INSTRUCTION SHEET – DELETE THIS PAGE BEFORE FINALIZING THE PACKET

This CP2A Merger Packet Example and Guidance is to be used for all projects in Merger.

This instruction sheet is intended to assist the writer and should not be included with the CP4A Merger Packet submittal. For additional information please see the [Merger Guidance](file://RALW00/projects/70492%20-%202022%20East%20Region%20PDSC%20and%20GESC/HB-0021_Pitt%20Co%20%28730419_Oxford%20Rd.%29/Meetings/2022-10-24%20Field%20Scoping%20Meeting/FSM_HB-0021_Pitt%20BR419_Final.pdf#page=47).

Hidden Text/Guidance

This document uses the “Hidden Text” feature of Microsoft Word to assist the writer in in the creation of a CP2A Merger Packet. Hidden text can be enabled and disabled by going to File > Options > Display and then check/uncheck Hidden text. It is highly recommended you enable the guidance text if this your first time working in this document.

* The purple hidden text explains the type of information needed.
* The red Example Text sections provide example language. This language is not intended to be copied and pasted exactly as stated and should be modified to change the specifics as it pertains to your project.
* The blue text are hyperlinks to guidance.

Format

Use text formatting (i.e. font, size, bold, italics, etc.) specifically as presented in this template. Follow the header and footer format as shown.

**Bridging Decisions and Alignment Review**

Insert STIP Description

Example TextNC 111 (Catherine Lake Road) Extension from US 258 (Richlands Highway) to SR 1308 (Gum Branch Road)

Insert County (ies)

Example TextOnslow County

Insert STIP Project No.

Example TextSTIP Project U-5733

Example TextNorth Carolina Department of Transportation

Insert Division Number

Example TextDivision 3

****

**MERGER CONCURRENCE POINT NUMBER 2A**

***Insert Meeting Date/Time***

Insert Table of Contents (if desired)

Appendices

* Figures
* Site map and individual site information (topographic quad map, plan sheet, photos) from the HPR

Figures (included with packet)

Study Area Map

Detailed Study Area Map

Jurisdictional Features Map

1. **Introduction**

**This section should provide information such as the Lead federal agency and primary points of contact for the project.**

Example TextLead federal agency: US Army Corps of Engineers

Primary points of contact for the subject project are:

|  |  |
| --- | --- |
| **Agency**  | **Name**  |
| Federal Highway Administration (FHWA)  | Trey Charles  |
| U.S. Army Corps of Engineers (USACE)  | Harry Trent |
| North Carolina Department of Water Resources (NCDWR)  | Clara Miller |
| North Carolina Department of Transportation  | Lucie Bing |
| HNTB  | Corey Laken |

Example TextThe purpose of this Merger Team meeting is to discuss and achieve concurrence on the proposed major hydraulic crossings on the project and the proposed alignment.

**1.1 Project Description**

This section should use the STIP description to introduce the project, provide the start and end points, the length of the project, and the project identification. It should also introduce Figure 1, the project location map.

Example TextThe North Carolina Department of Transportation (NCDOT) proposes to extend NC 111 (Catherine Lake Road) from US 258 (Richlands Highway) to SR 1308 (Gum Branch Road) north of Jacksonville, in Onslow County (**Figure 1**). The project includes a potential new location crossing of the New River.

**1.2** **Project History and Merger Plan**

This section should briefly state the project’s history to-date and include the previous concurrence point decisions. This section should provide a basic schedule and cost information. The project schedule should be discussed in context with the proposed Merger Plan for the project.  In this section, hyperlink the phrase “Merger Plan” and link it to the location in which current merger plan for the project resides (i.e., SharePoint).

Example Text The project is in the 2018-2027 NCDOT STIP that was approved by the NCDOT Board of Transportation on September 1, 2018, and most recently revised March 1, 2020. Though not currently programmed, NCDOT Division 3 anticipates Federal funding will be utilized for this project. Right-of-way (ROW) and Construction funding are scheduled for 2022 and 2024, respectively. The current STIP cost estimate is presented in Table 1. The proposed project schedule is included in Table 2 and is based on the Merger Plan. The schedule and cost estimates are draft and subject to change.

Table 1. 2018-2027 STIP U-5733 Cost Estimate

|  |  |
| --- | --- |
| **Phase** | **Cost Estimate** |
| Right of Way | $3,207,000 |
| Utilities | $600,000 |
| Construction | $39,576,000 |
| **Total**\* | **$43,383,000** |
| \*Includes $1,000,000 in prior years costs. Note: cost estimates are subject to change. |

Table 2**.** STIP U-5733 Project Schedule\*

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Format** | **Anticipated Date** |
| Public Meeting | Virtual Meeting | May 2020 |
| CP 3 (LEDPA Determination) | Virtual Meeting | June 2020 |
| Categorical Exclusion | Electronic Distribution | September 2020 |
| CP 4A | Virtual Meeting/Packet Concurrence | November 2020 |
| CP 4B | Virtual Meeting | January 2021 |
| CP 4C | Virtual Meeting | March 2021 |
| Begin ROW Acquisition  |  | June 2022 |
| Begin Construction  |  | June 2024 |

\*Tentative, subject to change.

**1.3** **Past Merger Meetings Summary**

This section should briefly discuss past merger meeting dates and public involvement efforts (if applicable). Note any major changes that may have occurred between meetings.

Example Text **CP1:** The Merger Meeting for CP1 was held on November 3, 2019. During the meeting, the Purpose and Need for the project was created and the Project Study Area was defined.

**CP2:** The Merger Meeting for CP2 was held on February 21, 2020. The purpose of the meeting was to discuss alternatives for project development and determine which should be carried forward for detailed study. As a result of this meeting the following alternatives have been carried forward: No Build, Build Alternative 1A (Southern Alignment), Build Alternative 1B (Southern Variant Alignment), and Build Alternative 2 (Middle Alignment).

1. **Water Resources**

This section should describe the water resources within the study area as presented in the NRTR. Provide figures showing the location of the features. Individual feature information, “Characteristics of Jurisdictional Streams” and “Characteristics of Jurisdictional Wetlands”, should be provided in a table and include the SAM and WAM ratings, respectively.

Example TextJurisdictional streams and wetlands are located in the study area and are shown in the Natural Resource Technical Report figures (**Appendix A**). Nine streams were identified within the study area and included three named streams: New River, Half Moon Creek, and Bachelors Delight Swamp. The remainder are unnamed tributaries (UTs) to these streams. These streams are considered jurisdictional surface waters under Section 404 of the Clean Water Act. All jurisdictional streams have been designated as warm water streams for the purposes of mitigation. Stream and surface water information are found in **Table 3**.

**Table 3.** Characteristics of Jurisdictional Streams in the Study Area

| **Stream Name** | **Figure No.** | **Map ID** | **NCDWR Index Number** | **Best Usage Classification** | **Length (ft.)** | **Classification** |
| --- | --- | --- | --- | --- | --- | --- |
| UT to New River | 3C | SAB | 19-(1) | C; NSW | 1,993 | Perennial |
| 451 | Intermittent |
| New River | 3K | SA | 19-(1) | C; NSW | 7,820 | Perennial |
| UT to New River | 3E | SAC | 19-(1) | C; NSW | 224 | Intermittent |
| UT to New River | 3H | SAD | 19-(1) | C; NSW | 2,802 | Perennial |
| 413 | Intermittent |
| UT to New River | 3A | SAF | 19-(1) | C; NSW | 357 | Perennial |
| Half Moon Creek | 3L | SB | 19-6 | C; NSW | 380 | Perennial |
| UT to New River | 3F | SAH | 19-(1) | C; NSW | 75 | Intermittent |
| Bachelors Delight Swamp | 3L | SC | 19-5 | C; NSW | 181 | Intermittent |
| UT to Bachelors Delight Swamp | 3B | SBA | 19-(1) | C; NSW | 234 | Intermittent |
| UT to Bachelors Delight Swamp | 3D | SBC | 19-(1) | C; NSW | 3,641 | Perennial |
| 372 | Intermittent |
|  |  |  |  | **TOTAL** | **18,943** |  |

Example TextThe New River within the study area is designated as an inland Anadromous Fish Spawning Area (AFSA). An AFSA Construction Moratorium is anticipated and will be determined through coordination with the NC Wildlife Resources Commission (NCWRC). One Coastal Area Management Act (CAMA) Area of Environmental Concern (AEC) is present in the study area. A Public Trust Water AEC is present on Half Moon Creek, Bachelors Delight Swamp, and the New River within the study area.

Four jurisdictional wetlands were identified within the study area. The locations of these wetlands are shown in **Appendix A**. All wetlands in the study area are located within the White Oak River basin (USGS Hydrologic Unit 03020302). Wetland information is found in **Table 4**.

**Table 4.** Characteristics of Jurisdictional Wetlands in the Study Area

| **Map ID** | **NCWAM Classification** | **NCWAM Rating** | **Hydrologic Classification** | **Area (ac.) in Study Area** |
| --- | --- | --- | --- | --- |
| WC | Pine Flat | Medium | Non-Riparian | 0.18 |
| WD | Riverine Swamp Forest | High | Riparian | 1.35 |
| WE | Bottomland Hardwood Forest | High | Non-Riparian | 0.22 |
| WF | Headwater Forest | High | Riparian | 0.05 |
|  |  |  | Total | 1.8 |

1. **Analysis of Alternatives**

Total impacts by build alternative for streams and wetlands and potentially competing resources are shown in **Table 5**.

|  |
| --- |
| **Table 5:** Total Potential Impacts\* to Streams and Wetlands by Build Alternative |
| **Resource** | **Alternative 1A****(Southern Alternative)** | **Alternative 1B****(Southern Variant Alternative)** | **Alternative 2****(Middle Alternative)** |
| Streams (ft) | 1,673 | 1,822 | 3,796 |
| Wetlands (ac) | 5.5 | 5.9 | 13.6 |
| EMS Facilities | 1 (planned) | 1 (Half Moon Fire Dept.) | 1 (Half Moon Fire Dept.) |
| Church Impacts | 1 (Iglesia Ni Cristo) | 3 (Bethel Church, Tue Life Ministries, Iglesia Ni Cristo) | 3 (Bethel Church, Tue Life Ministries, Iglesia Ni Cristo) |
| Canoe Landings | 0 | 0 | 1 (Henry McCallister Landing) |
| Potential Historic Architecture Sites | 1 | 5 | 3 |
| Voluntary Agricultural Districts | 1 | 0 | 1 |
| FEMA Floodway Width | 10,080 ft | 9,190 feet | 5,990 ft |
| \*Impacts measured based on slope stake limits plus an additional 40 feet. |

Note when and by whom the jurisdictional areas were approved and, if applicable, when the Preliminary Jurisdictional Determination (PJD) was approved.

Example TextJurisdictional areas identified during original field investigations were verified by Brad Shaver of the U.S. Army Corps of Engineers (USACE) and Joanne Steenhuis of the NC Division of Water Resources (NCDWR) on October 30-31, 2018 and March 28, 2019. The Preliminary Jurisdictional Determination (PJD) was approved by the USACE on May 9, 2019.

1. **Major Hydraulic Crossings**

This section should include the definition of a major hydraulic crossing and provide a table (from the HPR) describing the crossings. Include additional information (site map, site plan, and photographs) from the HPR as an appendix. The HPR table does not include the cost estimate or the impacts for the recommended structure, these will need to be added.

Example TextMajor hydraulic crossings are those with a contributing drainage area requiring conveyance greater than a 72-inch pipe. A total of six potential major hydraulic crossings were identified for the proposed project. These structures are described in **Table 6** and additional information including the site map and individual site plan and photographs are included in **Appendix B**.

|  |
| --- |
| **Table 6. Major Hydraulic Structures1 Recommendations, Cost Estimate, and Potential Impacts by Alternative** |
| **SITE NO** | **ROUTE** | **STREAM NAME**  | **NRTR MAP ID** | **NCDWR STREAM INDEX NUMBER** | **STREAM/ WETLAND SIZE****(ft / ac)**  | **STREAM CLASS** | **DRAINAGE AREA** | **EXISTING STRUCTURE** | **ALTERNATIVE 1A****(Southern Alternative)** | **ALTERNATIVE 1B****(Southern Variant Alternative)** | **ALTERNATIVE 2****(Middle Alternative)** |
| **Number, Size, Structure Type** | **Recommended Structure** | **Cost Estimate** | **Potential Stream/ Wetland Impact2** | **Recommended Structure** | **Cost Estimate** | **Potential Stream/ Wetland Impact2** | **Recommended Structure** | **Cost Estimate** | **Potential Stream/ Wetland Impact2** |
| 1 | NC 111 Extension | UT to New River | SAB/ WC | 19-(1) | 2,042 / 19.5 | C; NSW | 538 ac | None | 1 @ 7' x 8' RCBC | $450,000 | 459 ft / 1.0 ac | See Note (3) |  |  |  |  |  |
| 2 | NC 111 Extension | New River | New River (SA)/ WD | 19-(1) | 7,820 / 126.1 | C; NSW | 111.2 sq mi | None | Bridge min length4, 5 = 2,545' (2@100', 3@115', 20@100') | $14.9M | 0 ft / 3.9 ac | Bridge min length4, 5 = 2,545' (2@100', 3@115', 20@100') | $14.9M | 0 ft / 4.0 ac |  |  |  |
| 3 | NC 24 | UT to New River | SAC | 19-(1) | 3,072 | C; NSW | 2.17 sq mi | 2 @ 8' x 9' RCBC |  |  |  |  |  |  |  |  |  |
| 4 | NC 111 Extension | New River | New River (SB)/ WC/ WD | 19-(1) | 7,820/ (WBR) 5.0/ (WBM) 7.7 | C; NSW | 99.8 sq mi | None |  |  |  |  |  |  | Bridge min length = 1,100' (11@100') | $6.1M | 0 ft /(WBR) 0.53 ac(WBM) 0.95 ac |
| 5 | SR 1308 (Gum Branch Rd) | UT to Bachelors Delight Swamp | SBC6/ WF | 19-5 | 903/ 0.2 | C; NSW | 388 ac | 103" x 71" CSPA |  |  |  |  |  |  | 1 @ 7' x 7' RCBC | $290,000 | 385 ft/ 0.15 ac |
| 6 | SR 1308 (Gum Branch Rd) | Bachelors Delight Swamp | Bachelor's Delight Swamp (SB) | 19-5 | 528 | C; NSW | 8.5 sq mi | 3 @ 137" x 87" CMPA |  |  |  |  |  |  | 3 @ 10' x 8' RCBC | $219,000 | 179.5 ft |

NOTES:

1. Major Hydraulic Structures - conveyance greater than 72-inch pipe or have an opening equal to or greater than 30 square feet.
2. Impacts based on slope stake limits plus 40 feet.
3. Gray shading indicates that this Site is not crossed by the alternative.
4. Minimum bridge length is the minimum length required to span the floodway and have a “no rise”. It is not the minimum length required for the hydraulic opening.
5. To span both wetlands on either side of the proposed bridge, an additional approximately 1,000 ft of additional bridge length would be required.
6. All streams except Stream SBE are perennial. Stream SBE is intermittent.
7. **Avoidance and Minimization**

Include all documented avoidance and minimization measures discussed to-date. Use AMM Guidance from ***At ALL Merger Concurrence Points and key design meetings*** and ***Concurrence Point 2A.***

Build Alternative 1B was developed to avoid impacts to two mobile home parks east of US 258 and to avoid parallel impacts to an unnamed tributary that roughly parallels Spring Leaf Lane to the north then Brown Road to the south. Proposed structures cross perpendicular to the New River, thereby reducing impacts to the stream. The proposed structures will be of length to have a “no-rise” effect on the floodplain.

1. **Alignment Review**

This section should discuss the preferred alignment alternative and provide a brief description why it was concurred upon.

Based on review of the impacts analyzed for each alignment alternative, the Merger Team reached concurrence on Build Alternative 1B (Southern Variant Alignment). Concurrence was reached based on the determination that 1B will have the least environmental impacts from implementation of a major hydraulic structure, while still allowing the Purpose and Need of the project to be met.

1. **Merger Plan Review/Next Steps**

Based on the Merger Plan for the project, NCDOT proposes the next Merger Meeting will be CP 3 (LEDPA).  Prior to the next Merger Meeting, NCDOT will complete the impacts analyses and update costs. It is anticipated that the CP 3 meeting will be held in six months; Merger Team members will be notified of any changes that require a revision of this timetable.

**Section 404/NEPA Merger Project Team Meeting Agreement**

**Concurrence Point No. 2A**

**Project Purpose and Need and Study Area Defined**

Project Name/Description: US 561 (Knightsville Highway) to SR 1308 (Big Creek Road). Construct Extension of Copperhead Road on new location. **STIP Project: E-1225**

The Merger Team has concurred on this date of February 1, 2021, on the major hydraulics structures as shown in **Table 6** of the CP2A Merger Packetfor STIP Project E-1225.

USACE NCDCM

USEPA FHWA

USFWS NCDOT

NCDWR NOAA Fisheries

NCWRC CMPO

**Appendix A**

***\**** *Tables of jurisdictional features from the NRTR, including the SAM and WAM ratings for each feature (if available)\**

**Appendix B**

*\*Site map and individual site information (topographic quad map, plan sheet, photos) from the HPR\**