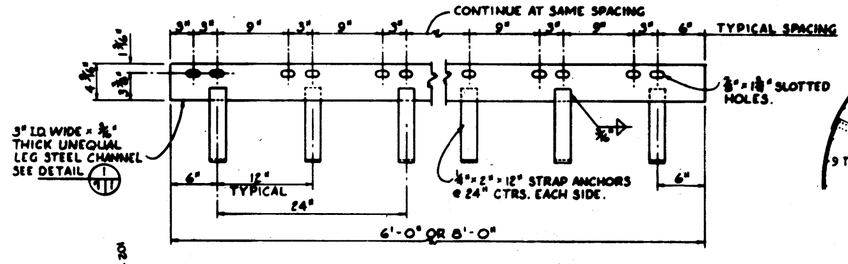
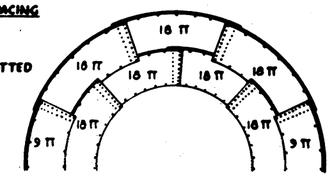
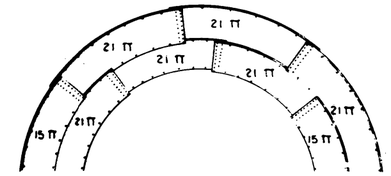


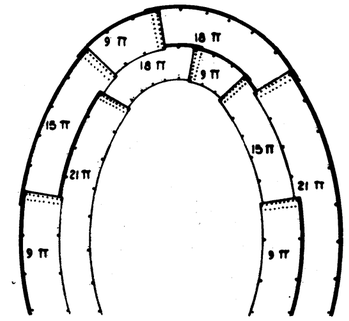
DETAIL 1/7
SCALE 1 1/2"=1'-0"



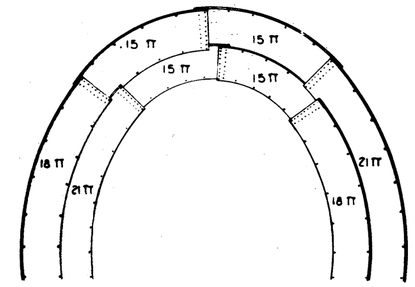
12'-0" WIDE ARCH



14'-0" WIDE ARCH



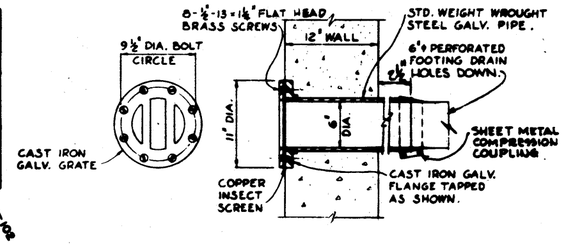
8'-0" WIDE ARCH



10'-0" WIDE ARCH

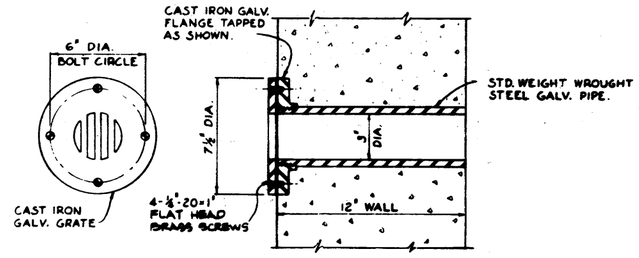
TWO ROWS OF TYPICAL ARCH PLATE INSTALLATION SHOWN FOR EACH ARCH. SUBSEQUENT ROWS OF PLATES TO BE INSTALLED IN A SIMILAR PATTERN.

ARCH PLATE ASSEMBLY
NOT TO SCALE



FRONT ELEVATION ③ SECTION

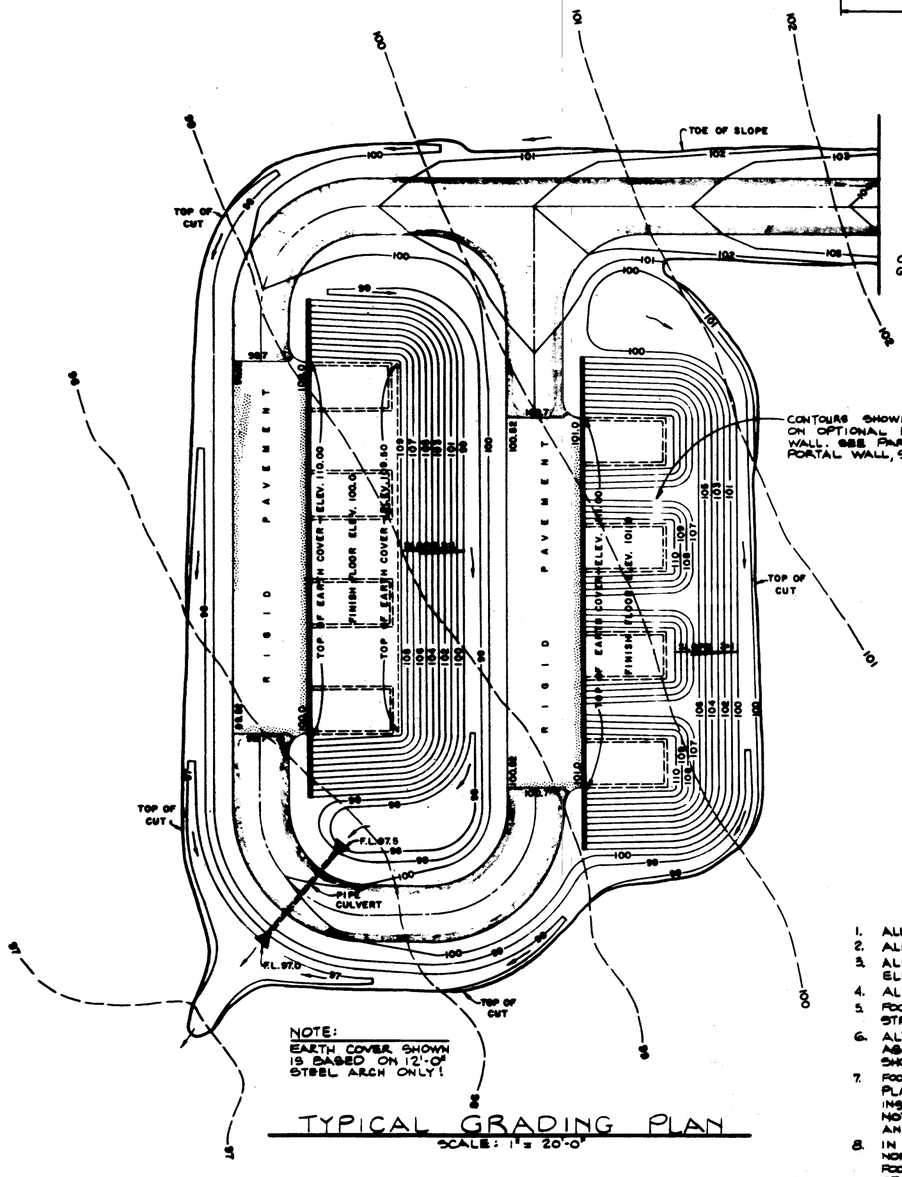
DETAIL 5/7
SCALE 1 1/2"=1'-0"



FRONT ELEVATION SECTION

DETAIL 6/7
SCALE 3"=1'-0"

WEEP HOLES & FOUNDATION DRAIN OUTLETS

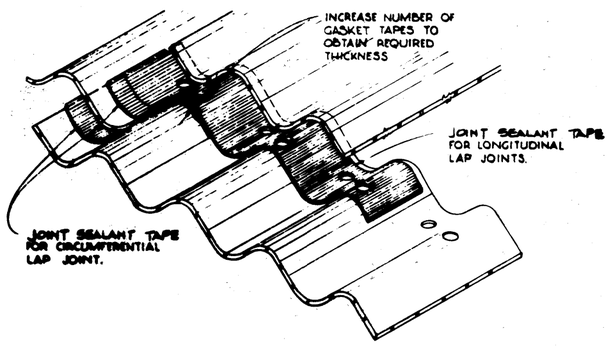


NOTE:
EARTH COVER SHOWN IS BASED ON 12'-0" STEEL ARCH ONLY!

TYPICAL GRADING PLAN
SCALE: 1" = 20'-0"

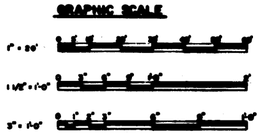
GENERAL NOTES

1. ALL CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.
3. ALL REINFORCING STEEL, EMBEDDED METAL AND STEEL ARCH SECTIONS SHALL BE MADE ELECTRICALLY CONTINUOUS BY TYING AND/OR WELDING.
4. ALL RE-BAR LAPS AND SPLICES TO BE 30 BAR DIAMETERS MIN. UNLESS SHOWN OTHERWISE.
5. FOOTING DRAINS - ELEVATIONS, SLOPES AND DIRECTIONS OF FLOW TO BE ESTABLISHED WHEN STRUCTURE IS SITE ADAPTED. HIGH POINT ENDS OF PIPE SHALL BE CAPPED.
6. ALTERNATE MATERIALS AND/OR SYSTEMS MAY BE SUBSTITUTED FOR ACCEPTANCE AS A SUBSTITUTE FOR POURED-IN-PLACE WING WALLS PROVIDED THEY ARE SHOWN TO BE STRUCTURALLY ADEQUATE AND COST EFFECTIVE.
7. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 3000 P.S.F. PLACED ON UNDISTURBED EARTH OR A STRUCTURALLY COMPACTED FILL WITH INSIGNIFICANT SETTLEMENT. IF THE SOILS INVESTIGATION OR MONITORING DOES NOT CONFIRM THIS MINIMUM VALUE, THE FOOTINGS MUST BE RE-DESIGNED AND/OR LOWERED TO AN ADEQUATE STRATUM.
8. IN SEVERE FROST AREAS WHERE PENETRATION EXCEEDS 2'-6", PROVIDE NON-FROST SUSCEPTABLE MATERIAL UNDER PORTAL AND WING WALL FOOTINGS TO FULL DEPTH OF FROST PENETRATION OR LOWER BOTTOMS OF FOOTINGS TO FROST PENETRATION DEPTH.
9. IF, AS A RESULT OF THE SOILS INVESTIGATION, OR LOCAL FROST CONDITIONS, IT IS DETERMINED THAT ANY OR ALL FOOTINGS MUST BE LOWERED THE APPROPRIATE FOOTING AND WALL DESIGNS MUST BE CHECKED AND ADJUSTED AS REQUIRED TO MEET THESE CONDITIONS.
10. HIGH SECURITY GUIDED HASP SHALL CONFORM TO MILITARY SPECIFICATION MIL-H-29181. A FOUR, PIECE HIGH SECURITY GUIDED HASP, AS SHOWN, OR A TWO PIECE HASP, WITH INTEGRAL ATTACH SHIELD, MAY BE USED.
11. CONTRACTOR SHALL PROVIDE DOOR STOPS TO PREVENT DOOR IMPACTING THE LOUVER SHIELD.
12. LOUVERS ARE OPTIONAL. THEIR NECESSITY AND SIZE SHALL BE DETERMINED, DURING SITE-ADAPTION PROCESS, BASED ON MATERIALS TO BE STORED AND GEOGRAPHICAL LOCATIONS. THE LOUVER WIDTH OF 6" INCHES SHALL BE MAINTAINED.



JOINT SEALANT INSTALLATION DETAIL
NOT TO SCALE

GRAPHIC SCALE



4	NOTES ADDED	30 JUN 90	
3	REVISED HIGH SECURITY HASP	18 SEP 81	[illegible]
2	GENERAL REVISIONS / SIMONS - EASTERN CO.	14 FEB 85	
1	JOINT SEALANT DET. ADDED & PIPE COUPLING IN SECT. OF DET. 5 ADDED	11 NOV 66	
	GENERAL REVISIONS	15 MAR 66	[illegible]
SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

BLACK & VEATCH CONSULTING ENGINEERS KANSAS CITY, MISSOURI

DEFENSE ATOMIC SUPPORT AGENCY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C.

DESIGNED BY: REJ GIC
TRACED BY: REJ GIC
CHECKED BY: WYH
SUBMITTED: HLC

EARTH COVERED STEEL ARCH MAGAZINES

TYPICAL GRADING PLAN & MISCELLANEOUS DETAILS

DRAWINGS APPROVED BY: [illegible]
DATE: 9 OCT 1987

SCALE: AS NOTED
SPEC. NO.
DRAWING NUMBER: 33-15-65
SHEET 6 of 6