

STORAGE IN APPROVED MAGAZINES OF CHARGE, DEMOLITION, LINEAR, HE M58A3 AND INERT M68A2, IN METAL SHIPPING AND STORAGE CONTAINER

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U.S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U.S. ARMY INDUSTRIAL OPERATIONS COMMAND <i>MLH</i> <i>David A. Piskovich</i> SMCAR-ESK	DRAFTSMAN	D. WHITMORE	
	ENGINEER	M. DAEUMER	
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND <i>Sandy W. [Signature]</i>	SUPPLY ENGINEERING DIVISION	<i>J. Sprague</i>	
	LOGISTICS ENGINEERING OFFICE	<i>Thomas J. [Signature]</i>	
DECEMBER 1986			
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	CLASS	DIVISION	DRAWING
REVISION NO. 1	NOVEMBER 1995	19	48
SEE REVISION LISTING ON PAGE 2		4210	FILE
			1-3-4-14-22 J1010

DO NOT SCALE

GENERAL NOTES

(GENERAL NOTES CONTINUED)

- 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 HEREIN ARE APPLICABLE TO LINEAR DEMOLITION CHARGES, HE M58A3 AND INERT M68A2, IN METAL SHIPPING AND STORAGE CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE SHIPPING AND STORAGE CONTAINER WITH CONTENTS.
- C. FOR DETAIL OF THE SHIPPING AND STORAGE CONTAINER, SEE THE DETAIL ON PAGE 3.

CONTAINER DIMENSIONS - - -: 6'-11-1/4" LONG X 53-3/4" WIDE X 24-3/4" HIGH.

GROSS WEIGHT (APPROX):
WITH HE COMP C4, M58A3 CHARGE, DODIC M913 - 2,900 LBS
WITH INERT, M68A2 CHARGE, DODIC M914 - - - 2,790 LBS

CUBE - - - - - 64.1 CUBIC FEET

- D. THIS ITEM, WHEN M58A3 CHARGE, IS A OD CLASS 1.1, COMP GROUP D EXPLOSIVE, WHEN AN M68A2 CHARGE, IS INERT. TO PERMIT STORAGE OF THESE ITEMS, THE MAGAZINE MUST HAVE A DOOR OPENING NOT LESS THAN 5'-0" WIDE. HOWEVER, A 7'-6" OR WIDER OPENING WILL FACILITATE HANDLING OPERATIONS. SEE GENERAL NOTE "P" BELOW.
- E. 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 PALLET UNITS 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.
- F. AISLE DIMENSIONS AS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT.
- G. 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".
- H. COVER SPANNER DUNNAGE, 2" X 6" X 54", AS DEPICTED IN THE STORAGE VIEWS, IS REQUIRED BETWEEN LAYERS UNDER EACH END OF EACH CONTAINER
- J. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- K. STORED CONTAINERS MUST NOT CONTACT THE WALLS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, CONTAINERS 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 CONTAINERS INTO STACKS, A 1" TO 2" SPACE BETWEEN CONTAINERS WAS ALLOWED IN THE STORAGE LAYOUTS SHOWN HEREIN.
- N. IF THE QUANTITY OF CONTAINERS FOR A DEPICTED MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN-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 OMITTING LAYERS. SEE GENERAL NOTE "L".
- 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.

- P. MAGAZINES WITH DOOR OPENINGS LESS THAN 7'-6" WIDE WILL REQUIRE END-HANDLING OF THE CONTAINERS THRU THE DOORWAY. SINCE THE DEPICTED CONTAINER DOES NOT HAVE BUILT-IN PROVISIONS FOR END-HANDLING, IT CAN BE PLACED ON BLOCKS OR OTHERWISE ELEVATED SUFFICIENTLY TO PERMIT PLACEMENT OF THE TINES OF TWO FORKLIFT TRUCKS OR PALLET JACKS UNDER THE SKIDS, AT BOTH ENDS OF THE CONTAINER AND THEN JOINTLY HANDLED THROUGH THE DOOR OPENING. OTHER METHODS AND EQUIPMENT, SUCH AS SECTIONS OF ROLLER CONVEYORS, ETC, MAY BE USED IF THEY PROVIDE FOR SAFE HANDLING OF THE CONTAINER THROUGH NARROWER DOOR OPENINGS.

(CONTINUED AT RIGHT)

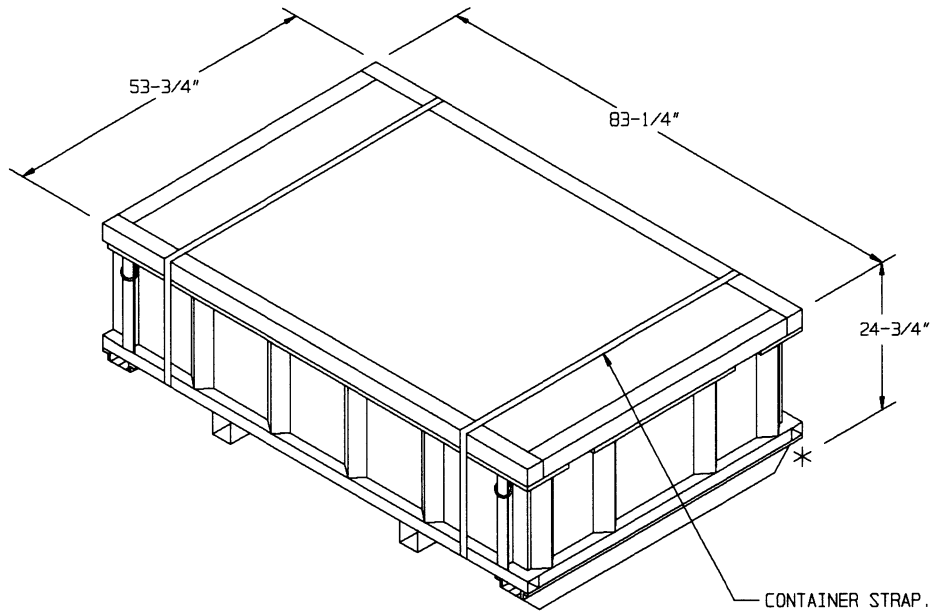
REVISIONS

REVISION NO. 1, DATED NOVEMBER 1995, CONSISTS OF:

- 1. CONVERTING TO CAD.

MATERIAL SPECIFICATIONS

LUMBER - - -: FED SPEC MM-L-751; DUNNAGE LUMBER, SEE TM 743-200-1.

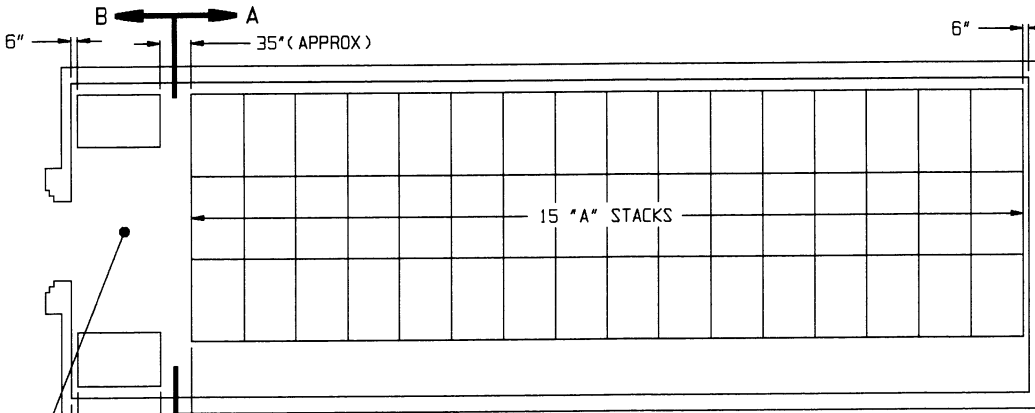


CONTAINER DETAIL

NOTE: CONTAINERS CANNOT BE STACKED
UNLESS COVER SPANNER DUNNAGE IS
PROVIDED UNDER SKIDS BETWEEN LAYERS.

STORAGE IN 81'-0" IGLOO
(12'-9" HIGH)

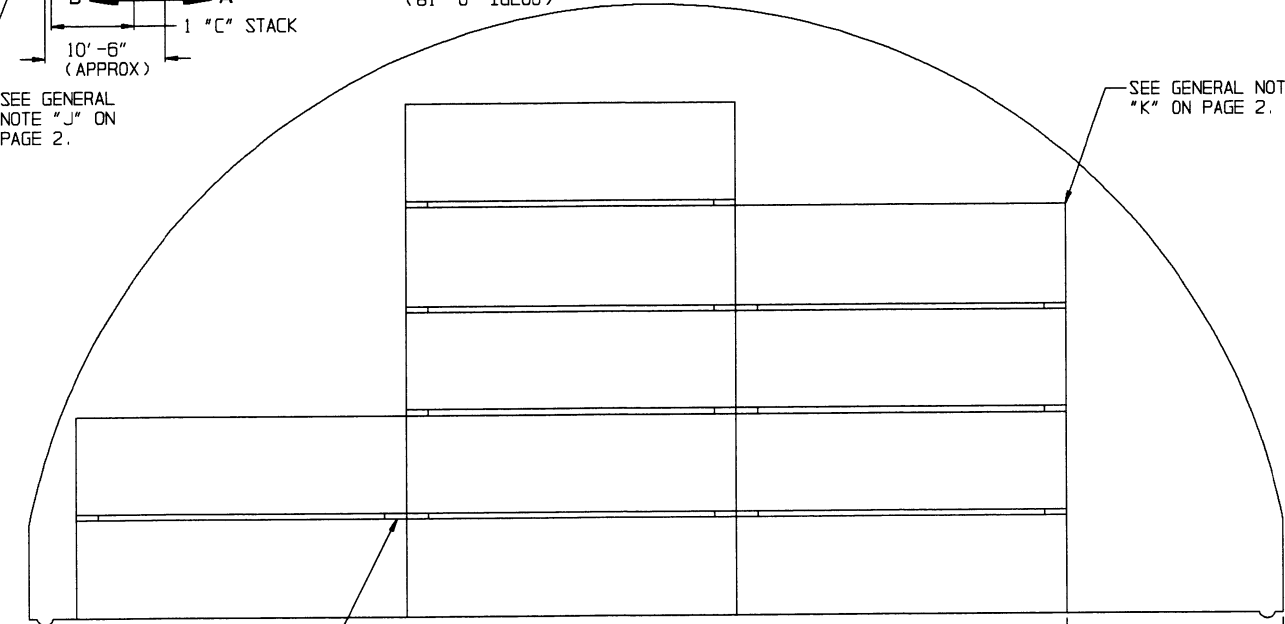
ITEM	QUANTITY
CONTAINERS - - - - -	169



PLAN VIEW
(81'-0" IGLOO)

SEE GENERAL NOTE "J" ON PAGE 2.

SEE GENERAL NOTE "K" ON PAGE 2.

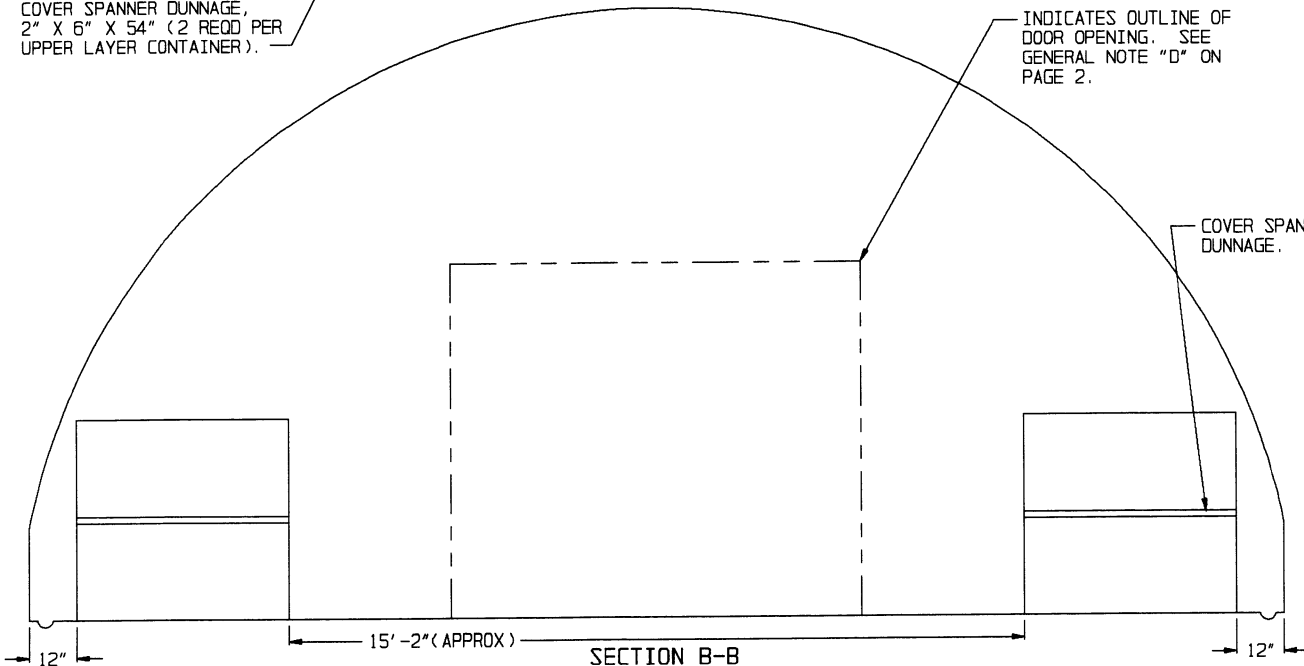


SECTION A-A

COVER SPANNER DUNNAGE, 2" X 6" X 54" (2 REQD PER UPPER LAYER CONTAINER).

INDICATES OUTLINE OF DOOR OPENING. SEE GENERAL NOTE "D" ON PAGE 2.

COVER SPANNER DUNNAGE.



SECTION B-B

STORAGE PROCEDURES IN 81'-0", 60'-8", AND 40'-4" L X 26'-6" W X 12'-9" H IGLOO MAGAZINES

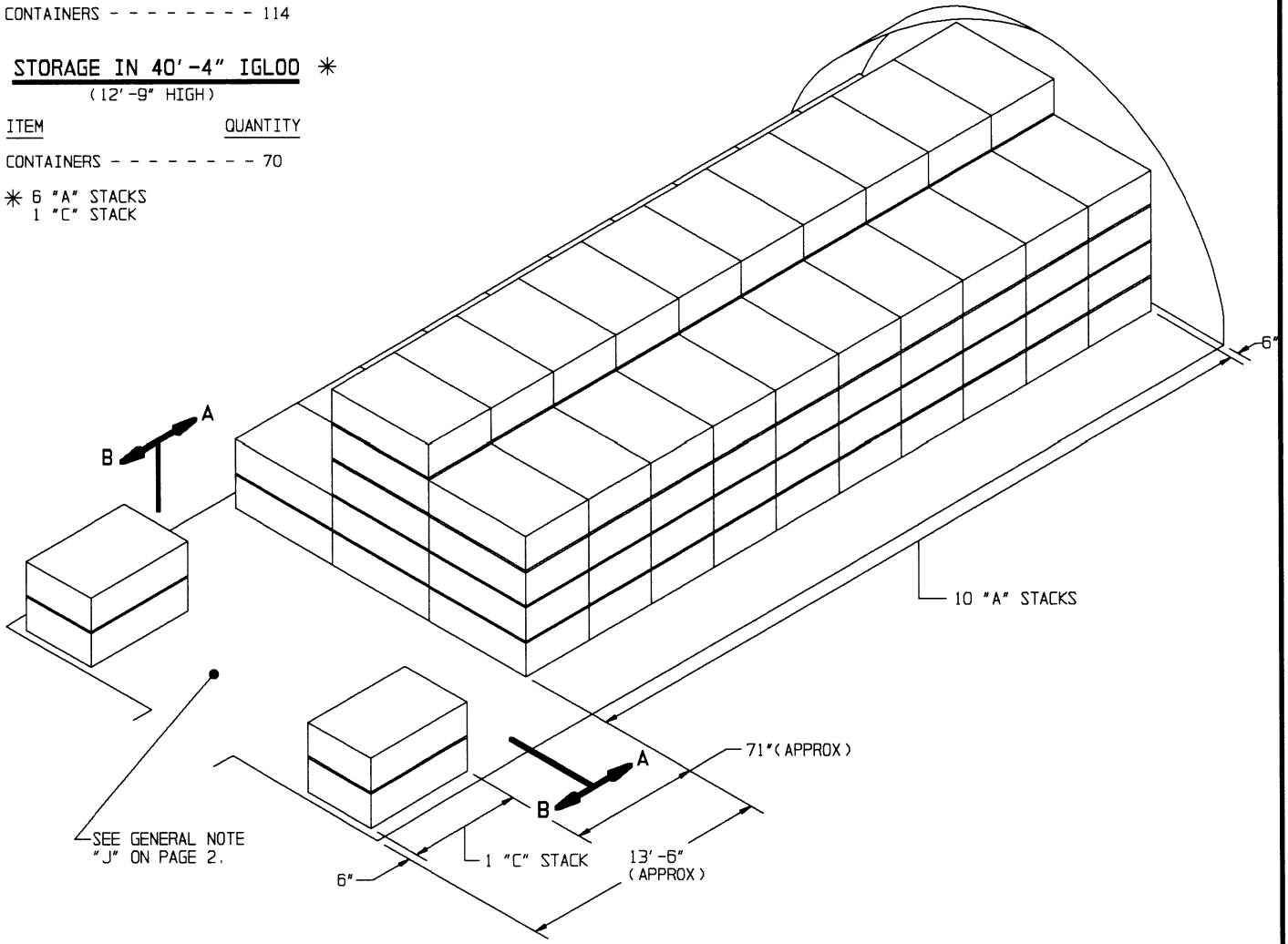
STORAGE IN 60'-8" IGLOO
(12'-9" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	114

STORAGE IN 40'-4" IGLOO *
(12'-9" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	70

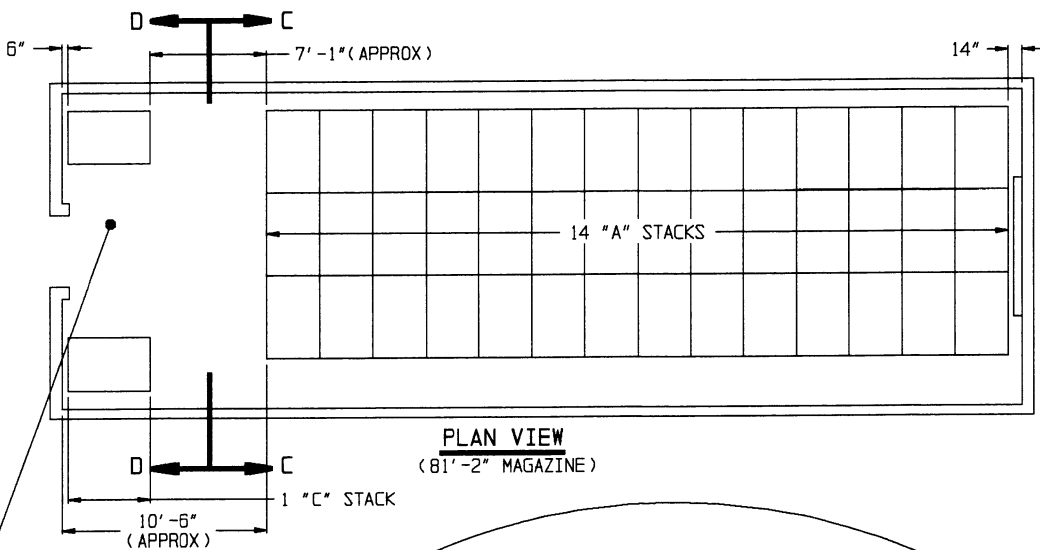
- * 6 "A" STACKS
- 1 "C" STACK



ISOMETRIC VIEW
(60'-8" IGLOO)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

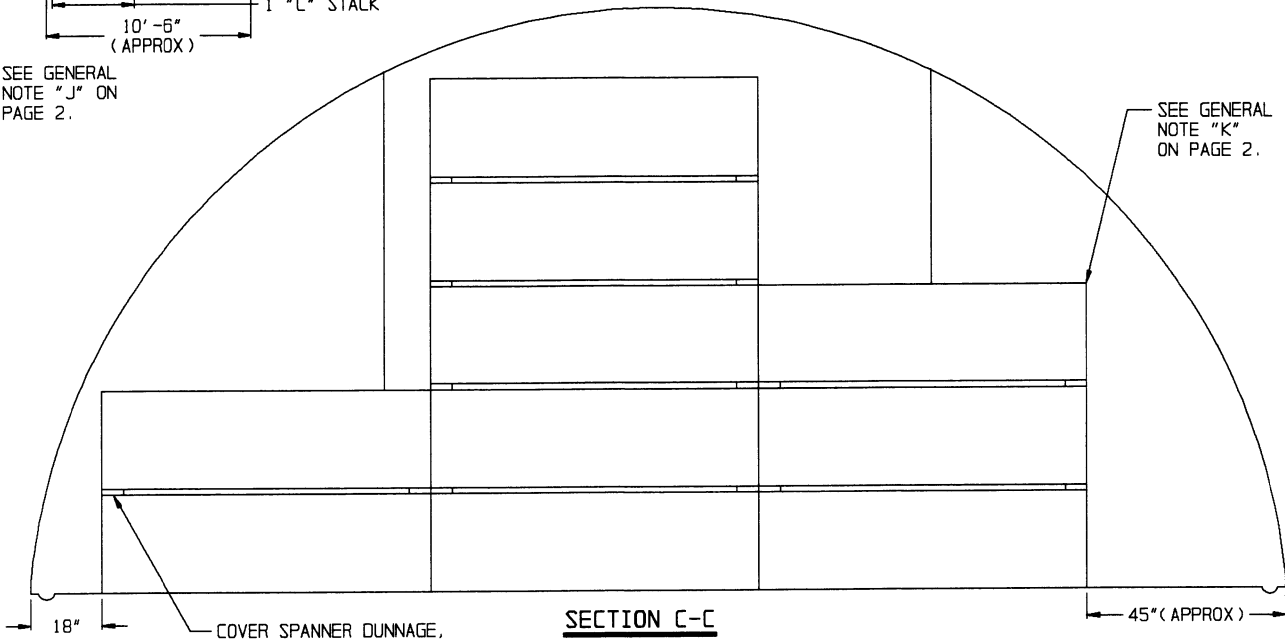
BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9



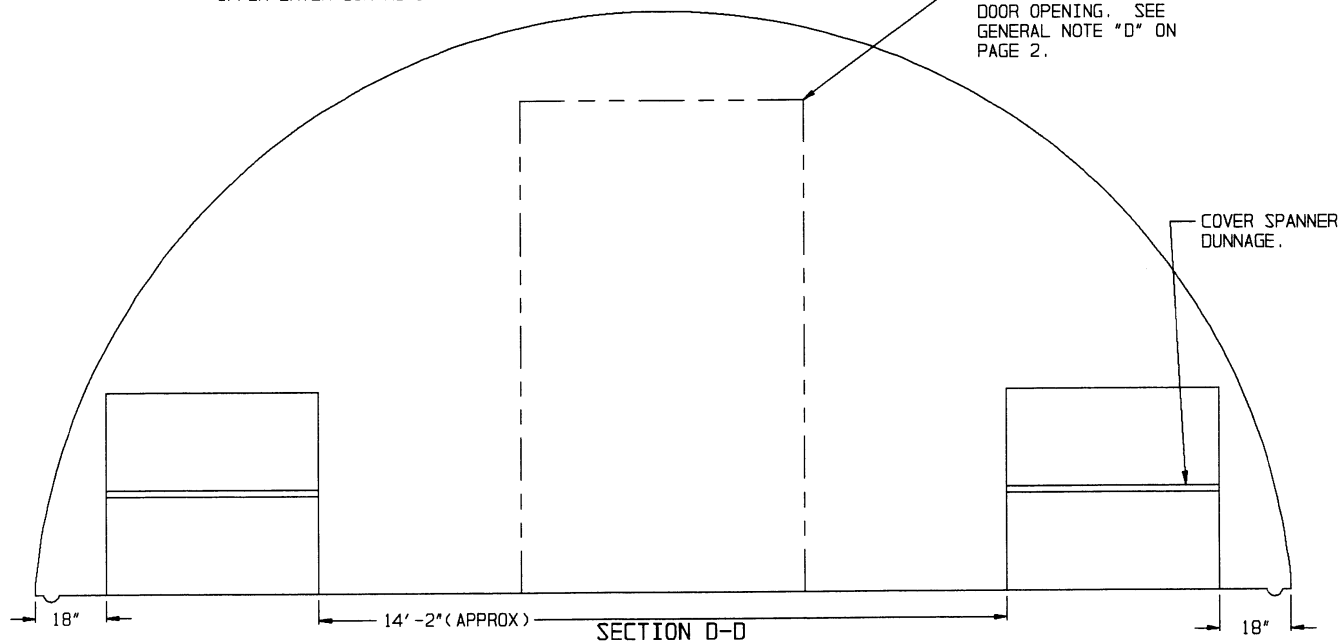
PLAN VIEW
(81'-2" MAGAZINE)

SEE GENERAL NOTE "J" ON PAGE 2.

SEE GENERAL NOTE "K" ON PAGE 2.



INDICATES OUTLINE OF DOOR OPENING. SEE GENERAL NOTE "D" ON PAGE 2.



STORAGE PROCEDURES IN 81'-2" L X 26'-6" W X 12'-1-3/4" H ARCH TYPE MAGAZINE

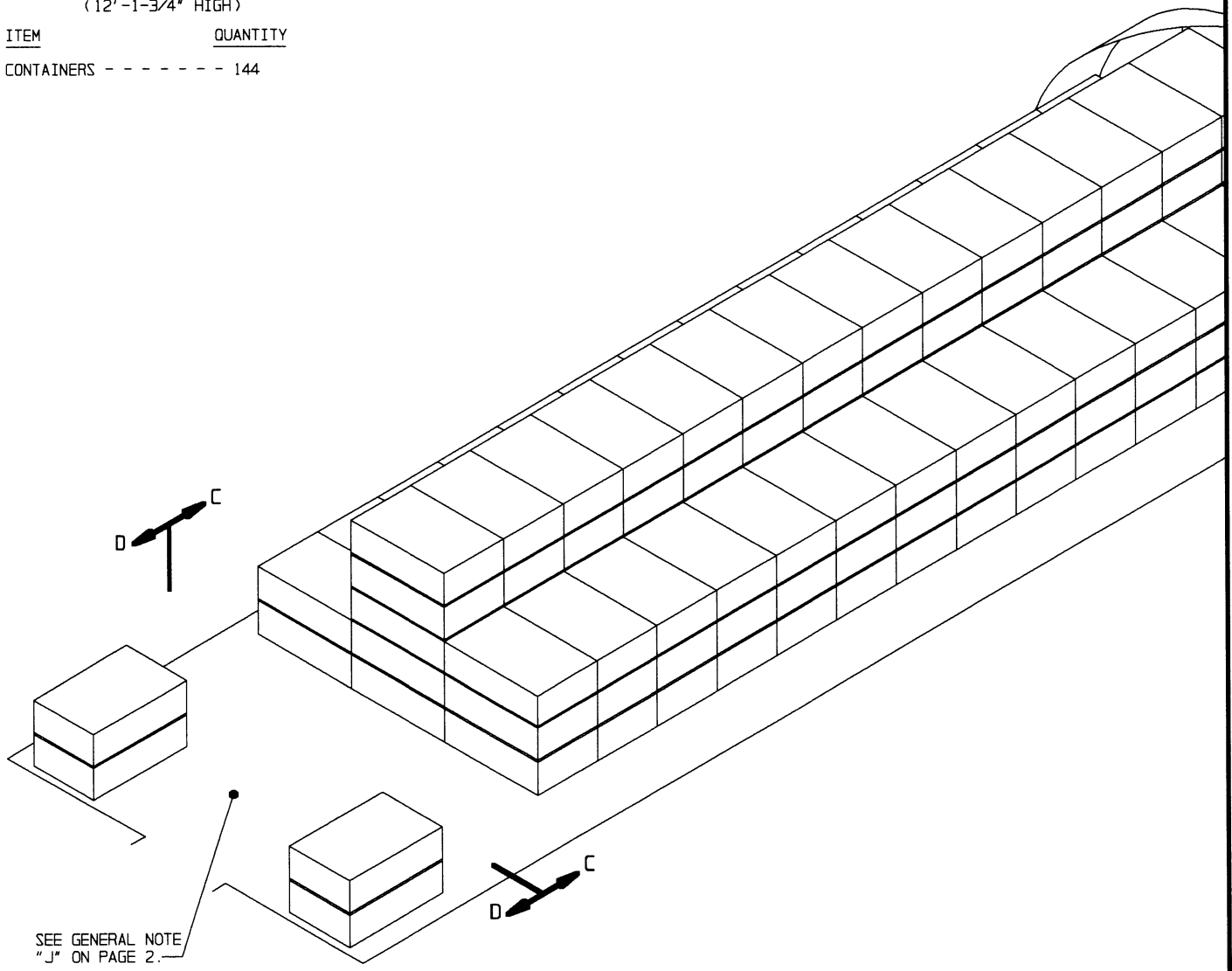
STORAGE IN 81'-2" MAGAZINE

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

ITEM

QUANTITY

CONTAINERS - - - - - 144



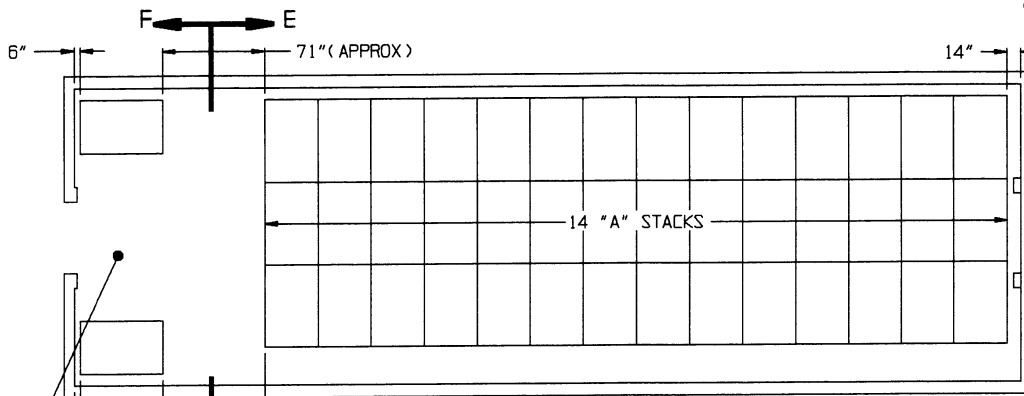
ISOMETRIC VIEW
(81'-2" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9

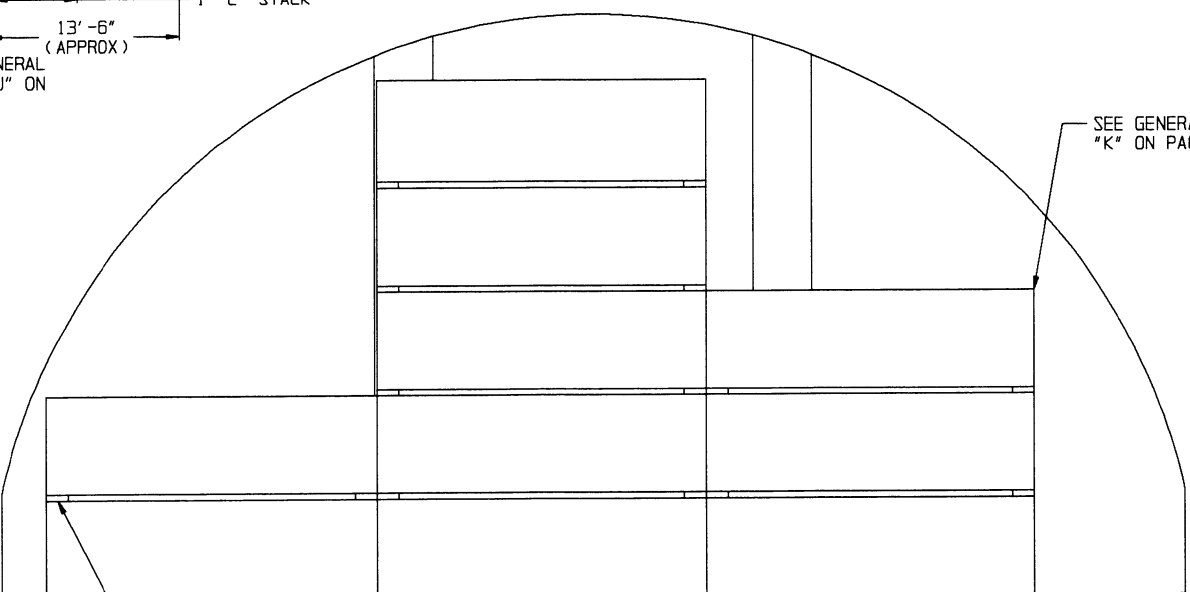
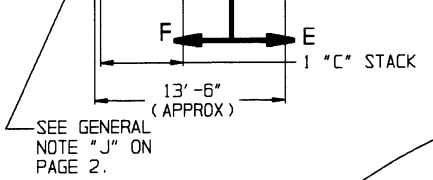
STORAGE IN 80'-0" MAGAZINE

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



ITEM	QUANTITY
CONTAINERS - - - - -	144

PLAN VIEW
(80'-0" MAGAZINE)



SECTION E-E

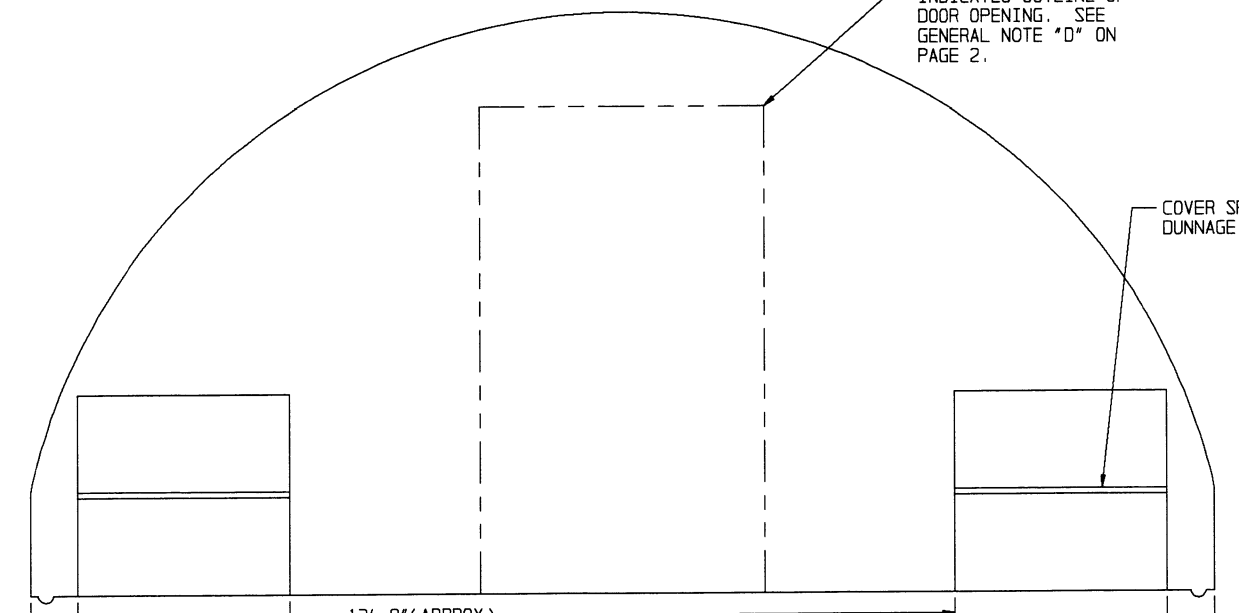
COVER SPANNER DUNNAGE
2" X 6" X 54" (2 REQD PER
UPPER LAYER CONTAINER).

SEE GENERAL NOTE
"K" ON PAGE 2.

SEE GENERAL
NOTE "J" ON
PAGE 2.

INDICATES OUTLINE OF
DOOR OPENING. SEE
GENERAL NOTE "D" ON
PAGE 2.

COVER SPANNER
DUNNAGE.



SECTION F-F

STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-0" W X 12'-1-3/4" H ARCH TYPE MAGAZINES

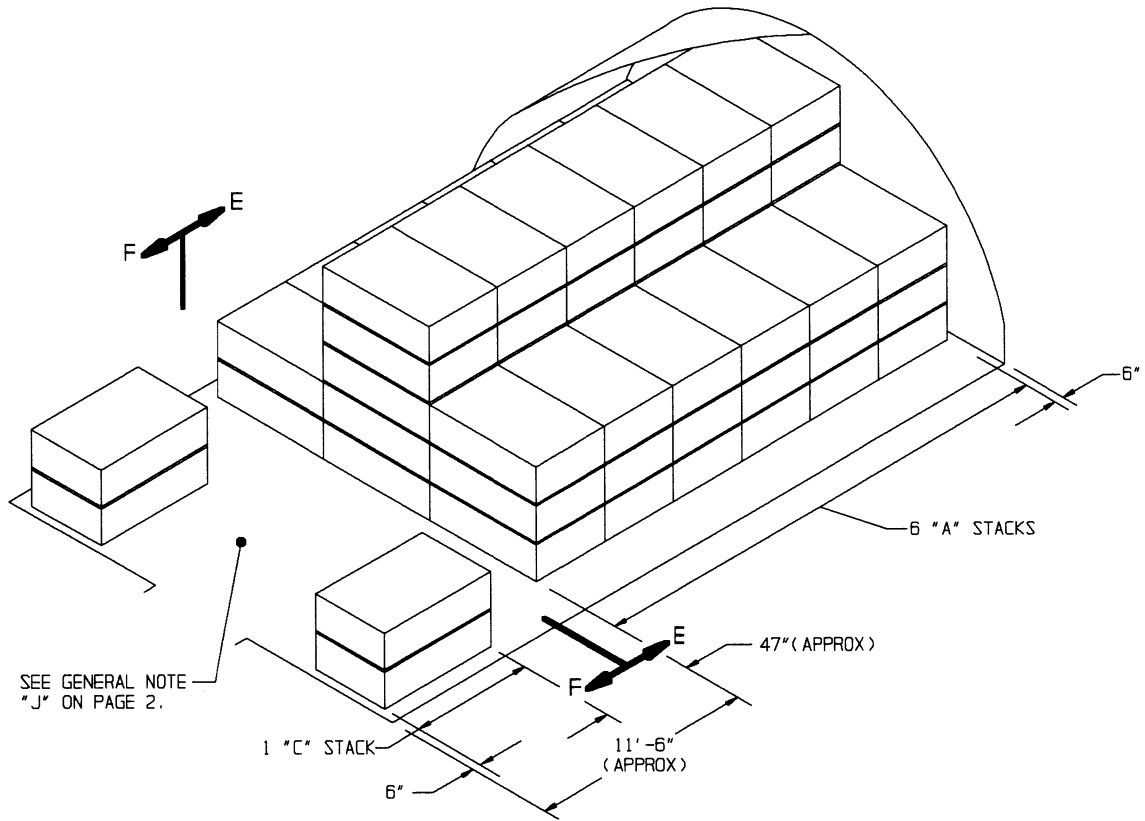
STORAGE IN 40'-0" MAGAZINE

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

ITEM

QUANTITY

CONTAINERS - - - - - 64



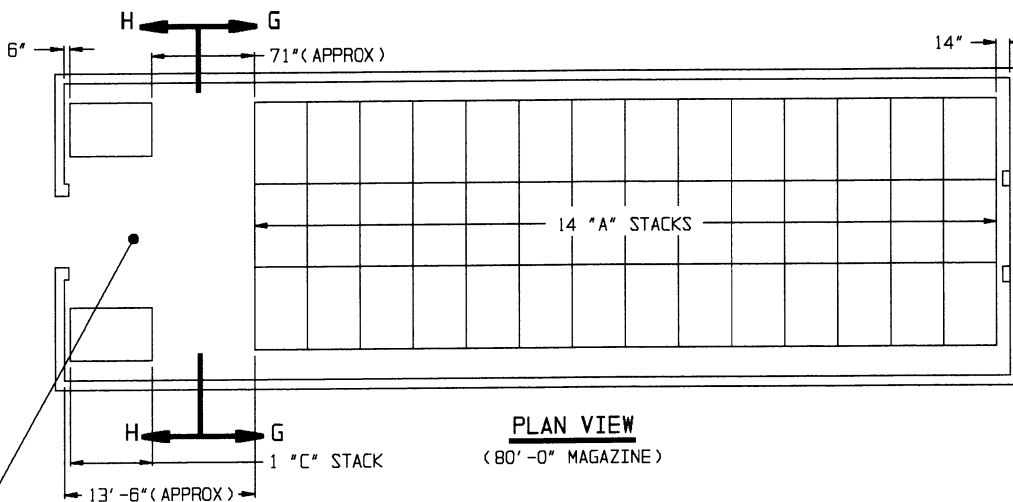
ISOMETRIC VIEW
(40'-0" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9

STORAGE IN 80'-0" MAGAZINE

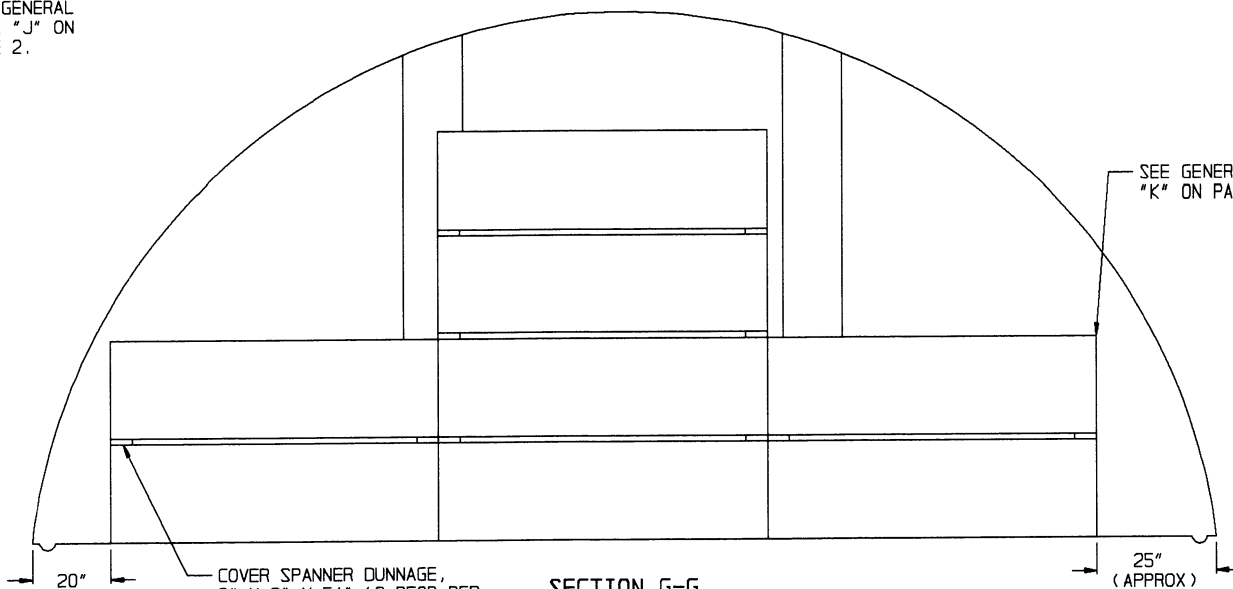
(11'-0" HIGH)



ITEM	QUANTITY
CONTAINERS	----- 116

PLAN VIEW
(80'-0" MAGAZINE)

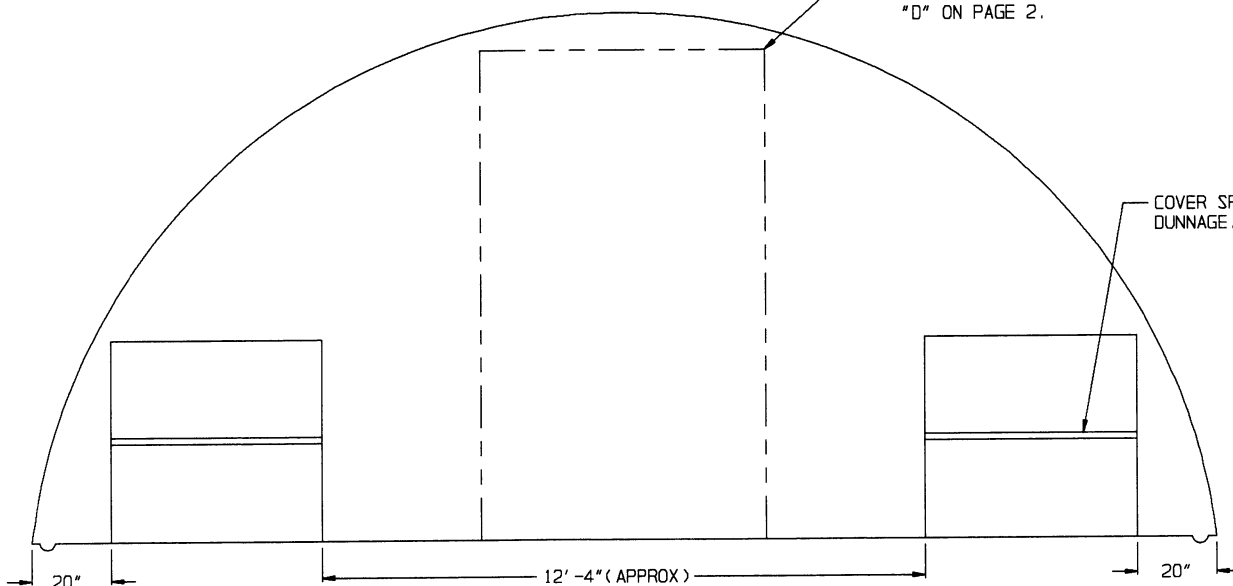
SEE GENERAL NOTE "J" ON PAGE 2.



SECTION G-G

SEE GENERAL NOTE "K" ON PAGE 2.

INDICATES OUTLINE OF DOOR OPENING. SEE GENERAL NOTE "D" ON PAGE 2.



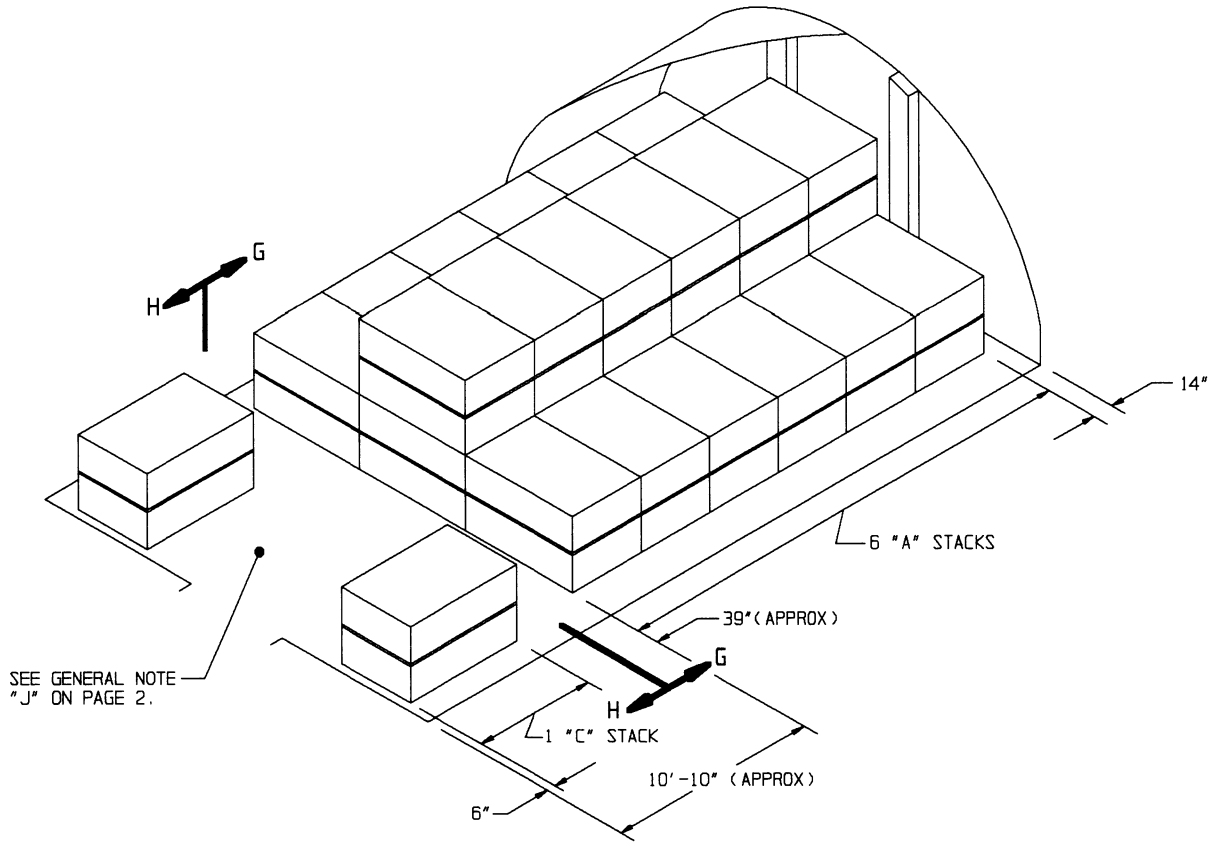
SECTION H-H

STORAGE PROCEDURES IN 80'-0" AND 40'-0" L X 25'-0" W X 11'-0" H ARCH TYPE MAGAZINES

STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)

ITEM QUANTITY
CONTAINERS - - - - - 52



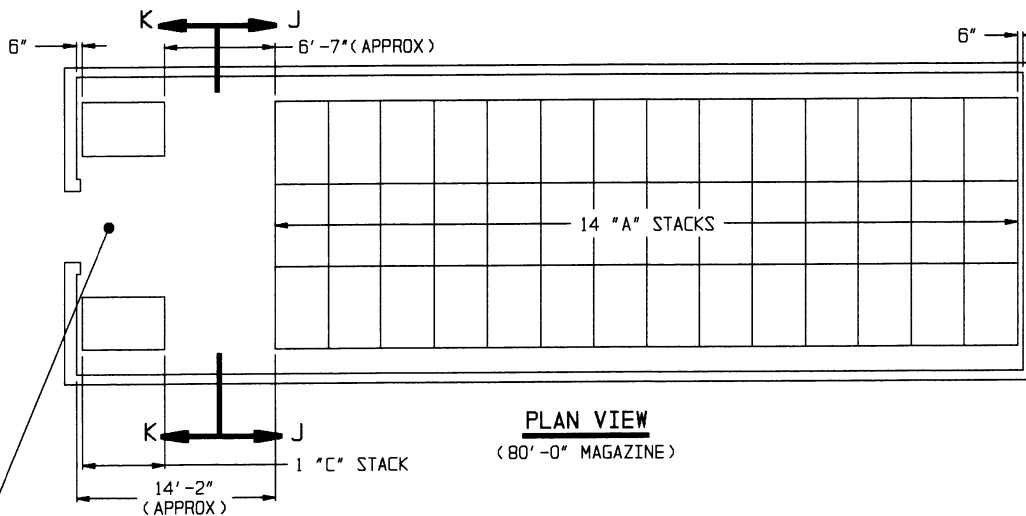
ISOMETRIC VIEW
(40'-0" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9

STORAGE IN 80'-0" MAGAZINE

(10'-0" HIGH)

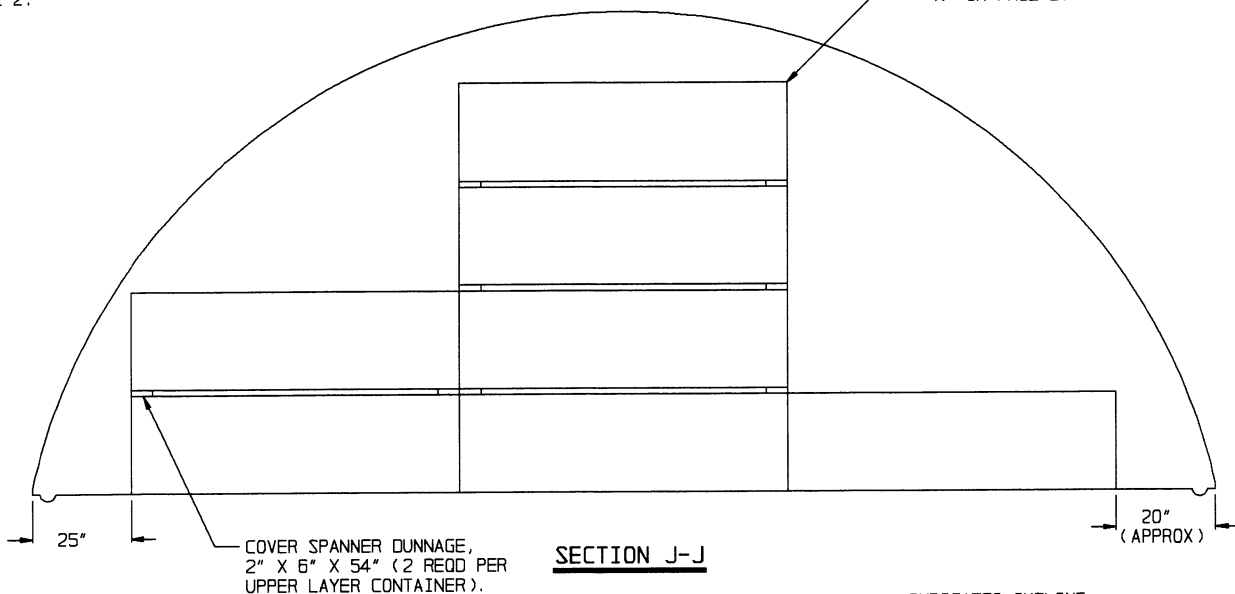


ITEM	QUANTITY
CONTAINERS - - - - -	102

PLAN VIEW
(80'-0" MAGAZINE)

SEE GENERAL NOTE "J" ON PAGE 2.

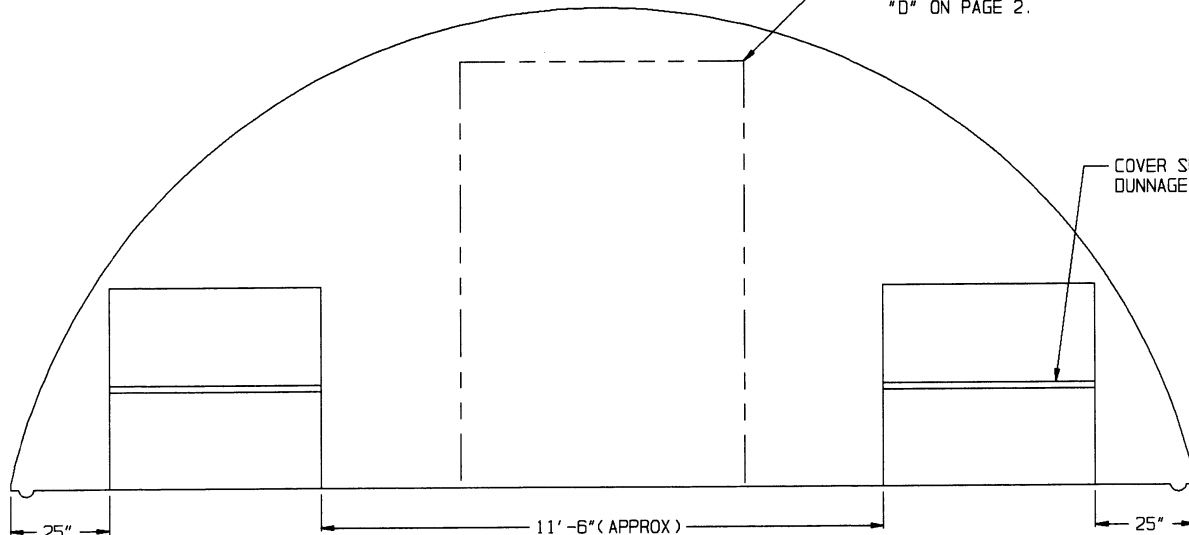
SEE GENERAL NOTE "K" ON PAGE 2.



SECTION J-J

INDICATES OUTLINE OF DOOR OPENING. SEE GENERAL NOTE "D" ON PAGE 2.

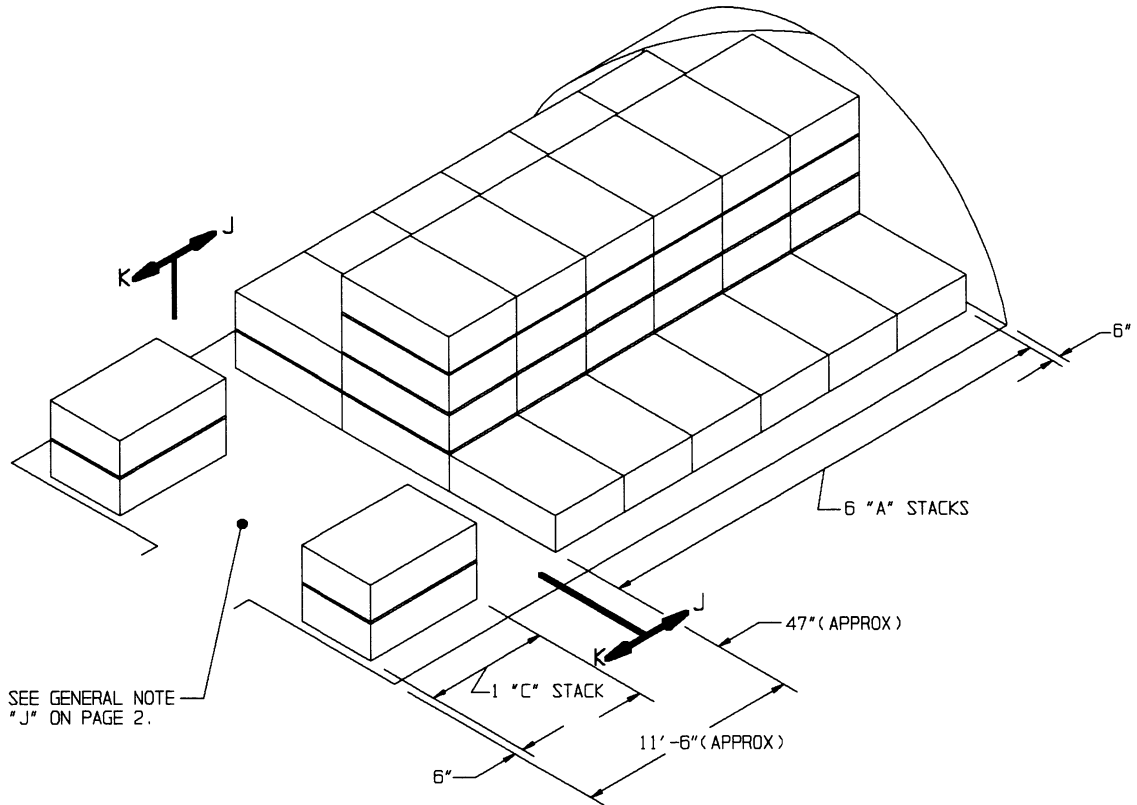
COVER SPANNER DUNNAGE.



SECTION K-K

STORAGE IN 40'-0" MAGAZINE
(10'-0" HIGH)

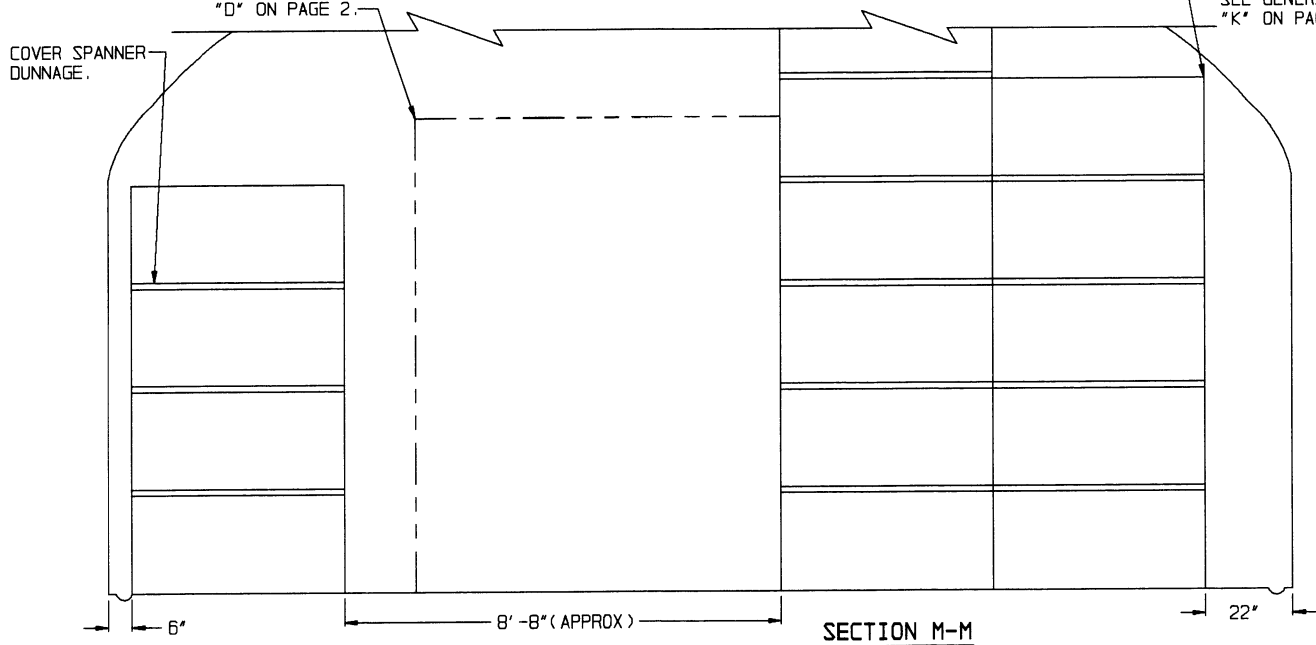
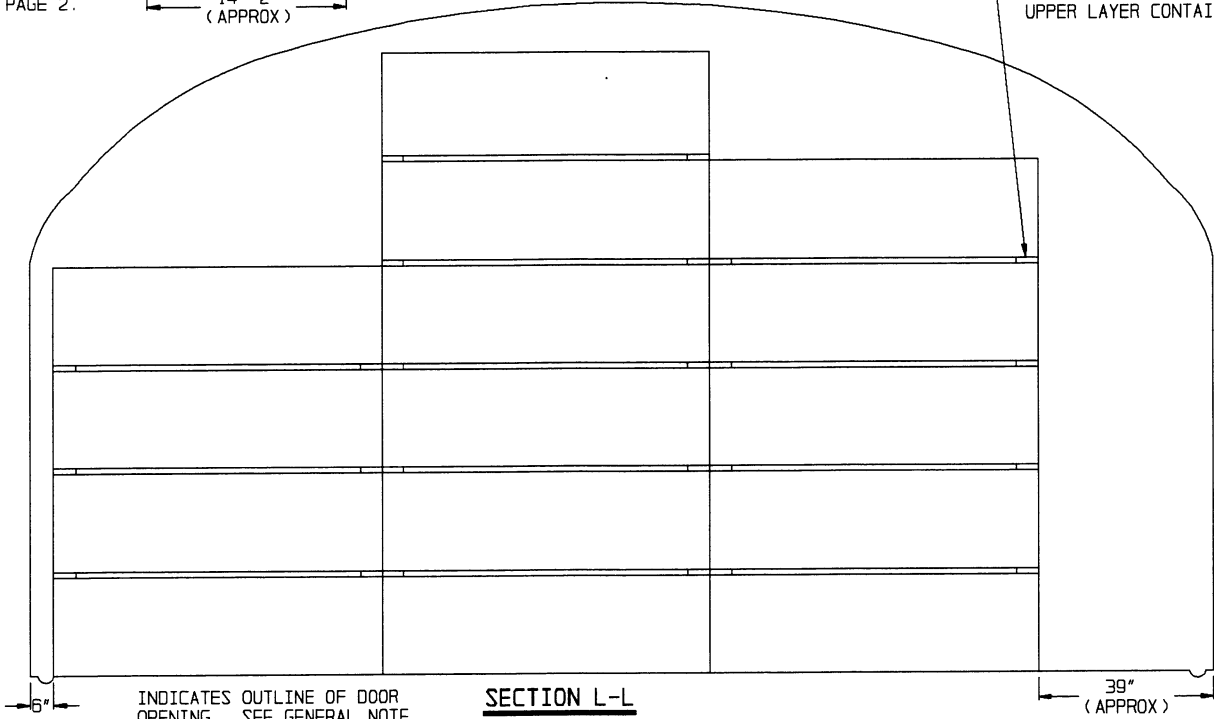
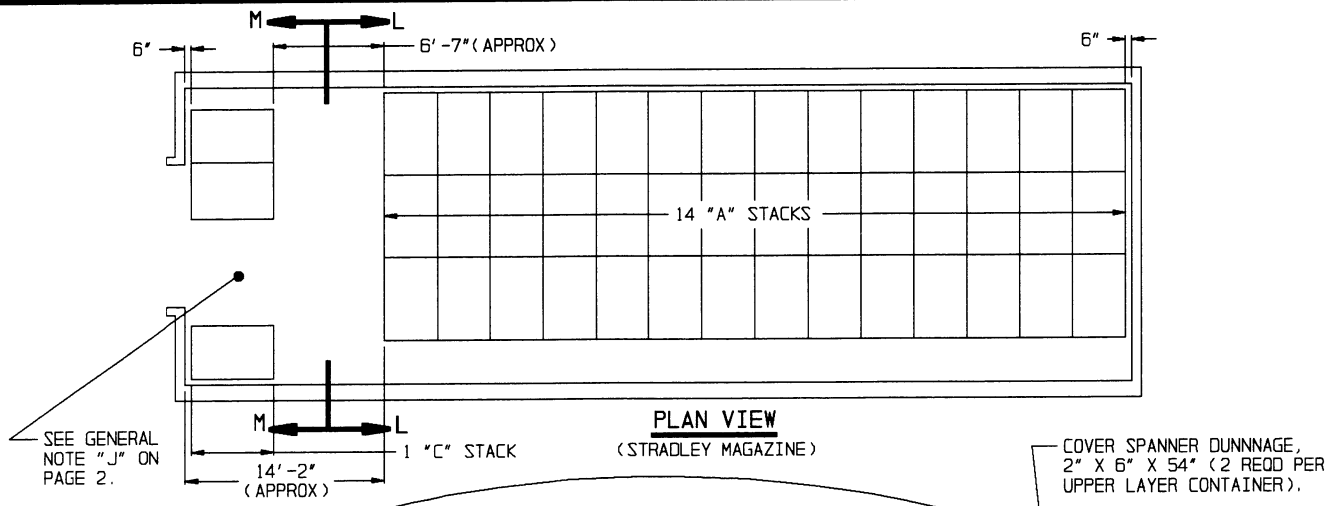
ITEM QUANTITY
CONTAINERS - - - - - 46



ISOMETRIC VIEW
(40'-0" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9



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 STRADLEY MAGAZINE

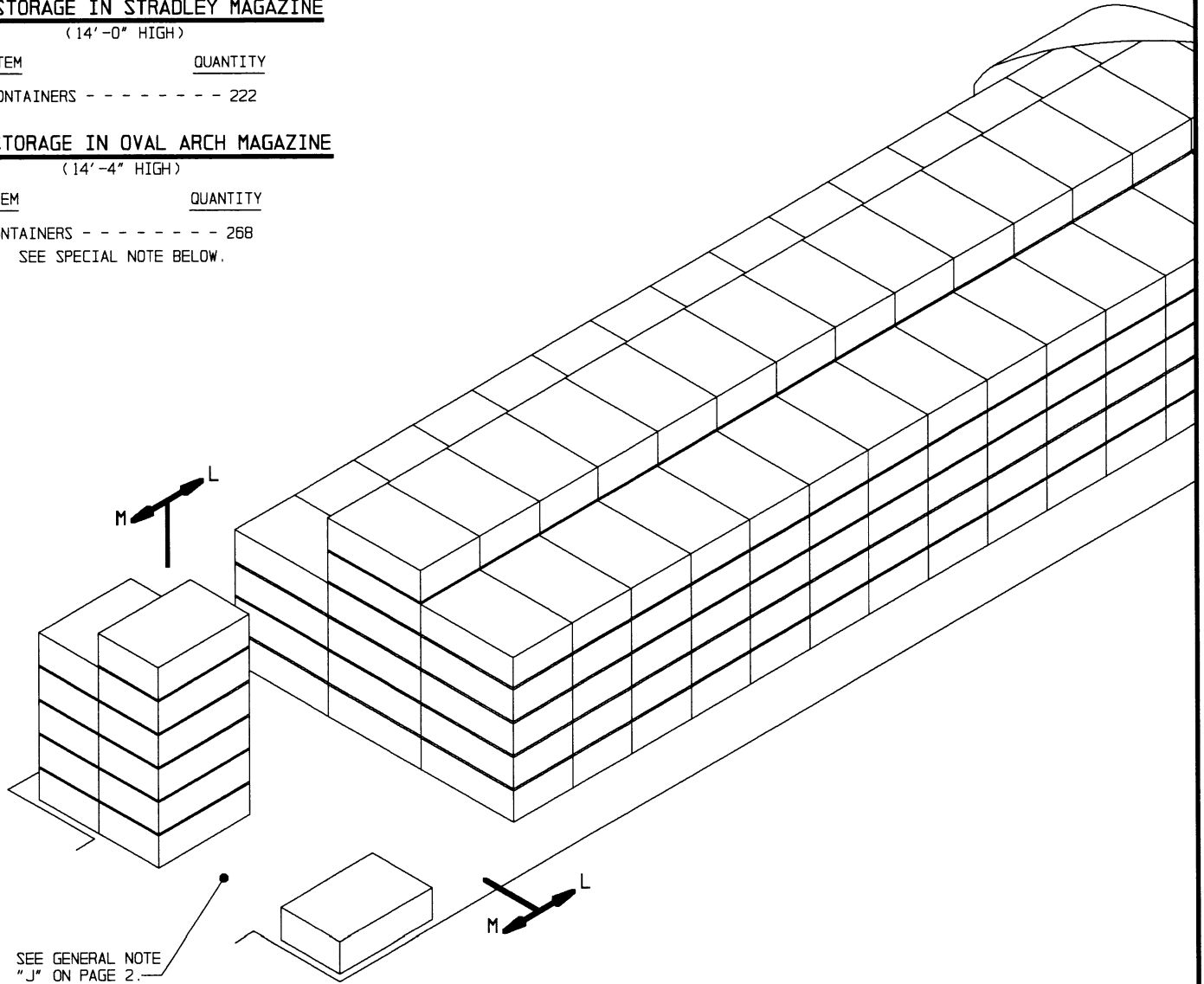
(14'-0" HIGH)

ITEM QUANTITY
CONTAINERS - - - - - 222

STORAGE IN OVAL ARCH MAGAZINE

(14'-4" HIGH)

ITEM QUANTITY
CONTAINERS - - - - - 268
SEE SPECIAL NOTE BELOW.



ISOMETRIC VIEW
(STRADLEY MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9

SPECIAL NOTE:

STORAGE IN AN 89'-0" LONG OVAL ARCH MAGAZINE WILL CONSIST OF 16 A-STACKS EACH HAVING 16 CONTAINERS, AND 1-C STACK OF 12 CONTAINERS TOTALING 268 CONTAINERS. THE A-STACKS WILL HAVE THE TWO OUTSIDE ROWS EACH 5 CONTAINERS HIGH AND THE CENTER ROW 6 CONTAINERS HIGH. TO PERMIT 16 CONTAINERS TO BE STORED IN EACH A-STACK, THE STACKS MUST BE CENTERED ACROSS THE WIDTH OF THE MAGAZINE.

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

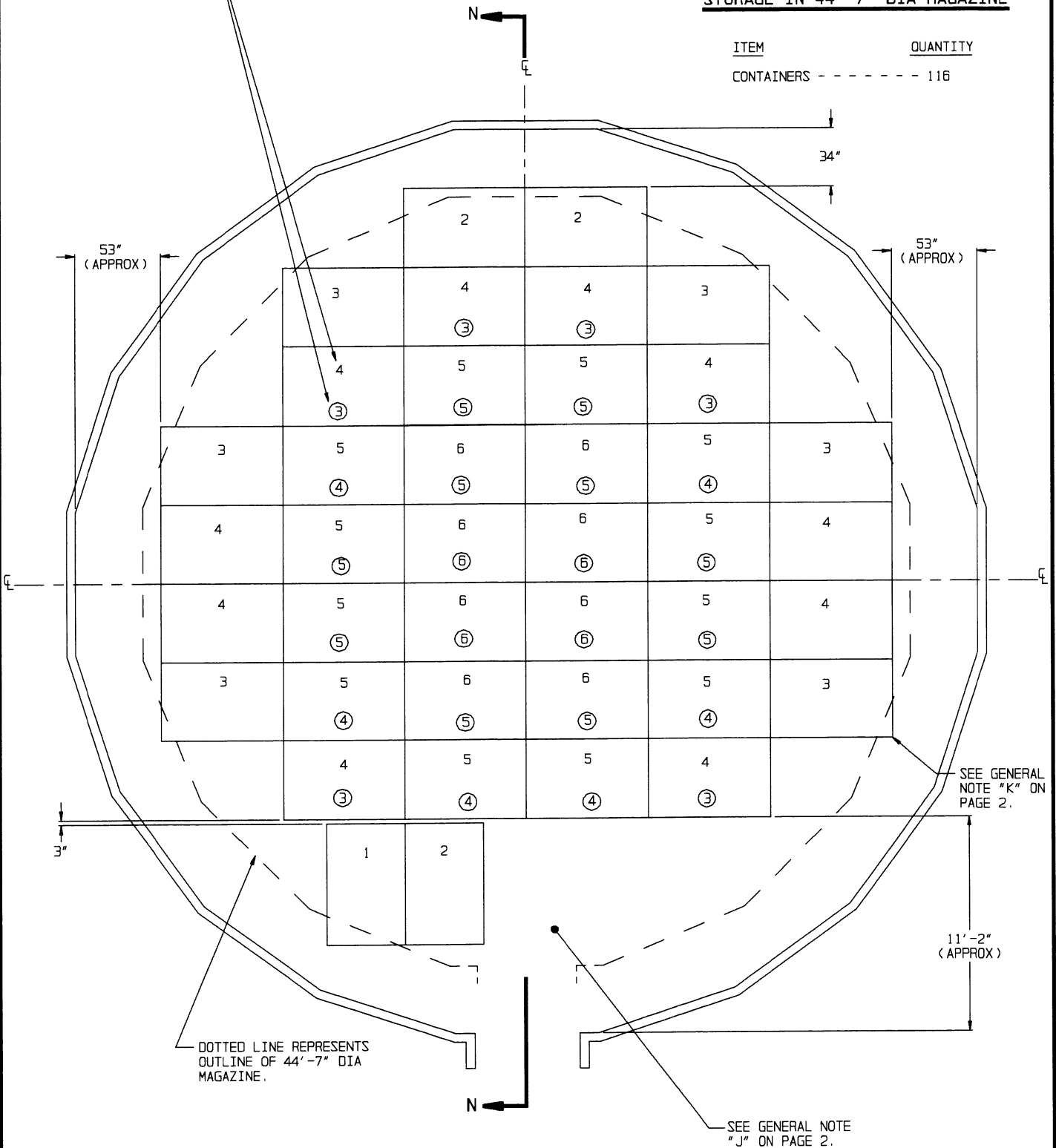
STORAGE IN 52'-0" DIA MAGAZINE

ITEM	QUANTITY
CONTAINERS - - - - -	173

STORAGE IN 44'-7" DIA MAGAZINE

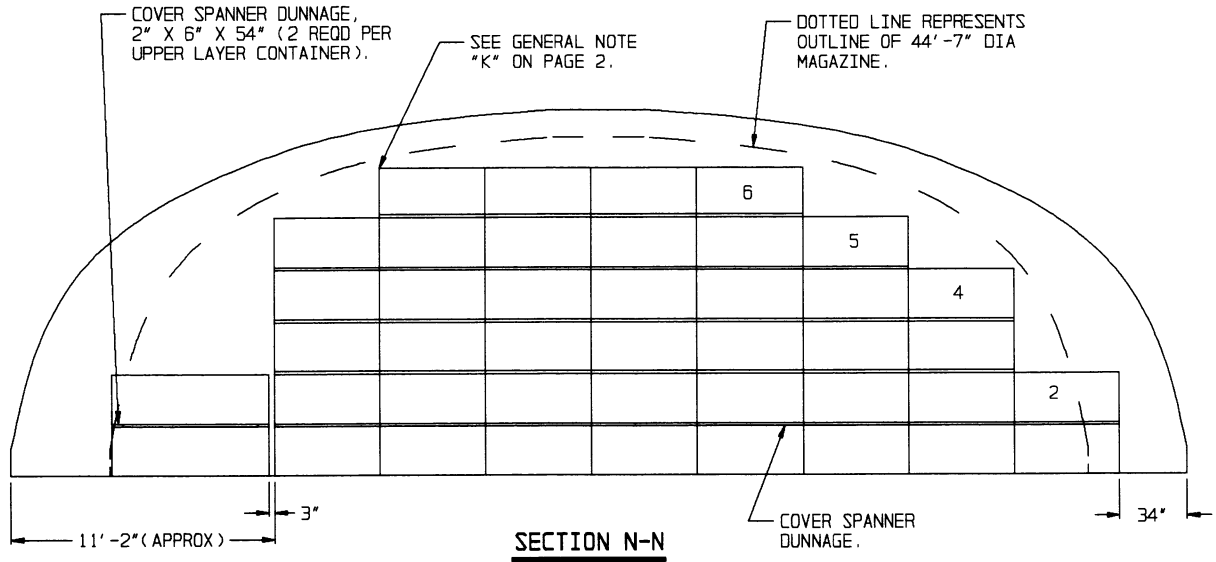
ITEM	QUANTITY
CONTAINERS - - - - -	116

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



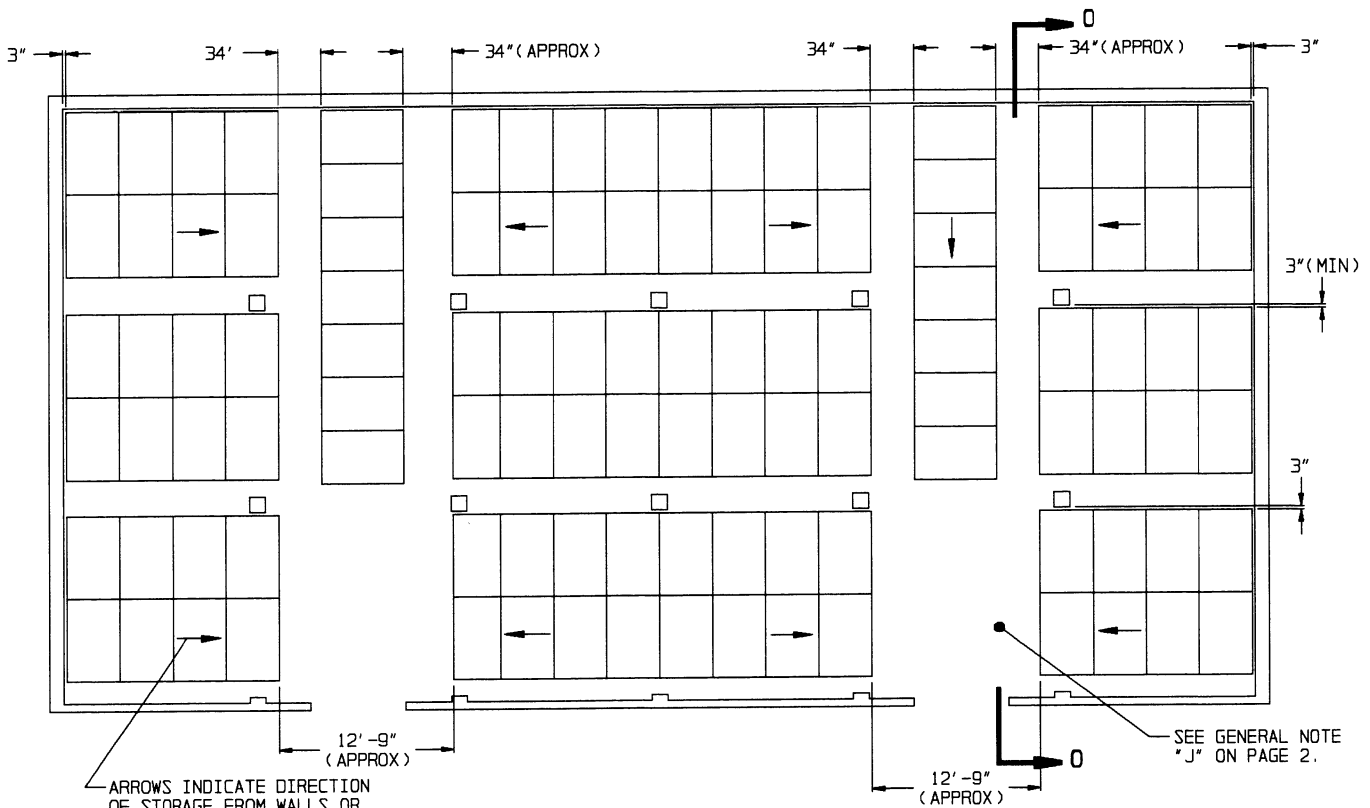
PLAN VIEW
(52'-0" DIA MAGAZINE)

STORAGE PROCEDURES IN 52'-0" AND 44'-7" DIA CORBETTA MAGAZINES

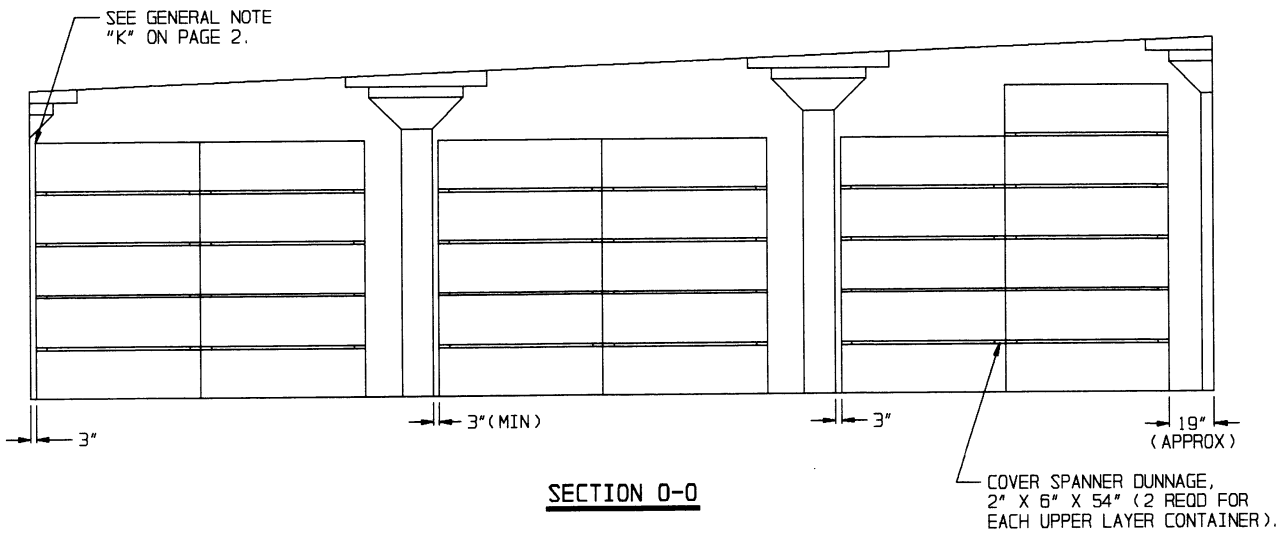


FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9



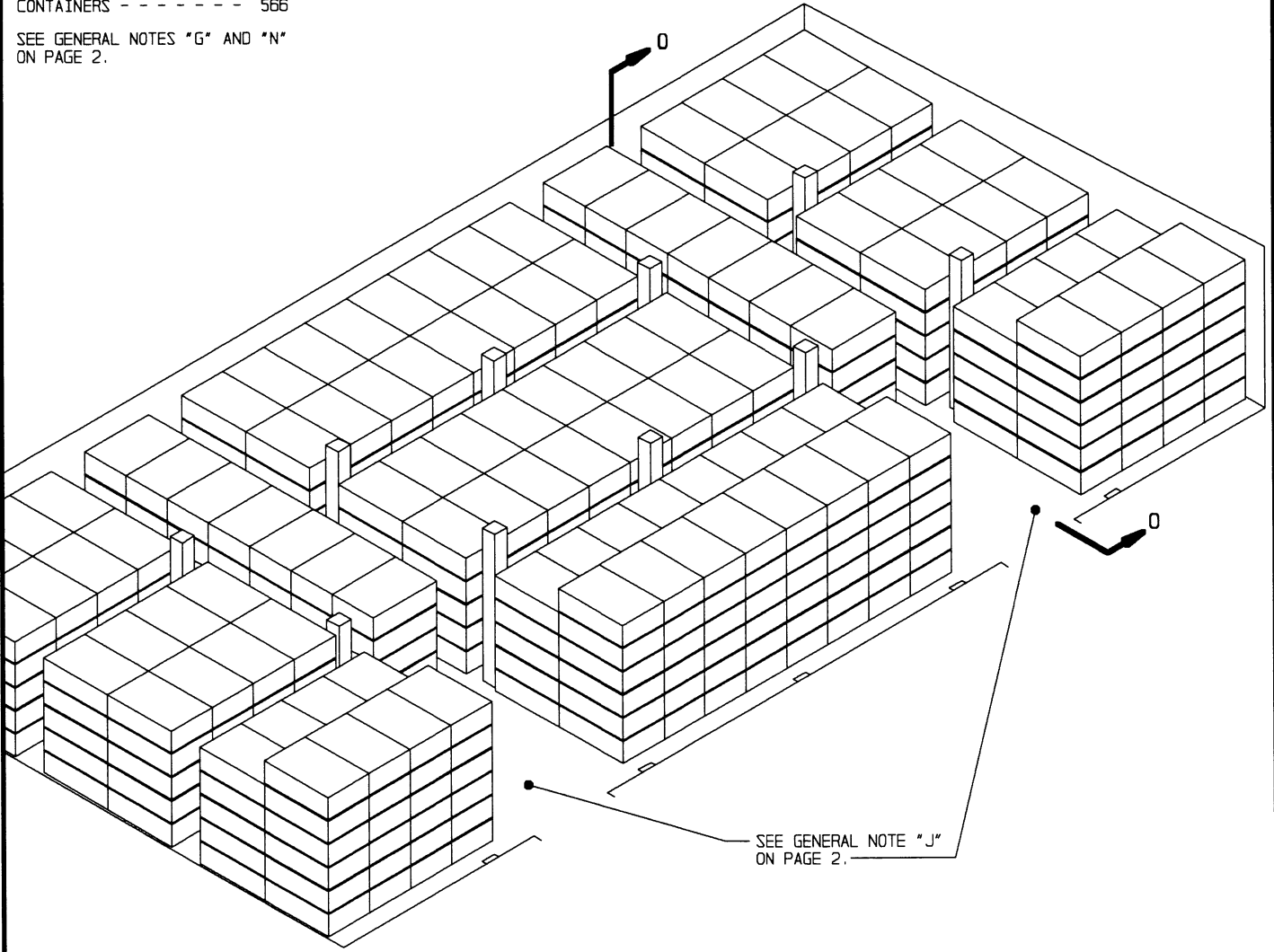
PLAN VIEW
(100'-8" X 50'-0" MAGAZINE)



STORAGE PROCEDURES IN 100'-8" L X 50'-0" W RECTANGULAR MAGAZINE

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

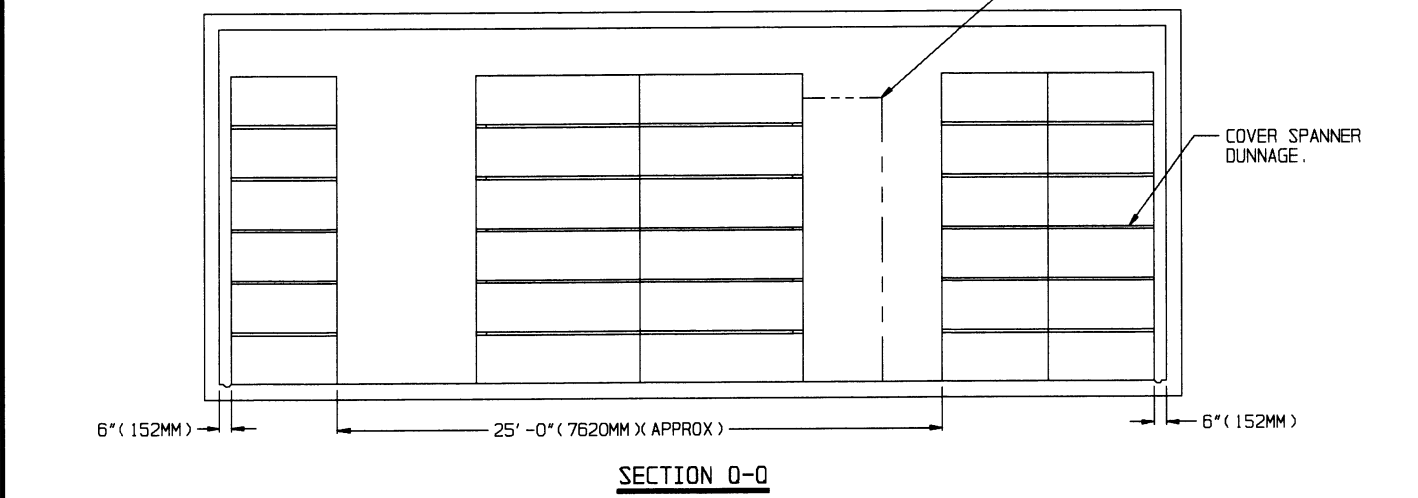
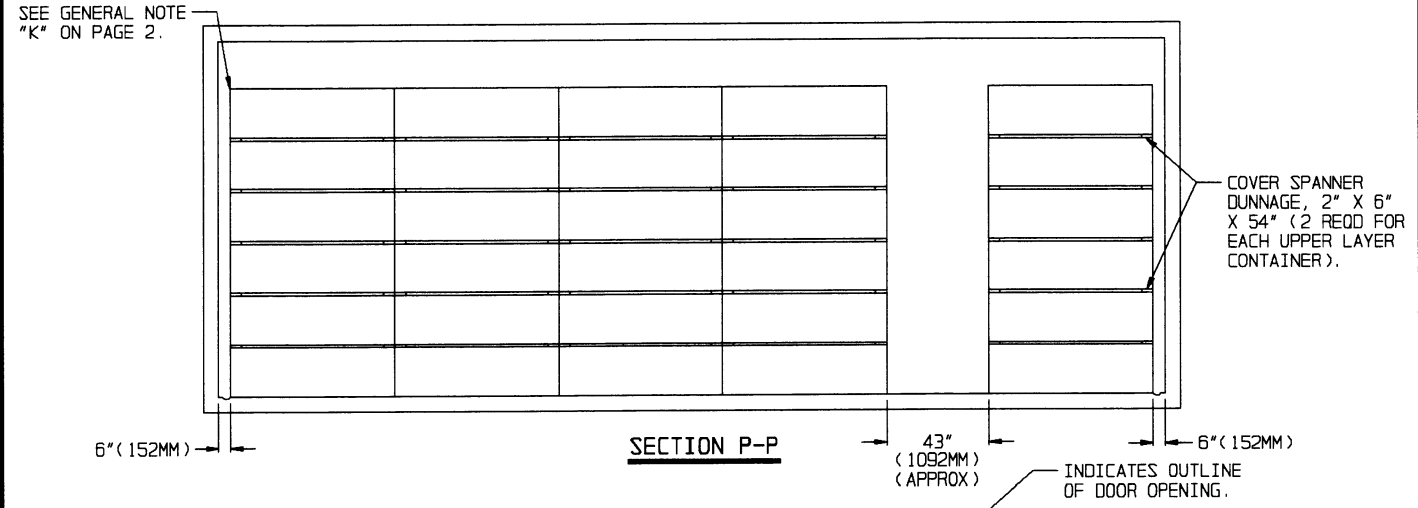
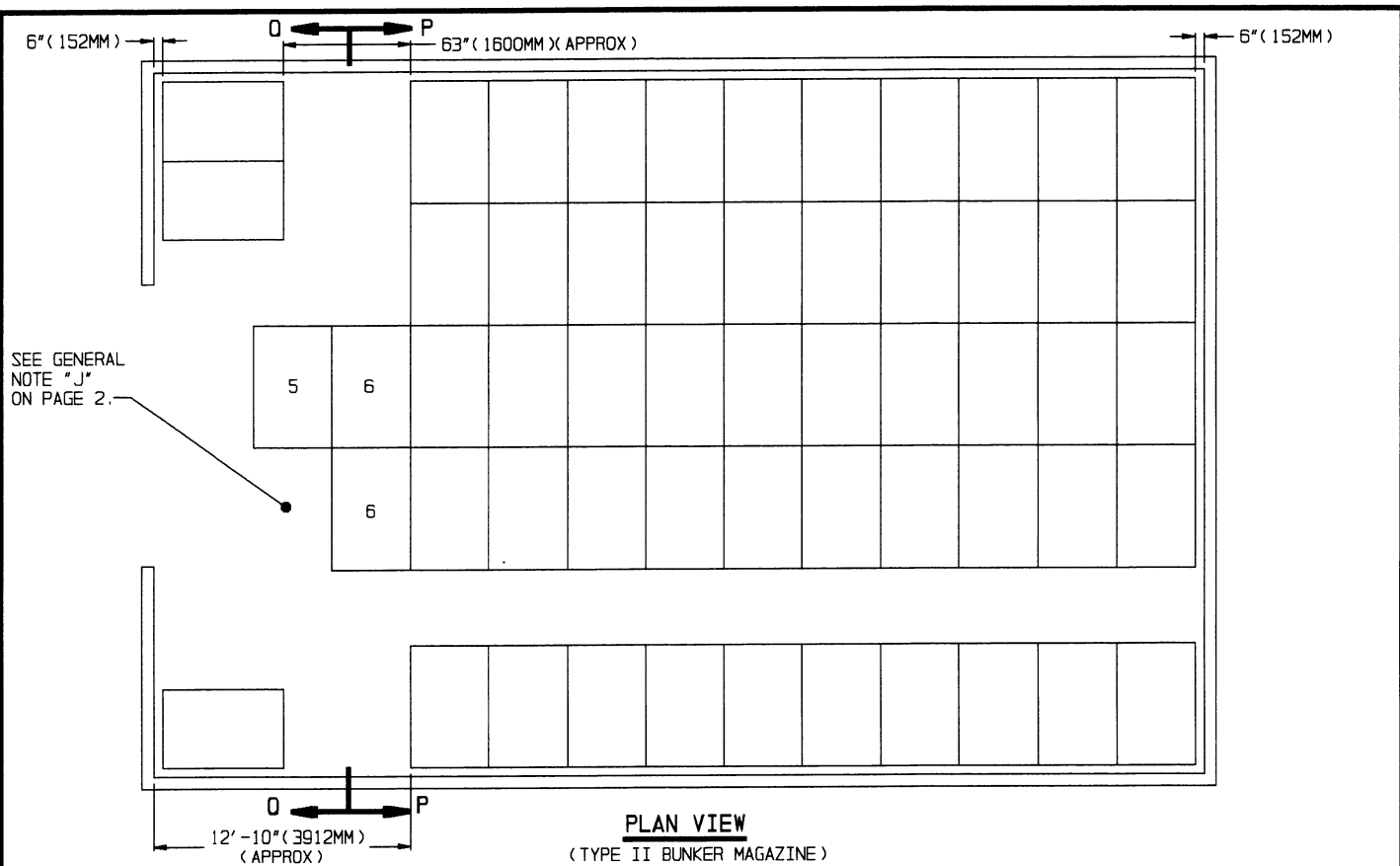
ITEM QUANTITY
CONTAINERS - - - - - 566
SEE GENERAL NOTES "G" AND "N"
ON PAGE 2.



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

**FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.**

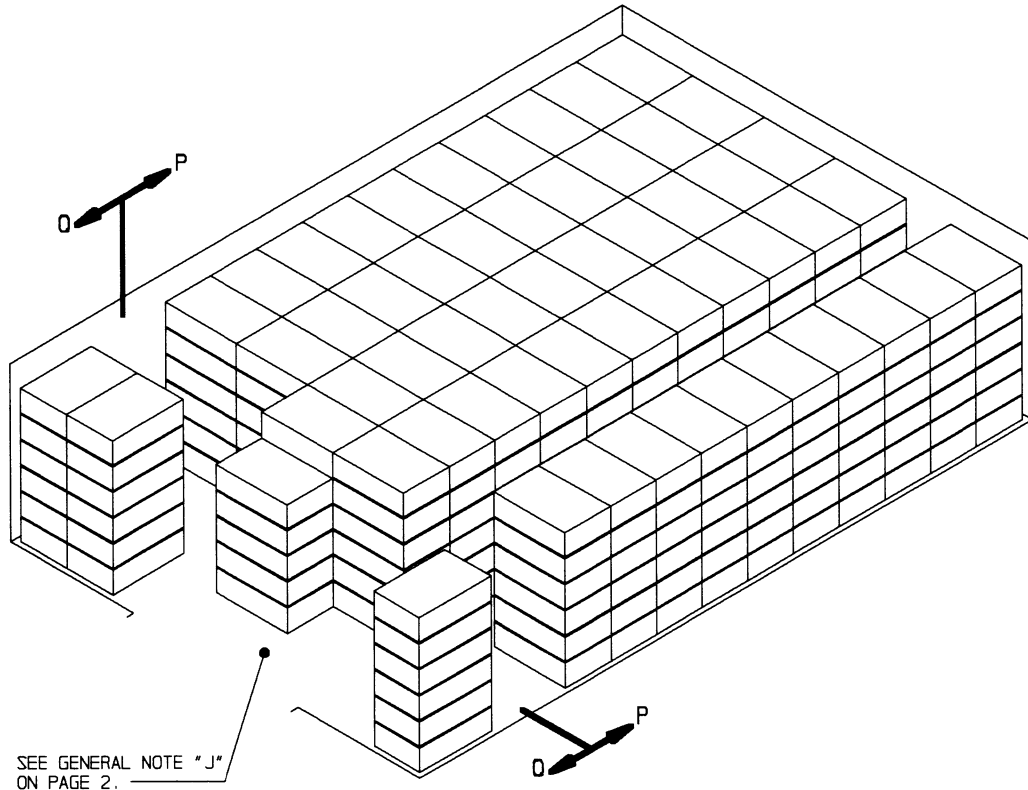
BILL OF MATERIAL (PER UPPER LAYER CONTAINER)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	9	9



STORAGE PROCEDURES IN 60'-0" L X 40'-0" W X 15'-0" H TYPE II BUNKER MAGAZINE

STORAGE IN TYPE II BUNKER

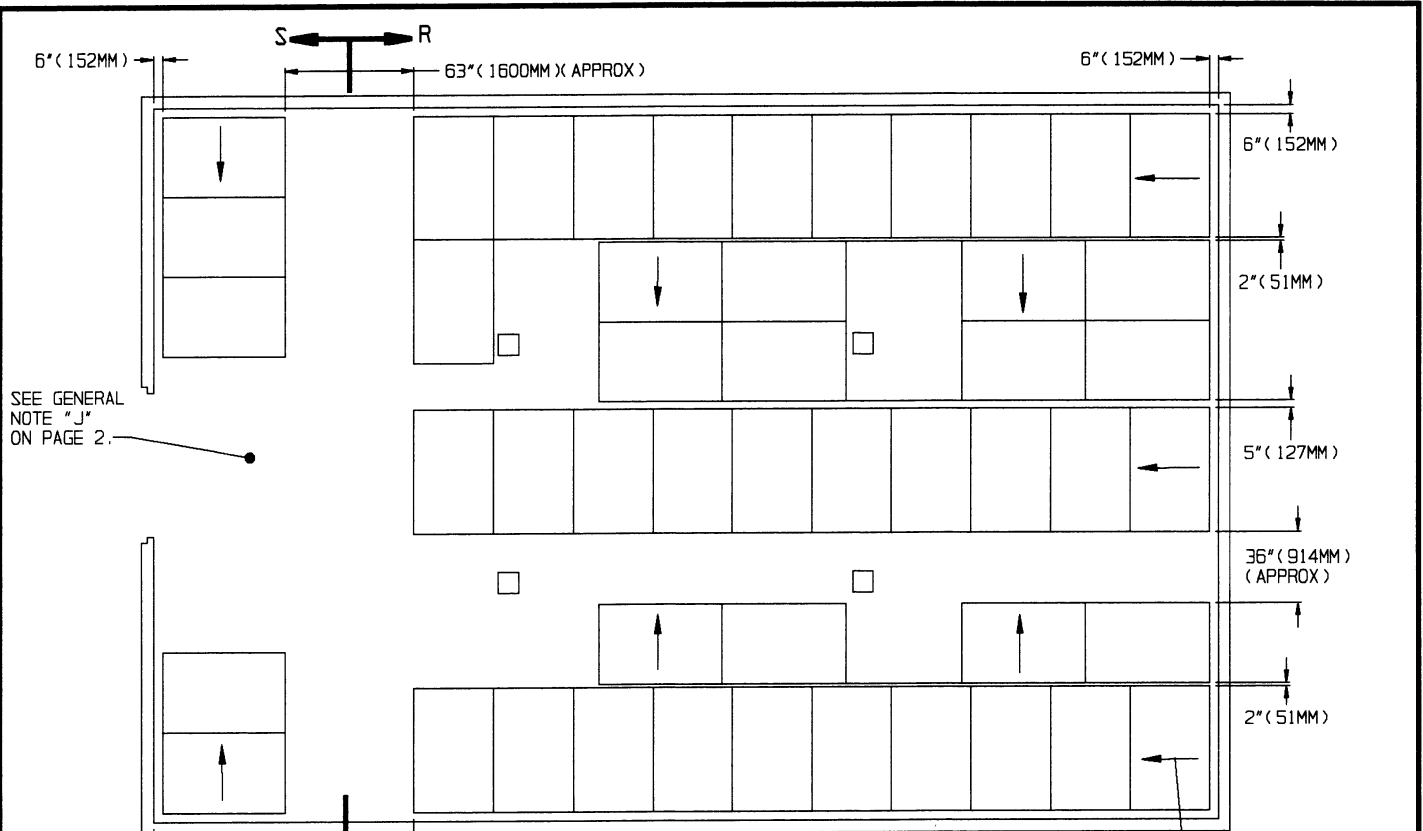
<u>ITEM</u>	<u>QUANTITY</u>
CONTAINERS - - - - -	335



ISOMETRIC VIEW
(TYPE II BUNKER MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

<u>BILL OF MATERIAL (PER UPPER LAYER CONTAINER)</u>		
<u>LUMBER</u>	<u>LINEAR FEET</u>	<u>BOARD FEET</u>
2" X 6"	9	9



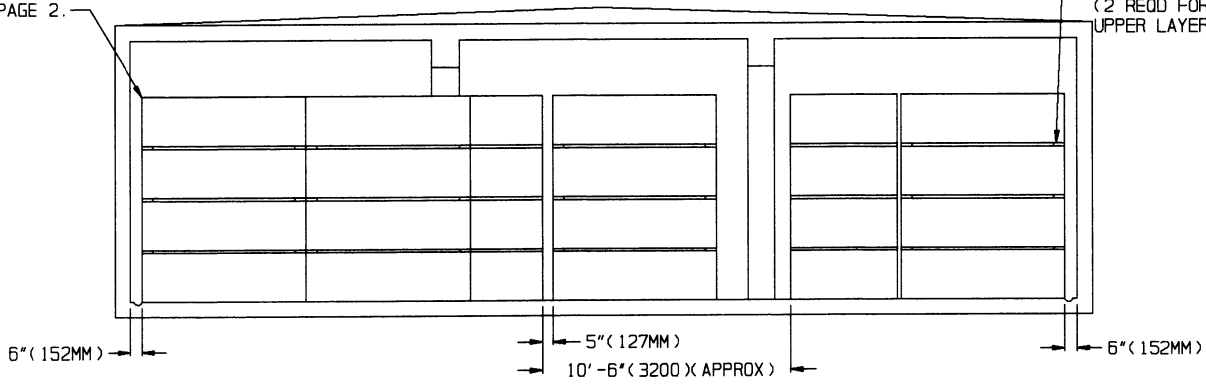
SEE GENERAL NOTE "J" ON PAGE 2.

SEE GENERAL NOTE "K" ON PAGE 2.

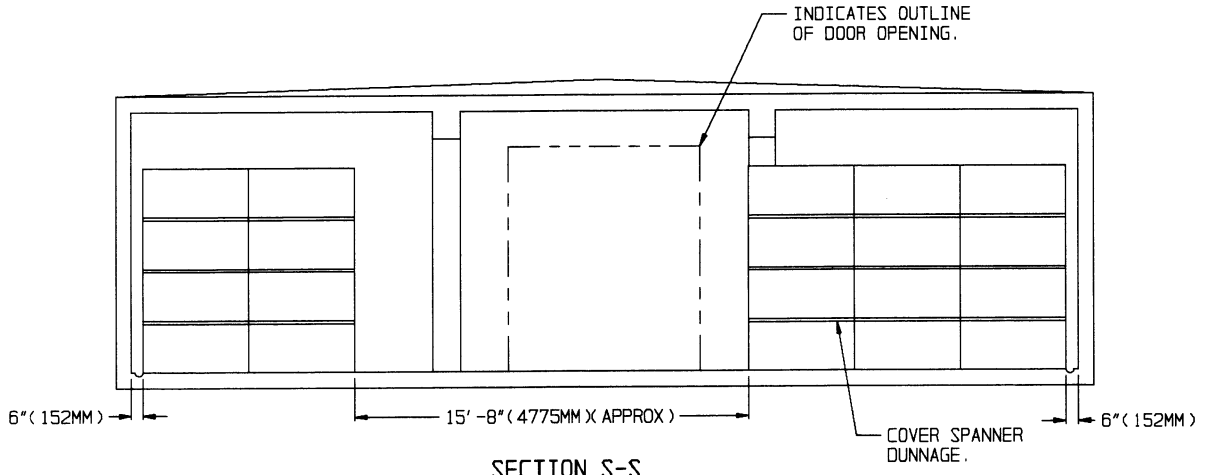
ARROWS INDICATE DIRECTION OF STORAGE FROM WALL OF MAGAZINE.

COVER SPANNER DUNNAGE, 2" X 6" X 54" (2 REED FOR EACH UPPER LAYER CONTAINER)

PLAN VIEW
(TYPE III BUNKER MAGAZINE)



SECTION R-R



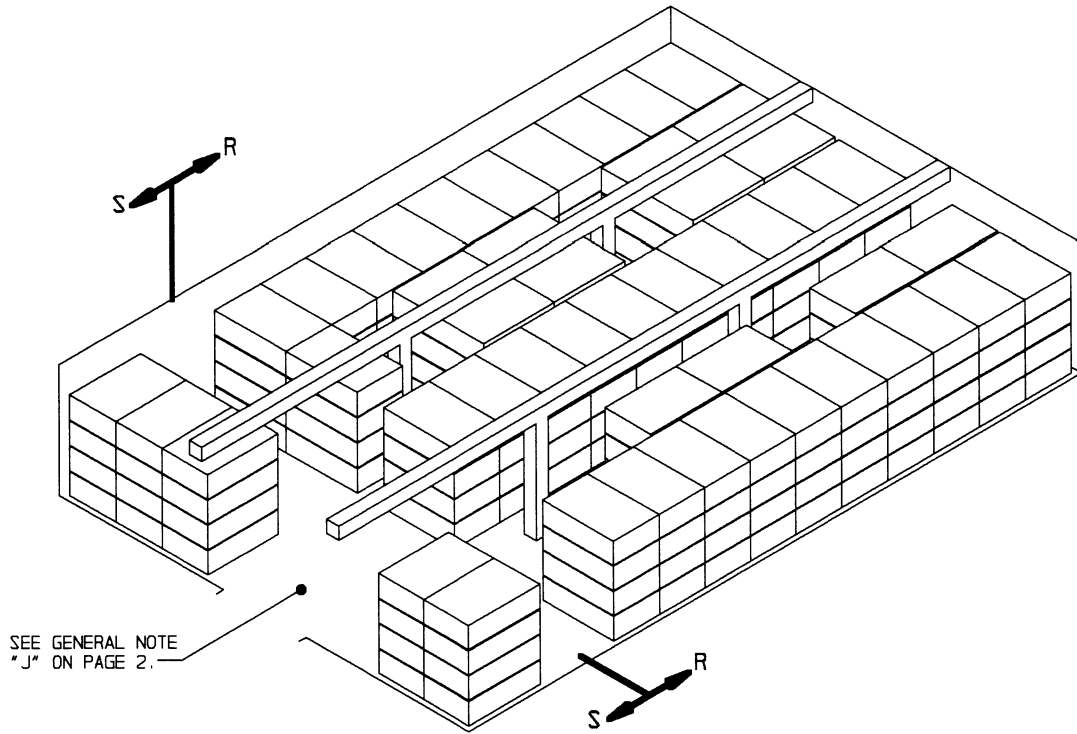
SECTION S-S

INDICATES OUTLINE OF DOOR OPENING.

COVER SPANNER DUNNAGE.

STORAGE IN TYPE III BUNKER

<u>ITEM</u>	<u>QUANTITY</u>
CONTAINERS - - - - -	192

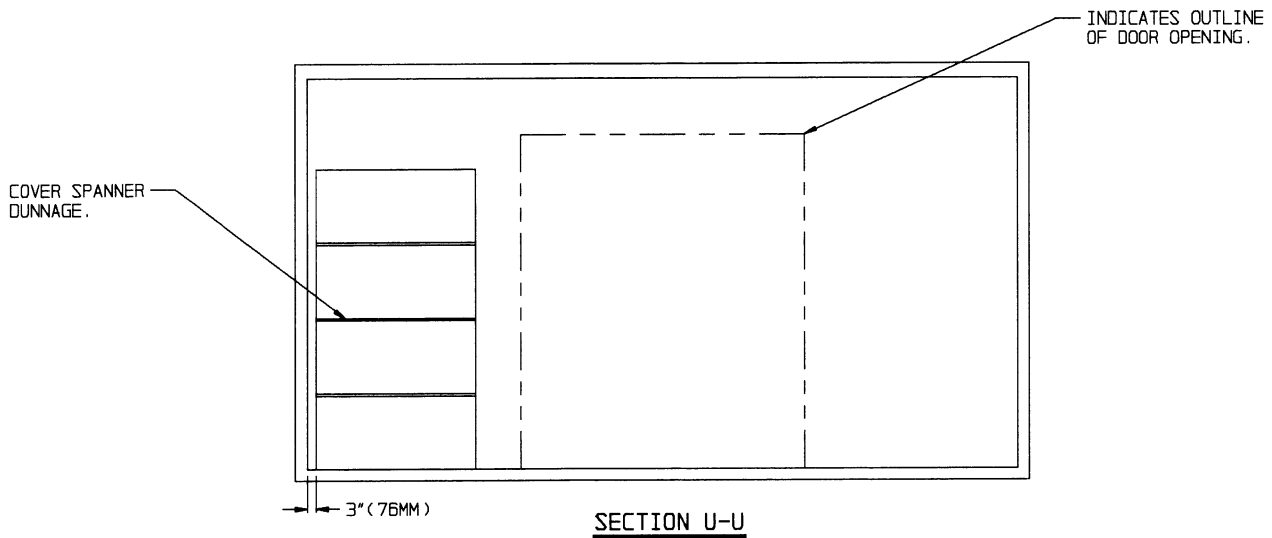
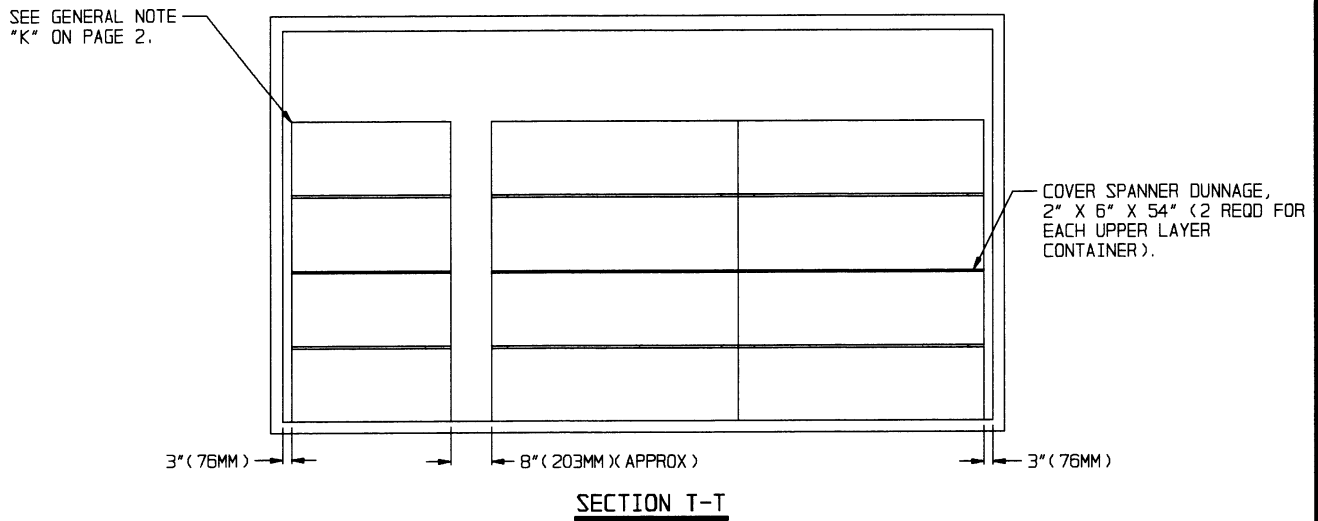
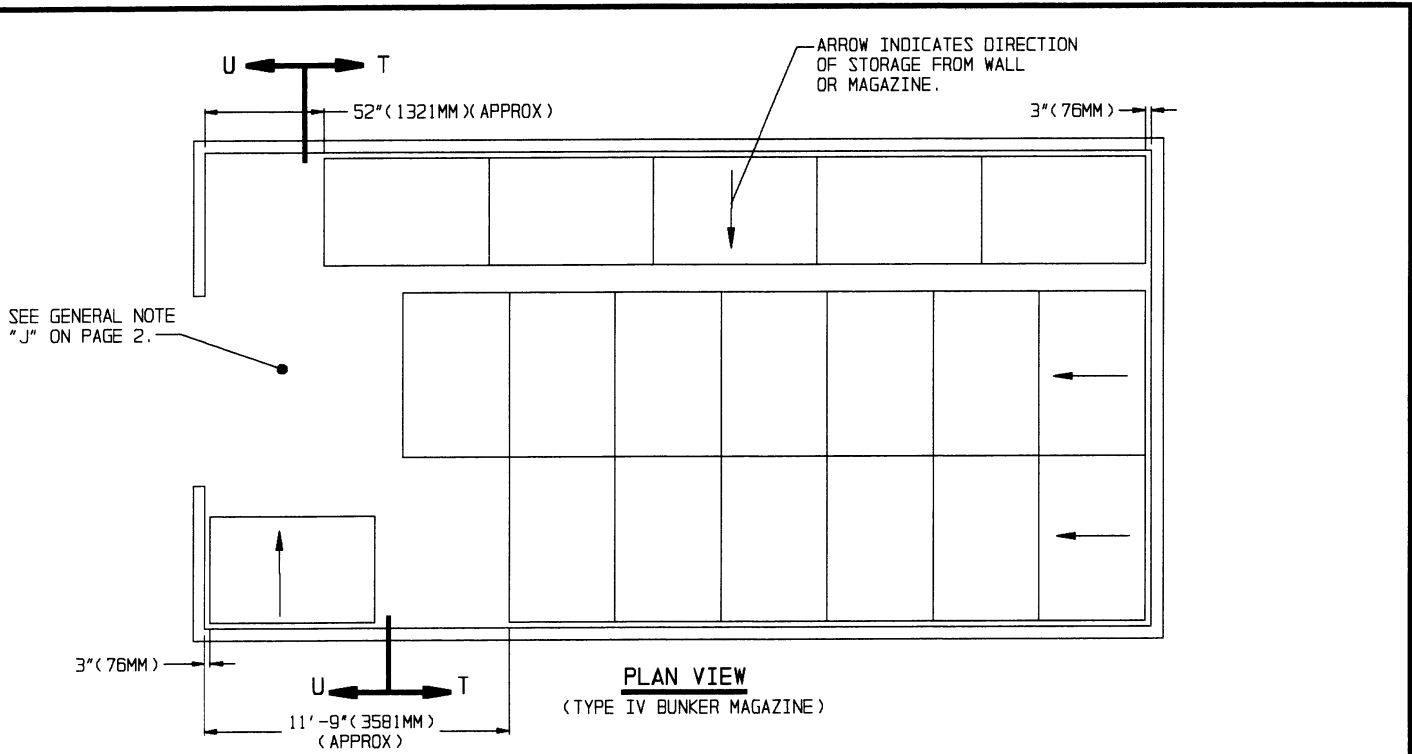


SEE GENERAL NOTE
"J" ON PAGE 2.

ISOMETRIC VIEW
(TYPE III BUNKER MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

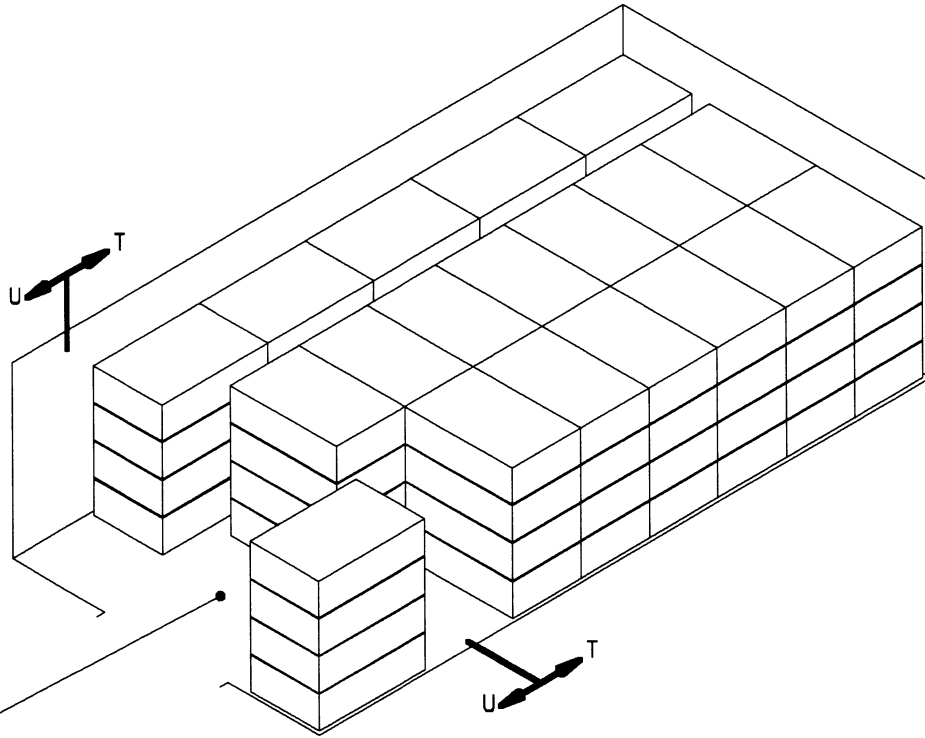
<u>BILL OF MATERIAL (PER UPPER LAYER CONTAINER)</u>		
<u>LUMBER</u>	<u>LINEAR FEET</u>	<u>BOARD FEET</u>
2" X 6"	9	9



STORAGE PROCEDURES IN 40'-0" L X 20'-0" W X 11'-0" H TYPE IV BUNKER MAGAZINE

STORAGE IN TYPE IV BUNKER

<u>ITEM</u>	<u>QUANTITY</u>
CONTAINERS - - - - -	76



SEE GENERAL NOTE "J"
ON PAGE 2.

ISOMETRIC VIEW
(TYPE IV BUNKER MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS",
SEE PAGE 2.

<u>BILL OF MATERIAL (PER UPPER LAYER CONTAINER)</u>		
<u>LUMBER</u>	<u>LINEAR FEET</u>	<u>BOARD FEET</u>
2" X 6"	9	9

