ABBREVIATIONS

A, AMP	AMPERES
AF	AMP FUSE OR AMP FRAME
AFC	AVAILABLE FAULT CURRENT (SYMMETRICAL)
A.F.F.	ABOVE FINISHED FLOOR
AIC.	AMPERE INTERRUPTING CAPACITY
AM.	AMMETER
AS	AMP SWITCH OR AMMETER SWITCH
ASYM.	ASYMMETRICAL
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
B.O.F.	BOTTOM OF FIXTURE
B.S.C.	BARE STRANDED COPPER CONDUCTOR
C	CONDUIT
CAP.	CAPACITY OR CAPACITOR
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT ,CCT	CIRCUIT
C.L.	CURRENT LIMITING
C.O.	CONDUIT ONLY
CONN.	CONNECT OR CONNECTION
CU	COPPER
DA	DURESS ALARM
DB	DOOR BELL
DISC.	DISCONNECT
DPST	DOUBLE POLE SINGLE THROW
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
EMERG, EM	EMERGENCY
EPO	EMERGENCY POWER OFF
EMT	ELECTRICAL METAL TUBING
E,EX	EXISTING
FDR.	FEEDER
FIXT.	FIXTURE
FLA	FULL LOAD AMPERES
FLUOR.	FLUORESCENT
GRC,GCR	GALVANIZED RIGID CONDUIT
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GRD,GND,G	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ.	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
I.G.	ISOLATED GROUND
INCAND.	INCANDESCENT
JB	JUNCTION BOX
KAIC	THOUSAND AMPERE INTERRUPTING CAPACITY
KVA	KILOVOLT AMPERES
KW	KILOWATT
KWH	KILOWATT HOUR
LTG	LIGHTING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MH	MANHOLE, METAL HALIDE OR MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
N.C.	NORMALLY CLOSED
N.E.C.	NATIONAL ELECTRICAL CODE
N.I.C.	NOT IN CONTRACT
NF	NON FUSIBLE
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OL	OVERLOADS
P	POLE
PB	PULLBOX
PH OR Ø	PHASE
PNL	PANEL
P.O.C.	POINT OF CONNECTION
PR	PAIR
PVC	POLYVINYL CHLORIDE
PWR.	POWER
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RX	REQUEST TO EXIT
SOL	SOLENOID
SPDT	SINGLE POLE DOUBLE THROW
SPKR	SPEAKER
SPST	SINGLE POLE SINGLE THROW
SW.	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
TEL	TELEPHONE
TRANSF.	TRANSFORMER
TTB	TELEPHONE TERMINAL BACKBOARD
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT AMPERES
VD	VOLTAGE DROP
VM	VOLT METER
VS	VOLT METER SWITCH
W	WATTS OR WIRE
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

GENERAL

MOUNTING HEIGHTS TO BE AS INDICATED UON. MOUNTING HEIGHTS ARE TO CENTER OF DEVICE FROM FINISHED FLOOR OR GRADE UON. SEE SPECIFICATION 16010 FOR ADDITIONAL REQUIREMENTS

2 KEY NOTE REFERENCE SYMBOL. DENOTES "SEE KEY NOTE NO. 2"

J TV FOOT ON DEVICE INDICATES WALL MOUNTED

EQUIPMENT OR TERMINAL CABINET AT +72" TO TOP

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE DIFFERENT SYSTEM TYPES

CCTV— CLOSED CIRCUIT TELEVISION
DC — DOOR CONTROL
DT — DATA TECHNOLOGY
FA — FIRE ALARM
G — GROUNDING ELECTRODE CONDUCTOR
IC — INTERCOM
ID — INTRUSION DETECTION
PA — PUBLIC ADDRESS SYSTEM
SEC — SECURITY
TC — TEMPERATURE CONTROL
TEL — TELEPHONE
TV — TELEVISION
RC — REMOTE CONTROL
CA — CARDIAC ARREST (CODE BLUE)
DD — DOCTORS DICTATION
DR — DOCTORS REGISTER
MGA — MEDICAL GAS ALARM
NC — NURSE CALL
PM — PHYSIOLOGICAL MONITOR

CIRCUIT DESIGNATIONS

1LN1-1
PANEL NAME
POLE NUMBERS

BRANCH CIRCUIT HOMERUN. PROVIDE PHASE, NEUTRAL AND GROUND CONDUCTORS FOR EACH INDICATED CIRCUIT OR MULTI WIRE BRANCH AS REQUIRED. PROVIDE SWITCH LEGS FOR SWITCH CIRCUITING AS REQUIRED. PROVIDE EQUIPMENT GROUND WIRE IN ALL BRANCH CIRCUIT RACEWAYS/CIRCUITS. PROVIDE SEPARATE ISOLATED GROUND WIRE TO ALL ISOLATED GROUND DEVICES.

CONDUIT SIZE	MAX QUANTITY OF CONDUCTORS PER CONDUIT		
	CONDUCTOR SIZE		
	12	10	8
1/2 INCH	1 TO 4	1 TO 4	NA
3/4 INCH	5 TO 8	5 TO 6	1 TO 3
1 INCH	9 TO 13	7 TO 11	4 TO 5
SEE SPECIFICATONS FOR LIMITATIONS ON QUANTITY OF CURRENT CARRYING CONDUCTORS PER CONDUIT			

CONDUIT RISER UP

CONDUIT RISER DOWN

INDICATES CIRCUIT CONTINUATION

STUB INTO ACCESSIBLE CORRIDOR CEILING SPACE UNLESS OTHERWISE NOTED

CONDUIT SEAL FITTING FOR HAZARDOUS AREAS

CONDUIT SLEEVE

CAP END OF CONDUIT

CABLE OR CORD CONNECTED

LIGHTING

NOTE A: UPPER CASE ALPHANUMERIC SUBSCRIPT DENOTES FIXTURE TYPE. SEE SCHEDULE(S)

NOTE B: LOWER CASE LETTER SUBSCRIPT PROVIDED ADJACENT TO SWITCHING DEVICE AND ASSOCIATED LIGHT FIXTURE(S) WHERE REQUIRED FOR CLARIFICATION.

CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

DIRECTIONAL AIMED FIXTURE AIM IN DIRECTION OF ARROW

WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

FLUORESCENT WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

FLUORESCENT UNDER CABINET/COUNTER LIGHT OUTLET OR STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE

EXIT LIGHT OUTLET WITH FIXTURE - SHADING INDICATES LOCATION OF FACE(S). ARROWS INDICATE DIRECTIONAL ARROWS WHERE REQUIRED. WALL MOUNTED SIGNS AT +90" CENTERED ABOVE DOOR WHERE APPLICABLE

EMERGENCY LIGHT FIXTURE WITH INTEGRAL BATTERY SOURCE AND ADJUSTABLE HEADS

8FT TRACK LIGHT OUTLET WITH FIXTURE. TYPE INDICATED, QUANTITY AND LENGTH AS SHOWN OR SCHEDULED

LIGHTING STANDARD POLE FIXTURE, PROVIDE QUANTITY OF HEADS AND ORIENTATION AS INDICATED

LIGHTING STANDARD WITH POST-TOP FIXTURE

BOLLARD FIXTURE

CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)

WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)

FLUORESCENT WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)

FLUORESCENT STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY (LIFE SAFETY BRANCH) AND NORMAL SOURCES

CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (CRITICAL BRANCH)

WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (CRITICAL BRANCH)

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (CRITICAL BRANCH)

FLUORESCENT WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (CRITICAL BRANCH)

FLUORESCENT UNDER CABINET/COUNTER LIGHT OUTLET OR STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (CRITICAL BRANCH)

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL AND EMERGENCY SOURCES (CRITICAL BRANCH)

FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO TWO EMERGENCY SOURCES (LIFE SAFETY AND CRITICAL BRANCHES)

$ SWITCH AT +48" U.O.N.

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE VARIOUS TYPES OF SWITCHES.

NO SUBSCRIPT - SINGLE POLE
2 — DOUBLE POLE
3 — THREE WAY
4 — FOUR WAY
D — LIGHTING DIMMER
P — PILOT LIGHT
L — LIGHTED HANDLE
K — KEY OPERATED
TE — MANUAL STARTER WITH THERMAL ELEMENT
XP — EXPLOSION PROOF
F — FOOT SWITCH
LS — LIMIT SWITCH
M — MOTOR RATED
V — VARIABLE INTENSITY CONTROLLER FOR SURGICAL LIGHT

LV LOW VOLTAGE SWITCH

PC PHOTOCELL

TC TIME CLOCK AT +48"

OS OCCUPANCY SENSOR WITH INTEGRAL SWITCH-WALL MOUNTED AT +48"

OS OCCUPANCY SENSOR - CEILING MOUNTED

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF OCCUPANCY SENSORS

NO SUBSCRIPT - COMBINATION INFRARED/ULTRASONIC SENSOR
I — INFRARED SENSOR
U — ULTRASONIC SENSOR

POWER AND DIAGRAMS

NOTE A: OUTLETS IN FINISHED OR SHELL SPACES SHALL BE MOUNTED AT +18" U.O.N.

NOTE B: RECEPTACLES LOCATED AT COUNTERS SHALL BE LOCATED 18" AFF IN KNEE SPACE IF PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS PROVIDED U.O.N.

NOTE C: WHERE ASTERISK (*) IS INDICATED NEXT TO RECPTACLES AT WORK COUNTER, RECEPTACLES SHALL BE LOCATED ABOVE COUNTER RATHER THAN IN KNEE SPACE.

NOTE D: RECEPTACLES IN MECHANICAL AND ELECTRICAL SPACES SHALL BE MOUNTED AT +48" U.O.N.

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE DIFFERENT TYPES OF RECEPTACLES

GF — GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE AT +42" IN TOILETS
ST — SAFETY TYPE RECEPTACLE
XP — EXPLOSION PROOF RECEPTACLE
IG — ISOLATED GROUND RECEPTACLE
WP — WEATHERPROOF
SW — TOP HALF OF DUPLEX RECEPTACLE SWITCHED
CL — CLOCK RECEPTACLE AT +84"
H — HORIZONTAL MOUNTING
U — RECEPTACLE SERVED BY UPS

20A, 125V, 2 POLE, 3 WIRE GROUNDING DUPLEX RECEPTACLE, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING DUPLEX RECEPTACLE, RED, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING SINGLE RECEPTACLE, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING SINGLE RECEPTACLE, RED, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R

20A, 125V, 2 POLE, 3 WIRE GROUNDING DOUBLE DUPLEX RECEPTACLE, RED, NEMA 5-20R

PEDESTAL TYPE, FLOOR OR COUNTER MOUNTED RECEPTACLE RECEPTACLE TYPE AS INDICATED ABOVE

CEILING MOUNTED RECEPTACLE, TYPE AS INDICATED ABOVE

FLUSH FLOOR BOX WITH RECEPTACLE, TYPE AS INDICATED ABOVE

COMBINATION POWER/COMMUNICATIONS FLOOR BOX, SEE COMMUNICATIONS PLAN FOR SYSTEMS DEVICE

PIGTAIL DENOTES CONNECTION TO LIGHT SWITCH, LIGHT FIXTURE OR FIXED EQUIPMENT

SPECIAL PURPOSE RECEPTACLE SUBSCRIPT DENOTES NEMA TYPE, REFER TO SPECIFICATIONS

JUNCTION BOX, 4 INCH SQUARE UNLESS OTHERWISE NOTED

PLUG-IN RECEPTACLE STRIP (LENGTH AS INDICATED)

TELECOMMUNICATIONS/POWER POLE

208 VOLT PANELBOARD AT +72" TO TOP

480 VOLT PANELBOARD AT +72" TO TOP

BUS DUCT, FEEDER OR PLUG-IN TYPE AS INDICATED

CABLE TRAY OR WIREWAY

SAFETY SWITCH AT +54". CHARACTERISTICS AS INDICATED BY FRAME/POLES.

FUSED SAFETY SWITCH AT +54". CHARACTERISTICS AS INDICATED BY FRAME/FUSESIZE/POLES.

MAGNETIC MOTOR STARTER AT +54". CHARACTERISTICS AS INDICATED BY FRAME SIZE/POLES/NEMA SIZE.

COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT AT +54". CHARACTERISTICS AS INDICATED BY FRAME/FUSE/POLES/NEMA SIZE

AFD ADJUSTABLE FREQUENCY DRIVE

MAGNETIC CONTACTOR AT +54". AMPS/POLES/CONTACT VOLTS/ COIL VOLTS AS INDICATED.

SEPARATELY MOUNTED, ENCLOSED MOLDED CASE CIRCUIT BREAKER AT +48". FLUSH MOUNTED IN FINISHED AREAS. AMP/POLES AS INDICATED.

CIRCUIT BREAKER. AMP/POLES AS INDICATED

FUSE. SIZE AS INDICATED

FUSIBLE SWITCH. AMP/POLES/FUSE SIZE AS INDICATED

AUTOMATIC TRANSFER SWITCH +72" TO TOP OR FLOOR MOUNTED.

DISCONNECT STABS FOR DRAWOUT TYPE EQUIPMENT

T TRANSFORMER

GROUND CONNECTION

MOTOR CONNECTION, HP AS INDICATED

G GENERATOR

START-STOP PUSHBUTTON STATION AT +48"

AS AMMETER PHASE SELECTOR SWITCH

VS VOLTMETER PHASE SELECTOR SWITCH

WS WATTMETER ON-OFF SWITCH

VM A.C. VOLTMETER

AM A.C. AMMETER

WM WATTMETER

FM FREQUENCY METER

DM DIGITAL METERING

KWHD KILOWATT HOUR/DEMAND METER

GFI GENERATOR GROUND FAULT INDICATION

GFP GROUND FAULT PROTECTION

CURRENT TRANSFORMER

POTENTIAL TRANSFORMER

GRA GENERATOR REMOTE ANNUNCIATOR AT +66"

CONTROL PANEL: INTEGRAL PART OF, OR FURNISHED BY OTHER THAN ELECTRICAL

ALT ALTERNATOR: FURNISHED BY OTHER THAN ELECTRICAL

EXOTHERMIC CONNECTION

GROUNDING SYSTEM TEST WELL

GROUNDING CONNECTION

MH,HH ELECTRICAL MANHOLE OR HANDHOLE MH=MANHOLE, HH=HANDHOLE

Ø COMBINED POWER AND TELEPHONE UTILITY POLE

GROUND BUS ON STANDOFFS

PS POWER SUPPLY

PUSHBUTTON STATION AT +48"

DEMOLITION AND REMODEL

EXISTING ELECTRICAL ITEM TO BE REMOVED

EXISTING ELECTRICAL ITEM TO BE REMOVED AND RELOCATED

EXISTING ELECTRICAL ITEM RELOCATED. NEW LOCATION

EXISTING ELECTRICAL ITEM TO REMAIN

EXISTING ELECTRICAL ITEM TO BE REMOVED AND PROVIDED WITH A BLANK COVERPLATE

EX EXISTING ELECTRICAL OR SYSTEMS CIRCUIT TO REMAIN

EXISTING ELECTRICAL CIRCUIT TO BE REMOVED SHOWN ONLY WHERE CLARIFICATION BETWEEN EXISTING TO REMAIN AND REMOVED ITEMS IS REQUIRED

FIRE DETECTION AND ALARM

FACP CONTROL PANEL AT +72" TO TOP

FATC FIRE ALARM TERMINAL CABINET AT +72" TO TOP

FACU FIRE ALARM CONTROL UNIT AT +72" TO TOP

FNAP FIRE ALARM NOTIFICATION APPLIANCE PANEL AT +72" TO TOP

FAA FIRE ALARM ANNUNCIATOR PANEL AT +72" TO TOP

FSCP FIRE SUPPRESSION SYSTEM CONTROL PANEL AT +72" TO TOP

F FIRE SUPPRESSION SYSTEM ABORT SWITCH STATION AT +48"

F MANUAL STATION AT +48"

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPE OF MANUAL STATIONS, FIRE SUPPRESSION SYSTEM CONTROL PANELS AND/OR ABORT SWITCHES

NO SUBSCRIPT - STANDARD FIRE ALARM PULL STATION
C02— CARBON DIOXIDE
DC — DRY CHEMICAL
DL — DELUGE SPRINKLER
FO — FOAM
K — KEY ACTIVATED
PRE— PREACTION SYSTEM
WC — WET CHEMICLE
WM — WATER MIST
WS — WATER SPRINKLER

SMOKE DETECTOR

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPE OF SMOKE DETECTORS

NO SUBSCRIPT - PHOTO ELECTRIC AREA BEAM
BR — BEAM RECEIVER
BT — BEAM TRANSMITTER
G — DETECTOR WITH GAURD
I — IONIZATION
U — DETECTOR UNDER RAISED FLOOR

D DUCT SMOKE DETECTOR

AUTOMATIC HEAT DETECTOR

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPE OF HEAT DETECTORS

NO SUBSCRIPT - FIXED TEMPERATURE (155 DEGREE U.O.N.)

R/F —COMBINATION RATE OF RISE FIXED TEMPERATURE (135 DEGREE U.O.N.)

XP —EXPLOSION PROOF, FIXED TEMPERATURE (135 DEGREE U.O.N.) CLASS 1, GROUP C

NOTE: WALL MOUNT VISUAL AND COMBINATION AUDIO/VISUAL NOTIFICATION APPLIANCES AT +80" AFF TO BOTTOM OF FACE PLATE U.O.N.

F VISUAL NOTIFICATION APPLICANCE

F WALL MOUNTED AUDIBLE NOTIFICATION APPLIANCE

F WALL MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE

F CEILING MOUNTED AUDIBLE NOTIFICATION APPLIANCE

V F CEILING MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE

F MAGNETIC DOOR HOLDER/RELEASE. COORDINATE MOUNTING HEIGHT WITH DOOR MANUFACTURER.

F SPRINKLER OR STANDPIPE FLOW ALARM SWITCH CONNECTION

F VALVE TAMPER SWITCH

SV F SOLENOID VALVE FOR PREACTION SPRINKLER SYSTEM

AP F AIR PRESSURE MONITOR SWITCH FOR PRE-ACTION OR DRY PIPE SPRINKLER SYSTEM

FR CEILING MOUNTED REMOTE ALARM INDICATOR

FRTS WALL MOUNTED REMOTE ALARM INDICATOR AND TEST STATION AT +48"

FP FREE STANDING PRINTER

FV VIDEO DISPLAY

FS CONNECTION OF FIRE SHUTTER TO FIRE ALARM SYSTEM

FD CONNECTION TO FIRE ALARM ACTIVATED DOOR CLOSER, ELECTRIC DOOR OPERATOR OR LOCK

FJ FIRE FIGHTERS TELEPHONE JACK AT +48"

FT FIRE FIGHTERS TELEPHONE IN ENCLOSURE AT +48"

COMMUNICATIONS

GENERAL NOTES

NOTE A: OUTLETS IN FINISHED OR SHELL SPACES SHALL BE MOUNTED AT +18" UON.

NOTE B: OUTLETS LOCATED AT COUNTERS SHALL BE LOCATED 18"AFF IN KNEE SPACE IF PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS PROVIDED UON.

NOTE C: WHERE ASTERISK (*) IS INDICATED NEXT TO OUTLET AT WORK COUNTER, OUTLET SHALL BE LOCATED ABOVE COUNTER RATHER THAN IN KNEE SPACE.

TELECOMMUNICATION

STANDARD TELECOMMUNICATIONS OUTLET - PROVIDE EXTRA DEEP DOUBLE GANG BOX WITH SINGLE GANG MUD RING AND (2) 3/4" CONDUITS TO ABOVE FINISHED CEILING WITH PULLSTRING. PROVIDE PLASTIC BUSHING AT THE ENDS OF THE CONDUITS. DATA DEVICES AND WIRING PROVIDED BY OTHERS U.O.N.

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS (NON-STANDARD) TYPES OF OUTLETS

— 1ST NUMBER INDICATES QUANTITY OF DATA CABLES
2ND NUMBER INDICATES QUANTITY OF VOICE CABLES
B — BLANK (ROUGH-IN TO ACCESSABLE CEILING SPACE)
F — FIBER
W — WALL PHONE OUTLET AT +48"
C — CEILING PHONE OUTLET
P — PUBLIC TELEPHONE AT +44"
FL — PEDESTAL FLOOR FITTING

NON-CONTACT VISITING TELEPHONE PAIR

PUBLIC ADDRESS

S PUBLIC ADDRESS SPEAKER HORN AT +96"

V VOLUME CONTROL FOR P.A. SPEAKER AT +48"

S PUBLIC ADDRESS AUDIO SELECTOR SWITCH AT +48"

SDR SOUND DISTRIBUTION RACK

M MICROPHONE OUTLET AT +18"

C M MICROPHONE OUTLET CEILING MOUNTED

F M MICROPHONE OUTLET FLOOR MOUNTED

S SPEAKER

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF SPEAKERS

NO SUBSCRIPT - PUBLIC ADDRESS ONLY
M — MUSIC ONLY
MP — MUSIC AND PUBLIC ADDRESS
D — DEPARTMENTAL AND GENERAL PAGING
2 — TWO-WAY PUBLIC ADDRESS AND MONITORING
V — INTEGRAL VOLUME CONTROL

INTERCOM

IC M,S TWO-UNIT INTERCOM SYSTEM AT +48"
M=MASTER, S=SLAVE

I MASTER INTERCOM STATION, DESK MOUNTED AND WALL MOUNTED OUTLET AT +18"

I MASTER INTERCOM STATION, WALL MOUNTED AT +48"

THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF INTERCOMS

NO SUBSCRIPT - MASTER STATION WITHOUT HANDSET
S — STAFF STATION
2 — STAFF STATION CAPABLE OF CALLING TWO MASTERS
H — MASTER STATION WITH HANDSET

CLOCKS

© DF CEILING MOUNTED DOUBLE FACED CLOCK ON SYNCHRONOUS SYSTEM

© WALL MOUNTED CLOCK ON SYNCHRONOUS SYSTEM AT +84"

CG CLOCK SIGNAL GENERATOR

AR ATTENDANCE RECORDER

ET ELAPSED TIME INDICATOR CLOCK AT +84" WITH SEPERATE ON-OFF RESET CONTROL UNIT AT +48"

TELEVISION DISTRIBUTION

TV TELEVISION ANTENNA TAP-OFF OOULTET AT +18"

TV RC COMBINATION ANTENNA AND REMOTE CONTROL TAP-OFF OUTLET AT +84"

VP VIDEO PLAYING/RECORDING EQUIPMENT OUTLET

SECURITY

FIXED VIDEO SURVEILANCE CAMERA

PTZ PAN/TILT/ZOOM VIDEO SURVEILANCE CAMERA

CLOSED CIRCUIT VIDEO SURVEILANCE MONITOR AT HEIGHT INDICATED

DOOR POSITION SWITCH

CONNECTION TO ELECTRIC OR PNEUMATIC DOOR LOCK

CR CARD READER AT +48"

KP CARD READER WITH KEYPAD AT +48"

M INTRUSION ALARM MOTION SENSOR

RX REQUEST TO EXIT MOTION SENSOR

DA DURESS ALARM TRANSMITTER

CAC CARD ACCESS CONTROLLER

GB ACOUSTIC TYPE GLASS BREAK SENSOR

MISC. COMMUNICATION

V VISUAL PAGE UNIT

CABLE TRAY OR WIREWAY

CPU CENTRAL PROCESSING UNIT

T B BELL TRANSFORMER

D DOOR CHIME AT +84"

AMP AMPLIFIER ASSEMBLY WITH CONTROLS

OUTLET FOR DESK MOUNTED EQUIPMENT

AL REMOTE ALARM INDICATOR FOR ISOLATION TRANSFORMER AT +72"

NOTE:
SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF DEVICES REQUIRED BY THE CONTRACT

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PROJECT
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EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
ELECTRICAL COVER SHEET

Sheet Number
E0.1

Do not scale drawings - Use figured dimensions CAD DWG E0.1 ELECTRICAL COVER SHEET.DWG

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. INSTALL WARNING TAPE ABOVE ALL NEW SITE CONDUITS. LOCATE 12" BELOW GRADE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

D. ALL NEW SITE CONDUITS SHALL BE LOCATED MINIMUM 30" BELOW GRADE.

E. REFER TO ARCHITECTURAL AND / OR CIVIL SITE DRAWINGS FOR SITE INTERFERENCES, UTILITIES, ETC. HAND DIG IN AREAS WITH OTHER UTILITIES TO AVOID INTERFERENCE, USE BELOW GRADE ELECTRONIC DETECTION METHODS WHERE NECESSARY TO LOCATE INTERFERENCES.

F. USE EXTREME CAUTION WHEN WORKING IN AREAS WITH EXISTING UTILITIES. REVIEW SITE DRAWINGS INCLUDING CIVIL DRAWINGS AND THE OWNER'S RECORD DRAWINGS. UTILIZE ELECTRONIC DETECTION TO LOCATE EXISTING UTILITIES. HAND DIG IN AREAS WITH EXISTING UTILITIES.

G. UNDERGROUND CONDUIT TO BE PVC, TRANSITION TO METALLIC CONDUIT ABOVE GRADE/FLOOR.

H. ALL NEW CONDUIT IN CONTACT WITH CONCRETE SHALL BE RIGID GALVANIZED STEEL.

I. CONDUIT ROUTING SHOWN ON PLAN IS FOR INTENT ONLY. FIELD DETERMINE BEST LOCATION TO SUIT FIELD CONDITIONS.

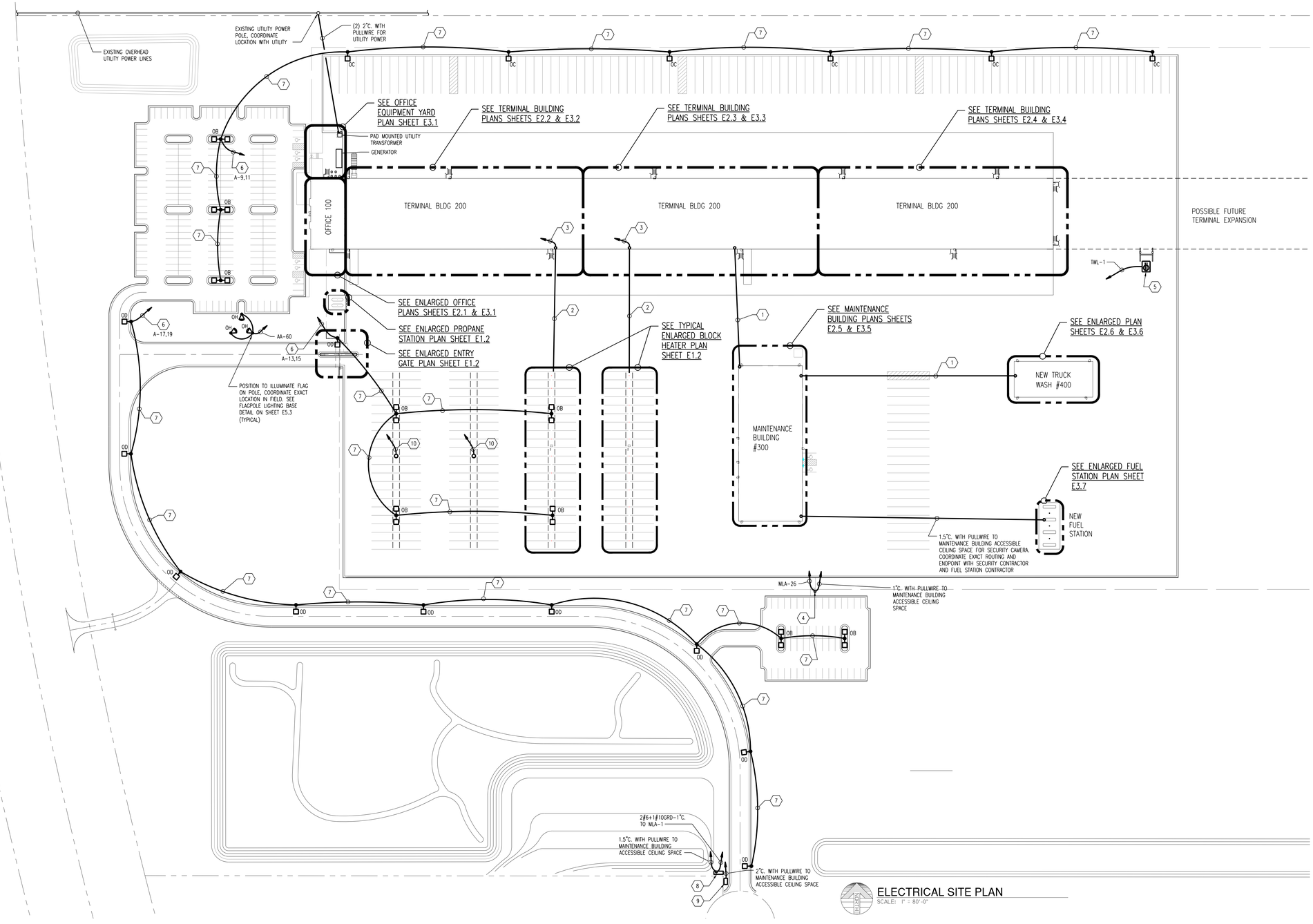
J. COORDINATE UNDERGROUND CONDUIT RUNS WITH OTHER TRADES.

K. REFER TO CIVIL SITE PLANS FOR EXACT LOCATION OF UTILITY SERVICES.

L. ALL POLE BASE LIGHT FIXTURES SHALL BE ON 24FT POLE ON 4FT RAISED POLE BASE FOR A TOTAL HEIGHT OF 28'-0" AFG. SEE RAISED POLE BASE DETAIL ON SHEET E5.3.

(#) KEY NOTES

1. (2) 2"C. WITH PULLWIRE FOR COMMUNICATIONS AND 1.5"C. FOR FIRE ALARM. ROUTE TO TRUSS SPACE, BUSH ENDS. COORDINATE EXACT ROUTING IN FIELD.
2. FIELD DETERMINE BEST ROUTING. SEE RISER DIAGRAM SHEET E5.1.
3. 480V-1Ø POWER. SEE RISER DIAGRAM SHEET E5.1.
4. ELECTRIC TURNSTYLE. PROVIDE IN GROUND JUNCTION BOX. ROUTE CONDUITS THRU IN GROUND JUNCTION BOX AND UP TO TURNSTYLE HEAD. PROVIDE REDUCER BUSHING FROM 120V 1"C. TO 3/4"C. 90 DEG SEALTIGHT FITTING AT TURNSTYLE HEAD. PROVIDE 120V GFI WEATHERPROOF OUTLET IN TURNSTYLE HEAD. COORDINATE EXACT REQUIREMENTS AND ROUTING WITH TURNSTYLE MANUFACTURER.
5. FLUSH IN-GRADE TRAFFIC RATED 12"x18" QUAZITE BOX WITHOUT BOTTOM AND WITH GFI WEATHERPROOF RECEPTACLE. COORDINATE FINAL LOCATION WITH ICE SCRAPER CONTROL PANEL PRIOR TO ROUGH-IN.
6. 2#12+1#12GRD-1"C. TO CIRCUIT INDICATED VIA TIMECLOCK AND PHOTOCELL. SEE EXTERIOR LIGHTING CONTROL DIAGRAM SHEET E5.3.
7. 2#12+1#12GRD-1"C.
8. 120V MONUMENT SIGN BY OTHERS, COORDINATE VOLTAGE, DISCONNECT LOCATION, AND EXACT REQUIREMENTS WITH SIGN INSTALLER.
9. NEW IN-GRADE QUAZITE BOX FOR COMMUNICATION CONNECTION. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH COMMUNICATIONS COMPANY.
10. CONDUIT STUB FOR FUTURE BLOCK HEATER DISTRIBUTION. PROVIDE PULL WIRE, BUSH ENDS, PROVIDE WEATHERPROOF CAP. ROUTE CONDUIT TO OFFICE ELECTRICAL ROOM. LABEL CONDUIT AS "FUTURE BLOCK HEATERS" IN ELECTRICAL ROOM.



ELECTRICAL SITE PLAN

SCALE: 1" = 80'-0"

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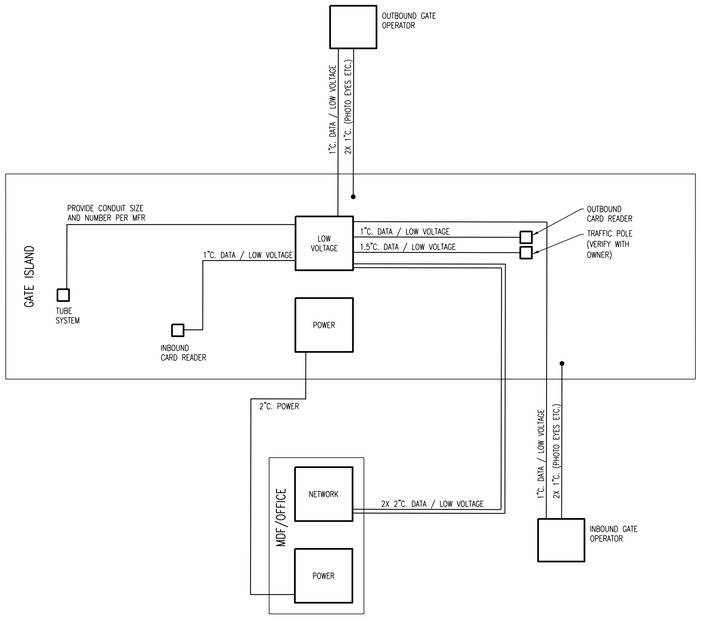
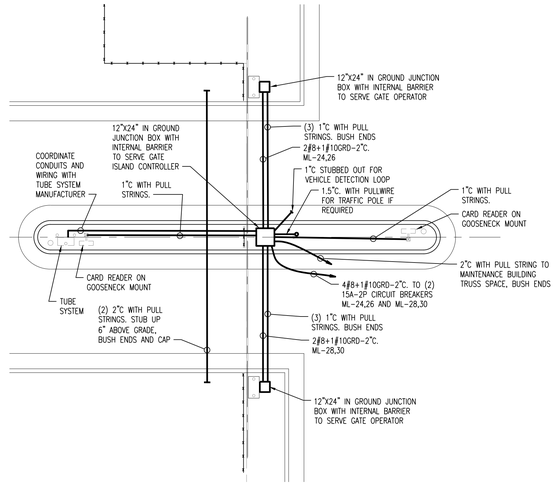


GATE OPERATOR LINE DIAGRAM

NO SCALE

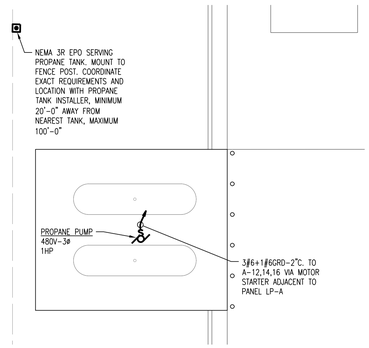


ENLARGED GATE ENTRY PLAN

SCALE: 1/8" = 1'-0"

GATE AND TURNSTILE CONDUIT FILL			
WIRE TYPE	**ORIGINATION**	**DESTINATION**	**DESCRIPTION**
18/6	MAIN MDF	INBOUND PEDESTAL	INBOUND READER
18/6	MAIN MDF	INBOUND PEDESTAL	FUTURE USE
18/6	MAIN MDF	OUTBOUND PEDESTAL	OUTBOUND READER
18/6	MAIN MDF	OUTBOUND PEDESTAL	FUTURE USE
18/6	MAIN MDF	INBOUND GATE OPERATOR	GATE CONTROL
18/6	LIGHT POLE	INBOUND GATE OPERATOR	RED LIGHT CONTROL (IF APPLICABLE)
18/6	MAIN MDF	OUTBOUND GATE OPERATOR	GATE CONTTROL
18/6	LIGHT POLE	OUTBOUND GATE OPERATOR	RED LIGHT CONTROL (IF APPLICABLE)
CAT-6	CLOSEST MDF/IDF	INBOUND PEDESTAL	IP INTERCOM
CAT-6	CLOSEST MDF/IDF	INBOUND PEDESTAL	FUTURE USE
CAT-6	CLOSEST MDF/IDF	OUTBOUND PEDESTAL	IP INTERCOM
CAT-6	CLOSEST MDF/IDF	OUTBOUND PEDESTAL	FUTURE USE
CAT-6	CLOSEST MDF/IDF	INBOUND GATE OPERATOR	GATE OPERATOR MONITOR
CAT-6	CLOSEST MDF/IDF	OUTBOUND GATE OPERATOR	GATE OPERATOR MONITOR
CAT-6	CLOSEST MDF/IDF	LIGHT POLE	LICENSE PLATE CAMERA
18/6	MAIN MDF	TURNSTILE	INBOUND READER
18/6	MAIN MDF	TURNSTILE	OUTBOUND READER
CAT-6	MAIN MDF	TURNSTILE	CONTROL/SPARE

18/6 = SOUTHWIRE 57788802 - 18/6 OR EQUIVALENT
CAT-6 = GENERAL CABLE 7136100.CAT6E OR EQUIVALENT



ENLARGED PROPANE STATION PLAN

SCALE: 1/16" = 1'-0"

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. INSTALL WARNING TAPE ABOVE ALL NEW SITE CONDUITS. LOCATE 12" BELOW GRADE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

D. ALL NEW SITE CONDUITS SHALL BE LOCATED MINIMUM 30" BELOW GRADE.

E. REFER TO ARCHITECTURAL AND / OR CIVIL SITE DRAWINGS FOR SITE INTERFERENCES, UTILITIES, ETC. HAND DIG IN AREAS WITH OTHER UTILITIES TO AVOID INTERFERENCE, USE BELOW GRADE ELECTRONIC DETECTION METHODS WHERE NECESSARY TO LOCATE INTERFERENCES.

F. USE EXTREME CAUTION WHEN WORKING IN AREAS WITH EXISTING UTILITIES. REVIEW SITE DRAWINGS INCLUDING CIVIL DRAWINGS AND THE OWNER'S RECORD DRAWINGS. UTILIZE ELECTRONIC DETECTION TO LOCATE EXISTING UTILITIES. HAND DIG IN AREAS WITH EXISTING UTILITIES.

G. UNDERGROUND CONDUIT TO BE PVC, TRANSITION TO METALLIC CONDUIT ABOVE GRADE/FLOOR.

H. ALL NEW CONDUIT IN CONTACT WITH CONCRETE SHALL BE RIGID GALVANIZED STEEL.

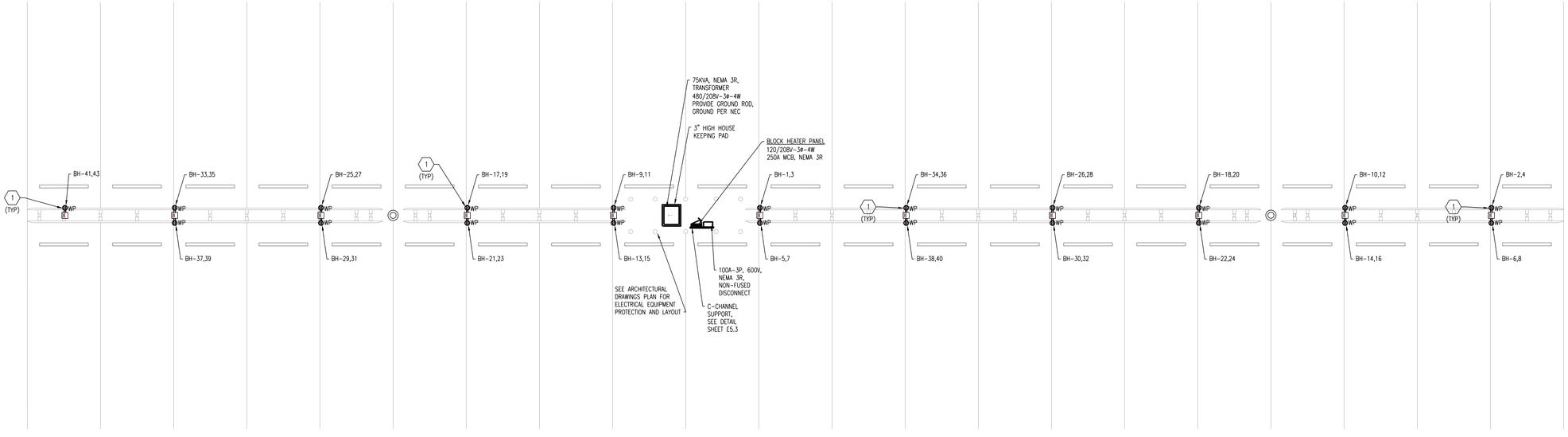
I. CONDUIT ROUTING SHOWN ON PLAN IS FOR INTENT ONLY. FIELD DETERMINE BEST LOCATION TO SUIT FIELD CONDITIONS.

J. COORDINATE UNDERGROUND CONDUIT RUNS WITH OTHER TRADES.

K. REFER TO CIVIL SITE PLANS FOR EXACT LOCATION OF UTILITY SERVICES.

(#) KEY NOTES

1. SPLIT WIRED DUPLEX RECEPTACLE SERVED FROM GFI BREAKER. SERVE EACH RECEPTACLE FROM DEDICATED CIRCUIT INDICATED. PROVIDE WEATHERPROOF IN-USE COVER. REFER TO ARCHITECTURAL DETAILS AND ELEVATIONS.



TYPICAL ENLARGED BLOCK HEATER PLAN

SCALE: 1/8" = 1'-0"

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ENLARGED ELECTRICAL SITE PLANS

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E1.2

Do not scale drawings - Use figured dimensions - CAD DWG E1.2 ENLARGED ELECTRICAL SITE PLANS.DWG

OFFICE LIGHTING PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.

B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

C. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

D. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

E. ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND IN ACCORDANCE WITH N.E.C. AND LOCAL REQUIREMENTS.

F. CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING OF ALL EXIT LIGHTS PRIOR TO ORDERING.

G. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS AND EXIT SIGNS. CONNECT TO THE SAME CIRCUIT AS THE NORMAL LIGHTING SERVING THE SURROUNDING AREA AHEAD OF ANY SWITCHING/CONTROLS.

H. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

I. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES 6'-0" LENGTH MAX. BRANCH CIRCUIT HOME RUNS SHALL BE IN EMT.

J. ALL CONDUITS LOCATED IN FINISHED AREAS MUST BE RECESSED IN WALLS OR LOCATED ABOVE FINISH CEILINGS. SURFACE MOUNTED CONDUIT WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE.

K. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

L. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS BEING SERVED. USE INDELIBLE MARKER ON BOX COVER.

M. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

N. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

O. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

P. VERIFY DEVICE & COVERPLATE COLORS WITH OWNER PRIOR TO THE START OF CONSTRUCTION.

Q. WHERE MULTIPLE SWITCHES ARE GROUPED TOGETHER, PROVIDE A SINGLE SHARED COVERPLATE.

R. ALL OCCUPANCY SENSORS AND POWER PACKS SHALL BE RATED FOR THE LOAD INDICATED TO BE SERVED. PROVIDE MULTIPLE POWER PACKS WHERE REQUIRED.

S. ALL WALL MOUNTED OCCUPANCY SENSORS SHALL BE PROGRAMMED SO THAT LIGHTS DO NOT TURN ON AUTOMATICALLY.

T. ALL POWER PACKS SERVED FROM CEILING MOUNTED OCCUPANCY SENSORS SHALL BE WIRED IN SERIES WITH LOCAL LIGHT SWITCH(ES).

U. MAINTAIN MANUFACTURER RECOMMENDED SPACING BETWEEN OCCUPANCY SENSORS AND HVAC DEFFUSERS AND FANS. ADJUST LOCATIONS AS REQUIRED.

(#) KEY NOTES

1. LIGHTING TO BE AUTO ON/AUTO OFF AFTER 20 MINUTES OF NO OCCUPANCY. LIGHTING TO BE CONTROLLED VIA WALL MOUNTED OCCUPANCY SENSOR/SWITCH WITH DIMMING. SEE LIGHTING CONTROL DETAIL SHEET E5.3.

2. BUILDING EXTERIOR MOUNTED LIGHTS SHALL BE CONTROLLED VIA LIGHTING CONTACTOR AND PHOTOCELL. REFER TO LIGHTING CONTACTOR DIAGRAM ON SHEET E5.3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING LOCATION.

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SHEET TITLE
OFFICE
LIGHTING PLAN

Sheet Number
E2.1

Do not scale drawings - Use figured dimensions CAD DWG E2.1 OFFICE LIGHTING PLAN.DWG

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.

B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

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D. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

E. ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND IN ACCORDANCE WITH N.E.C. AND LOCAL REQUIREMENTS.

F. CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING OF ALL EXIT LIGHTS PRIOR TO ORDERING.

G. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS AND EXIT SIGNS. CONNECT TO THE SAME CIRCUIT AS THE NORMAL LIGHTING SERVING THE SURROUNDING AREA AHEAD OF ANY SWITCHING/CONTROLS.

H. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

I. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES 6'-0" LENGTH MAX. BRANCH CIRCUIT HOME RUNS SHALL BE IN EMT.

J. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

K. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS BEING SERVED. USE INDELIBLE MARKER ON BOX COVER.

L. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

M. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

N. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

O. VERIFY DEVICE & COVERPLATE COLORS WITH OWNER PRIOR TO THE START OF CONSTRUCTION.

P. WHERE MULTIPLE SWITCHES ARE GROUPED TOGETHER, PROVIDE A SINGLE SHARED COVERPLATE.

Q. COORDINATE ALL PANEL AND TRANSFORMER LOCATIONS WITH DOCK DOOR CLEARANCE REQUIREMENTS.

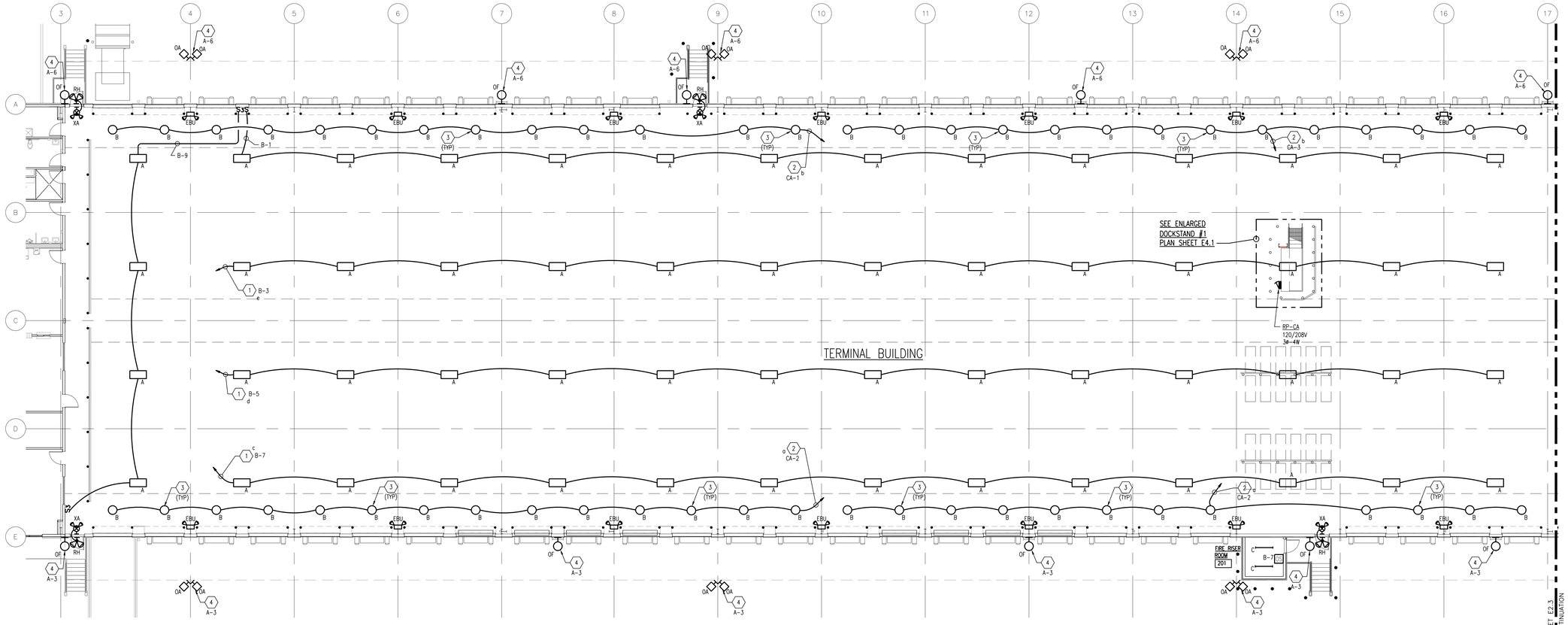
R. ALL PANELS AND TRANSFORMERS WITHIN TERMINAL BUILDINGS SHALL BE NEMA 3R RATED.

S. ALL TYPE A LIGHT FIXTURES IN TERMINAL BUILDING SHALL BE MOUNTED 30" BELOW PURLINS WITH RIGID STEM.

T. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT AL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. SERVE FROM 277V CIRCUIT INDICATED VIA LINE VOLTAGE SWITCH AT DOCKSTAND.
2. SERVE FROM 120V CIRCUIT INDICATED VIA LINE VOLTAGE SWITCH AT DOCKSTAND.
3. TYPE B FIXTURES ARE CORD AND PLUG AND SHALL BE SERVED FROM 120V RECEPTACLE. SEE MOUNTING DETAIL SHEET E5.3.
4. BUILDING EXTERIOR MOUNTED LIGHTS SHALL BE CONTROLLED VIA LIGHTING CONTACTOR AND PHOTOCELL. REFER TO LIGHTING CONTACTOR DIAGRAM ON SHEET E5.3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING LOCATION AND DETAILS.



TERMINAL BLDG LIGHTING PLAN
SCALE: 3/32" = 1'-0"

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TERMINAL BLDG LIGHTING PLAN

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E2.2

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D. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

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F. CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING OF ALL EXIT LIGHTS PRIOR TO ORDERING.

G. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS AND EXIT SIGNS. CONNECT TO THE SAME CIRCUIT AS THE NORMAL LIGHTING SERVING THE SURROUNDING AREA AHEAD OF ANY SWITCHING/CONTROLS.

H. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

I. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES 6'-0" LENGTH MAX. BRANCH CIRCUIT HOME RUNS SHALL BE IN EMT.

J. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

K. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS BEING SERVED. USE INDELIBLE MARKER ON BOX COVER.

L. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

M. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

N. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

O. VERIFY DEVICE & COVERPLATE COLORS WITH OWNER PRIOR TO THE START OF CONSTRUCTION.

P. WHERE MULTIPLE SWITCHES ARE GROUPED TOGETHER, PROVIDE A SINGLE SHARED COVERPLATE.

Q. COORDINATE ALL PANEL AND TRANSFORMER LOCATIONS WITH DOCK DOOR CLEARANCE REQUIREMENTS.

R. ALL PANELS AND TRANSFORMERS WITHIN TERMINAL BUILDINGS SHALL BE NEMA 3R RATED.

S. ALL TYPE A LIGHT FIXTURES IN TERMINAL BUILDING SHALL BE MOUNTED 30" BELOW PURLINS WITH RIGID STEM.

T. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT AL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. SERVE FROM 277V CIRCUIT INDICATED VIA LINE VOLTAGE SWITCH AT DOCKSTAND.
2. SERVE FROM 120V CIRCUIT INDICATED VIA LINE VOLTAGE SWITCH AT DOCKSTAND.
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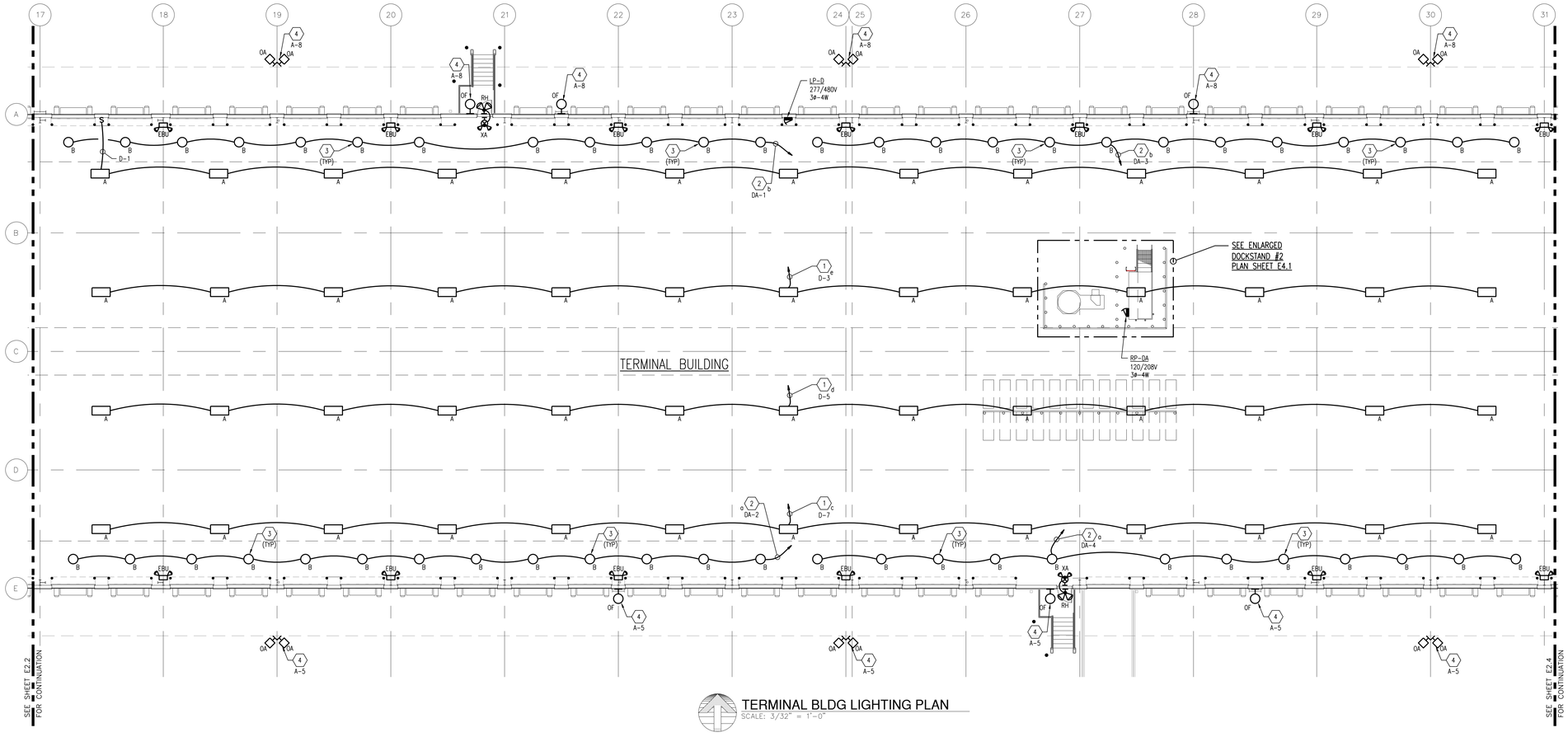

TERMINAL BLDG LIGHTING PLAN
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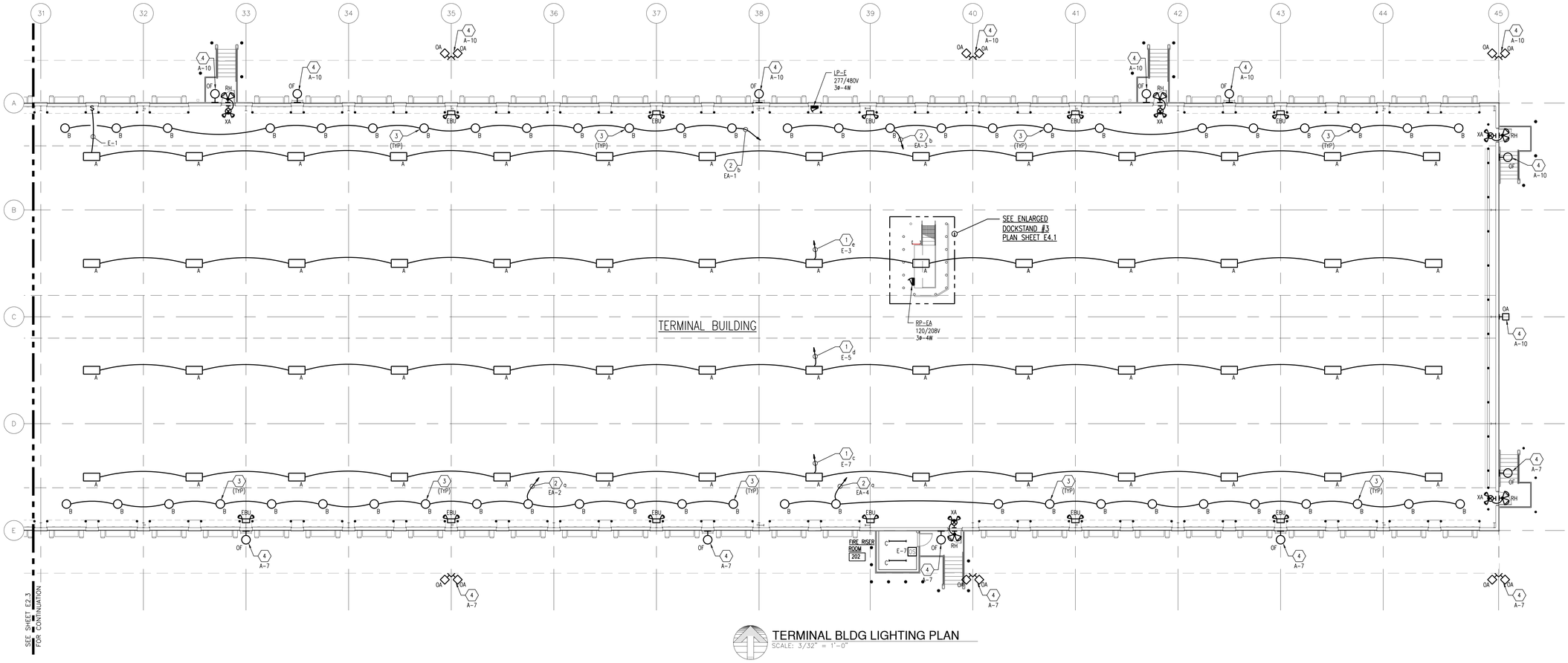
2. SERVE FROM 120V CIRCUIT INDICATED VIA LINE VOLTAGE SWITCH AT DOCKSTAND.
3. TYPE B FIXTURES ARE CORD AND PLUG AND SHALL BE SERVED FROM 120V RECEPTACLE. SEE MOUNTING DETAIL SHEET E5.3.
4. BUILDING EXTERIOR MOUNTED LIGHTS SHALL BE CONTROLLED VIA LIGHTING CONTACTOR AND PHOTOCELL. REFER TO LIGHTING CONTACTOR DIAGRAM ON SHEET E5.3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING LOCATION AND DETAILS.



TERMINAL BLDG LIGHTING PLAN
SCALE: 3/32" = 1'-0"

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E2.4

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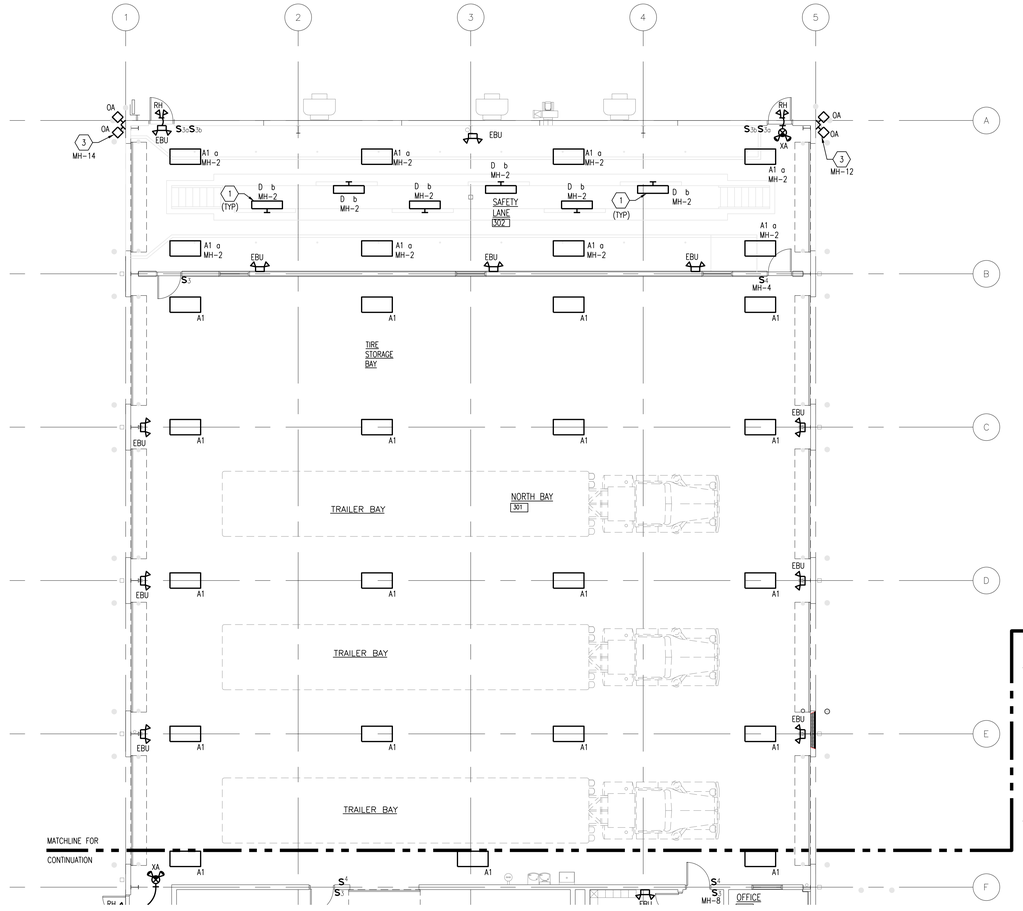

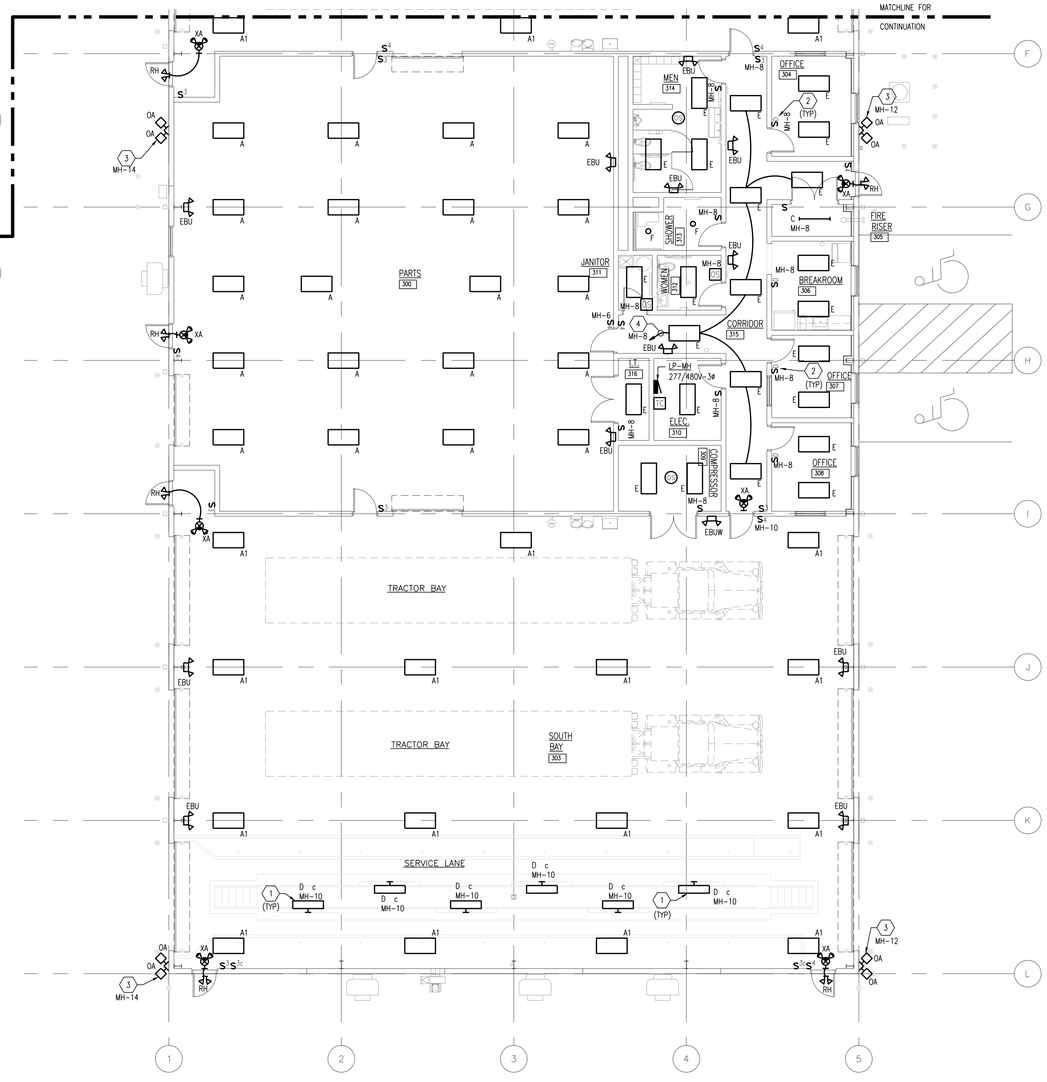

MAINTENANCE BLDG LIGHTING PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.

B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

C. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

D. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

E. ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND IN ACCORDANCE WITH N.E.C. AND LOCAL REQUIREMENTS.

F. CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING OF ALL EXIT LIGHTS PRIOR TO ORDERING.

G. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS AND EXIT SIGNS. CONNECT TO THE SAME CIRCUIT AS THE NORMAL LIGHTING SERVING THE SURROUNDING AREA AHEAD OF ANY SWITCHING/CONTROLS.

H. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

I. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES AND MOTORIZED EQUIPMENT 6'-0" LENGTH MAX. BRANCH CIRCUIT HOME RUNS SHALL BE IN EMT.

J. ALL CONDUITS LOCATED IN FINISHED AREAS MUST BE RECESSED IN WALLS OR LOCATED ABOVE FINISH CEILINGS. SURFACE MOUNTED CONDUIT WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE.

K. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

L. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

M. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELLED WITH CIRCUITS BEING SERVED. USE INDELIBLE MARKER ON BOX COVER.

N. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCH WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

O. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

P. ALL OCCUPANCY SENSORS AND POWER PACKS SHALL BE RATED FOR THE LOAD INDICATED TO BE SERVED. PROVIDE MULTIPLE POWER PACKS WHERE REQUIRED.

Q. ALL POWER PACKS SERVED FROM CEILING MOUNTED OCCUPANCY SENSORS SHALL BE WIRED IN SERIES WITH LOCAL LIGHT SWITCH(ES).

R. TYPE A AND A1 LIGHT FIXTURES SHALL BE SUSPENDED AT 18'-0"AFF. VERIFY MOUNTING HEIGHT WITH OWNER.

S. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. SERVICE PIT IS A CLASS 1, DIV. 2 HAZARDOUS LOCATION. MOUNT LIGHT SWITCH AT ACCESSIBLE LOCATION NEAR TOP OF STAIRS, AND COMPLY WITH ALL WIRING REQUIREMENTS FOR A CLASS 1 DIV. 2 LOCATION. FIELD COORDINATE LOCATION IN PIT.

2. LIGHTING TO BE AUTO ON/AUTO OFF AFTER 20 MINUTES OF NO OCCUPANCY. LIGHTING TO BE CONTROLLED VIA WALL MOUNTED OCCUPANCY SENSOR/SWITCH WITH DIMMING. SEE LIGHTING CONTROL DETAIL SHEET E5.3.

3. BUILDING EXTERIOR MOUNTED LIGHTS SHALL BE CONTROLLED VIA LIGHTING CONTACTOR AND PHOTOCELL. REFER TO LIGHTING CONTACTOR DIAGRAM ON SHEET E5.3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING LOCATION. COORDINATE 90 DEGREE MOUNTING WITH MOCKBEE.

4. CONTROL CORRIDOR LIGHTING VIA SWITCHES SHOWN.

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SHEET TITLE
MAINTENANCE BLDG LIGHTING PLAN

Sheet Number
E2.5

Do not scale drawings. Use figured dimensions. CAD DWG E2.5 MAINTENANCE BLDG LIGHTING PLAN.DWG

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES.

B. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

C. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

D. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

E. ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND IN ACCORDANCE WITH N.E.C. AND LOCAL REQUIREMENTS.

F. CONTRACTOR SHALL FIELD VERIFY EXACT MOUNTING OF ALL EXIT LIGHTS PRIOR TO ORDERING.

G. PROVIDE AN UNSWITCHED HOT TO ALL EMERGENCY BATTERY PACKS AND EXIT SIGNS. CONNECT TO THE SAME CIRCUIT AS THE NORMAL LIGHTING SERVING THE SURROUNDING AREA AHEAD OF ANY SWITCHING/CONTROLS.

H. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

I. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES AND MOTORIZED EQUIPMENT 6'-0" LENGTH MAX. BRANCH CIRCUIT HOME RUNS SHALL BE IN EMT.

J. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

K. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

L. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS BEING SERVED. USE INDELIBLE MARKER ON BOX COVER.

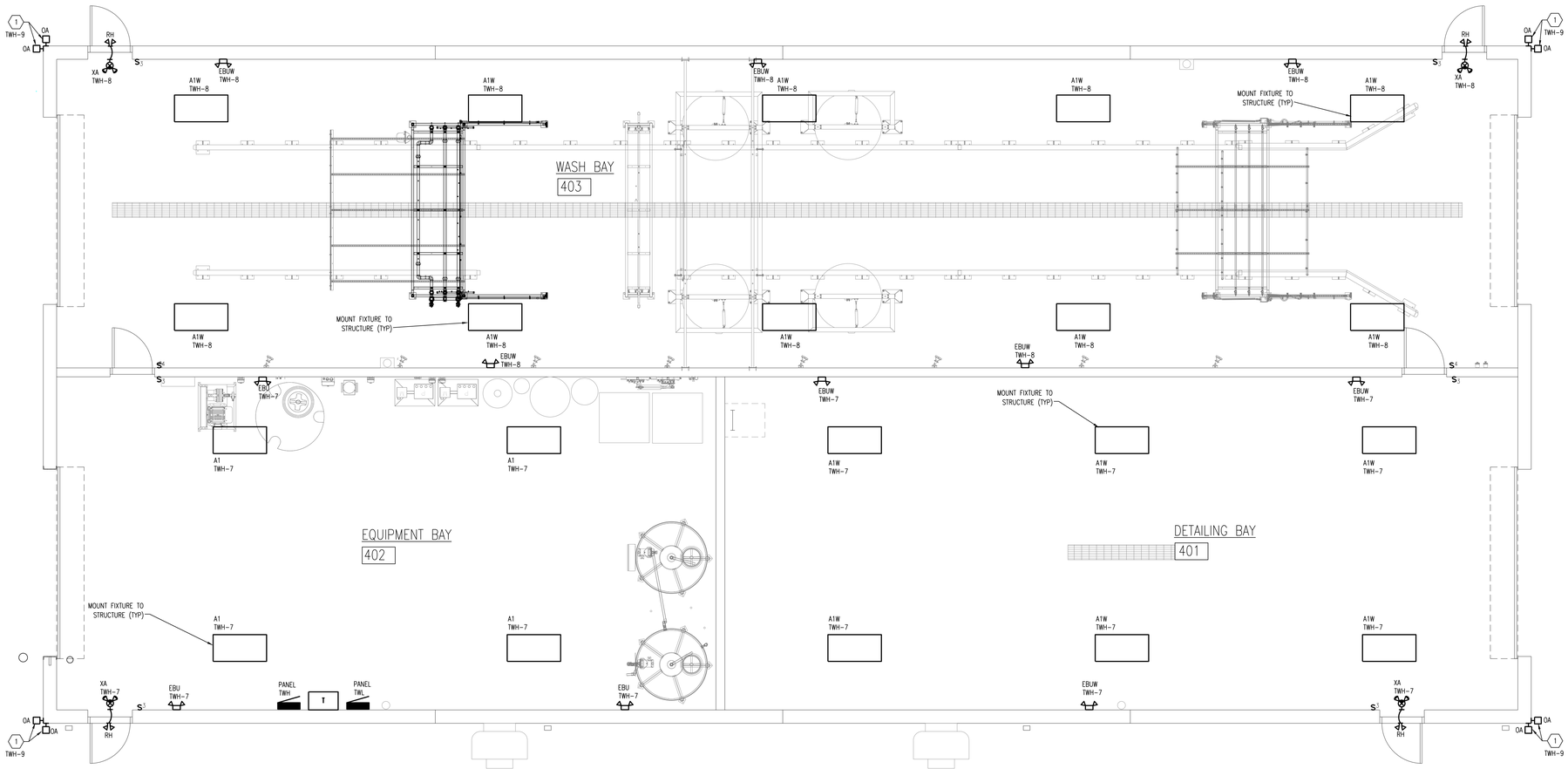
M. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCH WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

N. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

O. ALL TYPE A1 AND A1W LIGHT FIXTURES SHALL BE SURFACE MOUNTED TO CONCRETE ROOF.

(#) KEY NOTES

1. BUILDING EXTERIOR MOUNTED LIGHTS SHALL BE CONTROLLED BY A LIGHTING CONTACTOR PANEL AND PHOTOCELL. REFER TO LIGHTING CONTACTOR DIAGRAM ON SHEET E5.3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING LOCATION.



TRUCK WASH LIGHTING PLAN
SCALE: 1/4" = 1'-0"

TRUCK WASH ELECTRICAL SCOPE RESPONSIBILITY:
THIS DRAWING IS A PART OF THE TRUCK WASH ELECTRICAL DESIGN DOCUMENTATION. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK ON THIS DRAWING IN ADDITION TO ALL WORK ON THE DUBOIS-FLEETWASH ELECTRICAL DRAWINGS E-1.0 & E-2.0.

THE DUBOIS-FLEETWASH ELECTRICAL DRAWINGS ARE INCLUDED WITH THIS ELECTRICAL SET BUT MAY NOT BE THE LATEST VERSION. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH DUBOIS-FLEETWASH TO CONFIRM POSSESSION OF THE LATEST DUBOIS-FLEETWASH DRAWINGS. REFER TO E7.1 AND E7.2.

ALL PLUMBING AND CONDUIT LINES ARE TO BE RUN ABOVE SLAB (WASH BAY TO EQUIPMENT AREA) EXCEPT AS NOTED

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TRUCK WASH LIGHTING PLAN

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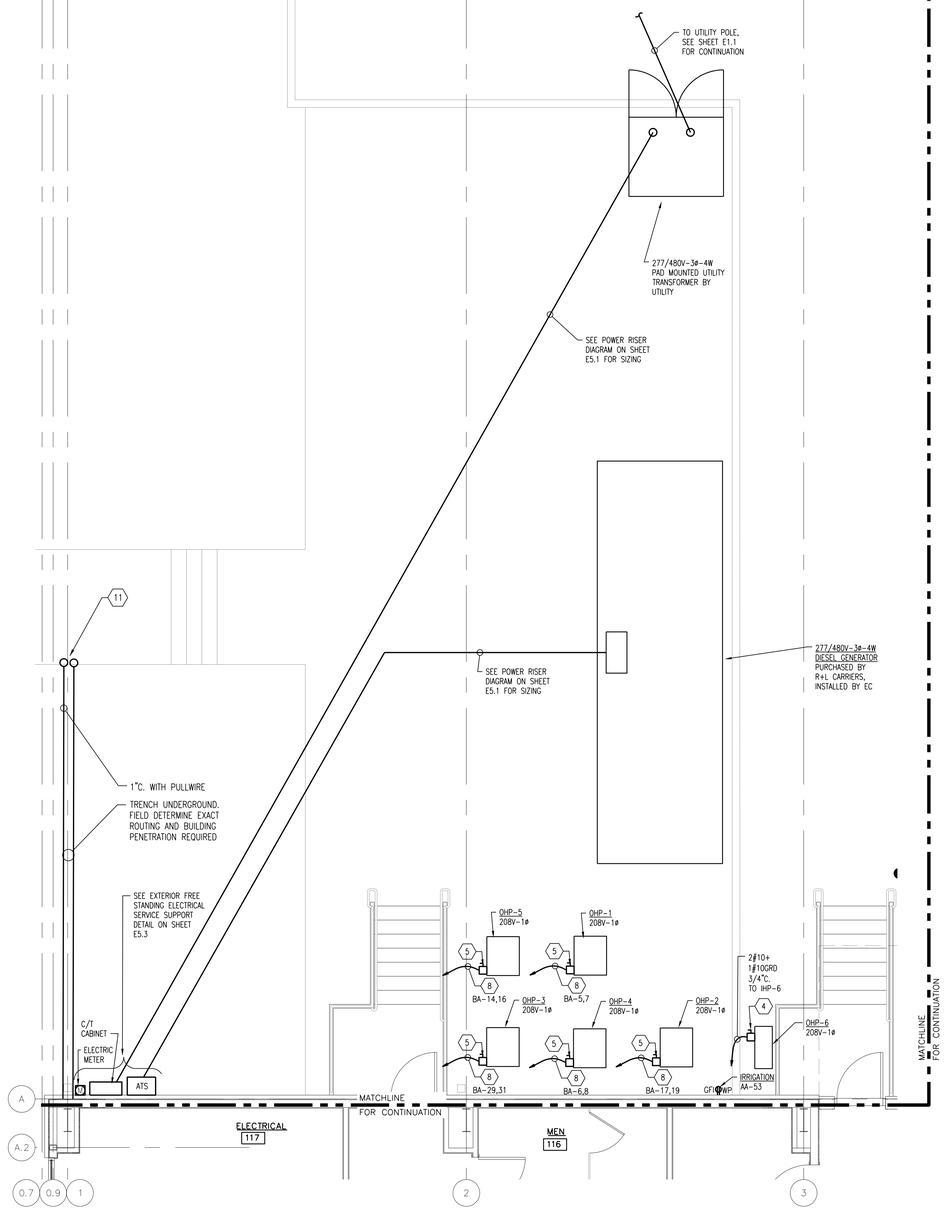
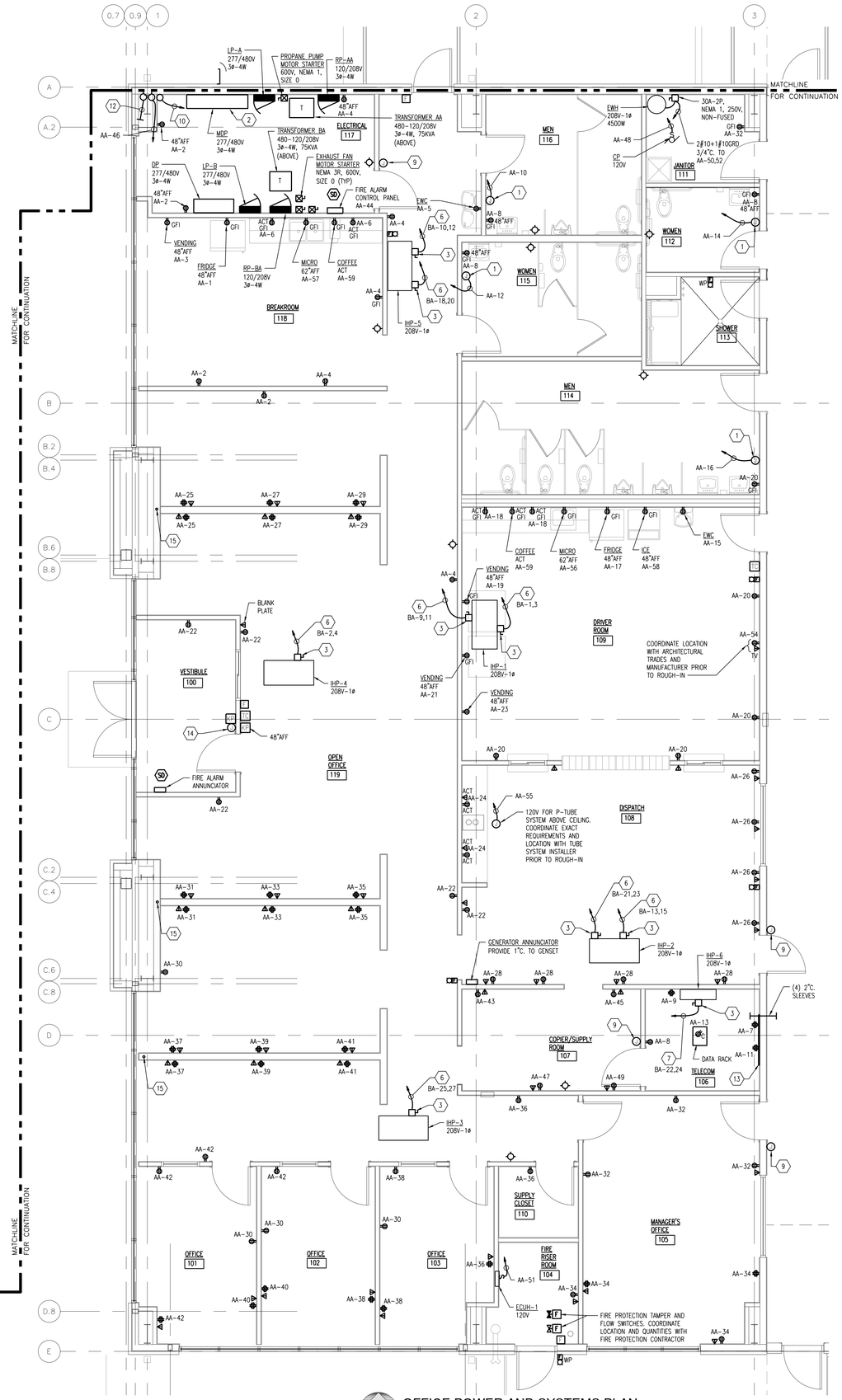


OFFICE EQUIPMENT YARD PLAN

SCALE: 1/4" = 1'-0"



OFFICE POWER AND SYSTEMS PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL FIRE ALARM STROBES SHALL BE SYNCHRONIZED.

E. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

F. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

G. ALL CONDUITS LOCATED IN FINISHED AREAS MUST BE RECESSED IN WALLS OR LOCATED ABOVE FINISH CEILINGS. SURFACE MOUNTED CONDUIT WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE.

H. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

I. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

J. ALL RECEPTACLES LOCATED WITHIN 6' OF A SINK MUST BE A GFI TYPE RECEPTACLE. DOWN STREAM PROTECTION OF MULTIPLE OUTLETS FROM A SINGLE UPSTREAM DEVICE IS NOT ALLOWED.

K. E.C. TO VERIFY ELECTRICAL AND DATA OUTLET LOCATIONS WITH THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION. ADJUST FINAL LOCATIONS AS NECESSARY TO ACCOMMODATE FURNITURE AND CASEWORK LAYOUTS.

L. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

M. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

N. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

O. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

KEY NOTES

1. HAND DRYER. 120V. 1000W.
2. MOP SHALL BE LESS THAN 6'-0" WIDE. SUBMIT DIMENSIONED SHOP DRAWING FOR APPROVAL. SUBMISSIONS WIDER THAN 6'-0" SHALL BE REJECTED. SQUARE D QED-2 SERIES OR APPROVED EQUAL.
3. 30A-2P, NON-FUSED, 250V, NEMA 1 BY EC.
4. 30A-2P, NON-FUSED, 250V, NEMA 3R BY EC.
5. 60A-2P, NON-FUSED, 250V, NEMA 3R BY EC.
6. 2#12+1#12GRD-3/4"C. TO CIRCUIT BREAKER INDICATED.
7. 2#10+1#10GRD-3/4"C. TO CIRCUIT BREAKER INDICATED.
8. 2#8+1#10GRD-3/4"C. TO CIRCUIT BREAKER INDICATED.
9. CARD ACCESS JUNCTION BOX. SEE DETAIL SHEET E5.3.
10. 2"C. WITH PULLWIRE TO SERVE FUTURE ELECTRIC FENCE. BUSH AND CAP EXTERIOR END. ROUTE INTERIOR END TO DISPATCH ROOM. COORDINATE EXACT LOCATION AND ROUTING WITH ARCHITECTURAL TRADES.
11. ELECTRIC TURNSTYLE. PROVIDE IN GROUND JUNCTION BOX. ROUTE CONDUITS THRU IN GROUND JUNCTION BOX AND UP TO TURNSTYLE HEAD. PROVIDE REDUCER BUSHING FROM 120V 1"C. TO 3/4"C. 90 DEG SEALTIGHT FITTING AT TURNSTYLE HEAD. PROVIDE 120V GFI WEATHERPROOF OUTLET IN TURNSTYLE HEAD. COORDINATE EXACT REQUIREMENTS AND ROUTING WITH TURNSTYLE MANUFACTURER.
12. STUB OUT IN TRUSS SPACE. BUSH ENDS.
13. 8'H x 8'W x 3/4"D FIRE RATED PLYWOOD BACKBOARD.
14. J-BOXES FOR BUZZER AND MAGNETIC LOCK. COORDINATE WITH OWNER.
15. 1.5"C. WITH PULL WIRE STUBBED UP TO ACCESSIBLE CEILING SPACE TO SERVE LOW VOLTAGE COMMUNICATION. BUSH ENDS. COORDINATE WITH ARCHITECTURAL TRADES.

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SHEET TITLE
OFFICE POWER AND SYSTEMS PLAN

Sheet Number
E3.1

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GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

E. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

F. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

G. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

H. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

I. PROVIDE LABELS ON OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

J. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

K. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

L. ALL ROOF PENETRATIONS SERVING MECHANICAL EQUIPMENT SHALL BE ROUTED THRU THE EQUIPMENT CURB AND COORDINATED WITH MECHANICAL TRADES.

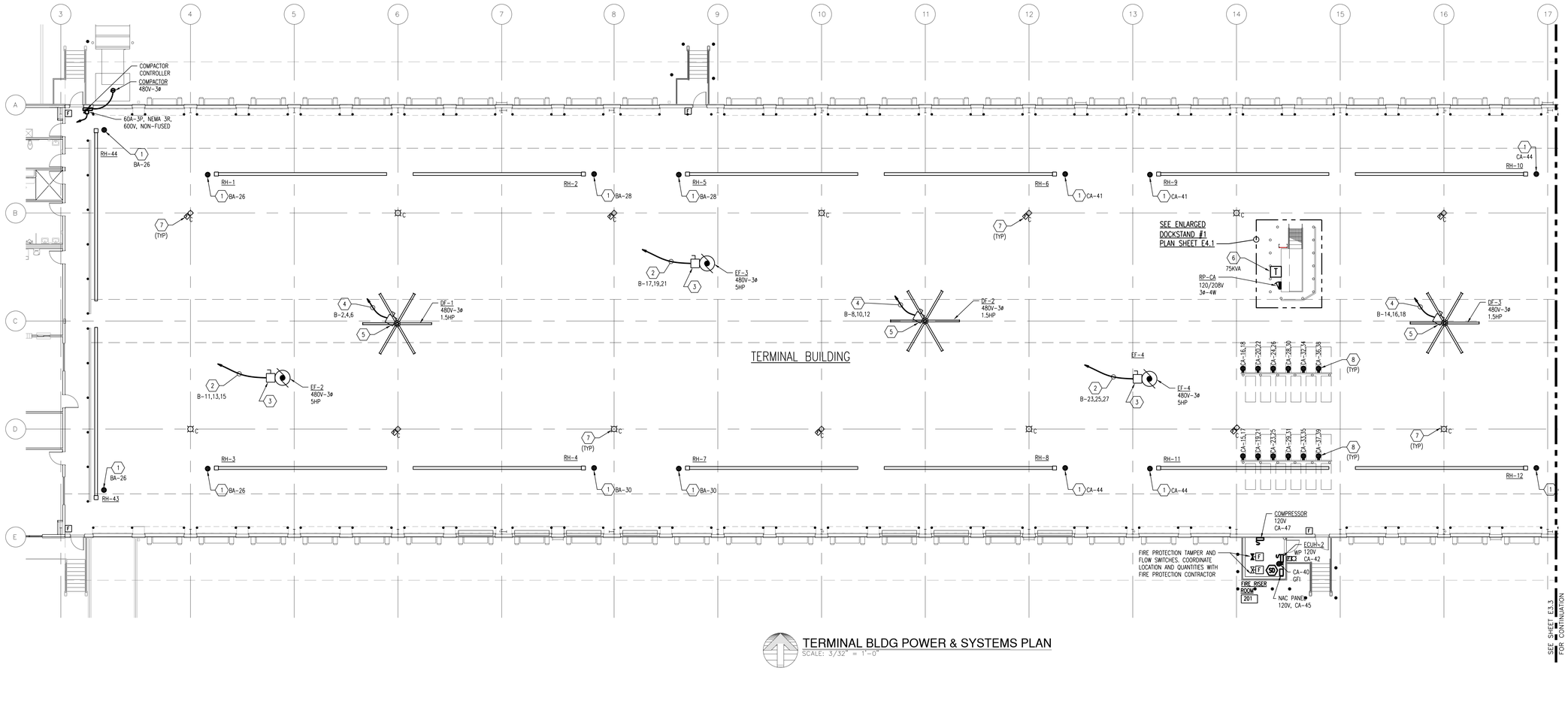
M. COORDINATE ALL PANEL AND TRANSFORMER LOCATIONS WITH DOCK DOOR CLEARANCE REQUIREMENTS.

N. ALL PANELS AND TRANSFORMERS WITHIN TERMINAL BUILDINGS SHALL BE NEMA 3R RATED.

O. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. PROVIDE RECEPTACLE MOUNTED IN TRUSS SPACE TO SERVE ADJACENT 120V RADIANT HEATERS. SERVE FROM CIRCUIT INDICATED. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH MECHANICAL TRADES PRIOR TO ROUGH-IN.
2. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED VIA MOTOR STARTER.
3. DISCONNECT BY MANUFACTURER.
4. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED.
5. VFD BY FAN MANUFACTURER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER. CONTROL VIA VFD CONTROLLER AT DOCK STAND #1.
6. NEW FLOOR MOUNTED 480-120/208Y-3ø-4W TRANSFORMER, KVA AS INDICATED.
7. WEATHERPROOF FIRE ALARM NOTIFICATION APPLIANCE. MOUNT TO BOTTOM OF STEEL.
8. SPLIT WIRE DUPLEX RECEPTACLE IN DOUBLE GANG BOX WITH COMMON COVERPLATE. SERVE EACH RECEPTACLE FROM A DEDICATED CIRCUIT INDICATED. INSTALL CONDUIT AND BOXES IN STEEL CHANNEL RAIL WEBBING. REFER TO ARCHITECTURAL DETAIL.



TERMINAL BLDG POWER & SYSTEMS PLAN

SCALE: 3/32" = 1'-0"

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SHEET TITLE
TERMINAL BLDG POWER & SYSTEMS PLAN

Sheet Number
E3.2

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GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

E. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

F. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

G. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

H. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

I. PROVIDE LABELS ON OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

J. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

K. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

L. ALL ROOF PENETRATIONS SERVING MECHANICAL EQUIPMENT SHALL BE ROUTED THRU THE EQUIPMENT CURB AND COORDINATED WITH MECHANICAL TRADES.

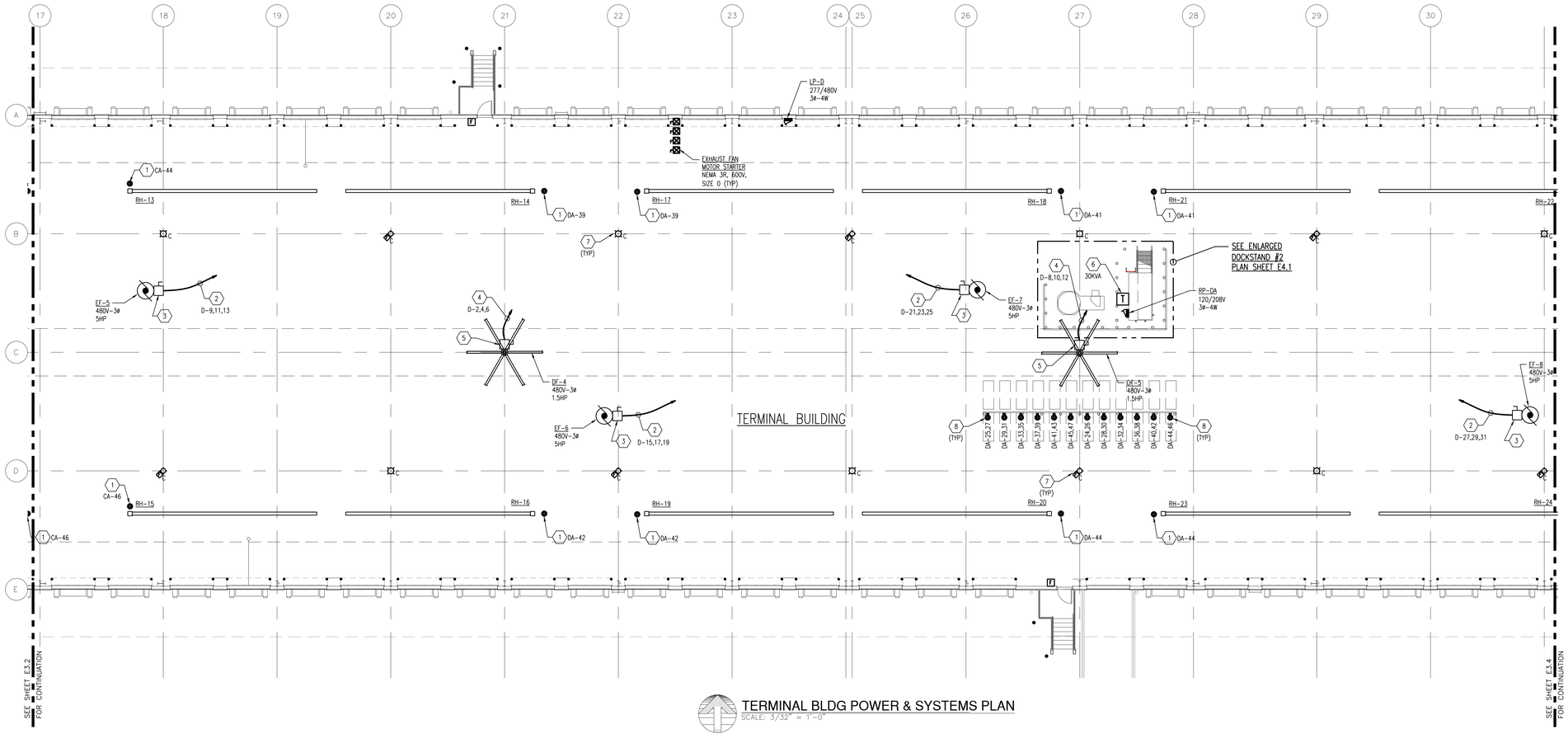
M. COORDINATE ALL PANEL AND TRANSFORMER LOCATIONS WITH DOCK DOOR CLEARANCE REQUIREMENTS.

N. ALL PANELS AND TRANSFORMERS WITHIN TERMINAL BUILDINGS SHALL BE NEMA 3R RATED.

O. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

(#) KEY NOTES

1. PROVIDE RECEPTACLE MOUNTED IN TRUSS SPACE TO SERVE ADJACENT 120V RADIANT HEATERS. SERVE FROM CIRCUIT INDICATED. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH MECHANICAL TRADES PRIOR TO ROUGH-IN.
2. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED VIA MOTOR STARTER.
3. DISCONNECT BY MANUFACTURER.
4. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED.
5. VFD BY FAN MANUFACTURER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER. CONTROL VIA VFD CONTROLLER AT DOCK STAND #2.
6. NEW FLOOR MOUNTED 480-120/208Y-3ø-4W TRANSFORMER, KVA AS INDICATED.
7. WEATHERPROOF FIRE ALARM NOTIFICATION APPLIANCE. MOUNT TO BOTTOM OF STEEL.
8. SPLIT WIRE DUPLEX RECEPTACLE IN DOUBLE GANG BOX WITH COMMON COVERPLATE. SERVE EACH RECEPTACLE FROM A DEDICATED CIRCUIT INDICATED. INSTALL CONDUIT AND BOXES IN STEEL CHANNEL RAIL WEBBING. REFER TO ARCHITECTURAL DETAIL.



TERMINAL BLDG POWER & SYSTEMS PLAN

SCALE: 3/32" = 1'-0"

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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

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SHEET TITLE
TERMINAL BLDG POWER & SYSTEMS PLAN

Sheet Number
E3.3

Do not scale drawings - Use figured dimensions C:\AD DWG E3.3 TERMINAL BLDG POWER & SYSTEMS PLAN.DWG

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

E. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

F. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

G. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

H. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

I. PROVIDE LABELS ON OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

J. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

K. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

L. ALL ROOF PENETRATIONS SERVING MECHANICAL EQUIPMENT SHALL BE ROUTED THRU THE EQUIPMENT CURB AND COORDINATED WITH MECHANICAL TRADES.

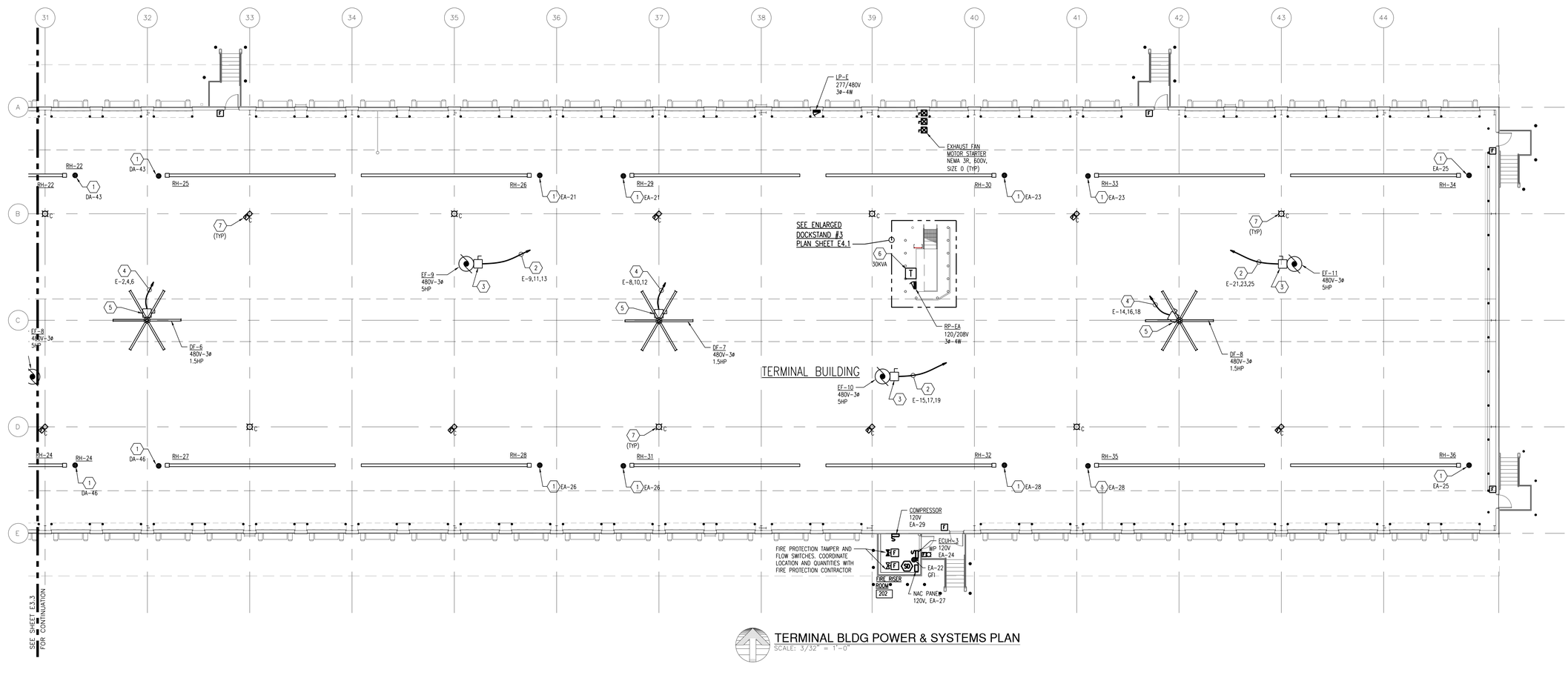
M. COORDINATE ALL PANEL AND TRANSFORMER LOCATIONS WITH DOCK DOOR CLEARANCE REQUIREMENTS.

N. ALL PANELS AND TRANSFORMERS WITHIN TERMINAL BUILDINGS SHALL BE NEMA 3R RATED.

O. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. PROVIDE RECEPTACLE MOUNTED IN TRUSS SPACE TO SERVE ADJACENT 120V RADIANT HEATERS. SERVE FROM CIRCUIT INDICATED. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH MECHANICAL TRADES PRIOR TO ROUGH-IN.
2. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED VIA MOTOR STARTER.
3. DISCONNECT BY MANUFACTURER.
4. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED.
5. VFD BY FAN MANUFACTURER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER. CONTROL VIA VFD CONTROLLER AT DOCK STAND #3.
6. NEW FLOOR MOUNTED 480-120/208Y-3ø-4W TRANSFORMER, KVA AS INDICATED.
7. WEATHERPROOF FIRE ALARM NOTIFICATION APPLIANCE. MOUNT TO BOTTOM OF STEEL.



TERMINAL BLDG POWER & SYSTEMS PLAN

SCALE: 3/32" = 1'-0"

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TERMINAL BLDG POWER & SYSTEMS PLAN

Sheet Number
E3.4

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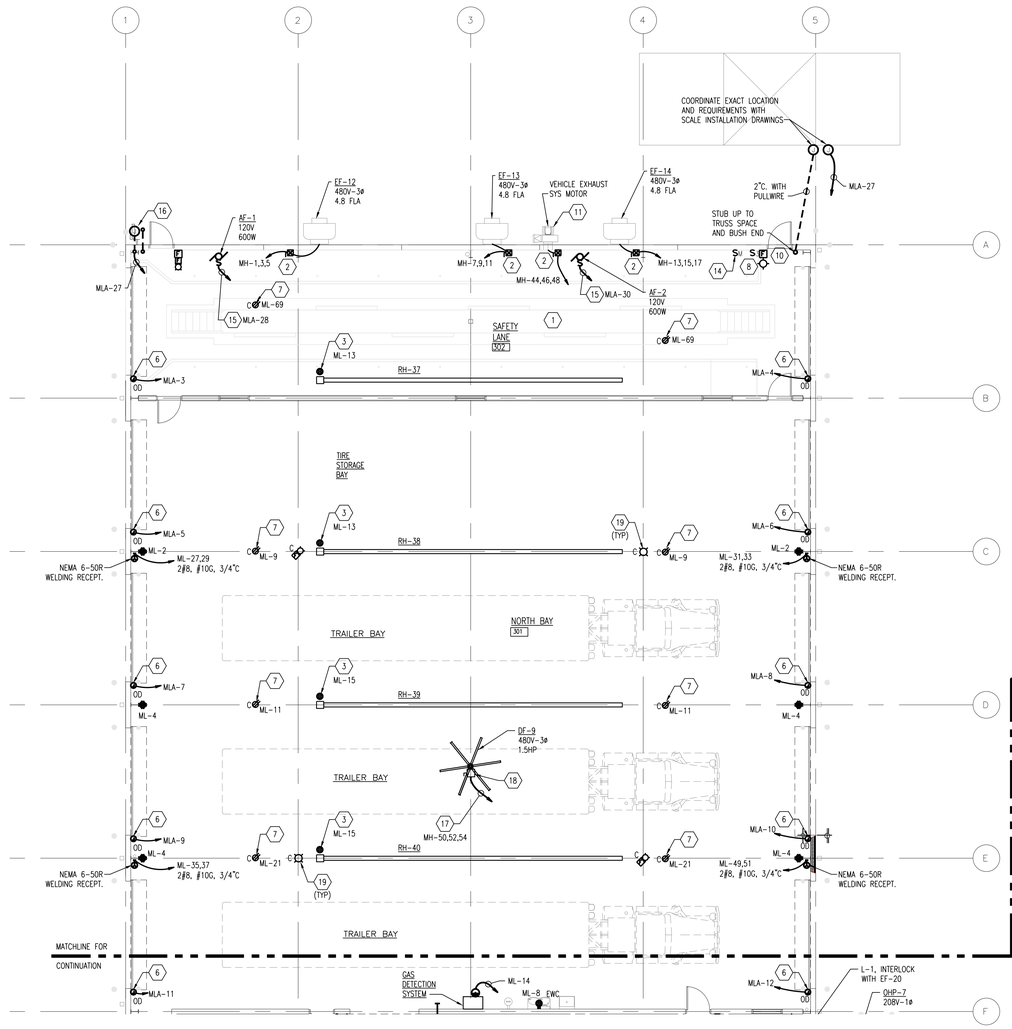

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B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL FIRE ALARM STROBES SHALL BE SYNCHRONIZED.

E. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

F. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

G. ALL CONDUITS LOCATED IN FINISHED AREAS MUST BE RECESSED IN WALLS OR LOCATED ABOVE FINISH CEILINGS. SURFACE MOUNTED CONDUIT WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE.

H. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

I. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

J. ALL RECEPTACLES LOCATED WITHIN 6' OF A SINK MUST BE A GFI TYPE RECEPTACLE. DOWN STREAM PROTECTION OF MULTIPLE OUTLETS FROM A SINGLE UPSTREAM DEVICE IS NOT ALLOWED.

K. E.C. TO VERIFY ELECTRICAL AND DATA OUTLET LOCATIONS WITH THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION. ADJUST FINAL LOCATIONS AS NECESSARY TO ACCOMMODATE FURNITURE AND CASEWORK LAYOUTS.

L. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

M. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

N. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

O. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

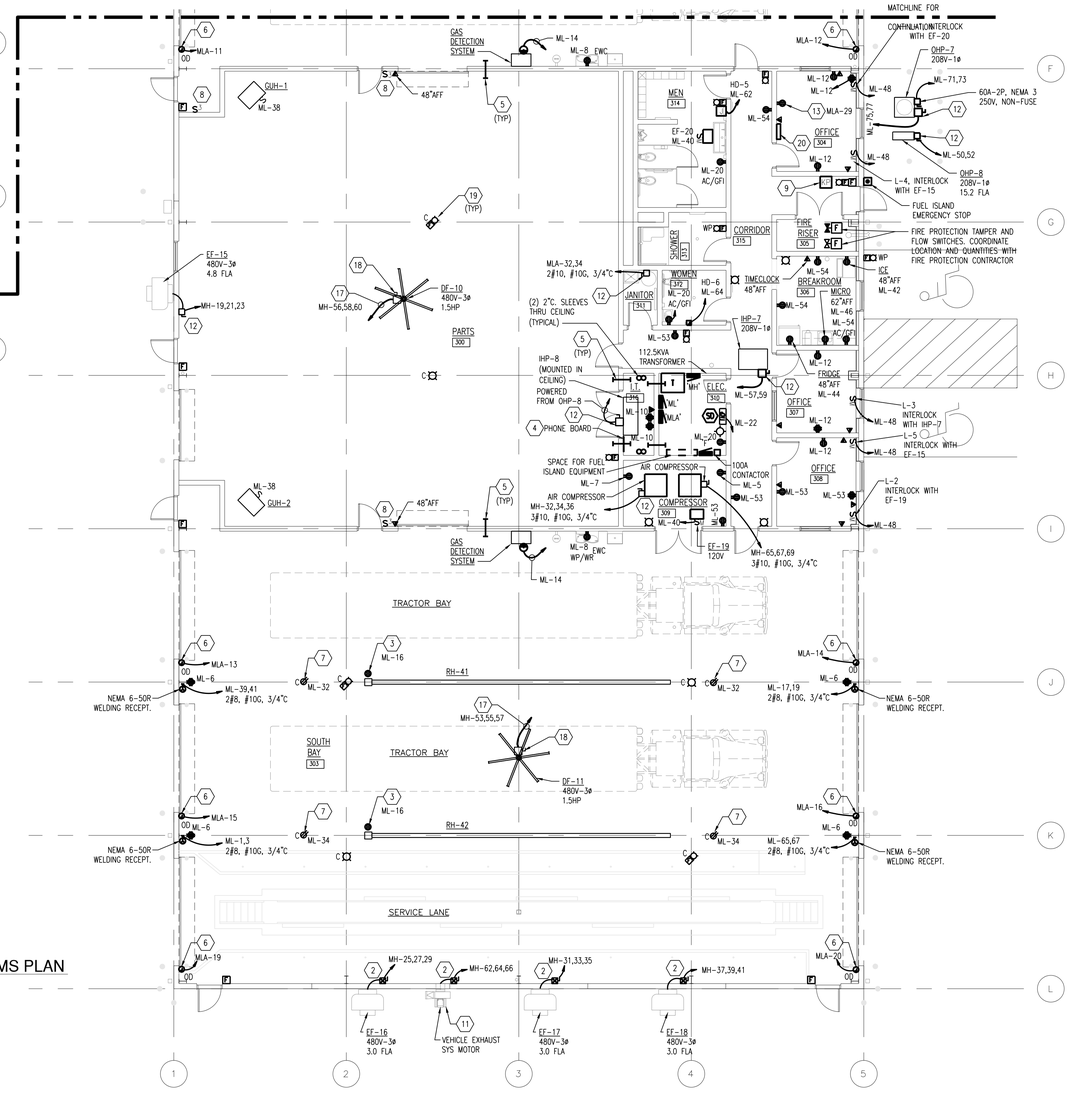
P. ROOF TOP UNITS ARE FURNISHED WITH CONTROL PANEL WITH MOTOR CONTROLLER(S).

Q. ALL ROOF PENETRATIONS SERVING MECHANICAL EQUIPMENT SHALL BE ROUTED THRU THE EQUIPMENT CURB AND COORDINATED WITH MECHANICAL TRADES.

R. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

KEY NOTES

1. SERVICE PIT IS A CLASS 1, DIV 2. HAZARDOUS LOCATION. MOUNT LIGHT SWITCH AT ACCESSIBLE LOCATION NEAR TOP OF STAIRS, AND COMPLY WITH ALL WIRING REQUIREMENTS FOR A CLASS 1, DIV. 2 LOCATION.
2. COMBINATION MOTOR STARTER / DISCONNECT. 600V, SIZE 0, 30A-3P, NEMA 3R. SERVE WITH 3#12+1#12GRD-3/4"C. TO CIRCUIT BREAKER INDICATED. PROVIDE H-O-A AND CONTACTS FOR CONTROL BY MECHANICAL. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL TRADES.
3. PROVIDE RECEPTACLE MOUNTED IN TRUSS SPACE TO SERVE ADJACENT 120V RADIANT HEATERS. SERVE FROM CIRCUIT INDICATED. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH MECHANICAL TRADES PRIOR TO ROUGH-IN.
4. PROVIDE 2' X 2' 1/2" FIRE RATED PLYWOOD TELEPHONE BOARD MOUNTED ON WALL, OR AS DIRECTED BY OWNER. GROUND BOARD TO BUILDING STEEL WITH #6 AWG COPPER, AND COIL 2' SPARE AT BOARD.
5. (2) 2"C. SLEEVES BELOW CEILING.
6. PROVIDE DEDICATED 120V, 20A CIRCUIT AND PUSH BUTTON STATION FOR ROLL-UP DOOR MOTOR. ALSO PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX MOUNTED AT +48" FOR DOOR CONTROLS. (CONTROL SWITCH F.W.E.) CONTRACTOR TO PROVIDE CONTROL WIRING AS REQUIRED, AND VERIFY ELECTRICAL REQUIREMENTS AND CONTROL LOCATION OF ACTUAL UNITS PURCHASED, AND MAKE ANY NECESSARY ADJUSTMENTS.
7. DROP CORD RECEPTACLE. SEE DETAIL ON SHEET E5.3.
8. VFD CONTROLLER SWITCH SHALL CONTROL CEILING FANS. PROVIDE ALL CONDUIT AND WIRING REQUIRED.
9. DOUBLE GANG JUNCTION BOX WITH BLANK COVERPLATE AT 60"AFF FOR SECURITY KEYPAD. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH SECURITY CONTRACTOR. PROVIDE 3/4"C. TO BOTTOM OF PURLINS. BUSH END.
10. CONTROLS FOR VEHICLE EXHAUST FAN MOTOR. ROUTE (1) 3/4" CONDUIT FROM VEHICLE EXHAUST CONTROL PANEL TO VEHICLE EXHAUST DEVICE.
11. VEHICLE EXHAUST FAN. 480V-3ø, 5 HP.
12. DISCONNECT. 600V, NON FUSED, 30A-3P, NEMA 3R. SERVE WITH 3#12+1#12GRD-3/4"C. TO CIRCUIT BREAKER INDICATED.
13. SCALE CONTROLLER. SERVE FROM 120V CIRCUIT INDICATED. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH SCALE CONTROLLER INSTALLATION DRAWINGS AND OWNER'S REPRESENTATIVE.
14. 2 POLE MOTOR RATED SWITCH, EACH POLE TO CONTROL AXIAL FAN. FANS TO BE ENERGIZED TOGETHER.
15. SERVE FROM CIRCUIT INDICATED VIA 2 POLE MOTOR RATED SWITCH.
16. SCALE DISPLAY. COORDINATE EXACT REQUIREMENTS WITH SCALE DISPLAY INSTALLATION INSTRUCTIONS. PROVIDE NEMA 3R JUNCTION BOX FOR 120V CIRCUIT INDICATED AND 2"C. WITH PULLWIRE TO TRUSS SPACE. BUSH ENDS.
17. 3#12+1#12GRD-3/4"C. TO 3 POLE CIRCUIT BREAKER INDICATED.
18. VFD BY FAN MANUFACTURER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER.
19. TRUSS MOUNTED FIRE ALARM NOTIFICATION APPLIANCE.
20. VEEDER ROOT BY FUEL ISLAND CONTRACTOR.



MAINTENANCE BLDG POWER & SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

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SHEET TITLE
MAINTENANCE BLDG POWER & SYSTEMS PLAN

Sheet Number
E3.5

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GENERAL NOTES

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B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

E. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

F. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

G. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

H. ALL RECEPTACLES LOCATED WITHIN 6' OF A SINK MUST BE A GFI TYPE RECEPTACLE. DOWN STREAM PROTECTION OF MULTIPLE OUTLETS FROM A SINGLE UPSTREAM DEVICE IS NOT ALLOWED.

I. E.C. TO VERIFY ELECTRICAL AND DATA OUTLET LOCATIONS WITH THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION. ADJUST FINAL LOCATIONS AS NECESSARY TO ACCOMMODATE FURNITURE AND CASEWORK LAYOUTS.

J. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

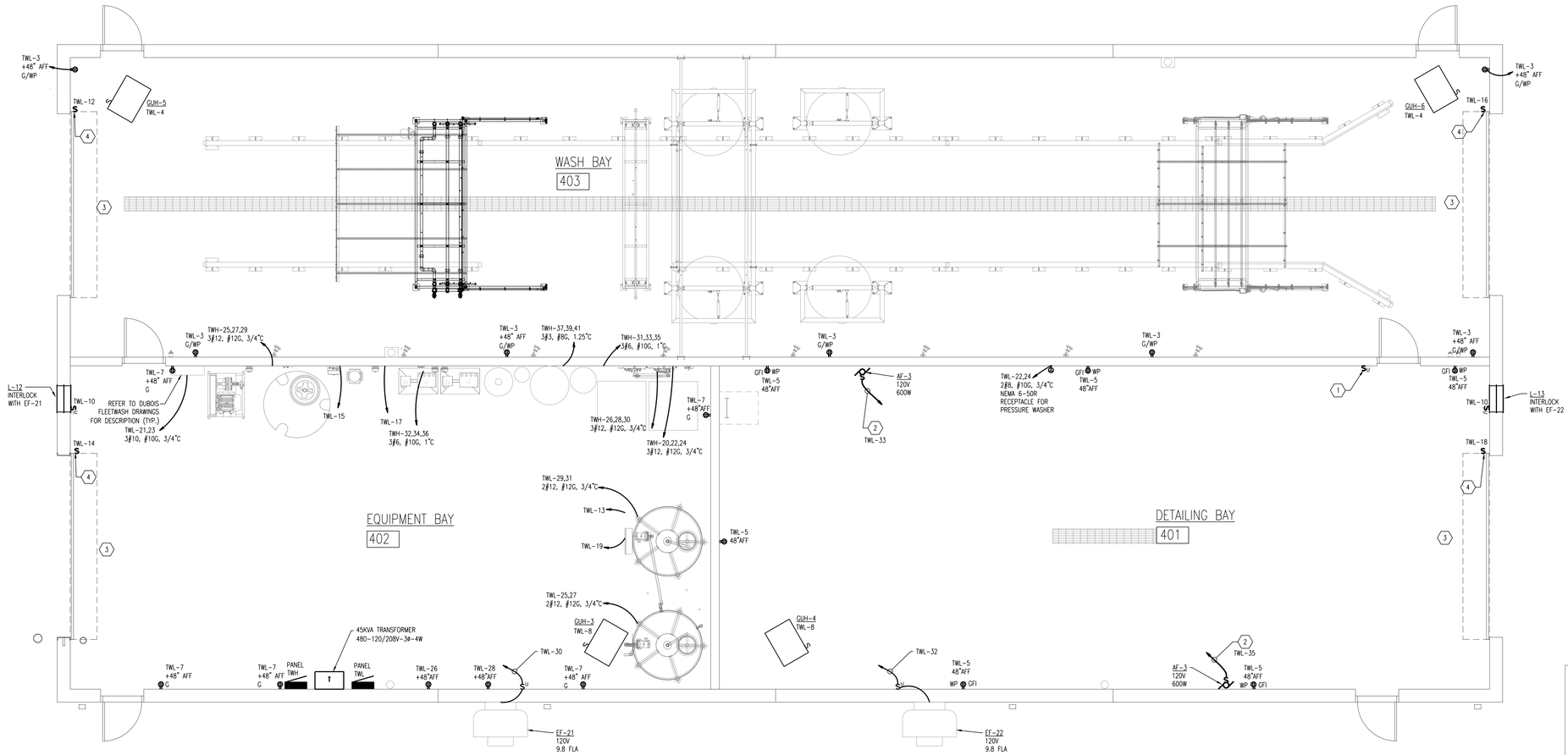
K. PROVIDE LABELS ON ALL OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

L. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

M. PROVIDE ALL REQUIRED COMPONENTS AS REQUIRED TO MOUNT ALL LIGHTING, ELECTRICAL PANELS, TRANSFORMERS, ETC.

(#) KEY NOTES

1. 2 POLE MOTOR RATED SWITCH. EACH POLE TO CONTROL AXIAL FAN. FANS TO BE ENERGIZED TOGETHER.
2. SERVE FROM CIRCUIT INDICATED VIA 2 POLE MOTOR RATED SWITCH.
3. CONTRACTOR TO ENSURE THAT LOCATIONS OF FIXTURES DO NOT INTERFERE WITH OPERATION OF ROLL-UP OVERHEAD DOOR.
4. PROVIDE DEDICATED 120V, 20A CIRCUIT AND PUSH BUTTON STATION FOR ROLL-UP DOOR MOTOR. ALSO PROVIDE 3/4" CONDUIT TO SINGLE GANG BOX MOUNTED AT +48" FOR DOOR CONTROLS. (CONTROL SWITCH F.W.E.) CONTRACTOR TO PROVIDE CONTROL WIRING AS REQUIRED. VERIFY ELECTRICAL REQUIREMENTS, LOCATIONS OF CONTROLS, ACTUAL UNITS PURCHASED, ETC. AND MAKE ANY NECESSARY ADJUSTMENTS.



TRUCK WASH POWER & SYSTEMS PLAN
SCALE: 1/4" = 1'-0"

TRUCK WASH ELECTRICAL SCOPE RESPONSIBILITY:

THIS DRAWING IS A PART OF THE TRUCK WASH ELECTRICAL DESIGN DOCUMENTATION. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK ON THIS DRAWING IN ADDITION TO ALL WORK ON THE DUBOIS-FLEETWASH ELECTRICAL DRAWINGS E-1.0 & E-2.0.

THE DUBOIS-FLEETWASH ELECTRICAL DRAWINGS ARE INCLUDED WITH THIS ELECTRICAL SET BUT MAY NOT BE THE LATEST VERSION. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH DUBOIS-FLEETWASH TO CONFIRM POSSESSION OF THE LATEST DUBOIS-FLEETWASH DRAWINGS. REFER TO E7.1 AND E7.2.

ALL PLUMBING AND CONDUIT LINES ARE TO BE RUN ABOVE SLAB (WASH BAY TO EQUIPMENT AREA) EXCEPT AS NOTED

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SHEET TITLE
TRUCK WASH POWER & SYSTEMS PLAN

Sheet Number
E3.6

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PANEL NAME: RP-F
SECTION: 1 OF 1
POLES: 66
LOCATION: FUEL STATION
MOUNTING: SURFACE
BUS: 100A
MAIN: 100A MCB
MIN KAIC: 10
ISO GND BUS: NO
L-L VOLTS: 208
PHASE: 3
WIRE: 4
PROJECT #: 18232.00
FED FROM: ML (MAINTENANCE)

* DENOTES GFCI CIRCUIT BREAKER
** DENOTES SCREW ON TYPE LOCKING DEVICE

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	LTS AT FUEL ISLAND	1200			200		20	1	1	A	2	1	20				200		SINGLE SATE	2
3	SWITCHED NEUTRAL						20	1	3	B	4	1	20						SWITCHED NEUTRAL	4
5	SPARE						20	1	5	C	6	1	20						SPARE	6
7	MASTER DEF. DISPENSER				200		20	1	7	A	8	1	20				200		SPATCO #1	8
9	SWITCHED NEUTRAL						20	1	9	B	10	1	20						SWITCHED NEUTRAL	10
11	SPARE						20	1	11	C	12	1	20						SPARE	12
13	MASTER/SATE #1				200		20	1	13	A	14	1	20				200		SPATCO #2	14
15	SWITCHED NEUTRAL						20	1	15	B	16	1	20						SWITCHED NEUTRAL	16
17	SPARE						20	1	17	C	18	1	20						SPARE	18
19	MASTER/SATE #2				200		20	1	19	A	20	1	20				200		SPATCO #3	20
21	SWITCHED NEUTRAL						20	1	21	B	22	1	20						SWITCHED NEUTRAL	22
23	SPARE						20	1	23	C	24	1	20						SPARE	24
25	MASTER/SATE #3				200		20	1	25	A	26	1	20				200		SPATCO #4	26
27	SWITCHED NEUTRAL						20	1	27	B	28	1	20						SWITCHED NEUTRAL	28
29	SPARE						20	1	29	C	30	1	20						SPARE	30
31	MASTER/SATE #4				200		20	1	31	A	32	1	20				200		SPATCO #5	32
33	SWITCHED NEUTRAL						20	1	33	B	34	1	20						SWITCHED NEUTRAL	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	MASTER/SATE #5				200		20	1	37	A	38	1	20				200		SPATCO #6	38
39	SWITCHED NEUTRAL						20	1	39	B	40	1	20						SWITCHED NEUTRAL	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42
43	2 HP DIESEL TANK			1350			20	1	43	A	44	1	20				400		VEEDER ROOT	44
45				1350			20	1	45	B	46	1	20						SPARE	46
47	2 HP DIESEL TANK			1350			20	1	47	C	48	1	20				200		OFF RD. DISPENSER	48
49				1350			20	1	49	A	50	1	20						SPARE	50
51	3/4 HP DEF. TANK			640			20	1	51	B	52	1	20						SPARE	52
53				640			20	1	53	C	54	1	20						SPARE	54
55	LIGHTING						20	1	55	A	56	1	20						SPARE	56
57	HP'S, CHP						20	1	57	B	58	1	20						SPARE	58
59							20	1	59	C	60	1	20						SPARE	60
61	SPARE						20	1	61	A	62	1	20						SPARE	62
63	SPARE						20	1	63	B	64	1	20						SPARE	64
65	SPARE						20	1	65	C	66	1	20						SPARE	66

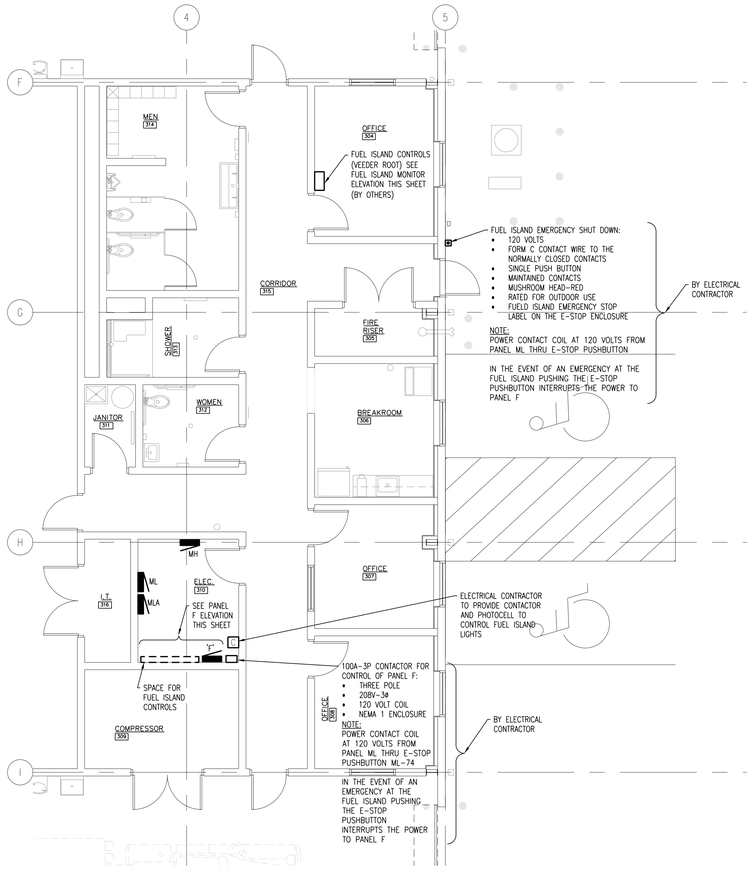
SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	1.2	0.0	2.7	3.2	0.0	7.1
PHASE B CONNECTED KVA	0.0	0.0	2.0	0.0	0.0	2.0
PHASE C CONNECTED KVA	0.0	0.0	2.0	0.2	0.0	2.2
25% OF LARGEST MOTOR			0.0			

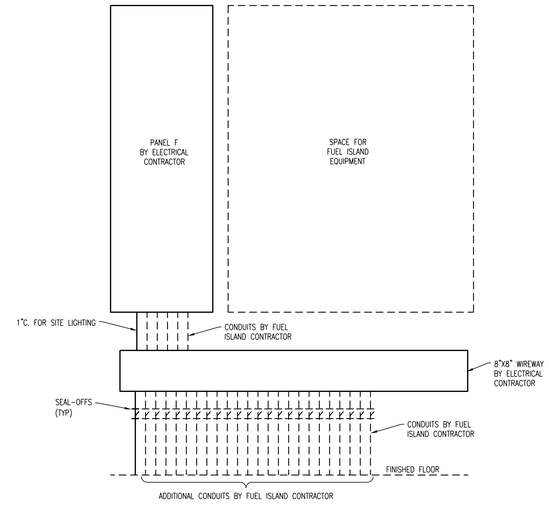
RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

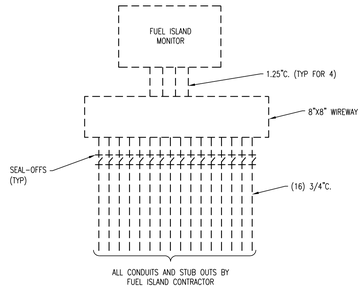
LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
1.2	0.0	6.7	3.4	0.0	11.3	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
1.2	0.0	6.7	3.4	0.0	11.3	0.0	11.3	DEMAND KVA
							31.3	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0			1.0	CONTINUOUS/NONCONT FACTOR
							32.1	MIN. OVERCURRENT DEVICE AMPS



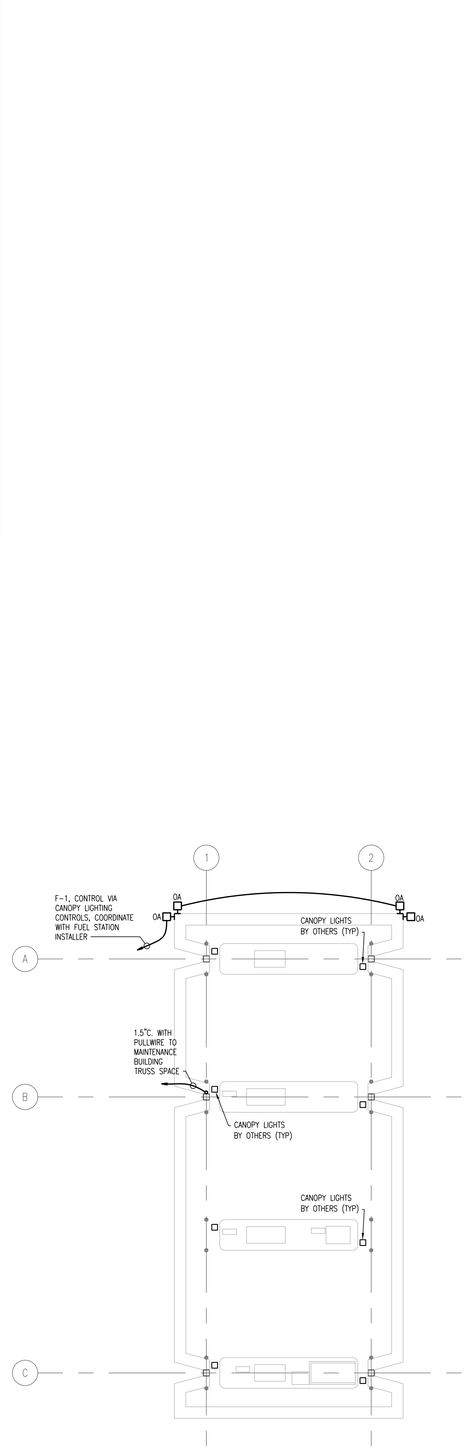
ENLARGED MAINTENANCE OFFICE PLAN
SCALE: 3/16" = 1'-0"



PANEL 'F' ELEVATION
SCALE: NTS
FOR REFERENCE ONLY



FUEL ISLAND MONITOR ELEVATION
SCALE: NTS
FOR REFERENCE ONLY



FUEL STATION PLAN
SCALE: 1/8" = 1'-0"

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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
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Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
ELECTRICAL FUEL STATION PLAN

Sheet Number
E3.7

Do not scale drawings. Use figured dimensions. CAD DWG E3.7 ELECTRICAL FUEL STATION PLAN.DWG

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS. THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.

C. SEE SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

D. ALL BRANCH CIRCUITS SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR AND GROUND CONDUCTOR.

E. LIQUID TIGHT FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTION TO MOTORIZED EQUIPMENT 6'-0" LENGTH MAX.

F. PROVIDE FIRE RATED SEALANT AROUND ALL CONDUIT PENETRATIONS THROUGH RATED WALLS AND FLOORS. VERIFY RATING OF WALLS AND FLOORS WITH ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

G. ALL DATA JACKS, WIRING AND COVERPLATES WILL BE PROVIDED AND INSTALLED BY OWNERS IT DEPARTMENT OR LOW VOLTAGE CONTRACTOR.

H. PROVIDE TYPE WRITTEN PANEL LEGENDS FOR ALL PANELS.

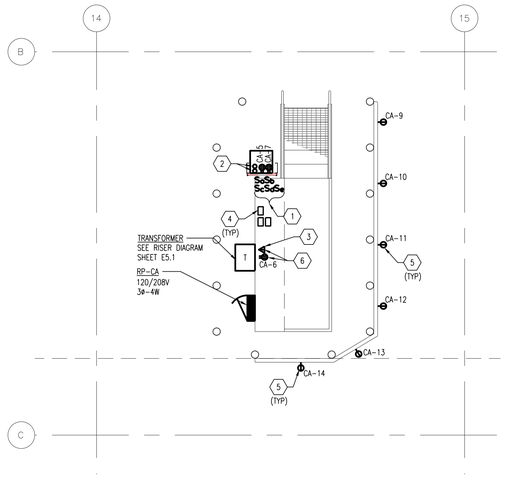
I. PROVIDE LABELS ON OUTLETS AND LIGHT SWITCHES WITH CIRCUIT NUMBER AND PANEL DESIGNATION.

J. PROVIDE AS-BUILT DRAWINGS INDICATING ALL ACTUAL LIGHTING AND RECEPTACLE CIRCUITS.

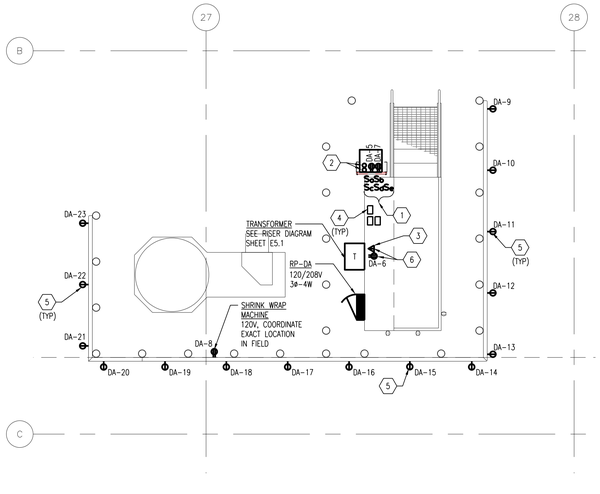
K. ALL EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) CONDUIT.

KEY NOTES

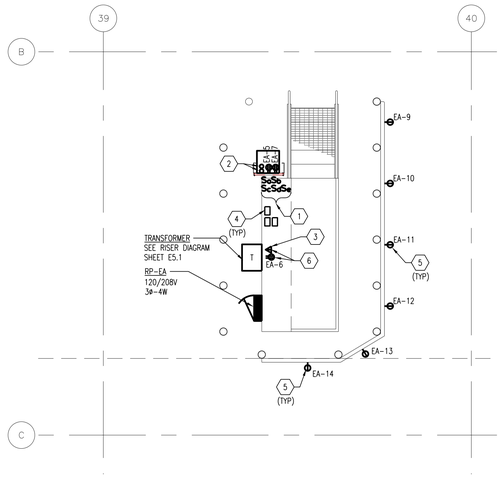
1. LIGHTING SWITCHBANK. MOUNT TO VERTICAL PLYWOOD. SEE ARCHITECTURAL DOCKSTAND DETAILS.
2. PROVIDE (2) 2"C. UP TO TRUSS SPACE WITH PULL STRINGS. BUSH ENDS.
3. PROVIDE 1.25"C. UP TO TRUSS SPACE WITH PULL STRING AND LOW VOLTAGE BOX. BUSH CONDUIT ENDS.
4. DESTRATIFICATION FAN VFD CONTROLLERS. PROVIDE ALL WIRING, CONDUIT, AND PROGRAMMING FOR A COMPLETE AND OPERATIONAL SYSTEM. INSTALL BENEATH LIGHTING SWITCHBANK.
5. SIMPLEX RECEPTACLE IN DOUBLE GANG BOX. SERVE FROM DOCK STAND PANEL CIRCUIT INDICATED. INSTALL CONDUIT AND BOXES IN STEEL CHANNEL RAIL WEBBING. REFER TO ARCHITECTURAL DETAIL.
6. COORDINATE EXACT MOUNTING AND LOCATION WITH OWNER PRIOR TO ROUGH-IN.



ENLARGED DOCKSTAND #1 PLAN
SCALE: 1/4" = 1'-0"



ENLARGED DOCKSTAND #2 PLAN
SCALE: 1/4" = 1'-0"



ENLARGED DOCKSTAND #3 PLAN
SCALE: 1/4" = 1'-0"

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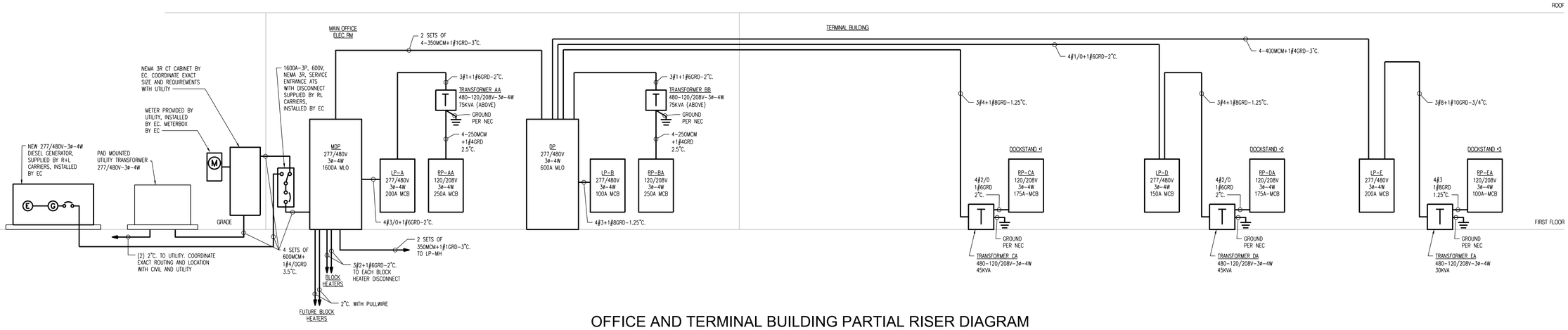
SHEET TITLE
ENLARGED PLANS

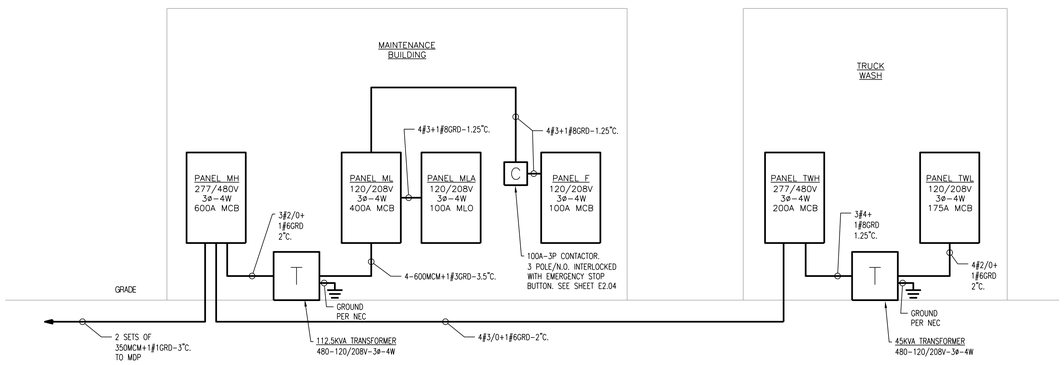
Sheet Number
E4.1

Do not scale drawings - Use figured dimensions CAD DWG E4.1 ENLARGED PLANS.DWG



OFFICE AND TERMINAL BUILDING PARTIAL RISER DIAGRAM

NO SCALE



MAINTENANCE AND TRUCK WASH BUILDINGS POWER RISER DIAGRAM

NO SCALE

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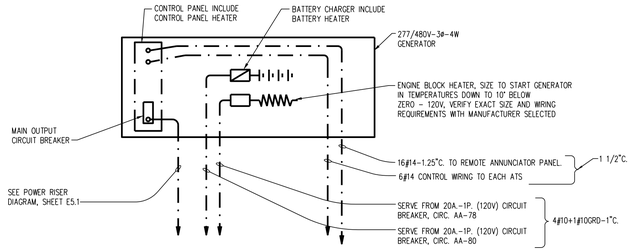
SHEET TITLE
DETAILS AND DIAGRAMS

Sheet Number
E5.1

Do not scale drawings - Use figured dimensions CAD DWG E5.1 DETAILS AND DIAGRAMS.DWG

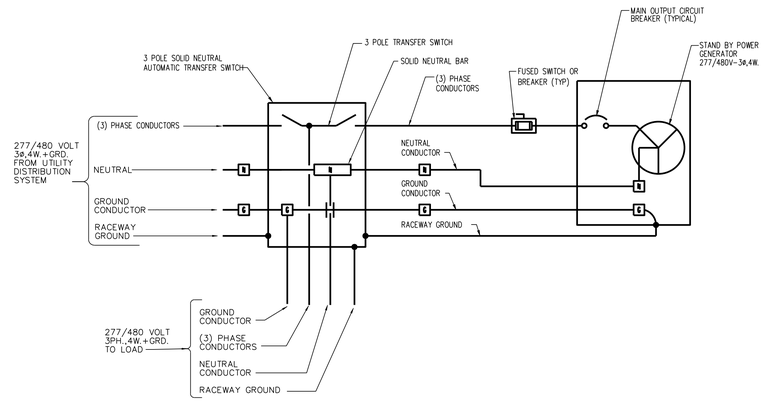


GENERATOR WIRING CONNECTION DETAIL

NO SCALE

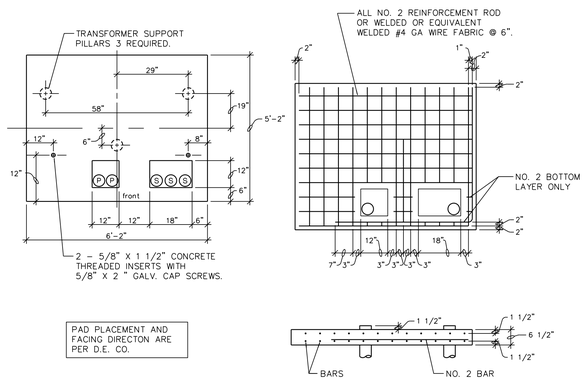
NOTES:

1. VERIFY ALL WIRING WITH GENERATOR SHOP DRAWINGS AND WIRING DIAGRAMS.

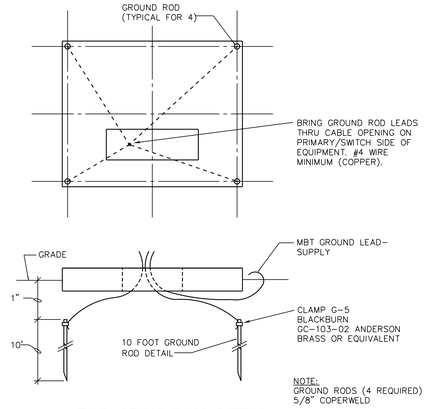


GENERATOR / ATS CONNECTION SCHEMATIC DIAGRAM

NO SCALE



PAD REINFORCEMENT DETAIL



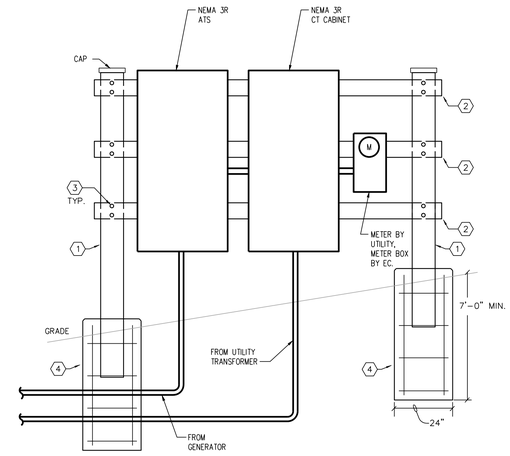
PAD GROUNDING DETAIL

SERVICE TRANSFORMER CONCRETE PAD DETAIL

NO SCALE

GENERAL NOTES:

1. SEE SIM-ESIG PAGES 3, 6, 9, AND 3, 6, 10 FOR PAD AND GROUND ROD INSTALLATION DETAILS AND 3, 7, 11 FOR MINIMUM CLEARANCES TO OBSTRUCTIONS.
2. PRIMARY CONDUIT MUST BE POSITIONED AT THE FRONT OF THE PRIMARY WINDOW AS SHOWN.
3. NUMBER OF CONDUIT IS TO BE APPROVED BY THE SERVICE PLANNER.
4. IF CONDUCTORS ARE NOT PULLED IN ALL SECONDARY SERVICE CONDUITS, THE UNUSED CONDUIT SHOULD BE AT THE FRONT POSITION.
5. SWEEPS MUST BE 4" RIGID CONDUIT OR INTERMEDIATE METALIC CONDUIT WITH A MINIMUM 36" RADIUS BEND.
6. CONCENTRATION 6 BAGS OF CEMENT PER YARD.
7. MAINTAIN CONCRETE COVER CLEARANCES BETWEEN REINFORCEMENT RODS AND SURFACES AS SHOWN.
8. TRANSFORMER AND PAD SELECTION ON SECONDARY METERED INSTALLATIONS WILL BE DETERMINED BY THE DETROIT EDISON SERVICE PLANNER.



EXTERIOR FREE STANDING ELECTRICAL SERVICE SUPPORT DETAIL

NO SCALE

GENERAL NOTES:

1. VERIFY ALL EQUIPMENT DIMENSIONS PRIOR TO FABRICATION OF STEEL SUPPORT ASSEMBLY.
2. ALL ABOVE GRADE CONDUIT SHALL BE GALVANIZED RIGID STEEL. TRANSITION TO PVC FOR HORIZONTAL BELOW GRADE CONDUIT.

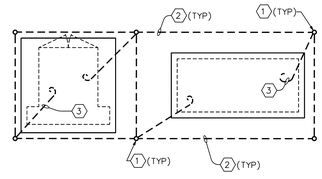
KEY NOTES:

(1) 4" GALVANIZED RIGID STEEL CONDUIT.

(2) 5"H X 1/4" THICK X 1" DEEP GALVANIZED STEEL "C" CHANNEL. GRIND ALL SHARP EDGES.

(3) ATTACH WITH 1/2" DIAMETER GALVANIZED BOLT, WASHERS AND LOCK-NUT. TWO PER LOCATION, GRIND END SMOOTH.

(4) CONCRETE FOOTING, 24" DIAMETER X 7'0" DEEP. PROVIDE 5#4 STEEL HOOPS AND 4 VERTICAL #4 STEEL RODS TO FORM STEEL REINFORCEMENT BASKET. ATTACH BASKET TO 4" PIPE WITH 3 HORIZONTAL STEEL RODS.



ELECTRIC SERVICE EQUIPMENT GROUNDING PLAN

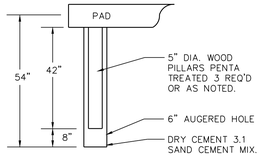
NO SCALE

KEY NOTES:

(1) 10'x5/8" DIAMETER COPPER GROUND ROD, TYPICAL FOR SIX (6).

(2) #4/0 BARE COPPER GROUND CABLE TO INTERCONNECT GROUND RODS (TYPICAL).

(3) 1#4/0 COPPER GROUND CABLE FROM GROUND ROD TO EQUIPMENT FOR GROUNDING, (TYPICAL).



SUPPORT POST DETAIL

NO SCALE

ALTERNATE SUPPORTS NOTE:

1. 6" DIA. CONDUIT 42" LONG CONCRETE FILLED.
2. 6" DIA. AUGERED HOLE 42" DEEP FILLED WITH CONCRETE.
3. EQUIVALENT PRE-CAST CONCRETE POST 42" LONG.

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SHEET TITLE
DETAILS AND DIAGRAMS

Sheet Number
E5.2

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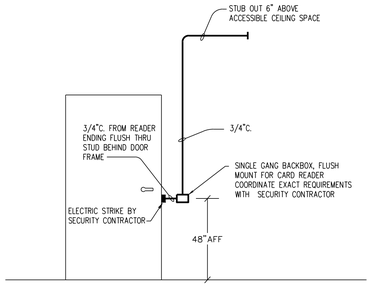
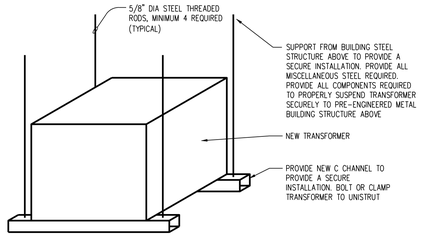


CARD ACCESS RACEWAY DIAGRAM

NO SCALE

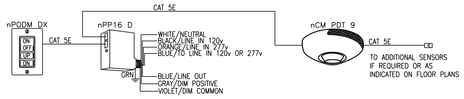
NOTES:

1. CARD READER AND WIRING BY SECURITY CONTRACTOR.
2. VERIFY ALL RACEWAY REQUIREMENTS WITH SECURITY CONTRACTOR PRIOR TO ROUGH-IN.



TRANSFORMER OVERHEAD MOUNTING DETAIL

NO SCALE

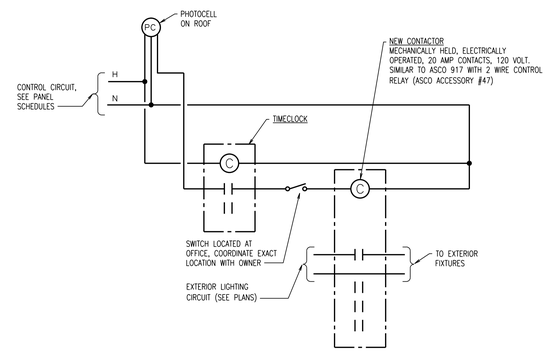


LIGHTING CONTROL DIAGRAM

NO SCALE

NOTE:

A. SENSOR SWITCH ITEMS SHOWN THIS DIAGRAM ARE BASIS OF DESIGN. CONTRACTOR MAY PROVIDE APPROVED EQUAL COOPER, HUBBELL, LEVITON, LUTRON, WATTSTOPPER.

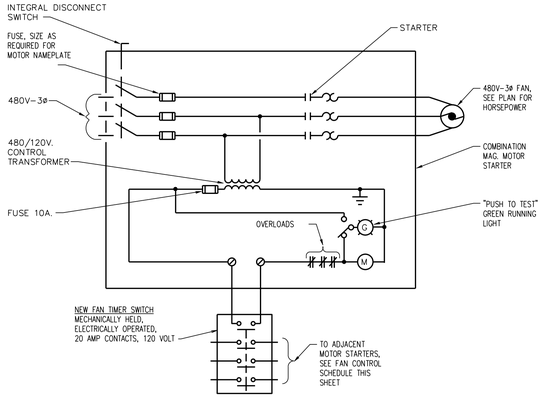


TYPICAL EXTERIOR LIGHTING CONTROL WIRING DIAGRAM

NO SCALE

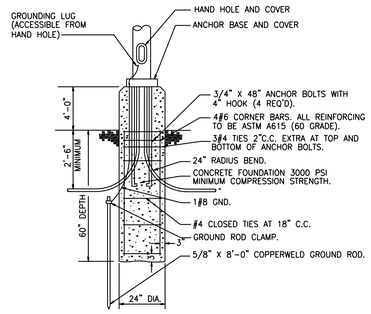
NOTES:

1. PROVIDE 1 SET OF CONTROLS FOR EACH TERMINAL BUILDING #200 AND #400.
2. LOCATE CONTACTORS ADJACENT TO LIGHTING PANEL.



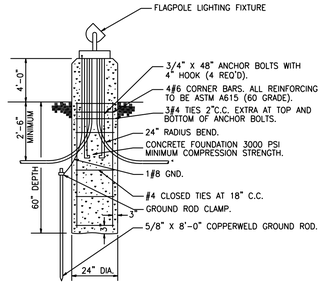
3 PHASE FAN WIRING DIAGRAM

NO SCALE



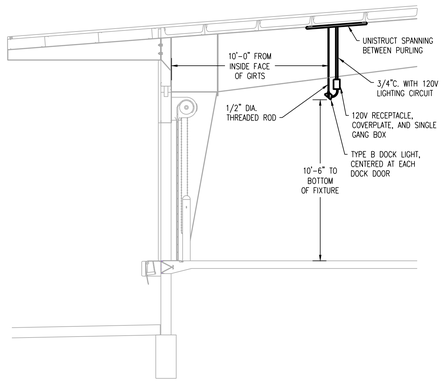
TYPICAL RAISED LIGHT POLE BASE

NO SCALE



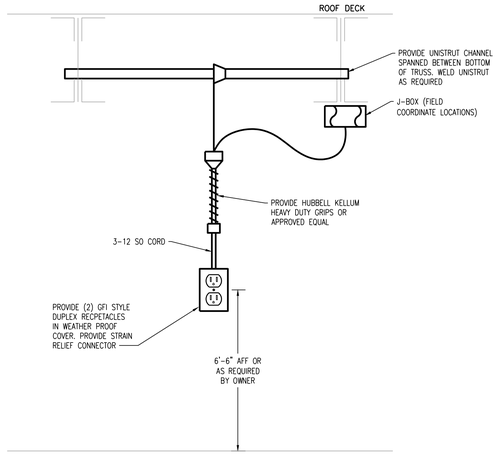
TYPICAL FLAG POLE LIGHTING BASE

NO SCALE



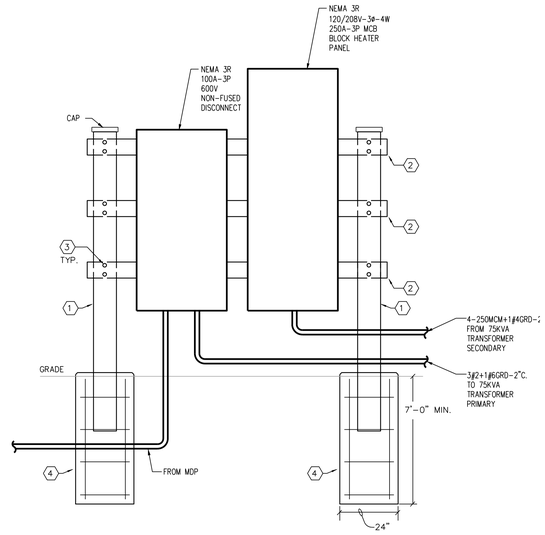
TYPICAL TYPE B DOCK LIGHT MOUNTING DETAIL

NO SCALE



TYPICAL DROP CORD MOUNTING DETAIL

NO SCALE



BLOCK HEATER PANEL SUPPORT DETAIL

NO SCALE

GENERAL NOTES:

1. VERIFY ALL EQUIPMENT DIMENSIONS PRIOR TO FABRICATION OF STEEL SUPPORT ASSEMBLY.
2. ALL ABOVE GRADE CONDUIT SHALL BE GALVANIZED RIGID STEEL. TRANSITION TO PVC FOR HORIZONTAL BELOW GRADE CONDUIT.

KEY NOTES:

1. 4" GALVANIZED RIGID STEEL CONDUIT.
2. 5"H X 1/4" THICK X 1" DEEP GALVANIZED STEEL "C" CHANNEL. GRIND ALL SHARP EDGES.
3. ATTACH WITH 1/2" DIAMETER GALVANIZED BOLT, WASHERS AND LOCK-NUT. TWO PER LOCATION, GRIND END SMOOTH.
4. CONCRETE FOOTING, 24" DIAMETER X 7'0" DEEP. PROVIDE 5#4 STEEL HOOPS AND 4 VERTICAL #4 STEEL RODS TO FORM STEEL REINFORCEMENT BASKET. ATTACH BASKET TO 4" PIPE WITH 3 HORIZONTAL STEEL RODS.
5. 3" GALVANIZED RIGID STEEL CONDUIT.
6. CONCRETE FOOTING, 12" DIAMETER X 7'0" DEEP. PROVIDE 5#4 STEEL HOOPS AND 4 VERTICAL #4 STEEL RODS TO FORM STEEL REINFORCEMENT BASKET. ATTACH BASKET TO 3" PIPE WITH 3 HORIZONTAL STEEL RODS.

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SHEET TITLE
DETAILS AND DIAGRAMS

Sheet Number
E5.3

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PANEL NAME: **LP-E**

SECTION: 1 OF 1 BUS: 225A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 MAIN: 200A MCB PHASE: 3 FED FROM: DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: TERMINAL MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1	LIGHTING	2086					20	1	1	A	2					719				2
3	LIGHTING	2086					20	1	3	B	4	3	15			719			DF-6 (1.5 HP)	4
5	LIGHTING	2086					20	1	5	C	6					719				6
7	LIGHTING	2146					20	1	7	A	8					719				8
9				2104					9	B	10	3	15			719			DF-7 (1.5 HP)	10
11	EF-9 (5 HP)			2104			20	3	11	C	12					719				12
13				2104					13	A	14					719				14
15				2104					15	B	16	3	15			719			DF-8 (1.5 HP)	16
17	EF-10 (5 HP)			2104			20	3	17	C	18					719				18
19				2104					19	A	20	1	20						SPARE	20
21				2104					21	B	22	1	20						SPARE	22
23	EF-11 (5 HP)			2104			20	3	23	C	24	1	20						SPARE	24
25				2104					25	A	26	1	20						SPARE	26
27	SPARE						20	1	27	B	28	1	20						SPARE	28
29	SPARE						20	1	29	C	30	1	20						SPARE	30
31	SPARE						20	1	31	A	32			486	400	1440	2600	0		32
33	SPARE						20	1	33	B	34	3	45	450	200	1440	3000	0	RP-EA (VIA TRANSFORMER)	34
35	SPARE						20	1	35	C	36			0	900	1220	4100	0		36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	4.7	0.4	9.9	2.6	0.0	17.6
PHASE B CONNECTED KVA	2.5	0.2	9.9	3.0	0.0	15.6
PHASE C CONNECTED KVA	2.1	0.9	9.7	4.1	0.0	16.8
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
9.3	1.5	29.5	9.7	0.0	50.0	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
9.3	1.5	29.5	9.7	0.0	50.0	0.0	50.0	DEMAND KVA
							60.2	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							63.0	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: **LP-A**

SECTION: 1 OF 1 BUS: 225A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 MAIN: 200A MCB PHASE: 3 FED FROM: MDP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC 117 MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1	EXTERIOR BLDG LTG	322					20	1	1	A	2	1	20	1145					OFFICE LTG	2
3	TERMINAL BLDG EXT LTG S	1920					20	1	3	B	4	1	20	1270					OFFICE LTG	4
5	TERMINAL BLDG EXT LTG S	1872					20	1	5	C	6	1	20	1920					TERMINAL BLDG EXT LTG N	6
7	TERMINAL BLDG EXT LTG S	1944					20	1	7	A	8	1	20	1872					TERMINAL BLDG EXT LTG N	8
9	NORTH LOT POLE LTG	1350					20	2	9	B	10	1	20	2094					TERMINAL BLDG EXT LTG N	10
11		1350							11	C	12					498				12
13	SOUTH LOT POLE LTG	750					20	2	13	A	14	3	15			498			PROPANE PUMP	14
15		750							15	B	16					498				16
17	ENTRANCE DRIVE POLE LTG	975					20	2	17	C	18	1	20						SPARE	18
19		975							19	A	20	1	20						SPARE	20
21	SPARE						20	1	21	B	22	1	20						SPARE	22
23	SPARE						20	1	23	C	24	1	20						SPARE	24
25	SPARE						20	1	25	A	26	1	20						SPARE	26
27	SPARE						20	1	27	B	28	1	20						SPARE	28
29	SPARE						20	1	29	C	30	1	20						SPARE	30
31	SPARE						20	1	31	A	32	1	20						SPARE	32
33	SPARE						20	1	33	B	34	1	20						SPARE	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38			0	15300	2200	3050	0		38
39	SPARE						20	1	39	B	40	3	125	0	14600	3500	2850	0	RP-AA	40
41	SPARE						20	1	41	C	42			60	13450	1400	400	0		42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	7.0	15.3	2.7	3.1	0.0	28.1
PHASE B CONNECTED KVA	7.4	14.6	4.0	2.9	0.0	28.8
PHASE C CONNECTED KVA	6.2	13.5	1.9	0.4	0.0	21.9
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
20.6	43.4	8.6	6.3	0.0	78.8	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
20.6	26.7	8.6	6.3	0.0	62.1	0.0	62.1	DEMAND KVA
							74.7	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							80.9	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: **LP-D**

SECTION: 1 OF 1 BUS: 225A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 MAIN: 150A MCB PHASE: 3 FED FROM: DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: TERMINAL MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1	LIGHTING	1937					20	1	1	A	2					719				2
3	LIGHTING	1937					20	1	3	B	4	3	15			719			DF-4 (1.5 HP)	4
5	LIGHTING	1937					20	1	5	C	6					719				6
7	LIGHTING	1937					20	1	7	A	8					719				8
9				2104					9	B	10	3	15			719			DF-5 (1.5 HP)	10
11	EF-5 (5 HP)			2104			20	3	11	C	12					719				12
13				2104					13	A	14	1	20						SPARE	14
15				2104					15	B	16	1	20						SPARE	16
17	EF-6 (5 HP)			2104			20	3	17	C	18	1	20						SPARE	18
19				2104					19	A	20	1	20						SPARE	20
21				2104					21	B	22	1	20						SPARE	22
23	EF-7 (5 HP)			2104			20	3	23	C	24	1	20						SPARE	24
25				2104					25	A	26	1	20						SPARE	26
27				2104					27	B	28	1	20						SPARE	28
29	EF-8 (5 HP)			2104			20	3	29	C	30	1	20						SPARE	30
31				2104					31	A	32	1	20						SPARE	32
33	SPARE						20	1	33	B	34	1	20						SPARE	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38			468	400	3000	15600	0		38
39	SPARE						20	1	39	B	40	3	70	450	0	0	15600	0	RP-DA (VIA TRANSFORMER)	40
41	SPARE						20	1	41	C	42			0	900	0	15600	0		42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	4.3	0.4	12.9	15.6	0.0	33.2
PHASE B CONNECTED KVA	2.4	0.0	9.9	15.6	0.0	27.8
PHASE C CONNECTED KVA	1.9	0.9	9.9	15.6	0.0	28.3
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
8.7	1.3	32.6	46.8	0.0	89.3	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
8.7	1.3	32.6	46.8	0.0	89.3	0.0	89.3	DEMAND KVA
							107.4	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							110.1	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: **DP**

SECTION: 1 OF 1 BUS: 600A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 30 MAIN: 600A MLO PHASE: 3 FED FROM: ATS ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: TERMINAL MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1		3934	0	8469	0	0			1	A	2			4342	400	12854	15600	0		2
3	LP-B	2533	0	8469	0	0	100	3	3	B	4	3	150	2387	0	9854	15600	0	LP-D	4
5		1937	0	8469	0	0			5	C	6			1937	900	9854	15600	0		6
7		0	0	18287	1000	0			7	A	8			4718	400	9909	2600	0		8
9	RP-BA (VIA TRANSFORMER)	0	0	7636	2000	0	125	3	9	B	10	3	200	2536	200	9909	3000	0	LP-E	10
11		0	0	14749	3000	0			11	C	12			2086	900	9689	4100	0		12
13		504	400	1440	13000	0			13	A	14					13833				14
15	RP-CA (VIA TRANSFORMER)	468	200	720	14700	0	70	3	15	B	16	3	60			13833			COMPACTOR	16
17		0	900	1220	14500	0			17	C	18					13833				18
19									19	A	20									20
21	SPACE ONLY							3	21	B	22	3							SPACE ONLY	22
23									23	C	24									24
25									25	A	26									26
27	SPACE ONLY							3	27	B	28	3							SPACE ONLY	28
29									29	C	30									30

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	13.5	1.2	64.8	32.2	0.0	111.7
PHASE B CONNECTED KVA	7.9	0.4	50.4	35.3	0.0	94.0
PHASE C CONNECTED KVA	6.0	2.7	57.8	37.2	0.0	103.7
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
27.4	4.3	173.0	104.7	0.0	309.4	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
27.4	4.3	173.0	104.7	0.0	309.4	0.0	309.4	DEMAND KVA
							372.2	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							380.4	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: **LP-B**

SECTION: 1 OF 1 BUS: 125A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 MAIN: 100A MCB PHASE: 3 FED FROM: DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: TERMINAL MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1	LIGHTING	1937					20	1	1	A	2					719				2
3	LIGHTING	1937					20	1	3	B	4	3	15			719			DF-1 (1.5 HP)	4
5	LIGHTING	1937					20	1	5	C	6					719				6
7	LIGHTING	1997					20	1	7	A	8					719				8
9	LIGHTING	596					20	1	9	B	10	3	15			719			DF-2 (1.5 HP)	10
11				2104					11	C	12					719				12
13	EF-2 (5 HP)			2104			20	3	13	A	14					719				14
15				2104					15	B	16	3	15			719			DF-3 (1.5 HP)	16
17				2104					17	C	18					719				18
19	EF-3 (5 HP)			2104			20	3	19	A	20	1	20						SPARE	20
21				2104					21	B	22	1	20						SPARE	22
23				2104					23	C	24	1	20						SPARE	24
25	EF-4 (5 HP)			2104			20	3	25	A	26	1	20						SPARE	26
27				2104					27	B	28	1	20						SPARE	28
29	SPARE						20	1	29	C	30	1	20						SPARE	30
31	SPARE						20	1	31	A	32	1	20						SPARE	32
33	SPARE						20	1	33	B	34	1	20						SPARE	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	3.9	0.0	8.5	0.0	0.0	12.4
PHASE B CONNECTED KVA	2.5	0.0	8.5	0.0	0.0	11.0
PHASE C CONNECTED KVA	1.9	0.0	8.5	0.0	0.0	10.4
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
8.4	0.0	25.4	0.0	0.0	33.8	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
8.4	0.0	25.4	0.0	0.0	33.8	0.0	33.8	DEMAND KVA
							40.7	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							43.2	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: **MDP**

SECTION: 1 OF 1 BUS: 1600A L-L VOLTS: 480 PROJECT #: 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 30 MAIN: 1600A MLO PHASE: 3 FED FROM: ATS ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC 117 MIN KAIC: 22 WIRE: 4
MOUNTING: SURFACE ISO GND BUS: NO

	LOAD	LOAD VOLT-AMPERES												LOAD VOLT-AMPERES					LOAD	
CKT	DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	DESCRIPTION	CKT
1		0	0	0	22500	0			1	A	2			7008	15300	2698	3050	0		2
3	BLOCK HEATERS	0	0	0	21000	0	100	3	3	B	4	3	200	7384	14600	3998	2850	0	LP-A	4
5		0	0	0	19500	0			5	C	6			6177	13450	1898	400	0		6
7		0	0	0	22500	0			7	A	8			13498	1200	64792	32200	0		8
9	BLOCK HEATERS	0	0	0	21000	0	100	3	9	B	10	3	600	7924	400	50421	35300	0	DP	10
11		0	0	0	19500	0			11	C	12			5960	2700	57814	37200	0		12
13		0	0	0	22500	0			13	A	14			9052	17940	40825	56563	0		14
15	BLOCK HEATERS	0	0	0	21000	0	100	3	15	B	16	3	600	8124	16120	41352	52341	0	LP-MH	16
17		0	0	0	19500	0			17	C	18			4150	20400	42332	49185	0		18
19		0	0	0	22500	0			19	A	20									20
21	BLOCK HEATERS	0	0	0	21000	0	100	3	21	B	22	3							SPACE ONLY	22
23		0	0	0	19500	0			23	C	24									24
25									25	A	26									26
27	SPACE ONLY							3	27	B	28	3							SPACE ONLY	28
29									29	C	30									30

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	29.6	34.4	108.3	181.8	0.0	354.1
PHASE B CONNECTED KVA	23.4	31.1	95.8	174.5	0.0	324.8
PHASE C CONNECTED KVA	16.3	36.6	102.0	164.8	0.0	319.7
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
69.3	102.1	306.1	521.1	0.0	998.6	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
69.3	56.1	306.1	521.1	0.0	952.6	0.0	952.6	DEMAND KVA
							1145.7	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							1166.6	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LIGHTING FIXTURE SCHEDULE

General: Lighting fixtures as hereinafter specified are identified by type as noted on drawings. Fixture specifications are based on construction and performance. Manufacturer's catalogue numbers are of general nature and indicate level of quality required, but do not necessarily reflect complete options as specified. Approval shall be based on description and specification of fixture as well as catalogue number indicated. Provide appropriate trim for fixture based on ceiling

TYPE	FIXTURE STYLE	MANUFACTURER	PART NUMBER	VOLTS	WATTS	LAMPS
OA	WALL MTD LIGHT FIXTURE.	LINMORE SITE LIGHTER WALL MOUNT	LL-SL1-LG-300WD-50K-60-UNV-WALL MOUNT	120/277V	150	INTEGRAL LED
OB	POLE MTD FIXTURE. DUAL FIXTURES ON 24FT POLE	LINMORE SITE LIGHTER	LL-SL1-MD-2-150W-50K-T5-UNV-GSB	480V	300	INTEGRAL LED
OC	POLE MTD FIXTURE. ON 24FT POLE	LINMORE SITE LIGHTER	LL-SL1-IG-300W-50K-T4-UNV	480V	300	INTEGRAL LED
OD	POLE MTD FIXTURE. ON 24FT POLE	LINMORE SITE LIGHTER	LL-SL1-MD-150WD-50K-T2-UNV-G2	480V	150	INTEGRAL LED
OE	WALL MTD LIGHT FIXTURE.	LINMORE	AL-WP1-60W-50K-F-UNV-PC	277V	60	INTEGRAL LED
OF	SURFACE MOUNTED LADDER LIGHT	ALPHALITE INC.	WPA-24B/50K-PS-OS	120/277V	24	INTEGRAL LED
OG	EXTERIOR DOWNLIGHT	ATG LIGHTING	DJ6T-22-01 (HIGH)	277V	22	INTEGRAL LED
OH	FLAG POLE LIGHT	ALPHALITE INC.	FLW-20/40K-K	277V	20	INTEGRAL LED
A	LED High Bay	CM Mockbee FLEX LED: 13K LUMENS PROVIDE 30" STEM MOUNTING WHERE INDICATED	ES40V-A1-13K-2MS	277V	81	INTEGRAL LED
A1	LED High Bay	CM Mockbee FLEX LED: 27K LUMENS PROVIDE 30" STEM MOUNTING WHERE INDICATED	ES40V-A1-27K-4MS	277V	149	INTEGRAL LED
A1W	LED High Bay	CM Mockbee FLEX LED: 27K LUMENS WET LOCATION	ES40V-A1-27K-4MS-WET	277V	149	INTEGRAL LED
B	Dock Door LED	TriLite Heavy Duty LED Lamp Head l HDLED-2	HDLED-2	277V	18	INTEGRAL LED
C	LED Strip Light	CM Mockbee ALPHALITE 4 FT LINEAR	ILL-H4-32S	277V	30	INTEGRAL LED
D	LED Pit Light	CM Mockbee Crouse-Hinds LL48	LL48-60W-765-C-1N	277V	60	INTEGRAL LED
E	2X4 LED Office Troffer	CM Mockbee Orion APOLLO Jetson Recessed Troffer Contour | LTHE EDGE SERIES: 2X2, 2X4	LTHE1H1UNVFDXX84024M	277V	40	INTEGRAL LED
F	DEAD FRONT WET LOCATION LED DOWNLIGHT	HUBBELL CAT. NO.	LF6LEDG4-6LFLED7G440K	277V	15	INTEGRAL LED
G	2X2 LED Office Troffer	CM Mockbee Orion APOLLO Jetson Recessed Troffer Contour | LTHE EDGE SERIES: 2X2, 2X4	LTHE1H1UNVFDXX84024M	277V	20	INTEGRAL LED
H	4ft Surface Wrap Around	ORION	HARRIS LSSL1-4-A1-UNV-FD-8CS-LFP (4000LM, 3500K CCT)	277V	30	INTEGRAL LED
J	6" LED DOWNLIGHT	ATG LIGHTING	DJ6T-22-01 (MED)	277V	15	INTEGRAL LED
EBU	LED Emergency Lighting	CM Mockbee Orion HARRIS Emergency Lighting | ELSUB	ELSUBWUNVBBUM	277V	5	INTEGRAL LED
EBUW	LED Emergency Lighting WET LOCATION	CM Mockbee Orion HARRIS Emergency Lighting | ELWUB	ELWUBWUNVBBUM	277V	5	INTEGRAL LED
XA	LED Exit Combo Sign	CM Mockbee Orion HARRIS Exit Signs & Emergency Combination | ECSUB	ECSUBRDWSDFUNVBBUM	277V	5	INTEGRAL LED
XB	LED Exit Sign	CM Mockbee Orion HARRIS Exit Signs | EXLUB	EXLUBRDWSDFUNVBBUM	277V	5	INTEGRAL LED
RH	EMERGENCY EGRESS REMOTE DOUBLE HEAD	TWIN HEAD EXTERIOR LED REMOTE EMERGENCY EGRESS LIGHT FOR WET LOCATION, POWERED BY INTERIOR EXIT SIGN	HUBBELL CAT. NO. CORD	6V	6	(2) 3W MR16

NOTE: ALL LIGHT FIXTURES SHALL BE SUPPLIED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR.
CONTACT MOCKBEE ENERGY SOLUTIONS FOR NATIONAL PRICING.
GRIFFIN FISCHER
4213 SPRING GROVE AVENUE
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NOVI, MICHIGAN 48375
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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
SCHEDULES

Sheet Number
E6.1

Do not scale drawings - Use figured dimensions CAD DWG E6.1 SCHEDULES.DWG

PANEL NAME: TYPICAL BLOCK HEATER PANEL

SECTION: 1 OF 1 **BUS:** 300A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 54 **MAIN:** 250A MCB **PHASE:** 3 **FED FROM:** MDP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: PARKING LOT **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	BLOCK HEATER				1500		20	1	1	A	2	1	20				1500		BLOCK HEATER	2
3	BLOCK HEATER				1500		20	1	3	B	4	1	20				1500		BLOCK HEATER	4
5	BLOCK HEATER				1500		20	1	5	C	6	1	20				1500		BLOCK HEATER	6
7	BLOCK HEATER				1500		20	1	7	A	8	1	20				1500		BLOCK HEATER	8
9	BLOCK HEATER				1500		20	1	9	B	10	1	20				1500		BLOCK HEATER	10
11	BLOCK HEATER				1500		20	1	11	C	12	1	20				1500		BLOCK HEATER	12
13	BLOCK HEATER				1500		20	1	13	A	14	1	20				1500		BLOCK HEATER	14
15	BLOCK HEATER				1500		20	1	15	B	16	1	20				1500		BLOCK HEATER	16
17	BLOCK HEATER				1500		20	1	17	C	18	1	20				1500		BLOCK HEATER	18
19	BLOCK HEATER				1500		20	1	19	A	20	1	20				1500		BLOCK HEATER	20
21	BLOCK HEATER				1500		20	1	21	B	22	1	20				1500		BLOCK HEATER	22
23	BLOCK HEATER				1500		20	1	23	C	24	1	20				1500		BLOCK HEATER	24
25	BLOCK HEATER				1500		20	1	25	A	26	1	20				1500		BLOCK HEATER	26
27	BLOCK HEATER				1500		20	1	27	B	28	1	20				1500		BLOCK HEATER	28
29	BLOCK HEATER				1500		20	1	29	C	30	1	20				1500		BLOCK HEATER	30
31	BLOCK HEATER				1500		20	1	31	A	32	1	20				1500		BLOCK HEATER	32
33	BLOCK HEATER				1500		20	1	33	B	34	1	20				1500		BLOCK HEATER	34
35	BLOCK HEATER				1500		20	1	35	C	36	1	20				1500		BLOCK HEATER	36
37	BLOCK HEATER				1500		20	1	37	A	38	1	20				1500		BLOCK HEATER	38
39	BLOCK HEATER				1500		20	1	39	B	40	1	20				1500		BLOCK HEATER	40
41	BLOCK HEATER				1500		20	1	41	C	42	1	20						SPARE	42
43	BLOCK HEATER				1500		20	1	43	A	44	1	20						SPARE	44
45	SPARE						20	1	45	B	46	1	20						SPARE	46
47	SPARE						20	1	47	C	48	1	20						SPARE	48
49	SPARE						20	1	49	A	50	1	20						SPARE	50
51	SPARE						20	1	51	B	52	1	20						SPARE	52
53	SPARE						20	1	53	C	54	1	20						SPARE	54

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.0	0.0	0.0	22.5	0.0	22.5
PHASE B CONNECTED KVA	0.0	0.0	0.0	21.0	0.0	21.0
PHASE C CONNECTED KVA	0.0	0.0	0.0	19.5	0.0	19.5
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.0	0.0	0.0	63.0	0.0	63.0	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.0	0.0	0.0	63.0	0.0	63.0	0.0	63.0	DEMAND KVA
							174.9	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							174.9	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: RP-DA

SECTION: 1 OF 1 **BUS:** 200A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 66 **MAIN:** 175A MCB **PHASE:** 3 **FED FROM:** DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: DOCKSTAND **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	DOCK LIGHTS N	234					20	1	1	A	2	1	20	234					DOCK LIGHTS S	2
3	DOCK LIGHTS N	234					20	1	3	B	4	1	20	216					DOCK LIGHTS S	4
5	IDF		400				20	1	5	C	6	1	20		500				WORKSTATION	6
7	IDF		400				20	1	7	A	8	1	20			1560			SHRINK WRAP MACHINE	8
9	PALLET JACK CHARGER				1,300		20	1	9	B	10	1	20				1,300		PALLET JACK CHARGER	10
11	PALLET JACK CHARGER				1,300		20	1	11	C	12	1	20				1,300		PALLET JACK CHARGER	12
13	PALLET JACK CHARGER				1,300		20	1	13	A	14	1	20				1,300		PALLET JACK CHARGER	14
15	PALLET JACK CHARGER				1,300		20	1	15	B	16	1	20				1,300		PALLET JACK CHARGER	16
17	PALLET JACK CHARGER				1,300		20	1	17	C	18	1	20				1,300		PALLET JACK CHARGER	18
19	PALLET JACK CHARGER				1,300		20	1	19	A	20	1	20				1,300		PALLET JACK CHARGER	20
21	PALLET JACK CHARGER				1,300		20	1	21	B	22	1	20				1,300		PALLET JACK CHARGER	22
23	PALLET JACK CHARGER				1,300		20	1	23	C	24	1	20				1,300		PALLET JACK CHARGER	24
25	PALLET JACK CHARGER				1,300		20	1	25	A	26	1	20				1,300		PALLET JACK CHARGER	26
27	PALLET JACK CHARGER				1,300		20	1	27	B	28	1	20				1,300		PALLET JACK CHARGER	28
29	PALLET JACK CHARGER				1,300		20	1	29	C	30	1	20				1,300		PALLET JACK CHARGER	30
31	PALLET JACK CHARGER				1,300		20	1	31	A	32	1	20				1,300		PALLET JACK CHARGER	32
33	PALLET JACK CHARGER				1,300		20	1	33	B	34	1	20				1,300		PALLET JACK CHARGER	34
35	PALLET JACK CHARGER				1,300		20	1	35	C	36	1	20				1,300		PALLET JACK CHARGER	36
37	PALLET JACK CHARGER				1,300		20	1	37	A	38	1	20				1,300		PALLET JACK CHARGER	38
39	PALLET JACK CHARGER				1,300		20	1	39	B	40	1	20				1,300		PALLET JACK CHARGER	40
41	PALLET JACK CHARGER				1,300		20	1	41	C	42	1	20				1,300		PALLET JACK CHARGER	42
43	PALLET JACK CHARGER				1,300		20	1	43	A	44	1	20				1,300		PALLET JACK CHARGER	44
45	PALLET JACK CHARGER				1,300		20	1	45	B	46	1	20				1,300		PALLET JACK CHARGER	46
47	PALLET JACK CHARGER				1,300		20	1	47	C	48	1	20			720			RADIANT HTRS RH-16, RH-19	48
49	RADIANT HTRS RH-14, RH-17			720			20	1	49	A	50	1	20			720			RADIANT HTRS RH-20, RH-23	50
51	RADIANT HTRS RH-18, RH-21			720			20	1	51	B	52	1	20			720			RADIANT HTRS RH-24, RH-27	52
53	RADIANT HTRS RH-22, RH-25			720			20	1	53	C	54	1	20						SPARE	54
55	SPARE						20	1	55	A	56	1	20						SPARE	56
57	SPARE						20	1	57	B	58	1	20						SPARE	58
59	SPARE						20	1	59	C	60	1	20						SPARE	60
61	SPARE						20	1	61	A	62	1	20						SPARE	62
63	SPARE						20	1	63	B	64	1	20						SPARE	64
65	SPARE						20	1	65	C	66	1	20						SPARE	66

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.5	0.4	3.0	15.6	0.0	19.5
PHASE B CONNECTED KVA	0.5	0.0	0.0	15.6	0.0	16.1
PHASE C CONNECTED KVA	0.0	0.9	0.0	15.6	0.0	16.5
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.9	1.3	3.0	46.8	0.0	52.0	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.9	1.3	3.0	46.8	0.0	52.0	0.0	52.0	DEMAND KVA
							144.4	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							145.0	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: RP-BA

SECTION: 1 OF 1 **BUS:** 300A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 54 **MAIN:** 250A MCB **PHASE:** 3 **FED FROM:** LP-A ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC 117 **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	IHP-1			468			15	2	1	A	2	2	15			468			IHP-4	2
3				468					3	B	4					468				4
5	OHP-1			2995			40	2	5	C	6	2	40			2995			OHP-4	6
7				2995					7	A	8					2995				8
9	IHP-1/OHP-1 ELEC HEAT				1000		15	2	9	B	10	2	15			468			IHP-5	10
11					1000				11	C	12					468				12
13	IHP-2			468			15	2	13	A	14	2	40			2995			OHP-5	14
15				468					15	B	16					2995				16
17	OHP-2			2995			40	2	17	C	18	2	15				1000		IHP-5/OHP-5 ELEC HEAT	18
19				2995					19	A	20						1000			20
21	IHP-2/OHP-2 ELEC HEAT				1000		15	2	21	B	22	2	25			1581			OHP-6/IHP-6	22
23					1000				23	C	24					1581				24
25	IHP-3			468			15	2	25	A	26	1	20			720			RADIANT HEATERS RH-1, RH-3	26
27				468					27	B	28	1	20			720			RADIANT HEATERS RH-2, RH-5	28
29	OHP-3			2995			40	2	29	C	30	1	20			720			RADIANT HEATERS RH-4, RH-7	30
31				2995					31	A	32	1	20			720			RADIANT HEATERS RH-43, RH-44	32
33	SPARE						20	1	33	B	34	1	20						SPARE	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42
43	SPARE						20	1	43	A	44	1	20						SPARE	44
45	SPARE						20	1	45	B	46	1	20						SPARE	46
47	SPARE						20	1	47	C	48	1	20						SPARE	48
49	SPARE						20	1	49	A	50	1	20						SPARE	50
51	SPARE						20	1	51	B	52	1	20						SPARE	52
53	SPARE						20	1	53	C	54	1	20						SPARE	54

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.0	0.0	18.3	1.0	0.0	19.3
PHASE B CONNECTED KVA	0.0	0.0	7.6	2.0	0.0	9.6
PHASE C CONNECTED KVA	0.0	0.0	14.7	3.0	0.0	17.7
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.0	0.0	40.7	6.0	0.0	46.7	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.0	0.0	40.7	6.0	0.0	46.7	0.0	46.7	DEMAND KVA
							129.5	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							129.5	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: RP-EA

SECTION: 1 OF 1 **BUS:** 125A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 **MAIN:** 100A MCB **PHASE:** 3 **FED FROM:** DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: DOCKSTAND **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	DOCK LIGHTS N	234					20	1	1	A	2	1	20	252					DOCK LIGHTS S	2
3	DOCK LIGHTS N	234					20	1	3	B	4	1	20	216					DOCK LIGHTS S	4
5	IDF		400				20	1	5	C	6	1	20		500				WORKSTATION	6
7	IDF		400				20	1	7	A	8	1	20						SPARE	8
9	PALLET JACK CHARGER				1,300		20	1	9	B	10	1	20				1,300		PALLET JACK CHARGER	10
11	PALLET JACK CHARGER				1,300		20	1	11	C	12	1	20				1,300		PALLET JACK CHARGER	12
13	PALLET JACK CHARGER				1,300		20	1	13	A	14	1	20				1,300		PALLET JACK CHARGER	14
15	SPARE						20	1	15	B	16	1	20						SPARE	16
17	SPARE						20	1	17	C	18	1	20						SPARE	18
19	SPARE						20	1	19	A	20	1	20						SPARE	20
21	RADIANT HTRS RH-26, RH-29			720			20	1	21	B	22	1	20		200				FIRE PROTECTION RM DUPLEX	22
23	RADIANT HTRS RH-30, RH-33			720			20	1	23	C	24	1	20				1,500		ECUH-3	24
25	RADIANT HTRS RH-34, RH-36			720			20	1	25	A	26	1	20			720			RADIANT HTRS RH-28, RH-31	26
27	NAC PANEL				400		20	1	27	B	28	1	20			720			RADIANT HTRS RH-32, RH-35	28
29	FIRE PROTECTION COMPRESSOR			500			20	1	29	C	30	1	20						SPARE	30
31	SPARE						20	1	31	A	32	1	20						SPARE	32
33	SPARE						20	1	33	B	34	1	20						SPARE	34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.5	0.4	1.4	2.6	0.0	4.9
PHASE B CONNECTED KVA	0.5	0.2	1.4	3.0	0.0	5.1
PHASE C CONNECTED KVA	0.0	0.9	1.2	4.1	0.0	6.2
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.9	1.5	4.1	9.7	0.0	16.2	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.9	1.5	4.1	9.7	0.0	16.2	0.0	16.2	DEMAND KVA
							45.1	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							45.7	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: RP-CA

SECTION: 1 OF 1 **BUS:** 200A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 54 **MAIN:** 175A MCB **PHASE:** 3 **FED FROM:** DP ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: DOCKSTAND **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	DOCK LIGHTS N	252					20	1	1	A	2	1	20	252					DOCK LIGHTS S	2
3	DOCK LIGHTS N	252					20	1	3	B	4	1	20	216					DOCK LIGHTS S	4
5	IDF		400				20	1	5	C	6	1	20		500				WORKSTATION	6
7	IDF		400				20	1	7	A	8	1	20						SPARE	8
9	PALLET JACK CHARGER				1,300		20	1	9	B	10	1	20				1,300		PALLET JACK CHARGER	10
11	PALLET JACK CHARGER				1,300		20	1	11	C	12	1	20				1,300		PALLET JACK CHARGER	12
13	PALLET JACK CHARGER				1,300		20	1	13	A	14	1	20				1,300		PALLET JACK CHARGER	14
15	PALLET JACK CHARGER				1,300		20	1	15	B	16	1	20				1,300		PALLET JACK CHARGER	16
17	PALLET JACK CHARGER				1,300		20	1	17	C	18	1	20				1,300		PALLET JACK CHARGER	18
19	PALLET JACK CHARGER				1,300		20	1	19	A	20	1	20				1,300		PALLET JACK CHARGER	20
21	PALLET JACK CHARGER				1,300		20	1	21	B	22	1	20				1,300		PALLET JACK CHARGER	22
23	PALLET JACK CHARGER				1,300		20	1	23	C	24	1	20				1,300		PALLET JACK CHARGER	24
25	PALLET JACK CHARGER				1,300		20	1	25	A	26	1	20				1,300		PALLET JACK CHARGER	26
27	PALLET JACK CHARGER				1,300		20	1	27	B	28	1	20				1,300		PALLET JACK CHARGER	28
29	PALLET JACK CHARGER				1,300		20	1	29	C	30	1	20				1,300		PALLET JACK CHARGER	30
31	PALLET JACK CHARGER				1,300		20	1	31	A	32	1	20				1,300		PALLET JACK CHARGER	32
33	PALLET JACK CHARGER				1,300		20	1	33	B	34	1	20				1,300		PALLET JACK CHARGER	34
35	PALLET JACK CHARGER				1,300		20	1	35	C	36	1	20				1,300		PALLET JACK CHARGER	36
37	PALLET JACK CHARGER				1,300		20	1	37	A	38	1	20				1,300		PALLET JACK CHARGER	38
39	PALLET JACK CHARGER				1,300		20	1	39	B	40	1	20		200				FIRE PROTECTION RM DUPLEX	40
41	RADIANT HTRS RH-6, RH-9			720			20	1	41	C	42	1	20				1,500		ECUH-2	42
43	RADIANT HTRS RH-10, RH-13			720			20	1	43	A	44	1	20			720			RADIANT HTRS RH-8, RH-11	44
45	NAC PANEL				400		20	1	45	B	46	1	20			720			RADIANT HTRS RH-12, RH-15	46
47	FIRE PROTECTION COMPRESSOR			500			20	1	47	C	48	1	20						SPARE	48
49	SPARE						20	1	49	A	50	1	20						SPARE	50
51	SPARE						20	1	51	B	52	1	20						SPARE	52
53	SPARE						20	1	53	C	54	1	20						SPARE	54

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.5	0.4	1.4	13.0	0.0	15.3
PHASE B CONNECTED KVA	0.5	0.2	0.7	14.7	0.0	16.1
PHASE C CONNECTED KVA	0.0	0.9	1.2	14.5	0.0	16.6
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
1.0	1.5	3.4	42.2	0.0	48.1	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
1.0	1.5	3.4	42.2	0.0	48.1	0.0	48.1	DEMAND KVA
							133.4	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							134.1	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

PANEL NAME: RP-AA

SECTION: 1 OF 1 **BUS:** 300A **L-L VOLTS:** 208 **PROJECT #:** 21205.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 84 **MAIN:** 250A MCB **PHASE:** 3 **FED FROM:** LP-A ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC 117 **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	FRIDGE		1000				20	1	1	A	2	1	20		1000				5 DUPLEX	2
3	VENDING		700				20	1	3	B	4	1	20		800				4 DUPLEX	4
5	EWC		800				20*	1	5	C	6	1	20		400				BREAKROOM GFI	6
7	TELEPHONE BACKBOARD		800				20	1	7	A	8	1	20		800				4 DUPLEX	8
9	TELEPHONE BACKBOARD		800				20	1	9	B	10	1	20			1000			HAND DRYER	10
11	TELEPHONE BACKBOARD		800				20	1	11	C	12	1	20			1000			HAND DRYER	12
13	IT RACK		800				20	1	13	A	14	1	20			1000			HAND DRYER	14
15	EWC		800				20*	1	15	B	16	1	20			1000			HAND DRYER	16
17	FRIDGE		1000				20	1	17	C	18	1	20		400				DRIVER RM GFI	18
19	VENDING		700				20	1	19	A	20	1	20		800				4 DUPLEX	20
21	VENDING		700				20	1	21	B	22	1	20		1000				5 DUPLEX	22
23	VENDING		700				20	1	23	C	24	1	20		400				2 DUPLEX	24
25	(2) WORKSTATIONS		1200				20	1	25	A	26	1	20		800				4 DUPLEX	26
27	(2) WORKSTATIONS		1200				20	1	27	B	28	1	20		800				4 DUPLEX	28
29	(2) WORKSTATIONS		1200				20	1	29	C	30	1	20		800				4 DUPLEX	30
31	(2) WORKSTATIONS		1200				20	1	31	A	32	1	20		800				4 DUPLEX	32
33	(2) WORKSTATIONS		1200				20	1	33	B	34	1	20		1200				2 DUPLEX + 2 QUAD	34
35	(2) WORKSTATIONS		1200				20	1	35	C	36	1	20		800				2 DUPLEX + 1 QUAD	36
37	(2) WORKSTATIONS		1200				20	1	37	A	38	1	20		1000				1 DUPLEX + 2 QUAD	38
39	(2) WORKSTATIONS		1200				20	1	39	B	40	1	20		800				2 QUAD	40
41	(2) WORKSTATIONS		1200				20	1	41	C	42	1	20		1000				3 DUPLEX + 1 QUAD	42
43	COPIER		1000				20	1	43	A	44	1	20**				400		FIRE ALARM	44
45	COPIER		1000				20	1	45	B	46	1	20**				600		TURNSTYLE	46
47	COPIER		1000				20	1	47	C	48	1	20			400			CP	48
49	COPIER		1000				20	1	49	A	50	2	30				2250		EWH	50
51	ECUH-1			1500			20	1	51	B	52						2250			52
53	IRRIGATION CONTROLLER		400				20	1	53	C	54	1	20		350				DRIVER ROOM TV	54
55	P-TUBE SYSTEM			1200			20	1	55	A	56	1	20		1200				MICROWAVE	56
57	MICROWAVE		1200				20	1	57	B	58	1	20		1200				ICE MACHINE	58
59	COFFEE		1000				20	1	59	C	60	1	20	60					FLAG POLE LTG	60
61	SPARE						20	1	61	A	62	1	20						SPARE	62
63	SPARE						20	1	63	B	64	1	20						SPARE	64
65	SPARE						20	1	65	C	66	1	20						SPARE	66
67	SPARE						20	1	67	A	68	1	20						SPARE	68
69	SPARE						20	1	69	B	70	1	20						SPARE	70
71	SPARE						20	1	71	C	72	1	20						SPARE	72
73	SPARE						20	1	73	A	74	1	20						SPARE	74
75	SPARE						20	1	75	B	76	1	20						SPARE	76
77	SPARE						20	1	77	C	78	1	20				400		GENERATOR HEATER	78
79	SPARE						20	1	79	A	80	1	20				400		GENERATOR BATTERY	80
81	SPARE						20	1	81	B	82	1	20						SPARE	82
83	SPARE						20	1	83	C	84	1	20						SPARE	84

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.0	15.3	2.2	3.1	0.0	20.6
PHASE B CONNECTED KVA	0.0	14.6	3.5	2.9	0.0	21.0
PHASE C CONNECTED KVA	0.1	13.5	1.4	0.4	0.0	15.3
25% OF LARGEST MOTOR			0.0			

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.1	43.4	7.1	6.3	0.0	56.8	0%		CONNECTED KVA
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.1	26.7	7.1	6.3	0.0	40.1	0.0	40.1	DEMAND KVA
							111.4	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							111.4	MIN. OVERCURRENT DEVICE AMPS

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
SCHEDULES

Sheet Number
E6.2

Do not scale drawings - Use figured dimensions CAD DWG E6.2 SCHEDULES.DWG

PANEL NAME: TWL

SECTION: 1 OF 1 **BUS:** 200A **L-L VOLTS:** 208 **PROJECT #:** ##### * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 **MAIN:** 175A MCB **PHASE:** 3 **FED FROM:** TWH ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: EQUIPMENT ROOM **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	ICE SCRAPER CONTROL PANEL		500				20	1	1	A	2	1	20				1,000		PUMP MODULE	2
3	RECEPT. WASH BAY		1080				20	1	3	B	4	1	20				966		GUH-5, GUH-6	4
5	RECEPT. DETAILING BAY		1080				20	1	5	C	6	1	20				1,000		WATER SOFTENER	6
7	RECEPT. EQUIPMENT ROOM		720				20	1	7	A	8	1	20				966		GUH-3, GUH-4	8
9	RECLAIM SYSTEM				500		20	1	9	B	10	1	20				400		L-12, L13	10
11	CONTACTOR PANEL				500		20	1	11	C	12	1	20				1130		OVERHEAD DOOR #1	12
13	RECLAIM SYSTEM CP				500		20	1	13	A	14	1	20				1,130		OVERHEAD DOOR #3	14
15	WATER SOFTENER				1000		20	1	15	B	16	1	20				1,130		OVERHEAD DOOR #4	16
17	WATER HEATER				1000		20	1	17	C	18	1	20				1,130		OVERHEAD DOOR #5	18
19	RECLAIM SOLENOID				1000		20	1	19	A	20	1	20						SPARE	20
21	TWC MASTER CONTROL PANEL				1500		30	2	21	B	22	2	50*				3,900		PRESSURE WASHER	22
23	"				1500		-	-	23	C	24	-	-				3,900		"	24
25	RECLAIM SYSTEM PUMP			1700			20	2	25	A	26	1	20				800		COMPRESSOR AIR DRYER	26
27	"			1700			-	-	27	B	28	1	20				800		COMPRESSOR AIR DRYER	28
29	RECLAIM TANK PUMP			1700			20	2	29	C	30	1	20				1176		EF-21	30
31	"			1700			-	-	31	A	32	1	20				1176		EF-22	32
33	A/F-3			600			20	1	33	B	34	1	20						SPARE	34
35	A/F-4			600			20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.0	1.2	6.5	3.5	0.0	11.2
PHASE B CONNECTED KVA	0.0	1.1	8.5	4.0	0.0	13.6
PHASE C CONNECTED KVA	0.0	1.1	9.6	4.0	0.0	14.7
25% OF LARGEST MOTOR			0.0			

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.0	3.4	24.7	11.4	0.0	39.5	0%		
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.0	3.4	24.7	11.4	0.0	39.5	0.0	39.5	DEMAND KVA
							109.6	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							109.6	MIN. OVERCURRENT DEVICE AMPS

PANEL NAME: TWH

SECTION: 1 OF 1 **BUS:** 200A **L-L VOLTS:** 480 **PROJECT #:** ##### * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 **MAIN:** 200A MCB **PHASE:** 3 **FED FROM:** MSB1 ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: EQUIPMENT ROOM **MIN KAIC:** 22 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	SPARE						20	1	1	A	2	1	20						SPARE	2
3	SPARE						20	1	3	B	4	1	20						SPARE	4
5	SPARE						20	1	5	C	6	1	20						SPARE	6
7	INTERIOR TRUCK WASH LTG	1490					20	1	7	A	8	1	20	1490					INTERIOR TRUCK WASH LTG	8
9	EXTERIOR TRUCK WASH LTG	2400					20	1	9	B	10	1	20						SPARE	10
11	PARKING LOT LIGHTING	730					20	1	11	C	12	1	20						SPARE	12
13	SPARE						20	1	13	A	14	1	20						SPARE	14
15	SPARE						20	1	15	B	16	1	20						SPARE	16
17	SPARE						20	1	17	C	18	1	20						SPARE	18
19	SPARE						20	1	19	A	20	3	20				3,710		HYDRAULIC PUMP	20
21	SPARE						20	1	21	B	22	-	-				3,710		"	22
23	SPARE						20	1	23	C	24	-	-				3,710		"	24
25	CHEMICAL APPLICATION PUMP				1275		15	3	25	A	26	3	20				3,710		HYDRAULIC PUMP	26
27	"				1275		-	-	27	B	28	-	-				3,710		"	28
29	"				1275		-	-	29	C	30	-	-				3,710		"	30
31	BACK DOOR RINSE PUMP				9020		60	3	31	A	32	3	60				9,020		BLASTER RINSE PUMP	32
33	"				9020		-	-	33	B	34	-	-				9,020		"	34
35	"				9020		-	-	35	C	36	-	-				9,020		"	36
37	RINSE PUMP				17250		100	3	37	A	38	3	70	0	1220	6506	3466	0	PANEL 'TWL' VIA TRANSFORMER	38
39	"				17250		-	-	39	B	40	-	-	0	1080	8530	3966	0	"	40
41	"				17250		-	-	41	C	42	-	-	0	1080	9636	4000	0	"	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	3.0	1.2	6.5	47.5	0.0	58.2
PHASE B CONNECTED KVA	2.4	1.1	8.5	48.0	0.0	60.0
PHASE C CONNECTED KVA	0.7	1.1	9.6	48.0	0.0	59.4
25% OF LARGEST MOTOR			0.0			

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
6.1	3.4	24.7	143.4	0.0	177.5	0%		
1.0	#1	1.0	0.7	1.0				DEMAND FACTOR
6.1	3.4	24.7	100.4	0.0	134.5	0.0	134.5	DEMAND KVA
							161.8	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							163.7	MIN. OVERCURRENT DEVICE AMPS

PANEL NAME: MLA

SECTION: 1 OF 1 **BUS:** 100A **L-L VOLTS:** 208 **PROJECT #:** 18232.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 42 **MAIN:** 100A MLO **PHASE:** 3 **FED FROM:** ML ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC/IT ROOM **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	MONUMENT SIGN	500					20	1	1	A	2	1	20						SPARE	2
3	OVERHEAD DOOR			600			20	1	3	B	4	1	20			600			OVERHEAD DOOR	4
5	OVERHEAD DOOR			600			20	1	5	C	6	1	20			600			OVERHEAD DOOR	6
7	OVERHEAD DOOR			600			20	1	7	A	8	1	20			600			OVERHEAD DOOR	8
9	OVERHEAD DOOR			600			20	1	9	B	10	1	20			600			OVERHEAD DOOR	10
11	OVERHEAD DOOR			600			20	1	11	C	12	1	20			600			OVERHEAD DOOR	12
13	OVERHEAD DOOR			600			20	1	13	A	14	1	20			600			OVERHEAD DOOR	14
15	OVERHEAD DOOR			600			20	1	15	B	16	1	20			600			OVERHEAD DOOR	16
17	SPARE						20	1	17	C	18	1	20						SPARE	18
19	OVERHEAD DOOR			600			20	1	19	A	20	1	20			600			OVERHEAD DOOR	20
21	SPARE						20	1	21	B	22	1	20						SPARE	22
23	SPARE						20	1	23	C	24	1	20						SPARE	24
25	SPARE						20	1	25	A	26	1	20				156		TURNSTYLE	26
27	SCALE POWER				250		20	1	27	B	28	1	20			720			A/F-1	28
29	SCALE CONTROLLER		500				20	1	29	C	30	1	20			720			A/F-2	30
31	SCALE DISPLAY				300		20	1	31	A	32	2	25				2,250		WH-1	32
33	SPARE						20	1	33	B	34						2,250			34
35	SPARE						20	1	35	C	36	1	20						SPARE	36
37	SPARE						20	1	37	A	38	1	20						SPARE	38
39	SPARE						20	1	39	B	40	1	20						SPARE	40
41	SPARE						20	1	41	C	42	1	20						SPARE	42

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	0.5	0.0	3.6	2.7	0.0	6.8
PHASE B CONNECTED KVA	0.0	0.0	4.3	2.5	0.0	6.8
PHASE C CONNECTED KVA	0.0	0.5	3.1	0.0	0.0	3.6
25% OF LARGEST MOTOR			0.0			

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
0.5	0.5	11.0	5.2	0.0	17.2	0%		
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
0.5	0.5	11.0	5.2	0.0	17.2	0.0	17.2	DEMAND KVA
							47.9	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							48.2	MIN. OVERCURRENT DEVICE AMPS

PANEL NAME: ML

SECTION: 1 OF 1 **BUS:** 400A **L-L VOLTS:** 208 **PROJECT #:** 18232.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 84 **MAIN:** 400A MCB **PHASE:** 3 **FED FROM:** MH ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC/IT ROOM **MIN KAIC:** 10 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	WELDING RECEPTACLE		2000				50	2	1	A	2	1	20		720				RECEPTS - TIRE BAY/SHOP 'A'	2
3	"		2000				-	-	3	B	4	1	20		1440				RECEPTS - SHOP 'A'	4
5	AIR COMPRESSOR DRYER			400			20	1	5	C	6	1	20		1440				RECEPTS - SHOP 'B'	6
7	AIR COMPRESSOR DRYER			400			20	1	7	A	8	1	20*				650		ELECTRIC WATER COOLER	8
9	TRUCK BAY RECEPT	400					20	1	9	B	10	1	20		800				IT RECEPT	10
11	TRUCK BAY RECEPT	400					20	1	11	C	12	1	20		1260				RECEPTS - OFFICE	12
13	RH-37,38		720				20	1	13	A	14	1	20**				300		GAS DETECTION SYSTEM	14
15	RH-39,40		720				20	1	15	B	16	1	20			720			RH-41,42	16
17	WELDING RECEPTACLE	2000					50	2	17	C	18	1	20						SPARE	18
19	"	2000					-	-	19	A	20	1	20		600				BATH RECEPTS/ELEC ROOM	20
21	TRUCK BAY RECEPT	400					20	1	21	B	22	1	20				200		FACP	22
23	SPARE						20	1	23	C	24	2	15			400			ENTRY GATE	24
25	SPARE						20	1	25	A	26					400				26
27	WELDING RECEPTACLE	2000					50	2	27	B	28	2	15			400			ENTRY GATE	28
29	"	2000					-	-	29	C	30					400				30
31	WELDING RECEPTACLE	2000					50	2	31	A	32	1	20		400				TRUCK BAY RECEPTACLES	32
33	"	2000					-	-	33	B	34	1	20		400				TRUCK BAY RECEPTACLES	34
35	WELDING RECEPTACLE	2000					50	2	35	C	36	1	20						SPARE	36
37	"	2000					-	-	37	A	38	1	20				966		GUH-1, GUH-2	38
39	WELDING RECEPTACLE	2000					50	2	39	B	40	1	20			700			EXHAUST FAN EF-19, EF-20	40
41	"	2000					-	-	41	C	42	1	20		1200				ICE MAKER	42
43	PANEL MLA	500	0	3600	2706	0	100	3	43	A	44	1	20		1000				FRIDGE	44
45	"	0	0	4320	2500	0	-	-	45	B	46	1	20		1200				MICRO	46
47	"	0	500	3120	0	0	-	-	47	C	48	1	20			1000			L1 THRU L5	48
49	WELDING RECEPTACLE		2000				50	2	49	A	50	2	20			1581			OHP-8/HP-8	50
51	"		2000				-	-	51	B	52					1581			"	52
53	RECEPTS - OFFICE AREA		1440				20	1	53	C	54	1	20		1080				RECEPTS - OFFICE AREA	54
55	SPARE						20	1	55	A	56	1	20						SPARE	56
57	HP-7			468			15	2	57	B	58	1	20						SPARE	58
59	"			468			-	-	59	C	60	1	20						SPARE	60
61	FUEL ISLAND E-STOP				100		20	1	61	A	62	1	20			690			HAND DRYER - HD-5	62
63	SPARE						20	1	63	B	64	1	20			690			HAND DRYER HD-6	64
65	WELDING RECEPTACLE		4000				50	2	65	C	66	1	20						SPARE	66
67	"		4000				-	-	67	A	68	1	20						SPARE	68
69	SAFETY LANE HANGING RECEPT		400				20	1	69	B	70	1	20						SPARE	70
71	OHP-7			2995			40	2	71	C	72	1	20						SPARE	72
73	"			2995			-	-	73	A	74	1	20				500		CONTACTOR PANEL	74
75	OHP-7 ELEC HEAT				1000		15	2	75	B	76	1	20						SPARE	76
77	"				1000		-	-	77	C	78	1	20						SPARE	78
79	PANEL F	1200	0	2700	3200	0	100	3	79	A	80	1	20						SPARE	80
81	"	0	0	1990	0	0	-	-	81	B	82	1	20						SPARE	82
83	"	0	0	1990	200	0	-	-	83	C	84	1	20						SPARE	84

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	1.7	16.7	12.4	9.1	0.0	39.9
PHASE B CONNECTED KVA	0.0	15.0	10.9	4.4	0.0	30.3
PHASE C CONNECTED KVA	0.0	19.3	10.8	1.2	0.0	31.3
25% OF LARGEST MOTOR			0.0			

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
1.7	51.1	34.1	14.7	0.0	101.6	0%		
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
1.7	30.5	34.1	14.7	0.0	81.0	0.0	81.0	DEMAND KVA
							224.9	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							226.0	MIN. OVERCURRENT DEVICE AMPS

PANEL NAME: MH

SECTION: 1 OF 1 **BUS:** 600A **L-L VOLTS:** 480 **PROJECT #:** 18232.00 * DENOTES GFCI CIRCUIT BREAKER
POLES: 84 **MAIN:** 600A MCB **PHASE:** 3 **FED FROM:** ATS ** DENOTES SCREW ON TYPE LOCKING DEVICE
LOCATION: ELEC/IT ROOM **MIN KAIC:** 22 **WIRE:** 4
MOUNTING: SURFACE **ISO GND BUS:** NO

CKT	LOAD DESCRIPTION	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	OCPD	P	CKT	PH	CKT	P	OCPD	LOAD VOLT-AMPERES LTS	REC	MOTOR	OTHER	KIT	LOAD DESCRIPTION	CKT
1	EF-12			1328			15	3	1	A	2	1	20	1552					SHOP 'A' LIGHTING	2
3	"			1328			-	-	3	B	4	1	20	2980					SHOP 'A' LIGHTING	4
5	"			1328			-	-	5	C	6	1	20	1620					PARTS ROOM LIGHTING	6
7	EF-13			1328			15	3	7	A	8	1	20	1020					OFFICE AREA LIGHTING	8
9	"			1328			-	-	9	B	10	1	20	2744					SHOP 'B' LIGHTING	10
11	"			1328			-	-	11	C	12	1	20	1800					EXTERIOR LIGHTING	12
13	EF-14			1328			15	3	13	A	14	1	20	1800					EXTERIOR LIGHTING	14
15	"			1328			-	-	15	B	16	1	20						SPARE	16
17	"			1328			-	-	17	C	18	1	20						SPARE	18
19	EF-15			1328			15	3	19	A	20	1	20						SPARE	20
21	"			1328			-	-	21	B	22	1	20						SPARE	22
23	"			1328			-	-	23	C	24	1	20						SPARE	24
25	EF-16			830			15	3	25	A	26	1	20						SPARE	26
27	"			830			-	-	27	B	28	1	20						SPARE	28
29	"			830			-	-	29	C	30	1	20						SPARE	30
31	EF-17			830			15	3	31	A	32	3	30			3880			AIR COMPRESSOR	32
33	"			830			-	-	33	B	34	-	-			3880			"	34
35	"			830			-	-	35	C	36	-	-			3880			"	36
37	EF-18			830			15	3	37	A	38	3	200	2980	1220	6506	47451	0	PANEL TWH	38
39	"			830			-	-	39	B	40	-	-	2400	1080	8530	47951	0	"	40
41	"			830			-	-	41	C	42	-	-	730	1080	9636	47885	0	"	42
43	KRMR TO PANEL ML	1700	16720	12396	9112	0	150	3	43	A	44	3	20			2102			VEHICLE EXHAUST FAN MOTOR	44
45	"	0	15040	10899	4390	0	-	-	45	B	46	-	-			2102			"	46
47	"	0	19320	10773	1200	0	-	-	47	C	48	-	-			2102			"	48
49	SPARE						20	1	49	A	50	3	3			719			DF-9	50
51	SPARE						20	1	51	B	52	-	-			719			"	52
53	DF-11			719			15	3	53	C	54	-	-			719			"	54
55	"			719			-	-	55	A	56	3	15			719			DF-10	56
57	"			719			-	-	57	B	58	-	-			719			"	58
59	SPARE						20	1	59	C	60	-	-			719			"	60
61	SPARE						20	1	61	A	62	3	20			2102			VEHICLE EXHAUST FAN MOTOR	62
63	SPARE						20	1	63	B	64	-	-			2102			"	64
65	COMPRESSOR (10 HP)			3880			30	3	65	C	66	-	-			2102			"	66
67	"			3880			-	-	67	A	68	1	20						SPARE	68
69	"			3880			-	-	69	B	70	1	20						SPARE	70
71	SPARE						20	1	71	C	72	1	20						SPARE	72
73	SPARE						20	1	73	A	74	1	20						SPARE	74
75	SPARE						20	1	75	B	76	1	20						SPARE	76
77	SPARE						20	1	77	C	78	1	20						SPARE	78
79	SPARE						20	1	79	A	80	1	20						SPARE	80
81	SPARE						20	1	81	B	82	1	20						SPARE	82
83	SPARE						20	1	83	C	84	1	20						SPARE	84

SUBTOTAL CONNECTED KVA

	LTS	REC	MOTOR	OTHER	KIT	TOTAL
PHASE A CONNECTED KVA	9.1	17.9	40.8	56.6	0.0	124.4
PHASE B CONNECTED KVA	8.1	16.1	41.4	52.3	0.0	117.9
PHASE C CONNECTED KVA	4.2	20.4	42.3	49.2	0.0	116.1
25% OF LARGEST MOTOR			0.0			

RECEPTACLE DEMAND FACTOR:
100% FIRST 10 KVA + 50% REMAINING

LOAD SUMMARY & FEEDER CALCULATION

LTS	REC	MOTOR	OTHER	KIT	SUBTOT	SPARE	TOTAL	
21.3	54.5	124.5	158.1	0.0	358.4	0%		
1.0	#1	1.0	1.0	1.0				DEMAND FACTOR
21.3	32.2	124.5	158.1	0.0	336.2	0.0	336.2	DEMAND KVA
							404.3	DEMAND AMPS
1.25	1.0	1.0	1.0	1.0		1.0		CONTINUOUS/NONCONT FACTOR
							410.7	MIN. OVERCURRENT DEVICE AMPS

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PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
SCHEDULES

Sheet Number
E6.3

Do not scale drawings. Use figured dimensions. CAD DWG E6.3 SCHEDULES.DWG

TRUCK WASH ELECTRICAL CONTROL WIRE CONNECTION SCHEDULE							
Equipment Number	Description	Equipment Voltage	Equipment Phase	Equipment Full Load Amps	Equipment Circuit	Wire Size	Equipment Conduit Size
1	Entrance Red/Green Traffic Light	24VAC	1	N/A	TWC	4-#14	1/2"
2	Emergency Stop #1 (Entrance)	24VAC	1	N/A	TWC	6-#14	1/2"
3	Remote Start Stop Station	24VAC	1	N/A	TWC	6-#14	1/2"
4	Application Pump Control	120VAC	1	N/A	TWC	2-#14	1/2"
5	P.E. #1-6 Receiver	24VAC	1	N/A	TWC	6-Belden	3/4"
6	P.E. #1-6 Transmitter	24VAC	1	N/A	TWC	6-Belden	3/4"
7	Process Control Red/Yellow Traffic Light	24VAC	1	N/A	TWC	4-#14	1/2"
8	Process Pacer Lights	120VAC	1	N/A	TWC	15-#14	3/4"
9	Rinse Tank	24VAC	1	N/A	TWC	6-#14	1/2"
10	Super Clear Reclaim System	120VAC	1	N/A	TWC	6-#14	3/4"
11	P.E. #7&8 Receiver	24VAC	1	N/A	TWC	2-Belden	1/2"
12	Rinse Valve Air Solenoids #1 & 2	24VAC	1	N/A	TWC	4-#14	1/2"
13	P.E. #7&8 Transmitter	24VAC	1	N/A	TWC	2-Belden	1/2"
14	Emergency Stop #2 (Exit)	24VAC	1	N/A	TWC	6-#14	3/4"
15	50HP Rinse Pump Control	120VAC	1	N/A	TWC	2-#14	1/2"
16	25HP Blaster Rinse Pump Control	120VAC	1	N/A	TWC	2-#14	1/2"
17	10HP Hydraulic Pump Control	120VAC	1	N/A	TWC	2-#14	1/2"
18	P.E. #9 Receiver & Transmitter	24VAC	1	N/A	TWC	2-Belden	1/2"
19	Rinse Arch Control Vavles	24VAC	1	N/A	TWC	6-#14	1/2"
20	P.E. #10 Receiver & Transmitter	24VAC	1	N/A	TWC	2-Belden	1/2"
21	25HP Rear Rinse Pump Control	120VAC	1	N/A	TWC	2-#14	1/2"
22	PH Probe Signal	24VAC	1	N/A	TWC	4-#14	3/4"

ELECTRICAL CONTRACTOR SHALL FURNISH THE FOLLOWING: (DUBOIS FLEETWASH WILL NOT FURNISH THE FOLLOWING.)

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND FURNISH ALL PERMITS, PERMIT FEES, INSPECTIONS, ALL OTHER FEES AND SALES TAXES RELATING TO ALL ELECTRICAL WORK.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES GOVERNING ELECTRICAL INSTALLATION.
3. ELECTRICAL SERVICE, MAIN ELECTRICAL DISTRIBUTION PANEL (MDP) AND OTHER ELECTRICAL DISTRIBUTION PANELS AS REQUIRED.
4. ELECTRICAL SERVICE CONDUIT AND WIRING FROM ELECTRICAL DISTRIBUTION PANELS TO ALL WASH EQUIPMENT INCLUDING BUT NOT LIMITED TO DUBOIS FLEET WASH'S CONTROL PANEL, PUMPS, PRESSURE WASHERS, AND WATER HEATERS.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR POWER WIRING ALL OF DUBOIS FLEET WASH'S EQUIPMENT. ELECTRICAL CONTRACTOR SHALL MAKE ALL TERMINATIONS.
6. ELECTRICAL CONTROL CONDUIT AND WIRING FROM DUBOIS FLEET WASH'S CONTROL PANEL TO WASH EQUIPMENT. DUBOIS FLEET WASH WILL MAKE FINAL CONNECTIONS IN CONTROL PANEL ONLY!
7. ELECTRICAL CONTRACTOR SHALL FURNISH ALL CONDUIT (EXPOSED, IN SLABS OR IN WALLS) , JUNCTION BOXES AND OTHER ITEMS AS REQUIRED FOR COMPLETE ELECTRICAL INSTALLATION.
8. ALL CONDUIT SHALL BE PVC WITH GASKET TYPE BOXES AND ROUTED UNDER SLAB UNLESS CODE REQUIRED.
9. ALL SCANNERS SHALL BE FURNISHED BY DUBOIS FLEET WASH AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR.
10. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE ELECTRICAL INSTALLATION FOR THE ELECTRICAL SERVICE, POWER WIRING, CONTROL WIRING, AND ALL ELECTRICAL CONDUIT. THE ELECTRICAL SHALL BE LEFT COMPLETE AND READY FOR USE BY THE OWNER.
11. DUBOIS FLEET WASH SHALL BE RESPONSIBLE FOR THE FINAL HOOK-UP OF PHOTO-EYES IN WASH BAY AND THE TERMINATION OF THE CONTROL WIRING IN THE WASH CONTROL PANEL ONLY.
12. PACER LIGHTS PROVIDED BY DUBOIS FLEET WASH ARE TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR. THE PACER LIGHTS ARE TO BE INSTALLED AT 7'-0" A.F.F.
13. ALL ELECTRICAL CONDUIT STUB-UPS SHALL BE LOCATED WITHIN 5'-0" MAX. OF JUNCTION BOXES ON DUBOIS'S EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 5'-0" MAX.LENGTH OF NONMETALLIC SEALTITE (IF LOCAL CODE PERMITS) TO DUBOIS FLEET WASH'S EQUIPMENT.

This drawing is for concept only.
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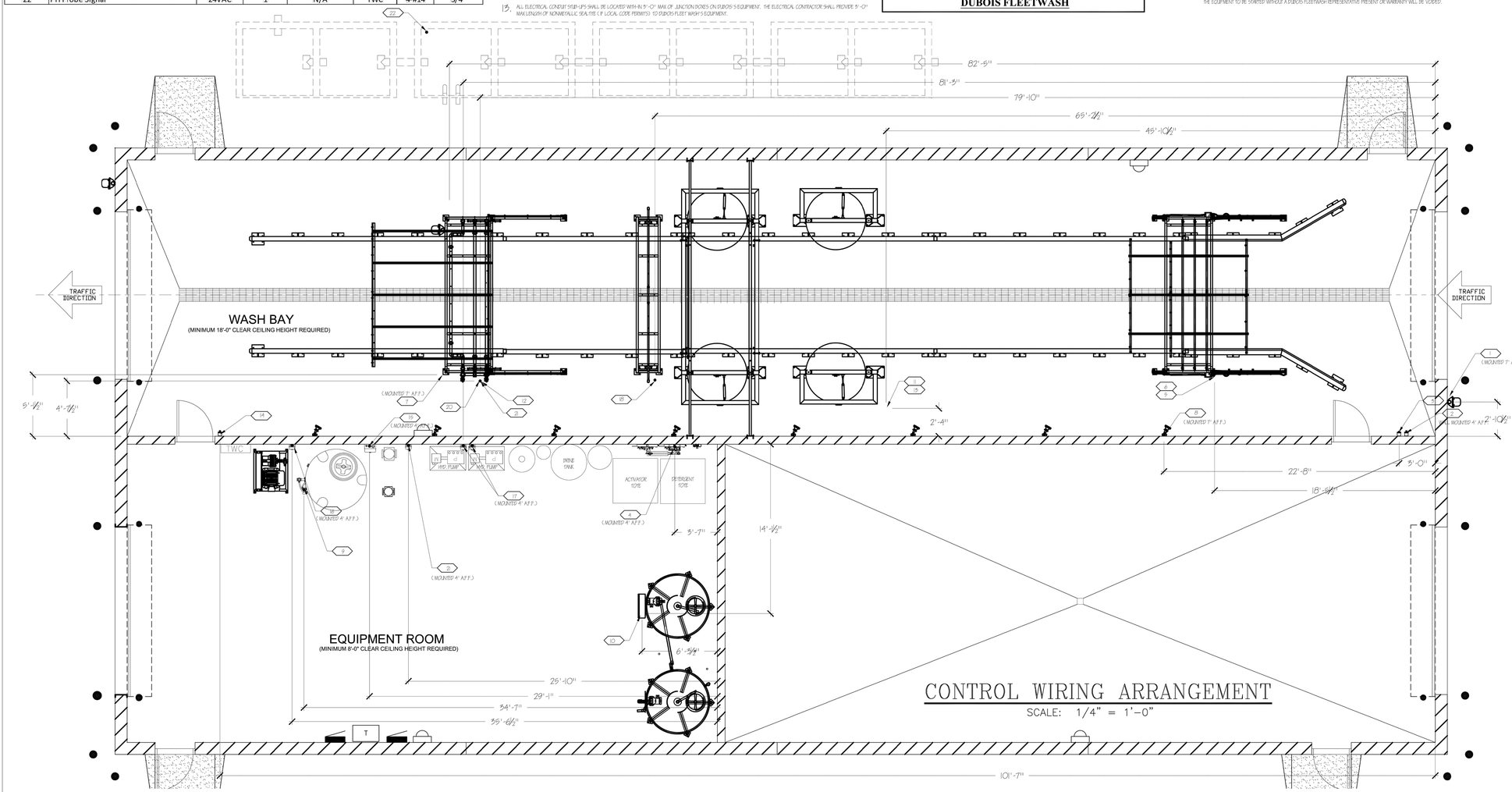
DUBOIS EQUIPMENT POWER REQUIREMENTS MDC

QNTY.	DESCRIPTION	SPECIFICATIONS
(1)	RINSE PUMP	50HP 480V 3PH 100AMP
(1)	BLASTER RINSE PUMP	25HP 480V 3PH 60AMP
(2)	RECLAIM SYSTEM PUMP	220V 1PH 20AMP
(2)	RECLAIM SYSTEM	120V 1PH 30AMP
(1)	HYDRA-FLEX PUMP	3HP 480V 3PH 10AMP
(2)	10HP HYDRAULIC POWER UNIT	10HP 480V 3PH 20AMP
(1)	WATER SOFTENER	120V 1PH 20AMP GFCI OUTLET
(1)	TRUCK WASH CONTROL (TWC)	120-240V 1PH 30AMP 4 WIRE
(1)	25HP REAR RINSE PUMP	480V 3PH 60AMP

PHOTOCELL CABLE REQUIREMENTS SUPPLIED BY DUBOIS FLEET WASH — WEST PENN WIRE CORP., CAT. NO. 291 2 # 22 STRANDED

STARTUP REQUIREMENTS

A DUBOIS FLEETWASH REPRESENTATIVE WILL TERMINATE CONTROL PANEL ONLY AND CHECK ROTATION OF MOTORS. UNDER NO CIRCUMSTANCES IS THE EQUIPMENT TO BE STARTED WITHOUT A DUBOIS FLEETWASH REPRESENTATIVE PRESENT OR WARRANTY WILL BE VOIDED.



CONTROL WIRING ARRANGEMENT

SCALE: 1/4" = 1'-0"

3630 EAST KEMPER ROAD
SHARONVILLE, OH 45241
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REVISION RECORD

NO.	DESCRIPTION	DATE	BY

TRUCK WASH FACILITY FOR:
R & L CARRIERS, INC.
EDINGBURG, IN.

DRAWN BY: Martin Billadet
DATE: 6/3/2021
JOB NUMBER 20-0141-02

DRAWING NO.
E-1.0

PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

Date Issued
Owner Review Aug 26, 2021
Bids & Permit Oct 08, 2021

Job Number
5147

SHEET TITLE
DUBOIS REFERENCE DRAWING

Sheet Number
E7.1

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TRUCK WASH ELECTRICAL POWER WIRE CONNECTION SCHEDULE						
Equipment Number	Description	Equipment Voltage	Breaker Poles	Equipment Full Load Amps	Equipment Circuit	Ckt Breaker Size
1	50hp Rinse Pump	480VAC	3	65	MDP	100
2	25HP Blaster Rinse Pump	480VAC	3	34	MDP	60
3	10HP Hydraulic Pump	480VAC	3	14	MDP	20
4	3HP Chemical Application Pump	480VAC	3	4.8	MDP	10
5	Reclaim System Control Panel	120VAC	1	20	MDP	20
6	TWC (Master Control Panel)	120-208VAC	1	30	MDP	30
7	Water Softener	120VAC	1	15	MDP	15
8	Water Heater	120VAC	1	15	MDP	15
9	3HP Reclaim System Pump	220VAC	1	17	MDP	20
10	25HP Back Door Rinse Pump	480VAC	3	34	MDP	60
11	Reclaim System Fresh Water Solenoid	120VAC	1	17	MDP	20
12	Reclaim Tank Pump	220VAC	1	17	MDP	20

ELECTRICAL CONTRACTOR SHALL FURNISH THE FOLLOWING: (DUBOIS FLEETWASH WILL NOT FURNISH THE FOLLOWING.)

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND FURNISH ALL PERMITS, PERMIT FEES, INSPECTIONS, ALL OTHER FEES AND SALES TAXES RELATING TO ALL ELECTRICAL WORK.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES GOVERNING ELECTRICAL INSTALLATION.
3. ELECTRICAL SERVICE, MAIN ELECTRICAL DISTRIBUTION PANEL (MDP) AND OTHER ELECTRICAL DISTRIBUTION PANELS AS REQUIRED.
4. ELECTRICAL SERVICE CONDUIT AND WIRING FROM ELECTRICAL DISTRIBUTION PANELS TO ALL WASH EQUIPMENT INCLUDING BUT NOT LIMITED TO DUBOIS FLEET WASH'S CONTROL PANEL, PUMPS, PRESSURE WASHERS, AND WATER HEATERS.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR POWER WIRING ALL OF DUBOIS FLEET WASH'S EQUIPMENT. ELECTRICAL CONTRACTOR SHALL MAKE ALL TERMINATIONS.
6. ELECTRICAL CONTROL CONDUIT AND WIRING FROM DUBOIS FLEET WASH'S CONTROL PANEL TO WASH EQUIPMENT. DUBOIS FLEET WASH WILL MAKE FINAL CONNECTIONS IN CONTROL PANEL ONLY!
7. ELECTRICAL CONTRACTOR SHALL FURNISH ALL CONDUIT (EXPOSED, IN SLABS OR IN WALLS) , JUNCTION BOXES AND OTHER ITEMS AS REQUIRED FOR COMPLETE ELECTRICAL INSTALLATION.
8. ALL CONDUIT SHALL BE PVC WITH GASKET TYPE BOXES AND ROUTED UNDER SLAB UNLESS CODE REQUIRED.
9. ALL SCRUBBERS SHALL BE FURNISHED BY DUBOIS FLEET WASH AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR.
10. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE ELECTRICAL INSTALLATION FOR THE ELECTRICAL SERVICE, POWER WIRING, CONTROL WIRING, AND ALL ELECTRICAL CONDUIT. THE ELECTRICAL SHALL BE LEFT COMPLETE AND READY FOR USE BY THE OWNER.
11. DUBOIS FLEET WASH SHALL BE RESPONSIBLE FOR THE FINAL HOOK-UP OF PHOTO-EYES IN WASH BAY AND THE TERMINATION OF THE CONTROL WIRING IN THE WASH CONTROL PANEL AND WASH BAY ONLY.
12. FACIA LIGHTS PROVIDED BY DUBOIS FLEET WASH ARE TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR. THE FACIA LIGHTS ARE TO BE INSTALLED AT 7'-0" A.F.F.
13. ALL ELECTRICAL CONDUIT SEAL-UPS SHALL BE LOCATED WITHIN 5'-0" MAX OF JUNCTION BOXES ON DUBOIS'S EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 5'-0" MIN LENGTH OF NONMETALLIC REALTITE (IF LOCAL CODE PERMITS) TO DUBOIS FLEET WASH'S EQUIPMENT.

STARTUP REQUIREMENTS

A DUBOIS FLEETWASH REPRESENTATIVE WILL TERMINATE CONTROL PANEL ONLY AND CHECK ROTATION OF MOTORS. UNDER NO CIRCUMSTANCES IS THE EQUIPMENT TO BE STARTED WITHOUT A DUBOIS FLEETWASH REPRESENTATIVE PRESENT OR WARRANTY WILL BE VOIDED.

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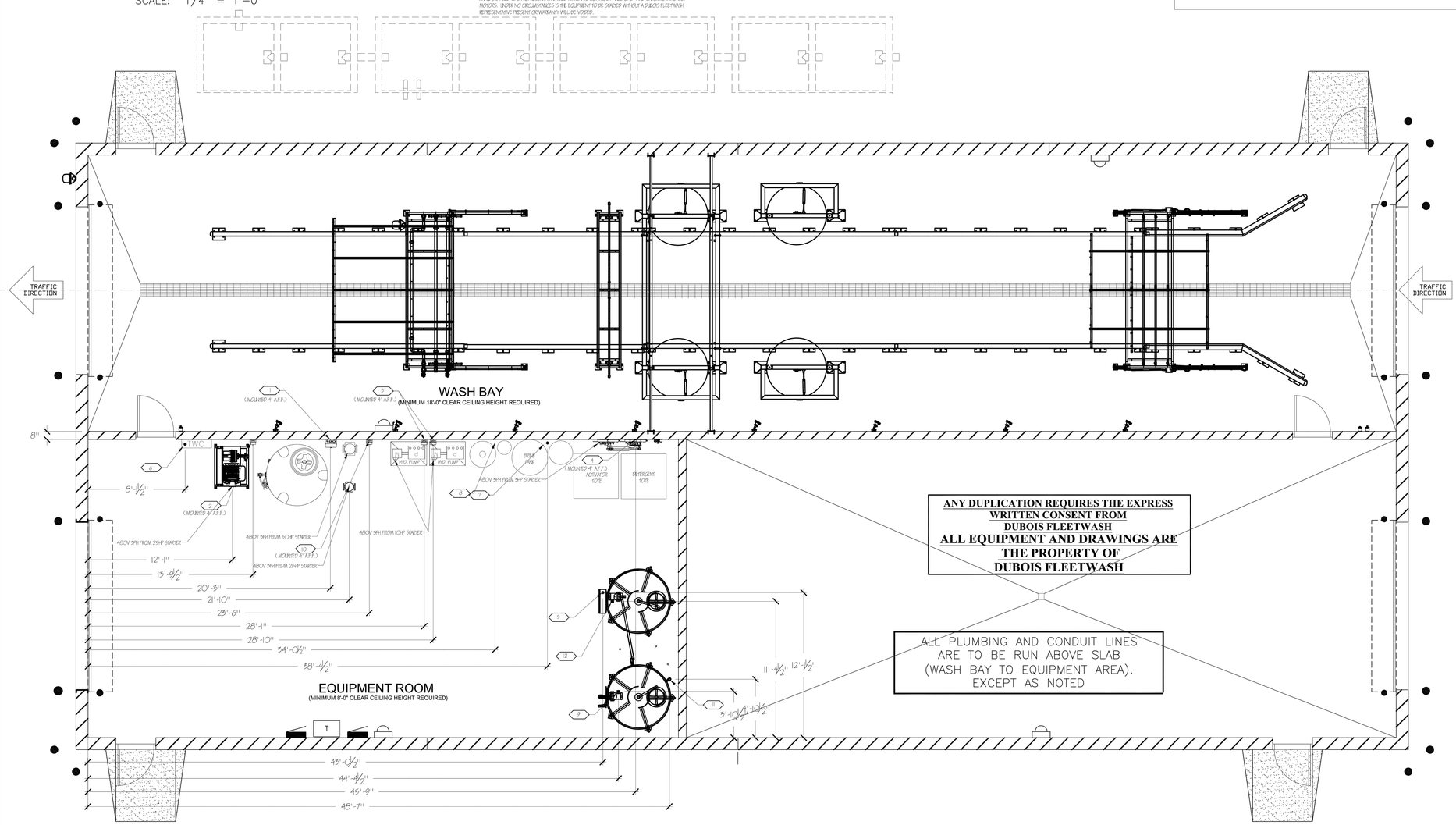
DUBOIS EQUIPMENT POWER REQUIREMENTS MDP		
QNTY.	DESCRIPTION	SPECIFICATIONS
(1)	RINSE PUMP	50HP 480V 3PH 100AMP
(1)	BLASTER RINSE PUMP	25HP 480V 3PH 60AMP
(2)	RECLAIM SYSTEM PUMP	220V 1PH 20AMP
(2)	RECLAIM SYSTEM	120V 1PH 30AMP
(1)	HYDRA-FLEX PUMP	3HP 480V 3PH 10AMP
(1)	10HP HYDRAULIC POWER UNIT	10HP 480V 3PH 20AMP
(1)	WATER SOFTENER	120V 1PH 20AMP GFCI OUTLET
(1)	TRUCK WASH CONTROL (TWC)	120-240V 1PH 30AMP 4 WIRE
(1)	25HP REAR RINSE PUMP	480V 3PH 60AMP
	PHOTOCELL CABLE REQUIREMENTS SUPPLIED BY DUBOIS FLEET WASH	WEST PENN WIRE CORP. CAT. NO. 291 2 #22 STRANDED

POWER WIRING ARRANGEMENT

SCALE: 1/4" = 1'-0"



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ALL PLUMBING AND CONDUIT LINES ARE TO BE RUN ABOVE SLAB (WASH BAY TO EQUIPMENT AREA). EXCEPT AS NOTED

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PHONE 248-489-9160

REVISION RECORD

DATE	BY

TRUCK WASH FACILITY FOR:
R & L CARRIERS, INC.
EDINBURG, IN.

DRAWN BY: Martin Elliott
DATE: 6/15/2021
JOB NUMBER 20-041-03

DRAWING NO.
E-2.0

PROJECT
R + L CARRIERS
EDINBURGH, INDIANA

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SHEET TITLE
DUBOIS REFERENCE DRAWING

Sheet Number
E7.2

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