Final Design
Activity Descriptions

May, 2016

PM

PROGRAM MANAGEMENT OFFICE

*SCOPE
*SCHEDULE
*COST

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Check the Capital Project Delivery website
to ensure this is the current version.

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Final Design

Final Design Initiated (4000)

Previous ID: New Activity

Start the Final Design Phase. (Milestone)

Activity Predecessor:	3990
Activity Successor:	4010

Initiate FD (4010)

Previous ID: 1010

The Project Manager reviews the approved PE documents and updates the Project Reporting System (PRS) to reflect any changes that may have occurred since PE closeout. The Project Manager sets up the FD job number and notifies the subject matter expert units of the upcoming project.

Role Description	
Responsible:	Project Manager
Consulted:	Subject Matter Expert Units, Designer
Informed:	Designer
Activity Predecessor:	4000
Activity Successor:	4035, 4050, 4085, 4785, 4790, 4210, 4250, 4310, 4360, 4520, 4600, 4720 (3015 for Limited Scope Projects)
Activity Duration:	10 (3 for Limited Scope Projects)
WBS Element Produced:	NA
Related Guidance Document:	Final Design Guideline

Determine Utility Master Agreement Applicability (4035)

Previous ID: 1235

During the preparation of the Alternatives of Accommodation the Designer identifies the utility impacts and prepares a utility relocation construction cost estimate. The Designer submits the utility impacts and utility relocation construction cost estimate to the Project Manager. The Project Manager determines if the impacted utility construction can be accommodated using the Utility Master Agreement process. The Project Manager contacts the Office of Utility Management to obtain concurrence on the use of the Utility Master Agreement. The Office of Utility Management provides the Project Manager with a Utility Master Agreement number and change order number.

Role Description	
Responsible:	Designer, Project Manager
Consulted:	Office of Utility Management, Utility Companies
Informed:	Designer
Activity Predecessor:	4010 (3030 for Limited Scope Projects)
Activity Successor:	4040
Activity Duration:	15
WBS Element Produced:	Associated with: 4.5.4
Related Guidance Document:	Utility Accommodation Policy

Prepare Utility Master Agreement Change Order (4040)

Previous ID: 1245

The Project Manager prepares a Master Agreement Change Order and submits to Utility Management Unit for review and approval. The Utility Management Unit returns the approved Master Agreement Change Order to the Project Manager for execution.

Role Description	
Responsible:	Project Manager, Office of Utility Management
Consulted:	NA
Informed:	NA
Activity Predecessor:	4035
Activity Successor:	4045
Activity Duration:	5
WBS Element Produced:	4.5.4
Related Guidance Document:	Utility Accommodation Policy

Execute Utility Master Agreement Change Order (4045)

Previous ID: 1250

The Project Manager circulates the Utility Master Agreement Change Order for execution. Once executed, the Project Manager distributes the Utility Master Agreement Change Order to the Designer, appropriate utility company and others listed on the distribution list.

Role Description	
Responsible:	Project Manager
Consulted:	NA
Informed:	Designer, Office of Utility Management
Activity Predecessor:	4040
Activity Successor:	4080 (4875 for Limited Scope Projects)
Activity Duration:	10
WBS Element Produced:	Executed 4.5.4
Related Guidance Document:	Utility Accommodation Policy, Utility Master Agreement Change Order Template

Develop Alternatives of Accommodation (4050)

Previous ID: 1145

The Designer develops an Alternatives of Accommodation Plan and confirms the proposed utility accommodation with each utility company. On complex projects where multiple utilities may be in conflict, the Designer should prepare a Utility Master Plan that overlays all utilities present within the project area.

Review and validate utility risk response action plans and revise as necessary. Implement the utility risk response action plans as appropriate. If any new utility-related risks are identified, the Designer notifies the Project Manager. The Project Manager updates the Risk Register with any new risks.

Role Description	
Responsible:	Designer
Consulted:	Utility Companies, Project Manager
Informed:	NA
Activity Predecessor:	4010 (3030 for Limited Scope Projects)
Activity Successor:	4055
Activity Duration:	40
WBS Element Produced:	4.5.6, 4.9.6.1
Related Guidance Document:	Utility Accommodation Policy, Risk Management Guideline

Conduct Supplemental Subsurface Utility Engineering (4085)

Previous ID: New Activity

If necessary, the Designer conducts supplemental subsurface utility engineering (SUE). The Designer determines the appropriate Quality Level (Level A, B, C or D) of utility data required for the given project and presents their recommendation to the Project Manager. The Project Manager approves the SUE Quality Level proposed and the limits of investigation. If approved, the Designer conducts SUE in order to determine the exact location of underground utilities. Prior to conducting SUE, the Designer must confirm with the utility company if previous SUE activities have been performed for the conflict area and if horizontal and vertical data exists. The Designer prepares a Supplemental SUE report and includes the survey notes from the SUE Contractor or utility company with the report.

Role Description	
Responsible:	Designer, SUE Contractor and/or Utility Companies
Consulted:	Project Manager, Utility Companies, Office of Utility Management (if needed)
Informed:	NA
Activity Predecessor:	4010
Activity Successor:	4055
Activity Duration:	40
WBS Element Produced:	4.5.7
Related Guidance Document:	Utility Accommodation Policy

Prepare Utility Owner Design Authorization Checklist (4055)

Previous ID: 1260

The Designer prepares the Utility Owner Design Authorization Checklist according to the Utility Accommodation Policy to accommodate the proposed alternatives for each utility and sends to the utility company. The utility company reviews and signs the Checklist and returns to the Designer for approval. The Designer forwards the approved Checklist to the Division of Project Management Project Manager for concurrence.

Role Description	
Responsible:	Designer, Utility Companies, Project Manager
Consulted:	NA
Informed:	NA
Activity Predecessor:	4250 lag, 4050, 4085 (4050 for Limited Scope Projects)
Activity Successor:	4060 (4070, 4090 for Limited Scope Projects)
Activity Duration:	45
WBS Element Produced:	4.5.1
Related Guidance Document:	Utility Accommodation Policy, Utility Owner Design Authorization Checklist

Prepare Utility Agreement Plans, Specifications and Estimates (4060)

Previous ID: 3520

Upon receipt of approved checklists, the Designer prepares the utility agreement plans of utility facilities to be relocated or altered. A utility agreement plan provides an overview of the existing and proposed utility location and is attached to each corresponding utility agreement modification. The Designer or Utility Company completes detailed plans, specifications and estimates of utility facilities to be relocated or altered.

Role Description	
Responsible:	Designer
Consulted:	Utility Companies, Project Manager
Informed:	NA
Activity Predecessor:	4055
Activity Successor:	4065
Activity Duration:	60
WBS Element Produced:	4.5.2
Related Guidance Document:	Utility Accommodation Policy

Approve Utility Agreement Plans, Specifications and Estimates (4065)

Previous ID: 3510

The Designer submits the utility agreement plans, specifications and estimates to the Project Manager for review. The Project Manager reviews the submission and provides comments to the Designer.

The Designer finalizes the utility agreement plans, specifications and estimates based on the Project Manager's comments and resubmits to the Project Manager for approval. The Project Manager reviews the revised submission and approves the utility agreement plans, specifications and estimates for incorporation in the utility agreement modifications.

Role Description	
Responsible:	Designer, Project Manager
Consulted:	NA
Informed:	NA
Activity Predecessor:	4060
Activity Successor:	4070, 4090
Activity Duration:	20
WBS Element Produced:	Approved 4.5.2
Related Guidance Document:	Roadway Design Manual, Utility Accommodation Policy

Incorporate Utility Design in Contract Documents (4090)

Previous ID: 3525

The Designer shows final utility accommodations and betterments on contract documents based on the completed utility agreement plans, specifications and estimates.

Role Description	
Responsible:	Designer
Consulted:	NA
Informed:	NA
Activity Predecessor:	4065 (4055 for Limited Scope Projects)
Activity Successor:	4220 lag
Activity Duration:	30
WBS Element Produced:	Included in 4.2.12
Related Guidance Document:	Utility Accommodation Policy

Prepare Utility Agreement Modifications (4070)

Previous ID: 3550

The Designer prepares the Utility Agreement Modifications (Construction Authorization) to modify existing utility agreements and submits to the Project Manager. The modification includes a detailed cost estimate and any relevant documents for execution.

Role Description	
Responsible:	Designer
Consulted:	NA
Informed:	Project Manager
Activity Predecessor:	4065 (4055 for Limited Scope Projects)
Activity Successor:	4075 (4875 for Limited Scope Projects)
Activity Duration:	5
WBS Element Produced:	4.5.3
Related Guidance Document:	Utility Accommodation Policy

Obtain Utility Environmental Reevaluation (4075)

Previous ID: 3540

Obtain a utility environmental reevaluation for utility modification approval and for any project that requires an authorization of utility work for advance utility relocations. The Bureau of Landscape Architecture and Environmental Solutions (BLAES) consults with the Project Manager regarding the current design as it relates to the previous environmental document and completes the reevaluation form. BLAES submits the reevaluation form to FHWA for approval, if required. FHWA approves the environmental reevaluation and sends the approved environmental reevaluation to BLAES.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Designer, Project Manager
Informed:	FHWA
Activity Predecessor:	4070
Activity Successor:	4080
Activity Duration:	20
WBS Element Produced:	4.8.1
Related Guidance Document:	Environmental Reevaluation Form

Authorize Utility Work (4080)

Previous ID: 3560

The Project Manager prepares the Utility Construction Funding Request and sends the Utility Construction Funding Request, Utility Agreement Modifications or Master Agreement Change Order and the Utility Environmental Reevaluation to the Bureau of Program Coordination for approval. The Bureau of Program Coordination reviews and approves the package. The Project Manager circulates the Utility Owner Design Authorization Checklists with an AD-12 for execution. Once executed, the Project Manager distributes the executed Construction Authorization Checklist and Utility Agreement Modifications. If necessary, the Project Manager prepares and includes notification to proceed with executed Construction Authorizations. For federally funded construction projects, the Project Manager prepares and sends a Utility Clearance Letter to Construction Management.

For advance utility work, in addition to the Utility Authorization package, a Right of Way (ROW) Clearance Letter is required when the utility work area involves ROW acquisitions or easements.

Role Description	
Responsible:	Project Manager, Bureau of Program Coordination
Consulted:	Designer
Informed:	Designer
Activity Predecessor:	4045, 4075
Activity Successor:	4870
Activity Duration:	40
WBS Element Produced:	4.5.5
Related Guidance Document:	NA

Prepare ITS Facilities Layout Plans (4250)

Previous ID: 2165

The Designer prepares ITS facilities layout plans for existing and proposed aerial and underground Intelligent Transportation Systems (ITS) facilities to aid in the development of the utility alternatives of accommodation.

Role Description	
Responsible:	Designer
Consulted:	Project Manager, Intelligent Transportation Systems, Traffic Operations
Informed:	NA
Activity Predecessor:	4010
Activity Successor:	4055 lag
Activity Duration:	20
WBS Element Produced:	Associated with: 4.2.15
Related Guidance Document:	ITS Interim Guidelines, ITS Design Manual

Prepare Financial Plan (Major Projects) (4785)

Previous ID: New Activity

The Project Manager prepares a Financial Plan for Major Projects, as required by FHWA regulations. As per FHWA regulations, a Financial Plan must be completed for a project that is estimated to have a total cost of $100,000,000 or more. The Financial Plan is submitted to FHWA for review and comment for a project with a total cost between $100,000,000 and $500,000,000. The Financial Plan is submitted to FHWA for review and approval for a project with a total cost of greater than $500,000,000.

Annual updates to the Financial Plan are required until the project has completed construction.

Role Description	
Responsible:	Project Manager
Consulted:	Executive Regional Manager, FHWA, Designer
Informed:	NA
Activity Predecessor:	4010
Activity Successor:	4870
Activity Duration:	40
WBS Element Produced:	4.1.1
Related Guidance Document:	FHWA Financial Plan Guidance

Update Project Management Plan (Major Projects) (4790)

Previous ID: New Activity

If significant changes have occurred to the project scope or management approach since the Project Management (PM) Plan for Major Projects was approved in Preliminary Engineering, the Designer updates the PM Plan. The Designer submits the updated PM Plan to the Project Manager for review and comment. After the Designer address the comments, the Project Manager submits to FHWA for review and approval.

Role Description	
Responsible:	Designer, Project Manager, FHWA, Subject Matter Experts
Consulted:	Executive Regional Manager, FHWA, Designer
Informed:	NA
Activity Predecessor:	4010
Activity Successor:	4870
Activity Duration:	40
WBS Element Produced:	4.12.3
Related Guidance Document:	FHWA Project Management Plan Guidance

Execute Final Design Public Involvement Action Plan (4795)

Previous ID: 2220

The Designer, Project Manager and the Division of Community and Constituent Relations (CCR) perform community involvement as per the Final Design Public Involvement Action Plan (PIAP). This may include public information centers and public meetings, as well as work sessions/focus groups with local officials. CCR will be responsible for scheduling and meeting protocol. Other tasks may include the preparation of mailing lists, data sheets, displays, technical presentations and meeting follow-up. When applicable, the public forum requirements of the Reforestation Act shall be met as part of this presentation.

Role Description	
Responsible:	Designer, Project Manager, Division of Community and Constituent Relations
Consulted:	Project Manager, Division of Community and Constituent Relations
Informed:	Division of Community and Constituent Relations
Activity Predecessor:	4010
Activity Successor:	4870
Activity Duration:	40
WBS Element Produced:	4.7.2
Related Guidance Document:	Final Design Guideline

Verify Pavement Design Recommendation (4205)

Previous ID: New Activity

If the Pavement recommendation is over two years old, the Project Manager coordinates with the Pavement Design Unit to ensure the pavement design recommendation is still valid. The Pavement Design unit will analyze the current pavement conditions to assess whether a revised pavement recommendation is required. The Pavement Design unit will provide any required pavement recommendation updates to the Project Manager. The Project Manager provides revised pavement recommendations to the Designer.

Role Description	
Responsible:	Project Manager
Consulted:	Pavement Design Unit
Informed:	Designer
Activity Predecessor:	4010
Activity Successor:	4220
Activity Duration:	10
WBS Element Produced:	4.2.1
Related Guidance Document:	NA

Complete Horizontal/Vertical Geometry (4210)

Previous ID: 1220

The Designer completes all roadway horizontal and vertical geometry calculations. The horizontal geometry is added to the Plan and Tie sheets. The vertical geometry is added to the Profile and Grade sheets. The Designer completes the driveway profiles where required to determine grading limits. The Designer prepares the Method of Cross Sections and prepares cross sections for mainline, ramps and side streets.

Role Description	
Responsible:	Designer
Consulted:	NA
Informed:	Project Manager
Activity Predecessor:	4010 (3030 for Limited Scope Projects)
Activity Successor:	4260, 4140, 4215 FF (15 day lag), 4300, 4350, 4385, 4410, 4440, 4550 (4215FF (15 day lag), 4160, 4220, 4240 for Limited Scope Projects)
Activity Duration:	40
WBS Element Produced:	4.2.2
Related Guidance Document:	NJDOT Roadway Design Manual

Conduct Supplemental Surveys (4215)

Previous ID: 1180

The Designer conducts a supplemental survey for any areas not addressed in previous surveys. Supplemental survey information may include additional topographic data, utility test pits, right of way stakeouts, soil borings and wetland delineation. The Designer prepares a supplemental report as an addendum to the original Control Survey Report and submits the results to the appropriate subject matter expert units. Update the base maps to reflect the supplemental survey information.

Role Description	
Responsible:	Designer
Consulted:	Regional Design and Survey Services
Informed:	Project Manager
Activity Predecessor:	4210 SS lag
Activity Successor:	4210 FF lag, 4360 FF (4210 FF lag for Limited Scope Projects)
Activity Duration:	20
WBS Element Produced:	4.2.3
Related Guidance Document:	NJDOT Survey Manual

Submit Draft Final Noise Study (4140)

Previous ID: New Activity

The Designer evaluates the Noise Technical Environmental Study (TES) that was prepared during the Preliminary Engineering Phase and consults with the Bureau of Landscape Architecture and Environmental Solutions (BLAES) to determine the need for additional study. If necessary, prepare a Final Noise Study to document the location, height and aesthetics of proposed noise barriers or other sound attenuation measures. The Designer submits a draft Final Noise Study to BLAES for review and comment. BLAES provides comments to the Designer. The Designer and BLAES meet with FHWA to discuss the mitigation measures.

The Designer reviews and validates noise risk response action plans and revises as necessary. Implement the noise risk response action plans as appropriate. If the study identifies noise mitigation is needed, the Designer notifies the Project Manager. The Project Manager updates the Risk Register with any new risks.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, FHWA
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4145, 4100
Activity Duration:	50
WBS Element Produced:	4.8.6, 4.9.6.1
Related Guidance Document:	Traffic Noise Management Policy and Noise Wall Design Guidelines, Risk Management Guideline

Obtain Noise Mitigation Community Support (4145)

Previous ID: New Activity

The Bureau of Landscape Architecture and Environmental Solutions (BLAES) notifies the Division of Community and Constituent Relations (CCR) to schedule a local officials briefing and public meeting to present the results of the draft Final Noise Study. CCR schedules the meetings, sends out meeting invitations and distributes a noise mitigation questionnaire. The Designer and BLAES meet with the local officials and present the proposed mitigation. The Designer and BLAES then meet with the affected community members to obtain input and collect the completed questionnaires.

BLAES evaluates the completed questionnaires, submits the results to the local officials and requests a formal resolution of support. Upon receiving resolution of support, BLAES instructs the Designer to complete the Final Noise Study.

Role Description	
Responsible:	Designer, Division of Community and Constituent Relations , Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Local Officials, Affected Community Members
Informed:	Project Manager
Activity Predecessor:	4140
Activity Successor:	4150
Activity Duration:	40
WBS Element Produced:	4.7.3, 4.8.12
Related Guidance Document:	Traffic Noise Management Policy and Noise Wall Design Guidelines

Submit Final Noise Study (4150)

Previous ID: New Activity

The Designer prepares and submits the Final Noise Study to the Bureau of Landscape Architecture and Environmental Solutions (BLAES) for review and comment. The Designer addresses comments and resubmits to BLAES to forward to FHWA for concurrence. Following FHWA concurrence, the Final Noise Study is sent to the local officials.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, FHWA
Informed:	Project Manager, Local Officials
Activity Predecessor:	4145
Activity Successor:	4175
Activity Duration:	20
WBS Element Produced:	Updated 4.8.6
Related Guidance Document:	Traffic Noise Management Policy and Noise Wall Design Guidelines

Prepare Noise Barrier Details (4175)

Previous ID: 3160

The Designer prepares the plans and details for the approved noise walls that are included within the Final Noise Study. The noise barrier details are included within the Final Roadway Plans and Final Structures Documents and are submitted as part of the Final Design Submission.

Role Description	
Responsible:	Designer
Consulted:	BLAES
Informed:	Project Manager
Activity Predecessor:	4150
Activity Successor:	4160 FF, 4220 lag
Activity Duration:	40
WBS Element Produced:	4.3.6
Related Guidance Document:	Bridges and Structures Design Manual

Prepare Jurisdictional Limit Maps and Agreements (4100)

Previous ID: 3015

The Designer prepares the Jurisdictional Limit Maps and draft Jurisdictional Agreements and submits them for review to the Project Manager. Upon completion of their review, the Project Manager forwards the Jurisdictional Limit Maps and Agreements to the Regional Maintenance Engineer and the Jurisdictional Control Unit for additional review. At this time the Jurisdictional Control Unit assigns identification numbers to the agreements. The Project Manager provides all comments to the Designer to revise the Jurisdictional Limit Map and draft Jurisdictional Agreements, if appropriate.

The Designer addresses the comments and submits the revised Jurisdictional Limit Maps and draft Jurisdictional Agreements to the Project Manager. The Project Manager forwards the revised submission to the Deputy Attorney General (DAG) for "approval as to form" (the DAG does not sign the agreement at this time). The DAG reviews the submission and, if necessary, requests revisions regarding the agreement's form and its correlation with the Jurisdictional Limit Map. Upon the DAG's "approval as to form," the Jurisdictional Limit Maps and Jurisdictional Agreements can proceed for execution.

Role Description	
Responsible:	Designer, Project Manager, Deputy Attorney General
Consulted:	Project Manager, Jurisdiction Control Unit
Informed:	Jurisdiction Control Unit
Activity Predecessor:	4140
Activity Successor:	4105
Activity Duration:	20
WBS Element Produced:	4.2.8
Related Guidance Document:	Corrective Action Notice 61

Execute Jurisdictional Agreements (4105)

Previous ID: 4015

The Project Manager sends the Jurisdictional Agreement and the attached Jurisdictional Limit Map to the respective public agencies (e.g., county, municipality) for execution. The respective agencies review the documents. If the respective agencies do not agree with the documents, the Project Manager meets with the respective agency representatives (e.g., elected officials, engineers) to resolve any issues. Once in agreement, the respective agencies shall submit three (3) signed, sealed and attested original agreements to the Project Manager. A signed and sealed resolution, authorizing the agency's exact signatories on the agreements shall also be sent to the Project Manager.

Upon receipt, the Project Manager forwards the package (including Jurisdictional Limit Maps) to the Deputy Attorney General's (DAG) office for signature. The DAG's signature indicates that the agency has executed the agreements correctly.

When the agreements have been signed by the DAG, the Project Manager attaches a Department Action Slip (AD-12) and Routing Slip (AD-37) to the package, to be circulated for Department signatures, completing final execution.

The Jurisdictional Unit, upon final execution of the agreement, will be responsible for the following:

- Receiving the final executed agreements from the Department Secretary
- Providing one signed original agreement to the agency involved
- Filing the State's original copy of the Agreement and Map(s)
- Forwarding copies of the signed agreement and map(s) to the Department's involved Units (e.g., Regional Maintenance Office & Data Development).
- Scanning and categorizing the maps and agreements while incorporating them into the appropriate electronic filing system/website, therefore becoming the keeper of record.

- Producing requested copies of previously executed maps and agreements not yet included in the electronic filing system/website, or providing copies of maps and agreements to entities that do not have access to the electronic data.

Role Description	
Responsible:	Project Manager, Respective Agencies
Consulted:	Jurisdiction Control Unit
Informed:	NA
Activity Predecessor:	4100
Activity Successor:	4880
Activity Duration:	60
WBS Element Produced:	Executed 4.2.8
Related Guidance Document:	Corrective Action Notice 61

Develop Landscape Architectural Design (4260)

Previous ID: 3070

The Office of Landscape Architecture (OLA) develops a landscape architectural design based on the Approved Project Plan. OLA performs a site analysis and develops conceptual landscape architectural plans.

Role Description	
Responsible:	Office of Landscape Architecture
Consulted:	Designer
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4265
Activity Duration:	20
WBS Element Produced:	Associated with: 4.2.14
Related Guidance Document:	Roadway Design Manual, Bridges and Structures Design Manual

Complete Landscape Architectural Design (4265)

Previous ID: 3075

The Office of Landscape Architecture prepares final landscape architectural plans based on the conceptual landscape architectural plans. Prepare specifications and details and calculate final quantities and costs of

all items. Submit plans and specifications to the Designer for inclusion in the Final Design Submission. All completed Landscape Design Plans need to be prepared, signed and sealed by a NJ licensed Landscape Architect.

Role Description	
Responsible:	Office of Landscape Architecture
Consulted:	Designer
Informed:	Designer, Project Manager
Activity Predecessor:	4260
Activity Successor:	4220 lag
Activity Duration:	100
WBS Element Produced:	4.2.14
Related Guidance Document:	Roadway Design Manual, Bridges and Structures Design Manual NJDOT Policy and Procedures 821

Develop Subsurface Exploration Program (4300)

Previous ID: 2395

The Designer develops a subsurface exploration program, which consists of borings and in-situ testing, and specifications necessary to initiate the subsurface explorations. Review and validate geotechnical risk response action plans and revise as necessary. Implement the geotechnical risk response action plans as appropriate. If any new geotechnical-related risks are identified, the Designer notifies the Project Manager. The Project Manager updates the Risk Register with any new risks. The subsurface exploration program may also include geophysical and geologic surveys. The Designer identifies the need for subsurface exploration and in-situ testing to evaluate foundation support, settlement, slope stability and ground water conditions and determines the general geology of the project site.

The Designer determines the number, location and depth of borings, the depth and types of samples and the in-situ testing required for the geotechnical design of structure foundations and roadway design, utilizing the Bridges and Structures Design Manual.

The Designer prepares a boring and in-situ testing layout plan and boring contract specifications and submits to the Geotechnical Engineering Unit for review and comment. The Geotechnical Engineering Unit reviews the submission and provides comments to the Designer. The Designer updates the plans and specifications and resubmits to the Geotechnical Engineering Unit for approval. The Geotechnical Engineering Unit provides approval to advertise the soil boring contract.

Role Description	
Responsible:	Designer, Geotechnical Engineering Unit
Consulted:	Geotechnical Engineering Unit, Hydrology and Hydraulics Unit
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4305
Activity Duration:	20
WBS Element Produced:	4.3.8, 4.3.9, 4.9.6.1
Related Guidance Document:	Bridges and Structures Design Manual, Risk Management Guideline

Gather Subsurface Information (4305)

Previous ID: 2400

If required, the Designer procures the services of a drilling or other specialty contractor to conduct the subsurface investigation. The specialty contractor conducts drilling, sampling and in-situ testing under the supervision of the Designer who classifies the samples.

The Designer gathers field data (detailed mapping of rock exposures and identification) for rock cut areas. The Designer prepares the laboratory testing program and submits the program to the Geotechnical Engineering Unit for review and approval. Upon approval, the Designer sends the samples for laboratory analysis.

The Designer gathers and reviews the subsurface (soil boring logs, soil lab testing data, in-situ testing data) and ground water information in the project site and at each structure location. The Designer determines the soil parameters and soil profile at each structure site required for the analysis and design of the foundation type.

The Designer submits the boring logs, boring location plans, in-situ testing and other investigative analysis, as well as foundation type selection to the Geotechnical Engineering Unit according to the Boring Data Submission Template and Standards located on the NJDOT Geotechnical Data Management System (GDMS) website. The Geotechnical Engineering Unit reviews and provides comments during the Final Design Submission review on boring logs, location plans, etc.

Role Description	
Responsible:	Designer, Specialty Contractor, Geotechnical Engineering Unit
Consulted:	Geotechnical Engineering Unit
Informed:	Project Manager
Activity Predecessor:	4300
Activity Successor:	4315 FF, 4320
Activity Duration:	100
WBS Element Produced:	4.3.10
Related Guidance Document:	Geotechnical Data Management System (GDMS)

Conduct Geotechnical Foundation, Roadway and Rock Slope Design (4320)

Previous ID: 2410, 2420

The Designer develops foundation recommendations and geotechnical assessments required to design the structure foundations. Conduct the geotechnical analysis and design for the structures foundations, analyzing the necessary items such as soil bearing capacity, pile bearing capacity, estimated pile tip elevation, required pile embedment, foundation settlement and foundation stability. Assess foundation constructability, pile drivability and other geotechnical foundation concerns. Prepare the Geotechnical Foundation Engineering Report and submit to the Geotechnical Engineering Unit.

The Designer develops roadway geotechnical recommendations required for the design of roadway embankments and cuts. Conduct the geotechnical analysis and design for the roadway, considering necessary items such as slope stability, settlement, required ground improvement, and subsurface drainage. Assess roadway geotechnical constructability and other geotechnical concerns. Conduct geologic structural analysis, investigating possible failure modes and evaluating stability of proposed rock slopes. Submit the Geotechnical Roadway and Rock Engineering Report to the Geotechnical Engineering Unit.

Role Description	
Responsible:	Designer, Geotechnical Engineering Unit
Consulted:	Geotechnical Engineering Unit
Informed:	Project Manager
Activity Predecessor:	4305, 4315
Activity Successor:	4160, 4220
Activity Duration:	100
WBS Element Produced:	4.3.2, 4.3.7
Related Guidance Document:	Bridges and Structures Design Manual

Complete Hydrologic & Hydraulic Analysis (4310)

Previous ID: 1285

The Designer completes the hydrologic and hydraulic stream analysis for all projects proposing a change to the bridge opening, roadway profile, or any activity within the 100-year floodplain of a stream with a drainage area over 50 acres to the point of interest. Secure all information and details necessary to model the stream flow. Perform backwater analysis to determine impacts to water surface elevation. The Designer submits the permit application to the Hydrology and Hydraulics Unit for review and comment. Once all comments are addressed, the Hydrology and Hydraulics Unit coordinates the submission of the Flood Hazard Area Permit with any additional permits.

Role Description	
Responsible:	Designer
Consulted:	Hydrology and Hydraulics Unit
Informed:	Project Manager
Activity Predecessor:	4010
Activity Successor:	4315
Activity Duration:	60
WBS Element Produced:	4.2.16, 4.2.17, 4.8.2
Related Guidance Document:	Drainage Design Manual, RDM – Section 10, NJ Stormwater Best Management Practices Manual

Complete Final Bridge Analysis (4315)

Previous ID: New Activity

The Designer performs scour calculations and incorporates countermeasures, if needed, in the structural design. The designer will secure all information and details necessary to perform scour analysis. Determine if proposed design is scour critical. If so, propose required scour countermeasures and incorporate these into structural design.

The Designer will perform the Seismic Retrofit Analysis to determine a structure's retrofit eligibility and cost effectiveness. Perform the analysis as per the NJDOT Bridges and Structures Design Manual. The final seismic retrofit features will be developed in conjunction with the SME. Submit recommendations with the Final Design Submission Package.

The Designer also prepares a Final Structure Appraisal and Design Report to document the final recommendations for the footprint of the bridge and details the project's structural design approach.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Structural Design, Hydrology and Hydraulics Unit
Informed:	NA
Activity Predecessor:	4310
Activity Successor:	4320
Activity Duration:	40
WBS Element Produced:	4.3.1, 4.3.4, 4.3.5
Related Guidance Document:	Bridges and Structures Design Manual

Prepare Final Structures Documents (4160)

Previous ID: 3190

The Designer prepares the final structures documents according to the Bridges and Structures Design Manual and the Quality Management Guideline. Confirm that the bridge stage construction plans are compatible with the roadway plans.

The final structures documents include:

- Key plan of structures
- Deck slab
- Retaining walls
- Sign structures
- General plan and elevation pile plan
- Detail sheets
- Demolition plans
- Specialty sheets
- Abutments, piers and superstructure
- Culverts
- Architecture plans
- Special and modified structural details

- Engineer quantity estimate
- Structural quantity calculations
- Structural details for noise barriers
- Design criteria and schematic layout for temporary structures
- Durations on structural items for the construction bar chart

Note for Limited Scope Projects:
For limited scope projects, final structures documents are limited to those required for a deck/superstructure replacement or deck patching.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Structural Design, Hydrology and Hydraulics Unit
Informed:	NA
Activity Predecessor:	4320 (4210 for Limited Scope Projects)
Activity Successor:	4220 lag (4220 lag for Limited Scope Projects)
Activity Duration:	60
WBS Element Produced:	4.3.3
Related Guidance Document:	Bridges and Structures Design Manual

Prepare Railroad 60% Submission (4110)

Previous ID: 3620

The Designer prepares and submits the roadway or bridge plans to the railroad company at the 60% point of design. If the project has Amtrak involvement, there must be a 30% and 60% submission. Included within the submission is a proposed construction sequence for railroad work that will minimize impacts to existing facilities.

Role Description	
Responsible:	Designer
Consulted:	Railroad Engineering and Safety Unit
Informed:	Project Manager
Activity Predecessor:	4160 lag, 4220 lag
Activity Successor:	4115
Activity Duration:	60
WBS Element Produced:	4.2.18
Related Guidance Document:	Roadway Design Manual, Design Manual for Bridges and Structures

Address Railroad 60% Comments (4115)

Previous ID: 3625

The railroad company reviews the Railroad 60% Submission and sends comments to the Designer. The Designer addresses the comments received and makes the appropriate changes. The Designer submits the revised plans to the railroad company and requests the railroad company to provide a force account estimate that includes material, labor, and equipment for railroad construction work. The Utility Coordinator begins to prepare the Railroad Construction Agreement based on the estimate.

Role Description	
Responsible:	Designer, Railroad Company, Utility Coordinator
Consulted:	Railroad Engineering and Safety Unit
Informed:	Project Manager
Activity Predecessor:	4110
Activity Successor:	4130, 4120
Activity Duration:	40
WBS Element Produced:	Updated 4.2.18
Related Guidance Document:	Roadway Design Manual, Design Manual for Bridges and Structures

Revisit Railroad Diagnostic Team Meeting (4130)

Previous ID: 3600

If the NJDOT Diagnostic Team Leader (DTL) determines that the design of the roadway has been altered significantly after the Diagnostic Team Meeting (DTM) was held or strong public opposition or comments are presented, the DTL reconvenes the attendees of the DTM held in Preliminary Engineering to address a possible amendment to the Memo of Record or Order.

Role Description	
Responsible:	Railroad Engineering and Safety Unit
Consulted:	Railroad Company, Designer
Informed:	Project Manager
Activity Predecessor:	4115
Activity Successor:	4120 FF
Activity Duration:	20
WBS Element Produced:	4.2.19
Related Guidance Document:	NA

Prepare Railroad 100% Submission (4120)

Previous ID: 3640

The Designer prepares and submits the completed roadway or bridge plans to the railroad company and prepares a master bill of material, which quantifies every component within every assembly detail. This submission includes:

- The final bonding and grounding plan and elevations for required work within the work limit.
- The final bonding and grounding assembly details for new/existing bridges, utilities and catenary structures.
- The final structure erection diagrams for proposed catenary structures and for any existing catenary structure that requires modifications to the catenary system, transmission wires or structural components.
- The final detailed structural elements for both modified existing structures and new catenary structures.
- The final catenary and transmission structural hardware design.
- The new catenary and transmission hardware as well as existing hardware. (Required modification or replacement will be identified and represented on the drawings.)
- The final bill of materials and scope of work related to the individual structures.

Role Description	
Responsible:	Designer
Consulted:	Railroad Engineering and Safety Unit
Informed:	Project Manager
Activity Predecessor:	4115
Activity Successor:	4130 FF, 4125, 4290 FF
Activity Duration:	60
WBS Element Produced:	4.2.20
Related Guidance Document:	Roadway Design Manual, Design Manual for Bridges and Structures

Review Railroad 100% Submission (4125)

Previous ID: 3660

The railroad company reviews the Railroad 100% Submission and provides concurrence.

Role Description	
Responsible:	Railroad Company
Consulted:	NA
Informed:	Designer, Project Manager, Railroad Engineering and Safety Unit
Activity Predecessor:	4120
Activity Successor:	4810 FF, 4815
Activity Duration:	40
WBS Element Produced:	Updated 4.2.20
Related Guidance Document:	Roadway Design Manual, Design Manual for Bridges and Structures

Delineate Wetlands (4360)

Previous ID: 1185

The Designer or Office of Environmental Solutions (OES) delineates the wetland areas and prepares a wetland delineation report. The Designer surveys the delineated wetland line and incorporates the survey in the construction plans. If the delineation report is prepared by the Designer, submit the report to OES for review and approval.

Role Description	
Responsible:	Designer, Office of Environmental Solutions
Consulted:	Office of Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4010
Activity Successor:	4215 FF
Activity Duration:	40
WBS Element Produced:	4.8.14, Associated with: 4.2.3
Related Guidance Document:	NA

Submit Reforestation Application (4440)

Previous ID: 2125

The Office of Landscape Architecture (OLA) prepares the Reforestation Application as outlined in the New Jersey Department of Environmental Protection (NJDEP) No Net Loss Reforestation Act Program Guidelines. All completed Reforestation Plans need to be prepared, signed and sealed by a NJ licensed Landscape Architect. OLA submits the Reforestation Application to the NJDEP Division of Parks and Forestry for review and approval.

Role Description	
Responsible:	Office of Landscape Architecture
Consulted:	Project Manager, Designer
Informed:	Project Manager, Designer
Activity Predecessor:	4210
Activity Successor:	4450, 4265
Activity Duration:	40
WBS Element Produced:	4.8.7
Related Guidance Document:	NJDEP No Net Loss Reforestation Act Program Guidelines NJDOT Policy and Procedures 821

NJDEP Reviews Reforestation Application (4450)

Previous ID: 2130

The NJDEP Division of Parks and Forestry reviews the Reforestation Application and provides comments to the Office of Landscape Architecture (OLA) if necessary. Once comments are addressed and the

Reforestation Application is resubmitted, the Division of Parks and Forestry makes recommendations to the Community Forestry Council for approval. Once the Community Forestry Council approves the

Reforestation Application, the Division of Parks and Forestry provides written approval to the Project Manager and the OLA.

Role Description	
Responsible:	NJDEP Division of Parks and Forestry, Community Forestry Council
Consulted:	Office of Landscape Architecture
Informed:	Project Manager, Office of Landscape Architecture
Activity Predecessor:	4440
Activity Successor:	4585
Activity Duration:	60
WBS Element Produced:	Approved 4.8.7
Related Guidance Document:	NJDEP No Net Loss Reforestation Act Program Guidelines

Prepare Soil Erosion and Sediment Control Report and Plans (4410)

Previous ID: 2115, 2180

The Designer prepares the Soil Erosion and Sediment Control (SESC) Report, which identifies the areas requiring temporary and permanent erosion control and identifies the type of controls to be most effective. The Designer will include field investigations, drainage survey, and identification of soil types; soil loss and drainage erosion calculations in the report, and recommend SESC controls or features.

The Designer also prepares the SESC Plans based on engineering/design need incorporating the controls and features identified in the SESC report. Develop SESC specifications and prepare the engineering construction cost estimate. Submit the SESC Report and Plans to the Bureau of Landscape Architecture and Environmental Solutions for review and comment.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4430
Activity Duration:	40
WBS Element Produced:	4.2.6, 4.2.7
Related Guidance Document:	Soil Erosion and Sediment Control Manual

Review Soil Erosion and Sediment Control Report and Plans (4430)

Previous ID: 2155

The Bureau of Landscape Architecture and Environmental Solutions (BLAES) reviews the Soil Erosion and Sediment Control (SESC) Report and Plans for conformity with the NJDOT SESC Manual. BLAES visits project site to verify need and type of erosion control. BLAES prepares and submits comments to the Designer for corrections or modifications. The Designer resubmits the corrected or modified plans with the Final Design Submission.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions, Designer
Consulted:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4410
Activity Successor:	4585
Activity Duration:	20
WBS Element Produced:	Updated 4.2.6, 4.2.7
Related Guidance Document:	Soil Erosion and Sediment Control Manual

Develop Cultural Resources Mitigation Measures (4550)

Previous ID: 2290

Based on the cultural resources commitments documented in the State Historic Preservation Office (HPO/SHPO) Resolution/Memorandum of Agreement, the Designer, Bureau of Landscape Architecture and Environmental Solutions (BLAES) and Project Manager consult with the HPO/SHPO to develop the cultural resources mitigation design measures to incorporate in the project design plans and specifications.

The Designer prepares any required cultural resources mitigation reports (e.g., Historic American Engineering Record) and submits to BLAES for review and approval. BLAES reviews and approves the mitigation reports and sends the approved report to the appropriate agencies and interested parties.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions, Project Manager
Consulted:	State Historic Preservation Office/Officer
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4220 lag
Activity Duration:	100
WBS Element Produced:	4.8.15, Associated with: 4.2.12
Related Guidance Document:	HPO/SHPO Resolution/Memorandum of Agreement

Prepare Conceptual Wetlands Mitigation Plans (4350)

Previous ID: 2280

The Designer or Bureau of Landscape Architecture and Environmental Solutions (BLAES) develops various alternatives to mitigate wetland impacts. The Designer or BLAES prepares Conceptual Wetlands Mitigation Plans. If the Conceptual Wetlands Mitigation Plans are prepared by the Designer, submit the plans to BLAES for review.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4210
Activity Successor:	4375, 4550 lag
Activity Duration:	45
WBS Element Produced:	4.8.5
Related Guidance Document:	NJDEP Freshwater Wetlands Protection Act Rules

Prepare Final Wetlands Mitigation Plans (4375)

Previous ID: 3200

The Designer, with assistance from the Bureau of Landscape Architecture and Environmental Solutions (BLAES), develops construction plans and specifications that contain the grading, landscaping, hydrologic/hydraulic, and erosion control requirements. Any special conditions, such as seasonal work

restrictions, agency notifications, progress reports, or fill disposal locations should be included in the final plans and specifications for the wetland mitigation work. In most cases, the wetland mitigation work will be done as part of the main highway project. However, there are some situations in which the mitigation work will be a separate contract, and the plans and specifications will have to contain all appropriate information needed to receive bids. All Final Wetland Mitigation Plans need to be prepared, signed and sealed by a NJ licensed Landscape Architect. BLAES submits the Final Wetlands Mitigation Plans to the review agencies.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4350, 4270 lag
Activity Successor:	4380, 4385 FF (For Army Corps Permits)
Activity Duration:	120
WBS Element Produced:	4.8.8
Related Guidance Document:	NJDEP Freshwater Wetlands Protection Act Rules NJDOT Policy and Procedures 821

NJDEP Approves Final Wetland Mitigation Plans (4380)

Previous ID: 3220

NJDEP reviews the Final Wetland Mitigation Plans during a 60-calendar day review period. During the review period, the Bureau of Landscape Architecture and Environmental Solutions (BLAES), with support from the Designer and the Project Manager, may respond to review agency requests for additional information or for clarification of the Final Wetland Mitigation Plans. NJDEP approves the Final Wetland Mitigation Plans and provides notice to BLAES. The approved Final Wetland Mitigation Plans are included in the contract documents.

Role Description	
Responsible:	NJDEP, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, Project Manager, Designer
Informed:	Project Manager
Activity Predecessor:	4375, 4395
Activity Successor:	4290 FF, 4585 FF
Activity Duration:	40
WBS Element Produced:	Approved 4.8.8
Related Guidance Document:	NJDEP Freshwater Wetlands Protection Act Rules

Prepare Permit Application (4385)

Previous ID: 2300

The Designer and Bureau of Landscape Architecture and Environmental Solutions (BLAES) collect supporting information and prepare required plans, engineering analysis, and environmental reports according to the current standards of the applicable permitting agency. If the Designer prepares the permit application, submit the draft application to the Division of Project Management (DPM) Project Manager and BLAES for review. The DPM Project Manager forwards the draft permit application to the Regional Maintenance Engineer for review and comment. Flood Hazard Area permit applications are submitted to the Hydrology and Hydraulics Unit. Army Corps permits may require Final Wetland Mitigation Plans be submitted as part of the permit application.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, Regional Maintenance Engineer, Hydrology and Hydraulics Unit
Informed:	Project Manager
Activity Predecessor:	4210, 4375 FF (For Army Corps Permits)
Activity Successor:	4390
Activity Duration:	40
WBS Element Produced:	4.8.2
Related Guidance Document:	Permitting Agency Regulations

Review & Submit Permit Application (4390)

Previous ID: 2305

The Bureau of Landscape Architecture and Environmental Solutions (BLAES), the Regional Maintenance Engineer and the Hydrology and Hydraulics Unit (if applicable) review the draft permit application before submitting the application to the applicable permitting agency. The Designer or BLAES revises the draft application based on the comments and resubmits the application to BLAES. BLAES submits the permit application to the appropriate permitting agency.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions, Regional Maintenance Engineer, Hydrology and Hydraulics Unit, Designer
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, Regional Maintenance Engineer, Hydrology and Hydraulics Unit
Informed:	Project Manager
Activity Predecessor:	4385
Activity Successor:	4395
Activity Duration:	20
WBS Element Produced:	Updated 4.8.2
Related Guidance Document:	Permitting Agency Regulations

Secure Permits (4395)

Previous ID: 3310

The permitting agency reviews the permit application for completeness and notifies the Bureau of Landscape Architecture and Environmental Solutions (BLAES). BLAES and the Hydrology and Hydraulics Unit, with the support of the Designer, provide any necessary additional information as requested by the permitting agency. BLAES and the Hydrology and Hydraulics Unit monitor the progress of the permitting agency review. Upon receipt of permitting agency comments, BLAES and the Hydrology and Hydraulics Unit, with the support of the Designer, revise the application as necessary.

Upon receipt of the approved permit, BLAES distributes the permit to the Project Manager, Designer and the Regional Construction Engineer to evaluate the conditions of the permit and determine constructability of the project.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions, Hydrology and Hydraulics Unit, Designer, Permitting Agencies
Consulted:	Bureau of Landscape Architecture and Environmental Solutions, Hydrology and Hydraulics Unit, Project Manager, Regional Construction Engineer, Designer
Informed:	Project Manager
Activity Predecessor:	4390
Activity Successor:	4585, 4380, 4355 (if applicable)
Activity Duration:	120
WBS Element Produced:	Approved 4.8.2
Related Guidance Document:	Permitting Agency Regulations

Prepare Wetlands Monitoring Plan (4355)

Previous ID: 3230

If a wetlands monitoring plan was a permit approval condition, the Bureau of Landscape Architecture and Environmental Solutions executes a Task Order Agreement to monitor newly constructed wetlands to determine if they are successful. The work performed on each project will vary depending on the permit conditions.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions, Task Order Consultant
Consulted:	NA
Informed:	Project Manager
Activity Predecessor:	4395
Activity Successor:	4950
Activity Duration:	20
WBS Element Produced:	4.8.13
Related Guidance Document:	NA

Conduct Contamination Site Investigation (Initial Sampling) (4520)

Previous ID: 1900

Based on the findings from the hazardous waste screening prepared for the environmental document, the Designer conducts an investigation at all sites with contamination concerns to determine the presence of contamination. The investigation will include the development and implementation of a sampling plan to assess the presence of contamination at all sites of concern. The Bureau of Landscape Architecture and Environmental Solutions (BLAES) reviews and approves the sampling plan and issues a *Notice of Intent to Enter* to the owners of the affected properties.

The Designer conducts the sampling and prepares a Site Investigation (SI) Report. BLAES reviews and approves the SI Report and provides the approved SI Report to the appropriate property owners notifying them of the findings. If contamination levels are above the NJDEP soil remediation standards, the Designer must hire a Licensed Site Remediation Professional (LSRP) to oversee the management of contamination encountered during the linear construction project as required by the NJDEP Site Remediation Program and submit the Linear Construction Project (LCP) Notification and Final Report Form.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions, Licensed Site Remediation Professional
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	NJDEP, Property Owners, Project Manager
Activity Predecessor:	4010
Activity Successor:	4540 or 4590
Activity Duration:	80
WBS Element Produced:	4.8.17
Related Guidance Document:	NJDEP Site Remediation Program Linear Construction Technical Guidance, Hazardous Waste Scope of Work Document, Linear Construction Project (LCP) Notification and Final Report Form

Conduct Remedial Investigation (Delineation Sampling) (4540)

Previous ID: 1920

Depending on the findings of the Site Investigation Report, a Licensed Site Remediation Professional (LSRP) may be required to conduct a remedial investigation (delineation sampling) of the contaminated properties to determine the extent of contamination identified in the Site Investigation Report. The remedial investigation will include the development and implementation of a detailed sampling plan at sites with additional contamination concerns. The Bureau of Landscape Architecture and Environmental Solutions (BLAES) reviews and approves the detailed sampling plan and issues a *Notice of Intent to Enter* to the owners of the affected properties.

The LSRP conducts the delineation sampling and prepares a Remedial Investigation (RI) Report. BLAES reviews and approves the RI report and provides the approved RI Report to the appropriate property owners notifying them of the findings.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions, Licensed Site Remediation Professional
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Property Owners, Project Manager
Activity Predecessor:	4520
Activity Successor:	4570, 4590
Activity Duration:	45
WBS Element Produced:	4.8.18
Related Guidance Document:	NJDEP Site Remediation Program Linear Construction Technical Guidance, Hazardous Waste Scope of Work Document

Prepare Material Management Plan (4570)

Previous ID: 2270

The Licensed Site Remediation Professional (LSRP), in consultation with the Bureau of Landscape Architecture and Environmental Solutions (BLAES), prepares a Material Management Plan to provide a set of procedures to be employed when contaminated soil and/or groundwater are encountered during construction activities within the proposed project limits. The LSRP and BLAES evaluate the sampling results and determine the best management method. The Designer, in consultation with the LSRP and BLAES, prepares the environmental plan sheets and specifications for incorporation in the overall project plans.

The Designer submits the Material Management Plan to BLAES for review and acceptance.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions, Licensed Site Remediation Professional
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4540
Activity Successor:	4585
Activity Duration:	40
WBS Element Produced:	4.8.10
Related Guidance Document:	NJDEP Site Remediation Program Linear Construction Technical Guidance, Hazardous Waste Scope of Work Document

Complete Environmental Plans (4585)

Previous ID: 3410

The Designer, in consultation with the Bureau of Landscape Architecture and Environmental Solutions, prepares the environmental plan sheets, incorporating environmental constraints, impacts, mitigation, commitments and permit conditions into the contract documents.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager
Activity Predecessor:	4220 lag, 4375, 4395, 4430, 4450
Activity Successor:	4290 FF
Activity Duration:	20
WBS Element Produced:	4.8.3
Related Guidance Document:	NJDOT Sample Plans

Prepare PAECE Report (4590)

Previous ID: 1940

The Designer prepares a Property Acquisition Environmental Cost Estimate (PAECE) report based upon the data obtained in the Site Investigation and Remedial Investigation for each right of way (ROW) parcel

where there are remedial costs. The PAECE Report includes all of NJDOT's investigative and remedial costs.

The Designer submits the PAECE Report to the Bureau of Landscape Architecture and Environmental Solutions (BLAES) for review and comment. Once the Designer updates the PAECE Report in accordance with BLAES comments, BLAES approves the PAECE Report and prepares the Environmental Summary Memorandum (ESM). The ESM provides costs from the PAECE Report and indicates the appropriate environmental clause to be used in the acquisition agreement. Once BLAES forwards the PAECE Report and ESM to the appropriate ROW District Office, the negotiations with the property owner can begin.

Role Description	
Responsible:	Designer, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Right of Way District Office, Project Manager
Activity Predecessor:	4540
Activity Successor:	4670 lag
Activity Duration:	40
WBS Element Produced:	4.8.11, 4.8.16
Related Guidance Document:	Hazardous Waste Scope of Work Document

Conduct Title Search (4600)

Previous ID: 1190

The Designer or NJDOT Right of Way Title Unit conducts a title search. A Title Summary document will accompany all right of way (ROW) submissions. If a title search is to be performed by the NJDOT Right of Way Title Unit, provide a title summary document to the Project Manager at the time of initiation of the "Prepare ROW Plans & Documents" Activity. If the Title Search is to be performed by a consultant designer, the Designer will be accountable for the hiring, accuracy, and timeliness of the Title Company's performance.

The Designer reviews the Risk Register for any previously identified ROW risks and identifies any new risks as a result of the title search. Notify the PM to update the Risk Register if new risks or changes to existing risks are identified.

Role Description	
Responsible:	Designer or NJDOT Right of Way Title Unit
Consulted:	NJDOT Right of Way Title Unit, Project Manager
Informed:	Project Manager
Activity Predecessor:	4010
Activity Successor:	4605, 4705
Activity Duration:	60
WBS Element Produced:	4.4.12, 4.9.6.1
Related Guidance Document:	Right of Way Manual, Risk Management Guideline

Prepare ROW Plans and Documents (4605)

Previous ID: 2010

The Designer prepares the Entire Tract Maps (ETM), General Property Parcel Maps (GPPM), descriptions of each parcel and the Individual Parcel Maps (IPM) and submits the Right of Way (ROW) plans and documents with all project commitment letters or memorandums to the Division of Right of Way and Access Management. Review and validate ROW risk response action plans and revise as necessary. Implement the ROW risk response action plans as appropriate.

ROW Technical Support distributes the ROW plans and documents to the appropriate units and offices and consults with the ROW District Office and Subject Matter Experts (SME) as needed.

Role Description	
Responsible:	Designer
Consulted:	Right of Way Engineering, Right of Way Technical Support, Right of Way District Office, Deputy Attorney General
Informed:	Project Manager
Activity Predecessor:	4600
Activity Successor:	4610
Activity Duration:	40
WBS Element Produced:	4.4.13, 4.4.13.1, 4.4.13.2, 4.4.13.3, 4.4.13.4, 4.9.6.1
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual, Risk Management Guideline

Review ROW Plans and Documents (4610)

Previous ID: 2025

Individual units within the Division of Right of Way (ROW) and Access Management review the ROW Plans and Documents. All comments are sent to the ROW Engineering Unit for comment consolidation. The ROW Engineering Unit prepares a combined review memo and sends the memo to the Project Manager who forwards to the Designer.

The assigned ROW District Office develops an updated ROW cost estimate and submits it to ROW Technical Support. ROW Technical Support reviews, finalizes and forwards the ROW cost estimate to the Project Manager.

If early acquisitions are recommended, the Programming Section of ROW Technical Support takes the lead in requesting a partial ROW authorization, establishing a funding source and alerting the applicable ROW District Office to begin the authorized stages of ROW acquisition.

Role Description	
Responsible:	Division of Right of Way and Access Management, Project Manager
Consulted:	Project Manager
Informed:	Designer
Activity Predecessor:	4605
Activity Successor:	4615, 4645
Activity Duration:	20
WBS Element Produced:	4.4.1, Associated with: 4.4.13, 4.4.13.1, 4.4.13.2, 4.4.13.3
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual

Prepare Pre-Final ROW Submission (4615)

Previous ID: 2035

Utilizing the comments received from the Division of Right of Way (ROW) and Access Management, the Designer updates the ROW plans and documents and prepares a comment resolution summary to submit as part of the Pre-Final ROW submission. The Designer submits the Pre-Final Submission to the ROW Engineering Unit.

Role Description	
Responsible:	Designer
Consulted:	Division of Right of Way and Access Management
Informed:	Project Manager
Activity Predecessor:	4610
Activity Successor:	4620
Activity Duration:	15
WBS Element Produced:	4.4.2
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual

Review Pre-Final ROW Submission (4620)

Previous ID: 2045

The Right of Way (ROW) Engineering Unit reviews the Pre-Final ROW Submission and approves the Comment Resolution Summary (CRS). The ROW Engineering Unit prepares a comment memorandum and sends to the Project Manager who forwards to the Designer.

Role Description	
Responsible:	Division of Right of Way and Access Management, Project Manager, Designer
Consulted:	Project Manager
Informed:	Designer
Activity Predecessor:	4615
Activity Successor:	4625, 4655
Activity Duration:	20
WBS Element Produced:	Associated with: 4.4.2
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual

Hold ROW Acquisition Kickoff Meeting (4635)

Previous ID: New Activity

The Project Manager schedules a meeting with the assigned ROW District Executive Regional Manager. The Project Manager and the Designer present the project's scope and discuss the details of ROW acquisitions. The purpose of the meeting is to introduce the project to the ROW District's Acquisition

Team and discuss ROW acquisition in detail with appropriate SME's present. This provides the ROW District's Acquisition Team with a comprehensive understanding of the project's purpose and need and impacts of proposed roadway improvements.

Role Description	
Responsible:	Division of Right of Way and Access Management, Project Manager, Designer
Consulted:	Project Manager
Informed:	Designer
Activity Predecessor:	4615
Activity Successor:	4625, 4655
Activity Duration:	20
WBS Element Produced:	Associated with: 4.4.2
Related Guidance Document:	NA

Prepare Final ROW Submission (4625)

Previous ID: 2030

The Designer resolves all comments and incorporates the changes within the Final Right of Way (ROW) Submission and submits to ROW Technical Support.

Role Description	
Responsible:	Designer
Consulted:	Division of Right of Way and Access Management
Informed:	Project Manager
Activity Predecessor:	4620, 4715
Activity Successor:	4655 SS, 4630
Activity Duration:	15
WBS Element Produced:	4.4.3
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual

Process Final ROW Submission (4630)

Previous ID: 2055

Right of Way (ROW) Technical Support inputs data within a ROW database and distributes the Final ROW Submission to the appropriate NJDOT service areas per the ROW Design Guideline and ROW Engineering Manual.

Role Description	
Responsible:	Right of Way Technical Support
Consulted:	Project Manager
Informed:	Project Manager
Activity Predecessor:	4625
Activity Successor:	4670
Activity Duration:	10
WBS Element Produced:	Associated with: 4.4.3
Related Guidance Document:	Right of Way Non Real Estate Report Format Guidelines, Right of Way Design Guideline, Right of Way Engineering Manual

Obtain ROW Environmental Reevaluation (4645)

Previous ID: 2040

A Right of Way (ROW) Environmental Reevaluation is required for projects where the ROW authorization will occur more than one year after the approval of the environmental document. The Bureau of Landscape Architecture and Environmental Solutions (BLAES) consults with the Project Manager regarding the current design as it relates to the previous environmental document and completes the reevaluation form. BLAES submits the reevaluation form to FHWA for approval, if required.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Designer, Project Manager
Informed:	NA
Activity Predecessor:	4610
Activity Successor:	4650
Activity Duration:	20
WBS Element Produced:	4.8.1
Related Guidance Document:	Environmental Reevaluation Form

Authorize Right of Way (4650)

Previous ID: 2020

Utilizing the updated Right of Way (ROW) cost estimate and the ROW Environmental Reevaluation, the Project Manager prepares a Project Summary Information form and sends a ROW authorization request to ROW Technical Support.

ROW Technical Support secures a funding commitment, federal project number, and ROW job number from Capital Investment Planning and Development and prepares an RE-27 package for submission to FHWA. The RE-27 package includes a copy of the original environmental document, or an environmental re-evaluation, and a firm and sound estimate letter. ROW Technical Support submits the RE-27 package to FHWA for approval.

Once the FHWA approves the authorization request, ROW Technical Support transfers project responsibility to the ROW District Office based on availability of final plans. There may be situations when early authorization is sought for ROW activities such as entire acquisitions involving relocation. Such authorization requests are made before receiving preliminary plans, based on tax map designations.

Role Description	
Responsible:	Project Manager, Right of Way Technical Support, FHWA
Consulted:	Project Manager, Division of Capital Investment Planning and Development
Informed:	ROW District Office
Activity Predecessor:	4645
Activity Successor:	4670, 4775
Activity Duration:	20
WBS Element Produced:	4.4.4
Related Guidance Document:	NA

Prepare Access Cut-Outs (4705)

Previous ID: 2090

The Designer prepares Access Cut-Outs (ACO) in accordance with the Access Design Guidelines and submits them to the Office of Access Design (OAD). If an Access Impact Assistance (AIA) Report is required, the OAD and the Project Manager will decide on the need to use the current Designer or a task order specialist through a Right of Way Task Order Agreement. The Designer provides necessary assistance and concurrence on the need for an AIA report. If the AIA Report is necessary, it is prepared and submitted to the OAD for review.

The Designer prepares and submits the Access Design Guidelines QA/QC Checklist for each ACO to the OAD. If applicable, the Request of Waiver Form (MT-159) is also submitted to the OAD. The Designer prepares and submits a list of property owners' names and mailing addresses to the OAD. If there is any revocation of access, include names and mailing addresses for tenants.

Role Description	
Responsible:	Designer
Consulted:	Office of Access Design, Project Manager
Informed:	NA
Activity Predecessor:	4600
Activity Successor:	4710
Activity Duration:	30
WBS Element Produced:	4.4.7, 4.4.8
Related Guidance Document:	Access Management Code, Access Design Guidelines

Review Access Cut-Outs (4710)

Previous ID: 2095

The Office of Access Design (OAD) reviews the Access Cut-Outs (ACO) and the Access Impact Assistance (AIA) reports. Upon resolution of comments, the Designer finalizes and submits the final ACOs to the OAD. The Designer or task order specialist finalizes and submits the AIA reports to the OAD.

Note: This activity is not required for in-house designed projects since OAD would be both access cutout designer and access cutout reviewer.

Role Description	
Responsible:	Office of Access Design, Designer
Consulted:	Project Manager
Informed:	NA
Activity Predecessor:	4705
Activity Successor:	4715
Activity Duration:	10
WBS Element Produced:	Updated 4.4.7, Updated 4.4.8
Related Guidance Document:	Access Management Code, Access Design Guidelines

Administer Access Alterations (4715)

Previous ID: 2100

The Office of Access Design (OAD) will administer all access alterations (i.e., revocations, modifications, adjustments and change of access) in compliance with the NJ State Highway Access Management Code and the Access Design Guidelines. The OAD prepares a notification letter along with the Access Cut-Outs (ACO) and sends, via certified mail, to the appropriate property owners. The notification letter will be signed by the OAD supervisor or case manager. After receipt of an owner's request (written or by telephone), the assigned OAD case manager identifies the property owner's issues and tries to resolve all access concerns.

If the property owner agrees with the proposed access alteration, the property owner signs a Lot Owner Access Concurrence (LOAC) form and, if applicable, a Lot Owner Lease Agreement (LOLA) form. If the property owner does not agree and a solution cannot be reached by phone or email, then the property owner has an opportunity for an informal meeting with all appropriate individuals (e.g., Manager of OAD, OAD case manager, Deputy Attorney General, ROW Technical Support, Project Manager, Designer and Owner/Owner's engineers or lawyers) to discuss the alterations to their access and to attempt to resolve any differences. OAD documents the minutes of the meeting. If a potential solution is found, the OAD case manager advises the owner of the acceptable solutions in writing along with a revised ACO, if necessary.

If the property owner does not agree and does not have a counter proposal, a formal written decision will be provided by the OAD. The written decision will also include appeal directions based on the type of access alteration. The OAD concludes the process by notifying Project Manager, Right of Way (ROW) Technical Support and the ROW District Office.

Role Description	
Responsible:	Designer, Office of Access Design
Consulted:	Deputy Attorney General, Right of Way Technical Support, Project Manager, Designer, Property Owner
Informed:	Property Owner
Activity Predecessor:	4710
Activity Successor:	4625
Activity Duration:	60
WBS Element Produced:	4.4.9, 4.4.10
Related Guidance Document:	Access Design Guidelines

Acquire ROW (4670)

Previous ID: 3025

After receipt of the Final Right of Way (ROW) Submission, the ROW District Executive Regional Manager assigns a ROW acquisition team. In general, this activity duration will be at least 14 months for a project with no relocations and at least 18 months where relocations are required. Projects involving complex relocations or a high number of acquisitions may take longer. The Project Manager coordinates the project specific duration of this activity with the ROW District Executive Regional Manager.

The ROW acquisition team leader coordinates the preparation and mailing of owner notification letters and relocation site surveys. The ROW acquisition team leader coordinates the preparation of an appraisal plan, the ordering of appraisals, appraisal reviews and appraisal registrations. Appraisals may be performed by in-house staff or by an appraisal consultant.

The ROW acquisition team leader assigns the negotiation cases as well as any relocation cases necessary. The ROW acquisition team conducts negotiations, reaches agreements or processes the case for condemnation and completes any relocation necessary. Upon completion of negotiations, the ROW District Office sends the agreements or condemnation cases to ROW Technical Support for review and funding verification.

ROW Technical Support forwards the agreements or condemnation cases to the Director of ROW and Access Management. The Director of ROW and Access Management authorizes the agreement or condemnation action and sends the cases to the ROW Closing Unit.

For all cases, the ROW Closing Unit verifies and updates each parcel title. For agreement cases, the ROW Closing Unit prepares a deed and sends to the Deputy Attorney General (DAG) for review and approval. Upon approval, the deed and associated documents are sent to the owner for signature. Once the signed documents are returned, the ROW Closing Unit records the deed and processes payment for the acquired property.

For condemnation cases, the ROW Closing Unit sends the case documents to the DAG for review and comment. Upon receipt of DAG comments, the ROW Closing Unit notifies the Project Manager of potential revisions, condemnation maps and documents. The ROW Closing Unit prepares the formal complaint and associated documents for filing with the Superior Court for eventual condemnation and acquisition.

The Director of ROW and Access Management issues a ROW Clearance Letter when all properties are acquired and all relocations are completed.

Role Description	
Responsible:	Director of Right of Way and Access Management, Right of Way District Office, Right of Way Acquisition Team, Right of Way Technical Support, ROW Closing Unit, Deputy Attorney General, Project Manager
Consulted:	Project Manager
Informed:	Project Manager, Designer
Activity Predecessor:	4590 lag, 4630, 4650
Activity Successor:	4660 FF, 4665 lag, 4675
Activity Duration:	300
WBS Element Produced:	4.4.5, 4.10.6
Related Guidance Document:	Right of Way Manual

Prepare Riparian License Application (4655)

Previous ID: 2590

The Designer coordinates with NJDEP to determine if a Riparian License or a Riparian License and Grant is required. If required, prepare an application including all necessary technical work for a Riparian License as per the Right of Way (ROW) Engineering Manual. This technical work includes responses to NJDEP requests for additional information and continued coordination until receipt of the Riparian License or a Riparian License and Grant. Submit the application to the ROW Technical Unit for approval and forwarding to NJDEP.

Role Description	
Responsible:	Designer, Right of Way Technical Support
Consulted:	NJDEP
Informed:	Project Manager, Office of Environmental Solutions
Activity Predecessor:	4625 SS
Activity Successor:	4660
Activity Duration:	5
WBS Element Produced:	4.4.6
Related Guidance Document:	Right of Way Engineering Manual

Secure Riparian License (4660)

Previous ID: 3590

The Right of Way (ROW) acquisition team leader coordinates the ordering of appraisals, appraisal reviews and appraisal registrations for riparian parcels. Appraisals and appraisal reviews may be performed by in-house staff or by an appraisal consultant. Once the appraisal is reviewed, the case is registered and riparian cases are assigned for negotiations.

The ROW acquisition team sends the application and appraisal to NJDEP – Tidelands Bureau. The ROW acquisition team responds to any requests for additional information. The NJDEP – Tidelands Bureau sends a price approval letter to the ROW acquisition team.

The ROW acquisition team reviews and processes the price approval letters for interim license and grant fees. The ROW acquisition team sends the ROW acquisition agreements to ROW Technical Support for review and funding verification.

ROW Technical Support forwards the agreements to the Director of ROW and Access Management. The Director of ROW and Access Management authorizes the agreement and sends the cases to the ROW Closing Unit for filing. The ROW District Office notifies the Project Manager that payment has been sent to NJDEP – Tidelands Bureau.

Role Description	
Responsible:	Right of Way Acquisition Team, Right of Way Technical Support, Right of Way District Office, Right of Way Closing Unit, NJDEP – Tidelands Bureau, Director of Right of Way and Access Management
Consulted:	NA
Informed:	Project Manager, Office of Environmental Solutions
Activity Predecessor:	4655
Activity Successor:	4675
Activity Duration:	100
WBS Element Produced:	4.8.2
Related Guidance Document:	Right of Way Engineering Manual, Right of Way Manual

Perform Asbestos Survey (4665)

Previous ID: 3005

Perform an Asbestos Survey on all buildings which are scheduled for demolition in a given project.

The Right of Way (ROW) District Office notifies the Project Manager that an asbestos survey is necessary. Utilizing the Asbestos Survey/Remediation Requests Instructions, the Project Manager notifies Bureau of Landscape Architecture and Environmental Solutions (BLAES) to perform an asbestos survey when the property in question has been acquired or a Right of Entry has been obtained.

BLAES arranges to have the asbestos survey performed by an Asbestos Remediation Consultant (ARC). The ARC performs the asbestos survey and sends the findings to BLAES. If asbestos remediation is necessary, BLAES instructs the ARC to submit a fee proposal to prepare the removal plans and specifications to be used in the construction contract and to prepare an Air Monitoring Program to be performed by the ARC during the contractor's asbestos removal.

The ARC prepares the plans and specifications for all asbestos remediation necessary for the construction contract and forwards them to BLAES. BLAES reviews the remediation plans and specifications and forwards to the Project Manager who will send them to the Designer for inclusion in the special provisions of the contract documents. The Designer includes the asbestos remediation task as a separate pay item (fixed-price) in the contract documents titled "Removal of Asbestos" and provides the estimated cost as supplied by the ARC.

Role Description	
Responsible:	Right of Way District Office, Project Manager, Program Systems Management, Asbestos Remediation Consultant, Designer
Consulted:	Project Manager
Informed:	Designer
Activity Predecessor:	4670 lag
Activity Successor:	4275 FF, 4280 FF
Activity Duration:	40
WBS Element Produced:	4.8.9
Related Guidance Document:	Management of Asbestos-Containing Material Guideline, Asbestos Survey/Remediation Requests Instructions

ROW Availability (4675)

Previous ID: 3030

The point that signals the Right of Way process has been completed. All properties have been acquired. (Milestone)

Activity Predecessor:	4660, 4670, 4775
Activity Successor:	4875

Prepare Green Acres Pre-Application (4720)

Previous ID: 5740

The Bureau of Landscape Architecture and Environmental Solutions prepares the Green Acres Pre-Application with the support of the Designer and the Division of Right of Way and Access Management and submits to the owner/applicant. The applicant is typically either a municipality or county, unless the diversion land is owned by the State. Requirements for the Green Acres Pre-Application can be found in the Pre-Application Checklist listed at www.nj.gov/dep/greenacres. Completion of the pre-application in no way grants any approval for the proposed diversion project.

Note: For major Green Acres diversions or disposals, a public hearing is necessary prior to the submission of the pre-application to the Green Acres Program.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Division of Right of Way and Access Management, Project Manager, Designer
Informed:	NA
Activity Predecessor:	4010
Activity Successor:	4725, 4780
Activity Duration:	40
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Owner Submits Green Acres Pre-Application (4725)

Previous ID: 5745

The owner/applicant reviews the pre-application and submits it to the Green Acres Program for review.

Role Description	
Responsible:	Owner/Applicant
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager, Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4720
Activity Successor:	4730
Activity Duration:	30
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Obtain Green Acres Compensation Appraisal (4780)

Previous ID: New Activity

The Bureau of Landscape Architecture and Environmental Solutions (BLAES) informs the Project Manager that an appraisal is required for any Green Acres parcels and any replacement parcels to be acquired. The Project Manager notifies the Right of Way (ROW) District Office to obtain an appraisal. Appraisals may be performed by in-house staff or by an appraisal consultant. The ROW District Office provides the Project Manager with the Green Acres parcel appraisal to forward to BLAES for use in preparing the Green Acres Final Application.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions, Right of Way District Office, Project Manager
Consulted:	Right of Way District Office, Designer
Informed:	Designer
Activity Predecessor:	4720
Activity Successor:	4740 FF
Activity Duration:	40
WBS Element Produced:	4.4.11
Related Guidance Document:	Right of Way Manual, NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Obtain Resolution of Support for Green Acres Pre-Application (4730)

Previous ID: 5750

A resolution of support from the owner/applicant (governing body) must be received as part of the pre-application.

Role Description	
Responsible:	Owner/Applicant
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager, Designer
Activity Predecessor:	4725
Activity Successor:	4735
Activity Duration:	30
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

NJDEP Reviews Green Acres Pre-Application (4735)

Previous ID: 5755

The NJDEP Green Acres Program must approve the pre-application before granting approval to submit the final application. The pre-application should be submitted at least seven (7) days before the first Tuesday of the month, to be considered for review during that month by an internal Green Acres committee. The Green Acres Program will notify the applicant in writing whether the applicant may proceed with the final application.

Role Description	
Responsible:	Green Acres Program
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4730
Activity Successor:	4740
Activity Duration:	20
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Prepare Green Acres Final Application (4740)

Previous ID: 5760

The Bureau of Landscape Architecture and Environmental Solutions prepares the Green Acres Final Application with the support of the Designer and the Division of Right of Way and submits to the owner/applicant. Requirements for the Green Acres Final Application can be found in the Final Application Checklist listed at www.nj.gov/dep/greenacres. If Green Acres Planting Plans are required, they need to be prepared, signed and sealed by a NJ licensed Landscape Architect. The final application must be submitted to Green Acres 75 days before the State House Commission meeting.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Division of Right of Way, Designer
Informed:	Project Manager
Activity Predecessor:	4735
Activity Successor:	4780 FF, 4745
Activity Duration:	20
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36) NJDOT Policy and Procedures 821

Owner Submits Green Acres Final Application (4745)

Previous ID: 5765

The owner/applicant reviews the final application and submits it to the NJDEP Green Acres Program. The Green Acres Program will review the final application and determine if it is complete for the public hearing.

Role Description	
Responsible:	Owner/Applicant
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager, Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4740
Activity Successor:	4750
Activity Duration:	30
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Hold Green Acres Public Hearing (4750)

Previous ID: 5770

The owner/applicant, with support from the Bureau of Landscape Architecture and Environmental Solutions (BLAES), holds a public hearing as required for all projects where Green Acres land is diverted or disposed. The Project Manager notifies the Division of Community and Constituent Relations to schedule and hold a public hearing and provide an advanced notice of the hearing. Advance notice of the hearing must be published within local newspapers, and a sign shall be posted on the affected Green Acres parcel. BLAES includes written comments and the public hearing transcript as part of the final application supplemental information.

Role Description	
Responsible:	Owner/Applicant, Project Manager, Bureau of Landscape Architecture and Environmental Solutions, Division of Community and Constituent Relations
Consulted:	Designer
Informed:	NA
Activity Predecessor:	4745
Activity Successor:	4755
Activity Duration:	40
WBS Element Produced:	4.7.2, Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Obtain Resolution of Support for Green Acres Final Application (4755)

Previous ID: 5780

Obtain a resolution of support from the owner/applicant (governing body) and include within the final application after the public hearing.

Role Description	
Responsible:	Owner/Applicant
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Project Manager, Designer
Activity Predecessor:	4750
Activity Successor:	4760
Activity Duration:	30
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Submit Green Acres Final Application Supplemental Information (4760)

Previous ID: 5775

The Bureau of Landscape Architecture and Environmental Solutions submits proof of a public hearing notice and a transcript of the public hearing minutes to the owner/applicant. The owner/applicant submits this information and the resolution of support to the NJDEP Green Acres Program to complete the final application.

Role Description	
Responsible:	Owner/Applicant, Bureau of Landscape Architecture and Environmental Solutions
Consulted:	NA
Informed:	Project Manager
Activity Predecessor:	4755
Activity Successor:	4765
Activity Duration:	20
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

NJDEP Reviews Green Acres Final Application (4765)

Previous ID: 5785

The NJDEP Green Acres Program reviews the final application before recommending it for approval to the State House Commission. The final application must be submitted to the NJDEP Green Acres Program at least 75 calendar days before the State House Commission meeting.

Permission to submit a final application does not constitute approval for the proposed diversion project. Final approval of an application to divert encumbered parkland may only be granted by the NJDEP Commissioner and the State House Commission.

Role Description	
Responsible:	Green Acres Program
Consulted:	Bureau of Landscape Architecture and Environmental Solutions
Informed:	Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4760
Activity Successor:	4770
Activity Duration:	50
WBS Element Produced:	Associated with: 4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Obtain State House Commission Approval (4770)

Previous ID: 5790

Once the NJDEP Green Acres Program approves the final application, it will get placed on the agenda of the State House meeting, which only occurs quarterly. The State House Commission usually meets on or about the 15th of March, June, September, and December. These dates are to be used ONLY as guidelines. Once the State House Commission has granted approval, the Green Acres parcels may be acquired.

Role Description	
Responsible:	Green Acres Program, State House Commission
Consulted:	NA
Informed:	Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4765
Activity Successor:	4775
Activity Duration:	20
WBS Element Produced:	4.8.4
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Acquire Green Acres Parcels (4775)

Previous ID: New Activity

After receipt of State House Commission approval, the Bureau of Landscape Architecture and Environmental Solutions notifies the Right of Way (ROW) District Executive Regional Manager that Green Acres parcels can be acquired. The ROW District Executive Regional Manager assigns a ROW acquisition team. The ROW acquisition team executes an agreement with the property owner. Upon execution of an agreement, the ROW District Office sends the agreement to ROW Technical Support for review and funding verification.

ROW Technical Support forwards the agreement to the Director of ROW and Access Management. The Director of ROW and Access Management authorizes the agreement and sends the cases to the ROW Closing Unit.

The ROW Closing Unit verifies and updates each parcel title. The ROW Closing Unit prepares a deed and sends to the Deputy Attorney General for review and approval. Upon approval, the deed and associated documents are sent to the owner for signature. Once the signed documents are returned, the ROW Closing Unit records the deed and processes payment for the acquired property.

Role Description	
Responsible:	Director of Right of Way and Access Management, Right of Way District Office, Right of Way Acquisition Team, ROW Closing Unit, Right of Way Technical Support, Deputy Attorney General, Project Manager
Consulted:	NA
Informed:	Bureau of Landscape Architecture and Environmental Solutions
Activity Predecessor:	4650, 4770
Activity Successor:	4675
Activity Duration:	100
WBS Element Produced:	4.4.5
Related Guidance Document:	NJDEP Green Acres Program, NJDEP Green Acres Regulations (N.J.A.C 7:36)

Prepare Final Roadway Plans (4220)

Previous ID: 2190

The Designer updates the preliminary roadway plans that were prepared in Preliminary Engineering to produce the final roadway plans. The final roadway plans shall be prepared in accordance with the NJDOT Sample Plans. Perform a field inventory of existing conditions before finalizing the plans to ensure accuracy. Prepare the Roadway Quantity Calculations and update the Design Communications Report accordingly. The final roadway plans may include:

- Key Sheet
- Typical Sections
- Construction Plans
- Traffic Control And Staging Plans
- Traffic Striping And Signing Plans
- Utility Construction Staging Plans
- Estimate – Distribution of Quantities
- Profiles
- Environmental Plans
- Ties & Grades
- Construction Details
- Electrical Details
- Plan Sheet Index
- Method of Cross Sections
- Cross Sections
- Electrical Plans
- Landscape Plans

The Designer reviews the Risk Register for any previously identified risks and strategies. Incorporate and refine applicable risk response strategies and action plans. Notify the PM to update the Risk Register for any changes to existing risks and strategies.

Note for Limited Scope Projects:
For limited scope projects, final roadway documents are limited to those required for a deck/superstructure replacement or Mill X, Pave X plus 1" projects. Since environmental plans are not typically prepared for limited scope projects, include any environmental notes or commitments on final roadway documents.

Role Description	
Responsible:	Designer
Consulted:	Subject Matter Experts
Informed:	Project Manager
Activity Predecessor:	4320 (3150, 4210 for Limited Scope Projects)
Activity Successor:	4275 lag, 4280 lag, 4285 lag, 4290
Activity Duration:	120
WBS Element Produced:	4.2.5, 4.2.12, 4.9.6.1
Related Guidance Document:	NJDOT Sample Plans, Risk Management Guideline

Complete Lighting Design (4230)

Previous ID: 3050

Utilizing the conceptual layout plans developed in Preliminary Engineering, the Designer prepares the lighting design plans and a Traffic Lighting Design Report as per the NJDOT Roadway Design Manual and Sample Plans. Resolve overhead and underground utility conflicts, and submit the lighting design plans, indicating areas of temporary lighting, if necessary, to the Bureau of Traffic Signal and Safety Engineering prior to the Final Design Submission.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Traffic Signal and Safety Engineering
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4220 lag
Activity Duration:	60
WBS Element Produced:	4.2.4, 4.2.11
Related Guidance Document:	NJDOT Roadway Design Manual, NJDOT Sample Plans

Complete Traffic Signal, Signing and Striping Plans (4240)

Previous ID: 3060

The Designer prepares the traffic signal, electrical signal, signing and striping plans and signal timing schedule as per the MUTCD, NJDOT Roadway Design Manual and Sample Plans. Resolve overhead and underground utility conflicts. Prepare interim or temporary signal plans and submit to the Bureau of Traffic Signal and Safety Engineering (TSSE). If requested by TSSE, submit the plans for review prior to the Final Design Submission.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Traffic Signal and Safety Engineering
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4220 lag
Activity Duration:	60
WBS Element Produced:	4.2.13
Related Guidance Document:	MUTCD, NJDOT Roadway Design Manual, NJDOT Sample Plans

Complete ITS Facilities Plans (4255)

Previous ID: 3065

Based on the *Intelligent Transportation Systems* (ITS) facilities design prepared during Preliminary Engineering, the Designer completes the electrical and communications design work required for the construction plans. The ITS facilities plans include wiring schematics, interconnection drawings, equipment layout special details, any non-standard electrical details, fiber assignment diagrams and system block diagrams. Also submit the ITS related section of special provisions including material and equipment specifications and a separate cost estimate for proposed ITS facilities. If any ITS issues are identified, the Designer obtains NJDOT approval of the design recommendations. Include the ITS facilities plans and FD Systems Engineering Review Form (SERF) with the Final Design Submission.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Intelligent Transportation Systems Engineering, Traffic Operations, Office of Information Technology
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4235 or 4220 lag
Activity Duration:	60
WBS Element Produced:	4.2.15
Related Guidance Document:	ITS Sample Plans, ITS Standard Details, ITS Interim Guidelines, ITS Design Manual

Complete Final Design Systems Engineering Review Form (4235)

Previous ID: New Activity

If additional Intelligent Transportation Systems (ITS) facilities have been proposed since the latest Systems Engineering Review Form (SERF) revision (either in Concept Development or Preliminary Engineering), revise the SERF and obtain approval from Traffic Operations prior to submitting it to ITS Engineering. Upon approval from Traffic Operations, the Designer submits the revised SERF to ITS Engineering.

Role Description	
Responsible:	Designer
Consulted:	Bureau of Intelligent Transportation Systems Engineering, Traffic Operations
Informed:	Project Manager
Activity Predecessor:	4255
Activity Successor:	4220 lag
Activity Duration:	20
WBS Element Produced:	4.2.21
Related Guidance Document:	ITS Interim Guidelines, SERF-Programmatic Instructions, SERF-Programmatic Template

Complete Drainage Design (4270)

Previous ID: 3080

The Designer completes the drainage design according to the Drainage Design Manual and the Quality Management Guideline. Make final revisions to drainage plans, if necessary, and prepare details and specifications for non-standard items; add drainage item quantities to plans and an engineering cost estimate. Prepare and submit a Final Drainage Design Report to the Project Manager.

Role Description	
Responsible:	Designer
Consulted:	Hydrology and Hydraulics Unit
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4220 lag
Activity Duration:	40
WBS Element Produced:	4.2.9, 4.2.10
Related Guidance Document:	Drainage Design Manual, Quality Management Guideline

Develop Construction Cost Estimate (4275)

Previous ID: 3145

The Designer develops the construction estimate utilizing the Construction Cost Estimating Guide.

Role Description	
Responsible:	Designer
Consulted:	Construction Management
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4290, 4665 FF (4290 for Limited Scope Projects)
Activity Duration:	15
WBS Element Produced:	4.9.4
Related Guidance Document:	Construction Cost Estimating Guide

Develop Specifications (4280)

Previous ID: 3150

The Designer develops input for the Special Provisions using guidance provided by the latest Baseline Document Changes and Standard Specifications.

The Designer reviews the Risk Register to incorporate applicable risk response strategies and action plans. Notify the Project Manager to update the Risk Register for any changes to existing risks and strategies.

Role Description	
Responsible:	Designer
Consulted:	Construction Management, Risk Management Support Group
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4290, 4665 FF (4290 for Limited Scope Projects)
Activity Duration:	15
WBS Element Produced:	4.9.3, 4.9.6.1
Related Guidance Document:	NJDOT Standard Specifications, Risk Management Guideline

Develop Construction Schedule (4285)

Previous ID: 3155

The Designer creates a construction schedule using Primavera and the Scheduling Manual for Design Projects.

The Designer reviews the Risk Register to incorporate applicable risk response strategies and action plans. Notify the PM to update the Risk Register for any changes to existing risks and strategies.

Role Description	
Responsible:	Designer
Consulted:	Construction Management, Office of Schedule and Budget Management
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4290
Activity Duration:	15
WBS Element Produced:	4.9.5, 4.9.6.1
Related Guidance Document:	Scheduling Manual for Design Projects, Risk Management Guideline

Prepare Final Design Submission Package (4290)

Previous ID: 3185

The Designer prepares the Final Design (FD) Submission package according to the Quality Management Guideline. The package should include:

- Transmittal letter indicating the distribution of all FD Submission deliverables
- Construction Job Number form (AC-1643)
- Designer FD Submission Certification
- Design Communications Report (DCR)
- Final Plans (prints only) with copies to the appropriate review units. Mylar sheets are to be held by the designer so that any necessary revisions can be made as required by the FD Review and Plans, Specifications and Estimate (PS&E) processing activities
- Special Provisions - show all revisions required to the current Standard Input (SI)
- Construction Cost Estimate
- Construction Schedule with narrative
- Bureau of Construction Management (CM) lane miles and bridge information
- Risk Report (summarizes the completed Risk Register)

The Project Manager holds a meeting with the Designer to discuss the requirements of the submission. The Project Manager and Executive Regional Manager will decide, using the FD Scope Statement, which functional Subject Matter Expert (SME) units will be selected for the distribution of documents for review and comment. The construction Cost Estimate and Schedule will always be reviewed by Construction Management. The Designer prepares and sends the CM lane miles and bridge information to the DPM Project Manager who forwards it to Bureau of CM.

If determined by the Project Manager, hold a Project Presentation Meeting and invite all selected units that will review the submission.

Role Description	
Responsible:	Designer, Project Manager
Consulted:	Project Manager, Subject Matter Experts
Informed:	Project Manager, Bureau of Construction Management, Subject Matter Experts
Activity Predecessor:	4120, 4220, 4275, 4280, 4285 (4220, 4275, 4280, 4285 for Limited Scope Projects)
Activity Successor:	4380 FF, 4585 FF, 4800 (4800 for Limited Scope Projects)
Activity Duration:	20
WBS Element Produced:	4.6.1.1, 4.9.2, 4.9.6
Related Guidance Document:	Quality Management Guideline, Risk Management Guideline

Final Design Submission (4800)

Previous ID: 3095

The Final Design Submission Package is submitted by the Designer to the Project Manager. (Milestone)

Activity Predecessor:	4290
Activity Successor:	4805, 4810, 4850, 4860, 4865 (4810, 4860, 4865 for Limited Scope Projects)

Review Final Design Submission (4810)

Previous ID: 3100

The Project Manager, Bureau of Construction Management (CM), Bureau of Quality Management Services (QMS) and appropriate Subject Matter Experts (SMEs) review the Final Design Submission (FDS) documents and provide comments. CM reviews and finalizes the construction cost estimate, construction schedule and the project's Substantial and Final Completion dates. QMS prepares and sends the Final Road User Costs and Lane Occupancy Charges to CM (used in the Liquidated Damages Calculations).

QMS prepares and sends the request for Construction Engineering Costs to CM (used in the Liquidated Damages Calculations).

The Designer prepares and sends the Job Training Request on all federal projects to the Division of Civil Rights and Affirmative Action.

The Designer prepares and sends the request for Disadvantaged Business Enterprise (DBE) Goals (federal projects) or Women/Minority Business Enterprise (W/MBE) Goals (100% state projects) to the Division of Procurement. After completing their portion of the request, the Division of Procurement forwards the request to the Division of Civil Rights and Affirmative Action for final goal assignment.

The Project Manager consolidates and reviews the comments to resolve any conflicting comments. The Project Manager prepares an FDS comments package, highlighting the major issues and attaches all comments (memos and marked up plans). The Project Manager forwards the package to the Designer. The Designer documents any design decisions that result from the FDS comments in the Design Communications Report.

Role Description	
Responsible:	Project Manager, Bureau of Construction Management, Bureau of Quality Management Services, Subject Matter Experts, Division of Procurement, Division of Civil Rights and Affirmative Action, Designer
Consulted:	Project Manager, Risk Management Support Group
Informed:	NA
Activity Predecessor:	4800, 4805 lag (4800 for Limited Scope Projects)
Activity Successor:	4815 if applicable, 4830 or 4835 (4815 if applicable, 4830 for Limited Scope Projects)
Activity Duration:	20
WBS Element Produced:	4.7.1, Associated with: 4.9.2, 4.9.3, 4.9.4, 4.9.5
Related Guidance Document:	Quality Management Guideline

Confirm Need for Traffic Regulation Orders (4855)

Previous ID: New Activity

The Bureau of Traffic Engineering reviews the final design submission to confirm the need for any Traffic Regulation Orders (TROs). The Bureau of Traffic Engineering notifies the Project Manager of the TRO needs. The Project Manager notifies the appropriate municipal officials, reminding them of the need for any future TRO resolutions to be issued upon reaching substantial construction completion.

Role Description	
Responsible:	The Bureau of Traffic Engineering
Consulted:	NA
Informed:	Project Manager, Appropriate Municipal Offices
Activity Predecessor:	4810
Activity Successor:	4830
Activity Duration:	10
WBS Element Produced:	4.7.4
Related Guidance Document:	NJDOT Policy and Procedures 907, Adoption of Traffic Regulations

FHWA Reviews Final Design Submission (4805)

Previous ID: 3120

The Project Manager submits the Final Design Submission (FDS) to FHWA for review and comment for PoDI projects. FHWA prepares an FDS comments package (memos and marked up plans) and forwards the package to the Project Manager. The Project Manager reviews the FHWA comments package and incorporates the comments into the FDS comments package.

Role Description	
Responsible:	Project Manager, FHWA
Consulted:	Project Manager, Designer
Informed:	NA
Activity Predecessor:	4800
Activity Successor:	4810 lag
Activity Duration:	15
WBS Element Produced:	Associated with: 4.9.2, 4.9.3, 4.9.4, 4.9.5
Related Guidance Document:	NA

Certify Soil Erosion & Sediment Control (4850)

Previous ID: 2120

The Bureau of Landscape Architecture and Environmental Solutions certifies to the Soil Conservation Districts that Final Design Submission plans and specifications are in conformity with the NJDOT Soil Erosion and Sediment Control standards. Provide a copy of the certification to the Executive Secretary of the State Soil Conservation Committee and the Project Manager.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	NA
Informed:	Designer, Project Manager, State Soil Conservation Committee
Activity Predecessor:	4800
Activity Successor:	4875
Activity Duration:	10
WBS Element Produced:	4.10.6
Related Guidance Document:	Soil Erosion and Sediment Control Manual

Obtain Construction Environmental Reevaluation (4860)

Previous ID: 3170

The Project Manager requests the Bureau of Landscape Architecture and Environmental Solutions (BLAES) complete a Construction Environmental Reevaluation form and an Environmental Inventory Checklist. If the reevaluation indicates that there has been a significant change to environmental considerations, then supplemental environmental documentation may be required. BLAES submits the reevaluation form and the Environmental Inventory Checklist to FHWA for approval, if required.

Role Description	
Responsible:	Bureau of Landscape Architecture and Environmental Solutions
Consulted:	Designer, Project Manager
Informed:	NA
Activity Predecessor:	4800
Activity Successor:	4875
Activity Duration:	20
WBS Element Produced:	4.8.1
Related Guidance Document:	Environmental Reevaluation Form

Execute Consultant Agreement Addendum (4865)

Previous ID: 3135

The Project Manager requests a proposal from the Designer, to provide construction engineering (CE) services (working drawing review, engineering assistance, preparation of as-built plans, etc.). If a Licensed Site Remediation Professional (LSRP) is required during Final Design, the Designer must continue to utilize a LSRP to oversee the management of contamination during the Construction Phase. The Designer prepares and submits a CE proposal to the Project Manager. The Project Manager reviews and negotiates

the CE proposal with the Designer in accordance with NJDOT Policy and Procedure #328. The Designer submits a final CE proposal for execution.

The Project Manager sends the Consultant Agreement Addendum (CAA) to the Designer. The Designer signs the CAA and sends two signed and sealed original copies back to the Project Manager along with copies of the Corporate Resolution and Business Registration Certificates. The Project Manager circulates the CAA and an AD-12 to NJDOT Management for signature and approval. The Project Manager distributes the executed CAA to the appropriate parties. Once the CAA is fully executed, the Project Manager issues a Notice to Proceed to the Designer.

Role Description	
Responsible:	Project Manager, Designer
Consulted:	NA
Informed:	Executive Regional Manager, Designer
Activity Predecessor:	4800
Activity Successor:	4950
Activity Duration:	20
WBS Element Produced:	4.11.1
Related Guidance Document:	NA

Finalize Specifications for Comptroller Approval (Projects over $10M) (4815)

Previous ID: 3045

Based on the comments received during the Final Design Submission review, the Designer finalizes the specifications. For projects over $10M, the Designer provides the Project Manager with the final specifications, estimated construction amount and proposed advertisement date who forwards to the Director of Construction Services and Materials forty (40) days prior to the proposed advertisement date to seek the Office of the State Comptroller's approval. Provide the specifications, estimated construction amount and proposed advertisement date in an electronic format.

Role Description	
Responsible:	Designer, Project Manager, Division of Construction Services and Materials
Consulted:	Office of the State Comptroller
Informed:	NA
Activity Predecessor:	4125, 4810 (4810 for Limited Scope Projects)
Activity Successor:	4825
Activity Duration:	15
WBS Element Produced:	4.10.3
Related Guidance Document:	Specification Style Guidelines

Comptroller Approves Specifications (Projects over $10M) (4825)

Previous ID: 3055

The Office of the State Comptroller reviews the specifications and provides the Director of Construction Services and Materials with approval. The Director of Construction Services and Materials forwards the approval to the Project Manager.

Role Description	
Responsible:	Office of the State Comptroller
Consulted:	NA
Informed:	Project Manager
Activity Predecessor:	4815
Activity Successor:	4840 FF
Activity Duration:	15
WBS Element Produced:	Approved 4.10.3
Related Guidance Document:	NA

Prepare Pre-PS&E Package (4835)

Previous ID: 3114

For PoDI & PoCI Projects only, the Designer prepares the Preliminary Plans, Specifications and Estimate (Pre- PS&E) package, based on the comments received during the Final Design Submission review and Contract

Meeting, and submits to the Project Manager. The Project Manager forwards the Pre-PS&E package to FHWA.

Role Description	
Responsible:	Designer, Project Manager
Consulted:	NA
Informed:	NA
Activity Predecessor:	4810
Activity Successor:	4845
Activity Duration:	15
WBS Element Produced:	4.10.1
Related Guidance Document:	Quality Management Guideline

FHWA Reviews Pre-PS&E (4845)

Previous ID: 3116

For PoDI & PoCI Projects only, the FHWA reviews the Preliminary Plans, Specifications and Estimate (Pre- PS&E) Package and returns comments to the Project Manager. The Project Manager forwards the FHWA comments to the Designer.

Role Description	
Responsible:	FHWA
Consulted:	Project Manager
Informed:	Designer
Activity Predecessor:	4835
Activity Successor:	4830
Activity Duration:	20
WBS Element Produced:	Associated with: 4.10.1
Related Guidance Document:	NA

Resolve Final Design Submission Comments (4830)

Previous ID: 3110

The Designer updates the contract documents, utilizing the Final Design Submission (FDS) comments package, recommendations from the Contract Meeting and any Preliminary Plans, Specifications and Estimate (Pre-PS&E) comments.

At the discretion of the Project Manager, hold a meeting with the Designer and appropriate Subject Matter Experts (SMEs) to discuss the resolution of comments. Once all comments are resolved, the Project Manager informs the Designer that the project can proceed to PS&E. The Designer updates the Design Communications Report (DCR) to reflect any design decisions.

Role Description	
Responsible:	Designer
Consulted:	Project Manager, Subject Matter Experts
Informed:	NA
Activity Predecessor:	4810 or 4845 (4810 for Limited Scope Projects)
Activity Successor:	4840
Activity Duration:	10
WBS Element Produced:	4.7.1, Associated with: 4.10.2, 4.10.3, 4.10.4, 4.10.5
Related Guidance Document:	Quality Management Guideline

Submit PS&E Package (4840)

Previous ID: 3115

The Designer prepares and submits the Plans, Specifications and Estimate (PS&E) package to the Project Manager as per the Quality Management Guideline. In addition to the project plans, specifications and estimate, the PS&E package may include:

- Designer PS&E Certification
- Soil Boring Log
- Construction Schedule and Narrative
- Trainee Memo
- ESBE Goal Memo
- Approved Design Communications Report
- Quantity Calculations and Design Calculations

Role Description	
Responsible:	Designer
Consulted:	NA
Informed:	NA
Activity Predecessor:	4830, 4825 FF
Activity Successor:	4870
Activity Duration:	10
WBS Element Produced:	4.6.1.3, 4.10.2, 4.10.3, 4.10.4, 4.10.5
Related Guidance Document:	Quality Management Guideline

PS&E Submission (4870)

Previous ID: 3175

The Plans, Specifications and Estimate (PS&E) package is complete and has been submitted to the Project Manager. (Milestone)

Activity Predecessor:	4785, 4795, 4790, 4840 (4840 for Limited Scope Projects)
Activity Successor:	4875

Prepare Advertising Authorization Package (4875)

Previous ID: 3125

The Project Manager submits the AC-1643 Construction Job Number Form to the Bureau of Program Coordination for completion (construction job number, construction year and item funding). The Bureau of Program Coordination sends the completed AC-1643 Construction Job Number Form to the Project Manager.

The Project Manager submits the Plans, Specifications (Special Provisions) and Estimate (PS&E) package along with the AC-1643 Construction Job Number Form to Construction Management (CM). The PS&E package includes the Designer's PS&E package along with:

- Utility Clearance Letter
- ROW Clearance Letter
- Environmental Re-Evaluations or valid environmental document (federally funded only)
- Soil Boring Logs
- Soil Erosion and Sediment Control Certifications
- Construction Environmental Authorization Checklist/Inventory
- Department Certification (federally funded only)
- Project Summary Information form (federally funded only)

CM reviews all documents for completeness and when acceptable, prepares the CM Certification, which officially certifies the PS&E package. At this time, CM also prepares a Construction Inspection Estimate to establish construction inspection funding. CM sends the CM Certification and the Construction Inspection Estimate to the Bureau of Program Coordination. The Bureau of Program Coordination requests funds for

construction and construction inspection to advertise approximately seven (7) calendar days after the receipt of the CM Certification and Construction Inspection Estimate.

CM circulates the Key Sheet for signature with the CM Certification. For state and federal projects, the Director of Project Management and the State Transportation Engineer sign the key sheet. For projects that are sponsored by local or county governments, also obtain key map signatures from the sponsoring body.

CM reviews the Construction Cost Estimate submitted by the Designer and coordinates with the Office of Schedule and Budget Management and the Bureau of Program Coordination to generate the project's Final Engineer's Estimate and Proposal for bidding. Utilizing the Final Construction Schedule, CM updates the Substantial and Final Completion dates if necessary into the Special Provisions. CM verifies that the correct Equal Employment Opportunity (EEO) Special Provisions, Disadvantaged Business Enterprise (DBE) or Women/Minority Business Enterprise (W/MBE) Goals, Training Special Provisions, Environmental Hazards Abatement Specification and general Wage Rates, etc. are included within the Special Provisions.

For federally funded construction projects, CM compiles the advertising authorization package and submits to the Bureau of Program Coordination. The advertising authorization package includes the Construction Authorization Request, Construction Engineering Authorization Request and Construction Inspection Authorization Request. For state funded construction projects, an advertising authorization package is not needed.

Role Description	
Responsible:	Project Manager, Construction Management, Bureau of Program Coordination, Engineering Documents Unit, Geotechnical Engineering Unit, FHWA, Designer
Consulted:	Project Manager, Office of Schedule and Budget Management
Informed:	NA
Activity Predecessor:	4850, 4860, 4870 (3060, 4045, 4070, 4860, 4870 for Limited Scope Projects)
Activity Successor:	4880
Activity Duration:	20
WBS Element Produced:	4.6.1.2, 4.12.1
Related Guidance Document:	Contract Administration Procedures

PS&E Certified (4880)

Previous ID: 3130

The Plans, Specifications and Estimate (PS&E) package has been certified. (Milestone)

Activity Predecessor:	4105, 4875
Activity Successor:	(4875 for Limited Scope Projects), 4890

Obtain Pavement Specifications (4295)

Previous ID: New Activity

The Designer coordinates with the Pavement Design Unit to obtain any required pavement specifications and inputs required for the project special provisions. The Pavement Design unit will provide the Designer with the required project pavement specifications, existing ride quality data and ride quality requirements. The Designer will include the pavement specifications into the project's special provisions.

Role Description	
Responsible:	Designer
Consulted:	Pavement Design Unit
Informed:	Project Manager
Activity Predecessor:	4220 lag
Activity Successor:	4290
Activity Duration:	10
WBS Element Produced:	Included in 4.9.3
Related Guidance Document:	NA

Authorization Request Date (4890)

Previous ID: 4200

This is the Authorization Request Date for Construction funding recommended by Construction Management. (Milestone)

Activity Predecessor:	4880
Activity Successor:	4885, 4895

Receive Authorization to Advertise (4885)

Previous ID: 3140

For federally funded construction projects, the Bureau of Program Coordination submits the Advertising Authorization Package to FHWA for approval. Upon approval, the Bureau of Program Coordination notifies the Project Manager and the Bureau of Construction Services (Division of Procurement) that the project is ready for advertisement. For state and federally funded construction projects, CM prepares an AD-12 and circulates for signature.

Role Description	
Responsible:	Bureau of Program Coordination, FHWA, Construction Management
Consulted:	NA
Informed:	Project Manager, Bureau of Construction Services
Activity Predecessor:	4890 (4890 for Limited Scope Projects)
Activity Successor:	4950
Activity Duration:	15
WBS Element Produced:	4.12.2
Related Guidance Document:	NA

Complete FD Closeout (4895)

Previous ID: New Activity

The Project Manager performs the steps necessary to close out the NJDOT Final Design (FD) Phase. If required, instruct the Designer to submit their Final Invoice for the FD Phase. Upon payment of the final invoice, notify Accounting to close the job number.

Role Description	
Responsible:	Project Manager
Consulted:	NA
Informed:	Accounting, Designer
Activity Predecessor:	4890
Activity Successor:	4950
Activity Duration:	20
WBS Element Produced:	4.11.2
Related Guidance Document:	Closeout Procedure Guideline

Final Design Complete (4950)

Previous ID: New Activity

The endpoint of the Final Design Phase. (Milestone)

Activity Predecessor:	4355, 4865, 4885, 4895 (4865, 4885, 4895 for Limited Scope Projects)
Activity Successor:	5000