



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

May 22, 2009

EUGENE A. CONTI, JR.  
SECRETARY

**MEMO TO:** Jon Nance, P. E., Chief Engineer-Operations  
Deborah Barbour, P. E., Director of Preconstruction  
Ellis Powell, P. E., Director of Field Support  
Lacy Love, P. E., Director of Asset Management

**FROM:** Terry Gibson, P. E.  
State Highway Administrator

A handwritten signature in black ink, appearing to read "Terry Gibson", written over a horizontal line.

**SUBJECT:** Update: Tri-Managed Bridge Replacement Process

As a result of additional streamlining of the Department's delivery of bridge replacement projects, the guidelines as shown in the September 5, 2008 memo from Mr. W. F. Rosser have been revised. The Tri-Managed Process will remain as originally planned and is attached. Training for the Tri-Managed Process is scheduled in June 2009. The Division Managed Process is being redefined and training on that process will begin in July 2009. The attached guidelines provide milestones for the major activities involved in the Tri-Managed Process.

Please share this information with your staff and proceed with implementation of the Tri-Managed guidelines immediately. Also, Division Construction Engineers should begin scheduling their field scoping meetings for 2009.

If you have any questions, please contact Art McMillan, Ellis Powell, or Bill Goodwin.

TRG/gl

Attachment

**cc:** Art McMillan, P. E.  
Neil Lassiter, P. E.  
Greg Thorpe, Ph.D.  
Bill Goodwin, P. E.  
John Rouse, P. E.

# **Tri-Managed Bridge Replacement Process Guideline**

The Tri-Managed Process will involve four phases; Data Collection, Field Scoping Meetings, Design, and Let. The following process is intended to be guidelines only and can be modified by the Tri-Managers as they determine necessary based on project specifics, funding considerations, manpower, and resource requirements.

## **Data Collection Phase**

The initial phase of each project will consist of data collection and evaluation. The Data Collection Phase for the Tri-Managed Bridge Replacement projects will be managed by the PDEA – Bridge Project Development Unit.

## **Field Scoping Meeting (FSM)**

A Field Scoping Meeting (FSM) will be held for each project to determine the scope and schedule. FSMs will be scheduled and analyzed in “bundles” of projects based on Division boundaries and project TIP schedules. The Division Construction Engineer will be responsible for the assembly and distribution of the FSM Worksheets to the various units, and for the scheduling and facilitating of FSM meetings. The completed FSM Worksheets will be used as the Final Minutes of that meeting.

## **Tri-Managed Bridge Process**

The Tri-Managed Bridge Replacement Process will be used by the Project Development and Environmental Analysis Branch, Highway Design Branch, in consultation with the Divisions to plan, design, and permit more complex TIP Bridge Replacement Projects that require a CE or PCE.

PDEA will be responsible for the planning document and all permit applications. The Highway Design Branch will be responsible for the designs and the projects will be let from the Central Proposals and Contract Office.

The following list of project and site conditions may be used as a guide for projects requiring the TRI-Managed Bridge Process:

- On-site Detour or new alignment [CE or PCE]
- FEMA detailed flood study area
- CAMA Major Permit
- Major Utility Impacts
- Relocatees
- Section 106 properties
- Section 7 impacts
- Section 4(f) resource impacts [Forest Service Lands, State Parks, etc.]

## DATA COLLECTION

Months before FSM	STaRS Milestones	DATA COLLECTION AND DELIVERABLES	RESPONSIBLE GROUP
<b>16</b>		Request Preliminary Engineering Funds	PDEA
<b>14</b>	TMOS / TSPS	Request digital mosaic and shell mapping	PDEA
		Request GEO preliminary subsurface information	PDEA
		Request NRTR Report	PDEA
		Request Preliminary L&S Report	PDEA
		Request Preliminary Hydraulic Recommendation	PDEA
		Request Traffic Forecast	PDEA
		Request Accident / Operating Speed analysis	PDEA
		Request detour study from Division - onsite vs offsite	PDEA
<b>4</b>		Electronic mapping of wetland & streams submitted to RDU & HYD	NEU
		All data collection activities have been completed and delivered to RDU, DCE, PDEA, and requesting parties	All Units
		Begin Preliminary Evaluation of Vert. and Horiz. alignment for FSM	RDU
<b>2</b>	NRTR	NRTR Report complete and distributed	NEU
		**Memo from Division announcing time and location of the FSM	DCE
<b>0</b>	FSM	On Site Field Scoping Meeting	FSM ATTENDEES

**\*\*NOTE:** At 2 months prior to FSM, the Division Construction Engineer (DCE) will send out notification of FSM Time and Location along with Divisions completed Field Scoping Meeting Worksheets. All Units shall complete their comments and return worksheets 2 weeks prior to FSM to the DCE. The DCE will compile, copy, and have worksheets available to discuss at FSM.

**TRI-MANAGED BRIDGE PROCESS**

<b>Months before LET</b>	<b>STaRS Milestones</b>	<b>MILESTONE</b>	<b>RESPONSIBLE GROUP</b>
36	FSM	FIELD SCOPING MEETING include DCE, HYD, SDU, PDEA, NEU-BIO, GEO, ABCE, RDU, DEO, DL&S, DRA and DUA Contact. Division Construction Engineer is the responsible person to set up FSM. Alternatives to study are selected during the field meeting.	DCE
	TLOC	Final Survey Request Submitted to Location & Surveys	RDU
32	PDS	Preliminary Designs & construction cost estimate submitted to PDEA	RDU
31	FLOC	Final Surveys submitted to RDU	L&S
30	ALT SEL	Alternative selection meeting between PDEA, RDU, & DCE	PDEA
		Preliminary "Green Sheet" commitments sent to RDU, HYD, SDU, Division, HEU, & NEU-BIO	PDEA
29		25% Design Plans submitted to HYD Unit	RDU
27	THYD	Roadway Design Plans submitted to HYD Unit	RDU
	SREC	Structure Recommendation Plans submitted to SDU	RDU
	DP	Roadway Design Plans submitted to DCE	RDU
		Request roadway subsurface information from GEO	RDU
25		Final Pavement Design request sent to Pavement Management	RDU
		Draft Bridge Survey Report (BSR) submitted to SDU.	HYD
		Coordinate with DBCE and the DCE concerning bridge span layout structure foundation, and to discuss access/removal details	SDU
24		Revised BSR comments submitted to HYD	SDU
22	FHYD	Final drainage designs submitted to RDU	HYD
	BSR	Bridge Survey Reports submitted to SDU, RDU, GEO, & the DCE	HYD
		Roadway subsurface & slope information submitted to RDU	GEO
21		Prepare FEMA and/or State Stormwater Permit Applications	HYD
20	PGDS	Preliminary Bridge General Drawings completed	SDU
		Draft CE distributed to NEU, HEU, RDU, HYD, SDU, REU, DCE, and FHWA for comments	PDEA
		Request final structure subsurface investigation from GEO	SDU
19	CE	Planning Document completed	PDEA
17	HEU LDA INFO	Request information for Location & Design Approval Letter	HEU
		RDU calls the DCE to set up the date, time, & place for the CFI	RDU
16	SFR	Structure foundation recommendations sent to SDU	GEO
		Plans distributed for CFI	RDU
15	CFI	Hold Combined Field Inspection	RDU / DCE
	LADA	State Highway Engineer signs Location and Design Approval Letter	State Highway Engineer
		HYD provided final details for temporary access and removal of existing bridge	SDU
14		Request for R/W authorization submitted to BOT	PROG DEV
13		Request is made for final permit drawings, impacts, & 1/2 size plans from HYD, SDU, PS-UTIL and RDU	NEU
12	R/W	Submit plans to Right of Way Branch	RDU
		Structure Impact data submitted to NEU for Permit Applications	SDU
		Utility Impact data submitted to NEU for Permit Applications	PS-UTIL
		Hydro submits Draft Permit Drawings to NEU	HYD
11		Draft Permit Drawing Comments sent to Hydro	NEU
10		HYD and RDU begin Plan / Permit Consistency Review	HYD / RDU
9	PDNEU	After plan / permit consistency review between HYD & RDU, 1/2 size plans & permit drawings are sent to NEU	NEU
8	PS	Permit Application submitted to Agencies (USACE, DWQ, DCM, & USCG)	NEU
4	RPCP	Plans turned into PS-CONTRACTS for letting	RDU & OTHERS
3		Permits received by NEU (401, 404, CAMA)	NEU
		Permits received by HYD (SSP and FEMA)	HYD
2		Let List finalized and permits received by PS-CONTRACTS	PS-CONTRACTS
0	LET	Project Letting	PS-CONTRACTS

<b>Abbreviation</b>	<b>Full Name</b>
ABCE	Area Bridge Construction Engineer
CE	Categorical Exclusion
CFI	Combined Field Inspection
DCE	Division Construction Engineer
DCM	Division Coastal Management
DEO	Division Environmental Officer
DL&S	Division Locations & Surveys
DRA	Division Right of Way Agent
DUA	Division Utilities Agent
DWQ	Division of Water Quality
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year
GEO	Geotechnical Unit
HEU	Human Environment Unit
HYD	Hydraulics Unit
FSM	Field Scoping Meeting
L&S	Location and Surveys
NEU	Natural Environment Unit
NEU-BIO	Natural Environment Unit - Biological Surveys Group
NRTR	Natural Resources Technical Report
PCE	Programmatic Categorical Exclusion
PDEA	Project Development & Environmental Analysis
PROG DEV	Program Development Branch
PS-CONTRACTS	Project Services - Contracts & Proposals Section
PS-UTIL	Project Services - Utility Section
RDU	Roadway Design Unit
REU	Roadside Environmental Unit
SDU	Structure Design Unit
SFR	Structure Foundation Recommendations
UCU	Utilities Coordination Unit
USACE	US Army Corps of Engineers

# TRI-Managed Bridge Process

**TRI-Managed Bridge Process Guidelines:**

On-site Detour or new alignment [CE or PCE]

FEMA detailed flood study area

CAMA Major Permit

Major Utility Impact

Relocates

Section 106 properties

Section 7 impact

Section 4(f) resource impact

