

# STORAGE IN APPROVED MAGAZINES OF MOTOR, 5.0 INCH ROCKET MK22 MOD 4 (LOADED ASSEMBLY) IN CONTAINER MK697 MOD 0, UNITIZED 2 CONTAINERS PER UNIT LOAD

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U.S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U.S. ARMY INDUSTRIAL OPERATIONS COMMAND <i>David A. Piskovik</i> AMSTA-AR-ESK		DRAFTSMAN I. DEPPE	
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND <i>Gregory W. ...</i>		ENGINEER M. DAEUMER	
		SUPPLY ENGINEERING DIVISION <i>J Sprague</i>	
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL REVISION NO. 1      JANUARY 1986		LOGISTICS ENGINEERING OFFICE <i>Thomas J. Michalski</i>	
		MARCH 1986	
SEE REVISION LISTING ON PAGE 2.		CLASS	DIVISION
		DRAWING	FILE
		19	48
		4220	1-3-4-14 22PA1008

DO NOT SCALE

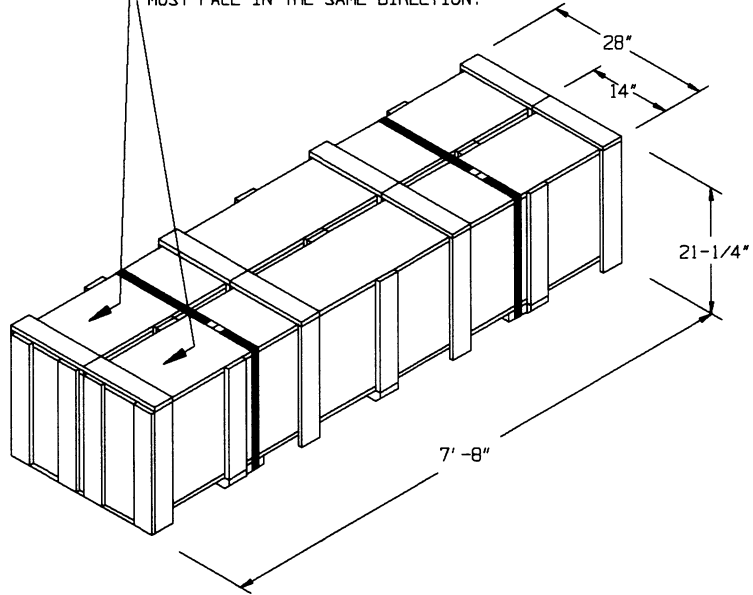
## GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO MOTOR, 5.0 INCH ROCKET MK22 MOD 4 (LOADED ASSEMBLY) PACKED ONE MOTOR PER MK697 MOD 0 CONTAINER, UNITIZED TWO CONTAINERS PER UNIT LOAD.
- C. FOR DETAIL OF THE UNIT LOAD, SEE PAGE 3.
- UNIT LOAD DIMENSIONS - - - 7'-8" L X 28" W X 21-1/4" H.  
GROSS WEIGHT (APPROX)- - - 547 POUNDS  
CUBE - - - - - - - - - - - - - 31.7 CUBIC FEET
- D. THIS ITEM IS A DD CLASS 1.3 COMPATIBILITY GROUP C EXPLOSIVE. CAUTION: THIS ITEM IS IN A "PROPULSIVE STATE" AND MUST BE STORED WITH THE "FORWARD (NOSE) END" FACING TOWARD THE MAGAZINE SIDEWALL OR THE REAR WALL AS INDICATED BY THE DIRECTIONAL ARROWS IN THE STORAGE VIEWS.
- E. CAUTION: DO NOT STACK MORE THAN SIX (6) UNIT LOADS HIGH IN STORAGE. STORAGE WILL ONLY BE IN THE UNIT LOAD CONFIGURATION.
- F. THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE UNIT LOADS IN OTHER TYPES OF APPROVED MAGAZINES. MINOR ADJUSTMENTS MAY BE MADE TO FACILITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED. SEE GENERAL NOTE "M" BELOW.
- G. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT.
- H. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. THIS LIMITATION MAY REQUIRE A QUANTITY REDUCTION FROM THE STORAGE AS SHOWN. SEE GENERAL NOTE "N" BELOW.
- J. IF AVAILABLE MHE PERMITS, ADDITIONAL UNIT LOADS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- K. STORED UNIT LOADS MUST NOT CONTACT THE WALLS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, UNIT LOADS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.
- L. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- M. TO FACILITATE MHE PLACEMENT OF UNIT LOADS INTO STACKS, A 1" SPACE BETWEEN THE ENDS OF UNIT LOADS WAS ALLOWED, WHERE FEASIBLE, IN THE STORAGE LAYOUTS HEREIN.
- N. IF THE QUANTITY OF UNIT LOADS FOR A MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN DUE TO THE PERMITTED "EXPLOSIVE LIMIT" OR FOR ANY OTHER REASON, SUCH AS A LIMITED QUANTITY TO BE STORED, THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS. SEE GENERAL NOTE "L" ABOVE.
- O. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENT MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4 MM, AND ONE POUND EQUALS 0.454 KG.

## REVISION

- REVISION NO. 1, DATED JANUARY 1996, CONSISTS OF:
1. CONVERTING DRAWING TO CAD.

NOTE: THE "FORWARD (NOSE) END"  
OF BOTH CONTAINERS OF A UNIT LOAD  
MUST FACE IN THE SAME DIRECTION.



UNIT LOAD

SEE GENERAL NOTE "E" ON PAGE 2.

UNIT LOAD DETAIL

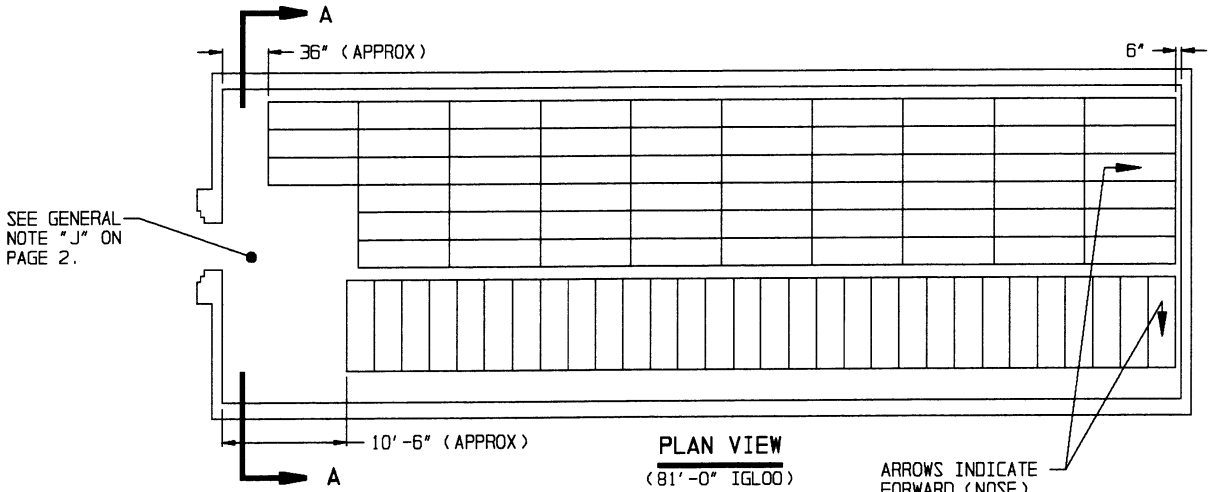
**STORAGE IN 81'-0" IGLOO**

(12'-9" HIGH)

ITEM QUANTITY

UNIT LOADS - - - - - 422

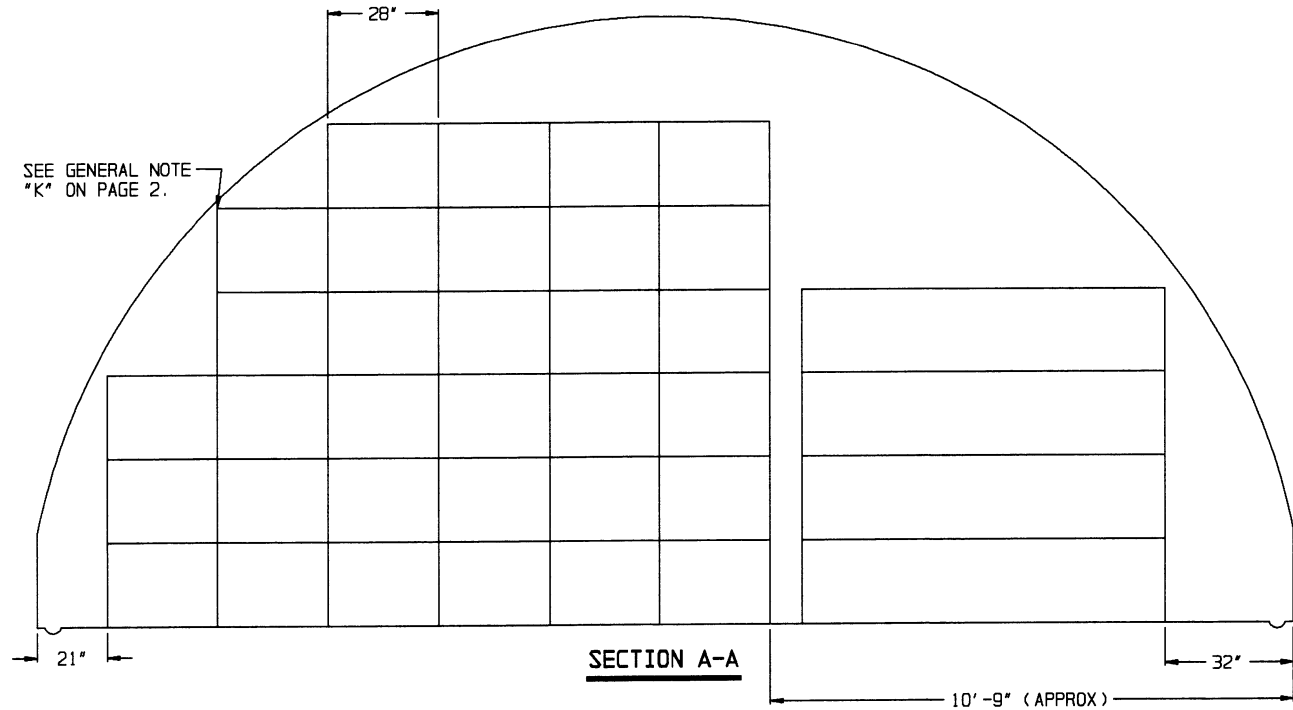
CONTAINERS/MOTORS- - - - 844



SEE GENERAL NOTE "J" ON PAGE 2.

**PLAN VIEW**  
(81'-0" IGLOO)

ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS SEE GENERAL NOTE "D" ON PAGE 2.



SEE GENERAL NOTE "K" ON PAGE 2.

**SECTION A-A**

**STORAGE IN 60'-8" IGLOO**

(12'-9" HIGH)

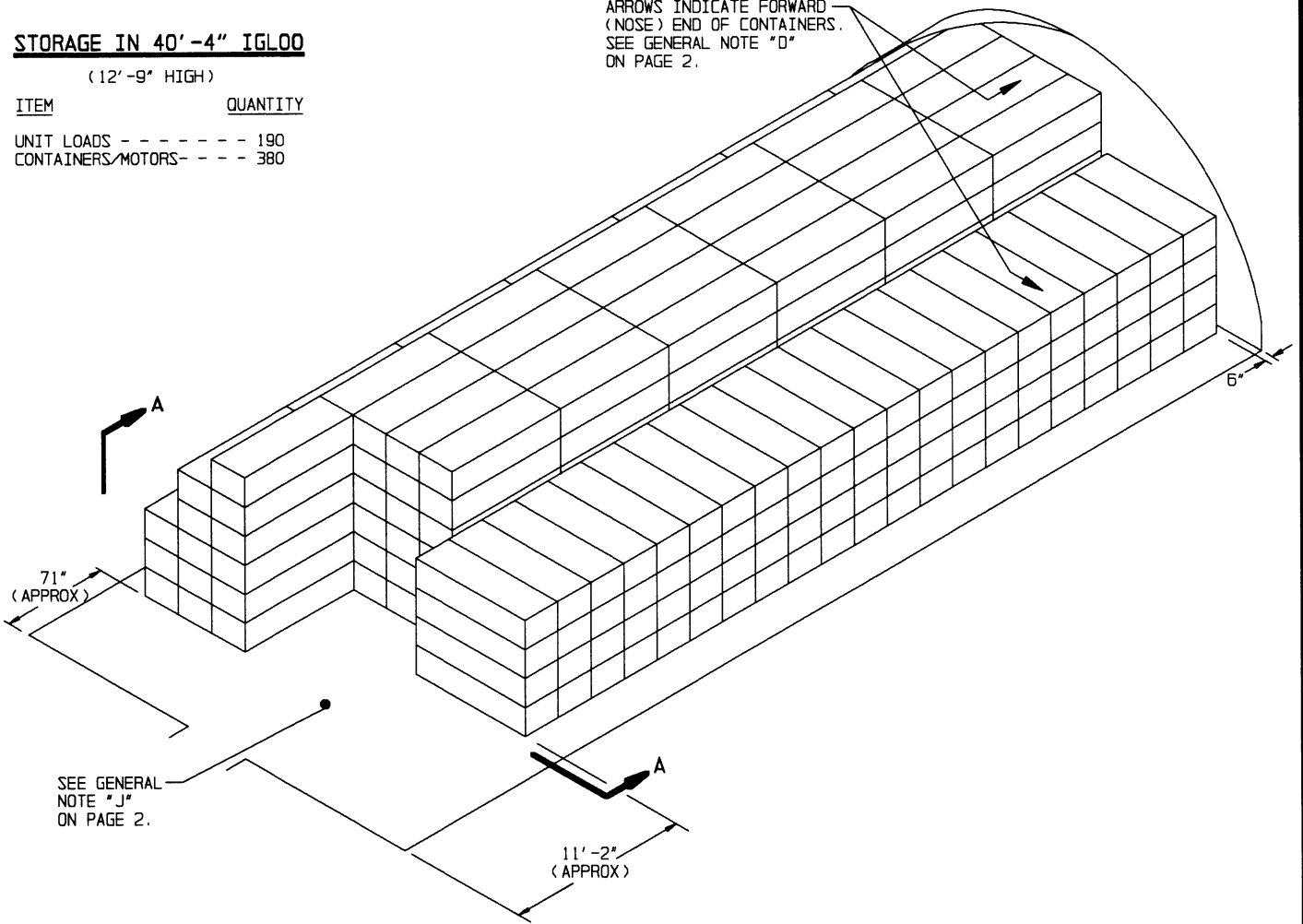
ITEM	QUANTITY
UNIT LOADS	290
CONTAINERS/MOTORS	580

**STORAGE IN 40'-4" IGLOO**

(12'-9" HIGH)

ITEM	QUANTITY
UNIT LOADS	190
CONTAINERS/MOTORS	380

ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



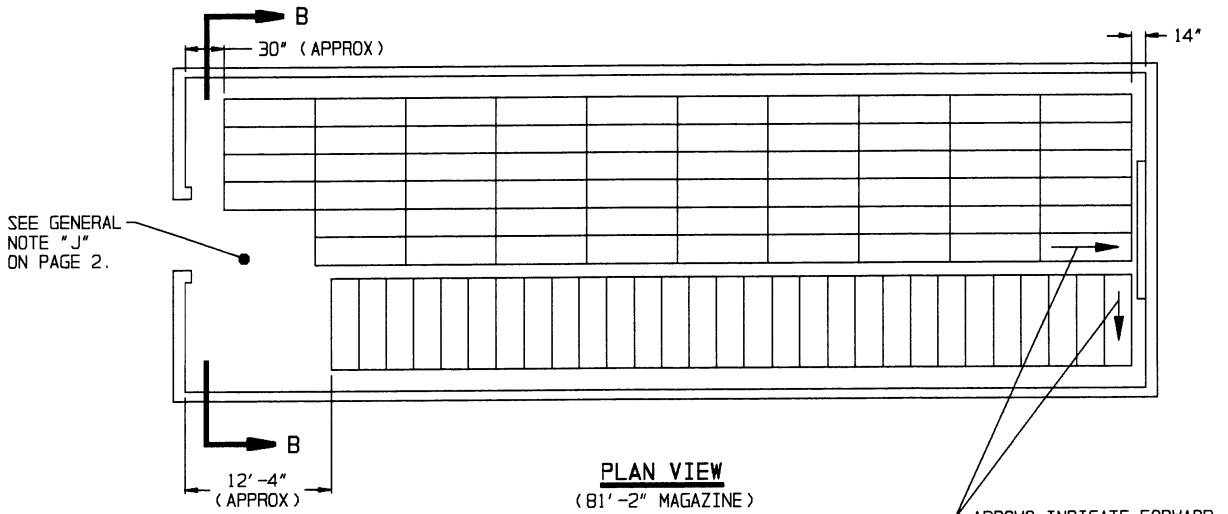
**ISOMETRIC VIEW**

(60'-8" IGLOO)

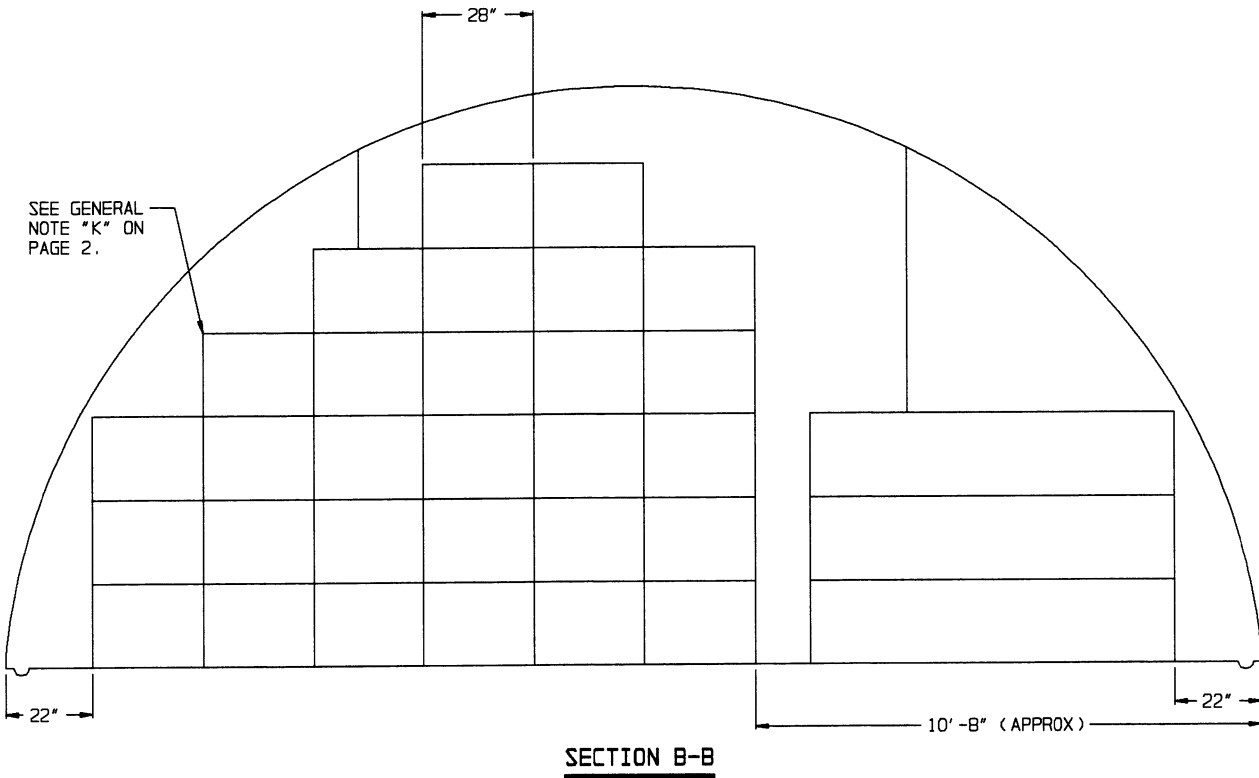
FOR "GENERAL NOTES", SEE PAGE 2.

SPECIAL NOTE:

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.



ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS  
SEE GENERAL NOTE "D" ON PAGE 2.



**STORAGE IN 81'-2" MAGAZINE**

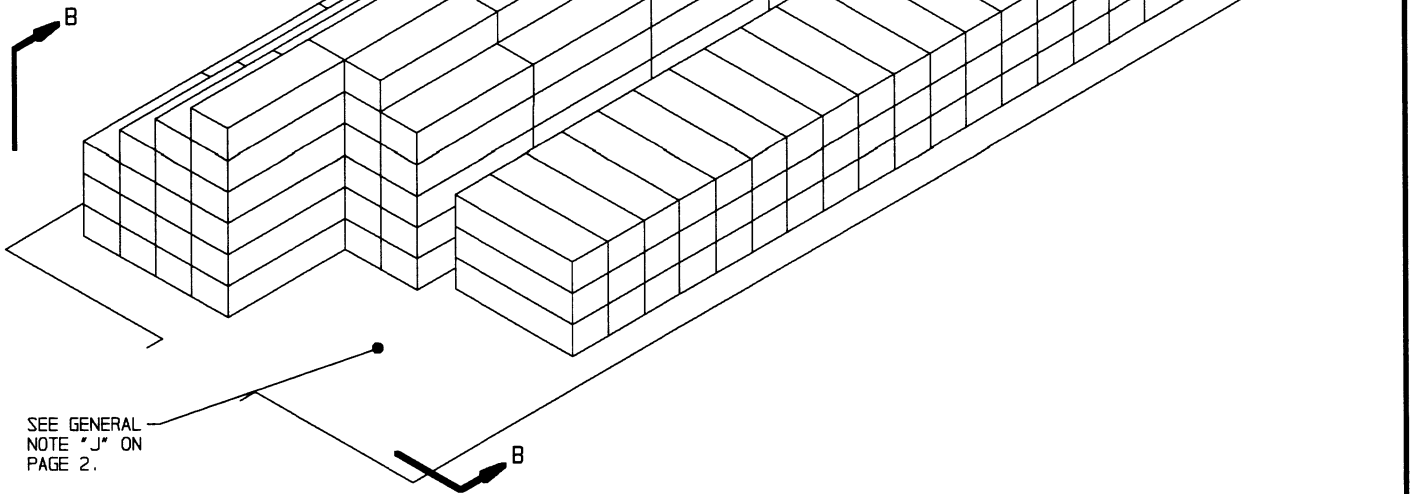
(12'-1-3/4" HIGH)

ITEM                      QUANTITY

UNIT LOADS - - - - - 366

CONTAINERS/MOTORS - - - 732

ARROWS INDICATE FORWARD  
(NOSE) END OF CONTAINERS.  
SEE GENERAL NOTE "D"  
ON PAGE 2.



FOR "GENERAL NOTES", SEE PAGE 2.

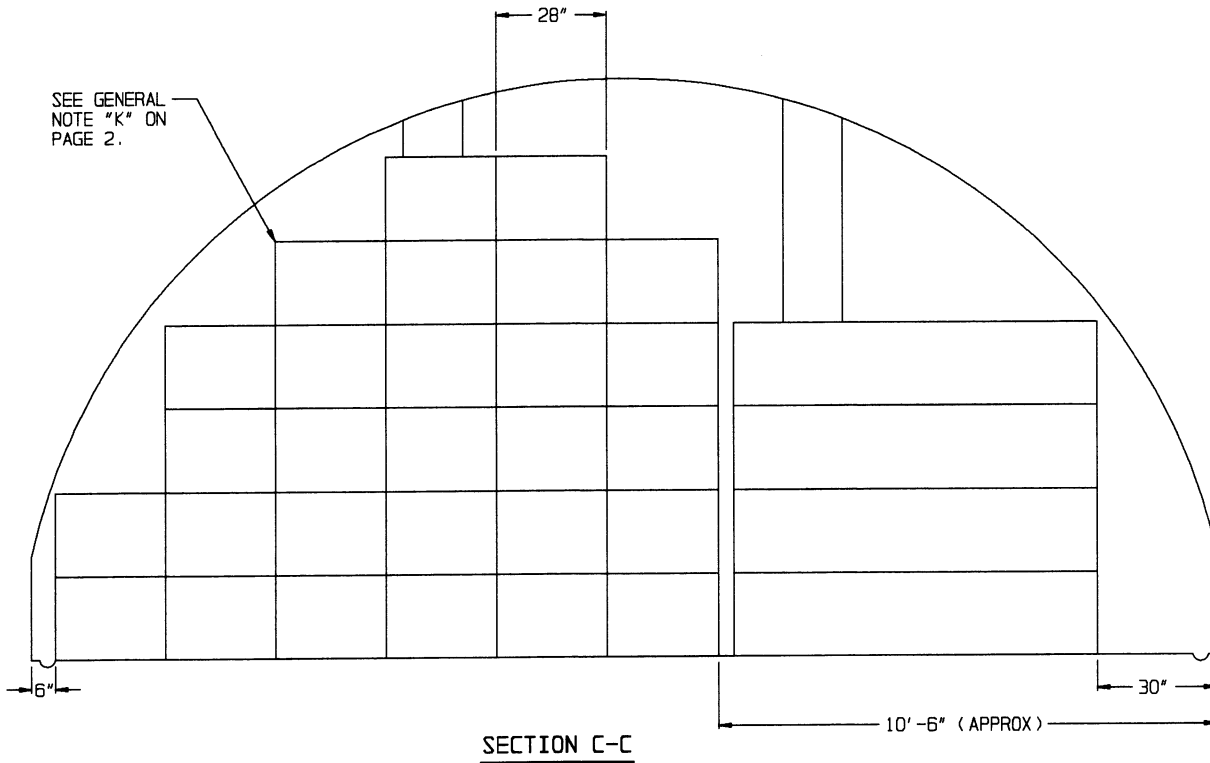
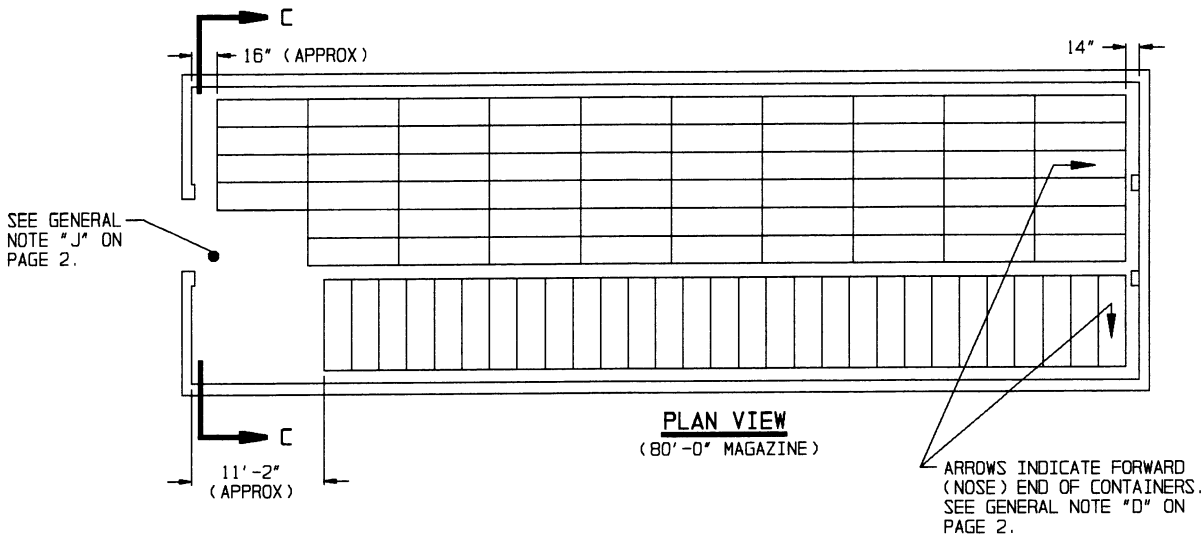
**ISOMETRIC VIEW**  
(81'-2" MAGAZINE)

SPECIAL NOTE:

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.

**STORAGE IN 80'-0" MAGAZINE**  
(12'-1-3/4" HIGH)

ITEM	QUANTITY
UNIT LOADS - - - - -	385
CONTAINERS/MOTORS - - - - -	770





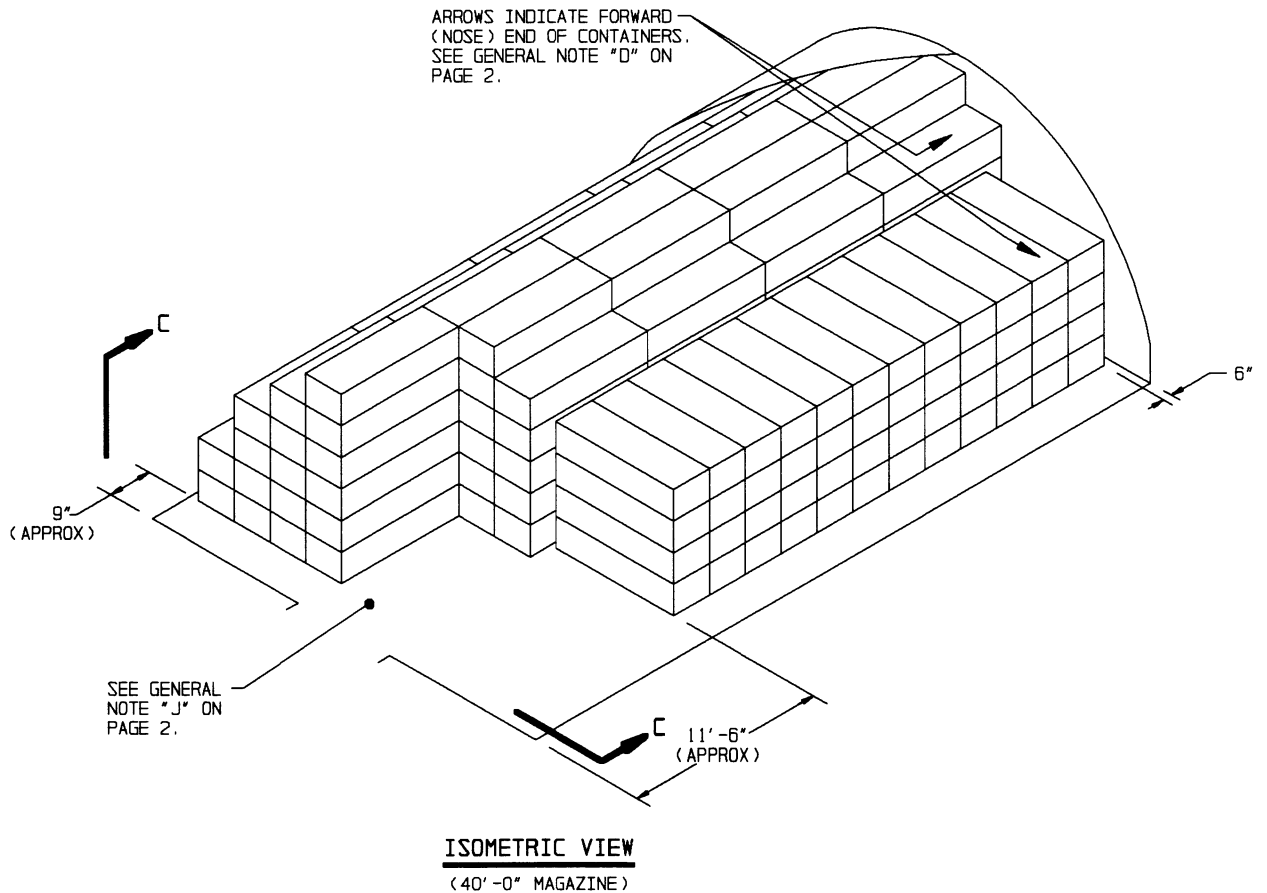
**STORAGE IN 40'-0" MAGAZINE**

(12'-1-3/4" HIGH)

ITEM QUANTITY

UNIT LOADS - - - - - 177

CONTAINERS/MOTORS- - - - 354



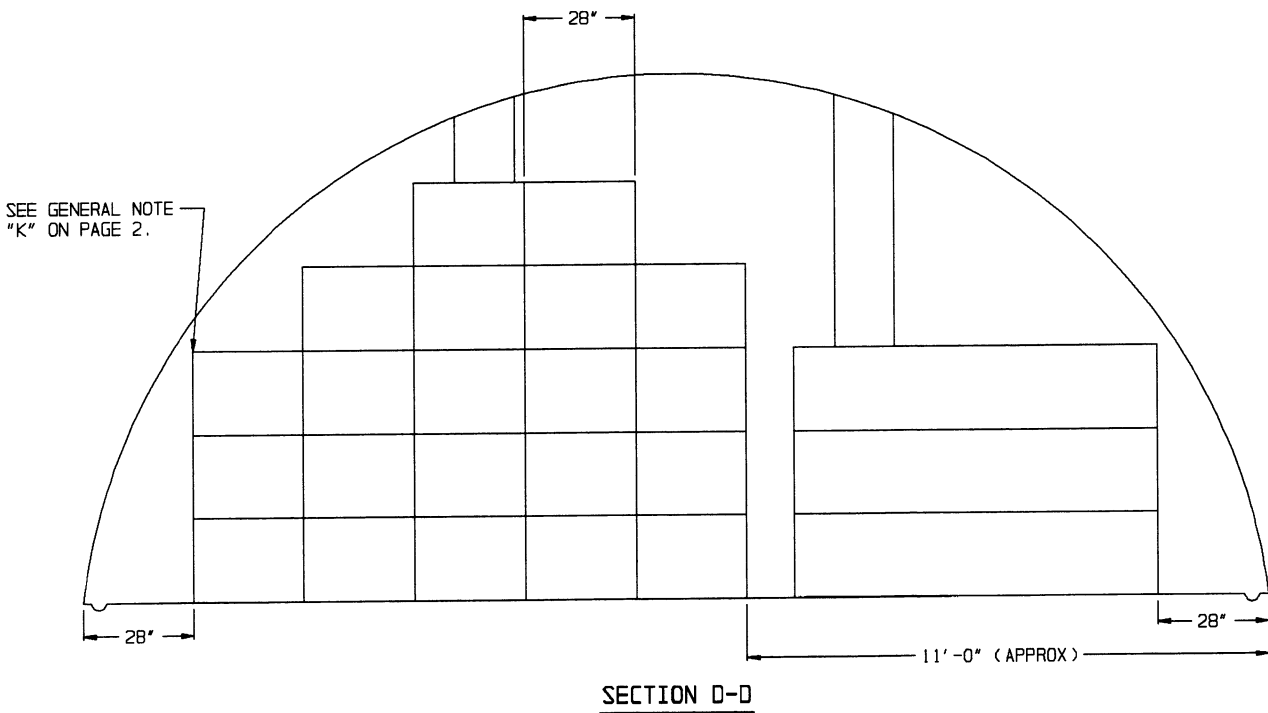
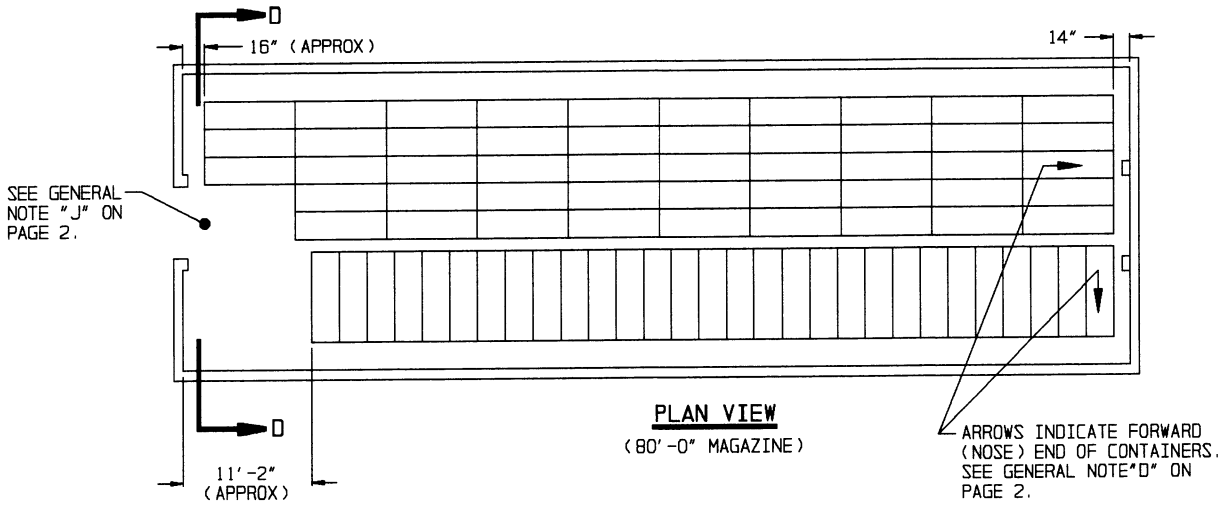
FOR "GENERAL NOTES", SEE PAGE 2.

SPECIAL NOTE:

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.

**STORAGE IN 80'-0" MAGAZINE**  
(11'-0" HIGH)

ITEM	QUANTITY
UNIT LOADS - - - - -	288
CONTAINERS/MOTORS - - -	576

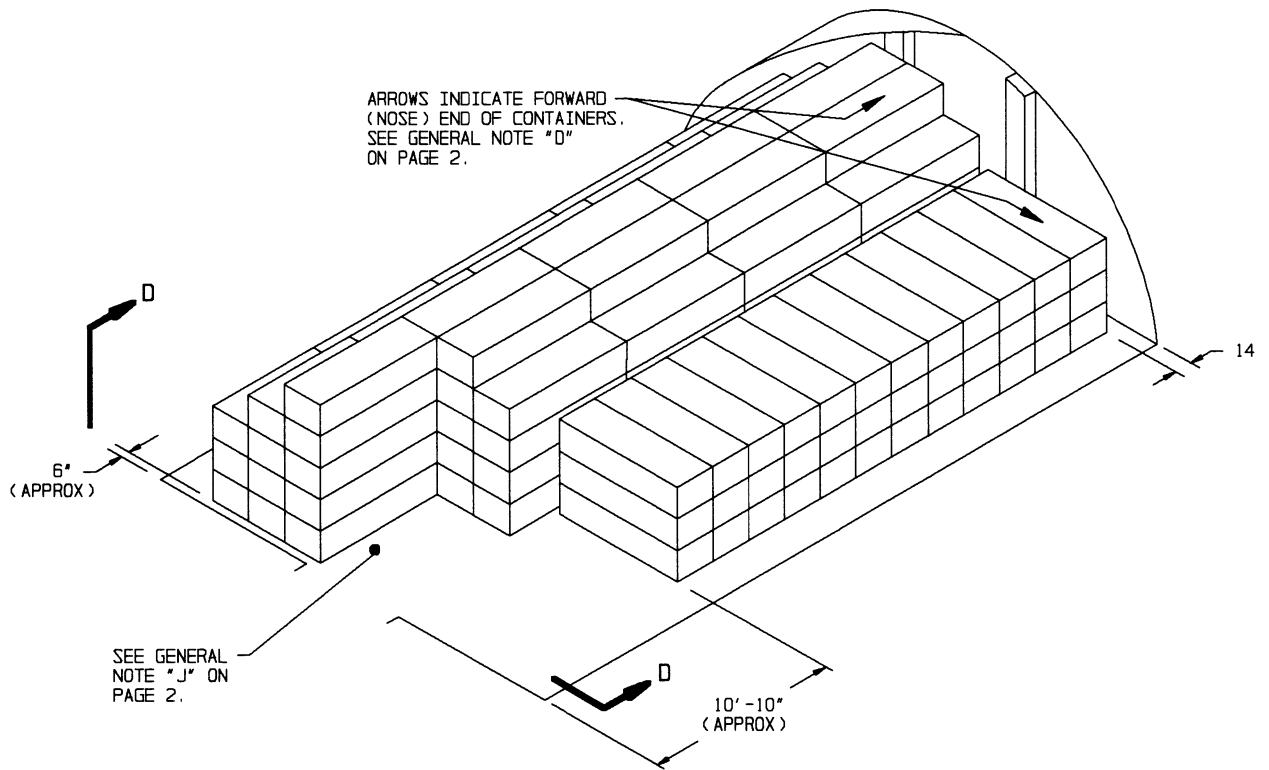


**STORAGE IN 40'-0" MAGAZINE**

(11'-0" HIGH)

ITEM                      QUANTITY

UNIT LOADS - - - - - 132  
CONTAINERS/MOTORS - - - 264



**ISOMETRIC VIEW**  
(40'-0" MAGAZINE)

FOR "GENERAL NOTES", SEE PAGE 2.

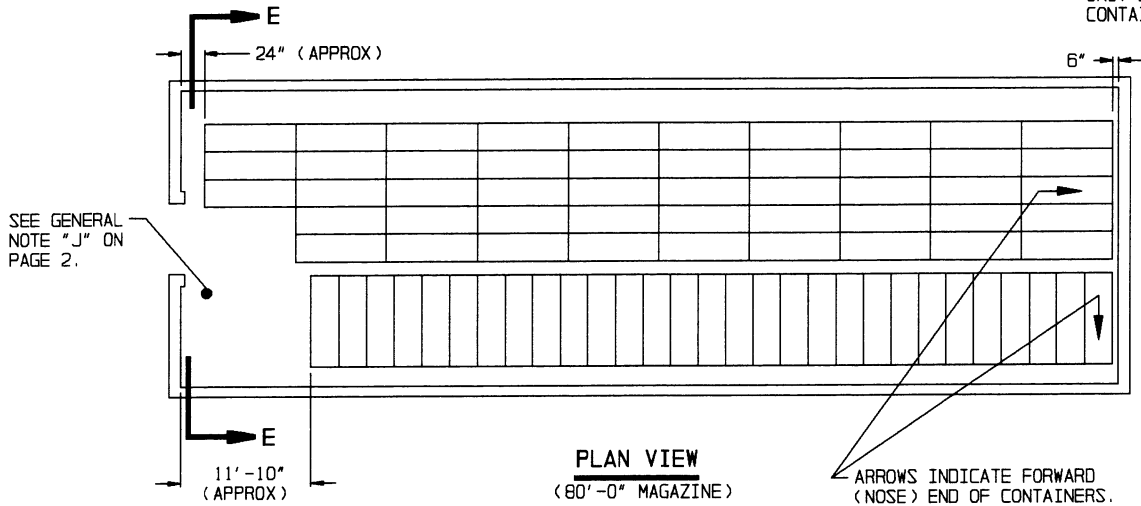
SPECIAL NOTE:

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.

**STORAGE IN 80'-0" MAGAZINE**

(10'-0" HIGH)

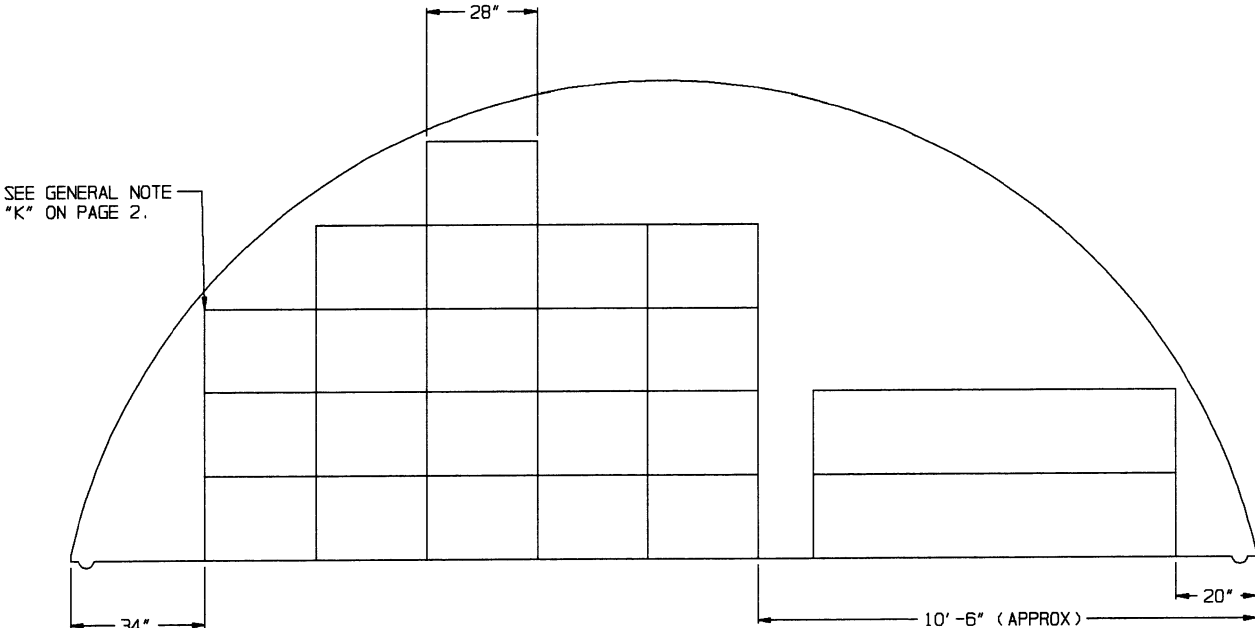
ITEM	QUANTITY
UNIT LOADS - - - - -	250
CONTAINERS/MOTORS - - -	500



**PLAN VIEW**  
(80'-0" MAGAZINE)

SEE GENERAL NOTE "J" ON PAGE 2.

ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



**SECTION E-E**

SEE GENERAL NOTE "K" ON PAGE 2.

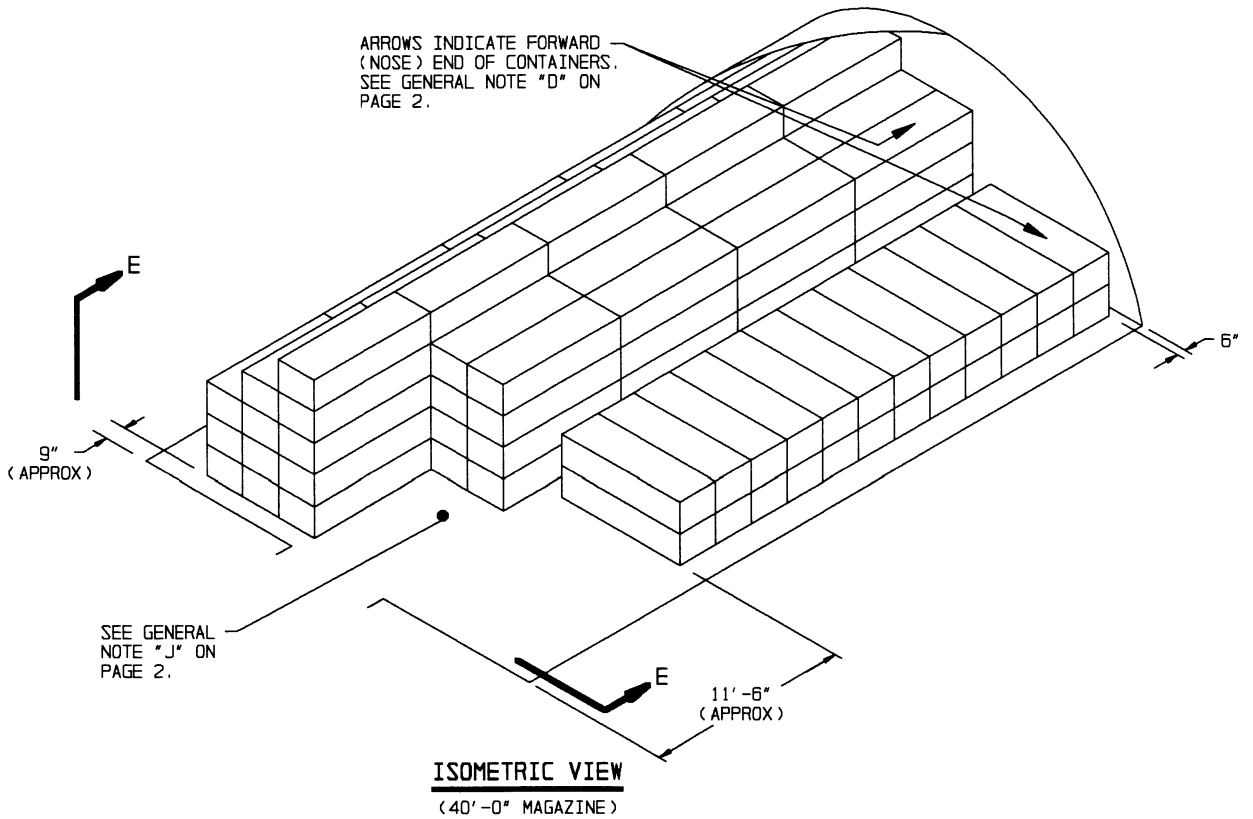
**STORAGE IN 40'-0" MAGAZINE**

(10'-0" HIGH)

ITEM QUANTITY

UNIT LOADS - - - - - 116

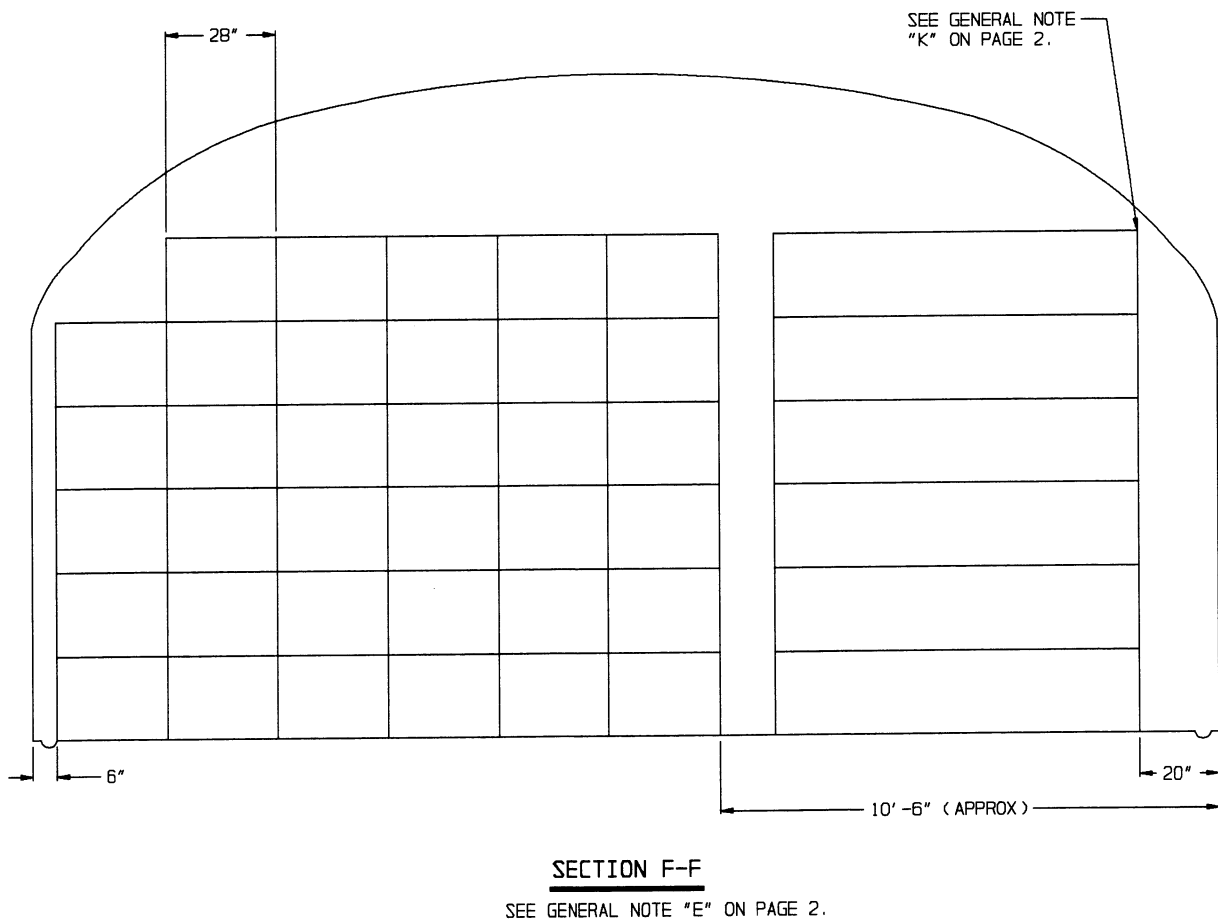
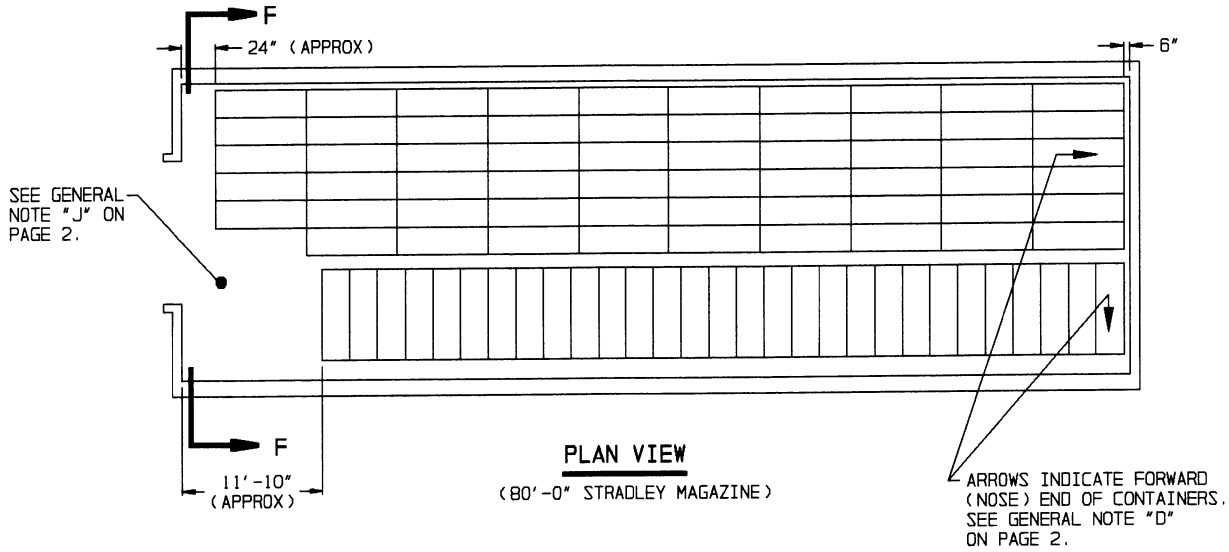
CONTAINERS/MOTORS- - - - 232



FOR "GENERAL NOTES", SEE PAGE 2.

SPECIAL NOTE:

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.



STORAGE PROCEDURES IN 80'-0" L X 25'-0" W X 14'-0" H STRADLEY AND 89'-0" L X 24'-10" W X 14'-4" H OVAL ARCH MAGAZINES

**STORAGE IN 80'-0" STRADLEY MAGAZINE**

(14'-0" HIGH)

ITEM	QUANTITY
UNIT LOADS - - - - -	518
CONTAINERS/MOTORS - - - - -	1,036

**STORAGE IN 89'-0" OVAL ARCH MAGAZINE**

(14'-4" HIGH)

ITEM	QUANTITY
UNIT LOADS - - - - -	576 *
CONTAINERS/MOTORS - - - - -	1,152

\* STORAGE ON LEFT 18" FROM SIDE WALL.

10 STACKS - - - - - 6 W X 6 H = 360  
 1 FRONT STACK - - - 3 W X 6 H = 18

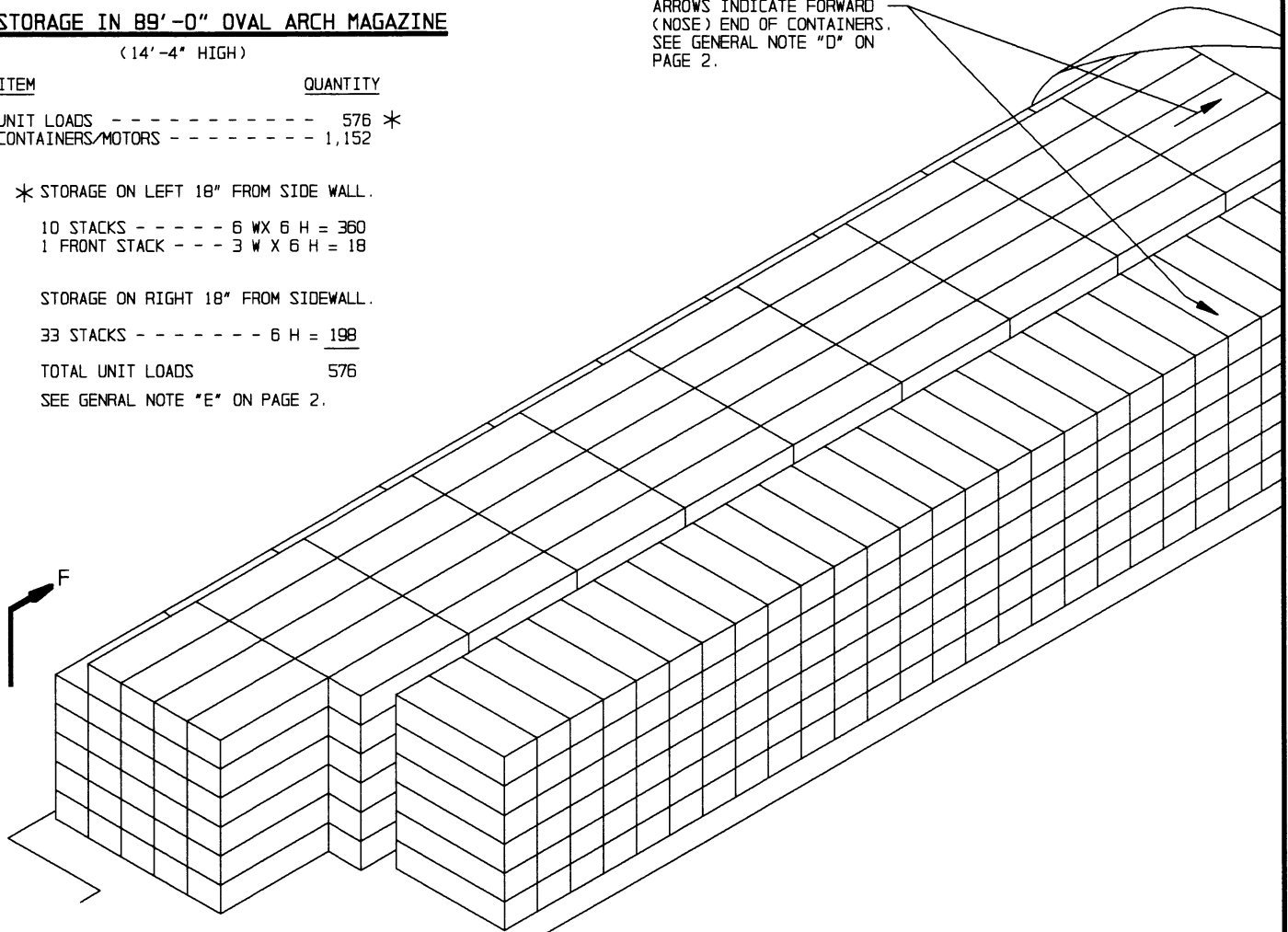
STORAGE ON RIGHT 18" FROM SIDEWALL.

33 STACKS - - - - - 6 H = 198

TOTAL UNIT LOADS 576

SEE GENERAL NOTE "E" ON PAGE 2.

ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



SEE GENERAL NOTE "J" ON PAGE 2.

**ISOMETRIC VIEW**

(80'-0" STRADLEY MAGAZINE)

FOR "GENERAL NOTES", SEE PAGE 2.

**SPECIAL NOTE:**

STORAGE INSTALLATIONS HAVING FRONT/SIDE LOADING FORKLIFTS MAY STORE CONTAINERS OPPOSITE HAND FROM THAT SHOWN IN THESE VIEWS, I.E., CONTAINERS PARALLEL TO THE SIDE WALL ON THE RIGHT SIDE AND CONTAINERS PERPENDICULAR TO THE SIDE WALL ON THE LEFT SIDE. ALL OTHER SPECIFIED REQUIREMENTS WILL APPLY.

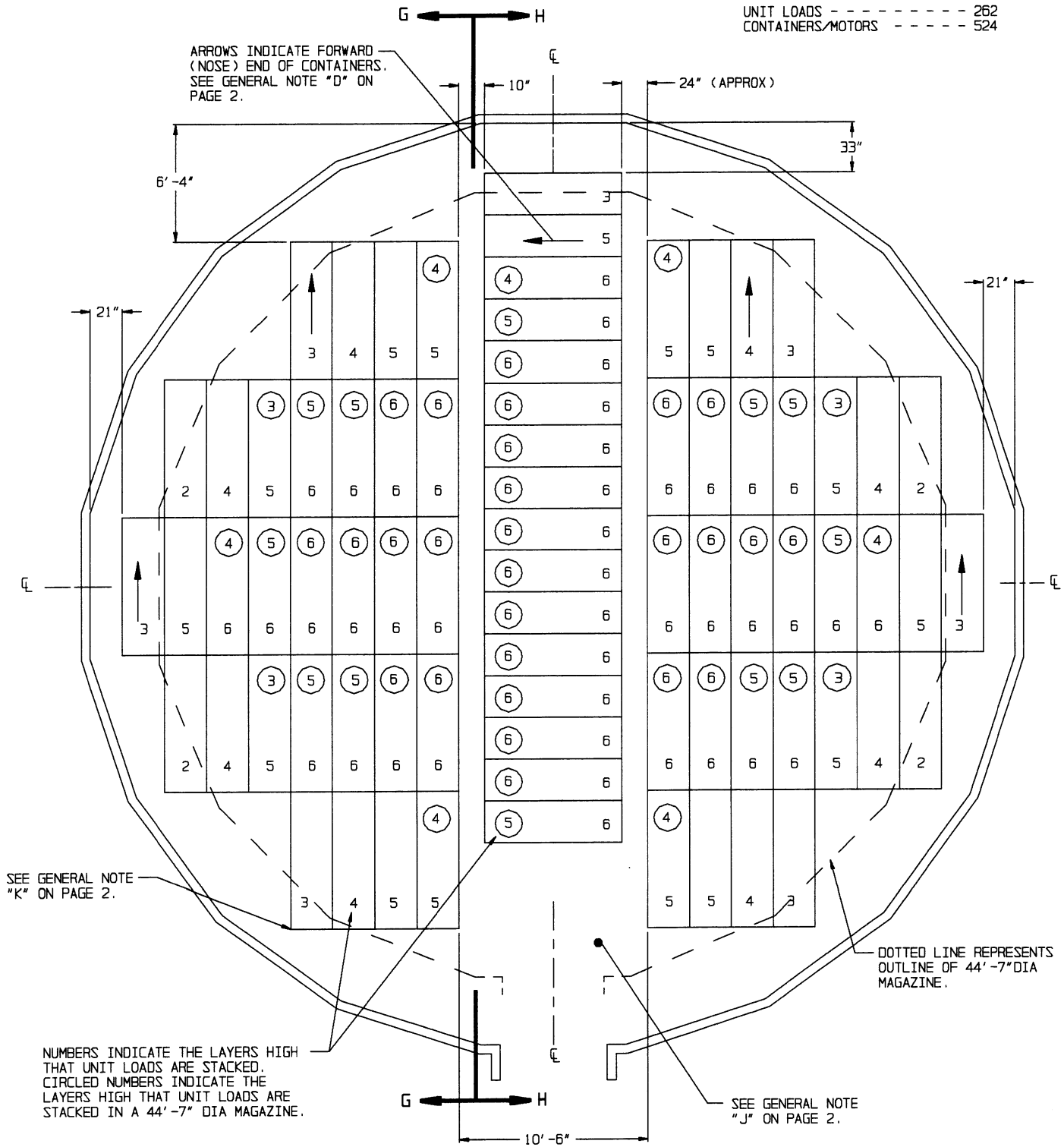
**STORAGE PROCEDURES IN 80'-0" L X 25'-0" W X 14'-0" H STRADLEY AND 89'-0" L X 24'-10" W X 14'-4" H OVAL ARCH MAGAZINES**

**STORAGE IN 52'-0" DIA MAGAZINE**

ITEM	QUANTITY
UNIT LOADS	388
CONTAINERS/MOTORS	766

**STORAGE IN 44'-7" DIA MAGAZINE**

ITEM	QUANTITY
UNIT LOADS	262
CONTAINERS/MOTORS	524



ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.

SEE GENERAL NOTE "K" ON PAGE 2.

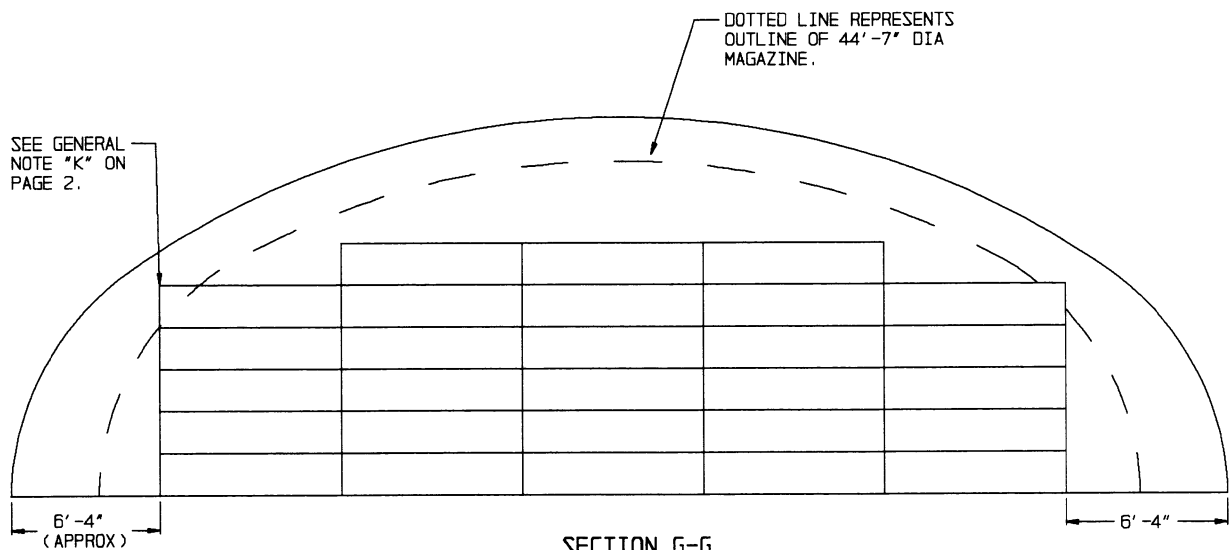
NUMBERS INDICATE THE LAYERS HIGH THAT UNIT LOADS ARE STACKED. CIRCLED NUMBERS INDICATE THE LAYERS HIGH THAT UNIT LOADS ARE STACKED IN A 44'-7" DIA MAGAZINE.

DOTTED LINE REPRESENTS OUTLINE OF 44'-7" DIA MAGAZINE.

SEE GENERAL NOTE "J" ON PAGE 2.

**PLAN VIEW**  
(52'-0" DIA MAGAZINE)



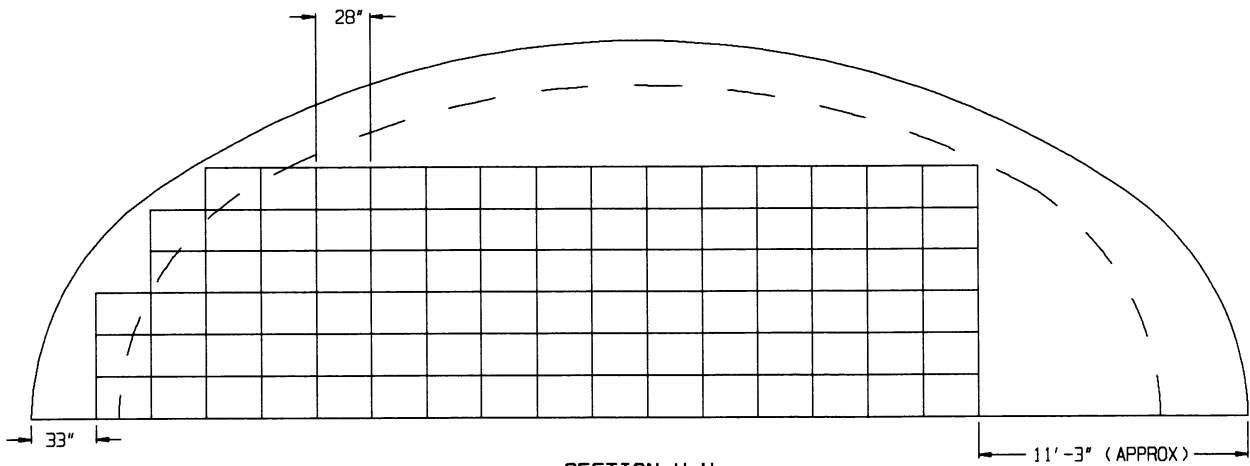


SEE GENERAL NOTE "K" ON PAGE 2.

DOTTED LINE REPRESENTS OUTLINE OF 44'-7" DIA MAGAZINE.

**SECTION G-G**

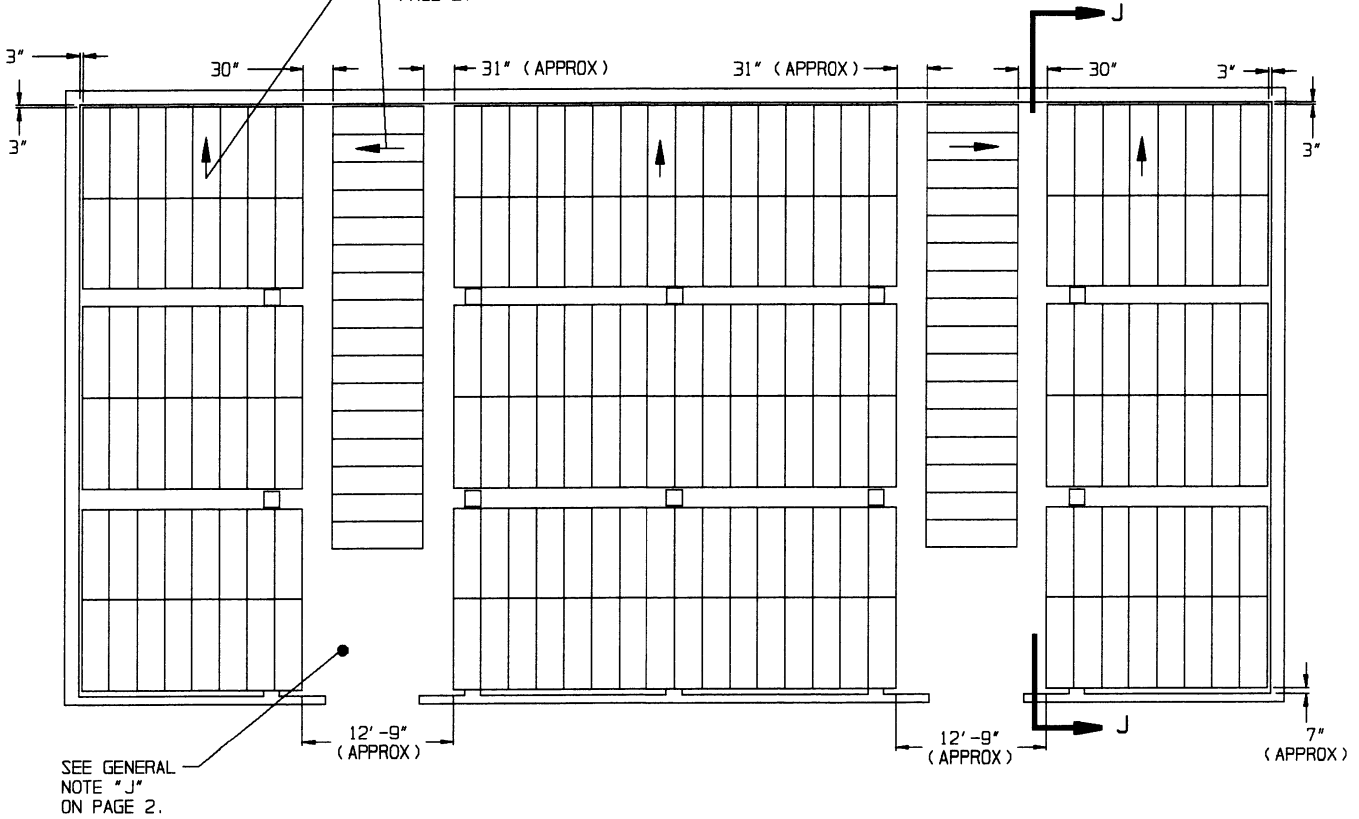
SEE GENERAL NOTE "E" ON PAGE 2.



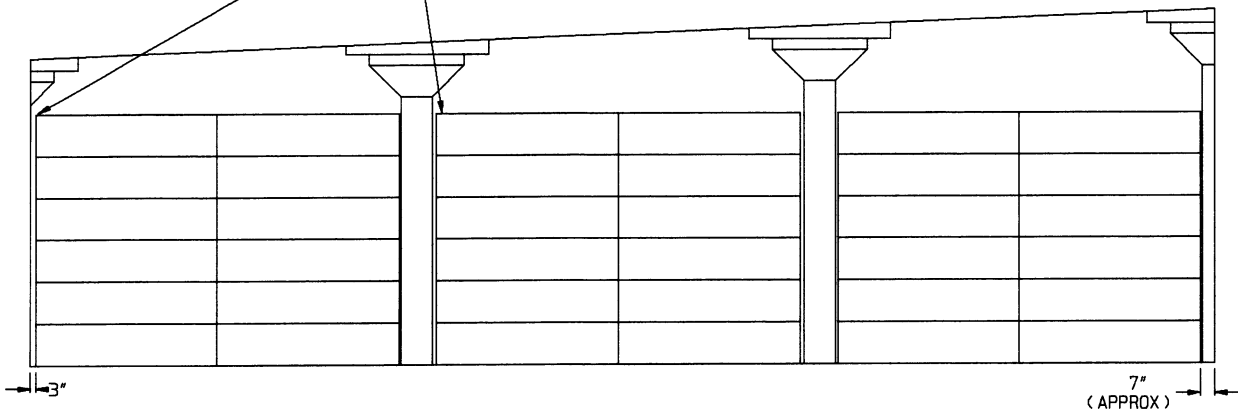
**SECTION H-H**

FOR "GENERAL NOTES", SEE PAGE 2.

ARROWS INDICATE FORWARD  
(NOSE) END OF CONTAINERS.  
SEE GENERAL NOTE "D" ON  
PAGE 2.



CONTAINERS MUST NOT BE IN  
CONTACT WITH COLUMNS. SEE  
GENERAL NOTE "K" ON PAGE 2.

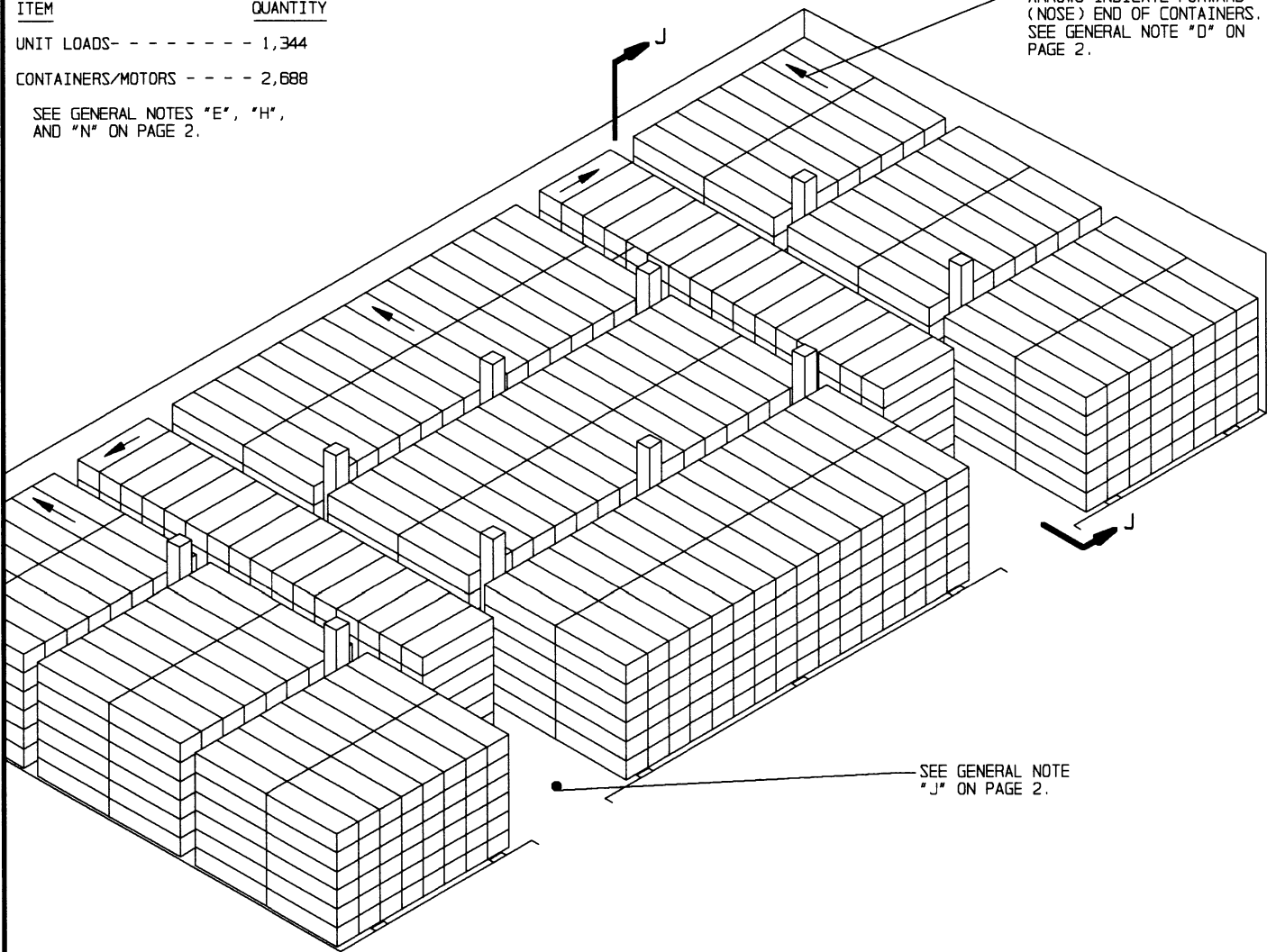


**STORAGE IN 100'-8" X 50'-0"  
RECTANGULAR MAGAZINE**

ITEM	QUANTITY
UNIT LOADS- - - - -	1,344
CONTAINERS/MOTORS - - - -	2,688

SEE GENERAL NOTES "E", "H",  
AND "N" ON PAGE 2.

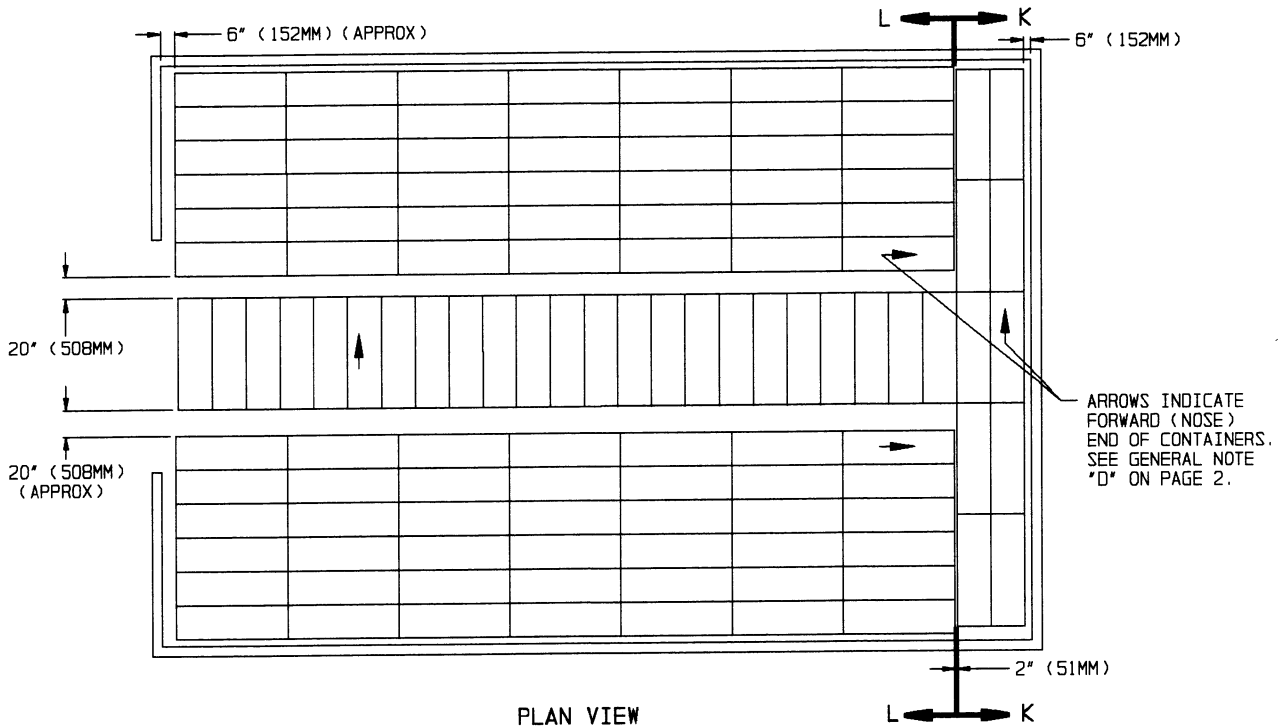
ARROWS INDICATE FORWARD  
(NOSE) END OF CONTAINERS.  
SEE GENERAL NOTE "D" ON  
PAGE 2.



SEE GENERAL NOTE  
"J" ON PAGE 2.

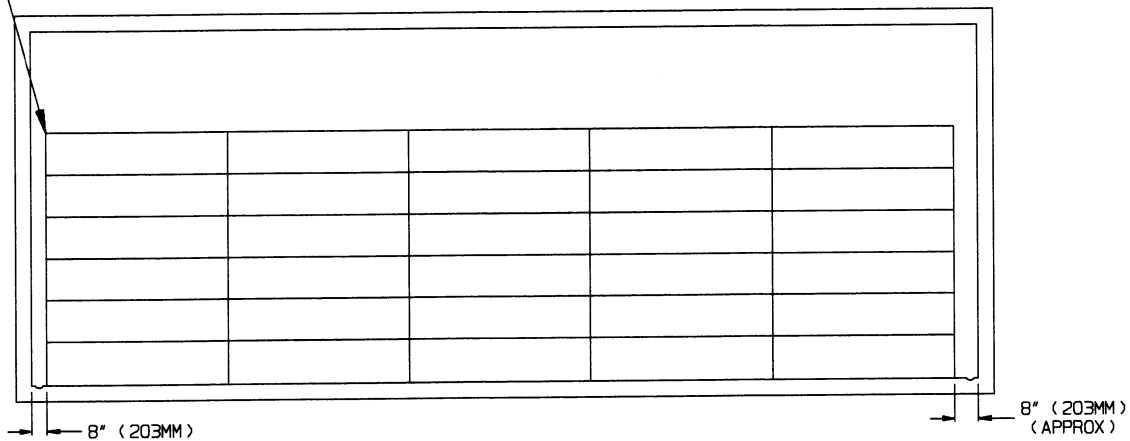
**ISOMETRIC VIEW**  
( 100'-8" X 50'-0" MAGAZINE )

FOR "GENERAL NOTES", SEE PAGE 2.

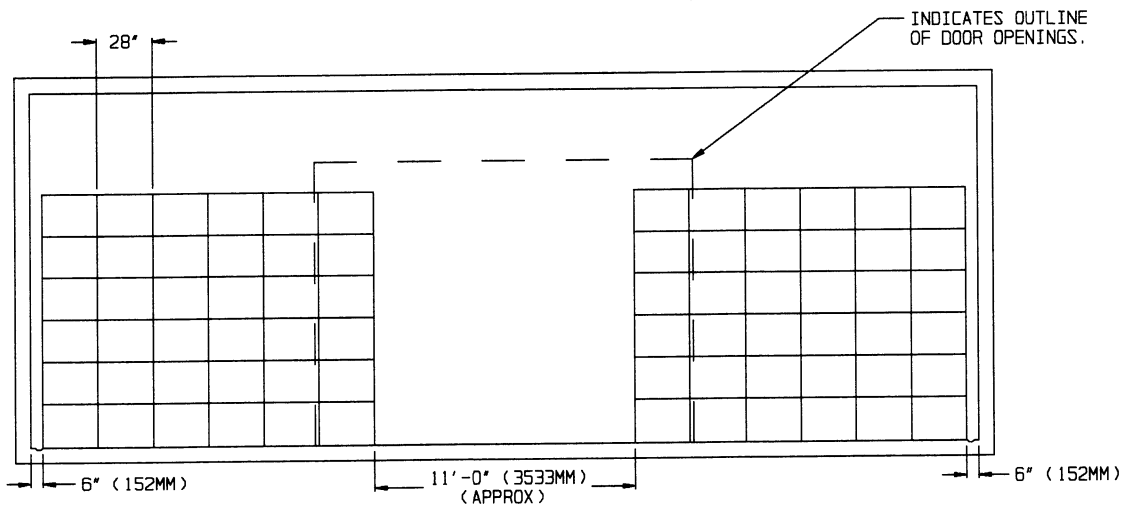


**PLAN VIEW**  
(TYPE II BUNKER MAGAZINE)

SEE GENERAL NOTE "K" ON PAGE 2.



**SECTION K-K**  
SEE GENERAL NOTE "E" ON PAGE 2.

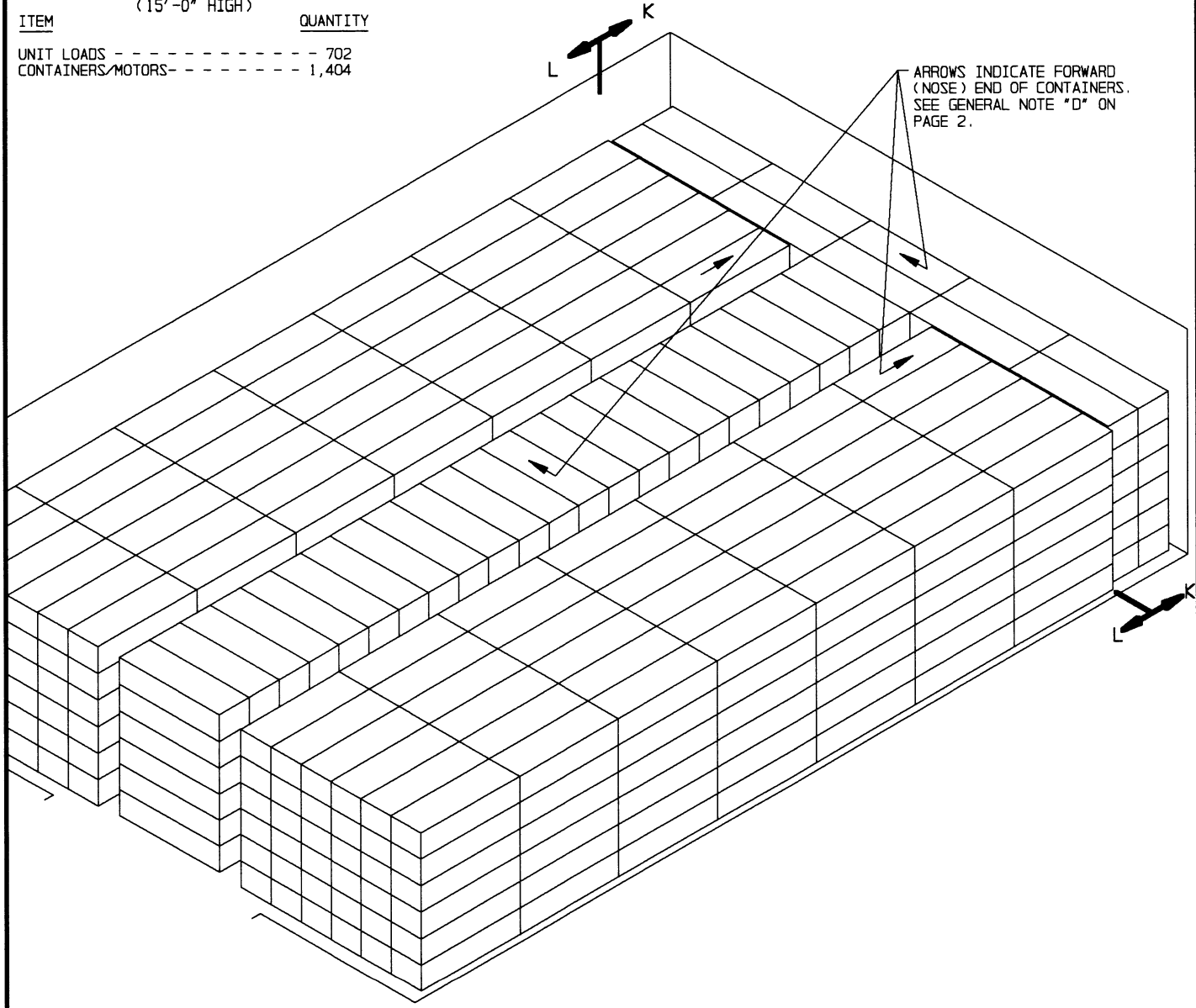


**SECTION L-L**

**STORAGE IN TYPE II BUNKER MAGAZINE**

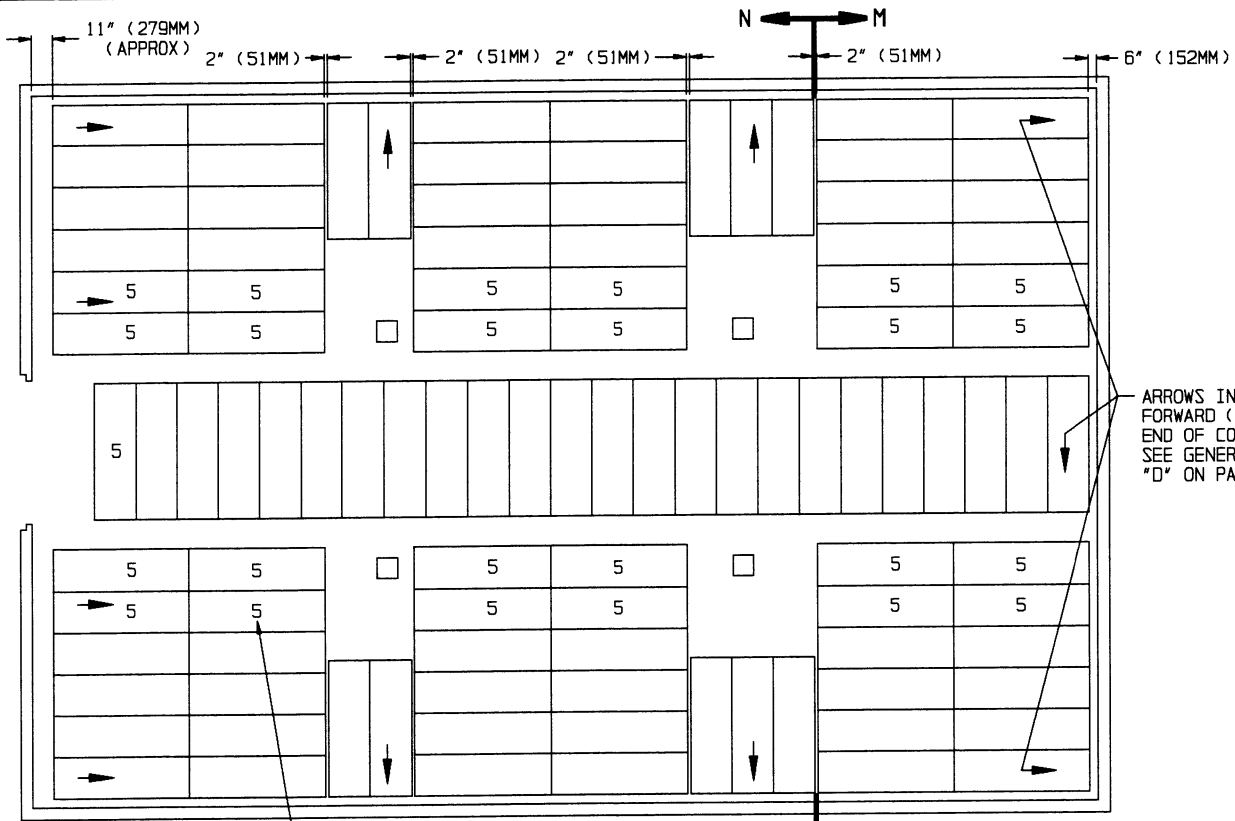
(15'-0" HIGH)

<u>ITEM</u>	<u>QUANTITY</u>
UNIT LOADS - - - - -	702
CONTAINERS/MOTORS - - - - -	1,404



**ISOMETRIC VIEW**  
(TYPE II BUNKER MAGAZINE)

FOR "GENERAL NOTES", SEE PAGE 2.

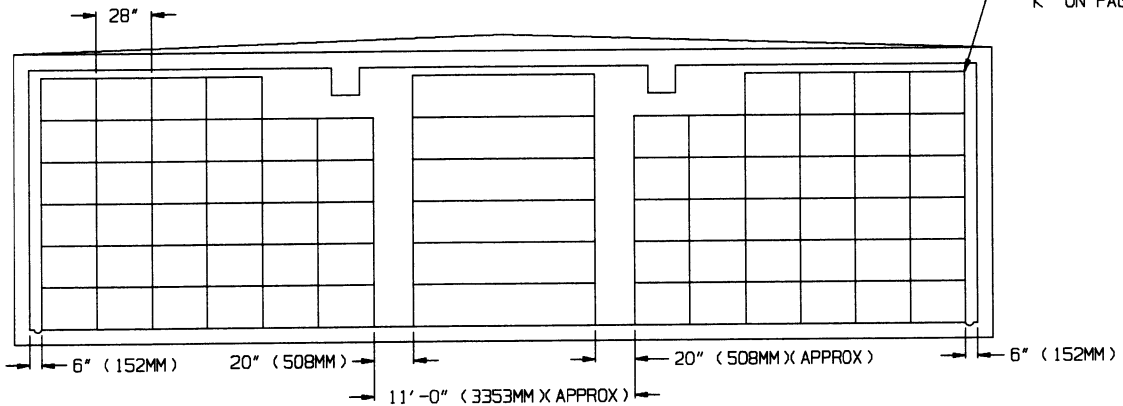


ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.

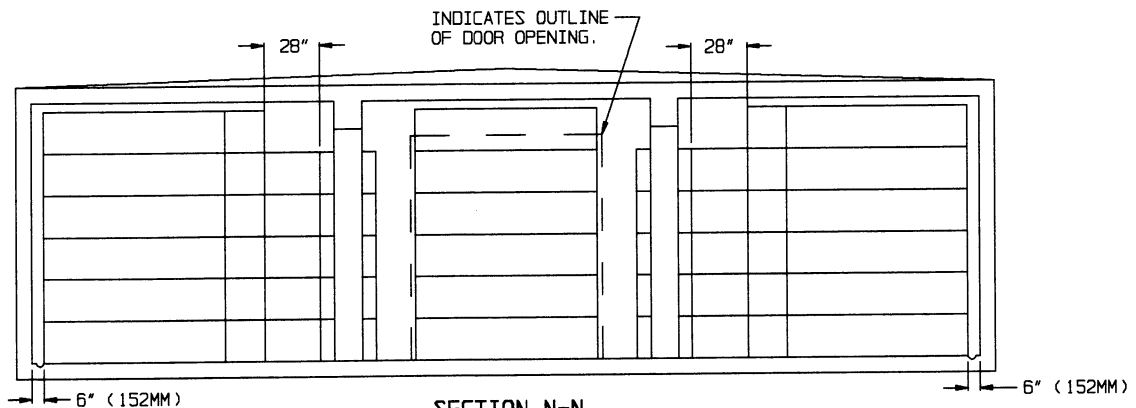
INDICATES 5-LAYER HIGH STACK. ALL UNNUMBERED STACKS ARE 6 LAYERS HIGH.

**PLAN VIEW**  
(TYPE III BUNKER MAGAZINE)

SEE GENERAL NOTE "K" ON PAGE 2.



**SECTION M-M**



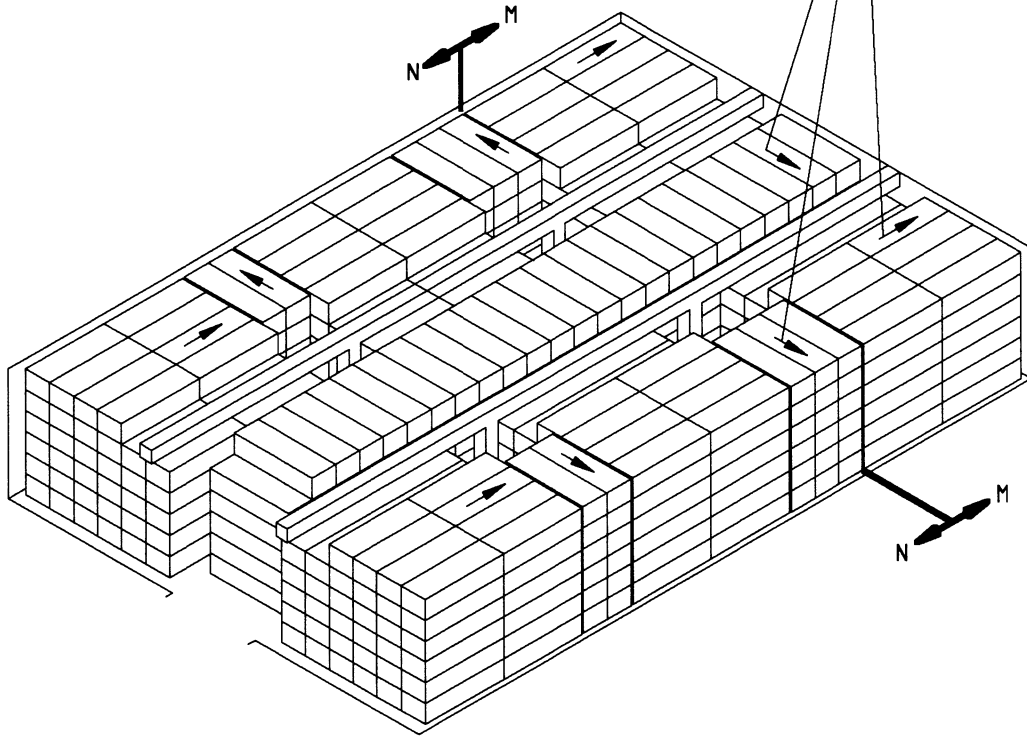
**SECTION N-N**

**STORAGE IN TYPE III BUNKER MAGAZINE**

(11'-0" HIGH)

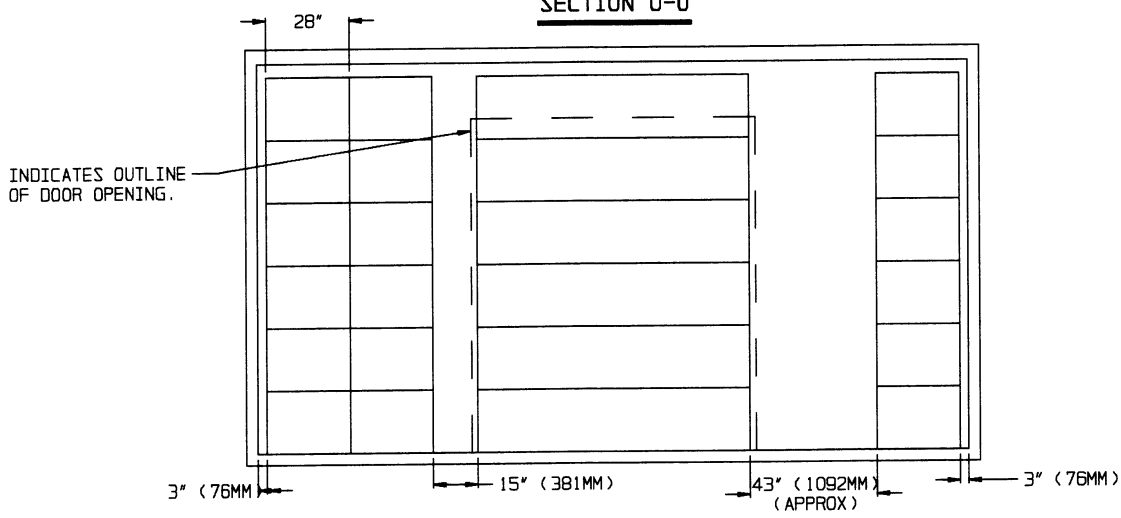
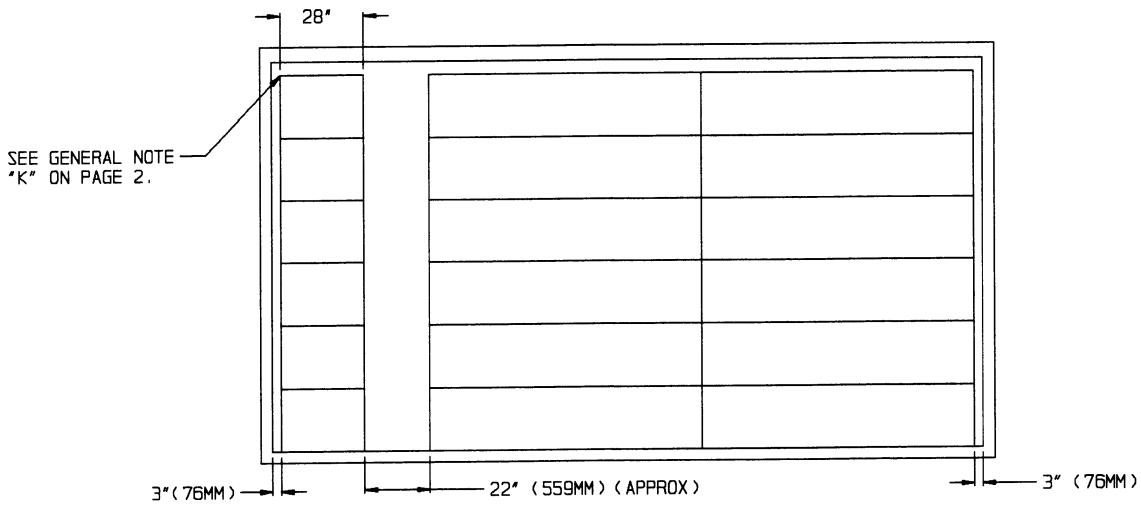
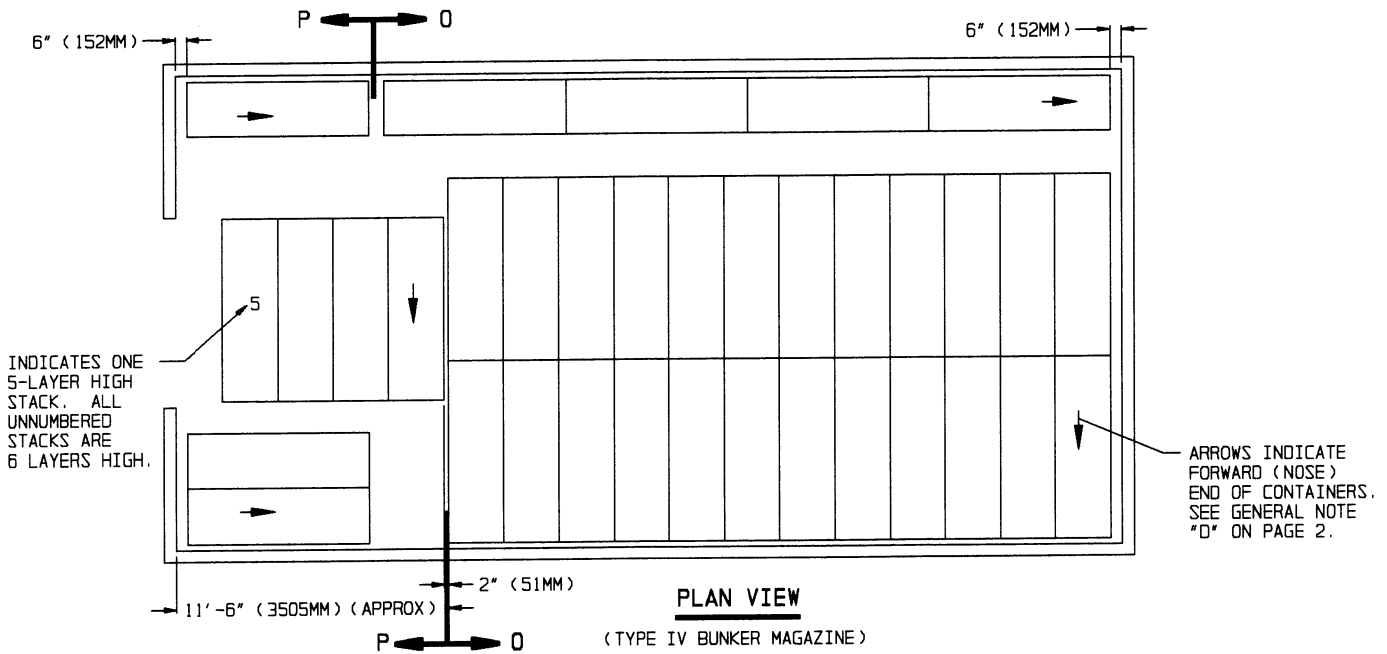
<u>ITEM</u>	<u>QUANTITY</u>
UNIT LOADS- - - - -	611
CONTAINERS/MOTORS - - - - -	1,222

ARROWS INDICATE FORWARD  
(NOSE) END OF CONTAINERS.  
SEE GENERAL NOTE "D" ON  
PAGE 2.



**ISOMETRIC VIEW**  
(TYPE III BUNKER MAGAZINE)

FOR "GENERAL NOTES", SEE PAGE 2.

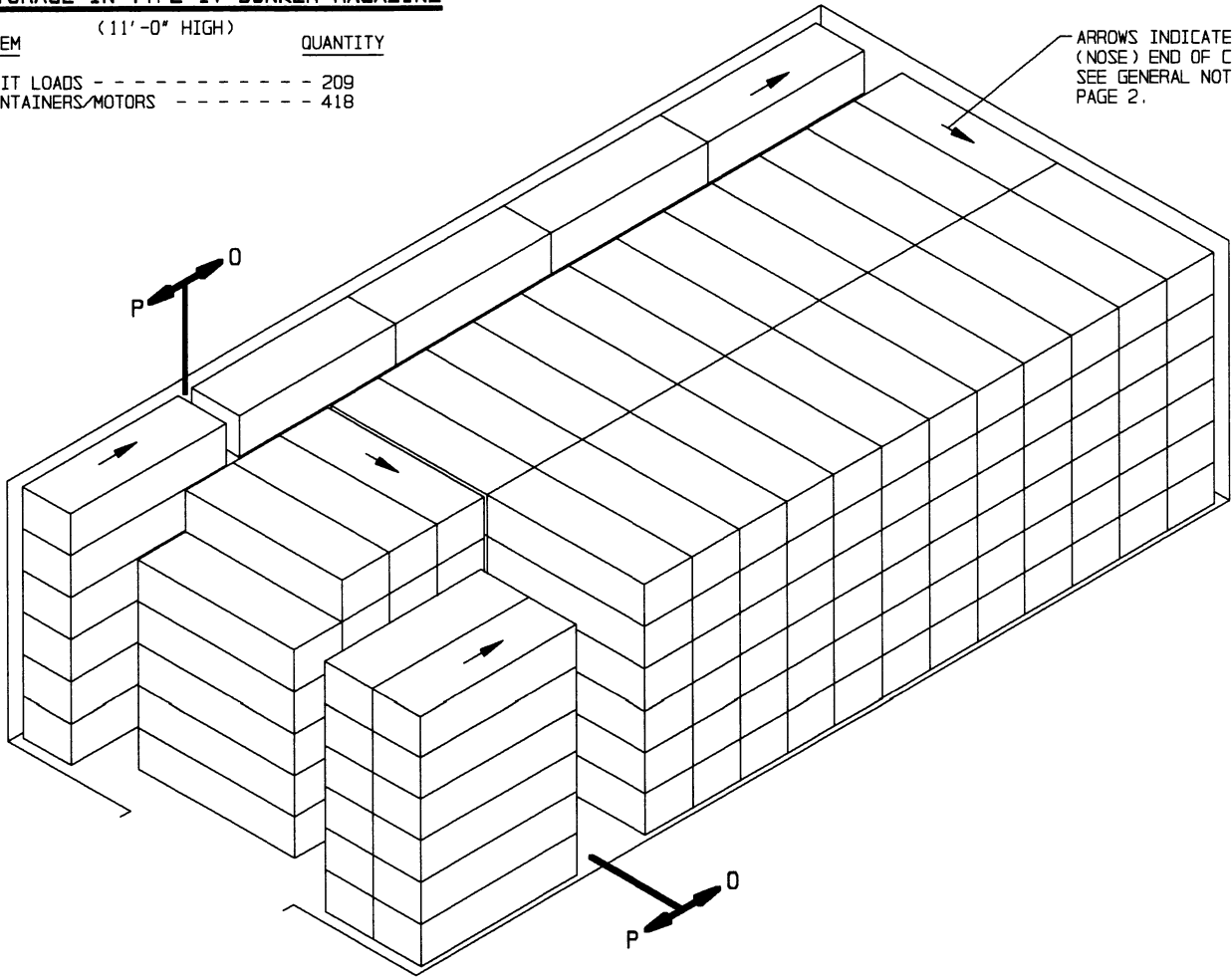




**STORAGE IN TYPE IV BUNKER MAGAZINE**

ITEM	(11'-0" HIGH)	QUANTITY
UNIT LOADS	-----	209
CONTAINERS/MOTORS	-----	418

ARROWS INDICATE FORWARD (NOSE) END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



**ISOMETRIC VIEW**  
(TYPE IV BUNKER MAGAZINE)

FOR "GENERAL NOTES" SEE PAGE 2.

