interlocal Agreement. An agreement from 1999 was presented as the Interlocal Agreement governing the project. The 1999 Interlocal Agreement did not mention Project No.C-28(352) specifically.

Finding # 3

DCIAD was unable to locate an Interlocal Agreement between the County and SID 405 specifically mentioning Project No. C-28(352). Without an updated resolution, specifically mentioning project C-28(352) it would be difficult for the County Board to give deliberate approval for the project.

Recommendation:

The County Engineer should implement more timely Interlocal Agreements, containing specific project data and updated cost allocations, to ensure the County Board is notified of appropriate construction project information.

Management Response:

We will work on this to clarify projects to the County Board.

Finding #4

DCIAD was unable to determine if the design process, especially making a determination to outsource the design process, was uniform and/or reasonable since there are no written procedures or policies guiding the process.

Recommendation:
The County Engineer needs to document the project design process to help current, and future employees, understand the intricacies of design process determinations. A periodic assessment of outsourcing practices, including an analysis of distribution of design costs, could determine if current practices employ the best use of resources.

Management Response:
We will look in to this.

Douglas County Board approval is required for all construction projects. The County Engineer submits a Six Year Highway Improvement Plan (SYHIP) to the County Board for approval of construction projects under consideration. Each project in the Six Year Plan is submitted on a form, developed by the Board of Public Roads Classifications and Standards. The form includes a location description, **estimated costs**, **subdivision cost responsibility**, and a Project Number. The County Board decides if the plan is in conformance with the Douglas County Comprehensive Development Plan. If the SYHIP is determined to be in conformance, the plan is approved as submitted. Copies of the Six Year Highway Improvement Plan are available on the Engineers website.

In the SYHIP, dated July 1, 2004 and approved by the County Board, the estimated total cost for project C-28 (352), the fixed asset project track by DCIAD, was $1,010,000.00 dollars. The final cost of this project was $3,100,000.00 dollars. (see attachment # 1, Chart #1)

In the July 1, 2004, Summary of One-Year Plan, issued by the County Engineer and approved by the County Board, the estimated approved total cost of C-28 (448), the project chosen by DCIAD to track a non-fixed asset project, was $860,000.00 dollars. The final cost of this project was $1,581,805.00 dollars. (see attachment #1, Chart # 2)

Neb.Rev.Stat.§23-1901, Sec.(d) requires the Engineer to "*make a report in writing to the County Board with a statement in regard to whether the same comply with the plans, specifications, and detail drawings of the County Board prepared for such work or improvements and under which the contract was let.*"

Finding # 5

Estimated budgeted costs of the two projects tracked were significantly lower than actual costs.

Recommendation:

Based on our limited review of project budgets it would appear that the County Engineer's cost-estimating procedures could be improved.

Management Response:

The SYHIP is not a budgeting tool. Projects are budgeted by fiscal year.

Finding # 6

Construction in progress costs are presented in stages to the County Board for approval. This process makes it difficult for the Board to follow the accumulated cost of a project.

Recommendation:

Neb. Rev.Stat.§ 23-1901, Section(d) requires the County Engineer to issue a report to the County Board regarding whether actual construction complied with planned construction.

To enhance accountability and clarify accumulated CIP actual costs the County Engineer should present accumulated cost data, including original budget estimates in their compliance report to the County Board.

Management Response:
We will explore Oracle reports for this purpose.

Finding # 7
The County Engineer does not aggregate any budgeted to actual data on construction projects.

Recommendation:
The County Engineers Office should work with Oracle staff, and the County Clerk Finance Division, to determine the report capabilities of the system and utilize the system to produce regular reports, such as budgeted to actual and a cost allocation summary, for the CIP process. This information would be helpful internally for estimating future projects. The information could also be periodically presented to the County Board to fulfill reporting requirements comparing budgeted to actual costs, and a cost allocation summary, of an approved project.

Management Response:
We will explore Oracle reports for this purpose.

Nebraska Revised State Statute § 23-1901 establishes the qualifications, powers and duties for County Engineer. In Neb.Rev.Stat. §23-1901,(e), the statute requires the County Engineer to," have charge and general supervision of work or improvements *authorized by the county board,* inspect all materials, direct the work, and make a report of each piece of work to the county board."

DCIAD has provided a flow chart of the CIP process (see attachment 2, Chart # 3) prior to construction. The flow chart highlights several stages of the process that require County Board authorization to initiate or complete.

During our review we noted several exceptions when invoices were paid prior to a County Board resolution authorizing payment.

The County Board authorized the Chairman to execute an Interlocal Agreement for Project C-28(326) on July 26, 2000. Invoices in the amount of $76, 901.25 were paid prior to the resolution.

The County Board authorized Project No.C-28(415) in the One and Six Year Highway Improvement Program, FY 2003 to FY 2008 on June 18, 2002. An invoice for $5884.85 was paid to Batheja & Associates on June 17, 2002.

County Engineer staff explained that exceptions, or modifications, were needed to prevent delay during the CIP process.

In a memo to DCIAD, County Engineer staff admitted that change orders are accumulated and, *"at the end of a project, we will send a resolution to the Board to approve the increased cost over the approved amount."*

While state law requires authorization by the County Board it does not specify whether the authorization is required before the authorized action begins.

Finding # 8
The County Engineers office processes CIP invoices, and authorizes change orders for projects, before Board authorization has been obtained.

Recommendation
The County Engineers Office should seek written authorization for exceptions, or modifications, to customary County Board and County Purchasing Department policies. The County Engineers Office should also work with the County Clerks Finance Division to determine if the resolution number should be provided when invoices are submitted for payment. At a convenient time, further clarification in state law, allowing commencement of CIP projects before County Board authorization, would be helpful.

Management Response:
Past and current practice has been to allow costs to exceed bids by 10% provided funds are available in the budget.

Many construction projects require Interlocal Agreements between the County and other impacted political subdivisions. Costs for the projects are allocated to participating political subdivisions according to the agreed upon percentages. Current practice requires the lead subdivision, the subdivision that assumes the largest portion of the total costs, accumulate all costs and bill other participating subdivisions after project completion. This method of financing road projects obligates Douglas County to carry a large portion of the costs of a project for the entire construction phase of a project.

Finding # 9

Douglas County totally finances a number of road construction projects for extended periods of time before requiring payment from participating political subdivisions.

Recommendation:

An analysis of current construction financing should be conducted to determine if Douglas County is using the most cost effective method to finance road construction costs.

Management Response:

We will review our current procedure.

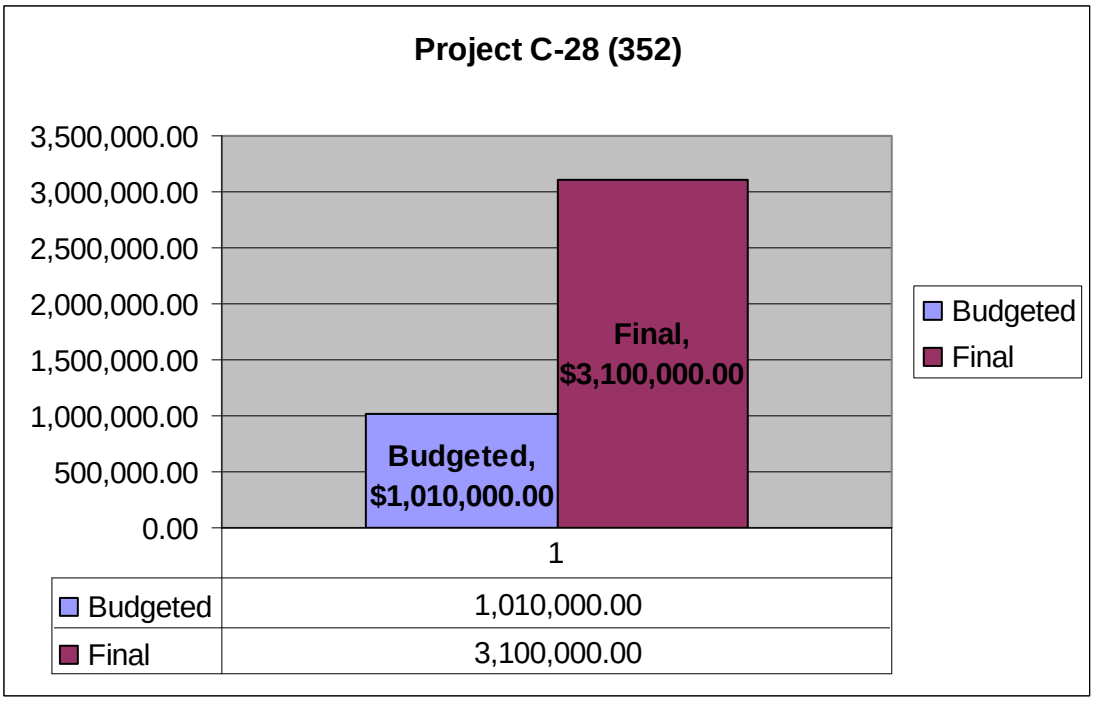

Chart # 1

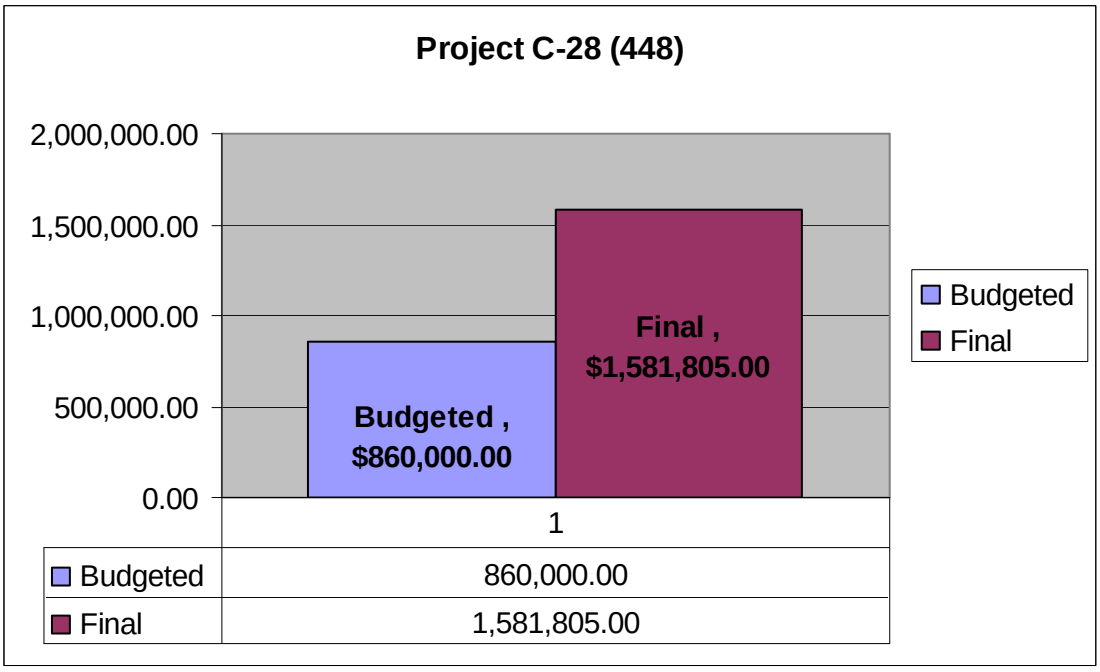

Chart #2

Attachment # 1

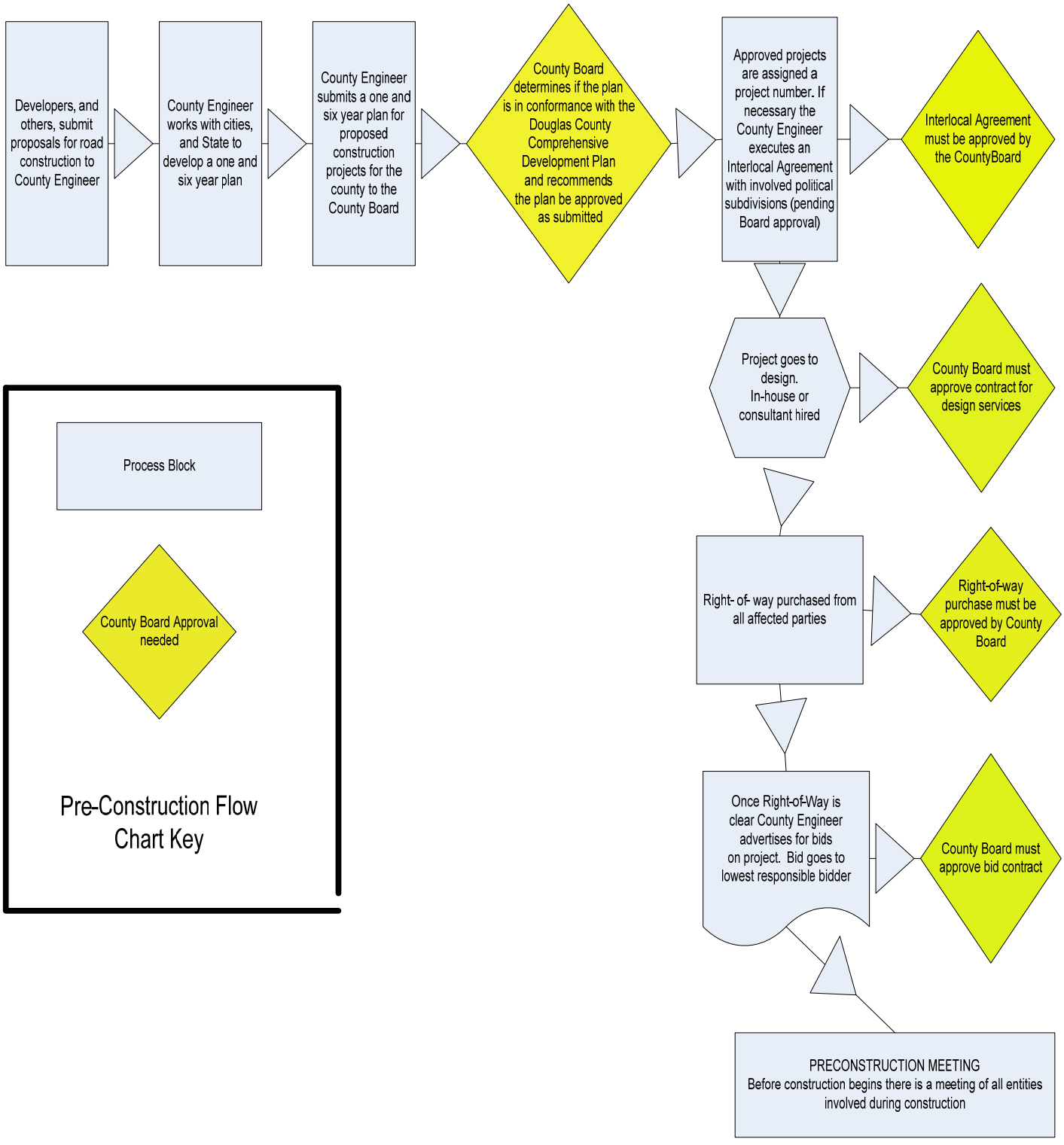

Chart # 3

Attachment # 2