Pennsylvania’s Separations Act
Recognizing and Addressing the Limitations of the Multiple-Prime Delivery System

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Introduction

In Pennsylvania, when public Owners want to build, the Separations Act, 71 P.S. §1618, requires them to use a multiple-prime project delivery system and each of these prime construction contracts must be competitively bid. This paper will not focus on whether Pennsylvania’s Separation Act should be changed; just like the Geico Insurance commercial, “Everyone knows that.” Instead, this paper will assume that for the immediate future this law will remain in place, just as it has for the past one hundred years. Consequently, Public Owners need to manage their multiple prime construction projects the best way possible. This paper will address how this required project delivery system works, its limitations and will identify some key considerations in trying to improve project performance on a multiple-prime project.

The Separations Act

Pennsylvania’s Separations Act provides:

Hereafter in the preparation of specifications for the erection, construction, and alteration of any public building, when the entire cost of such work shall exceed four thousand dollars, it shall be the duty of the architect, engineer, or other person preparing such specifications, to prepare separate specifications for the plumbing, heating, ventilating, and electrical work; and it shall be the duty of the person or persons authorized to enter into contracts for the erection, construction, or alteration of such public buildings to receive separate bids upon each of the said branches of work, and to award the contract for the same to the lowest responsible bidder for each of said branches.

The Act of May 1, 1913 (P.L. 155, No. 104), 53 P.S. §1003 (Municipal) and 71 P.S. §1618 (State).

Since the Separations Act became law in 1913, except for a limited number of exceptions, Pennsylvania’s public projects have been constructed utilizing a multiple-prime delivery system; which necessarily means a system without a General Contractor. In essence, the Separations Act compels the Owner to serve as its own General Contractor.

The Fiction of Project Savings

The Concerned Contractors of Pennsylvania, an advocacy group organized to protect and promote the rights of plumbing, electrical, HVAC and general contractors, has the stated mission to “shed light on unfair and needlessly expensive bidding practices.”
The Concerned Contractors of Pennsylvania has published a “Fact Sheet” that identifies the purpose of the Separations Act as follows:

This assures a cleaner and less expensive process of spending taxpayer dollars. Multiple prime contracts prevent the taxpayer from paying for unnecessary mark up of subcontractor’s prices. It also provides an opportunity for small and local contractors to bid on projects directly to the public body. The work is awarded based on low bid and is free of personal interest, bias, and prejudice.

(www.concernedcontractors.com/Seprations_act_FACT_SHEET.docx)

The “logic” behind this mandated contractual format from the Owner’s side is a cost savings due to the Owner directly controlling the entities performing the work thereby eliminating a layer of mark-up that produces a better price. However, these savings are in many instances illusory due to the management void left by the absence of a General Contractor; weakening the Owner’s ability to control the work, resulting in less efficient and in turn more costly work execution. Management and coordination of the work of the Prime Contractors is essential to the success of a project. Because of this it is not a simple task to fill this void. Not only must management and coordination be performed by a competent party, that party must have tools other than the language of the contracts to implement and enforce its management efforts. In the typical project where the General Contractor holds the contracts, the General Contractor controls payment. Having control of payments has proven to be one of the most effective means of enforcing discipline. The Owner must pay to fill the management void, further adding to project costs and often the party called upon to fill the void is powerless because it does not control the payments.

**The Reality of Reduced Collaboration**

In an industry racing towards a more collaborative construction process, the requirement of a design, bid, build process with separate prime contractors directly contradicts everything the industry has learned, viz., that collaboration and early involvement of the contractor in the design process produces a project that is more efficient, has less conflict and has a design that is more constructible and value engineered.

Constructability, schedule and budget are improved through collaboration. Collaboration, like coordination, is the traditional “management tool” of the General Contractor when dealing with its subcontractors and separately its “client,” the Owner. Conversely, separately contracting with major trade contractors delays contractor input and dilutes the effectiveness of that input because the primes have only the Owner to answer to and are, therefore, self-focused instead of project-focused. This of course can have an adverse effect on developing and implementing a constructible design, developing and maintaining an integrated construction schedule, and cooperation among the primes; all of which typically results in more efficient and less costly construction.

A necessary evil of the design, bid, build process is a lack of collaboration. Even if the Public Owner spends significant time working with an Architect to develop the project
design, because of the hard bid requirement, none of the Contractors see the plans for the project prior to receiving them as part of their bid packages. This evil is compounded in the multi-prime scenario because the Owner loses the collaboration between trade contractors that is usually fostered by using a General Contractor.

On a multiple-prime project, the Prime Contractors’ primary focus during pre-bid plan review is to assess overall project requirements and calculate quantities to determine the amount of their bid. Assessing constructability and potential opportunities for value engineering are not the primary focus of the primes; to the extent this occurs, it is done without active collaboration with the Architect. The primes may communicate with the designer by submitting Requests For Information (“RFIs”), but this is less beneficial than having working sessions with the Architect. Besides, the RFIs are typically focused on clarifications needed to calculate individual bid estimates and not on design or coordination issues that could be in the best interest of the project. Lastly, because this occurs during the bid process, the primes may not want to educate the other bidders regarding their thinking by seeking a public clarification of an issue. Consequently, the Owner will likely lose the benefit of obtaining the best ideas for its project.

**Lack of Familiarity Breeds Contempt**

On a multiple-prime project, the Owner and primes do not know who will comprise the project team until all of the primes have been awarded contracts. Unlike a General Contractor who typically has a stable group of “go to” subs, multi-prime project members may not even know the other primes and may have never worked with one or more of them. Even worse, the primes may know but dislike one another and/or may compete with them for work on other projects. It is like some odd type of pick-up game. At a minimum, the Owner is trying to get at least four (4) independent companies to work together without the unifying force of a General Contractor. This clearly introduces a level of confusion. This level of confusion and uncertainty will often drive bid prices up.

**Effect on the Early Stages of the Project**

Consider the difference in the first three months after the issuance of a notice to proceed between spending those three months having the Architect and the Contractor collaborating to complete the design versus spending those three months with each trade contractor focused on their own needs. In a single prime collaborative delivery system, at the time of the notice to proceed, the constructability and value engineering reviews have already taken place, the Contractor has had adequate opportunity to understand and appreciate what the Architect is requiring and, perhaps as significantly, the Contractor and Architect have begun working together as a team.

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1 An interesting study would be whether accident rates are higher on a project being built using the multiple prime delivery system; since the project participants may not be used to working together and there is no unified project safety program. Whatever safety program is put in place, it will be the Owner’s responsibility to oversee that program.
On design-bid-build projects, the Contractor has reviewed the design for bidding purposes but has not been involved in the development or refinement of the design. Since the Contractor is new to the design, it is not until after the bids have been submitted and the lowest responsible bidder selected that the designer and Contractor can even begin to work together. The problems caused by this lack of collaboration are magnified on a multiple-prime project. The “lowest responsible bidder” is oftentimes neither the most qualified Contractor nor the one who can build the project for the least amount of money. The lowest responsible bidder is simply the contractor who met the minimum qualifications required and submitted the lowest bid.

At the same time that the Contractor is just becoming familiar with the design, the Contractor is being directed to proceed with the work. Almost without exception, his contract contains language declaring that “time is of the essence”. He is typically in a hurry. Permits are being issued at a time when the Contractor and Architect have not necessarily reached a consensus on what performance is required by the drawings and specifications. If value engineering is even going to be considered, it has to done at the same time that the Contractor is performing a constructability review of the design. The prime Contractors have reviewed their part of the design for their own limited purposes but are new to the overall design of the project and new to working with the other primes.

The multiple-prime delivery system often produces an us-versus-them interaction. A successful project for one prime can occur even if the overall project is not a success. The single focus of a General Contractor working toward the success of the entire project is replaced with the “me first” focus of each project participant working toward individual success.

Consider how creating separate bid packages and separately contracting with the four major trades exacerbates the problems engendered by hard bidding the project. The shortened design and constructability review time is combined with the fact that none of the primes are charged with the responsibility of conducting an overall review of the project design. Even so, it is not uncommon for one of the Prime Contractors, for example the mechanical contractor to be required to produce “coordinated” drawings showing the mechanical, electrical and fire prevention systems. The fragmented assignment of responsibility can easily result in clashes in the field that should have been addressed before construction began. It is cheaper and quicker to move a wall on a drawing than it is in the field.

Management Tip #1:

Although construction drawings have already been issued, the Owner should require the primes to meet with the Architect to discuss and review the design. Time is needed for the Designer and the Contractors to get on the same page. The pre-construction conference is no substitute for these design review meetings.

Absence of Leadership

The multiple-prime delivery system establishes a group of equals that owe no
loyalty to one another. The work has been separated into distinct bid packages according to the trades and separately awarded to each of the trades by individual prime contracts. These primes prepare for the work individually and then the Owner directs the work to commence. In a collection of equals who will lead? Some Owners try to address this absence of leadership by designating the general trades contractor as the “lead” contractor and/or by hiring a Construction Manager.

A construction project must have a leader. There must be clear lines of authority with a decision-maker who speaks with one voice. There are too many competing interests to try to run a project by committee. The need for leadership is compounded by the fact that many public projects are subject to the authority of a board of supervisors or a school board. These boards must balance competing interests and reach a consensus in order to make decisions. Decision making by committee is difficult at best. Combine the limitations of governance by committee with a multiple-prime delivery system and you have the perfect recipe for disputes and poor project performance.

The desired effect of using the multiple-prime delivery system is that all trades have a direct relationship with the Owner without anyone between the primes and the Owner. In a multi-prime delivery system the Owner is the hub of the wheel. All power flows out from the Owner directly to the trade contractors without the interference of an intermediary. This system establishes that it is the Owner’s responsibility to control the project even though the Owner may not be the best party to take on this challenge. Contrast this with a single prime project where project control is contracted over to a General Contractor who takes on overall project responsibility. On a multiple-prime project, the Owner has overall project responsibility, which cannot be contracted away or delegated in any meaningful fashion.

Based on how the contracts are set up on a multiple-prime project, with the Owner directly contracting with all of the trades, the Owner is left to manage its own project and fill the role of project/construction manager. Unfortunately, public Owners are generally not equipped to fill this role. The public Owner may employ someone who acts as a clerk of the works, i.e., someone acting as both a witness to what is occurring in the field and as the conduit for supplying information to the public Owner’s decision makers. Unfortunately an in-house clerk of the works oftentimes lacks the skill set necessary to provide true construction management.

The ideal situation would be for the Owner to have an in-house construction staff that is able to provide the necessary construction management services. This would supply the Owner with the needed leadership and services and unmistakably indicate that the construction management team’s actions have the full endorsement of the Owner. Also, the in-house team knows what the Owner needs and wants. However, with in-house construction departments getting smaller or being eliminated, most Owners do not have the capacity to provide the needed construction management services and these services need to be outsourced.

Outsourcing Project Leadership
This gap between what is needed and what the public Owner can provide is oftentimes addressed by hiring a Construction Manager. A Construction Manager is an independent professional who directly contracts with the Owner and is usually retained during the early stages of design. The Construction Manager is generally paid a percentage of the cost of the work and has the responsibility for scheduling and managing the work of the multiple primes. In today’s economy, with a large percentage of contractors struggling to find work, many general contractors also provide services as Construction Managers.

**Construction Managers Provide Professional Services**

One advantage the Owner has in using a Construction Manager is that the Construction Manager’s services are considered professional services and therefore, the Owner is able to directly hire the Construction Manager without having to competitively bid the work. This is also true of the project architect. However, if the Construction Manager is to also perform construction services, the Owner could not hire him directly because a contract for construction is subject to the Separations Act and its competitive bidding requirements.

If a company is providing construction services, it cannot also function as an independent advisor to the Owner. Due to the requirements of the Separations Act, the Construction Manager cannot have any of the four (4) main trade contractors under contract to it because this would cause that trade contractor to not be prime, i.e., to not have a direct contract with the Owner, and would instead be a subcontractor. Consequently, the Construction Manager’s services as the Owner’s advisor can only be considered professional services if he does not perform any construction services.

**The Authority of the Construction Manager**

A Construction Manager advisor functions as a clerk of the works or an extension of the Owner’s staff but with a more developed skill set. During the design phase, the Construction Manager can provide cost estimating, develop the construction schedule, and provide input regarding constructability, and the allocation of work among the prime contractors. During construction, the Construction Manager can observe the work, help manage the work of the prime contractors, and report on project status to the Owner.

Where the limitations of the control exercised by the Construction Manager are most evident is when the Construction Manager interacts with the Prime Contractors. The Construction Manager must act with the concurrence of the Owner. For this reason, Owners need to work closely with and support their Construction Manager in order to maximize his effectiveness. Nonetheless, the Construction Manager is, at best, only a representative of the Owner. Although the Construction Manager is typically required to make recommendations to the Owner, the Construction Manager does not have the power to terminate a Contractor, grant change orders, hold up payment, grant extensions of time,

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compel performance, or re-sequence work. Like a public school teacher, they can yell but cannot hit.

Compare the power of the Construction Manager advisor to the power of a General Contractor. If the General Contractor is dissatisfied with the services of a subcontractor, the General Contractor can terminate the subcontractor’s contract, withhold compensation, and/or direct them to correct or accelerate their work. If a General Contractor needs the subcontractor to perform work out of sequence, the General Contractor, as master of means, methods and the construction schedule, can compel the subcontractor’s performance. The General Contractor can both punish and reward.

A Construction Manager speaks most forcefully when he speaks as the authorized representative of the Owner. The Construction Manager has no purse. It is only as the Owner’s representative that the Construction Manager is able to convince the prime contractors that he must be obeyed or there will be a negative economic impact.

**Designating the General Trades Contractor as the Lead Contractor**

Owners will sometimes assign one trade contractor to act as the “lead” contractor with responsibility to coordinate the work of the other trade contractors and to manage the project schedule. Often this is an impossible task. The lead contractor has the same limited powers as a Construction Manager but lacks the ability to claim that he functions as the representative of the Owner. His own interests in performing his scope of work conflicts with his assigned role of managing the work of the other Contractors. Since the lead Contractor is not the Owner’s representative and has no contractual authority to control the other prime contractors, the lead Contractor cannot lead.

Another key factor is that the lead Contractor does not have access to the same information that the Construction Manager does. For example, the lead Contractor does not have access to the applications for payment of the other Prime Contractors. These applications for payment are reviewed and verified to be accurate by the Architect and therefore would be the clearest evidence of the progress of the work. Without access to pay application information, the lead contractor cannot use this information to verify that the schedule update information provided by the Prime Contractors is consistent with what is being told to and verified by the Owner. This knowledge gap puts the lead Prime Contractor at an extreme disadvantage. Conversely, all of this information is readily available to the Construction Manager.

**Management Tip #2**

On a multiple-prime project, an Owner should use a qualified person or company to act as Construction Manager. Because the Construction Manager is not one of the Prime Contractors, the Construction Manager can then oversee the work of all the Prime Contractors without the apparent conflict of interest of assigning one Prime Contractor the responsibility to oversee the work of the other, co-equal Prime Contractors. The Construction Manager should prepare, update, and manage the construction schedule. This
allows the Owner to take advantage of being able to hire a professional who holds himself out as having an expertise in scheduling. The Construction Manager will not be building anything and therefore there is no conflict of interest; which permits the construction Manager to act with the full endorsement of the Owner. Finally, the Construction Manager has access to the Owner, Architect and all of the submissions of the Prime Contractors; which elevates his ability to manage the schedule and the work.

On any project, the schedule should not be merely a record of the work performed with a listing of future work. The schedule needs to be a tool used to effectively forecast and help manage the work. If a claim regarding time goes to court, an accurate and properly updated construction schedule can be vital. Whether it is a request for a change order, a dispute, or claim, it is best for all parties to have an evaluation based upon what was planned and what actually occurred. Proper documentation and a current project schedule are the keys to making this a reality. Gaps in information benefit no one.

**Scheduling on a Multiple-Prime Project**

The construction schedule is vitally important to a multiple-prime project. It is a means to coordinate the work and compel the separate primes to perform their work in sequence so that it fits together with the work of the other primes. It is needed to coordinate the work of the primes and is a powerful management tool. Once the construction schedule has been prepared, it is sent to the primes for review and comment. The primes’ review and acceptance of the construction schedule is the first clear acknowledgement of how the primes will work together to build the project.

The approach to scheduling on a multiple-prime project illustrates the limitations of this delivery system. Typically the bid documents will provide an overall construction duration, the duration of each prime’s work, and overall and prime-specific milestone dates, but there is usually nothing approaching a true project construction schedule. The project construction schedule is generally developed after the contracts have been let to the individual primes.

Once the prime contracts are let, each prime is to prepare a construction schedule for its work. Due to the absence of a true construction schedule in the bid documents, the Prime Contractors have to prepare an initial work schedule reflecting how they intend to perform their scope of work. These individual construction schedules are then submitted to the entity charged with the responsibility to prepare the overall construction schedule. Unless the Owner decides to separately provide the scheduling, either the lead prime or the Construction Manager will provide the scheduling. Developing the construction schedule on a multiple-prime project requires the scheduler to combine and synthesize each prime’s individual schedule. The management of the interface between each prime’s work schedule is crucial to developing a meaningful construction schedule.

Think of each prime’s schedule as a Jello mold. The scheduler is assigned the task of combining four or more Jello molds into a single Jello mold. Once these molds are set, it is almost impossible to combine them. To do this properly, the Jello needs to be combined when it is still a liquid, i.e., early on in the process. With a multiple-prime
project, there is no real opportunity for the primes to provide early input to assist in the
development of a project construction schedule. The established schedules of each Prime
Contractor have to be made to work together as a project work schedule. The best way to
do this is through early meetings and collaboration.

Who Should Prepare the Project Schedule?

In examining who should be assigned the scheduling responsibility, it is helpful to
consider what has to be done to develop a meaningful construction schedule. The
individual construction schedules prepared by each prime are developed based upon their
individual needs with little regard for the needs of the other primes. These work schedules
reflect the primes’ means and methods related to sequence and duration of their work.
Ideally, the scheduler would maintain a focus on the entire project and assemble a schedule
to build the Project from concept to completion without being influenced by the bias of a
particular contractor. Although the primes’ individual schedules are the building blocks
for the project construction schedule, these schedules are not necessarily consistent and/or
compatible with each other. This task is best assigned to an entity with construction
experience but no construction responsibility. Due to the absence of a true construction
schedule in the bid documents, the primes have to prepare an initial work schedule
reflecting how they intend to perform their scope of work.

Management Tip #3

The project scheduler has the task of assembling the primes’ work schedules and
combining them into a single construction schedule. The greater effort that is put into
providing a more detailed schedule in the bid documents, the easier it will be to prepare a
Project construction schedule. Also, time must be taken prior to the start of construction
to permit prime contractors to provide meaningful input into the project construction
schedule. Scheduling meetings should be held promptly after the successful primes are
awarded their contracts. This may cost extra time and money in the beginning, but will
ultimately pay large dividends.

A Prime Contractor should not be the Scheduler

Some Owners will assign the responsibility to prepare and update the construction
schedule to the general trades contractor who has been designated as the “lead” contractor.
As project scheduler, the lead contractor collects scheduling information from the other
primes, then prepares or updates the construction schedule. However, being the one to
assemble information into a schedule only prepares the schedule for review and potential
approval by the Owner, i.e., it is merely a “proposed” schedule.

To be effective in his role as lead contractor, the general trades contractor must
function as if he has authority over the entire project similar to a general contractor.
However, if the lead contractor is given any real power over the other primes, he would be
acting independently of the Owner and this would have the effect of the Owner inserting a
Contractor between the Owner and the other prime contractors; which is prohibited by the Separations Act.

Unless the Contracts provide otherwise, any schedule prepared by the lead contractor is without any effect unless and until it is approved by the other Prime Contractors and the Owner. Some Owners may try to avoid formally approving the schedule, but the reality is that once the construction schedule is distributed to all the primes and identified as the construction schedule, it becomes the schedule for the Project. A schedule has no legal effect on the other primes without the Owner’s endorsement. One prime cannot direct another prime to do something because there is no contract between them. They only relate to one another through the Owner.

The Construction Manager should be required to prepare, update and manage the construction schedule. The schedule is the management tool that the Construction Manager can use to measure performance and progress. The Construction Manager needs to update and manage the schedule so that it continues to be relevant. The Construction Manager does not have to force a prime to accelerate its work because the construction schedule backed up by the threat of liquidated damages does that for him.

A Prime Contractor is not the best entity to prepare the schedule. One prime has no power over the other primes; the other primes will likely not be fully responsive to his requests for information; and he will be viewed as biased in his own favor. A schedule prepared by the general trades contractor may actually be biased in his own favor. Assigning scheduling responsibilities to a Prime Contractor is setting them up to fail.

It is best to have the Construction Manager collect the schedule updates from the primes, meet with the primes to build/update the schedule, review it with the Owner and issue the project schedule. If the primes are not providing their updates in a timely fashion the lead contractor cannot force compliance and is left with only being able to complain to the Owner. The Construction Manager is in a better position to compel compliance by the Prime Contractors.

Management Tip #4

Owners need to abandon the practice of designating the general trades contractor as the “lead” contractor. This does not work because the lead contractor has no power to lead. The Separations Act prohibits giving the lead contractor any real authority. Assigning scheduling responsibility to the lead contractor is an artifice since the lead contractor has no power to establish or control the schedule. There is no advantage gained by an Owner having the lead contractor prepare the project schedule. The Owner should utilize a Construction Manager to both prepare the schedule and manage the work.

Conclusion

A Contractor will do what benefits them the most. This is not going to change. Owners have to change. Owners have to become more aware of what is needed to run a
multiple-prime project. The key to an Owner getting good value on a multiple-prime job is the Construction Manager. The limitations of a multiple-prime delivery system can be largely overcome through the use of an experienced Construction Manager with the necessary skill set and commitment to actively manage the project. The Construction Manager has to be more than a glorified clerk of the works. The Construction Manager has to be able to enforce the contracts, be the voice of the Owner, the voice of reason, push the project players towards a more collaborative atmosphere, and both build and actively manage the construction schedule. Finally, the Owner needs to commit to a more collaborative approach to its project by making time for the Prime Contractors to function as a group and to provide meaningful input.

Arguing for the abolition of the multi-prime delivery system is contrary to my best interests as a construction litigator. There is no better source of construction litigation than Pennsylvania’s requirement that all government contracts over Four Thousand ($4,000) Dollars have to be hard bid and the Public Owner must enter into separate contracts for the plumbing, heating, ventilating and electrical work. There are problems with project management, scheduling, communication, and collaboration among the trade contractors and between the trade contractors and the Owner. It speaks volumes that virtually no Owners undertaking privately funded construction projects select a hard bid multiple-prime delivery system to build their project. For the past One Hundred (100) years, Pennsylvania’s public construction projects have been saddled with the multiple-prime project delivery system. Until it is repealed, Public Owners need to make the best of a tough situation.