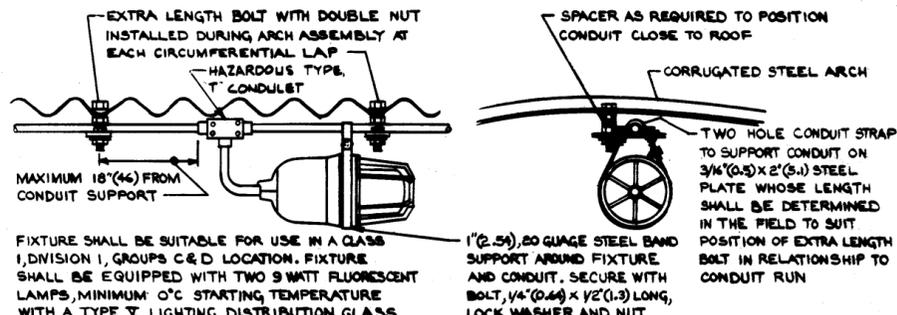


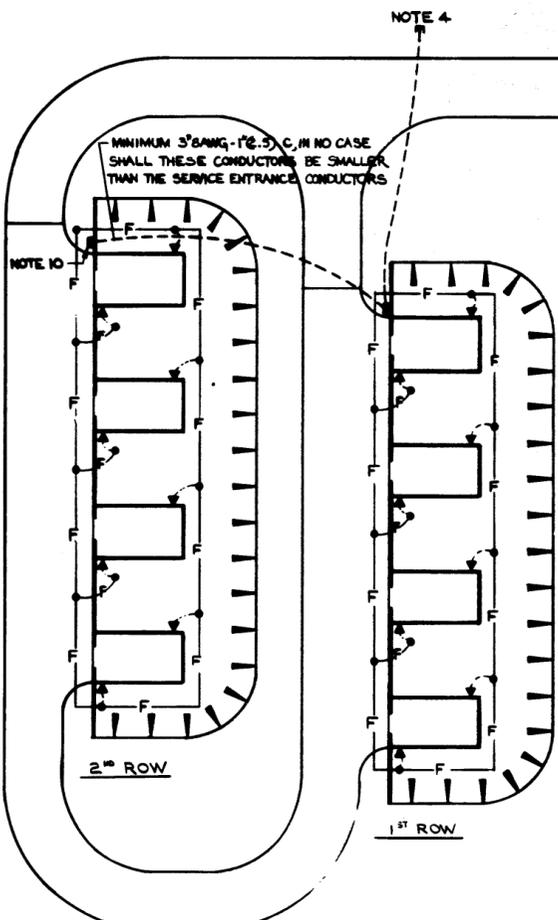
FIXTURES REQUIRED				CONNECTED LOAD			
STRUCTURE	INTERIOR LIGHTING	INTERIOR LIGHTING	EXTERIOR	PER	PANEL	8 MAG.	
WIDTH	LENGTH	MOUNTING	LAMP/FIXT	TOTAL	TOTAL	TOTAL	
FT.(M)	FT.(M)	HGT. A.F.F.	QUANTITY	WATTS	WATTS	WATTS	
8(2.4)	11(3.4-10.4)	7'-4"(2.23)	3	42/126	400	1600	3200
8(2.4)	15(4.6-13.4)		4	42/126	450	1800	3600
8(2.4)	19(5.8-16.6)		5	42/126	500	2000	4000
8(2.4)	23(7.0-19.8)		6	42/126	550	2200	4400
10(3)	11(3.4-10.4)	6'-7"(2.01)	3	42/126	400	1600	3200
10(3)	15(4.6-13.4)		4	42/126	450	1800	3600
10(3)	19(5.8-16.6)		5	42/126	500	2000	4000
10(3)	23(7.0-19.8)		6	42/126	550	2200	4400
12(3.7)	11(3.4-10.4)	6'-4"(1.93)	3	42/126	400	1600	3200
12(3.7)	15(4.6-13.4)		4	42/126	450	1800	3600
12(3.7)	19(5.8-16.6)		5	42/126	500	2000	4000
12(3.7)	23(7.0-19.8)		6	42/126	550	2200	4400
14(4.3)	11(3.4-10.4)	6'-4"(1.93)	3	42/126	400	1600	3200
14(4.3)	15(4.6-13.4)		4	42/126	450	1800	3600
14(4.3)	19(5.8-16.6)		5	42/126	500	2000	4000
14(4.3)	23(7.0-19.8)		6	42/126	550	2200	4400



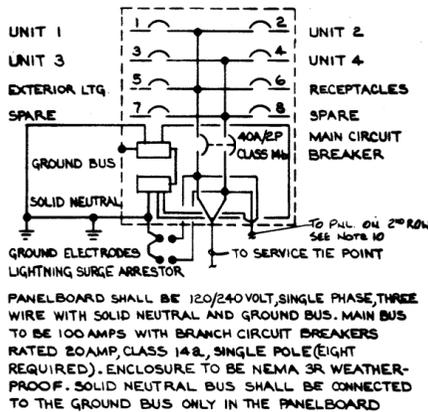
INTERIOR FIXTURE MOUNTING DETAIL
NOT TO SCALE

ELECTRICAL LEGEND

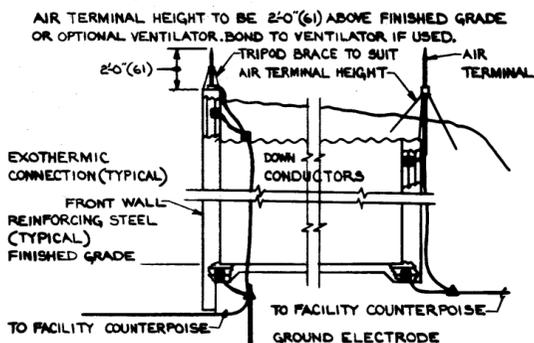
- WALL MOUNTED LIGHTING FIXTURE
- CEILING MOUNTED LIGHTING FIXTURE
- SPECIAL PURPOSE 3-GANG OUTLET BOX, SEE DETAIL 5/5/5
- ⊕ JUNCTION BOX, CAST METAL WITH THREADED WALLS OR HUBS
- LIGHTING PANELBOARD, SEE DETAIL 2/5/5
- ▽ GROUNDING CONNECTION OF DOWN CONDUCTOR TO COUNTERPOISE
- COPPER CLAD STEEL GROUND ROD, 3/4"(1.9) x 10'-0"(3M)
- LIGHTNING AIR TERMINAL, EXTEND 2'-0"(61) ABOVE PROTECTED OBJECT
- VALVE TYPE SECONDARY SURGE ARRESTOR (L.A.)
- (2.54) DIMENSIONS IN PARENTHESES ARE METRIC, CENTIMETERS UNLESS NOTED
- F — FACILITY COUNTERPOISE SYSTEM, 98500 CIRCULAR MILS BARE COPPER WIRE
- DOWN CONDUCTORS FROM BONDS, 65500 CIRCULAR MILS BARE COPPER WIRE
- CONDUIT RUN EXPOSED ON WALLS OR CEILING
- CONDUIT RUN CONCEALED BELOW GRADE



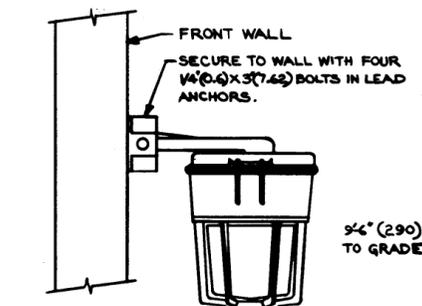
SITING PLAN
NOT TO SCALE



PANELBOARD SCHEMATIC DETAIL
NOT TO SCALE



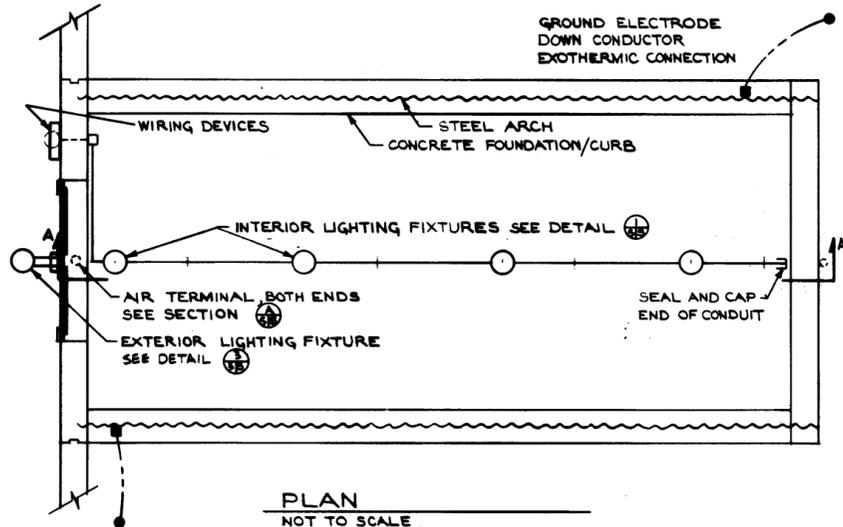
LIGHTNING PROTECTION/GROUNDING SECTION
NOT TO SCALE



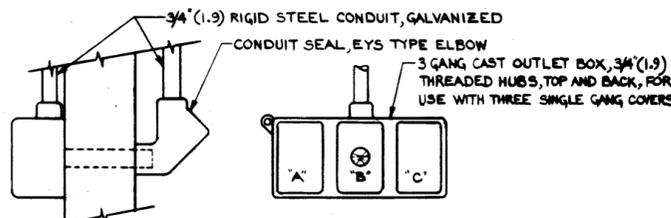
EXTERIOR FIXTURE DETAIL
NOT TO SCALE

NOTES

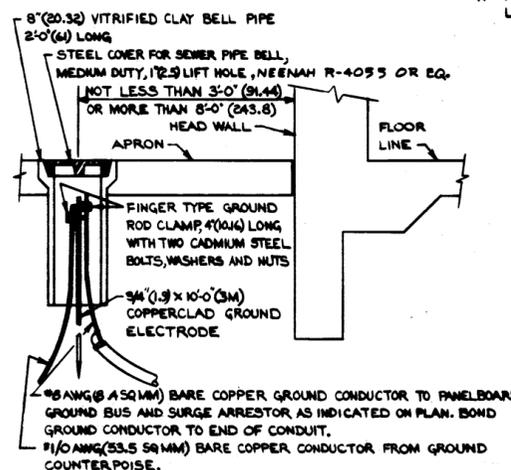
- 1 HOLES SHALL NOT BE MADE IN STEEL ARCH ROOFING FOR ANY ELECTRICAL WORK.
- 2 CONNECT STEEL ARCH, GROUND BUS, GROUNDING ELECTRODE AND AIR TERMINALS TO REINFORCING STEEL OF HEAD AND REAR WALL WITH 65,500 CIRCULAR MILS BARE COPPER STRANDED CONDUCTOR. CONNECTIONS TO REINFORCING STEEL AND 1000 SHALL BE MADE BY EXOTHERMIC PROCESS; OTHER CONNECTIONS SHALL BE MADE BY COMPRESSION TYPE FITTINGS. ALL EXOTHERMIC CONNECTIONS SHALL BE COMPLETE PRIOR TO WATERPROOFING APPLICATION.
- 3 THE FRONT WALL CONDUIT SHALL HAVE HORIZONTAL SUPPORTS SPACED NOT MORE THAN 8'-0"(243.8) OR NOT TO EXCEED 5'-0"(152) FROM CONSTRUCTION JOINTS.
- 4 INSTALL A 1/2"(3.81) EMPTY CONDUIT 2'-0"(61) BELOW FINISHED GRADE FOR THE 120/240 VOLT, GROUND, SINGLE PHASE, THREE WIRE SERVICE. TERMINATE THE CONDUIT WITH A PLUGGED COUPLING NOT LESS THAN 5'-0"(152) BEYOND PAVED AREA.
- 5 EXTERIOR LIGHTING FIXTURES SHALL BE CONTROLLED FROM THE PANEL. A MAXIMUM OF FOUR FIXTURES SHALL BE CONNECTED TO A 20 AMP CIRCUIT.
- 6 THE NUMBER OF INTERIOR LIGHTING FIXTURES VARIES, DEPENDING ON THE INTERNAL LENGTH OF THE MAGAZINE. SEE "FIXTURE REQUIRED" TABLE.
- 7 RUNNING THREAD COUPLING CONNECTIONS ARE NOT PERMITTED FOR THE RIGID CONDUIT SYSTEMS.
- 8 LIGHTNING PROTECTION AIR TERMINALS SHALL BE A MINIMUM 2'-0"(61) IN LENGTH.
- 9 GROUND ELECTRODES SHALL BE LOCATED NOT LESS THAN 3'-0"(91.4) NOR MORE THAN 8'-0"(243.8) FROM THE STRUCTURE.
- 10 WIRING FOR THE HEAD WALL ON THE SECOND ROW OF UNITS IS AS SHOWN EXCEPT THE 120/240 VOLT, SINGLE PHASE, THREE WIRE POWER SUPPLY IS AN EXTENSION OF THE SERVICE ENTRANCE SHOWN OF THE SAME SIZE.
- 11 MAGAZINES EXCEEDING 27'-0"(8.23M) IN LENGTH WILL REQUIRE ADDITIONAL LIGHTING AND LIGHTNING PROTECTION DESIGN.



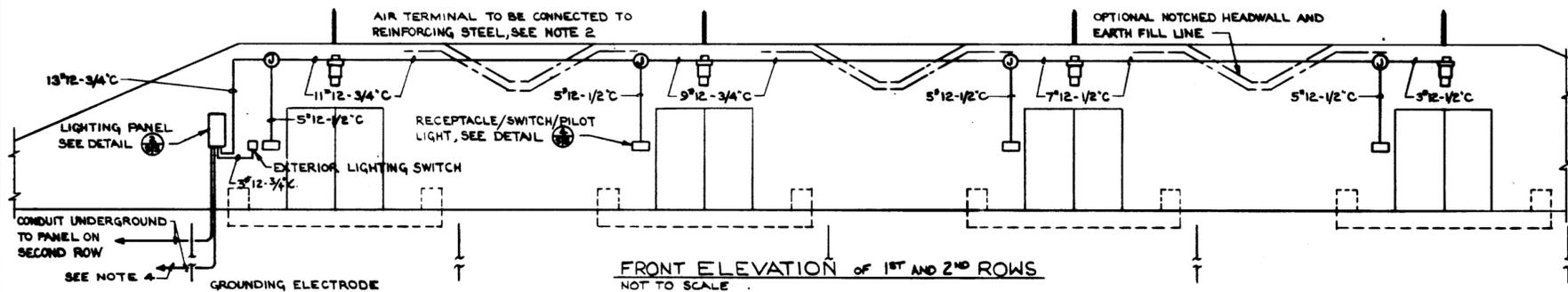
PLAN
NOT TO SCALE



WIRING DEVICE MOUNTING DETAIL
NOT TO SCALE



GROUNDING SYSTEM SECTION
NOT TO SCALE



FRONT ELEVATION OF 1ST AND 2ND ROWS
NOT TO SCALE

Symbol	Description	Date	Approved
Revisions			
SIMONS - EASTERN COMPANY CONSULTING ENGINEERS ATLANTA, GEORGIA		U.S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA	
Site adapt A/E:	EARTH COVERED STEEL ARCH MAGAZINES LIGHTING, WIRING AND LIGHTNING PROTECTION ELECTRICAL		
Dwn. by: J.D. ENGLE	Ckd. by: J.D. ENGLE	Date: 14 FEB 65	Sheet reference number: 33-15-65
Reviewed by:	Drawing code: E-001	Design file no.:	33-15-65
Approved by:		Sheet 5 of 6	