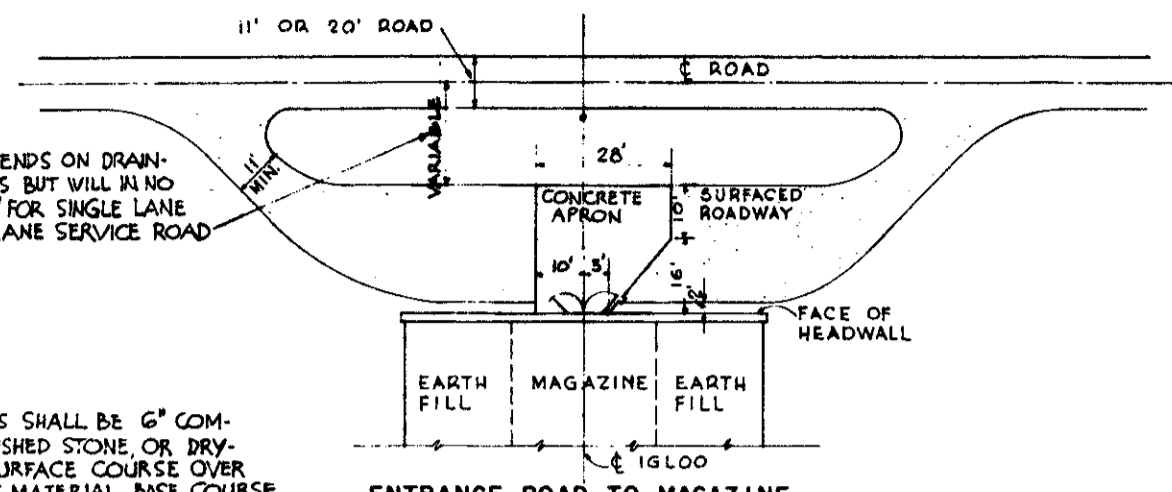
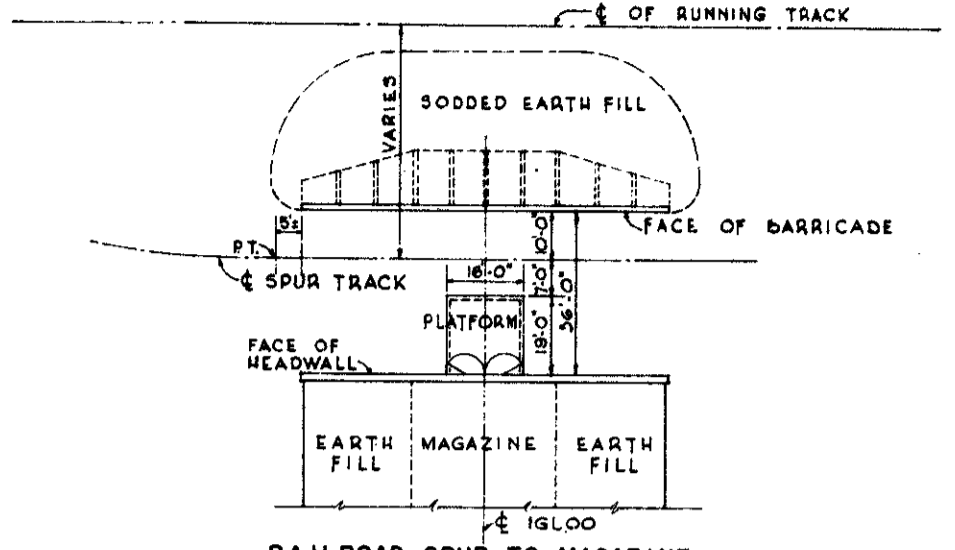


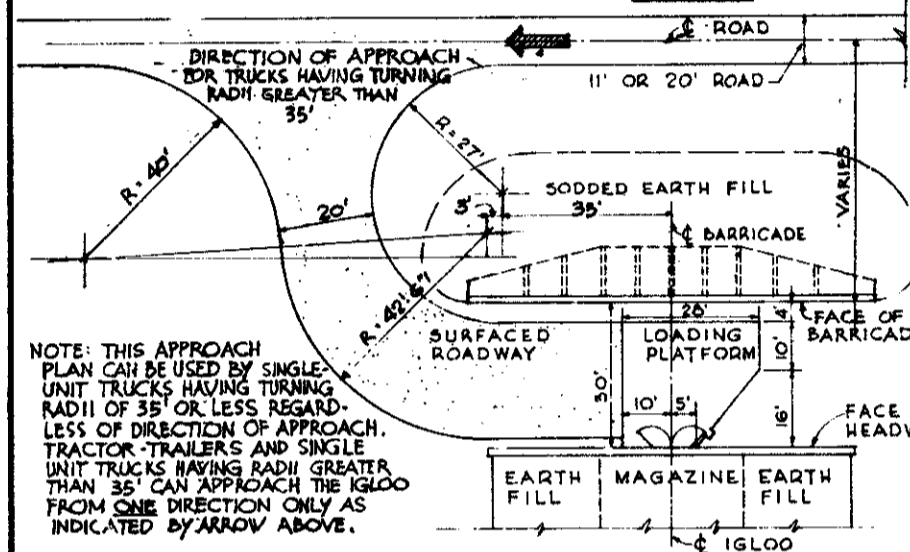
ENTRANCE ROAD TO MAGAZINE WITH TRUCK LEVEL PLATFORM WITHOUT BARRICADE
1" = 20'-0"



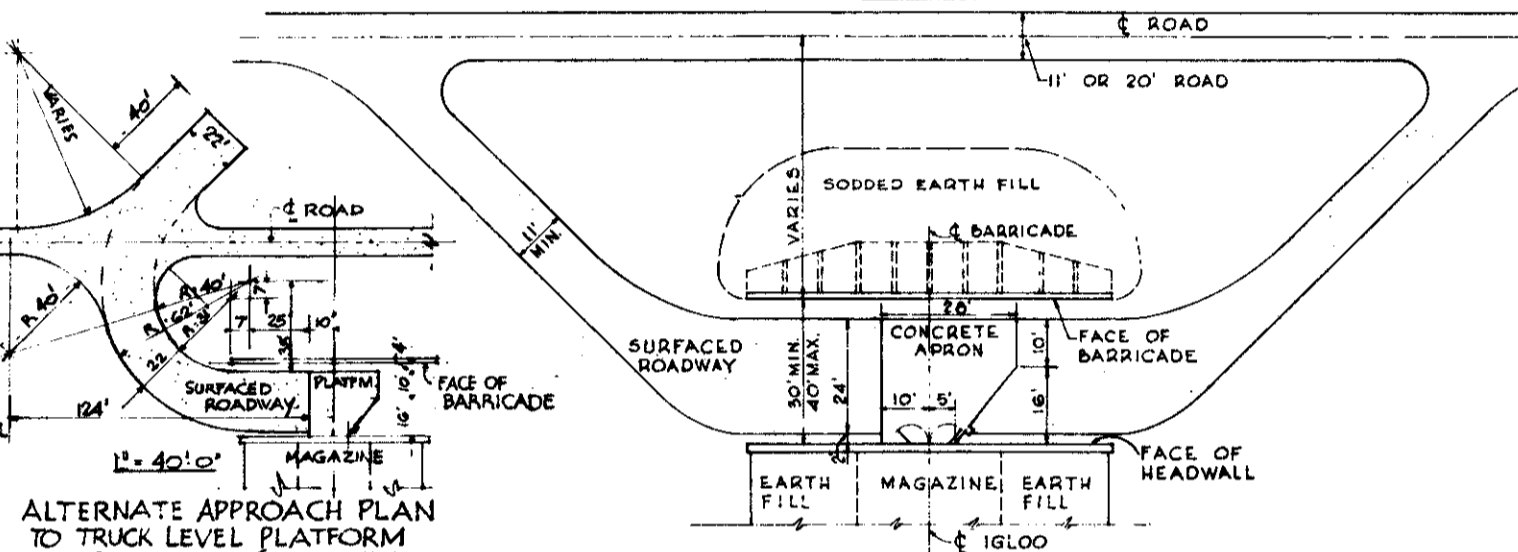
ENTRANCE ROAD TO MAGAZINE WITH GROUND LEVEL PLATFORM WITHOUT BARRICADE
1" = 20'-0"



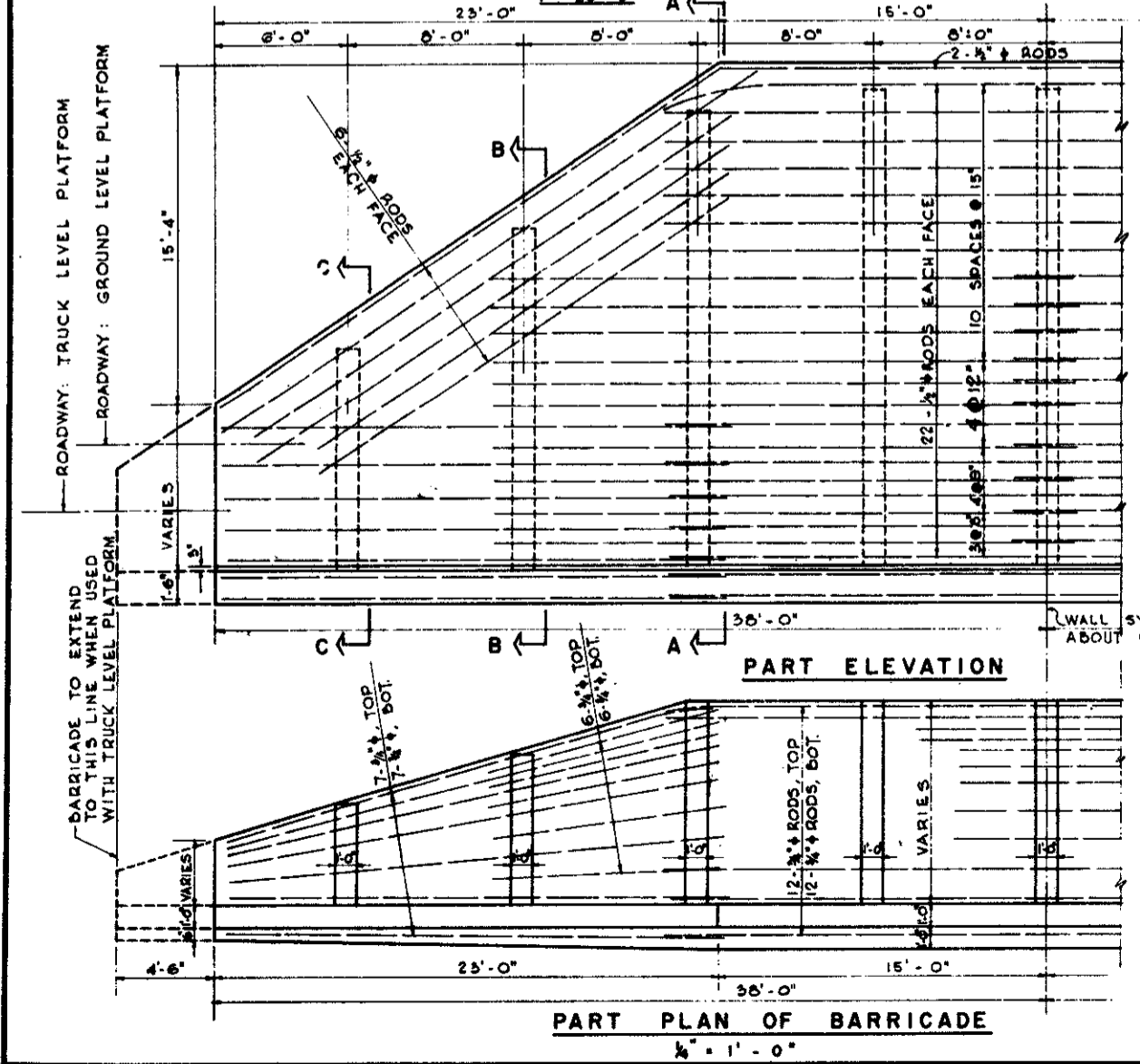
RAILROAD SPUR TO MAGAZINE WITH HIGH OR LOW LEVEL PLATFORM WITH BARRICADE
1" = 20'-0"



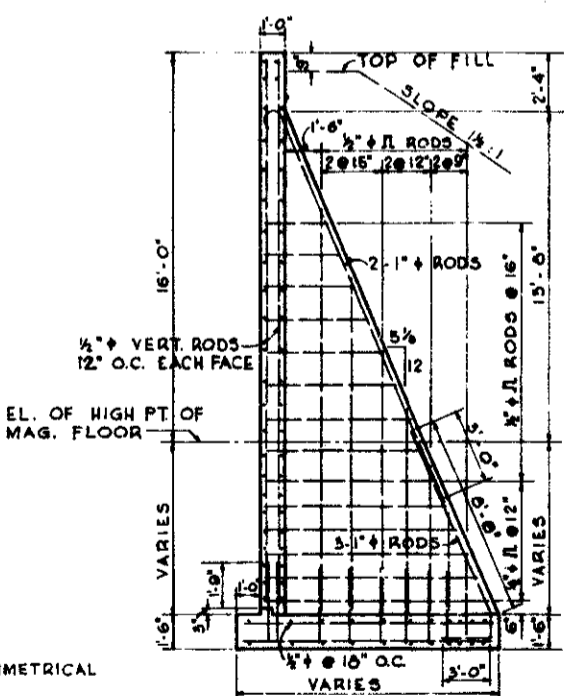
ENTRANCE ROAD TO MAGAZINE WITH TRUCK LEVEL PLATFORM WITH BARRICADE
1" = 20'-0"



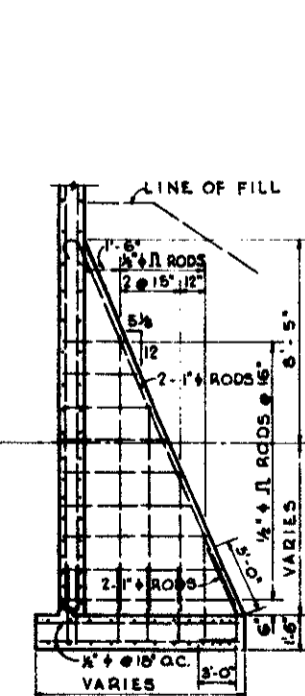
ENTRANCE ROAD TO MAGAZINE WITH GROUND LEVEL PLATFORM WITH BARRICADE
1" = 20'-0"



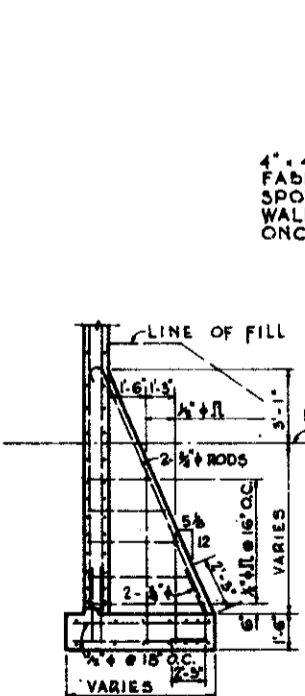
PART PLAN OF BARRICADE
1/4" = 1'-0"



SECTION A-A
1/4" = 1'-0"



SECTION B-B
1/4" = 1'-0"

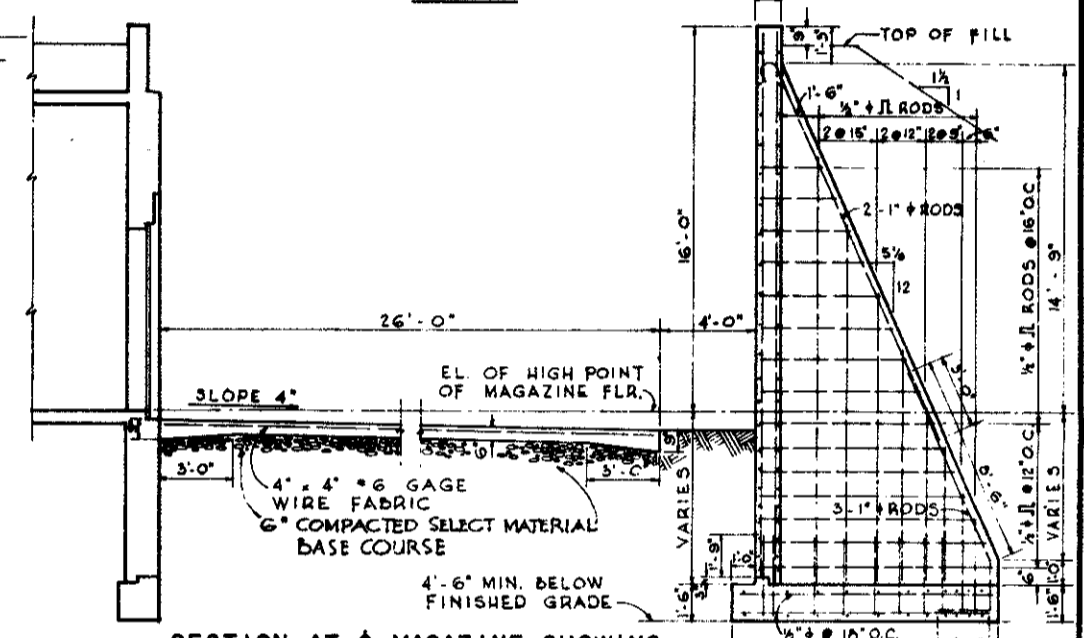


SECTION C-C
1/4" = 1'-0"

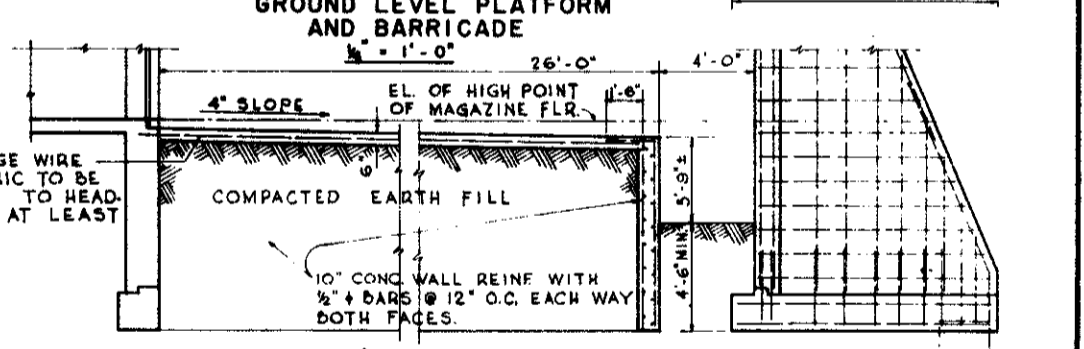
FLOOR AND PLATFORM OF IGLOO 5'-9" ABOVE SURFACE OF PAVEMENT WILL BE PERMITTED ONLY WHEN JUSTIFIED BY SPECIAL USAGE OR WHEN TERRAIN WILL PERMIT THE USE WITHOUT ADDITIONAL COST.

BARRICADES TO BE CONSTRUCTED ONLY WHEN NECESSARY FOR SAFETY REQUIREMENTS

RAIL SPUR TO INDIVIDUAL IGLOOS WILL ONLY BE CONSTRUCTED WHEN AUTHORIZED BY OFFICE, CHIEF OF ENGINEERS.



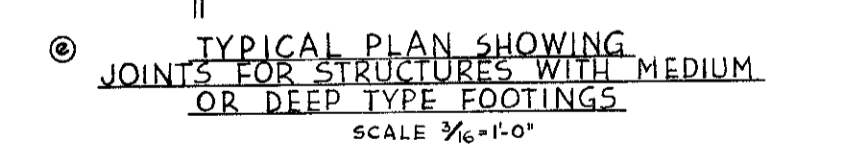
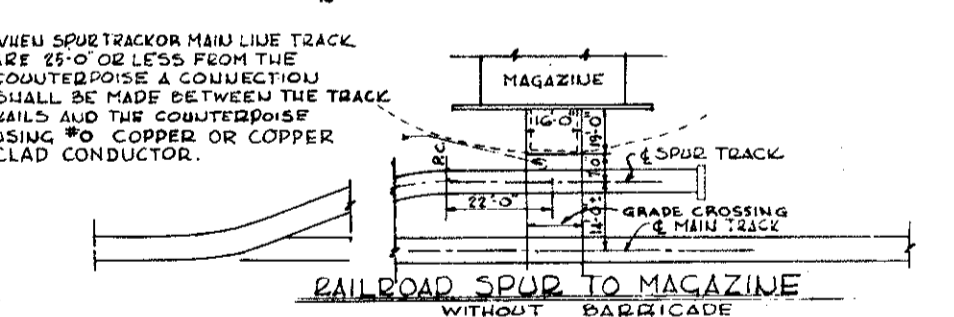
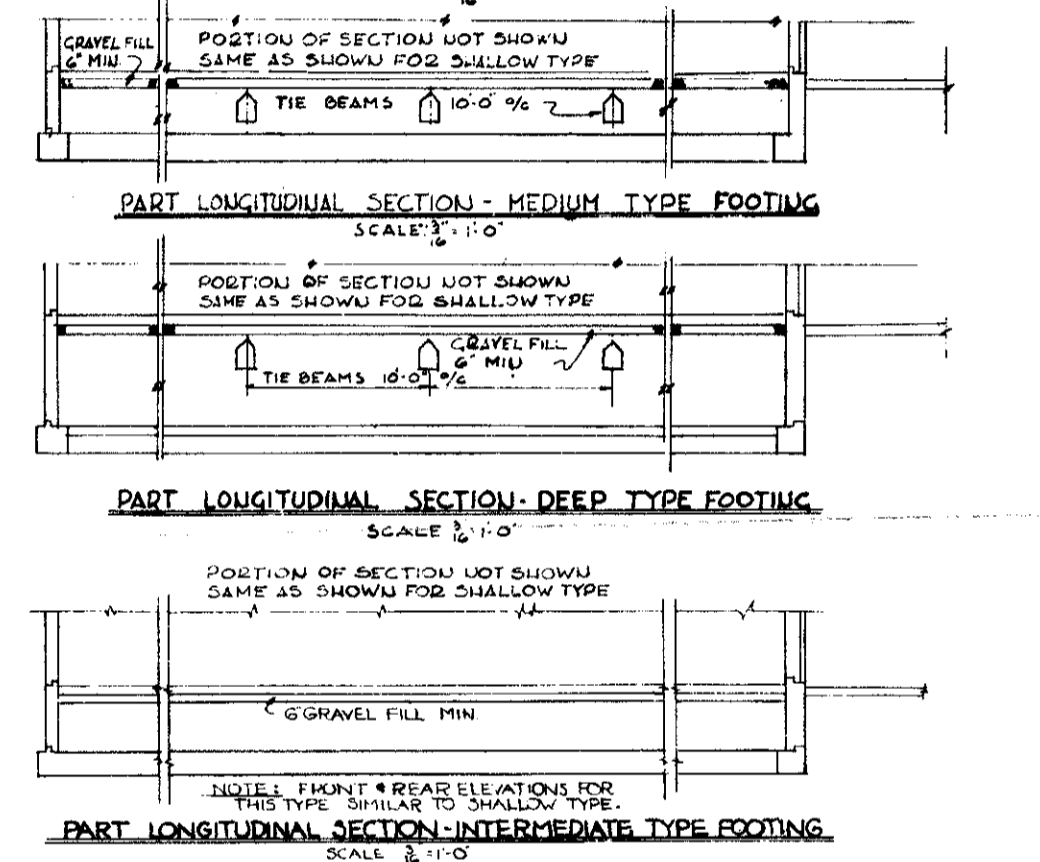
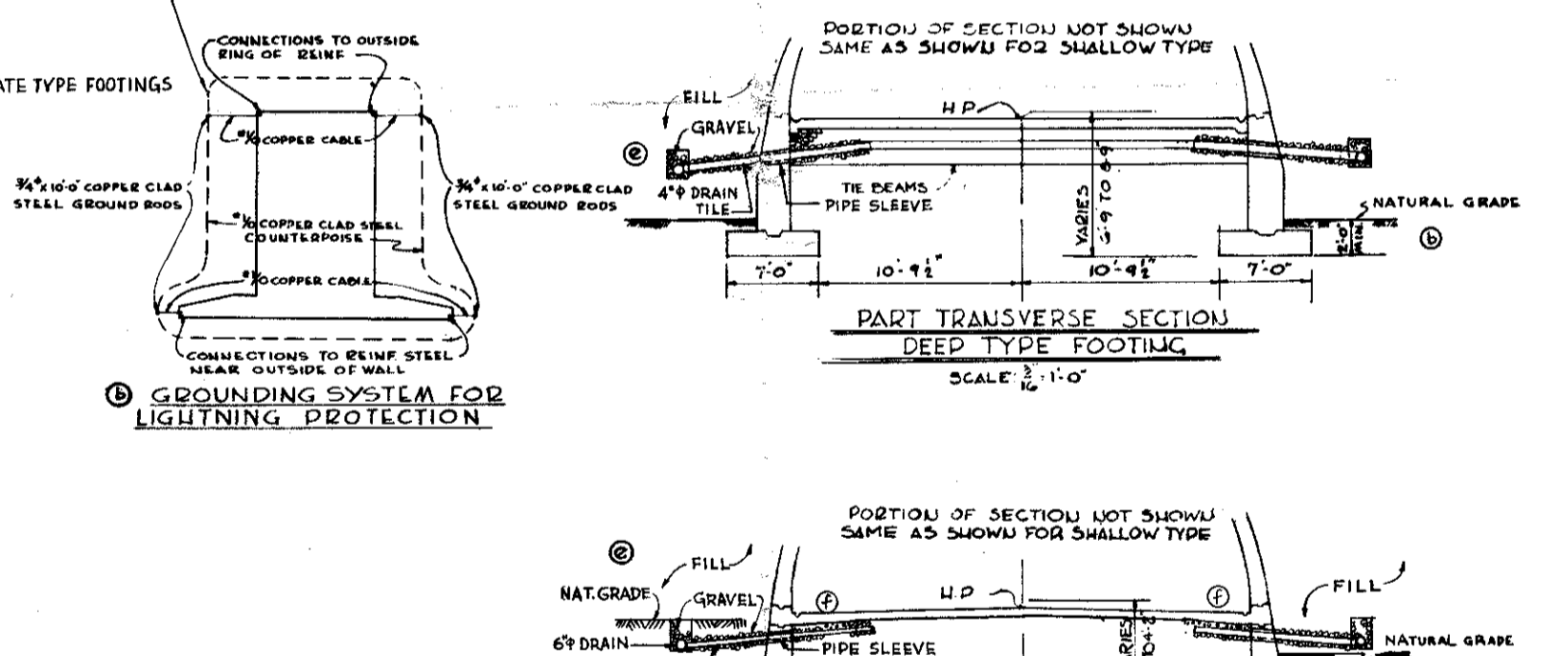
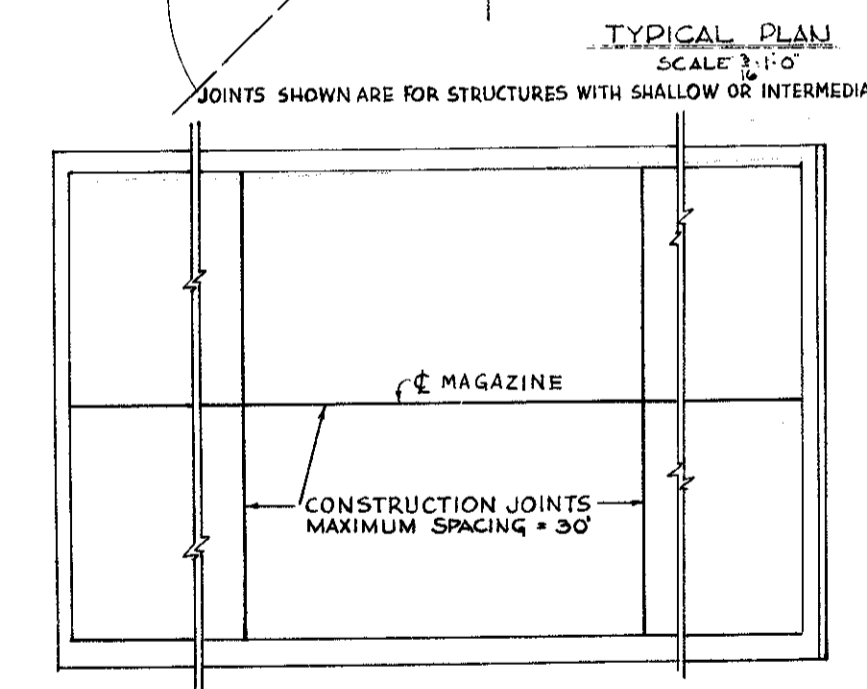
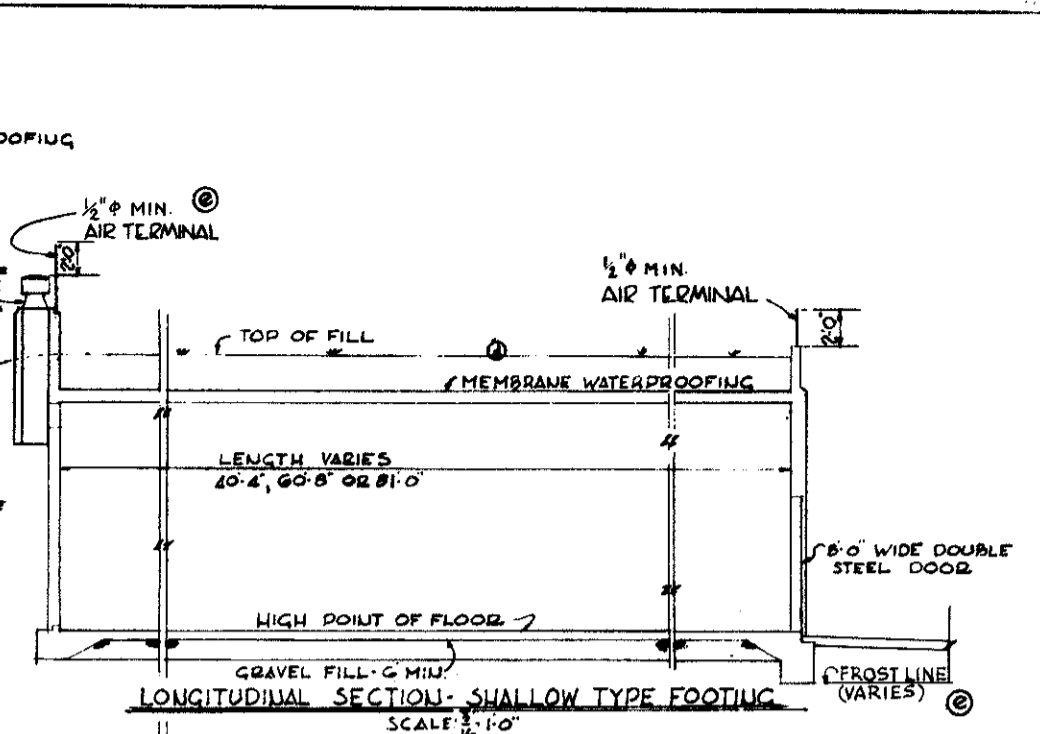
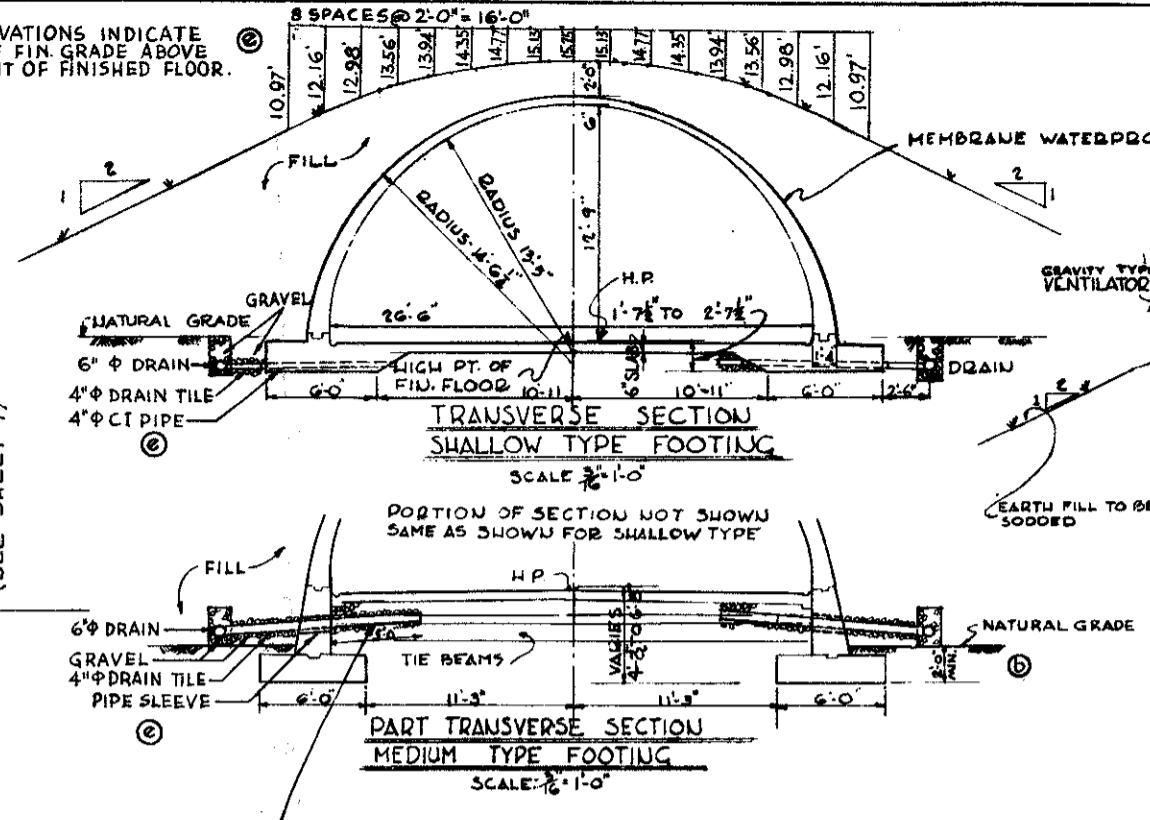
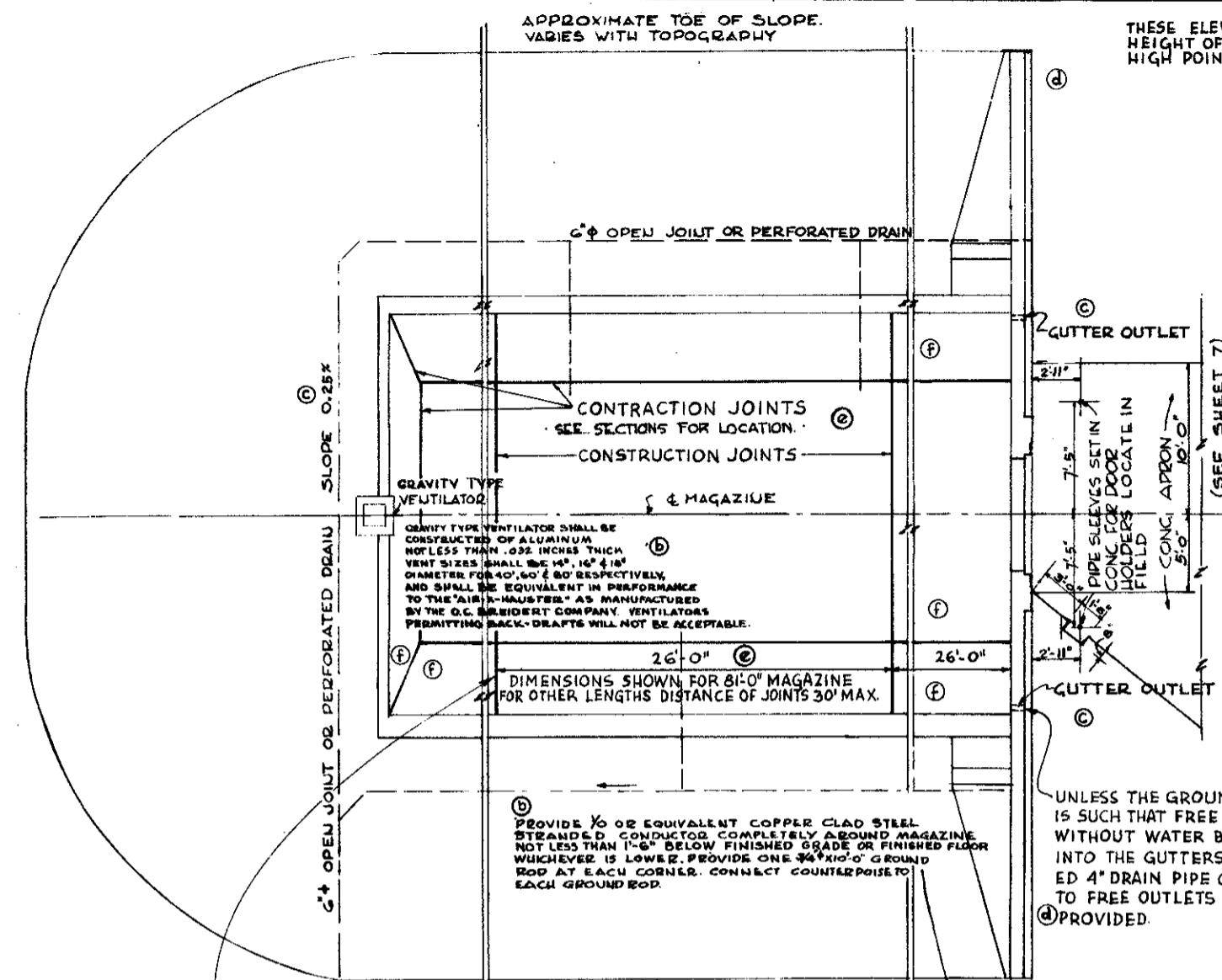
SECTION AT MAGAZINE SHOWING GROUND LEVEL PLATFORM AND BARRICADE
1/4" = 1'-0"



SECTION AT MAGAZINE SHOWING TRUCK LEVEL PLATFORM AND BARRICADE
1/4" = 1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
HOWE, FOSTER & SNYDER ARCHITECTS - ENGINEERS WASHINGTON, D. C.		DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS MILITARY CONSTRUCTION - ENGINEERING DIVISION WASHINGTON, D. C.	
DRAWN BY:	W. T. M.	MAGAZINE MOUNDED CONCRETE IGLOO	
TRACED BY:	W. T. M.		
CHECKED BY:	JRS		
APPROVED BY:	<i>[Signature]</i>	DATE: 28 OCT 1954	
SCALE AS SHOWN		SHEET NUMBER: 33-15-06	
SHEET 7 OF 7			

CAUTION: After using chemical correction fluid on photographic film, wash or rinse eradicated area with clean water.



TYPICAL PLANS & SECTIONS FOR 40' MAGAZINE 60' & 80' MAGAZINES SIMILAR

NOTE: NO BLASTING WILL BE PERFORMED IN CONNECTION WITH CONSTRUCTION WITHOUT APPROVAL OF THE CONTRACTING OFFICER.

10. WHEN THE FLOOR IS ABOVE NATURAL GRADE THE FILL WILL BE COMPACTED TO OBTAIN A MINIMUM SOIL VALUE OF 3000 P.S.I.

11. PAINT INTERIOR 2 COATS OF WHITE CEMENT-WATER PAINT

ABBREVIATIONS

1. C.I. - CONSTRUCTION JOINT - 4. N.S. - NEAR SIDE	2. I.F. - INSIDE FACE	3. O.F. - OUTSIDE FACE	4. E.F. - EACH FACE
--	-----------------------	------------------------	---------------------

SCHEDULE OF DRAWINGS

DWG. NO.	SHEET	TITLE
33-15-01	1 OF 7	TYPICAL PLAN & SECTIONS
33-15-02	2 OF 7	HALF FLOOR PLAN, SECTIONS & DETAILS
33-15-03	3 OF 7	HALF ELEVATIONS & DETAILS
33-15-04	4 OF 7	MISC. SECTIONS & DETAILS
33-15-05	5 OF 7	DOOR DETAILS, REAR WALL ELEV. & DETAILS
33-15-06	6 OF 7	WALL VENTILATOR & VENTILATOR STACK DETAILS
33-15-07	7 OF 7	APPROACH ROAD & BARRICADE DETAILS

REVISIONS

NO.	DESCRIPTION	DATE	APPROVAL
1	TYPICAL PLANS, JOINTS INDICATED AND PLAN ADDED.	29 JULY 50	CCD
2	TRANSVERSE SECTIONS, GRADE ELEVATIONS & FOOTINGS DRAWN TO SCALE. NOTE: REVISED DRAIN SIZES & PIPES SHOWN.		
3	LONG SPECIFICATIONS AIR TERMINAL, SIDE REVISION, FRONT WALL LOWERED, NOTE REGARDING COUNTERPOISE.	11 OCT 50	CCD
4	HEADWALL EXTENDED, EARTH RAMP MODIFIED.	28 OCT 50	CCD
5	ENTRANCE ROAD PLAN REVISED AND TRANSFERRED TO SHEET 7.		
6	GENERAL NOTE G MODIFIED.		
7	INTERMEDIATE AIR TERMINALS DELETED.		
8	AIR TERMINALS ADDED, DRAIN DITCH OMITTED, DRAIN TILE SLOPE CHANGED.	12 OCT 50	SLU
9	NATURAL GRADE, LIGHTNING PROTECTION, & VENTILATOR ADDED.	7 AUG 51	SLU
10	PREVIOUS DRAWING NUMBERS SUPERSEDED.	31 MAR 52	CCD

- GENERAL NOTES
- DESIGN LIVE LOAD FOR FLOOR SLAB IS 9000 LBS. PER SQUARE FOOT
 - ALL CONCRETE SHALL DEVELOP A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT THE END OF 28 DAYS OF 2500 LBS. PER SQUARE INCH.
 - FINISHES ARE AS FOLLOWS:
 - FLOOR AND PLATFORM TROWELED SMOOTH.
 - TOPS OF WALL AND ENTRANCE TROWELED SMOOTH.
 - ALL OTHER SURFACES SHALL BE DENSE AND SMOOTH AS CAN BE OBTAINED BY CAREFUL FORMWORK, PROPER PLACING AND SPADING OF CONCRETE. ALL FINISHER PROJECTIONS SHALL BE CAREFULLY REMOVED AND ALL HONEYCOMB SHALL BE CAREFULLY AND COMPLETELY POINTED.
 - ALL EXPOSED CORNERS AND EDGES SHALL BE CHAMFERED.
 - REINFORCING BARS MAY BE INTERMEDIATE BILLET, HARD BILLET OR HARD RAIL STEEL. WIRE MESH IS TO BE ELECTRICALLY WELDED FABRIC OF COLD DRAWN MILD STEEL.
 - EARTH COVER WILL BE 2'-0" THICK AT CROWN AND SHOULD SLOPE AT 1 VERTICAL TO 2 HORIZONTAL.
 - COVERING MATERIAL SHOULD BE EARTH SELECTED WITH REGARD TO STABILITY WITH RESPECT TO SETTLEMENT AND EROSION, AND SHOULD NOT CONTAIN MORE THAN 15% OF GRAVEL RETAINED ON #4 SCREEN AND SHOULD BE FREE OF STONES RETAINED ON #1 SCREEN.

- CONC. THE GRAVEL IS PERMISSIBLE ONLY AS RANDOM POUND AND SHOULD NOT BE IN FORM OF A BLANKET OR LAYER.
- SURFACE SHOULD BE STABILIZED BY ESTABLISHMENT OF A VEGETATIVE COVER OR BY MECHANICAL STABILIZATION TREATMENTS APPROPRIATE TO THE LOCAL SOIL TYPE AND CLIMATE.
- EARTH COVER FOR ARCH SHALL BE PLACED IN SUCH A MANNER THAT DIFFERENCE IN HEIGHT OF EARTH FILL SHALL BE NOT MORE THAN 2'-0" AT ANY TIME. FILL ON OPPOSITE SIDES OF ARCH IS TO BE PLACED SIMULTANEOUSLY.
- EARTH COVER SHALL BE PLACED IN SUCH A MANNER THAT INJURY TO MEMBRANE WATERPROOFING WILL NOT OCCUR.
- BACKFILLING OPERATIONS SHALL NOT BE COMMENCED UNTIL APPROVAL HAS BEEN SECURED FROM THE CONTRACTING OFFICER.
- FRONT WALL FOOTING SHALL BE PROVIDED WITH A FRONT CURTAIN AT THE DISCRETION OF THE CONTRACTING OFFICER.
- PROVIDE 6" PERFORATED OR OPEN JOINTED DRAINS AT FOOTINGS OF DEAR AND SIDE WALLS, SLOPE 0.25% TO OUTLET.
- WHERE INDICATED ON THE DRAWINGS, PROVIDE 5 PLY MEMBRANE WATERPROOFING PROTECTED BY 1/2" OF PARQUING.
- MIN. COVER FOR REINF. IS TO BE 2" UNLESS SHOWN OTHERWISE.

- CONTINUED:
- SHALLOW TYPE FOOTINGS ARE TO BE USED WHEN THE SOIL HAS A MINIMUM BEARING CAPACITY OF 3000 P.S.I. AT FLOOR LEVEL.
 - INTERMEDIATE, MEDIUM DEEP TYPE FOOTINGS THE WIDTHS OF THESE FOOTINGS SHOWN ARE BASED ON A MINIMUM BEARING CAPACITY OF 5500 P.S.I. WHEN THE SOIL BEARING CAPACITY IS OTHER THAN 5500 P.S.I. THE SIZES OF FOOTINGS ARE TO BE MODIFIED ACCORDINGLY.
 - 5-PLY WATERPROOFING MEMBRANE SHALL HAVE TOP & BOTTOM PLY OF FABRIC OR FIBERGLASS.
 - OPTIONAL METHODS OF PROTECTION FOR MEMBRANE WATERPROOFING INCLUDE 3/4" THICK ASPHALT-SATURATED FIBERBOARD, TREATED FOR PROTECTION AGAINST FUNGI, TERMITES, MOLD AND VERMIN, OR 1/2" THICK ASPHALT-SATURATED FIBERGLASS MAT.
 - SEE ABOVE

ROSS & WALTON ARCHITECTS-ENGINEERS

DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS MILITARY CONSTRUCTION - ENGINEERING DIVISION WASHINGTON, D. C.

MAGAZINE MOUNDED CONCRETE IGLOO

TYPICAL PLAN & SECTIONS

APPROVED: [Signature] DATE: 1 AUG 1951

SCALE AS NOTED 33-15-06

33-15-06-82-02

33-15-06

1 OF 7

#28