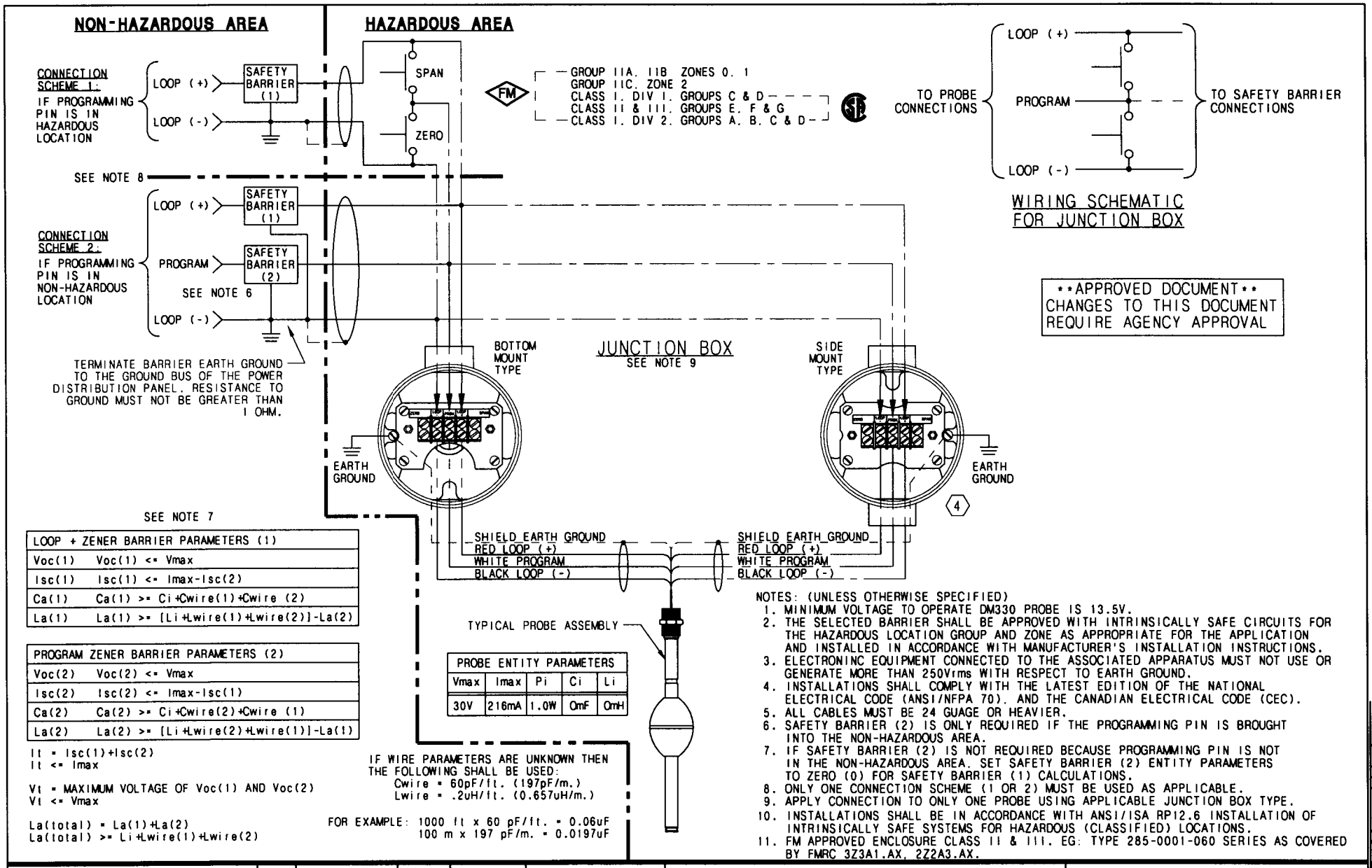

SEE NOTE 7

LOOP + ZENER BARRIER PARAMETERS (1)	
Voc(1)	Voc(1) <= Vmax
Isc(1)	Isc(1) <= Imax-Isc(2)
Ca(1)	Ca(1) >= Ci+Cwire(1)+Cwire (2)
La(1)	La(1) >= [Li+Lwire(1)+Lwire(2)]-La(2)

PROGRAM ZENER BARRIER PARAMETERS (2)	
Voc(2)	Voc(2) <= Vmax
Isc(2)	Isc(2) <= Imax-Isc(1)
Ca(2)	Ca(2) >= Ci+Cwire(2)+Cwire (1)
La(2)	La(2) >= [Li+Lwire(2)+Lwire(1)]-La(1)

It = Isc(1)+Isc(2)
It <= Imax

Vt = MAXIMUM VOLTAGE OF Voc(1) AND Voc(2)
Vt <= Vmax

La(total) = La(1)+La(2)
La(total) >= Li+Lwire(1)+Lwire(2)

PROBE ENTITY PARAMETERS				
Vmax	Imax	Pi	Ci	Li
30V	216mA	1.0W	0mF	0mH

IF WIRE PARAMETERS ARE UNKNOWN THEN THE FOLLOWING SHALL BE USED:
Cwire = 60pF/ft. (197pF/m.)
Lwire = .2uH/ft. (0.657uH/m.)

FOR EXAMPLE: 1000 ft x 60 pF/ft. = 0.06uF
100 m x 197 pF/m. = 0.0197uF

NOTES: (UNLESS OTHERWISE SPECIFIED)
1. MINIMUM VOLTAGE TO OPERATE DM330 PROBE IS 13.5V.
2. THE SELECTED BARRIER SHALL BE APPROVED WITH INTRINSICALLY SAFE CIRCUITS FOR THE HAZARDOUS LOCATION GROUP AND ZONE AS APPROPRIATE FOR THE APPLICATION AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. ELECTRONINC EQUIPMENT CONNECTED TO THE ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250Vrms WITH RESPECT TO EARTH GROUND.
4. INSTALLATIONS SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70), AND THE CANADIAN ELECTRICAL CODE (CEC).
5. ALL CABLES MUST BE 24 GUAGE OR HEAVIER.
6. SAFETY BARRIER (2) IS ONLY REQUIRED IF THE PROGRAMMING PIN IS BROUGHT INTO THE NON-HAZARDOUS AREA.
7. IF SAFETY BARRIER (2) IS NOT REQUIRED BECAUSE PROGRAMMING PIN IS NOT IN THE NON-HAZARDOUS AREA, SET SAFETY BARRIER (2) ENTITY PARAMETERS TO ZERO (0) FOR SAFETY BARRIER (1) CALCULATIONS.
8. ONLY ONE CONNECTION SCHEME (1 OR 2) MUST BE USED AS APPLICABLE.
9. APPLY CONNECTION TO ONLY ONE PROBE USING APPLICABLE JUNCTION BOX TYPE.
10. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ANSI/ISA RP12.6 INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS.
11. FM APPROVED ENCLOSURE CLASS II & III, EG: TYPE 285-0001-060 SERIES AS COVERED BY FMRC 3Z3A1.AX, 2Z2A3.AX.

CERTIFIED by
PO #
ENG
USER
DE #

ISS.	EDO/DSR NO.	APP'D	DATE
4	9-04-214	THP	10/28/04
3	9-04-214	NOT RELEASED	
2	7-04-213	THP	7-20-04
1	12-03-213	THP	4-16-04

SCALE NONE
UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)
DR. JJS 10-27-04
CK. CDD

AMETEK®
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HORSHAM, PA 19044-9986
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FM, CSA & NEMKO CONTROL DRAWING DM330 TANK PROBE WITH JUNCTION BOX

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