

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## CAMBRIDGE

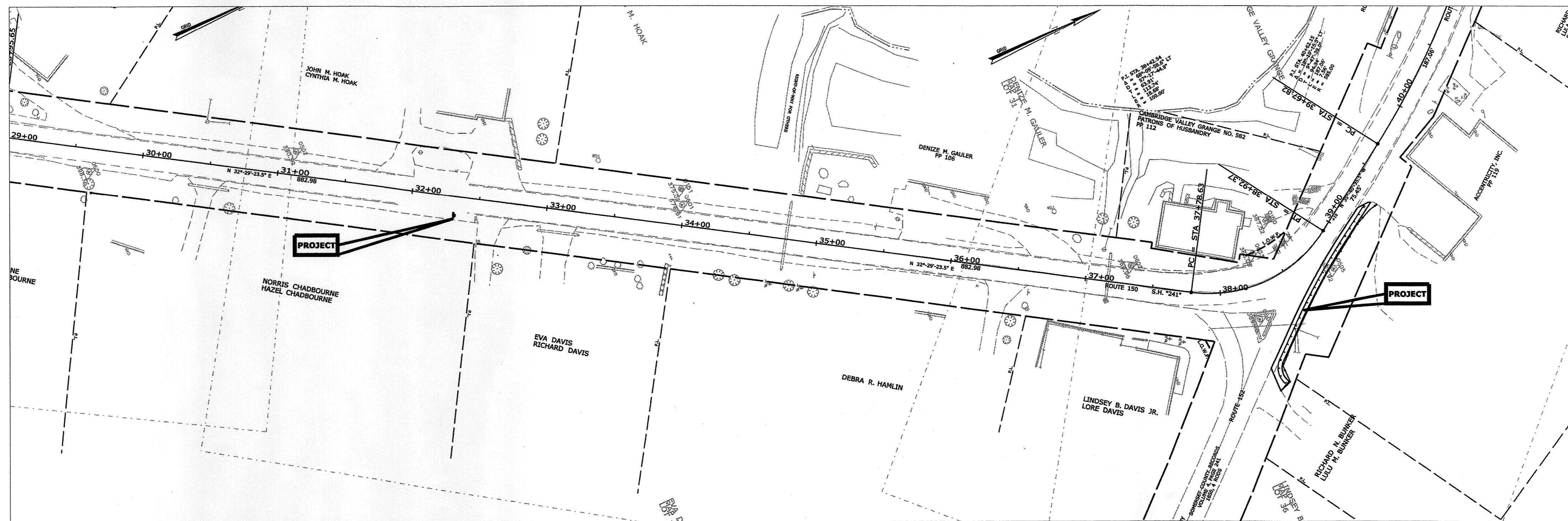
### SOMERSET COUNTY ROUTE 150 & 152 FEDERAL AID PROJECT NO. HRRP-1751(606)x SAFETY IMPROVEMENTS

#### PLAN LEGEND

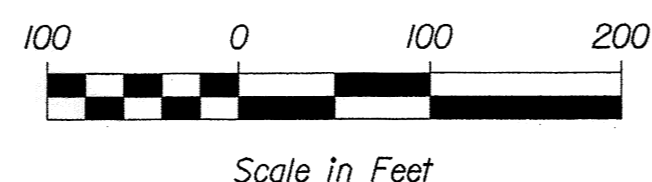
Town, County, State	Centerline-Existing	Centerline-Proposed
Property Lines	Travelway-Existing	Travelway-Proposed
R/W Lines-Existing	Railroad	Catch Basins
R/W Lines-Proposed	Culvert-Existing	Manholes
Culvert-Proposed	Curbing Existing	Proposed Underdrain
Proposed	Type 1	Proposed Ditch
Type 3	Type 5	Existing Ditch
Outline of Bodies of Water	Ledge	Utility Poles
Buildings	Trees	Fire Hydrants
Tree Line	Clearing Limit Line	Existing Water Line
		Existing San. Sewer
		Existing San. Sewer Manhole
		Guardrail-Existing
		Guardrail-Proposed
		Guardrail-Cable, Other

#### INDEX OF SHEETS

Description	Sheet No.
Title Sheet .....	1
Signage Plan .....	2
Guardrail Plan .....	3



#### LAYOUT SCALE



**GP** Gorrill-Palmer Consulting Engineers, Inc.  
 PO Box 1237 Engineering Excellence Since 1998 207-657-6910  
 15 Shaker Road Gray, ME 04039 FAX: 207-657-6912  
 E-Mail: mailbox@gorrillpalmer.com

<b>PROJECT LOCATION:</b>	In the town of Cambridge near the intersection of Route 150 & Route 152
<b>PROGRAM AREA:</b>	Operational and safety improvements
<b>OUTLINE OF WORK:</b>	Roadway Safety Modifications

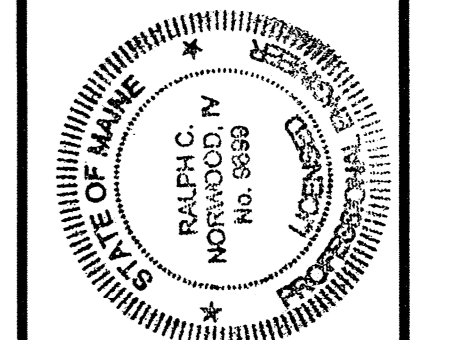
WIN 17516.06 HRRP-1751(606)x

CAMBRIDGE  
ROUTE 150  
TITLE SHEET

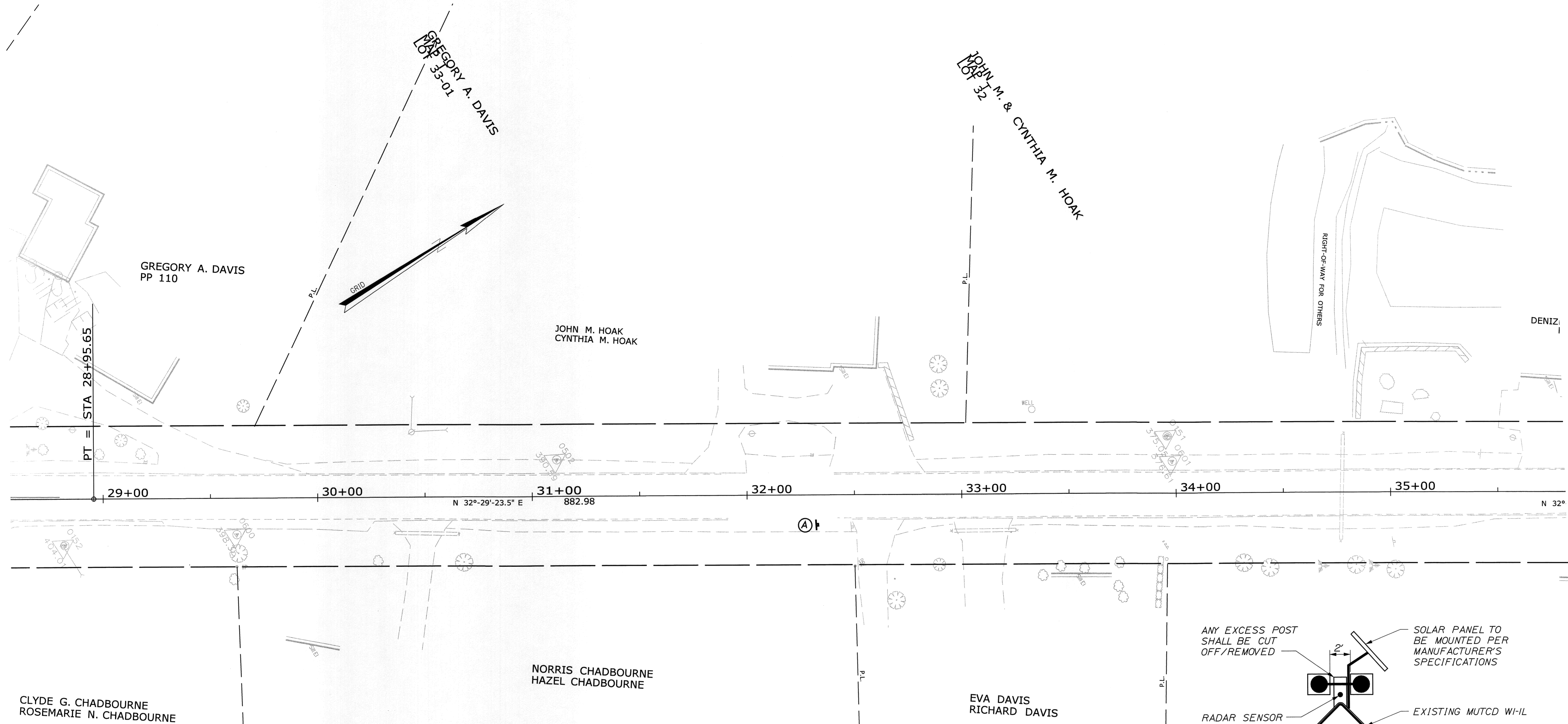
SHEET NUMBER  
**1**  
OF 3

PROJECT INFORMATION	
PROGRAM	TRAFFIC
PROJECT MANAGER	B. KEEZER
DESIGNER	R. NORWOOD
CONSULTANT	GORRILL-PALMER
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

SIGNATURE	DATE
<i>B. Keezer</i>	7-19-12
P.E. NUMBER	
9697	



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
APPROVED	DATE
<i>James H. Ducey</i>	8/24/12
COMMISSIONER	
CHIEF ENGINEER	



**GENERAL NOTES:**

1. ALL MATERIALS AND WORK COMPLETED UNDER THIS CONTRACT SHALL CONFORM TO THE MDOT STANDARD SPECIFICATION, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH FEDERAL HIGHWAY ADMINISTRATIONS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", MOST CURRENT EDITION.

2. THE CONTRACTOR SHALL CONTACT UTILITIES UPON AWARD OF THE CONTRACT. THE CONTRACTOR SHALL CONTACT DIG-SAFE PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL PROVIDE DEPARTMENT WITH A DIG SAFE NUMBER AND "OK TO DIG" NUMBER BEFORE ANY DIGGING BEGINS.

3. FLASHING BEACON ASSEMBLY SHALL BE:  
 - RU2 SYSTEM OVER SPEED RADAR SENSOR OR APPROVED EQUAL.  
 - BEACONS SHALL BE SOLAR POWERED.  
 - CIRCUIT BOARD SHALL BE CONFORMAL COATED AND WEATHER SEALED AND SHALL USE INDUSTRIAL GRADE COMPONENTS.  
 - LED LENSES SHALL BE 12 INCH DIAMETER AND AMBER IN COLOR  
 - ENVIRONMENTAL REQUIREMENTS:

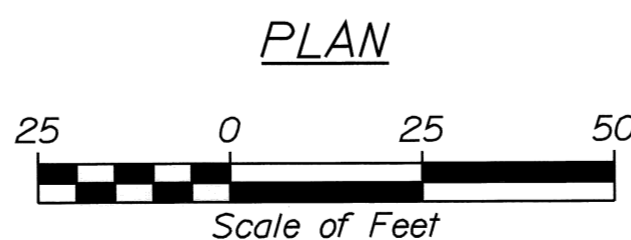
- OPERATING TEMPERATURE: -40F TO +165 F
- MINIMUM DAILY SOLAR INSOLATION: 0.8 HOURS
- OPERATE AT RATED USAGE FOR 7 DAYS WITHOUT SOLAR CHARGING

- SIGN ASSEMBLY, COMPONENTS, INSTALLATION, AND OPERATION SHALL CONFORM TO THE CURRENT EDITIONS OF THE MUTCD AND THE MAINE DOT STANDARD SPECIFICATIONS AND DETAILS.
- BATTERY AND SOLAR ASSEMBLY SHALL BE OF SUFFICIENT SIZE TO POWER SIGN DURNING EXTENDED PERIODS OF CLOUDY DAYS, 7 DAYS WITHOUT SOLAR CHARGING.
- BATTERIES SHALL BE GEL CELL OR ABSORBED GLASS MAT (AGM) BATTERIES
- SOLAR PANEL MUST BE FACING TRUE SOUTH SET TO A 60° ANGLE
- RADAR UNIT MUST BE ABLE TO DETECT FOR 500 FEET
- CONTROLLER CABINET SHALL BE ALUMINUM AND SHALL BE MOUNTED ON THE BACKSIDE OF THE POST (WITH FRONT BEING WHERE SIGNS ARE LOCATED).

4. A SWITCH SHALL BE INSTALLED TO TURN OFF THE RADAR SENSOR AND HAVE THE BEACONS FLASH CONSTANTLY

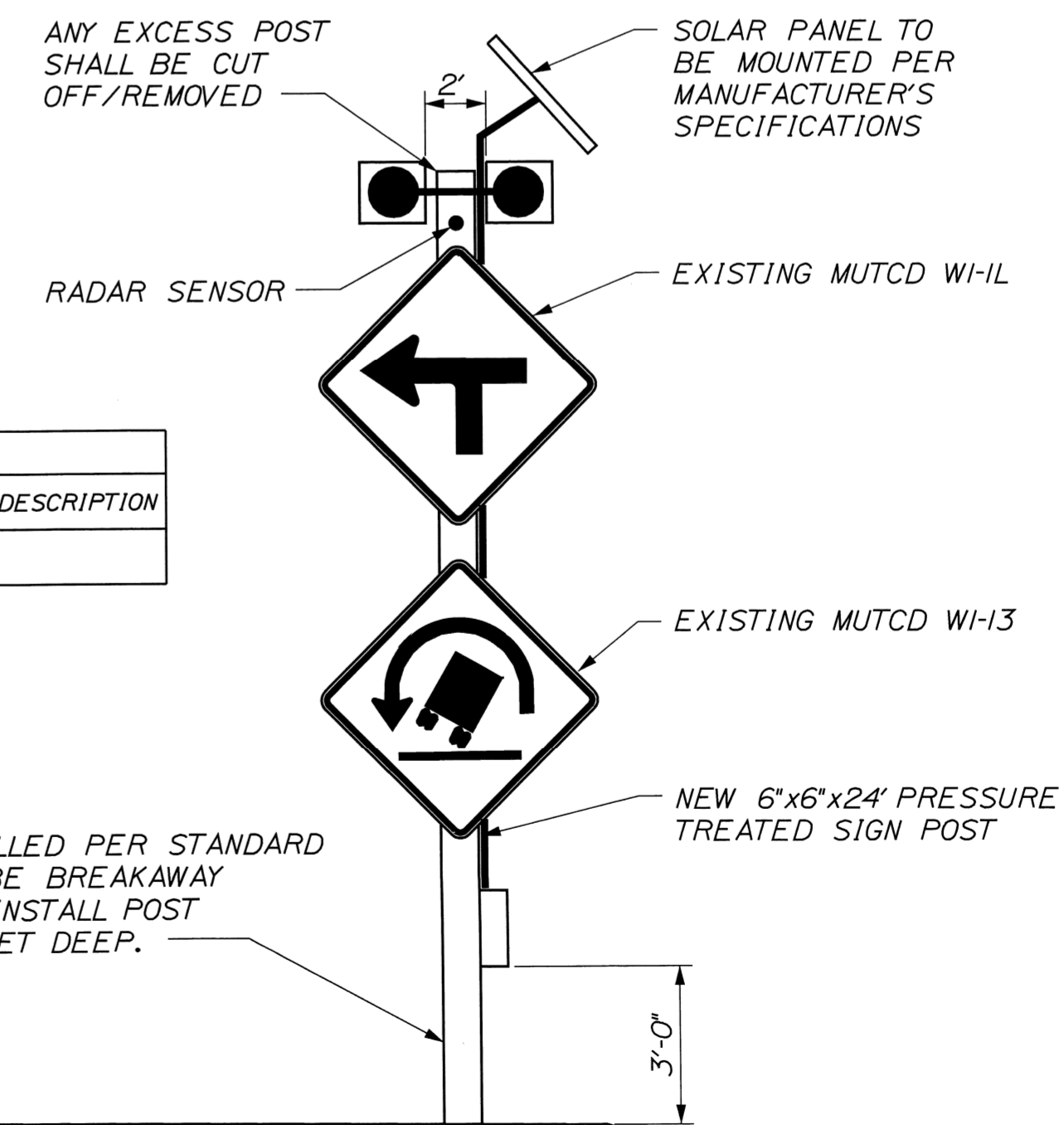
EQUIPMENT SCHEDULE			
DESIGNATION	FATIGUE CATEGORY	ITEM	DESCRIPTION
A	N/A	ACTUATED SIGN	

POST SHALL BE DRILLED PER STANDARD DETAIL AND SHALL BE BREAKAWAY OR 350 COMPLIANT. INSTALL POST A MINIMUM OF 4 FEET DEEP.



**FLASHING BEACON ASSEMBLY DETAIL**

NOT TO SCALE  
 PAID FOR AS ITEM 643.6



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STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 HRRP-1751(606)X  
 WIN  
 17516.06  
 HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D. BURGESS	
CHECKED-REVIEWED	R. NORWOOD	T. GORRILL	
DESIGN2-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CAMBRIDGE  
 ROUTE 150  
 SAFETY IMPROVEMENTS

SHEET NUMBER  
 2  
 OF 3

