**PROJECT DESIGN APPROVALS**

*The Design Report is intended to be a high-level summary of a project. If information exists in a supplemental document, do not reiterate in this Report; cite the source and include as a Reference or Appendix to this Report. Information shall be updated, as needed at each project Submittal through Advertisement.*

[ ]  **Project Snapshot**

[ ]  **Project Location**

[ ]  **Project Background**

[ ]  **Design Directives**

[ ]  **Public Involvement**

[ ]  **Existing Roadway Information**

[ ]  **Traffic Operations**

[ ]  **Design Alternatives**

[ ]  **Design Exception Summary**

[ ]  **Active Transportation Elements**

[ ]  ADA Compliance

[ ]  Environmental Coordination

[ ]  Right-Of-Way

[ ]  Utilities/Railroad

[ ]  TSMO

[ ]  Pavement Structure

[ ]  Geotechnical

[ ]  Drainage

[ ]  Traffic Control

[ ]  Budget

[ ]  Proposed Layout – Selected Alt

[ ]  Construction Schedule

[ ]  Agency Agreements

*Below are anticipated supplementals to the Design Report (not an all-inclusive list). “Appendices” are to be submitted with each Project Submission. “Other References” are intended to be included with a Submission if there have been updates since the last Submission or as directed by the Design Team.*

**Appendices**

[ ]  Pending/Outstanding issues

[ ]  Design Criteria

[ ]  Intersect. Sight Distance Template

[ ]  Design Exception/Deviation Memo

[ ]  Pavement Recommendations

[ ]  Geotechnical Recommendations

[ ]  Construction Schedule

[ ]  Guardrail Calculations

[ ]  Horizontal Alignment Table

[ ]  Vertical Alignment Table

[ ]  Super-elevation Calculations

[ ]  Agency Agreements

[ ]  TCC-TMP Determination Memo

**Other References:**

[ ]  Public Involvement Plan

[ ]  Traffic Operations Analysis/Memo

[ ]  Alternatives Analysis

[ ]  Drainage Report

[ ]  Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRELIMINARY DESIGN:

*Check all sections that have been addressed as part of the Preliminary Design. For Preliminary Design, sections in* **bold** *are typically completed in their entirety and it is anticipated that the existing information and high-level review portions of the other Sections are also started/completed.*

**Signature Date**

**NHDOT Project Manager:**

 **NHDOT Geometrics SME:**

 **Engineer of Record:**

FINAL DESIGN:

*Check all sections that have been updated and/or completed as part of the Project’s Final Design. It is anticipated that all sections of this Report are final upon signature.*

**Signature Date**

**NHDOT Project Manager:**

 **Engineer of Record:**

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# PROJECT SNAPSHOT

*Provide a brief project snapshot. Design criteria can be found in the Design Criteria Form, to be provided as an Appendix to this Report.*

|  |  |  |
| --- | --- | --- |
| **Town(s):**  | **Route(s):**  |  |
| **State Project No:**  | **Federal Project No:**  |
| **Project Type:**  | **Funding Type:**  |
| **Project Location:**  |
| **Project Length:**  | **BMM:** | **EMM:** |
| **Program:**  | **Program Manager:**  |
| **Project Manager:** | **Regional Planning Commission:** |
| **DOT Design Lead:** | **District Construction Engineer:** |
| **Consultant:** | **District Engineer:** |
| **FHWA Oversight:**  |  |

# PROJECT LOCATION

Insert GIS Location Map, showing project area.



# PROJECT BACKGROUND

**Project Origin:**

*Ten Year Plan (TYP) Statement/Initial Need*

**Support Documents:**

*List and provide links for available information: Report of Commissioner, Hearing outcomes, corridor studies, RSAs, charrettes, hydraulic studies, TSL studies, draft/final NEPA, etc.*

**Early Project Coordination:**

*Maintenance and Operational Issues/Concerns: District, Bridge, Traffic, Highway Safety and AT, RPCs, etc.*

# DESIGN DIRECTIVES

**Major Scope Changes: Submittal Revisions or Updates?** [x] **Yes** [ ] **No**

*Describe major scope changes since last submission.*

**Purpose and Need: Submittal Revisions or Updates?** [ ] **Yes** [ ] **No**

**Scope of Work/Project Improvement**: **Submittal Revisions or Updates?** [ ] **Yes** [ ] **No**

**Department Coordination: Submittal Revisions or Updates?** [ ] **Yes** [ ] **No**

*Document decisions made that impact project direction. These may include discussions with other Bureaus and/or Departmental Meetings.*

# PUBLIC INVOLVEMENT

*All projects with a Public Advisory Committee (PAC) should consider a Public Involvement Plan (PIP), to be provided as an Appendix to this Report. If the project does not warrant a PIP, provide information on project contacts/stakeholders and a summary of the public involvement intent.*

**Public Involvement Plan:** [ ]  **Yes** [ ]  **No**

Public Contacts/Stakeholders:

Brief Summary of Public Involvement:

# EXISTING ROADWAY INFORMATION

EXISTING SITE CONDITIONS

*Initial information from desktop survey or site visit. Include a description only if there are existing conditions that do not conform to New Hampshire Standards.*

**Side Slopes** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Roadway Atypical Elements** Nonconforming Conditions [ ] Yes [ ] No

Brief Description *(ex/ medians, bypass lanes, curbing, etc.):*

**Design Vehicle Considerations** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Clear Zone (Guardrail and/or Encroachments)** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Sight Distance Obscurement** Nonconforming Conditions [ ] Yes [ ] No

Brief Description *(ex/ vegetation, buildings, rail, slopes, etc.):*

**Active Transportation Elements** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**ADA Compliance** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Access Management Issues/Encroachments** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Drainage High-Level Considerations** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Utility High-Level Considerations** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Right-of-Way High-Level Considerations** Nonconforming Conditions [ ] Yes [ ] No

Brief Description *(ex/ ownership of mainline and intersecting roads, etc.):*

**Other** Nonconforming Conditions [ ] Yes [ ] No

Brief Description *(ex/ retaining walls, overhead structures, railroad signals, traffic signals, sign structures, stone lined slopes, flat intersecting road radii, safety/operational observations/concerns)*:

EXISTING GEOMETRY REVIEW

*The intent of this Section is to capture existing conditions that do not conform to the project’s design criteria. Existing Conditions Review deliverables are project specific but may include roll plan of the existing roadway layout, existing profiles, important geometric information (conveyed concisely, ex/ table format). This review often includes an OTS with the consultant/team.*

**Horizontal Alignment** Nonconforming Conditions [ ] Yes [ ] No

 Brief Description:

 **Vertical Alignment** Nonconforming Conditions [ ] Yes [ ] No

 Brief Description:

**Superelevation and Super Transitions** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

**Cross Slopes (Travel Way)** Nonconforming Conditions [ ] Yes [ ] No

Brief Description:

EXISTING TYPICAL

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Lane Width** | **Shoulder Width** | **Comments** |
| **Road Name: STA to STA** |  |  |  |
| **Road Name: STA to STA** |  |  |  |
| **Road Name: STA to STA** |  |  |  |

# TRAFFIC OPERATIONS

*Depending on the project a Traffic Operations Analysis or Traffic Analysis Memo may be required to capture information on existing and proposed traffic operations and analysis. It is anticipated that only projects that are not proposing to change the existing traffic configuration would be N/A (ex/ Resurfacing Projects). All other projects would warrant a standalone Memo or Report, to be provided as an Appendix to this Report.*

**Brief Summary:**

[ ]  **Traffic Operations Analysis**

[ ]  **Traffic Analysis Memo**

[ ]  **N/A** (if N/A, provide brief Traffic summary in comments)

Comments:

**Traffic Operations Analysis/Memo Final?** [ ]  **Yes** [ ]  **No** [ ]  **N/A Completion/Revision Date:**

# DESIGN ALTERNATIVES

*Provide a high-level summary of the Design Alternatives considered for this project. Depending on the project scope, if a separate Alternatives Analysis is required, this shall be provided as an Appendix to this Report.*

**Brief Summary:**

# DESIGN EXCEPTIONS/DEVIATIONS SUMMARY

*Requirements regarding Controlling Criteria and documentation for Design Exceptions and Deviations/Variances can be found in Chapter 3 of the NHDOT Highway Design Manual (HDM). Example Memo provided in the HDM – Appendix 3-2. Project Design Exceptions and/or Deviations to be provided as an Appendix to this Report.*

[ ]  **No design exceptions are required.**

**Controlling Criteria**

*Controlling Criteria Design Exceptions require completion of memos and formal memo signoffs as described in Chapter 3 of the HDM.*

**Design Exception:**  **Date Approved:**

**Design Deviations/Variances**

*Design Deviations/Variances require completion of memos as described in the Chapter 3 of the HDM. Approval of the Design Report will serve as approval of these deviations/variances.*

**Design Deviation/Variance:** **Date Approved:**

# ACTIVE TRANSPORTATION ELEMENTS

*To date, NHDOT does not have a formal Complete Street’s Policy or Guidance. However, all projects should strive to include active transportation (complete street) elements. A Complete Street is a roadway that provides safe and efficient access to the transportation system to all users. Each Active Transportation element shall be considered; formal guidance will be provided in the upcoming NH Pedestrian Bike Plan.*

*Some municipalities in New Hampshire have adopted Complete Street Guidance. All projects should check with the municipality the project is located to determine additional specific requirements.*

**Select all Active Transportation (AT) elements that have been incorporated into the project:**

[ ]  Sidewalks

[ ]  Crosswalks

[ ]  Pedestrian Signals (RRFB, PHB)

[ ]  Lighting (street or pedestrian)

[ ]  Shoulder Improvements

[ ]  Bike Lanes

[ ]  Shared Use Paths

[ ]  Street Scape

[ ]  Public Transit

[ ]  Municipal Policy (explain)

 Comments:

[ ]  Other (explain)

 Comments:

**Project reviewed by Safety Section:** [ ]  **Yes** [ ]  **No**

 **Date:** **Comments:**

**Explanation of Improvements:**

*Provide an analysis and justification for all locations where active transportation elements were incorporated into the proposed design.*

|  |  |  |
| --- | --- | --- |
| **Location**  | **Analysis** (Include as Appendix) | **Justification** |
|  | --- |  |
|  | --- |  |

**Explanation of Omissions**:

*Provide an analysis and justification for all locations where active transportation elements were* ***not*** *incorporated into the proposed design. If an in-depth analysis was completed as part of a separate document (alternatives analysis), provide as an Appendix to this Report and include a brief description below.*

**Location: Justification:**

# ADA COMPLIANCE

*Pedestrian facilities shall be upgraded to comply with current policies. These include* [NHDOT Sidewalk Curb Ramp Details](https://www.nh.gov/dot/org/projectdevelopment/highwaydesign/detailsheets/documents/crb_ramp_1_9.pdf) *which build upon the* [*Public Right-of-Way Accessibility Guidelines (PROWAG)*](https://www.adainfo.org/sites/default/files/1.4-Public-Rights-of-Way-2-slides-per-page.pdf) *and the* [NHDOT FED 3 Policy – Adoption of Standard ADA Title II](https://nhdot-docs.com/2018/10/12/fed-3-policy-adoption-of-standard-title-ii-ada/)*. These policies are based on* [*the* ADA Accessibility Guidelines (ADAAG)](https://www.access-board.gov/ada/) *which is the current law.*

**Project reviewed by ADA Title II Coordinator:** [ ]  **Yes** [ ]  **No** [ ]  **N/A**

 **Date:** **Comments:**

**Select all that apply:**

[ ]  No pedestrian facilities exist on the project, and none will be installed.

[ ]  Existing pedestrian facilities will not be upgraded to ADA compliance based on project scope.

[ ]  New pedestrian ADA compliant facilities will be installed where none previously existed.

[ ]  Existing pedestrian facilities will be upgraded to ADA compliance unless technically infeasible.

[ ]  Pedestrian signals will be installed or upgraded if required.

**Provide information on existing and/or new pedestrian facilities:**

*See Existing Site Conditions Section of this Report for information regarding existing conditions that do not conform to ADA and PROWAG.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Sidewalks****(Y/N)** | **Curb Ramps****(Y/N)** | **Crosswalks****(Y/N)** | **Pedestrian Signals (Y/N)** |
| **Existing Facilities** | **-** | **-** | **-** | **-** |
| **Proposed Facilities** | **-** | **-** | **-** | **-** |

**The ADA Coordinator must sign-off on each location where ADA elements were not incorporated into the proposed design. This applies to both existing and proposed sidewalk locations.**

 **Location: Description:**

# ENVIRONMENTAL COORDINATION

Environmental Manager:

Environmental Consultant:

*The below table is intended to include all environmental information available on the project, reach out to the Environmental lead ahead of each Submission. This Section is not intended to capture impacts or design constraints which should be located in other Sections of this Report.*

|  |  |
| --- | --- |
| **ENVIRONMENTAL CONSIDERATION** | **BRIEF DESCRIPTION** |
| **NEPA Classification** |  |
| **Section 106 (Cultural Resources)** |  |
| Inventories Required |  |
| Archaeological Elements |  |
| **Section 4(f)** |  |
| **Section 6(f)** |  |
| **Plants, Wildlife, Fisheries**  |  |
| Federal Endangered Species |  |
| State Endangered Species |  |
| Essential Fish Habitat  |  |
| Fish Passage Design Review  |  |
| **Wetlands** |  |
| ACOE |  |
| Designated Rivers |  |
| In-Stream Work Window/ Construction Restrictions |  |
| Dredge Material |  |
| **Shoreland Protection** |  |
| **Floodplains/Floodways** |  |
| Coast Guard  |  |
| FEMA |  |
| **Water Quality** |  |
| **Conservation Lands** |  |
| **Plants, Wildlife, Fisheries**  |  |
| Federal Endangered Species |  |
| State Endangered Species |  |
| Essential Fish Habitat  |  |
| Fish Passage Design Review  |  |
| **Contamination** |  |
| **Mitigation**  |  |
| **Any additional permits/coordination not listed above.** |  |

# RIGHT-OF-WAY (ROW)

ROW COORDINATION

NHDOT ROW Bureau Contacts:

Prime Contact - Assistant Administrator:

Chief of Surveying and Mapping:

Chief ROW Agent:

Chief ROW Appraiser:

Initial Boundary Survey to be Completed By:  [ ]  DOT [ ]  Project Consultant [ ]  ROW Consultant [ ]  N/A

ROW Registry Plans to be Recorded: [ ]  Yes [ ]  No

|  |  |  |  |
| --- | --- | --- | --- |
| **Approved By** | **Type** | **Date Approved** | **Comments** |
|  |  |  |  |
|  |  |  |  |

Level of ROW Coordination Anticipated:

[ ]  Level 1 [ ]  Level 2 [ ]  Level 3 [ ]  Level 4 [ ]  ROW Alignment [ ]  ROW Facilitation Meeting

EXISTING ROW

Types of Land Ownership:

[ ]  ROW [ ]  LAROW [ ]  CAROW [ ]  RRROW [ ]  State Owned ROW (Towns, Parks, etc.)

[ ]  Conservation Land [ ]  Land Types (condo, legacy easement, etc.)

Notes:

*Provide notes on any information where level of detail would have an impact on the project coordination needed. Example: Prescriptive or municipally owned ROW.*

SELECTED ALTERNATIVE – ROW

**Submittal Revisions or Updates?** [ ]  **Yes** [ ]  **No**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Existing Width** | **Proposed Width** | **No. of Abutters** | **No. of Acquisitions** | **No. of Relocations** | **Special Case Impacts** | **Easement Types** |
| **Road Name: STA to STA** |  |  |  |  |  |  |  |
| **Road Name: STA to STA** |  |  |  |  |  |  |  |
| **Overview Comments:** |

# UTILITIES/RAILROAD

UTILITY COORDINATION

Utility Coordinator:

Town Master Plan (future capital improvement projects):

Municipal Utility Work:

RAILROAD COORDINATION

Railroad Coordinator:

Railroad Owner:

Railroad Operator:

EXISTING UTILITIES

Above Ground Utilities:

Underground Utilities:

Utility Constraints/Concerns (ROW, Historic, Env, etc.):

SELECTED ALTERNATIVE - UTILITIES

**Submittal Revisions or Updates?** [ ]  **Yes** [ ]  **No**

|  |  |  |
| --- | --- | --- |
|  | **Required for Project?** **(Yes or No)** | **Coordination Still Needed?****(Yes or No)** |
| **Utility Conflict List:** | **-** | **-** |
| **Utility Agreements**: | **-** | **-** |
| **Railroad Preliminary Agreements (Flagging/Design):** | **-** | **-** |
| **Railroad Construction Agreement:** | **-** | **-** |
| **Unique Situations. Explain:**  |  |

**Temporary Relocations:**

# AERONAUTICS

**Has initial coordination been complete?** [ ]  **Yes** [ ]  **No**

**Any project restrictions?**

 **Temporary?** [ ]  **Yes** [ ]  **No**

Comments:

**Permanent?** [ ]  **Yes** [ ]  **No**

Comments:

# TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSMO)

**Preliminary ITS Review:**

*Summarize NHDOT’ s Initial ITS Request information received from TSMO.*

 **Additional ITS coordination needed?** [ ]  **Yes** [ ]  **No**

# PAVEMENT STRUCTURE

*Preliminary and/or Final Pavement Recommendations/coordination can be found as an Appendix to this Report.*

Pavement Design Engineer:

PRELIMINARY HIGH-LEVEL PAVEMENT REVIEW

 **Preliminary Pavement Report?** [ ]  **Yes** [ ]  **No**

Brief Description:

*Only needed if a Preliminary Pavement Report is not available. Reference other documents, such as the Alternative Analysis, if discussion on pavement alternatives exists elsewhere.*

FINAL PAVEMENT DESIGN

**Pavement Structure Design**

*Information provided here is intended to be a summary of the formal Pavement Recommendations. A separate table should be provided for each proposed treatment.*

|  |  |  |
| --- | --- | --- |
|  | **Existing** | **Proposed** |
| **Layer** | **Thickness** | **Type** | **Thickness** | **Type** |
| Wearing/Binder/Base |  |  |  |  |
| Select Material |  |  |  |  |
| Atypical Pavement Treatment | - |

**Comments:** *Provide justification if Atypical Pavement Treatment is used or proposed treatment deviates from the Pavement Recommendations.*

**Pavement Recommendations Final?** [ ]  **Yes** [ ]  **No Completion/Revision Date:**

# GEOTECHNICAL

Geotechnical Engineer:

Other Contacts:

PRELIMINARY HIGH-LEVEL SOIL REVIEW

*Highlight major soil considerations. Preliminary Geotechnical Recommendations/coordination can be found as an Appendix to this Report.*

Available Soils Information:

*NRCS Soil mapping, existing nearby borings from GIS boring database, other.*

General Consideration:

*Provide a general narrative of information that will help to inform “Geotechnical considerations” and high-level information.*

Geotechnical Considerations:

*Information regarding proposed highway structures can be found in the Proposed Layout – Selected Alternative section below.*

Borings Required? [ ]  Yes [ ]  No [ ]  TBD Status: \_\_\_

Geotechnical Analysis Required? [ ]  Yes [ ]  No [ ]  TBD Status: \_\_\_

Rock Concerns? [ ]  Yes [ ]  No [ ]  TBD Status: \_\_\_

Permeability Tests Required? [ ]  Yes [ ]  No [ ]  TBD Status: \_\_\_

Structural Foundations Required? [ ]  Yes [ ]  No [ ]  TBD Status: \_\_\_

FINAL GEOTECHNICAL DESIGN

**Geotechnical Recommendations Final?** [ ]  **Yes** [ ]  **No Completion/Revision Date:**

**Rock Slope Review Memo Final?** [ ]  **Yes** [ ]  **No Completion/Revision Date:**

# DRAINAGE

PRELIMINARY HIGH-LEVEL DRAINAGE REVIEW

*Drainage is inclusive of hydraulics, hydrology, and stormwater. Summarize the project’s high-level drainage considerations. Highlight elements that could influence the Project’s Design including ones that should be identified as part of the Pre-Hearing review.*

Existing Conditions:

Stormwater Treatment/Impervious Areas:

MS 4 Community? [ ]  Yes [ ]  No

Alteration of Terrain (AoT)? [ ]  Yes [ ]  No

Pollutant Loading Analysis? [ ]  Yes [ ]  No

Tiered Crossings: [ ]  Yes [ ]  No

General Considerations

Is Floodway Effected by Design [ ]  Yes [ ]  No

Is Floodplain Effected by Design? [ ]  Yes [ ]  No

Bridge Design Involvement? [ ]  Yes [ ]  No

Pre-Hearing Drainage Design Memo? [ ]  Yes [ ]  No

FINAL DRAINAGE DESIGN

*Depending on the project scope, a separate Drainage Report may be required to capture existing and proposed drainage information. Drainage is inclusive of hydraulics, hydrology, and stormwater.*

**Brief Summary:**

[ ]  **Drainage Report**

[ ]  **Drainage Memo**

[ ]  **N/A** (If N/A, Preliminary Review above should include all applicable project drainage information)

**Drainage Report/Memo Final?** [ ]  **Yes** [ ]  **No Completion/Revision Date:**

# TRAFFIC CONTROL

PRELIMINARY HIGH-LEVEL TRAFFIC CONTROL

*To be completed prior to the completion of the TCC-TMP Determination Memo. Provide a brief summary of any assumptions, concerns, or other factors for consideration as traffic control is developed. Reference other documents, such as the Traffic Report or Alternatives Analysis, if discussion on traffic control exists elsewhere.*

**Summary:**

TRAFFIC CONTROL COMMITTEE (TCC) DETERMINATION

*The following provides a summary of information from the TCC-TMP Determination Memo, to be provided as an Appendix to this Report.*

|  |  |
| --- | --- |
| **Morning Restrictions** |  |
| **Evening Restrictions** |  |
| **Maximum Closure Length** |  |
| **Minimum Lane Width** |  |
| **Significance Determination** |  |

Seasonal restrictions? [ ]  Yes [ ]  No

Multi-Season Project? [ ]  Yes [ ]  No

Phased Construction? [ ]  Yes [ ]  No

Detour? [ ]  Yes [ ]  No

 Type:

TC Traffic Analysis Required? [ ]  Yes [ ]  No

 *See Traffic Analysis Report/Memo*

Speed Reduction? [ ]  Yes [ ]  No

Smart Work Zone? [ ]  Yes [ ]  No

Temporary Signals? [ ]  Yes [ ]  No

**TCC Meetings attended**:

**Date: Committee Requirements:**

# BUDGET

*This Section is intended to be completed for the selected alternative only. Information regarding other alternatives to be included as part of the Alternatives Analysis, provided as an Appendix to this Report.*

***This Section to be completed collaboratively between the Department and Consultants.***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Selected Alternative** | **Current (ProMIS)***Information to come from NHDOT* | **Ten Year Plan (TYP)***Information available online, use most recent approved TYP.*  | **Funding** |
| **Date** |  |  |  |  |
| **Construction** |  |  |  |  |
| **Construction Engineering** |  |  |  |  |
| **PE** |  |  |  |  |
| **Preliminary** |  |  |  |  |
| **Final** |  |  |  |  |
| **Right-of-Way** |  |  |  |  |
| **Other** |  |  |  |  |
| **TOTAL** |  |  |  |  |
| **\*Previous Funding** |  |  |  |  |
| **Construction Cost per Lane Mile:** |  |  |  |  |
| **Bridge Cost:** |  |  |  |  |
| **Notes:** |  |

*\*This line is intended to capture previous TYP information (if applicable). Intent of table is to understand full picture of project cost.*

**Estimate Review Committee (ERC) Meetings attended:**

**Date:**  **Committee Requirements:**

# PROPOSED LAYOUT – SELECTED ALTERNATIVE

*Proposed layout information to be provided once a selected alternative is chosen; typically at the Pre-Hearing Submittal.*

TYPICAL SECTION

*Each line is intended to represent a typical roadway section. A separate line is only required if the design criteria changes or there is an area constraint.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Lane Width**  | **Shoulder Width** | **Sidewalk Width** | **Cross-Slopes** | **Side-Slopes** | **Ditch Depth** |
| **Road Name: STA to STA** |  |  |  |  |  |  |
| **Road Name: STA to STA** |  |  |  |  |  |  |
| **Road Name: STA to STA** |  |  |  |  |  |  |

Additional Comments:

*Provide information on areas that deviate from the typical.*

HORIZONTAL ALIGNMENT

*All horizontal elements to be checked with the Proposed Design - Horizontal Alignment Review Table, provided as an Appendix to this Report.*

**Justification:**

*Describe factors that influence the proposed alignment. Refer to Design Exceptions/ Deviations Summary of this Design Report and formal Memos provided in the Appendices.*

**Submittal Revisions or Updates?** [ ]  **Yes** [ ]  **No**

*Cite the locations of where changes were made from previous submission.*

VERTICAL ALIGNMENT

*All horizontal elements to be checked with the Proposed Design - Horizontal Alignment Review Table, provided as an Appendix to this Report.*

**Justification**

*Describe factors that influence the proposed alignment. Refer to Design Exceptions/ Deviations Summary of this Design Report and formal Memos provided in the Appendices.*

**Submittal Revisions or Updates?** [ ]  **Yes** [ ]  **No**

*Cite the locations of where changes were made from previous submission.*

INTERSECTIONS

INTERSECTION SIGHT DISTANCE (ISD)

*ISD should be reviewed for intersecting roadways, major drives, and driveways in unique situations.*

*Provide a summary of all approaches in Table. See Intersection Sight Distance Template for specific analyses. Provide justification for all locations where design criteria is not met.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Existing Control** | **Proposed Control** | **ISD Existing** | **ISD Required** | **ISD****Provided** | **Comments** |
|  |  |  |  |  |  | Justification Provided Below |
|  |  |  |  |  |  | \_\_\_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  \_\_\_\_\_\_\_\_\_\_ |

**Design Justifications (provide as needed for each location):**

INTERSECTION LAYOUT

*Provide specific design considerations for each intersection, as needed. Include a justification regarding any elements that deviate from the Project’s design criteria and traffic analysis recommendations.*

1. *INTERSECTION NAME:*
2. *INTERSECTION NAME:*

CLEAR ZONE

GUARDRAIL LOCATIONS

*Provide Guardrail Calculation worksheets as an Appendix to this Report.*

|  |  |
| --- | --- |
| **Existing Guardrail** | **Proposed Guardrail** |
| **Number of GR Runs** | **Total Project GR Length** | **Number of GR Runs** | **Total Project GR Length** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Proposed Guardrail Summary:** Ex/ high hazard areas, crash locations, if LON not met, GR sections other than W-Beam, end units other than EAGRTs, etc. |
|  |
|  |

OTHER CLEAR ZONE LOCATIONS

*Identify locations where design decisions were made which eliminated the need for guardrail and where guardrail was decided not to be placed to shield isolated hazards.*

|  |  |
| --- | --- |
| **Location**  | **Notes**  |
|  |  |
|  |  |

ATYPICAL DRIVES AND ENTRANCES

*Provide a listing of atypical drive solutions (access management, sight distance, turning movements, etc) that are unique from standard treatments - Drive Manual.* ***Do not provide a listing of all drives/entrances****.*

|  |  |
| --- | --- |
| **Location**  | **Description** |
|  |  |
|  |  |

HIGHWAY STRUCTURES

*Provide information on highway structures, these are structures that require geotechnical information and oftentimes a Bridge Design Review. List locations of all elements included on the project, including a brief description of each (location, height, type, foundations, maintenance considerations, vertical clearance limitations etc.).*

**RETAINING WALLS**

1. STA X – STA X:

**SOUNDWALLS**

1. STA X – STA X:

**LARGE CULVERTS**

1. STA X – STA X:

**ATYPICAL HEADWALLS**

1. STA X – STA X:

**SIGNAL (traffic and pedestrian) MAST ARMS/FOUNDATIONS**

1. STA X:

**OVERHEAD SIGN STRUCTURES/FOUNDATIONS**

1. STA X:

**RAILROAD MAST ARMS/FOUNDATIONS**

1. STA X:

**PERMANENT ITS STRUCTURES/FOUNDATIONS**

1. STA X:

**OTHER**

1. STA X – STA X:

# CONSTRUCTION SCHEDULE

*The intent of this section is to include high level construction schedule information. Depending on the project scope, the project may include a Construction Schedule, found as an Appendix to this Report. The schedule type will depend on project complexity ranging from a Construction Sequencing Narrative to a detailed Microsoft Project’s schedule.*

**Construction Schedule Created?** [ ]  **Yes** [ ]  **No**

|  |  |
| --- | --- |
| **PS&E Date** |  |
| **Advertise Date** |  |
| **Construction Begin** |  |
| **Interim Construction Completion** |  |
| **Final Construction Completion** |  |

**Additional Information:**

# AGENCY AGREEMENTS

*Include all project agreements as Appendices to this Report.*

Municipal Agreements:

Other Agreements