The Empire State

New York State

Department of Transportation

DESIGN–BUILD

PROCEDURES MANUAL

VOLUME I

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DESIGN-BUILD PROCEDURES MANUAL

1.0 INTRODUCTION

This Design-Build Procedures Manual (DBPM) serves as a supplement to other New York State Department of Transportation manuals by providing policies and procedures specific to the Design-Build (DB) method of project delivery. Where the requirements of other manuals conflict with this manual, the DBPM shall take precedence for DB projects only.

1.1 OVERVIEW, PURPOSE, AND USE

1.1.1 Overview

The DBPM covers the entire spectrum of DB project delivery from planning and environmental documentation through project execution and closeout. The DB procedures and the format and content of the various documents have been developed based on "best practices" in the DB industry to meet the specific needs and requirements of the Department and the State of New York and to assure DB projects progress in conformance with applicable Federal and State laws and regulations. Projects are to be developed and executed in accordance with this DBPM.

1.1.2 Purpose

The purpose of this manual is to describe the following:

A) The DB planning, environmental process, Preliminary Engineering (PE), procurement, and project execution procedures to be followed;

B) The roles and responsibilities of the participants in the DB process;

C) The format and content of DB procurement and Contract Documents; and

D) The DB supplements and changes applicable to other Department policies and procedures.

1.1.3 Use

This DBPM is written primarily to help Department staff directly involved in DB projects understand and implement the varied components of the DB method of project delivery. Other staffs that are indirectly involved will also use this DBPM to some extent.

The roles and responsibilities of other participants in the DB process (such as, project Stakeholders, Design-Builders, and Oversight and regulatory agencies) are defined and explained. The relationship of this DBPM to other Department manuals is also covered.

The DBPM also provides "samples" of typical DB procurement and Contract Documents shown as exhibits in the DBPM.

The processes described herein are intended to serve the following purposes:

A) Allow the Department to capitalize on the strengths of DB while preserving the high standards of the Department;

B) Identify and explain DB procedures and responsibilities;

C) Coordinate DB procedures with existing Department policies and procedures;

D) Foster innovation and creativity through the DB method of project delivery; and

E) Provide consistency of approach to DB while allowing Regions to tailor contract requirements to the needs of individual projects.

1.1.4 General Description of Volumes

The DBPM is composed of the basic manual and five Exhibits to the basic manual, and Exhibits III and IV have subdivisions called Divisions. The basic manual and its exhibits are logically and conveniently assembled into five volumes. This hierarchy is shown more clearly by referring to the Table of Contents of this document.

A) Volume I, the basic manual, contains the overall approach and guidance to Department managers for implementing a Design-Build project and is not a document issued to Proposers;

B) Volume II provides sample documents for the Request for Letters of Interest (LOI), the Request for Qualifications (RFQ), and the Instructions to Proposers (ITP) portion of the Request for Proposals (RFP). These documents are templates and will require project specific tailoring prior to being issued;

C) Volume III provides the Contract Documents (Parts 1-10) portion of the RFP and are intended, with the exception of Part 10, to be used with little or no modification;

D) Volume IV provides samples for the evaluation and selection plans applicable to the RFQ and the RFP processes; and

E) Volume V provides most of the Departmental Forms that would be used throughout the Design-Build process.

1.2 SUMMARY OF THE DEPARTMENT'S DESIGN-BUILD PROCESS

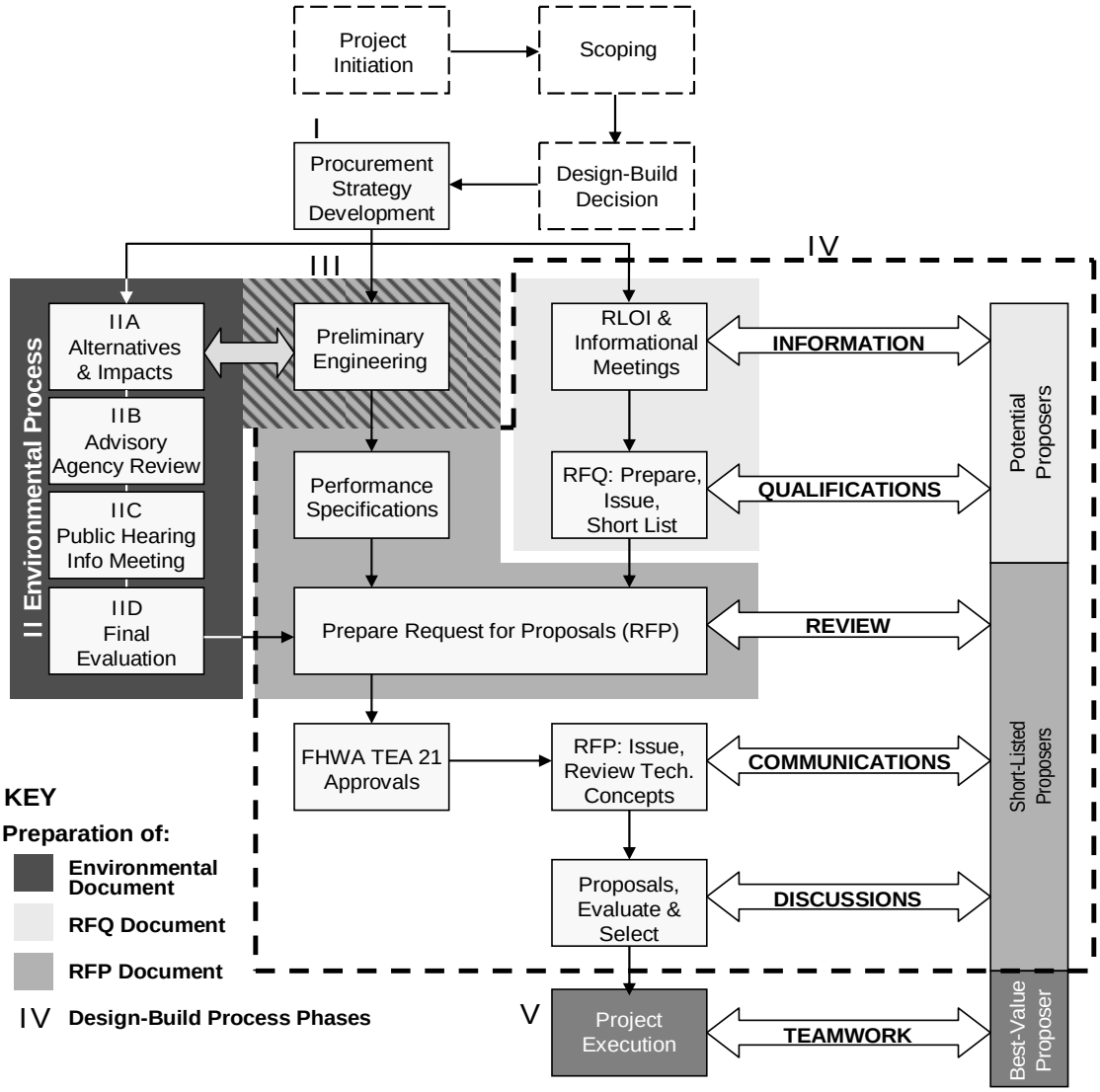
The Department's DB process consists of five phases after scoping and the decision to use design-build to deliver a project. The DB process is carefully integrated from project initiation to project completion and closeout. The four subphases of DB Phase II, Environmental Process, are very similar to Design Phases I through IV outlined in the Department's Project Development Manual. The other four phases are specific to DB. Except for the Procurement Strategy Development Phase, which precedes all other DB Phases, the phases are not necessarily sequential and, in many cases, tasks in different phases will be performed concurrently. For instance, the activities and steps listed in the Preliminary Engineering and DB Procurement Phases should be performed concurrently with the subphases of the Environmental Process to ensure a successful project. It is preferred by the Department that the Environmental Process Phase be completed before issuing the Request for Proposals (RFP) in the DB Procurement Phase, however, FHWA DB regulations (revised by SAFETEA-LU) do not preclude issuance of the RFP, proceeding with award of the DB Contract or issuing a NTP for preliminary design work prior to NEPA compliance. Concurrence of the Chief Engineer must be obtained to proceed ahead of NEPA. The phases for DB projects are:

DB Phase I	Procurement Strategy Development
DB Phase II	Environmental Process
DB Subphase IIA	Development of Feasible Design Alternatives, Identification and Assessment of Impacts
DB Subphase IIB	Advisory Agency Review (if needed)
DB Subphase IIC	Public Hearing/Informational Meeting (if needed)
DB Subphase IID	Final Evaluation and Recommendation
DB Phase III	Preliminary Engineering
DB Phase IV	DB Procurement
DB Phase V	DB Execution

Figure 1-1 graphically illustrates how the phases for DB projects relate to each other in the Department's development of a Design-Build project. The DB Procurement Phase is expanded to show steps described in Sections 5.0 through 9.0 of this DBPM. The following sections in this DBPM also cover the other decisions and DB Phases of Figure 1-1 as follows: Section 2.0, the design-build decision; Section 3.0, the Procurement Strategy Development Phase; Section 4.0, both the DB process relationship to Design Phases I-IV, and the Preliminary Engineering Phase; and Section 10, which is entirely devoted to the DB Execution Phase. Figure 1-1 shows how the procurement strategy development kicks off the concurrent start of the environmental process, the preliminary engineering, and the development of both the RFQ and RFP documents. It further shows how the preliminary engineering is tailored to support both the environmental process as well as the design-build process. The right-hand side of the Figure 1-1 graphic depicts the ongoing dialogue between the Department and the Proposers throughout the Design-Build procurement process.

FIGURE 1-1

DESIGN-BUILD PROJECT DEVELOPMENT



1.3 APPLICABILITY AND RESPONSIBILITIES (DESIGN-BUILD PHASES)

This manual applies to all DB projects let by the Department (including local-let projects) regardless of project type, fund source, estimated cost, or functional class of Highway.

The responsibilities for liaison with FHWA for Federal-aid projects remain the same as shown in Exhibit 4-1 of the Project Development Manual.

The "TEA-21 Procedures/Design Related Approval Matrix" (Exhibit 4-2 of the Project Development Manual) is applicable to DB projects, except that "RFP Approvals" take the place of "Design Approvals" since there will be no design (i.e., PS&E package) for a DB project.

1.4 RELATIONSHIP AMONG ENVIRONMENTAL CLASSES/TYPES, DESIGN-BUILD PHASES, AND DESIGN APPROVAL DOCUMENTS

The relationship among the environmental classes [National Environmental Policy Act (NEPA)] and environmental types (SEQR) and Design Phases I through IV outlined in the Project Development Manual remain essentially the same as with the Department's design-bid-build process. The basic exception is that no Design Approval documents are required under design-build procurement. In its place is the requirement to obtain approval of the RFP document from FHWA for Federal-Aid projects. The procedures outlined for remaining DB Phases are essentially identical for all environmental classes and types.

1.5 ROLE OF THE FUNCTIONAL MANAGER FOR TECHNICAL DECISIONS DURING DESIGN-BUILD

The role of the Functional Manager during the scoping stage and preliminary design stage is essentially the same as outlined in the Project Development Manual. The roles of the Functional Manager during DB project procurement and execution are spelled out in Sections 5.0 through 10.0 of this DBPM.

1.6 ABBREVIATIONS AND TERMS AND DEFINITIONS

The abbreviations, terms and definitions relevant to this DBPM that are initially capitalized are found in Appendix A to this DBPM and Exhibit III, Division 2, Part 02, DB Section 101-3.

1.7 RESPONSIBILITY FOR PREPARING DESIGN-BUILD DOCUMENTS

The Design-Build approach requires a collaborative effort to prepare and produce all of the necessary DB procurement documents. The DBPM provides all of the information and approaches needed to prepare these documents but each project will require some effort to tailor the general Design-Build documents into documents suitable for a specific Design-Build Project. In general it is expected that the Department will assemble a Design-Build Project Management Team to lead this effort however, this team will need the support of other NYSDOT entities in order to complete the procurement documents. Table 1.7 lists the basic Design-Build Procurement and Contract Documents (including the products of the Procurement Strategy Development) and the entity which has the lead role for a preparing or assembling the information that will be included in a particular document as well as the entities which have a supporting or review role in this process. As a project is progressing, the roles will be define to be more specific including identification of the personnel who are assigned to specific documents or tasks with due dates.

This process of defining specific assignments is discussed further in Section 3.8.

TABLE 1.7

NYSDOT ROLES FOR DESIGN-BUILD DOCUMENT PREPARATION

Document	Lead in Preparing documents	Primary Support or review	Secondary Support or review	Notes
Pre RFP Procurement Documents				
Procurement Strategy • Design-Build Scope of Work • Stakeholders • Project Goals • Risk Assessment & Allocation • Specific Project Approaches • Procurement Schedule	1	2, 3 & 5	4	
Request for Letters of Interest	1	2 & 5	3 & 4	A & B
Advertisement	1	5	4	A & B
Request for Qualifications	1	2 & 3	4 & 5	A, C, & D
Evaluation and Selection Criteria for SOQ's	1	2 & 5	3 & 4	
Evaluation and Selection Criteria for RFP's	1	2, 3, 4, & 5	-	
RFP Documents	-	-	-	A & B
General Instructions to Proposers	1	2 & 5	4	
Management Proposal Instructions	1	2, 3, 4, & 5	-	
Technical Proposal Instructions	1	2 & 3	-	
Pricing Instructions	1	2 & 3	-	
Forms (as needed for above)	-	-	-	
Contract Documents				
Part 1 DB Agreement	4	5	1	
Part 2 DB Standard Specification Section 100	1	2 & 3		
Part 3 Design Requirements	2 & 3	1		
Part 4 Performance Specifications	2 & 3	1		
Part 5 Special Provisions	1	2	4 & 5	
Part 6 Utility Requirements/Agreements	1	3		
Part 7 RFP Plans				
Administrative Plans	3	2	1	
Directive Plans	3	2	1	
Indicative Plans	3	2	1	
Part 8 Engineering Data				
Geotechnical Data	3	2	1	
Survey Control Data	2	3	1	
Mapping Data	3	2	1	

Document	Lead in Preparing documents	Primary Support or review	Secondary Support or review	Notes
Condition surveys	3	2	1	
Technical Data (E.g. traffic)	3	2	1	
Part 9 Standard Specs and Engineering Instructions				
Standard Specifications	3	2	1	
Construction Materials	3	2	1	
Engineering Instructions	3	2	1	
Part 10 DB's Proposal and Pricing Documents (by DB Contractor)	-	-	-	
Reference Documents				
Existing as-built plans	1	3	2	
Background and preliminary reports	1	3	2	
Stakeholder Agreements	1	3	2	
Memorandum of Understanding	1	3	2	
Historical Data	1	3	2	
EIS documents	1	3	2	

Key to Table 1.7:

1 = Department's Design-Build Project Management Team
2 = Regional Office
3 = Main Office Divisions
4 = Office of Legal Affairs
5 = Contract Bureau

A = Issued by Contract Management Bureau
B = Final Approval by Commissioner's Office
C = Complex RFQ's may require a further breakdown as per Table 3.8
D = The Chief Engineer will approve the RFQ as well as responses to questions and Addenda

2.0 DESIGN-BUILD DECISION

The decision whether to use the DB method of project delivery may be determined by action of the legislature or may be left to the discretion of the Commissioner.

If requested by the Commissioner, the Department will prepare a DB decision paper for each candidate project justifying its recommendation to use the DB method of project delivery for any given project.

Many factors should be considered when determining whether any given project is a good candidate for DB. There are no formulae or cut-off scores in such an evaluation. In some cases, one or two factors may override all others.

The following is a listing of factors that should be considered and a brief discussion of each.

Time: The most commonly noted advantage of DB is time. Design-Build generally allows final project delivery in a shorter period of time compared to traditional design-bid-build project delivery. The primary reasons for this schedule acceleration are that design and construction proceed concurrently and the design and construction interface is managed by a single entity.

If timely completion is critical and/or the available or desired time of project delivery is short, the Project may be an excellent candidate for DB. Even if time is not an overriding consideration, the Project may still be a good DB project.

Clarity and Consistency of Scope: A successful DB project needs a well-defined, consistent scope of work. The Department must be able to spell out the needs and objectives and define the criteria and constraints. This does not mean that every element of the Project has to be spelled out in minute detail. It does mean that the scope should not change significantly as the work progresses. The scope should carry through any environmental or community commitments.

Flexibility: Design-Build thrives in situations where designers and Design-Builders have a fair degree of latitude in determining the solution to a given problem or situation. If the Department feels it is necessary to prescribe a single solution or to adopt prescriptive requirements, it will not gain the full benefit of DB. This does not mean the Department should avoid prescriptive requirements entirely when using DB. However, if the design solution and construction means and methods are generally tightly controlled by the Department or other Stakeholders, the Project may not be a good candidate for DB.

Innovation/Creativity and Complexity: If the Project offers opportunities for innovation and creativity relating to design and engineering solutions and/or construction scheduling, phasing, or techniques, the synergistic relationship of designer and constructor inherent in DB can work strongly to the benefit of the Project and the Department. This is especially the case for complex projects, where a single Design-Builder, working closely with the Department, can creatively plan for, coordinate, and control all of the Project design and construction variables. Innovation and creativity is not limited to technical design and construction, and often extends to management techniques and other elements of the Project, such as public information and community relations, staging and phasing of Maintenance and Protection of Traffic (MPT) activities, and schedule. Even if a project does not offer significant opportunities for innovation and creativity, DB may still be beneficial for schedule and other reasons.

Current Status of Design: It is best to determine whether or not to use the DB method of project delivery early in the Project planning phases before significant design work is done. The scope of the pre-DB contract PE work can then be tailored to meet the specific needs and conditions associated with the DB project.

Once the design has progressed to the point where the significant and controlling design decisions have already been made, the benefits of designer/constructor interaction in developing solutions are reduced (or existing design may require some “de-engineering” to be compatible with use of DB). Under this circumstance, the Department loses the benefit of being able to review multiple solutions from different Design-Builders and being able to select the best solution. If design has progressed to the point where the major design decisions have been made, the Project essentially becomes what is called a “draw-build” project, where the Design-Builder completes the details of the design and constructs the Project based on the solution dictated by the Department. In the alternative, if the Department allows flexibility to re-design, thereby gaining the benefit of innovation by the Design-Builder, the Department will have paid twice for the Project design.

Approval Requirements: If the approval requirements of the Project or elements of the Project, particularly third party approvals (such as railroads and other governmental agencies), require the design

to be progressed to a high level of completion before a regulatory or cooperating agency or entity will "approve" a project, or where such agencies or entities will not allow construction to begin until design has reached a high level of completion (even 100%), the primary time benefits associated with DB can evaporate. Whenever approvals are a part of the Design-Builder's responsibilities, delayed or extended approval processes can add significantly to cost and uncertainty (with an attendant increase in Proposer contingency costs) and increase project risk to the Department. Potential problems with third party approvals can be mitigated if the criteria and time required for third party approvals are covered in written agreements between the Department and such third parties and are spelled out in the Contract Documents. Potential problems can be further reduced by giving the third parties the opportunity to participate with the Department in formulating project requirements, evaluating Proposals, and executing the Project.

Cost/Funding: It is well documented that DB results in greater "cost certainty" that the final cost will be close to the amount of the original contract price. Design-Build projects typically see less cost escalation during the course of the Project, primarily because one of the primary reasons for Orders-on-Contract and claims on design-bid-build projects (design errors and omissions or design/construction interface issues), is removed from the Department's realm of responsibility. The Design-Builder is responsible for its own design and resolving its own design/construction interface issues. In addition to design risk issues, public owners have also been successful in shifting a greater degree of other project risks to the Design-Builder, thereby reducing Order-on-Contract potential and increasing certainty of first cost. Historically, the major causes of cost escalation on DB projects have involved poorly defined scope or additions to scope at the order of the owners or request of stakeholders.

Design-Builders can also be selected using a fixed price/best design procurement process, based on an evaluation of proposed design solutions and other quantitative factors, with the contract price set by the owner. A project with a firm, fixed budget may be a good candidate for DB using this approach.

Miscellaneous Requirements: Design-Build has proven to be particularly adaptable to and able to handle miscellaneous project requirements, such as erosion and sediment control, public information, community relations, environmental mitigation, MPT, and maintenance of access. If such issues are a significant element of a project, DB may provide an opportunity for the Department to review and evaluate a number of alternate solutions during the selection process and to benefit from all the good solutions offered by Proposers (including ideas submitted by unsuccessful Proposers) during execution of the Project.

Environmental Risks/Issues: The method of project delivery (DB, design-bid-build, and others) does not have a direct bearing on or relationship to the environmental documentation for a project. However, the environmental issues and required mitigation measures on some projects may require design to be taken to a high level of completion, thereby reducing (or possibly negating) the benefits of DB. Environmentally sensitive projects have been delivered successfully using DB, and DB can handle the "moving target" associated with such projects provided the overall contract provides flexibility and the means to mitigate or minimize the uncertainties and risks in an equitable manner.

Potential Proposal Costs and Stipends: The cost of preparing Proposals is a major concern to Design-Builders and designers. Preparation costs for DB Proposals are usually significantly higher than traditional design-bid-build bids. Recognizing that the cost of proposal preparation is one of the factors examined by industry in making the decision to participate in DB procurements, the Department will need to evaluate the potential costs and consider steps that can be taken to reduce them. For example, if it appears the cost of providing information requested/required by the Department or Stakeholders will be excessive, the Department should consider whether the requirements can be reduced. Excessive Proposal requirements can have a damaging impact on an entire DB program, not just a single project. To the extent legally permissible, payments to the unsuccessful Proposers (also known as stipends) can help

offset some of the costs incurred in responding to RFPs and are becoming a frequent tool for public owners to engender interest and high quality Proposals.

3.0 DESIGN-BUILD PROJECT PROCUREMENT STRATEGY PROCESS

See Appendix B of this DBPM for typical Procurement Strategy documentation for a DB Project.

3.1 SELECTION OF THE DEPARTMENT PROJECT MANAGEMENT TEAM

Implementing and administering a DB procurement process from project inception to project completion will be made easier and more successful if responsibility is assigned to individuals who are well versed in the concepts and principles of DB and who understand the gains in productivity possible with this project delivery method. In lieu of keeping DB project management within the Department's normal organizational structure, the Department may want to create a small, separate office to undertake such projects. Regardless of which approach is taken, the projects should be staffed with specially selected, creative, "out-of-the-box" thinking individuals who embrace the concepts of DB and are interested in improving existing systems. It may be advisable to engage a DB consultant to support Department staff in this effort.

If, after Contract Award, the Project will be turned over to a separate team to administer the Contract, the administrative staff needs to fully understand and support the concepts of DB, the new and different responsibilities of the Design-Builder, and the role to be played in overseeing the Design-Builder's design and construction efforts.

The Chief Engineer or designee will select the Department's Project Management Team.

Continuity of personnel can make a significant difference in the success of a project. The Department's field construction representative responsible for managing the construction Oversight for the Project should also be a part of the team that plans the procurement, prepares the Request for Proposals (RFP), and evaluates and selects the Design-Builder. Similarly, the engineers who write the Performance Specifications, oversee the PE, and prepare the RFP should also evaluate the Proposals and review the designs produced by the Design-Builder. It is important to recognize that the Department's Project Management Team should be an integrated planning, design, construction, and contracting team from inception through Final Acceptance of the Project.

See Section 10.1.1 of this DBPM for a typical Department organizational chart for a DB Project.

3.2 DESIGN-BUILD ORIENTATION/TRAINING (MANAGING CULTURAL CHANGE)

Especially for the first project and any time that new people are involved in DB, a short training (or refresher) session on DB will be invaluable in building an understanding and acceptance of the concepts of DB. The training should include appropriate Department personnel and, if appropriate, Stakeholder and consultant personnel who will be involved in project procurement and execution. Early involvement of Stakeholder personnel does much to assure that they will "buy-in" to the overall DB process.

A) The orientation/training should include review of the following:

1) Relationships between the Department and Design-Builders inherent in DB;

2) Type and extent of engineering performed by the Department;

3) Type of technical provisions and specifications in DB;

4) Contractual provisions;

5) Procurement documents and the method of selection; and

6) Administration and Oversight of DB contracts.

B) Typical orientation/training topics include the following:

1) Comparison of design-bid-build to DB;

2) Reasons for using and benefits of DB;

3) Procurement strategy development, including setting project goals and identifying, assessing, and allocating risk;

4) Understanding DB challenges;

5) Determining the appropriate amount of PE;

6) Ensuring quality in DB;

7) Design-Build procurement and Contract Documents, including Performance Specifications;

8) Steps in the DB process;

9) Key decisions to make during the DB process;

10) Evaluation and selection criteria;

11) Evaluation and selection processes;

12) Keys to successful DB administration; and

13) Lessons learned from other DB projects.

The Chief Engineer will decide the extent and nature of orientation/training required for specific projects.

See Appendix C of this DBPM for a sample orientation/training presentation.

3.3 STAKEHOLDER IDENTIFICATION

The Department's Project Management Team should identify the Stakeholders for each project (i.e., those having a significant financial, regulatory, approval, or jurisdictional interest in the project).

In the context of this discussion, Stakeholders are those entities having a significant financial, regulatory, approval, or jurisdictional interest in the Project. In addition to the Department, Stakeholders may include the following entities:

A) Federal agencies, such as the Federal Highway Administration (FHWA), United States (US) Army Corps of Engineers, and Environmental Protection Agency (EPA);

B) State and local agencies and/or political subdivisions;

C) Municipalities;

D) Public Interest Groups;

E) Metropolitan Planning Organizations (MPOs); and/or

F) Utility Owners and railroads.

Identifying the Stakeholders and creating a way to involve them in the Project's procurement process is vital to the Project's success. The goal is to know the Stakeholders' concerns, address those concerns in

the Project, and obtain buy-in on the part of each Stakeholder regarding how the Project is to be designed and constructed.

Design-Build may require Stakeholders to adjust their normal mode of operations, and early and continuous involvement in project decision-making can do much to facilitate their understanding and cooperation.

Some Stakeholders may not be identified until later in the DB process, but the major players should be identified prior to proceeding with the DB process.

Identified Stakeholders should be contacted and requested to assign a single point of contact for the duration of the DB project, if feasible.

3.4 PROJECT GOALS

The Department's Project Management Team develops the list of project goals in coordination with representatives of key Stakeholders.

Clearly and definitively articulated project goals are critical to the DB procurement process. The goals are usually developed in the form of time, quality, and cost and guide all subsequent decisions of the RFP development. The Project goals will be approved by the Chief Engineer (with input from Stakeholder management, when appropriate). Once set, the goals should not change except in unusual circumstances.

It should be noted it is rarely possible to maximize all project goals. Constraints on funding or time may require adjustment in quality goals. Time may be a driving force that takes precedence over budget to a degree. The setting of goals may require negotiations and tradeoffs among the Stakeholders.

Department and Stakeholder staff may wish to develop an initial list of project goals using brainstorming techniques. Subsequently, the list should be refined such that the final project goals are expressed in a few succinct statements. For example, project goals may be stated as follows:

A) Cost:

1) Cost not to exceed $_____;

2) Cost within Project budget;

3) Life cycle cost not to exceed _____; and/or

4) Ability to finance Project in the following manner(s): _____

B) Time:

1) Substantial Completion (or Final Acceptance) by (date/event);

2) Substantial Completion (or Final Acceptance) within _____ days of Notice to Proceed (NTP);

3) Completion of procurement by _____; and/or

4) Issuance of NTP by _____.

C) Quality:

1) Minimize disruption to residents, businesses, and the traveling public during construction;

2) Minimize disturbance to the environment/mitigate environmental impacts.

3) Design life of _____ years;

4) Warranty of _____ years;

5) Maintainable, durable facility;

6) Provide aesthetic solutions to minimize visual impacts; and/or

7) Maintain Department standards for Worker and public safety and security.

As is evident from the above, the list of quality goals can be highly variable and include many direct and indirect project factors.

3.5 RISK IDENTIFICATION, ASSESSMENT, AND ALLOCATION

A systematic approach to risk management can reduce the initial contract price and other Department costs, and can help to avoid potential contract disputes. As a result, risk analysis is a crucial part of the DB planning process, and should be one of the first steps taken when the Department starts to develop the procurement documents. Once risks are identified, the Department will evaluate possible measures to mitigate the potential impact of a risk and will determine how to allocate risks among the Department, Design-Builder and others. In general, risk should be allocated to the party that can best take steps to avoid adverse impacts or to manage the effects of the risk. The RFP evaluation factors and contract clauses will be developed to implement the risk mitigation strategies and risk allocation decisions. In addition, the risk-related decisions will serve as a key indicator of where to focus PE efforts, namely on those activities that will reduce the risks to the Department and/or the Design-Builder.

The Department's project team and project Stakeholders should participate in the risk identification. For more complex projects, participation by other Department specialists, including a representative of the Office of Legal Affairs, may be advisable. There are many ways to assess and allocate risk. The procedure outlined here is relatively straightforward and easily documented and can be used on projects of any size or complexity. The process consists of five steps as described below and as summarized in Table 3.5. The rating process for risk probability (Step 2), severity (Step 3) and overall risk rating (Step 4) is illustrated in Figure 3.5-1.

Step 1: Identify (list) and define the risks. The list should include those risks that may affect successful implementation of the project, regardless of when such risks may occur. A typical list may include the following:

A) Environmental approvals;

B) Right of Way (ROW) acquisition;

C) Geotechnical conditions;

D) Permits;

E) Utility locations;

F) Differing Site Conditions;

G) Design approvals (by external agencies);

H) Utility agreements and/or delays;

I) Railroad agreements;

J) Security;

K) Financing;

L) Time/completion;

M) Destruction/casualty;

N) Force majeure;

O) Community opposition; and/or

P) Third party litigation.

While many projects will have similar risk categories, the risks may vary significantly from one project to another.

Step 2: Assess the likelihood (probability) a risk event of the nature listed and defined will occur over the course of the contract, including Warranty periods. The probability should be rated on a scale of 1 to 3, with 3 representing the highest probability.

Step 3: Assess the degree of impact (severity) the occurrence of an identified risk event would have on the Project. The impact should be rated on a scale of 1 to 3, with 3 representing the highest impact.

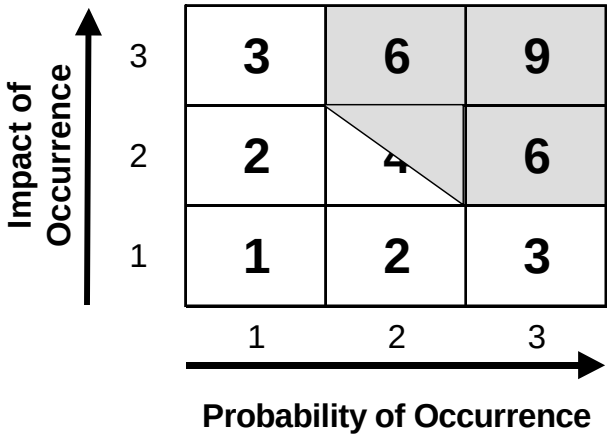
Step 4: The overall risk rating is determined by multiplying the probability rating by the severity rating, resulting in a range of 1 to 9 for the overall risk rating.

Step 5: This step involves establishing the priorities for addressing the risks, determining risk mitigation measures, and allocating the risk between the parties to the contract. The general rule is to allocate the risk to the party that can best manage or deal with it in a positive, proactive manner. Particular attention should be given to risk factors with ratings of "6" of higher. Moderate risk factors in the "4" range should also receive appropriate attention and attempts should be made to mitigate or appropriately allocate the risks. Risk factors with ratings of "3" or less have a relatively small impact on the Project and the amount of time spent on them should be budgeted accordingly. Project owners typically use boilerplate contract provisions in allocating this category of risk, dealing with any impacts of such risks if and when they arise.

TABLE 3.5
RISK MATRIX

1	2	3	4	5
Risk Identification	**Probability Rating (1)**	**Impact Rating (2)**	**Overall Risk Rating (1)x(2)**	**Mitigation/Allocation**

FIGURE 3.5-1
RISK ANALYSIS MATRIX



In some situations it may be advisable to use a more structured approach in documenting the risk analysis process. Figures 3.5-2 and 3.5-3 illustrate an alternative approach.

FIGURE 3.5-2

RISK IDENTIFICATION, ASSESSMENT, AND ALLOCATION WORKSHEET	
Risk identification and definition	
Issue(s)	
Options (Department, Design-Builder, or Sharing)	
How can risk be shared?	
Who can best manage the risk?	
Resources	
Challenges	
Recommended allocation	
Steps for mitigation	
Other recommendations	

FIGURE 3.5-3

RISK IDENTIFICATION AND ALLOCATION SUMMARY									
Description of Risk	**Allocation**				**Where Covered**				**Remarks**
	Department	Shared	Design-Builder	Insure	Contract	Specs	Criteria/ Plans	Agency Agreements	

The results of the risk analysis process are used in preparing contract provisions and agreements with Stakeholders and other third parties and are used to identify the type and extent of PE for different components of the Project.

3.6 DESIGN-BUILD PROCUREMENT OPTIONS AND CHALLENGES

The Department's enabling legislation provides an overall structure for the Department's DB procurements. Additionally, Federal-aid projects will be subject to the Federal Highway Administration regulations regarding DB procurements. Both State law and Federal regulations allow the Department significant flexibility to select among different procurement approaches for DB contracts, including the alternatives described in this DBPM. Furthermore, the federal rule specifically encourages state highway agencies to consider the unique aspects of each project in developing its procurement and Contract Documents. The Department should take advantage of this flexibility to develop strategies and documentation appropriate to the specific needs of each project, taking the specific project goals and risks into account.

3.6.1 Basis of Selection

The Department's enabling legislation permits a "best value" selection process to be used for DB contracts, allowing price and other factors to be considered when selecting a Design-Builder, instead of the competitive bidding selection process typically used for construction contracts, or the qualifications based selection process used for design agreements. The enabling legislation allows the Department a great deal of flexibility in establishing selection criteria and developing an evaluation process. The FHWA DB regulations, which also permits agencies to use a best value selection process, provides a number of requirements that must be addressed in the Department's Federal-aid projects. Even though the federal requirements are not strictly applicable to state-funded projects, they represent sound industry practice and have therefore been integrated into this DBPM and the Department's standard DB documents.

The FHWA DB regulations requires the relative weighting of price and the total of "other factors" to be identified in the procurement documents. The solicitation must state whether the combination of other factors is:

A) Significantly less important than price;

B) Approximately equal to price; or

C) Significantly more important than price.

Best value procurement, by allowing factors other than price to be considered, allows the Department to select the Design-Builder that best meets a combination of Department and Stakeholder goals. Furthermore, price itself can be evaluated not only on the dollar amount but also on factors such as responsiveness and reasonableness of the Price Proposal.

For example, quality-related factors of importance to the Department and other project Stakeholders may be considered in a best value evaluation and selection process. Quality factors may include the following:

1) Design-Builder's organization for the work;

2) Experience and qualifications of the firms and personnel;

3) Proposed management scheme, including: Quality Control (QC); schedule; MPT and maintenance of access; and public information/community relations;

4) Design and/or construction technical solutions;

5) Past performance;

6) Backlog and capacity; and

7) Financial capacity.

Even though the specific relative weightings of all of the selection criteria, including price as well as other factors, are not required to be set forth in the Request for Qualifications, they must be determined early in the procurement process and in all events must be established before issuing the Request for Proposals and before the proposal evaluation process commences. Relative weightings should be determined with reference to the Department's goals for the Project.

3.6.2 Stipends

The Department's Project Management Team will prepare a recommendation regarding stipend payment for approval by the Chief Engineer or designee.

Stipends may be paid to some or all of the Proposers who submit a responsive but unsuccessful Proposal. The value of the stipend varies from project to project depending on the value and complexity of the Project and the amount of engineering and design work required to prepare a responsive Proposal. Stipend amounts can vary among unsuccessful Proposers (i.e., the second highest rated Proposal getting more than the third highest rated). The measure of Proposal "responsiveness" needs to be defined in the RFP documents and is usually determined by minimum ratings for quality factors, passing pass/fail factors, and the responsiveness of the Price Proposal (which may include proposing a price within a Competitive Range). In return for stipends, the Department receives ownership of all ideas, techniques, concepts, and intellectual property set forth in the unsuccessful Proposer's Proposal, including the right to use the same on the project.

Stipends serve the following purposes:

A) Increases the quality of Proposals and level of innovation in the Proposals;

B) Encourages highly qualified Proposers to participate in the procurement;

C) Compensates unsuccessful Proposers for a portion of the cost of preparing a DB Proposal, recognizing the relatively high cost of DB Proposals;

D) Secures ownership of ides and concepts within all Proposals; and

E) Encourages participation in future DB procurements.

Stipends are not intended to pay the full cost of preparing and submitting a Proposal. Stipends on previous DB projects in other states have ranged from 0.1% to 0.3% of the estimated contract value or successful Proposal price, with the higher range applying to projects of lesser value.

3.6.3 Minority-owned Business Enterprise/Women-owned Business Enterprise/Disadvantaged Business Enterprise Requirements and Subcontracting

The Minority-owned Business Enterprise (MBE) Women-owned Business Enterprise (WBE) and Disadvantaged Business Enterprise (DBE) (for Federal-aid projects) and subcontracting goals and requirements associated with any other method of procurement and project delivery can and should be incorporated into DB contracts with some minor adjustments in the timing for achievement of the desired results.

In design-bid-build projects it is common to require the contractor to identify and have commitments with MBEs/WBEs/DBEs and other subcontractors and suppliers and to meet project goals (or demonstrate good faith efforts if goals are not met) at the time that bids are submitted. Since final design is completed before the Project is advertised, contractors can solicit and get binding bids from subcontractors.

In DB, the Design-Builder may not be able to identify and "sign up" Subcontractors (including MBEs/WBEs/DBEs) in advance of Proposal submittal, because most Subcontractors do not have the capability of providing quotes based on an incomplete design. Federal regulations requiring grantees to implement DBE programs, recognizing the difficulties associated with achievement of project goals before the design has been completed specifically permit use of an alternative DBE compliance approach for DB projects. The standard DB procurement documents, therefore, require the Proposals to include a satisfactory plan/program for reaching the applicable project goal and demonstration of good faith efforts through submission of the Proposal, as well as providing appropriate evidence of good faith efforts undertaken prior to submittal of the Proposal. Also, the DB Contract Documents require evidence of continuing compliance to be submitted after selection and Award. By allowing the Design-Builder to secure MBEs/WBEs/DBEs after submission of the Proposal and Award of the DB contract, as design for components of the Project is completed, bids and proposals can be solicited from Subcontractors without their incurring the risk of bidding on incomplete plans. It is also possible in DB to have separate goals for the design portion of the contract.

3.6.4 Incentives/Disincentives

Incentives and disincentives are useful tools for encouraging compliance with DB contract requirements, and incentives can also be used as a means to achieve superior performance. Disincentives must be carefully structured to meet legal requirements (generally the same requirements that apply to liquidated damages) in order to avoid characterization as unenforceable penalties. In contrast, incentive programs can be structured as deemed advisable by the Department to achieve desired results. For DB contracts, incentives are particularly appropriate due to the large degree of flexibility and opportunities for innovation held by the Design-Builder.

Most DB contracts will also include liquidated and/or stipulated damages related to timely completion or failure to correct non-conforming work.

Incentive fees are not currently authorized, however an example is included in the Contract Document samples in Exhibit III. Their use may be authorized only by the Chief Engineer or designee for specific, special needs of a project.

If providing incentives, it is essential the potential amount of the "reward" exceed the cost to the Design-Builder to earn it; otherwise the incentive will be ineffective to achieve the desired results. The incentives should focus on key areas of performance that are important to the Department or other project Stakeholders. A good starting point is to tie incentives to exceeding project goals.

In order to avoid any implication that an incentive program is subject to the same requirements as disincentives, it must be clear that the incentive funding is outside of the DB contract price and the Department has discretion regarding payment of the incentive. Accordingly, the pricing forms should not refer to the incentive program, and the incentive amount should not be included in the DB contract price. The contract should clearly state that the incentives are payable only based on a Department determination that the Design-Builder's performance exceeds minimum specified requirements. Incentives are typically added to the contract price by Order on Contract following a determination by the Department that payment is appropriate.

Examples of areas of performance that may be appropriate for inclusion in an incentive program include, but are not limited to, the following:

A) Schedule (the most common use);

B) Quality;

C) Public Information/Community Relations;

D) Maintenance and Protection of Traffic; and

E) Public and Worker Safety.

Determination of the amount to be included in an Incentive Fee program is not an exact calculation. Some Incentive Fee amounts lend themselves to calculation, such as an incentive for early completion, where savings in user costs can be used to indicate the amount of incentive fee. (This is essentially the reverse of the calculation used to determine the amount of liquidated damages based on added user costs.)

Recommended incentives/disincentives should be developed by the Department's Project Management Team subject to approval by the Chief Engineer or designee.

The overall incentive fee amount (the incentive fee pool) has ranged from approximately one (1) to three (3) percent of contract value for other states and agencies, with the higher range going to larger, more complex issues with a significant number of key focus areas. Once the overall incentive fee pool is established, the amount available for individual factors should relate to the relative importance of the individual incentive fee factors.

Some guidelines for determining incentive fee pool amounts follow:

1) As noted above, the early completion incentive fee pool amount may be determined based on reduced user costs. If the Design-Builder is ahead of schedule halfway through the Project, an interim projected early completion date could be used to estimate reduced future user costs. Such projection could provide an indicator for an appropriate interim incentive fee payment.

2) User costs may also be used as an indicator for the pool amount for maintenance and protection of traffic, particularly where lane and/or road closures are one of the subfactors being considered.

3) Future maintenance costs and user costs may be an indicator related to the quality incentive fee pool amount. For example, if high pavement quality can be related to fewer overlays or seals over a 20 year period with an associated reduction in traffic interruptions, an estimate of savings to the Department and the using public could provide an indicator of an appropriate incentive fee.

4) Safety incentive fees may be related to accident costs. Appropriate indices and indicators of impacts may be available from Department risk management staff or from the insurance industry.

5) Incentive fee pool amounts for superior performance on such elements as environmental monitoring and mitigation and/or community relations are difficult to calculate. The relative value of their importance calls for judgment on the part of the Department's Project Management Team. Tangible benefits may be difficult to quantify, but the relative importance of such factors is generally easy to determine. If any of the factors is relatively unimportant, there would be no need to provide an incentive fee.

3.6.5 Determining Progress/Payment

Progress and payment for work performed under a design-bid-build project are normally determined by measuring quantities of work accomplished and multiplying the quantity by a unit price included in the contractor's bid.

Since most work on DB projects is priced on a lump sum basis, and not based on quantities, other means must be used to determine progress and the appropriate level of payment.

The Department's standard DB procurement and Contract Documents provide for payment to be made using the Price Center (PC) concept. Progress will be based on a Critical Path Method (CPM) schedule. For smaller, less complex projects, progress will be determined by mutual agreement between the Department and the Design-Builder of the physical percent complete of each PC. For larger, more complex projects, progress and payment will be determined on the basis of a Contract Periodic Payment Schedule (PPS-C) developed from the CPM schedule with periodic verification of progress through Progress Check Points (PCP). For further information *see* Section 7.2.9 of this DBPM and Exhibit III, Division 2, Part 2, DB Section 109[S or L].

For certain types of work it may be appropriate to use Unit Prices and quantities as the basis of measuring progress and making payment. Typically work measured and paid on the quantity/Unit Price basis includes high risk items, such as Hazardous Materials remediation, or work that is difficult to define during the procurement phase of the Project, such as relocation of fiber optic lines or other Utilities whose location or extent is not well defined. Even in a lump sum contract, quantities and Unit Prices can be used as a means of determining the amount of periodic payments when a schedule of values is included in the Price Proposal and quantities of work are measured as work progresses. In the latter case, schedule of values is merely a tool for determining interim payments, and any change in quantities from the original assumptions would not affect the lump sum price for the Project.

3.6.6 Insurance

Traditionally, insurance for projects is covered under a contractor's standard insurance policies, with types of insurance and insurance limits reviewed on a project-by-project basis. However, with many large, non-traditional projects, other forms of insurance programs, including Owner Controlled Insurance Programs (OCIP) and Contractor Controlled Insurance Programs (CCIP), have been successfully utilized. During the procurement strategy phase of a DB project, the Department should discuss the pros and cons of the variety of insurance programs available and determine the approach to use based on the individual project and its risks and complexities.

One area that may require some special attention during insurance discussions is professional liability, or Errors and Omissions (E&O), insurance. If a standard insurance program is used, it is imperative that the entity with which the Department will execute the DB contract (i.e., the Design-Builder) hold a professional liability insurance policy in the name of the Design-Builder. It is not acceptable for the Design-Builder to rely on the insurance policy or policies of its designers to cover professional liability. This protects the Department from dealing with multiple insurance agencies, from dealing with myriad policies that may or may not cover the risks associated with this project, and from dealing with Principal Participants or Subcontractors individually. It should be noted that requiring the Design-Builder to carry a professional liability insurance policy does not alleviate the need of the designers to carry their own professional liability insurance. However, the Design-Builder, as the entity with privity with the Department, is the entity to which the Department will solely have to look for responsibility.

Wrap-up insurance programs have become a more frequently utilized program management tool over the last several years. Wrap-up insurance includes CCIPs, OCIPs, and rolling wrap-ups. Many owners have chosen to use wrap-up insurance because of several potential advantages, including insurance cost savings, improved claim management, and more effective safety and loss control.

If a CCIP is used on a DB project, the Design-Builder would be required to provide a project-specific insurance program, including professional liability insurance, which would cover the work of the Design-

Builder and its Subcontractors. The Design-Builder would be responsible for the administration of the CCIP and for ensuring that the Subcontractors do not include insurance costs in their overhead.

If an OCIP is used, either project-specific or a rolling wrap-up, the Department is responsible for the procurement of an insurance broker and the creation of an OCIP program. The OCIP would include general and professional liability insurance, among other insurance. The Design-Builder and its Subcontractors, or Subcontractors to a certain tier, would be contractually required to participate in the OCIP and to delete insurance costs from their overhead. Again, however, with either a CCIP or an OCIP, designers would still need to carry their own professional liability insurance policies, in addition to those carried by the CCIP or OCIP.

A rolling wrap-up utilizes all the same theories as CCIPs or OCIPs, but it covers multiple projects over a period of time (i.e., rolls projects into one program), and thus is more likely to be used by owners that are able to program their projects, thus having some certainty as to what will likely be included in the rolling wrap-up program over a given period of time.

3.7 SPECIFIC DESIGN-BUILD PROJECT APPROACH

Basic, best practices Design-Build procurement approaches, such as performance specifications, a two-phase process, short-listing, best value selection, adjectival ratings, consensus, discussions, revised proposals, draft RFP review, technical concepts review, QC/QA responsibilities and design review, have been incorporated in the procurement process of this DBPM. However, each DB project is unique with unique project goals and may require specific approaches to address unique requirements identified in the project goals and the risk assessment. Various additional procurement options are available for the Department's DB projects consistent with applicable law and Department policy and as reflected in this DBPM. Specific approaches cover a range of issues including, but not limited to: the level and type of preliminary engineering and/or design; the use of stipends; the use of and the type of incentives/disincentives; long-term maintenance; Warranties; wrap-up insurance; the use of options and a stipulated sum; Design-Builder responsibilities in ROW acquisition, utility relocation, permits (construction and environmental) and public information; partnering; subcontracting safeguards; the project organization including whether or not to use a support consultant for project management; the need for a SEP-14 Request (for those instances when procurement procedures or techniques are needed for a project that are not allowed by the FHWA DB regulations); and the use of Alternate Proposals or alternate technical concepts.

The Project-specific DB approach will be developed by the Department's Project Management Team.

3.7.1 Preliminary Engineering Requirements

One of the most significant determinations to be made relates to the type and amount of PE (or design) that needs to be accomplished prior to award of the DB contract. This decision must be consistent with NEPA, risk issues, Stakeholder concerns and the Project specific approaches for Utilities, ROW, drainage, and railroads. As with design-bid-build projects, a certain level of PE is necessary to support the environmental process for a DB project as well as advance acquisition of ROW. The challenge with DB is to avoid progressing the preliminary design to the point where the benefits of DB are overridden due to a reduction in the opportunity for innovation and flexibility.

It is not uncommon for project owners to undertake a greater level of PE than is necessary. The extent of PE should be driven by the requirements of the environmental document and information gleaned from the risk identification, assessment, and allocation process.

A) The focus of PE for a specific DB project should be on the following:

1) Providing information necessary for the environmental documents;

2) Defining reasonable limits of ROW acquisition;

3) Identifying/defining the Project's needs and objectives (not prescribing the solutions);

4) Defining the parameters (requirements) under which the work is to be done;

5) Mitigating and/or sharing the risk in the manner determined during the risk identification, assessment, and allocation process;

6) Preparing and executing appropriate agreements with local government/agencies, Utilities, and railroads; and

7) Retaining flexibility to foster different solutions and innovation.

B) The amount of PE will vary from project to project and vary among the components within a project.

C) There is a natural tendency to do more PE than is necessary for the Proposers to prepare a Proposal. As has been stated previously, taking PE too far may negate the benefits of DB by curtailing opportunities for innovation and creativity. Another downside of taking PE too far is the possibility that the Design-Builder will throw out much of the design and start over with its own approach, wasting time and money.

D) One of the focal points of PE is to provide sufficient data and information to support the environmental process. Care should be taken, however, to focus on defining those elements that are actually needed to determine the potential environmental impacts.

E) The risk analysis process (*see* Section 3.5 of this DBPM) should identify some items of high risk that should be addressed in PE. For almost all projects, PE should involve significant effort related to the following:

1) Geotechnical investigations;

2) Subsurface Utility engineering to locate and classify Utilities;

3) Right-of-Way limits;

4) Pavement and subgrade investigations for projects with existing pavement structures; and

5) Agreements with Utility Owners, railroads, and local governments.

F) Preliminary Engineering effort should also concentrate on adequately defining the elements of the Basic Project Configuration and the allowable limits of deviation for Basic Project Configuration, such as the following:

1) Horizontal and vertical alignment;

2) Project limits and ROW;

3) Vertical clearances;

4) Locations of signal and Intelligent Transportation System work; and

5) Interchange types and locations.

G) Other PE efforts should focus on the following:

1) Special Provisions and Performance Specifications, including defining MPT constraints;

2) Appropriate design requirements;

3) Cost estimates;

4) Preliminary scheduling to define appropriate contract time limits;

5) Stakeholder desires and requirements; and

6) Department-secured permits.

H) The PE effort also needs to include a VE study of the Project, its components, and associated criteria and specifications (*see* Section 4.3.9 of this DBPM). This is a requirement for Federal-aid projects and is also advisable for non-Federal-aid projects.

I) The following guidelines should be followed in determining the appropriate level of PE:

1) Concentrate on gathering data (such as, geotechnical and Utility locations) but leave most, if not all, the analysis to the Design-Builder;

2) Leave identification of material sources to the Design-Builder;

3) Finalize necessary agreements to the extent possible;

4) Progress roadway design to a 20% to 30% level of completion, focusing on horizontal and vertical alignment;

5) Determine ROW limits, but allow some "wiggle room" for flexibility in design concepts;

6) Update bridge condition surveys and associated drainage capacity analysis to determine adequacy of existing structures;

7) Perform a preliminary drainage analysis to determine flow requirements and to identify special concerns;

8) If project components need to be compatible with existing systems, such as ITS facilities, progress the design to a 50% to 60% level of completion; and

9) Progress bridge design to the point where requirements are specified. In many cases, only location is required. Note that if a specific type of structure is specified, the Department may be stifling creativity and innovation as well as adversely affecting cost. A preferred approach regarding structure type is to define the allowable types of structures or what types would not be allowed. A major freeway reconstruction project in another state involving over 140 bridges only had bridge design developed to the 10% level for the RFP.

See also Section 4.3 of this DBPM for additional information regarding PE.

3.7.2 Initial Engineering Parameters

Simply put, the design requirements and applicable standards and references need to be specified and listed. Care should be taken to avoid incorporating a "laundry list" of standards and references that may have conflicting requirements. If special criteria are to apply for a specific project, these need to be determined or developed.

This task includes defining specific performance criteria for components of the Project, such as pavement, drainage, and structures, and particularly for those elements of the Project for which there will be Performance Specifications in the contract.

The specific construction criteria or requirements should be identified with an eye toward allowing flexibility in means and methods where possible. This will require the examination of the Department's Standard Specifications and the likely need for Special Provisions to supplement or alter the Standard Specifications.

3.7.3 Initial Procurement and Contract Parameters

Determining certain procurement and contract parameters may significantly impact other work associated with the Project, before and after Award, for both the Department and Design-Builders. Many of the parameters are similar to those in design-bid-build projects, but will likely have different applications and considerations in DB. Such parameters include the following:

A) Procurement schedule;

B) Project and contract schedule;

C) Timing and source(s) of funding;

D) Funding and cost "share" requirements;

E) Pricing and payment scheme(s);

F) Minority-owned Business Enterprise, WBE, DBE, and subcontracting requirements;

G) Equal Employment Opportunity (EEO) requirements;

H) Rules of contact between the Department and Proposers;

I) Amount of stipends, if any;

J) Incentives and disincentives that will be applicable to the Project;

K) Quality Assurance (QA) and Quality Control (QC) roles and responsibilities;

L) Third party involvement and approvals;

M) Risk allocation;

N) Extent and availability of due diligence materials and the extent to which Proposers will be allowed to rely on them;

O) Design documents that can be relied upon, if any, and design documents that are provided as reference documents for the Proposer;

P) Insurance requirements;

Q) List of firms ineligible to participate on a Proposer's team due to organizational conflicts of interest (defined by the federal rule as meaning "that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the owner, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage"), including consultants that assisted in preparation of the RFP:

1) Department policies concerning organizational conflict of interest should be specified or referenced in the Design-Build RFQ or RFP document as well as any contract for engineering services, inspection or technical support in the administration of the Design-Build Contract. All Design-Build solicitations should address the following situations as appropriate:

a) Consultants and/or sub-consultants who assist the owner in the preparation of a RFP document will not be allowed to participate as an

Proposer or join a team submitting a Proposal in response to the RFP; and

b) All solicitations for Design-Build contracts, including related contracts for inspection, administration or auditing services, must include a provision which:

- Directs Proposers attention to this restriction; and
- Requires Proposers to provide information concerning potential organizational conflicts of interest in their Proposals. The apparent successful Proposers must disclose all relevant facts concerning any past, present or currently planned interests which may present an organizational conflict of interest. Such firms must state how their interests, or those of their chief executives, directors, key Project personnel, or any proposed consultant, contractor or subcontractor may result, or could be viewed as, an organizational conflict of interest. The information may be in the form of a disclosure statement or a certification.

R) Financial capability or capacity requirements;

S) Guaranty requirements;

T) Liability caps;

U) Warranty obligations;

V) Bonding requirements;

W) Basis of selection ("best value" for DB);

X) Confidentiality and no conflict of interest requirements for Department and consultant staff; and

Y) Applicable federal and State requirements.

Additional procurement and contract parameters will be developed later.

3.7.4 Department Project Organization

Following the parameters and guidance discussed in Section 3.1 of this DBPM and based on subsequent decisions made as outlined above, the overall Department project organization structure should be established by the Department's Project Manager. If the Department will be supported by consultants, the services of appropriate consultant(s) should be acquired early in the Project development process. The specific key individuals (Department and/or consultant) should be determined as well as their anticipated duration and extent of their commitment to the Project. Continuity of key staff throughout Project preparation, procurement, selection, and execution contributes significantly to the overall success of a DB Project. Identified staff should include the following:

A) Project management staff;

B) Preliminary design and design Oversight staff;

C) Construction Oversight staff; and

D) Procurement management/contract administrative staff.

3.7.5 Special Experimental Project 14 (SEP-14) Request (Federal-aid only)

The federal design-build regulations (promulgated as the result of TEA-21 and revised under SAFETEA-LU) reflect no limitations on the size or dollar value of "qualified", Federal-aid, design-build projects

(i.e., procured accordance with the FHWA DB regulations). If the Department wishes to procure a non-qualified, Federal-aid project (i.e., incorporate procurement procedures or techniques not allowed by the FHWA DB regulations), it must first obtain an SEP-14 approval from FHWA. No special approval is required for qualified projects.

Requirements relating to SEP-14 approvals can be found on FHWA's website, at <http://www.fhwa.dot.gov////programadmin/contracts/wkpl_req.htm>. If it decides to proceed with a project under SEP-14, the Department will be required to prepare and submit reports to FHWA, typically including an initial report immediately following Award of the contract; interim report(s) at agreed intervals (normally only required for longer duration projects); and a final report.

3.7.6 Alternate Proposals and Alternate Technical Concepts (ATC)

To the extent that a range of technical solutions are well defined and the performance specifications are flexible to allow opportunity for innovation and creativity on the part of the DB Proposers, then the use of Alternate Proposals and ATCs would probably not be warranted. However, if the initial design concepts, upon which the RFP is based, are limited or significant pressure exists in time and funding, then allowing DB Proposers to offer solutions outside the requirements defined by the RFP, may prove to be very beneficial. Outside the requirements includes different configurations, different design criteria, a waiver of the Buy America requirements, different standard specifications, use of materials not previously used or allowed by the Department. Allowing of Alternate Proposals doesn't mean the Department will automatically accept them, but it does mean that the Department will seriously consider them and the benefits they may present.

If the Department contemplates including the opportunity for either Alternate Proposals or ATCs in the RFP, the quality evaluation factors, especially those for technical solutions, need to be written so that both baseline and alternate solutions can be easily and fairly evaluated and rated for quality.

3.7.6.1 Alternate Proposals

An Alternate Proposal is in addition to the baseline proposal required in the RFP. It is unique to the Proposer that submitted it, and if accepted, the details of it are not shared with the other Proposers. If accepted, the Alternate Proposal is evaluated the same as all other proposals and is considered with the others in the selection of best value. Under an RFP without Alternate Proposals, if the Department likes a concept that is outside the RFP requirements (revealed in one-on-one meetings or communications or through the technical concepts review), then the Department must revise the RFP requirements through an Addendum thus affording all Proposers the opportunity to consider the revised requirements. That is not the case for Alternate Proposals, and therein lies its benefit for innovation.

3.7.6.2 Alternate Technical Concepts

Under Alternate Proposals, the RFP requires that a Proposer submitting an Alternate Proposal must also submit a baseline proposal. Under ATC, a Proposer can submit an ATC to the Department for consideration during the proposal preparation period (much the same as with technical concepts review), and if accepted, can elect to concentrate on and submit only the accepted ATC. Again, if accepted, the details of the accepted ATC are not shared with the other Proposers.

3.8 PROCUREMENT PROCESS OUTLINE

An overall outline of the procurement process should be developed to identify the following:

A) Specific events in the procurement process;

B) Time frames for preparation, review, and response;

C) Products to be developed and responsibilities for development;

D) Approvals required and from whom; and

E) Specific coordination points or requirements.

Table 3.8, below, provides an example of such an outline.

TABLE 3.8

PROCUREMENT PROCESS OUTLINE

Event/Activity	Responsibility (Assign by name if possible)	Date/Duration [(2)] (Give specific date or time prior to Award)
Establish initial procurement and contract parameters		
Develop summary of Scope of Project, Design-Builder responsibilities and status of Project		
Prepare SEP-14 application (if not a "qualified project" under 23 CFR 636) and obtain FHWA approval (Federal-aid projects only)		
Prepare and issue/advertise Request for Letters of Interest (RLOI)		
Conduct preliminary information meeting for interested entities		
Receive Letters of Interest (LOI)		(20-30 days after issuing RLOI)
Prepare and issue/advertise Request for Qualifications (RFQ)		
Conduct RFQ informational meeting		
Respond to inquiries/questions; prepare and issue addenda to RFQ, as necessary		
Prepare and submit Statements of Qualifications (SOQ)	Proposer	(Minimum of 30 days after issuance of RFQ)
Receive and evaluate SOQs		
Seek clarifications concerning SOQs		

Event/Activity	Responsibility (Assign by name if possible)	Date/Duration [2] (Give specific date or time prior to Award)
Determine Short-List of Proposers		
Prepare and issue draft RFP to Proposers on the Short-List and Stakeholders		
Conduct draft RFP informational meeting		
Receive and evaluate comments on draft RFP		
Hold individual meetings with Proposers on the Short-List (dependent on legal, procurement, and communication rules applicable to Project)		At time of receipt of comments on draft RFP
Prepare final RFP		
Obtain approvals of applicable environmental documents and design approval		
Obtain approval of the RFP and project authorization from FHWA (Federal-aid projects only)		
Issue RFP		
Respond to inquiries/questions; prepare and issue amendments, as necessary		
Prepare and submit Proposals	Proposer	(60-90 days after issuance of RFP)
Receive and evaluate Proposals		
Seek communications concerning Proposals		
Hold interviews/presentations (optional)		
Determine Competitive Range		

Event/Activity	Responsibility (Assign by name if possible)	Date/Duration [2] (Give specific date or time prior to Award)
Hold "Discussions," if necessary [1]		
Request final Proposal Revisions and issue addenda, if necessary [1]		
Respond to inquiries/questions; prepare and issue addenda, if necessary		
Prepare and submit final Proposal Revisions [1]	Proposer	
Receive and evaluate final Proposal Revisions, if requested [1]		
Seek communications concerning final Proposal Revisions [1]		
Select Proposer offering best value to Department (Award)		
Execute contract		
Notice to Proceed		

[1] These steps should be allowed for in the procurement process, but only used if necessary. Selection and Award can be made based on initial Proposal.
[2] Durations will vary depending on scope, needs, and complexity of Project.

3.9 PRELIMINARY EVALUATION FACTORS

Appropriate evaluation factors should be established early in the Project development process, with reference to the Project goals. In determining the evaluation factors, one should identify the objectives related to each factor, i.e., why the particular information is being requested, and what the Department expects to learn from the information submitted. Evaluation factors should focus on differentiators, i.e., factors that will allow the Department to determine real differences between the Proposers. Care should be taken to avoid requesting extensive, time-consuming, or costly information from Proposers that will not be used by or useful to the Department in evaluating and differentiating Proposals.

The focus of evaluation factors is significantly different between the RFQ and the RFP, but there are some similarities, particularly for items rated on a "pass/fail" basis. For instance, a responsiveness determination is required for both the SOQ and Proposal. Also, at both the RFQ and RFP phases of procurement, certain legal and financial information will be submitted and evaluated. The firm's bonding capacity is generally reviewed at both phases.

3.9.1 Request for Qualifications

See the RFQ sample in Exhibit II.

The evaluation factors for the RFQ phase need to be determined quickly in order to allow timely issuance of the RFQ, and should focus on experience and past performance. Usually at this stage the Project requirements have not been identified sufficiently to request specific, meaningful information relative to Project approach. However, information regarding understanding of the Project and its issues may be requested at this stage.

Typical SOQ evaluation factors include the following:

A) For Pass/Fail Factors:

1) Responsiveness of the SOQ in general (often assessed prior to legal/financial evaluation);

2) Provision of draft legal documents outlining the proposed organizational structure and legal relationships of the Proposers;

3) Provision of certain legal documents identifying and designating the authorized representatives of the Proposer;

4) Evidence of compliance with professional licensing statutes or commitment to obtain appropriate licenses;

5) Letters from Surety indicating sufficient bonding capacity of the Proposer;

6) Acceptable certification regarding debarment status and other legal compliance issues (such as fraud convictions); and

7) For larger projects, provision of acceptable financial statements, information regarding tangible net worth, and other financial data relative to capacity to undertake and sustain a project of the size and scope contemplated.

B) SOQ evaluation factors may include the following quality factors:

1) Experience of firms, including experience of the following:

a) The proposing entity and its members, if a joint venture, partnership, or similar organization;

b) Lead design entity;

c) Major Construction Subcontractors; and

d) Specialty design subconsultants and/or specialty Subcontractors as may be designated by the Department.

2) Capability of the firms to perform the work

3) Relevant past performance information (if available), including:

a) Record of conforming to contract requirements (including M/W/DBE compliance) and to standards of good workmanship;

b) Record of forecasting and controlling costs;

c) Adherence to contract schedules, including the administrative aspects of performance;

d) History of reasonable and cooperative behavior and commitment to customer satisfaction; and

e) Business-like concern for the interest of the customer.

The Department maintains a past performance database for Design Consultants, but not for Construction Contractors. If past performance of Construction Contractors will be a factor, the evaluation will need to be based on information provided by the Contractors and its clients. Typically the SOQ would ask for client contact information which would then be used by the Department to make telephone calls or to request forms to be filled out, to rate the contractor in the above areas. Any decision to request information regarding issues such as protests, claims and litigation should be made only after consultation with Department counsel, to ensure that appropriate standards are included and that due process requirements are met. Information relating to past performance should focus on the past three to five years for the actual offices or divisions of the firms that will be performing the work. For Federal-aid projects, if a particular firm does not have a record of relevant past performance or if information on past performance is not available, the lack of relevant past performance cannot be a basis of a favorable or unfavorable rating. (*See* 23 CFR 636.206.)

4) Safety record;

5) Backlog and capacity information; and

6) Project understanding.

The factors and information evaluated during the RFQ/SOQ stage should not be re-evaluated during the RFP/Proposal stage, except that final legal organizational documents, a specific commitment of a Surety, updated financial information, and specific information relating to the key personnel not evaluated at the RFQ/SOQ stage should be evaluated in the RFP/Proposal stage. Material adverse changes in any SOQ-provided information should also be evaluated in the RFP/Proposal stage.

Information relating to past performance should focus on the past three to five years for the actual offices or divisions of the firms that will be performing the work. On Federal-aid projects, the lack of a record of relevant past performance cannot be a basis of a favorable or unfavorable rating. *See* 23 CFR 636.206.

3.9.2 Request for Proposals

See the RFP sample in Exhibit III.

Although the issuance of the RFP comes later in the procurement process, it is important to develop a "tentative" list of evaluation factors in order to: (1) help focus the Department as it accomplishes PE and begins preparation of the RFP; and (2) include in the RFQ to assist Proposers in establishing and organizing their team. The evaluation factors for the Proposals should focus on how the Proposer intends to accomplish the work. Except as noted above, "Qualifications" ratings should be established during the RFQ/SOQ stage and not repeated at this stage. Of course, price will also be evaluated and considered at this stage of the procurement. The evaluation factors for the RFP/Proposal stage typically include, but are not limited to, the following:

A) Pass/Fail Factors:

1) Responsiveness in general;

2) Provision of acceptable final legal documents regarding the organizational structure and legal relationships of the Proposer;

3) Evidence of possession of, or ability to, obtain appropriate licenses;

4) Provision of required certifications and disclosures;

5) Letters from a Surety committing to provide required payment and performance bonds; and

6) Acceptability of changes to financial statements or other information provided in the SOQ; and

B) Quality Factors:

1) Experience and Qualifications:

a) Qualifications of individuals holding key management positions identified by the Department; and

b) Qualifications of key technical personnel.

2) Management Approach, including the following:

a) Organization;

b) Project controls, particularly the schedule;

c) Quality Plan and approach to quality;

d) Interfaces and approach between Design-Builder and Department and with other applicable third parties; and

e) Safety Plan.

3) Technical Solutions, including the following:

a) Proposed technical solutions to key technical aspects of a project, such as, geotechnical design, pavements, structures, and drainage; and

b) Other technical features as identified by the Department;

4) Project Support, including the following:

a) Maintenance and Protection of Traffic;

b) Public information/community relations, if such work is included in the scope of the Project;

c) Soil and erosion control;

d) Environmental mitigation and monitoring, including aesthetics; and

e) The Department maintains a Consultant database.

C) Price:

1) Total price (it may be beneficial to base the price evaluation on present value for large, multi-year projects to discourage “front-loading” of the Price Proposal);

2) Price reasonableness of specific items, including options;

3) Responsiveness; and

4) Conformity of time-price curve to the work schedule (for larger, more complex projects).

The following are key items to keep in mind when establishing evaluation factors:

a) Focus on what is important to the Department and other Stakeholders;

b) Only ask what is necessary to make a decision (consider the cost to prepare Proposals and the cost to evaluate them); and

c) Direct efforts towards discriminators where the RFP allows Proposers the flexibility to develop different approaches.

4.0 ENVIRONMENTAL DOCUMENTATION AND DESIGN-BUILD PRELIMINARY ENGINEERING

4.1 INTRODUCTION AND CORRELATION OF DESIGN PHASES I THROUGH IV TO DESIGN-BUILD

Design-Build projects, like all other Department projects, require environmental analysis and preparation of environmental documents. The DB process includes DB Subphases IIA-IID, which, except for the elimination of design approval documents and the activities associated with their drafting and approvals, are essentially the same as Design Phases I through IV as delineated in the Project Development Manual with several other exceptions as noted herein.

During DB Subphases IIA_IID, it is important to remember to limit the amount of design work performed to coincide with the level of design required to support the environmental documentation. In a design-bid-build project, the design work performed in connection with the environmental analysis is often performed by the same team who will produce the final design, and therefore it is largely irrelevant to the end product whether work is performed earlier or later—although even for design-bid-build projects the risk of a “no project” decision or an alternative alignment should be considered in deciding whether to spend the Department’s resources on design work relating to a specific alternative. In the case of DB, not only is additional design work unnecessary, but it may also result in the following adverse consequences:

A) Artificial constraint of options and opportunities for DB innovation and creativity;

B) Elimination of potential qualified Proposers or creation of a competitive disadvantage if a Proposer’s preferred means and methods are eliminated in the design process; and/or

C) Duplicative design efforts and associated duplicative expenses, if the selected Design-Builder opts for a different design solution.

4.2 RELEVANCE OF DESIGN PHASES I THROUGH IV ACTIVITIES FOR DESIGN-BUILD

The procedures outlined in the Project Development Manual for Design Phases I through IV for a design-bid-build project are essentially the same (with the exception of no Design Approval) as DB Phase II, Environmental Process (Subphases IIA through IID), of a DB Project. Note that all references to Design Phases V and VI are not applicable to DB.

DB Subphases IIA though IID can and should progress concurrently with supplemental PE and with development of the procurement and Contract Documents. *See* Figure 1-1 in this DBPM.

The procedural steps of Chapter 4, Sections 4.4 and 4.5, of the Project Development Manual are applicable to DB Projects for Design Phases I through IV only (i.e., DB Subphases IIA through IID). Design Phases V and VI are not applicable for DB. Also, since Design Approval is likewise not applicable to DB, activities related to Design Approval should be replaced with activities aimed at obtaining RFP Approval.

Throughout DB Subphases IIA through IID, the extent of PE done in support of the environmental process needs to be closely coordinated with any supplemental PE for the DB Project (*see* Section 4.3 of this DBPM) and with the risk identification, assessment, and allocation process (*see* Section 3.5 of this DBPM). To the extent feasible, definition of the alternatives and the preferred alternative should allow sufficient flexibility and not unnecessarily constrain design options for the potential Design-Builders. Care should be taken not to negate the advantages in DB by being overly prescriptive and restrictive in DB Subphases IIA through IID.

4.3 SUPPLEMENTAL PRELIMINARY ENGINEERING AND ESTIMATING FOR DESIGN-BUILD

4.3.1 Purpose of Supplemental Preliminary Engineering and Estimating

As noted above during DB Subphases IIA through IID, certain minimum PE work is required to support the environmental documents and analysis. Additional or supplemental PE and estimating may be necessary or desirable to further the Projects goals, to better define the scope and Project criteria/parameters, and/or to support the assessment and allocation of project risks and minimize contingency costs on the part of the Department and the Design-Builder. The engineer's estimate will also serve as the basis for a price analysis prior to Award. For certain projects, some supplemental activities may be advisable to facilitate the overall Project Development Schedule. As a general matter it is the Department's goal to perform and/or complete activities in such a manner so as to allow the Design-Builder to proceed expeditiously once the Project is Awarded.

The focus of the PE effort should be on identifying and defining issues and problems and defining criteria and parameters applicable to Project work. To maximize the benefits of DB, project solutions should be left to the Design-Builder.

4.3.2 Supplemental Data Acquisition

In most DB Projects major risks or unknowns include issues associated with relocation of existing Utilities, subsurface conditions, and Hazardous Materials remediation. While some preliminary information regarding Utility Relocations and Site conditions may have been gathered as part of DB Subphases IIA through IID, it is frequently beneficial to perform additional, more detailed investigations (such as geotechnical investigations, subsurface utility engineering, and pavement subgrade investigations) to provide more information to Proposers regarding existing conditions in order to lessen uncertainty and reduce contingency amounts included in Proposal prices.

Additional drainage studies or data gathering may be necessary, particularly if development has occurred in the Project area subsequent to installation of the existing drainage facilities or if it is desirable to provide joint facilities among agencies.

It may also be desirable to obtain additional information in order to speed up project development. For example, taking geotechnical borings while the RFP is being developed, in lieu of including the borings in the Design-Builder's scope, could shorten the time required to complete the Project.

In some cases it may be desirable to conduct preconstruction condition surveys of buildings and structures to document their condition and provide a basis for settlement of or defense against damage claims during construction.

Decisions regarding steps to be taken to obtain additional data should be guided by the risk identification, assessment, and allocation process outlined in Section 3.5 of this DBPM. As with all other information

provided to Proposers, the Department should consider whether the Proposers should be allowed to rely on any additional investigations performed by the Department or whether the results of such investigations should be included in the reference documents.

4.3.3 Supplemental Design, Analysis, and Reports

Limited analysis and design may be desirable to allow the Department to more accurately estimate the design and construction efforts and their associated costs. Care should be taken in developing design information beyond the minimum necessary because of the associated reduction in DB flexibility and increased risk of retained liability.

Due to Project phasing constraints, access requirements, or difficulties with obtaining approvals or defining criteria for obtaining approvals from certain Stakeholders, it may even be necessary to carry the design of certain elements of a Project to a relatively high level of completion; in some cases, to final design. In such cases, the Department project management staff should consult with counsel regarding its ability to transfer responsibility and risk to the Design-Builder for the adequacy and accuracy of the design documents.

4.3.4 Third Party Agreements

Preliminary work to draft and execute agreements relating to the Project can do much to provide for smoother execution of the Project and lessen risk (and contingency costs) to the Department and the Design-Builder. The Contract Documents should specify which of the requirements included in an agreement that are to be carried out by the Design-Builder and which are to be performed by the Department. The agreements themselves should in most cases be included in the RFP either as reference documents or in some instances, contract requirements.

Third party agreements to be included in the RFP may include agreements with:

A) Utility Owners;

B) Railroads;

C) Political subdivisions;

D) Regulatory agencies; and

E) Landowners.

4.3.4.1 Utilities

Agreements with Utilities should cover a number of issues that arise during a DB Project. Design-bid-build projects involve the same issues, but the differences in timing of design and construction necessitate different solutions. Issues to be addressed include the following:

A) Responsibility for design and/or construction with a desirable option of having the Design-Builder design and construct the relocations;

B) Design requirements and construction specifications;

C) Betterments, including the approach to determining whether an item is a betterment;

D) Notifications to the involved parties;

E) Review of designs and/or cost estimates by the Utility or the Design-Builder, including timelines;

F) Emergency response actions and timing;

G) Limitations on timing of construction or interruption of service;

H) Damage repair;

I) Inspections and testing by the Utility and/or Design-Builder;

J) Approvals (including provisions for early start of construction); and

K) Payment for relocation.

4.3.4.2 Non-Utility Facility Rearrangements

The agreements for local agency non-utility facility rearrangements should cover similar issues as noted for Utilities. Non-utility facility rearrangements could include the relocation or mitigation of impacts to local agency buildings, roads, or pedestrian or bike paths, among others.

It is also desirable to obtain advance agreement regarding the process to be followed for any permits required by local agencies, preferably including an expedited process for issuance of permits, waivers of restrictions on night and weekend work, provisions regarding traffic management, coordination of the work with adjacent projects, and addressing any issues relating to work within local agency rights-of-way.

4.3.4.3 Railroads

If a project interfaces with railroads, advance agreements with the railroad operator can be critical in terms of schedule and costs. While the typical agreement may be similar to a railroad agreement for a design-bid-build project, due to the fast track schedule in DB, the potential impacts of any failure of the railroad operator to cooperate with the Department and its contractors can be costly. Issues to be addressed include the following:

A) Design criteria and requirements relating to construction on railroad property and for facilities affecting railroad operations;

B) Investigations to be conducted on railroad property;

C) Treatment of railroad-related or owned Utilities;

D) Railroad procedures and schedule for design and construction approval;

E) Conditions under which construction on railroad property may start prior to completion of design;

F) Railroad design reviews and construction inspections;

G) Time periods during which field and construction activities can occur, including designated construction windows;

H) Operational constraints and requirements for field and construction activities, including flagging responsibility and costs; and

I) Payments to railroad.

As an example of the differences between DB and design-bid-build projects, railroads typically require their review and approval of 100% design submittals prior to allowing any construction on or over their property. For DB Projects, it would be preferable to obtain railroad agreement to participate in over-the-shoulder Design Reviews and allow construction to commence based on a release for a construction design package rather than requiring a final design.

4.3.4.4 Interagency/Intergovernmental Agreements

When projects are jointly developed (funded) or when different agencies or governmental entities have jurisdiction over portions of the Project, it is advisable to execute a joint agreement among all such entities covering the following:

A) Applicable criteria and specifications for all components of the Project;

B) Procedures for implementing changes to the Project;

C) Approvals of changes desired by one or more parties;

D) Limits on changes in scope, criteria, or specifications;

E) Responsibility for cost or credits for changes;

F) Involvement of parties in Design Reviews and construction inspection;

G) Designation and authority of representatives of each entity; and

H) Designation and recognition of the contracting agency and the relationship of other parties with the Design-Builder.

These issues may be similar to those in design-bid-build projects but may be addressed in different ways. The purpose of such agreements is to make the relationship among the various agencies or governmental entities as transparent to the Design-Builder as possible in order to avoid perceived risk and contingency costs. Since the DB contract will be between the Design-Builder and the Department, the Design-Builder only needs to know that the funding is available and should not be concerned with the source of funds. Also, even though different agencies may be responsible for Design Reviews and construction inspection for different portions of the Project, a single process should be specified and followed by all responsible agencies.

4.3.5 Specifications

Additional PE efforts may focus on preparing Performance Specifications and Special Provisions (modifications to the Standard Specifications) specific to the Project.

Performance Specifications focus on defining the design and performance requirements to be met by the Design-Builder while allowing the Design-Builder the latitude to develop the specific means and methods of accomplishing the specified level of performance. Additional information and examples regarding Performance Specifications and Special Provisions for DB are provided in Sections 7.4 and 7.5 of this DBPM and Exhibit III, Division 2, Part 4 – Performance Specifications and Part 5 – Special Provisions.

4.3.6 Permits

Major permits which have not been obtained prior to the due date for Proposals are likely to be considered a major project risk by the Proposers. It is therefore advisable for the Department to take steps to obtain such permits during this phase of project development if not previously obtained during Design Phases I through IV. This is the case even though such permits may normally be obtained during Design Phases V and VI of a design-bid-build project.

It may not be feasible to obtain all permits until after 100% design has been completed. The Department should evaluate the risks associated with such permits and determine whether it wishes to retain responsibility or transfer the responsibility to the Design-Builder. It may be possible to obtain a generic permit covering the major issues, and to delegate responsibility to the Design-Builder to obtain specific permits once the design reaches an appropriate level. Certain other permits may typically be obtained by a contractor on a design-bid-build project after award of the contract. The Department should examine such permits and, if they require long lead times, may wish to work out alternative arrangements in order to expedite the Project schedule. In assessing the value or viability of obtaining a permit prior to award to the Design-Builder, the Department should balance the advantages of obtaining the permit against the disadvantages of producing the higher level of design required to obtain the permit, with reference to the Project goals, the desired allocation of project risk, and the need to provide design flexibility to the Design-Builder.

As noted above, some permits may be best obtained by the Design-Builder or completed based on interim or draft permits obtained by the Department. Where it is not possible to obtain an interim or draft permit, the Department should work with regulatory agencies to facilitate approval of permits prior to advanced levels of design or final design. In some cases agencies will provide the criteria for permit approval and agree to issue the permit once the Design-Builder satisfies those criteria.

4.3.7 Rights-of-Way and Easements

Work on a DB Project performed during Design Phases I through IV includes identification of needed ROW and easements, similar to a design-bid-build project. However, the process for acquisitions is likely to be different for DB Projects, particularly if the Department wishes to award the DB contract soon after issuance of the final environmental decision, and if it is precluded from commencing the acquisition process until after the final environmental decision has been issued. Some of the Department's procedures will likely have to be revised to enable acquisitions to proceed based on the limits identified during Design Phases I through IV or during supplemental PE, instead of basing the acquisition on the final design. In addition, procedures will need to be instituted to allow acquisitions to occur after Advertisement and even after Award of the DB contract. If any parcels remain to be acquired following Award, the RFP should include a ROW acquisition schedule indicating dates when access to properties will be provided by the Department. The Department's Project Manager for the DB Project should notify the Director of the Real Estate Division when a DB Project commences to ensure completion of the ROW identification and acquisition process in accordance with a DB methodology.

For Federal-aid projects, information on the status of ROW must be provided in the RFP indicating either all ROW will be acquired prior to the Award of the contract or all necessary arrangements have been made to acquire the ROW (23 CFR 636.309). The Department may elect to have the Design-Builder acquire the ROW, in which case the requirements of 23 CFR 710.313 must be included in the RFP.

In addition, the Contract Documents should specify how acquisition of additional ROW or easements for the benefit of the Design-Builder will be handled. The Department may wish to require the Design-Builder to prepare supporting documentation and, under certain circumstances, to assume responsibility for acquisition costs.

For additional information, *see* Exhibit III, Division 2, Part 2, DB Section 107-22.

4.3.8 Cost Estimating

While preliminary cost estimates will be prepared during Design Phases I through IV, refinements to such estimates will be necessary as the RFP is developed, to ensure that all costs are recognized in the estimate. Cost estimates obtained by the Department for design-bid-build projects are based on: (1) having a design (plans and specifications); and (2) review of comparable prices for the construction of the design. A different process must be used for DB cost estimates. A DB estimate (engineer's estimate) needs to be developed generally following the same process that will be used by the Proposers—involving selection among different design alternatives, MPT scheme, and means and methods of construction. Engineering and design costs must be considered as well as the costs of additional responsibilities assigned to Design-Builders that are normally performed by the Department in design-bid-build projects (such as, certain QC activities and documentation, public information/community relations, monitoring environmental mitigation, and As-built Plans), and the potential costs associated with risks that have been allocated to the DB contractor. Design-Build Price Proposals are not made on the basis of quantities and Unit Prices, except for a few items (typically Hazardous Materials remediation work). Unit Prices need to be analyzed and adjusted to compensate for the different pricing schemes, responsibilities, and risk allocation associated with DB.

Additionally, to facilitate analysis and comparison of the Price Proposals, the DB estimate should follow the same format as that required for the Price Proposals.

See Exhibit III, Division 1 - Instructions to Proposers, for the format of the Price Proposal. *See* Section 7.2.9 of this DBPM and Exhibit III, Division 2, Part 2, DB Section 109[S or L] for further discussion of the pricing and payment concepts.

When preparing the cost estimate, the estimator(s) should also determine the appropriate amount to be included in the Contract Price for Interim Payments. *See* Exhibit III, Division 2.

4.3.9 Value Engineering

Value Engineering is a valuable tool for DB Projects, just as it is in design-bid-build.

Significant benefits can often be derived by performing a VE study in the early stages of DB Project development as PE and the environmental documents are being done, project requirements are being defined, and specifications and other contract requirements are being prepared. For Federal-aid DB Projects, the Department is required to perform a VE analysis prior to the release of the RFP (*see* 23 CFR 627.5).

It should be noted that the greatest opportunity for VE in DB occurs during the Proposal preparation process for procurements using a best value as the basis of selection. For such procurements, Proposers essentially go through a VE process as they prepare their Proposals, including analyzing the options to reduce project costs as well as the costs and benefits of quality enhancements. The Department receives full value of the benefits of such work done by the Proposers.

Although the primary opportunity for VE occurs prior to Award of the DB Contract, additional opportunities for VECPs existing following contract execution. The Department's standard DB contract provisions provide for VE cost savings to be shared on much the same basis as for design-bid-build projects. This gives the Design-Builder a continuing incentive to look for creative and innovative design solutions as it develops the project design.

5.0 DESIGN-BUILD PROCUREMENT DOCUMENTS

This Section 5.0 covers the various documents to be prepared and issued during the procurement process and those to be used during the actual contract execution phase. *See* Figure 1-1, Department Design-Build Project Development Process and Section 3.8, Table 3.8.

5.1 REQUEST FOR LETTERS OF INTEREST

An RLOI is a public announcement soliciting letters of interest from potential Design-Builders or potential members of DB Teams for participation in informational meetings and for receipt of an RFQ for a project.

An RLOI serves the following purposes:

A) Announces and defines the Project;

B) Stimulates interest;

C) Facilitates formation of DB Teams;

D) Provides Department contact information; and

E) Initiates communication and information exchange and identifies the ground rules of that exchange.

The RLOI must be published for 15 business days in a newspaper published in the county in which the Project is to be constructed or improved, in the NYS Contract Reporter and in such other newspapers or trade journals the Department may designate, as well as on the Department Web site. Copies should be sent to the Stakeholders and others that have previously expressed an interest in the Project. A sample RLOI is shown in Exhibit I.

The RLOI should be optional. An RLOI may not be beneficial if it conflicts with the timing demands of the procurement and the contract or if it is evident a sufficient number of qualified firms are already interested in the Project.

If used, the RLOI should be prepared by the Department's Project Management Team and approved by the Chief Engineer or designee. The RLOI will be issued by the Contracts Management and Audit Division.

5.2 INFORMATIONAL MEETINGS

One or more informational meetings for the potential Design-Builders or members of DB Teams should be held to disseminate more detailed information about the Project and the procurement process as the Project progresses. Early informational meetings facilitate the formation of viable DB Teams. Informational meetings also set the stage for the open communications and partnering critical to the success of DB Projects. This represents the first opportunity to convey trust and the "different way of doing business" inherent in the DB delivery method and the sincerity of the Department in seeking Design-Builders who wish to team with the Department for the success of the Project. Informational meetings can be held at the following times:

A) Prior to, concurrent with, or subsequent to issuance of an RFQ;

B) At significant milestones in the development of the RFP or other significant project-related milestones, such as the approval of environmental documents, execution of key agreements, or securing funding;

C) Concurrent with or following issuance of the RFP;

D) Following issuance of an RFP to announce and/or explain significant revisions to the Project or the RFP; and/or

E) Prior to, concurrent with, or following issuance of a request for final Proposal Revisions.

F) Typically more than one informational meeting is held, depending on project circumstances. Informational meetings typically cover the following topics:

1) Design-Build orientation, especially in early stages of initiating a DB program;

2) Scope of work and key technical aspects of a project;

3) Availability of specific project information and due diligence materials;

4) Information relative to environmental, Stakeholder, and community concerns and constraints;

5) Procurement and project schedules;

6) Evaluation factors and the evaluation and selection process;

7) Key contractual requirements;

8) Minority-owned Business Enterprise, WBE, DBE, and EEO program requirements;

9) Organization of procurement and Contract Documents;

10) Other mandated administrative and procurement information;

11) The intended team relationship between the Department and the Design-Builder;

12) The approach to risk sharing and level of pre-Award PE; and

13) The roles of the Department and the Design-Builder, especially in design and construction QC/QA.

Informational meetings should typically be held in the Region where the Project is located and be led by the Department's Project Manager who would set the agenda, subject to approval by the Chief Engineer or designee. Project informational displays, including general layout (alignment) plans may be shown. Attendees should be requested to fill out an attendance sheet so the Department knows whom to contact if additional notices or meetings are required.

Informational meetings normally also provide for a question and answer period at the end of any presentation to foster the open communication process. The Department may also elect to make attendance at the meeting mandatory for firms interested in submitting qualifications or for those short-listed firms submitting Proposals on the Project. The meetings may be announced in the local media and on the Department Web site with interested parties and Stakeholders specifically invited. Meeting announcements should be released through the Contracts Bureau. Following the meetings, informational handouts and attendance lists should be made available to the media and the attendees.

5.2.1 Group Meetings

Informational meetings held for the purpose of providing additional information or guidance to the Proposers should be group meetings. The major purpose of these meetings is to allow an opportunity for firms interested in being involved in the DB Project to gather the information needed to make decisions regarding the Project. The Department should use these group meetings to disseminate information so all potential Proposers receive the same information simultaneously. Insights gained by the Department during group meetings will manifest themselves in the details of the RFP document.

It is recommended that these group meetings be video taped or a transcript be made of the proceedings so the Department has a record of the information communicated to the Proposers at the meeting. Having a record of what was discussed during the group meeting may be useful during the subsequent communications or discussions (*see* Sections 9.6.3 and 9.6.6 of this DBPM) with the Proposers or contract negotiations with the successful Proposer.

5.2.2 Individual Proposer Meetings

Depending on the risks, complexities, or need for creativity regarding a project, the Department, during the RFP preparation phase, may elect to invite Proposers on the Short-List to one-on-one meetings to gain further insight from the Proposers regarding major challenges and keys for success. The individual Proposer meetings provide a confidential forum allowing each Proposer on the Short-List to provide input and comments to the Department regarding the Project. Individual Proposer meetings are most beneficial when combined with a request for the Proposers on the Short-List to review and comment on drafts of the RFP. These one-on-one meetings are primarily intended to allow the Department to gain information from the Proposers rather than to disseminate information to the teams. Once the RFP is issued, it is generally inadvisable to continue to hold one-on-one meetings because of the potential for inadvertently disclosing information to one Proposer that is not disseminated to the others. Nevertheless, it may be

desirable to hold additional meetings with individual Proposers to discuss certain technical concepts (*see* Section 9.4). In addition, if all of the Proposers on the Short-List request additional one-on-one meetings be held, the Department may consider such request, but should make a decision to hold additional meetings only after consulting with Department counsel. It is important that all one-on-one meetings be strictly controlled so information is provided to all the teams equally and no team gets an unfair advantage due to information they may receive during such a meeting. To reduce the risk of protest associated with one-on-one meetings, the Department must control and handle such meetings in a strict, fair, and equitable manner by undertaking, among other things, the following:

A) Inviting all Proposers on the Short-List to the individual meetings;

B) Identifying in the RFQ that meetings of this nature may occur in connection with RFP development;

C) Limiting the number of Department and consultant personnel who attend these sessions and attempting to have the same Department/consultant "team" participate in each of the meetings;

D) Ensuring that any oral or written information provided in the meetings by the Department, including interpretation of the RFP and answers to Proposer questions regarding procurement requirements, is provided to all teams; and

E) Ensuring that no Proposer is given an unfair advantage as a result of the sessions, such as by commenting on the merits, disadvantages or desirability of a particular Proposer's intended approach;

The one-on-one informational meetings should be taped (either audio or video) and maintained for evidentiary purposes in the event of a protest. If the Project is a Federal aid project, the Department should invite and have an FHWA representative observe the meetings to ensure and confirm fairness.

Refer to Section 9.6.6 regarding procedures for one-on-one meetings that may be held for post-Proposal Discussions.

5.3 ADVERTISEMENT

Prior to release of the RFQ an Advertisement announcing the availability of the RFQ should be published. The Advertisement must be published for 15 business days in a newspaper published in the county in which the Project is to be constructed or improved, in the NYS Contract Reporter and in such other newspapers or trade journals as the Department may designate, as well as on the Department Web site. The Advertisement shall include a brief description of the proposed Work, with an announcement where the RFQ or RFP may be obtained, the terms and conditions under which the SOQs will be received, the amount of the Proposal Bond and other matters as the Commissioner deems advisable to include therein.

5.4 REQUEST FOR QUALIFICATIONS

The RFQ is the basic action/document of step one of the two-step selection process.

A number of basic facts about DB affect the RFQ process, including the following:

A) The overall Procurement/Proposal process, particularly the preparation of Proposals in response to an RFP, requires a significantly greater commitment of resources and dollars on the part of the Proposers as compared with the resources required to bid on a design-bid-build project;

B) Proposers are willing to incur these costs provided they have a reasonable chance of success and the competition is limited to a reasonable number of teams;

C) At the RFQ stage, specific project requirements and constraints are rarely defined to the level that allows Design-Builders to identify "how" they propose to complete a Project;

D) The Department needs to consider the resources and time it may need to evaluate SOQs submitted in response to an RFQ; and

E) Staff that will perform the evaluations must be identified early and trained. Using staff involved in the preparation of the RFQ builds consistency in the process. Including staff that expect to participate in RFP development and evaluation can also be helpful to those later stages.

5.4.1 Purpose

The primary purpose of an RFQ is to determine the Short-List, typically from three to five Proposers best qualified to develop the Project based on stated evaluation criteria. While the Department may wish to find out, as part of the qualification process, how Proposers intend to solve project related problems, the specific project requirements are likely to be ill-defined at this stage of the procurement and the resulting answers are likely to be less than clear and concise and not a good basis of evaluation. Furthermore, the answers to such project approach questions require expenditure of significant resources, and therefore, are more appropriately left to the RFP phase. A distinction can be made, however, with respect to questions regarding the Design-Builder's understanding of the Project and its requirements – such questions may be appropriate at the RFQ stage and can be useful in evaluating a Proposed Design-Builder.

Experience in other states has proven RFQs that focus on determining the qualifications of potential Design-Builders better serve the overall procurement process than seeking solutions at this first step of the procurement. Maintaining a focus on qualifications minimizes the cost to the Proposers in preparing their SOQs and minimizes the Department resources required to evaluate the SOQs and determine an appropriate Short-List. This qualifications only approach is also consistent with the New York State DB legislation and the FHWA's DB regulations.

5.4.2 Composition

The composition of an RFQ should be fairly standard from one project to another. While the specific information submitted with the SOQs may vary somewhat from project to project, the general organization and categories of information can easily be standardized, thus having a three-fold benefit: (1) making preparation of the RFQ easier and faster for the Department; (2) making preparation and submittal of SOQs less costly for the Proposers; and (3) facilitating the evaluation of the SOQs by the Department since all the SOQs are composed in a similar fashion.

See Exhibit II of this DBPM for a sample RFQ.

A) The main body of an RFQ should include the following:

1) Statement of project goals and objectives;

2) General information relating to project schedule, environmental status, funding status and plans, governing law, insurance, and bonding requirements; how inquiries from Proposers will be handled; RFQ amendment procedures; Department notification procedures; other administrative matters; and "rules of contact" (how the parties will communicate with each other during the SOQ preparation and evaluation phases);

3) Explanation of the overall two-step procurement process and schedule, including summary information relating to the RFP step to the extent it is known, such as tentative evaluation factors;

4) Explanation of the SOQ evaluation process, including evaluation objectives, evaluation factors and their relative importance, method of evaluation, and the short-listing criteria and process;

5) Protest procedures;

6) State and Department rights and disclaimers;

7) Minority-owned Business Enterprise, WBE, DBE, and EEO requirements; and

8) Other mandated provisions.

B) The recommended form of the RFQ includes three appendices, as follows:

1) Appendix A provides a more detailed description of the scope of work, including the Project limits, physical components to be designed and constructed, current status of the Project, NEPA process status, anticipated Design-Builder roles and responsibilities, anticipated Department roles and responsibilities, Material or Equipment available from the Department, and Stakeholder roles and responsibilities. Appendix A may include maps, sketches, or other general graphic representations of the Project, but not engineering drawings. The contents of Appendix A are provided in a stand-alone document because the information is likely to vary significantly among different projects. Appendix A should not exceed five pages in length, exclusive of maps, graphics, and sketches;

2) Appendix B identifies the SOQ submittal requirements, including page limits and specific content requirements for each of the identified evaluation factors and also defines the format for submittal of the SOQ. If the format is not specified, the Proposers may organize their SOQs in any number of ways, with significantly varying formats, increasing the probability they will omit information, making evaluation more difficult for the Department. Specifying the organization and format of the SOQs makes evaluation of the SOQs easier for the Department staff, expedites the review process and assures more equitable evaluations; and

3) Appendix C contains the forms required for the SOQ. Some forms may be Department, State, or Federal standard forms required for all procurements. Other forms are specific to the Project and serve to provide Proposers a standard format for submittal of the information requested in the RFQ. Use of forms facilitates preparation and evaluation of the information. The RFQ forms do not usually vary significantly from procurement to procurement (*see* Appendix C, Exhibit II to this DBPM for examples of RFQ forms).

5.4.3 Evaluation Factors

Evaluation factors generally fall into two categories, “pass/fail” and quality factors.

A) The “pass/fail” factors usually include the following:

1) Legal: The proposed legal make-up of the Proposer, state licensing information, and a statement from a Surety indicating a willingness to provide bonds, although it is sometimes preferable to examine the Proposer’s and guarantor’s financial statements as well, particularly for larger projects or project revenue financed projects; debarment status; and lobbying certifications;

2) Financial: This includes a statement from a Surety indicating willingness to provide bonds, and, if deemed advisable, review of financial statements for the Design-Builder and any third party guarantors. On some large projects, the financial strength of a Proposer may also be a quality evaluation factor; and

3) Responsiveness of the SOQ: This requirement is a basic premise of public contract law and incentivizes the Proposers to provide all information in the specified format and gives the Department a means to "encourage" compliance.

B) Quality factors for the RFQ/SOQ often include the following:

1) Experience of the firms: This includes joint venture or partnership members or the general contractor, lead designer, and major or specialized subcontractors or sub-consultants; identification of team members, their proposed role, division of work and responsibilities; and prior experience as a team;

2) Past performance: (*see* Section 3.9.1B for a discussion regarding issues to be considered); and

3) Project understanding: This is the Proposer's knowledge and understanding of specific project issues and concerns.

It is necessary to develop a list of the specific items addressing each evaluation factor submitted with the SOQ. It can be beneficial to include a brief discussion of the rationale (objectives) underlying the identified evaluation factors. Identifying the objectives and specific information submitted, allows the Proposers to direct their efforts in addressing the Department's major concerns and provides guidance to the Department's evaluators as to what is important.

Avoid re-evaluation, at the RFP step, of factors that were already evaluated at the RFQ/SOQ step and have not materially changed. It may, however, be appropriate to evaluate similar qualifications in both steps if it is decided in the RFP step another aspect with regard to the firm or staff experience is important. For example, the RFQ/SOQ step may include evaluation of management key personnel and the RFP/Proposal step may include evaluation of technical key personnel. Deferring identification of the technical key personnel until the RFP/Proposal step allows the short-listed Proposers to better understand the scope and challenges over the prolonged period of the procurement process and to identify the majority of their proposed staff after they have a better understanding of the Project.

Exhibit II of this DBPM contains a generic RFQ reflecting pass/fail and quality evaluation factors for a mid-sized project.

5.4.4 Preparation

The RFQ will be prepared by the Department's Project Management Team.

The preparation of the RFQ requires significant coordination within the Department, and also among other local, State and federal agencies, such as FHWA. Coordination with other Stakeholders may also be necessary. RFQ preparation and procurement scheduling need to consider necessary review and comment resolution time, particularly in the early stages of DB program implementation.

The list of objectives and particularly the list of information to be submitted must be developed carefully. Avoid asking for too much information. Requiring more information to be provided than is strictly necessary not only increases the cost of preparing an SOQ, but also requires the Department to devote more resources than necessary to evaluate the SOQs. Content and preparation of the RFQ should always focus on the Department's overall goals and objectives. Every effort should be made to seek information

about discriminators—those items that may differentiate one Proposer from another. The guiding premise should be to focus on what is important to the Department.

The Department must specify in the RFQ the maximum number of Proposers to be included on the Short-List.

5.4.5 RFQ Approval

The RFQ will be approved by the Chief Engineer or designee. There is no requirement to obtain FHWA approval of the RFQ. Procurement scheduling should allow sufficient time for review and comment resolution.

5.4.6 Issuance of RFQ

The RFQ will be issued by the Contract Management Bureau.

Issuance of the RFQ should be advertised in relevant periodicals and should be issued to those firms that submitted Letters of Interest (LOI), if LOIs are requested, as well as to firms requesting the RFQ in response to the ad. For smaller, less complicated projects, at least 30 Days should be allowed following issuance to give the Proposers time to make necessary teaming arrangements and to prepare a response. For larger, more complex projects, the time from date of issuance to the response due date should be at least 45 Days. The time between issuance and receipt of SOQs should also accommodate a period for questions from the potential participants and responses to those questions by the Department, as well as time for issuance of any necessary addenda to the RFQ.

The SOQ due date may be modified after issuance of the RFQ through an RFQ Addendum that has been approved by the Chief Engineer or designee.

The RFQ should be issued in hard copy and/or electronic format, consistent with current Department policy.

5.4.7 Proposers' Questions and Answers

The RFQ should allow interested firms to submit questions seeking to clarify portions of the RFQ. Any question received and its response should be sent to all firms that received an RFQ. It may be advisable to publish questions and responses on a Department or project Web site. When publishing the questions and providing responses, the firm submitting the question should not be identified (which may necessitate rephrasing and/or revision of the question by the Department).

To facilitate responding to questions, firms submitting questions should be required to submit the questions in hardcopy and electronic format (floppy disk, CD-ROM, or via E-mail or Web site, if used) on a standard form provided in the RFQ Appendix C. *See* Exhibit II to this DBPM.

Responses should be prepared by the Department's Project Management Team, subject to approval of the Chief Engineer or designee. Responses should be disseminated in the same manner as noted for RFQ Addenda in Section 5.4.8 of this DBPM.

5.4.8 RFQ Addenda

Addenda to the RFQ may be necessary to clarify requirements, correct errors or omissions or to provide supplemental information not previously available. Questions from interested firms may also generate the need for Addenda.

Addenda will be prepared by the Department's Project Management Team, subject to the approval of the Chief Engineer or designee. The addenda should be issued by the Contracts Management Bureau. All firms that were sent a copy of the RFQ shall receive a copy of any Addendum.

5.4.9 Evaluation and Selection Plan for the Statements of Qualifications

The SOQ Evaluation and Selection Plan (SOQ E&S Plan) document (*see* DBPM Exhibit IV, Division 1) is the Department's internal document that details the procedures for every step in the evaluation and Short-List process from receipt of SOQs to the final documentation of the Short-List decision. It also lists the functions of every person in the process including the selection official; the members and chairpersons of the evaluation panels(s); the procurement management team (that maintains the integrity of the process); and the legal, financial, and technical advisors (Department, Stakeholder, or consultant staff) on the evaluation teams. The document must be tied directly to and be consistent with the RFQ. Portions of the SOQ E&S Plan will be identical to portions of the RFQ, such as the evaluation factors, the rating guidelines, the relative importance among the evaluation factors, and other information regarding pass/fail and clarifications.

The SOQ E&S Plan document is critical to the discipline, fairness, confidentiality, credibility, and dependability of the Short-List process. If the procedures are followed precisely, it will be difficult for a disgruntled Proposer to submit a legitimate protest, and failure to follow the procedures may constitute grounds for protest. Counsel should be consulted before any action is taken that deviates from the documented procedures.

The SOQ E&S Plan document should contain a flow diagram of the evaluation process. *See* Exhibit IV, Division 1, for a generic SOQ E&S Plan for a mid-sized project. The process is flexible and adaptable to different types of projects. The evaluation and Short-List organization could, especially for smaller projects, be compressed to a single board or committee to both evaluate the SOQs and select the Proposers for the Short-List. The SOQ E&S Plan document should be prepared by the Department's Project Management Team, and should be approved and signed by the selection official prior to issuing the RFQ.

5.4.10 Evaluation of Statements of Qualifications and Short-List

The Short-List resulting from the RFQ process should include at least three but no more than five Proposers. A minimum of three teams is desirable in order to provide a reasonable level of competition and to avoid having the Proposers in a position to unduly influence RFP requirements.

The Short-List should include the most highly qualified entities that have the general capability to perform the contract. It is best to draw the line between the Short List and the unsuccessful teams at a point where there is a significant break in the ratings between similarly rated teams, provided such a breakpoint exists within the minimum and maximum numbers specified in the RFQ.

A) Evaluation

As noted above, the SOQ evaluation process must be disciplined and follow precisely the procedures and responsibilities that are laid out, unless counsel advises a deviation is permissible. The process also must maintain strict confidentiality. The Proposers must be able to "trust" that the Department will maintain confidentiality of their Proposals, and the process of developing this trust begins with the information contained in the SOQs. The SOQ E&S Plan should require that each individual involved in the evaluation process (including consultants) sign a Confidentiality Statement (*see* Exhibit IV). Evaluation participants should also be required to disclose potential conflicts of interest with Proposers, including organizational conflicts of interest. Utilize the Department's current procedure to assess the potential conflicts disclosed by the evaluation participants,

so a determination can be made whether it is appropriate for the individual or entity to continue to participate. These requirements serve to provide assurance to the Department and the Proposers that the individuals involved in the evaluation process will follow the evaluation and Short-List process described in the RFQ and treat the Proposers fairly in the evaluation. The person(s) assigned to the proposal management team are critical to the discipline of the process.

In developing the committees and identifying the individual evaluators, the Department should consider the Project needs and SOQ requirements. While outside consultants can provide support and analysis to the evaluation teams and committee(s) and even make rating recommendations, the final ratings should be solely determined by public agency personnel (Department and Stakeholder staff). This limitation on the role to be played by consultants provides further assurance any disclosed or undisclosed consultant conflicts of interest will not have a significant influence on the final decision.

The period of time for the evaluation must be scheduled in advance, so individuals participating in the evaluation can clear their calendars to attend the training and organizational sessions and spend the requisite amount of review time. If it is impossible for a selected individual to devote the necessary time to the evaluation, the Department will need to find an alternate person.

It is advisable to use the same rating method for the SOQs and the Proposals, to avoid the need for re-training and to assure consistency in the overall decision making process. Ideally, the selection committee members would be the same for both the SOQ evaluation and the Proposal evaluation. They should be individuals that can focus on the "big-picture" issues and not get bogged down in the details. The evaluation team members should usually be different for each step since they should be individuals with specific expertise that can focus on the details.

B) Short-List

The evaluation and Short-List process will culminate in the Short-List as discussed above. No Proposer who “fails” a pass/fail factor or receives an “Unacceptable” rating on a quality evaluation factor will be entitled to be on the Short-List. It is important the Short-List be the product of, and the individuals participating in the evaluation precisely follow, the evaluation and Short-List process articulated in the RFQ and the SOQ E&S Plan, with any deviations approved in advance by counsel. As mentioned above, a designated individual, known as the selection official, will determine the Short List. The selection official shall be a Department employee and shall have the authority to exercise professional judgment in reviewing and evaluating the recommended ratings and any recommendations regarding the Short-List decision. The basis for the Short-List decision must be fully documented in a report that will become part of the Project procurement file. The Short-List and accompanying report may be subject to review by others in the Department prior to announcement.

5.4.11 Protests of Statement of Qualifications Evaluation and Short-Listing

Section 5.0 of the RFQ in Exhibit II states the protest procedures applicable to the RFQ step of DB procurements. This process constitutes a mandatory administrative remedy that Proposers must follow before seeking judicial recourse.

At all stages of the SOQ evaluation and short-listing process, a Proposer is obligated to attempt to informally resolve any issues it may have with the SOQ evaluation and short-listing prior to filing a

protest with the protest official. Informal resolution can include exchanges between the Proposer and representatives of the Department in writing, in an attempt to resolve the issue or a face-to-face meeting between the Proposer and the Department in which only the potential protest may be discussed. The choice of how to conduct the informal resolution process is at the discretion of the Department. However, be mindful any informal process must focus solely on the potential protest – no other issues the Proposer has regarding the SOQ evaluation and short-listing process may be discussed. This limitation is to protect the Department from protests from other Proposers alleging the Proposer raising the potential protest has received an unfair competitive advantage because other project or procurement issues were discussed during the informal resolution process.

If the Proposer and the Department are unable to informally resolve the grounds for the potential protest, the Proposer is required to file a written protest with the protest official, as identified at Section 5.1 of the RFQ (*see* Exhibit II). The Department will only accept written protests because only written protests will fulfill the various requirements for filing found in Sections 5.3 and 5.5 of the RFQ (*see* Exhibit II).

Once the protest official receives the written protest, they may also choose to discuss the protest with the protestor prior to issuance of their written decision. However, the protest official is not obligated to do so. The protestor bears the burden of proving the grounds for the protest.

A protest must include the following information:

A) The name and address of the protestor;

B) The contract number;

C) A detailed statement of the nature of the protest and the grounds on which the protest is made;

D) All factual and legal documentation in sufficient detail to establish the facts; and

E) The protestor must show a specific law, regulation, or section of the RFQ has been violated in order to be successful in its protest. (*See* Exhibit II, RFQ Section 5.2.)

The protest official, or their designee, shall be the sole finder of fact and issue the final decisions. All decisions of the protest official, or their designee, must be in writing.

If the protestor submits a deficient or incomplete protest, the protest official is under no obligation to allow the protestor to correct its submission.

5.4.11.1 Protest Regarding RFQ Terms

All protests regarding the terms of the RFQ must be filed at least seven Calendar Days prior to the SOQ due date, except that the deadline for protests regarding modifications to the terms of the RFQ set forth in an addendum issued less than 14 Calendar Days prior to the SOQ due date is seven Calendar Days after the addendum issuance date. Upon receipt of a protest the Department must decide whether it will delay the SOQ due date. If the Department chooses to delay the SOQ due date, it must notify all other potential Proposers of the delay and the reason for the delay. At this stage of the Proposal process, all entities that have requested a copy of the RFQ from the Department are considered Proposers and would be entitled to receive notification of the change.

If the Department chooses not to delay the SOQ due date, it must immediately notify the protestor so the protestor may submit an appeal to this decision in a timely manner. (*See* Exhibit II, RFQ Section 5.3.)

5.4.11.2 Protest Prior to Announcing the Short-List

If a protestor files a protest prior to the Department's release of the Short-List, the Department must delay the release of that Short-List until the resolution of the protest, unless the Commissioner determines an emergency exists precluding delay of the Short-List announcement.

5.4.11.3 Protest Regarding Short-List Decision

A Proposer that is not selected for the Short List may protest its exclusion from the Short List by submitting a protest within seven Calendar Days of the date when the protestor knows, or should have known, that it was not on the Short-List. Any such protest must be based solely on the grounds the selection decision was not in accordance with the terms of the RFQ. Upon submission of a timely protest, the protest official must immediately determine whether the procurement is to be delayed or the Short-List considered for revision.

If the protest official decides to delay the procurement, they must notify all of the Proposers. If, after the protest official releases their decision on the protest, they determine a revision to the Short-List is warranted, all of the Proposers must be informed of the revisions.

5.4.11.4 Right of Appeal

A protestor may appeal the protest official's decision by submitting a written appeal to the Commissioner within seven Calendar Days after receipt of the protest official's decision. The Commissioner will then appoint a protest committee of at least three members to review the protest and the protest official's decision.

The protest committee will inform the protestor of its decision regarding the protestor's appeal. If the protest <u>and</u> appeal were filed prior to release of the Short-List, the Department will not announce the Short-List for seven Calendar Days after the decision of the protest committee, unless the Commissioner determines an emergency situation exists justifying a decision to release the Short-List.

After the protestor exhausts the appeal process, it may appeal to judicial authority.

5.4.12 Proposal Stipend

The Department may provide a stipend for the Proposers on the Short-List. The stipend amount will be determined at the discretion of the Department. Such determination will be based on the complexity and estimated cost of each project. The stipend amount shall be paid to each Proposer not chosen as the successful Proposer, provided:

A) Its Proposal has achieved a rating of Pass on all "Pass/Fail" evaluation factors and an overall qualitative rating of at least "Acceptable-" for all quality evaluation factors;

B) It has submitted a responsive Price Proposal; and

C) The Proposal demonstrates fulfillment of the M/W/DBE requirements.

No Proposer will be obligated to accept a stipend. Any Proposer that declines to accept a stipend must sign a statement waving the right to a receive stipend payment.

In the event the procurement is cancelled prior to the Proposal Due Date, Proposers will be provided the opportunity, at their option, of attending an interview and delivering to the Department the work product of their Proposal preparations to date. There is no specific format required for such work product.

Those Proposers that choose to attend the interview and deliver their work product may be paid a portion of the stipend amount, at the Department's discretion, in consideration for the work product. No portion

of the stipend amount will be paid in the event a Proposer chooses not to attend the interview or chooses not to deliver its work product.

Submittal of a Proposal in response to the RFP constitutes an acknowledgement by the Proposer that the Department reserves the right to use any ideas or information contained in the Proposal in connection with any Contract Awarded for the Project, or in connection with a subsequent procurement.

5.5 REQUEST FOR PROPOSALS

The RFP is step two in the two-step selection method required by the New York State DB legislation. For DB, the RFP is analogous to the production of plans, specifications, and an estimate (or the technical documents) in a design-bid-build delivery process.

The RFP will be prepared by the Department's Project Management Team.

As with the RFQ, preparation of the RFP requires significant coordination not only within the Department, but also among project Stakeholders. The RFP development needs to be a continuously and fully integrated process among those responsible for procurement, management, technical development, and project support activities, such as ROW acquisition, environmental analysis and decision-making, public information/community relations, and Stakeholder involvement and coordination.

In preparation of the evaluation factors and subfactors for the Instructions to Proposers (ITP), the Department should focus on the question, "What is important to the Department and Stakeholders and why?" The answer to that question will provide guidance in identifying the objectives for each factor/subfactor and the specific information to be included in the Proposals.

A) The "pass/fail factors" in the RFP include:

1) Provision of satisfactory updated information regarding legal and financial issues;

2) Satisfaction of M/W/DBE requirements; and

3) Overall responsiveness of the Proposal.

B) The quality factors/subfactors in an RFP might include the following:

1) Experience and Qualifications (Technical key personnel and resumes);

2) Management Approach (includes proposed schedule, Quality Plan, Safety Plan, M/W/DBE plan, MPT and maintenance of access, organization, key personnel qualifications, and design and construction management);

3) Technical Solutions (this will vary depending on the scope of the Project and would typically include such items as geotechnical, structures, pavement, and drainage); and

4) Project Support (may include environmental mitigation and monitoring and public information/community relations).

C) Price will be a major consideration for most Proposal evaluations. For Federal-aid projects, the RFP must specify the relative importance of price to all other factors.

D) Care should be taken in establishing the evaluation factors/subfactors and in determining the information to be provided, taking the following considerations into account:

1) Factors/subfactors should be limited to discriminators, i.e. those items that will differentiate one Proposer from another;

2) Requested information should focus on those components of the Project for which flexibility will be allowed in designing and implementing the solution. If the solution and approach is prescribed in the RFP, any question about solution or approach will only result in the Proposer "parroting" the RFP requirements in its response;

3) The amount of information requested should be reasonable, keeping in mind that the Proposers devote costly resources in preparing their responses, and that if unnecessary information is requested, the Department will need to devote additional resources to evaluate it; and

4) Information is not requested that will not be evaluated and used in the selection process.

The RFP should focus on how Proposers will complete the Project. As noted above, requesting information already provided in the SOQs adds unnecessary work for the Proposers and the Department and is inconsistent with the guidelines provided in the FHWA's DB regulations. It is appropriate, however, to solicit information on changes from SOQ information in the area of qualifications, key personnel, organizational structure (i.e., new equity owners, major subcontractors, etc.), financial and legal status. If qualifications of key personnel were not requested in the RFQ, the RFP should require they be provided; along with a firm commitment such individuals will be available for the Project.

As was also the case for the RFQ, the relative importance of the factors/subfactors and the method of rating the Proposals need to be clearly defined.

5.5.2 Purpose

The primary purpose of an RFP is to solicit Proposals that will allow the Department to determine which Proposer has provided the best combination of quality and price (i.e., best value) to complete the design and construction of the Project based on stated evaluation criteria. Everything produced by the Department and its consultants in support of a DB procurement (i.e., PE/design; agreements with Utilities and others; ROW; environmental assessments and permits; and Performance Specifications) is interrelated with the RFP. During the preparation of the RFP, rather than attempting to solve problems, the focus should be on identifying problems for the Design-Builder to solve and defining parameters/criteria applicable to potential solutions. A well conceived and well written RFP is crucial to the success of a DB project.

5.5.3 Composition

An RFP typically includes the following three components:

A) Instructions to Proposers;

B) Contract documents; and

C) Reference documents.

See Exhibit III for a sample of an RFP.

Typical components of an RFP are shown in Figure 5.5.3.

FIGURE 5.5.3

REQUEST FOR PROPOSALS			
Instructions to Proposers	**Contract Documents**		**Reference Documents (Examples)**
General Instructions	Agreement	Utilities Requirements	Existing As-built Plans
Appendix A: Management & Technical Proposal Instructions	DB Standard Specifications Section 100	RFP Plans	Background or Preliminary Reports
Appendix B: Price Proposal Instructions	Design Requirements	Engineering, Geotechnical, and Survey Data	Stakeholder Agreements
Appendix C: Forms	Performance Specifications	Standard Specifications, Construction & Materials and EIs	Memoranda of Understanding
	Special Provisions		Historical Data and Information

5.5.3.1 Instructions to Proposers

The ITP establishes the rules, processes, and procedures for preparing and submitting Proposals. The Contract Documents consist of those documents forming the agreement between the Department and the successful Proposer. Reference documents include information and documents provided to the Proposers "for information only"—i.e. which can be used by Proposers/Design-Builders for reasons they may deem appropriate, at their risk. Any information the Proposer can rely upon should be extracted and placed in the engineering data in the Contract Documents. Decisions regarding the appropriate categorization of such information should take into account potential liability issues. *See also* Sections 5.4.2.3 and 7.8 of this DBPM.

It should be noted that certain information submitted by the successful Proposer, including specific legal, management, and technical information and the Price Proposal, will be incorporated into the Contract Documents at Award.

The ITP consists of General Instructions and three appendices. The general contents of these items are as follows:

A) The General Instructions of the ITP - The information listed in Section 6.1 of this DBPM;

B) Appendix A of the ITP, Management and Technical Proposal Instructions - Detailed instructions relative to the information to be submitted in the Proposals for each of the evaluation factors and subfactors except price;

C) Appendix B of the ITP, Price Proposal Instructions - Detailed instructions relative to the information to be submitted in the Price Proposals; and

D) Appendix C of the ITP, Forms - Forms required for the Proposals. Some forms relate to the Proposal Information and some to the Price Proposal.

5.5.3.2 Contract Documents

The Contract Documents are generally self-explanatory. Those deserving some explanation include the following:

A) Design-Build Agreement, a modified version of the agreement in the design-bid-build Standard Specification Section 102-17 (*See* DBPM Section 7.1);

B) DB Section 100, a modified version of the design-bid-build Standard Specification Section 100, which (among other things) includes provisions for design management and review and the specific roles and responsibilities of the Department and the DB Team (particularly relative to QA and QC) and to reflect the selected lump sum pricing and payment concepts for a project;

C) Design requirements, policies, and procedures that define the technical standards and requirements for the design of the various components of the project;

D) Special Provisions that provide project-specific direction and modify or supplement the DB Section 100; modify the Standard Specifications, Construction and Materials, to be compatible with the DB contract; and modify/supplement other standard specifications to meet the particular requirements of a given project.

E) Performance Specifications, tailored to the needs of a specific project and focused on the desired end result rather than the "how to" approach in traditional design-bid-build specifications (may also include applicable design policies and procedures), including environmental constraints and commitments from the environmental process for the Project;

F) Utilities requirements, identifying the roles and responsibilities of the Department, the Utility Owners, and the DB Team, including assignment of responsibilities for design and construction and timing of work done by Utility Owners;

G) Engineering, geotechnical, and survey data, which in a DB contract is typically limited to raw data such as traffic counts and projections, presence of Hazardous Materials, and boring hole and sampling and testing data. These data are warranted by the Department. Other data that are not warranted by the Department will be placed in the Reference Documents. If interpretive information is available, it is usually placed in the reference documents; and

H) Construction Specifications, which may be tailored to the Project, but often are the Department's Standard Specifications, Construction and Materials, with certain of the specifications being modified for DB or superseded by the Special Provisions and/or Performance Specifications.

5.5.3.3 Reference Documents

The reference documents often include information gathered from earlier projects or created by entities other than the Department, often for purposes unrelated to the Project. They may include studies and preliminary reports relating to project conditions. Agreements applicable to the Project (such as railroad and Utility agreements) that do not involve the DB Team as a signing party are often provided in the reference documents, in which case the Department will need to ensure any substantive requirements in such agreements are addressed in the Contract Documents.

Reference documents include a variety of information that may be useful or of interest to the Proposers/Design-Builders in preparing their Proposals and executing the contract. Reference documents are provided to the Proposer/Design-Builder but the use of such information is entirely at the Proposer/Design-Builder's risk and the Reference Documents come without Department warranties and may not be relied upon by the Design-Builder except as specifically provided in the Contract Documents.

Reference documents are not included in the Contract Documents for a variety of reasons, including the following:

A) The information may be historical in nature and may be outdated or obsolete;

B) The information may have been provided or prepared by entities over which the Department has no control or with which the Department has no contractual or legal agreement;

C) The information may be ambiguous regarding its assignment of responsibility for performance of work. For example, an agreement between the Department and a local agency or Utility Owner may assign the Department responsibility for certain work, but not identify what the Design-Builder is to do, since the Design-Builder is not a party to the agreement. The Department will need to extract items to be done by the Design-Builder and include a scope description in the Contract Documents; and/or

D) The information may have been obtained for a different project or at another time and may or may not represent current conditions, such as geotechnical borings for building projects along a roadway corridor.

Reference documents may be in the form of Department manuals (such as the Contract Administration Manual, Materials Inspection Manual, etc.), the environmental documents and decisions, old contract plans or As-built Plans, reports, condition surveys, agreements, other contracts, photographs, boring logs, correspondence, and meeting minutes.

The Department cannot require work to be done in accordance with the reference documents. For example, environmental documents included in the reference documents may identify certain mitigation or permit requirements. If the Department wishes to require the Design-Builder to fulfill any of those requirements, those requirements should be duplicated and included in the Contract Documents as mandatory. The Contract Documents may incorporate portions of the reference documents by reference, thereby converting that portion of the reference document into a Contract Document. However, it is preferable to avoid this approach because it can lead to confusion regarding the intent of the parties.

6.0 INSTRUCTIONS TO PROPOSERS

The ITP is the document that describes to the Proposers all of the requirements for preparation and submittal of their Proposals. It also contains information regarding the rules for interaction between the Department and the Proposers and between the Proposers. It consists of a General Instructions and three appendices.

See Exhibit III, Division 1, for a sample of an ITP, including appendices.

6.1 GENERAL INSTRUCTIONS

The General Instructions of the ITP provides the ground rules and the framework for the Proposers to deal with the Department, Stakeholders, and other Proposers. It contains the rules all parties will follow throughout the procurement process. It also provides direction enabling the Proposers to understand what is required in their Proposals, how the Proposals will be organized, and how the Department will evaluate them and select a Design-Builder.

6.1.1 Contents of General Instructions

The General Instructions of the ITP should contain the following information:

A) General information relating to governing law, insurance, and bonding requirements; how inquiries from DB Teams will be handled; RFP Addenda procedures; Department notification procedures; other administrative matters; and "Rules of the Game";

B) Specific Proposal and selection schedule for the RFP step;

C) Explanation of the Proposal evaluation process, including evaluation objectives, evaluation factors and their relative importance, method of evaluation, and the selection criteria and process;

D) Clear identification of the Proposal submittal requirements, including page limits, specified formats, and specific content requirements for each of the identified evaluation factors;

E) Information pertaining to required meetings and/or presentations and interviews;

F) Protest procedures;

G) State and Department rights and disclaimers;

H) Minority-owned Business Enterprise, WBE, DBE, and EEO Program requirements; and

I) Other mandated provisions.

6.1.2 Evaluation Factors

Evaluation factors generally fall into three categories, i.e., "pass/fail," quality factors, and price.

A) The "pass/fail" factors usually include the following:

1) Legal, including M/W/DBE;

2) Financial (for most projects this will be limited to confirmation that a Surety commitment has been provided meeting the RFP requirements, but for larger projects may include review of financial statements for financially responsible parties to determine whether the Proposer can support the cash flow required for the Project and meets other RFP financial requirements); and

3) Responsiveness of the Proposal. All information must be provided in the specified format unless the Department agrees to waive noncompliance. Counsel should be consulted before granting a waiver.

B) Quality factors for the RFP/Proposal often include the following:

1) Experience and Qualifications (often part of the management and technical solutions factors);

2) Management Approach (includes, Quality Plan, Safety Plan, MPT, organization, key management personnel qualifications and experience, and design and construction management; as well as certain aspects of scheduling);

3) Technical Solutions (depends on the scope of the Project but would include such items as geotechnical, structures, pavement, drainage, key technical personnel qualifications and experience, and maintainability); and

4) Project Support (may include environmental mitigation and monitoring, public information/community relations, and community impacts).

C) The bottom line on the pricing forms will be balanced against the quality factors to determine the best value proposal. The relative importance of price compared to the combination of all other factors must be clearly spelled out in the RFP. This can be stated

in the ITP in terms of the combination of all other factors being "significantly less important than cost or price," "approximately equal to cost or price," or "significantly more important than cost or price." For evaluation purposes, the price factor can include:

1) A lump sum contract price, typically shown on the form as the sum of various line items, which may include allowance components (*see* discussion in Section 7.2.9.1A) as well as pre-set amounts for items such as mobilization;

2) The product of proposed Unit Prices and estimated quantities identified by the Department;

3) For long-term projects, a lump sum amount representing the present value of the projected cash flow for the Project; and/or

4) Option and/or Alternate Proposal prices.

The following steps should be taken when establishing the evaluation factors/subfactors and in making determinations regarding the information to be provided:

a) Factors/subfactors should be limited to discriminators, i.e. those items that will discriminate between the Proposers;

b) Requested information should focus on those components of the Project for which the RFP allows flexibility in designing and implementing the solution. If the solution and approach is prescribed in the RFP, any question about solution or approach will only result in the Proposer "parroting" the RFP requirements in its response. There is no real chance of differentiating between Proposers when the solutions are prescribed; and

c) Keep the amount of information requested reasonable. Remember, not only do the Proposers devote costly resources in preparing their responses, but also the Department will need to devote a commensurate amount of resources to evaluate the information provided.

The RFP should focus on how Proposers will complete the Project. It should be noted if the Department requests information already provided in the SOQs, it adds unnecessary work to the Proposal preparation process and is also inconsistent with the guidelines provided in the FHWA DB regulations. However, the Proposers should be required to confirm there has not been any material changes in the applicable SOQ information since submission of the SOQs. Also, if qualifications of key personnel were not requested in the RFQ, they should be requested in the RFP as well as a firm commitment that they will be available for the Project.

The relative importance of the factors/subfactors and the method of rating the Proposals needs to be clearly defined. It is necessary to develop a list of the specific items addressing each evaluation factor to be submitted with the Proposal. It can be beneficial to include a brief discussion in the RFP of the rationale (objectives) underlying the identified evaluation factors. Identifying the objectives and specific information to be submitted allows the Proposers to direct their efforts in addressing the Department's major concerns and provides guidance to the Department's evaluators as to what is important.

Exhibit III, Division 1 of this DBPM contains a generic ITP reflecting pass/fail and quality evaluation factors for a mid-sized project.

6.2 MANAGEMENT AND TECHNICAL PROPOSAL INSTRUCTIONS

Appendix A of the ITP, Management and Technical Proposal Instructions, contains the detailed instructions relative to the information to be submitted in the Proposals for each of the evaluation factors and subfactors except for price (the Management and Technical Proposal). This appendix should also specify the organization and format for the Proposals; otherwise information may be presented in any number of ways by different Proposers, making evaluation difficult and time consuming. Specific directions on page number limitations, page formatting, submission requirements for each evaluation factor and subfactor, and organization and formatting guidelines must be clearly spelled out. This appendix also needs to clearly define what information submitted with the Proposal will be incorporated into the contract (S*ee* Exhibit III, Division 1 – General Instructions – Section 1.2.2.1), and what information will be used for evaluation and selection purposes only (Supplemental Selection Information) (*See* Exhibit III, Division 1 – General Instructions – Section 1.2.2.2). For example, specific proposed technical solutions would be incorporated into the contract while resumes of key personnel would not. Proposal Information and Supplemental Selection Information will be separated in the Proposal to make this distinction clear.

6.3 PRICE PROPOSAL INSTRUCTIONS

ITP, Appendix B, Price Proposal Instructions, should be separated from instructions relating to other components of the Proposal, in part to emphasize the necessity for keeping the Price and Management and Technical Proposals completely separated. The pricing instructions need to be tailored to the pricing concepts and needs of the Project, and the organization and format of the Price Proposal to be submitted should be clearly specified. Unlike a design-bid-build project where the pricing document may only be a bid form, pricing documents for a DB project may include a greater variety of documents, such as a proposed payment schedule, a price loaded schedule, a breakdown of prices to facilitate price evaluation and contract administration (payment), and definitions of components of lump sum priced work. If options are included in the RFP, the pricing instructions need to explain how the option and Alternate Proposal prices will be treated in the overall price consideration (and how the options and/or Alternate Proposals, if any, will factor into overall evaluation and selection). Similar language and guidance to evaluators regarding how to evaluate options or Alternate Proposals will also have to be included in the Evaluation and Selection Plan for the procurement.

The engineer's estimate should be prepared using the same format as the Price Proposal in order to facilitate the review and analysis process.

6.4 FORMS

Appendix C of the ITP contains the forms required for the Proposals. As with the RFQ forms, some forms may be standard Department, State, or federal forms required for all procurements. Other forms are developed to provide DB Teams a uniform format for provision of the information requested in the RFP, particularly the Price Proposal. Appendices A and B provide guidance regarding the location of the forms within the Proposals.

7.0 DESIGN-BUILD CONTRACT DOCUMENTS

The Contract Documents will constitute the agreement of the parties regarding the work to be performed and obligations to be met, defining the level of flexibility and identifying constraints applicable to the Project's components as they relate to the Project's management, technical solutions, and Project support activities.

As previously noted, the Contract Documents should focus on defining the problem, not specifying the solution. Particular attention should be directed to development or definition of Design Requirements and Performance Specifications appropriate to the Project. Performance Specifications are not required for all the Project's components and should be limited to those Project components for which the Department is willing to give the Design-Builder flexibility to solve the problems and for which the potential for innovative and cost-effective solutions is the greatest. Allowing flexibility for other components of the Project, such as striping, median barriers, and signing, is unlikely to produce significant benefits; consequently it is appropriate to specify standard practices and processes for such elements. Use of standard requirements for such elements may also facilitate the Department's normal maintenance operations and parts supply.

For design-bid-build projects the Department typically expends time and resources analyzing the costs and benefits of different Materials and procedures to determine which is the most economical, including pavements (asphalt versus concrete) and structures (steel versus concrete). Except in unusual circumstances, the use of DB provides the opportunity to eliminate such extra efforts by the Department by leaving such analysis and decisions to the Design-Builder.

Prescriptive specifications may also be appropriate where project components must interface with existing systems, such as traffic control systems, guide rail, bridge rail, street lighting, curb and sidewalk details, and Utility systems.

Decisions regarding plans and engineering data to be included in the RFP should be consistent with the risk assessment and allocation performed as part of the Project's procurement strategy (*see* Section 3.5 of this DBPM). The degree of specificity of the plans may and should vary between project components. The amount of data gathered should be consistent with the risks and the assignment of responsibility for those risks. The decision makers should keep in mind that solutions specified in plans, specifications, and reports contained in the Contract Documents may result in retained risk by the Department and will reduce opportunities for innovation by the Design-Builder.

Development of the Project's management specifications and definition of the Department's roles and responsibilities should focus on facilitating the Design-Builder's management and control of the Project and achieving the Department's objectives, while avoiding measures that would negate the inherent benefits of DB. The management provisions should reflect an attitude of trust and confidence and partnering, while still allowing appropriate protections to the Department in the event of a dispute.

The particular requirements within the contract should also consider the size and complexity of the Project. This DBPM and its exhibits discuss and illustrate alternative provisions for use on small, less complex projects and to larger, more complex projects. This is particularly evident with respect to the alternative provisions relating to pricing and payment provisions (DB Section 109S for smaller, less complex projects and DB Section 109L for larger, more complex projects). There is no formula for determining whether a project is small or large, complex or not complex. The Department's Project Management Team will need to make this determination and include the contract provisions that are consistent with its determination.

7.1 DESIGN-BUILD AGREEMENT (CONTRACT DOCUMENTS PART 1)

The DB Agreement is the document that is actually signed, or executed, by delegated authorities of the Department and the Design-Builder; signed by a representative of the Office of the Attorney General, as to form [and execution]; and approved by a delegated authority of the State's Office of the Comptroller. This document is the actual binding agreement between the State and the Design-Builder; all the other documents that make up the Contract Documents are incorporated into the contract through Article 5 of

the DB Agreement. Department counsel should be consulted before making any alterations to the boilerplate language of the DB Agreement.

In design-bid-build projects, the DB Agreement is termed the "form of agreement" and a sample form of agreement is located at Section 102-17 of the design-bid-build Section 100 General Provisions.

For DB projects, the DB Agreement can be found at Part 1 of the RFP, which will become Part 1 of the Contract Documents upon execution and delivery of the agreement. *See* Exhibit III, Division 2, Part 1 – Agreement.

The DB Agreement contains certain provisions that are not included in the form of agreement for design-bid-build projects, including: Contract Price (Article 1.1), Notice To Proceed (Article 2.1), Substantial Completion (Article 2.2), Minority-owned Business Enterprise and Women-owned Business Enterprise and Disadvantaged Business Enterprise Goals (Article 6), Project Organization (Article 16), Insurance Program (Article 17.1), Liquidated Damages (Article 18), and Federal Clauses (Article 33). The clauses were added to the DB Agreement in part to emphasize the fact that they represent important business terms of the agreement between the Department and the Design-Builder and in part because some of these clauses are subject to change on a project-to-project basis. These provisions were not included in DB Section 100 based on the premise that the general conditions contained in DB Section 100 should not be altered from project-to-project.

It should be noted that Article 7, Payment of Estimates, and Article 8, No Estimate on Contractor's Non-Compliance, in the DB Agreement are not the same as the comparable provisions in the design-bid-build form of agreement. These provisions have been revised to reflect the payment structure and policies set forth in DB Section 109[S or L] of the DB Section 100 (Article 9, Periodic Payments, and Article 10, No Periodic Payment on Design-Builder's Non-Compliance).

The unsigned DB Agreement is included in the RFP documents to ensure that the underlying contract principles of offer and acceptance are met. Inclusion of the form in the RFP also gives Proposers the opportunity to review the form of agreement and inform the Department if there is an issue with any of the provisions.

The DB Agreement will be executed in the same manner as the form of agreement on design-bid-build contracts. *See* Section 10.2.3 of this DBPM for more information.

The detailed Scope of Work for the Project will be included as Appendix A to Part 1 of the RFP and, subsequently, Appendix I to Part 1 of the Contract Documents.

If the Project is a Federal-aid project, certain contract provisions, the "Federal Provisions," are required by FHWA to be included in the DB contract. These Federal Provisions are found in Appendix B to Part 1 of the RFP and, subsequently, Appendix II to Part 1 of the Contract Documents. The Federal Provisions are the same as those included in design-bid-build project contracts and cannot be altered without prior written approval from FHWA. The Federal Provisions should not be included in non-Federal-aid projects. *See* Section 7.10 of this DBPM and Exhibit VIII – Federal Requirements for further information regarding federal requirements for Federal-aid projects.

7.2 DESIGN-BUILD SECTION 100 (CONTRACT DOCUMENTS PART 2)

DB Section 100 is the General Provisions that will be relevant to the Department's DB procurements. These provisions are found at Part 2 of the RFP and Part 2 of the executed Contract Documents. The

Section 100 provisions that have been drafted for DB projects are delineated by the inclusion of the "DB" prefix before the section number.

Some of the provisions found in the DB Section 100 are new provisions that are applicable only to DB projects. In other instances, portions of the design-bid-build Section 100 have been modified to comply with the DB process or have been included in their entirety in the DB Section 100. Regardless of whether a specific provision is new, updated from design-bid-build, or the same as design-bid-build, the DB Section 100 provisions will not change from project to project. If there are issues that are project-specific, they have been inserted into Special Provisions, which are updated on a project-by-project basis.

7.2.1 DB Section 101 – Abbreviations, Symbols, and Terms and Definitions

Design-Build brings with it a number of new terms and definitions, acronyms, and abbreviations. Refer to Appendix A to this DBPM and Exhibit III, Division 2, Part 2, DB Section 101 for the meanings of terms, acronyms, symbols, and abbreviations applicable to DB.

7.2.2 DB Section 102 – Requirements and Conditions

The DB Section 102 addresses the requirements and conditions of the DB contract. This Section includes provisions on coordinating with Utilities and railroads (*see also* Sections 4.3.4.1 and 4.3.4.3 of this DBPM for more information regarding Utilities and railroads, respectively); labor; MBE/WBEs and DBEs; and EEO.

The DB Section 102 is significantly pared down from the design-bid-build Section 102. The "Contract Clauses Required in Public Work" provision and Sample Form of Agreement have been moved and consolidated in the DB Agreement. The other sample forms have been moved to either the RFQ or RFP, as appropriate.

The DBE program has been updated to come into compliance with FHWA DB regulations, promulgated by the "Design-Build Contracting; Final Rule" (67 Fed. Reg. 75902 (2002)). *See* Sections 7.11 and 10.3.6 of this DBPM for more information on the MBE/WBE and DBE programs.

The EEO provisions formerly found in the "Special Equal Employment Opportunity Provisions" of Appendix A, "Standard Clauses for all New York State Contracts," are now found in the DB Section 102.

Contact the Director of OEODC or authorized designee for more information regarding the MBE/WBE or DBE program. This contact must be made, and goals must be set for the MBE/WBE or DBE program and the EEO program prior to release of the RFQ.

7.2.3 DB Section 103 – Award and Execution of Contract

Applicable law, bonds, and the partnering program are addressed in the DB Section 103. Information on Award and execution of the contract has been moved to this DBPM Section 10.2.3. Bond requirements are now found at Exhibit III, Division 1, Appendix C – RFP Forms, Appendix to Form of Proposal, Part 1(4) and (5).

7.2.4 DB Section 104 – Scope of Work

The DB Section 104 contains general provisions related to the scope of the work, such as MPT and VE, as well as changed conditions, Warranties, and delay. In its "Design-Build Contracting; Final Rule" (67 Fed. Reg. 75902, 75925 (2002)), the FHWA strongly encourages the use of such clauses.

A) The Scope of Work for the Project will be set out in detail in Appendix I to the Agreement, Part 1 of the Contract Documents. The Department must create an Appendix I to the Agreement for each project.

B) Maintenance and Protection of Traffic is covered at DB Section 104-9. However, MPT also typically needs a project-specific Performance Specification. *See* Exhibit III, Division 2, Part 4 – Performance Specifications of this DBPM for a sample of an MPT Performance Specification.

C) There are certain provisions that need to be established in the procurement and Contract Documents for each project relative to changed conditions and delays in the following 1) through 4).

1) Differing Site Conditions

It is essential that the Contract Documents spell out the responsibilities of the Department and the Design-Builder for determining conditions on the site. The Differing Site Conditions provision applies to conditions encountered "at the site differing materially from those indicated in the contract." Since the information provided in a DB RFP is substantially less than that provided in design-bid-build contract plans in a bid Advertisement, the RFP needs to specifically spell out the responsibilities and risks associated with site conditions. The Department should clearly state that it assures the accuracy of site information only at the specific locations where investigations and tests were taken and to the degree of accuracy indicated in the Contract Documents, and that any interpolation between those points is the responsibility of the Design-Builder. Analytical and interpretive opinions or reports should generally not be included in the RFP. If the Department deems it advisable to include such information, it should be included in the reference documents with specific disclaimers of Department liability. The Contract Documents must clearly spell out what investigations and tests are the responsibility of the Design-Builder.

2) Basic Project Configuration

Since the RFP only represents PE, it is necessary to define the physical constraints within which the Proposer may submit its Proposal and complete the final design and construction. Such constraints, defined in the environmental documents and Contract Documents, are referred to as the Basic Project Configuration.

The Basic Project Configuration normally consists of information relative to the following:

a) Horizontal and vertical alignment;

b) Vertical clearance requirements;

c) Rights Of Way limits;

d) Number of lanes;

e) Project limits/termini; and

f) Other factors that may define the limits and constraints of the Project.

During the Proposal process, the Basic Project Configuration establishes the limits of allowable technical solutions for the base Proposal. If the ITP allows alternate technical proposals, an alternate technical proposal may propose solutions outside the Basic Project Configuration. The acceptance of an alternate technical proposal by the Department will necessitate a change in the Basic Project Configuration which should be

incorporated in the conformed Contract Documents at the time of executing the contract.

After execution of the Agreement, the Basic Project Configuration description establishes the limits on allowable changes to the information shown on the RFP Plans. The Basic Project Configuration defines the following:

- Limits within which the Design-Builder may make changes in the information shown on the RFP Plans without requesting an Order-on-Contract;
- Limits within which the Department may order a change prior to the first Design Review without executing an Order-on-Contract; and
- What constitutes a "material change" in the Basic Project Configuration.

The Department needs to define the Basic Project Configuration and its limits in the Contract Documents (*see* Exhibit III – Appendix I to Part 1, DB Agreement). If a material change in the Basic Project Configuration is made, such change must be covered by an Order-on-Contract.

The Basic Project Configuration also defines the extent of change (the risk) for which the Design-Builder is responsible. If the Design-Builder has to adjust the design within the Basic Project Configuration limits, the Design-Builder is responsible for all cost and time implications associated with such an adjustment. The Basic Project Configuration also defines the limits of the Department's responsibility for a change. If it is necessary to make a change outside the defined limits of the Basic Project Configuration in order to design and construct the Project within the specified criteria and parameters, such a change is a material change in the Basic Project Configuration and is a Necessary Basic Project Configuration Change. A Necessary Basic Project Configuration Change must be covered by an Order-on-Contract.

3) Accuracy of Utility Information

During the risk identification and assessment process (*see* DBPM Section 3.5); the responsibility for location and accuracy of Utility information should be addressed.

Where the Department assumes the risk for specific Utility locations, the Contract Documents need to define the accuracy of the information provided in the RFP relative to existing Utilities. If the actual location or condition of the existing Utilities differs from that shown in the RFP by more than the specified limits, such conditions may constitute a Significant Change in the Character of Work. Typically, limits are specified for some or all of the following:

a) Horizontal location (different limits are usually specified for underground and overhead Utilities and for project involving deep trenches or tunnels it may be appropriate to allow a change only if the facility has moved inside or outside of the trench or tunnel area);

b) Vertical location (usually only warranted at the actual location of the measurement);

c) Size of the Utility; and

d) Type of Material.

The Department may decide to assign the risk of Utility locations to the Design-Builder. In such a case, the issue regarding limits of accuracy need not be addressed.

4) Change in Design/Accuracy of Preliminary Engineering

The Design-Builder is responsible for all necessary changes in design and is required to adjust for inaccuracies in the RFP Plans, except for Necessary Basic Project Configuration Changes.

D) Warranties and Guarantees: Warranties follow substantially the same US DOT practices for DB projects as design-bid-build projects. Under the FHWA's DB regulations, general project Warranties and performance Warranties for specific components may be used on National Highway System (NHS) projects. General project Warranties may only be used if the term of the Warranty is short, the Warranty is not the only means of acceptance, and routine maintenance is not included in the Warranty. A general project Warranty may include the quality of the workmanship, Material, and tasks as long as they are identified in the contract. Project warranties of greater length may be considered for specific project components or attributes (i.e., water tightness).

National Highway System projects are eligible for performance Warranties at the Department's discretion. If the Department chooses to request a performance Warranty, a Performance Specification must be included in the RFP.

On non-NHS Federal-aid projects, the Department may follow its own discretion regarding the inclusion of Warranties.

Lastly, the Department may allow Proposers to submit alternate Warranty proposals that improve upon the terms of the Warranty specified in the RFP. Submission of an alternate Warranty proposal may only be in addition to the Proposer's response to the base Warranty request found in the RFP. (23 CFR 635.413.)

For a sample Warranty provision, *see* Exhibit III, Division 2, Part 5, Special Provision 104. *See also* Section 7.13 of this DBPM for more information regarding Warranties.

7.2.5 DB Section 105 – Control of the Work

The DB Section 105 discusses control of the work, including the Project's organization, inspection, and meetings. The Department's project's organization is specifically addressed in Special Provision 105.

For DB projects, there are many meetings that are necessary that are not found on design-bid-build projects. DB Section 105-16 spells out specific meeting requirements for a DB project.

In the design-bid-build Section 105, provisions regarding work affecting railroads and dispute resolution were also found in this Section. Those provisions have been moved to DB Sections 102-6 and 109[S or L]-10, respectively, in order to maintain the flow of the subject matter of the document and keep like subjects together in certain Sections.

DBPM Section 10.1.1.1 provides a list of items for which the Department will have to issue written Approvals.

7.2.6 DB Section 106 – Control of Materials

Materials and the treatment, storage, and other requirements of such Materials, including Buy America provisions, are the topics of DB Section 106.

7.2.7 DB Section 107 - Legal Relations and Responsibility to the Public

The DB Section 107 of the DB Section 100 addresses legal relations for the Project as well as the Design-Builder's insurance requirements and responsibility to the public during the Project. This Section identifies requirements for Project safety and security, in various environmental and Cultural Resources areas, and for ROW.

Currently, this Section requires the Design-Builder to acquire all licenses and permits for the Project. If the Department determines that there are some licenses or permits that it will acquire for the Project, those licenses or permits that the Department will acquire should be identified in a Special Provision.

Specific requirements for the Design-Builder's insurance program for the DB project are found in Special Provision 107.

Acquisition of ROW and easements by the Department is discussed at DB Section 107-22. In addition, the Department will need to prepare a list of properties that the Department has determined must be acquired for the Project and the status of each of those acquisitions. This list will be identified on Form 107A, found in Exhibit III, Division 1, Appendix C – RFP Forms. Form 107A serves as the list of properties from which the Proposers will identify their preferred priorities for ROW acquisition by the Department.

The Department will also obtain all temporary construction easements that would be required for all reasonable technical solutions and construction methodologies on behalf of the Design-Builder. The Design-Builder has the responsibility to identify the required temporary construction easements for the Department to acquire.

7.2.8 DB Section 108 – Prosecution and Progress

The progress and the prosecution of the work are addressed in the DB Section 108. This section cross references with Part 5, Special Provision 108A regarding scheduling, and Special Provision 108B regarding the Design-Builder's key personnel.

7.2.9 DB Section 109 – Pricing, Determining Progress, and Payment

The Contract Documents samples in Exhibit III, Division 2, Part 2 – DB Section 100, provides the following two variations for pricing, determining progress, and payment:

A) DB Section 109S for smaller, less complex projects; and

B) DB Section 109L for larger, more complex projects.

The determination of what constitutes a smaller, less complex project and a larger, more complex project can vary, depending on the type of work to be accomplished on the Project, the Project cost, the complexity of the Project schedule, and the complexity of various interfaces on the Project, among other factors. The decision of whether a project is smaller, less complex or larger, more complex is at the discretion of the Department after taking all aspects of the Project into account.

The language in DB Section 109 provides guidance on establishing cost control processes for a Design-Build project. In particular, this language is directed at DB contract requirements for reporting costs and

presents a complete and service proven approach to achieve Cost Control. However, this doesn't mean that other methods of Cost Control aren't equally valid. In certain cases a mixture of different Cost Control processes may be needed to address Cost Control issues.

Examples of other methods include use of Unit Prices when specific works items are well suited for that method of payment, milestone payments based upon specific deliverables, or using a cost loaded schedule with a Work Breakdown Structure (WBS) which integrates the payment of work items with a CPM schedule. Specific cost reporting requirements from participating agencies also have to be considered when developing the Cost Control processes for a Design-Build contract.

It is always preferred to have a robust Cost Control process that meets all of the needs of the Project as part of the Contract Terms and Conditions rather than developing special Cost Control processes to meet unique needs after the Contract is awarded. This permits the Design-Build Contractor to fully understand the cost reporting requirements and arrange his Cost Proposal to meet those requirements.

See also Section 10.3.9 of this DBPM.

7.2.9.1 Pricing

The vast majority of work on a DB contract is priced on a lump sum basis. For those few items that may be paid on the basis of Unit Prices and measured quantities, the method of pricing, determining progress and payment is the same as on design-bid-build projects.

A) Price Centers

While it is possible to have a Price Proposal contain a single lump sum amount for the entire project, it is preferable to require the Proposers to divide the Project into defined and more manageable components for pricing and payment, regardless of how progress is determined. Those components are referred to as Price Centers (PC) in the Contract Documents samples in Exhibit III, Division 2 – Contract Documents. This approach allows the Department to analyze the reasonableness of price allocations to different components of the work, and simplifies the process of making progress determinations for payment purposes over the course of the work.

There are significant non-construction components of work on a DB project, engineering and design being the most notable. Identifying such non-construction components and having them separately priced further assists in evaluating the reasonableness of Price Proposals and in administering the contract. As shown in the Price Proposal Instructions in Exhibit III, Division 1, Appendix B – Price Proposal Instructions [S or L], typical non-construction PCs include the following:

1) Preliminary and General Requirements (including project and construction management and construction QC) (PC 1). The limits of the value of PC1 should be specified in the ITP, Appendix B, to discourage overloading administrative costs and to provide a "floor" so that suspension of payment of PC1 for non-compliance with administrative requirements has real meaning and effect. The usual range is 5-15% of the Base Proposal Price plus the maximum allowable mobilization percentage (4%). Therefore the reasonable price range for PC1 should be 10-20% of the Base Proposal Price (*see* Exhibit III, Division 1, Appendix C, Form SP);

2) Engineering and Design (including design management and design QC) (PC 2);

3) Maintenance and Protection of Traffic (PC 3);

4) Environmental Monitoring and Mitigation (if included in the contract) (PC 4);

5) Public Information/Community Relations (if included in the contract) (PC 5); and

6) Harmful and Hazardous Materials Remediation (if known to exist and included in the contract) (PC 6). Although Hazardous Materials remediation includes construction activities, it also may include significant design and permitting activities and is typically separated from the other construction PCs. Hazardous Materials remediation is typically priced on estimated quantities and paid on the basis of Unit Prices and measured quantities or on a force account basis for any type of remediation outside the scope of the unit priced work. Under certain circumstances, it may be possible to obtain a lump sum price for cleanup of identified sites, with unit pricing for quantities in excess of the quantities identified in the RFP.

For smaller, less complex projects PCs 3 through 5 may be consolidated into a single PC or included in PC 1.

For some PCs, and particularly for PCs 1 through 6, it may be beneficial to have lump sum prices for some activities included in the PCs. Again this facilitates analysis of Price Proposals and administration of the contract. Examples of such activities are shown in the Price Proposal Instructions [S or L] in Exhibit III, Division 1, Appendix B – Price Proposal Instructions [S or L] of this DBPM.

Mobilization will be included in PC 1 for the entire project to be paid when the Baseline Project Schedule is submitted and acknowledged by the Department's Project Manager to meet contract requirements [and the Contract Periodic Payment Schedule (PPS-C) is submitted for larger, more complex projects].

For construction items, the PCs should be distinct physical components of the Project that are clearly delineated and defined in terms of their location. Examples of construction PCs include the following:

a) A bridge (except that a major bridge may be divided into PCs, such as, foundations, intermediate supports, and superstructure);

b) Pavement structure (base course(s) and pavement) between defined points;

c) Excavation and embankments between defined points;

d) Drainage facilities;

e) Retaining structures; and

f) Erosion control and revegetation.

On a larger project, it may be advisable to divide the Project into Sections or segments with PCs within each Section or segment.

For some items of unknown or uncertain scope, it may be desirable to establish an allowance or contingency pool to cover resulting project costs. An allowance is typically used for a specific type of item which is difficult to price, such as unknown hazmat remediation or the relocation of certain categories of Utilities where the extent and/or location is not clearly defined or identified in the RFP. In such a case, the Department would establish the amount to be included in the Contract Price. A contingency pool is

typically used to cover costs incurred by the Department as well as the Design-Builder, often with the Design-Builder sharing in any amount remaining in the pool at the end of the Project.

B) Schedule of Values (Option 1)

The Price Proposal may include a requirement for the Design-Builder to include Unit Prices for items of work that may likely have minor increases or decreases in scope directed by the Department during the Project. This is shown as "Option 1, Schedule of Values" in Exhibit III, Division 1, Appendix C – RFP Forms. The intent is to have previously established Unit Prices to facilitate rapid processing of Orders-on-Contract for changes in the scope of work (increases or decreases) that may occur during the course of the contract. The Unit Price should include all construction costs and applicable markups.

The Department should specify the items for which a Unit Price is desired on Form SOV (*see* Exhibit III, Division 1, Appendix C – RFP Forms) when it prepares the RFP, but may want to allow the Proposers to add other items to the list. The procurement and Contract Documents samples in Exhibit III allow the Department to exercise a "line item veto" eliminating any proposed Unit Prices that appear to be excessive before incorporating the option into the contract.

The contract should provide for negotiating any design costs associated with items covered by Form SOV or establish a fixed allowance in terms of a percentage of construction cost.

It should be noted that cost of changes not covered by Unit Prices on Form SOV will be negotiated as provided in DB Section 109[S or L]-9.2.

7.2.9.2 Determining Progress

The amount of work accomplished for a DB project is normally not determined by measurement of quantities. Since the Design-Builder, through its Designer, determines the Project quantities, there may be the perception that the Design-Builder might have a strong monetary incentive to not develop an efficient design if it were able to determine its own "bottom line" by inflating quantities.

Since a lump sum price is received for each of the PCs (and for some activities), there are generally two means of determining progress and calculating the amount earned for payment, namely the following:

A) Payment based on physical percent complete; or

B) Payment based on a PPC-C and achievement of Progress Check Points (PCP).

Both methods tie directly to scheduling software commonly in use in the industry.

It should be noted that there may be limited items of work paid by Unit Prices or Force Account. In such cases, progress is determined by quantities of work accomplished or amount of labor, Material, and Equipment time expended.

7.2.9.3 Physical Percent Complete

For smaller, less complex projects, the Department will determine the actual physical percent complete by agreement between the Department and the Design-Builder. This method is used in DB Section 109S of the Contract Documents sample (Exhibit III, Division 2, Part 2).

Percent complete can also be estimated from the Design-Builder's work schedule based on the ratio of the following:

A) Days expended to days allowed;

B) Hours expended to hours budgeted; or

C) Dollars expended to contract value.

These ratios do not always reflect the actual physical percent complete [the mere passage of time (expenditure of days) or expenditure of hours or dollars is not a true measure of progress, especially if things are not going well on a project] and are therefore not recommended.

7.2.9.4 Contract Periodic Payment Schedule (PPS-C) and Progress Check Points (PCPs)

For larger, more complex projects, progress will be determined by using a PPS-C/PCP method that overcomes some of the difficulties that may be associated with payment based on percent complete. The details on how to set up a PPS-C and how to define and schedule the PCPs is contained in Exhibit III, Division 2, Part 2, DB Section 109L. While the method requires more up-front setup work on the part of the Design-Builder, the method reduces the time for determining progress and payment during the life of the contract. The PPS-C/PCP method eliminates the calculation and negotiation often associated with the percent complete process. The PPS-C/PCP method naturally places emphasis on actual areas of deficient progress. The determination is based on completion of readily identifiable components and requires no measurements.

The PPS-C/PCP method requires the Design-Builder to develop a time-price curve for each of the PCs and to identify, define, and schedule PCPs within each PC. The number of PCPs is largely dependent on the duration of work on the PC. As a minimum, the following two PCPs are required for each PC:

A) At the start of work on the PC which initiates payment for work on that PC; and

B) At completion of work on the PC.

If the duration of the PC exceeds six months or has multiple independent activities, such as in PC 1, additional PCPs should be identified and scheduled so that there are actual physical checks on progress at reasonable periods throughout the project. Progress Check Points should be defined in terms of readily identifiable completed components, not percent complete or quantity of work accomplished. As long as work is progressing in reasonable conformance to the PPS-C, payment is made each month in accordance with the PPS-C for that PC. If a PCP is due and met during a given month, payment continues in accordance with the PPS-C. If a PCP is missed on a PC, payment is suspended on that PC at the previous month's payment level. Payment is resumed on that PC upon meeting the PCP. Meeting the PCP not only includes accomplishing the physical work, but also performing and documenting associated work such as the specified QC activities and erosion control and environmental mitigation work.

One of the benefits to the Department associated with the two pricing and payment variations included in the Contract Documents is that it gives the Department an easily applied incentive to encourage Design-Builder compliance with the administrative requirements of the contracts such as submittal of progress reports, updated schedules, and Quality Plan and Safety Plan. If the Design-Builder does not provide the required documents, payment is suspended for the entire PC where such activity resides. For example, submitting updated schedules is usually included under PC 1. If the Design-Builder does not submit a monthly schedule update, payment is suspended on PC 1. Price Center 1 typically represents 10 to 20% of the Contract Price, so suspension of payment may result in a 10 to 20% reduction in payment for a given period. Typical design-bid-build contracts often include provisions indicating that the Department may withhold payment for all work if an updated schedule is not provided. Such a disincentive likely does not fit the severity of the deficiency, so such withholding of the entire payment is rarely imposed.

The two methods allow appropriate application of a disincentive that more closely fits the severity of the non-compliance. The payment is only suspended on the PCs where performance does not meet contract requirements or where PCPs are not met.

Compliance with administrative requirements can be tied to a positive incentive, such as incentive fees.

An example of the PPS-C/PCP method follows. For simplicity of illustrating the method, the example is not divided into construction sections as would normally occur on a larger, more complex project.

7.2.9.5 Example Highway/Bridge Design-Build Project

A) The work under this example highway/bridge DB project includes the following:

1) Highway reconstruction;
2) Bridge construction;
3) Utility Relocations;
4) New storm drain; and
5) Landscaping.

B) The Project has project-wide activities in the following categories:

1) "Preliminary and General Requirements," including mobilization;
2) Engineering and design; and
3) Maintenance and Protection of Traffic and maintenance of access.

The following PCs were identified and the Design-Builder priced the PCs as shown in the following table:

Price Center	Description	Price Center Value
1	Preliminary and general requirements	$ 2,400,000.00
2	Engineering and design	$ 940,000.00
3	Maintenance and Protection of Traffic	$ 390,000.00
4	Roadway excavation, embankment, and drainage	$ 1,200,000.00
5	Roadway pavement structure	$ 2,100,000.00
6	Bridge	$ 2,950,000.00
7	Utility Relocations	$ 600,000.00
8	Storm drain	$ 1,000,000.00
9	Landscaping	$ 200,000.00
	Contract Price	$11,780,000.00

The Project has a duration of 18 months from Notice to Proceed (NTP) to completion.

The Design-Builder has identified the following PCPs at the times (months from NTP) indicated.

PC#	PCP #'s	Activity	Price Distribution	Start Date (Mo. from NTP)	Finish Date (Mo. from NTP)
1	01 & 02	Bonds and Insurance	$830,000.00	0	1
	03 & 04	Mobilization	$470,000.00	0	1
	05 & 06	Required Plans	$200,000.00	0	2
	07 & 08	Continuing Activities	$300,000.00	0	6
	09 & 10	Continuing Activities	$300,000.00	7	12
	11 & 12	Continuing Activities and Closeout	$300,000.00	13	18
2	01 & 02	Definitive Design	$180,000.00	0	3
	03 & 04	Intermediate Design	$180,000.00	4	6
	05 & 06	Final Design	$180,000.00	7	9
	07 & 08	Design Support During Construction	$300,000.00	4	18
	09 & 10	As-built Plans	$100,000.00	9	18
3	01 & 02	MPT Plans	$60,000.00	0	3
	03 & 04	MPT Operations Phase 1	$90,000.00	4	6
	05 & 06	MPT Operations Phase 2	$120,000.00	7	12
	07 & 08	MPT Operations Phase 3	$120,000.00	13	18
4	01 & 02	Excavation, embank, and drainage Phase 1	$900,000.00	4	9
	03 & 04	Excavation and embankment Phase 2	$300,000.00	14	16
5	01 & 02	Pavement structure Phase 1	$1,500,000.00	8	10
	03 & 04	Pavement structure Phase 2	$600,000.00	16	18
6	01 & 02	Footings/abutments	$750,000.00	6	8
	03 & 04	Piers/columns	$600,000.00	9	12
	05 & 06	Superstructure	$1,600,000.00	13	16
7	01 & 02	Utility Relocations	$600,000.00	3	6
8	01 & 02	Storm drain	$1,000,000.00	4	8
9	01 & 02	Landscaping	$200,000.00	17	18

The resulting PPS-C is shown on the next pages.

Price Center	Comple -tion PCP	Planned Payment ($M) - Month after NTP																	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1	1-02, 04	1.30																	
	1-06	0.10	0.10																
	1-08	0.05	0.05	0.05	0.05	0.05	0.05												
	1-10							0.05	0.05	0.05	0.05	0.05	0.05						
	1-112													0.05	0.05	0.05	0.05	0.05	0.05
	PC1 Mo. Total	1.45	0.15	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Cum Total	1.45	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40
	PCP Comple-tion Date	X	X				X						X						X
2	2-02	0.06	0.06	0.06															
	2-04				0.06	0.06	0.06												
	2-06							0.06	0.06	0.06									
	2-18				0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	2-18									0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	PC2 Mo. Total	0.06	0.06	0.06	0.08	0.08	0.08	0.08	0.08	0.09	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Cum Total	0.06	0.12	0.18	0.26	0.34	0.42	0.50	0.58	0.67	0.70	0.73	0.76	0.79	0.82	0.85	0.88	0.91	0.94
	PCP Comple-tion Date			X			X			X									X

Price Center	Comple -tion PCP	Planned Payment ($M) - Month after NTP																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	3-02	0.02	0.02	0.02															
	3-04				0.03	0.03	0.03												
	3-06							0.02	0.02	0.02	0.02	0.02	0.02						
	3-08													0.02	0.02	0.02	0.02	0.02	0.02
	PC3 Mo Total	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Cum Total	0.02	0.04	0.06	0.09	0.12	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.39
	PCP Comple-tion Date			X			X						X						X
4	4-02				0.15	0.15	0.15	0.15	0.15	0.15									
	4-04														0.01	0.01	0.01		
	PC4 Mo Total	0.0	0.0	0.0	0.15	0.15	0.15	0.15	0.15	0.15	0.0	0.0	0.0	0.0	0.10	0.10	0.10	0.0	0.0
	Cum Total	00.0	0.0	0.0	0.15	0.30	0.45	0.60	0.75	0.90	0.90	0.90	0.90	0.90	1.00	1.10	1.20	1.20	1.20
	PCP Comple-tion Date.									X							X		
5	5-02								0.50	0.50	0.50								
	5-04																0.20	0.20	0.20
	PC5 Mo Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.50	0.50	0.0	0.0	0.0	0.0	0.0	0.20	0.20	0.20
	Cum Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.70	1.90	2.10
	PCP										X								X

Price Center	Comple -tion PCP	Planned Payment ($M) - Month after NTP																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Comple-tion Date																		
6	6-02						0.25	0.25	0.25										
	6-04									0.15	0.15	0.15	0.15						
	6-06													0.40	0.40	0.40	0.40		
	PC6 Mo Total	0.0	0.0	0.0	0.0	0.0	0.25	0.25	0.25	0.15	0.15	0.15	0.15	0.40	0.40	0.40	0.40	0.0	0.0
	Cum Total	0.0	0.0	0.0	0.0	0.0	0.25	0.50	0.75	0.90	1.05	1.20	1.35	1.75	2.15	2.55	2.95	2.95	2.95
	PCP Comple-tion Date								X				X				X		
7	7-02			0.15	0.15	0.15	0.15												
	PC7 Mo Total	0.0	0.0	0.15	0.15	0.15	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cum Total	0.0	0.0	0.15	0.30	0.45	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	PCP Comple-tion Date						X												
8	8-02				0.20	0.20	0.20	0.20	0.20										
	PC8 Mo Total	0.0	0.0	0.0	0.20	0.20	0.20	0.20	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cum Total	0.0	0.0	0.0	0.20	0.40	0.60	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Price Center	Comple -tion PCP	Planned Payment ($M) - Month after NTP																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	PCP Comple-tion Date								X										
9	9-02																	0.10	0.10
	PC9 Mo Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
	Cum Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.20
	PCP Comple-tion Date																		X
	Mo. Project Total	1.53	0.23	0.28	0.64	0.66	0.91	0.75	1.25	0.96	0.75	0.25	0.26	0.49	0.60	0.60	0.80	0.40	0.40
	Project Cum Total	1.53	1.76	2.04	2.70	3.36	4.27	5.02	6.27	7.23	7.98	8.23	8.49	8.98	9.58	10.18	10.98	11.38	11.78

Note:
For discontinuous activities within a PC (for example, excavation and embankment) the start and finish dates represent PCPs. If an activity does not start as scheduled, payment will not commence until the work actually starts.

If an activity starts or finishes early or late, it will likely require an adjustment in the PPS-C for the affected PCs and the Project as a whole.

For the PPS-C/PCP method, payments would be made as follows:

A) If all PCPs are met as scheduled, payment will be made in accordance with the PPS-C as shown; or

B) If a PCP is missed, payment in the affected PC would be suspended at the previous month's level for that PC. All other payments for all other PCs would be made as scheduled.

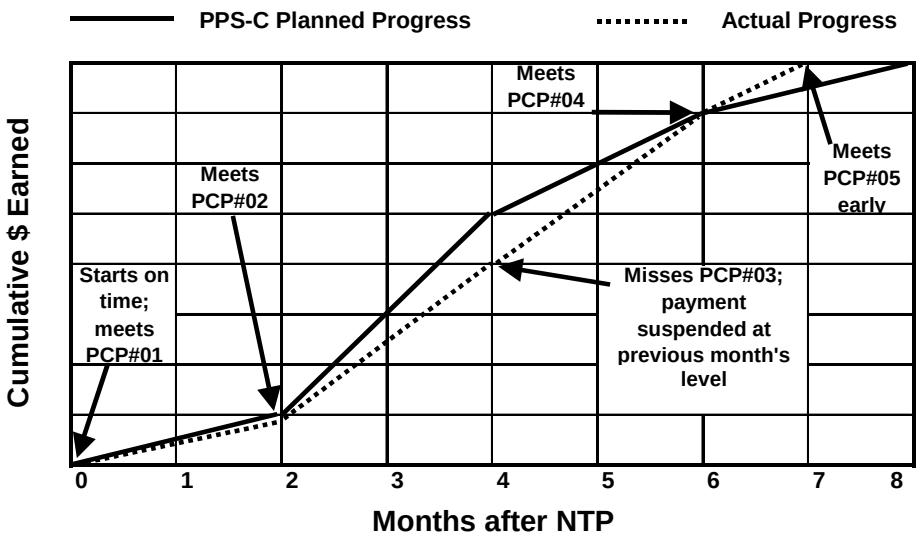
For example, if Excavation and Embankment Phase 1 in PC4 did not start until month 5, the payment for PC4 would be $0.00 for month 4, not the $150,000.00 shown on the schedule. The total project cumulative payment would be adjusted accordingly to $2,550,000.00 instead of the scheduled $2,700,000.00.

If the same activity were not completed by the scheduled date of month 8, cumulative payment for the PC would be suspended at the $750,000.00 (previous month's) level instead of the $900,000.00 shown on the schedule. The Project total cumulative payment would be $6,120,000.00, not the scheduled $6,270,000.00. If the PCP were achieved by the following month, the PC4 cumulative payment in month 9 would be restored to the $900,000.00 level and the Project total cumulative payment would be $7,230,000.00 as scheduled. .

Likewise, if a PCP were achieved early, payment would be made at the level represented at the scheduled PCP date. For example, if the storm drain (PC8) were completed in month 7 instead of the scheduled month 8, cumulative payment at the end of month 7 would be $1,000,000.00 instead of the scheduled amount of $800,000.00. The Project cumulative payment would be $5,220,000.00 instead of the scheduled $5,020,000.00.

Figure 7.2.9.5 shows a graphical representation of the planned and actual payment curves where PCPs are met, missed, or achieved early.

FIGURE 7.2.9.5



7.2.10 DB Section 110 – Escrowed Proposal Documents

This is an entirely new Section of the general provisions to cover the preparation, deposit, and use of Escrowed Proposal Documents.

All Proposers are required to place a copy of all documents used in the preparation of their Price Proposals in the custody of an escrow agent, usually a bank designated by the Department or selected by the Proposer/Design-Builder. The Department will need to specify the escrow agent or instruct the Proposers to select their own. The Department will also need to provide an escrow agreement similar to that shown in Exhibit III, Division 1, Appendix C – RFP Forms.

The Proposers are typically required to place/deposit the Escrowed Proposal Documents within 72 hours of submitting their Proposals. The time between submitting the Proposals and depositing the Escrowed Proposal Documents is allowed so that the Proposers can have time to organize and submit the Escrowed Proposal Documents after the usual last minute rush of preparing the Proposal.

The Escrowed Proposal Documents are intended for use in evaluating Orders-on-Contract and for resolving claims or other disputes during the course of the contract. Access is tightly controlled. The Escrowed Proposal Documents can only be accessed and viewed jointly and concurrently by a designated representative of the Department and the Design-Builder. The Escrowed Proposal Documents are not used during the Proposal evaluation process.

See Exhibit III, Division 2, Part 2, DB Section 110 for more complete information regarding the Escrowed Proposal Documents. *See also* Section 10.2.4 of this DBPM regarding the checking and use of Escrowed Proposal Documents after execution of the contract.

7.2.11 DB Section 111 – Design Management and Design Quality Assurance/Quality Control

This is an entirely new Section of the general provisions to cover the management and QC of the design produced by the Design-Builder.

The provisions of DB Section 111 relate to the execution phase of a DB project. Therefore, the discussion of its provisions is in Section 10.4 of this DBPM.

The design management and design QA/QC requirements are based on the following premises:

A) The Design-Builder is responsible for managing and scheduling all design work to meet its construction schedule;

B) The Design-Builder is responsible for the adequacy and efficiency (effectiveness) of the design solutions and the design documents;

C) The Design-Builder is primarily responsible for the quality of the design documents its organization develops;

D) All design documents will be developed under the direction of a professional engineer licensed in the State of New York;

E) Design documents may be developed and released for construction in incremental stages allowing the Design-Builder to initiate construction at its own risk prior to completion of final design documents;

F) The Design-Builder's Design QC Manager is responsible for arranging and conducting reviews of all design documents and Working Plans (such as, shop drawings and fabrication drawings);

G) Department representative [the Design Compliance Engineer (DCE) and/or Design Compliance Monitors (DCM)] will provide continuous design Oversight throughout the Project. *See* Section 10.4 of this DBPM for a discussion of typical design Oversight activities;

H) The Design-Builder's Designer and Design QC Manager have continuing responsibilities during construction; and

I) Design will not be considered complete until all As-built Plans have been reviewed and approved by the Department.

The Department and the Design-Builder will meet and mutually agree on the schedule and duration of Design Reviews. The initial schedule will be verified and modified by mutual consent during the course of the contract. The Design-Builder will be required to give the Design Compliance Engineer at least one week's notice prior to any Design Review. The Department's participation in the Design Reviews must be accomplished in a timely manner but still must be thorough.

The DB concept envisions that design will be released for construction in stages or phases such that construction will start prior to completion of final design. If any component will require completion of final design of the component or project prior to its release for construction, such requirement must be clearly identified in the Contract Documents.

7.2.12 DB Section 112 – Construction Quality Assurance and Quality Control

This is an entirely new Section of the general provisions to cover the management and QC of the Design-Builder's construction.

The prime responsibility for quality will rest with the Design-Builder, including sampling and testing. During preparation of the RFP the Department's Project Management Team will need to determine the Design-Builder's inspection requirements and sampling and testing requirements for both Verification Sampling and Testing (by the Department) and QC sampling and testing (by the Design-Builder). *See also* Section 10.5 of this DBPM.

DB Section 112 defines the roles and responsibilities for QC and QA. The requirements for the Design-Builder's QC organization are established to provide a reasonable degree of independence between the QC organization and the production forces. It also focuses high-level management attention to QC by having the QC organization report directly to corporate management rather than the Design-Builder's Project Manager or Construction Manager.

DB Section 112 contains several appendices defining the following:

A) Quality Control inspection and QC sampling and testing requirements (Appendices 112A and 112B respectively);

B) Quality Assurance inspection, including Verification Sampling and Testing and Independent Assurance (Appendices 112C and 112D, respectively); and

C) Forms to be used in QC reporting and documentation (Appendix 112E).

The Department's Project Management Team will need to determine the specific QA and QC requirements for each project. The specific project requirements may vary from those shown in Exhibit III – RFP Sample.

7.2.13 DB Section 113 – Design-Builder's Quality Plan

This is an entirely new Section of the general provisions to cover the preparation of the Design-Builder's Quality Plan.

This section specifies the requirements for the management of the Design-Builder's QC organization and the format and contents of the Design-Builder's Quality Plan. *See also* Section 10.5 of this DBPM. The Quality Plan Specification (Exhibit III, Division 2, Part 2, DB Section 113) should be tailored to fit the size and complexity of the Project.

7.3 DESIGN REQUIREMENTS (CONTRACT DOCUMENTS PART 3)

The Contract Documents should contain or indicate the applicable Design Requirements for all components of the Project. The Design Requirements should be listed or specified in a logical format, with separate Sections in Part 3 of the Contract Documents, such as, roadway geometry, geotechnical, pavement section, structures, and drainage.

The Design Requirements may be spelled out in terms of a list of applicable standards and references to be used in the design, such as AASHTO, FHWA, and/or Department publications. Any deviations or exceptions from these standards, whether incorporated in RFP Plans or Design Plans, will require approval of the Chief Engineer or designee. Care should be taken to avoid making an all-inclusive list of every possible reference or standard, particularly when the standards or references may conflict with one another. Design Requirements that are spelled out in cited references or standards should not be repeated or paraphrased in Part III. Restating the requirements is not cost-effective and is a potential source of error and/or conflict between the reference/standard and the text of the Contract Documents. It is better to incorporate the requirements of the cited standards by reference rather than by copying, restating, or paraphrasing the Design Requirements. It is important to remember that the Department has full responsibility for determining the Design Requirements. If there are ambiguities or conflicts among the listed requirements, the Department may be liable for time and cost impacts of resolving the conflicts once the contract is underway. Particular care should be taken when referencing some of the standard Department procedures manuals. The technical requirements may be entirely appropriate and applicable to a DB project, but many of the procedures have been written for design-bid-build projects and may not compatible with DB.

The Design Requirements should also cover any special requirements not included in the standards and references cited.

The preparation of Design Requirements (Contract Documents Part 3) should be coordinated with the preparation of Performance Specifications (Contract Documents Part 4). If the requirements of the Project component are covered by a Performance Specification, care needs to be taken to avoid stating conflicting direction and requirements in Part 3. If the work is to be covered by a Performance Specification, one should include all the requirements in the Performance Specification and only provide a cross reference to the appropriate Performance Specification in Part 3 - Design Requirements. To further clarify the intent of the contract, the order of precedence between Part 3 and Part 4 must be specified (*see* Exhibit III, Division 2, Part 2, DB Section 102-2).

7.4 PERFORMANCE SPECIFICATIONS (CONTRACT DOCUMENTS PART 4)

Typical design-bid-build contracts utilize construction specifications that can be categorized as "prescriptive" specifications. The content of prescriptive specifications focuses on how to do the work. Many are very detailed in spelling out precisely how each work activity will be carried out.

Another type of specification that is particularly applicable to DB is the Performance Specification. Rather than focusing on how to do the work, Performance Specifications define the required results. Using Performance Specifications inherently recognizes that there may be more than one way to achieve the desired result. They fit well with DB in that they can, if properly written, provide more flexibility and encourage more innovation and creativity than prescriptive specifications.

A) Typical Performance Specifications have the following four essential elements:

1) Attributes: the critical elements of the work that are of importance to the owner; the means by which the performance characteristics are identified. For example, pavement structure attributes may be measured in terms of rideability (smoothness), durability, and skid resistance;

2) Performance Requirements: a statement of the desired qualitative results, such as, a skid resistance of 45;

3) Design Requirements: definitive statements of performance for a particular requirement, usually a statement of results desired at particular times in the life of the Project component (such statements or requirements should not be repeated in Part 3); and

4) Substantiation/Performance: a statement of what is required and how and when actual performance/conformance will be measured or how predicted performance will be determined.

B) In preparing Performance Specifications the writer should do the following:

1) Establish the attributes, requirements, criteria, and substantiation for design, construction, and long-term performance;

2) Allow flexibility to the extent possible;

3) Avoid specifying solutions; and

4) Include prescriptive elements where necessary.

C) Although there is not an industry-wide format for Performance Specifications, the specifications format should be consistent within the Department. The following format will be used for the Department's Performance Specifications:

1) 1.0 - Title and Scope;

2) 2.0 - Applicable Standards & References (i.e., AASHTO, FHWA, Department);

3) 3.0 - Essential Elements, including the following:

a) Attributes;

b) Requirements;

c) Criteria; and

d) Substantiation/Performance.

The Department may "standardize" some Performance Specifications over time while others may be tailor-made for a given project. Performance Specifications should not be prepared for all project components. They should be prepared where a degree of flexibility is allowed and where innovation and creativity may result in better value, higher quality, or lower cost. For example, it would not be advisable to prepare a Performance Specification for pavement striping or markers. If system-wide standards and requirements exist, they should be referenced in paragraph 2.0, Applicable Standards and References, of the individual Performance Specification.

Examples of previously used Performance Specifications are included in Exhibit III, Division 2, Part 4 - Performance Specifications.

All Performance Specifications must be approved by the Chief Engineer or designee.

7.5 SPECIAL PROVISIONS (CONTRACT DOCUMENTS PART 5)

Special Provisions are required to:

A) Provide project-specific supplements to the provisions in DB Section 100;

B) Specify project-specific requirements not covered by the Standard Specifications, Construction and Materials, and Engineering Instructions (EIs) (Part 9);

C) Modify technical standards and references cited in the Contract Documents or other documents included in the contract by reference; and/or

D) Modify the Standard Specifications and/or EIs so they are compatible with the design-build concepts and procedures specified elsewhere in the contract.

To facilitate their ease of use, Special Provisions should be prepared so that an entire paragraph or Section is replaced with the new wording, rather than directing a series of "cut and paste" operations for individual words or phrases. If a given specification requires significant rewriting, it may be best to rewrite the entire specification as a complete Special Provision.

7.6 DESIGN-BUILD UTILITY REQUIREMENTS (CONTRACT DOCUMENTS PART 6)

The Contract Documents must contain or indicate the applicable requirements for the protection-in-place or Relocation of Utilities affected by the Project. The requirements should be listed or specified in a logical format in Part 6 – DB Utility Requirements of the Contract Documents, with Utility agreements in the reference documents.

The Department should decide early in the Project definition process whether to have any of the Utilities relocated prior to executing the DB contract or to have the Utilities relocated during the DB contract.

If the Department chooses to have the Utilities relocated prior to the DB contract, this can be accomplished through separate Utility agreements and the standard notification process (*see* Chapter 13 of the Highway Design Manual). Since the Project design will not be complete prior to issuing the RFP, the major concern with this approach is that the Department must make some assumptions about whether Utilities require Relocation. If those assumptions prove to be incorrect, the Department may be responsible to relocate additional Utilities, make a second Relocation of a Utility previously relocated, and/or pay the Design-Builder to relocate them during the DB contract execution phase. In either case, the Department may be responsible for delays caused by these Utility Relocations.

If the Department chooses to have the Utilities relocated during the DB contract, the Design-Builder will be responsible for the Utility Relocations, regardless of who actually performs the work. By making the Design-Builder responsible for the Relocation and/or protection-in-place of all Utilities, the Design-Builder has an incentive to avoid as much Relocation as possible. The Design-Builder also has the responsibility for all coordination between the various Utility companies and its own forces and can schedule the work of the various entities so as not to adversely impact the Baseline Progress Schedule.

If the RFP indicates that the Design-Builder is to relocate the municipal Utilities, then the cost to relocate the municipal Utilities would be included in the Price Proposal. For non-municipal utilities the Department may chose to negotiate agreements with the non-municipal Utilities for the Utilities to reimburse the Department for the cost of their Relocations, or the Department may chose to let the Design-Builder negotiate the Relocations with the non-municipal Utilities. If the Department negotiates reimbursement agreements with the non-municipal Utilities, the costs to relocate those non-municipal Utilities would be included in the Price Proposal. If a non-municipal Utility wishes to have the Design-Builder relocate its affected Utility facilities, but such work is not included in the Design-Builder's scope of work under the Contract Documents, then the Utility Owner and the Design-Builder would need to execute a separate agreement covering the Utility Relocation outside of the DB Contract. In this instance, the Utility owner would pay the Design-Builder directly for the cost of Relocation.

The only unforeseen circumstance is the discovery of a Utility that no party was aware of prior to the construction.

Certain Utilities will be eligible for reimbursement of their relocation costs, for example, a Utility that is installed pursuant to an easement or that is located on private property. *See* Chapter 13 of the Highway Design Manual, Section 13.5.2 for additional reimbursement cases.

The Department still has the responsibility to investigate and indicate in the RFP Plans the locations of all potentially affected Utilities and to endeavor to execute and provide Utility agreements with each of the Utility Owners covering the Design Requirements and construction requirements for each Utility's facilities. Experience has proven that there are distinct advantages to the Department and the Project if Utility Owners will allow the Design-Builder to design and construct the Utility Relocations. If the Design-Builder is given the responsibility to design and construct Utility Relocations, the Design-Builder has better control of the work with significantly less risks of delay and interruptions to its planned schedule.

A) The utility agreements between the Department and the Utilities should address the following issues:

1) Responsibility for the design and construction of the facilities;

2) Responsibility for payment;

3) Applicable Design Requirements and construction specifications that will be applicable to each specific Utility Owner;

4) Utility point(s) of contact;

5) Utility requirements/time allowance for Design Reviews and/or construction inspection for any work done by the Design-Builder;

6) Use of Utility-designated designers and/or construction contractors, if applicable;

7) Definition and identification of required/desired betterments and how payment for betterments will be handled; and

8) Any limitations regarding interruption of service.

B) Information that is pertinent to the DB contract will be included in the Contract Documents Part 6 – DB Utility Requirements. Typically Part 6 – DB Utility Requirements should be organized as follows:

1) General text and instruction pertaining to all Utilities, including a summary table showing responsibility for design, construction, and payment; and

2) Appendices for each Utility covering the specific information and requirements extracted from the Utility agreements.

See example Utility requirements in Exhibit III, Division 2, Part 6 – DB Utility Requirements.

7.7 RFP PLANS (CONTRACT DOCUMENTS PART 7)

RFP Plans are those Department and Stakeholder plans provided with the RFP and included in the Contract Documents. Generally speaking, RFP Plans are incomplete plans representing the Project and its components. However, there are different categories of RFP Plans based on what the plans represent and the degree of latitude allowed the Design-Builder in completing the design.

A) The main categories of RFP Plans are as follows:

1) Administrative Plans;

2) Directive Plans; and

3) Indicative Plans.

B) Administrative Plans are those that contain general project or Plan information such as cover sheets, index sheets, and similar non-technical information.

C) Directive Plans are those plans that depict required elements and components of the Project within specifically defined parameters. The Design-Builder has limited or no latitude to adjust components or details shown on Directive Plans. Examples of Directive Plans include the following:

1) Basic Project Configuration Plans that depict the Basic Project Configuration within the limits defined in the contract. The contract defines the features comprising the Basic Project Configuration and the limits of flexibility that the Design-Builder has in adjusting the components and elements shown on the Basic Project Configuration Plans. The Basic Project Configuration Plans for a highway/ bridge project usually include the following:

a) Horizontal and vertical alignment;

b) Right of Way Plans that depict the limits of ROW or easements obtained or to be obtained by the Department;

c) Vertical clearances;

d) Number and width of lanes;

e) Location of major structures;

f) Railroad crossings (grade separation or at-grade); and

g) Location of signalized intersections.

2) Standard Plans, those detailed Department or Stakeholder plans that depict the dimensional requirements of certain features of the Project and components;

3) Final Department Plans represent the final design of a self-contained component of the Project, such as a bridge or drainage structure. The component is essentially a piece of design-bid-build work within a DB project. The Design-Builder has no responsibility for the design of the component except for the design of its interface with other components of the Project. The component shown on Final Department Plans is to be constructed as shown; and

4) Project-specific details required by the Department or other Stakeholder(s).

D) Indicative Plans represent the nature and type of work to be designed and constructed as part of the Project and reflect items for which the Department has no particular view on the specific configuration or Material used in the final product, such as the following:

1) Structure type (concrete or steel);

2) Pavement type (concrete or asphalt);

3) Drainage Material or size; or

4) Pile type.

E) Indicative Plans do not necessarily reflect the final locations, quantities, or all elements required to complete the design. The Design-Builder has more latitude in determining the requirements and limits of features illustrated on Indicative Plans. Indicative Plans are used to represent the type of work intended to be designed and constructed. Indicative Plans may include the following:

1) Typical cross-sections;

2) Existing Utility and drainage location plans;

3) Planned Utility or drainage Relocations;

4) Landscaping;

5) Drainage features;

6) Bridge locations;

7) Lighting;

8) Intelligent Transportation System (ITS) installations; and

9) Signing and striping/pavement markings.

One or more of the elements listed above as examples of Indicative Plans may actually be required elements or show required details for a specific project. In such cases, the information should be shown on and identified as Directive Plans.

The different categories of plans need to be kept in mind as PE progresses towards completion of the RFP and Contract Documents. Do not mix directive and indicative information on the same Plan, if possible. If it is necessary to mix directive and indicative information on the same Plan sheet, the directive and indicative information should be clearly delineated so as to avoid confusion during project execution.

The applicable Plan category should be noted on the Plan index. It is particularly important to clearly identify the Basic Project Configuration Plans.

In order to facilitate the completion of the design, the CADD files for RFP Plans will be provided to the Proposers during the RFP step of the procurement. Such CADD files, normally provided on CD-ROMs, are also considered Contract Documents. The applicable CADD file for each RFP Plan sheet should be noted on the index sheet.

7.8 ENGINEERING DATA (CONTRACT DOCUMENTS PART 8)

Engineering data that should be placed in the Contract Documents includes the following:

A) Control survey data, monumentation, and plots;

B) Project mapping and other survey data;

C) Geotechnical investigation data and maps;

D) Results of condition surveys and preconstruction surveys done for the Project; and

E) Similar technical data and information gathered for the Project.

Any available CADD files for engineering data will be provided to the Proposers with the RFP. The CADD files will also be considered Contract Documents.

Typically interpretive and analytical reports are not included in the DB Contract Documents except when the Department is going to warrant the accuracy of the analysis and interpretation of the data. The decision regarding whether the Department will warrant such information should take place during the risk identification, assessment, and allocation exercise explained in Section 3.5 of this DBPM. If such analysis and reports are to be included and warranted by the Department, such documents should be placed in the engineering data portion of the Contract Documents; otherwise, they should be placed in the reference documents.

7.9 STANDARD SPECIFICATIONS AND ENGINEERING INSTRUCTIONS (CONTRACT DOCUMENTS PART 9)

The Department Standard Specifications, Construction and Materials, and Engineering Instructions (EIs), as modified by Part 5, Special Provisions, are included in the DB contract by reference. However, there are certain “standard” revisions that will be covered by standard DB Special Provisions to the Standard Specifications (*see* Exhibit III, Division 2, Part 5 – Special Provisions). The following are the most notable changes:

A) The design-bid-build Section 100 is replaced in its entirety by Contract Documents Part 2 – DB Section 100 (*see* Exhibit III, Division 2, Part 2 – DB Section 100); and

B) Measurement and payment provisions are revised to reflect that quantities are not normally measured in DB, and payment is on a lump sum basis for a grouping of the typical Pay Items rather than on a Unit Price basis for each specification Section.

Other technical and procedural Special Provisions may be prepared by the Department and included in the Contract Documents.

The intent of the DB Contract is to have the Design-Builder use the Standard Specifications and EIs in preparing its own Project Specifications that are tailored to the specific design and construction means and methods the Design-Builder will use on the Project. The Project Specifications may take the form of supplements to the Standard Specifications or may be totally new specifications for items not covered by the Standard Specifications. The Design-Builder may also choose to use one or more of the Standard Specifications unchanged, except for the Special Provisions included in Part 5 – Special Provisions of the Contract Documents.

The Project Specifications will be reviewed by the Design-Builder's Design QC staff and the Department (and other Stakeholders) during Design Reviews (*see* DB Section 111-12). Their use will be subject to the Department's Consultation and Written Comments regarding use on the work covered by the Project Specifications.

7.10 MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE AND DISADVANTAGED BUSINESS ENTERPRISE SUBCONTRACTING REQUIREMENTS

Minority-owned Business Enterprise (MBE) and Women-owned Business Enterprise (WBE) and Disadvantaged Business Enterprise (DBE) program requirements are found at Sections 102-08 and 102-9, respectively, of the DB Section 100. According to the New York State Executive Law Section 313, where compliance with federal requirements regarding the participation of MBEs and WBEs is required, the contracting agency may determine whether the federal requirements duplicate or conflict with the State's requirements and may waive the State requirements where such duplication or conflict exists. Further, the FHWA's DB regulations state that no subcontracting goals may be imposed other than those necessary to comply with the federal DBE program (23 CFR 635.116(3)). Thus, for projects that do not use any federal funding, DB Section 102-8 applies and for Federal-aid projects, DB Section 102-9 applies.

The MBE/WBE and DBE programs for DB are substantially the same as those utilized for design-bid-build projects. The main difference is that the Design-Builder is given longer time frames for submission of documents in a DB project than are contractors in a design-bid-build project. The reason for this is that, under a DB project, the final design has not been completed at the time the DB contract is awarded. Therefore, it is nearly impossible for the Design-Builder to be able to identify what MBEs/WBEs or DBEs it will use on the Project. Thus, the Design-Builder is required to submit its MBE/WBE or DBE program with its Proposal. The program is the item that is evaluated during the procurement process. Once portions of final design have been completed, or, in the case of the Contract Document sample, after 30 days, the Design-Builder submit lists of MBEs/WBEs or DBEs. This list will be updated as the Project progresses and as there are changes or additions to the MBE/WBE or DBE list.

The Office of Equal Opportunity Development and Compliance (OEODC) must be consulted early in the process to create the goals for the Project and on an on-going basis during the Project for Oversight and monitoring of the Design-Builder's MBE/WBE or DBE program.

7.10.1 Minority and Women-owned Business Enterprise Program

The MBE/WBE program applies to all non-Federal-aid contracts. The Department and its Design-Builder are required to follow the requirements of the MBE/WBE program to ensure that MBEs and WBEs have

the maximum opportunity to compete for subcontracts to the DB contract. Furthermore, the Department and Design-Builder may not discriminate in the Award of contracts and subcontracts on the basis of race, color, national origin, or sex, and this policy must be made a part of all subcontracts of every tier under the DB contract. The Design-Builder also may not use the MBE/WBE program to discriminate against any qualified company.

The Design-Builder may only utilize MBEs and WBEs that are found to be eligible by the New York State Department of Economic Development (NYSDED). If the Design-Builder is aware of an MBE or WBE with which it would like to subcontract, in order for that subcontract to be applied toward the MBE/WBE goal, the MBE or WBE must be certified as such with NYSDED at the time they are proposed to participate as a subcontractor. Therefore, the Design-Builder should work to ensure, prior to submission of its Proposal, that all its proposed MBEs and WBEs are registered with NYSDED. If an MBE or WBE is later found to be ineligible, then the Design-Builder must replace such MBE or WBE with another certified MBE or WBE firm. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.1.

Prior to release of the RFQ, it will be necessary to meet with the Office of Equal Opportunity Development and Compliance (OEODC) to determine an MBE/WBE goal for the contract. The goals will be stated in Section 7.2 of the RFQ; Section 6.9 of the ITP; and Part 1, Article 6.1 of the Contract Documents. If a goal of zero percent is determined for the contract, the Design-Builder must still make good faith efforts to subcontract with MBEs and WBEs. *See* Exhibit III, Division 2, Part 2, DB Sections 102-8.2 and 102-8.3.

7.10.2 Disadvantaged Business Enterprise Program

The DBE program applies to all Federal-aid contracts. Although the federal DBE program is very similar to the State's MBE/WBE program, the federal DBE program is created under the authority of federal laws and regulations. The spirit of the DBE program is the same as that of the State's MBE/WBE program in that its purpose is to afford DBEs maximum opportunity to compete for and perform contracts. The DBE program also requires that the Department and Design-Builder not discriminate in the Award of contracts on the basis of race, color, national origin, or sex, and that such requirement be passed down to Subcontractors of every tier. The Design-Builder may not use the DBE program to discriminate against a qualified company. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.

In the case of the DBE program, DBEs must be certified with the New York State Department of Transportation, as opposed to the registration with NYSDED that is required for the MBE/WBE program. If the Design-Builder would like to use a DBE, it must ensure that the DBE is registered with the New York State Department of Transportation prior to submission of its Proposal. If it is found that a Subcontractor is not eligible as a DBE, the Design-Builder will be required to replace that ineligible DBE with a different DBE. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.1.

Similarly to the MBE/WBE program, it will be necessary to meet with the OEODC to determine a DBE goal for the contract prior to release of the RFQ. The goals will be found in Section 7.2 of the RFQ; Section 6.9 of the ITP; and Part 1, Article 6.2 of the Contract Documents. Also, under the FHWA's DB regulations, the Department may prescribe separate goals for various elements of the work under the contract. The OEODC will assist in determining if declaring separate goals is of benefit to the DBE program for each individual contract. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.2.

If a goal of zero percent is determined for the contract, the Design-Builder must still make good faith efforts to subcontract with DBEs. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.3.

The OEODC requires the signatures of all DBEs on the recommendation of the Award of the contract (Form AAPHC-89). If these signatures are not received by the OEODC, Award of the contract could be delayed. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.17.

7.11 QUALITY PRICE ADJUSTMENTS

Quality price adjustments in the DB contract must be handled differently than in the Department's normal contracts because quality price adjustment factors are tied to quantities and unit prices that are not typically found in design-build contracts. With some modifications, the Department's quality price adjustment can be incorporated into DB contracts. For such projects, the Design-Builder does not report quantities to the Department for payment, so quality price adjustments can be based on something other than unit prices. Alternately, for the purpose of the quality price adjustment, the Design-Builder can provide quantities of specific items. *See* Exhibit III, Division 2, Part 2, DB Section 109L-7.5-6 or DB Section 109S-7.3-4.

7.12 WARRANTIES

In addition to the warranty provisions included in DB Section 104-15 of the Contract Documents sample, there are two other general categories of warranties available to the Department, namely a general Warranty covering all work on a project or a component-specific warranty (usually an extended warranty) limited to selected items or types of work on a project, such as structures or pavement.

Where the Design-Builder is given a significant degree of flexibility in determining the design and the construction means and methods, warranty provisions can provide a real quality incentive to the Design-Builder while providing extended protection to the Department. If the Department is overly prescriptive and the Design-Builder provides the specified solution and constructs the Projects according to the means and methods specified by the Department, it may be very difficult to enforce warranty provisions.

A general warranty covering the entire project should be limited to a maximum of two (2) years (*see* 23 CFR 635.413). General warranty terms for 100% State-funded projects may vary from the federal two-year limit. The specific requirements of the general warranty should be covered by a Special Provision. *See* Exhibit III, Division 2, Part 5, Special Provision 104, for an example of a general warranty.

Extended warranties covering specific components of the Project may extend beyond the general warranty's two-year limit. The term (length) of extended warranties will likely be limited by the Design-Builder's ability to get bonds covering the warranty period. Extended warranty periods in the range of five years are feasible and may be extendable to 10 years. The technical warranty provisions for project specific components should be integrated into Performance Specifications governing the specific work covered. *See* the sample pavement Performance Specification in Exhibit III, Division 2, Part 4, for an example of technical warranty requirements. The administrative and contractual components of the warranty, including enforcement provisions, should be covered in a Special Provision. *See* Exhibit III, Division 2, Part 5, Special Provision 104.

If extended warranties are desired, they may be included in the RFP and priced in the Price Proposal as options that the Department may or may not choose to exercise.

In developing warranty provisions, whether general or component specific, the following guidelines should apply:

A) Warranty provisions should cover component failures or extraordinary distress due to design and/or construction;

B) Do not include normal maintenance operations and repairs in the Warranty provisions. For example, roadside vegetation control (mowing or spraying), repair of guiderail, cleaning culverts, and similar activities should not be warranty items;

C) Identify the specific work to be covered by the warranty, whether a general warranty or a component-specific warranty;

D) Define the conditions of distress or failure that will require warranty work;

E) Specify the minimum acceptable corrective action to repair or fix the work covered by the warranty;

F) Specify the frequency and/or time that the Project or its warranted components will be inspected and who will participate in such inspection;

G) Specify the time limit for the Design-Builder to respond to the warranty requirement. Such response time should be expressed in terms of response time for temporary and for permanent repairs;

H) Specify the Department's remedy should the Design-Builder not provide warranty service. Such remedies may include self-performance by the Department or procurement of services from outside source;

I) Specify warranty bond requirements; and

J) Specify the time allowed for the Department to exercise a warranty option. Normally the option should be exercised before executing the contract. In some cases it may be necessary to delay execution of the warranty to a short time period after Award.

Experience has proven that it can be difficult to enforce warranty provisions, especially if the Department is not able to adequately substantiate that it has maintained the road within specified standards or has allowed activities that could be considered a cause for distress or damage. Therefore, the Department's Project Management Team should coordinate with the Department's maintenance staff to identify the maintenance standards that will apply to the Project once it is completed. If the Department's standard maintenance procedures are documented, such standards and any expected deviations from them should be included in the contract by reference and/or included in the Contract Documents.

In some cases, it may be advisable to include special components in a project to help the Department verify that it has managed the road in such a manner as to preclude activities that may cause distress or damage to warranted items. For example, one freeway reconstruction project that included long-term requirements for the performance and condition of pavements and structures included the installation of several weigh-in-motion stations along the Project to allow the Department to verify that it was not permitting overloads (which could nullify the Warranty) to use the completed project.

For a particularly complex project where many potential solutions are available, such as a major bridge crossing that may allow many different technical approaches, it may be desirable to have the Proposer propose not only the Warranty price, but also the Warranty technical and contractual provisions. The actual Warranty provisions could then be evaluated for price and quality during the selection process. In this example, the Warranty would address the specific components for the particular structure proposed. Otherwise, the Department would have to prepare Warranty provisions for all possible alternative solutions or structures.

Examples of technical Warranty requirements are shown in some of the sample Performance Specifications in Exhibit III, Division 2, Part 4 – Performance Specifications. Sample contractual and

administrative provisions and a sample general Warranty provision are shown in Exhibit III, Division 2, Part 5, Special Provision 104.

8.0 REQUEST FOR PROPOSALS REVIEW AND APPROVAL

8.1 REVIEW OF DRAFT REQUEST FOR PROPOSALS

Prior to issuance of the RFP, a draft RFP should be reviewed internally by the Department and by selected Stakeholders, particularly the FHWA for Federal-aid projects or for projects on the Dwight D. Eisenhower National System of Interstate and Defense Highways (Interstate System) or the NHS.

Additionally, a review of the draft RFP by Proposers on the Short-List has proven particularly beneficial to the Project and the owner. Such a review, especially during early phases of DB implementation, facilitates the following:

A) Identification of "fatal flaws" or "deal killers" from the perspective of the Proposers on the Short-List;

B) Incorporation of good ideas from the construction and design communities, in terms of technical, management, and contractual provisions;

C) Trust and teamwork between the Department and the Proposers;

D) Communication between the Department and Proposers, a very necessary component of a successful DB project;

E) Modifications to the draft RFP in a reasonable, timely manner, allowing the Department to thoroughly examine and consider comments given; and

F) Preparation of Proposals by allowing Proposers to get a head start in preparing their Proposals, which typically results in higher quality Proposals.

The input from the Proposers on the Short-List may be in the form of written comments and/or private oral presentations by the Proposers to the Department during individual meetings (*see* Section 5.2.2 of this DBPM). Information received from each DB Team should be held in confidence and the source of comments not shared with other Proposers. Requesting Proposers to participate in an open (group) forum to discuss their comments and concerns may not result in an open and frank exchange of information. Therefore, individual private meetings are preferred.

A review by the Proposers on the Short-List should not be considered as participating in drafting the RFP. The Department receives the comments and determines and controls the final contents of the RFP, based on input from the Department, other Stakeholders, and the Proposers on the Short-List.

8.2 REQUEST FOR PROPOSALS APPROVAL

The RFP will be approved by the Chief Engineer or designee. For Federal-aid projects and projects on the Interstate System or the National Highway System (NHS), the RFP must also be approved by the FHWA Division Administrator, which constitutes project authorization and approval/authorization to release the RFP documents.

A) In order for the FHWA's Division Administrator to approve the RFP (authorize advertisement or release of the RFP), the following conditions must be fulfilled:

1) The Project must conform to statewide and metropolitan planning requirements (23 CFR 450);

2) Projects in air quality nonattainment and maintenance areas must comply with transportation conformity requirements (40 CFR 51 and 40 CFR 93);

3) Originally under the FHWA DB regulations (23 CFR 636.109) the NEPA process was required to be completed. However, SAFETEA-LU removed that restriction, and the RFP can be issued prior to compliance with NEPA. It is preferred by the Department that NEPA be completed prior to issuance of the RFP, however, there may to circumstances that compel a project to proceed ahead of NEPA compliance, in which case the Department's Project Manager must obtain concurrence from the Chief Engineer;

4) The RFP must be approved by the FHWA Division Administrator; and

5) The Department must either have completed or have arrangements to complete ROW acquisitions and Utility and railroad work [23 CFR 635.309(p)(1)(i) – (v)].

B) The Department must certify to each of the abovementioned conditions to the FHWA before authorization for the advertisement or release of the RFP will be granted [23 CFR 635.309(p)].

C) If the Department chooses to include ROW acquisition or Utility or railroad work in the RFP, then it must include the following statements in the RFP:

1) A statement of the required scope and status of the ROW, Utility, or railroad related items; and

2) A statement that requires the Design-Builder to conform with the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended [23 CFR 635.309(p)(1)(vi)].

If the Project has a lapse in conformity, then it may continue as long as there has not been a significant change in the scope of the Project, the FHWA has authorized the Project, and the Project has met any necessary transportation conformity requirements [23 CFR 635.309(p)(2)]. If there is a change to the Project concept or scope, the Department must comply with the statewide and metropolitan planning processes, as well as any transportation conformity requirements, that are appropriate to the Project. The Design-Builder must receive notification from the Department when such changes occur. [23 CFR 635.309(p)(3)].

9.0 ISSUANCE OF REQUEST FOR PROPOSALS AND PROPOSAL EVALUATION AND SELECTION

9.1 ISSUANCE OF REQUEST FOR PROPOSALS

The RFP will be issued to the Short-Listed Proposers by the Contract Management and Audit Division.

The RFP should be issued in order to allow sufficient time for DB Teams to prepare a response. In a DB response the Proposer must not only prepare a Price Proposal (similar to the bids prepared for design-bid-build projects) but also may need to conduct additional engineering investigations, prepare a multitude of design documents, conduct extensive research into public needs and perceptions, and prepare written responses to a variety of questions included in the ITP. While the typical bid period for design-bid-build projects may be 30 to 45 days, it is unusual to see a DB procurement that allows less than 60 days for preparation of the Proposal. A time period of 90 or more days for large, complex projects is not unusual. Conversely, it is also not unusual for DB Teams to start working on their Proposals shortly after issuance of the RFQ if they are aggressive and believe they have a good chance of being on the Short-List.

The time between issuance of the RFP and receipt of Proposals should also accommodate questions and requests for technical concept reviews, if included, from the Proposer's and responses to those questions/inquiries by the Department.

The Proposal Due Date may be modified after issuance of the RFP only with approval of the Chief Engineer or designee.

The RFP should be issued in hard copy and/or electronic format, consistent with current Department policy.

9.2 PROPOSERS' QUESTIONS AND ANSWERS

As with the RFQ, the RFP should provide a means for Proposers to submit written questions seeking to clarify portions of the RFP. Any question received and its response should be sent to all Proposers on the Short-List. When responding to questions, the identification of the Proposer submitting the question should not be revealed. *See* Section 2.3 of the ITP (*see* Exhibit III).

To facilitate responding to questions, Proposers submitting questions should be required to submit the questions in hardcopy and electronic format (floppy disk or CD-ROM) on a standard form provided in the ITP Appendix C. *See* Exhibit III, Division 1, to this DBPM.

Responses should be prepared by the Department's Project Management Team, subject to necessary approvals. Responses should be disseminated in the same manner as noted for RFP Addenda in Section 9.3 of this DBPM.

9.3 REQUEST FOR PROPOSALS ADDENDA

Addenda to the RFP may be necessary to correct errors or omissions or to provide supplemental information not previously available. Questions from Proposers may also generate the need for Addenda. *See* Section 2.4 of the ITP (*see* Exhibit III).

Addenda will be prepared by the Department's Project Management Team, subject to the approval of the Chief Engineer or designee and will be issued by the Contract Management Bureau. For Federal-aid projects, Addenda involving major changes must be approved by the FHWA Division Administrator. The Addenda should be issued by the Chief Engineer or designee and distributed in the same manner that the original RFP was distributed to all of the Proposers on the Short-List.

9.4 TECHNICAL CONCEPT REVIEWS

As discussed above, the Contract Documents should clearly establish the parameters applicable to the design and construction of the Project, including standards as well as constraints. For more complex projects, it may be desirable to allow Proposers to submit technical concepts for review prior to submitting the actual Proposal if they so desire. The purpose of the technical concept review is to allow the Proposers to submit technical (or management) concepts to the Department to verify that the concept meets the parameters specified in the RFP. In responding to such a request, the Department would make no statement regarding the quality of the concept, but rather would advise the Proposer whether its concept was in compliance with the RFP requirements. In complex projects, the Proposers may be expending significant resources in developing concepts. Technical concept reviews provide assurance to Proposers that those expenditures will not be wasted. In addition, if a Proposer carries a concept through to submission of a Proposal, only to find that the concept does not comply with an RFP requirement (that may be somewhat obscure or subject to interpretation), the Proposer would have little opportunity to

adjust its Proposal in a timely manner, even if Discussions and Proposal Revisions were to follow. If the technical concepts are reviewed early and problems communicated to the Proposer, the Proposer will have the opportunity to adjust its concept(s) in sufficient time to prepare and submit a fully compliant Proposal for evaluation.

During the technical concepts review, there must be a strict procedure employed to protect the confidentiality of each Proposer's technical concepts. The technical concepts should be submitted without a reference to the Proposer submitting them, but with a cover sheet attached. They should be received by the Department, the cover sheet removed and a code applied to the first page for tracking so that the evaluators will not know which Proposer submitted them. Once the review takes place, the response is sent back to the Proposer.

9.5 EVALUATION AND SELECTION PLAN FOR PROPOSALS

The Proposal Evaluation and Selection Plan (Proposal E&S Plan) document (*see* Exhibit IV, Division 2) is the Department's internal document that details the procedures for every step in the evaluation and selection process from receipt of Proposals to the final documentation of the selection decision. It also lists the functions of every person in the process from the Regional Director (the selection official); to the members and chairpersons of the evaluation panels(s); to the procurement management team (that maintains the integrity of the process); to the legal, financial, and technical advisors (Department, Stakeholder, or consultant staff) on the evaluation teams. The document is tied directly to and is consistent with the RFP. Portions of the Proposal E&S Plan are identical to language in the ITP, such as, the evaluation factors, the rating guidelines, the relative importance among the evaluation factors, and other information regarding pass/fail factors and Communications.

The Proposal E&S Plan document is critical to the discipline, fairness, confidentiality, credibility, and dependability of the selection process. If followed precisely, it is a shield against successful protests.

The Proposal E&S Plan document should contain a flow diagram of the evaluation process. Exhibit IV, Division 2, contains a generic Proposal E&S Procedure for a mid-sized project. The process is very flexible and adaptable to different projects by size and complexity. The evaluation and selection could, especially for smaller projects, be compressed to a single board or committee to both evaluate the Proposals and select the Design-Builder. The Proposal E&S Plan document should be prepared by the Department's Project Management Team and be approved and signed by the selection official prior to issuing the Request for Qualifications. The Proposal E&S Plan is prepared and approved early in the procurement process so as to avoid any appearance that the evaluation criteria or evaluation and selection procedures favor any particular Short-Listed firms.

9.6 EVALUATION AND SELECTION OF DESIGN-BUILDER

9.6.1 Overview

As evidenced in the above discussion on the Proposal E&S Plan, the evaluation process must be disciplined and follow precisely the procedures and responsibilities that are laid out. The process also must maintain strict confidentiality. The Proposers must be able to "trust" that the Department will maintain confidentiality of their Quality and Price Proposals—that their management and technical approaches and prices will not be leaked to the other Proposers or other unauthorized persons. The Proposal E&S Plan should require that each individual involved (including consultants) in the evaluation process follow the Department's current policy to sign Confidentiality and No Conflict of Interest Statements (*see* Exhibit IV). Evaluation participants should also disclose potential conflicts of interest with any Proposers and, in the event of any disclosures, a procedure should exist to assess the extent of

the disclosed item and determine whether the individual or entity can continue participating in the evaluation process. The Proposers also need to feel assured that the Department will follow the evaluation and selection process described in the ITP portion of the RFP and treat them fairly in the evaluation. The persons assigned to the procurement management team are critical to the discipline of the process.

In developing the committees and individuals that will undertake evaluations, the Department should assess what legal, financial, and technical disciplines are involved with the Project and will be implicated by the Project needs and Proposals. While outside consultants, stakeholder staff, other public agency staff and FHWA may provide support and analysis to the evaluation teams and committee(s), and even make rating recommendations, the final ratings should be solely determined by the Department personnel. Proceeding in this manner will reduce potential for protests due to disclosed or undisclosed consultant conflicts of interest.

The period of time for the evaluation must be scheduled, and individuals participating in the evaluation must attend the designated sessions and make time on their calendars to devote to the evaluation and selection of the Design-Builder.

Worksheets for each evaluation factor need to be prepared by the Project Management Team for use by the evaluators for both the pass-fail and quality evaluations (*see* Exhibit IV, Division 2 – Sample Worksheets).

9.6.2 Evaluation Teams

For larger, more complex projects, the evaluation teams identified below should be established to effectively divide the work and allow the evaluation to proceed in a timely manner. For small projects, the selection committee could perform all the tasks identified for the evaluation teams and the other items from Section 9.6.2.1 through Section 9.6.6.3 below and make the recommendation for selection to the selection official. The decision on how to organize this effort should be made on a project-by-project basis.

9.6.2.1 Pass-Fail

Proposals must pass all the pass-fail factors in order to be considered for the quality evaluation. Therefore, it is necessary that the pass-fail evaluation take place prior to the quality evaluation. Generally, it is a good idea to schedule these evaluations so that there are one or more days between them in order to allow time for Communications between the Department and the Proposers if required.

Even though there are three pass-fail factors, there is usually only one pass-fail evaluation team. The Proposals should undergo the “responsiveness to RFP requirements” evaluation first and then be evaluated on the legal and financial pass-fail factors. This initial pass-fail evaluation can be handled in two different ways. Since the responsiveness evaluation is simply a check to see if all requested items have been submitted and is not an evaluation of the adequacy of the information, the proposal management team can conduct the responsiveness evaluation and report their findings to the pass-fail evaluation team, or the pass-fail evaluation team can conduct this evaluation as their first step prior to evaluating the other pass-fail factors.

The evaluation of the pass-fail factors consists of ascertaining the answer to the following two questions regarding each factor and/or subfactor:

A) Has the requested information been provided?

B) Does the provided information meet the RFP requirements?

During the evaluation, the pass-fail evaluators need to determine if missing and/or incomplete information falls into the category of minor or clerical revisions that are allowed under Communications. If they can be corrected through Communications, a brief request for Communications needs to be prepared and issued to the Proposer as discussed below in Section 9.6.3 to this DBPM.

Proposals that pass all pass-fail factors advance to the quality evaluation.

9.6.2.2 Quality

Each quality evaluation team will be assigned a factor or subfactor to evaluate based on the size and complexity of the Project and the expected quantity of information requested. Worksheets should be provided that list all of the subfactors and elements that require evaluation and facilitate the process of evaluation. The individual members of the evaluation team use the worksheets to rate the Proposals.

All team members may rate each assigned subfactor for each Proposal, or the Proposals may be divided into groups and the assigned subfactors for each Proposal evaluated by only a portion of the team. It is recommended that all subfactors and factors be evaluated and rated by all team members. However the team decides to divide its work, it is important that each subfactor for each Proposal be evaluated by at least two team members. In addition to assigning the ratings for the subfactors, and factors, the individual evaluators should note on the worksheets the rationale for their ratings. This is especially true for any "Exceptional," "Potential to Become Acceptable," or "Unacceptable" ratings assigned.

Once each of the Proposals have been evaluated and rated by at least two individuals, the quality evaluation team should discuss the ratings one Proposal at a time and reach consensus ratings for each subfactor and factor for each Proposal. Any dissenting opinions that individual evaluators have from the group consensus rating should be clearly noted on the consensus worksheet.

In addition to the consensus worksheets, the quality evaluation teams should prepare for the presentation of their recommendations to the selection committee. Each quality evaluation team will have to determine what level of effort to put into such a presentation based on the circumstances of the procurement and the complexity of the factor or subfactor it is evaluating. Presentations normally consist of simply going through the consensus worksheet and discussing the rationale behind the ratings.

During the evaluation, the evaluators need to determine if there is any information that requires clarification from the Proposers and that falls into the category of minor or clerical revisions that are allowed under Communications. If this information can be corrected through Communications, a brief request for Communications needs to be prepared and issued to the Proposer as discussed below in Section 9.6.3 of this DBPM.

9.6.2.3 Price

Simultaneous with the quality evaluations, a price evaluation team meets and reviews the Price Proposals and evaluates them based on the criteria listed in the ITP. *See* Exhibit III, Division 1, Instructions to Proposers, Section 6.1.3 for a listing of the information to be evaluated by the price evaluation team.

Since it is important to the evaluation process to have the quality evaluations completed prior to revealing any price data to the evaluators, steps must be taken to ensure that there is no direct interaction between the price evaluation team and the quality evaluation teams. The simplest way to achieve this is to have them meet in separate locations.

During the evaluation, the price evaluators need to determine if there is any information that requires clarification from the Proposers and that falls into the category of minor or clerical revisions that are allowed under Communications. If this information can be corrected through Communications, a brief

request for Communications needs to be prepared and issued to the Proposer as discussed below in Section 9.6.3 to this DBPM.

9.6.3 Proposal Communications

Communications are exchanges between the Department and the Proposers, after receipt of Proposals, which lead to the establishment of the Competitive Range (*see* 23 CFR 636.103).

A) Communications may be conducted with the Proposers to accomplish the following:

1) Enhance the Department's understanding of the Proposals;

2) Allow reasonable interpretation of the Proposals; and

3) Facilitate the Department's evaluation process (23 CFR 636.406).

B) Communications shall not provide an opportunity for a Proposer to revise its Proposal, but may address the following:

1) Ambiguities in the Proposal or other concerns of the Department (e.g., perceived Deficiencies, Weaknesses, error, omissions, or mistakes); and

2) Information relating to relevant past performance (if the information on past performance is the determining factor in their being placed in the Competitive Range and they have not previously had the opportunity to respond to the salient issues) (23 CFR 636.407 and 636.409).

C) Communications may not be used to do the following:

1) Cure Proposal Deficiencies or material omissions;

2) Materially alter the technical or price elements of the Proposal; or

3) Otherwise revise the Proposals (23 CFR 636.408).

The Department prepares brief written questions that can be sent to the Proposers in order to have them respond with the information that clarifies the ambiguities or addresses the concerns of the Department. The request for Communications should also contain instructions for response and a timeframe in which the response must be received. If Communications are held with one Proposer, then they must be held with all Proposers whose Proposals are susceptible to correction through Communications.

9.6.4 Presentations and Interviews

If the Department decides it is advantageous, the Proposers can be asked to attend individual presentations and interviews as part of the evaluation process. If it is determined that this be done, the information regarding the presentations and interviews should be included in the RFP so that schedules can be arranged and presentations prepared. *See* Section 6.3 of the ITP (*see* Exhibit III, Division 1).

During the presentations and interviews, no mention of the Price Proposals is acceptable. These meetings focus entirely on the quality evaluation factors and on increasing the Department's understanding of the Proposals.

9.6.4.1 Presentations

Presentations may take place at two places during the evaluation process. Sometimes the Department may wish to begin the evaluation by having the Proposers present a 30 to 60 minute presentation to the evaluation teams and the selection committee focusing on the issues and portions of its Proposal that it feels are especially important. This is done to familiarize the evaluation personnel with the teams and the Proposals.

Alternately, the Department may wish to have the Proposers make their presentations to the selection committee in conjunction with the interviews as discussed below in Section 9.6.4.2 after the preliminary ratings have been determined so that the selection committee can, with the insight gained from the evaluation process, observe the dynamics of the Proposers as they present what they feel to be the strong points of their Proposals.

9.6.4.2 Interviews

Interviews normally take place after the evaluation teams and the selection committee have met and determined their preliminary ratings as discussed below in Section 9.6.5. The selection committee asks a prepared list of questions to which the Proposer must respond. The questions are prepared during the evaluation process and may consist of several general questions that are asked of all Proposers and specific questions that relate directly to each Proposer's Proposal.

9.6.5 Preliminary Ratings

After all of the evaluation teams have completed their ratings, the selection committee meets to receive their recommendations and to decide on ratings for each subfactor, factor and the overall quality ratings for each Proposal. Each member of the selection committee should familiarize themselves with the Proposals prior to meeting. Each evaluation team gives its report to the selection committee and a matrix of ratings for each Proposal is created to facilitate the determination of the overall ratings. The selection committee then deliberates and determines, based on the information provided by the evaluation teams or otherwise obtained by the committee, whether to accept the recommended ratings or to modify them based on the information in the Proposals, the information provided by the evaluation teams or otherwise obtained by the committee. Any such modification is documented in the selection committee's report. The end result of this process is a matrix that shows the preliminary ratings for each subfactor and factor, as well as an overall rating for each Proposal.

If presentations and/or interviews are scheduled per Section 9.6.4 of this DBPM, the selection committee reconvenes following the presentations and/or interviews and reconsiders its preliminary ratings in light of the information and/or clarifications that may have been provided. When the selection committee is satisfied that the ratings accurately reflect the quality of the Proposals, it is given the information from the Price Proposal evaluation and it determines the Competitive Range (*see* 23 CFR 636.404). The Competitive Range should include all Proposers that have a reasonable chance of being selected. Borderline Proposals should not be excluded from further consideration if the Proposers have a reasonable chance of being selected if meaningful Discussions are conducted and appropriate improvement is achieved. Examples of Proposals that would be excluded from further consideration include the following:

A) A Proposal that, even after requests for Communications or supplemental information, cannot pass the pass/fail factors; or

B) A Proposal that, after the initial evaluation, is rated "Unacceptable" for any evaluation factor or subfactor.

If the Department can make a selection based on the preliminary ratings, skip to Section 9.6.7 of this DBPM.

9.6.6 Discussions

The Department may decide to conduct written and/or oral Discussions with the Proposers in the Competitive Range regarding the content of their Proposal. If Discussions are held with one Proposer, they must be held with all Proposers in the Competitive Range. Discussions are negotiations conducted in a competitive acquisition, after establishment of the Competitive Range and prior to the selection of the

Design-Builder (23 CFR 626 Subpart E). Discussions may include both quality and price issues (23 CFR 636.508).

9.6.6.1 Purpose

If the Department determines that Discussions are required, they will be conducted for the following purposes:

A) Advising the Proposers of significant Weaknesses and/or Deficiencies in their Proposals (relative to the RFP);

B) Attempting to resolve any uncertainties and obtaining any significant clarifications concerning the Proposal;

C) Resolving any suspected mistakes by calling them to the attention of the Proposers as specifically as possible without disclosing information concerning other competing Proposers' Proposals or the evaluation process; and

D) Providing the Proposers a reasonable opportunity to submit any further technical or other supplemental information to their Proposals.

9.6.6.2 Procedures

A) The following specific procedures will apply:

1) Discussions will only be conducted with Proposers in the Competitive Range. All Discussions will be confidential;

2) Discussions may be written and/or oral;

3) If oral Discussions are held, minutes must be kept;

4) No indication will be made to any Proposer of the evaluation status of any other Proposer or Proposal; and

5) If Discussions are held with one Proposer, they must be held with all Proposers in the Competitive Range.

B) During Discussions, Department personnel involved in the acquisition are prohibited from engaging in the following conduct that:

1) Favors one Proposer over another;

2) Reveals a Proposer's technical solution, including unique technology, innovative and unique uses of commercial items, or any information that would compromise a Proposer's intellectual property to another Proposer;

3) Reveals a Proposer's price without that Proposer's permission;

4) Reveals the names of individuals providing reference information about a Proposer's past performance; or

5) Knowingly furnishes source selection information in violation of the Department's procurement policies and the laws of the State of New York.

9.6.6.3 Proposal Revisions

If the Department decides to enter Discussions with the Proposers in the Competitive Range, they must also request Proposal Revisions from the Proposers in the Competitive Range. Proposers will be requested and/or allowed to revise their Quality and Price Proposals, including correction of any Weaknesses, minor irregularities, errors, and/or Deficiencies identified to the Proposers by the Department following initial evaluation of the Proposals. The request for Proposal Revisions will allow

adequate time for the Proposers to revise their Proposals. Upon receipt of the final Proposal Revisions, the process of evaluation will be repeated for the revised information. The process will consider the revised information and re-evaluate and revise ratings as appropriate.

9.6.7 Final Evaluation and Selection

The Department has determined that selection will be based on a best value determination, thus providing the best opportunity to obtain the right Design-Builder to assure a successful Project. Although price is an important factor, time and quality are also major factors in determining the Project's success. The Department's procedures for the evaluation and selection of Proposals were designed to provide a comprehensive evaluation of quality, that when combined with price, will result in the selection of the appropriate Design-Builder.

A Selection Committee will perform an integrated assessment including Tradeoffs, of evaluation factors (including subfactors) and Price with the overall quality rating and price having the relative importance specified in the Instructions to Proposers (Exhibit III, Division 1) and the Proposal Evaluation and Selection Plan (Exhibit IV, Division 2), determine the Proposal that represents the best value, and recommend selection to the Selection Official. Based on review of the recommendation and professional judgment, the Selection Official will select the responsive Proposer providing a fully compliant Proposal that represents the best value to the Department.

Examples of previous integrated assessments and tradeoff analyses are provided to provide a better understanding of such processes.

Example 1: A Proposer offered a 30-year pavement design for a 38-mile roadway widening project at an increase in cost of only about $3 million over the cost of a 20-year pavement design. The selection committee for that project estimated that the improved pavement durability and life would save $12-$15 million over the life of the pavement. It was determined that the increase in cost was far outweighed by the benefit to that agency. In this case, the agency considered future maintenance savings and construction cost in their tradeoff analysis.

Example 2: A Proposer offered to temporarily restripe a bypassing loop road to increase the number of lanes on the bypass to compensate for reduced capacity on the mainline road being reconstructed. The cost of the restriping was only about $1 million. Although the agency did not actually estimate the savings to the traveling public, in their judgment the selection committee determined that the value of the restriping far exceeded any cost increase and was a far superior solution to any other maintenance of traffic scheme offered by other Proposers.

Example 3: A project required public approval and acceptance of retaining wall designs along a rural, scenic highway. One Proposer offered only one type of retaining wall and indicated that they were sure the public would accept that one solution along the entire length of the roadway. Another Proposer offered a "menu" of retaining wall types from which the public could choose at no difference in cost. The evaluating agency, in their professional judgment, felt that the first solution increased the agency's risk. If the public did not accept the one solution, the contractor may have been able to claim several million dollars in additional costs to provide other wall types. No such risk existed in the case of the second Proposer.

Example 4: The Project included widening of five bridges. The Proposers had the option of widening the existing bridges or replacing some or all of the structures. One Proposer offered to replace all the structures with new bridges; other Proposers offered to only widening existing structures or replace only one or two. The price of all variations was essentially the same. The agency judged that getting all new

structures represented a much better value due to improved design life and reduced maintenance costs over the life of the structures.

The evaluation and selection process culminates with the selection of the Proposal/Proposer that offers/represents the best value to the State. It is important that the selection be the product of, and that the selection committee precisely follows, the evaluation and selection process articulated in the ITP and the Proposal E&S Plan. As mentioned above, a designated individual who is an employee of the Department will make the selection. The selection official should have the authority to exercise professional judgment in reviewing and evaluating the quality and price evaluations, any recommendations, and any tradeoff analysis in the best value decision. The selection official may approve the recommended selection, modify and approve the recommended selection, or remand the recommendation back to the selection committee for further consideration. The selection may also have to be reviewed by other Department officials or the Commissioner prior to announcement. As will be required in the Proposal E&S Plan, the selection decision will be fully documented in a report that will accompany the review and become part of the project file.

After selection (but prior to contract execution) the Department may elect (if provided for in the RFP) to exercise an additional negotiations step in order to sort out any outstanding scope, schedule, and financing issues or questions remaining from the evaluation of quality and price. *See* 23 CFR 636.513.

9.7 DEBRIEFING OF UNSUCCESSFUL PROPOSERS

After the Award and Execution of the contract, the Department may schedule debriefings with the unsuccessful Proposers to provide them with information from the evaluation process regarding their individual Proposals that will enable them to understand the strengths and weaknesses of their Proposals and what they might do better on future projects to be more competitive. Debriefings should take place, upon the request of the unsuccessful Proposer, as soon as possible after the Award and Execution of the contract. No information is provided regarding the other Proposals or their ratings. One possible way to accomplish this is to take consensus rating worksheets from the selection committee and remove everything that does not deal specifically with a noted strength or weakness. In doing so, some of the comments may need to be reworded slightly to deal with facts rather than opinions. This revised debriefing worksheet is then presented to the Proposer in an individual meeting scheduled for that purpose and the Proposer is allowed to review the worksheet and ask appropriate questions of the Department. It is recommended that the Department limit its and the Design-Builder's participation in these debriefings to a minimum number of people.

9.8 PROTESTS OF PROPOSAL EVALUATION AND SELECTION

Section 7.0 of the ITP (Exhibit III, Division 1) states the protest procedures that must be used for each DB procurement. If a Proposer is protesting any aspect of the Proposal evaluation and selection process, it must go through this process if it may go to a judicial authority.

At all stages of the Proposal evaluation and selection process, a Proposer is obligated to attempt to informally resolve any issues it may have with the Proposal evaluation and selection prior to filing a protest with the protest official. Informal resolution can include exchanges between the Proposer and representatives of the Department in writing in an attempt to resolve the issue or a face-to-face meeting between the Proposer and the Department in which <u>only</u> the potential protest may be discussed. The choice of how to conduct the informal resolution process is at the discretion of the Department. However, be mindful that any informal process must focus solely on the potential protest – no other issues that the Proposer has regarding the Proposal evaluation and selection process may be discussed. This limitation is to protect the Department from protests from other Proposers alleging that the Proposer raising the

potential protest has received an unfair competitive advantage because other project or procurement issues were discussed with it during the informal resolution process.

If the Proposer and the Department are unable to informally resolve the grounds for the potential protest, the Proposer is required to file a written protest with the protest official, as identified at Section 7.1 of the ITP. The Department will only accept written protests. Only written protests will fulfill the various requirements for filing found in Sections 7.3 and 7.5 of the ITP.

Once the protest official receives the written protest, he/she may also choose to discuss the protest with the protestor prior to issuance of his/her written decision. However, the protest official is not obligated to do either of these actions. It is the protestor's burden to prove the grounds for the protest.

A protest must include the following information:

A) The name and address of the protestor;

B) The contract number;

C) A detailed statement of the nature of the protest and the grounds on which the protest is made; and

D) All factual and legal documentation in sufficient detail to establish the facts.

The protestor must show that a specific law, regulation, or section of the RFP has been violated in order to be successful in its protest. (*See* Exhibit III, Division 1, ITP Section 7.2.)

The protest official, or his/her designee, shall be the sole finder of fact and issue the final decisions. All decisions of the protest official, or his/her designee, must be in writing.

If the protestor submits a deficient or incomplete protest, the protest official is under no obligation to allow the protestor to correct its submission.

9.8.1 Protest Prior to the Proposal Due Date

All protests regarding the terms of the RFP or the solicitation process itself must be filed at least seven Calendar Days prior to the Proposal being due to the Department. The Department must immediately decide whether it will delay the Proposal due date. If the Department chooses to delay the Proposal due date, it must notify all of the other potential Proposers of the delay and the reason for the delay.

If the Department chooses to not delay the Proposal due date, it must immediately notify the protestor so that the protestor may submit an appeal to this decision in a timely manner. (*See* Exhibit III, Division 1, ITP Section 7.3.)

9.8.2 Protest Prior to Announcing the Selection

If a protestor files a protest prior to the Department's announcement of the selection, the Department must delay the selection until the resolution of the protest, unless the Commissioner determines that an emergency exists precluding delay of the selection.

9.8.3 Protest Regarding Selection Decision

A protestor must submit a protest within seven Calendar Days of Award. Upon submission of a valid protest, the protest official must immediately determine whether the procurement is to be delayed or the selection considered for revision.

If the protest official decides to delay the procurement, it must notify all of the Proposers. If, after the protest official releases its decision on the protest, it determine that a revision to the selection is warranted, all of the Proposers must be informed that the selection is to be revised and what those revisions are.

9.8.4 Right of Appeal

If a protestor is not satisfied with the protest official's decision relating to the protestor's filing, the protestor may appeal the decision by submitting a written appeal to the Commissioner within seven Calendar Days after receipt of the protest official's decision. The Commissioner will then appoint a protest committee of at least three members to review the protest and the protest official's decision.

The protest committee will inform the protestor of its decision regarding the protestor's appeal. If the protest and appeal were filed prior to the announcement of the selection, the Department will not announce the selection for seven Calendar Days after the decision of the protest committee, unless the Commissioner determines an emergency to exist.

After the protestor exhausts the appeal process, it may appeal to judicial authority.

10.0 DESIGN-BUILD PROJECT EXECUTION

10.1 PROJECT ROLES

Overall project roles differ significantly from the typical design-bid-build project. Through the DB Contract, the Design-Builder is given significantly more responsibility and authority to manage and control the Work. The Department has continuing roles to verify that the interests of the State and the public are met.

10.1.1 Department's Role

A) The Department's Oversight roles are primarily the following:

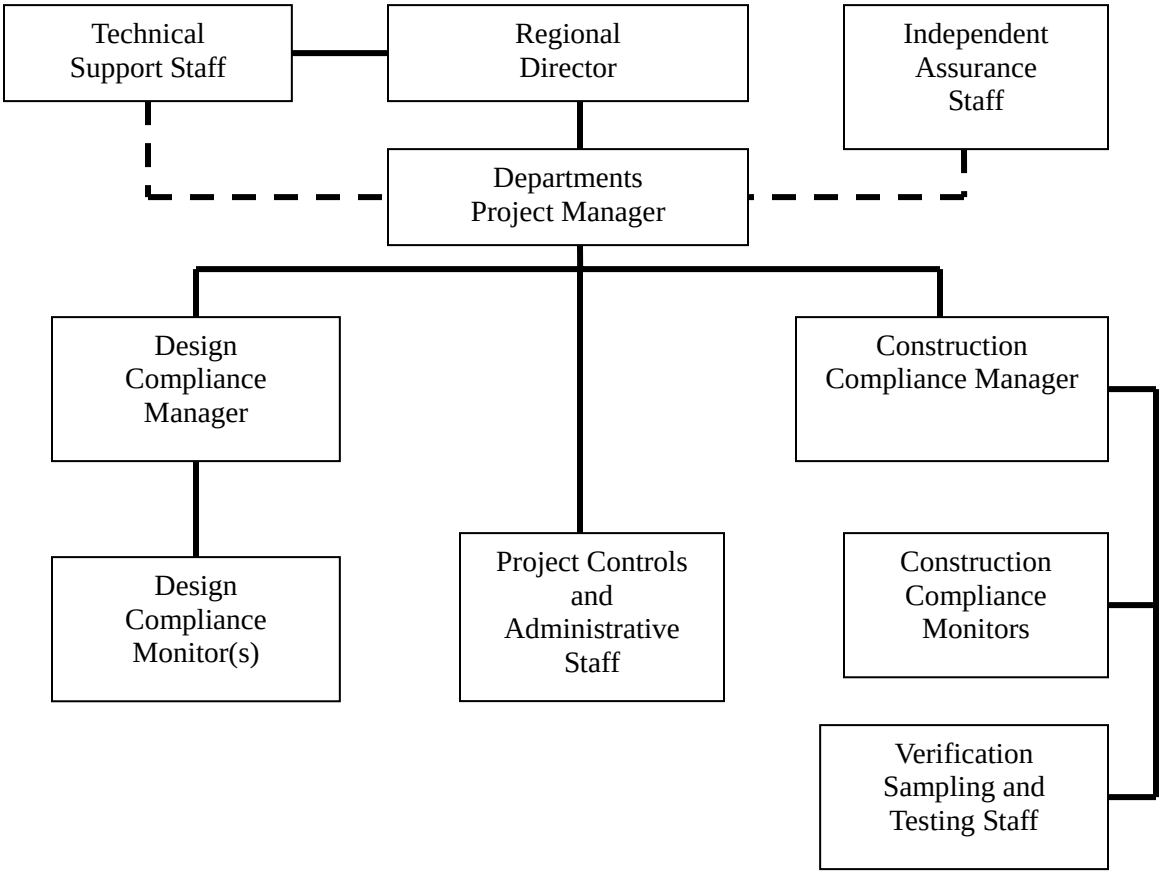
1) Monitoring;

2) Auditing; and

3) Verifying.

B) The Department has additional roles and responsibilities as described in this Section 10.

C) The Department's organization for Project execution should reflect these roles and be structured and staffed commensurate with these roles. A typical Department project team should fit within the following general scheme:



D) Department activities may include many tasks with a similar title or name as activities done during a design-bid-build project, but the actual tasks are done at different times, by different people, and in a different manner. This Section 10 of the DBPM will highlight the Department's activities and responsibilities relative to the following:

1) Management;

2) Design; and

3) Construction.

10.1.1.2 Department Approvals

The Department will only "approve" those submittals, activities, actions, and/or work that are specifically identified in the Contract Documents for "Approval" or "approval." *See* Exhibit III, Division 2, Part 2, DB Sections 101-3.9 and 105-15. Any Approvals must be documented in writing. Requirements for Department "Approvals" are limited to avoid the Department's prematurely incurring/assuming risk and responsibility that should remain with the Design-Builder until Final Acceptance of the Project.

Department Approvals identified in DB Section 100 are listed below. Other Approvals may be required for Work covered by the Standard Specifications, Construction and Materials, Sections 200 – 700. The cross-references are to DB Section 100 sections found in Exhibit III, Division 2, Part 2, except as otherwise noted.

A) Contract Periodic Payment Schedule (PPS-C) (large, more complex projects only) (DB Section 109L-1.4);

B) Requests for periodic payments (DB Section 109-6);

C) Requests for payment for Materials delivered to the Site (DB Section 109-6.3);

D) Requests for release of retention (DB Section 109-8.1);

E) Changes to the following:

1) Schedule of Prices or other documents submitted in the Price Proposal (DB Section 109L-1.6.2 or DB Section 109S-1.3.2);

2) Schedule of Progress Check Points (Form PCP) (DB Section 109L-1.6.3);

3) Contract Periodic Payment Schedule (DB Section 109L-1.6.4);

4) Price Center Values (PCV) (DB Section 109L-1.6.2 or DB Section 109S-1.3.2); and

5) Price Center (PC) descriptions (DB Section 109L-1.6.1 or DB Section 109S-1.3.1);

F) Joint venture or partnership agreements [DB Section 102-9.4(B)];

G) Changes to the M/W/DBE Schedule of Utilization (DB Sections 102-8.11 and 102-9.11);

H) Subcontractors (DB Section 108-8);

I) Safety Plan and updates (DB Section 107-7);

J) Security Plan and updates (DB Section 107-8,

K) Quality Plan and updates (DB Section 113);

L) Value Engineering Change Proposal (VECP) concepts and VECPs (DB Section 104-13);

M) Use of overweight construction Equipment or vehicles on the Project (DB Section 105-9);

N) Use of ROW for storage (DB Section 106-7);

O) Assignment of payment to creditors [DB Section 108-9(H)];

P) Project Specifications representing lower quality than that specified in the Contract Documents, including the Design-Builder's Proposal (DB Section 111-19.4).

Q) As-Built Plans (DB Section 111-12.2.2);

R) Design (at time of Approval of As-Built Plans) (DB Section 111-12.2.5);

S) Acceleration of Work;

T) Orders-on-Contract (DB Section 104-3);

U) Supplemental agreements (DB Section 104-3);

V) Deviations from sampling and testing methods and/or frequencies (DB Section 112-10);

W) Design exceptions (DB Section 111-13);

X) Warranty remedies (Part 5, Special Provision 104-2);

Y) Uncompleted Work agreement (DB Section 109[S or L]-8.1); and

Z) Final Agreement (DB Section 109[S or L]-12).

10.1.1.3 Department Consultation and Written Comments

The Department's normal review, Oversight, audit, and inspection activities are referred to as "Consultation and Written Comments." *See* Exhibit III, Division 2, Part 2, DB Sections 101-3.31 and 105-15. The Department's Consultation and Written Comments, as the wording implies, must be documented in writing. The Design-Builder must address the Department's comments and indicate in writing whether it concurs with the comment. If the Design-Builder does not agree with the Department's comments, the Department and Design-Builder will need to work together to resolve the issue before proceeding.

The Department has the authority to order the Design-Builder to proceed as directed in the Department's comments even if there is no agreement. In such a case, the Design-Builder is responsible for designing and constructing the Department's solution correctly, but the Department may then incur the risk that the solution directed by the Department is the correct solution.

If agreement cannot be reached, the issue must be resolved as provided in the Contract Documents for dispute resolution.

10.1.1.4 Non-Conformance Reports

If, during its review, audit, observation, or monitoring of Design-Builder documents, submittals, activities, and/or work, the Department notices items that do not comply with the contract requirements, the Department will issue a written Non-Conformance Report (NCR) to the Design-Builder. The Design-Builder is required to address items covered in NCRs and bring work covered by NCRs into compliance with contract requirements and notify the Department's Project Manager in writing of the corrective action taken.

10.1.1.5 Applicability of Department Manuals

Many of the procedures outlined in the Department's manuals are applicable to design-build with certain exceptions and deviations noted in this DBPM.

A) Contract Administration Manual (CAM)

Department staff should follow the CAM procedures except as modified in this DBPM. Most significantly, it is important to note that many of the cross-references in the CAM pertain to DB Section 100 of the Standard Specifications, Construction and Materials, and not to the Agreement (Exhibit III, Division 2, Part 1) and DB Section 100 (Exhibit III, Division 2, Part 2). The location and content of many of the DB Section 100 provisions differ from the Section 100 of the Standard Specifications. Only the Agreement and DB Section 100 apply to design-build. Therefore much of the discussion in the CAM relative to Section 100 is not applicable.

It should also be noted that the primary responsibility for detailed record keeping rests with the Design-Builder. The Department retains record-keeping responsibilities, but to a lesser degree of detail compared to design-bid-build. The Department has an important role of auditing the Design-Builder's records to provide assurance that required records are kept in accordance with Contract requirements.

Some of the more notable information in the CAM that remains unchanged includes discussions on Labor Law; Laws, Permits and Licenses; the FHWA requirements for Federal-aid projects (now Appendix II to the Agreement); existing safety and health requirements; and M/W/DBE provisions (except that the times lines for reporting and

determining compliance are different). The procedures for orders-on-contract are also similar, except that the design of design changes is the responsibility of the Design-Builder.

B) Materials Inspection Manual (MIM)

The acceptance requirements for materials are essentially the same, except that the Design-Builder assembles and retains the records, subject to Department audit. The acceptance records are turned over to the Department at the completion of the Project. The MIM is included as a Reference Document and should serve as a guide to the Design-Builder in developing its Quality Plan procedures (*see* Exhibit III, Division 2, Part 2, DB Section 113).

C) Construction Inspection Manual (CIM) – MURK Part 1-B

The CIM provides instructions to Department inspection personnel for design-bid-build projects. The activities, for the most part, are applicable to design-build except that the Design-Builder's independent quality firm responsible for construction QC will be performing the inspection activities with the Department conducting spot checks and auditing the Design-Builder's performance and QC records. The CIM is included as a Reference Document and should serve as a guide to the Design-Builder in developing its Quality Plan procedures (*see* Exhibit III, Division 2, Part 2, DB Section 113).

10.1.2 Design-Builder's Role

The Design-Builder has the primary responsibility for controlling and managing the work, including management, design, and construction. The Design-Builder role also includes full responsibility for QC as defined in the Contract Documents sample (Exhibit III – RFP Sample, Division 2 – Contract Documents, Part 2 – DB Section 100, DB Section 112) and in Section 1.3 of this DBPM. Note that the scope of quality control is more encompassing than in design-bid-build and may include some activities traditionally considered quality assurance.

10.2 PRELIMINARY (PRE-CONTRACT EXECUTION) ACTIVITIES

The Department's Project Management Team will need to perform certain tasks identified in Section 10.2.1 through 10.2.4 after selection but prior to executing the contract and issuing the NTP.

10.2.1 Contract and Proposal Review

The Contract Documents, including the Design-Builder's Proposal must be reviewed. If any minor clarifications are necessary, they should be covered in negotiations prior to contract execution, documented in writing and included in the appropriate Parts and/or Sections of the Contract Documents.

10.2.2 Options and Alternate Proposals

The Department's Project Management Team will need to review any options or Alternate Proposals included or presented with the selected Design-Builder's Proposal. To the extent possible, such options or Alternate Proposals that are acceptable to the Department should be incorporated into the Contract Documents and made part of the contract at time of execution, however, some may be decided at a later date. The deadlines for executing options or alternatives should be spelled out in the Appendix to the Form of Proposal (*see* Exhibit III, Division 1, Appendix C, Forms).

Particular attention should be given to determining which Unit Prices shown in Option 1 (Schedule of Values), submitted with the Design-Builder's Price Proposal, will be accepted and which will be rejected by the Department. *See* DBPM Section 7.2.9.1B.

10.2.3 Proposed Baseline Progress Schedule

A proposed Baseline Progress Schedule will typically have been provided as part of the Design-Builder's Proposal. Normally the Department will have comments on the schedule that should be discussed with and addressed by the selected Design-Builder during negotiations prior to executing the contract. Any adjustments should be documented in writing and included in the Design-Builder's Proposal in Part 10 – Design-Builder's Proposal of the Contract Documents prior to execution of the contract.

10.2.4 Release, Review, and Use of Escrowed Proposal Documents

Prior to executing the contract, the Department's Project Manager should designate the Department's authorized representative(s) (usually no more than two persons) who are authorized access to the Escrowed Proposal Documents of the Design-Builder. The designated persons should contact the Design-Builder and make arrangements for a repository for the Escrowed Proposal Documents and a joint review of the Escrowed Proposal Documents.

The Department representatives, in company of the Design-Builder's representatives, should review the contents and organization of the Escrowed Proposal Documents prior to contract execution to verify that the Escrowed Proposal Documents are complete and organized in such a manner to facilitate retrieval and review of the information contained therein. The Escrowed Proposal Documents should contain data pertaining to the Design-Builder's assumptions and pricing data, including information from Subcontractors and suppliers. If any information is missing or not organized properly, the Department should require the Design-Builder to correct the deficiency prior to executing the contract.

After execution of the contract, the Department should notify the escrow agent holding the Escrowed Proposal Documents of the unsuccessful Proposers to release the Escrowed Proposal Documents to the unsuccessful Proposers.

The repository for the Escrowed Proposal Documents is designated in DB Section 110-1. Neither the Department nor the Design-Builder will have exclusive access to the Escrowed Proposal Documents. The Escrowed Proposal Documents can only be accessed jointly and concurrently, and only by those persons specifically granted access by the Design-Builder and the Department. Typically the Department's representatives will be required to sign a confidentiality and non-disclosure statement that they will not disclose any information in the Escrowed Proposal Documents except as provided in the contract.

During the course of the contract, the Design-Builder is required to deposit pricing information from subcontracts and procurements completed after the DB contract is executed.

The Escrowed Proposal Documents usually are not accessed very often. They are to be used to help negotiate Orders-on-Contract and/or resolve disputes and claims, if any. The Department is not authorized to make copies of Escrowed Proposal Documents to keep in their own files, although excerpts from the Escrowed Proposal Documents may be used to justify Orders-on-Contract and/or resolution of claims and disputes.

10.2.5 Award and Execution of Contract

10.2.5.1 Comparison of Design-Bid-Build and Design-Build Award/Execution Procedures

A) After bids are opened for design-bid-build projects, the Department's Construction Division performs the following activities:

1) Reviews bids using the Bid Analysis Management System;

2) Conducts a review of the low bidder;

3) Verifies quantities;

4) Reviews unit bid prices, especially high unit priced bid items;

5) Makes site visits, as necessary; and

6) Verifies the qualification and capacity of first-time low bidders.

B) In the case of DB, many of the same activities are performed, but at different times and probably by different staff. The selection and Award analysis for DB will be performed by evaluation teams and/or a selection committee comprised of representatives of legal, contracting, design, and construction staffs, and perhaps Stakeholders. Some of the activities are not performed at all. The following are examples of the activities performed during a DB procurement:

1) Since the vast majority of the work will be priced on a lump sum basis, the review of prices (bids) will not use the Bid Analysis Management System. Since the contract is lump sum, with few, if any quantities, there will be no verification of quantities or review of Unit Prices (except for the Schedule of Values in Option 1).

2) Any price reviews will take place during the evaluation of proposals prior to selection of the successful Design-Builder.

3) The proposals from all Proposers will be reviewed in detail for pass/fail, quality, and price factors during the evaluation and selection process.

4) The qualifications and capacity of all potential Design-Builders will be reviewed during the evaluation of the SOQs submitted in response to the RFQ.

5) The Award and execution process for design-bid-build and DB involve review and approval by the following:

a) Contract Review Unit;

b) Contract Management Bureau, OEODC;

c) Office of the Attorney General; and

d) Office of the State Comptroller.

10.2.5.2 Execution of the Design-Build Contract

The contract will be awarded to the Proposer that submits a responsive and responsible Proposal that represents the best value to the Department, as determined by the evaluation teams, selection committee, and selection official in accordance with the RFP and the Proposal E&S Plan (*see* Exhibit IV, Division 2).

When the selection committee has completed its evaluation of the Proposals and is prepared to make its recommendation for Award to the selection official, the chair of the selection committee will prepare a memorandum recommending Award. The memorandum recommending Award and the Agreement will be forwarded to the selection official for concurrence and signature.

The Department must assemble a “conformed contract” consisting of the following:

A) Contract documents included in the RFP, including a conformed Agreement incorporating pertinent information such as the selected Design-Builder’s firm information, Contract Price, etc. (*See* Exhibit III – Division 2 – Part 1 and fill in the blanks). Note that the Substantial Completion Date in Article 2.2 must be the Substantial Completion Date

shown in the selected Design-Builder's Proposed Baseline Progress Schedule, not the Substantial Completion Date specified in the RFP;

B) Those components of the selected Design-Builder's Proposal designated for inclusion in the contract, including the contents of any final Proposal Revision (Best and Final Offer or BAFO), if any; and

C) Results of any negotiations conducted after selection but prior to contract execution.

Note that the components of the initial Proposal that are superseded by a BAFO must not be included in the "conformed contract."

The selection committee's recommendation and the conformed contract must be forwarded to the Contract Management Bureau and the OEODC for concurrence in the recommendation.

After receiving the concurrence of the selection official, the Contract Management Bureau, and the OEODC, the conformed contract will be sent to the Office of the Attorney General and the Office of the State Comptroller for final review, approval, and signature. The Office of the State Comptroller will notify the Contract Management Bureau when the conformed contract has been approved and executed. The Contract Management Bureau will then send out the New York State Department of Transportation Contract Approval notice to the Design-Builder. Copies of the letter will be sent to the Department's Project Manager and the OEODC.

After the Department's Project Manager receives the New York State Department of Transportation Contract Approval notice from the Contract Management Bureau, he or she will forward an NTP and a copy of the executed conformed contract to the Design-Builder. The NTP should state that the Design-Builder may begin contract work as of the date cited in the NTP. It is important that the Department not allow the Design-Builder to start any contract work prior to the NTP date.

For projects where less than three Proposals are received, the evaluation teams and selection committee should evaluate those Proposals in accordance with the RFP and the Proposal E&S Plan (Exhibit IV, Division 2). If a selection is made, the memorandum recommending Award prepared by the chair of the selection committee should include information stating that less than three Proposals were received; identifying the sources where the RLOI, RFQ, and RFP were advertised; and stating that the Price Proposal is reasonable.

10.3 DEPARTMENT'S OVERSIGHT MANAGEMENT

The Department has numerous Oversight activities to perform during the performance of the contract. Many have similar titles to the activities performed in design-bid-build contracts but are performed in ways consistent with the DB contract. These activities include the following:

A) Meeting with the Design-Builder;

B) Reviewing progress reports and payment requests;

C) Verifying progress;

D) Auditing payroll records;

E) Partnering;

F) Auditing the subcontracting process;

G) Verifying M/W/DBE, EEO, and other Affirmative Action (AA) compliance;

H) Conducting management reviews;

I) Participating in progress meetings;

J) Reviewing baseline schedules and updates; and

K) Reviewing management-related plans.

10.3.1 Use of Department Technical Specialists

Although Department technical specialists may be used to review Design Plans and solutions to problems that arise during design and construction, the primary responsibility for determining the solution to such problems rests with the Design-Builder and it's Designer. Department technical specialists may participate in reviews of designs and solutions developed by the Design-Builder and its Designer but normally should not provide the solutions. If the Department provides solutions, the risk for adequacy of the solutions may shift to the Department even though the Design-Builder is responsible for designing the Department's solution correctly. *See* also DBPM Section 10.4.

Similarly, requests for clarification of Design Plans and/or Project Specifications prepared by the Design-Builder's organization should be referred to the Design-Builder's Designer, not to the Department. Department staff should check clarifying statements or documents to ensure such statements or documents conform to contract requirements.

10.3.2 Meetings

The Department's current design-bid-build procedures indicate that the Department will conduct a series of meetings, including the following:

A) Partnering meeting;

B) Utility coordination meeting;

C) Preconstruction meeting;

D) Local government and agency meetings;

E) Meetings with other Departments;

F) Meetings with permitting agencies; and

G) Affirmative Action meetings.

Similar meetings will be held for DB contracts except that the Design-Builder should attend and participate in each of these meetings.

In addition to the meetings listed in this Section 10.3.2, the meetings described in Sections 10.3.2.1 through 10.3.2.5 of this DBPM should be held within the first 45 days after NTP.

10.3.2.1 Pre-Work Meeting

Instead of a "preconstruction meeting" typical to design-bid-build projects, a DB contract should have a "pre-work meeting," so called to reflect that the Project includes design and construction activities. The actual agenda of the meeting should focus on broader, project-wide activities since there will likely be separate design mobilization and site mobilization meetings that will cover the details and specifics of design and construction issues. *See* Exhibit III, Division 2, Part 2, Section 105-16.1.

10.3.2.2 Examination of Advantageous Concepts in Unsuccessful Proposals

There may be worthwhile design concepts and construction means and methods and other ideas contained in unsuccessful Proposals that the Department may want to consider for inclusion in the contract. Immediately after contract execution, but not later than 30 days after execution of the contract, the

Department's project staff should review the unsuccessful proposals and identify those items it may wish to discuss with the Design-Builder for inclusion in the contract. A meeting should be scheduled and held with the Design-Builder to discuss the advisability and feasibility of incorporating these concepts and approaches into the contract. The Department's Project Manager may request proposals for those concepts and approaches of most benefit to the Department with the idea that the work may be incorporated into the contract as extra work or as Value Engineering Change Proposals (VECPs). Note that the ratio of savings for VECPs originating from unsuccessful proposals is 75% for the Department and 25% for the Design-Builder.

10.3.2.3 Value Engineering Change Proposal Workshop

Although Value Engineering Change Proposals (VECP) may be presented at any time during the contract, those that are submitted early in the contract typically have the greater opportunity for cost savings with the least disruption to on-going work. Therefore, a Value Engineering (VE) workshop should be scheduled within the first 45 days after NTP to allow the Design-Builder to present VECPs for the Department's consideration. This workshop may be scheduled concurrently with the review of advantageous concepts from unsuccessful proposals (*see* Section 10.3.2.2 of this DBPM).

10.3.2.4 Partnering

While Partnering is often used on design-bid-build projects, it is critical to the success of DB projects, more so than in design-bid-build projects. The initial Partnering session(s) should be held within 30 days of NTP.

Continuous, effective communication between the Department and the Design-Builder is critical. There must be a common understanding of the Project goals and of the management, design, and construction processes and their interaction. The Partnering process and procedures are no different. But follow-on Partnering after the initial Partnering meetings cannot be over emphasized. Design-Build projects typically move quickly. Decisions must be made and issues resolved on a "real-time" basis.

In addition to overall project Partnering it has proven to be advantageous, particularly for larger, more complex projects, to have Partnering "sub-groups" that focus on management, design, and construction issues.

10.3.2.5 Progress Meetings

The Department should plan on participating in regular progress meetings with the Design-Builder. Due to the fast pace of most DB projects, weekly meetings may be necessary to facilitate resolution of issues and to keep the parties informed of upcoming activities. Such meetings are particularly important to the Department so that it may schedule its management, design, and construction Oversight resources and activities in response to the Design-Builder's schedule. The Department and the Design-Builder should mutually agree upon the format and frequency of these meetings early in the DB contract.

10.3.3 Management Schedules and Plans

There are numerous written plans and schedules (or updates from proposed plans and schedules) required early in a DB contract. These typically include the Baseline Progress Schedule, the PPS-C (for larger, more complex projects), Safety and Security Plans, a Quality Plan, an MPT Plan, and a public information/community relations plan, if required by the contract (*see* Exhibit III, Division 2, Part 4 – Performance Specifications). The necessity to complete these plans should be emphasized because their submittal and acknowledgement by the Department's Project Manager directly affect the initiation of payment and the ability of the Design-Builder to initiate work, especially any construction activities.

It is important that the Department project staff review such documents expeditiously so as not to delay the Design-Builder.

10.3.3.1 Progress Schedules

See Exhibit III, Division 2, Part 2, DB Section 108-1 and Part 5, Special Provision 108A.

The proposed Baseline Progress Schedule, as it may have been revised during negotiations, will be included in the contract at time of contract execution. Within 15 days of NTP the Design-Builder is required to submit a detailed 90-day schedule, and within 45 days of NTP the Design-Builder is required to submit a complete Baseline Progress Schedule covering the entire period of the contract. Subsequently, monthly schedule updates are required to be submitted with each request for periodic payment as part of the monthly progress report because the progress schedule is closely tied to the payment method for a DB contract. Review of the schedule is an important part of the invoice and payment process, not only to assure that work is progressing in reasonable conformity with the PPS-C, but also to assure that the prerequisites are met for any payment for PC 1 (Preliminary and General Requirements).

If work is progressing faster or slower than represented on the Baseline Progress Schedule, it may be necessary to request a revised Baseline Progress Schedule from the Design-Builder. For larger, more complex projects, requesting a revised Baseline Progress Schedule should also trigger a request for a revised PPS-C and revised Schedule of PCPs. *See* Exhibit III, Division 2, Part 2, DB Sections 108-1 and 109L-1.6.

The Baseline Progress Schedule and updates should be reviewed to ensure that they reasonably depict the Design-Builder's actual progress as well as planned work. The Department reviewer's should be alert to check to see that the schedules do not contain the following:

A) Excessive lead or lag times. If they are present, it makes identification of impacts of changes very difficult.

B) Multiple calendars. Multiple calendars can lead to discontinuous float paths and make it difficult to identify the Critical Path.

C) Assigned constraints except those specified by the Contract Documents. Assigned constraints override computer calculations at the core of CPM scheduling and essentially results in a bar chart that does not comply with CPM scheduling requirements.

D) Retained logic. If old logic (logic from previous updates) is retained, it may be impossible to get an accurate update, resulting in erroneous remaining durations because there is no way to know what activities are driving the activities that are currently in progress.

The Department's reviewers should also check to see that the schedule reflects design work including the Design-Builder's designated Design Units and agreed design reviews (*see* DB Section 111-5).

10.3.3.2 Contract Periodic Payment Schedule (PPS-C)

For larger, more complex projects, the Design-Builder will be required to prepare and submit a PPS-C that reflects the planned progress and payment for each PC over the life of the contract. Payment will be made according to the PPS-C provided the PCPs are met as scheduled. The PPS-C needs to be closely reviewed by the Department to assure that it is reasonably consistent with the Baseline Progress Schedule, the Proposal Periodic Payment Schedule (PPS-P), and the Price Proposal as incorporated into the contract. *See* Exhibit III, Division 2, Part 2, DB Section 109L-1.

10.3.3.3 Safety and Security Plans

The Design-Builder will have primary responsibility for Worker and public safety and project security.

The Design-Builder is required to submit a Safety Plan and a Security Plan to the Department for review and written approval indicating that it meets the contract requirements. The Safety Plan and the Security Plan need to address not only construction safety, but safety related to engineering field activities that may occur prior to the start of any construction. If the Design-Builder submitted a Safety Plan and a Security Plan or a summary of a Safety Plan and a Security Plan with its Proposal, an update of the Proposal information will be required early in the contract, incorporating any comments the Department may have. *See* Exhibit III, Division 2, Part 2, DB Sections 107-7 and 107-8.

The Design-Builder is required to have a Safety Manager and sufficient safety supervisors to plan, implement, execute, and update the Safety Plan and Security Plan and associated programs.

Matters relating to public safety will normally be covered in an MPT Plan. The requirements for MPT are typically spelled out in a Performance Specification (*see* Exhibit III, Division 2, Part 4 – Performance Specifications). The Design-Builder will be required to submit an MPT Plan for Consultation and Written Comment by the Department's Project Manager that the plan meets contract requirements. The specific details of MPT for each component to be released for construction must be prepared by the Design-Builder and reviewed as part of the release for construction review (*see* Exhibit III, Division 2, Part 2, DB Section 111-12.3).

The Department, primarily though the Construction Compliance Engineer (CCE) and the Construction Compliance Monitors (CCM), will oversee the Design-Builder's safety (public and Worker) and security programs to verify that the Design-Builder is conducting its operations in accordance with contract requirements and the Design-Builder's Safety Plan and Security Plan. The Department staff should also conduct periodic audits of safety and security records to verify that performance deficiencies are being documented and corrective action is being taken in a timely manner. Department Oversight should also include checking of Design-Builder staff to verify that they have the required qualifications for the work they are performing.

Non-compliance in safety and security issues should be reported immediately to the Design-Builder's Safety Manager and the Design-Builder's designated security manager. Non-compliances and corrective action should be documented on Form NC-C (*see* Exhibit III, Division 2, Part 2, DB Section 112, Appendix 112C), whether documented by Design-Builder staff or Department staff.

Although the Design-Builder has primary responsibility for enforcing and managing the safety and security programs, the Department's CCE and CCMs still have the responsibility and authority to suspend work in areas where there is an immediate threat of serious injury or death to Workers or the public.

Safety and security issues and status must be reported in the narrative portion of the monthly progress reports and in separate reports as specified in DB Section 108-1 (Exhibit III, Division 2, Part 2, DB Section 108-1). The Department staff should review these reports as part of their auditing responsibilities.

10.3.3.4 Quality Plan

The Design-Builder will have submitted an outline or draft Quality Plan with its Proposal. Soon after NTP the Design-Builder will submit its Quality Plan for approval by the Department. The Quality Plan must be tailored to the specific requirements of a project and reflect its scope and complexity. Subsequent updates of the Quality Plan may be required during the course of the contract, which will also require Department approval.

The Quality Plan specification (*see* Exhibit III, Division 2, Part 2, DB Section 113) requires a Quality Plan based on a modified version of the International Standards Organization (ISO) 9001 standard elements and requirements. Using this recognized standard will result in Quality Plans that establish and

implement quality policies and procedures for project management, design, and construction. It should be recognized that a well prepared Quality Plan does not assure high quality performance of itself, but having such a Plan and implementing and using its procedures is another tool in the toolbox that contributes to quality.

The Department may wish to consider requiring the Design-Builder to be actually ISO certified/registered for a large, complex project that has a duration of several years. Having the Design-Builder actually receive ISO certification can provide the Department further assurance of proper implementation and use of the procedures in the Quality Plan since the Design-Builder would be audited by third party ISO registrars initially and semi-annually thereafter. It should be noted that the initial registration process may take up to a year and is costly. The requirement for actual ISO registration should only be included in an RFP upon approval of the Chief Engineer or designee. During the RFQ process, for the reasons just stated concerning the length of time and cost required to obtain ISO certification, such certification should not be considered to be a requirement, however, it may be appropriate to give additional consideration and higher ratings to a Design-Builder that possesses such an ISO certification.

Having the Quality Plan prepared in a standard format as outlined in Exhibit III, Division 2, Part 2, DB Section 113 will facilitate the Department's approval process and its audit of Design-Builder operations for consistency with the written Plan. If audits of Design-Builder's operations reveal deficiencies in the Quality Plan or its application, the Department should issue an NCR and may order an update to the Quality Plan. DB Section 113 also requires that the Design-Builder conduct its own internal audits and prepare modifications to the Quality Plan to address deficiencies discovered in its own audit.

The Department review of the Quality Plan should involve representatives of the region and project management, design, and construction.

Typically, the Department will need to review the Quality Plan and updates to ensure it reflects the specified organizational requirements, contents, and especially the design and construction QC procedures. The Quality Plan must be organized and address the following components which may vary from project to project. A more complex project's Quality Plan should address the following:

A) The Design-Builder's quality system;

B) Contract (and Order-on-Contract) review;

C) Design control;

D) Purchasing;

E) Control of Department-supplied Material and/or Equipment;

F) Product identification and traceability;

G) Process control;

H) Inspection and testing;

I) Management responsibility;

J) Inspection and test status;

K) Control of non-conforming Material and workmanship;

L) Corrective and preventive action;

M) Handling, storage, packing, and delivery;

N) Control of quality records;

O) Internal quality audits;

P) Training;

Q) Servicing;

R) Statistical techniques; and

S) Environmental mitigation and monitoring.

The Department's Oversight role will also include auditing the Design-Builder's activities to verify that the Design-Builder is complying with its own Quality Plan in addition to complying with Department-specified activities.

If the Design-Builder does not submit its Quality Plan or updates when specified in the contract or if the organization and/or contents do not meet contract requirements, the Department may suspend payment under Price Center 1 until the Design-Builder meets the specified Quality Plan requirements. *See* Exhibit III, Division 2, Part 2, DB Section 109S-2.1 or DB Sections 109L-2.1 and 109L-5.1.2.

Quality Control forms for use by the Design-Builder are provided in Exhibit III, Division 2, Part 2, Appendices 111A and 112E. Quality Assurance forms for use by the Department are provided in Exhibit V. These forms are similar to the standard MURK forms used by the Department for design-bid-build projects but have been modified for design-build.

10.3.3.5 Maintenance and Protection of Traffic Plan

In design-bid-build projects, the Department typically inspects for compliance with signing, barrier, and warning requirements contained in the contract. In Design-Build Projects, the MPT Plan may include such components as:

A) Design-Builder management and inspection of MPT activities;

B) Construction Staging Plan;

C) Traffic Impact Plan;

D) Traffic Mitigation Plan;

E) Emergency Vehicle Access Plan;

F) Maintenance of Access to Property Plan;

G) Emergency Response Plan; and

H) School Zone Safety Plan.

Typically the DB contract will specify the parameters governing the development of the MPT Plan and its components. *See* Exhibit III, Division 2, Part 4 – Performance Specifications for an example of an MPT Plan Performance Specification. The Department will need to review the MPT Plan and any updates to ensure that it meets the specified parameters and to monitor and audit the Design-Builder's design and construction operations and products to verify that the provisions of the contract and the MPT Plan are being met, including specified notice requirements. The MPT Plan and components should be a topic at weekly progress meetings.

10.3.3.6 Public Information/Community Relations Plan

The Department may wish to retain all responsibility for public information and community relations. This may be particularly appropriate where local officials prefer dealing directly with the Department rather than the Design-Builder. However, design-build contracts may include requirements for the Design-Builder to perform certain activities related to public information and community relations. In

such cases, the Department will need to review the public information/community relations plan for compliance with specified requirements and monitor Design-Builder operations for compliance with the contract requirements and provisions of the public information/community relations plan. The contract and the public information/community relations plan may include significant record-keeping requirements. The Department will need to periodically audit the records maintained by the Design-Builder.

See Exhibit III, Division 2, Part 4 for a sample public information/community relations Performance Specification.

10.3.4 Subcontracting

Under the DB contract, the Design-Builder is responsible for all of the contract work, including that work that will be completed by Subcontractors. However, there are some aspects of the Design-Builder's relationship with its Subcontractors that the Department must monitor.

The Design-Builder must submit all Subcontractors for Department approval before any Subcontractor begins work on the Project. For Federal-aid projects (*see* Exhibit III, Division 2, Part 1 - Agreement, Appendix I, 8.0(D)), this does not necessarily entail actually reviewing and approving the subcontracts themselves, although the Department has the right to do so. For Federal-aid projects, the Department must establish a program for requiring the Design-Builder's certification that it will include required federal contract provisions and auditing the Design-Builder's certification.

As part of the monthly progress report, the Design-Builder must submit a subcontract report providing the Department with an updated list of Subcontractors (design and construction, at all tiers, including labor only). The Design-Builder is required to specifically identify DBEs, MBEs, and WBEs in the report. The location where the Subcontractors worked should also be shown. *See* Exhibit III, Division 2, Part 2, DB Section 108-1.3.4 for more information on the subcontract report.

The DB contract has goals for MBEs/WBEs (for non-Federal-aid contracts) and DBEs (for Federal-aid contracts). Aside from the Design-Builder meeting the goals, or making good faith efforts to do so, the Department must also monitor the Design-Builder's MBE/WBE or DBE program. *See* Section 10.3.5 of this DBPM for more information regarding the Department's role in the administration of the MBE/WBE or DBE program.

The Department must also monitor the percentage of the work that the Design-Builder performs itself to ensure that the Design-Builder is in compliance with either federal or state self-performance requirements. The Design-Builder must also request the consent of the Department before entering into any subcontracts, pursuant to Federal Provisions and to the New York State Executive Law Section 138. *See* Exhibit III, Division 2, Part 1 – Agreement, Appendix I Section 8.0 and Part 2, DB Section 108-8 for more information on Design-Builder self-performance.

Lastly, in accordance with New York State Finance Law Section 139-f, the Design-Builder must pay it's Subcontractors within 15 Calendar Days of receiving any payments from the Department. This requirement flows down to all tiers of Subcontractors and to their materialmen. If payments are not made within the 15 Calendar Day time period, interest will accrue on the amounts due to the Subcontractors or materialmen, such interest to be paid by the Design-Builder or Subcontractor that has not met the 15 Calendar Day time period. If the Design-Builder fails to do so, the Department may direct the Design-Builder to make such payment to the Subcontractor. If the Design-Builder does not comply with that direction, the Department will withhold payment for work completed by the Design-Builder. The Design-Builder must submit reports to the Department regarding payments made to Subcontractors evidencing

that payment is made in a timely manner to those Subcontractors. *See* Exhibit III, Division 2, Part 2, DB Sections 102-8.13, 102-9.13, and 108-8.

The DB contract requires that the Design-Builder submit a certificate of compliance with these requirements with the monthly progress report. The Department will need to monitor and audit the Design-Builder's compliance with these requirements

10.3.5 Minority- and Women-owned Business Enterprise and DBE Requirements

Minority- and Women-owned Business Enterprise and DBE program administration requirements are found at DB Sections 102-9 and 102-10, respectively, of the DB Section 100 (*see* Exhibit III, Division 2, Section 2). According to the New York State Executive Law Section 313, where compliance with federal requirements regarding the participation of MBEs and WBEs is required, the contracting agency may determine whether the federal requirements duplicate or conflict with the State's requirements and may waive the State requirements where such duplication or conflict exists. Thus, for projects that do not use any federal funding, DB Section 102-9 applies and for Federal-aid projects, DB Section 102-10 applies.

The Department's Project Manager should work with the OEODC to determine roles and responsibilities for the administration of the MBE/WBE or DBE program. The Department will need to monitor Design-Builder compliance with the requirements, audit Design-Builder records and document Department observations and findings.

10.3.5.1 Minority- and Women-owned Business Enterprise Program Administration

The Design-Builder must initially submit a completed MBE/WBE utilization package within 30 days of Execution of the contract. After this initial submission of the utilization package, the Design-Builder must submit an update whenever it signs a subcontract with an MBE/WBE or whenever it makes a change to the utilization package.

If the Design-Builder fails to submit its utilization package within 30 days or if it is determined that the Design-Builder has not adequately documented its good faith efforts, the contract may be terminated by the Department. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.8. If the Design-Builder fails to conform to the utilization package or make good faith efforts to do so, payment will be withheld from the Design-Builder. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.10. The Design-Builder must agree to allow inspections by the Director of OEODC or authorized designee. If the inspections result in a determination by the Director of OEODC or authorized designee that the Design-Builder has failed to comply with the MBE/WBE program, the DB contract may be canceled, terminated, or suspended, in whole or in part. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.12. The Design-Builder may request a waiver from the MBE or WBE goals. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.17.

Under Section 139-f of the New York State Finance Law, the Design-Builder must pay all Subcontractors, including MBEs/WBEs, within 15 Calendar Days of receiving payment from the Department. If the Design-Builder fails to do so, the Department may direct the Design-Builder to make such payment to the MBE/WBE. If the Design-Builder does not comply with that direction, the Department will withhold payment for work completed by the Design-Builder. The Design-Builder must submit reports to the Department regarding payments made to Subcontractors evidencing that payment is made in a timely manner to those subcontractors. *See* Exhibit III, Division 2, Part 2, DB Section 102-8.13.

10.3.5.2 Disadvantaged Business Enterprise Program Administration (Federal-Aid Projects)

The Design-Builder must initially submit a completed DBE utilization package within 30 days of Execution of the contract. After this initial submission of the utilization package, the Design-Builder must submit an update whenever it signs a subcontract with a DBE or whenever it makes a change to the utilization package.

If the Design-Builder fails to submit its utilization package within 30 days or if it is determined that the Design-Builder has not adequately documented its good faith efforts, the contract may be terminated by the Department. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.8. If the Design-Builder fails to conform to the utilization package or make good faith efforts to do so, payment will be withheld from the Design-Builder. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.10. The Design-Builder must agree to allow inspections by the Director of OEODC or his or her authorized representative or representatives of the federal government. If the inspections result in a determination by the Director of OEODC or authorized designee or representative of the federal government that the Design-Builder has failed to comply with the DBE program, the DB contract may be canceled, terminated, or suspended, in whole or in part. The Design-Builder may be referred to the United States Department of Transportation (USDOT) for possible suspension or debarment. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.12.

Under Section 139-f of the New York State Finance Law, the Design-Builder must pay all subcontractors, including DBEs, within 15 Calendar Days of receiving payment from the Department. If the Design-Builder fails to do so, the Department may direct the Design-Builder to make such payment to the DBE. If the Design-Builder does not comply with that direction, the Department will withhold payment for work completed by the Design-Builder. The Design-Builder must submit reports to the Department regarding payments made to Subcontractors evidencing that payment is made in a timely manner to those Subcontractors. *See* Exhibit III, Division 2, Part 2, DB Section 102-9.13.

10.3.6 Equal Employment Opportunity Requirements

The Design-Builder is required to meet and document compliance with specified EEO goals. The Department is responsible for auditing the Design-Builder records and conducting interviews and other activities to verify compliance.

10.3.7 Wage Rate Compliance

The Department will need to conduct wage rate interviews and audit and check compliance with minimum wage rate provisions of the contract just as in design-bid-build contracts.

10.3.8 Progress Reports

The Department will be required to review the monthly progress reports submitted by the Design-Builder. The components of the reports include the following:

A) A progress narrative;

B) Quality certifications;

C) A safety report;

D) A security report;

E) A monthly Baseline Progress Schedule update;

F) An Order-on-Contract status report;

G) A monthly subcontract report;

H) Affidavit of payment to Subcontractors;

I) Quantity calculations;

J) Updated Contract Submittal List (CSL);

K) A summary of hazardous and contaminated substance activities; and

L) Statement of Material and labor used (Federal-aid projects only).

Detailed requirements for the progress reports are specified in the contract sample (*see* Exhibit III, Division 2, Part 2, DB Section 108-1.3).

Submittal of the required monthly progress report and its components is a condition precedent to the Design-Builder's receiving payment under PC 1. If the Design-Builder does not comply, the Department needs to check the request for periodic payment and make adjustments to the request by suspending payment under Price Center 1 at the previous month's level.

10.3.9 Invoices/Request for Periodic Payment

In design-bid-build projects, the Department measures the quantities, calculates the amount due on any periodic payment, and submits the periodic payment to the contractor for concurrence. As noted previously, few if any Pay Items are based on quantities and Unit Prices. Therefore a different approach is required to determine progress and determine the amount due for any periodic payment. The approach also varies depending on the size and complexity of the Project (*see* Sections 10.3.9.1 and 10.3.9.2 of this DBPM).

Generally in DB, the Design-Builder calculates the amount due and submits the payment request to the Department for approval and processing. The specific requirements and procedures for invoicing are spelled out in Exhibit III, Division 2, Part 2, DB Sections 109S (for smaller, less complex projects) or 109L (for larger, more complex projects). *See also* discussion of DB Section 109 under Section 7.2.9 of this DBPM.

10.3.9.1 Smaller, Less Complex Projects

For smaller, less complex projects, the invoice and certification will be prepared using Form PP-S (*see* Exhibit III, Division 2, Part 2, DB Section 109S, Appendix 109S-A). It will be necessary for the Department representatives, primarily the Design Compliance Engineer (DCE) and the Construction Compliance Engineer (CCE) to meet with their counterparts in the Design-Builder's organization to discuss and agree on the cumulative physical percent complete for PC 2 (Engineering and Design) and the lump sum construction PCs. Prior to such meeting the Design-Builder should be required to status (update) its progress schedule to reflect work accomplished to date. Work should only be considered complete if the required reviews (for design) and/or inspection, sampling and testing (for construction), and specified documentation are up to date and any NCRs resolved. If the Department and the Design-Builder cannot agree on the percent complete, the Department's Project Manager is authorized to unilaterally determine the percent complete for periodic payments. The amount earned for each PC is determined by multiplying the Price Center Value (PCV) by the cumulative percent complete.

The Design-Builder's design and construction managers should meet with the DCE and CCE soon after NTP to establish and document guidelines to be used to define and determine percent complete for each PC during the course of the contract. Establishing such mutually agreed guidelines early in the Project can significantly reduce the potential for controversy as the Project progresses.

The amount due for Unit Priced Work and Force Account Work is determined as specified in DB Sections 109[S or L]-6.2 and 109[S or L]-9.2, respectively. The amount due is determined in a similar manner as for design-bid-build contracts, except that the Design-Builder will measure the quantities for periodic payment, with the field measurements certified by a New York-licensed professional engineer or land surveyor working within the Design-Builder's QC organization. *See* DBPM Sections 10.4.7 and 10.5.2.1 for further discussion of the Department's roles and responsibilities regarding verification of quantities and force account work.

The contract provides that the amounts due for PC 1 and for other PCs not directly pertaining to design or construction will be spread equally over the duration of the contract, except that amounts due for bond

and insurance premiums and for mobilization will be paid early in the contract, usually within the first two months. Mobilization will only be paid after the Design-Builder has submitted its Baseline Progress Schedule to the Department and the Department's Project Manager has provided Consultation and Written Comment that it meets contract requirements. Note that if the Design-Builder does not provide the documents or services specified under PC 1 or other non-design or non-construction PCs, including submittal of schedule updates and progress reports, the Department may suspend payment on the affected PC until the required documents or services are provided.

The Design-Builder also submits a certificate to the Department's Project Manager indicating that all work included on the invoice meets contract requirements. The Design-Builder's Project Manager (or, the Design-Builder's Deputy Project Manager) and the Design-Builder's QC Manager must sign the invoice and certificate.

Any adjustments in payment due to deficiencies in QC and related documentation should be documented prior to the submittal of the invoice by NCRs from either the Design-Builder's QC staff or the Department.

10.3.9.2 Larger, More Complex Projects

The Department will be specifying the use of the PPS-C/PCP method of payment for larger, more complex projects. Using Form PP-L (*see* Exhibit III, Division 2, Part 2, DB Section 109L, Appendix 109L-A) the Design-Builder will invoice the amounts shown on the PPS-C for each PC provided all PCPs due that period have been met. If any scheduled PCP has not been met, the invoice amount for the affected PC shall be the amount shown on the previous month's invoice. If a PCP is met earlier than the date shown on the Schedule of PCPs, the amount on the invoice should be the amount on the PPS-C that coincides with the originally scheduled PCP date shown on the Schedule of PCPs. In other words, the Design-Builder can be paid in advance of the payment schedule shown on the PPS-C if the PCPs are met early.

Mobilization (included in PC 1) will only be paid after the Design-Builder has submitted its PPS-C and Baseline Progress Schedule to the Department and the Department's Project Manager has approved them in writing.

Unit Priced and Force Account Work will be paid in the same manner as discussed for smaller, less complex projects.

The Design-Builder also submits a certificate to the Department's Project Manager indicating what PCPs scheduled for the period have been met and that all work included on the invoice meets contract requirements.

The Design-Builder's Project Manager (or, the Design-Builder's Deputy Project Manager) and the Design-Builder's QC Manager must sign the invoice and certificate.

The Department's checking of the invoice should be simple and straightforward. The Department's project management staff needs to verify that the amounts shown as earned for each PC coincide with the amounts shown on the PPS-C for that period. The Department project management staff also needs to verify that the PCPs certified by the Design-Builder have actually been met. It is expected that the achievement of PCPs will have been discussed with the Design-Builder prior to its submitting an invoice.

Note that achievement of a construction PCP is not merely completing the physical work on the Project. To be met, the associated QC sampling and testing, associated documentation, and any corrective action needs to be complete and up to date. A design PCP, usually the completion of a review at a certain stage

of design development, is not met until the Department's Project Manager has provided Consultation and Written Comment that the design appears to meet contract requirements. Any determination that a PCP has not been met due to deficiencies in QC and related documentation should be documented prior to the submittal of the invoice by NCRs from either the Design-Builder's QC staff or the Department.

In other non-construction PCs, particularly PC 1 (Preliminary and General Requirements) there are periodic PCPs such as plan or report submittals. There are also monthly PCPs relating to submittal of the specified progress reports and updated schedules. If any of the contractual PCPs in PC 1 are not met, payment for all of PC 1 is suspended at the previous month's level and not resumed until the required documents are submitted.

Other adjustments to the invoice may also be required, such as adjustments for Material quality and other adjustments provided in the contract (*see* Exhibit III, Division 2, Part 2, DB Section 109L).

10.3.9.3 Avoidance of Delaying Payments

Upon receipt of the payment request and certifications from the Design-Builder, the Department should expeditiously review the request and quickly resolve any issues with the Design-Builder. The payment request should not be held up pending resolution of issues requiring significant time to resolve. Uncontested amounts should be forwarded for payment and every effort made to resolve any outstanding issues by the end of the next payment period.

10.3.10 Right-Of-Way Acquisition Management

The contract commits the Department to provide access to property per the schedule shown on Form 107A, Right-of-Way Acquisition Schedule (*see* Exhibit III, Division 1, Appendix C – RFP Forms). During the Proposal process, the Design-Builder will identify its preferred priorities and dates for property acquisition. While the Department is only required to meet the schedule it prepared and displayed on Form 107A, the Department and the Design-Builder should meet soon after NTP to see if the Right-Of-Way Acquisition Schedule can be adjusted to accommodate the Design-Builder's desires and priorities. At that meeting and at regular intervals thereafter, the Department and the Design-Builder should meet to review the status of ROW acquisition and to alert each other of any difficulties anticipated or discovered.

10.4 DESIGN MANAGEMENT AND QUALITY

The contractual requirements for design management and QA/QC are the primary responsibility of the Design-Builder rather than the Department and are spelled out in Exhibit III, Division 2, Part 2, DB Section 111.

10.4.1 General

There are significant differences in DB from typical design-bid-build projects. Due to the faster pace on a DB project, it is important that standard review procedures be adjusted to facilitate the pace of the DB contract. It is important for the Department to meet the contractual time commitments. If time commitments are not met in a typical consultant contract, the effects of delays may be relatively minor. In a DB contract, delays in reviews can result in direct construction delays that can be significant and costly. The provisions are written with the intent of keeping the Department activities off the Critical Path of the Project schedule.

In DB, subcomponents of the Project are typically "released for construction" prior to the entire project being designed and prior to the design of the individual project component being completed (i.e., "fast track"). For example, construction of bridge foundations may begin long before the entire bridge design

is done. If such phased release for construction is not allowed, one of the major benefits of DB will be negated.

The Design-Builder/Designer is required to identify Design Units, those components of the Project that will be produced as an integral, but independent, component of the Project. A Design Unit will have a single "responsible engineer" who will direct and sign off on the final design of that component by the Design-Builder.

For example, a Design Unit may be any of the following:

A) A bridge;

B) A section of roadway;

C) A retaining structure; or

D) Certain Utility Relocations.

The identification of Design Units is intended to facilitate scheduling of Department participation in the design and Design Review processes.

In DB, the stages of design development are designated as the following:

1) Definitive Design, where the design concepts and parameters are established that will be followed through to completion of the Project;

2) Readiness for construction design, where the design is progressed to the point where components of the facility can be released for construction. There may be more than one stage of readiness for construction design where the Project component is built in stages, with each stage requiring a review of the design before construction can proceed further. *See* Exhibit III, Division 2, Part 2, DB Section 111-12.5, for Readiness for Construction requirements;

3) Interim design, where the design is being progressed to final design without intermediate releases for construction. When design is progressed in this manner, at least one interim Design Review is required between the Definitive Design Review and the Final Design Review.

4) Final design, where the design is 100% complete;

5) Working Plans, which includes working drawings, shop drawings, fabrication drawings, and similar documents that provide more specific construction detail; and

6) As-built design, the plans and specifications that actually represent the as-constructed project.

Typically "Design Acceptance" by the Department should not take place until the As-built Plans have been reviewed and approved.

During the course of the Department's participation in design reviews, it is important that Department representatives be careful about offering, suggesting, or ordering solutions to design problems. The Department may offer or suggest possible solutions to the Design-Builder with the express provision that the Design-Builder is not bound to accept the suggestion. If a solution is ordered and the Designer incorporates the solution in its design, the Department may transfer the risk for the adequacy and appropriateness of the Department-ordered solution from the Design-Builder to the Department, even though the Design-Builder would be responsible for designing the Department solution correctly.

Department comments during the review process should focus on whether or not the proposed solution or process meets the contract requirements as specified. If the Department decides the specified requirements in the contract are not adequate, it may change those requirements, but the Design-Builder may be entitled to adjustment in time and cost for incorporating the change(s).

Quantity estimates are not provided by the Department in the RFP and quantities usually are not the basis of payment. However, the Designer is required to provide quantities so that the Design-Builder's construction QC personnel and Department construction QA personnel can determine the number of samples or tests that are to be taken during construction. Quantities may also be required for negotiation of Orders-on-Contract.

The products of the Designer's work will be various design reports, Design Plans and/or Project Specifications. The Design Plans will represent further development of the RFP Plans. The Project Specifications will cover the specific means, methods, and Material used by the Design-Builder to construct the Project. The Project Specifications may take the form of supplements to the Department Standard Specifications or may be entirely new specifications covering processes not included in the Standard Specifications.

10.4.2 Design Workshop

In order to facilitate the Designer/Department relationship, design development and Design Reviews, a design workshop should be held soon after NTP. Such a workshop should focus on a review of the critical design elements and criteria and on how the Designer plans to organize its design and conduct the reviews.

The design workshop must include discussions and agreements reached between the Department and the Design-Builder regarding the time allotted for the reviews of each Design Unit. *See* Exhibit III, Division 2, Part 2, DB Section 111-5.

Department participation in design task force or discipline meetings should be covered to facilitate the "over-the-shoulder" (Oversight) Design Review process. The roles and relationships of the Designer and Department staffs should be spelled out and documented, including desired lines of communication. *See* Exhibit III, Division 2, Part 2, DB Section 111.

It is important to understand that the interaction between Designer and Department staff should be continuous throughout the design process through the "over-the shoulder" reviews that typically would consist of activities, such as:

A) Participating in design meetings;

B) Responding to design requests for information or clarification; and/or

C) Auditing the design QC process and records.

Designer/Department contact should not be limited to Design Review periods or the success of the DB project may be jeopardized.

Design Plan and Project Specification reviews and reviews of other Design documents take place as scheduled by the Design-Builder to meet its design and construction schedule.

All agreements and understandings reached during the design workshop must be documented in writing and signed off by the Design-Builder's Project Manager and the Department's Project Manager.

10.4.3 Design-Builder Responsibilities and Design Quality Control

The Design-Builder, through its Designer, is responsible for managing the design process, design QC, and final design and its associated Design Plans, Project Specifications, design reports and other documents specified in the contract. The Design-Builder, through its Designer, is responsible for the accuracy, adequacy and timeliness of the final design. The Design-Builder is responsible for the following:

A) Detailed design checks by the Designer and the Design QC Manager;

B) Constructibility of the Project and performing the constructibility reviews as part of the overall Design Review process;

C) Managing the Design Review process, including scheduling Design Reviews and notifying/inviting the Department and other Stakeholders to participate in Design Reviews;

D) Providing documentation of the design process and design QC per the contract requirements (*see* Exhibit III, Division 2, Part 2, DB Section 111-18);

E) Reviewing and approving Working Plans and related documents to assure that they meet the intent and requirements of the Design Plans and Project Specifications;

F) Having the Designer and Design QC Manager review and approve all design changes during the course of the Project, regardless of which party initiates the change; and

G) DB Project Manager and Quality/Assurance Control Manager must stamp/seal and sign all readiness for Construction Design Plans, Final Design Plans and Title Sheets.

10.4.4 Department Role and Design Quality Assurance

The Department's project staff Oversight role during design and Design Review consists of monitoring and auditing design progress, interpreting contract requirements, and verifying design compliance with contract requirements. In performing this role, Department staff should comply with the following guidelines:

A) Department staff needs to be available to provide interpretation and answers regarding contract requirements on a "real time" basis – often on a daily basis. Such continuous involvement is often referred to as "over-the-shoulder" review. By having continuous contact during the design process, the Department staff should face no "surprises" during the Design Reviews. Department staff should already know how the design is progressing and be fully informed of the issues;

B) Department input and participation in the review process should be limited to no more than the time frame agreed during the design workshop (*see* DBPM Section 10.4.2);

C) The Department's role is to verify that the design meets the overall contract requirements. The Department's participation in Design Reviews should not involve detailed checks of plans and calculations, except in unusual cases;

D) The Department's project staff should verify through audits of design QC records that the Design-Builder's Design QC Manager is fulfilling his/her responsibilities and that the design quality procedures contained in the Quality Plan are being followed. An audit may include detailed checks of plans and calculations in some cases;

E) The Department's design compliance staff will be responsible for verifying design progress for payment purposes. This will normally require verification that design PCPs have been met according to schedule;

F) The Department's Project Manager will provide Consultation and Written Comment that the design appears to meet contract requirements at the successful completion of each Design Review;

G) The DCE, Design Compliance Monitors (DCM) and other participants in design reviews should record their comments on Form DR (Design Review Comments). *See* Exhibit III, Division 2, Part 2, Appendix 111A; and

H) The DCE and DCMs should record their daily activities and observations on Form MURK 2b (DB-DCE) (Exhibit V – Forms for Department Use to this DBPM).

10.4.5 Design Reviews

Design Reviews are conducted at each of the following stages of design development (*see* Exhibit III, Division 2, Part 2, DB Section 111-9 through 111-11):

A) Definitive Design;

B) Readiness for Construction;

C) Interim;

D) Final;

E) Working Plans;

F) Design Changes; and

G) As-built Plans.

The Design-Builder's Design QC Manager is responsible for conducting the Design Reviews with Department and Stakeholder participation, except for the As-built reviews. The review of As-built Plans is done by the Department with Design-Builder participation. Design Reviews are also required for all design changes that occur during design and/or construction.

Design Reviews are normally conducted in the offices of the Designer or Design-Builder. Design Reviews do not consist of packaging formal submittal documents and sending them off to Department offices for formal written reviews. If assistance from other Regions, the Department's main office, or Stakeholder staff is required for a review, the Department project staff should invite them to participate in the review. If material needs to be sent to another location by the Department, the Department project staff must closely track the progress of the review and expected comments to ensure that the Department does not exceed the review time allowed in the contract.

The Department may wish to participate in the review of Working Plans, but does not actually review and approve them as in a design-bid-build project. In a design-bid-build project the Department or its consultant is the designer of record and must review and approve shop drawings and similar documents. In DB the Design-Builder's Designer is the designer of record and is responsible to ensure the adequacy of the Working Plans and related documents.

The Department's Project Manager must provide Consultation and Written Comment on the design product before the review is considered complete and the design released for construction. This Consultation and Written Comment does not constitute approval of the design. Design Acceptance is not given until the end of the Project after all As-built Plans have been reviewed and accepted.

10.4.6 Negotiation of Orders-on-Contract that Include Design

The Department's DCE will need to be involved in the negotiation of Orders-on-Contract that include design work. Note that the Unit Prices included in the Schedule of Values (Option 1) do not include any costs associated with designing the work involved. Design costs must be negotiated separately.

10.4.7 Design Force Account Work

The DCE will be responsible for verifying the work involved in design Force Account Work and for signing-off on the Design-Builder's design Force Account records on a daily basis. The actual mechanics of how this will be done should be covered in the initial design workshop or as part of the negotiation for extra work. Force Account records for design must be kept separate from construction Force Account records because different mark-ups apply.

10.5 CONSTRUCTION MANAGEMENT AND QUALITY

The primary responsibility for construction management and construction quality for a DB project rests with the Design-Builder rather than the Department.

10.5.1 Design-Builder Responsibilities and Construction Quality Control

The Design-Builder's roles, responsibilities, organizational requirements, and tasks for construction QC are spelled out in Exhibit III, Division 2, Part 2, DB Section 112 and its appendices.

10.5.2 Department Role in Construction Quality Assurance and Independent Assurance

The Department's Oversight roles and activities relating to construction cover the full range of responsibilities found in a design-bid-build project; however the specific tasks and responsibilities differ for DB. This section of the DBPM will identify the significant differences between the Department's design-bid-build and DB construction activities.

10.5.2.1 Inspection

The Design-Builder will be providing QC Inspectors and be performing many of the traditional Inspector duties. The Department's CCE and CCMs should perform inspection-related activities such as the following:

A) Verifying that current stamped and signed Design Plans and Project Specifications are on-site (*See* Sections 111-12.5 and 111-19.1 of this DBPM). The CCE and CCMs should regularly check to see that the appropriate Design Plans and Project Specifications are on-site and being used to govern construction work. (*See* DB Section 113-2.5.2 of this DBPM);

B) Checking the Design-Builder's Construction QC staff to determine that they:

   1) Have the specified qualifications, licenses, and/or certifications;

   2) Are present to observe and control the work;

   3) Are performing their duties in accordance with contract requirements, specifically those specified in DB Section 112 (Exhibit III, Division 2, Part 2); and

   4) Are conducting sampling and testing of Material.

C) Determining if differing site conditions and/or significant changes in the character of the work occurs. (*See* Sections 10.6.2, 10.6.1.3 and 113-2.4.8 of this DBPM of this DBPM);

D) Verifying progress and reviewing payment requests. Typically this does not involve measurement of quantities because the DB payment is not based on quantities;

E) Auditing the Design-Builder's construction QC records. This activity involves auditing QC inspection reports and records and sampling and testing reports and results. The latter should be compared to Department generated results from Verification Sampling and Testing. The audits of records are usually made on a random sampling of reports and records generated by the Design-Builder. The auditing process should be continuous throughout any given period and not be concentrated at the end of any payment period. It is important to remember that the Department's CCE and CCMs are part of the overall quality team. The primary purpose of the Department's activities is to assist the Design-Builder in maintaining quality and performing its QC responsibilities by providing real-time, continuous feedback to allow the Design-Builder to make adjustments in its construction QC program;

F) Verifying records of Force Account Work. The Design-Builder will be responsible for maintaining the Force Account records, but the Department's staff should spot-check the labor, Equipment, and Material being used and sign-off the Design-Builder's records on a daily basis;

G) Spot-checking measurements of any work paid on the basis of quantities and Unit Prices. Although payment based on Unit Prices and quantities is likely to be rare, when it does occur, the Department CCMs should make spot checks of the measurements and compare them to the results determined by the Design-Builder's QC staff. The comparisons should be made soon after the spot checks are made and not be held until the request for periodic payment is submitted. Delaying the comparison until after the request is submitted will likely delay processing the payment request and not contribute to the teamwork and partnering critical to success of the Project;

H) Auditing safety and security records and checking the qualifications of safety and security personnel;

I) Spot-checking for compliance with Design Plans and Project Specifications and comparing Department CCM records with Design-Builder construction QC Inspection results;

J) Reviewing and spot-checking MPT activities and installations. The Design-Builder will be required to inspect and correct any deficiencies and maintain MPT records. The Department should make spot checks and compare its results to the Design-Builder's records;

K) Participating in readiness for construction Design Reviews and reviews of Working Plans (such as, shop drawings). Note that the Department will not be the primary reviewer of Working Plans because that is the responsibility of the Design-Builder's Designer, the designer of record. Department design and construction Oversight personnel should participate and make input to these reviews, however;

L) Conducting and managing the review of As-built Plans. The Design-Builder, not the Department, will be responsible for maintaining the As-built Plans. As a component of Final Acceptance activities, the Department DCE and CCE will conduct and manage the review of the As-built Plans; and

M) The CCE should record daily activities on Form MURK 2b (DB-CCE) (*see* Exhibit V – Forms for Department Use). The form may also be used by individual CCMs to record their observations and activities.

10.5.2.2 Plant Inspection

The Department should check the Design-Builder's asphalt and concrete QC plan administrator's and QC technicians' qualifications, spot check the administrator's and technicians' procedures, and audit their records. The Department should also make QA spot checks on the plant itself and compare its results to those reported by the Design-Builder's asphalt QC plan administrator and QC technicians covering the same time period. (*See also* Section 401 of the Standard Specification, Construction and Materials, latest version).

10.5.2.3 Production Inspection

In DB, production inspection should be the responsibility of the Design-Builder, with Department CCMs overseeing the processes, performing Verification Sampling and Testing, comparing results to Design-Builder results, and auditing the records kept by the Design-Builder's QC staff. The responsibility for production inspection should be covered in the Contract Documents and confirmed at pre-work and site mobilization meetings. (*See also* Section 401 of the Standard Specification, Construction and Materials, latest version).

10.5.2.4 Harmful and Hazardous Materials

The Design-Builder should be assigned the responsibility for inspecting the remediation of Hazardous Materials, using specifically trained and qualified personnel. As with other inspection activities, the Department should have CCMs assigned to check the Design-Builder's QC Inspectors and records. Hazardous Material remediation is typically paid on a Unit Price and quantity basis. In DB, the Design-Builder's QC staff will measure the quantities, but the Department CCMs should make spot-check measurements and compare them against the Design-Builder's measurements.

The Department will need to have appropriate staff on-call and available to respond should Hazardous Materials be found that are not identified and/or included in the contract scope of work. Should unknown, unidentified Hazardous Materials be encountered, the Department will assume responsibility for coordinating with appropriate State or federal agencies. The remediation of previously unknown Hazardous Materials may still be assigned to the Design-Builder, but such activities must be covered by an appropriate Order-on-Contract.

10.5.2.5 Monitoring Plans and Changes

The Department will still have a responsibility to monitor compliance with various plans, including Design Plans, but in an Oversight and auditing mode. The Design-Builder's production and QC staff will have an active role in checking for compliance with plans and identifying and addressing changes. The Department staff needs to monitor activities and make appropriate decisions regarding whether contractual changes occur. However, it is important that the Department staff do not impose solutions to changes that occur. The Design-Builder and its Designer need to provide the solutions. The Department staff is to check to see that the solutions proposed by the Design-Builder conform to the requirements of the contract.

10.5.2.6 Working Plan Reviews

In design-bid-build projects, the Department reviews the Working Plans (such as, shop drawings and fabrication drawings) for conformance with the intent and requirements of the design because the Department (or a consultant retained by the Department) is the designer of record and therefore has intimate knowledge of the design provided to the contractor. In DB the Design-Builder's Designer is the designer of record. Therefore, the Designer is the most appropriate party to review the Working Plans for conformance with Design Requirements. However, the Department's project design and construction staff (and other appropriate Region or Department main office staff) should participate in Working Plan

reviews. The Design-Builder is responsible for scheduling the reviews and notifying the Department of the time and location of the reviews (*See also* Section 10.4.4 of this DBPM).

10.5.2.7 Material Inspection

In design-bid-build projects, the Department performs material inspection functions such as sampling and testing. In DB, the Design-Builder's construction QC staff has the primary responsibility for performing Material inspection functions. The Department staff is responsible for Verification Sampling and Testing and Independent Assurance (IA) activities.

Verification Sampling and Testing is typically performed at a frequency of about 10% of that normally performed by Department sampling and testing personnel for a design-bid-build contract. The Design-Builder is required to perform QC sampling and testing at the frequency specified in DB Section 112 (Exhibit III, Division 2, Part 2). The Department's Verification Sampling and Testing should be performed on the same lots and during the same time period as the Design-Builder's QC sampling and testing so that a valid comparison of results can be made.

10.5.2.8 Material Certifications

In design-bid-build, the Department staff typically collects and maintains the material certifications. In DB the certifications are typically retained as part of the QC records by the Design-Builder's QC staff, subject to review and audit by the Department. This is done so that all QC records are maintained in one place and turned over to the Department at the conclusion of the Project. The Department may request copies of any certifications as it deems appropriate. *See* Exhibit III, Division 2, Part 2, DB Section 109[S or L]-7.1 for payment requirements for material.

10.5.2.9 Monitoring Utility Relocations and Installations

The Department will still need to monitor Utility Relocations and installations. The approach to Utility Relocations and installations may be different from design-bid-build and from one DB project to another. In DB there may be significantly more Design-Builder involvement in the design and construction of Utilities than for a contractor in a design-bid-build project.

10.5.2.10 Environmental Monitoring

The responsibility for monitoring compliance with environmental requirements may vary from one contract to another. It is not unusual for the Design-Builder to have responsibility for monitoring its own compliance through the use of environmental specialists assigned to the Design-Builder's QC staff. If the Design-Builder has such responsibilities, the Department would need to perform such activities as the following:

A) Verifying qualifications of Design-Builder environmental staff;

B) Spot checking compliance; and

C) Auditing Design-Builder environmental monitoring records.

10.5.2.11 State Pollutant Discharge Elimination System

The Design-Builder will be responsible for complying with the State Pollutant Discharge Elimination System (SPDES) in all cases. If the Department assigns responsibility to the Design-Builder (through its QC organization) to inspect and monitor compliance with SPDES requirements, the Department will still need to conduct Oversight activities similar to those for environmental monitoring in Section 10.5.2.10 of this DBPM.

10.6 ORDERS-ON-CONTRACT

There are numerous differences regarding Orders-on-Contract for a DB contract compared to a design-bid-build project. These variations are summarized herein. Department project staff (management, design, and construction) will evaluate and document conditions and changes as they occur and determine if conditions are such that an Order-on-Contract is justified under the terms of the DB contract. An Order-on-Contract that increases the Contract Price to be paid to the Design-Builder should only occur where the Design-Builder has justified to the Department an increase in cost, not simply a change of the scope of Work or extension of the schedule, or where the Department has ordered a change to the contract that increases the Design-Builder's costs.

If a change in the scope of work relating to one lump sum item is made or occurs that subsequently results in a change in one or more other lump sum items, the latter change may result in an adjustment under the provision. (*See* Exhibit III, Division 2, Part 2, DB Section 104-4).

10.6.1 Extra Force Account Work, Dispute Compensation, and Recordkeeping

The most significant change from the Standard Specifications is that Force Account labor needs to be separated for construction and non-construction labor, and non-construction labor needs to be split into non-construction labor performed by construction firms and non-construction labor performed by architectural/engineering firms. The overhead and other markups associated with the different categories of labor are significantly different. *See* Exhibit III, Division 2, Part 2, Section 109[S or L]-9.

10.6.2 Differing Site Conditions

Under a design-bid-build, detailed investigations are performed to the degree necessary to design the Project. The design and descriptions of existing conditions are provided in the form of plans and specifications, and the Department, therefore, assumes the risk for differing site conditions.

Under Design-Build, as discussed in Sections 3.5, 3.7.1 and 4.3.2 of this DBPM, the issues associated with site conditions are addressed in the risk identification, assessment and allocation portion of procurement strategy process. The results of which provide a decision on: (1) how risk will be shared between the Department and the Design-Builder on different site conditions, and therefore (2), what and how much preliminary or supplemental preliminary engineering/investigations need to be performed. For example, in transportation, geotechnical information is almost always identified as a high-risk issue. In most cases, this will result, consistent with the accuracy of the right-of-way and approximate locations of bridges, in the Department performing a thorough geotechnical investigation, providing the results of the investigation to the Design-Builder, and warranting the data for use by the Design-Builder. This risk sharing approach is a compromise between warranting all site conditions as with design-bid-build and the other extreme of holding the Design-Builder responsible for all site conditions. The latter results in uncertainty, price contingency in the Proposal price and time after award to conduct investigations. Consistently, the contract states "the Department represents that, to the best of its knowledge, the information represented by the borings and tests taken by the Department are accurate at the location of the tests. Any extrapolation of such information to other locations by the Design-Builder shall be at Design-Builder's risk. Furthermore, the Design-Builder is responsible to determine what additional geotechnical information is required to support its design and is responsible for obtaining such information and is responsible for the accuracy of such information." Clearly there is a significant shift in the degree of risk from the typical design-bid-build contract. The Design-Builder is only able to rely on the information shown in the contract at the specific locations of the investigations or tests.

Other site conditions, such as utilities, water tables, drainage structures and hazardous waste should be treated similarly in the procurement strategy, risk assessment, preliminary/supplemental preliminary engineering and administration of the contract.

When the issue of a Differing Site Condition does occur, the Department staff should carefully review how responsibilities and risks are allocated in the contract. Unlike the example above, there may be cases where, for a specific, unique Project, the contract assigns the responsibility for significant site investigation, analysis and the risk of interpolation and interpretation to the Design-Builder. In which case, the preponderance of the risk for differing site conditions will be the responsibility of the Design-Builder. *See* Exhibit III, Division 2, Part 2, DB Section 104-5.

10.6.3 Significant Changes in the Character of the Work

There are several significant changes from the design-bid-build specifications regarding what constitutes significant changes in the character of the Work. A significant change applies only to:

A) When the changes modify the general definition of the Project or the Design-Build character of the Work; or

B) When the Department requires Work to be performed that is physically remote from the original Project and not necessary for completion of the original Project.

A significant change in scope or location of work, not a change in quantities, is the measure of a change in the character of work. Where quantities are not the basis of measurement or payment (quantities are not typically represented in the Contract Documents), the significance of the change in the scope or location of work is the determining factor (*See* Exhibit III, Division 2, Part 2, DB Section 104-3.2).

10.6.4 Necessary Basic Project Configuration Change

If there is a Necessary Basic Project Configuration Change [*see* Section 7.2.4(B) of this DBPM and Exhibit III, Division 2, Part 2, DB Section 104-4.1], such change may constitute a change in the Work. Any adjustment in Contract Price or time must be justified in writing by the Design-Builder and approved by the Department. A Necessary Basic Project Configuration Change occurs when there is an error in or omission from the Contract Documents such that the Project cannot be reasonably designed or constructed within the specified limits of variability for the Basic Project Configuration elements. For example, presume the specified horizontal alignment limit of variability is two (2) meters, but there is a "bust" in the horizontal alignment shown on the Basic Project Configuration Plans. If it is necessary to make an adjustment in the horizontal alignment of more than two (2) meters to fix the "bust," then a Necessary Basic Project Configuration Change would have occurred and an Order-on-Contract may be required because the situation qualifies as a change in the Work. If the "bust" can be fixed by adjusting the alignment two (2) meters or less, it would not be considered a Necessary Basic Project Configuration Change and would not be considered a change in the work.

10.6.5 Environmental Mitigation

A change in the Work may be deemed to occur if environmental measures are required by the Department or others that are not specified or reasonably implied in the Contract Documents, including the mitigation measures included in the Design-Builder's Proposal. In other words, if the Design-Builder proposes certain mitigation measures in its Proposal that are not required by the Contract Documents, but subsequently are required by the Department or other agency, the Design-Builder would not be entitled to an Order-on-Contract under the provision. *See* Exhibit III, Division 2, Part 2, DB Section 104-4.4.

10.6.6 Changes Applicable to Utility Relocations

In DB there are numerous situations where Orders-on-Contract may be required that normally do not occur in design-bid-build contracts due to the more limited scope of design done by the Department and the likelihood that at least some Utility Relocation design and/or construction will be performed by the Design-Builder.

A) Accuracy of Existing Utility Locations, Size, and Type

The Contract Documents will specify the accuracy limits of the location, size, and type of Material for existing Utilities. *See* Exhibit III, Division 2, Part 1, Section 4.3 of Appendix I to the DB Agreement, for an example. If the actual conditions encountered are outside those specified limits of accuracy, the provision will apply for increases and decreases in the scope of work. For example, presume the RFP Plans show a 250 mm steel water main below a road centerline. The Contract Documents state that the horizontal location is accurate within ± one meter and the size is accurate within 25% of the stated diameter. If the actual pipe is 375 mm in diameter and located one meter to the left of centerline, a significant change in the character of work may result because the actual pipe diameter was off by more than 67.5 mm (25% of 250 mm).

B) Changes in "conflict/no conflict" status represented on the RFP Plans and Design Plans or As-built Plans for existing Utilities will qualify for an Order-on-Contract only if the change in status is the result of an inaccuracy outside the specified limits.

C) An Order-on-Contract will be required if the responsibility for design and/or construction of a given Utility Relocation changes from the Design-Builder to the Utility Owner or vice versa.

D) Since the Design-Builder will be designing and constructing the Project, it may have significant opportunity to change the cost of the Utility Relocation Work. In the course of its design and/or construction of the entire project, the Design-Builder may increase or decrease the cost of Utility Relocation Work without any adverse impacts to itself, in the case where the Design-Builder is not responsible for designing and constructing Utility Relocations. The Design-Builder is required to consider and minimize the impacts on Utility Relocations as the work progresses.

E) The Design-Builder is not entitled to an Order-on-Contract if it incurs increased costs to facilitate the avoidance of a Utility Relocation (perhaps the Design-Builder avoided the Relocation so as to avoid adverse schedule impacts, to its benefit).

F) The Design-Builder will be required to reimburse the Department if its design increases Department costs related to Utility Relocations. For example, if the RFP identifies known conflicts and the Design-Builder's design results in more avoidable conflicts than represented in the RFP, the Design-Builder may be held responsible for time and cost impacts associated with the additional utility relocations.

G) The Design-Builder is not obligated to give the Department a credit if it reduces its cost by avoiding a Utility Relocation.

H) Delays

It should be noted that the contract provides for sharing the risk of delays associated with discovery of Utilities not identified in the Contract Documents. The Design-Builder is required to assume the time and cost impacts of the first 30 days of delay. Thereafter, the Department is responsible for time and cost impacts of the delay.

I) It may be desirable to establish a contract contingency to cover relocation of utilities that are not shown on the RFP Plans or described in the scope of work.

See Exhibit III, Division 2, Part 2, DB Section 104-4.2.

10.6.7 Harmful/Hazardous Materials Order-on-Contract

Hazardous Material remediation is typically paid on a Unit Price basis for quantities of work actually performed, even in DB contracts. This approach is taken to minimize Design-Builder risk on what can be very risky business, especially since the extent of contamination is often difficult to determine until the

site is actually opened up. The variation in quantities provision, however, does not apply to each site, but to the total quantities for the entire project for each category of Hazardous Materials remediation. The "category" can be the nature of the material required or the type of remediation involved. For example, a hydrocarbon Hazardous Material could be remediated on-site or hauled away for remediation. There would actually be two categories of remediation in such a case.

The provision requires the Design-Builder to obtain the services of previously trained and qualified personnel to perform the remediation work. Otherwise, the Department could be exposed to significant training and delay costs while the Design-Builder gets untrained, unqualified personnel through the process of training and qualification.

It may be desirable to establish a contract contingency to cover cases when unknown Hazardous Materials occur.

See Exhibit III, Division 2, Part 2, DB Section 104-4.3.

10.6.8 Inaccuracies in Preliminary Design

Except for inaccuracies that lead to a material change in the Basic Project Configuration Change (*see* DBPM Section 10.6.4), the Design-Builder will be responsible for the time and cost impacts due to inaccuracies in the preliminary design. *See* Exhibit III, Division 2, Part 2, DB Section 104-4.1.4.

10.7 PROJECT COMPLETION

10.7.1 Uncompleted Work Agreement

Since the DB contract does not have Unit Prices or quantities, the uncompleted work agreement needs to be set up based on the remaining scope and on prices consistent with the price structure of the original contract. This may require some additional negotiations to set up the agreement. *See* Exhibit III, Division 2, Part 2, DB Section 109[S or L]-8.1.

10.7.2 Substantial Completion

Substantial Completion of the Project occurs at the point at which the Project, or Section thereof, is complete, such that it can be safely and effectively used by the public without further lane closures, barriers, cones, delays, disruption, or impediments, with all lanes open to traffic (*See* DB Section 101-3). The actual Substantial Completion Date is identified in the Agreement at Article 2.2 (Exhibit III, Division 2, Part 1 – Agreement) and will need to be updated accordingly for each project.

In accordance with DB Section 109-11.2, the Design-Builder must notify the Department's Project Manager in writing when it believes that the Project is substantially complete. The Design-Builder must ensure that any specified training for Department personnel (such as operation and maintenance of an ITS system, drainage pumping station, etc.) has been completed before it may receive a certification of Substantial Completion.

Within seven days of receipt of the Design-Builder's written application for a certificate of Substantial Completion, the Department's Project Manager, in the company of the Design-Builder, must inspect the Project covered by the notice. The Design-Builder must complete or correct any outstanding items before issuance of the certificate of Substantial Completion.

If the Design-Builder had outstanding issues, it must request re-inspection by the Department's Project Manager before re-submitting its request for issuance of the certificate of Substantial Completion.

10.7.3 Final Acceptance

Upon receipt of written notice from the Design-Builder of the projected completion date of all of the requirements for the Project, the Department's Project Manager will inspect or review any remaining portions of the Project not inspected at the time of issuance of the certificate of Substantial Completion and review any activities required under the contract not completed at the time of Substantial Completion on the projected completion date to verify that all work items, including surveys and As-built Plans and Design Acceptance, have been completed.

Upon verification that all items have been completed, the final inspection by the Department's Project Manager and the Regional Director shall be scheduled and conducted within 14 Calendar Days. If the inspection discloses work, in whole or in part, as being unsatisfactory, the Department's Project Manager will give the Design-Builder the necessary written instructions within the time limit set by the Department's Project Manager. Upon correction of the work, the Department's Project Manager will make an additional inspection and notify the Design-Builder accordingly as soon as reasonably possible thereafter.

For Federal-aid contracts, to ensure prompt federal acceptances and payments, a written notification should be sent to the FHWA Area Engineer when the contract is 95% complete, but no less than one month before the anticipated Final Acceptance recommendation by the Regional Director.

In the Final Acceptance of DB contracts, whether financed with federal or 100% State funds, concurrence in the acceptance of completed DB contract by cooperating or affected agencies should be obtained to the extent possible. The term cooperating agency is intended to mean any federal, State, county, city, Utility, or other agency which has provided funds, land, or some type of real interest for constructing any portion of a DB project.

A) The following are some examples of cooperating or affected agencies:

1) An agency or political entity which is either participating in the cost of the work or will have the maintenance responsibility upon completion;

2) An agency or political entity which has furnished funds for adjusting, improving, or constructing facilities as part of the DB contract;

3) A Utility whose facilities may be adjusted as a part of the DB contract;

4) A governmental agency which has placed certain requirements as a condition of conveying land or property to the State for purposes of the DB project (an infrequent condition, but a possibility);

5) The United States (US) Coast Guard or US Army Corps of Engineers relative to compliance with clearance requirements affecting navigation; or

6) A local government or toll authority which has reached agreement with the State for improvement or adjustment of some segment of its street or highway system as a part of the DB contract.

B) Any of the following are acceptable forms of documentation of acceptance by affected agencies:

1) A written notification of acceptance from the agency;

2) A documented report by the Department's Project Manager of verbal acceptance by a responsible agency official, which also indicates that a copy of this report has been mailed to the agency; or

3) Documentation of correspondence sent to the agency requesting its concurrence with the acceptance of the Project or comments as to corrections needed and indicating that no reply by a specified date will signify concurrence.

Where cooperating or affected agencies concur in the acceptance of the Project, it will be sufficient to include a statement to that effect on the back of the Final Acceptance form indicating the dates of such concurrence, without forwarding copies of the documentation. However, where no replies are received from the other agencies or where there are specific objections by such agencies which have not been resolved, copies of related correspondence and reports should be forwarded with the recommendation for Final Acceptance.

There should be no unreasonable delay in securing acceptances or comments from cooperating agencies since such delays would place unnecessary and unwarranted hardships upon the Design-Builder, who must maintain the Project during such extended periods and suffer the interest costs of retained monies which could otherwise be released to them upon Final Acceptance. If there are cooperating agencies whose acceptance is required prior to acceptance by the Department, the names and specific acceptance requirements must be spelled out in the Contract Documents so that the Design-Builder is informed of such requirements.

It should be standard procedure to notify all affected agencies of the imminent completion of the DB contract so that any valid comments they may have can be incorporated into the DB project's punch list. The acceptance of any cooperating or affected agencies could be made subject to the satisfactory completion of the remaining work which affects them. In addition, as soon as work affecting such agencies is completed, their review and acceptance should be solicited, rather than waiting until the completion of the DB contract.

In the event that a cooperating or affected agency refuses to accept a project because of some reason which is not acceptable to the Department, or requests additional work beyond the scope of the DB contract, copies of such correspondence, together with the Department's Project Manager's recommendations or response to each specific point, should be forwarded to the Regional Director with the recommendation for Final Acceptance. Furthermore, the Department's Project Manager should indicate on the back of the Final Acceptance form the dates of all concurrences by each affected agency in the Final Acceptance of the Project or the status thereof.

All efforts should be exercised towards prompt Final Acceptance of the Project upon satisfactory completion of all contract work. If uncompleted work agreements are involved, their processing should be expedited.

The Department's Project Manager may occasionally receive demand letters for notification of completion and acceptance submitted in accordance with Section 11-a of the New York State Lien Law. The Department's Project Manager should work with the Construction Division to determine a procedure to provide notice to any person performing work or providing Material to the Design-Builder at the same time the Design-Builder is notified of the Commissioner's acceptance of the Project.

The Department is required to submit a verified statement within 40 days of the Design-Builder's cashing the final check. To meet that deadline, the Office of Legal Affairs requires a response from the Department's Project Manager within 25 Days of the filing of any contract claim covering each specific cause of action, the accuracy of all stated facts and allegations, whether and how any related payments had been made, and the disposition of any previous disputed work letters or similar matters. While documentation will not be needed at that time, the Department's Project Manager's response will be time consuming.

In order to provide sufficient lead time for investigation, review, dispositions, and response to Design-Builder claims, the following procedure should be implemented.

Upon Final Acceptance or receipt from the Design-Builder of a request for an uncompleted work agreement, the Design-Builder's attention should be directed, in writing, to DB Sections 109L-12 or 109S-12, depending on the size of the Project, as follows:

> *"In accordance with DB Section [109L-12 or 109S-12] of the New York State Department of Transportation's DB Section 100, the final agreement for the Project herein referenced will not be drawn and finalized until all work required under the Contract has been satisfactorily completed, all claims presented, and all accounts for Extra Work and Material have been rendered, considered, and, if agreed to, made a part of such final agreement. Since the Project herein referenced has been accepted or recommended for acceptance, a final accounting must be completed.*
>
> *"As the Design-Builder, you are hereby required to promptly submit to the Department's Project Manager all claims and accounts for Extra Work and Material, together with supporting measurements and/or data. In order to be considered as a part of the final agreement, claims and supporting documentation must be received by the Department's Project Manager within 15 days of the date of this letter. If this deadline presents a serious problem, please notify the Department's Project Manager by certified mail within 15 days of the date of this letter as to when you will forward the required information."*

Concurrently, the final agreement should be processed without delay. The following are the purposes of the above notification and request:

- To encourage timely submission of all claims to ensure adequate consideration and response; and
- In the event of noncompliance with the request by the Design-Builder, it can be cited in the State's defense.

Before the Department's Project Manager transmits the final agreement package for processing to the Regional Director, the disputed work process must be completed. The Department's main office should be contacted if any disputed work letters are found to be outstanding in order that a reply may be immediately prepared to minimize delays in final payment.

In the event that a disputed work letter or a request by the Design-Builder for a meeting to make another review of all disputed work issues is received subsequent to the Department's Project Manager's transmittal of the final agreement package to the Regional Director, the Department's Project Manager should immediately notify the Department's main office to stop the processing of the final agreement until such issues are resolved. *See* also Exhibit III, Division 2, Part 2, Section 109-10, Dispute Resolution and Disputed Work Provisions.

It may be anticipated that some Design-Builders will continue to defer the submission of their claims to some point within the prescribed 40-day period after receipt of final payment or beyond that period by returning the final check. In such instances, the Office of Legal Affairs should be promptly notified of the receipt by the Department's Project Manager of any claim directly from sources other than the Department's main office, and the Department's Project Manager should expedite review and report to the Office of Legal Affairs within 25 days of the receipt thereof from any source.

When a local road or street is necessary as a detour route during the construction of a project, the Department issues an official order establishing the detour route as a temporary State Highway pursuant to Section 42 of the New York State Highway Law. To eliminate the need for a second official order at the completion of the work, the following paragraph is inserted in an Official Order of this nature:

> *"FURTHER ORDERED: That this official order shall expire when Contract No. _____ is accepted by the Commissioner of Transportation in accordance with Section 44 of the New York State Highway Law."*

The agency of original jurisdiction should be informed by a letter from the Department's Project Manager that the contract has been accepted and that the official order establishing the detour route as a temporary State Highway is, therefore, rescinded.

As necessary, Form C230, Designation of Restricted Highways, is prepared and issued by the Department's Project Manager, with concurrence from the Regional Director. Form C231, Notice of Cancellation of Designation of Restricted Highway, should likewise be prepared and issued by the Department's Project Manager with concurrence from the Regional Director upon receipt of notification of acceptance of the contract.

Notice to all agencies responsible for maintenance and repair of the Final Acceptance of the Project are to be prepared and mailed by the Department's Project Manager in accordance with the following:

- At the time the Department's Project Manager recommends acceptance of the contract, notices to the agencies responsible for maintenance and repair should be prepared for mailing (except for date) and held, pending notification of the Commissioner's acceptance of the contract;
- Upon the Department's Project Manager's receipt of a copy of the contract acceptance letter, the date of the official acceptance should be inserted into the previously prepared notices and transmitted to the agency or agencies concerned; and
- A copy or print of the maintenance table and notes from the plans should accompany each notice. In each notice include the contract number, description, and county.

The Regional Director shall transmit a recommendation for contract acceptance to the Deputy Chief Engineer, Construction, using Form R 45c (DB) (Exhibit V – Forms for Department Use).

For Federal-aid projects, the Department's Project Manager shall execute and the Regional Director shall transmit a Form HC 193a (DB), Project Materials Certification (Exhibit V – Forms for Department Use) to the FHWA Division Administrator.

10.8 CLOSE-OUT

At the conclusion of the Project, the Contract closeout will initiate a final audit of Contract expenses and allow the Department to release any retainage. Contract closeout should be completed by the Department's Project Manager in a timely manner. The standard procedures for closeout of Department contracts are contained in the Department's MURK Part 1D, Chapter 5, and Contract Administration Manual Section 109-11. Contract Final Acceptance is covered in Section 10.7.3 of this DBPM above.

10.8.1 Final Agreement

The final agreement [Form C47-B (DB) – Final Agreement, Appendix 109L-A or 109S-A] will be drawn and finalized when all Work required under the Contract has been satisfactorily completed and all claims presented and all accounts for Extra Work and Material have been considered and, if agreed to, made a

part of such final agreement. Work remaining to be accomplished under an uncompleted Work agreement, shall be considered as completed Work for the purpose of the final agreement.

Prior to processing the final agreement, the Department's Project Manager must ensure that every Order-on-Contract has been appropriately processed and that no Orders-on-Contract are still pending. The Department's Project Manager must also ensure that the "estimated force account" has been replaced by the "actual force account" for any Work completed under the Contract as force account work.

The Department's Project Manager should also review unanswered disputed Work letters, if any. If unanswered disputed Work letters exist, the Main Office should be contacted in order that a reply may be immediately prepared to minimize delays in final payment. In the event that a disputed Work letter or a request by the Design-Builder for a meeting to make another review of all disputed Work issues is received subsequent to the transmittal of the final agreement package to the Construction Division, Main Office should be immediately notified to stop the processing of the final agreement until such dispute Work issues are resolved.

If it appears that the all Orders-on-Contract have been completed and no disputes are outstanding, the Department's Project Manager should send the following notification to the Design-Builder:

> *"In accordance with Section 109[L or S}-11 of the Contract, the final agreement for the Project referenced herein will not be drawn and initialized until all Work required under the Contract has been satisfactorily completed, all claims presented, and all accounts for Extra Work and Materials have been rendered, considered, and, if agreed to, made a part of such final agreement.*
>
> *Additionally, as of the date of this notification, the following have not yet been received and may delay the processing of the final payment:*
>
> [LIST ANY MISSING DOCUMENTATION. IF ALL DOCUMENTATION HAS BEEN SUBMITTED, THE NOTIFICATION SHOULD BE MODIFIED ACCORDINGLY.]
>
> *You are promptly required to submit to this office any exceptions or disputes relative to the accounts for Extra Work and Materials, together with supporting data, and any other documentation listed above. In order to be considered as a part of the final agreement, your reply with supporting documentation must be received by this office within 15 Working Days of this notification. If this deadline presents a serious problem, please notify this office by certified mail within 15 working days of the date of this notification as to when you will forward the required information.*
>
> *If notification is received from you within fifteen Work Days of this notification, it will be assumed that you have not outstanding disputes and the final agreement will be processed".*

If a reply is not received by the Design-Builder within the time period requested, the final agreement should be prepared. If any issues are presented by the Design-Builder to the Department, they should be referred to the Regional Office promptly upon receipt.

The documentation to be included in the final agreement package is as follows:

A) Certification of Work Payment [CONR 30b (DB)];

B) Documentation to Support Any Charges to the Design-Builder

This documentation includes LDs, credits, and royalties. Every charge to the Design-Builder must have an explanation and back-up documentation to justify the charge.

Back-up documentation may include correspondence, calculations, or copies of diary sheets;

C) Documentation to Support Any Bonus Payment or Penalty Deduction Resulting from an Incentive/Disincentive

Unless fully documented in an Order-on-Contract, a complete description of the payment or deduction is to be provided;

D) Documentation to Support Payments or Deductions Made Under Asphalt and Fuel Price Adjustment Items

See Section 7.11 for additional information on asphalt or fuel price adjustments. The documentation to be submitted regarding asphalt or fuel price adjustment items will vary on the price adjustment program instituted by the Department.

E) General Release from Claims

When an administrative settlement has been reached on the Contract, a general release from claims must be executed by the Design-Builder when signing the final agreement. The Construction Division will prepare the release after notification by the Region that the final agreement package is being prepared;

F) Prime Contractors Certificate and Subcontractors Certification (AC 2947 and AC 2948);

G) Prime Contractor Report of Payments to D/M/WBEs (AAP 21b);

H) Federal-Aid Contract Documentation

The federal Materials Certification Form (HC-193) must be completed for Federal-Aid contracts and Statement of Materials and Labor Used by Contractors on Highway Construction Involving Federal Funds (Form FHWA-47) must be completed for projects on the NHS that exceed $1 million;

I) Final Agreement Transmittal Memorandum.

Once the final agreement is prepared, it should be forwarded to the Design-Builder for review and signature. Any documentation missing from the Design-Builder in order to process the final agreement should also be requested at this time. If the Design-Builder refuses to sign the final agreement or provide required documentation within seven Calendar Days, the Design-Builder should be notified that final payment cannot be made without the required signature and/or documentation. Delays in processing the final payment must be documented. If it becomes apparent that the Design-Builder has not intention of signing the final agreement, the final agreement should be processed without the Design-Builder's signature. Final agreements processed without the Design-Builder's signature must be accompanied by an explanation to the Construction Division.

After return from the Design-Builder of the signed final agreement, the final agreement is to be signed by the Regional Director or his/her designee. The final agreement is to then be submitted to the Construction Division, with a copy retained in the Regional Office files.

The Commissioner, or his/her designee, will have final Approval of the final agreement as prepared and certified as to its correctness by the Department's Project Manager and approved by the Regional Director, less any and all deductions authorized to be made by the Commissioner under the Contract. The Commissioner may reject the whole or any portion of the final agreement, should the certification of correctness by the Department's Project Manager be found to be inconsistent with the terms of the Contract or otherwise improperly given.

Payment pursuant to such final agreement less any deductions authorized to be made by the Comptroller shall constitute the final payment to the Design-Builder.

10.8.2 Prompt Payment

Under prompt payment legislation, payment to the Design-Builder are subject to interest penalties when not made within specified periods. The required payment date for a final payment on a highway construction contract is 75 Calendar Days after "receipt of an invoice." Receipt of an invoice for a final payment is further defined as "the date on which the contract work has been accepted as completed by the commissioner of transportation." This invoice date, also referred to as the Merchandise/Invoice Received (MIR) date, may be adjusted under the following conditions:

A) Defective Invoice

If the Design-Builder fails to provide necessary documentation as required by the notification cited in Section 10.8.1 of this DBPM or by the Contract, the MIR date is increased by the number of days it takes to correct the deficiency. The Department is responsible for notifying the Design-Builder in writing of such defects within 15 Calendar Days of Acceptance. If the Design-Builder is not notified in 15 Calendar Days of acceptance, the increased MIR date is then reduced by the number of days taken to notify the Design-Builder in excess of the 15 Calendar Days.

B) Design-Builder Processing Delays

Since processing of the final agreement requires certain actions by the Design-Builder, some processing delays may be charged to the Design-Builder. The Design-Builder is required to review and sign the final agreement and accompanying documentation in seven Calendar Days. Time taken beyond this limit can be charged to the Design-Builder as a processing delay.

10.8.2.1 Documentation of the Final Agreement Process and the Merchandise/Invoice Received Date

A documented history of the preparation and processing of the final agreement must be maintained for each project from the date the project is accepted. Any delay in the progress of the final agreement which is in any due to the fault, neglect, or omission on the part of the Design-Builder must be carefully documented. All submissions must be date stamped so that the basis for the MIR date and any delays chargeable to the Design-Builder are documented. A summary of all delays attributable to the Design-Builder should be maintained and should include the following types of information:

A) A log of telephone calls, personal visits to the Regional Office, and correspondence by the Design-Builder related to disputes and the related delays to processing;

B) Delays in the submission of documentation by the Design-Builder in accordance with the notification cited in Section 10.8.1 of this DBPM or the Contract. All requests to the Design-Builder for the submission of such documentation should be in writing and the dates of their receipt documented. In the event the Design-Builder does not respond in due time, a follow-up letter should be sent; and

C) All requests for meetings to review disputes should be confirmed in writing and copies retained in the Region in the event of a dispute. The summary should refer to such letters and meetings and also should include reference to disputed work letters that result from such discussions.

To determine the MIR date, all of the following dates and time periods must be documented:

1) Acceptance date;

2) Inspection period;

3) Defective invoice; and

4) Design-Builder processing delays.

When establishing the MIR date, care must be taken so as not to charge the Design-Builder for concurrent delays. Also, the MIR date cannot really be established by the Region until after the final agreement is ready of Albany review. When the MIR date is determined, it should be entered on Form CONR 30b(DB), Certification of Work Payment. If the MIR date is more than 30 Calendar Days after Contract acceptance, an explanation is required in the final agreement transmittal memorandum.

The Construction Division may adjust the MIR date in accordance with Section 109-11(V)(C) of the Contract Administration Manual.

10.8.3 File Archiving

Agency records, and those records created under contract to the Department, must be retained by the Department in accordance with the New York State Education Law. Record retention and file archiving should be completed by the Department's Project Manager in accordance with the Department's MURK Part 1D, Chapter 5.2.

10.9 FOLLOW-ON ACTIVITIES

10.9.1 Warranties

If a two-year general Warranty or specific long-term Warranty provisions are included in the contract, arrangements will need to be made and scheduled with the Design-Builder for periodic mutual inspections of the Project after Final Acceptance. The frequency of such inspection will be specified in the contract.

Prior to Final Acceptance, the Design-Builder must provide a new Performance Bond covering the Warranty.

Any non-conformance with required performance or failure to respond to Warranty requirements must be documented in writing to the Design-Builder. Prior to Final Acceptance the Department's Project Manager must obtain a written designation of the Design-Builder's point of contact regarding any Warranty related items. If the Department's Project Manager will not have continuing responsibilities for the Project, the Department must designate its point of contact for Warranty related items.

If Warranty work is required, the Design-Builder should coordinate all Warranty activities with the Department's designated point of contact to ensure that there will be minimal disruption to the traveling public. Any work should be done according to an agreed written schedule and in full compliance with the Warranty provisions and other applicable provisions of the contract.

10.9.2 Maintenance after Construction

Design-Build contracts will not include any provisions for the Design-Builder to perform maintenance after Final Acceptance of the Project.

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