# PRELIMINARY PLANS MILESTONE

## GOAL

1. To perform preliminary design of the project.

2. To gain concurrence from project team on the scope and preliminary design of the project.

## DESIGN WORK TO PERFORM

Perform hydrology & hydraulic site assessment using Hydraulic Site Assessment Checklist found in DelDOT's Bridge Design Manual.

Develop hydraulic models for stream only, existing, and proposed structure conditions.

Prepare draft H&H report.

Perform preliminary structure design (TS&L level).

Perform preliminary foundation design (TS&L level).

Develop draft foundation report.

Develop draft TS&L report. Coordination with the Bridges & Structures Section should occur during this time to ensure the selected bridge will be acceptable.

Develop roadway geometric model based on structure type and size needed. This may require iterations to balance geometric needs and structural needs. Establish conservative LOC.

Perform guardrail/barrier design.

Establish road design criteria and determine need for design exceptions. Use Design Control Checklist, Design Criteria Form, and Design Exception Request documents found in DelDOT's Bridge Design Manual.

Determine need for design variances. Use Design Variance Request document found in DelDOT's Bridge Design Manual.

Coordinate with Traffic Safety to determine how to safely maintain vehicular and pedestrian access during construction. Obtain TMP determination or confirmation.

Coordinate with impacted utilities to determine potential relocations and if additional right-of-way is anticipated. This may require multiple meetings and back-and-forth with the utility companies. This coordination may require input from other project team members, such as Environmental, Construction, etc.

Coordinate with water resources group within Environmental section regarding impacts to sensitive areas.

Coordinate with cultural resources group within Environmental section regarding impacts to any historic or archaeologically sensitive areas.

Establish conservative right-of-way needs. Consider contractor access, environmental impacts, stream diversion requirements, erosion and sediment control needs, and utility relocations in addition to roadway and structure needs. Submit pre-preliminary plans to Real Estate for review of right-of-way needs so that final right-of-way can be approved shortly after Preliminary Plans submission.

Date pre-preliminary plans submitted to Real Estate:

Meet with property owners impacted by right-of-way needs to help them understand the project and the needs. Include a representative from Real Estate in the meeting.

Develop quantity list and prepare CTP cost estimate using CTP Estimate document.

Prepare schedules for final design and construction. Consider time of year, lane closure, and work hour restrictions.

Perform night work survey if required for work hours.

Prepare draft NEPA checklist using the NEPA Checklist template document.

Prepare public outreach plan and public outreach distribution list.

Host virtual workshop. Date comment period closed:

Host public workshop. Date held:

## PRELIMINARY PLANS

REQUIRED SHEETS

1. Title Sheet
2. Plan Sheet Index
3. Addendum and Revision Sheet
4. Legend Sheet
5. Notes Sheet
6. Typical sections
7. Horizontal and Vertical Control Sheets
8. Construction Plan
9. Profile Sheet

10. Grades and Geometrics

11. Construction Details

12. Plan, Section, and Elevation Sheet

13. Preliminary Structural Details

14. Soil Boring Logs

15. Conceptual Maintenance of Traffic Plan

16. Detour Plan

17. Erosion and Sediment Control Plan

18. Environmental Compliance Notes

19. Environmental Compliance Plan

20. Signing, striping, and conduit plans with proposed striping, existing signs and proposed sign structure locations shown

21. Right-of-Way Plan

22. Right-of-Way Data Sheet

23. Right-of-Way Tabulation Sheet

REQUIRED SUPPORTING DOCUMENTATION

1. Deeds

2. Archive Plans

3. Subdivision Plats

4. Right-of-way narrative explaining how the existing right-of-way was established and identifying any elements of note for impacted parcels

5. Plan Submission Checklist

6. Right-of-Way Plan Checklist

7. Applicable Bridge Plan Submission Checklist

8. Preliminary Plans Milestone Checklist

9. Compiled comments and responses from Project Scoping Meeting and Survey Plans submission

10. Approved Design Control Checklist

11. Approved Design Criteria Form

12. Approved Design Exceptions

13. Approved Design Variance Requests

14. Draft NEPA Checklist

15. Draft Project Work Plan

16. Quantity List

17. CTP Cost Estimate

18. Draft H&H Report

19. Draft Foundation Report

20. Draft TS&L Report

21. Special Provisions

PLAN DISTRIBUTION RECIPIENTS

1. To project team for review of preliminary design and development of plan details.

2. Schedule scope concurrence meeting for 45-60 days from date of submittal. Representatives from Traffic, Environmental, Utilities, Right-of-way, Team Support, Stormwater, Construction, Community Relations, and Bridge must be in attendance. Other support sections should be in attendance if they have a stake in the scope.

Date Held:

3. Obtain approvals for TS&L Report on:

4. Obtain approvals for design control checklist, design criteria, design exceptions, and design variances on:

5. Obtain approvals for project work plan on:

6. Finalize Right-of-Way Plans. Date approved on: