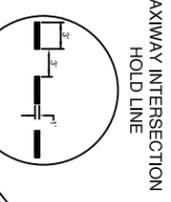


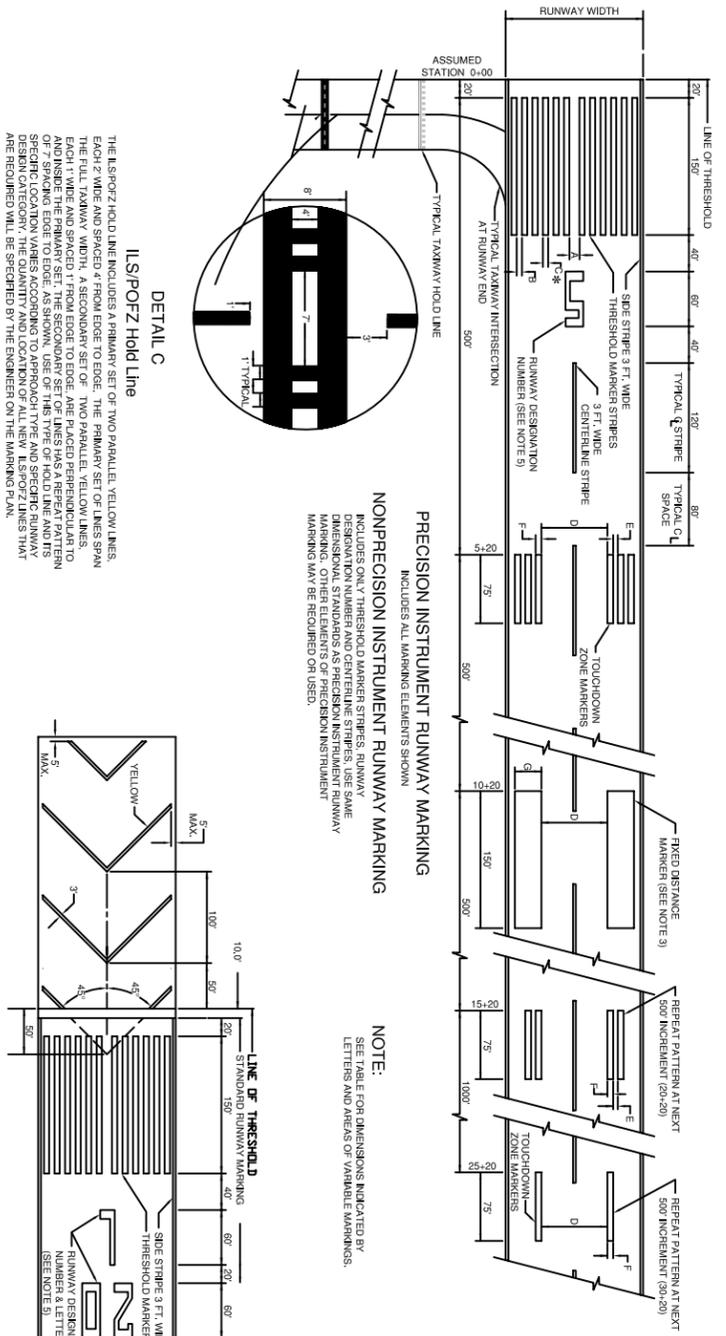
TABLE 1:
RUNWAY TABLE OF VARIABLE DIMENSIONS

BLAST PAD AREA PER CHEVRON	THRESHOLD MARKER STRIPES			TOUCHDOWN ZONE MARKERS					FIXED DISTANCE MARKERS		AREA FOR 2 MARKERS			
	DIMENSIONS OF STRIPES	# OF STRIPES	AREA FOR STRIPES	DIMENSIONS OF STRIPES	# OF STRIPES	AREA FOR STRIPES	DIM. OF MARKERS	# OF MARKERS	AREA FOR 2 MARKERS					
150	A	B	C	D	E	F	G	H	I	J	8,900			
100	382	11 59'	59'	8	6,900	48	3 38'	6 5	1,550	1,100	590	193'	30 29	5,900
75	275	11 59'	59'	6	5,175	36	2 3	5 4	1,350	900	450	15	23 22	4,500
50	212	11 59'	59'	4	3,450	24	1 3"	1 6"	900	600	300	11 8"	18 17	3,500
40	127	11 59'	29'	4	3,450	24	1 3"	1 6"	675	450	225	9 8"	15 14	2,900

* DIMENSIONS ARE IN FEET AND INCHES.
* THRESHOLD MARKER STRIPES ARE 8" WIDE WHEN USING STRIATED MARKING THE 59" SPACE BETWEEN STRIPES IS MAINTAINED.
AREAS ARE IN SQUARE FEET, MEASURED FROM OUTSIDE TO OUTSIDE OF EACH MARKER STRIPE. THE TOTAL AREA FOR THE NUMBER OF MARKERS BY TYPE INSTALLED AT A PARTICULAR RUNWAY STATION IS SHOWN.



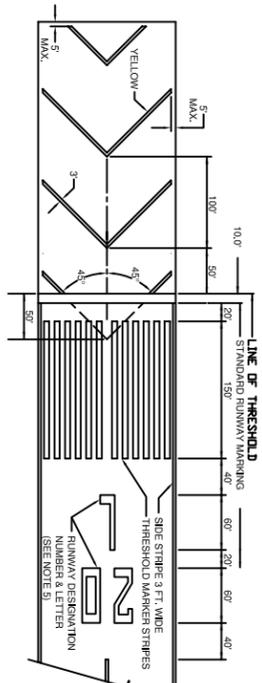
DETAIL D
TAXIWAY INTERSECTION
HOLD LINE



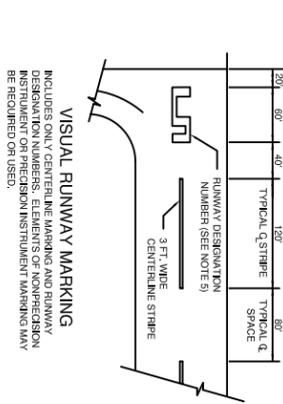
PRECISION INSTRUMENT RUNWAY MARKING
INCLUDES ALL MARKING ELEMENTS SHOWN

NONPRECISION INSTRUMENT RUNWAY MARKING
INCLUDES ONLY THRESHOLD MARKER STRIPES, RUNWAY DESIGNATION NUMBER AND CENTERLINE STRIPES. USE SAME DIMENSIONAL STANDARDS AS PRECISION INSTRUMENT MARKING. OTHER ELEMENTS OF PRECISION INSTRUMENT MARKING MAY BE REQUIRED OR USED.

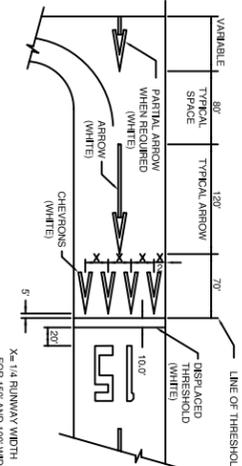
NOTE:
SEE TABLE FOR DIMENSIONS INDICATED BY LETTERS AND AREAS OF VARIABLE DIMENSIONS.



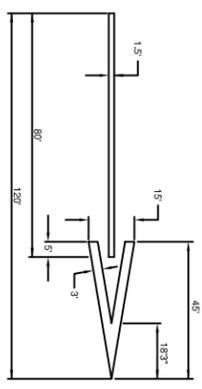
BLAST PAD MARKING
50 FT SQUARE AREA OF 5' WIDE YELLOW STRIPE



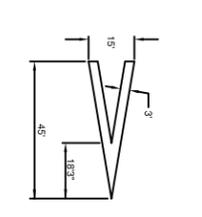
VISUAL RUNWAY MARKING
INCLUDES ONLY CENTERLINE MARKINGS AND RUNWAY DESIGNATION NUMBER. ELEMENTS OF NONPRECISION INSTRUMENT OR PRECISION INSTRUMENT MARKING MAY BE REQUIRED OR USED.



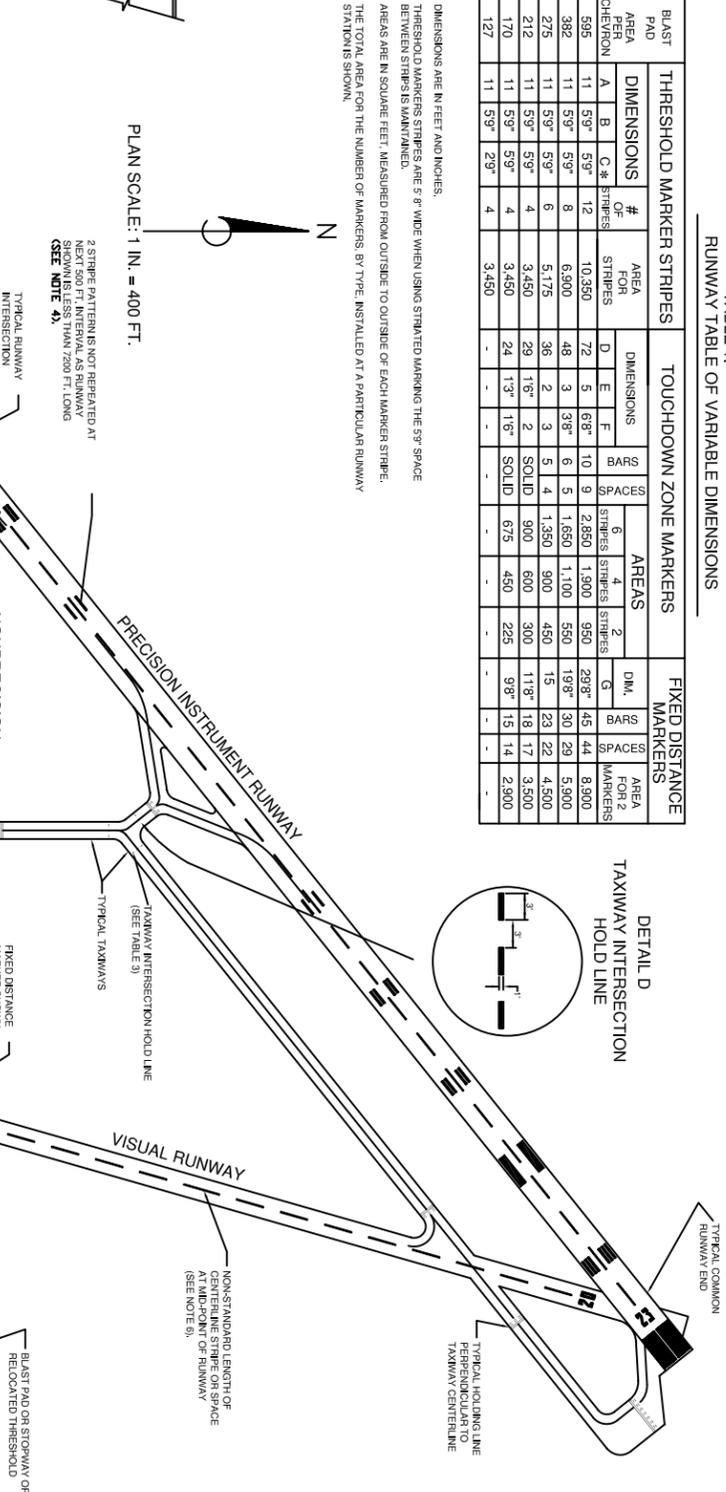
DISPLACED THRESHOLD MARKING
IF STRIATED MARKINGS ARE SPECIFIED, STRIATIONS IN THE DISPLACED THRESHOLD BAR SHALL RUN PERPENDICULAR TO THE RUNWAY CENTERLINE. (16 BARS, 15 SPACES)



ARROW DETAIL
CENTERS ON RUNWAY CENTERLINE
AREA FOR EACH ARROW=1/4" x 1/8" x 3/4" FT.
AREA FOR EACH ARROW=1/4" x 1/8" x 3/4" FT.
(5 BARS, 4 SPACES EACH)



CHEVRON DETAIL
(AREA = 218 sq. ft.)
RUNWAY WIDTHS 100' TO 150' : USE FOUR PER DISPLACED THRESHOLD
RUNWAY WIDTH 75 USE THREE PER DISPLACED THRESHOLD
RUNWAY WIDTHS 40', 50', 60' : USE TWO PER DISPLACED THRESHOLD



PLAN SCALE: 1 IN. = 400 FT.

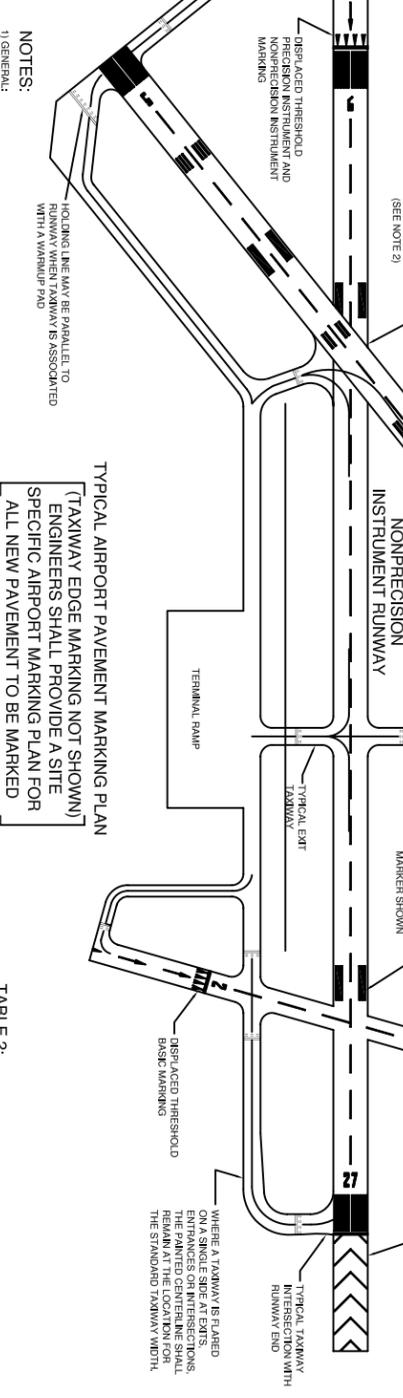


TABLE 2:
RUNWAY & TAXIWAY HOLDING POSITION MARKING LOCATIONS

AIRCRAFT APPROACH CATEGORY (AIRPLANE DESIGN GROUP) (SEE AC 150 / 5300-13)	VISUAL/NONPRECISION INSTRUMENT	PRECISION INSTRUMENT
A & B (ALL SMALL AIRPLANE ONLY)	175'	250'
A & B (ALL M & H)	200'	250'
A & B (ALL)	250'	250'
C & D (THRUST)	250'	250'
C & D (V)	250'	250'

TABLE 3:
TAXIWAY INTERSECTION HOLD LINE LOCATION

AIRCRAFT DESIGN GROUP	I	II	III	IV	V	VI
PERPENDICULAR DISTANCE	44.5'	65.5'	93.0'	129.5'	180.0'	193.0'



STANDARD PLAN FOR AIRPORT PAVEMENT MARKING

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF AERONAUTICS
LANSING, MICHIGAN

APPROVED: *David L. Robson*
DATE: 07/13/2007

FILE NUMBER: ST-M-11-B

NOTES:
1) GENERAL: ALL MARKINGS SHALL BE PAINTED SOLID UNLESS SPECIFIED OTHERWISE IN THE PLANS OR BY DOCUMENT. NOTES RELATIVE TO MARKINGS WHICH HAVE EVIDENCE OF FROST HEAVE SHOULD BE PAINTED WITH STRIATED MARKINGS. IN THE CASE RUNWAY MARKINGS 3 FEET AND WIDER SHOULD BE STRIATED STRIATED MARKINGS SPACE COMPOSED OF 15 FEET APART EXCEPT THE NUMBERS IN NUMBER 11, WHICH ARE SPACED 27 FEET APART AT THE BASE.
2) RUNWAY MARKING PREFERENCES:
1) PRECISION INSTRUMENT
2) NONPRECISION INSTRUMENT
3) VISUAL (VERB) PREFERENCE RUNWAYS SHALL BE INTERFERED AT THE EDGE OF HIGHER PREFERENCE RUNWAYS AT INTERSECTIONS AND COMMON ENDS (SEE TYPICAL MARKING PLAN).
4) HOLDING POSITION MARKINGS SHOULD ONLY BE INSTALLED ON A RUNWAY WHERE PORTION OF THE RUNWAY IS USED AS A TAXIWAY OR USED FOR TAKEOFF OR LANDING.
5) THE LOCATION OF THESE MARKINGS SHALL BE IN ACCORDANCE WITH TABLE 2.
3) FIXED DISTANCE MARKERS:
1) MARKINGS ON BASEC AND NONPRECISION INSTRUMENT RUNWAYS. PROVIDE FIXED DISTANCE MARKERS ON RUNWAYS OF 4,000 FEET OR LONGER.
4) TOUCHDOWN ZONE MARKERS:
1) RUNWAYS LESS THAN 7200 FEET BETWEEN THRESHOLDS, ANY PAIR OF TOUCHDOWN ZONE MARKERS THAT WOULD EXTEND TO WITHIN 900 FEET OF THE MIDPOINT OF THE RUNWAY SHALL BE ELIMINATED.
5) RUNWAY DESIGNATION NUMBERS:
THE RUNWAY DESIGNATION NUMBER ASSIGNED EACH RUNWAY IS THE WHOLE NUMBER NEAREST TO ONE-TENTH OF THE MAGNETIC AZIMUTH MEASURED ALONG THE RUNWAY CENTERLINE. LETTERS L, C AND R INDICATE LEFT, CENTER OR RIGHT RUNWAY.
NUMBERS AND LETTERS ARE DETERMINED FROM THE APPROACH DIRECTION. NUMBERS AND LETTERS ARE CENTERED ON THE RUNWAY CENTERLINE. 15 FEET APART EXCEPT THE NUMBERS IN NUMBER 11, WHICH ARE SPACED 27 FEET APART AT THE BASE.
REDUCED SIZED NUMBERS ARE SPACED 12 FEET AND 22 FEET APART, WHEN REDUCED SIZED NUMBERS ARE USED. THE 60 FEET HEIGHT SHOWN ON THE LAYOUT IS REDUCED TO 48 FEET.
6) RUNWAY CENTERLINE LAYOUT:
1) RUNWAY CENTERLINE STRIPES SHALL BE Laid OUT FROM RUNWAY DIRECTION NUMBERS TOWARD THE MIDDLE.
2) ANY NON-STANDARD LENGTH STRIPE OR SPACE REQUIRED SHALL BE AT THE MIDDLE OF THE RUNWAY.
7) PAINT:
1) RUNWAYS AND TAXIWAYS SHALL BE MARKED WITH A TRAFFIC MARKING PAVEMENT CONFORMS TO AASHTO SPECIFICATION. DISPLACED THRESHOLD ARROWS AND CHEVRONS, YELLOW SHALL BE USED FOR TAXIWAY MARKING. BLAST PAD CHEVRONS, SHOULDER MARKINGS, AND ALL HOLDING POSITION LINES, APPROXIMATE PAINT COVERAGE IS 155 TO 225 SQUARE FEET PER GALLON. SOLID MARKING DEVELOPING ON PAVEMENT SURFACE TEXTURE. THE ACTUAL PAINTED AREA OF STRIATED MARKINGS AVERAGE 55% OF THE TOTAL AREA SHOWN IN THE TABLE AND DETAILS.