

# PLANS AND DETAILS FOR PROPOSED LIGHTING /ELECTRICAL CONSTRUCTION

## NOTES

- △ INTERCEPT EXISTING CIRCUITRY WITH STUB OUT INSIDE JB-4
- △ ABANDON OR REMOVE EXISTING HIGH MOUNT FOUNDATION
- △ ABANDON EXISTING CIRCUITRY AND USE THE EXISTING ELECTRICAL DUCT
- △ LOCATE ALL JUNCTION BOXES OUTSIDE CLEAR ZONE AND IN AN AREA UNLIKELY TO BE USED BY TRAFFIC

## SCOPE OF WORK

RELOCATE 30m HIGH MOUNT STANDARD AND CIRCUITRY IN CONFLICT WITH CONSTRUCTION.

## DESIGN CRITERIA

- 2005 AASHTO "ROADWAY LIGHTING DESIGN GUIDE"
- 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS
- 2005 NATIONAL ELECTRICAL CODE
- 2002 AASHTO ROADSIDE DESIGN GUIDE

## ROADWAY STANDARDS

THE FOLLOWING DRAWINGS, AS APPEAR IN "NCDOT ROADWAY STANDARD DRAWINGS - METRIC", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2002, AND DETAIL NUMBER 1402D01AND ATTACHED HEREWITH, ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

DRAWING NO.	TITLE
1402D01	HIGH MOUNT FOUNDATION
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUITS
1411.01	ELECTRICAL JUNCTION BOXES

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2002 AND PROJECT SPECIAL PROVISIONS, TITLED LIGHTING.

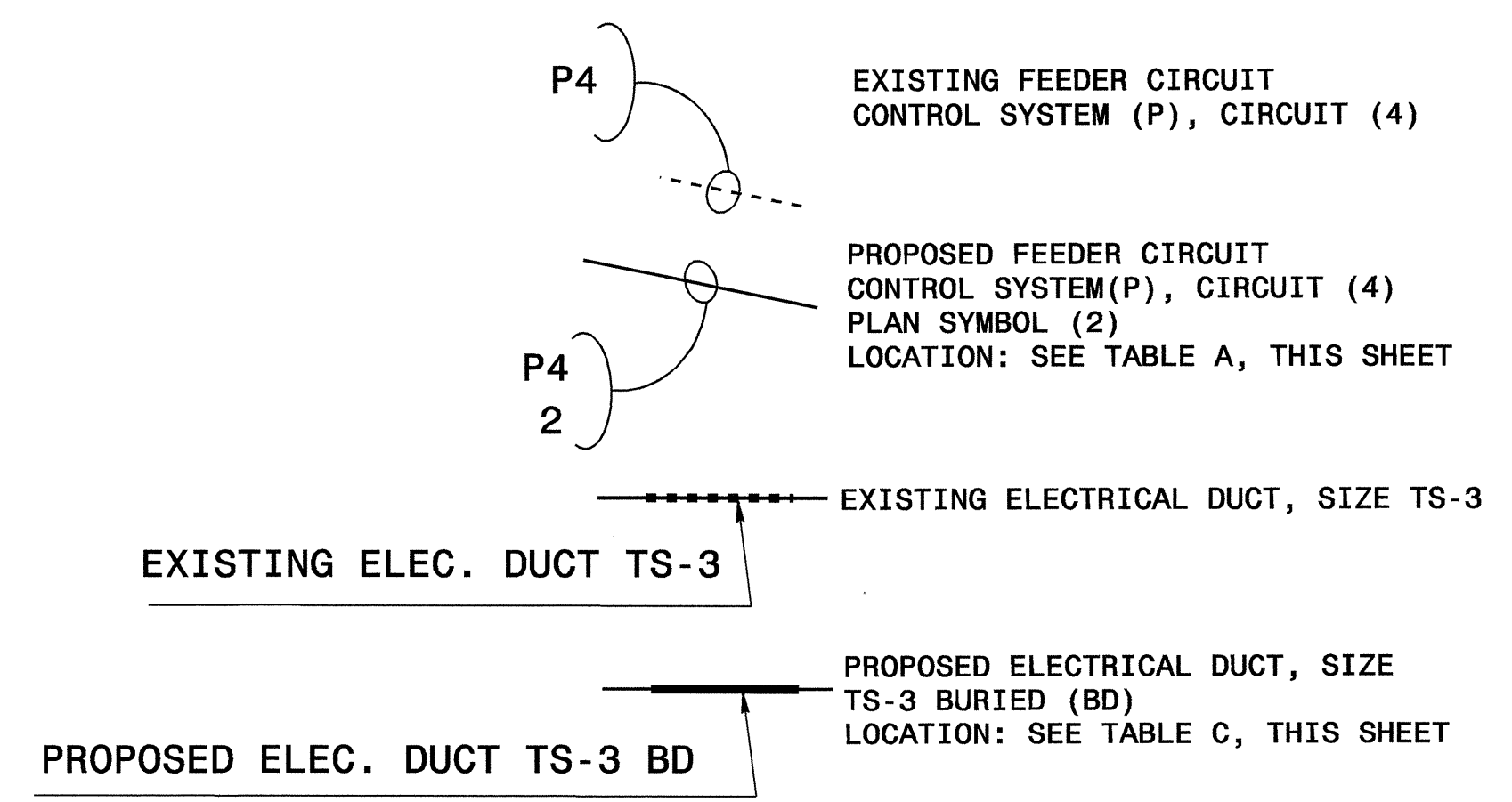
## LEGEND

- EXISTING 30m HIGH MOUNT STANDARD WITH FOUNDATION & FOUR (4) HM LUMINAIRES OF 1KW HPS
- PROPOSED NEW LOCATION OF 30m HIGH MOUNT STANDARD WITH HM FOUNDATION 110 MPH WIND SPEED
- EXISTING ELECTRICAL JUNCTION BOX
- PROPOSED ELECTRICAL JUNCTION BOX TYPE PC18 (450mm L X 300mm W X450mm H) LOCATION: SEE TABLE B, THIS SHEET
- REFERENCE TO CORRESPONDING NOTE AS NUMBERED

PLAN SYMBOL	DESCRIPTION	CONTRACT ITEM
2	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 4 GROUNDING CONDUCTOR TS-1.5 PVC CONDUIT	2 #2 W/G FEEDER CIRCUIT IN TS-1.5 CONDUIT

NUMBER	LOCATION	TYPE	SHEET
JB4	STA. 31+19 -L- 14m RT	PC18	E2
JB5	STA. 10+50 -LPC- 8.6m RT	PC18	E2
JB10	STA. 10+75 -LPC- 8m LT	PC18	E2
TOTAL		PC18	3

STATION	RACEWAY	SHEET	TYPICAL LENGTH IN METERS									
			BURIED (BD)				JACKED (JA)					
			SIZE TS-2	SIZE TS-3	SIZE TS-4	SIZE TS-8	SIZE TS-2	SIZE TS-3	SIZE TS-4	SIZE TS-8		
10+75 -LPC-		E2		9								
TOTAL				9								



### ABBREVIATIONS

- BD BURIED
- LT LIGHT
- JA JACKED
- MH MOUNTING HEIGHT
- ∅ PHASE
- PVC PVC SCHEDULE 40 CONDUIT
- RGC RIGID GALVANIZED STEEL CONDUIT
- C CONDUIT
- CKT CIRCUIT
- N NEUTRAL
- G GROUND
- ABN ABANDON
- TS TRADE SIZE
- HM HIGH MOUNT STANDARD

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Rev.	Date	Description	Approved
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN UNIT LIGHTING/ELECTRICAL SECTION			
RELOCATION OF HIGH MOUNT STANDARD INSIDE PROPOSED LOOP-C AT BURLINGTON-WESTERN ALAMANCE LOOP INTERCHANGE CONSTRUCTED UNDER TIP U2905 IN ALAMANCE COUNTY			
Drawn By	Approved By	Dwg No.	
SKS 07/05/06	<i>[Signature]</i>		





STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

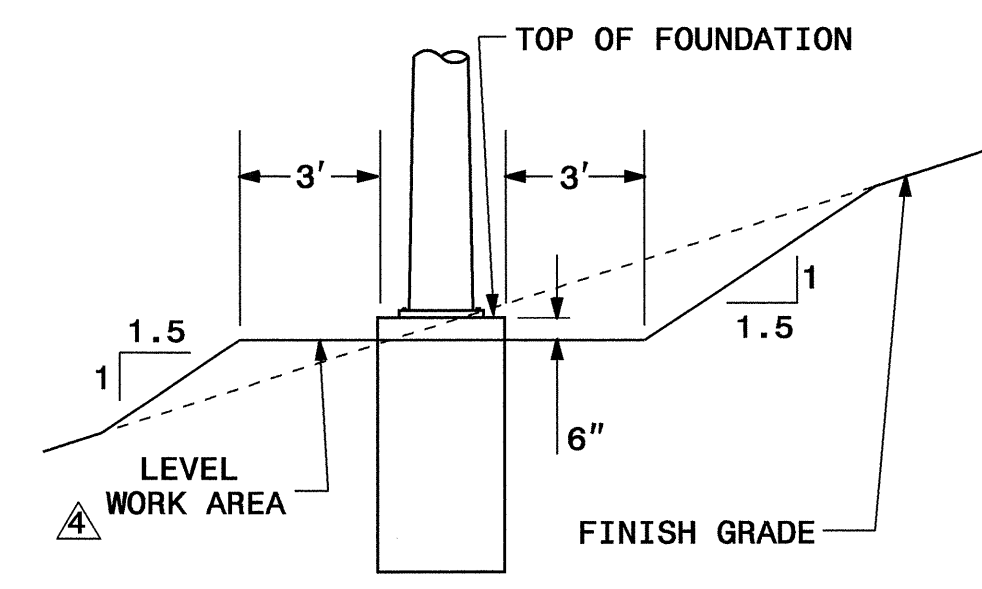
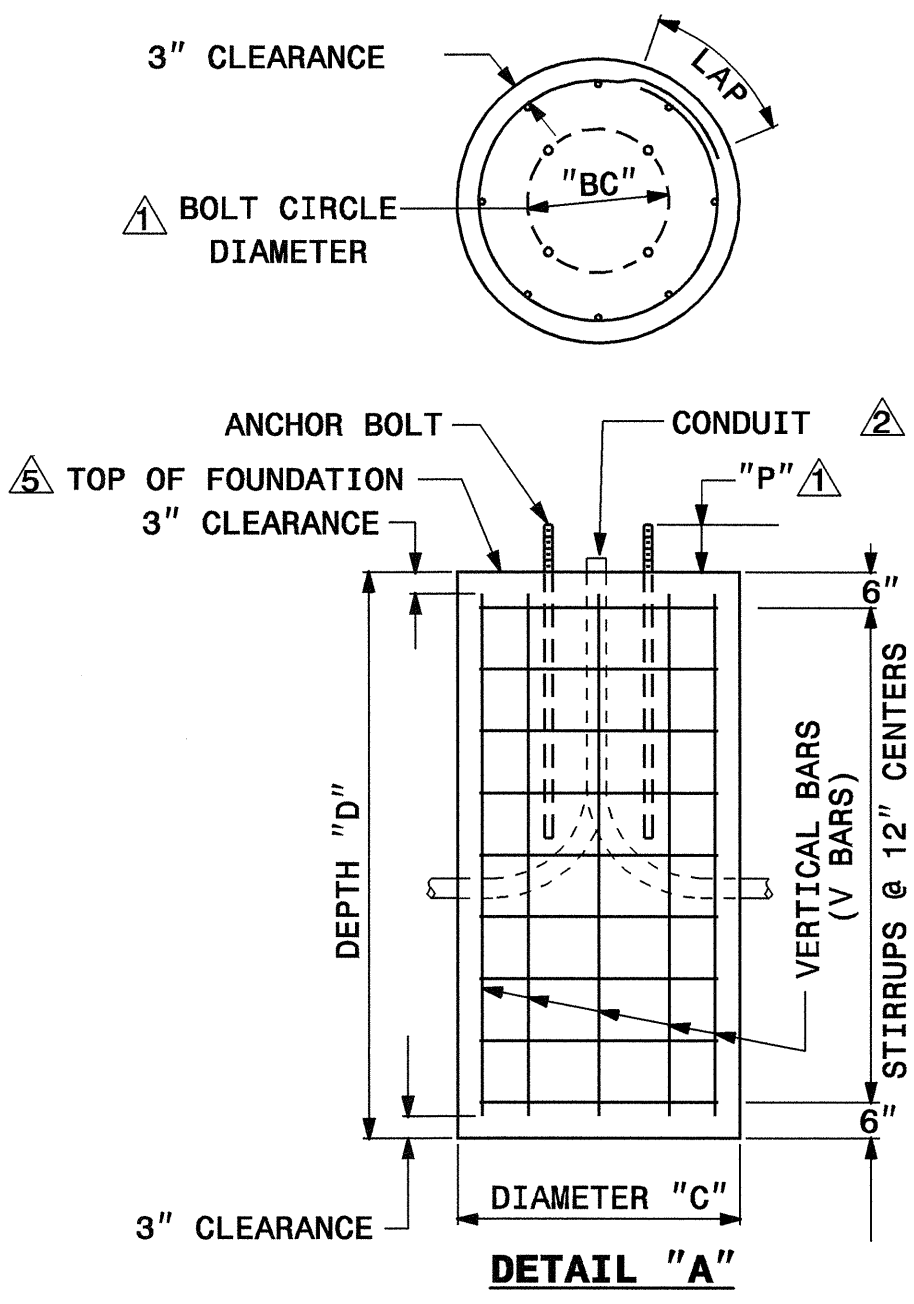
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ENGLISH STANDARD DRAWING FOR  
HIGH MOUNT FOUNDATION

SHEET 1 OF 1  
1402D01

HEIGHT OF HIGH MOUNT FT	DIAMETER "C" FT	STIRRUPS		WIND VELOCITY MPH														
				90				110				130						
				DEPTH "D" FT	V BARS	REINF.* STEEL LBS	CONCRETE CY	DEPTH "D" FT	V BARS	REINF.* STEEL LBS	CONCRETE CY	DEPTH "D" FT	V BARS	REINF.* STEEL LBS	CONCRETE CY			
80	3.5	#3	1.0	12	8	#8	306	4.3	13	8	#8	331	4.6	15	8	#8	382	5.3
100	4.0	#3	1.0	13	8	#9	413	6.1	15	8	#9	477	7.0	16	8	#9	509	7.4
120	4.5	#3	1.0	15	8	#10	557	8.2	16	8	#10	636	9.4	18	8	#10	716	10.6

\* INCLUDES STIRRUPS AND VERTICAL BARS (V BARS)



DETAIL "B"

- NOTES**
- ANCHOR BOLTS  
CONFORM NUMBER, SIZE, AND LENGTH OF ANCHOR BOLTS, BOLT CIRCLE DIAMETER "BC", AND ANCHOR BOLT PROJECTION "P" TO APPROVED HIGH MOUNT STANDARD DRAWINGS.
  - CONDUITS  
MATCH ORIENTATION, QUANTITY, TYPE, AND SIZE OF CONDUITS TO THE LAYOUT SHEETS. STUB AND CAP ONE SPARE CONDUIT AT EACH FOUNDATION. PROJECT CONDUIT A MAXIMUM OF 2" ABOVE TOP OF FOUNDATION. PLACE CONDUIT 30" BENEATH FINISH GRADE.
  - DIMENSIONS & QUANTITIES  
DIMENSIONS AND QUANTITIES OF CONCRETE AND REINFORCING STEEL ARE GIVEN FOR THE PURPOSE OF OBTAINING BID PRICES ONLY. SEE STANDARD SPECIFICATIONS SECTION 1402, FOR OTHER STRUCTURAL REQUIREMENTS.
  - WORK AREA  
PROVIDE A LEVEL WORK AREA AROUND EACH FOUNDATION. CUT/FILL SLOPES MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
  - ELEVATION  
SET TOP OF FOUNDATION AT 6" ABOVE LEVEL WORK AREA. SEE DETAIL "B".

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY ANUPAM SHAH, P.E., 029979, ON OCTOBER 12, 2005.

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-06

ENGLISH STANDARD DRAWING FOR  
HIGH MOUNT FOUNDATION

SHEET 1 OF 1  
1402D01

2			
1			
Rev.	Date	Description	Approved

NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DESIGN SERVICES LIGHTING/ELECTRICAL SECTION

**LIGHTING DETAILS**

**HIGH MOUNT FOUNDATION**

Drawn By: PKC      Approved By: [Signature]      Dwg No.:

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