

NO ALTERATION PERMITTED EXCEPT AS PROVIDED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.



REV.	DATE	DESCRIPTION
0	07/11/2020	ISSUED FOR PERMIT APPLICATION

CLIENT:
 ELECTRONICS
 PARK AVE UNIT 3
 EDISON, NJ 08820

PROJECT:
EXISTING WAREHOUSE ELECTRICAL DISTRIBUTION
 ADDRESS:
 PARK AVE UNIT 8 & 11
 EDISON, NJ 08820

ISSUE DATE:
 07/11/2020
 PROJECT NUMBER:
 AE# 1157
 SCALE: NONE
 DESIGNED BY: DEE
 DRAWN BY: DEE
 CHECKED BY: DEE

DRAWING TITLE:
ELECTRICAL EQUIPMENT LAYOUT AND SCHEDULE

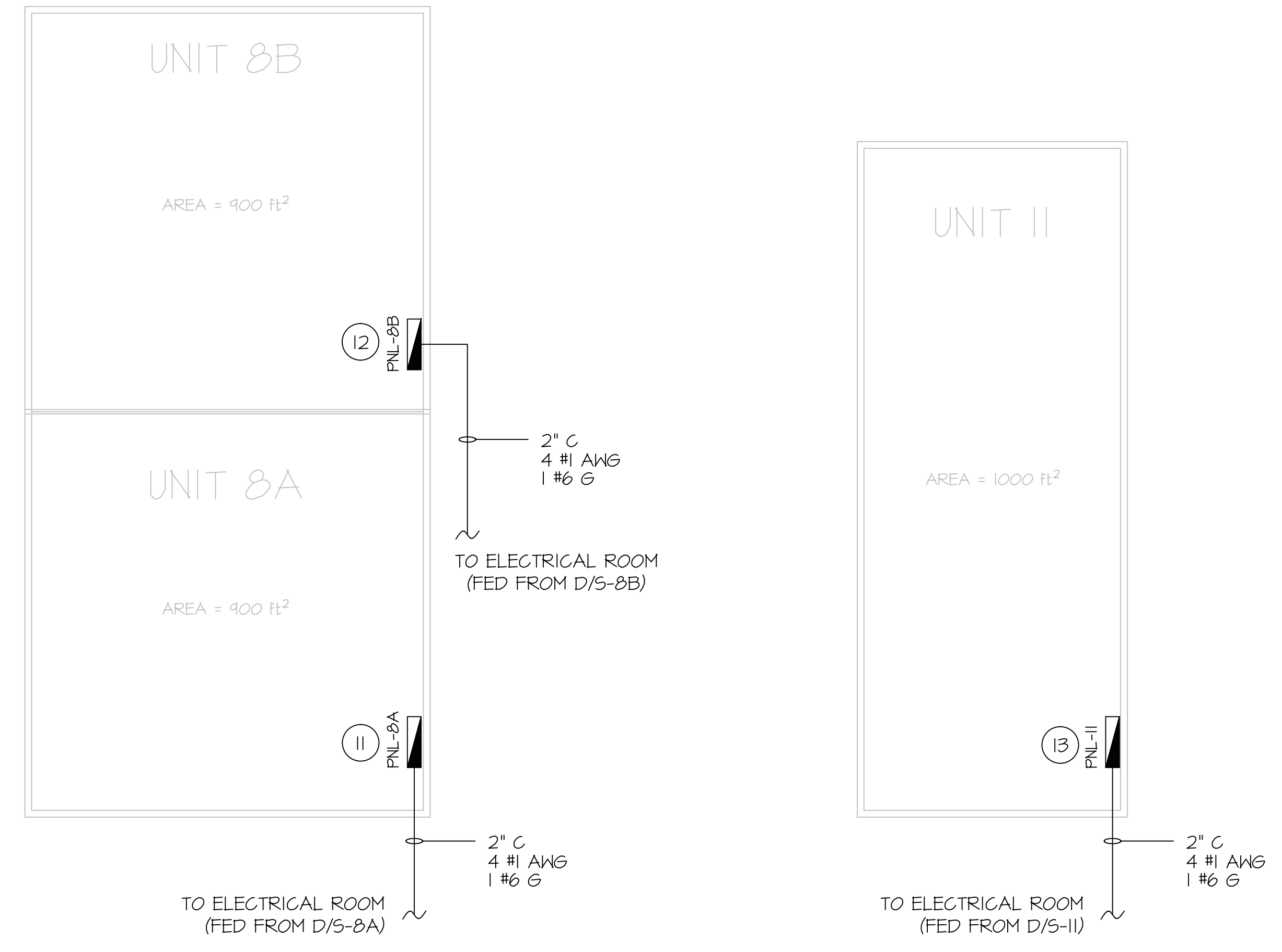
DRAWING NO: **E2**
 REVISION: **0**

EQUIPMENT SCHEDULE

ITEM NO.	TAG NO.	DESCRIPTION
1	---	(3) POLE BREAKER ADDED, RATED 150 AMP
2	WHM-8A	WATTHOUR METER AND METER PAN AS REQUIRED
3	D/S-8A	3P, FUSED 100A DISCONNECT SWITCH
4	XFMR-8A	30KVA STEP DOWN TRANSFORMER 480V Δ - 120V/208V Y
5	WHM-8B	WATTHOUR METER AND METER PAN AS REQUIRED
6	D/S-8B	3P, FUSED 100A, DISCONNECT SWITCH
7	XFMR-8B	30KVA STEP DOWN TRANSFORMER 480V Δ - 120V/208V Y
8	WHM-II	WATTHOUR METER AND METER PAN AS REQUIRED
9	D/S-II	3P, FUSED 100A, DISCONNECT SWITCH
10	XFMR-II	30KVA STEP DOWN TRANSFORMER 480V Δ - 120V/208V Y
11	PNL-8A	DISTRIBUTION PANEL 100A, 120/208V, 3P-4W, 42 CKT
12	PNL-8B	DISTRIBUTION PANEL 100A, 120/208V, 3P-4W, 42 CKT
13	PNL-II	DISTRIBUTION PANEL 100A, 120/208V, 3P-4W, 42 CKT
14	---	WIREWAY (SIZE 6"x 6")
15	D/S-8A	3P, FUSED 50A, DISCONNECT SWITCH
16	D/S-8B	3P, FUSED 50A, DISCONNECT SWITCH
17	D/S-II	3P, FUSED 50A, DISCONNECT SWITCH

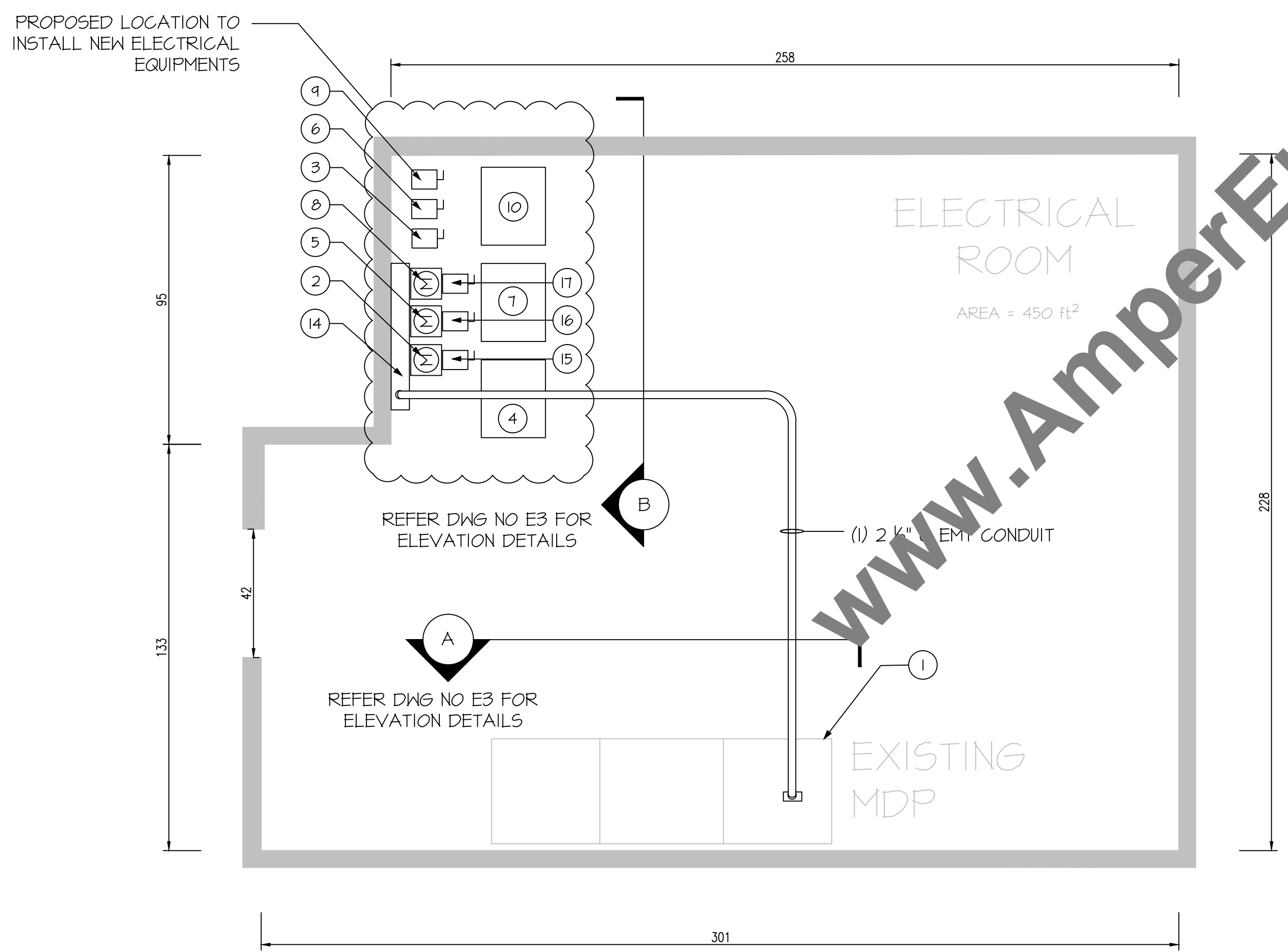
NOTES:

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY COORDINATE. COORDINATE ELECTRICAL EQUIPMENT LOCATION AND INSTALLATION WITH EQUIPMENT BEING SERVED. PROVIDE ALL POWER FINAL CONNECTIONS TO THE SYSTEM AS REQUIRED.
- SPACE PROVISION FOR THE NEW (3) ELECTRICAL METER AND (3) STEP DOWN TRANSFORMERS AT ELECTRICAL ROOM SHALL BE FIELD VERIFIED.
- STEP DOWN TRANSFORMERS SHALL BE GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE. SEE DRAWING NO. E4 FOR TYPICAL TRANSFORMER GROUNDING DETAILS.
- ELECTRICAL EQUIPMENT TO BE INSTALLED SHALL HAVE KAIC RATING DERIVED FROM MDP KAIC RATING.

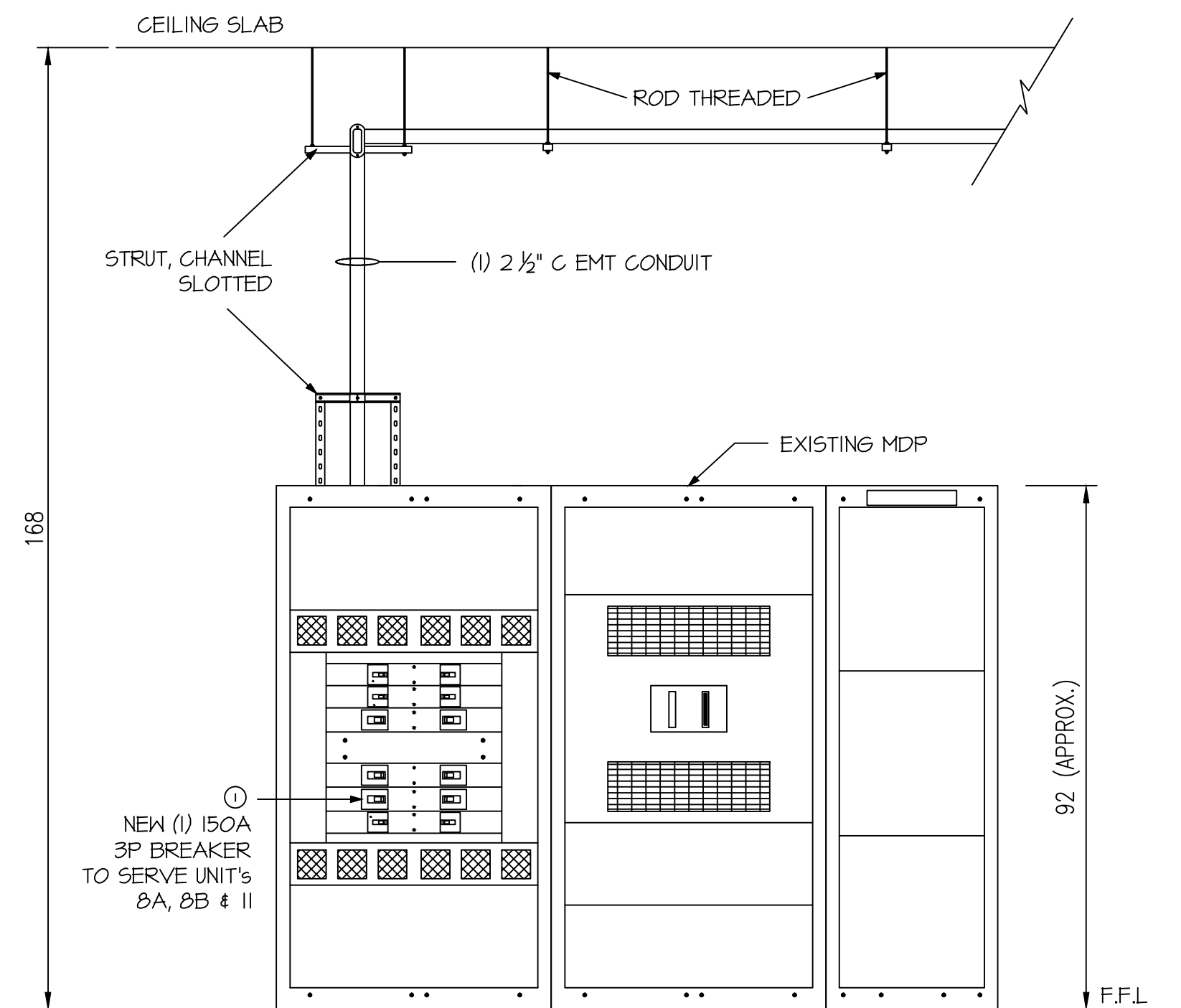


WAREHOUSE - UNIT 8A / 8B

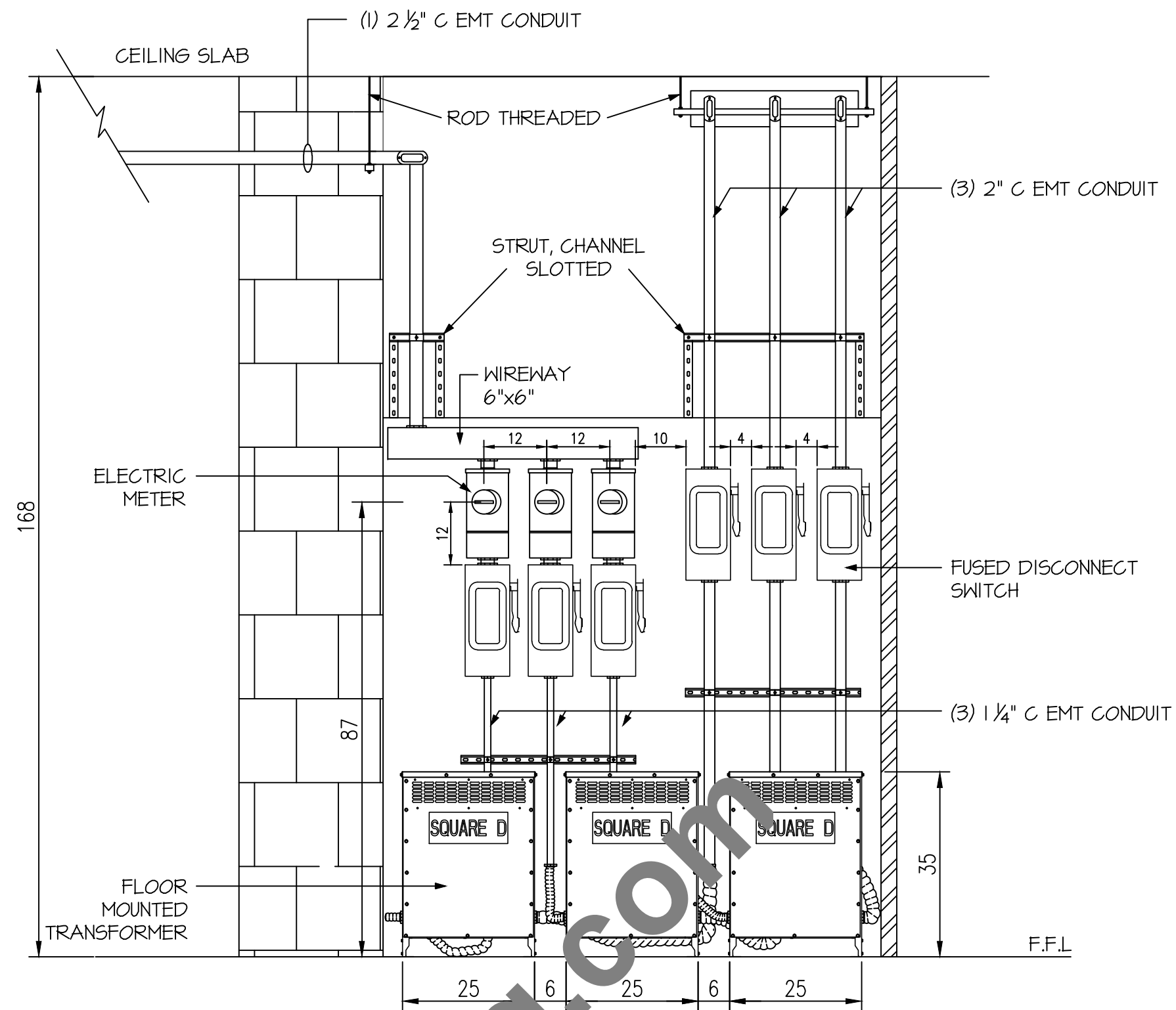
WAREHOUSE - UNIT II



ELECTRICAL ROOM LAYOUT



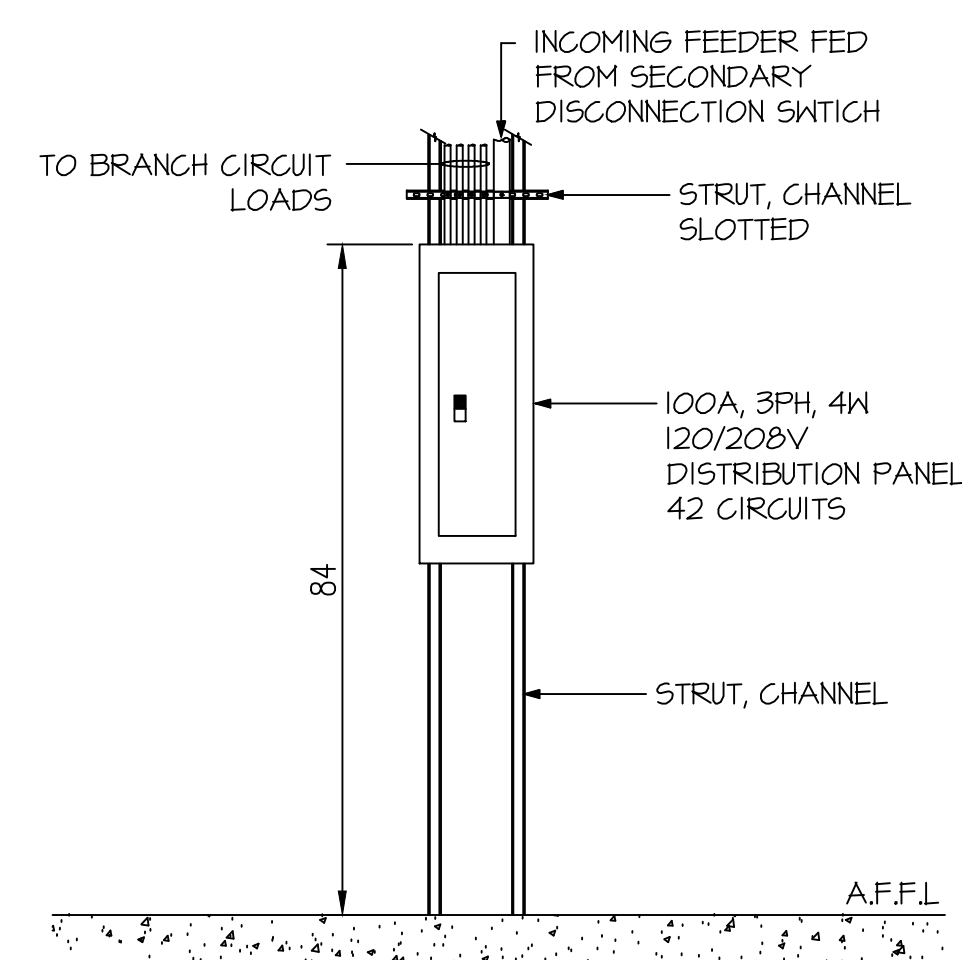
A EXISTING MDB ELEVATION DETAILS
SCALE: 1/2" = 1'-0"



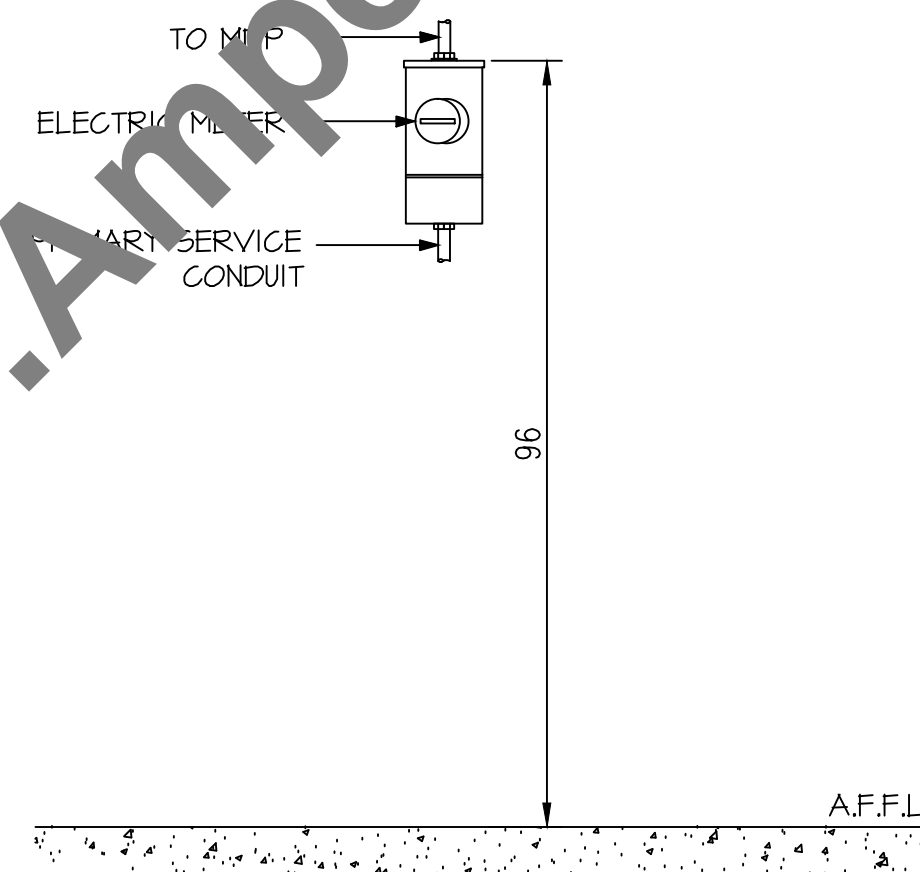
B ELECTRICAL EQUIPMENT ELEVATION DETAILS
SCALE: 1/2" = 1'-0"

NOTES:

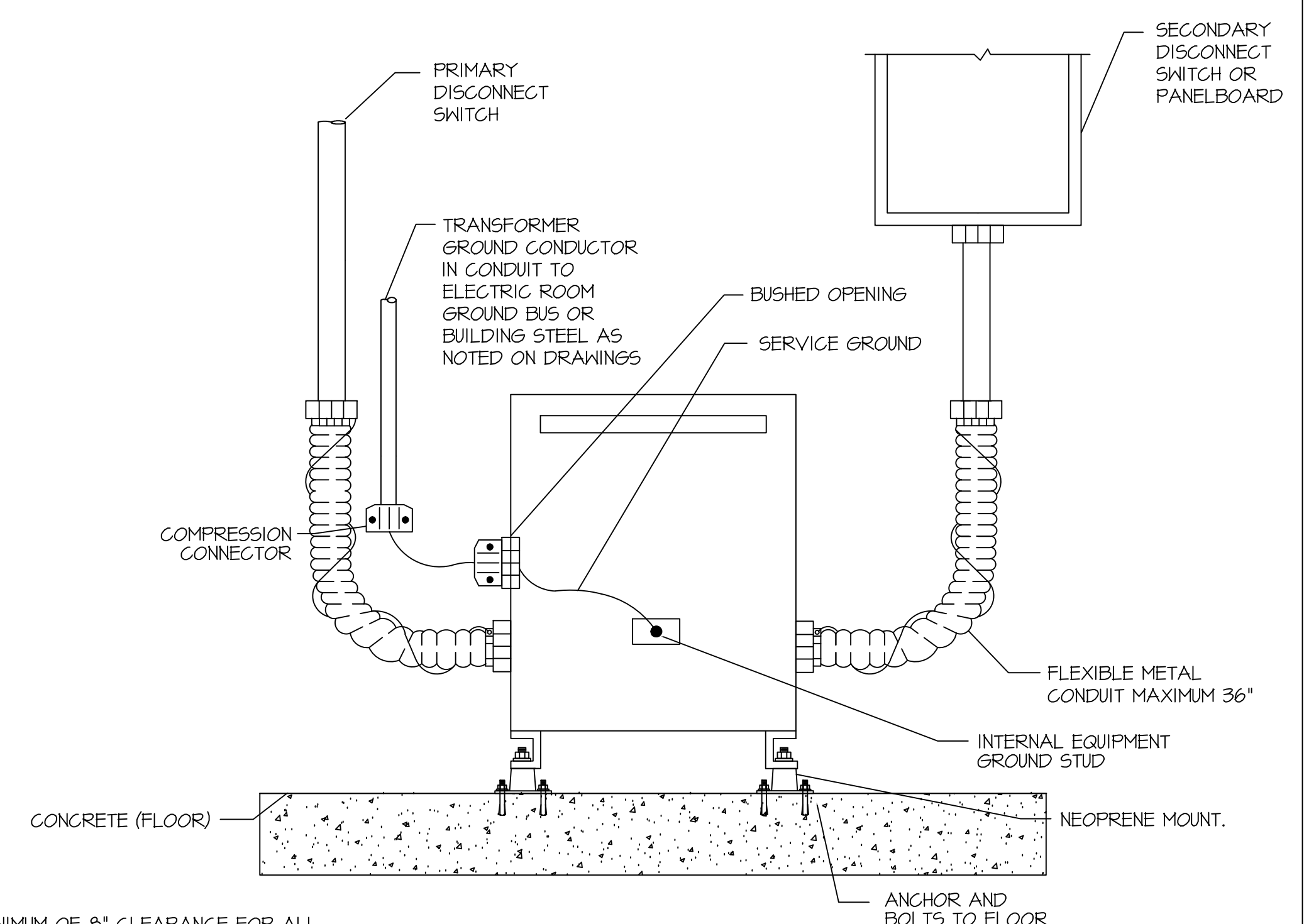
- CONTRACTOR TO VERIFY ALL NOTED DIMENSIONS IN FIELD. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- INSTALLATION OF NEW WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- COORDINATE WITH ARCHITECT TO VERIFY ELEVATION AND DETAILS FOR EXACT LOCATION, MOUNTING HEIGHTS AND ADDITIONAL INFORMATION PRIOR TO COMMENCE WORK.



DISTRIBUTION PANEL INSTALLATION DETAIL
SCALE: NTS



ELECTRIC METER INSTALLATION DETAIL
SCALE: NTS



NOTES:

- PROVIDE A MINIMUM OF 8" CLEARANCE FOR ALL TRANSFORMERS 75 KVA AND BELOW -12" CLEARANCE FOR ALL TRANSFORMERS GREATER THAN 75 KVA TO ALL WALLS AND EQUIPMENT FOR VENTILATION.

FLOOR MOUNTED TRANSFORMER DETAIL
SCALE: NTS

PROFESSIONAL ENGINEER

AMPER ENGINEERING
Engineering - Estimating - Consulting - Procurement
Phone: (201) 920-2899
Email: info@AmperEngineering.com
Address: PO Box 35 Livingston, NJ 07039

SEAL & SIGNATURE

No. 24GE54902
07/13/2020
LICENSED PROFESSIONAL ENGINEER
(Signature)

NO ALTERATION PERMITTED EXCEPT AS PROVIDED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

REV.	DATE	DESCRIPTION
0	07/11/2020	ISSUED FOR PERMIT APPLICATION

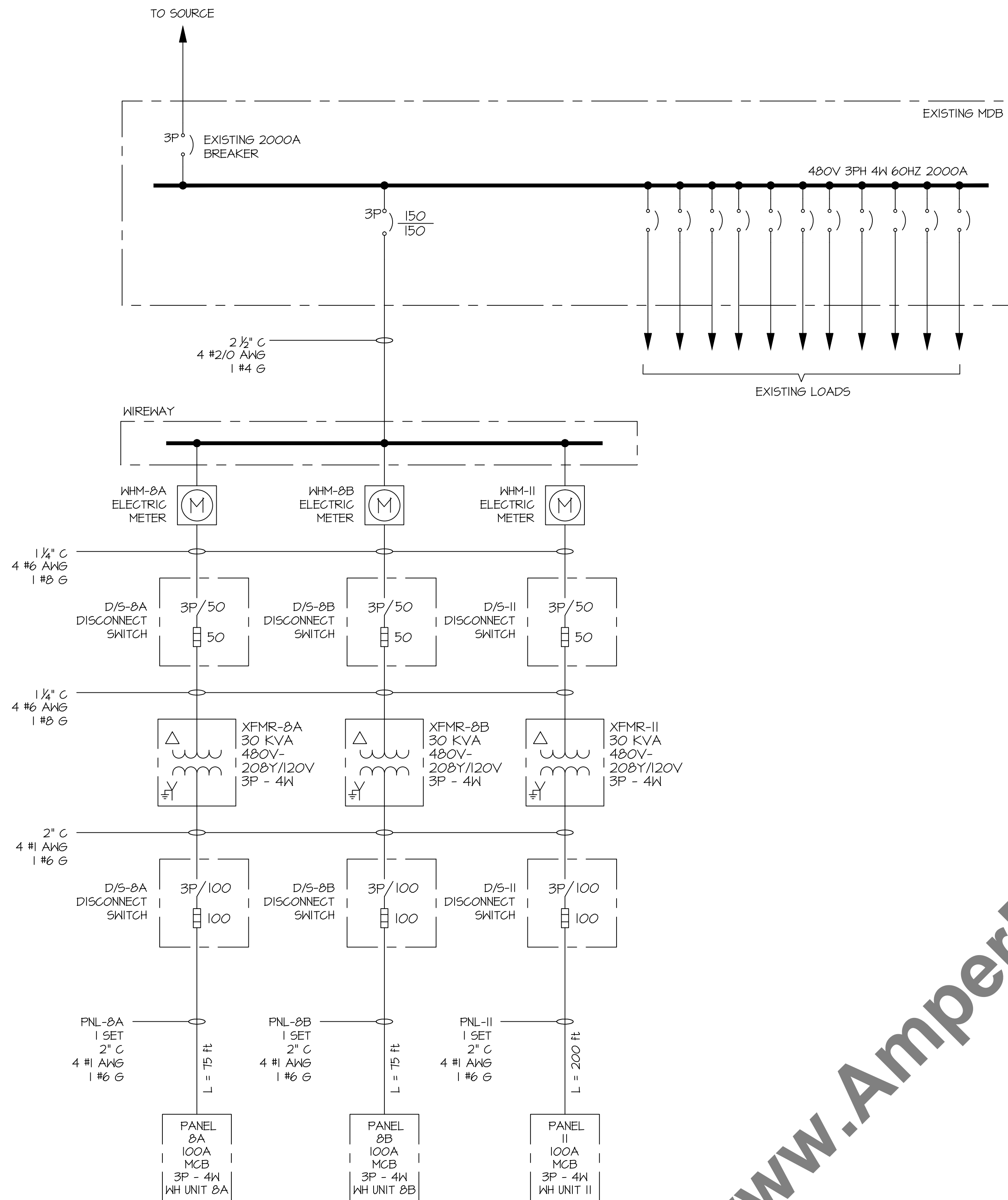
CLIENT: **TRONICS**
PARK AVE UNIT 3
EDISON, NJ 08820

PROJECT: **EXISTING WAREHOUSE ELECTRICAL DISTRIBUTION**
ADDRESS: **PARK AVE UNIT 8 & 11 EDISON, NJ 08820**

ISSUE DATE: 07/11/2020
PROJECT NUMBER: AE# 1157
SCALE: NONE
DRAWN BY: DEE
DESIGNED BY: DEE
CHECKED BY: DEE

DRAWING TITLE: **ELEVATION AND INSTALLATION DETAILS**

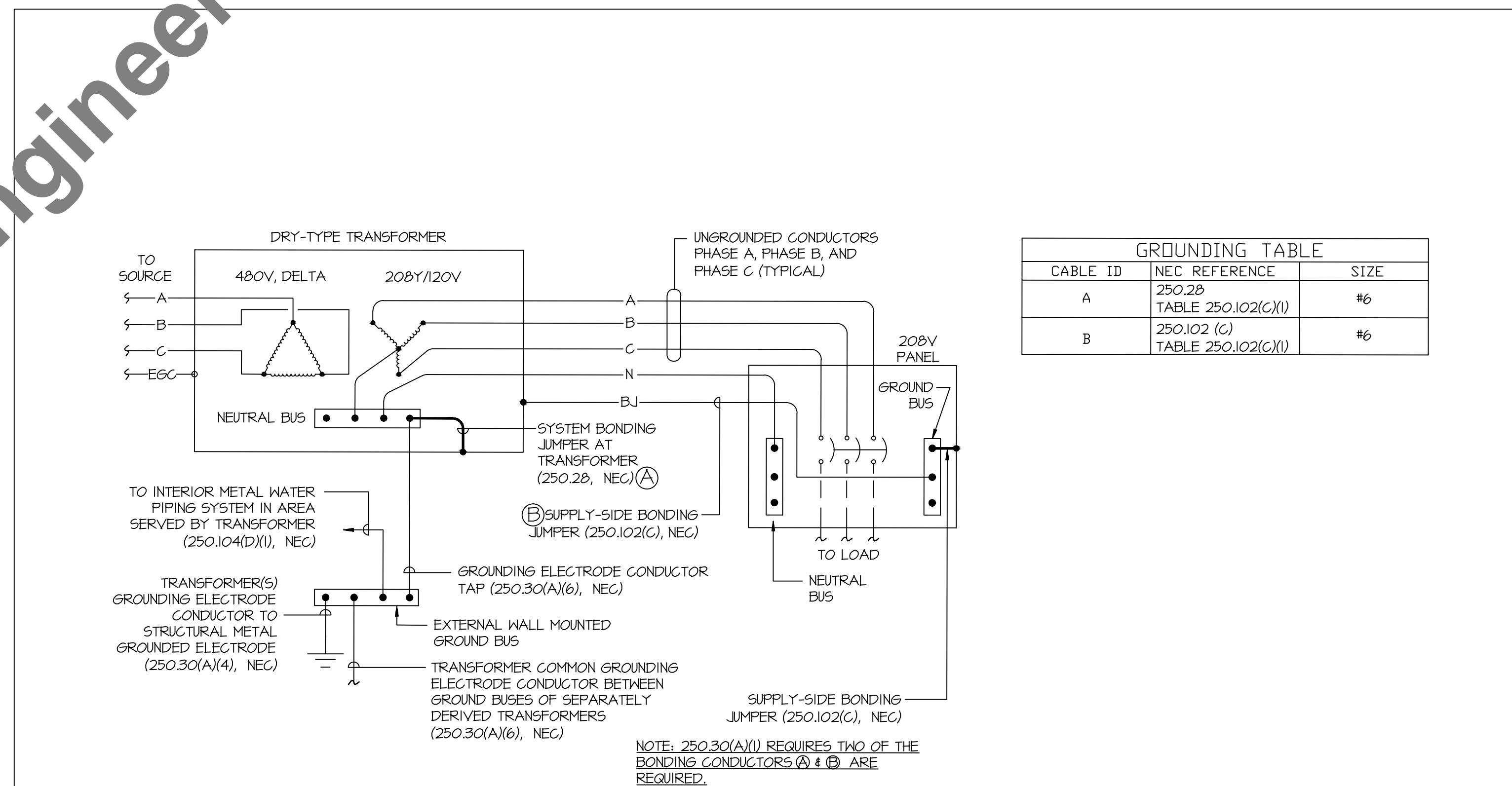
DRAWING NO: **E3**
REVISION: **0**



SINGLE LINE DIAGRAM

VOLTAGE DROP CALCULATION												
TAG	CABLE ROUTE		SYSTEM PARAMETERS			INPUT PARAMETERS					RESULT	
	FROM	TO	PHASE	CONDUCTOR	INSTALLATION	DISTANCE IN FEET (FT)	VOLTAGE	MAX V.D (%)	CURRENT (AMP) (END OF CABLE RUN)	PARALLEL (SETS)	VOLTAGE DROP	MINIMUM CONDUCTOR SIZE
PNL-8A	UNIT-8A	ELEG RM	3	COPPER	CONDUIT	75	208	3	100	1	0.93%	#1 AWG
PNL-8B	UNIT-8B	ELEG RM	3	COPPER	CONDUIT	75	208	3	100	1	0.93%	#1 AWG
PNL-II	UNIT-II	ELEG RM	3	COPPER	CONDUIT	200	208	3	100	1	2.41%	#1 AWG

CONDUIT FILL TABLE								
TAG	CONDUIT		CONDUCTORS			GROUND		FILL (%)
	TYPE	SIZE	TYPE	SIZE	NO. OF WIRES	SIZE	NO. OF WIRES	
PNL-8A	EMT	2"	THHN	#1 AWG	4	#6 G	1	19.17%
PNL-8A	EMT	2"	THHN	#1 AWG	4	#6 G	1	19.17%
PNL-8A	EMT	2"	THHN	#1 AWG	4	#6 G	1	19.17%



GROUNDING TABLE		
CABLE ID	NEC REFERENCE	SIZE
A	250.28 TABLE 250.102(C)(1)	#6
B	250.102 (C) TABLE 250.102(C)(1)	#6

COMMERCIAL BUILDING TRANSFORMER SOLID GROUNDING
SCALE: NTS

PROFESSIONAL ENGINEER
AMPER ENGINEERING
 Engineering • Estimating • Consulting • Procurement
 Phone: (201) 920-2899
 Email: info@AmperEngineering.com
 Address: PO Box 35 Livingston, NJ 07039
 SEAL & SIGNATURE:
 No. 24GE54902
 07/13/2020
 LICENSED PROFESSIONAL ENGINEER
(Signature)

NO ALTERATION PERMITTED EXCEPT AS PROVIDED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

REV. DATE	DESCRIPTION
07/11/2020	ISSUED FOR PERMIT APPLICATION

CLIENT:
 ELECTRONICS
 PARK AVE UNIT 3
 EDISON, NJ 08820

PROJECT:
EXISTING WAREHOUSE ELECTRICAL DISTRIBUTION
 ADDRESS:
 PARK AVE UNIT 8 & 11
 EDISON, NJ 08820

ISSUE DATE:
 07/11/2020
 PROJECT NUMBER:
 AE# 1157
 SCALE:
 NONE
 DESIGNED BY:
 DEE
 DRAWN BY:
 DEE
 CHECKED BY:
 DEE

DRAWING TITLE:
SINGLE LINE DIAGRAM & TRANSFORMER GROUNDING DETAILS

DRAWING NO:
E4
 REVISION:
0