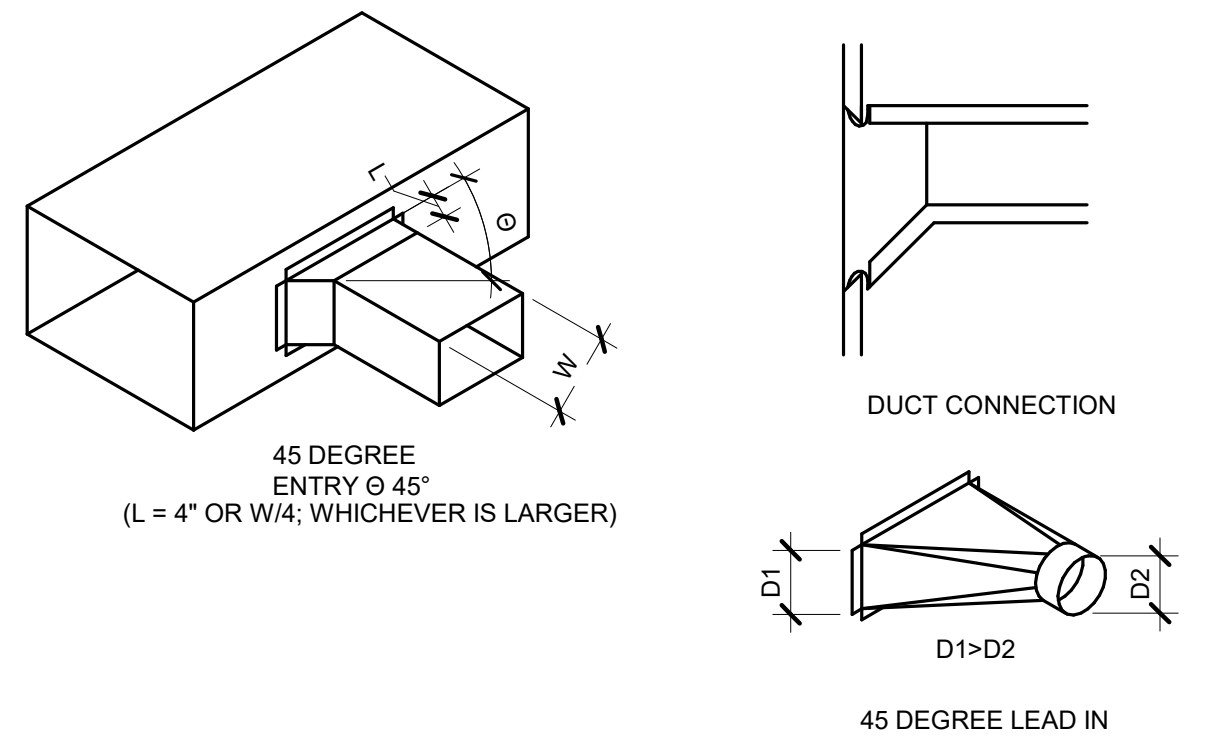


OVAL / ROUND RADIUS ELBOW
SMOOTH OR 5 GORE (MINIMUM)
R/W = 1.5 (MINIMUM)

RECTANGULAR RADIUS ELBOW
TYPE RE1
R/W = 1.0 (MINIMUM)
R/W < 1.0 SHALL BE TYPE RE3

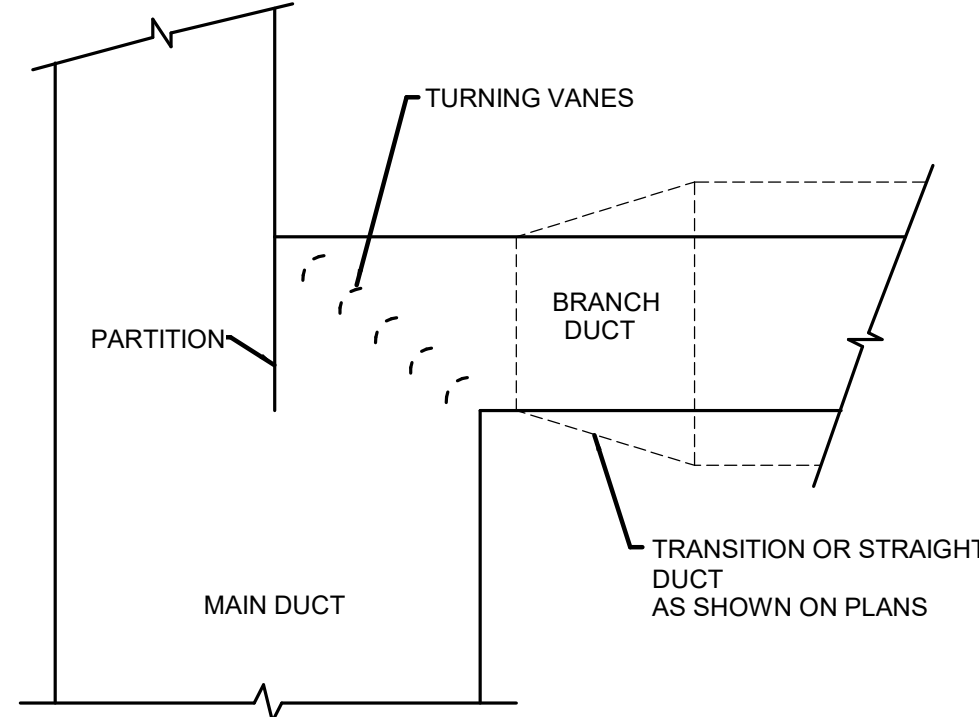
RECTANGULAR RADIUS ELBOW WITH VANES
TYPE RE3

REFER TO SMACNA HVAC SYSTEMS DUCT DESIGN MANUAL, FOURTH EDITION, SECTION 5.14 "SPLITTER VANES" AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS, THIRD EDITION, FIGURES 4-2 AND 4-9 AND CHARTS 4-1 AND 4-1M. ELBOW SHALL HAVE THREE SPLITTER VANES AND $r/W = 0.10$ ($R/W = 0.60$) UNLESS NOTED OTHERWISE.

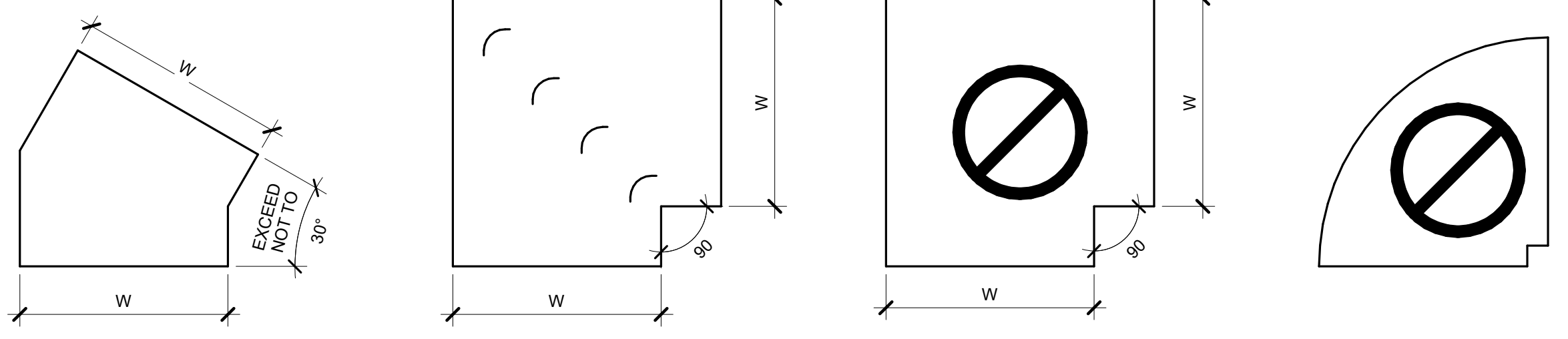


- NOTES:**
- DO NOT USE CONNECTIONS WITH SCOOPS.
 - FIT ALL CONNECTIONS TO AVOID VISIBLE OPENINGS AND SECURE THEM SUITABLY FOR THE PRESSURE CLASS.
 - ADDITIONAL MECHANICAL FASTENERS ARE REQUIRED FOR 4"W.G. AND OVER.
 - SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2 DUCT - BRANCH CONNECTIONS
NO SCALE



4 TYPICAL DETAIL OF BRANCH CONNECTION FROM MAIN SUPPLY DUCT
NO SCALE



RECTANGULAR MITERED ELBOW
TYPE RE6

RECTANGULAR MITERED ELBOW WITH VANES
TYPE RE2

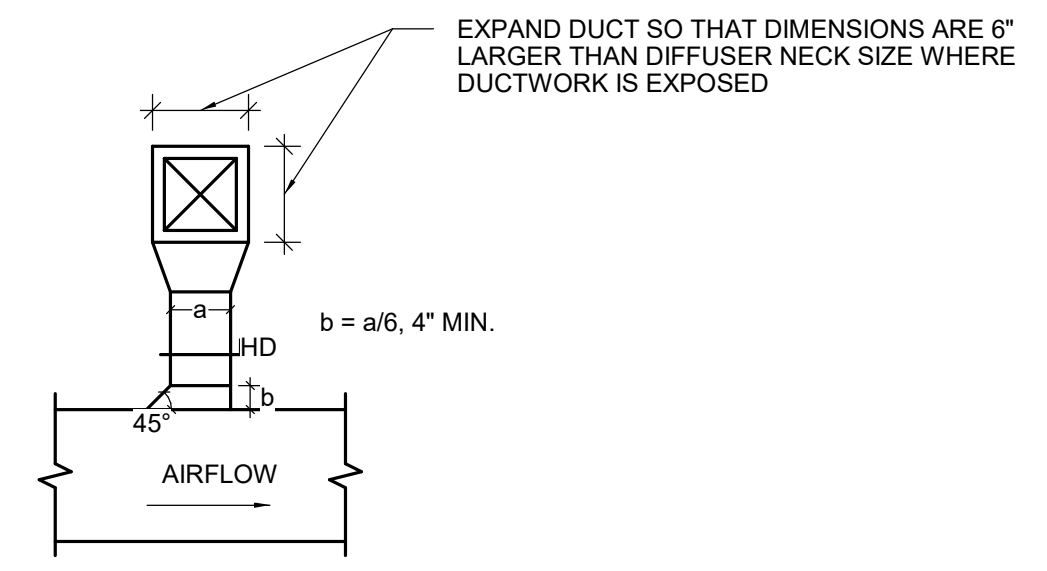
RECTANGULAR / OVAL / ROUND MITERED ELBOW WITHOUT VANES
TYPE RE4

RECTANGULAR RADIUS ELBOW WITH SQUARE THROAT
NOT ALLOWED

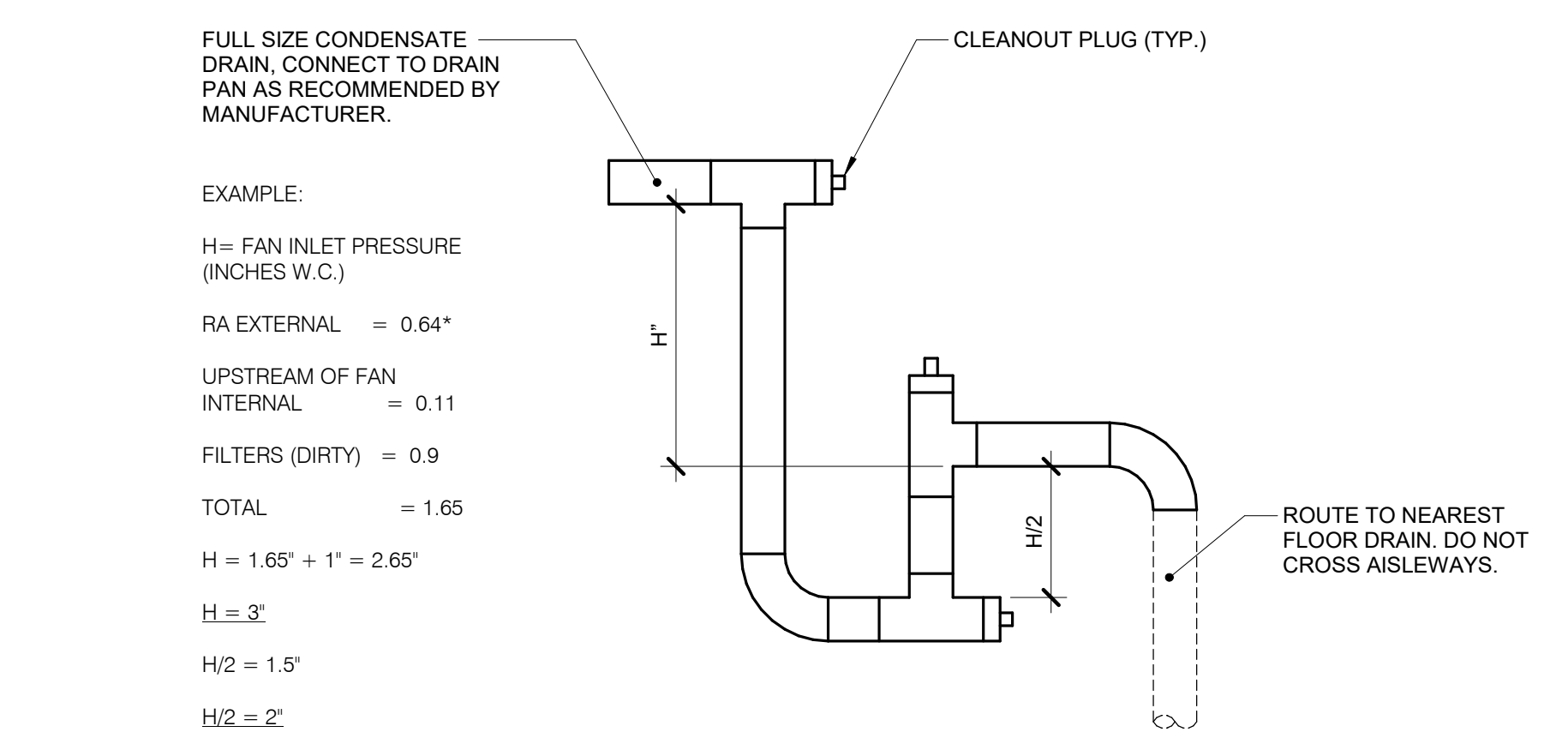
USE ONLY AS PART OF OFFSETS AND TRANSITIONS PER FIGURE 4-7 TYPE 2 OR AS SHOWN ON DRAWINGS. OFFSETS ABOVE 30° SHALL BE TYPE RE1.

- NOTES:**
- BEAD, CROSSBREAK, AND REINFORCE FLAT SURFACES AS IN STRAIGHT DUCT.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - DEFAULT ELBOW SHALL BE TYPE "RE1".
 - ELBOW TYPES SHALL BE INSTALLED AS SHOWN AND NOT BE SUBSTITUTED WITHOUT PERMISSION. EXCEPTION: RE1 OR RE3 MAY BE SUBSTITUTED FOR RE2.

1 DUCT - ELBOW CONSTRUCTION
NO SCALE

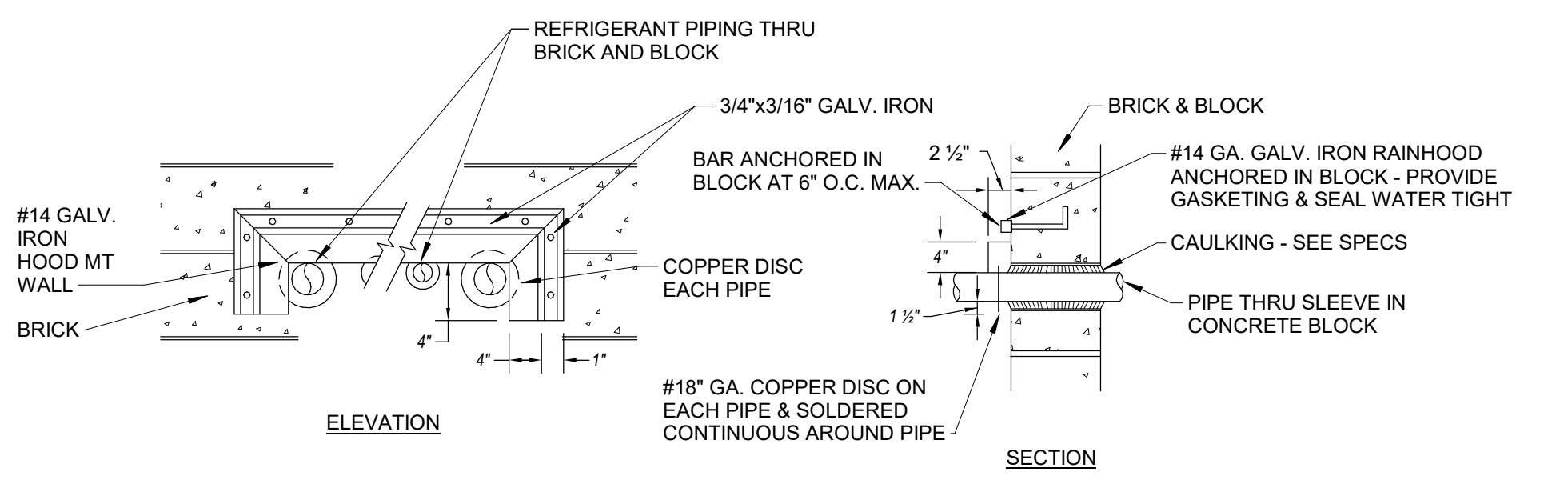


6 TYPICAL DETAIL OF BRANCH TAKE OFF AND RECT. NECK DIFFUSER CONN.
NO SCALE

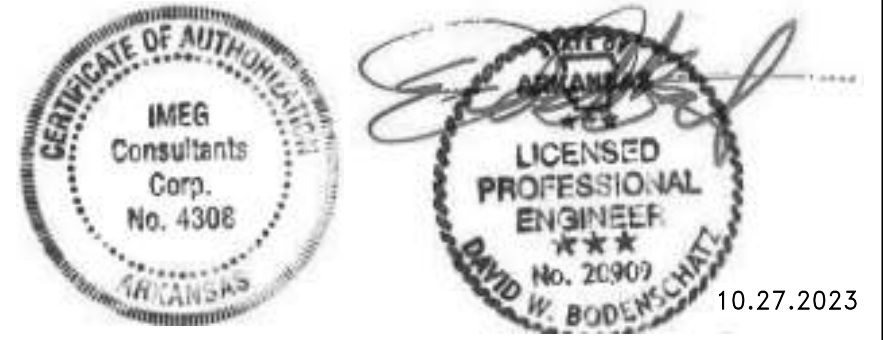


- EXAMPLE:**
- H = FAN INLET PRESSURE (INCHES W.C.)
 - RA EXTERNAL = 0.64"
 - UPSTREAM OF FAN INTERNAL = 0.11
 - FILTERS (DIRTY) = 0.9
 - TOTAL = 1.65
 - H = 1.65' + 1' = 2.65'
 - H = 3'
 - H/2 = 1.5'
 - H/2 = 2'

3 CONDENSATE TRAP - DRAW THROUGH COIL
NO SCALE



5 DETAIL OF RAINHOOD FOR REFRIGERANT PIPING
NO SCALE



A/E FIRMS	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
ARCH: QUINN EVANS 219 1/2 N. MAIN STREET ANN ARBOR, MI T: 734.663.5888	SGB	02 M5.0	LIBBEY BATHHOUSE	128
MEP/ENG: IMEG CORP. 1400 BALTIMORE STREET SUITE 300 KANSAS CITY, MO T: 816.842.8437	CADD: WMM		MECHANICAL DETAILS	182951
	TECH. REVIEW: SCB		REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	PMIS/PKG NO. 318915
	DATE: 10.27.2023			SHEET 236 OF 286