

SPECIFICATIONS

GENERAL

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED TO INSTALL A COMPLETE SYSTEM OF ELECTRICAL WORK AS INDICATED ON THE ELECTRICAL, MECHANICAL, PLUMBING, ARCHITECTURAL AND OTHER DRAWINGS
2. ALL EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW AND OF RECENT MANUFACTURE AND SHALL BE UL LISTED AND LABELED APPROPRIATE FOR THE AREA IN WHICH IT IS USED
3. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES AND ORDINANCES OF THE JURISDICTION IN WHICH THE PROJECT IS LOCATED
4. THE ELECTRICAL CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL THE PERMITS REQUIRED FOR THE ELECTRICAL WORK
5. THE ELECTRICAL CONTRACTOR AT HIS EXPENSE, SHALL HAVE AN INSPECTION MADE BY THE LOCAL ELECTRICAL INSPECTION DEPARTMENT OF THE ELECTRICAL INSTALLATION UNDER THIS CONTRACT AND SHALL DELIVER THE CERTIFICATE OF APPROVAL TO THE OWNER BEFORE RECEIVING THE FINAL PAYMENT
6. THE OWNER RESERVES THE RIGHT TO INSPECT AND TEST ANY PORTION OF THE EQUIPMENT OR INSTALLATION DURING THE PROGRESS OF ITS ERECTION. ANY DEVICE OR SYSTEM OR COMPONENT THAT FAILS THE TEST(S) OR PERFORMS BELOW SPECIFICATIONS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. THE ELECTRICAL CONTRACTOR SHALL TEST THE ENTIRE SYSTEM IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE WHEN THE WORK IS FINALLY COMPLETED TO INSURE THAT ALL PORTIONS ARE FREE FROM SHORT CIRCUITS OR GROUNDS AND ARE IN GOOD AND INTENDED WORKING CONDITIONS
7. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE THE ENTIRE ELECTRICAL INSTALLATION UNDER THIS CONTRACT FOR ONE YEAR AFTER ACCEPTANCE BY THE OWNER
8. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING BID
9. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND THE DEVICE LOCATIONS MAY BE MOVED UPTO 20 FEET IN EITHER DIRECTION TO COORDINATE WITH ARCHITECTURAL, MECHANICAL, STRUCTURAL OR PLUMBING REQUIREMENTS AT NO ADDITIONAL COST TO OWNER
10. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL SUBMIT TO THE OWNER A SET OF "AS-BUILT" MARK-UP DRAWINGS, HARD COPY PRINTS AND AUTOCAD FILES IN VERSION 2008
11. THE CONTRACTOR SHALL COORDINATE WITH PEPCO THE UPGRADES TO THE EXISTING ELECTRIC SERVICE INCLUDING THE DEMOLITION OF EXISTING APPARATUS AND FURNISHING AND INSTALLING NEW CONDUIT, WIRE, METERING AND ALL NECESSARY DEVICES, COMPONENTS FOR A FULLY FUNCTIONAL SYSTEM

SUBMITTALS: THE CONTRACTOR SHALL SUBMIT TO THE OWNER/ARCHITECT, SIX (6) COPIES OF THE MANUFACTURERS CATALOG CUT SHEETS, IDENTIFYING THE SPECIFIC EQUIPMENT TO BE FURNISHED TO THE PROJECT

- A. CONDUIT AND OUTLET BOXES
B. WIRE
C. SWITCHES
D. LIGHTING FIXTURES
E. PANELBOARDS
F. MOTOR CONTROLLERS
G. SWITCH BOARDS

PRODUCTS:

- A. CONVENIENCE OUTLETS SHALL BE UL LISTED AND MEET THE REQUIREMENTS OF THE APPLICABLE FEDERAL SPECIFICATIONS
- DUPLEX RECEPTACLE: NEMA 5-20R, IVORY
GFI: NEMA 5-20R WITH INTEGRAL GROUND FAULT TRIPS
- B. WALL SWITCHES SHALL BE 120/277V, 20A, QUICK MAKE QUICK BREAK, UL LISTED AND MEETING THE REQUIREMENTS APPLICABLE FEDERAL STANDARDS
- C. DEVICE PLATES SHALL BE STAINLESS STEEL, TYPE 303, SATIN FINISH. MULTIPLE DEVICES IN MULTI GANG INSTALLATIONS SHALL HAVE SINGLE COVER PLATE
- D. CONDUIT: INDOOR DRY LOCATIONS, GALVANIZED STEEL ELECTRICAL METALLIC TUBE (EMT), MINIMUM 1/2" TRADE SIZE INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.

TYPE AC, MANUFACTURED CABLE WITH INTEGRAL SEPARATE GROUNDING CONDUCTOR WHEN INSTALLED CONCEALED IN FINISHED SPACES. TYPE AC CABLE MAY BE INSTALLED EXPOSED IN MECHANICAL/ELECTRICAL ROOMS AND IN UNFINISHED SPACES

INDOOR WET LOCATIONS, PVC COATED STEEL CONDUIT WITH COMPATIBLE FITTINGS AND/OR PVC SCHEDULE 40 WITH COMPATIBLE FITTINGS WHEN APPROVED FOR THE APPLICATION IN NATIONAL ELECTRICAL CODE

UNDERGROUND, PVC CONDUIT WITH LONG SWEEP GALVANIZED RIGID CONDUIT ELBOWS TO TRANSITION TO ABOVE GROUND

- E. WIRE: ANNEALED COPPER CONDUCTORS, #12 AWG MINIMUM, WITH THW PVC INSULATION AND JACKET RATED FOR 75 DEGREES C, WET OR DRY. THE WIRE SHALL BE UL LISTED AND LABELED

#12 AWG #10 AWG - SOLID CONDUCTOR UNLESS OTHERWISE NOTED ON PLANS
#8 AWG AND LARGER - STRANDED CONDUCTOR
#2 AWG GROUNDING CONDUCTOR - SOLID OR STRANDED

- F. BOXES: OUTLET BOXES SHALL BE GALVANIZED PRESSED STEEL, MINIMUM 3 1/3 INCHES DEEP WITH INTERNAL VOLUME TO SUIT THE SIZE AND QUANTITY OF CONDUCTORS PER NATIONAL ELECTRICAL CODE

PULL BOXES SHALL BE GALVANIZED STEEL OR ALUMINUM WITH SCREW ATTACHED COVER PLATES

- G. LIGHTING FIXTURES: REFER TO LIGHTING FIXTURE SCHEDULE ON DRAWINGS. CONTRACTOR SHALL COORDINATE THE VOLTAGE RATINGS OF THE FIXTURES TO MATCH THE CIRCUIT VOLTAGES TO WHICH THEY ARE CONNECTED PRIOR OR ORDERING THE MATERIAL

- H. MOTOR STARTERS: THE CONTRACTOR SHALL COORDINATE THE MOTOR STARTER AND DISCONNECT SWITCH RATINGS WITH THE MECHANICAL EQUIPMENT SHOP DRAWINGS. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY TO BE RESOLVED PRIOR TO ORDERING THE MATERIAL

- J. PANEL BOARDS: CIRCUIT BREAKER TYPE, WITH PLUG-IN BREAKERS RATED AS INDICATED IN THE PANEL BOARD SCHEDULES ON THE DRAWINGS. BREAKERS SERVING HVAC EQUIPMENT SHALL BE "HACR" RATED

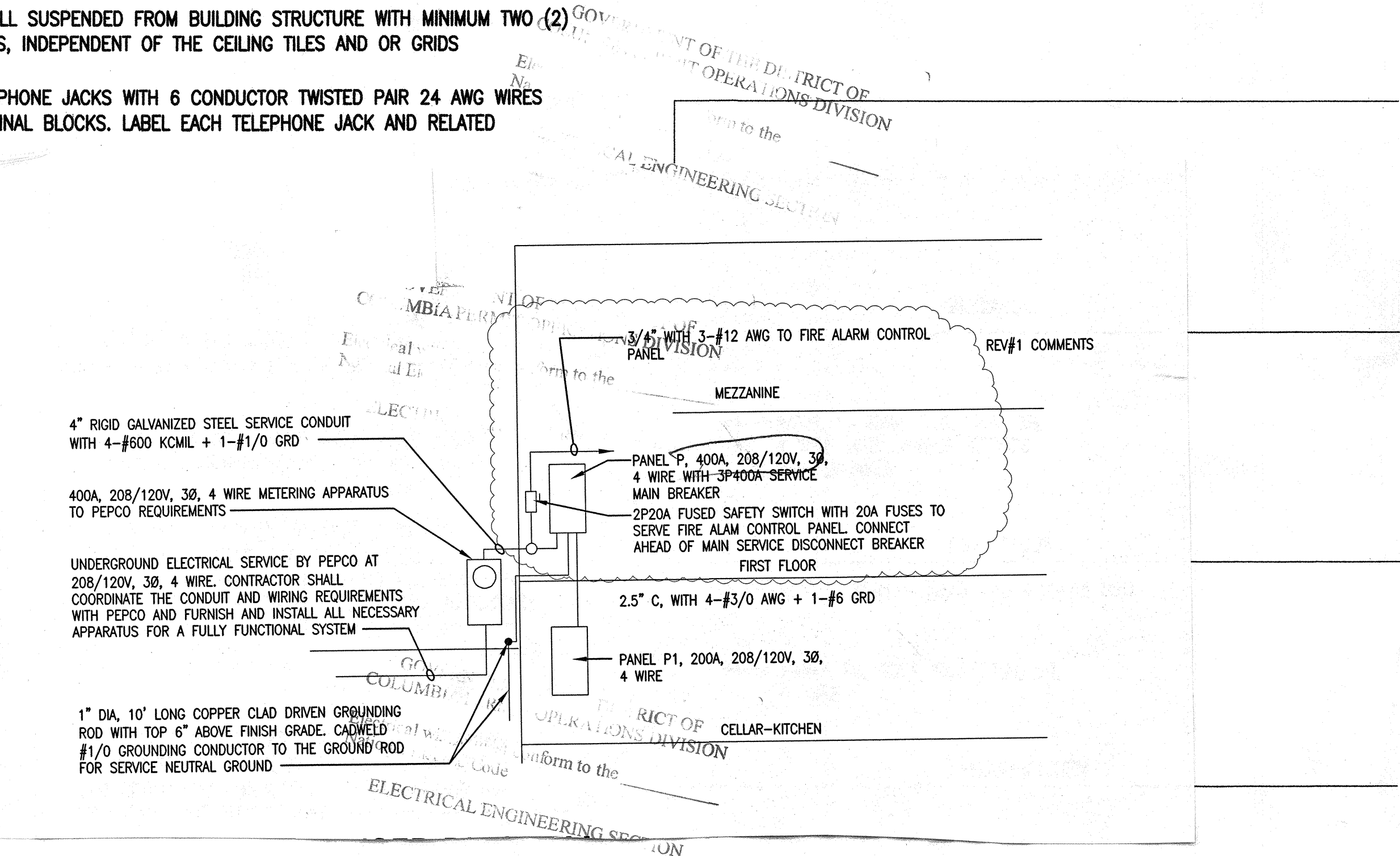
EXECUTION

- A. ALL WIRING SHALL BE INSTALLED CONCEALED IN WALL OR CEILING SPACES IN FINISHED AREAS

ALL WIRING IN EXPOSED AREAS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE BUILDING LINES, SECURELY ATTACHED TO BUILDING SURFACES

RECESSED FLUORESCENT FIXTURES SHALL SUSPENDED FROM BUILDING STRUCTURE WITH MINIMUM TWO (2) #8 STEEL WIRES AT DIAGONAL CORNERS, INDEPENDENT OF THE CEILING TILES AND OR GRIDS

- B. THE CONTRACTOR SHALL PROVIDE TELEPHONE JACKS WITH 6 CONDUCTOR TWISTED PAIR 24 AWG WIRES TERMINATED IN NEW TELCO #110 TERMINAL BLOCKS. LABEL EACH TELEPHONE JACK AND RELATED TERMINATIONS



POWER RISER DIAGRAM

NOT TO SCALE

PANEL P1										PANEL P2									
MAIN: 3P200A MAIN LUGS ONLY										MIN. RATING: 10,000 AIC									
VOLTAGE: 208/120V, 3Ø, 4 WIRE										FEED: 2.5" C, WITH 4-#3/0 AWG + 1-#6 GRD									
MOUNTING: SURFACE										REMARKS: CELLAR-BRANCH CIRCUIT PANEL									
CKT. NO.	LOAD	TRIP	WIRE PH	COND. SIZE	VA	VA	VA	VA	VA	TRIP	WIRE PH	COND. SIZE	LOAD	CKT. NO.					
1	EXIT, EMERG. LIGHTING	1 20	#12	1/2"	800					5000	#8	1"	DISHWASHER	2					
3	LIGHTING-CELLAR-KITCHEN	1 20	#12	1/2"	1200					5000	#8	1"		4					
5	LIGHTING-CELLAR-KITCHEN-TOILET	1 20	#12	1/2"		1200				5000	#8	1"		6					
7	L6 DISPOSER (EST 2 HP)	3 20	#12	1/2"	900					600	#12	1/2"	K8 WORKTOP REFRIGERATOR	8					
9			#12		900					950	#12	1/2"	K5 FOOD PREP TABLE	10					
11			#12			900				800	#12	1/2"	K3 WORKTOP REFRIGERATOR	12					
13	DUMB WAITER	1 20	#12	1/2"	1500					1600	#12	1/2"	K4 ICE MAKER	14					
15	RECEPTACLE	1 20	#12	1/2"	180					1000	#12	1/2"	WALK-IN LIGHTS, DE-FROST HTR	16					
17	SPARE	1 20	#12	-	-	-				1800	#10	1/2"	WALK-IN FREEZER COMP/ENAP	18					
19	K1 CONVECTION OVEN	2 30	#10	3/4"	3100					1800	#10	1/2"		20					
21			#10		3100					720	#12	1/2"	RECEPTACLES-KITCHEN	22					
23	K6 FOOD PREP TABLE	1 20	#12	1/2"		1040				720	#12	1/2"	RECEPTACLES-CELLAR	24					
25	SPARE	1 20	-	-	-	-				720	#12	1/2"	RECEPTACLES-CELLAR	26					
27	K1 CONVECTION OVEN	2 30	#10	3/4"	3100					720	#12	1/2"	RECEPTACLES-CELLAR	28					
29			#10		3100					-	1 20	-	SPARE	30					
31	K3 REFRIGERATOR	1 20	#12	1/2"	600					-	1 20	-	SPARE	32					
33	K4 ICE MAKER	1 20	#12	1/2"	1600					-	1 20	-	SPARE	34					
35	SPARE	1 20	-	-	-	-				-	1 20	-	SPARE	36					
37	SPACE	-	-	-	6000					-	-	-	SPACE	38					
39		-	-	-	6000					-	-	-		40					
41		-	-	-	6000					-	-	-		42					
TOTALS					6900	6980	6290			9720	8390	8120	TOTALS						
NOTES: THE TOTAL CONNECTED LOAD IS 46,350 VA, WHICH IS 129 AMPS PER PHASE																			
GOVERNMENT OF THE DISTRICT OF COLUMBIA PERMIT OPERATIONS DIVISION																			

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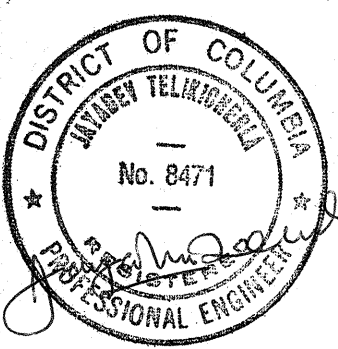
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REVISIONS

SEAL



DATE
10/28/2012

SHEET NUMBER
E-3