

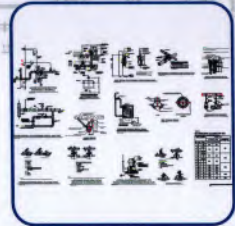
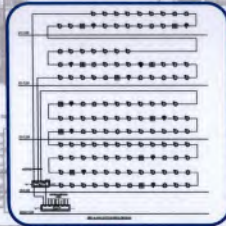
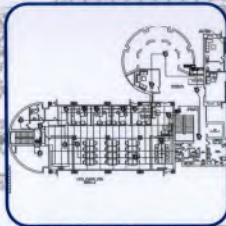
FIREFIGHTING DRAWINGS FOR RENOVATION OF PRCL OFFICE BUILDING AT KARACHI

NOVEMBER-2023



PAKISTAN REINSURANCE COMPANY LIMITED

ENGINEERING CONSULTANCY SERVICES FOR RENOVATION OF PRCL OFFICE BUILDING AT KARACHI



ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD.

A Premier Engineering Consultancy Firm Owned by Government of the Punjab



PRC Towers, 32 - A, Lalazar Drive, M.T. Khan Road,
Karachi, Sindh Pakistan
Tel: (+92-21) 99202900-14
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83-A, E/1, Main Boulevard, Gulberg - III, Lahore.
Tel: +92-42-99333976, +92-42-35717681-4
www.ecsp.com.pk

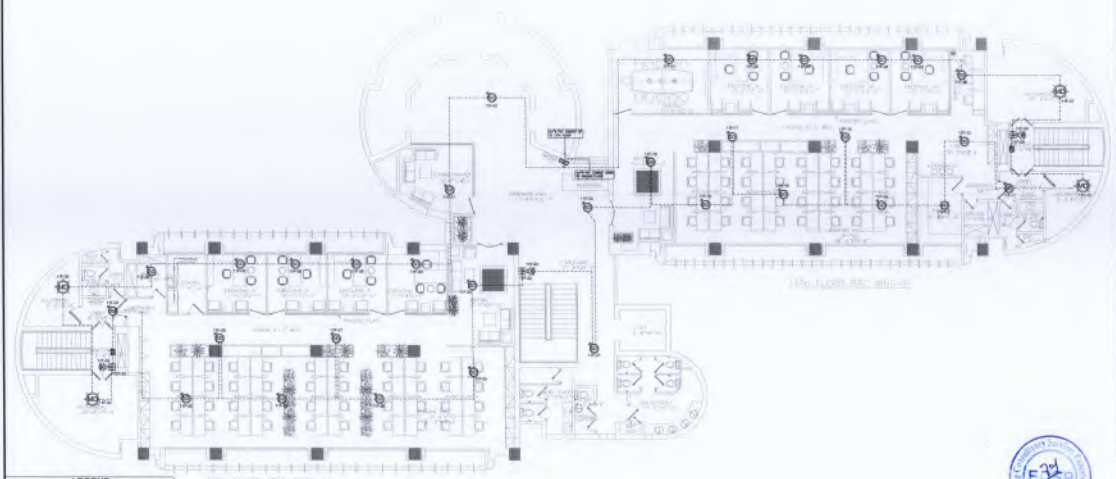
PRCL OFFICE BUILDING AT KARACHI

LIST OF DRAWINGS

| S. NO. | TITLE OF DRAWING | DRAWING NO. |
|----------------------------|---|-------------------|
| FIRE ALARM DRAWINGS | | |
| 1 | ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN 11TH FLOOR WING- A & B | 231107-375-ELE-01 |
| 2 | EMERGENCY LIGHT & EXIT LIGHT LAYOUT PLAN 11TH FLOOR WING- A & B | 231107-375-ELE-02 |
| 3 | ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN 12TH FLOOR WING- A & B | 231107-375-ELE-03 |
| 4 | EMERGENCY LIGHT & EXIT LIGHT LAYOUT PLAN 12TH FLOOR WING- A & B | 231107-375-ELE-04 |
| 5 | ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN 13TH FLOOR WING- A & B | 231107-375-ELE-05 |
| 6 | EMERGENCY LIGHT & EXIT LIGHT LAYOUT PLAN 13TH FLOOR WING- A & B | 231107-375-ELE-06 |
| 7 | ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN 14TH FLOOR WING- A & B | 231107-375-ELE-07 |
| 8 | EMERGENCY LIGHT & EXIT LIGHT LAYOUT PLAN 14TH FLOOR WING- A & B | 231107-375-ELE-08 |
| 9 | ELECTRICAL FIRE ALARM SYSTEM RISER DIAGRAM | 231107-375-ELE-09 |



| | | | | | | | | | |
|--|--|--|---|---|------------------------------|--|--|--|--|
|  PAKISTAN REINSURANCE COMPANY LIMITED |  ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (KSP) 10/A, 11/T, Main Boulevard, Ghalang El, Lahore, Pakistan T: +92-42-9853337, +92-42-7170014 E: info@ksp.com.pk | PROJECT: RENOVATION OF PRCL OFFICE BUILDING AT KARACHI | DRAWN BY: MUHAMMAD ALI HUSSAIN | DRAWING TITLE: LIST OF DRAWINGS | DRAWING NO: 231107-375-EL-00 | REV. NO. DESCRIPTION DATE | | | |
| | | | DESIGNED BY: ASAD NAVEED CHECKED BY: Engr. M. S. A. J. APPROVED BY: Engr. NAWAZ ZUBA DATE: NOVEMBER 2023 | | SCALE: AS SHOWN SHEET: 03 | | | | |



| SL# | DESCRIPTION | SYMBOL | MARKING |
|-----|-------------------------------|--------|---------|
| 1 | SMOKE DETECTOR | | S1 |
| 2 | MANUAL DETECTOR | | M1 |
| 3 | HEAT DETECTOR | | H1 |
| 4 | MANUAL CALL POINT | | MCP |
| 5 | SOUNDER | | SND |
| 6 | SOUNDER WITH FLASHER | | SND+FL |
| 7 | FIRE ALARM CONTROL PANEL | | FACP |
| 8 | FIRE ALARM BELL | | FAB |
| 9 | RENOVATED PVC CONDUIT 1" DIA. | | |

CLIENT:
 PUNJAB NATIONAL BANK COMPANY LIMITED

CONSULTANTS:
 ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (ECS)
 15/4, 15/5, Main Boulevard, Ghalib Road, Lahore, Pakistan
 ☎ +92-42-99333316, +92-42-977391-4
 ✉ info@ecs.com.pk | www.ecsp.com.pk

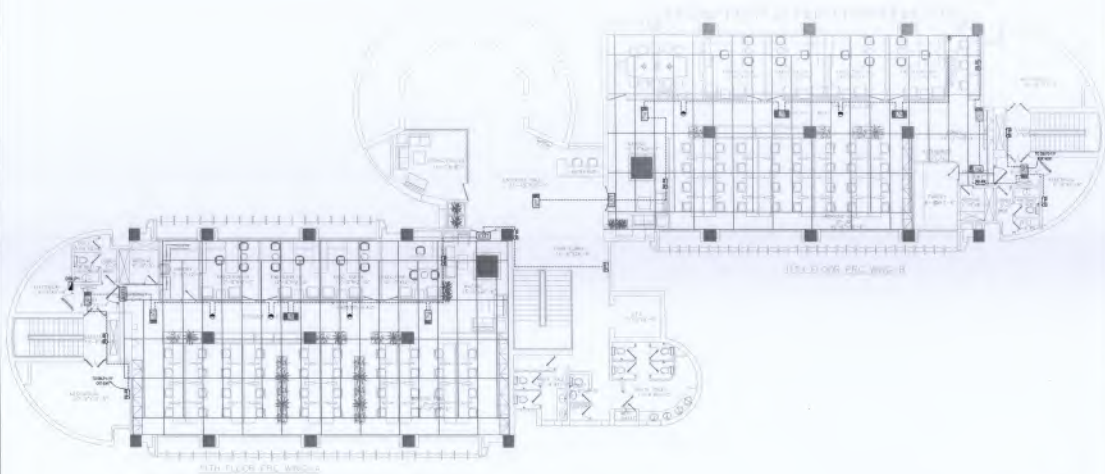
PROJECT:
RENOVATION OF PRC OFFICE BUILDING AT KARACHI

DRAWN BY: MUHAMMAD ALI HUSSAIN
 DESIGNED BY: ASAD NAVEED
 CHECKED BY: Engr. M. B. ALI
 APPROVED BY: Engr. NAWAZ ZISHI
 DATE: NOVEMBER 2022

DRAWING TITLE:
ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN (11TH FLOOR PLAN PRC WING-ASB)

DRAWING NO.: 227/107-076-02-01
 SCALE: AS SHOWN
 SHEET: 03

| REV. | DESCRIPTION | ISSN | DATE |
|------|-------------|------|------|
| | | | |
| | | | |
| | | | |



| LEGEND | | | |
|--------|--------------------|--------|--------------------|
| SYM. | DESCRIPTION | SYMBOL | MARKING |
| 1 | EMERGENCY LIGHT SW | ⬢ | EMERGENCY LIGHT SW |
| 2 | EXIT LIGHT | ⬢ | EXIT LIGHT |
| 3 | EMERGENCY LIGHT SW | ⬢ | EMERGENCY LIGHT SW |

CLIENT: **PAKISTAN REINSURANCE COMPANY LIMITED**

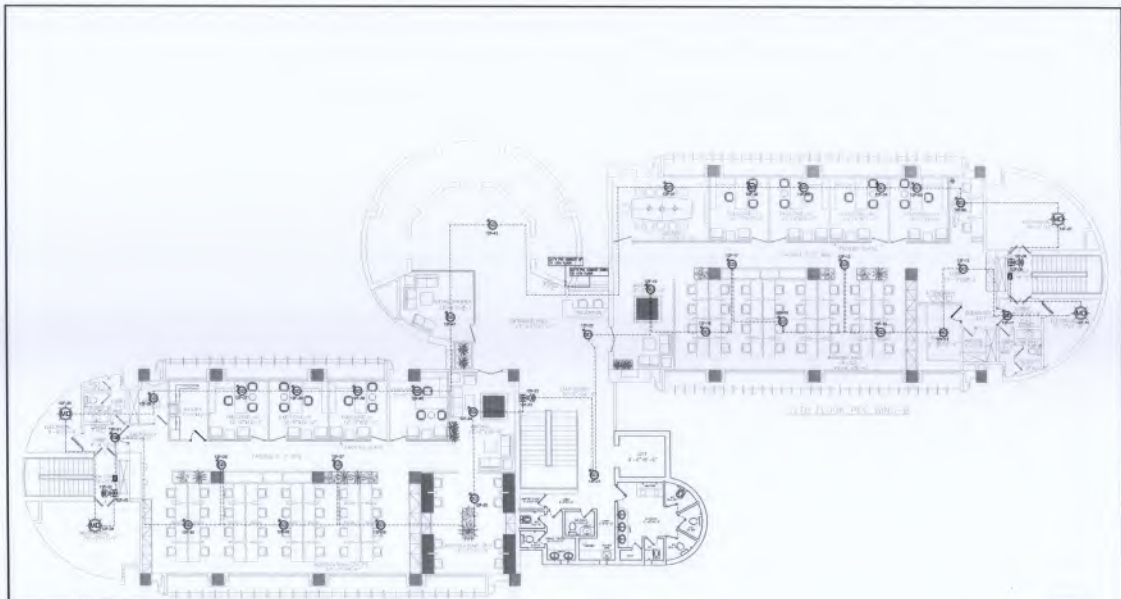
CONSULTANTS: **ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (ECSP)**
 E-4, G/1, Main Road, Ghalib, H-8, Lahore.
 Tel: (924) 3677886-88, Fax: (924) 3677888

PROJECT: **RENOVATION OF PRECAST OFFICE BUILDING AT KARACHI**

DRAWN BY: **MUHAMMAD ALI HOSSAIN**
 CHECKED BY: **ASAD NAWAZ**
 APPROVED BY: **Engr. MAWAJZEH**
 DATE: **OCTOBER 2023**

DRAWING TITLE: **EMERGENCY LIGHT & EXIT LIGHT LAYOUT (11TH FLOOR PLAN PRECAST WING-A&B)**

| DRAWING NO. | REV. | DESCRIPTION | ISSA. | DATE |
|----------------|--------|-------------|-------|------|
| 237-015-ELI-02 | | | | |
| SCALE: | DHEET: | | | |
| AS SHOWN | A3 | | | |



LEGEND

| S/N | DESCRIPTION | SYMBOL | MARKING |
|-----|--------------------------|--------|---------|
| 1 | SMOKE DETECTOR | | |
| 2 | MANUAL CALL POINT | | |
| 3 | HEAR RESISTOR | | |
| 4 | MANUAL CALL POINT | | |
| 5 | SOUNDER | | |
| 6 | SOUNDER NOT PLACED | | |
| 7 | FIRE ALARM CONTROL PANEL | | |
| 8 | SMOKE DETECTOR | | |
| 9 | SMOKE DETECTOR SYMBOL | | |

CLIENT:
PAKISTAN REINSURANCE COMPANY LIMITED

CONSULTANTS:

ENGINEERING CONSULTANCY SERVICES (PUNJAB PVT) LTD (ECSPL)
 F-10/A, 8/1, Main Boulevard, Durgam 8, Lahore, Pakistan.
 T: +92-42-8833330, +92-42-8777864
 E: info@ecspl.com.pk @ www.ecspl.com.pk

PROJECT:
RENOVATION OF PRC OFFICE BUILDING AT KARACHI

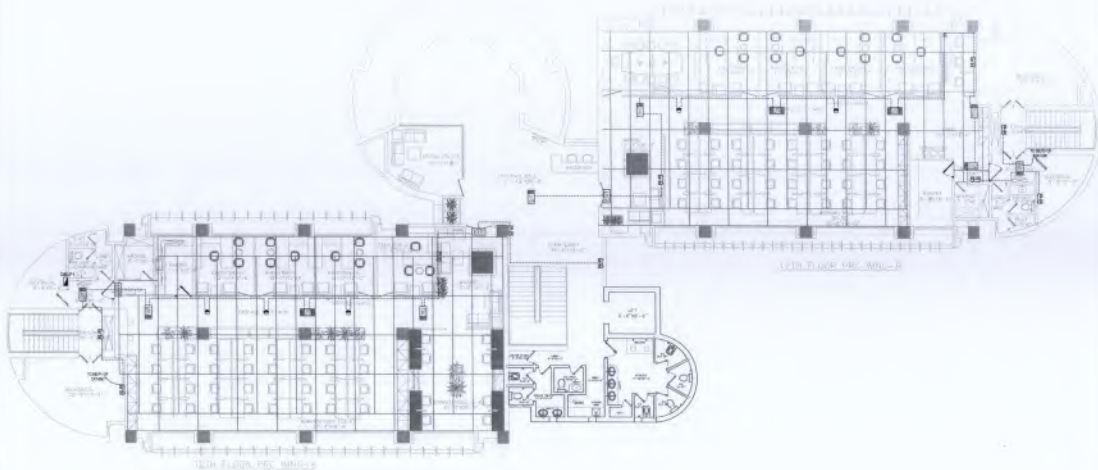
DESIGN BY: MUHAMMAD RIZWAN
DRAWN BY: ASAD NAVEED
CHECKED BY: Eng. M.B.LAL
APPROVED BY: Eng. NAWAZISH
DATE: OCTOBER 2023

DRAWING TITLE:
ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN (15TH FLOOR PLAN PRC WING 488)

DRAWING NO.: 251-107-015-016-05
SCALE: AS SHOWN
SHEET: AS

| REV. | DESCRIPTION | ISSN. | DATE |
|------|-------------|-------|------|
| | | | |
| | | | |
| | | | |





| LEGEND | | | |
|---------------------------|---------------------|---------------------------|-------------|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
| (Symbol: Square with 'E') | EMERGENCY LIGHT IN | (Symbol: Square with 'X') | EXIT LIGHT |
| (Symbol: Square with 'E') | EMERGENCY LIGHT OUT | (Symbol: Square with 'X') | EXIT LIGHT |

SUBMIT:

PAKISTAN INSURANCE COMPANY LIMITED

CONSULTANTS:

ENGINEERING CONSULTANCY SERVICES PRIVATE (PVT) LTD (ECS)
 12/A, 11/ Main National Highway, G-1/Phase-1, Lahore
 Tel: (9952) 3371768-64 Fax: (9952) 3371769

PROJECT:

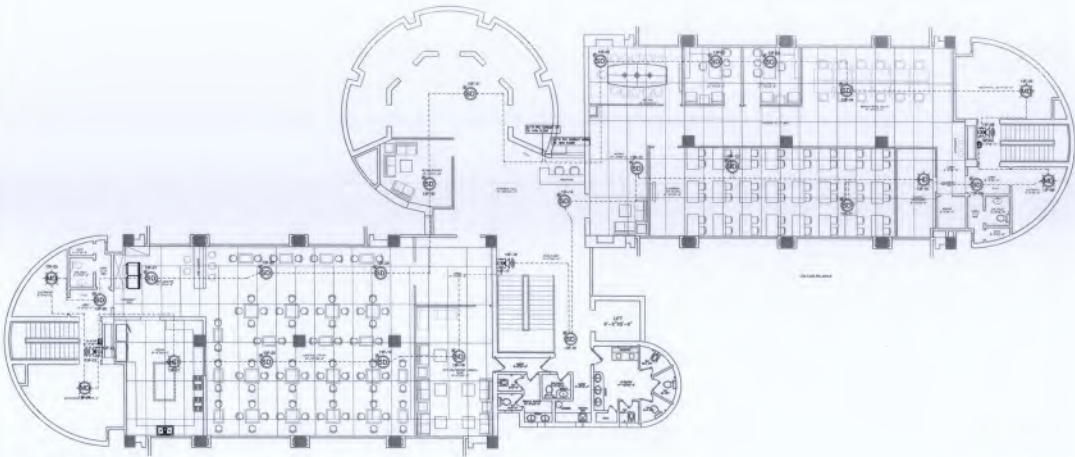
RENOVATION OF FIC OFFICE BUILDING AT KARACHI

DRAWN BY: MUHAMMAD ALI HUSSAIN
DESIGNED BY: AFAQ NAVEED
CHECKED BY: Engr. M BILAL
APPROVED BY: Engr. NAHAZESH
DATE: OCTOBER 2023

DRAWING TITLE:

EMERGENCY LIGHT & EXIT LIGHT LAYOUT (12TH FLOOR PLAN FIC WING-A&B)

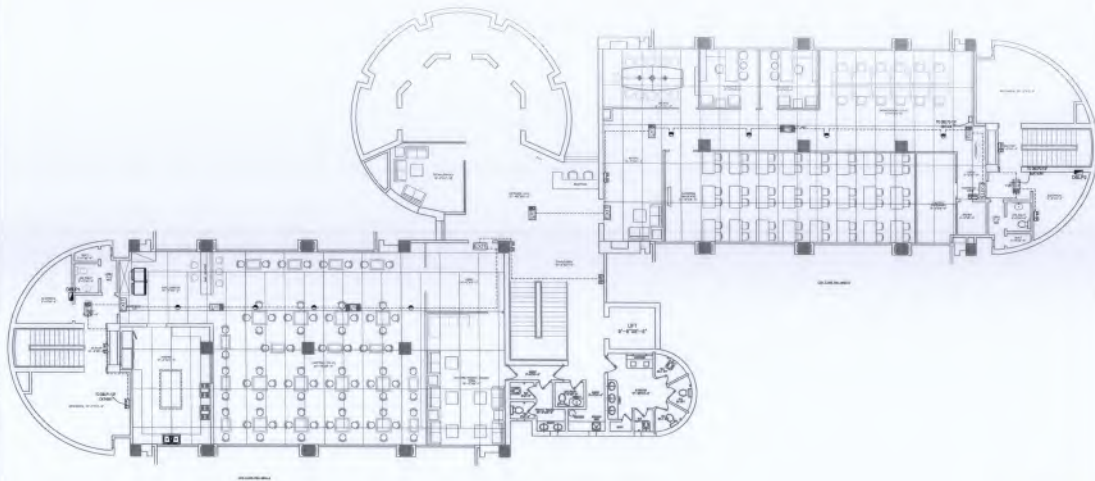
| DRAWING NO: | | REV. | | DESCRIPTION | REQ. | DATE | |
|-------------------|--------|------|--|-------------|------|------|--|
| 201167-075-ELI-04 | | | | | | | |
| SCALE: | SHEET: | | | | | | |
| AS SHOWN | A3 | | | | | | |



| LEGEND | | |
|--------|-----------------------------|--------|
| S.N | DESCRIPTION | SYMBOL |
| 1 | SMOKE DETECTOR | |
| 2 | MANUAL DETECTOR | |
| 3 | HEAT DETECTOR | |
| 4 | MANUAL CALL POINT | |
| 5 | SMOKE | |
| 6 | SMOKE WITH FLAMES | |
| 7 | FIRE ALARM CONTROL PANEL | |
| 8 | ALARM BELL | |
| 9 | PROTECTED FIRE EXTINGUISHER | |



| | | | | | | | |
|--|---|---|--------------------------------------|----------------------------------|--|---------------------------------------|------------------------------|
| CLIENT: PAKISTAN REINSURANCE COMPANY LIMITED | CONSULTANTS: ENGINEERING CONSULTANCY SERVICES PAKISTAN (PVT) LTD (ECS) E-14, F-1, Main Boulevard, Ghalib Road, Lahore, Pakistan. T: +92-42-8863336, +92-42-8717981-4 F: +92-42-8863337 www.ecsp.com.pk | PROJECT: RENOVATION OF PRC OFFICE BUILDING AT KARACHI | DRAWN BY: MUHAMMAD FARUQ ANAM | CHECKED BY: ASAD KHANVEED | DRAWING TITLE: ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN (11TH FLOOR PLAN IN PRC WING-4B) | DRAWING NO: 131107-075-01-E-01 | REV. DESCRIPTION NO. DATE |
| | | | DESIGNED BY: ASAD KHANVEED | CHECKED BY: Eng. MEZEL | | SCALE: AS SHOWN | |
| | | | APPROVED BY: Eng. NURHAZIM | DATE: NOVEMBER 2023 | | | |



| LEGEND | | | |
|--------|--------------------|--------|---------|
| NO | DESCRIPTION | SYMBOL | REMARKS |
| 1 | EMERGENCY LIGHT SW | ▲ | NOTED |
| 2 | EXIT LIGHT | ▲ | NOTED |
| 3 | EMERGENCY LIGHT SW | ■ | NOTED |

CLIENT: **PARSTAN REINSURANCE COMPANY LIMITED**

ENGINEERING CONSULTANCY SERVICES: **PKSAS (PVT) LTD (ECP)**
 15/A, 17, Main Boulevard, Clifton III, Lahore, Pakistan.
 T: +92-42-8833337, +92-42-7178114
 E: info@pkas.com.pk | www.pkas.com.pk

PROJECT: **RENOVATION OF PRCIL OFFICE BUILDING AT KARACHI**

DESIGNED BY: **MOHAMMAD ALI HUSSAIN**

DESIGNED BY: **ASAD NAVEED**

CHECKED BY: **Engr. MURAJ**

APPROVED BY: **Engr. NAWAZISH**

DATE: **NOVEMBER 2023**

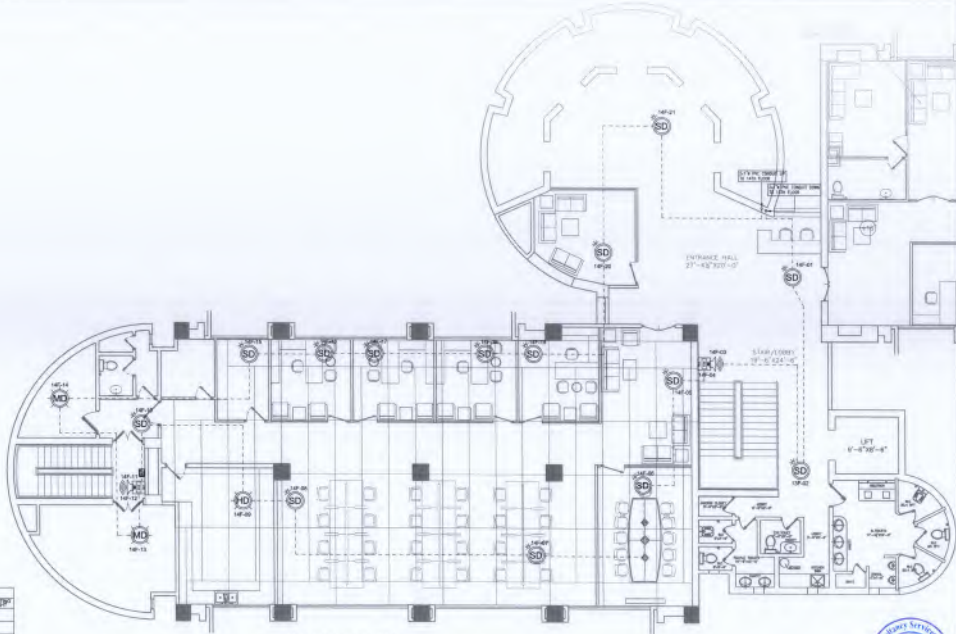
DRAWING TITLE: **EMERGENCY LIGHT & EXIT LIGHT LAYOUT (15TH FLOOR PLAN PRC BWS ARE)**

DRAWING NO: **231107-015-ELE-06**

SCALE: **AS SHOWN**

SHEET: **A3**

| NO | DESCRIPTION | SKN. | DATE |
|----|-------------|------|------|
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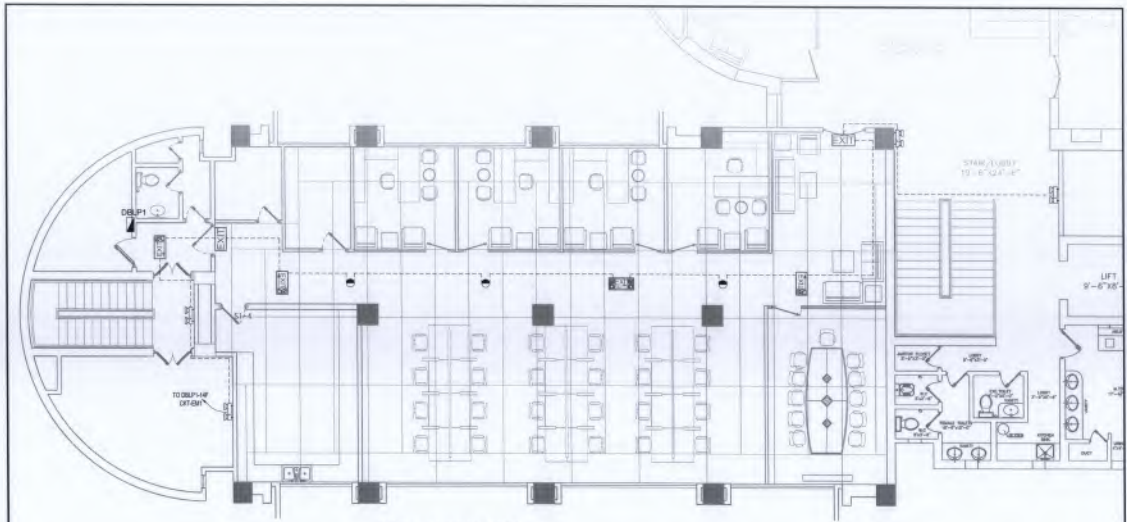


14TH FLOOR PRC
WING-A



| LEGEND | | |
|--------|--------------------------|--------|
| S/N | DESCRIPTION | SYMBOL |
| 1 | SMOKE DETECTOR | |
| 2 | HAND CALL BELL | |
| 3 | HEAT DETECTOR | |
| 4 | HAND CALL BELL | |
| 5 | DOORER | |
| 6 | DOORER WITH FLASHER | |
| 7 | FIRE ALARM CONTROL PANEL | |
| 8 | JUNCTION BOX | |
| 9 | PROCESSED CABLE TIE BAR | |

| | | | | | | | | | |
|---|---|--|---------------------------------------|--|---------------------------------------|-------------|---------------------|-------------|--------------|
| CLIENT: PAKISTAN REINSURANCE COMPANY LIMITED | CONSULTANTS: ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (ECSF) 10-A, E-11, Main Boulevard, Gali No. 03, Lahore, Pakistan T: +92-42-88633379, F: +92-42-77189114 E: info@ecsfc.com.pk www.ecsf.com.pk | PROJECT: RENOVATION OF PRC OFFICE BUILDING AT KARACHI | DRAWN BY: MUHAMMAD ALI HUSSAIN | DRAWING TITLE: | DRAWING NO: 031-107-0735-04-07 | NO.: | DESCRIPTION: | SKD: | DATE: |
| | | | DESIGNED BY: ASAD NAVEED | ELECTRICAL FIRE ALARM SYSTEM LAYOUT PLAN (14TH FLOOR PLAN PRC WING A) | | | | | |
| | | | DATE: NOVEMBER 2023 | | AS SHOWN: | A3: | | | |




**14TH FLOOR PRC
WING-A**



| LEGEND | | | |
|--------|--------------------|--------|----------------|
| SL# | DESCRIPTION | SYMBOL | NOTES |
| 1 | EMERGENCY LIGHT SW | ◆ | DOUBLE CHECKED |
| 2 | STAIR LIGHT | □ | DOUBLE CHECKED |
| 3 | EMERGENCY LIGHT SW | ◆ | DOUBLE CHECKED |

CLIENT:
 **PARISTAN INSURANCE COMPANY LIMITED**

CONSULTANTS:
 **ENGINEERING CONSULTANCY SERVICES (PRIVATE) LTD (ECSPL)**
 10-A, 11-A, 11-B, 11-C, 11-D, 11-E, 11-F, 11-G, 11-H, 11-I, 11-J, 11-K, 11-L, 11-M, 11-N, 11-O, 11-P, 11-Q, 11-R, 11-S, 11-T, 11-U, 11-V, 11-W, 11-X, 11-Y, 11-Z, 11-AA, 11-AB, 11-AC, 11-AD, 11-AE, 11-AF, 11-AG, 11-AH, 11-AI, 11-AJ, 11-AK, 11-AL, 11-AM, 11-AN, 11-AO, 11-AP, 11-AQ, 11-AR, 11-AS, 11-AT, 11-AU, 11-AV, 11-AW, 11-AX, 11-AY, 11-AZ, 11-BA, 11-BB, 11-BC, 11-BD, 11-BE, 11-BF, 11-BG, 11-BH, 11-BI, 11-BJ, 11-BK, 11-BL, 11-BM, 11-BN, 11-BO, 11-BP, 11-BQ, 11-BR, 11-BS, 11-BT, 11-BU, 11-BV, 11-BW, 11-BX, 11-BY, 11-BZ, 11-CA, 11-CB, 11-CC, 11-CD, 11-CE, 11-CF, 11-CG, 11-CH, 11-CI, 11-CJ, 11-CK, 11-CL, 11-CM, 11-CN, 11-CO, 11-CP, 11-CQ, 11-CR, 11-CS, 11-CT, 11-CU, 11-CV, 11-CW, 11-CX, 11-CY, 11-CZ, 11-DA, 11-DB, 11-DC, 11-DD, 11-DE, 11-DF, 11-DG, 11-DH, 11-DI, 11-DJ, 11-DK, 11-DL, 11-DM, 11-DN, 11-DO, 11-DP, 11-DQ, 11-DR, 11-DS, 11-DT, 11-DU, 11-DV, 11-DW, 11-DX, 11-DY, 11-DZ, 11-EA, 11-EB, 11-EC, 11-ED, 11-EE, 11-EF, 11-EG, 11-EH, 11-EI, 11-EJ, 11-EK, 11-EL, 11-EM, 11-EN, 11-EO, 11-EP, 11-EQ, 11-ER, 11-ES, 11-ET, 11-EU, 11-EV, 11-EW, 11-EX, 11-EY, 11-EZ, 11-FA, 11-FB, 11-FC, 11-FD, 11-FE, 11-FF, 11-FG, 11-FH, 11-FI, 11-FJ, 11-FK, 11-FL, 11-FM, 11-FN, 11-FO, 11-FP, 11-FQ, 11-FR, 11-FS, 11-FT, 11-FU, 11-FV, 11-FW, 11-FX, 11-FY, 11-FZ, 11-GA, 11-GB, 11-GC, 11-GD, 11-GE, 11-GF, 11-GG, 11-GH, 11-GI, 11-GJ, 11-GK, 11-GL, 11-GM, 11-GN, 11-GO, 11-GP, 11-GQ, 11-GR, 11-GS, 11-GT, 11-GU, 11-GV, 11-GW, 11-GX, 11-GY, 11-GZ, 11-HA, 11-HB, 11-HC, 11-HD, 11-HE, 11-HF, 11-HG, 11-HH, 11-HI, 11-HJ, 11-HK, 11-HL, 11-HM, 11-HN, 11-HO, 11-HP, 11-HQ, 11-HR, 11-HS, 11-HT, 11-HU, 11-HV, 11-HW, 11-HX, 11-HY, 11-HZ, 11-IA, 11-IB, 11-IC, 11-ID, 11-IE, 11-IF, 11-IG, 11-IH, 11-II, 11-IJ, 11-IK, 11-IL, 11-IM, 11-IN, 11-IO, 11-IP, 11-IQ, 11-IR, 11-IS, 11-IT, 11-IU, 11-IV, 11-IW, 11-IX, 11-IY, 11-IZ, 11-JA, 11-JB, 11-JC, 11-JD, 11-JE, 11-JF, 11-JG, 11-JH, 11-JI, 11-JJ, 11-JK, 11-JL, 11-JM, 11-JN, 11-JO, 11-JP, 11-JQ, 11-JR, 11-JS, 11-JT, 11-JU, 11-JV, 11-JW, 11-JX, 11-JY, 11-JZ, 11-KA, 11-KB, 11-KC, 11-KD, 11-KE, 11-KF, 11-KG, 11-KH, 11-KI, 11-KJ, 11-KK, 11-KL, 11-KM, 11-KN, 11-KO, 11-KP, 11-KQ, 11-KR, 11-KS, 11-KT, 11-KU, 11-KV, 11-KW, 11-KX, 11-KY, 11-KZ, 11-LA, 11-LB, 11-LC, 11-LD, 11-LE, 11-LF, 11-LG, 11-LH, 11-LI, 11-LJ, 11-LK, 11-LL, 11-LM, 11-LN, 11-LO, 11-LP, 11-LQ, 11-LR, 11-LS, 11-LT, 11-LU, 11-LV, 11-LW, 11-LX, 11-LY, 11-LZ, 11-MA, 11-MB, 11-MC, 11-MD, 11-ME, 11-MF, 11-MG, 11-MH, 11-MI, 11-MJ, 11-MK, 11-ML, 11-MM, 11-MN, 11-MO, 11-MP, 11-MQ, 11-MR, 11-MS, 11-MT, 11-MU, 11-MV, 11-MW, 11-MX, 11-MY, 11-MZ, 11-NA, 11-NB, 11-NC, 11-ND, 11-NE, 11-NF, 11-NG, 11-NH, 11-NI, 11-NJ, 11-NK, 11-NL, 11-NM, 11-NO, 11-NP, 11-NQ, 11-NR, 11-NS, 11-NT, 11-NU, 11-NV, 11-NW, 11-NX, 11-NY, 11-NZ, 11-OA, 11-OB, 11-OC, 11-OD, 11-OE, 11-OF, 11-OG, 11-OH, 11-OI, 11-OJ, 11-OK, 11-OL, 11-OM, 11-ON, 11-OO, 11-OP, 11-OQ, 11-OR, 11-OS, 11-OT, 11-OU, 11-OV, 11-OW, 11-OX, 11-OY, 11-OZ, 11-PA, 11-PB, 11-PC, 11-PD, 11-PE, 11-PF, 11-PG, 11-PH, 11-PI, 11-PJ, 11-PK, 11-PL, 11-PM, 11-PN, 11-PO, 11-PP, 11-PQ, 11-PR, 11-PS, 11-PT, 11-PU, 11-PV, 11-PW, 11-PX, 11-PY, 11-PZ, 11-QA, 11-QB, 11-QC, 11-QD, 11-QE, 11-QF, 11-QG, 11-QH, 11-QI, 11-QJ, 11-QK, 11-QL, 11-QM, 11-QN, 11-QO, 11-QP, 11-QL, 11-QM, 11-QN, 11-QO, 11-QP, 11-QR, 11-QS, 11-QT, 11-QU, 11-QV, 11-QW, 11-QX, 11-QY, 11-QZ, 11-RA, 11-RB, 11-RC, 11-RD, 11-RE, 11-RF, 11-RG, 11-RH, 11-RI, 11-RJ, 11-RK, 11-RL, 11-RM, 11-RN, 11-RO, 11-RP, 11-RQ, 11-RR, 11-RS, 11-RT, 11-RU, 11-RV, 11-RW, 11-RX, 11-RY, 11-RZ, 11-SA, 11-SB, 11-SC, 11-SD, 11-SE, 11-SF, 11-SG, 11-SH, 11-SI, 11-SJ, 11-SK, 11-SL, 11-SM, 11-SN, 11-SO, 11-SP, 11-SQ, 11-SR, 11-SS, 11-ST, 11-SU, 11-SV, 11-SW, 11-SX, 11-SY, 11-SZ, 11-TA, 11-TB, 11-TC, 11-TD, 11-TE, 11-TF, 11-TG, 11-TH, 11-TI, 11-TJ, 11-TK, 11-TL, 11-TM, 11-TN, 11-TO, 11-TP, 11-TQ, 11-TR, 11-TS, 11-TT, 11-TU, 11-TV, 11-TW, 11-TX, 11-TY, 11-TZ, 11-UA, 11-UB, 11-UC, 11-UD, 11-UE, 11-UF, 11-UG, 11-UH, 11-UI, 11-UJ, 11-UK, 11-UL, 11-UM, 11-UN, 11-UO, 11-UP, 11-UQ, 11-UR, 11-US, 11-UT, 11-UY, 11-UZ, 11-VA, 11-VB, 11-VC, 11-VD, 11-VE, 11-VF, 11-VG, 11-VH, 11-VI, 11-VJ, 11-VK, 11-VL, 11-VM, 11-VN, 11-VO, 11-VP, 11-VQ, 11-VR, 11-VS, 11-VT, 11-VU, 11-VV, 11-VW, 11-VX, 11-VY, 11-VZ, 11-WA, 11-WB, 11-WC, 11-WD, 11-WE, 11-WF, 11-WG, 11-WH, 11-WI, 11-WJ, 11-WK, 11-WL, 11-WM, 11-WN, 11-WO, 11-WP, 11-WQ, 11-WR, 11-WS, 11-WT, 11-WU, 11-WV, 11-WX, 11-WY, 11-WZ, 11-XA, 11-XB, 11-XC, 11-XD, 11-XE, 11-XF, 11-XG, 11-XH, 11-XI, 11-XJ, 11-XK, 11-XL, 11-XM, 11-XN, 11-XO, 11-XP, 11-XQ, 11-XR, 11-XS, 11-XT, 11-XU, 11-XV, 11-XW, 11-XX, 11-XY, 11-XZ, 11-YA, 11-YB, 11-YC, 11-YD, 11-YE, 11-YF, 11-YG, 11-YH, 11-YI, 11-YJ, 11-YK, 11-YL, 11-YM, 11-YN, 11-YO, 11-YP, 11-YQ, 11-YR, 11-YS, 11-YT, 11-YU, 11-YV, 11-YW, 11-YX, 11-YY, 11-YZ, 11-ZA, 11-ZB, 11-ZC, 11-ZD, 11-ZE, 11-ZF, 11-ZG, 11-ZH, 11-ZI, 11-ZJ, 11-ZK, 11-ZL, 11-ZM, 11-ZN, 11-ZO, 11-ZP, 11-ZQ, 11-ZR, 11-ZS, 11-ZT, 11-ZU, 11-ZV, 11-ZW, 11-ZX, 11-ZY, 11-ZZ

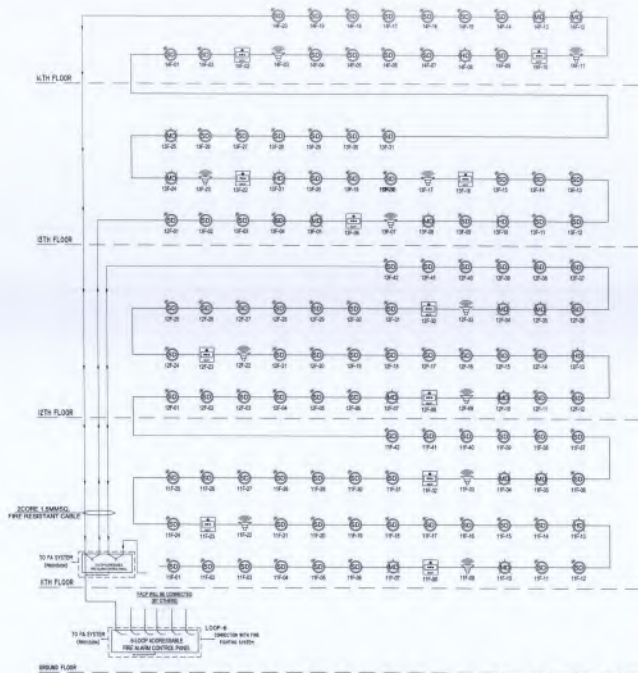
PROJECT:
RENOVATION OF PRC OFFICE BUILDING AT KARACHI

DESIGNED BY: MUHAMMAD ALI HUSSAIN
DESIGNED BY: ASAD NAVEED
CHECKED BY: Engr. M. ZEAL
APPROVED BY: Engr. NAWAZ ZEHRA
DATE: NOVEMBER 2020

DRAWING TITLE:
 EMERGENCY LIGHT & EXIT LIGHT LAYOUT
 (14TH FLOOR PLAN PRC WING-A)

DRAWING NO.: 201107-075-035-08
SCALE: AS SHOWN
SHEET: A3

| REV. | DESCRIPTION | BY | DATE |
|------|-------------|----|------|
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FIRE ALARM SYSTEM RISER DIAGRAM





| | | | | | | | | | |
|---|---|--|--------------------------------|--|---------------------------------|------|--------------|------|-------|
| CLIENT: PARESTAN INSURANCE COMPANY LIMITED | CONSULTANTS: ENGINEERING CONSULTANCY SERVICES (UK) LTD (ECS) (2/A, 2/F, Main Building, Clarendon B, Lahore, Pakistan, +92-42-8850000, +92-42-8117814 @ECS@ecs.com.pk @ www.ecs.com.pk | PROJECT: RENOVATION OF PUGL OFFICE BUILDING AT KARACHI | DRAWN BY: MUHAMMAD ALI HUSSAIN | DRAWING TITLE: | DRAWING NO: 201107-075-FL-02 | REV: | DESCRIPTION: | ERG: | DATE: |
| | | | DESIGNED BY: ASAD NAVEED | ELECTRICAL FIRE ALARM SYSTEM RISER DIAGRAM | | | | | |
| | | | APPROVED BY: Engr. NAWAZ ZESH | | AS SHOWN | A3 | | | |
| | | | DATE: NOVEMBER 2020 | | | | | | |

**LIST OF DRAWING FIREFIGHTING PRCL OFFICE BUILDING
AT KARACHI**

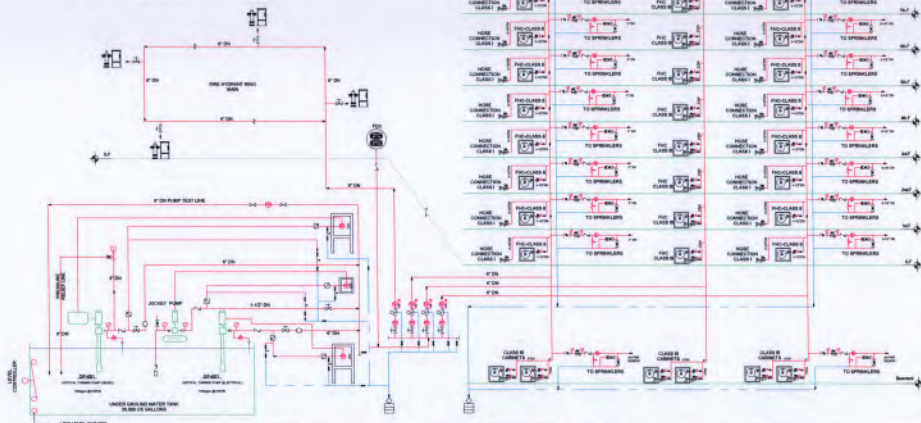
| LIST OF DRAWING FIREFIGHTING PRCL OFFICE BUILDING AT KARACHI | | |
|--|-------------------------------------|--------------------|
| SR. NO. | DRAWING TITLE | DRAWING NO. |
| 01 | LIST OF DRAWING | 231102-375-FIRE-00 |
| 02 | FIREFIGHTING RISER DIAGRAM | 231102-375-FIRE-01 |
| 03 | GENERAL NOT AND LEGEND | 231102-375-FIRE-02 |
| 04 | 11TH FLOOR PLAN FIREFIGHTING LAYOUT | 231102-375-FIRE-03 |
| 05 | 12TH FLOOR PLAN FIREFIGHTING LAYOUT | 231102-375-FIRE-04 |
| 06 | 13TH FLOOR PLAN FIREFIGHTING LAYOUT | 231102-375-FIRE-05 |
| 07 | 14TH FLOOR PLAN FIREFIGHTING LAYOUT | 231102-375-FIRE-06 |
| 08 | FIREFIGHTING INSTALLATION DETAILS | 231102-375-FIRE-07 |



| | | | | | | | | | |
|--|--|---|---|--------------------------------------|--|-------------|--------------------|-------------|-------------|
| CLIENT:  PAKISTAN REINSURANCE COMPANY LIMITED | CONSULTANTS:  ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (ECS) 8/11-A, 5/1, Main Boulevard, Gulberg II, Lahore, Pakistan T: +92-42-99333075 F: +92-42-971708-4 e: info@ecsp.com.pk www.ecsp.com.pk | PROJECT: RENOVATION OF PRCL OFFICE BUILDING AT KARACHI | DRAWN BY: M.SALEEM SAIED | DRAWING TITLE: LAYOUT DRAWING | DRAWING NO.: 231102-375-FIRE-00 | REL. | DESCRIPTION | REQ. | DATE |
| | | | DESIGNED BY: ENGR.AREELA QADKER CHECKED BY: ENGR.FAHAD HASSAN APPROVED BY: ENGR.FAHAD HASSAN DATE: OCTOBER, 2023 | LIST OF DRAWING | SCALE: AS SHOWN SHEET: 03 | | | | |

| S.N | SYMBOLS | DESCRIPTION |
|-----|---------|--------------------------------------|
| 1 | | FIRE HYDRANT LINE |
| 2 | | PRESSURE SIGNALING LINE |
| 3 | | DRAIN LINE |
| 4 | | WATER TANK |
| 5 | | FIRE ALARM WITH HOSE CABINET |
| 6 | | JOCKEY VALVE |
| 7 | | FIRE DEPARTMENT CONNECTION |
| 8 | | FLEXIBLE JOINT |
| 9 | | WATER STOPPER |
| 10 | | PRESSURE GAUGE |
| 11 | | VERTICAL TURBINE PUMP (ELECTRICAL) |
| 12 | | JOCKEY PUMP |
| 13 | | VERTICAL TURBINE PUMP (DIESEL) |
| 14 | | FLOW METER |
| 15 | | CHECK VALVE |
| 16 | | FULLY OPERATED PRESSURE RELIEF VALVE |
| 17 | | BRONZE CHECK VALVE |

| S.N | SYMBOLS | DESCRIPTION |
|-----|---------|----------------------------|
| 18 | | DRAIN COVER |
| 19 | | SEE NEXT PAGE |
| 20 | | ALARM CHECK VALVE ASSEMBLY |
| 21 | | PRESSURE SWITCH |
| 22 | | FLOOR SWITCH |
| 23 | | BALL VALVE |
| 24 | | PRESSURE REGULATING VALVE |
| 25 | | LOCK SHIELD VALVE |
| 26 | | SUPERINTEND VALVE |
| 27 | | PRESSURE RELIEF VALVE |
| 28 | | CLASS B HOSE CABINET |
| 29 | | CIRCULATION RELIEF VALVE |
| 30 | | EXHAUSTIVE REDUCER |
| 31 | | CONCENTRIC REDUCER |
| 32 | | PANEL DRAIN |
| 33 | | TEST AND DRAIN VALVE |
| 34 | | FOOT VALVE |



CLIENT:
PAKRE INSURANCE COMPANY LIMITED

CONSULTANTS:
ENGINEERING CONSULTANCY SERVICES PAKISTAN (PVT) LTD (ECSPP)
 8/4, G-1, Main Boulevard, Gulshan-3, Lahore.
 Tel: (995) 33717881-84, Fax: (995) 33717862

PROJECT:
RENOVATION OF P.O. OFFICE BUILDING AT KARACHI

DRAWN BY: ENGR. ABEEL GAJNER
 DESIGNED BY: ENGR. ABEEL GAJNER
 CHECKED BY: ENGR. FAHAD HASSAN
 APPROVED BY: ENGR. FAHAD HASSAN
 DATE: OCT-2023

DRAWING TITLE:
FIRE FIGHTING SYSTEM - P&ID DRAWING

DRAWING NO:
 2023/1027-078-FRE-01
 SCALE:
 AS SHOWN
 SHEET:
 AS

| REV. | DESCRIPTION | SKD. | DATE |
|------|-------------|------|------|
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GENERAL NOTES:

1. ALL FIRE FIGHTING SHALL BE COMPLIANCE WITH NFPA AND PREVAILING LATEST INTERNATIONAL STANDARDS.
2. SUPPORT, SPACING SWAY/ SEISMIC BRACING SHALL COMPLY NFPA STANDARDS.
3. ALL HANGERS, BRACKETS, ETC. SUPPORTING THE PIPES AND EQUIPMENT SHALL COMPLY WITH NFPA STANDARDS.
4. ALL FITTINGS / VALVES TO BE APPROVED.
5. EQUIPMENT USED MUST BE UL LISTED OR APPROVED.
6. INSTALLATION OF FIRE FIGHTING SYSTEM (STANDPIPE) SHALL BE AS PER NFPA 14.
7. INSTALLATION OF FIRE FIGHTING EXTINGUISHERS SHALL BE AS PER NFPA 10.
8. PORTABLE FIRE EXTINGUISHERS SHALL BE LISTED LABELED AND CLEARLY MARKED ON EACH FIRE EXTINGUISHERS.
9. PORTABLE FIRE EXTINGUISHERS SHALL BE APPROVED.
10. ALL FIRE FIGHTING PIPES PENETRATION THROUGH WALLS AND SLABS SHALL BE SEALED WITH FIRE RETARDANT MATERIAL OR RATING NOT LESS THAN THE RATING OF WALL OR SLAB BEING PENETRATED.
11. NOTES APPEAR ON OTHER DRAWINGS SHALL BE APPLICABLE FOR ALL THE FIRE FIGHTING DRAWINGS OF THIS PROJECT.
12. ALL FIRE FIGHTING PIPES SHALL BE PROTECTED AGAINST SEISMIC EVENTS COMPLYING WITH NFPA STANDARDS. FLEXIBLE CONNECTION SHALL BE INSTALLED ON BUILDING SEISMIC / EXPANSION JOINTS / GAPS SHALL BE COMPLY WITH LATEST EDITION OF NFPA 13.
13. CONTRACTOR SHALL COORDINATE ALL BUILDER WORK REQUIREMENTS BASED ON DRAWINGS, MATERIAL AND SUBMITTAL APPROVALS.
14. CONTRACTOR TO CO-ORDINATE ALL BUILDING SERVICES.
15. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH SPECIFICATIONS.

KEY PLAN



Firefighting Line Outside building (HDP)



Firefighting Line Inside building (Black Steel Pipe)



Fire Hose Cabinet Class II



Fire Hose Cabinet Class III



Pendent Sprinkler



Upright Sprinkler



Pendent Sprinkler



FE-1 Fire Extinguisher ABC



FE-2 Fire Extinguisher K-typ for Kitchen area



FE-3 Fire Extinguisher CO2



Ø2 1/2 Siamese Connection



Check Valve



Gate Valve



Pumper Fire Hydrant



= ABOVE FALLS CEILING



= DOWN



= FIRE DEPARTMENT CONNECTION



= FROM ABOVE



= FROM BELOW



= HIGH LEVEL



= TO ABOVE



= TO BELOW



= UNDER GROUND





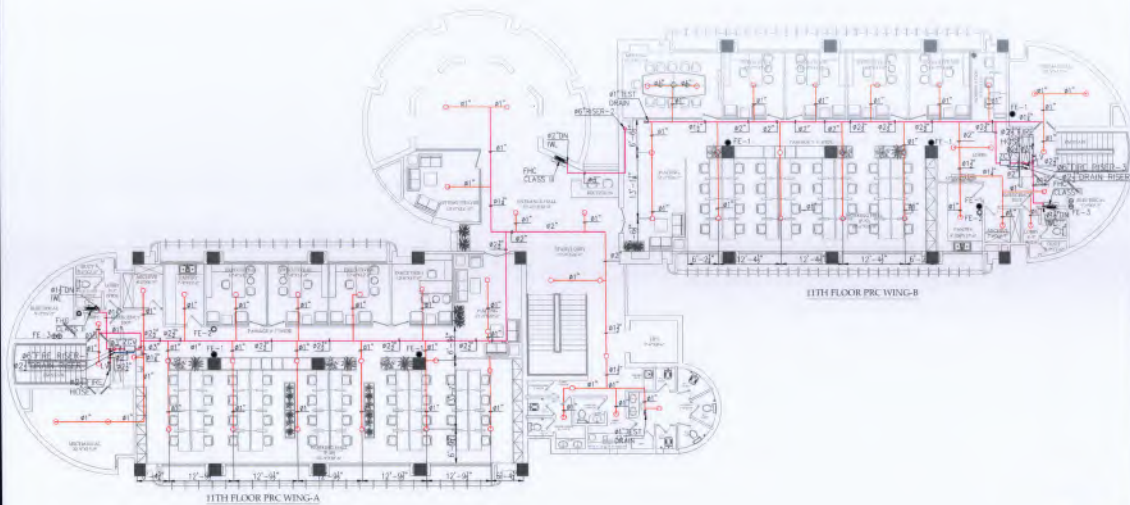
= UP IN WALL




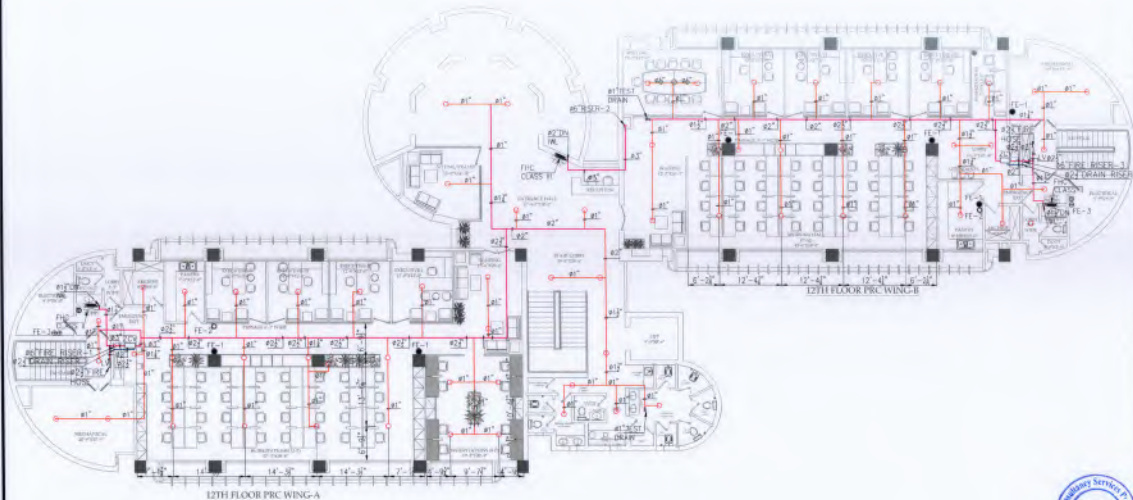
= DOWN IN WALL





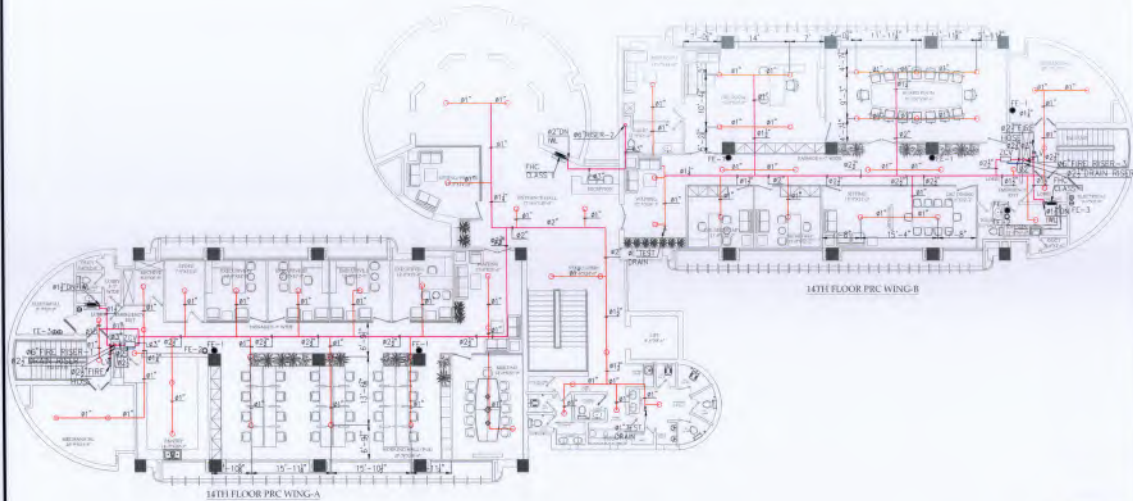
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|--|--|---|--|--------------------------------------|---------------------------------------|-------------|---------------------|---------------|---------------|--------------|
| CLIENT:  PAKISTAN REINSURANCE COMPANY LIMITED | CONSULTANTS:  ENGINEERING CONSULTANCY SERVICES PUNJAB (PVT) LTD (ECS) 25/24-A, C-1, Main Boulevard, Gulberg II, Lahore, Pakistan T: +92-42-9933307, +92-42-011781-4 e: info@ecs.com.pk www.ecs.com.pk | PROJECT: RENOVATION OF FUEL OFFICE BUILDING AT KARACHI | DRAWN BY: M.SALEEM SAIED | DRAWING TITLE: LAYOUT DRAWING | DRAWING NO: DR/130-079/1113-02 | REV: | DESCRIPTION: | SCALE: | SHEET: | DATE: |
| | | | DESIGNED BY: ENGR.ABIDUL GADDER | GENERAL NOTE AND LEGEND | | | | | | |
| | | | CHECKED BY: ENGR.FAHAD HUSSAIN | | | | | | | |
| | | | APPROVED BY: ENGR.FAHAD HUSSAIN | | | | | | | |
| | | | DATE: OCTOBER 2023 | | | | | | | |




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|--|---|--|--|--|---|---|
| CLIENT:  PAKISTAN INSURANCE COMPANY LIMITED | CONSULTANTS: ENGINEERING CONSULTANCY SERVICES MULLER (PVT) LTD (ECS) 87/4-A, 87, West Boulevard, Durgam Hill, Lahore, Pakistan T: +92-42-69339376 F: +92-42-6717881-4 e: info@ecsp.com.pk www.ecsp.com.pk | PROJECT: RENOVATION OF PRC OFFICE BUILDING AT KARACHI | DRAWN BY: M.SALEEM SAIED | DRAWING TITLE: LAYOUT DRAWING 11TH FLOOR PLAN FIRE-FIGHTING LAYOUT | DRAWING NO: 23100-075-7333-01 | REV. DESCRIPTION SIGN. DATE |
| | | | DESIGNED BY: ENGR.ABIDUL GADDER CHECKED BY: ENGR.FAHAD HASAN APPROVED BY: ENGR.FAHAD HASAN DATE: OCTOBER-2023 | | SCALE: SHEET: AS SHOWN A3 | |



| CLIENT:  PAKISTAN REINSURANCE COMPANY LIMITED | CONSULTANTS:  ENGINEERING CONSULTANCY SERVICES PAKISTAN (PVT) LTD (ECS) 27/A, 2/F, Main Boulevard, Durrani B, Lahore, Pakistan T: +92-42-89339378 F: +92-42-8717981-4 e: info@ecs.com.pk www.ecs.com.pk | PROJECT: RENOVATION OF FULL OFFICE BUILDING AT KARACHI | DRAWN BY: M.SALEEM SAIED | DRAWING TITLE: LAYOUT DRAWING GROUND TO 12TH FLOOR MASTER PLAN FIRE FIGHTING LAYOUT | DRAWING NO: 201305-075-1317-04 | REV. | DESCRIPTION | SKD. | DATE |
|--|--|---|--|--|---|-------------|--------------------|-------------|-------------|
| | | | DESIGNED BY: ENGR.ABDEL GACKER CHECKED BY: ENGR.FAHAD HASSAN APPROVED BY: ENGR.FAHAD HASSAN DATE: OCTOBER, 2023 | | <table border="1"> <tr> <th>SCALE</th> <th>SHEET</th> </tr> <tr> <td>AS SHOWN</td> <td>AS</td> </tr> </table> | | | | |
| SCALE | SHEET | | | | | | | | |
| AS SHOWN | AS | | | | | | | | |



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|--|---|--|---|--|--|--|
| CLIENT:  PAKISTAN INSURANCE COMPANY LIMITED | CONSULTANTS: ENGINEERING CONSULTANCY SERVICES FUJIAN (PVT) LTD (ECSF) 10/11-A, 6/1, Main Boulevard, Gulberg II, Lahore, Pakistan T: +92-42-99333078, +92-42-9717991-4 E: info@ecsf.com.pk @ www.ecsf.com.pk | PROJECT: RENOVATION OF PRC OFFICE BUILDING AT KARACHI | DRAWN BY: M. SADEEM SADEEM | DRAWING TITLE: LAYOUT DRAWING 14TH FLOOR PLAN FIRE FIGHTING LAYOUT | DRAWING NO: 21115-97-1132-06 | REV. DESCRIPTION SIGN. DATE |
| | | | DESIGNED BY: ENG. ALEENA QADIR CHECKED BY: ENG. FARAZ HUSSAIN APPROVED BY: ENG. FARAZ HUSSAIN DATE: OCTOBER 2009 | | SCALE: AS SHOWN | |

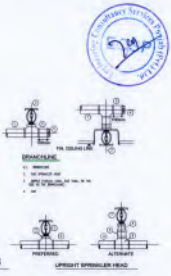
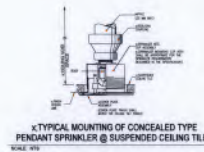
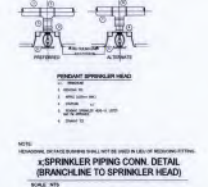
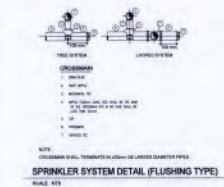
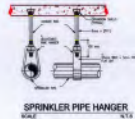
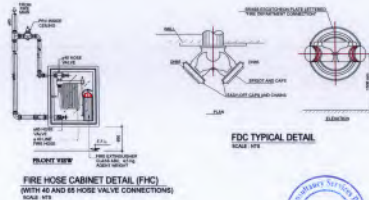
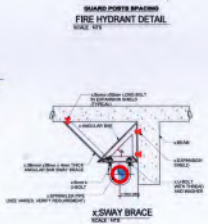
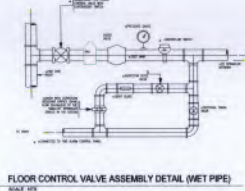
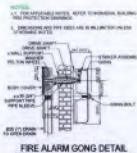
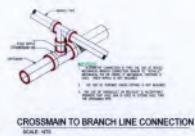
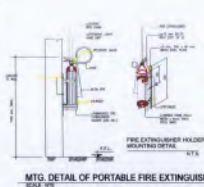
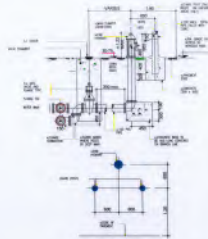
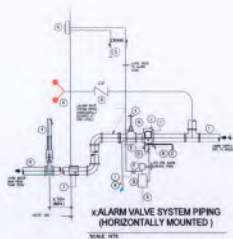


TABLE-1
PIPE HANGER SPACING AND HANGERS' ROD SIZES FOR BLACK STEEL & GALVANIZED STEEL

| PIPE DIAMETER | STEEL TYPE | | HANGERS' ROD SIZE (IN) |
|---------------|-----------------|-------------------|------------------------|
| | L SPRINKER (IN) | VERTICAL POSITION | |
| 15 | 1 1/2" | 2.4 | 1.8 |
| 20 | 2 1/4" | 3.0 | 2.5 |
| 25 | 3" | 3.0 | 2.5 |
| 32 | 1 1/2" | 3.7 | 2.5 |
| 40 | 1 1/2" | 3.7 | 2.5 |
| 50 | 2" | 4.6 | 3.0 |
| 65 | 2 1/2" | 5.5 | 3.7 |
| 80 | 3" | 6.5 | 4.5 |
| 100 | 4" | 7.5 | 5.5 |
| 125 | 5" | 8.5 | 6.5 |
| 150 | 6" | 9.5 | 7.5 |
| 200 | 10" | 10.5 | 8.5 |
| 250 | 12" | 10.5 | 9 |
| 300 | 12" | 10.5 | 9 |
| 450 | 18" | 10.5 | 8.5 |

| | | | | | | | | | |
|--|--|--|--|--|---|---------------------|------------------------------|-----------------|--------------------|
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| | | | DESIGNED BY: ENGR. ANJAL QADIR | | SCALE: AS SHOWN | SHEET: 01 | DATE: OCTOBER-2023 | NO. 1 | DESCRIPTION |