

**Roadway Design Staff Meeting**  
**April 2, 2009**  
**Roadway Design Unit Conference Room**  
**9:00 a.m. – 11:00 a.m.**

**Regionalization:**

Post year projects should be reassigned by April 3, 2009. All regional assignments should be completed and reassigned by May 15, 2009. The Project Engineers said that most of the post year projects have been reassigned. Ron Allen's office will provide a report for all active projects. This report is an excel spreadsheet for active projects and it was distributed to the project engineers on April 2, 2009 (via e-mail).

**Performance Management:**

All documents for the Performance Management Review cycle ending March 31, 2009, should be completed and turned in to Dewayne Sykes by April 9, 2009. The current Performance Management system is being phased out and the Performance Dashboard and Appraisal (PDA) system will be phased in starting on April 1, 2009.

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The PDA yearly evaluation begins April 1, 2009. Final evaluations of the PDA (for the pilot process) through March 31, 2009 should be completed by May 22, 2009. The new PDA should be completed with Goals, Measures, Targets and Weights, by May 1, 2009, retro-active to April 1, 2009. Broad-banding classifications and forms are on the Share Drive = S:\Share\ Performance Dashboard and Appraisal. I will send out new salary ranges for the broad-banding of positions. Please be reminded that there will be no changes in salaries during the hiring and salary freeze.

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V8i is the newest version of Microstation. There will be no structural changes, just the new look and the new capabilities. V8i training will be ½ day starting in August 2009. Corridor modeler training will start following the V8i training and will be a 2 day class.

**SuperStreet Presentation:**

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**R/W Milestone and Right of Way Plan Sent Dates in STaRS:** The Final Design Field Inspection Date, Right of Way Plans Completion Date and the Right of Way Authorization Dates for a typical project were discussed in detail.

The STaRS network restructuring sends right of way plans to the Right of Way Branch at the end of the "Final Design Field Inspection" activity. The "Obtain R/W Authorization" activity begins approximately one month before the "Final Design Field Inspection" (FDFI) ends and has a 2 month duration. The "R/W Authorization Letter" milestone (3<sup>rd</sup> Friday of the month) is at the end of the "Obtain R/W Authorization" activity and occurs approximately 5-6 weeks after R/W plans are sent. Roadway Design has lost about one month of time to hold the field inspection and complete R/W plans (based on our current scheduling practices).

Roadway Project Engineers are encouraged to hold field inspections ahead of the latest finish date for the "Final Design Field Inspection" activity. Our goal is to be able to send the R/W plans to the Right of Way Branch ahead of the R/W Authorization Letter.

**General Guide lines for Clear Zone and Utility Poles:** A new guideline for utility pole placement along Curb and Gutter projects is being developed. The draft guidelines are attached for your information.

Minutes Approved By: Original Signed by Jay A. Bennett on 05/13/09

Jay A. Bennett, PE  
State Roadway Design Engineer  
05/13/09

**Bennett, Jay A****ACTIVE PROJECT  
EXCEL SPREADSHEET**

**From:** So, Kim L  
**Sent:** Thursday, April 02, 2009 9:10 PM  
**To:** Bennett, Jay A  
**Cc:** Allen, Ronald (Ron) D  
**Subject:** report on RDU work centers  
**Follow Up Flag:** Follow up  
**Flag Status:** Red  
**Attachments:** Jay.xls

Jay,

Ron said that you wanted a report on all projects with Roadway work centers.

**What's in this Report:**

It contains all projects in that have not been let to contract, including post year projects. Some of the projects are handled by BMU and Divisions.

It shows all the RDU work centers that are assigned to at least 1 Activity or an Element has is still in Released or Created status. Even if no RDU work center shows up on any project in this report, there could still be an activity/element once assigned to a RDU work center that is either TECO'd, confirmed or had time charges against it. In this case, the RPE's name still shows up as the project engineer.

There are 4 columns with the RDU work centers:

- first column has only Jay Bennett's work center (project has an activity or element that has not been lower assigned)
- the next 3 columns contain work centers for RPE/ RPDE

The second worksheet on the attached file contains all the RDU work centers, it will help your Unit in identifying the work center numbers when performing mass change on work centers.

**Suggestions on how to use the report effectively** to clean up incorrect work center or project assignment:

**Co-PM :** Co-Project Manager  
**AM:** Activity Manager (Squad Leader)

- 1) If the name of RPE/ RPDE shows up on a project that is handled by BMU or Division and no RDU Work Center appears on any of the 4 work center columns, the RPE/ RPDE must perform the **Contact Override** on the NCDOT Data tab at the Project Definition level.
- 2) If the name of RPE/ RPDE shows up on a project that is handled by BMU or Division and RDU has no involvement but at least 1 RDU Work Center appears on any of the 4 work center columns, perform the **Contact Override** and the S.M.O. will do the rest.

- 3) If Jay's work center shows up as well as that for a Co-PM/AM (in column "WC 2"), that indicates an incomplete lower assignment was done – at least an activity or element was left out in the lower assignment. The RPE/ RPDE must perform the work center **mass change** again.
- 4) For projects that have multiple AM work centers (in columns WC 2-4), **mass change** the work centers to the correct AM and check if RPDE on the report matches the correct work center; if not, perform the **Contact Override**.
- 5) For projects that have a Co-PM's work center and more than 1 AM work centers, do a **mass change**. Check the RPDE's name on report against the work center, if the RPDE does not match the work center, perform the **Contact Override**.

There are some projects that appeared to have been lower assigned or re-assigned, but the mass change performed was incomplete; therefore these projects also have the work center for Jay Bennett and/or the previous project engineer. Please let us know if you have any questions regarding the report.

Thanks,

*Kim L So, PE*  
*Schedule Management Office*  
Ph: (919) 250 - 4160  
Fax: (919) 212 - 5711  
kso@ncdot.gov

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## **New Broad Banding Classifications**

Engineering Technician (Contributing) --TT I and II

Engineering Technician (Journey) -- TT III and IV

Engineering Technician (Advanced) -- TT VI

Engineer (Contributing) – TE I

Engineer (Journey) – TE II

Engineer Electrical (Contributing) TEE I

Engineer Electrical (Journey) TEE II

Engineering Supervisor (Journey) – TES II

Engineering Supervisor (Advanced) – TES III

Engineering Manager (Contributing) – TEM I

Engineering Manager (Advanced) – TED I

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FOR REFERENCE ONLY

# Engineering Banding Posting Information

APR 02 '09

CC: Project  
ENGINEERS  
SYLES  
JB

## Posting and Hiring Ranges

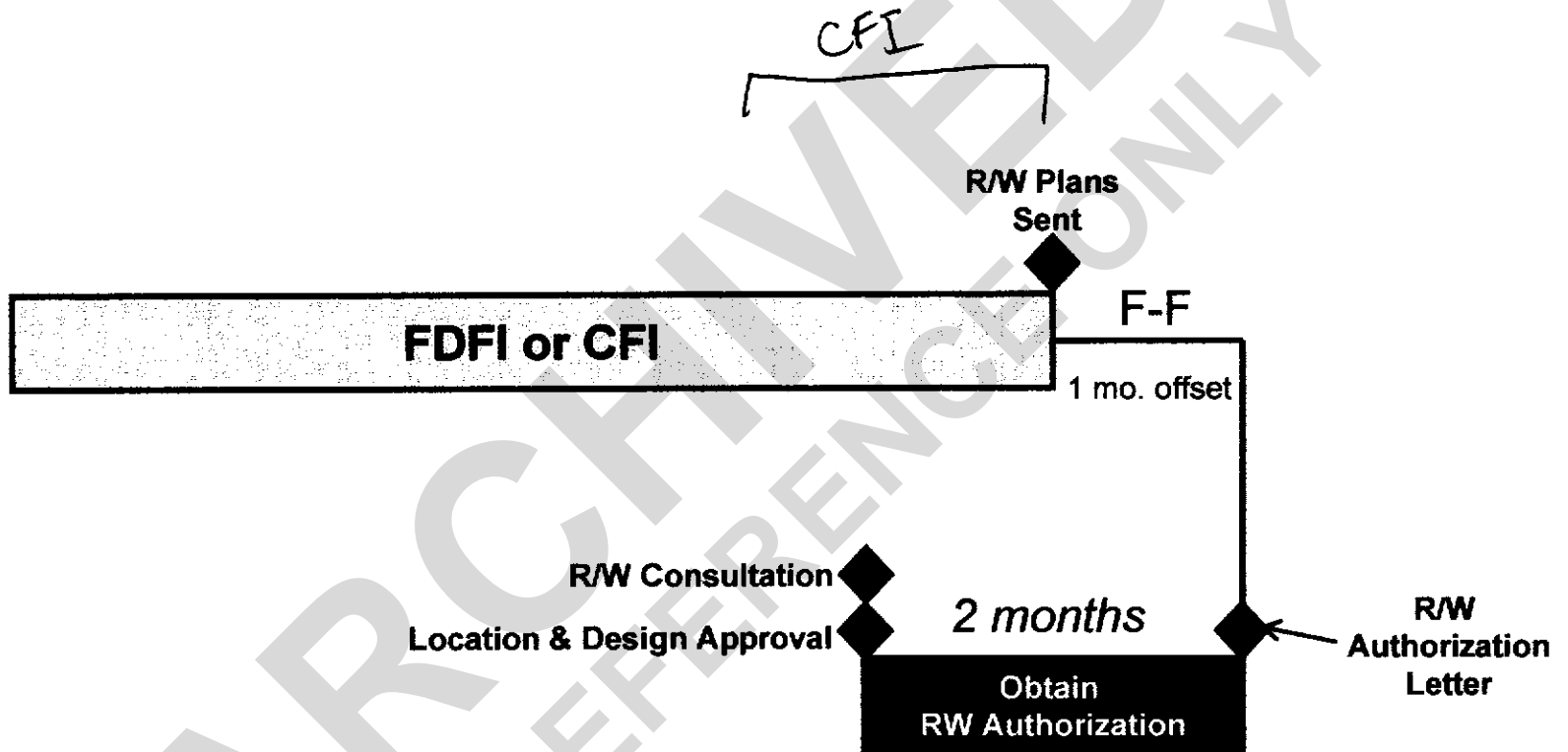
COPIES SENT

Schematic Code	Band Title	Level	Market Rate	Posting Range	Hiring Range
16102	Engineering Assistant	C	\$ 27,437	\$22,238-\$40,797	\$24,693-\$30,181
		J	\$ 32,650		\$29,385-\$35,915
		A	\$ 36,568		\$32,911-\$40,225
16103	Engineering Technician	C	\$ 35,840	\$27,384-\$68,613	\$32,256-\$39,424
		J	\$ 44,083		\$39,675-\$48,491
		A	\$ 56,426		\$50,783-\$62,069
16104	Engineer	C	\$ 52,102	\$41,532-\$108,999	\$46,892-\$57,312
		J	\$ 62,523		\$56,271-\$68,775
		A	\$ 85,657		\$77,091-\$94,223
16105	Engineering Supervisor	C	\$ 70,234	\$45,387-\$114,449	\$63,211-\$77,257
		J	\$ 80,769		\$72,692-\$88,846
		A	\$ 88,846		\$79,961-\$97,731
16106	Engineering Manager	C	\$ 91,663	\$61,990-\$122,789	\$82,497-\$100,829
		J	\$ 100,829		\$90,746-\$110,912
		A	\$ 110,912		\$99,821-\$122,003
16107	Engineering Director	C	\$ 115,232	\$73,322-\$159,170	\$103,709-\$126,755
		J	\$ 120,994		\$108,895-\$133,093
		A	\$ 140,353		\$126,318-\$154,388

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TIP ID	WBS	PROJECT	Milepost	Division	County	City	Environmental Status
U-4716	40460	<i>CHUCK ST...</i> Hopson Rd. Grade Separation Grade separation of high volume roadway. Track to be realigned as part of project for 79 mph with roadbed prepared for future second track.	H64.7 to H65.4	5 <i>B. MOORE</i>	Durham/Wake	Durham	To be complete August 2009
n/a	41178	Carmon Rd. Crossing Closure and Extension The Carmon Rd. grade crossing is located in the middle of McLeansville passing siding. This project would close the existing grade crossing and extend the road 1 mile west to McLeansville Rd. Division 7 DDC.	H9.1	7 <i>J. SPEER</i>	Guilford	Gibsonville	To be complete August 2009
U-3459	34951	Klumac Rd. Grade Separation Environmental work complete. Railroad over highway. Federal earmark WBS 34951.1.1 - PE, 34951.1.2 - R/W, 34951.3.1 - Const.	335.2	9 <i>T. HUBER</i>	Rowan	Salisbury	Complete
U-5008	n/a	Sugar Creek Rd. Grade Separation Earmarked funding available as well as \$10M in NCRR Capital Budget.	374.0	10 <i>BREW</i>	Mecklenburg	Charlotte	Not yet started
U-4437	35868.1.1	Blue Ridge Rd. Grade Separation Environmental document underway.	H77.2	5 <i>B. MOORE</i>	Wake	Raleigh	Completion Date Unknown
n/a	n/a	36th. Street To be grade separated in conjunction with the CATS Blue Line Extension and Third Main Track.	H3.0	7 <i>J. SPEER</i>	Guilford	Greensboro	Not yet started
n/a	n/a	Rogers Lake Rd./Universal St. Grade Separation Includes closure of Winecoff School Rd. Identified in 2002 NCDOT "Investing in the Future" proposed bond plan.	350.7	10 <i>BREW</i>	Cabarrus	Kannapolis	Not yet started

# R/W Milestone







## UPDATE

By the  
**Schedule Management Office**  
 Transportation Program Management Unit  
 Technical Services

### RIGHT-OF-WAY MILESTONES

- WHAT:** Convey to Project STaRS users changes to and maintenance of right-of-way related milestones.
- WHY:** The purpose for these changes is to allow for separation of project schedule-related milestones from fiscal management milestones that relate to right-of-way authorization.
- WHO:** These changes directly affect the following groups:
- (1) **PDB** – Project Management Unit
  - (2) **HDB - Roadway Design Unit**
  - (3) **PDEA** – Project Development
  - (4) **PDEA – HEU**

### **DESCRIPTION OF UPDATE:**

#### Milestones

This document is guidance for how to maintain R/W related milestones in Project STaRS. See Figure 1 for how the milestones will look in Project STaRS and see Figure 2 for how to update the milestones. The following milestones ♦ are the ones affected:

#### ♦ *R/W Plans Sent*

This milestone has been moved to the Final Design Field Inspection activity (*originally in Obtain R/W Authorization*). This milestone is completed once the right of way plans are sent to the Right of Way Branch from Roadway Design. At this point, Roadway Design will enter an actual date for this milestone and enter the “Basic” scheduled date to the fixed date field (See figure 2). Once all steps for this activity have been completed, Roadway Design can final confirm the Final Design Field Inspection activity.

- ◆ *R/W Consultation*
- ◆ *Location and Design Approval*
- ◆ *R/W Authorization Letter (new)*
- ◆ *Obtain R/W Authorization (to be deleted)*

Each of these milestones should be maintained by entering an actual date for each milestone upon their completion; (1) *R/W Consultation* by PDEA, (2) *Location & Design Approval* by HEU upon obtaining the State Highway Design Engineer's signature, and (3) the *R/W Authorization Letter* by PDB after confirming completion of the first two milestones using the signature date of the letter of authorization. After all these milestones are completed, the Obtain R/W Authorization activity can be final confirmed by PDB.

- ◆ *R/W BOT Approved (new)*

This new milestone will be maintained by the PDB by entering an actual date of receiving BOT approval of full right-of-way authorization. It will be located at the 3rd Level Right-of-Way WBS.

### Activities

In addition to the changes related to milestones, the relationship between the Final Design Field Inspection and the Obtain R/W Authorization activities have been revised to a Finish to Finish relationship with a one month offset.

Act.	Network	Rel.	Typ.	Interv.	Un.	D.	T.	Short text
0710	11000843	SS						Develop GeoEnv. Acquisition Requirements
0750	11000843	FF		1.0	MON			Obtain R/W Authorization
1110	11000845	FS						Finalize Hydraulic Plans
1136	11000845	FS		2.0	MON			Prepare Traffic Plans

### **IMPLEMENTATION:**

The Schedule Management Office (SMO) has made these milestone changes to the Standard Networks and they will be reflected in new projects immediately. The SMO will begin incorporating these changes to existing projects starting with projects on the 6-month R/W list and then making sure that future projects that will be added to the 6-month R/W list are in compliance with this Project STARS Update.

Figure 1

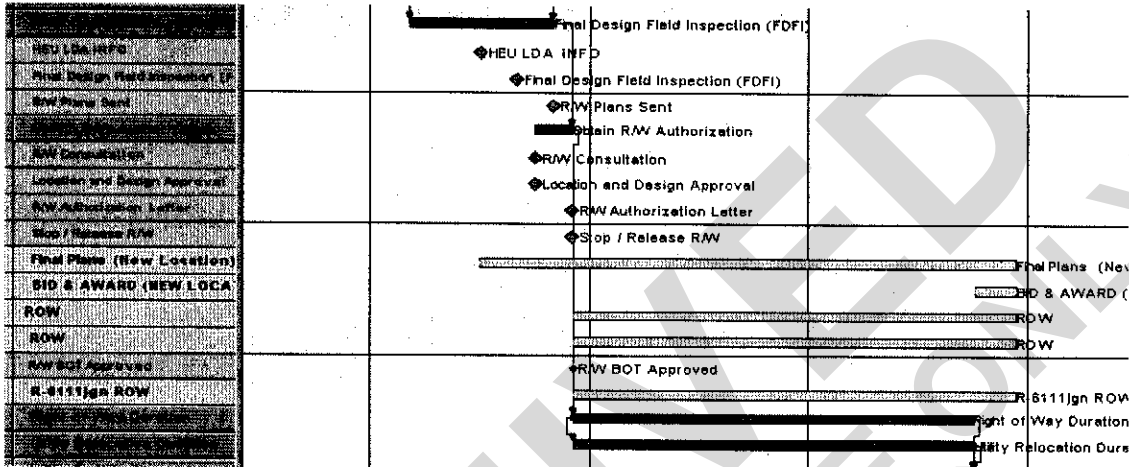


Figure 2

Identification  
 Milestone 99332 Location and Design Approval

Basic data | Functions | Administ

Usage M0275 Location and Design Approval

Activity 0038 Obtain RW Authorization

Usage <input type="checkbox"/> Milestone functions <input type="checkbox"/> Release stop ind. <input type="checkbox"/> Trend analysis	Progress analysis <input type="checkbox"/> Progress analysis	Progress analysis Perc of compl. [ ] %
		Billing plan Invoice Percentg [ ] %

Forecast dates

Fixed date	08/03/2009	"Basic" scheduled date <input type="checkbox"/> Offset to fin Offset [ ] / [ ] %
Actual date	07/15/2009 00:00:00	
Scheduled date	08/03/2009 00:00:00	

To maintain milestones upon their completion, (1) the "Basic" scheduled date should be entered to the fixed date field; (2) the actual date is entered when it was completed, and (3) save the project.



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

MEMO TO: Art McMillan, PE, Robert Memory and Tommy Cozart, PE

FROM: Deborah Barbour, PE  
Director of Preconstruction

and

Ellis Powell, PE  
Director of Field Operations

DATE: March 27, 2009

SUBJECT: **Proposed Right of Way, Permanent Utility Easement and  
Utility Pole/Fixed Object Placement**



The purpose of this memo is to serve as updated technical guidance regarding proposed Right of Way (R/W), Permanent Utility Easement (PUE) and utility pole placement along Transportation Improvement Program (TIP) projects. As noted in the 2006 AASHTO Roadside Design Guide, motor vehicle crashes with utility poles account for approximately 10% of all fixed object crashes. It is therefore prudent to put utilities underground or place utility poles as far away from the roadway edge as is feasible.

The project footprint, construction method, operation and maintenance are things to be considered when setting proposed R/W. The clear zone and recovery area as defined by the 2006 AASHTO Roadside Design Guide should also be considered when setting proposed R/W. The following are typical applications when setting proposed R/W, PUE and placing utility poles:

Shoulder Section with Control of Access (C/A)

Proposed R/W with C/A should be set at a dimension that includes the project footprint and encompasses the clear zone as defined by the 2006 AASHTO Roadside Design Guide. All new or relocated utility poles shall be placed outside the proposed R/W and C/A. Please see the attached sketch.

Shoulder Section without C/A

Proposed R/W should be set at a dimension that encompasses the project footprint and the clear zone as defined by the 2006 AASHTO Roadside Design Guide. All new or relocated utility poles shall be placed outside the clear zone, but not necessarily beyond the proposed R/W. A PUE may be provided beyond the proposed R/W along one side of the highway to encompass the utility poles. Please see the attached sketch.

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
ROADWAY DESIGN UNIT  
1582 MAIL SERVICE CENTER  
RALEIGH NC 27699-1582

TELEPHONE: 919-250-4016  
FAX: 919-250-4036

WEBSITE: [WWW.NCDOT.ORG/DOH](http://WWW.NCDOT.ORG/DOH)

LOCATION:  
CENTURY CENTER COMPLEX  
BUILDING A  
1000 BIRCH RIDGE DRIVE  
RALEIGH NC

**DRAFT**

Curb and Gutter Section

Proposed R/W should be set at a dimension that encompasses the berm and protects the clear zone. For a curb and gutter section posted at 45 mph, the minimum clear zone is defined as 12 feet. All new or relocated utility poles shall be placed at or just outside the R/W and consequently beyond the 12 foot minimum clear zone. A PUE may be provided beyond the proposed R/W along one side of the highway to encompass the utility poles. Please see the attached sketch.

Summary

For a shoulder section, all new or relocated utility poles should be placed at or beyond the clear zone as defined by the 2006 AASHTO Roadside Design Guide or the most current edition. For a curb and gutter section posted at 45 mph or less, a 12 foot minimum clear zone is acceptable for utility pole placement. Please see the attached sketch. The Proposed Design Criteria sheet for each TIP project will list the appropriate clear zone.

Site specific constraints such as insufficient R/W available, slopes are prohibitive and other factors may make implementation of the full clear zone unfeasible. In such cases good engineering judgment should be used. Relocated and new utility poles should be placed as far as practical from the roadway, consistent with other fixed objects along the subject road. During the planning stages for TIP projects, consideration should be given to the need for additional R/W and PUE for the placement of utility poles.

Please begin using these guidelines immediately on all TIP Projects. If you have any questions, please contact me or Dewayne Sykes at (919) 250-4016.

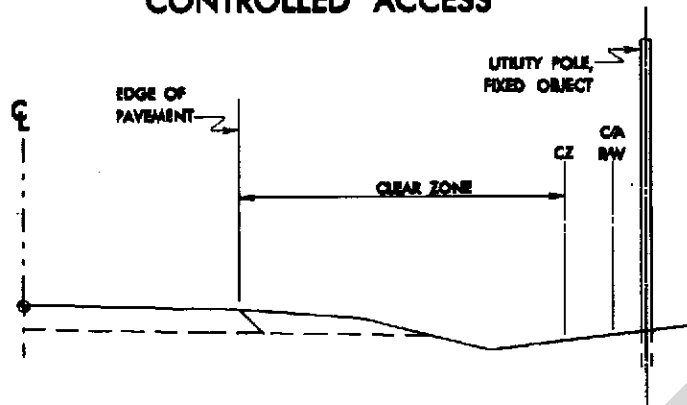
DMB/EP/dls

Attachments

cc: Terry Gibson, PE  
Jon Nance, PE  
Victor Barbour, PE  
Greg Thorpe, PhD  
Division Engineers  
Roadway Design Project Engineers

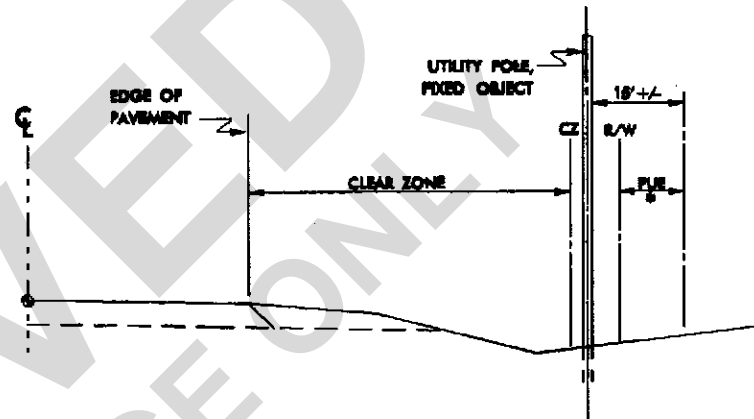
Roger Worthington, PE  
Kevin Lacy, PE  
A. D. Allison, II  
Jay Bennett, PE  
Ron Hancock, PE

**SHOULDER SECTION  
w/FULL & LIMITED  
CONTROLLED ACCESS**



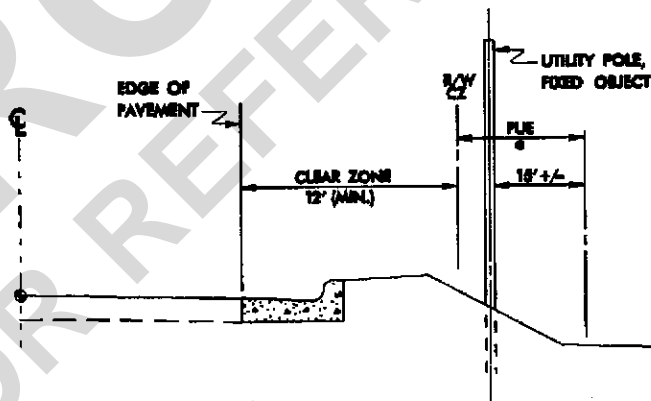
UTILITY POLE PLACED OUTSIDE CLEAR ZONE & RIGHT OF WAY

**SHOULDER SECTION  
w/NO OR PARTIAL  
CONTROLLED ACCESS**



UTILITY POLE PLACED OUTSIDE CLEAR ZONE,  
BUT NOT NECESSARILY OUTSIDE RIGHT OF WAY

**CURB & GUTTER SECTION  
(POSTED AT 45 MPH & LESS)**



UTILITY POLE PLACED OUTSIDE CLEAR ZONE & RIGHT OF WAY

**DRAFT**

\*UTILITY POLE WITH PUE TO BE LOCATED ON ONE SIDE OF THE HIGHWAY AND NOT BOTH.

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