FIRE ALARM SPECIFICATIONS:

A. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL FIRE ALARM DEVICES AND ASSOCIATED CABLING AS PER THE PLANS AND DIAGRAMS.
B. ALL FIRE ALARM DEVICES WILL BE COMPATIBLE WITH THE NEW FIRE ALARM SYSTEM. ALL DEVICES SHALL BE PURCHASED FROM THE SAME MANUFACTURER.
D. ALL STROBES, SPEAKERS AND COMBINATION SPEAKER STROBES SHALL BE WHITE.
E. THE CONTRACTOR SHALL INCLUDE IN HIS BID FILING FOR AND OBTAINING ALL PERMITS AND APPROVALS FROM ALL AUTHORITIES HAVING JURISDICTION.

F. GENERAL

FURNISH AND INSTALL ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO EXTEND THE EXISTING FULLY ADDRESSABLE FIRE ALARM SYSTEM AS DETAILED BY THESE SPECIFICATIONS, AND AS SHOWN ON THE PLANS. SYSTEM IS TO BE TO BE WIRED, CONNECTED, TESTED, AND LEFT IN FIRST CLASS OPERATING CONDITION. ALL EQUIPMENT SHALL BE UL LISTED FOR USE IN FIRE PROTECTIVE SIGNALING SYSTEMS AND BEAR THE UL LABEL. THE INSTALLED SYSTEM SHALL CONFORM TO INTERNATIONAL BUILDING CODE, ALL APPLICABLE NFPA CODES, THE AMERICANS WITH DISABILITIES ACT, AND SHALL MEET THE REQUIREMENTS OF ALL OTHER CODES AND STANDARDS CURRENTLY ADOPTED BY THE AUTHORITY HAVING JURISDICTION.

THE FIRE ALARM SYSTEM SHALL BE THE PRODUCT OF ONE MANUFACTURER AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

ADDRESSABLE CONTROL PANEL
SERIAL ALPHA NUMERIC ANNUNCIATOR
ANALOG ADDRESSABLE COMBINATION PHOTOELECTRIC SENSORS
ANALOG ADDRESSABLE PHOTOELECTRIC AIR DUCT SMOKE SENSORS
ANALOG ADDRESSABLE THERMAL DETECTORS
ADDRESSABLE INPUT (MONITOR) AND OUTPUT (CONTROL) MODULES
DUAL ACTION ADDRESSABLE MANUAL STATIONS
AUDIO/VISUAL, AUDIO AND VISUAL ALARM INDICATING APPLIANCES
BATTERY BACK-UP
CENTRAL STATION CONNECTION

THE MODEL NUMBERS SPECIFIED HEREIN ARE THOSE OF EDWARDS SYSTEMS TECHNOLOGY (EST/SSC)) AS DISTRIBUTED BY THEIR AUTHORIZED DISTRIBUTOR, SYSTEMS SALES CORPORATION, NEPTUNE, NJ (732-751-0600).

ALL OPERATIONAL PERFORMANCE CRITERION OF THIS SPECIFICATION MUST BE MET BY THE PROPOSED COMPARABLE EQUIPMENT IN ORDER TO QUALIFY THAT PROPOSED EQUIPMENT IS EQUAL TO THE PERFORMANCE EQUIPMENT CONTAINED WITHIN THIS SPECIFICATION.

FINAL DETERMINATION OF COMPLIANCE WITH THESE SPECIFICATIONS SHALL REST WITH THE ARCHITECT AND ENGINEER, WHO, AT THEIR DISCRETION, MAY REQUIRE PROOF OF PERFORMANCE.

G. SYSTEM MINIMUM OPERATING REQUIREMENTS

ALL OF THE FUNCTIONS DETAILED BELOW ARE MINIMUM OPERATING STANDARDS FOR THE PROPOSED FIRE ALARM SYSTEM. ANY EQUIPMENT SUPPLIER WHO BIDS ON THIS PROJECT MUST DEMONSTRATE THESE FUNCTIONS DETAILED IN THIS SPECIFICATION ON AN OPERATING DEMONSTRATION SYSTEM OF THE TYPE WHICH IS TO BE BID.

THE USE OF CATALOG PAGES TO DEMONSTRATE A FIRE ALARM FUNCTION IS NOT ACCEPTABLE.

OPERATOR INTERFACE: THE SYSTEM SHALL PROVIDE AN OPERATOR INTERFACE WHICH IS DEDICATED LED ANNUNCIATION FOR THE FOLLOWING SYSTEM CONDITIONS: NORMAL, ALARM, SUPERVISORY, TROUBLE, AND TEST/PROGRAM. INDIVIDUAL OPERATOR PUSH-BUTTON SHALL BE PROVIDED FOR THE FOLLOWING SYSTEM FUNCTIONS: RESET, ALARM SILENCE, TROUBLE SILENCE, AND DRILL/ALL CALL SYSTEM. CHANGE OF STATE ACKNOWLEDGMENT PUSH BUTTONS SHALL BE PROVIDED WHICH WILL ALLOW THE OPERATOR TO ACKNOWLEDGE ALL NEW CHANGES OF STATE IN THE SYSTEM UTILIZING THE 'BACK' AND 'NEXT ACKNOWLEDGE' COMMAND SET.

ALPHANUMERIC LCD (LIQUID CRYSTAL DISPLAY) SHALL BE PROVIDED. THE LCD SHALL ANNUNCIATE, IN FULL ENGLISH LANGUAGE, ALL CHANGES OF STATE IN THE SYSTEM, AS WELL AS THE DESCRIPTIVE LOCATION OF THE DEVICE WHICH HAS CHANGED STATE WITHIN THE PROTECTED PREMISES. THE LCD SHALL CONSIST OF 2 LINES OF 40 CHARACTERS EACH TO ACCOMPLISH THIS ANNUNCIATION. THE LCD SHALL INDICATE THE CURRENT TIME OF DAY, THE TOTAL NUMBER OF ACTIVE POINTS IN THE SYSTEM, AND THE TOTAL NUMBER OF DISABLED POINTS WITHIN THE SYSTEM. THE LCD SHALL ALSO INDICATE WHETHER THE SYSTEM HAS ADDITIONAL MESSAGES WAITING FOR THE OPERATOR BY DISPLAYING A 'MESSAGE WAITING' MESSAGE, AS WELL AS THE SOUNDING OF THE SYSTEM OPERATOR ALERT SIGNAL. THE OPERATOR ALERT SIGNAL SHALL SOUND UNTIL ALL 'MESSAGES WAITING' STATES HAVE BEEN ACKNOWLEDGED BY THE OPERATOR. THE LCD SHALL BE CAPABLE, UPON OPERATOR COMMAND, TO DISPLAY THE CONDITION OF ALL CIRCUITS OR DEVICES IN THE SYSTEM.

SYSTEM PROGRAMMING. THE SYSTEM SHALL BE PROGRAMMABLE WITH THE USE OF A PROPRIETARY, APPLICATION-SPECIFIC DATA ENTRY PROGRAM THAT HAS BEEN DEVELOPED SPECIFICALLY OR THE PURPOSE OF PROGRAMMING THE SYSTEM.

THE SYSTEM DATA ENTRY PROGRAM SHALL PROVIDE A MENU DRIVEN FORMAT, WHICH WILL IDENTIFY ALL OF THE FUNCTIONS OF THE FIELD PANELS. THE DATA ENTRY PROGRAM WILL BE A DATA COMPILER AND A PROGRAMMER-INITIATED DOWNLOAD PROCEDURE, WHICH WILL ALLOW THE PROGRAMMER OF THE FIRE ALARM/FIRE ALARM SYSTEM TO DOWNLOAD THE COMPILED DATA TO THE ENTIRE TRUE NETWORK FROM A SINGLE POINT IN THE NETWORK. THE NEED TO BURN PROMS FOR THE INITIAL DEFINITION OF, OR SUBSEQUENT MODIFICATION OF THE SYSTEM PROGRAM IS UNACCEPTABLE.

SENSITIVITY REPORTS: THE SYSTEM SHALL BE CAPABLE OF PROVIDING A HARD COPY REPORT, WHICH WILL DOCUMENT THE SENSITIVITY OF EACH OF THE SYSTEM ANALOG DEVICES AT THE TIME OF TESTING. THIS REPORT SHALL BE TIME AND DATE STAMPED, AND SHALL BE GENERATED.

HISTORY REPORTS: THE SYSTEM SHALL BE CAPABLE OF THE GENERATION OF HISTORY REPORTS WHICH WILL DOCUMENT ALL SYSTEM ACTIVITIES (CHANGES OF STATE), WITHIN THE SYSTEM WHICH HAVE OCCURRED SINCE THE LAST 'RESET VERIFY HISTORY', OR SYSTEM 'RESTART' COMMAND WERE ISSUED.

H. SYSTEM OPERATION

THE OPERATION OF A MANUAL STATION OR ACTIVATION OF ANY SMOKE/HEAT SENSOR, DUCT SMOKE DETECTOR, THERMAL DETECTOR, SPRINKLER WATER FLOW SWITCH, OR ANY AUTOMATIC ALARM-INITIATING DEVICE SHALL AUTOMATICALLY: ACTIVATE THE CENTRAL STATION ALARM TRANSMISSION. SOUND ALL AUDIBLE DEVICES THROUGHOUT THE BUILDING.

FLASH ALL ALARM STROBES THROUGHOUT THE BUILDING. VISUALLY INDICATE VIA THE CONTROL PANEL LCD, THE ADDRESSABLE DEVICE IN AN ALARM CONDITION. VISUALLY INDICATE VIA THE REMOTE ANNUNCIATOR LCD DISPLAY, THE ADDRESSABLE DEVICE IN AN ALARM CONDITION

THE OPERATOR SHALL ACKNOWLEDGE THE ALARM BY PRESSING THE NEXT/ACK BUTTON, AND THE BUZZER WILL SILENCE PROVIDING THERE ISN'T AN ADDITIONAL ALARM PENDING. IF THERE ARE ADDITIONAL ALARMS WAITING THE OPERATOR SHALL ACKNOWLEDGE ALL PENDING ALARMS BEFORE THE BUZZER WILL SILENCE. TO SILENCE AUDIBLE DEVICES THE OPERATOR SHALL PRESS THE ALARM SILENCE BUTTON, A NEW ALARM SHALL CAUSE THE AUDIBLE SIGNALS TO RESOUND. TO RESET THE SYSTEM THE OPERATOR SHALL PRESS THE RESET BUTTON.

I. EQUIPMENT

FIRE ALARM CONTROL PANEL

FURNISH AND INSTALL WHERE SHOWN ON THE PLANS AN EDWARDS SYSTEMS TECHNOLOGY MODEL NO EST-2 FIRE ALARM CONTROL PANEL. THE CONTROLLER SHALL BE MODULAR FOR EASE OF INSTALLATION, MAINTENANCE AND CONFIGURATION. THE CONTROLLER SHALL HAVE AN 80 CHARACTER LIQUID CRYSTAL DISPLAY (LCD) THAT OFFERS (2) 40-CHARACTER LINES. DURING THE NORMAL STATE, THE NORMAL LED (GREEN) SHALL FLASH. THE FIRST LINE OF THE LCD SHALL DISPLAY THE TIME IN (HHMMSS) AS WELL AS THE NUMBER OF ACTIVE POINTS ('AP') AND THE NUMBER OF DISABLED POINTS ('DP') IN THE SYSTEM.

THE CONTROLLER SHALL PROVIDE FOR SENSITIVITY ADJUSTMENT AND ALARM VERIFICATION BY POINT, PROCESS THE INFORMATION FROM ALL ADDRESSABLE DEVICES ON ITS LOOP AND MONITOR NORMAL, ALARM, TROUBLE AND ENVIRONMENTAL COMPENSATION CONDITIONS. THE BROADCAST POLLING TIME FOR THE SYSTEM SHALL BE UNDER 1 SEC. REGARDLESS OF THE NUMBER OF ADDRESSABLE LOOPS IN THE SYSTEM. SYSTEMS REQUIRING SPECIAL WIRE OR HOME RUN CONNECTIONS SHALL NOT BE ACCEPTABLE. 'T' TAPPING SHALL BE PERMITTED IN CLASS B WIRING CONFIGURATIONS. THE ANALOG LOOP CONTROLLER SHALL PROVIDE INTEGRAL ALARM AND TROUBLE RELAYS. THE ANALOG LOOP CONTROLLER SHALL BE CAPABLE OF DETECTING THE ELECTRICAL LOCATION OF EACH ADDRESSABLE DEVICE. IT SHALL BE POSSIBLE TO DISPLAY ON A LAPTOP PERSONAL COMPUTER, THE ADDRESSABLE DEVICE MAP IN THE MANNER WHICH IT IS WIRED.

THE FIRE ALARM CONTROL PANEL SHALL BE PROVIDED WITH A 6.0 AMP POWER SUPPLY TO ALLOW SUFFICIENT CAPACITY FOR INDICATING APPLIANCES BEING INSTALLED IN THE CORE BUILDING AS WELL AS THOSE WHICH WILL BE INSTALLED IN FUTURE TENNANT FITOUTS.

J. ANALOG AREA SMOKE DETECTORS

THE ADDRESSABLE MUL SHALL BE EST INC. TYPE SIGA-IPHS AND CONNECT WITH (2) WIRES TO THE SYSTEM CONTROLLER. THE SIGA-IPHS SENSOR SHALL BE EASY TO INSTALL INTO A TWIST-LOCK BASE. THE SIGA-IPHS SHALL GATHER ANALOG INFORMATION FROM ITS SMOKE SENSING ELEMENTS CONVERTING THEM INTO DIGITAL SIGNALS.

K. ANALOG AIR DUCT SMOKE DETECTORS:

THE DUCT DETECTOR SHALL BE THE EST, INC. SIGA-SD AND SHALL ACCOMMODATE A SIGNATURE SERIES ANALOG PHOTOELECTRIC SMOKE DETECTOR. THE AIR VELOCITY RANGE OF THE DETECTORS SHALL BE 0 TO 4,000 FT/MIN. LOCATE DUCT DETECTOR ACCORDING TO NFPA 72 RECOMMENDATIONS. FOR EACH DUCT SMOKE DETECTOR INSTALLED, A MODEL NO. SD-TRK REMOTE KEY OPERATED TEST STATION WITH ALARM INDICATING LED SHALL BE FURNISHED AND INSTALLED AT LOCATION SHOWN ON THE PLANS OR AS DIRECTED IN THE FIELD.

L. ANALOG THERMAL SENSORS:

THE ADDRESSABLE ANALOG THERMAL SENSOR SHALL BE EST INC. TYPE SIGA-HFS AND CONNECT WITH (2) WIRE (TWISTED PAIR) TO THE CONTROLLER. THESE SENSORS SHALL BE EASY TO INSTALL INTO A TWIST-LOCK BASE. THE SENSORS ON BOARD MICROPROCESSOR SHALL MEASURE AND ANALYZE DIGITAL SIGNALS AND SHALL COMPARE THEM TO HISTORICAL READINGS AND TIME PATTERNS IN ORDER TO MAKE AN ALARM DECISION. DIGITAL FILTERS ARE USED TO REMOVE SIGNAL PATTERNS THAT ARE NOT TYPICAL OF FIRES, THUS NEARLY ELIMINATING UNWANTED ALARMS. THE SENSORS SHALL BE BASED ON FIXED TEMPERATURE AND SHALL ALARM AT 135 DEGREES (SIGA-HFS).

M. ADDRESSABLE MANUAL PULL STATIONS:

PROVIDE ADDRESSABLE 278 SERIES DOUBLE ACTION, SINGLE STAGE NON-CODED FIRE ALARM STATION (SIGA-278). THE FIRE ALARM STATION SHALL BE OF LEXAN CONSTRUCTION WITH AN INTERNAL TOGGLE SWITCH. PROVIDE A LOCKED TEST FEATURE. FINISH THE STATION IN RED WITH WHITE 'PULL IN CASE OF FIRE' LETTERING. THE ADDRESSABLE FIRE ALARM STATION SHALL HAVE A MINIMUM OF 2 DIAGNOSTIC LEDS. A GREEN LED SHALL FLASH TO CONFIRM COMMUNICATION WITH THE LOOP CONTROLLER. A RED LED SHALL FLASH TO DISPLAY ALARM STATUS. THE FIRE ALARM STATION SHALL BE CAPABLE OF DISPLAYING UP TO 32 DIAGNOSTIC CODES. THE MODULE SHALL BE SUITABLE FOR MOUNTING ON A NORTH AMERICAN 1 1/2 " DEEP, 4" SQUARE BOX WITH 1/2" RAISED COVER. TERMINAL CONNECTIONS SHALL BE ACCESSIBLE FROM THE ROOM SIDE OF THE ASSEMBLY.

N. ADDRESSABLE MONITOR MODULES:

THE ADDRESSABLE MONITOR MODULE EST INC. DULA INPUT TYPE SIGA-CT2 AND SHALL BE USED TO CONNECT SUPERVISED WATER FLOW AND TAMPER SWITCHES TO THE ADDRESSABLE ANALOG LOOPS. THE MODULE SHALL BE CAPABLE OF CONNECTING CLASS B NORMALLY OPEN ALARM, SUPERVISORY, OR MONITOR TYPE DRY CONTACT INITIATING DEVICE CIRCUITS (IDC). MODULES SHALL TAKE THEIR OPERATING POWER FROM THE INITIATING DEVICE CIRCUIT AND SHALL NOT REQUIRE ADDITIONAL WIRING FOR OPERATING POWER.

O. ADDRESSABLE CONTROL MODULES:

THE ADDRESSABLE CONTROL MODULE EST INC. TYPE SIGA-CR SHALL BE USED TO CONTROL EXTERNAL APPLIANCES SUCH AS ELEVATOR RECALL, ELEVATOR SHUNT TRIP AND FANS, WITH A FORM C DRY RELAY CONTACT. THE ON BOARD PROCESSOR ENSURES THAT THE RELAY IS IN THE PROPER ON/OFF STATE. MODULES SHALL TAKE THEIR OPERATING POWER FROM THE INITIATING DEVICE CIRCUIT AND SHALL NOT REQUIRE ADDITIONAL WIRING FOR OPERATING POWER.D

P. REMOTE ALPHA NUMERIC DISPLAY ANNUNCIATOR:

THE EST MODEL NO. 2-LSRA-C REMOTE ALPHANUMERIC ANNUNCIATOR SHALL BE LOCATED AS INDICATED ON THE DRAWINGS. THE ANNUNCIATOR SHALL CONTAIN A SUPERVISED, BACKLIT, LIQUID CRYSTAL DISPLAY ALPHANUMERIC DISPLAY. THE DISPLAY SHALL FULLY DUPLICATE THE INFORMATION PRESENTED ON THE NETWORK CONTROLLER INCLUDING NORMAL, ALARM, TROUBLE AND SUPERVISORY LED'S. KEY SWITCH ENABLED RESET, ALARM, TROUBLE, SILENCE, TROUBLE SILENCE AND DRILL SWITCHES SHALL BE PROVIDED. A PRINTER PORT SHALL BE PROVIDED ON THE ANNUNCIATOR TO FACILITATE GENERATING HARD COPY RECORD OF SYSTEM ACTIVITY.NEN

Q. LOW PROFILE HORN-STROBES:

PROVIDE ELECTRONIC HORN/STROBES MANUFACTURED BY EST, CAT. NO. GIRF-HDVM SERIES. THE HORN/STROBE SHALL HAVE A RED PLASTIC HOUSING. A SYNCHRONIZED TEMPORAL PATTERN SOUND OUTPUT LEVEL OF 97-DBA AVERAGE SHALL BE PROVIDED. THE STROBE SHALL PROVIDE MULTI-CANDELA SYNCHRONIZED FLASH OUTPUTS. THE STROBE SHALL HAVE LENS MARKINGS ORIENTED FOR WALL MOUNTING. HORN/STROBE SHALL MOUNT TO 1-GANG ELECTRICAL BOX (2-1/8" DEEP) ELECTRICAL BOX.

R. LOW PROFILE STROBES:

SELF-SYNCHRONIZED STROBES SHALL BE EDWARDS MODEL NO. GIRF-VM MULTI-CANDELA SYNCHRONIZED FLASH OUTPUTS. THEY SHALL BE UL LISTED FOR FIRE PROTECTIVE SERVICE AND COMPLY WITH ADA REQUIREMENTS. STROBES SHALL MOUNT IN A 1-GANG ELECTRICAL BOX (2-1/8" DEEP). ALL STROBES SHALL HAVE LENS MARKINGS ORIENTED FOR WALL MOUNTING.

S. DIGITAL ALARM ANNUNCIATOR

THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL AN EST MODEL NO. DL-2 UL LISTED FIRE ALARM DIGITAL COMMUNICATOR FOR TRANSMISSION OF FIRE ALARM, TROUBLE AND SUPERVISORY SIGNALS TO A UL LISTED CENTRAL STATION. PROVIDE, AS PART OF THE INSTALLATION CONTRACT AND UPON DATE OF SYSTEM ON-LINE USE, THE FIRST 90 DAYS OF CENTRAL STATION MONITORING. THE ELECTRICAL CONTRACTOR SHALL INCLUDE ALL INITIAL CONNECTION FEES, FIRST 90 DAYS OF SUBSCRIPTION FEES AND ANY OTHER RELATED EXPENSES IN THIS BID. IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PROVIDE TWO TELEPHONE LINES TERMINATED AT RJ31X JACKS ADJACENT TO THE COMMUNICATOR. THE ALARM MONITORING COMPANY SHALL, THROUGH THE ELECTRICAL CONTRACTOR, PROVIDE THE OWNER A PROPOSAL FOR ANNUAL MONITORING OF THE SYSTEM UPON EXPIRATION OF THE INITIAL 90-DAY PERIOD.

T. FIRE ALARM SYSTEM INSTALLATION:

INSTALLATION OF THE FIRE ALARM SYSTEM SHALL BE IN STRICT COMPLIANCE WITH MANUFACTURERS' RECOMMENDATIONS AND AS INDICATED ON THE RISER/CONNECTION DIAGRAM DRAWINGS. EACH SYSTEM ALARM POINT SHALL BE UNIQUELY LABELED AND RETAINED WITHIN THE FIRE ALARM CONTROL PANEL. NAMES OF THE SYSTEM POINTS SHALL BE AS DEFINED BY THE SYSTEM SUPPLIER AND APPROVED BY THE ARCHITECT/ENGINEER.

U. CABLE AND WIRING:

CONDUIT AND CONDUCTORS: COMPLETE WIRING AND CONDUIT SHALL BE SUPPLIED BETWEEN ALL EQUIPMENT. UNLESS OTHERWISE SPECIFIED WITHIN THE INSTALLATION MANUAL OF THE SPECIFIC EQUIPMENT BEING USED, ALL FIELD WIRING SHALL BE MINIMUM #18 AWG FPLP FOR THE ADDRESSABLE DATA LINE CIRCUIT AND #14 AWG FPLP FOR SIGNALING APPLIANCE CIRCUITS. ALL FIELD DEVICES SHALL BE MOUNTED IN OR UPON UL. LISTED ELECTRICAL JUNCTION BOXES. ALL SPLICES IN FIELD WIRING SHALL BE MADE IN UL. LISTED ELECTRICAL JUNCTION BOXES. ALL ELECTRICAL JUNCTION BOXES SHALL BE LABELED AS 'FIRE ALARM SYSTEM' WITH DECAL OR OTHER APPROVED MARKINGS. THE FIRE ALARM/FIRE ALARM INSTALLATION SHALL COMPLY FULLY WITH ALL LOCAL, STATE AND NATIONAL CODES, AND THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ). CABLE MUST BE SEPARATED FROM ANY CONDUCTORS OF POWER, OR CLASS 1 CIRCUITS, AND SHALL NOT BE PLACED IN ANY CONDUIT, JUNCTION BOX OR RACEWAY CONTAINING THESE CONDUCTORS, AS PER NEC ARTICLE 760-29.

V. SYSTEM INSTALLATION:

THE ENTIRE SYSTEM SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH APPROVED MANUFACTURERS' MANUALS AND WIRING DIAGRAMS. THE CONTRACTOR SHALL FURNISH ALL CONDUIT, WIRING, OUTLET BOXES, JUNCTION BOXES, CABINETS AND SIMILAR DEVICES NECESSARY FOR THE COMPLETE INSTALLATION. WHERE DEVICES SUCH AS MANUAL PULL STATIONS, BELL/STROBES OR STROBES ARE INDICATED AS SURFACE MOUNTED, PROVIDE THE A FINISHED SURFACE BOX BY FIRE ALARM THE EQUIPMENT MANUFACTURER WHICH IS SPECIFICALLY INTENDED FOR USE WITH THAT DEVICE. ALL WIRING SHALL BE OF THE TYPE RECOMMENDED BY THE NEC, APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION FOR THE PURPOSE, AND SHALL BE INSTALLED IN DEDICATED CONDUIT THROUGHOUT, AND WIRED PER THE MANUFACTURERS' RECOMMENDATIONS. ALL PENETRATION OF FLOOR SLABS AND FIREWALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH ALL LOCAL FIRE CODES.

W. FINAL SYSTEM ACCEPTANCE:

THE FIRE ALARM SYSTEM WILL BE ACCEPTED ONLY AFTER A SATISFACTORY TEST OF THE ENTIRE SYSTEM HAS BEEN ACCOMPLISHED BY A FACTORY-TRAINED ENGINEERED SYSTEMS DISTRIBUTOR IN THE PRESENCE OF A REPRESENTATIVE OF THE AUTHORITY HAVING JURISDICTION AND THE OWNER'S REPRESENTATIVE. THE ENGINEERED SYSTEMS DISTRIBUTOR WILL PRESENT A COMPLETE SET OF FIRE ALARM SYSTEM. REPORTS OF ALL TESTING PERFORMED DURING INSTALLATION OF THE SYSTEM SHALL BE FORWARDED TO THE ENGINEER.

EACH INDIVIDUAL SYSTEM POINT AND OPERATION SHALL BE TESTED, AND DOCUMENTED ON A POINT BY POINT BASIS FOR ITS COMPLETE AND PROPER OPERATION. PROCEDURES FOR TESTING THE ENTIRE FIRE ALARM SYSTEM SHALL BE PROVIDED BY THE ENGINEERED SYSTEMS DISTRIBUTOR TO THE FOLLOWING PARTIES: THE LOCAL AUTHORITY HAVING JURISDICTION, THE ENGINEER, AND THE BUILDER OWNERS REPRESENTATIVE. A HARD COPY OF THE ANALOG VALUE OF EACH INITIATING INPUT/DEVICE SHALL BE GIVEN TO THE ENGINEER AND LOCAL AUTHORITY HAVING JURISDICTION UPON COMPLETION OF THE SYSTEM TEST. THE ENGINEERED SYSTEMS DISTRIBUTOR SHALL MAKE AVAILABLE CONTRACTED PERIODIC SYSTEM TESTING, MAINTENANCE, AND/OR CALIBRATION SERVICES.

X. ON SITE SERVICES:

THE ENGINEERED SYSTEMS DISTRIBUTOR SHALL PROVIDE THE ON-SITE SERVICES OF AN AUTHORIZED, FACTORY TRAINED TECHNICAL REPRESENTATIVE TO SUPERVISE ALL CONNECTIONS AND FULLY TEST ALL DEVICES AND COMPONENTS OF THE SYSTEM DURING THE INSTALLATION PHASE. THE SYSTEM SHALL BE DEMONSTRATED TO PERFORM ALL THE FUNCTIONS AS SPECIFIED. ALL SYSTEM SMOKE AND HEAT DETECTORS SHALL BE FUNCTIONALLY TESTED WITH AN APPROVED TESTING APPARATUS. THE USE OF 'SPRAY SMOKE', WITHOUT THE USE OF A SPECIFICALLY DESIGNED DISPENSING CANISTER, WHICH PREVENTS AEROSOL CONTAMINATION, WILL NOT BE ALLOWED. SIMILARLY, ALL HEAT DETECTORS WILL BE TESTED BY MEANS OF AN APPROVED HEAT-GENERATING DEVICE. THE USE OF CONSUMER GRADE 'BLOW DRYERS' WILL NOT BE ALLOWED.

THE CONTRACTOR SHALL PROVIDE THE SERVICES OF THE MANUFACTURER'S TRAINED REPRESENTATIVE FOR A MINIMUM OF 4 HOURS, DURING NORMAL BUSINESS HOURS, TO INSTRUCT THE OWNER'S DESIGNATED PERSONNEL AND /OR A REPRESENTATIVE FROM THE FIRE DEPARTMENT ON THE OPERATION AND ROUTINE MAINTENANCE OF THE SYSTEM.

Y. SYSTEM WARRANTY:

THE MANUFACTURER SHALL WARRANT THE FIRE ALARM SYSTEMS COMPONENTS AS FOLLOWS:

WARRANTY ALL CONTROL EQUIPMENT, ANALOG SENSORS AND ADDRESSABLE I/O MODULES FOR THREE (3) YEARS. ALL OTHER MATERIALS, INCLUDING PERIPHERALS, INSTALLATION AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE, UNLESS OTHERWISE SPECIFIED.

Z. TESTING AND INSTALLATION CERTIFICATION

UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM EQUIPMENT, THE ELECTRICAL CONTRACTOR SHALL PROVIDE TO THE ARCHITECT, A SIGNED WRITTEN STATEMENT, SUBSTANTIALLY AS FOLLOWS:

THE UNDERSIGNED, HAVING ENGAGED AS THE ELECTRICAL CONTRACTOR ON THE MONMOUTH COUNTY SOCIAL SERVICES OFFICES CONFIRMS THAT THE FIRE ALARM SYSTEM EQUIPMENT INSTALLED IS IN AGREEMENT WITH THE WIRING DIAGRAMS AND WRITTEN INSTRUCTIONS AND DIRECTIONS PROVIDED BY THE ENGINEERED SYSTEMS DISTRIBUTOR.

ALL TESTING SHALL BE PERFORMED BY THE FIRE ALARM EQUIPMENT MANUFACTURERS AUTHORIZED REPRESENTATIVE, AND SHALL BE DONE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENTLY ADOPTED VERSION OF NFPA72. UPON COMPLETION OF SYSTEM TESTING, THE FIRE ALARM SYSTEM SUPPLIER SHALL PROVIDE A COMPLETED AND SIGNED COPY OF THE NFPA TESTING AND INSPECTION FORM.

THE CONTRACTOR SHALL, AT HIS EXPENSE, ENGAGE THE BUILDING MANAGEMENT APPROVED FIRE ALARM VENDOR TO PROVIDE INSTALLATION SHOP DRAWINGS OF THE ENTIRE FIRE ALARM SYSTEM. THE FIRE ALARM VENDOR AS PART OF THIS CONTRACT SHALL PROVIDE ANY AND ALL REQUIRED HARDWARE & SOFTWARE MODIFICATIONS TO THE SYSTEM AND PERFORM ALL SYSTEM TERMINATIONS. THE FIRE ALARM VENDOR SHALL TEST AND COMMISSION THE FIRE ALARM SYSTEM AND PROVIDE ALL NECESSARY LABOR AND INSTRUCTION FOR THE CONTRACTOR. THE FIRE ALARM VENDOR SHALL BE RESPONSIBLE TO OBTAIN ALL FINAL INSPECTIONS AND SIGNOFFS FROM ALL AUTHORITIES HAVING JURISDICTION.

JOB#: 9039 DATE: 1/16/07 SCALE: N/A	OCEAN MEDICAL PROPERTIES 3 NORTH MAIN STREET FREEPORT, NY 11520		
DRAWING NUMBER FA-3	DRAWING: FIRE ALARM SPECIFICATIONS		

REV #:	DATE:	NOTE:	BY:
1	4/08/10	GENERAL REVISIONS	TET

THE DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS PREPARED BY THE ARCHITECT FOR THIS PROJECT ARE THE INSTRUMENTS OF THE ARCHITECT'S SERVICES FOR USE SOLELY WITH RESPECT TO THIS PROJECT AND, UNLESS OTHERWISE PROVIDED, THE ARCHITECT SHALL BE DEEMED THE ARTHUR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS INCLUDING COPYRIGHT. THE OWNER SHALL BE PERMITTED TO RETAIN COPIES OF THE ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS FOR THE PROJECT. THE ARCHITECT'S DRAWINGS SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

DRAWN BY: MAT
CHECKED BY: TET

CONSULTANTS:
Tangel Engineering Associates, P.C.
Consulting Engineers
285 Middle Country Road, Suite 208
Smithtown, NY 11787
Phone: 631-750-2800 Fax: 631-750-2744

NYS P.E. LIC # 66867

OCG ARCHITECTS, LLP
ARCHITECTURE+INTERIORS
60 CARLETON AVE
ISLIP TERRACE, NY 11752
TEL: 631-859-3488
FAX: 631-859-3489

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