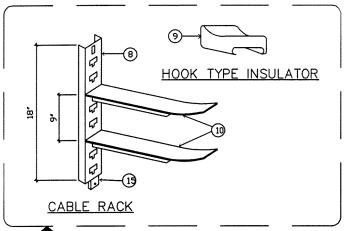
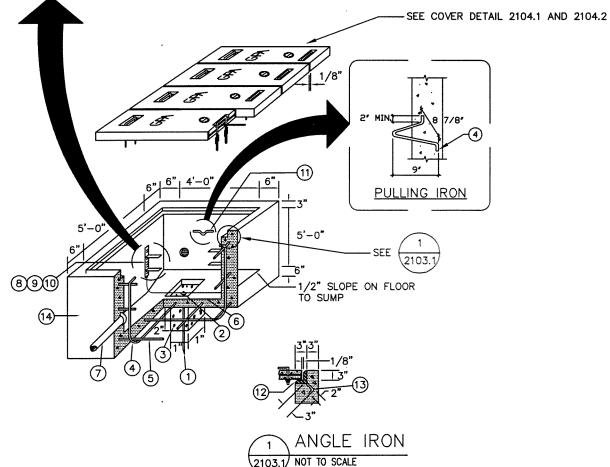
PREPARED BY ENGINEERING DEPARTMENT

5' x 4' x 5' CONCRETE PRIMARY HANDHOLE REF. 2103.1

REV. 1



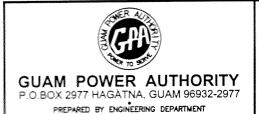


A PRIMARY HANDHOLE
2103.1 SCALE: NONE

EFFECTIVE DATE: 9/19/07

ISSUED: 4

APPROVED: MRONMEROW



## 5' x 4' x 5' CONCRETE PRIMARY HANDHOLE

REF. 2103.2

REV. 1

## NOTES:

- 1. COORDINATE LAYOUT AND EXACT DIMENSIONS WITH GPA ENGINEERING PRIOR TO INSTALLATION.
- 2. GROUND ALL HARDWARE IN THE HANDHOLE.
- 3. TOP OF THE HANDHOLE SHALL BE FLUSH WITH THE SIDEWALK SURFACE, OTHERWISE THERE SHOULD BE A 2" CLEARANCE FROM FINISHED GROUND SURFACE.
- 4. AREA OF CONDUIT ENTRANCES SHOULD BE 6" MINIMUM FROM THE FLOOR SLAB, 10" MINIMUM FROM THE LEFT OR RIGHT SIDE WALL, AND 15" MINIMUM FROM THE TOP OF THE HANDHOLE.
- 5. PROVIDE APPROXIMATELY & CLEARANCE BETWEEN HANDHOLE COVERS AND BETWEEN COVERS AND LEDGE SIDES.

ITEM	BILL OF MATERIALS					
1	5/8"ø X 8'-0" COPPER WELD GROUND ROD					
2	5/8"ø COPPER GROUND ROD CLAMP					
3	3/4"ø MAXIMUM GRAVEL SIZE, FILL TO FINISH FLOOR					
4	#4 REBAR AT 10" O.C. VERTICAL					
(5)	#4 REBAR AT 10" O.C. VERTICAL					
6	#6 COPPER WIRE (SOLID) FOR GROUNDING HARDWARE					
7	CONDUIT WITH END BELL 6" FROM FLOOR SLAB,					
	SIZE AND QUANTITY AS REQUIRED					
8	CABLE RACK HOT DIP GALVANIZED					
9	HOOK TYPE INSULATOR					
10	INSULATOR WELDED SUPPORT					
11)	PULLING IRON 7/8"Ø GALVANIZED, LOCATED AT OPPOSITE END					
	OF EACH CONDUIT ENTRANCE					
12	3" X 3" X 3/8" ANGLE IRON HOT DIP GALVANIZED					
13	3/8"ø STEEL ROD WELDED TO FRAME EVERY 12" O.C.					
14)	6" THICK CONCRETE FLOOR SLAB AND WALL AT 3000 PSI					
	YIELD STRENGTH OF GRADE 40 FOR REBARS					
15)	SLOT FOR 1/2" BOLT AND LEAD ANCHOR					

			11		
EFFECTIVE DATE: 9/19/11	ISSUED:	20/1	1/l	~	APPROVED: MARON MORON