# ROADWAY DESIGN UNIT STAFF MEETING

Roadway Design Unit Conference Room 8:30 a.m. – 12:30 a.m. September 2, 2008

 2009-2015 TIP Scheduling Process (Scheduling Meeting with DOT Management is September 11, 2008)
 All schedule changes to be completed by the Roadway Design Unit Co-Project Manager are due to Dewayne by Tuesday, 09/09/08. (Sykes)



Email dated October 1, 2008 (Sykes). The approved Final Problem Project List is complete. It contains the approved Problem Projects and their respective schedules. It was shared with the Divisions earlier this week. Also attached is the preliminary Problem Project List (East Central and West PP final). It contains the preliminary problem projects and highlighted in green are the changes agreed to at the Problem Project Meeting in September. Both listed have been sorted by RDU PE.

• Tri-Managed and Division Managed Bridge Replacement Process
As a result of recommendations from the Bridge Technical Team and Transformation
Management Team, the existing bridge replacement process has been separated into
two different project management approaches. Both processes involve a data collection
stage followed by a bridge scoping meeting. The filed scoping meeting attendees will
establish the type of work for each bridge project.



Share this information with your staff members and proceed with implementation of these guidelines immediately.

 TMT – Performance Dashboard Appraisal (PDA) Engineers and Technicians (Bennett - Sykes - Blevins)



This PDA new system will be implemented for all employees in April 2009. Beginning October 1, 2008, all employees will transition to the new system for a six-month introductory period. The purpose of this six-month transition period is to allow time for employees to become familiar with the new process, to allow time for managers and supervisors to develop performance metrics for employees, and validate the performance measures, targets, and weights prior to implementation next year. At the end of this transition period, your introductory PDA will be evaluated along with your current performance management plan that was prepared in April 2008. However, your performance rating for the period April 1, 2008, thru March 31, 2009, cycle will be based upon your current PM, excluding the top leadership positions that began the cycle with a PDA.

Each employee should have a PDA in place by October 31, 2008.

Roadway Design Unit Staff Meeting September 2, 2008 Page 2

• Concrete Transitional Sections for Catch Basins and Drop Inlets

Due to a request from the Contracting Industry, two new pay items have been added to
transport. Concrete Transitional Sections for Catch Basins and Concrete
Transitional Sections for Drop Inlets will be measured and paid for in units of each.

This is effective with the January 20, 2009 letting. The new Special Provision needed
for the new pay items is attached. See Randy Garris' memo dated August 26, 2008.

4

In the original Standard Specifications the concrete apron was incidental to construction of the drainage structure.

Drainage Summary Sheets have been modified to implement this change. The Unit needs to start using the new drainage summary sheets.

Open Discussion (Bennett)

**Minutes Approved By:** 

lay A. Bennett, PE 10/17/08

### Bennett, Jay A



From:

Sykes, Dewayne L

Sent:

Wednesday, October 01, 2008 10:27 AM

To:

Brew, Gregory E; Goodnight, James S; Haire, Christopher K; Houser, Anthony A; Houser, Catherine S; Lovering, Gary R; Moore, Brenda L; Moore, Jason; Mumford, Glenn W; Speer.

James A; Taylor, Bryan D; Thomas, Roger D; Walls, Ted S

Cc: Subject: Blevins, Scott D; Bennett, Jay A; Allen, Ronald (Ron) D

Approved Final Problem Project List

Follow Up Flag:

Follow Up

Flag Status: Red

Attachments:

East Cent West PP final sorted by RDU PE.xls; Final Prob Proj List sorted by RDU PE.xls



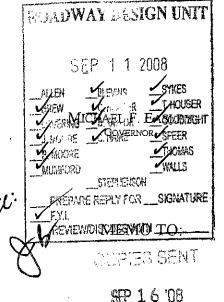


East Cent West PP Final Prob Proj List final sorted... sorted bu...

A11,

Attached is the approved Final Problem Project List. It contains the approved Problem Projects and their respective schedules. It was shared with the Divisions earlier this week. Also attached is the preliminary Problem Project List (East Cent West PP final). It contains the preliminary problem projects and highlighted in green are the changes agreed to at the Problem Project Meeting in September. Both listed have been sorted by RDU PE. Please let me know if you have any questions.

Dewayne L. Sykes, PE Assistant State Roadway Design Engineer NCDOT







SEP 1 0 2008

HIGHWAY DESIGN BRANCH

1/4/--

dyd \_\_\_\_Staff &S \_\_\_Exe Photo Sec.

LYNDO TIPPETT A

Take appropriate Action
Prepare reply for

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

September 5, 2008

Steve Varnedoe, P.E, Chief Engineer-Operations

Deborah Barbour, P.E., Director of Preconstruction

Jon Nance, P.E., Director of Field Support
Lacy Love, P.E., Director of Asset Management

W. F. Rosser, P.E.

State Highway Administrator

SUBJECT:

FROM:

Tri-Managed and Division Managed Bridge Replacement Process

As a result of recommendations from the Bridge Technical Team and Transformation Management Team, the existing bridge replacement process has been revised and separated into two different project management approaches. The two processes were developed with a goal of streamlining the Department's delivery of bridge replacement projects. Both processes involve a Data Collection Stage followed by a Field Scoping Meeting. The Field Scoping Meeting attendees will decide on the appropriate process to follow for the remainder of the project. The attached guidelines provide milestones for the major activities involved in each of the two processes.

Please share this information with your staff members and proceed with the implementation of these guidelines immediately. For bridge projects currently under development, the Tri-Managers should decide how existing projects can be brought into the new process.

If you have any questions, you may contact Art McMillan, Neil Lassiter, or Bill Goodwin.

WFR/gI

Attachment

cc: Roberto Canales, P.E.
Ellis Powell, Jr., P.E.
Art McMillan, P.E.
Neil Lassiter, Jr., P.E.
Bill Goodwin, P.E.

MAILING ADDRESS: NC DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATOR 1536 MAIL SERVICE CENTER

TELEPHONE: 919-733-7384 FAX: 919-733-9428

LOCATION: TRANSPORTATION BUILDING 1 SOUTH WILMINGTON STREET RALEIGH NO

## **Bridge Replacement Process Guideline**

As a result of recommendations of the Transformation Management Team, the existing bridge replacement process has been revised and separated into two different project management approaches. These new processes consist of a TRI-Managed Process and a Division Managed Process. The selection of the type of process will be dependant upon the project complexity and site conditions. The Bridge Management Unit will complete the planning and design of projects that are underway. After these projects are complete they will no longer plan, design, or let bridge replacement projects.

The following processes are intended to be guidelines only and can be modified by the Tri-Managers as they determine appropriate 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 <u>all</u> 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 which process the project should follow. FSMs will be scheduled and analyzed in "bundles" of projects based on Division boundaries and project TIP schedules. The Division Bridge Manager 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 using a CE or PCE.

PDEA will be responsible for the planning document and all permit applications. All projects will be designed by the Highway Design Branch and Let from the Central Proposals and Contract Office.

The following list of project and site conditions may be used to determine 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.]

### **Division Managed Bridge Process**

The Division Managed Bridge Process will be used by the Division Bridge Managers and the Highway Design Branch to plan, design, and permit less complex TIP Bridge Replacement Projects that require a Programmatic Categorical Exclusion (PCE).

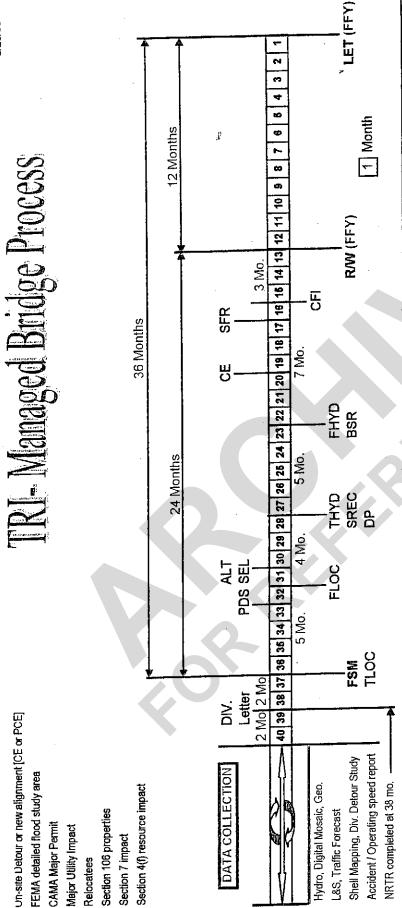
The Division Environmental Officer will be responsible for the planning document and the 401, 404, and CAMA General permit applications. The designs will be done by the Highway Design Branch. These projects can be Let by the Divisions or by the Central Office.

Due to a short pre-construction schedule for these types of projects, Right of way and Let may be placed on a production schedule. It will be the Division's responsibility to obtain the funding for any advancement in the TIP FY Funding.

The following list of project and site conditions may be used to determine where the Division Managed Process can be used:

- > Off-site Detour, one alternate [PCE]
- No FEMA detailed flood study area
- > No CAMA Permit or CAMA general permit only
- Minor Utility Impacts
- No Relocatees
- No Section 106 properties
- ➤ No Section 7 impacts
- > No Section 4(f) resource impacts [Forest Service Lands, State Parks, etc.]

Abbreviation	Full Name
CE	Categorical Exclusion
CFI .	Combined Field Inspection
DBM	Division Bridge Manager
DCE	Division Construction Engineer
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



# Division Managed Bridge Process

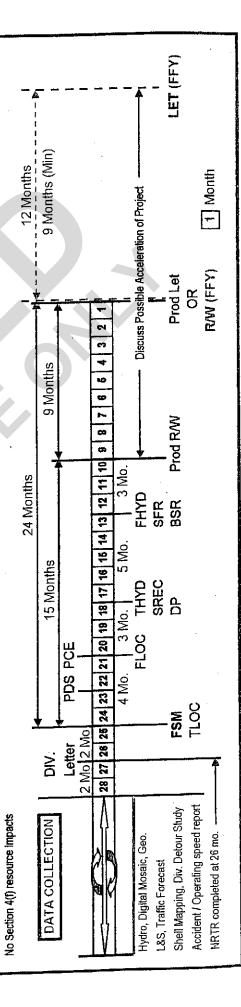
No Section 106 properties, No Section 7 Impacts

No CAMA Permit or CAMA general permit only

No FEMA detailed flood study area

No Relocatees, Minor Utility impacts

Bridge Process Requirements: Off-site Detour, One Alternate, [PCE]



### **DATA COLLECTION**

Months before FSM	STaRS Milestones	DATA COLLECTION AND DELIVERABLES	RESPONSIBLE GROUP
16		Request Preliminary Engineering Funds	PDEA
	TMOS / TSPS	Request digital mosaic and shell mapping	PDEA
1	111.007.70.0	Request GEO preliminary subsurface information	PDEA
14		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
4		Electronic mapping of wetland & streams submitted to RDU & HYD	NEU
		All data collection activities have been completed and delivered to RDU, DBM, PDEA, and requesting parties	All Units
		Begin Preliminary Evaluation of Vert. and Horiz. alignment for FSM	RDU
	NRTR	NRTR Report complete and distributed	NEU
2	NKIK	**Memo from Division announcing time and location of the FSM	DBM
0	FSM	On Site Field Scoping Meeting	FSM ATTENDEES

<sup>\*\*</sup>NOTE: At 2 months prior to FSM, Division Bridge Manager 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 DBM.

DBM will compile, copy, and have worksheets available to discuss at FSM.

### TRI-MANAGED BRIDGE PROCESS

Months before LET	STaRS Milestones	MILESTONE	RESPONSIBLE GROUP
36	FSM	FIELD SCOPING MEETING include DCE, HYD, SDU, PDEA, NEU-BIO, GEO, BCE, RDU, DBM, DEO, DL&S, DRA and DUA Contact. Division Bridge Manager is the responsible person to set up FSM. Alternatives to study are selected during the field meeting.	DBM
	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
-	ALT SEL	Alternative selection meeting between PDEA, RDU, & DBM	PDEA
30		Preliminary "Green Sheet" commitments sent to RDU, HYD, SDU, Division, HEU, & NEU-BIO	POEA
29		25% Design Plans submitted to HYD Unit	RDU
	THYD	Roadway Design Plans submitted to HYD Unit	RDU
	SREC	Structure Recommendation Plans submitted to SDU	ROU
27	DP	Roadway Design Plans submitted to DBM	RDU
		Request roadway subsurface information from GEO	RDU
		Final Pavement Design request sent to Pavement Management	RDU
		Draft Bridge Survey Report (BSR) submitted to SDU.	HYD
25		Coordinate with BCE and the DCE concerning bridge span layout	SDU
24		structure foundation, and to discuss access/removal details  Revised BSR comments submitted to HYD	SDU
<u> </u>	FHYD	Final drainage designs submitted to RDU	HYD
22	BSR	Bridge Survey Reports submitted to SDU, RDU, GEO, & the DBM	HYD
LL	·	Roadway subsurface & slope information submitted to RDU	GEO
21		Prepare FEMA and/or State Stormwater Permit Applications	HYD
	PGDS	Preliminary Bridge General Drawings completed	SDU
20	1 000	Draft CE distributed to NEU, HEU, RDY, HYD, SDU, REU, DBM, 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
40	SFR	Structure foundation recommendations sent to SDU	GEO
16		Plans distributed for CFI	RDU
	CFI	Hold Combined Field Inspection	RDU / DCE
45	LADA	State Highway Engineer signs Location and Design Approval Letter	State Highway
15	LADA	HYD provided final details for temporary access and removal of	Engineer SDU
14		existing bridge  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
		Submit plans to Right of Way Branch	RDU
12		Structure impact data submitted to NEU for Permit Applications	SDU
'^		Utility impact data submitted to NEU for Permit Applications	PS-UTIL
44		Hydro submits Draft Permit Drawings to NEU  Draft Permit Drawing Comments sent to Hydro	HYD
11		HYD and RDU begin Plan / Permit Consistency Review	HYD / RDU
10 9	DDNEU	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		Plans turned into PS-CONTRACTS for letting	RDU & OTHERS
_		Permits received by NEU (401, 404, CAMA)	ИЕП
3		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

# DIVISION MANAGED BRIDGE PROCESS

Months before	STaRS Milestones	MILESTONE	RESPONSIBLE GROUP
24	FSM	FIELD SCOPING MEETING include DCE, HYD, SDU, PDEA, NEU-BIO, GEO, RDU, DBM, DEO, DL&S, DRA and DUA Contact. Division Bridge Manager is the responsible person to set up FSM. Alternatives to study are selected during the field meeting.	DBM
		Request final structure subsurface investigation from GEO	SDU
		Final Survey Request Submitted to Location & Surveys	RDU
	TLOC	Preliminary Design & Construction cost estimate submitted to DEO	RDU
22	PDS		L&S
20	FLOC	Final Surveys submitted to RDU	⊿ DEO
	PCE	Planning Document completed by DEO	RDU
	THYD	Roadway Design Plans submitted to HYD Unit	RDU
17	SREC	Structure Recommendation Plans submitted to SDU	
	DP	Roadway Design Plans submitted to DBM	RDU
1 7		Request roadway subsurface information from GEO	RDU
		Final Pavement Design request sent to Pavement Management	RDU
		Draft BSR submitted to SDU.	HYD
15		Coordinate with BCE and the DCE concerning bridge span layout structure foundation, and to discuss access/removal details	SDU
		Revised BSR comments submitted to HYD	SDU
14	HEU LDA INFO	Revised BSR comments submitted to 1112  Request information for Location & Design Approval Letter	HEU
		Final drainage designs submitted to RDU	HYD
	FHYD	Bridge Survey Reports submitted to SDU, RDU, GEO, & DBM	HYD
4	BSR	Preliminary Bridge General Drawings completed	SDU
	PGDS	Preliminary Bridge General Drawings completes	GEO
12	SFR	Structure foundation recommendations sent to SDU	GEO
12		Roadway subsurface & slope information submitted to RDU	
		HYD provided final details for temporary access and removal of	SDU
		existing bridge State Highway Engineer signs Location and Design Approval Letter	State Highway Engineer
	LADA	State Highway Engineer signs Location and Besign Approximation of formal CEL	
	PDBM	Distribute Plans for review and comments in lieu of formal CFI (use current CFI distribution list)	RDU
11		Request for R/W authorization submitted to BOT	PROG DEV
		Structure impact data submitted to DEO for Permit Application	SDU
		Utility impact data submitted to DEO for Permit Application	PS-UTIL
9	R/W	Submit plans to Right of Way Branch	RDU
	TO/WW	Roadway Design Plans submitted to DEO for Permit Application	RDU
8		Permit Application submitted to Agencies by DEO	DEO
	RPCP	Plans turned into PS-CONTRACTS or Division for letting	RDU & OTHERS
4	NF OF	Permits received by Division (401, 404, CAMA General)	DEO .
3		Permits received by HYD (SSP and FEMA)	HYD PS-CONTRACTS of
2		Let List finalized and permits received by PS-CONTRACTS or Division	DIVISION PS-CONTRACTS OF
0	LET	Project Letting	DIVISION .

### Bennett, Jay A

3

From: Service Account - IT Infrastructure/Ops Distribution

Sent: Tuesday, September 23, 2008 8:27 AM

To: DOT ALL

Subject: Distribution A - New Performance Management System

MEMORANDUM

TO: NCDOT Employees

FROM: Daniel H. DeVane

Chief Operating Officer

SUBJECT: New Performance Management System

As you are aware, in April, NCDOT's top managers began the current performance cycle using the new Performance Dashboard & Appraisal (PDA), which is the tool used to document performance expectations (metrics) and results achieved.

This new system will be implemented for all employees in April 2009. Beginning October 1, 2008, all employees will transition to the new system for a six-month introductory period. The purpose of this six-month transition period is to allow time for employees to become familiar with the new process, to allow time for managers and supervisors to develop performance metrics for employees, and validate the performance measures, targets, and weights prior to implementation next year. At the end of this transition period, your introductory PDA will be evaluated along with your current performance management plan that was prepared in April 2008. However, your performance rating for the period April 1, 2008, thru March 31, 2009, cycle will be based upon your current PM, excluding the top leadership positions that began the cycle with a PDA.

Over the last five months, managers and supervisors across the Department have attended training on results-based performance management and the new PDA process. I am directing managers and supervisors to begin meeting with their employees to introduce them to the new PDA process. Each employee should have a PDA in place by October 31, 2008.

The TMT Performance Metrics and Management Team has been working with many managers individually to develop performance metrics. In addition, senior managers were asked to create focus groups to develop "like metrics", which are results expectations that may be the same across similar classifications within the Department. For example, there are multiple administrative positions across the state with similar performance expectations. Therefore, a focus group of administrative staff members from various business units was formed to develop examples of like metrics specifically for administrative roles.

A metrics library has been created as a resource tool for supervisors to use as they establish metrics for their employees and to provide consistency throughout the Department. To view or download the Metrics Library, instructions, forms, the new Performance Management Policy & Procedures, Guidelines to Developing Metrics, and other documents related to the performance management system, log onto the NCDOT portal. On the portal home page, you will see in orange letters "New Performance Management System" then click on the folders to access these documents.

A results-based performance management system is designed to support a performance culture in which clear expectations are established, and employees are held accountable for achieving the

expected results. This new system represents a significant change for all of us and that is why this sixmonth transition period is so important. We want all employees to fully understand the new system prior to statewide implementation next year.

If you have questions, please contact your supervisor or business unit manager. You may also contact one of the following for assistance with:

### **Developing Metrics:**

Victor Barbour: vbarbour@ncdot.gov

Ken Pace: kpace@ncdot.gov Ron Allen: rallen@ncdot.gov

Ehren Meister: emeister@ncdot.gov (for assistance with metrics)

### PDA Process/Forms:

Teresa Pergerson: tpergerson@ncdot.gov Terry Hopkins: thopkins@ncdot.gov

### Performance Management Policy Interpretation:

Patricia Broadhurst: pbroadhurst@ncdot.gov

I appreciate your continued support as our Department continues to strive to make our organization a place that works well and a great place to work.



# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

August 26, 2008

Memorandum To Mr. Jay Bennett, PE

Mr. Ron Hancock, PE

**Division Engineers** 

From:

Randy A. Garris, P.E.

State Contract Officer

Subject:

Concrete Transitional Sections for Catch Basins and Drop Inlets

Due to a request from the Contracting industry, we have decided to add two pay items to Transport. The pay items are as follows:

Concrete Transitional Section for Catch Basins - Per Each Concrete Transitional Section for Drop Inlets - Per Each

These pay items will be added to all projects as needed beginning with the <u>January 20</u>, <u>2009 Letting</u>.

These items are shown as "Concrete Aprons" on Rdwy. Std. Dwgs. 852.04, 852.05 and 852.06 and are considered incidental to the Catch Basin or Drop Inlet. Prior to the 2006 Specifications Book update, these items were paid for as "Concrete Aprons for Drop Inlets" or "Concrete Aprons for Catch Basins" on a per each basis. We have decided to rename these items to avoid confusion with Concrete Aprons that are attached to Median Drop Inlets. The Special Provision needed for the new pay items is attached.

If you have any questions, please call Joel Howerton at (919) 250-4128.

RAG/JSH

Attachments

Cc: J. V. Barbour, PE Cynthia B Perry, PE Ron Davenport, PE ROADWAY DESIGN UNIT

SEP 1 0 2008

STEPHENSON

COPIES SENT

SEP 16 78

SIGNATURE

RE REPLY FOR

VIEWIDISCUSS WITH

Cs:

# CONCRETE TRANSITIONAL SECTIONS FOR CATCH BASINS AND DROP INLETS: (1-20-09)

Revise the *Metric Standard Specifications* as follows:

# Page 8-26, Article 840-4 Measurement and Payment, delete the eighth full paragraph and replace with the following:

Concrete Transitional Section for Catch Basin will be measured and paid for in units of each.

Concrete Transitional Section for Drop Inlet will be measured and paid for in units of each.

Payment will be made under:

### Pay Item

Concrete Transitional Section for Catch Basin Concrete Transitional Section for Drop Inlet Pay Unit Each

Each Each

Revise the Metric Roadway Standard Drawings as follows:

On page 852.04, change Pay Limits for Concrete Apron for Drop Inlets in two places on the drawing to Pay Limits for Concrete Transitional Section for Drop Inlet.

On page 852.05, change Concrete Apron for Catch Basin on the drawing to Concrete Transitional Section for Catch Basin.

On page 852.06, change Pay Limits for Concrete Apron for Drop Inlets in two places on the drawing to Pay Limits for Concrete Transitional Section for Drop Inlet.

# CONCRETE TRANSITIONAL SECTIONS FOR CATCH BASINS AND DROP INLETS: (1-20-09) SP8RG

Revise the Standard Specifications as follows:

Page 8-32, Article 840-4 Measurement and Payment, delete the eighth full paragraph and replace with the following:

Concrete Transitional Section for Catch Basin will be measured and paid for in units of each.

Concrete Transitional Section for Drop Inlet will be measured and paid for in units of each.

Payment will be made under:

### Pay Item

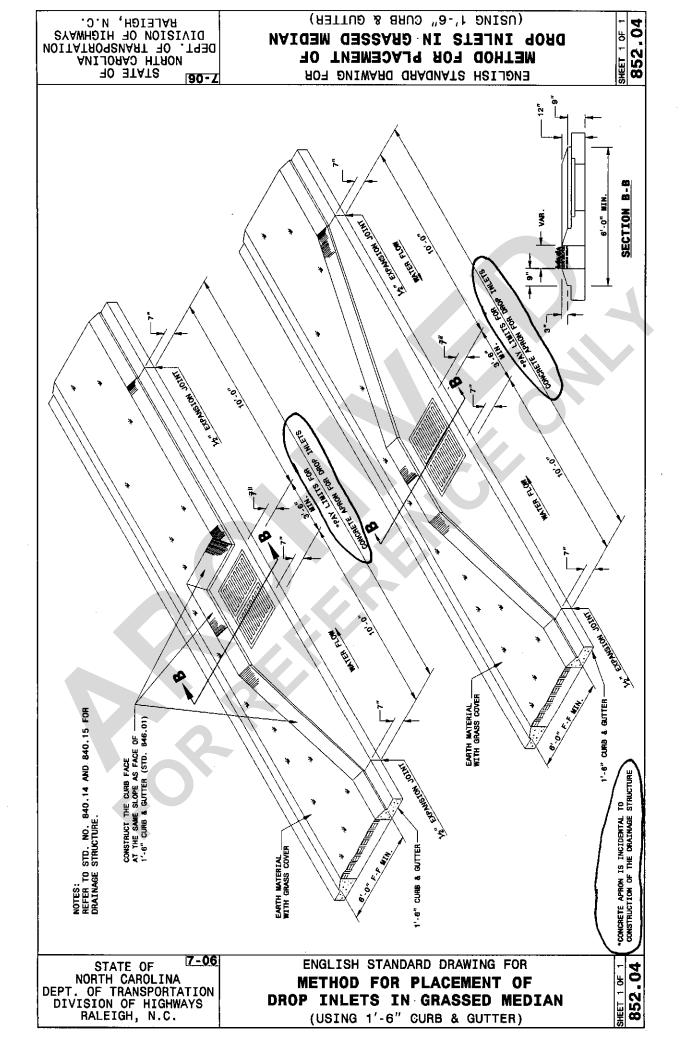
Concrete Transitional Section for Catch Basin Concrete Transitional Section for Drop Inlet Pay Unit Each Each

Revise the Roadway Standard Drawings as follows:

On page 852.04, delete the statement: \*CONCRETE APRON IS INCIDENTAL TO CONSTRUCTION OF THE DRAINAGE STRUCTURE and change \*Pay Limits for Concrete Apron for Drop Inlets in two places on the drawing to Pay Limits for Concrete Transitional Section for Drop Inlet.

On page 852.05, delete the statement: \*CONCRETE APRON IS INCIDENTAL TO CONSTRUCTION OF THE DRAINAGE STRUCTURE and change \*Concrete Apron for Catch Basin on the drawing to Concrete Transitional Section for Catch Basin.

On page 852.06, delete the statement: \*CONCRETE APRON IS INCIDENTAL TO CONSTRUCTION OF THE DRAINAGE STRUCTURE and change \*Pay Limits for Concrete Apron for Drop Inlets in two places on the drawing to Pay Limits for Concrete Transitional Section for Drop Inlet.



NORTH CAROLINA
DEPT. OF TRANSPORTATION
DEPT. OF TRANSPORTATION
RALEIGH, N.C.
RALEIGH, N.C. 852.05 (FOR USE WITH 1'-6" CURB AND GUTTER) SHEET 1 MEDIAN CURB FOR CATCH BASIN STATE OF ENGLISH STANDARD DRAWING FOR 90-2 (HISAS HOTAS AND WARA STERNASS.) 118" RADIUS 1/4" RADIUS RADIUS 88 THEAR TOTAL SO, OAS NO TO, OAS URAUMITE VAR. 9" TO 2'-0" VAR. 1'-6" TO 2'-6" SECTION SECTION GUTTER WATCH SSARS FO UMARET TTERCHOO VAR. CURB AND HADIUS. RADIUS ١,٠٥٠,١ 0 1 134" RADIUS ż ź 7 "9-<u>,</u> L 7," EXPANSION JOINT **JJBAIRAV** 840.03 FRAME, GRATE AND HOOD 840.01 **EXPANSION JOINT** DEPRESSED GUTTER LINE SEE STANDARD NO. 10,-01 STD. ELEVATION PLAN 3'-112" 3'-112 Ç Ç 2'-6" 9 1/8" RADIUS 8 TO STRUCTURE GRASS MEDIAN OR CONCRETE ISLAND **EXPANSION JOINT** 10,-0" 10,-0 EXPANSION JOINT ဗ္ပ \*CONCRETE APRON IS INCIDENTAL CONSTRUCTION OF THE DRAINAGE 5,-0 SECTION 1,-6,, 1/2" RADIUS ,,0-,1 STATE OF 7-06

NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C. 7-06 852.05 ENGLISH STANDARD DRAWING FOR MEDIAN CURB FOR CATCH BASIN (FOR USE WITH 1'-6" CURB AND GUTTER)

DEPT. OF TRANSPORTATION DE HIGHWAYS RALEIGH, N.C. 852.06 SHEET 1 OF 1 DROP INLETS IN CONCRETE ISLANDS METHOD FOR PLACEMENT OF NORTH CAROLINA STATE OF ENGLISH STANDARD DRAWING FOR 90-Z STD. NO. 840.14 AND 840.15 FOR STRUCTURE.
STD. NO. 840.16 FOR GRATE AND 20:01 WHEN FLOW NOTES:
-REFER TO S
DRAINAGE S
-REFER TO S WHEN FLOW WOTH RELIAM IS INCIDENTAL TO THE DRAINAGE STRUCTURE SECTION 'A-A' \*CONCRETE APRON 1 STATE OF 17-06
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C. 7-06 SHEET 1 OF 1 852.06 ENGLISH STANDARD DRAWING FOR METHOD FOR PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS



Coastal Zone: Land and waters adjacent to the coast that exert an influence on the uses of the sea and its ecology or, inversely, whose uses and ecology the sea affects.

Collector: In rural areas, routes that serve intracounty rather than statewide travel. In urban areas, streets that provide direct access to neighborhoods and arterials.

Command-and-Control Policy: Environmental policy that relies on regulation (permission, prohibition, standard setting and enforcement) as opposed to financial incentives, that is, economic instruments of cost internalization.

Comment Period: Duration of time during which written comments or responses may be submitted to an agency that has distributed a document for review and comment. It can be applicable to all types of documents that are circulated, as well as to formal presentations such as those, which may be given by transportation department officials at a public hearing.

Commercial Service Airport: Public airport that annually enplanes 2,500 or more passengers and receives schedule airline passenger service.

Common Property Resources: Environmental natural resources owned and managed collectively by a community or society rather than by individuals.

Comprehensive Transportation Plan (CTP): A mutually adopted, multimodal transportation planning set of vision maps (highway, public transportation & rail, bicycle, and pedestrian) that serves present and anticipated travel demand in a safe and effective manner.

Conformity: Process to assess the compliance of any transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.

Congestion Mitigation & Air Quality Improvement Program (CMAQ): A categorical federal-aid funding program created to fund projects that contribute to meeting national air quality standards. CMAQ funds generally may not be used for projects that result in the construction of new capacity available to single-occupant vehicles.

**Connectivity**: The ability to travel to desired destinations.

Control of Access: The regulation of public access rights to and from properties abutting and public streets crossing highway facilities. Also see Full Control of Access, Limited Control of Access, Partial Control of Access, and No Control of Access.

Corridor: A broad geographical land area that is linear, connects major sources of trips, and may contain a number of streets, highways, transit lines, and routes; generally follows an interstate, greenway, or major roadway.

Corridor Protection: The coordinated application of various measures to obtain control of or protect the right-of-way for a planned transportation facility and to preserve the capacity of existing roadways through access management.

Corridor Study: A study that examines and addresses issues of strategic importance to the long-term

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by land-clearing human activities related to farming, resident and industrial development and it has as effect increasing run-offs, decline of arable layers, siltation in lakes, lagoons and oceans.

**Expansion**: Activities focused on adding capacity of new facilities/services.

**Expressway**: A facility with a functional purpose of high mobility and low to moderate access. The facility has limited or partial control of access, no traffic signals, and a minimum of 4 travel lanes with a median. Connections are provided only at interchanges for major cross streets and at-grade intersections for minor cross streets.

Facility Type: A classification for highways in terms of the character of service that individual facilities are providing or are intended to provide, including the level of access, ranging from travel mobility to land access. Facility Types include Freeways, Expressways, Boulevards, and Thoroughfares.

Finding Of No Significant Impact (FONSI): Environmental document for proposed projects where it has been determined through the circulation of an Environmental Assessment that a project will not have a significant impact on the environment.

**Freeway**: A facility with a functional purpose of high mobility and low access. The facility has full control of access, no traffic signals, no driveways, and a minimum of 4 travel lanes with a median. Connections are provided only at interchanges for major cross streets. All cross streets are grade-separated.

**Frontage Road**: A public or private drive that generally parallels a public roadway between the right-of-way and the front building setback line. The frontage road provides access to private properties while separating them from the arterial roadway. Also see Service Road.



Full Control of Access: Connections to a facility provided only via ramps at interchanges. All cross-streets are grade-separated. No private driveway connections allowed. A control of access fence is placed along the entire length of the facility and at a minimum of 1000 feet beyond the ramp intersections on the Y lines (minor facility) at interchanges (if possible).

Functional Design: A general design that includes horizontal and vertical alignments, edge of pavements, slope stakes, and right of way limits. No turn lanes are added at this stage. This type of design is usually performed using orthophotographs.

**Grade-Separation**: The use of a bridge structure and its approaches to confine portions of traffic to different elevations, thus dividing or separating the crossing movement.

Greenfield: Property in both rural and urban areas that has not been previously developed. It also includes forestry and agricultural land and buildings, as well as previously developed sites, which have now blended into the natural landscape over time.

Hurricane Evacuation Route: Major facilities that shall be used to evacuate people from coastal areas in the event of a hurricane; developed by the North Carolina Division of Emergency Management.

Idle Land: Land that was cultivated but is now in a state of disuse; abandoned land; fallow land.

Indirect and Cumulative Impacts (ICI): Impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regard-

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fense Highways, it is the system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. Also connects the United States to internationally significant routes in Canada and Mexico.

Interstate Loops and Spurs: Interstate connectors or full or partial circumferential beltways around an urban area. These highways carry a three-digit number.

Investing Support for Resource Agencies: NCDOT funds 21 positions with state and federal resource agencies for staff dedicated to review of environmental projects. The funded positions include the following: 22 positions at NCDENR; three at NCWRC; thee at NCDCR, three at USFWS, and two at USEPA.

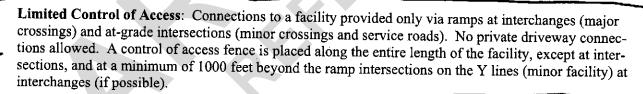
Just-in-Time Delivery: A method of production and inventory cost control based on the delivery of parts and supplies at the precise time they are needed in a production process.

Land Use Plan: A plan that establishes strategies for the use of land to meet identified community needs.

Land Use: Refers to the manner in which portions of land or the structures on them are used, i.e. commercial, residential, retail, industrial, etc.

Land-use Classification: Classification providing information on land cover, and the types of human activity involved in land use. It may also facilitate the assessment of environmental impacts on, and potential or alternative uses of, land.

Level of Service (LOS): 1) A qualitative assessment of a road's operating conditions. For local government comprehensive planning purposes, LOS means an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. LOS indicates the capacity per unit of demand for each public facility. 2) This term refers to a standard measurement used by transportation officials which reflects the relative ease of traffic flow on a scale of A to F, with free-flow being rated LOS-A and congested conditions rated as LOS-F.



Long Range Transportation Plan (LRTP): A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system, and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years.

Maintenance: Regular, routine roadway and bridge treatments that sustain highway conditions.

Master Plan: Contains all recommended operational, design, access, and land use improvements that support a corridor vision.

Median: The portion of a highway separating opposing directions of travel, not including two-way left-turn lanes; can be non-traversable (a physical barrier, such as a concrete barrier of landscaped island) or traversable (does not physically discourage or prevent vehicles from crossing it, such as a painted me-



No Control of Access: Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. No physical restrictions, i.e., a control of access fence, exist. Normally, private driveway connections are defined as one connection per parcel. Additional connections may be considered if they are justified and if such connections do not negatively impact traffic operations and public safety.

**Non-Attainment**: Any geographic area that has not met the requirements for clean air as set out by USEPA/federal legislation in the Clean Air Act of 1990 (that is their air quality is poor). This triggers a requirement of actions by the MPO or state that an analysis be performed on long-range plans and the TIP to show that these programs will improve their air quality. After being designated as "non-attainment" and improving their air quality to the required standards, the area becomes "maintenance" - it does not reverse to "attainment".

Non-Renewable Natural Resources: Exhaustible natural resources such as mineral resources that cannot be regenerated after exploitation.

North Carolina Certified Sites: NCDOC Certified Sites program showcases premium property sites that have been pre-qualified by undergoing a stringent site package preparation process to ensure property is ready for development. Sites are approved by the North Carolina Certified Sites Steering Committee.

North Carolina Intrastate System: A 3,600 mile system of highways designated by the North Carolina General Assembly in 1989 to be improved to at least four lanes in order to encourage economic development and growth, and connect the population areas to outlying areas of the state.

North Carolina Regional Economic Partnerships: Counties of North Carolina are organized into seven regional partnerships for economic development. These regional partnerships enable regions to compete effectively for new investment and to devise effective economic development strategies based on regional opportunities and advantages.

**Notice of Intent (NOI)**: An announcement to the public and to interested agencies that a project is being developed and that an EIS will be prepared. It briefly describes the study area, the proposed action, its proposed purpose and need, the agency's proposed public scoping process, and identifies the agency contact person (name and address).

**Operations**: The day to day tasks associated with maintaining and constructing highways. Includes evaluating driveway permits, traffic signal installations, overseeing constructing projects, and patching potholes. The 14 NCDOT Highway Division Offices are the primary groups responsible for handling the daily operations.

Partial Control of Access: Connections to a facility provided via ramps at interchanges, at-grade intersections, and private driveways. Private driveway connections are normally defined as a maximum of one connection per parcel. One connection is defined as one ingress and one egress point. The use of shared or consolidated connections is highly encouraged. Connections may be restricted or prohibited if alternate access is available through other adjacent public facilities. A control of access fence is placed along the entire length of the facility, except at intersections and driveways, and at a minimum of 1000 feet beyond the ramp terminals on the minor facility at interchanges (if possible).

**Permit**: Written permission given by a governmental agency with "permitting" authority to take certain action during specific steps of a project development process. Example: permits may include permission