

**EAST NORRITON-PLYMOUTH-WHITPAIN
JOINT SEWER AUTHORITY
200 ROSS STREET
PLYMOUTH MEETING, PENNSYLVANIA 19462
(610) 279-5759 • (610) 279-6264
FAX: (610) 279-8033**

July 24, 2006

CERTIFIED MAIL #7000 2870 0000 6519 5882
RETURN RECEIPT REQUESTED

Pennsylvania Department of Environmental Protection
Bureau of Radiation Protection
P.O. Box 8469
Harrisburg, PA 17105-8469

RE: East Norriton-Plymouth-Whitpain Joint Sewer Authority
Tritium Lighting Emergency Exit Signs

Dear Sir or Madam:

The East Norriton-Plymouth-Whitpain Joint Sewer Authority (Sewer Authority) received in today's mail a postcard (copy enclosed) concerning the use of tritium lighting in self-luminous emergency exit signs. Please be advised that the Sewer Authority does not currently possess such signs.

During calendar year 2002, the Sewer Authority was finalizing the completion of a capital improvement project that included the construction of a new Maintenance and Operations Building. The scope of work for this project included the provision of emergency exit signs by the electrical contractor (KSC Electrical Contractors, Inc.). KSC Electrical Contractors, Inc. initially installed three (3) emergency exit signs that were manufactured by Isolite Corporation. A copy of the electrical contractor's submittal for the emergency lights is included with this letter. These are most likely the tritium lights that are referenced in the previously mentioned postcard.

Following an inspection of the Maintenance and Operations Building in late 2002 by Plymouth Township, the electrical contractor was directed by the Sewer Authority's design engineer, ARRO Consulting, Inc., to remove the existing signs and replace them with hard-wired emergency exit signs manufactured by Dual Lite (see enclosed letter from ARRO Consulting to KSC Electrical Contractors). All three Isolite Corporation signs were replaced with hard-wired signs, and one additional hard-wired sign was installed as part of the work. The electrical contractor ultimately chose to install Emergi-Lite EC Series emergency lights manufactured by Thomas & Betts Limited (see enclosed catalogue cut sheet) instead of the Dual Lite emergency lights.

RECEIVED
REGION 1
206 JUL 27 PM 1:05

July 24, 2006

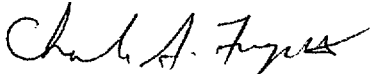
To summarize, the originally installed emergency exit signs were ultimately rejected by the Sewer Authority and ARRO Consulting, and were removed and replaced by the electrical contractor with lights that do not contain tritium. This work was done prior to the Sewer Authority and the engineer giving final approval to the overall construction project.

It is our recommendation that the electrical contractor be contacted for further information concerning the originally installed Isolite exit signs. The address and contact information is as follows:

KSC Electrical Contractors, Inc.
23 Lindsay Court
Mohnton, PA 19540
Contact Person: Mr. Edward Rotkiske

Please feel free to contact me at telephone number (610) 279-5759, extension 11 should you have any questions or require additional information.

Sincerely,



Charles A. Fagan, II, P.E.
Executive Director

Enclosures

cc: James Dwyer, Nuclear Regulatory Commission (w/encl.)
Jay R. Jackson, ARRO Consulting (w/encl.)
Edward Rotkiske, KSC Electrical Contractors (w/encl.)
Tom Daly, ENPWJSA (w/encl.)

Department of Environmental Protection
Bureau of Radiation Protection
P.O. Box 8469
Harrisburg, PA 17105-8469

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SEP 1 1996



Dear Building Owner or Maintenance Manager,

This is a notice from the Pennsylvania Department of Environmental Protection regarding the presence of licensed radioactive materials at your facility. According to our records, your facility uses radioactive tritium lighting in self-luminous emergency exit signs. This message is a reminder that, by possessing these devices, you are a General Licensee of the U.S. Nuclear Regulatory Commission (NRC). The license and license conditions that govern the acquisition, receipt, use, possession and transfer or disposal of these devices are found in Title 10 Part 31.5 of the Code of Federal Regulations. Federal Regulations require that licensees appoint an "individual responsible" for having knowledge of the appropriate regulations and to ensure compliance - See 10 CFR 31.5 (c)(12). You should ensure that all staff and contractors, as well as any demolition crews, are aware of the requirements for the use, handling, and proper disposal of these devices.

Luminescent devices containing radioactive tritium, such as exit signs, may not be disposed of in any landfill within the Commonwealth of Pennsylvania but must either be returned to the manufacturer or disposed in a licensed Low Level Radioactive Waste facility. There are no Low Level Radioactive Waste disposal facilities in the Commonwealth. Thus, you may need to contact a LLRW broker for assistance with disposal.

The Department is concerned about the accountability and security of these devices. Please be sure that all devices you currently possess or have possessed can be accounted for and that the NRC has been notified of any transfer or disposal of these devices as well as any that may be unaccounted for. Improper disposal of these devices can result in the release of radioactive tritium into the environment. If you have any questions regarding this message or your responsibilities under Federal Regulations, please visit the Department of Environmental Protection Web site at www.depweb.state.pa.us, Keyword "Radiation Protection" (located under Air Topics), Tel.: 717-787-3720, or contact the Nuclear Regulatory Commission at 1-800-432-1156 (www.nrc.gov).

KSC Electrical Contractors
23 Lindsay Court Mohnton, PA 19540

Letter of Submittal
(610)-855-8003 Fax: (610)-855-8004

Owner: East Norriton-Plymouth Meeting-Whitpain Joint Sewer

Engineer: Arro Consulting, Inc.
649 North Lewis Rd.
Limerick, PA. 19468-1234

Approved for Contract Requirements

The Contractor's signature below indicates that this Submittal has been checked with the Drawings, Specifications, and site conditions and found to meet all requirements of same including dimensions, and that the Contractor's guarantee fully applies to the Product(s) covered.

RE: Project New Maintenance/Operations Building and Dewatering Mods.

Submittal Number 2-16500-04 Illuminated Exit Signs

Drawing Sheet Number E-2 Detail Number _____

Deviations from Contract Documents? No X Yes _____

By: Edward Rotkiske
Signature (Contractor)

Contractor's Name Edward Rotkiske

SUBMITTAL REVIEW

APPROVED A ☒
APPROVED AS NOTED AN ☐
RETURNED FOR CORRECTION RC ☐
NOT AS SPECIFIED NS ☐

Approval is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to techniques of construction; and for coordination of the work of all trades.

DEVIATION NOTED BY CONTRACTOR ☐

ARRO CONSULTING, INC.

By DKH/TD Subm. No. _____
Date 3/8/02

Self-Luminous Exit Sign
Model 2040-50/60 ABS Plastic Frame

ISOLITE

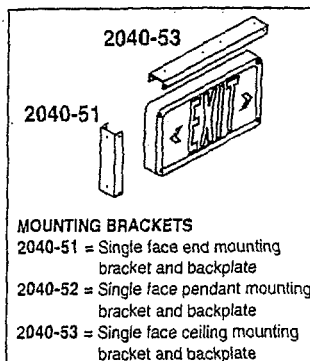
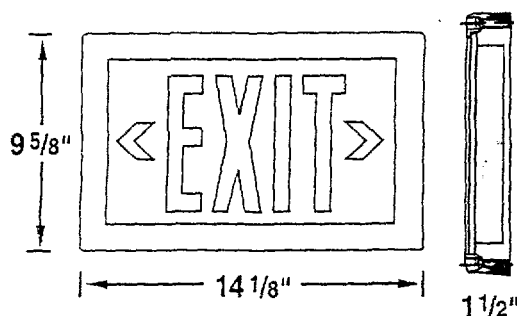


**A "budget-friendly" exit sign
that doesn't compromise quality**

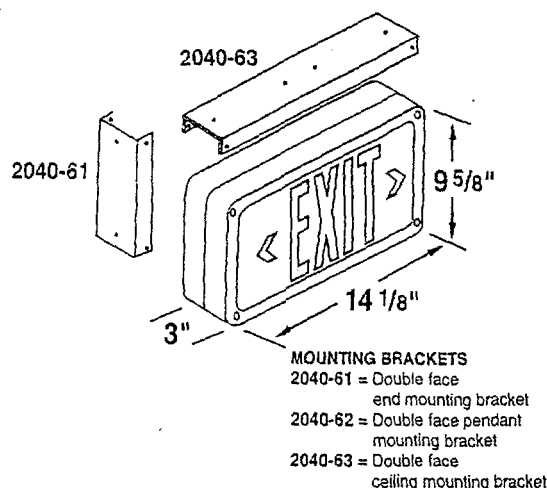
- Sturdy molded ABS frame
- Requires no external light source for illumination
- Ideal for wet or damp locations
- Maintenance free
- Requires no electricity
- Easy to install - no wiring required
- Service life 10, 12, 15, 20 years
- UL listed, meets UL 924 standard and NFPA Life Safety Code 101



Isolite Model 2040-50 Dimensions



Isolite Model 2040-60 Dimensions



Model 2040-50 Specifications

Overall Size:	2040-50 Single face: 14 1/8" x 9 5/8" x 1 1/2" 360 mm x 245 mm x 38 mm 2040-60 Double face: 14 1/8" x 9 5/8" x 3" 360 mm x 245 mm x 76 mm
Weight:	2040-50 Single face: 3 lbs. 2040-60 Double face: 6 lbs.
Construction:	Frame: Injection molded ABS plastic.
Letters:	6" high; 3/4" stroke, standard exit sign. 152 mm x 19 mm
Arrows:	Universal chevrons.
Service Life:	10, 12, 15, 20 years
Approvals:	UL Listed, meets UL 924 Standards, NFPA Life Safety Code 101.
Warranty:	Our self-luminous products are warranted against any defects in material or workmanship for the rated life of the product. We agree to replace any product free of charge that does not meet our stated specifications.

Isolite Model 2040-50/60 Exit Sign

Designed and constructed for applications where economy is a consideration, but where performance cannot be compromised. Payback is rapid because they require no energy, no maintenance, no lamp changes, and no back-up batteries for up to 20 years. Add it up and you save hundreds of dollars over the service life of an Isolite Self-Luminous Exit Sign.

Ideal for harsh environments

Isolite Self-Luminous Exit Signs are unaffected by moisture and temperature extremes. This makes them ideally suited for harsh environments including outdoor and cold or freezer applications. They are performance tested from -67°F to 176°F.

Ordering Information

Model	Faceplate color	Service Life	Frame color	Mounting Brackets	
				2040-50 Single Face (Surface Mt. Sign)	2040-60 Double Face (Specify Mounting Requirement)
→ 2040-50 Single face	R = Red G = Green BK = Black	10 = 10 Years 12 = 12 Years 15 = 15 Years 20 = 20 Years	BK = Black WH = White	2040-51 = End mounting bracket and backplate 2040-52 = Pendant mount bracket and backplate 2040-53 = Ceiling mounting	2040-61 = End mounting bracket 2040-62 = Pendant mount 2040-63 = Ceiling bracket and backplate
2040-60 Double face			Black is standard		

Example: 2040-50R-10-BK

Project _____

Date _____ Type _____

Catalog Number _____

Remarks _____

Call the Isolite office nearest you.

HEADQUARTERS
31 Waterloo Avenue
Berwyn, PA 19312
800-888-5483
610-647-8200
610-296-8952 Fax

WESTERN OFFICE
3563 Sueldo, Suite M
San Luis Obispo, CA 93401
800-799-5343
805-546-9669
805-546-9564 Fax



January 13, 2003

JAN 15 2003

enpwjsa

Mr. Edward Rotkiske
K S C Electrical Contractors, Inc.
23 Lindsey Court
Mohnton, PA 19540

The ARRO Group, Inc.

ARRO Consulting, Inc.

ARRO Environmental
Services, Inc.

RE: East Norriton-Plymouth-Whitpain Joint Sewer Authority
New Maintenance / Operations Building
and Dewatering Building Modifications
ARRO #5245.07

649 North Lewis Road

Suite 100

Limerick, PA 19468-1234

610.495.0303

Fax: 610.495.5855

info@thearrogroup.com

www.thearrogroup.com

Dear Mr. Rotkiske:

Find attached a sketch of the new Maintenance / Operations Building with locations for two (2) additional emergency lighting packs, two (2) additional emergency lighting remote heads and one (1) additional exit sign as received from Plymouth Township after their Use & Occupancy inspection of the building. Also, as directed by Plymouth Township, the exit signs already installed as part of the contract shall be removed and replaced with hard-wired emergency exit signs. Attached for your use are cut sheets of Dual-Lite Metropolitan Series emergency exit signs that will be installed in the building at the locations shown.

Wiring for the new emergency lighting and exit signs shall be in accordance with the Contract Documents and shall be shown on the electrical record drawings to be submitted at the end of the project.

Please proceed with the work and provide a cost proposal for ARRO to review and present to the Authority.

If there are any questions, please advise.

Sincerely,

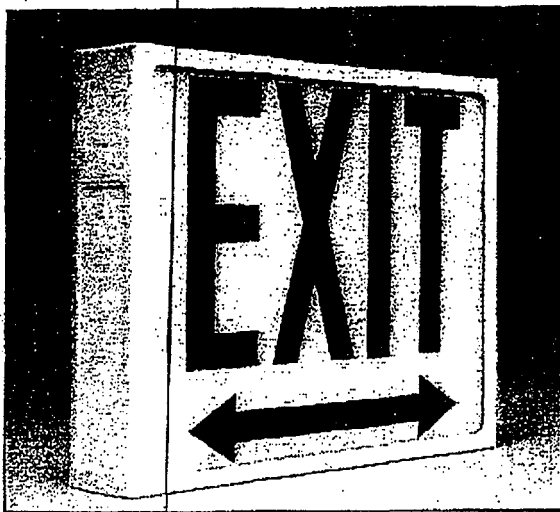
Jay R. Jackson, P.E.

JRJ:car

Enclosures

c: Charles A. Fagan, II, P.E. - ENPWJSA ✓
Farley F. Fry, P.E. - ARRO
Donald Heinly - ARRO

ENGINEERING
CONSULTING
OPERATIONS



Applications

Installations requiring exit signs to meet Chicago design specifications, or for any application requiring a metal sign with glass exit plaques.

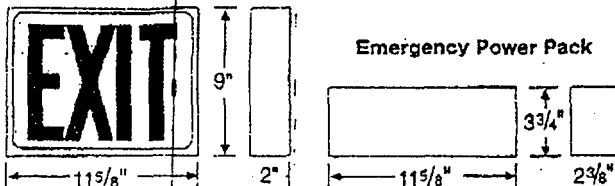
Standard Sign Features

- 20-gauge metal enclosure with black or white baked-enamel finish
- Translucent glass face secured by channels
- Six-inch-high letters
- Full length, silkscreened directional arrows
- Extended-life, incandescent AC lamps
- Standard 120 VAC (277 VAC optional)
- Wall surface end or ceiling mounting
- Designed for maximum downlight
- City of Chicago approved
- UL Listed

Emergency Sign Features

- Completely self-contained emergency power pack
- 120-minute operation
- Fully automatic, solid-state charger
- Automatic, low-voltage battery disconnect
- Charge rate indicator and test switch
- Premium grade, pure-lead, maintenance-free battery
- Universal transformer allows connection to 120 or 277VAC

Dimensions



Metropolitan Series

Specification-grade, all-metal signs with glass exit plaques designed to meet Chicago specifications.

Product Selector

Fixture Type	Model Number	Colors		Description
		Letters	Enclosure	
	MWRW	Red	White	Wall mount, single face without canopy
	MWRB	Red	Black	
	MWGW	Green	White	
	MWGB	Green	Black	
	MSRW	Red	White	Ceiling or end mount, single face with canopy
	MSRB	Red	Black	
	MSGW	Green	White	
	MSGB	Green	Black	
	MDRW	Red	White	Ceiling or end mount, double face with canopy
	MDRB	Red	Black	
	MDGW	Green	White	
	MDGB	Green	Black	

Silkscreened directional arrows — Add suffix:

- L = Left arrow (Do not use with Double Face Signs)
- R = Right arrow (Do not use with Double Face Signs)
- P = No arrow(s)
- D = Dual directional arrow(s)
- C = For use with Double Face signs requiring left or right directional arrows. (Use on Double Face Signs only.)

Optional Features

Factory Equipped Add Suffix To Model	Field Conversion Kit Order Part No.	Description
-MWP	F-MWP	White Emergency Power Pack
-MBP	F-MBP	Black Emergency Power Pack
-M6	F-M6	Emergency Sockets With 6V Wedge Base Lamps
-M12	F-M12	Emergency Sockets With 12V Wedge Base Lamps
-M2K	F-M2K	277 VAC Operation (1)
—	FN-WMC	Mounting Canopy (White)
—	FN-BMC	Mounting Canopy (Black)
-PM	—	Phosphorescent Face

(1) 277 VAC operation transformer for AC incandescent lamp operation mounts inside sign on bottom rail. Self-contained emergency signs provide a transformer tap for incandescent AC lamp operation and do not require this option.

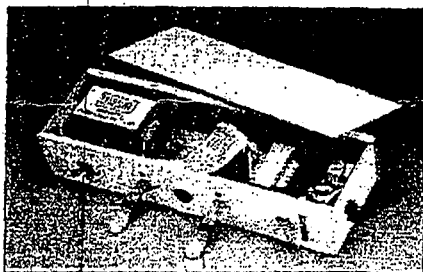
Post-it® Fax Note	7671	Date	01/17/03	# of pages	2
To	JAY JACKSON	From	Don Beckley		
Co./Dept.		Co.			
Phone #	5245.08	Phone #			
Fax #		Fax #			

Specifications

Metropolitan Series

Description

Dual-Lite Metropolitan Series exit signs were designed specifically to meet the electrical code requirements of the city of Chicago. The unit housing is constructed of 20-gauge steel and features built-in channels to securely hold the sign's letter plaque in place. Exit housings are available standard in a choice of white or black. All Metropolitan Series letter plaques are of flat-sided glass with screen-printed lettering. Chicago version signs are supplied with six-inch letters and customer-specified, full-length directional arrows. A choice of red or green letters on a white background is offered standard. Phosphorescent exit plaques are available as an option on all models. Downlight is provided by a four-inch aperture in the bottom of the exit frame.



Emergency Power Pack

Emergency operation is achieved through the addition of a factory- or field-installed emergency power pack. The emergency power pack housing is constructed entirely of 20-gauge steel. The housing mounts to the top of the exit and contains the unit's battery and solid-state charger.

During normal utility operation, the sign is illuminated by its AC lamps and the unit's solid-state charger constantly maintains the battery at full capacity. Upon loss of normal power, the charger's transfer circuit automatically switches the unit to emergency operation. DC lamp emergency illumination is provided for 120 minutes. During extended power outages, the unit's battery is protected from deep discharge damage by an automatic low-voltage circuit which disconnects the battery from the load when it reaches 80% of its nominal capacity. On restoration of normal power, the charger will begin a recharge cycle. The battery will be brought to full capacity within acceptable UL time standards. A test switch is provided to check emergency operation. Operating temperature range: 20°-30°C. A universal transformer allows operation from either 120 or 277VAC sources.

Battery

Maintenance-Free Battery Type	Warranty Period		
	No-Charge Replacement	Pro-Rata Charge	Total
Pure-Lead	3 years	3 years	6 years

Illumination

Standard AC illumination is supplied by two 15T6-145VAC extended-life incandescent lamps derated to 12 watts at 120VAC operation. Optional emergency illumination provided by either remotely powered DC sockets or self-contained power pack consisting of two 3.6-watt wedge base lamps. An optional phosphorescent stencil face is also available with all models. All Metropolitan AC models offered meet UL 924 requirements for exit face illumination and contrast ratio.

Installation

End or ceiling mounted units are supplied with canopy and mounting hardware for connection to a 3 1/2" octagonal or switch box. Canopy mounting kits are also available for field conversion of wall mount signs to end or ceiling mount. (See Product Selector for ordering information.) Knockouts are provided in the exit wall plate for connection to 1/2" conduit and for securing the unit directly to wall surfaces. Wiring is simplified through pre-stripped, 18-gauge lamp leads.

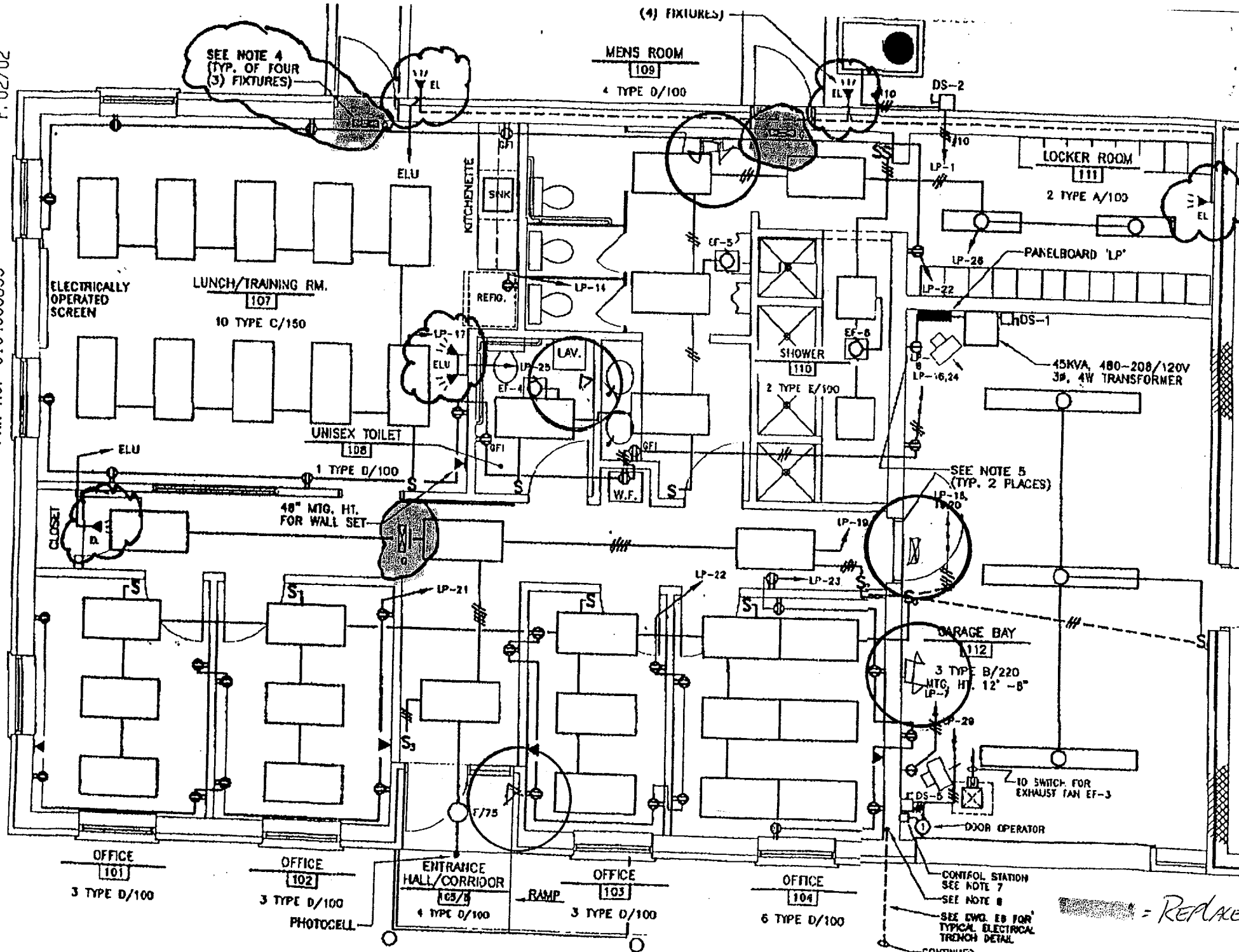
Suggested Specification

Exit sign housing shall be constructed of 20-gauge sheet metal. Normal AC illumination shall be provided by two 15T6 extended-life incandescent lamps. Letters shall be six inches and screen-printed on translucent glass face. Directional arrows shall be full length and screen-printed. Exit signs must comply with Chicago requirements, as well as all UL 924 requirements. Mounting canopies shall be provided with end and ceiling mounted models. Mounting canopies shall be of 20-gauge sheet metal. Emergency exit signs shall be achieved through a (factory) (field) installed, fully automatic power pack. Power pack construction shall be of sheet metal and shall provide a solid-state battery charger; a premium grade, pure-lead battery; a charge rate pilot light; and a test switch. The charger shall provide a low-voltage disconnect circuit and shall be capable of recharging the battery within acceptable UL time standards. The power pack must be capable of operating two 3.6-watt DC lamps for 120 minutes.

Optional equipment shall include _____

Dimensions to be _____





FLOOR PLAN - EL. 74.50

SCALE 1/4" = 1'-0"



NRTL. UL 924

The Escort is a versatile exit sign, featuring an all-in-one design that uses the same compact housing for both AC, AC/DC and Self-Powered models. The signs are molded in tough high impact thermoplastic with a scratch resistant suede finish. It's off white or optional black color blends well with a variety of interiors and matches other Escort family emergency units and remote heads.

AC-Only Signs are listed for use in Damp Locations, Self-Powered, Damp Listing is optional.

Light Sources

- LED, Light Emitting Diodes

Sealed Maintenance-Free Batteries

- Nickel Cadmium

Standard Features

Reliability

The EC Escort Thermoplastic LED Exit Series has a 5-year full warranty.

Unit Data

Exit frame, backplate, faceplate and mounting canopy is constructed of rugged high impact off white thermoplastic.

Low Energy Consumption LED Light Source

- Models consume less than 2 watts in either 120 or 277 volt models.
- Uniform LED light output.
- No Maintenance... long life LED's eliminate bi-yearly lamp changes.

High Performance Circuitry

- Sealed, maintenance-free nickel cadmium battery provide 90 minutes of emergency operation.
- Fully automatic charger is solid state.
- No canopy is required for back mounted signs.
- Test switch/pilot light is located on the side of sign.
- Batteries recharge per UL924 requirements.
- AC, AC/DC and Self-Powered Models are 120/277 dual voltage.

Electrical Data

AC Only and AC/DC (Numbers = red LED's, Numbers = green LED's)

Input Voltage	Input Power	Ampacity	Power Factor
120	1.18W	.012A	.79
277	1.55W	.009A	.48
120	1.21W	.012A	.79
277	1.57W	.010A	.5

Self-Powered (Numbers = red LED's, Numbers = green LED's)

Input Voltage	Input Power	Ampacity	Power Factor
120	2.1W	.099A	.41
277	1.73W	.011A	.49
120	1.90W	.018A	.88
277	1.20W	.011A	.6

How To Order

Housing	ECLXN Series	4 Face	R Stencil Face	VR1 Option
Blank=white	ECL= AC-Only	4=Universal	R=red	See
B=black	ECLXN= Self-powered nickel cadmium battery	2 faces, backplate and canopy	G=green	Option chart
			Open face *	
			RW=red on white	
			GW=green on white	

*Open face required only with special wording.



Diagnostic / Self Test (Optional)

Self-Powered units with the diagnostic / self test option have a test switch, external AC on and "Service Required" indicators. The diagnostic / self test option features continuous monitoring of the charger assembly, battery and LED assembly current. If a fault is indicated the external service required indicator will illuminate. The internal fault indicators will then indicate the nature of the fault. The diagnostic / self test option will also self test 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually. Complies with NFPA 101 Life Safety code.

Optional Features

Add Suffix

Convert AC signs for DC operation (6, 12, 24, 36 or 48 volt)	DC
Fire alarm activated flasher (AC-only sign)	FAC
Dual circuit operation (120/120 or 277/277)	2CKT*
Damp location listed	DL
Diagnostic / self test (self-powered)	D
Fire alarm activated flasher (self-powered)	FA
Flasher / buzzer (self-powered)	FZ
Vandal resistant (tamper proof screws)	VR
Vandal resistant shield (tamper proof screws and shield)	VR-1

*AC-only units

Accessories (order as a separate item)

12" white pendant	P12WT
12" black pendant	P12BK
Wire guard (wall mount)	WG-1
Wire guard (ceiling or end mount)	WG-5

Outline and Dimensions

Dimensions are approximate and subject to change.

