



- NOTES:**
- ① SWITCHGEAR IS LOCATED IN THE 138 KV SUBSTATION ELECTRICAL ROOM.
 - ② SWITCHGEAR LOCATED IN HIGH SERVICE ELECTRICAL BUILDING.
 - ③ LOCATED IN HIGH SERVICE PUMP STATION.
 - ④ REPLACE ALL METAL-CLAD SWITCHGEAR FRONT DOORS.
 - ⑤ REPLACE 3-3000/5 CTs WITH 3-2000/5 ANSI C200 RELAY ACCURACY CTs.
 - ⑥ REMOVE 3 WESTINGHOUSE TYPE CO RELAYS, ANSI DEVICE 27 AND ANSI DEVICE 81 AND REPLACE WITH MULTILIN 750 RELAY.
 - ⑦ ADD 3-2000/5 ANSI C200 RELAY ACCURACY CTs.
 - ⑧ REMOVE KVA METER, AMMETER, AMMETER SWITCH, VOLTMETER AND VOLTMETER SWITCH AND REPLACE WITH MULTILIN PQMII.
 - ⑨ REPLACE 3-3000/5 CTs WITH 3-3000/5 ANSI C400 RELAY ACCURACY CTs.
 - ⑩ REMOVE 3 WESTINGHOUSE TYPE CO RELAYS AND REPLACE WITH MULTILIN 750 RELAY.
 - ⑪ FUSE SIZE AND TYPE ARE NOT KNOWN. DOCUMENT FUSE SIZE AND TYPE.
 - ⑫ INVESTIGATE THE FUNCTION OF WATT AND KVA TRANSDUCERS AND SEND A REPORT TO THE ENGINEER. INCLUDE THE COST TO RECONNECT OR REMOVE TRANSDUCERS AS DIRECTED BY THE ENGINEER. INCLUDE THE COST TO REMOVE TRANSDUCERS AND CONDUITS AND CONDUCTORS BACK TO DIGITAL RACK NO. 10 IF SO DIRECTED BY THE ENGINEER. SEE DWG. ES-E-5 FOR APPROXIMATE LOCATION OF DIGITAL RACK NO. 10.
 - ⑬ 33 KVA SYM. INTERRUPTING RATING, 66 KA ASYM. CLOSE AND LATCH RATING.
 - ⑭ REPLACE RBA TYPE FUSES AND FUSE MOUNTINGS WITH CLE TYPE FUSES AND FUSE MOUNTINGS. REPLACE POWER CONDUCTORS TO TRANSFORMER IF EXISTING POWER CONDUCTORS ARE TOO SHORT TO REACH NEW FUSE TERMINALS.

No.	Date	Revisions	App.

PRIVATE UTILITY LINES SHOWN

CENTER POINT ENERGY/GAS FACILITIES

SBC CO. VALID FOR ONE YEAR
APPROVED ONLY FOR UNDERGROUND CONDUIT FACILITIES
UNLESS NOTED.

CENTER POINT ENERGY/ELECTRIC FACILITIES
APPROVED ONLY FOR CROSSING UNDERGROUND DUCTLINES
UNLESS NOTED. VALID AT TIME OF REVIEW ONLY.

CABLE COMPANY

KGI Kalluri Group, Inc.
Consulting Engineers & Project Managers
10497 Town & Country Way, Suite 220
Houston, Texas 77024
Phone: (713)-365-9288

APPROVED: MHW DATE: 09-15-06
DESIGNED BY: MHW DRAWN BY: KCW

CDM Camp Dresser & McKee Inc.
consulting • engineering • construction • operations
3050 POST OAK BLVD, SUITE 300, HOUSTON, TEXAS 77056
(713) 423-7300 FAX (713) 840-0173

STATE OF TEXAS
MICHAEL H. WOOLEY
40433
Professional Engineer
5-2-07

SURVEYED BY: RBI FB NO. P-5142

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

**SOUTHEAST WATER PURIFICATION PLANT
PHASE I - 80 MGD EXPANSION**

**MVS-1
7.2 KV ONE-LINE DIAGRAM
ELECTRICAL**

WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.	FILE NO. WA10484-11	PUBLIC WORKS AND ENGINEERING ACCEPTED AND FILED 43711 CITY DRAWING NUMBER HOUSTON, TEXAS
	GFS NO. S-0012-20-3	
DWG. NO.	DRAWING SCALE	
ES-E-3	AS NOTED	
	CITY OF HOUSTON PM	
	AVATAR MANN, P.E.	
	SHEET NO. 46 OF 953	