



NEW JERSEY DEPARTMENT OF
TRANSPORTATION

DESIGN-BUILD INDUSTRY WORKSHOP

HNTB



Welcome and Keynote Speakers (9 AM – 9:30 AM)

Moderator: Albert Balluch, Senior Director, Division of Construction & Materials, NJDOT

Welcome: Parth Oza, Assistant Commissioner, NJDOT

Keynote Speakers: Francis O'Connor, Commissioner, NJDOT

Robert Clark, Division Administrator, FHWA

Mike McDonnell, Executive Committee, ACECNJ

Roly Acosta, Board Member, UTCA/ACCNJ

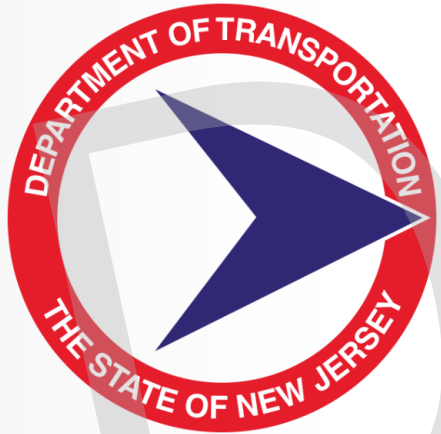
Design-Build Industry Workshop (9:30 AM - 12:00 PM)

Moderator: Thomas Kondash, Director, Alternate Project Delivery, NJDOT

Presentation: NJDOT and HNTB (with a 30-minute break)

Closing Remarks and Q&A: NJDOT and HNTB

KEYNOTE SPEAKERS





NEW JERSEY DEPARTMENT OF
TRANSPORTATION

DESIGN-BUILD PROGRAM

HNTB

1.

Organization Structure
(NJDOT)

2.

Procurement Process

3.

Request for Qualifications
(RFQ) (Solicitation)

4.

Request for Proposals
(RFP)

5.

Quality

Organization Structure (NJDOT)

NJDOT Design-Build Program Status

- **NJDOT's Policies and Procedures**

- NJDOT developing best practice Design-Build program (work in progress)
- Coordination with DAG, FHWA-NJ Division

- **Legislative Authority – Design-Build Construction Services Procurement Act**

- Procurement Act signed into law April 30, 2021

- **Proposed New Rules (N.J.A.C. 16:44B)**

- Comments received from Industry
- Update and Finalize Rules

NJDOT Design-Build Organization Structure

Assistant Commissioner
Parth Oza

Senior Director
(Division of Construction and Materials)
Albert Balluch

Director
(Alternative Project Delivery)
Thomas Kondash

Project Support Staff

Procurement Process

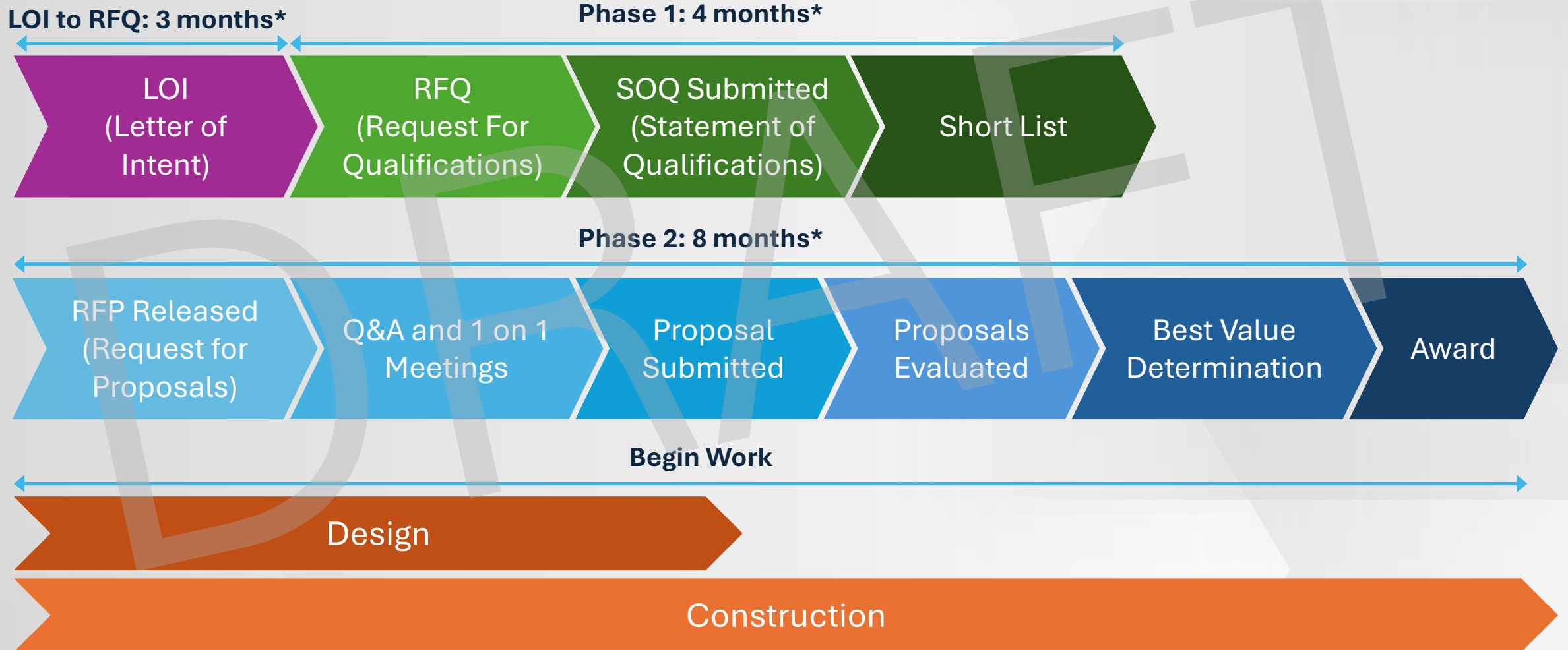
Procurement Process

**Letter of
Intent
(LOI)**

Phase 1
Request for
Qualifications
(RFQ)
(Solicitation)

Phase 2
Request for
Proposals
(RFP)

Procurement Process



*Procurement durations subject to change on a project-by-project basis

Letter Of Intent (LOI)

Provides Basic Project Information

- Project Name and Identifying Information
- Location Map
- Scope of Work
- Contract Work Classification Range
- Type of Procurement (Best-Value)
- Procurement Schedule – RFQ, RFP issuance dates
- Website address where RFQ will be posted
- Letter of Intent Response Form
- Contact email address

**Phase 1:
Request for
Qualifications
(RFQ)
(Solicitation)**

Evaluation Factors – Pass/Fail

- Legal
- Financial
- Backlog and Capacity
- Non-Suspension or Non-Debarment

Evaluation Factors - Quality

- Organization and Key Personnel
- Experience of the Firms
- Past Performance
- Compliance with SOQ Format and Organization Requirements

Shortlist will be announced

Phase 2: Request for Proposals (RFP)

Evaluation Factors: Pass/Fail, Quality, Price

- **Pass/Fail**
 - Legal
 - Financial
 - Administrative
 - DBE/ESBE/SBE Compliance

Phase 2: Request for Proposals (RFP)

Quality

- Design-Build Organization and Process
 - Key Personnel
 - Overall Design Build Team Organization
- Design-Build Approach to the Project (Technical Solutions)
 - Project Understanding
 - Design Approach
 - Construction Approach (Means and Methods)
- Schedule
 - Initial Baseline Progress Schedule
 - Project Completion/Interim Milestones

Price

- Price Score (50% minimum of the overall score)

Phase 2: Request for Proposals (RFP)

Best-Value Determination

- Criteria and Weight will be disclosed in the RFP
- The “Best-Value” determination shall be based on the following:
 - Proposal Price
 - Quality Evaluation of technical approach
 - Composite score of quality and proposal price will be computed to determine the Best-Value Proposal
- **NJDOT Technical Review Committee**

Request for Qualifications (RFQ)

Request for Qualifications (RFQ)

Sections

- **Role of the Department**
- **Project Schedule**
- **Rules of Contact**
- **Proposer Questions**
- **Proposal Stipend**
- **Forms**
- **Evaluation Process**

Role of the Department

- **1.3 Role of the Department – In the context of the Project, the Department is responsible for:**
 - Environmental Process & ROW acquisition
 - Secure 3rd Party Agreements
 - Secure Initial Agency Permits
 - Project Procurement & Post Award Administration
 - Preparation of Contract documents
 - Assign Department Project Team
 - Design & Construction Quality Assurance
 - Project Acceptance & Closeout

Project Schedule

Activity	Date
RFQ Issued	
Final Date for Receipt of RFQ questions	
Final Date for RFQ Addenda and/or Answers to Questions	
SOQ Due Date	
Short listed DB Teams Announced	
Draft RFP Issued	
Draft RFP Information Meeting	
Final RFP to short listed Firms	
Proposals Due	
Best Value Selection/Designation Announced	
Contract Award	
Notice to Proceed Issued	

Rules of Contact

- Rules begin upon issuance of RFQ
- End with execution of the Contract
- Communication with the Department can be made only with designated contacts



Proposer Questions

- All questions must be submitted by email to the Department's Contact
- Responses disseminated only by posting on the Department's BidExpress website and will not indicate which Proposer submitted question
- The Department may consolidate and may post multiple sets of questions and answers
- The last response will be posted on the Department's website on the date indicated in the procurement schedule in RFQ, Appendix A

Proposer Stipend

- The Department will provide payment of a stipend to Proposers on the short list who submit a Proposal in response to the RFP, except the selected Proposer
- No Proposer will be obliged to accept an offer of a stipend
- Any Proposer that declines to accept payment of a stipend will be required to sign a waiver to its right to payment
- The amount of the stipend is included in the RFQ, Appendix A

Statement of Qualifications Forms

Submitted in Volume 1

Form	Form Title
Form AOR	Acknowledgment of Receipt of RFQ, Addenda and Responses to Questions
Form L-1	Proposer's Organization Information
Form L-3	Authorization to Provide Professional Engineering Services in New Jersey
Form B	Backlog Information
	Certification of Non-Suspension and Non-Debarment Form

Submitted in Volume 2

Form	Form Title
Form R	Summary of Individual's Experience
Form E-1	Project Description
Form PP	Past Performance
Form S	Safety Questionnaire
Form DBE/ESBE/SBE	Record of DBE/ESBE/SBE Program Experience

Evaluation Factors

Legal

- **Form L-1 Proposer's Organization Information**
 - **Designer(s) and Construction Inspection Professional Firm to include prequalified disciplines**
 - **Work Classification Limit**
- **Form L-3 Authorization to Provide Professional Engineering Services in New Jersey**



Non-Suspension or Non-Debarment

- **Certification of Non-Suspension and Non-Debarment Form**



Financial

- **Surety Letters**



Backlog and Capacity

- **Form B Backlog Information**



Evaluation Factors Quality

Organization and Key Personnel

- Teams submit organizational chart and communication narrative
- Form R Summary of Individual's Experience



Past Performance

- Form PP Past Performance
- Safety
 - Form S Safety Questionnaire
 - Experience Modification Rates (EMR) – Proposer submits for Constructor(s) and Construction Inspection firm(s)
- Form DBE/ESBE/SBE Program Experience



Experience of the Firm

- Form E-1 Project Description



Compliance with SOQ

- Format and Organization requirements are met



Request for Proposals (RFP)

Request For Proposals (RFP)

- Instructions to Proposers (ITP)
- Part 1: Contract
- Part 2: DB100 General Provisions
- Part 3: Project Requirements
- Part 4: Utilities
- Part 5: Additional Project Requirements
- Part 6: RFP Plans
- Part 7: Engineering Data
- Part 8: DB Special Provisions
- Part 9: DB Proposal
- Part 10: Addenda

Instructions to Proposers (ITP)

The ITP includes significant contract provisions that must be complied with for a Proposal to be considered compliant for scoring and award as a Best Value Proposal

Typical Detailed Procurement Schedule

Activity	Date
Draft RFP Informational Meeting	
Final RFP to Shortlisted Firms	
Date Proposers may start submitting ATCs for review	
Proposal period one-on-one meetings with all Proposers	
Final date for Proposers to submit new ATC's for review	
Final date for requests for changes to Proposer's organization and personnel	
Final date for Proposers to submit revised ATC's for final review	
Final date for Department's responses to new ATC's submitted for review	
Final date for Department's responses to revised ATC's submitted for review	
Final date for receipt of Proposers Questions	
Final date for Proposers to respond to conditional approval of ATC's	
Issued Date for Final Addendum and/or answers to Proposer questions	
Proposal Due	
Post Proposal meetings (if required)	
Selection of Best Value	
Limited Negotiations (if required)	
Contract Award	
Notice to Proceed	

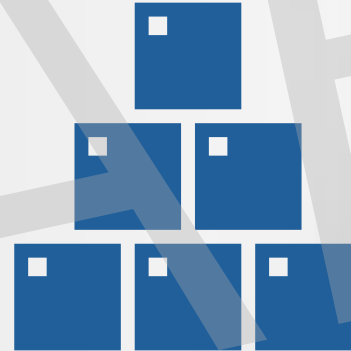
ITP: 1.7 General Provisions Regarding Proposals

- Each Proposal shall include the following
- An Administrative Submittal (Volume 1)
- A Technical Proposal (Volume 2); and
- A Price Bid (Volume 3).
- Instructions for each Volume are provided within the ITP in Appendices B, C and D with the standard forms provided in Appendix E



ITP: 1.14 Quality Control (QC) Provisions

- Place significant responsibility on the Design-Builder for quality of the project.
- Responsibility for quality of:
 - Project's Quality Control Program
 - Material requirements
 - Design & Construction



ITP: 1.15 Changes to the Proposer's Organization

- There are requirements that limit or prohibit the modification of a Proposer's Organization
- Particular attention placed on Principal Participants & Key Personnel
- When permitted by the Contract, Department approval will be required
- It is intended that the Proposer's Team composition related to Principal Participants and Key Personnel not change subsequent to publishing the Shortlists

ITP: 2.3 Addenda and Responses to Questions

- **Addenda**

- The Department may at any time modify conditions or requirements of the RFP by issuance of Addendum via BidExpress

- **Questions and Responses to Questions: Each Proposer/Design Builder may submit**

- Questions requesting clarification or interpretation of the Contract
- Two Forms of Questions:
 - **Public questions: NJDOT's response is provided to all Teams**
 - **Confidential questions: NJDOT's response only provided to the team that submitted**
- The responses will not be considered part of the Design-Build contract but may be relevant in resolving any ambiguities in the DB Contract.
- Inquiries resulting in any modifications to the Contract will be documented in Addenda

ITP: 2.4 One-On-One Meetings

- **The Department will plan to conduct one or more confidential One-On-One meetings with each Proposer during the procurement**
- **The intent of the confidential one-on-one meetings is to:**
 - Have confidential discussion
 - Proposers may wish to discuss their strategic approach to winning and delivering the project
 - Proposers may wish to discuss potential ATCs for consistency with the Project Goals
 - Proposers may wish to discuss risks
 - Recommendations to improve the contract via issuance of Addenda
 - Raise questions seeking clarification, Etc.

ITP: 2.6 Proposal Stipend & 2.7 Escrowed Bid Documents

- **2.6 Proposal Stipend**

- To receive the stipend the proposer must meet the requirements for quality

- **2.7 Escrowed Bid Documents**

- As a condition of the award of the DB contract, the successful Proposer must agree to escrow all bid documents

ITP: 3.0 Alternative Technical Concepts (ATC)

- Allows a Proposer to submit to the Department, for pre-approval on a confidential basis, proposed alternatives to the Project Requirements, and design solutions included in the RFP
- Approved ATCs can be included in the Proposer's Proposal
- Submittal due dates provided in the Procurement Schedule, Appendix A
- Standard Forms for submittal provided in Appendix E
- Department reviews and makes a determination
 - **Approved**
 - **Disapproved**
 - **Approve with Conditions**

ITP: 4.6.2 Electronic Copy of Proposals & BidExpress

Proposers shall submit the full Proposal in electronic format via BidExpress

Instructions are provided in the Appendices

ITP: Proposal Evaluations

Overall Score



- The contract RFQ and ITP will clearly state the quality criteria that will be evaluated, and it is intended to also be transparent regarding the point distribution of each evaluation criteria
- The Quality and Price scores will be combined to establish the overall Proposal score
- Price will account for no less than 50% of the overall score

ITP Appendix A: Project Information

- Description of the Project
- Reference Documents
- Procurement Schedule
- Conflict of Interest
- Department's Contact
- One-on-One Meetings
- Alternative Technical Concepts
- Quality Evaluation Factors, Subfactors and Weighting

ITP Appendix B: Administrative Submittal Requirements

Submitted in Volume 1

Proposal Component	Reference
Section 1	
Written Certification from the Subcontractor(s)	B2.2.2
Section 2 — Proposer Information	
Summary of Proposer's Legal Structure (2 single sided pages)	B2.2.1
Changes in Organization (Form RFC, if applicable)	B2.2.2
Licensing Information	B2.2.6

Appendix B: Administrative Submittal Requirements

Submitted in Volume 1

Proposal Component	Reference
L-3, Authorization to Provide Professional Services in New Jersey	B2.2.3
Section 3 — Forms and Certificates	
Form AAP-10 DBE/ESB/SBE Solicitation Log	B2.2.3
Form AR, Acknowledgement of Receipt of RFP, Addenda and Responses to Questions	B2.2.3
Form C, Proposer's Representative	B2.2.3
Form CR, Commitment to Assign Identified Resources to Project	B2.2.3
Certification of Non-Suspension and Non-Debarment Form	B2.2.3
Certification of Non-Involvement in Prohibitive Activities in Russia or Belarus Form	B2.2.3
Form DC16, Disclosure of Investment Activities in Iran	B2.2.3
Form EEO, Equal Employment Opportunity Certification	B2.2.3

Appendix B: Administrative Submittal Requirements

Submitted in Volume 1

Proposal Component	Reference
Form KP, Key Team Member Information	B2.2.3
Form LLL, Disclosure of Lobbying Activities	B2.2.3
Form LDB, List of Proposed DBE/ESBE/SBE	B2.2.3
Form LSI, Letter of Subcontract Intent	B2.2.3
Surety Commitment Letters	B2.3.4.1
Appendix A	
Evidence of Authorization	B2.3.1
Joint and Several Liability Statement (If Applicable)	B2.3.2
Organizational Documents	B2.3.3
Appendix B	
Updated Financial Information	B2.3.4

Appendix C: Technical Proposal Submittal Requirements

Submitted in Volume 2

Proposal Component	Reference
Volume 2, Section 1 — Design-Build Organization and Process	
Volume 2, Section 1A — Key Personnel	
Key Team Member Form R	C2.1
Volume 2, Section 1B — Overall Design-Build Team Organization	
Design-Build Team Organization Chart (Narrative, Max X pages plus 11”x17” organization chart)	C2.2.1
Design-Build Team Communication Protocol (Narrative, Max X pages plus 11”x17” communication Graphic)	C2.2.2
Design-Build Quality Control Plan (max X pages plus organization charts)	C2.2.3
Volume 2, Section 2 — Design-Build Approach to the Project (Technical Solutions)	
Volume 2, Section 2A — Project Understanding	
Project understanding (Narrative, max 6 pages, Form R1 — max X pages, Form R2 — max X pages)	C3.1

Appendix C: Technical Proposal Submittal Requirements

Submitted in Volume 2

Proposal Component	Reference
Volume 2, Section 2B — Design Solutions	
Design Approach (Narrative, max X Pages)	C3.2.1
Copies of department's approval letter for each ATC that is incorporated into the proposer's proposal along with each submitted ATC that was approved and used.	C3.2.1
Volume 2, Section 2C — Construction Approach (Means and Methods)	
Overall Project Construction Sequence (Max X pages)	C3.3.1
Work Zone Traffic Control (Max X pages)	C3.3.2
Protection of Existing Facilities (Max X pages)	C3.3.3
Utility Work (Max X pages)	C3.3.4
Drainage Modifications (Max X pages)	C3.3.5

Appendix C: Technical Proposal Submittal Requirements

Submitted in Volume 2

Proposal Component	Reference
Volume 2, Attachment A — Design Drawings	
Project Limits	C3.2.2
General Configurations	C3.2.2
Construction Phasing	C3.2.2
Demolition Limits	C3.2.2
Work Zone Traffic Control	C3.3.2
Volume 2, Attachment B — Project Schedules	
Inline Baseline Progress Schedule (Max X pages)	C4.1
Inline Baseline Progress Schedule Narrative (Max X pages)	C4.1
Form SCD — Schedule of Contract Durations	C4.1

Appendix D: Price Bid

Submitted in Volume 3

Section	Description	Reference
Section 1	<ul style="list-style-type: none">Form PP, Price Bid Cover Sheet	D2.1
Section 2	<ul style="list-style-type: none">Form SP, Schedule of Prices	D2.2
	<ul style="list-style-type: none">Form WPS, Work Payment Schedule	D2.3
Section 3	<ul style="list-style-type: none">Form BB, Bid Bond	D2.4

Appendix D: Price Bid – Form SP

Item #	Item Name	Price (1)
TBD	Design Build – Construction Work	
TBD	Design Build – New Work	\$XXX,000.00
TBD	Design Build – Utility Related Work	\$XXX,000.00
	Subtotal A	
Section 154	Design Build – Site Mobilization (Maximum 4% of Subtotal A)	
	Subtotal B (Sum of Subtotal A and Site Mobilization)	
TBD	Design Build – Design Services	
TBD	Design Build – Construction Inspection Services	
TBD	Design Build – Quality Control Services	
	TOTAL PROPOSAL PRICE	

Notes:

- 1.) Proposers shall complete Form SP using the excel spreadsheet located on the Department's Project web site.
- 2.) Subtotal B will be the value used to *calculate* the 30% Prime/DB self work requirement less any Self Performance Specialty Items included in Part 5 – Special Provisions.

Instructions:

- 1.) Enter Lump Sum Price for each Price Item in the white, non-shaded, cells.

Appendix D: Price Bid – Form WPS

- (1) Percent of Lump Sum Price to be completed by Proposer. Total percent for all Work Items shall equal 100%
- (2) Subsequent to Selection of Best Value, the Design-Builder may submit to the Department a more detailed Work Payment Schedule which breaks individual work items into multiple stages, for the Department's review and acceptance. However, the sum of the percentages proposed for each stage shall equal the percentage for that work item submitted by the Design-Builder included on Form WPS, and in no case shall the payment for any individual stage be more than 50% nor less than 10% of the total percentage bid for that work item.
- (3) Payment will be verified through the CPM Cost Loaded schedule per Request for Proposals Part 5.

WORK ITEM	MAXIMUM PERCENT OF LUMP SUM PRICE	PERCENT OF LUMP SUM PRICE (To be completed by D-B) ⁽¹⁾
Demolition and Removal of Existing Bridge Elements	6%	
Demolition and Removal of Existing Approach Slabs	2%	
Construct Pier and Abutment Foundations	15%	
Construct Pier(s)	11%	
Construct Abutments and Wing Walls	12%	
Fabricate and Install Bearings and Superstructure	21%	
Construct Reinforced Concrete Bridge Deck Slab	18%	
Construct Reinforced Concrete Approach Slabs	3%	
Demolish and construct USGS Gaging station	2%	
Reconstruction of the bridge approaches between the project Tie-ins.	10%	
Miscellaneous (WZTC, Landscaping, etc.)	7%	
Fabricate and Install Bridge Rail	5%	
Fabricate and Install Guide Railing	3%	
Punch list work, Site Cleanup and Restoration	2% (fixed)	2% (fixed)
Retainage (Per RFP Part 2 109.05)	2% (fixed)	2% (fixed)

Appendix: E Forms

Form	Title
Form AAP-10	DBE/ESBE/SBE Solicitation Log
Form AR	Acknowledgment of Receipt of RFP, Addenda and Responses to Questions
Form ATC	Alternative Technical Concept (ATC) Submittal Form
Form C	Proposer's Representative
Form CR	Commitment to Assign Identified Resources to Project
	Certification of Non-Suspension and Non-Debarment Form
	Certification of Non-Involvement in Prohibitive Activities in Russia or Belarus Form
Form DC16	Disclosure of Investment Activities in Iran
Form EEO	Equal Employment Opportunity Certification
Form KP	Key Personnel Information

Appendix: E Forms

Form	Title
Form L-3	Authorization to Provide Professional Engineering Services in New Jersey
Form LLL	Disclosure of Lobbying Activities
Form LDB	List of Proposed DBE/ESBE/SBE Firms
Form LSI	Letter of Subcontract Intent
Form R	Summary of Individual's Experience
Form R-1	Risk Response Strategy Narratives
Form R-2	Additional Risk Identification and Assessment
Form RFC	Request for Change
Form SA*	Stipend Agreement
Form SCD	Schedule of Contract Durations

Appendix: F Conflict of Interest Policy

- Individual Conflict of Interest and Organizational Conflict of Interest
 - The Department will publish the identified conflicts in the RFQ and RFP (ITP)
 - The Design-Builder has a responsibility to identify and report any conflicts of interest as well

Part 1: Contract

- **Standard Design-Build Contract to be executed by NJDOT and the Design-Builder**

DRAFT

Part 2: DB Division 100 General Provisions

- **DB Division 100 General Provisions replaces Division 100 General Provisions of the 2019 Standard Specifications for Road and Bridge Construction in its entirety.**
- **Select Sections will be discussed briefly today**

Part 2: DB Division 100 General Provisions

- **101-02 – Abbreviations**
- **101-03 – Terms**
- **Section 104 – Scope of Work**
- **104.02.02 – Value Engineering**
- **104.03.03 – Types of Changes**
- **Deleted Work, New Work**
- **104.03.03.3a – Differing Site Condition**
- **104.03.03.e – Changes in Basic Project Configuration:**
- **104.04 – Alternate Technical Concepts (ATC)**
- **Section 105 – Control of Work**
- **Section 109 – Measurement and Payment**

Part 2: DB Division 100 General Provisions

101-02 Abbreviations

Design Builder's Team:

DQCE Design Quality Control Engineer

CQCE Construction Quality Control Engineer

QM Quality Manager

Department's Team

DQAE Design Quality Assurance Engineer

CQAE Construction Quality Assurance Engineer

NCR Non-Conformance Report

Part 2: DB Division 100 General Provisions

101-03 Terms

- **Quality Control** – activities performed by the Design-Builder to ensure Work performed conforms to contract requirements
- **Quality Assurance** – The Department's process of forming an acceptance decision to ensure the Design-Builder's design and construction are in contract conformance
- **Quality Manager** – The Design-Builder's designated individual responsible for the overall quality program

Part 2: DB Division 100 General Provisions

101-03 Terms

- **Directive Plans** – Depict required elements
- **Indicative Plans** – Indicate the nature and type of work to be designed, not a directed configuration
- **Non-Conformance Report** – Written documentation of deficiencies, instances of noncompliance, errors
- **Principal Participant** – the Proposer, Joint Venture, any Equity Participant

Part 2: DB Division 100 General Provisions

- **104.03.03**

- **Changes in Basic Project Configuration:** Material and Non-Material changes are discussed. It establishes conditions for contemplating compensable change. Only a DB ATC approved could alter the Basic Project Configuration...during the procurement. During execution, the Department may order a change that could be a change in the Base Project Configuration

- **104.03.03.3.a**

- **Differing Site Condition:** Notice, Recordkeeping provisions apply. Time & Cost compensation is possible if merit is determined

Part 3: Project Requirements

- 3.1.3 – Scope of Work
- 3.1.4 – Third Party Agreements
- 3.1.8 – Indicative Plans
- 3.1.9 – Directive Plans
- 3.2 – Project Management
 - 3.2.2 – Management Plans
 - 3.2.3 – Baseline Progress Schedule
- 3.3 – Project Team
 - 3.3.2 – Key Personnel
- 3.4 – Design Builder's Quality Program
- 3.5 – Design, Design Quality Control and Quality Assurance
- 3.6 – Construction Quality Control and Quality Assurance
- 3.7 – Environmental
- 3.8 – General Project Scope of Work
- 3.9 – Survey and GIS

Part 3: Project Requirements

- **3.10 – Right of Way**
- **3.11 – Public Involvement**
- **3.12 – Utilities**
- **3.13 – Geotechnics**
- **3.14 – Structures**
- **3.15 – Landscape Architecture**
- **3.16 –
Signage, Pavement Markings,
and Traffic Signals**
- **3.17 – Lighting Systems**
- **3.18 – ITS**
- **3.19 – Work Zone Traffic
Control & Access**
- **3.20 – Pavement Design &
Construction**
- **3.21 – Drainage & Stormwater**
- **3.22 – Highway Design**
- **3.23 – Document
Control Management & Reporting**

Part 3: Project Requirements

- **Appendix A – Construction Quality Control & Inspection**
- **Appendix B – Construction Quality Control Material Testing**
- **Appendix C – Design and Construction Quality Control Plan Template**
- **Appendix D – Quality Assurance Plan Program Guide**
- **Appendix D – Attachment 1 Schedule of Construction Quality Assurance and Verification Inspection**

Management Plans and Schedule Requirements (Reference RFP Part 3 Project Requirements Section 3.2.2)

Plan Title	Contract Document Reference	Initial Plan Submitted with the Proposal?	Submittal Deadline
Workforce Participation Plan	Part 2 105.02.05	No	60 Days after NTP
Safety Plan	Part 3, Section 3.2.2.3	No	30 Days after NTP or 30 days prior to beginning any construction work
Quality Control Plan*	Part 3, Section 3.4.2.3	Yes	30 Days after NTP
Overall Design-Build Team Organization Plan	Part 3, Section 3.2.2.5	Yes	25 Days after NTP
Design Management Plan	Part 3, Section 3.2.2.6	No	30 Days after NTP

Management Plans and Schedule Requirements (Reference RFP Part 3 Project Requirements Section 3.2.2)

Plan Title	Contract Document Reference	Initial Plan Submitted with the Proposal?	Submittal Deadline
Construction Management Plan	Part 3, Section 3.2.2.7	No	45 Days after NTP
Design Review Plan	Part 3, Section 3.2.2.8	No	10 Days after NTP
Transportation Management Plan/Emergency Response Plan	Part 3, Section 3.19.10	No	30 Days after NTP
Initial Baseline Progress Schedule	Part 3, Section 3.2.3	Yes	15 Days after NTP
Risk Management Plan	Part 3, Section 3.2.2.10	Forms R1 and R2 are submitted with the Technical Proposal	75 Days after NTP
Railroad Management Plan	Part 3, Section 3.2.2.11	Yes	45 Days after NTP

Design Units

- A Design Unit is a distinct portion of the Project of which the design is performed as a contiguous, integrated unit
- Within 30 Calendar Days of NTP, the Design-Builder shall provide a written report and schedule updating information submitted with the Design-Builder's Proposal and identifying each Design Unit

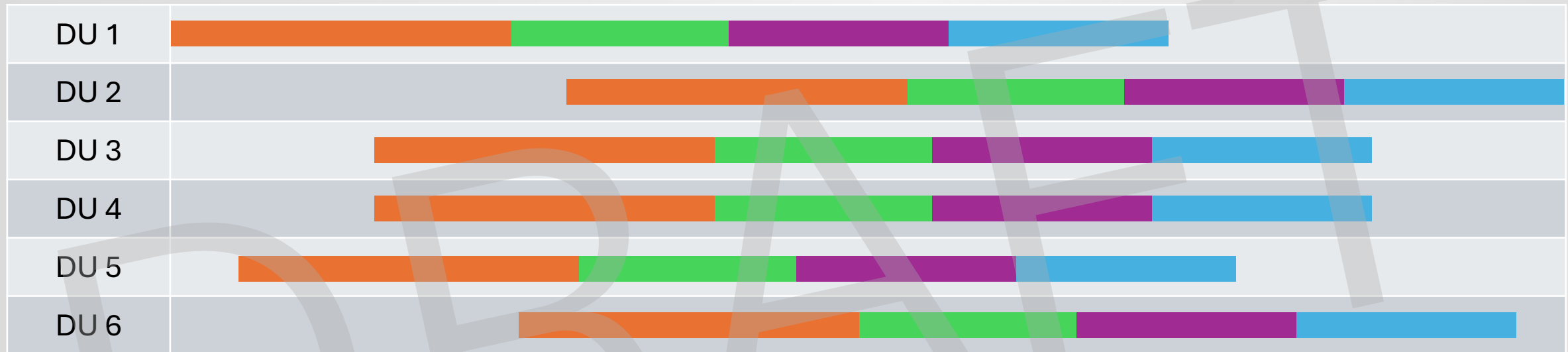
Stages of Design Development

- Definitive Design
- Interim Design
- Final Design
- Release for Construction Design

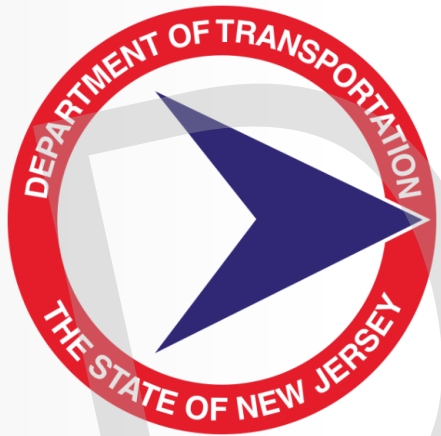
Design Units

- The identification of a Design Unit schedule is intended to facilitate Department participation in the design review processes
- **Design Units (examples):**
 - Bridge (substructure, superstructure) (Steel & Bearing as expedited)
 - Section of Roadway (Horz & Vert. Control)
 - Drainage & Grading Plans
 - Retaining Structures
 - Certain Utility Relocations
 - Work Zone Traffic Control

Design Units



- Definitive Design - design concepts and parameters are established that will be followed through to completion of the Project
- Interim design - after Definitive Design where the Design Plans and Project Specifications for a Design Unit are at the 60% to 80% stage of completion
- Final design - the Design Plans and Project Specifications for a Design Unit are 100% complete;
- Release for Construction - the Design Plans and Project Specifications for a Design Unit or a component thereof are 100% complete



NJAPA



Part 4: Utility Requirements

Provides information on the Design-Builder's overall responsibilities as they relate to existing and new utilities, the manner in which utilities are to be protected, relocated, upgraded, constructed or incorporated into the construction, and who will be responsible for the Work.

Part 4: Utility Requirements

4.2.2 – Utility Coordination Manager

- **The Design-Builder shall utilize a single dedicated person responsible for managing all utility coordination**
- **Responsible for managing all utility issues**

Part 4: Utility Requirements

- **Appendix A: Utility Requirements**
- **A-1: Utility Companies; List of utility companies with facilities within the project limits as well as contact information**
- **A-2: Utility Relocation Reimbursements; List of Department/Utility Co. Agreements executed**
- **A-3: Design Build Utility Documents; requirements associated with coordination between Design-Builder and Utility**

Part 4: Utility Requirements

Appendix B:

- **Utility Agreement Plan and Utility Owner Authorization Checklist**
 - Work described in Appendix B includes known relocation(s) and other utility work required to remove known interference(s) with Project elements
 - The Design-Builder is expected to coordinate with all affected utility owner(s) and the Department to negotiate and execute Final Utility Owner Authorization Checklist between the Design-Builder, Utility Owner(s), and Department and update the Utility Agreement Plans as necessary

Part 5: Additional Project Requirements

- **5.1 – Critical Path Method Schedule**
 - All Work (design and construction) included
- **5.2 – Payment Reductions and Liquidated Damages**
- **5.3 – Risk Register**
 - Project risks identified by NJDOT during the preliminary engineering design phase will be provided
 - Risk Register provided will be combined with Design-Builder's identified risks to form a Unified Project Risk Register
 - The Design-Builder will be responsible for updating the Unified Project Risk Register for the duration of the project

Part 6: RFP Plans – Directive Plans

DIRECTIVE AESTHETIC TREATMENTS



SOUTH ELEVATION

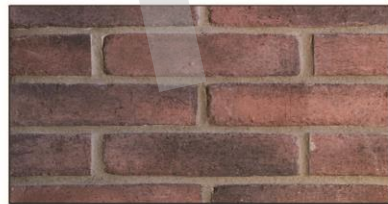


SOUTH ELEVATION

Part 6: RFP Plans – Directive Plans



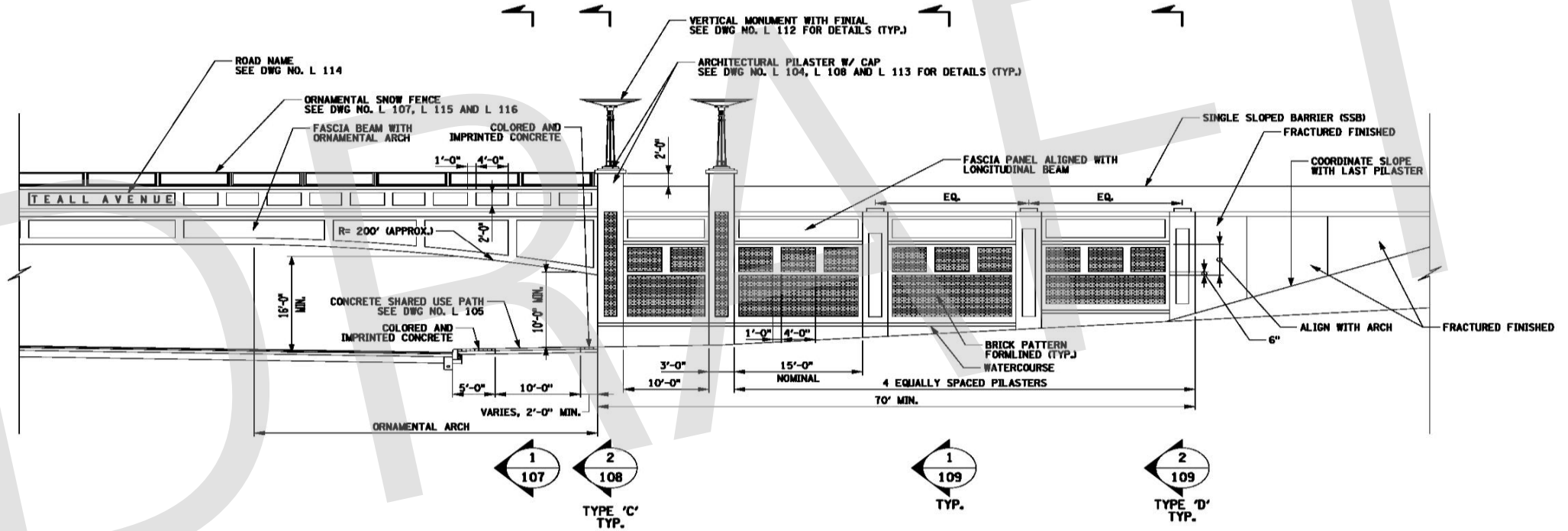
PARTIAL EAST ELEVATION



FORMLINER BRICK PATTERN DETAIL

Part 6: RFP Plans – Directive Plans

Directive Aesthetic Treatments

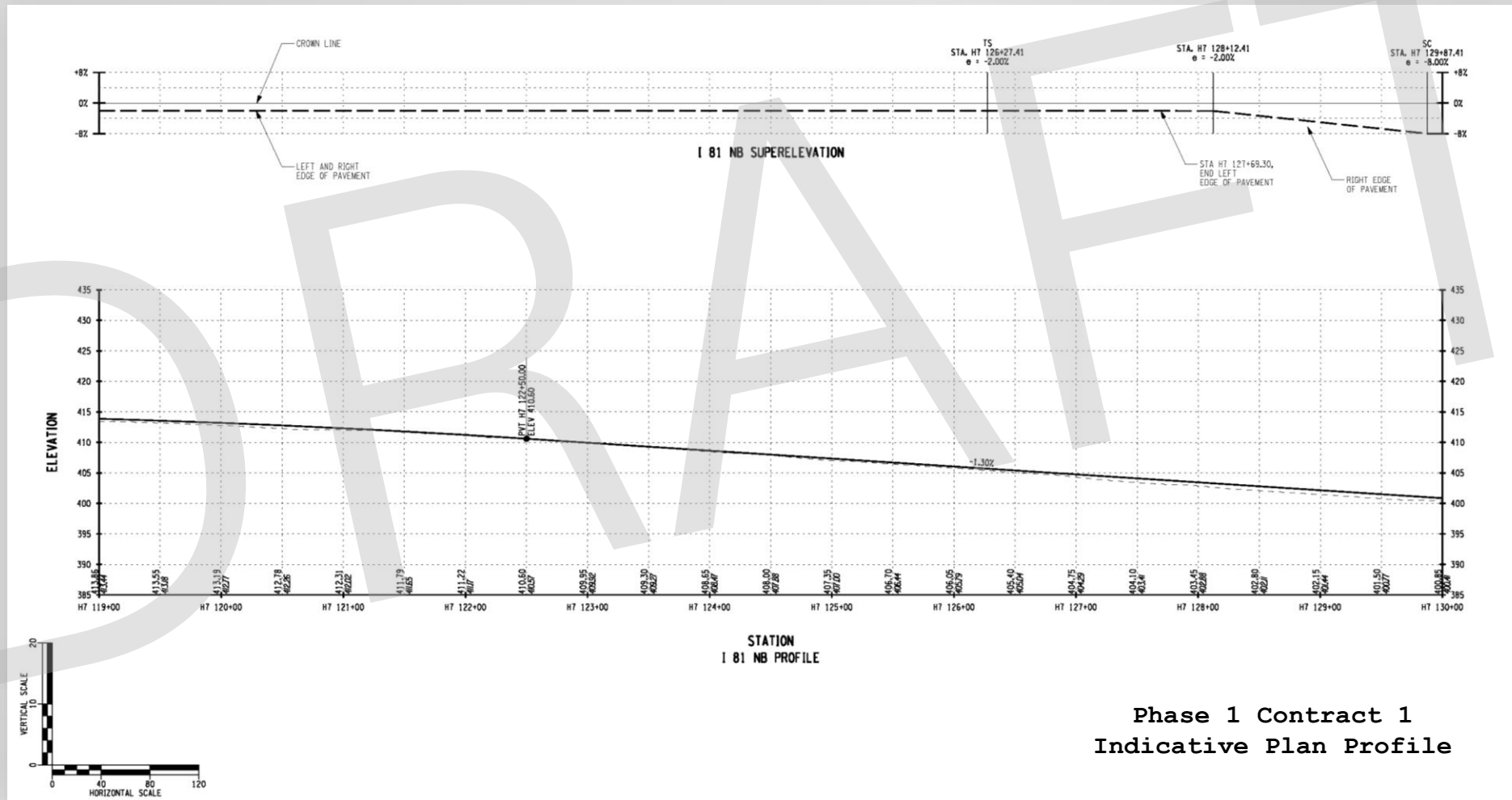


PARTIAL SOUTH ELEVATION - MIRROR TREATMENT ON OPPOSITE SIDE OF BRIDGE OPENING (PROVIDE NORTH ELEVATION TO MATCH)

Part 6: RFP Plans – Directive Plans



Part 6: RFP Plans – Indicative Plans



Part 7: Engineering Data

- Information and reports from the preliminary engineering activities
- Examples:
 - Select Survey Information
 - Design Criteria

Part 8: DB Special Provisions

- 8.1 – General
- 8.2 – NJDOT Standard Specifications for Road and Bridge Construction
- 8.3 – Special Provisions
- 8.4 – Design Document Change Announcements
- 8.5 – No Specification (NS) Items
- Appendix A - DB Standard Input
- Appendix B - No Specification Items

Part 8: DB Special Provisions

- **8.3 Special Provisions**

- Appendix A created from Standard Input (SI) with project-specific requirements filled in

Part 8: DB Special Provisions

- **8.4 – Design Document Change Announcements**
- **8.4.1 – Baseline Document Change (BDC)**
- **8.4.2 – Corrective Action Notice (CAN)**
- **8.4.3 – Quality Improvement Advisories (QIA)**

Design-Builders must incorporate BDCs, CANs and QIAs into the progression of their Design Unit submittals as agreed to with the Department

Part 8: DB Special Provisions

- **8.5 No Specification (NS) Items**

- The following No Specification (NS) Items are provided:

Item Number	Description
TBD	Design-Build - Design Services
TBD	Design-Build - Construction Inspection Services
TBD	Design-Build - Quality Control Service
TBD	Design-Build - New Work
TBD	Mobilization
TBD	Design-Build - Construction Work
TBD	Design-Build - Utility Related Work

Quality

DRAFT

Part 2: DB Division 100 General Provisions

101-03 Terms

- **Quality Control** – activities performed by the Design-Builder to ensure Work performed conforms to contract requirements
- **Quality Assurance** – The Department's process of forming an acceptance decision to ensure the Design-Builder's design and construction are in contract conformance
- **Quality Manager** – The Design-Builder's designated individual responsible for the overall quality program

Part 2: DB Division 100 General Provisions

101-03 Terms

- **Design Quality Control Engineer** – Design-Builder's representative, reports directly to the Quality Manager, responsible for all design QC
- **Design Quality Assurance Engineer** – Department's representative, responsible for monitoring/auditing the Design-Builder's design

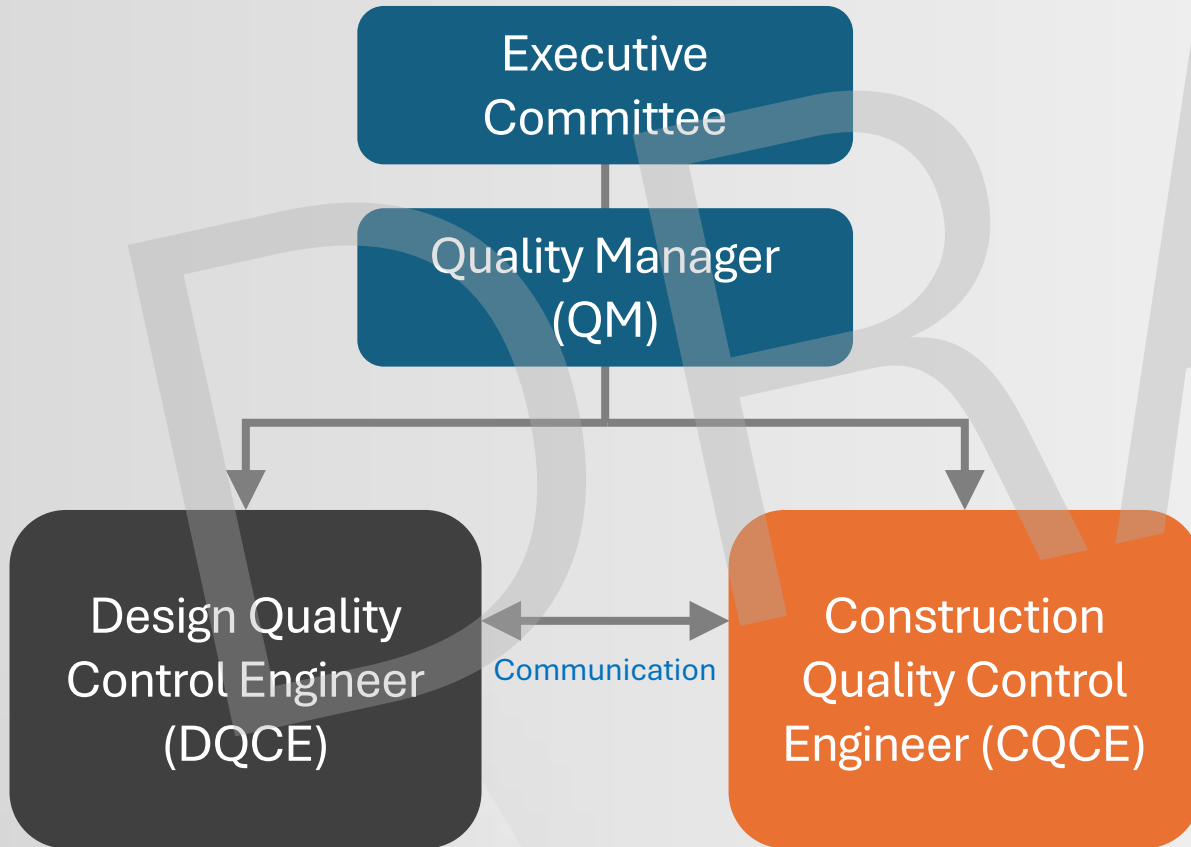
Part 2: DB Division 100 General Provisions

101-03 Terms

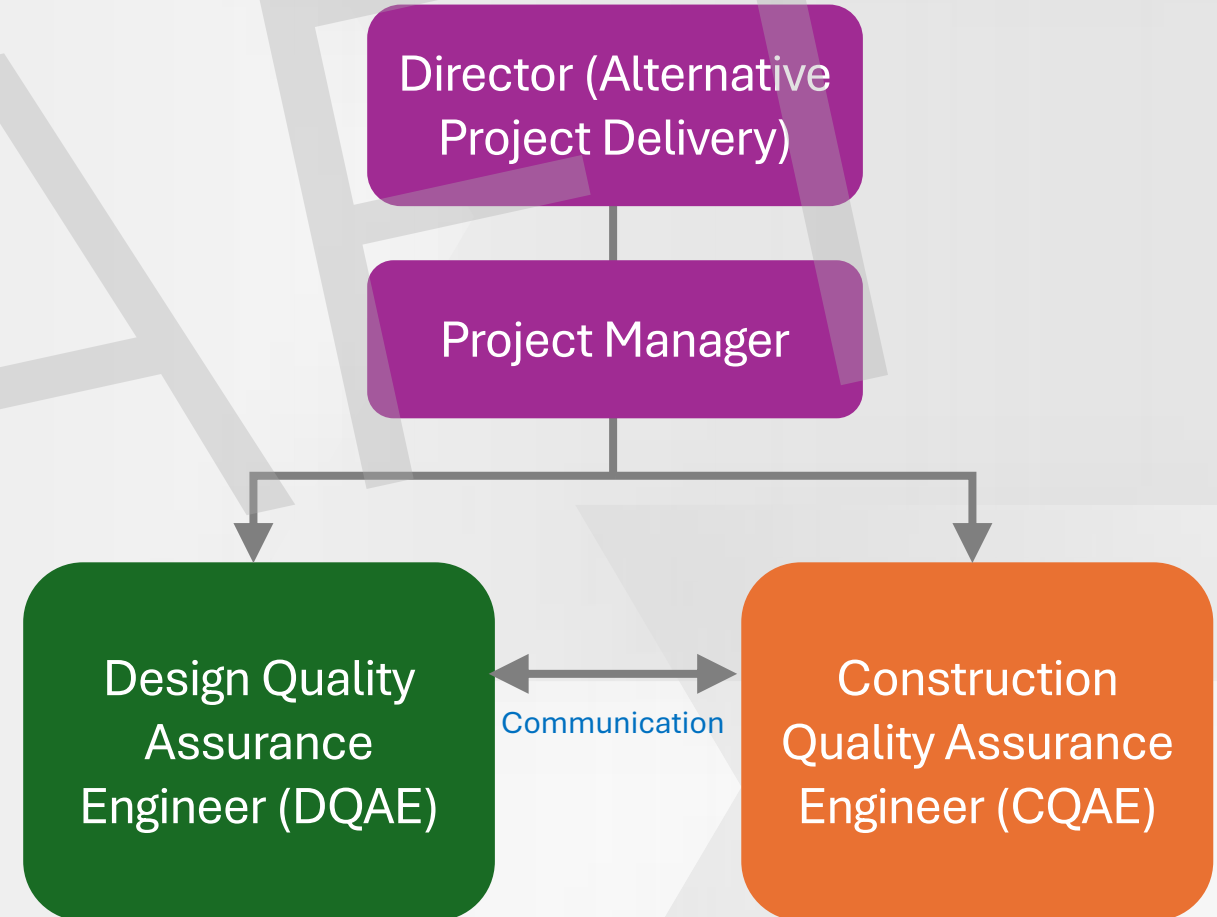
- **Construction Quality Control Engineer** – Design-Builder's representative who leads the construction quality control activities
- **Construction Quality Assurance Engineer** – Department's representative responsible for monitoring/auditing the Design-Builder's construction

Organization Structures

Design-Builder Project Team

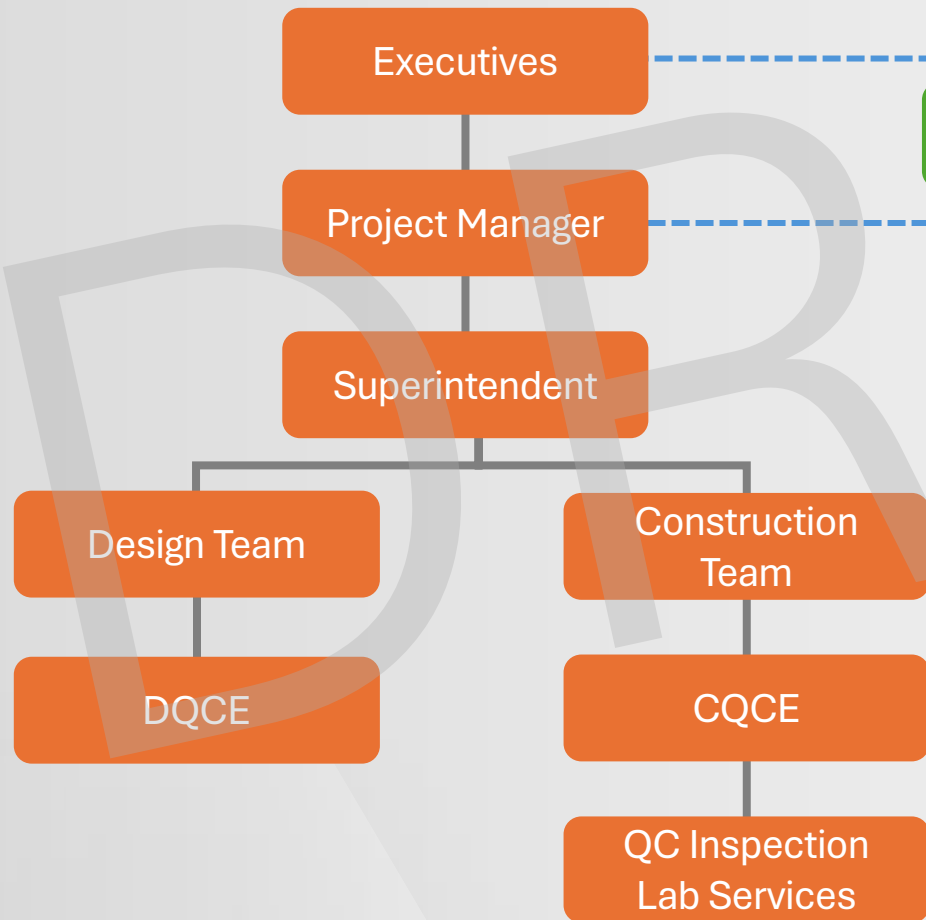


NJDOT Team

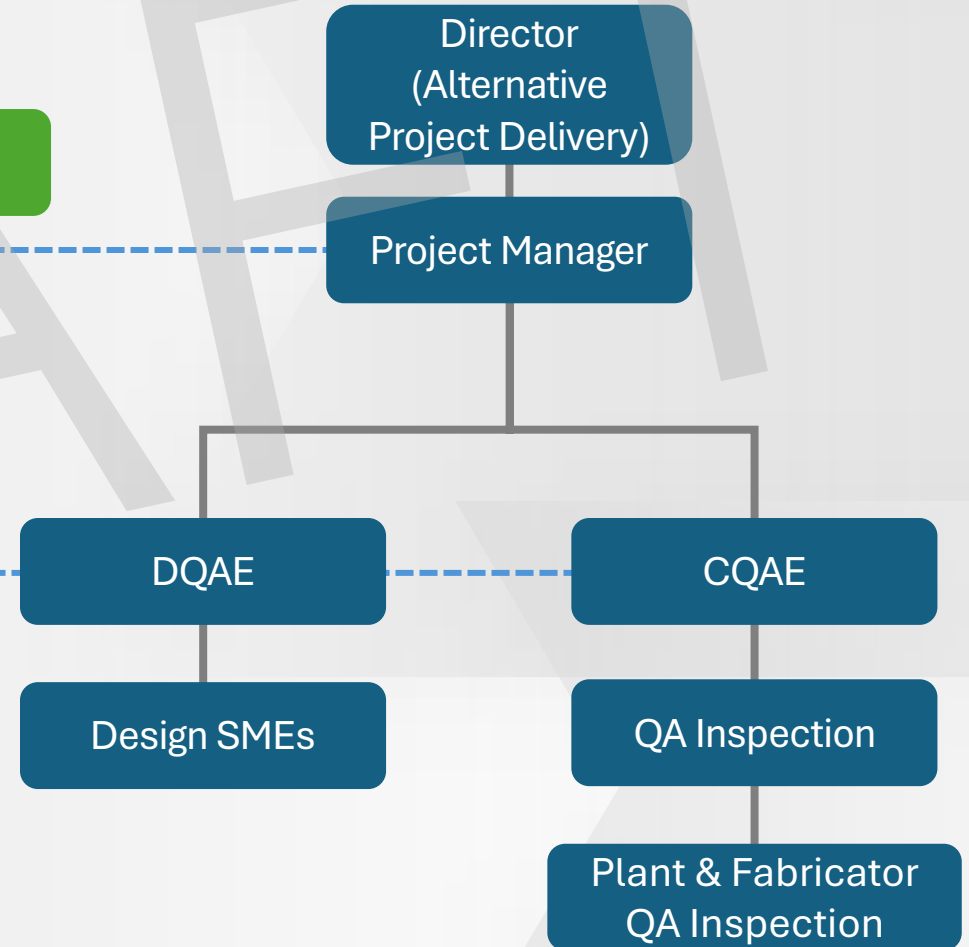


DB Project Organization Structure

Design-Builder Org. Chart



NJDOT Org. Chart



Project Quality Manager

Director (Alternative Project Delivery)

Project Manager

DQAE

CQAE

Design SMEs

QA Inspection

Plant & Fabricator QA Inspection

Design-Builder's Quality Manager

The designated representative of the Design-Builder who is responsible for the overall Quality Program of the Design-Builder, including the quality of management, design, and construction

Reports to:

- Design-Builder Senior/Executive Management

Interfaces with:

- Design QC Engineer
- Construction QC Engineer
- NJDOT Design QA Engineer
- NJDOT Construction QA Engineer

Examples of Work Includes:

- Ensures design and construction QC Engineers comply with Quality Control Plan
- Prepares and manages the DB Quality Control Plan
- Performs DB QC Oversight of Subcontractor Quality Plans
- Quality Manager issues monthly status report and monthly risk register update

Quality Provisions

- **Project Quality Plan Requirements (RFP Part 3, Section 4)**
 - Designates a Quality Manager
 - Defines Teams Commitment to Quality
 - Design Quality Control Engineer
 - Construction Quality Control Engineer

- **QC Plan to Meet all Project Requirements:**
 - Contractual (administrative)
 - Environmental & Permits (compliance)
 - Design (reviews)
 - Construction (inspection, verification & hold points)
 - Fabrication & Manufacturing (shop inspection)
 - Procurement (purchasing, approved materials & suppliers)
 - Document Control (format, process & digital storage)

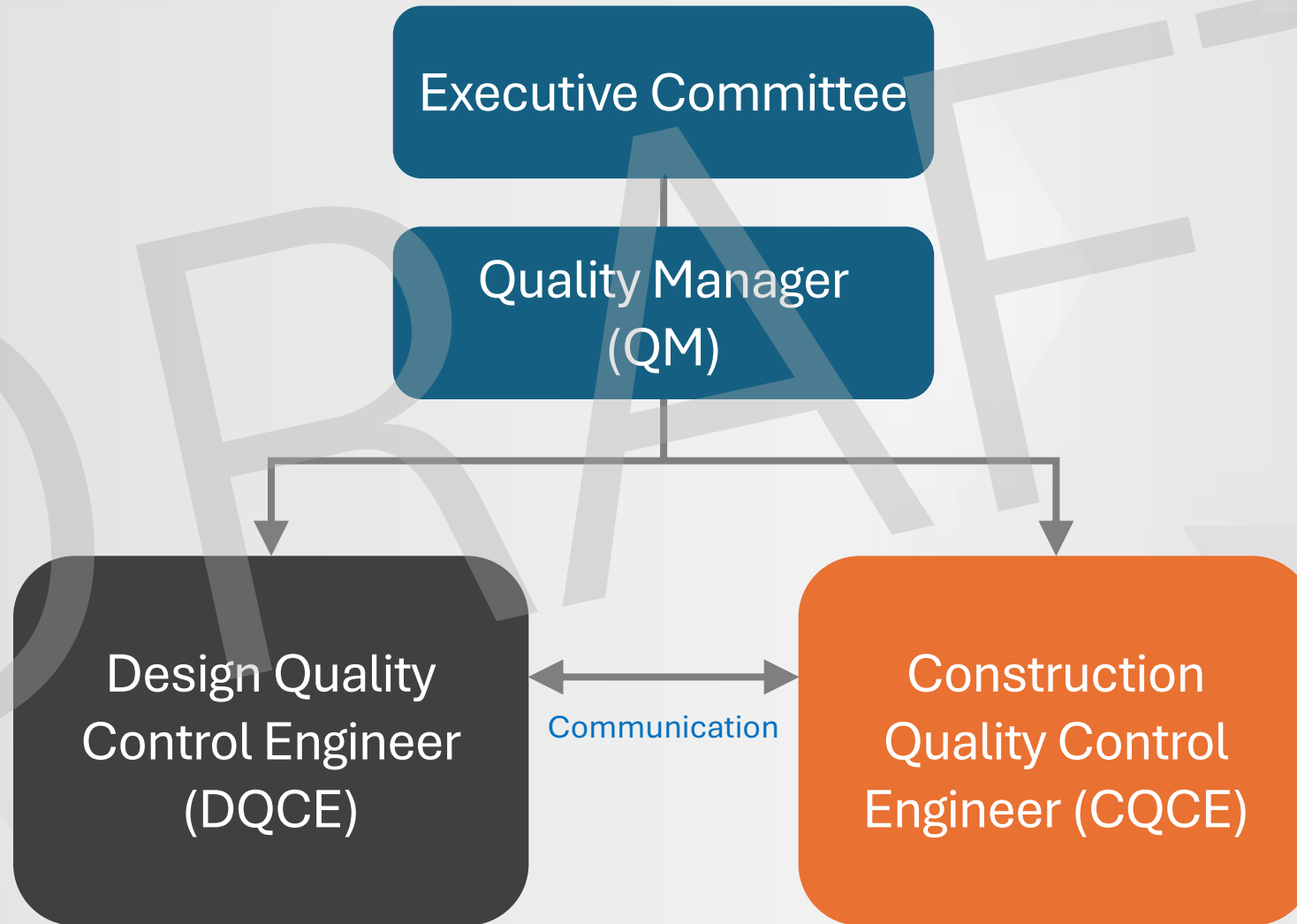
RFP Part 3, Section 4: Design-Builder's Quality Program

Proposal Component	Reference
General	4.1
Elements of the Design-Builder Quality Program	4.2
Quality Policy	4.2.1
Quality Program Organization	4.2.2
Quality Control Plan (Design and Construction)	4.2.3
Document and Data Control	4.2.4
Procurement and Purchasing	4.2.5
Control of Department Supplied Items	4.2.6
Product Identification and Traceability	4.2.7

RFP Part 3, Section 4: Design-Builder's Quality Program

Proposal Component	Reference
Process Control	4.2.8
Inspection and Testing	4.2.9
Control of Inspection, Measuring and Test Equipment	4.2.10
Inspection and Test Status	4.2.11
Control of Nonconforming Product	4.2.12
Corrective and Preventative Action	4.2.13
Handling, Storage, Packaging, Preservation, and Delivery	4.2.14
Control of Quality Records	4.2.15
Internal Quality Audits	4.2.16
Training	4.2.17

Design-Builders Quality Organization



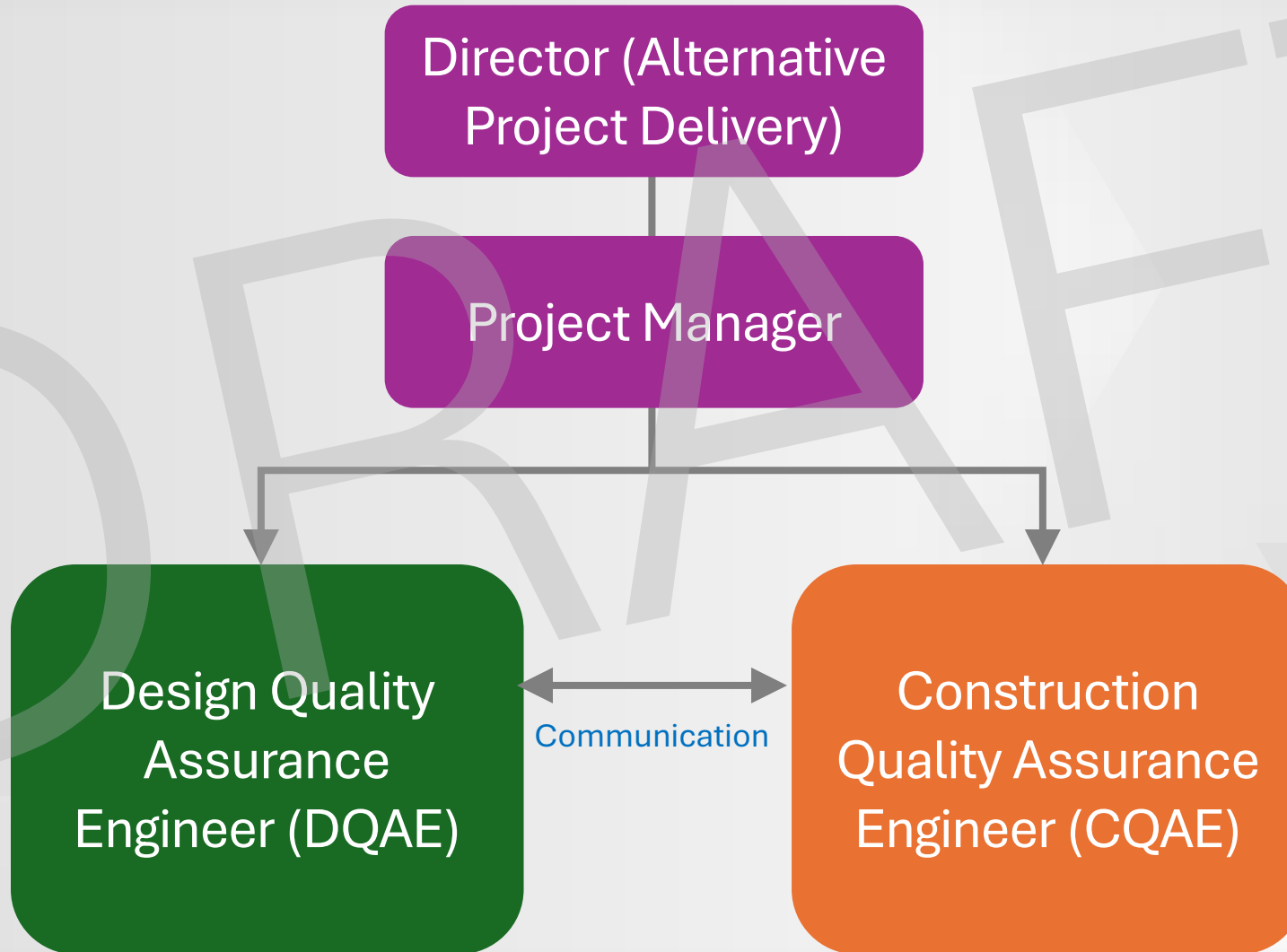
Design Quality Control Engineer (DQCE)

- Design-Builder's designated representative leading Design QC activities
- The Design QC Engineer shall have Quality Control responsibilities related to the following (Ref. Part 3, Section 4):
 - Design of permanent and major temporary components
 - Changes in design of permanent components
 - As Built Plans
 - Identifying and reporting non-conformities/non-compliance
 - Tracking, monitoring, and reporting on status of outstanding design-related non-conformance reports
 - Responsible for the Design QC organization
 - Reports directly to the Design-Builder's Quality Manager
 - Maintains open and frequent communication with the NJDOT's Design QA Engineer

Construction Quality Control Engineer (CQCE)

- Design-Builder's designated representative leading Construction QC activities
- The Construction QC Engineer shall have Quality Control responsibilities related to the following (Ref. Part 3, Section 6):
 - May be the Resident Engineer working for the Independent Construction Inspection Professional Engineering Firm
 - Responsible for overall management and supervision of the Design-Builder's Construction QC programs
 - Responsible for coordinating the schedules of construction QC inspectors
 - Responsible for the Construction QC organization
 - Reports directly to the Design-Builder's Quality Manager
 - Maintains open and frequent communication with the NJDOT's Construction QA Engineer

NJDOT Quality Organization



Design Quality Assurance Engineer (DQAE)

- Department's designated representative leading Design QA activities
- Reports to NJDOT's Project Manager
- Provides continuous design oversight
- Interfaces with:
 - Design-Builder Design QC Engineer
 - NJDOT Construction QA Engineer
 - Department Staff
- Verifies Design-Builder's QC Plan is followed
- Design Reviews (Definitive, Interim, Final, and Release for Construction)

Construction Quality Assurance Engineer (CQAE)

- Department's designated representative leading Construction QA activities
- Reports to NJDOT's Project Manager
- Provides continuous construction oversight
- Interfaces with:
 - Design-Builder Construction QC Engineer
 - NJDOT Design QA Engineer
 - Department Staff
- Verifies Design-Builder's QC Plan is followed
- Materials testing and acceptance

Part 3 Appendices

- **Appendix A – Construction Quality Control Inspection**
- **Appendix B – Construction Quality Control Materials Testing**
- **Appendix C – Design and Construction Quality Control Plan Template**
- **Appendix D – Quality Assurance Plan Program Guide**

Part 3 Appendix A – Construction Quality Control Inspection

- **Quality Control Inspection Requirements Tables**
 - Table 1 and 2 provide for QC Inspection Requirements

Part 3 Appendix B – Construction Quality Control Materials Testing

- **Used by Design-Builder as a guide to develop a Quality Control Plan**
 - Provides requirements for Materials Quality Control (QC) and Construction Inspection (CI)
 - Based on NJDOT manuals – 2019 Standard Specifications for Roads and Bridge Construction, Construction Procedures Handbook, etc.
- **Acceptance Testing by NJDOT**
- **Independent Assurance Testing by NJDOT**

Part 3 Appendix C – Design and Construction Quality Control Plan Template

- **A quality control plan template is provided**
 - Components included, but are not limited to – Checking of Calculations, Checking of Plans, Review of Working Drawings

Part 3 Appendix D – Quality Assurance Plan Program Guide

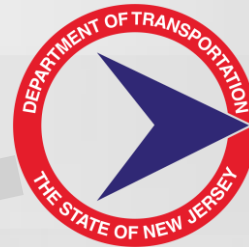
- **Primary objectives are to:**

- Provide consistency and practical guidance in the Design-Build Quality Assurance Program
- Outline the processes for reviewing and accepting the Design-Builder's Quality Control Plan; and
- Define expected Department oversight staffing and resources needs as well as define the specific roles, responsibilities and procedures for design and construction oversight; inclusive of Design Reviews, Construction Inspection, Material Acceptance

**Part 3
Appendix D
Quality
Assurance
Plan Program
Guide**

**Design Management and Design
Quality Assurance**

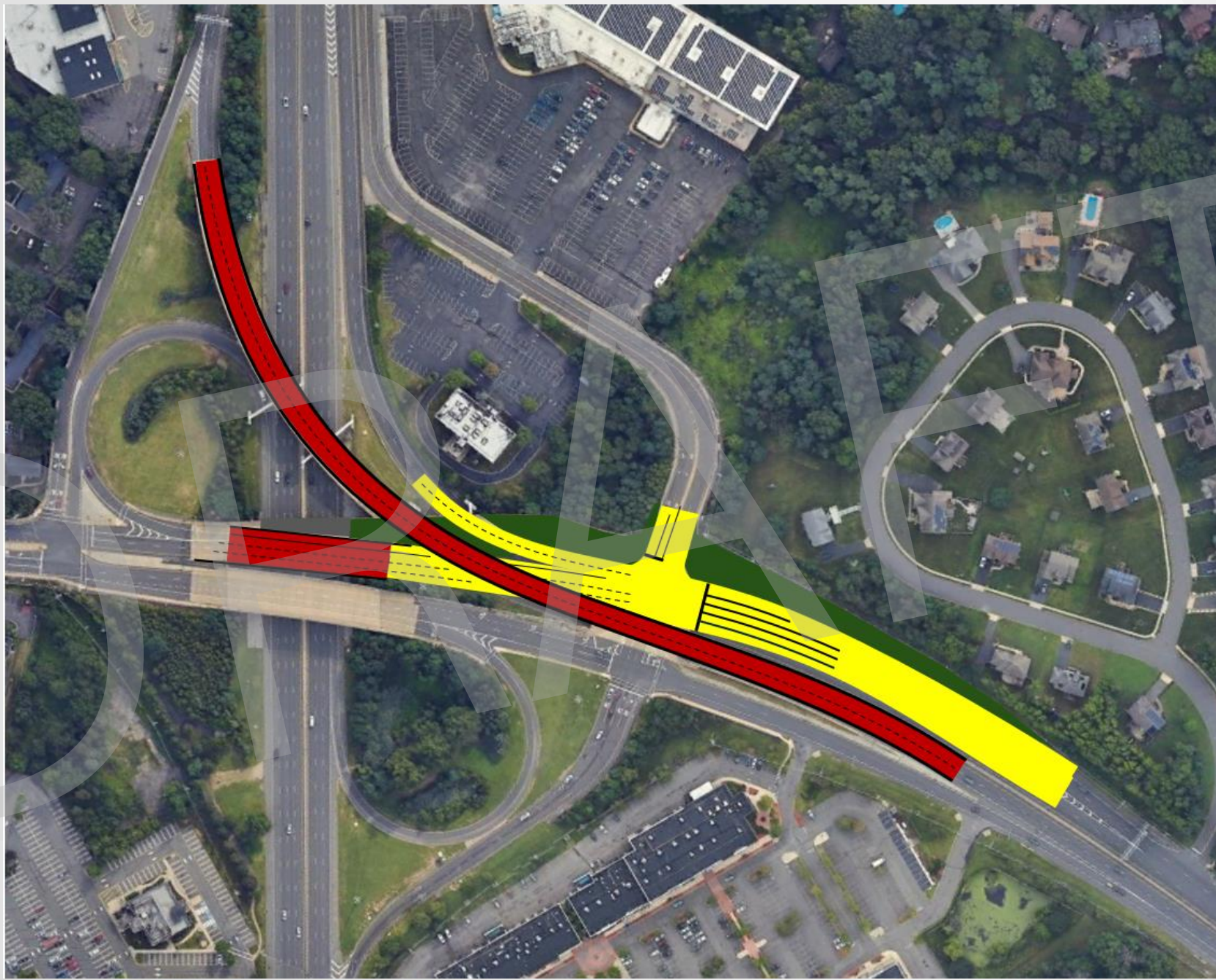
- **3.1 General**
- **3.2 Design Workshop**
- **3.3 Department's Role and Design Quality Assurance**
- **3.4 Design Reviews**
- **3.5 Negotiation of Orders on Non-contract That Include Design**
- **3.6 Design Force Account Work**



Closing Remarks



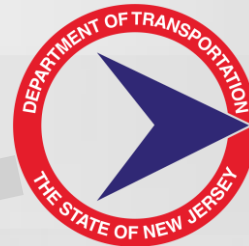






Closing Remarks

- Topics presented were high-level best practices that NJDOT will strive to adapt and implement into the Program
- NJDOT will continue to be a collaborative partner with industry and remains receptive to feedback and continuous improvement



Q & A Session

**Additional Feedback
or Questions?**



Scan to fill out our
*Feedback Form by
July 26, 2024*