Roadway Design Staff Meeting
Roadway Design Unit Conference Room

May 21, 2013
8:30 AM – 10:00 AM

PDA Revision (Attachment 1)

Jay Bennett noted our Performance Dashboard & Appraisals will be revised for the next evaluation cycle beginning January 1, 2014. Under Performance Metrics, the measures for all Engineer and Technician classifications in Production and the Engineering Coordination Section will be the same. By making this change, it will make it easier to compile the data at the end of the work cycle and make to where the majority of employees will have the same Performance Metrics throughout the unit.

Roadway Design Workload Plan / PEF Utilization

Doug Taylor reviewed the Roadway Design Workload Plan that was prepared the summer of 2012. He noted this information was compiled based upon a STaRS data run for projects scheduled for a 5 to 10 year timeframe. Furthermore, he noted the manday data included the PEF oversight. This information will be updated again once the Strategic Mobility Formula project prioritization is implemented. It was noted that we will likely need to create more spreadsheets and request additional information form the Project Engineers to aid with tracking PEF costs for all phases of project develop pment.

PE Budget and Manday Tracking (Attachment 3)

A third list of projects for preparing PE budgets has been requested with a due date of June 3, 2013. It was noted from this point forward it would be the Project Engineer's responsibility to request their projects be budgeted at key budgeting milestones. The primary triggers for developing a budget for R/W and Final Plans is the TLOC stage and at the R/W submittal stage, respectively.

Corridor Modeler with Preliminary Designs (Attachment 4)

Doug Taylor noted there were some advertised PDEA projects that did not specify the use of Corridor Modeling (CM) for the preliminary design preparation. We need to implement the usage of CM at this stage of project development to make it where the modeling information can be used throughout the life of a project. With PEF contracts, the upfront additional mandays for preparing the model can be added with the understanding the number of mandays for subsequent tasks will decrease. It was also noted the use of criteria is going away and the usage of CM will be of benefit during the planning stage to aid with the use of visualization.

Misc. Topic – Standard Signal Pole Placement (Attachment 5)

Jay Bennett noted he was going to send out an email addressing Standard Signal Pole Placement. Recently there have been a lot of questions concerning Standard Pole Placement as it pertains to the clear zone.

Minutes Approved By: Original Signed by Jay A. Bennett Date: 06/20/2013

Jay A. Bennett, PE
State Roadway Design Engineer

PERFORMANCE DASHBOARD & APPRAISAL

Section A: Performance Metrics

Performance Cycle Date:		**Unit/Section:**	
Employee's Name:		**Supervisor's Name:**	
Employee's Classification/Title:		**Supervisor's Title:**	

NCDOT Goals: (1) Make our transportation network **safer.**
(2) Make our transportation network move people and goods **more efficiently.**
(3) Make our infrastructure **last longer.**
(4) Make our organization a place that **works well.**
(5) Make our organization a **great place** to work.

Enter NCDOT Goal (1-5)	Results Expectations			Year End		
	Measure	Target	% Weight	Actual Results	Number Rating *1, 2, 3	Weighted Rating % Weight x No. Rating
1,2,3,4	_____ Environmental Planning Documents completed within 9 months of basic schedule milestones. _____ Concurrence Points completed within 9 months of basic schedule milestones CP#1, CP#2, CP#2A, CP#3, CP#4A, CP#4B, & CP#4C.	70-95%	5%	Completed _____ Environmental Planning Documents Completed _____ Concurrence Points		
1,2,3,4	_____ Preliminary design submittals completed within 1 month of basic schedule milestones TORT, TPPS, TTOP, TLOC, PDS & FDS. _____ Hearing Map Review Meetings and Public Hearings held within 2 months of basic schedule milestones CPHRM, CDPH, DPHRM & DPH.	70-95%	20%	Completed _____ preliminary design submittals Held _____ Hearing Map Review Meetings and Public Hearings		
1,2,3,4	_____ Right of way plan activities completed within 1 month of basic schedule milestones DP, CFI, FDFI, HEU LDA INFO, RPC, & 25%HYD.	70-95%	30%	Completed _____ right of way plan activities		
1,2,3,4	_____ Pre-let Field Inspection meetings held within 1 month of basic schedule milestone PLFI. _____ Sets of plans distributed to Plans and Standards Management within 1 week of basic schedule milestone Roadway Plans to Cont and Prop.	70-95%	25%	Held _____ Pre-Let Field Inspection Meetings Distributed _____ plans to Plans and Standards Management		
1,2,3,4	_____ Projects let to contract by basic schedule milestone Letting.	70-95%	5%	Let _____ projects to contract		
1,2,3,4	_____ Advanced Acquisitions, Right of Way Revisions and Construction Revisions completed and distributed within 3 weeks of date received by Roadway Design Unit. Submittal letters to the RDU and distribution of letters from RDU.	60-70%	5%	Completed _____ Advanced Acquisition requests, Right of Way Revisions, and Construction Revisions		

Attachment 1

PERFORMANCE DASHBOARD & APPRAISAL

1,2,3,4	_____ Concurrence Point Construction Cost Estimates requested within 9 months of basic schedule milestones CP2 est, CP2A est, CP3 est, & CP4A est. _____ Thirteen Month Construction Cost Estimates requested within 1 week of basic schedule milestone 13M est. _____ Construction Cost Estimates requested within 1 month of basic schedule milestones FD est, PD est, & CONST est.	80-95%	10%	Requested _____ Construction Cost Estimates		
1,2,3,4	_____ Contract functions needed to achieve Notice to Proceed within 1 month of basic schedule milestones. (PEF & Notice to Proceed).	70-95%	10%	Completed _____ contact functions		
		Total % =	**110%**	**Combined Weighted Rating =**		
				Sum of % weights that received a number rating of "1" at year end		

***Number Rating Key:**
3 = Exceeds expectations
2 = Meets expectations
1 = Does not meet expectations

Beginning of performance cycle: Signatures indicate supervisor and employee have discussed performance metrics, values and competencies.			
Supervisor's signature:		Date:	
Employee's signature:		Date:	

Progress Reviews: Supervisor - Enter the dates progress reviews are performed and attach progress review documentation form.		
(1)	(2)	(3)

Attachment 3

Thomas, Roger D

From: Midkiff, Eric
Sent: Tuesday, May 07, 2013 10:01 AM
To: Harris, Philip S; Burton, J. Dale; Thomas, Roger D; Twisdale, John W; Pilipchuk, John L; Koch, Thomas K; Whitaker, Barry W; Joyner, Drew; Marshall, Harrison; Furr, Mary Pope; Smith, Gregory A; Wilkerson, Matt T; Robbins, Jamille A; Hutchings, Deborah S; Bourne, John S; Allen, Ronald (Ron) D; Patel, Rekha V; Oberhausen, Stacy B; Conforti, John G; Cox, Charles R; Robinson, Beverly G; McInnis, Jay; Walls, Ted S; Yamamoto, Brian F; Moore, Brenda L; Lovering, Gary R; Brew, Gregory E; Moore, Jason; Speer, James A; Houser, Anthony A
Cc: McMillan, Art; Mulla, Mohammed A; Kim, K J; Hidden, Scott A; Perfetti, Gregory R; Sykes, Dewayne L; Memory, John R; Worthington, Roger G; Farr, Olivia J; Bruff, Michael S; Roach, Renee B; Johnston, Keith R; Storch, Carl E; Gedzior, Jerzy (Jurek); Hanson, Robert P; Harris, Jennifer; Mccollum, Ron; Thorpe, Gregory J; MacIntyre, Stan A; Penny, Lisa E; Goodwin, William (Bill) T
Subject: PE Budgets - 3rd Batch
Attachments: Copy of 05032013_Final _Third Batch to Budget.xlsx

PE Budget Participants,

It is time to provide PE budgets for the next batch of widening and new location projects. This will be the last time budgets will be handled within a large batch, as budgeting will commence on a per project basis after these entries for widening and new location projects. The deadline to complete budgeting for this last batch of projects is June 3rd
.

Follow these steps to enter the PE budget information:

1) **Find the attached spreadsheet containing the third batch of projects for budget estimates. Refer to Column E for instructions on which phases should be budgeted for each project (Planning, Design, or Design with an update to Planning). Note that in some instances there will be no need to provide Planning budgets because planning activities are too far along or complete (See notes in column E). Column G in the "Information Source" column provides links to project specific information on Project Store that could help in your budgeting efforts - such as scoping minutes or documents. However, feel free to contact the Roadway or PDEA CoPM's if you have specific questions about the projects that would help you determine the budget.**

2) **Once you have established the remaining man-days needed for the noted phases of a project, save your calculations and work at the following location in your own format. "Project Store - TIP Number - Common - Man-day Estimate - Estimate Computation Forms - YOUR Unit". The purpose of saving your work here is to have a record of your budget details in case you or someone else need to review the data later.**

3) **The next step is to enter your predicted man-days and actual man-days on the "Widening and New Location Man-day Comp sheet". That sheet can be found at the following location: "Project Store - TIP Number - Common - Man-day Estimate". The file is called "Widening and New Location Man-day Comp sheet X-XXXX" where X-XXXX is the TIP number.**

- **There are 3 main steps for entering the budget data onto the Man-day Comp sheet:**
    - **You must run the report to find your actual man days called the "PE TIP Expenditures" Report located at "NCDOT Workplace-->Business Objects-->Preconstruction. Instructions for running this report can**

be found in the "Budget Entry" tab of the "Widening and New Location Man-day Comp Sheet" form. You will refresh the report with the list of Sub-TIP numbers assigned to you from the attached 3rd batch of projects.

- On the "Widening and New Location Man-day Estimate" excel sheet, key the date you ran the PE TIP Expenditures report in the date field for your unit and your corresponding "Technical", "Professional", and "Management" days into the "Actual" section of your units/sections entry location.
    - A key thing to note; let's say you have Management Mandays on the PE TIP Expenditures report and no entry location for Management Mandays on the "Widening and New Location Man-day Estimate" sheet, just move those mandays to the next closest level. In this instance your Management "Actual" Mandays would go to "Professional" Mandays. This is noted as this could have occurred if you have had recent cost center changes.
- Based on Column E of the project list attachment, enter the appropriate predicted/remaining value(s) for the portion of the project indicated (Planning = Phase 2, Design = Phase 3 & 4) in the "Widening and New Location Man-day Estimate" excel sheet. For a reminder of the typical activities that occur in each phase or a reminder as to what needs to occur at that budget estimate point, review the "Phase Detail" tab on the "Widening and New Location Man-day Estimate" spreadsheet.

Key things to note:

- As mentioned, the deadline is June 3rd COB to make your entry into the file for each of the projects attached.
- If you have questions, please contact the following:
    - Roger Thomas - Roadway Design, Location & Surveys, Geotechnical, Structure Management, Utilities, Hydraulics
      Eric Midkiff – PDEA PD, PDEA HES, PDEA NES, Transportation Planning, Traffic Management, Photogrammetry

Thank you very much for your participation!

-Eric Midkiff

Eric Midkiff, P.E.
Central Region Section Head
Project Development and Environmental Analysis Branch
Email: Emidkiff@ncdot.gov
Phone: (919)707-6030

Thomas, Roger D Attachment 4

From: Taylor, Bryan D
Sent: Wednesday, September 12, 2012 10:48 AM
To: Thorpe, Gregory J; Joyner, Drew; Harris, Philip S; Hanson, Robert P; Midkiff, Eric; Harris, Jennifer; Goodwin, William (Bill) T; Capps, Karen B
Cc: Roadway PE; Bennett, Jay A; Mumford, Glenn W; Thomas, Roger D; Mcmellon, James A; Blevins, Scott D
Subject: FW: Corridor Modeling for Preliminary Design Plan Preparation

It has come to my attention that the recently advertised PDEA projects do not specify the use of Corridor Modeling for the preliminary design preparation. For the recently advertised projects that have not been scoped and negotiated, and for projects advertised from this point forward, please include Corridor Modeling for preliminary design preparation as a requirement in the scope of work. We have developed some additional tasks that we are allowing in our design contracts to assist PEFs in the transition to Corridor Modeling, so Jim McMellon and I will be reviewing those tasks to determine if they need to be moved into the scope of work for the preliminary design. I will send out a subsequent e-mail when that determination has been made. Please call if you have any questions about this guidance.

Thanks,

B. Doug Taylor, PE, CPM
Assistant State Roadway Design Engineer
Western Region
North Carolina Department of Transportation
Phone: 919-707-6207

From: Bennett, Jay A
Sent: Monday, September 10, 2012 2:20 PM
To: Taylor, Bryan D
Cc: Mumford, Glenn W; Thomas, Roger D
Subject: FW: Corridor Modeling for Preliminary Design Plan Preparation

Doug,

This is what I discussed this afternoon with you. There is no corridor modeling listed in the preliminary design plan preparation for the PDEA scopes of work.

Jim, Doug will discuss this with you soon. Jay.

From: Midkiff, Eric
Sent: Monday, September 10, 2012 8:23 AM
To: Bennett, Jay A
Subject: corridor modeling

Jay,

I spoke to all our group leaders and no one has included corridor modeling in their contracts yet.

Eric

Attachment 5

Thomas, Roger D

From: Bennett, Jay A
Sent: Tuesday, May 21, 2013 1:57 PM
To: Roadway PE
Cc: Fuller, Gregory A; Murr, Buddy; Sykes, Dewayne L; Mccollum, Ron
Subject: Standard Signal Pole Placement
Attachments: Clear Zone Distances for Pole Placement.pdf

Roadway Project Engineers,

Standard signal pole placement at intersections is designed and installed in accordance with the attached guidelines.

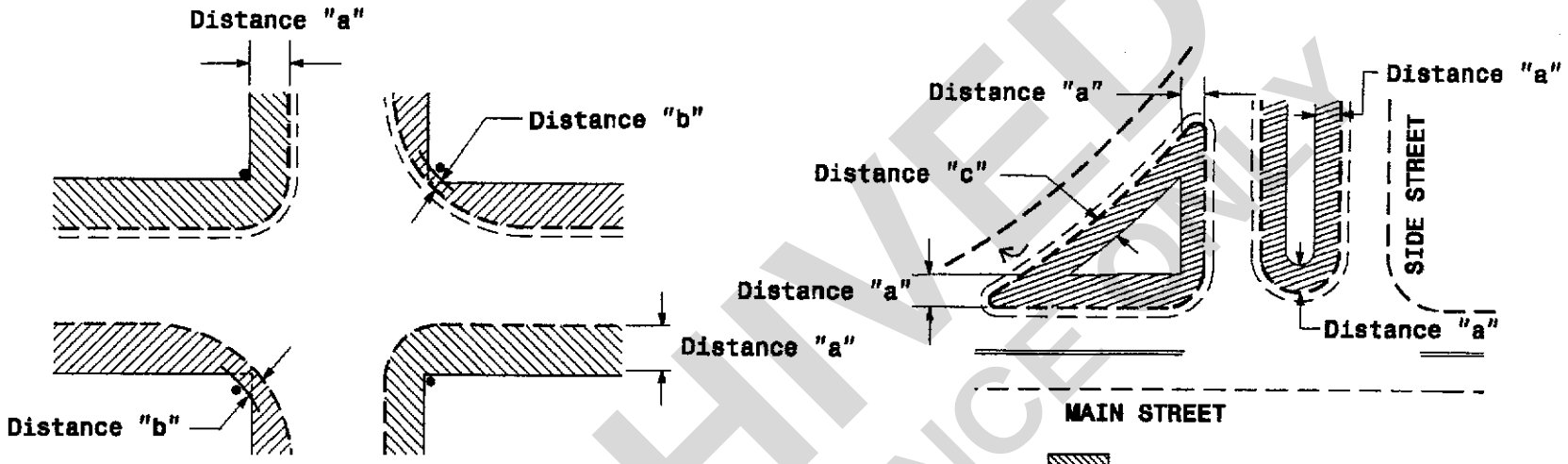
Traffic signal supports, including structures with cantilevered arms, present a special situation where a breakaway support and/or shielding the fixed object may not be practical or desirable. Please note that traffic signal supports (specifically metal mast arm poles) need not be treated as utility poles (as it relates to clear zone). It is frequently neither feasible nor justifiable due to span length and cost to place them beyond the desired clear zone.

When traffic signals are installed on high speed facilities (generally defined as those having speed limits greater than 50 mph or greater), the signal supports and the signal support boxes should be placed as far away from the roadway as practical. Painted islands should not be used for signal support locations unless a method of shielding is provided.

Placing signal supports in medians should be an exception rather than the rule.

Please make your staff aware of this guidance. Thank you, Jay Bennett, State Roadway Design Engineer.

Clear Zone Distances for Pole Placement



Design Speed MPH (km/h)	Distance "a"		Distance "b"		Distance "c"		
	Distance from Face of Curb ft (m)	Distance from EOP ft (m)	Face of Curb ft (m)	EOP ft (m)	Side St. Speed MPH	Distance from Face of Curb ft (m)	Distance from EOP ft (m)
≤40 (64)	12 (3.5)	14 (4.0)	7 (2.0)	10 (3.0)	≤40	7 (2.0)	7 (2.0)
					45-50	7 (2.0)	7 (2.0)
					≥55	10 (3.0)	12 (3.0)
45-50 (72-80)	16 (5.0)	18 (5.5)			≤40	7 (2.0)	7 (2.0)
					45-50	10 (3.0)	12 (3.5)
					≥55	12 (4.5)	14 (4.5)
≥55 (88)	22 (6.5)	22 (6.5)			≤40	7 (2.0)	7 (2.0)
					45-50	10 (3.0)	12 (3.5)
					≥55	12 (3.5)	14 (4.5)

Note 1: When traffic signals are installed on high-speed facilities, the signal supports should be placed as far away from the roadway as practical.

Note 2: Painted islands should not be used for pole locations unless a method of protection is provided (such as a guardrail).

Distances are the desired minimum from the face of pole

Reference: "Roadside Design Guide" 2002 AASHTO

Standard Pole Placement

SIGNALS & GEOMETRICS SECTION
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

7-04

STD. NO. 10.0